Shell Carmon Creek Cogeneration, RP-1320

and

Whitetail Peaking Station, *RP-1290*

The attached *AESO Assessment and Acceptance of the Carmon Creek and Whitetail Connection Engineering Studies* was prepared by the AESO to assess the potential impacts of the proposed Carmon Creek Co-generation and Whitetail Peaking Station connections on the transmission system.

Date: December 17th 2014

Function	Name	Company	Signature	Date
Manager, Projects and System Access Studies	Sami Abdulsalam, PhD, P.Eng	Alberta Electric System Operator (AESO)		Dec 17th 2014

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APPENDIX A

AESO ASSESSMENT AND ACCEPTANCE OF THE CARMON CREEK AND WHITETAIL CONNECTION ENGINEERING STUDIES

AESO Assessment and Acceptance of the Carmon Creek and Whitetail Connection Engineering Studies

1.0 Introduction

As part of the AESO Connection Process,[1] market participants have the option of engaging a consultant to conduct a connection engineering study to assess the impacts of their connection on the transmission system. Each of the Carmon Creek Co-generation Facility and Whitetail Peaking Station market participants have separately engaged consultants to conduct engineering studies for which the AESO defined the study scope and provided the system models and study assumptions (Connection Studies). Since both of these generating facilities are connecting in the Peace River area in 2015-2016, the AESO has reviewed the two Connection Studies (Attached) in conjunction, and provides this Assessment and Acceptance document in support of both connections.

2.0 Project Development Summary

2.1 Whitetail Peaking Station

Enbridge Inc. filed a System Access Service Request with the AESO on December 6, 2011 for the 200 MW (four 50 MW units) gas-fired Whitetail Peaking Station (Whitetail). The expected in-service date for Whitetail is August 2016.

Whitetail passed Gate 2 of the AESO Connection Process in January 2013. At the time the Whitetail Connection Study was being prepared, the Carmon Creek Co-generation Facility (Carmon Creek) had not yet passed Gate 2 of the AESO Connection Process. Since connection studies typically include only area generation that has passed Gate 2, Carmon Creek was not included in the Whitetail Connection Study. The Whitetail study, which demonstrates the impact of the connection of Whitetail on the transmission system prior to the energization of Carmon Creek, did not indicate any N-0 violations or N-1 thermal constraints.

2.2 Carmon Creek

Shell Canada Ltd. filed a System Access Service Request to the AESO on June 11, 2012 for the 690 MW (three 230 MW units) gas-fired Carmon Creek Co-generation

[1] http://www.aeso.ca/connect/#overview

Facility (Carmon Creek). The expected in-service date for Carmon Creek is staged for July 2015, January 2016 and Q4, 2016.

Carmon Creek passed Gate 2 of the AESO Connection Process in July 2013. At the time the Carmon Creek Connection Study was being prepared, Whitetail had passed Gate 2 of the AESO Connection Process, and was therefore included in the Carmon Creek Connection Study. The Connection Study indicates a potential for thermal constraints under both normal (N-0) and abnormal (N-1) system conditions following connection of Carmon Creek and Whitetail, as further described in Paragraph 3.0.

3.0 Important Engineering Study Results

The Northwest Region is currently a load surplus region with high transfer-in requirements, typically from the Lake Wabamun and Fort McMurray areas, to reliably serve load in the region. Following the connection of the 690 MW Carmon Creek and the 200 MW Whitetail facilities, the Northwest Region is expected to be in generation surplus in circumstances where both of the new generating facilities are dispatched to high output levels. As the existing transmission system reliably serves existing regional load, only high generation dispatch scenarios for the region with peak output dispatch of Carmon Creek and Whitetail were studied in the Carmon Creek Connection Study. This peak output dispatch exceeds the existing capacity of the transmission system to accommodate approximately 575 MW of new generation in the Wesley Creek area under system-normal (N-0) operating conditions.

3.1 N-0 Constraints

The existing transmission system can accommodate up to approximately 575 MW of new generation in the Wesley Creek area over the near term under system-normal (N-0) operating conditions. The Carmon Creek Connection Study assesses the capability of the transmission system in the area following the sequential energization of each of the three Carmon Creek generating units. The study reveals the potential for N-0 overload along the existing 7L27 144 kV line with two Carmon Creek units and Whitetail dispatched at peak output levels. The identified overload along 7L27 increases with the third generating unit dispatch at Carmon Creek.

3.2 N-1 Constraints

The Carmon Creek Connection Study also identifies a number of contingencies leading to thermal overloads under N-1 conditions. The two major 240 kV lines - 9L11 and 9L15 - are critical transfer paths within the Northwest Region. Contingency of one line (N-1 condition) can result in system performance violations when the region is at peak load for the existing system and when the region is at high generation in 2016.

3.3 Constraint Mitigation

The AESO 2013 Northwest Region Plan (NWRP), specifically the new 240 kV transmission line from Wesley Creek 834S substation to the proposed Little Smoky South substation, will remove the identified thermal constraints. In the interim, the AESO will manage any N-0 constraints that materialize in accordance with ISO Rule 302.1, *Transmission Constraints Management*. In addition, the AESO will specify the needed remedial action schemes for maintaining system reliability following constrained N-1 conditions.

4.0 AESO Acceptance

The AESO considers the results provided in the attached:

- Connection Engineering Study Report for AUC Application - Project 1321 Shell Carmon Creek Cogeneration Interconnection; and the

- Connection Engineering Study Report for AUC Application - Project P1290 Whitetail Peaking Generation Station

as acceptable for determining the impact of the proposed Carmon Creek and Whitetail connections on the transmission system.

Whitetail Peaking Generation Station Interconnection

RP-05-1290

The attached engineering study report has been prepared by a third party as part of the AESOs connection process. The AESO has reviewed the report and the conclusions that it contains, and finds it acceptable for the purpose of assessing potential impacts of the proposed connection on the transmission system.

Information regarding the AESO's connection process can be found at: http://www.aeso.ca/8602.html

Date: 17/12/2014

Function	Name	Company	Signature	Date
Senior Engineer	for Liuzhong Shi, P.Eng.	Alberta Electric System Operator	Jagtar Tatla	Dec 17, 2014
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Connection Engineering Study Report for AUC Application

Project P1290

Whitetail Peaking Generation Station

Revision: 1

Revision Date: 2014-12-16

	Name	Date	Signature
Prepared by:	Paul Kos, P.Eng.	December 16, 2014	

Executive Summary

Project Overview

Enbridge Inc. (Enbridge) is proposing to construct the Whitetail Peaking Station ("the Project") as a new point of supply (POS) - Project 1290. The Project is to be developed in one stage with an in service date ("ISD") of August 1, 2016.

The plant consists of 200MW of gas fired generation. The generation comprises four 50 MW units. Enbridge is requesting the Supply Transmission Service ("STS") capacity of 200MW. The anticipated unit start-up power requirement is 0.5MW. The station service load during operation is 2MW, which will be netted from the local power plant output. Enbridge has also requested 1.0 MW of Demand Transmission Service (DTS).

The plant is located in the Peace River area (Area 19) in the vicinity of LSD 29-85-19-W5 which is located approximately 13.5 km to the north of the existing Wesley Creek 834S substation.

Existing System

The Project is located in the Northwest (NW) Region of the Alberta Interconnected Electric System ("AIES") in the AESO Planning Area 19, Peace River. Figure 1 shows the existing system configuration of the Northwest Region.

The NW Region transmission system consists of long 144 kV and 240 kV transmission lines. The Northwest Region imports power from the rest of the AIES. Currently there are three 240 kV lines (919L, 989L and 913L) which transfer power to the NW Region from the Wabamun Lake area, a major source of generation in the province. There are also three 138 kV lines (799L, 7L230 and 854L) that run parallel to these 240 kV lines and transfer power to the same region. The NW Region receives power transfers, under certain conditions, from the Northeast Region via the 9L15 240 kV line.

Alternative Selected

Three alternatives were considered for the connection of the Project:

- Alternative 1 - a radial connection to Wesley Creek substation at 144 kV.
- Alternative 2 - an In/Out 144 kV connection to 7L106 between Wesley Creek 834S and Meikle 905S.
- Alternative 3 (preferred alternative) - a tap 144 kV connection to 7L106.

Detailed studies were conducted for the preferred Alternative 3.

Study Summary

The Whitetail Peaking Generation Station ISD was originally Q3, 2014 and was subsequently changed to Q3 2016. The 2014 summer peak (SP), 2014 summer light (SL) and 2014 winter peak (WP), scenarios were studied using the AESO 2012 Long-term Outlook (2012 LTO) forecast. The AESO 2014 Long-term Outlook forecast has been posted on the AESO website. During the time period from the initial Q3, 2014 to the later Q3, 2016, there are neither system upgrades in the

NW Region, or material changes to local load and generation development. Therefore the power flow, transient stability analysis performed for the 2014 SP, 2014 SL and 2014 WP conditions remain valid to evaluate the impact of the proposed Whitetail Peaking Generation Station on the AIES with 2016 SP, 2016 SL and 2016 WP conditions. Pre-connection system performance studies are presented in Section 4 and proposed connection alternatives are analyzed in section 5 and 6 of this Engineering Study Report.

Alternative 3, the preferred alternative, complies with AESO reliability criteria except for Line Terminal Open condition at Wesley Creek 834S for 7L106. For this condition, the Whitetail generators would remain electrically connected with the AIES via the 7L106 between Whitetail and Meikle 905S and would experience loss of synchronism. The potential instability for 7L106 Line Terminal Open condition requires implementation of direct transfer trip (DTT) to all Whitetail generators on line at the same time. Since the Line Terminal Open condition would occur at Wesley Creek 834S when one breaker of 7L106 is open for planned maintenance and second breaker of 7L106 trips to clear a close-in fault on adjacent line 7L12 or 240/144 kV 901T-834S transformer; the DTT scheme is not expected to operate frequently.

Recommendation

It is recommended to proceed with Alternative 3 subject to implementing the DTT scheme as previously described.

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1. Introduction

This Customer Connection Engineering Study Report presents the results of the study conducted to analyze the proposed connection of the Project to the AIES.

1.1. Project

1.1.1. Project Overview

Enbridge Inc. (Enbridge) is proposing to construct the Whitetail Peaking Station as a new Point of Supply ("POS"). The Project is to be developed in one stage.

The plant consists of 200MW of gas fired generation. The generation comprises four 50 MW units. Enbridge is requesting the STS capacity of 200MW. The anticipated unit start-up power requirement is 0.5MW. The station service load during operation is 2MW, which will be netted from the local power plant output. Enbridge has also requested 1.0 MW of DTS.

The plant is located in the Peace River area (Area 19) in the vicinity of LSD 29-85-19-W5 which is located approximately 13.5 km to the north of the existing Wesley Creek 834S substation.

The plant is a simple cycle, gas fired peaking generating station.

The target ISD for the generating facility is August 1, 2016.

1.1.2. Load Component

The proposed on site load for the project is:

1. 0.5 MW for construction and unit start-up power requirement.
2. Station service load of approximately 2 MW with an ISD of August 1, 2016. The station service load during operation will be netted from the local power plant.

Enbridge has requested 1.0 MW of DTS.

No load expansion is presently anticipated.

1.1.3. Generation Component

The proposed generation component for the project is 200 MW with an ISD of August 1, 2016.

The generation comprises four 50 MW gas fired, simple cycle units.

The maximum reactive power capability of the 50 MW generators is + 24 MVAr and – 17 MVAr at 50 MW output level.

The customer is applying for 200 MW of Supply Transmission Service ("STS").

No future generation capacity expansions are anticipated at this time.

1.2. Study Scope

1.2.1. Study Objectives

The objectives of the study were as follows:

- To assess the impact of the addition of Whitetail Peaking Station STS generation at Wesley Creek area on the performance of the transmission system in the study area.
- Identify any reliability concerns associated with the connection of the project to the AIES.
- Propose and assess possible solutions to any system performance violations of reliability criteria that might have been identified.

In order to identify any reliability concerns, power flow, transient and short circuit analyses were performed to compare the system response before and after the connection of the Project. The system response was evaluated against the AESO Reliability Criteria.

1.2.2. Study Area

1.2.2.1. Study Area Description

The Project is located in the NW Region of AIES in the AESO Planning Area 19, Peace River. Figure 1 shows the assumed system configuration of the NW Region at the time of Project ISD.

The study area includes all the AESO Planning Areas in the NW region. The NW Region includes the area generally northwest of Lake Wabamun and Hinton/Edson areas as shown in Figure 1.

The NW Region transmission system consists of long 144 kV and 240 kV transmission lines. The Northwest region imports power from the rest of the AIES. Currently there are three 240 kV lines (919L, 989L and 913L) which transfer power to the NW Region from the Wabamun Lake area, a major source of generation in the province. There are also three 138 kV lines (799L, 7L230 and 854L) that run parallel to these 240 kV lines and transfer power to the same region. The NW Region receives power transfers, under certain conditions, from the Northeast Region via the 9L15 240 kV line.

1.2.2.2. Existing Constraints

The Northwest region operation is currently managed by the ISO Rule 302.1 and associated ID 2011-004 and the ISO Rule 304.4 Voltage Control Practice and associated ID # 2010-007RS.

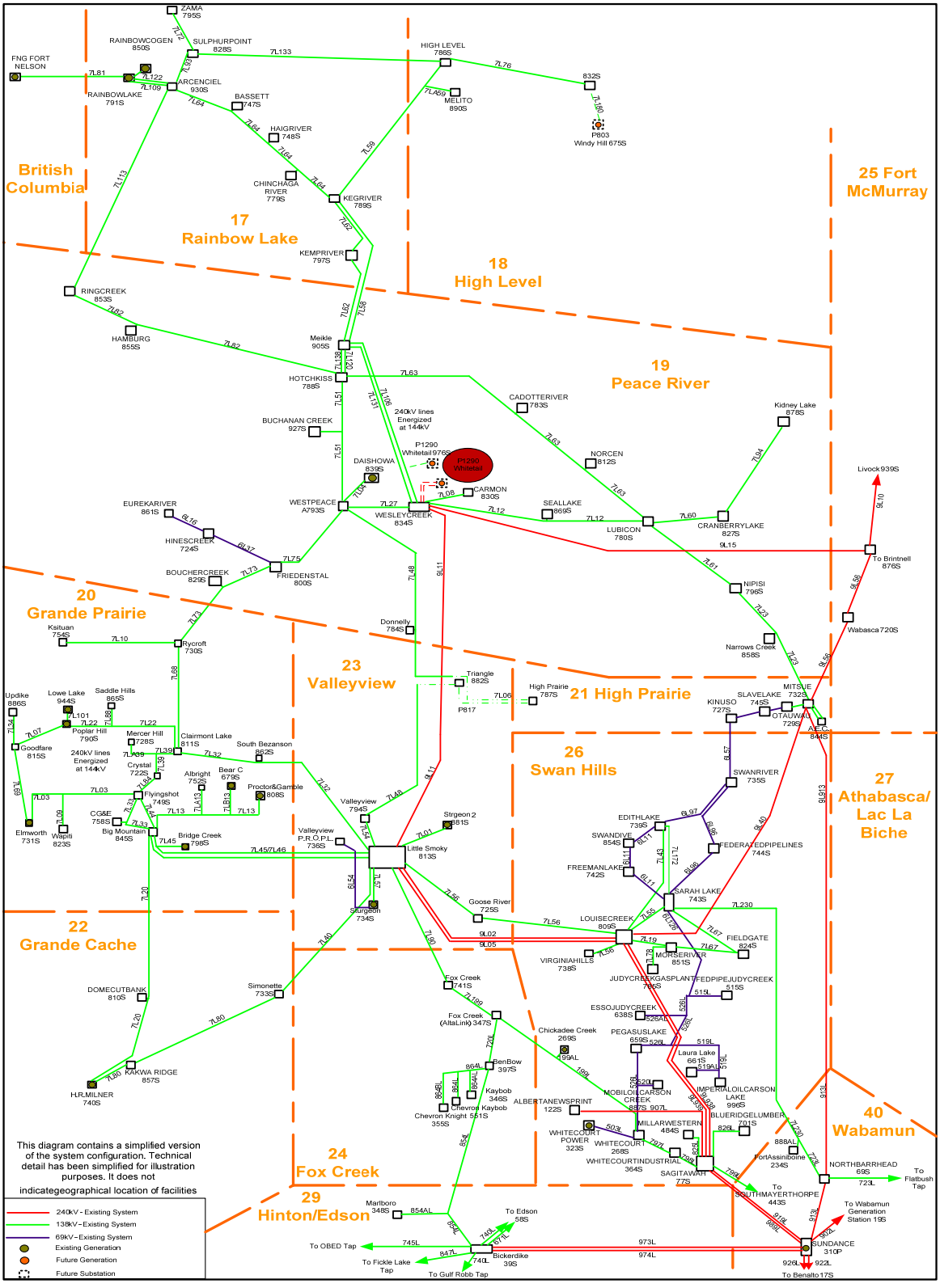

Figure 1: An overview of the existing system in the study areas

1.2.3. Studies Performed

Studies were performed for both pre-connection and post-connection system conditions corresponding to 2014. PTI PSS/E was used to simulate the electrical system.

Analysis of both pre-connection and post-connection conditions allows direct comparison between results and a determination of whether any issues identified are attributable to the new connection. Furthermore, the comparison allows a determination of whether any issues identified are independent, alleviated or aggravated by the new connection.

More specifically, the following system studies were performed for the system in pre-connection state:

- Power flow analysis (Category A and B and selected C)
- Transient stability analysis (Category B)
- Short-Circuit fault studies

The following studies were performed for each scenario for the post-connection:

- Power flow analysis (Category A and B and selected C)
- Transient stability analysis (Category B and selected C)
- Short-Circuit fault studies

1.3. Report Overview

The Executive Summary provides a high-level summary of the report and its conclusions. Section 1 provides an Introduction. Section 2 describes the Criteria, System Data, and Study Assumptions. Section 3 presents the Study Methodology. Section 4 discusses the Pre-Connection System Assessment. Section 5 presents the Connection Alternatives. Section 6 provides a Technical Analysis of the Connection Alternatives. Section 7 provides a Short-Circuit Analysis. Section 8 discusses Project Interdependencies. Section 9 presents a Summary and Conclusion.

2. Criteria, System Data, and Study Assumptions

2.1. Criteria, Standards, and Requirements

2.1.1. AESO Transmission Reliability Criteria

The AESO's Transmission Planning Criteria – Basis and Assumptions (Reliability Criteria)[1] were applied to evaluate system performance under Category A system conditions (i.e. all elements in-service, or N-0) and Category B contingencies (i.e. single element outage, or N-1), prior to and following the addition of the requested project development.

Category A represents a normal system with no contingencies and all facilities in service. Under these conditions, the system must be able to supply all firm load[2] and firm transfers to other areas. All equipment must operate within its applicable rating, voltages must be within their applicable range, and the system must be stable with no cascading outages.

Category B events result in the loss of any single specified system element under specified fault conditions with normal clearing. These elements are a generator, a transmission circuit, a transformer, or a single pole of a DC line. All equipment must operate within its applicable rating, voltages must be within their applicable range, and the system must be stable with no cascading outages. Planned or controlled interruption of electric supply to radial customers or some local network customers, connected to or supplied by the faulted element or by the affected area, may occur in certain areas without impacting the overall reliability of the interconnected transmission systems.

The AESO Thermal Loading Criteria requires that the continuous thermal rating of any transmission element is not exceeded under normal operating conditions. In this study, thermal limits are assumed to be one hundred per cent of the normal summer and winter ratings.

The normal minimum and maximum voltage limits specified by the Reliability Criteria are used to identify Category A system voltage violations, while the emergency minimum and maximum limits are used to identify Category B system violations. Table 1 shows the acceptable steady state voltages for different transmission voltage classes.

.

Table 1: Acceptable Range of Steady-State Voltages (kV)

Nominal	Emergency Minimum	Normal Minimum	Normal Maximum	Emergency Maximum
500	475	500	525	550
240	216	234	252	264
260 (NW & NE)	234	247	266	275

[1] Filed under separate cover

[2] "Firm load" refers to the load that the ISO and system members will use reasonable best efforts to supply without interruption.

Nominal	Emergency Minimum	Normal Minimum	Normal Maximum	Emergency Maximum
144	130	137	151	155
138	124	135	145	152
72	65	68.5	75.5	79
69	62	65.5	72.5	76

The post contingency voltage deviations following Category B events were checked against the guidelines in Table 2.

Table 2: Post-Contingency Voltage Deviation Guidelines

Parameter and Reference Point	Time Period		
	Post Transient (Up to 30s)	Post Auto Control (30s to 5min)	Post Manual Control (Steady State)
Voltage Deviation from Steady-State at Low-Voltage Load Bus	+/- 10%	+/-7%	+/-5%

Facility loading will be monitored to record any violations based on 100% static seasonal thermal rating of the associated equipment. All transmission elements must be operating within their ratings with no thermal overloads. Cascading outages or unplanned loss of load/generation following any simulated contingencies is not allowed. The Alberta system operating limits must be respected, including the minimum acceptable voltages. Any violation will be recorded in the engineering study report.

2.1.2. AESO . Rules

The AESO Voltage Control Practice ID # 2010-007RS will be applied to establish pre- contingency voltage profiles in the study region. The TCM Rule 302.1 will be followed in setting up the study scenarios and assessment of the connection impact. In addition, due regard will be given to the AESO Customer Connection Study Requirements Document and the Generation and Load Interconnection Standard.

The Reliability Criteria is the basis for planning the AIES. The transmission system will normally be designed to meet or exceed the Reliability Criteria under credible worst-case loading and generation conditions.

2.1.3. Other Requirements

Other AESO requirements to be considered, when performing connection studies are outlined below:

- Alberta Reliability Standards (studies per Appendix of the following standards: TPL-001-AB-0; TPL-002-AB-0; TPL-003-AB-0)

2.2. Load and Generation Assumptions

2.2.1. Load Assumptions

The study area load forecast used for this connection study is reflected in Table 3 and is from the AESO 2012 LTO.

Table 3: Northwest Region Coincident Load Forecast (2012LTO)

Area Name	2014 Summer Peak (MW)	2014 Summer Light (MW)	2014 Winter Peak (MW)
NW Region Total	1,090.00	945.2	1,177.00
AIL w/o Losses	10,673	7,833	11,768

As part of its planning responsibilities, the AESO updates its corporate forecasts routinely to ensure they reflect the latest economic projects, factors and timing. While the AESO has updated its regional forecasts since the connection studies were performed, the use of the current AESO load forecasts (2014 LTO) for the region would not materially alter the connection study results or affect its conclusions.

2.2.2. Generation Assumptions

The existing generation within NorthWest Alberta consists of coal, gas and steam cogeneration and wood waste plants. The generation assumed in each of the cases is shown in Table 4 together with the unit maximum capability.

Table 4: Local Generators in the Study Cases

Name	Bus	Symbol	Max Capacity (MW)	Generation Level Modelled in the Study Case (MW)		
				2014		
				WP	SL	SP
White Court Cogen	408	WHITEGE9-G1	31.8	24	24	24
Fort Nelson	1015	FORT NE9-G1	52.2	30	20	30
	1019	FORT NE8-G2	28.0	20	0	20
Rainbow Lake	1032	RBW 2-G2	44.1	35	13.92	35
	1035	RBW 4-G4	52.7	47	38	47
	1037	RBW5-G5	52.7	45	9.8	45
Daishowa	1087	DAISHOW8-G2	25.1	25	12	25
	1089	DAISHOW9-G1A	40.0	27.8	15	27.8
P&G	1146	P&G 8-G1A	49.2	46.4	44	46.4
HR Milner	1148	HR MILN9-G1	151.1	144	90	144
Valley View	1171	VALLEYG1-G1	52.7	50	0	50
	1173	VALLEYG2-G2	52.7	50	0	50
Swan Hills	2674	SWAN_H02-G1	18.6	16.0	16.0	16.0
P803 Mustus Biomass Generation	11013	WIND02-G	45	25.0	25.0	25.0
Poplar Hill	16118	POPLAR-4-G1	52.7	42	14	42
GPEP39	17101	GPEP39-G2	28.8	24	3.6	24
Lowe	17120	LOWE2-G1	79.2	79	0	79
Bear Creek	18142	BEARCK2-G1	58.0	48	14.3	48
	19142	BEARCK3-G2	38.6	36	11	36
Bridge Creek	19145	BRDGE C9-G1	6.0	5	3	5
Elmworth	20134	ELMWORTH-G5	3.4	3	0	3
	20134	ELMWORTH-G6	3.4	3	0	3
	20134	ELMWORTH-G7	3.4	3	0	3
	20134	ELMWORTH-G8	3.4	3	0	3
	20134	ELMWORTH-G9	9.2	3	0	3

2.2.3. Intertie Flow Assumptions

The study area is considered far from the BC, Montana and Saskatchewan interties with the AIES. The intertie flows will not have a significant impact on the study area.

2.3. System Projects

Table 5 lists system projects in northern Alberta that will be included in the study.

Table 5: Summary of System Projects Included in the Study Cases

Project No	System Facility Name	Projected In-Service Date
P-629	Heartland 500 kV Transmission Development (CTI)	Q3, 2014
P-786	Wabamun–Edmonton Debottlenecking Project	Q1, 2015
P-817	North-Central Region Transmission Development	Q4, 2014

2.4. Customer Connection Projects

Table 6 summarizes the relevant customer connection facilities presently identified to be in-service in the Study Area prior to or immediately following connection of the Project.

Table 6: Summary of Customer Connection Assumptions

	Customer Facility Name	Projected In-Service Date
P-1215	Millar Western Pulp	Q3, 2015
P-1294	Fortis Pegasus Lake 659S	Q3, 2015
P-803	Mustus Energy Biomass Generator	Q1, 2015

2.5. Facility Ratings and Shunt Elements

A summary of key transmission line rating and key transformer rating for the system elements in the study area are shown in Table 7 and Table 8 respectively.

A list of the shunt elements in the study area, including shunt element size and status are shown in Table **9**.

Table 7: Summary of Transmission Line Ratings

Line	Description	Voltage (kV)	Nominal Summer Rating (MVA)	Nominal Winter Rating (MVA)	Emergency Summer Rating (MVA)	Emergency Winter Rating (MVA)
1L359	Fort Nelson 852S - BC Border	144	200	237	200	237
7L03	Elmworth 731S - Wapiti 823S - Flyingshot 749S	144	73	73	73	73
7L07	Poplar Hill 790S - Goodfare 815S - Elmworth 731S	144	114	145	129	157
7L106	Meikle 905S - Wesley Creek 834S	144	300	300	376	389
7L109/7L122	Arcenciel 930S - Rainbow Lake 791S	144	165	211	188	227
7L113	Arcenciel 930S - Ring Creek 853S	144	114	145	129	157
7L12	Lubicon 780S - Seal Lake 869S	144	114	145	129	157
7L12	Seal Lake 869S - Wesley Creek 834S	144	114	145	129	157
7L120/7L138	Meikle 905S - Hotchkiss 788S	144	114	145	129	157
7L131	Meikle 905S - Wesley Creek 834S	144	300	300	376	389
7L133	High Level 786S - Sulphur Point 828S	144	114	145	129	157
7L20	HR Milner 740S -Big Mountain 845S	144	150	150	150	150
7L22	Poplar Hill 790S - Saddle Hill 865S	144	114	145	129	157
7L22	Saddle Hill 865S - Clairmont Lake 811S	144	114	145	129	157
7L23	Mitsue 732S - Nipisi 796S	144	114	145	129	157
7L27	Wesley Creek 834S - Peace River 793S	144	114	145	129	157
7L40	Little Smoky 813S - Simmonette 733S	144	114	145	129	157
7L44	Flyingshot 749S - Big Mountain 845S	144	146	149	147	187
7L48	Peace River 793S - Valleyview 794S	144	114	145	129	157
7L51	Hotchkiss 788S - West Peace River 793S	144	99	99	129	129
7L55	Louise Creek 809S - Sarah Lake 743S	144	99	99	129	129
7L58	Keg River 789S - Meikle 905S	144	114	146	129	157
7L59	Keg River 789S - High Level 786S	144	114	145	129	157
7L61	Lubicon 780S - Nipisi 796S	144	99	99	129	129
7L62	Keg River 789S - Meikle 905S	144	114	146	129	157
7L63	Hotchkiss 788S - Lubicon 780S	144	99	99	129	129
7L64	Arcenciel 930S - Keg River 789S	144	75	90	75	90
7L73	Friedenstal 800S - Rycroft 730S	144	99	99	129	129
7L75	Peace River 793S - Friedenstal 800S	144	99	99	129	129
7L80	HR Milner 740S -Simmonette 733S	144	75	75	75	75
7L81	Rainbow Lake 791S - BC Border	144	149	149	183	183

Line	Description	Voltage (kV)	Nominal Summer Rating (MVA)	Nominal Winter Rating (MVA)	Emergency Summer Rating (MVA)	Emergency Winter Rating (MVA)
7L82	Hotchkiss 788S - Ring Creek 853S	144	114	145	129	157
7L84	Crystal Lake 722S - Flyingshot 749S	144	149	149	188	189
7L93	Arcenciel 930S - Sulphur Point 828S	144	114	146	129	157
9L02/9L05	Little Smoky 813S - Louise Creek 809S	240	498	498	592	648
9L11	Wesley Creek 834S - Little Smoky 813S	240	498	498	592	648
9L15	Wesley Creek 834S - Brintnell 876S	240	549	701	627	759
9L40	Mitsue 732S - Louise Creek 809S	240	332	332	432	432
9L56	Wabasca 720S - Mitsue 732S	240	488	624	557	675
919L	Sundance 310P - Sagitawah 77S	240	489	606	587	727
989L	Sundance 310P - Sagitawah 77S	240	499	599	587	727
9L939/9L938	Louise Creek 809S - Sagitawa 77S	240	498	498	592	648

Table 8: Summary of Transformer Ratings

Transformers			
Substation Name and Number	**Transformer ID**	**Transformer Voltages (kV)**	**MVA Rating**
Wesley Creek	T1	240/144/25	300
	T2	240/144/25	300

Table 9: Summary of Shunt Elements in the Study Area

		Capacitors		Reactors		SVC / Sync Condenser	
Station Name and Number	**Voltage (kV)**	**Capacitor (MVar)**	**Status in Study**	**Reactor (Mvar)**	**Status in Study**	**SVC (Mvar)**	**Status in Study**
Arcenciel 930S	144	1x 30	Y				
	13.8					+/- 30 SVC	Y
	13.8					+50/-30 Sync Condenser	Y
Big Mountain 845S	144	1x 27.54	Y				
Clairmont Lake 811S	144	1x 27	Y				
Crystal Lake 722S	15	1x27.17	Y				
Cranberry Lake 827S	144					+/- 30	Y
Friedenstal 800S	144	1x 18	Y				

		Capacitors		Reactors		SVC / Sync Condenser	
Station Name and Number	**Voltage (kV)**	**Capacitor (MVar)**	**Status in Study**	**Reactor (Mvar)**	**Status in Study**	**SVC (Mvar)**	**Status in Study**
	25	1x 4.8	Y				
Goodfare 815S	138	2x13.77	Y				
High Level 786S	15					+/- 30	Y
High Level 786S	25	4x2.5	Y				
HR Milner 740S	144	1X5.4	Y				
Hotchkiss 788S	144			1x10	Y		
Keg River 789S	144			1x 9.18 1x13.16	Y Y		
Ksituan 754S	144	1x 15	Y				
Little Smoky 813S	144	3x 30	Y				
	34.5					+/- 100	Y
	25			2x 20	Y		
Lubicon 780S	144	2x 30	Y				
Louise Creek 809S	144	1x48.49	Y				
	25			1x20 1x10	Y		
Mitsue 732S	25			2x 20	Y		
Peace River 793S	144	2x 15	Y				
Poplar Hill 790S	144	1x 25	Y				
	25	2x 1.2, 2x 2.4, 1x 5.4	Y Y Y				
Wesley Creek 834S	240			1x 25	Y		
	25			1x 20	Y		

2.6. Dynamic Data and Assumptions

The dynamic model for the four 50 MW units, is shown in Table 10, Table 11, Table 12, and Table 13.

Table 10: Generator Dynamic Model Data

Generator Dynamic Data (GENROU model)											
T'do	**T"do**	**T'qo**	**T"qo**	**H**	**D**	**Xd**	**Xq**	**X'd**	**X'q**	**X"d**	**Xl**
9.6700	0.050	2.9500	0.050	1.1930	0.00	2.3500	2.1500	0.20000	0.24000	0.14400	0.088
S(1.0)	**S(1.2)**										
1.55	2.50										

Table 11: Generator Exciter Dynamic Data

Exciter Dynamic Data (REXSYS model)											
TR	**Kvp**	**Kvi**	**Vimax**	**Ta**	**TB1**	**TC1**	**TB2**	**TC2**	**VRMAX**	**VRMIN**	**KF**
0	28	28	999	0	0	0	0	0	15.52	-15.52	0
TF	**TF1**	**TF2**	**FBF**	**KIP**	**KII**	**TP**	**VFMAX**	**VFMIN**	**KH**	**KE**	**TE**
1	0	0	1	20	20	0	15.52	-15.52	1	0.4	0.4
KC	**KD**	**E1**	**SE(E1)**	**E2**	**SE(E2)**	**F1IMF**					
0.1	0.6	3.256	1.00E-03	4.342	2.00E-03	0					

Table 12: Generator Stabilizer Dynamic Data

Stabilizer Dynamic Data (PSS2B model)											
ICS1	**REMBUS 1**	**ICS2**	**REMBUS2**	**M**	**N**	**Tw1**	**Tw2**	**T6**	**Tw3**	**Tw4**	**T7**
1	0	3	0	5	1	2	2	0	2	0	2
KS2	**KS3**	**T8**	**T9**	**KS1**	**T1**	**T2**	**T3**	**T4**	**T10**	**T11**	**VSI1MAX**
0.179	1	0.5	0.1	15	0.15	2.00E-02	0.1	1.50E-02	0	0	99
VSI2MIN	**VSI1MAX**	**VSI2MIN**	**VSTMAX**	**VSTMIN**							
-99	99	-99	0.1	-0.1							

Table 13: Generator Governor Dynamic Data

Governor Dynamic Data (GGOV1 model)											
R	**Tpelec**	**Maxerr**	**Minerr**	**Kpgov**	**Kigov**	**Kdgov**	**Tdgov**	**Vmax**	**Vmin**	**Tact**	**Kturb**
5.00E-02	1	2.30E-02	-2.30E-02	3	1.2	0	1	1.2	0.17	0.3	1.3
Wfnl	**Tb**	**Tc**	**Teng**	**Tfload**	**Kpload**	**kiload**	**Ldref**	**Dm**	**Ropen**	**Rclose**	**Kimw**
0.22	0.1	0	0	0.3	1	3.3	0.918	0	99	-99	0
Aact	**Ka**	**Ta**	**Trate**	**db**	**Tsa**	**Tsb**	**Rup**	**Rdown**	**Rselect**	**Flag**	
99	10	0.1	50	0	1	1	99	-99	1	1	

Dynamic date file posted on the AESO website were used for all other generators, Synchronous condensers and other system elements.

2.7. Protection Fault Clearing Times

Fault clearing times are shown in Table 14.

Table 14: Summary of Protection Fault Clearing Times

Line ID	Tele – protection Y/N	Faulted End	Tripping End	Total Clearing Time (cycles)
9L15	Y	Wesley Creek (834S)	Wesley Creek (834S)	5
			Brintnell (876S)	7
		Brintnell (876S)	Brintnell (876S)	5
			Wesley Creek (834S)	7
9L11	Y	Wesley Creek (834S)	Wesley Creek (834S)	5
			Little Smoky (813S)	7
		Little Smoky (813S)	Little Smoky (813S)	5
			Wesley Creek (834S)	7
7L12	N	Wesley Creek (834S)	Wesley Creek (834S)	6
			Lubicon (780S)	24
		Lubicon (780S)	Lubicon (780S)	6
			Wesley Creek (834S)	24
7L63	N	Hotchkiss (788S)	Hotchkiss (788S)	6
			Lubicon (780S)	36
		Lubicon (780S)	Lubicon (780S)	6
			Hotchkiss (788S)	24
7L04	Y	Daishowa (839S)	Daishowa (839S)	6
			West Peace River (793S)	8
		West Peace River (793S)	West Peace River (793S)	6
			Daishowa (839S)	8
7L27	N	West Peace River (793S)	Peace River (793S)	6
			Wesley Creek (793S)	24
		Wesley Creek (793S)	Wesley Creek (793S)	6
			Peace River (793S)	24
7L51	N	Hotchkiss (788S)	Hotchkiss (788S)	6
			Peace River (793S)	24
		West Peace River (793S)	Peace River (793S)	6
			Hotchkiss (788S)	24
7L58	Y	Keg River (789S)	Keg River (789S)	6
			Meikle (905S)	8
		Meikle (905S)	Meikle (905S)	6
			Keg River (789S)	8
7L62	Y	Keg River (789S)	Keg River (789S)	6
			Meikle (905S)	8
		Meikle (905S)	Meikle (905S)	6
			Keg River (789S)	8
7L120	Y	Hotchkiss (788S)	Hotchkiss (788S)	6
			Meikle (905S)	8
		Meikle (905S)	Meikle (905S)	6

Line ID	Tele – protection Y/N	Faulted End	Tripping End	Total Clearing Time (cycles)
			Hotchkiss (788S)	8
7L138	Y	Hotchkiss (788S)	Hotchkiss (788S)	6
			Meikle (905S)	8
		Meikle (905S)	Meikle (905S)	6
			Hotchkiss (788S)	8
7L131	Y	Meikle (905S)	Meikle (905S)	6
			Wesley Creek (793S)	8
		Wesley Creek (793S)	Wesley Creek (793S)	6
			Meikle (905S)	8
7L106	Y	Meikle (905S)	Meikle (905S)	6
			Wesley Creek (793S)	8
		Wesley Creek (793S)	Wesley Creek (793S)	6
			Meikle (905S)	8

2.8. Voltage Profile Assumptions

Voltage Control Practice ID # 2010-007RS was used to establish normal system (i.e. pre-contingency) voltage profiles for all area busses prior to commencing any studies. Key study area bus voltage ranges are shown in Table 15.

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Table 15: Summary of Voltage at Key Nodes in the Study Region

Bus Name & kV	Nominal Voltage (kV)	Minimum Voltage (kV)	Desired Range (kV)
Big Mountain 138	144	144	147 - 152
Clairmont Lake 138	144	144	147 – 152
Cranberry 138	144	146	148 – 150
Crystal Lake 138	144	144	147 - 151
Flyingshot 138	144	144	147 - 151
High Level 138	144	144	148 - 151
Hotchkiss 138	144	144	148 - 151
HR Milner 138	140	140	147 - 150
Keg River 138	144	144	148 - 151
Little Smoky 138	144	150	150 - 152

Bus Name & kV	Nominal Voltage (kV)	Minimum Voltage (kV)	Desired Range (kV)
Little Smoky 240	240	261	262 - 268
Louise Creek 138	144	144	146 - 152
Louise Creek 240	240	254	257 - 268
Lubicon 138	144	146	148 - 150
Mitsue 138	144	140	147 - 151
Mitsue 240	240	248	255 - 268
Poplar Hill 138	144	140	145 - 151
Rainbow Lake 138	144	137	148 - 150
Wesley Creek 138	144	149	150 - 152
Wesley Creek 240	240	262	262 - 268
West Peace 138	144	149	150 - 152

3. Study Methodology

3.1. Study Objectives

The objectives of the study were the following:

- To assess the impact of the Whitetail Peaking Plant generation on the performance of the transmission system in the study area.
- Identify any reliability concerns associated with the connection of the project the AIES.
- Propose and assess possible solutions to any system performance violations of reliability criteria that were identified.

In order to identify any reliability concerns, power flow, transient stability, and short circuit analyses were performed. Whenever any reliability concerns were identified the system response was compared before and after the connection of the Project to confirm whether the issue is caused or aggravated by the addition of the Project.

3.2. Study Scenarios

The system study was performed using 2014 summer peak, summer light and winter peak load cases. More explicitly, the study cases were derived from the following 2012 AESO's planning base cases:

- 2014 summer peak (PBCS2012_2014SP_V32_R1.sav),
- 2014 summer light, (PBCS2012_2014SL_V32_R1.sav),

- 2014 winter peak (PBCS2012_2014WP_V32_R1.sav),

The Project ISD was originally Q3, 2014 and was subsequently changed to Q3 2016. The 2014 SP, 2014 SL and 2014 WP, scenarios were studied using the AESO 2012 Long-term Outlook (2012 LTO) forecast. The AESO 2014 Long-term Outlook forecast has been posted on the AESO website. During the time period from the initial Q3, 2014 to the later Q3, 2016, there are neither system upgrades in the NW Region, or material changes to local load and generation development. Therefore the power flow, transient stability analysis performed for the 2014 SP, 2014 SL and 2014 WP conditions remain valid to evaluate the impact of the proposed Whitetail Peaking Generation Station on the AIES with 2016 SP, 2016 SL and 2016 WP conditions.

The study scenarios are summarized in Table 16.

Table 16: Study Scenarios

Scenario	Year	Load Condition
1	2014	Winter Peak (WP)
2	2014	Summer Light (SL)
3	2014	Summer Peak (SP)

3.3. Connection Studies Carried Out

The analysis performed included:

1. Power flow (Category A, B and selected C for pre- and post-connection)
2. Short circuit analysis (2014 pre- and post-connection and 2022 pre- and post-connection)
3. Transient stability analysis (Category B pre-connection and Category B and selected C for post-connection)

3.4. Power Flow Analysis

Power flow studies were performed for scenarios shown in Table 17. Cases both with and without the Project were analyzed in order to determine whether any identified criteria violations are caused by the new project, exacerbated by the new project or whether they exist prior to the project and the project has no adverse impact.

Table 17: Scenarios analyzed in power flow studies

	With Project 1290		Without Project 1290	
Study Case	**Whitetail Facility Generation**	**Whitetail Facility Load**	**Whitetail Facility Generation**	**Whitetail Facility Load**
2014 SP	200 MW	2 MW	0 MW	0 MW
2014 SL	200 MW	2 MW	0 MW	0 MW
2014 WP	200 MW	2 MW	0 MW	0 MW

The analysis was performed as per the Reliability Criteria to identify thermal overloads and voltage deviations for all considered contingencies.

3.4.1. Contingencies Studied

Analysis was performed for the Category A, Category B and selected Category C contingencies shown in Table 18 and Table 19.

Table 18: Contingency List – B level

Contin-gency	System Condition	Outage	From Substation	To Substation
0	All transmission elements in service (N-0)	**-**	**-**	**-**
1	Line 9L15 out of service (N-1)	9L15	WESLEYCREEK	Brintnell
2	Line 9L11 out of service (N-1)	9L11	WESLEYCREEK	LITTLESMOKY
3	Line 9L05 out of service (N-1)	9L05	LITTLESMOKY	LOUISECREEK
4	Line 9L40 out of service (N-1)	9L40	MITSUE	LOUISECREEK
5	Line 913L out of service (N-1)	913L	NORTHBARRHEAD	MITSUE
6	Line 9L56 out of service (N-1)	9L56	WABASCA	MITSUE
7	Line 9L10 out of service (N-1)	9L10	WABASCA	Brintnell
8	Line 9L02 out of service (N-1)	9L02	LITTLESMOKY	LOUISECREEK
9	Line 7L27 out of service (N-1)	7L27	WESLEYCREEK	WESTPEACE
10	Line 7L12 out of service (N-1)	7L12	WESLEYCREEK	LUBICON
11	Line 7L61 out of service (N-1)	7L61	LUBICON	NIPISI
12	Line 7L23 out of service (N-1)	7L23	NIPISI	MITSUE
13	Line 7L131 out of service (N-1)	7L131	WESLEYCREEK	Meikle
14	Line 7L06 out of service (N-1)	7L06	WESTPEACE	HIGHPRAIRIE
15	Line 7L48 out of service (N-1)	7L48	HIGHPRAIRIE	VALLEYVIEW
16	Line 7L54 out of service (N-1)	7L54	VALLEYVIEW	LITTLESMOKY
17	Line 7L45 out of service (N-1)	7L45	LITTLESMOKY	BIGMOUNTAIN
18	Line 7L46 out of service (N-1)	7L46	BIGMOUNTAIN	LITTLESMOKY
19	Line 7L40 out of service (N-1)	7L40	LITTLESMOKY	SIMONETTE
20	Line 7L80 out of service (N-1)	7L80	SIMONETTE	HR MILNER
21	Line 7L20 out of service (N-1)	7L20	HR MILNER	BIGMOUNTAIN
22	Line 7L63 out of service (N-1)	7L63	HOTCHKISS	LUBICON
23	Line 7L58 out of service (N-1)	7L58	KEGRIVER	Meikle
24	Line 7L04 out of service (N-1)	7L04	WESTPEACE	DAISHOWA
25	Line 7L51 out of service (N-1)	7L51	WESTPEACE	HOTCHKISS
26	Line 7L58 out of service (N-1)	7L58	KEGRIVER	Meikle
27	Line 7L120 out of service (N-1)	7L120	HOTCHKISS	Meikle
28	Line 7L01 out of service (N-1)	7L01	LITTLESMOKY	Sturgeon
29	Line 7L44 out of service (N-1)	7L44	FLYINGSHOTLAKE	BIGMOUNTAIN
30	Line 7L33 out of service (N-1)	7L33	BIGMOUNTAIN	FLYINGSHOTLAKE
31	Line 7L75 out of service (N-1)	7L75	WESTPEACE	FRIEDENSTAL
32	Line 7L73 out of service (N-1)	7L73	RYCROFT	FRIEDENSTAL

Contin-gency	System Condition	Outage	From Substation	To Substation
33	Line 7L68 out of service (N-1)	7L68	RYCROFT	CLAIRMONTLAKE
34	Line 7L84 out of service (N-1)	7L84	CRYSTALLAKE	FLYINGSHOTLAKE
35	Line 7L39 out of service (N-1)	7L39	CRYSTALLAKE	CLAIRMONTLAKE
36	Line 7L03 out of service (N-1)	7L03	FLYINGSHOTLAKE	ELMWORTH
37	Line 7L07 out of service (N-1)	7L07	POPLARHILL	ELMWORTH
38	Line 7L22 out of service (N-1)	7L22	POPLARHILL	CLAIRMONTLAKE

Table 19: Contingency List – C level

Contin-gency	System Condition	Outage	From Substation	To Substation
40	C5 of 7L106 and 7L131	7L106	Wesley Creek 834S	Meikle 905S
		7L131	Wesley Creek 834S	Meikle 905S
		7L58	Meikle 905S	Keg River 789S
		7L12	Wesley Creek 834S	Seal Lake 869S
41	C5 of 7L120 and 7L138	7L120	Meikle 905S	Hotchkiss 788S
		7L138	Meikle 905S	Hotchkiss 788S
		7L62	Meikle 905S	Kemp River 797S
42	834S breaker 703 is open and 7L12 near end fault	7L106	Wesley Creek 834S end open	
		7L12	Wesley Creek 834S	Lubicon 780S
43	834S breaker 704 is open and 901T-834S transformer fault	7L106	Wesley Creek 834S end open	
		901T-834S	240/144/25 kV 901T-834S Transformer	

3.5. Voltage Stability (PV) Analysis

Voltage stability analysis was not performed.

3.6. Short-Circuit Analysis

Short circuit analysis was performed for the 2014 and 2022 winter peak cases with and without the proposed development.

Maximum fault levels were determined for 240 kV buses in the study region and 144 kV buses at substations within the area where the project is located and in the vicinity of the Wesley Creek 240/144 kV substation.

Analysis included three phase and single line to ground faults. Fault levels are provided with currents in kilo amperes and per unit positive and zero sequence impedances.

3.7. Transient Stability Analysis

Transient stability studies were performed using the 2014 summer light and winter peak cases for pre- and post-connection of the Whitetail generation comprising four 50 MW units. The transient stability analysis was performed for the Category B near end and far end faults on the 240 kV and 144kV elements shown in Table 18, and selected Category C near end faults for elements shown in Table 19.

Stability plots for relevant quantities including bus voltage, machine relative angle, active and reactive power outputs for the proposed generating units were developed along with relative machine angles for selected machines and buses close to the connection point.

For line faults, a sustained 3 phase fault was assumed at both the near and far end of transmission lines and is designated as L-A and L-B respectively, where –A is the substation the line is from and –B is the substation the line is going to. Assumed clearing times are shown in Table 14.

4. Pre-Connection System Assessment

4.1. Pre-Connection Power Flow Analysis

A power flow contingency analysis including Category A 'N-0' and Category B 'N-1' and select Category C 'N-2' contingencies was performed using the 3 study scenarios without the proposed Project 1290. The results of the steady state analysis are illustrated by the plots in Attachment C.

Thermal overloads were identified in the study area for pre-connection scenarios. The overload conditions are summarized in Table 20.

Table 20: Pre-connection Thermal Overloads

No	Scenario	Contingency	Branch	Pre-Connection	
				Power Flow (MVA)	% Loading
1	2014WP	Cont 21 – 7L20	7L80 – HR Milner to Simonett 7L40 – Simonett to Little Smoky	124 116	162 102
3	2014SP	Cont 21 – 7L20	7L80 – HR Milner to Simonett 7L40 – Simonett to Little Smoky	120 112	160 98

The 7L20 contingency thermal overload in Table 20 is a result of the contingency resulting in a loss of 7L20, HR Milner to the Big Mountain connection. The remaining line, 7L80 does not have the capability to accept the full HR Milner output. This is an existing system constraint in the local area and is currently managed by the AESO and ATCO Electric Ltd.'s real time operating practice by following ATCO Electric Ltd.'s policies for line loading. The Project 1290 has no material impact to this existing constraint; this constraint is not further discussed in this report.

No relevant post contingency, steady state voltage deviations that would violate AESO Reliability Criteria were observed on the system in 2014 cases.

4.2. Pre-Connection Transient Stability Analysis

Pre-connection transient stability analysis was performed for all Category B contingencies shown in Table 18.

An obvious loss of synchronism due to islanding generators in contingencies 24 (7L04 Peace River to Daishowa), 28 (7L101 Little Smoky to Sturgeon) and 30 (7L33 Big Mountain to Flying Shot) was observed.

As expected, the most severe system disturbances were caused by faults in the vicinity of the existing units. As an example, Figure 2 shows the system response to a fault in vicinity of HR Milner - Contingency 21.

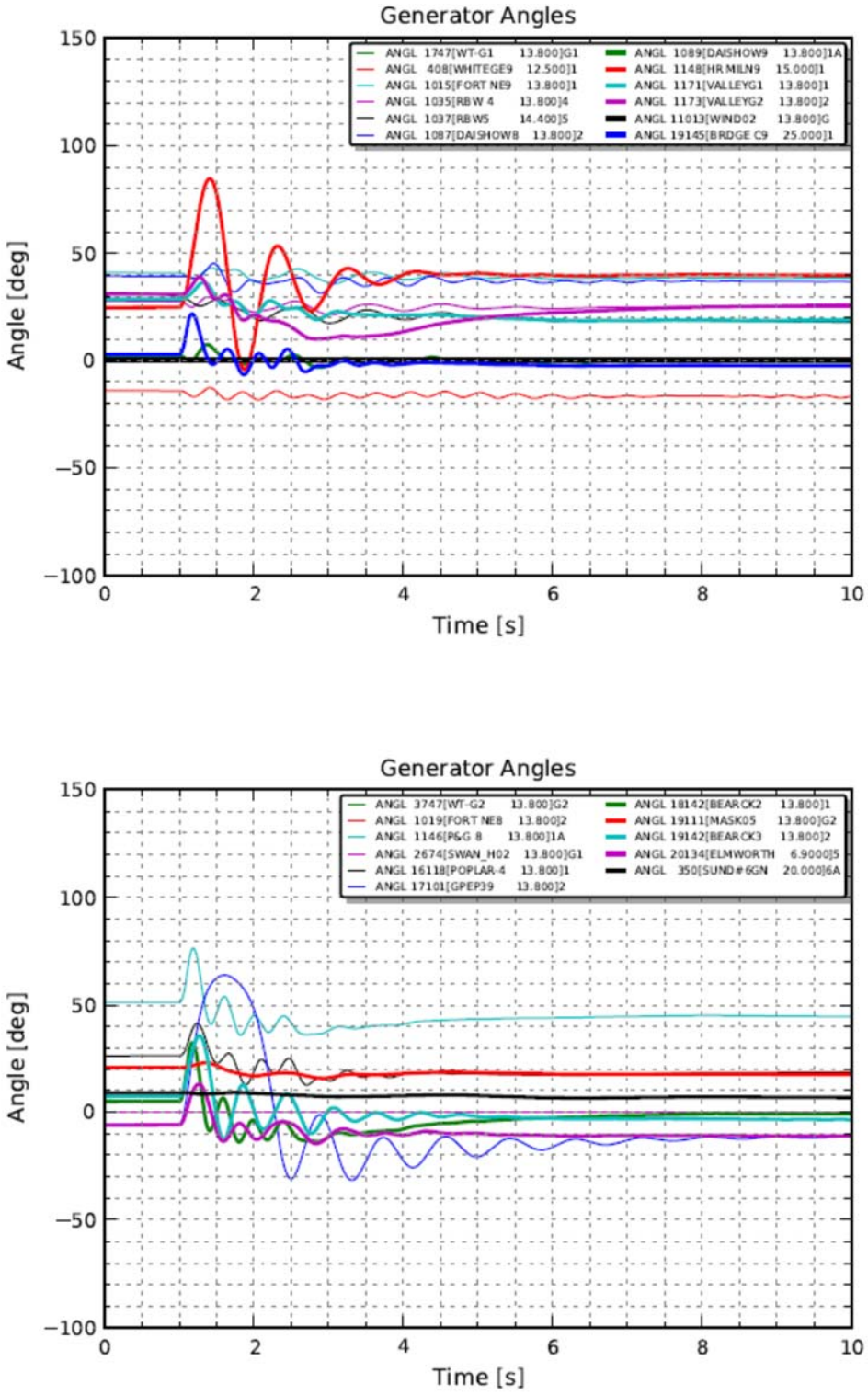


Figure 2: Example of pre-connection system response to fault in vicinity of HR Milner (Cont 21A fault on 7L20 at HR Milner end), 2014 Winter Peak Scenario.

5. Connection Alternatives

5.1. Overview

The Whitetail Peaking Generation Station plant is located approximately 13.5 km to the north of the existing Wesley Creek 834S substation and approximately 0.3 km from 7L106.

Three alternatives were considered for the connection of the Project:

- Alternative 1 - a radial connection to Wesley Creek substation at 144 kV.
- Alternative 2 - an In/Out 144 kV connection to 7L106 between Wesley Creek 834S and Meikle 905S.
- Alternative 3 (preferred alternative) - a tap 144 kV connection to 7L106.

5.2. Connection Alternatives Evaluated

5.2.1. Alternative 1 – 144kV Connection to the existing Wesley Creek 834S substation

Connection Alternative-1 will involve the following system developments:

- Approximately 13.5 km of single circuit 144 kV line from the Whitetail peaking station to the existing Wesley Creek 834S substation.
- Installing one (1) 144kV circuit breaker and associated devices at Wesley Creek substation.
- Constructing the Whitetail peaking station as stated in Alternate 3.

Alternative 1 is shown in Figure 3 and Figure 4. Figure 3 shows the location of the project with respect to the Northwest region. Figure 4 shows the details of interconnection.

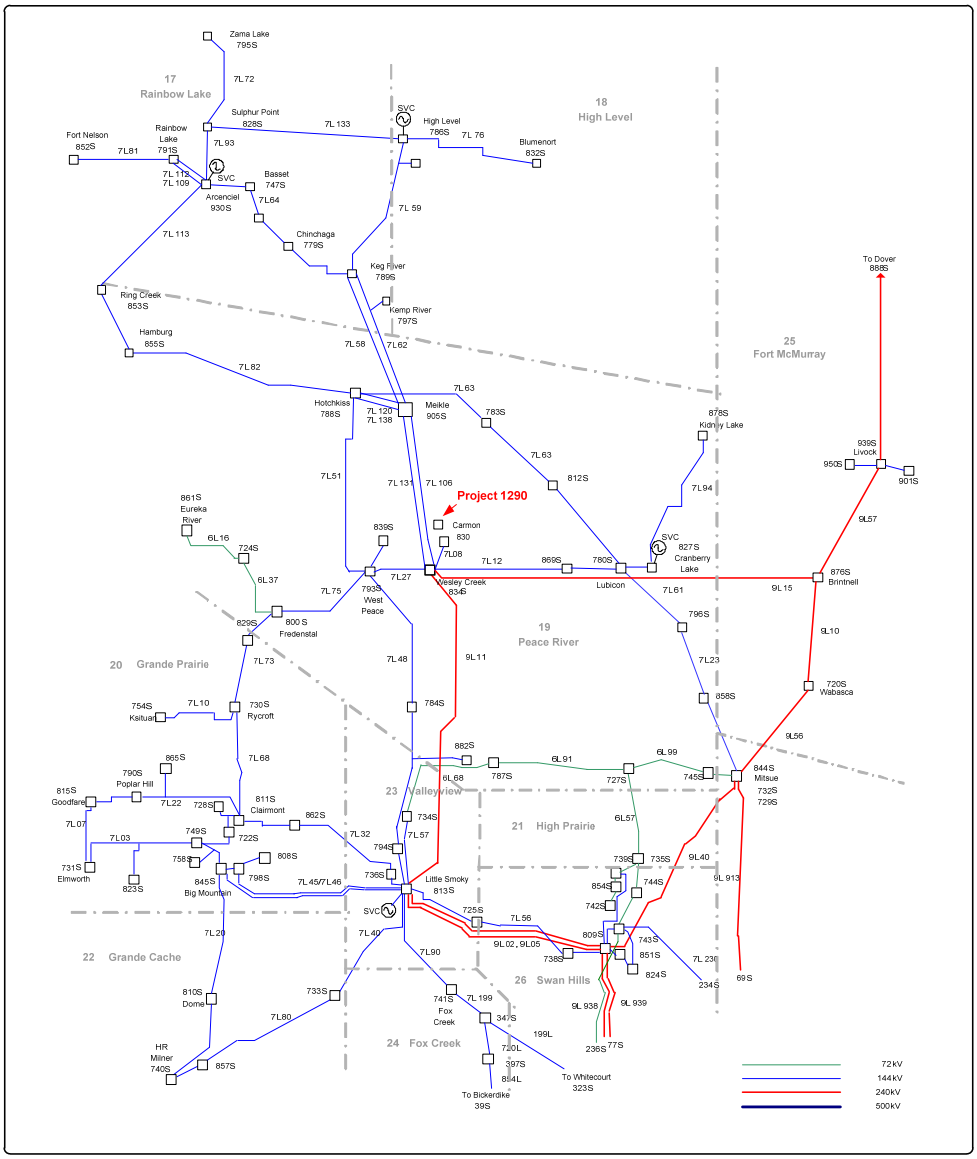


Figure 3: Project 1290 connection Alternative 1

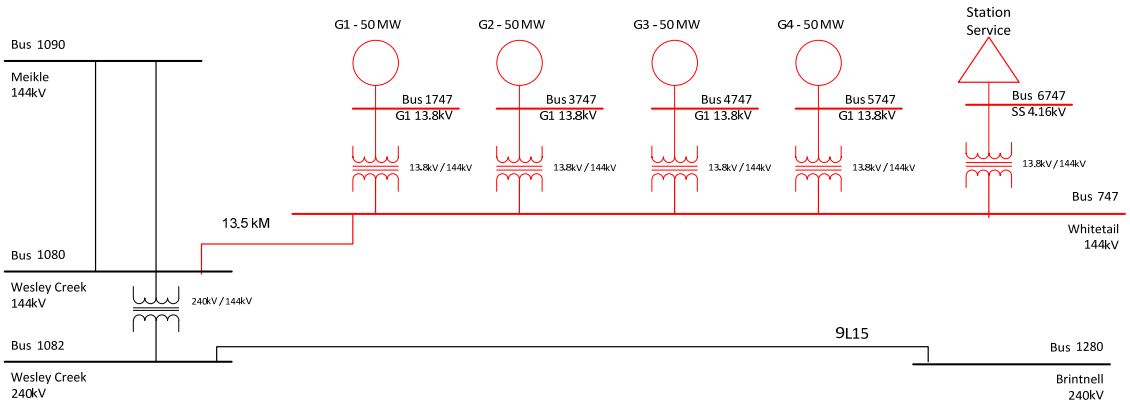


Figure 4: Enbridge Whitetail Peaking Station – Alternative 1

5.2.2. Alternative 2 – In/Out Connection to 7L106 between Wesley Creek 834S and Meikle 905S

Alternative 2 is an in and out connection to 7L106 line approximately 13.5 km north of Wesley Creek substation.

This connection alternative involves the following developments:

- Constructing a switching station adjacent to the Whitetail peaking station. The switching station will be complete with a ring bus configuration with three (3) 144kV circuit breakers.
- Modifications to circuit 7L106 and construction of approximately 0.3 km of double circuits 144 kV line to the switching station.
- Constructing the Whitetail peaking station as stated under Alternate 3.

Alternative 2 is shown in Figure 5 and Figure 6. Figure 5 shows the location of the project with respect to the Northwest region. Figure 6 shows the single line diagram of the interconnection.

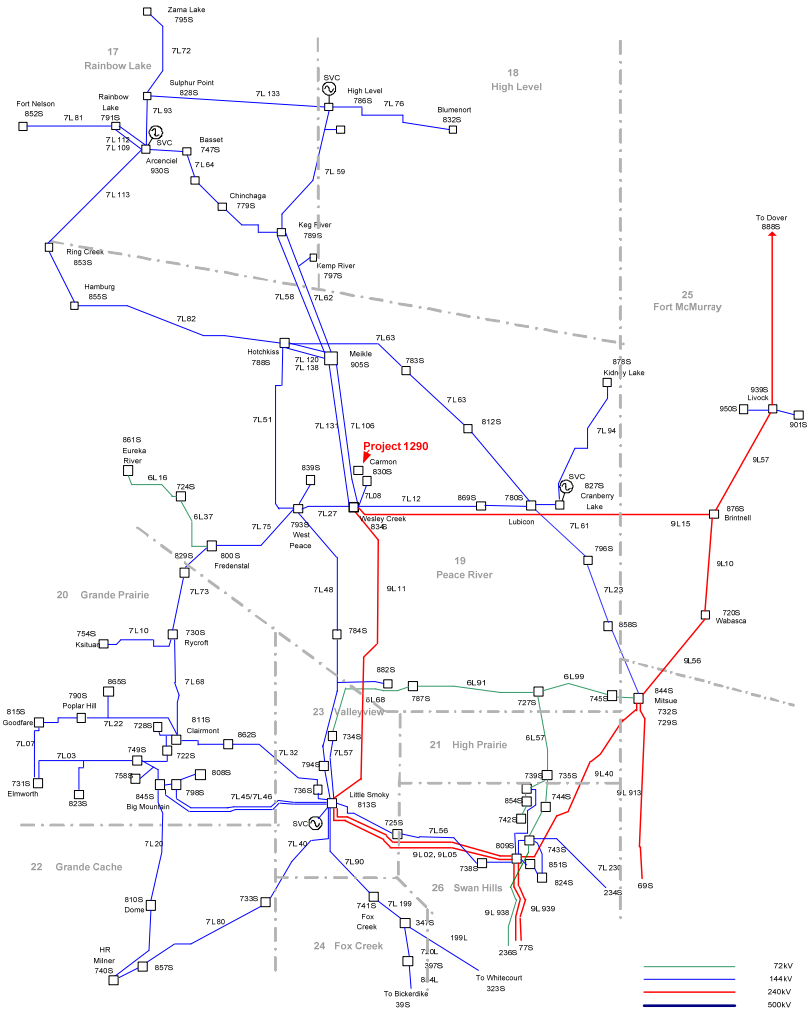


Figure 5: Project 1290 connection Alternative 2

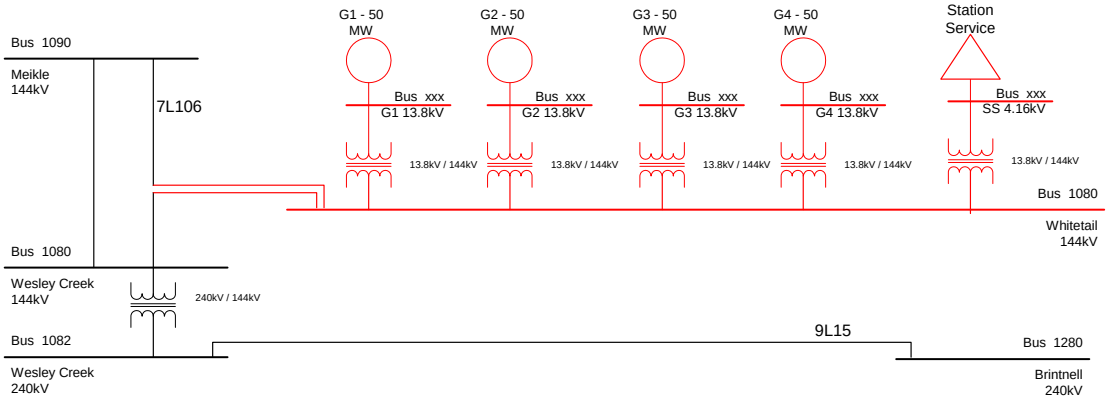


Figure 6: Enbridge Whitetail Peaking Station – Alternative 2

5.2.3. Alternative 3 – Tap Connection to 7L106 between Wesley Creek 834S and Meikle 905S

Alternative 3 is a tap connection to 7L106 line at the point approximately 13.5 km north of Wesley Creek substation.

Alternative 3 involves a modification to the existing line 7L106 to convert it to three terminal line.

This connection alternative involves the following developments:

- Modifications to circuit 7L106 and construction of approximately 0.3 km single circuit 144kV line tap to the customer's proposed substation.
- Installing a line terminal breaker at Whitetail facilities; this breaker will form the inter-connection point to the system. This breaker is located within the customer's site.
- Constructing the Whitetail peaking station by installing:
    - Four (4) 144/13.8 kV 40/60/75 MVA unit transformers with associated 144kV (240 kV) circuit breakers, and
    - Four (4) 13.8 kV/800V 2/2.66 MVA station service transformer.

Alternative 3 is shown in Figure 7 and Figure 8. Figure 7 shows the location of the project with respect to the Northwest region. Figure 8 shows the details of interconnection.

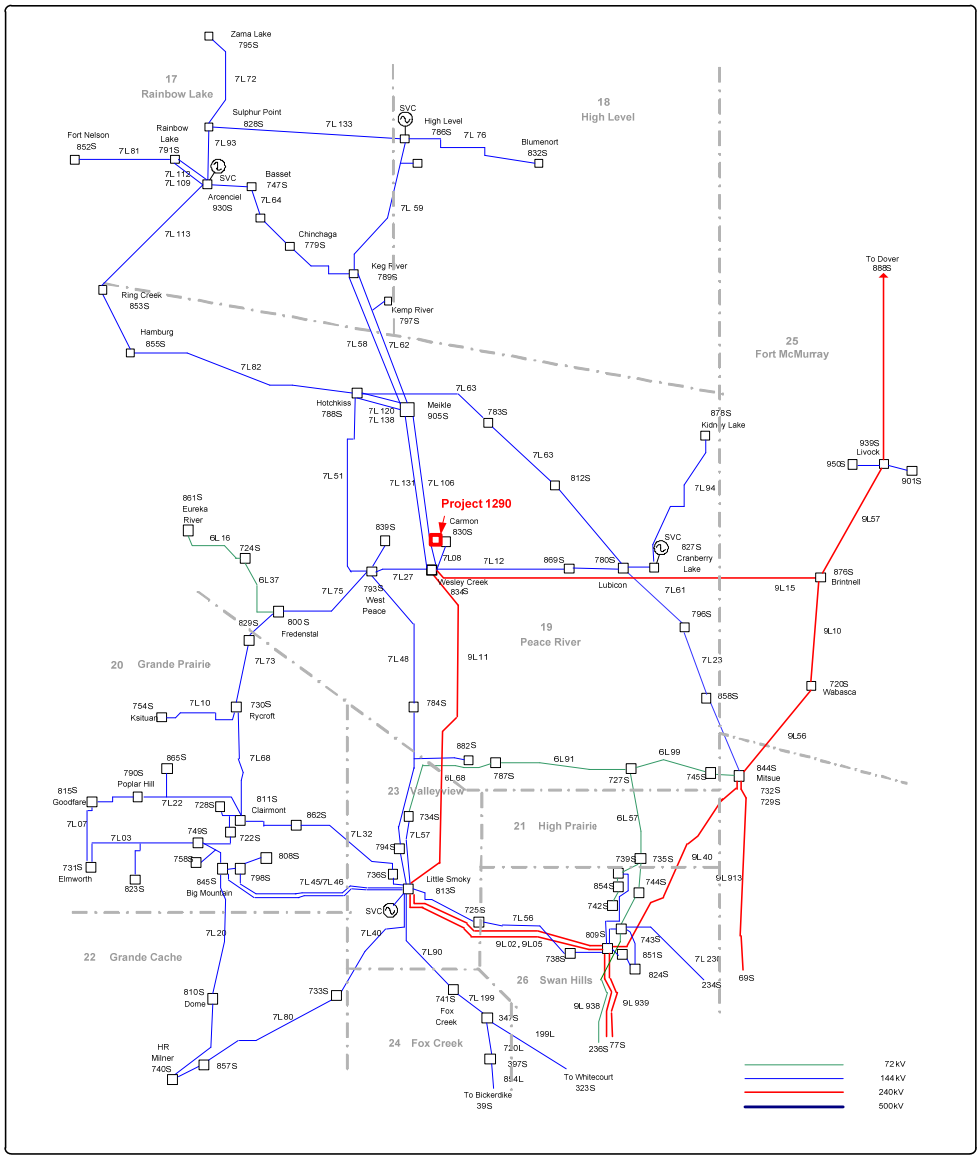


Figure 7: Project 1290 connection Alternative 3 - Preferred Alternative

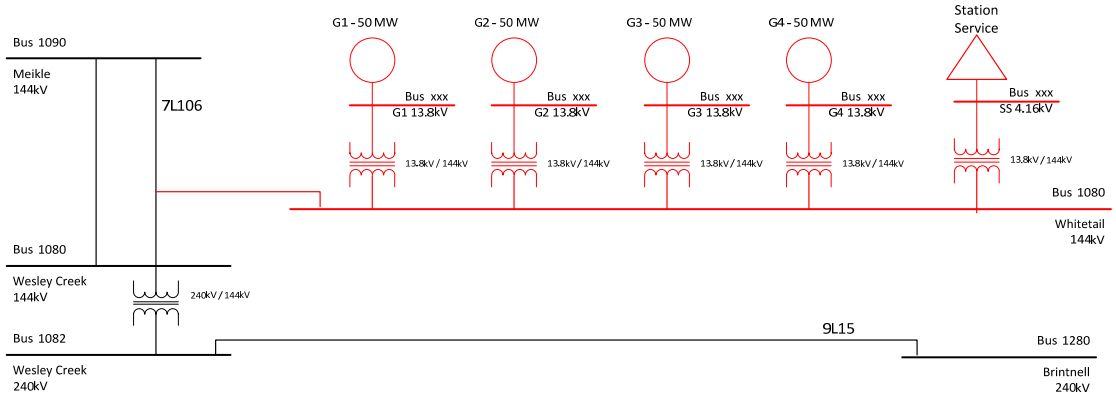


Figure 8: Enbridge Whitetail Peaking Station – Alternative 3

5.2.4. Connection Alternatives Selected for Detailed Study

Alternative 1 is a 144kV radial connection to Wesley Creek substation. Approximately 13.5 km of single circuit 144 kV line from the Whitetail peaking station to the existing Wesley Creek 834S substation would need to be built for this alternative. The existing Wesley Creek substation would need to be modified to accommodate the radial connection.

Alternative 2 is an in and out connection to 7L106. Although only 0.3 km of double circuit 144 kV line would be needed; this alternative involves the construction of a switching station to be completed with a ring bus configuration with three 144kV circuit breakers.

Alternative 3 is a tap connection to 7L106 line. Only 0.3 km of new single circuit 144 kV line will be needed.

Alternative 1 was not selected for study. This alternative involves 13.5 km of additional transmission line as well as development at 834S Wesley Creek. These factors eliminate this alternative on the basis of higher economic and environmental impacts.

Compared to Alternative 2, Alternative 3 avoids the need to build a 144 kV switching station.

Alternative 3 is therefore the least expensive connection option and selected as the preferred connection alternative. Detailed studies were conducted for Alternative 3.

6. Technical Analysis of the Connection Alternatives

Results of the analysis performed for the connection alternatives are discussed in detail in this section.

6.1. Alternative 3 (Preferred Alternative)

Alternative 3 consists of a tap interconnection to 144kV line 7L106 approximately 13.5 km north of Wesley Creek substation (T-Tap). 7L106 is one of the two lines connecting Wesley Creek with Meikle substation. These two lines provide the bulk of the interconnection with the electrical system further northwest.

Alternative 3 is the preferred alternative.

6.1.1. Power Flow Analysis (Alternative 3)

The power flow analysis did not identify any thermal overloads or any voltage range criteria violation for the system with all components energized (N-0) and for category B contingencies besides those identified previously in the pre-connection system. None of those overloads were affected by the Project 1290.The results for the system with all components in service and for all contingencies are summarized in Attachment D1 and shown in detail in Attachment D2.

Voltage stability analysis was not performed.

6.1.2. Transient Stability Analysis (Alternative 3)

The analysis of Alternative 3 confirms that the system remains stable for all contingencies shown in Table 18 and Table 19 with one exception. The exception is 7L106 Line Terminal Open condition at 834S Wesley Creek. The 7L106 open becomes true at Wesley Creek 834S when one breaker of 7L106 is open for planned maintenance and second breaker of 7L106 trips to clear an 834S near end fault on adjacent line 7L12 or 240/144 kV transformer. Transient stability results are shown in Attachment E.

For this condition, the Whitetail generators would remain electrically connected with the AIES via 7L106 between Whitetail and Meikle 905S and would experience loss of synchronism as shown in Figure 9. Such a condition is unacceptable and would result in uncoordinated tripping of the Whitetail units as well as a possible adverse impact on the AIES.

The Whitetail unit tripping that would rely on conventional protection schemes may not be fast enough to prevent the damage to Whitetail generators and the adverse impact on the AIES.

All the other monitored units remained stable.

Two possible solutions were identified during the course of this study to alleviate the transient stability concerns for contingencies 42 and 43 of Table 19:

1) Increase the dampening factor

2) Install DTT to Whitetail generators for the 7L106 open condition at Wesley Creek 834S

Since increasing the dampening factor was not viable, the potential instability for 7L106 open condition requires implementation of DTT scheme. This scheme will trip the Whitetail generators.

For contingencies with a stable system response, the relative severity of each contingency varied with the scenario and winter vs. summer case.

Generally, the most severe contingencies were faults in the vicinity of the existing strong generation sources and in the vicinity of the Whitetail generation. The former are not perceivably affected by the addition of the connection of Whitetail generation.

An example of the former is shown in Figure 10 for 2014 Winter Peak Scenario for fault in the vicinity of HR Milner. Figure 10 can be directly compared with Figure 2 showing the system response to the same fault in the pre-connection system. The system does not display any appreciable difference.

An example of the latter fault is shown in Figure 11. All generators remain stable with quickly dampened oscillatory response.

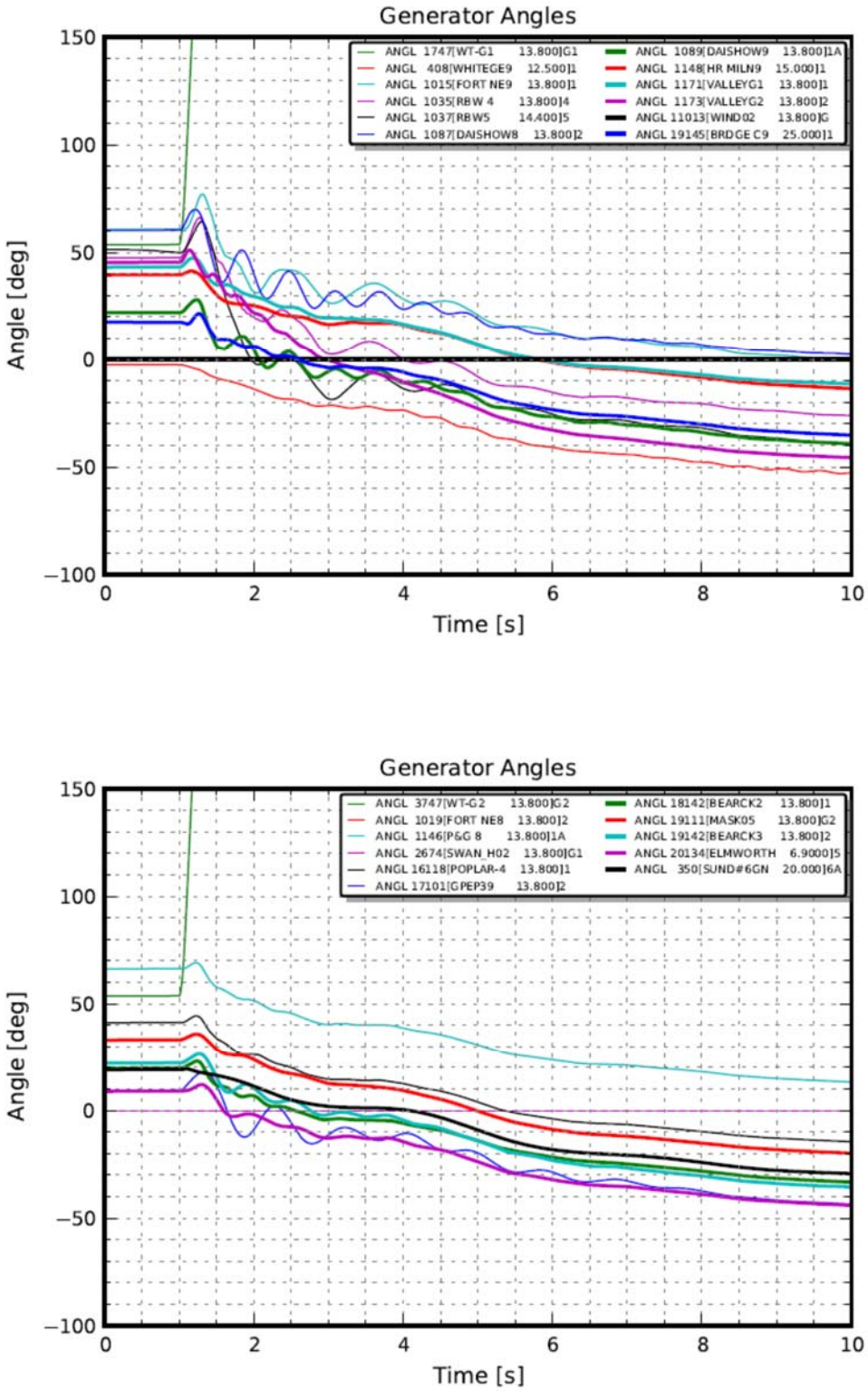


Figure 9: Loss of Whitetail generation for 7L106 Line Terminal Open condition at Wesley Creek, 2014 Winter Peak Scenario.

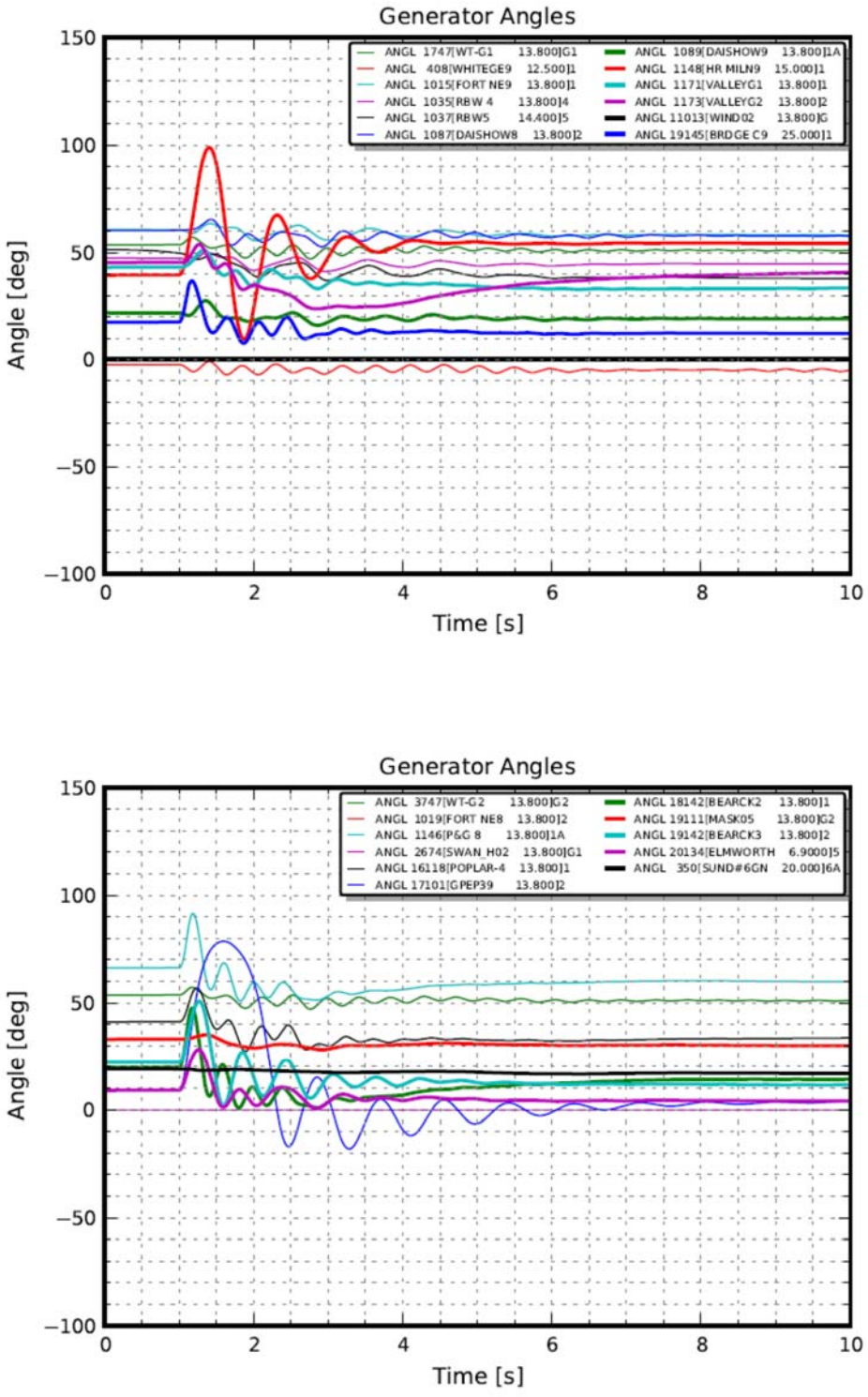
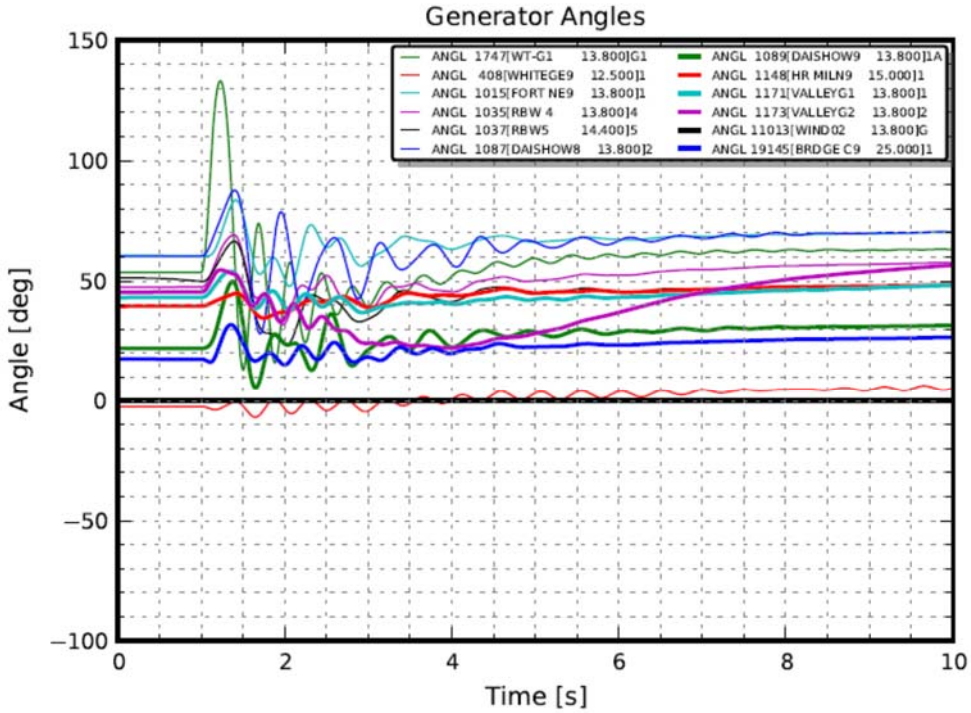


Figure 10: Example of system response to fault in the vicinity of HR Milner (Cont 21A – fault on 7L20 at HR Milner end), 2014 WP Scenario



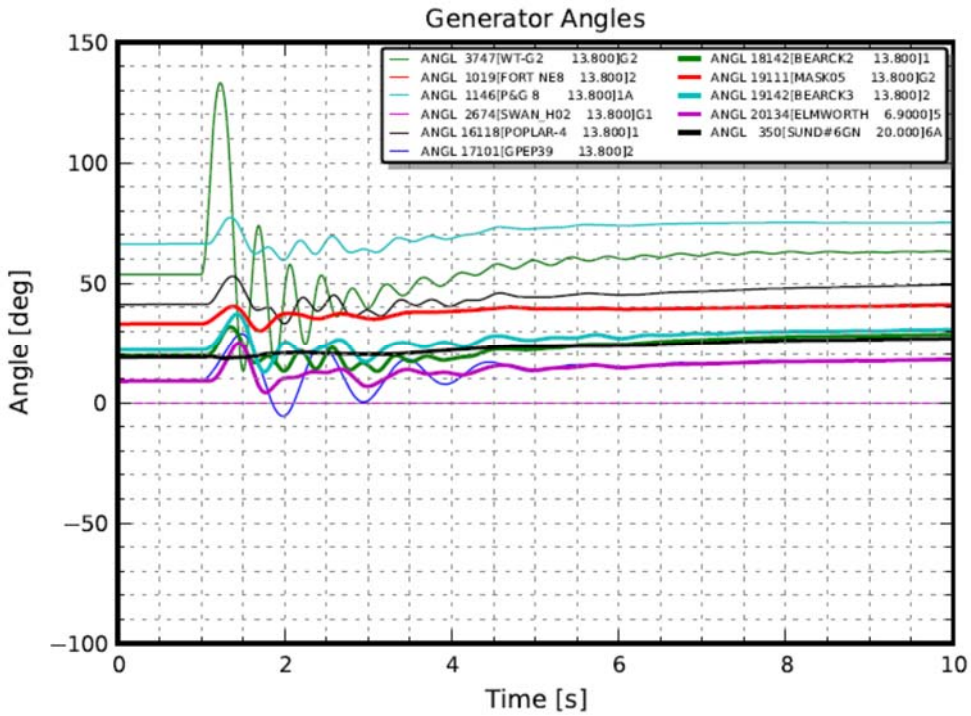


Figure 11: Example of system response to fault in the vicinity of Wesley Creek (Cont. 10 A fault on 7L12 at Wesley Creek end), 2014 Winter Peak Scenario

6.1.3. Mitigation Measures for Identified Issues (Alternative 3)

6.1.3.1. Mitigation Measures for Transient Stability Issues

Two possible solutions were identified during the course of this study:

1) Increase the dampening factor
2) Transfer trip Whitetail generation for trip of Wesley Creek to Whitetail transmission line

6.1.3.1.1 Increase the dampening

Increased dampening results in a better ability to remain in synchronism. Transient analysis was repeated with an increasing dampening coefficient in the GENROU model in order to determine whether the stability can be maintained following the Wesley Creek to Whitetail contingency and what the magnitude of the dampening would have to be.

The results of analysis confirmed that a stable response can be obtained at approximately D=12 pu as can be seen in Figure 12. To achieve such dampening is not realistic and was not pursued any further.

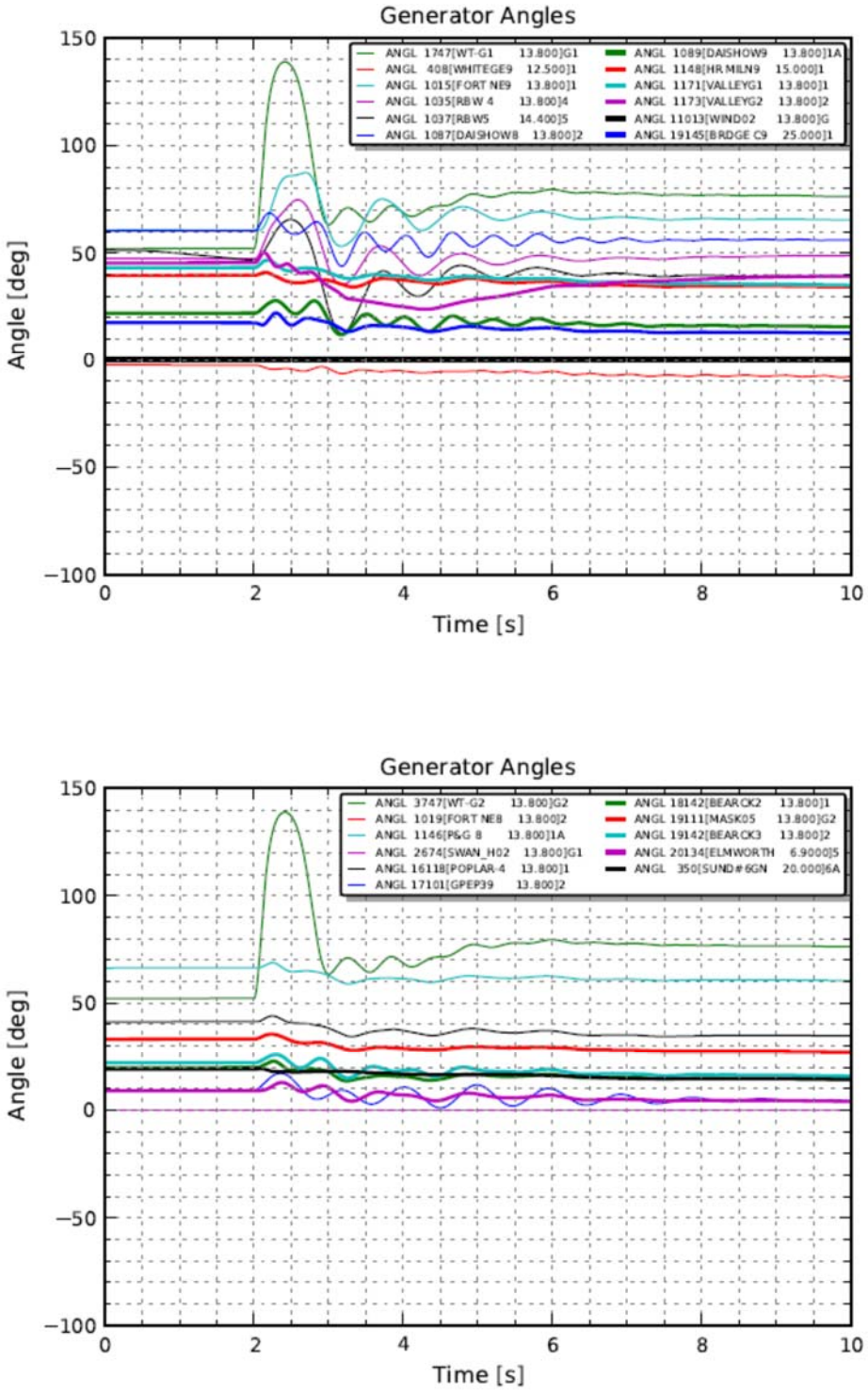


Figure 12: Whitetail and system response for 7L106 Line Terminal Open condition at Wesley Creek with increased dampening D=12, Winter Peak Scenario.

6.1.3.1.2 DTT Whitetail Generators

Another solution that alleviates the instability is a DTT of Whitetail generators for 7L106 open is true at Wesley Creek 834S when one breaker of 7L106 is open for planned maintenance and a second breaker of 7L106 trips to clear a near-end fault on adjacent line 7L12 or 240/144 kV transformer.

Transient analysis confirmed that the system remains stable as shown in Figure 13 and Figure 14.

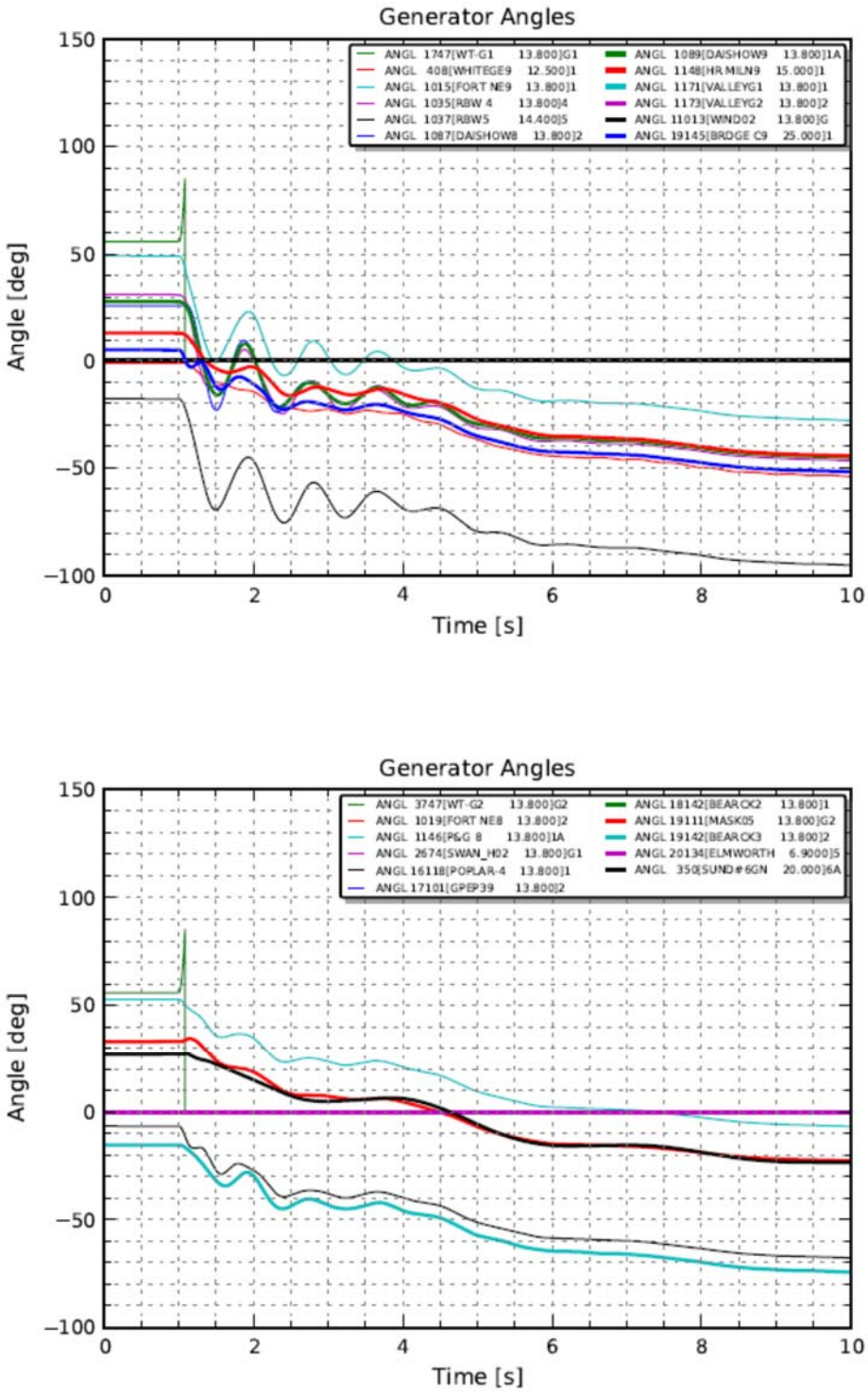


Figure 13: System response for 7L106 Line Terminal Open condition at Wesley Creek with transfer trip, 2014 Summer Light Scenario.

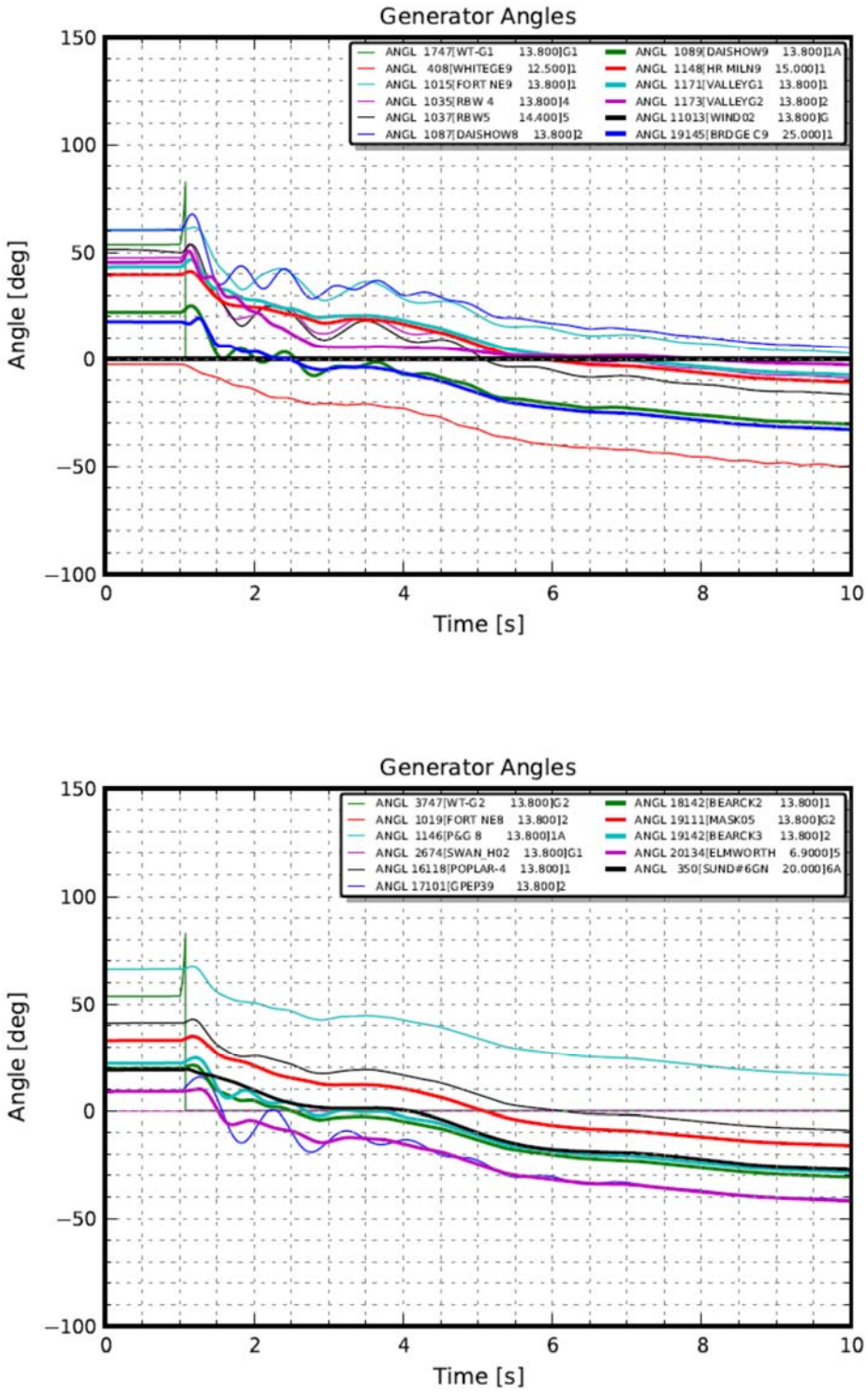


Figure 14: System response for 7L106 Line Terminal Open condition at Wesley Creek with transfer trip, 2014 Winter Peak Scenario

6.2. Conclusions and Recommendations

Alternative 3 complies with all AESO Reliability Criteria except for loss of synchronism of Whitetail generators for 7L106 open condition at Wesley Creek 834S substation. The 7L106 open condition can arise only at Wesley Creek 834S when one breaker of 7L106 is open for planned maintenance and second breaker of 7L106 trips to clear an 834S near end fault on adjacent line 7L12 or 240/144 kV 901T transformer. While the other AIES generators remain stable and synchronized, the Whitetail generation may not trip fast enough to prevent damage to Whitetail generators and possibly other equipment in the area.

The potential instability for the 7L106 open condition requires implementation of DTT to all Whitetail generators at the time 7L106 open condition becomes true at 834S.

The scheme is required to trip Whitetail generators following the 7L106 open condition at Wesley Creek 834S. In the absence of the DTT scheme, the generators would remain connected to AIES via 7L106 line to Meikle 905S and lose synchronism.

7. Short-Circuit Analysis

A 3 phase and 1 phase to ground short circuit analysis was performed for the system before and after the addition of Project 1290 in years 2014 and 2022. The results are summarized in Table 21, Table 22, Table 23 and Table 24.

7.1. Pre-Connection

The results for pre-connection short circuit analysis are shown in Table 21 and Table 22 below.

Table 21: Summary of Short-Circuit Current Levels[3] – Pre-Connection (Year 2014)

Substation Name and Number	Base Voltage (kV)	Pre-Fault Voltage	Pre-Fault Voltage (pu)	3-Φ Fault (kA)	Positive Sequence Thevenin Source Impedance (R1+jX1) (pu)	1-Φ Fault (kA)	Zero Sequence Thevenin Source Impedance (R0+jX0) (pu)
LITTLESMOKY 813S	240	260.6	1.086	6.9	0.008166+j0.037036	6.9	0.003093+j0.038755
Brintnell 876S	240	256.8	1.070	4.7	0.012410+j0.052877	5.1	0.002409+j0.043794
WESLEYCREEK 834S	240	262.8	1.095	4.1	0.017157+j0.062727	4.6	0.002253+j0.042203
WESLEYCREEK 834S	138	150.3	1.089	6.5	0.019937+j0.067003	8.2	0.001232+j0.027305
WESTPEACE A793S	138	151.8	1.100	5.0	0.031958+j0.085531	4.3	0.028986+j0.133976
Meikle 905S	138	150.8	1.093	4.2	0.035422+j0.102887	3.4	0.041976+j0.183132

All pu values are on 100MVA basis

Table 22: Summary of Short-Circuit Current Levels – Pre-Connection (Year 2022)

Substation Name and Number	Base Voltage (kV)	Pre-Fault Voltage	Pre-Fault Voltage (pu)	3-Φ Fault (kA)	Positive Sequence Thevenin Source Impedance (R1+jX1) (pu)	1-Φ Fault (kA)	Zero Sequence Thevenin Source Impedance (R0+jX0) (pu)
LITTLESMOKY 813S	240	260.9	1.087	7.3	0.007216+j0.035066	7.1	0.003048+j0.038316
Brintnell 876S	240	262.6	1.094	6.5	0.007393+j0.039282	6.4	0.002409+j0.043793
WESLEYCREEK 834S	240	264.9	1.104	5.1	0.010715+j0.051220	5.4	0.002192+j0.041332
WESLEYCREEK 834S	138	155.1	1.124	8.6	0.012288+j0.053383	10.1	0.001279+j0.028130
WESTPEACE A793S	138	153.4	1.111	5.7	0.027168+j0.077077	4.6	0.028012+j0.132123
Meikle 905S	138	155.0	1.124	4.6	0.030573+j0.098597	3.5	0.042636+j0.185381

All pu values are on 100MVA basis

[3] Short-circuit current studies were based on modeling information provided to the AESO by third parties. The authenticity of the modeling information has not been validated. Fault levels could change as a result of system developments, new customer connections, or additional generation in the area. It is recommended that these changes be monitored and fault levels reviewed to ensure that the fault levels are within equipment operating limits. The information provided in this study should not be used as the sole source of information for electrical equipment specifications or for the design of safety-grounding systems.

7.2. Post-Connection

The results for pre-connection short circuit analysis are shown in Table 23 and Table 24 below.

Table 23: Summary of Short-Circuit Current Levels – Post-Connection (Year 2014)

Substation Name and Number	Base Voltage (kV)	Pre-Fault Voltage	Pre-Fault Voltage (pu)	3-Φ Fault (kA)	Positive Sequence Thevenin Source Impedance (R1+jX1) (pu)	1-Φ Fault (kA)	Zero Sequence Thevenin Source Impedance (R0+jX0) (pu)
LITTLESMOKY 813S	240	260.4	1.085	7.1	0.007391+j0.035798	7.0	0.003093+j0.038755
Brintnell 876S	240	255.6	1.065	4.8	0.011511+j0.051642	5.1	0.002409+j0.043800
WESLEYCREEK 834S	240	259.9	1.083	4.8	0.011454+j0.053350	5.2	0.002253+j0.042202
WESLEYCREEK 834S	138	147.6	1.070	8.2	0.012376+j0.052632	9.9	0.001232+j0.027305
WESTPEACE A793S	138	149.7	1.085	5.5	0.027265+j0.076730	4.5	0.028986+j0.133976
Meikle 905S	138	149.3	1.082	4.5	0.029838+j0.094538	3.5	0.041965+j0.183111

Table 24: Summary of Short-Circuit Current Levels – Post-Connection (Year 2022)

Substation Name and Number	Base Voltage (kV)	Pre-Fault Voltage	Pre-Fault Voltage (pu)	3-Φ Fault (kA)	Positive Sequence Thevenin Source Impedance (R1+jX1) (pu)	1-Φ Fault (kA)	Zero Sequence Thevenin Source Impedance (R0+jX0) (pu)
LITTLESMOKY 813S	240	260.1	1.084	7.4	0.006882+j0.034335	7.2	0:0.003048+j0.038316
Brintnell 876S	240	261.2	1.089	6.6	0.007126+j0.038714	6.4	0.043793, 18.18040
WESLEYCREEK 834S	240	259.6	1.082	5.6	0.007872+j0.045136	5.8	0.002192+j0.041332
WESLEYCREEK 834S	138	150.5	1.090	10.3	0.008408+j0.043586	11.5	O.001279+j0.028130
WESTPEACE A793S	138	149.6	1.084	6.0	0.024779+j0.071029	4.8	0.028012+j0.132123
Meikle 905S	138	151.9	1.100	4.8	0.027489+j0.092509	3.5	0.042624+j0.185359

8. Project Interdependencies

Alternative 3 complies with all AESO Reliability Criteria except for loss of synchronism of Whitetail generators for Line Terminal Open condition on 7L106 at Wesley Creek substation. This condition can arise only for Line Terminal Open = True at 834S Wesley Creek when one breaker open for planned maintenance and second breaker trips to clear an close-in fault on adjacent line 7L12 or 240/144 kV 901T transformer. The potential instability for Line Terminal Open condition requires implementation of DTT to all whitetail generators on line at the time.

The Project has no dependency on any other projects.

9. Summary and Conclusion

This report presents the engineering study assumptions and analysis conducted to interconnect Project 1290, Whitetail generating station. The plant consists of four 50 MW units. The Project is located in the vicinity of Wesley Creek 834S substation. The in service date is August 1, 2016.

Three alternatives were considered for the connection of the Project:

- Alternative 1 - a radial connection to Wesley Creek substation at 144 kV.
- Alternative 2 - an In/Out 144 kV connection to 7L106 between Wesley Creek 834S and Meikle 905S.
- Alternative 3 (preferred alternative) - a tap 144 kV connection to 7L106.

Detailed studies were conducted for the preferred Alternative 3. Alternative 3 requires implementation of a simple DTT scheme for the 7L106 open condition at Wesley Creek 834S. The scheme is required to trip Whitetail generators following the 7L106 open condition at Wesley Creek 834S. In the absence of the DTT scheme, the Whitetail generators would remain connected to AIES via 7L106 line to Meikle 905S and lose synchronism.

Attachment A

Dynamic Data of all Equipment Proposed for Connection

PSSE models used to represent Whitetail generation were as follows:

```
1747 'GENROU' G1    9.6700      0.50000E-01   2.9500      0.50000E-01
       1.1930       0.0000       2.3500       2.1500      0.20000
      0.24000      0.14400      0.88000E-01   1.5500       2.5000    /
1747 'PSS2B '  G1         1          0          3          0          5          1
       2.0000       2.0000       0.0000       2.0000       0.0000
       2.0000      0.17900       1.0000      0.50000      0.10000
       15.000      0.15000      0.20000E-01  0.10000      0.15000E-01
       0.0000       0.0000       99.000      -99.000       99.000
      -99.000      0.10000     -0.10000     /
1747 'REXSYS' G1    0.0000       28.000       28.000       999.00
       0.0000       0.0000       0.0000       0.0000       0.0000
       15.520      -15.520       0.0000       1.0000       0.0000
       0.0000       1.0000       20.000       20.000       0.0000
       15.520      -15.520       1.0000      0.40000      0.40000
      0.10000      0.60000       3.2560      0.10000E-02   4.3420
      0.20000E-02   0.0000    /
1747 'GGOV1' G1          1          1
       0.50000E-01    1.0000       0.23000E-01  -0.23000E-01    3.0000
        1.2000        0.0000        1.0000        1.2000       0.17000
       0.30000        1.3000       0.22000       0.10000        0.0000
        0.0000       0.30000        1.0000        3.3000       0.91800
        0.0000        99.000       -99.000        0.0000        99.000
        10.000       0.10000        50.000        0.0000        1.0000
        1.0000        99.000       -99.000    /

3747 'GENROU' G2    9.6700      0.50000E-01   2.9500      0.50000E-01
       1.1930       0.0000       2.3500       2.1500      0.20000
      0.24000      0.14400      0.88000E-01   1.5500       2.5000    /
3747 'PSS2B '  G2         1          0          3          0          5          1
       2.0000       2.0000       0.0000       2.0000       0.0000
       2.0000      0.17900       1.0000      0.50000      0.10000
       15.000      0.15000      0.20000E-01  0.10000      0.15000E-01
       0.0000       0.0000       99.000      -99.000       99.000
      -99.000      0.10000     -0.10000     /
3747 'REXSYS' G2    0.0000       28.000       28.000       999.00
       0.0000       0.0000       0.0000       0.0000       0.0000
       15.520      -15.520       0.0000       1.0000       0.0000
       0.0000       1.0000       20.000       20.000       0.0000
       15.520      -15.520       1.0000      0.40000      0.40000
      0.10000      0.60000       3.2560      0.10000E-02   4.3420
      0.20000E-02   0.0000    /
3747 'GGOV1' G2          1          1
       0.50000E-01    1.0000       0.23000E-01  -0.23000E-01    3.0000
        1.2000        0.0000        1.0000        1.2000       0.17000
       0.30000        1.3000       0.22000       0.10000        0.0000
        0.0000       0.30000        1.0000        3.3000       0.91800
        0.0000        99.000       -99.000        0.0000        99.000
        10.000       0.10000        50.000        0.0000        1.0000
        1.0000        99.000       -99.000    /
```

```
4747 'GENROU' G3    9.6700      0.50000E-01   2.9500      0.50000E-01
        1.1930       0.0000       2.3500       2.1500       0.20000
       0.24000      0.14400      0.88000E-01   1.5500       2.5000    /
  4747 'PSS2B '  G3         1          0          3          0          5          1
        2.0000       2.0000       0.0000       2.0000       0.0000
        2.0000      0.17900       1.0000      0.50000      0.10000
        15.000      0.15000      0.20000E-01  0.10000      0.15000E-01
        0.0000       0.0000       99.000      -99.000       99.000
       -99.000      0.10000     -0.10000     /
  4747 'REXSYS' G3    0.0000       28.000       28.000       999.00
        0.0000       0.0000       0.0000       0.0000       0.0000
        15.520      -15.520       0.0000       1.0000       0.0000
        0.0000       1.0000       20.000       20.000       0.0000
        15.520      -15.520       1.0000      0.40000      0.40000
       0.10000      0.60000       3.2560      0.10000E-02   4.3420
       0.20000E-02   0.0000    /
  4747 'GGOV1' G3          1          1
        0.50000E-01    1.0000       0.23000E-01  -0.23000E-01    3.0000
         1.2000        0.0000        1.0000        1.2000       0.17000
        0.30000        1.3000       0.22000       0.10000        0.0000
         0.0000       0.30000        1.0000        3.3000       0.91800
         0.0000        99.000       -99.000        0.0000        99.000
         10.000       0.10000        50.000        0.0000        1.0000
         1.0000        99.000       -99.000    /

  5747 'GENROU' G4    9.6700      0.50000E-01   2.9500      0.50000E-01
        1.1930       0.0000       2.3500       2.1500       0.20000
       0.24000      0.14400      0.88000E-01   1.5500       2.5000    /
  5747 'PSS2B '  G4         1          0          3          0          5          1
        2.0000       2.0000       0.0000       2.0000       0.0000
        2.0000      0.17900       1.0000      0.50000      0.10000
        15.000      0.15000      0.20000E-01  0.10000      0.15000E-01
        0.0000       0.0000       99.000      -99.000       99.000
       -99.000      0.10000     -0.10000     /
  5747 'REXSYS' G4    0.0000       28.000       28.000       999.00
        0.0000       0.0000       0.0000       0.0000       0.0000
        15.520      -15.520       0.0000       1.0000       0.0000
        0.0000       1.0000       20.000       20.000       0.0000
        15.520      -15.520       1.0000      0.40000      0.40000
       0.10000      0.60000       3.2560      0.10000E-02   4.3420
       0.20000E-02   0.0000    /
  5747 'GGOV1' G4          1          1
        0.50000E-01    1.0000       0.23000E-01  -0.23000E-01    3.0000
         1.2000        0.0000        1.0000        1.2000       0.17000
        0.30000        1.3000       0.22000       0.10000        0.0000
         0.0000       0.30000        1.0000        3.3000       0.91800
         0.0000        99.000       -99.000        0.0000        99.000
         10.000       0.10000        50.000        0.0000        1.0000
         1.0000                            99.000                          -99.000              /
```

Attachment B

Modifications to AESO Base Cases

AESO 2012 planning base cases were used as the basis for developing study base cases. The study cases consisted of 2014 winter and summer peak cases and summer Light load case. These were derived from 2017 cases.

No topological changes or data modifications were made to the base cases for modeling the existing system.

Generation was dispatched as per AESO direction to “stress” the cases.

Study cases were further "solved" meaning that voltages were adjusted to better comply with ID#2010-007RS General Operating Practice Voltage Control, to eliminate or reduce loop flows and to reduce Var flows.

Python record files were kept for all modification and are included in their electronic form with this report.

The published AESO errata files were applied to base cases prior to any of the above modifications.

In addition, number of generators were GNETed for dynamic analysis. These included predominantly the wind generation since they were assumed not to affect the Project 1290 due to their electrical distance.

A number of generators were GNETed as per original AESO IDV file. These included:

[18307, 18351, 19351, 18420, 2674, 2954, 2358, 2603, 3227, 4205, 4227, 4735, 4740, 536, 17101, 3043, 4043, 4060, 4997]

In addition, generators at the following buses were also GNETed, since they were assumed to be electrically distant and not to affect the Project 1290.

[11002, 12358, 13358, 15343, 16343, 2773, 2775, 2781]

Several shunts also displayed initialization issues. To address these issues, their control mode was set to 0. The modified shunts are at the following buses:

[1620, 1621, 677, 18070, 17054, 18419, 4159, 10605, 4458]

Attachment C

Pre-Connection
Power Flow and Transient Analysis Results

Appendix C-1 - Background

The Steady state power flow analysis was prepared for the existing system under normal operating conditions and for those contingencies identified in Table C-1 and C-2 below:

Table C-1: Contingency List – Catergory B

Contin-gency	System Condition	Outage	From Substation	To Substation
0	All transmission elements in service (N-0)	**-**	**-**	**-**
1	Line 9L15 out of service (N-1)	9L15	WESLEYCREEK	Brintnell
2	Line 9L11 out of service (N-1)	9L11	WESLEYCREEK	LITTLESMOKY
3	Line 9L05 out of service (N-1)	9L05	LITTLESMOKY	LOUISECREEK
4	Line 9L40 out of service (N-1)	9L40	MITSUE	LOUISECREEK
5	Line 913L out of service (N-1)	913L	NORTHBARRHEAD	MITSUE
6	Line 9L56 out of service (N-1)	9L56	WABASCA	MITSUE
7	Line 9L10 out of service (N-1)	9L10	WABASCA	Brintnell
8	Line 9L02 out of service (N-1)	9L02	LITTLESMOKY	LOUISECREEK
9	Line 7L27 out of service (N-1)	7L27	WESLEYCREEK	WESTPEACE
10	Line 7L12 out of service (N-1)	7L12	WESLEYCREEK	LUBICON
11	Line 7L61 out of service (N-1)	7L61	LUBICON	NIPISI
12	Line 7L23 out of service (N-1)	7L23	NIPISI	MITSUE
13	Line 7L131 out of service (N-1)	7L131	WESLEYCREEK	Meikle
14	Line 7L06 out of service (N-1)	7L06	WESTPEACE	HIGHPRAIRIE
15	Line 7L48 out of service (N-1)	7L48	HIGHPRAIRIE	VALLEYVIEW
16	Line 7L54 out of service (N-1)	7L54	VALLEYVIEW	LITTLESMOKY
17	Line 7L45 out of service (N-1)	7L45	LITTLESMOKY	BIGMOUNTAIN
18	Line 7L46 out of service (N-1)	7L46	BIGMOUNTAIN	LITTLESMOKY
19	Line 7L40 out of service (N-1)	7L40	LITTLESMOKY	SIMONETTE
20	Line 7L80 out of service (N-1)	7L80	SIMONETTE	HR MILNER
21	Line 7L20 out of service (N-1)	7L20	HR MILNER	BIGMOUNTAIN
22	Line 7L63 out of service (N-1)	7L63	HOTCHKISS	LUBICON
23	Line 7L58 out of service (N-1)	7L58	KEGRIVER	Meikle
24	Line 7L04 out of service (N-1)	7L04	WESTPEACE	DAISHOWA
25	Line 7L51 out of service (N-1)	7L51	WESTPEACE	HOTCHKISS
26	Line 7L58 out of service (N-1)	7L58	KEGRIVER	Meikle
27	Line 7L120 out of service (N-1)	7L120	HOTCHKISS	Meikle
28	Line 7L01 out of service (N-1)	7L01	LITTLESMOKY	Sturgeon
29	Line 7L44 out of service (N-1)	7L44	FLYINGSHOTLAKE	BIGMOUNTAIN
30	Line 7L33 out of service (N-1)	7L33	BIGMOUNTAIN	FLYINGSHOTLAKE
31	Line 7L75 out of service (N-1)	7L75	WESTPEACE	FRIEDENSTAL
32	Line 7L73 out of service (N-1)	7L73	RYCROFT	FRIEDENSTAL
33	Line 7L68 out of service (N-1)	7L68	RYCROFT	CLAIRMONTLAKE
34	Line 7L84 out of service (N-1)	7L84	CRYSTALLAKE	FLYINGSHOTLAKE
35	Line 7L39 out of service (N-1)	7L39	CRYSTALLAKE	CLAIRMONTLAKE
36	Line 7L03 out of service (N-1)	7L03	FLYINGSHOTLAKE	ELMWORTH
37	Line 7L07 out of service (N-1)	7L07	POPLARHILL	ELMWORTH

Contin-gency	System Condition	Outage	From Substation	To Substation
38	Line 7L22 out of service (N-1)	7L22	POPLARHILL	CLAIRMONTLAKE

Table C-2 Contingency List – Category C

Contin-gency	System Condition	Outage	From Substation	To Substation
40	C Cont 7L106 and 7L131	7L106	Wesley Creek 834S	Meikle 905S
		7L131	Wesley Creek 834S	Meikle 905S
		7L58	Meikle 905S	Keg River 789S
		7L12	Wesley Creek 834S	Seal Lake 869S
41	C Cont 7L120 and 7L138	7L120	Meikle 905S	Hotchkiss 788S
		7L138	Meikle 905S	Hotchkiss 788S
		7L62	Meikle 905S	Kemp River 797S

The Steady state power flow analysis of the system prior to Project 1290 was prepared for normal operating conditions and for those contingencies identified in Table C1 and C2 above. Contingencies involving elements from Project 1290 are excluded.

Each contingency was analyzed for Post Transient conditions, Post Auto Adjustment conditions and if required, for Post Manual Adjustment conditions. If the Post Auto Adjustment conditions returned voltages to +-5% band, the Post Manual Adjustment was not required and is not shown herein.

Three operating scenarios were considered with respect to Project 1290, namely the:

1) 2014 Winter Peak Load
2) 2014 Summer Light Load
3) 2014 Summer Peak Load

The results of load flow analysis as shown in this Appendix are further explained in Table C-3.

Two operating scenarios were considered with respect to transient analysis, namely the:

1) 2014 Winter Peak Load
2) 2014 Summer Light Load

Transient analysis was prepared for N-1 contingencies shown in Table C-1

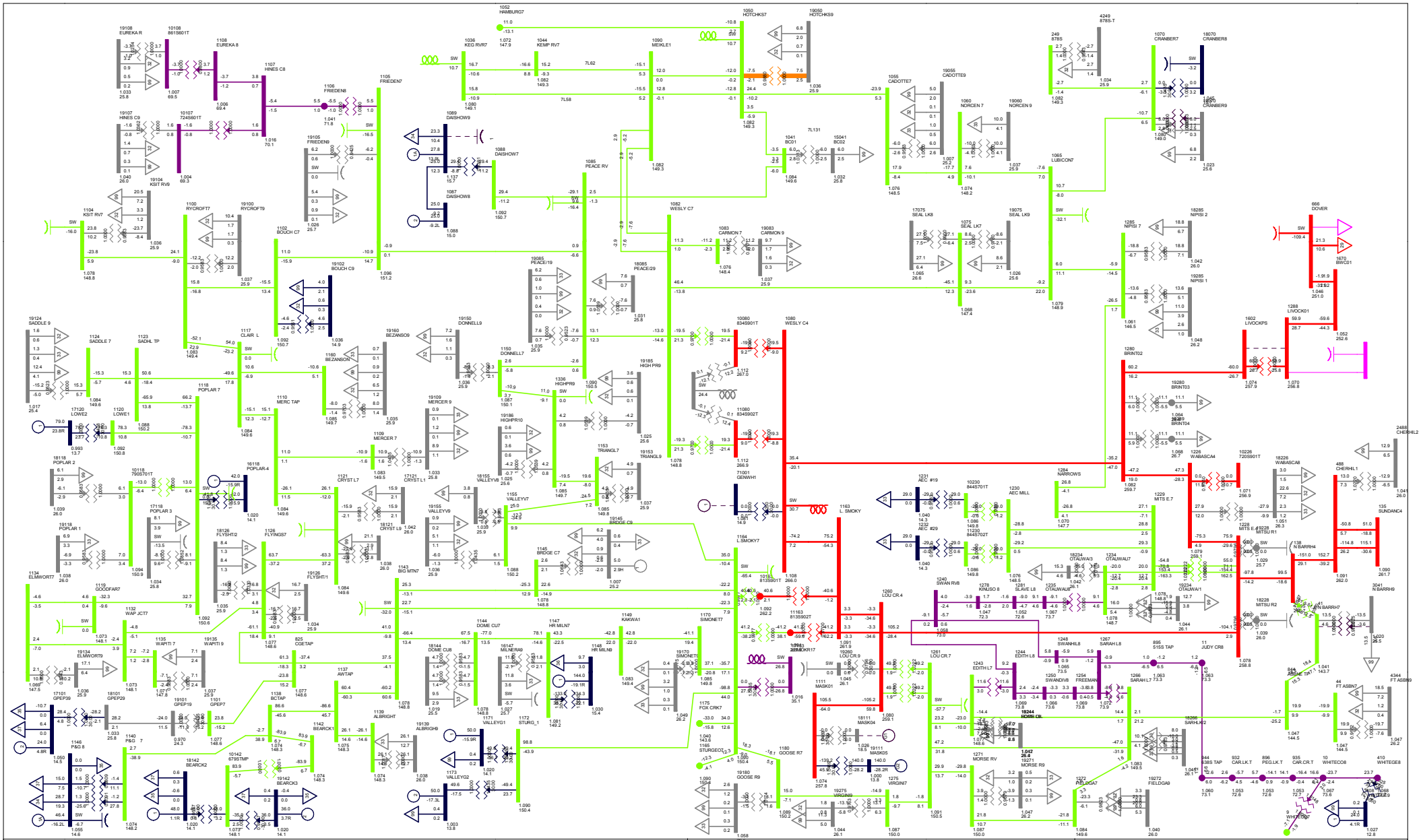
The results of transient analysis as shown in this Appendix are further explained in Table C-4.

Table C-3 A Summary of the load flow analysis results provided in Appendix C.

Appendix	Cases	Notes
Appendix C-2-A	SLDs for 2014 Winter Peak Load Scenario for normal system and Contingencies. All SLD's are shown for: 1) post transient (_A suffix) and 2) post auto (_B suffix)	"CONT PreContingency" designates system under normal operation (no contingencies)
Appendix C-2-B	SLDs for 2014 Summer Low Load Scenario for normal system and Contingencies. All SLD's are shown for: 1) post transient (_A suffix) and 2) post auto (_B suffix)	"CONT PreContingency" designates system under normal operation (no contingencies)
Appendix C-2-C	SLDs for 2014 Summer Peak Load Scenario for normal system and Contingencies. All SLD's are shown for: 1) post transient (_A suffix) and 2) post auto (_B suffix)	"CONT PreContingency" designates system under normal operation (no contingencies)

Table C-4 A Summary of the transient analysis results provided in Appendix C.

Appendix	Cases	Notes
Appendix C-Tr2-A	Transient analysis traces for elected buses and generators for 2014 Winter Peak Load Suffix _A denotes close end line fault while suffix _B denotes remote line end fault.	
Appendix C-Tr2-B	Transient analysis traces for elected buses and generators for 2014 Summer Light Load Suffix _A denotes close end line fault while suffix _B denotes remote line end fault.	



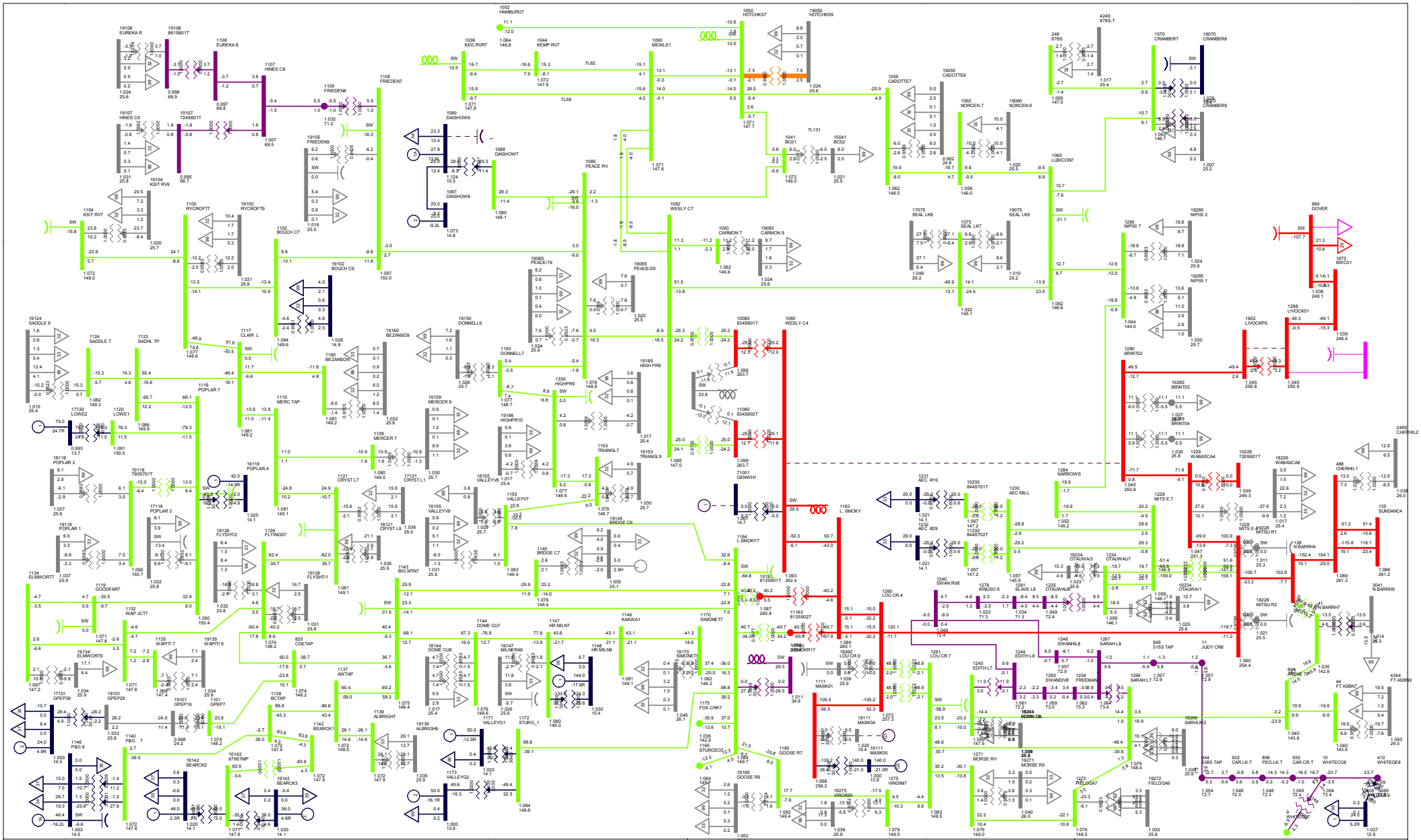
Appendix C2A

Figure: 1

Study Case Description

CASE 01 2014 WP Mgen -
SCEN 01 Base Case -
CONT PreContingency.

Whitetail Project 1290 Interconnection Study



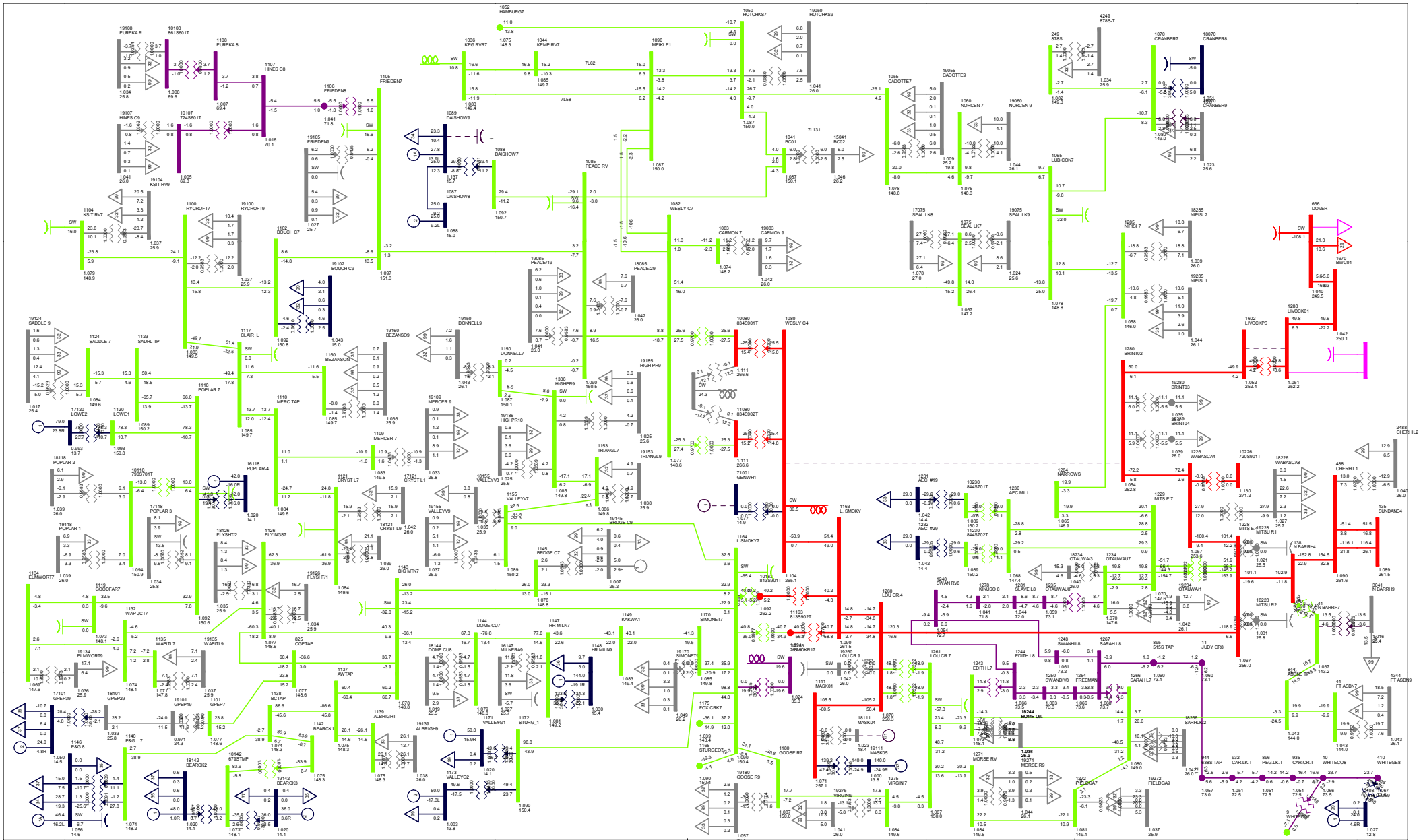
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 001 9L15 WESLEYCREEK to Brintnell_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 4

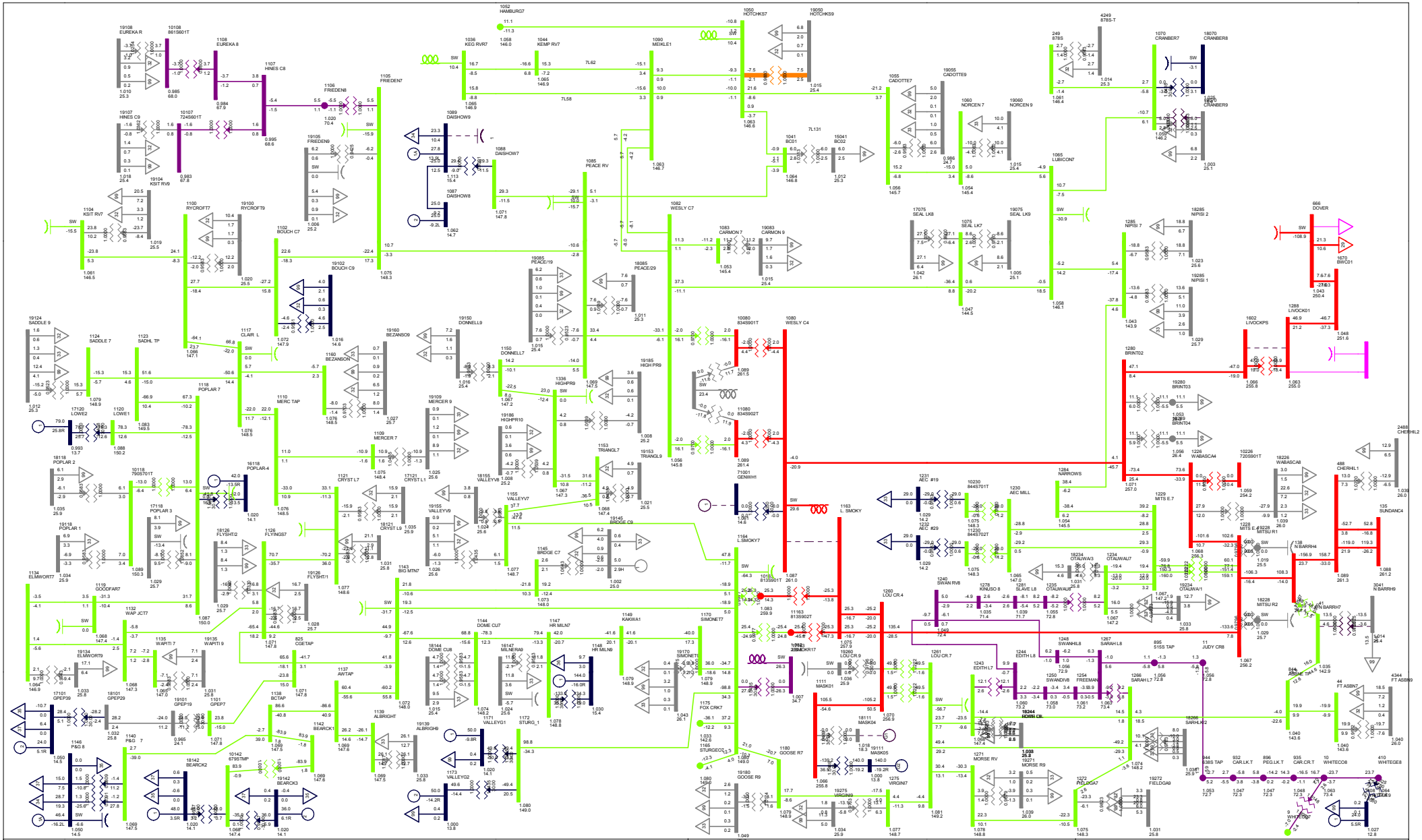


Appendix C2A Figure: 5

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 001 9L15 WESLEYCREEK to Brintnell_B.

Whitetail Project 1290 Interconnection Study



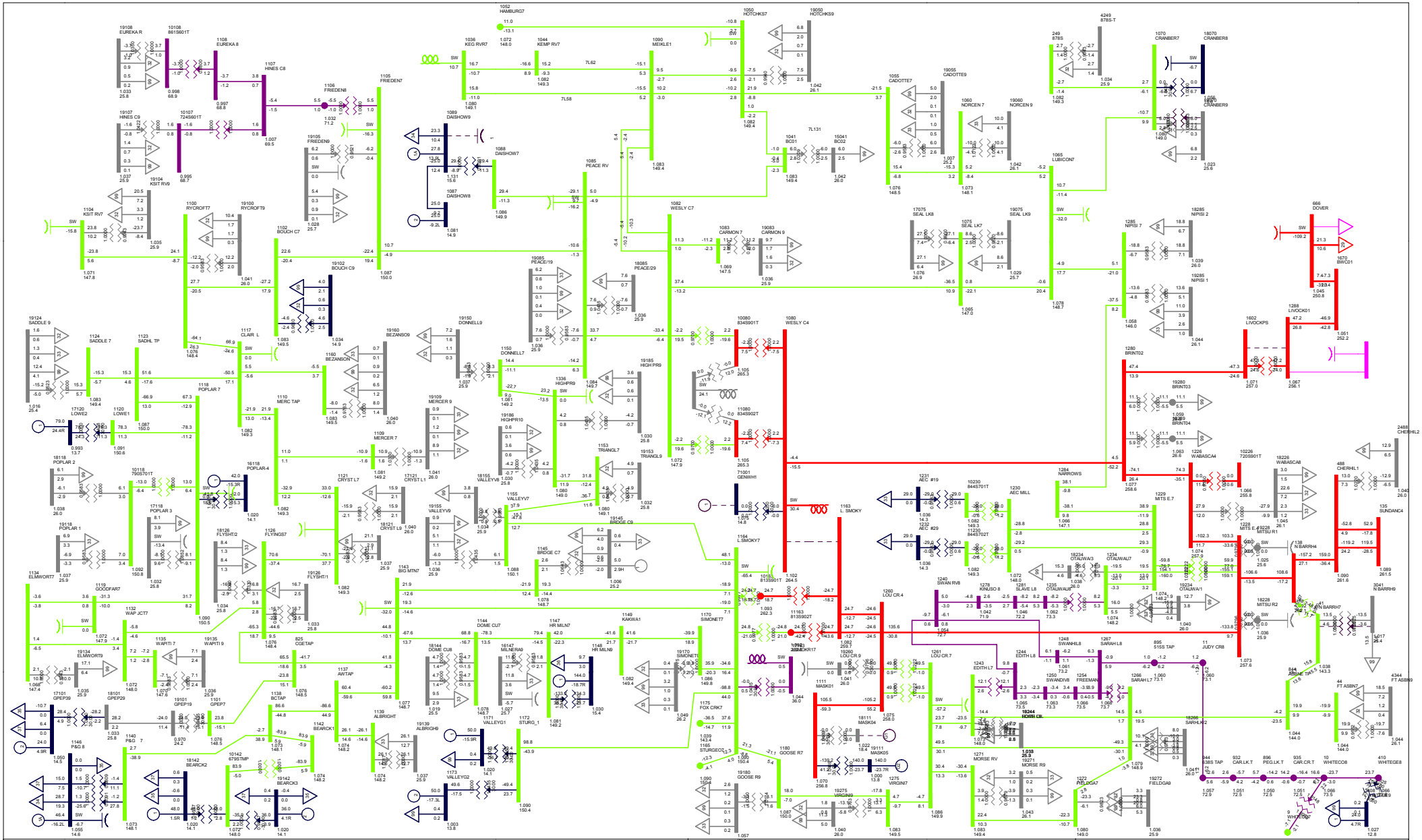
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 6

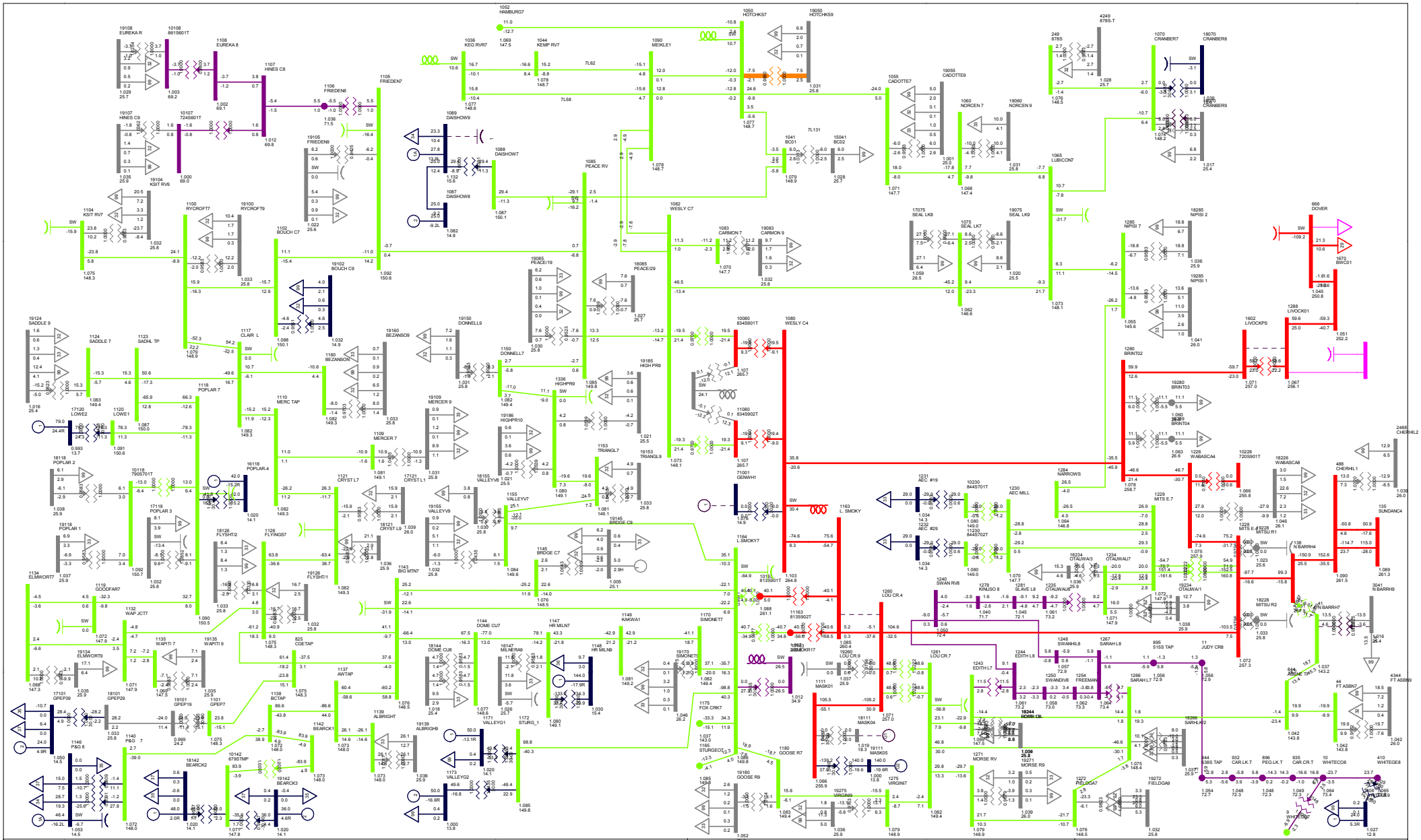


Appendix C2A Figure: 7

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_B.

Whitetail Project 1290 Interconnection Study



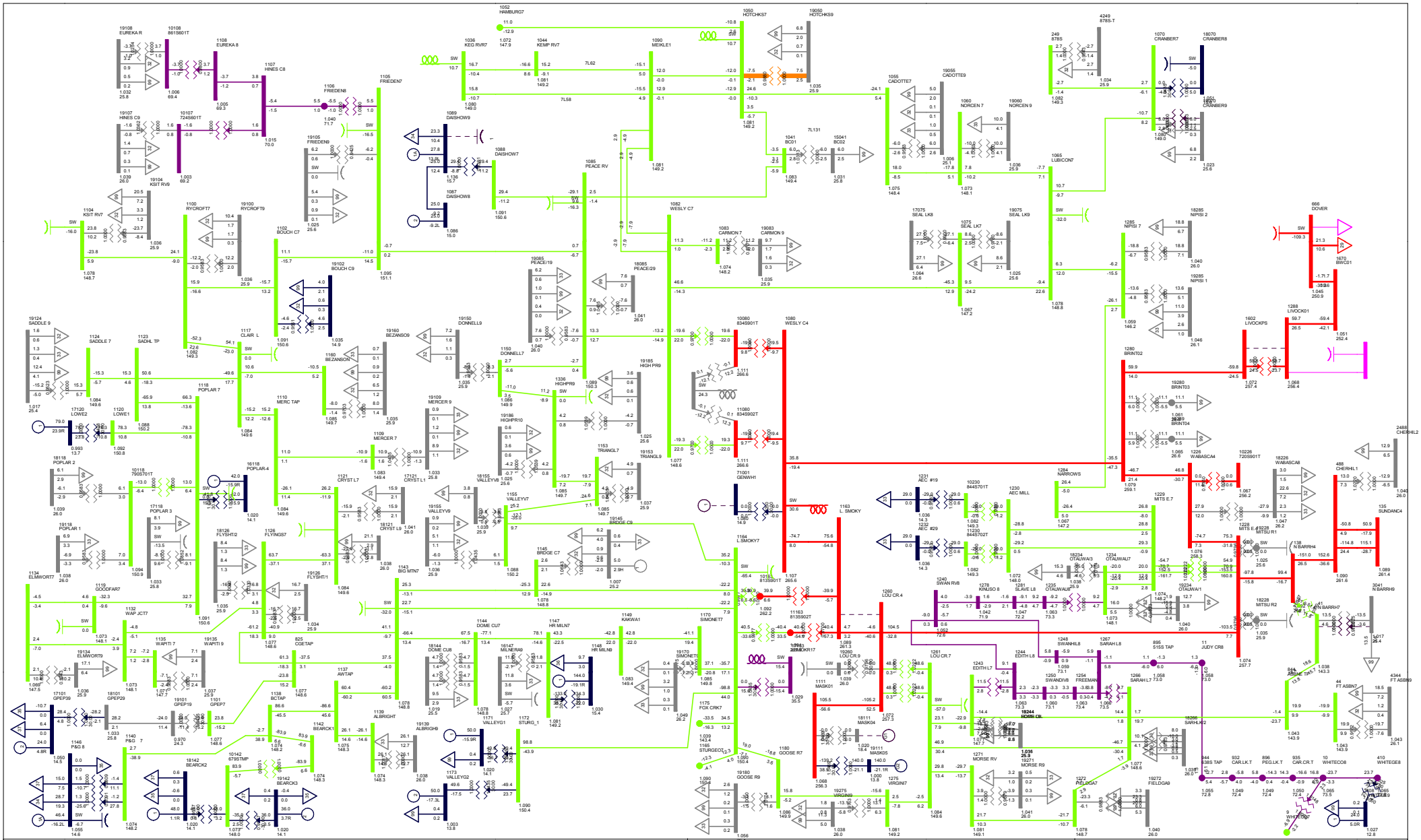
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 8



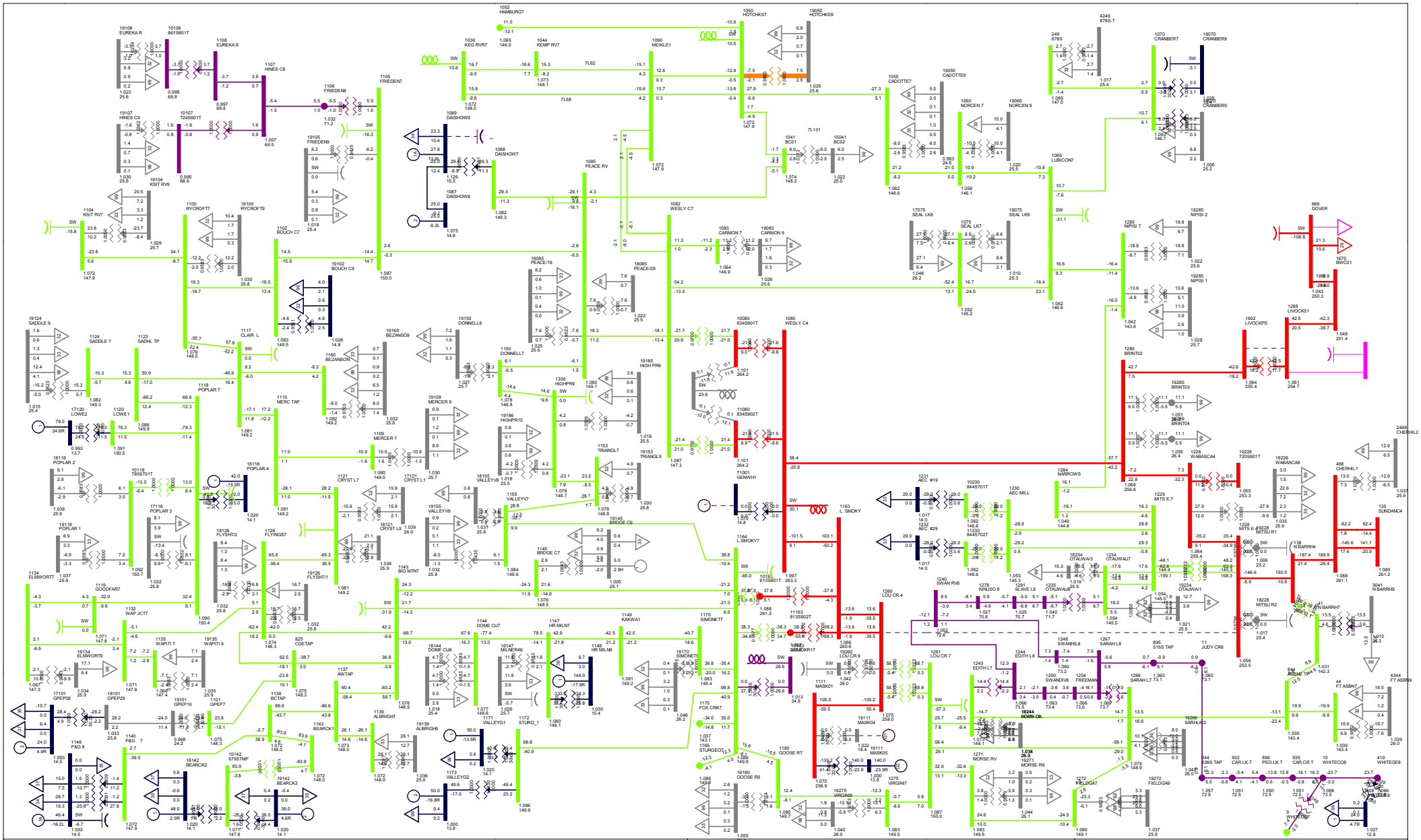
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 9



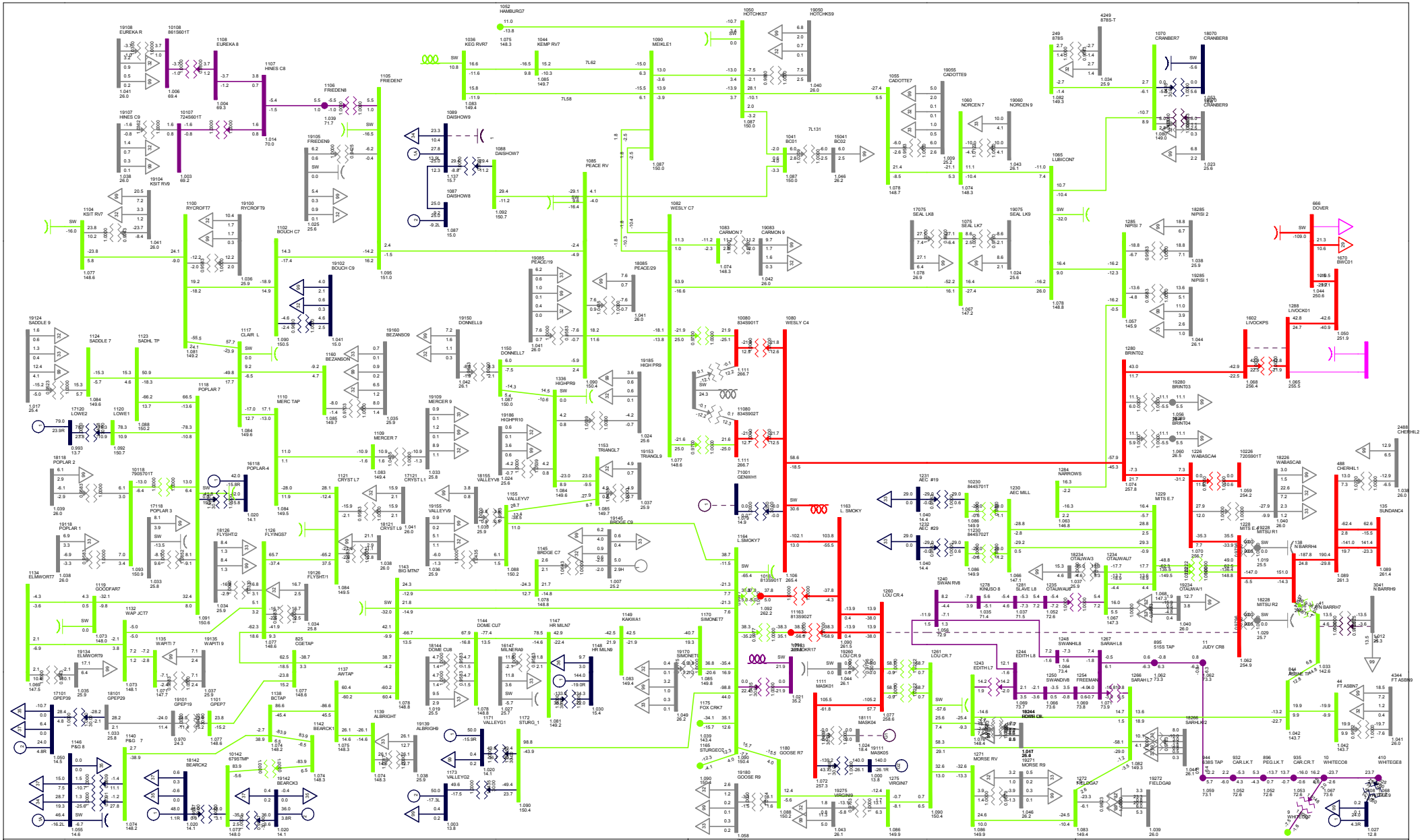
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 004 9L40 MITSUE to LOUISECREEK_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 10



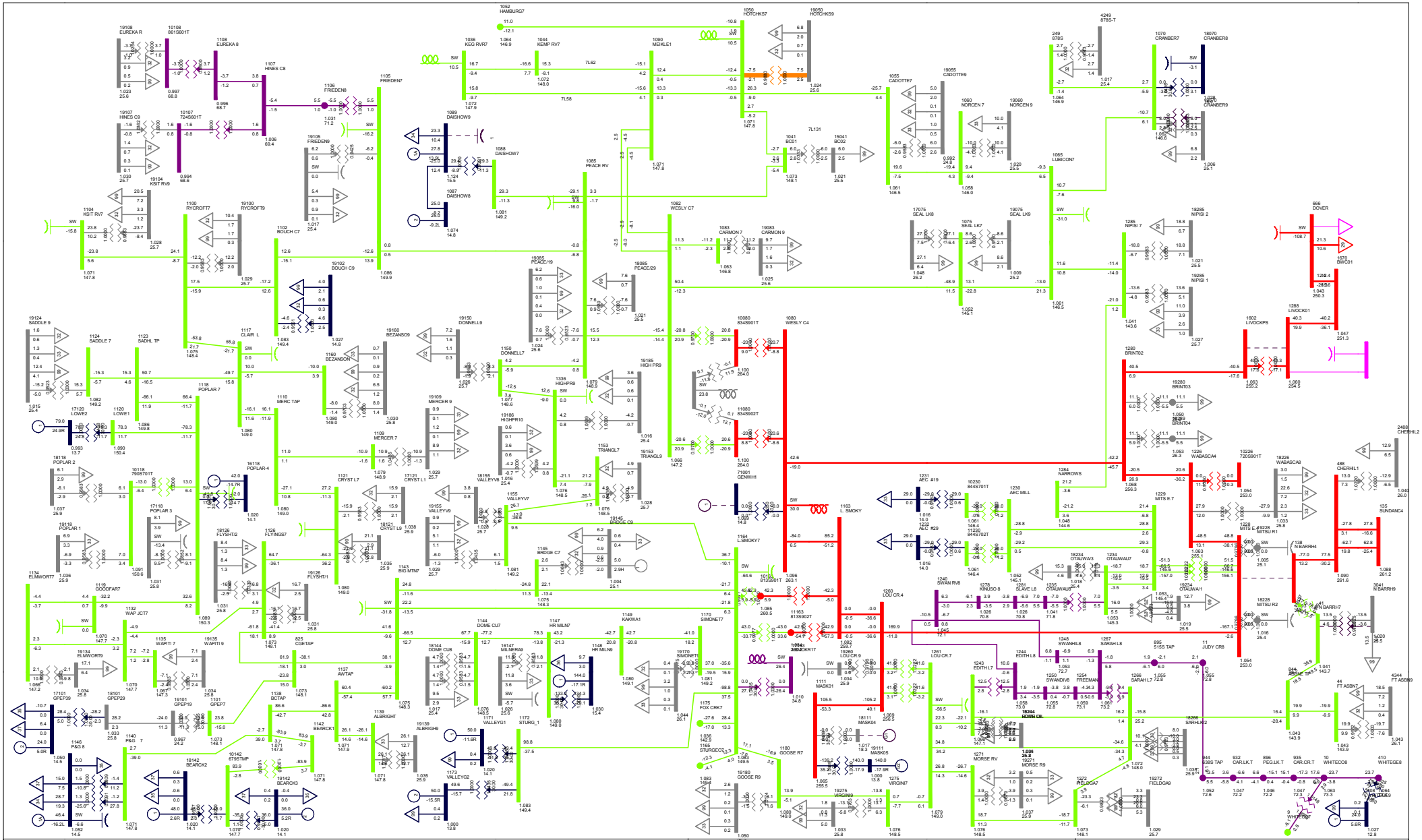
Appendix C2A

Figure: 11

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 004 9L40 MITSUE to LOUISECREEK_B.

Whitetail Project 1290 Interconnection Study



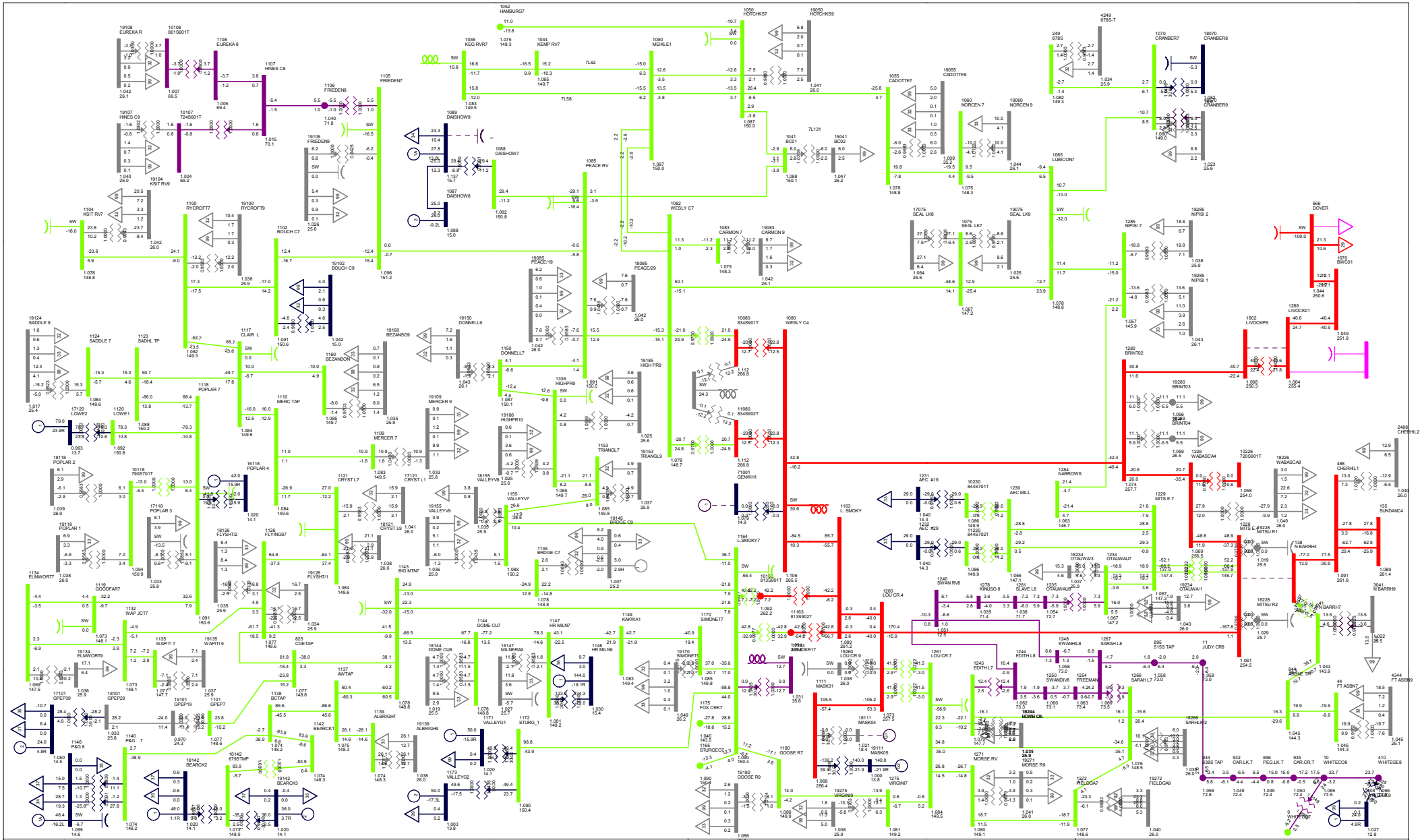
Appendix C2A

Figure: 12

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 005 913L NORTHBARRHEAD to MITSUE_A.

Whitetail Project 1290 Interconnection Study



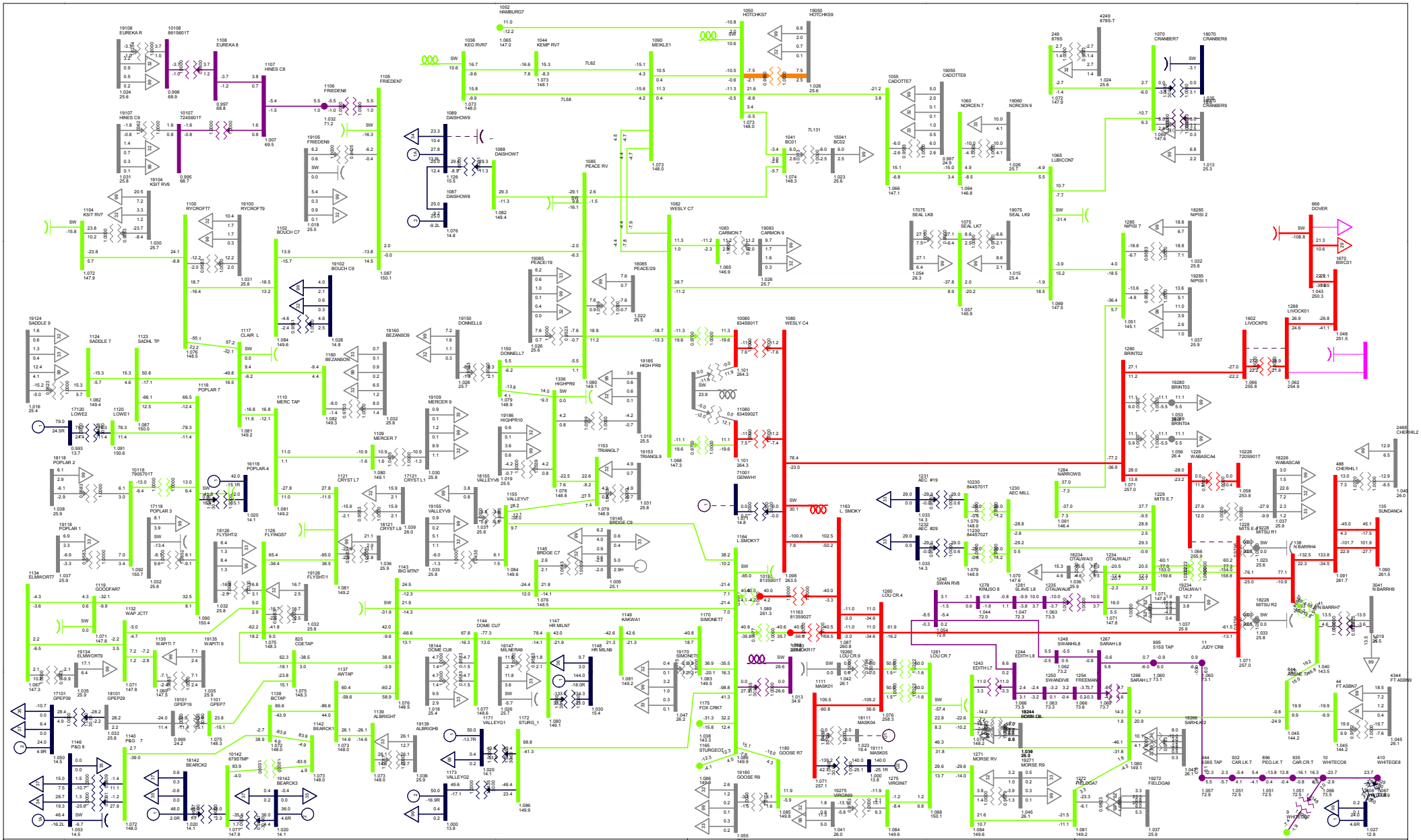
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 005 913L NORTHBARRHEAD to MITSUE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 13



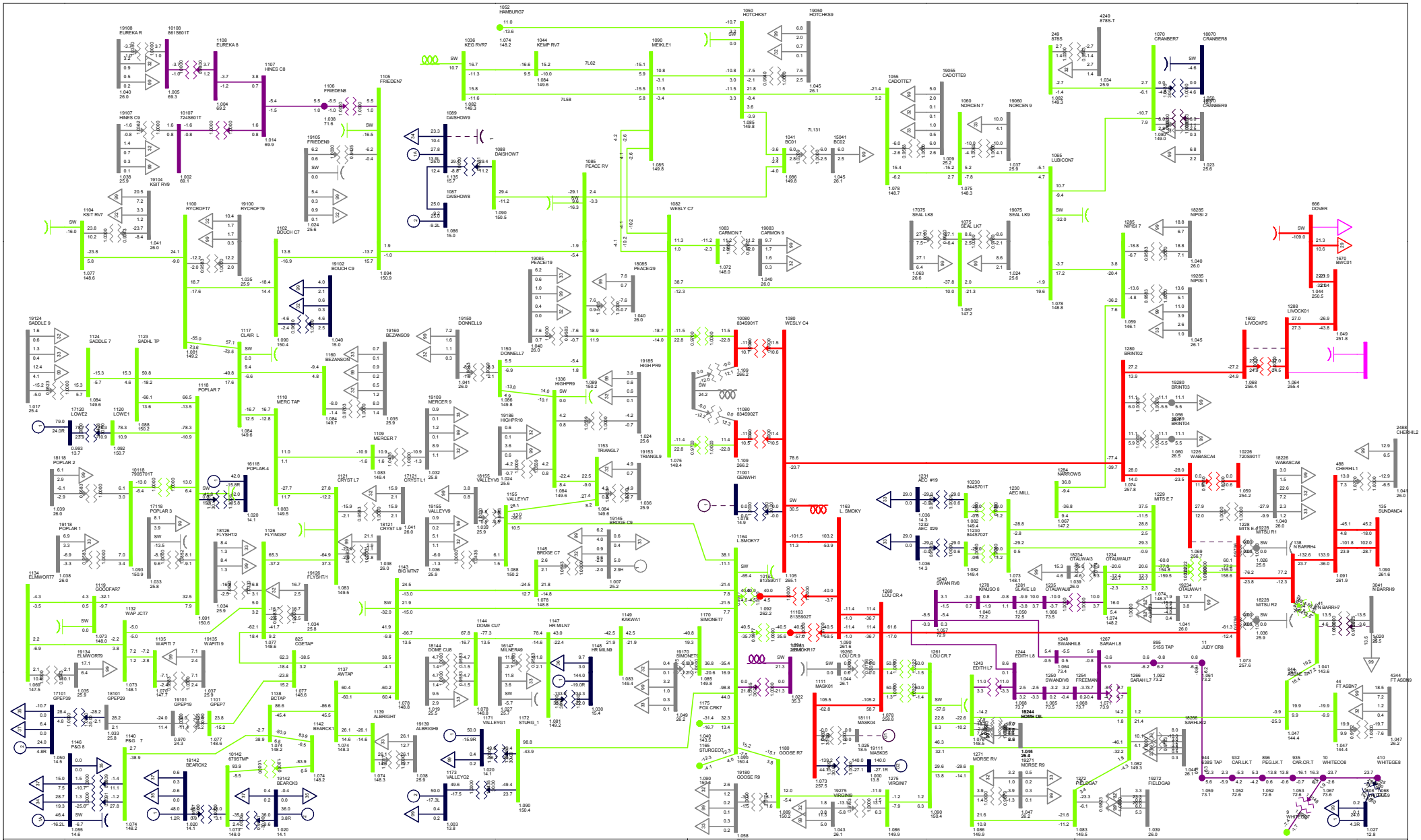
Appendix C2A

Figure: 14

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 006 9L56 WABASCA to MITSUE_A.

Whitetail Project 1290 Interconnection Study



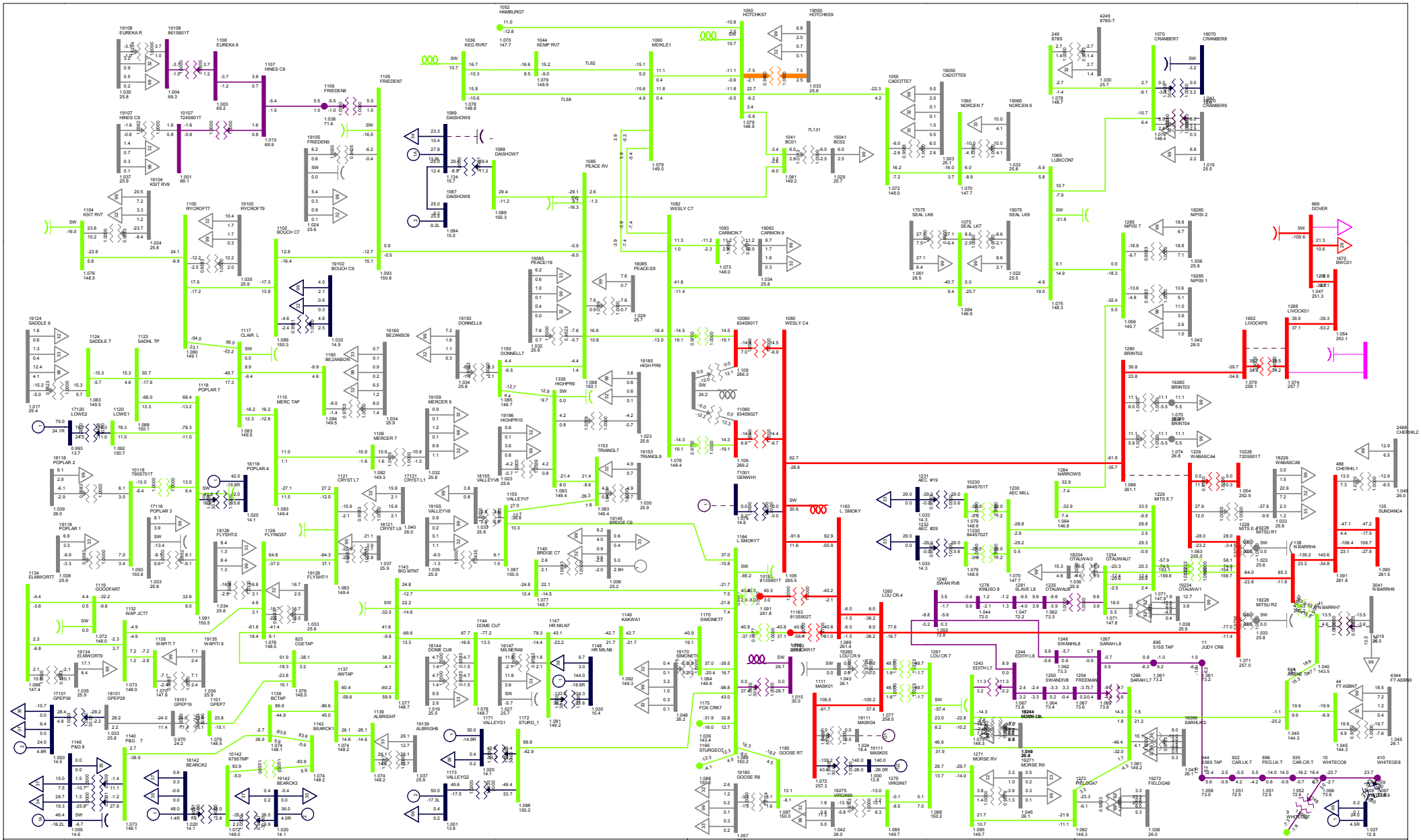
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 006 9L56 WABASCA to MITSUE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 15



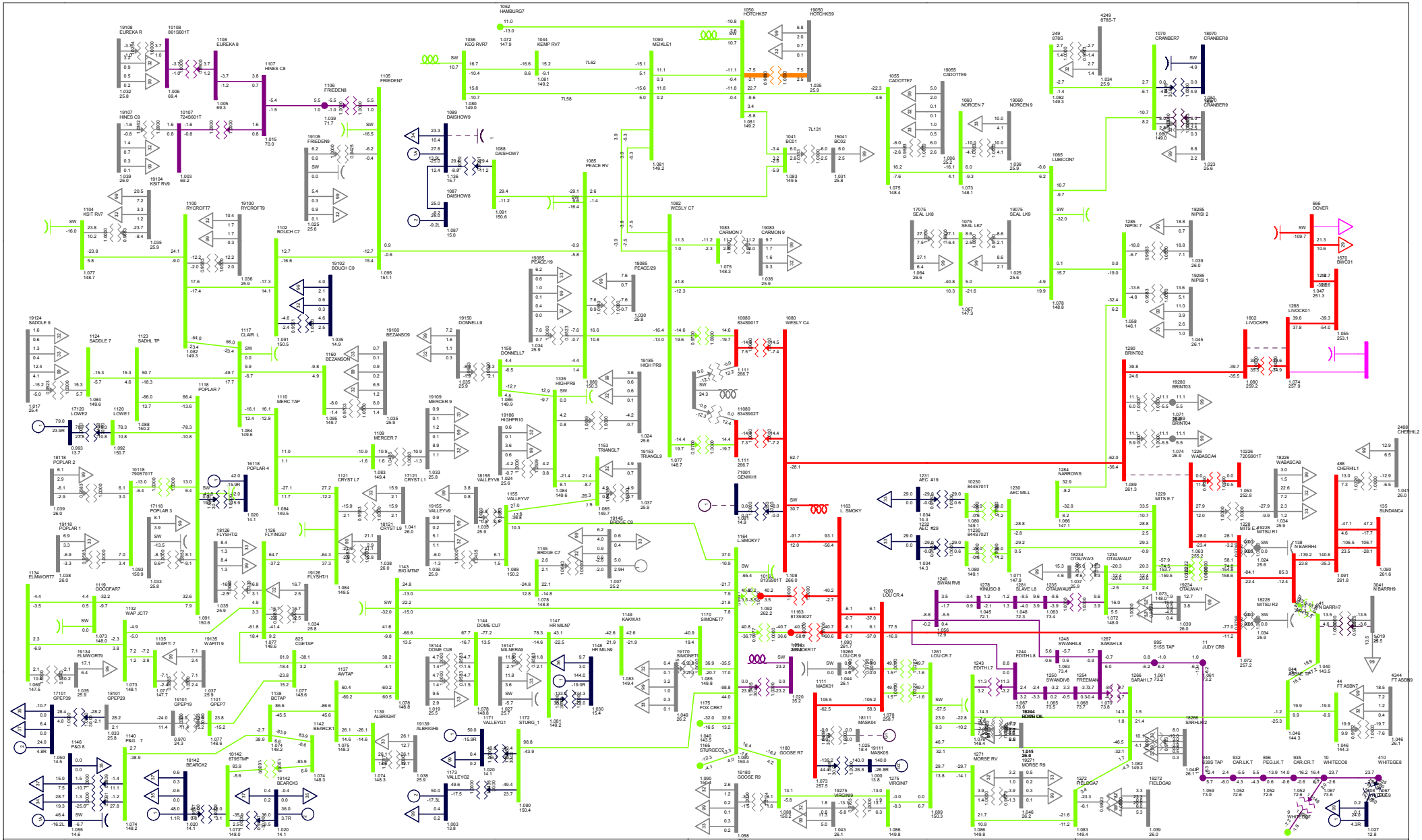
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 007 9L10 WABASCA to Brintnell_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 16



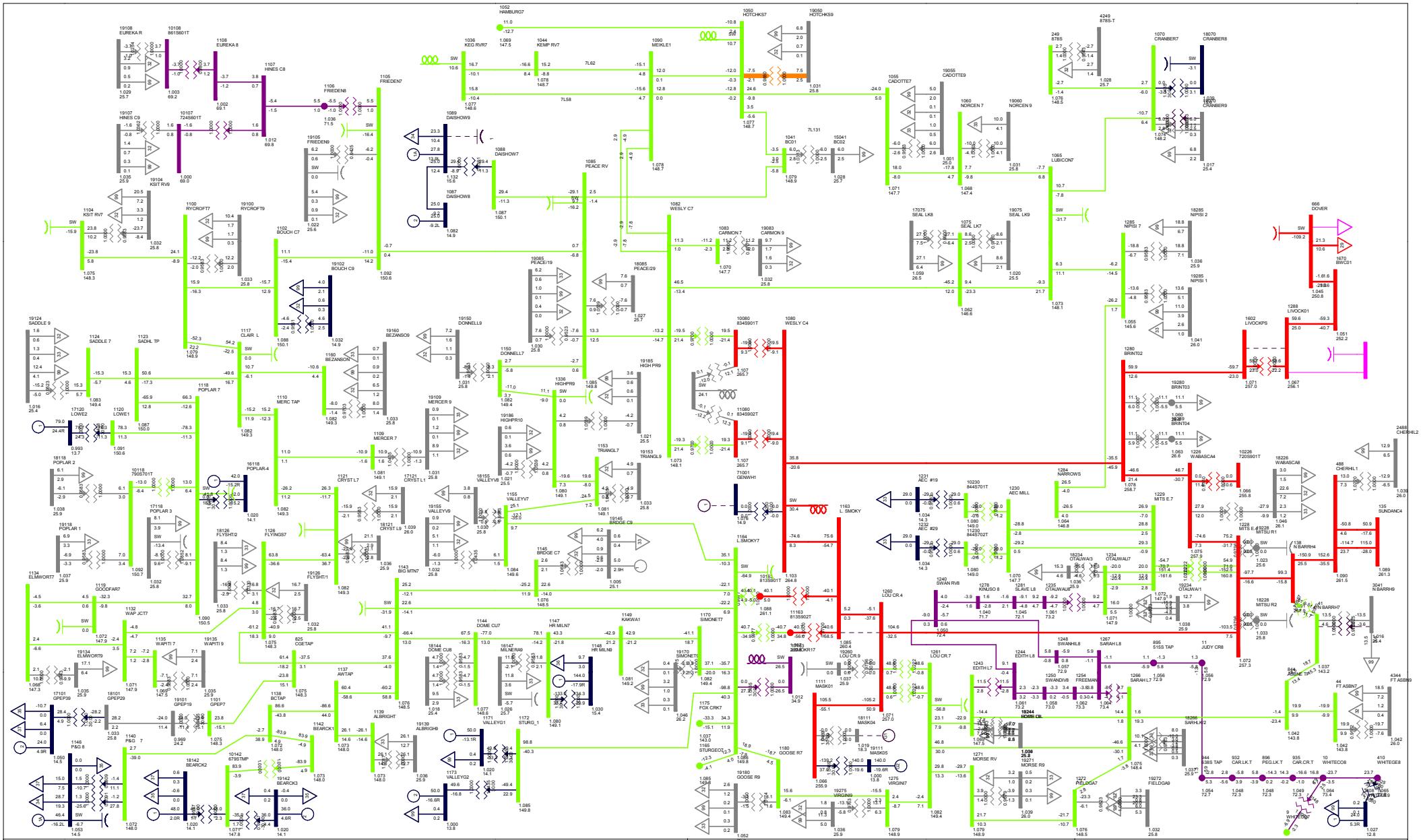
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 007 9L10 WABASCA to Brintnell_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 17



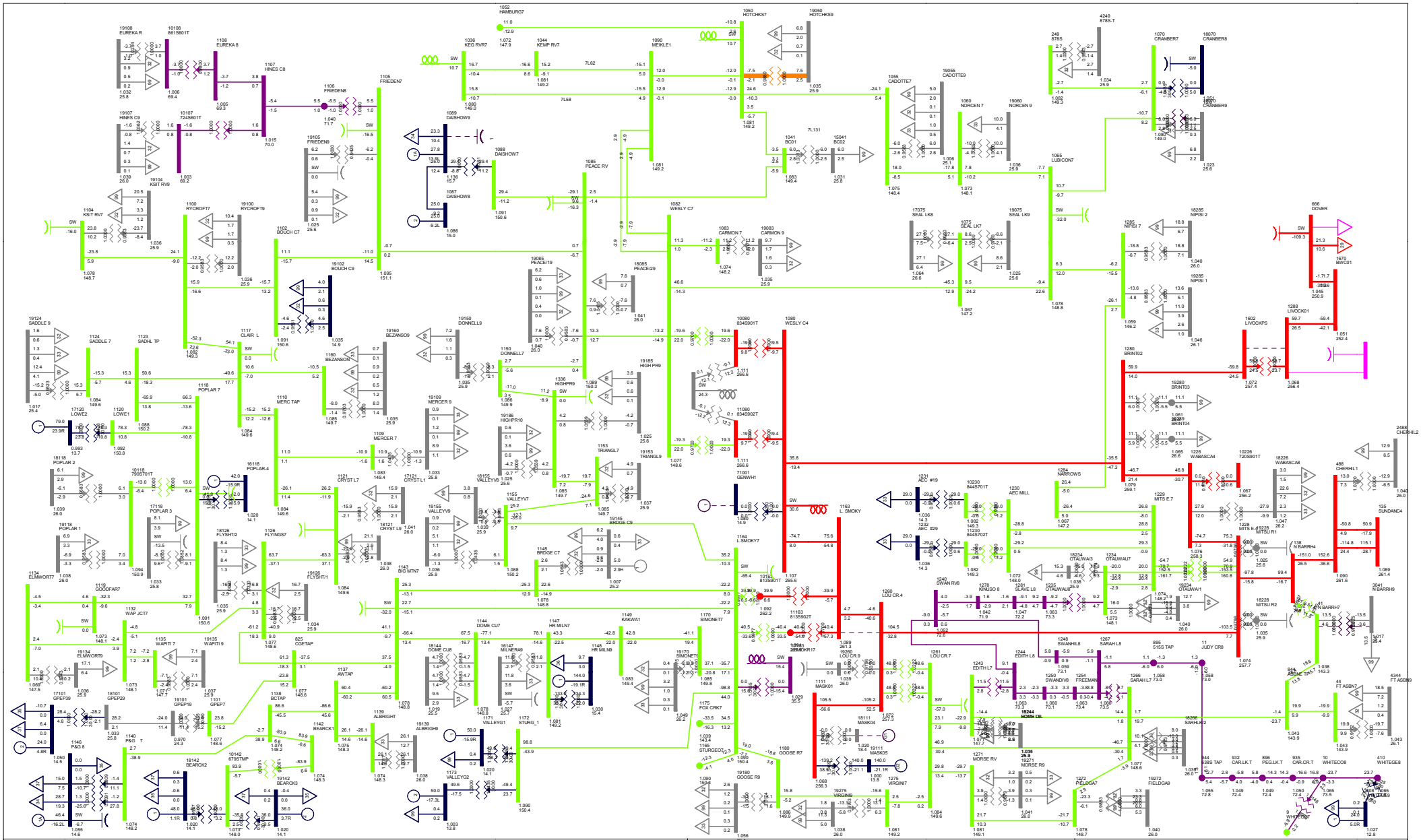
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 18



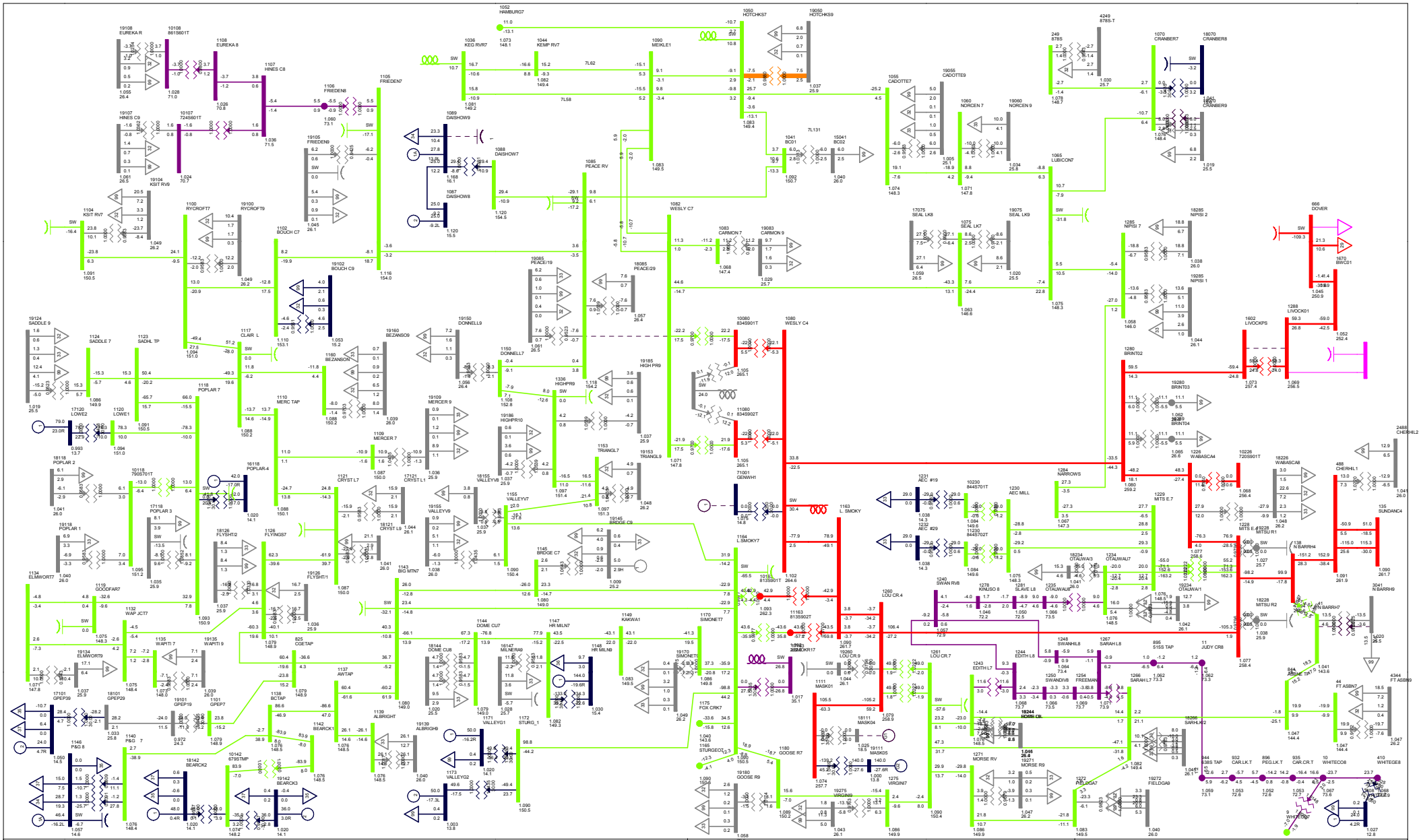
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 19



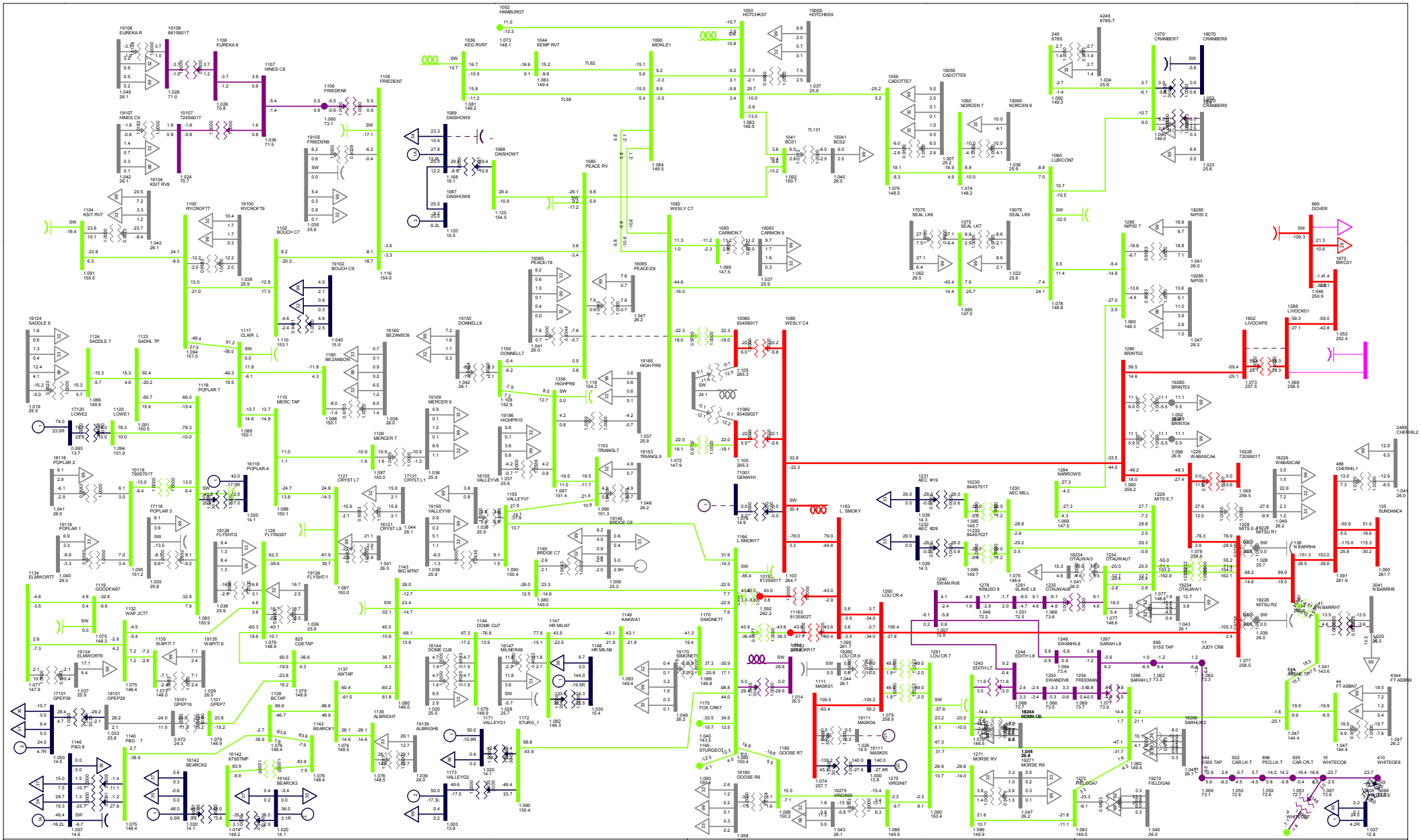
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 009 7L27 WESLEYCREEK to WESTPEACE_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 20



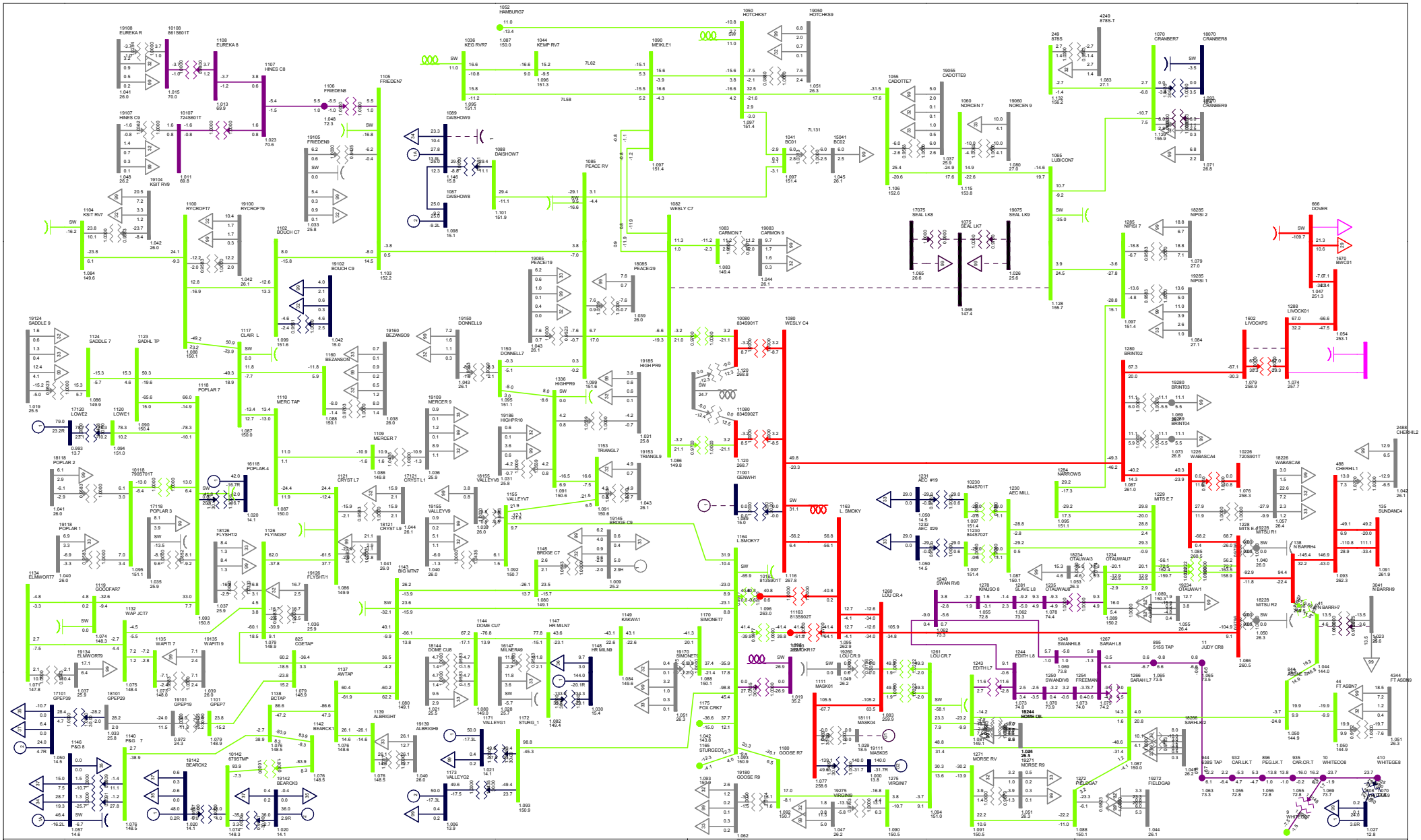
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 009 7L27 WESLEYCREEK to WESTPEACE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 21



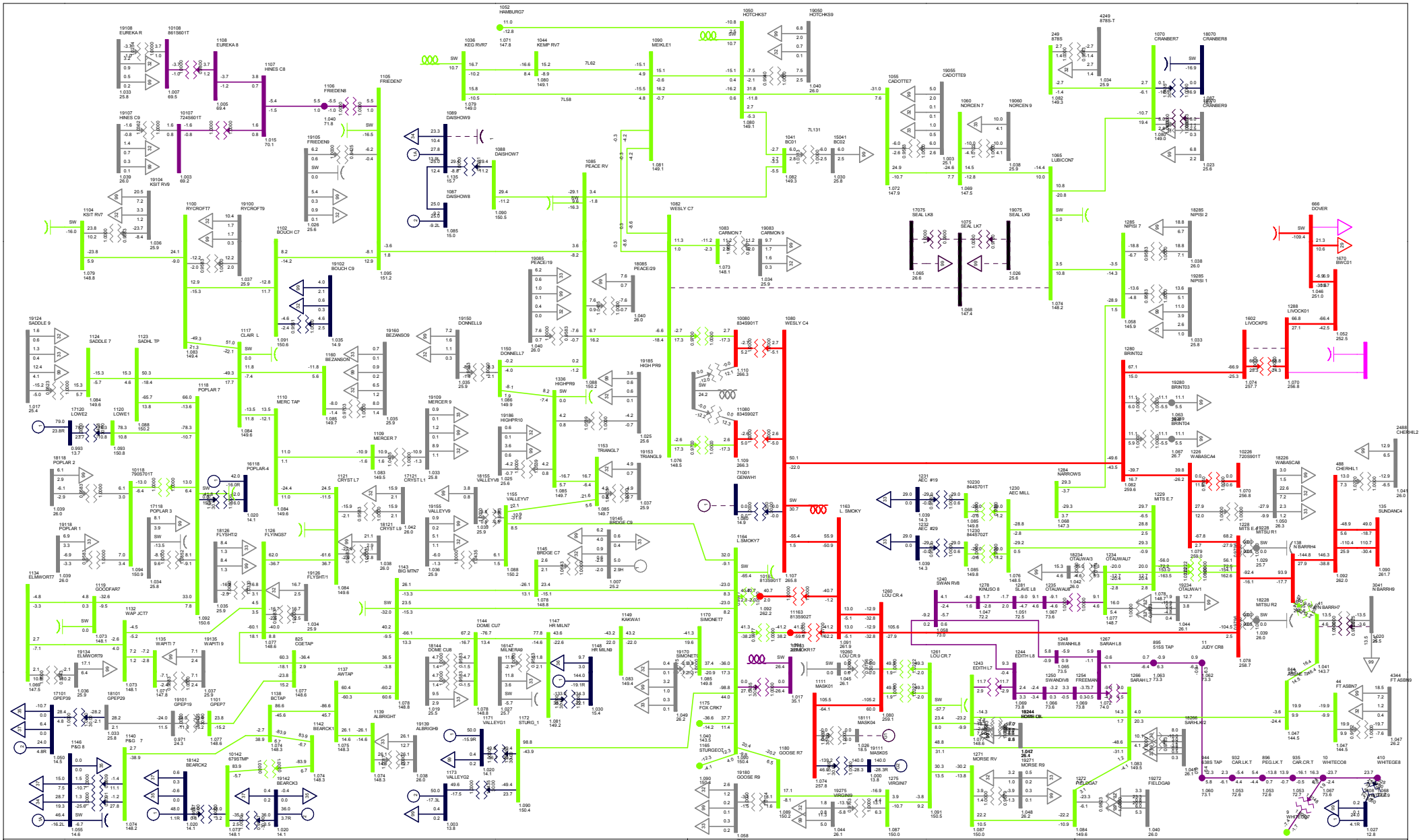
Appendix C2A

Figure: 22

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 010 7L12 WESLEYCREEK to LUBICON_A.

Whitetail Project 1290 Interconnection Study



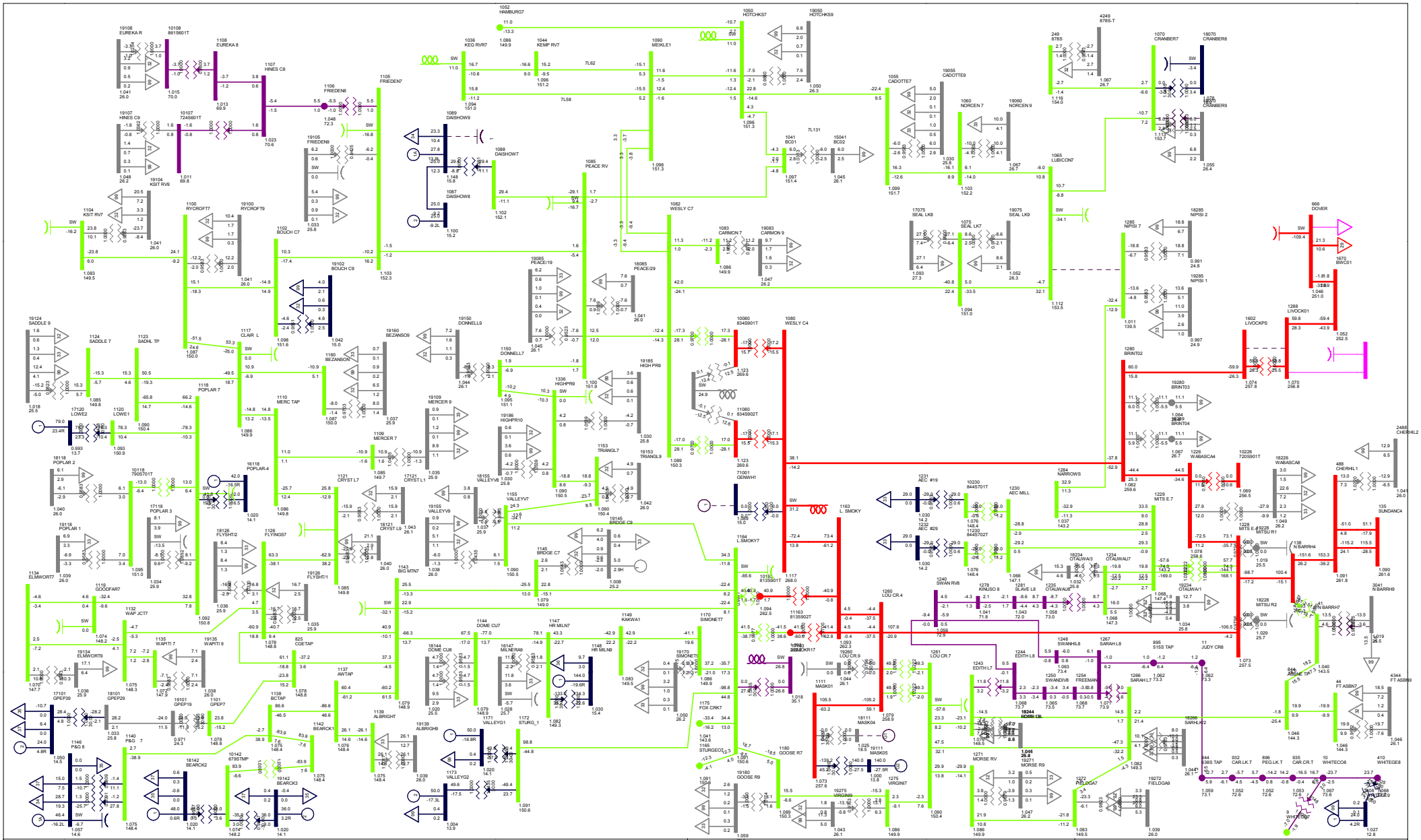
Appendix C2A

Figure: 23

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 010 7L12 WESLEYCREEK to LUBICON_B.

Whitetail Project 1290 Interconnection Study



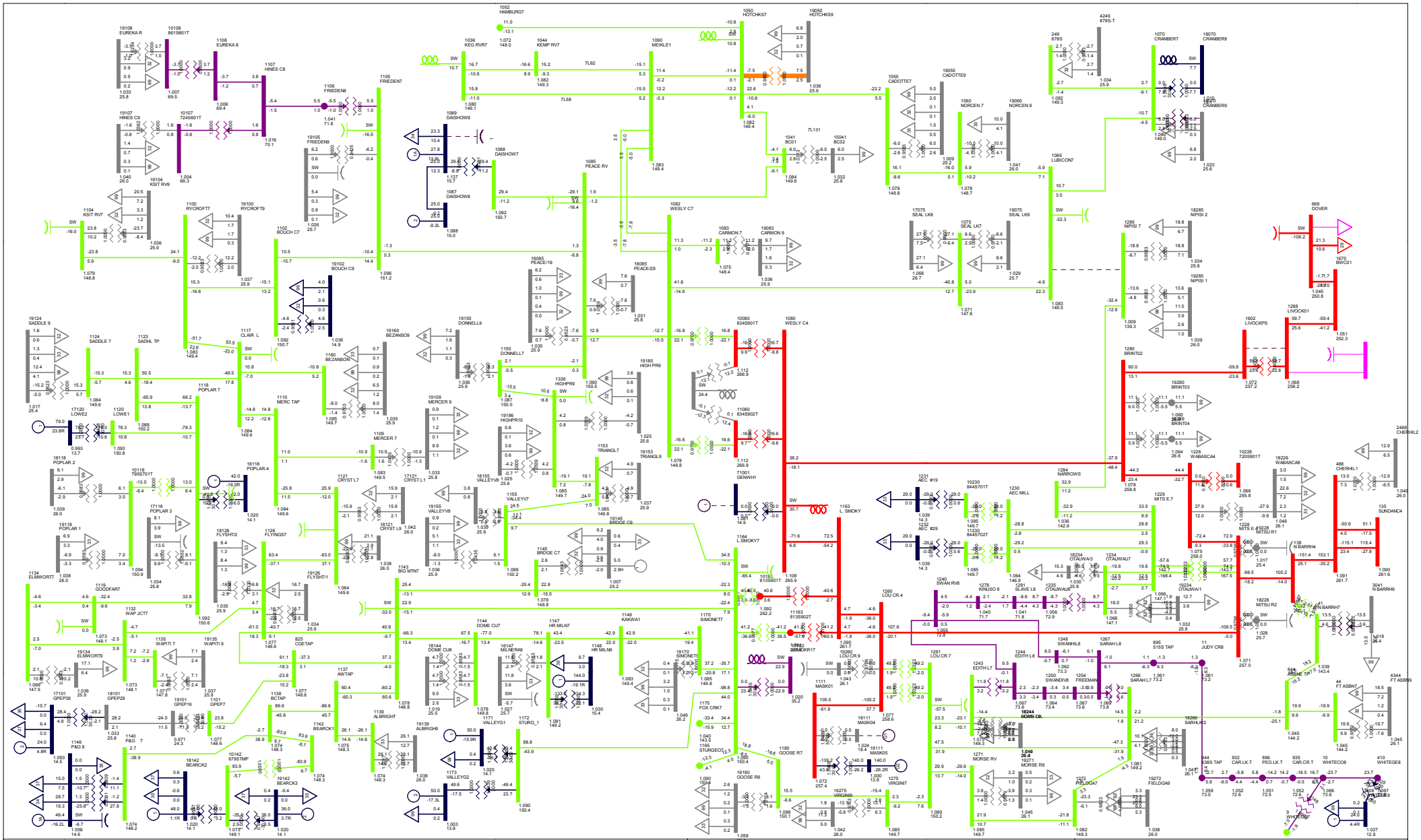
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 011 7L61 LUBICON to NIPISI_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 24



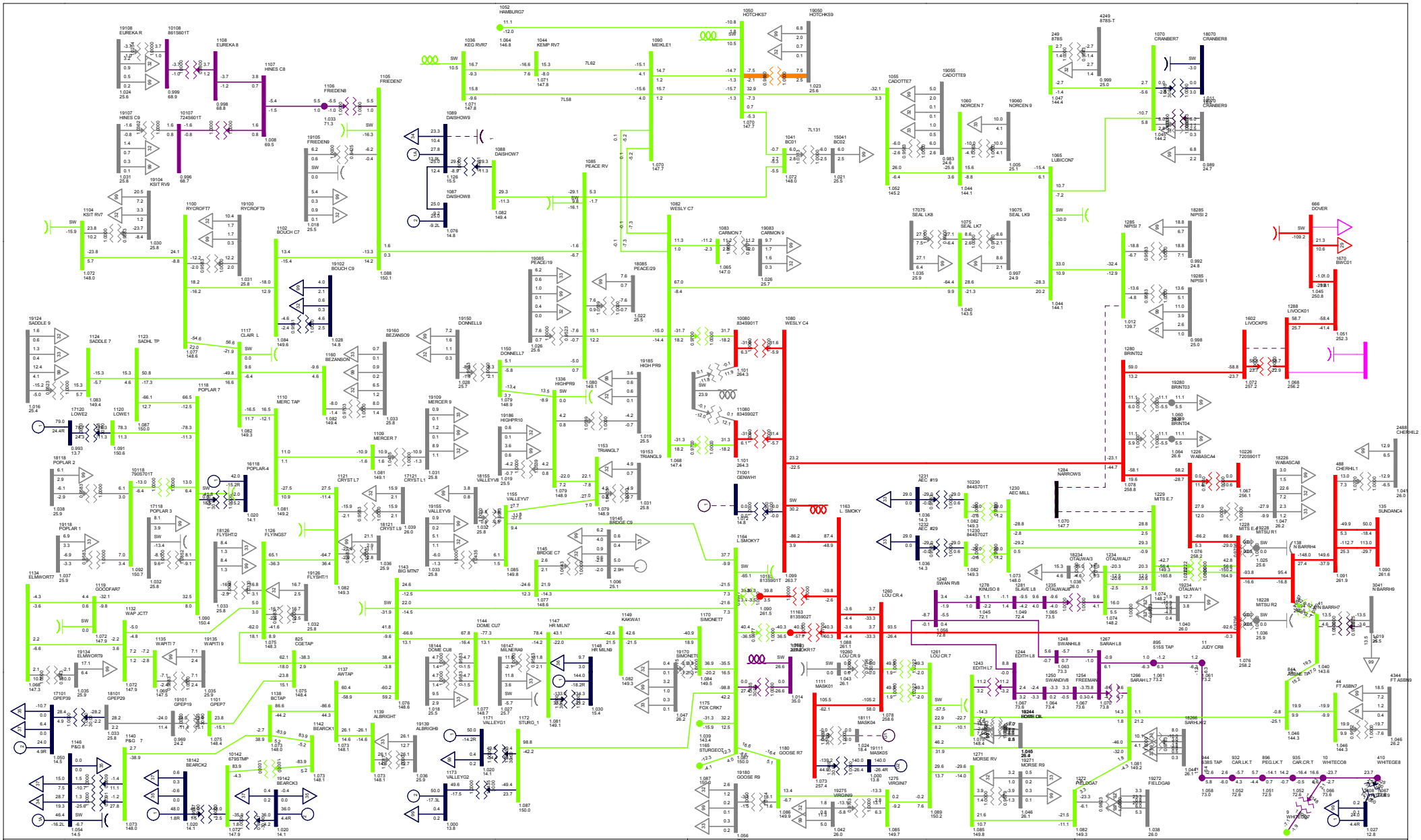
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 011 7L61 LUBICON to NIPISI_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 25



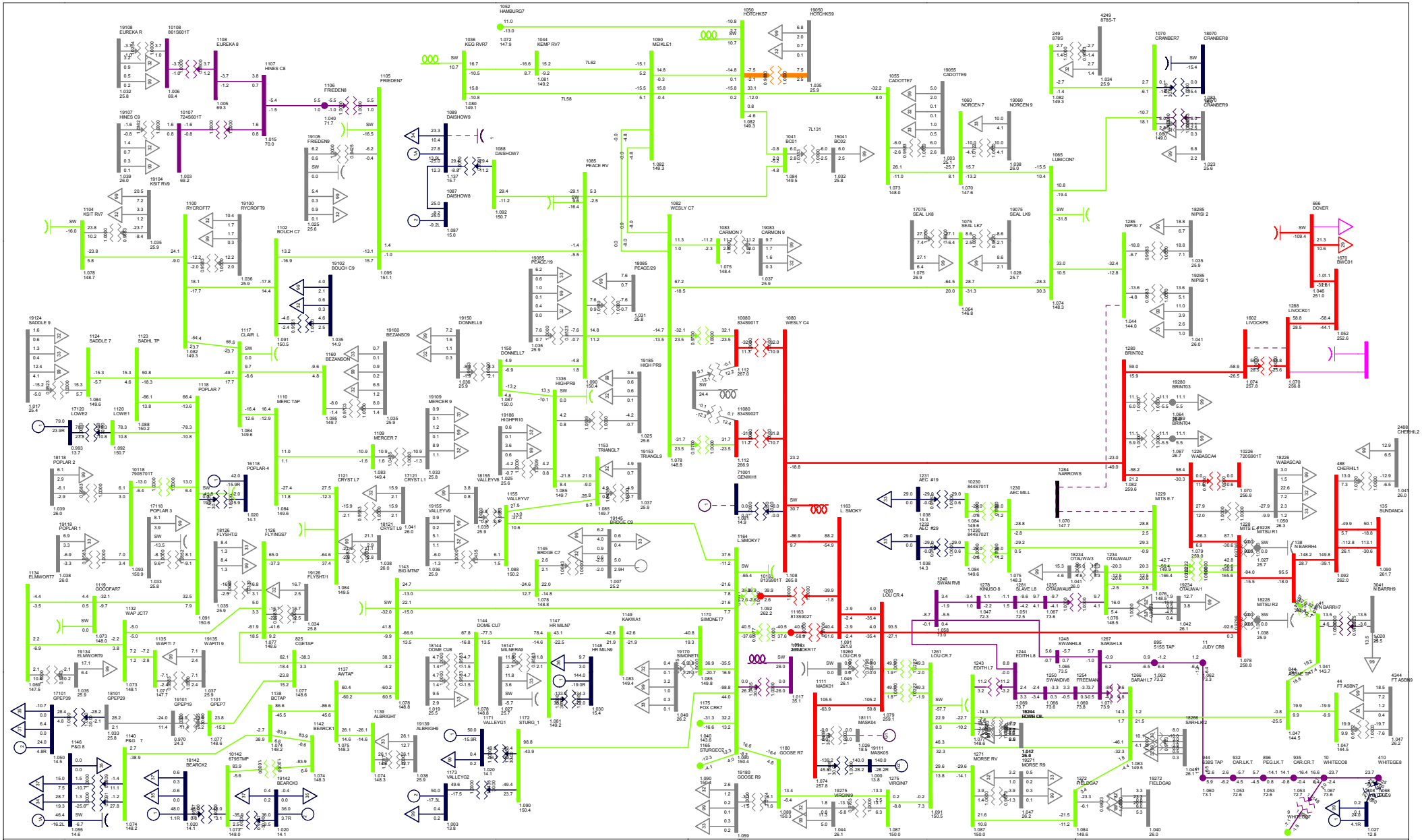
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 012 7L23 NIPISI to MITSUE_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 26



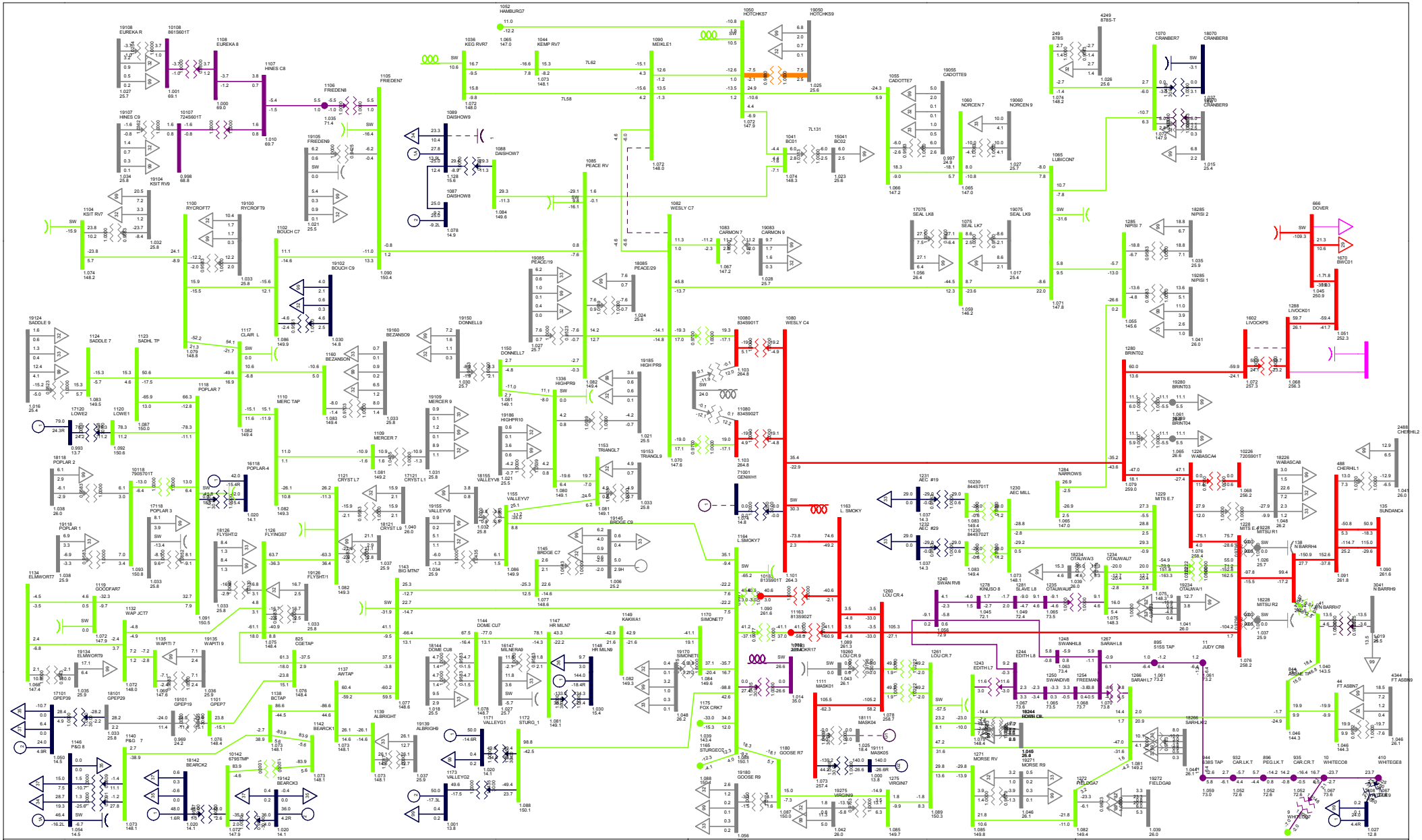
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 012 7L23 NIPISI to MITSUE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 27



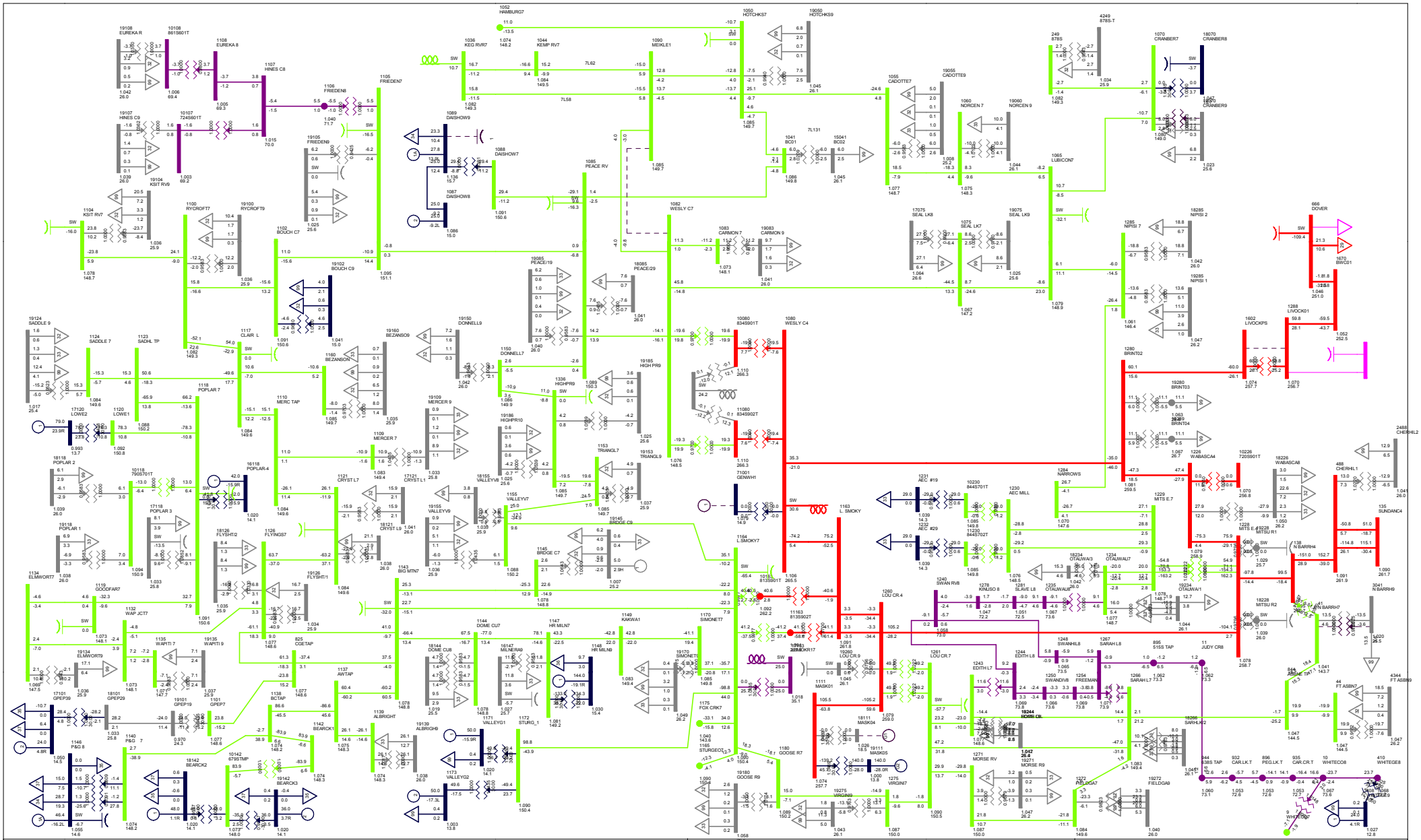
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 013 7L131 WESLEYCREEK to Meikle_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 28



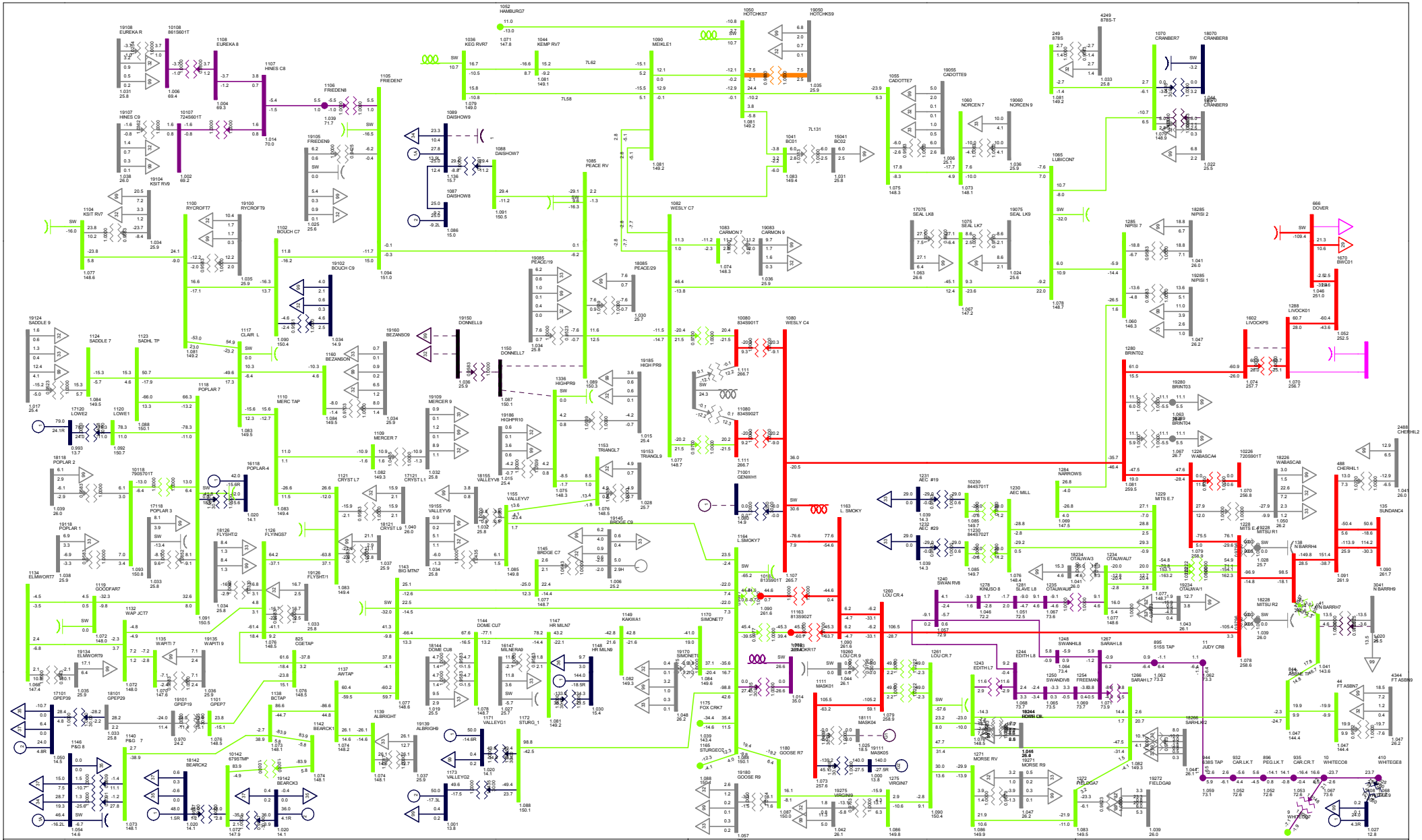
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 013 7L131 WESLEYCREEK to Meikle_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 29



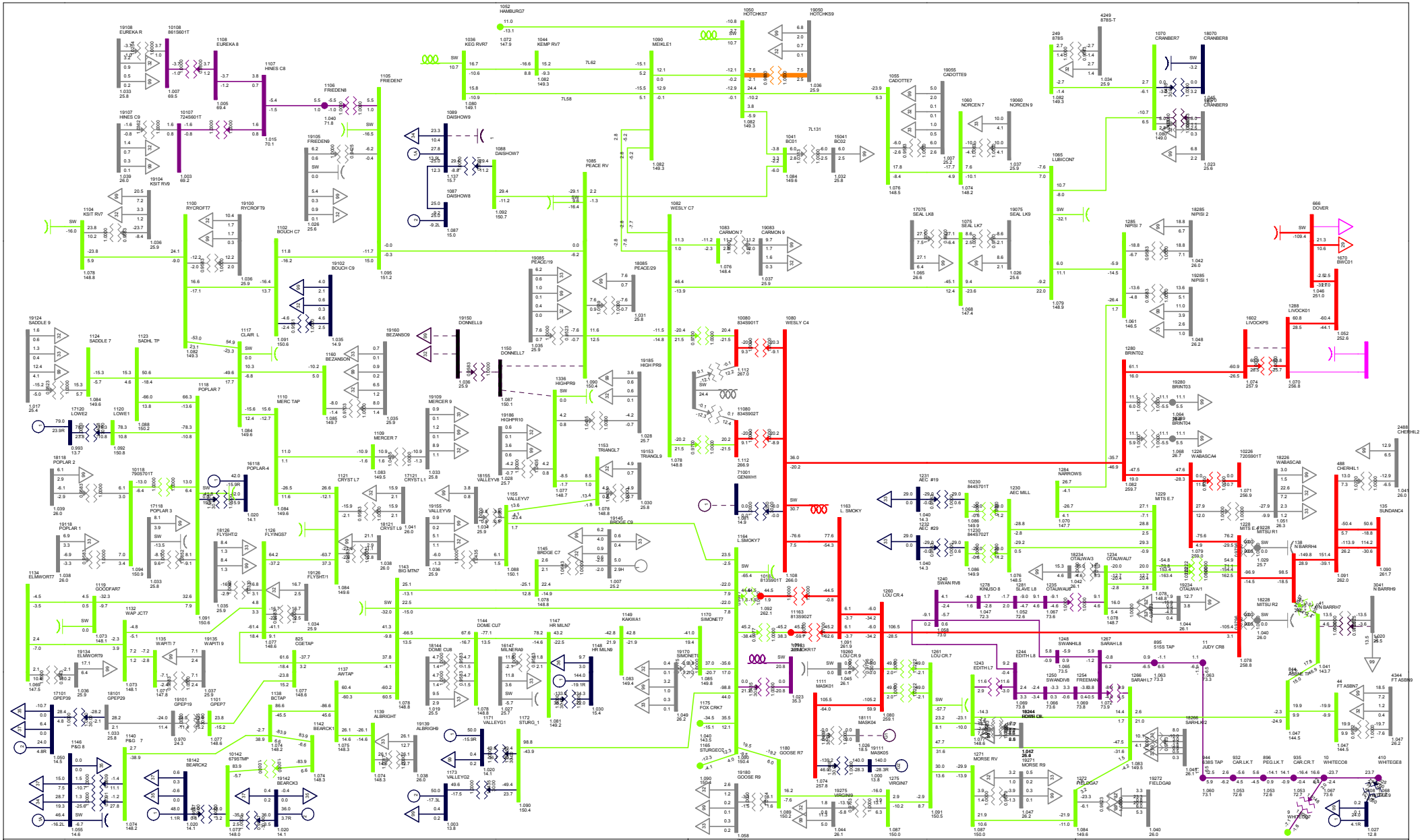
Appendix C2A

Figure: 30

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_A.

Whitetail Project 1290 Interconnection Study



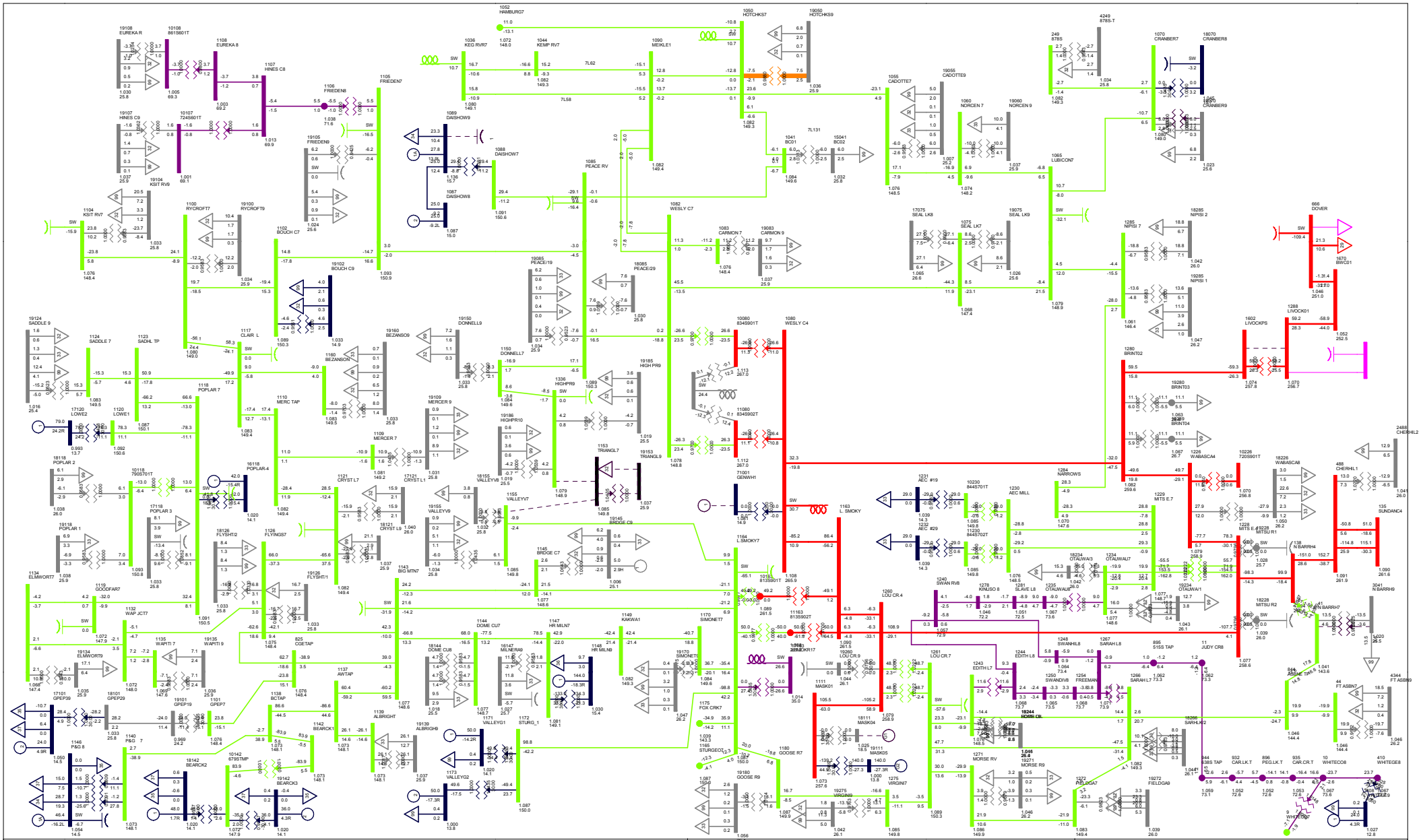
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 31



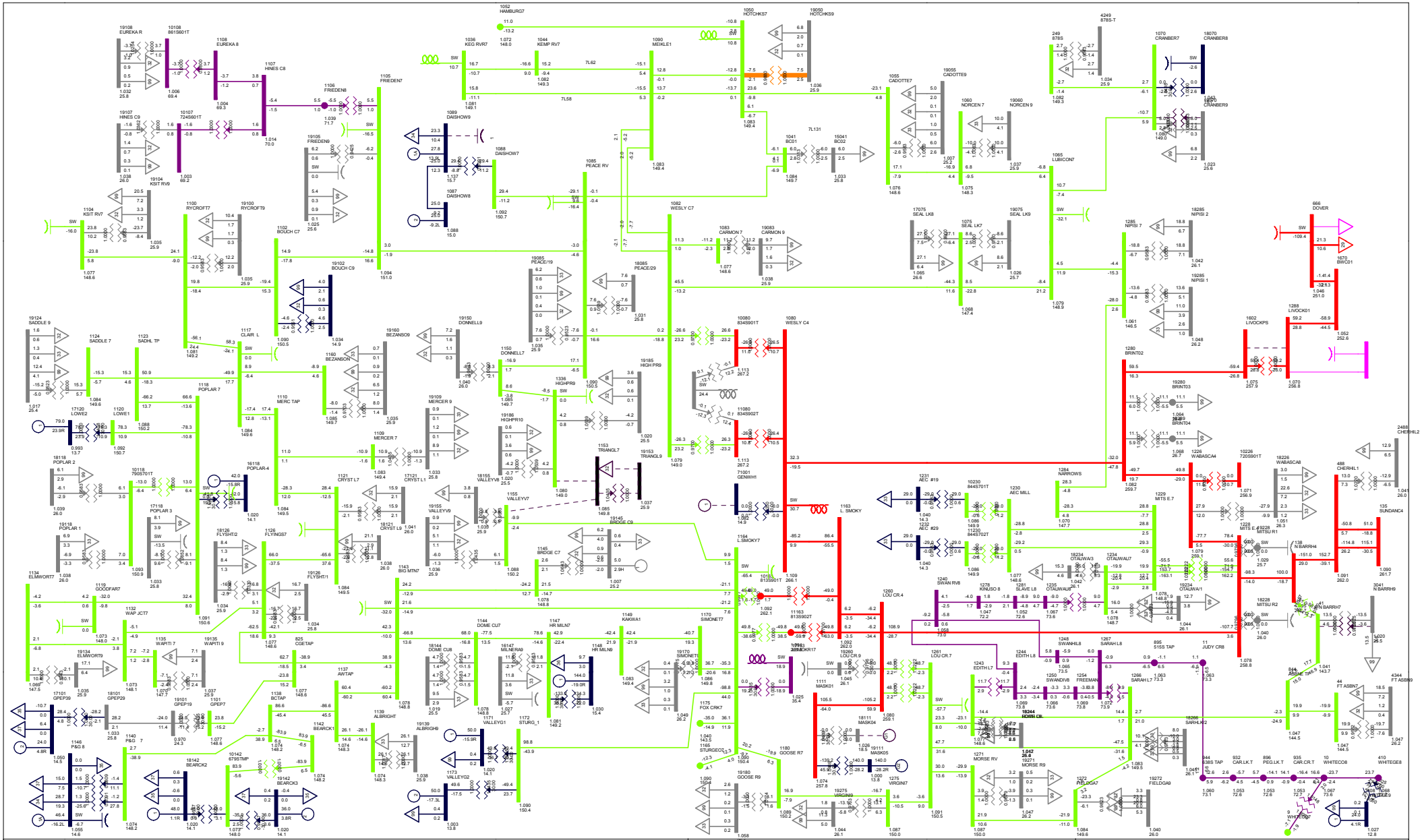
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 32



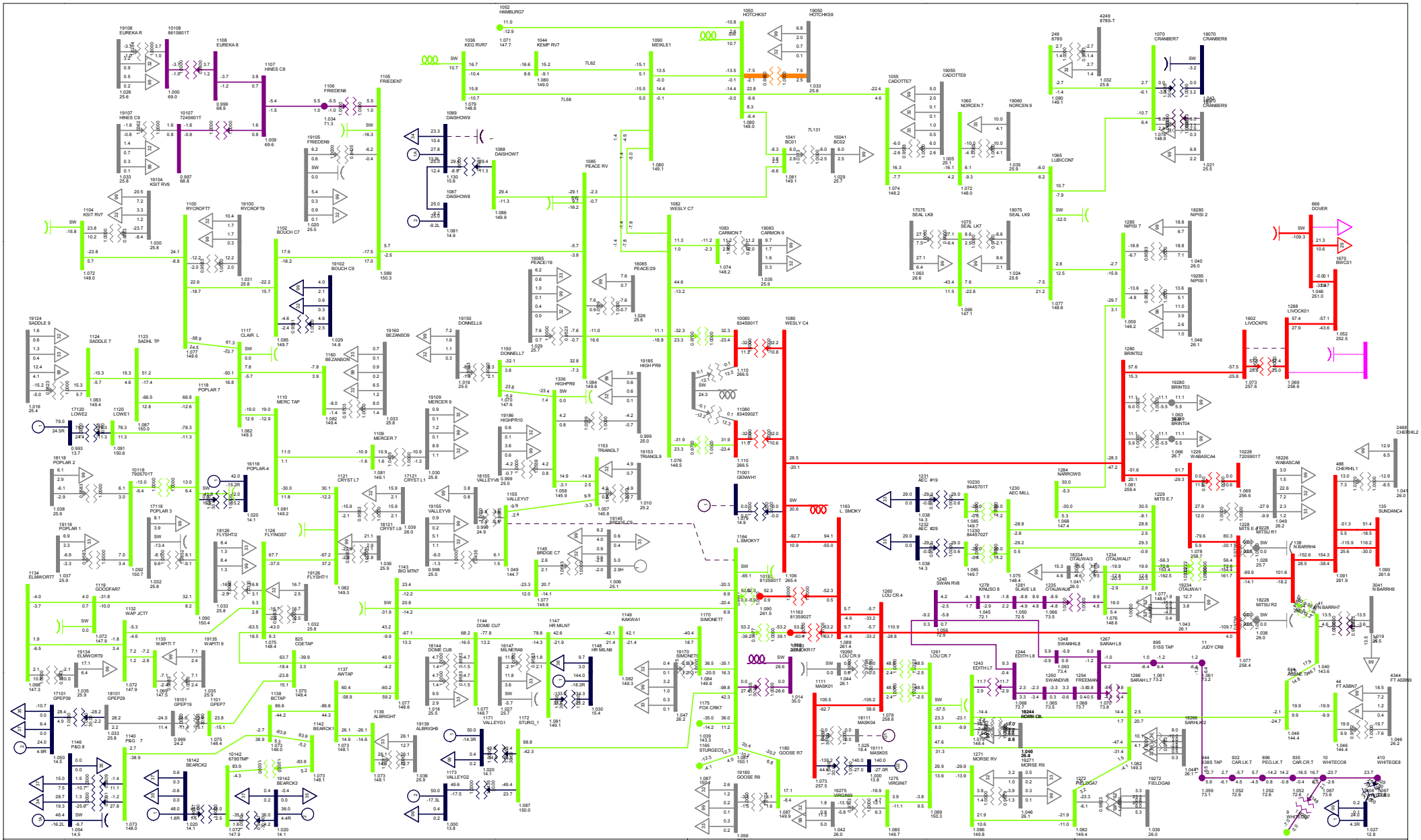
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 33

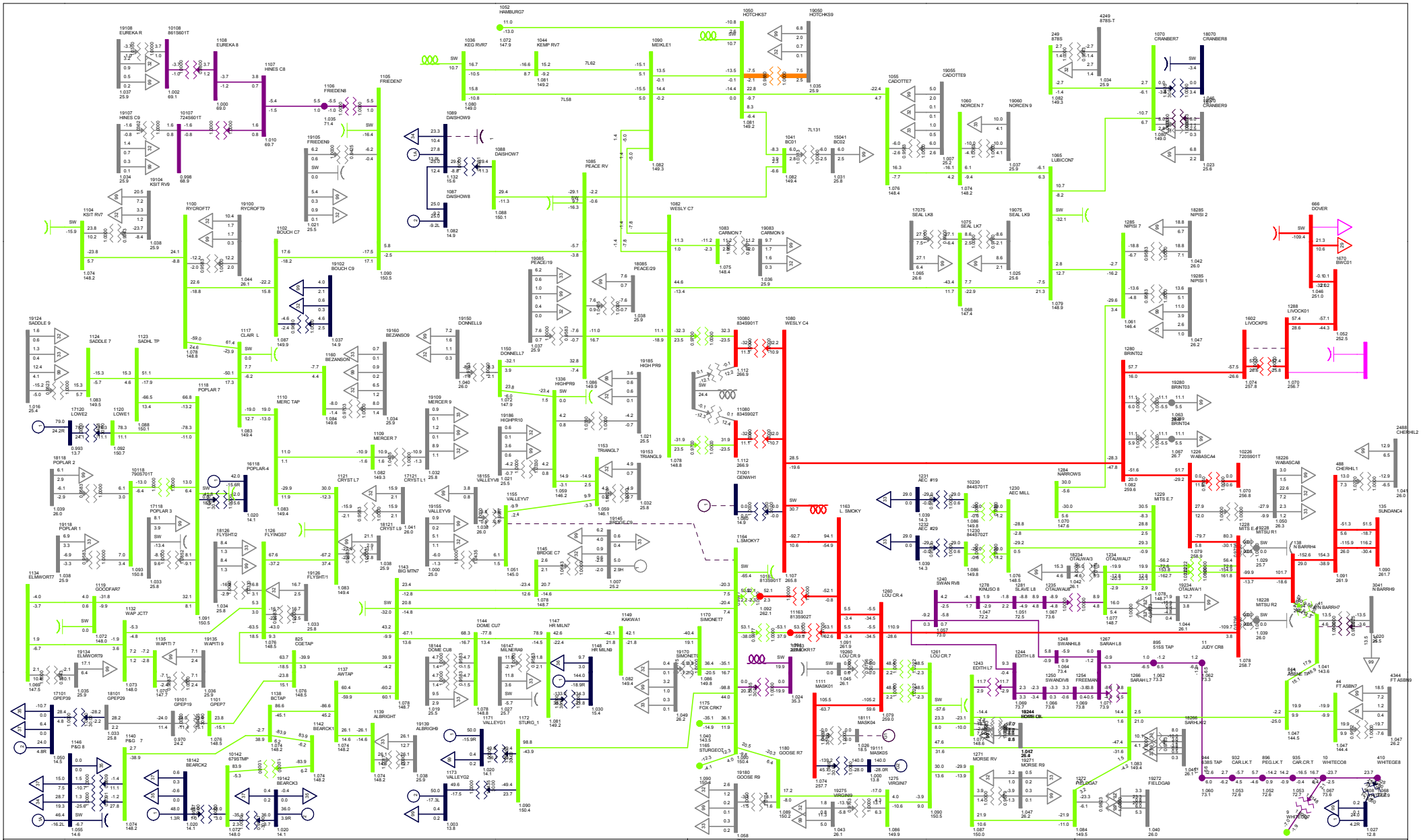


Appendix C2A Figure: 34

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_A.

Whitetail Project 1290 Interconnection Study



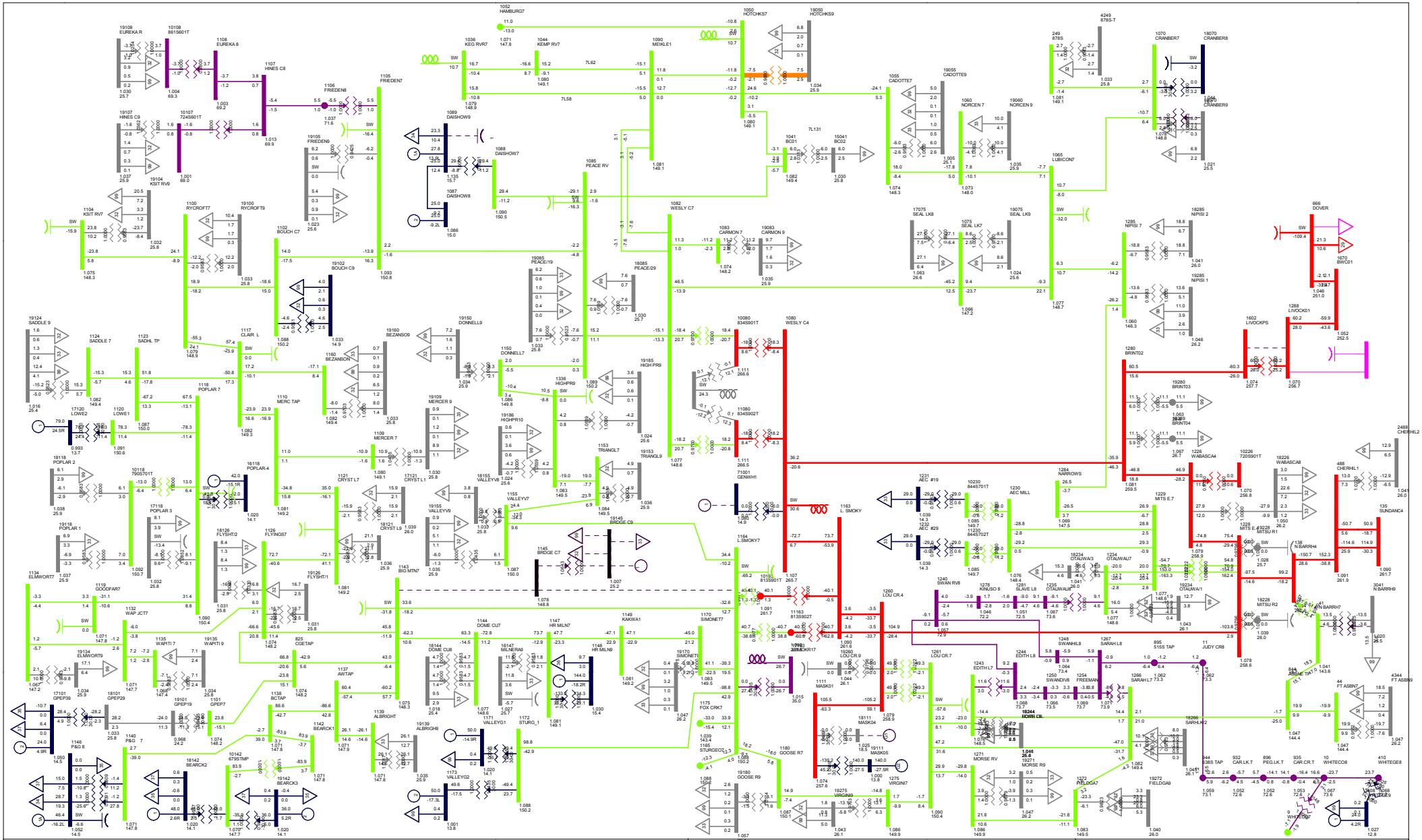
Appendix C2A

Figure: 35

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_B.

Whitetail Project 1290 Interconnection Study



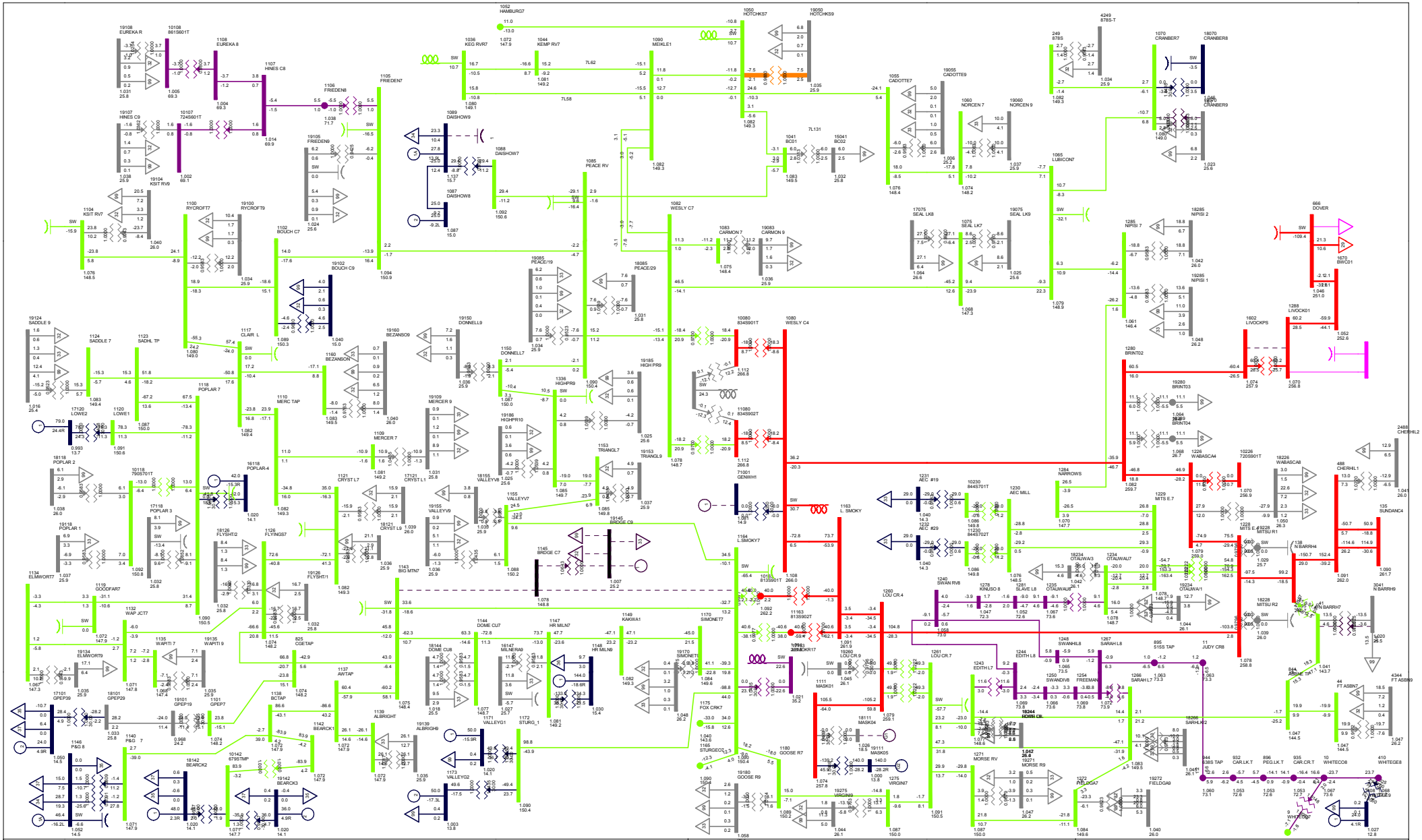
Appendix C2A

Figure: 36

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_A.

Whitetail Project 1290 Interconnection Study



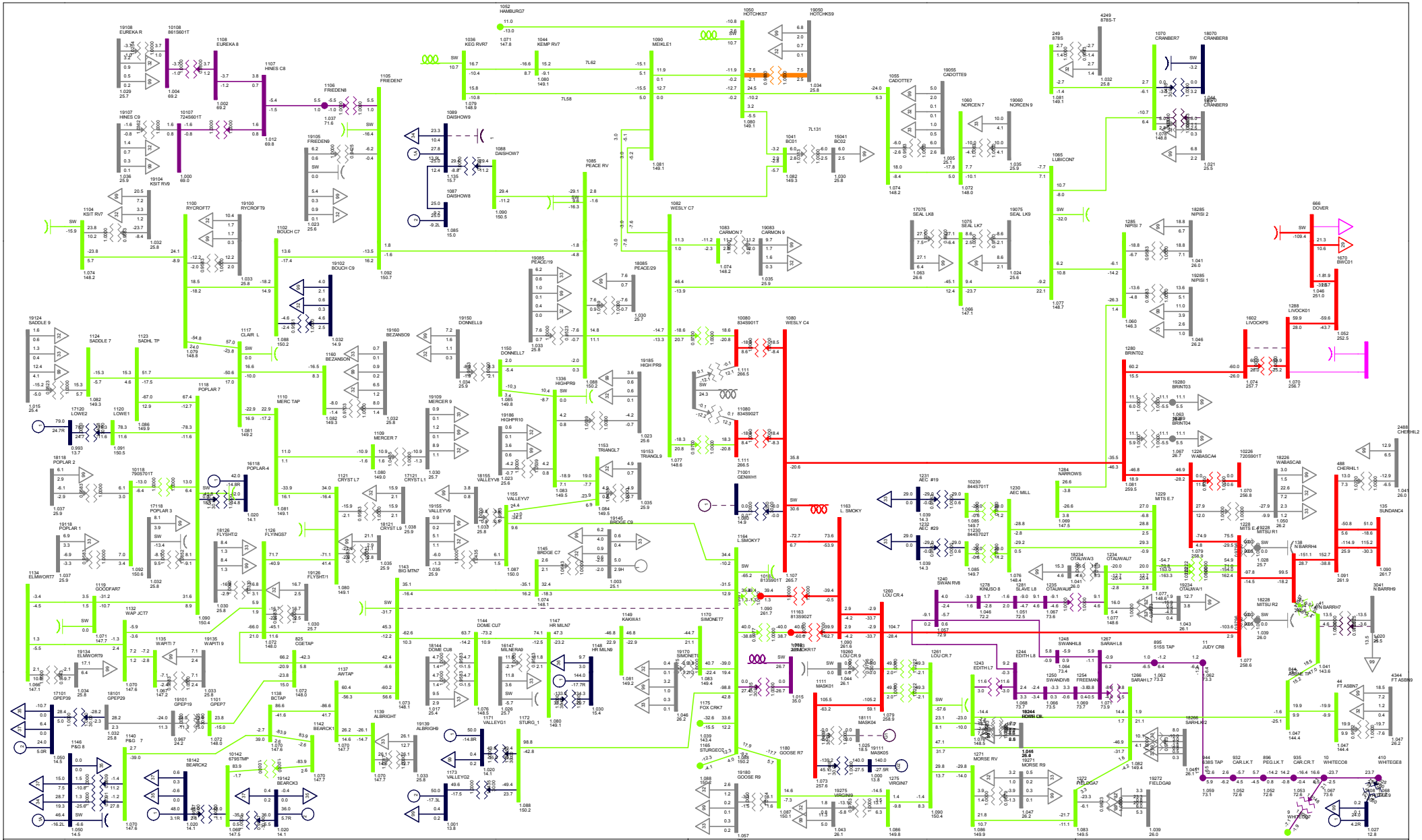
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 37

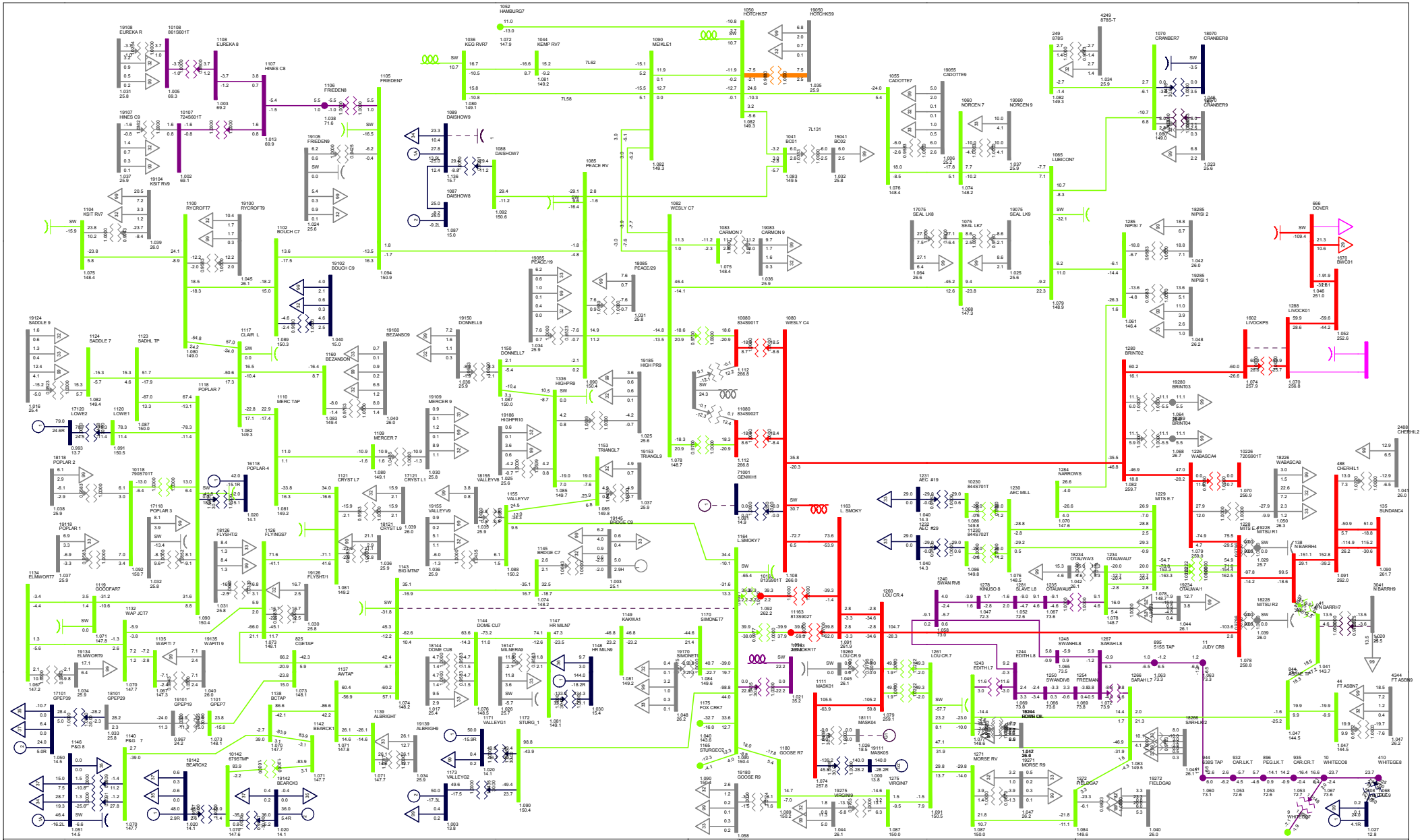


Appendix C2A Figure: 38

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_A.

Whitetail Project 1290 Interconnection Study



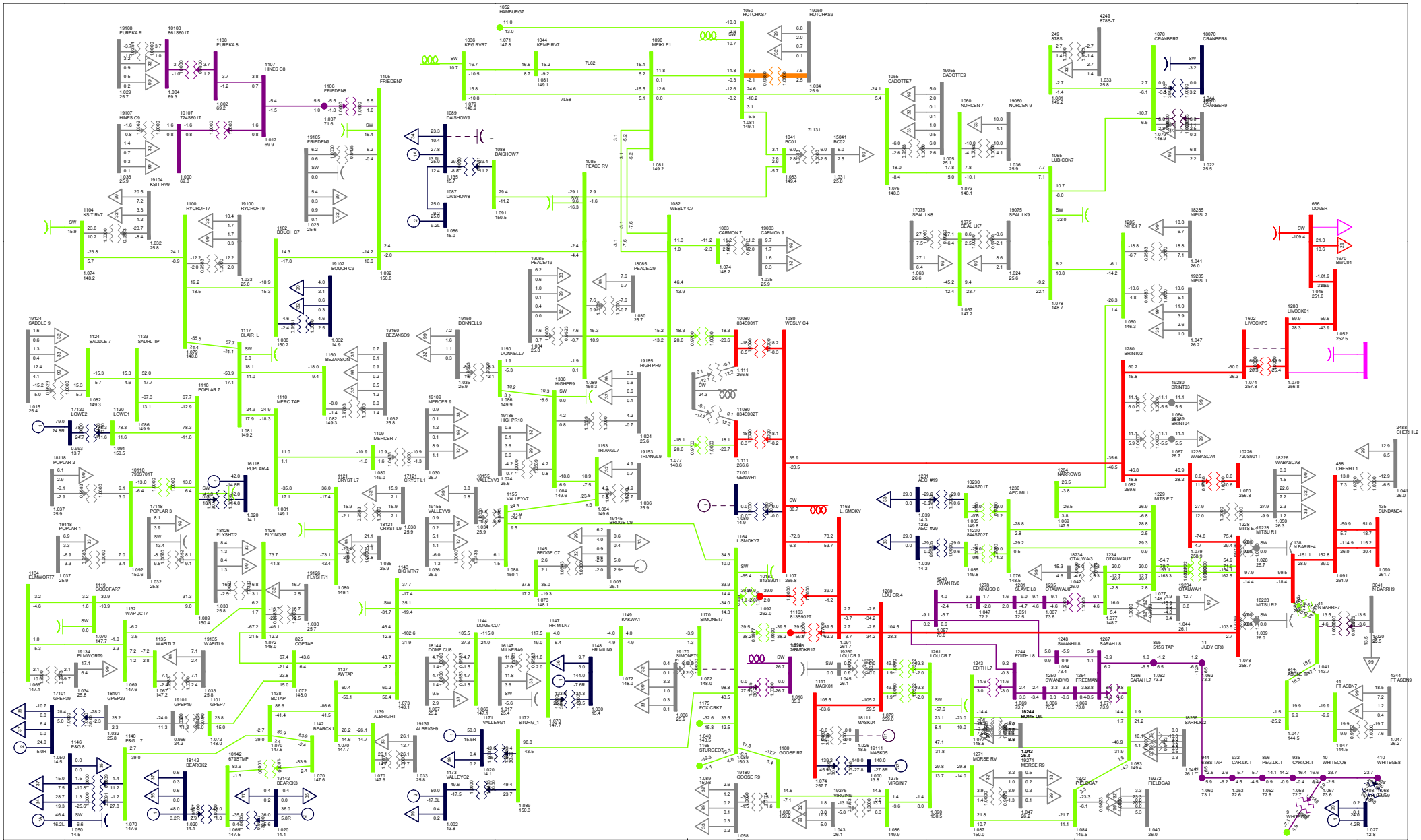
Appendix C2A

Figure: 39

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_B.

Whitetail Project 1290 Interconnection Study



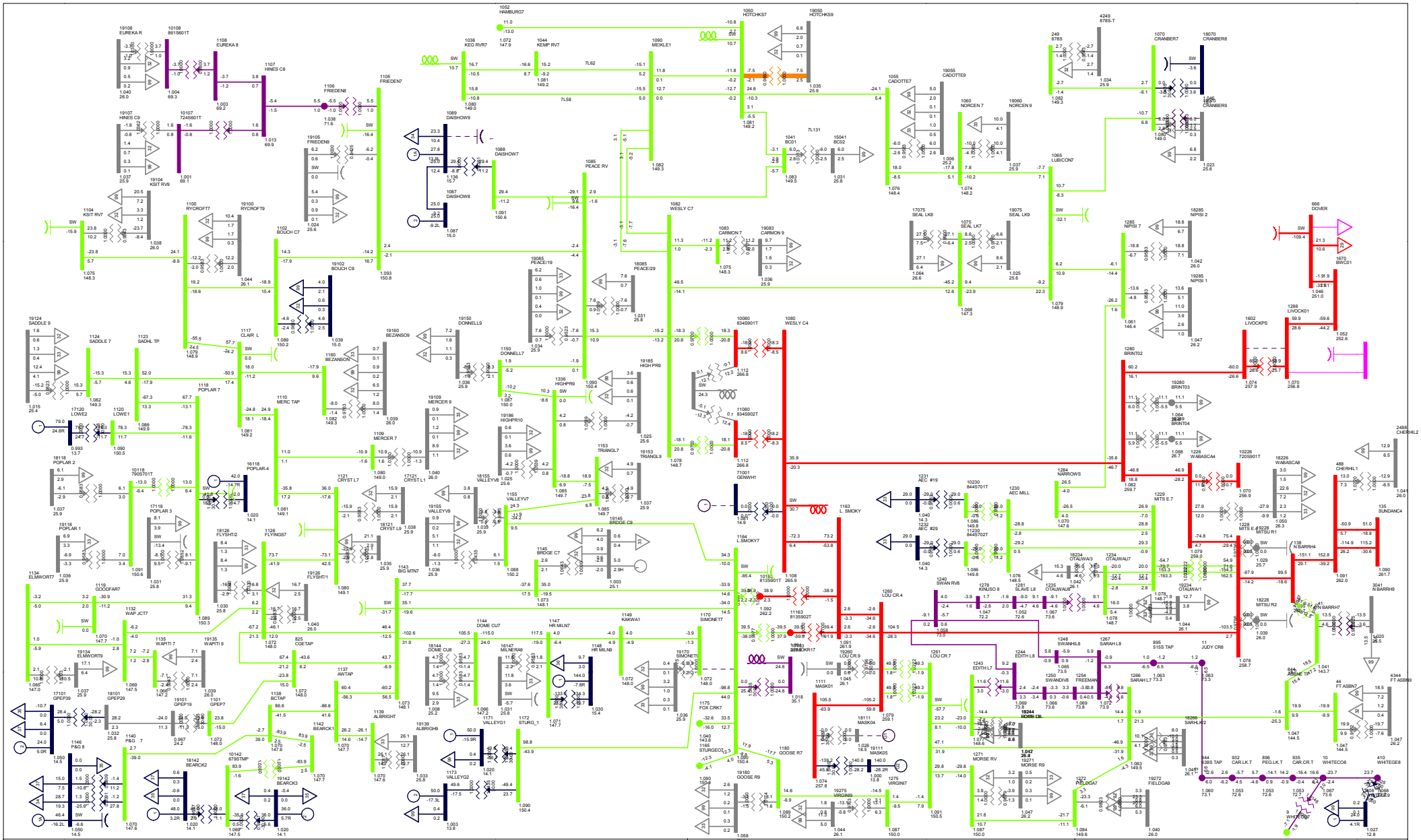
Appendix C2A

Figure: 40

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 019 7L40 LITTLESMOKY to SIMONETTE_A.

Whitetail Project 1290 Interconnection Study



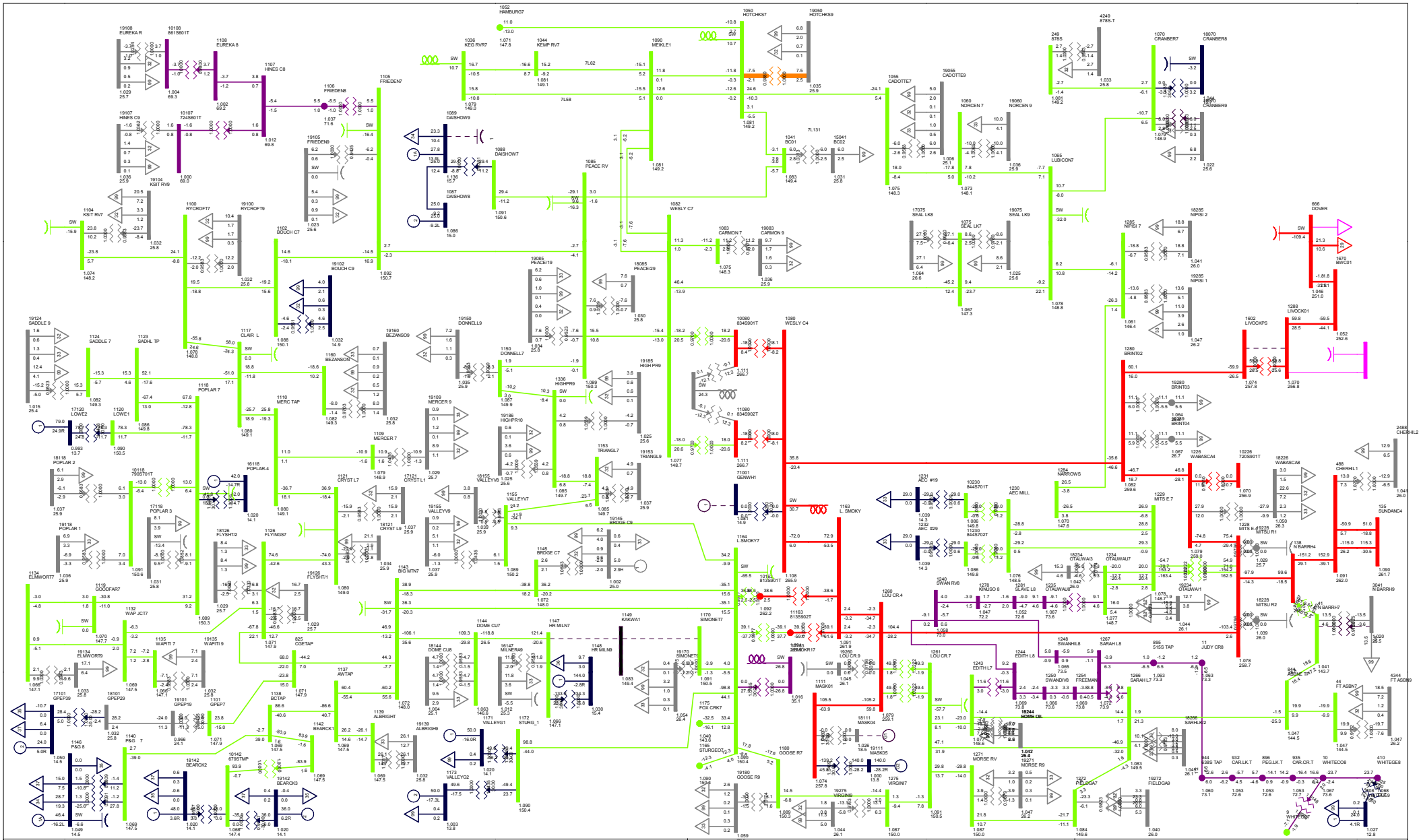
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 019 7L40 LITTLESMOKY to SIMONETTE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 41



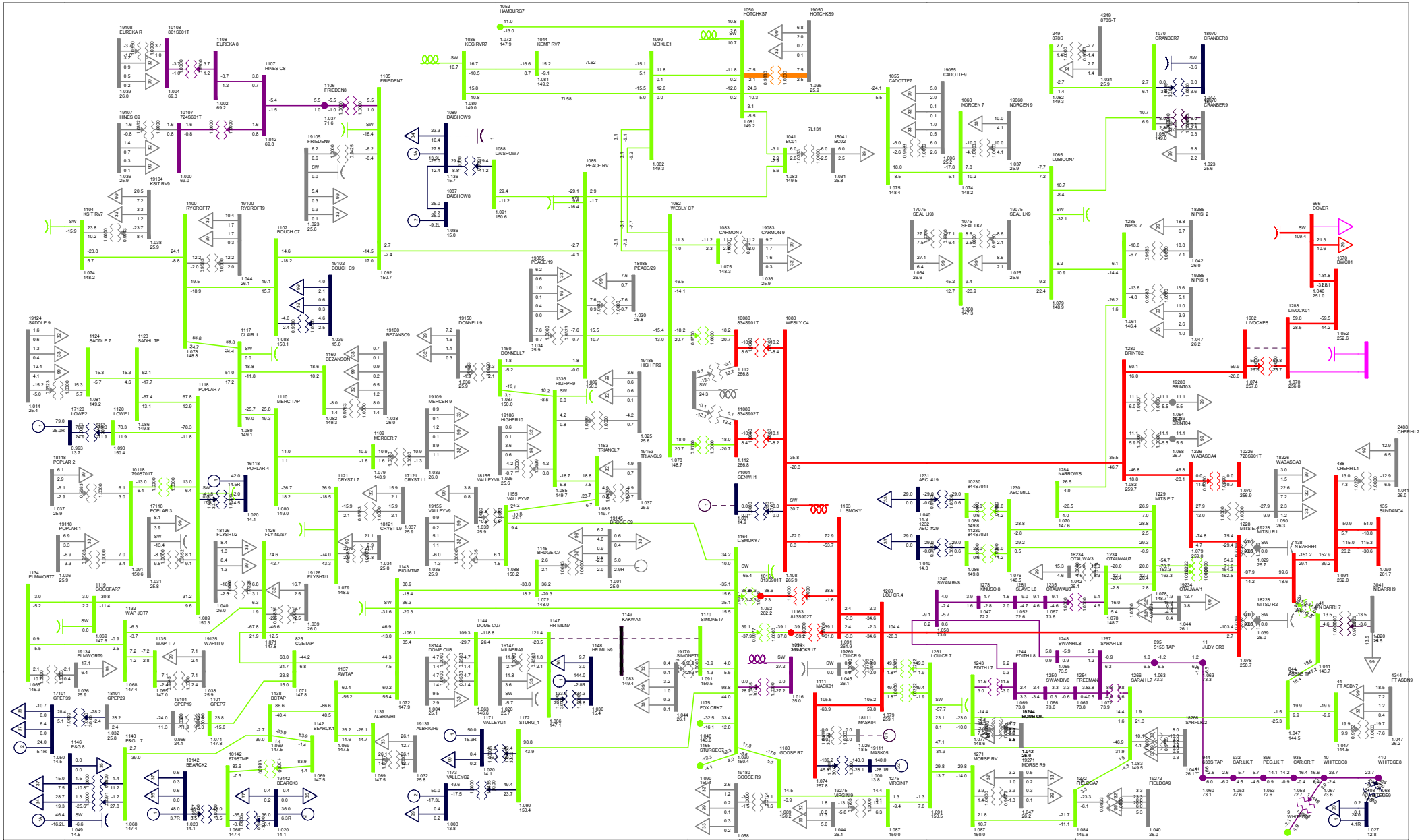
Appendix C2A

Figure: 42

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 020 7L80 SIMONETTE to HR MILNER_A.

Whitetail Project 1290 Interconnection Study



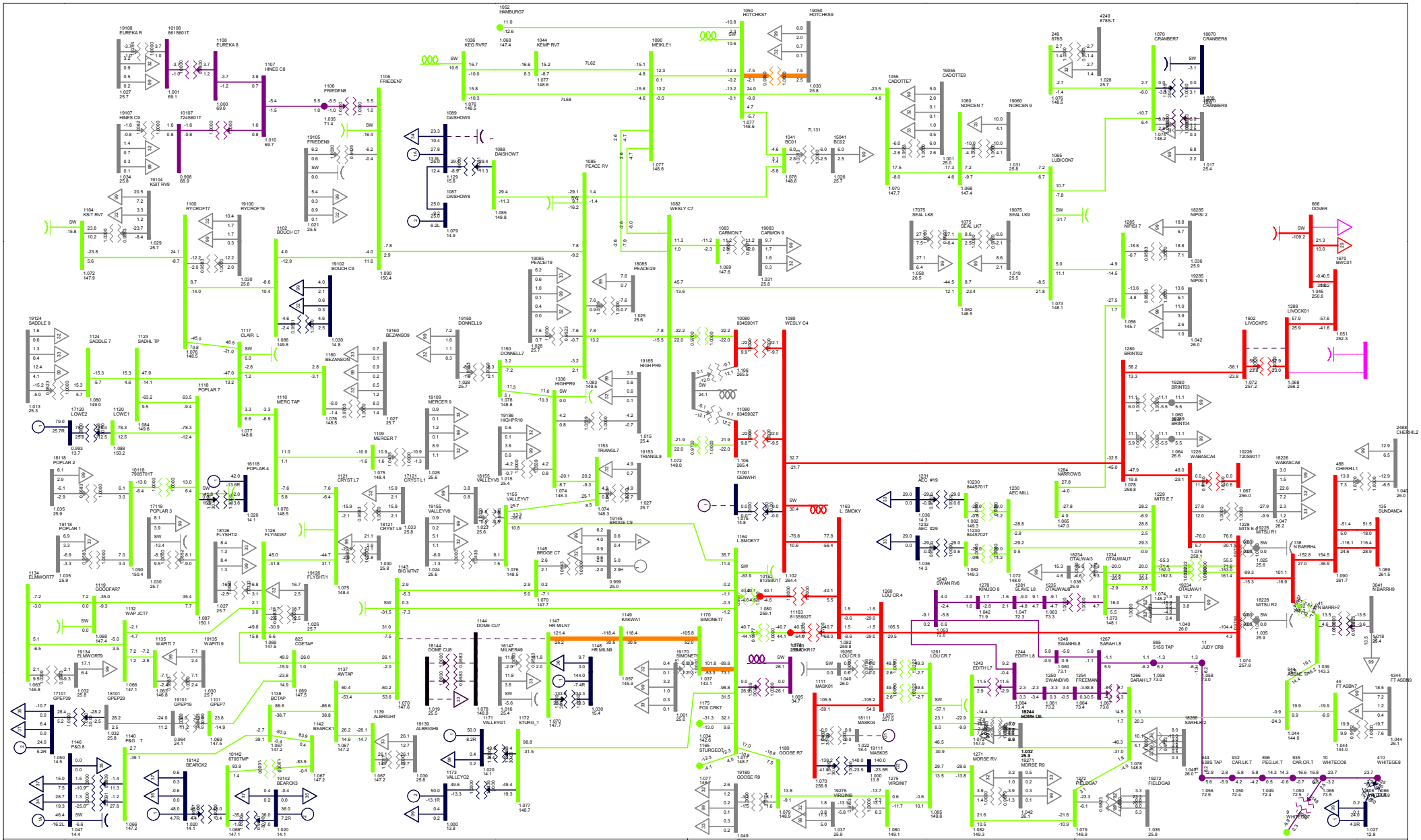
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 020 7L80 SIMONETTE to HR MILNER_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 43



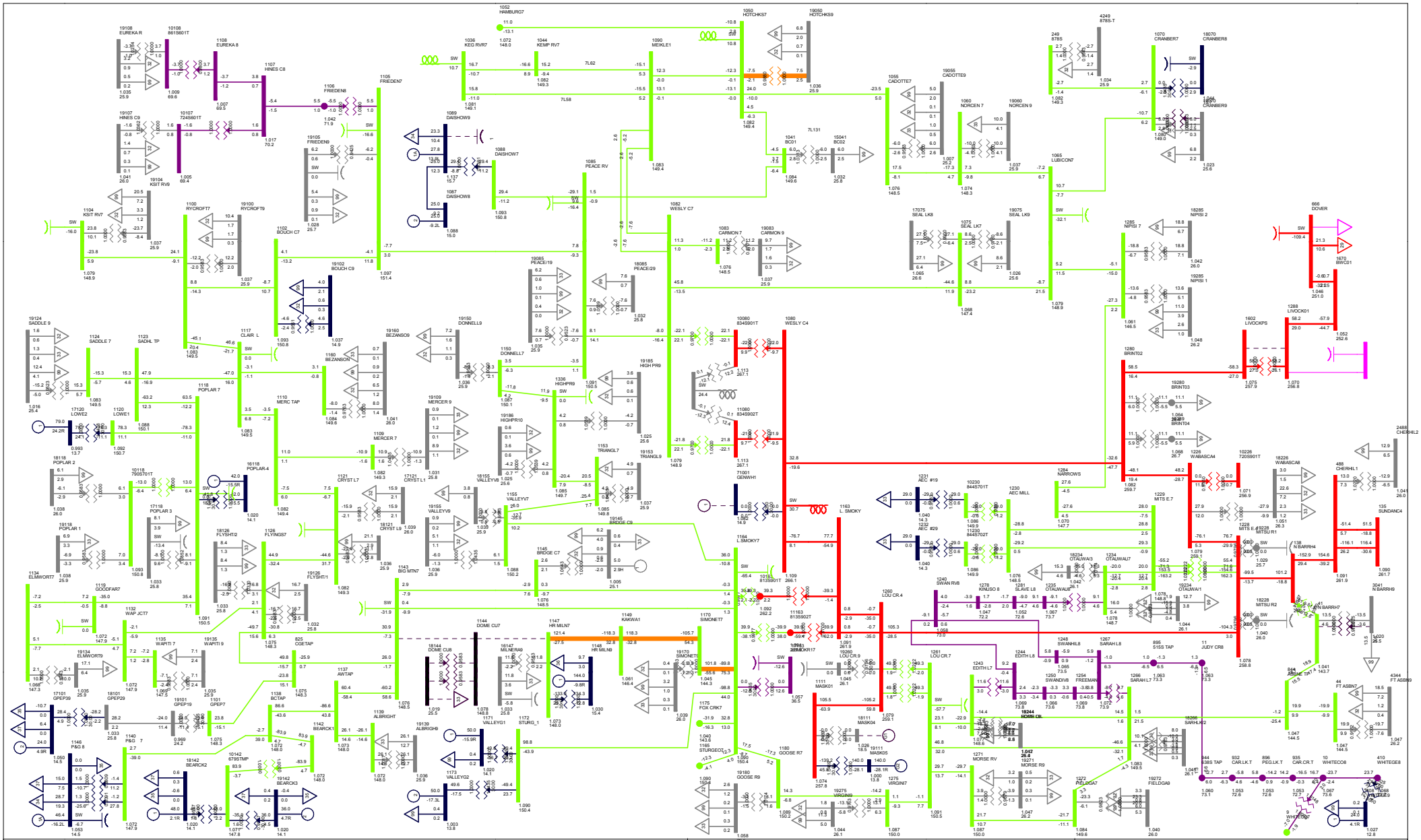
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 44



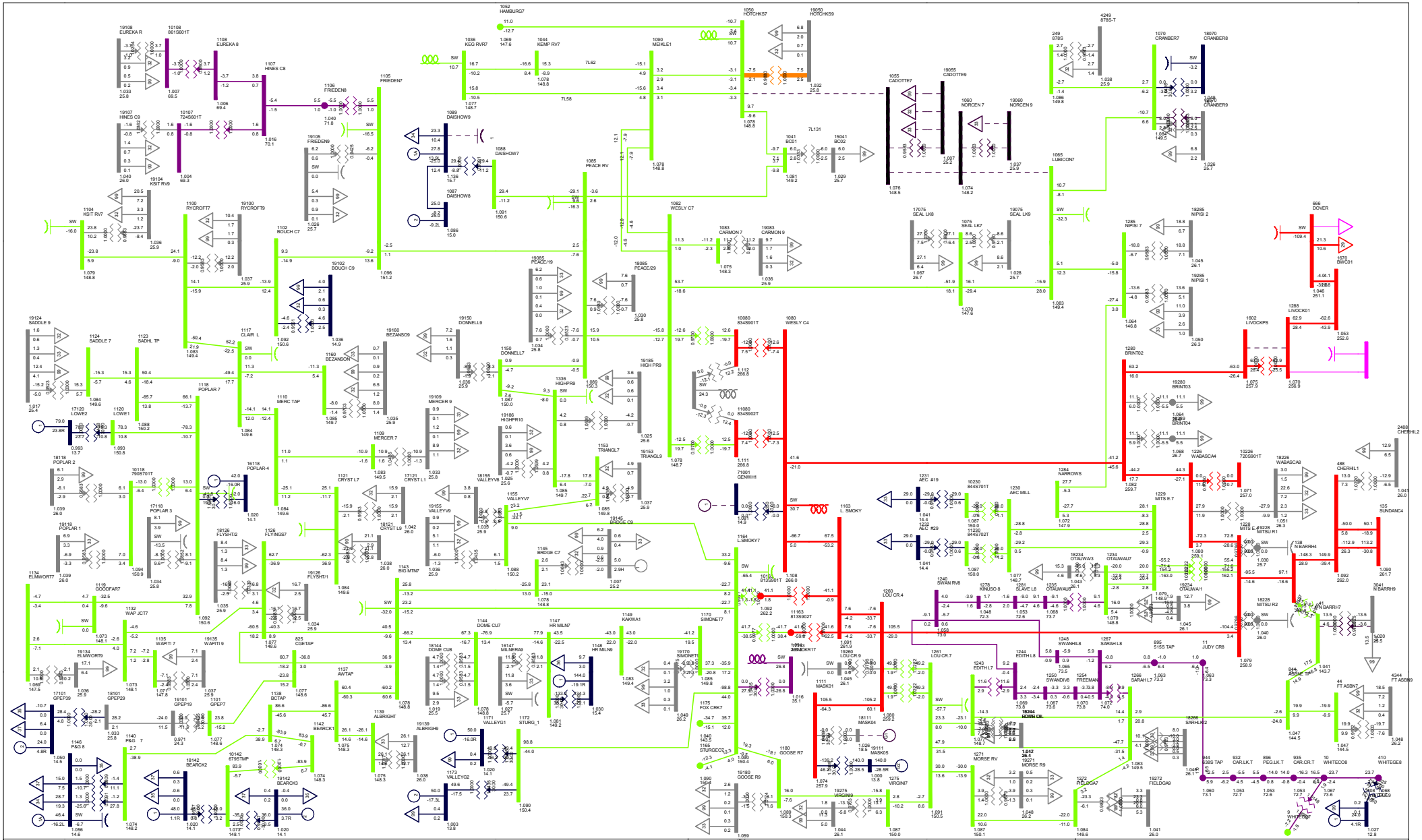
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 45



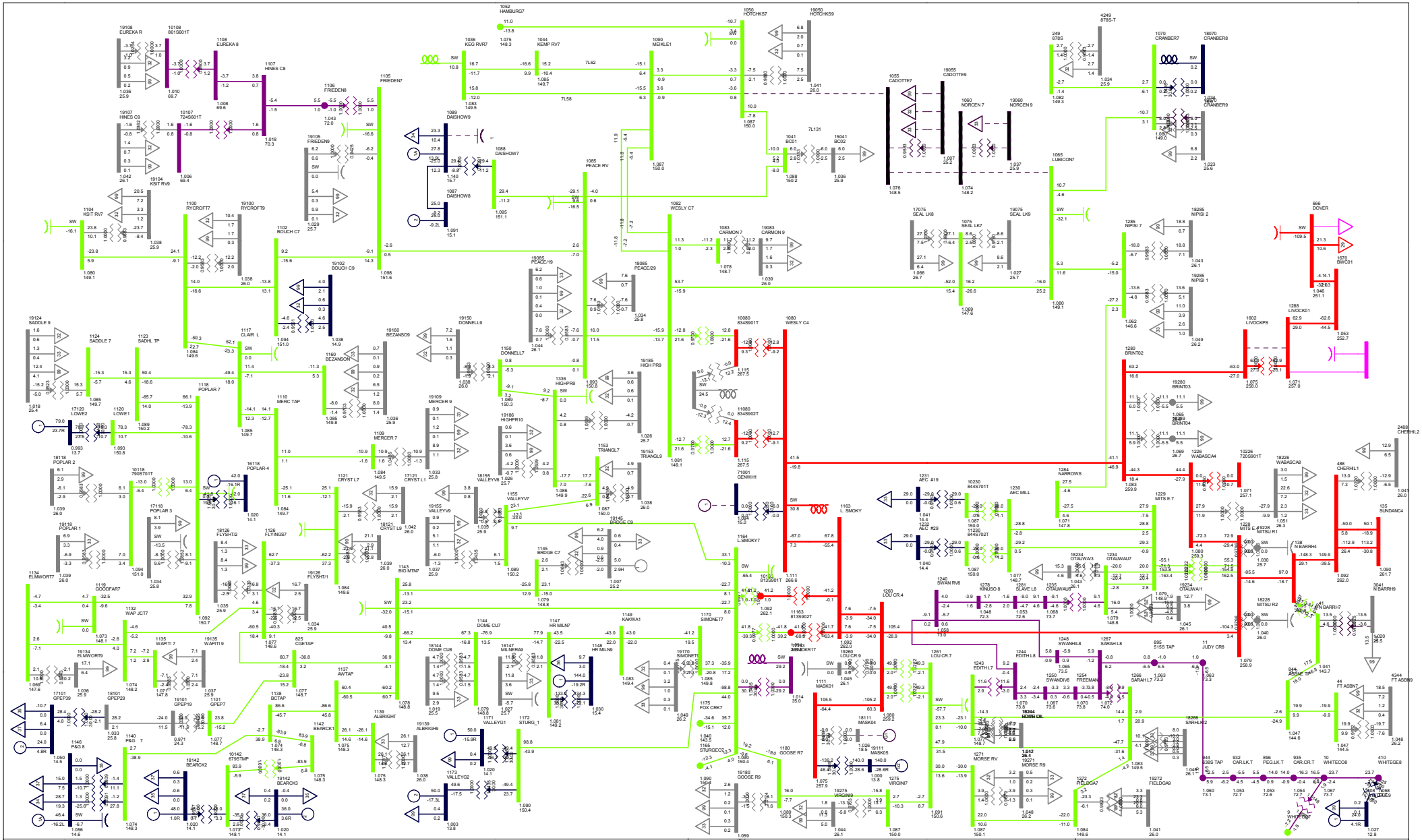
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 022 7L63 HOTCHKISS to LUBICON_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 46



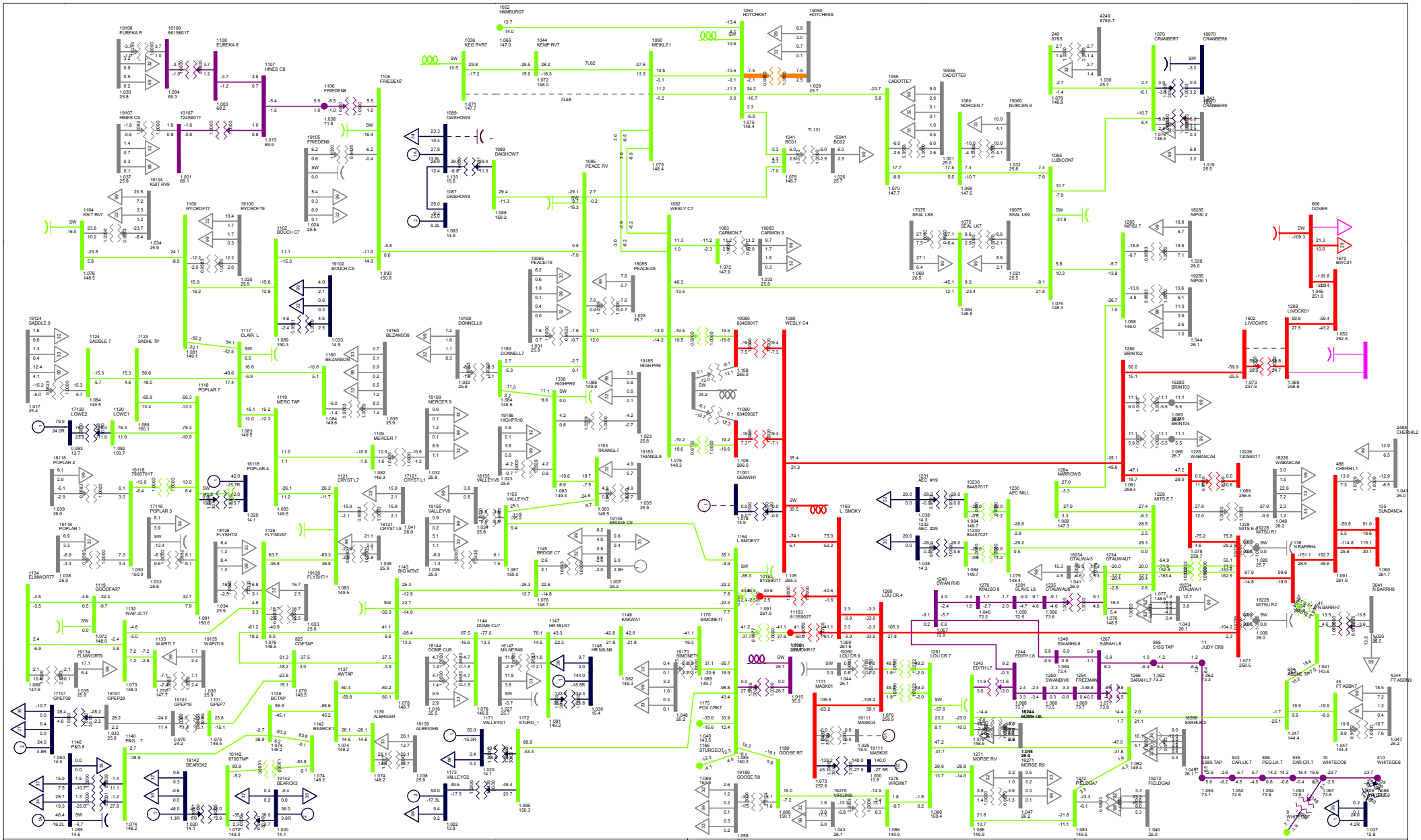
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 022 7L63 HOTCHKISS to LUBICON_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 47



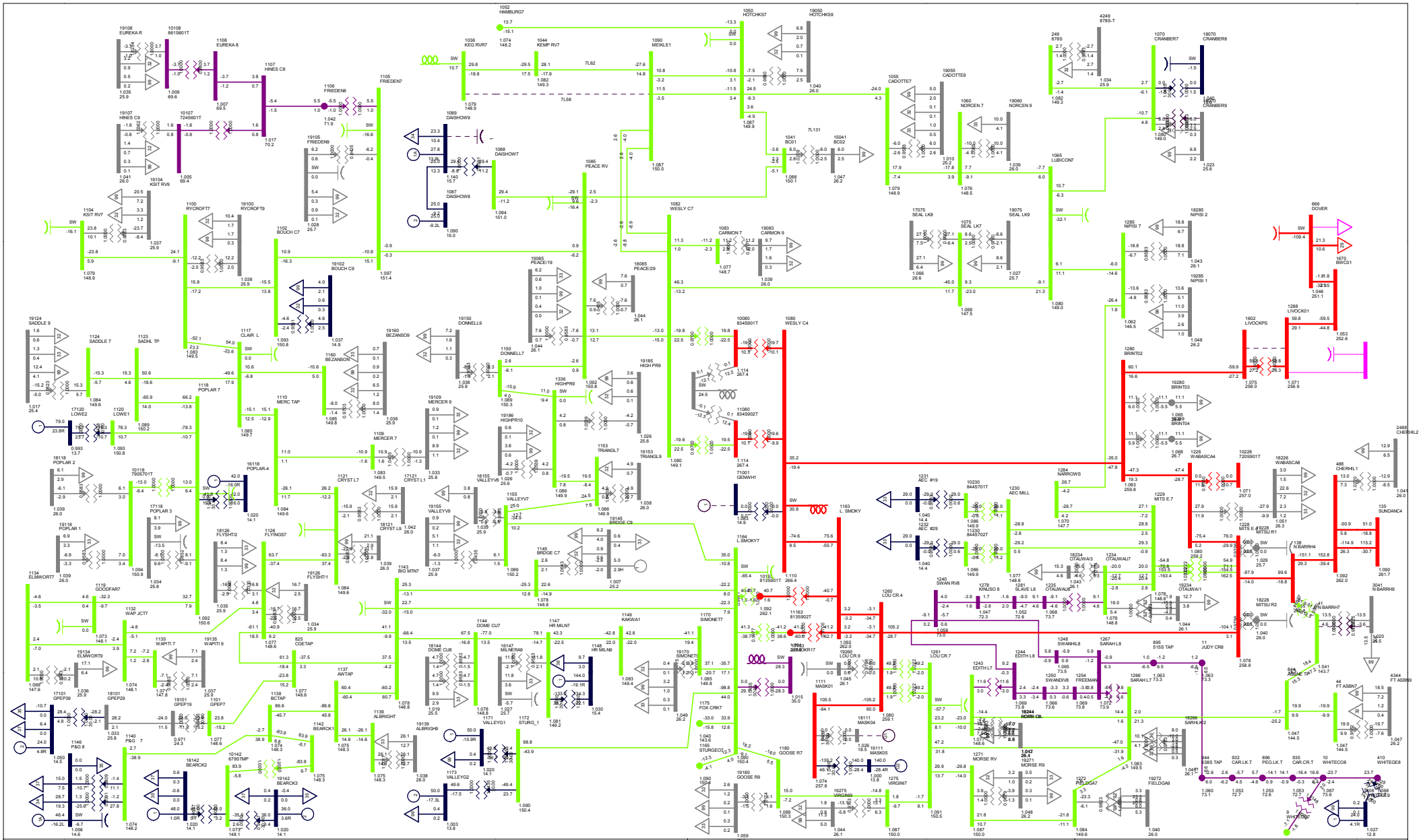
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 023 7L58 KEGRIVER to Meikle_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 48



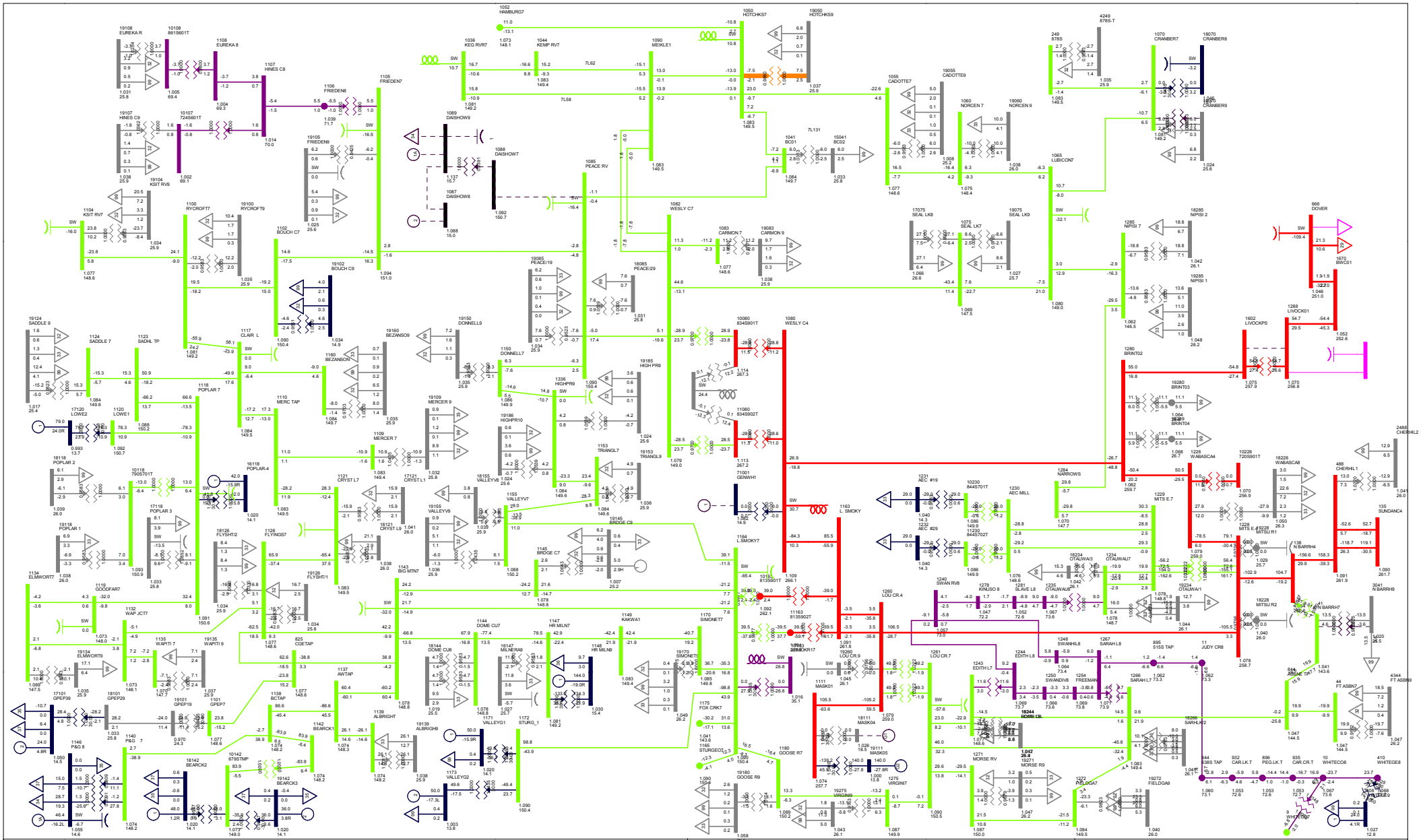
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 023 7L58 KEGRIVER to Meikle_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 49



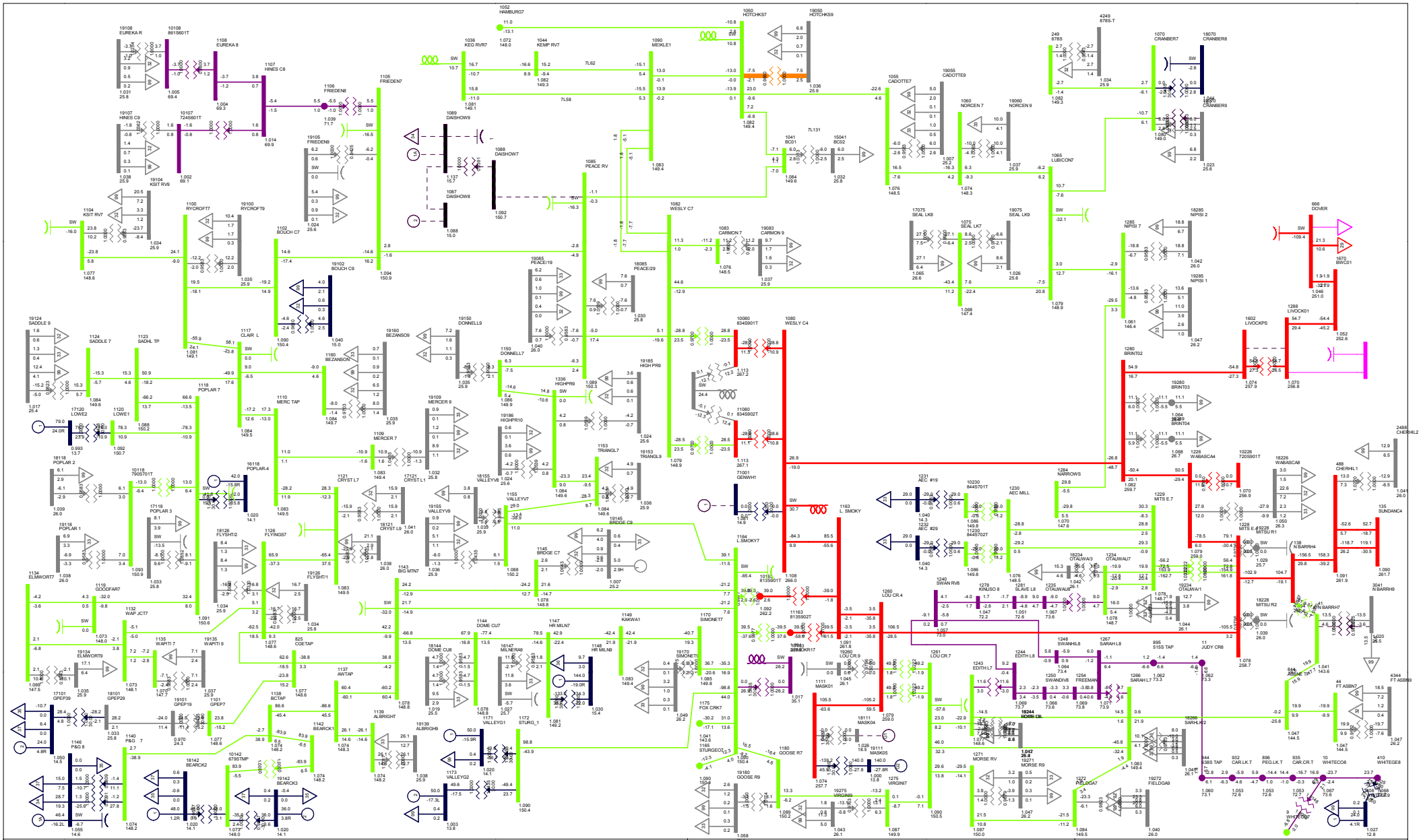
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 024 7L04 WESTPEACE to DAISHOWA_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 50



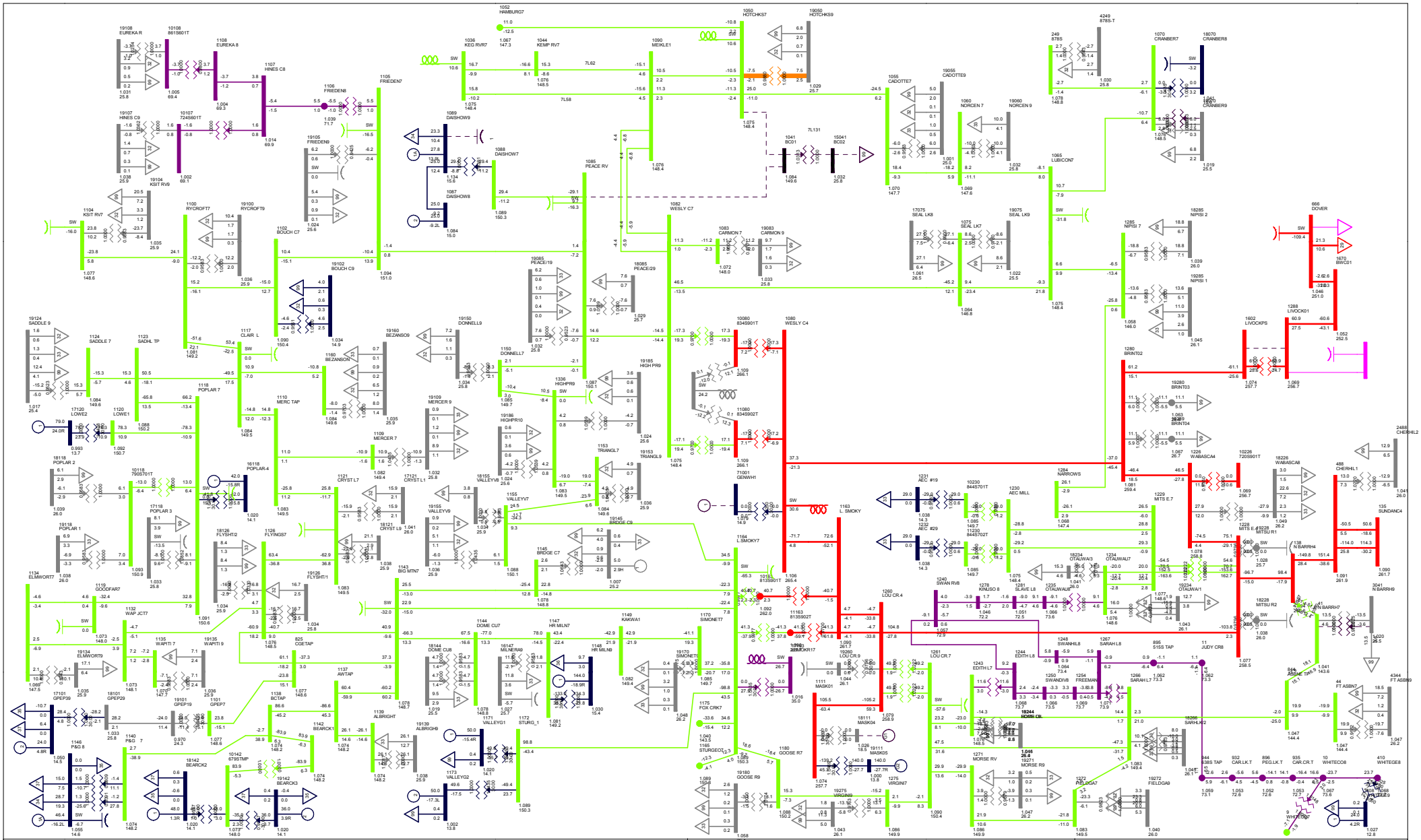
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 024 7L04 WESTPEACE to DAISHOWA_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 51



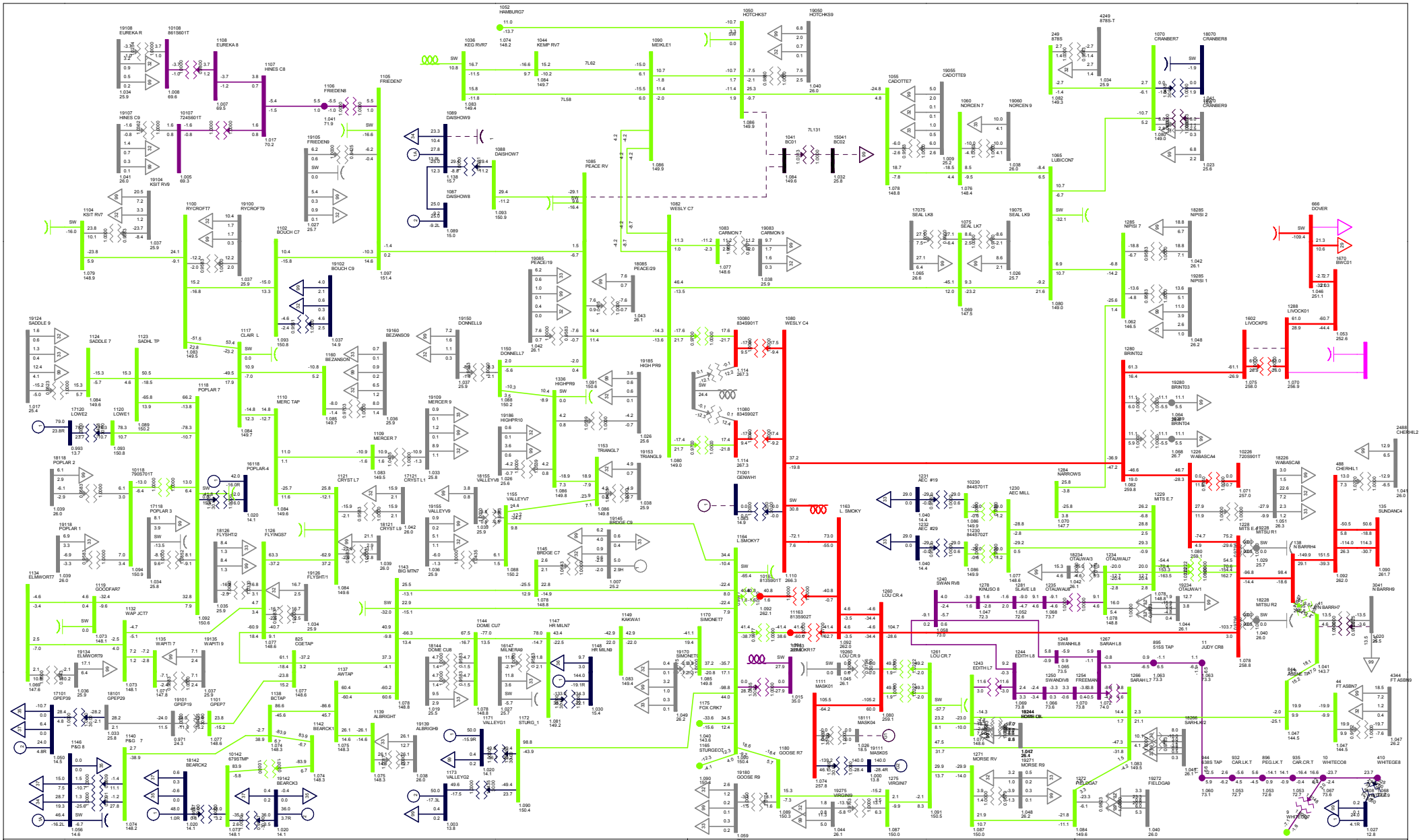
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 025 7L51 WESTPEACE to HOTCHKISS_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 52



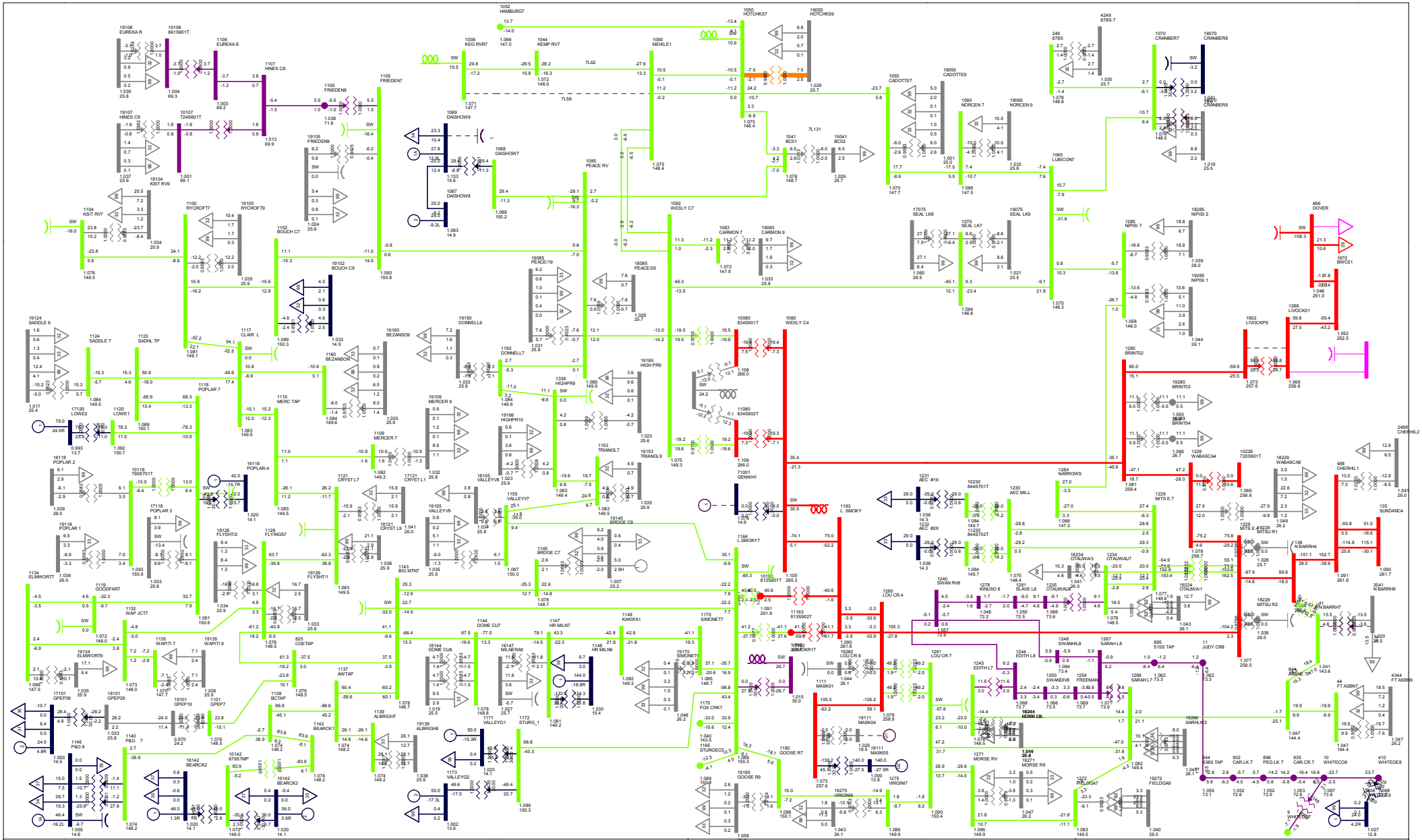
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 025 7L51 WESTPEACE to HOTCHKISS_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 53



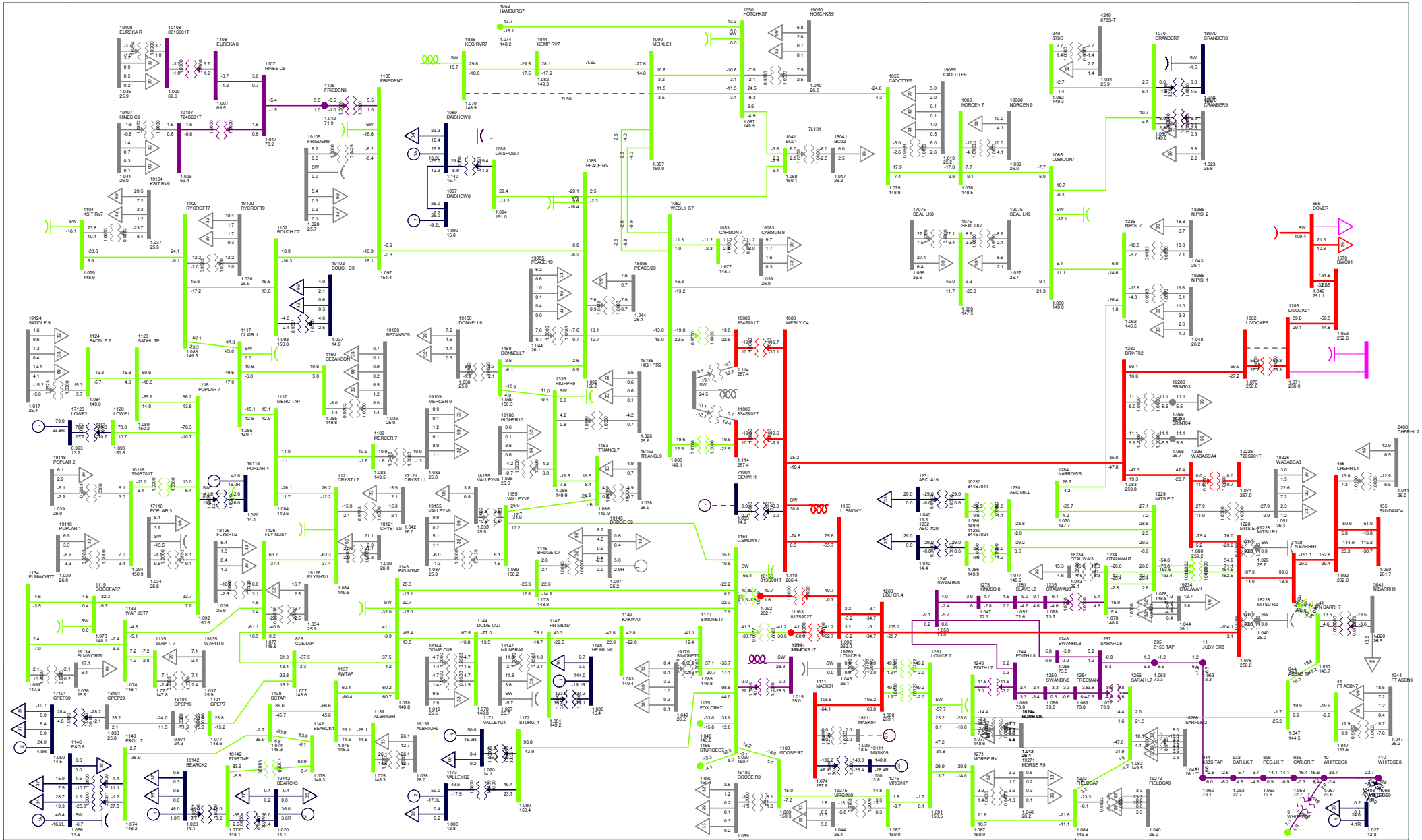
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 026 7L58 KEGRIVER to Meikle_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 54



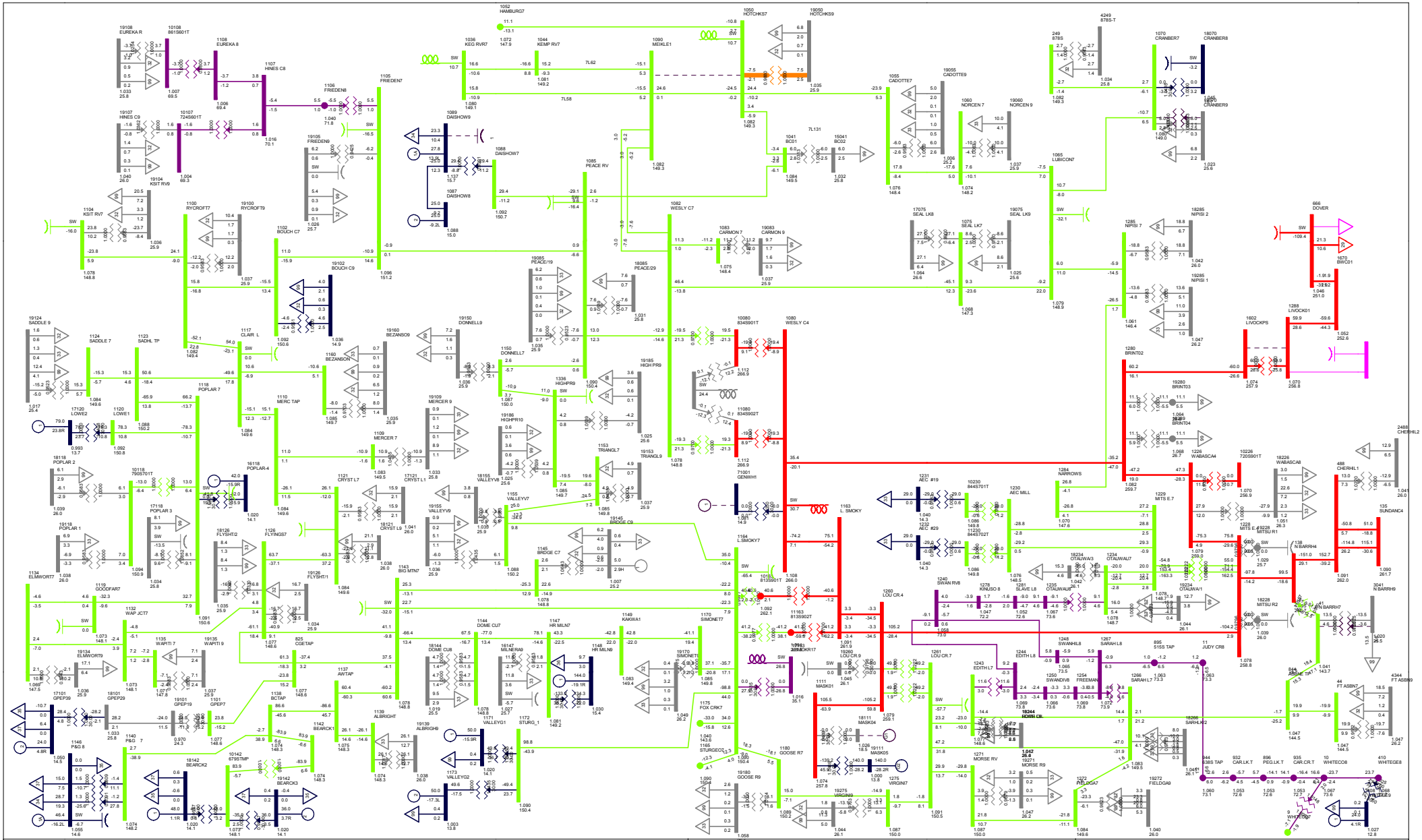
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 026 7L58 KEGRIVER to Meikle_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 55

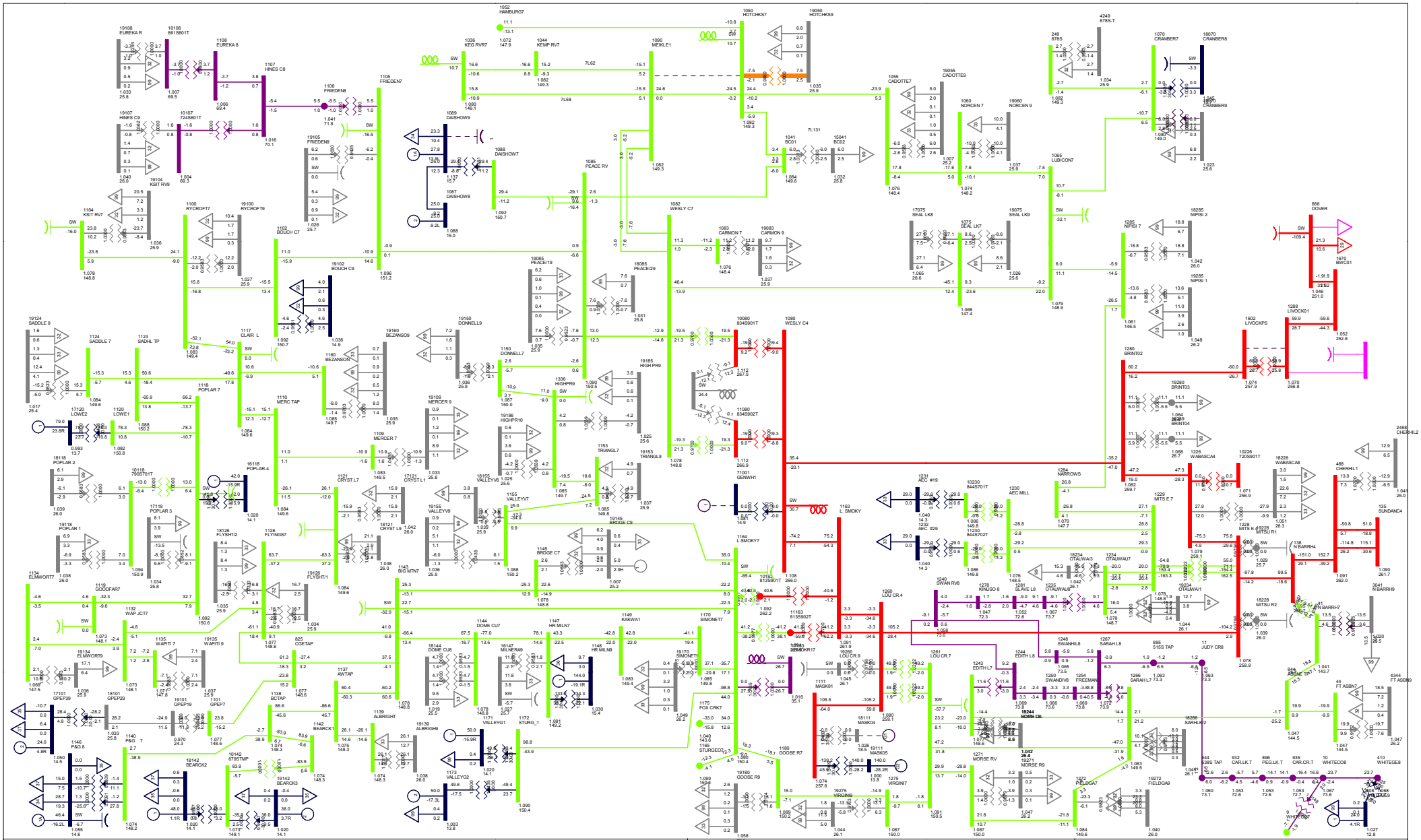


Appendix C2A Figure: 56

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 027 7L120 HOTCHKISS to Meikle_A.

Whitetail Project 1290 Interconnection Study



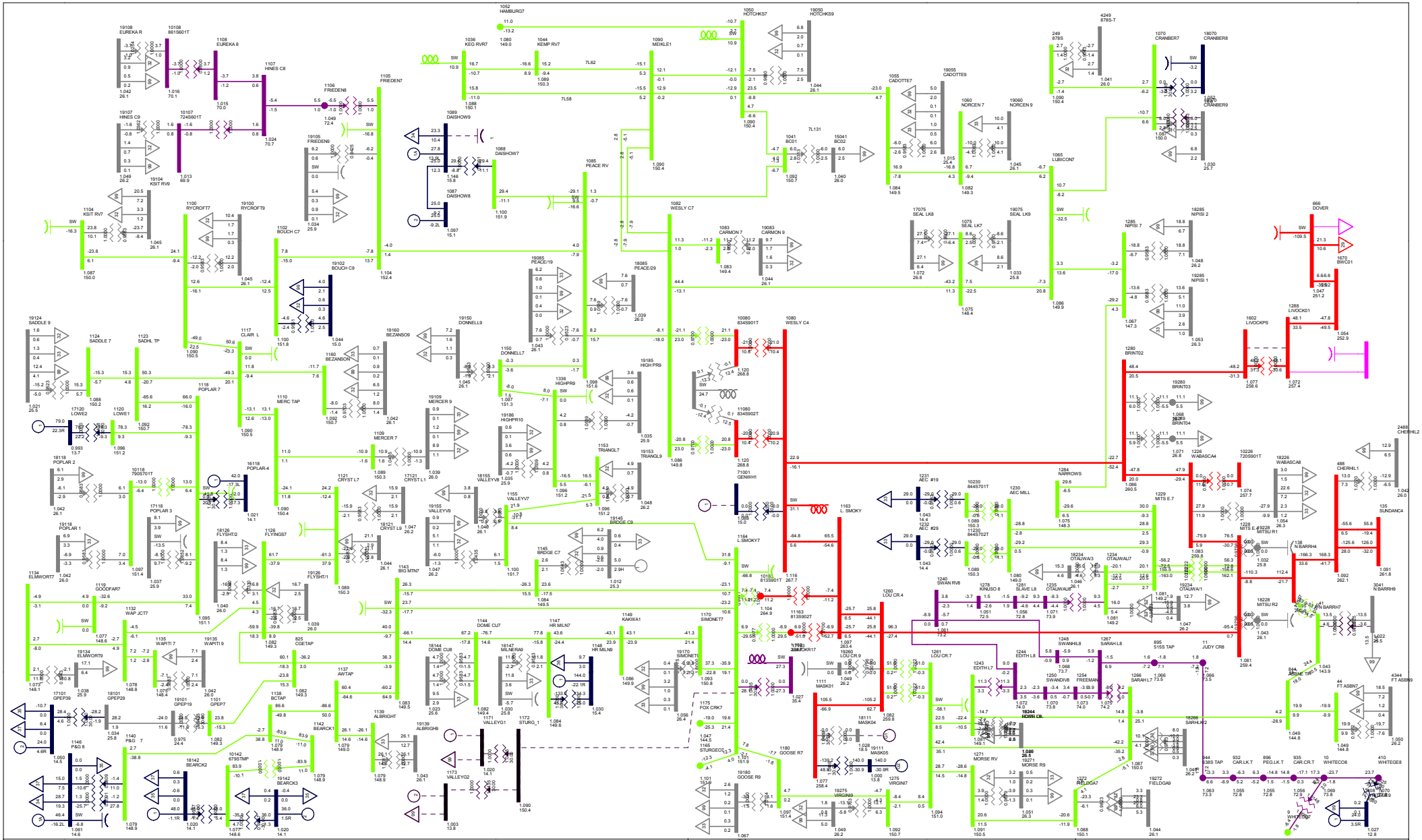
Appendix C2A

Figure: 57

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 027 7L120 HOTCHKISS to Meikle_B.

Whitetail Project 1290 Interconnection Study



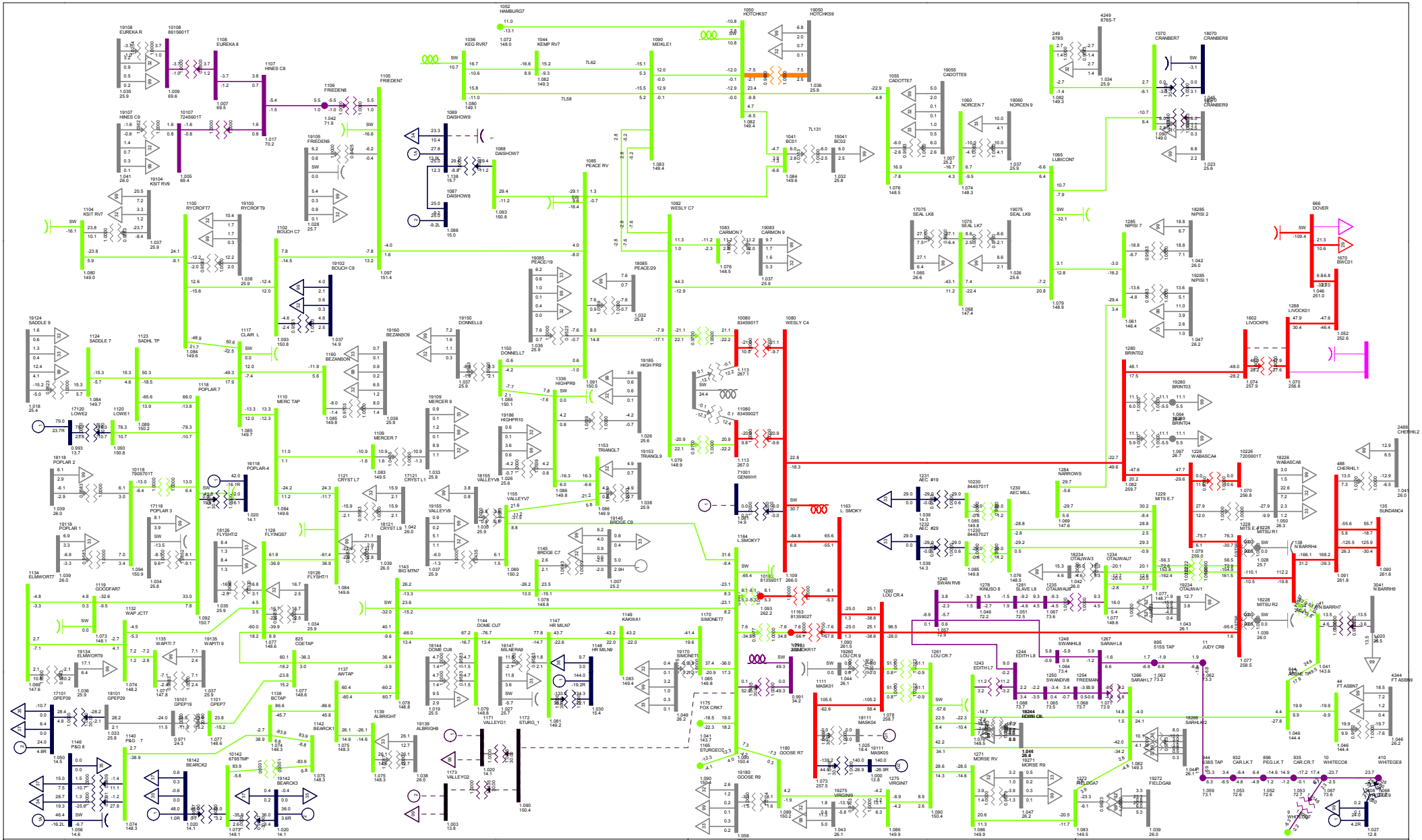
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 028 7L01 LITTLESMOKY to Sturgeon_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 58



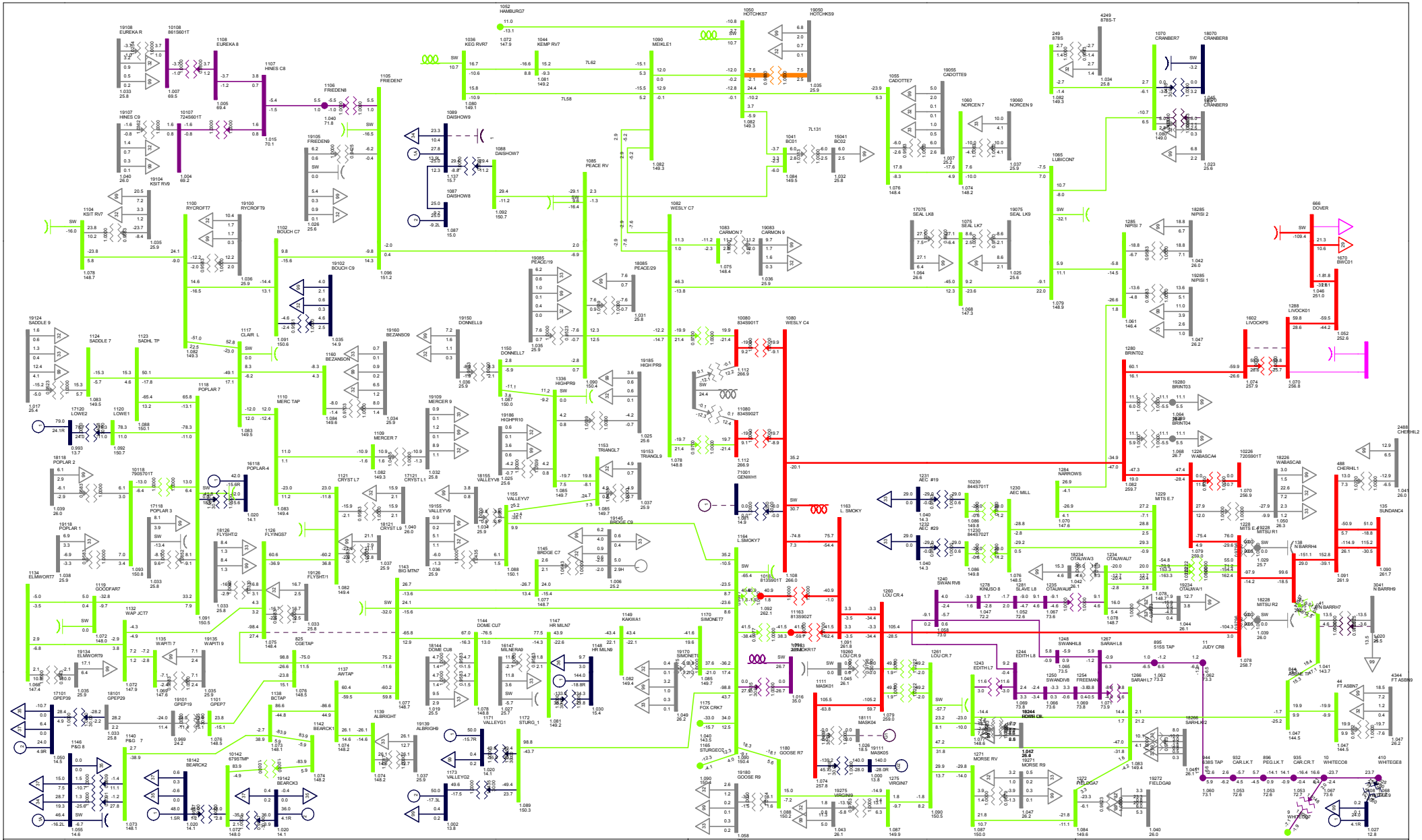
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 028 7L01 LITTLESMOKY to Sturgeon_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 59



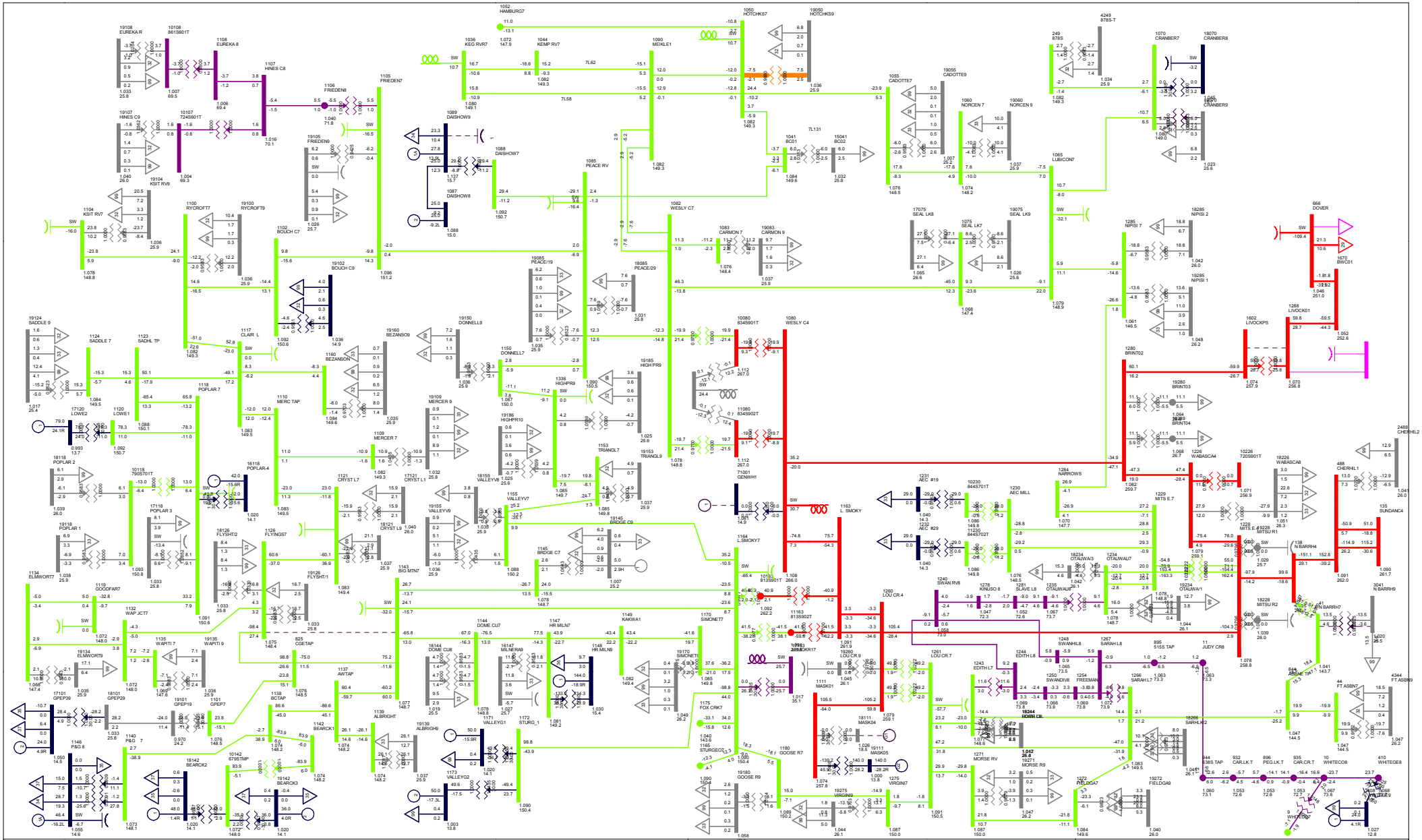
Appendix C2A

Figure: 60

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_A.

Whitetail Project 1290 Interconnection Study



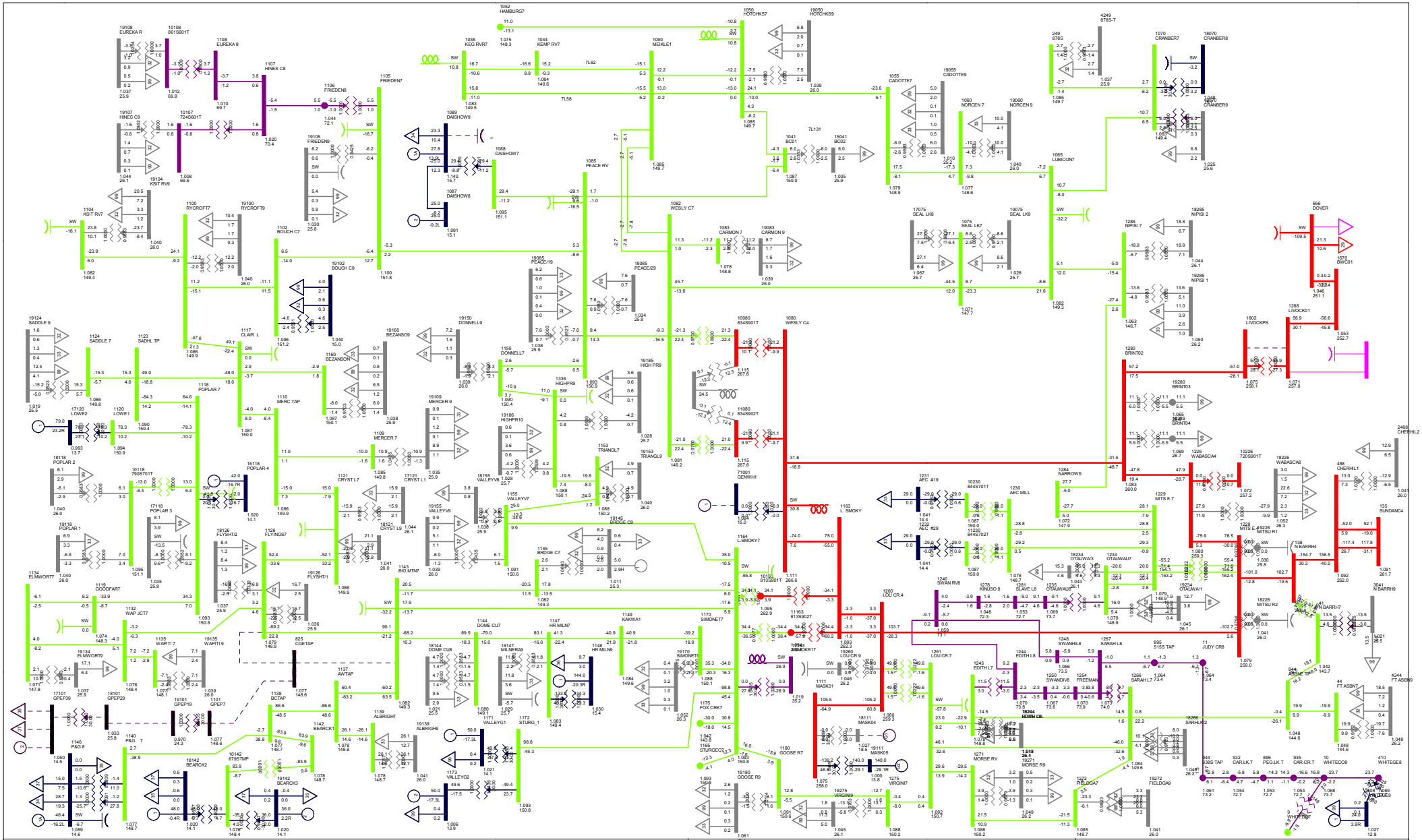
Appendix C2A

Figure: 61

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_B.

Whitetail Project 1290 Interconnection Study



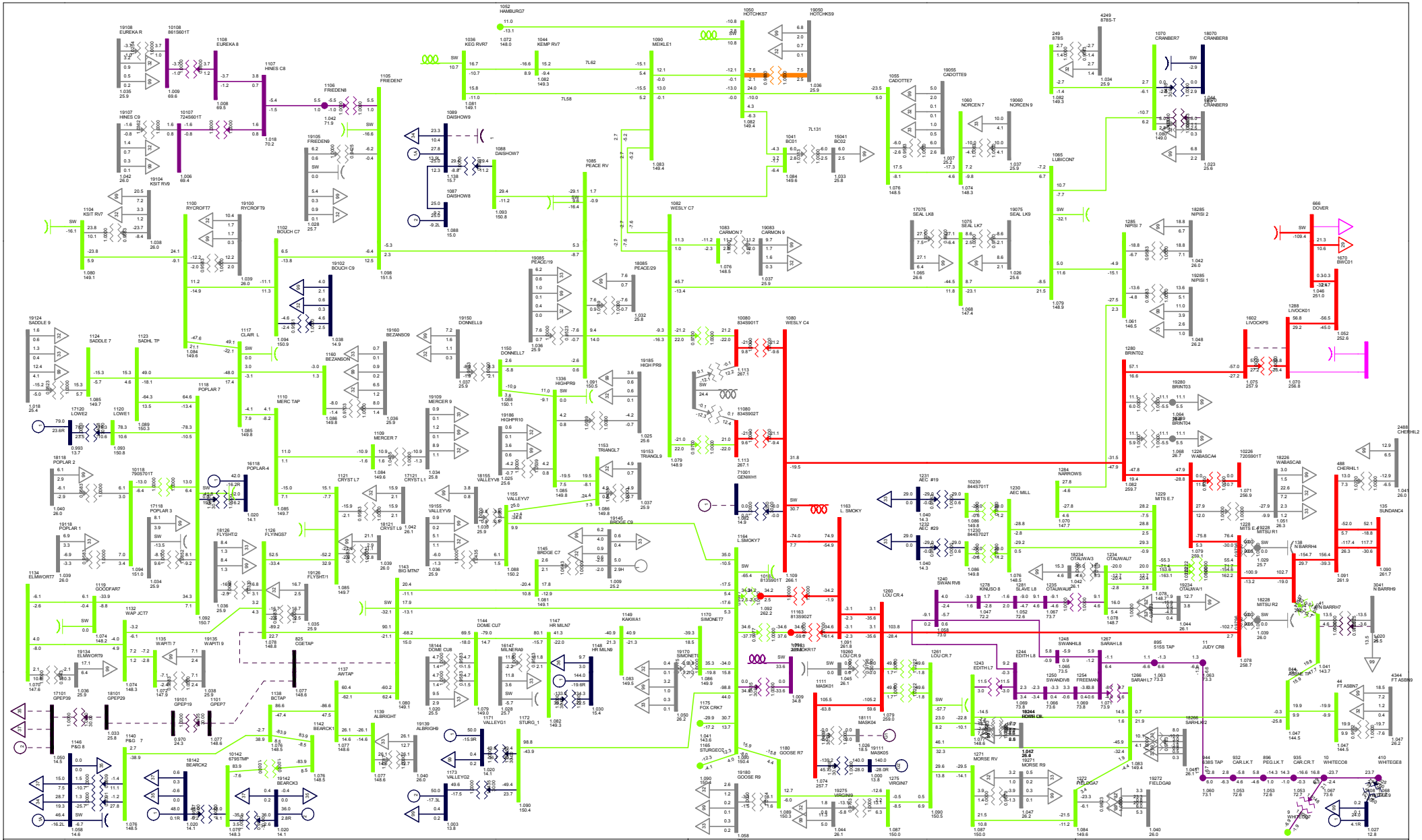
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 62



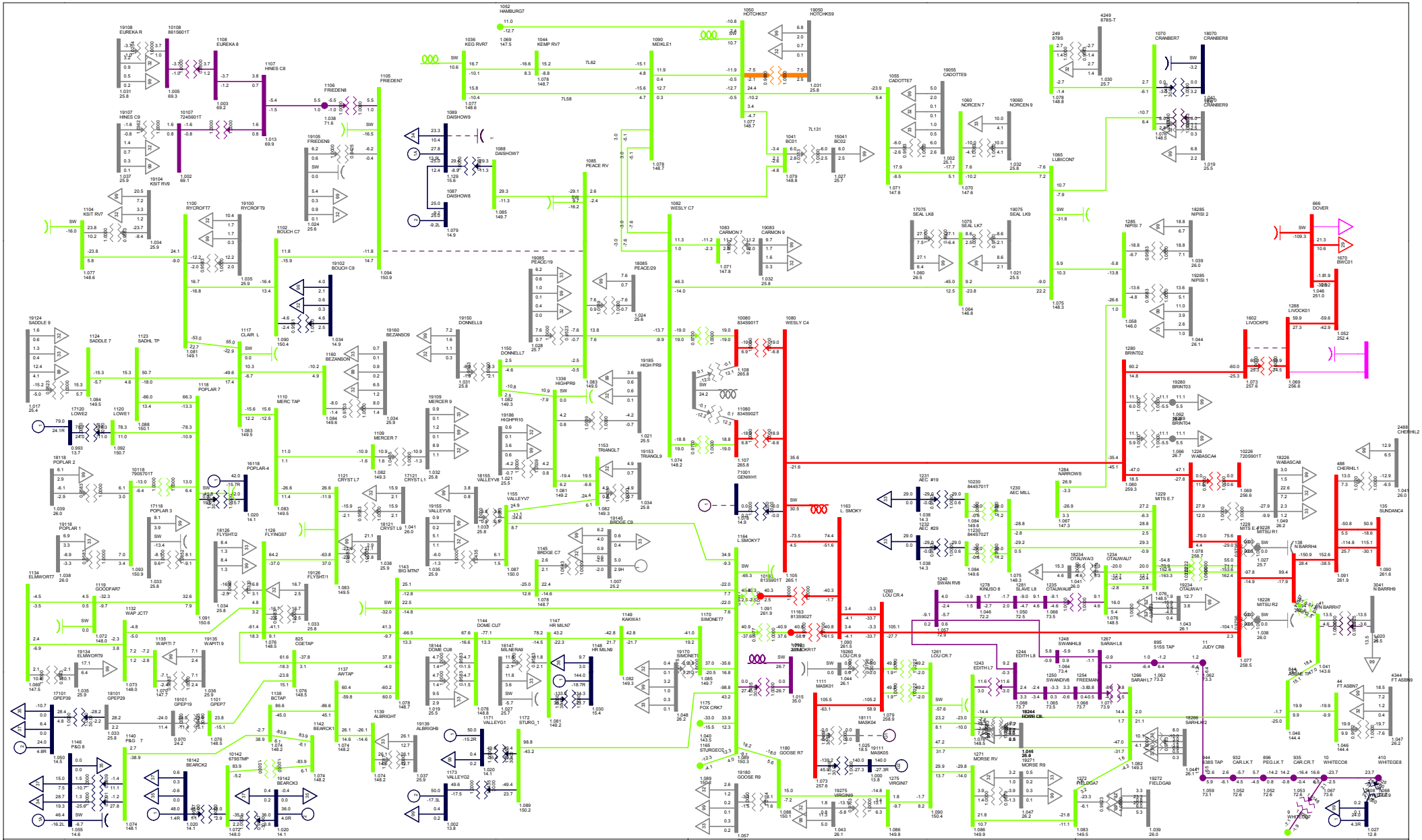
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 63



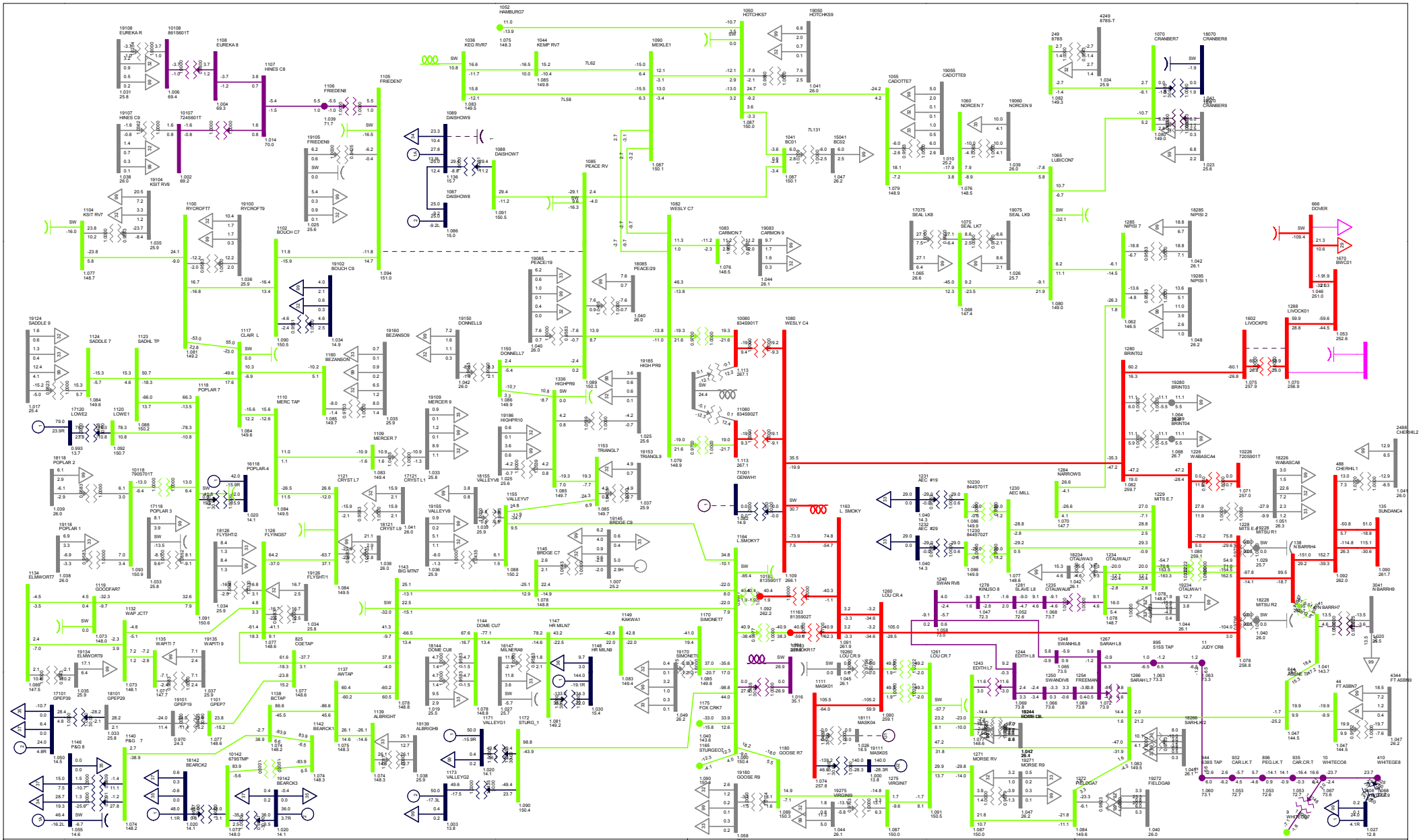
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 64



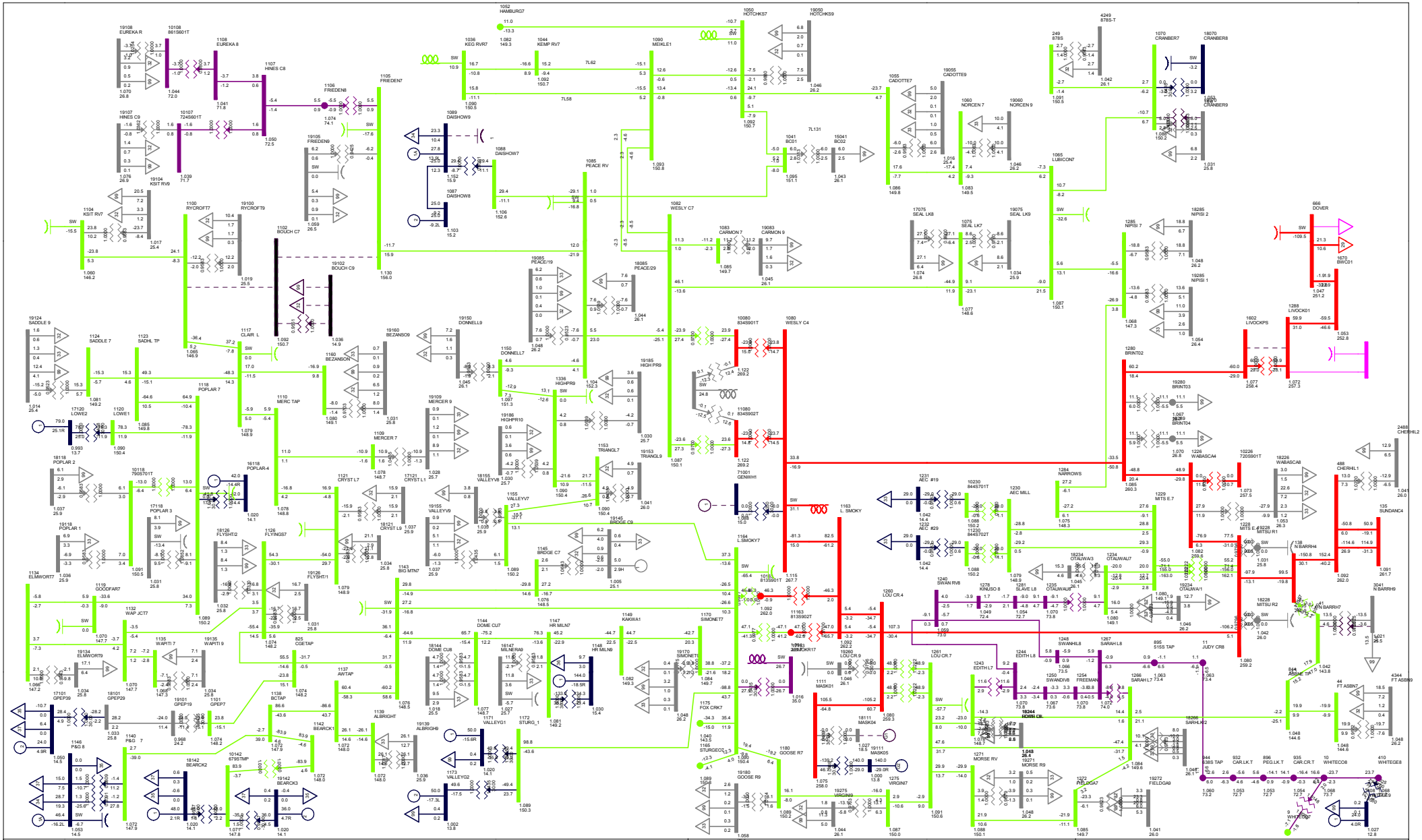
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 65



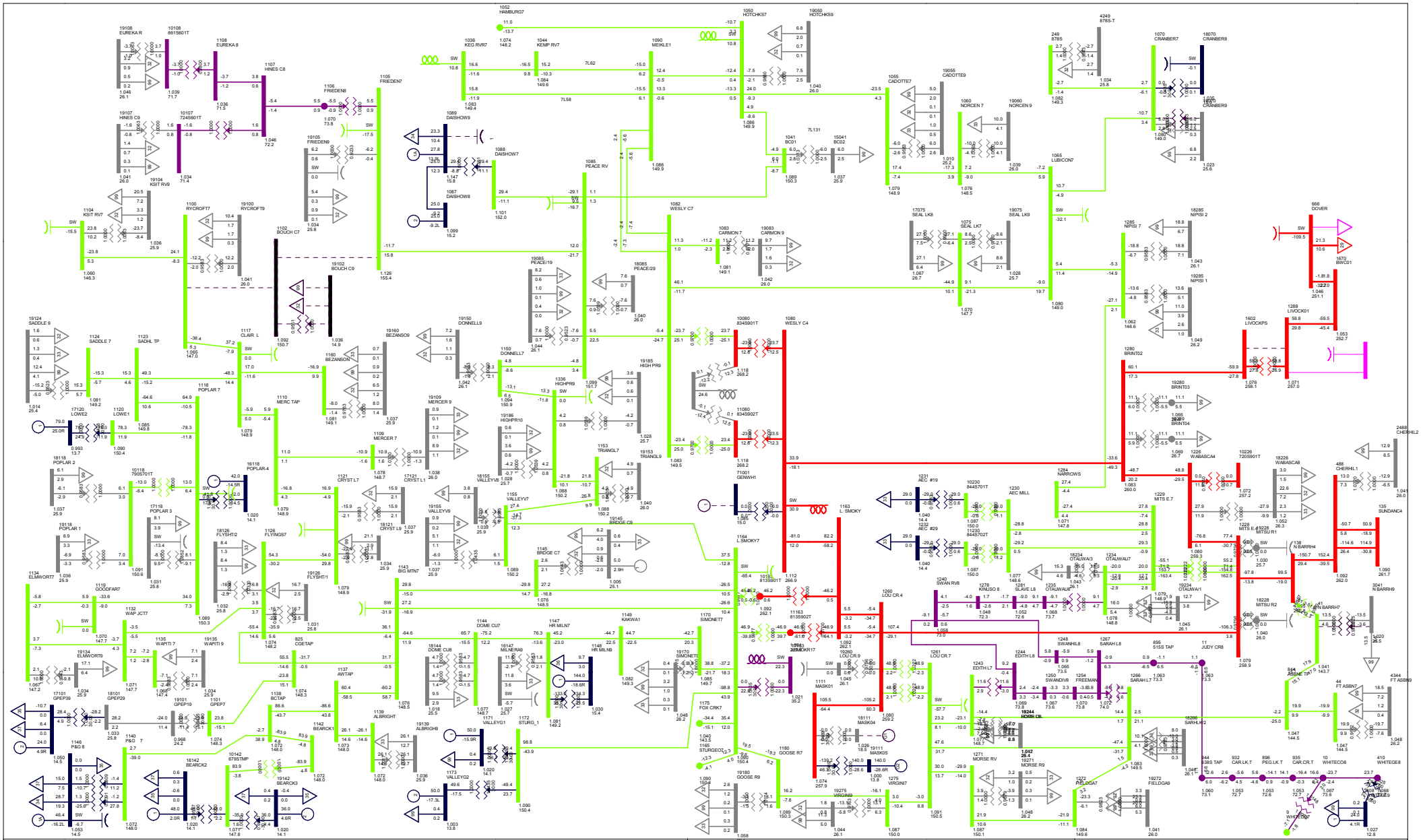
Appendix C2A

Figure: 66

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 032 7L73 RYCROFT to FRIEDENSTAL_A.

Whitetail Project 1290 Interconnection Study



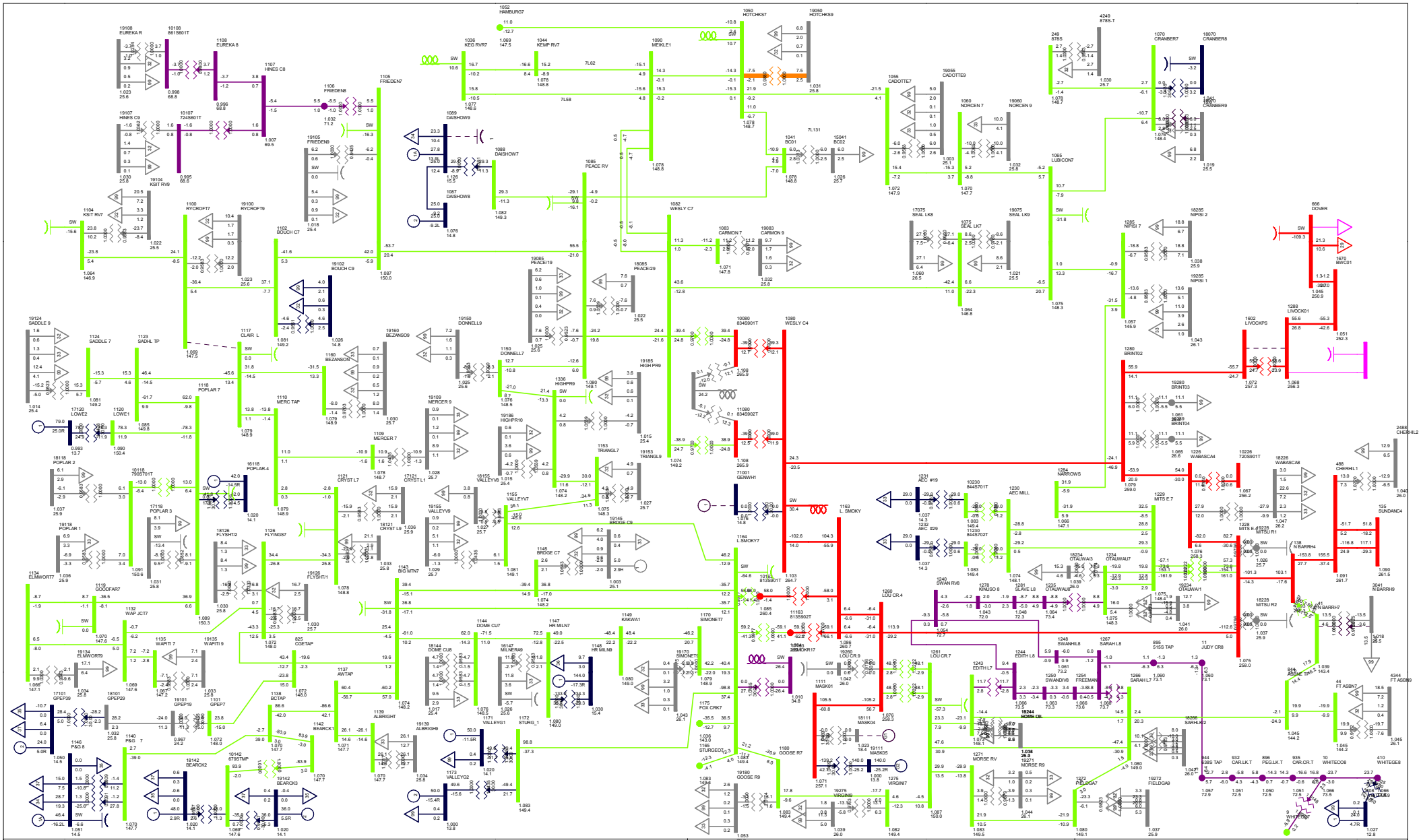
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 032 7L73 RYCROFT to FRIEDENSTAL_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 67



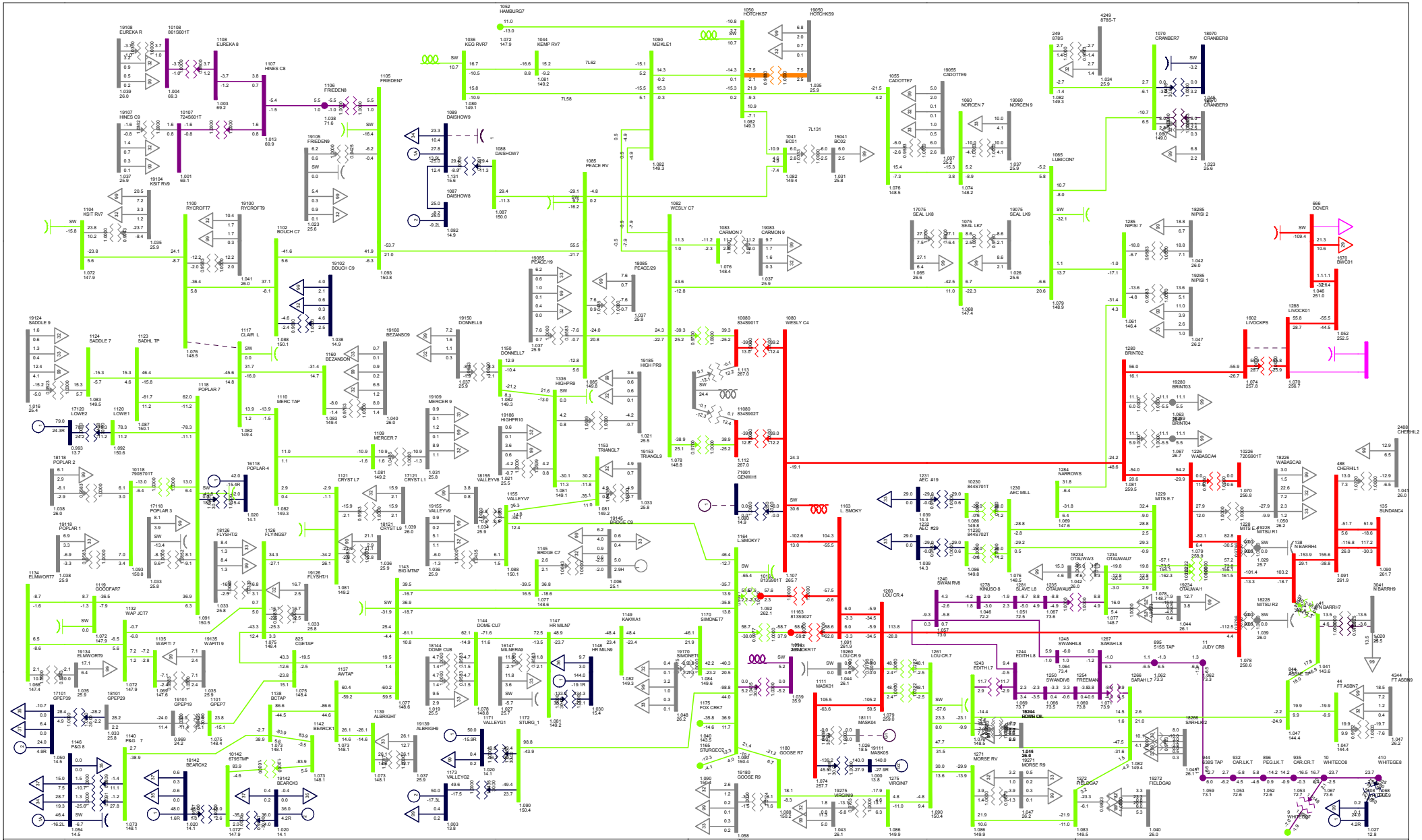
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 68



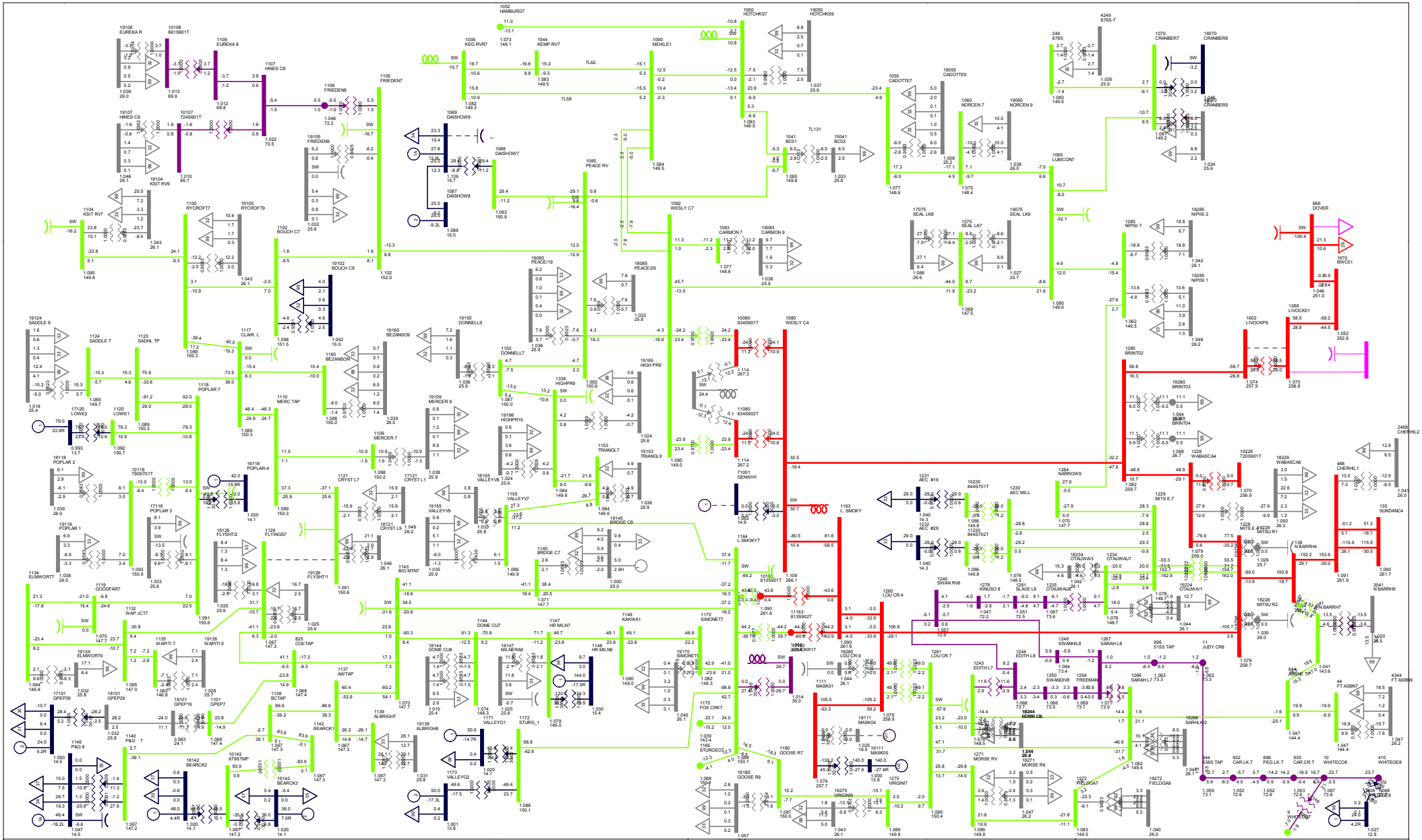
Appendix C2A

Figure: 69

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_B.

Whitetail Project 1290 Interconnection Study



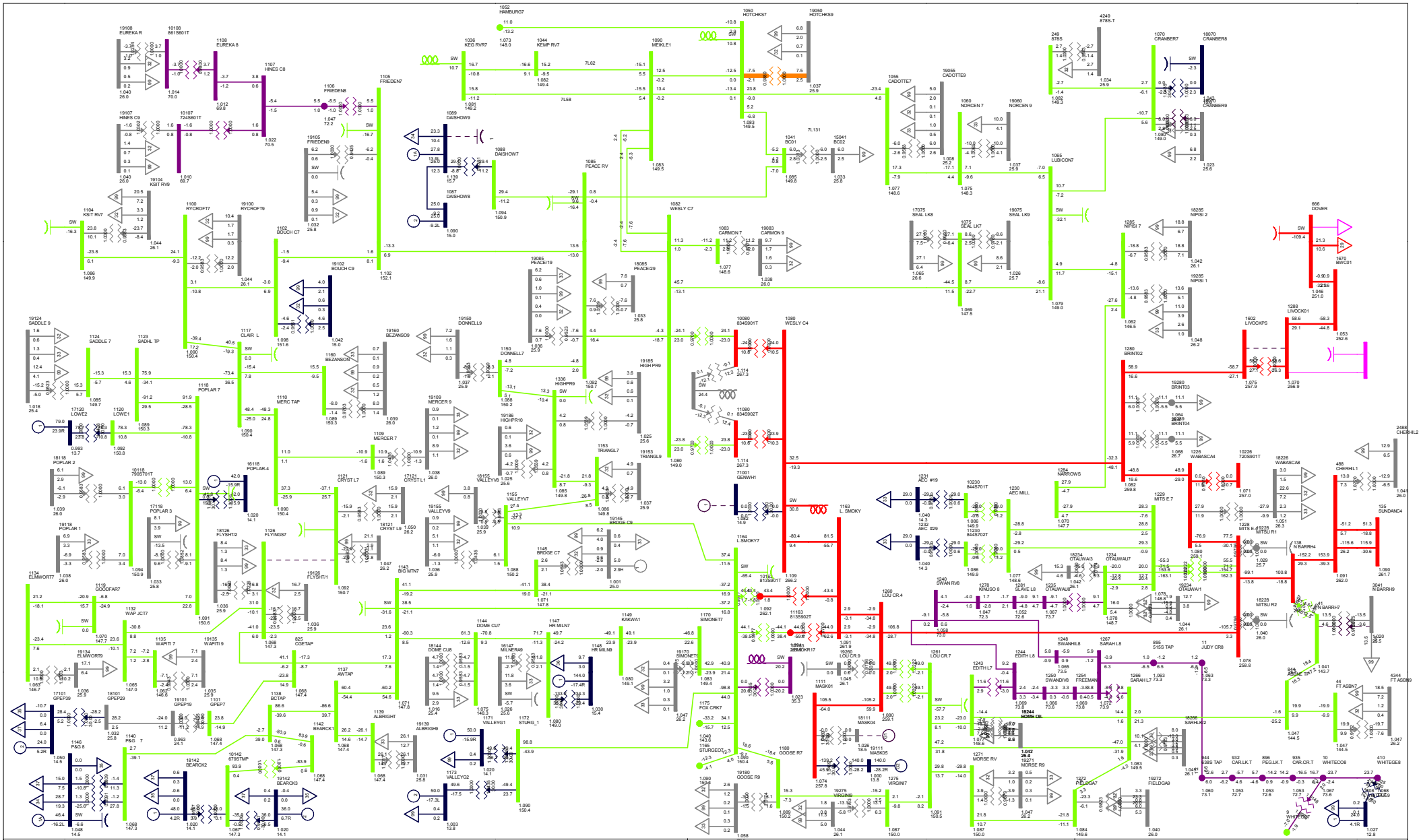
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 70



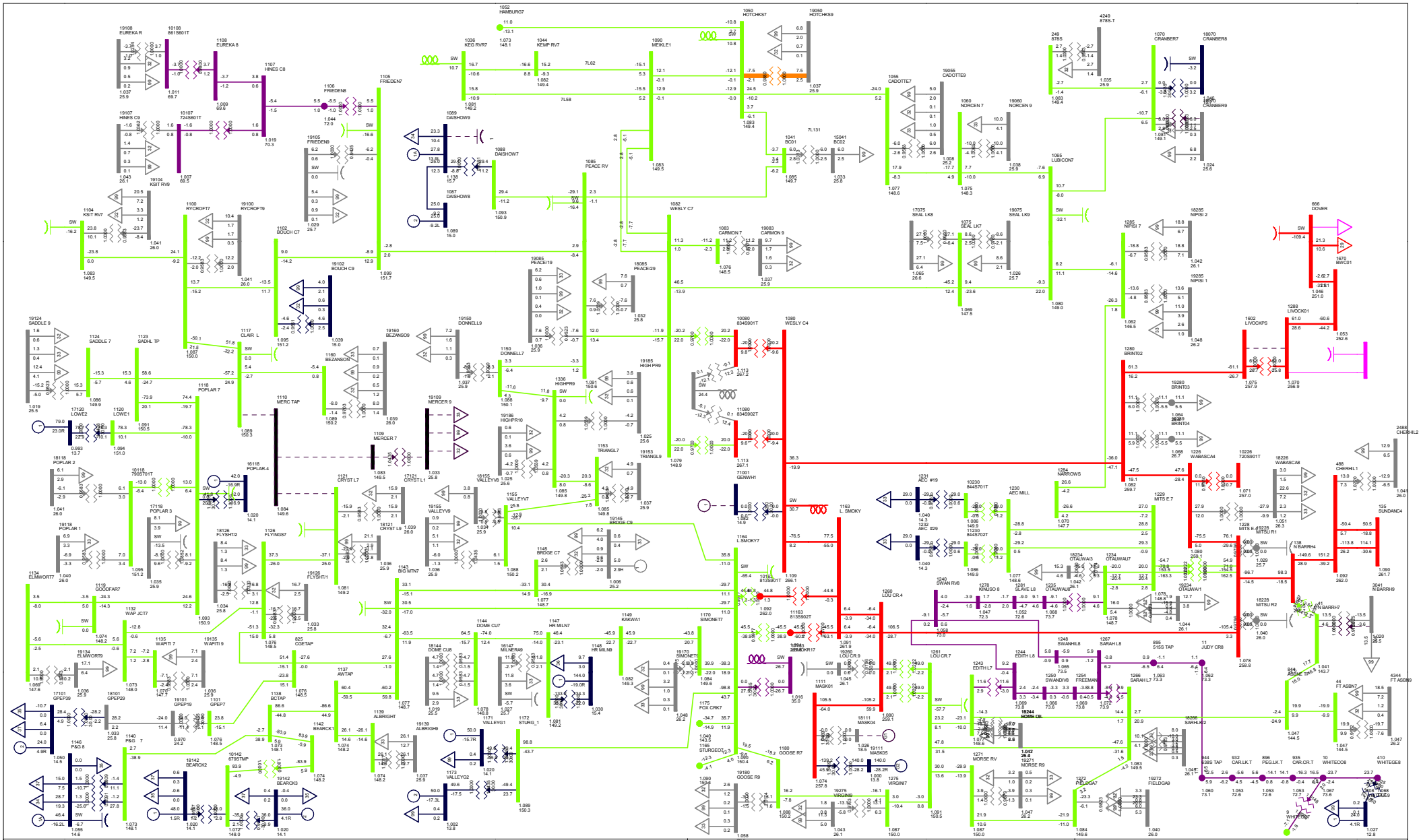
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 71



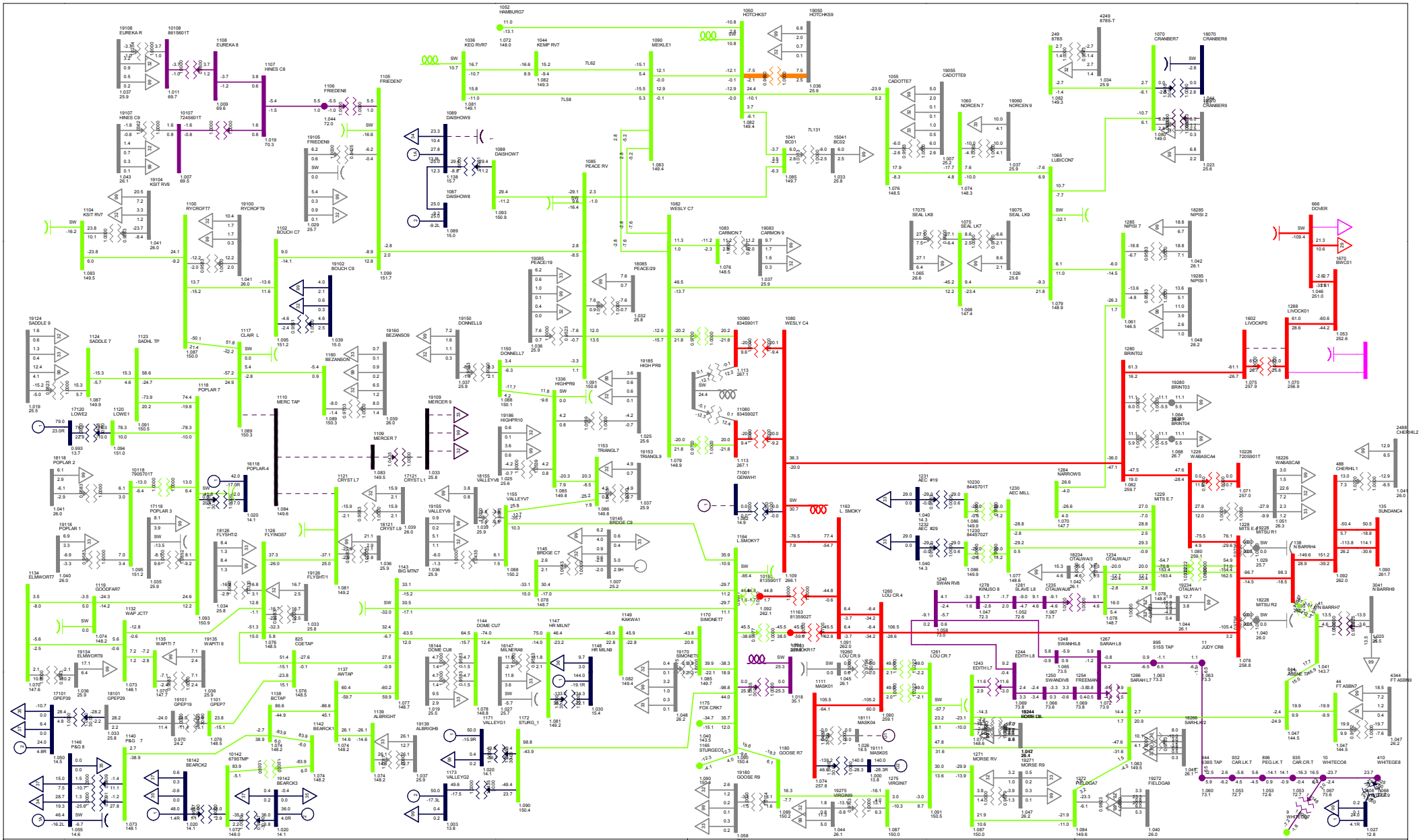
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 72



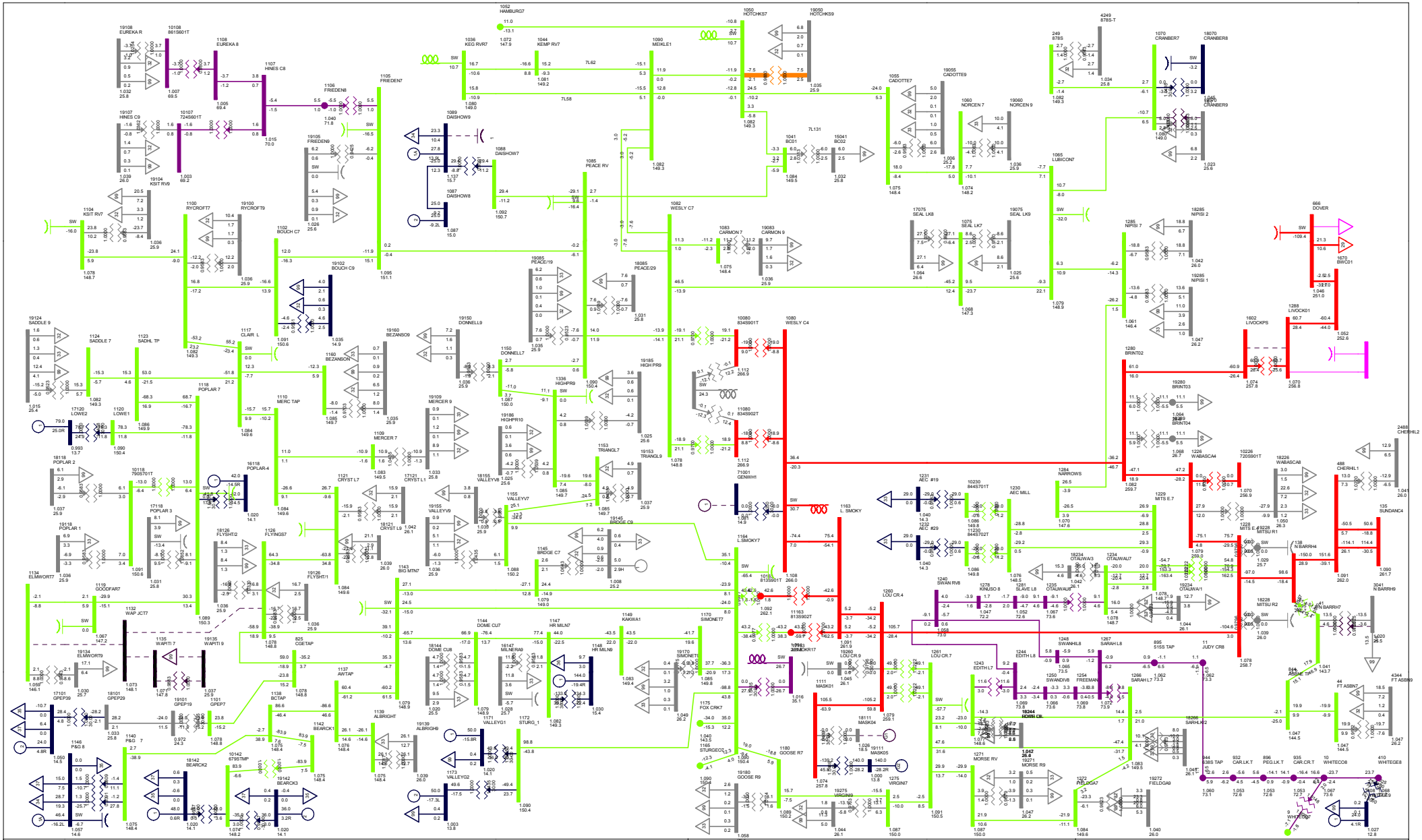
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 73



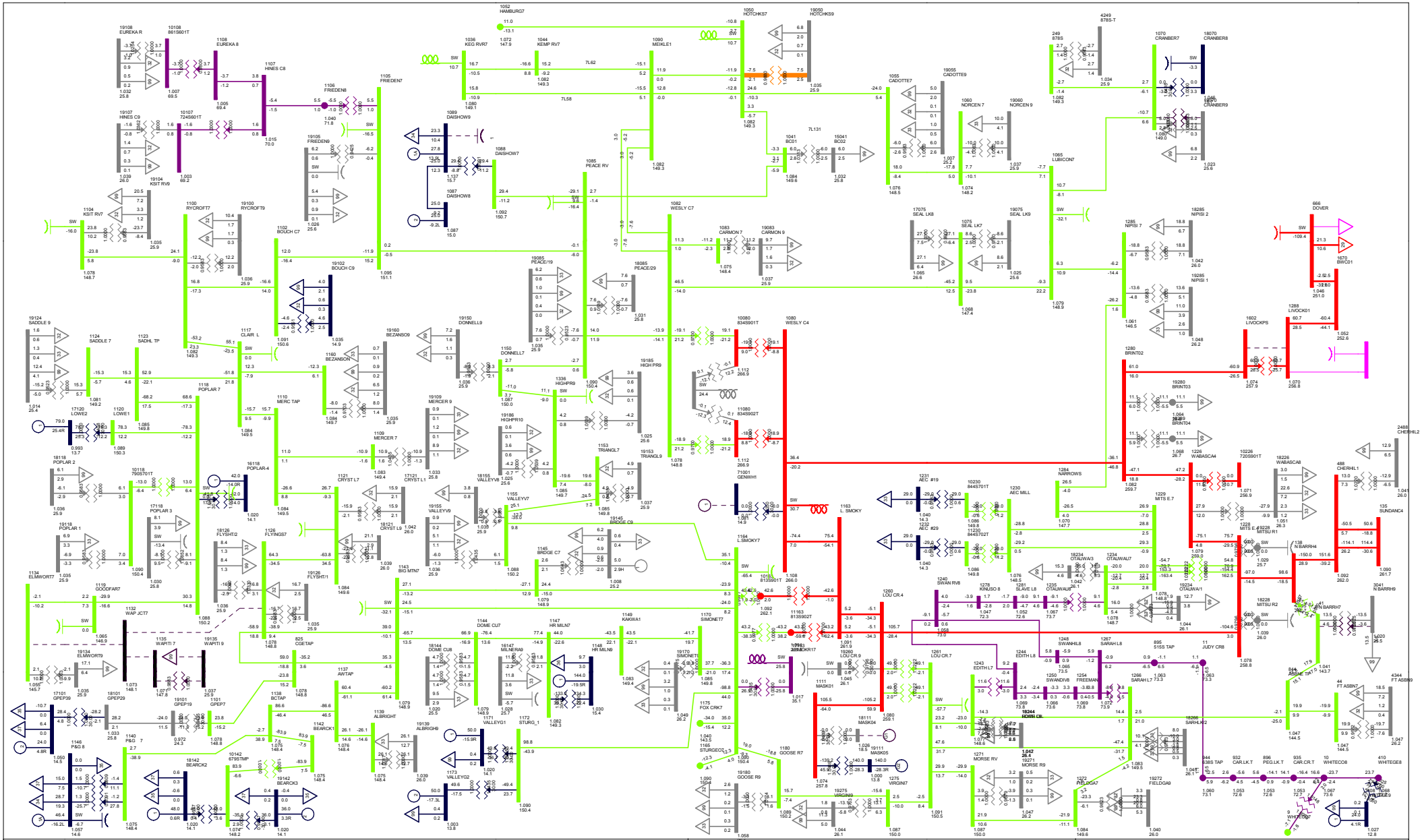
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 74



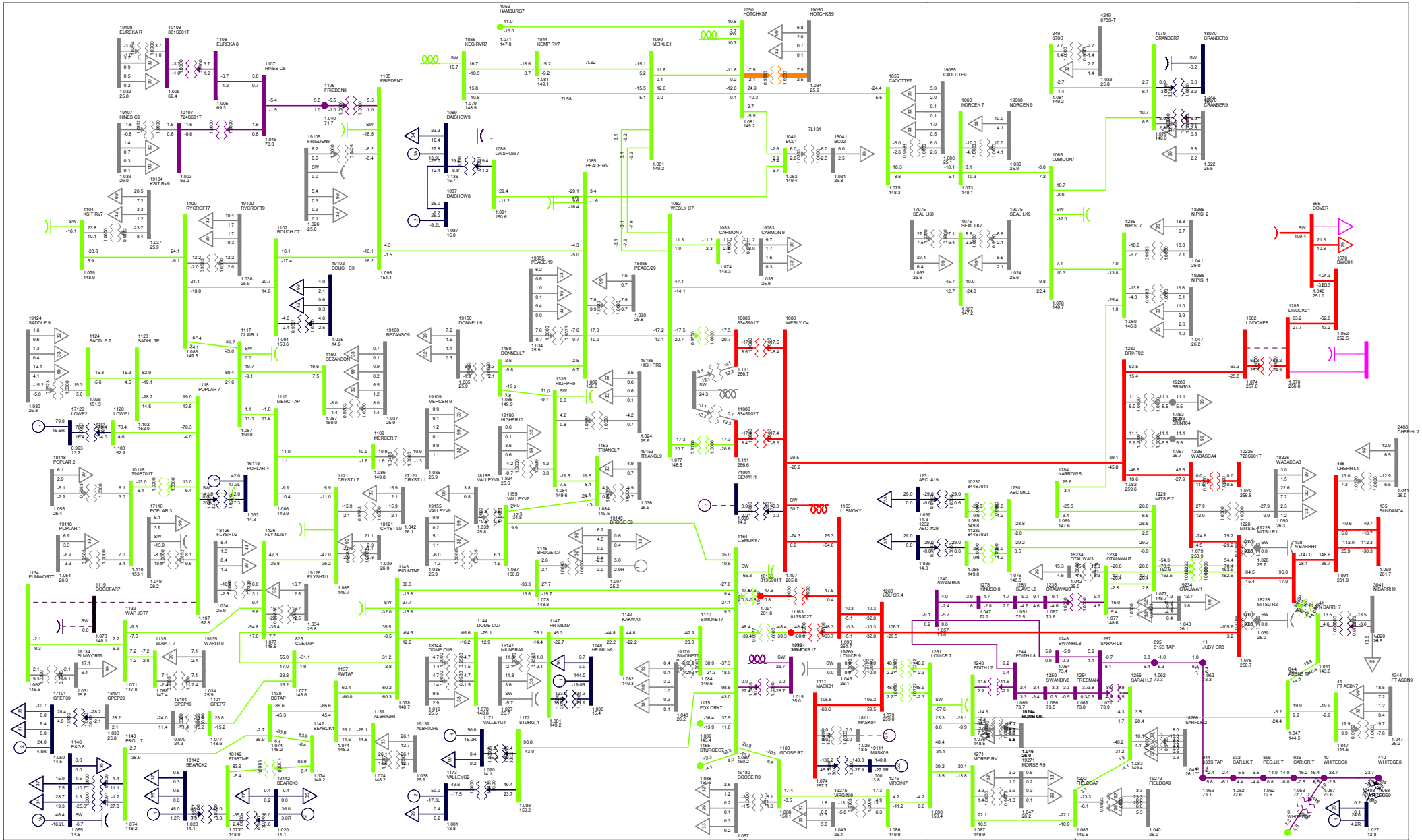
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 75



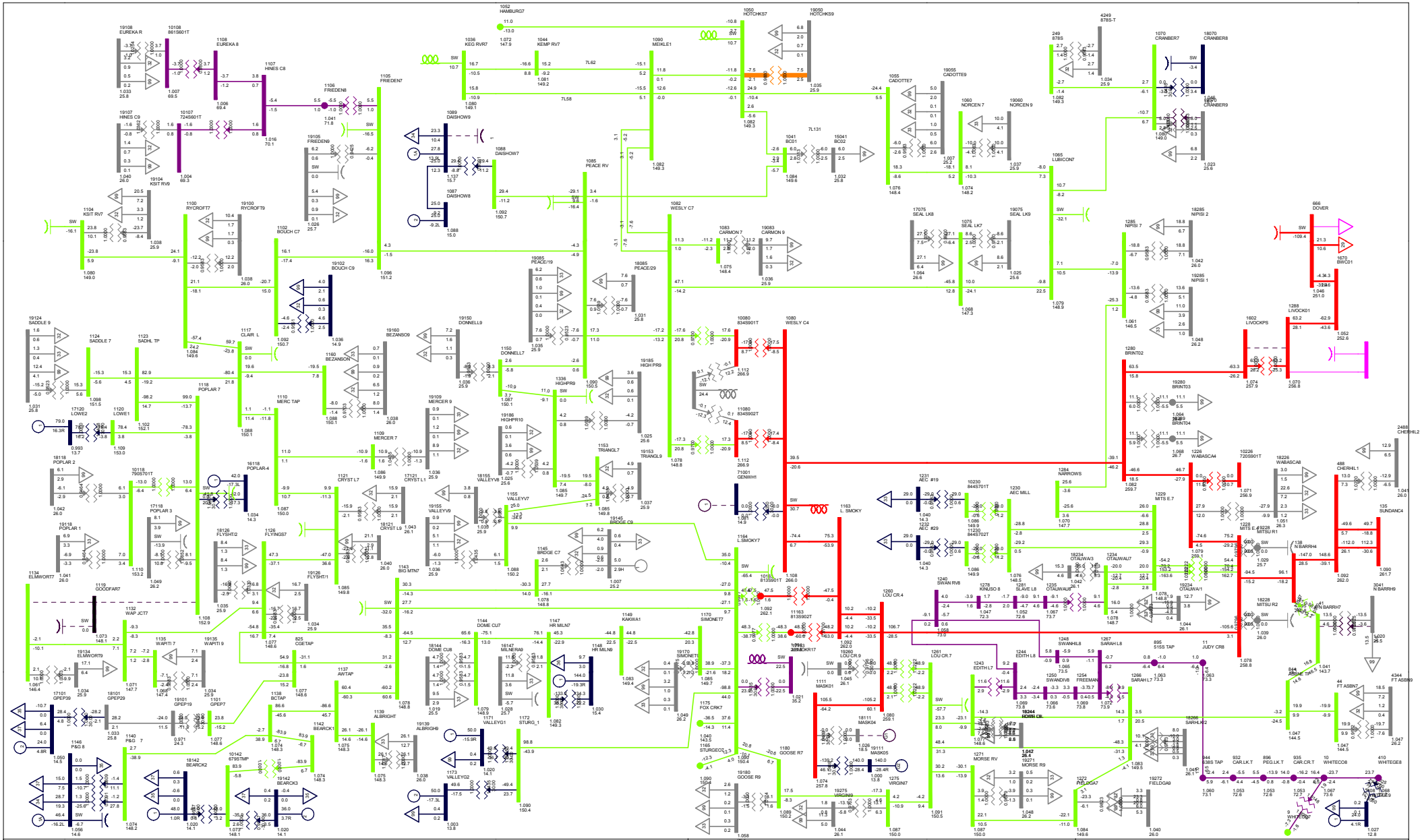
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 037 7L07 POPLARHILL to ELMWORTH_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 76



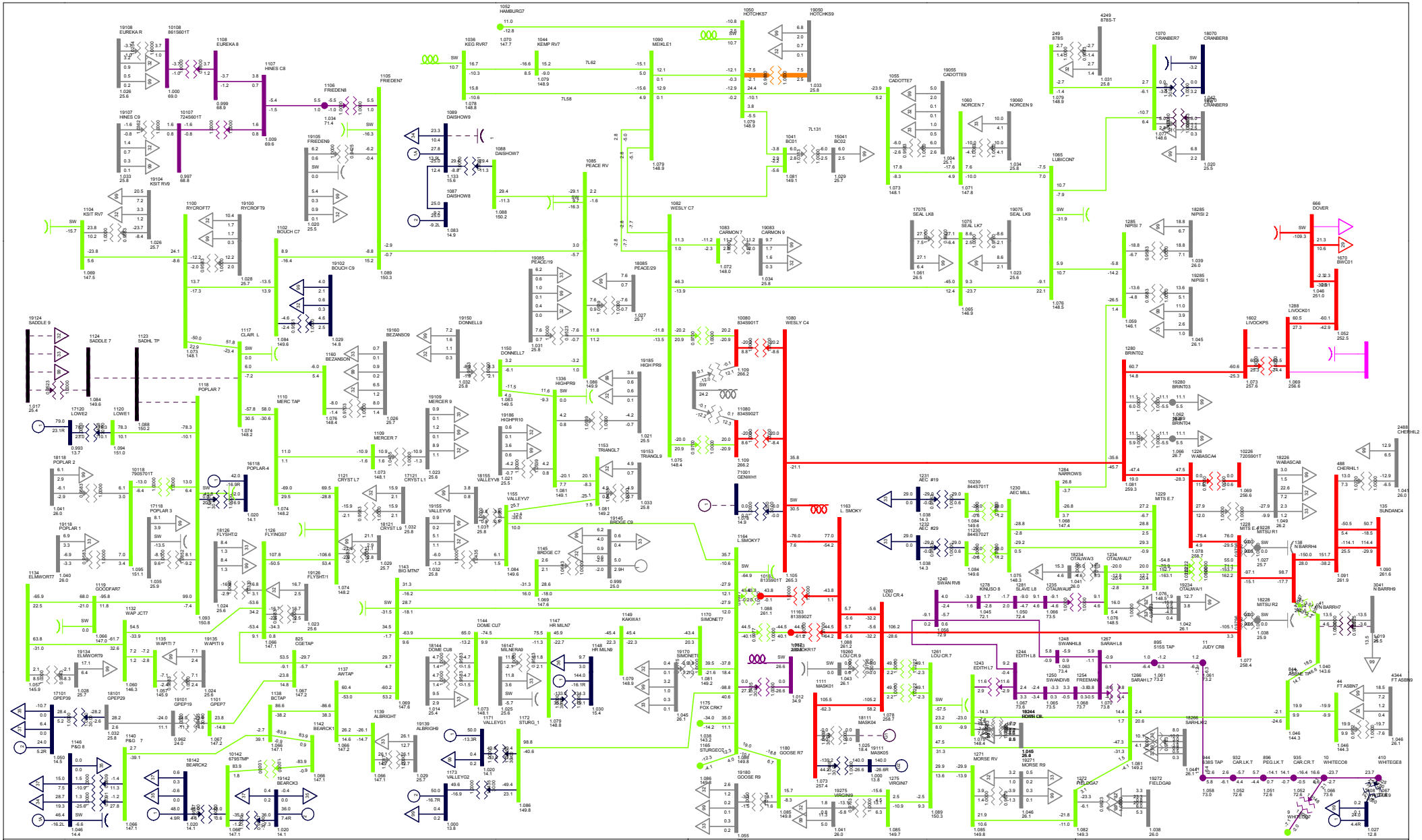
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 037 7L07 POPLARHILL to ELMWORTH_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 77



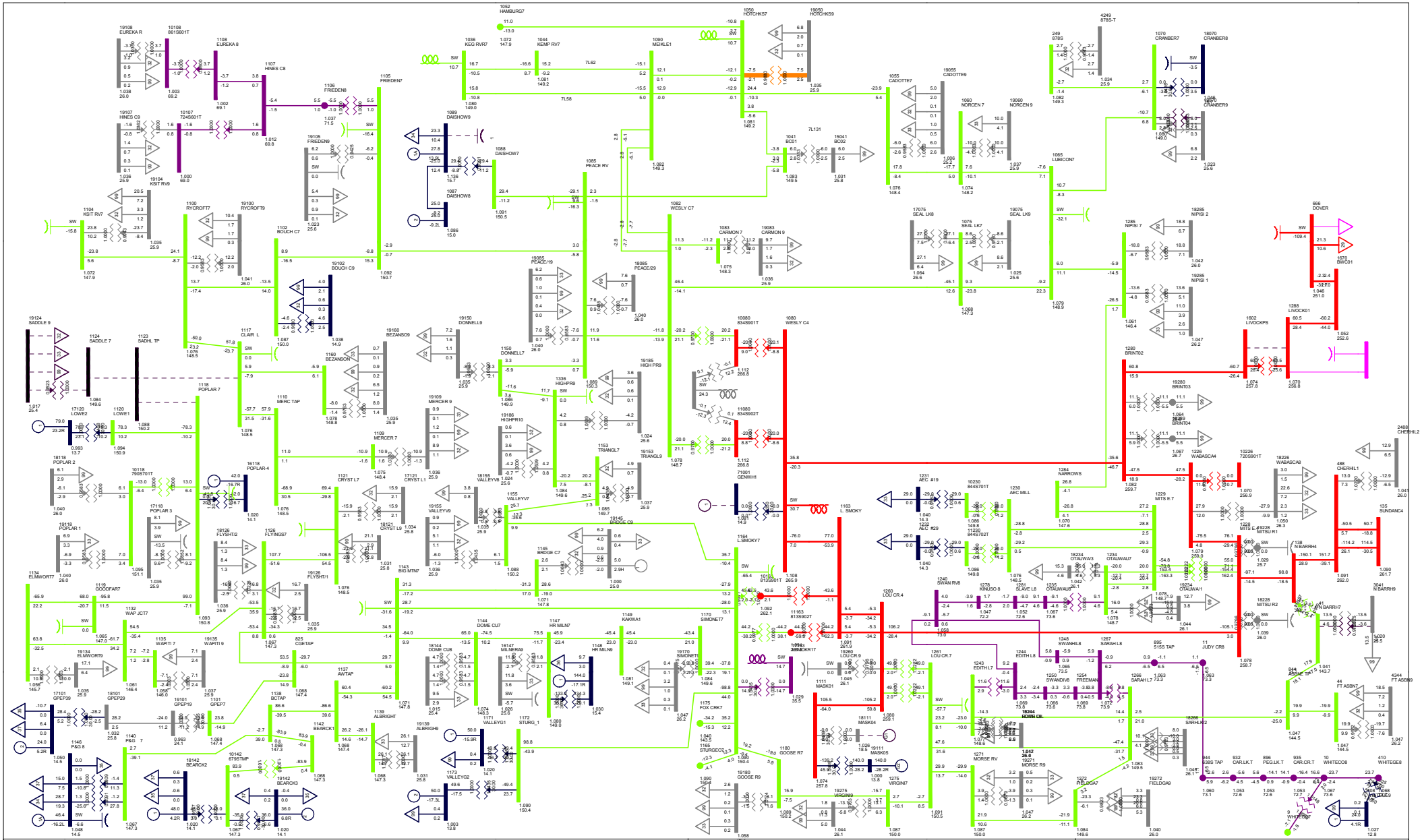
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 78



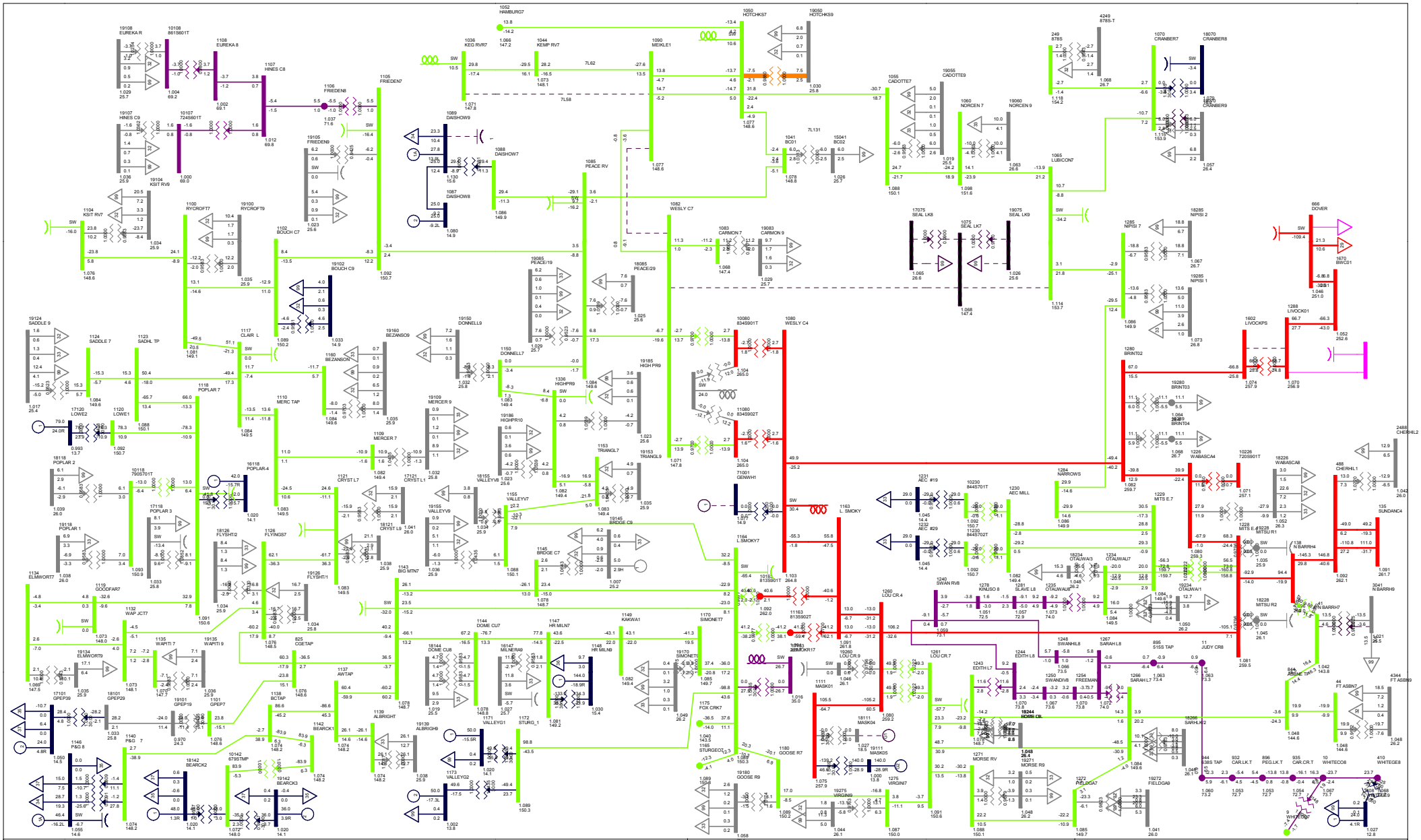
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 79



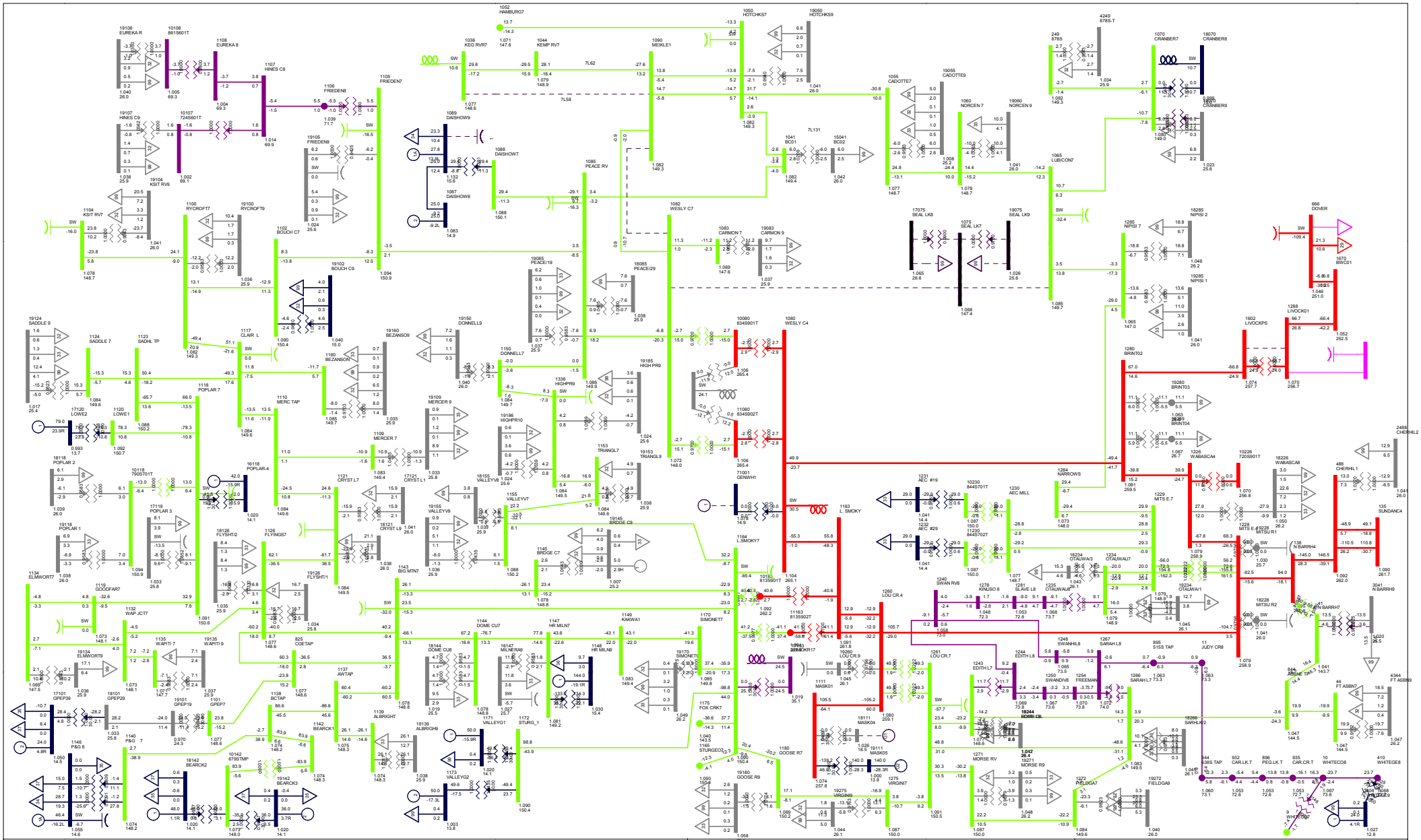
Appendix C2A

Figure: 80

Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 040 C Cont 7L106 7L131 (TAP)_A.

Whitetail Project 1290 Interconnection Study



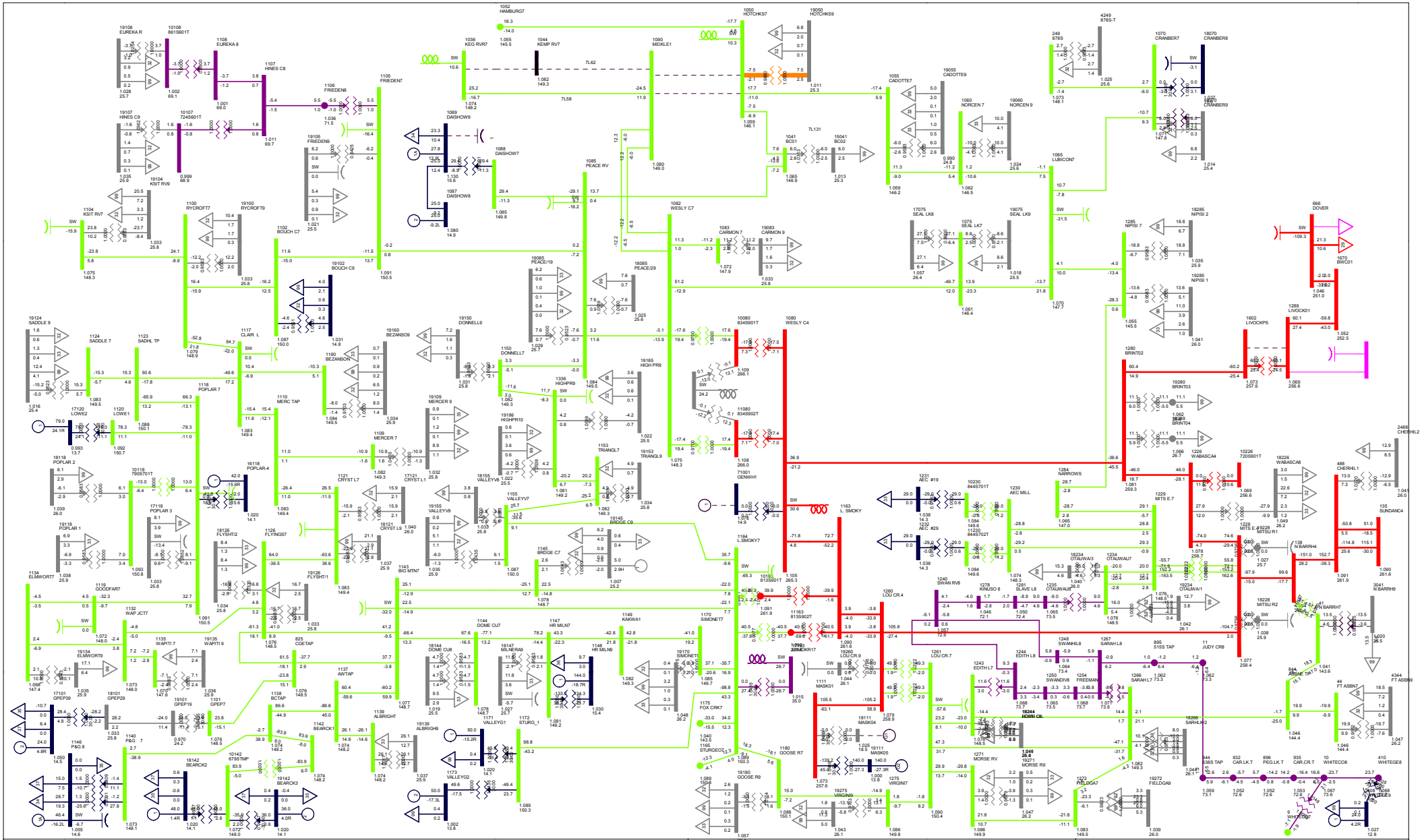
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 040 C Cont 7L106 7L131 (TAP)_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 81



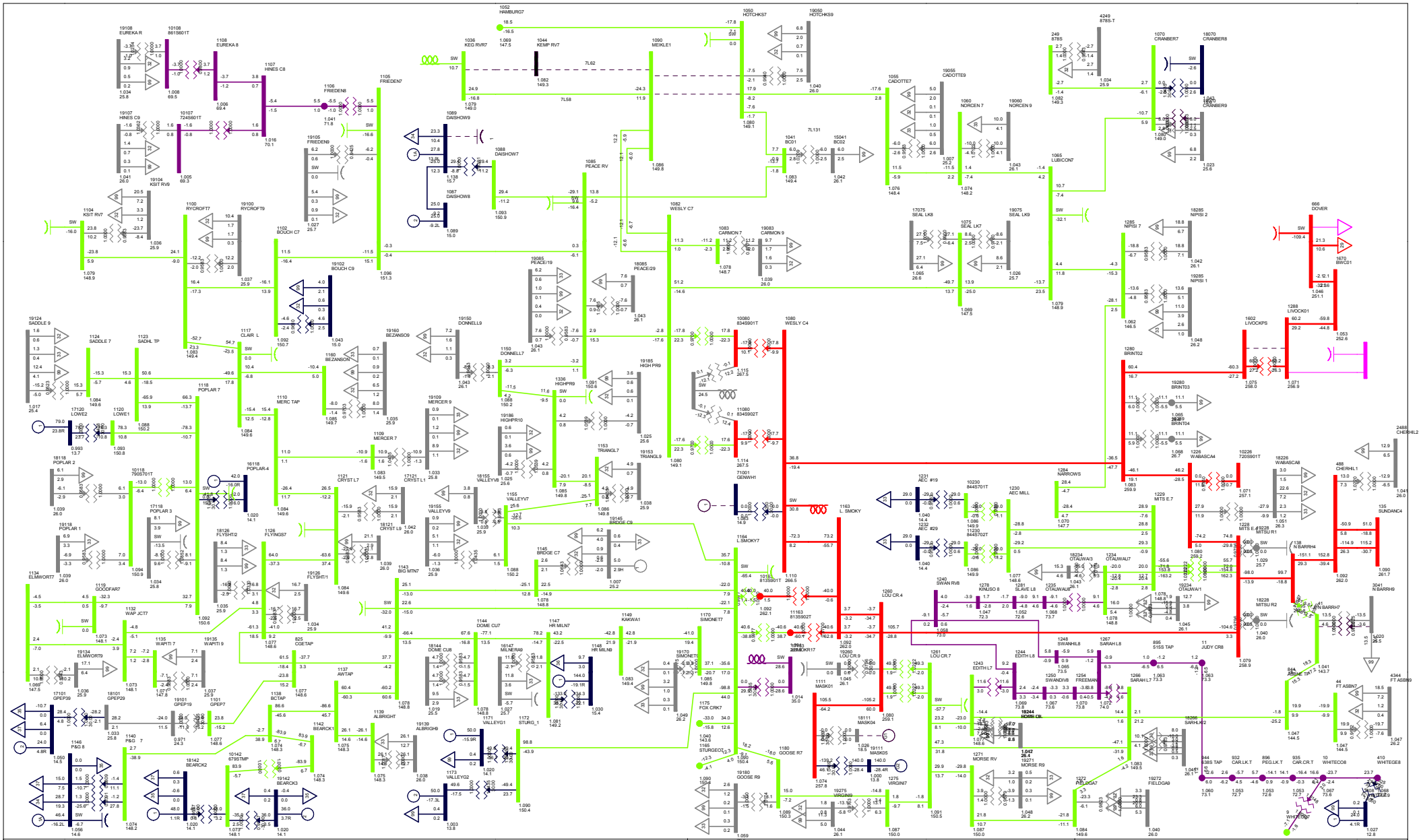
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 041 C Cont 7L120 7L138 (TAP)_A.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 82



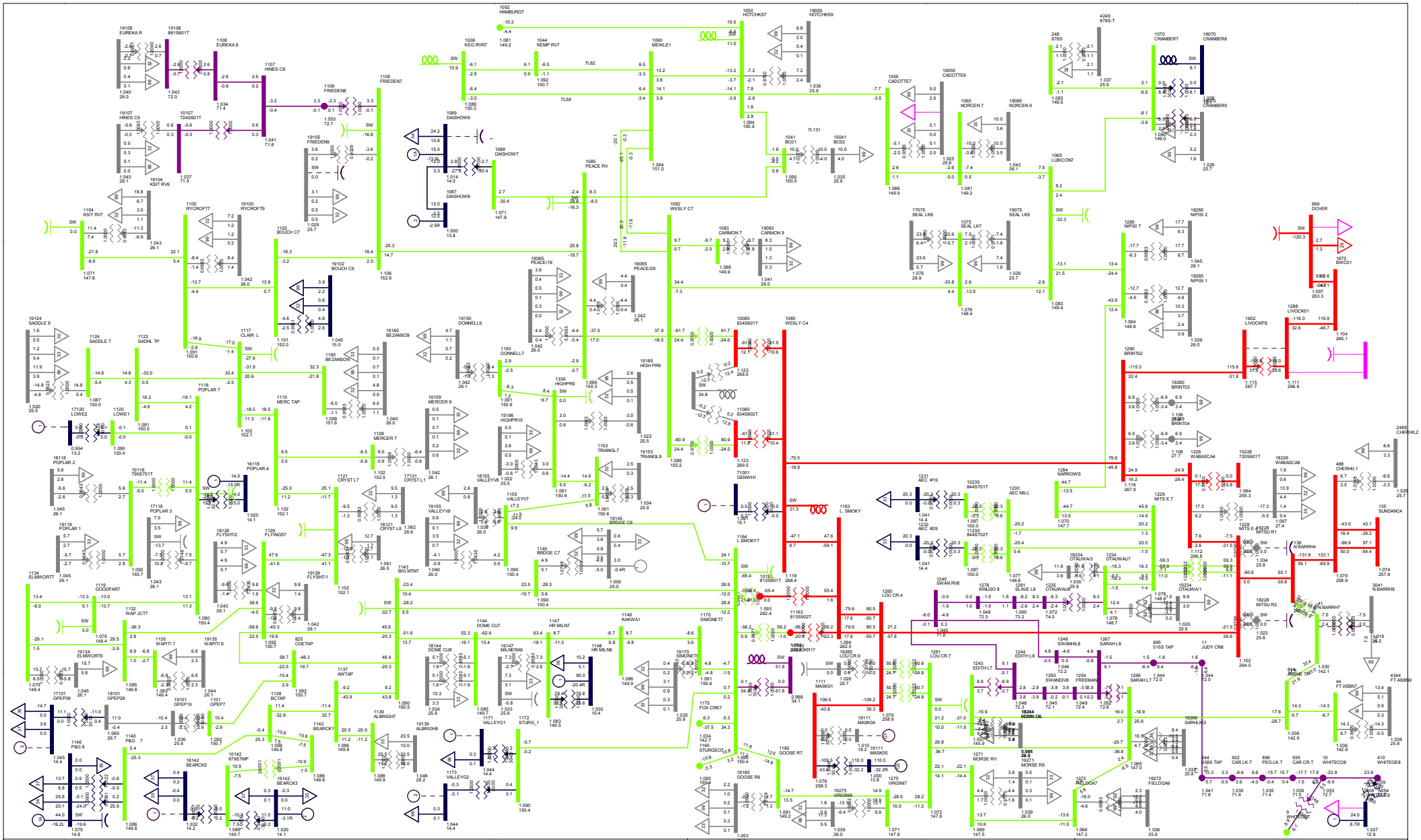
Study Case Description

CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 041 C Cont 7L120 7L138 (TAP)_B.

Whitetail Project 1290 Interconnection Study

Appendix C2A

Figure: 83



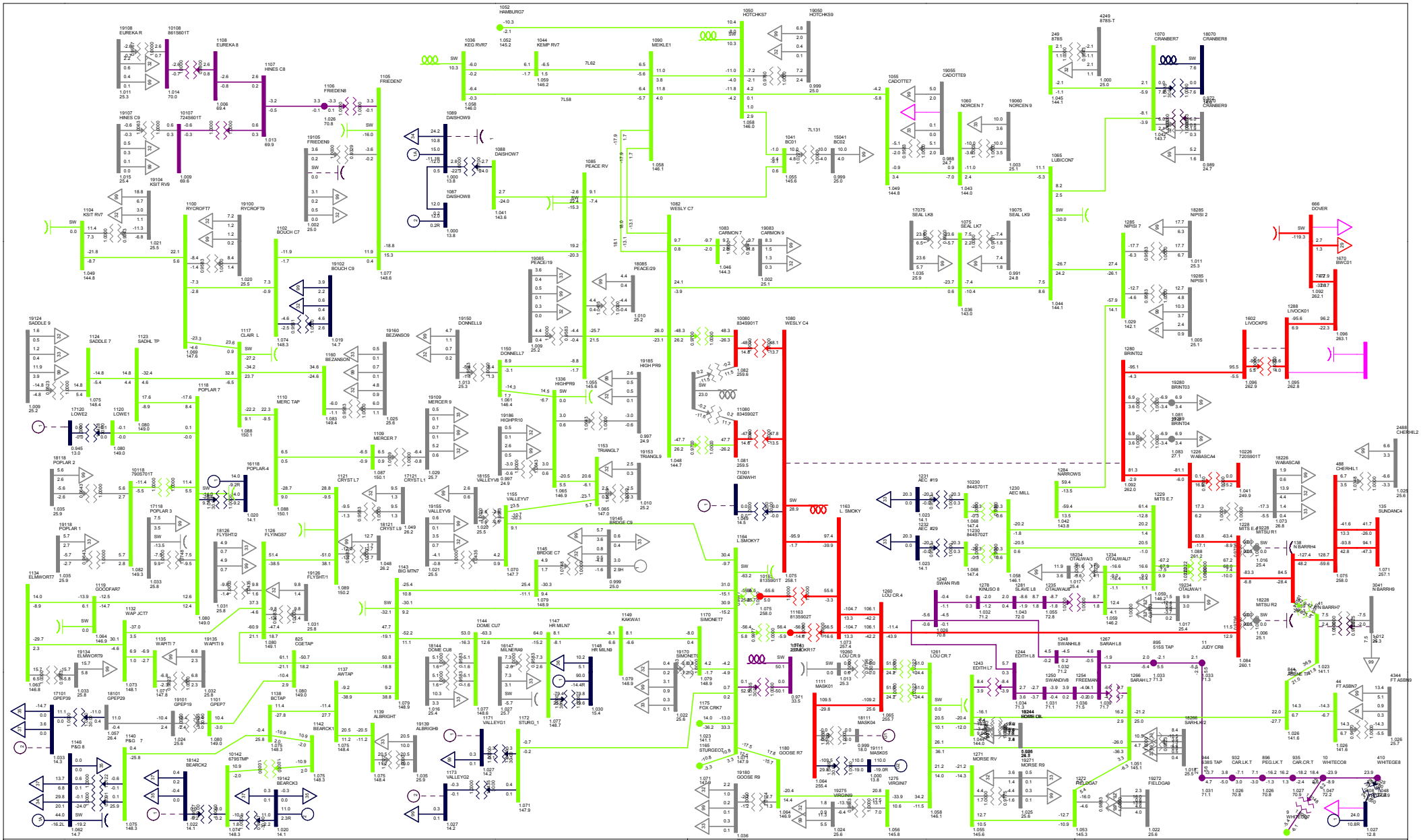
Appendix C2B

Figure: 1

Study Case Description

CASE 02 2014 SL Mgen -
SCEN 01 Base Case -
CONT PreContingency.

Whitetail Project 1290 Interconnection Study



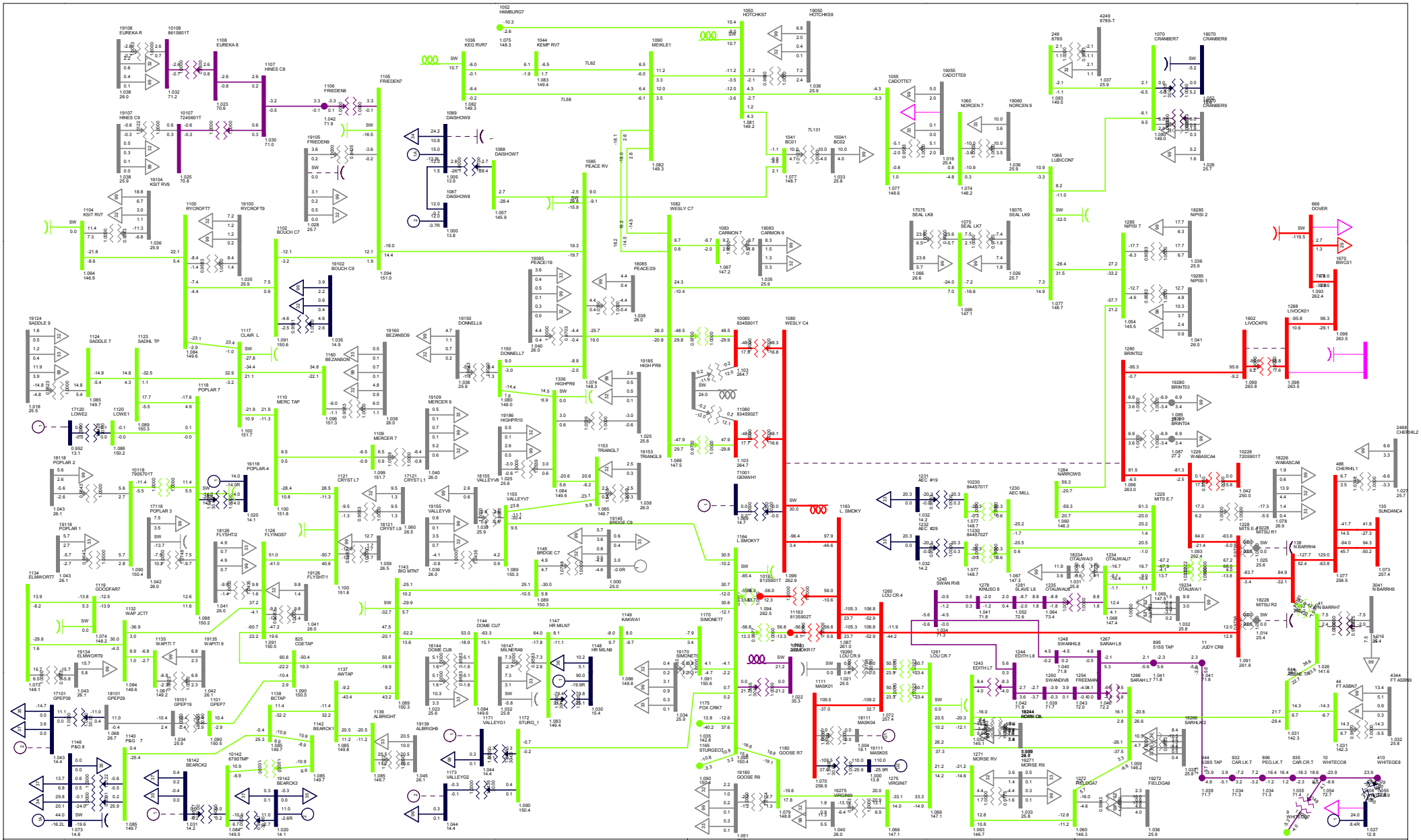
Appendix C2B

Figure: 4

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 001 9L15 WESLEYCREEK to Brintnell_A.

Whitetail Project 1290 Interconnection Study

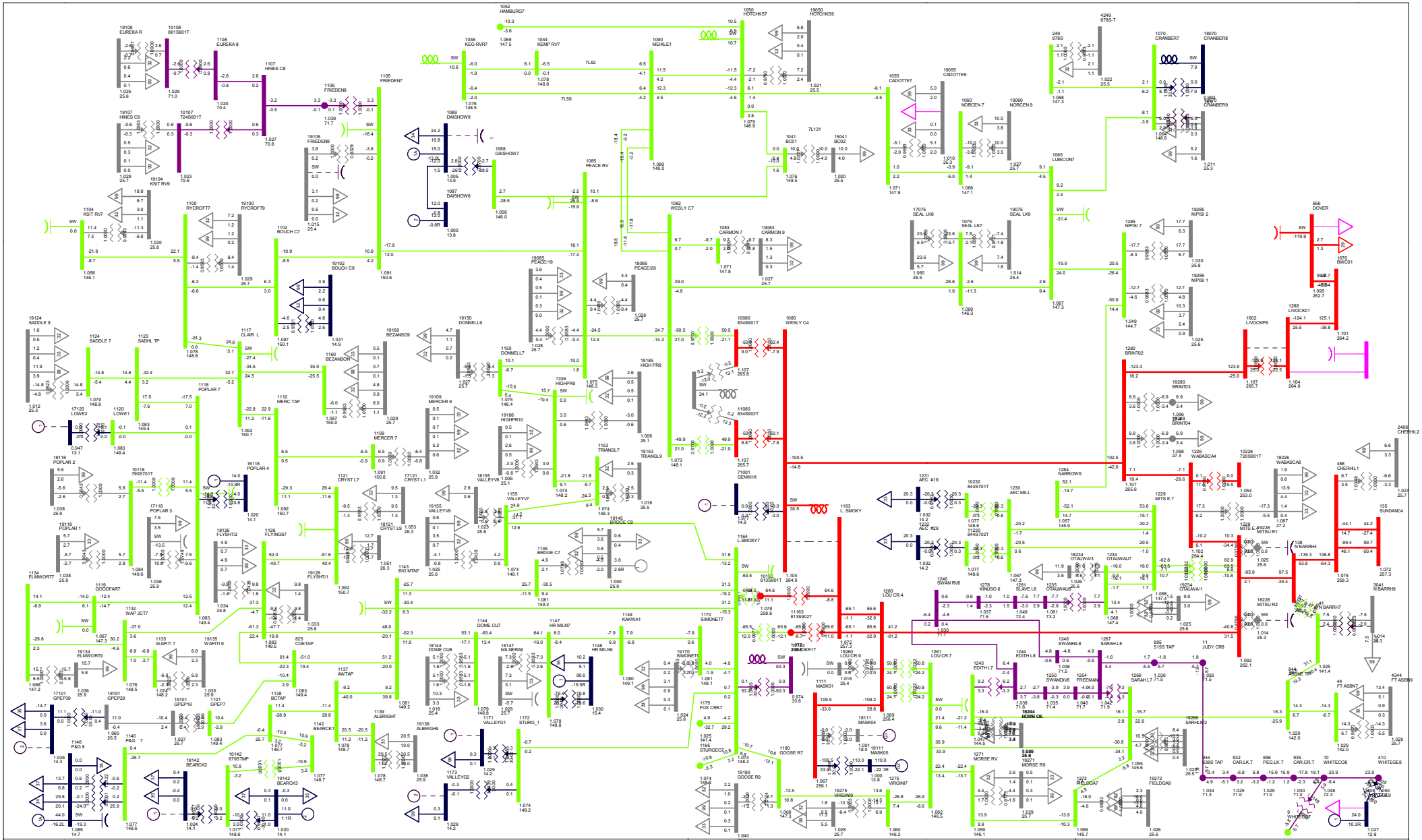


Appendix C2B Figure: 5

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 001 9L15 WESLEYCREEK to Brintnell_B.

Whitetail Project 1290 Interconnection Study



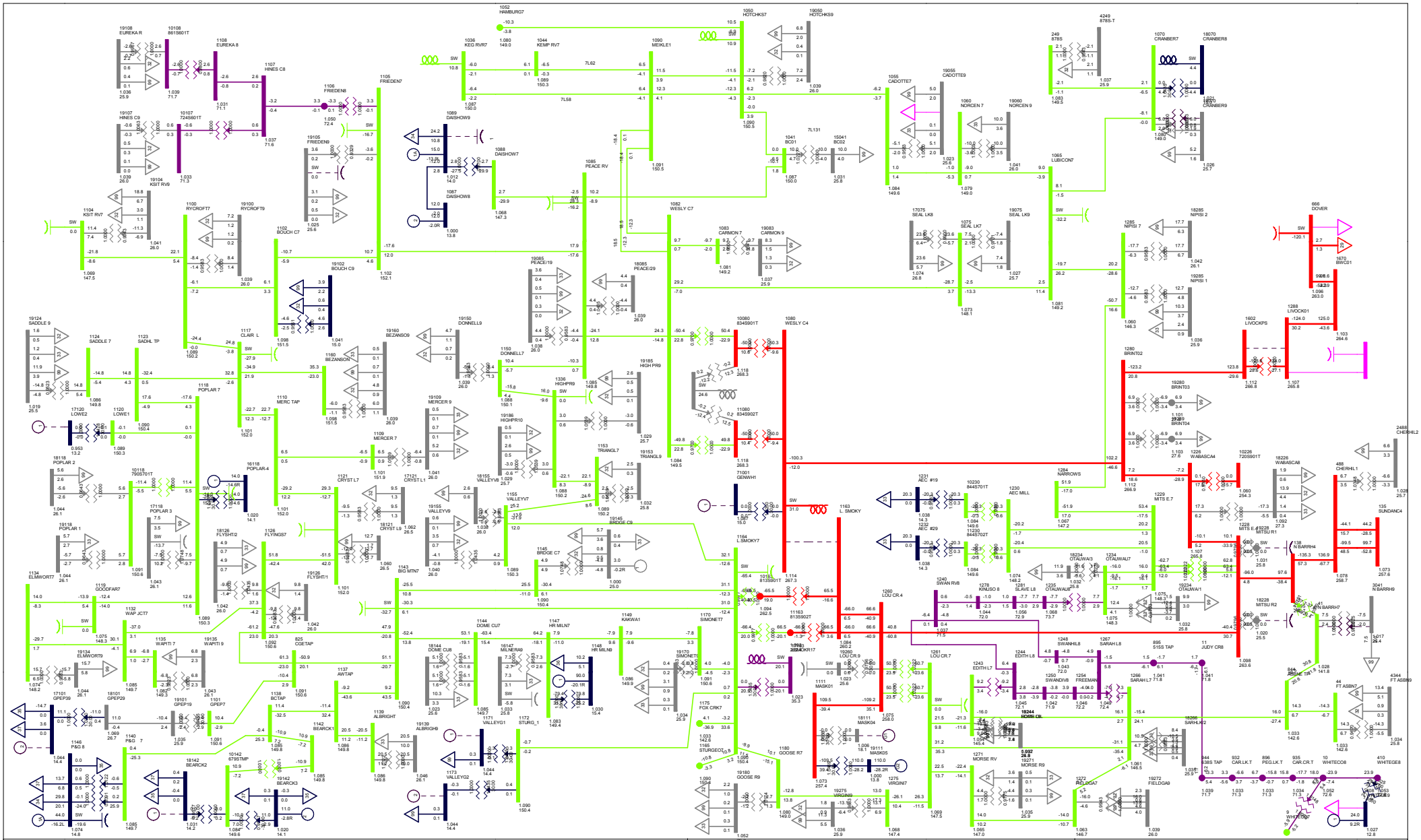
Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_A.

Whitetail Project 1290 Interconnection Study

Appendix C2B

Figure: 6

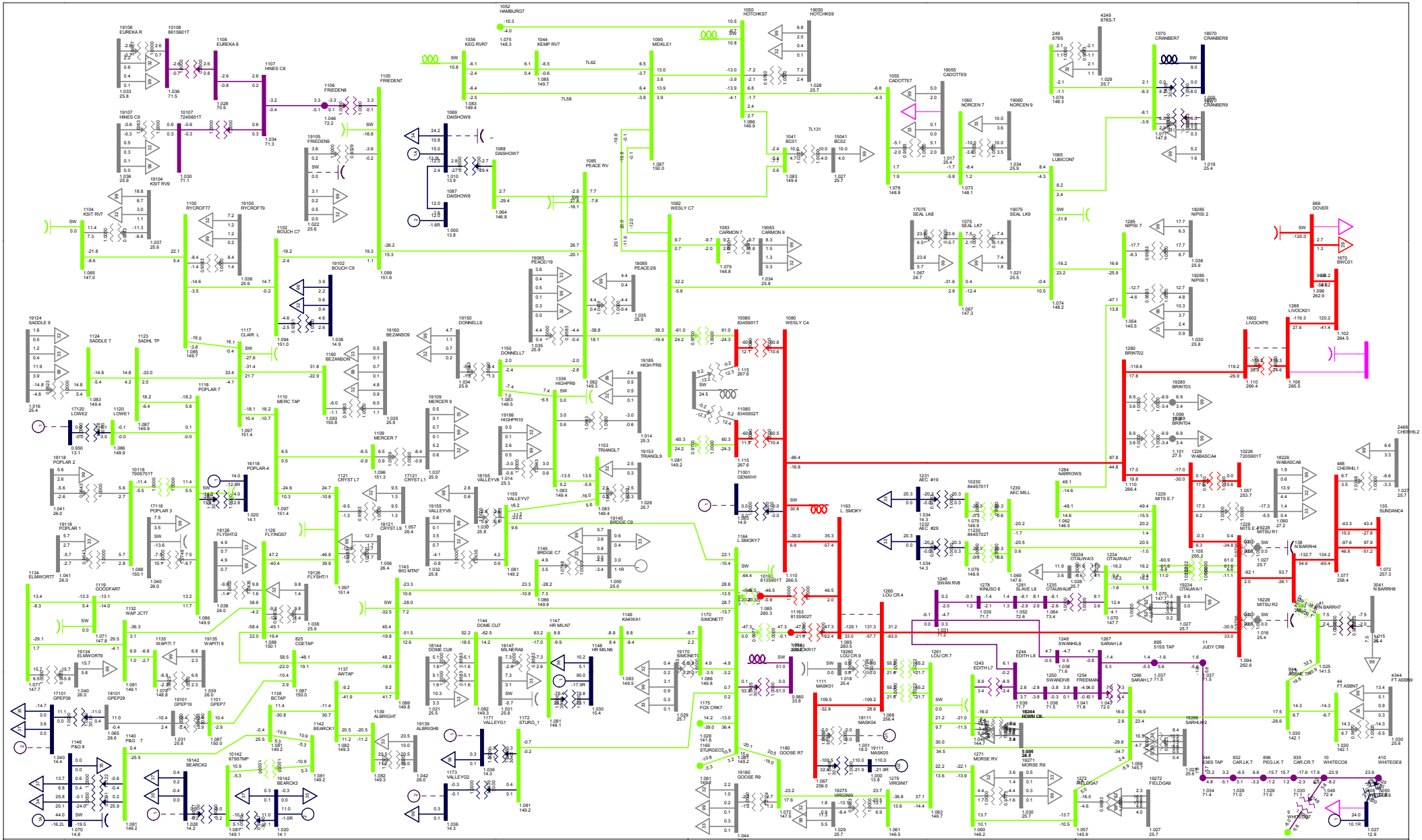


Appendix C2B Figure: 7

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_B.

Whitetail Project 1290 Interconnection Study



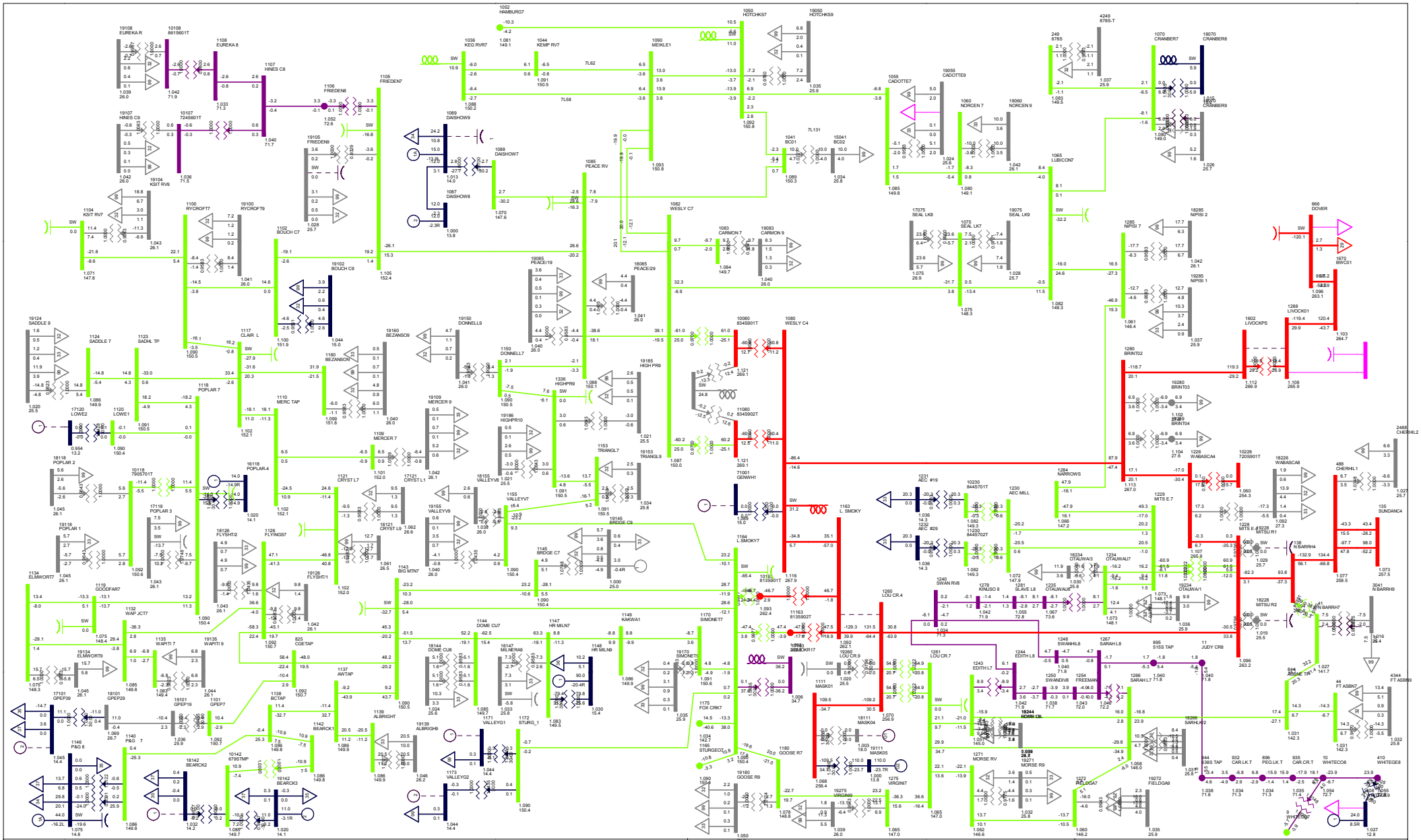
Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_A.

Whitetail Project 1290 Interconnection Study

Appendix C2B

Figure: 8

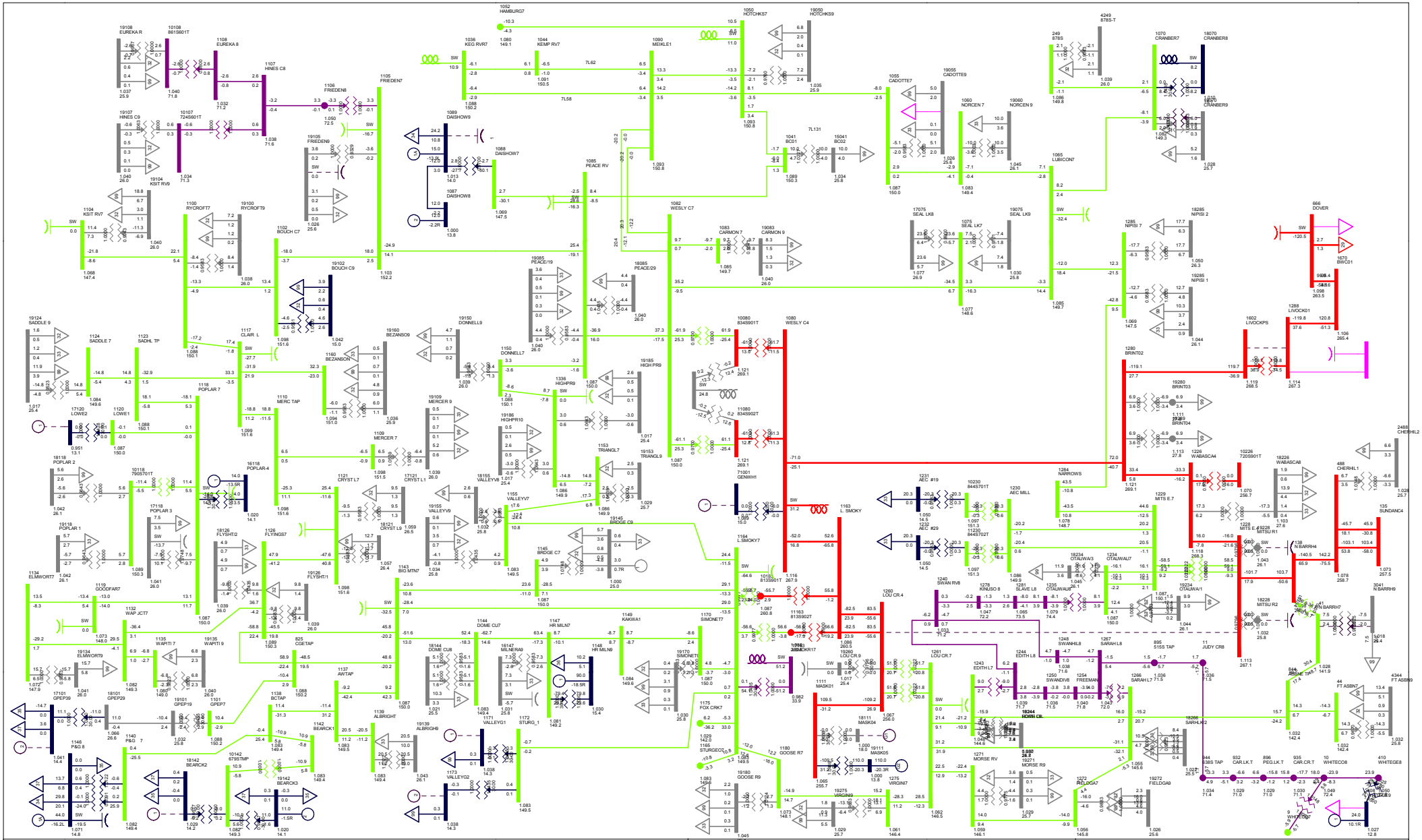


Appendix C2B Figure: 9

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_B.

Whitetail Project 1290 Interconnection Study



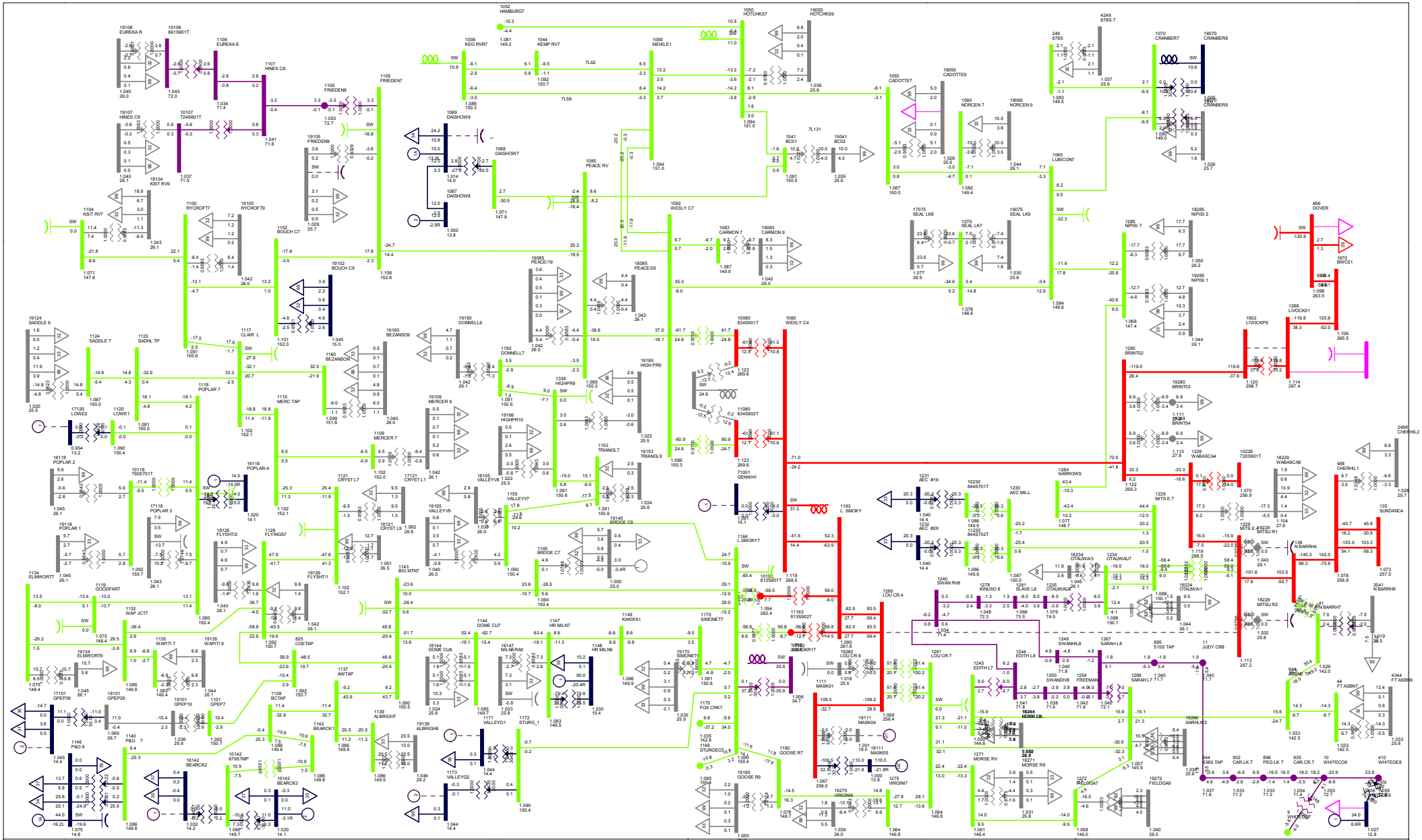
Appendix C2B

Figure: 10

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 004 9L40 MITSUE to LOUISECREEK_A.

Whitetail Project 1290 Interconnection Study



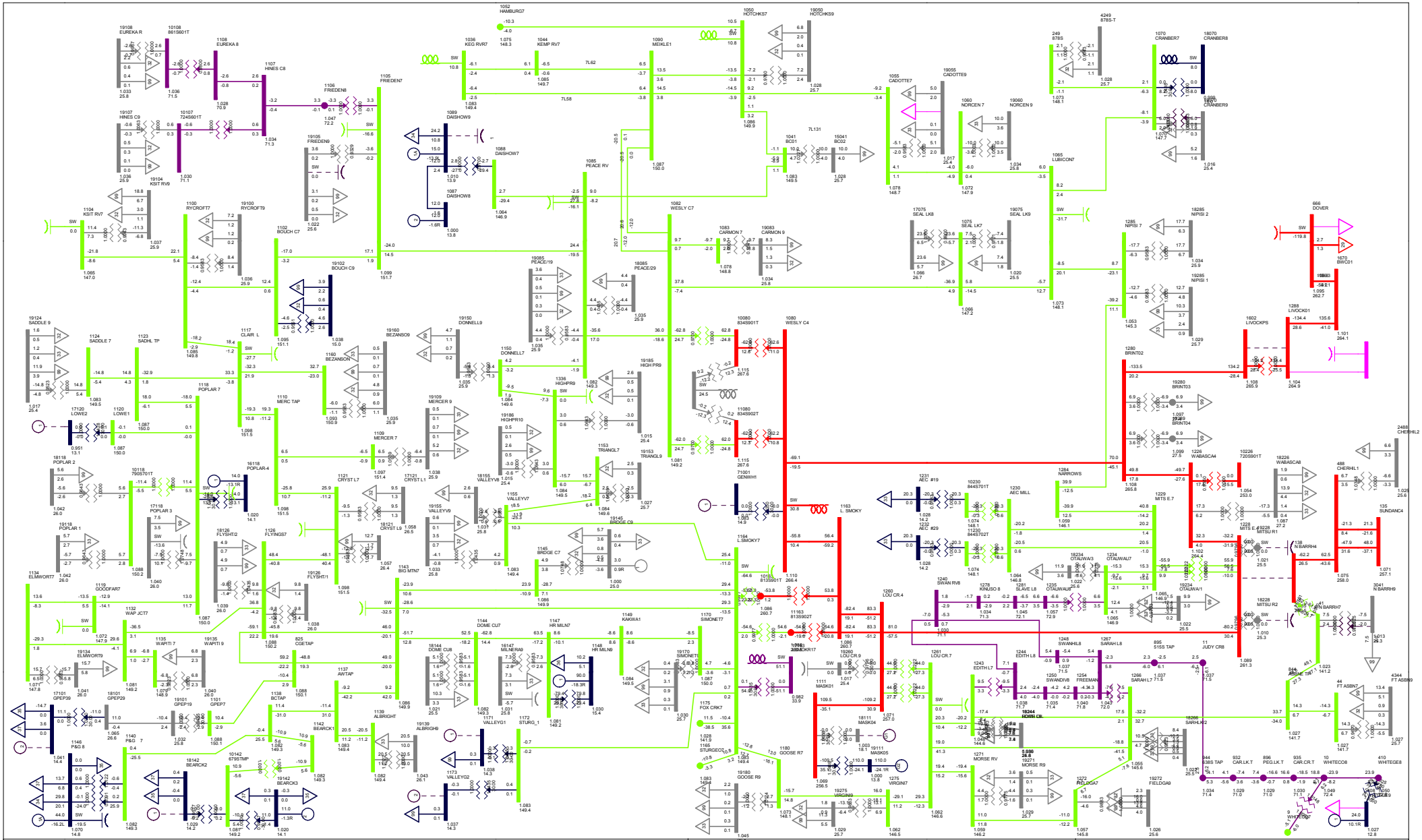
Appendix C2B

Figure: 11

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 004 9L40 MITSUE to LOUISECREEK_B.

Whitetail Project 1290 Interconnection Study



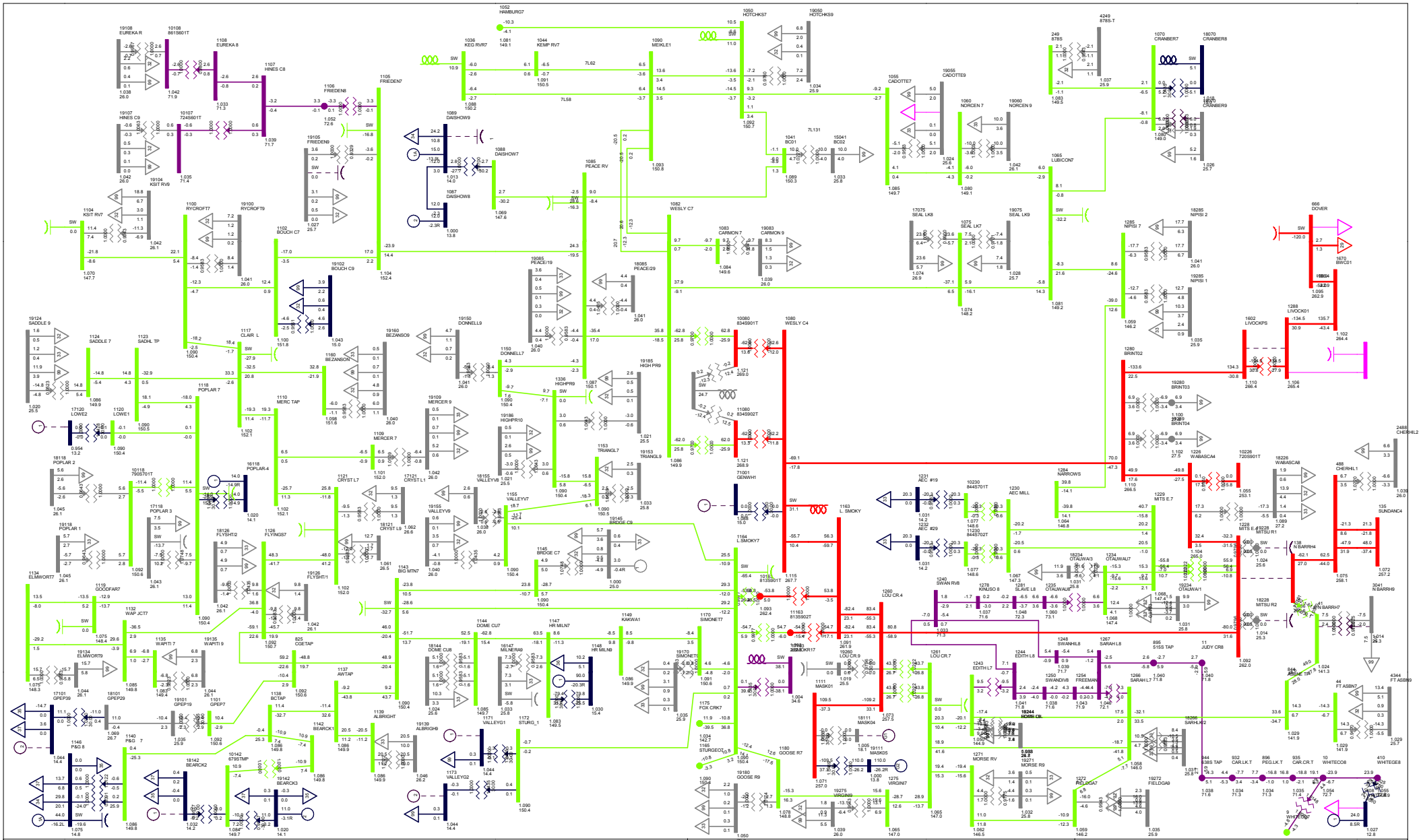
Appendix C2B

Figure: 12

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 005 913L NORTHBARRHEAD to MITSUE_A.

Whitetail Project 1290 Interconnection Study

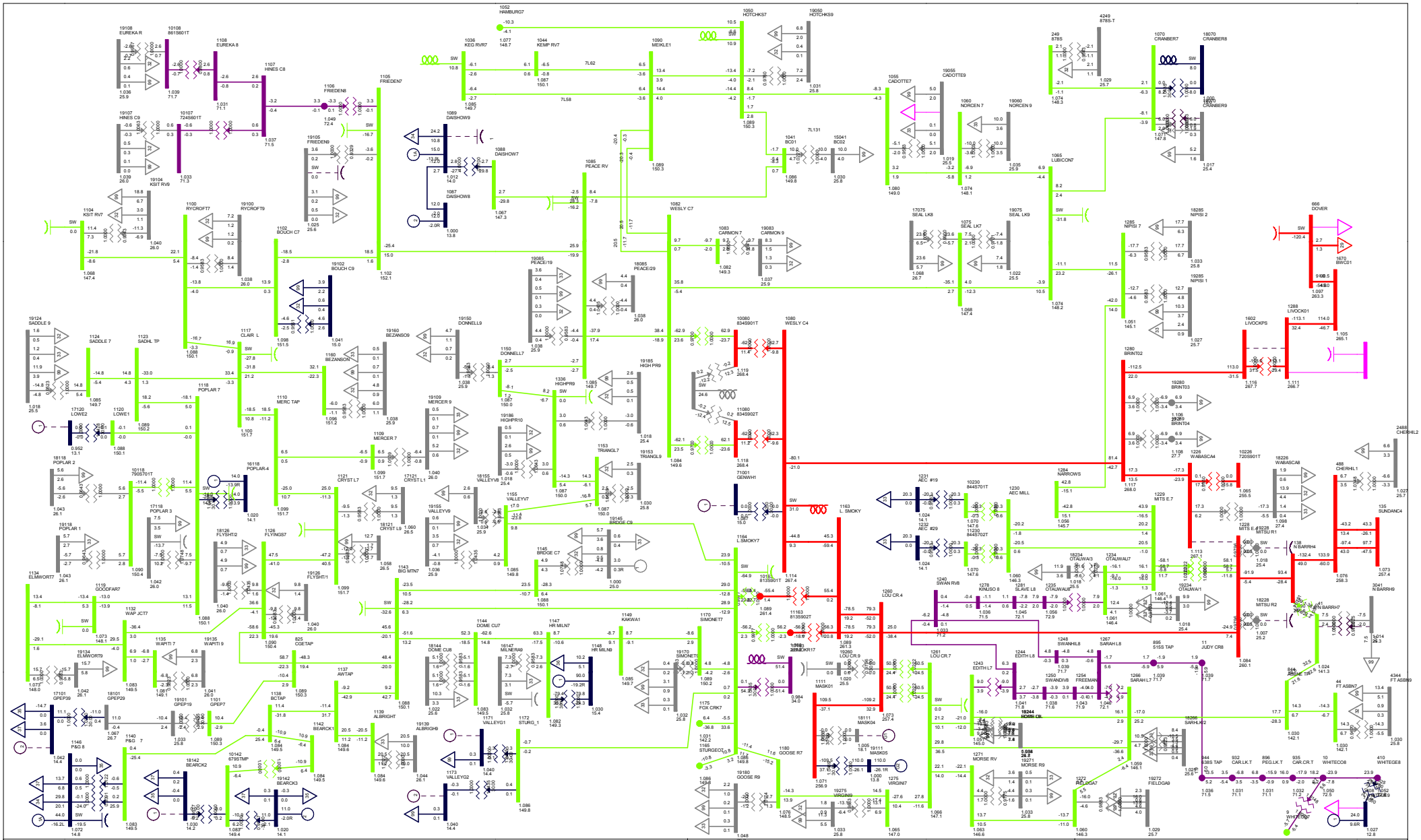


Appendix C2B Figure: 13

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 005 913L NORTHBARRHEAD to MITSUE_B.

Whitetail Project 1290 Interconnection Study



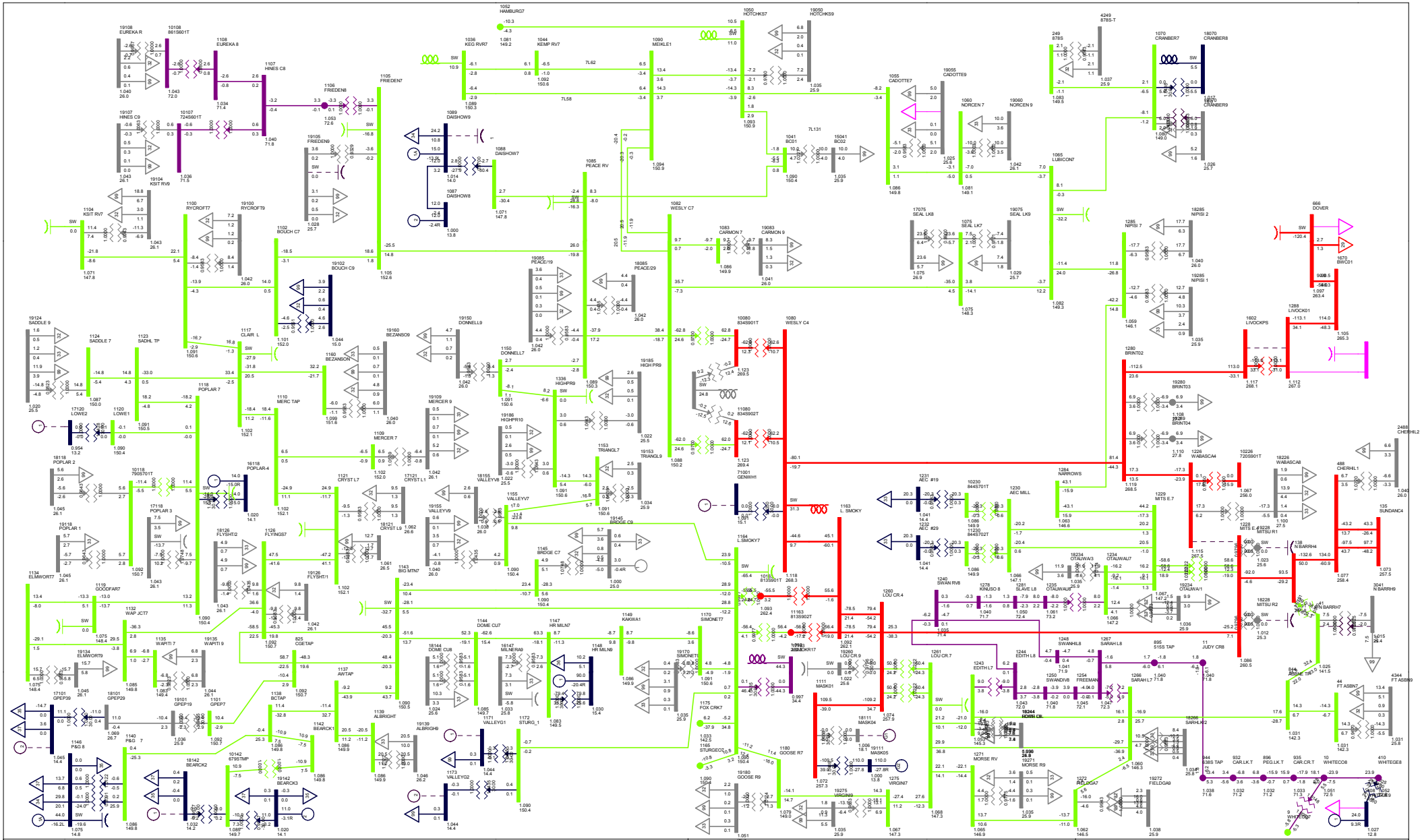
Appendix C2B

Figure: 14

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 006 9L56 WABASCA to MITSUE_A.

Whitetail Project 1290 Interconnection Study

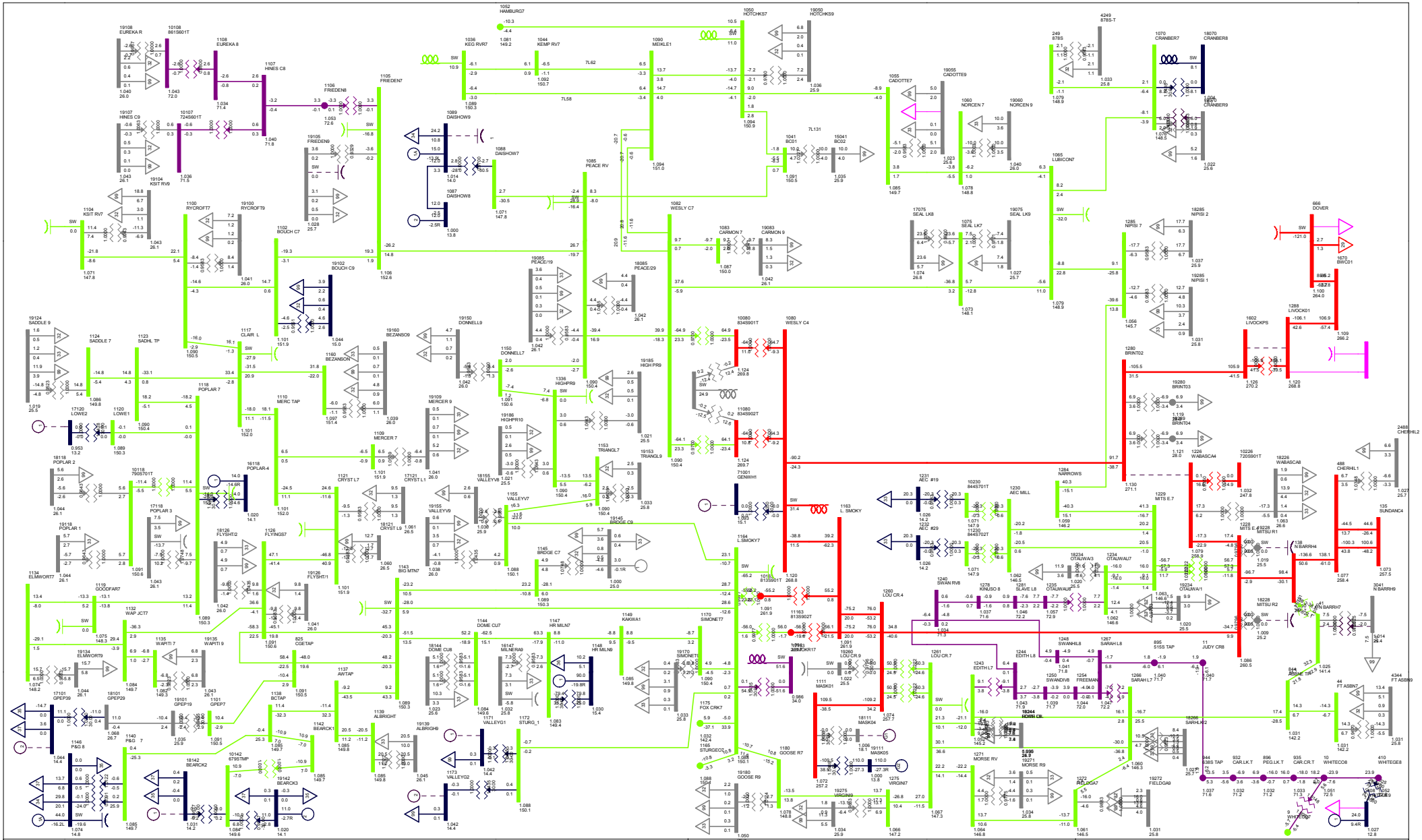


Appendix C2B Figure: 15

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 006 9L56 WABASCA to MITSUE_B.

Whitetail Project 1290 Interconnection Study



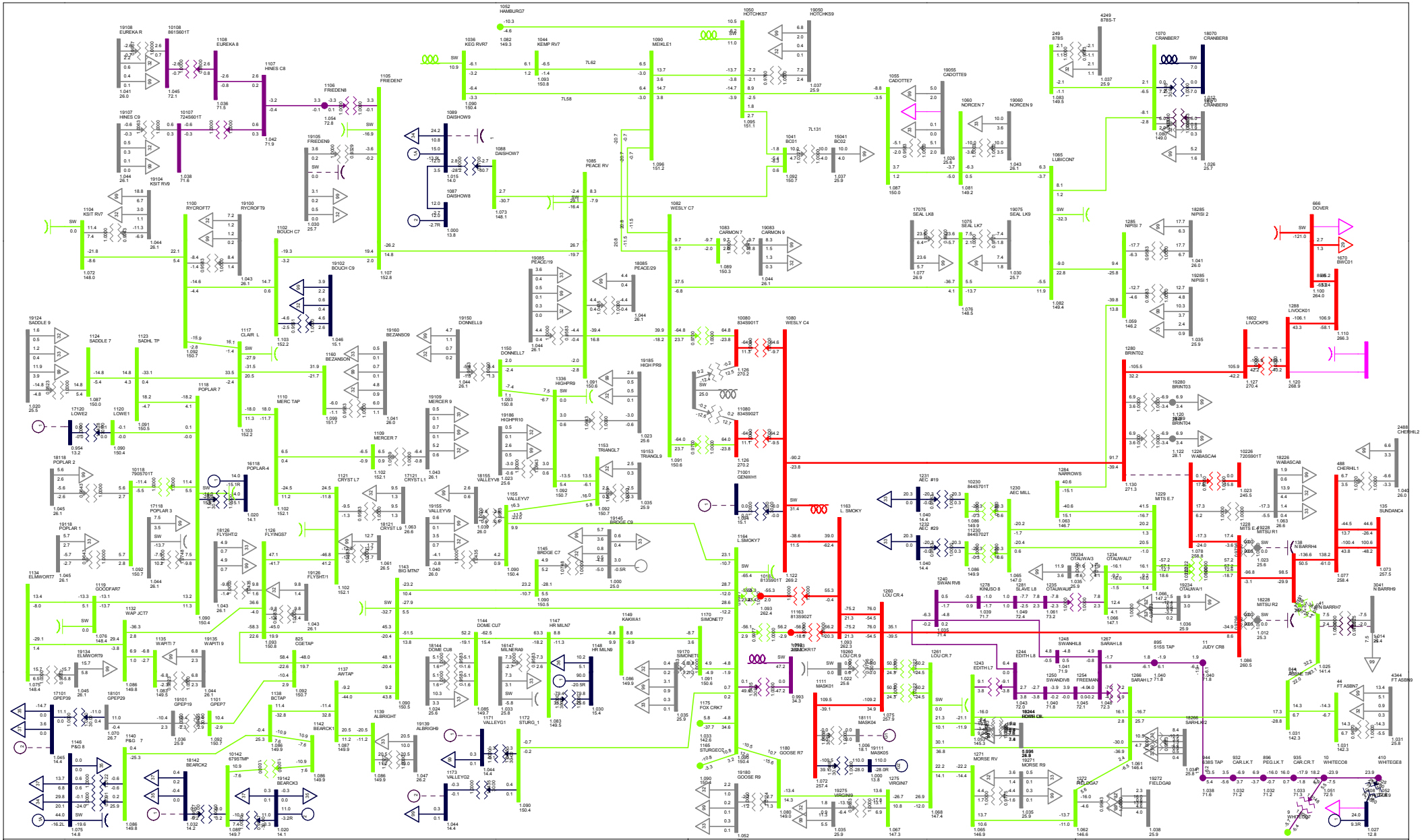
Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 007 9L10 WABASCA to Brintnell_A.

Whitetail Project 1290 Interconnection Study

Appendix C2B

Figure: 16



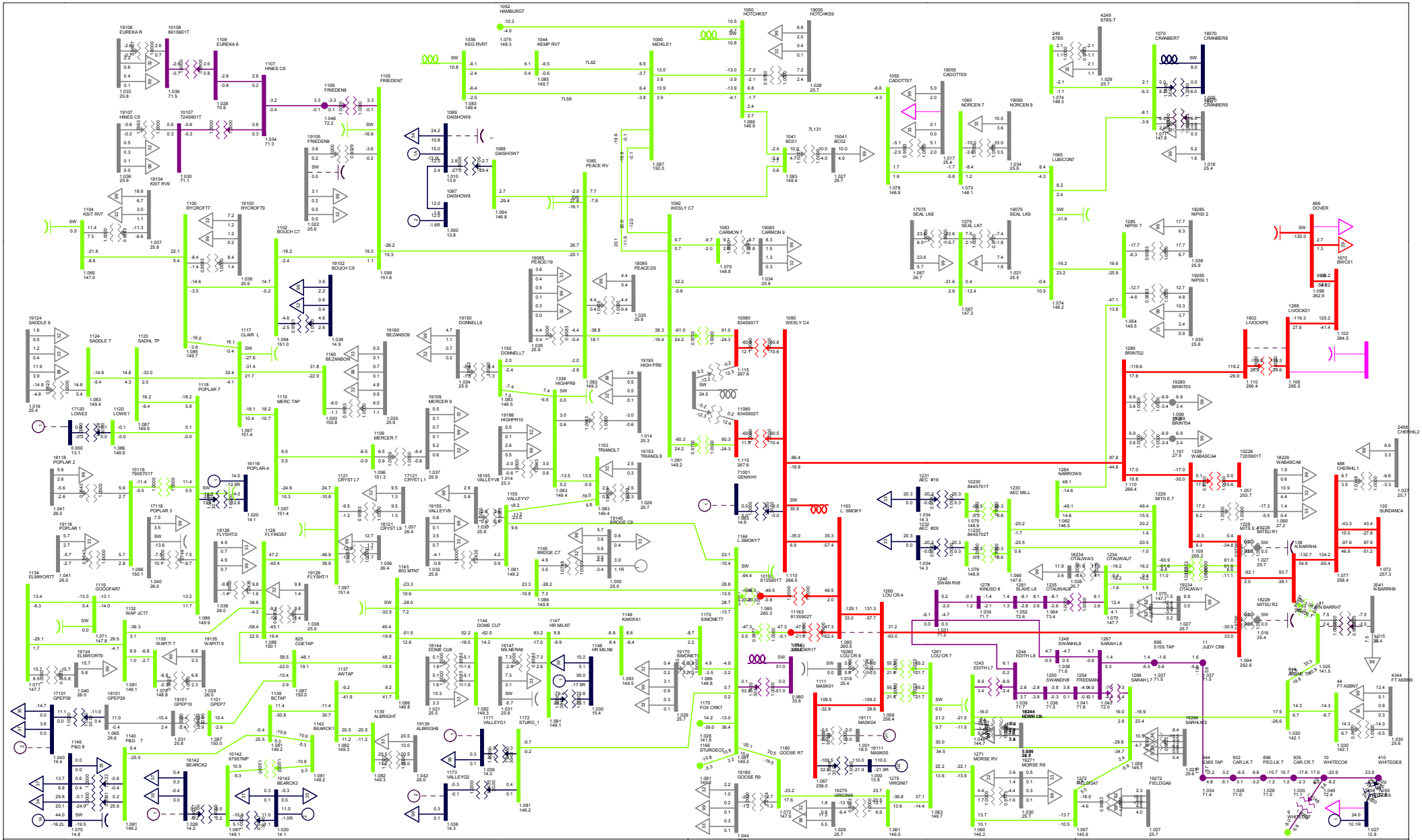
Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 007 9L10 WABASCA to Brintnell_B.

Whitetail Project 1290 Interconnection Study

Appendix C2B

Figure: 17



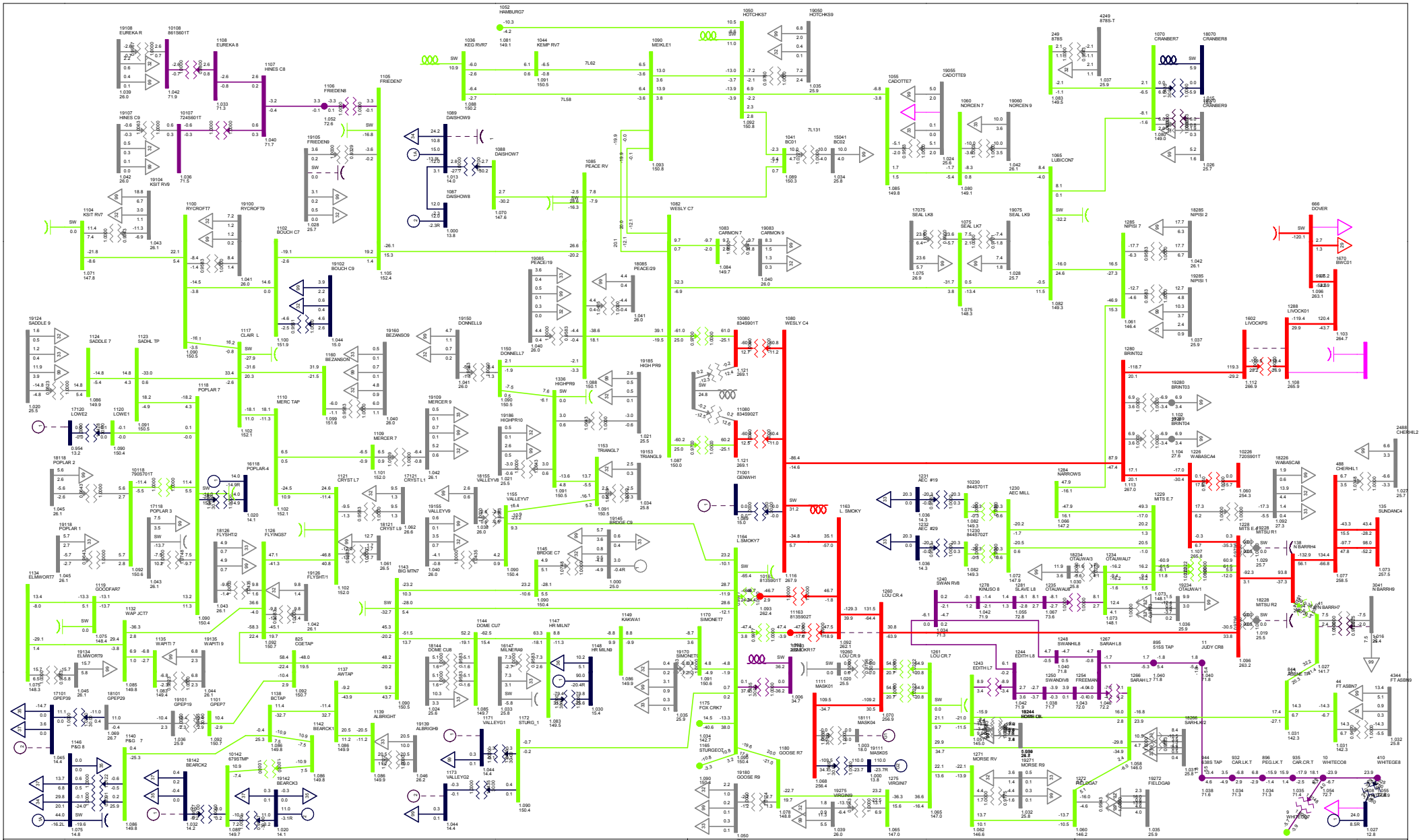
Appendix C2B

Figure: 18

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_A.

Whitetail Project 1290 Interconnection Study



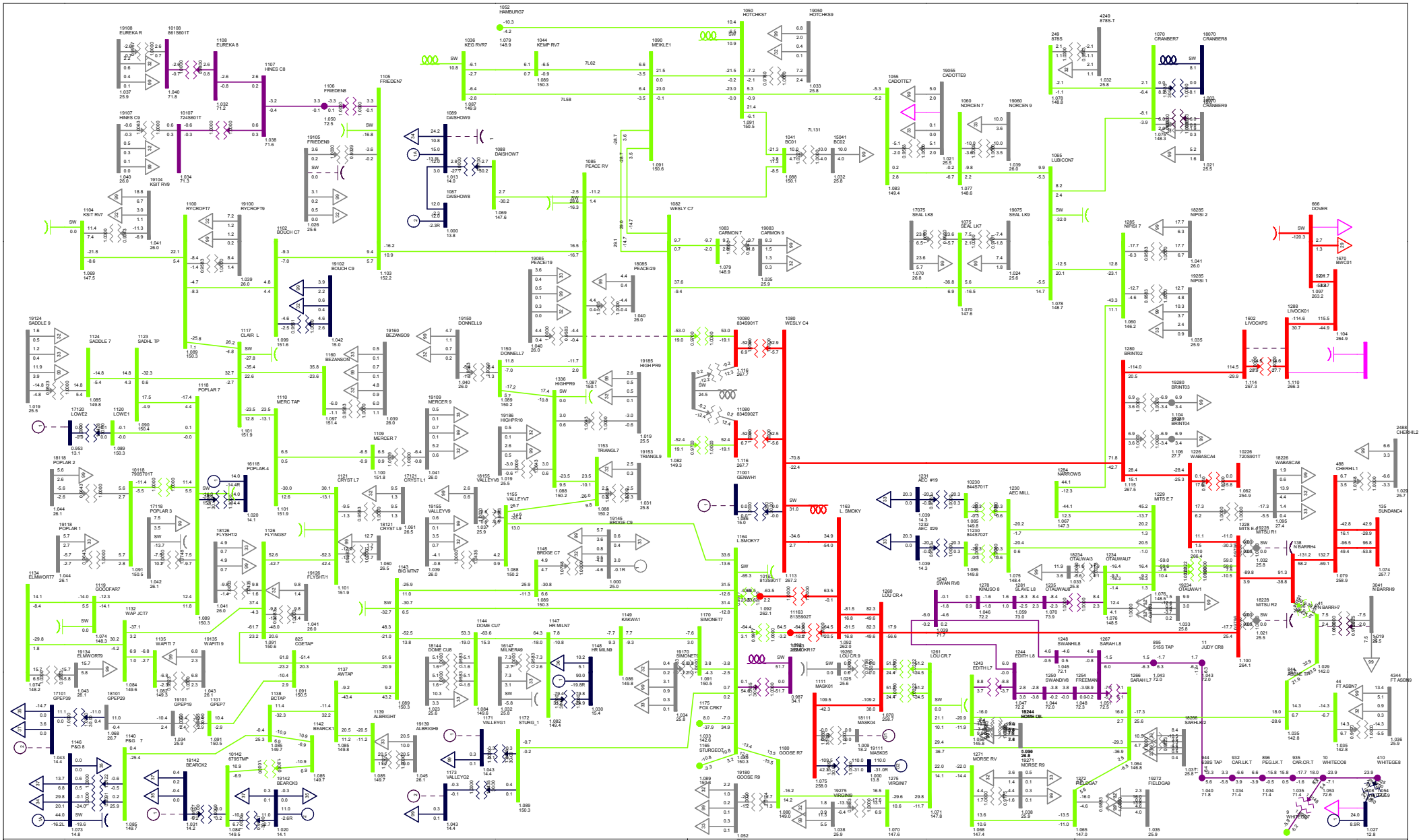
Appendix C2B

Figure: 19

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_B.

Whitetail Project 1290 Interconnection Study

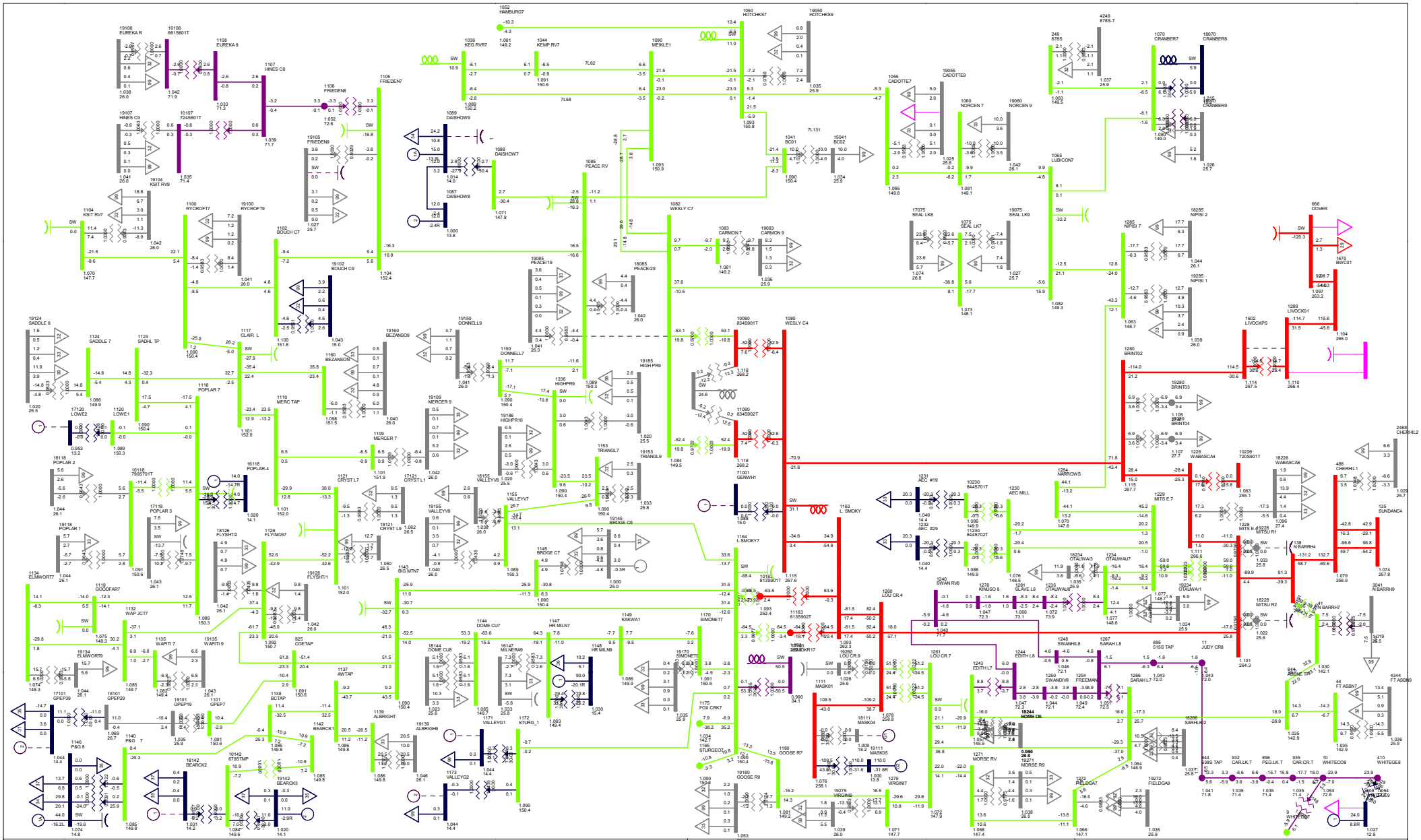


Appendix C2B Figure: 20

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 009 7L27 WESLEYCREEK to WESTPEACE_A.

Whitetail Project 1290 Interconnection Study

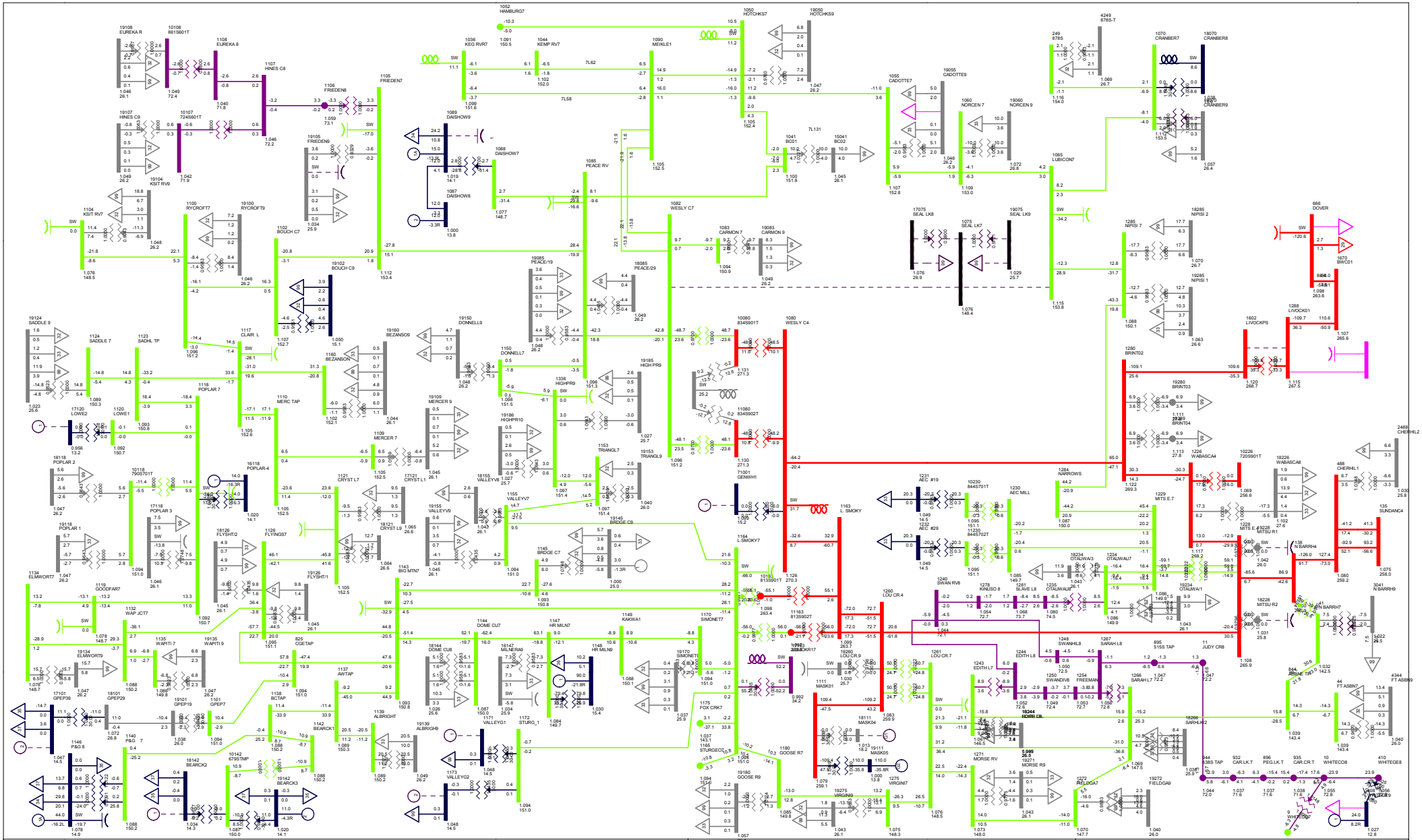


Appendix C2B Figure: 21

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 009 7L27 WESLEYCREEK to WESTPEACE_B.

Whitetail Project 1290 Interconnection Study



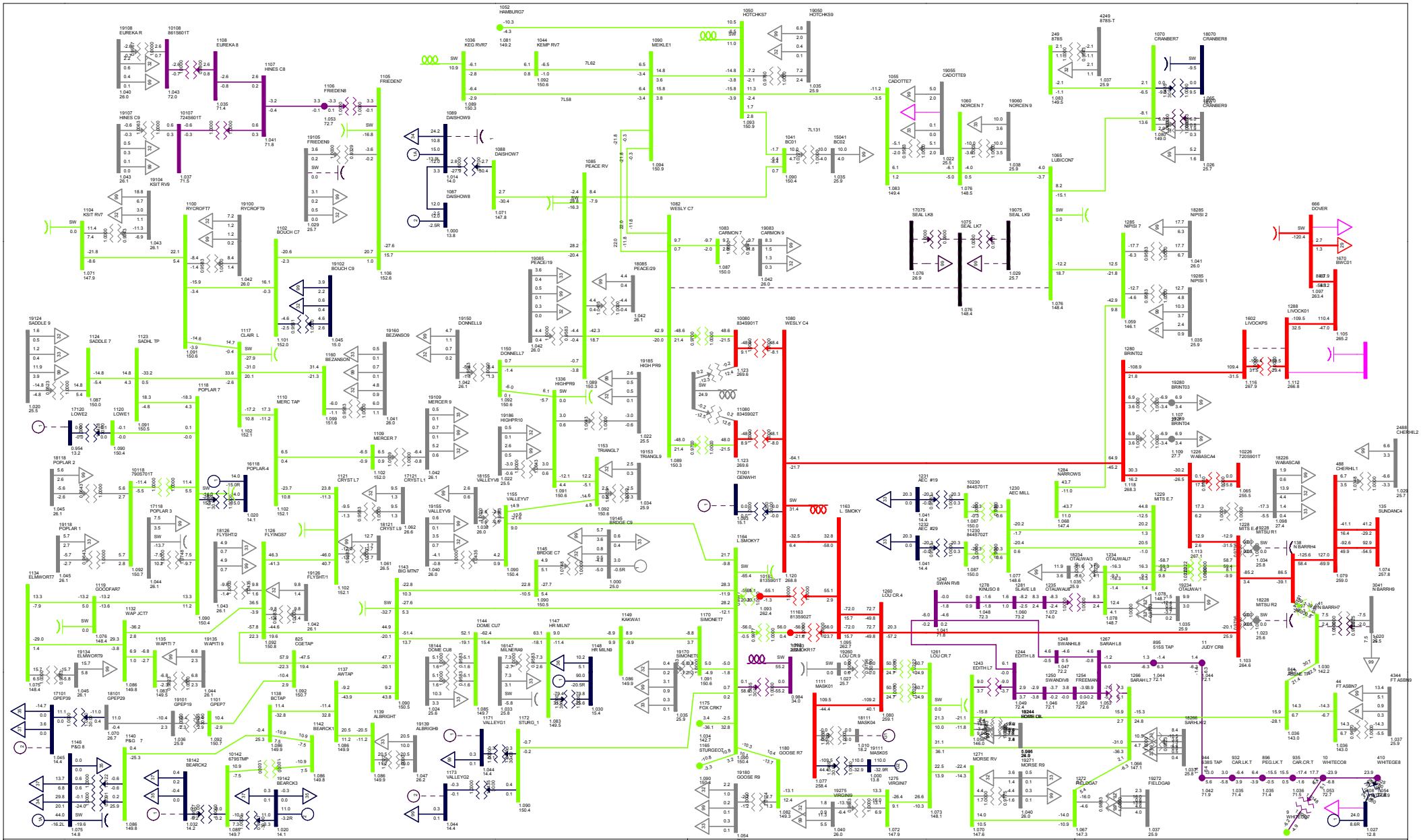
Appendix C2B

Figure: 22

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 010 7L12 WESLEYCREEK to LUBICON_A.

Whitetail Project 1290 Interconnection Study

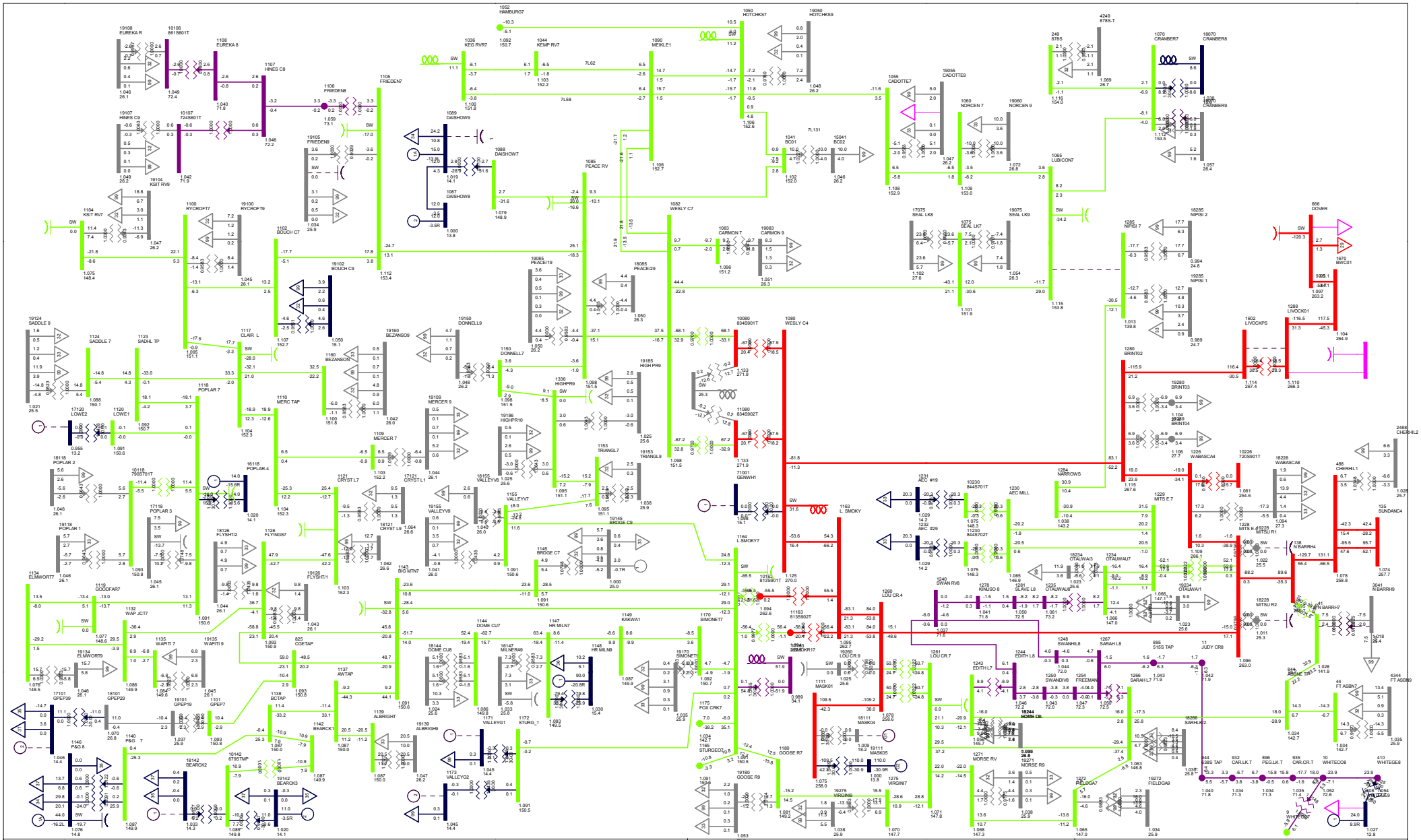


Appendix C2B Figure: 23

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 010 7L12 WESLEYCREEK to LUBICON_B.

Whitetail Project 1290 Interconnection Study

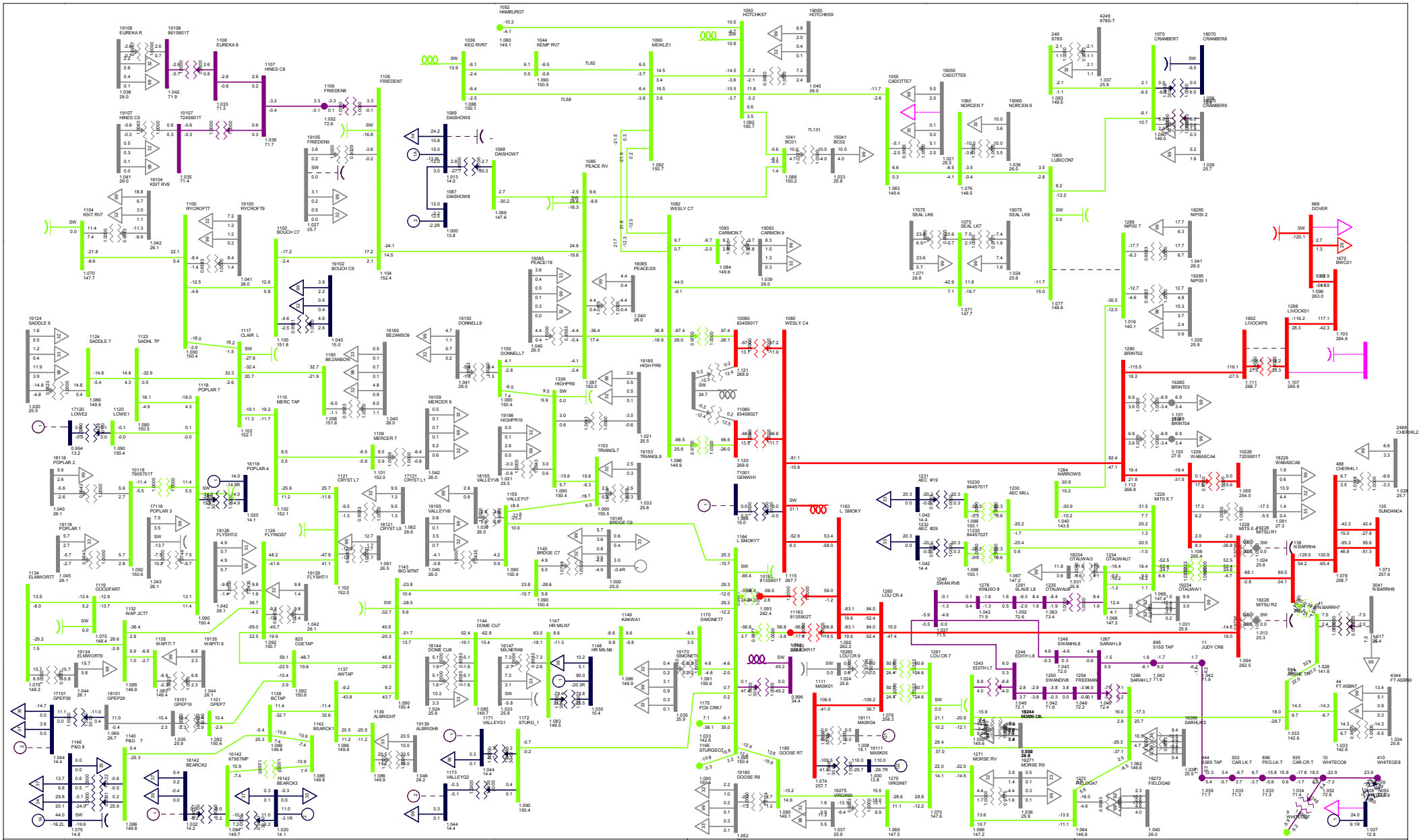


Appendix C2B Figure: 24

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 011 7L61 LUBICON to NIPISI_A.

Whitetail Project 1290 Interconnection Study



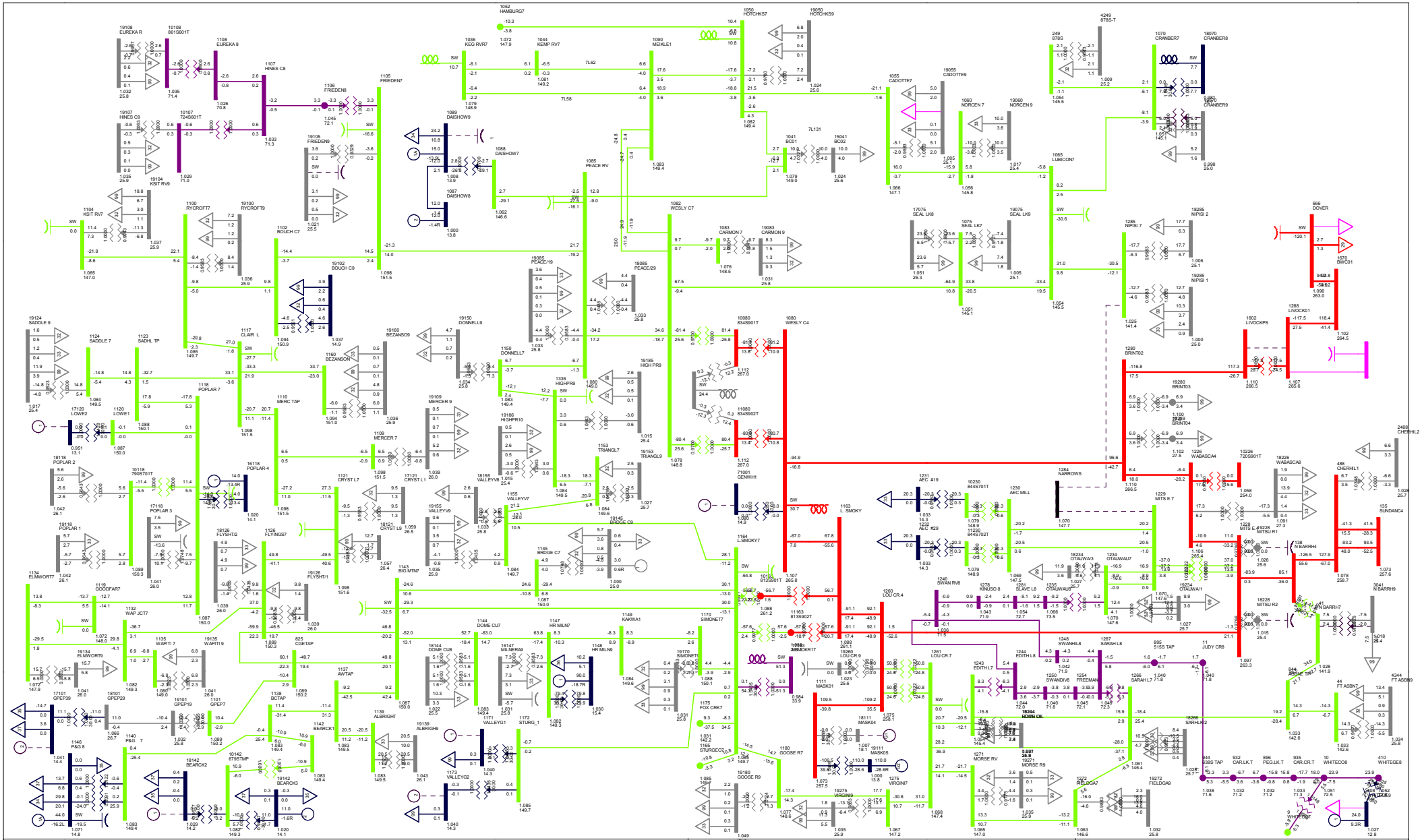
Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 011 7L61 LUBICON to NIPISI_B.

Whitetail Project 1290 Interconnection Study

Appendix C2B

Figure: 25



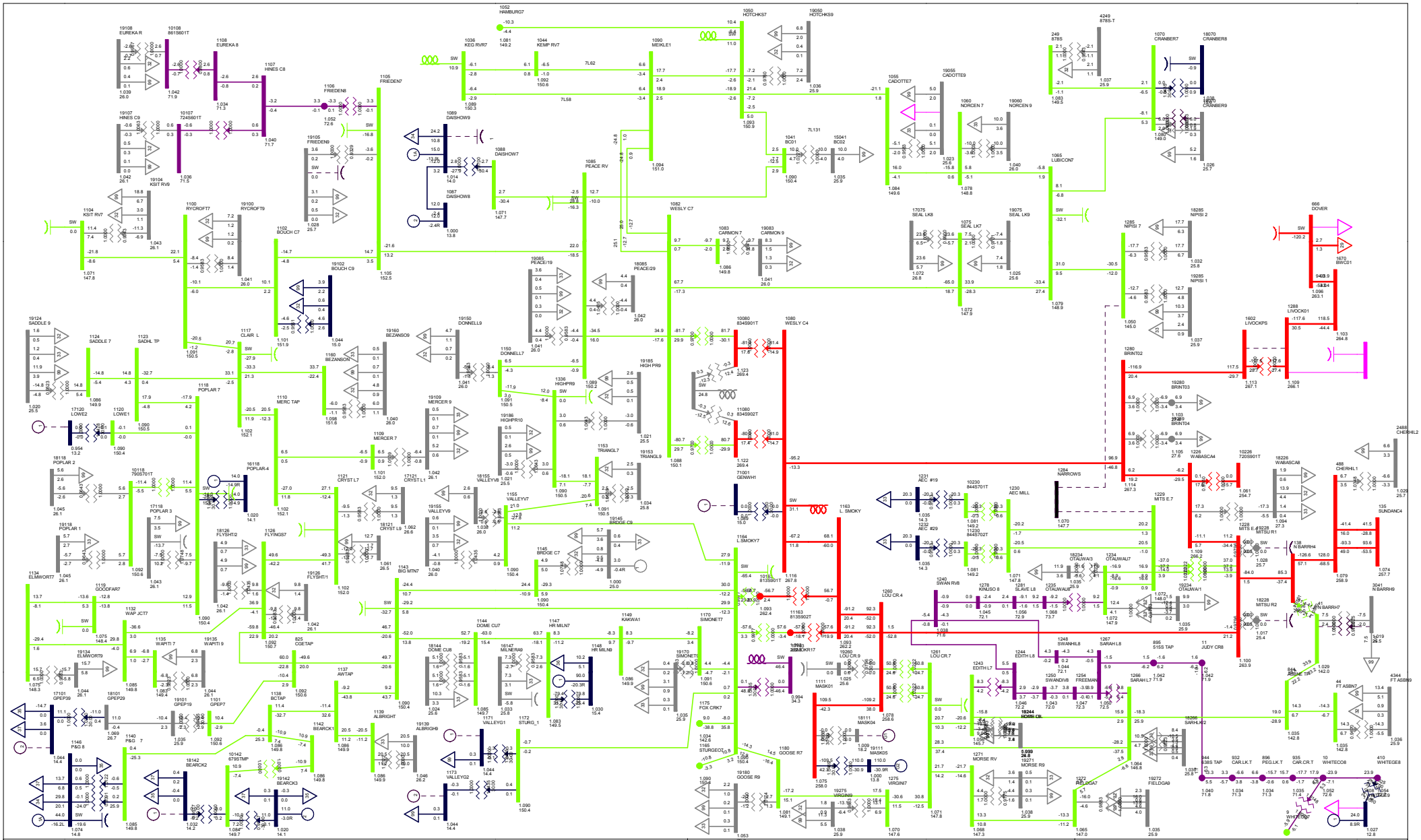
Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 012 7L23 NIPISI to MITSUE_A.

Whitetail Project 1290 Interconnection Study

Appendix C2B

Figure: 26



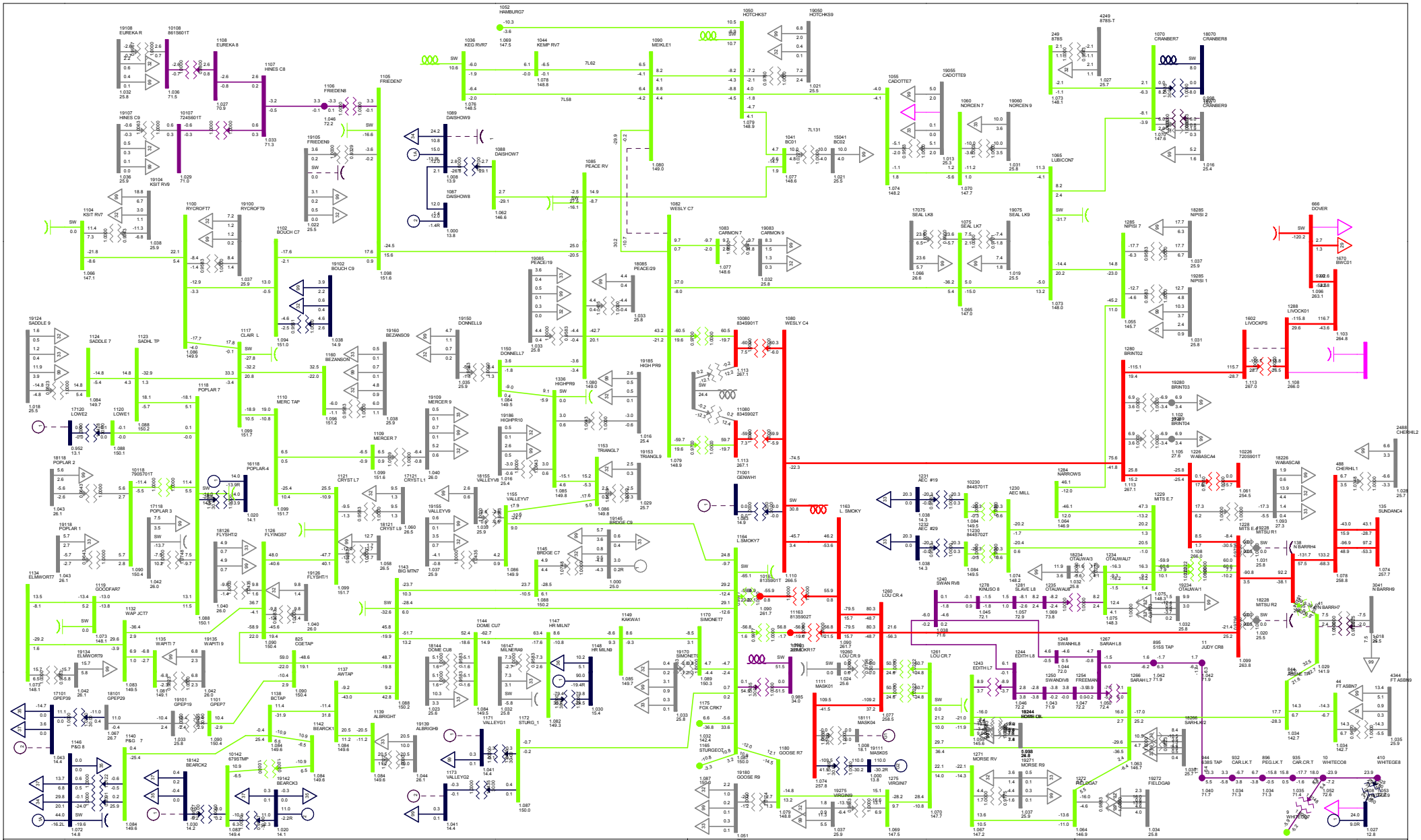
Appendix C2B

Figure: 27

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 012 7L23 NIPISI to MITSUE_B.

Whitetail Project 1290 Interconnection Study



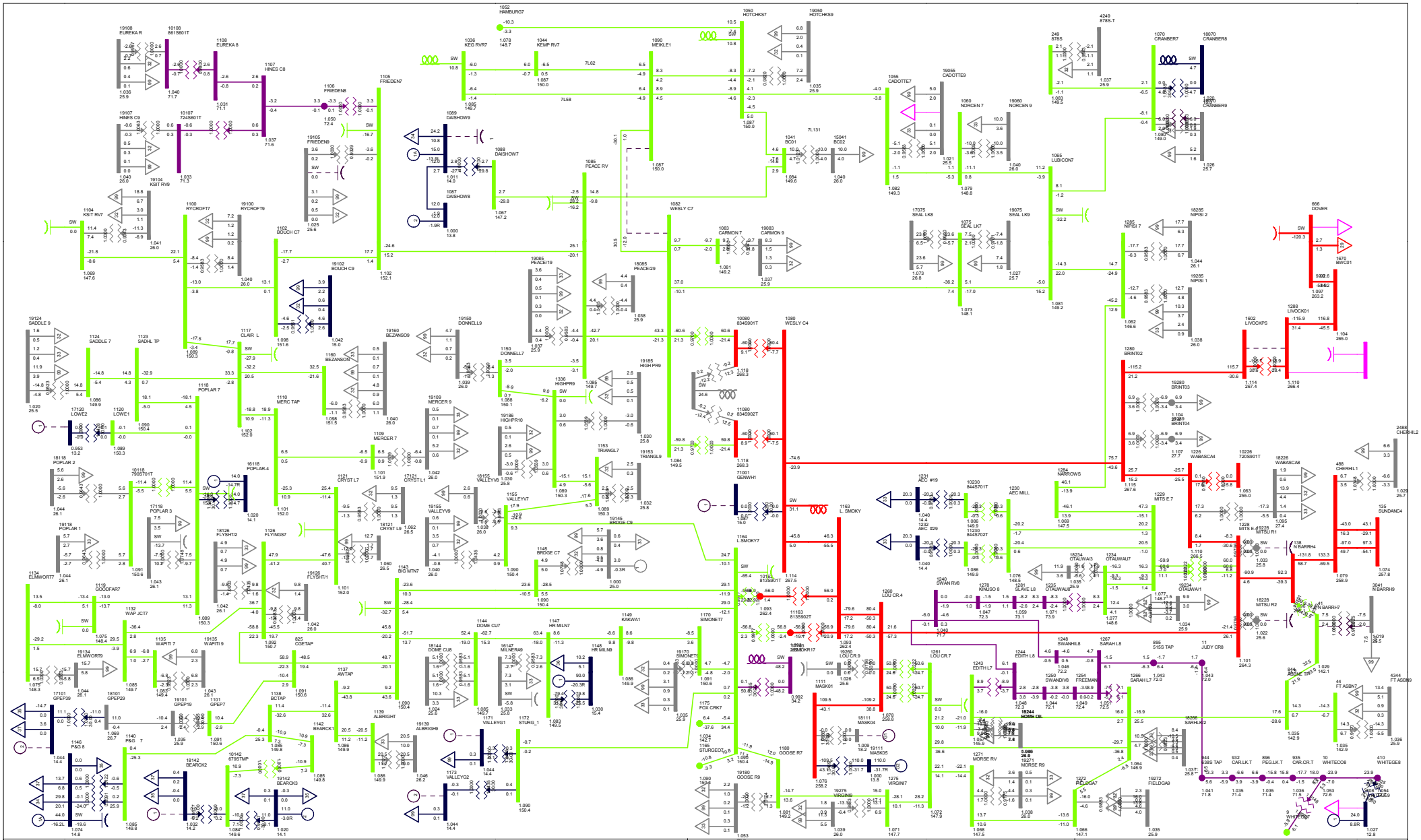
Appendix C2B

Figure: 28

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 013 7L131 WESLEYCREEK to Meikle_A.

Whitetail Project 1290 Interconnection Study



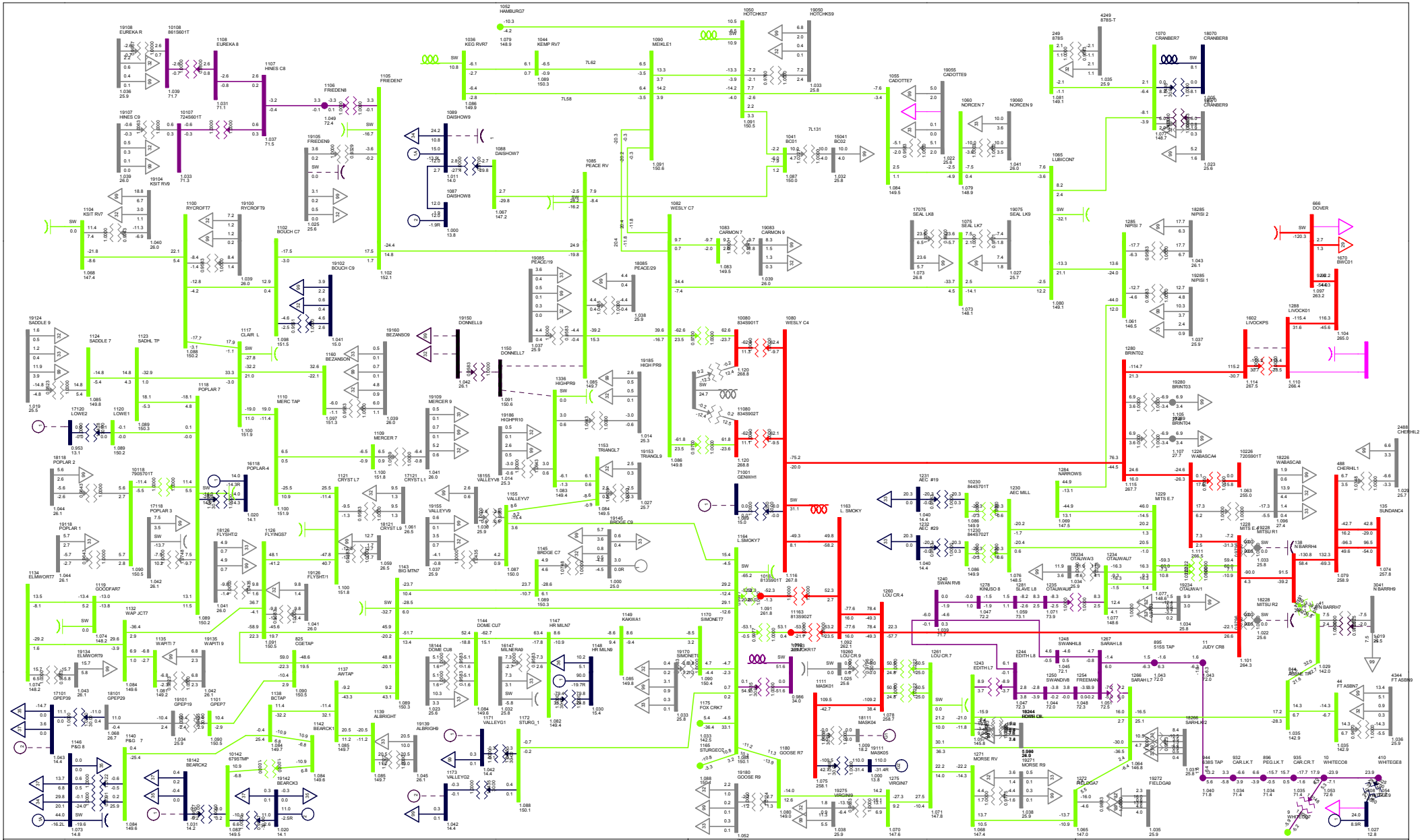
Appendix C2B

Figure: 29

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 013 7L131 WESLEYCREEK to Meikle_B.

Whitetail Project 1290 Interconnection Study



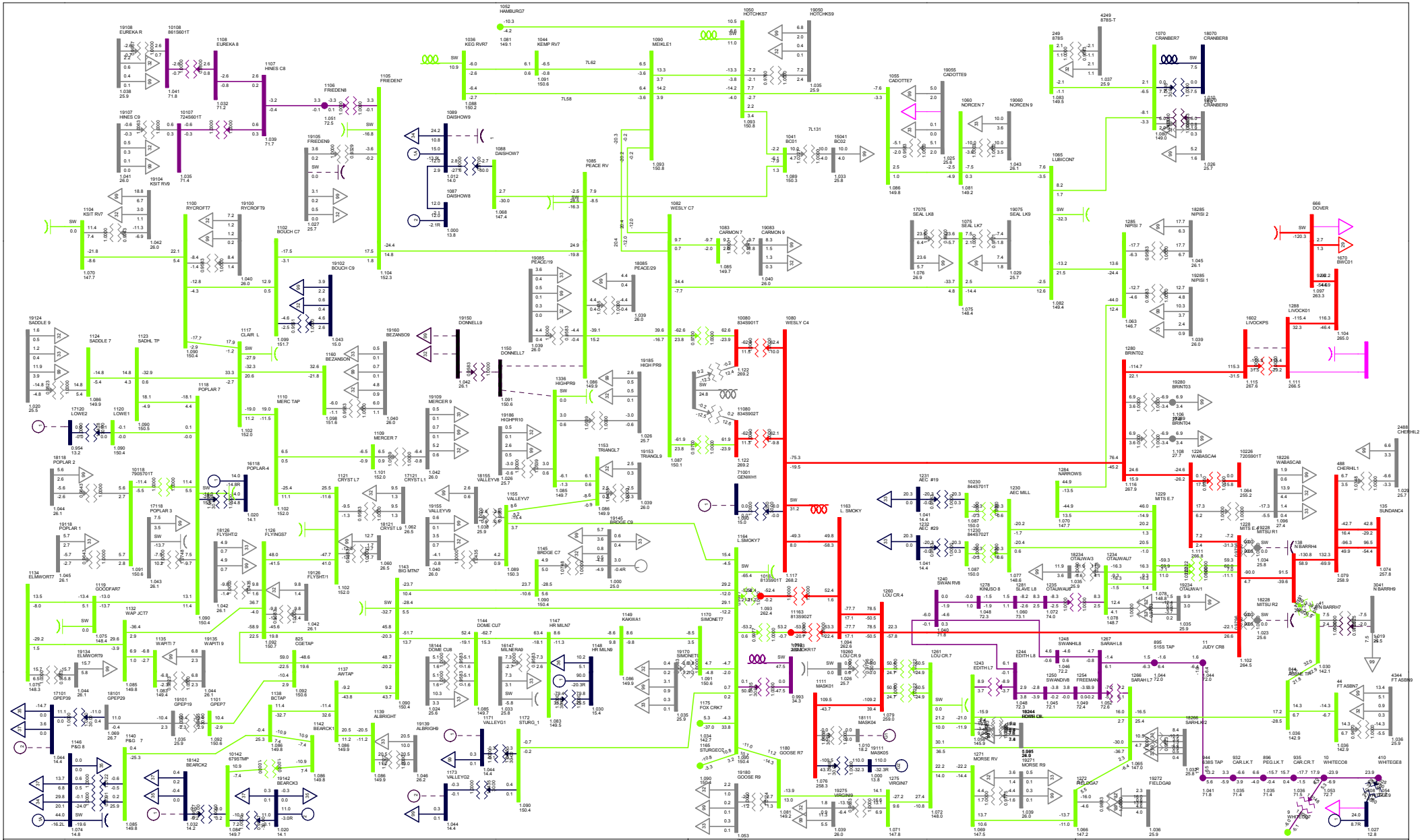
Appendix C2B

Figure: 30

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_A.

Whitetail Project 1290 Interconnection Study



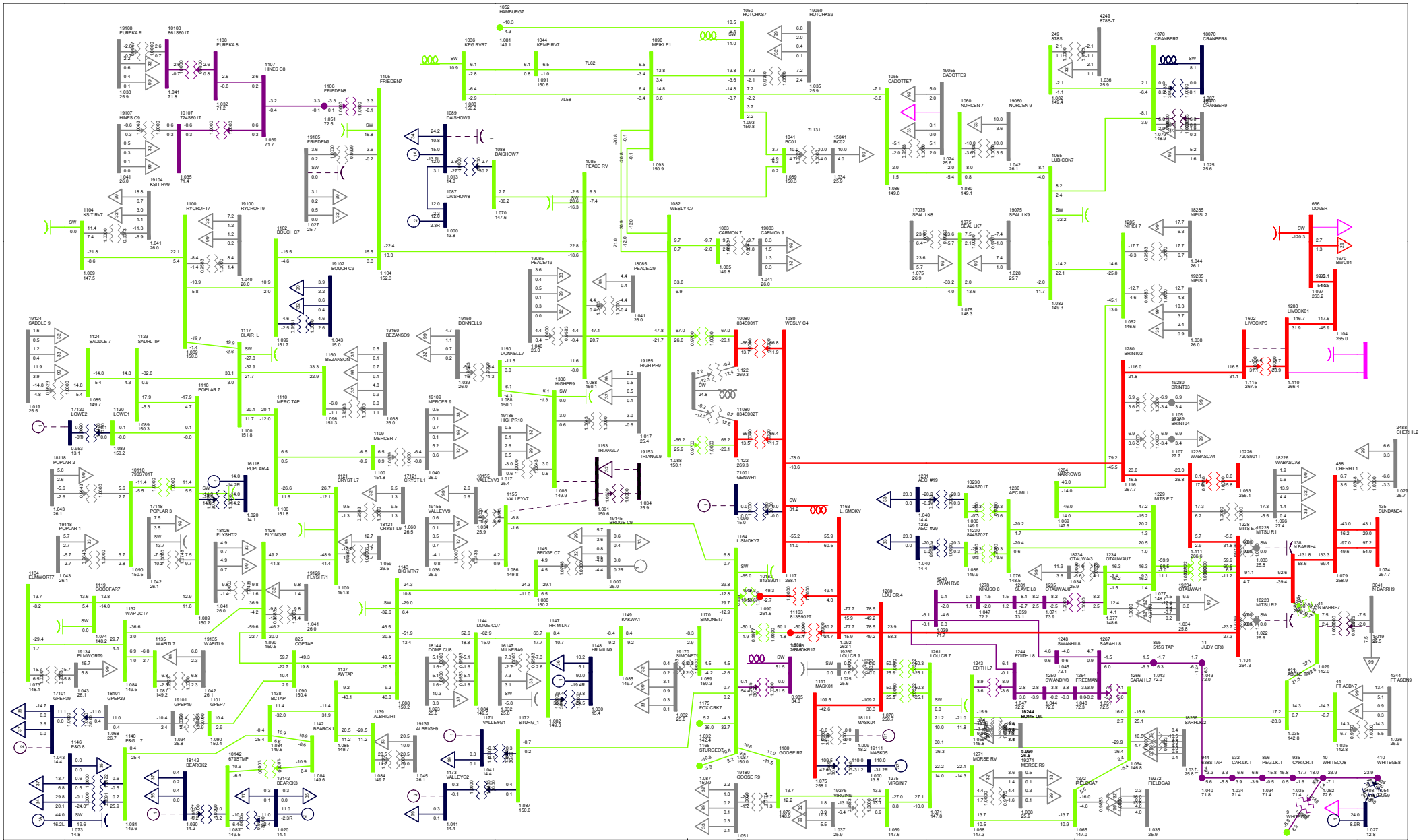
Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2B

Figure: 31

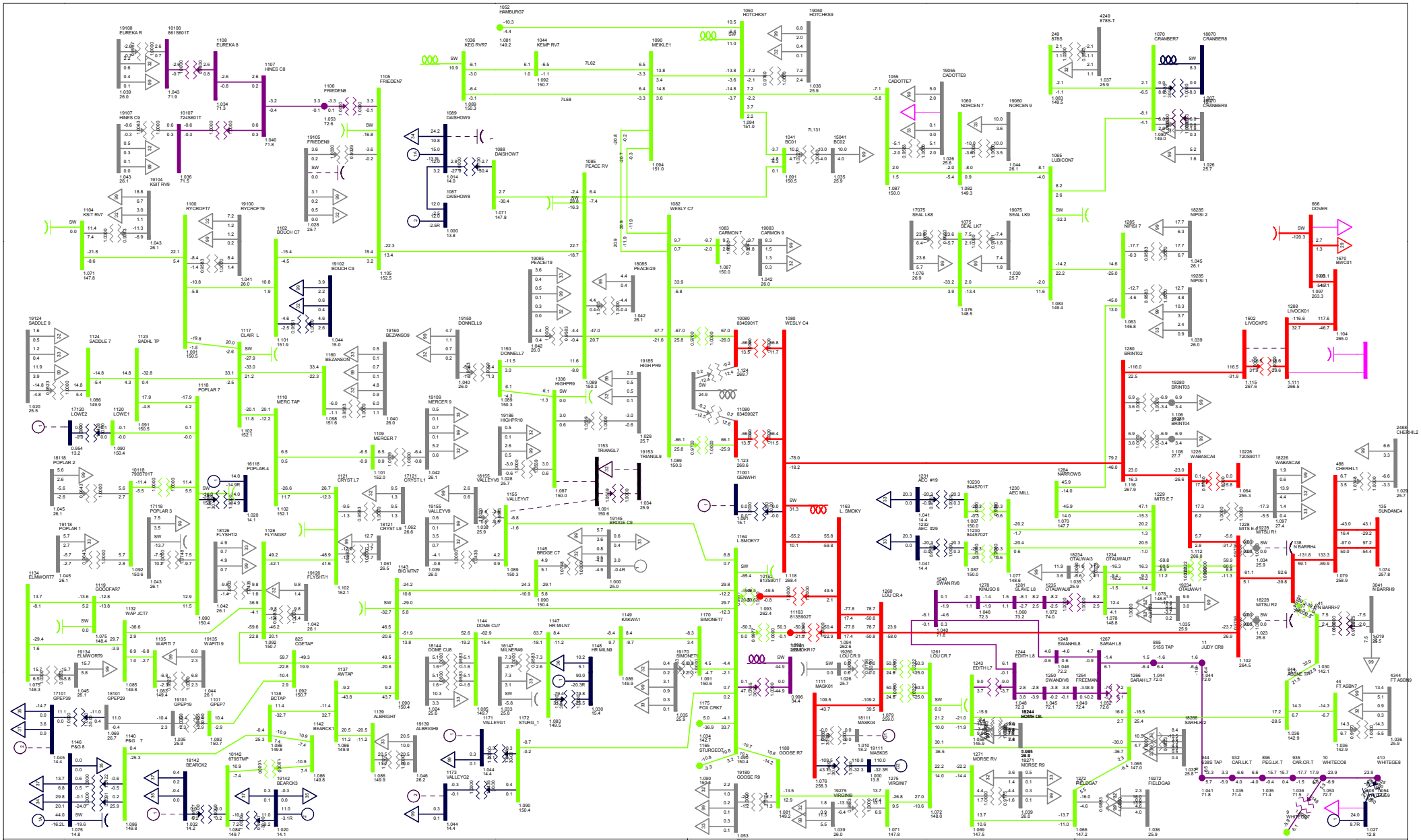


Appendix C2B Figure: 32

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_A.

Whitetail Project 1290 Interconnection Study



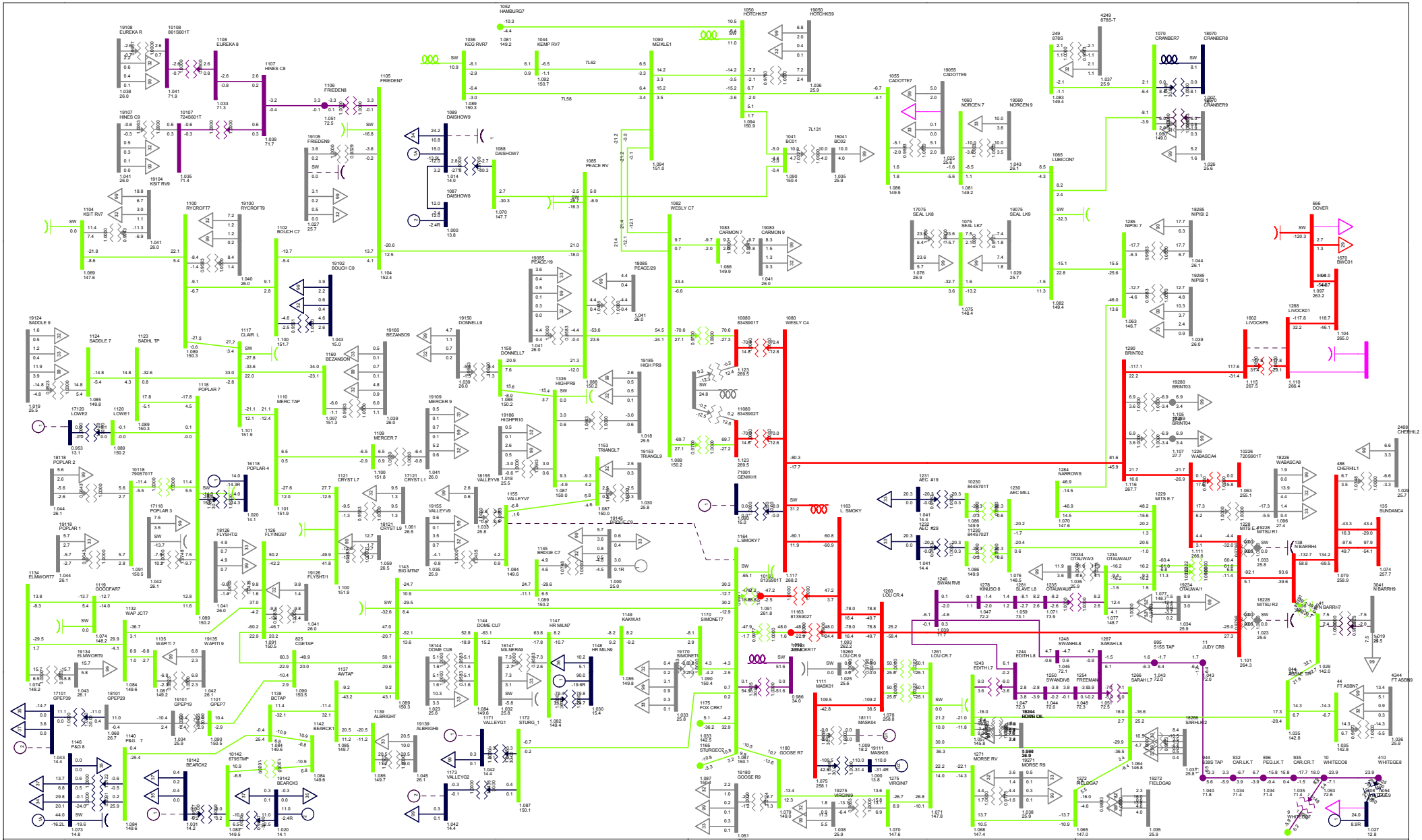
Appendix C2B

Figure: 33

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_B.

Whitetail Project 1290 Interconnection Study



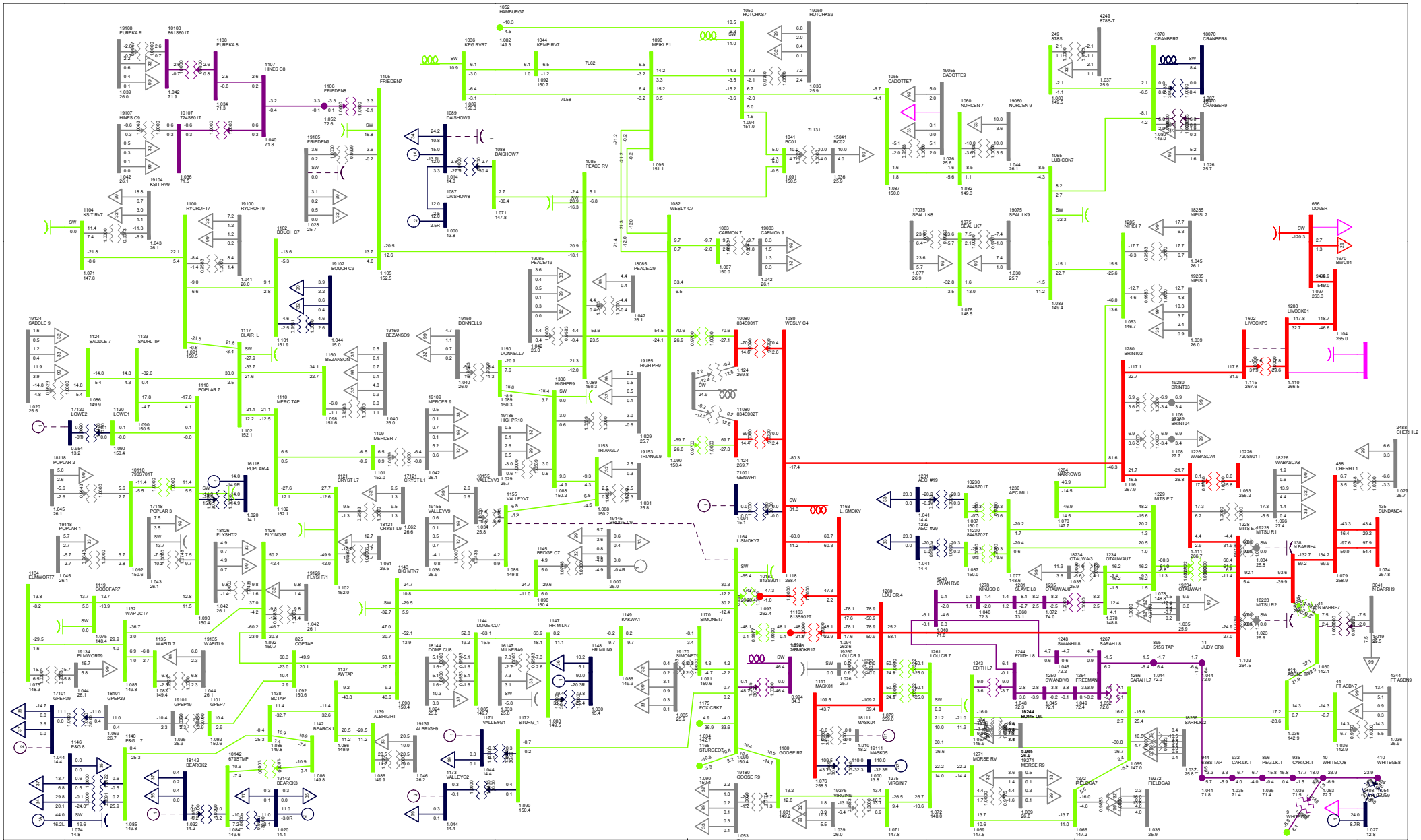
Appendix C2B

Figure: 34

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_A.

Whitetail Project 1290 Interconnection Study

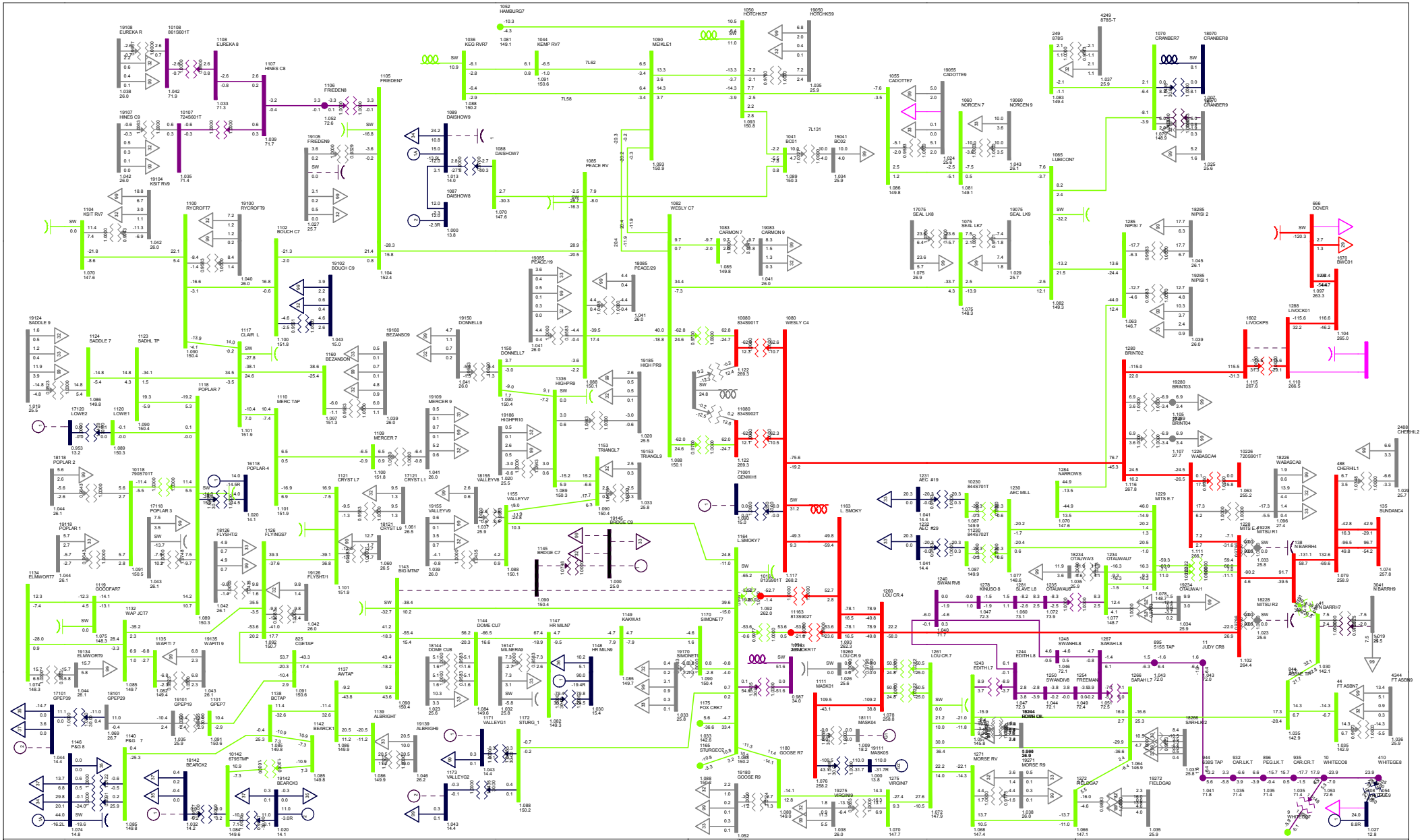


Appendix C2B Figure: 35

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_B.

Whitetail Project 1290 Interconnection Study

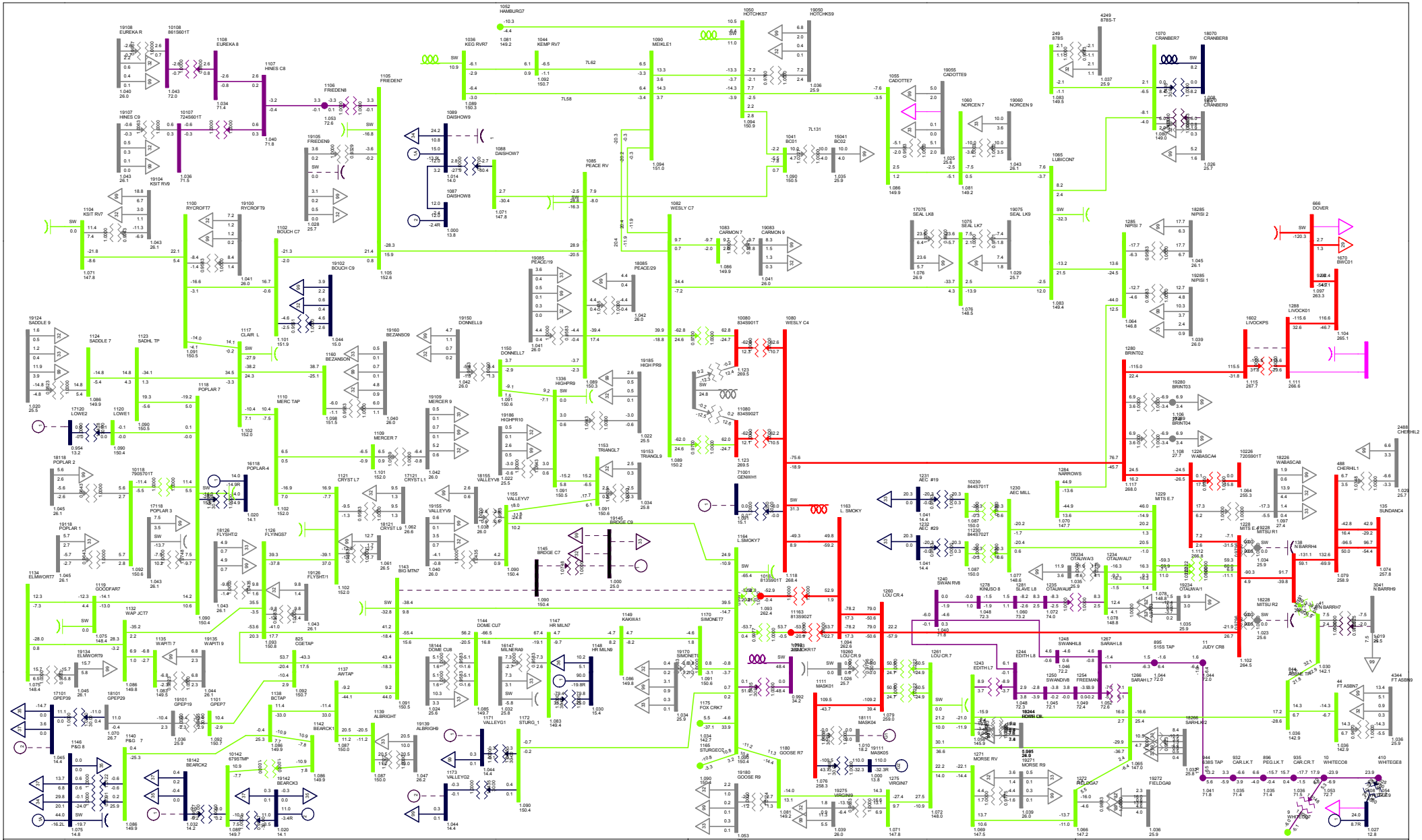


Appendix C2B Figure: 36

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_A.

Whitetail Project 1290 Interconnection Study



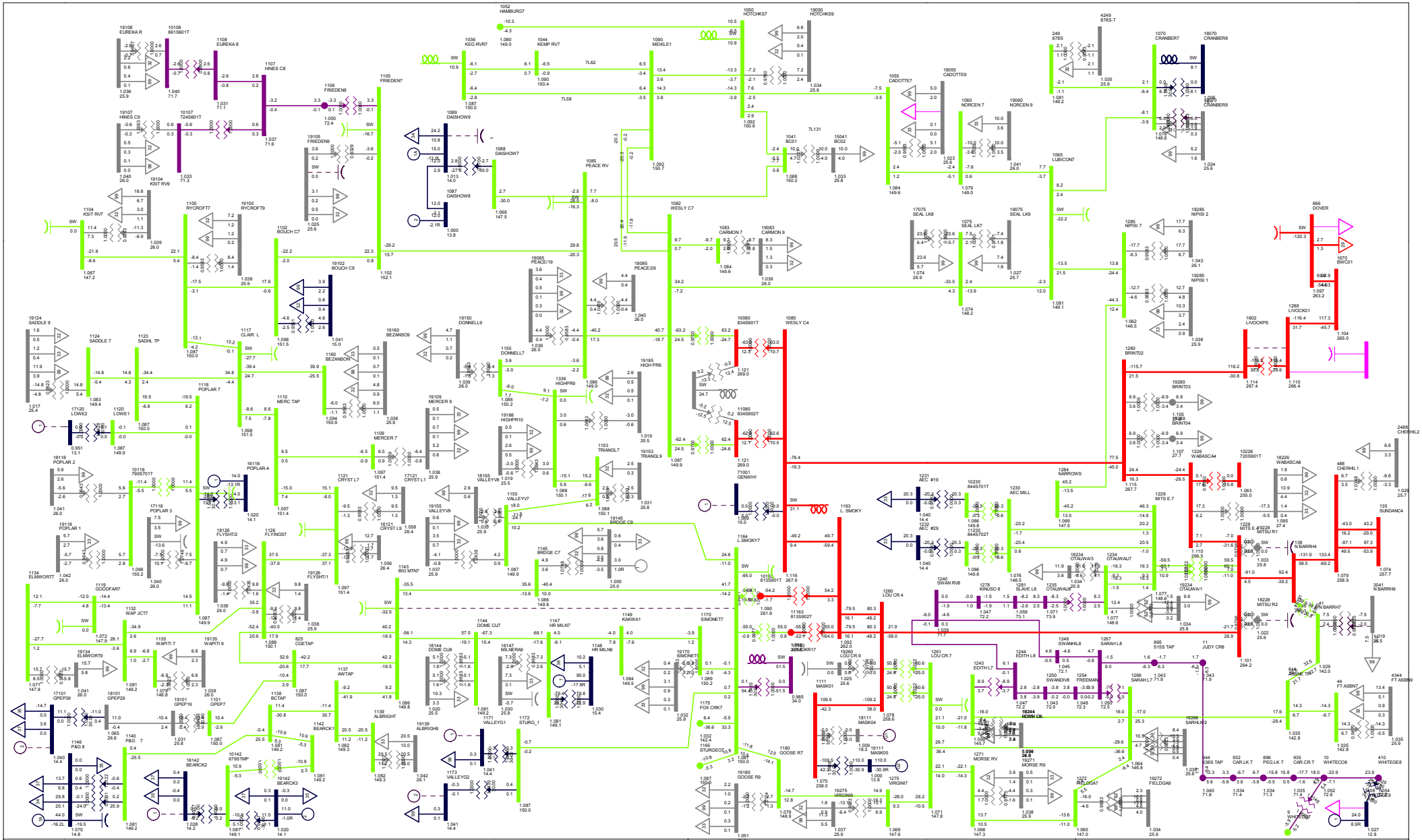
Appendix C2B

Figure: 37

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_B.

Whitetail Project 1290 Interconnection Study

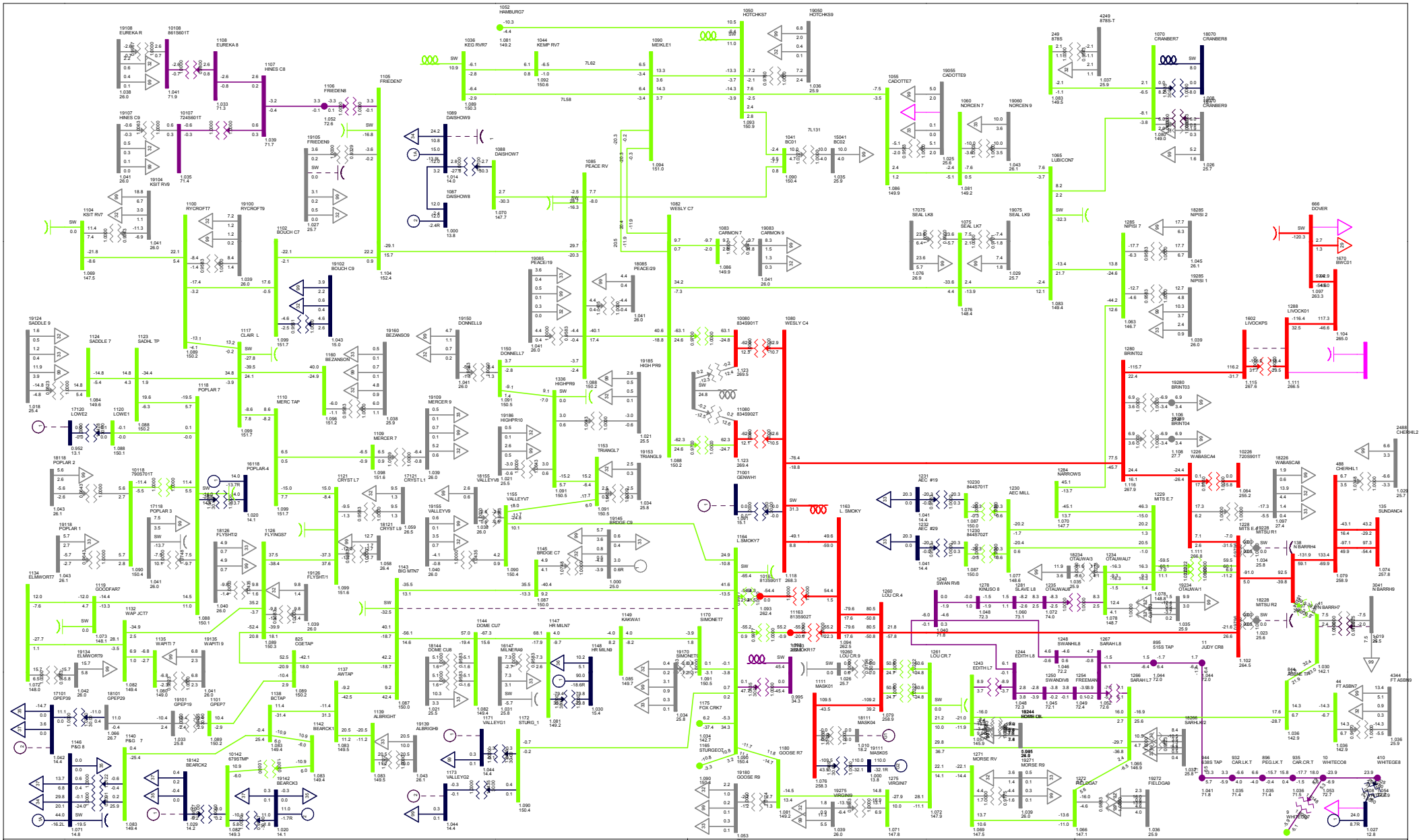


Appendix C2B Figure: 38

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_A.

Whitetail Project 1290 Interconnection Study



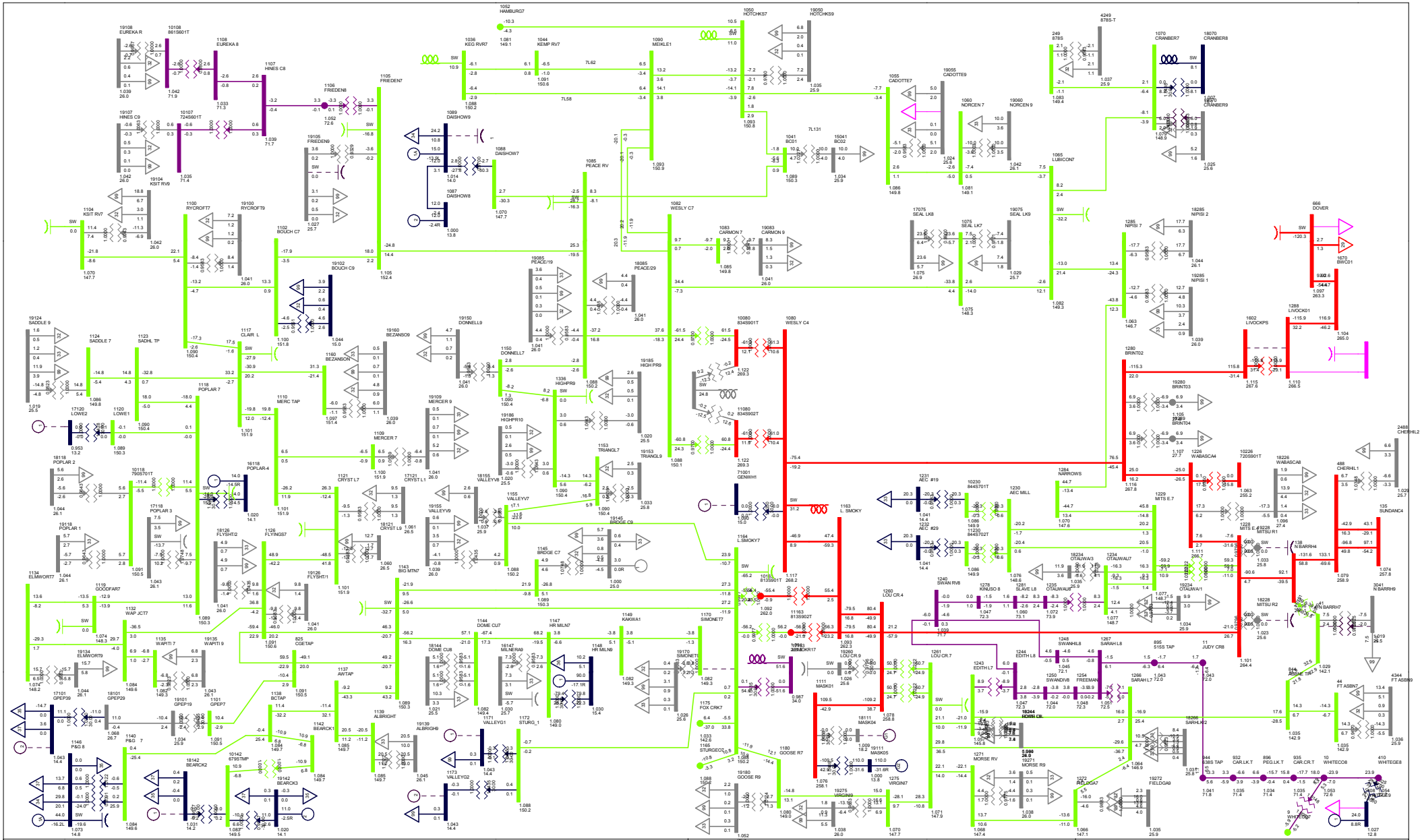
Appendix C2B

Figure: 39

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_B.

Whitetail Project 1290 Interconnection Study



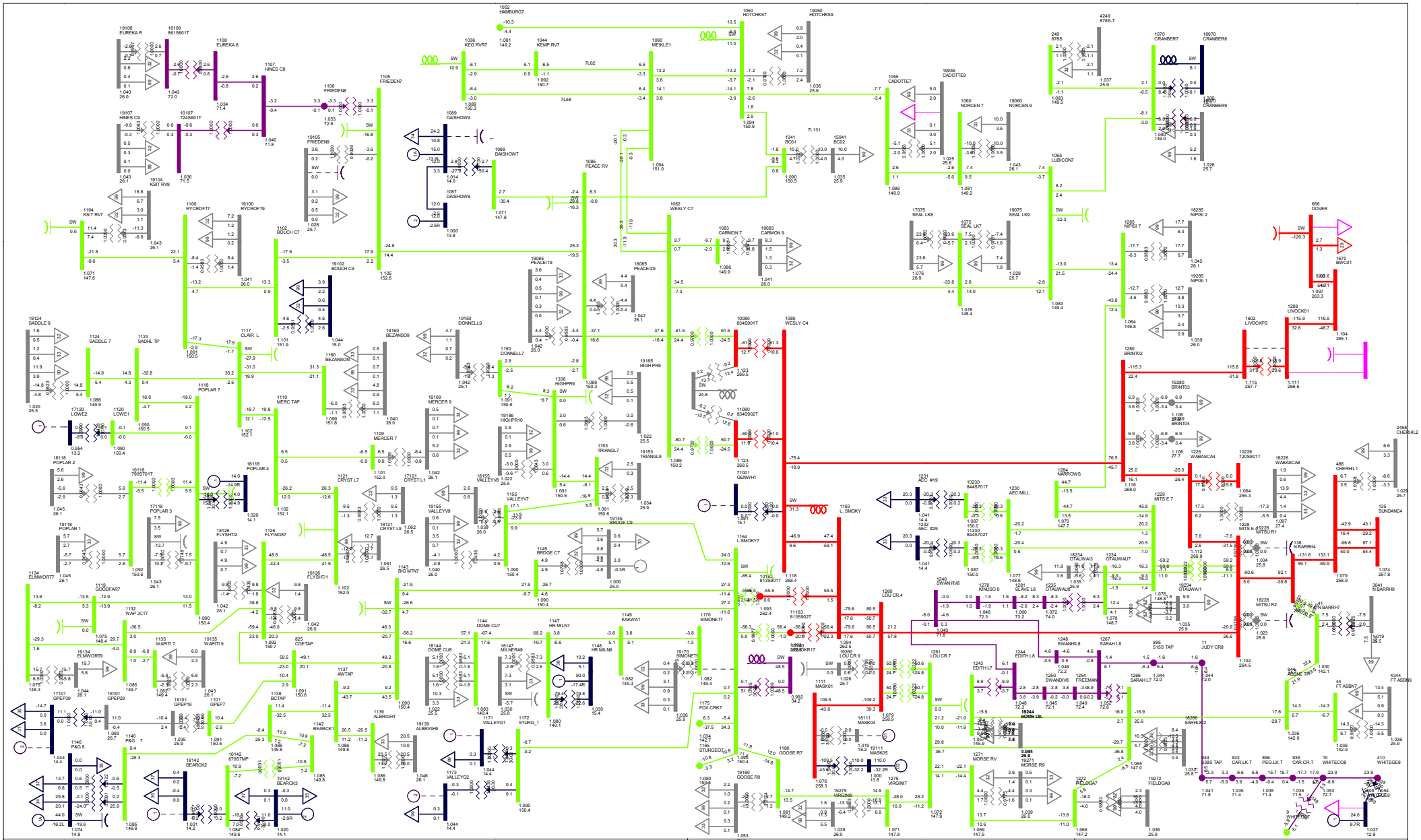
Appendix C2B

Figure: 40

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 019 7L40 LITTLESMOKY to SIMONETTE_A.

Whitetail Project 1290 Interconnection Study



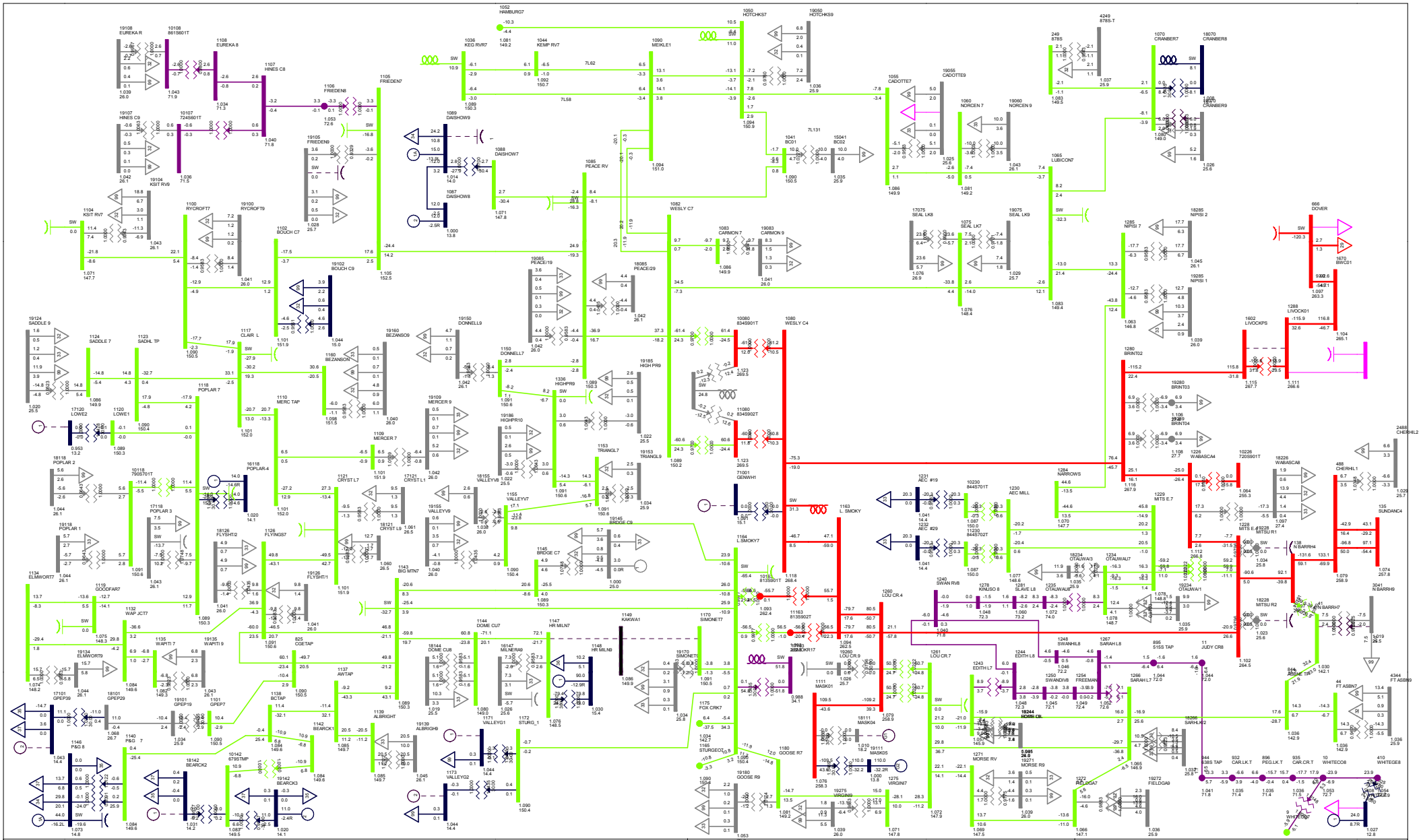
Appendix C2B

Figure: 41

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 019 7L40 LITTLESMOKY to SIMONETTE_B.

Whitetail Project 1290 Interconnection Study



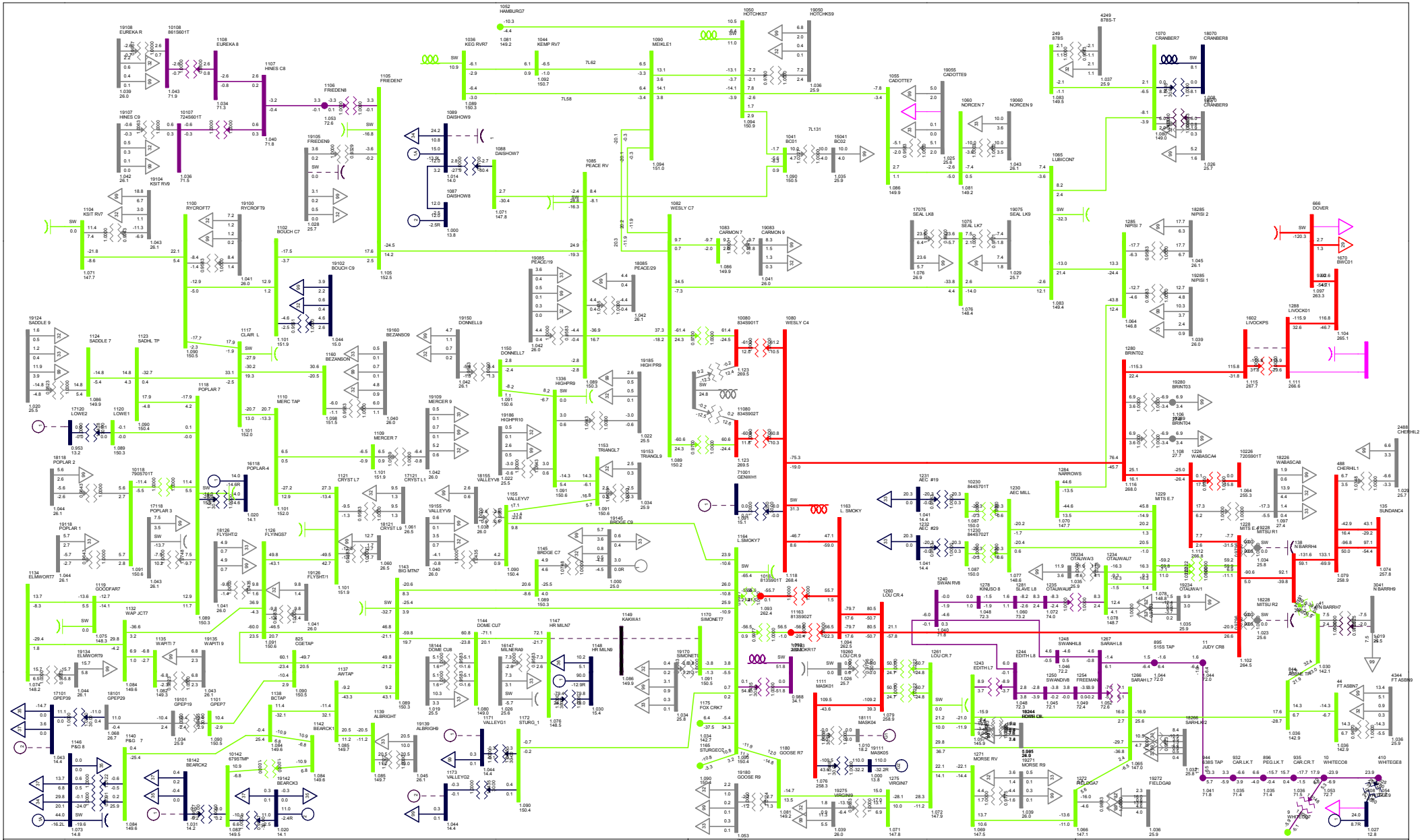
Appendix C2B

Figure: 42

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 020 7L80 SIMONETTE to HR MILNER_A.

Whitetail Project 1290 Interconnection Study



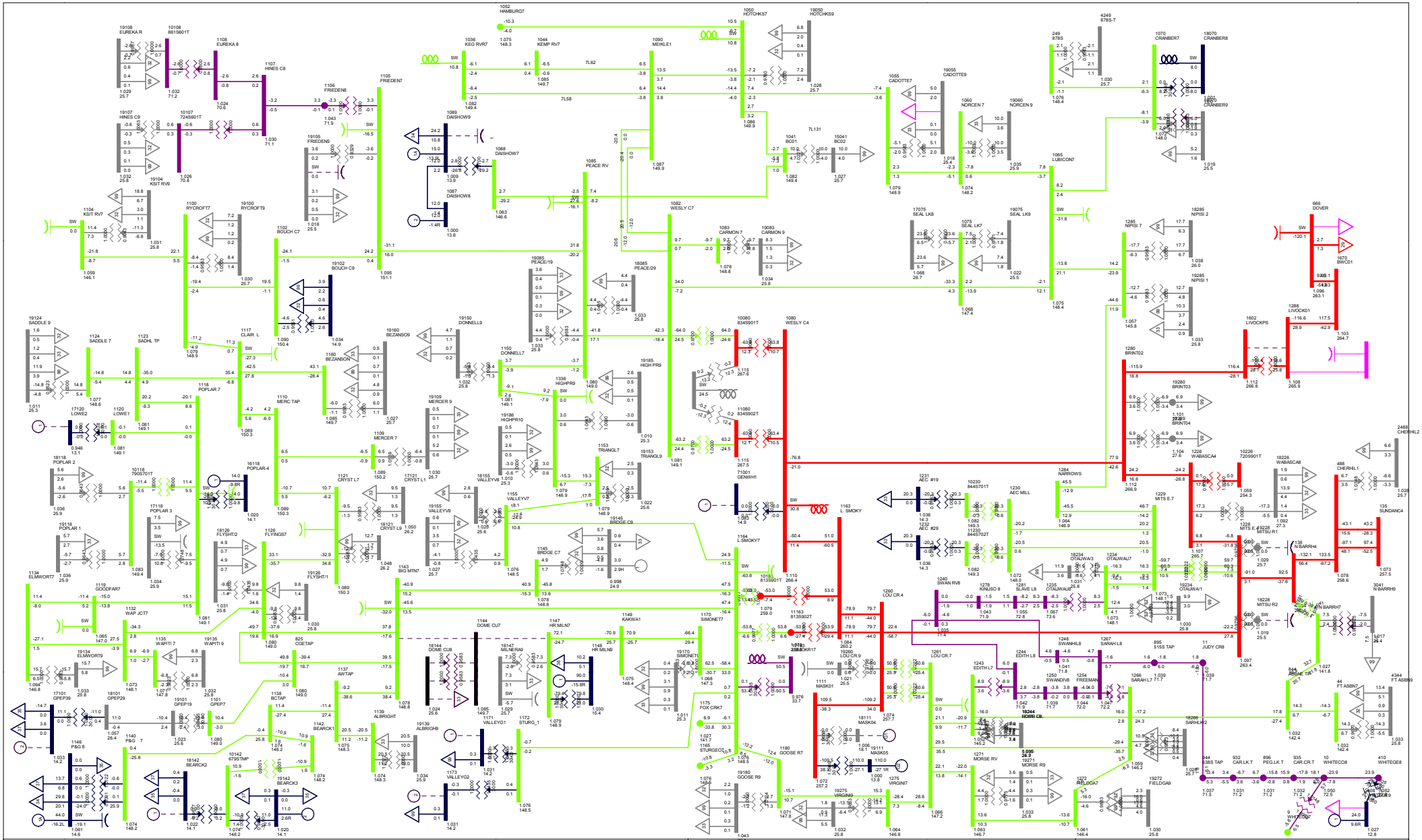
Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 020 7L80 SIMONETTE to HR MILNER_B.

Whitetail Project 1290 Interconnection Study

Appendix C2B

Figure: 43



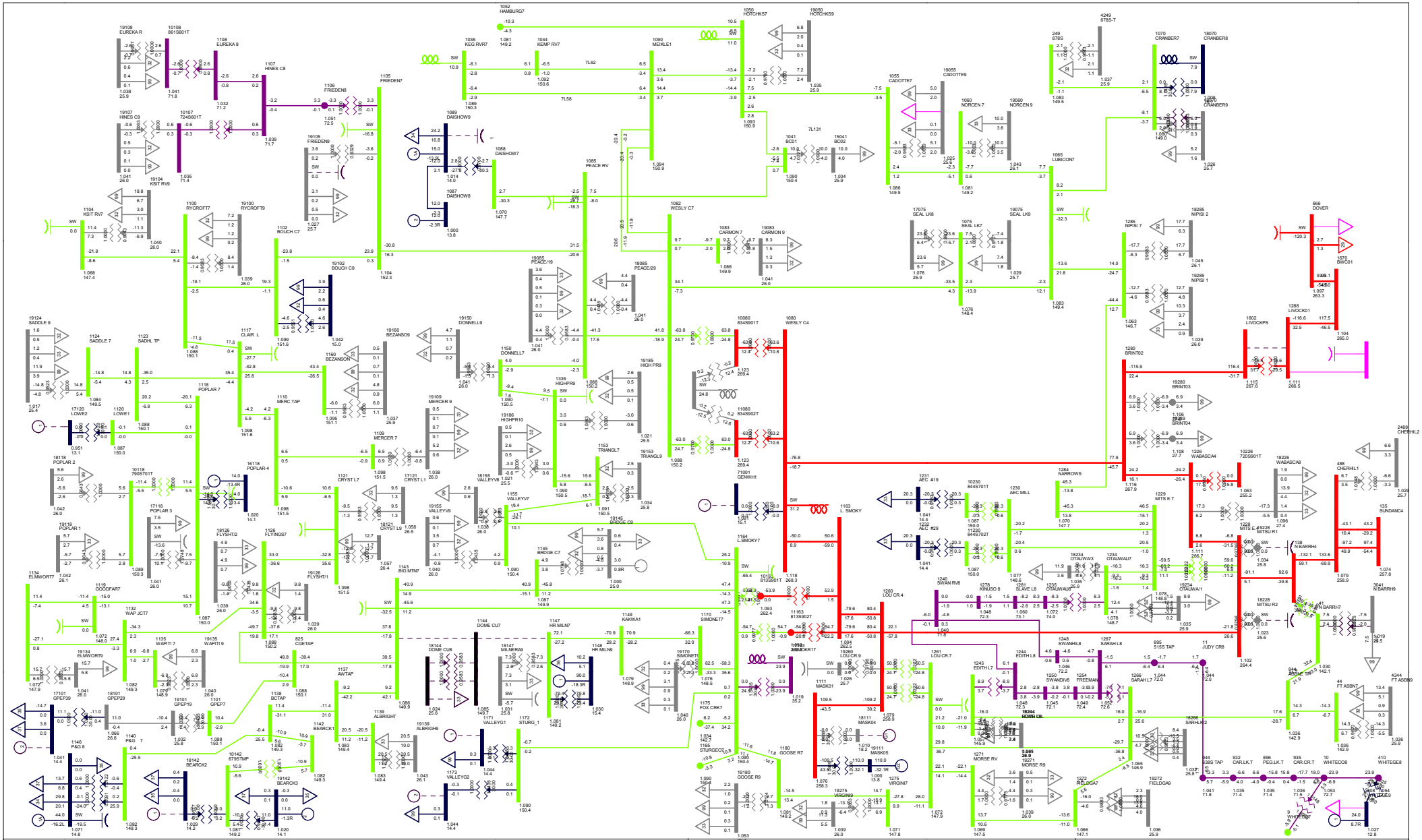
Appendix C2B

Figure: 44

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_A.

Whitetail Project 1290 Interconnection Study

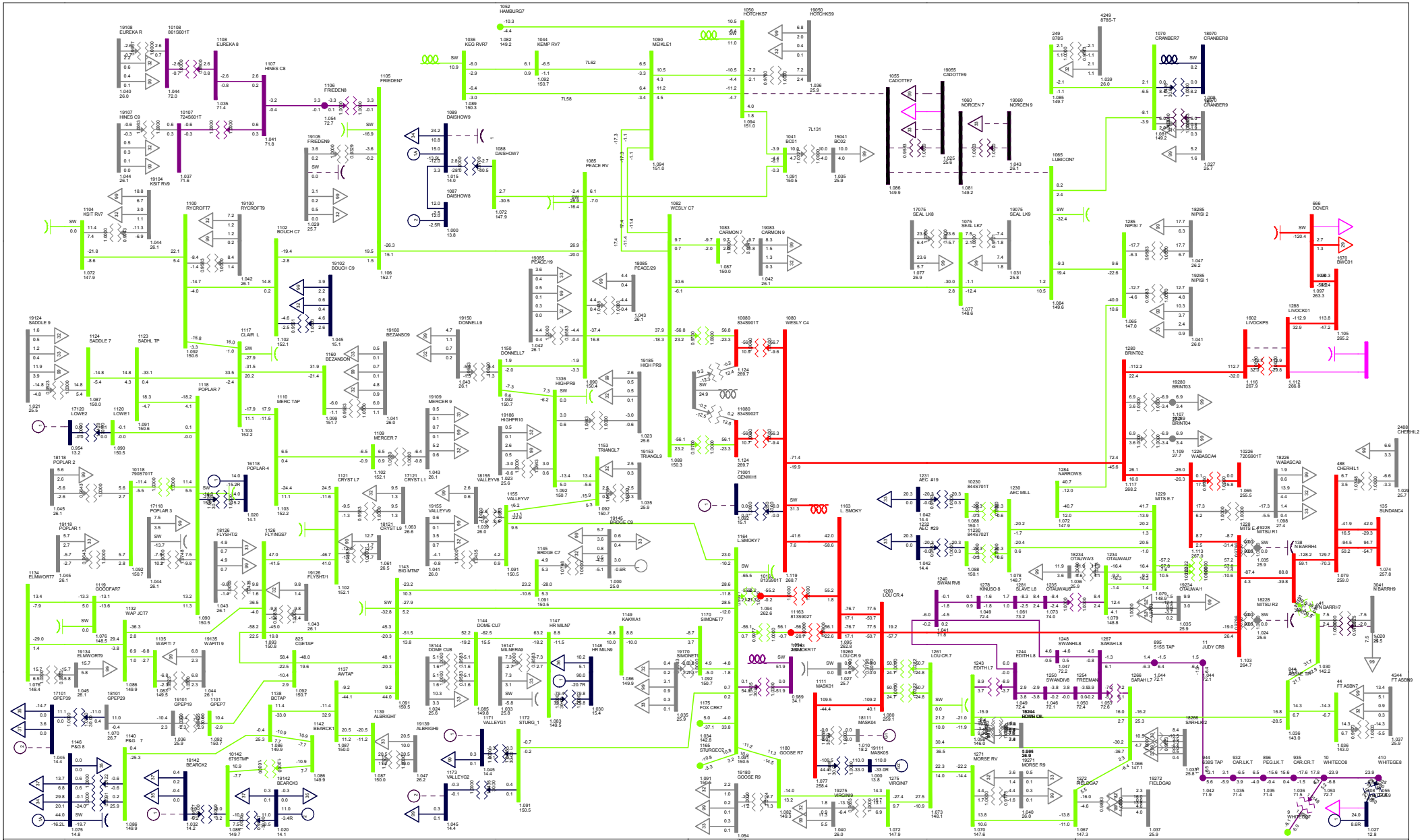


Appendix C2B Figure: 45

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_B.

Whitetail Project 1290 Interconnection Study



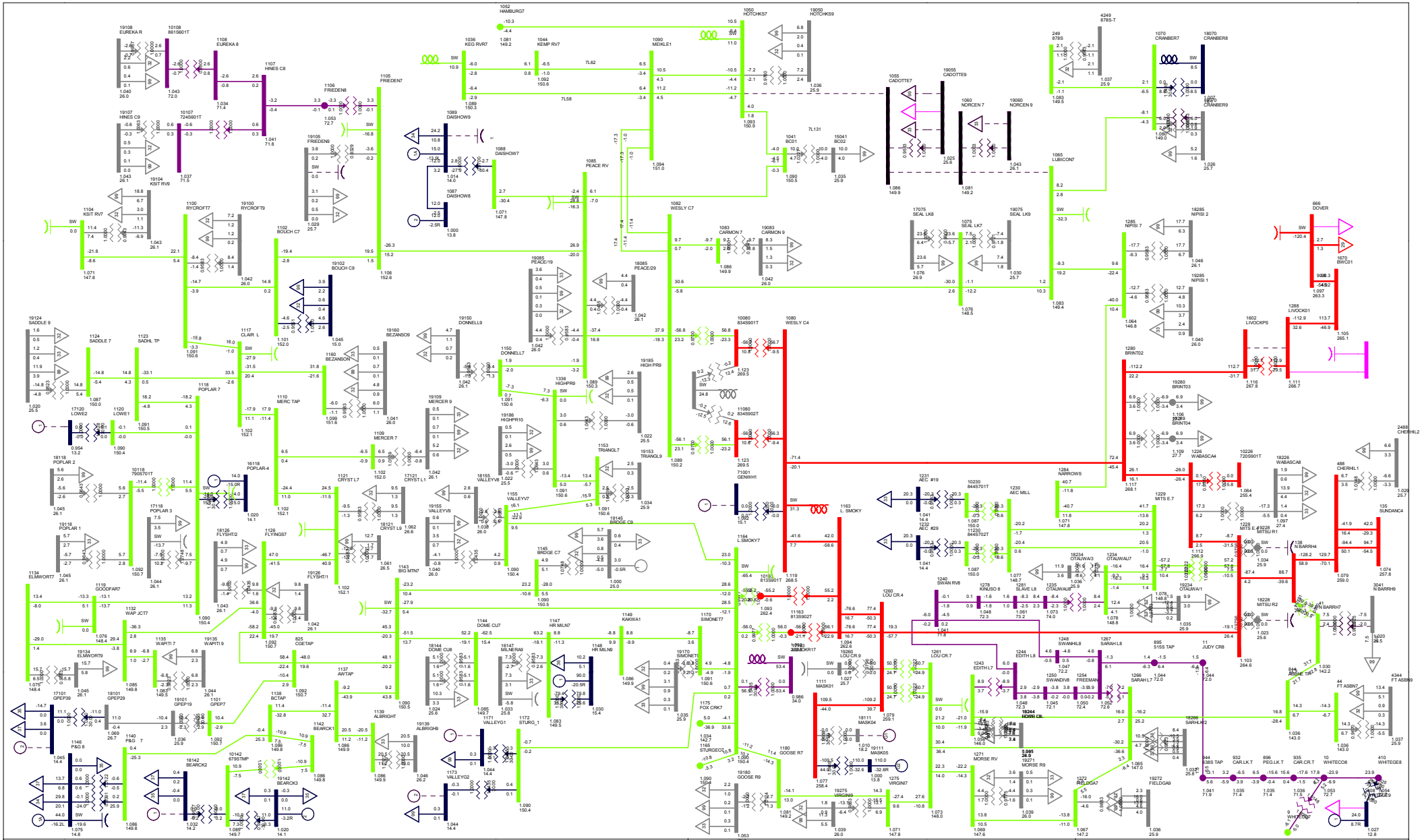
Appendix C2B

Figure: 46

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 022 7L63 HOTCHKISS to LUBICON_A.

Whitetail Project 1290 Interconnection Study



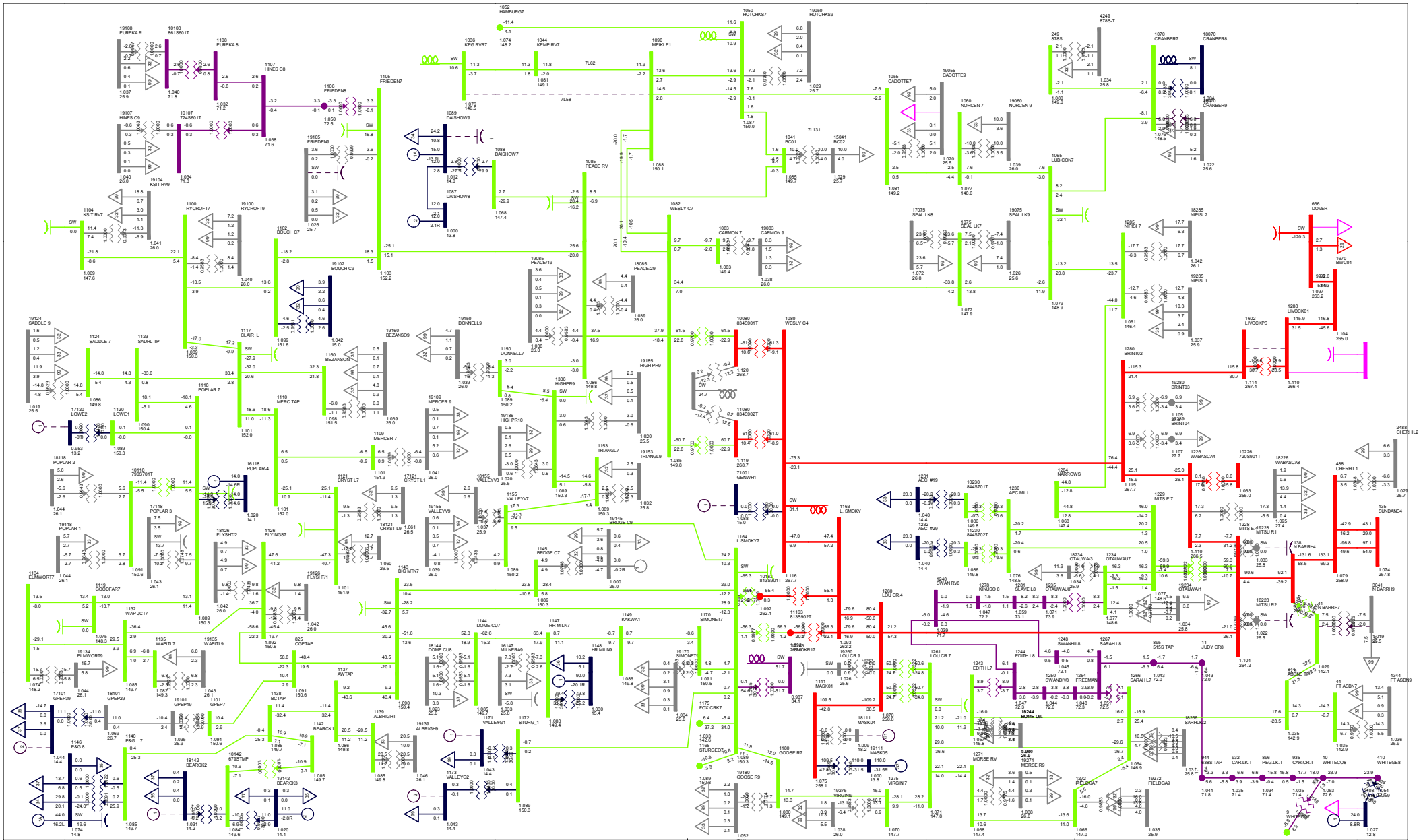
Appendix C2B

Figure: 47

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 022 7L63 HOTCHKISS to LUBICON_B.

Whitetail Project 1290 Interconnection Study



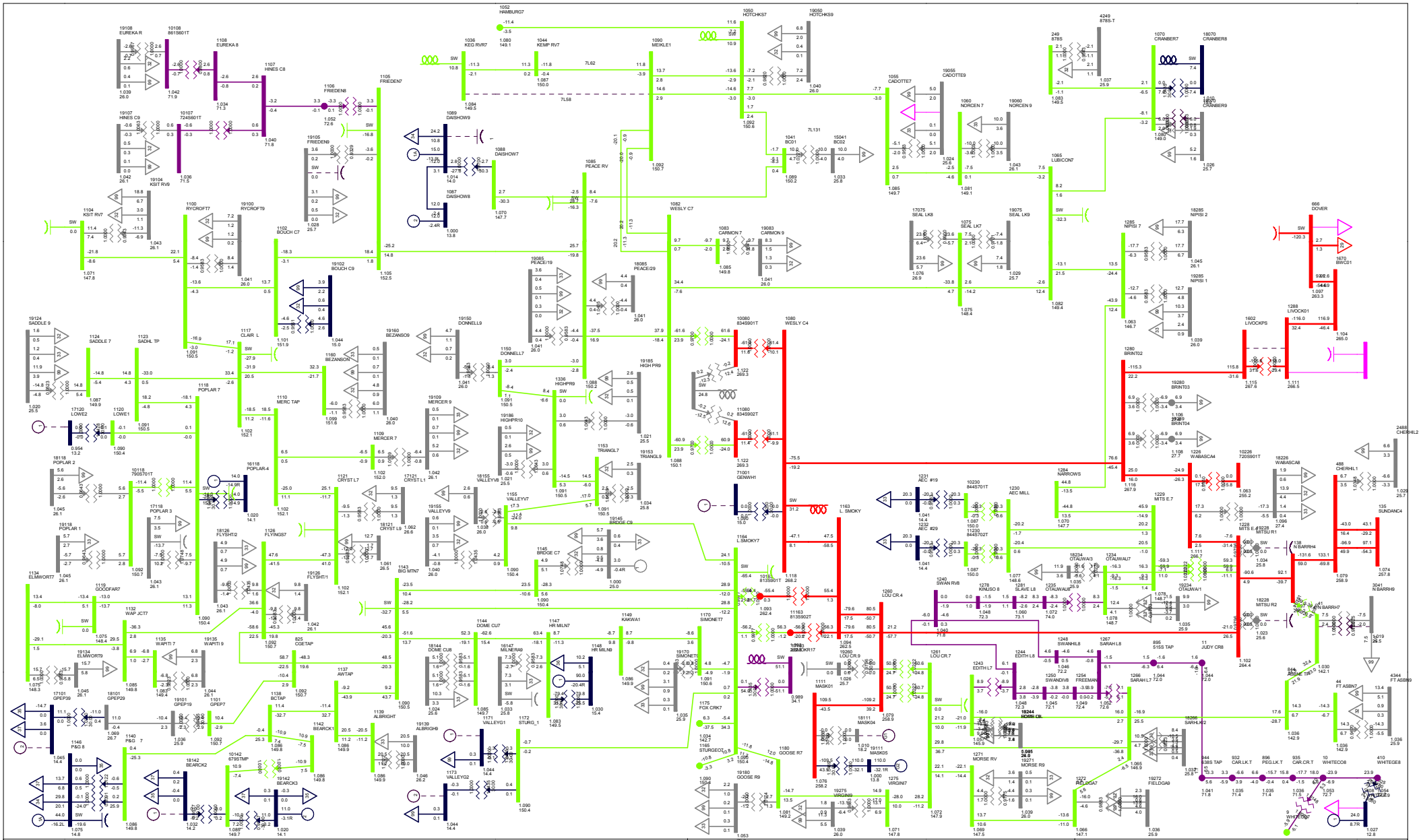
Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 023 7L58 KEGRIVER to Meikle_A.

Whitetail Project 1290 Interconnection Study

Appendix C2B

Figure: 48



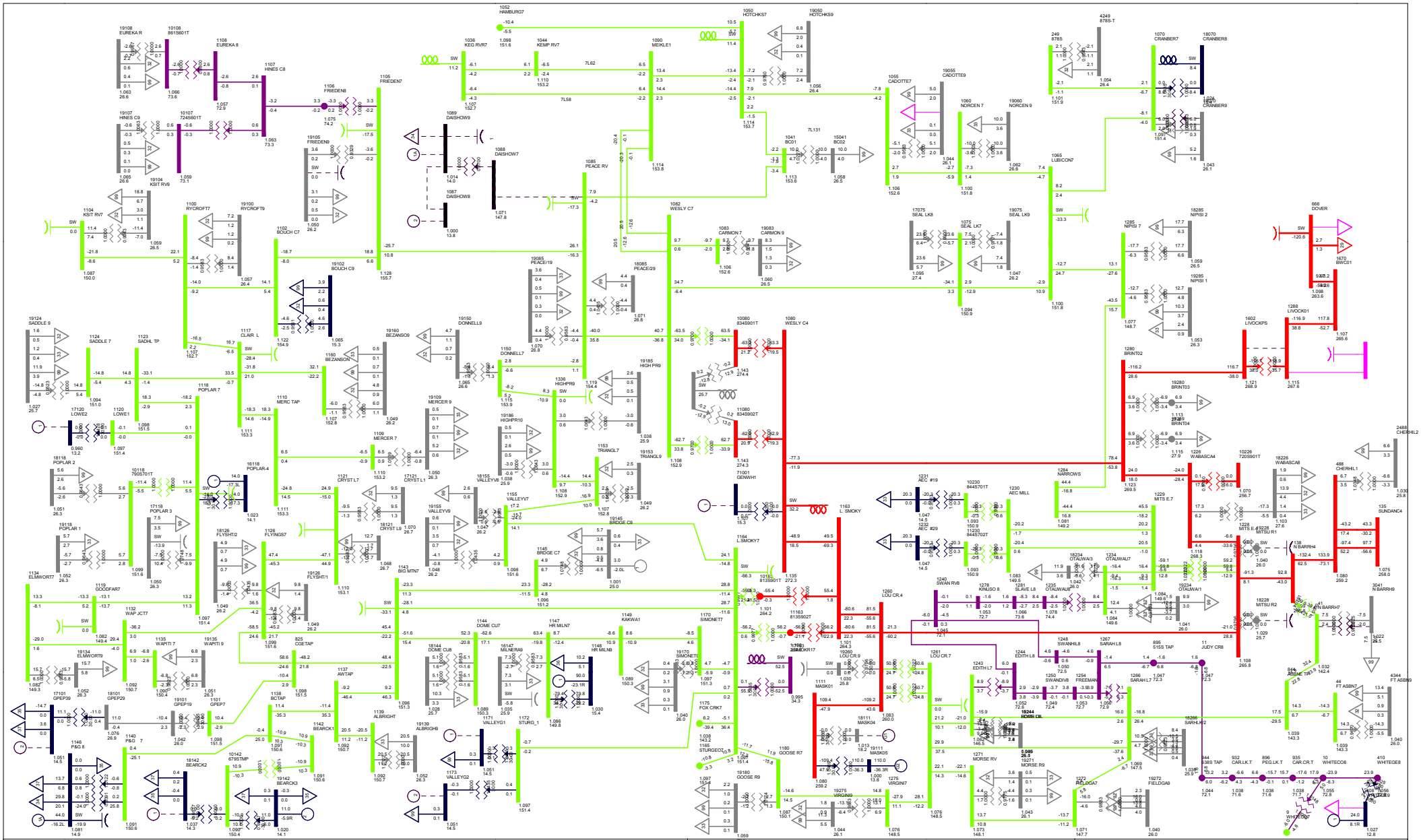
Appendix C2B

Figure: 49

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 023 7L58 KEGRIVER to Meikle_B.

Whitetail Project 1290 Interconnection Study



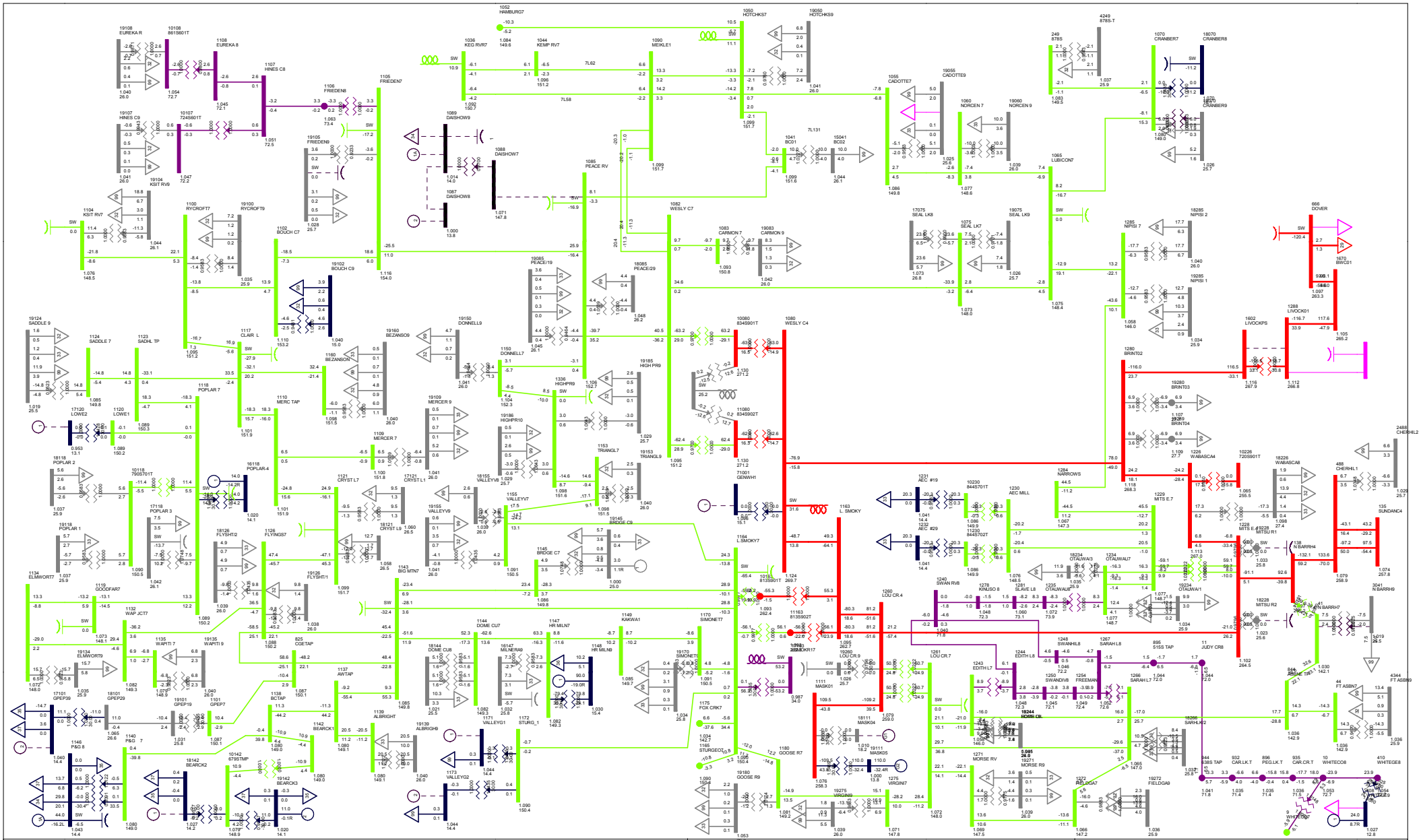
Appendix C2B

Figure: 50

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 024 7L04 WESTPEACE to DAISHOWA_A.

Whitetail Project 1290 Interconnection Study



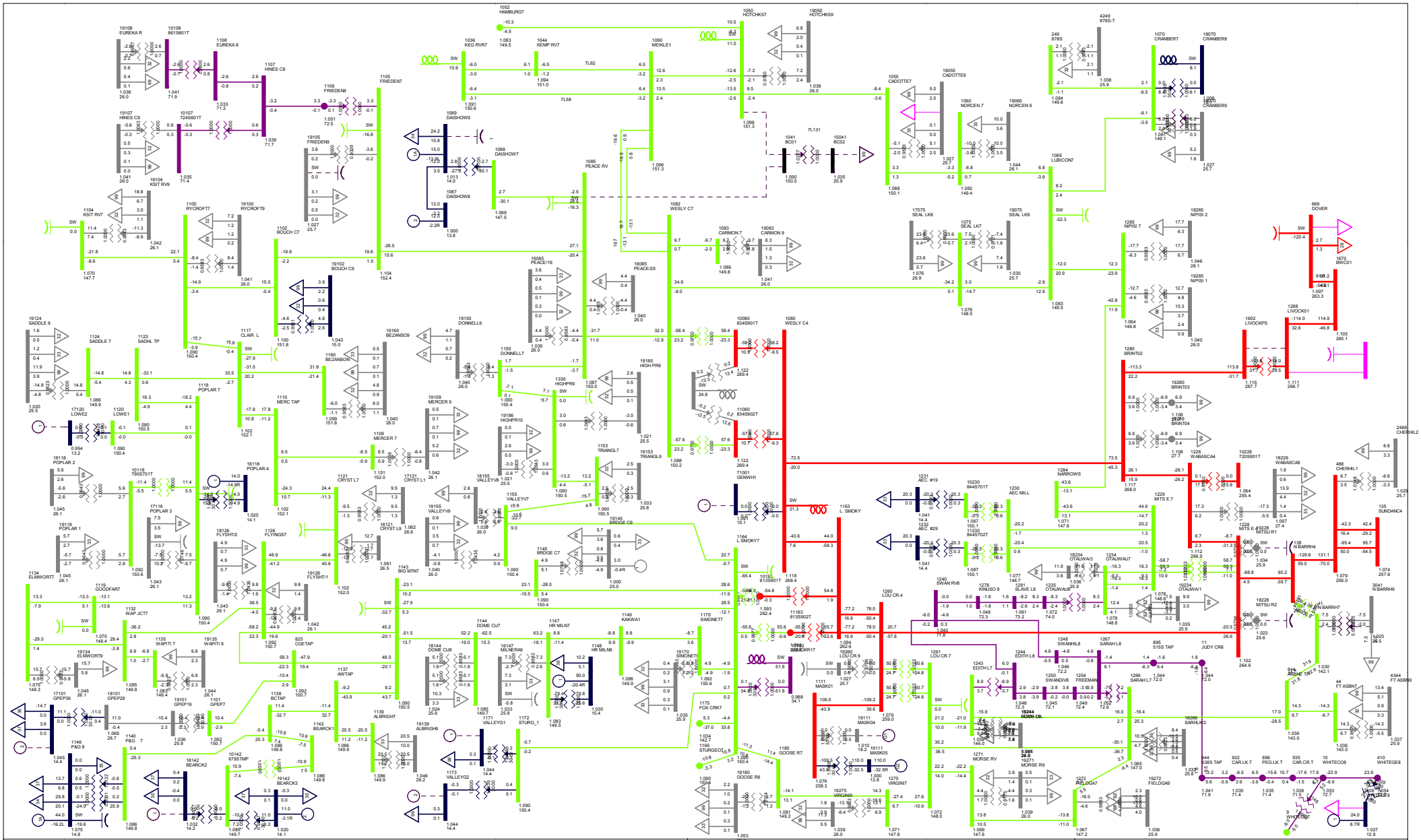
Appendix C2B

Figure: 51

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 024 7L04 WESTPEACE to DAISHOWA_B.

Whitetail Project 1290 Interconnection Study

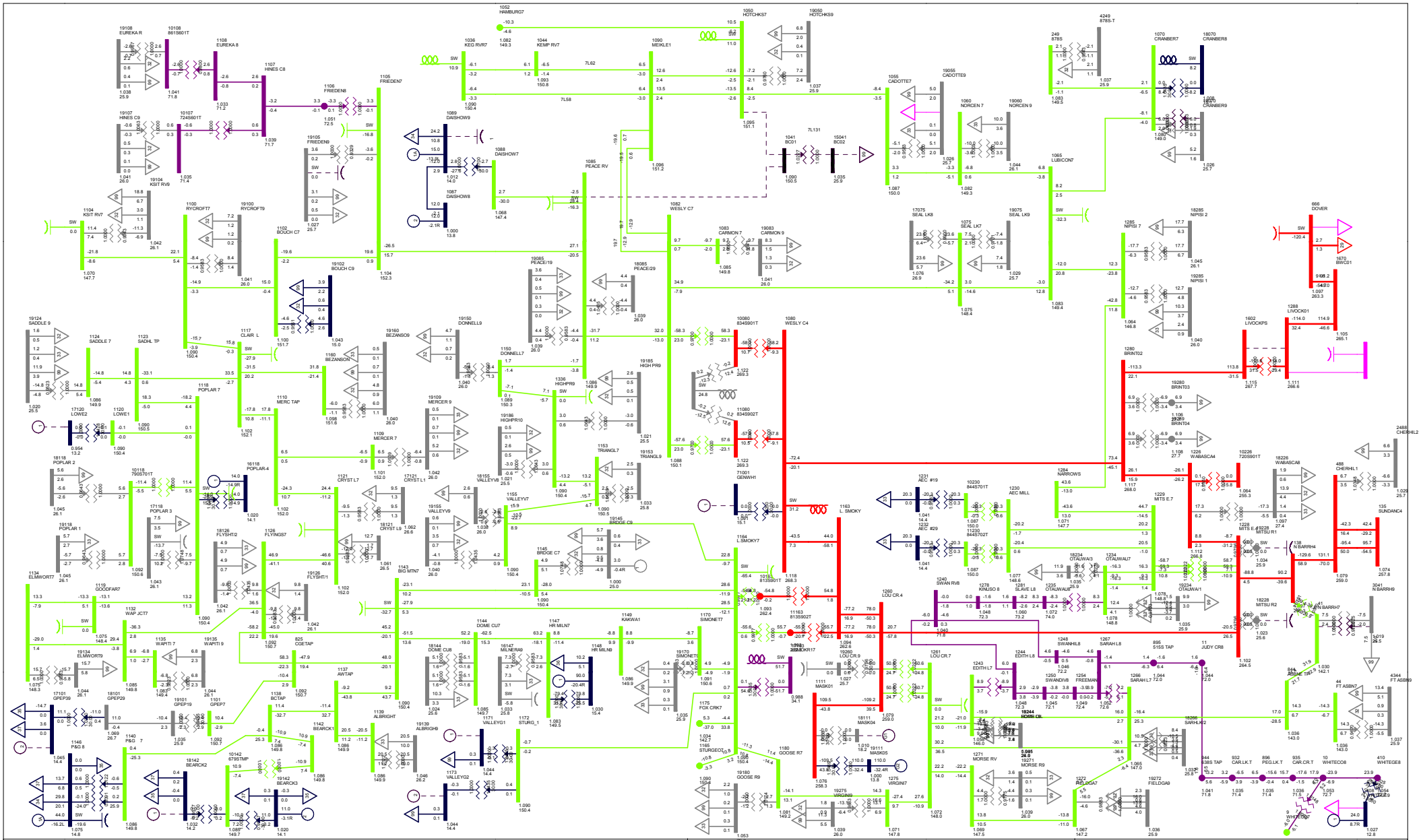


Appendix C2B Figure: 52

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 025 7L51 WESTPEACE to HOTCHKISS_A.

Whitetail Project 1290 Interconnection Study



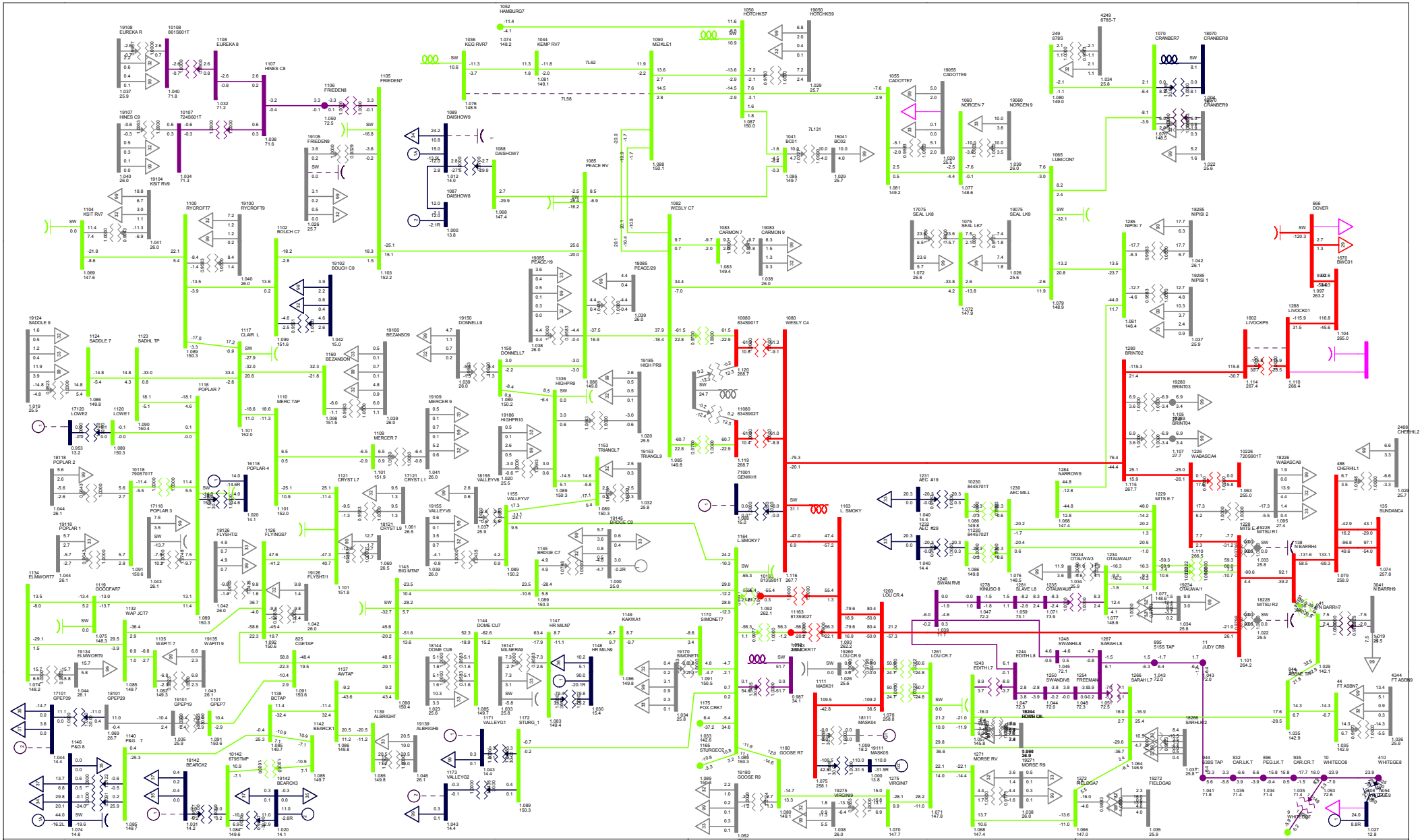
Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 025 7L51 WESTPEACE to HOTCHKISS_B.

Whitetail Project 1290 Interconnection Study

Appendix C2B

Figure: 53

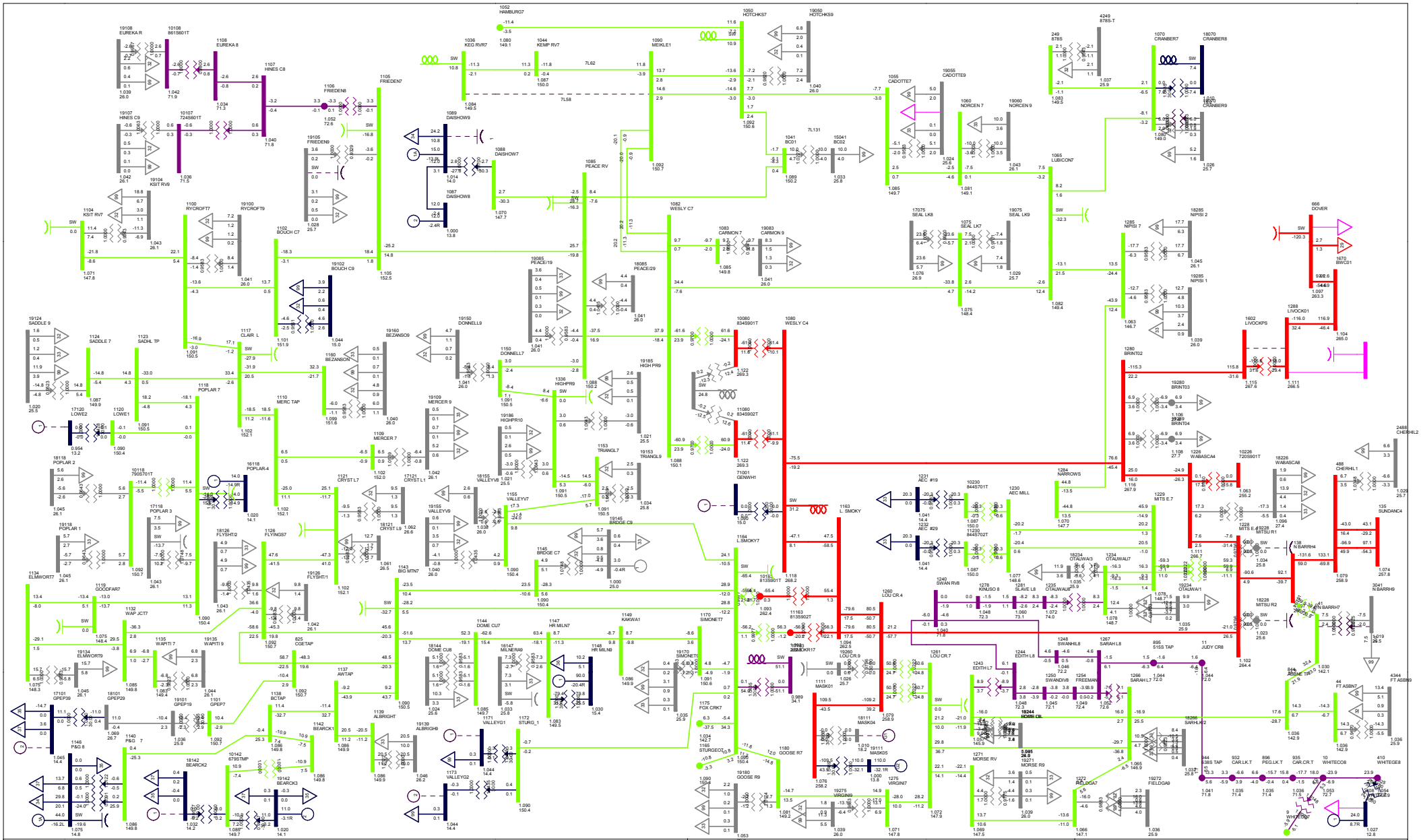


Appendix C2B Figure: 54

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 026 7L58 KEGRIVER to Meikle_A.

Whitetail Project 1290 Interconnection Study

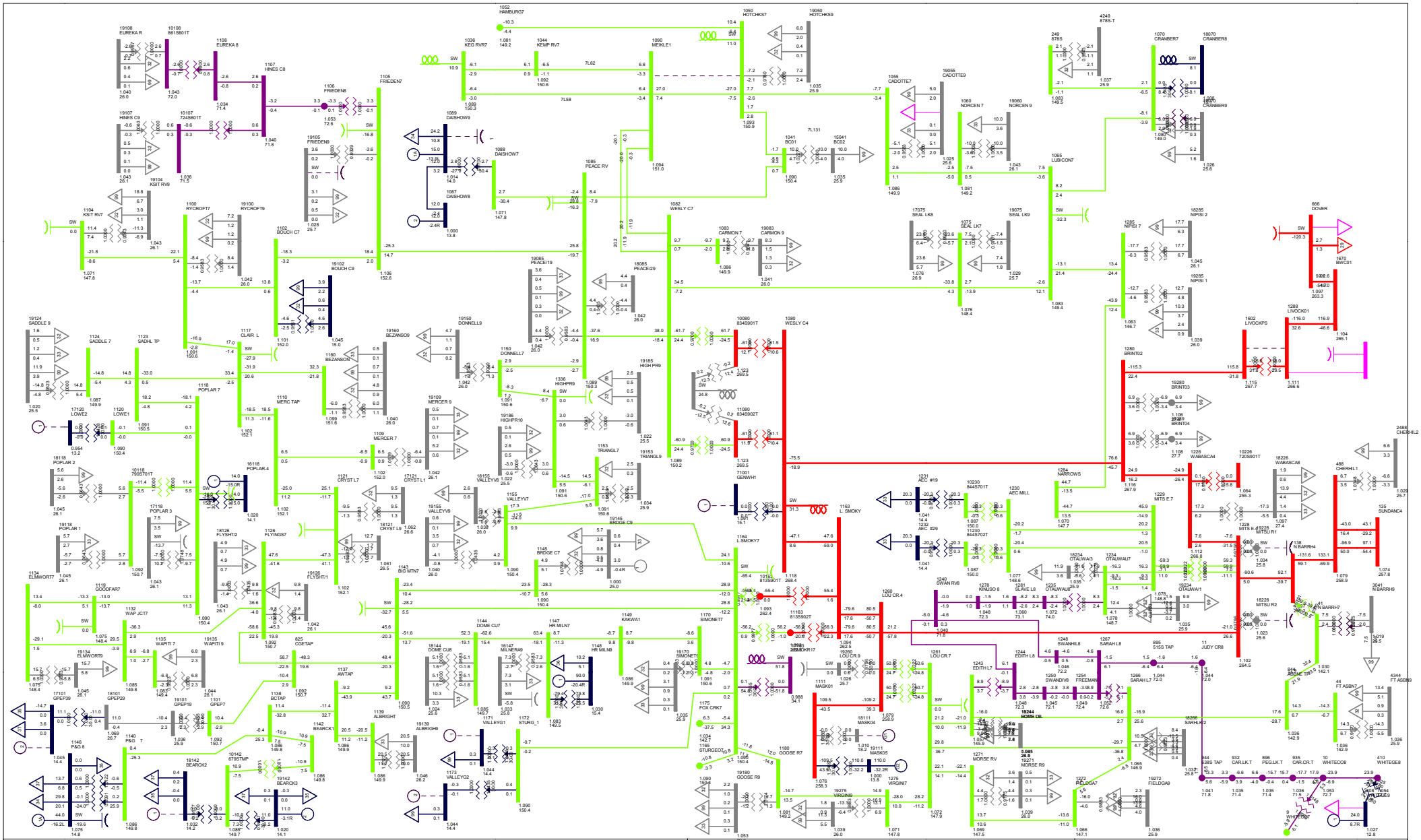


Appendix C2B Figure: 55

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 026 7L58 KEGRIVER to Meikle_B.

Whitetail Project 1290 Interconnection Study



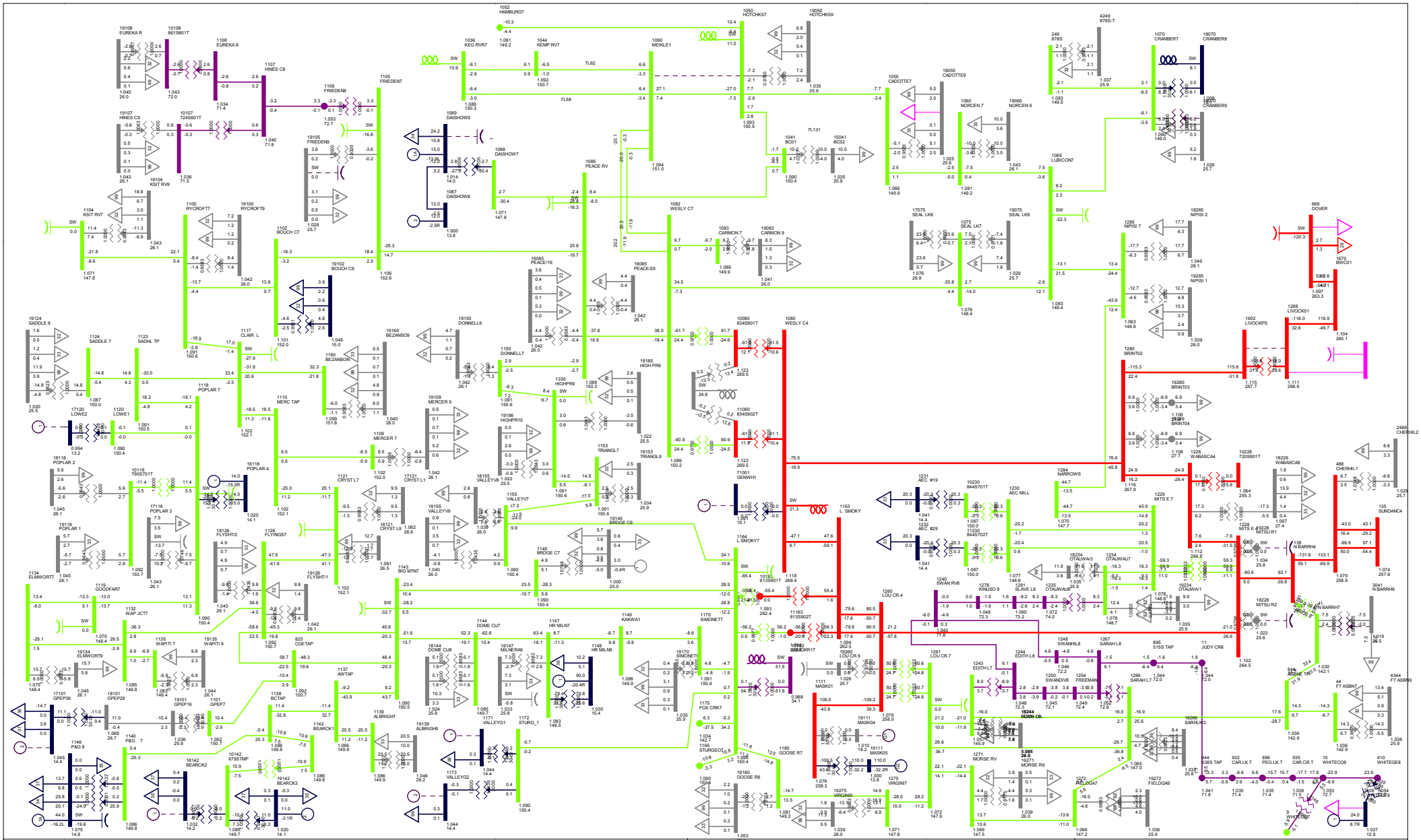
Appendix C2B

Figure: 56

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 027 7L120 HOTCHKISS to Meikle_A.

Whitetail Project 1290 Interconnection Study



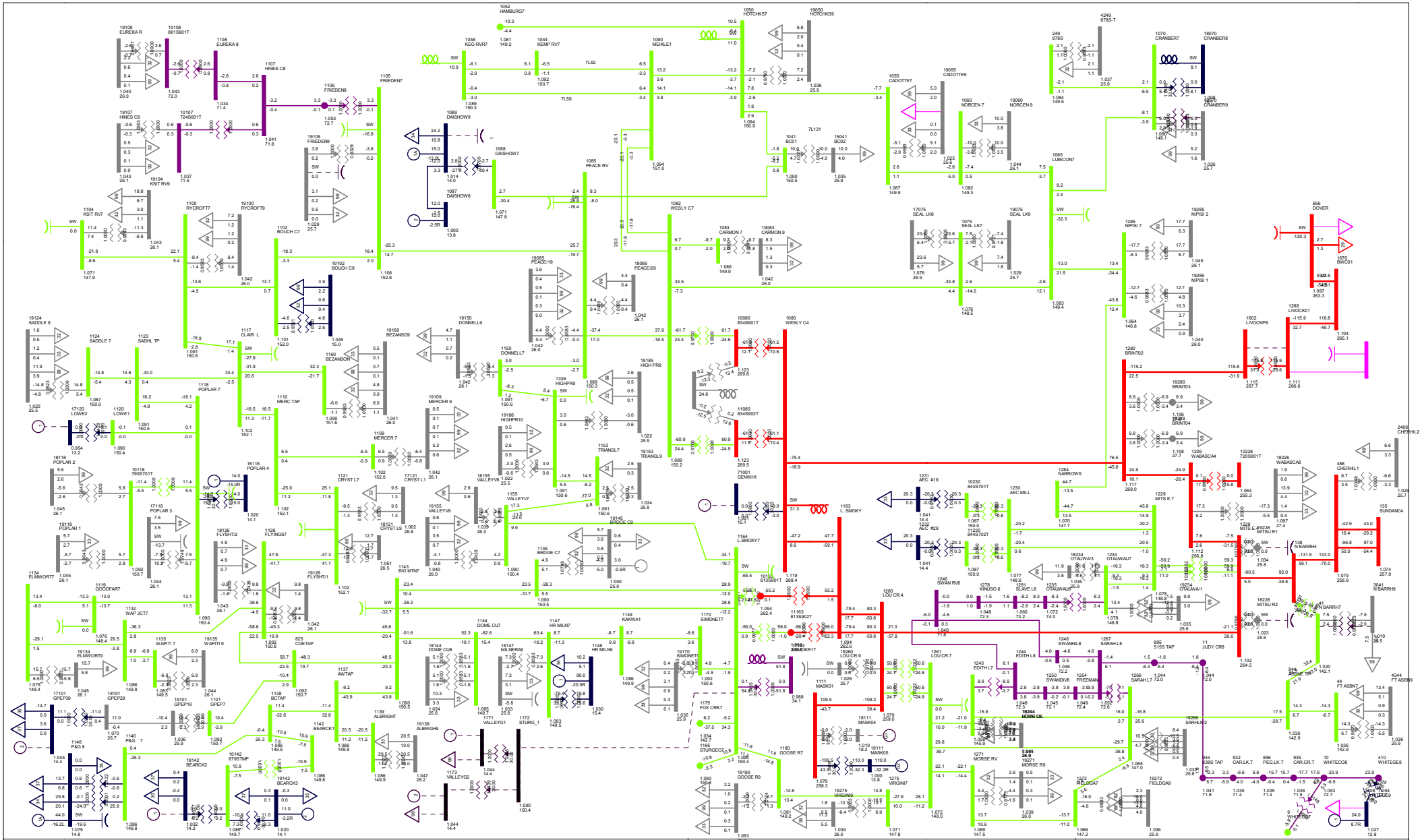
Appendix C2B

Figure: 57

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 027 7L120 HOTCHKISS to Meikle_B.

Whitetail Project 1290 Interconnection Study



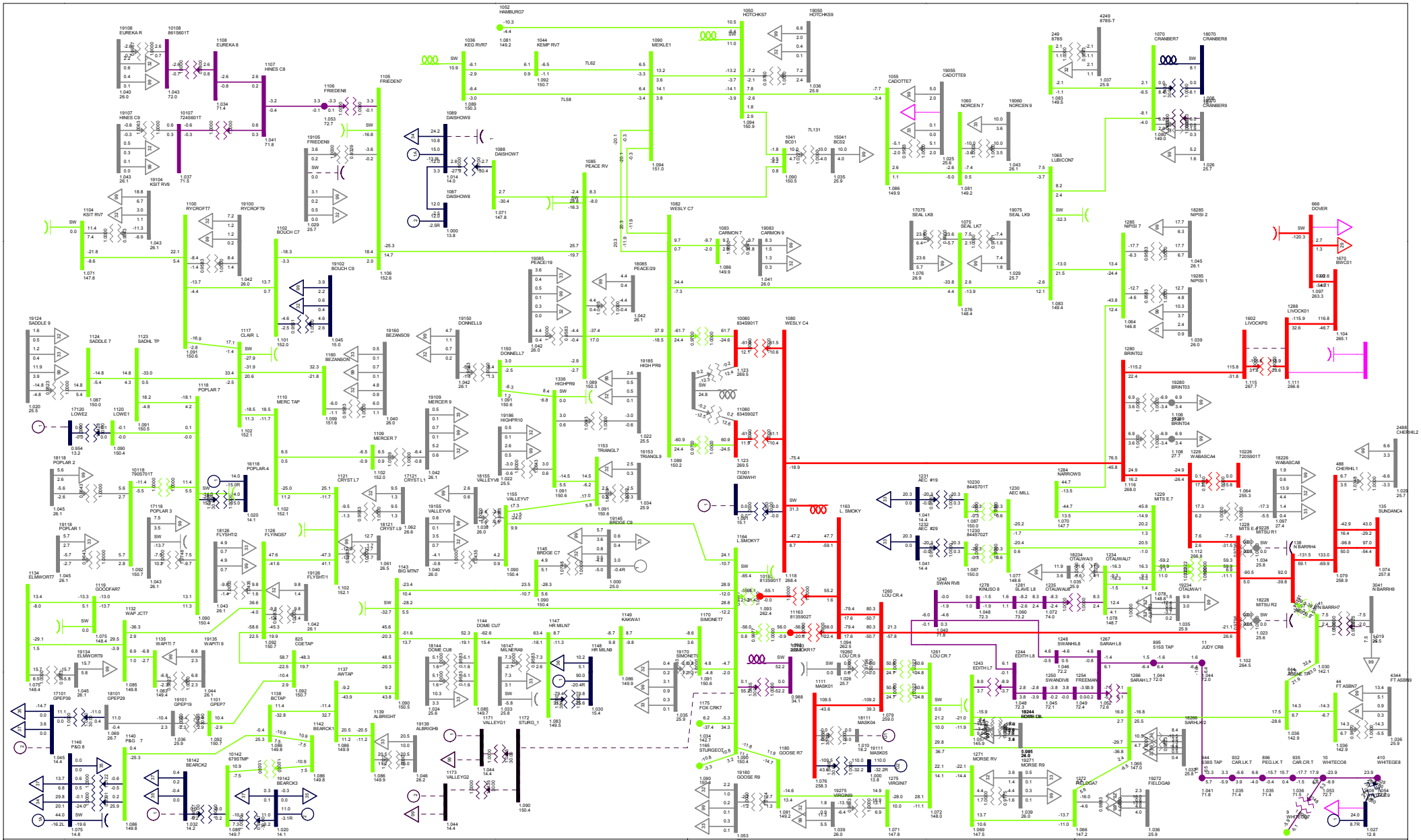
Appendix C2B

Figure: 58

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 028 7L01 LITTLESMOKY to Sturgeon_A.

Whitetail Project 1290 Interconnection Study



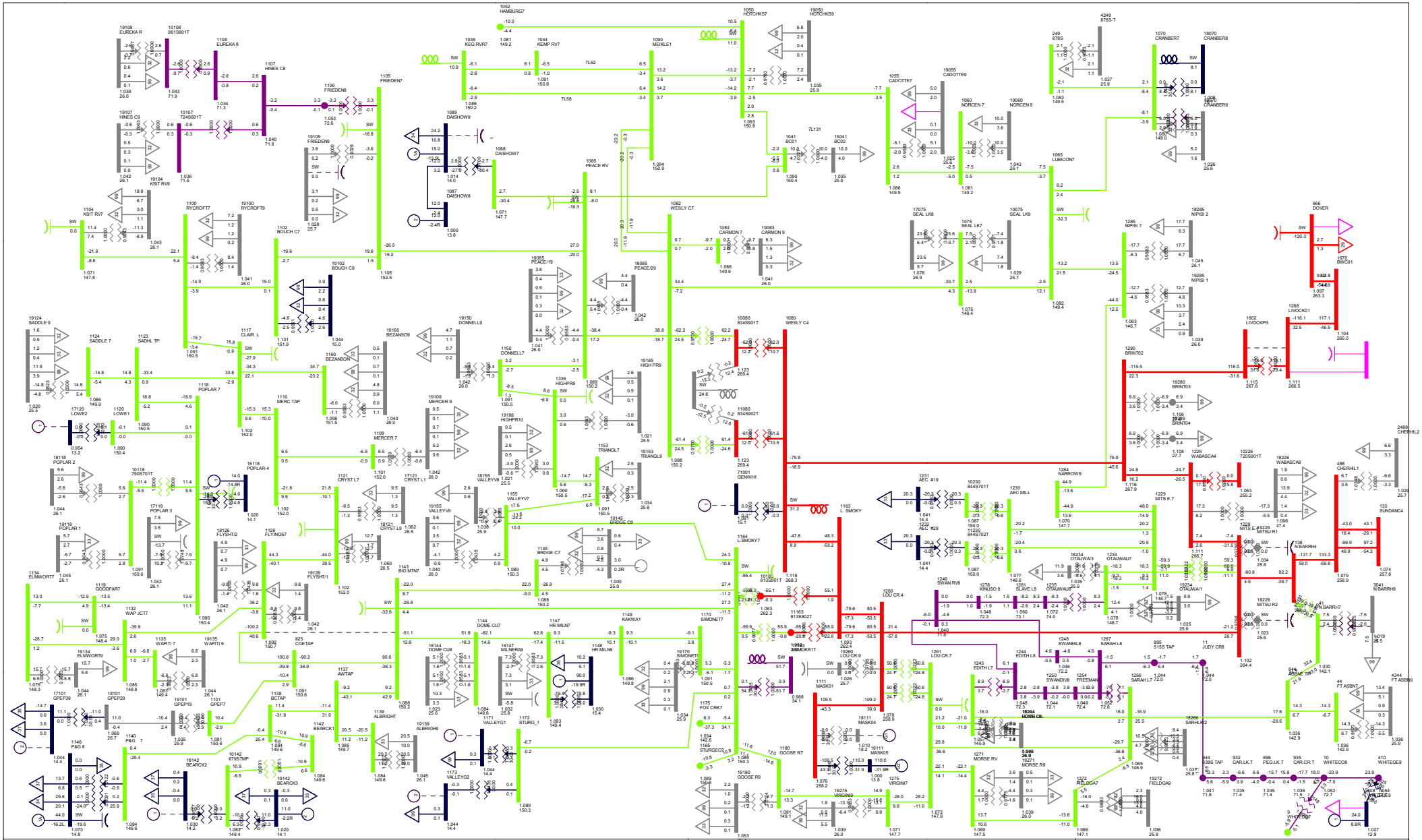
Appendix C2B

Figure: 59

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 028 7L01 LITTLESMOKY to Sturgeon_B.

Whitetail Project 1290 Interconnection Study



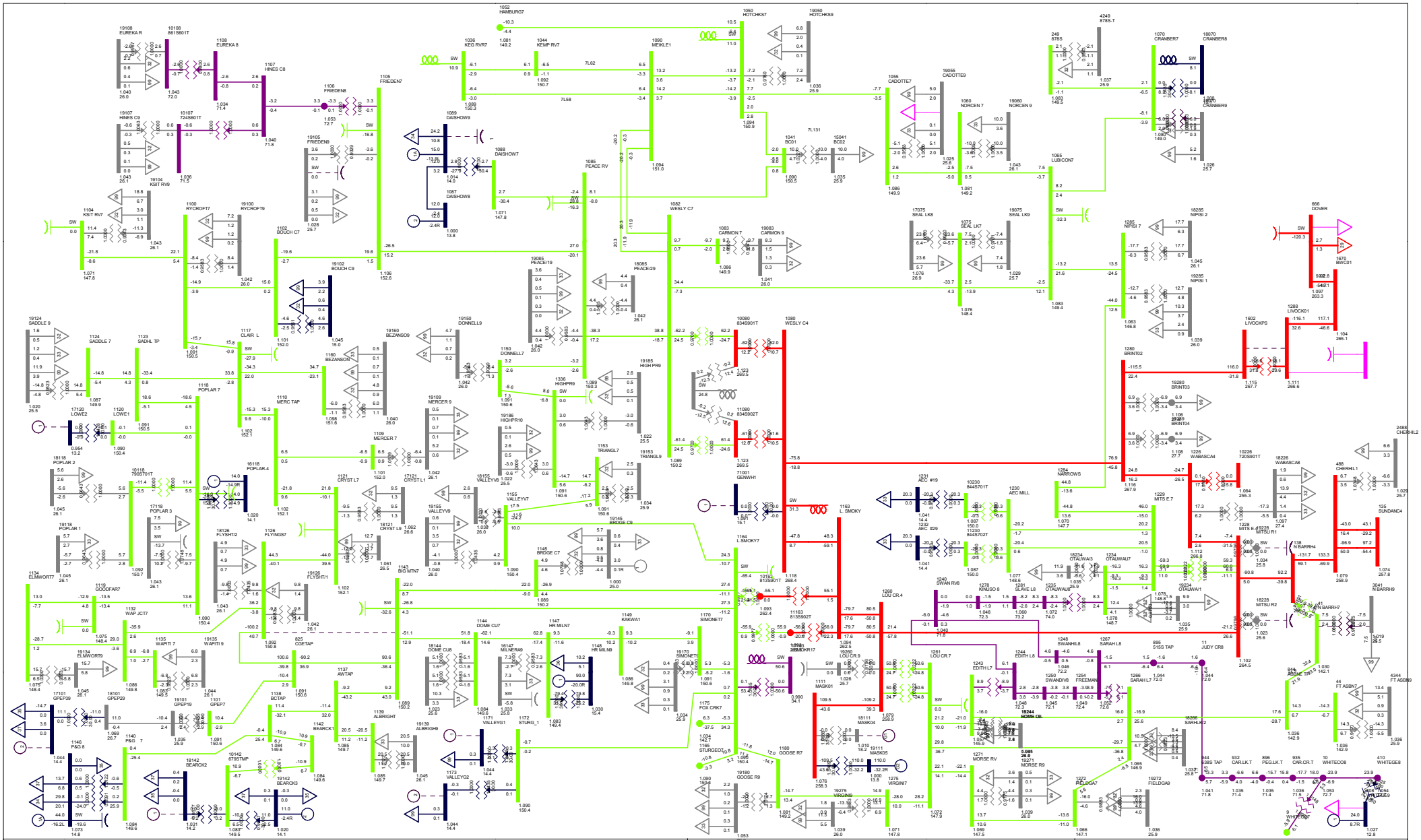
Appendix C2B

Figure: 60

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_A.

Whitetail Project 1290 Interconnection Study



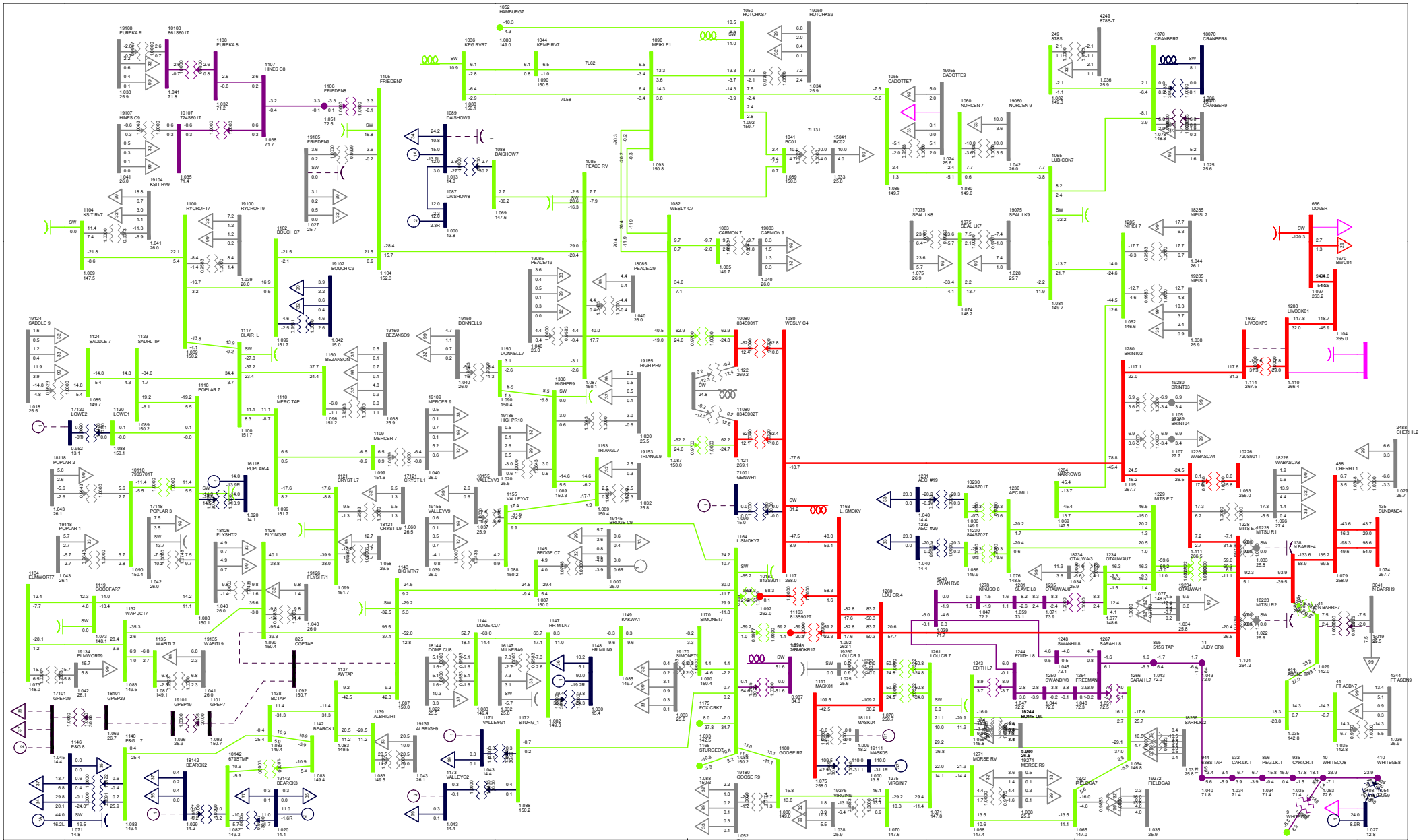
Appendix C2B

Figure: 61

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_B.

Whitetail Project 1290 Interconnection Study

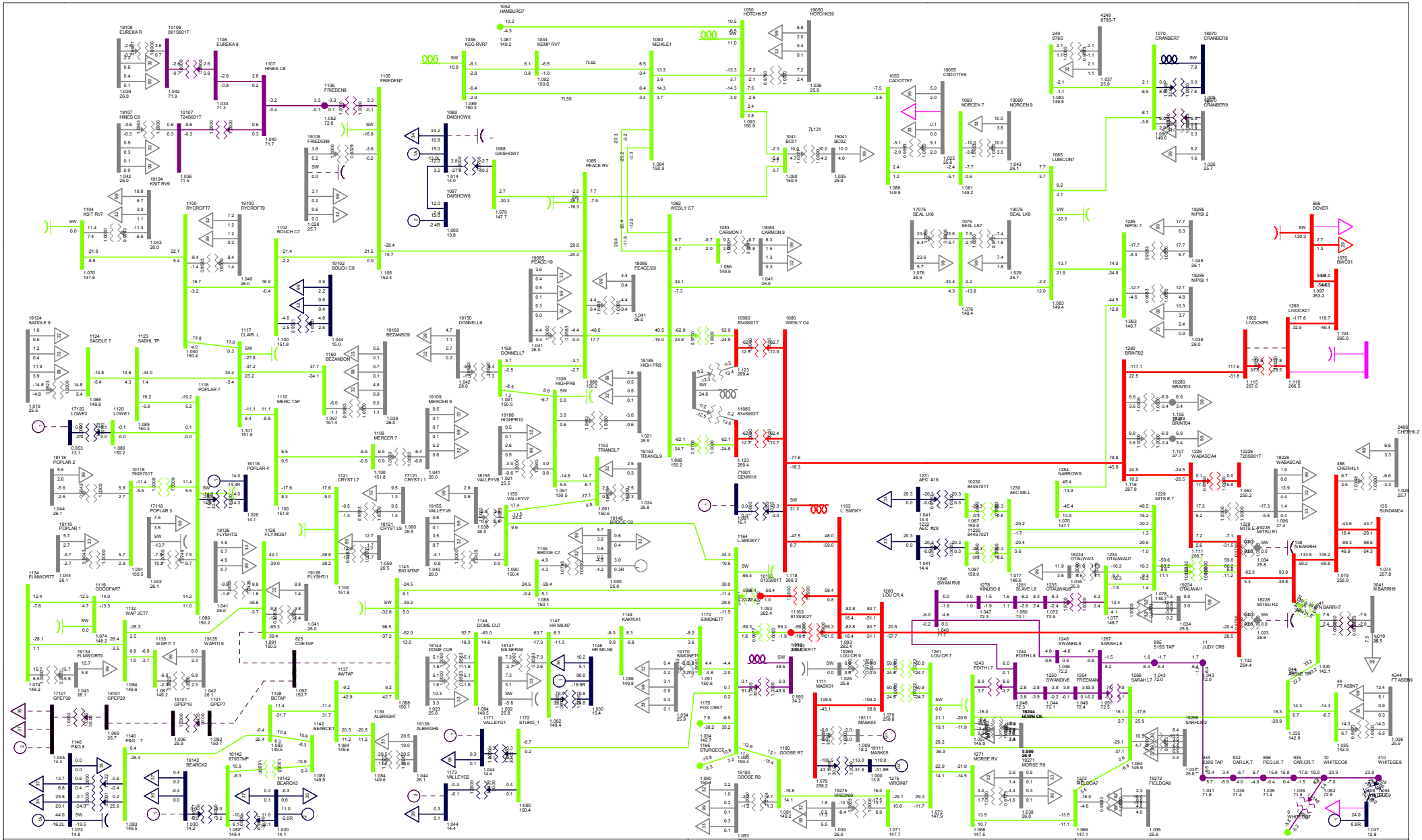


Appendix C2B Figure: 62

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_A.

Whitetail Project 1290 Interconnection Study

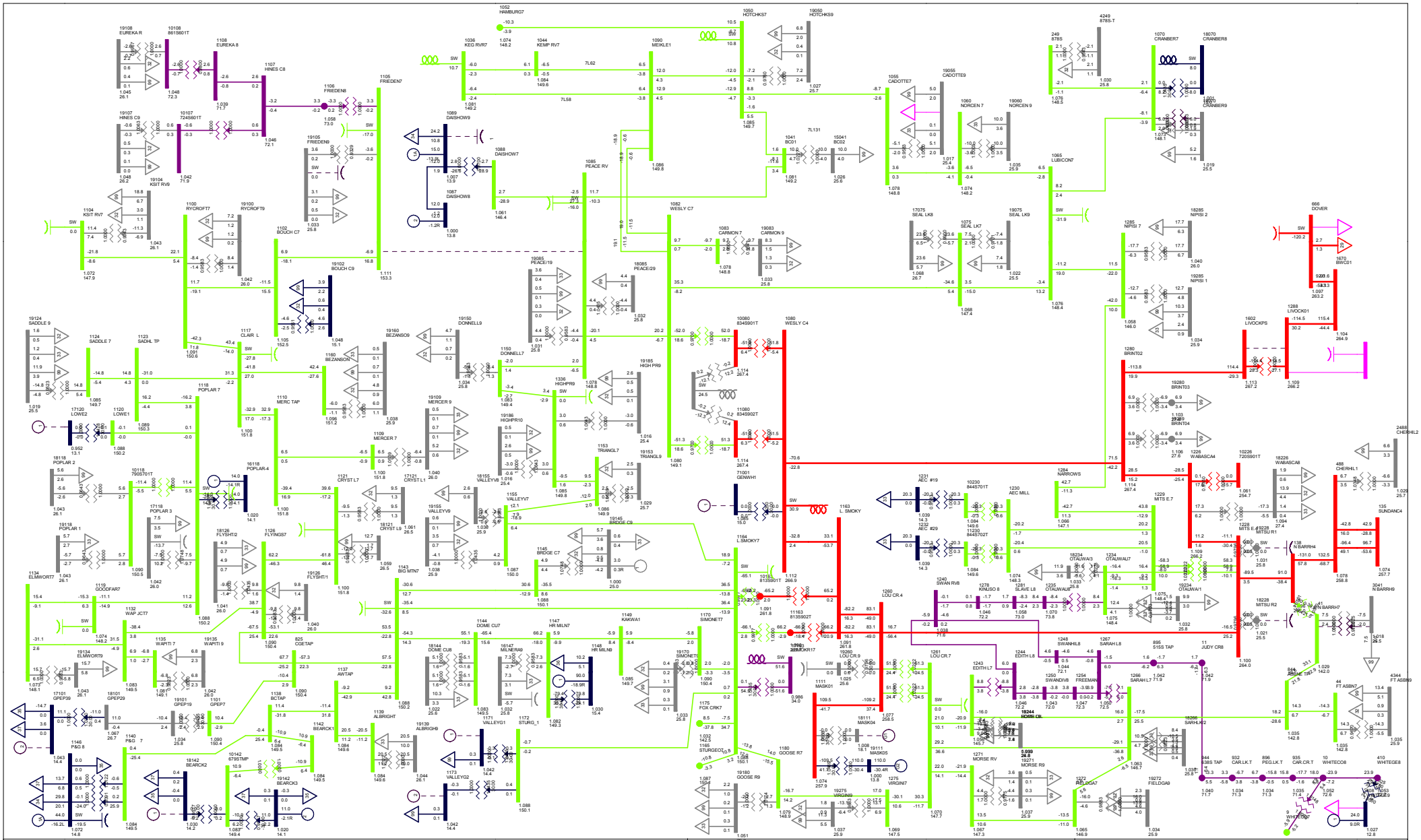


Appendix C2B Figure: 63

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_B.

Whitetail Project 1290 Interconnection Study

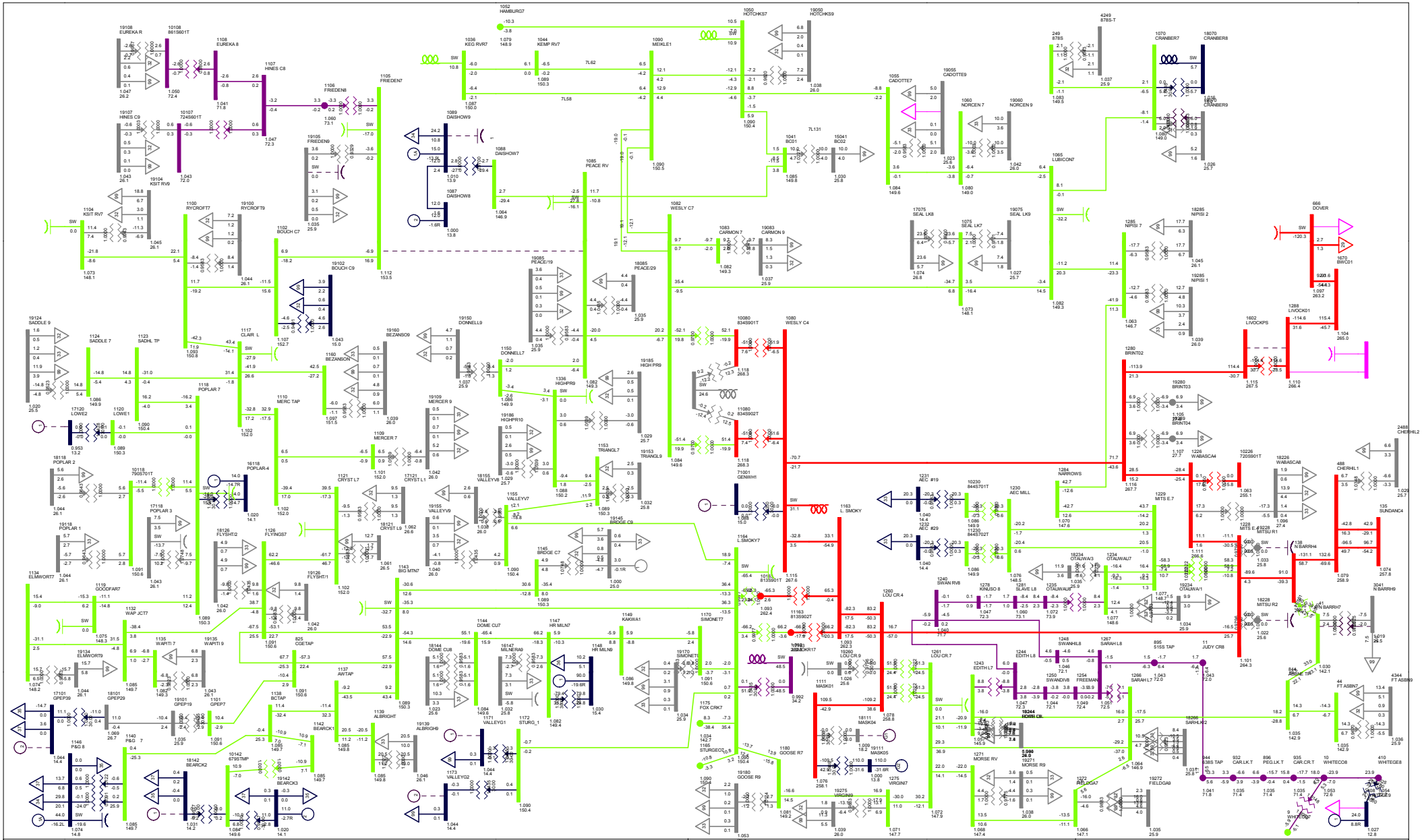


Appendix C2B Figure: 64

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_A.

Whitetail Project 1290 Interconnection Study



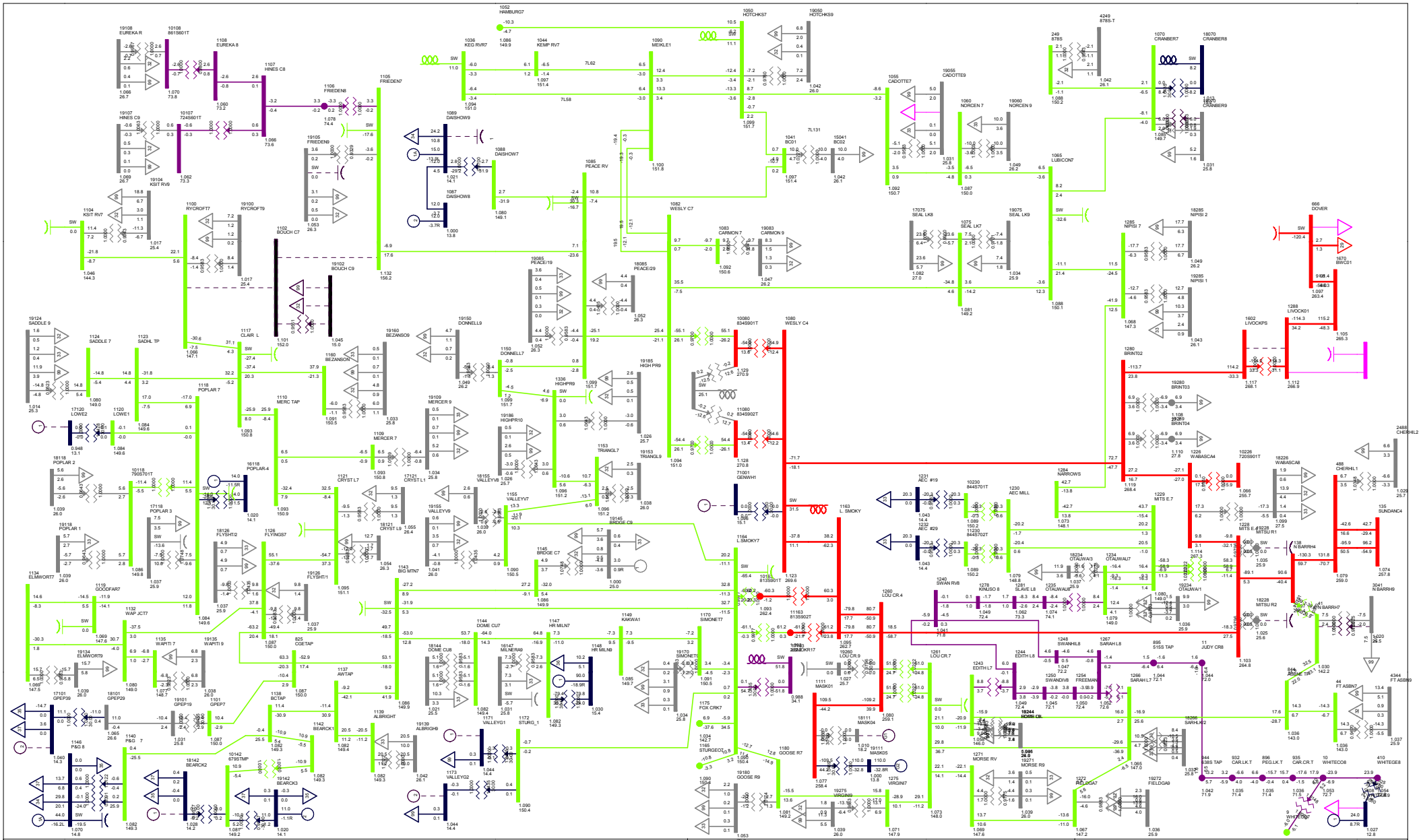
Appendix C2B

Figure: 65

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_B.

Whitetail Project 1290 Interconnection Study



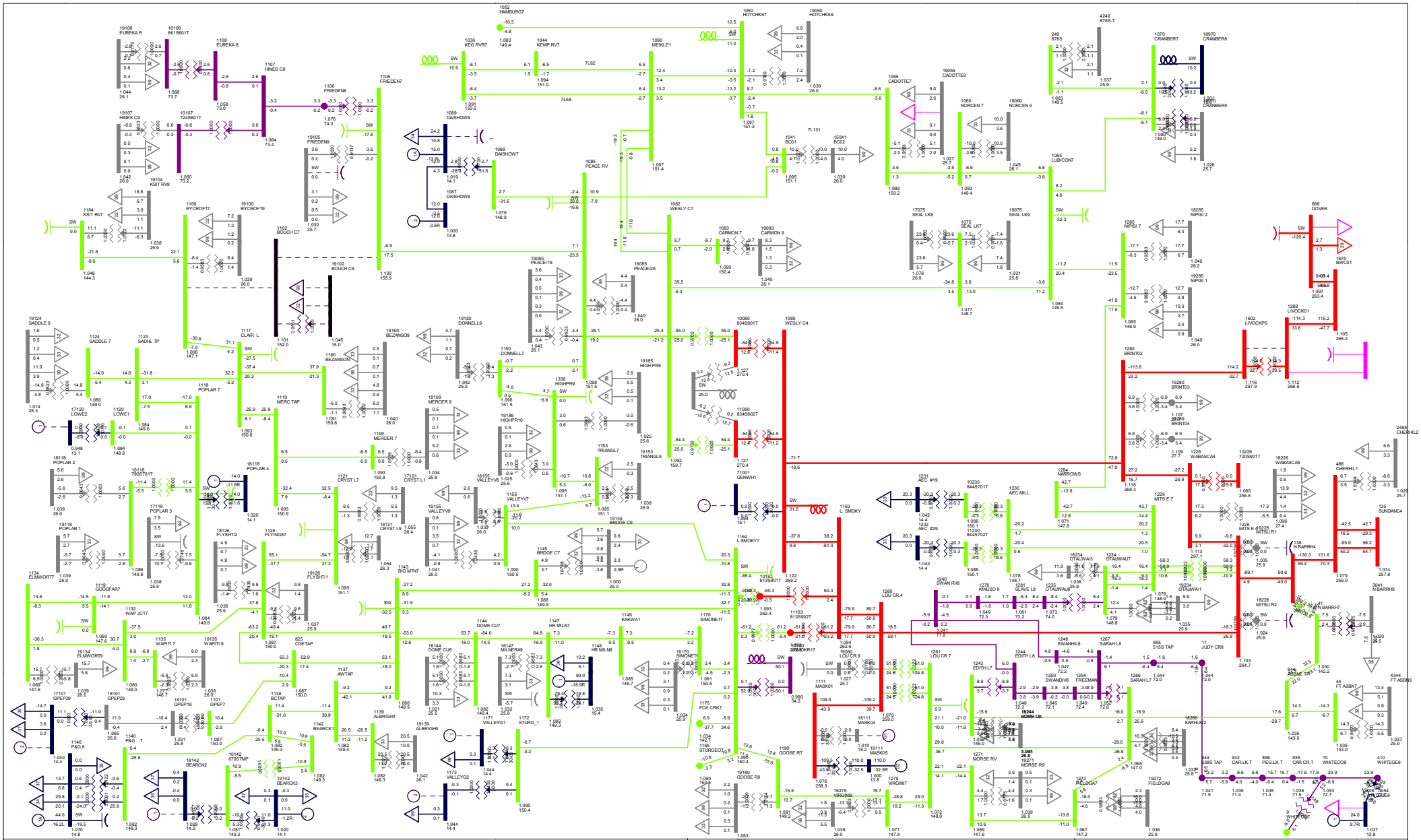
Appendix C2B

Figure: 66

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 032 7L73 RYCROFT to FRIEDENSTAL_A.

Whitetail Project 1290 Interconnection Study



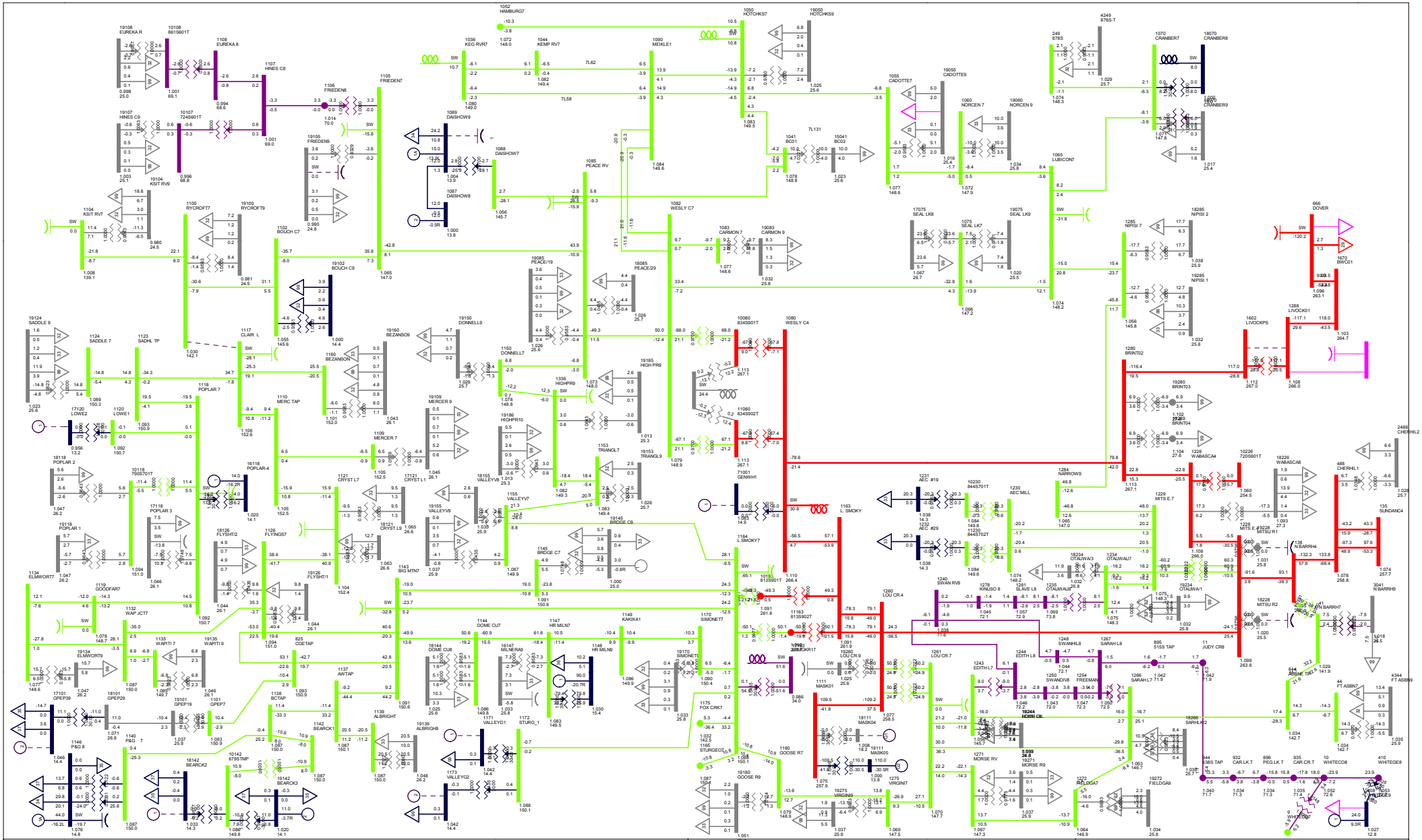
Appendix C2B

Figure: 67

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 032 7L73 RYCROFT to FRIEDENSTAL_B.

Whitetail Project 1290 Interconnection Study

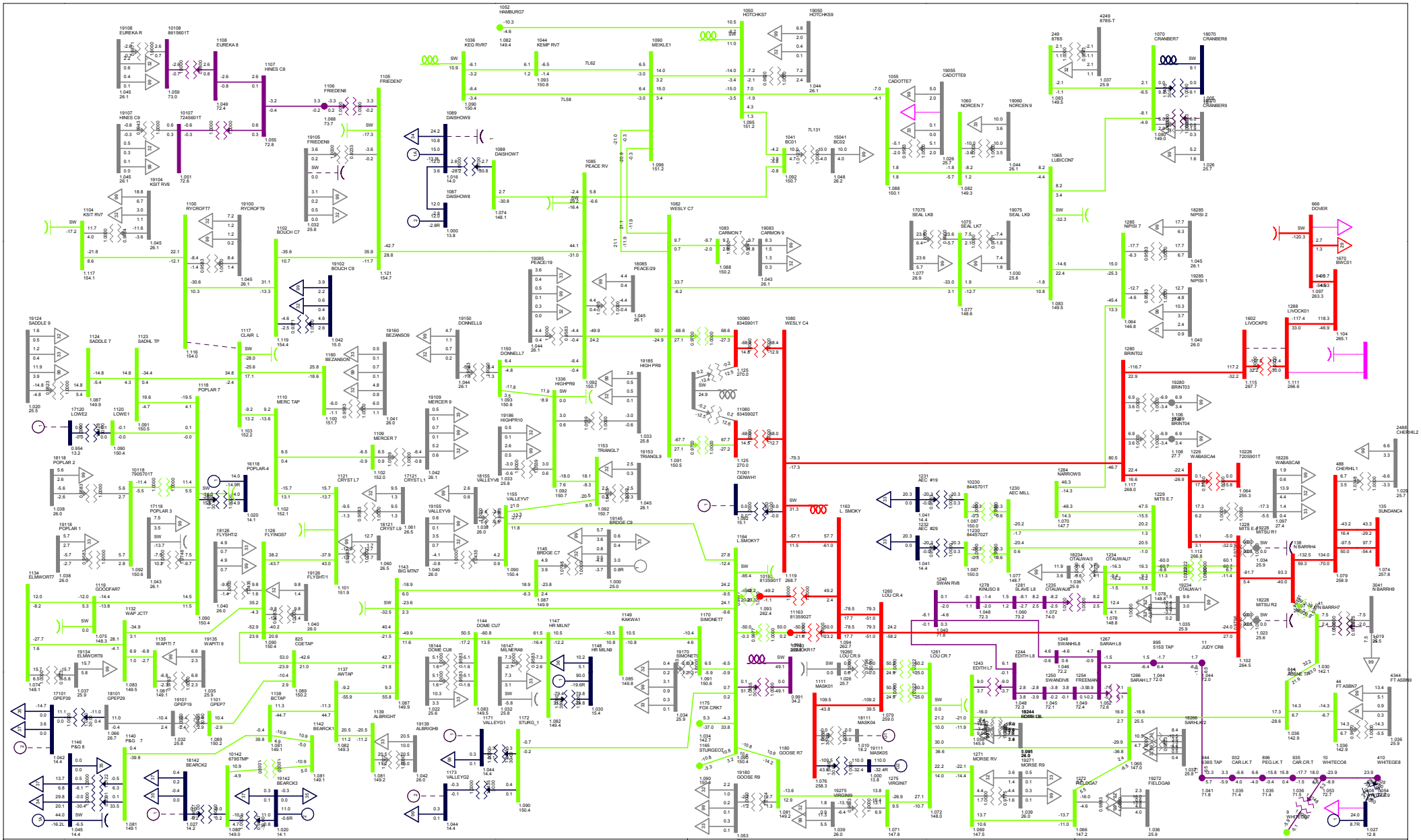


Appendix C2B Figure: 68

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_A.

Whitetail Project 1290 Interconnection Study



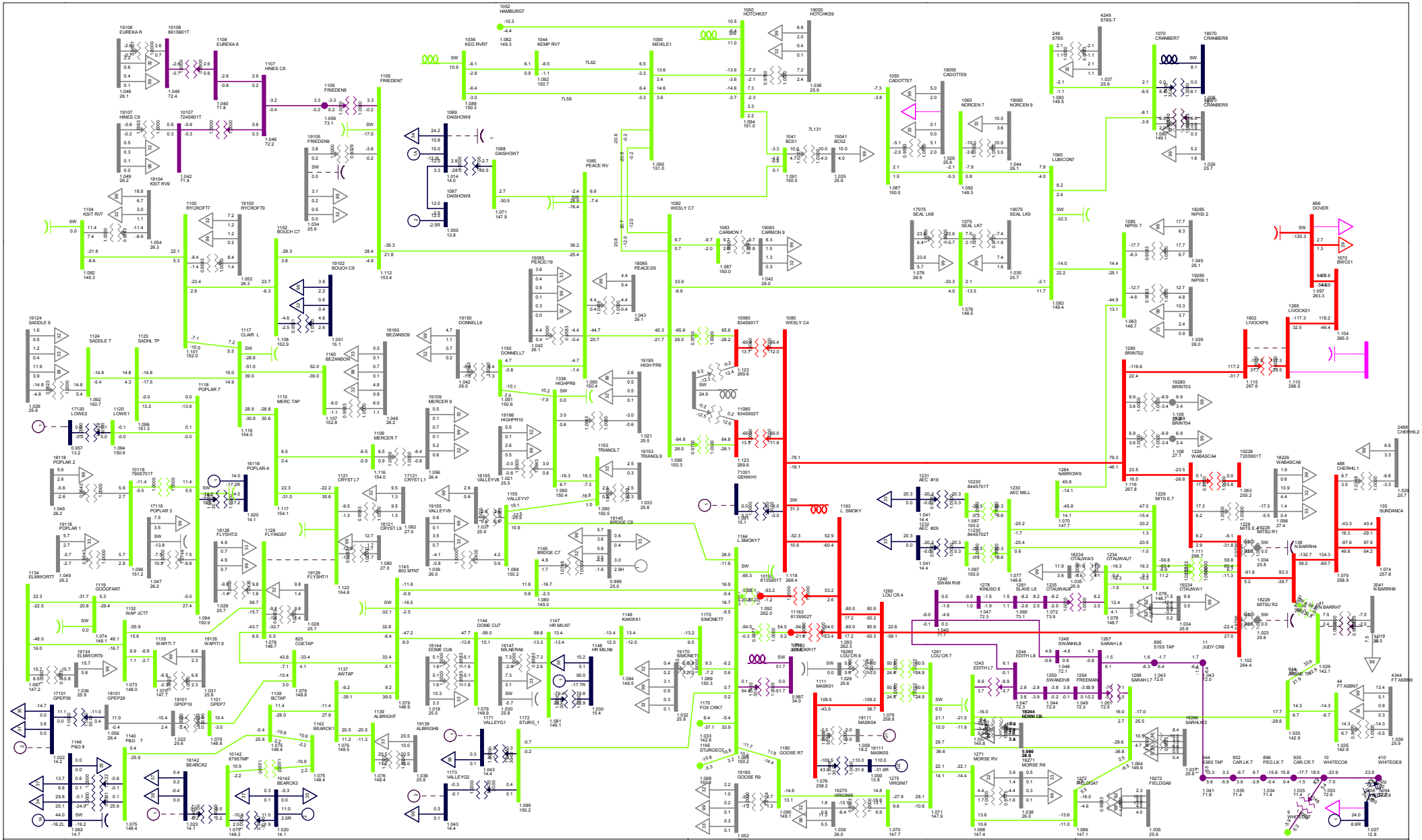
Appendix C2B

Figure: 69

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_B.

Whitetail Project 1290 Interconnection Study

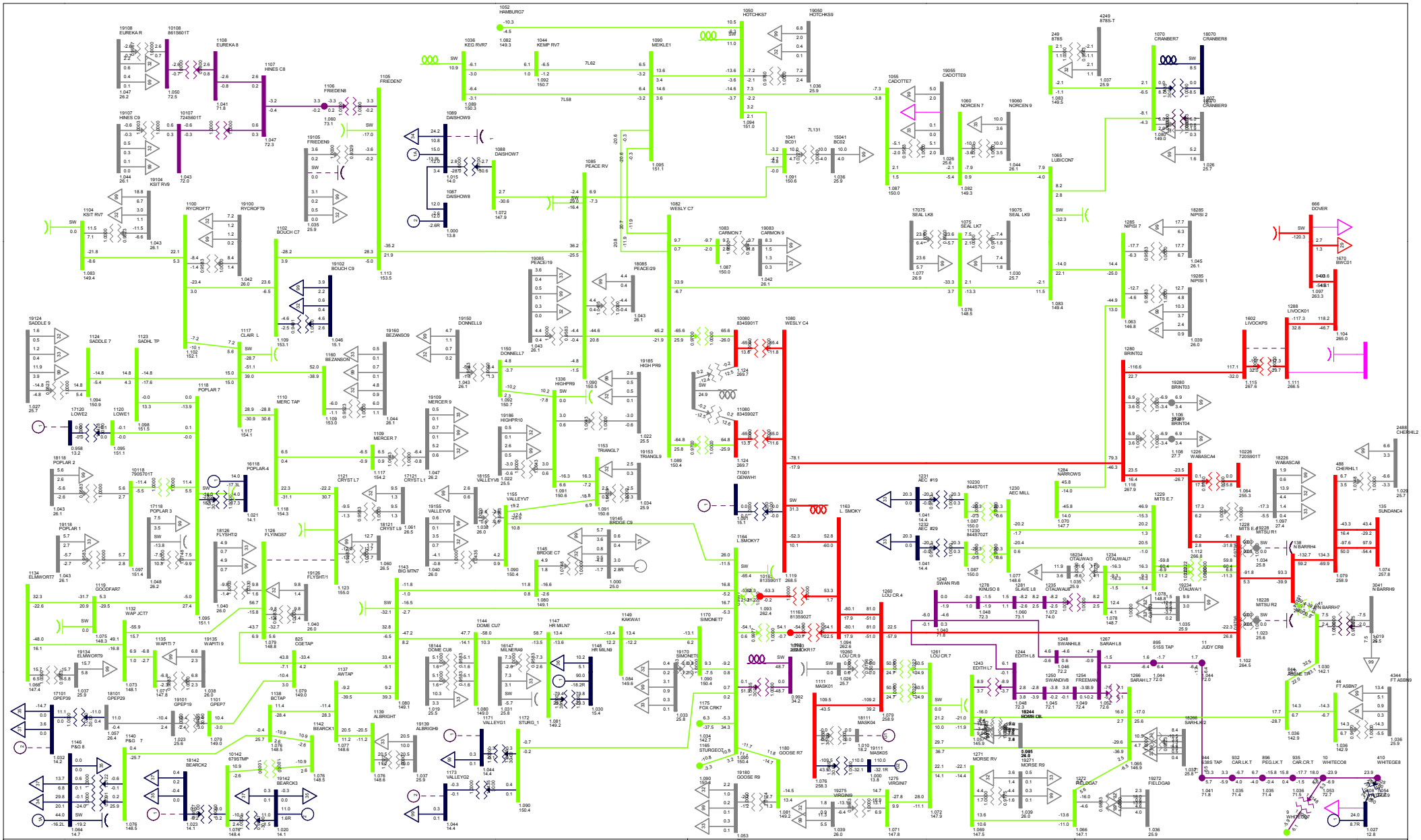


Appendix C2B Figure: 70

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_A.

Whitetail Project 1290 Interconnection Study



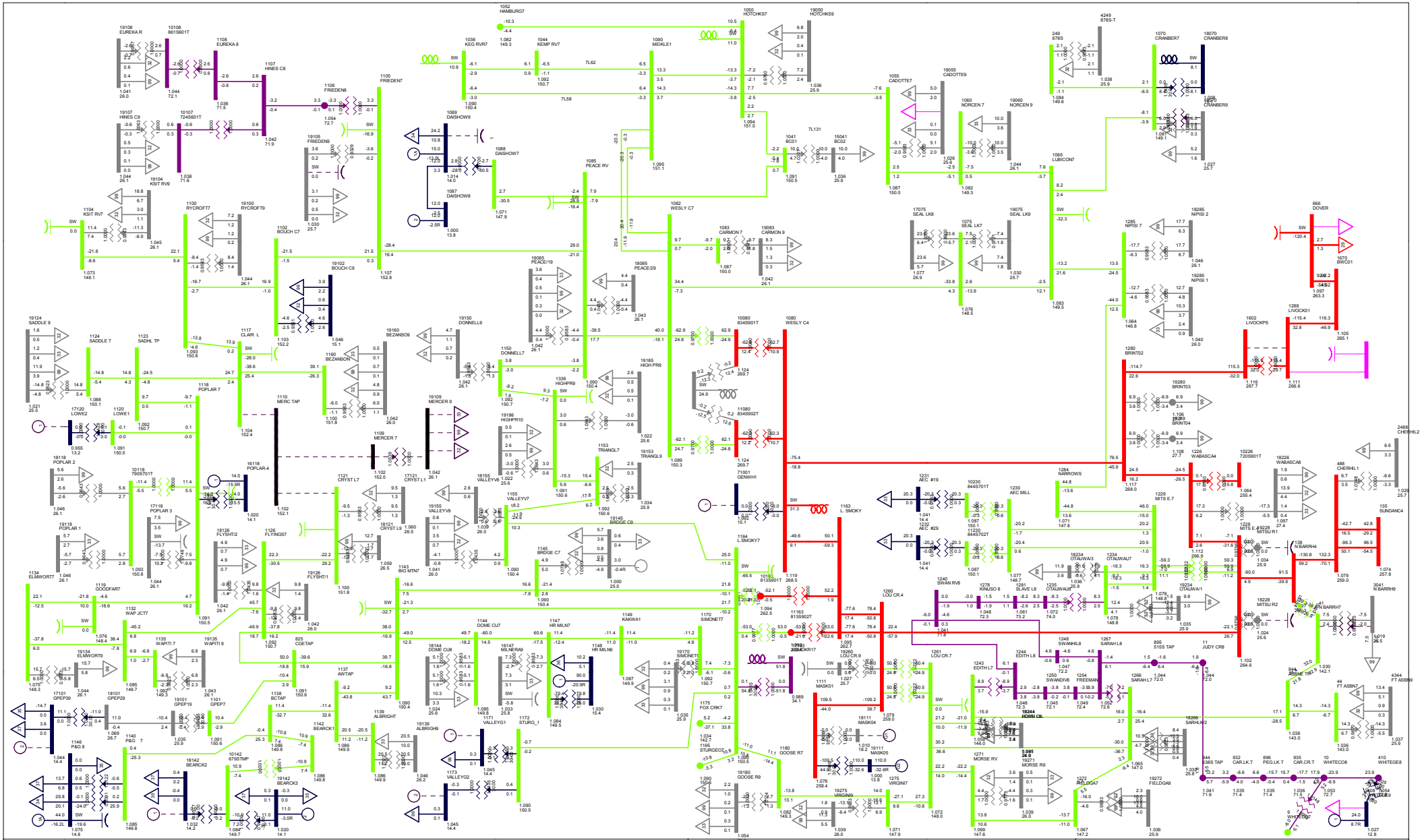
Appendix C2B

Figure: 71

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_B.

Whitetail Project 1290 Interconnection Study

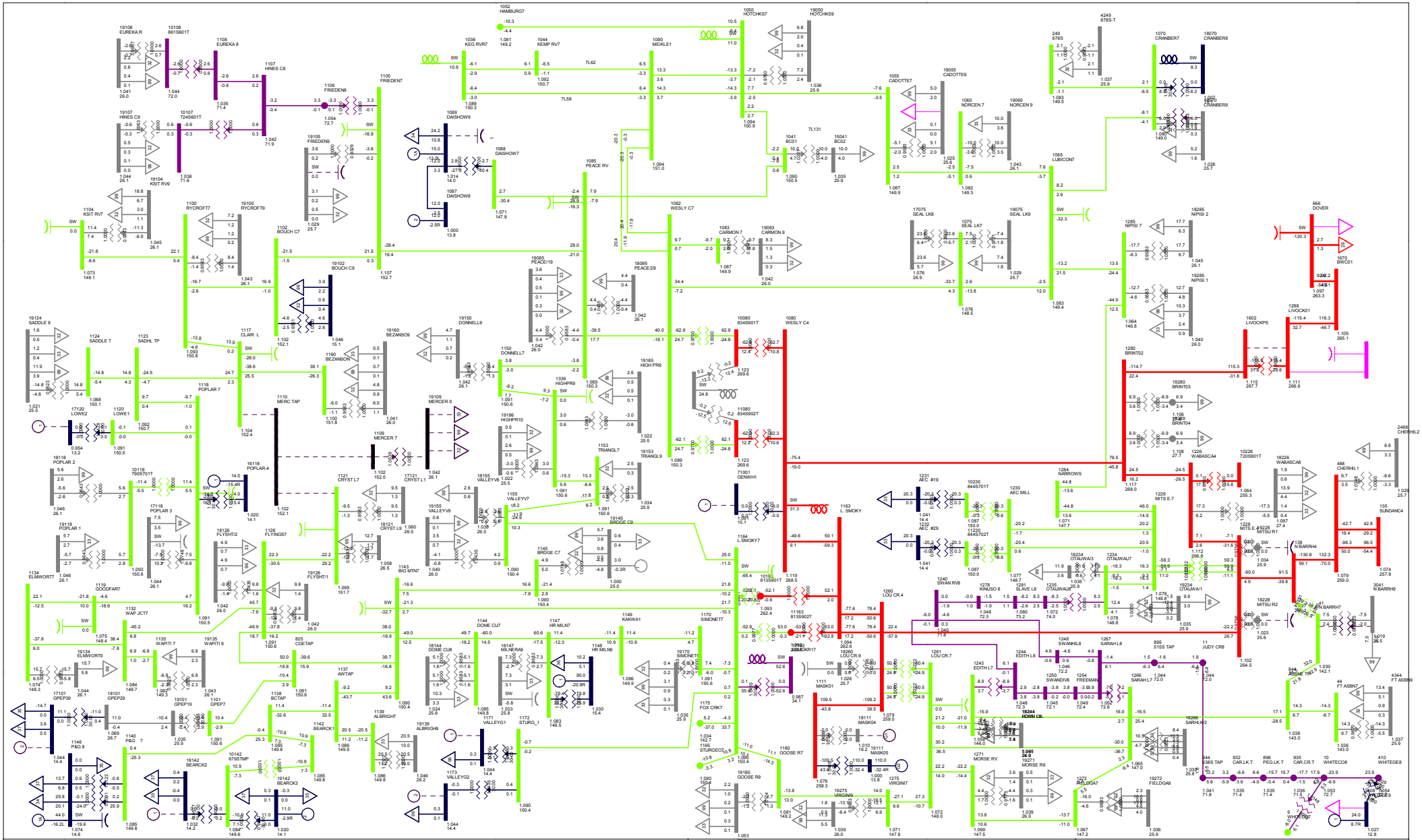


Appendix C2B Figure: 72

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_A.

Whitetail Project 1290 Interconnection Study



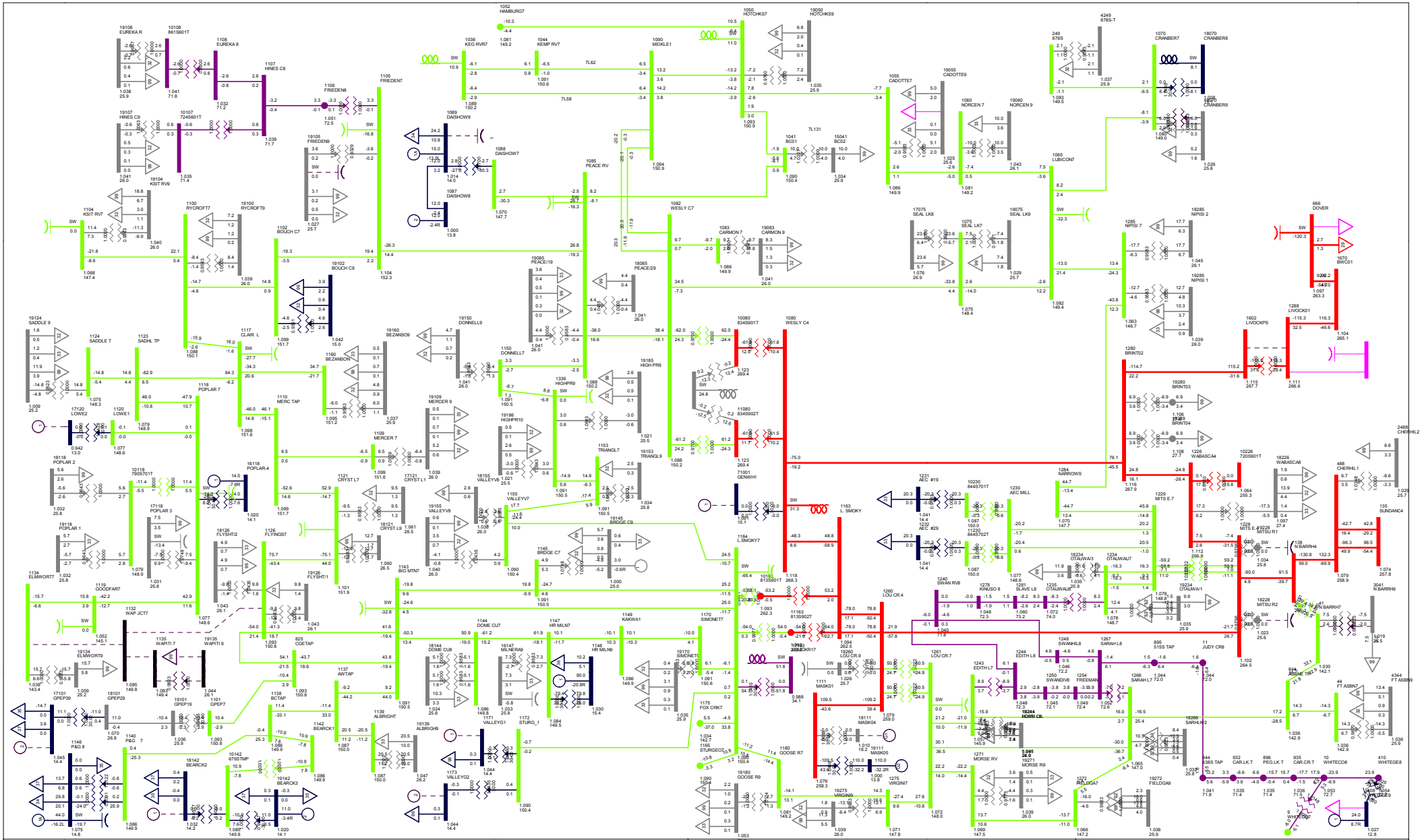
Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2B

Figure: 73



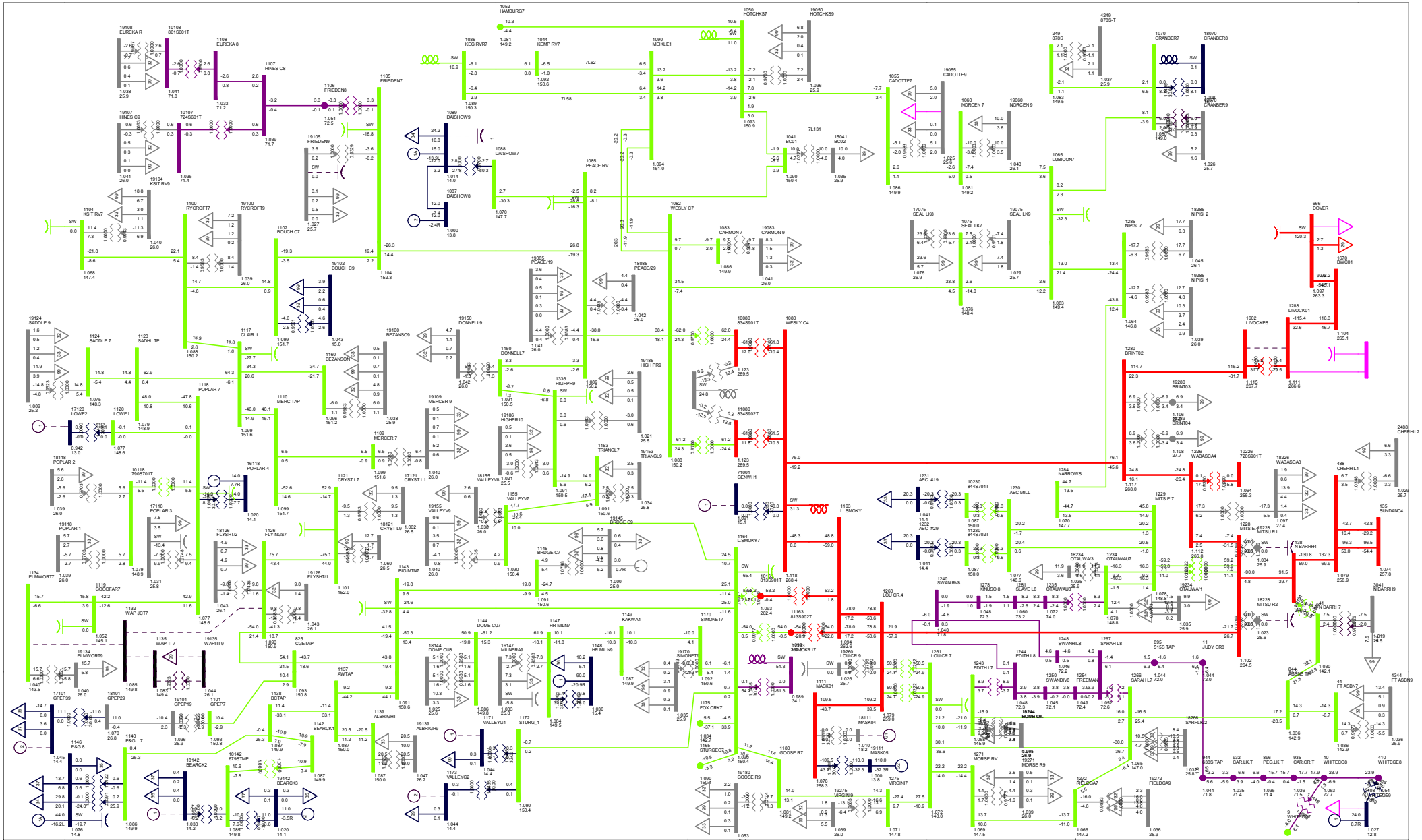
Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_A.

Whitetail Project 1290 Interconnection Study

Appendix C2B

Figure: 74

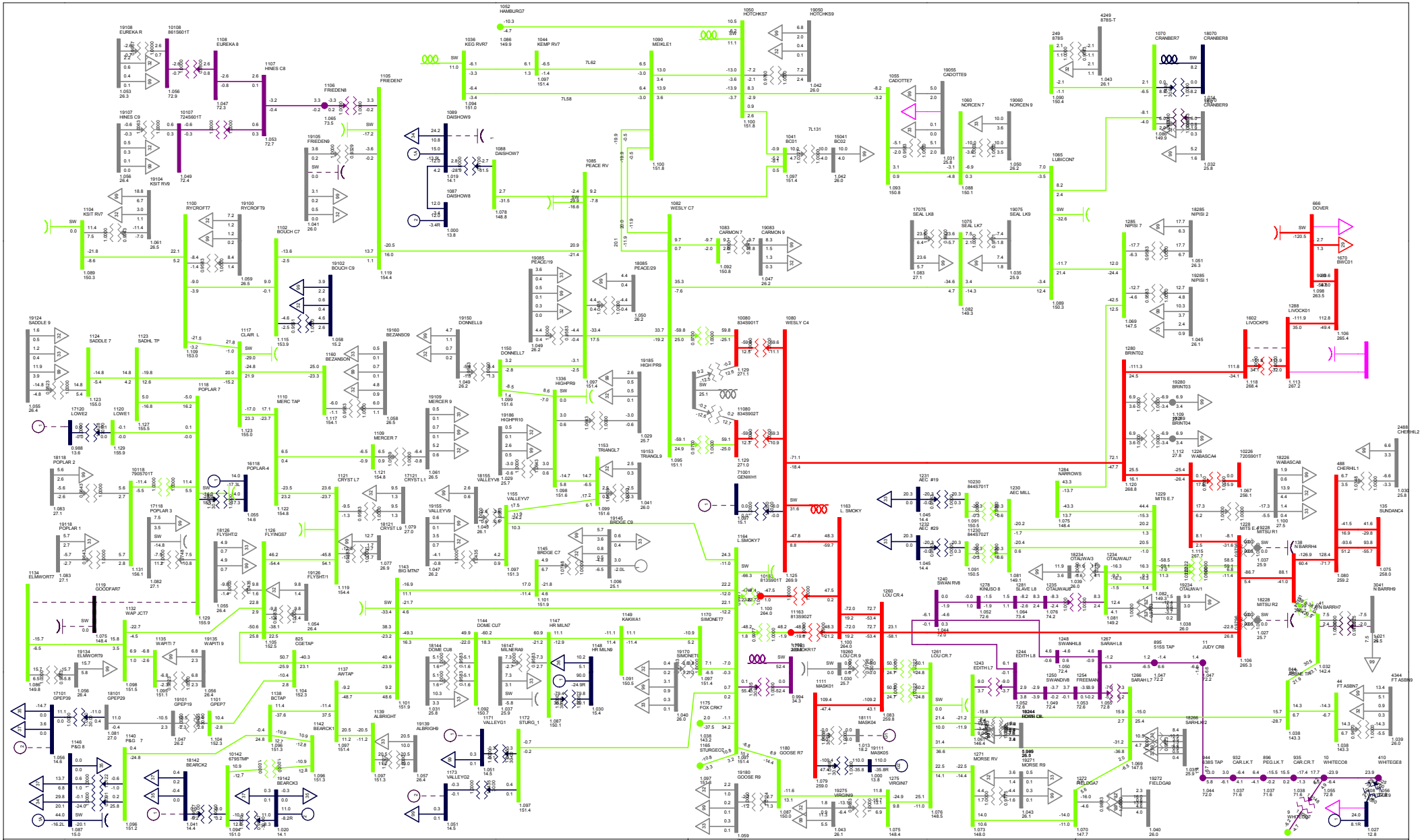


Appendix C2B Figure: 75

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_B.

Whitetail Project 1290 Interconnection Study



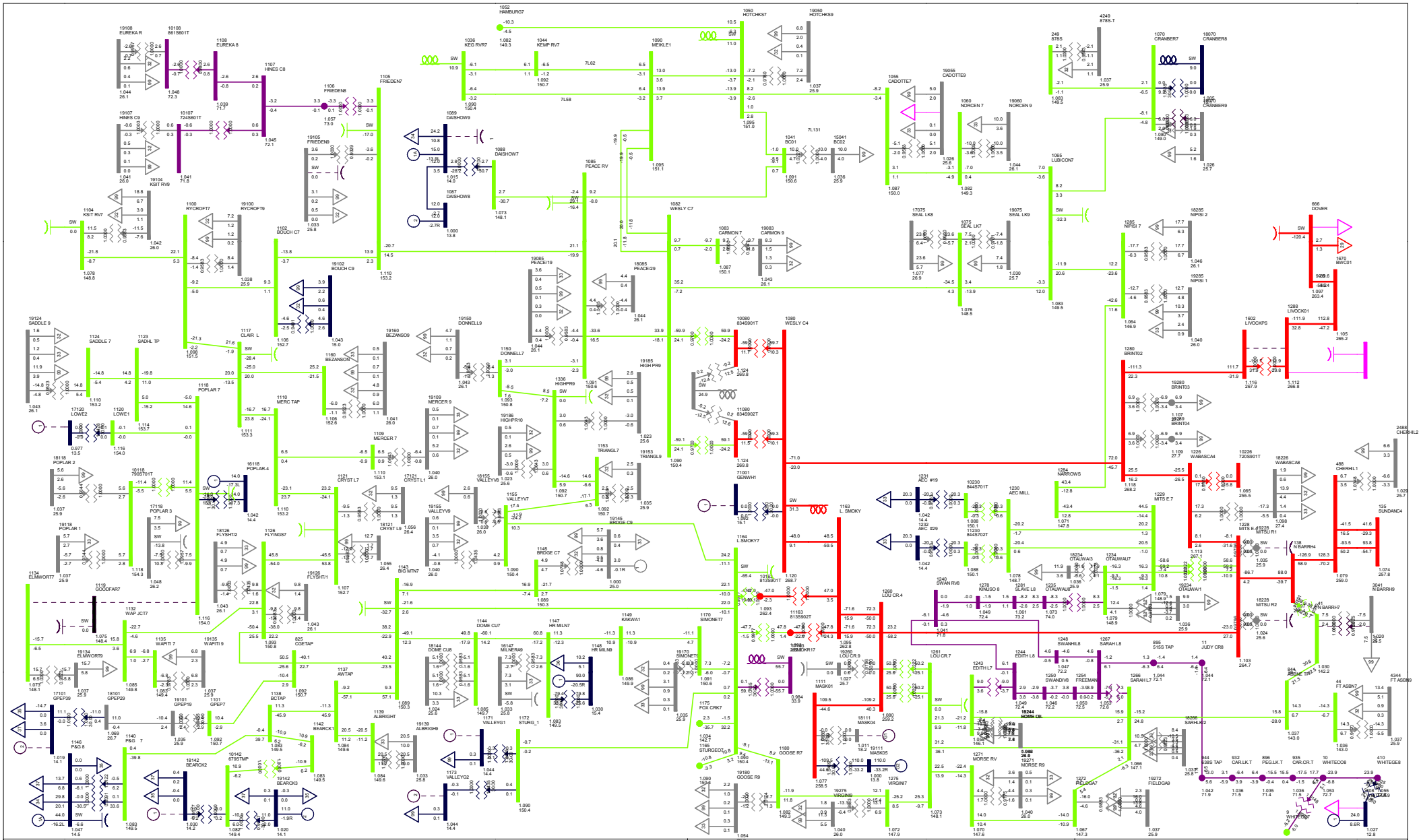
Appendix C2B

Figure: 76

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 037 7L07 POPLARHILL to ELMWORTH_A.

Whitetail Project 1290 Interconnection Study



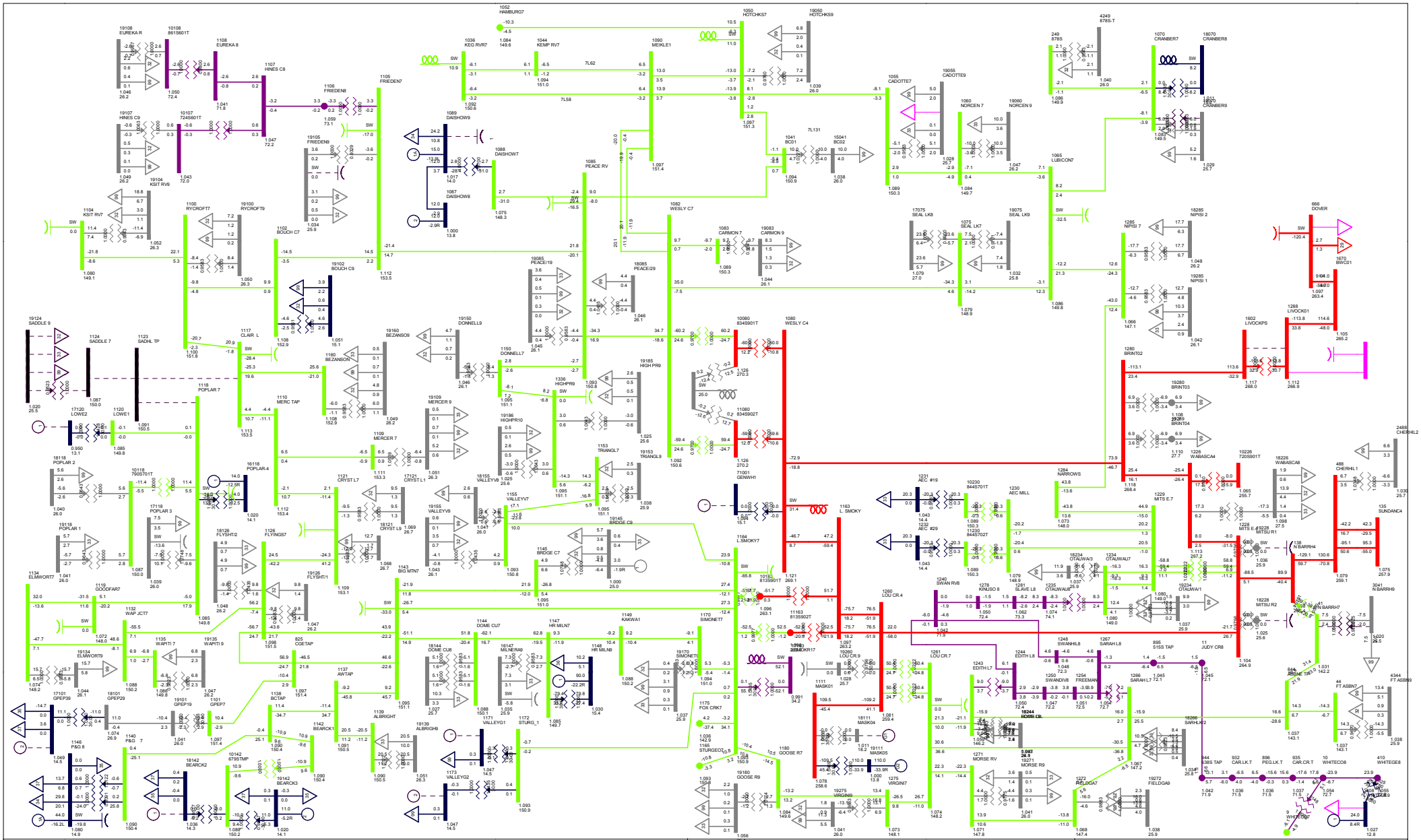
Appendix C2B

Figure: 77

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 037 7L07 POPLARHILL to ELMWORTH_B.

Whitetail Project 1290 Interconnection Study

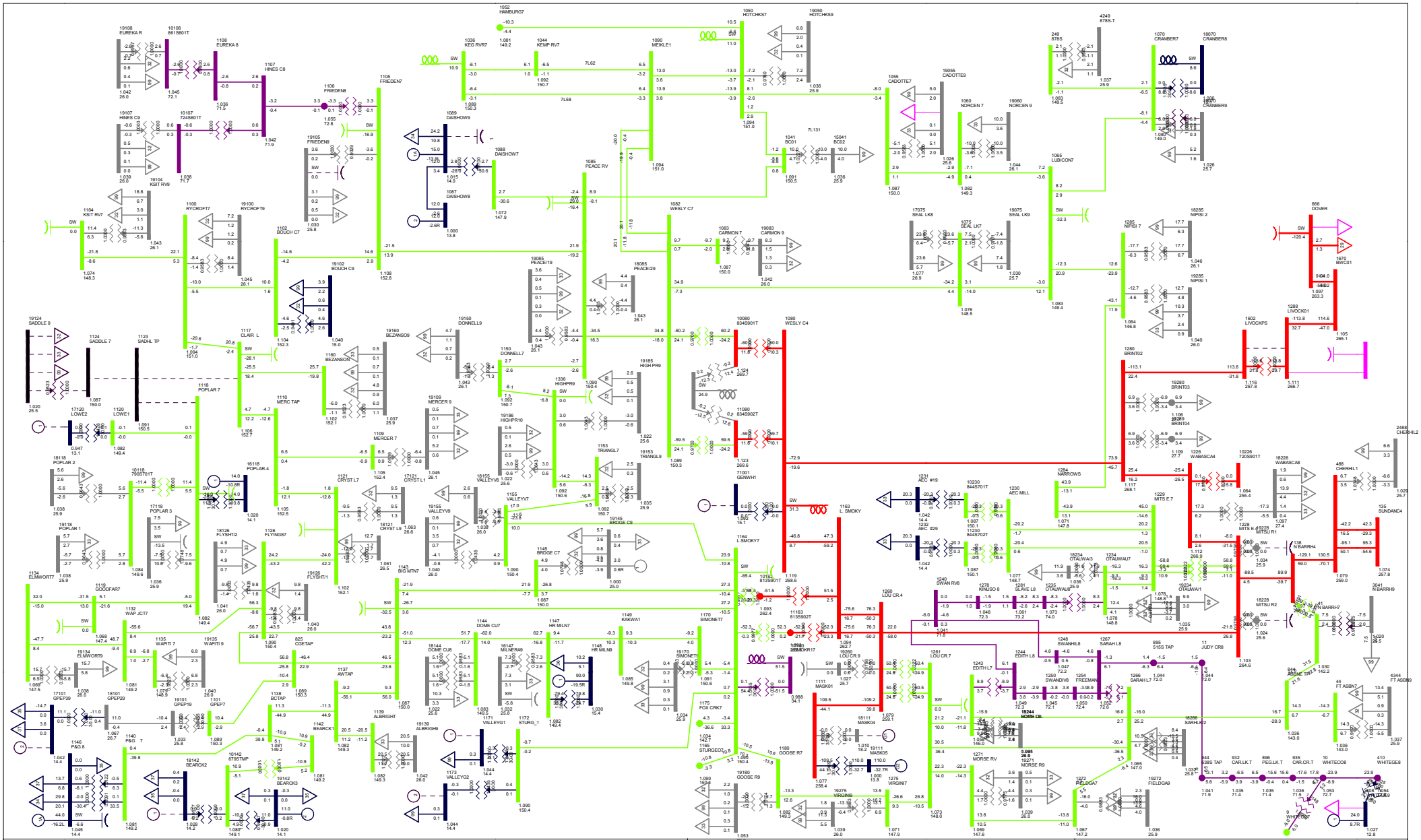


Appendix C2B Figure: 78

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_A.

Whitetail Project 1290 Interconnection Study



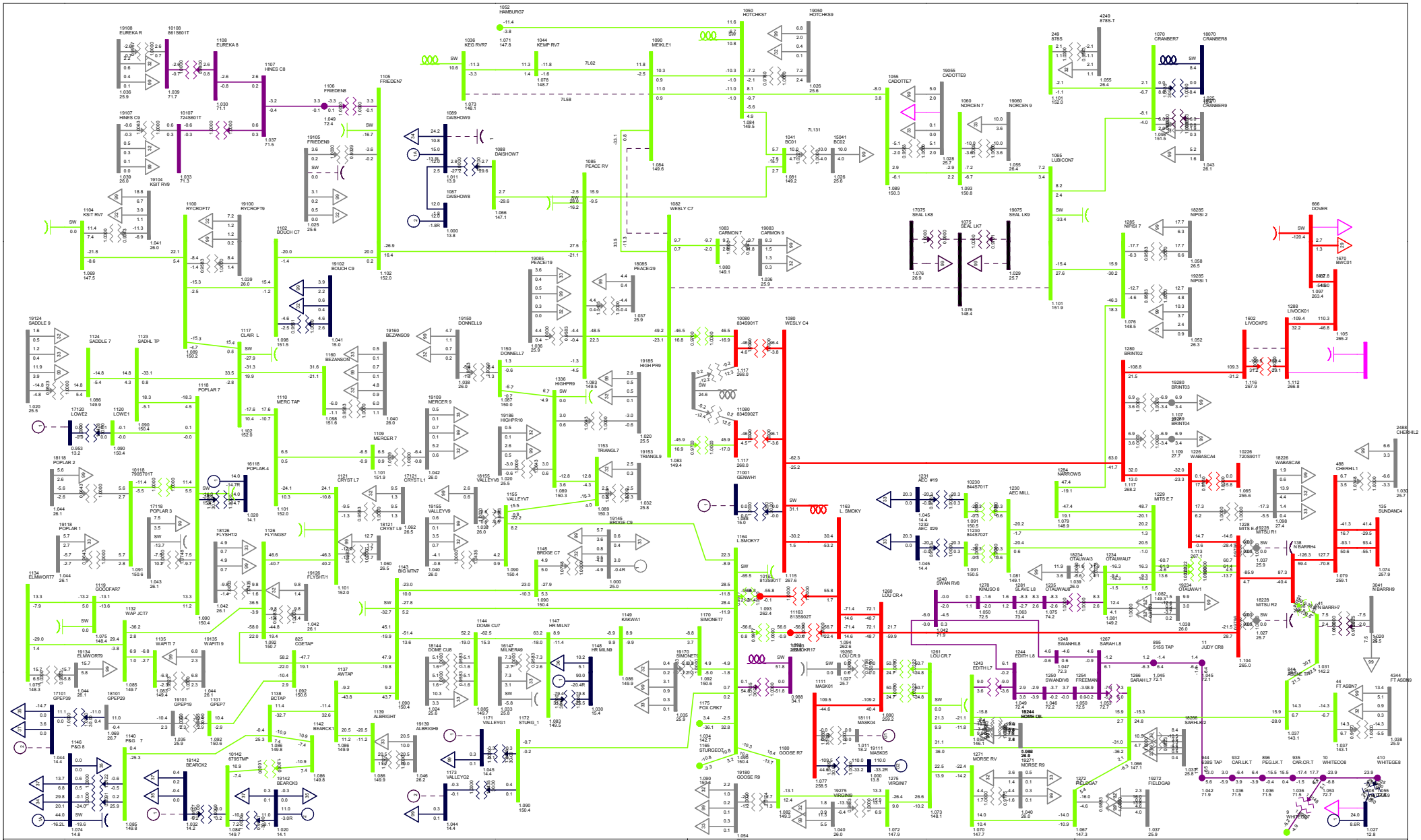
Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2B

Figure: 79



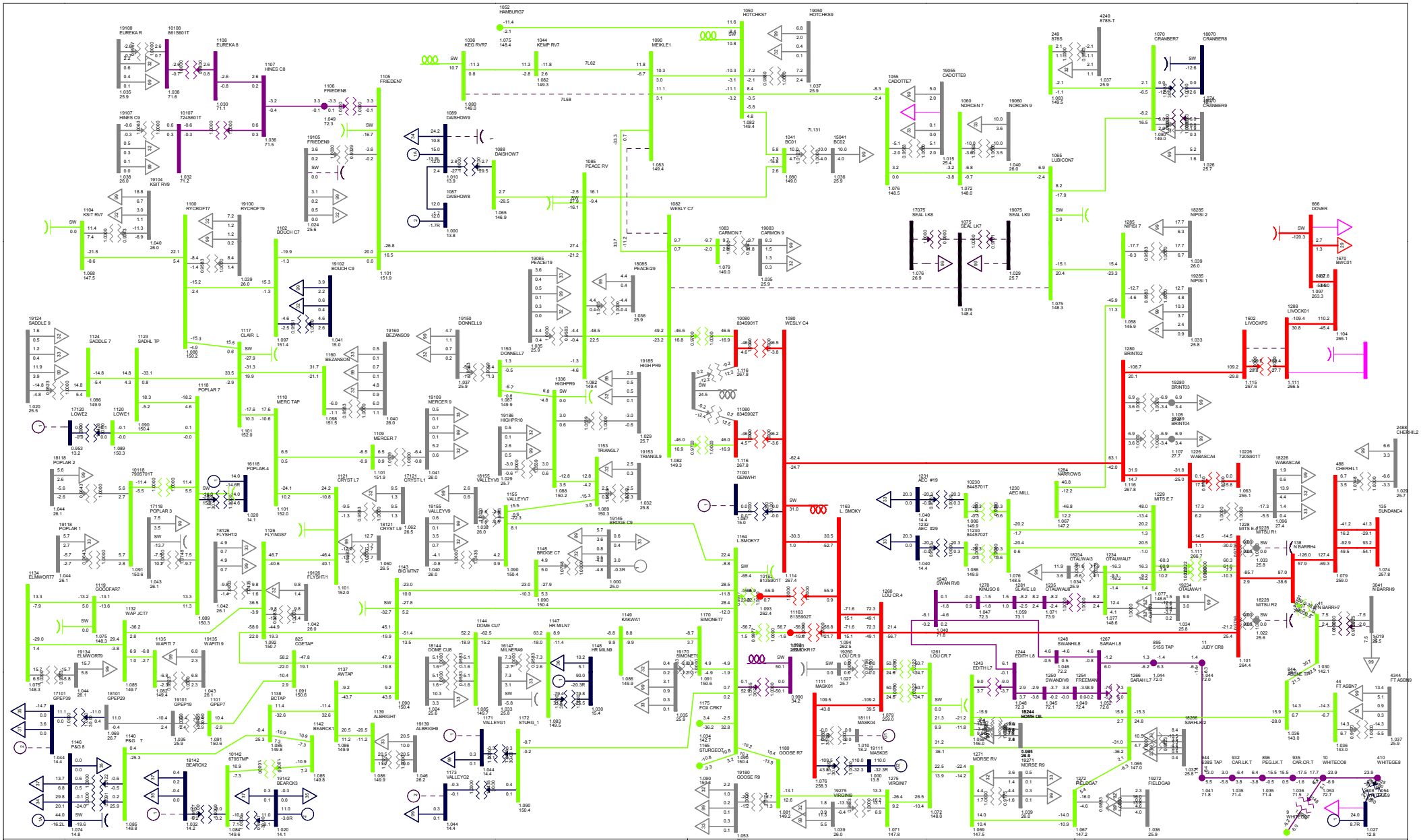
Appendix C2B

Figure: 80

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 040 C Cont 7L106 7L131 (TAP)_A.

Whitetail Project 1290 Interconnection Study



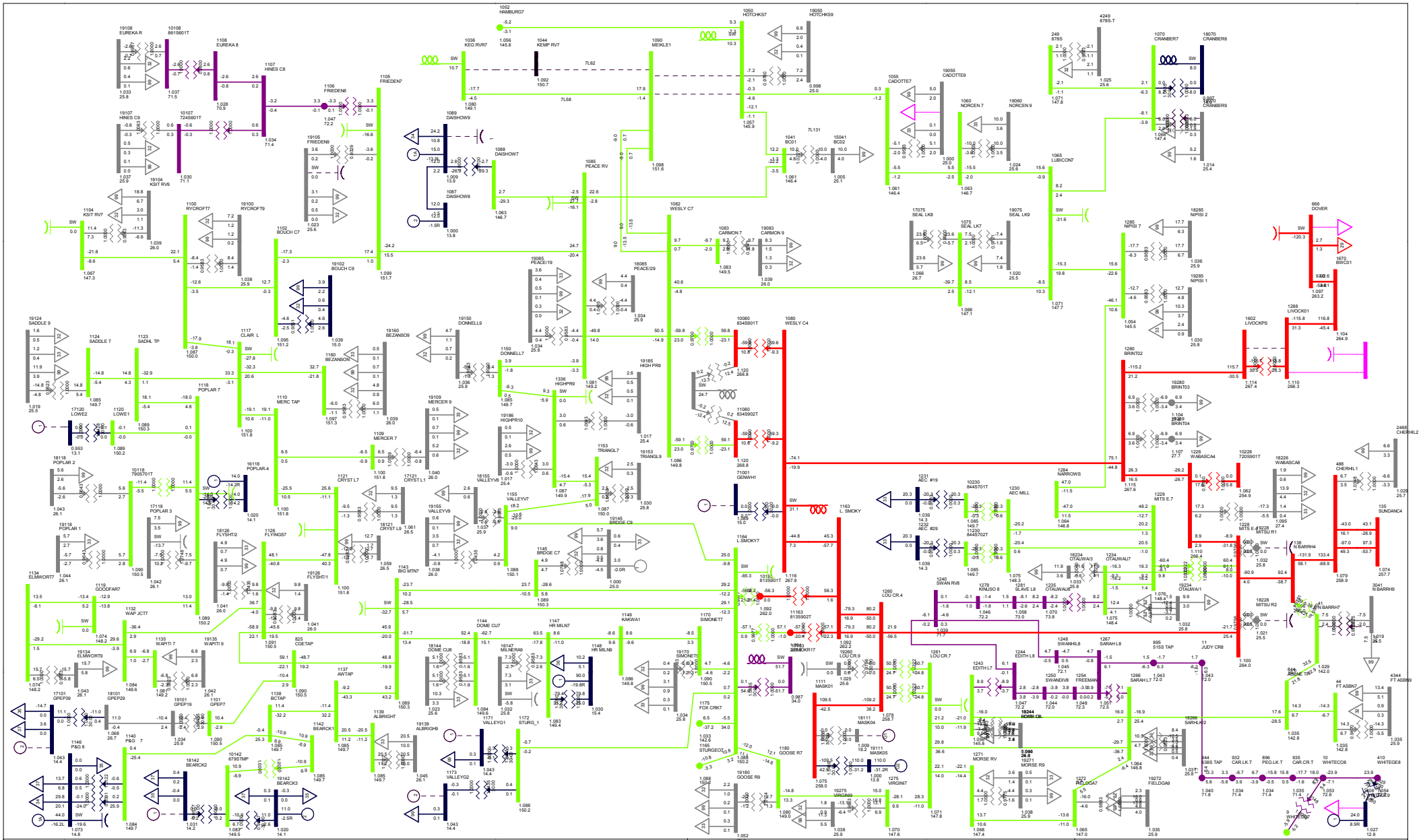
Appendix C2B

Figure: 81

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 040 C Cont 7L106 7L131 (TAP)_B.

Whitetail Project 1290 Interconnection Study



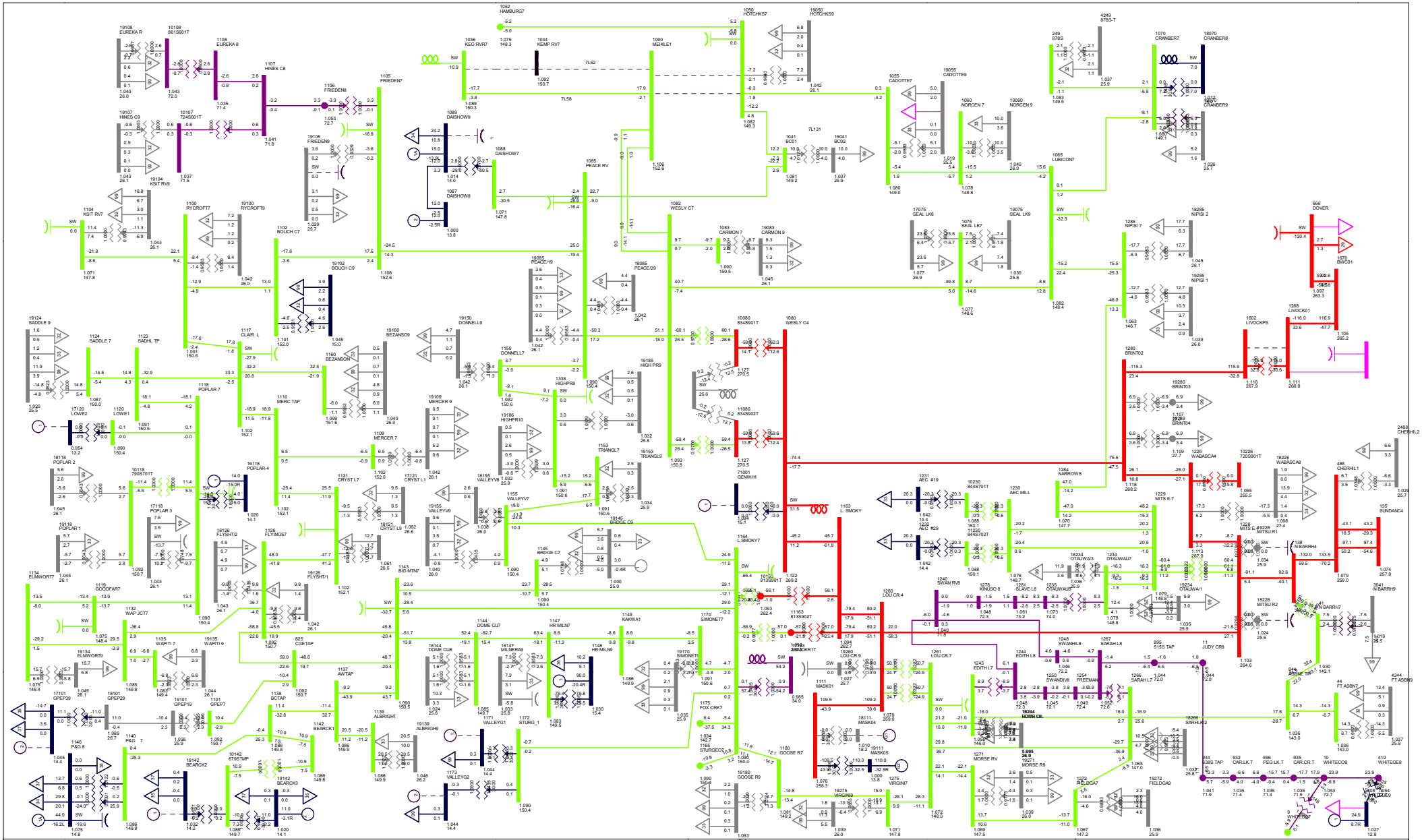
Appendix C2B

Figure: 82

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 041 C Cont 7L120 7L138 (TAP)_A.

Whitetail Project 1290 Interconnection Study



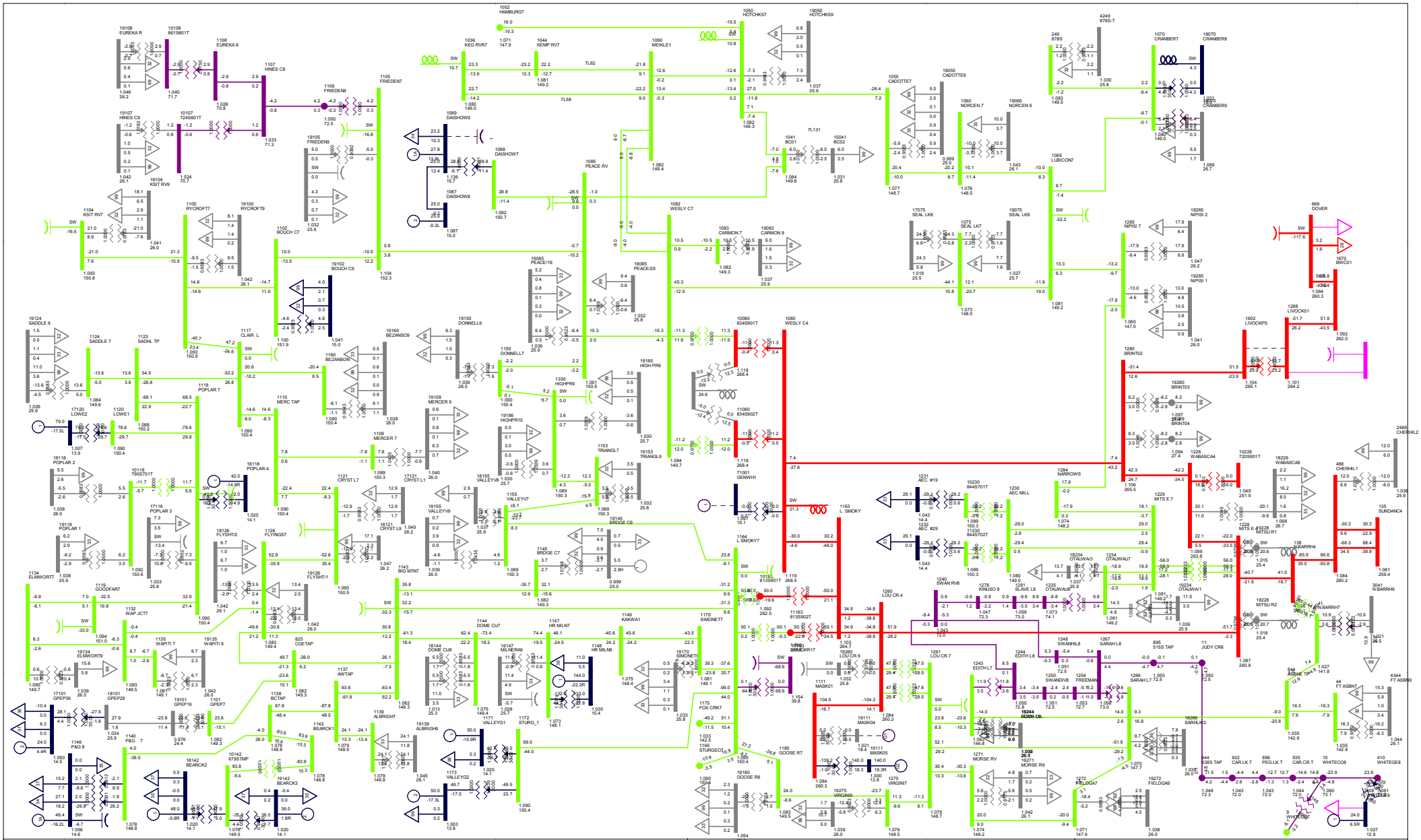
Appendix C2B

Figure: 83

Study Case Description

CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 041 C Cont 7L120 7L138 (TAP)_B.

Whitetail Project 1290 Interconnection Study



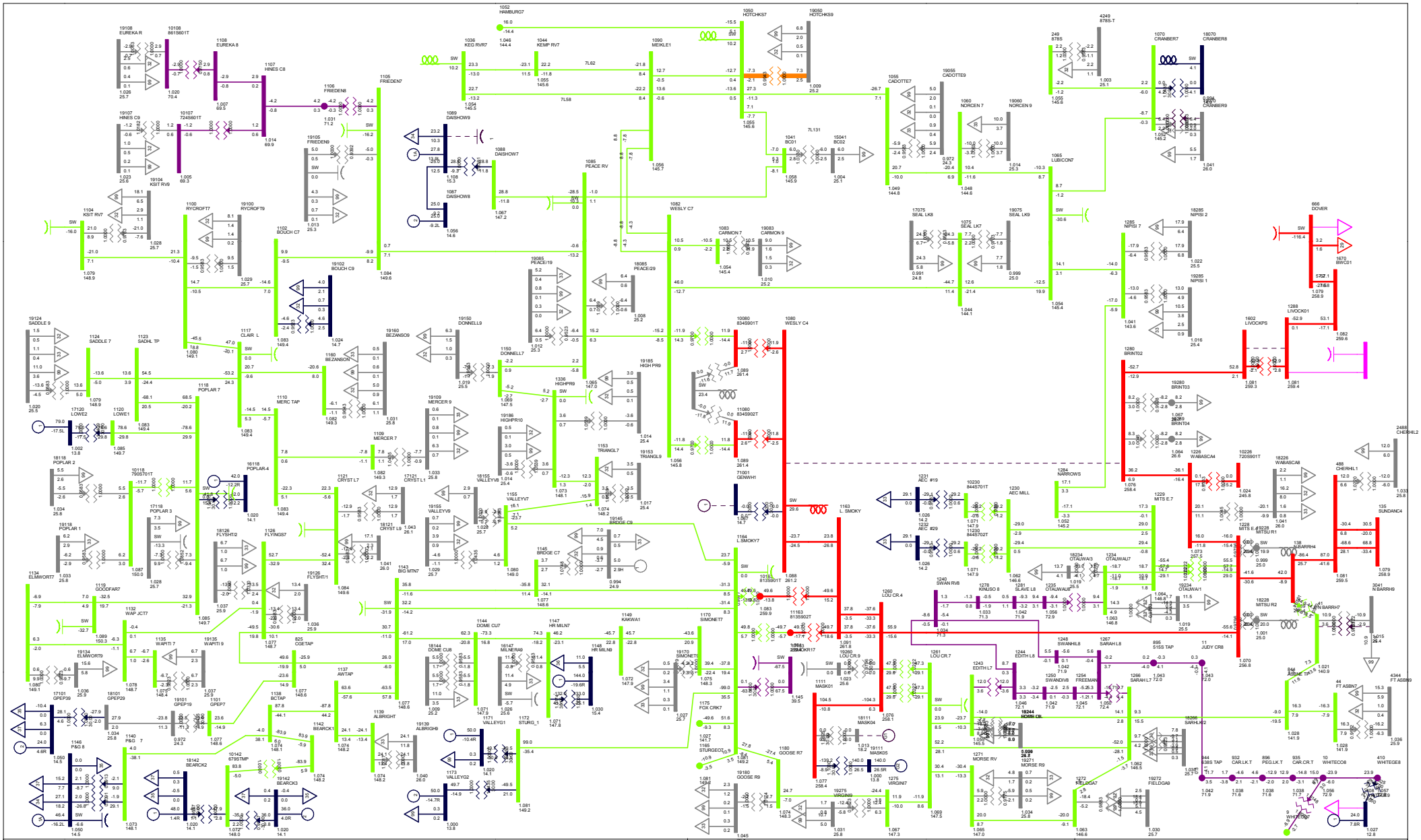
Study Case Description

CASE 03 2014 SP Mgen -
SCEN 01 Base Case -
CONT PreContingency.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 1



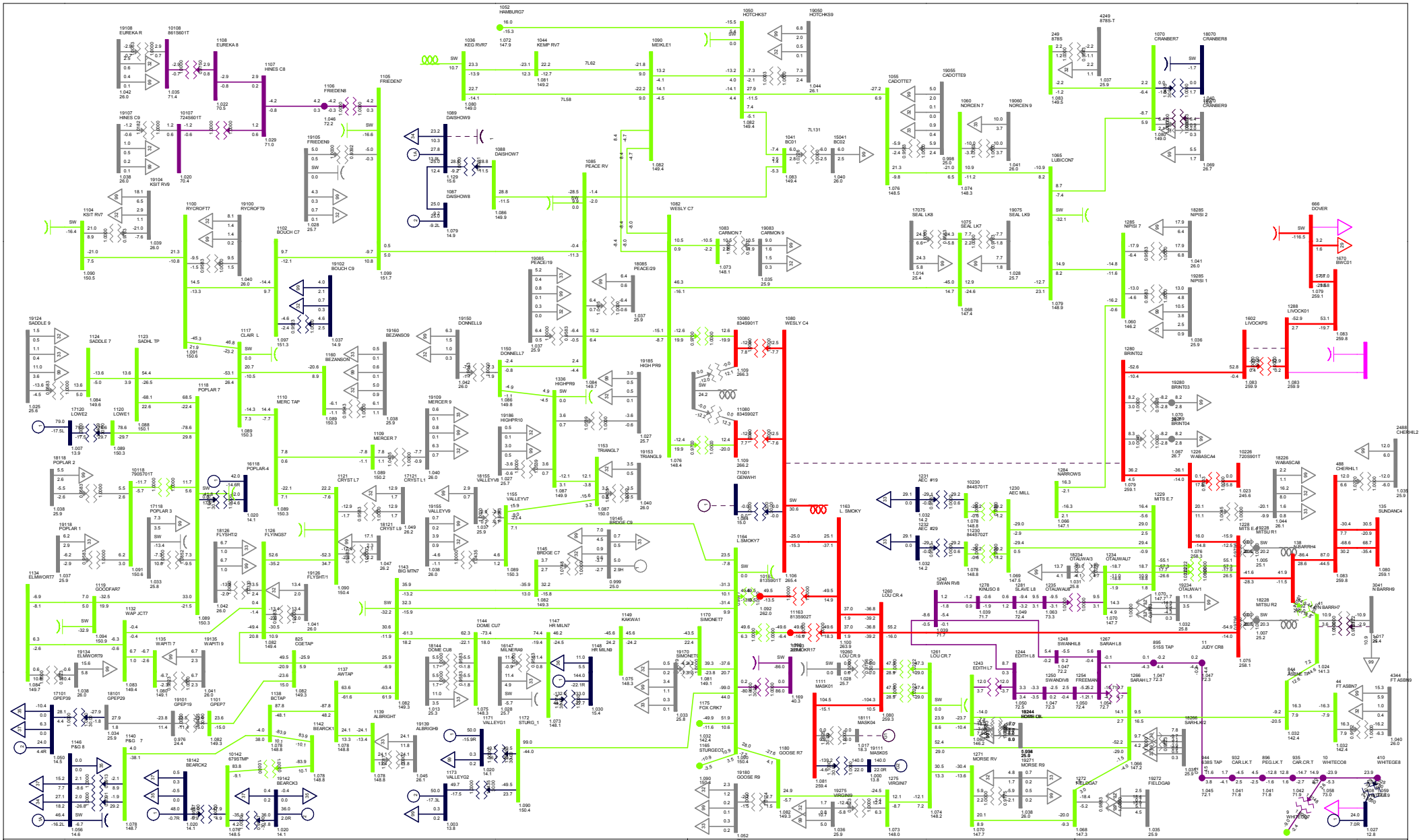
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 001 9L15 WESLEYCREEK to Brintnell_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 4



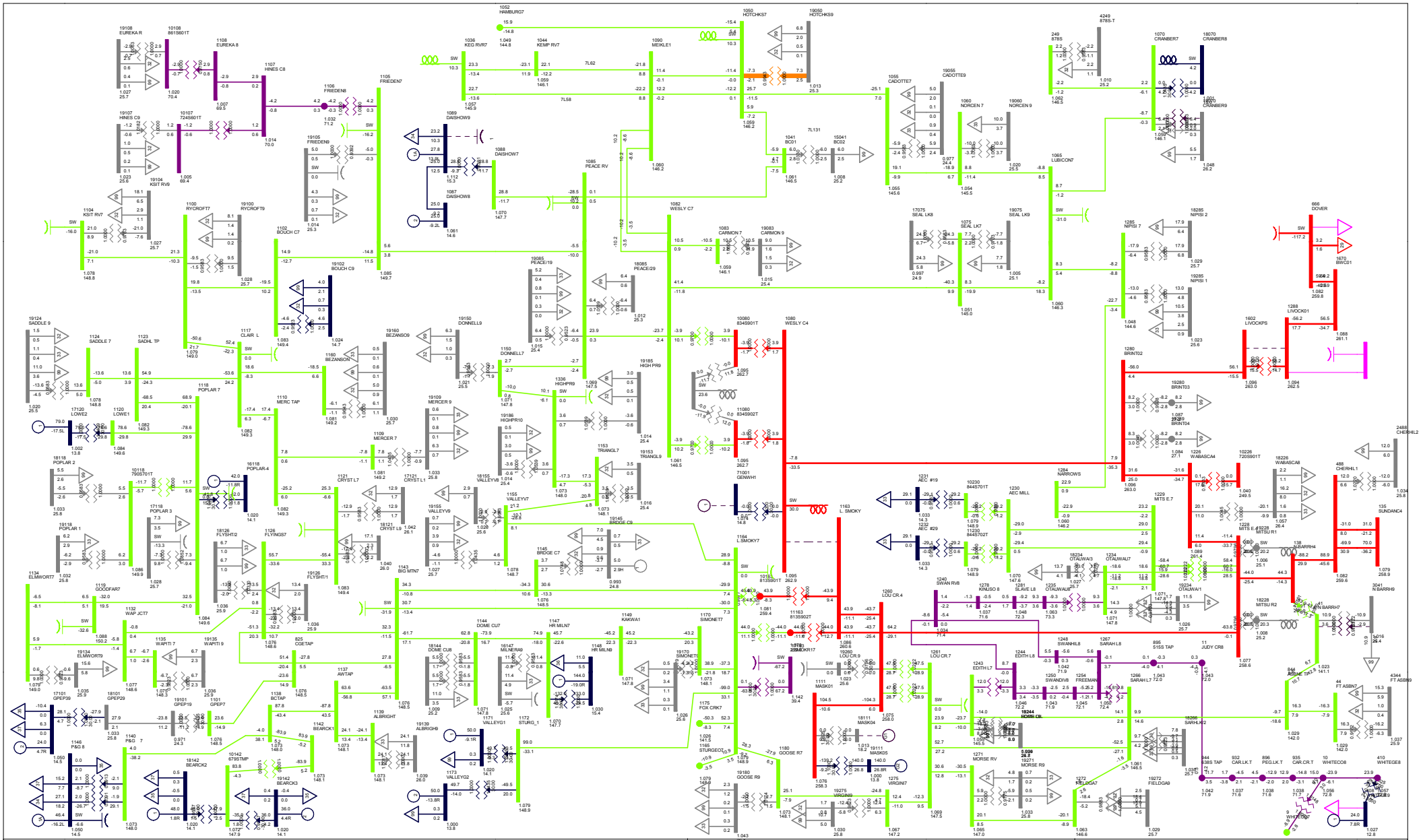
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 001 9L15 WESLEYCREEK to Brintnell_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 5



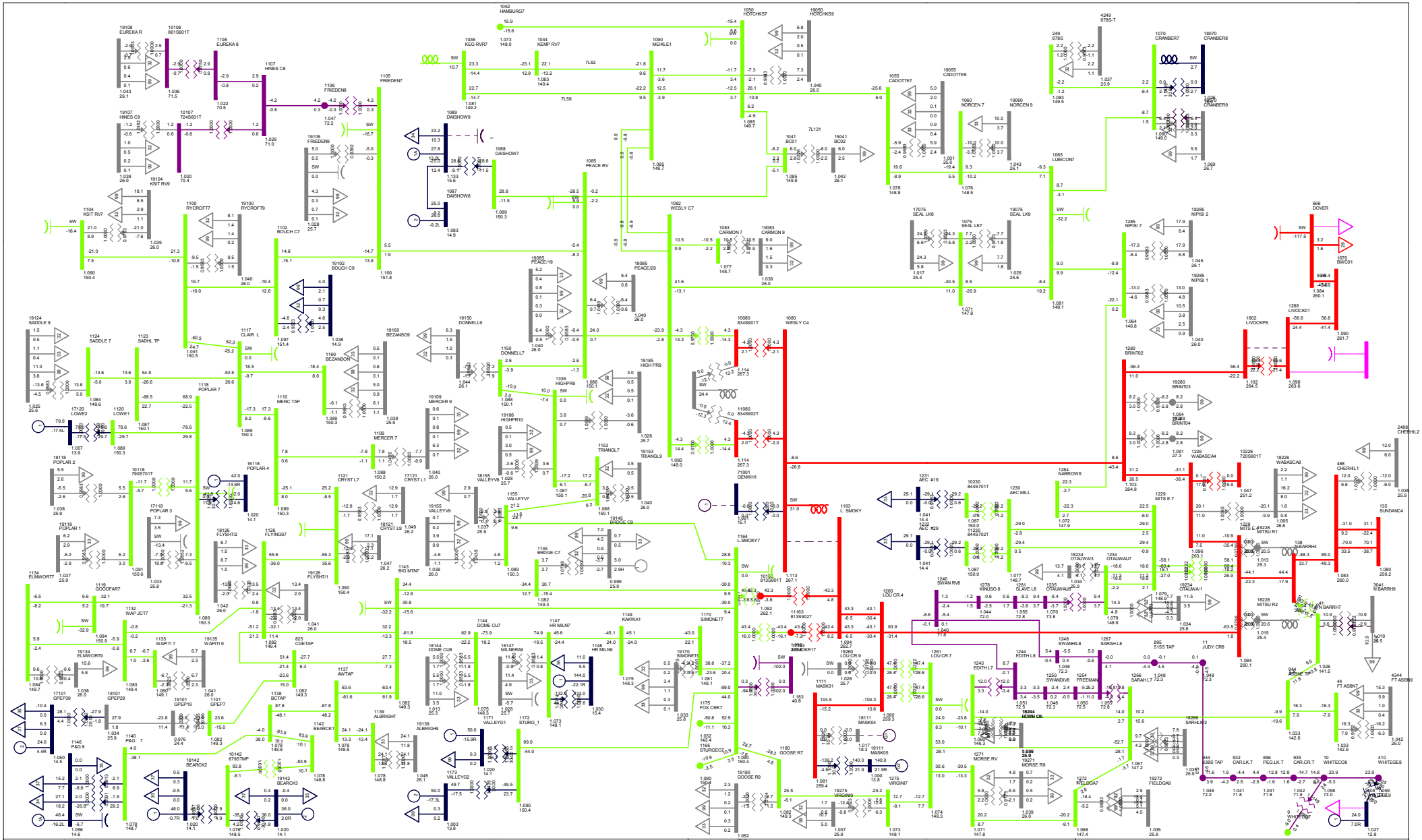
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 6

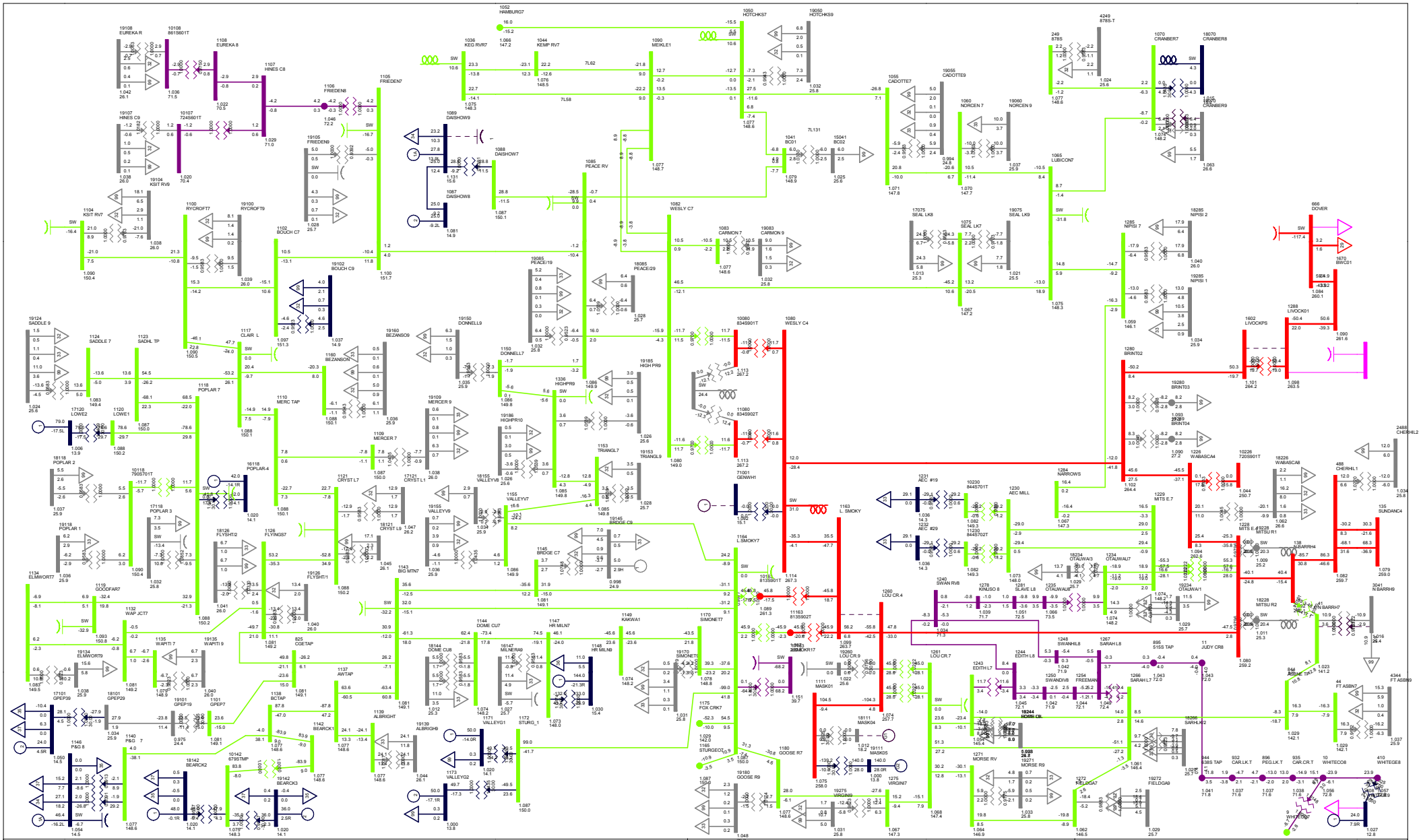


Appendix C2c Figure: 7

Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_B.

Whitetail Project 1290 Interconnection Study



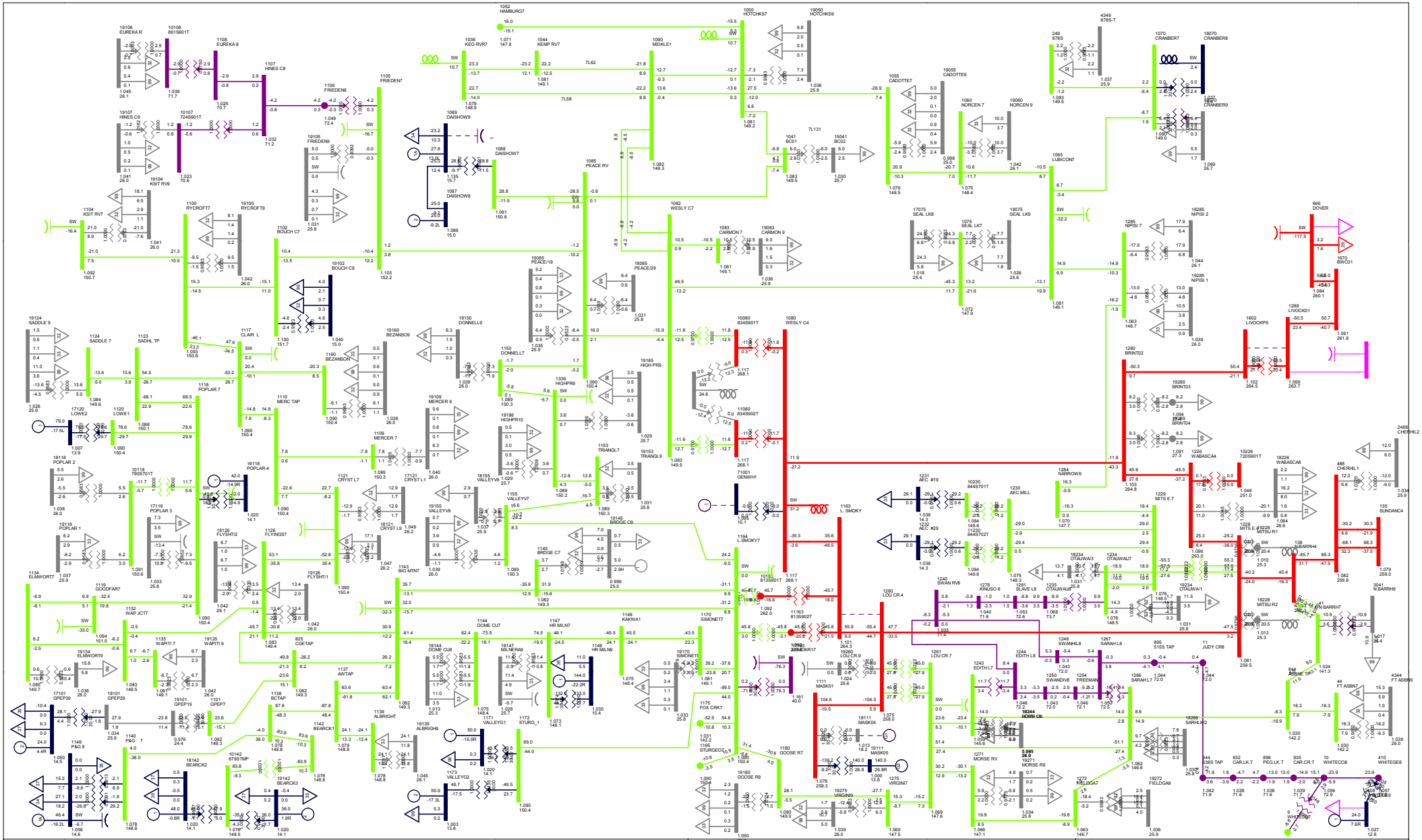
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 8



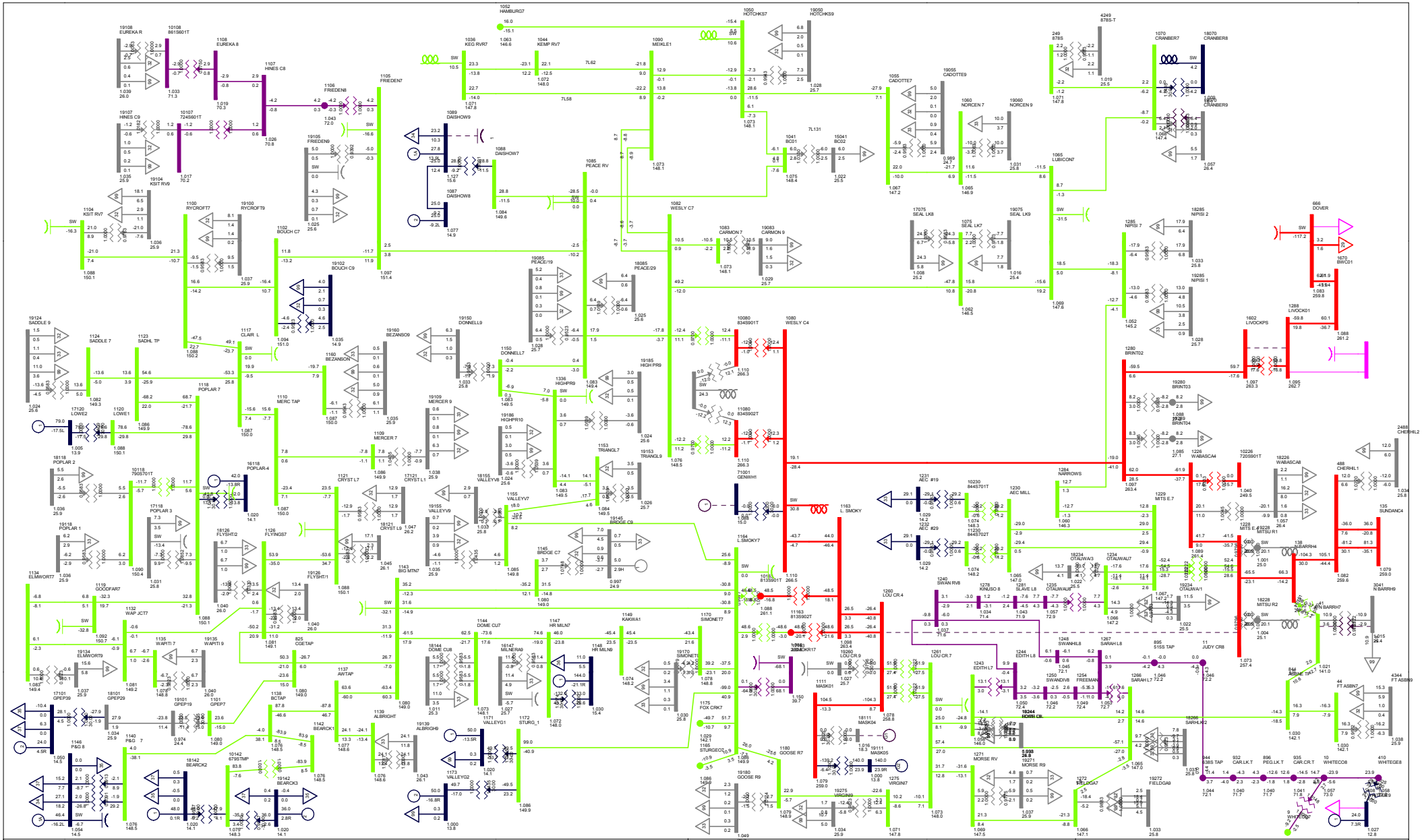
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 9



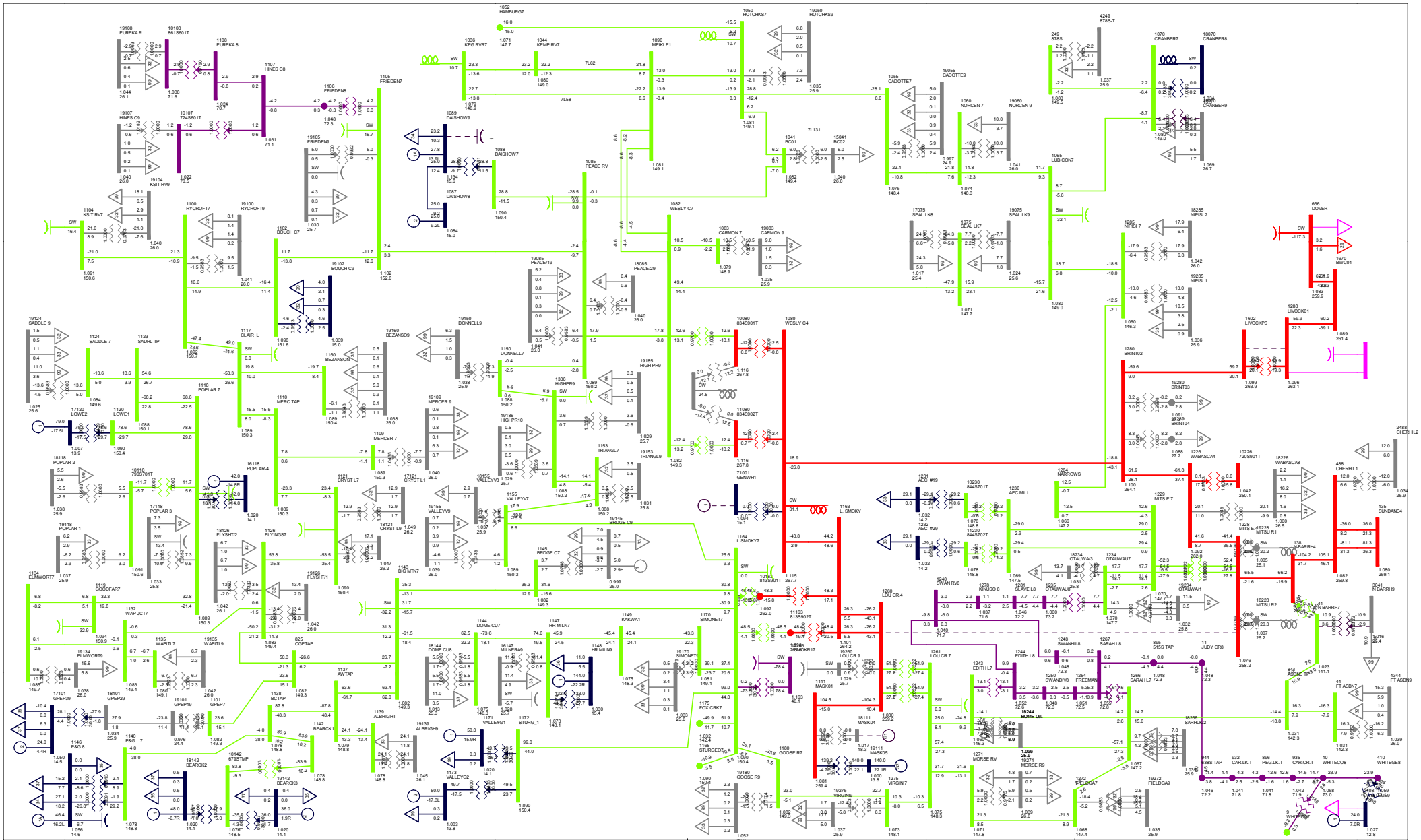
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 004 9L40 MITSUE to LOUISECREEK_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 10



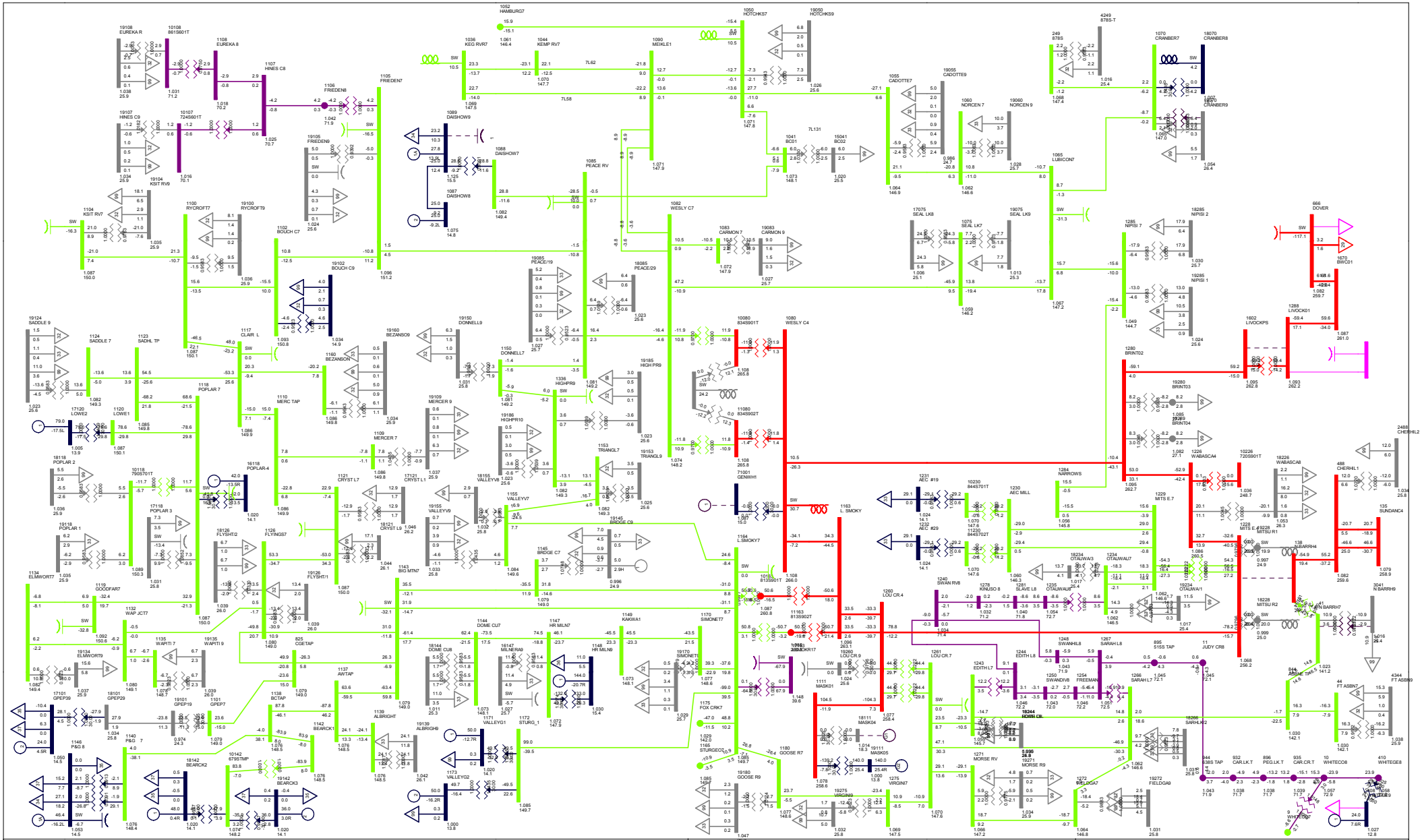
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 004 9L40 MITSUE to LOUISECREEK_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 11



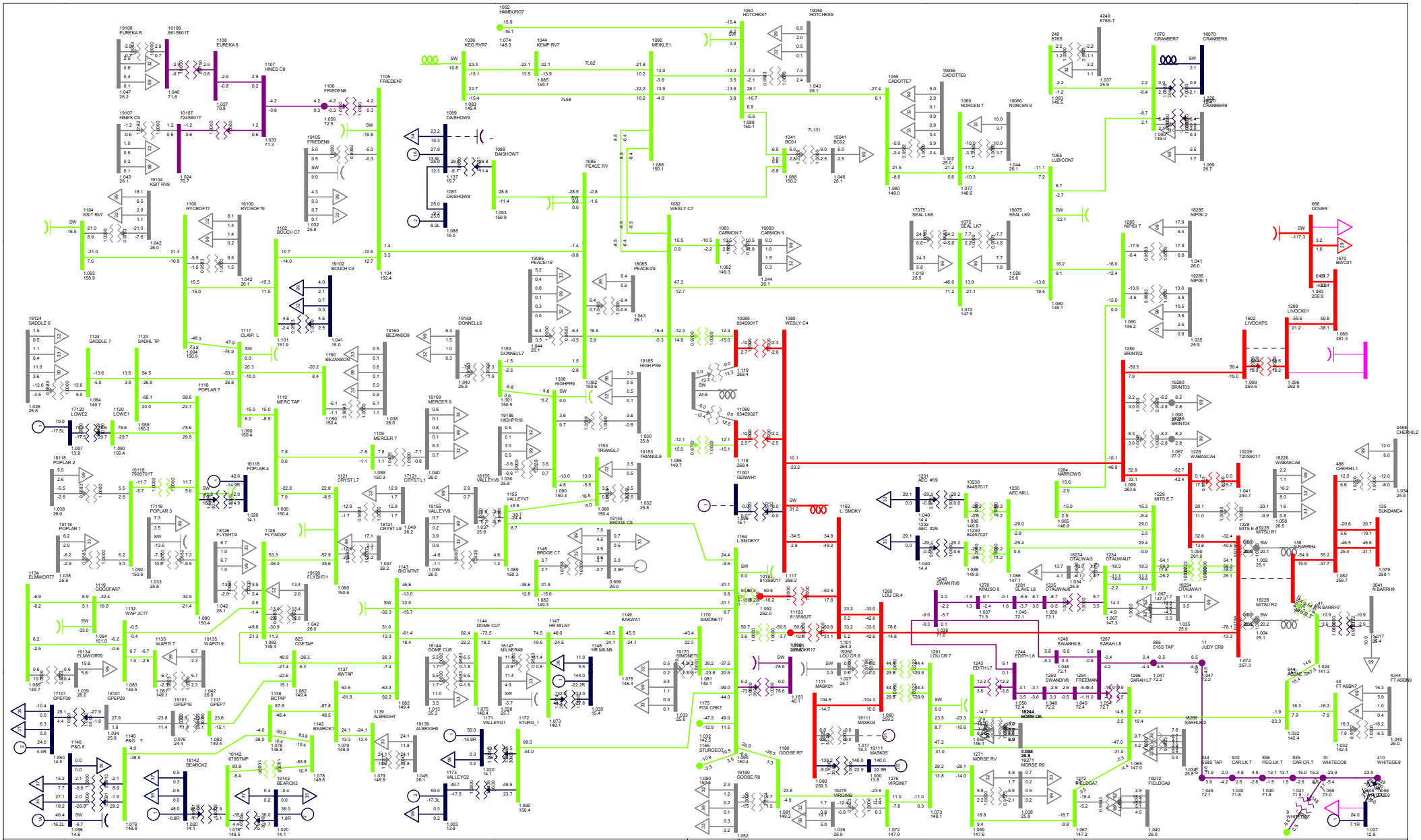
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 005 913L NORTHBARRHEAD to MITSUE_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 12



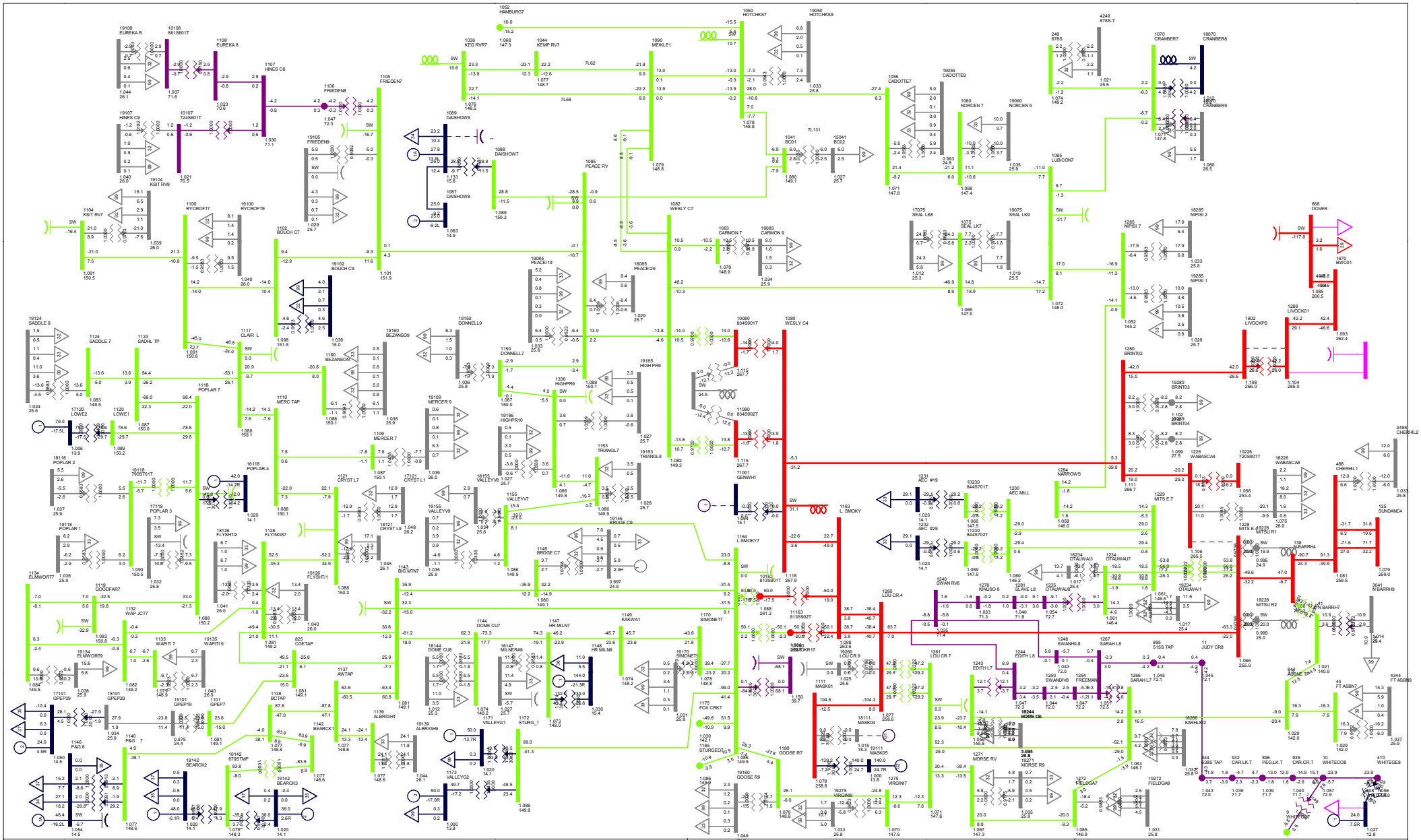
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 005 913L NORTHBARRHEAD to MITSUE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 13



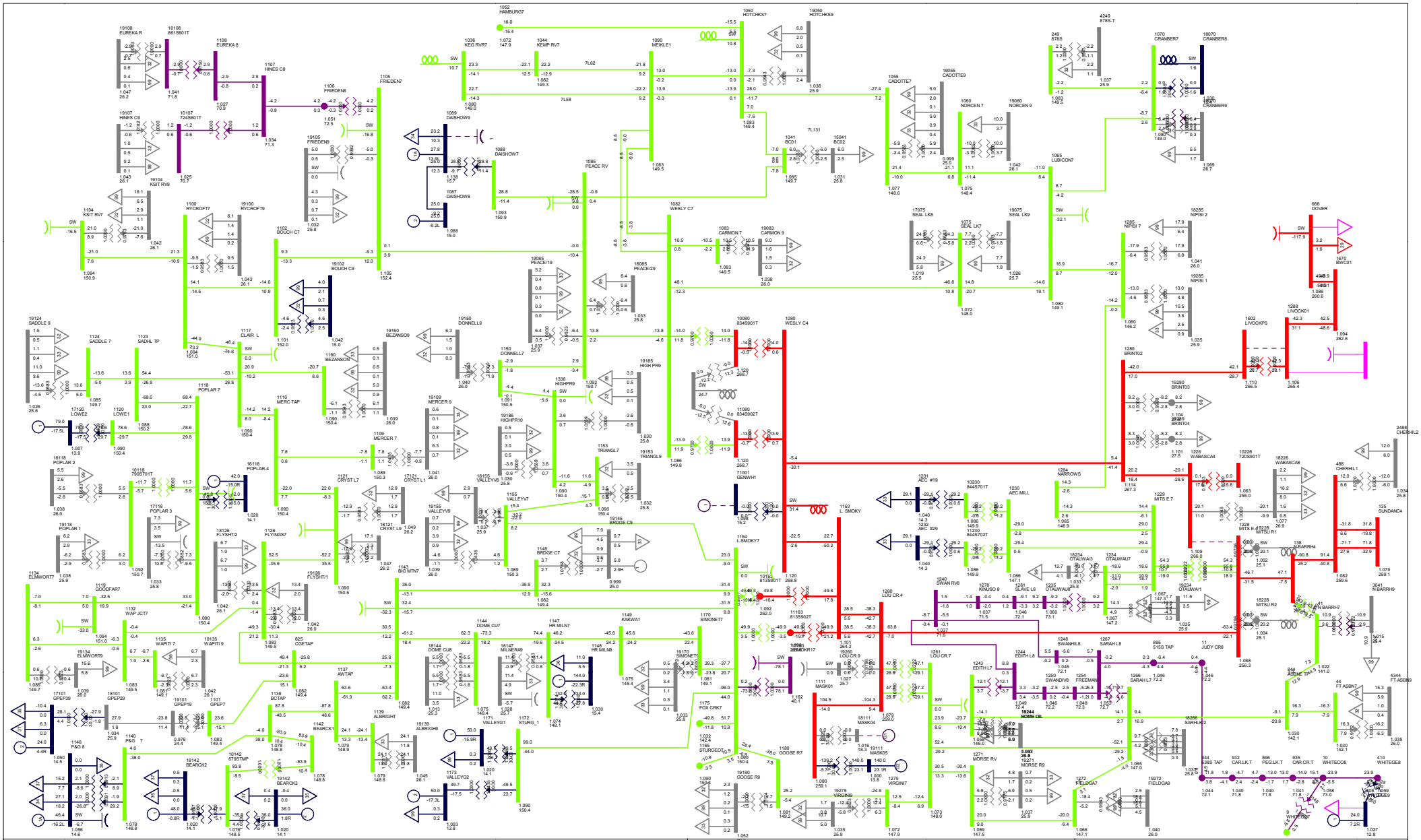
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 006 9L56 WABASCA to MITSUE_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 14



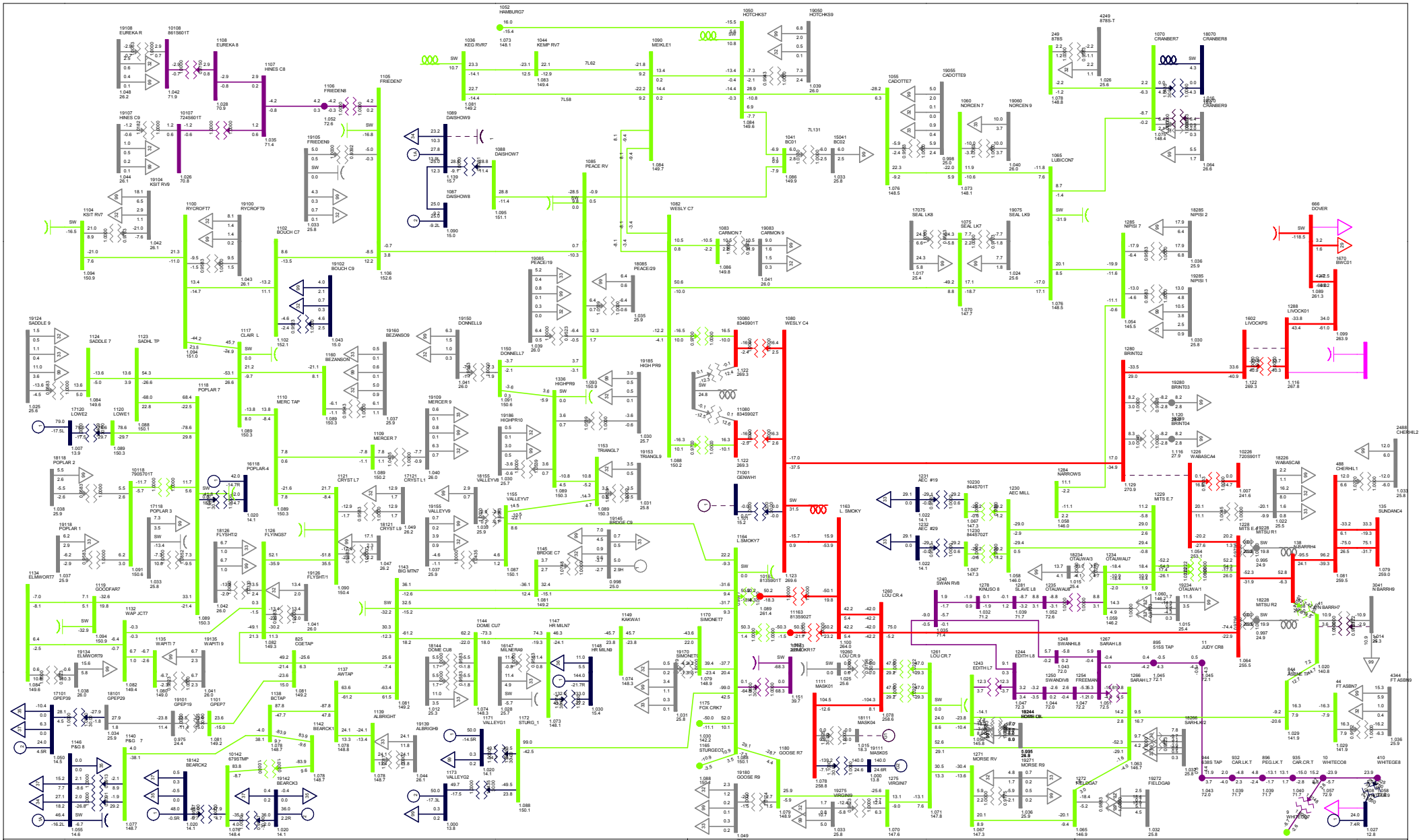
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 006 9L56 WABASCA to MITSUE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 15



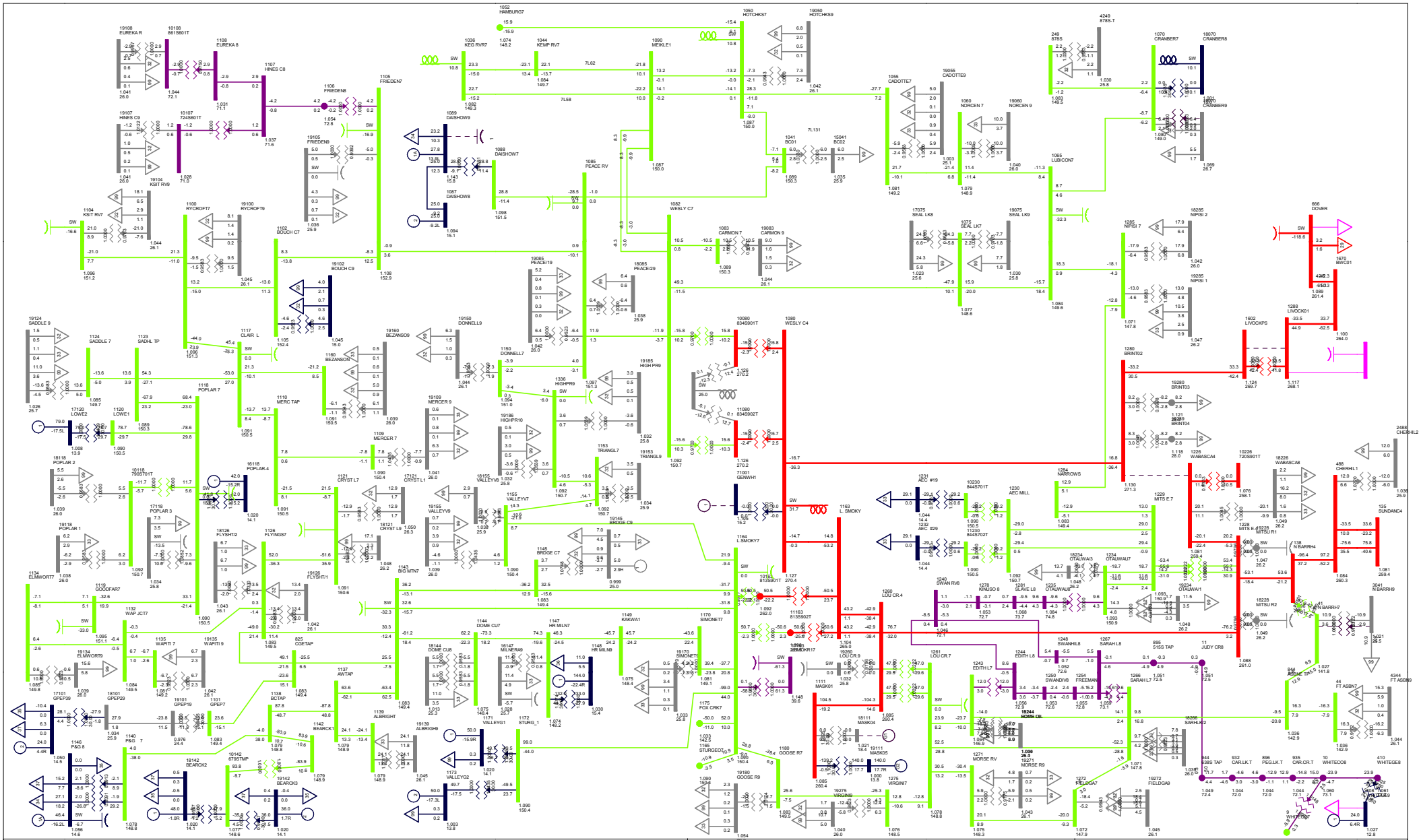
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 007 9L10 WABASCA to Brintnell_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 16



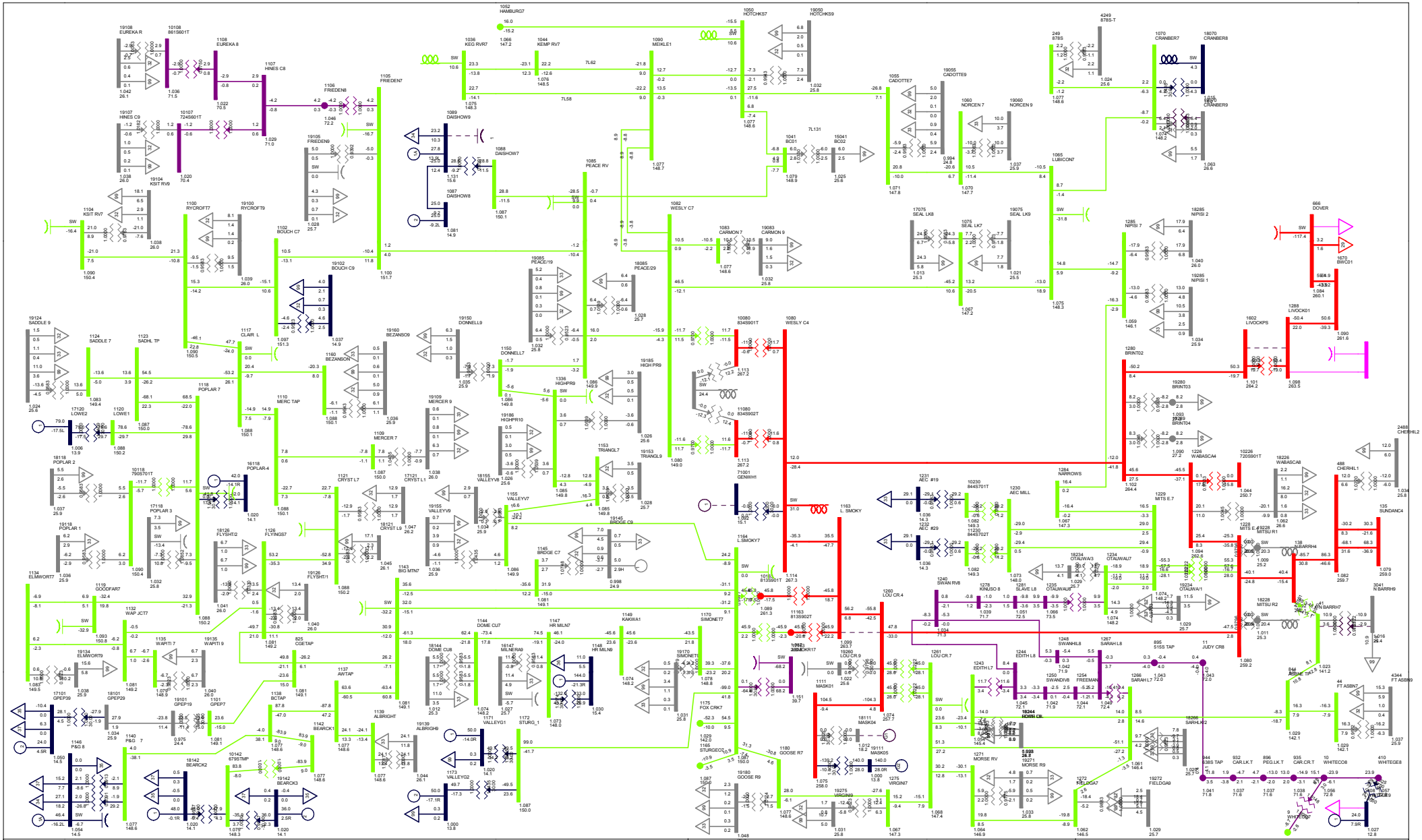
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 007 9L10 WABASCA to Brintnell_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 17



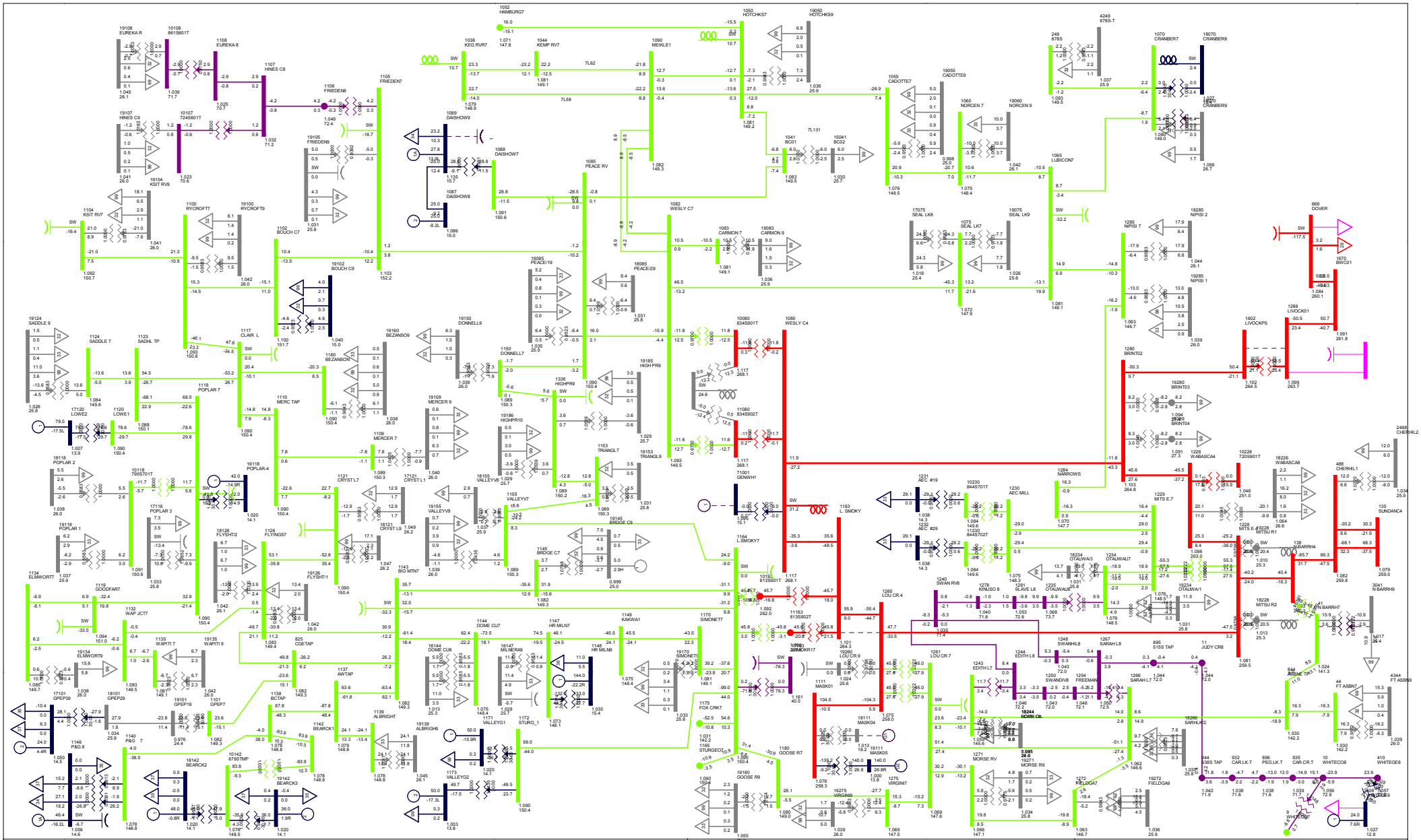
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 18



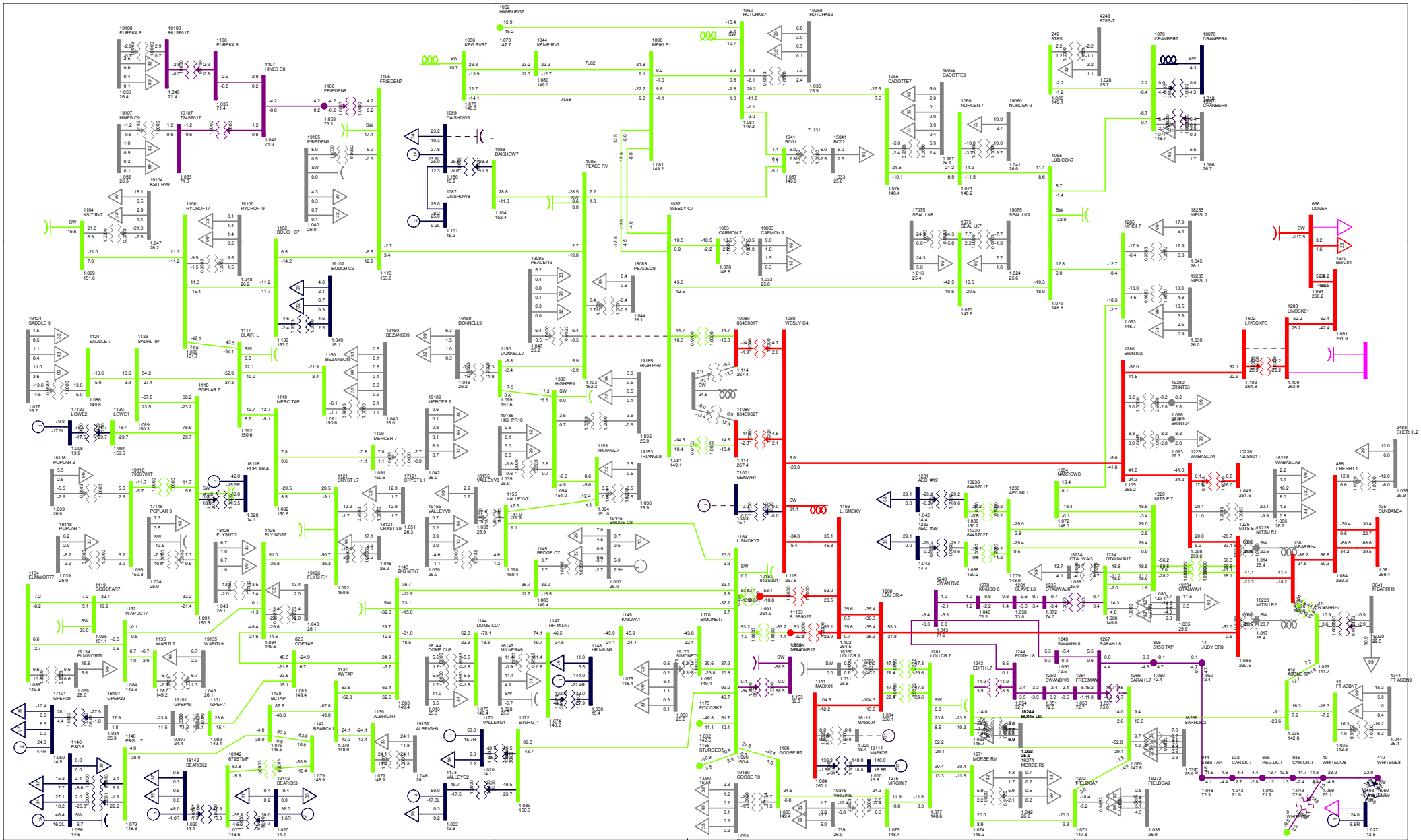
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 19



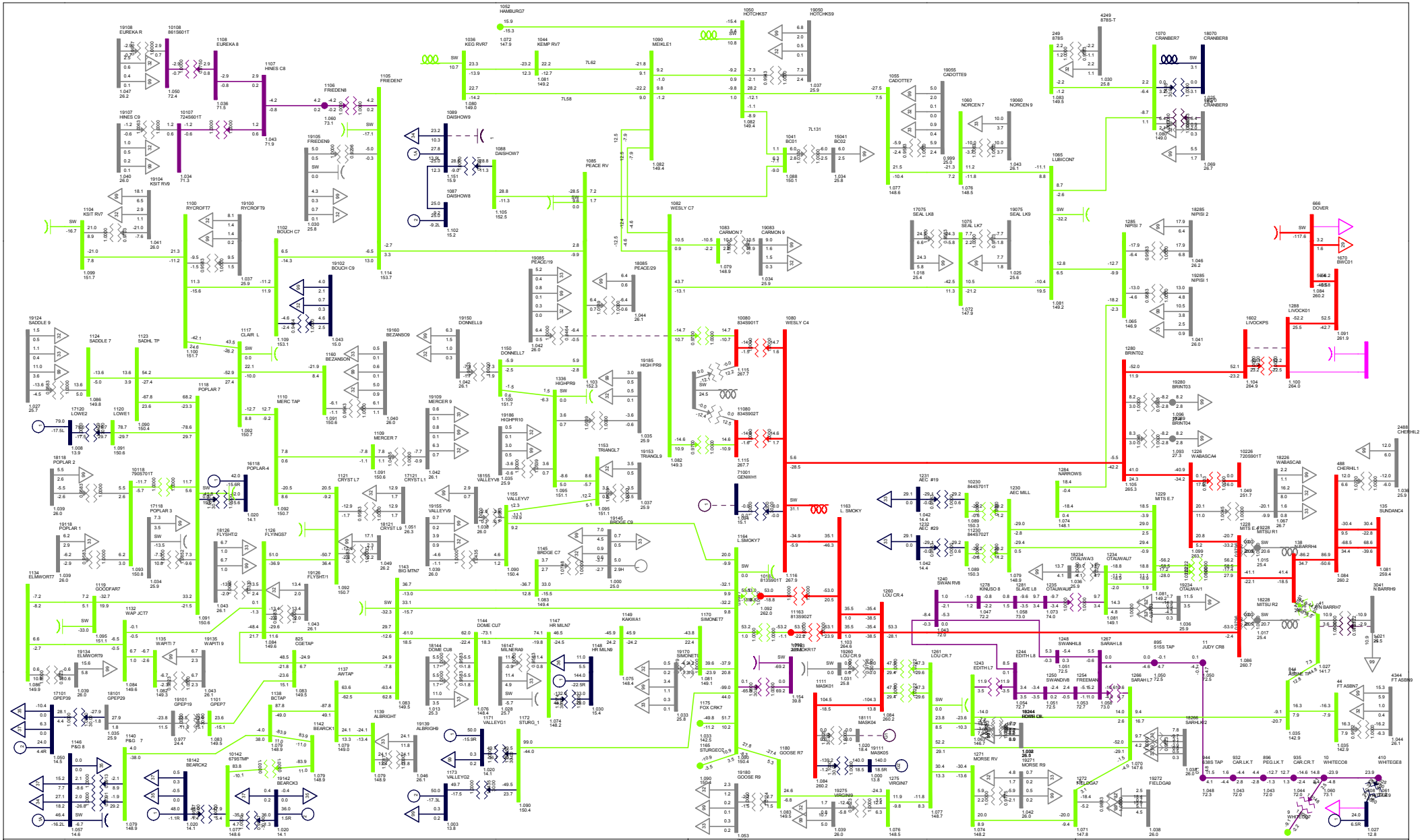
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 009 7L27 WESLEYCREEK to WESTPEACE_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 20



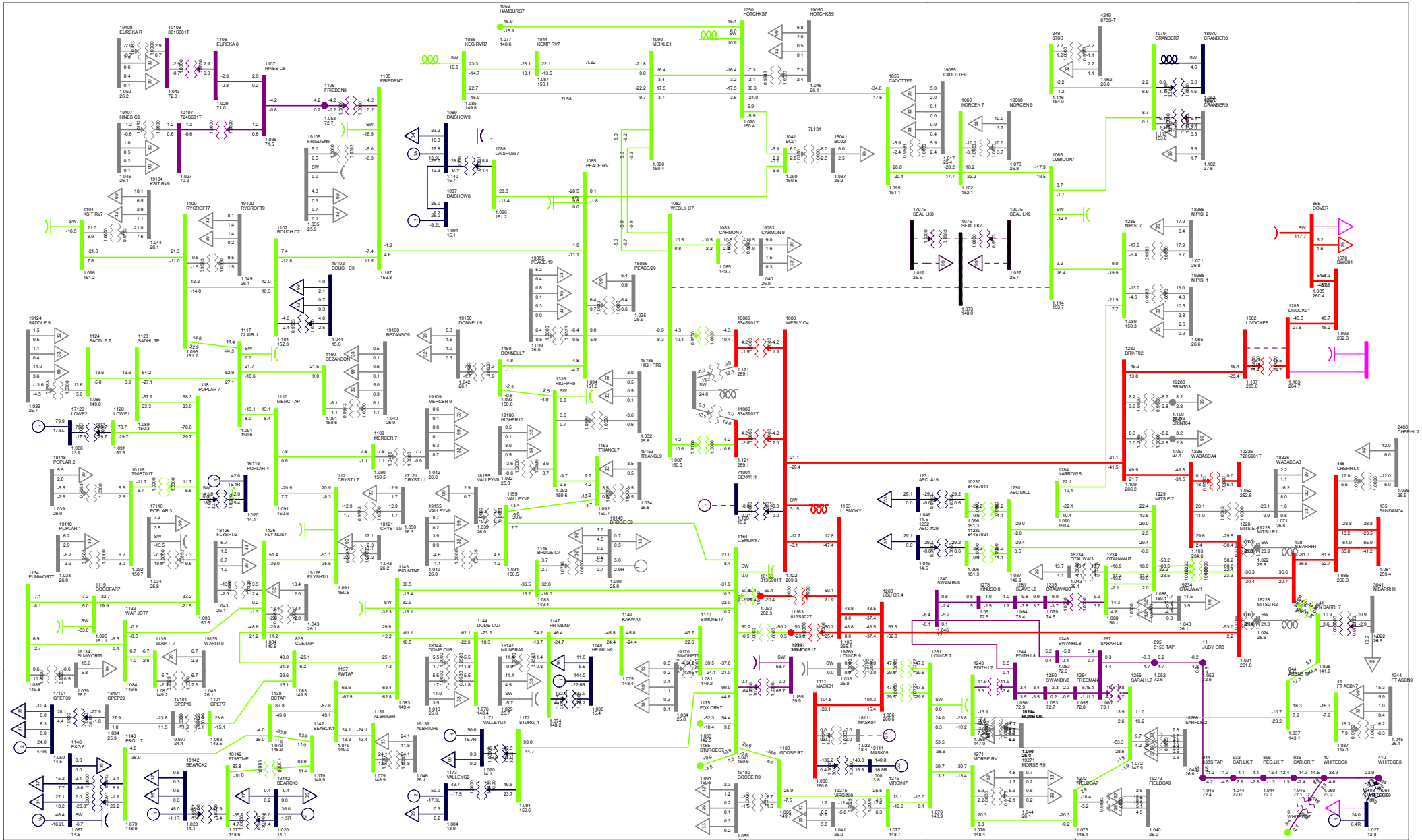
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 009 7L27 WESLEYCREEK to WESTPEACE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 21



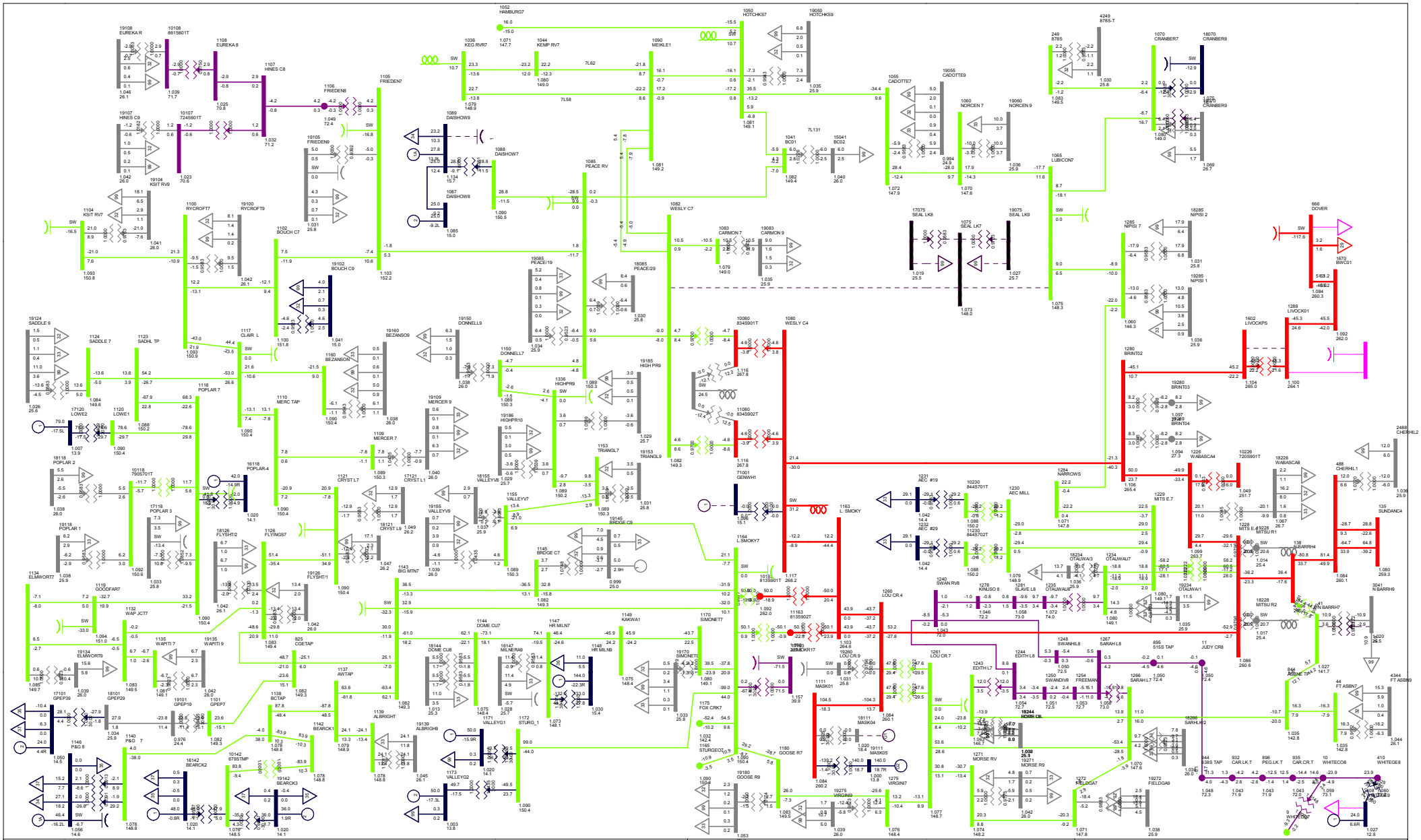
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 010 7L12 WESLEYCREEK to LUBICON_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 22



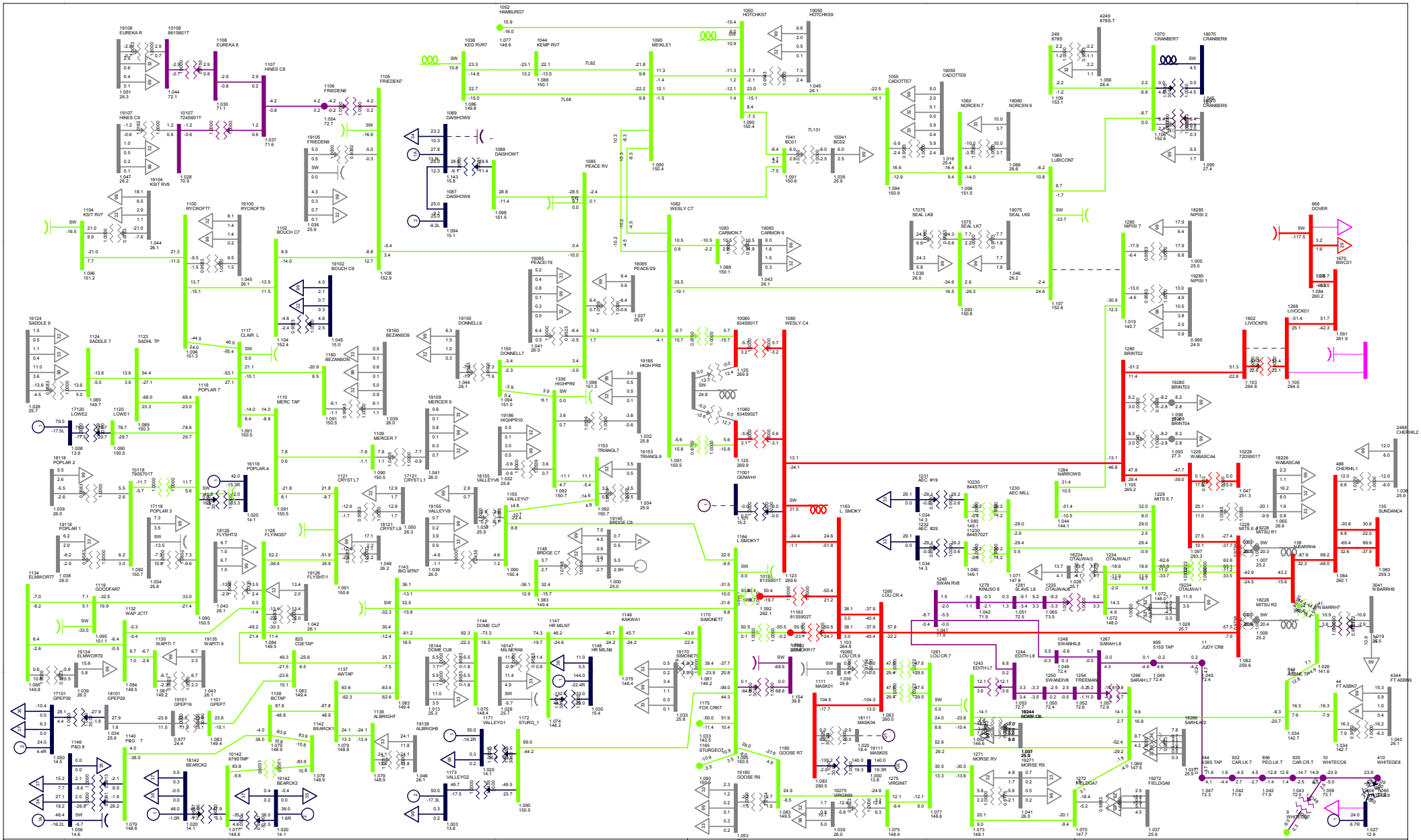
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 010 7L12 WESLEYCREEK to LUBICON_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 23



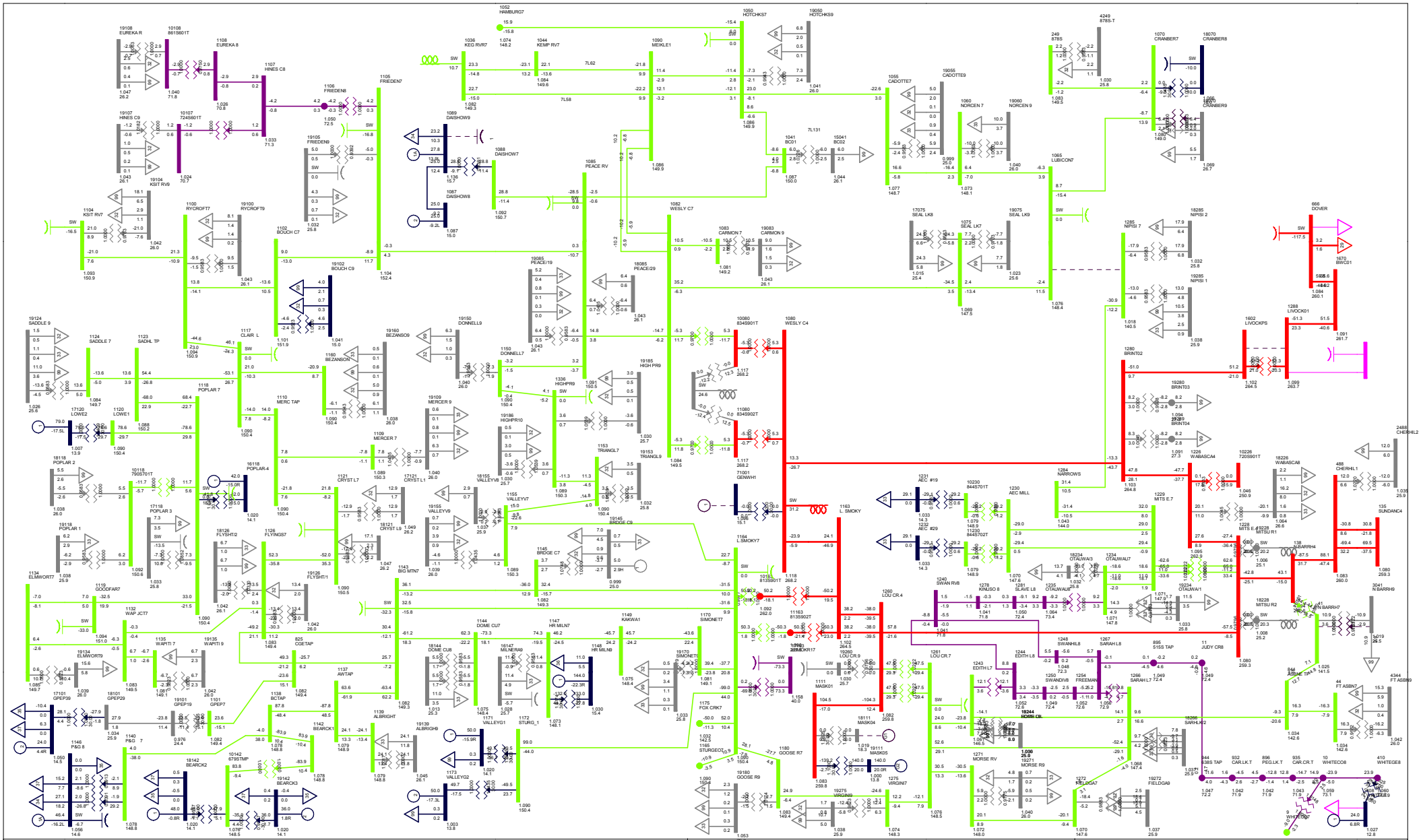
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 011 7L61 LUBICON to NIPISI_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 24



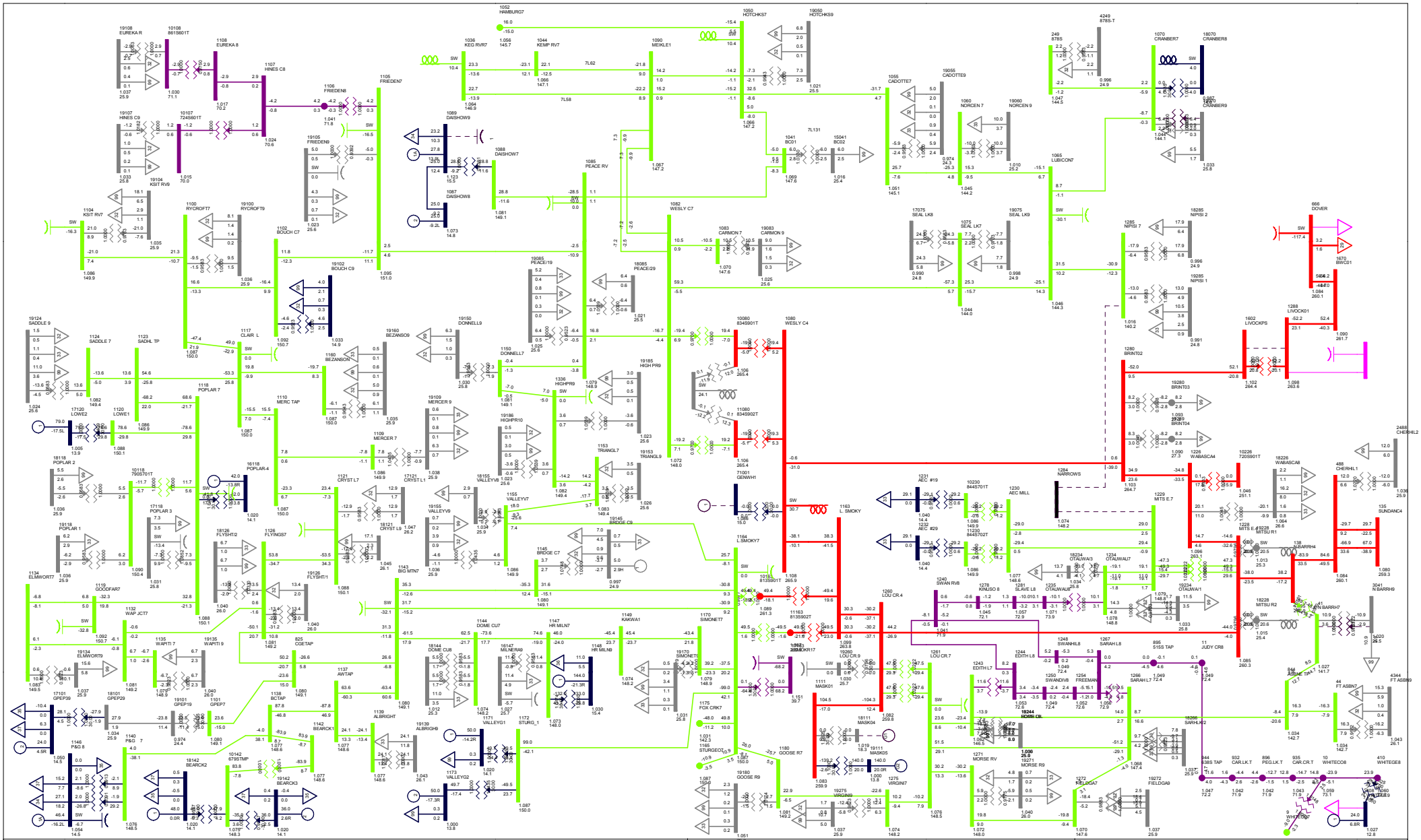
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 011 7L61 LUBICON to NIPISI_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 25



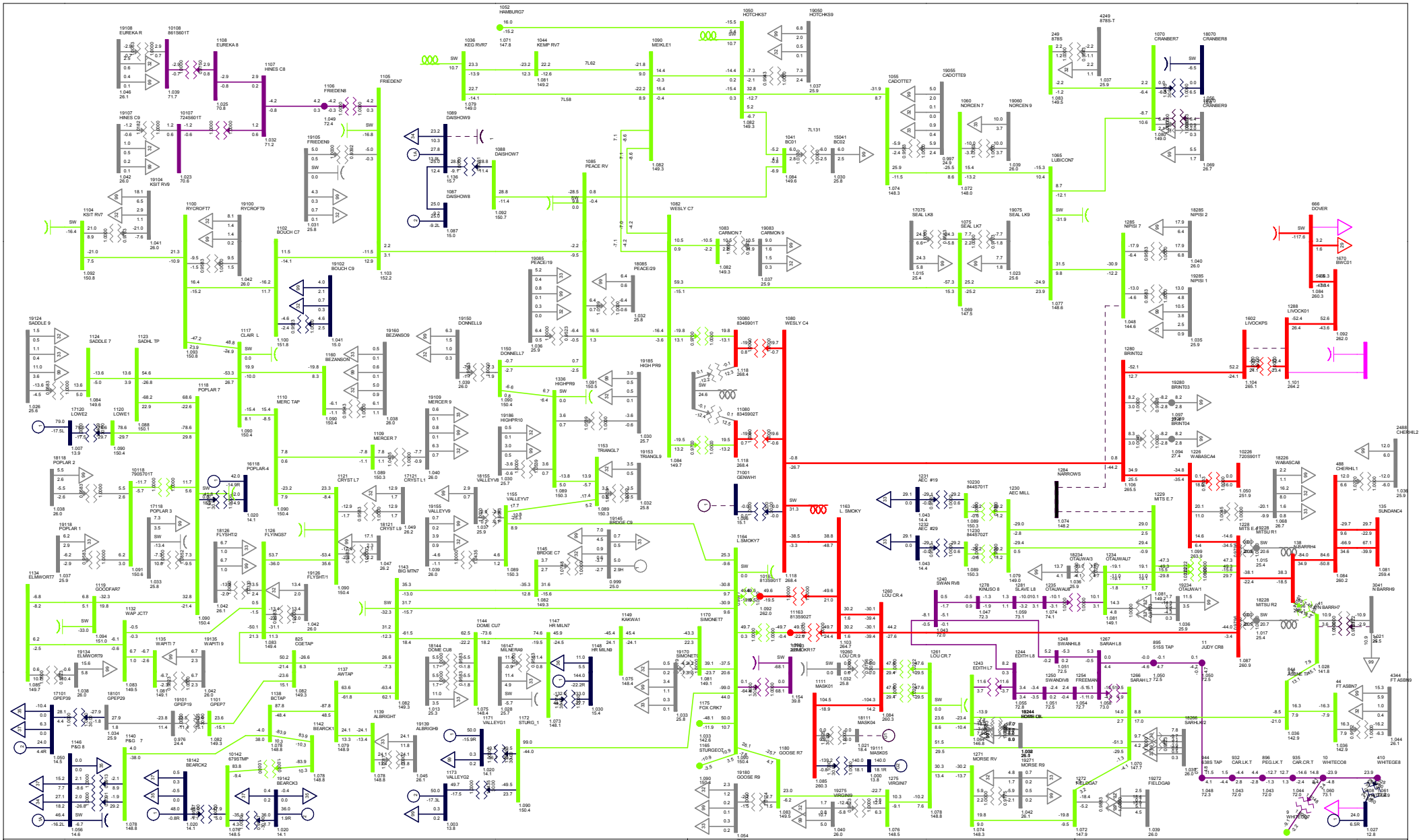
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 012 7L23 NIPISI to MITSUE_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 26



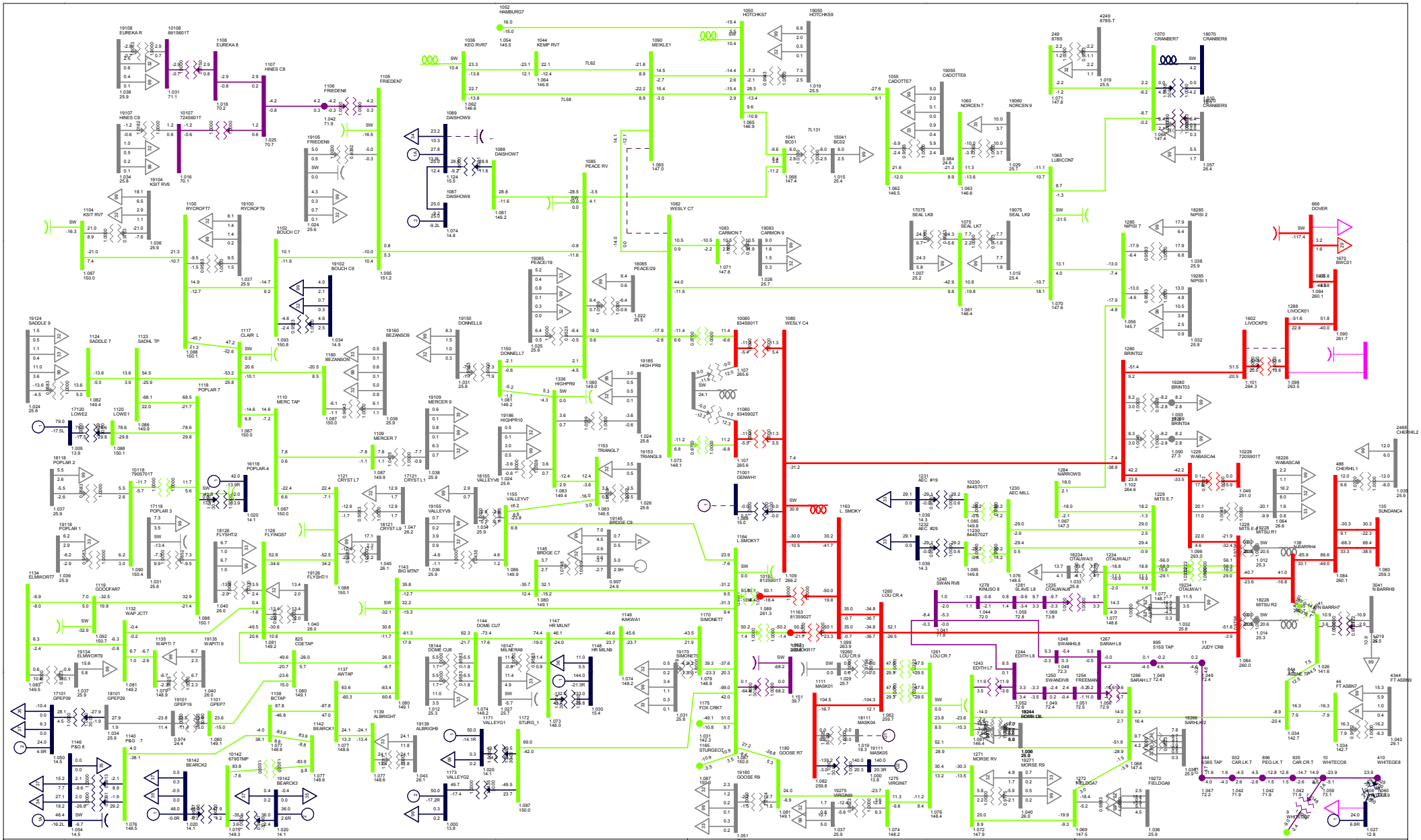
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 012 7L23 NIPISI to MITSUE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 27



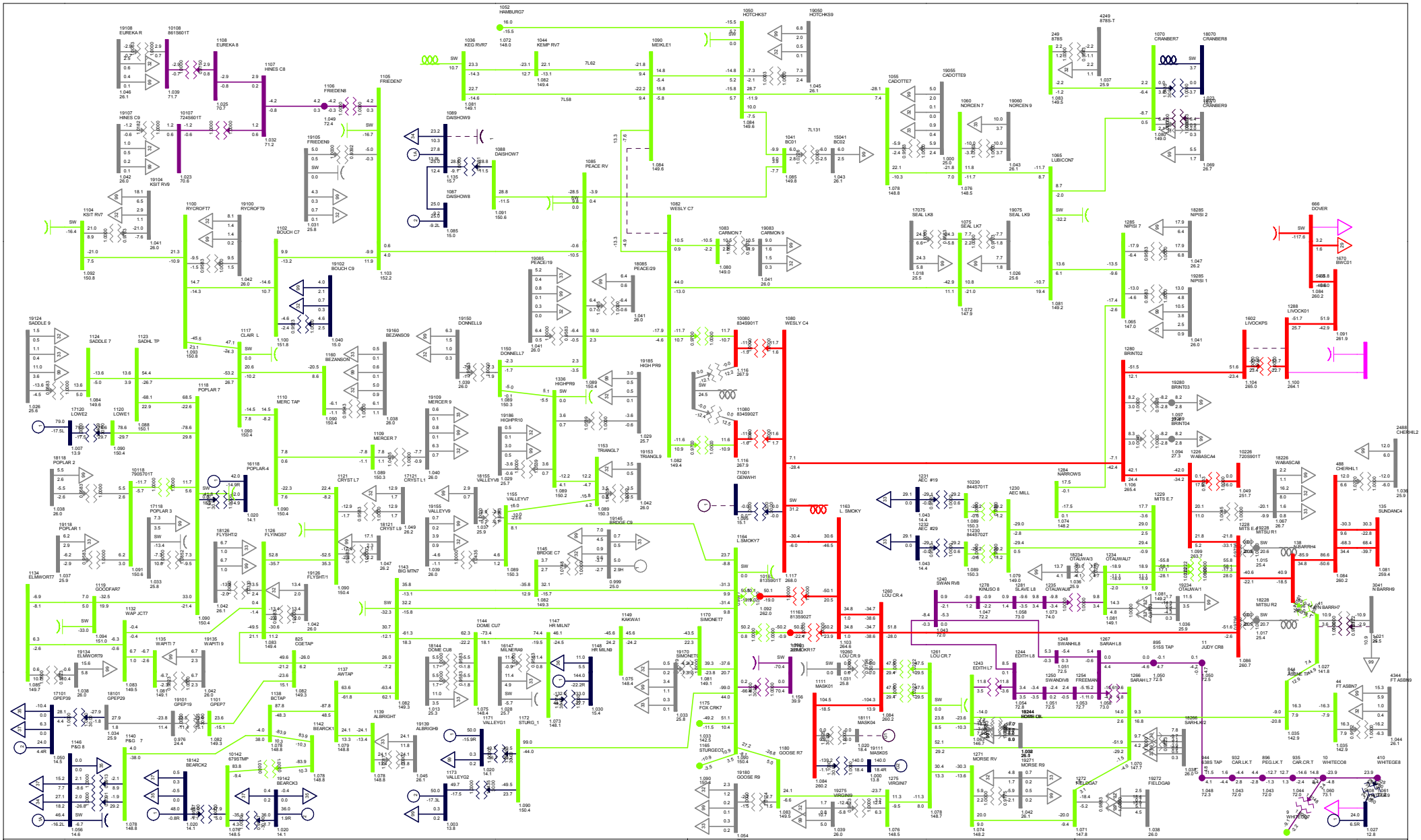
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 013 7L131 WESLEYCREEK to Meikle_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 28



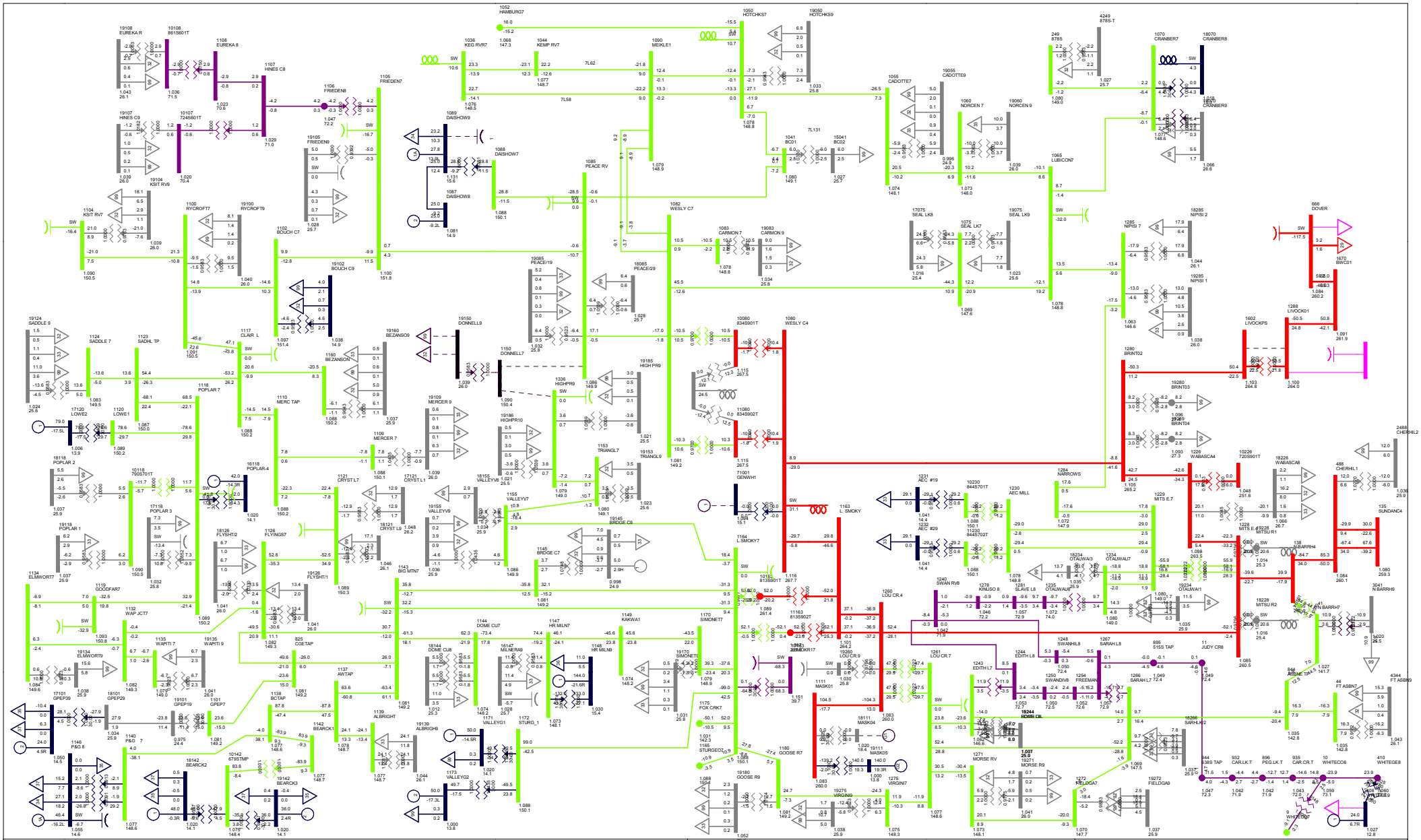
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 013 7L131 WESLEYCREEK to Meikle_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 29



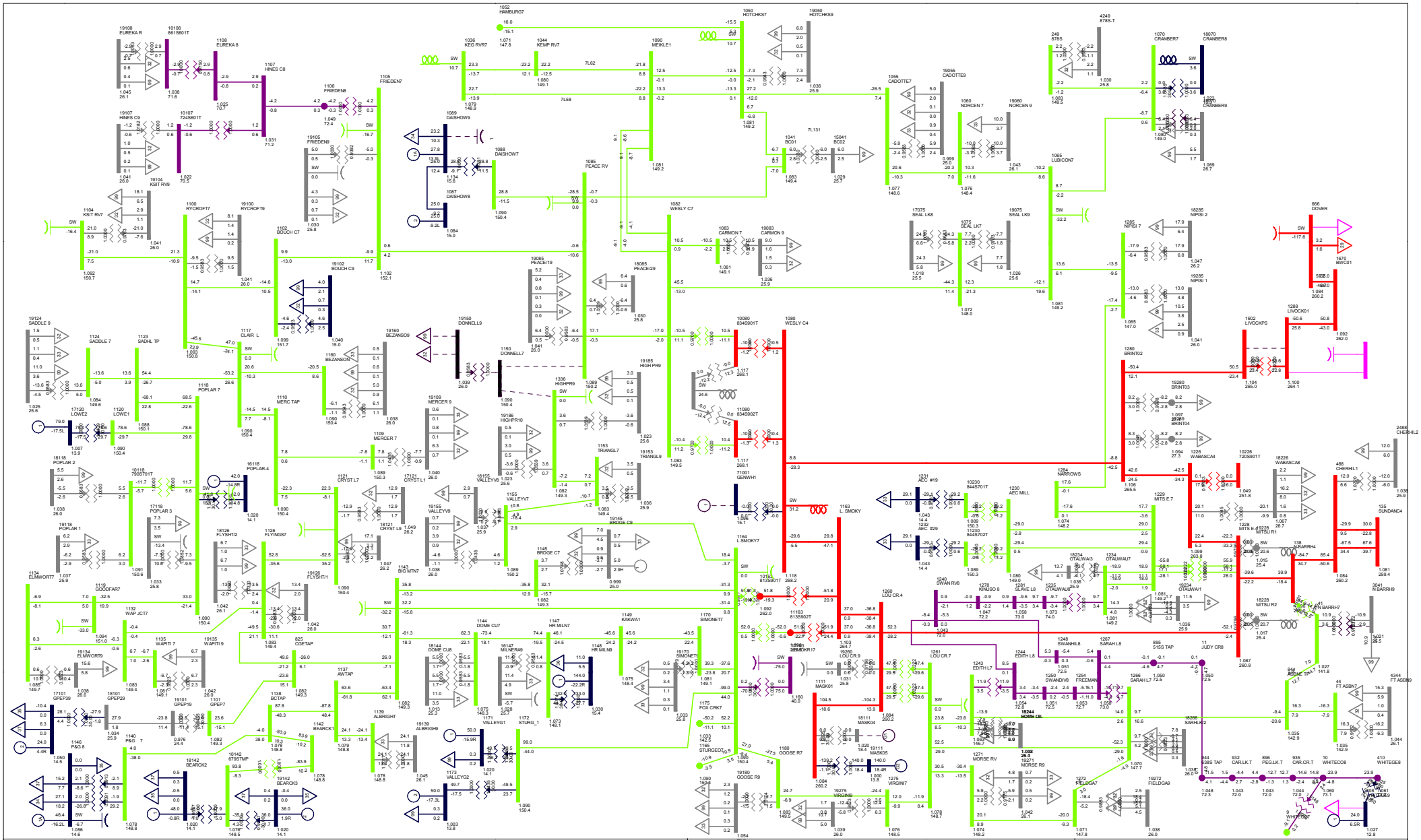
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 30

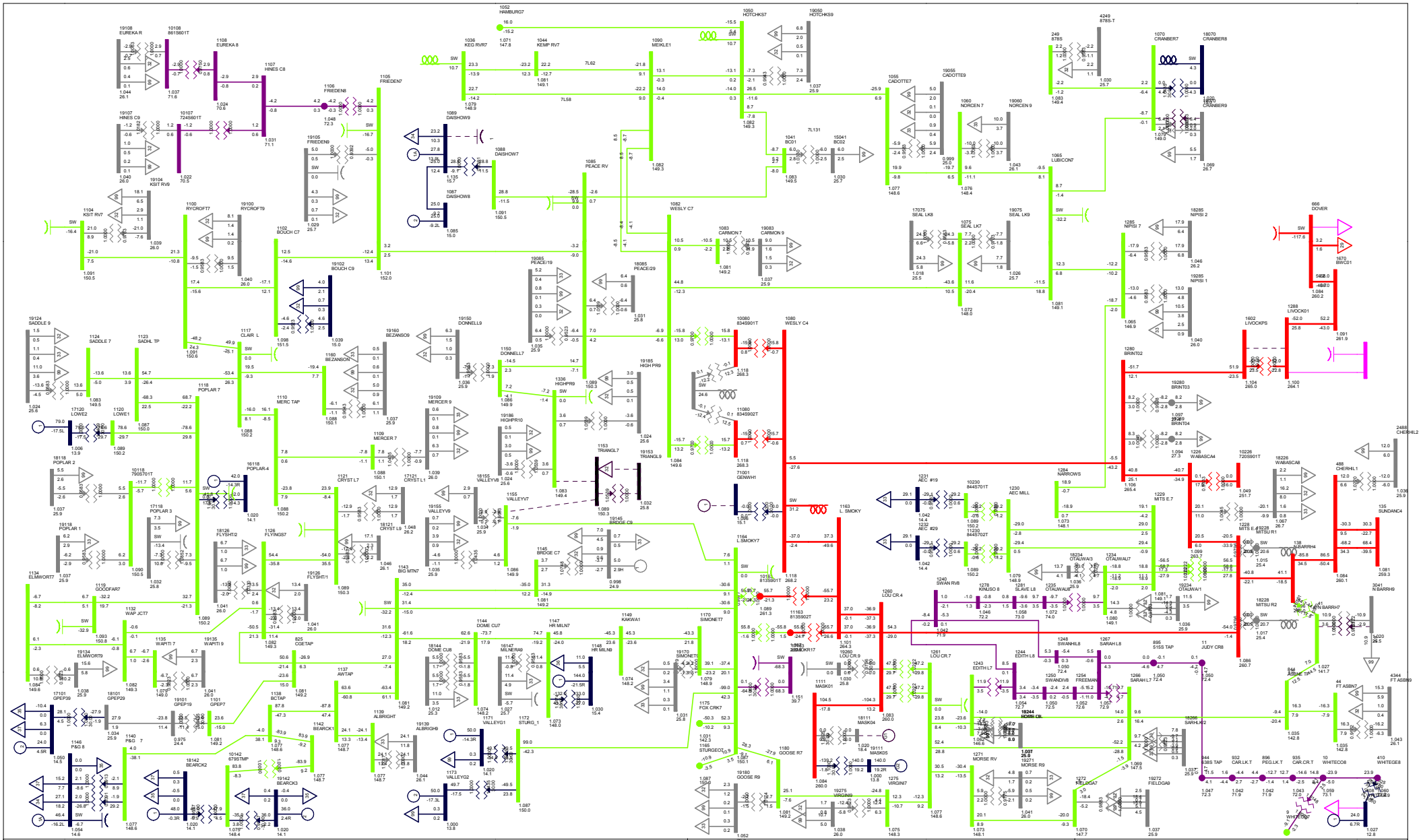


Appendix C2c Figure: 31

Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_B.

Whitetail Project 1290 Interconnection Study

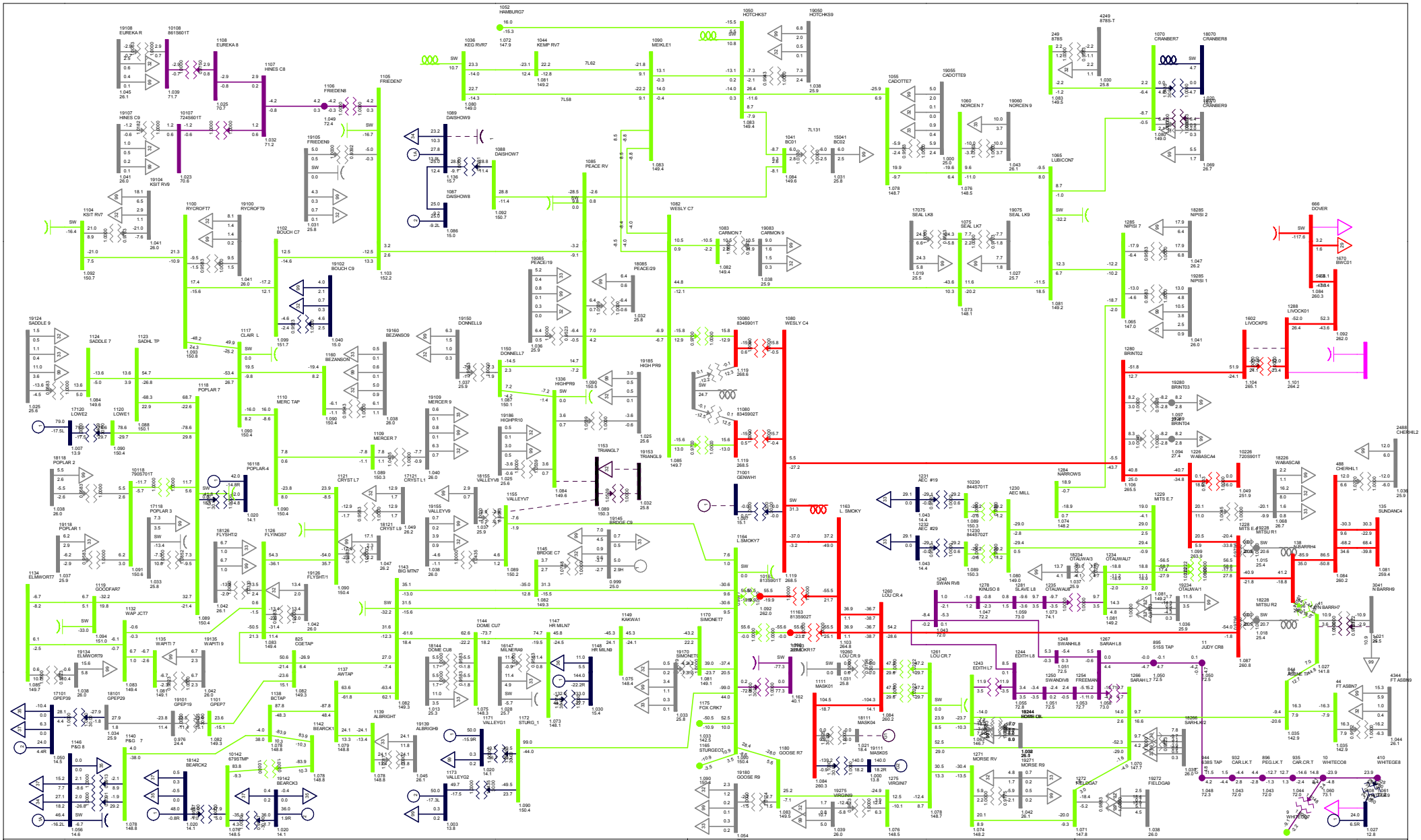


Appendix C2c Figure: 32

Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_A.

Whitetail Project 1290 Interconnection Study



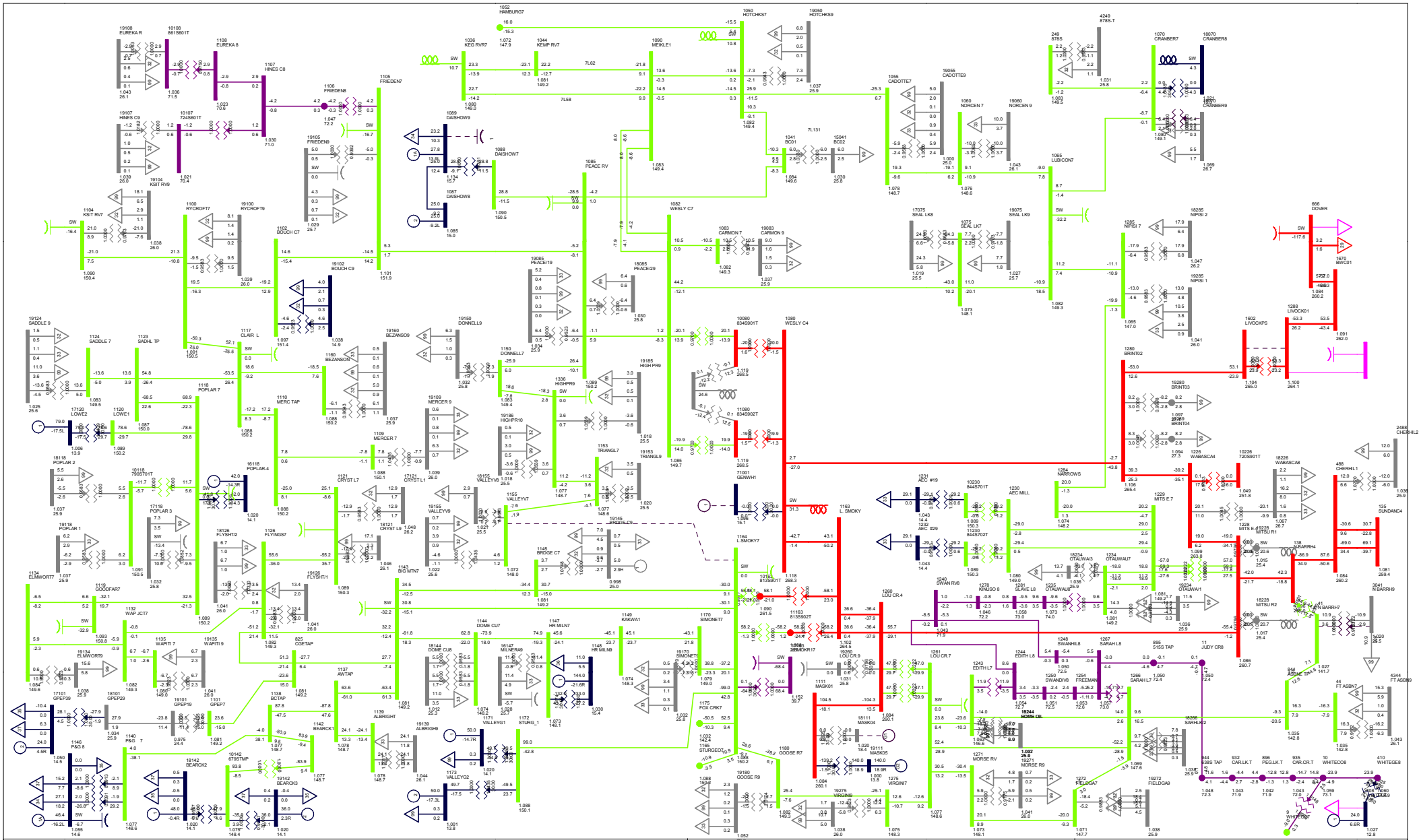
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 33

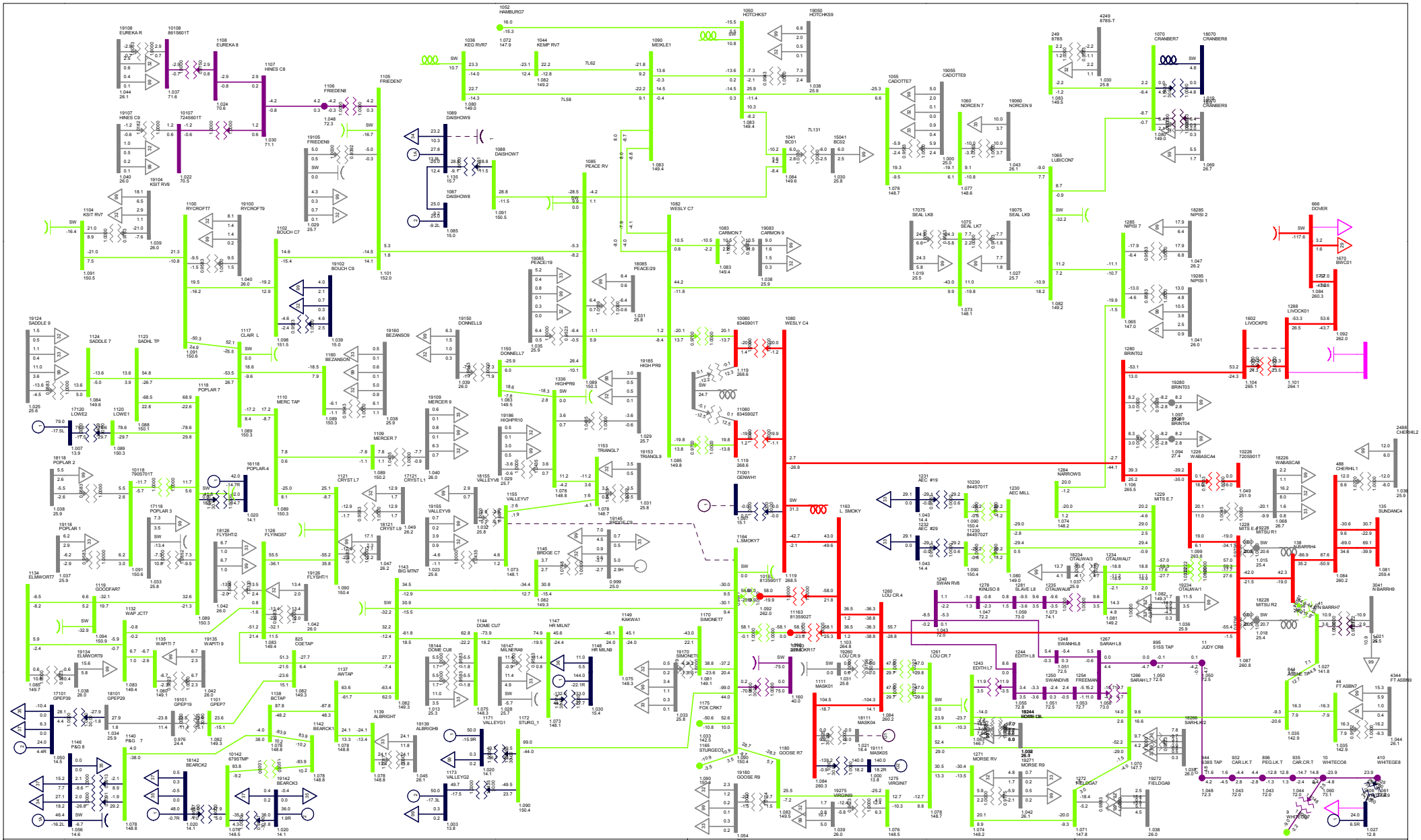


Appendix C2c Figure: 34

Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_A.

Whitetail Project 1290 Interconnection Study



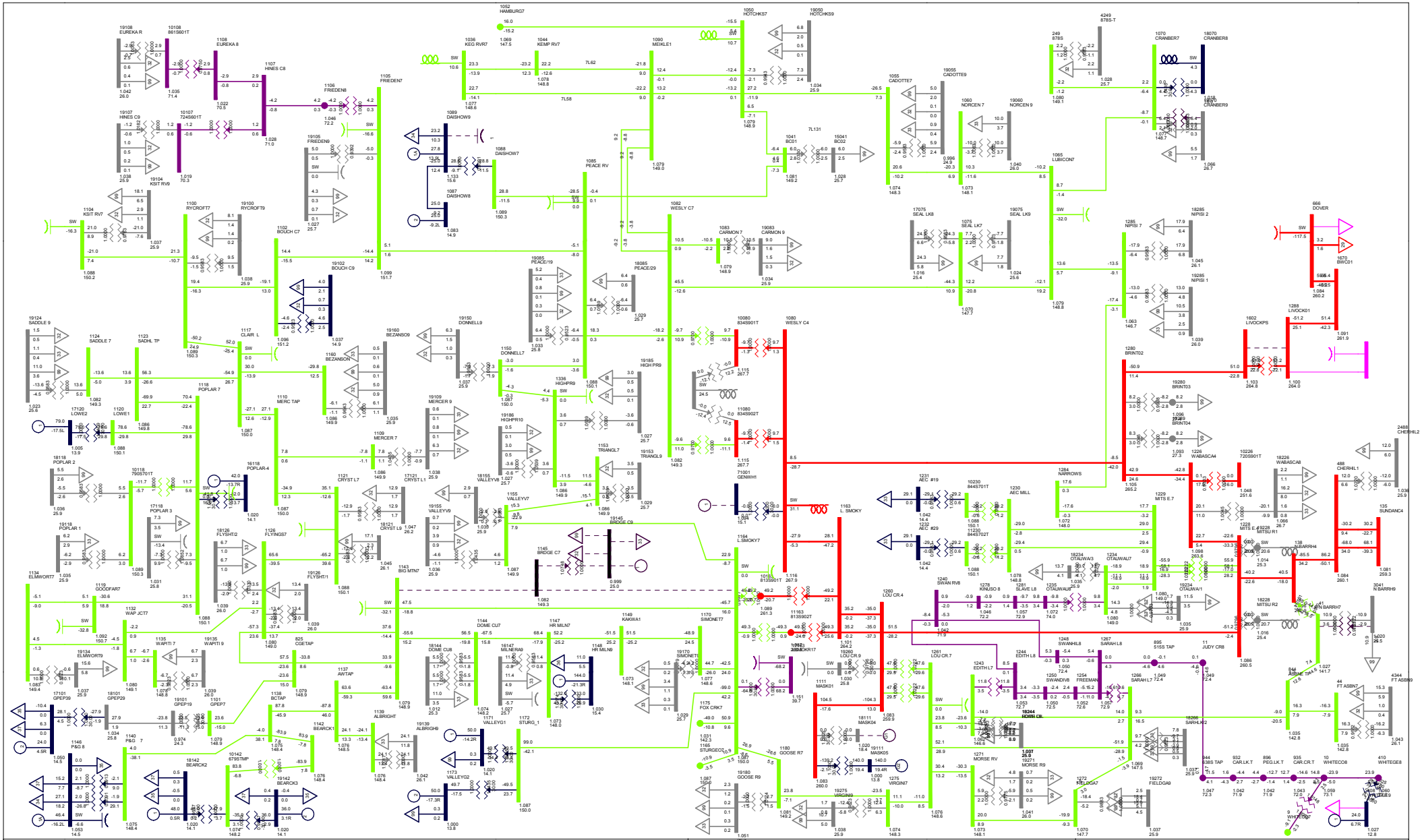
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 35



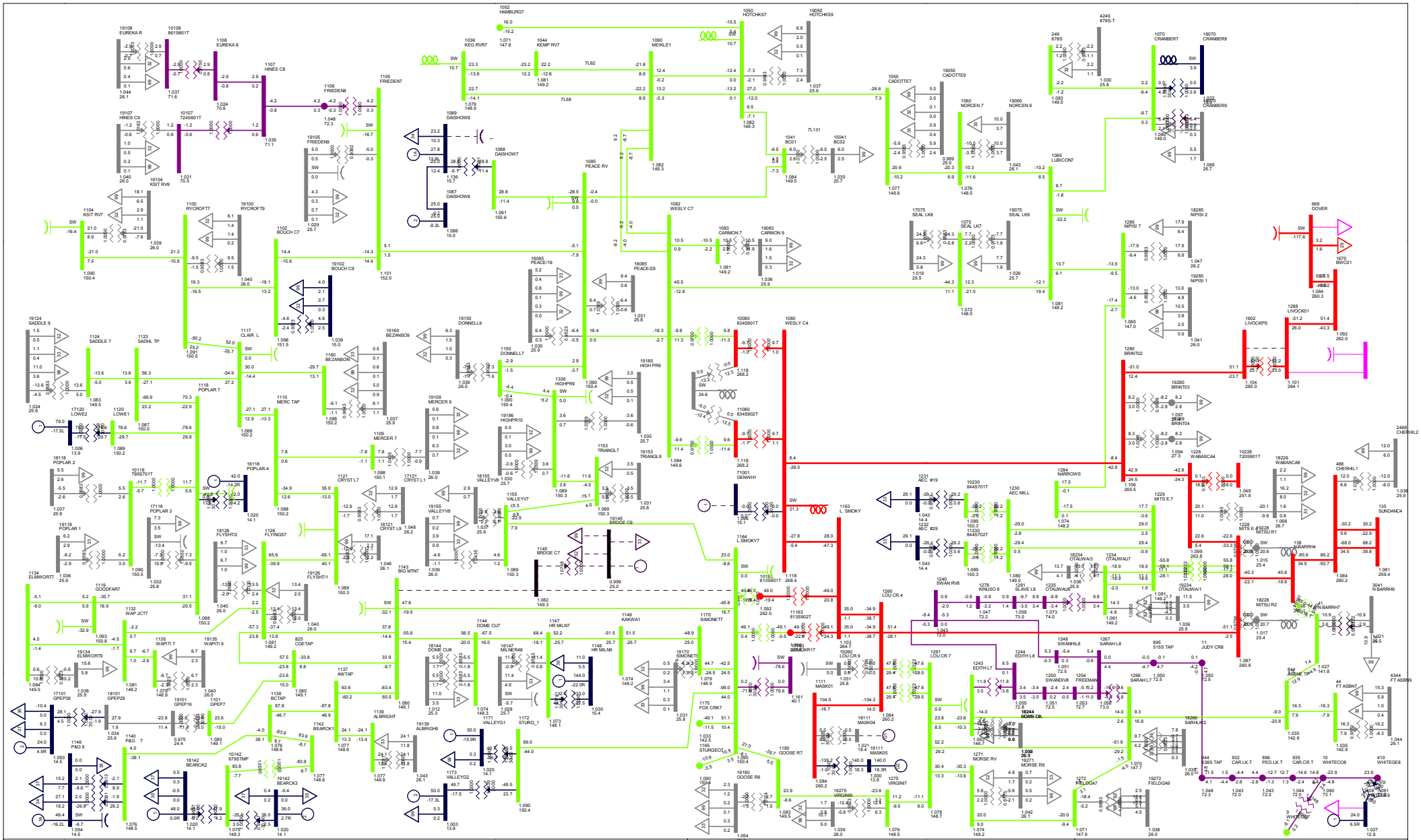
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 36



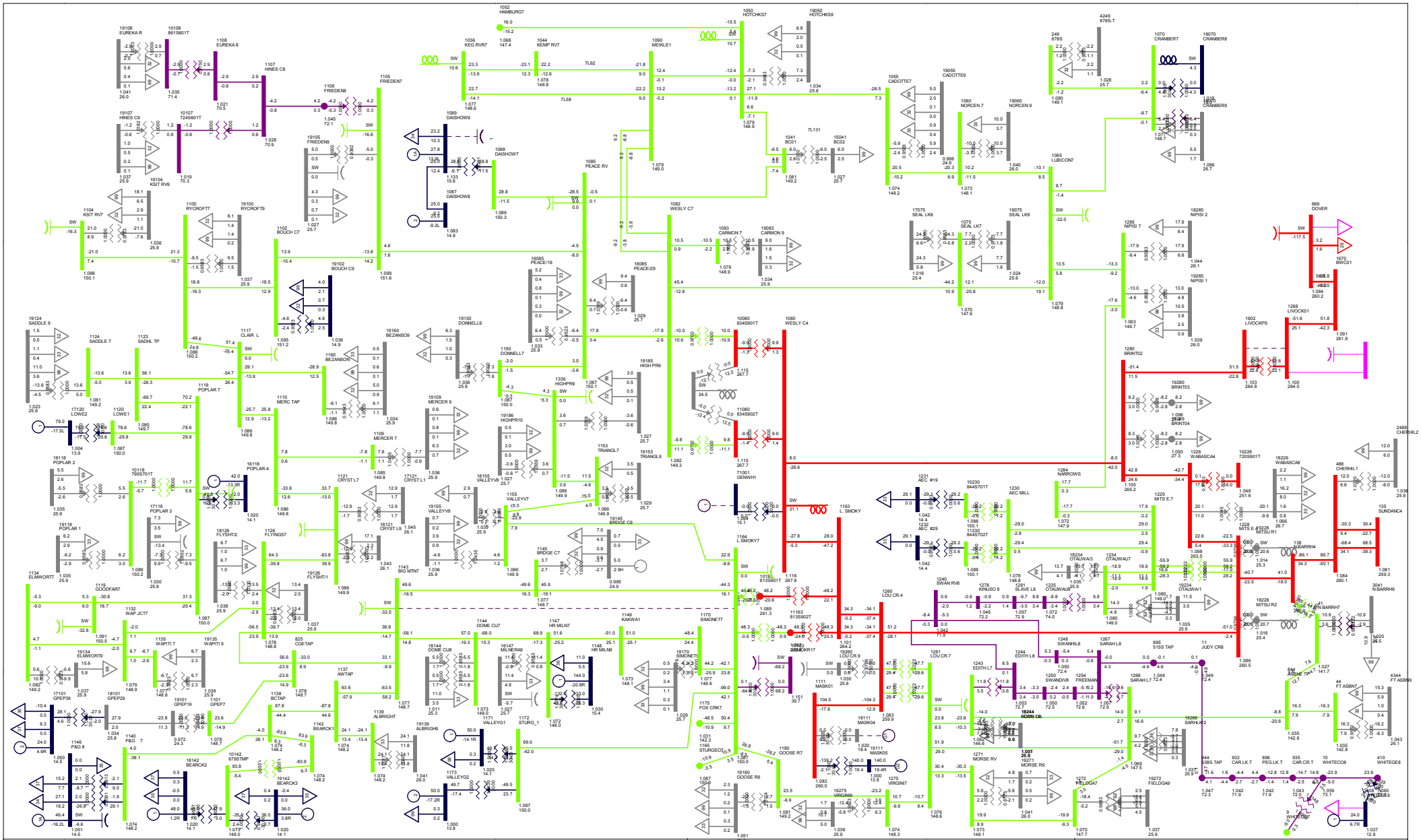
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 37



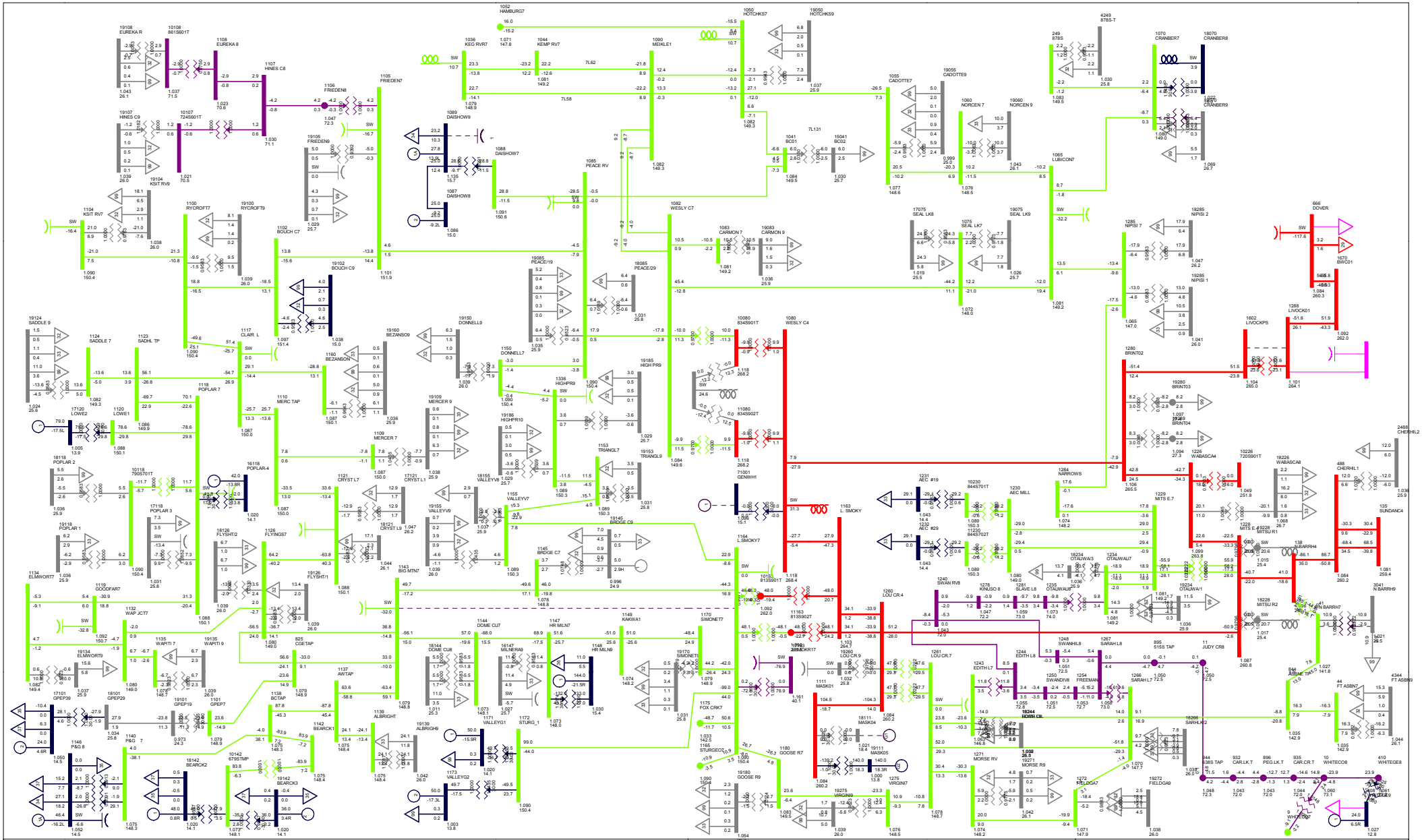
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 38



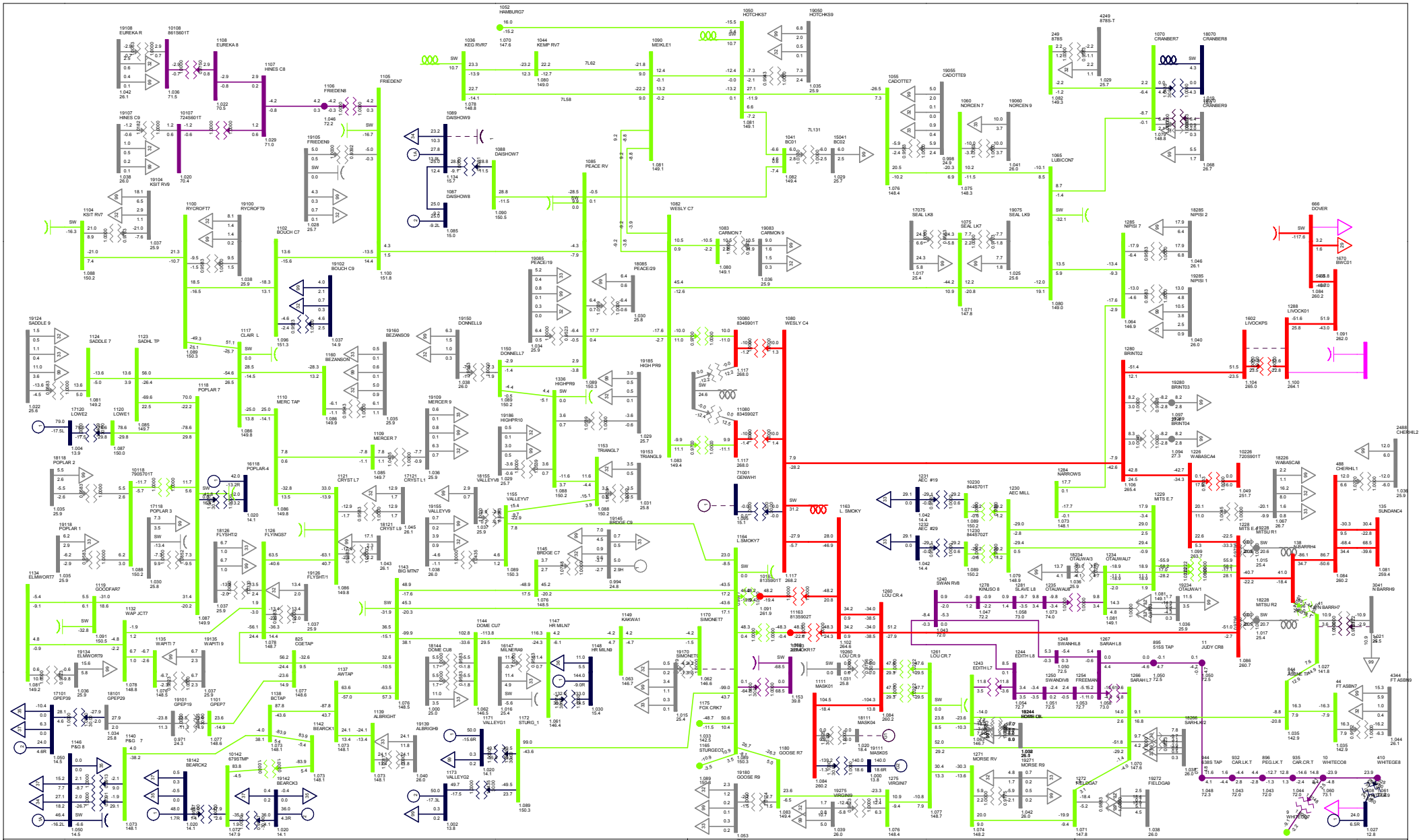
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 39

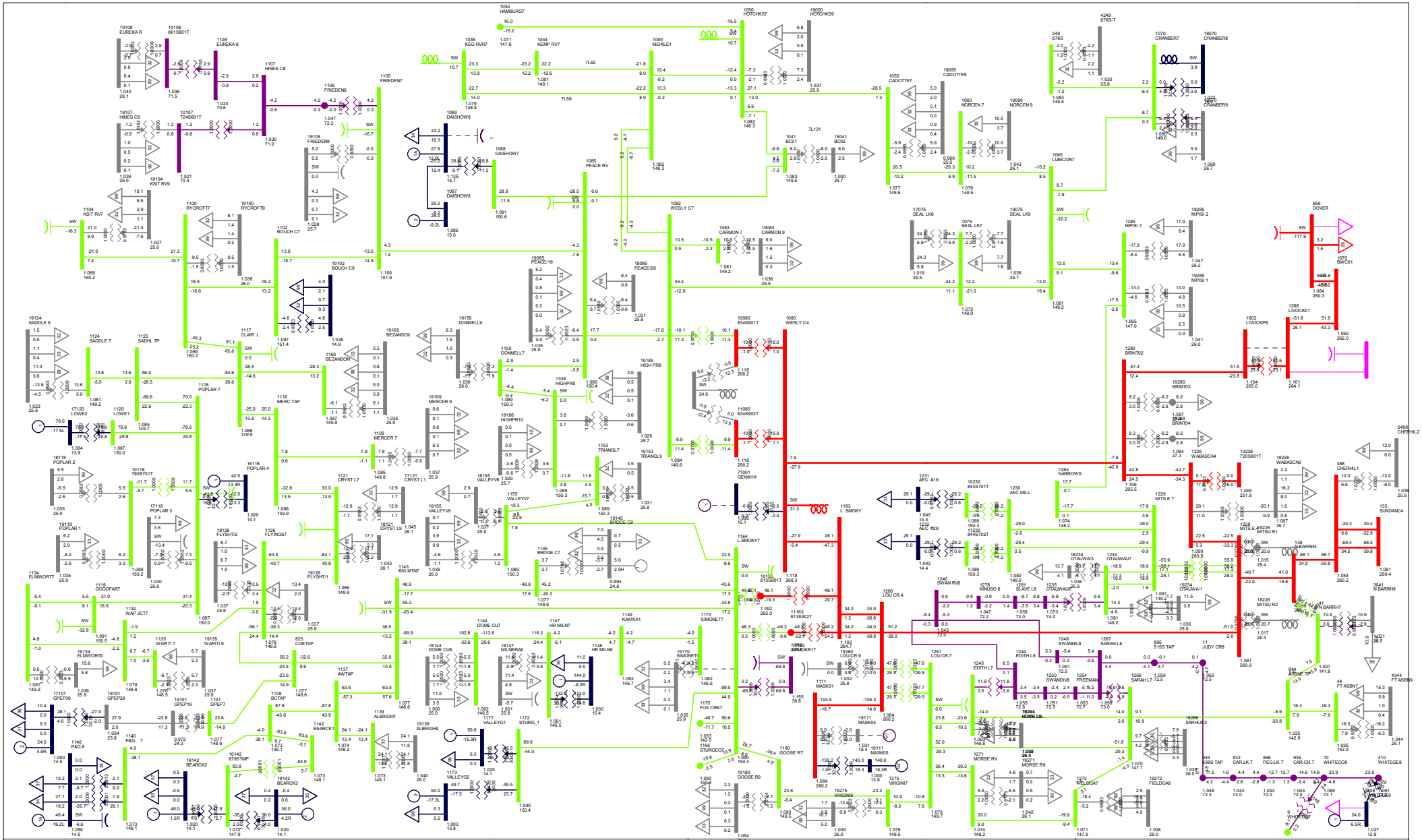


Appendix C2c Figure: 40

Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 019 7L40 LITTLESMOKY to SIMONETTE_A.

Whitetail Project 1290 Interconnection Study



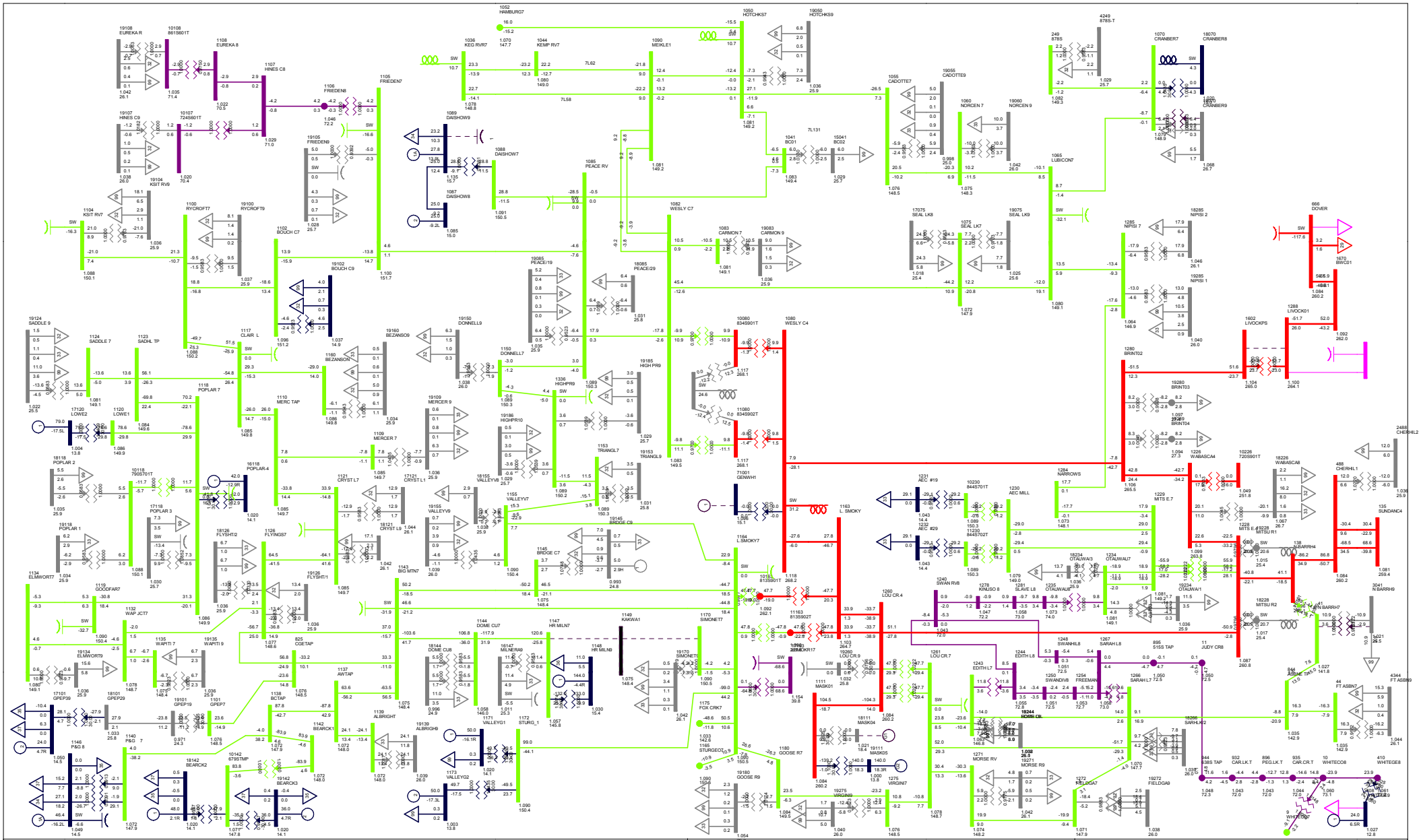
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 019 7L40 LITTLESMOKY to SIMONETTE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 41

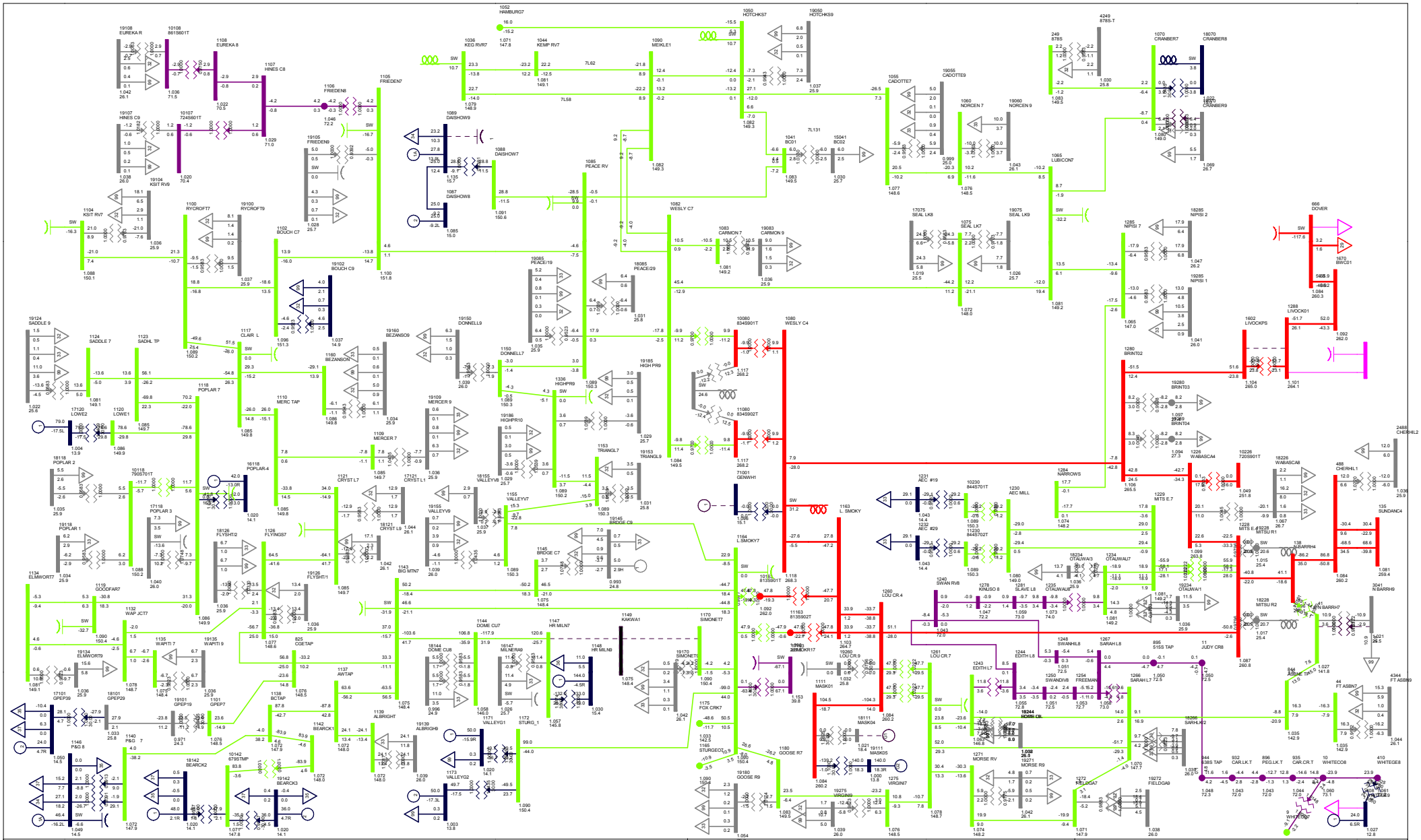


Appendix C2c Figure: 42

Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 020 7L80 SIMONETTE to HR MILNER_A.

Whitetail Project 1290 Interconnection Study



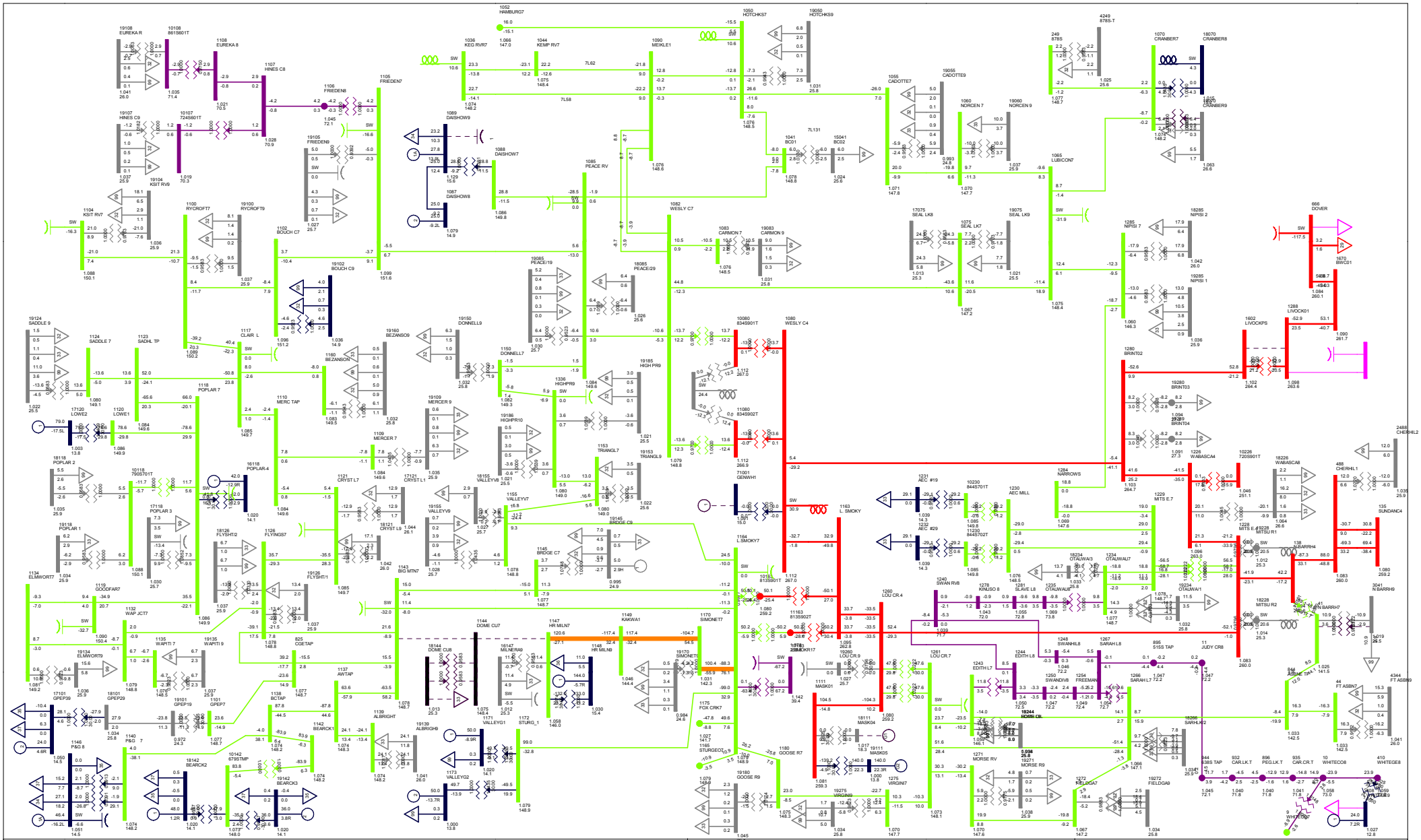
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 020 7L80 SIMONETTE to HR MILNER_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 43



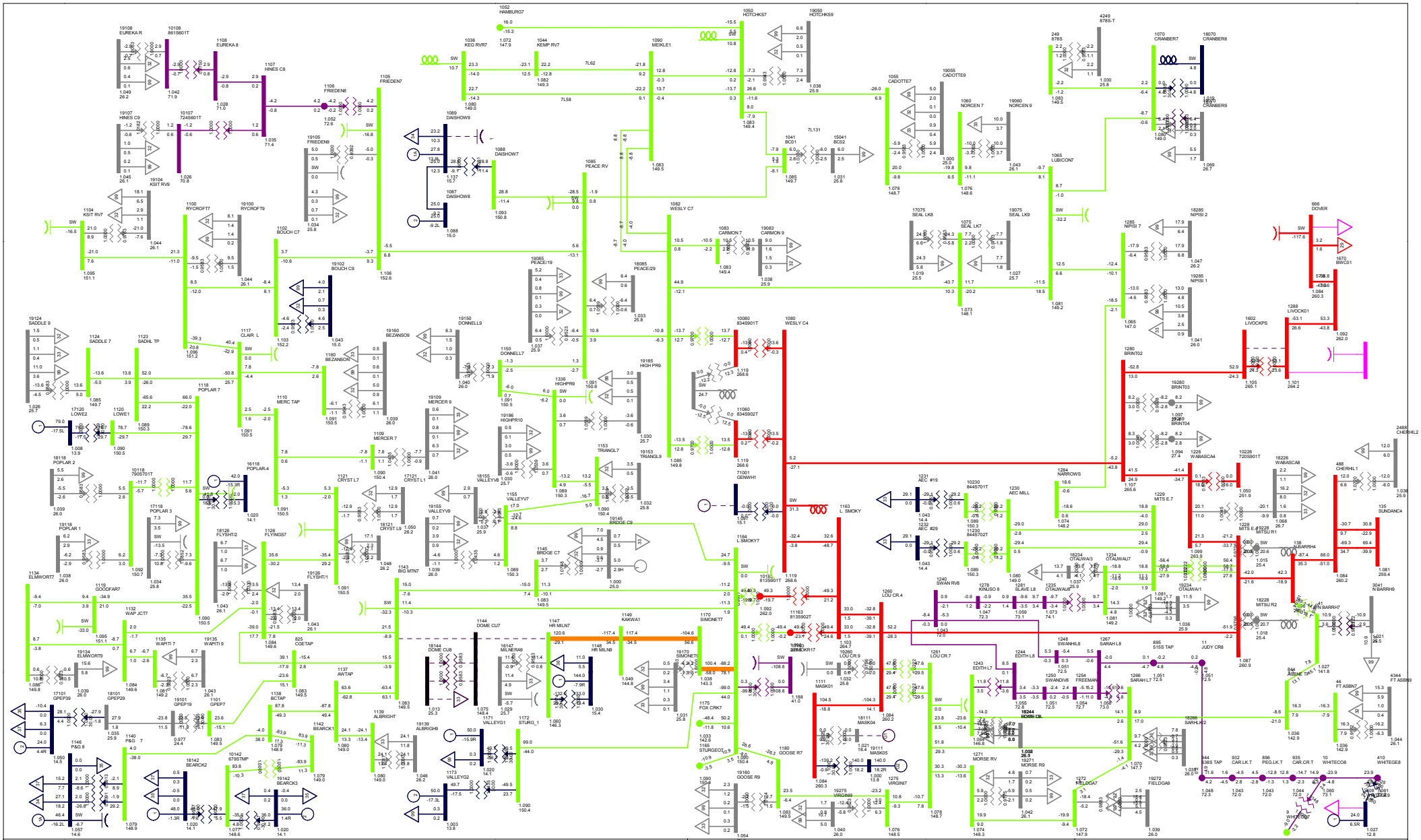
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 44



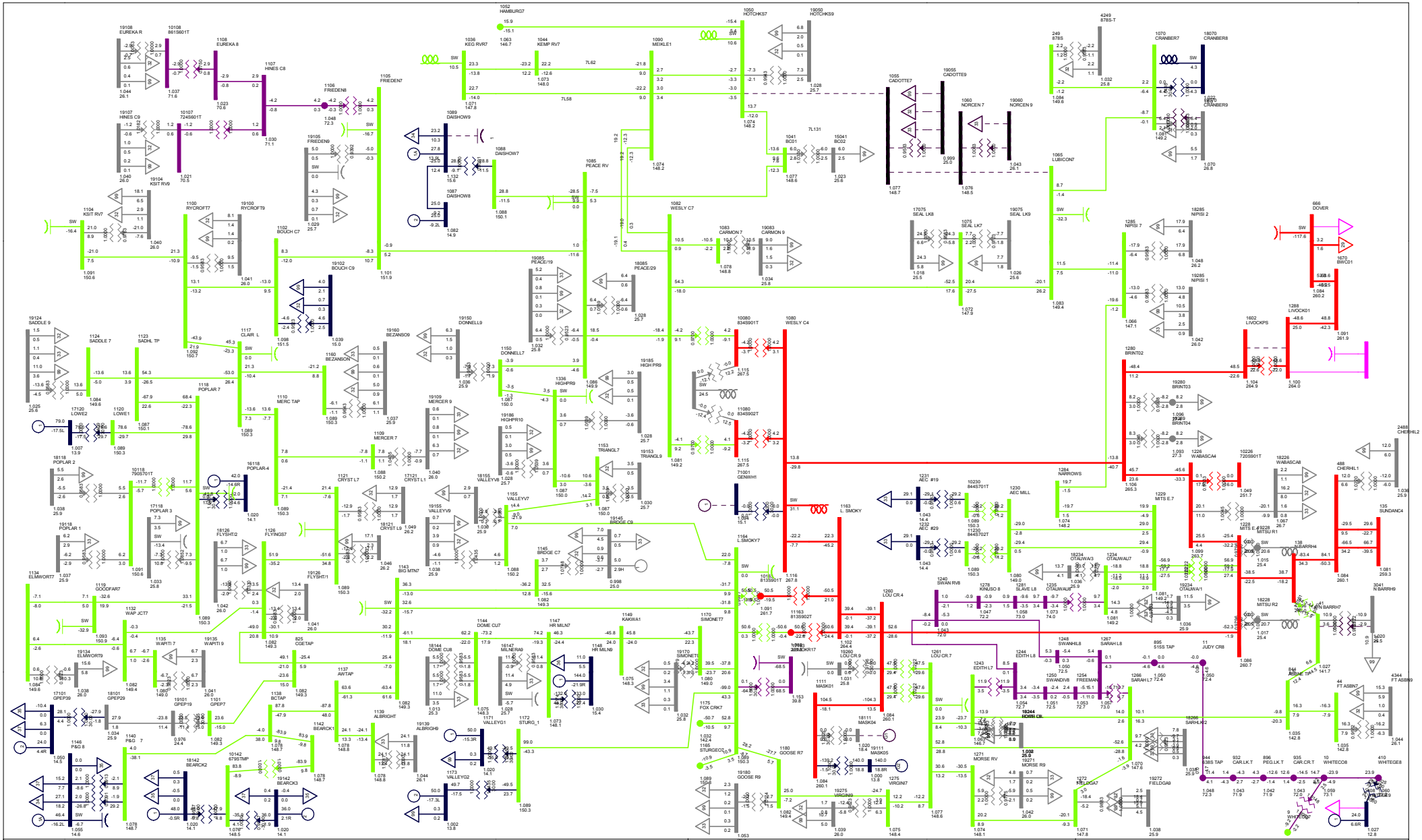
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 45



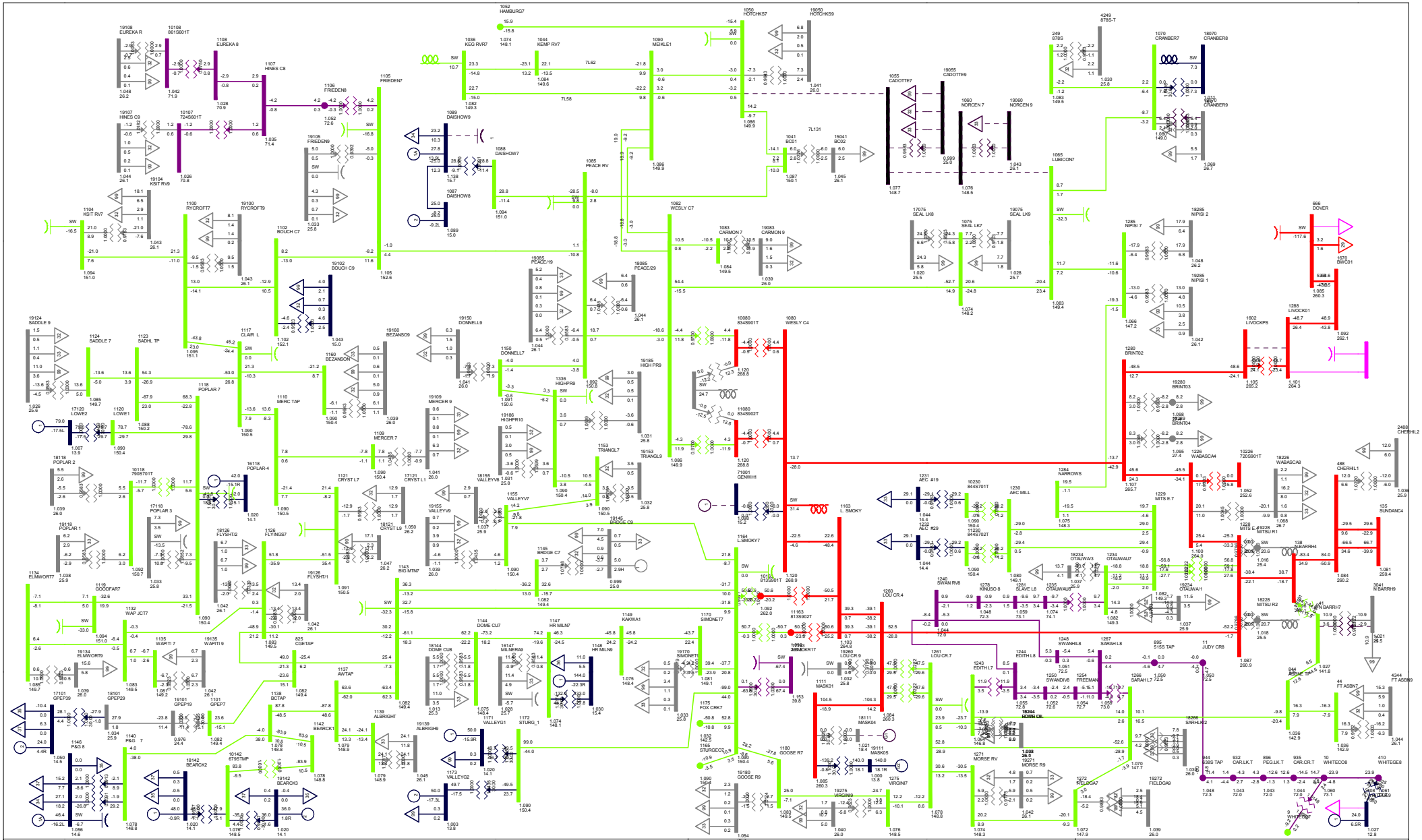
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 022 7L63 HOTCHKISS to LUBICON_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 46



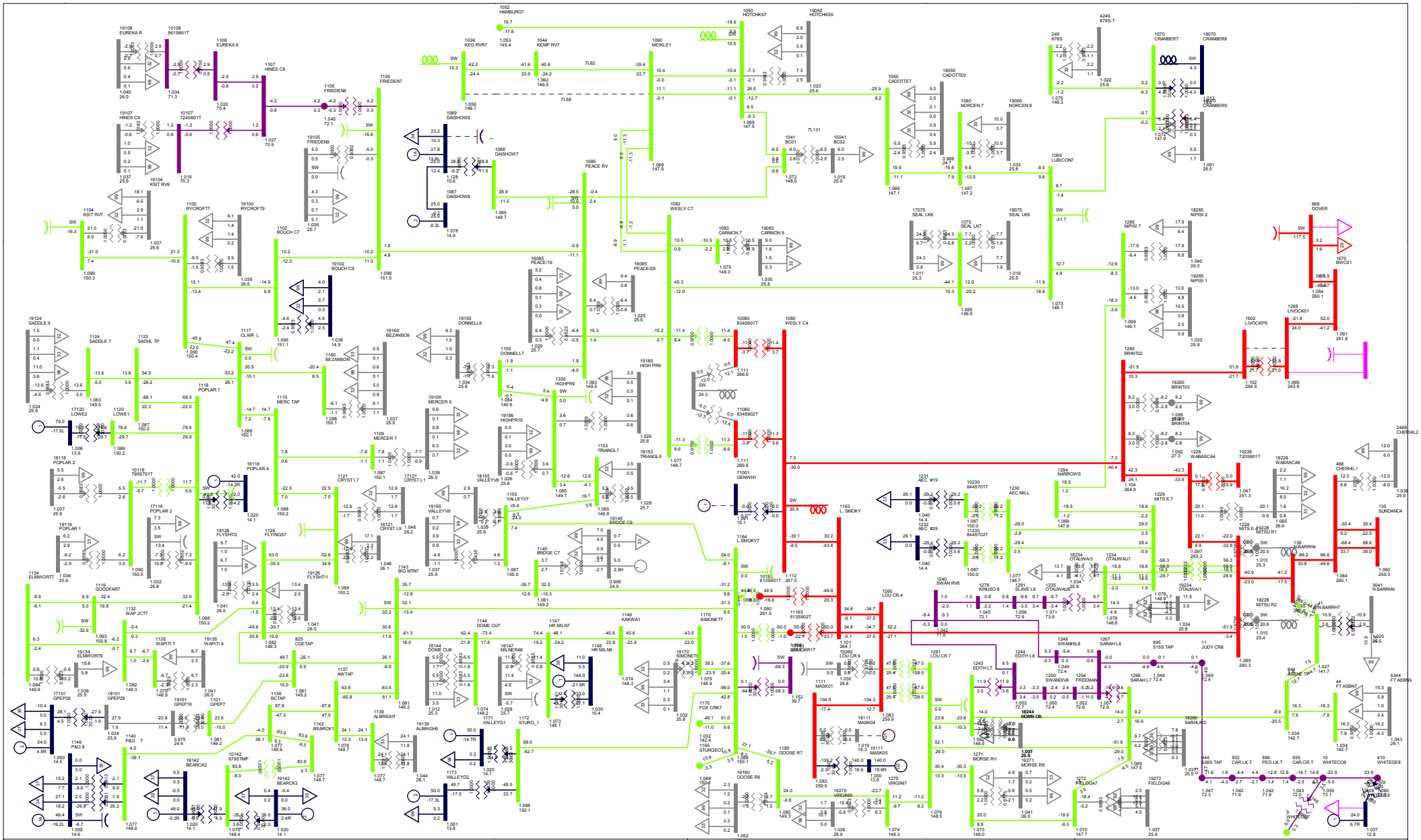
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 022 7L63 HOTCHKISS to LUBICON_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 47



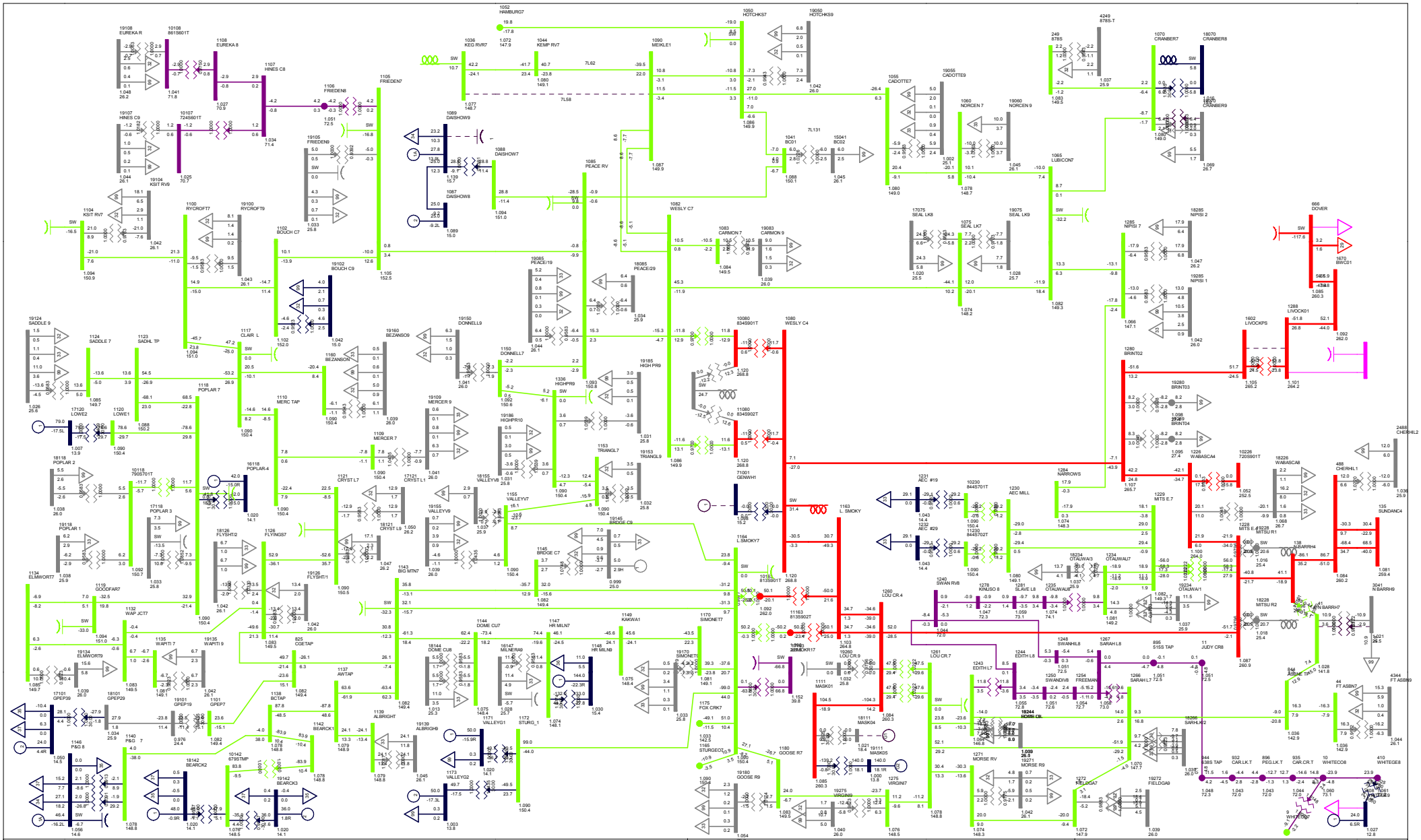
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 023 7L58 KEGRIVER to Meikle_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 48

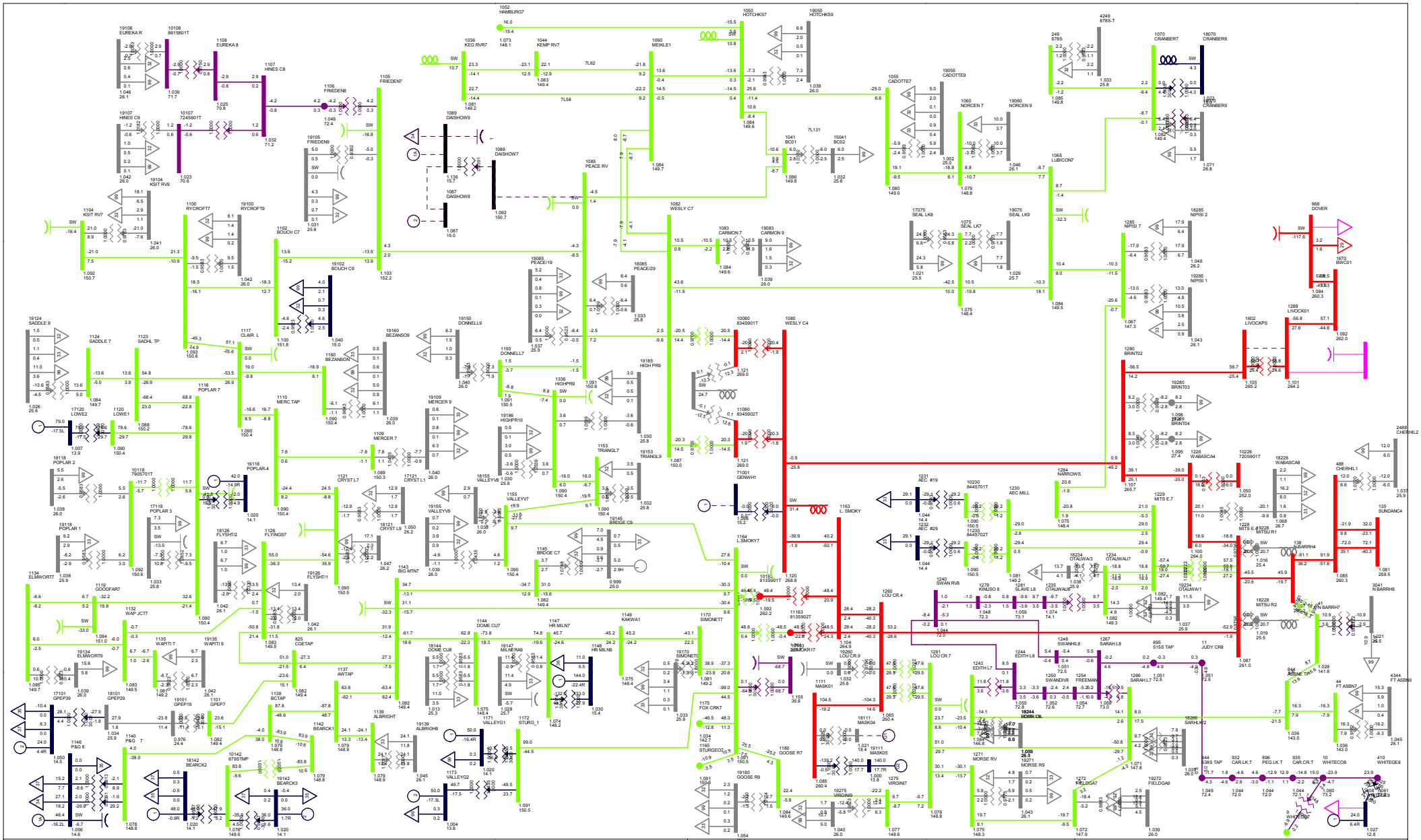


Appendix C2c Figure: 49

Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 023 7L58 KEGRIVER to Meikle_B.

Whitetail Project 1290 Interconnection Study



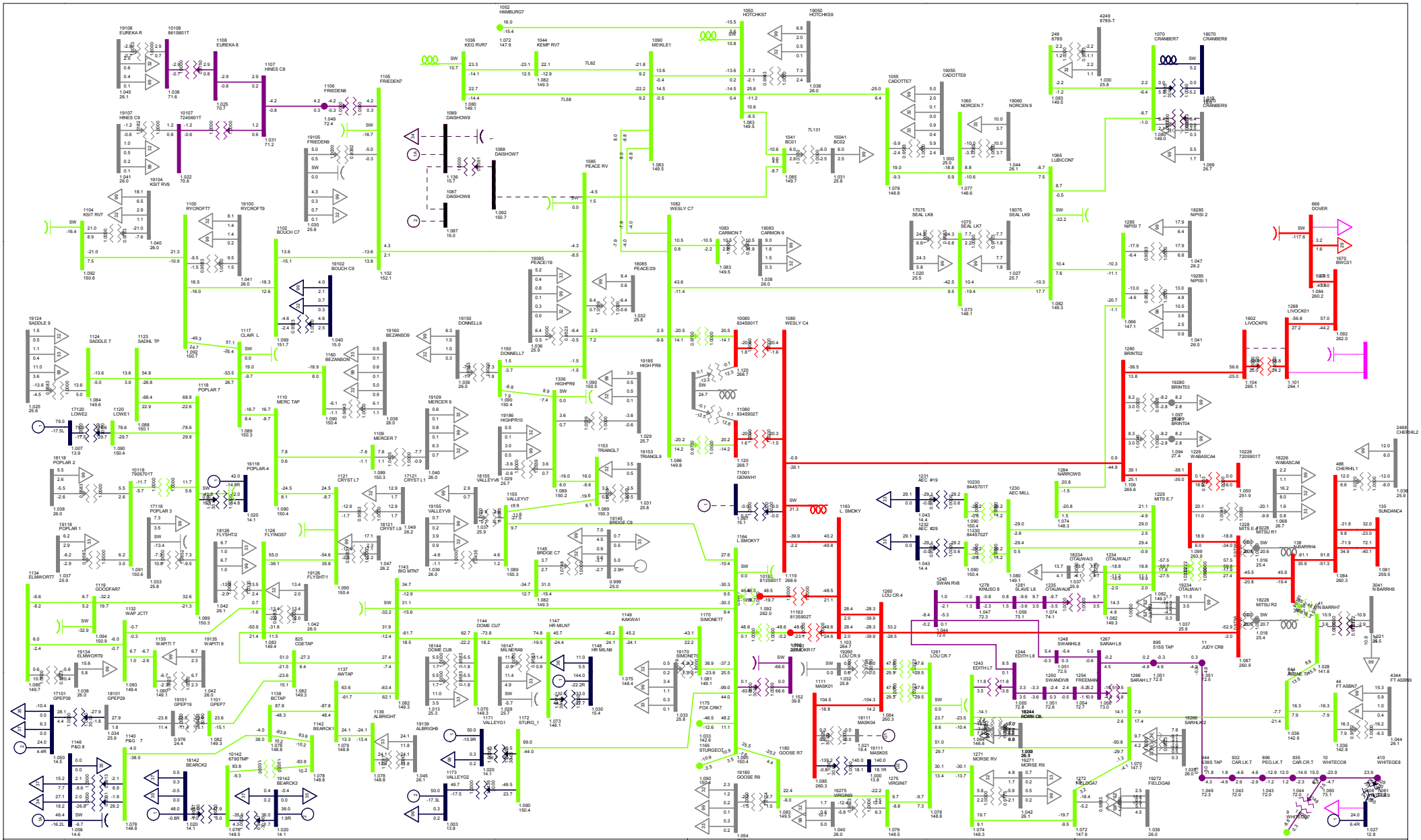
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 024 7L04 WESTPEACE to DAISHOWA_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 50



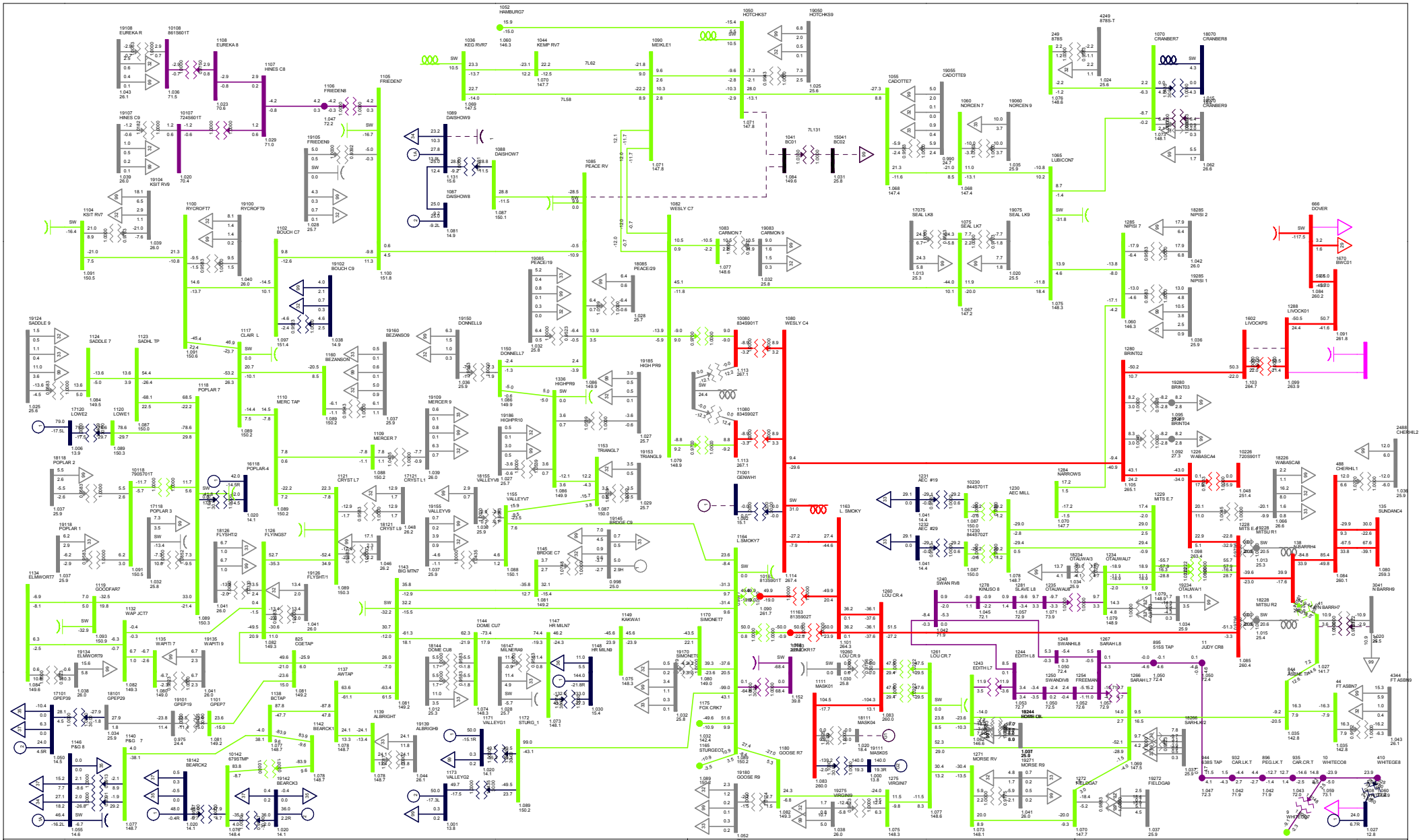
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 024 7L04 WESTPEACE to DAISHOWA_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 51

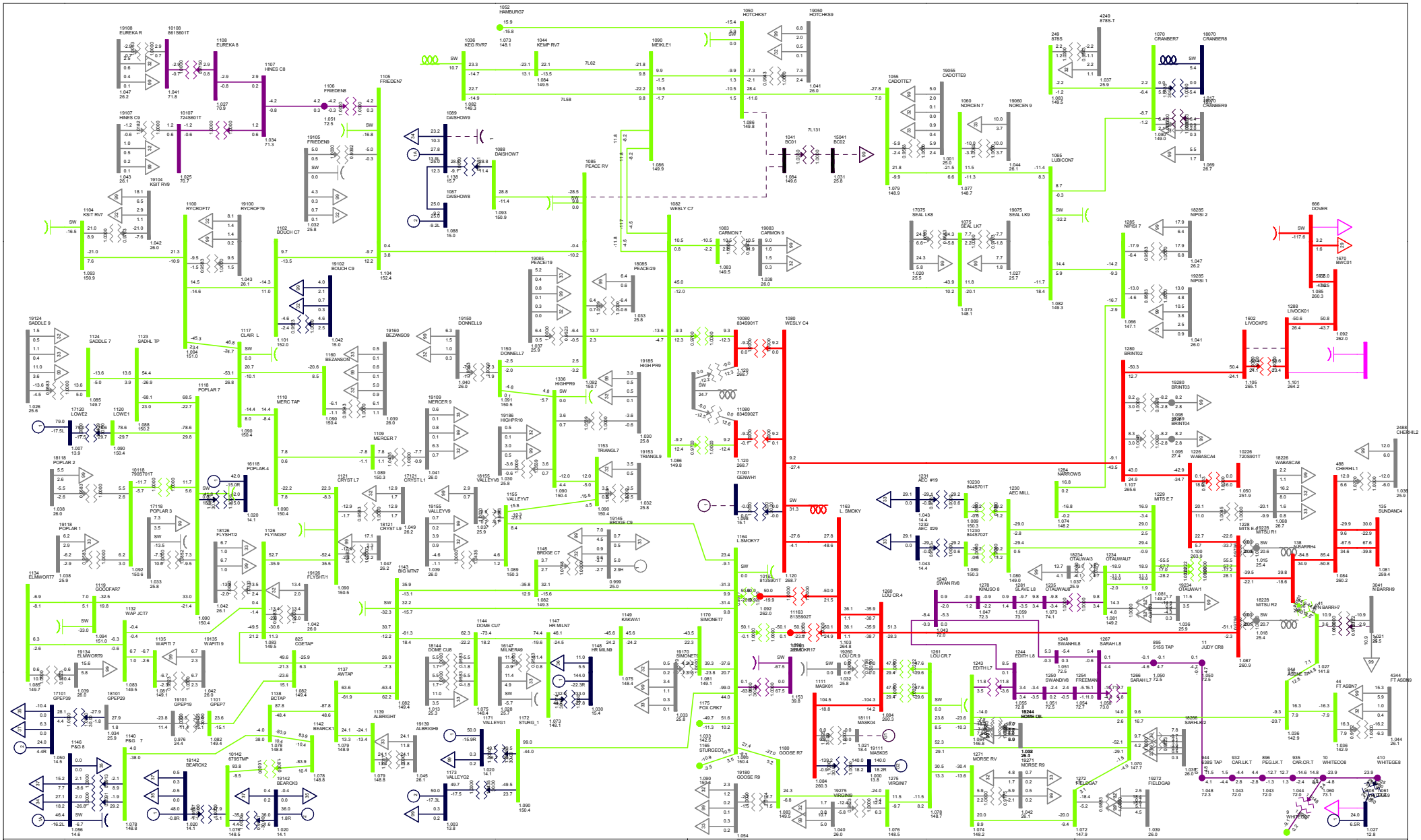


Appendix C2c Figure: 52

Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 025 7L51 WESTPEACE to HOTCHKISS_A.

Whitetail Project 1290 Interconnection Study

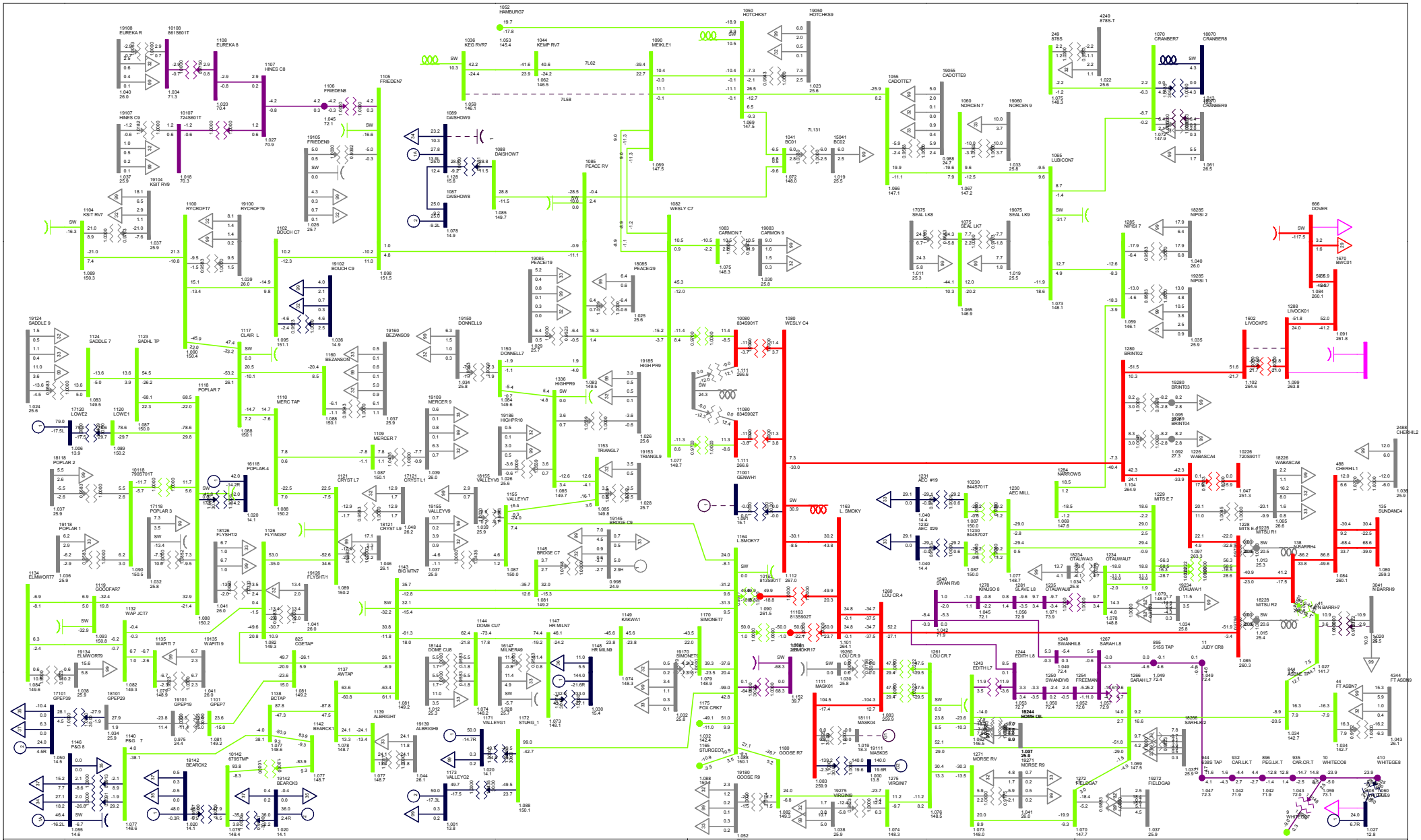


Appendix C2c Figure: 53

Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 025 7L51 WESTPEACE to HOTCHKISS_B.

Whitetail Project 1290 Interconnection Study

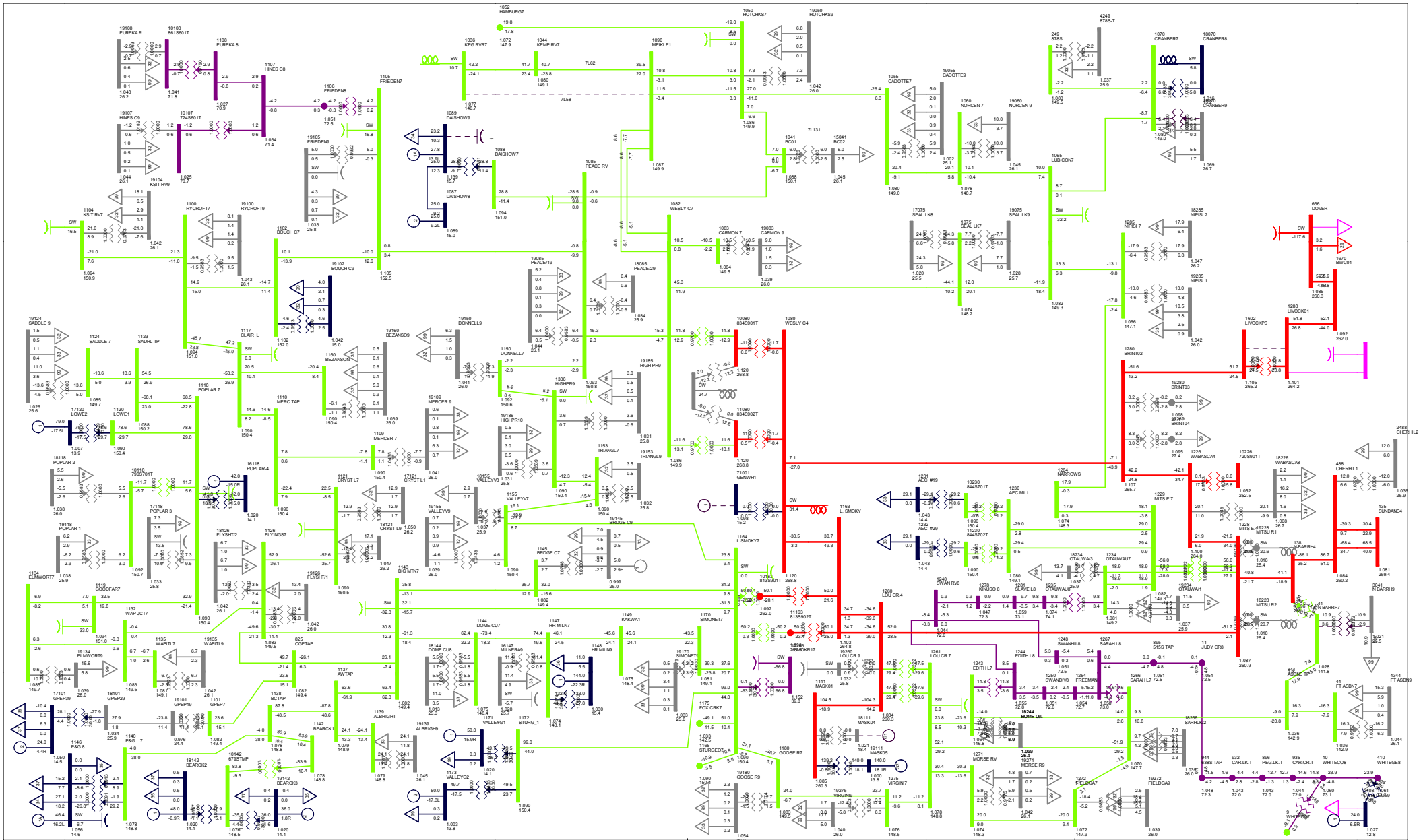


Appendix C2c Figure: 54

Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 026 7L58 KEGRIVER to Meikle_A.

Whitetail Project 1290 Interconnection Study



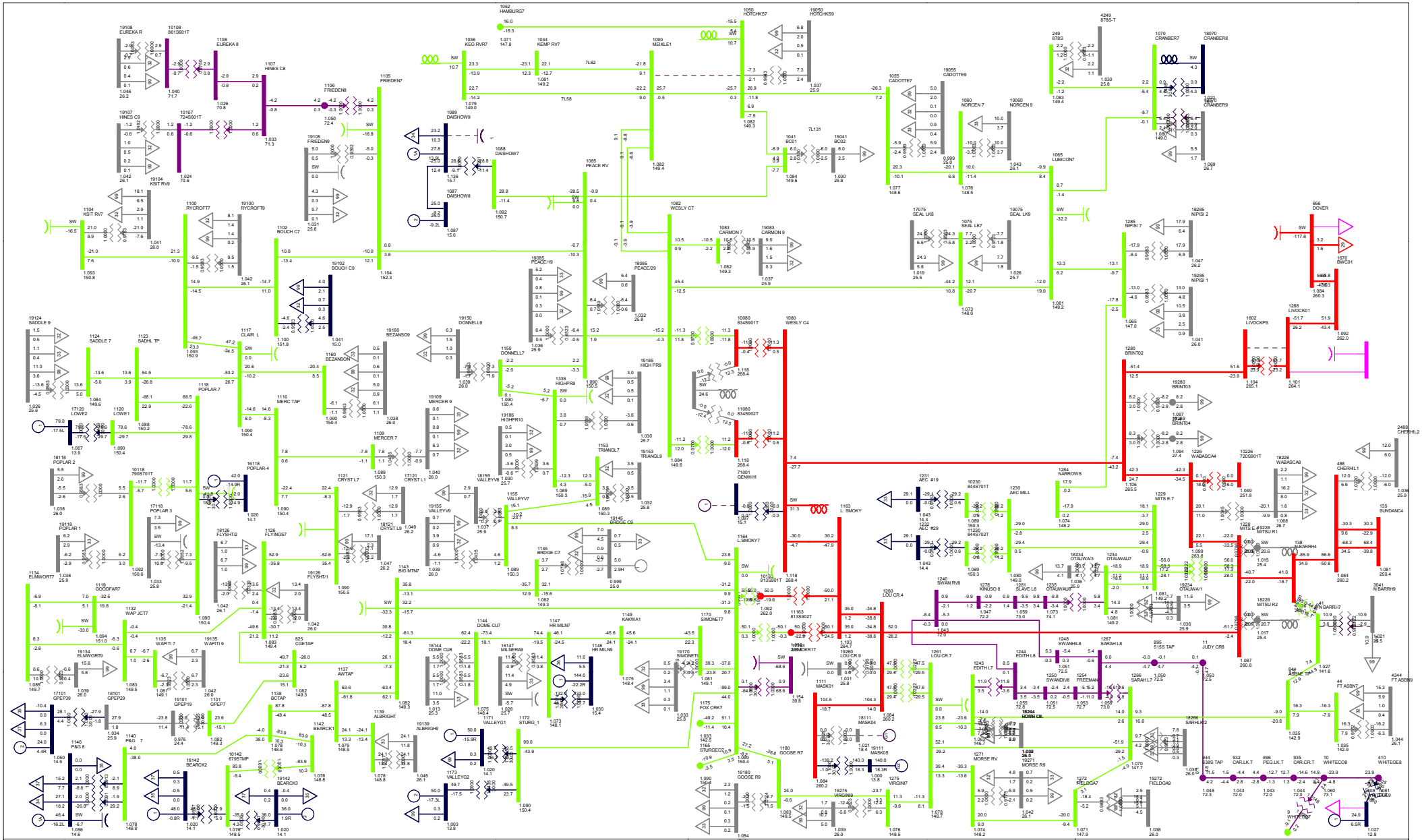
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 026 7L58 KEGRIVER to Meikle_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 55

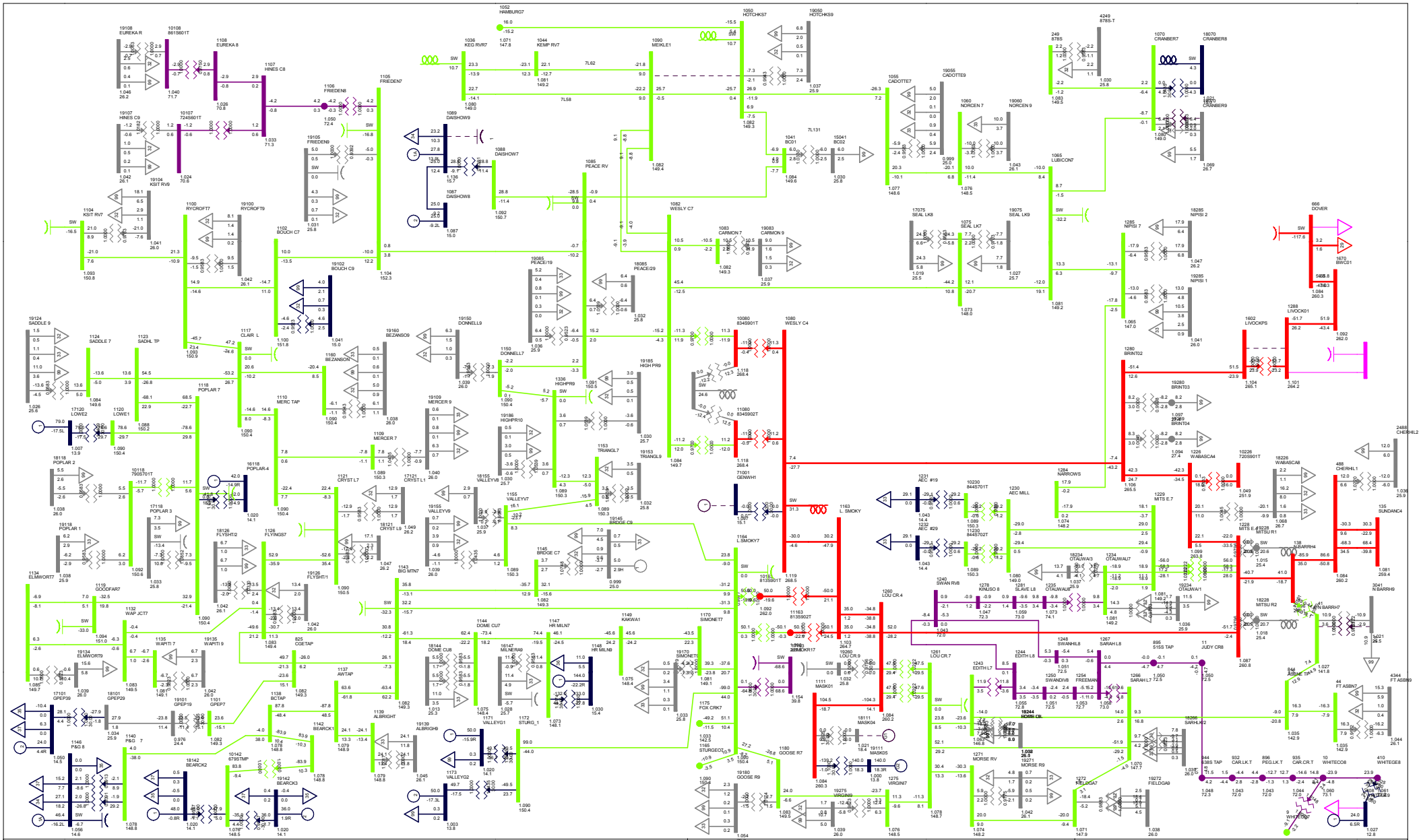


Appendix C2c Figure: 56

Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 027 7L120 HOTCHKISS to Meikle_A.

Whitetail Project 1290 Interconnection Study



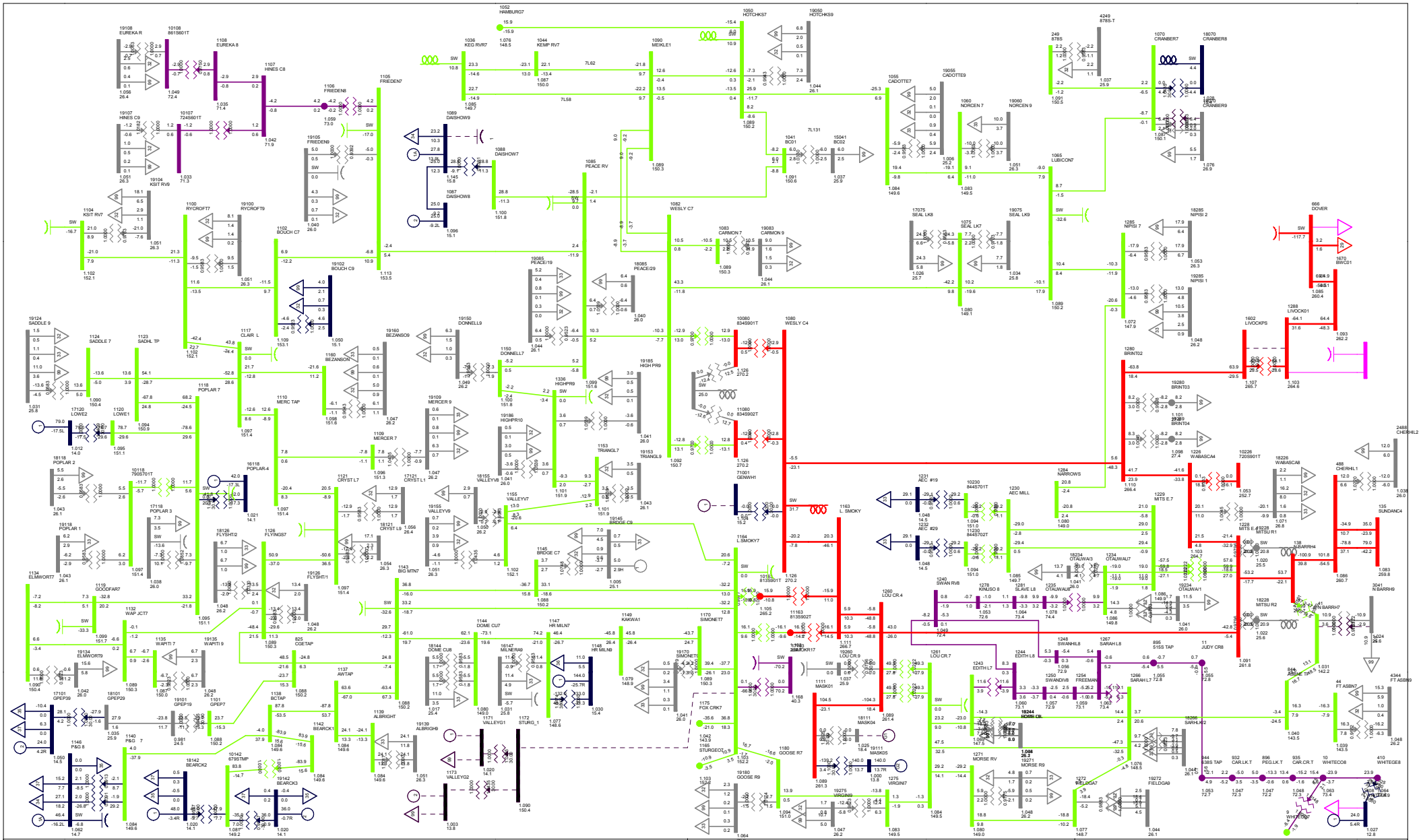
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 027 7L120 HOTCHKISS to Meikle_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 57

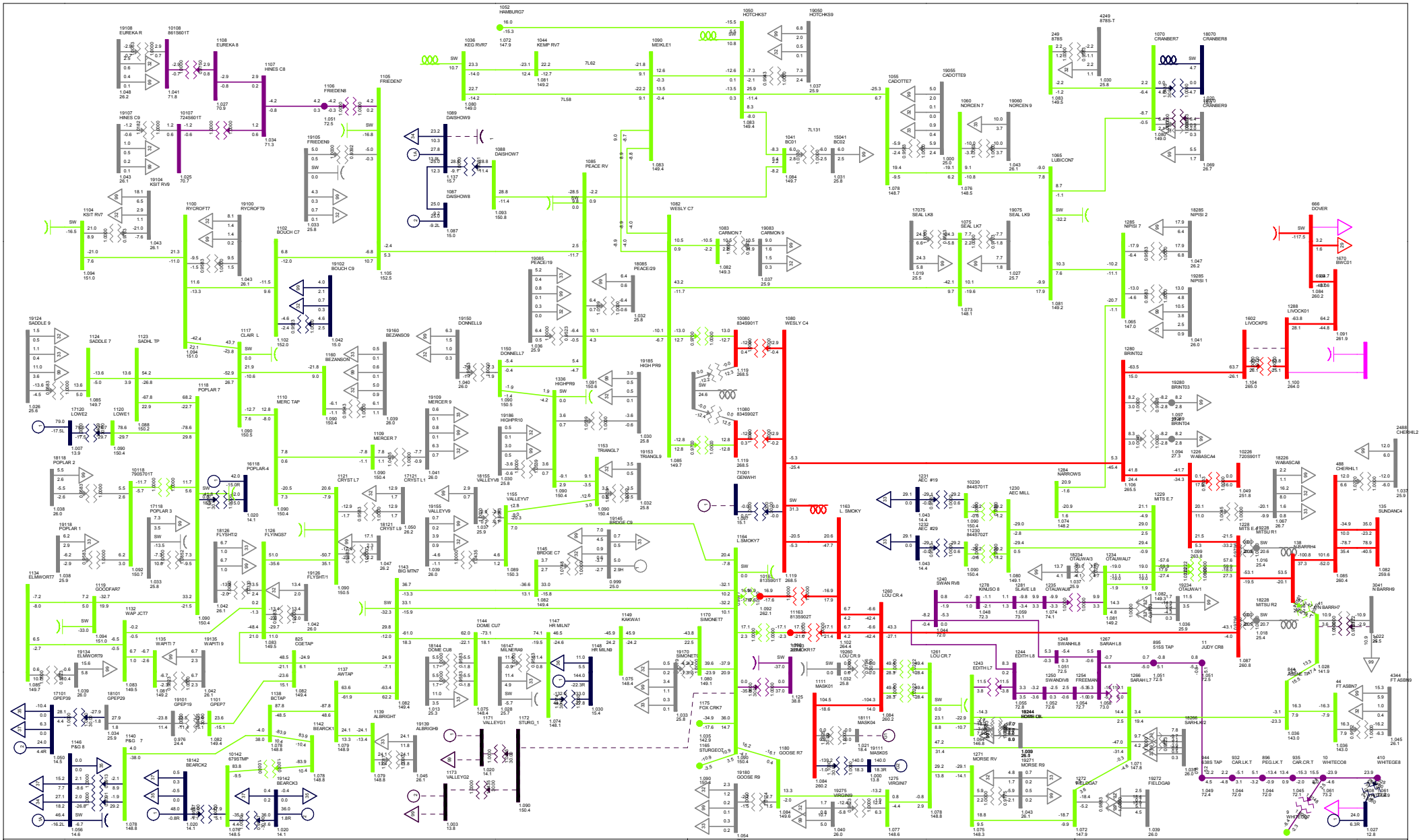


Appendix C2c Figure: 58

Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 028 7L01 LITTLESMOKY to Sturgeon_A.

Whitetail Project 1290 Interconnection Study



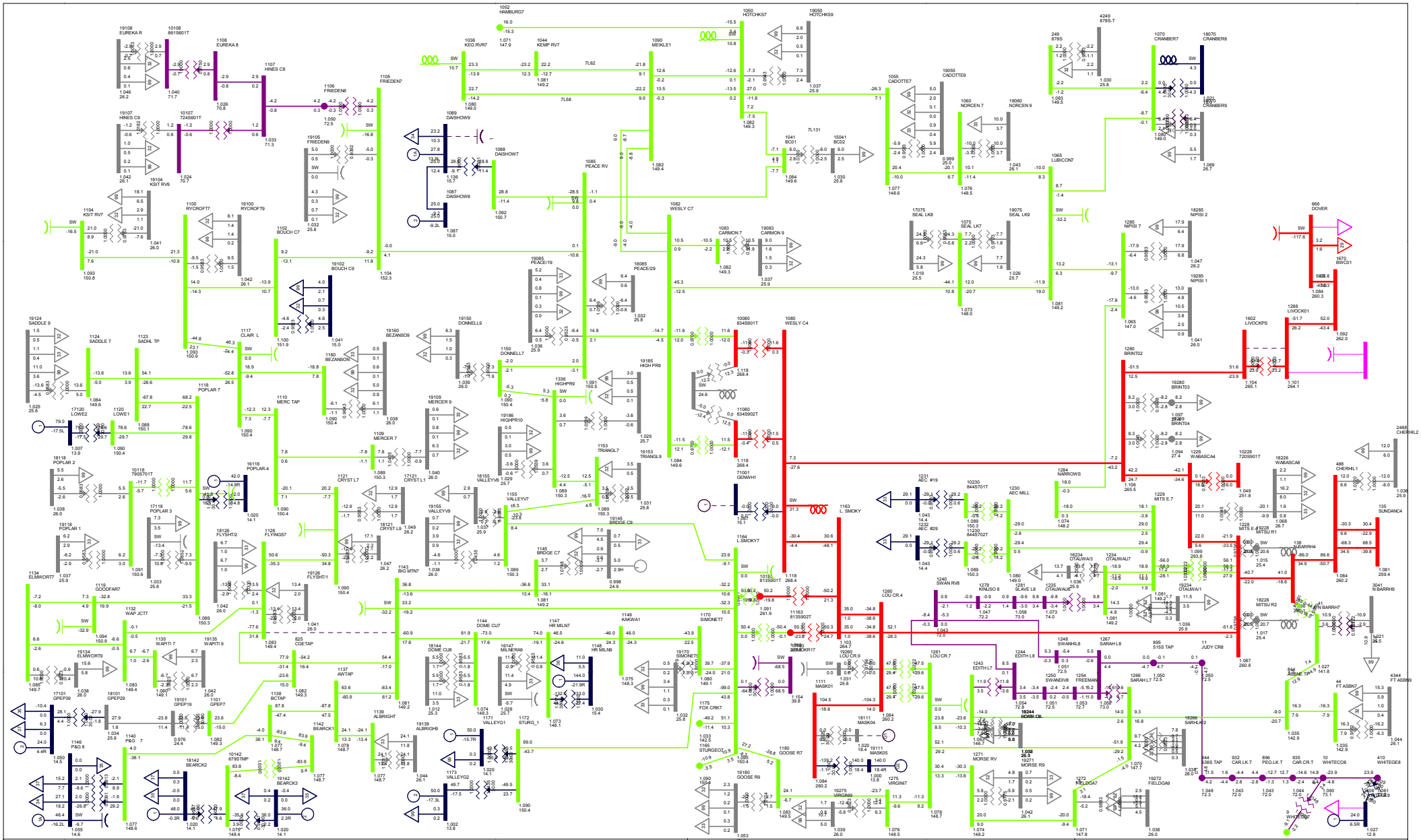
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 028 7L01 LITTLESMOKY to Sturgeon_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 59



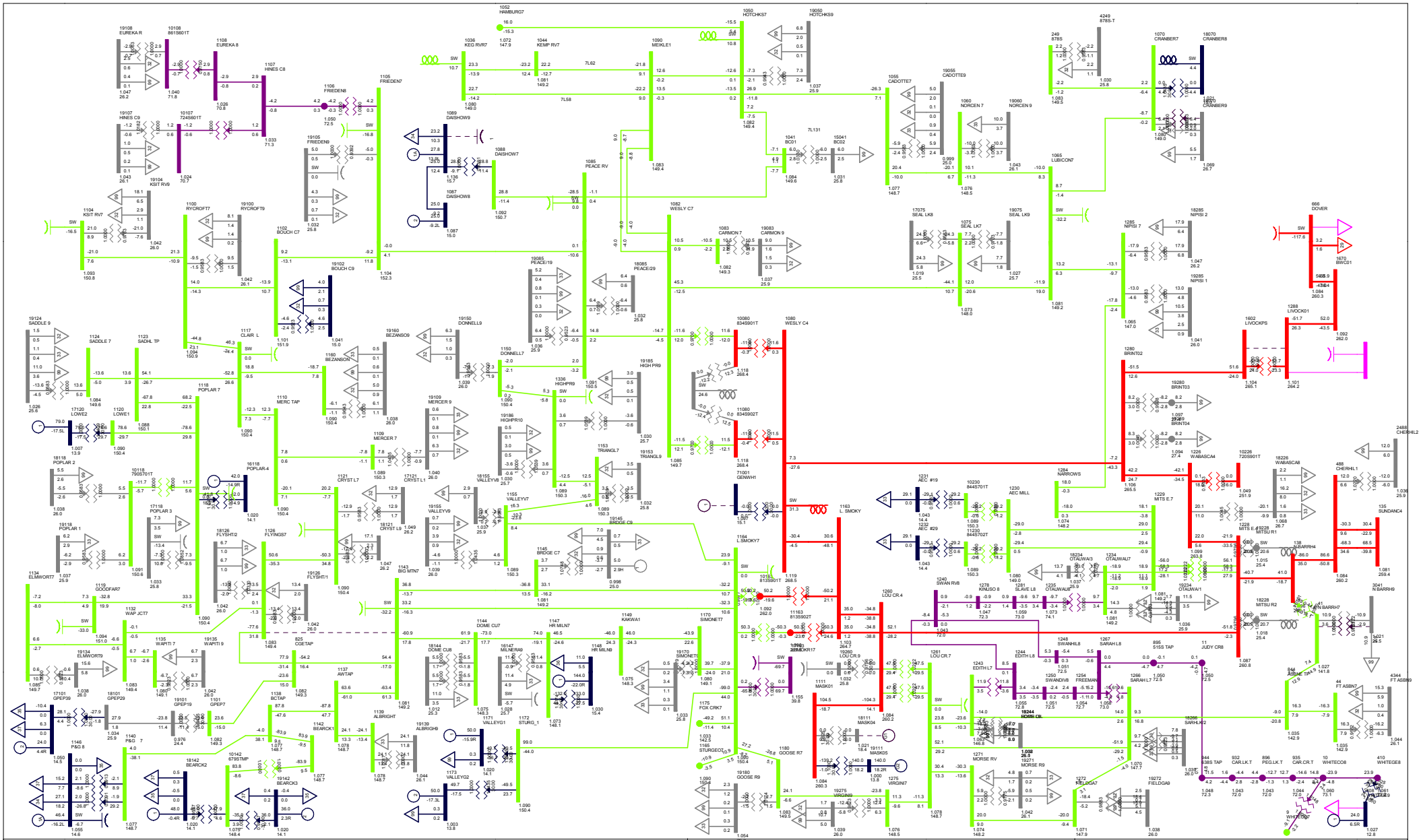
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 60



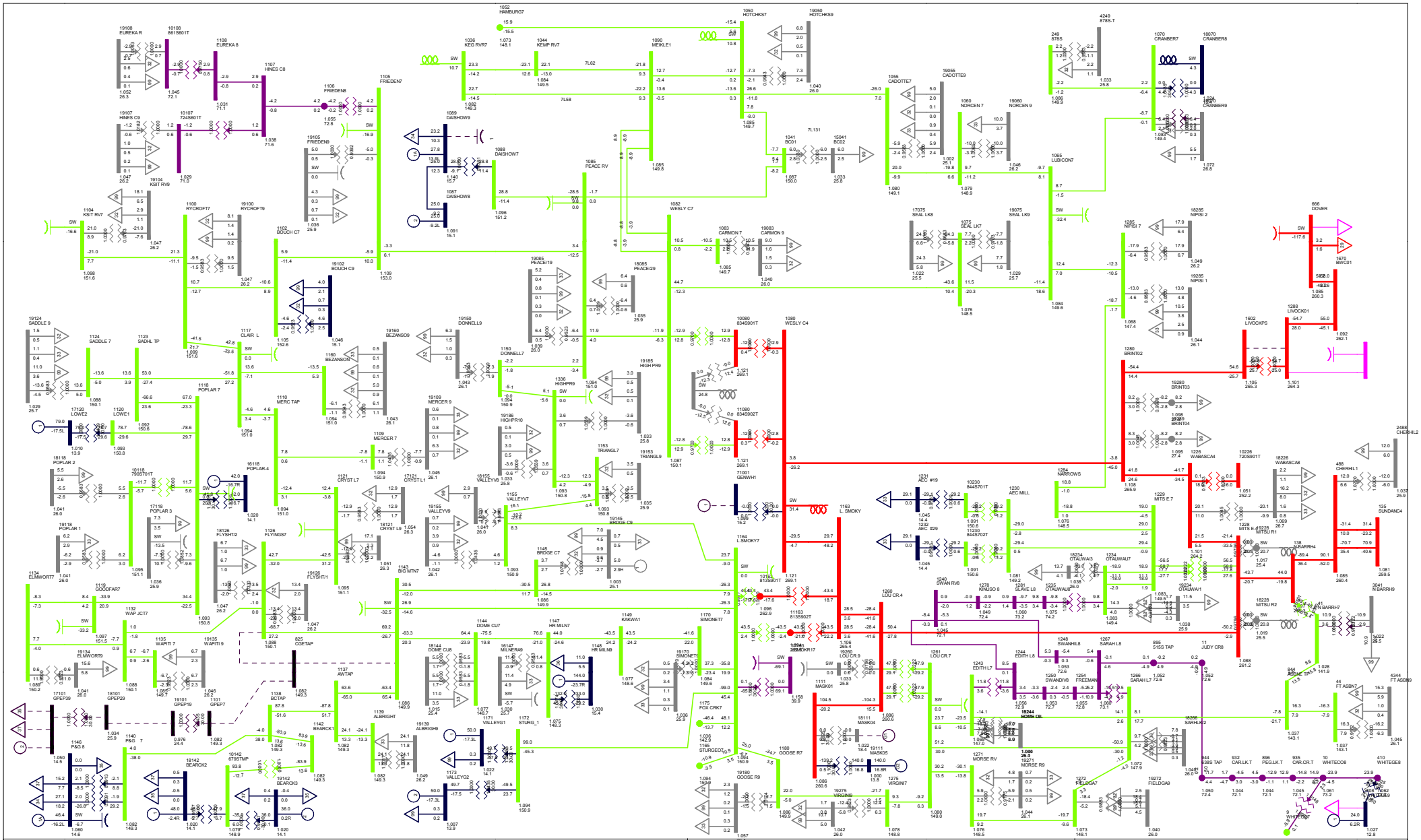
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 61



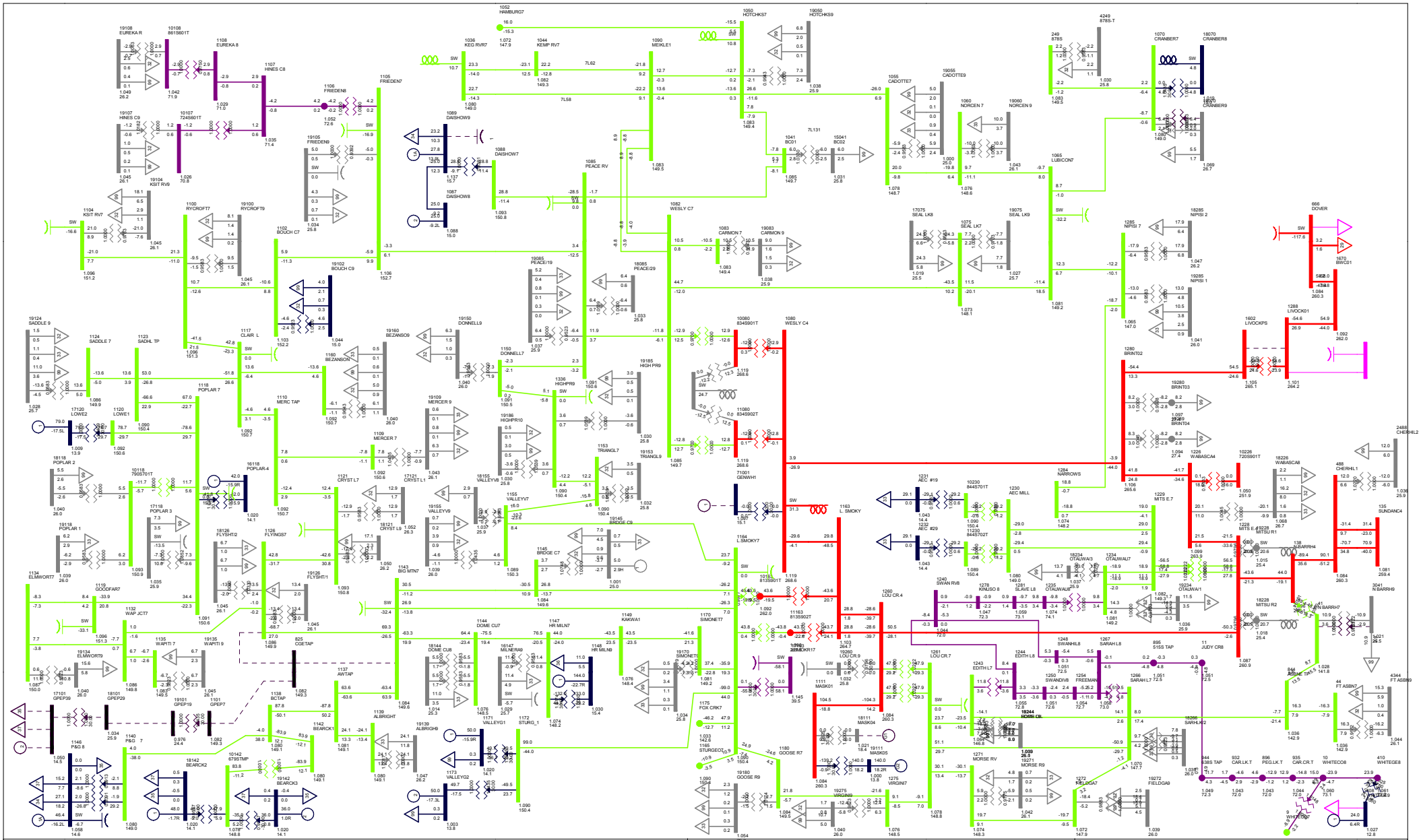
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 62



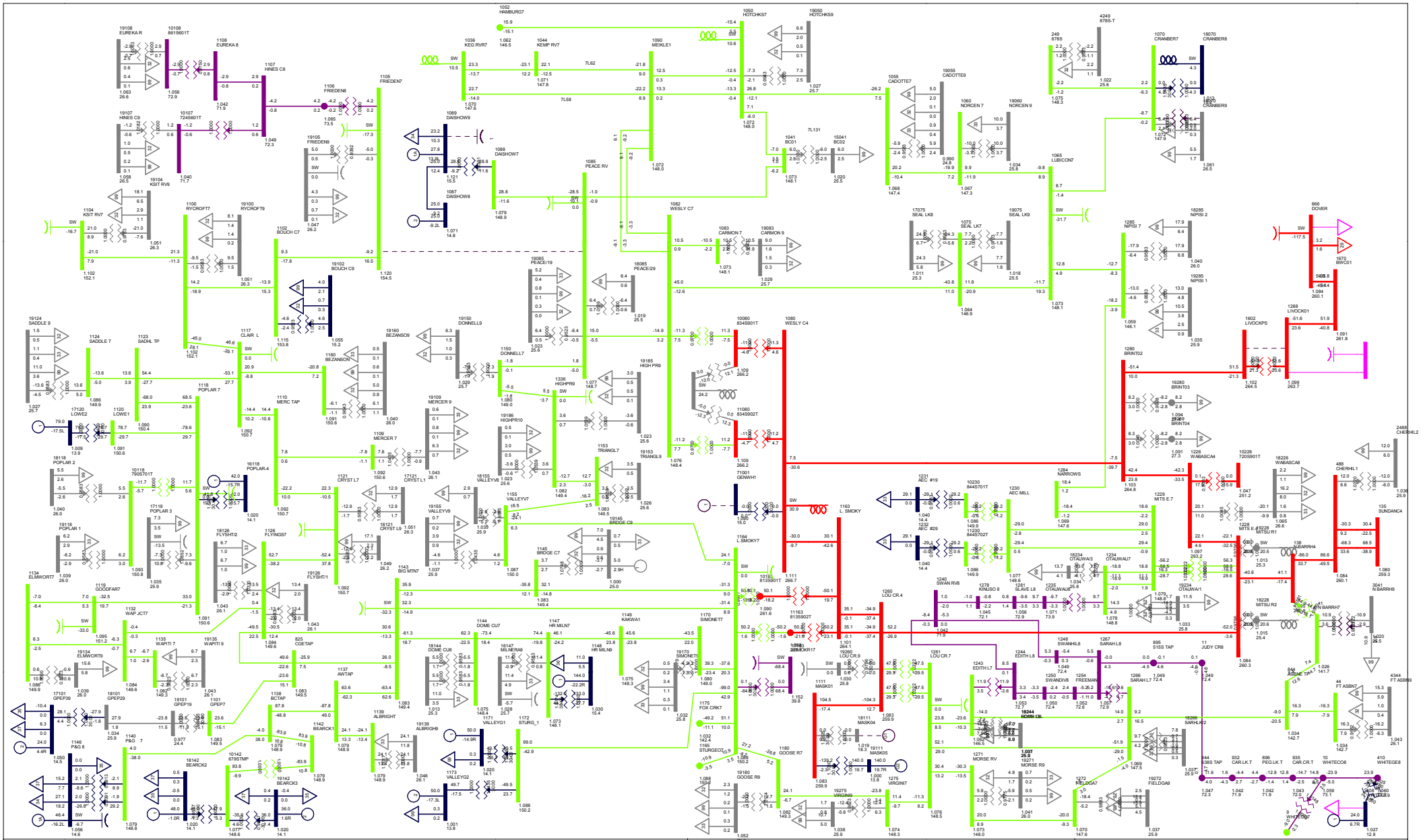
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 63



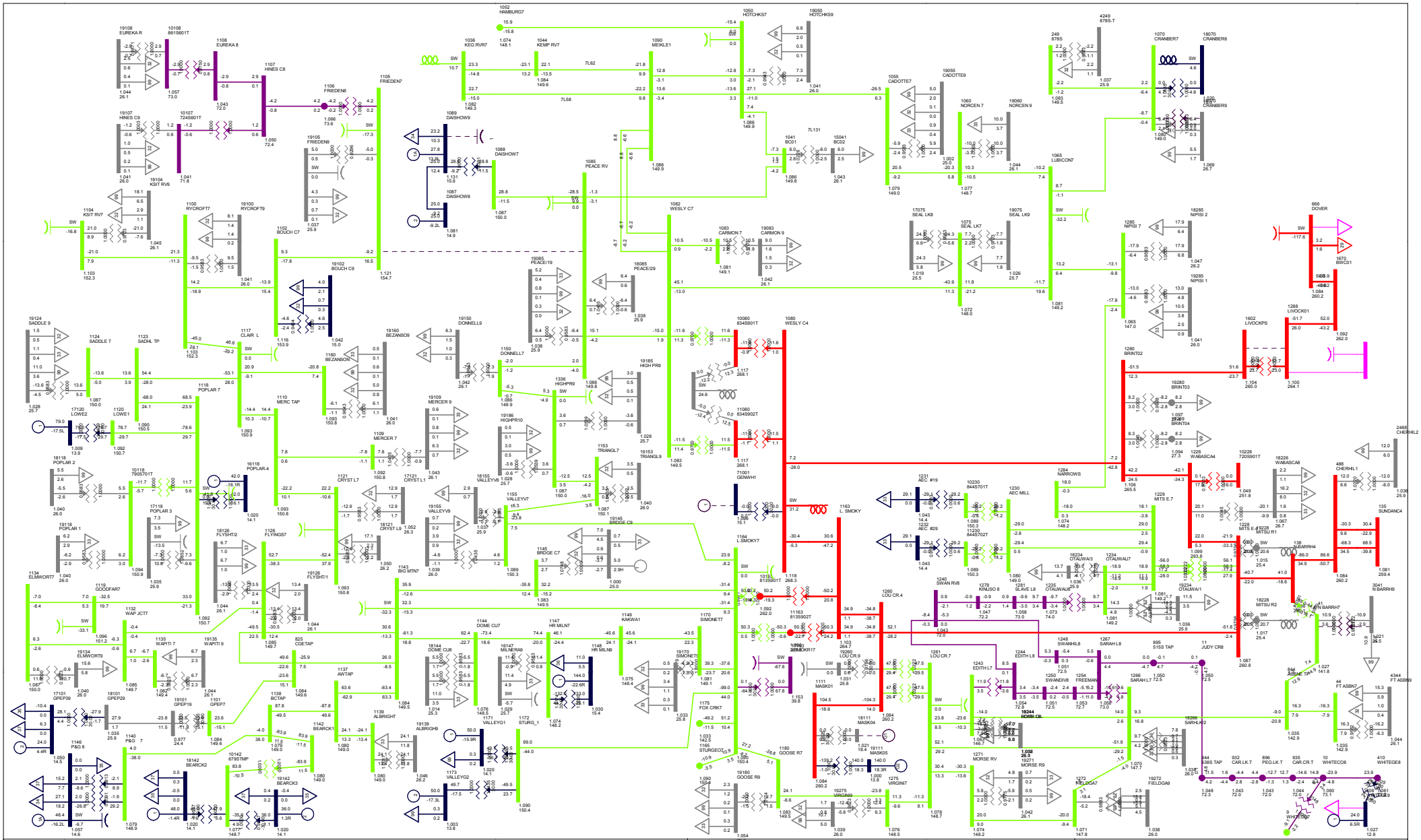
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 64



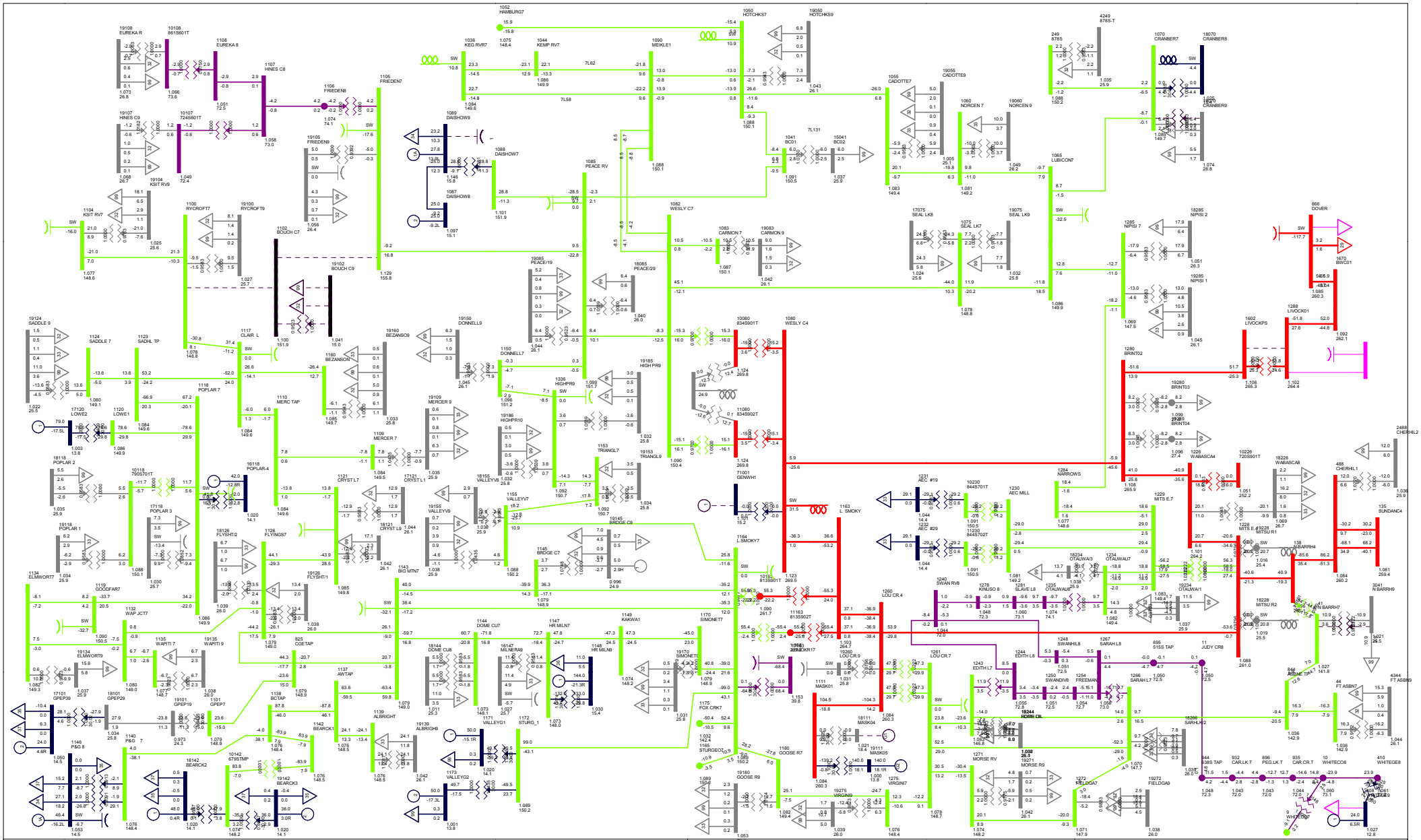
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 65



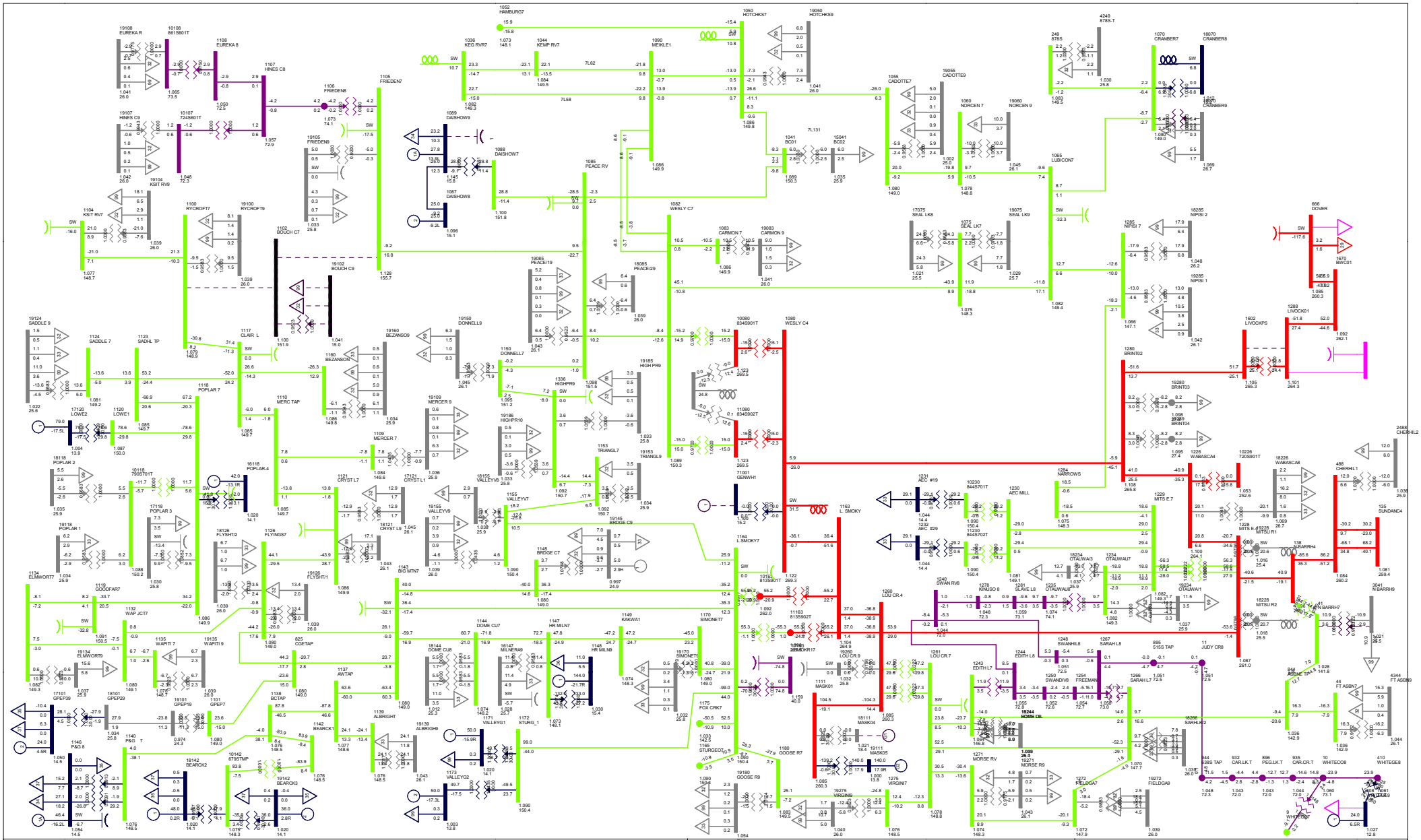
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 032 7L73 RYCROFT to FRIEDENSTAL_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 66



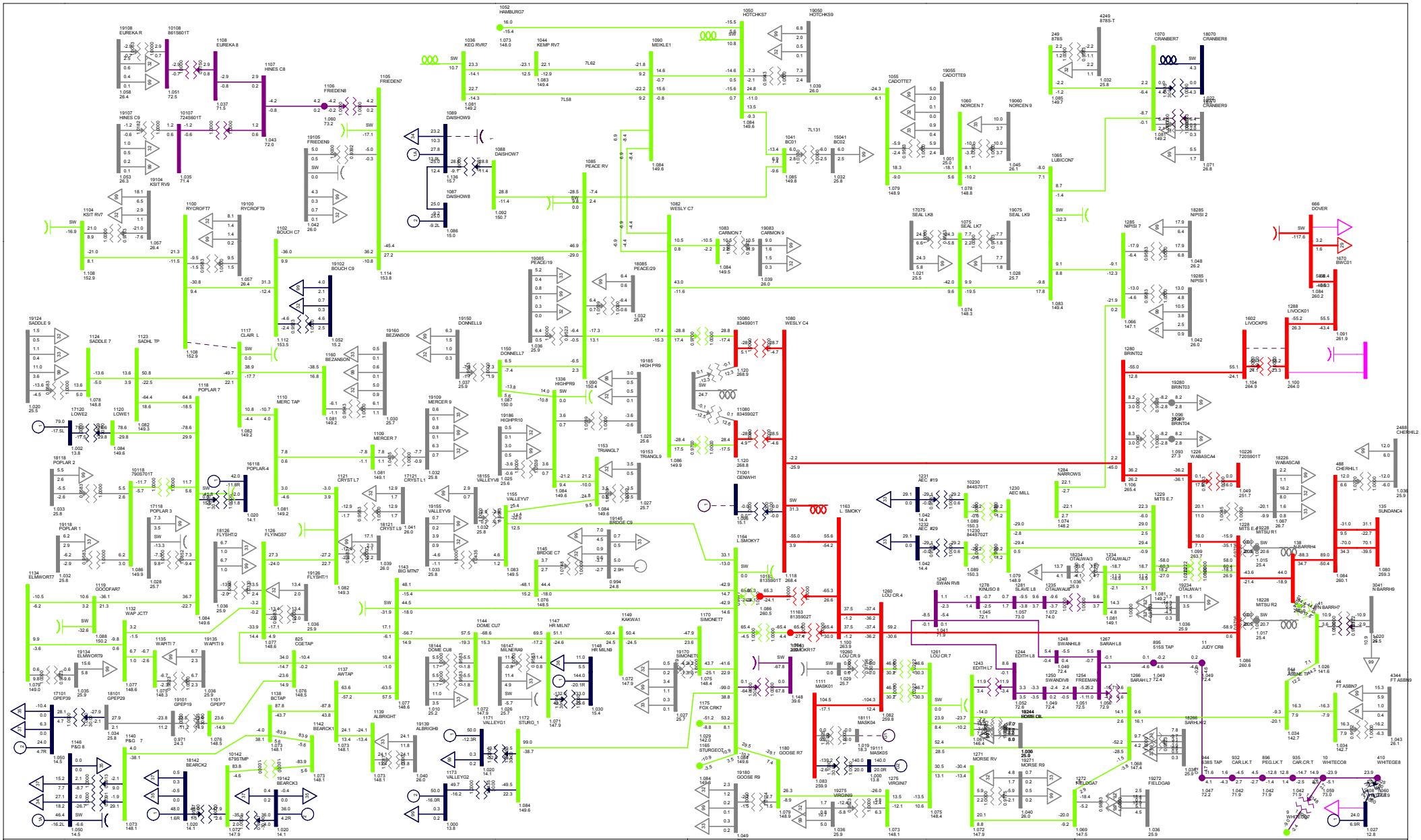
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 032 7L73 RYCROFT to FRIEDENSTAL_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 67



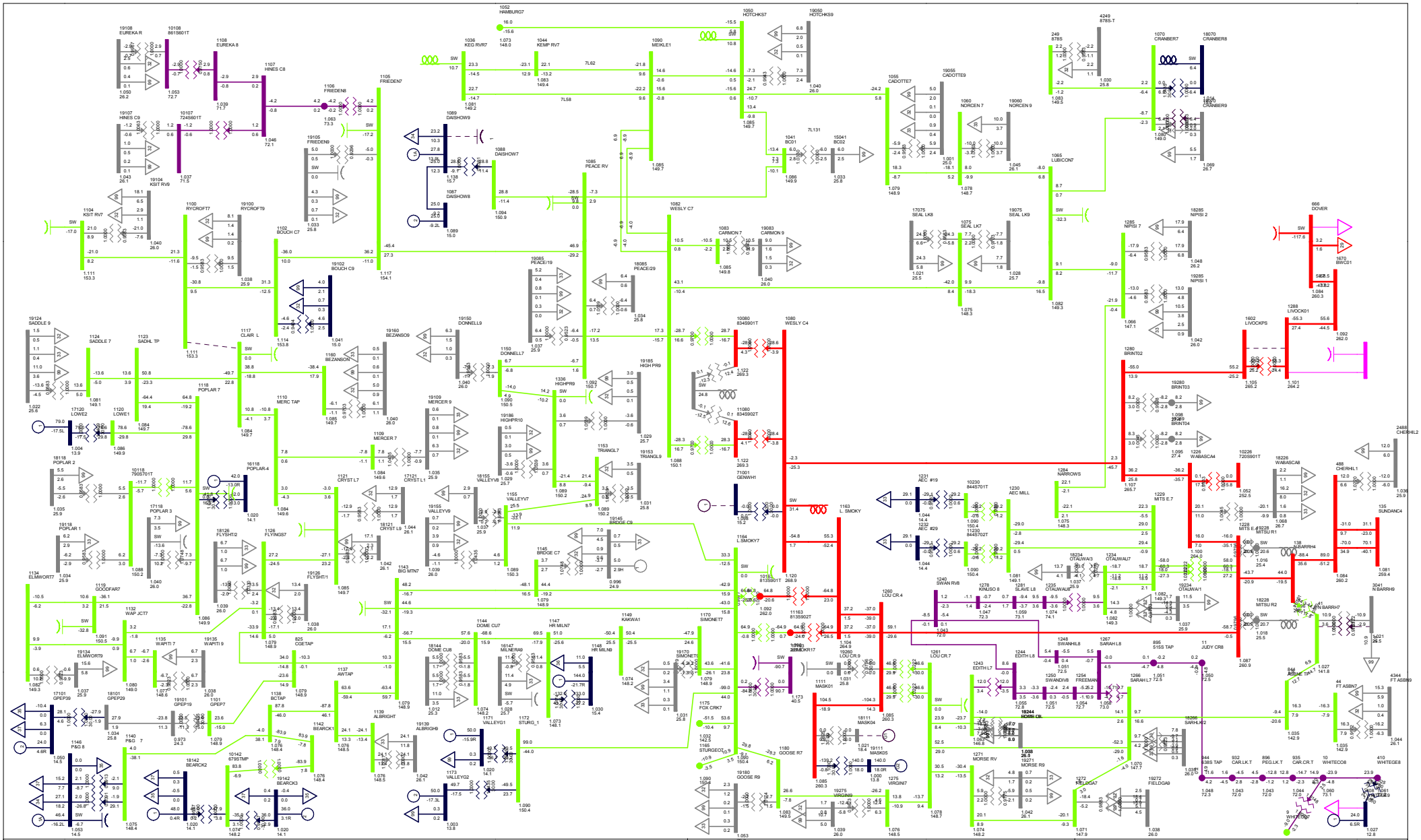
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 68

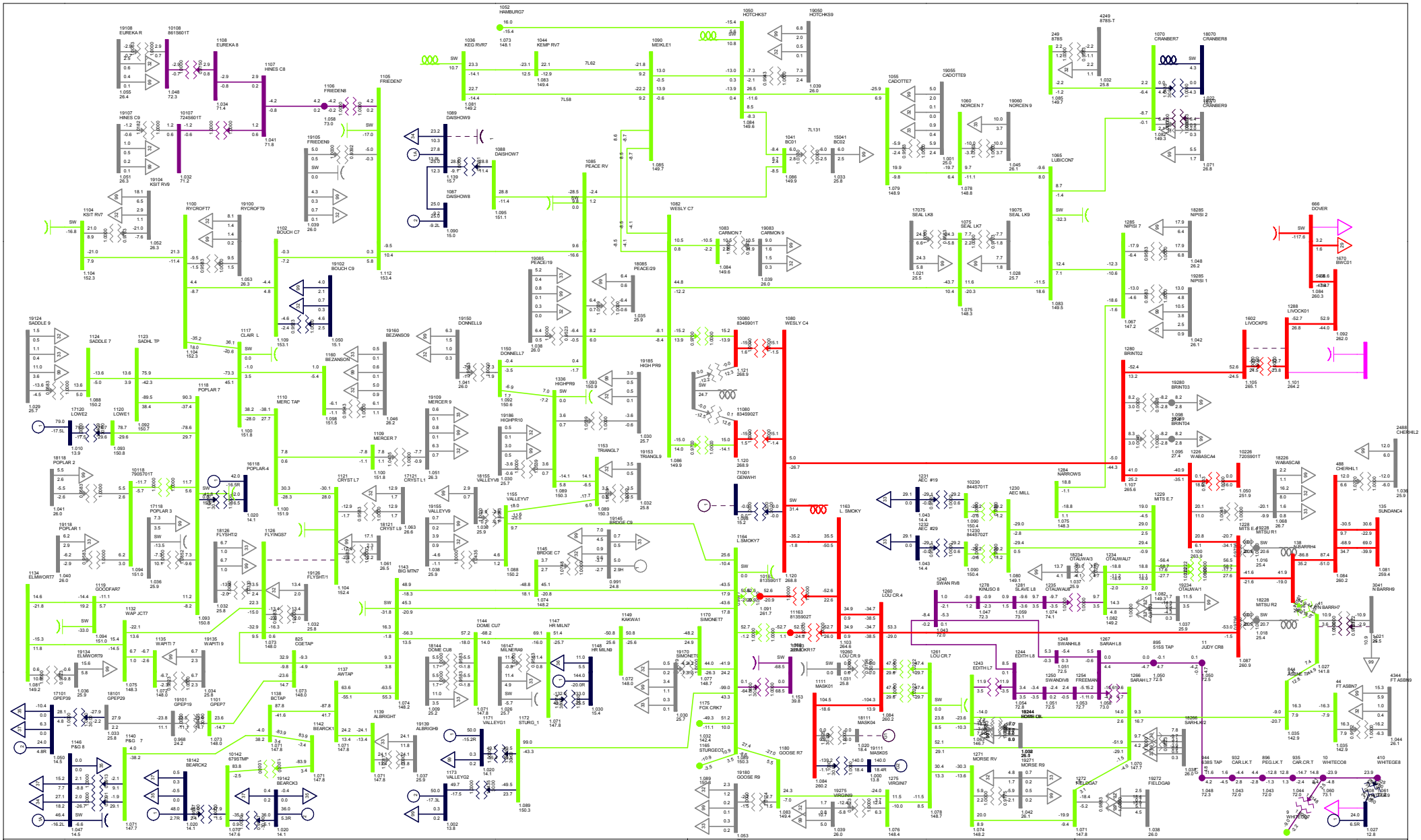


Appendix C2c Figure: 69

Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_B.

Whitetail Project 1290 Interconnection Study

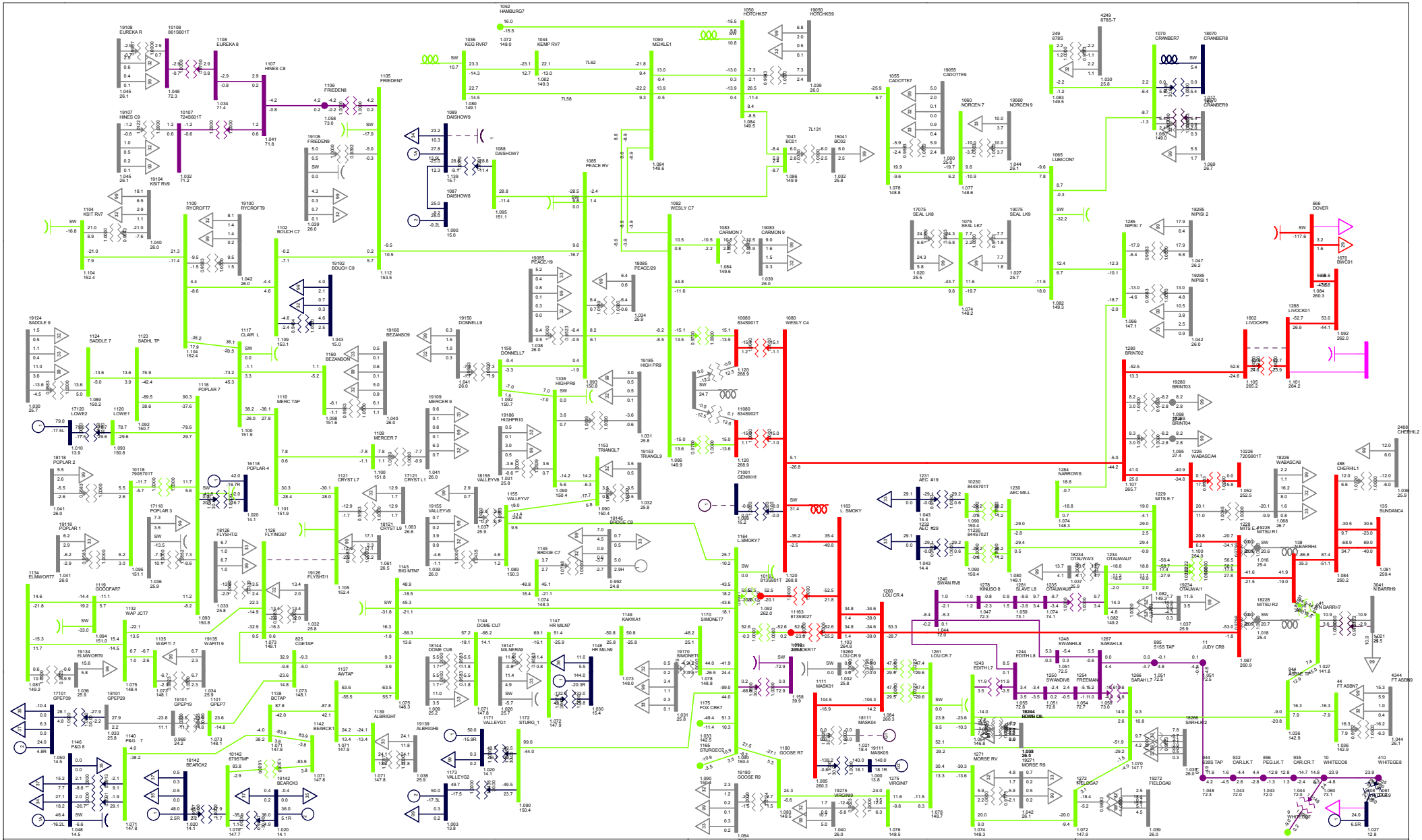


Appendix C2c Figure: 70

Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_A.

Whitetail Project 1290 Interconnection Study



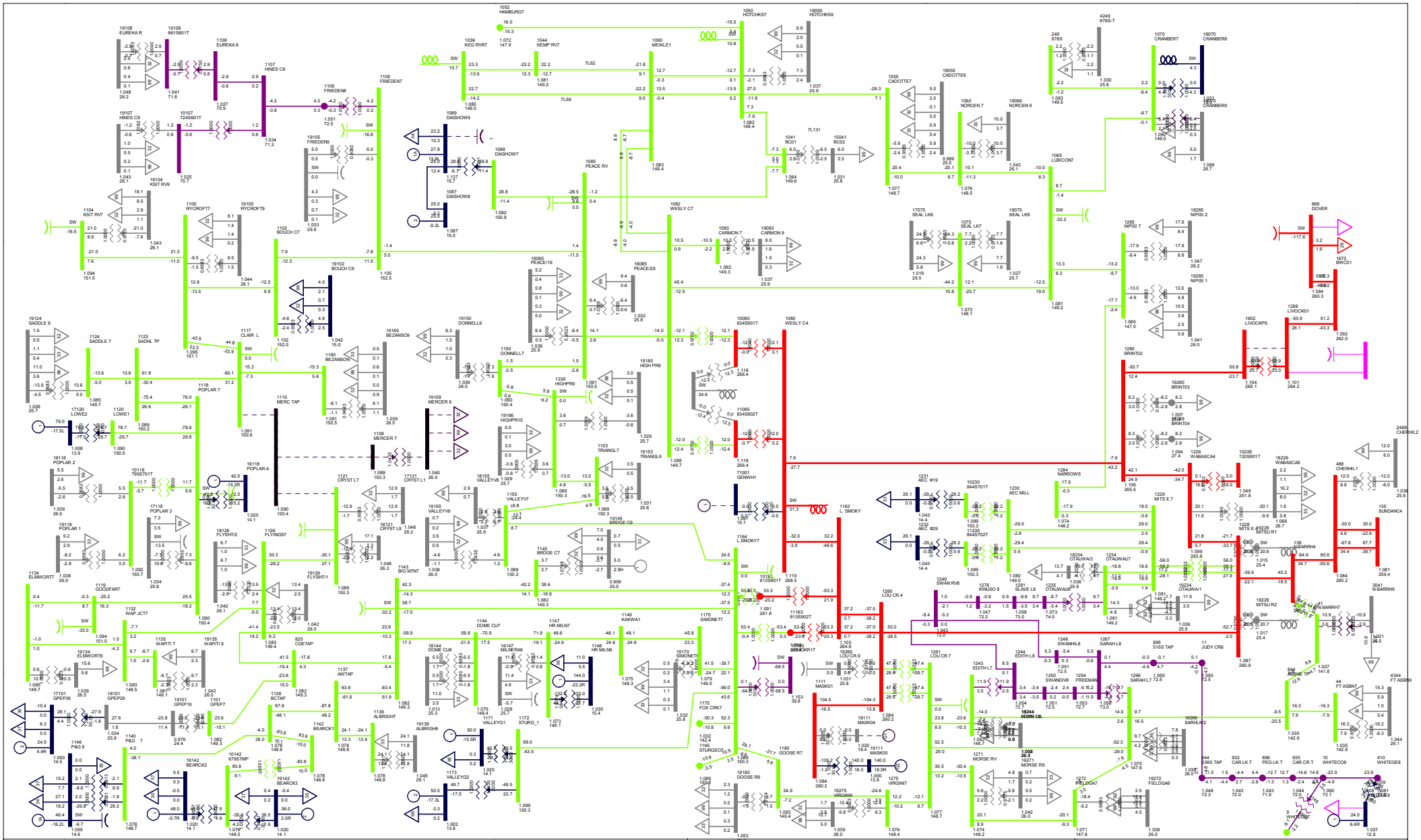
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 71



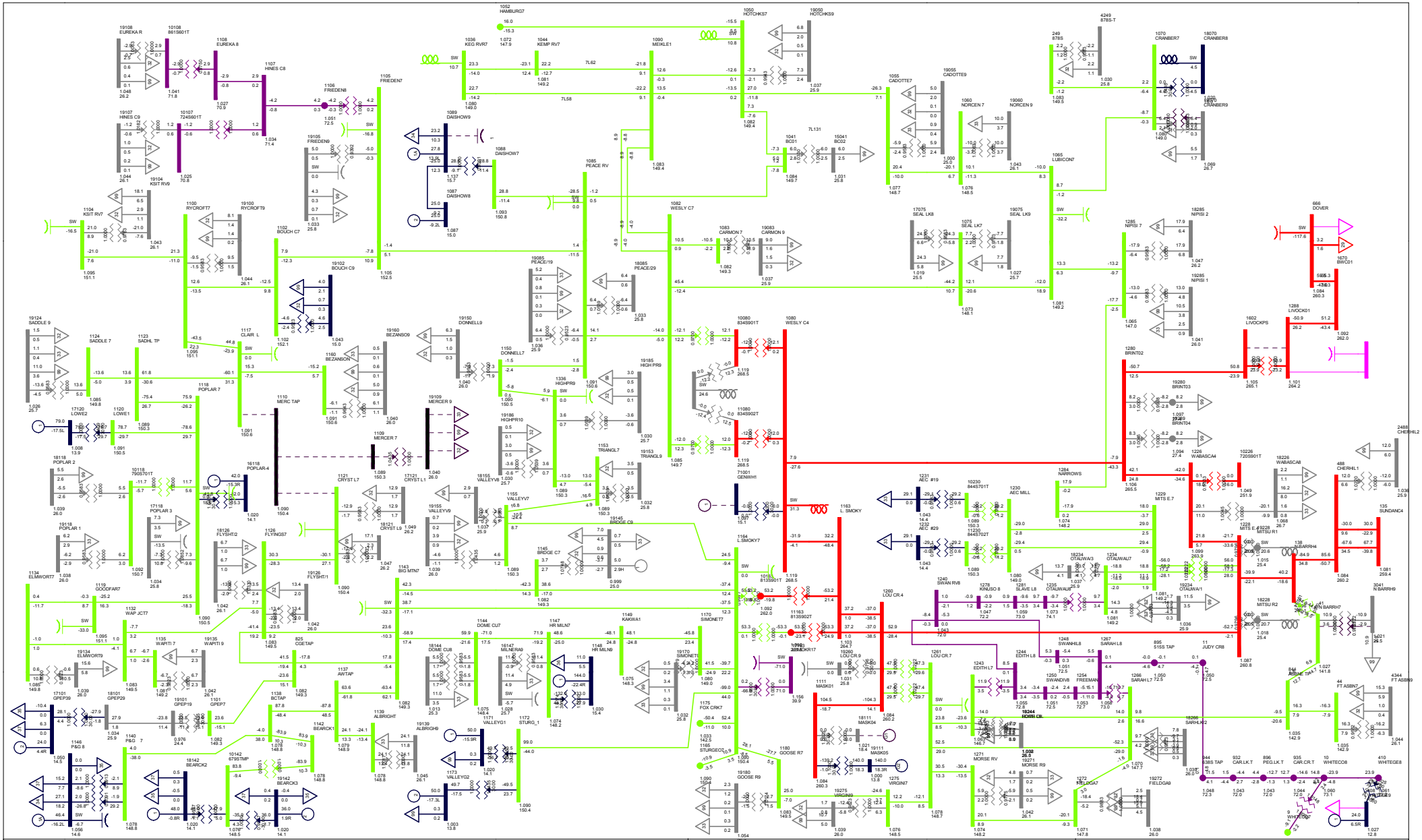
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 72



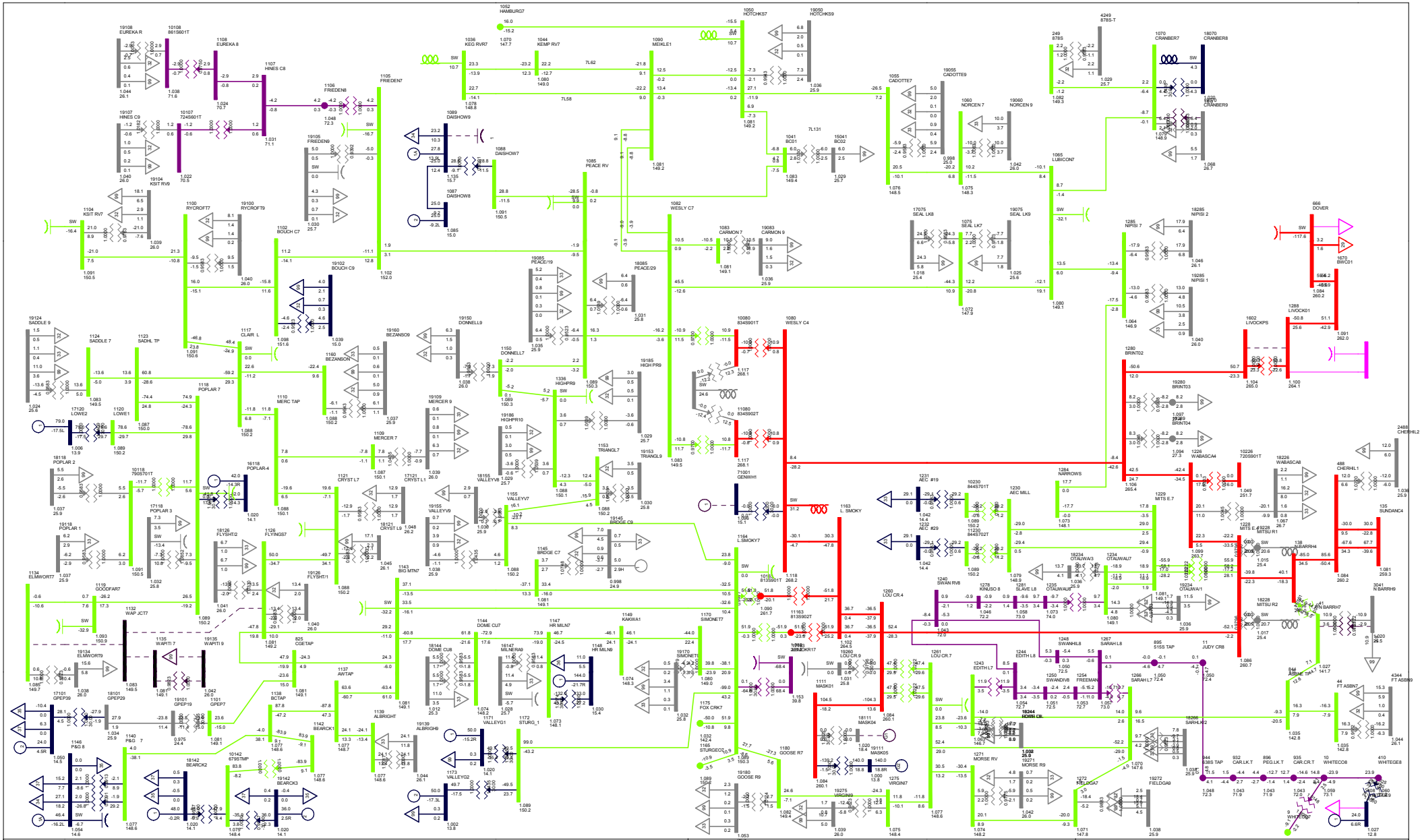
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 73



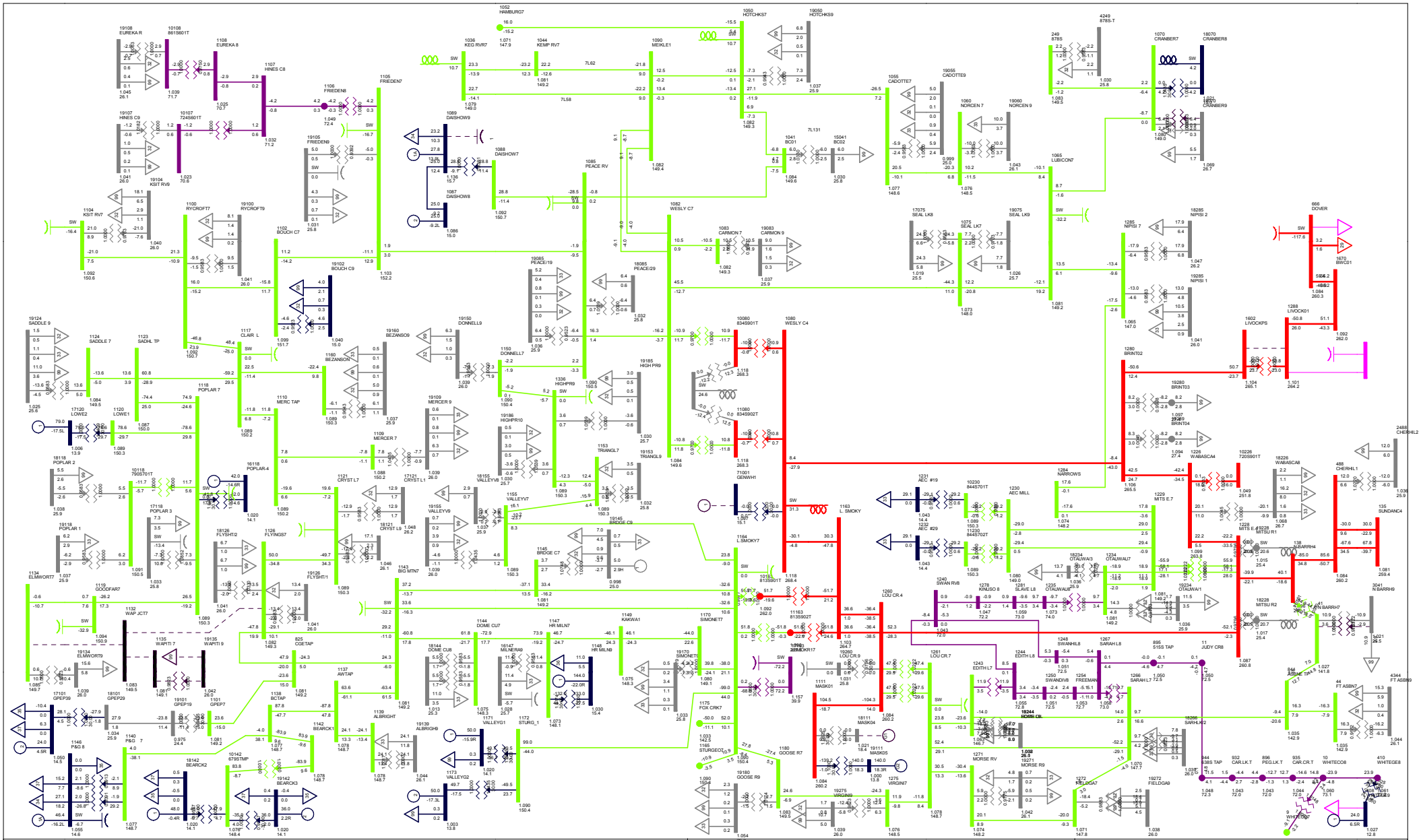
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 74



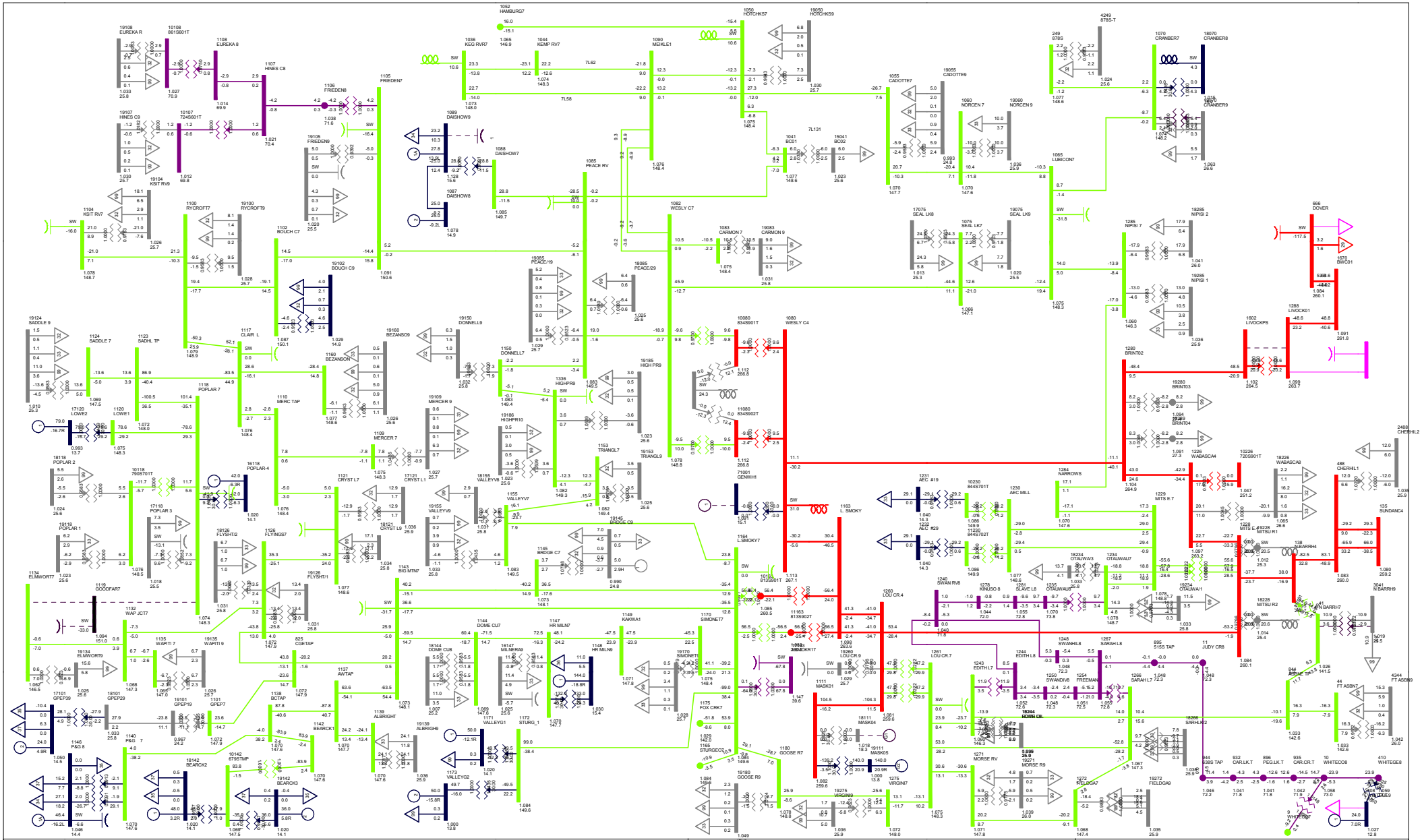
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 75



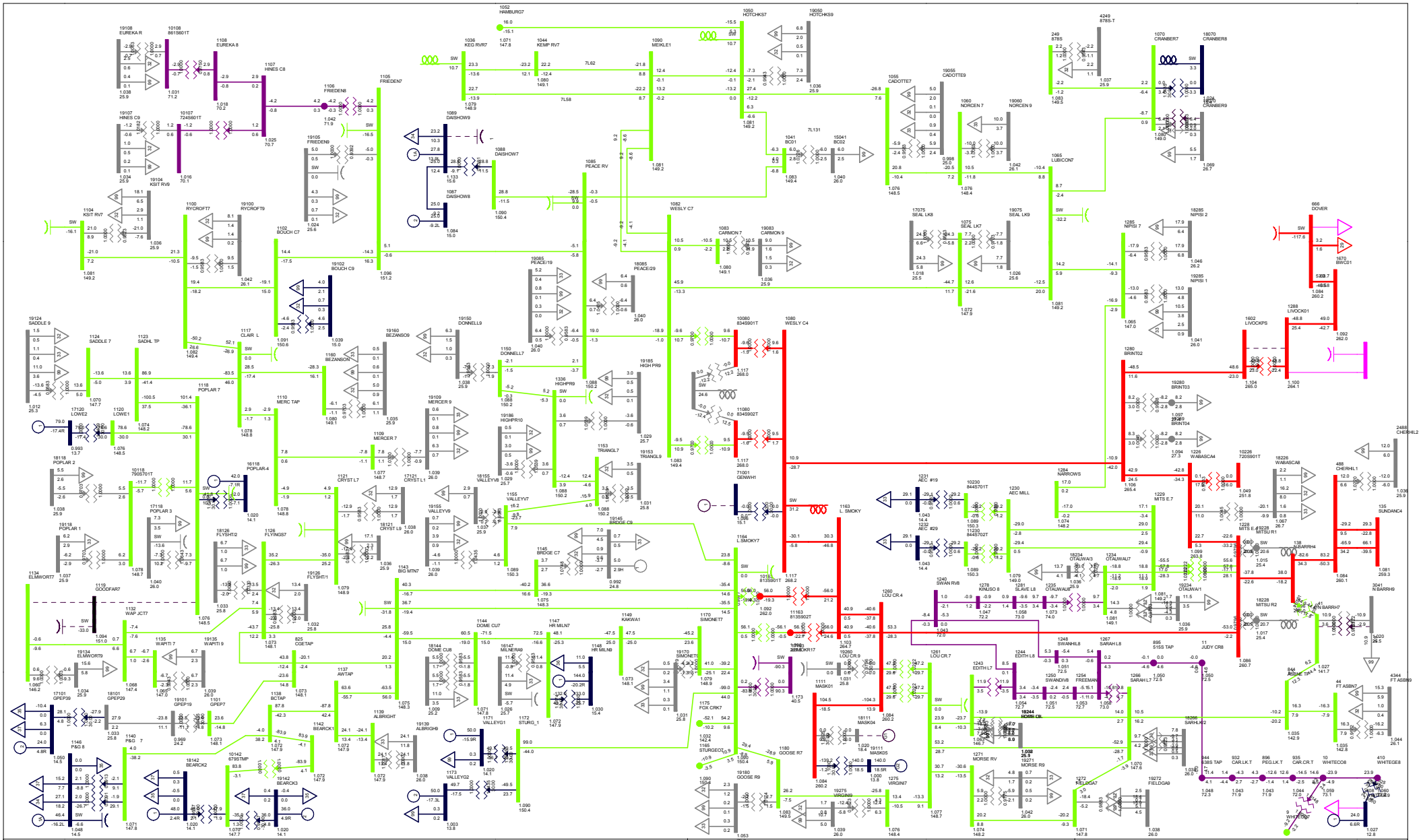
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 037 7L07 POPLARHILL to ELMWORTH_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 76



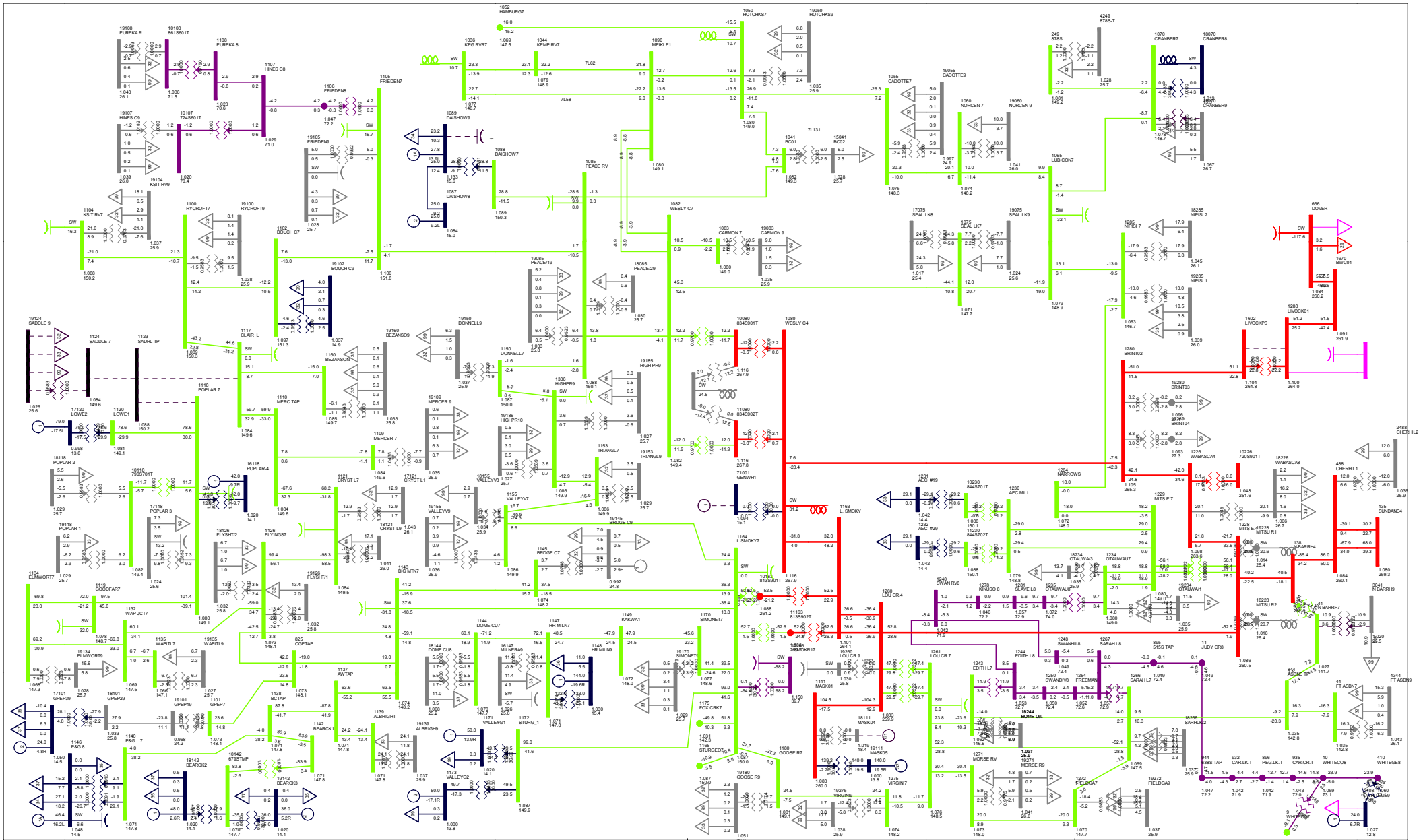
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 037 7L07 POPLARHILL to ELMWORTH_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 77

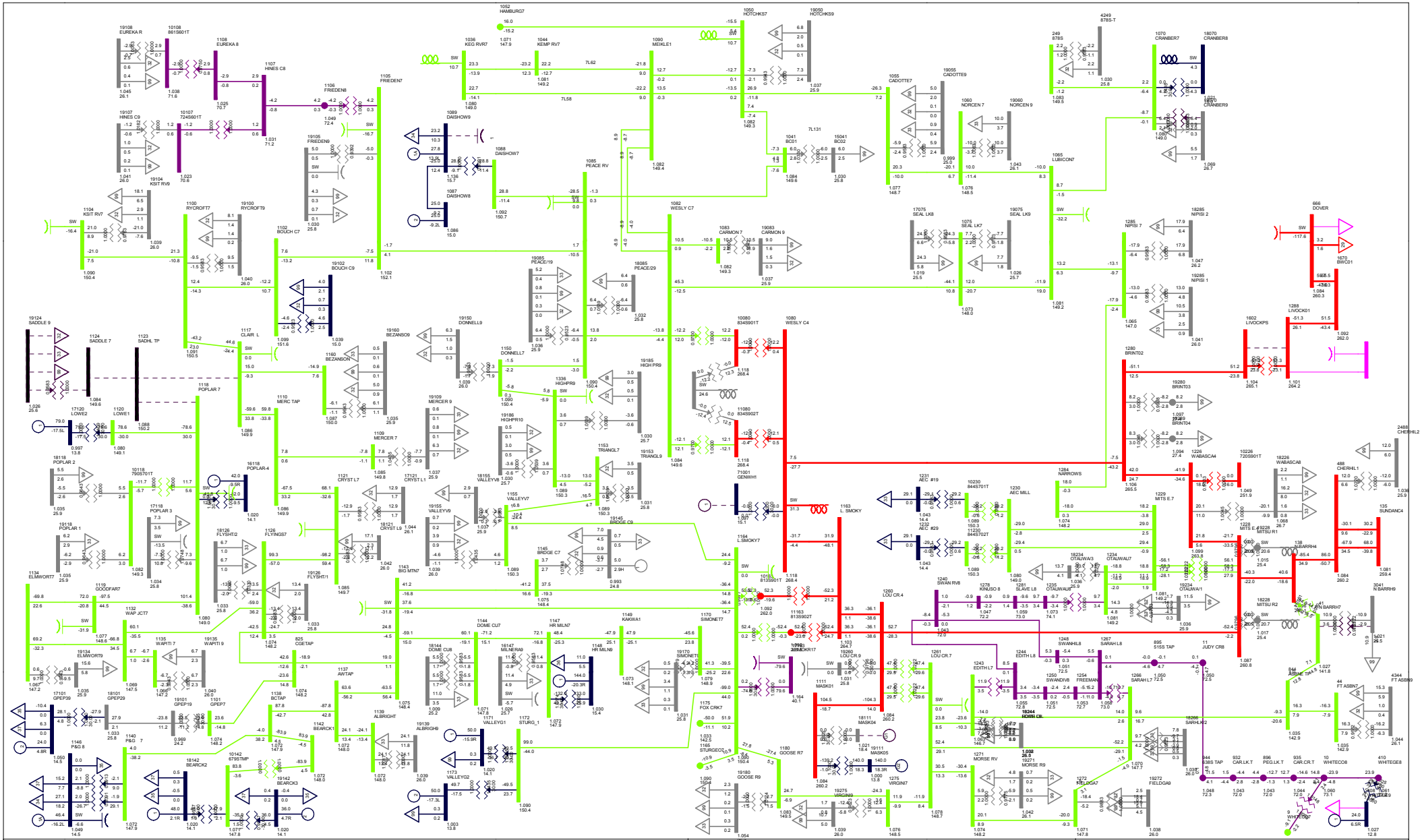


Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c Figure: 78

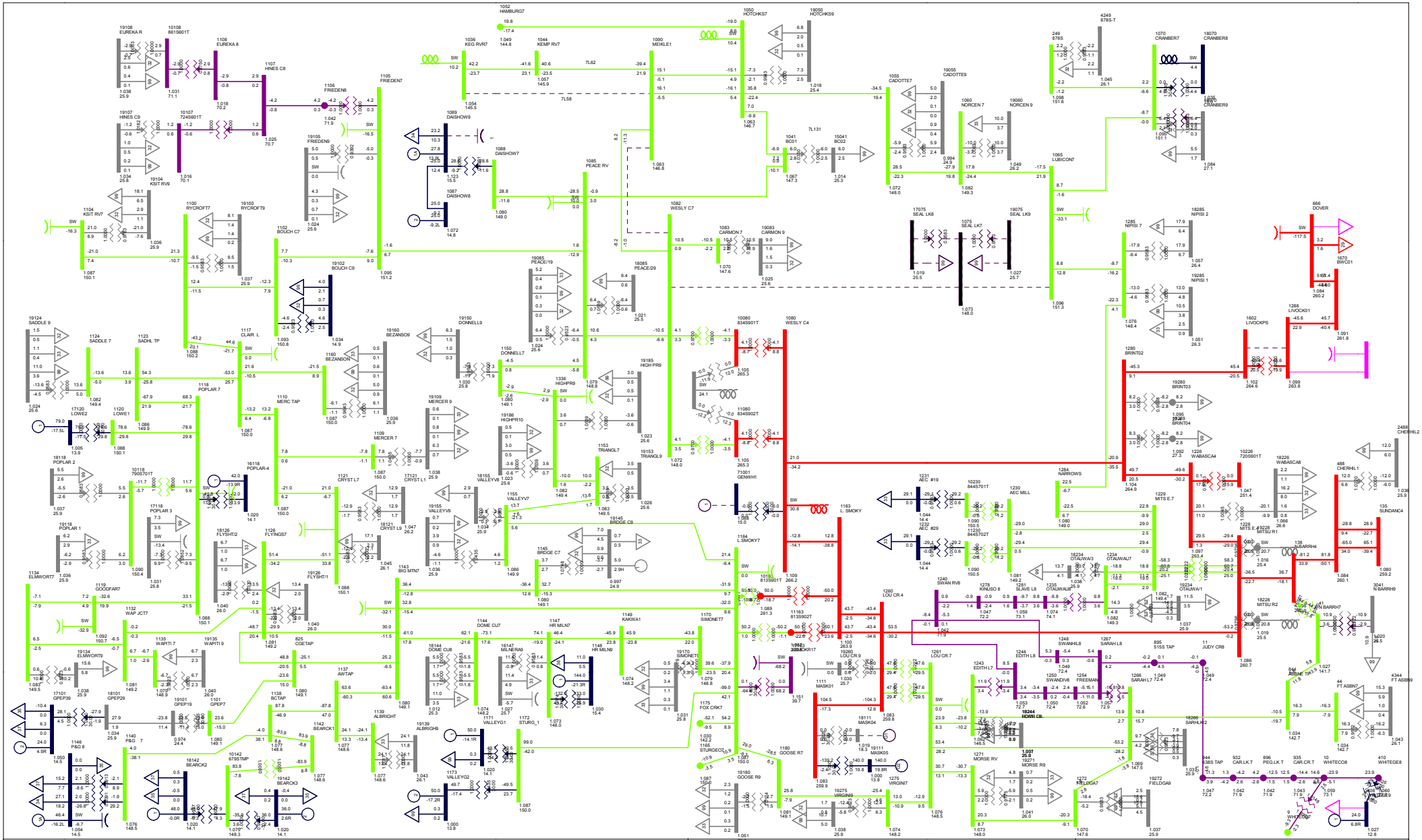


Appendix C2c Figure: 79

Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_B.

Whitetail Project 1290 Interconnection Study



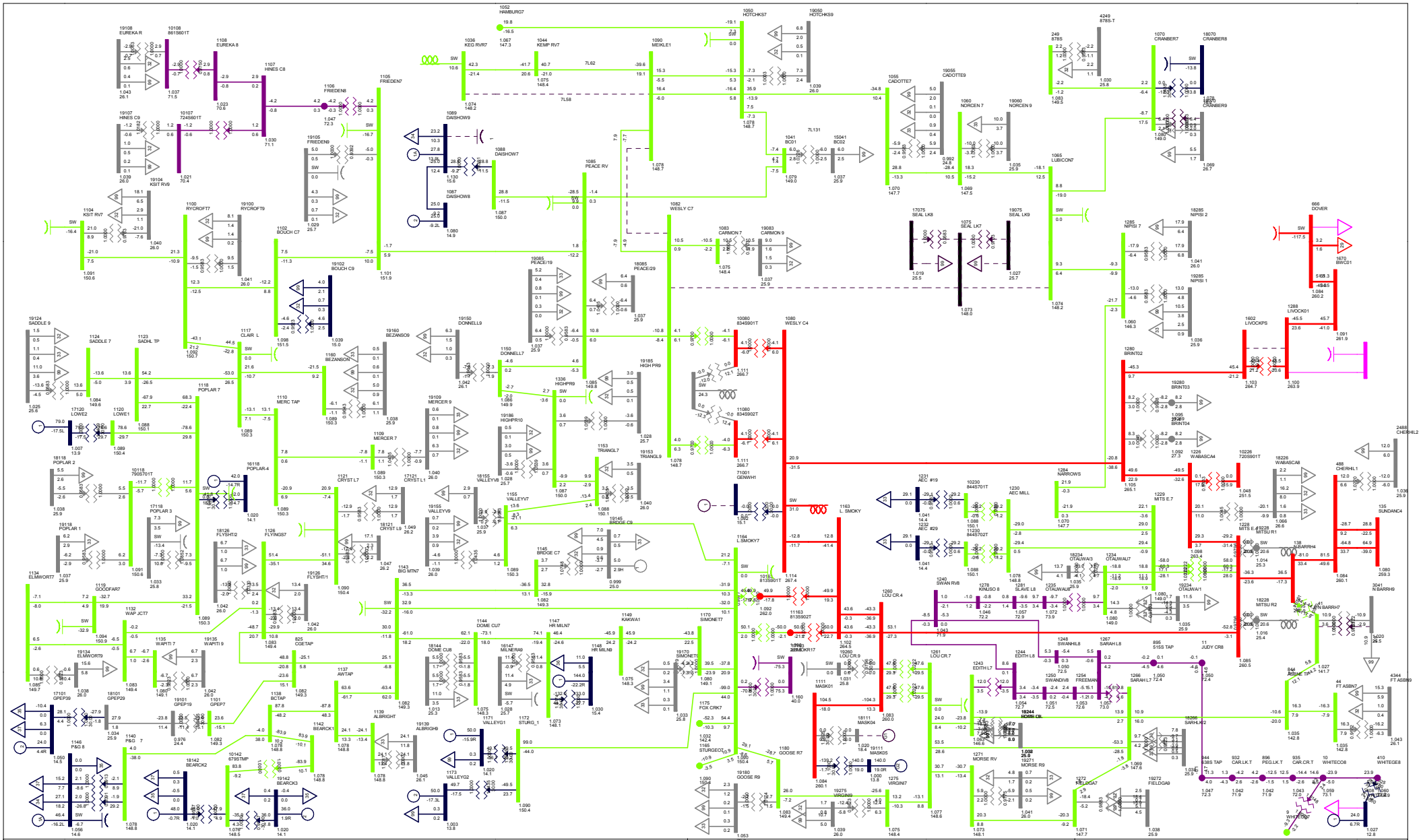
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 040 C Cont 7L106 7L131 (TAP)_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 80



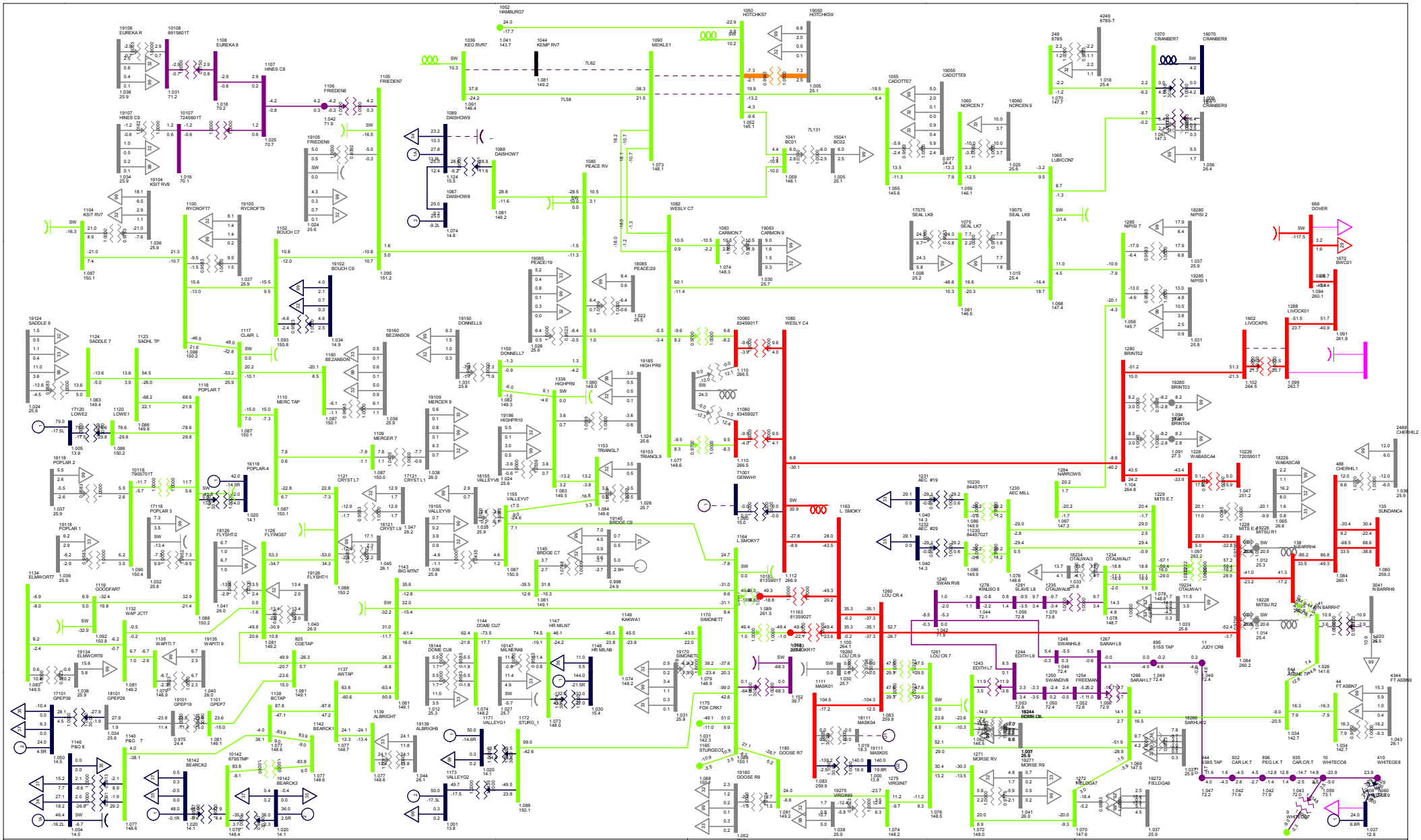
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 040 C Cont 7L106 7L131 (TAP)_B.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 81



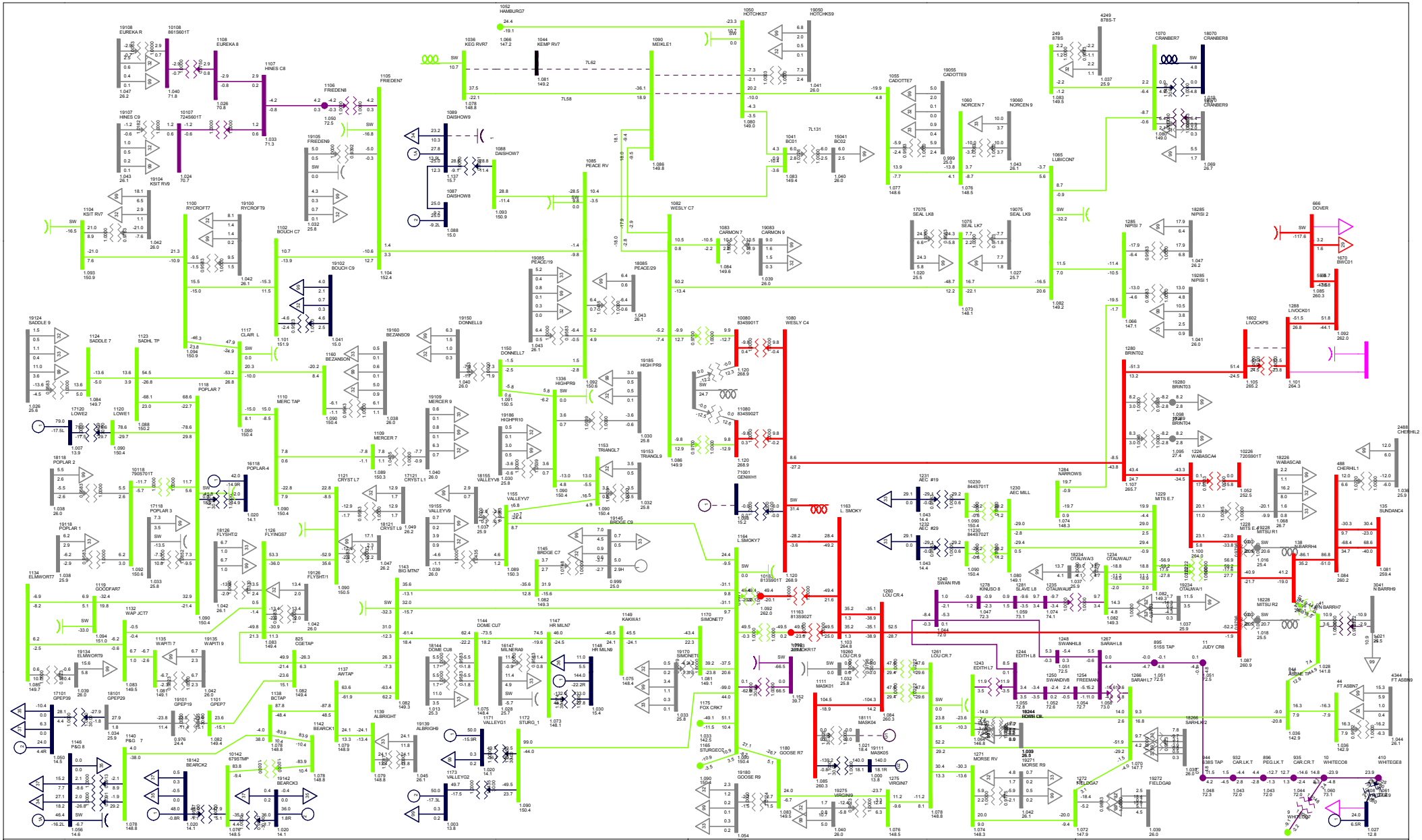
Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 041 C Cont 7L120 7L138 (TAP)_A.

Whitetail Project 1290 Interconnection Study

Appendix C2c

Figure: 82



Study Case Description

CASE 03 2014 SP Mgen
SCEN 01 Base Case
CONT 041 C Cont 7L120 7L138 (TAP)_B.

Whitetail Project 1290 Interconnection Study

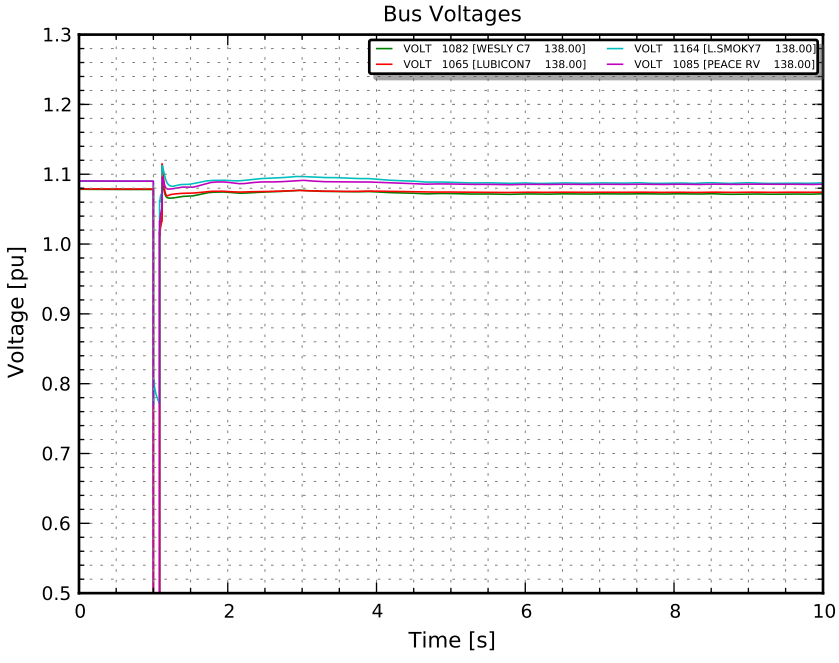
Appendix C2c

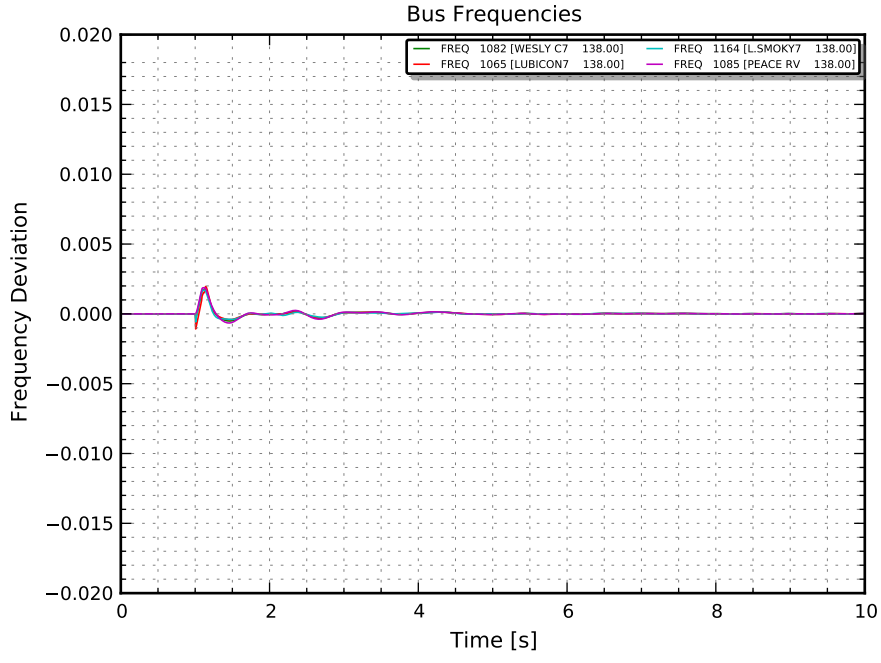
Figure: 83

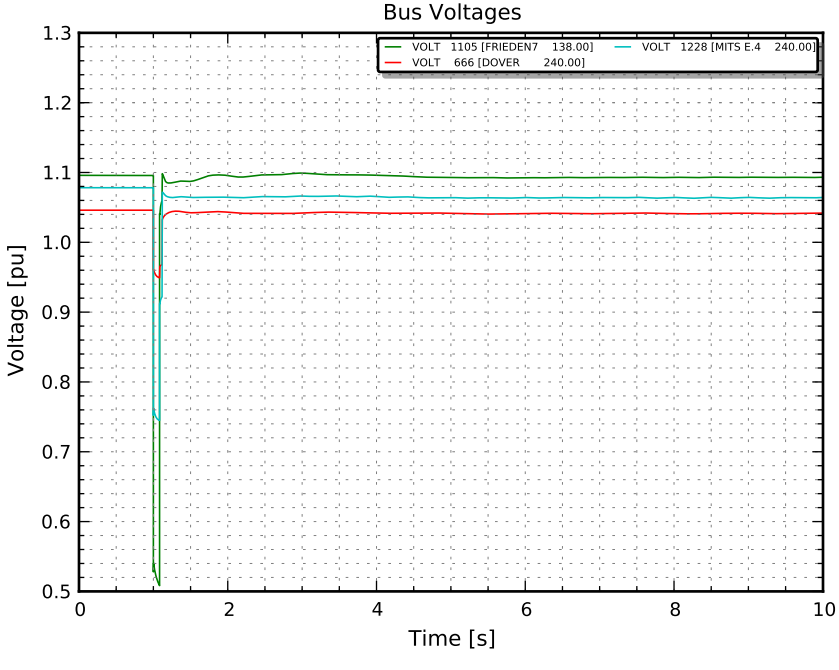
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 001 9L15 WESLEYCREEK to Brintnell_A.

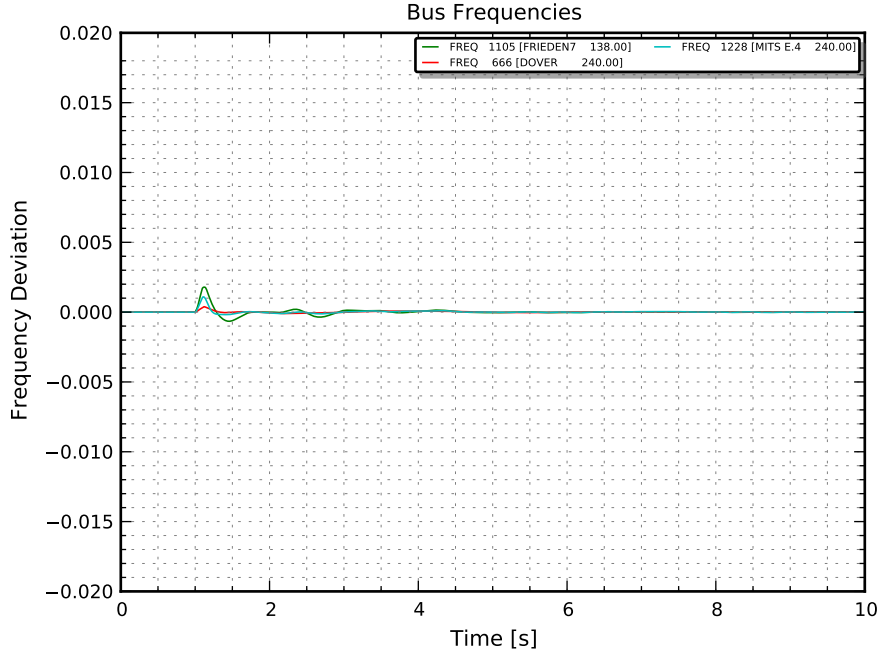
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 001 (A. 1)





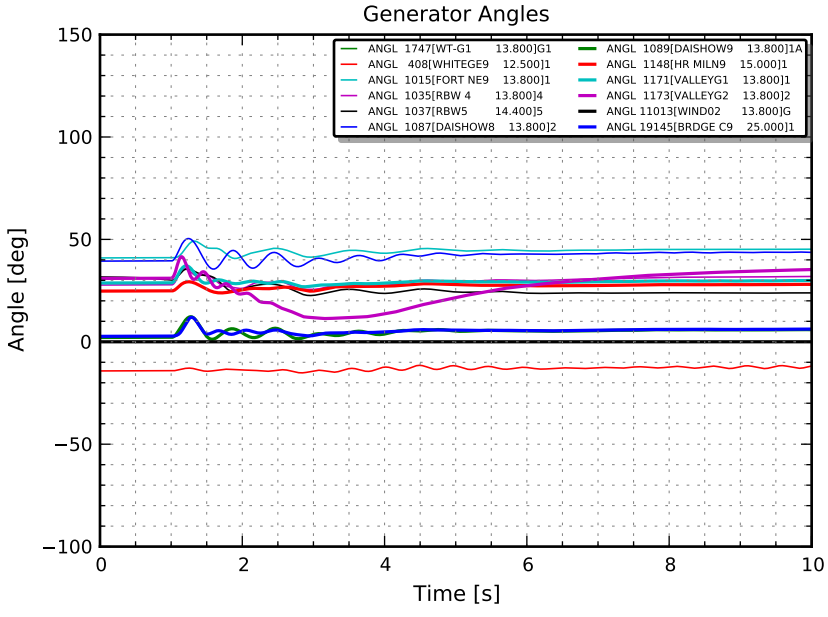


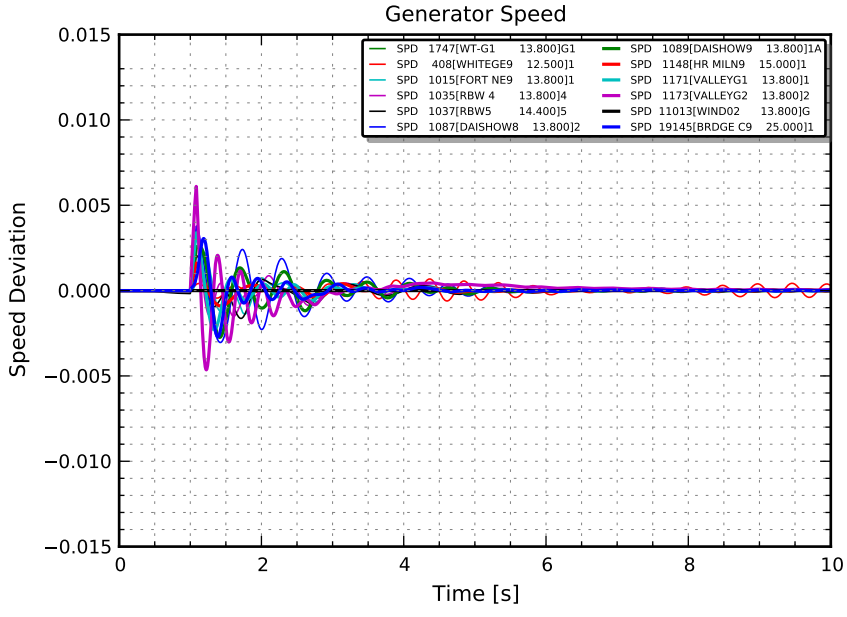


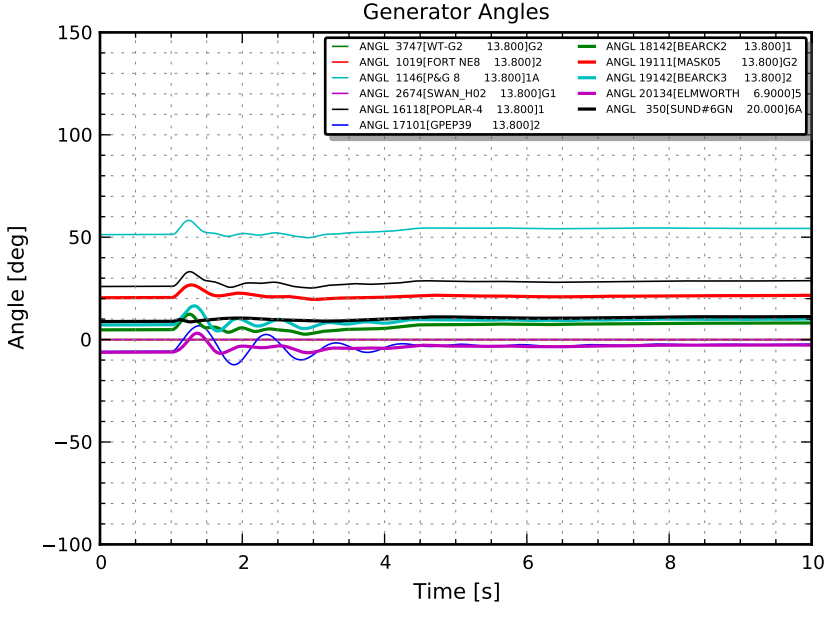
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 001 9L15 WESLEYCREEK to Brintnell_A.

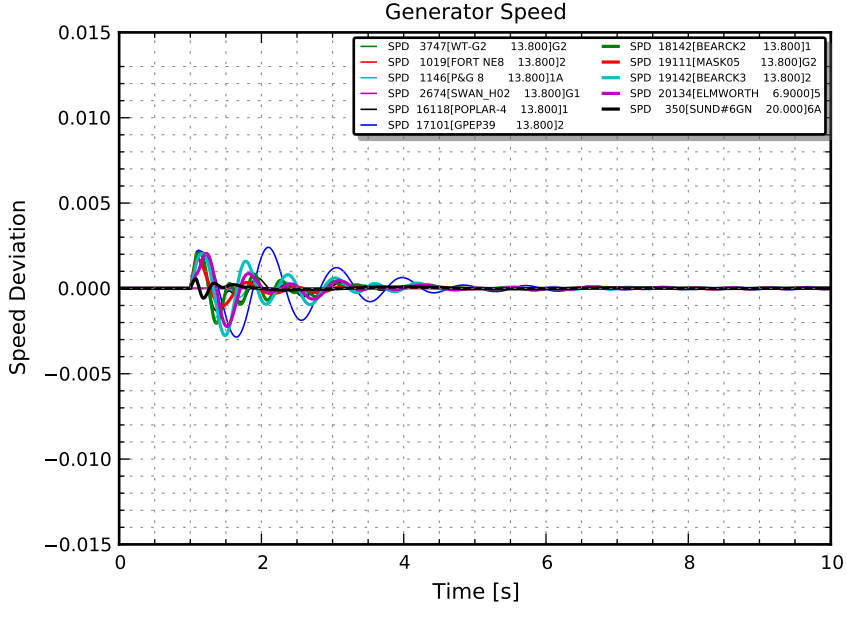
Study Area Generators

Appendix C2A
Figure: 001 (A. 2)





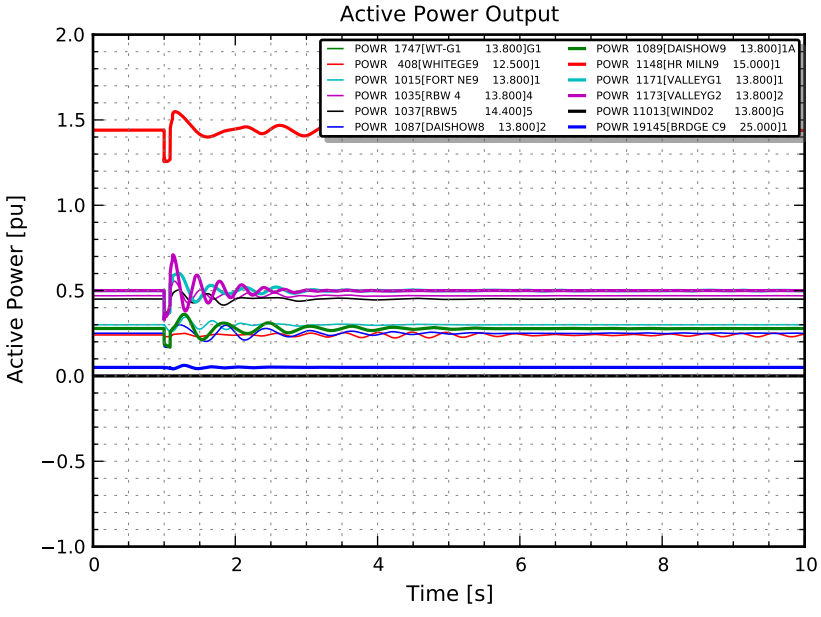


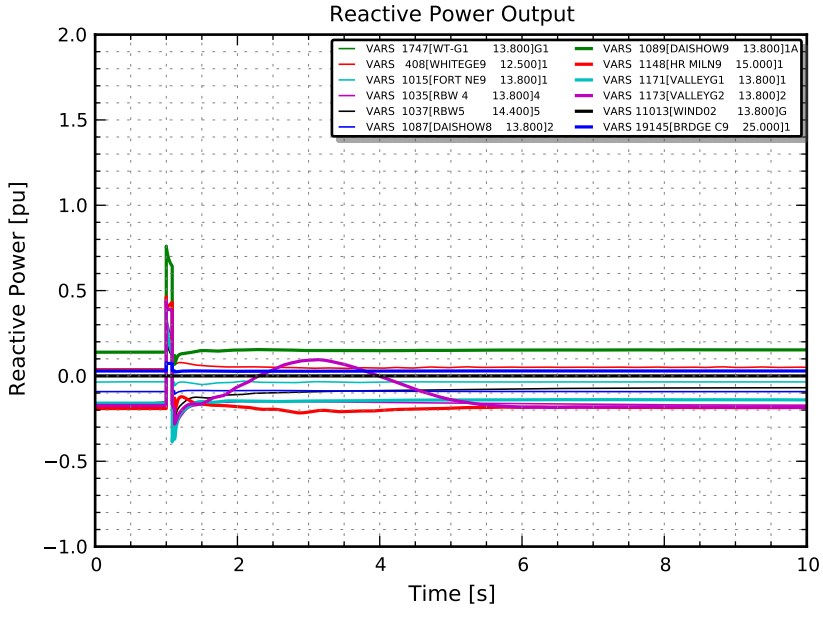


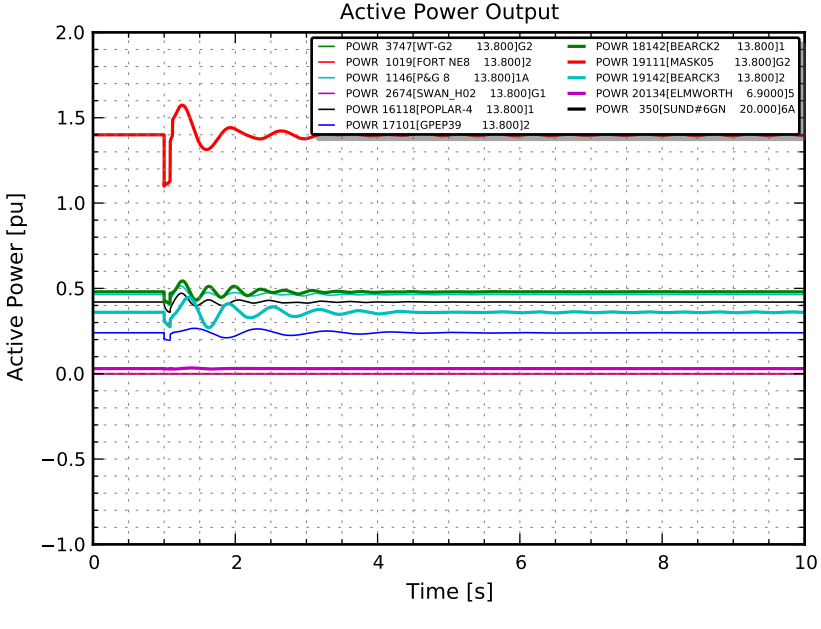
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 001 9L15 WESLEYCREEK to Brintnell_A.

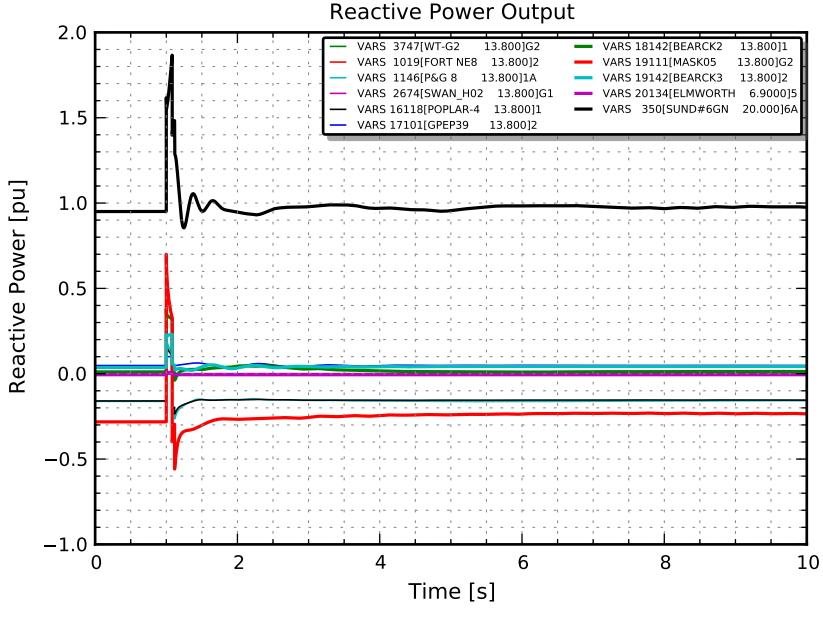
Study Area Generators

Appendix C2A
Figure: 001 (A. 3)





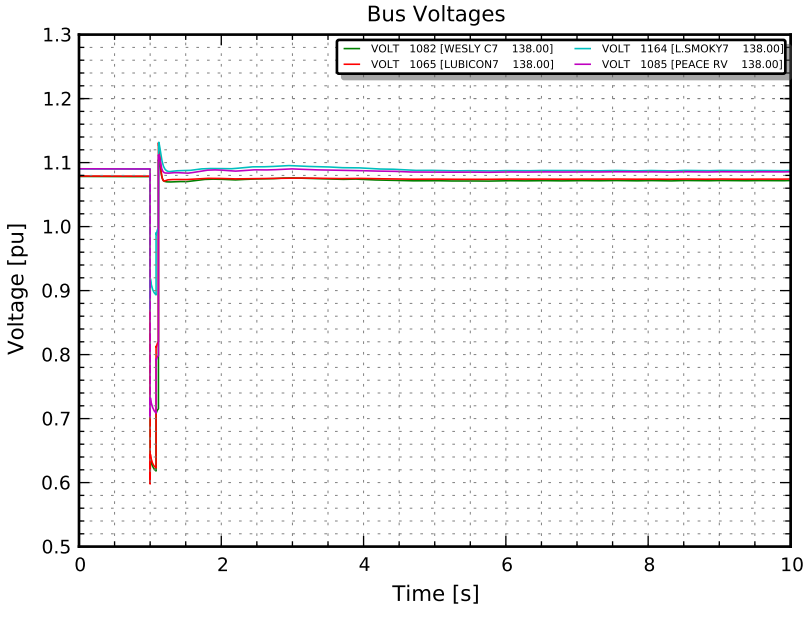


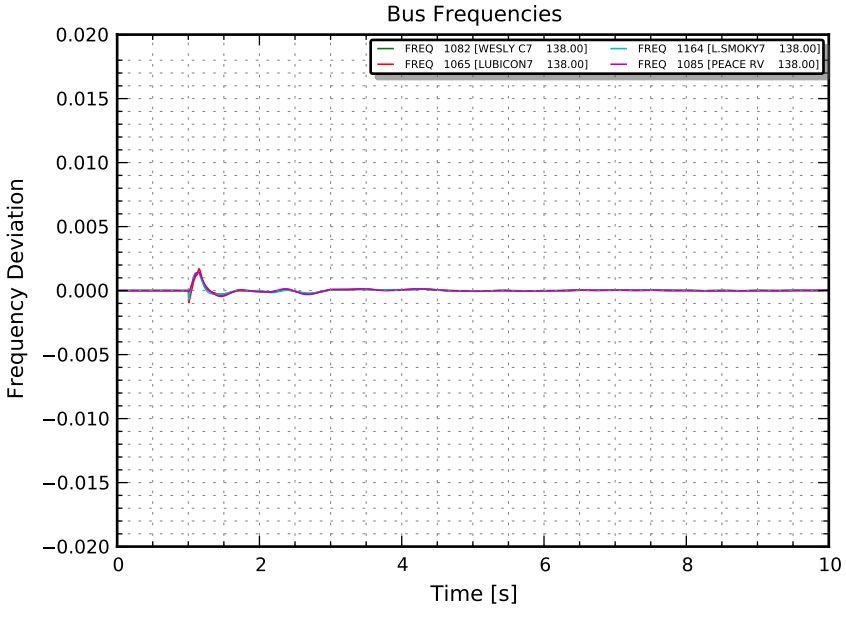


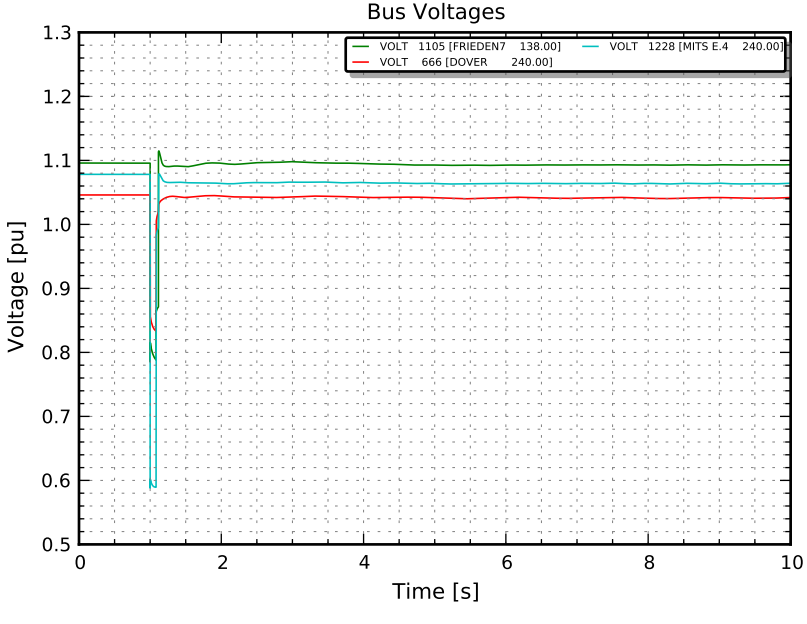
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 001 9L15 WESLEYCREEK to Brintnell_B.

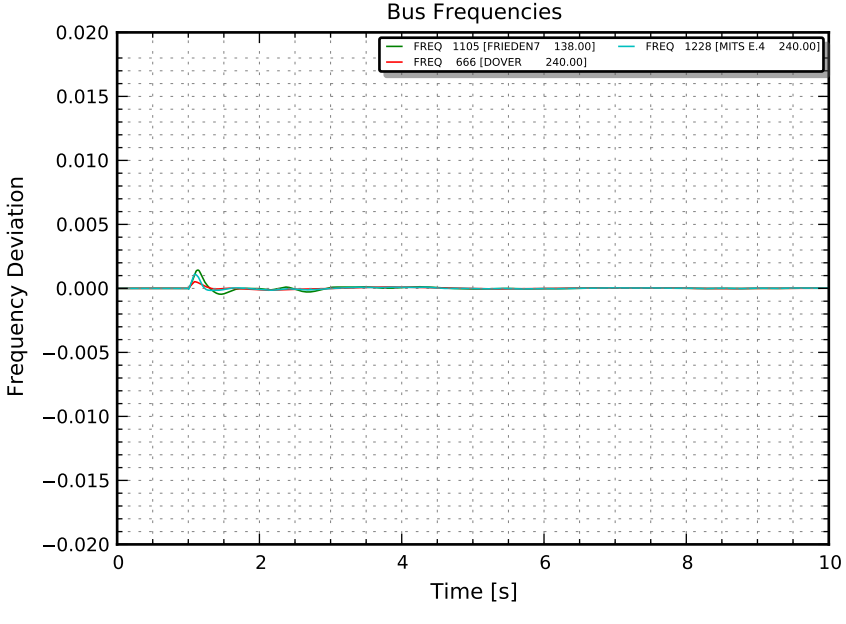
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 001 (B. 1)





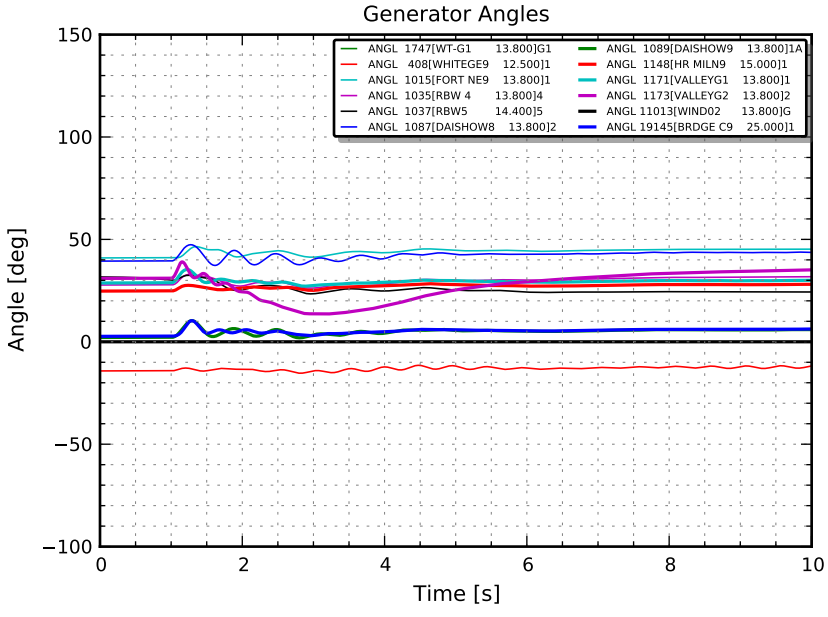


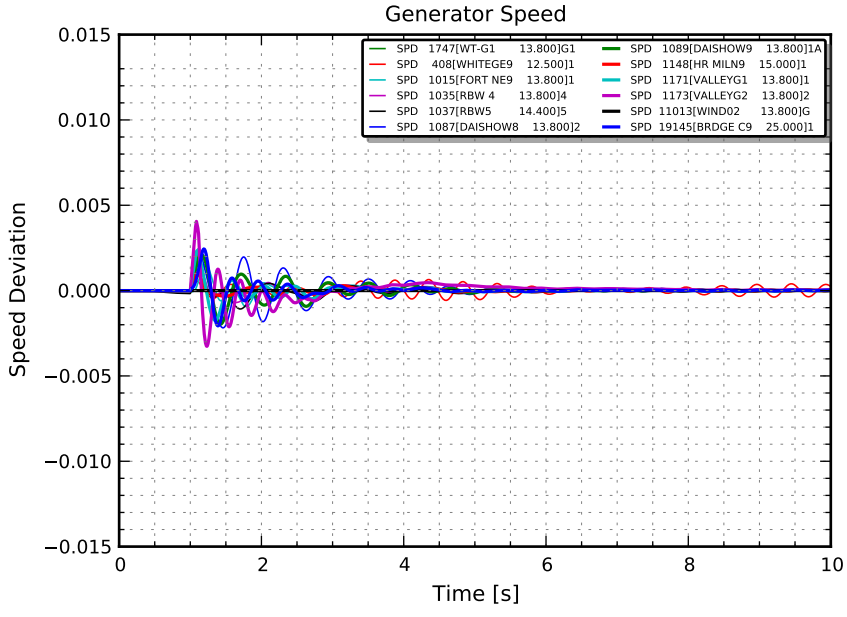


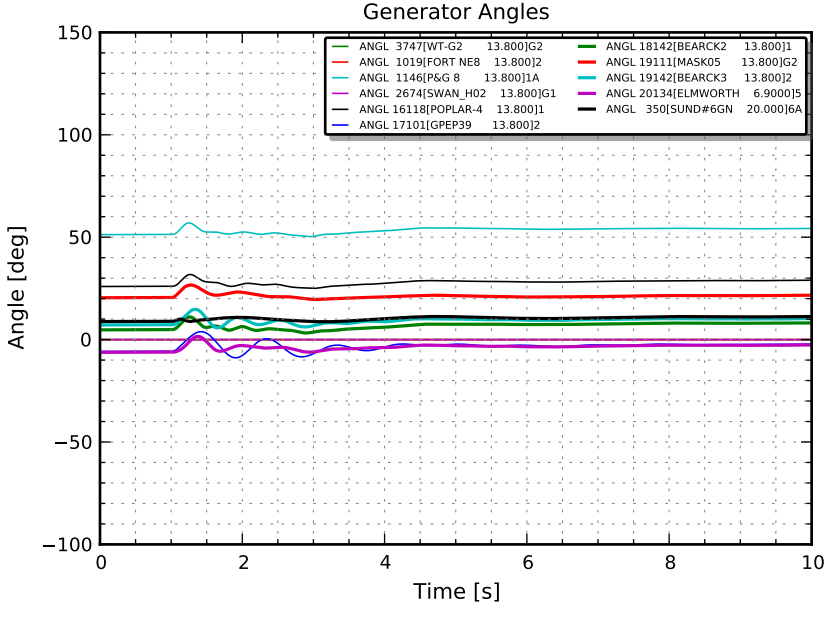
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 001 9L15 WESLEYCREEK to Brintnell_B.

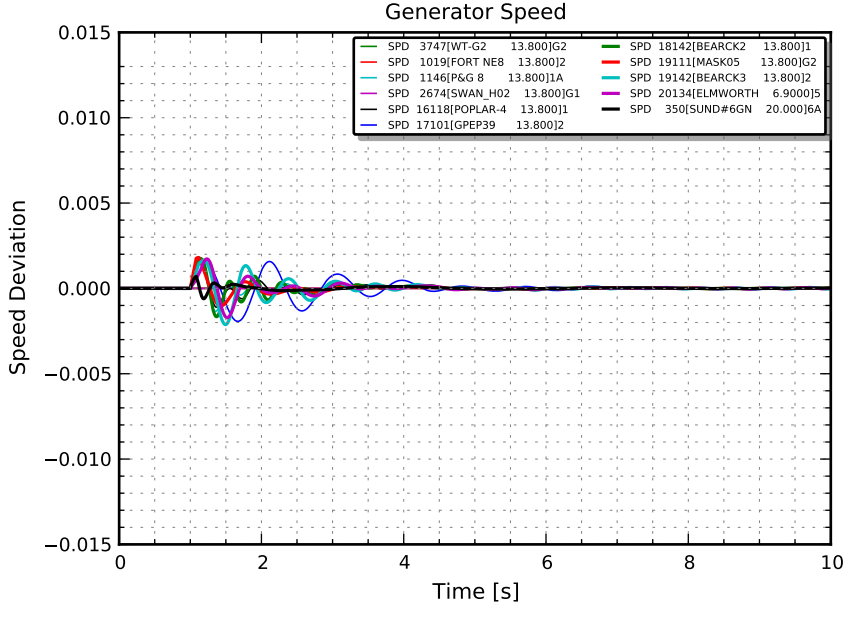
Study Area Generators

Appendix C2A
Figure: 001 (B. 2)





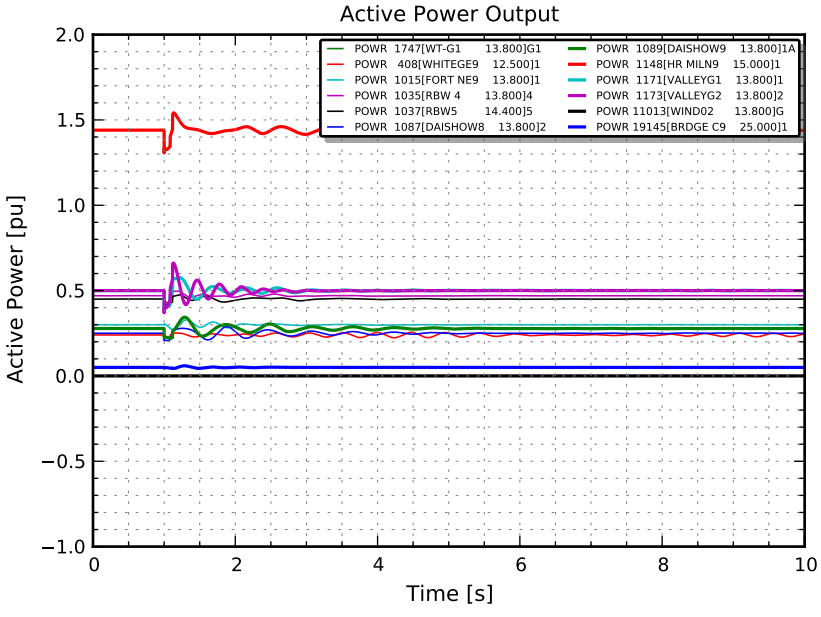


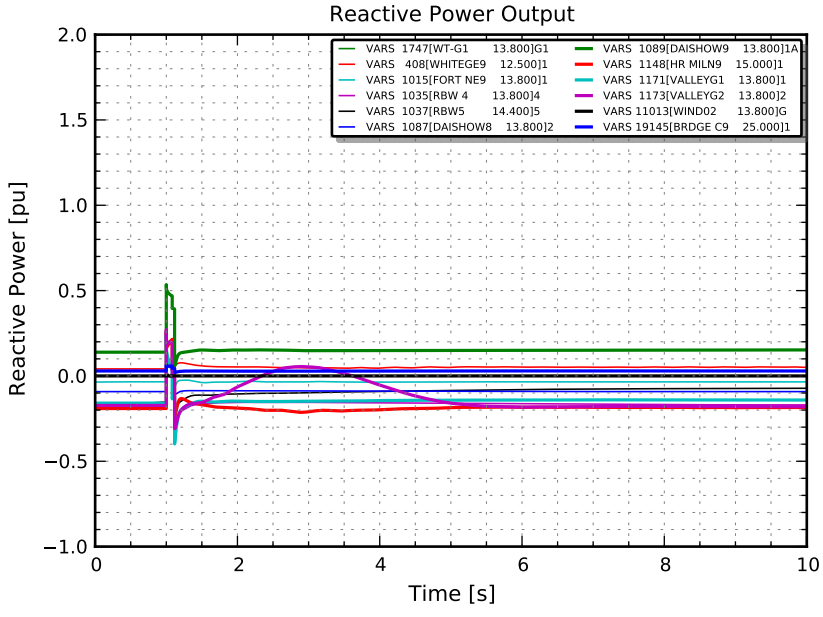


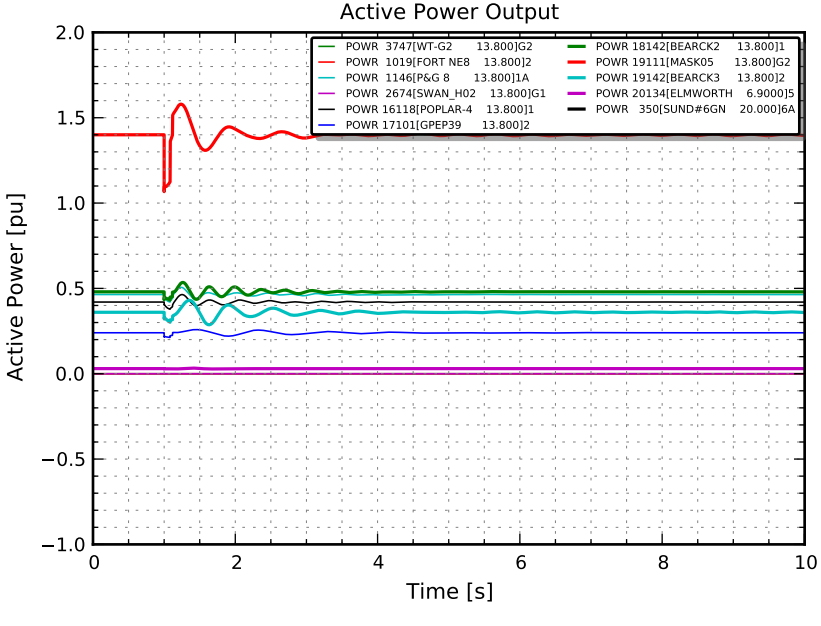
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 001 9L15 WESLEYCREEK to Brintnell_B.

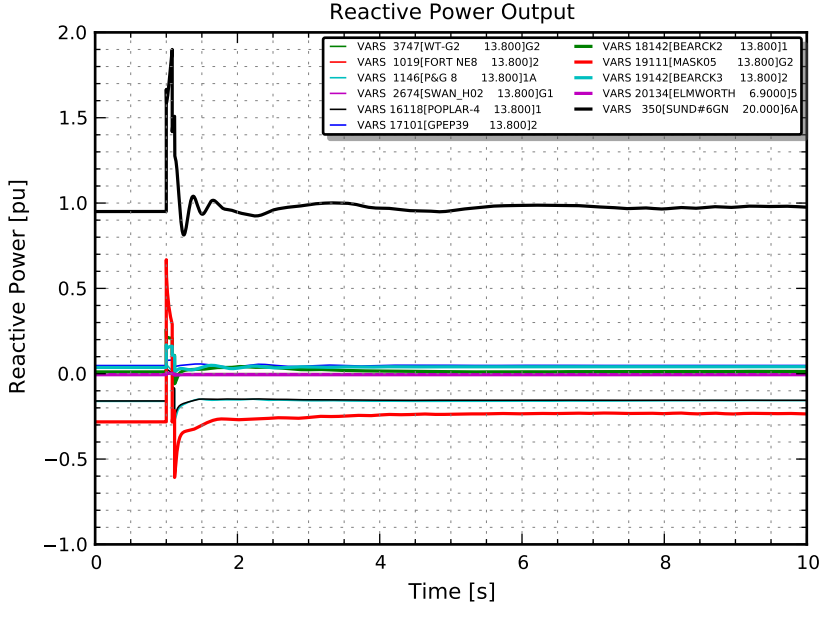
Study Area Generators

Appendix C2A
Figure: 001 (B. 3)





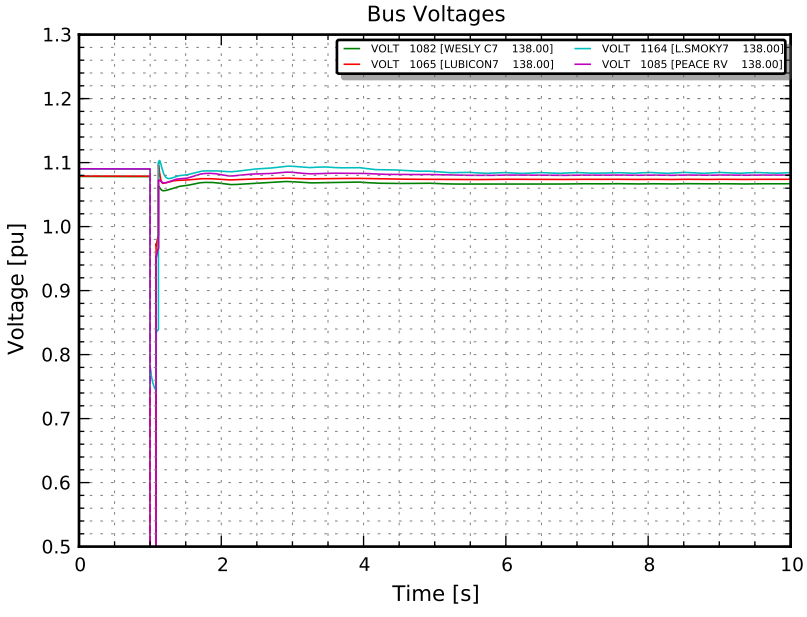


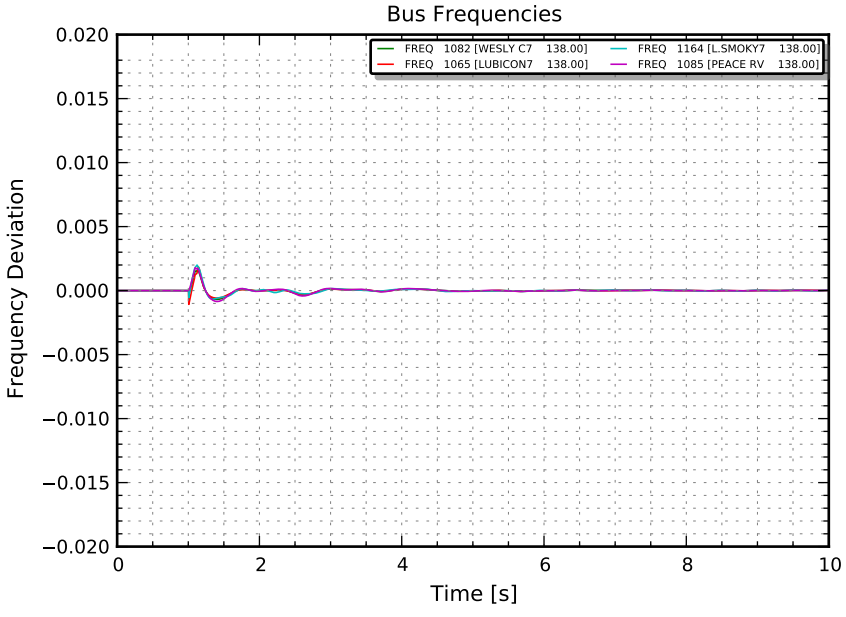


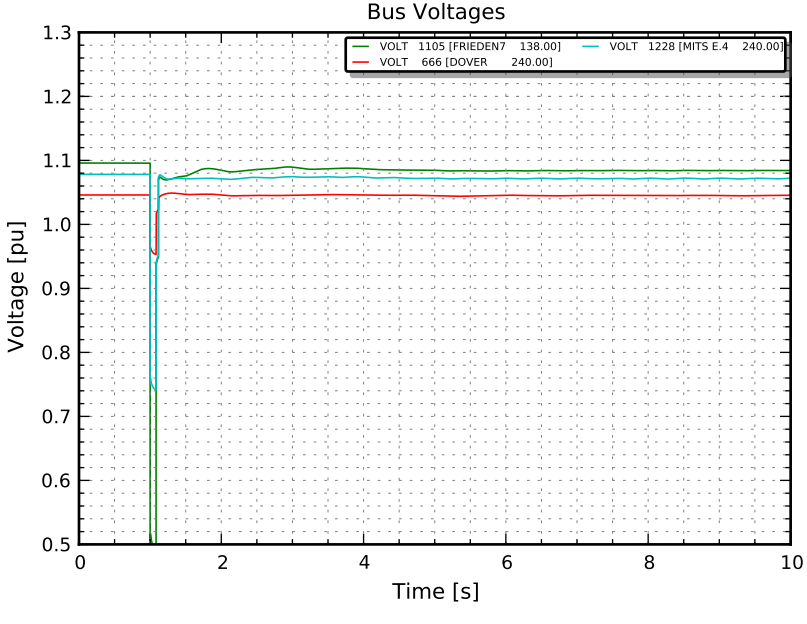
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_A.

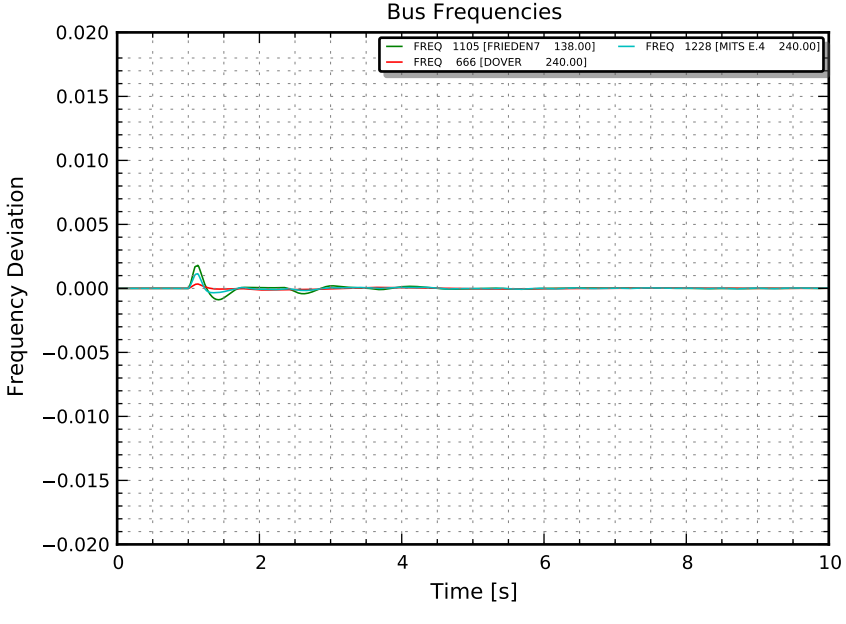
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 002 (A. 1)





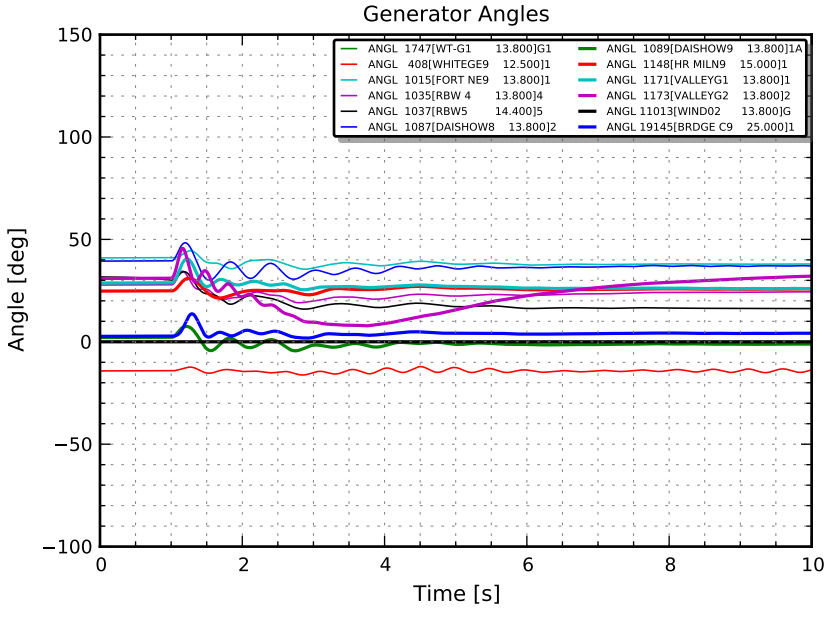


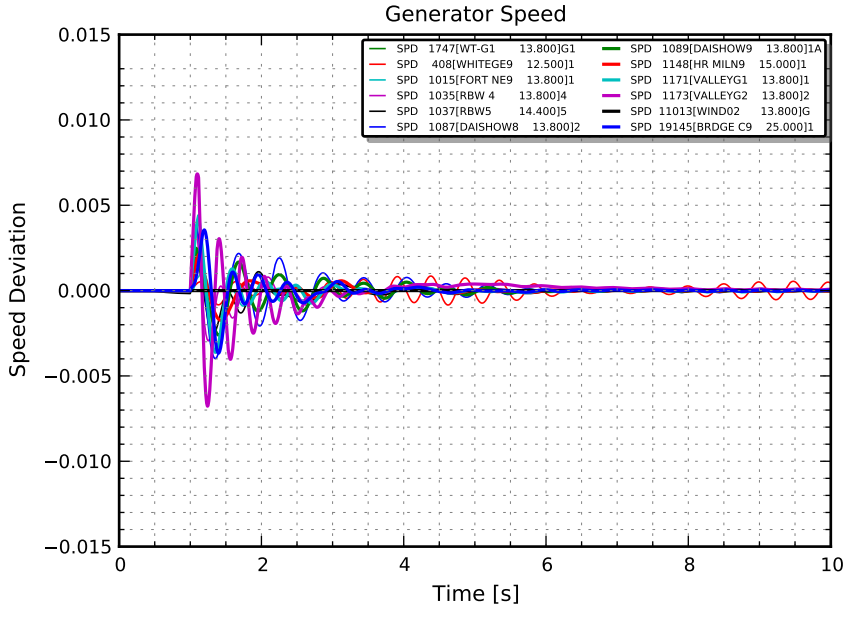


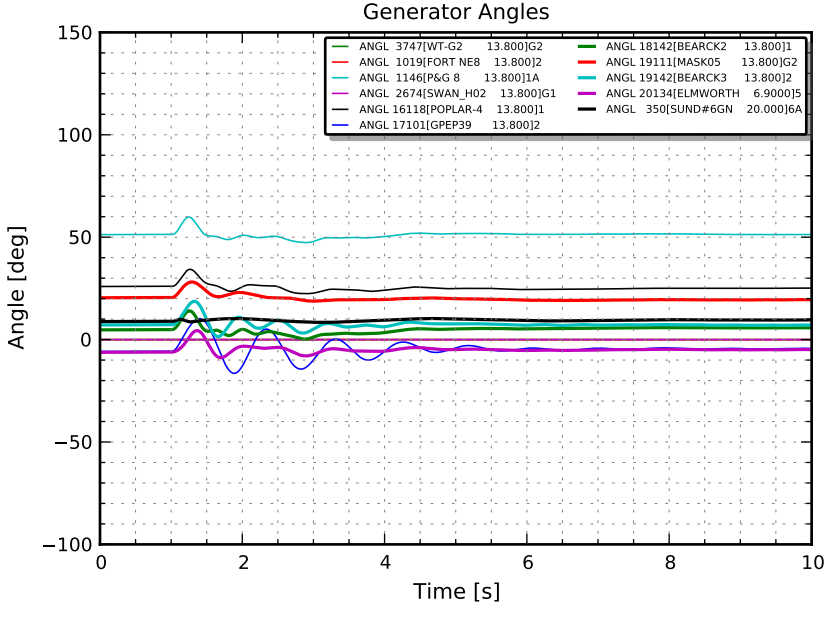
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_A.

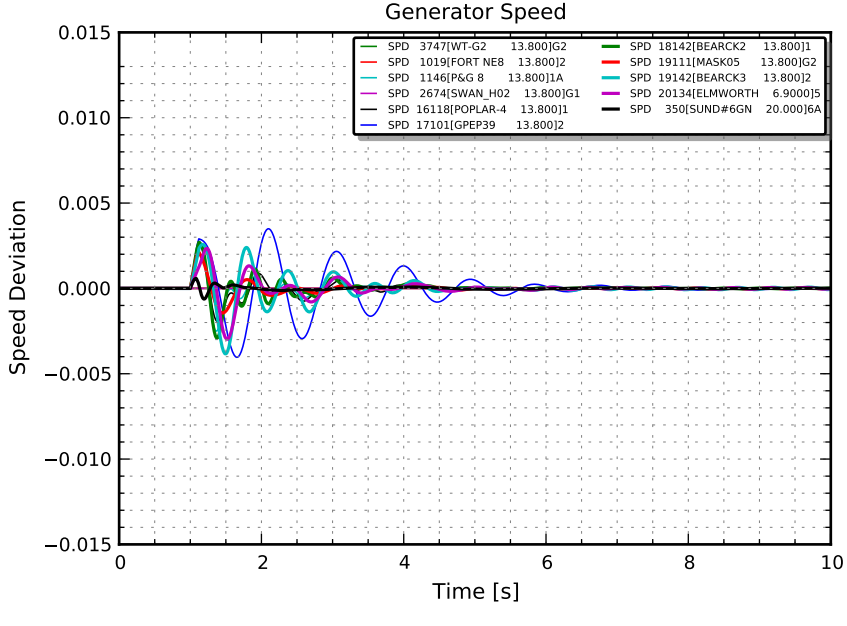
Study Area Generators

Appendix C2A
Figure: 002 (A. 2)





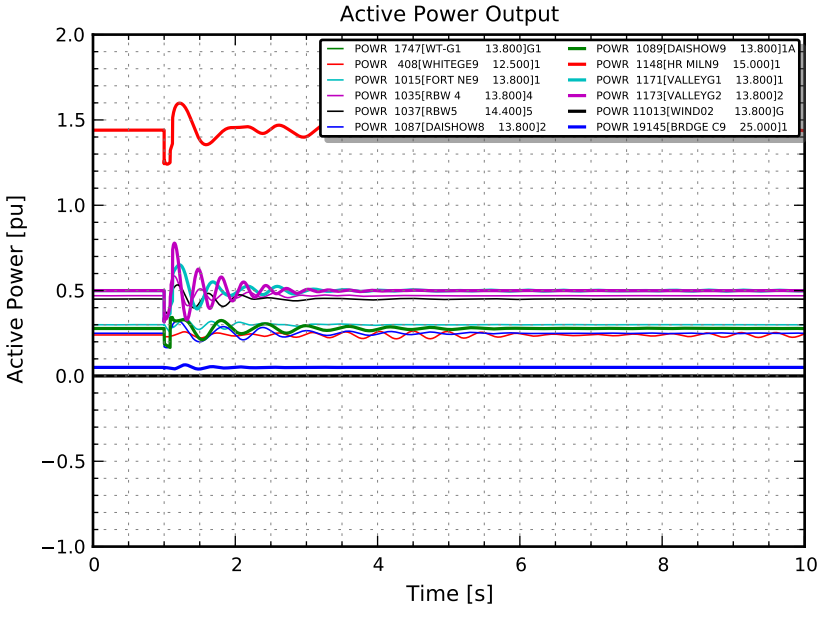


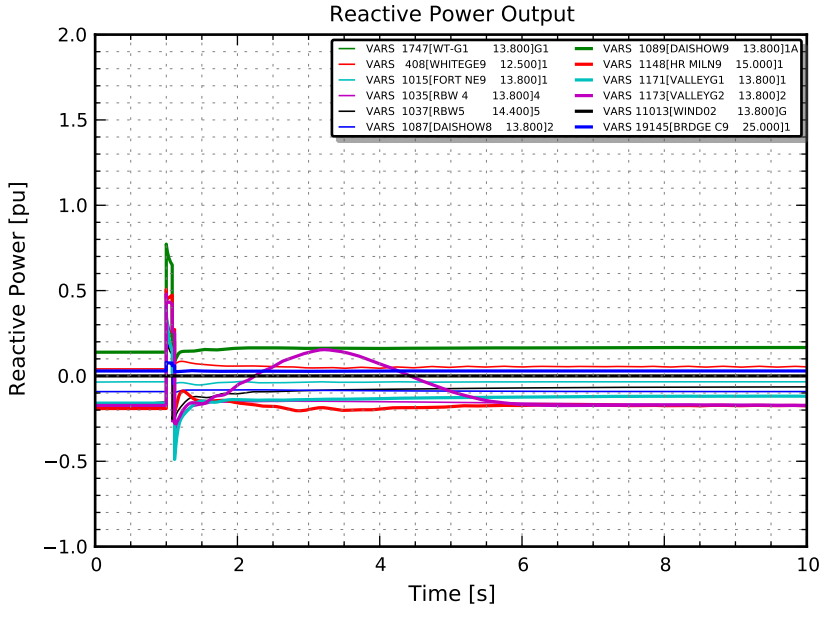


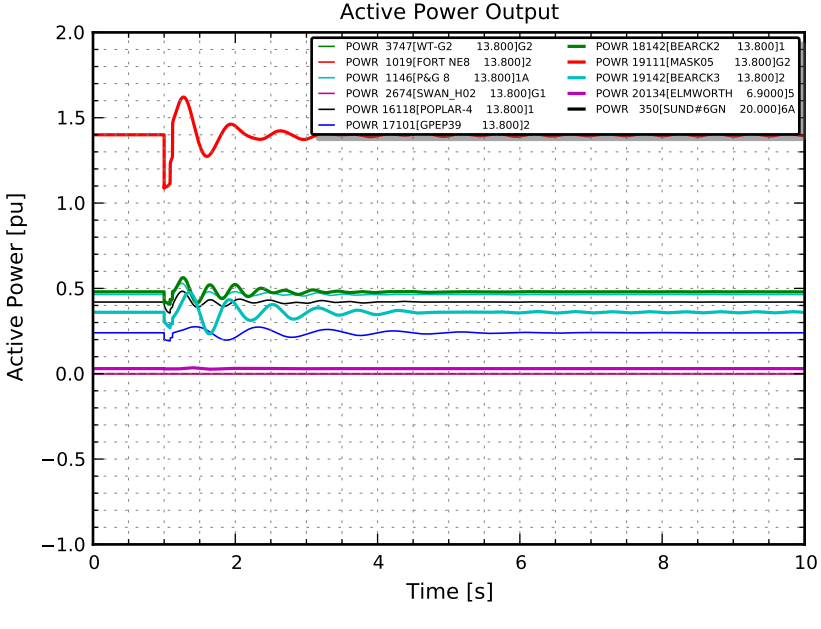
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_A.

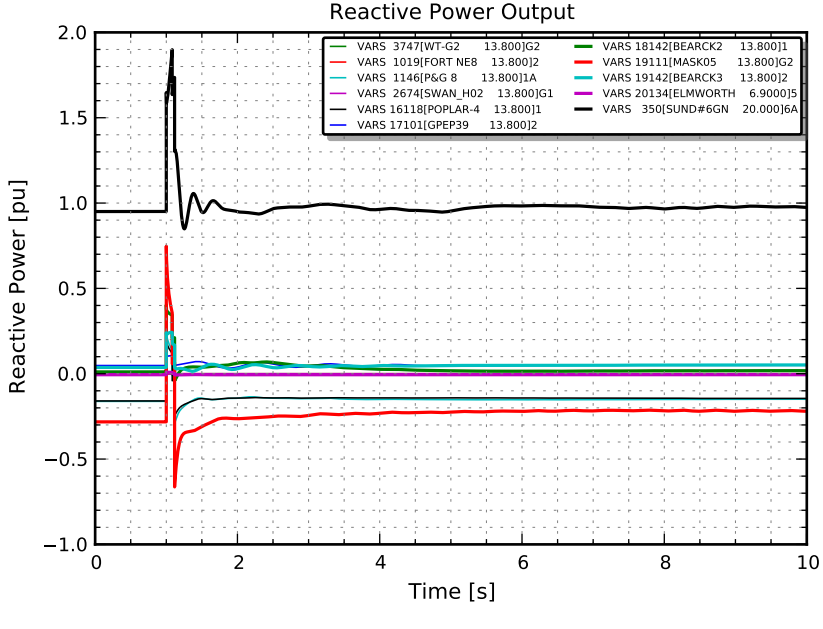
Study Area Generators

Appendix C2A
Figure: 002 (A. 3)





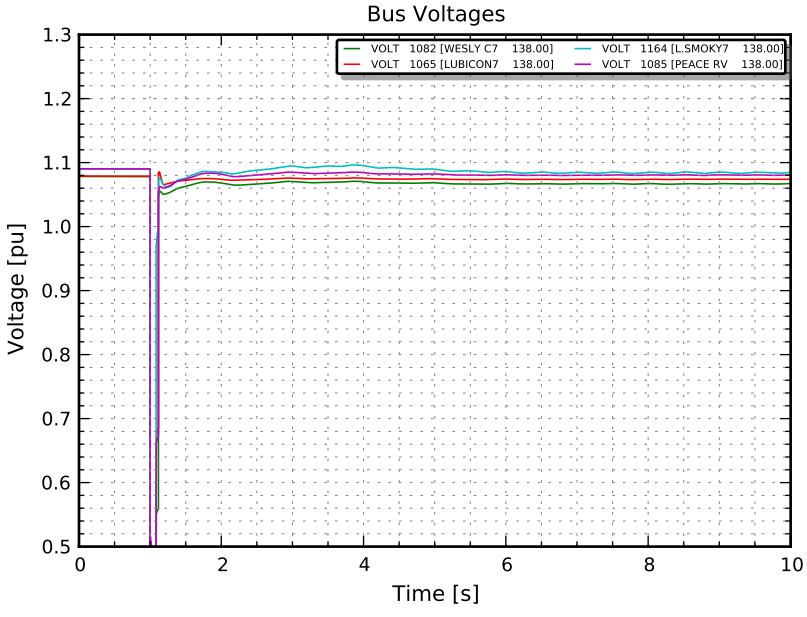


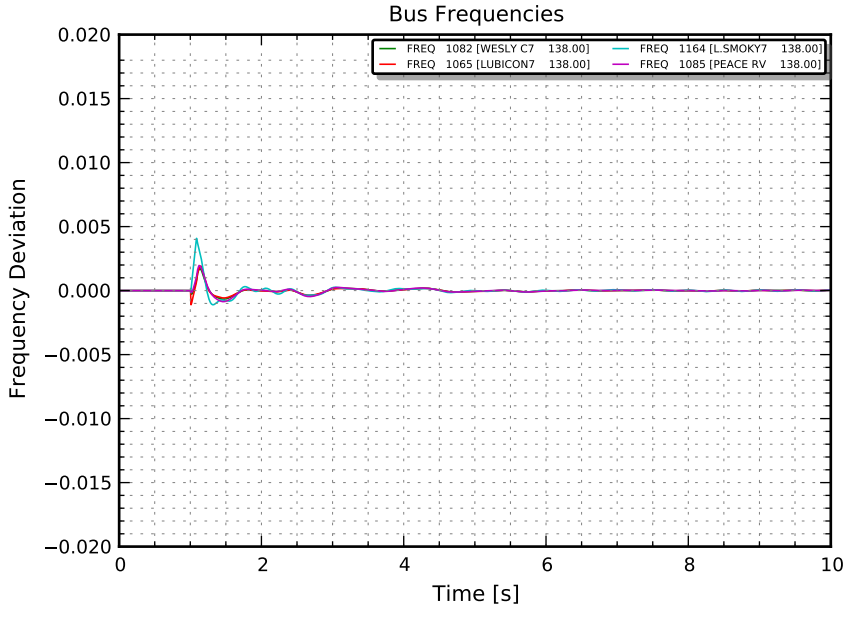


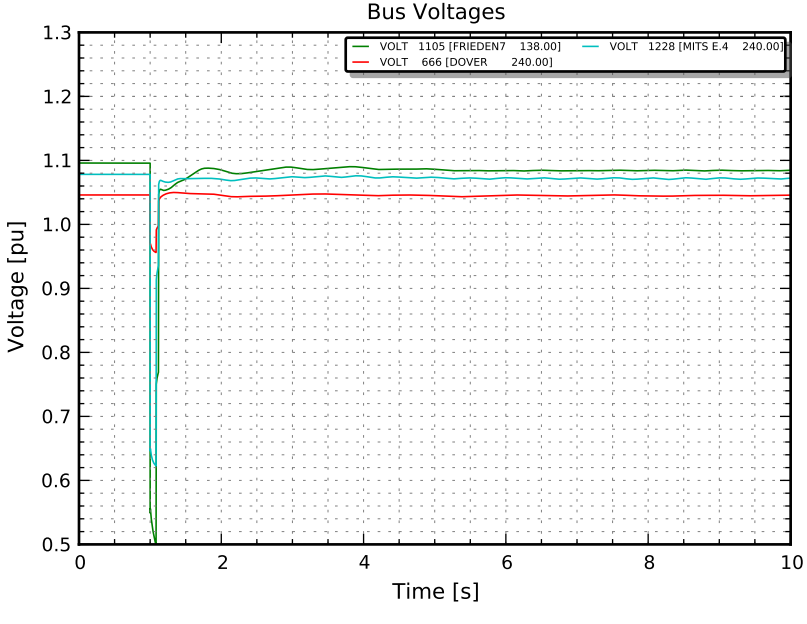
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_B.

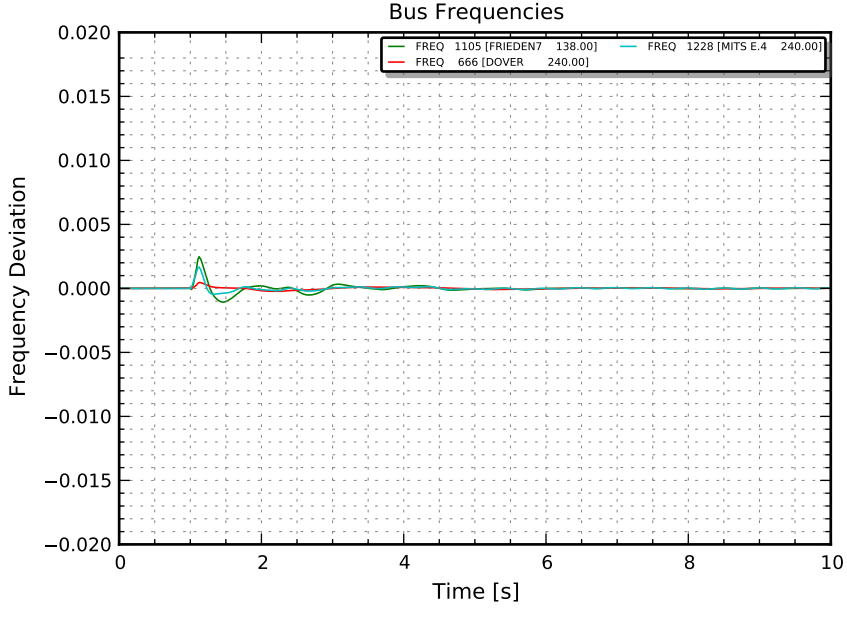
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 002 (B. 1)





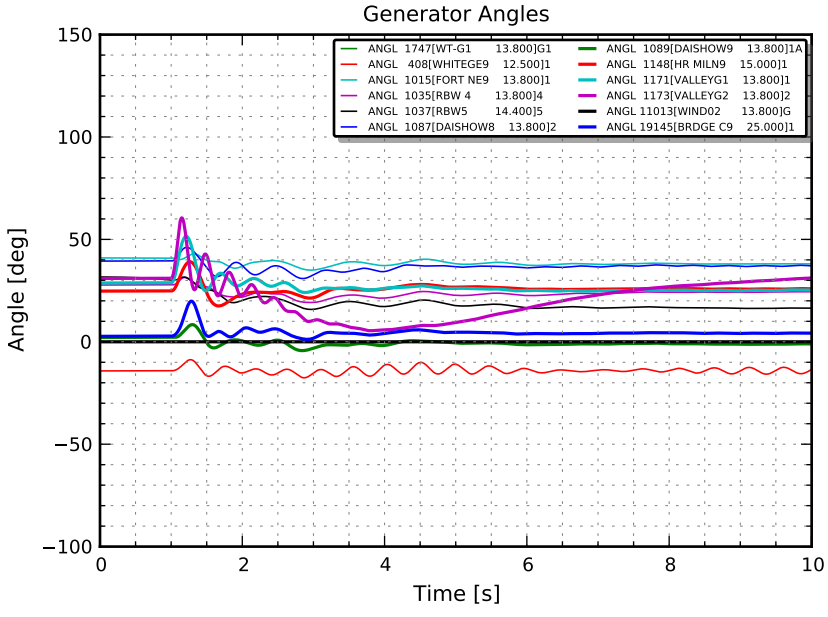


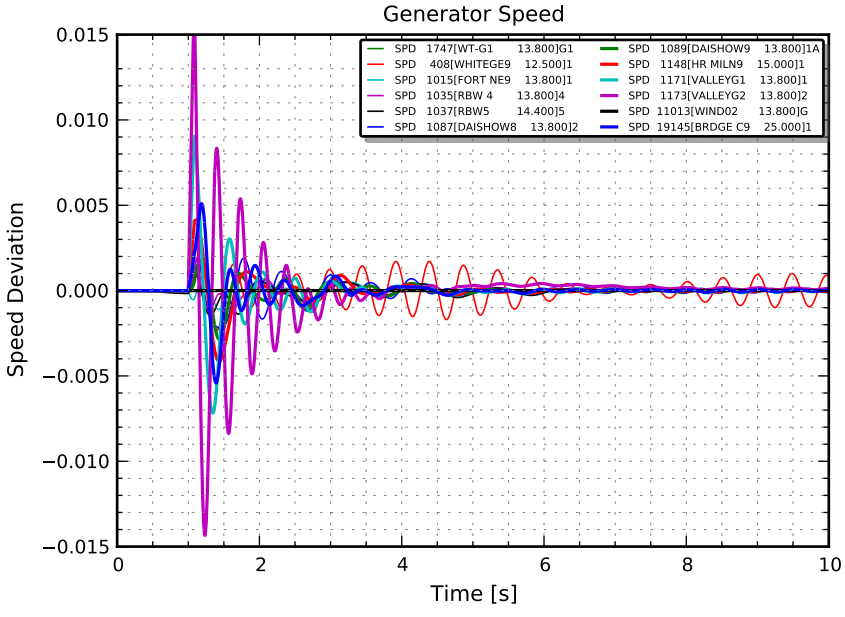


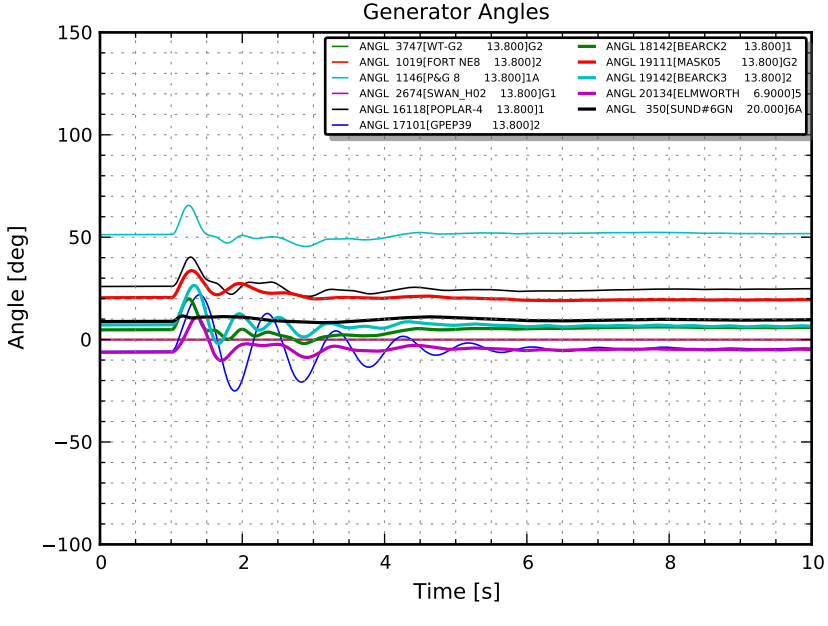
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_B.

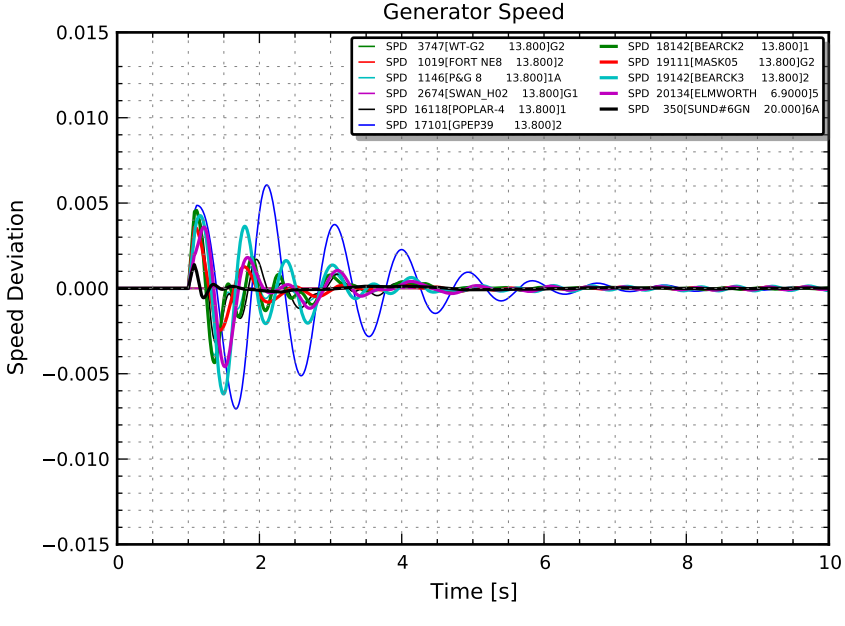
Study Area Generators

Appendix C2A
Figure: 002 (B. 2)





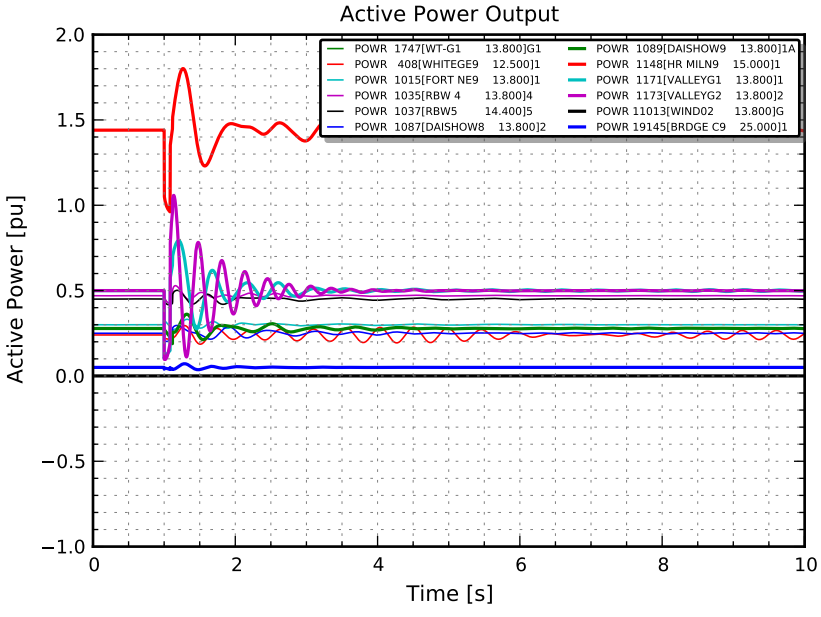


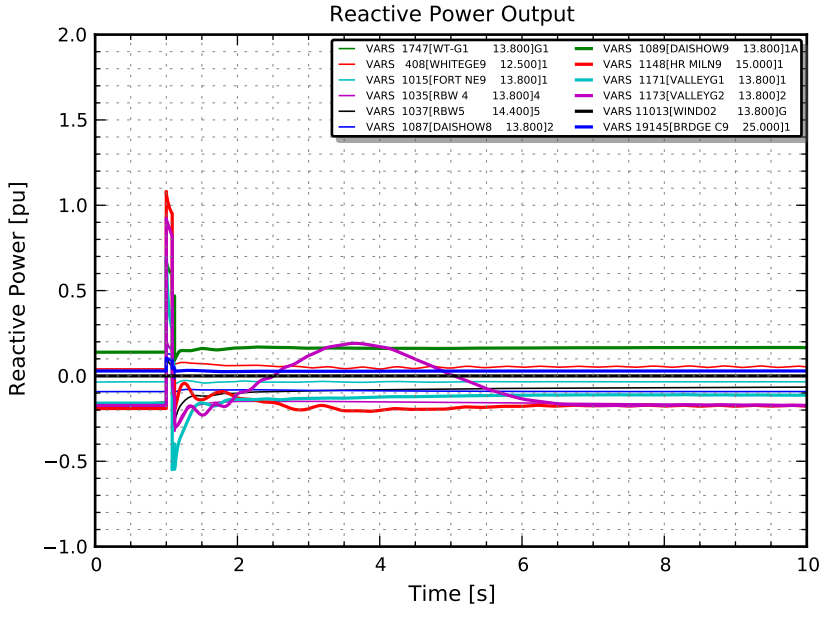


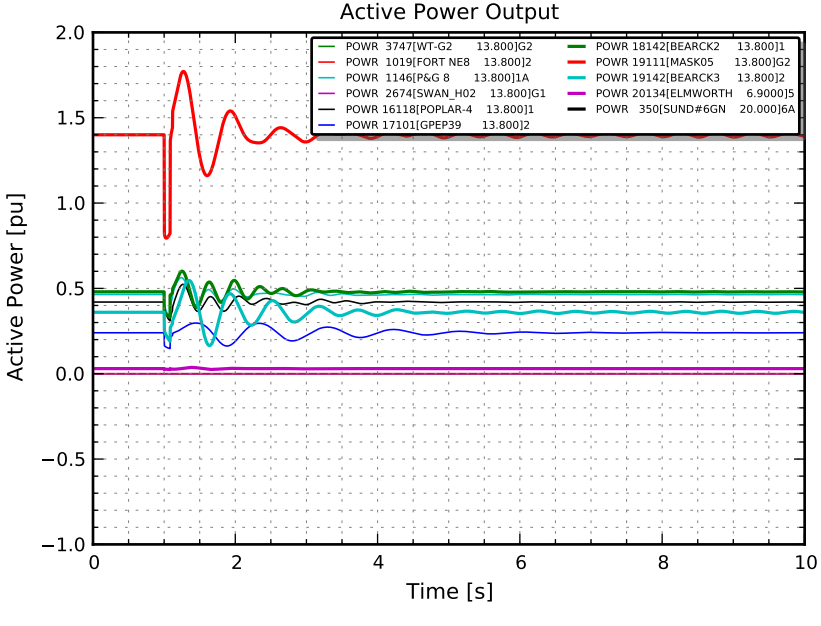
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_B.

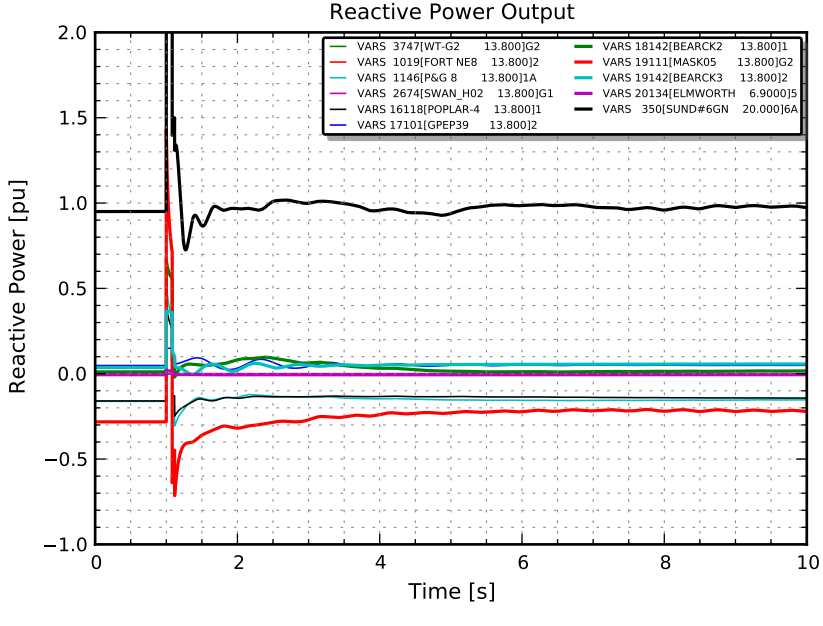
Study Area Generators

Appendix C2A
Figure: 002 (B. 3)





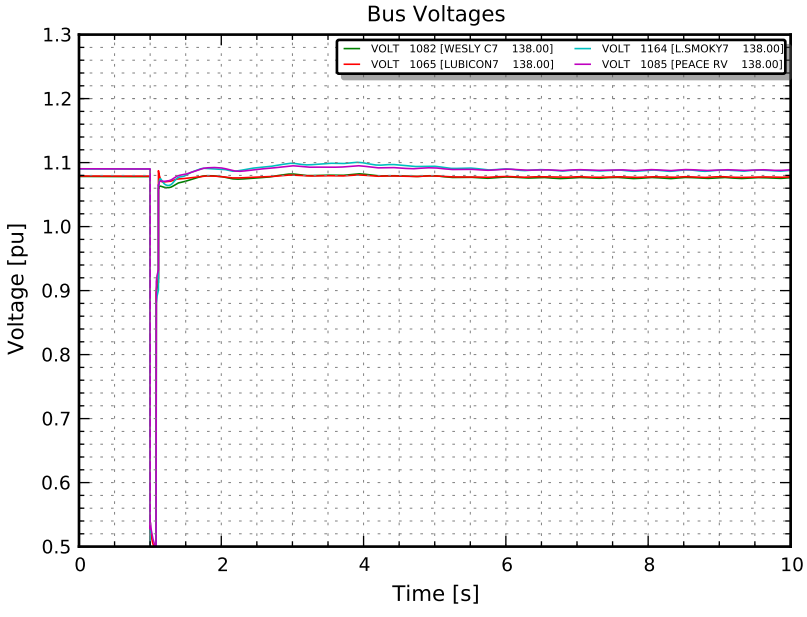


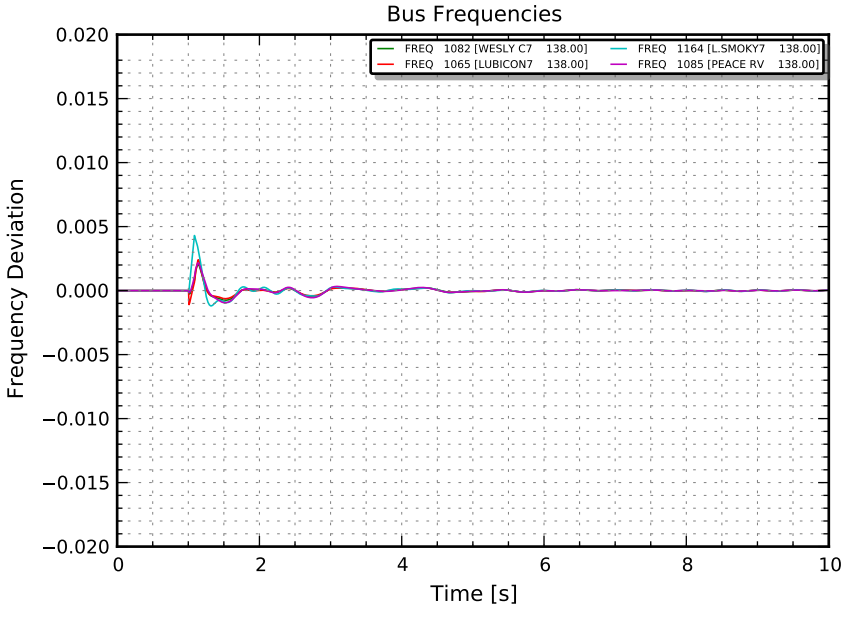


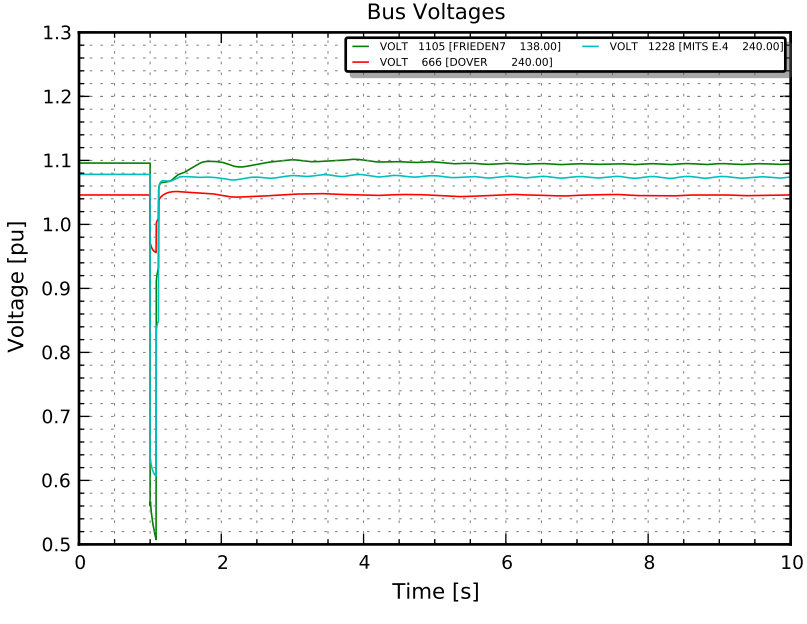
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_A.

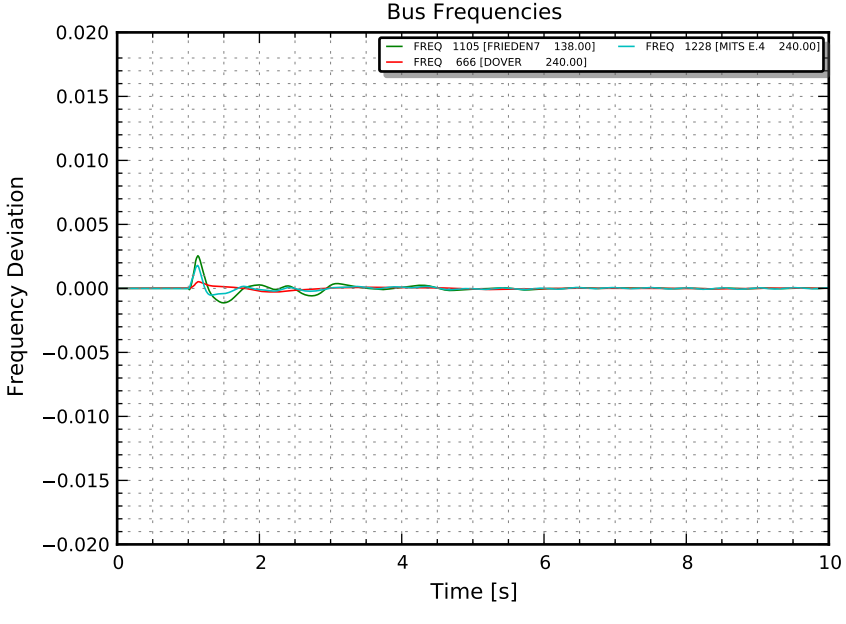
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 003 (A. 1)





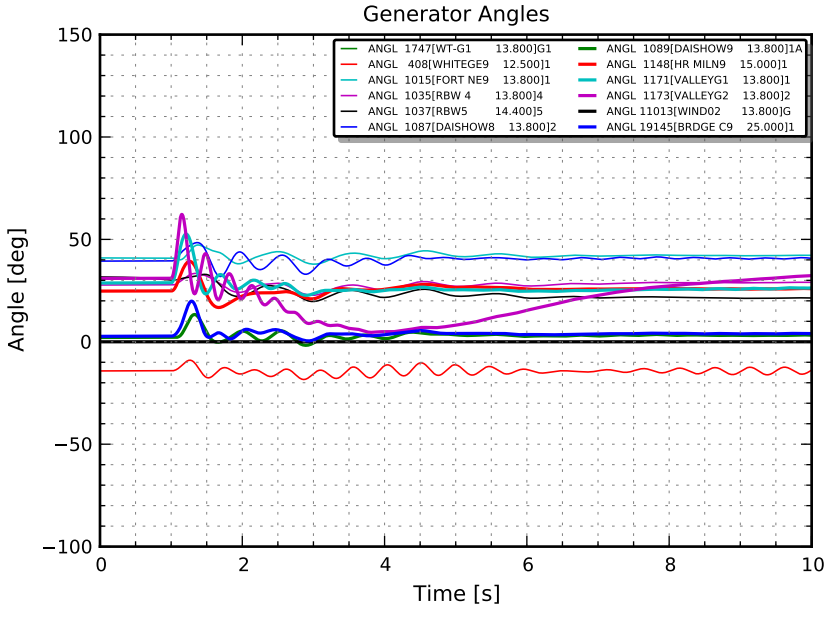


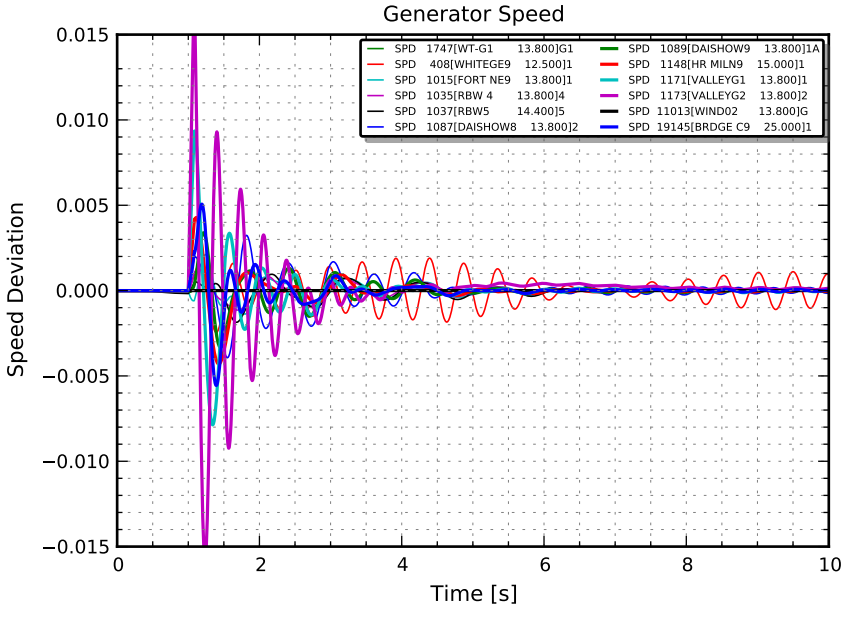


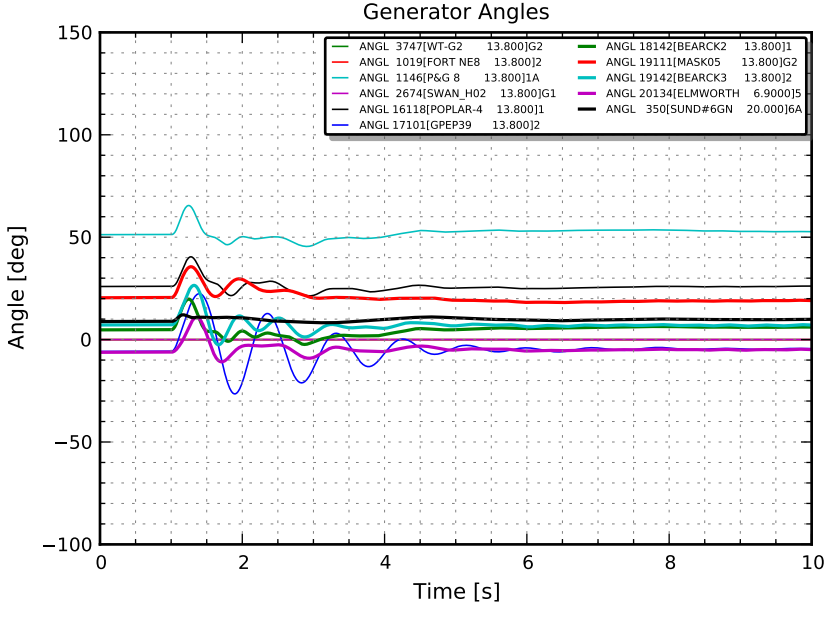
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_A.

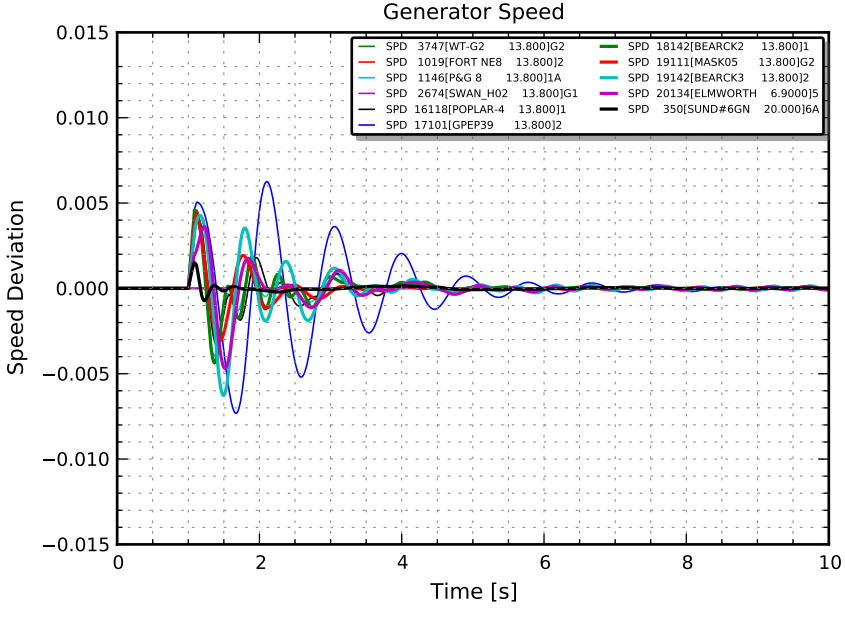
Study Area Generators

Appendix C2A
Figure: 003 (A. 2)





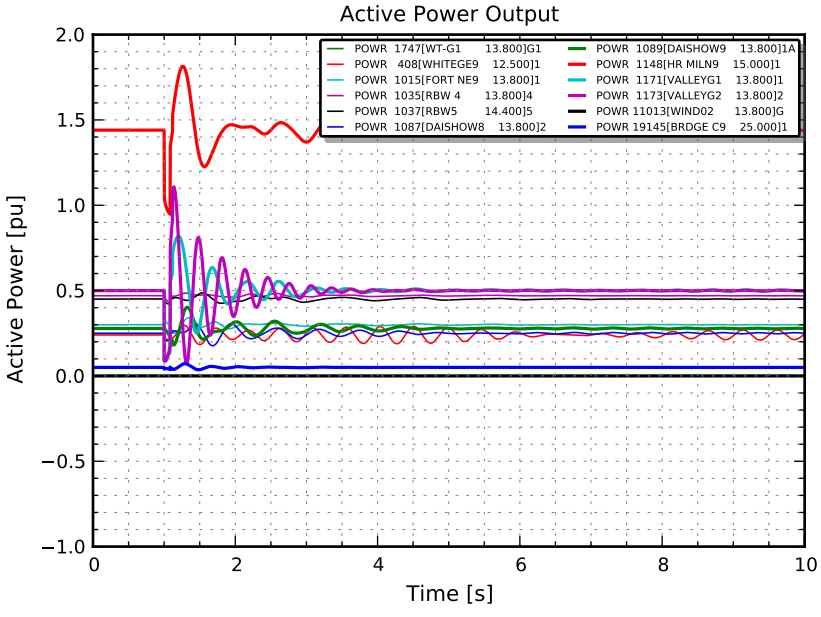


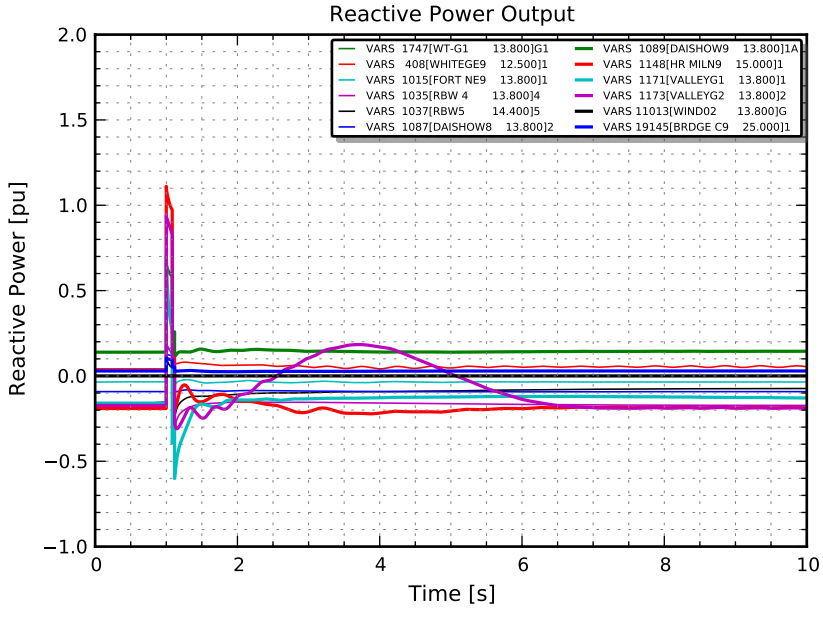


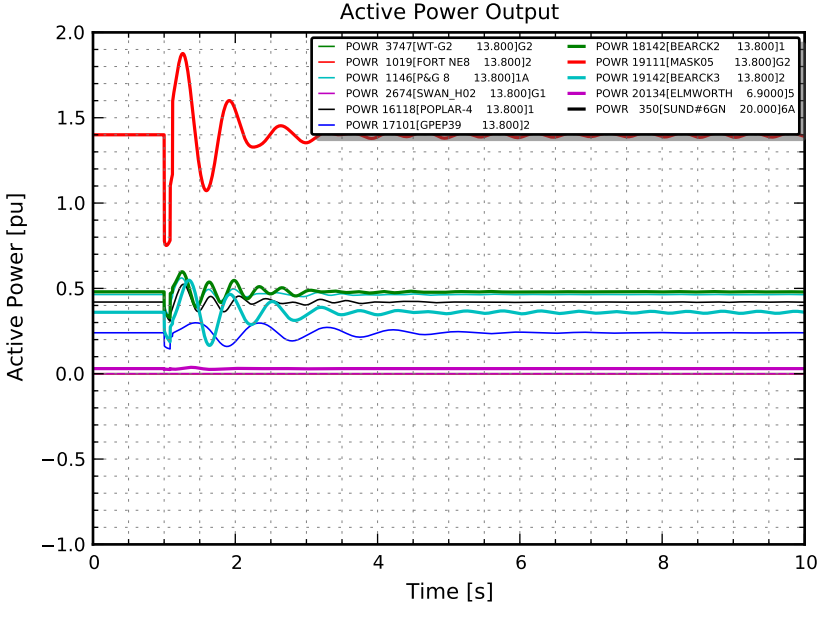
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_A.

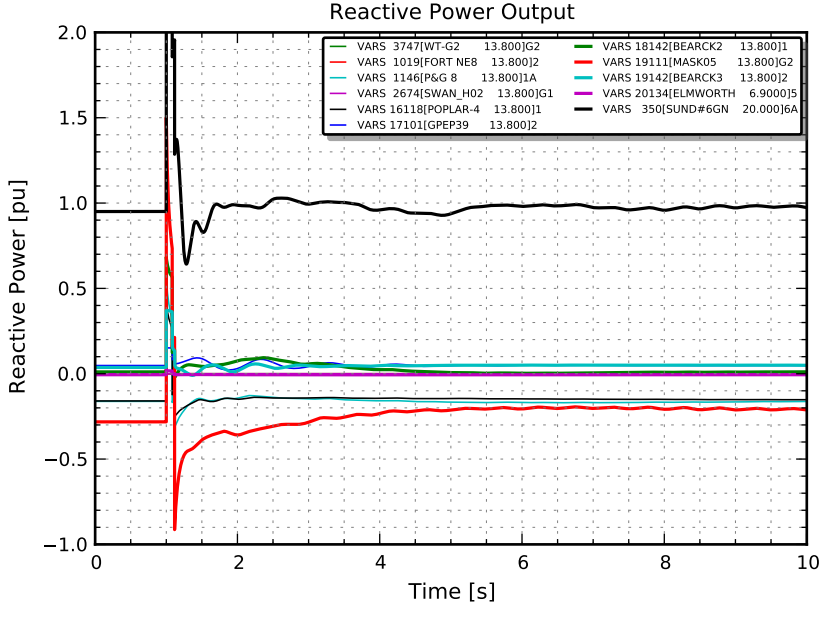
Study Area Generators

Appendix C2A
Figure: 003 (A. 3)





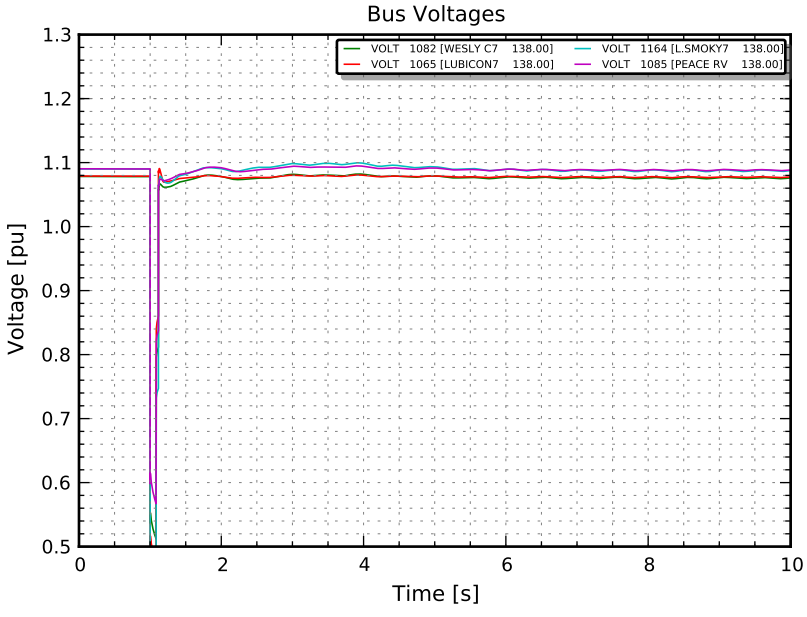


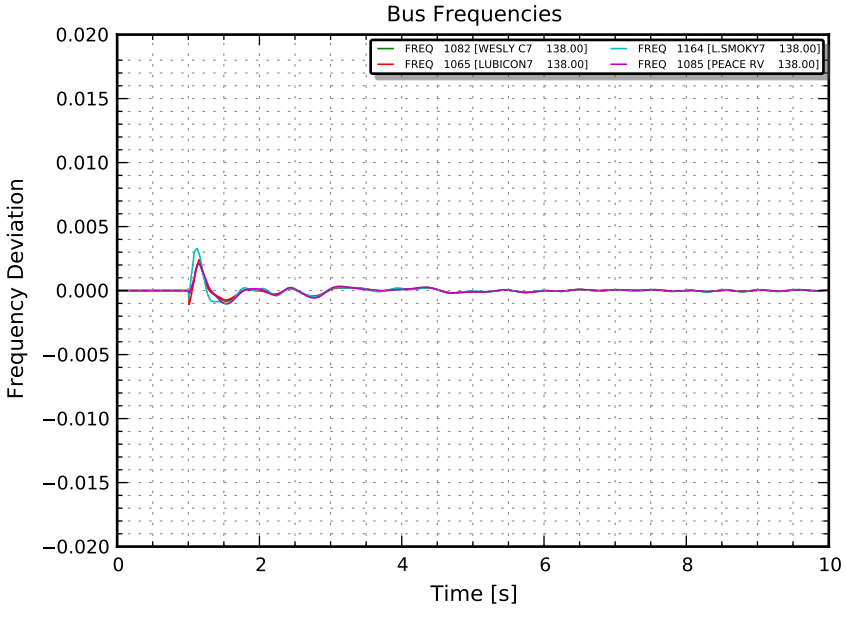


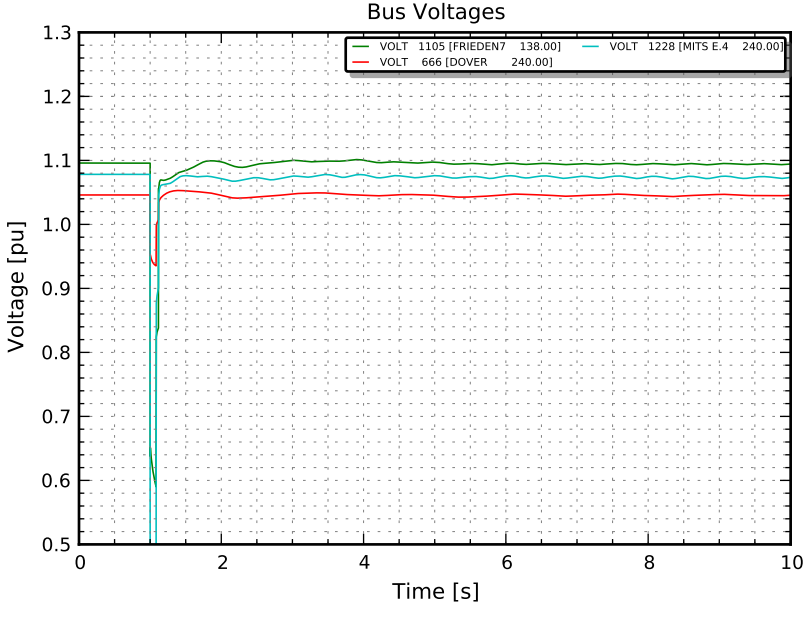
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_B.

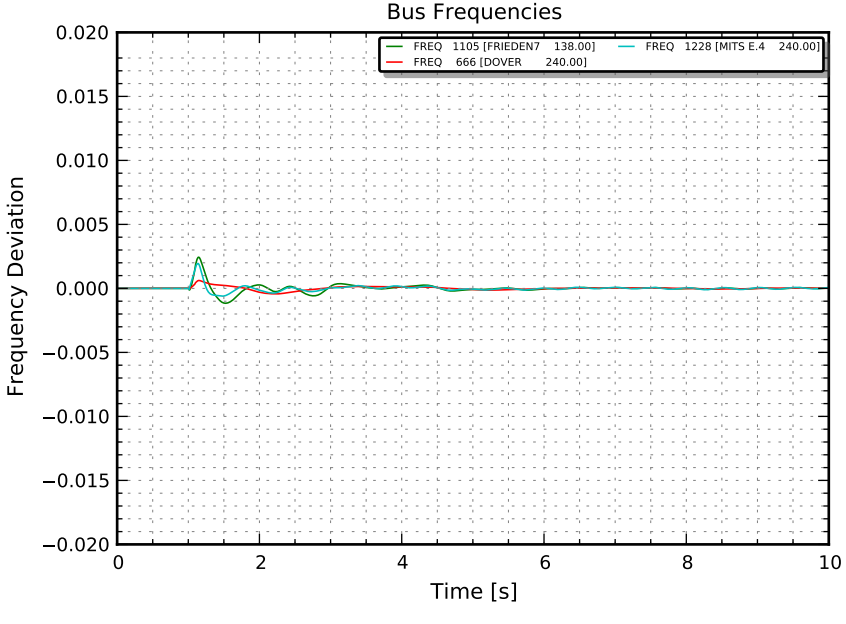
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 003 (B. 1)





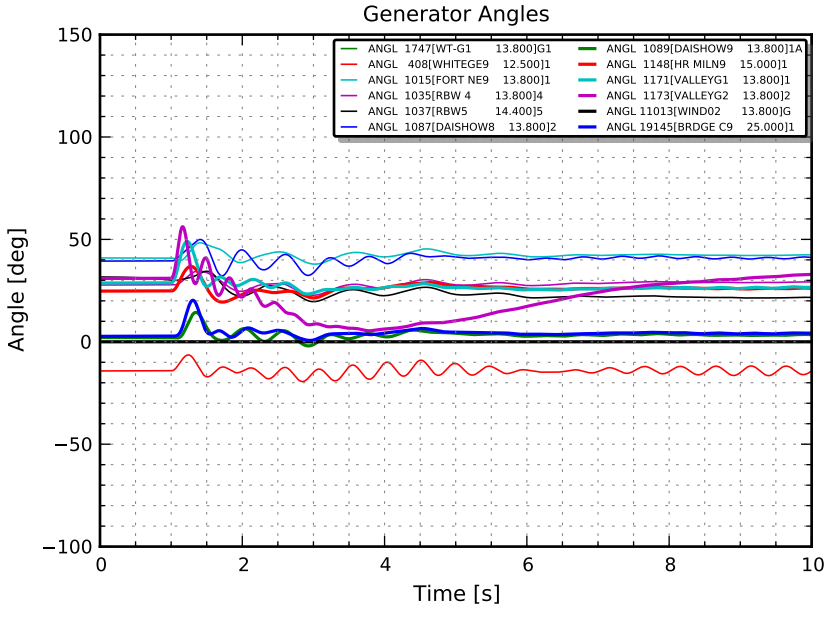


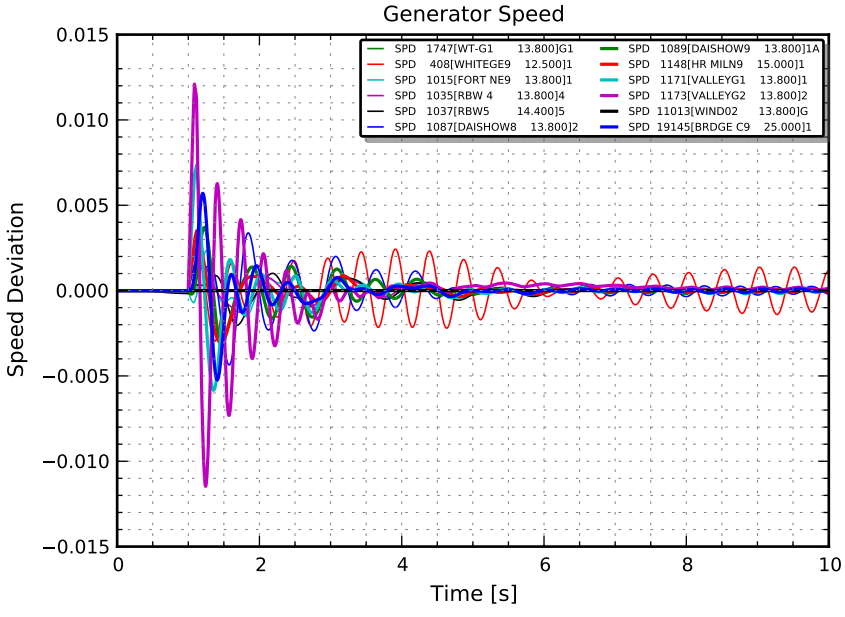


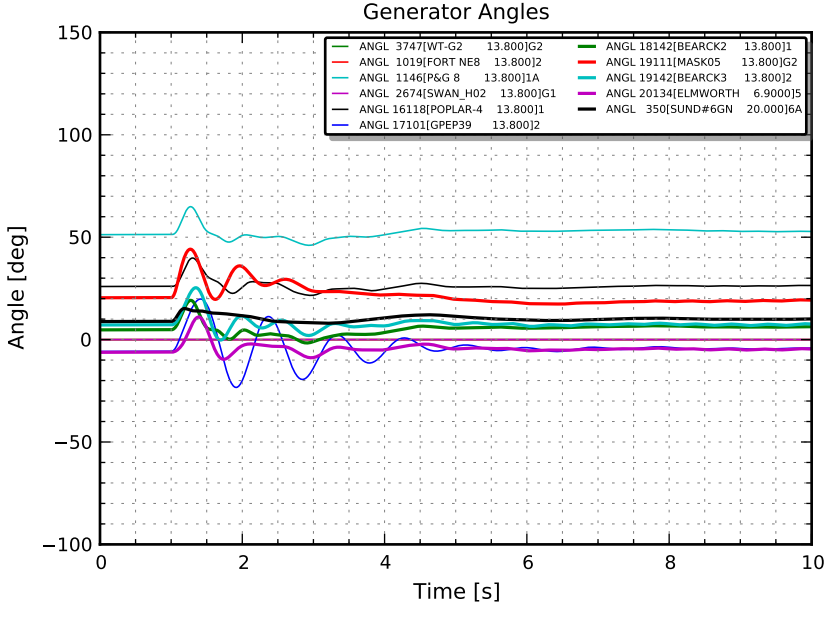
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_B.

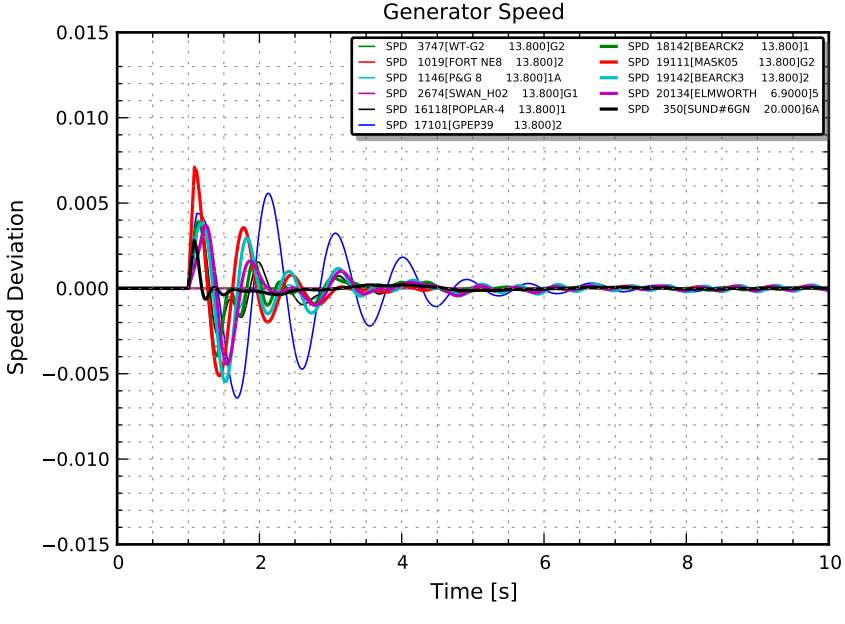
Study Area Generators

Appendix C2A
Figure: 003 (B. 2)





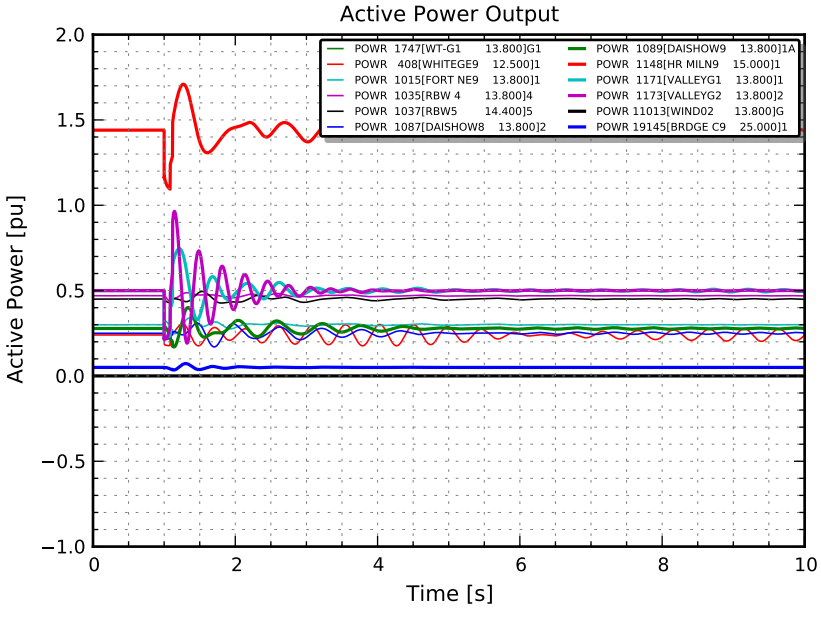


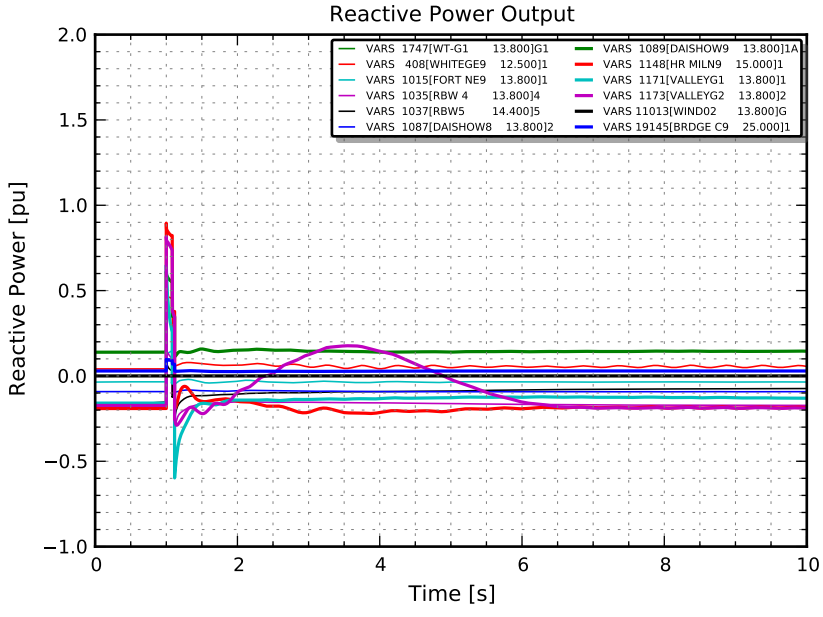


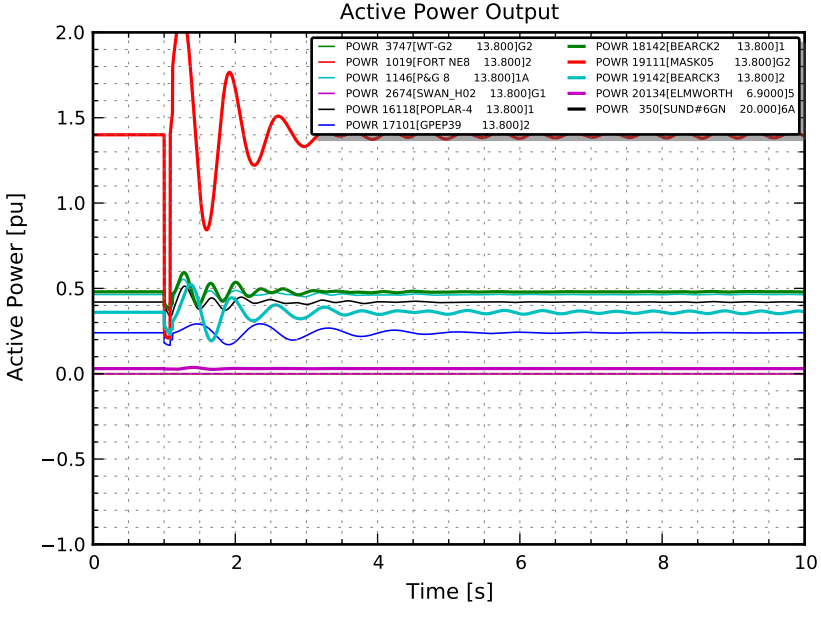
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_B.

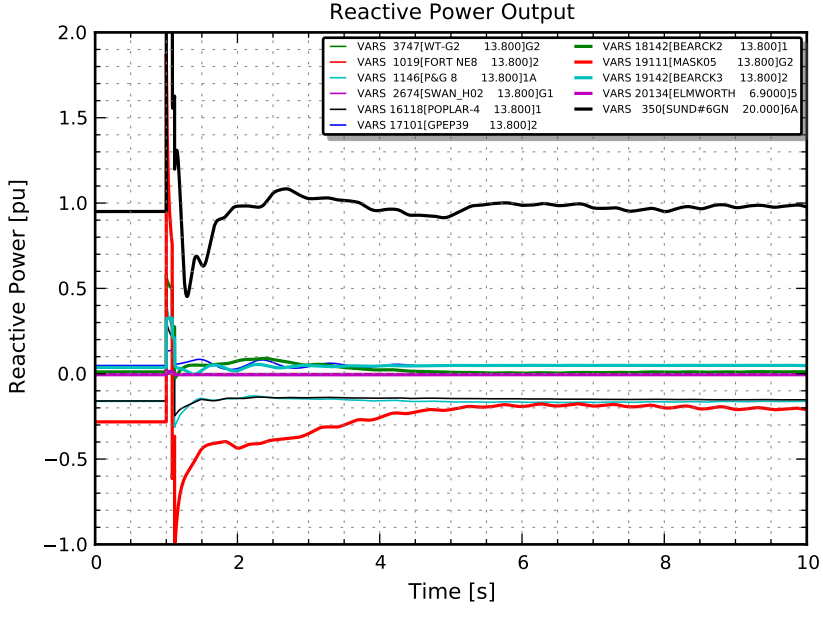
Study Area Generators

Appendix C2A
Figure: 003 (B. 3)





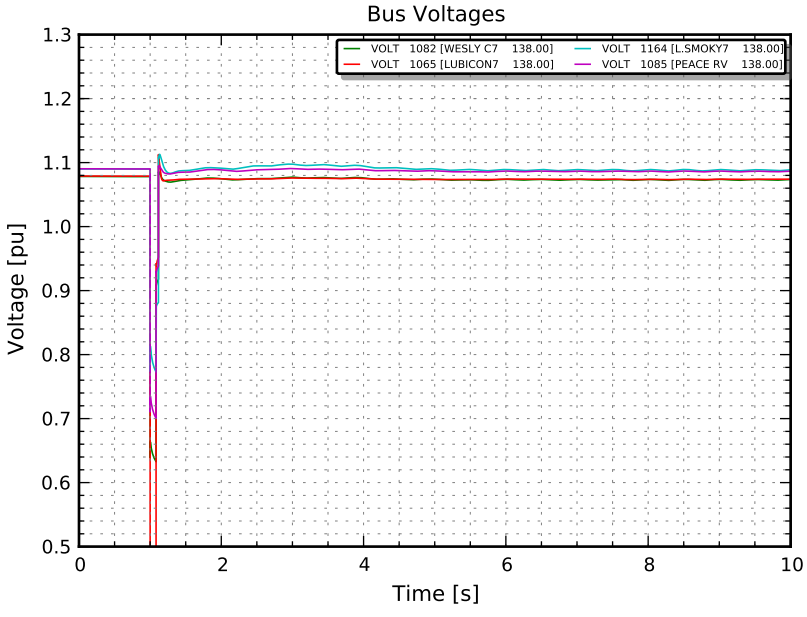


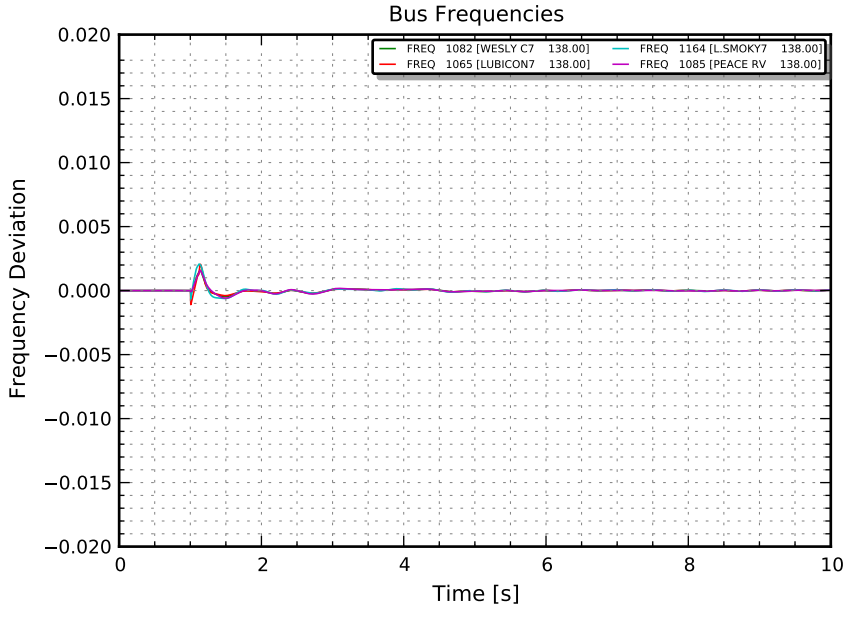


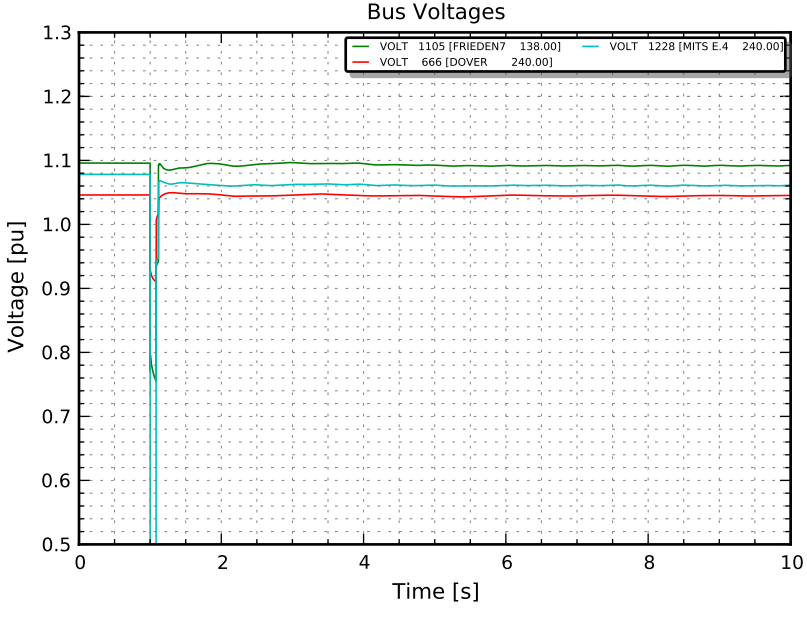
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 004 9L40 MITSUE to LOUISECREEK_A.

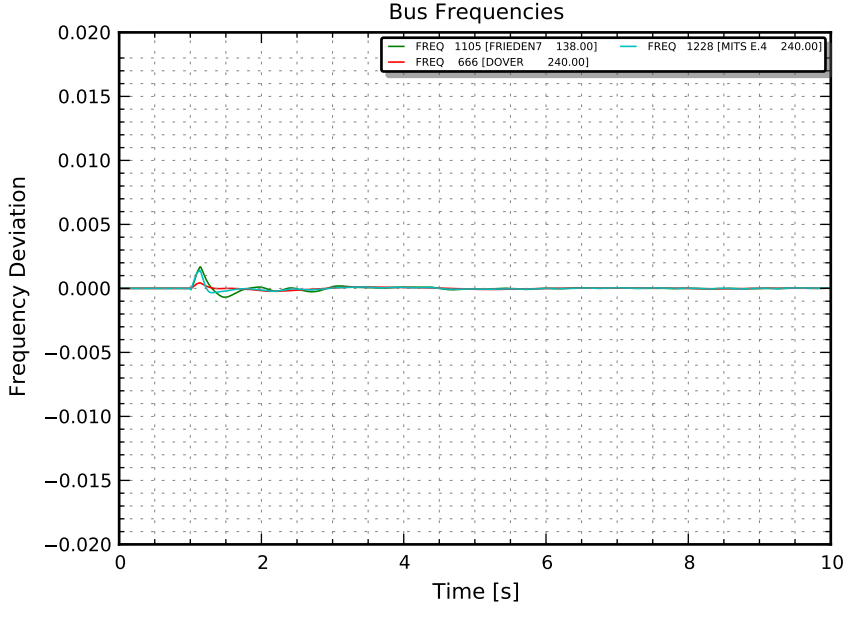
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 004 (A. 1)





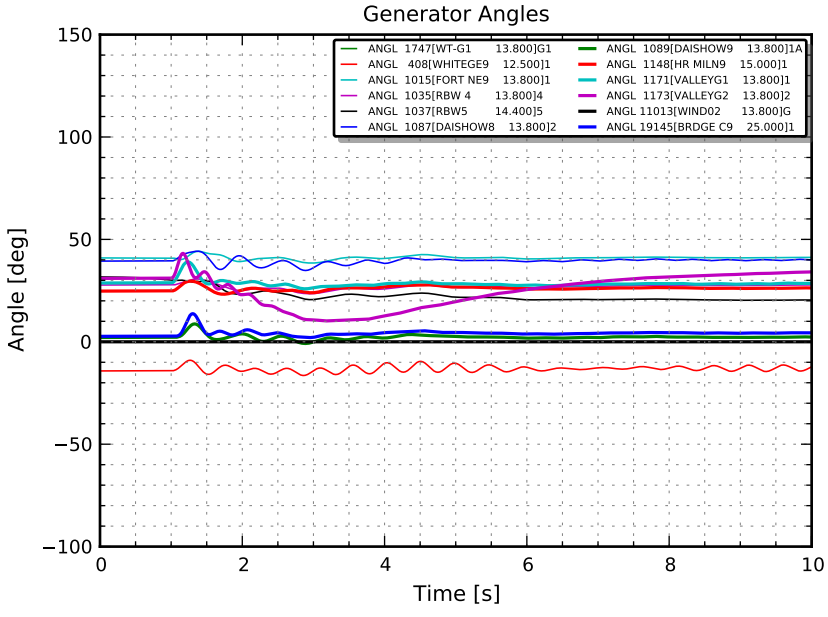


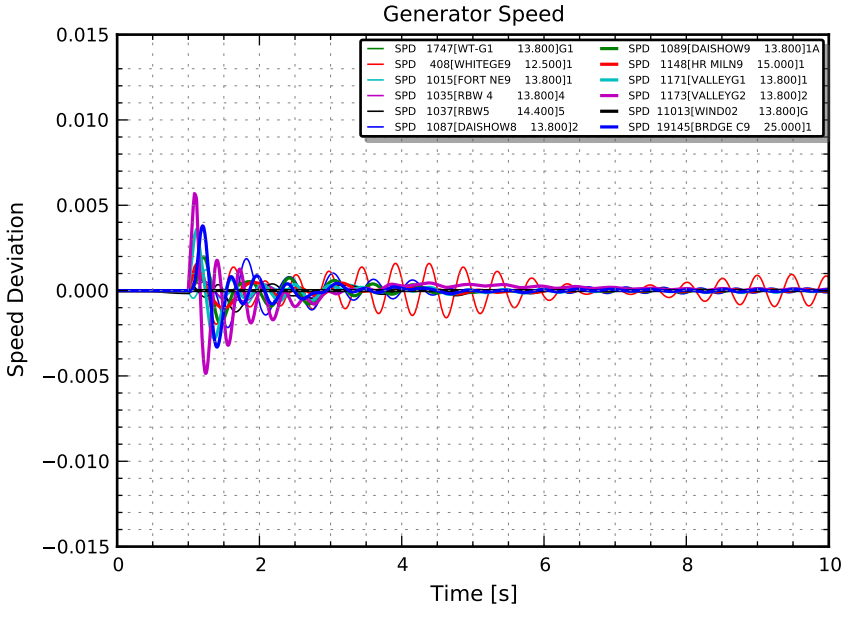


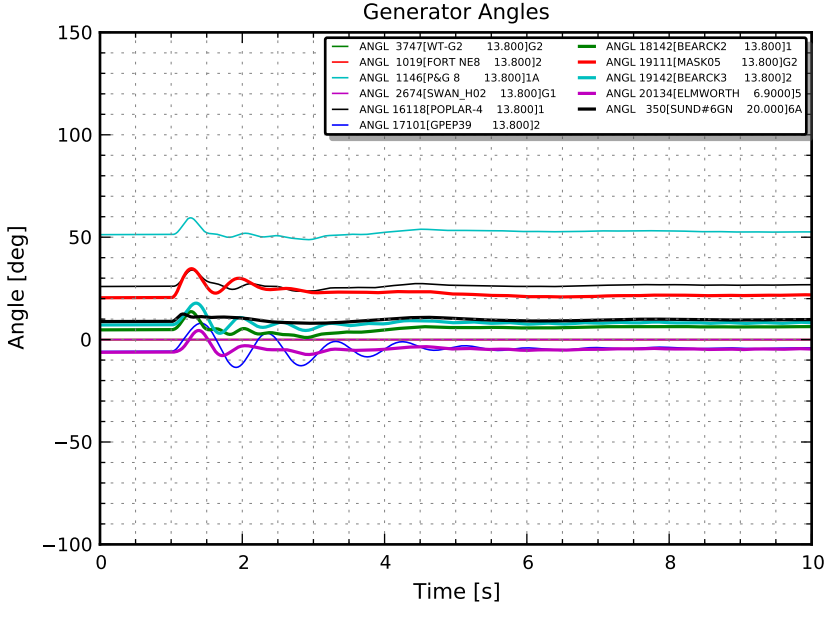
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 004 9L40 MITSUE to LOUISECREEK_A.

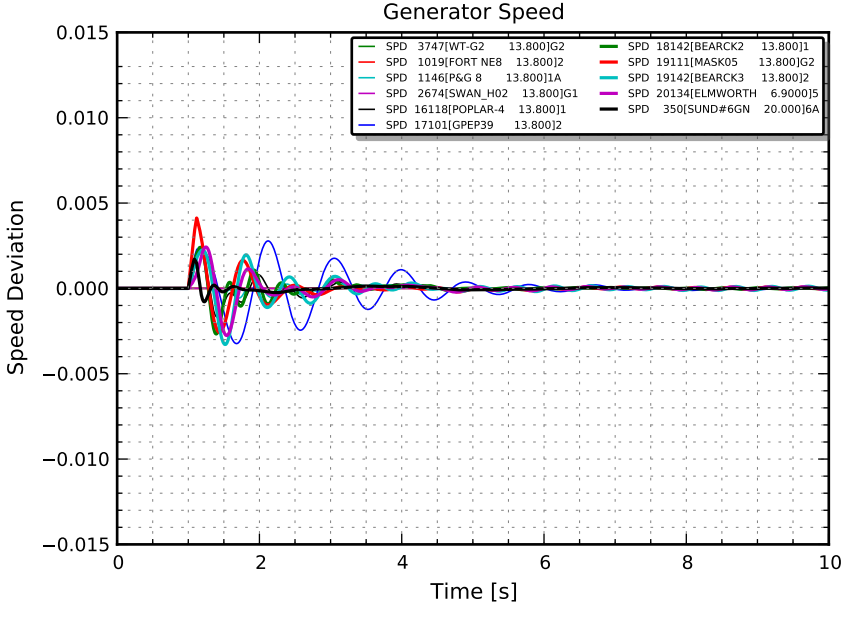
Study Area Generators

Appendix C2A
Figure: 004 (A. 2)





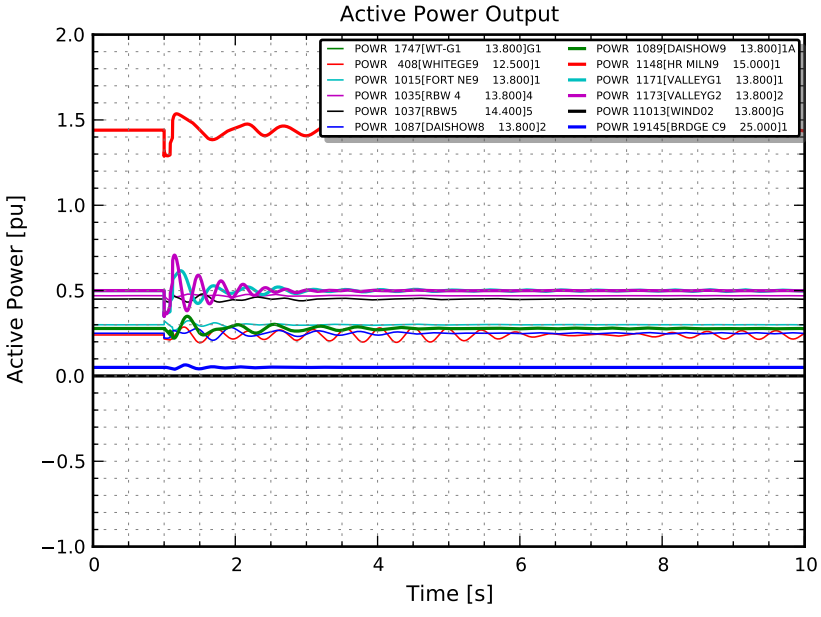


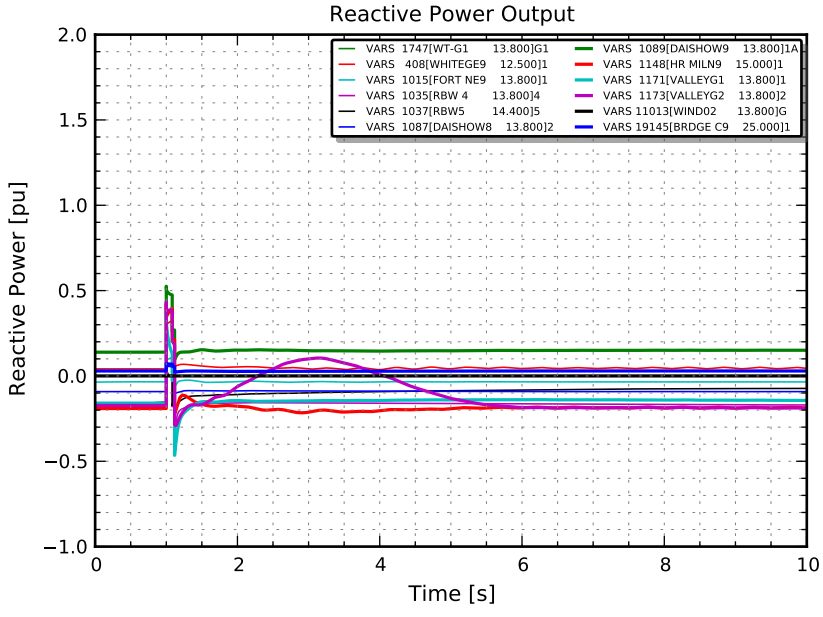


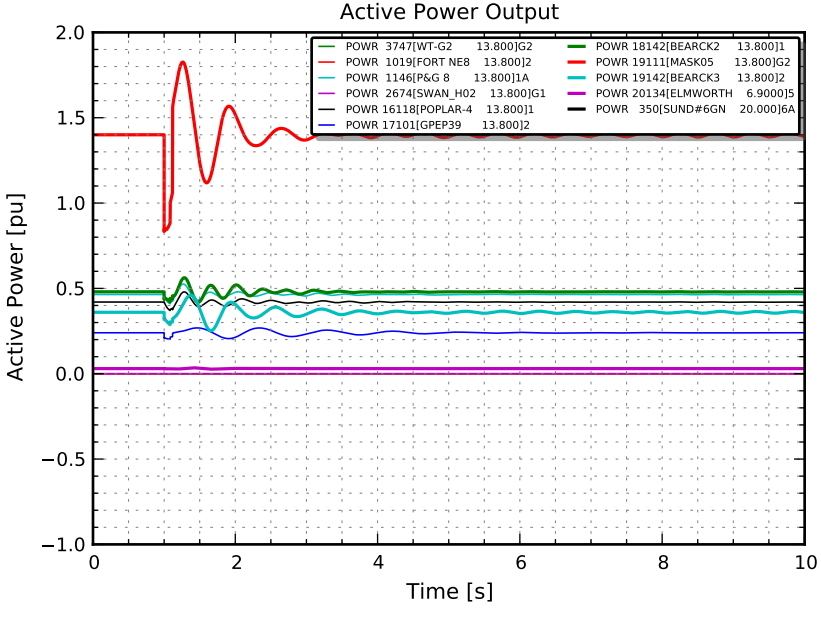
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 004 9L40 MITSUE to LOUISECREEK_A.

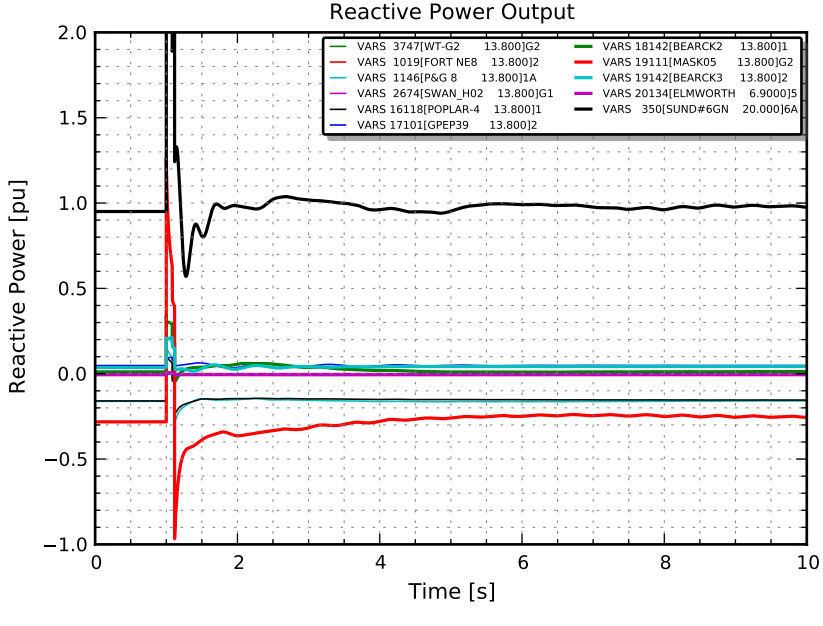
Study Area Generators

Appendix C2A
Figure: 004 (A. 3)





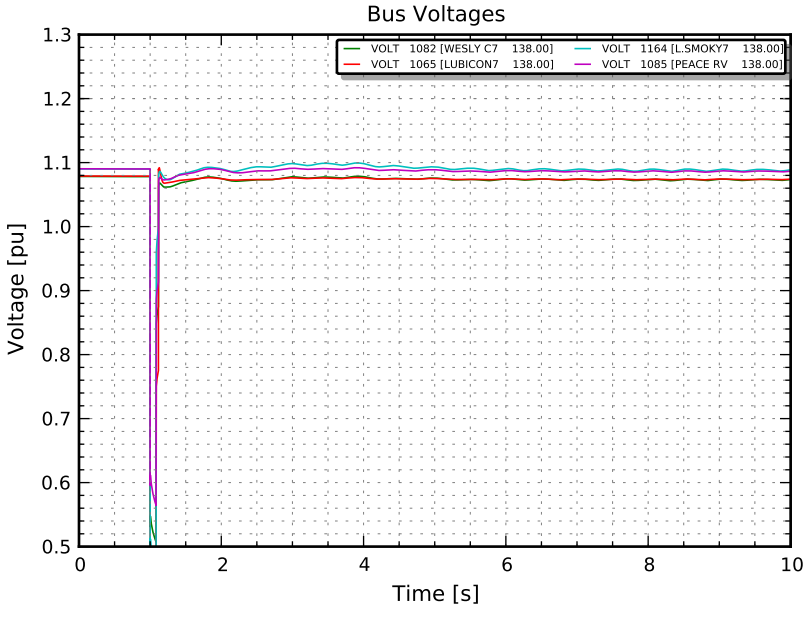


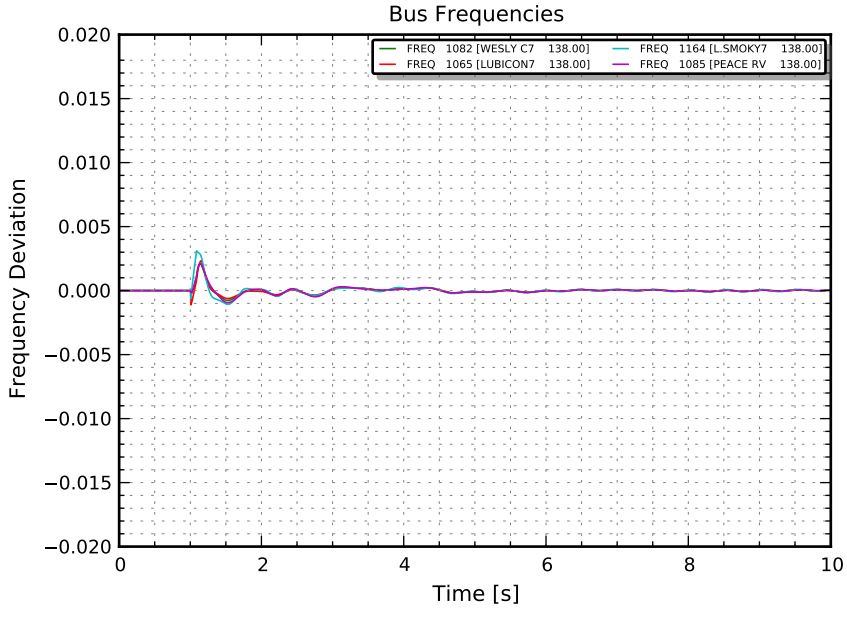


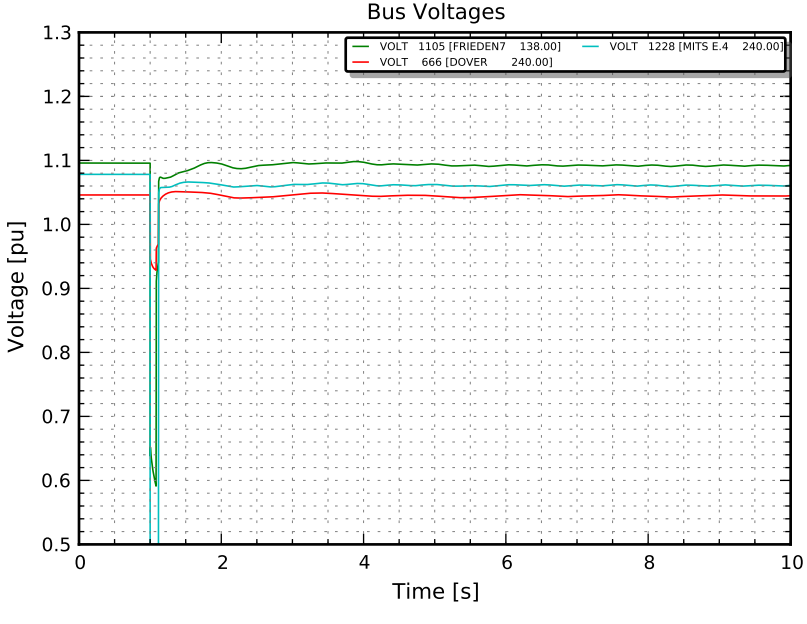
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 004 9L40 MITSUE to LOUISECREEK_B.

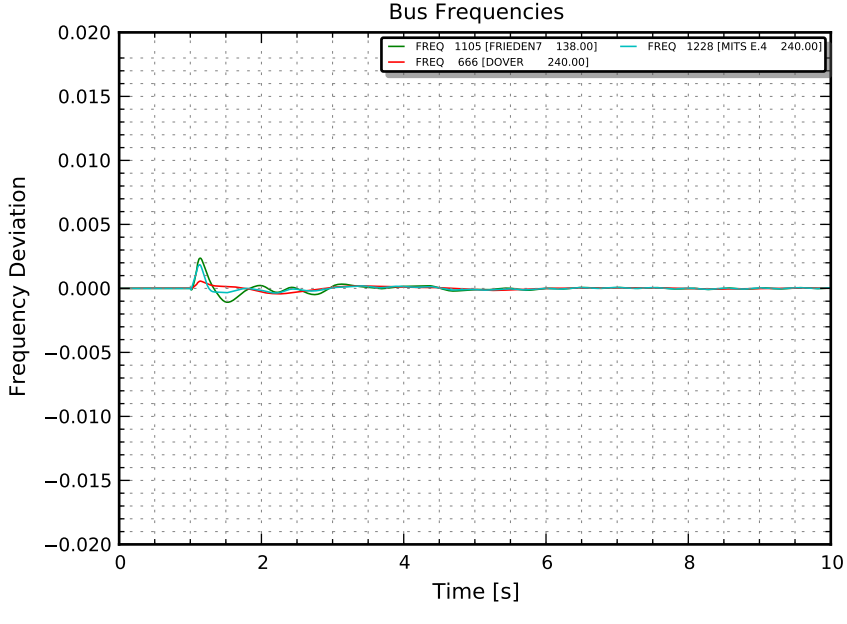
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 004 (B. 1)





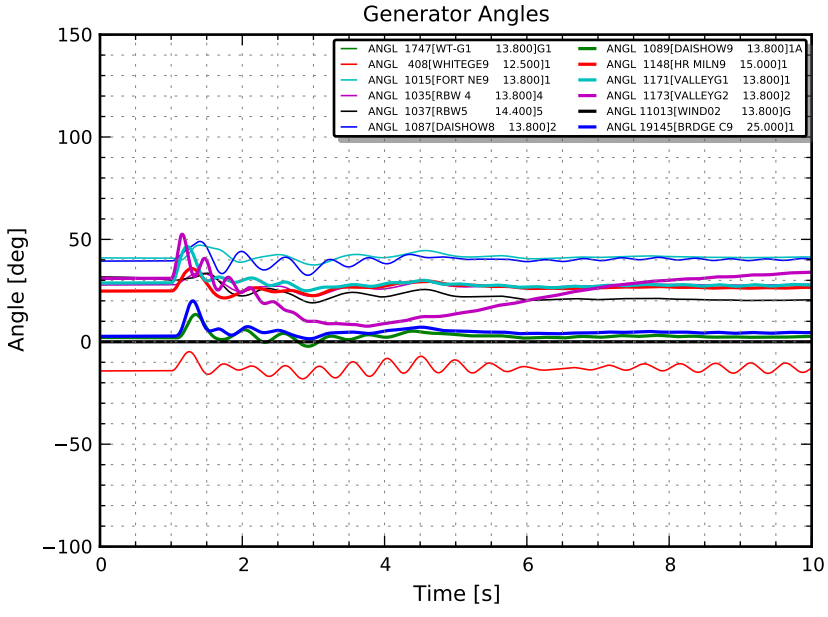


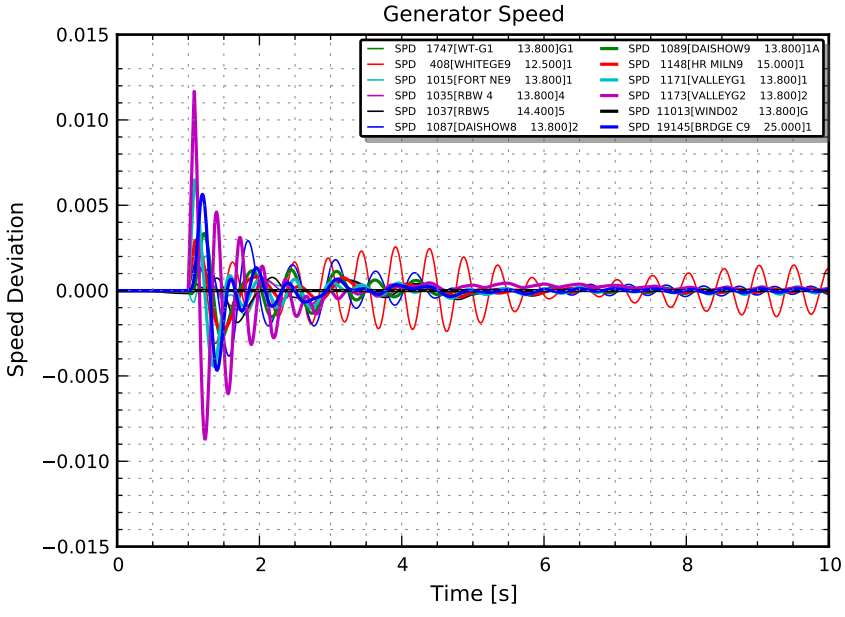


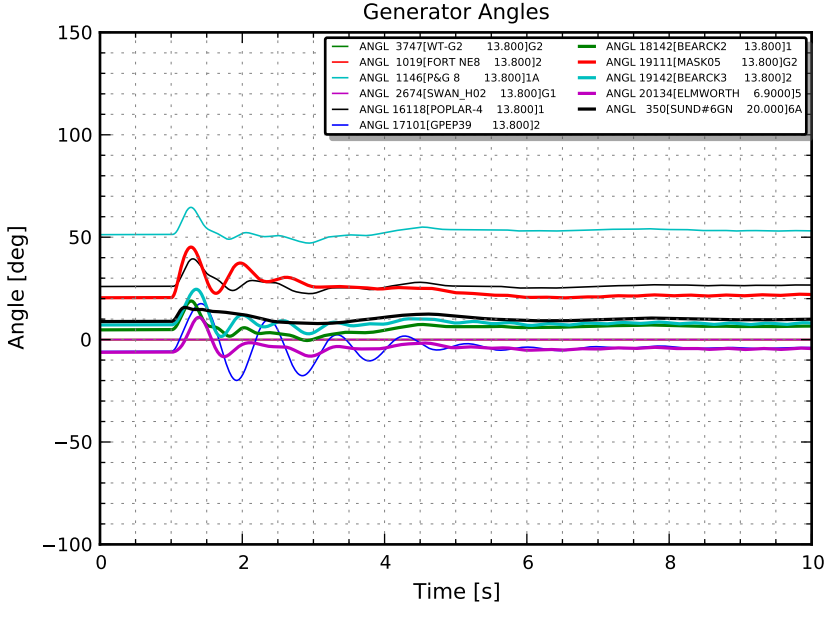
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 004 9L40 MITSUE to LOUISECREEK_B.

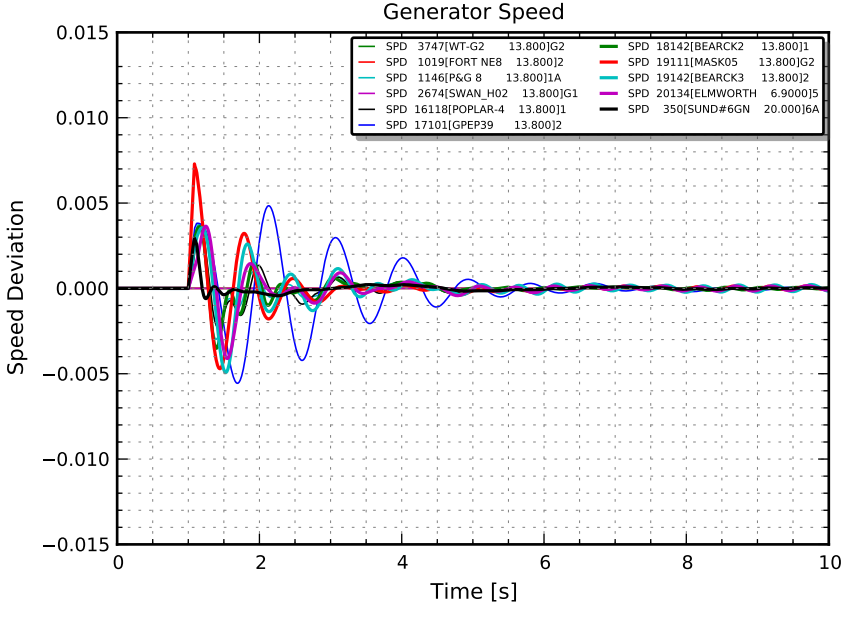
Study Area Generators

Appendix C2A
Figure: 004 (B. 2)





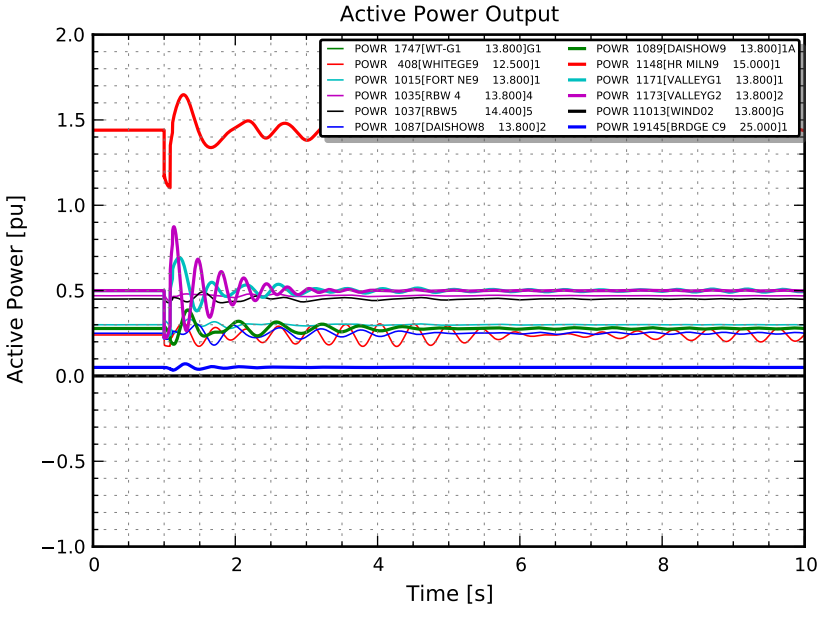


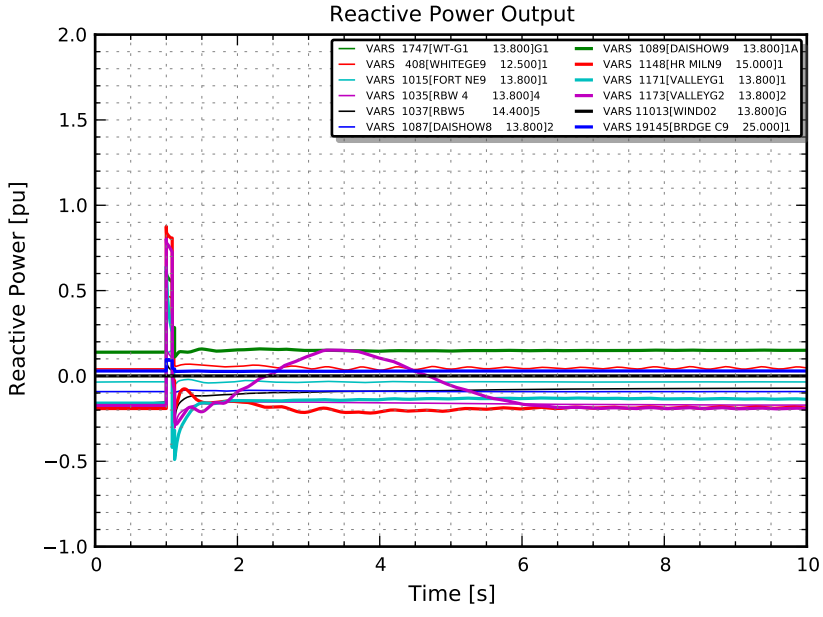


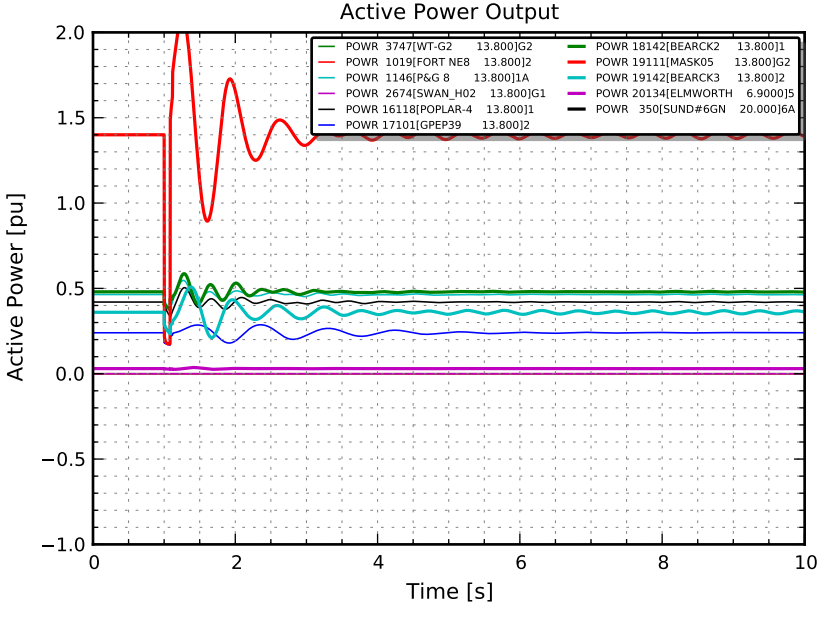
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 004 9L40 MITSUE to LOUISECREEK_B.

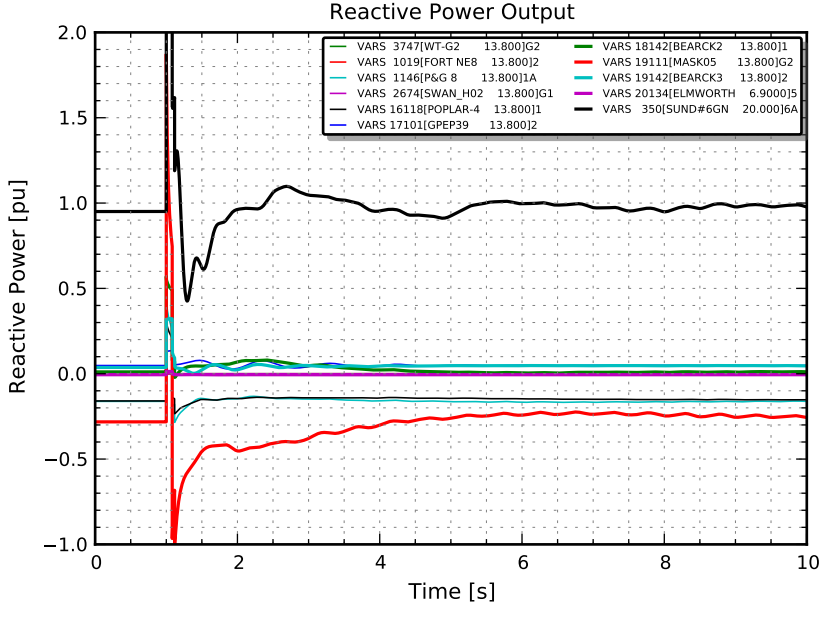
Study Area Generators

Appendix C2A
Figure: 004 (B. 3)





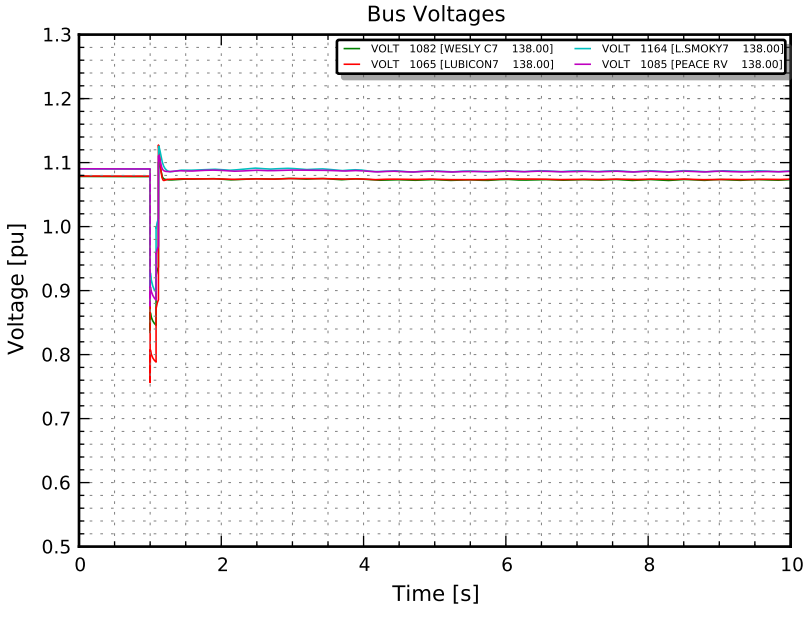


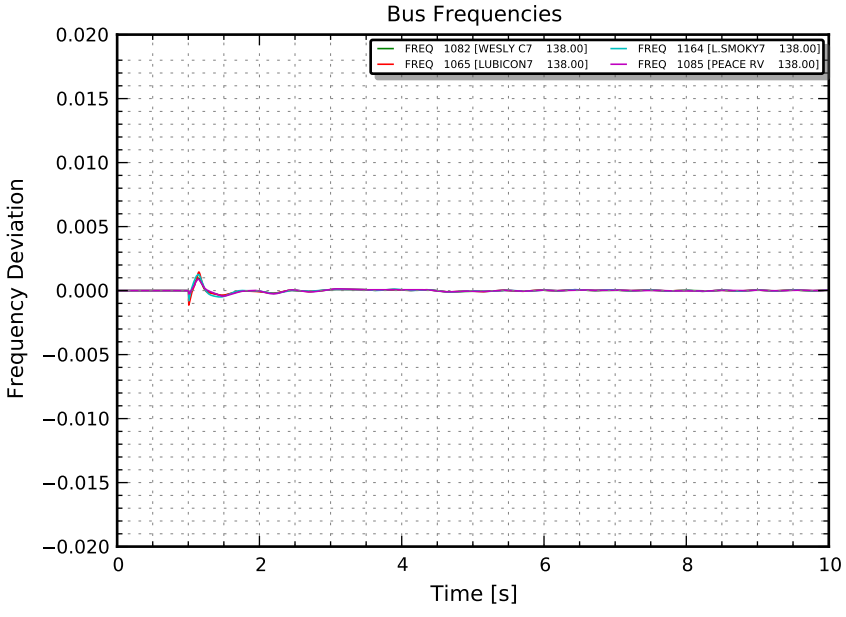


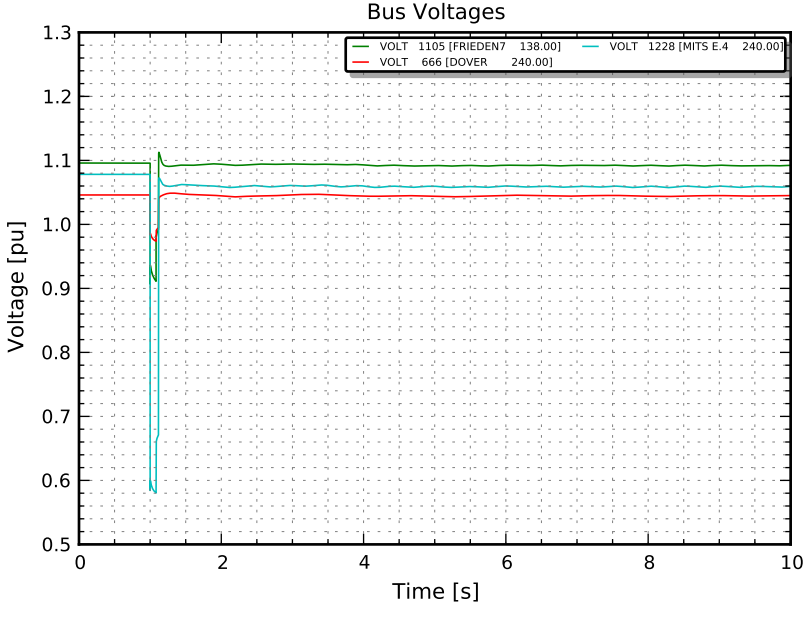
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 005 913L NORTHBARRHEAD to MITSUE_A.

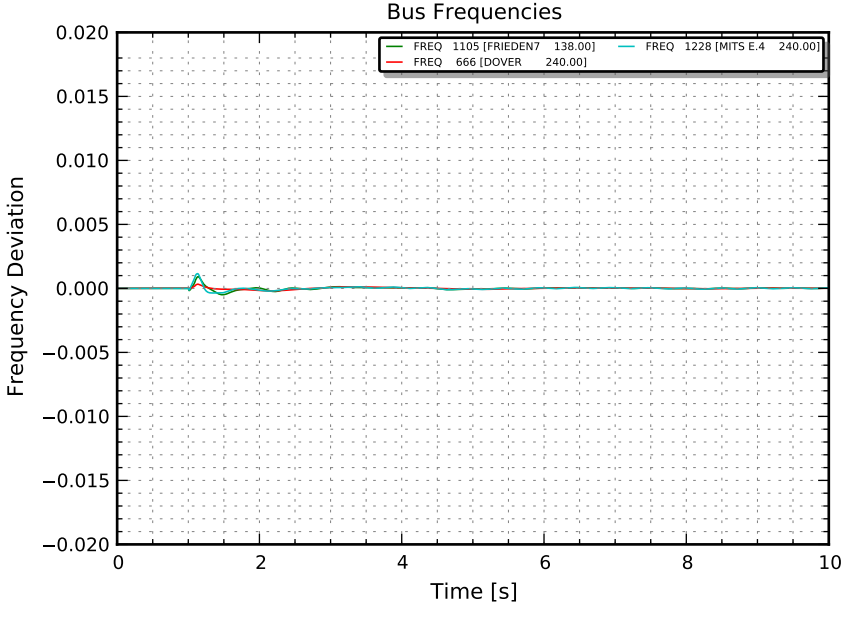
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 005 (A. 1)





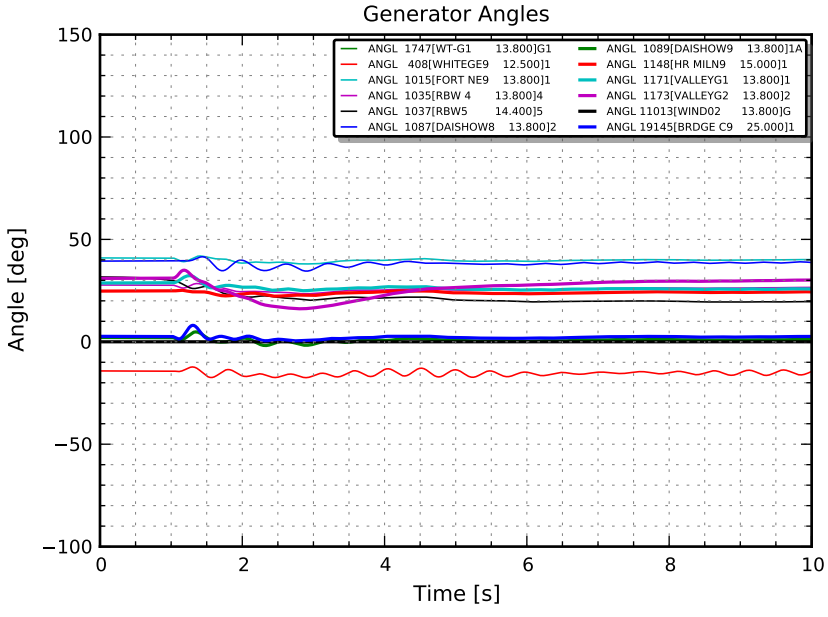


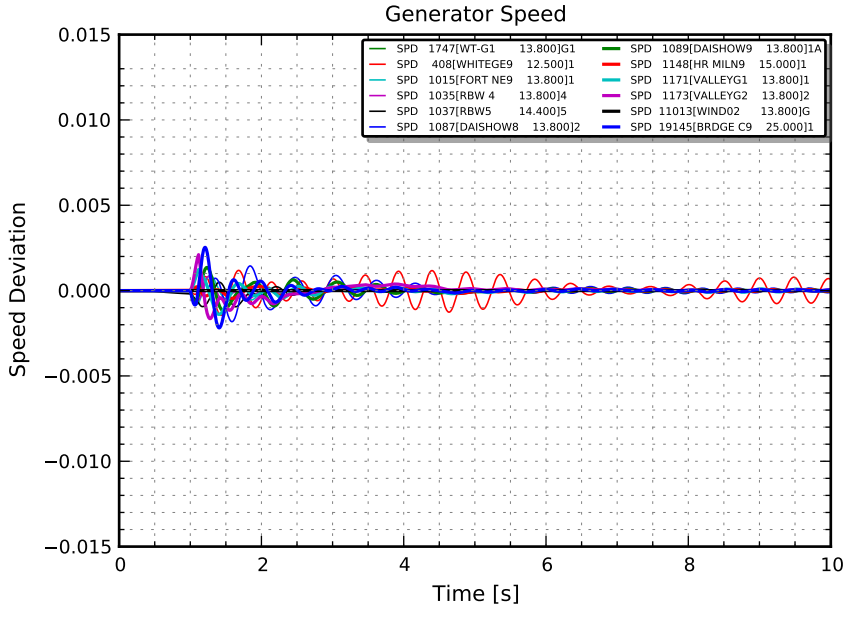


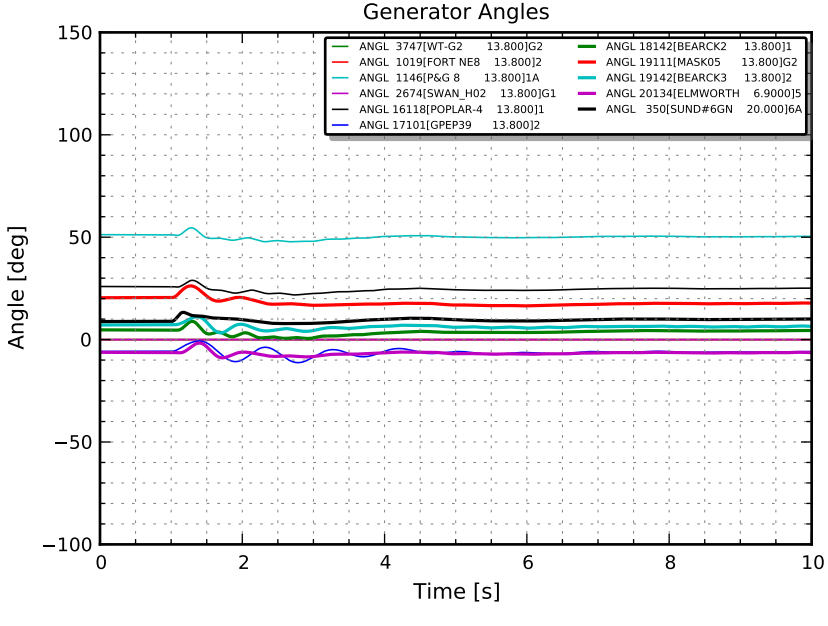
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 005 913L NORTHBARRHEAD to MITSUE_A.

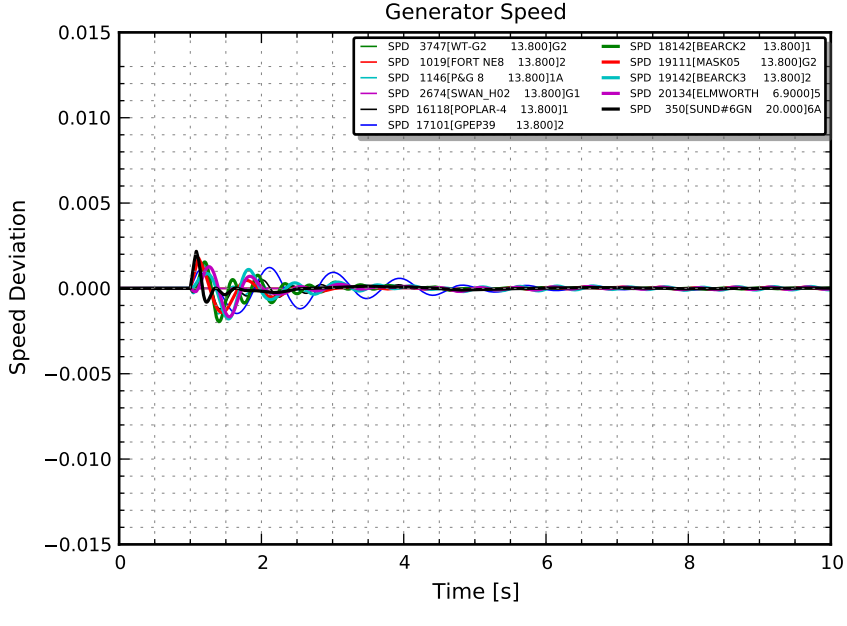
Study Area Generators

Appendix C2A
Figure: 005 (A. 2)





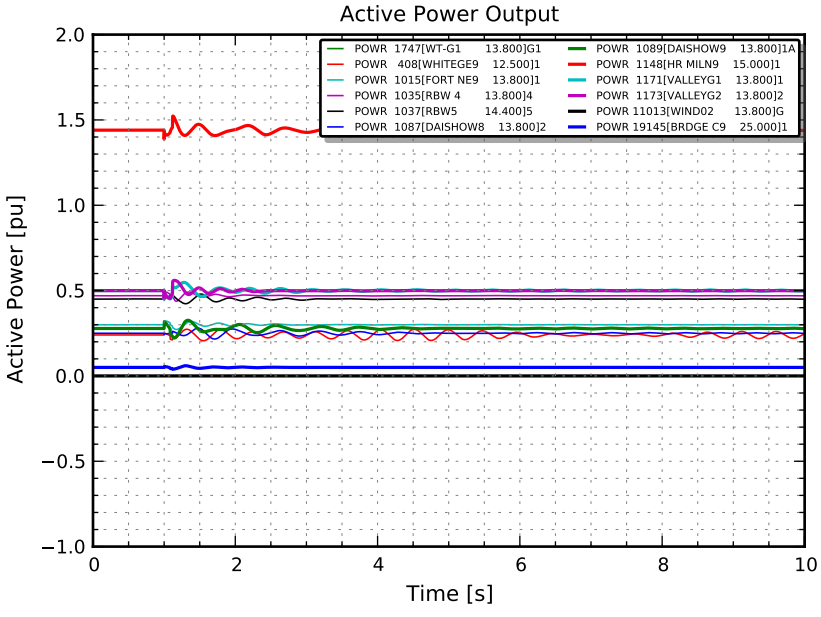


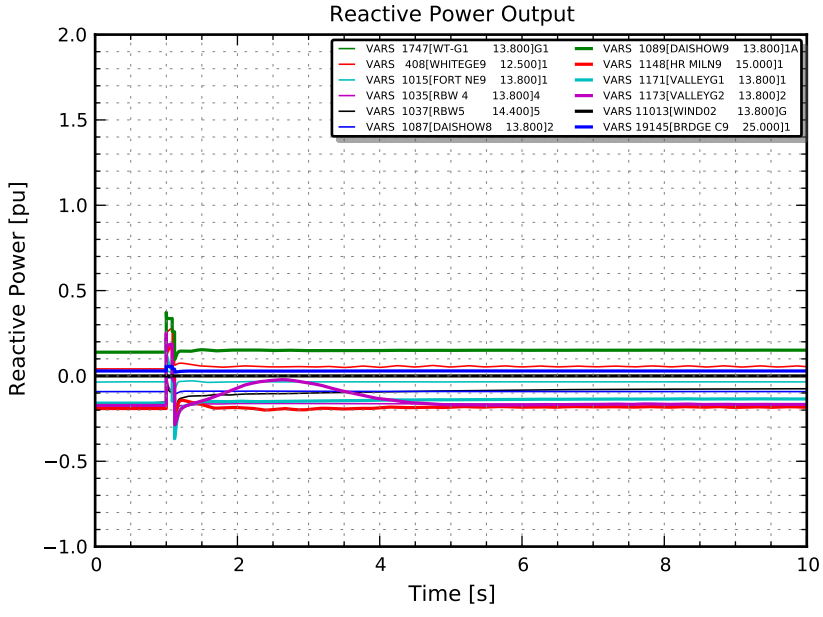


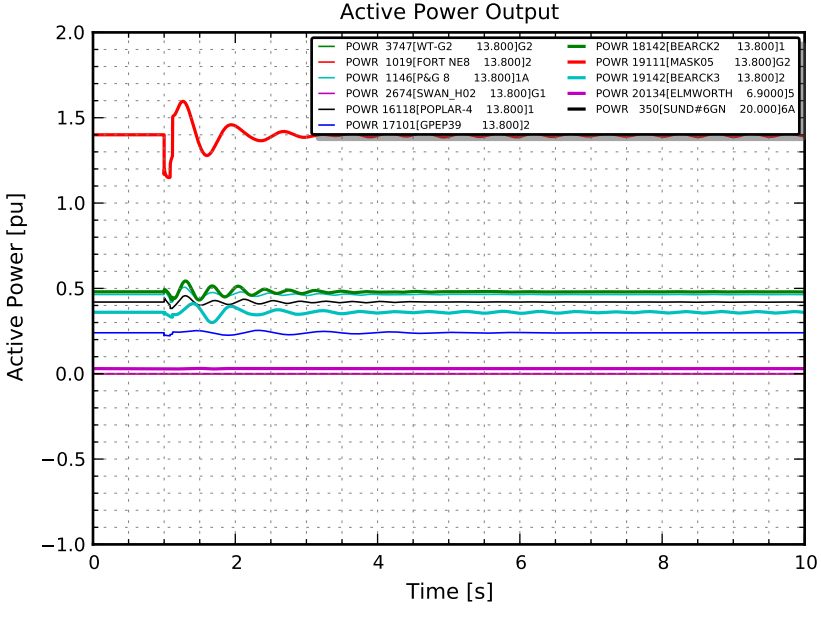
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 005 913L NORTHBARRHEAD to MITSUE_A.

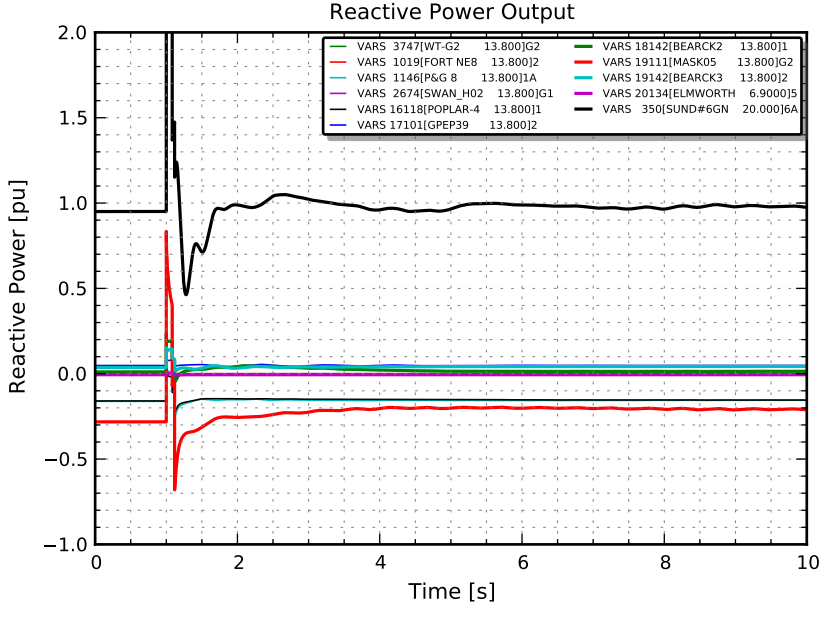
Study Area Generators

Appendix C2A
Figure: 005 (A. 3)





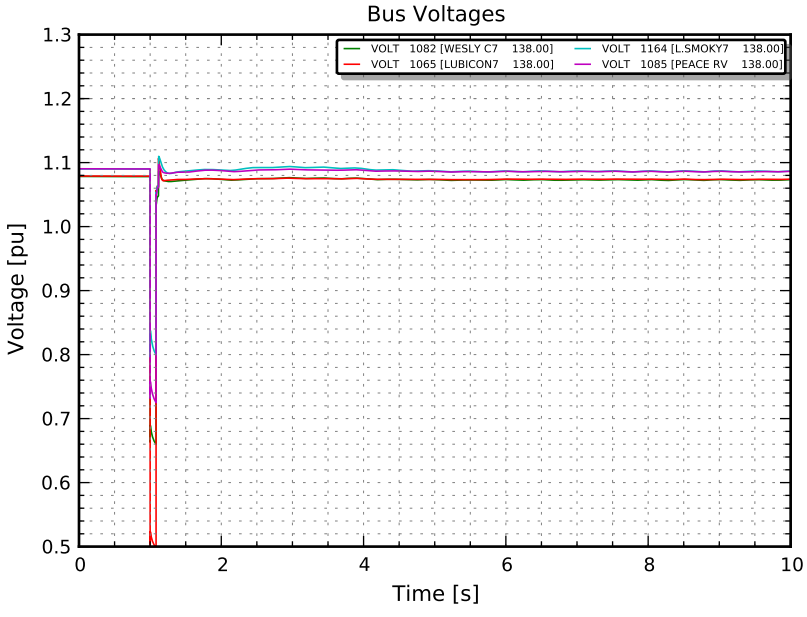


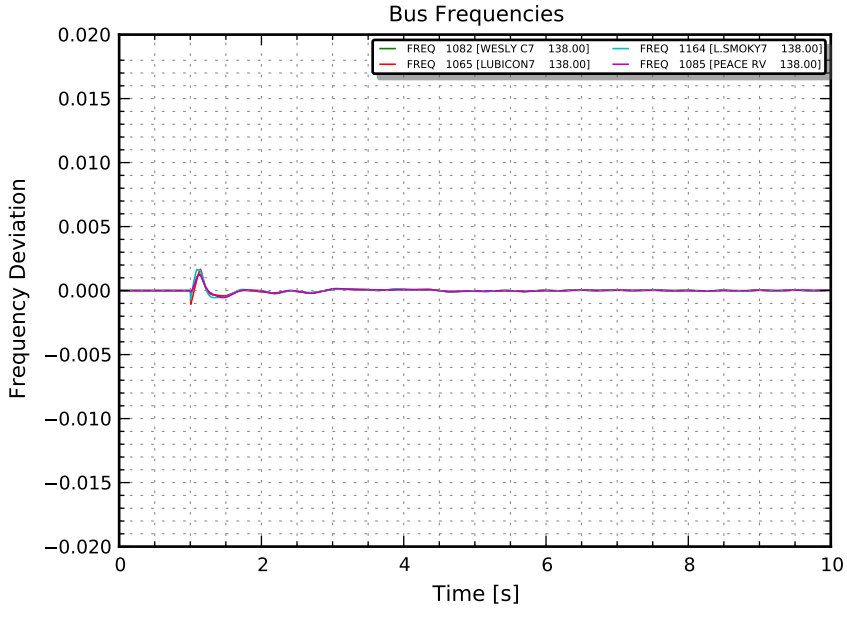


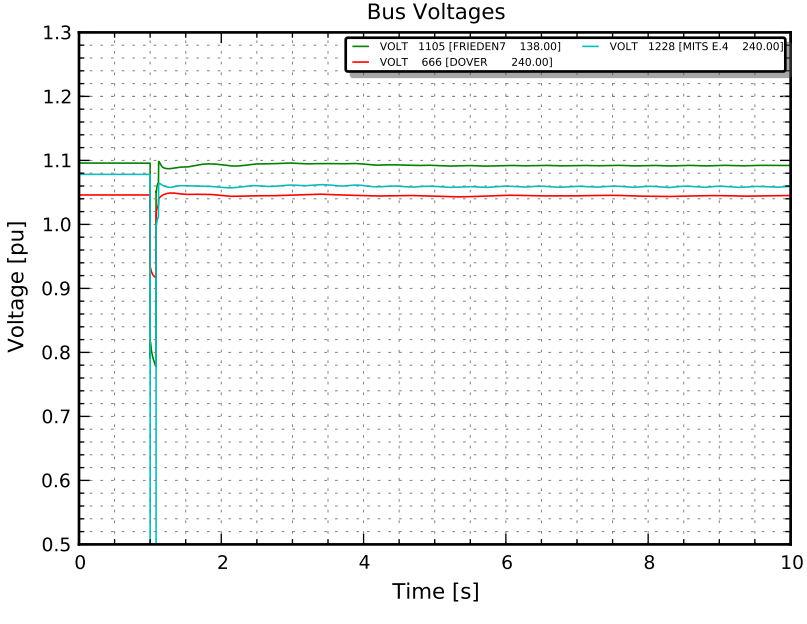
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 005 913L NORTHBARRHEAD to MITSUE_B.

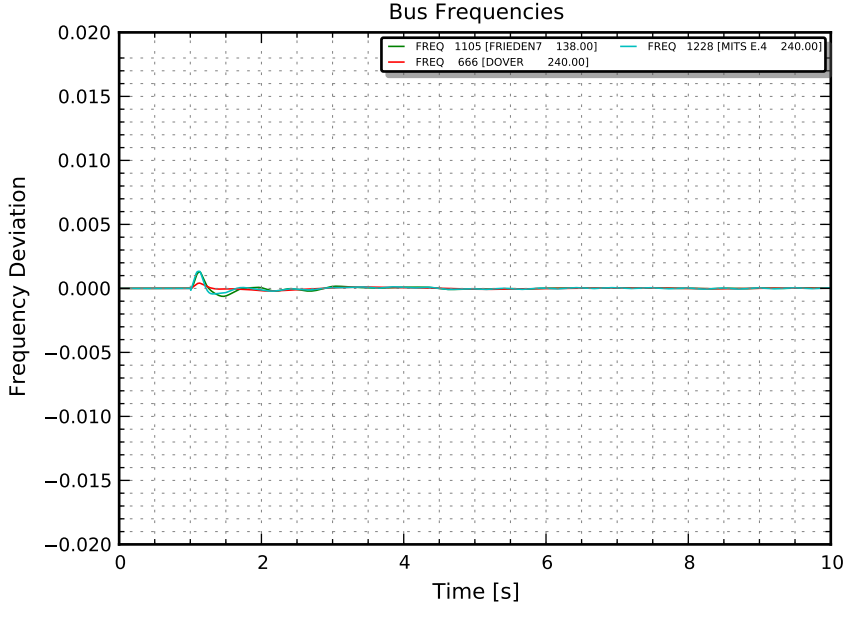
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 005 (B. 1)





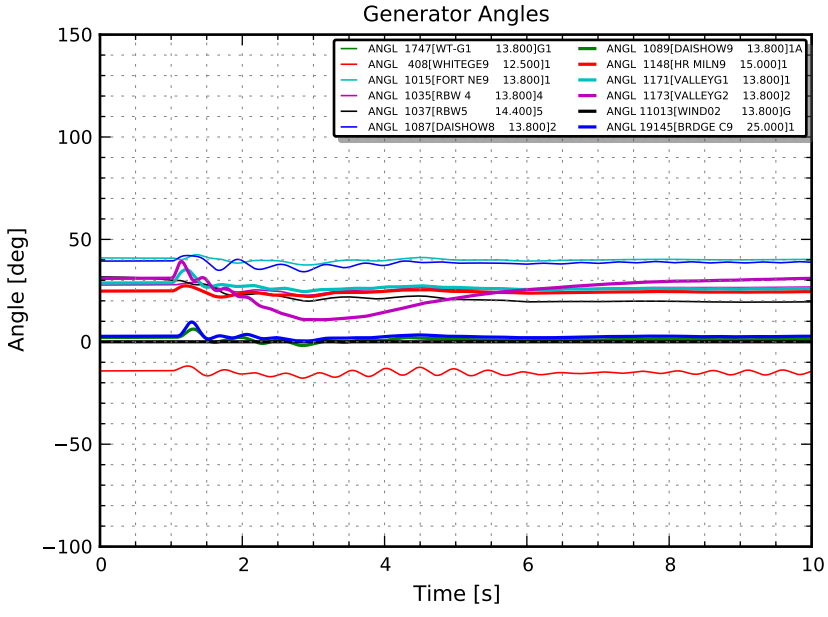


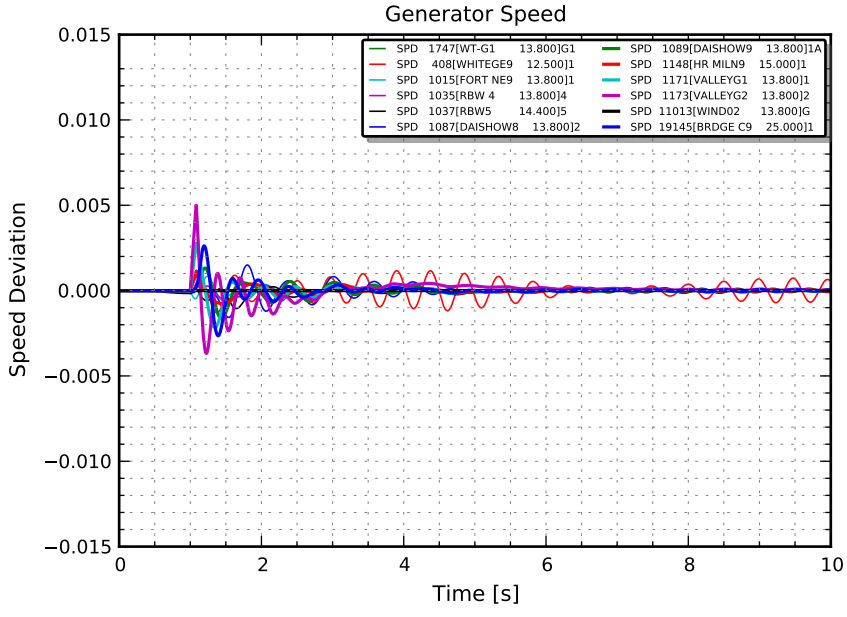


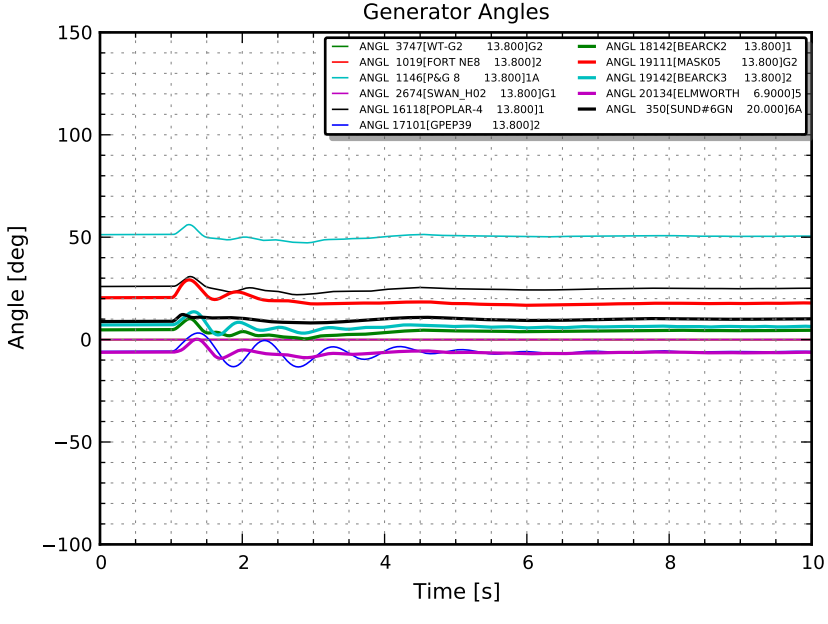
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 005 913L NORTHBARRHEAD to MITSUE_B.

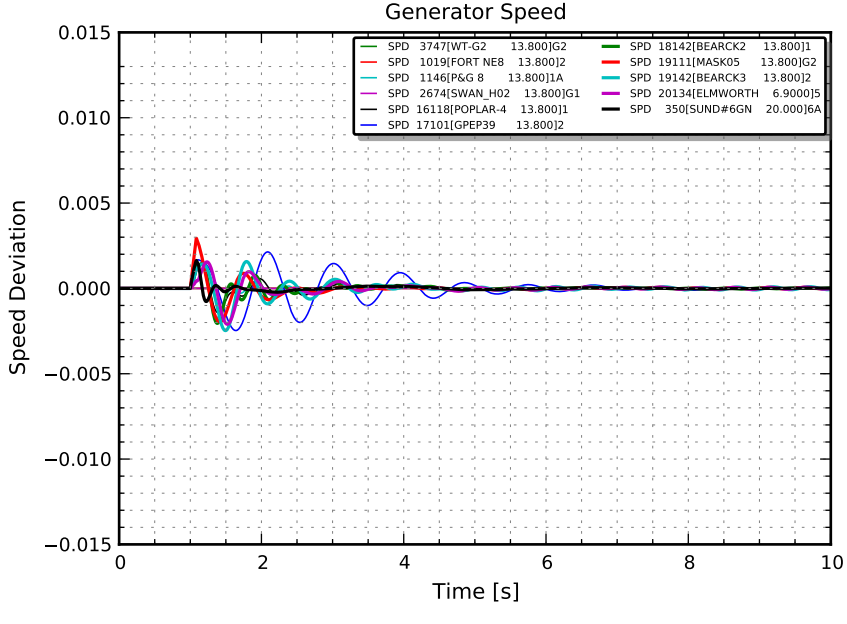
Study Area Generators

Appendix C2A
Figure: 005 (B. 2)





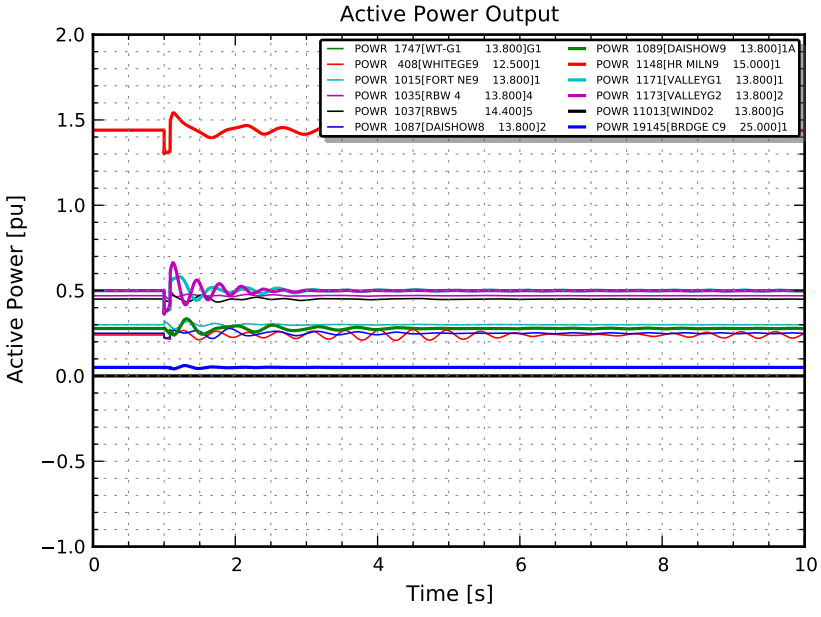


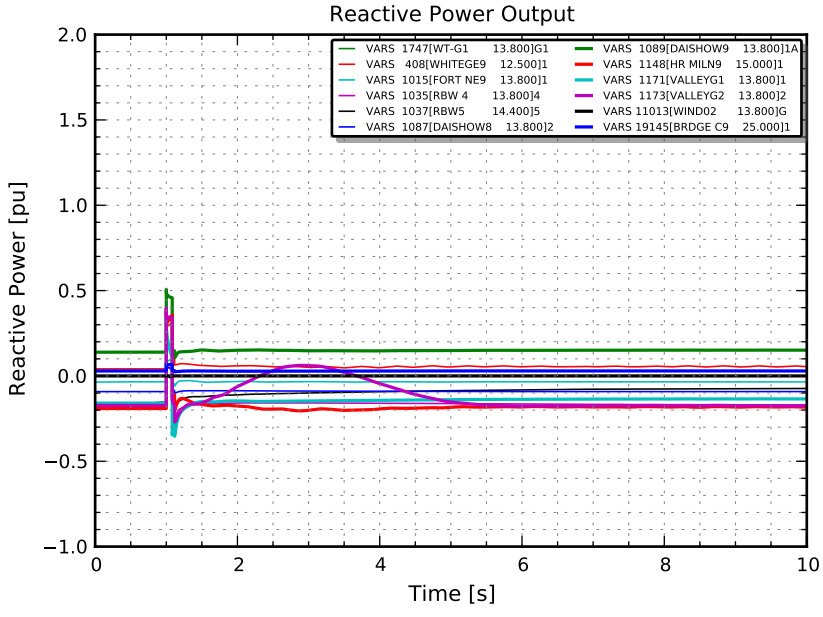


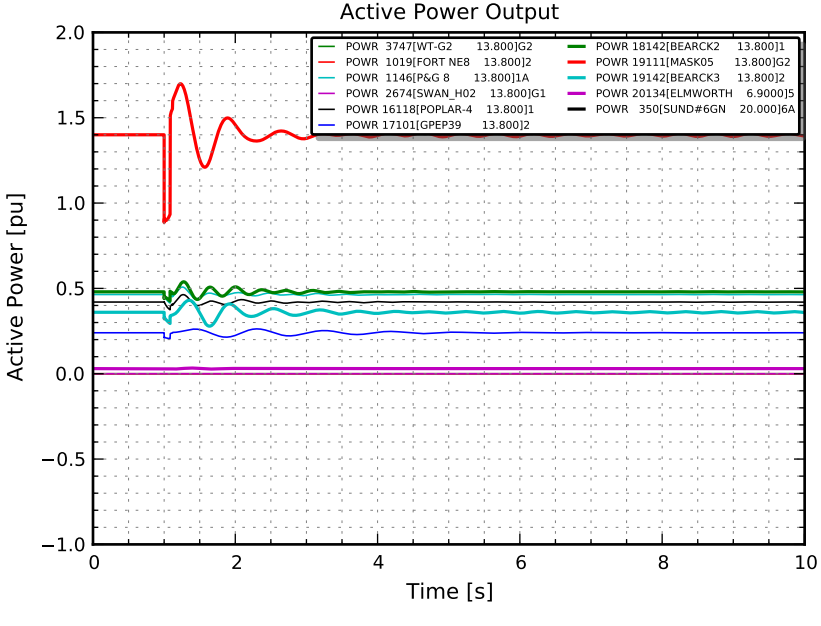
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 005 913L NORTHBARRHEAD to MITSUE_B.

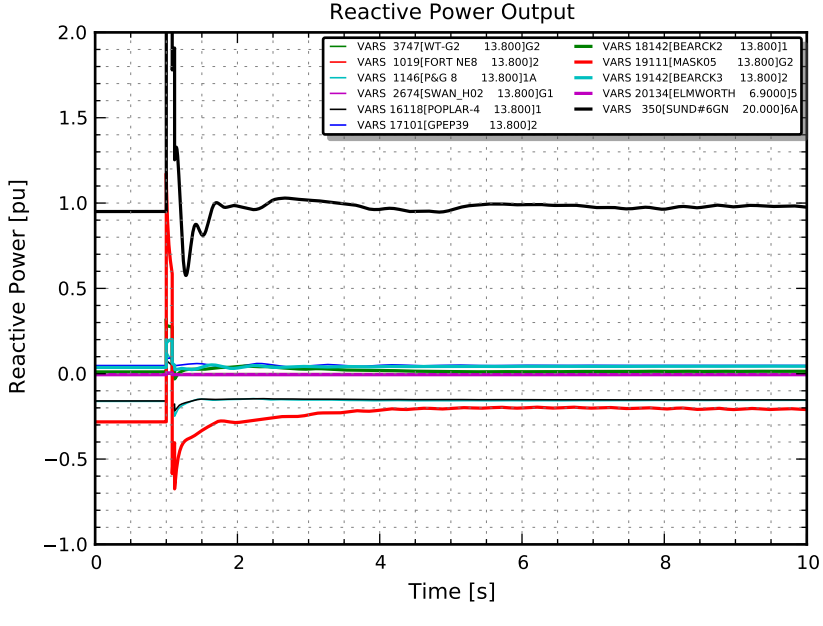
Study Area Generators

Appendix C2A
Figure: 005 (B. 3)





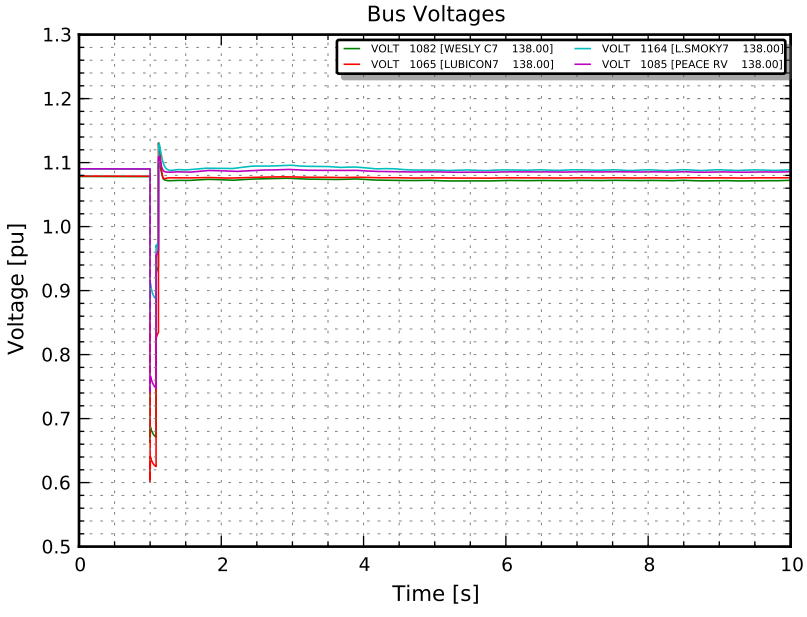


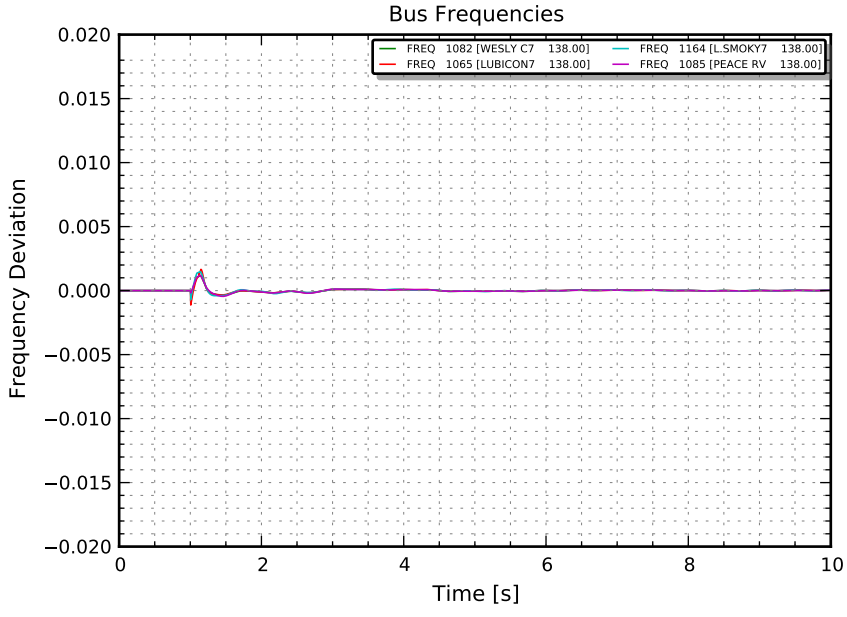


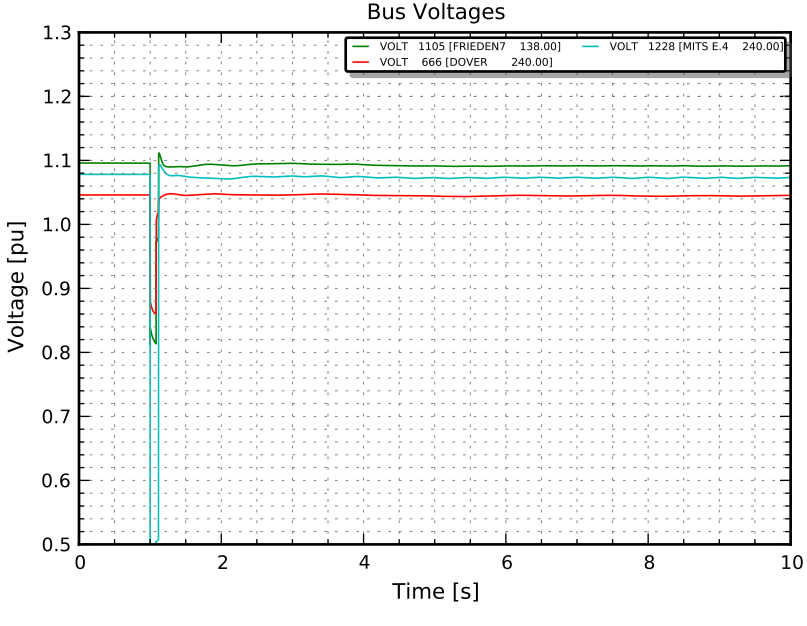
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 006 9L56 WABASCA to MITSUE_A.

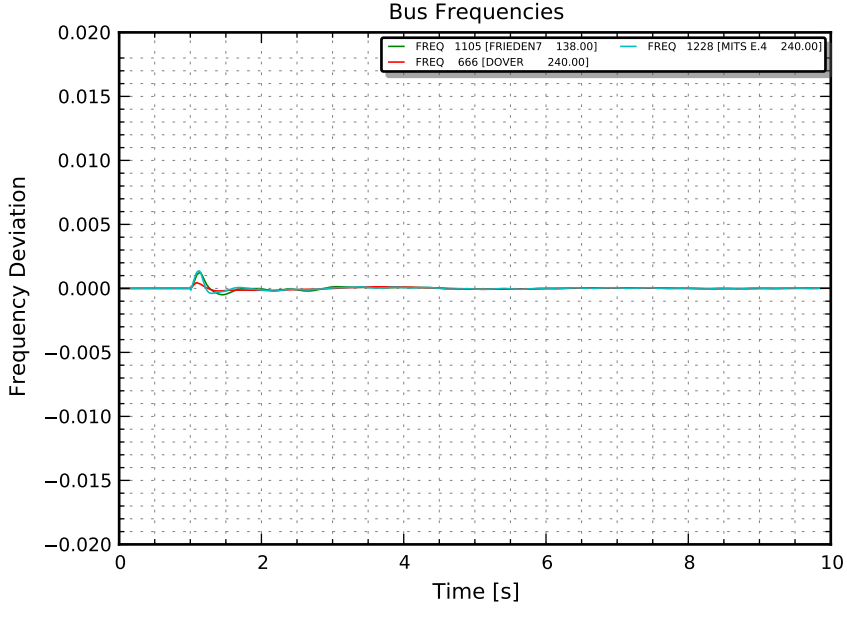
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 006 (A. 1)





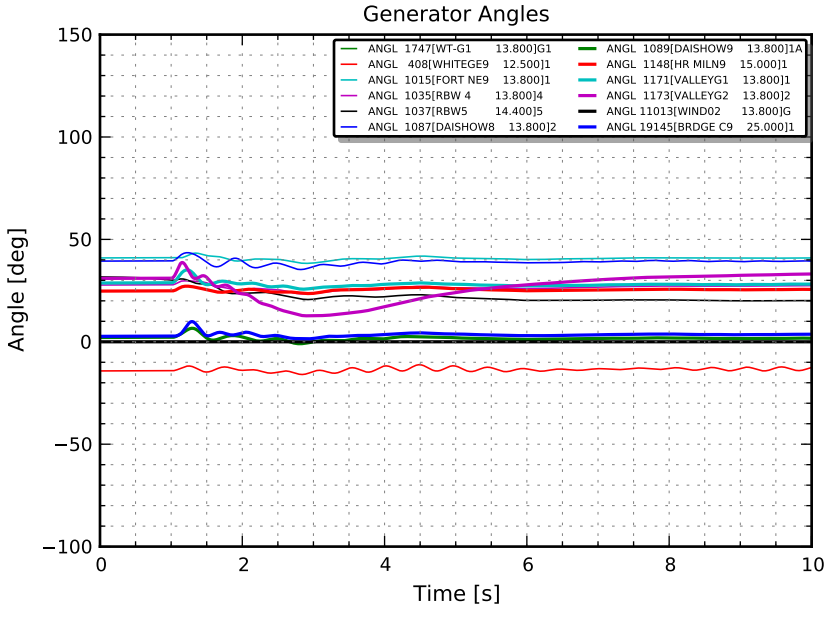


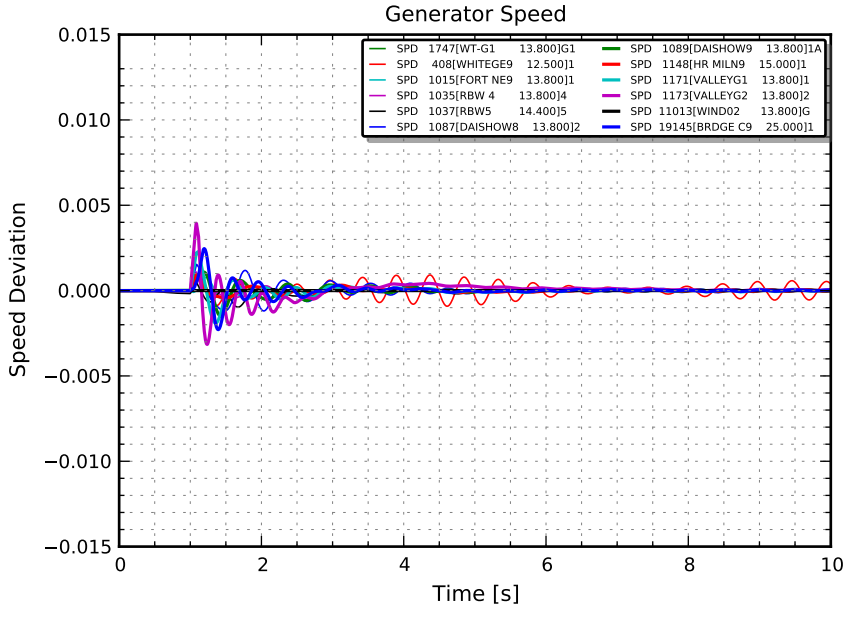


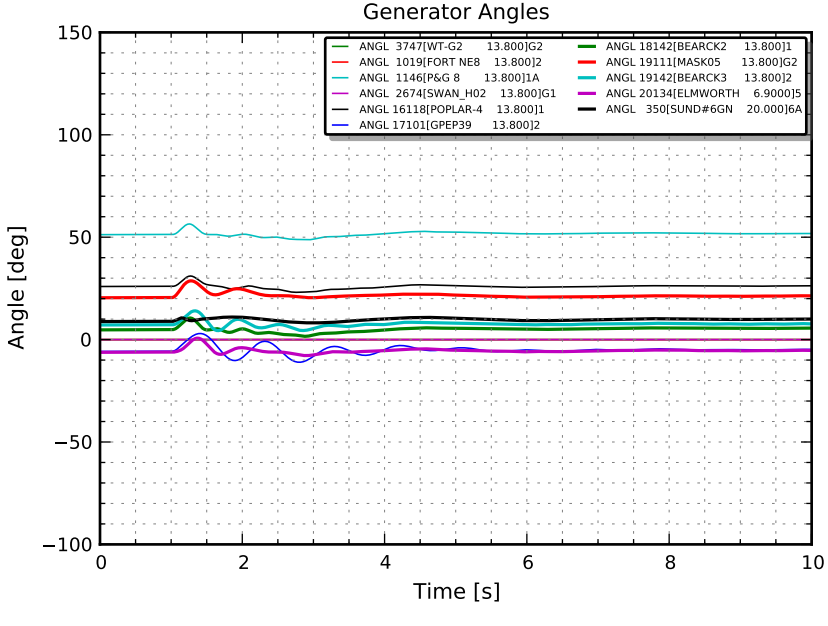
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 006 9L56 WABASCA to MITSUE_A.

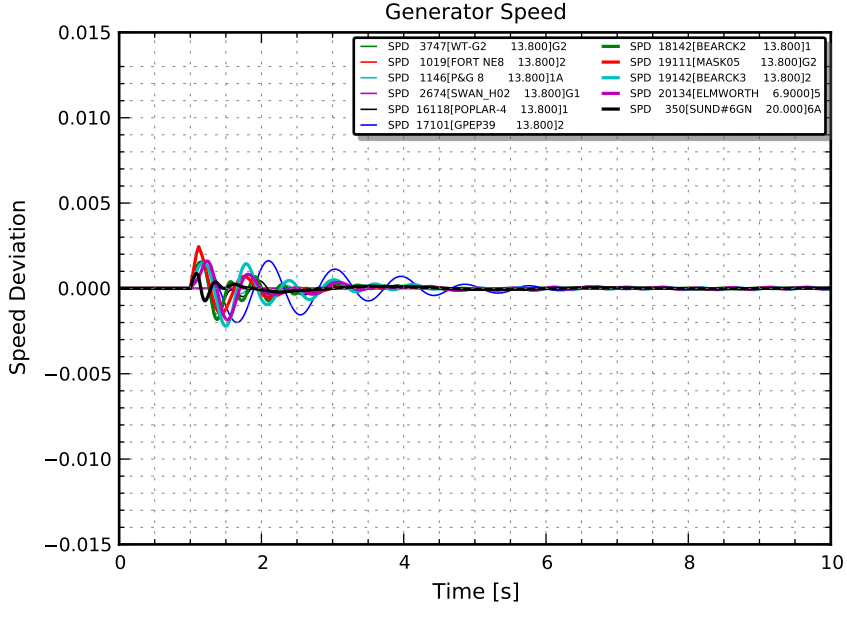
Study Area Generators

Appendix C2A
Figure: 006 (A. 2)





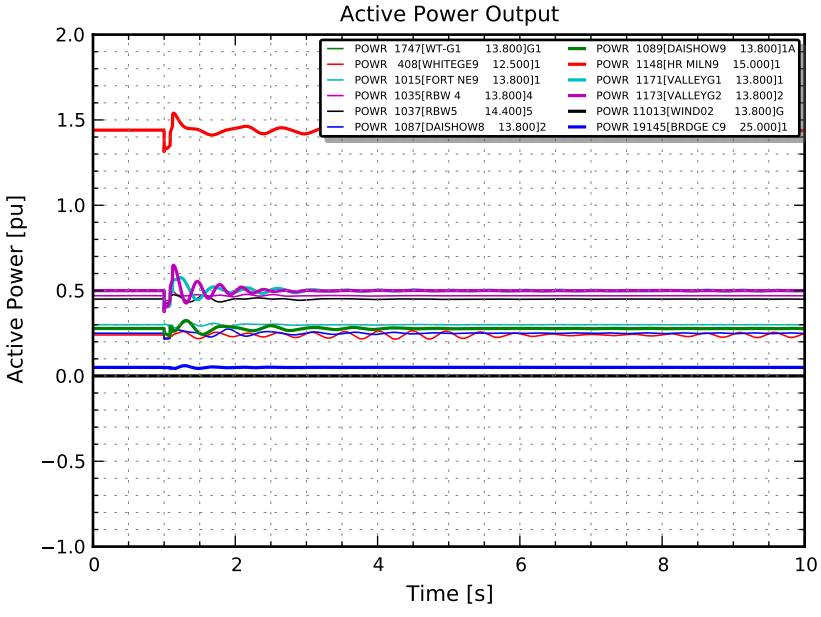


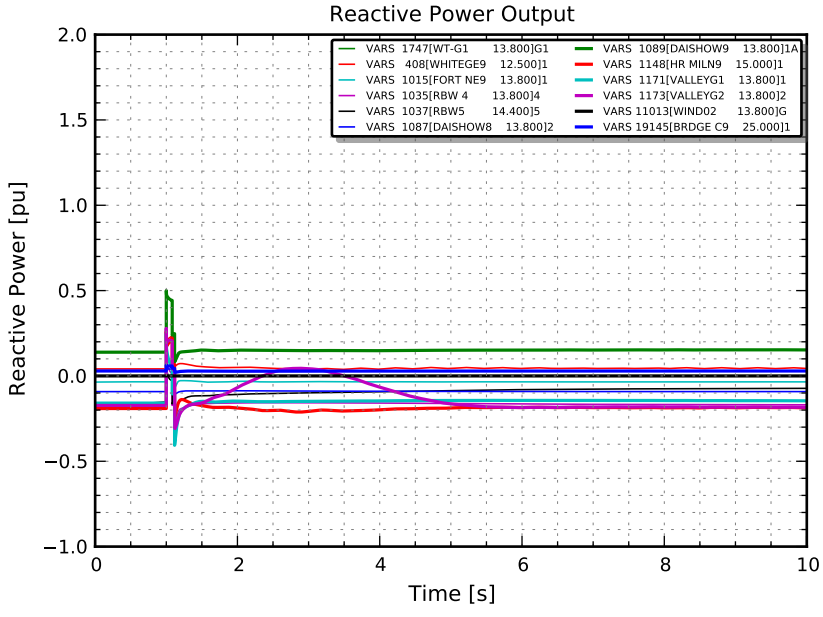


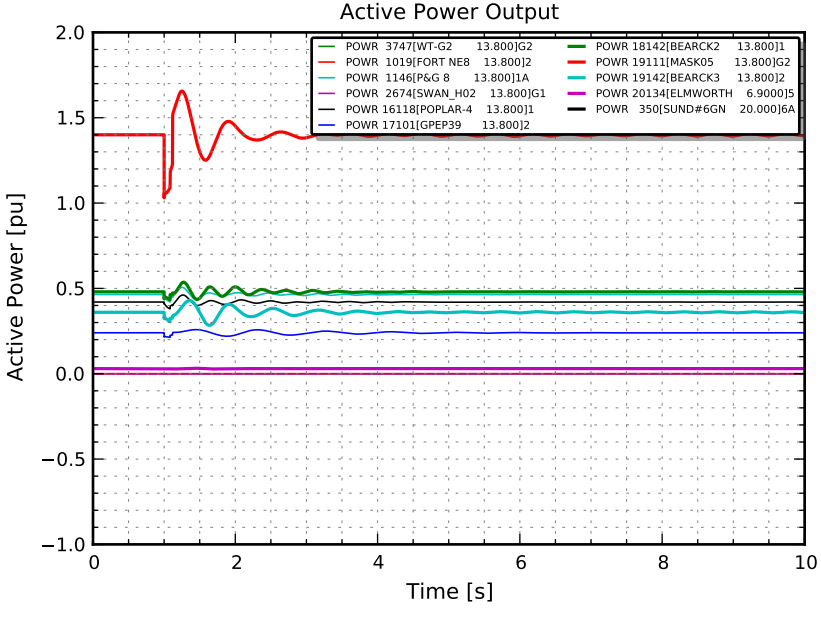
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 006 9L56 WABASCA to MITSUE_A.

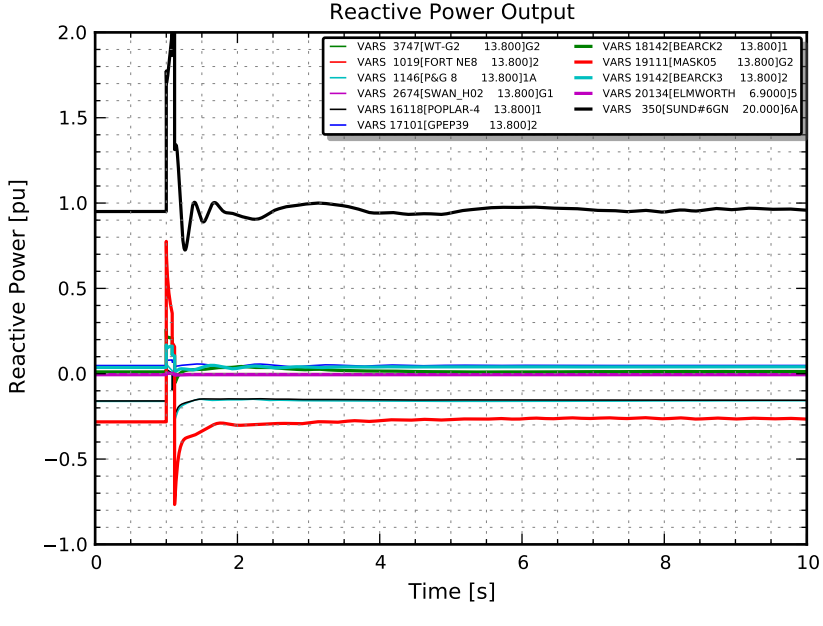
Study Area Generators

Appendix C2A
Figure: 006 (A. 3)





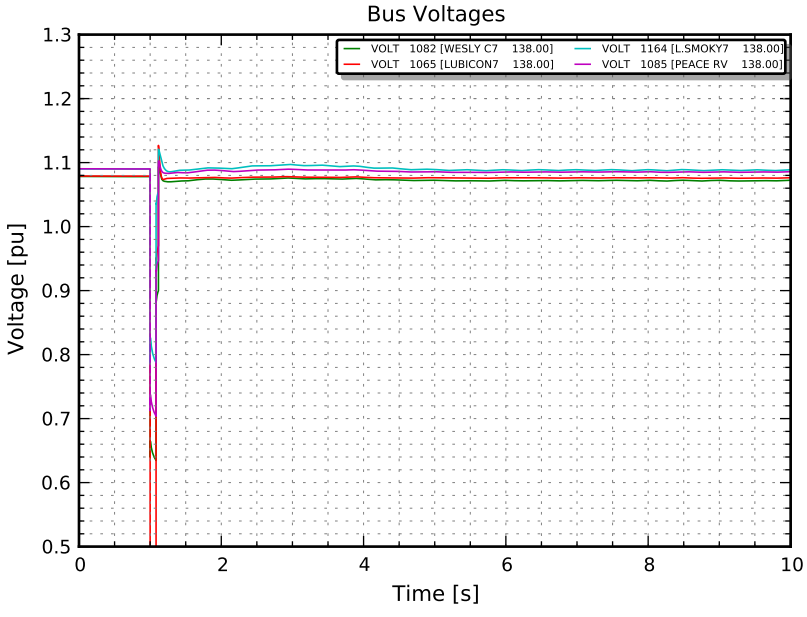


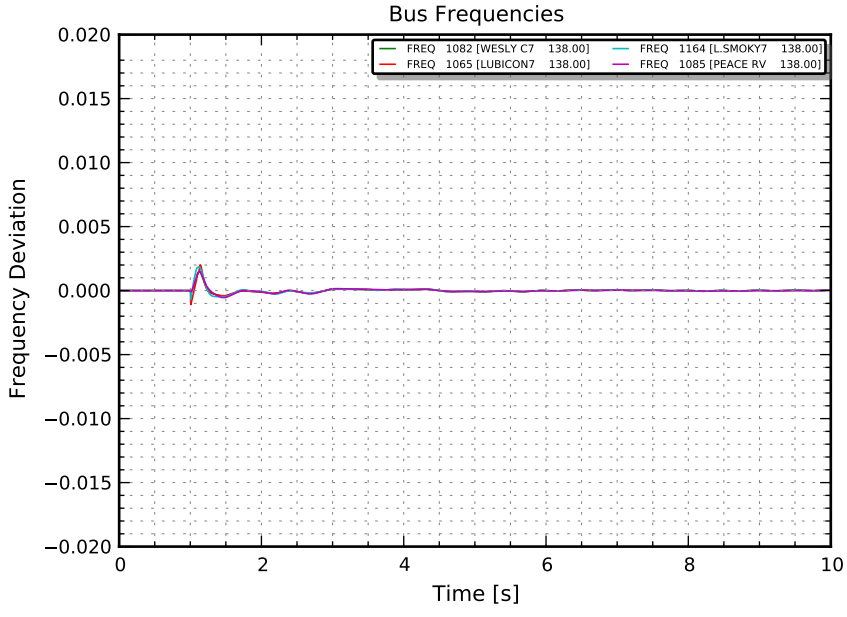


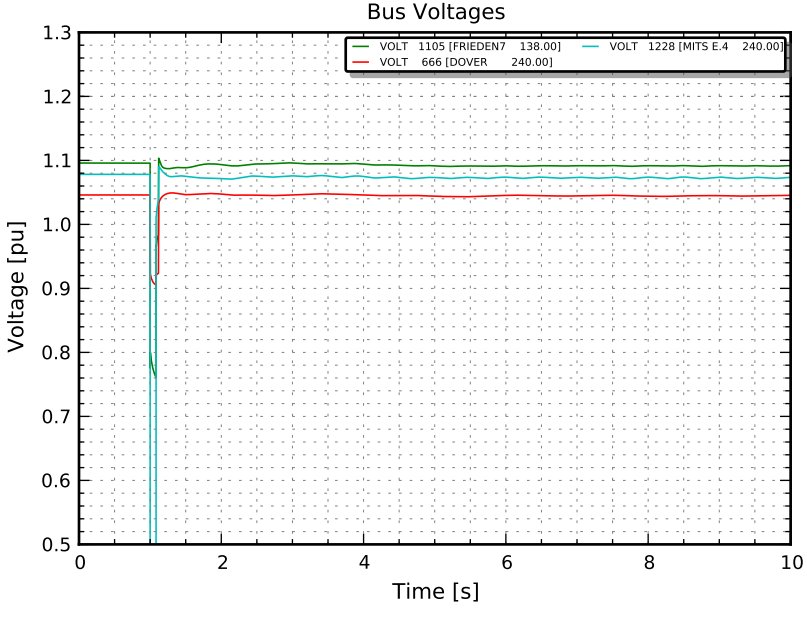
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 006 9L56 WABASCA to MITSUE_B.

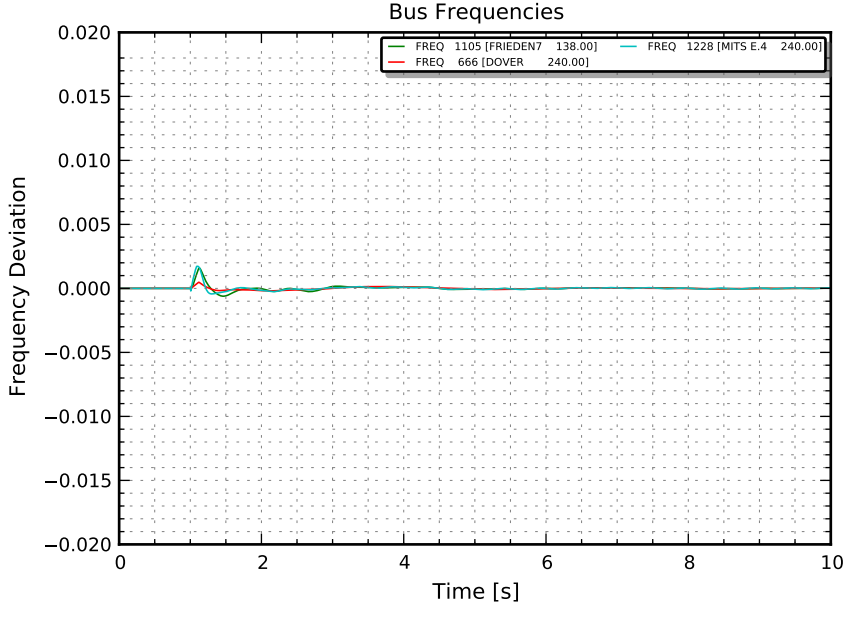
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 006 (B. 1)





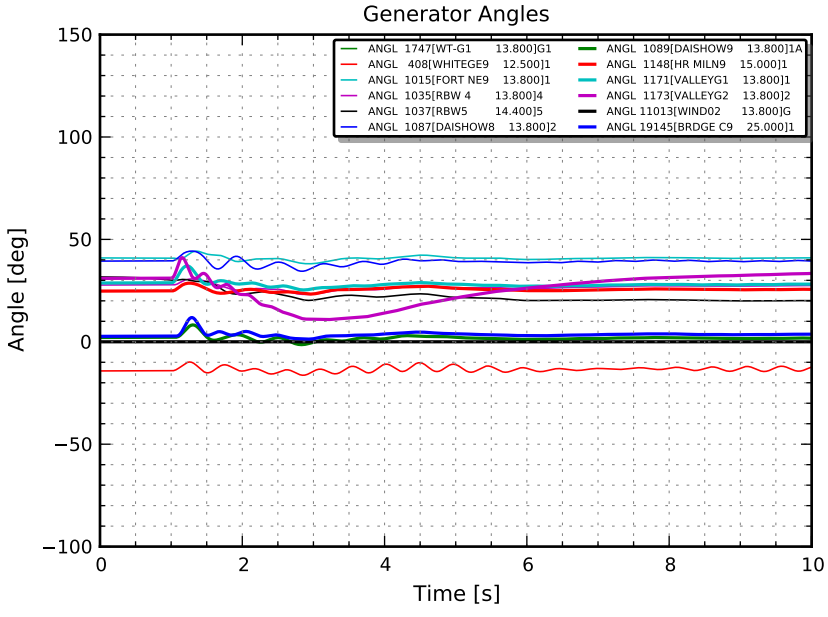


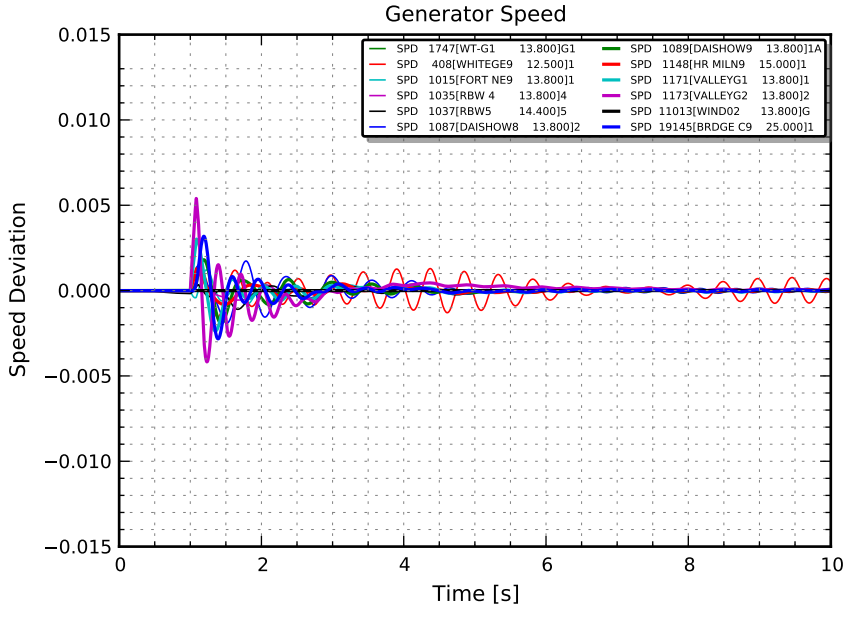


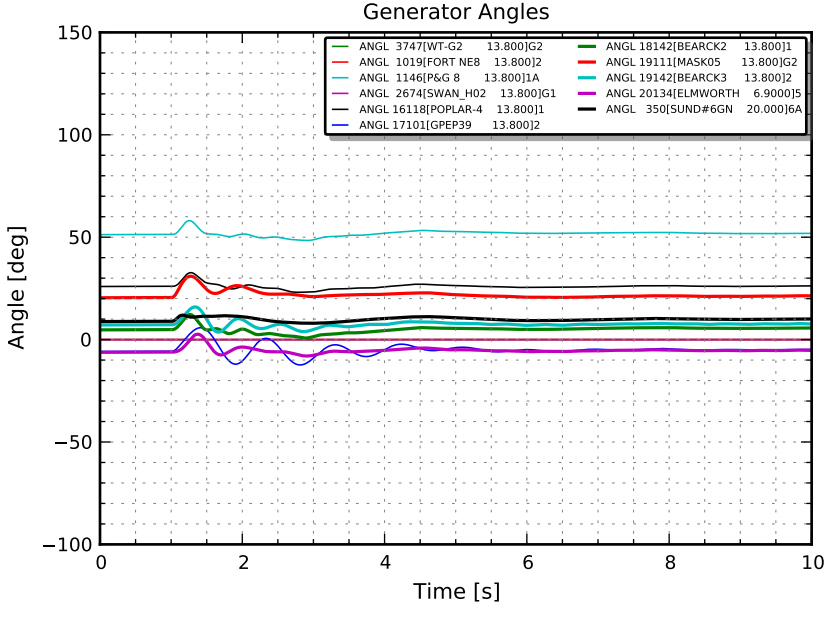
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 006 9L56 WABASCA to MITSUE_B.

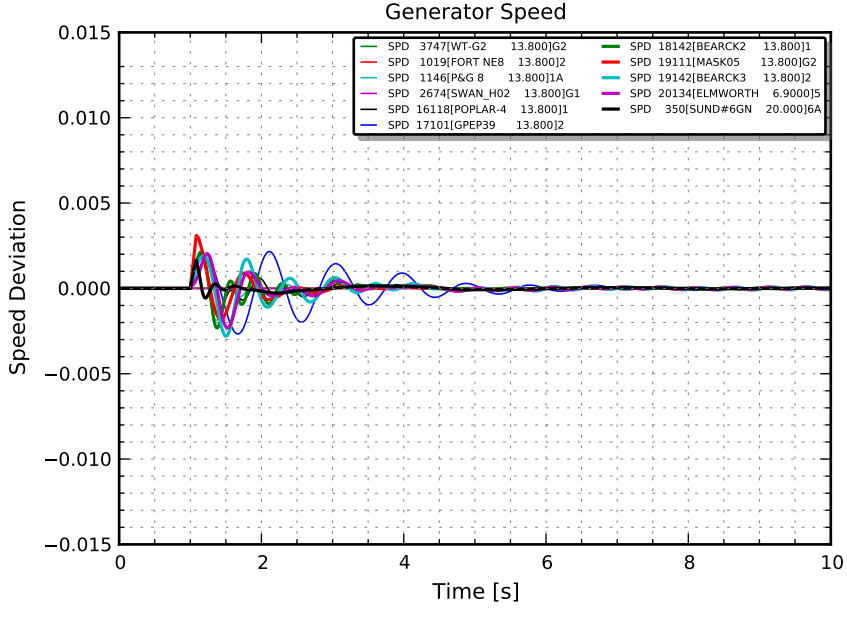
Study Area Generators

Appendix C2A
Figure: 006 (B. 2)





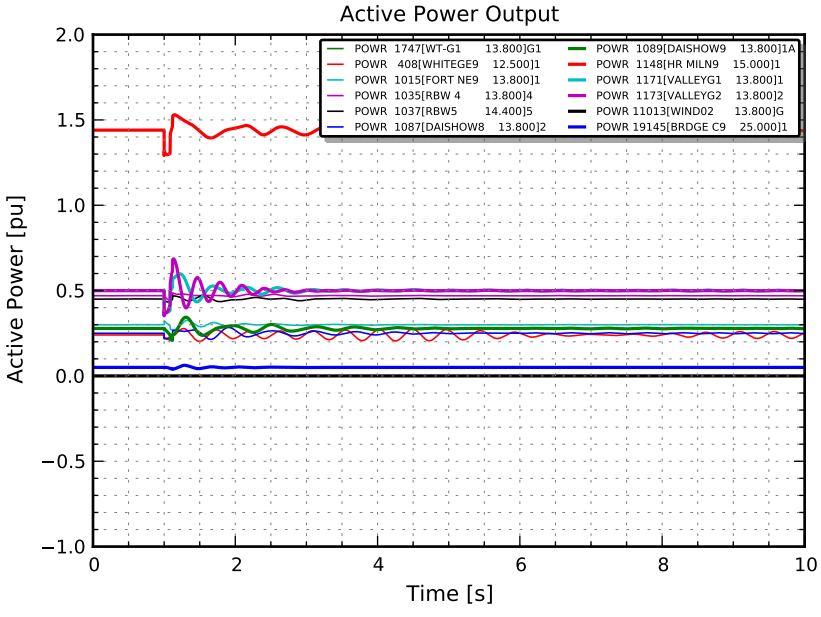


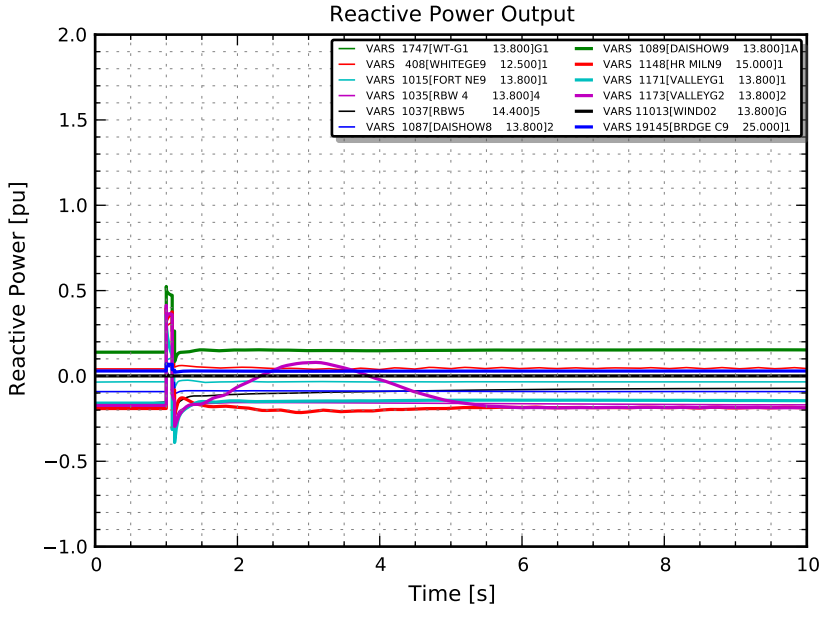


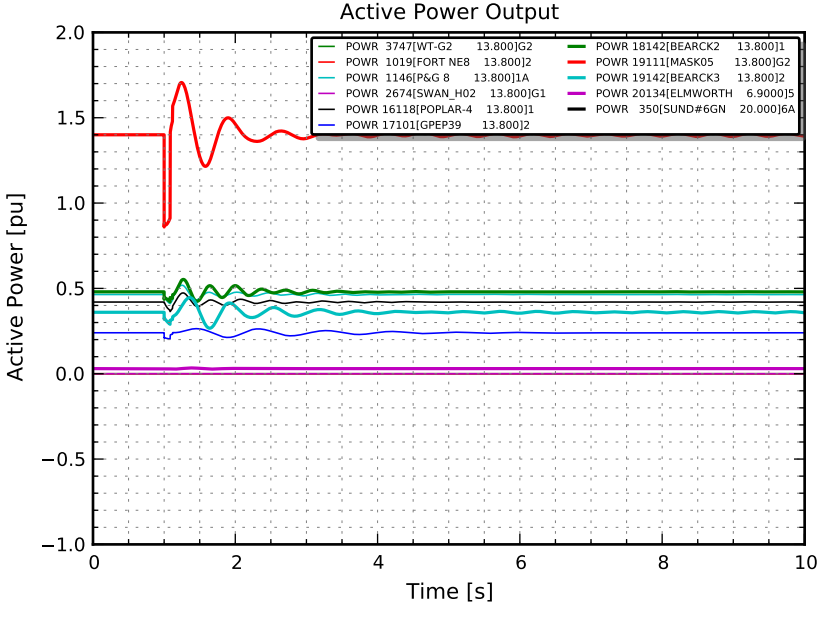
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 006 9L56 WABASCA to MITSUE_B.

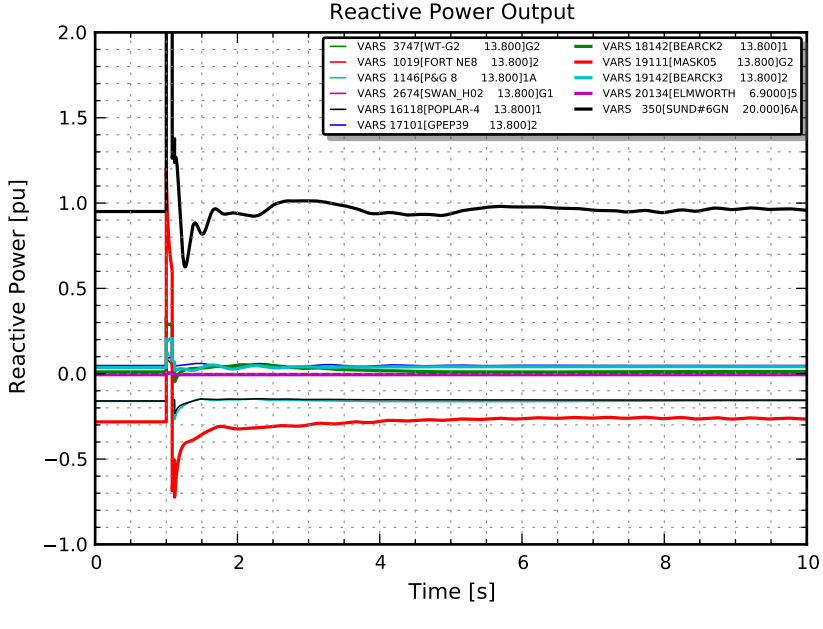
Study Area Generators

Appendix C2A
Figure: 006 (B. 3)





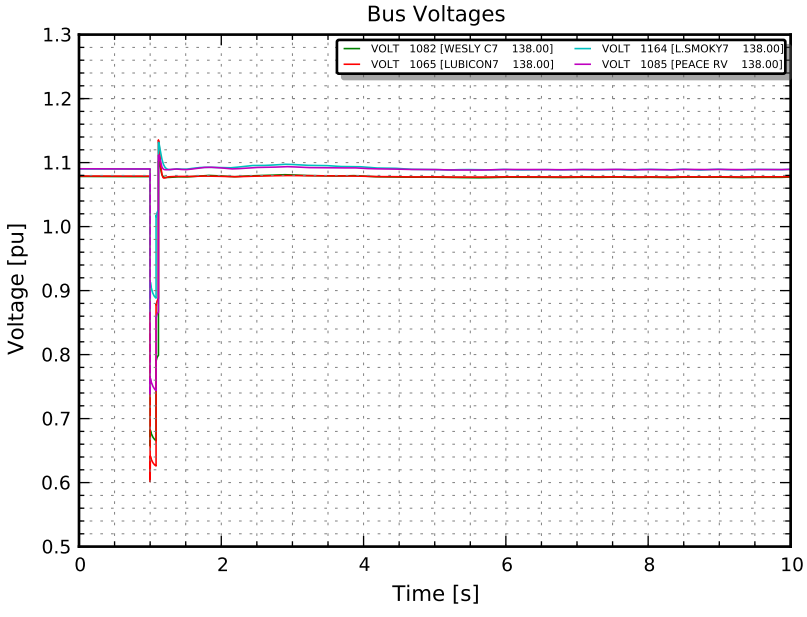


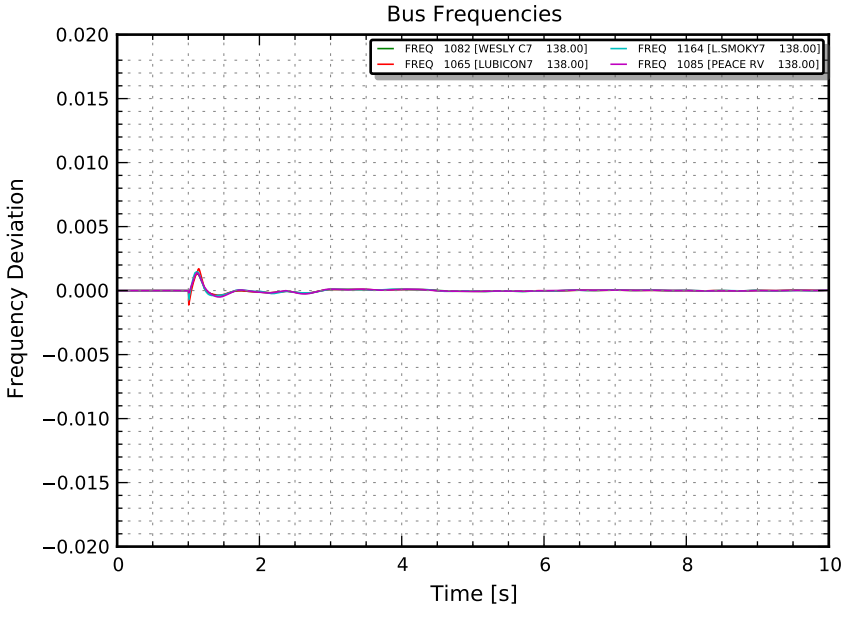


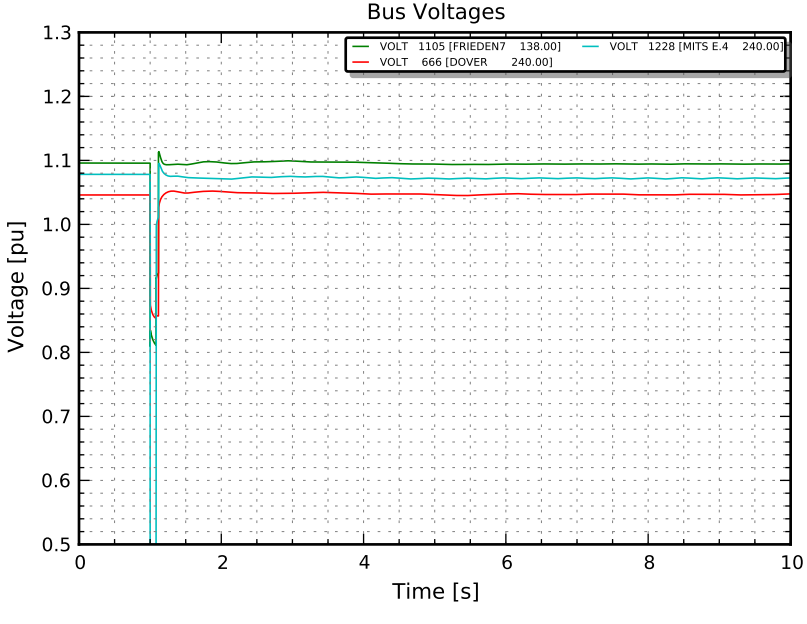
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 007 9L10 WABASCA to Brintnell_A.

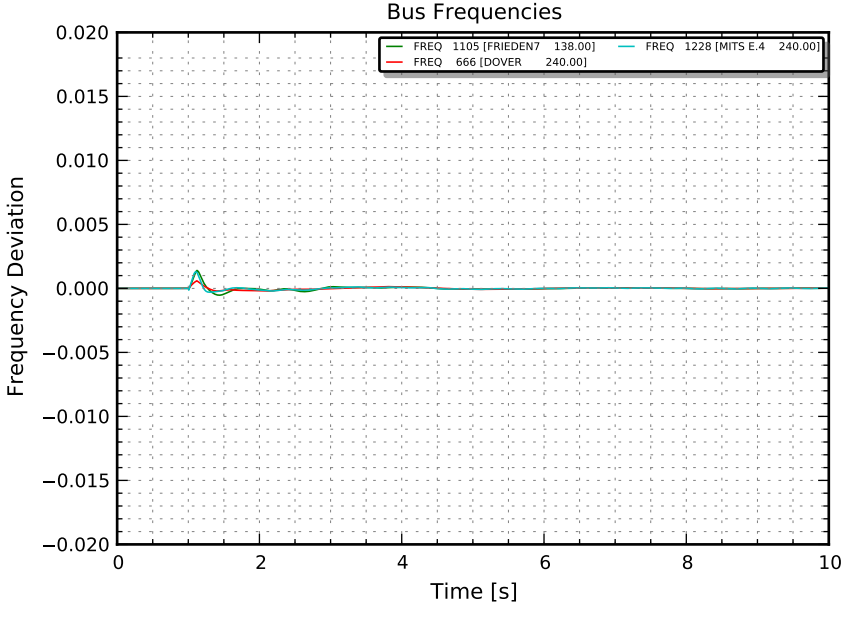
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 007 (A. 1)





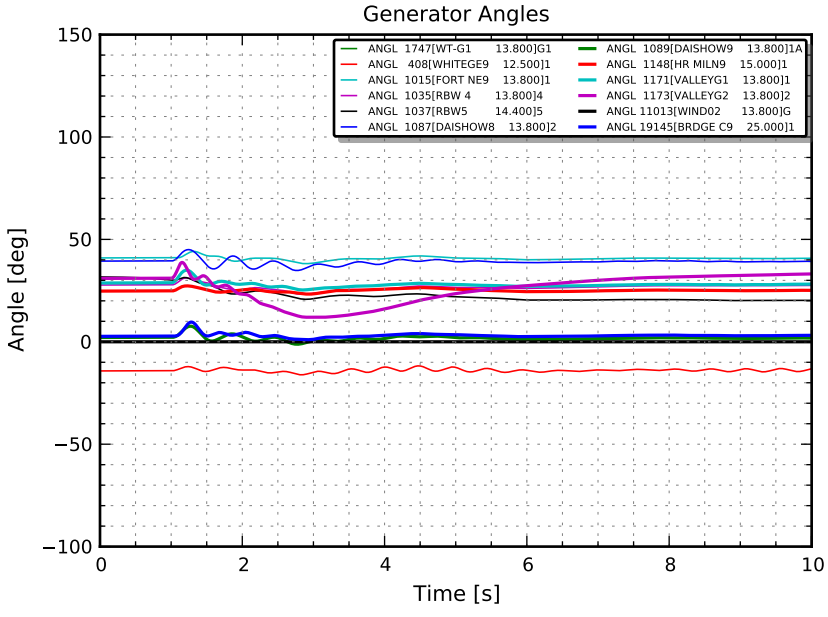


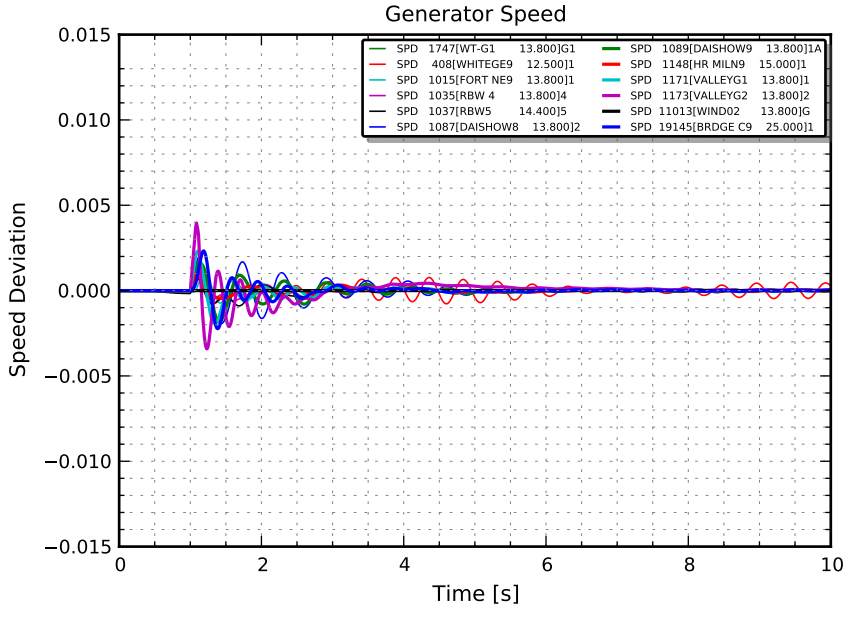


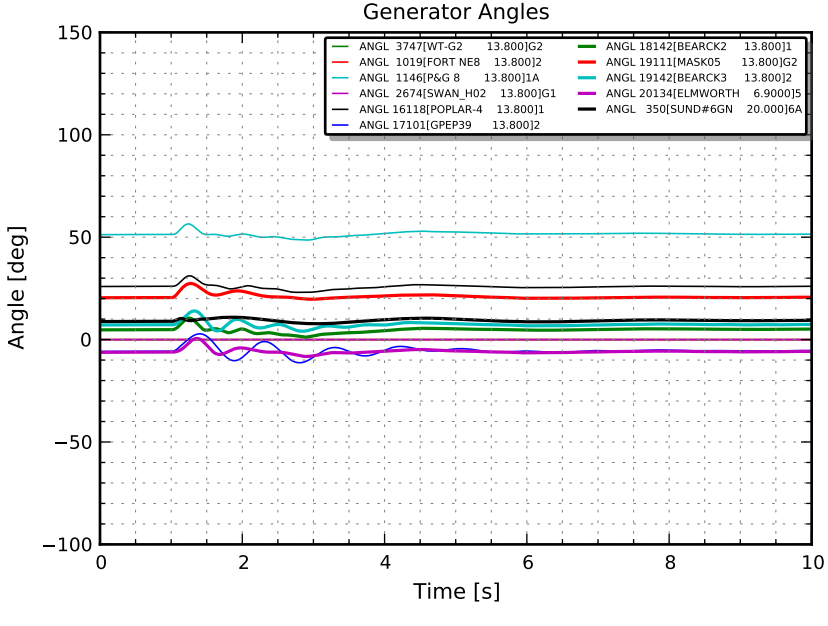
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 007 9L10 WABASCA to Brintnell_A.

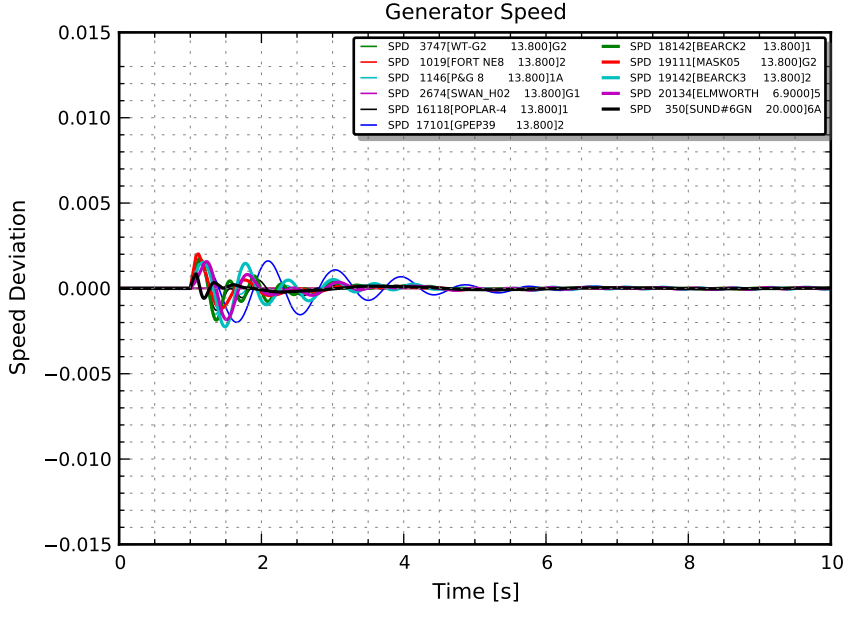
Study Area Generators

Appendix C2A
Figure: 007 (A. 2)





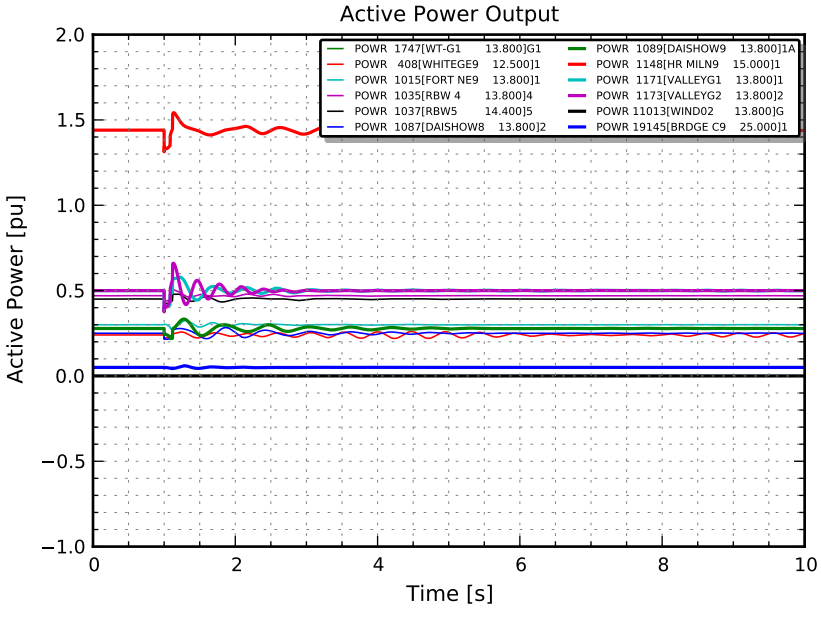


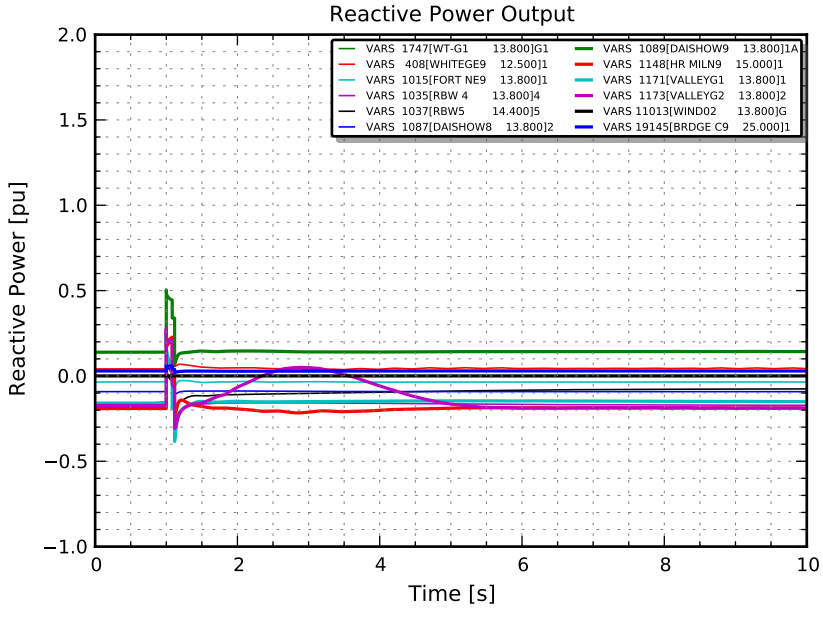


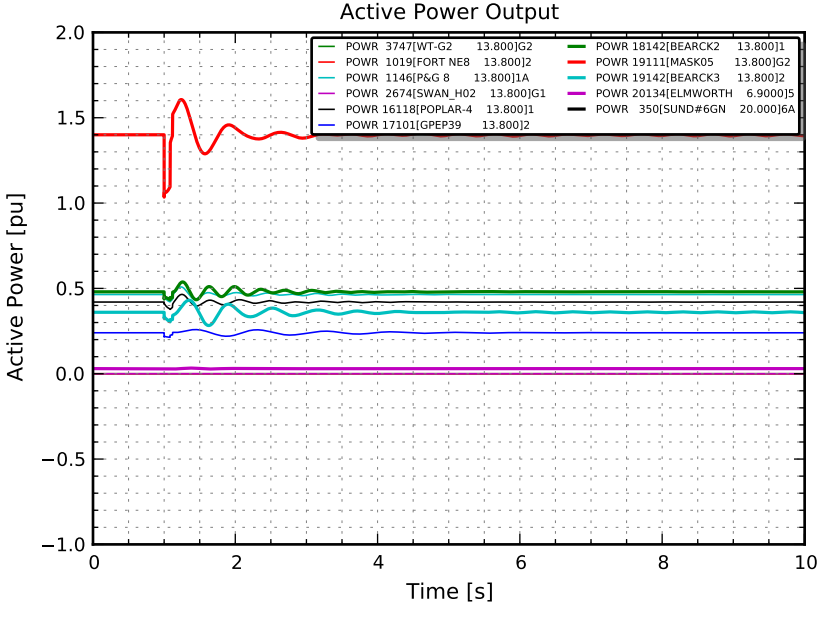
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 007 9L10 WABASCA to Brintnell_A.

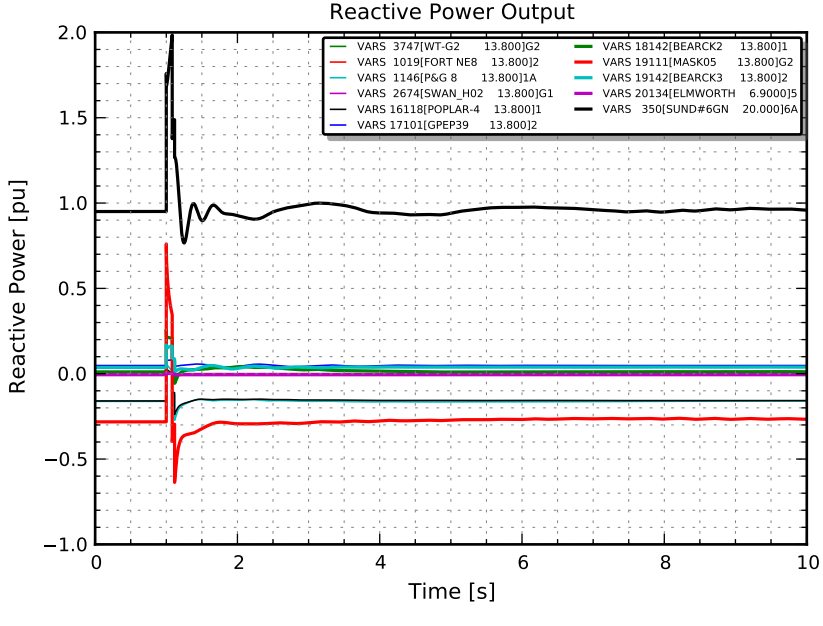
Study Area Generators

Appendix C2A
Figure: 007 (A. 3)





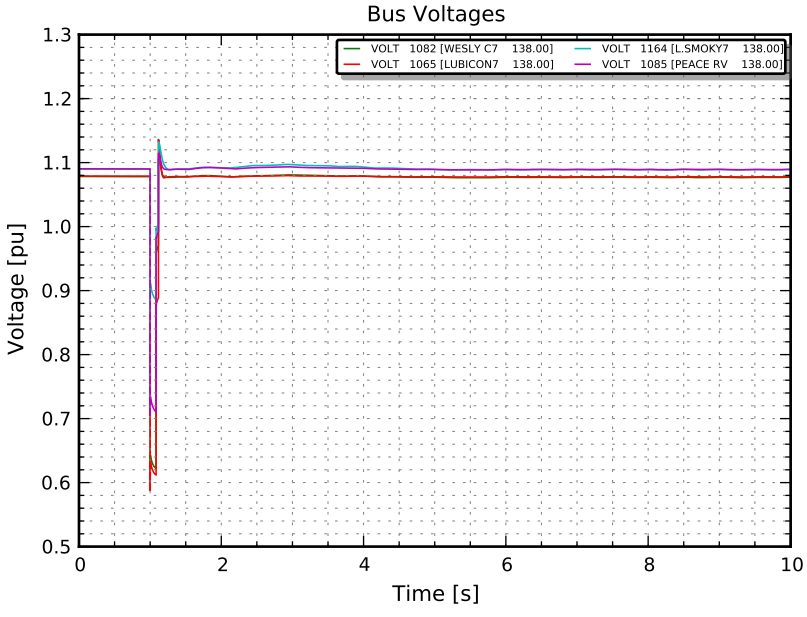


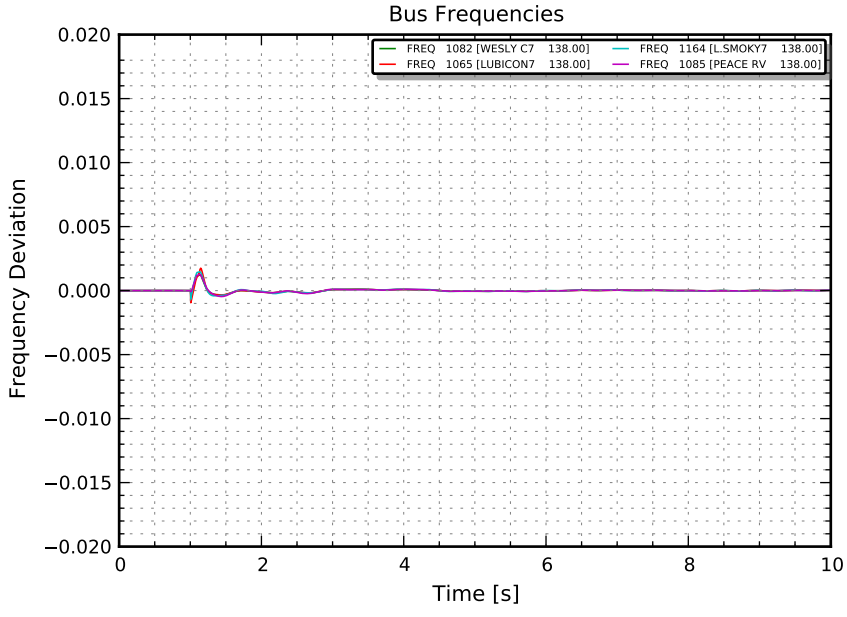


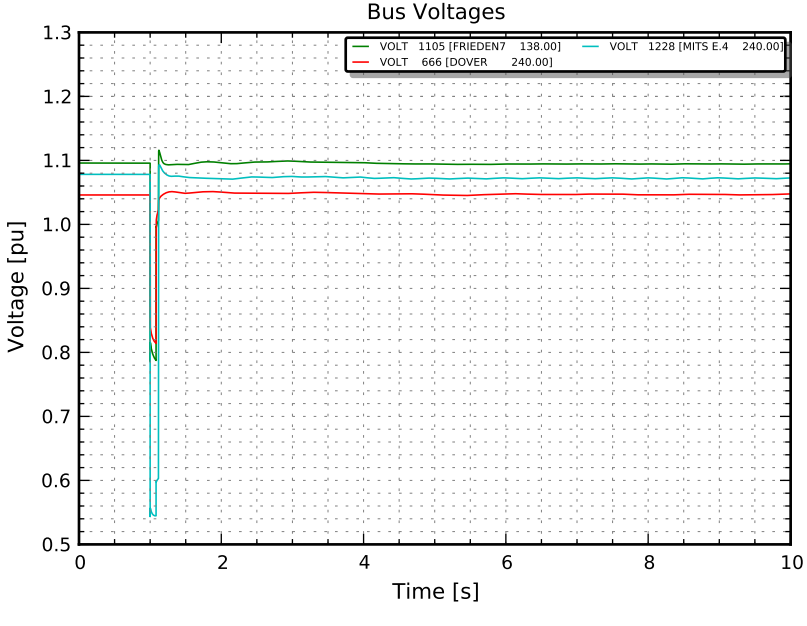
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 007 9L10 WABASCA to Brintnell_B.

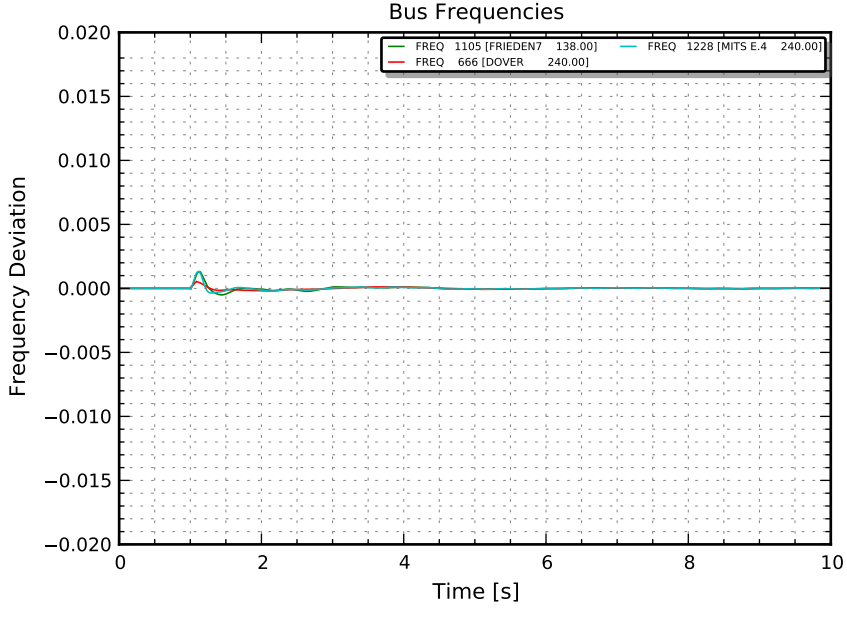
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 007 (B. 1)





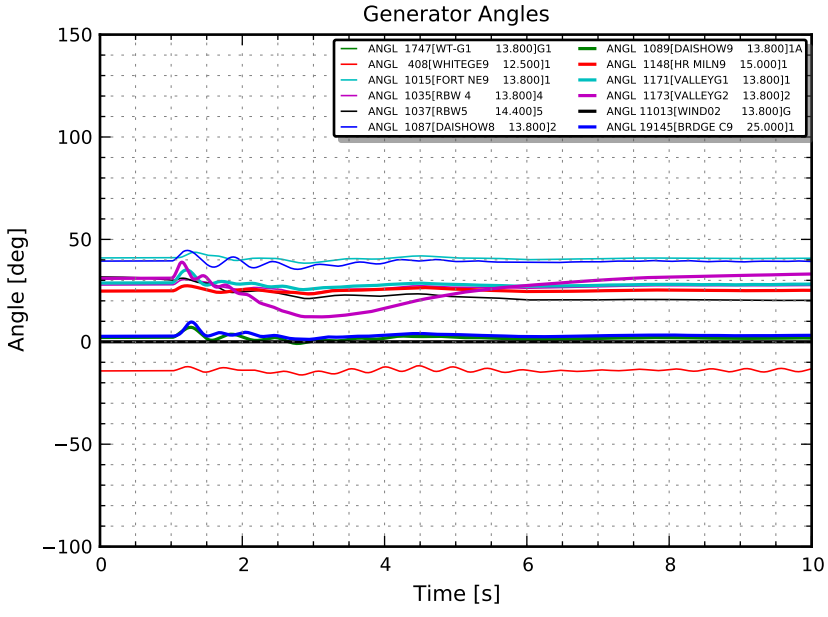


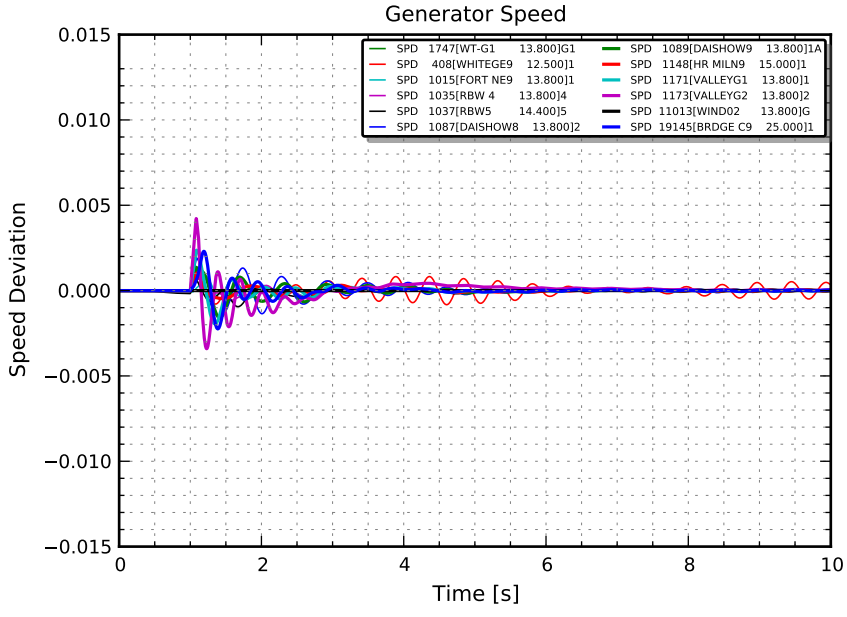


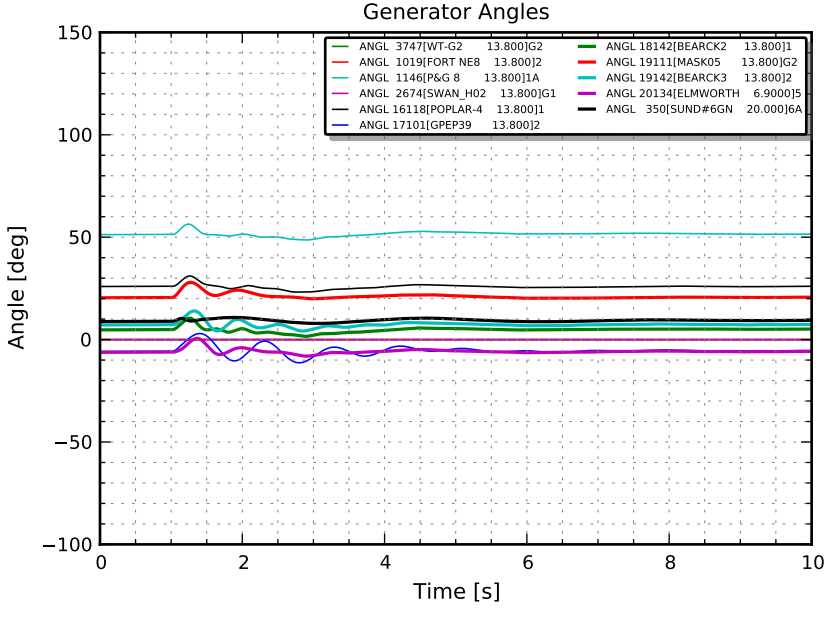
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 007 9L10 WABASCA to Brintnell_B.

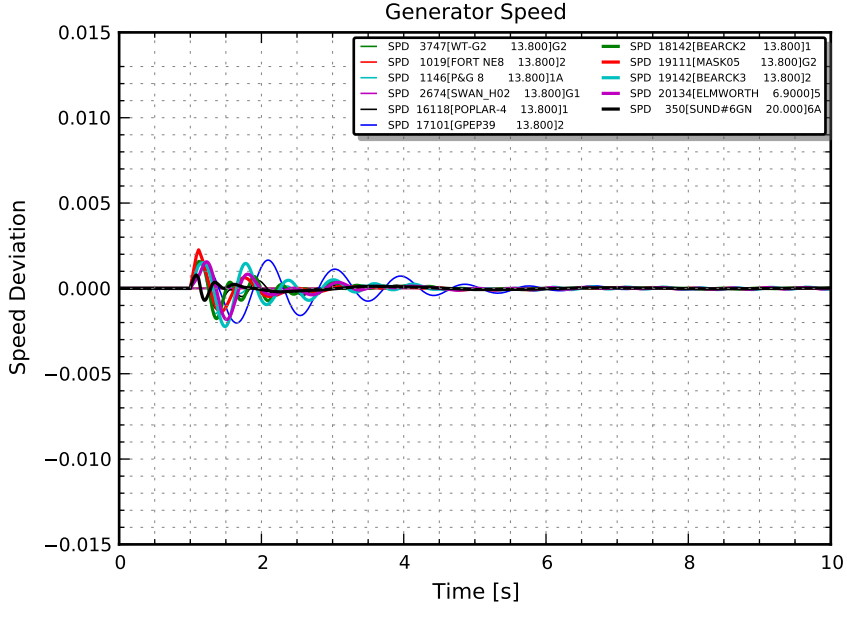
Study Area Generators

Appendix C2A
Figure: 007 (B. 2)





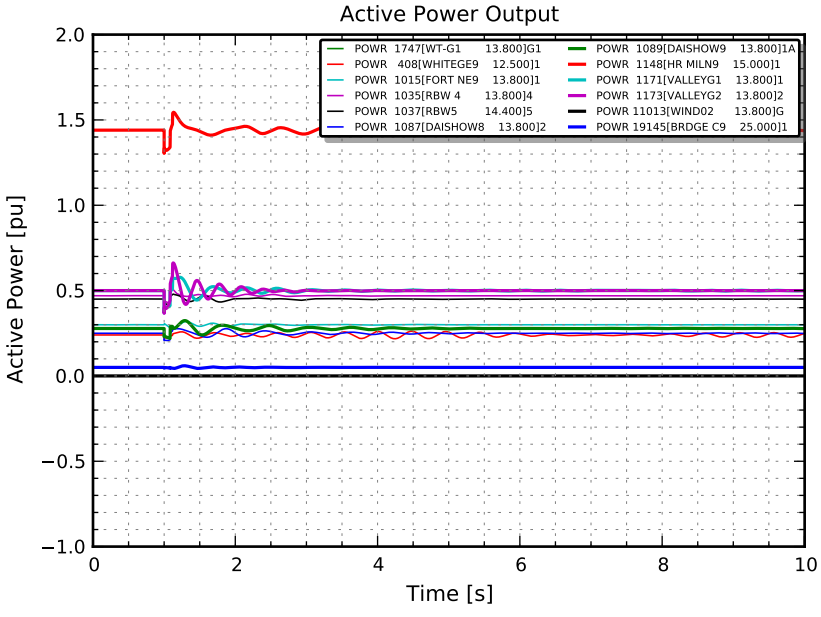


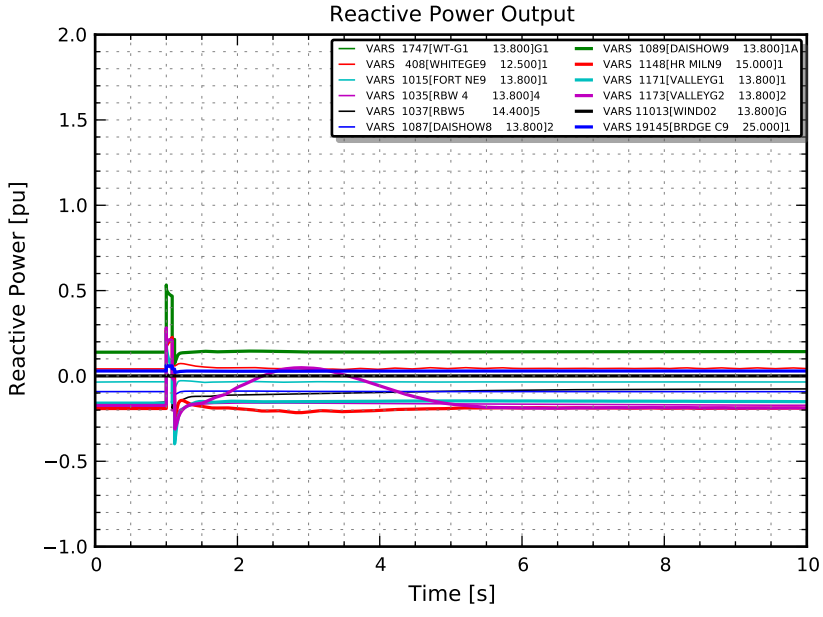


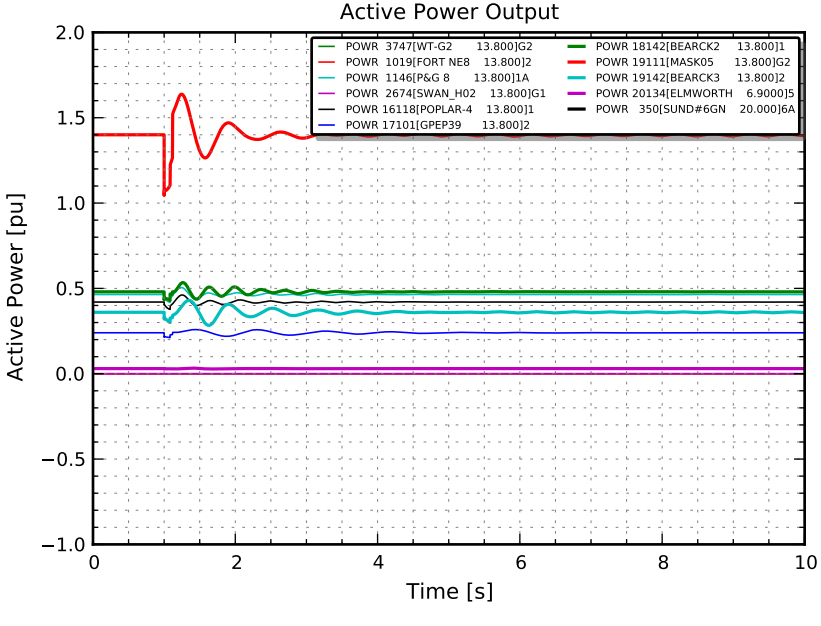
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 007 9L10 WABASCA to Brintnell_B.

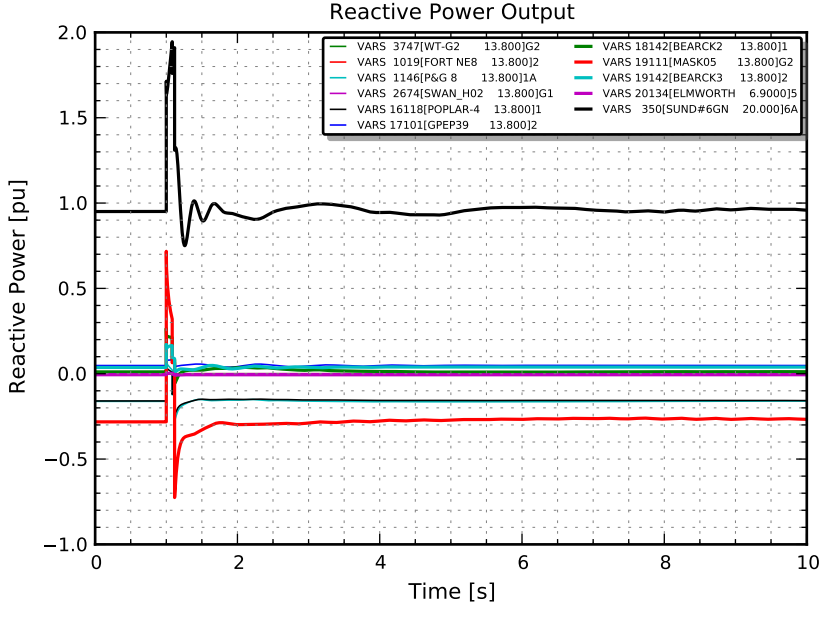
Study Area Generators

Appendix C2A
Figure: 007 (B. 3)





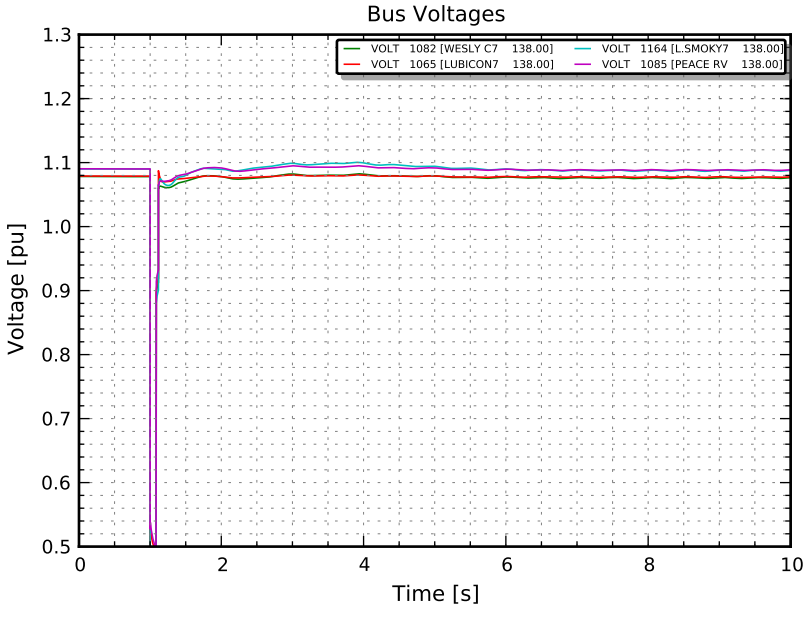


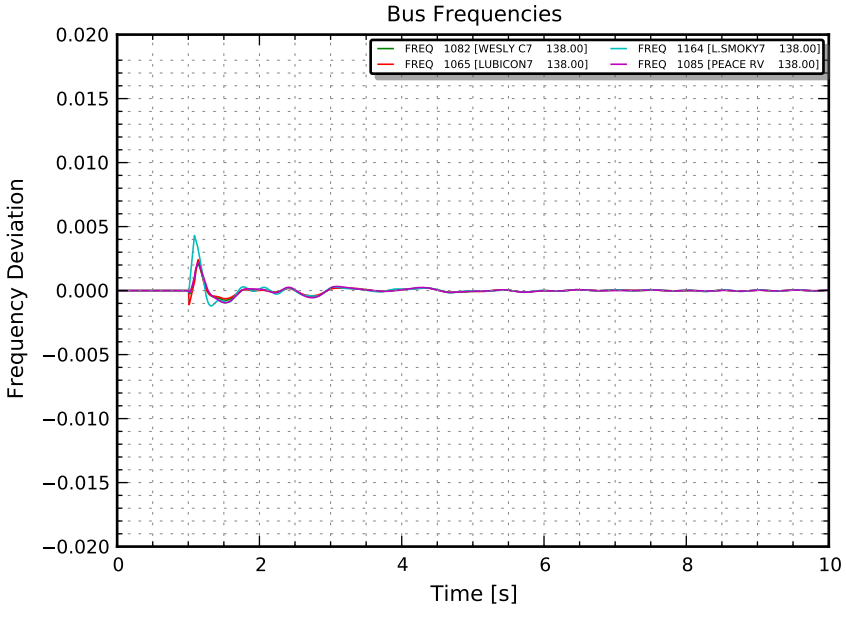


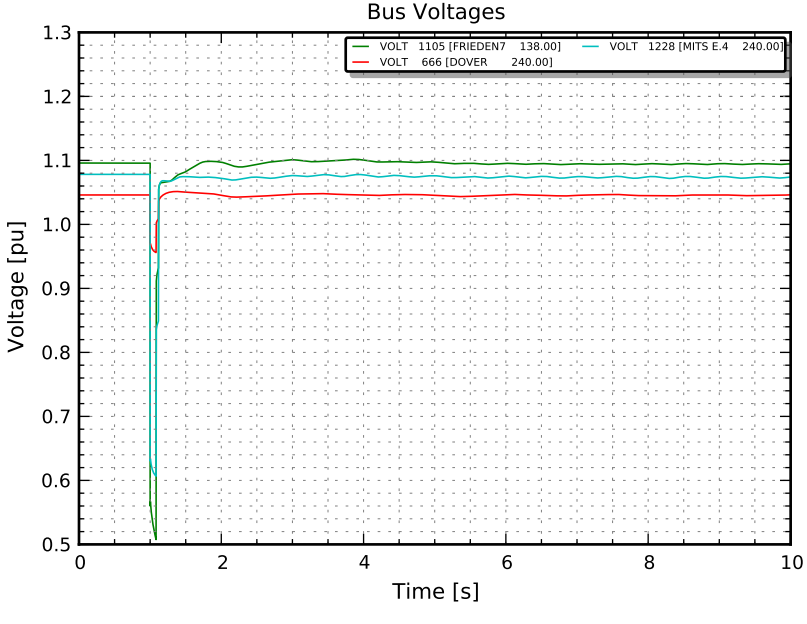
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_A.

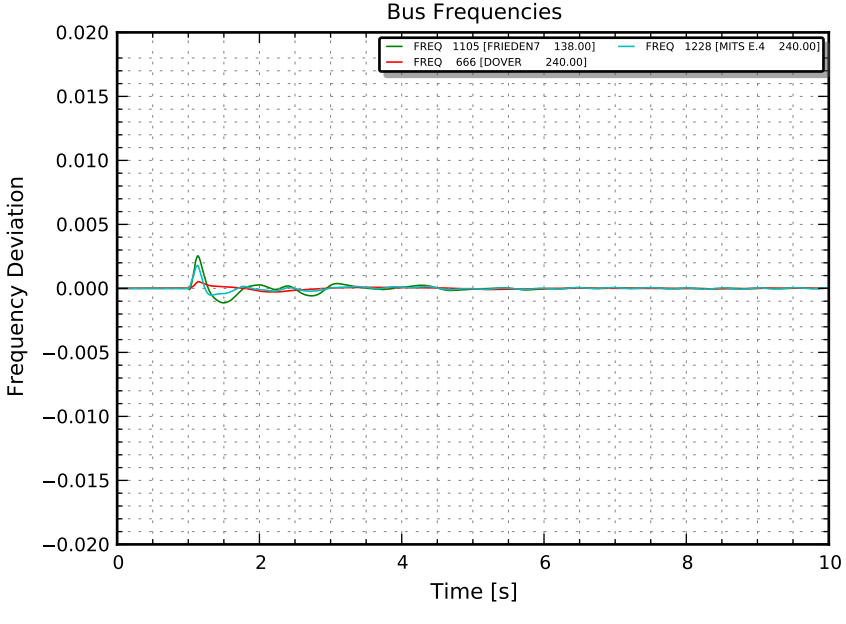
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 008 (A. 1)





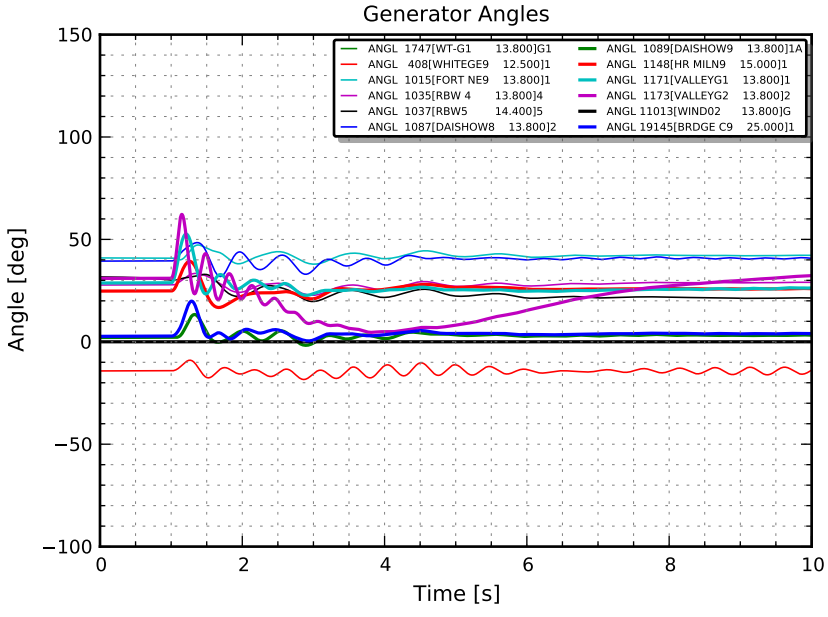


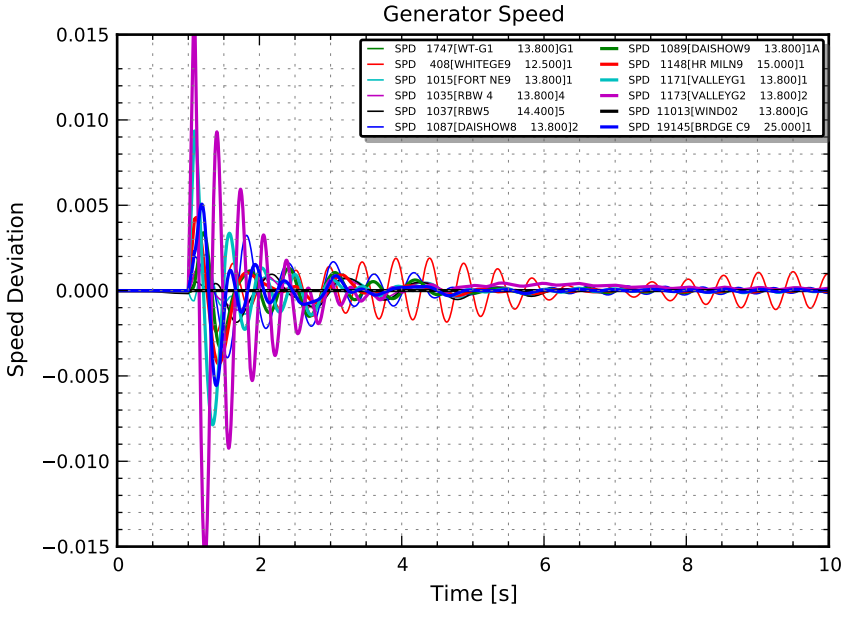


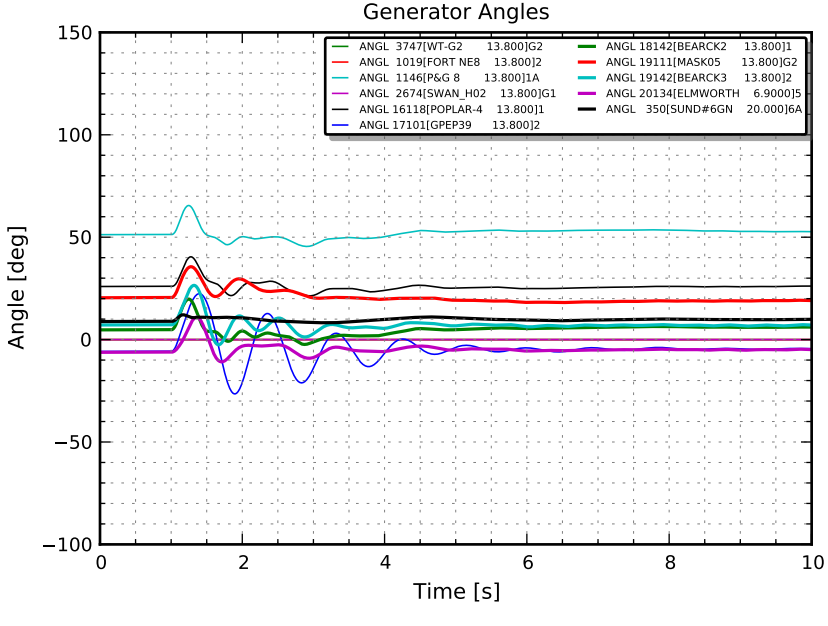
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_A.

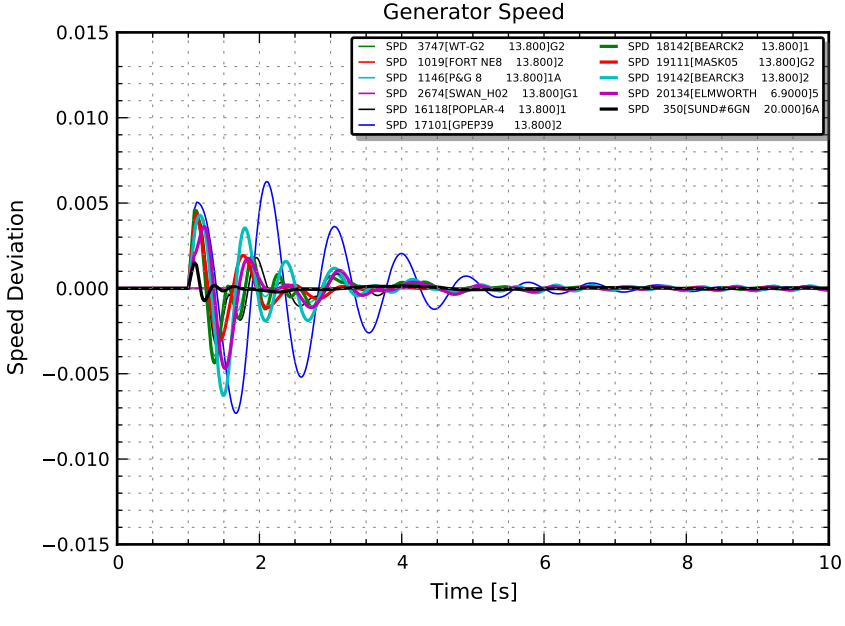
Study Area Generators

Appendix C2A
Figure: 008 (A. 2)





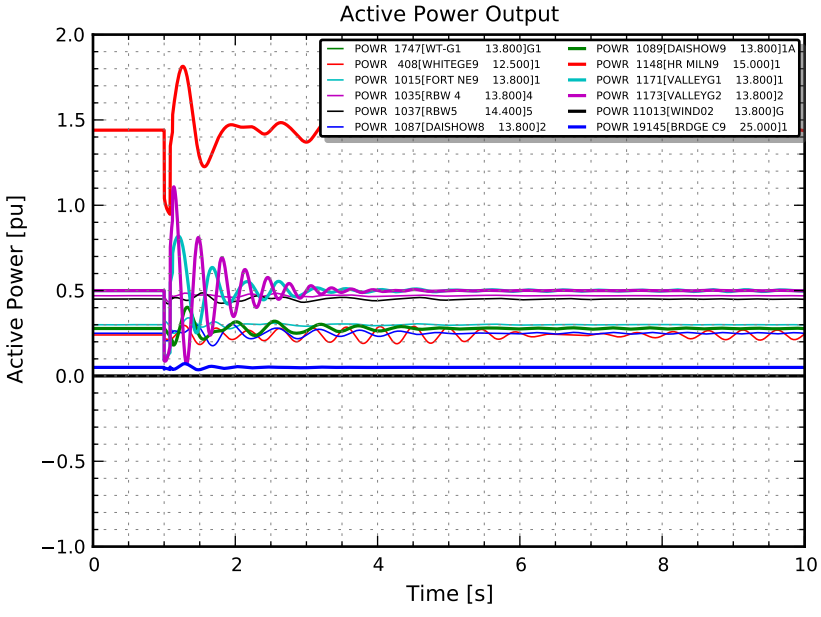


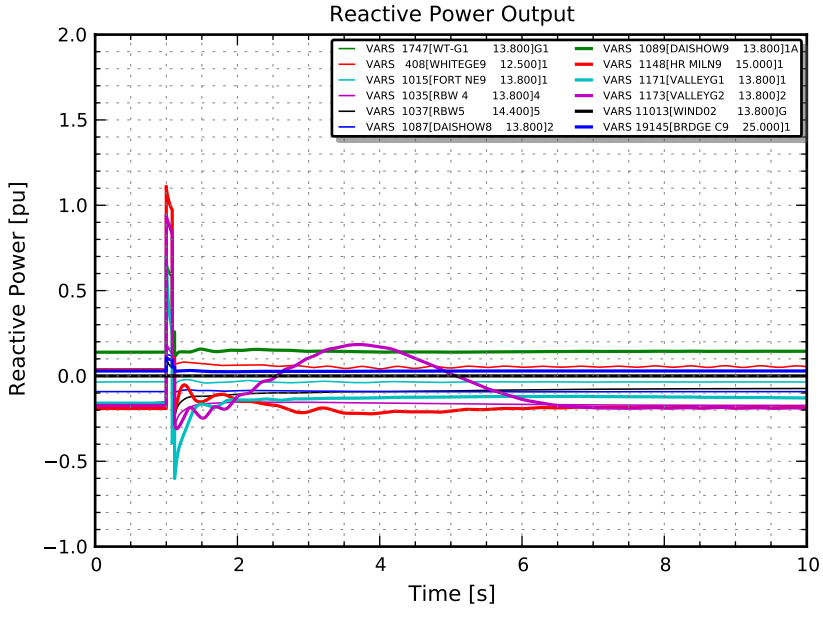


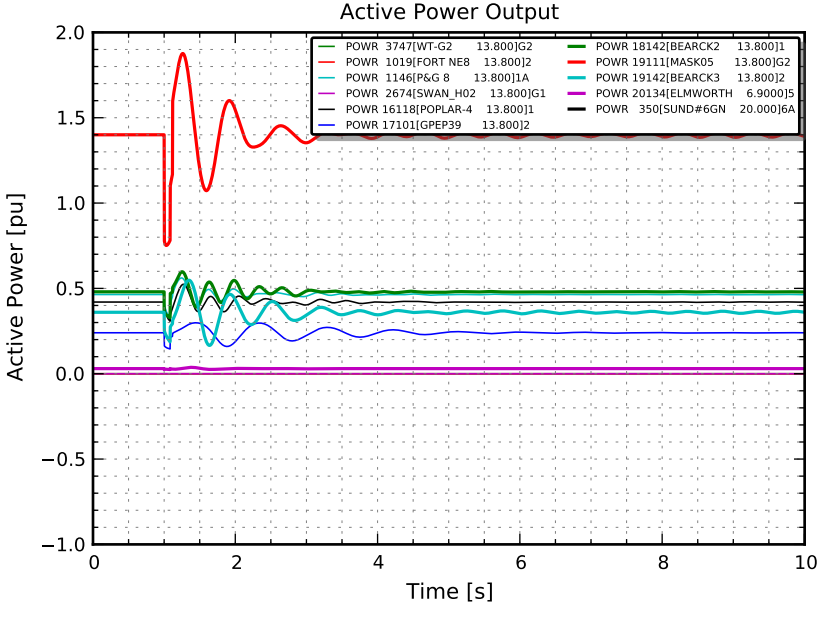
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_A.

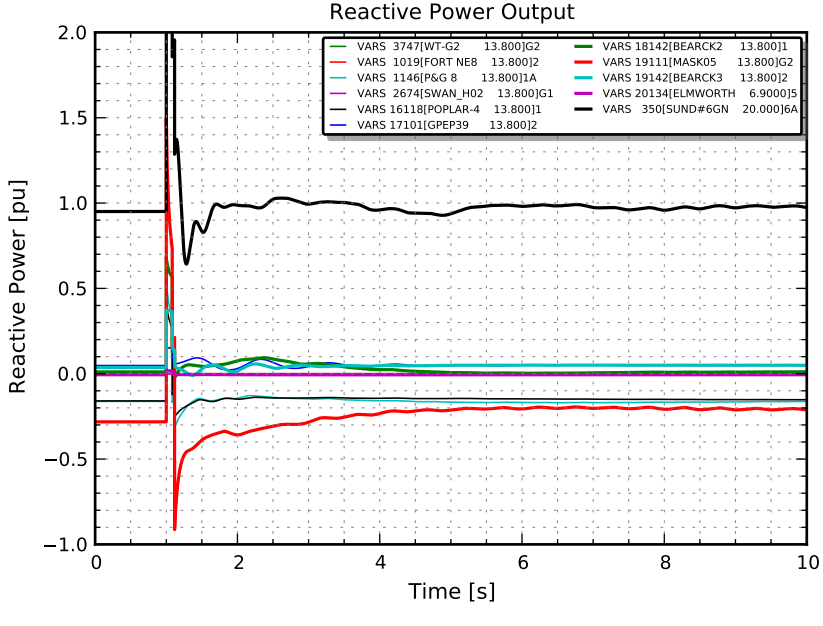
Study Area Generators

Appendix C2A
Figure: 008 (A. 3)





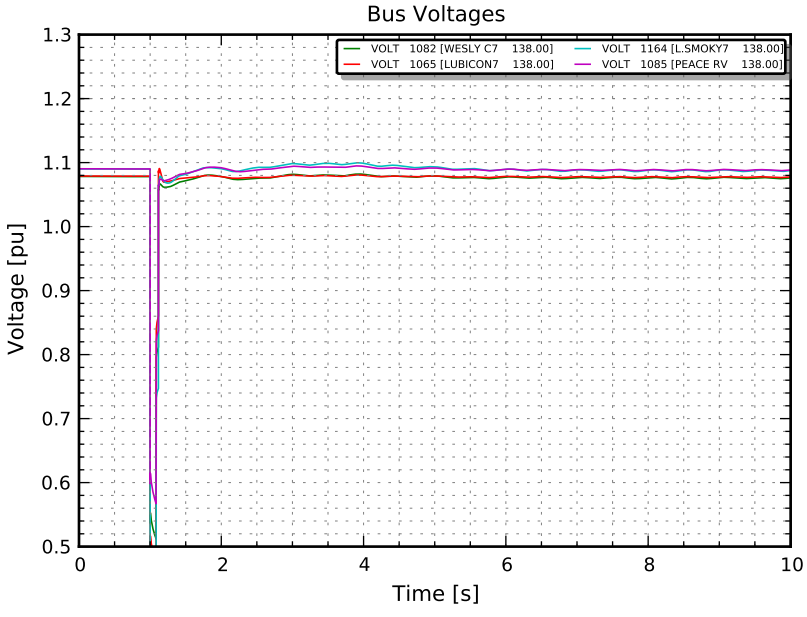


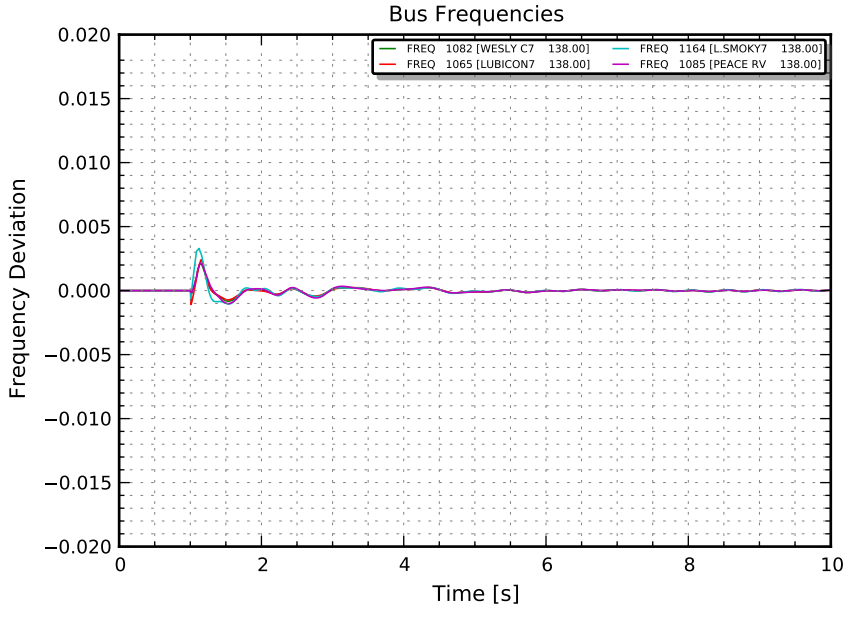


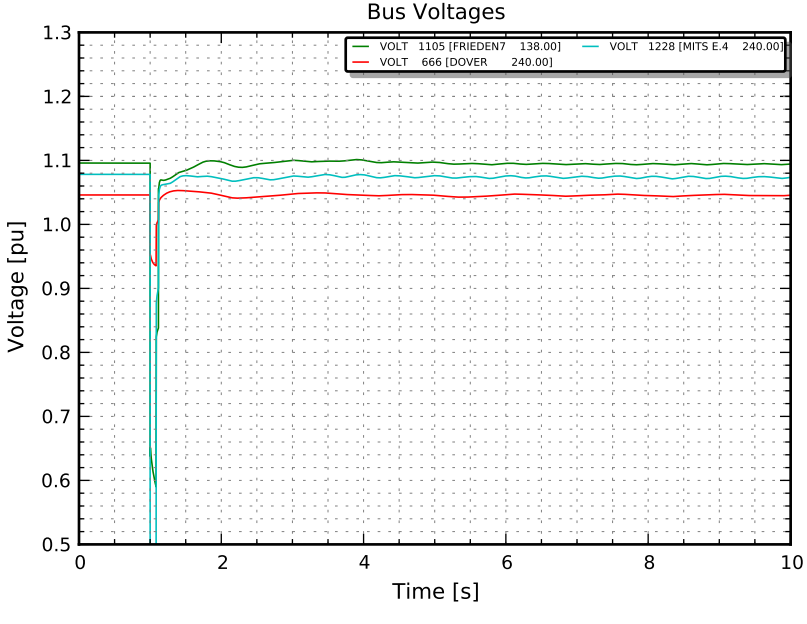
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_B.

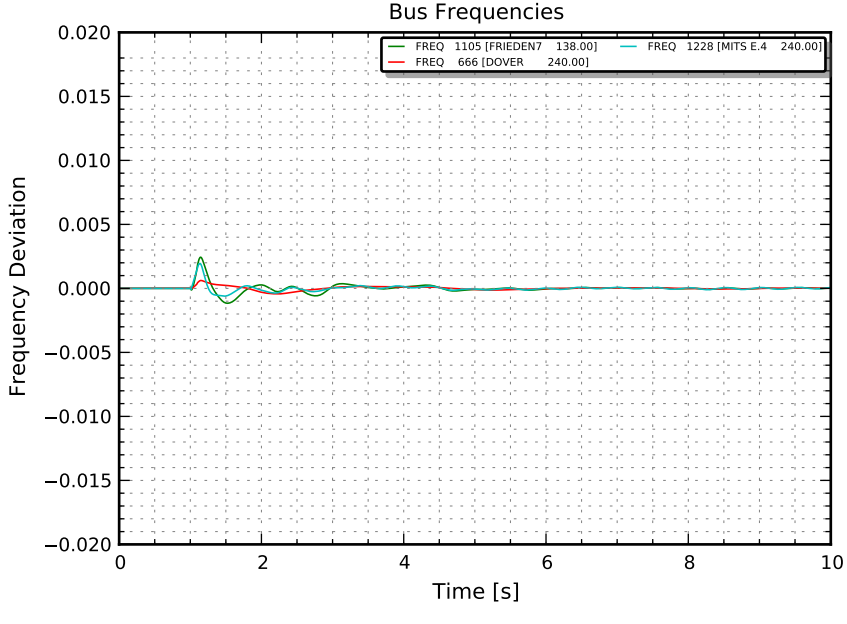
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 008 (B. 1)





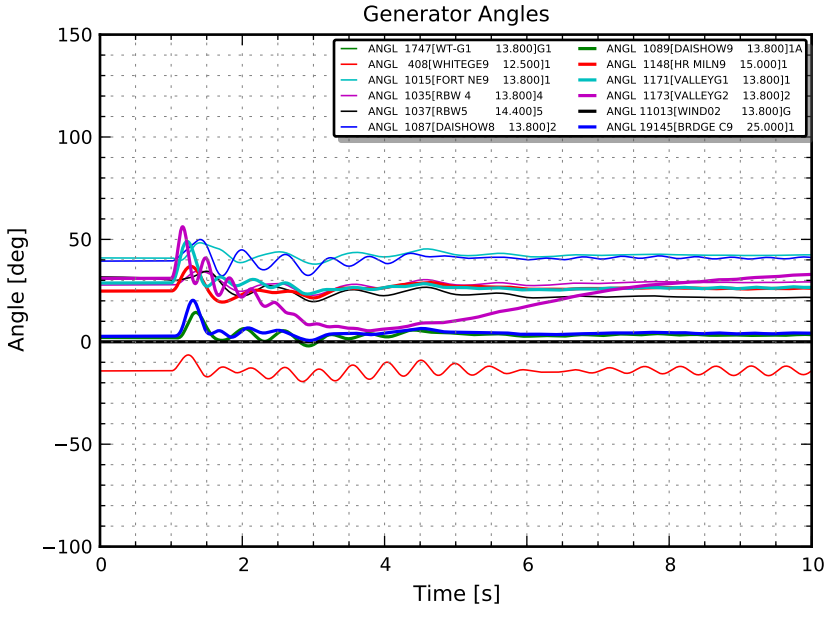


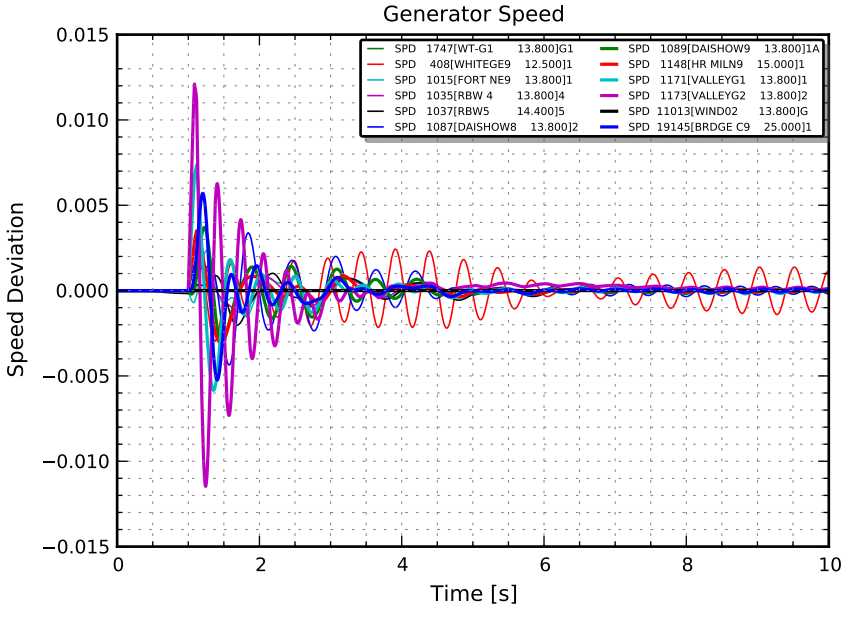


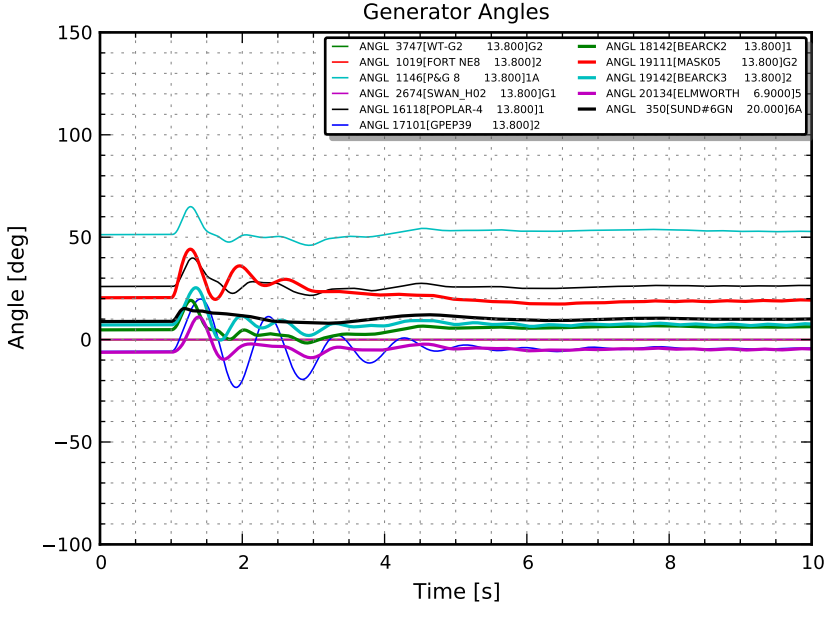
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_B.

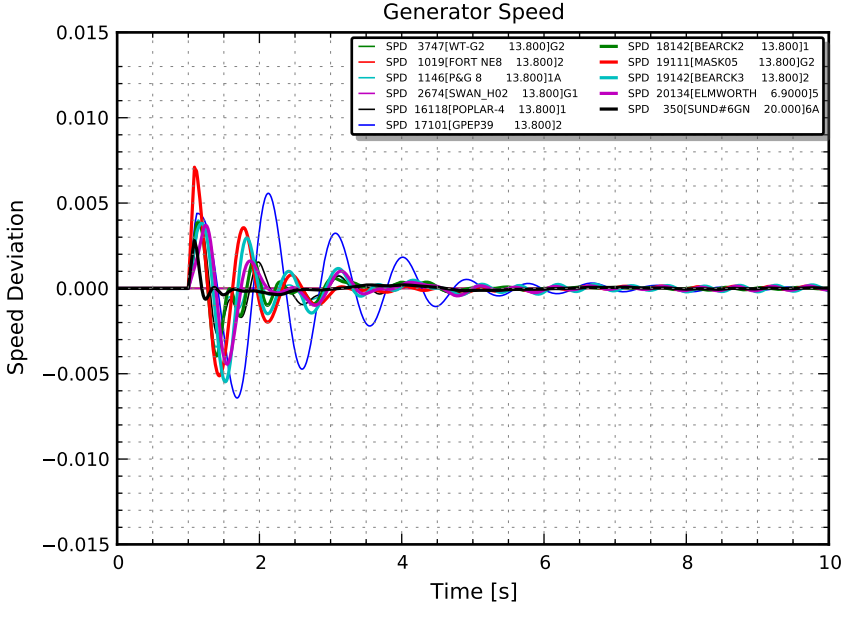
Study Area Generators

Appendix C2A
Figure: 008 (B. 2)





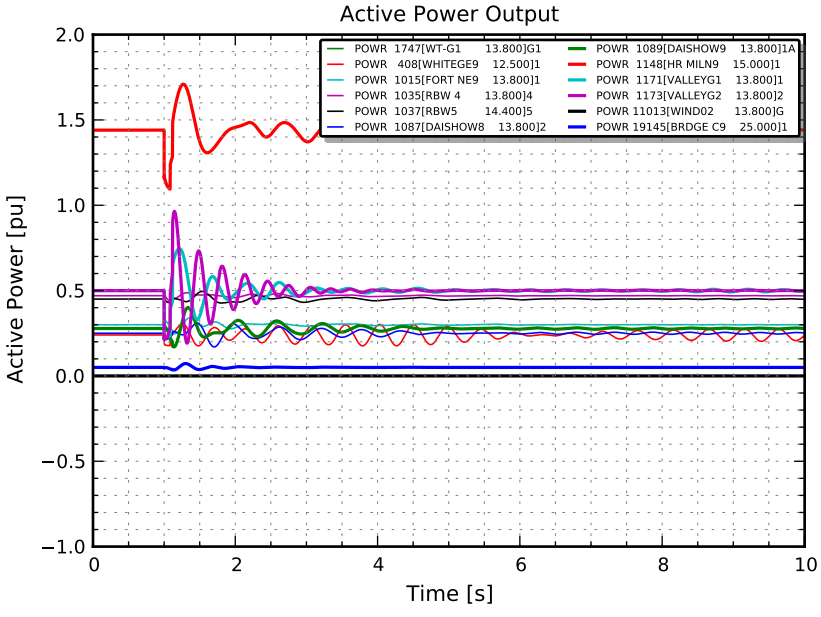


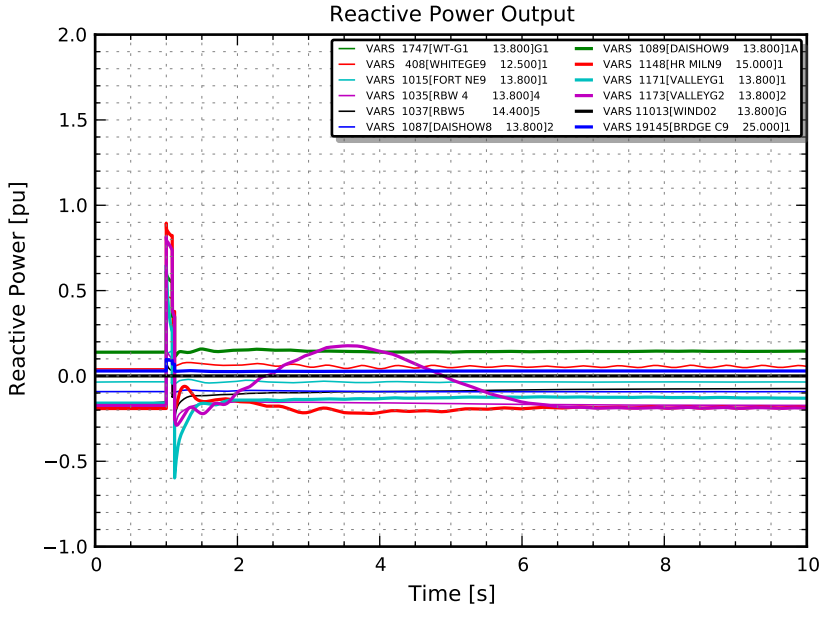


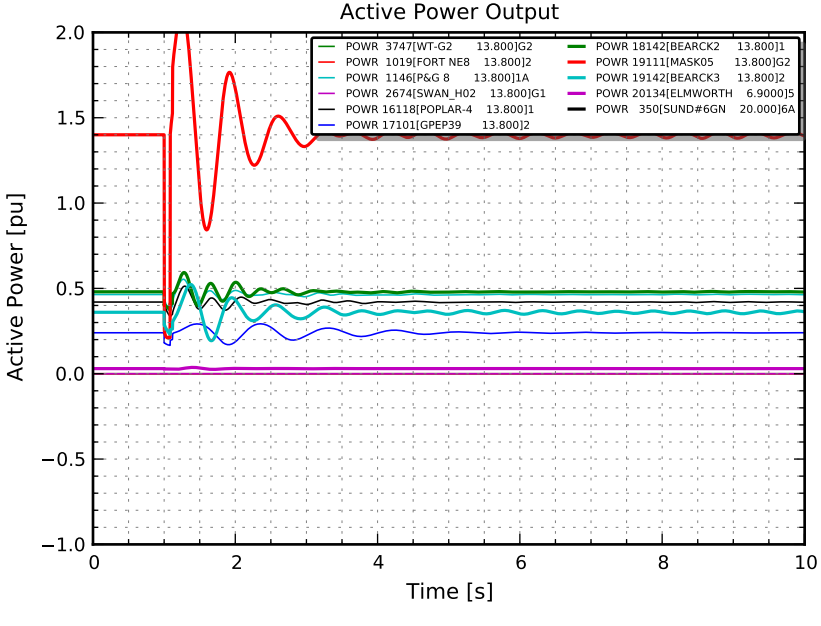
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_B.

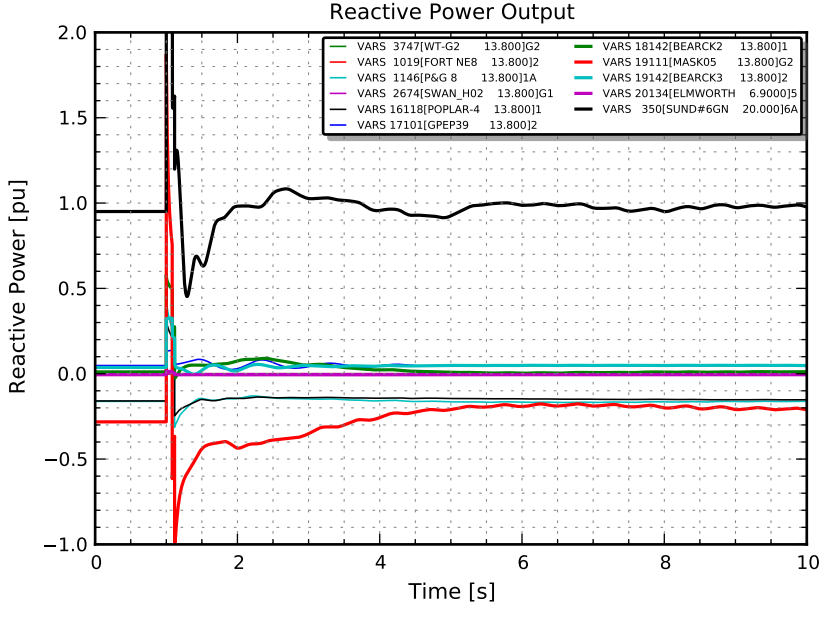
Study Area Generators

Appendix C2A
Figure: 008 (B. 3)





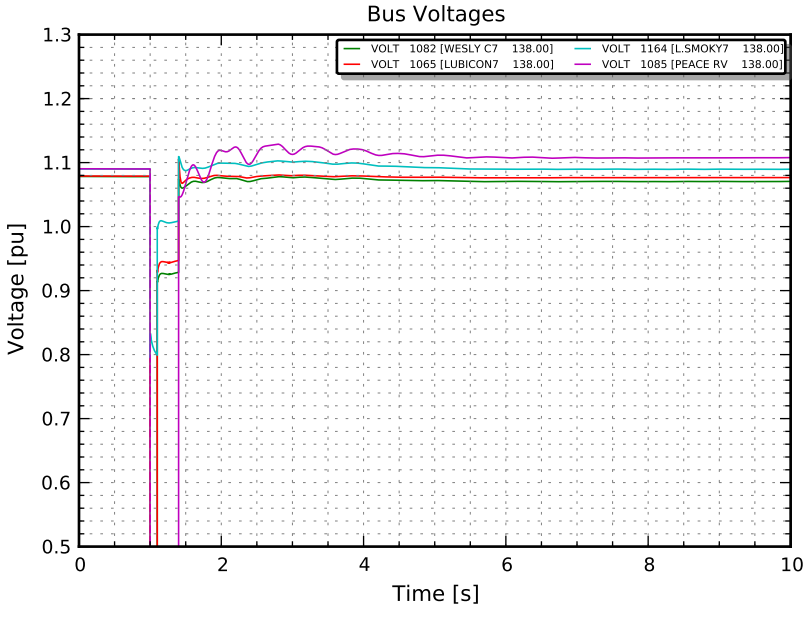


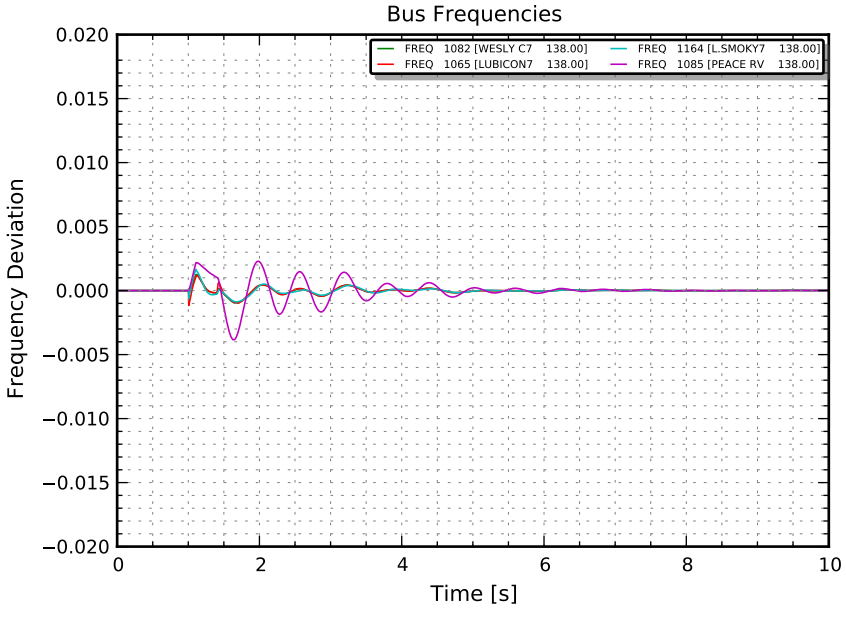


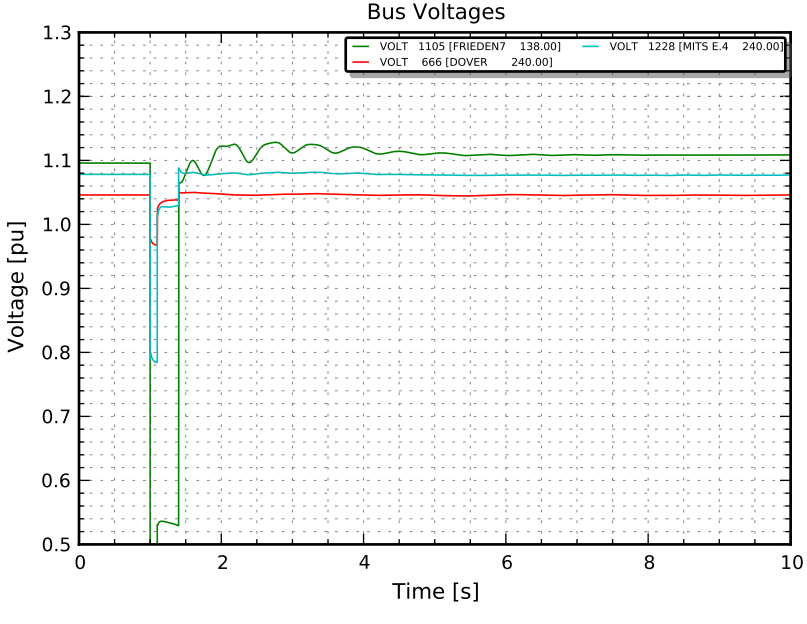
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 009 7L27 WESLEYCREEK to WESTPEACE_A.

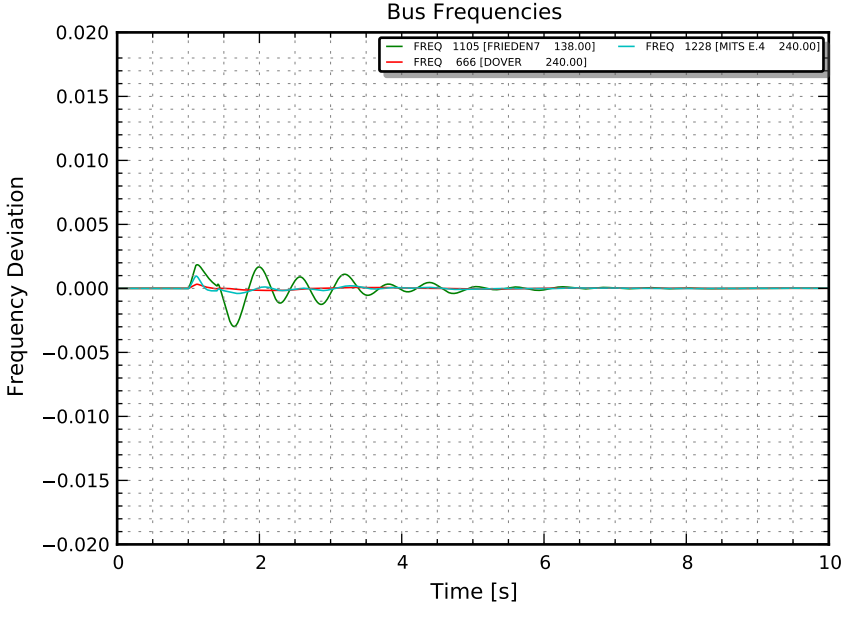
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 009 (A. 1)





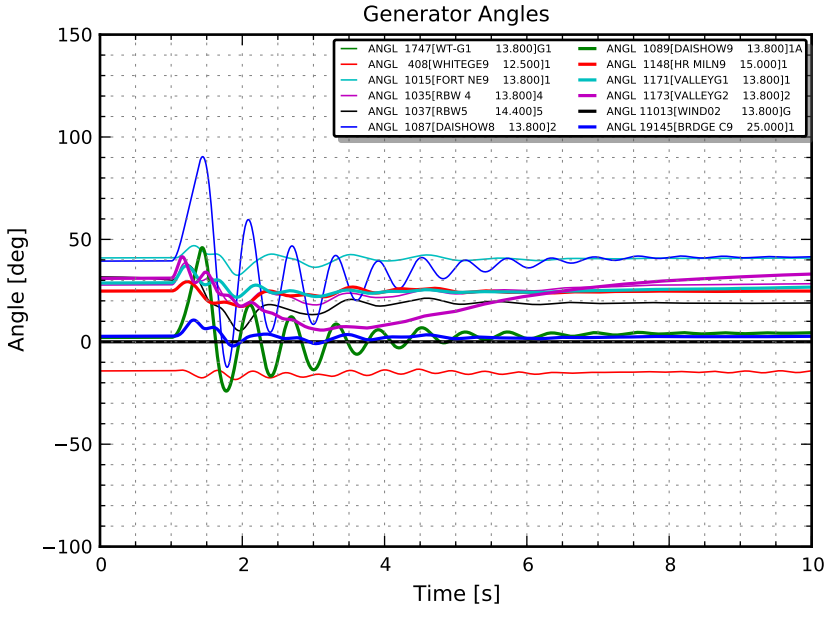


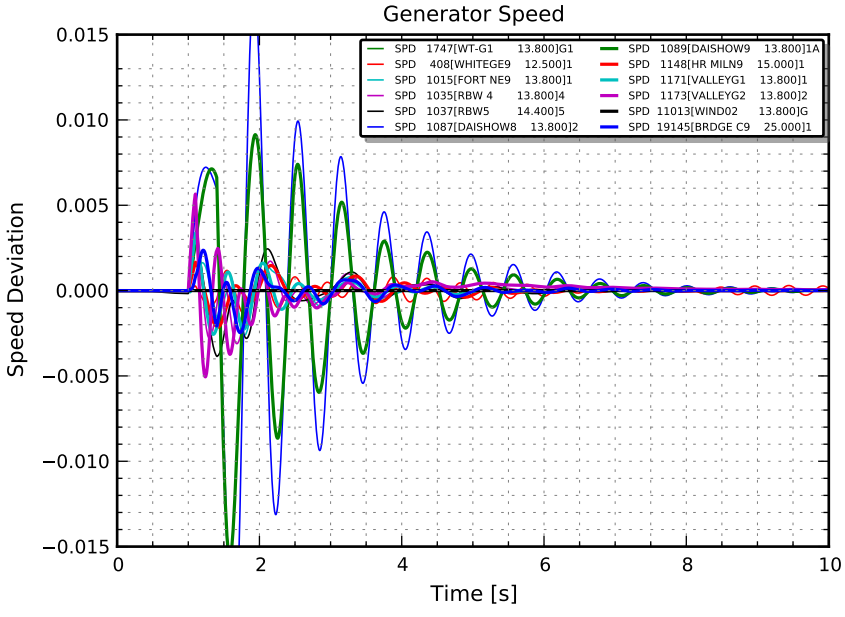


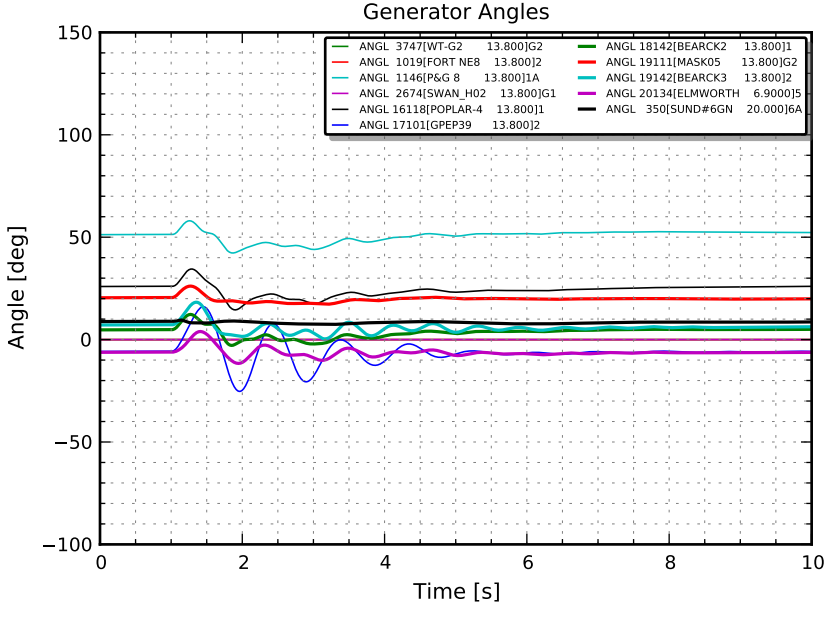
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 009 7L27 WESLEYCREEK to WESTPEACE_A.

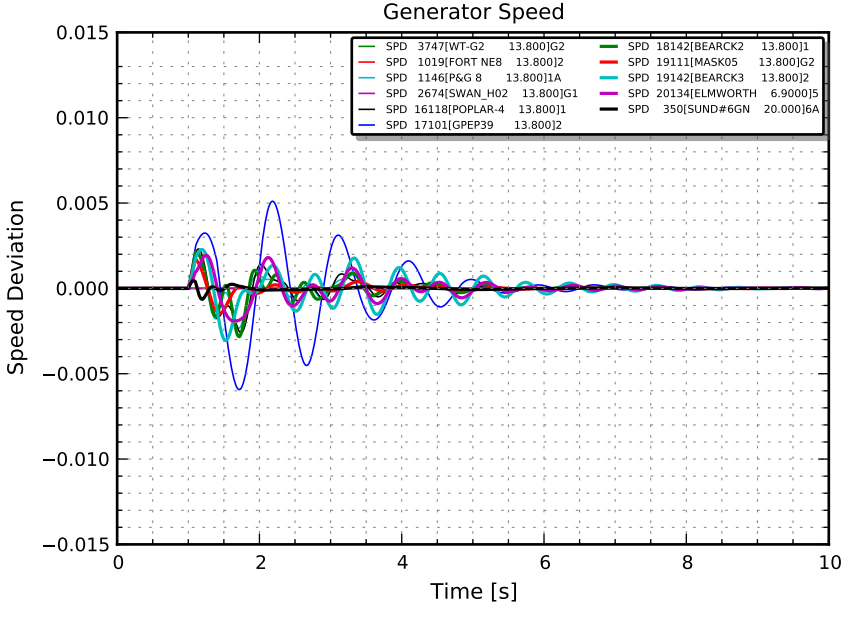
Study Area Generators

Appendix C2A
Figure: 009 (A. 2)





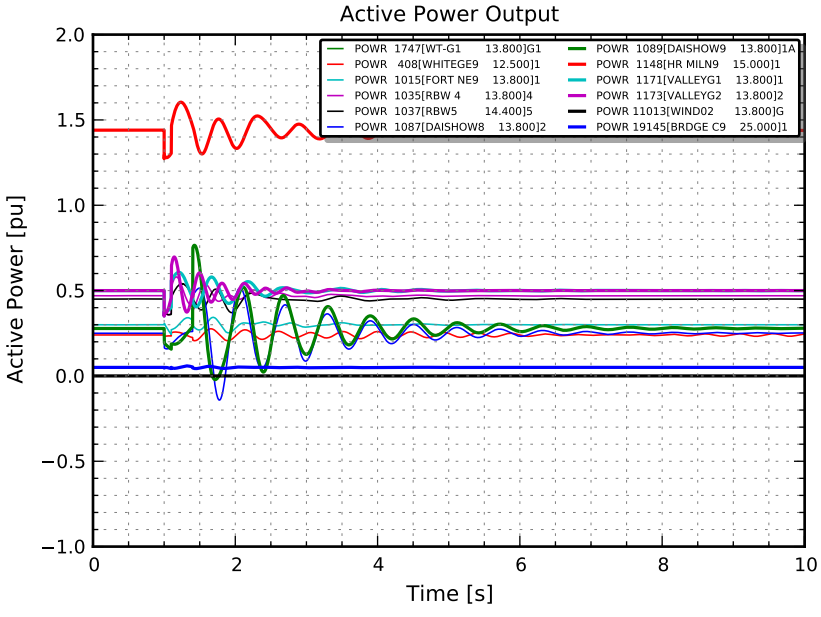


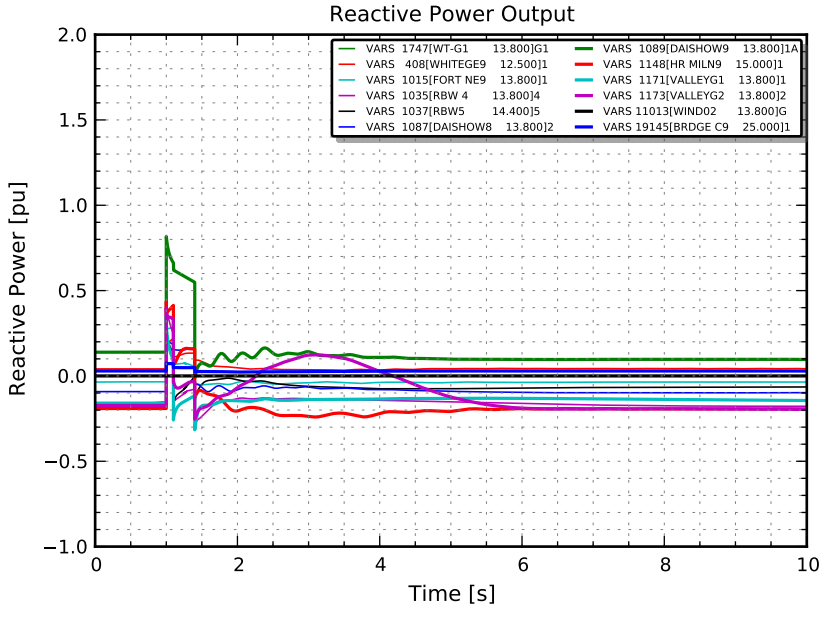


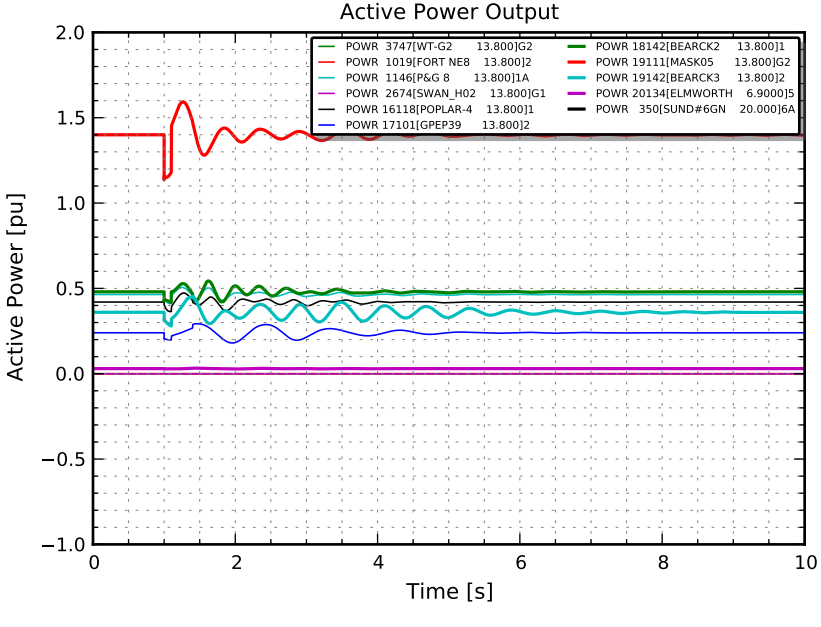
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 009 7L27 WESLEYCREEK to WESTPEACE_A.

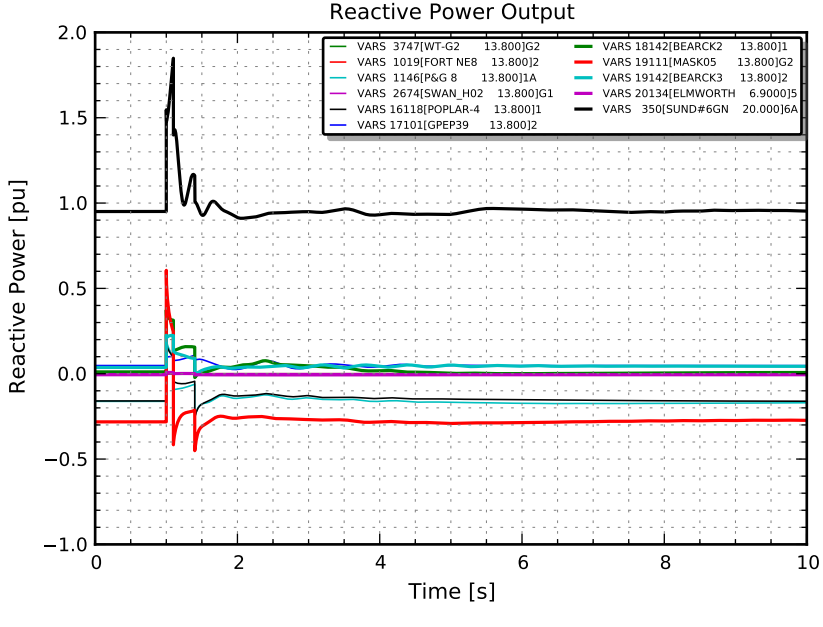
Study Area Generators

Appendix C2A
Figure: 009 (A. 3)





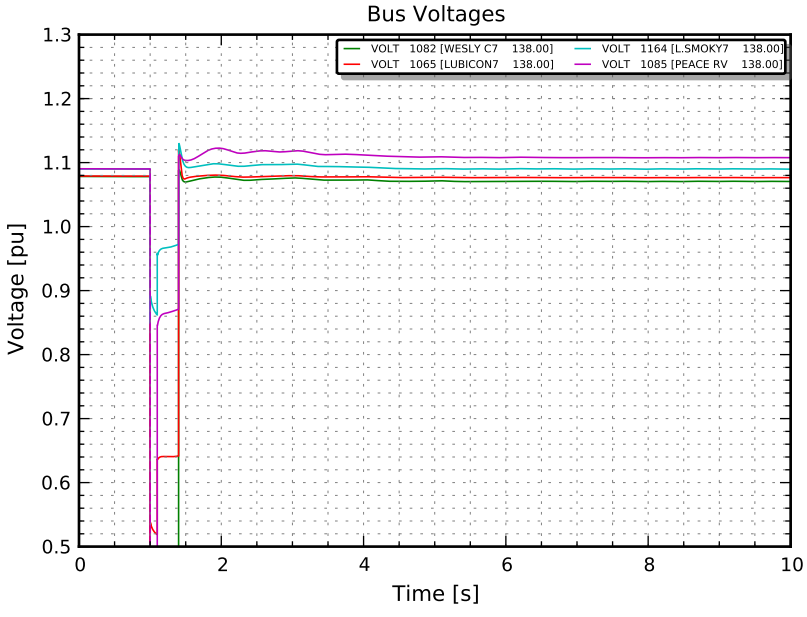


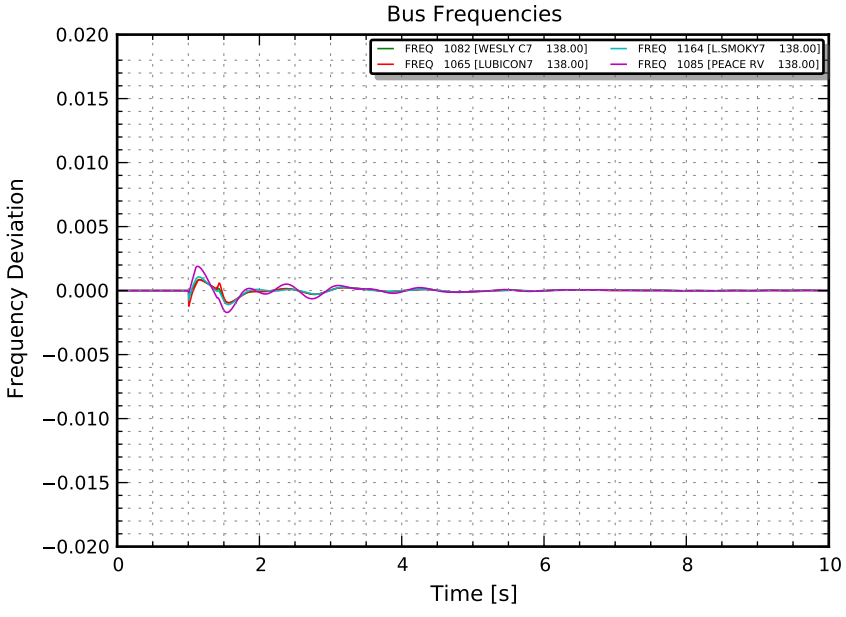


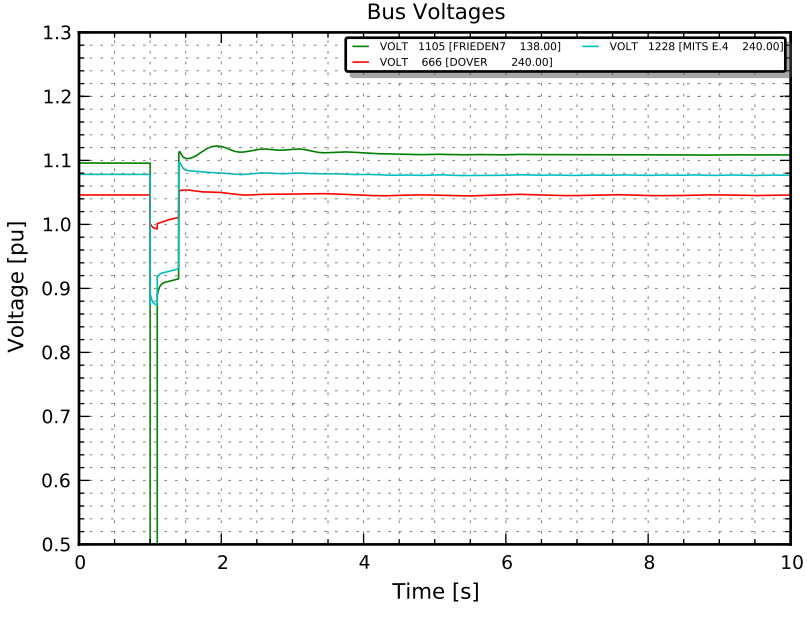
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 009 7L27 WESLEYCREEK to WESTPEACE_B.

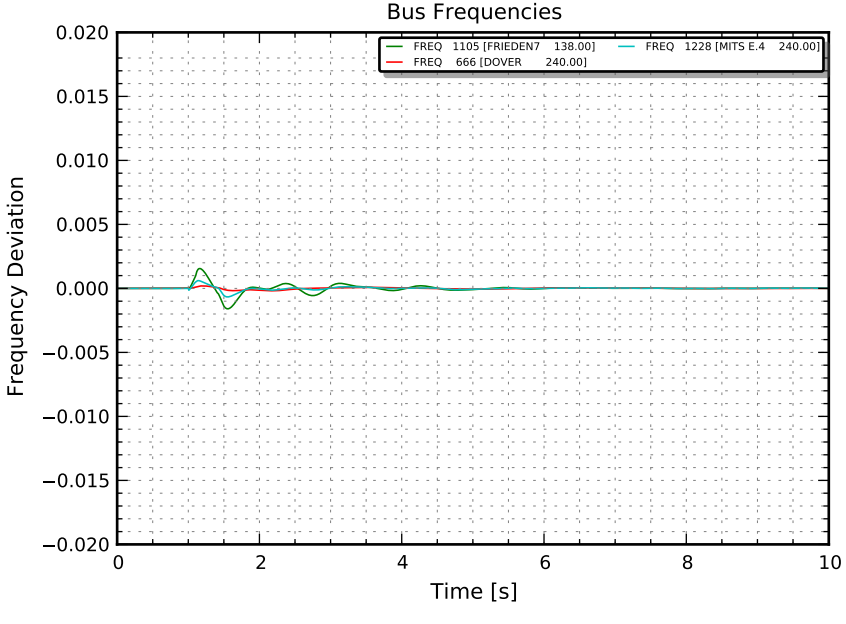
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 009 (B. 1)





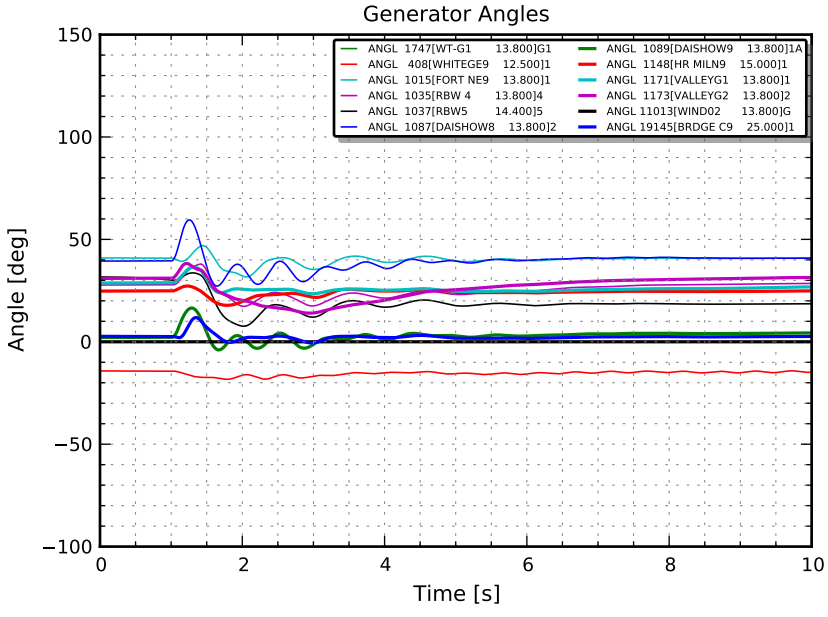


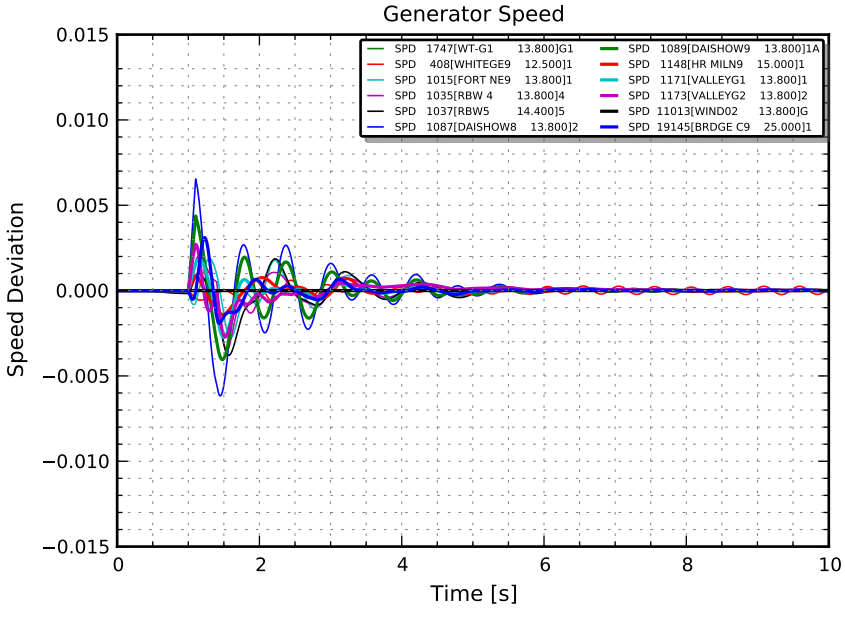


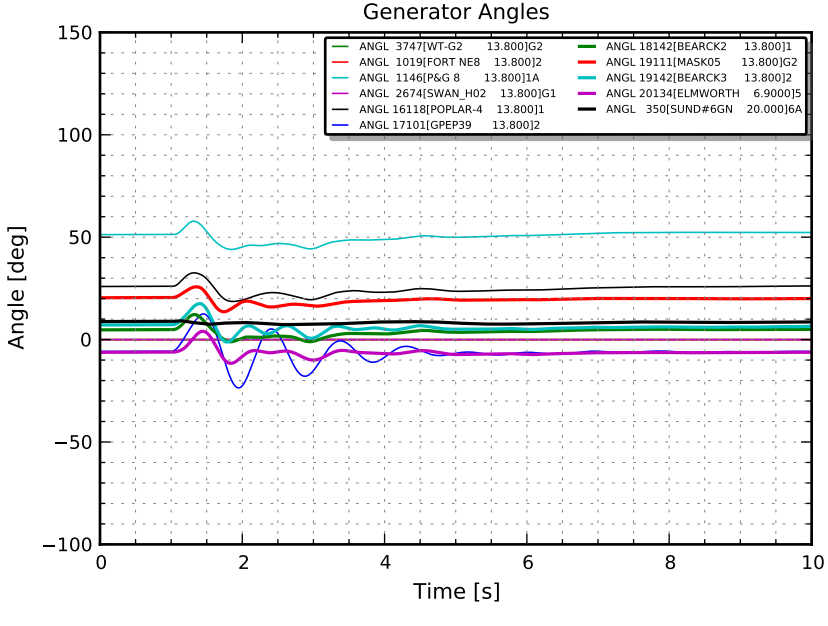
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 009 7L27 WESLEYCREEK to WESTPEACE_B.

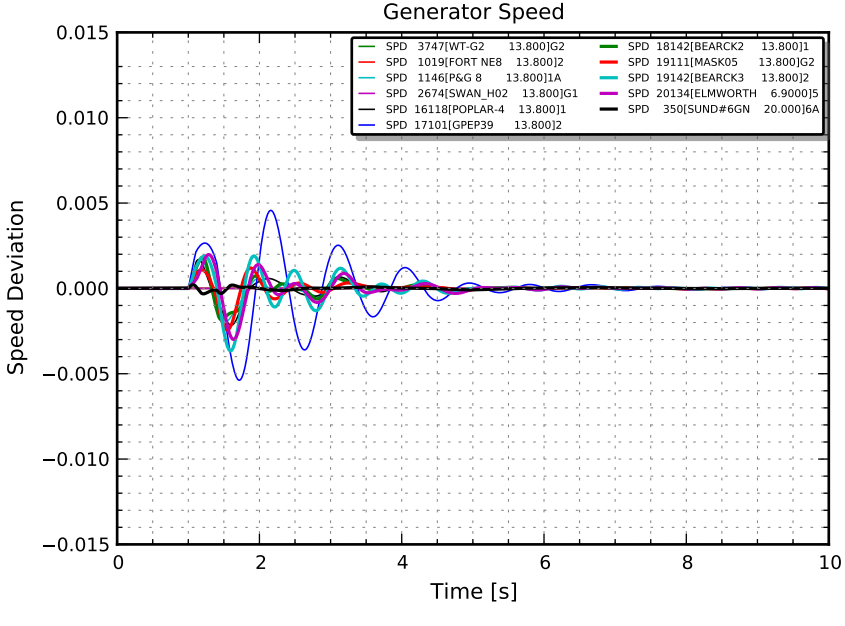
Study Area Generators

Appendix C2A
Figure: 009 (B. 2)





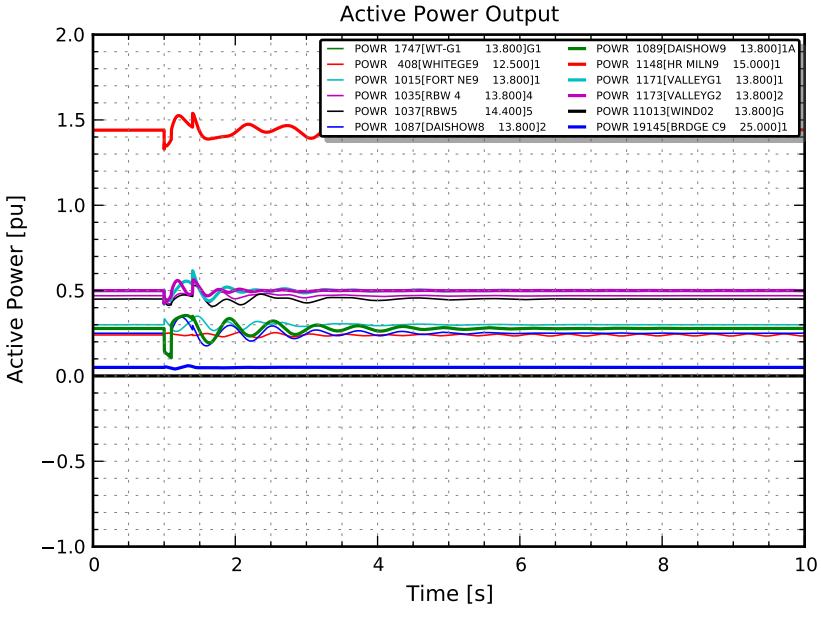


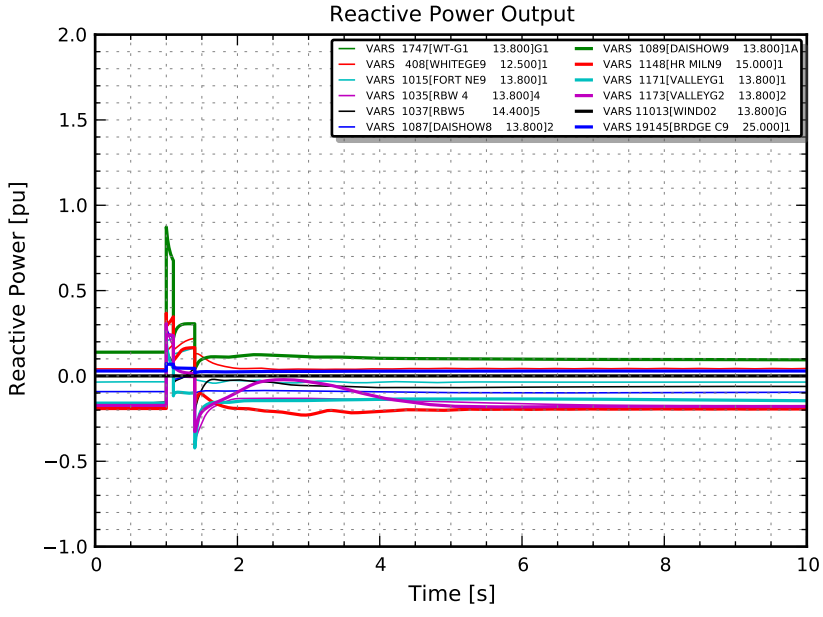


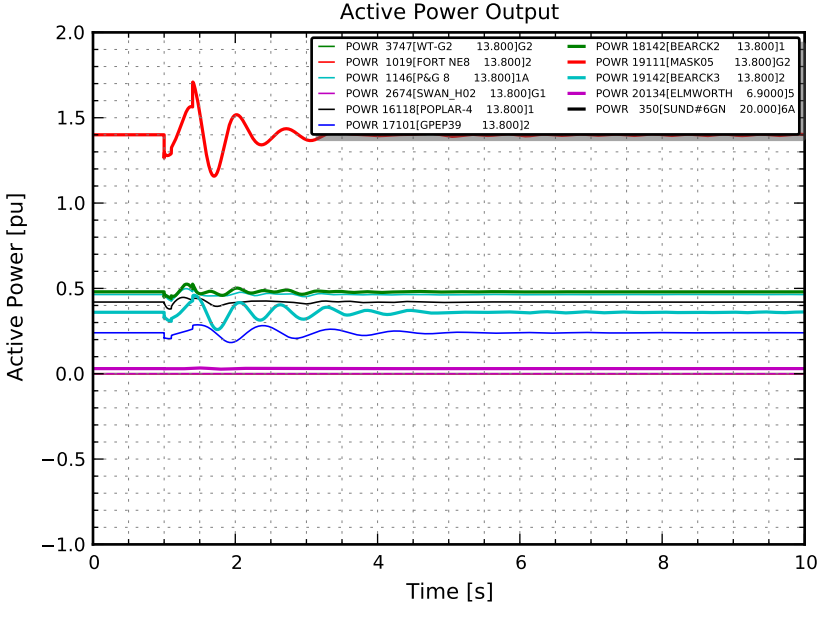
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 009 7L27 WESLEYCREEK to WESTPEACE_B.

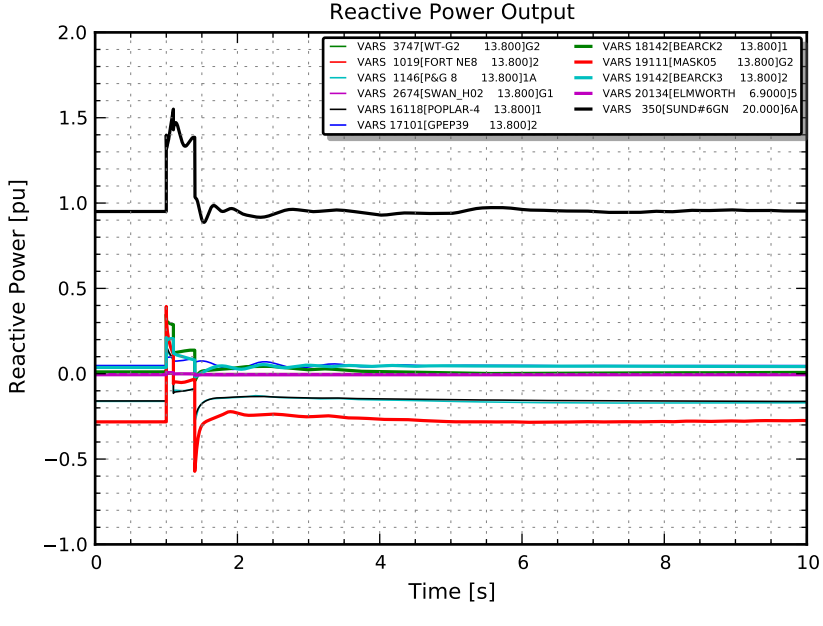
Study Area Generators

Appendix C2A
Figure: 009 (B. 3)





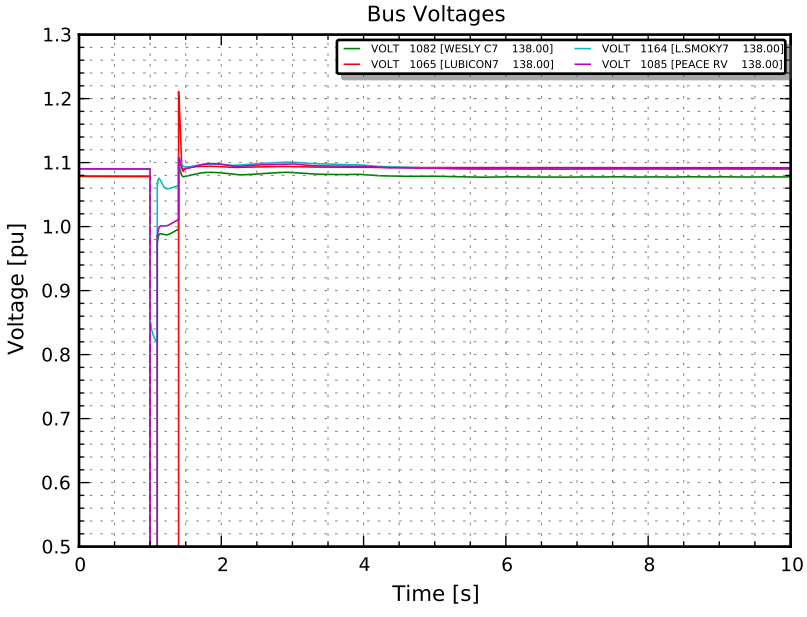


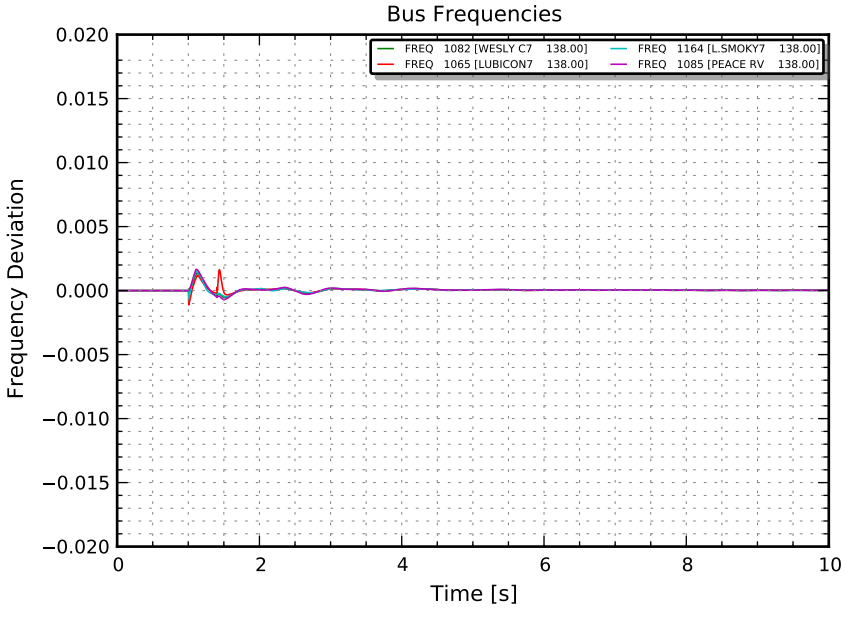


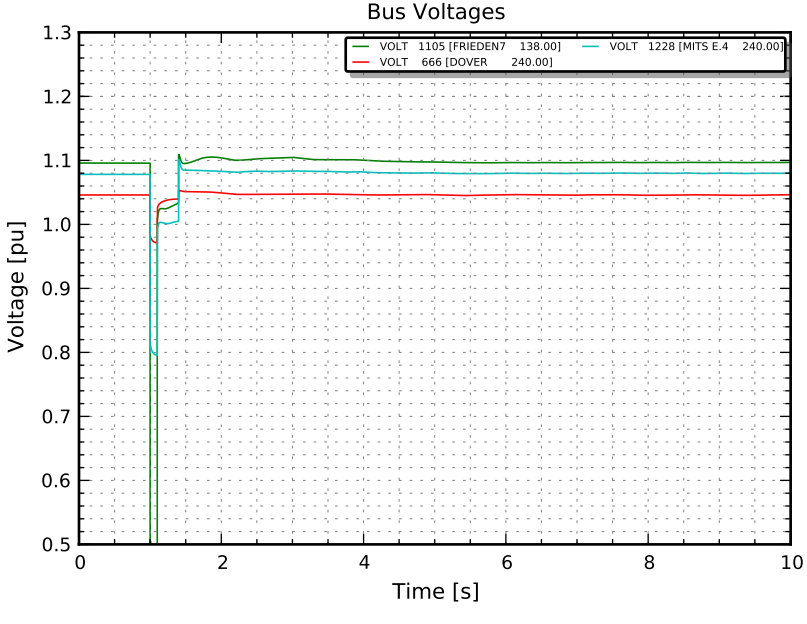
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 010 7L12 WESLEYCREEK to LUBICON_A.

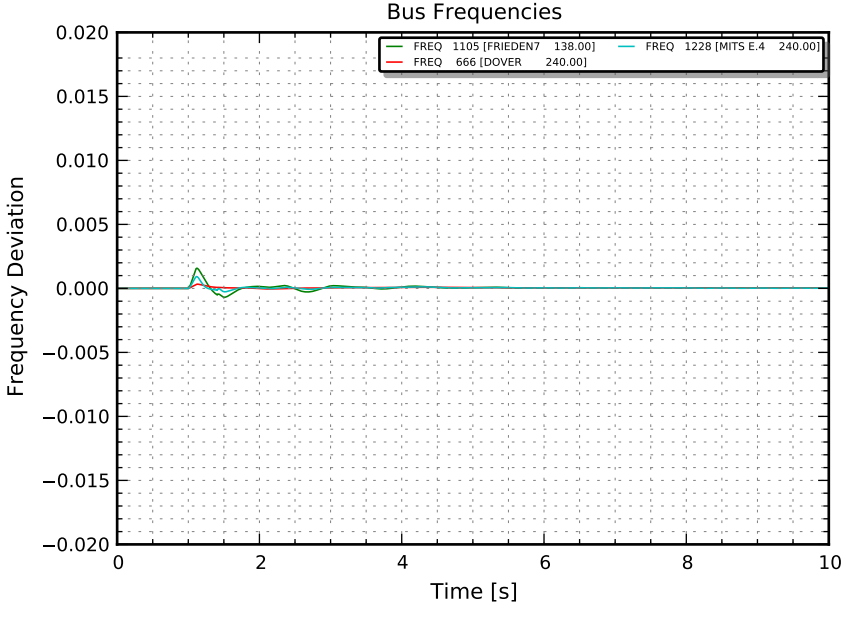
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 010 (A. 1)





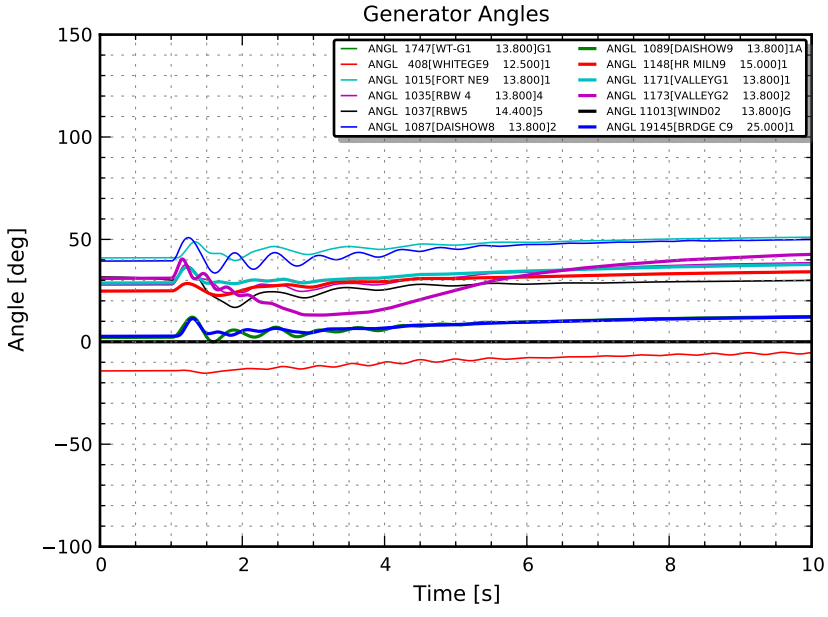


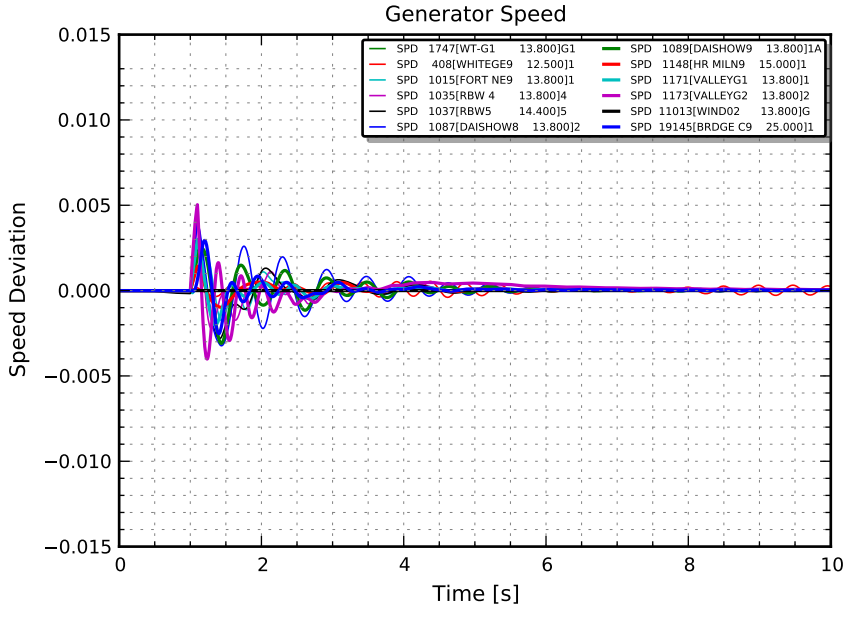


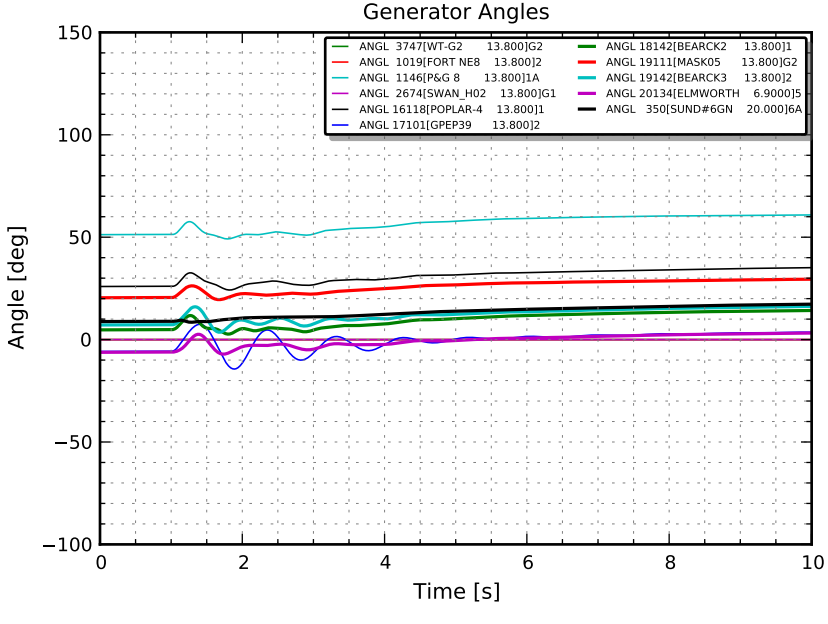
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 010 7L12 WESLEYCREEK to LUBICON_A.

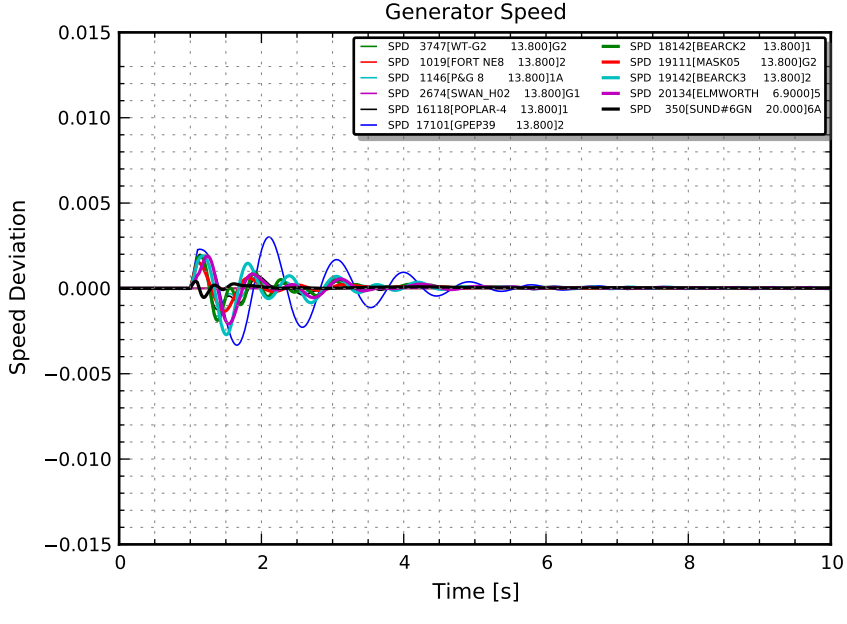
Study Area Generators

Appendix C2A
Figure: 010 (A. 2)





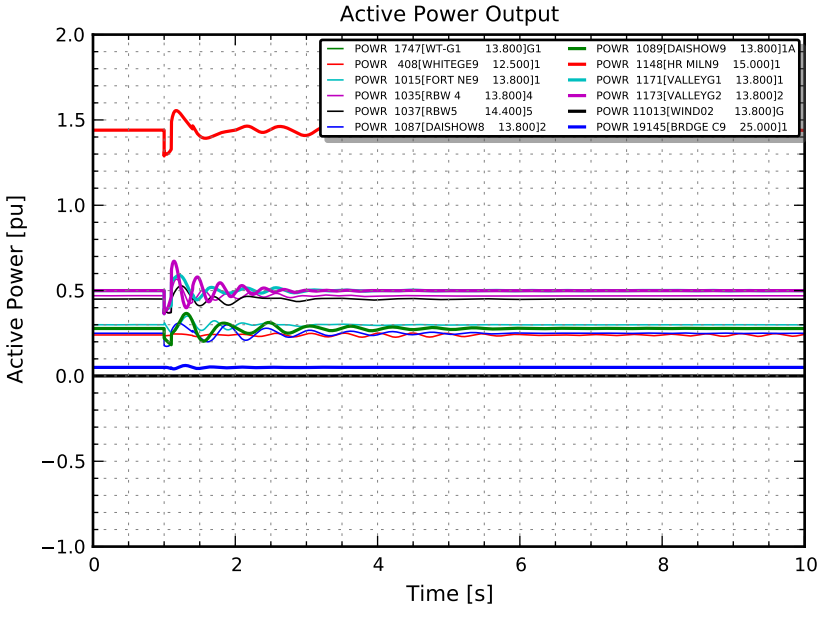


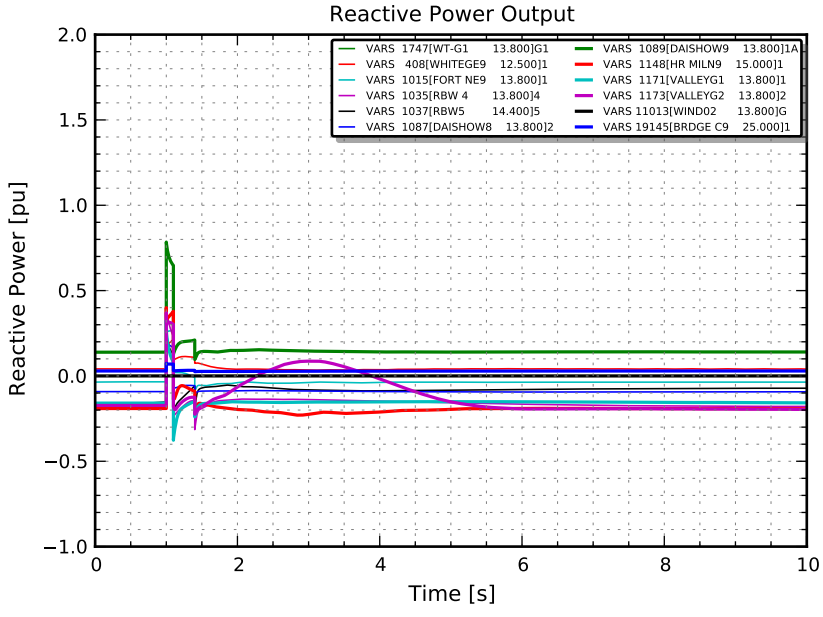


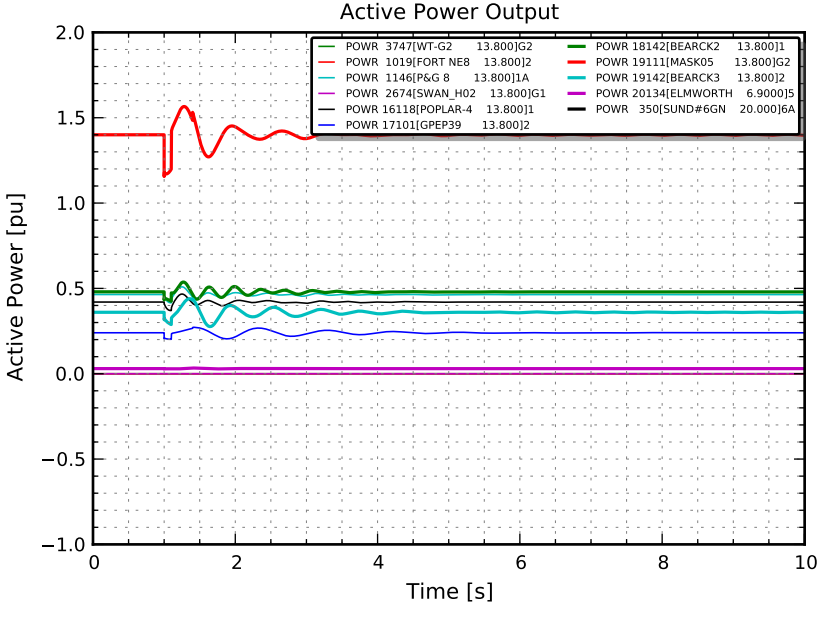
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 010 7L12 WESLEYCREEK to LUBICON_A.

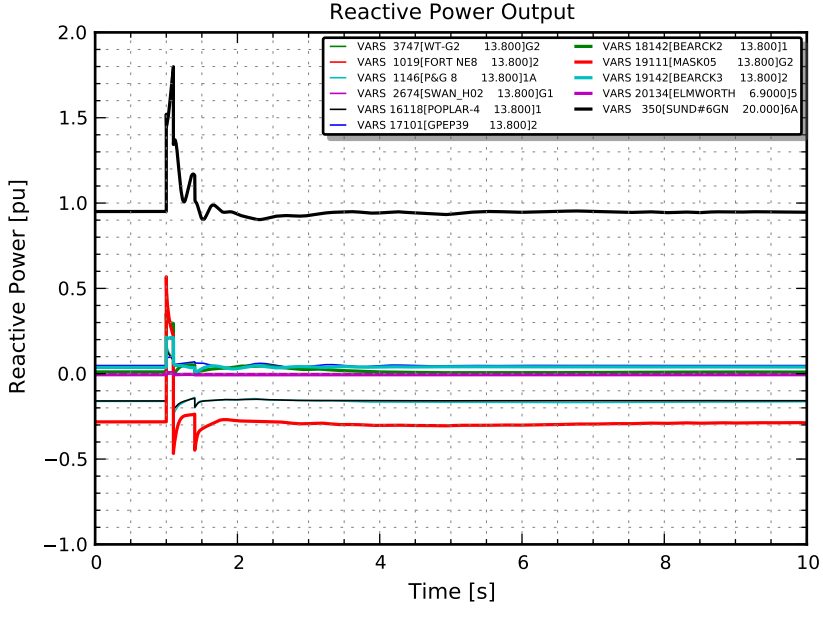
Study Area Generators

Appendix C2A
Figure: 010 (A. 3)





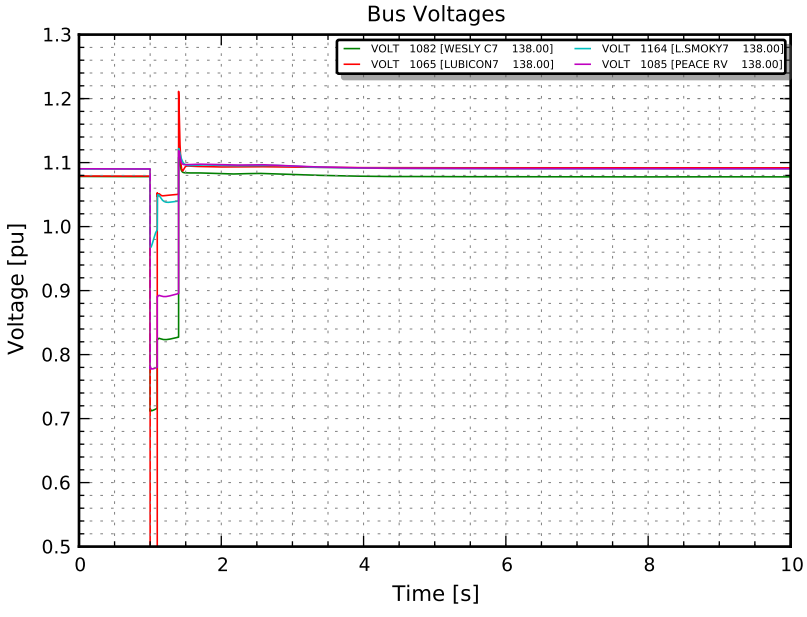


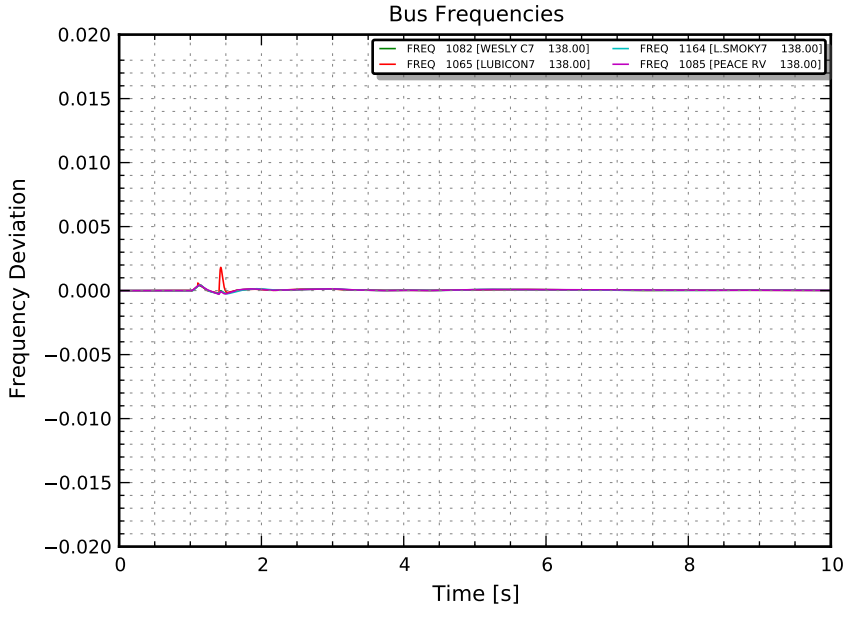


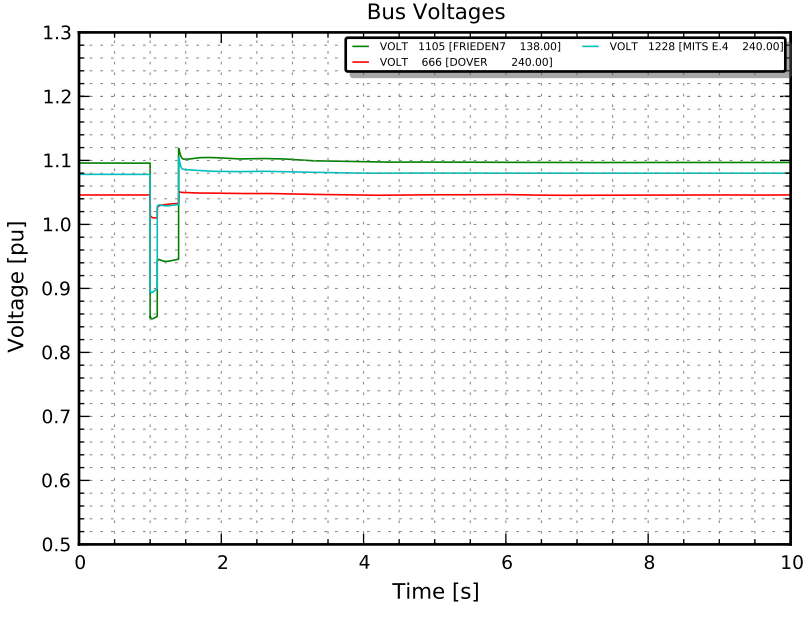
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 010 7L12 WESLEYCREEK to LUBICON_B.

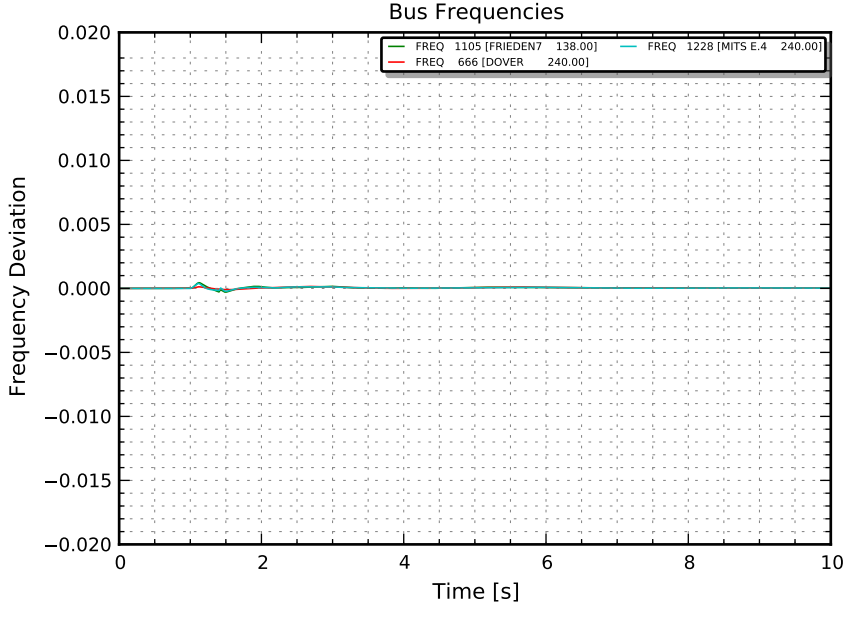
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 010 (B. 1)





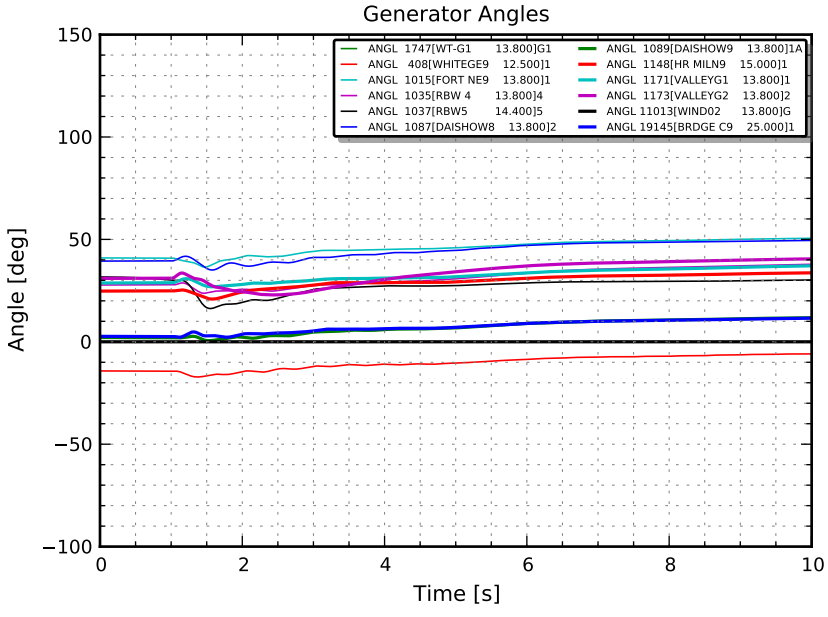


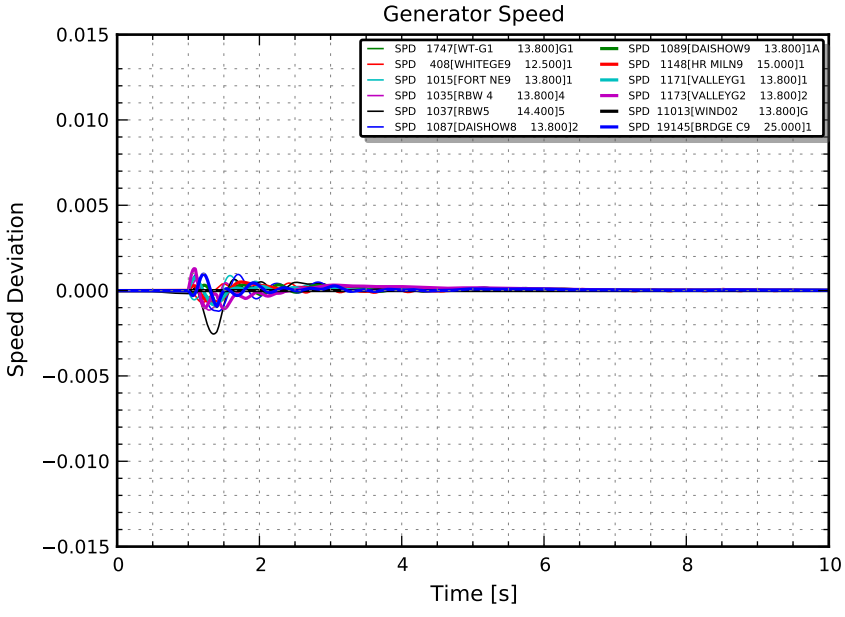


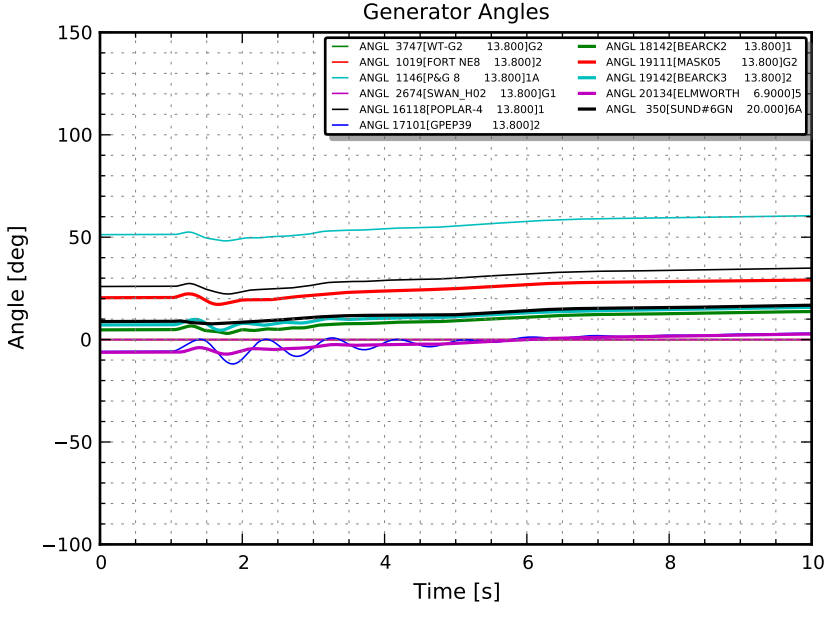
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 010 7L12 WESLEYCREEK to LUBICON_B.

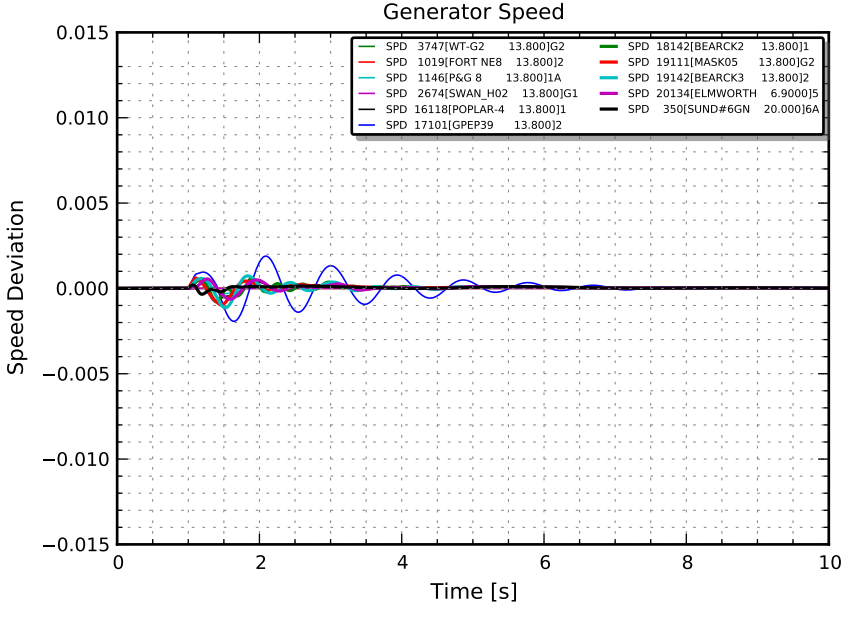
Study Area Generators

Appendix C2A
Figure: 010 (B. 2)





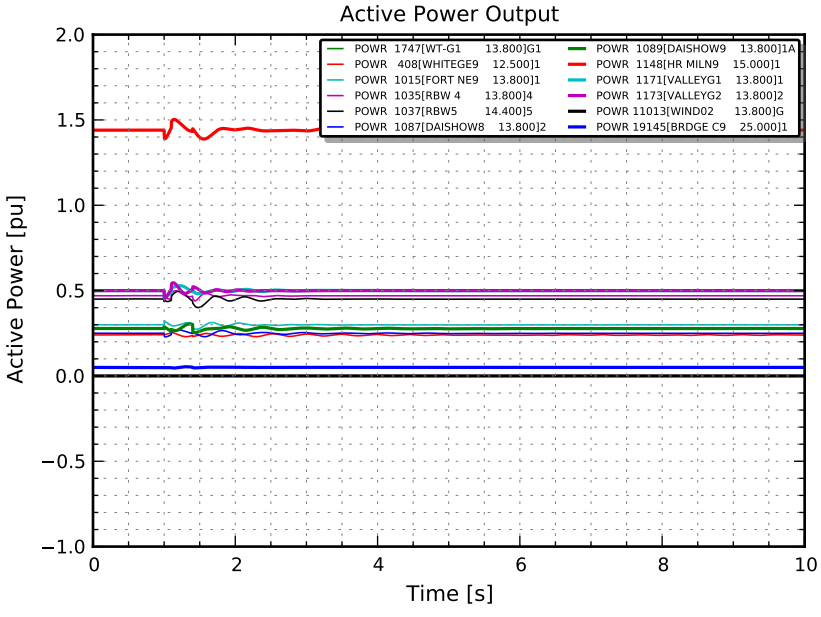


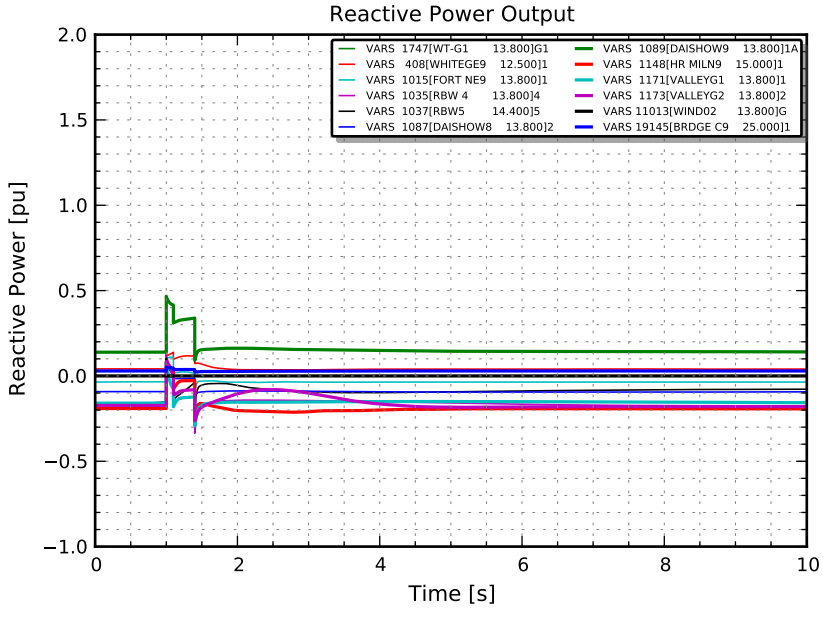


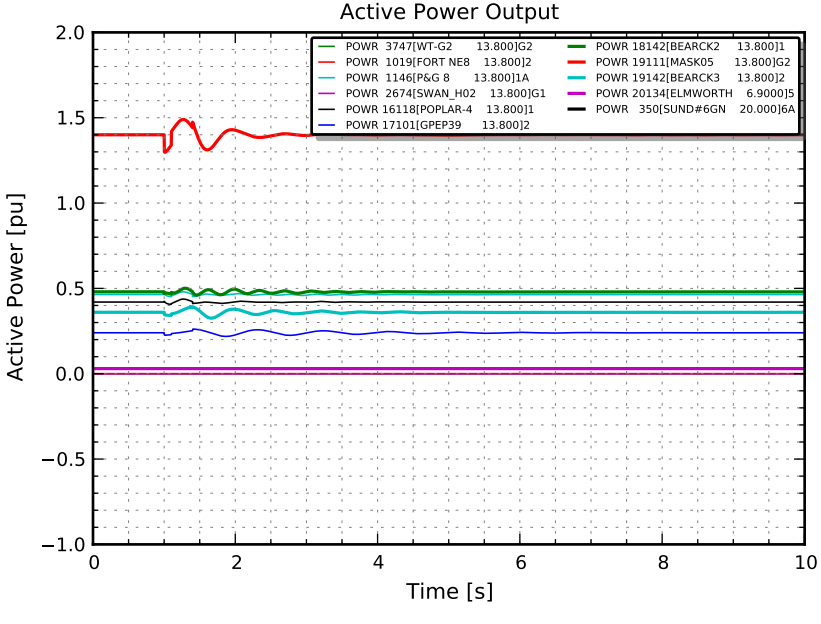
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 010 7L12 WESLEYCREEK to LUBICON_B.

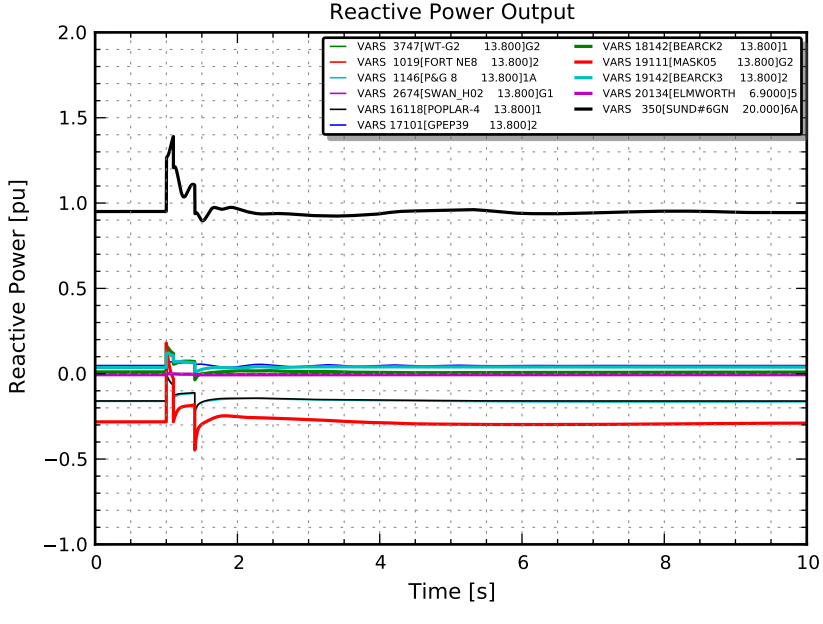
Study Area Generators

Appendix C2A
Figure: 010 (B. 3)





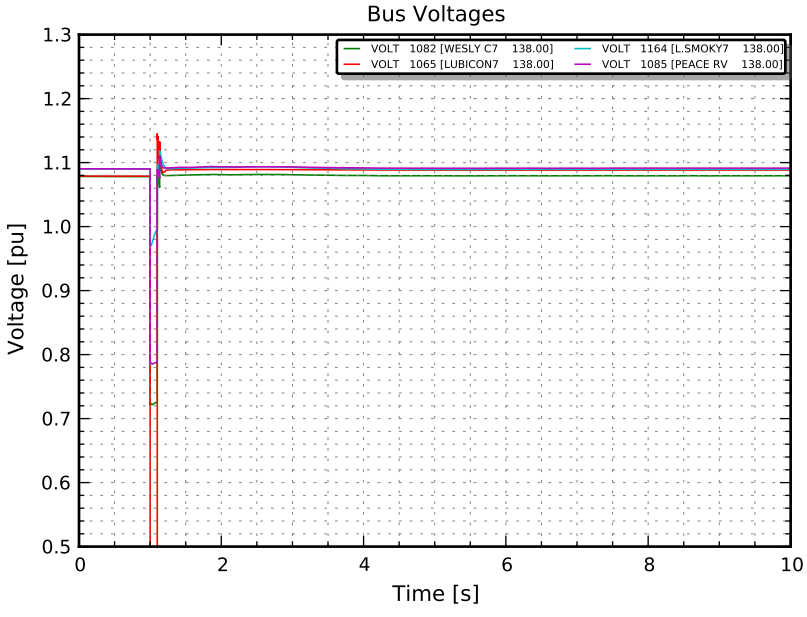


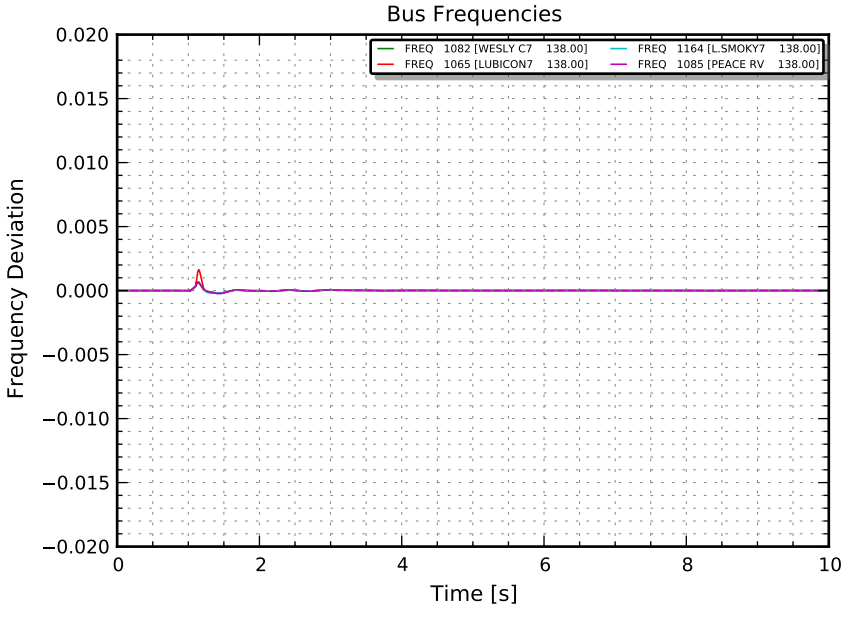


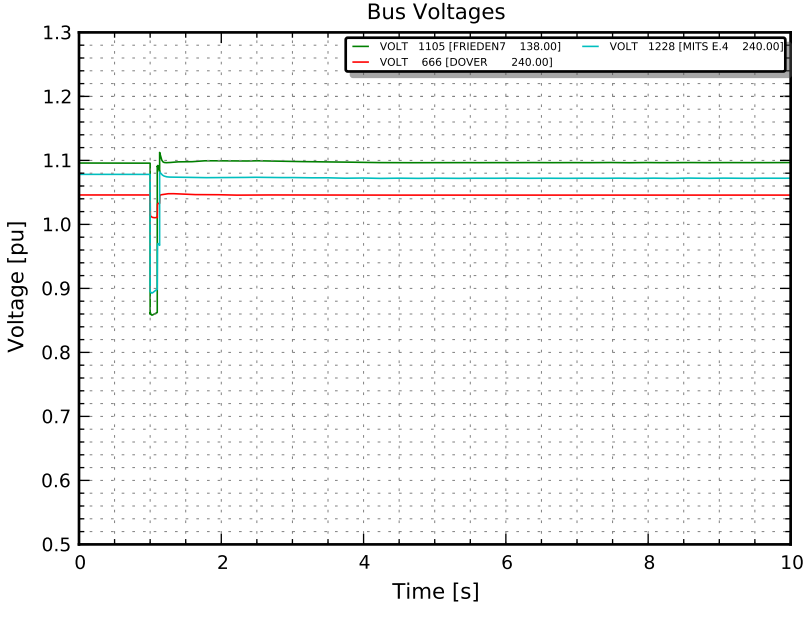
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 011 7L61 LUBICON to NIPISI_A.

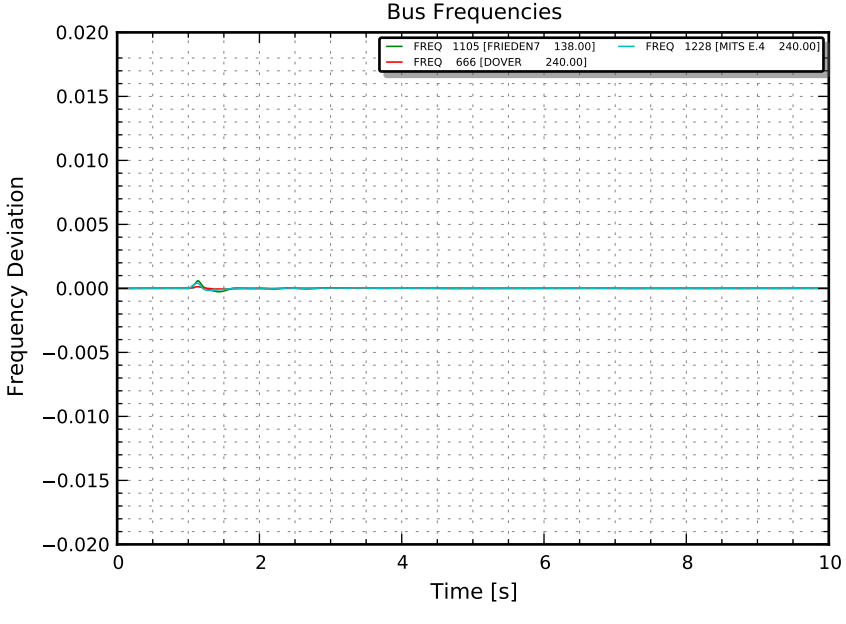
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 011 (A. 1)





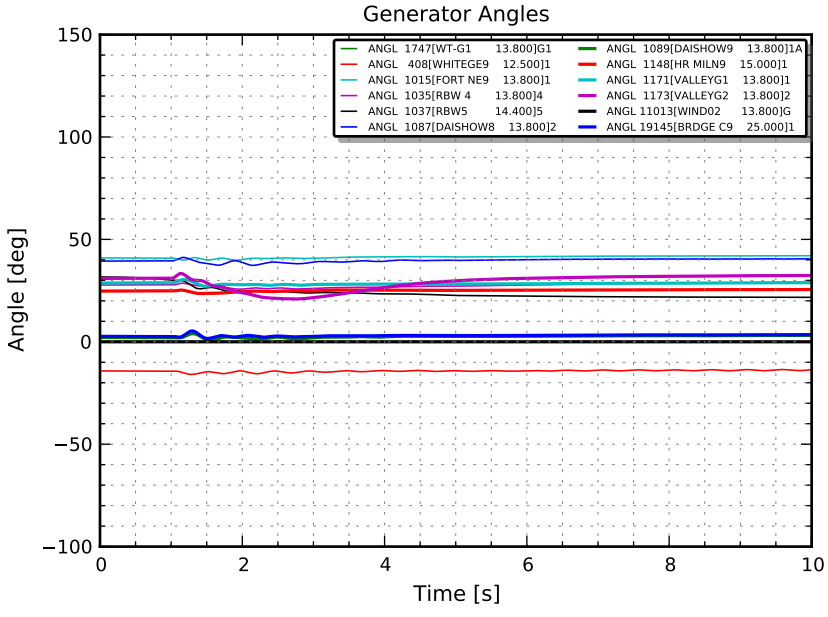


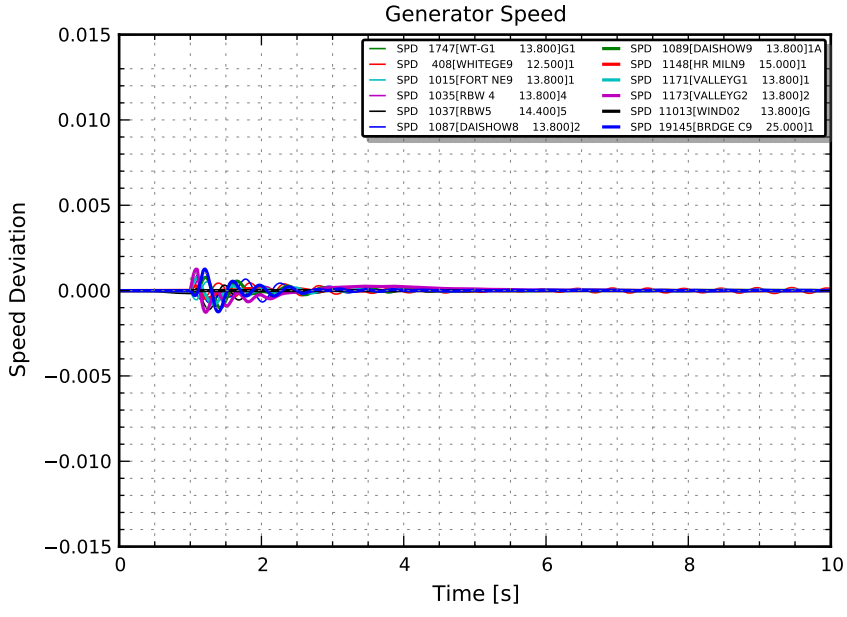


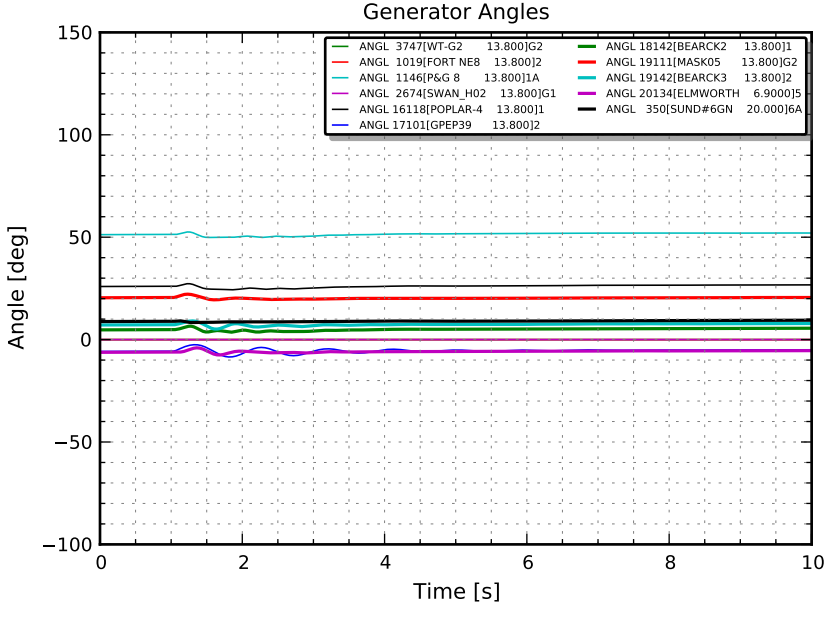
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 011 7L61 LUBICON to NIPISI_A.

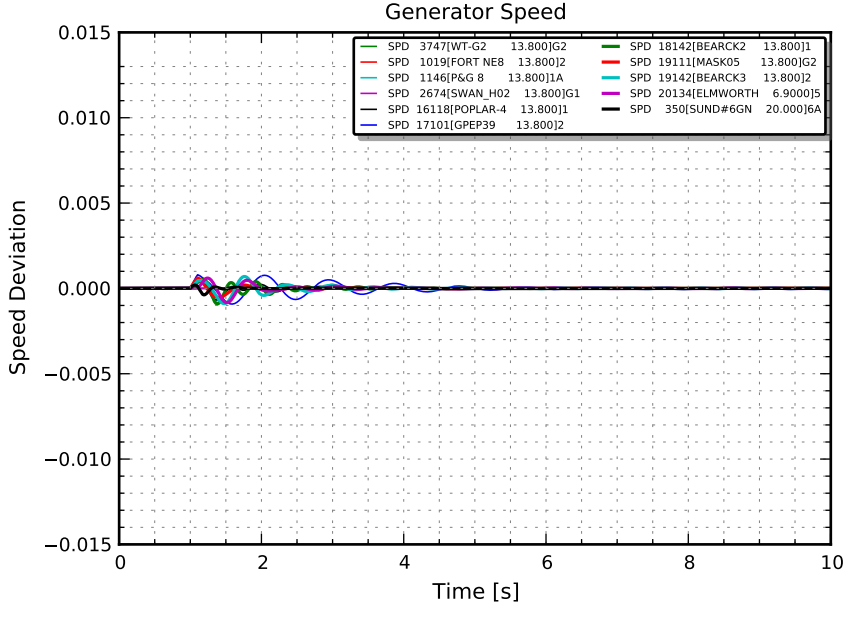
Study Area Generators

Appendix C2A
Figure: 011 (A. 2)





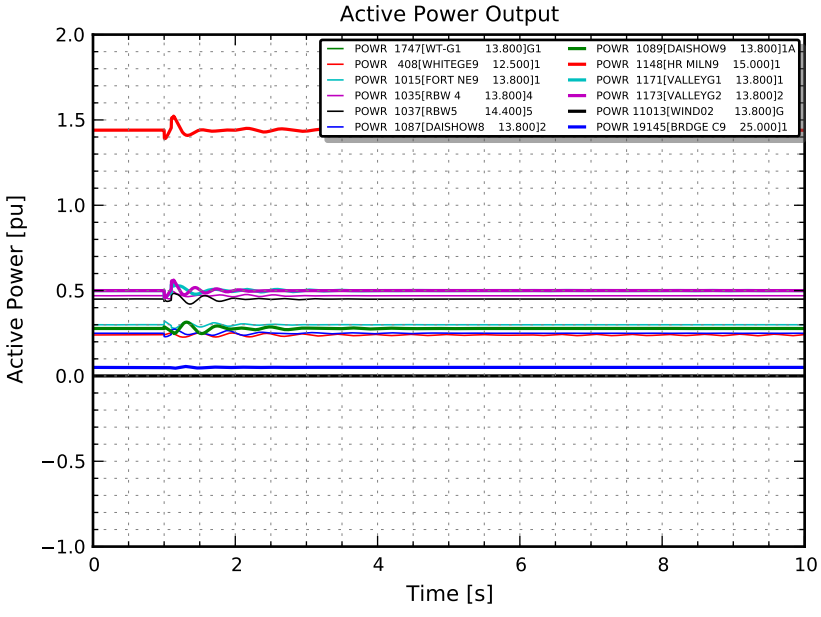


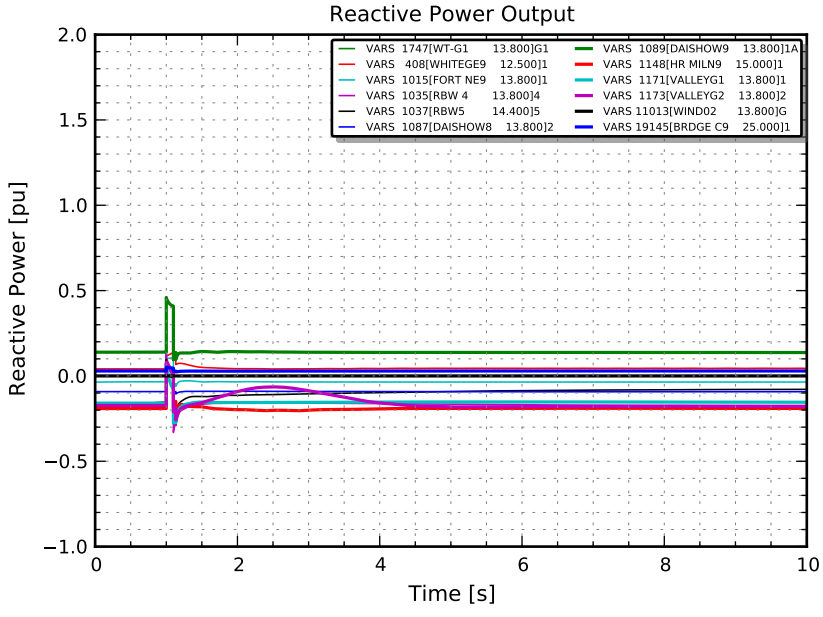


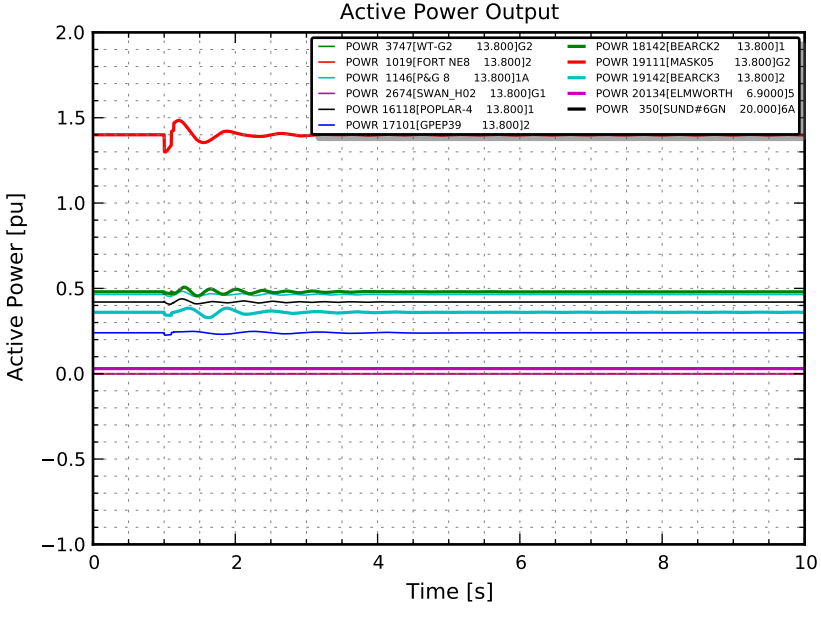
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 011 7L61 LUBICON to NIPISI_A.

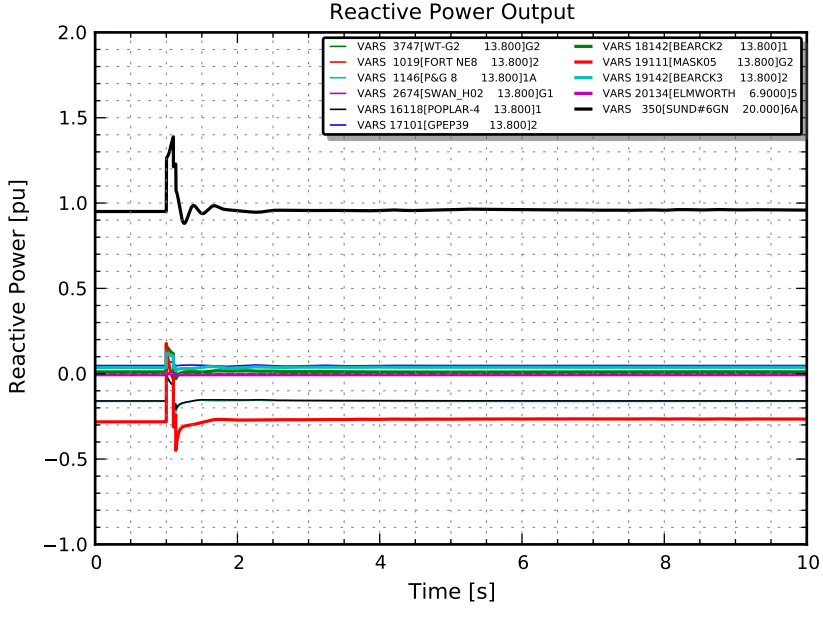
Study Area Generators

Appendix C2A
Figure: 011 (A. 3)





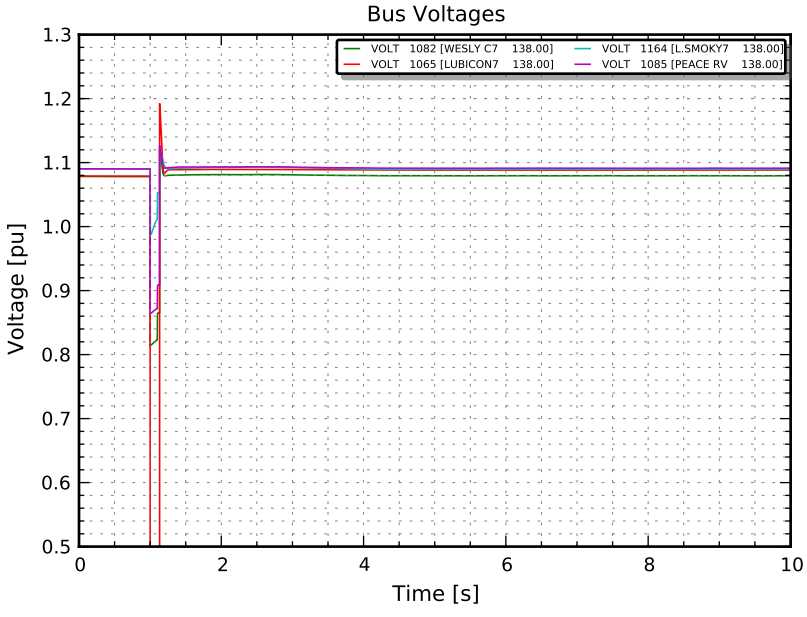


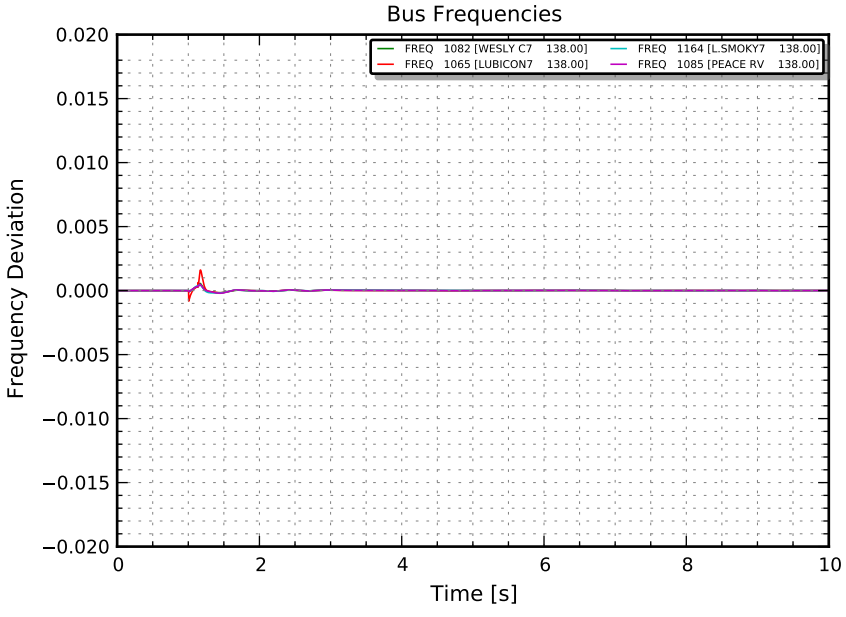


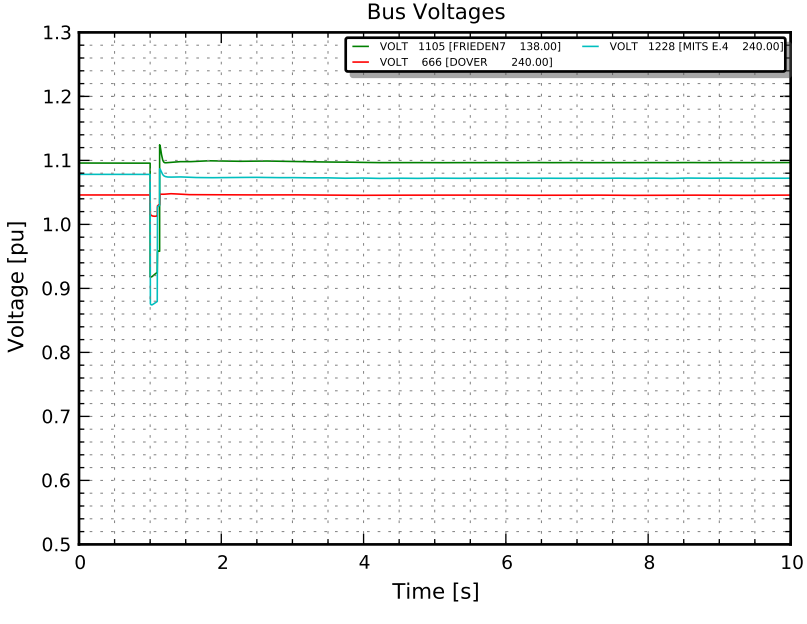
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 011 7L61 LUBICON to NIPISI_B.

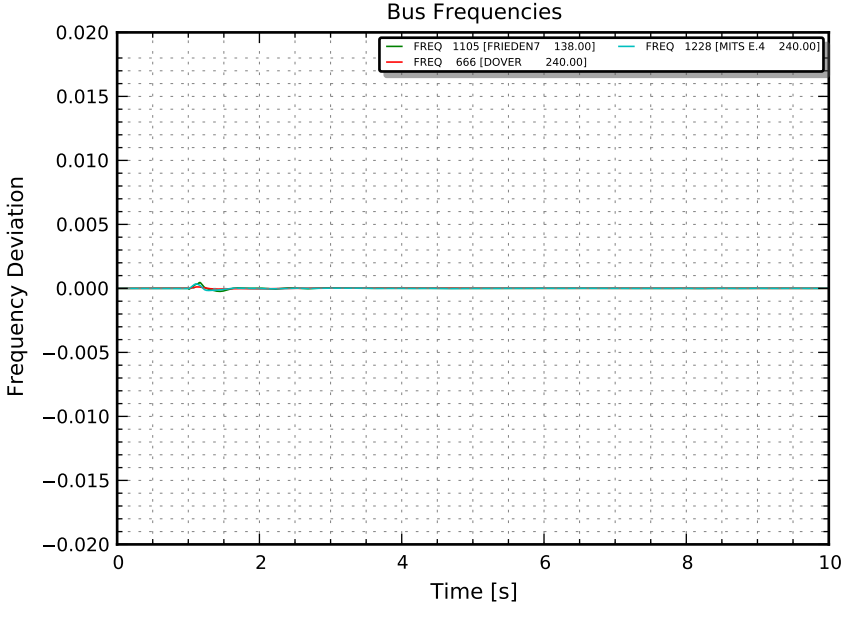
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 011 (B. 1)





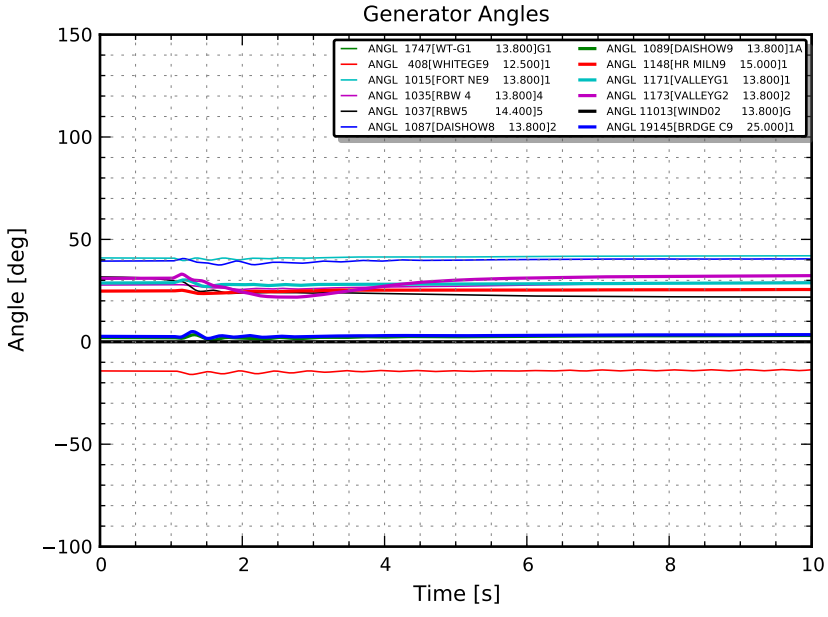


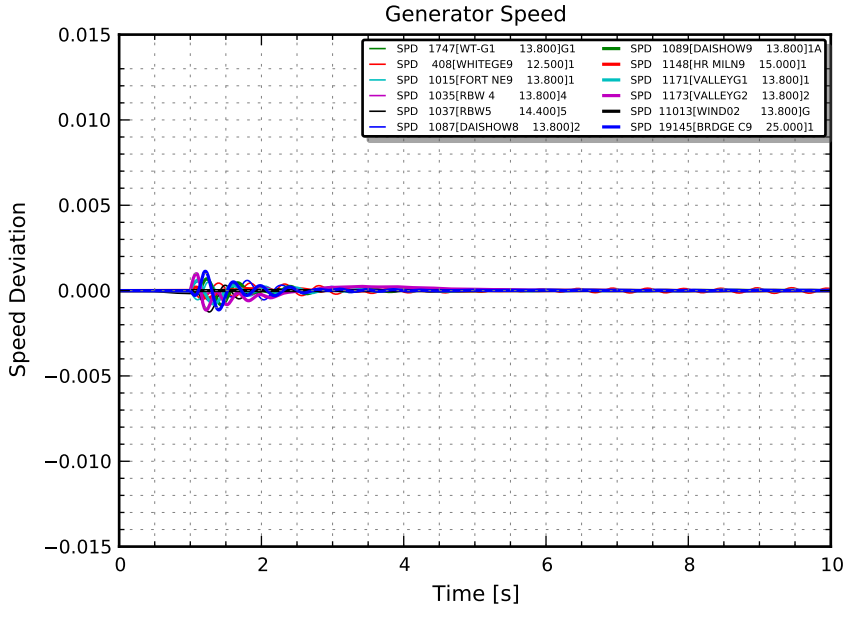


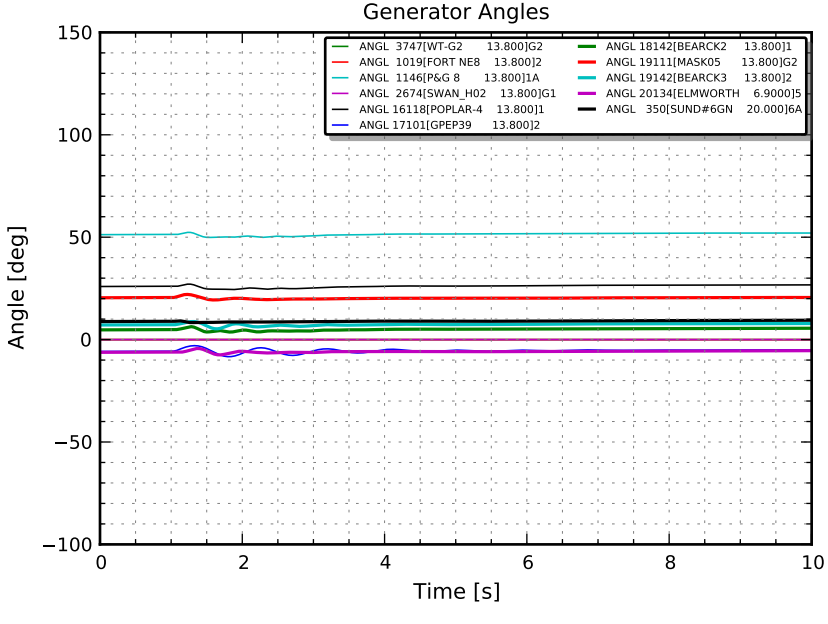
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 011 7L61 LUBICON to NIPISI_B.

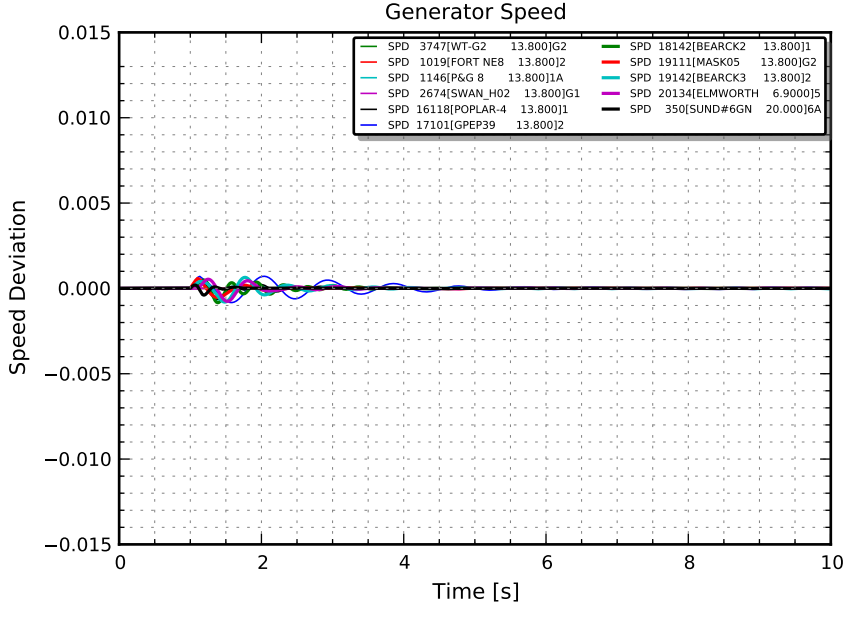
Study Area Generators

Appendix C2A
Figure: 011 (B. 2)





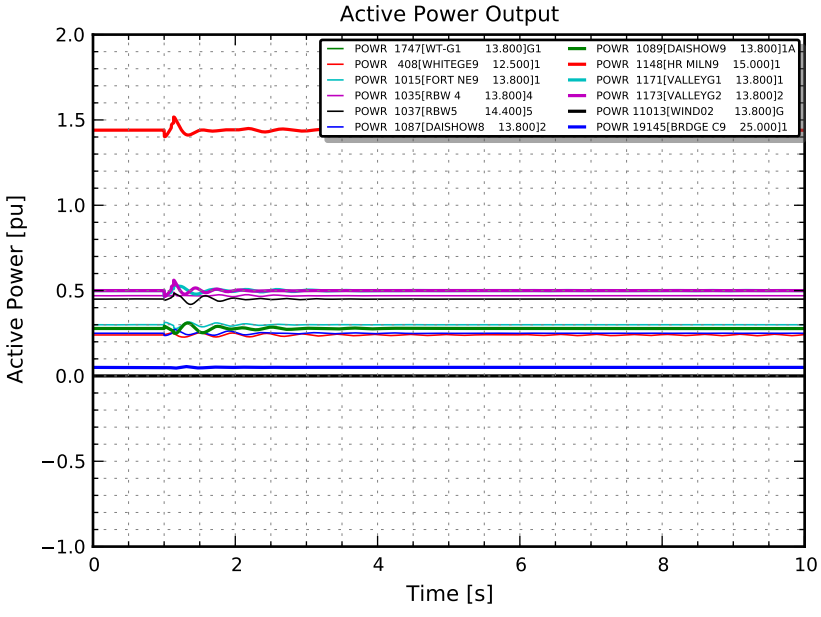


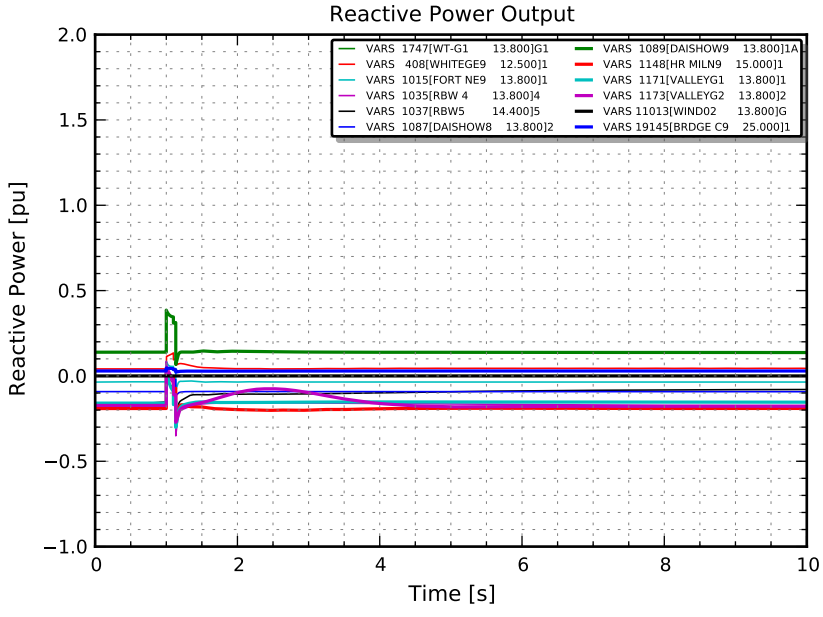


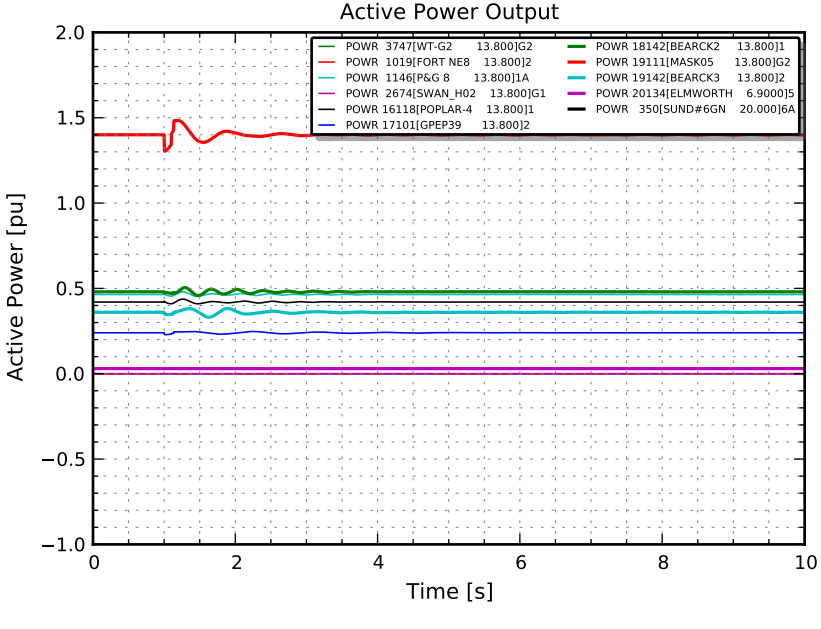
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 011 7L61 LUBICON to NIPISI_B.

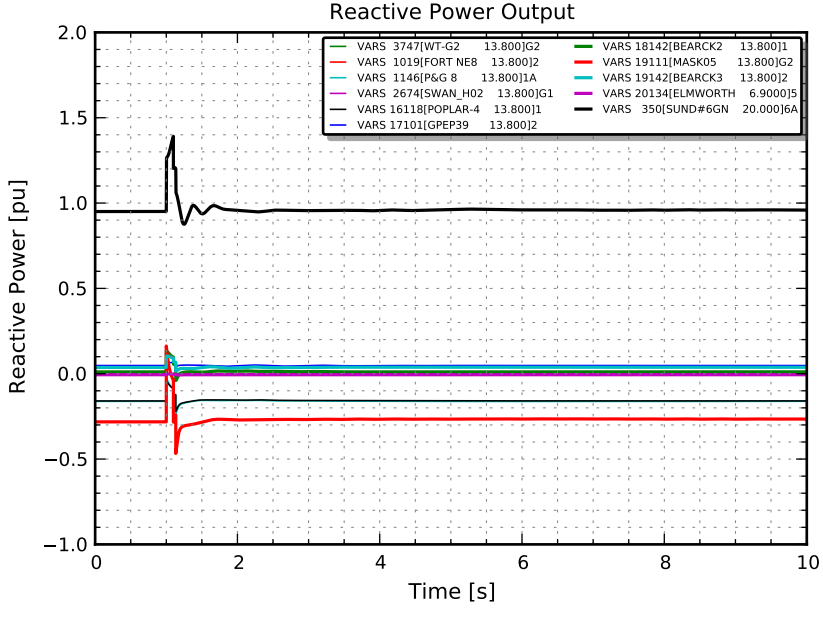
Study Area Generators

Appendix C2A
Figure: 011 (B. 3)





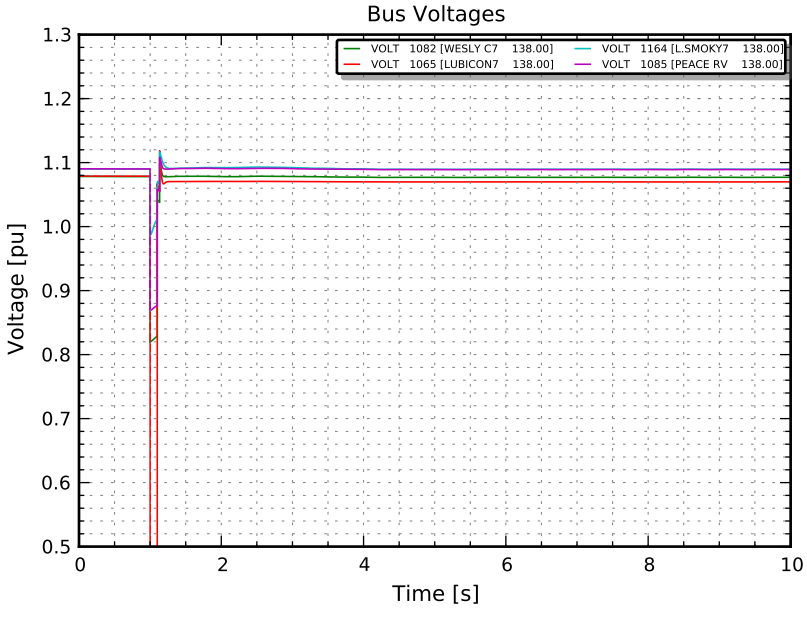


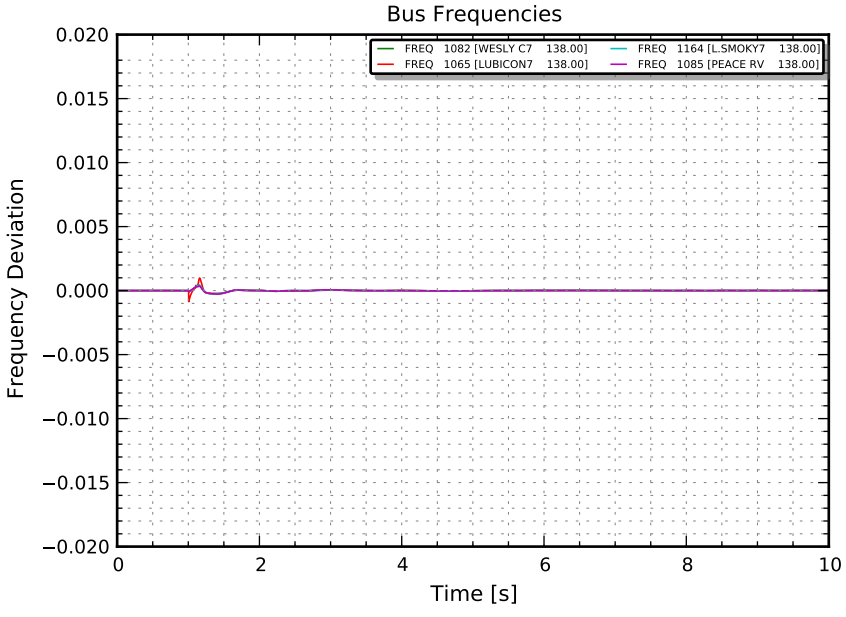


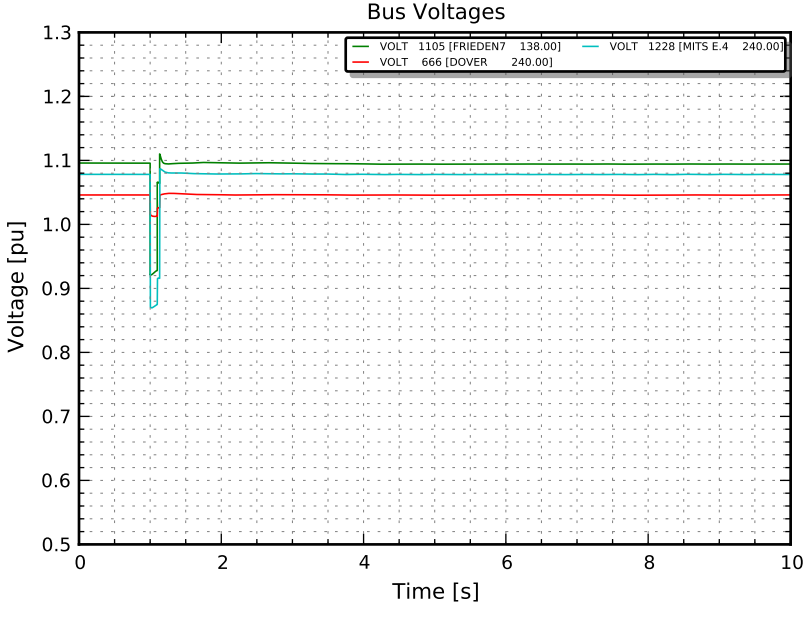
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 012 7L23 NIPISI to MITSUE_A.

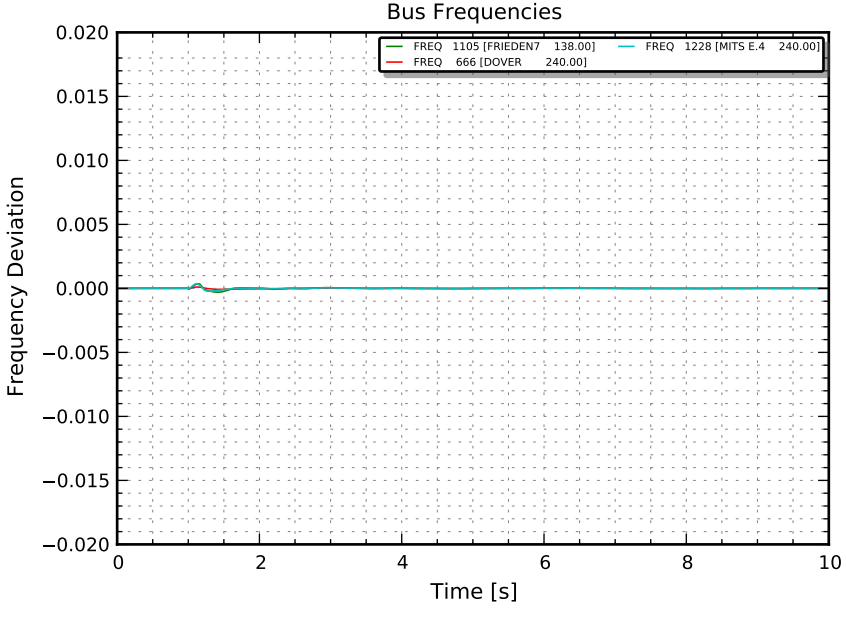
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 012 (A. 1)





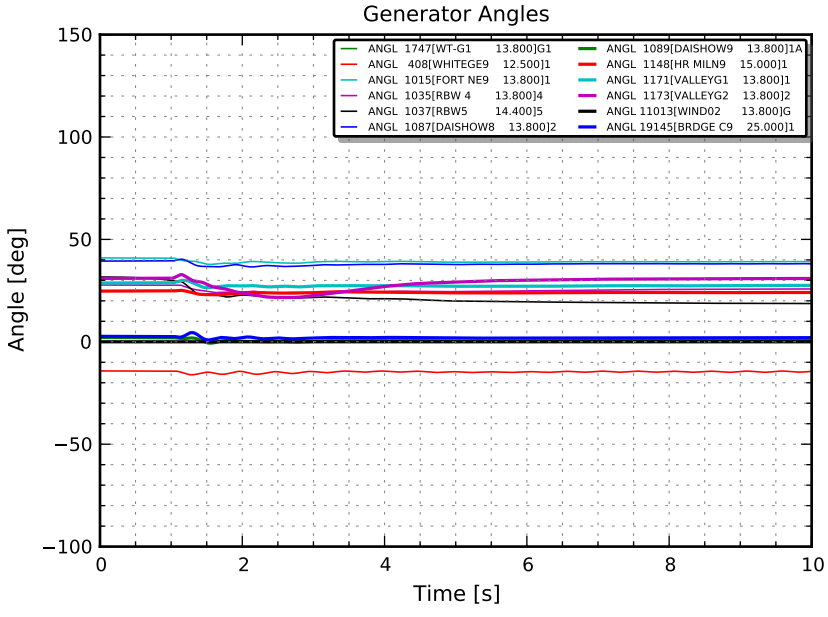


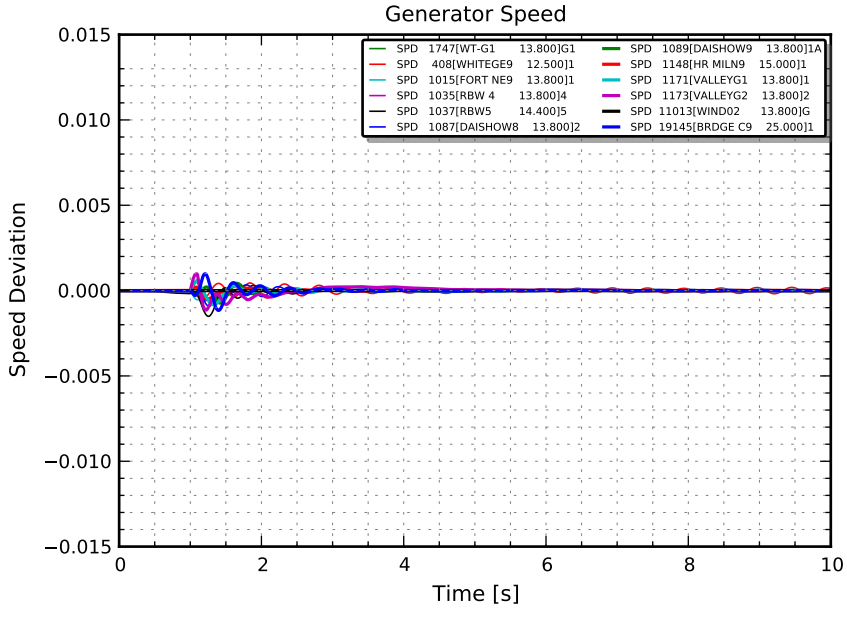


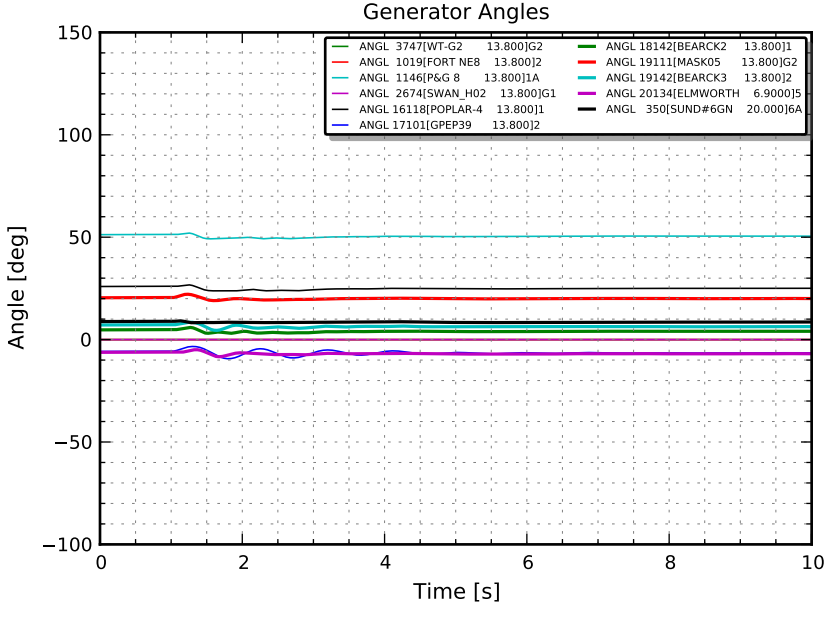
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 012 7L23 NIPISI to MITSUE_A.

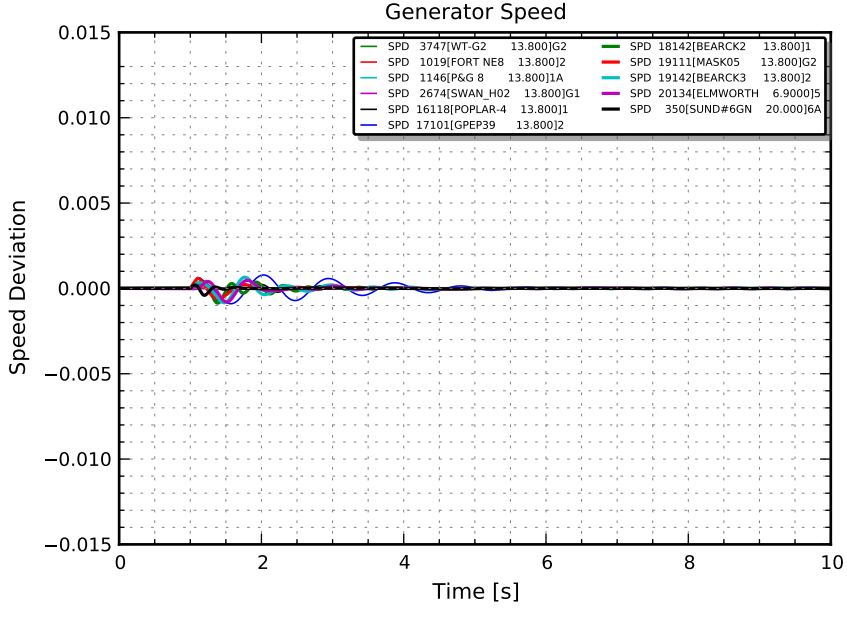
Study Area Generators

Appendix C2A
Figure: 012 (A. 2)





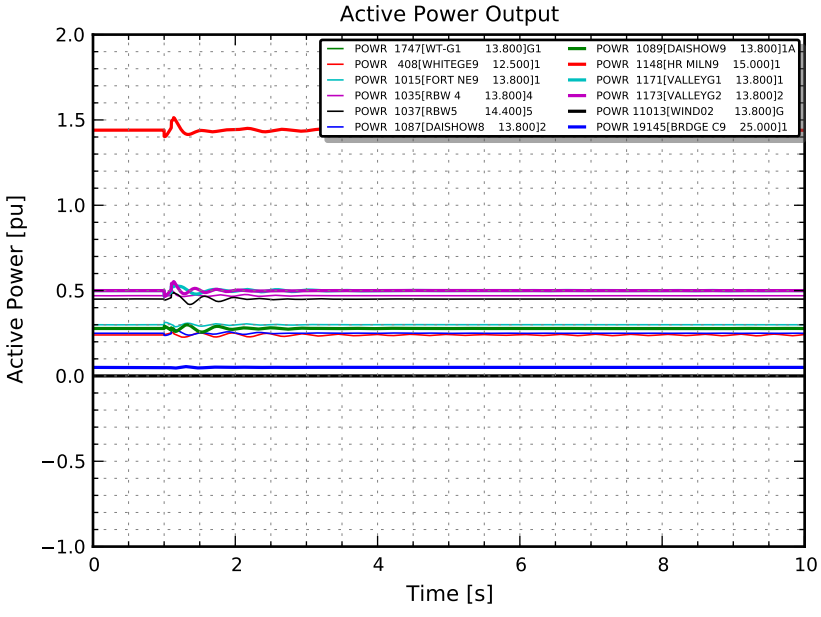


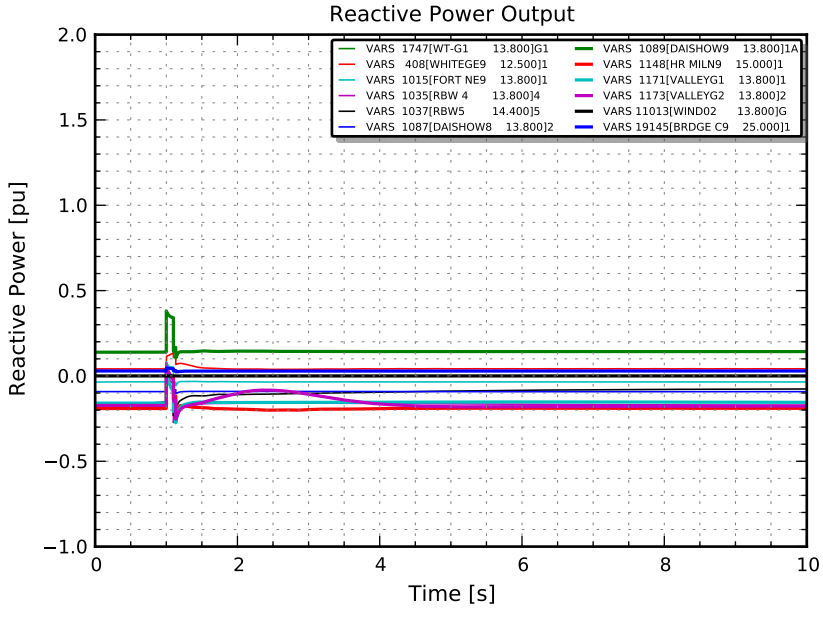


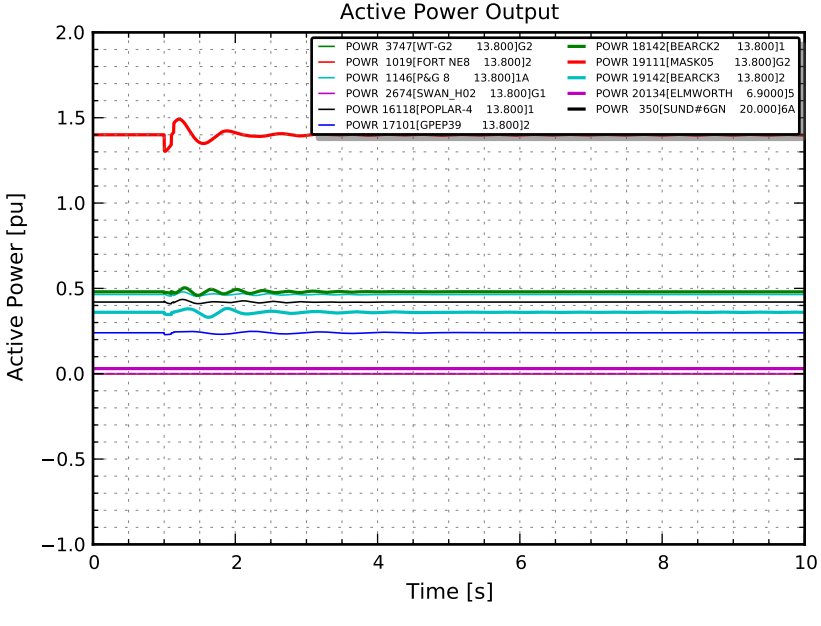
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 012 7L23 NIPISI to MITSUE_A.

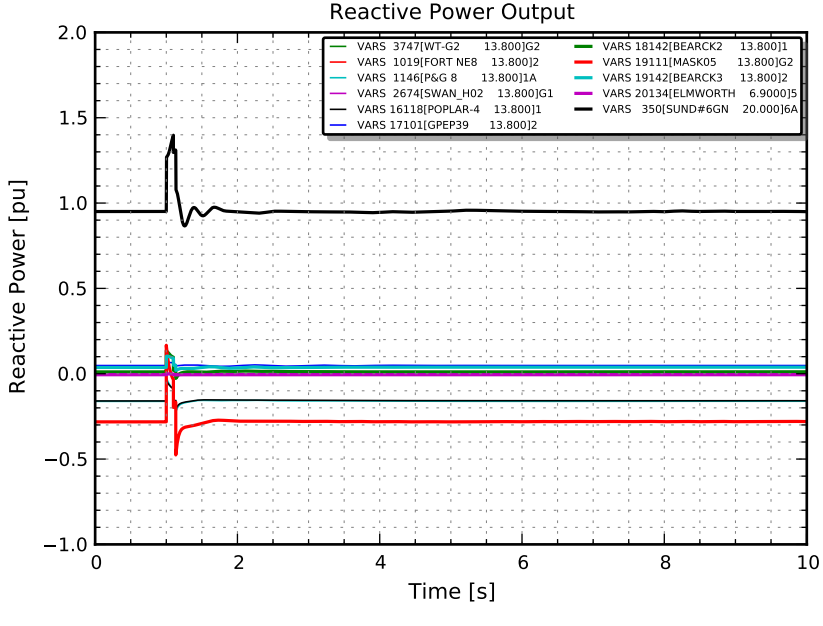
Study Area Generators

Appendix C2A
Figure: 012 (A. 3)





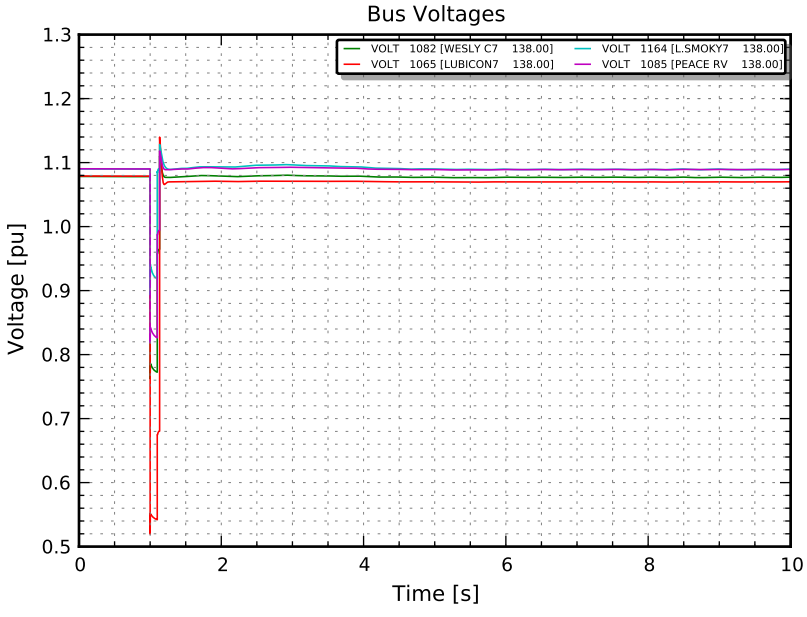


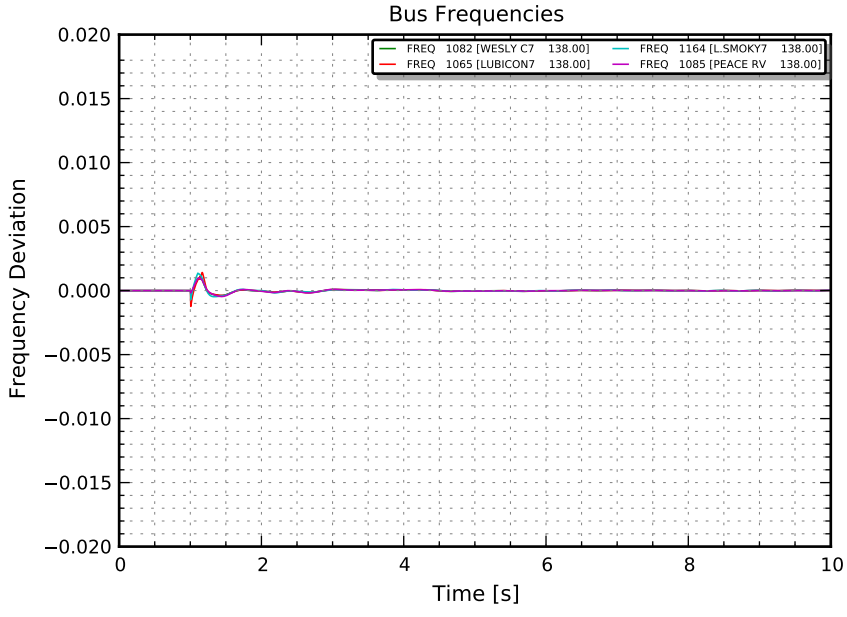


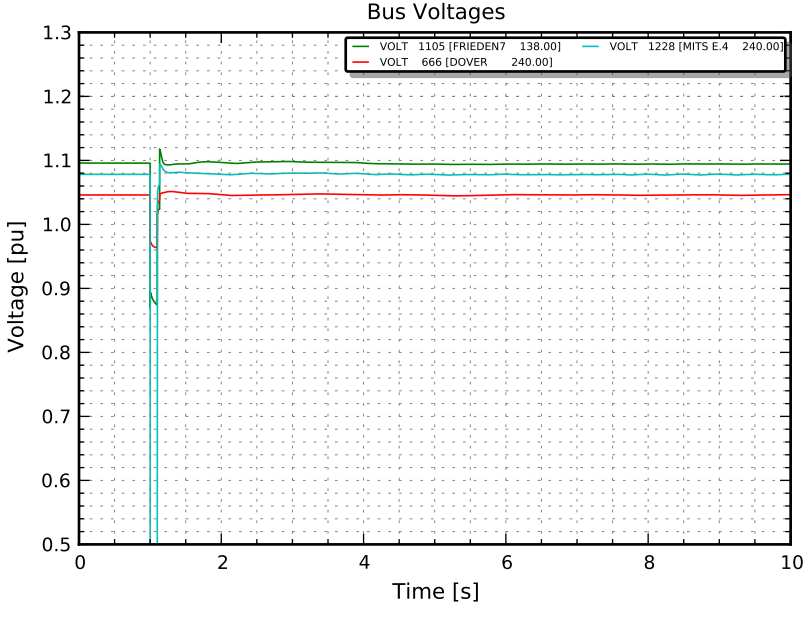
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 012 7L23 NIPISI to MITSUE_B.

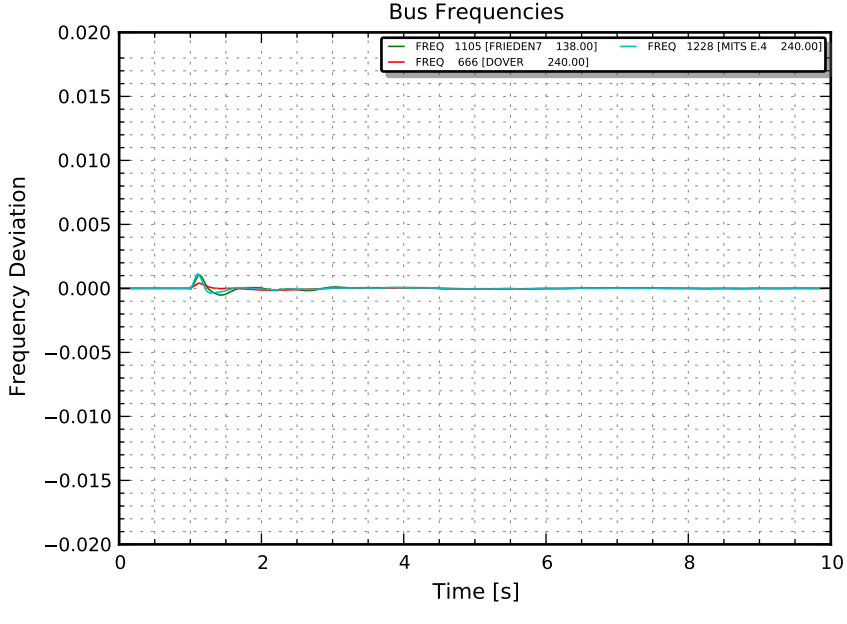
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 012 (B. 1)





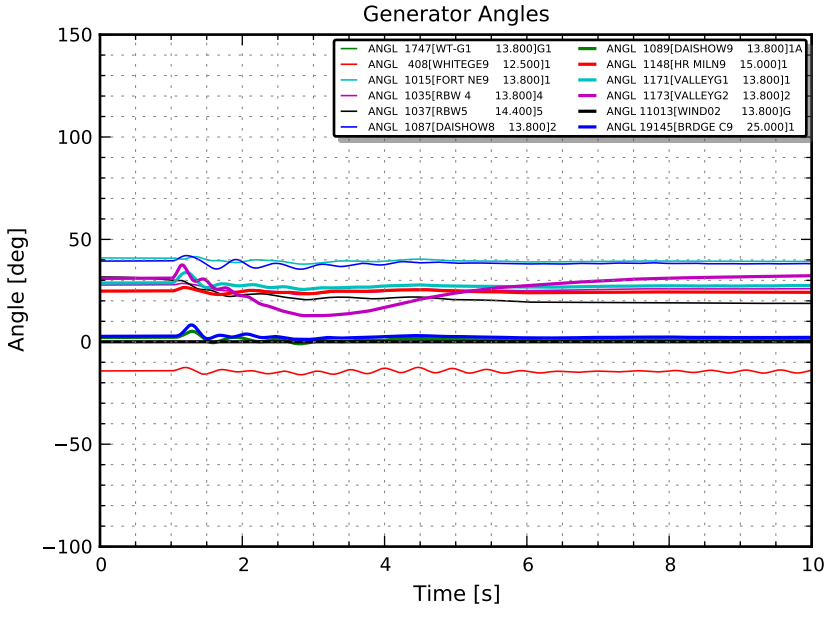


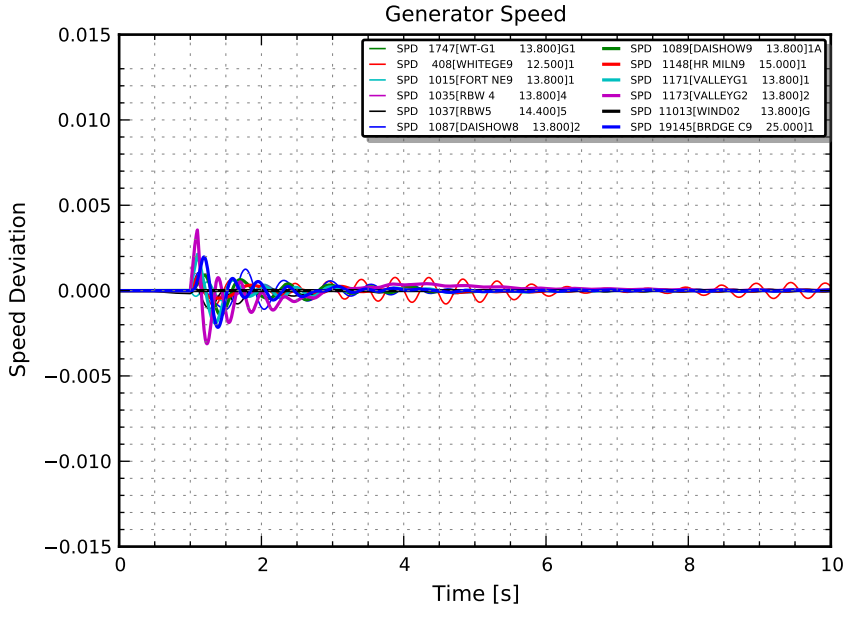


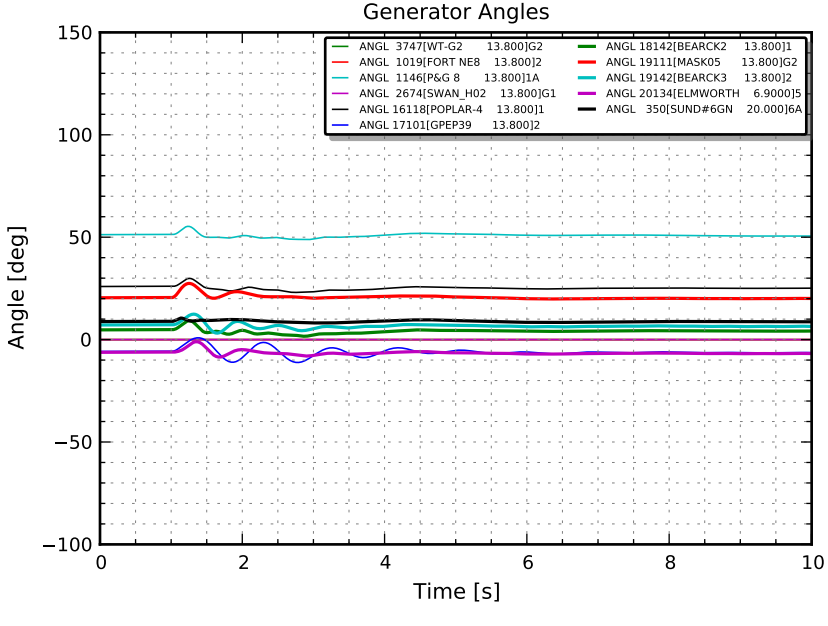
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 012 7L23 NIPISI to MITSUE_B.

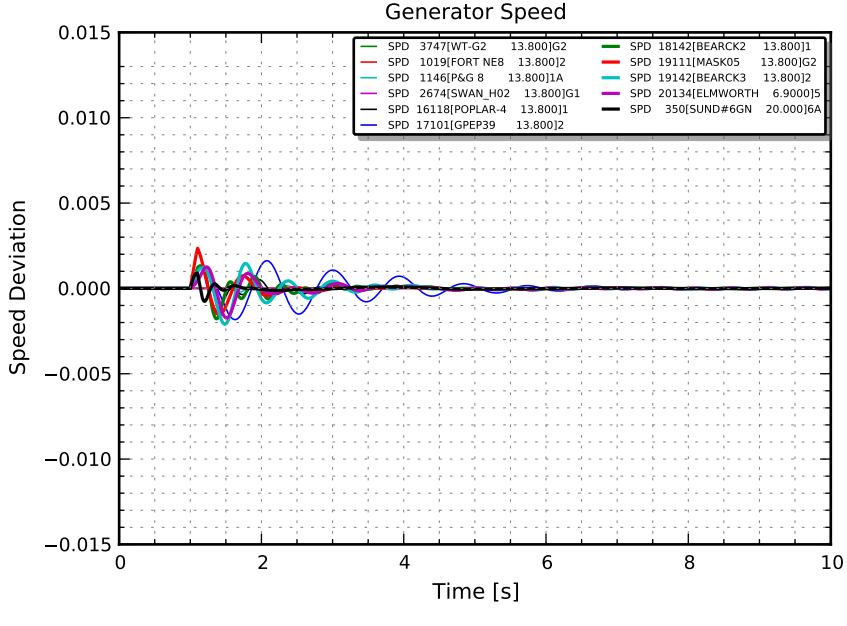
Study Area Generators

Appendix C2A
Figure: 012 (B. 2)





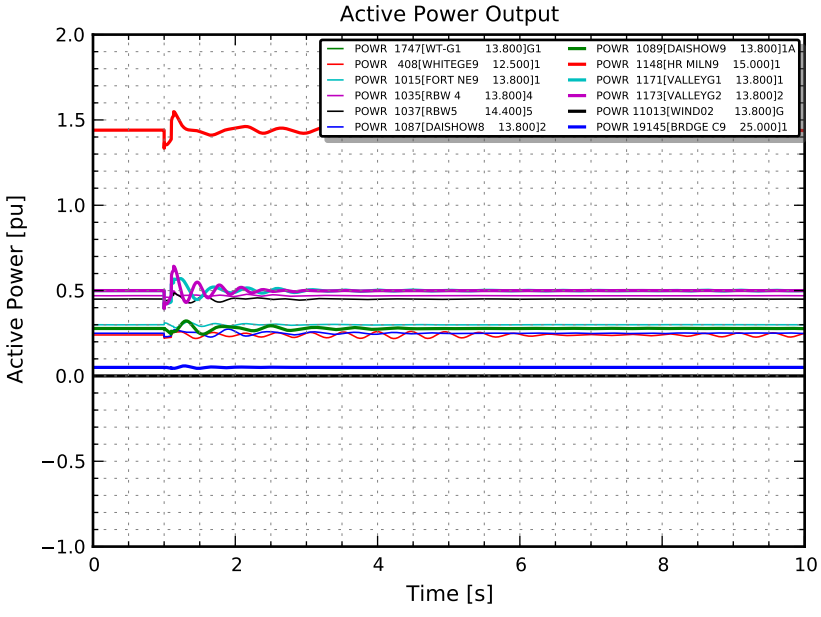


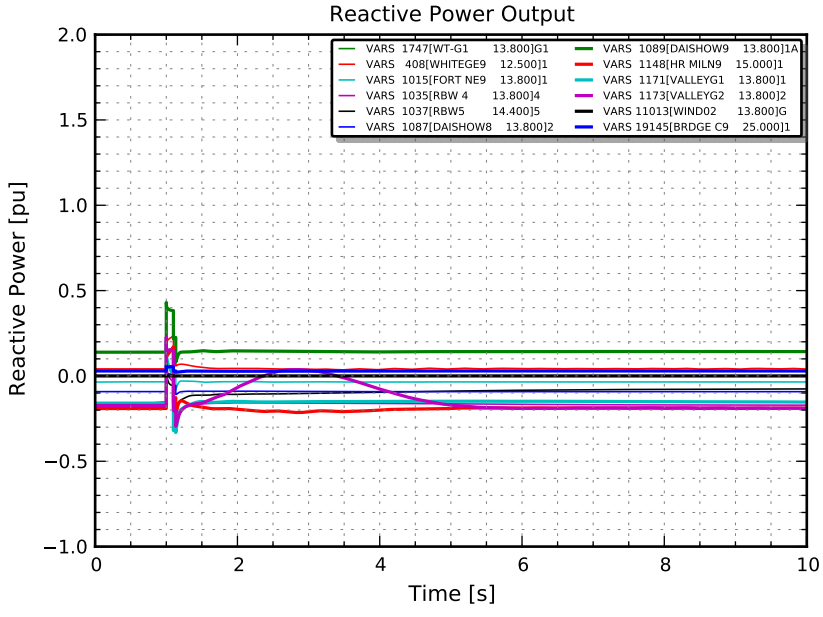


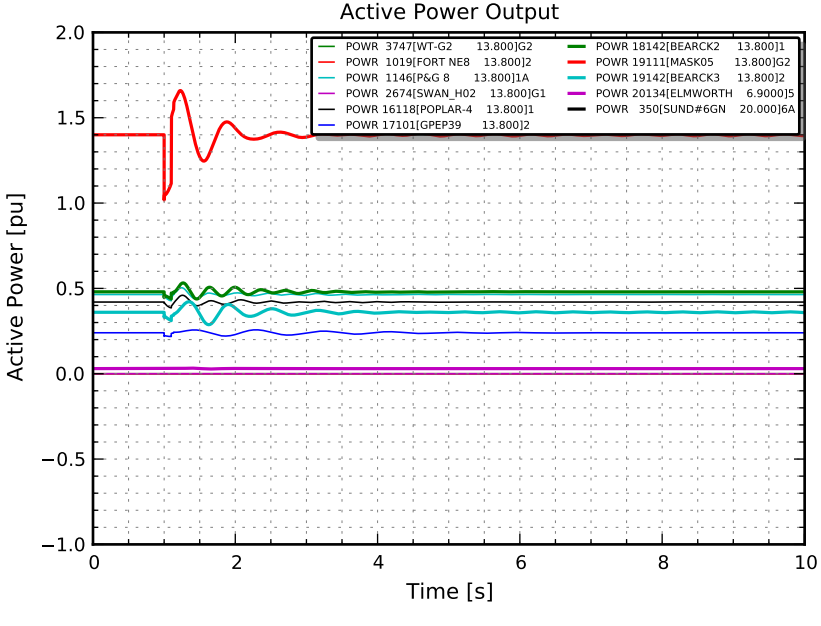
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 012 7L23 NIPISI to MITSUE_B.

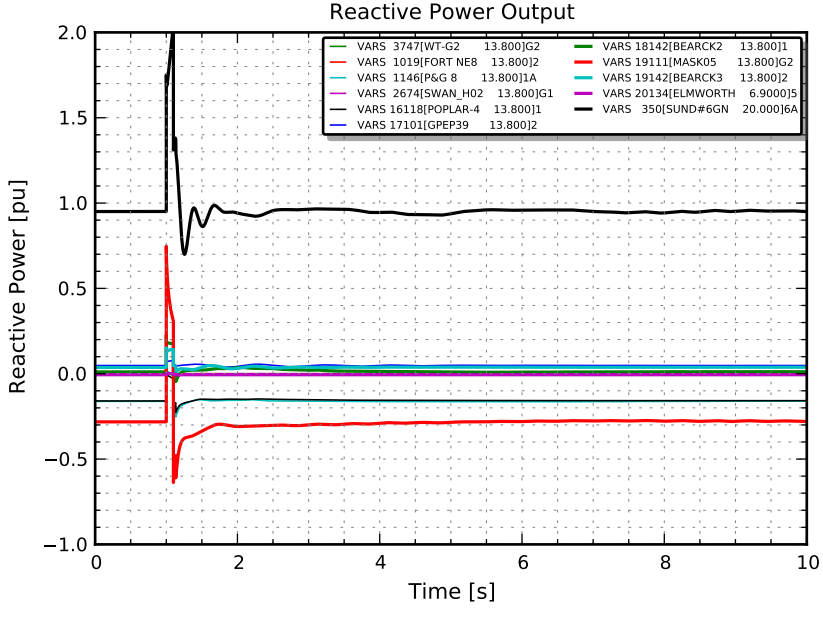
Study Area Generators

Appendix C2A
Figure: 012 (B. 3)





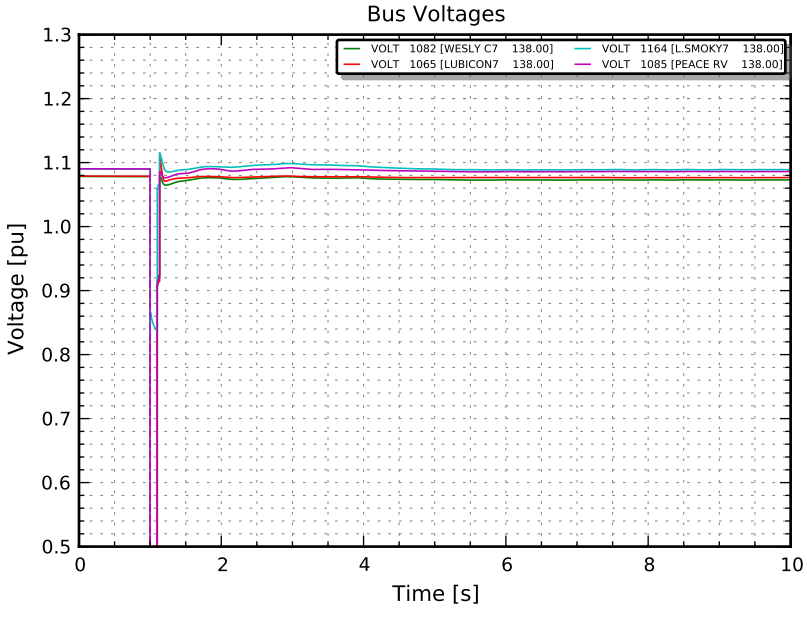


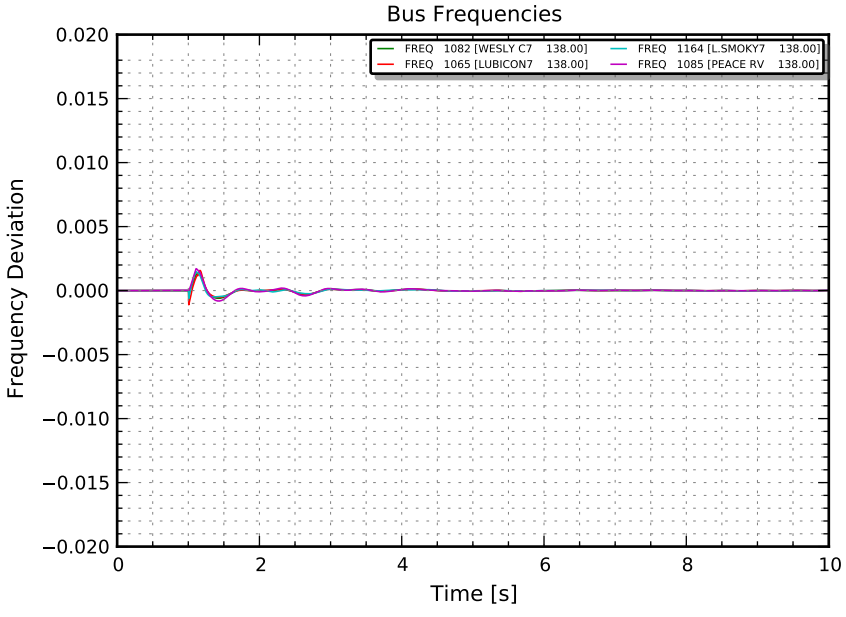


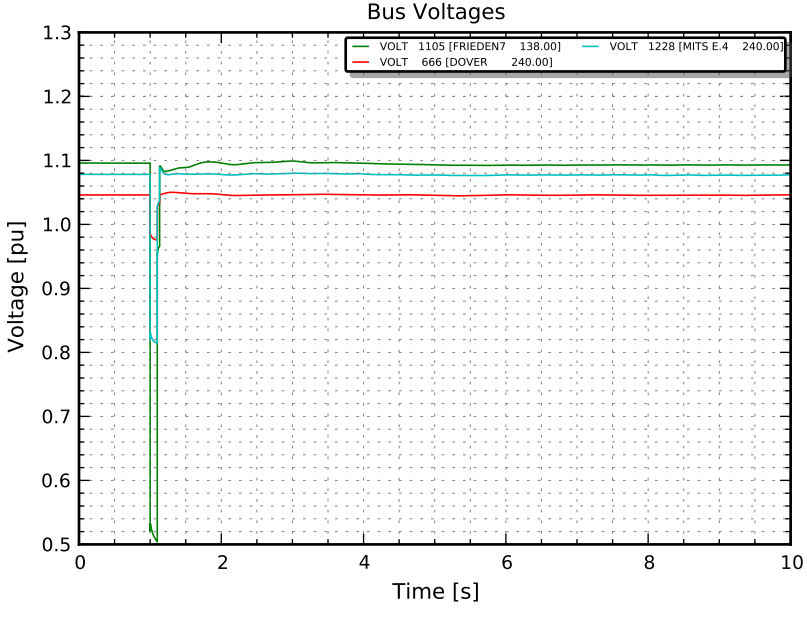
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 013 7L131 WESLEYCREEK to Meikle_A.

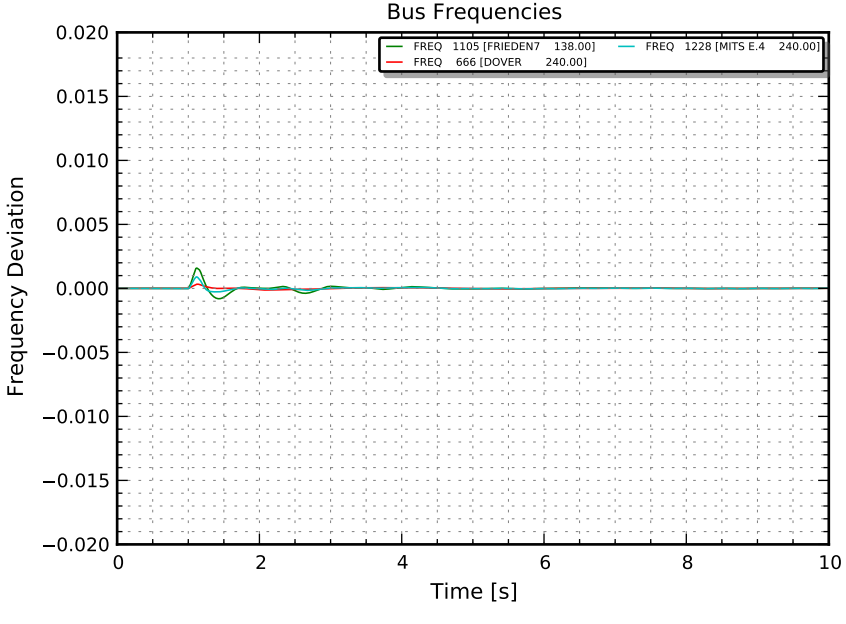
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 013 (A. 1)





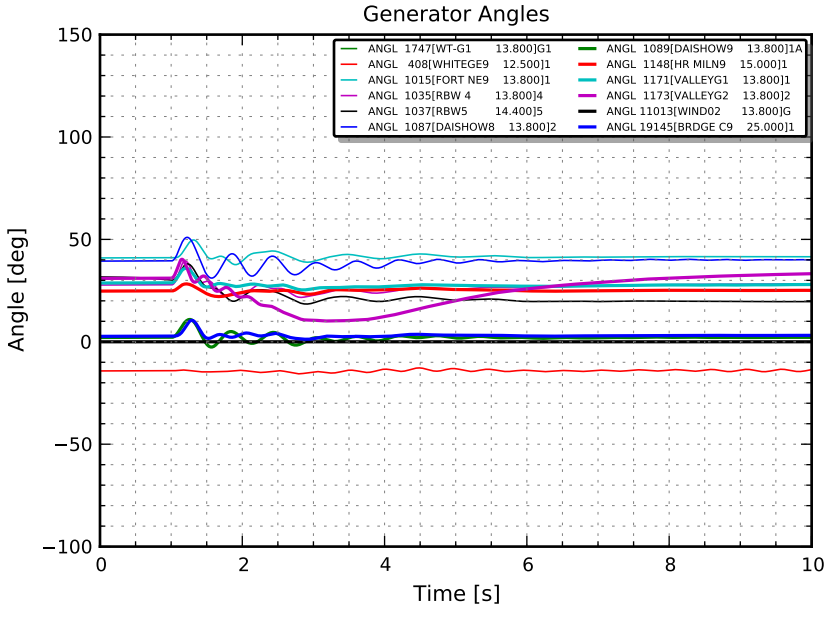


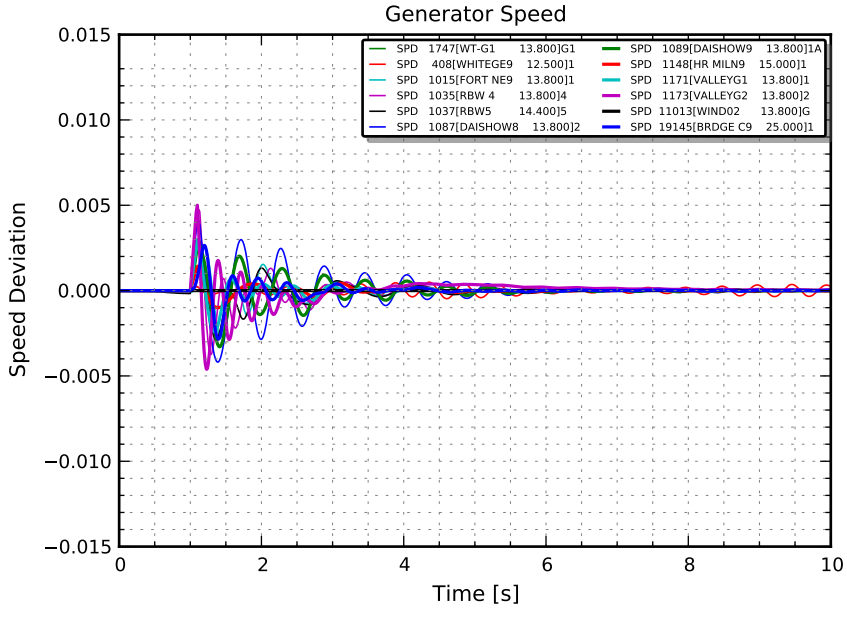


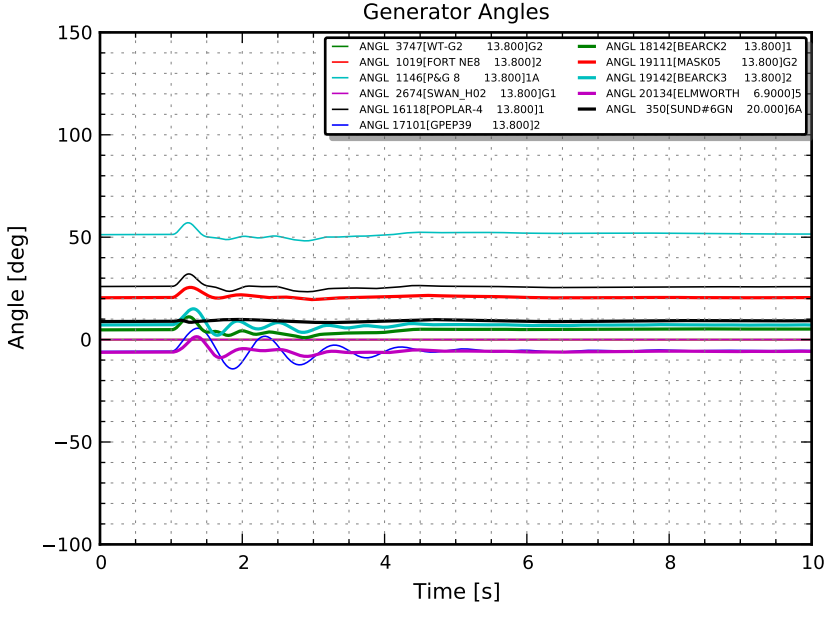
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 013 7L131 WESLEYCREEK to Meikle_A.

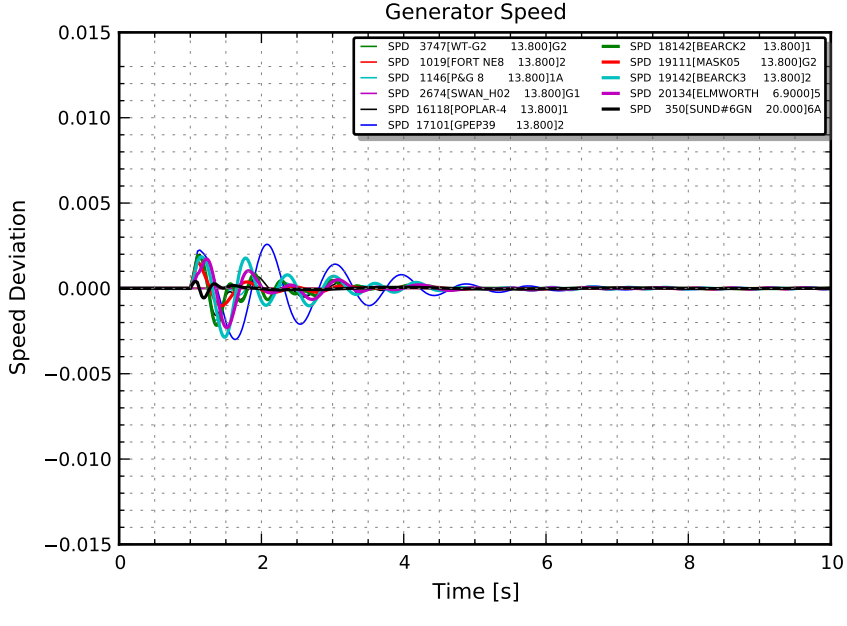
Study Area Generators

Appendix C2A
Figure: 013 (A. 2)





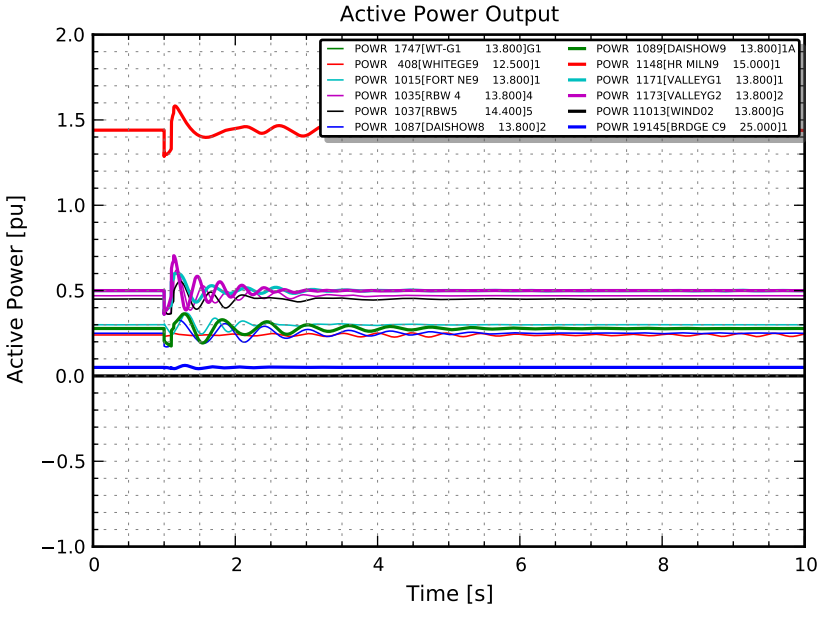


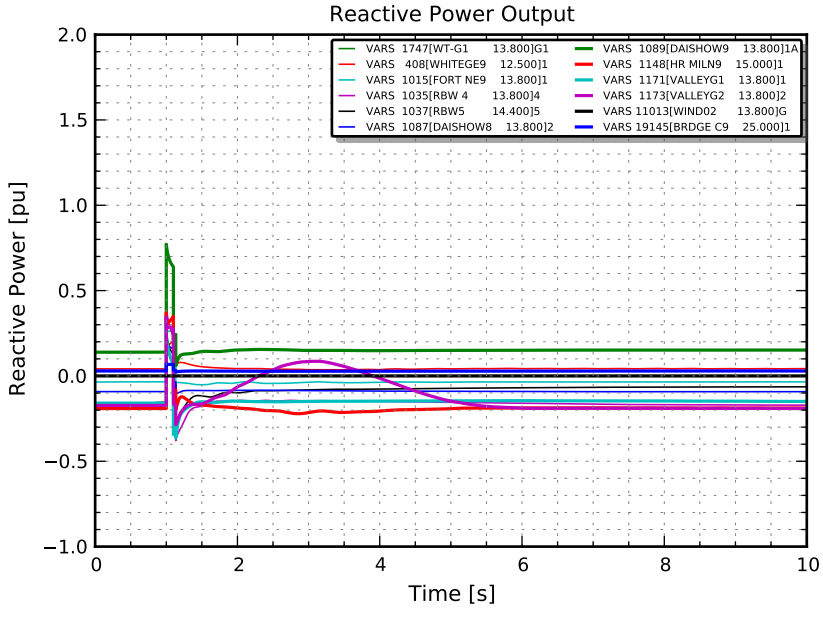


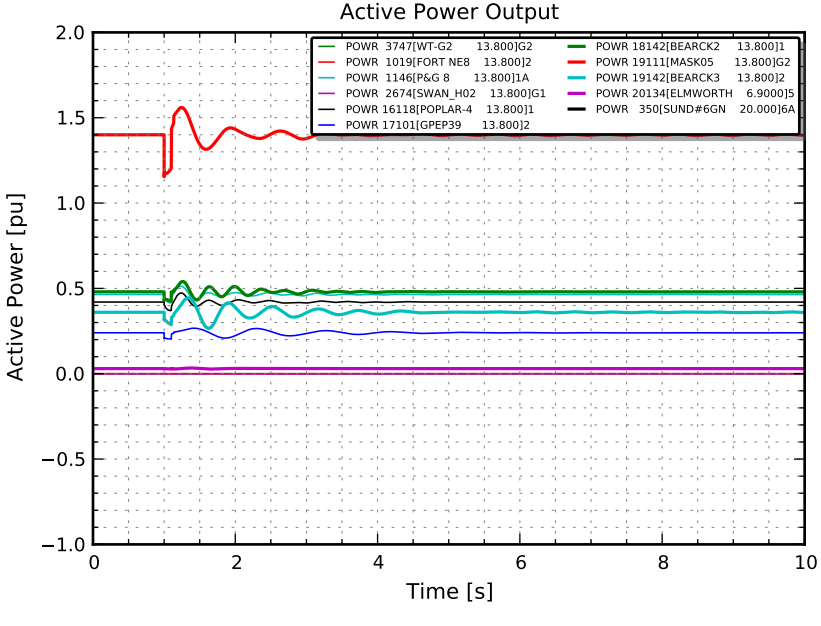
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 013 7L131 WESLEYCREEK to Meikle_A.

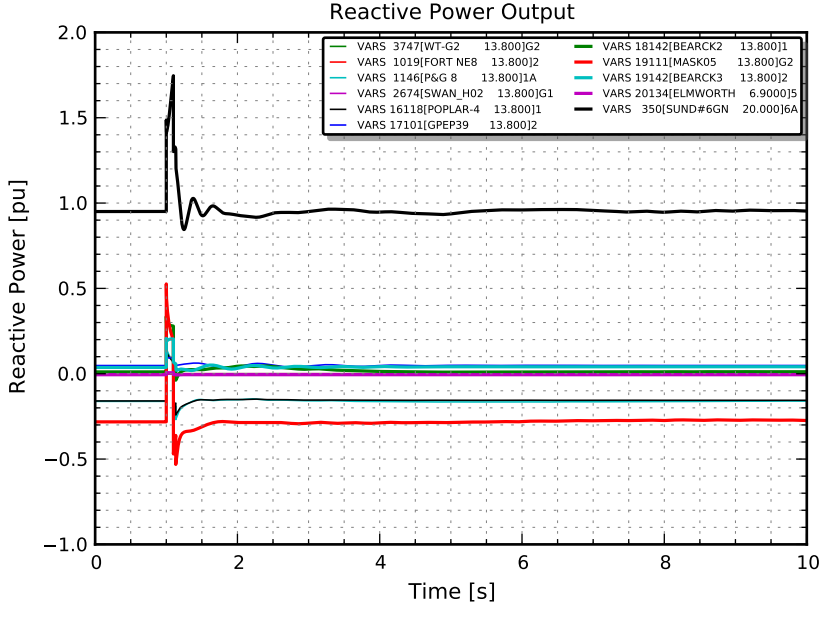
Study Area Generators

Appendix C2A
Figure: 013 (A. 3)





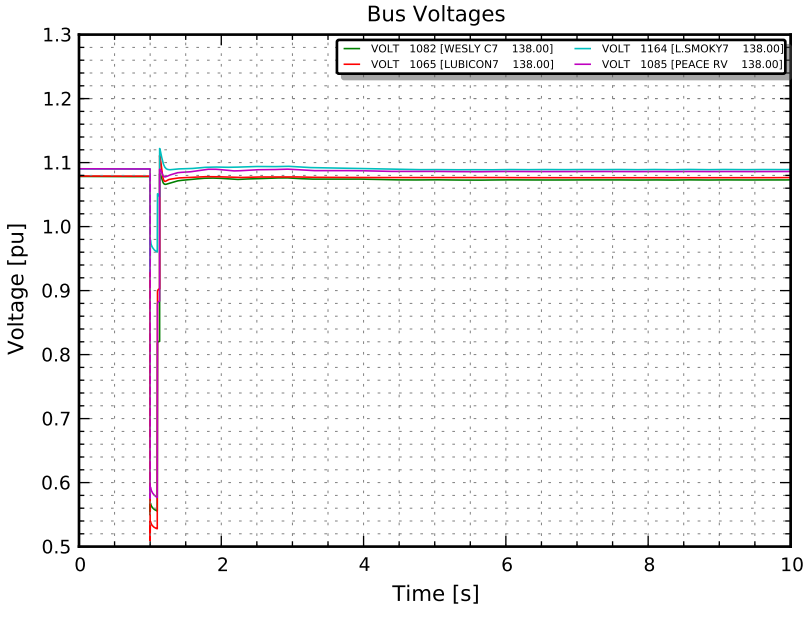


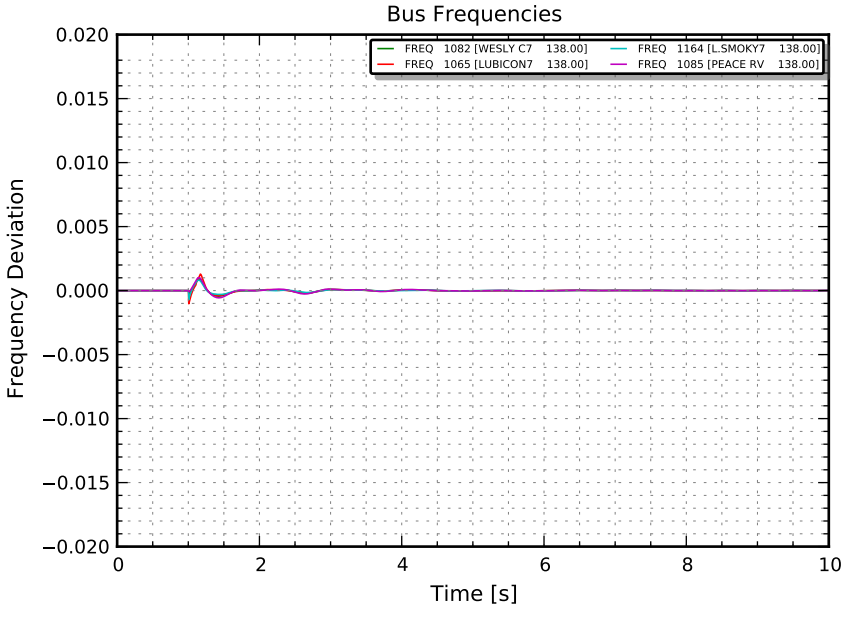


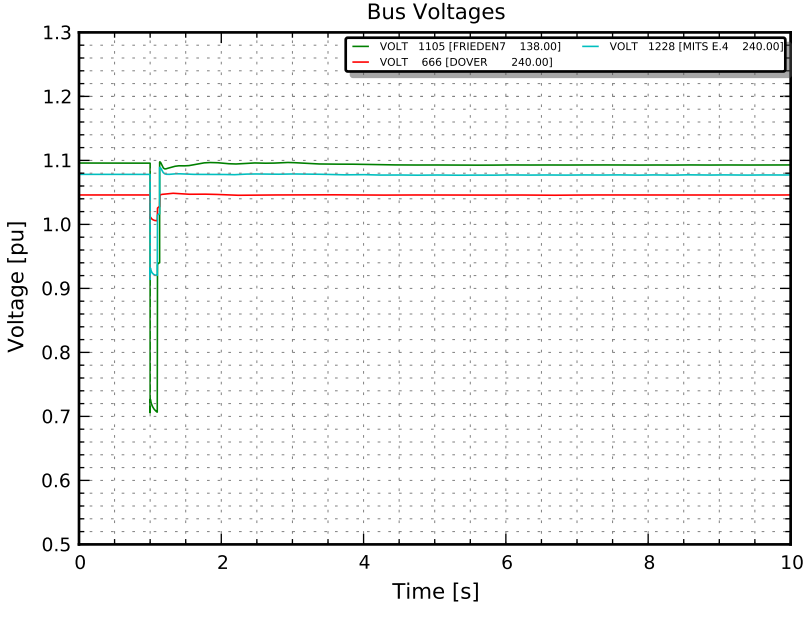
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 013 7L131 WESLEYCREEK to Meikle_B.

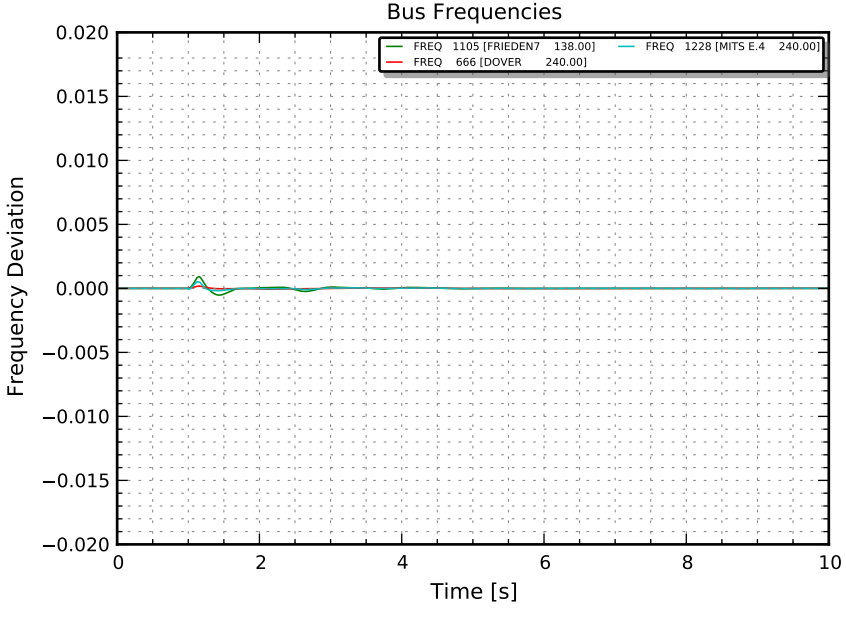
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 013 (B. 1)





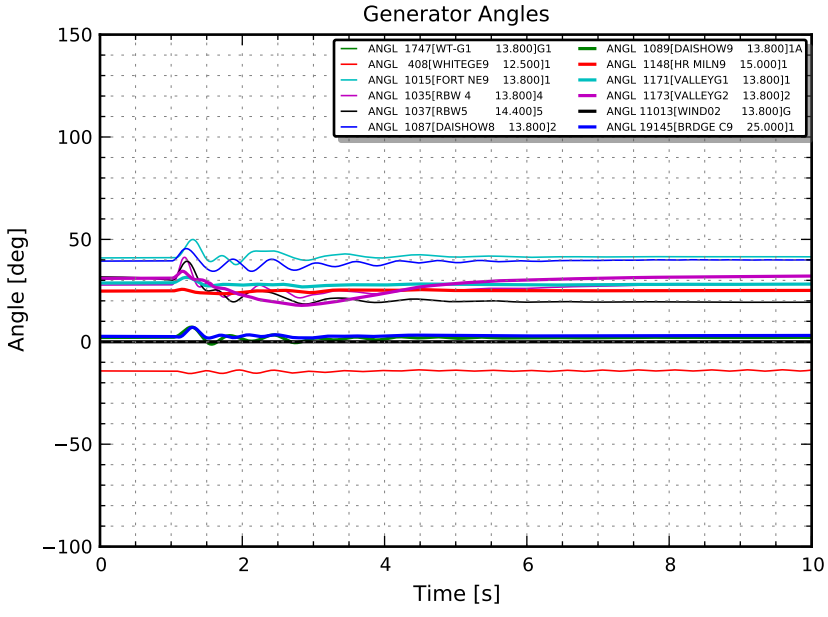


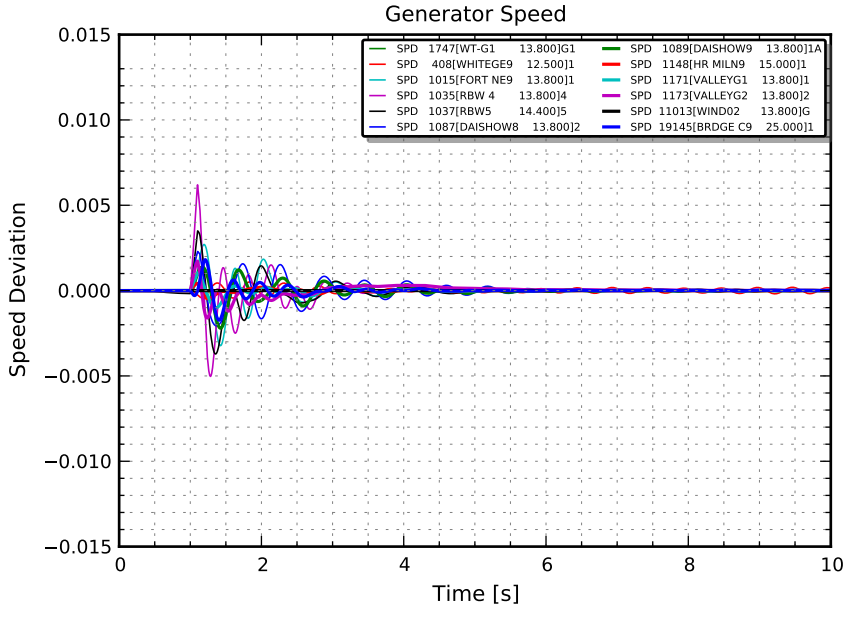


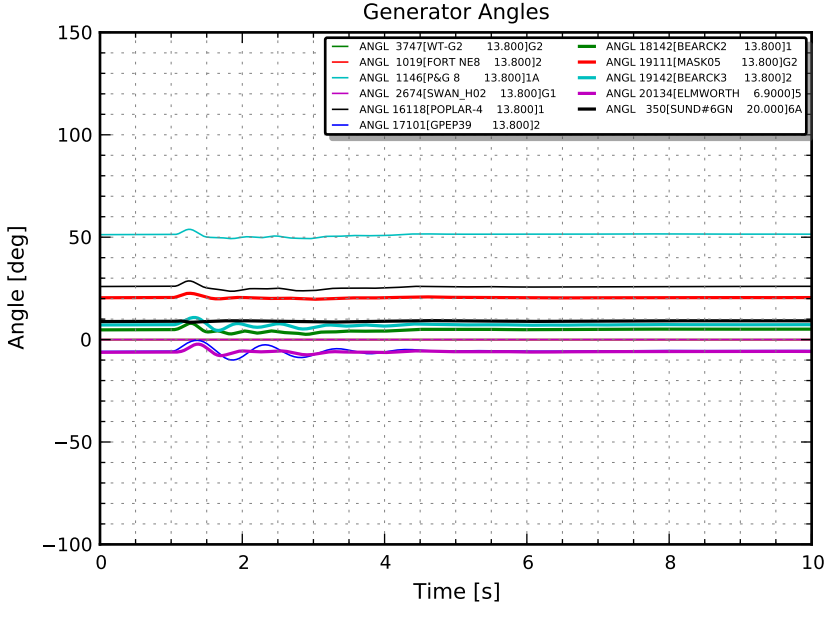
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 013 7L131 WESLEYCREEK to Meikle_B.

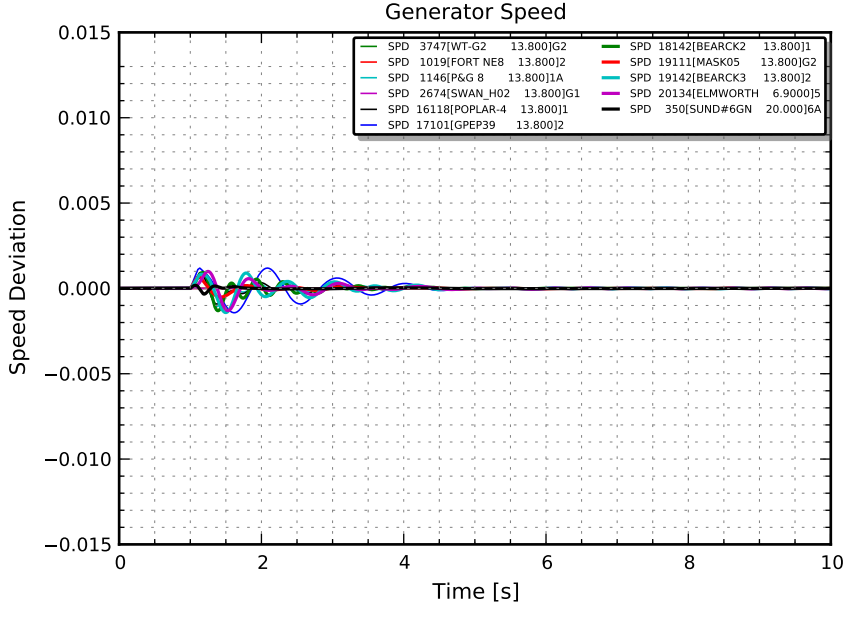
Study Area Generators

Appendix C2A
Figure: 013 (B. 2)





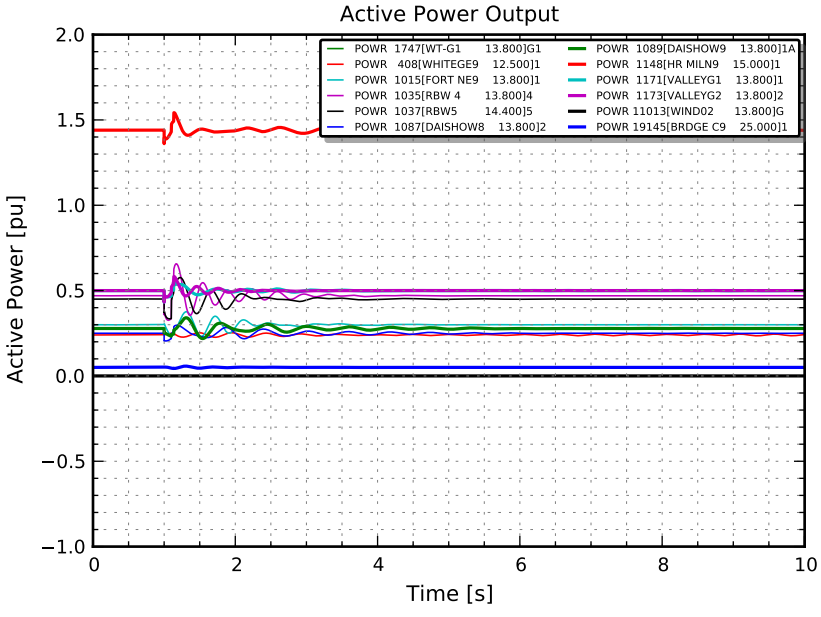


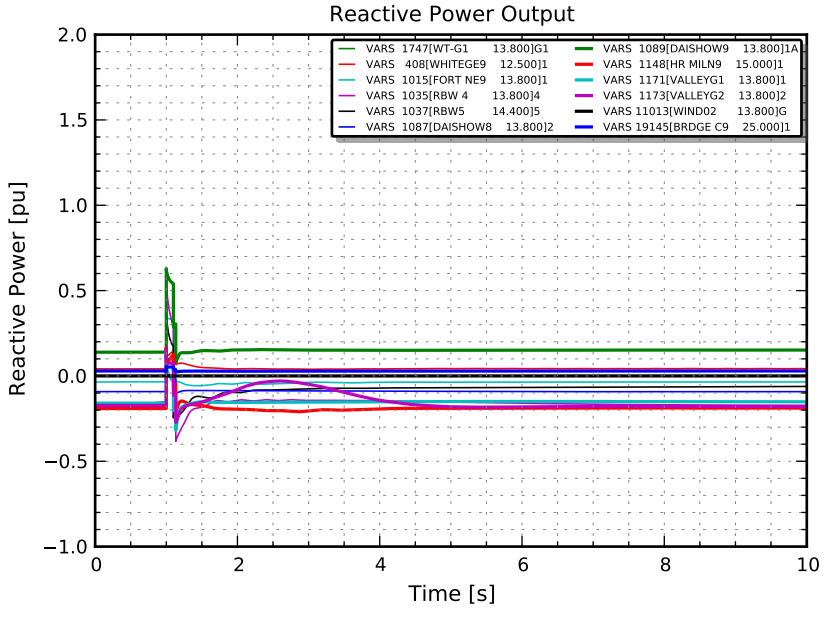


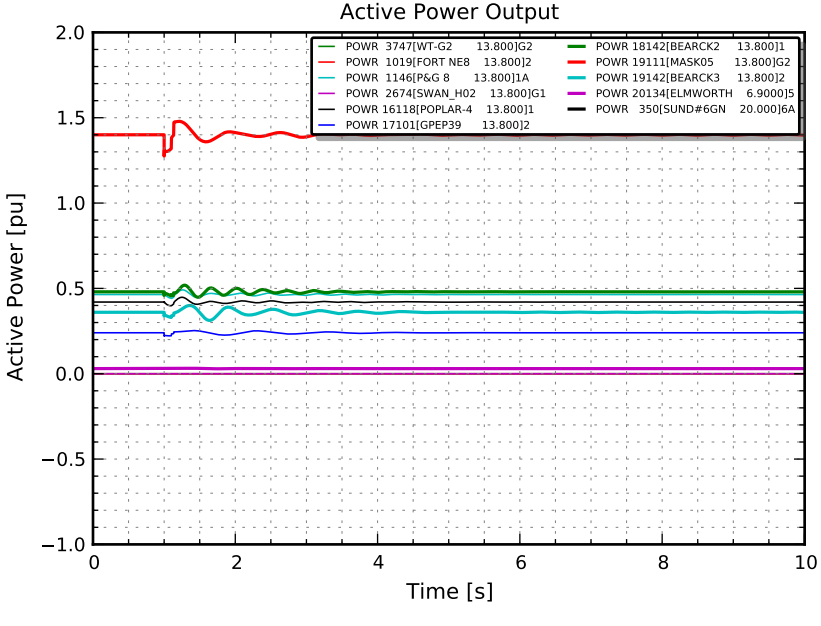
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 013 7L131 WESLEYCREEK to Meikle_B.

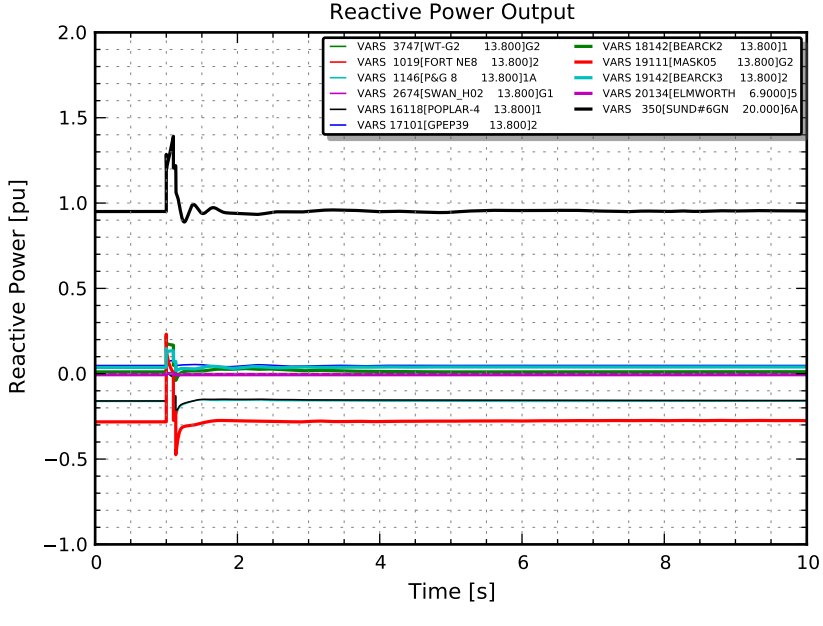
Study Area Generators

Appendix C2A
Figure: 013 (B. 3)





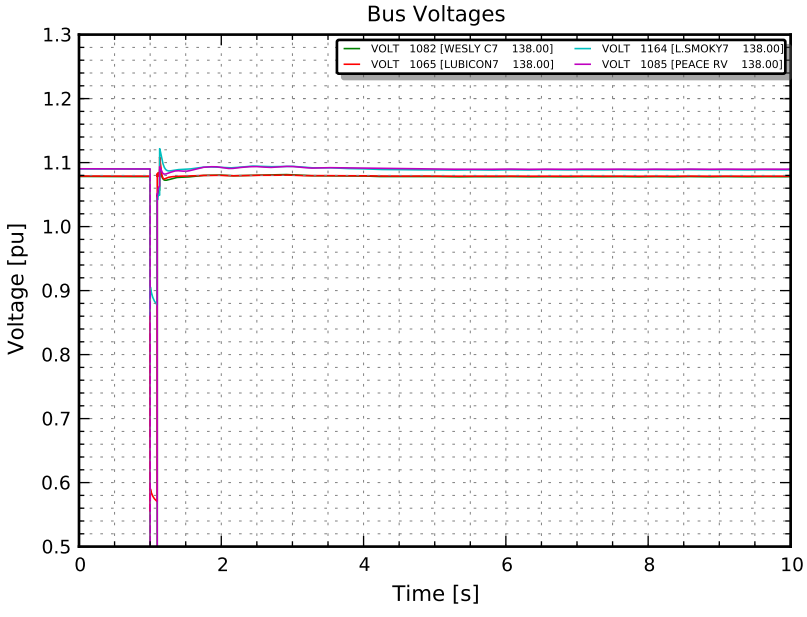


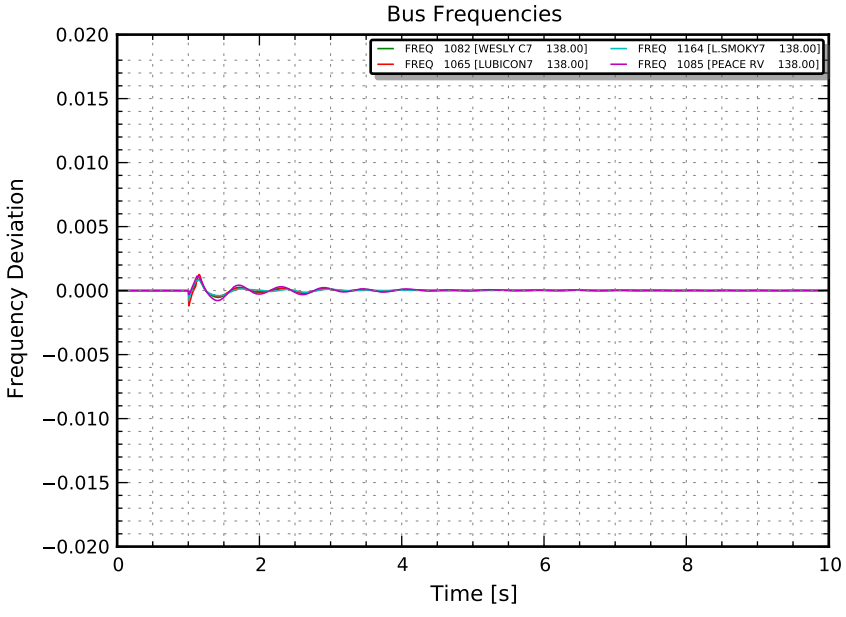


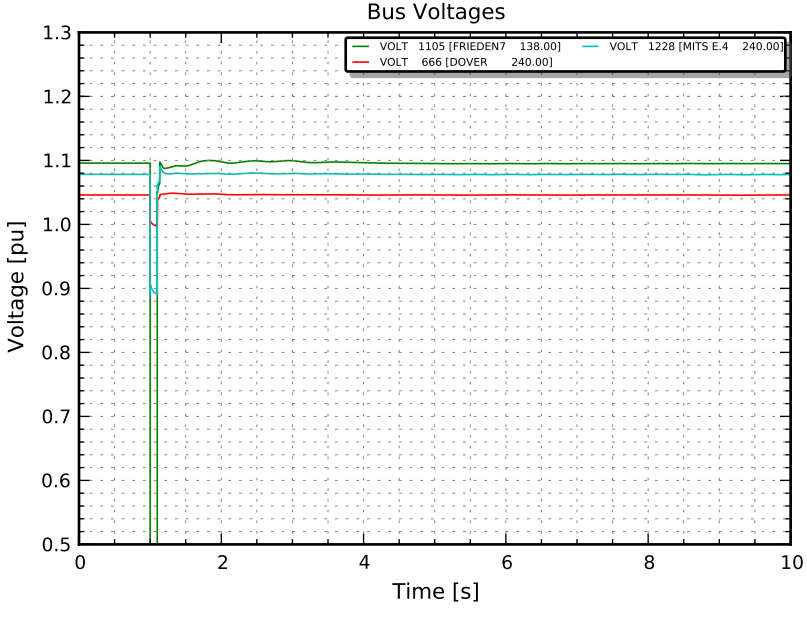
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_A.

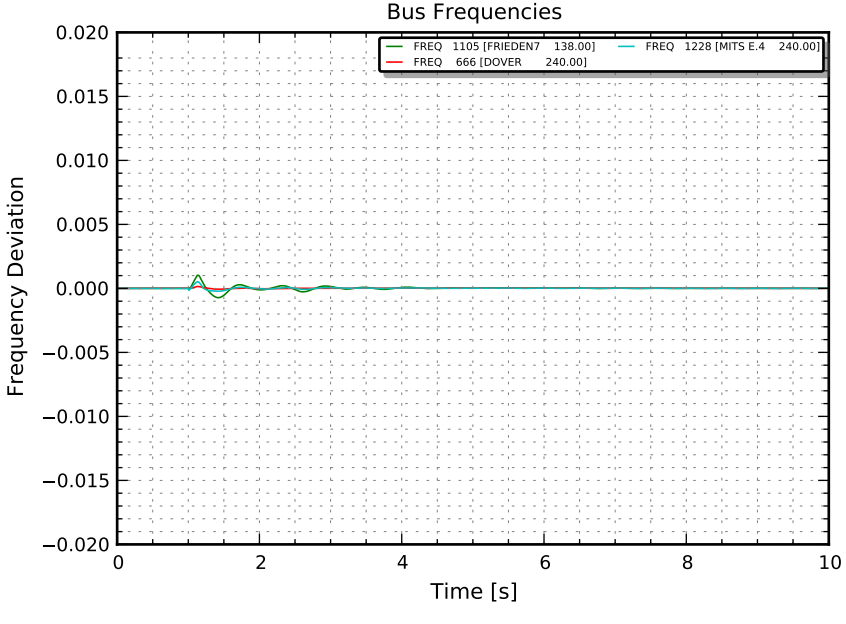
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 014 (A. 1)





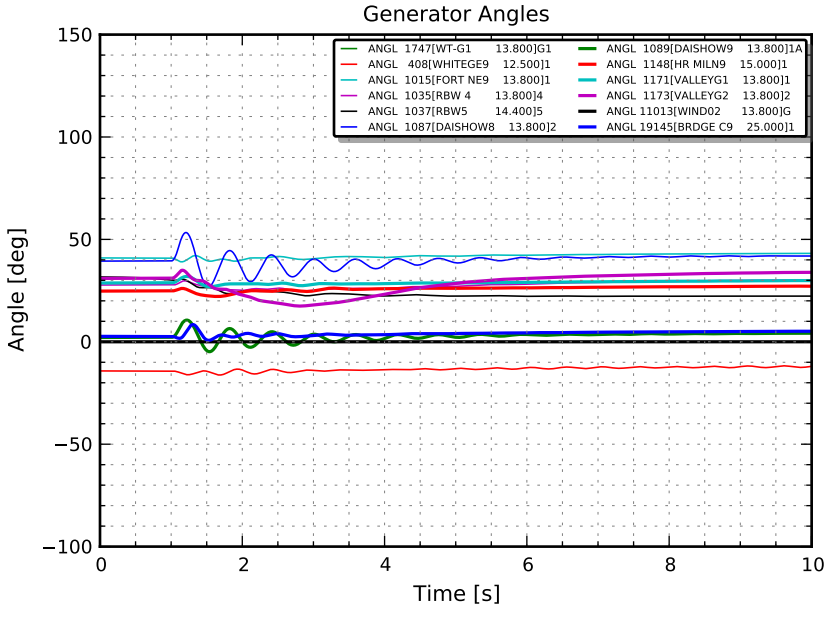


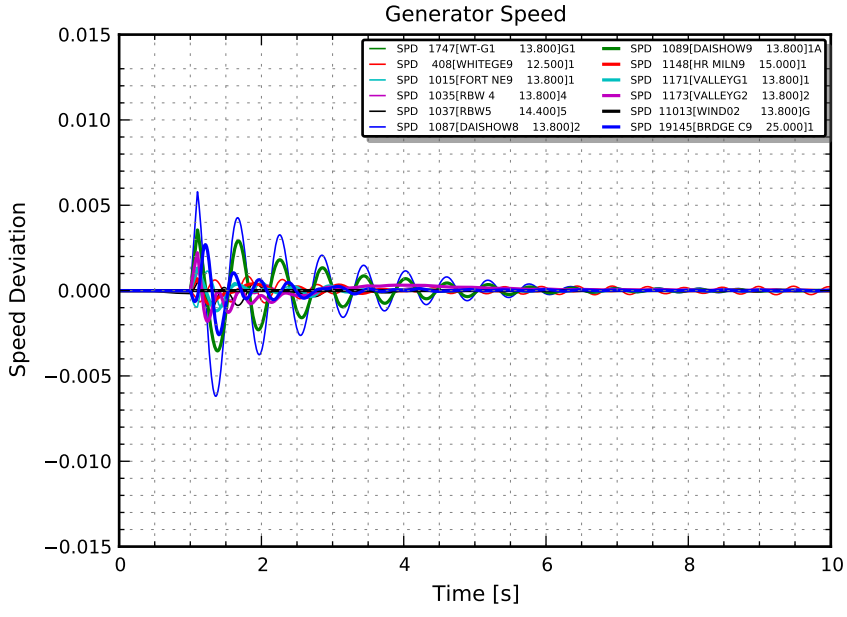


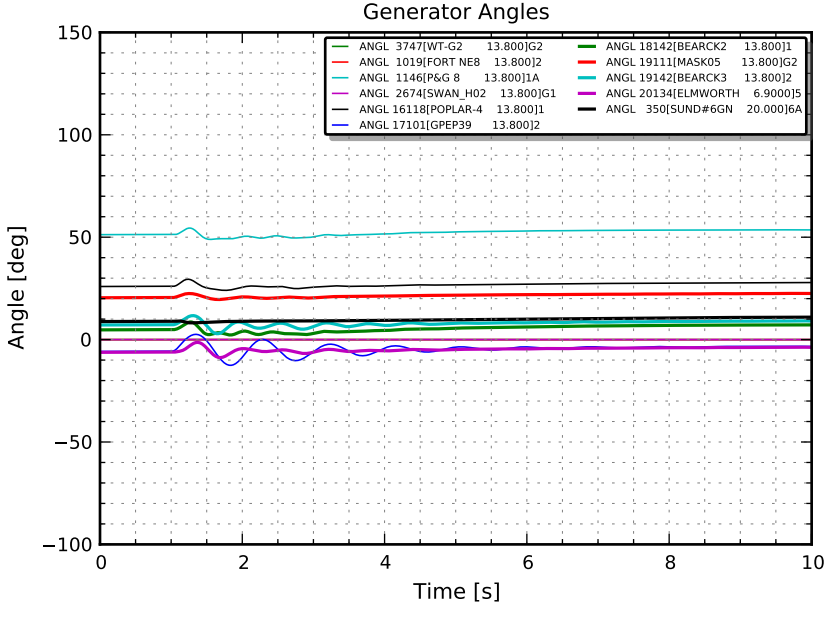
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_A.

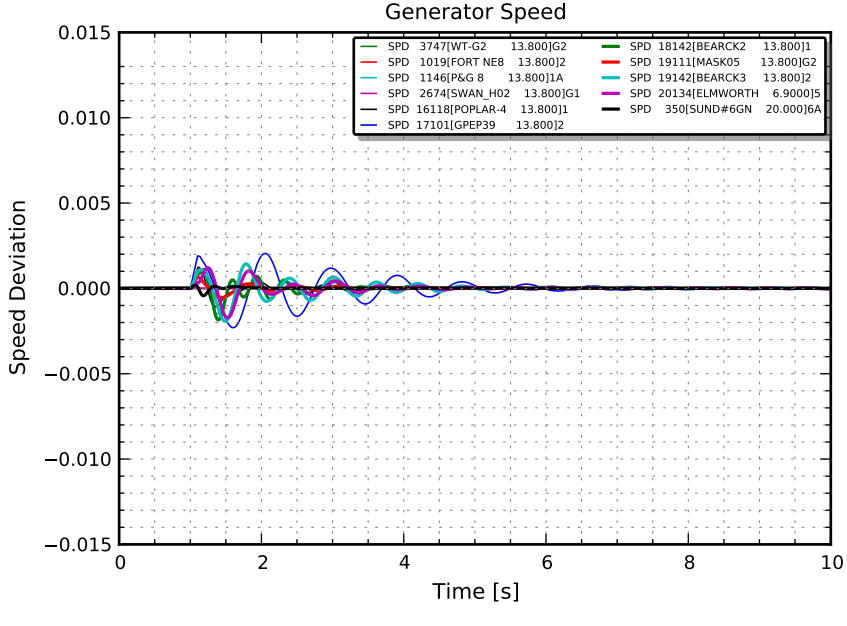
Study Area Generators

Appendix C2A
Figure: 014 (A. 2)





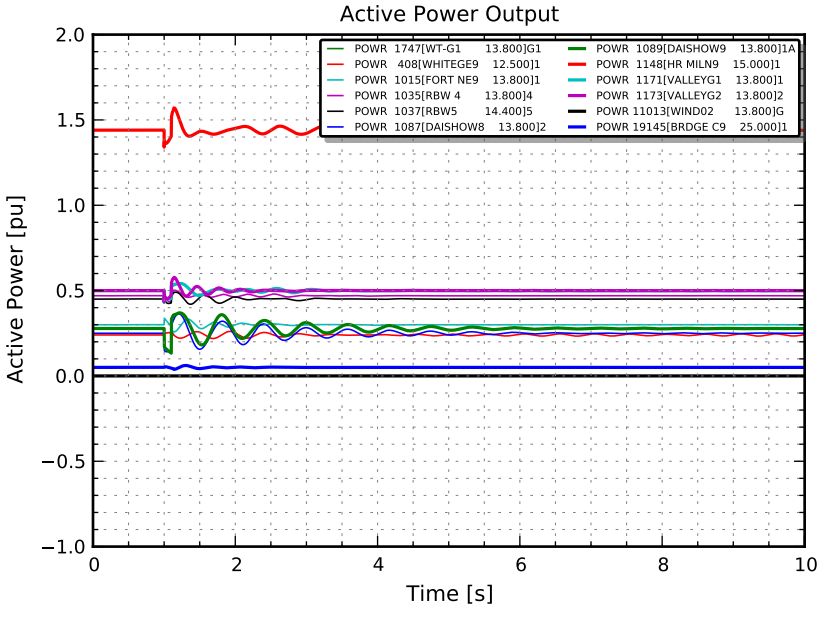


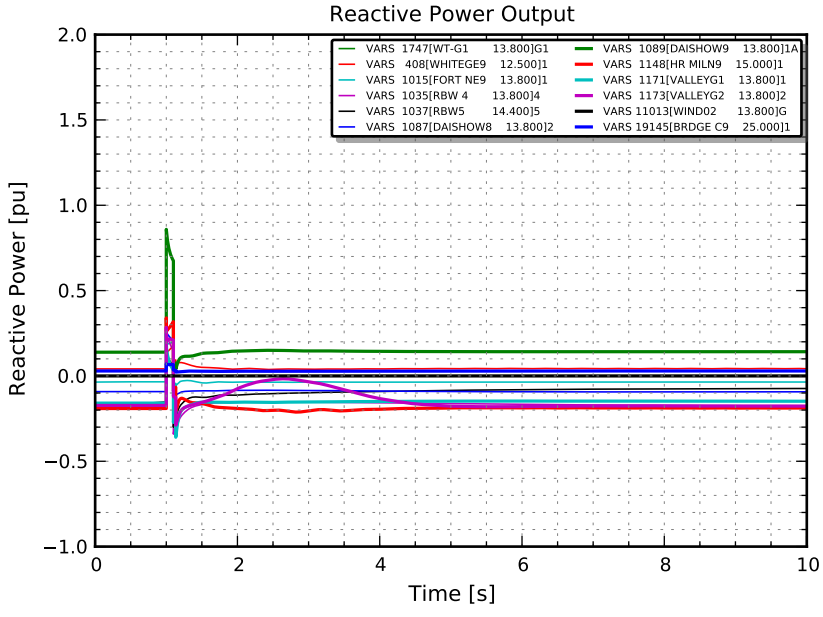


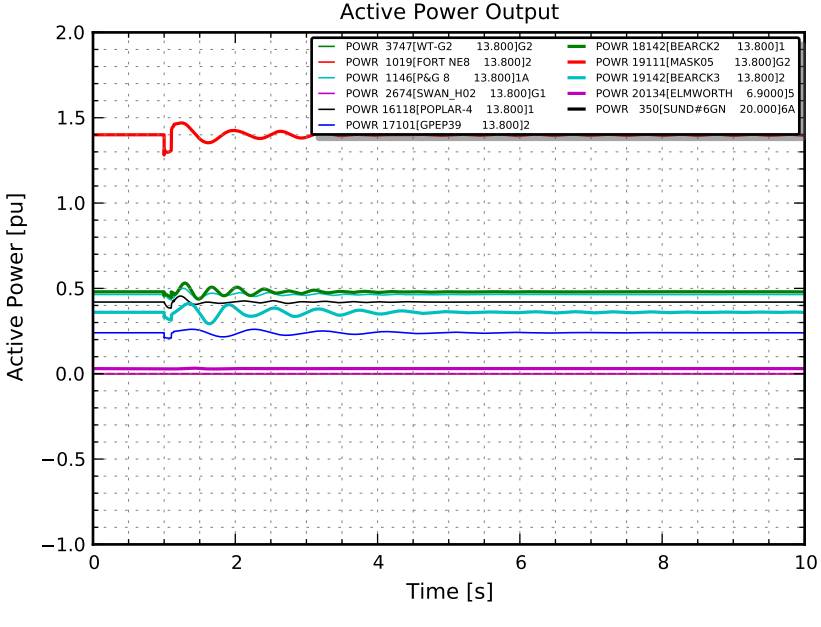
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_A.

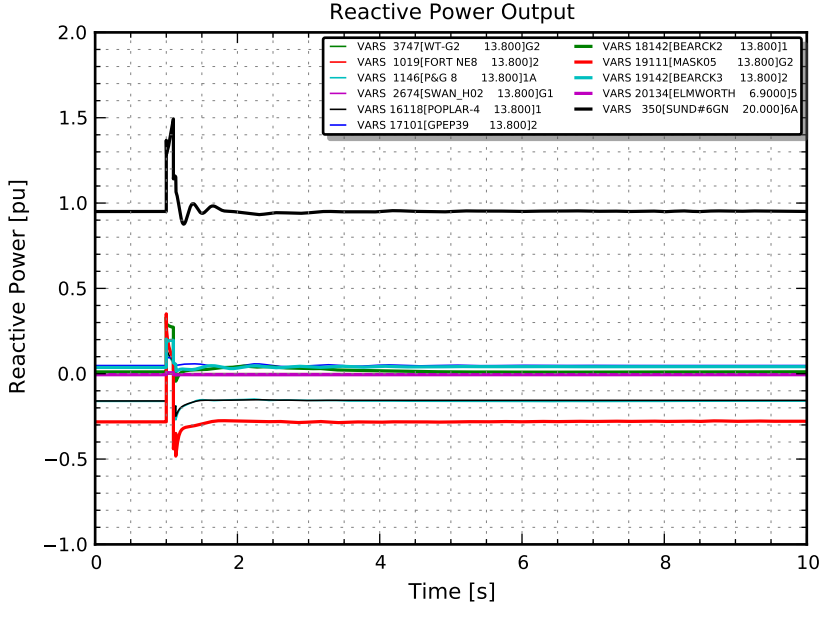
Study Area Generators

Appendix C2A
Figure: 014 (A. 3)





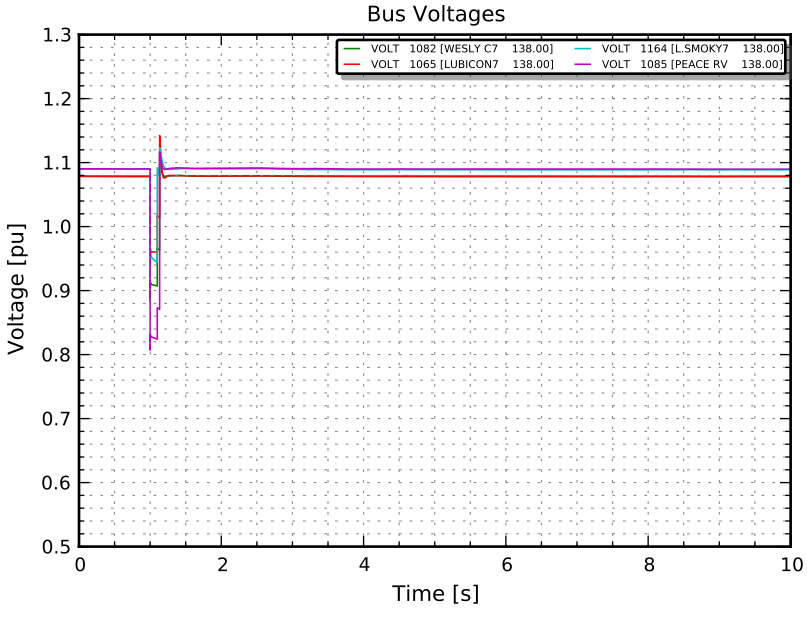


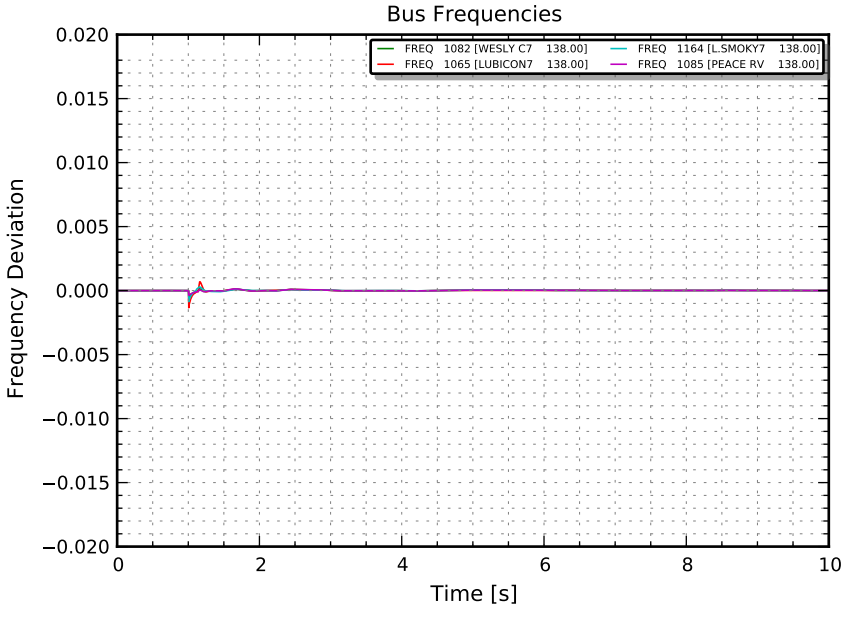


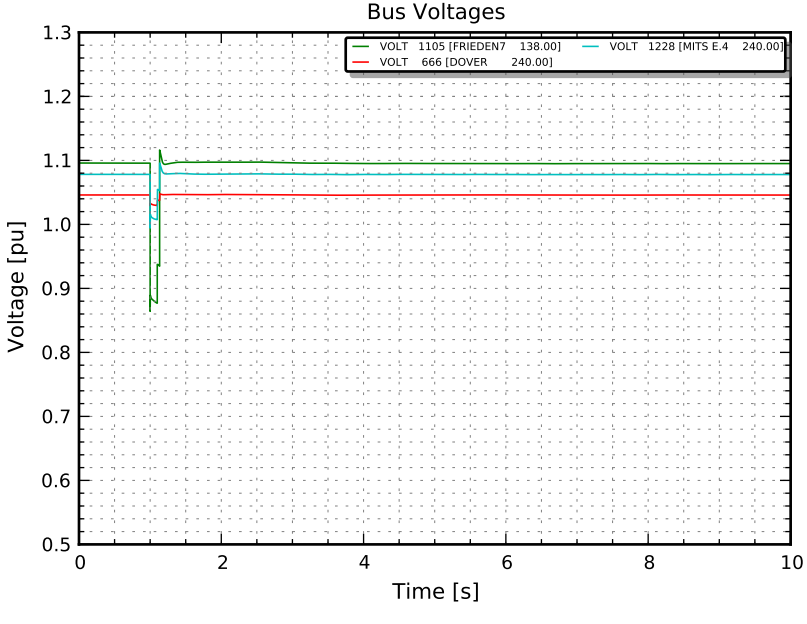
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_B.

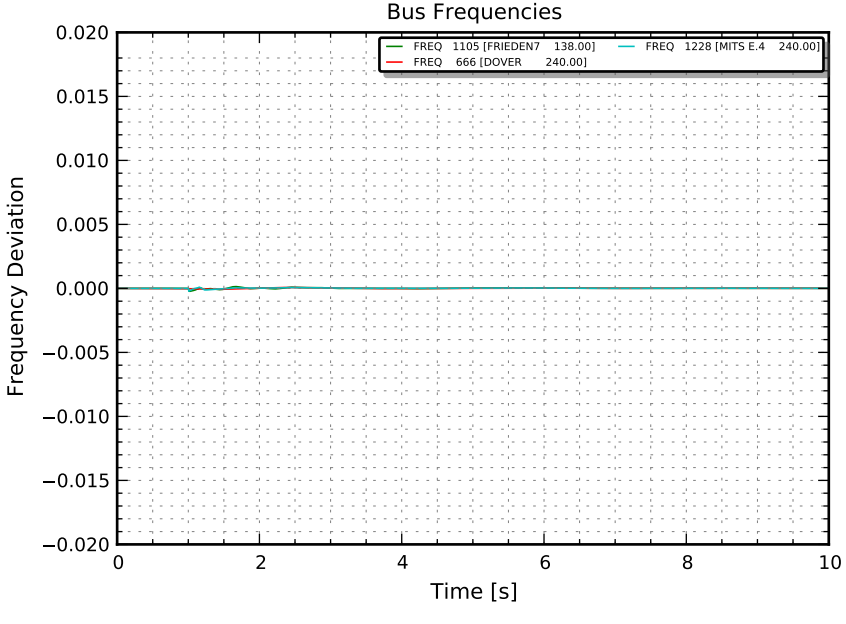
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 014 (B. 1)





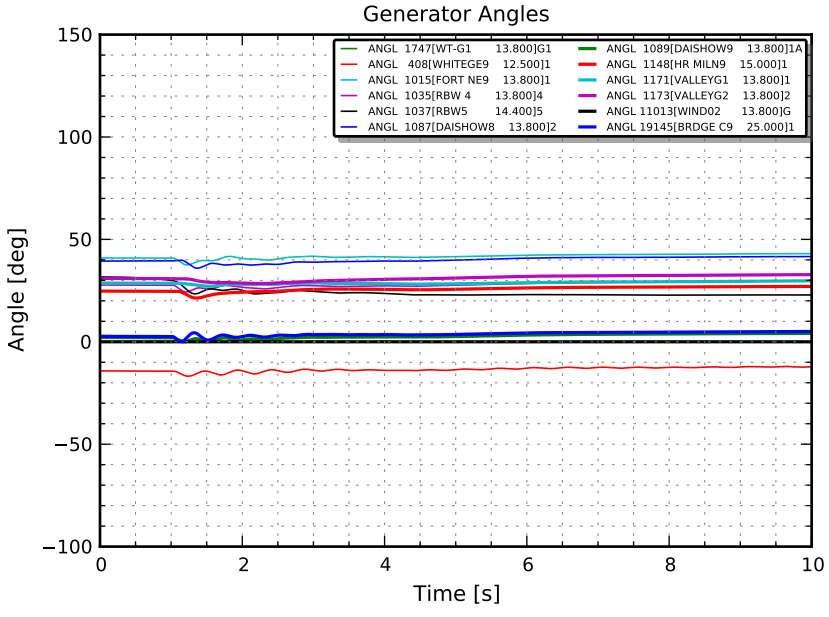


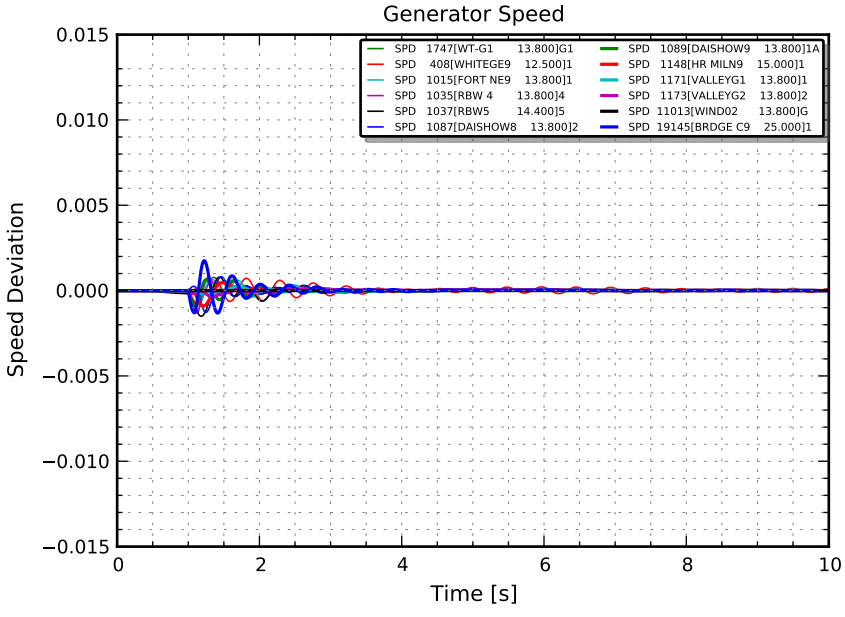


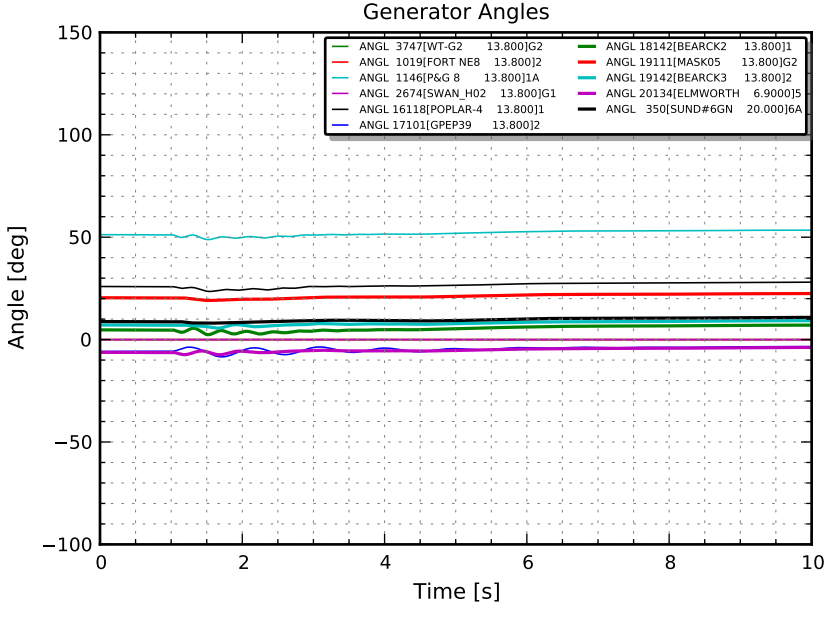
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_B.

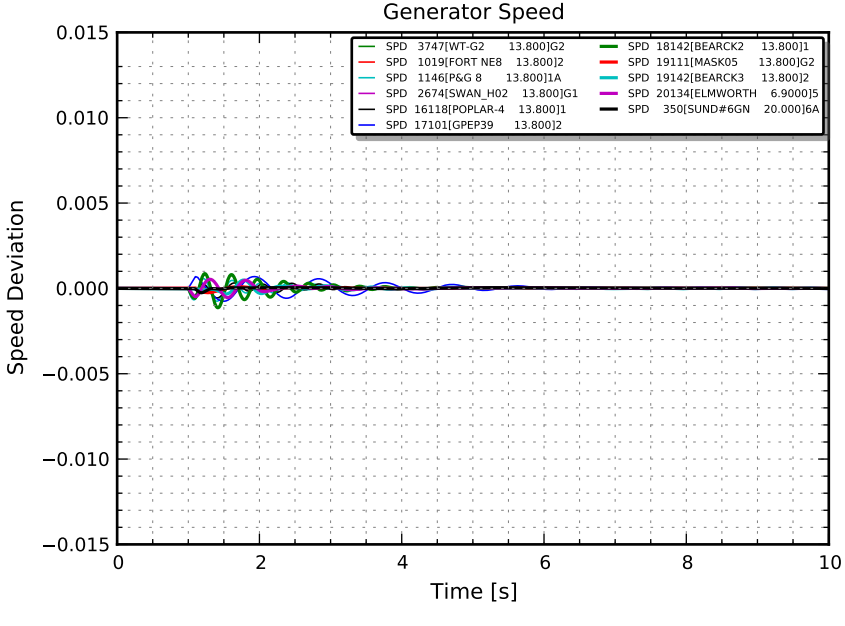
Study Area Generators

Appendix C2A
Figure: 014 (B. 2)





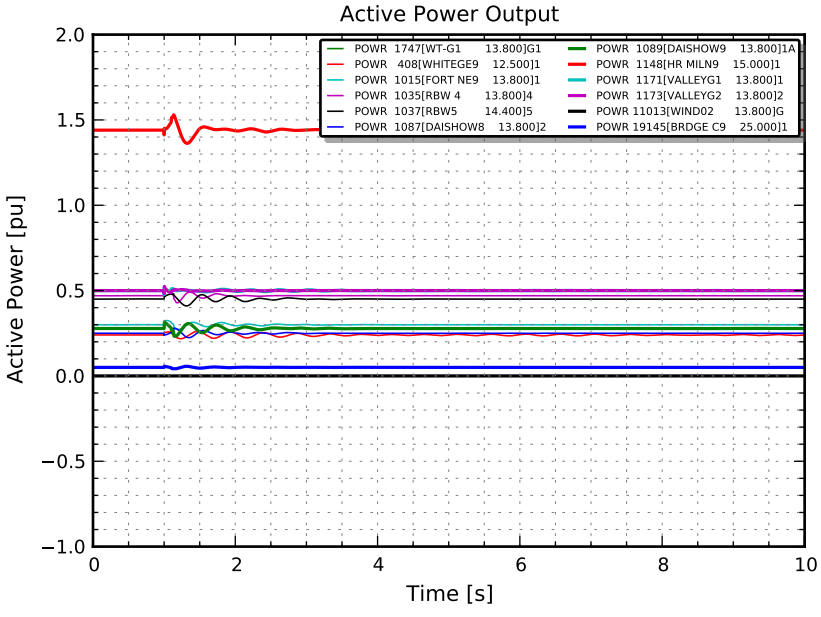


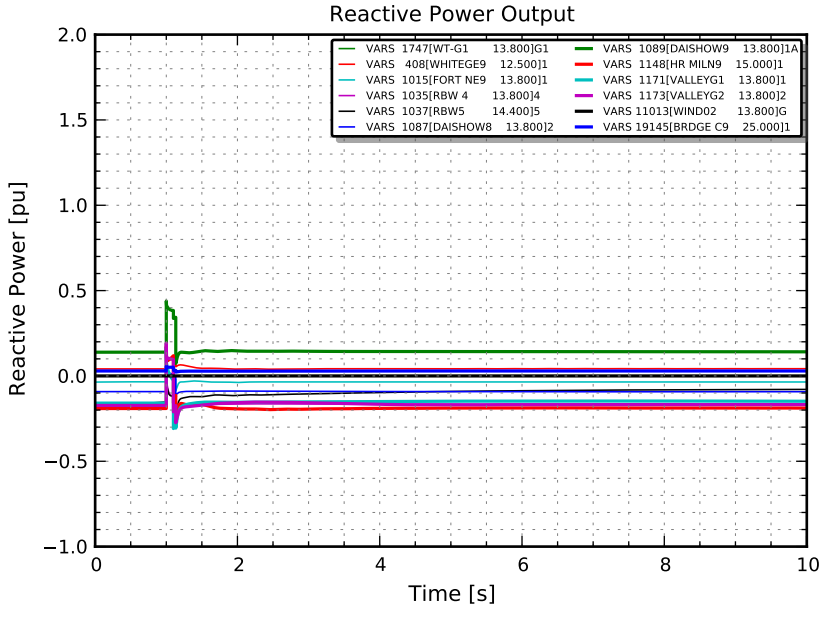


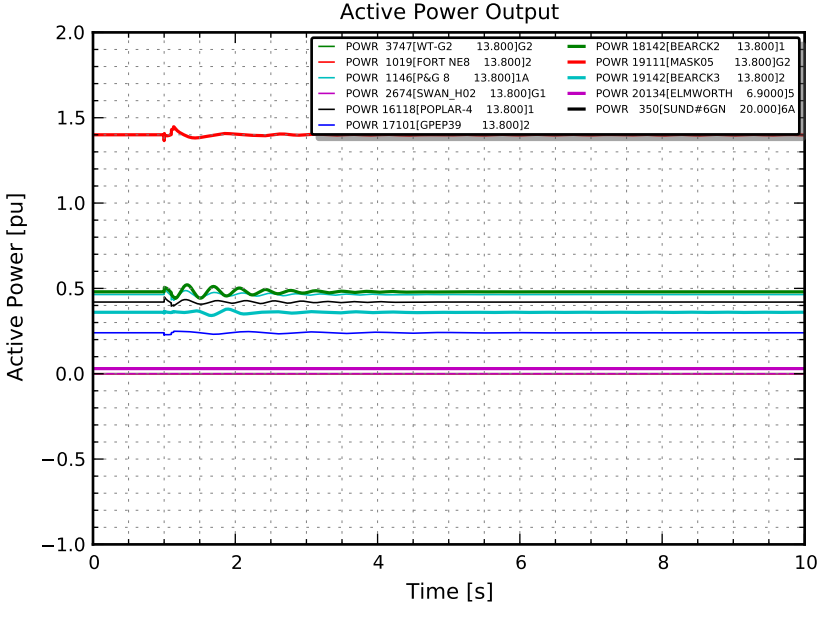
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_B.

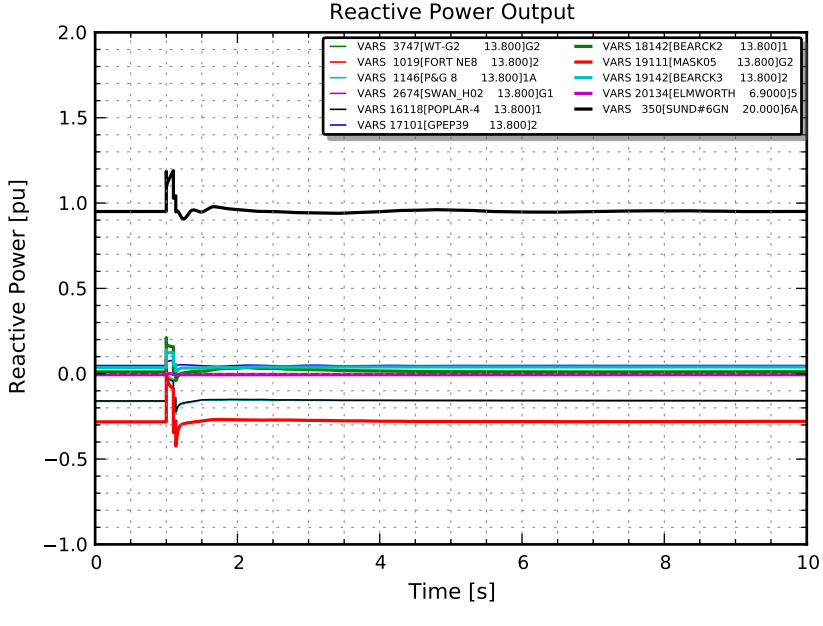
Study Area Generators

Appendix C2A
Figure: 014 (B. 3)





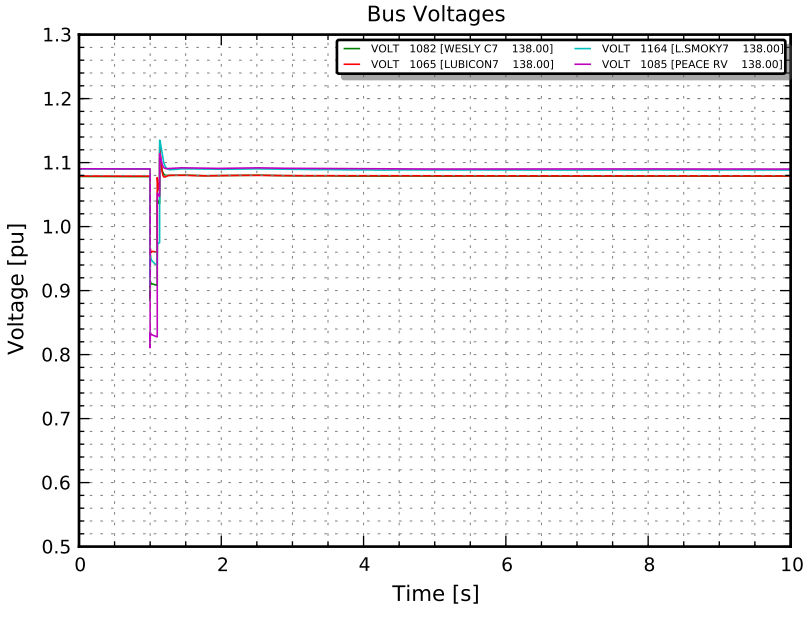


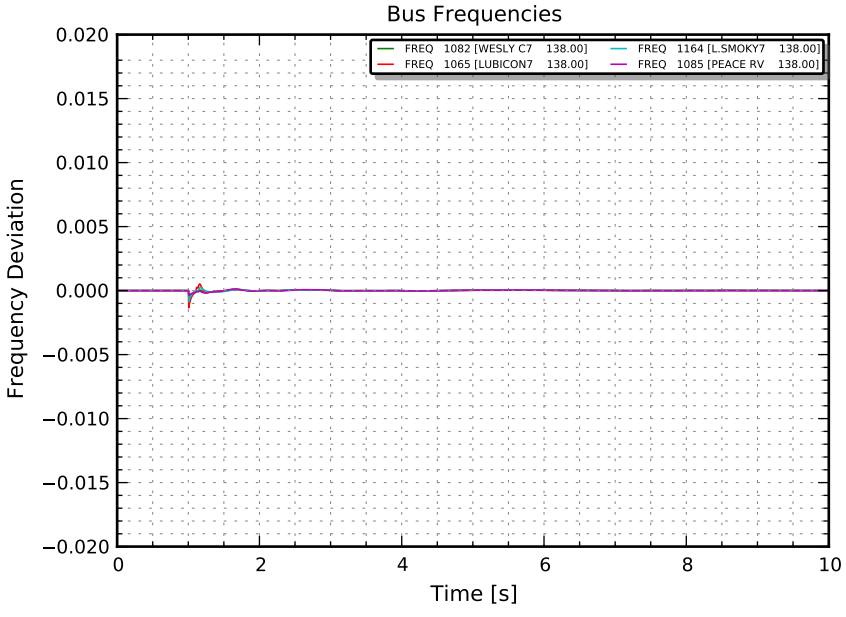


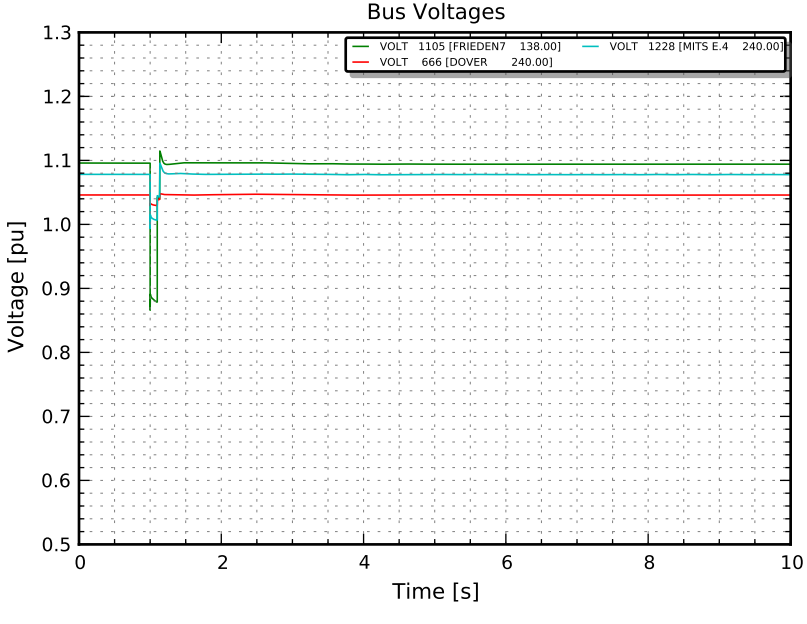
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_A.

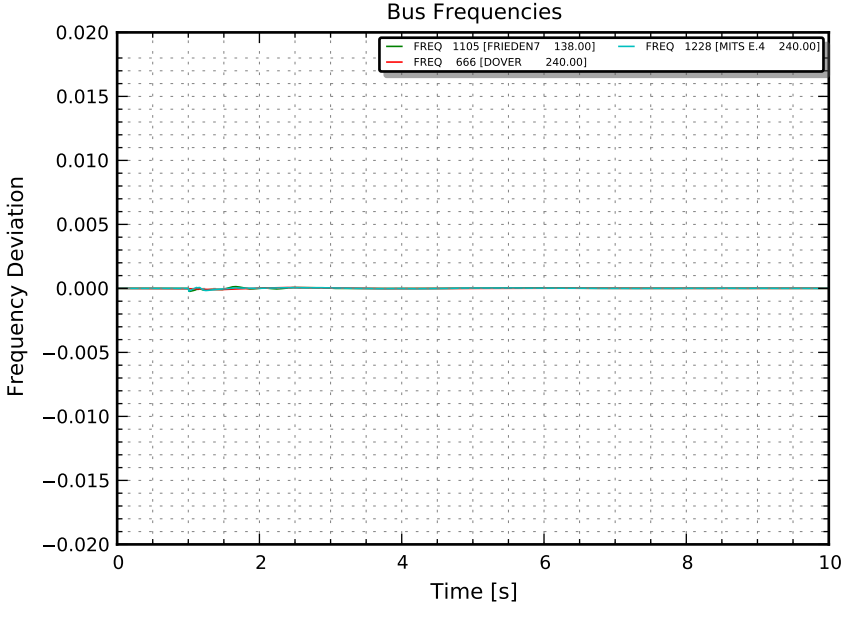
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 015 (A. 1)





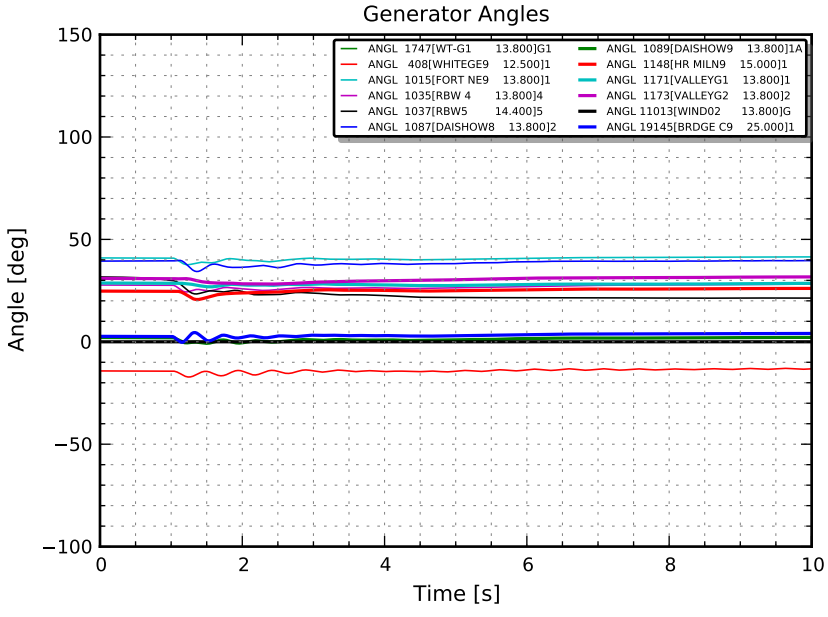


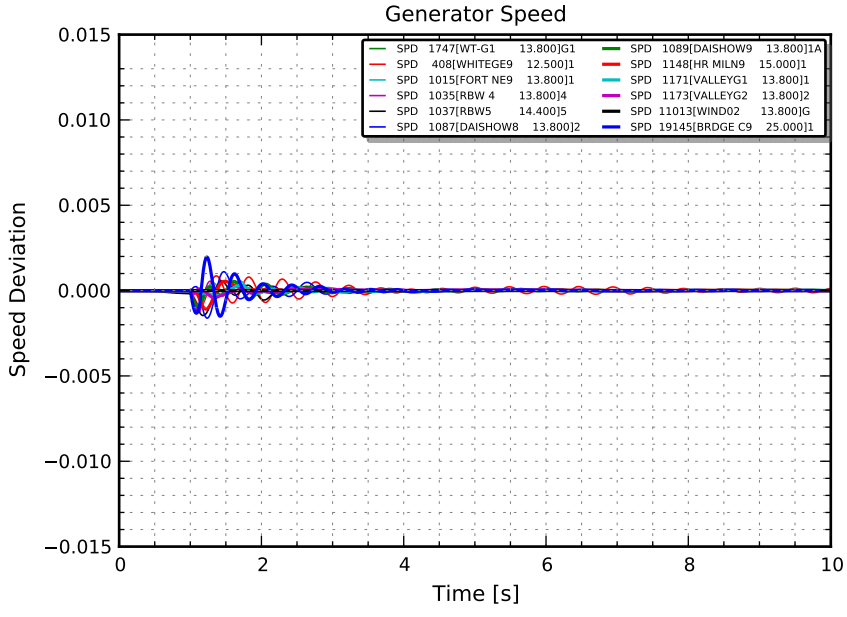


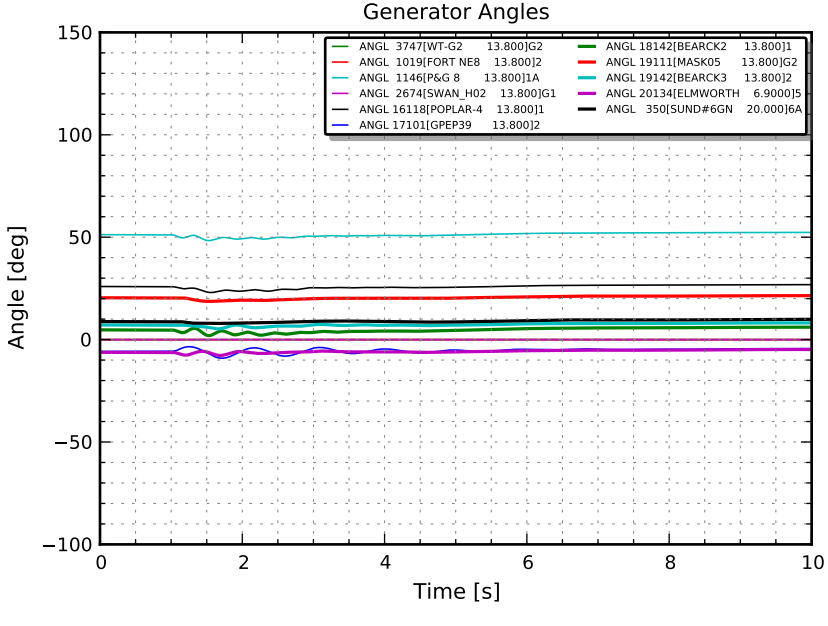
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_A.

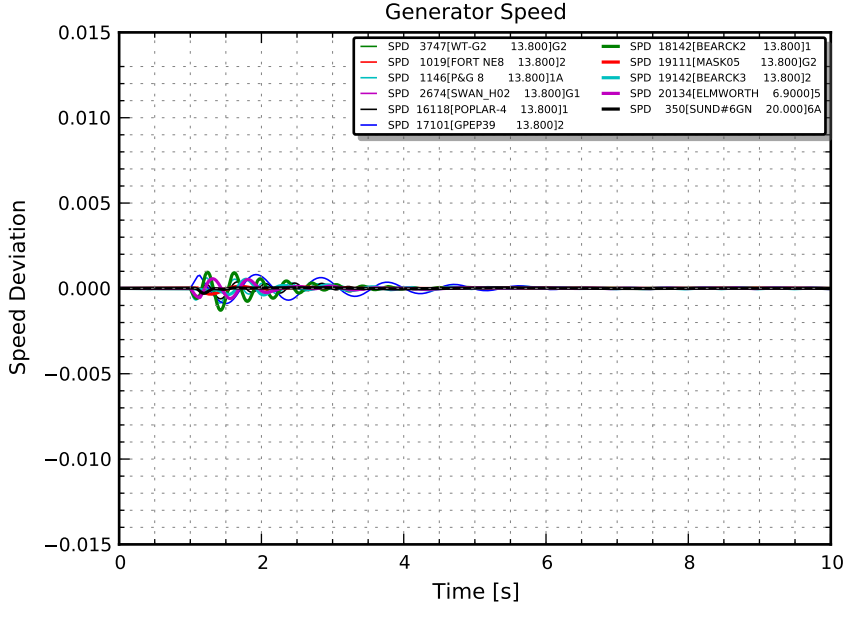
Study Area Generators

Appendix C2A
Figure: 015 (A. 2)





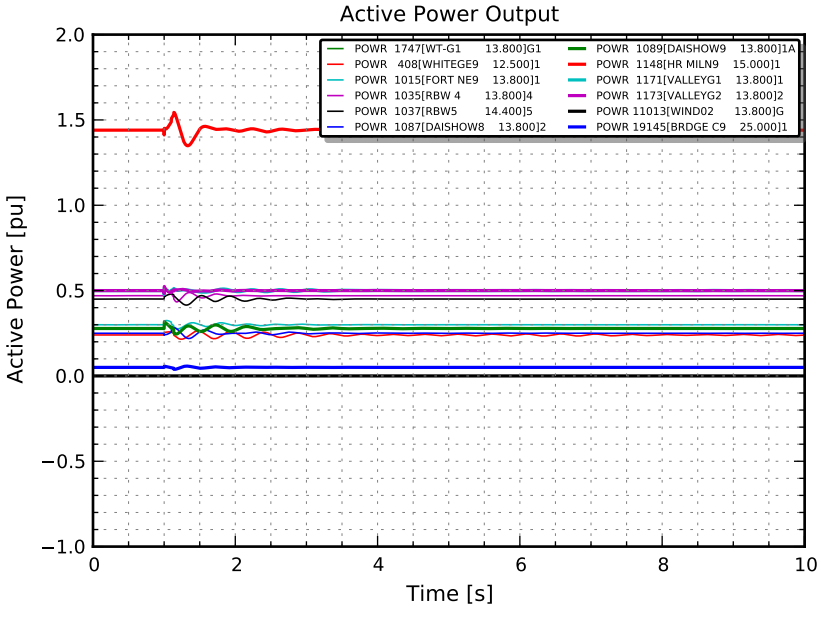


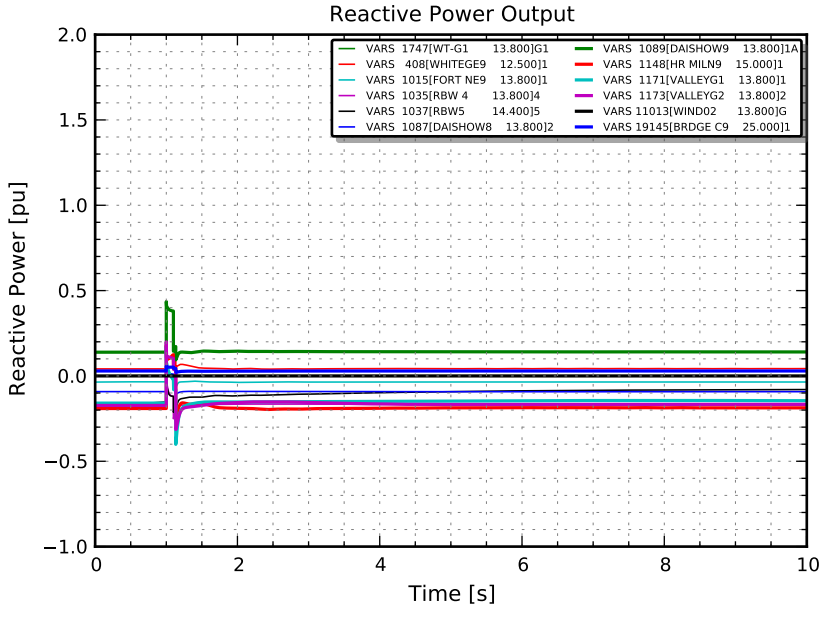


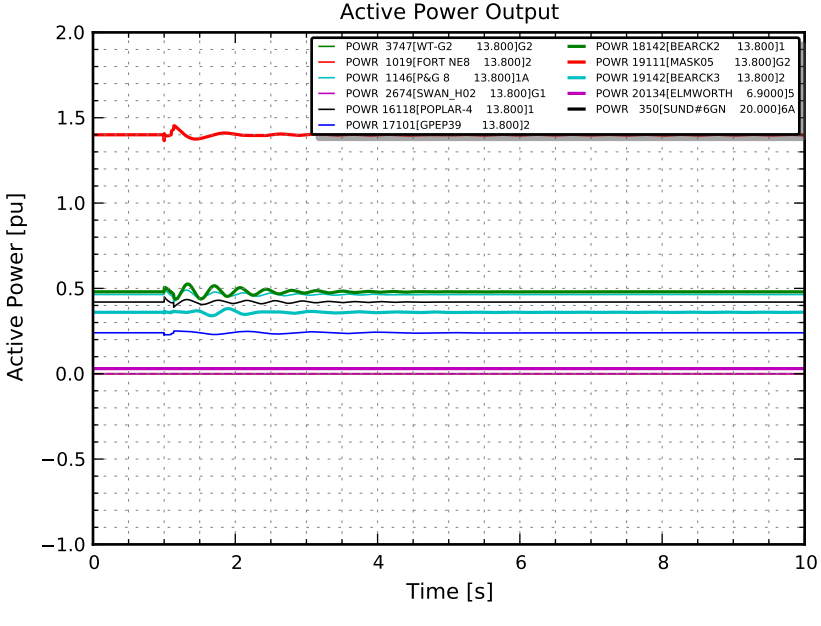
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_A.

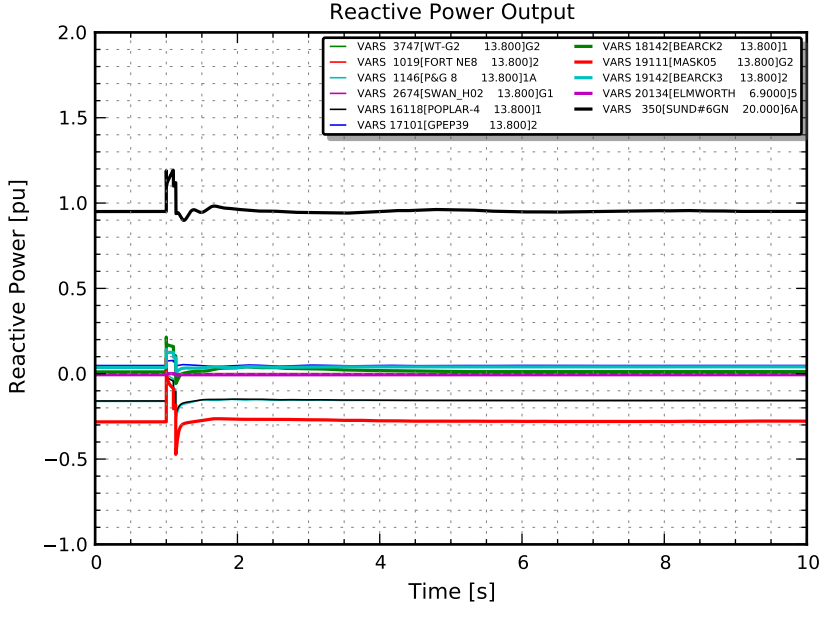
Study Area Generators

Appendix C2A
Figure: 015 (A. 3)





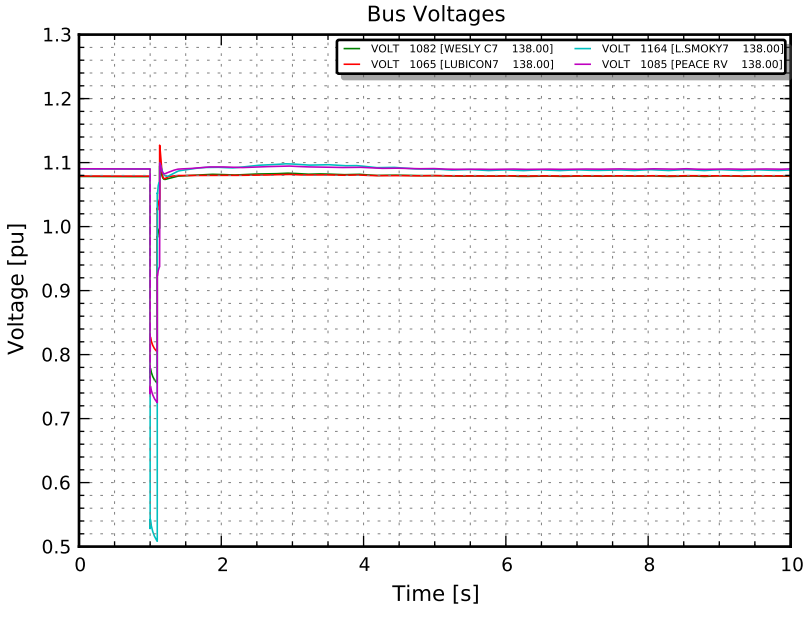


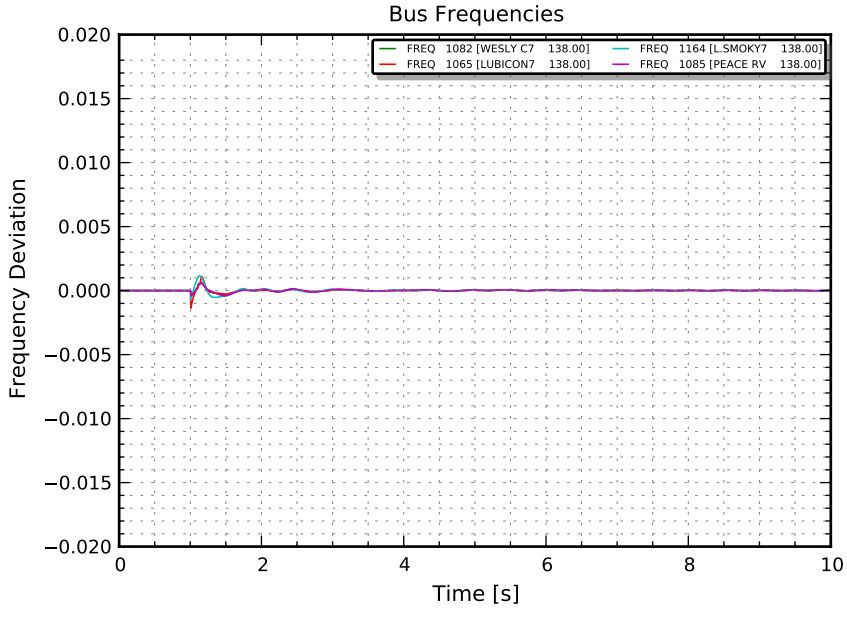


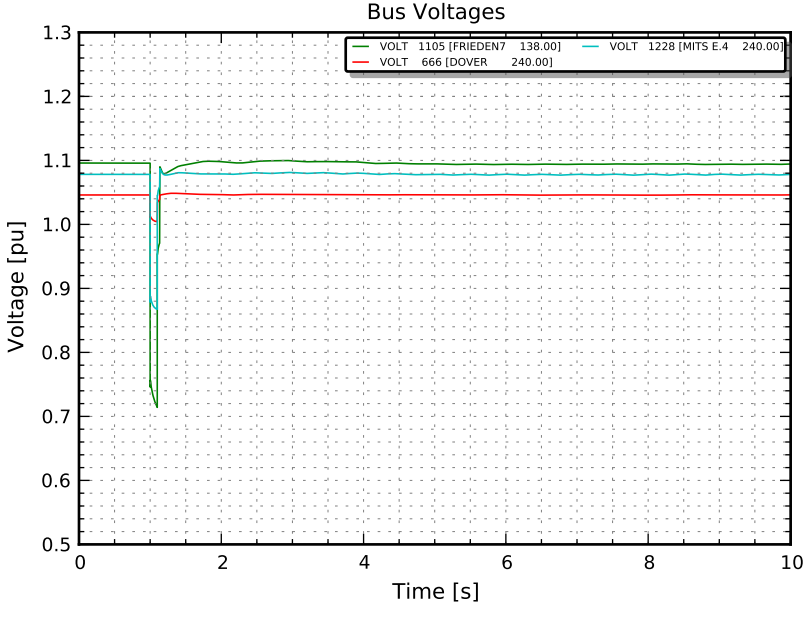
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_B.

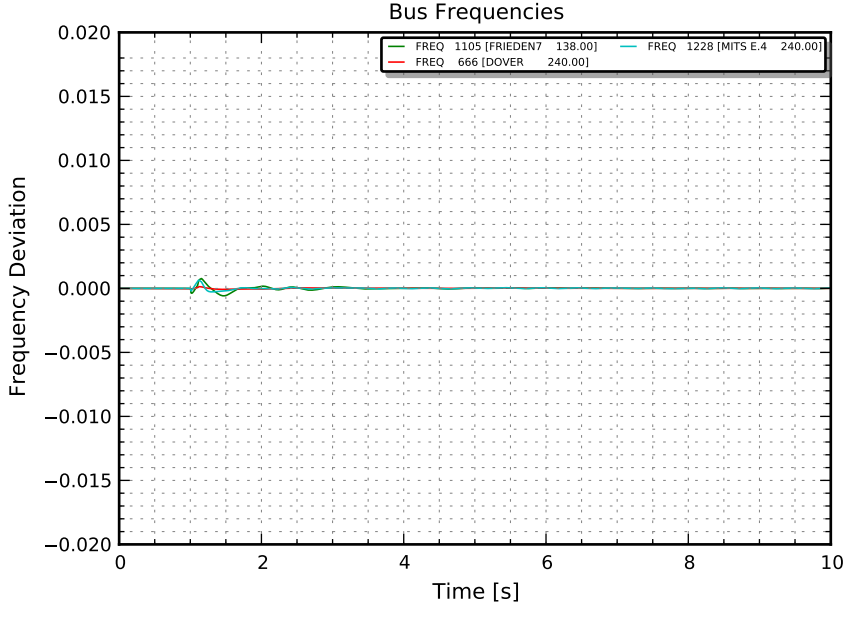
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 015 (B. 1)





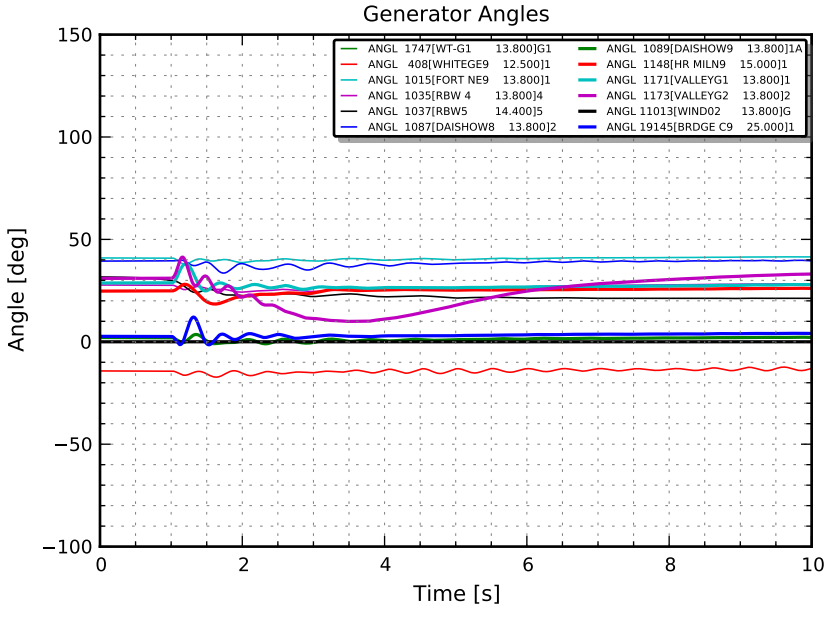


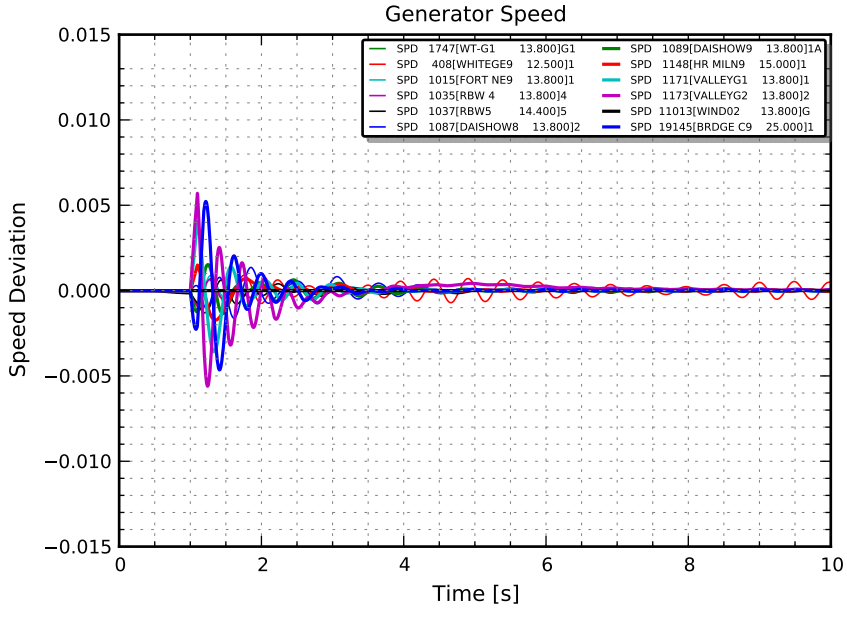


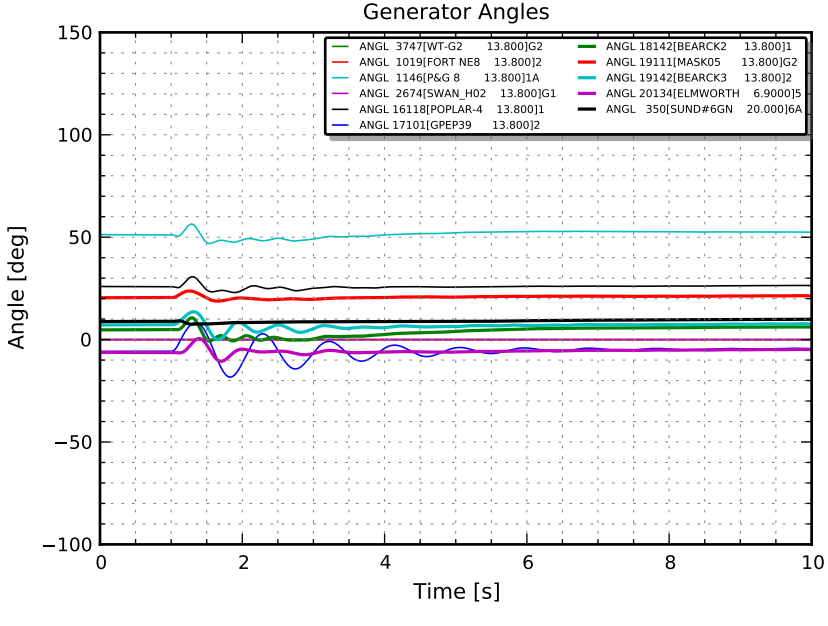
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_B.

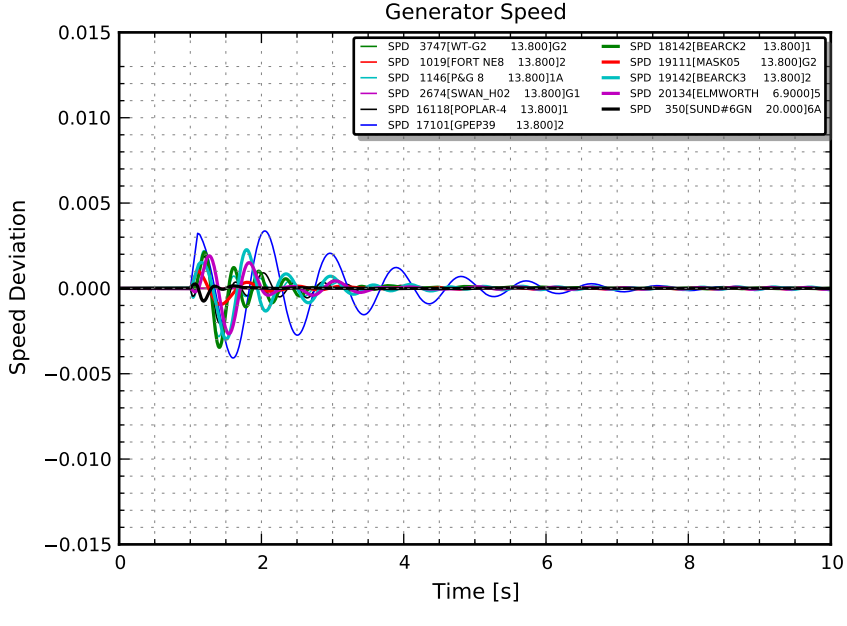
Study Area Generators

Appendix C2A
Figure: 015 (B. 2)





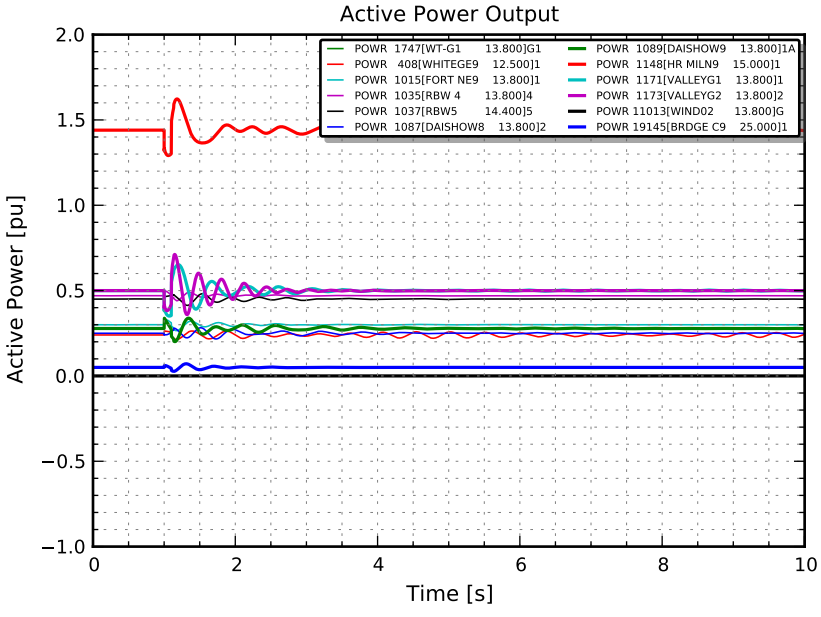


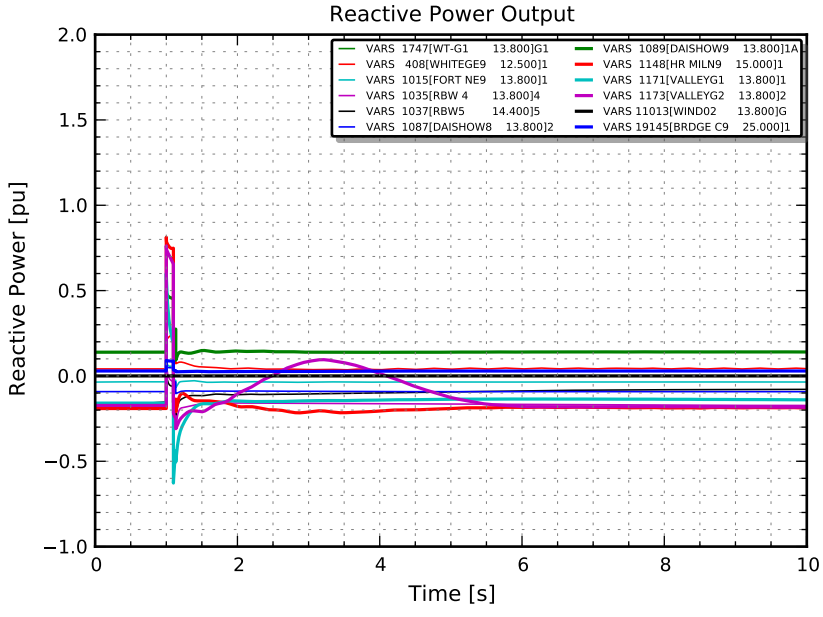


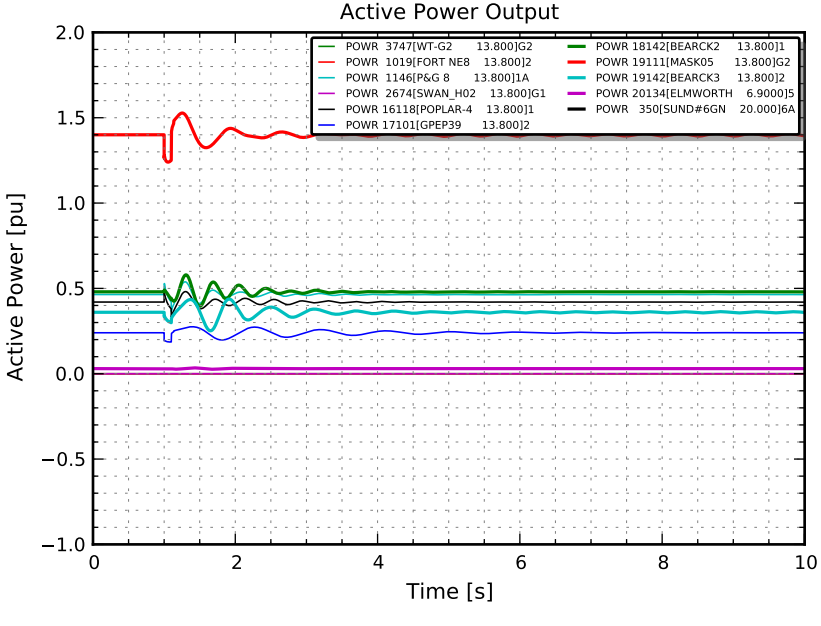
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_B.

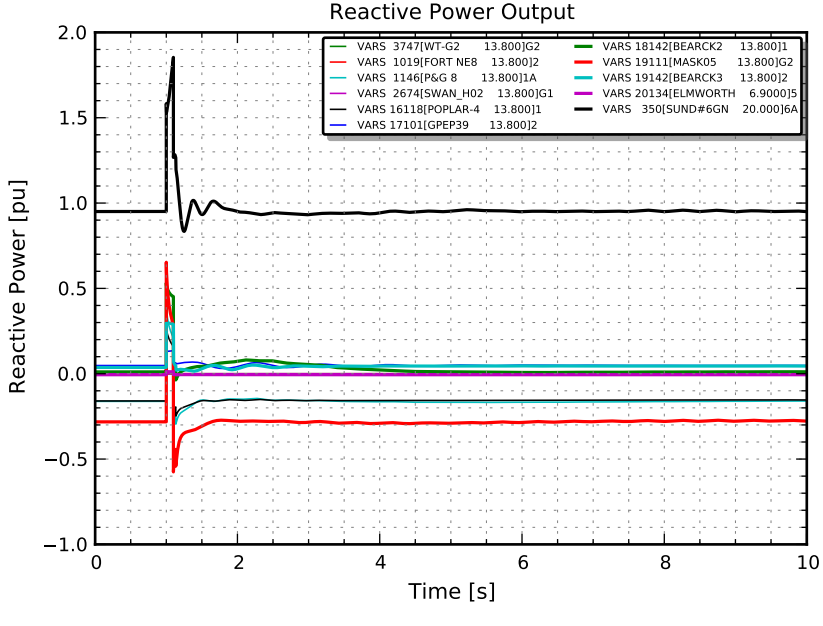
Study Area Generators

Appendix C2A
Figure: 015 (B. 3)





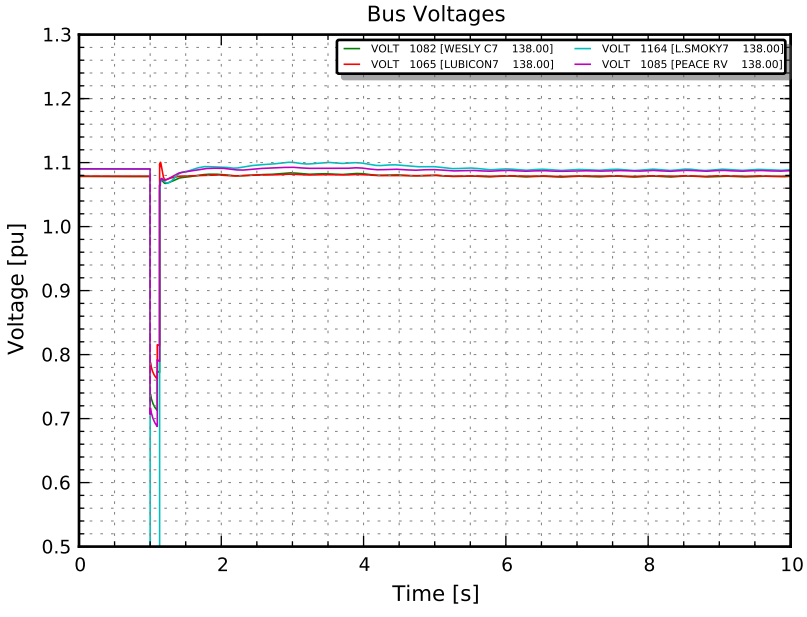


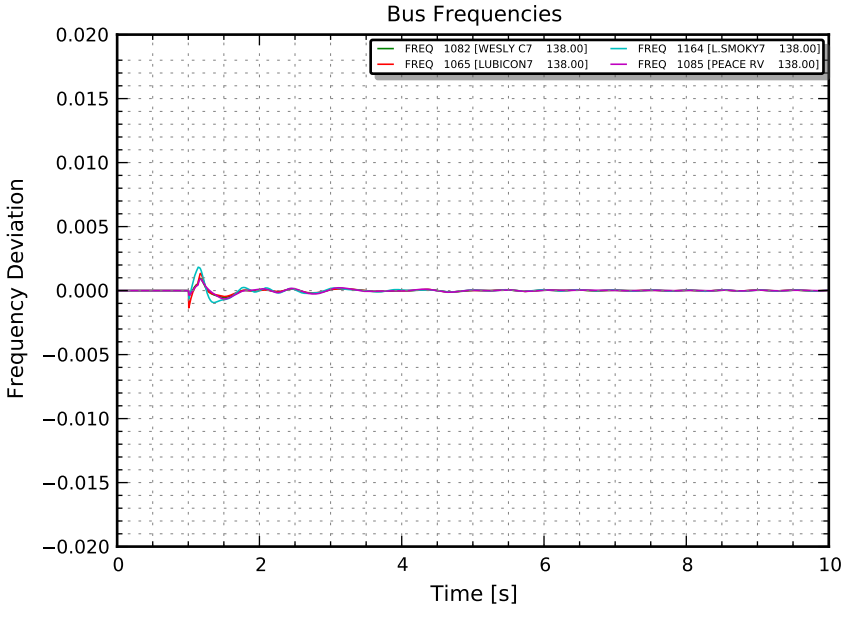


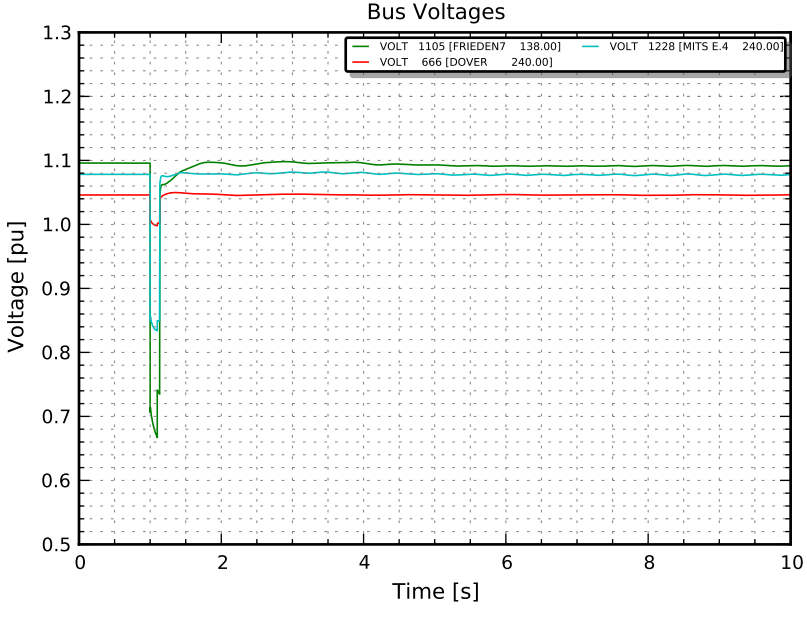
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_A.

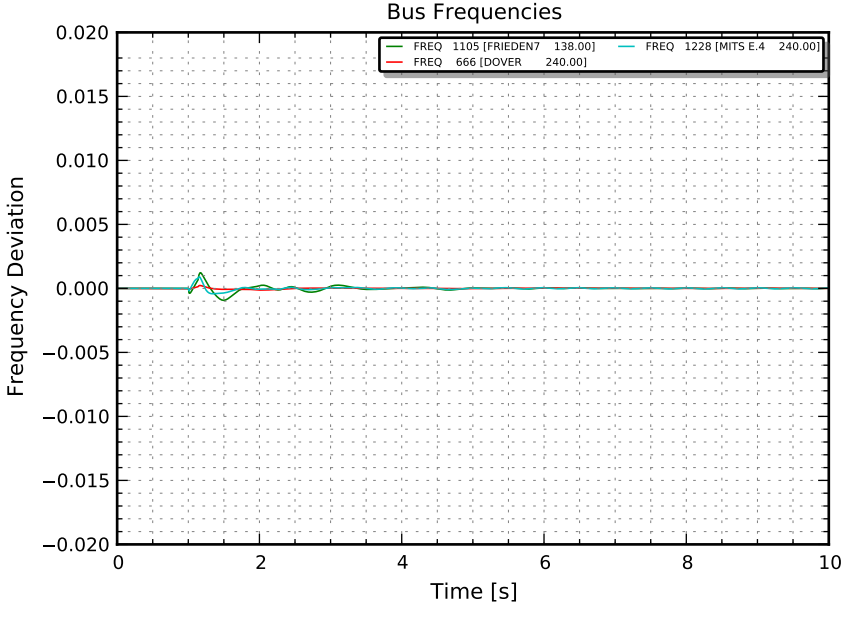
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 016 (A. 1)





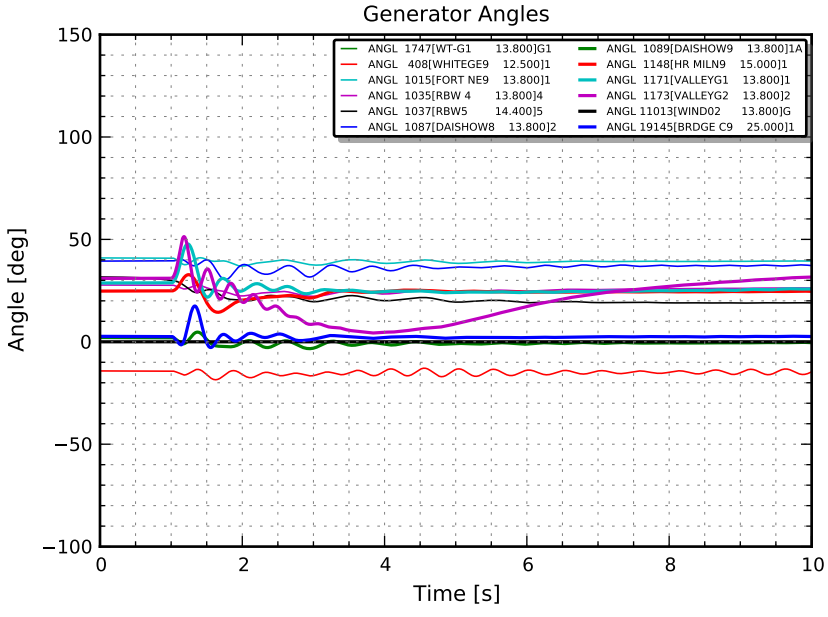


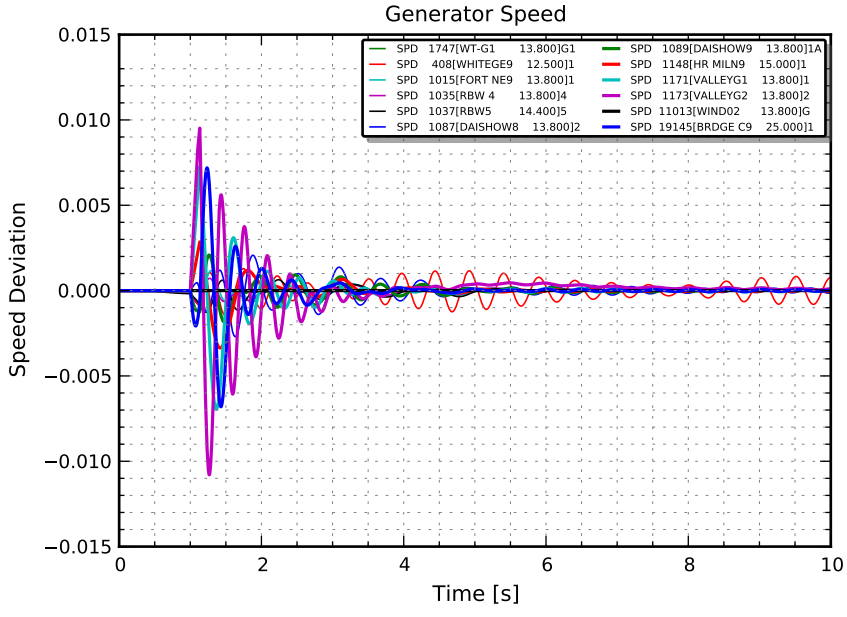


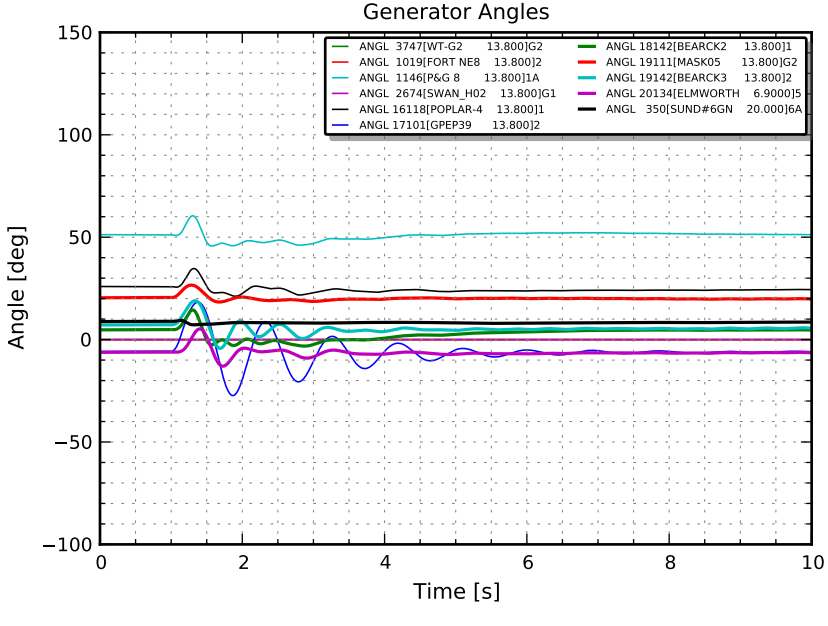
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_A.

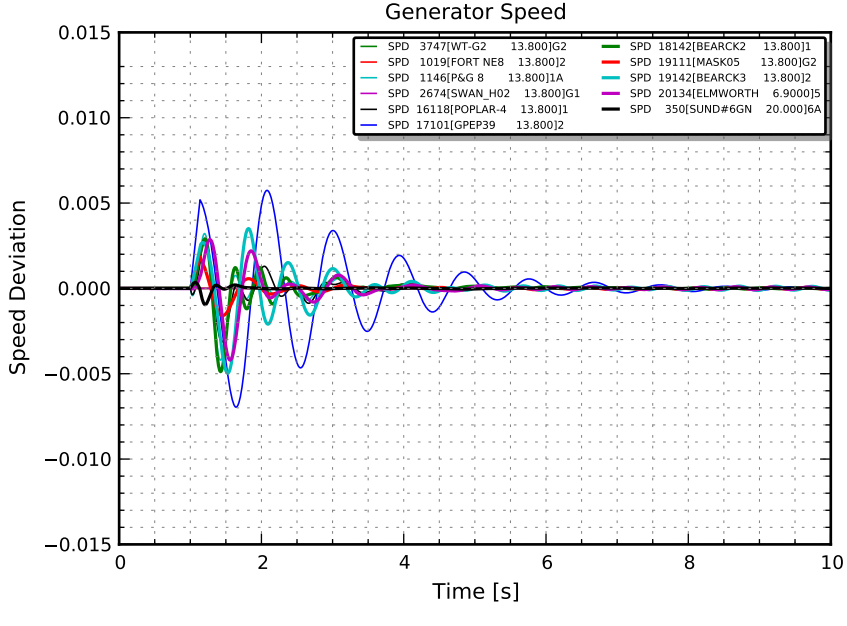
Study Area Generators

Appendix C2A
Figure: 016 (A. 2)





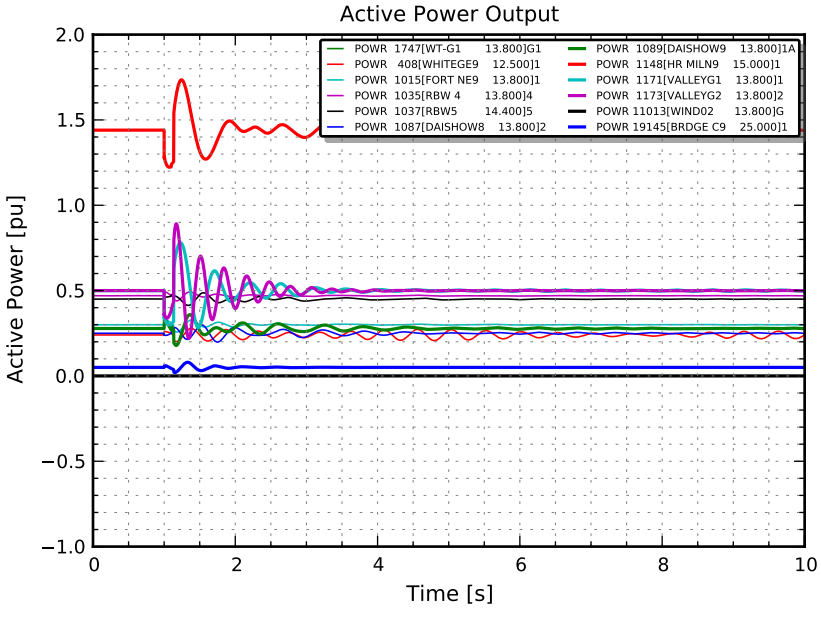


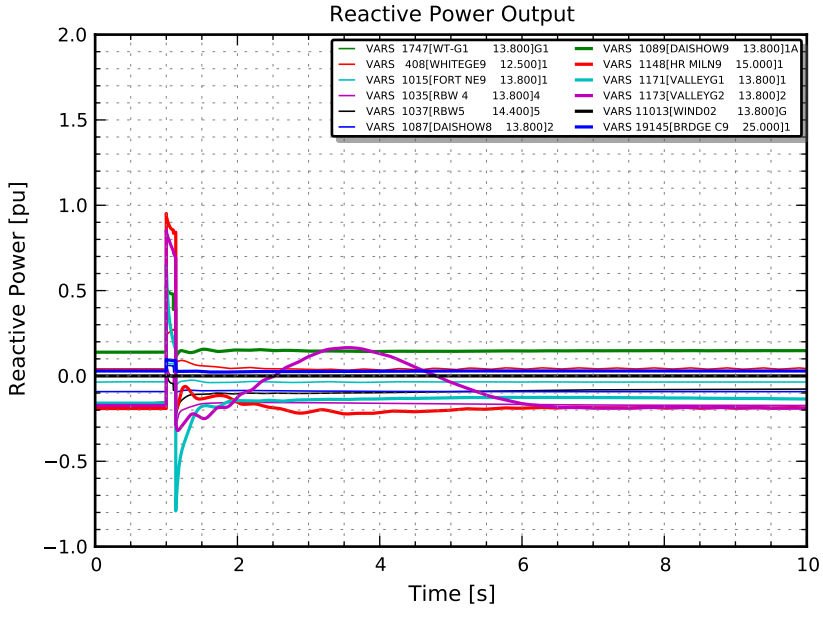


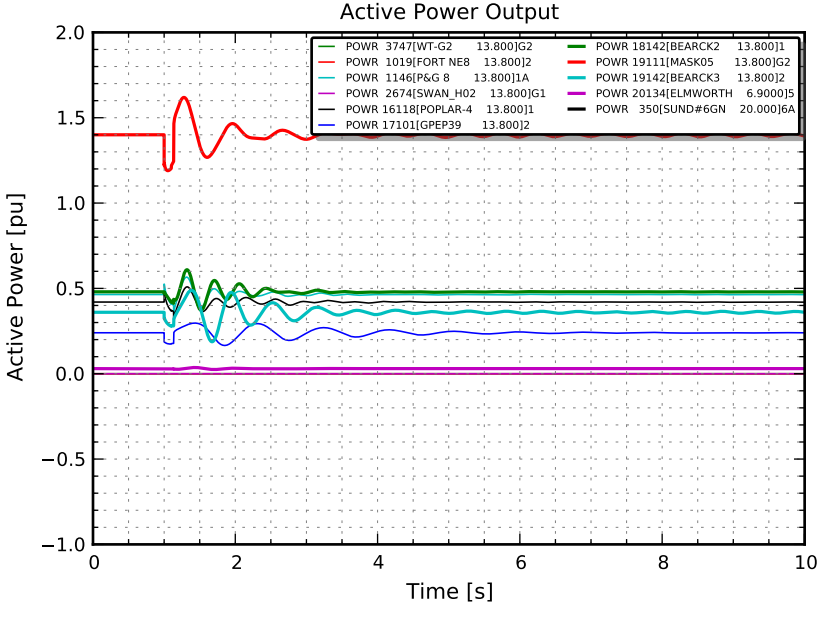
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_A.

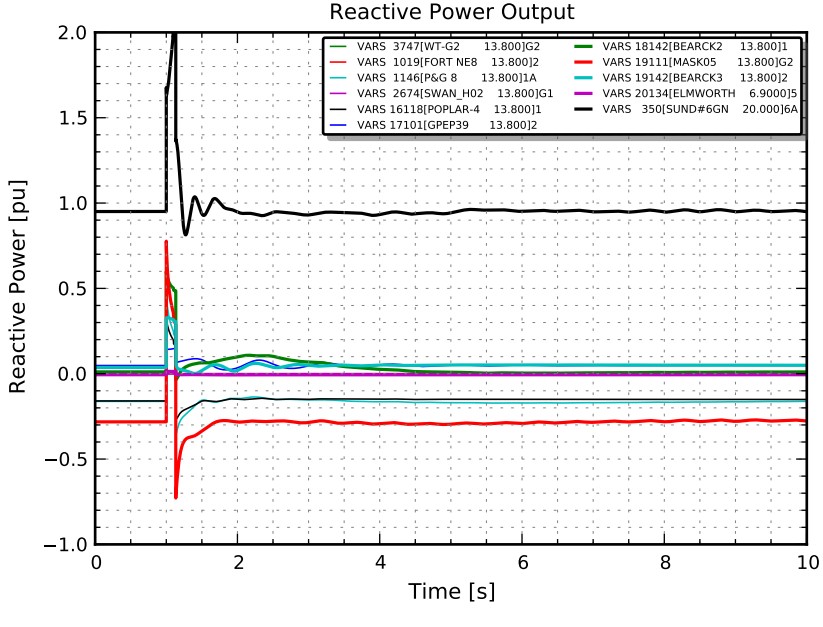
Study Area Generators

Appendix C2A
Figure: 016 (A. 3)





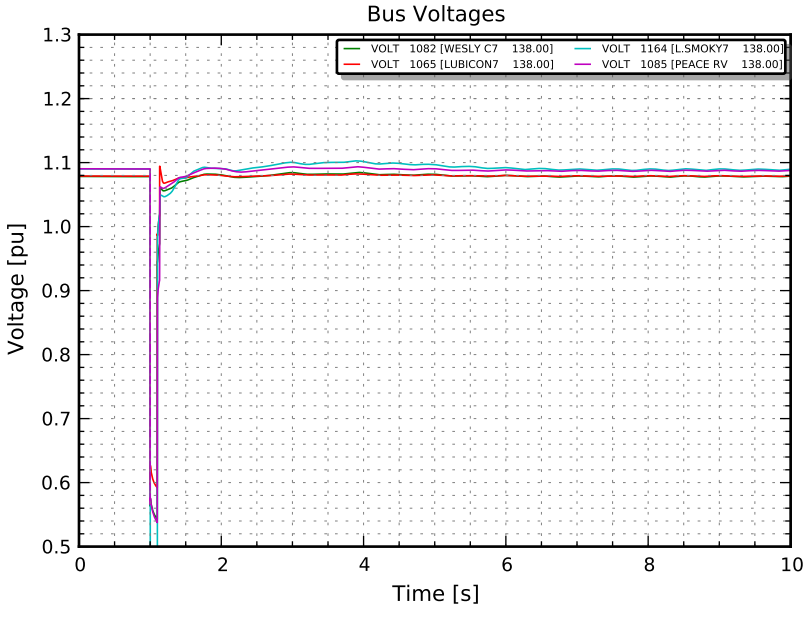


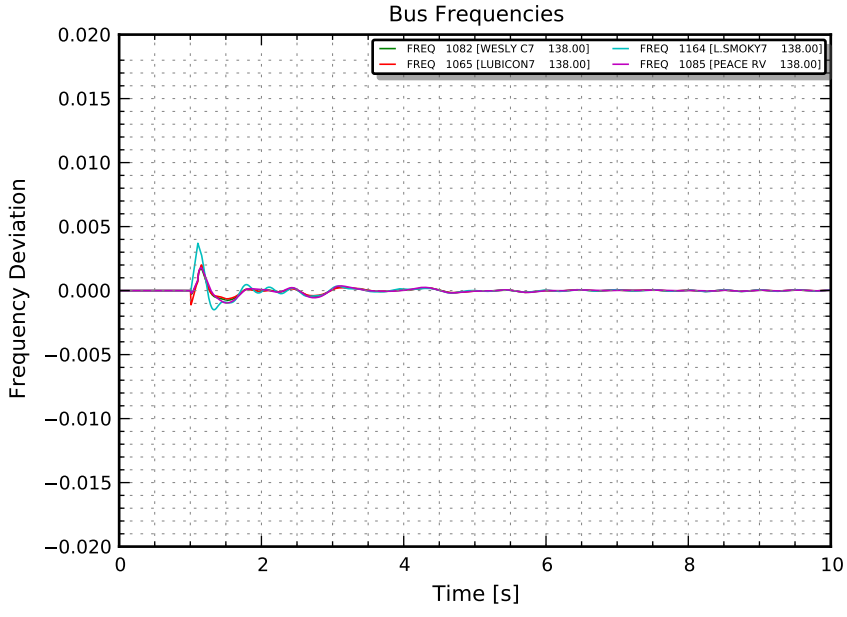


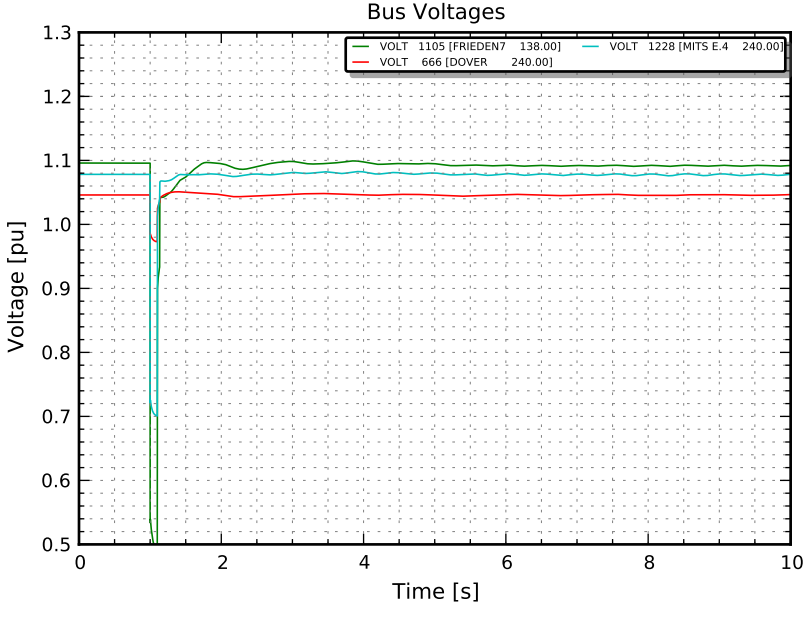
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_B.

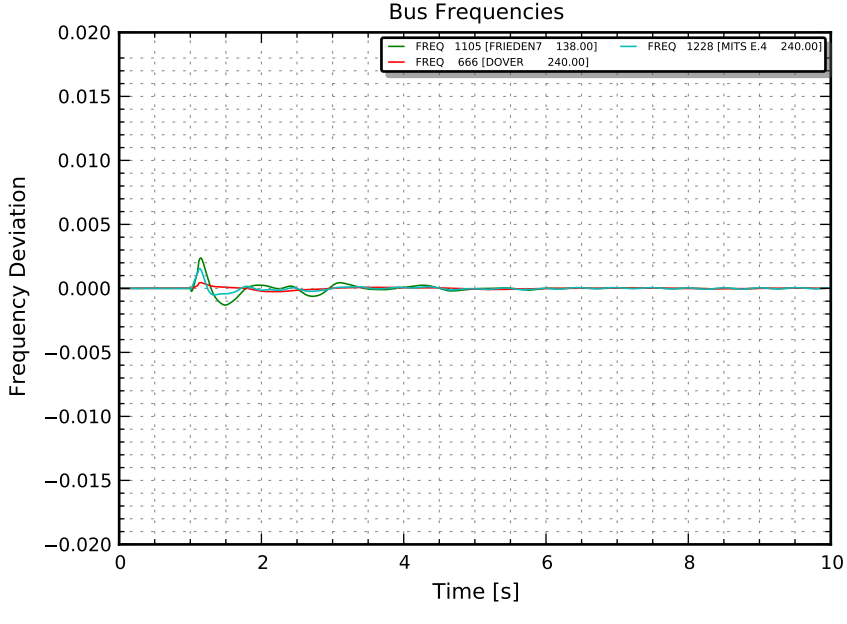
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 016 (B. 1)





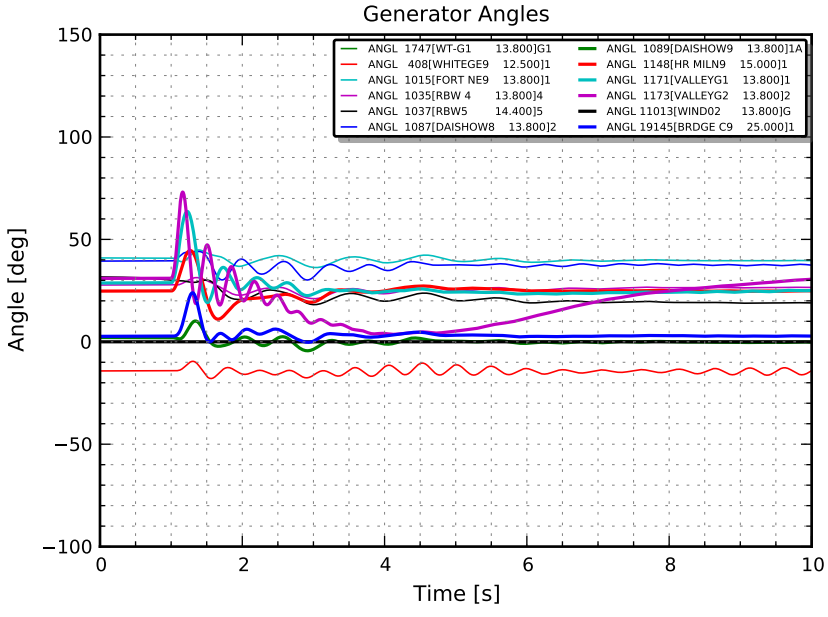


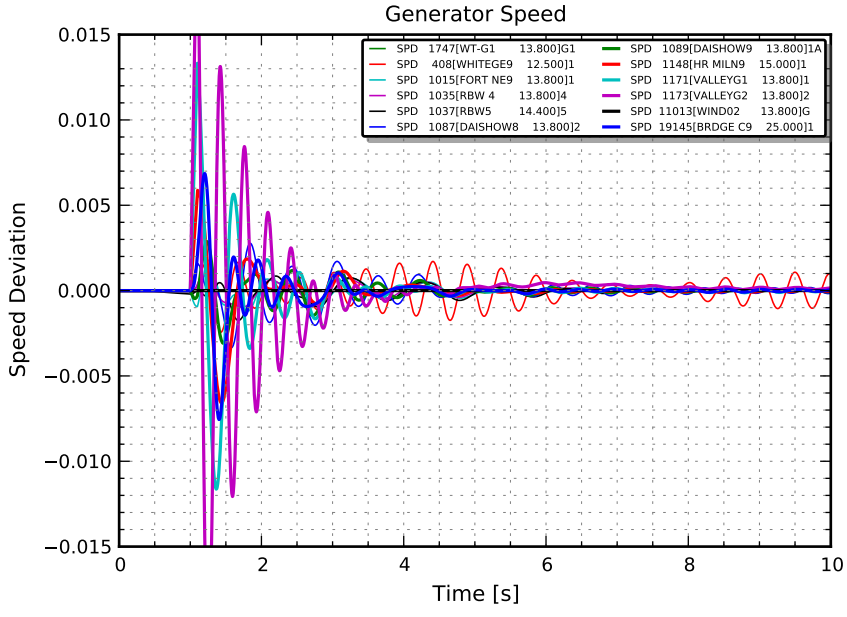


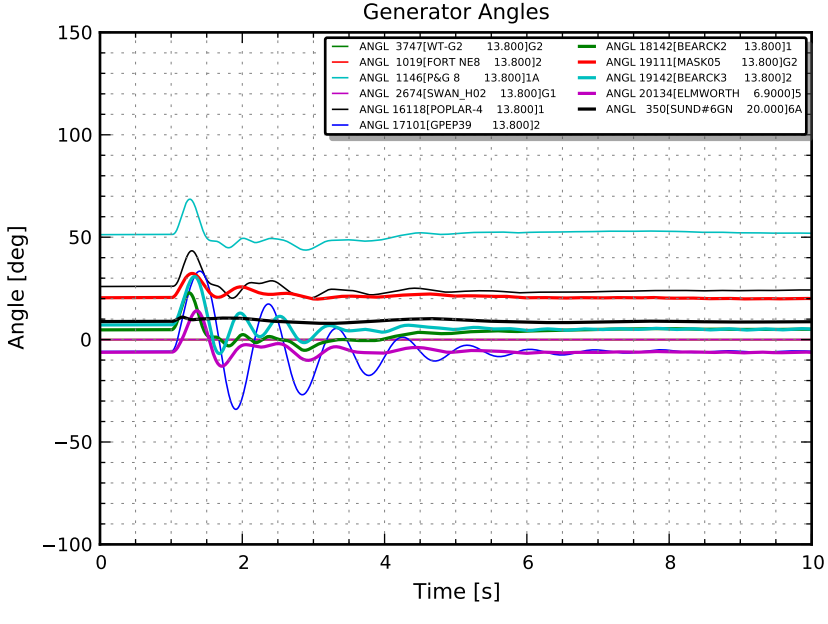
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_B.

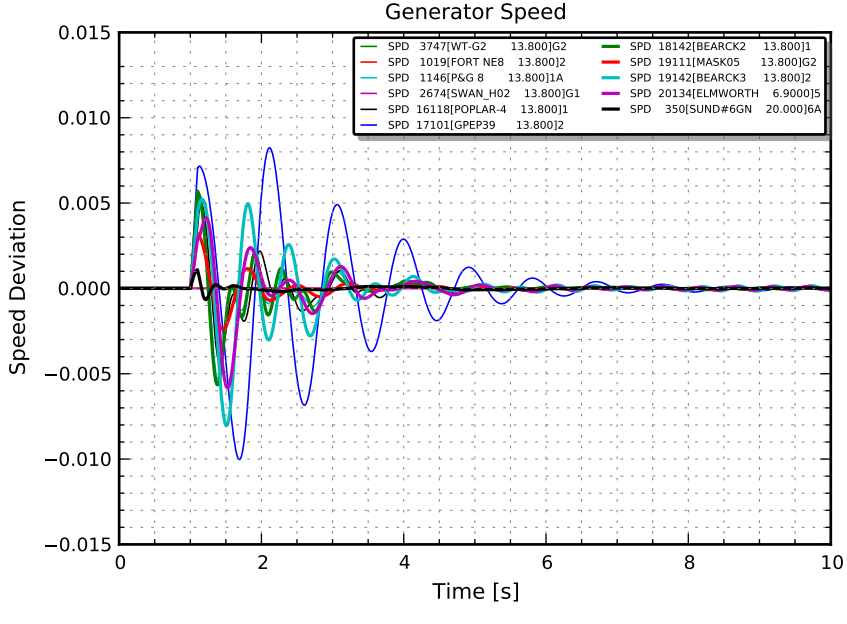
Study Area Generators

Appendix C2A
Figure: 016 (B. 2)





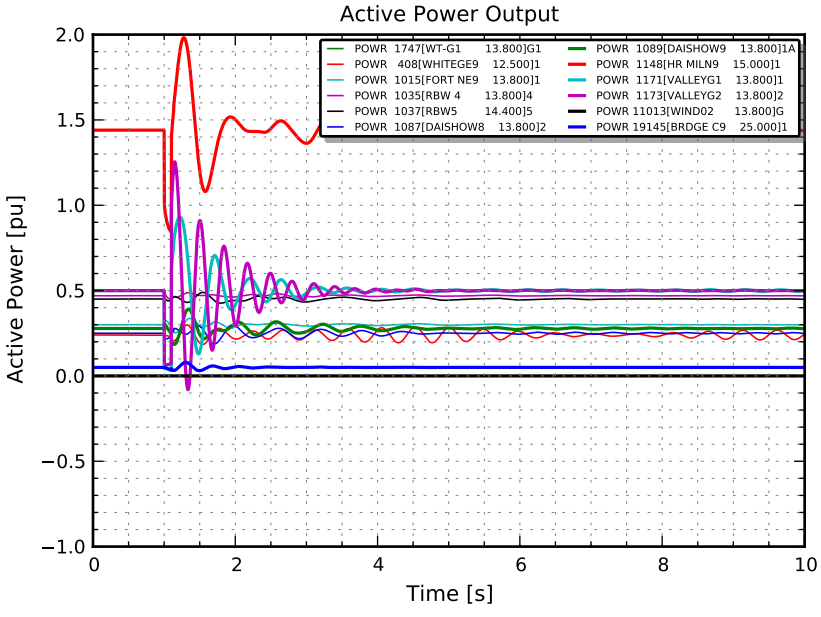


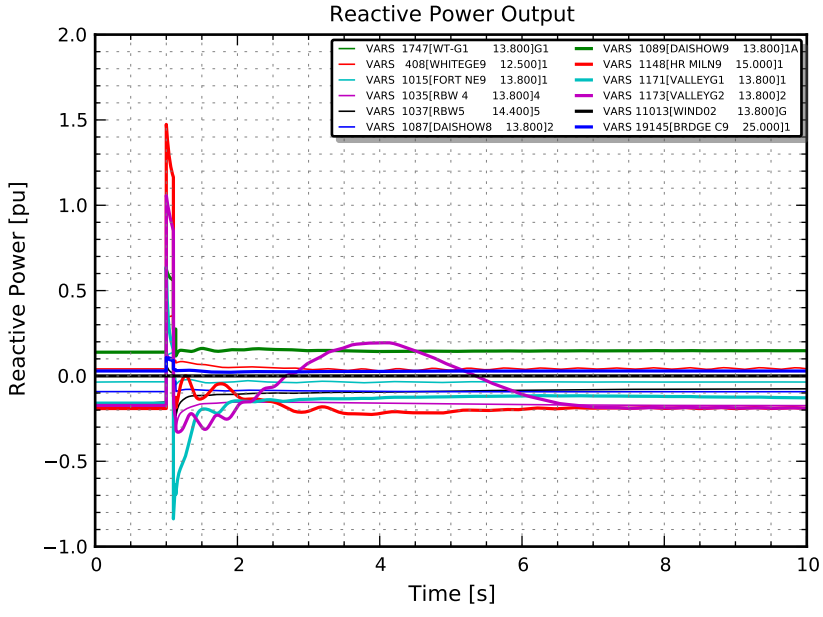


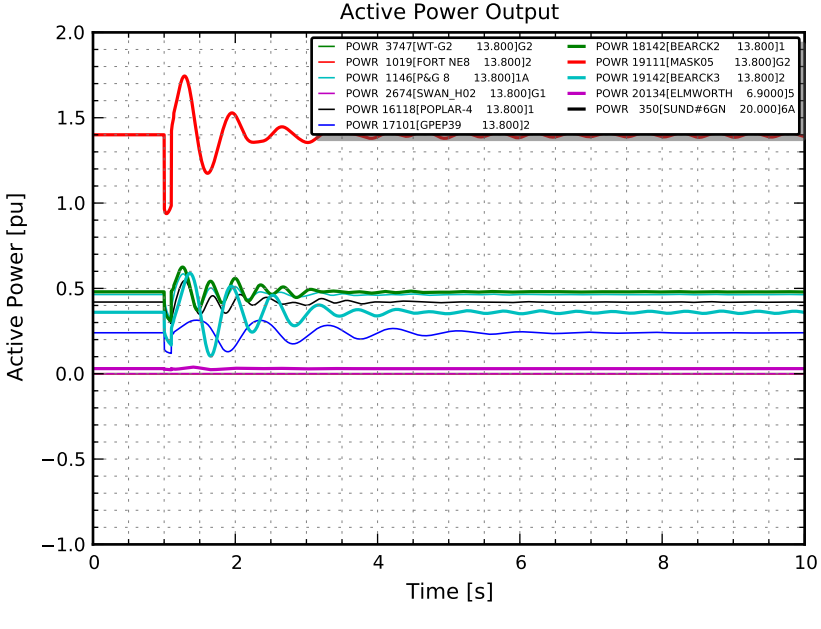
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_B.

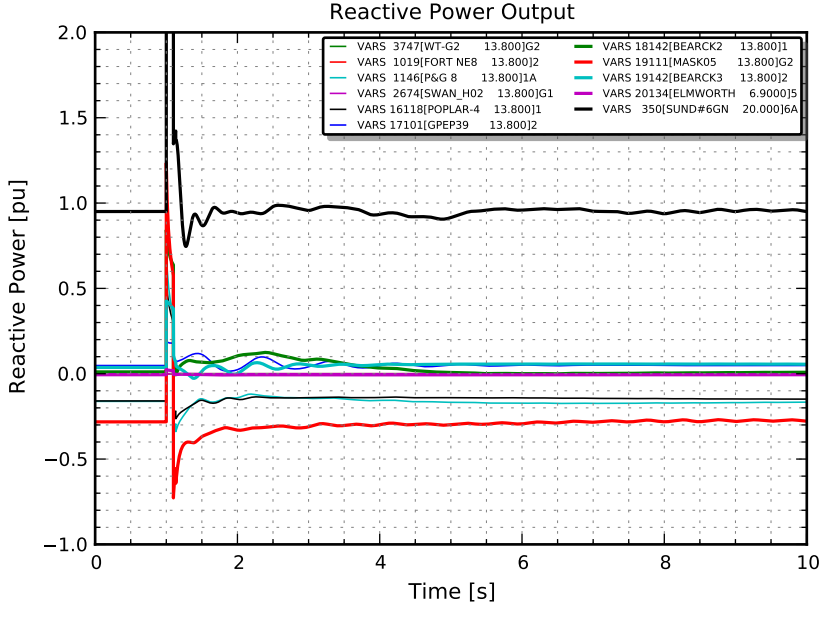
Study Area Generators

Appendix C2A
Figure: 016 (B. 3)





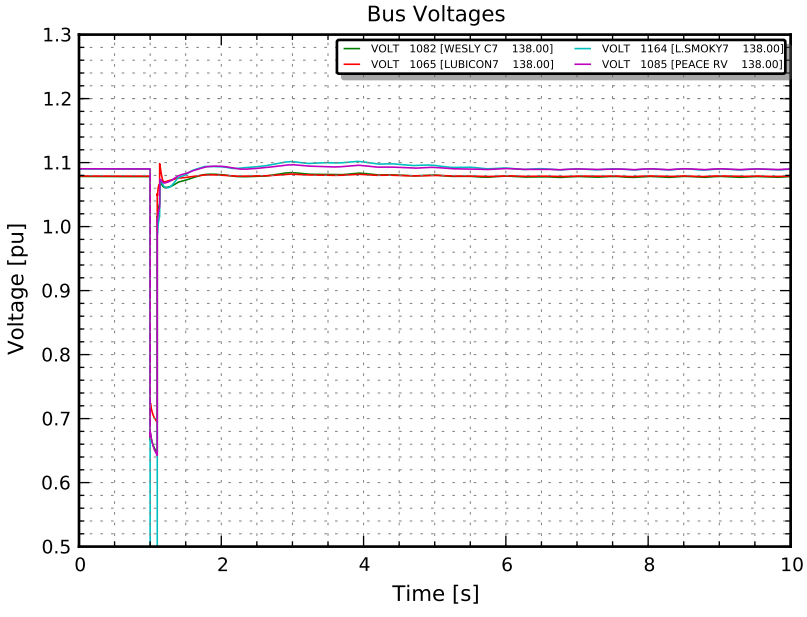


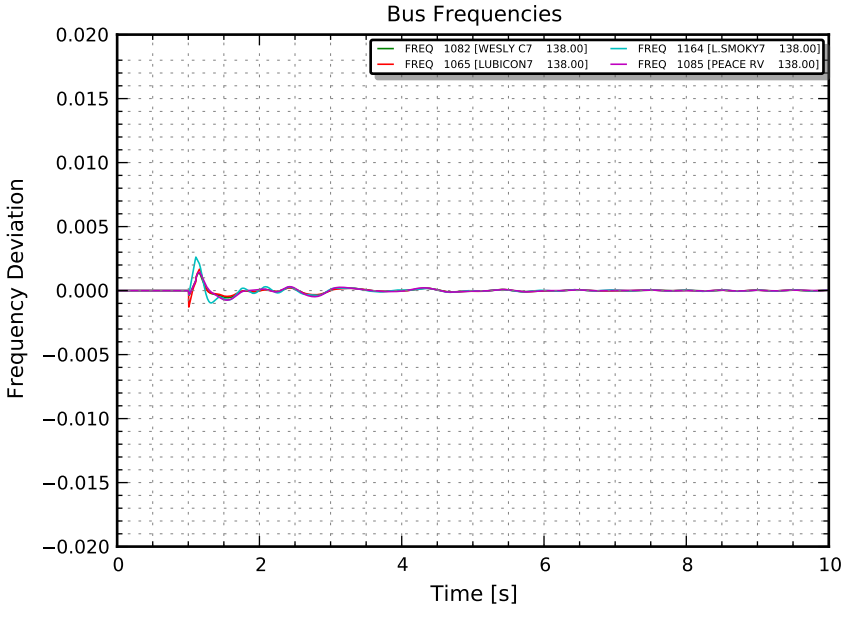


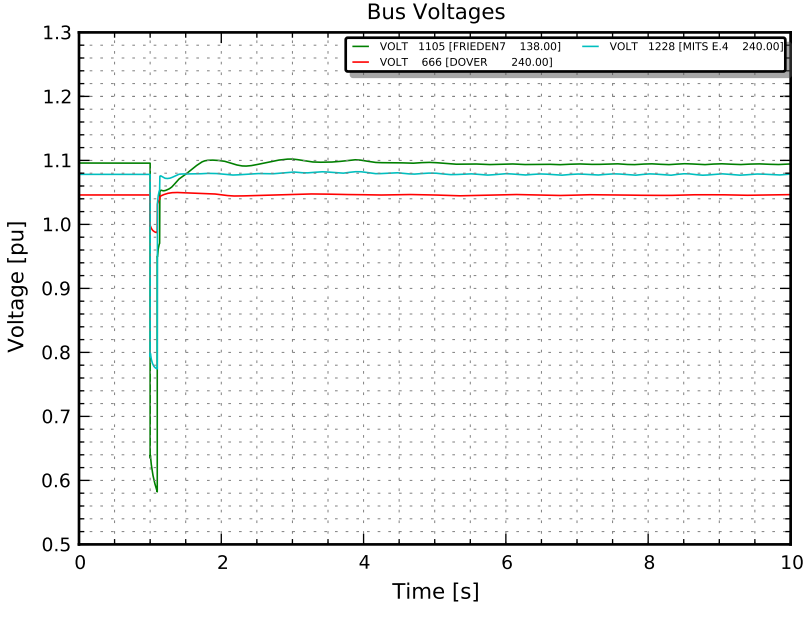
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_A.

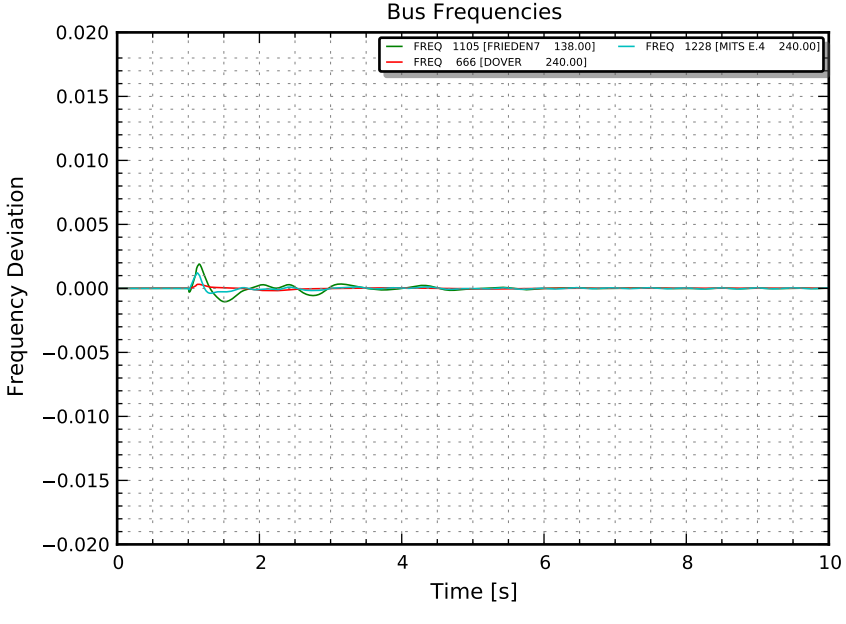
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 017 (A. 1)





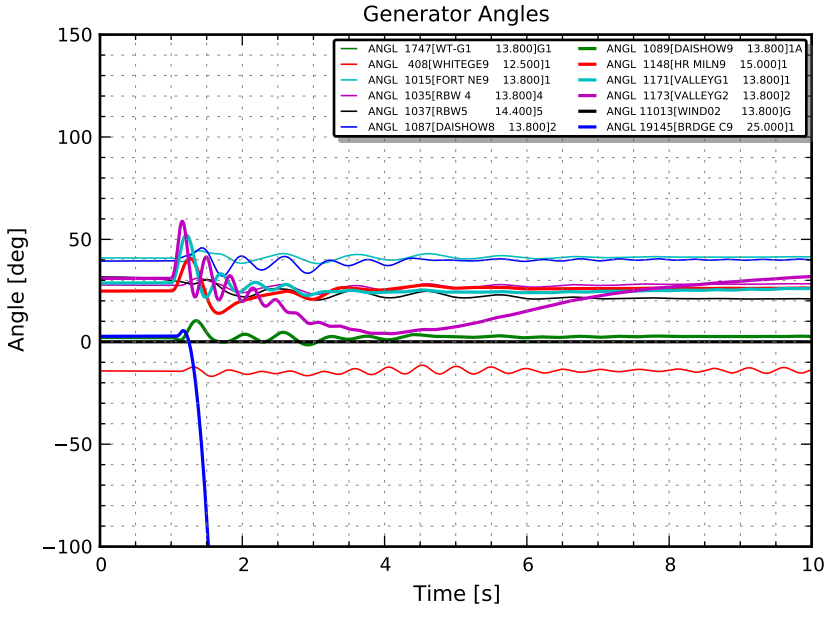


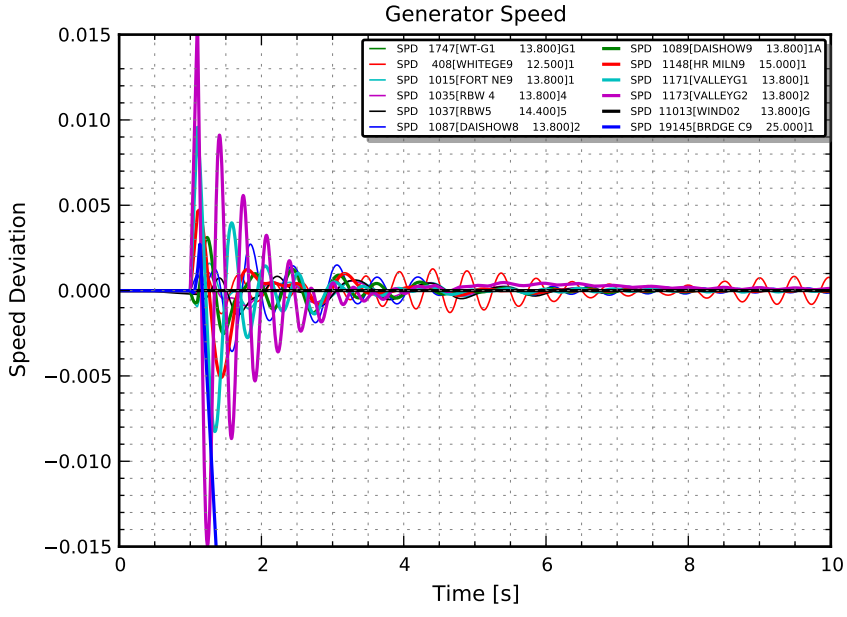


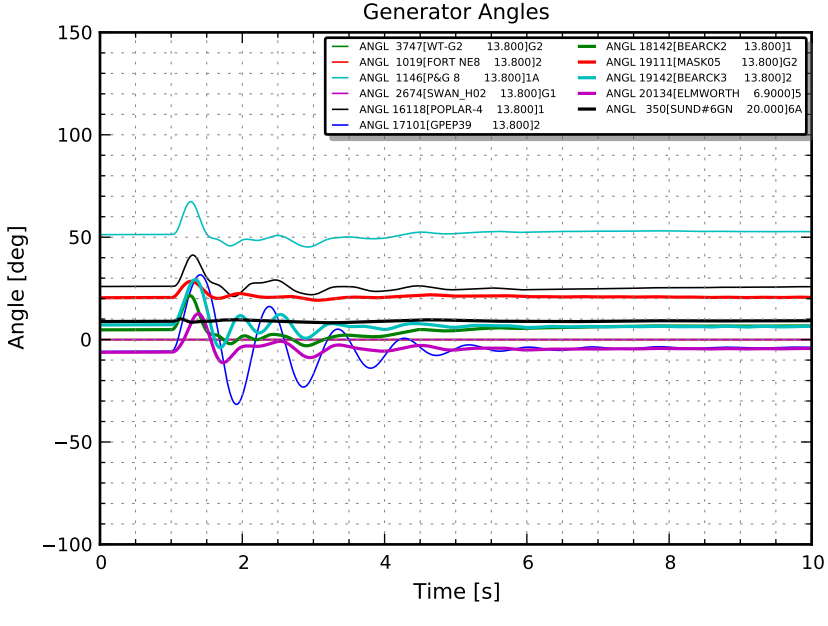
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_A.

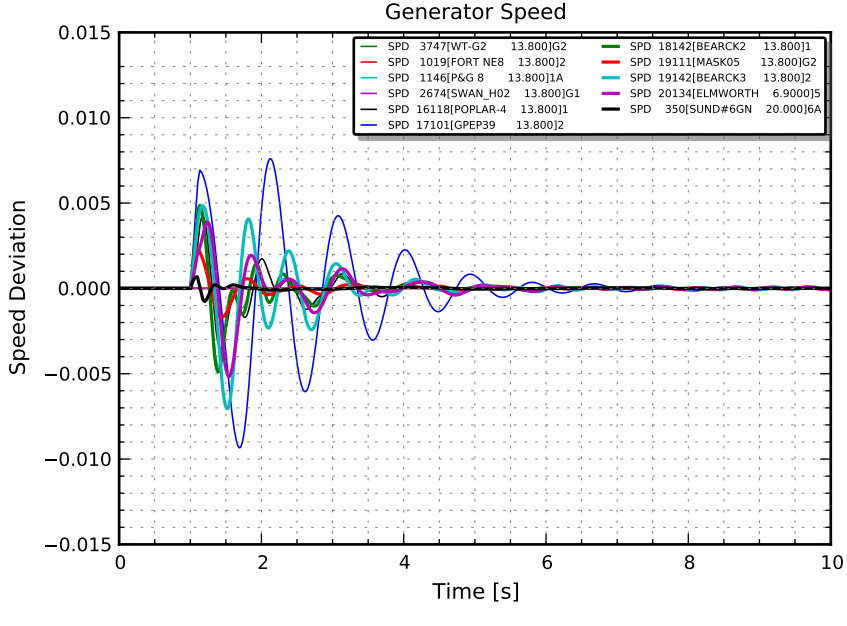
Study Area Generators

Appendix C2A
Figure: 017 (A. 2)





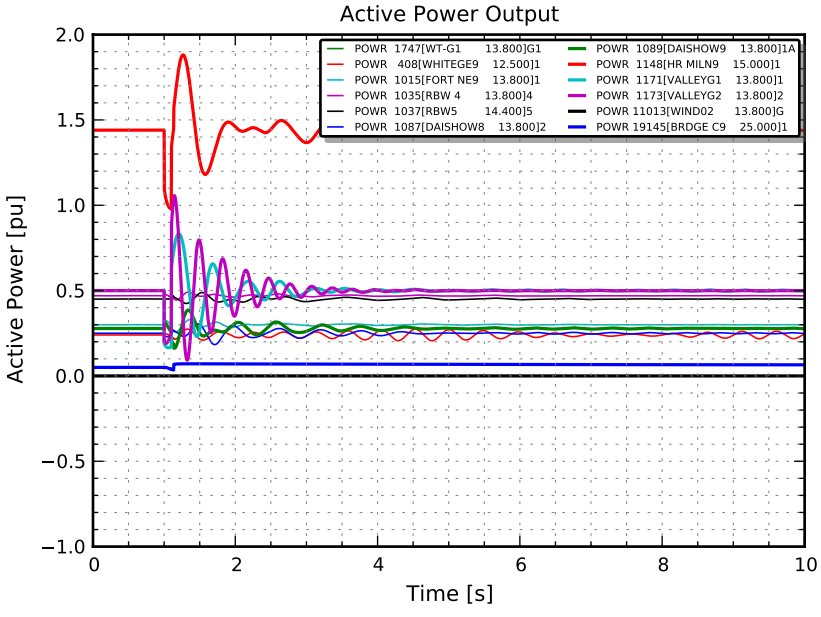


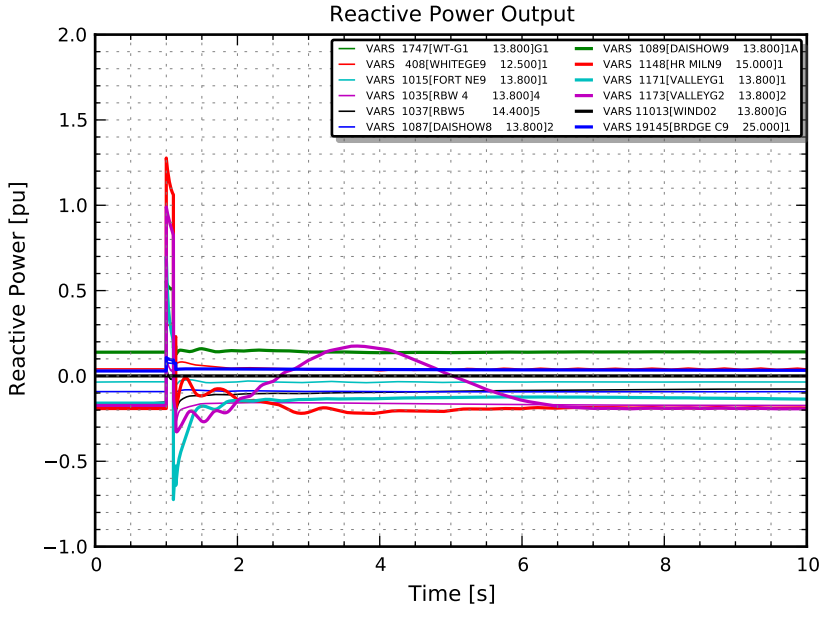


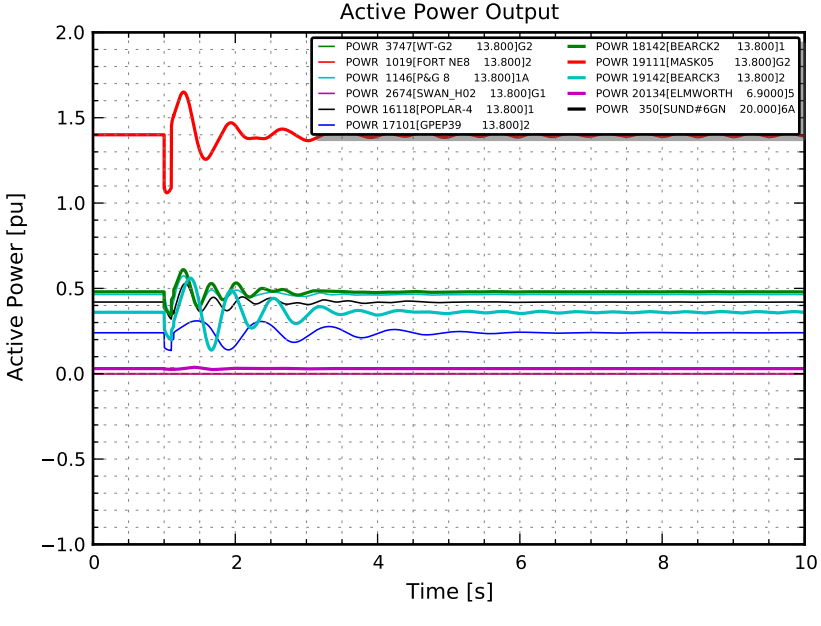
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_A.

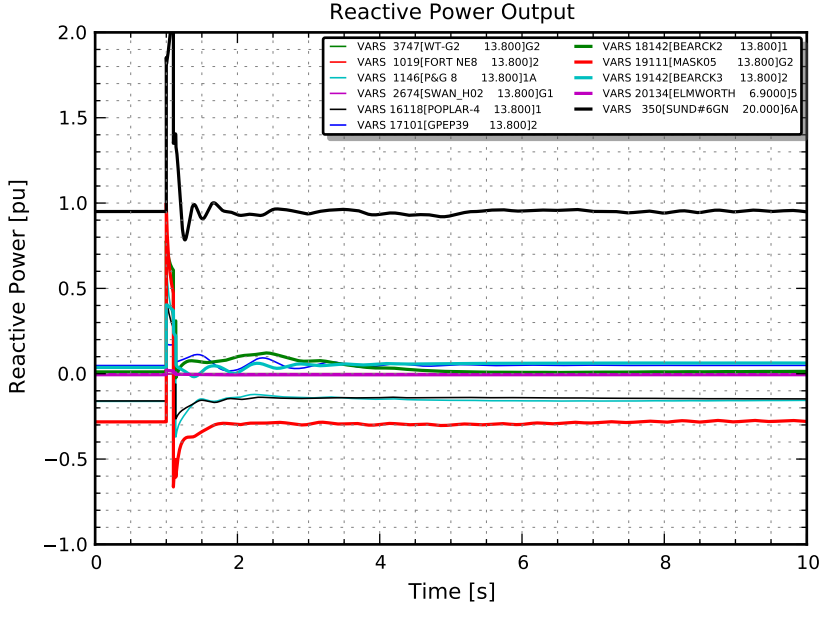
Study Area Generators

Appendix C2A
Figure: 017 (A. 3)





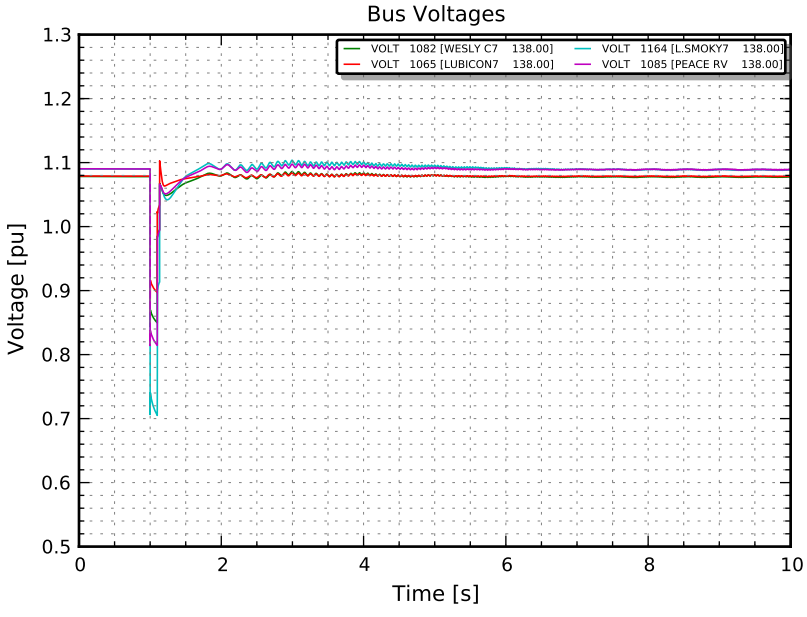


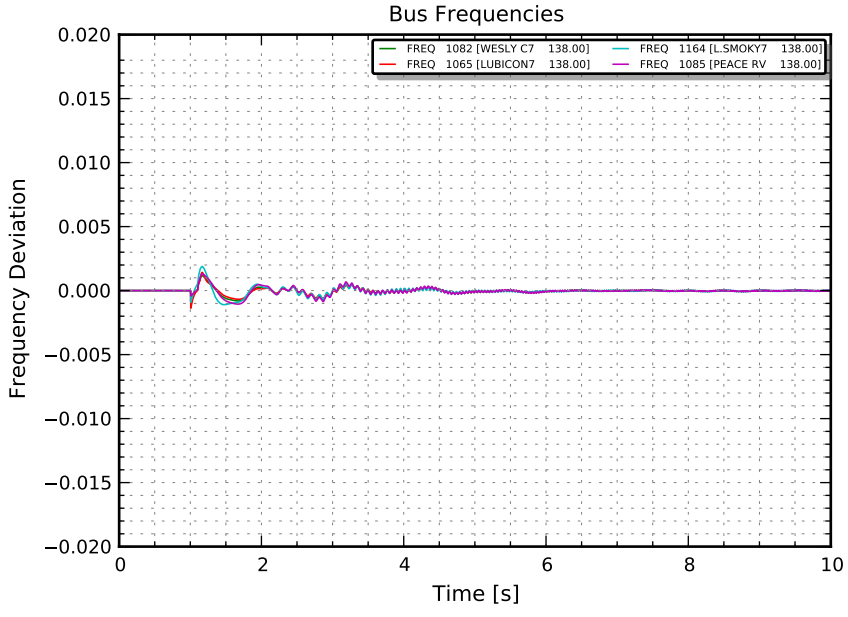


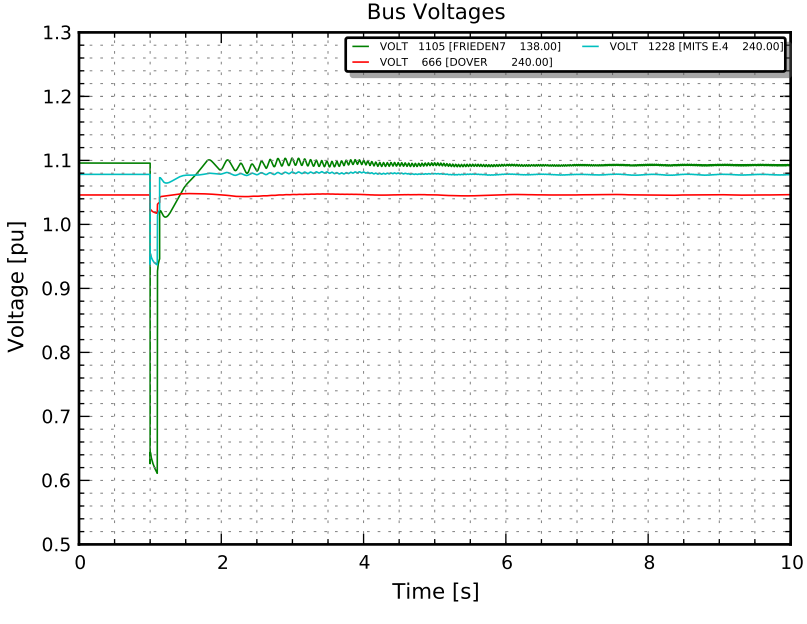
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_B.

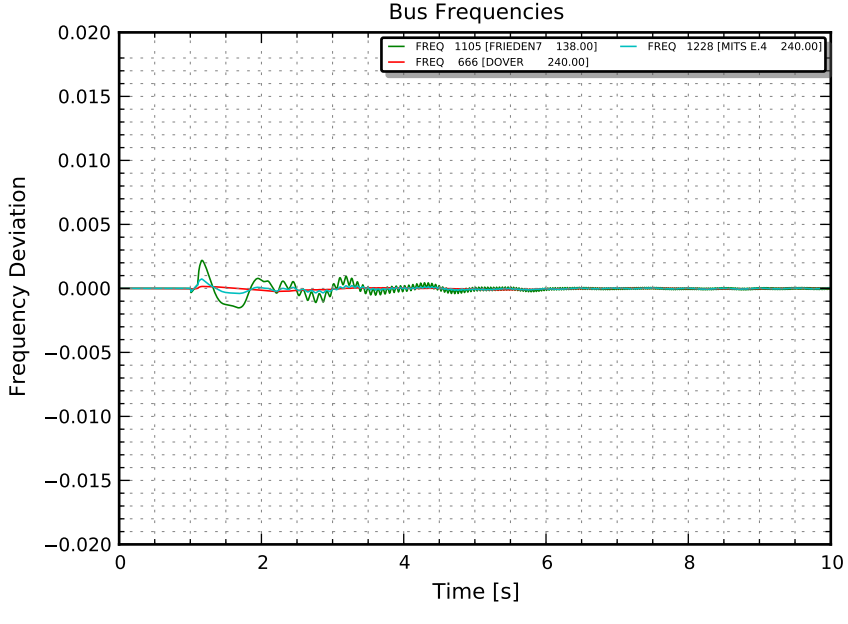
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 017 (B. 1)





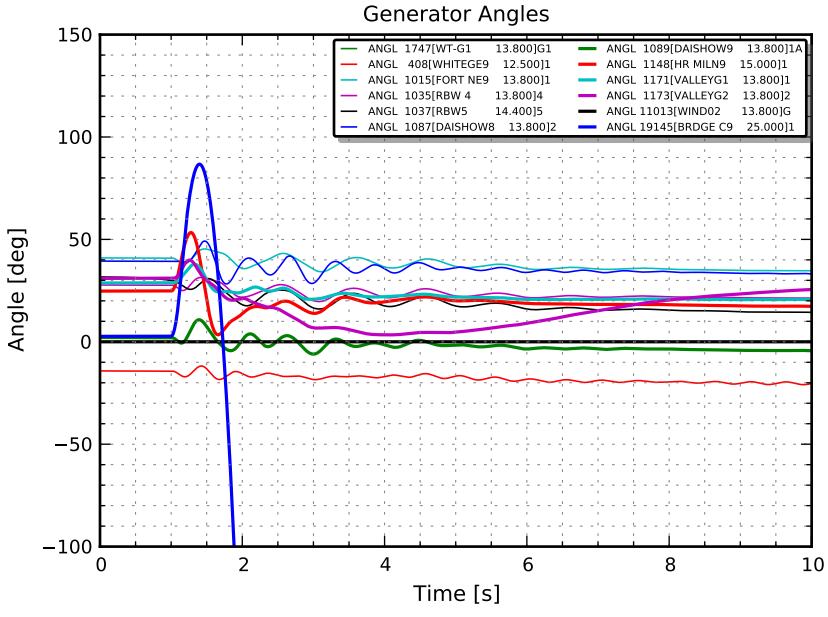


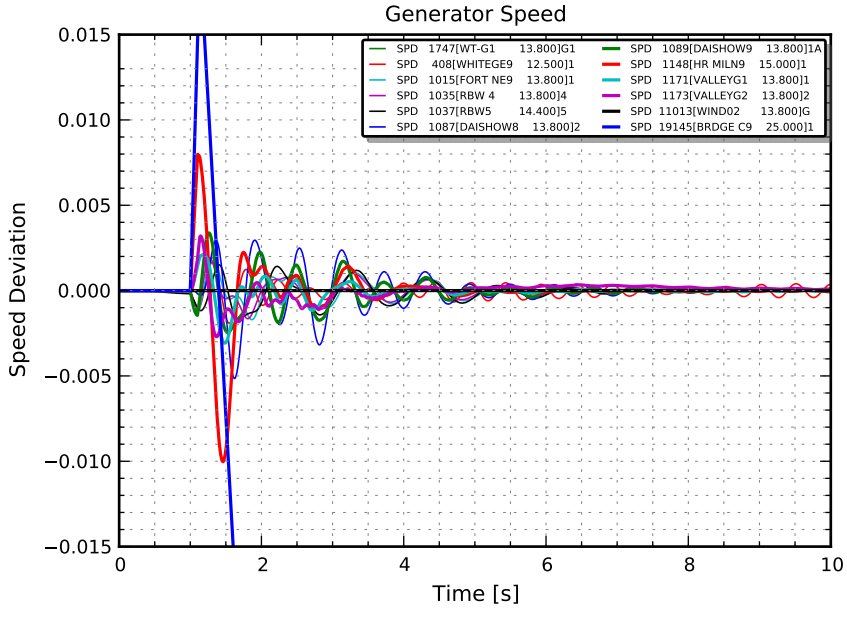


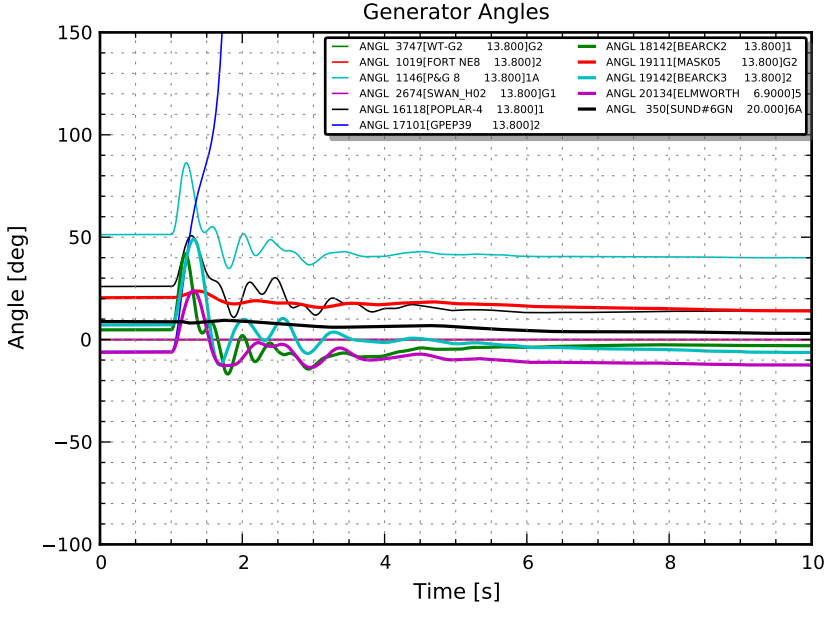
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_B.

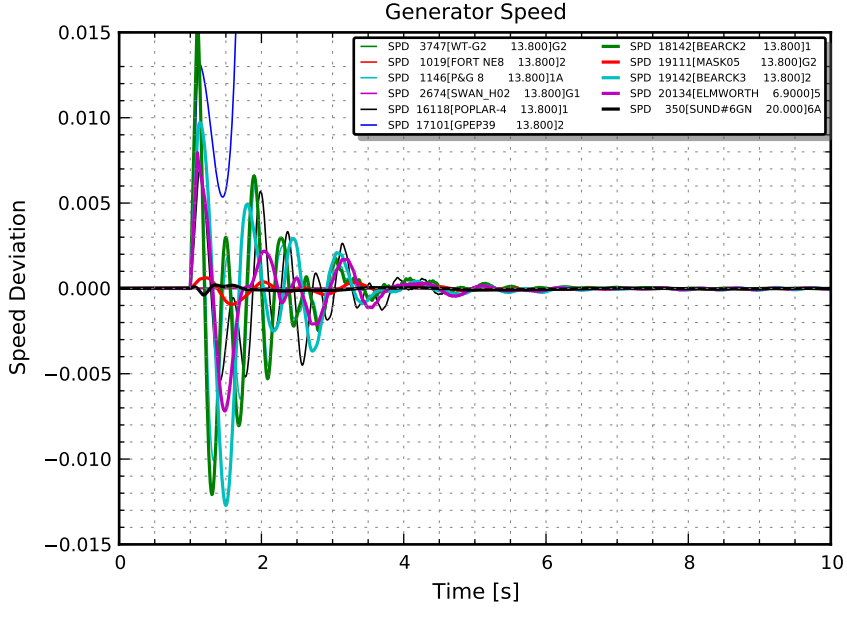
Study Area Generators

Appendix C2A
Figure: 017 (B. 2)





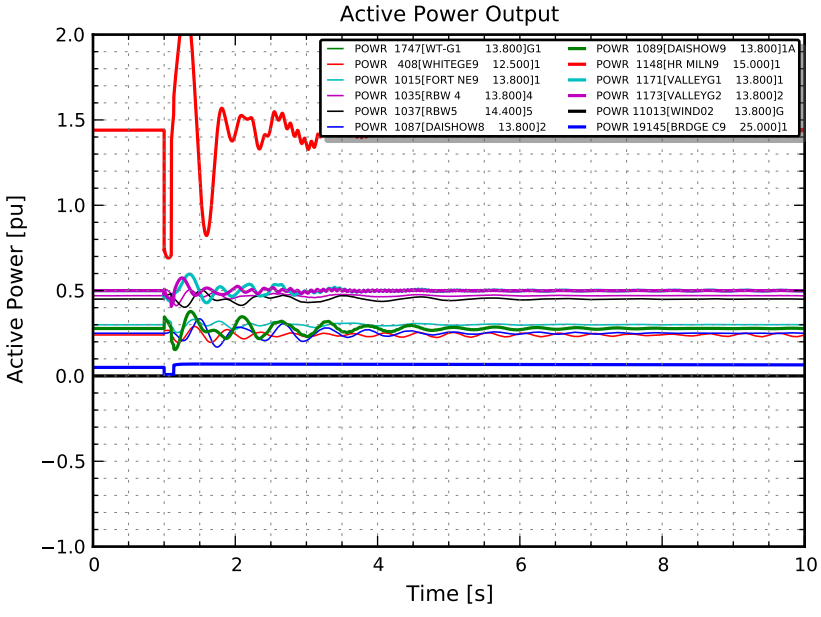


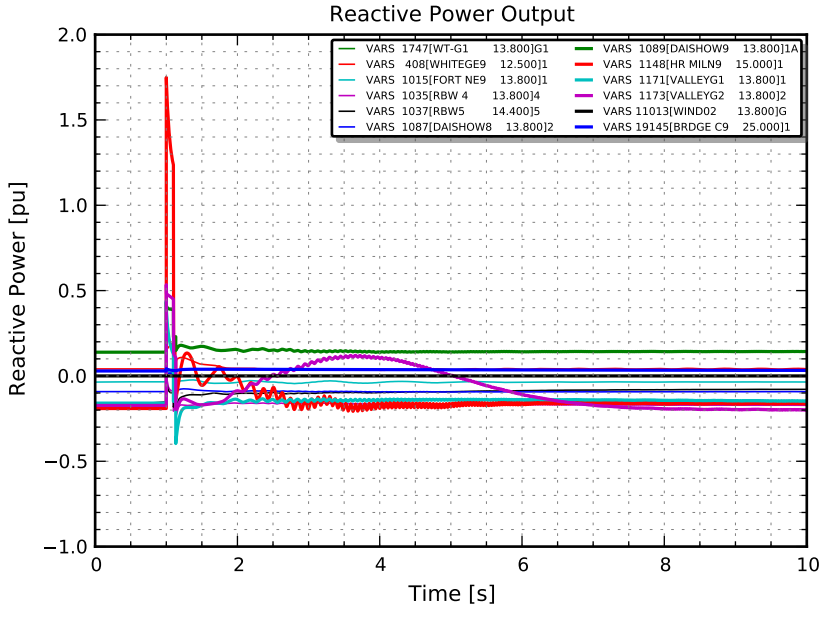


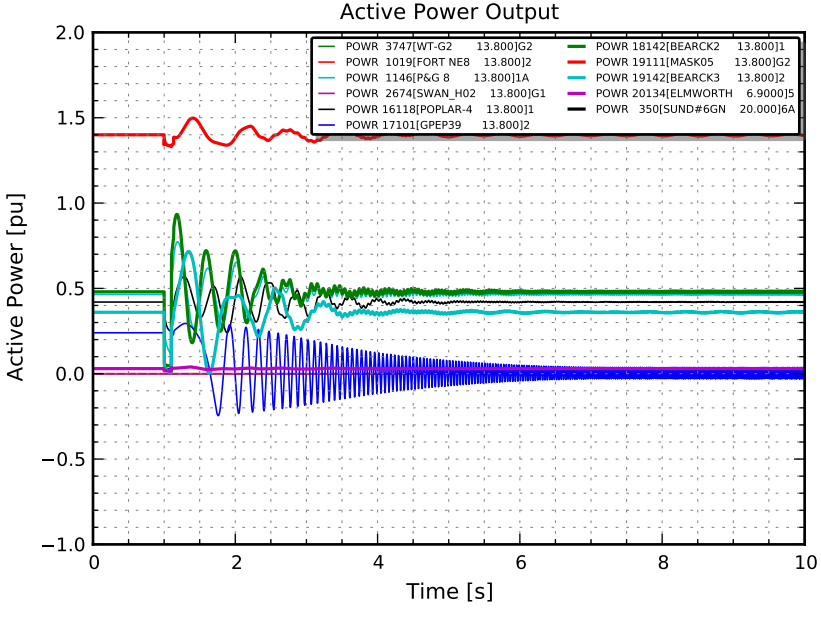
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_B.

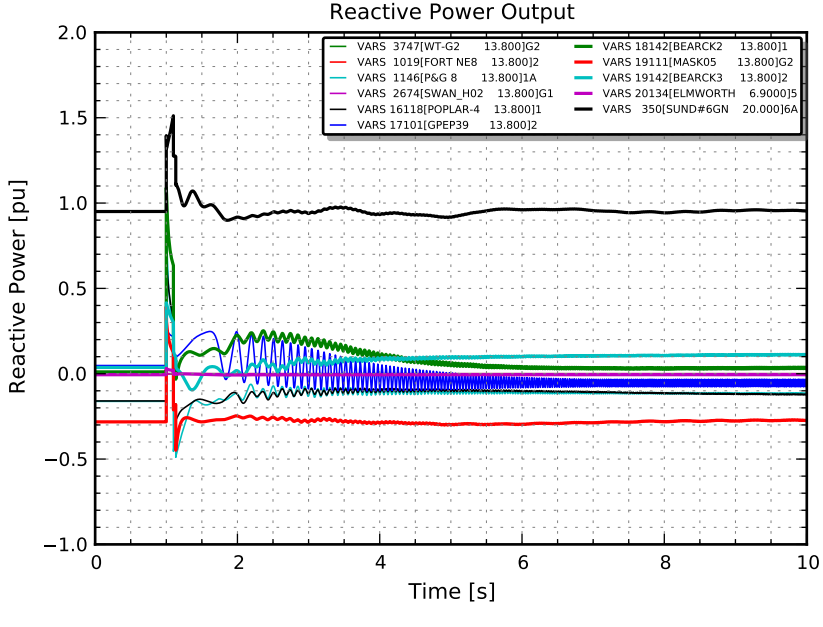
Study Area Generators

Appendix C2A
Figure: 017 (B. 3)





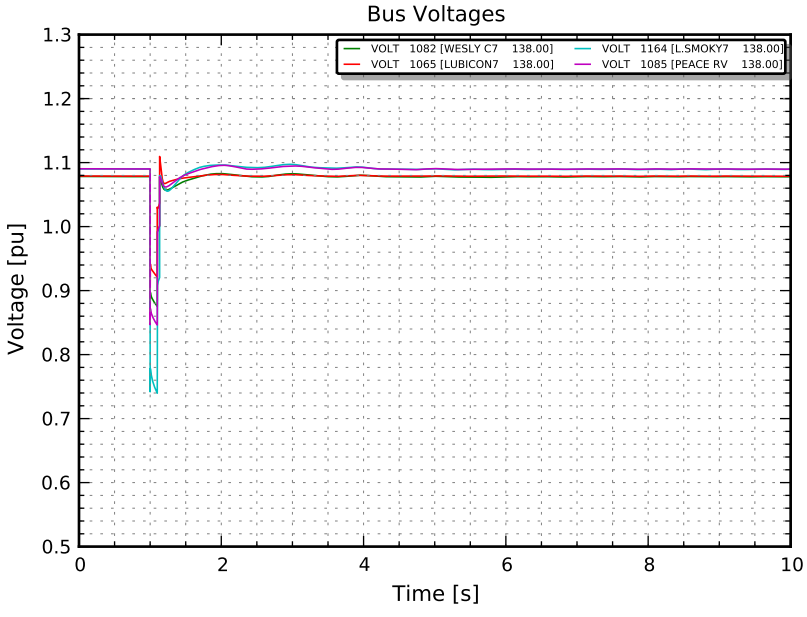


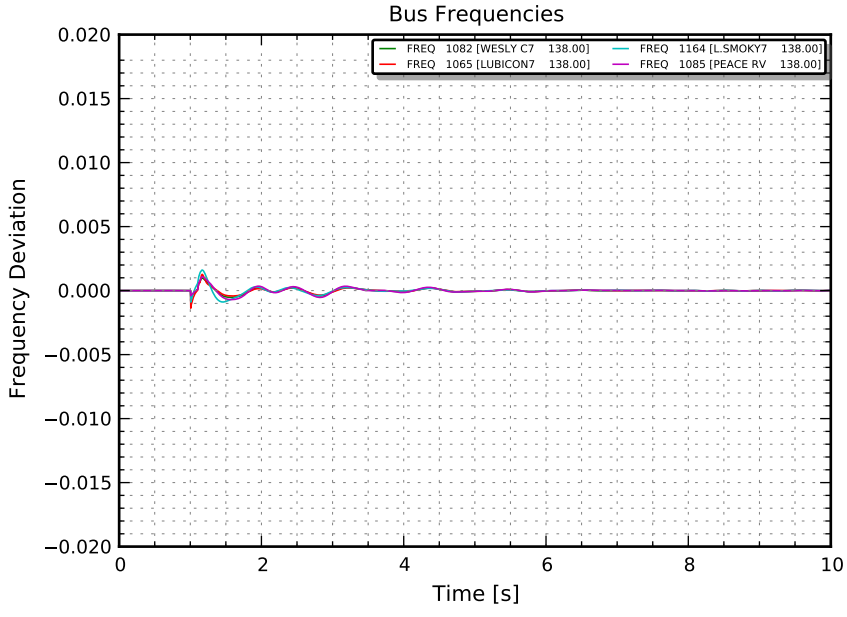


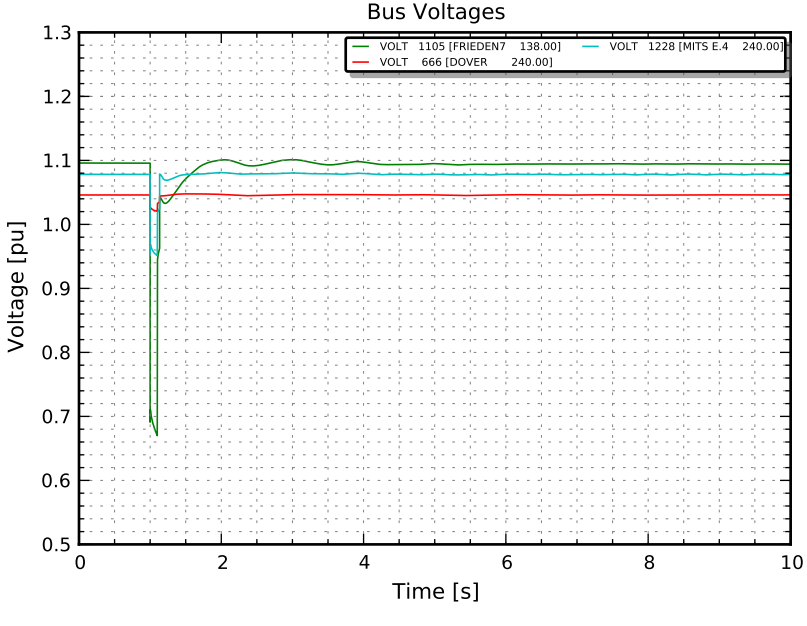
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_A.

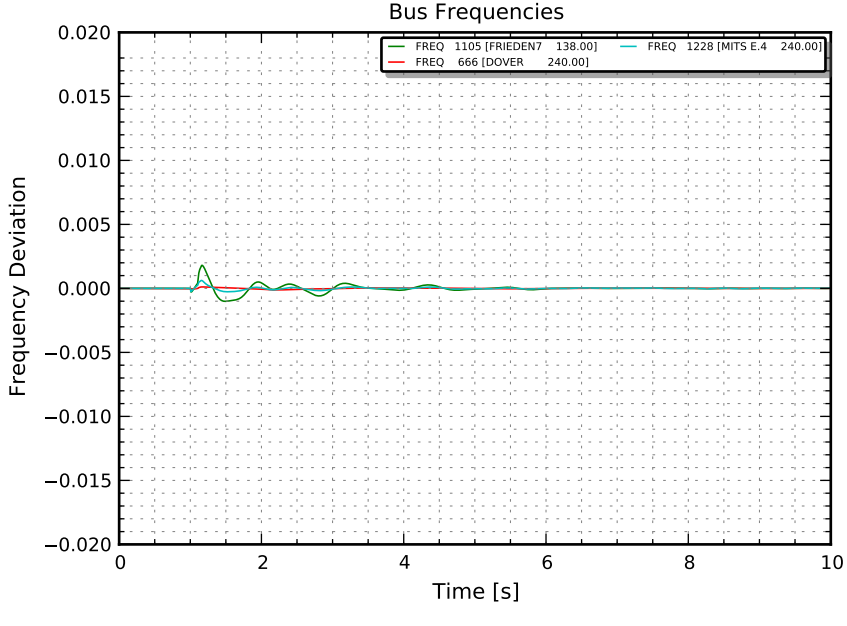
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 018 (A. 1)





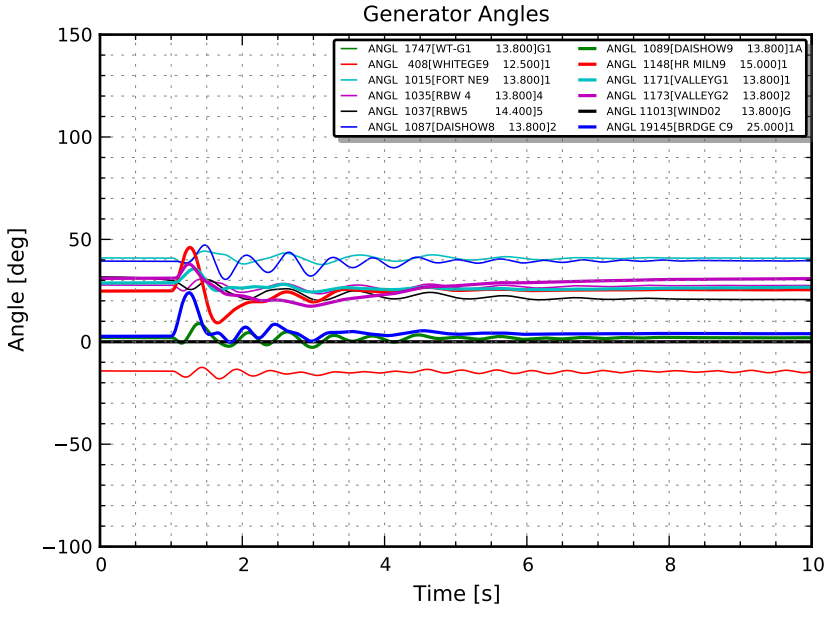


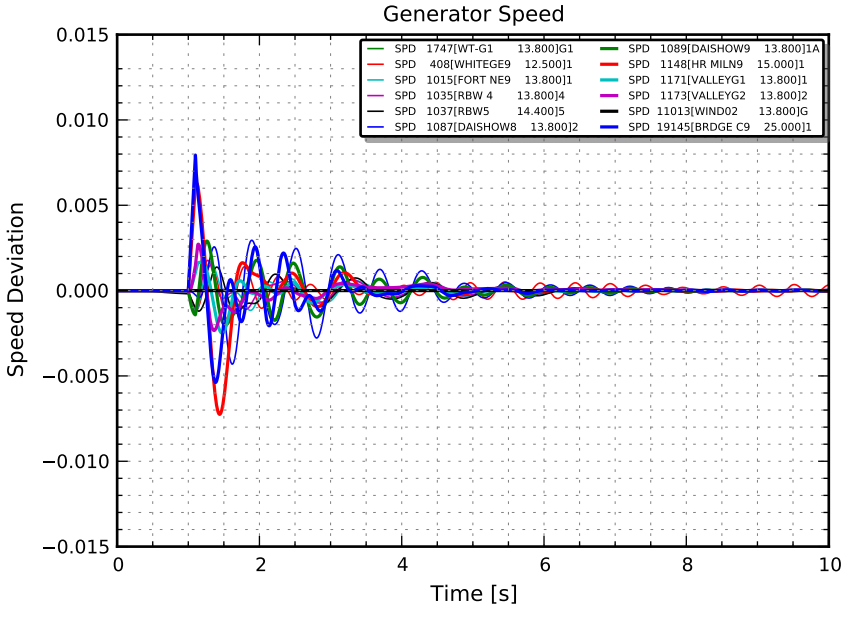


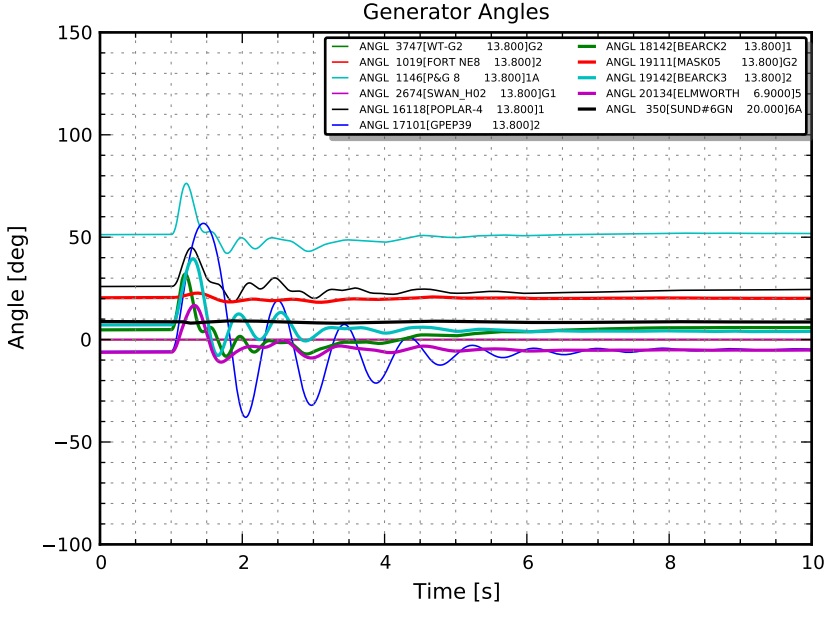
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_A.

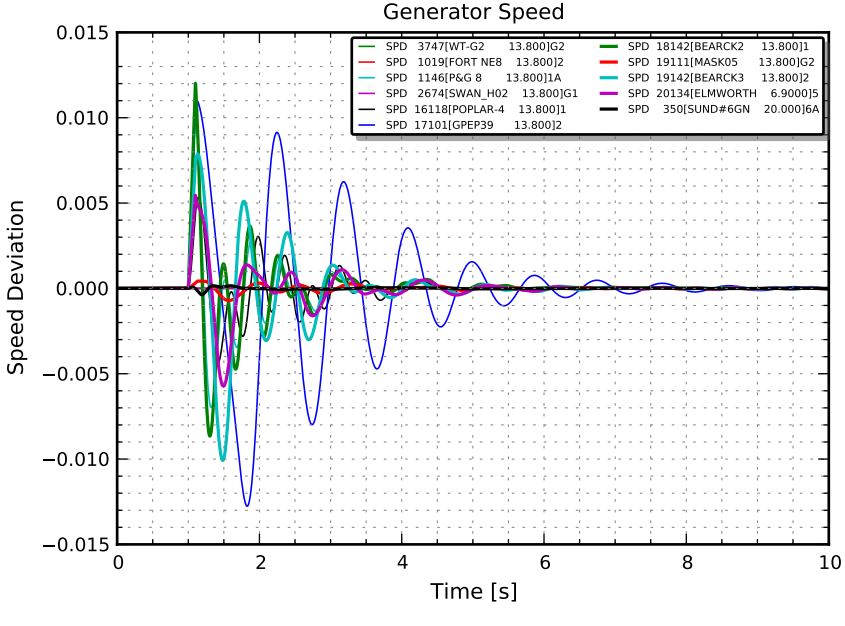
Study Area Generators

Appendix C2A
Figure: 018 (A. 2)





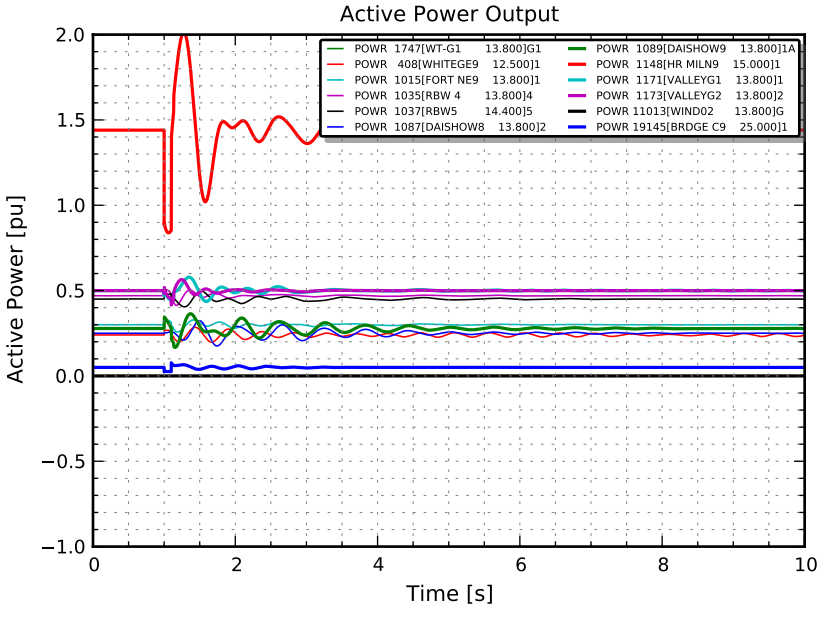


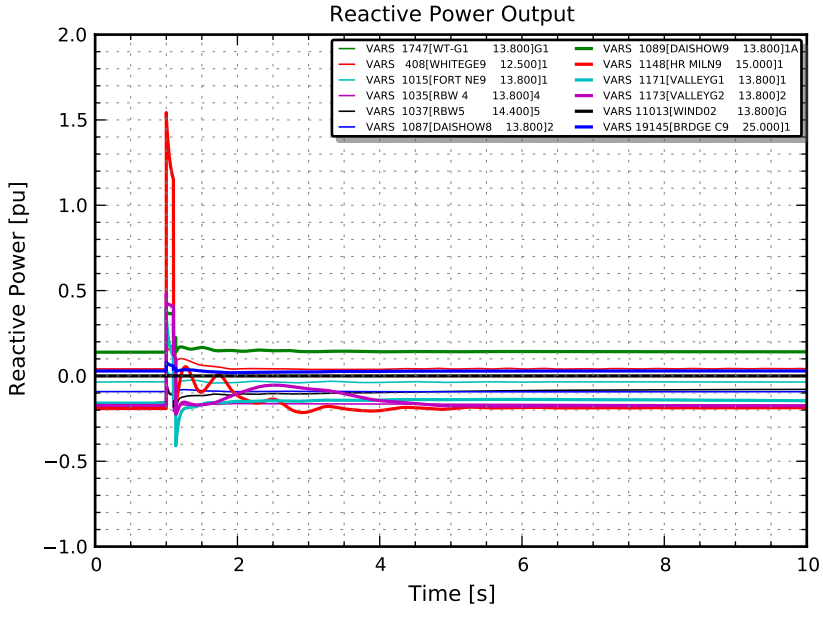


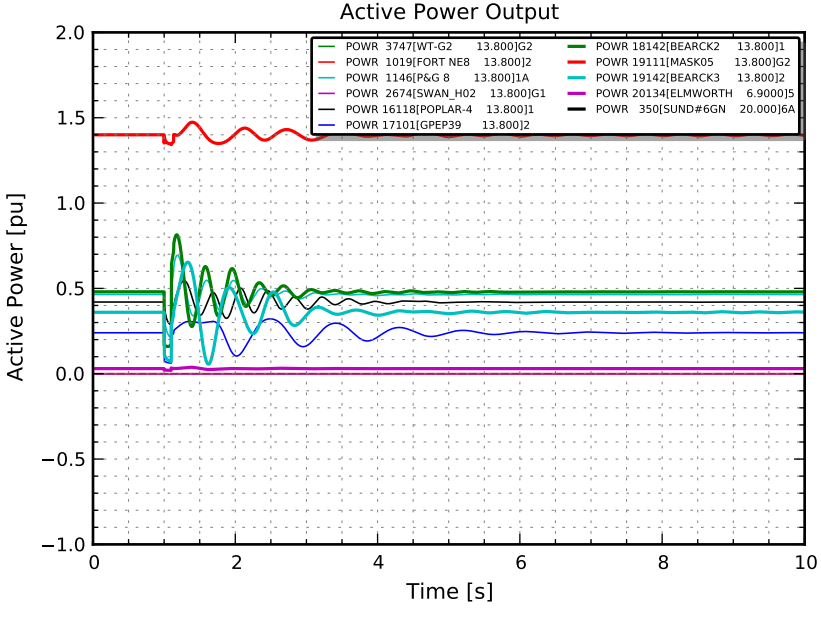
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_A.

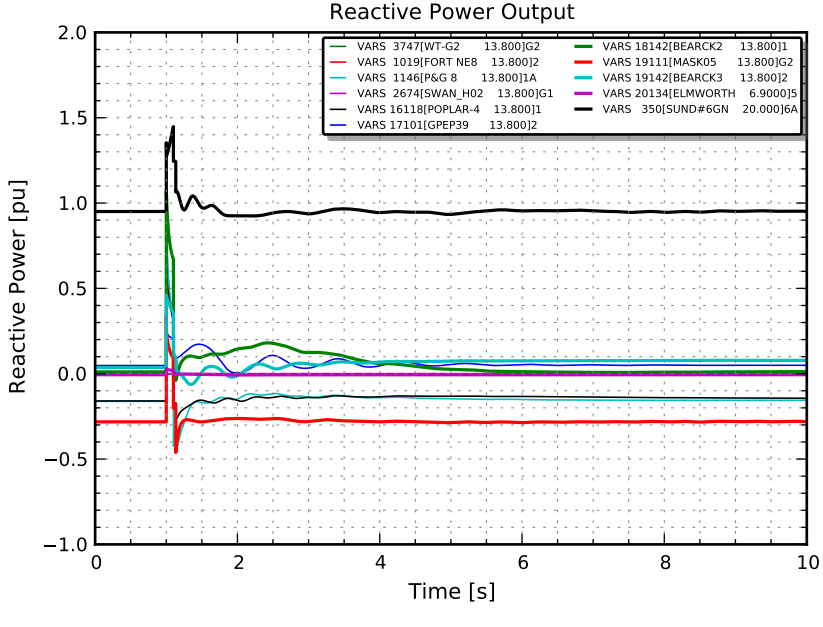
Study Area Generators

Appendix C2A
Figure: 018 (A. 3)





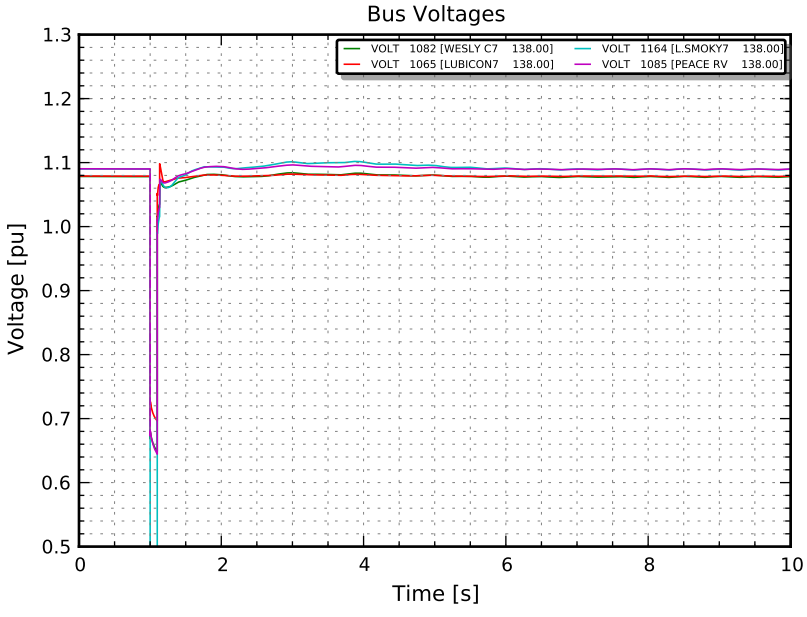


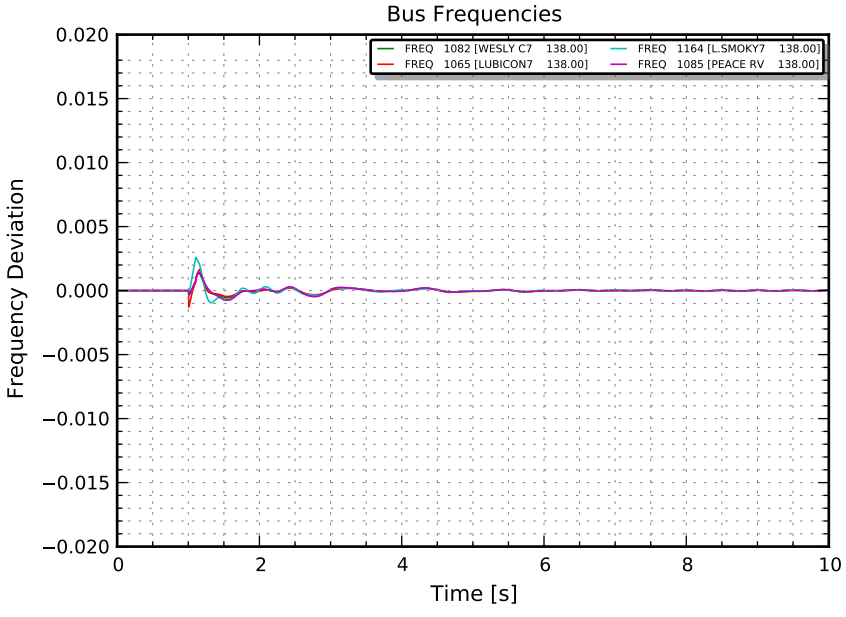


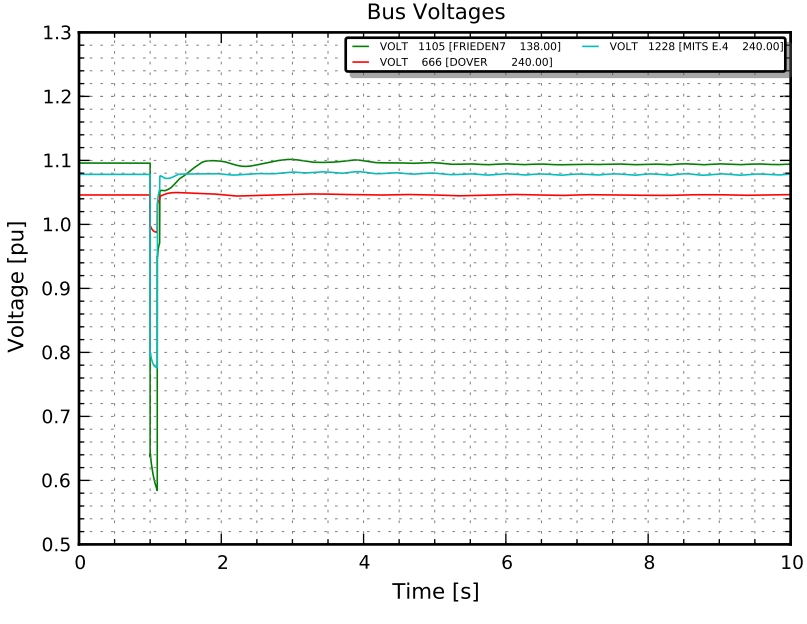
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_B.

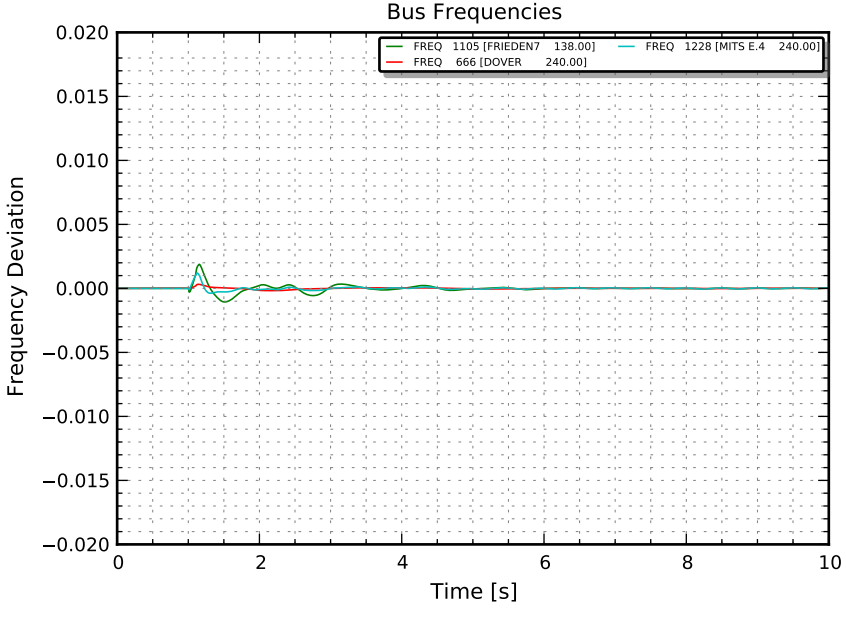
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 018 (B. 1)





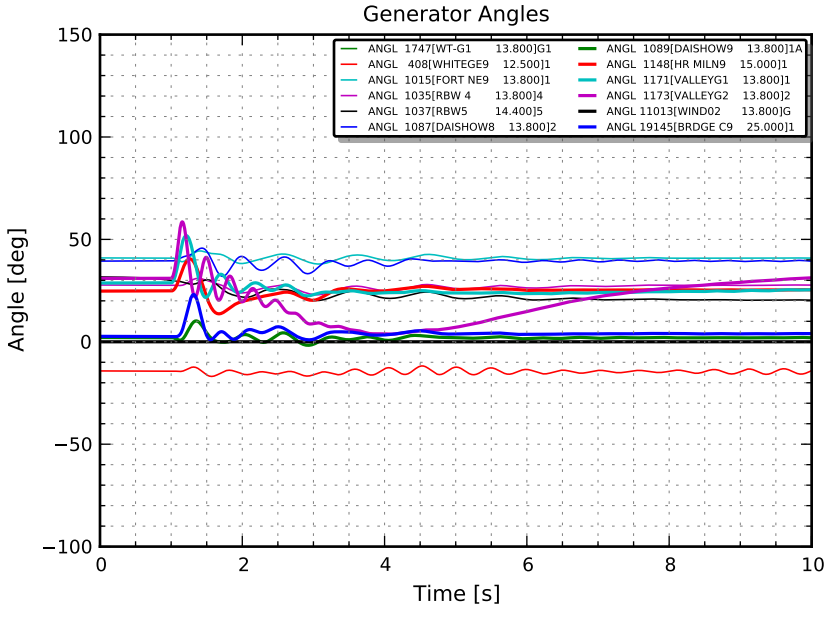


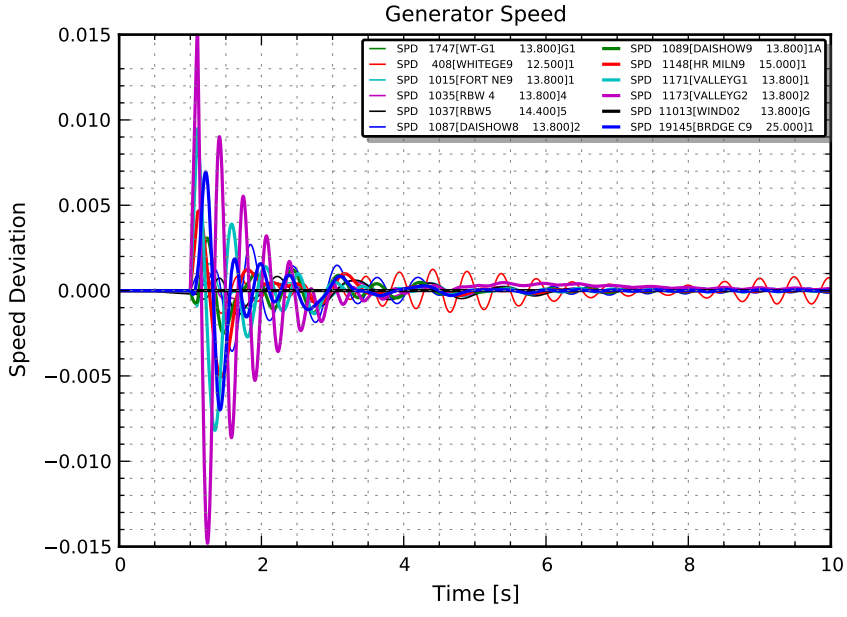


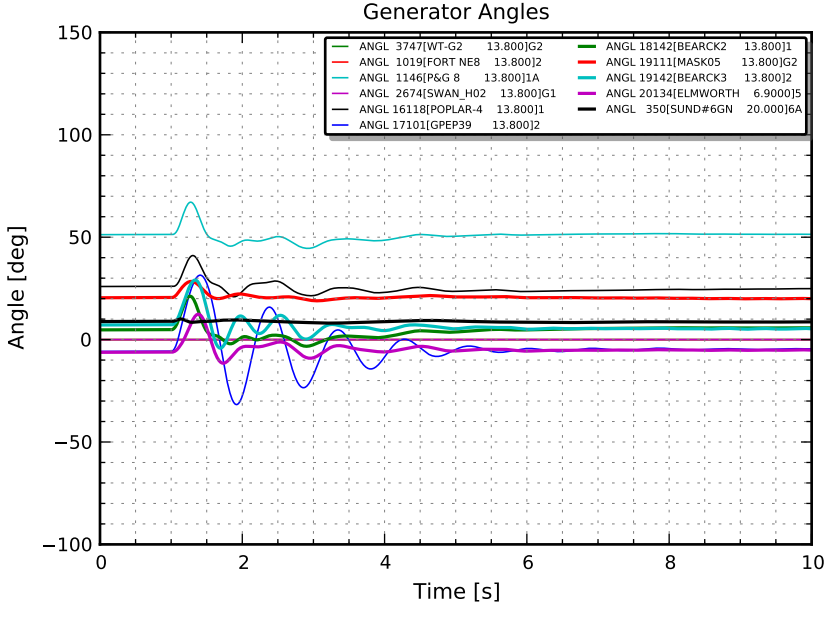
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_B.

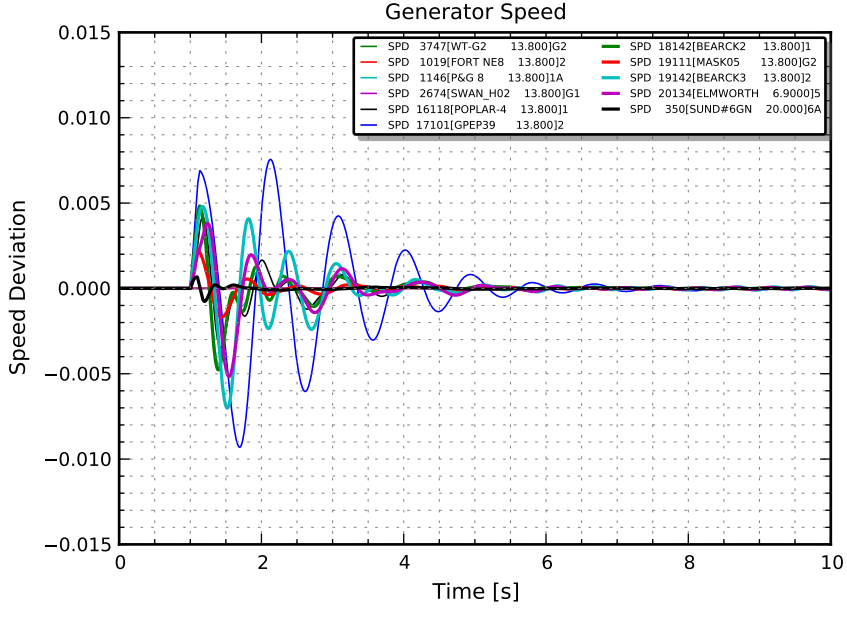
Study Area Generators

Appendix C2A
Figure: 018 (B. 2)





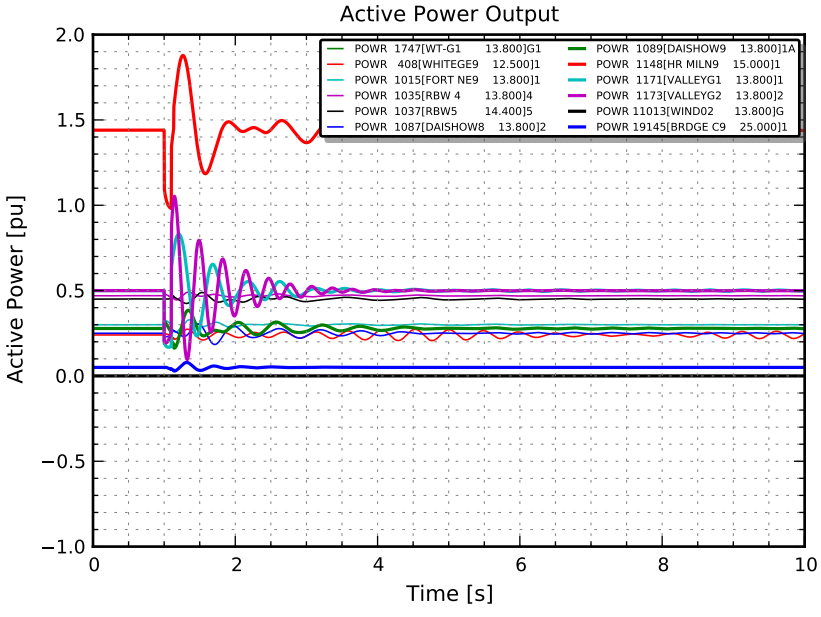


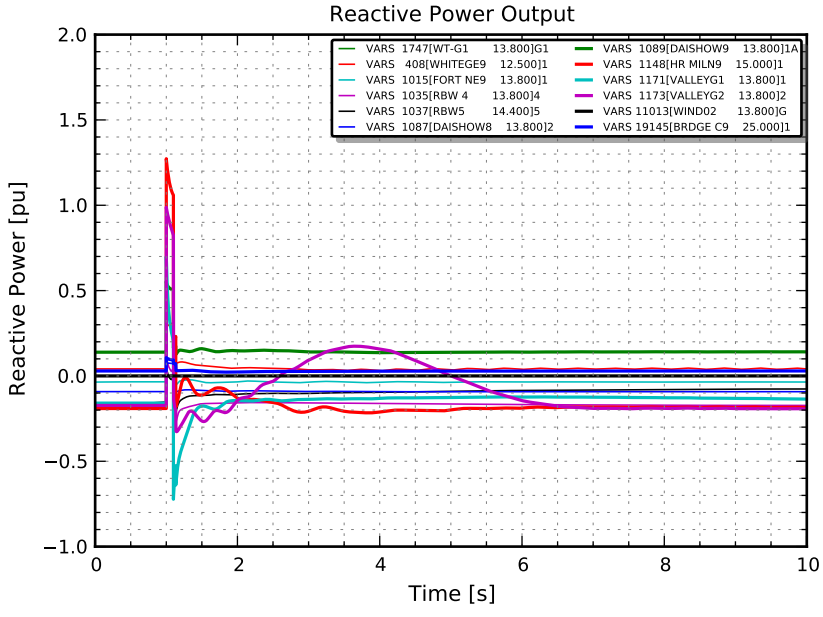


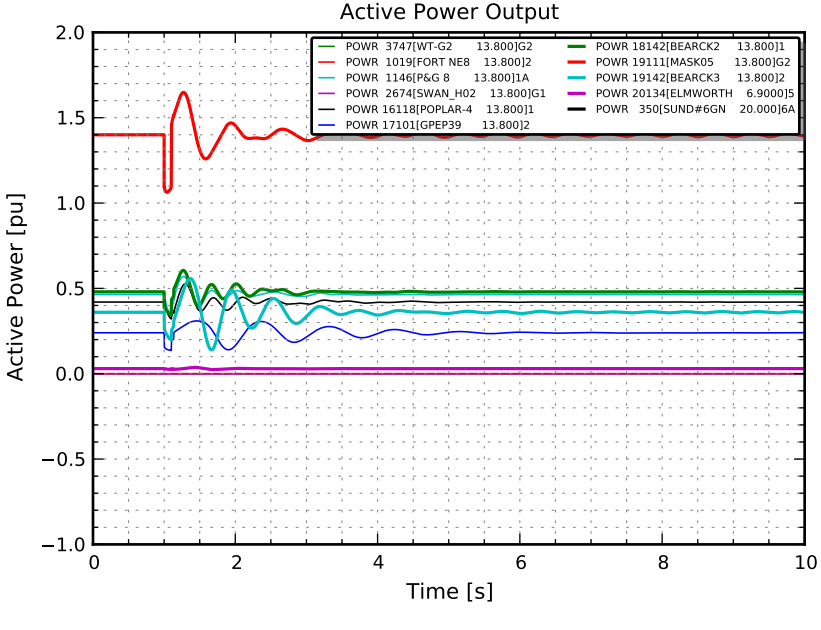
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_B.

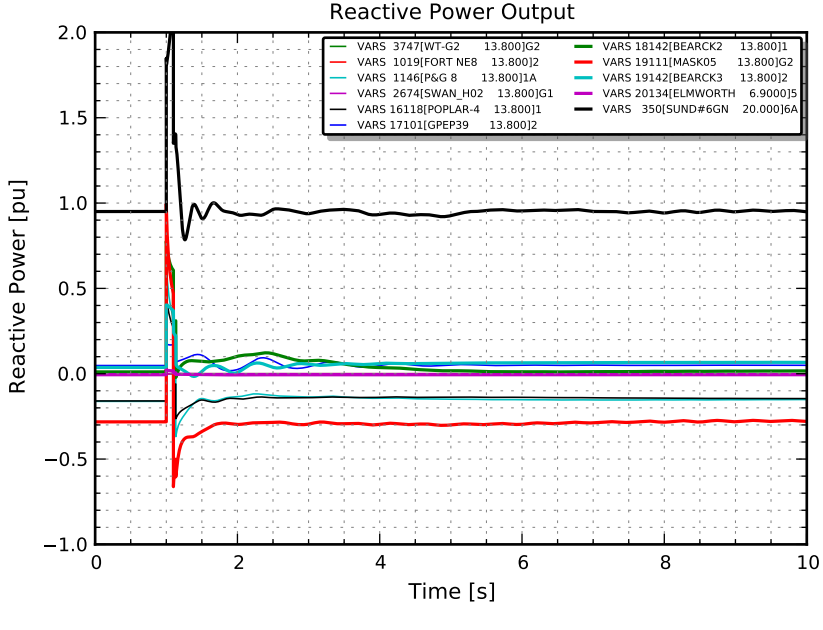
Study Area Generators

Appendix C2A
Figure: 018 (B. 3)





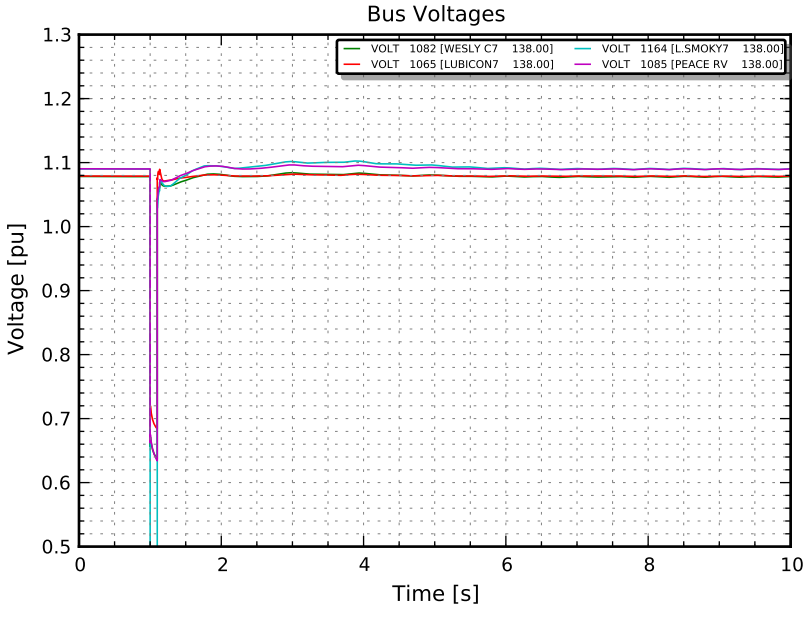


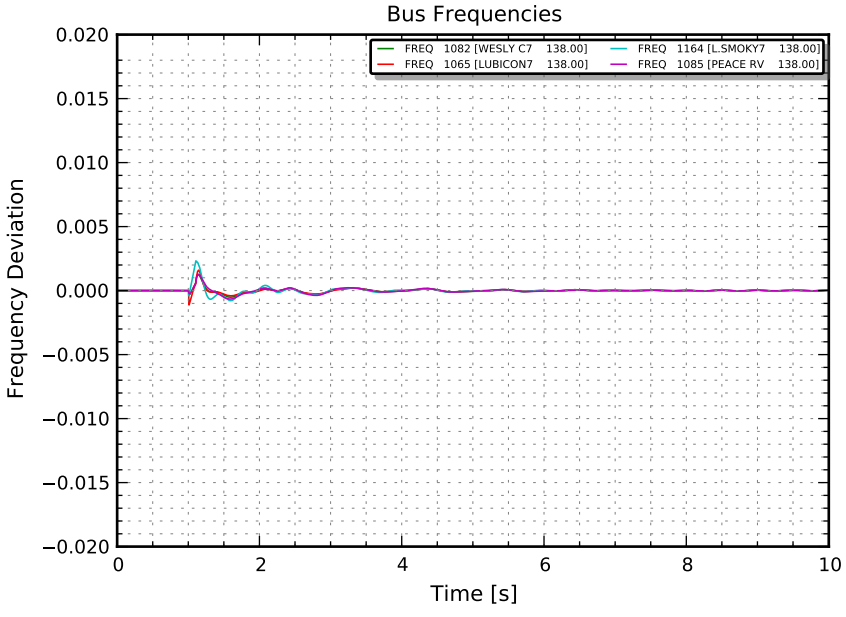


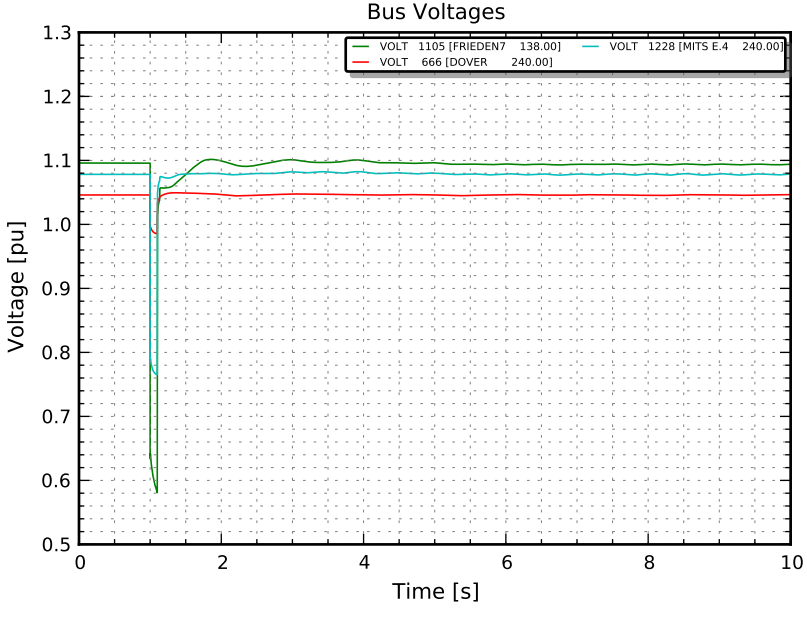
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 019 7L40 LITTLESMOKY to SIMONETTE_A.

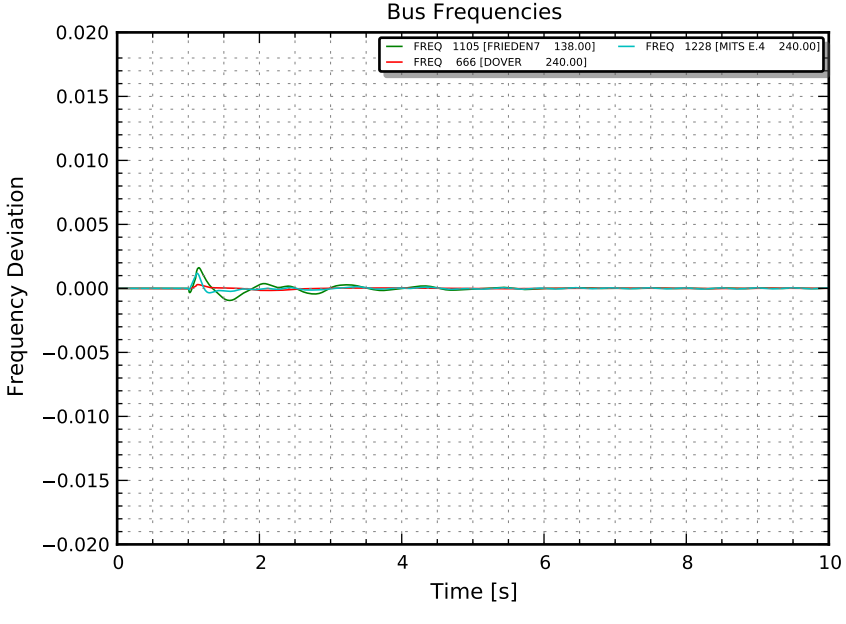
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 019 (A. 1)





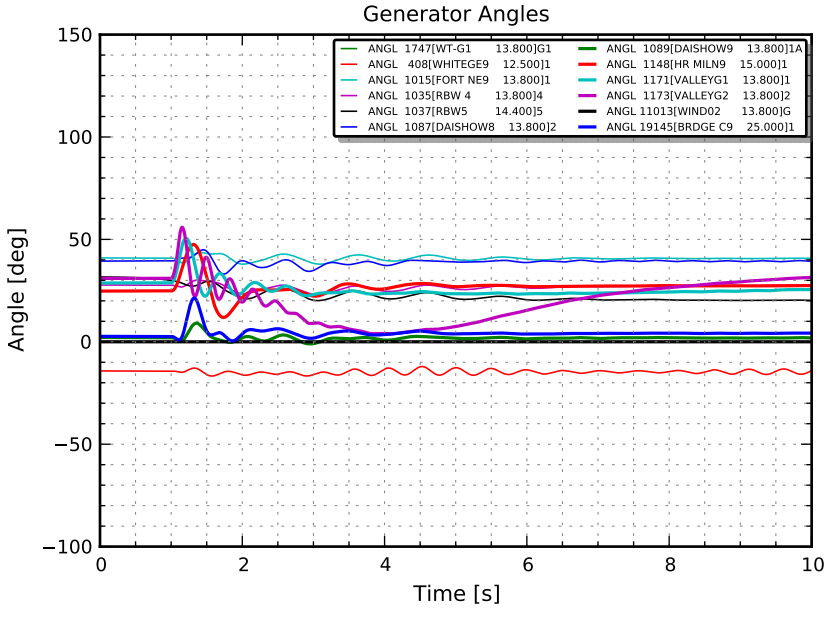


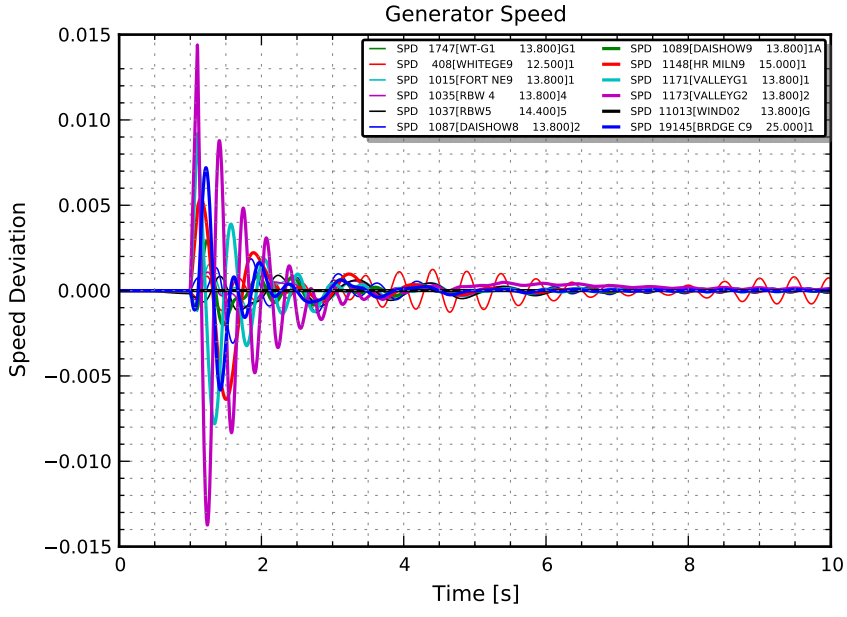


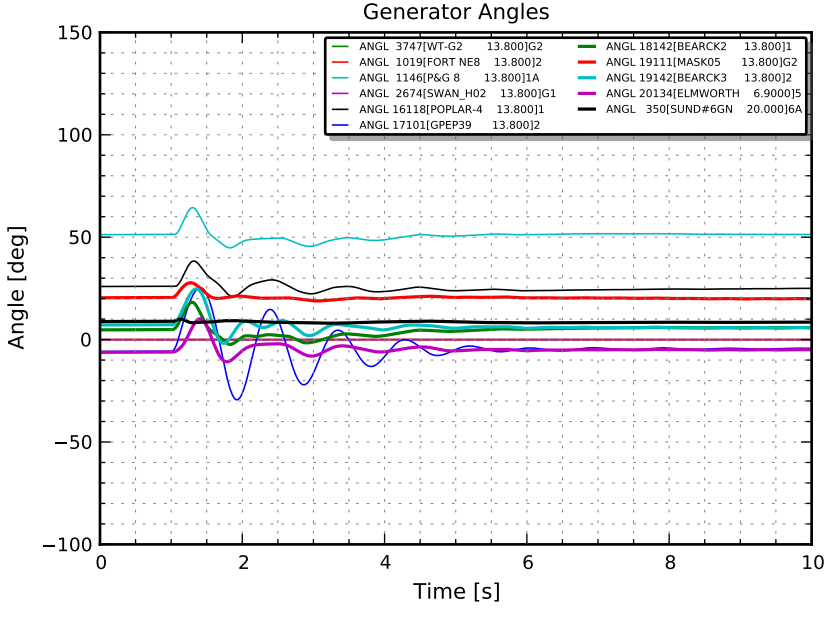
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 019 7L40 LITTLESMOKY to SIMONETTE_A.

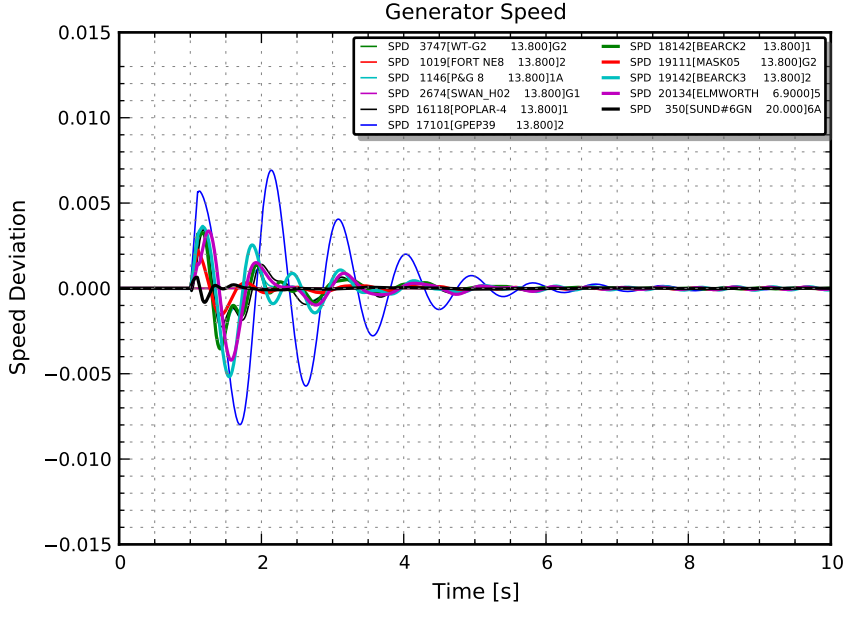
Study Area Generators

Appendix C2A
Figure: 019 (A. 2)





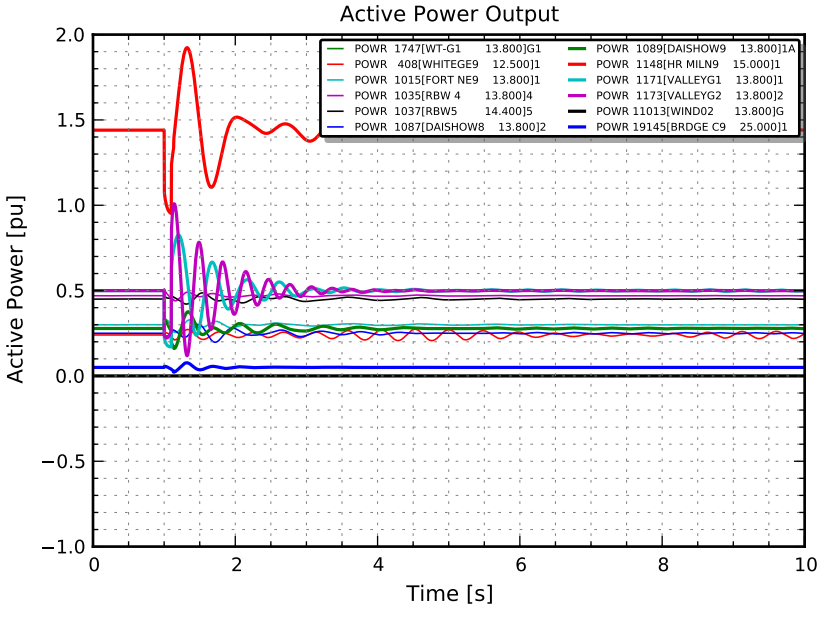


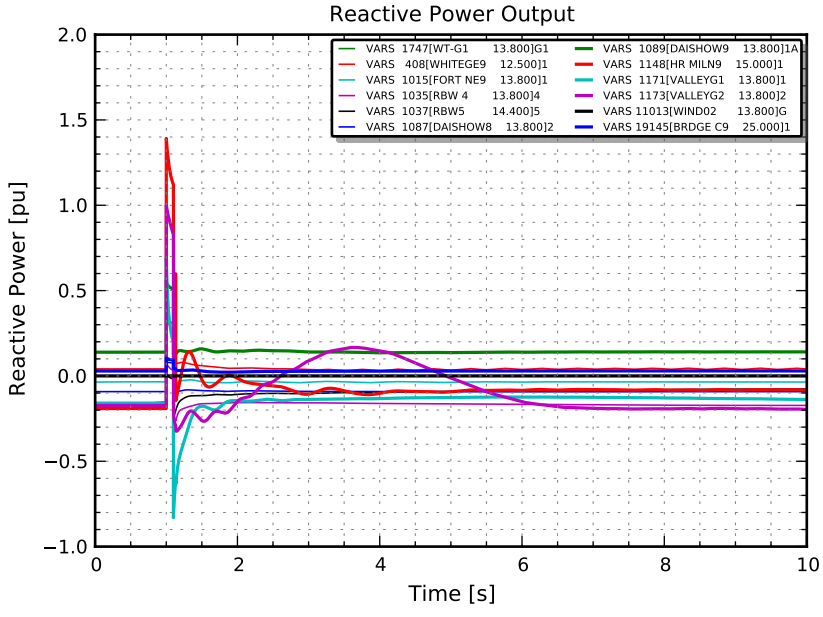


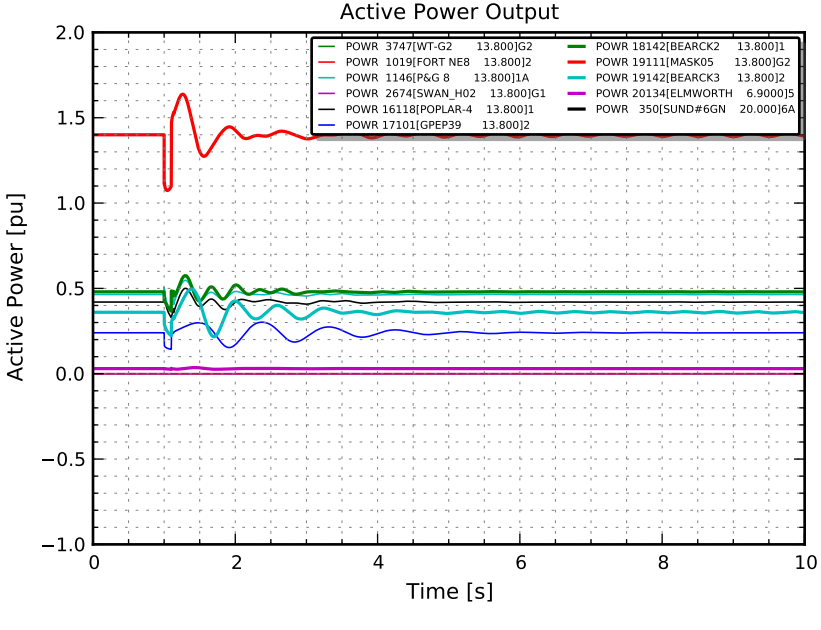
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 019 7L40 LITTLESMOKY to SIMONETTE_A.

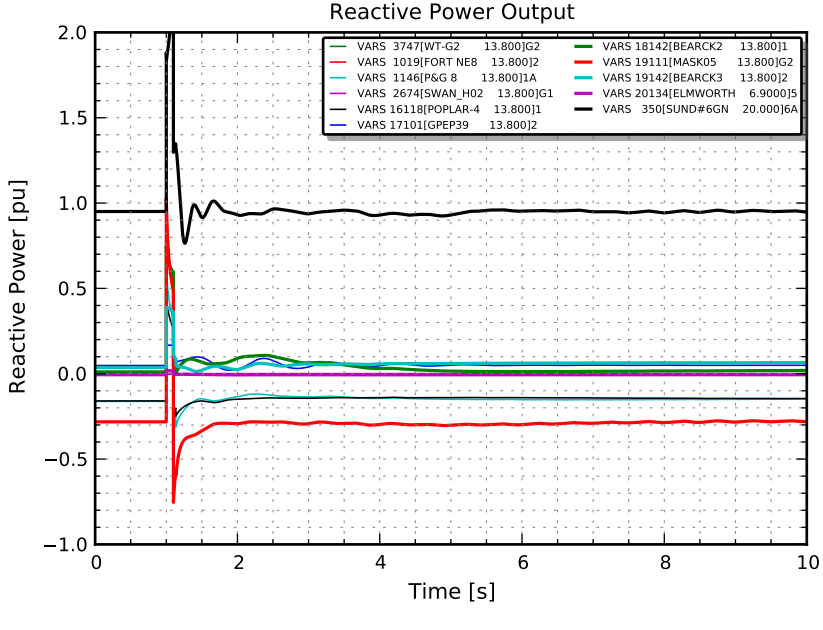
Study Area Generators

Appendix C2A
Figure: 019 (A. 3)





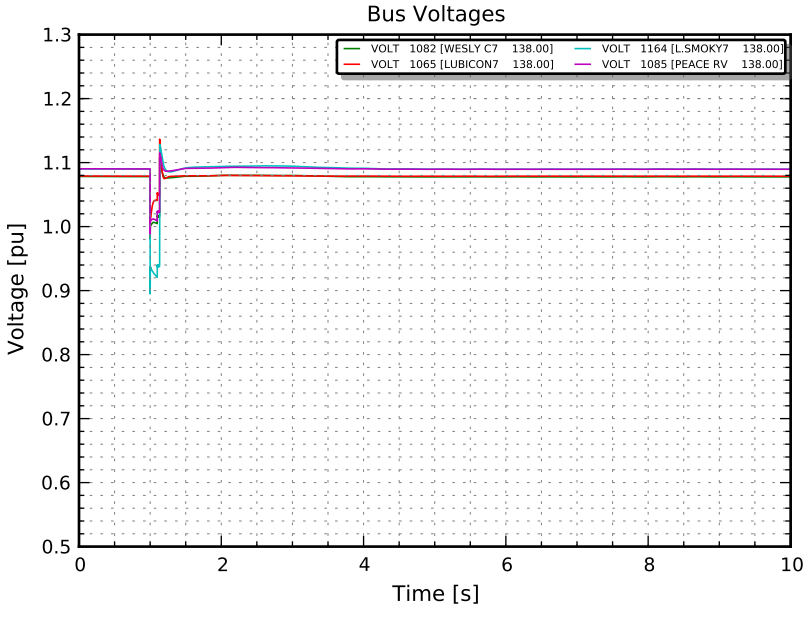


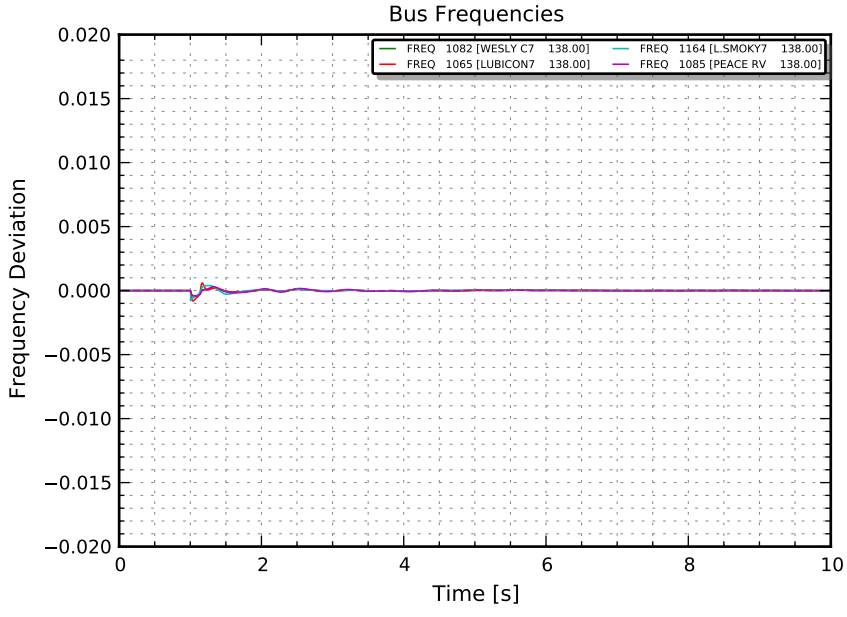


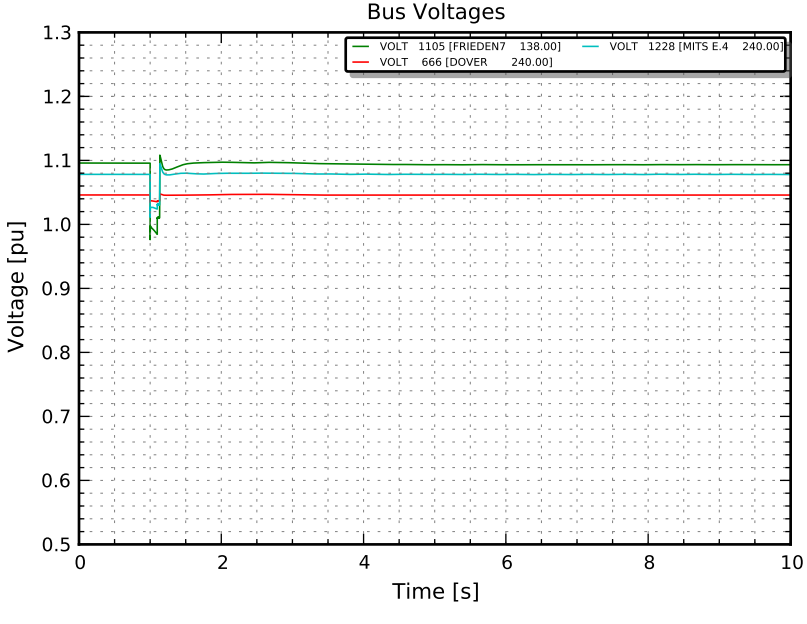
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 019 7L40 LITTLESMOKY to SIMONETTE_B.

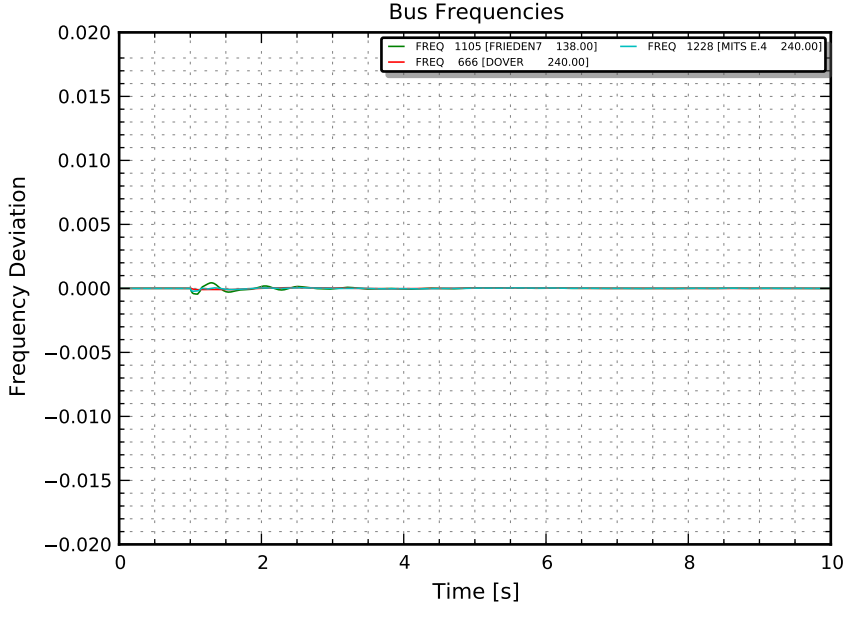
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 019 (B. 1)





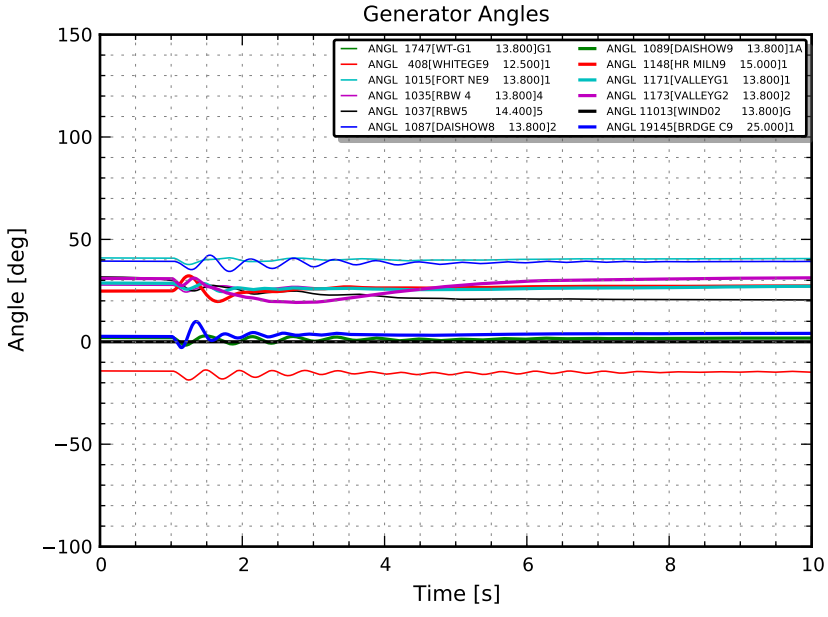


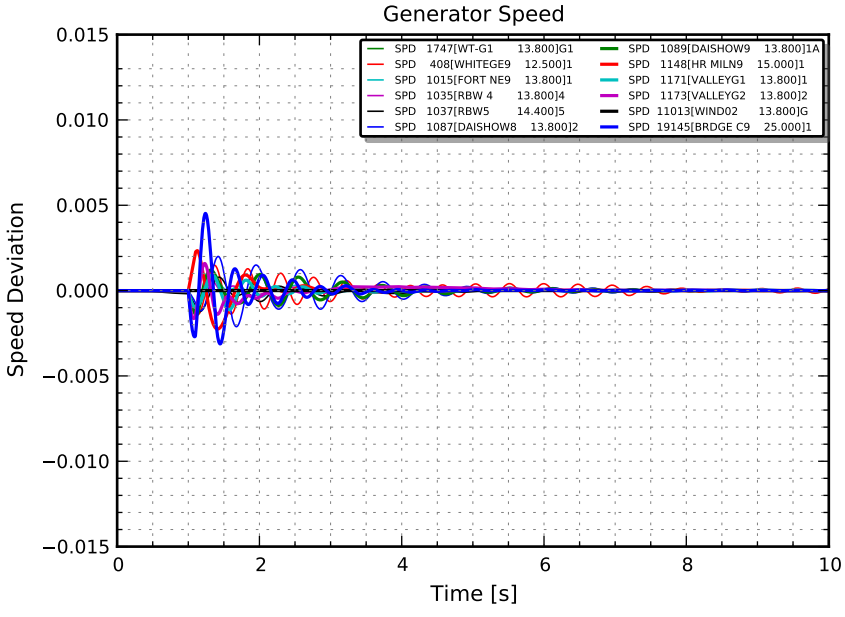


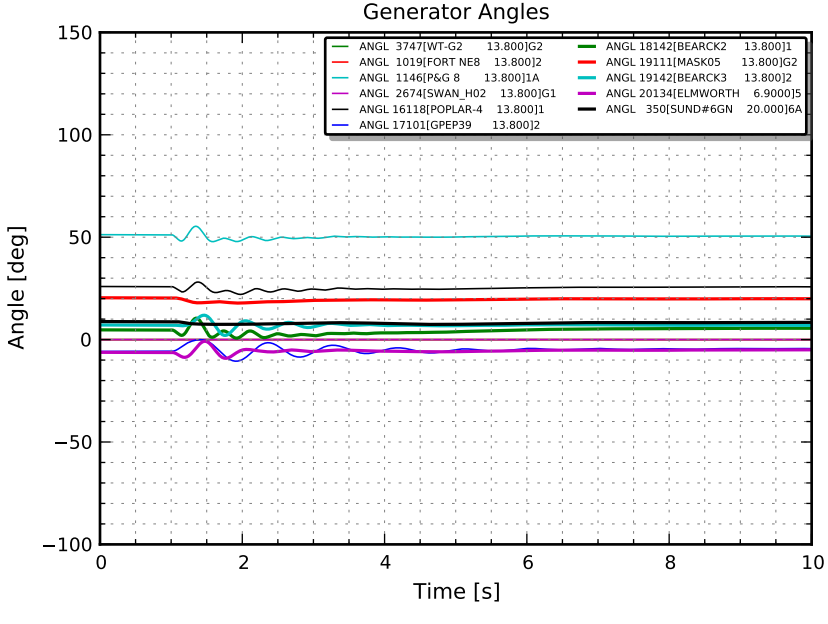
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 019 7L40 LITTLESMOKY to SIMONETTE_B.

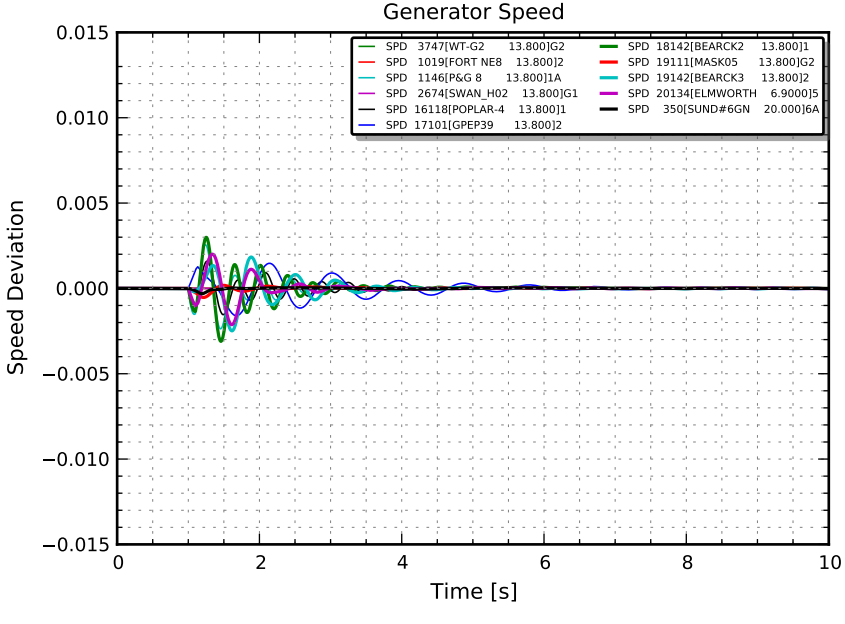
Study Area Generators

Appendix C2A
Figure: 019 (B. 2)





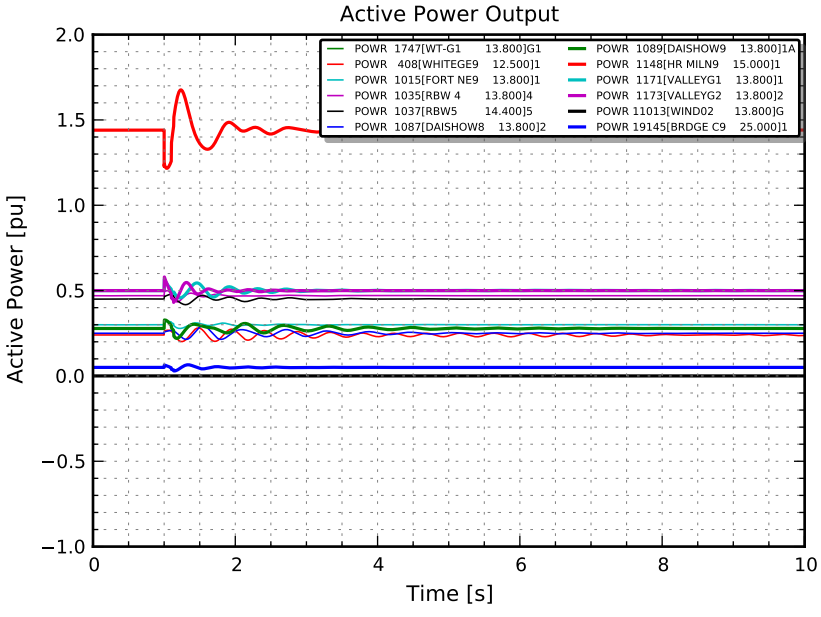


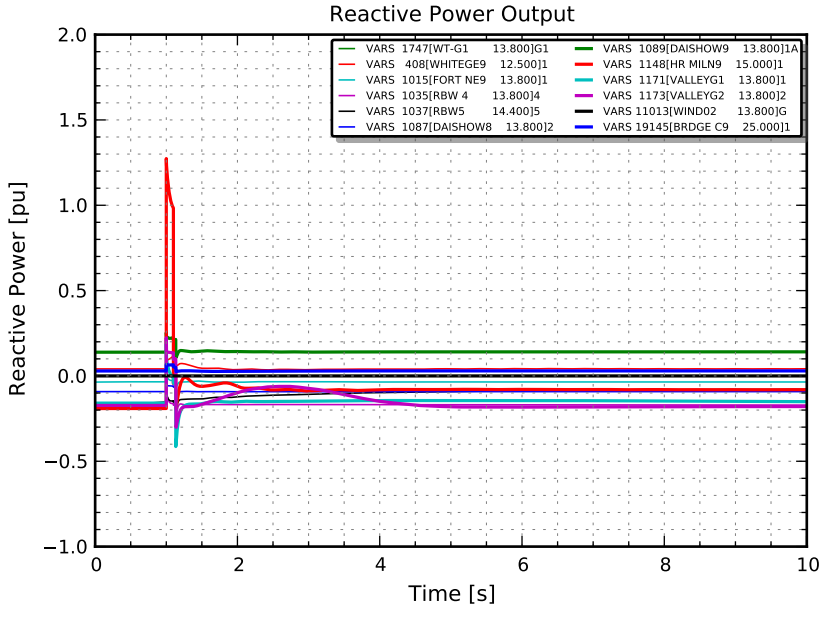


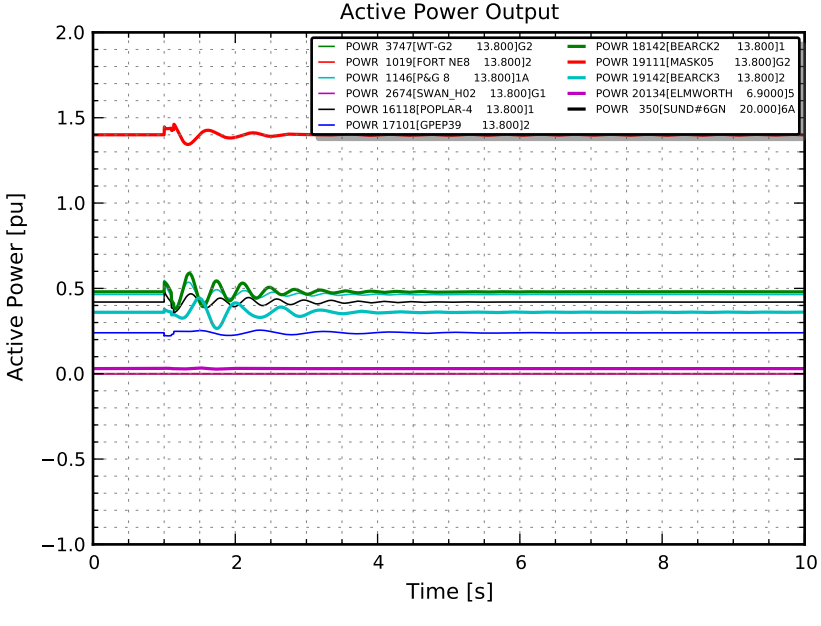
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 019 7L40 LITTLESMOKY to SIMONETTE_B.

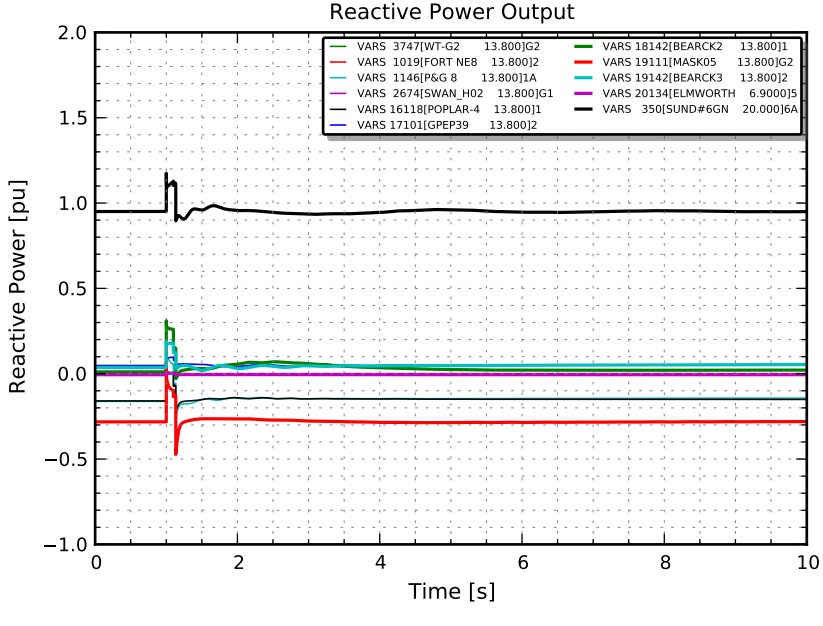
Study Area Generators

Appendix C2A
Figure: 019 (B. 3)





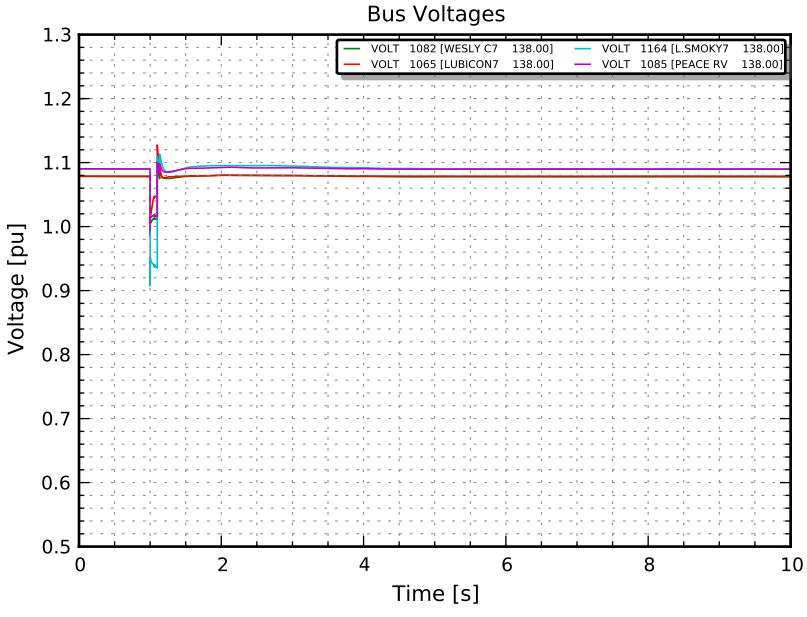


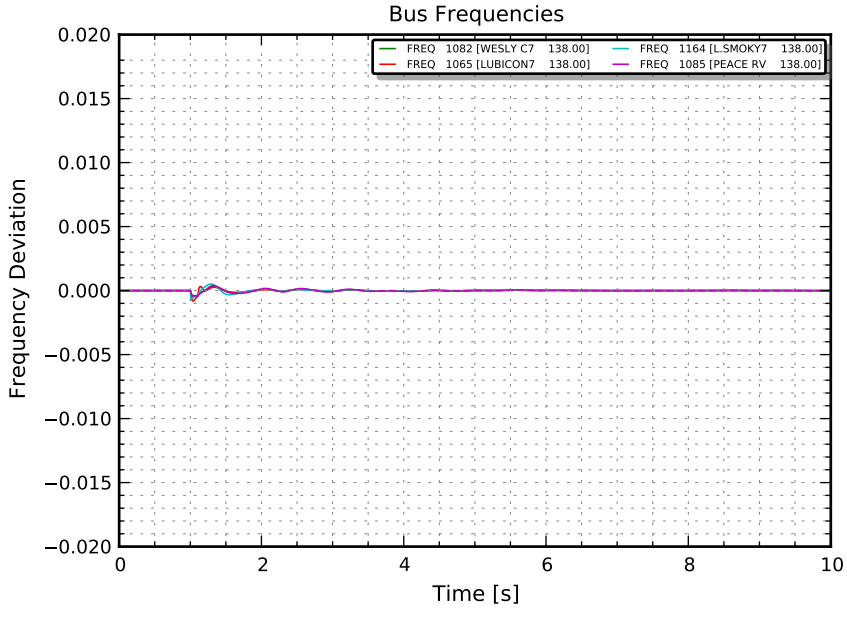


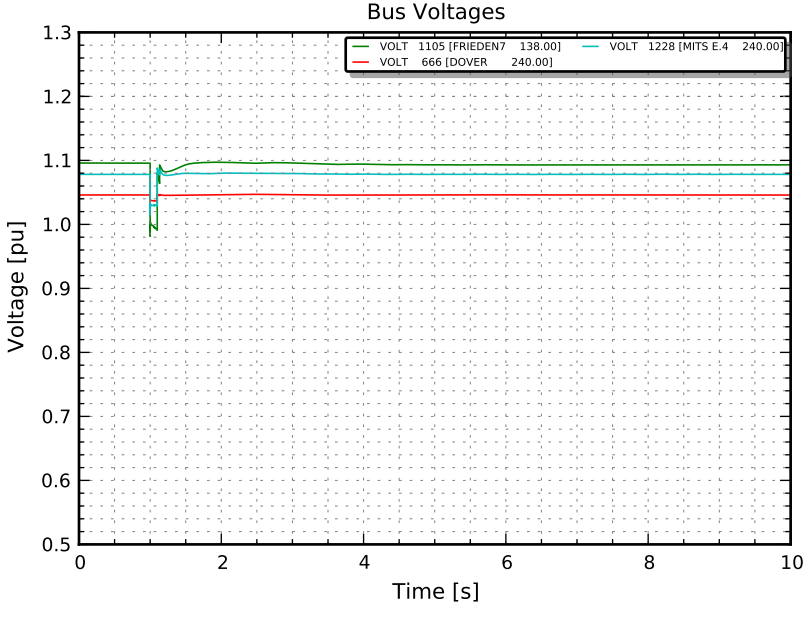
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 020 7L80 SIMONETTE to HR MILNER_A.

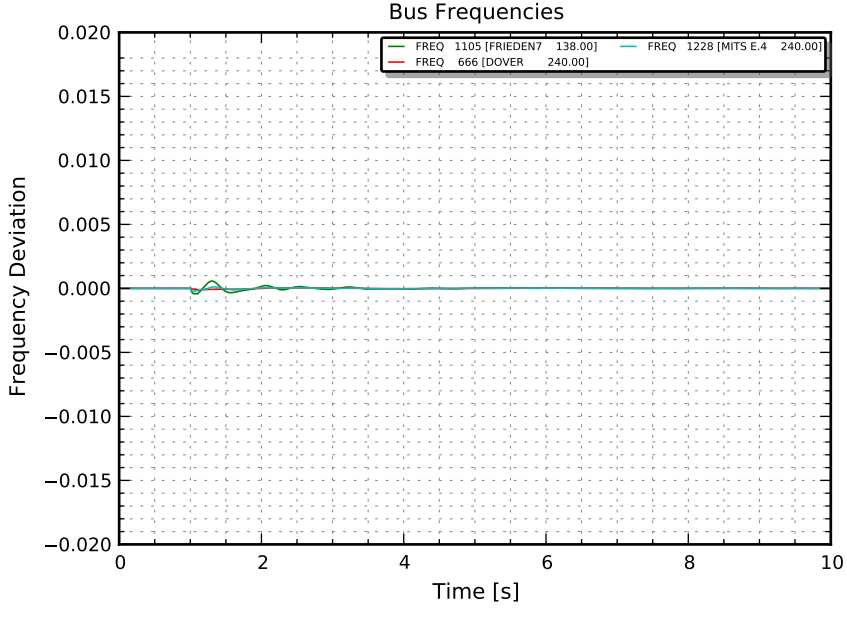
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 020 (A. 1)





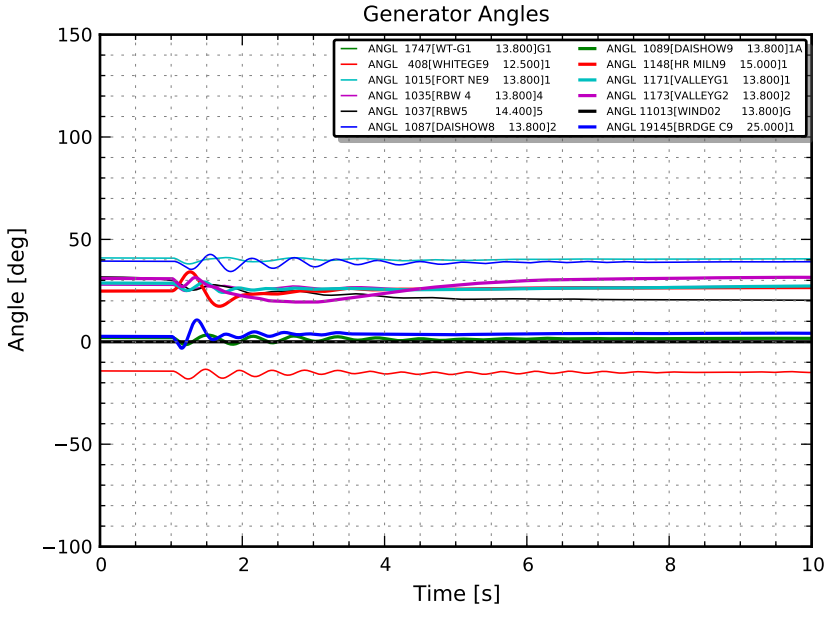


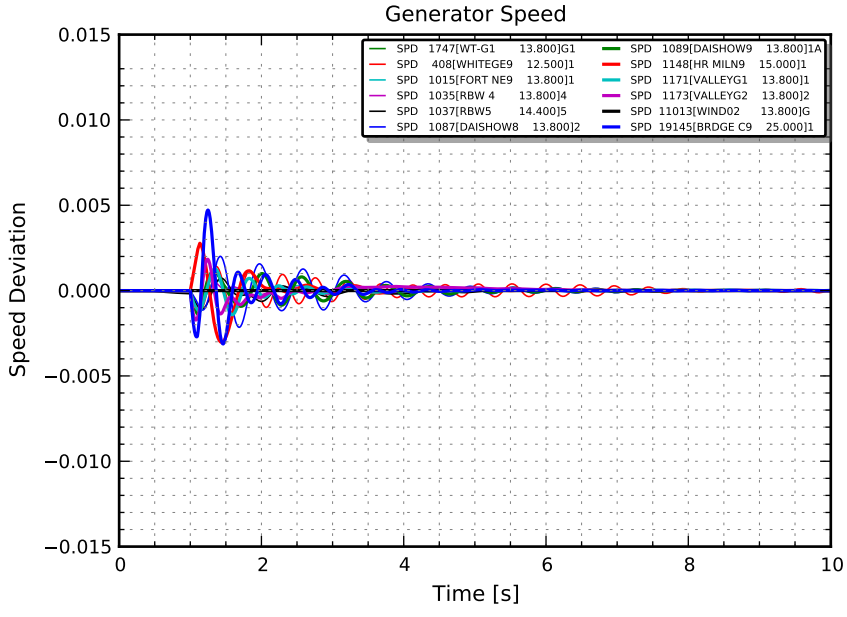


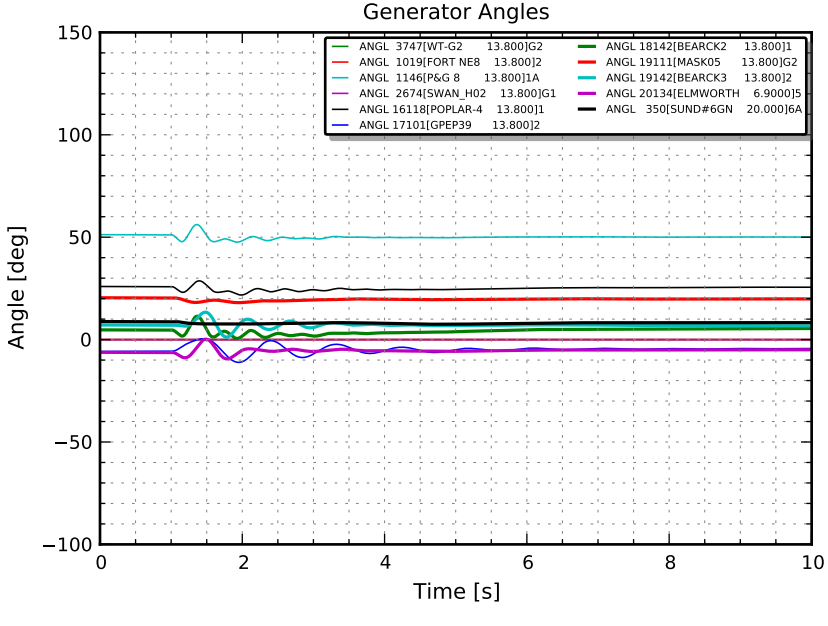
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 020 7L80 SIMONETTE to HR MILNER_A.

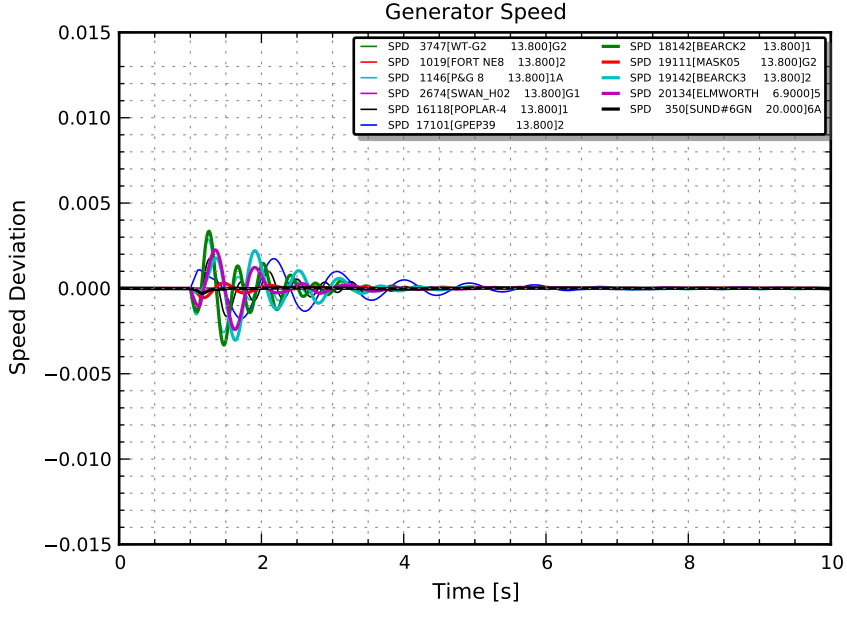
Study Area Generators

Appendix C2A
Figure: 020 (A. 2)





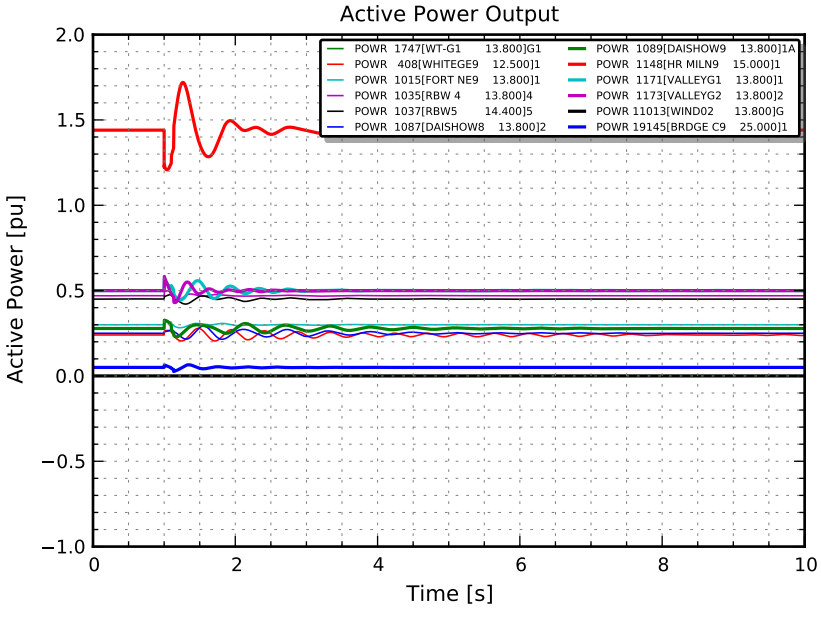


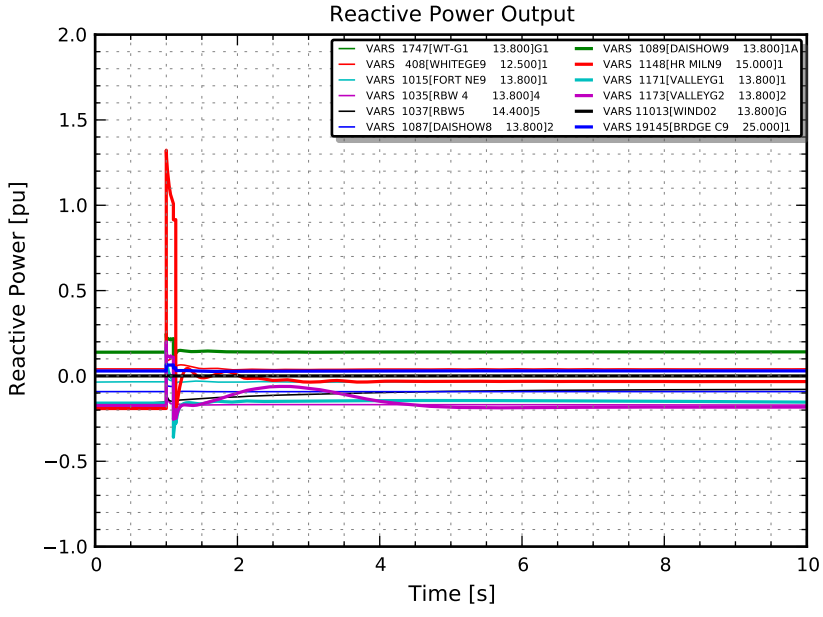


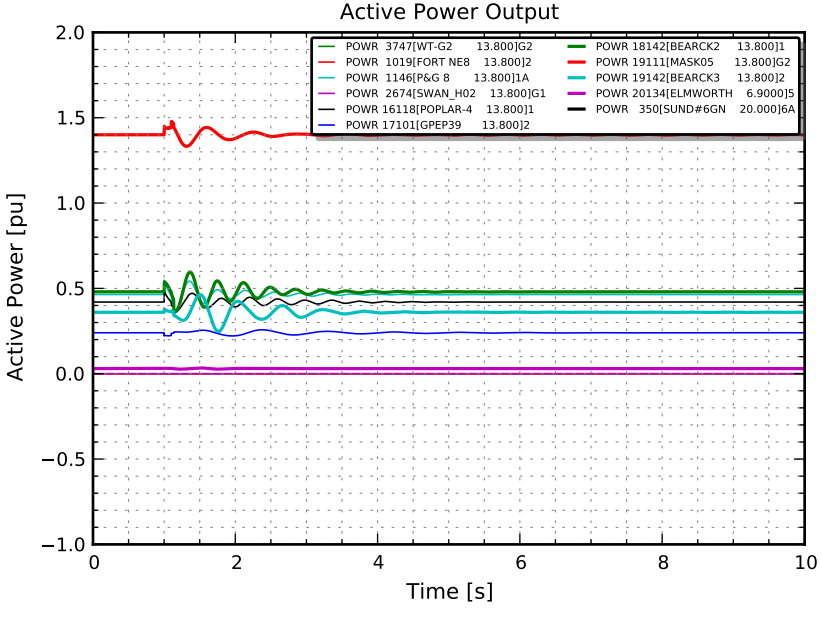
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 020 7L80 SIMONETTE to HR MILNER_A.

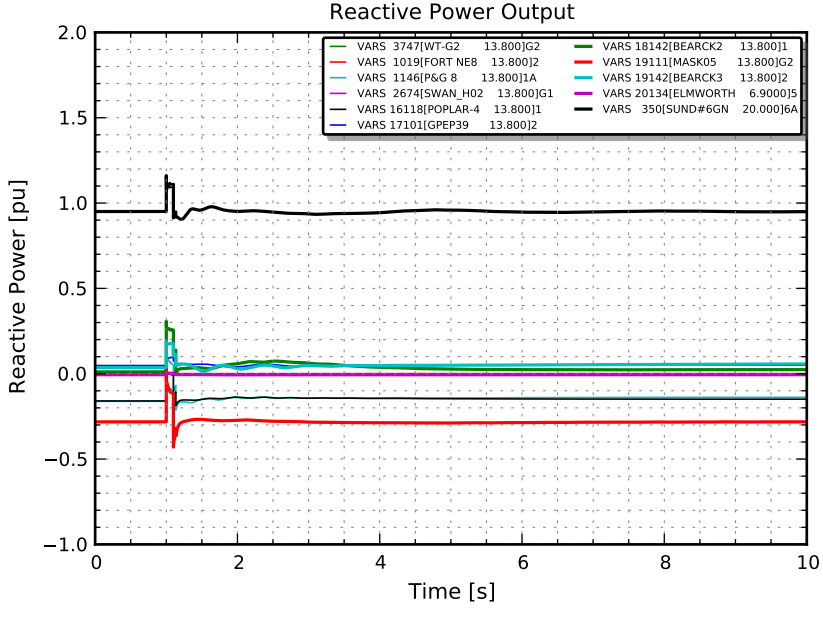
Study Area Generators

Appendix C2A
Figure: 020 (A. 3)





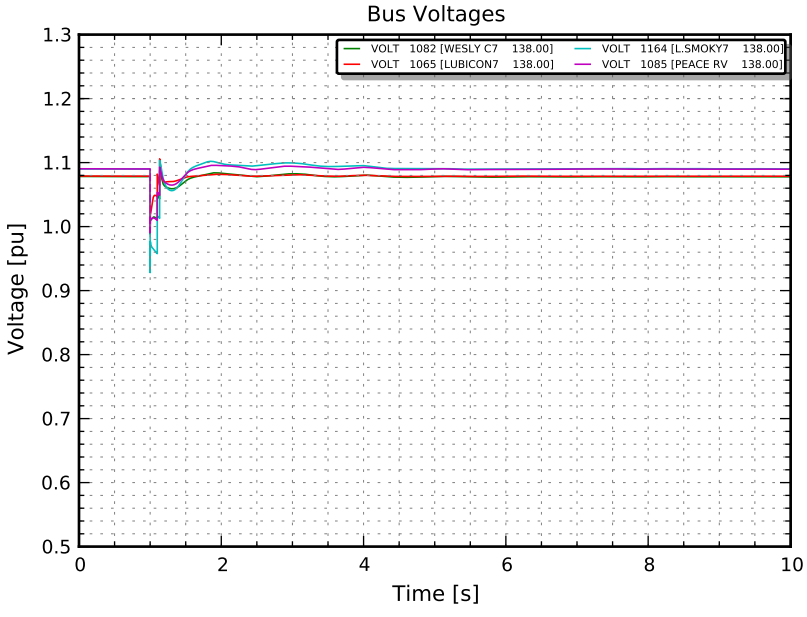


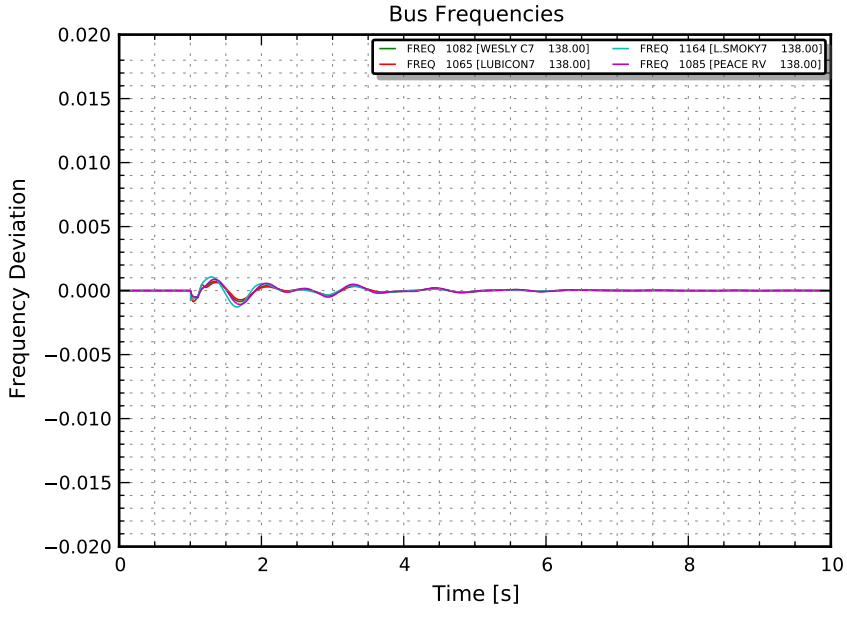


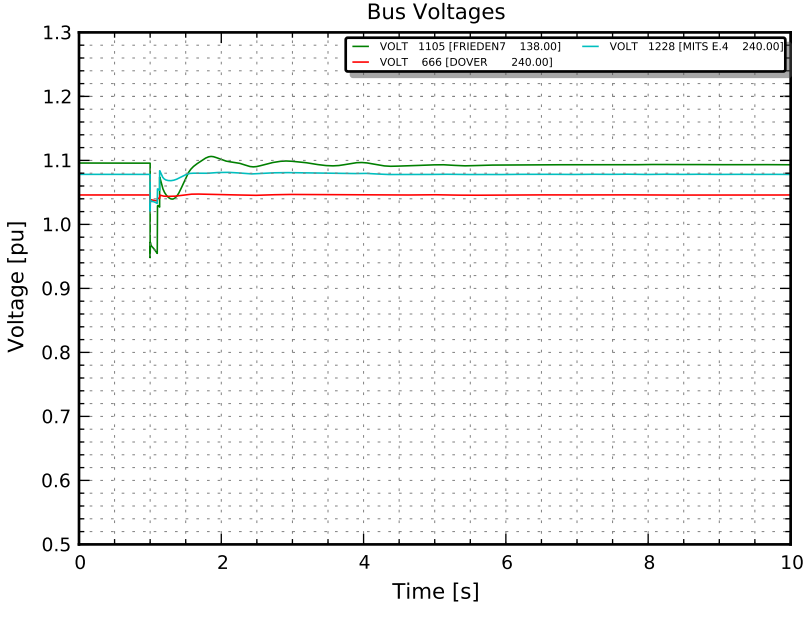
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 020 7L80 SIMONETTE to HR MILNER_B.

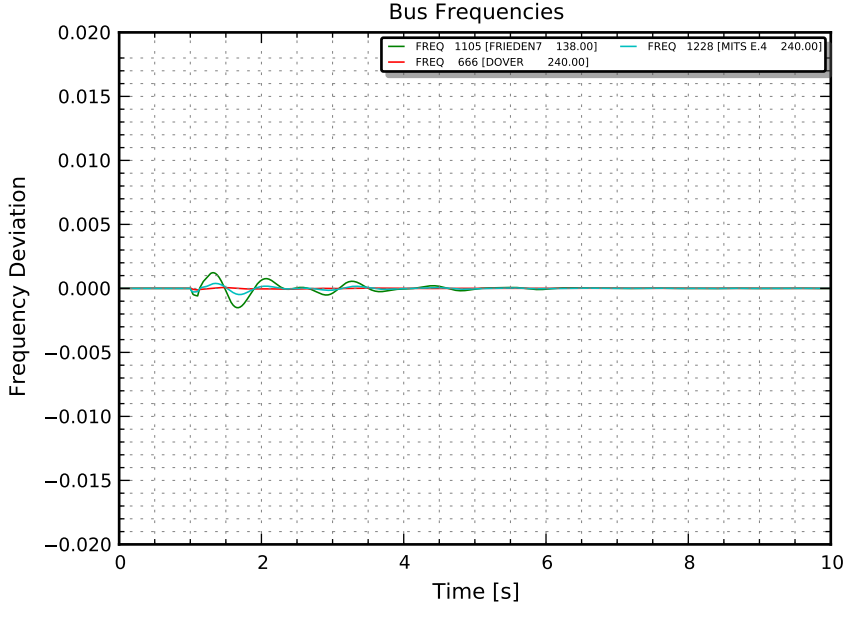
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 020 (B. 1)





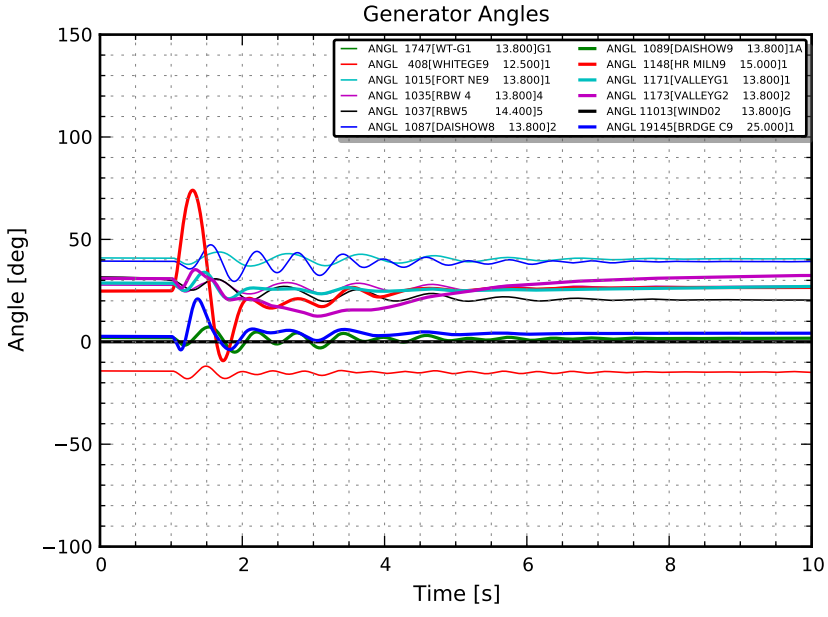


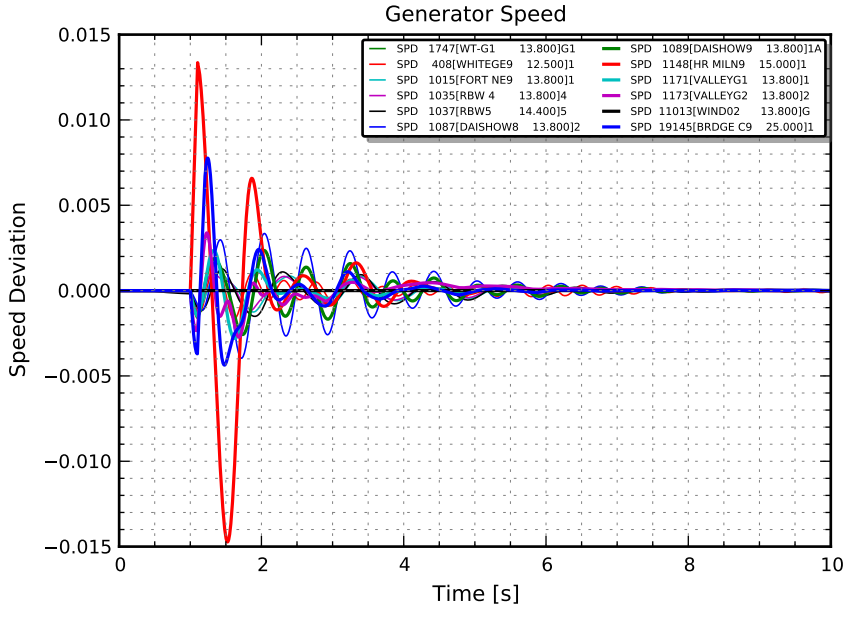


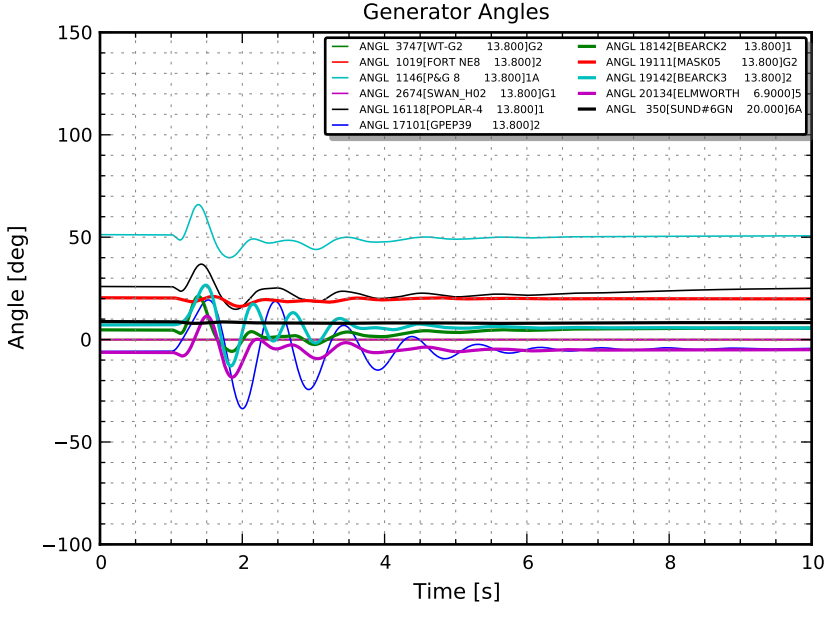
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 020 7L80 SIMONETTE to HR MILNER_B.

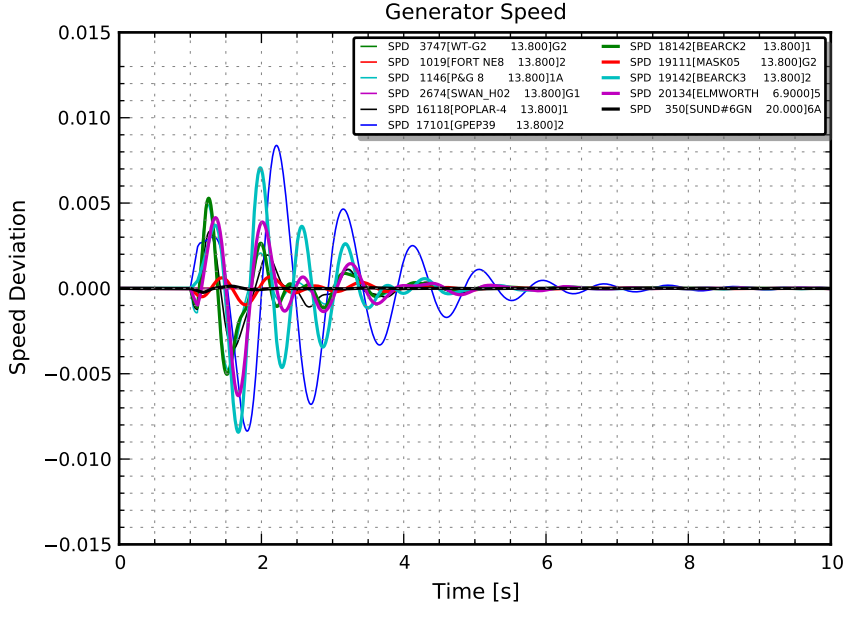
Study Area Generators

Appendix C2A
Figure: 020 (B. 2)





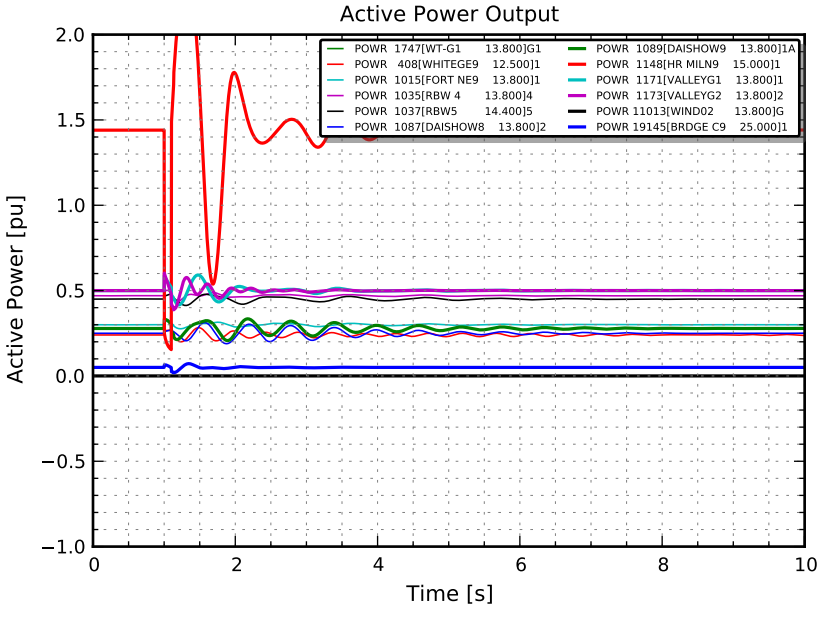


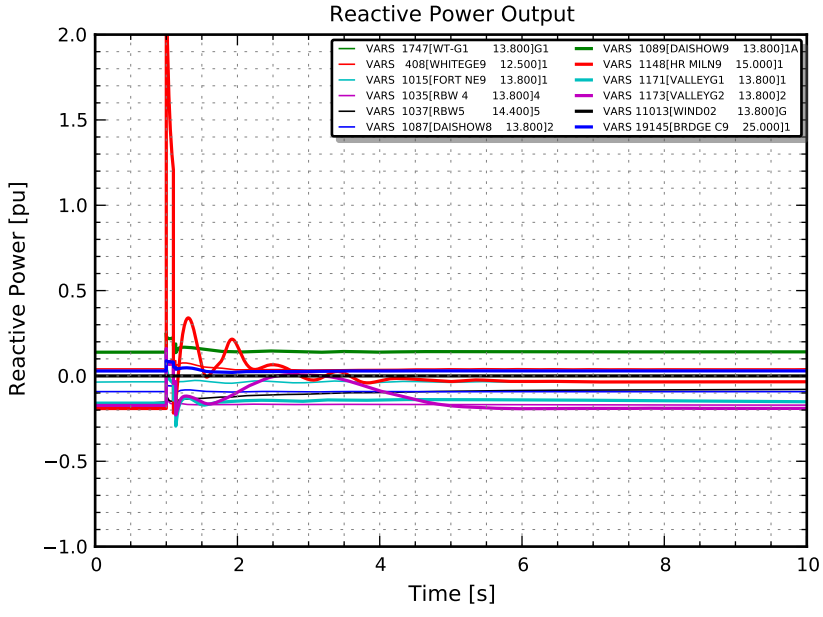


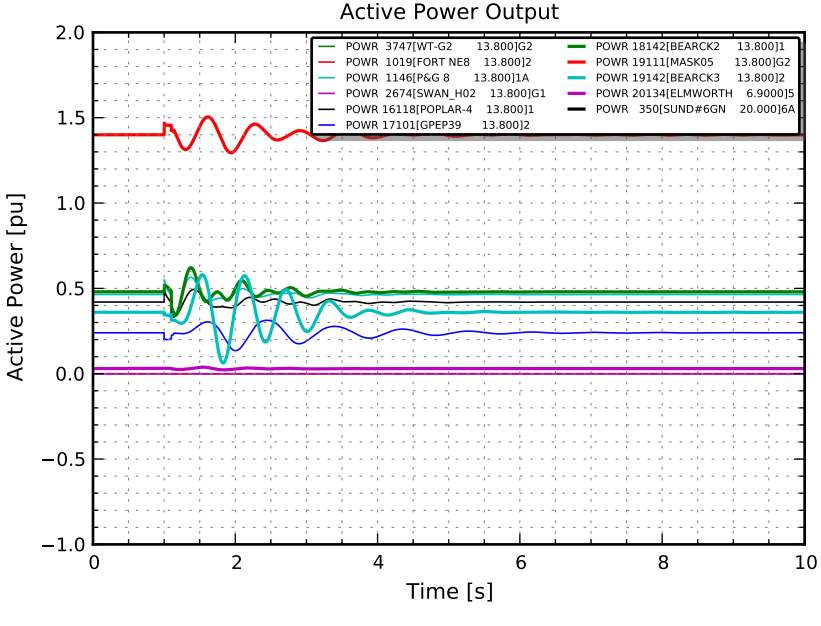
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 020 7L80 SIMONETTE to HR MILNER_B.

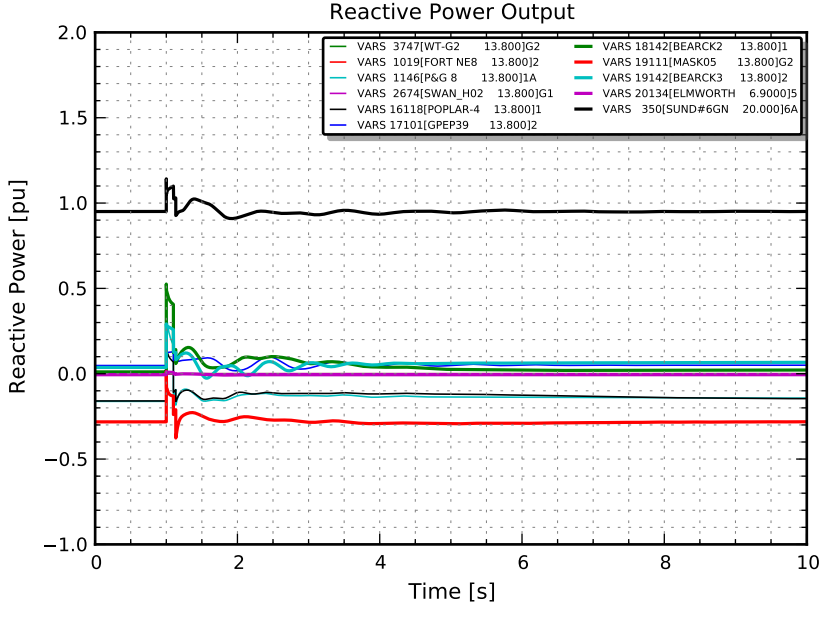
Study Area Generators

Appendix C2A
Figure: 020 (B. 3)





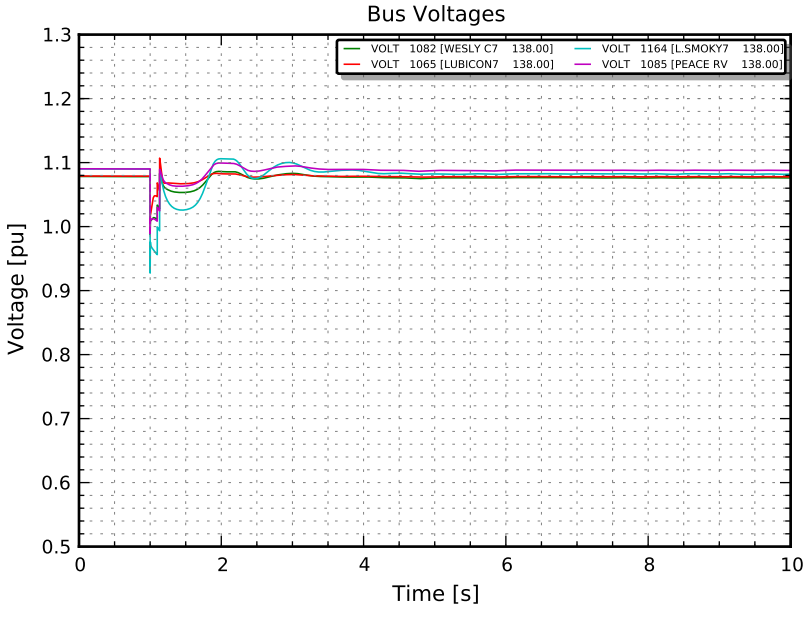


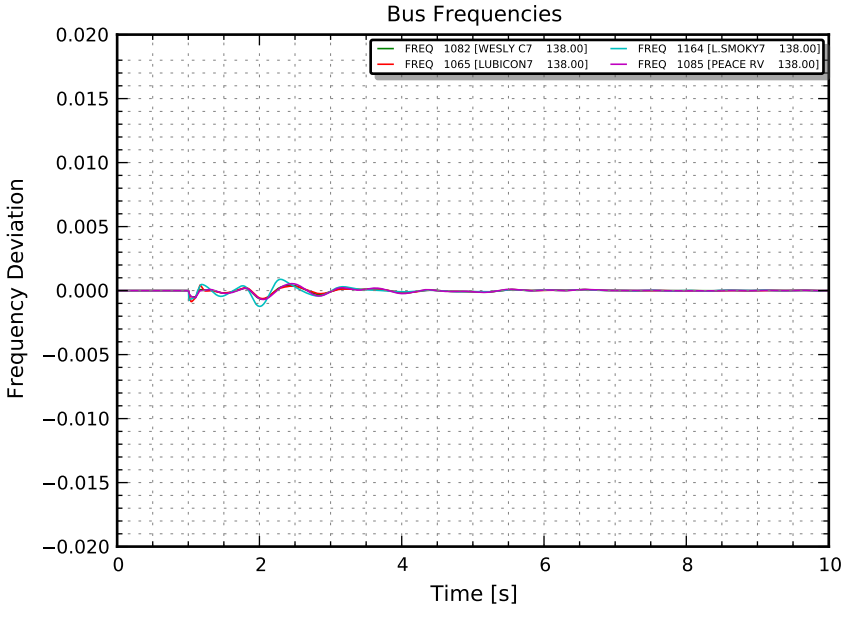


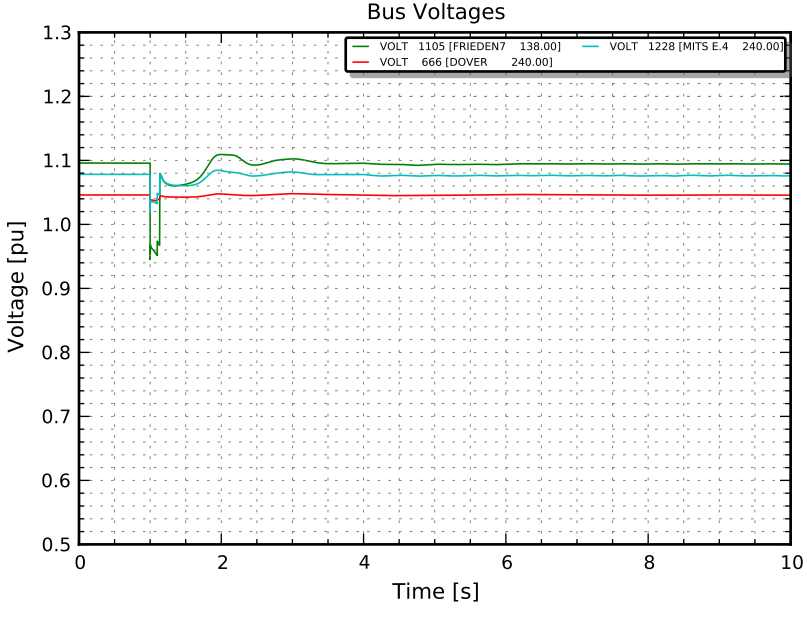
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_A.

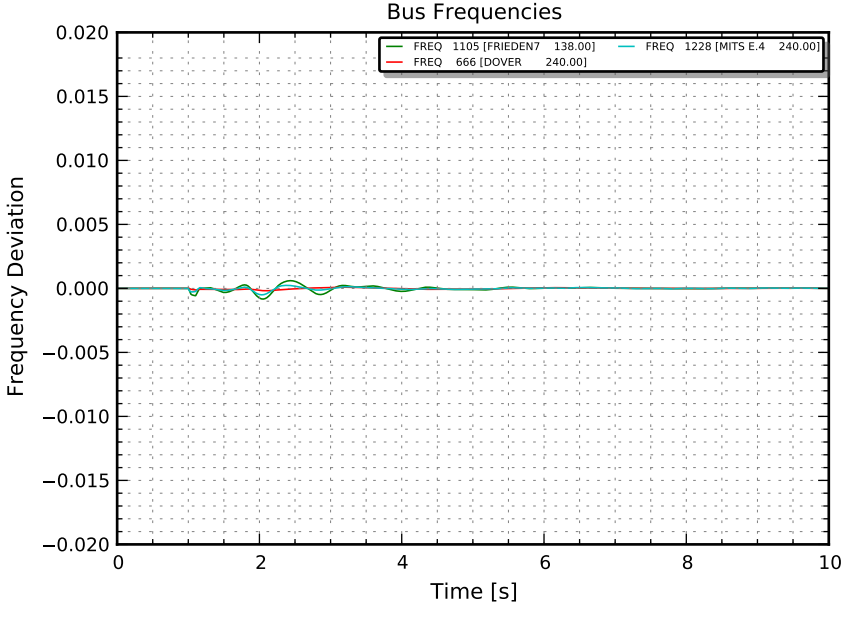
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 021 (A. 1)





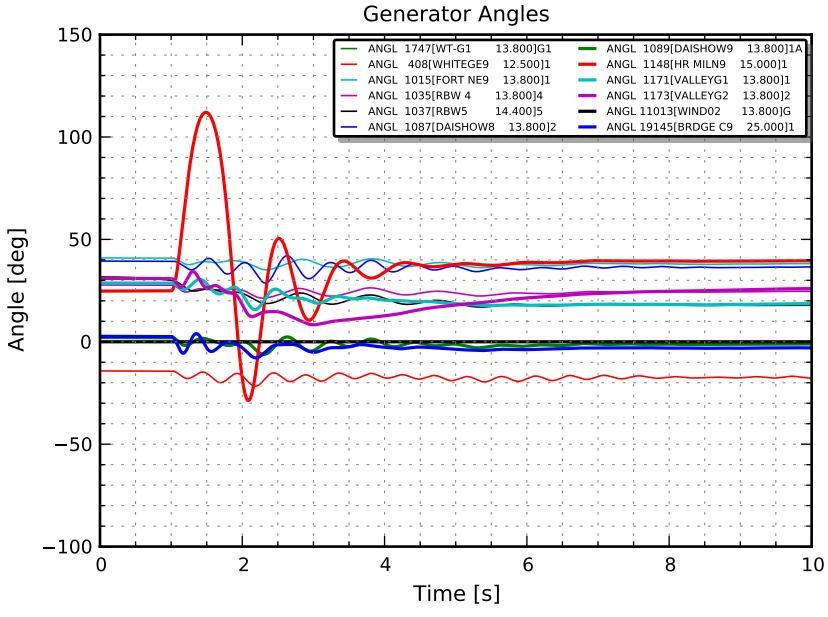


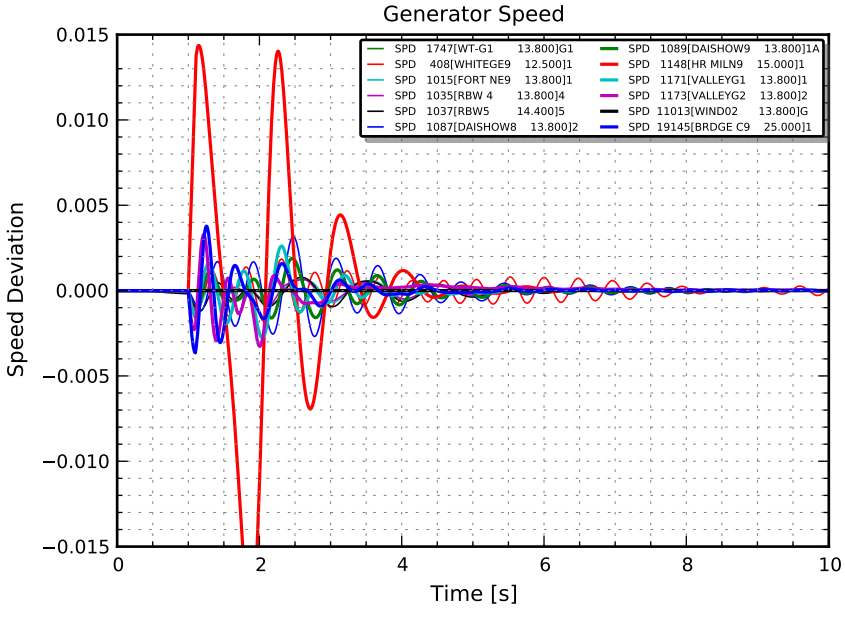


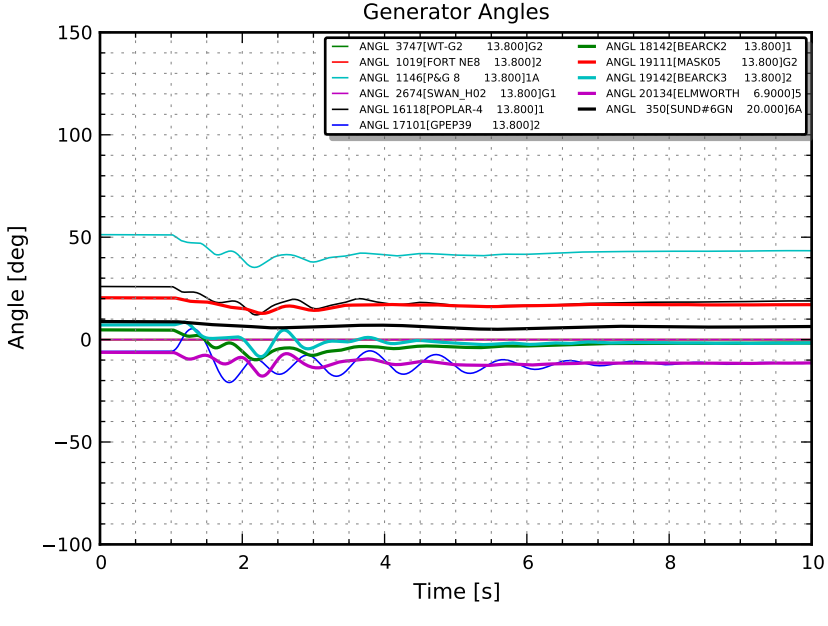
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_A.

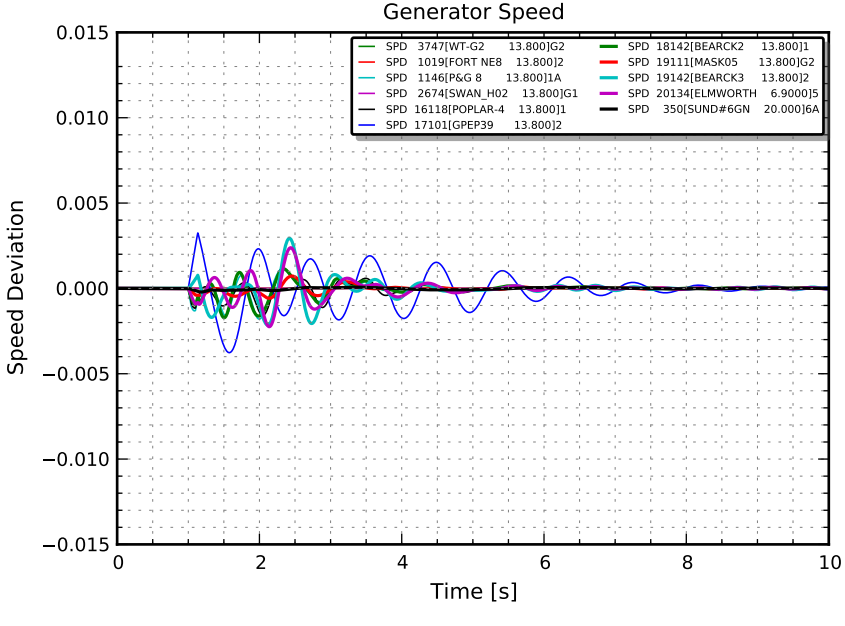
Study Area Generators

Appendix C2A
Figure: 021 (A. 2)





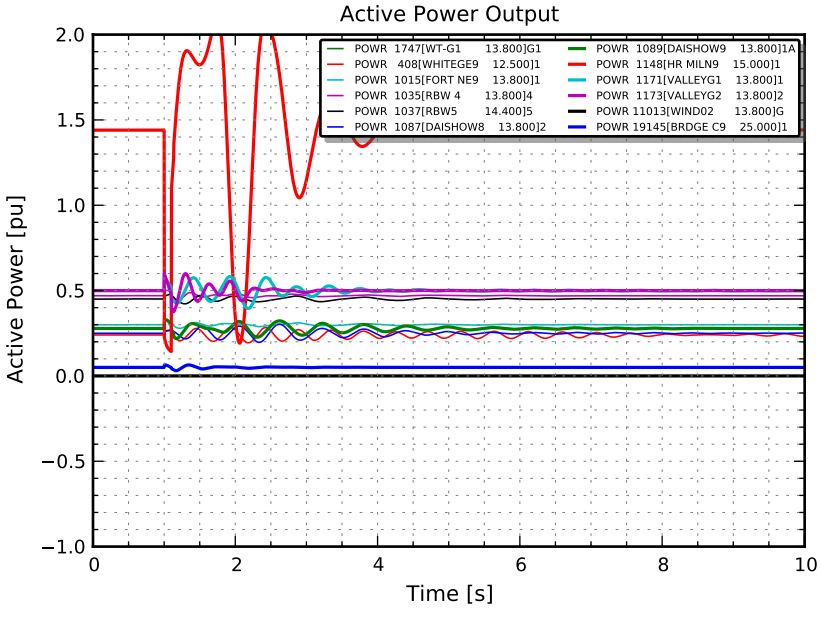


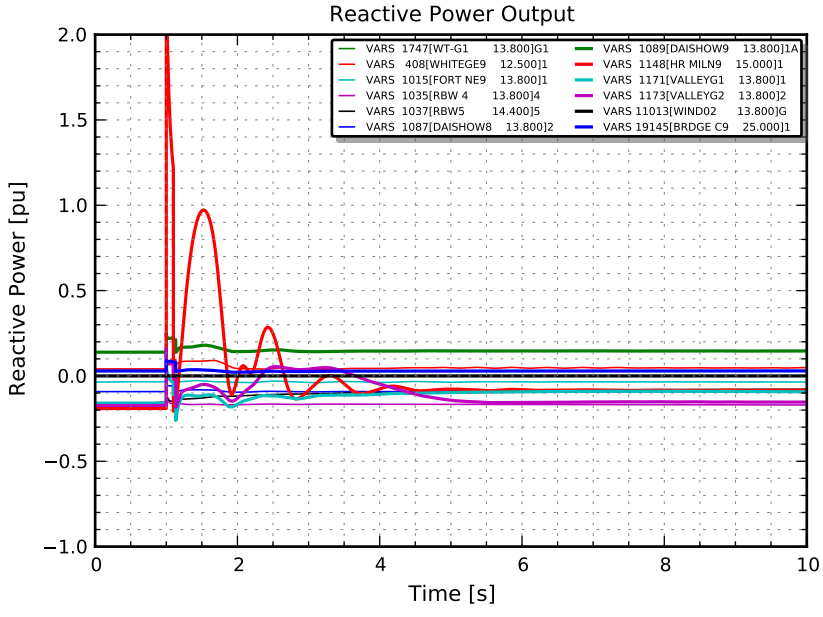


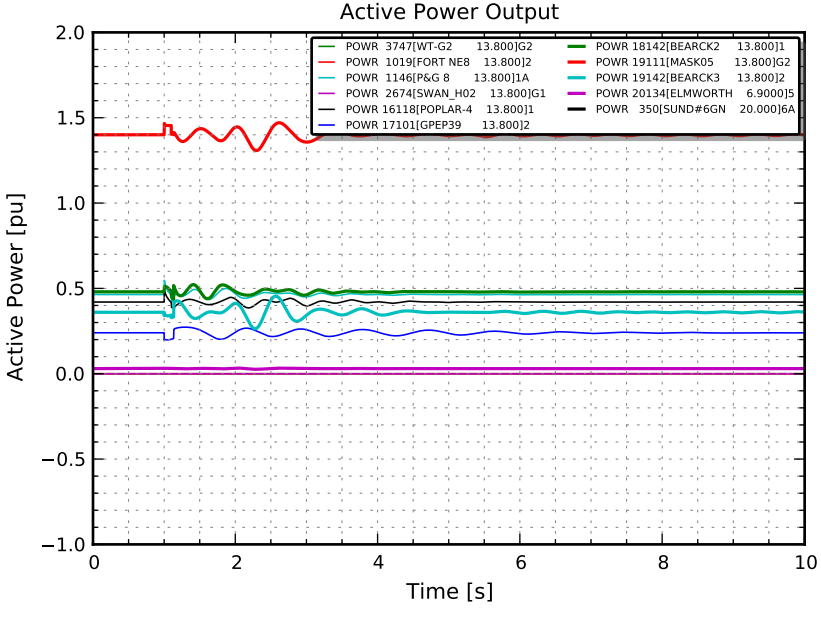
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_A.

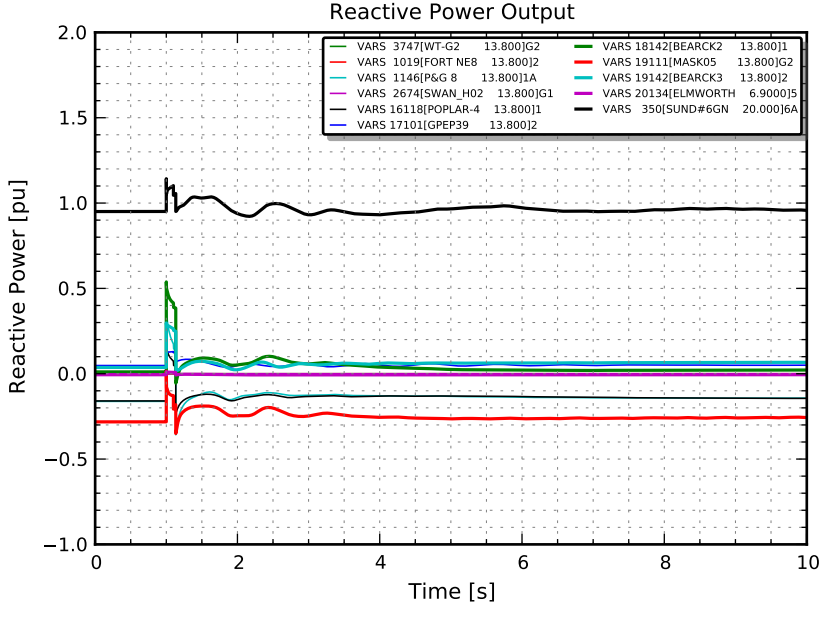
Study Area Generators

Appendix C2A
Figure: 021 (A. 3)





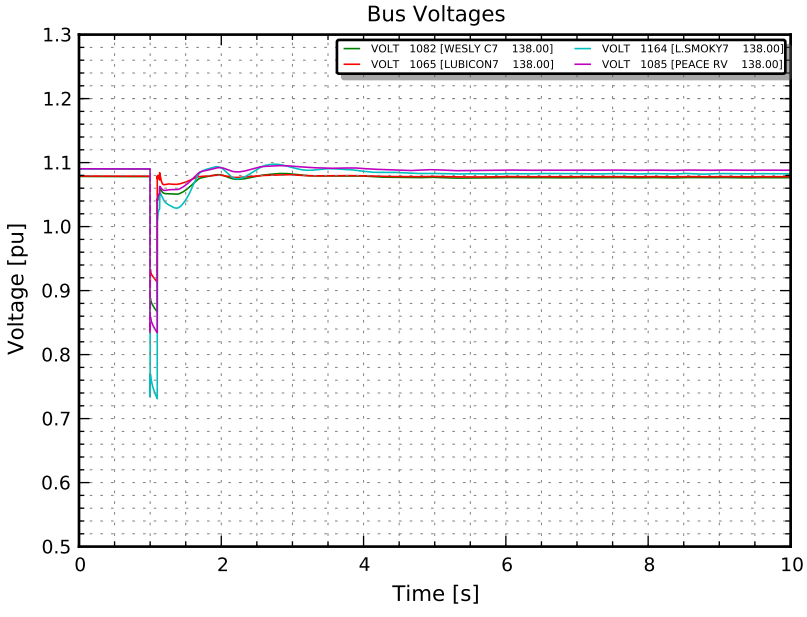


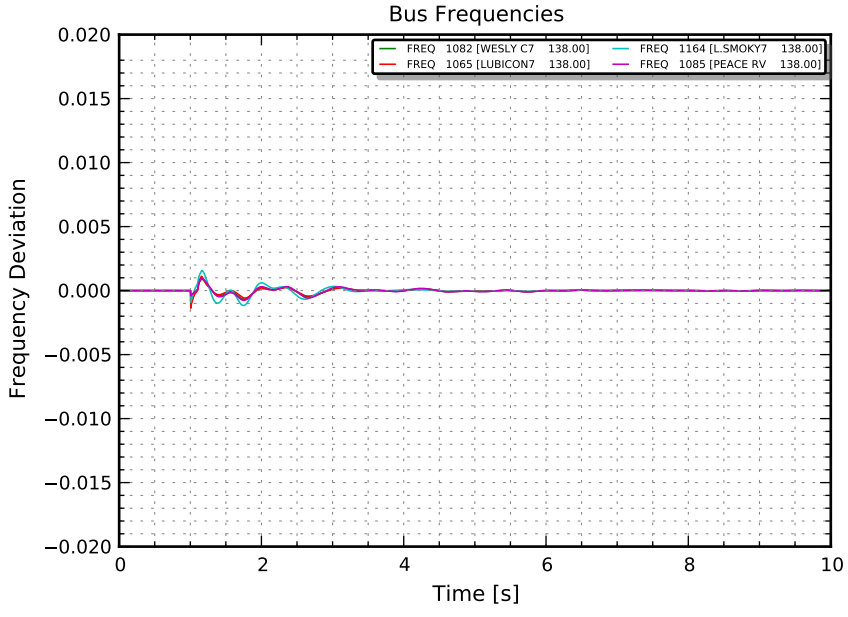


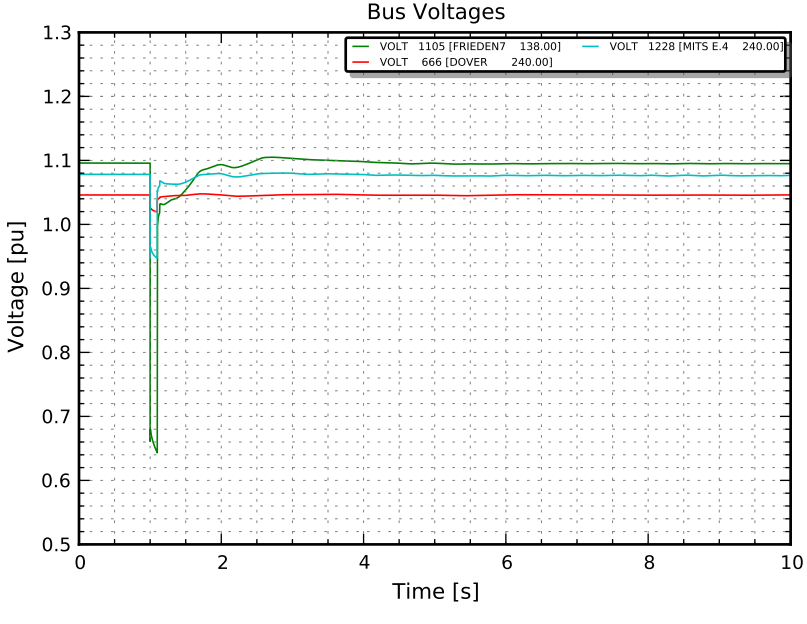
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_B.

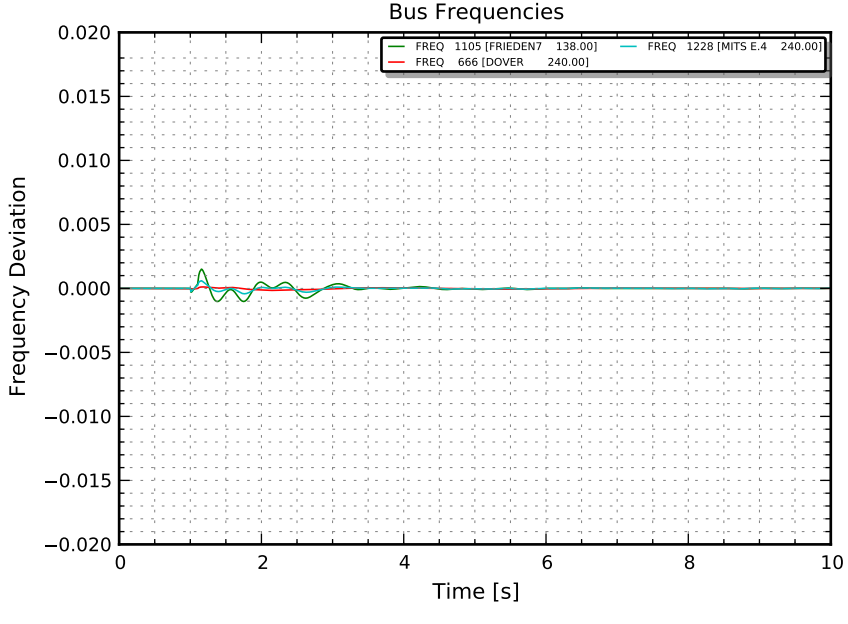
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 021 (B. 1)





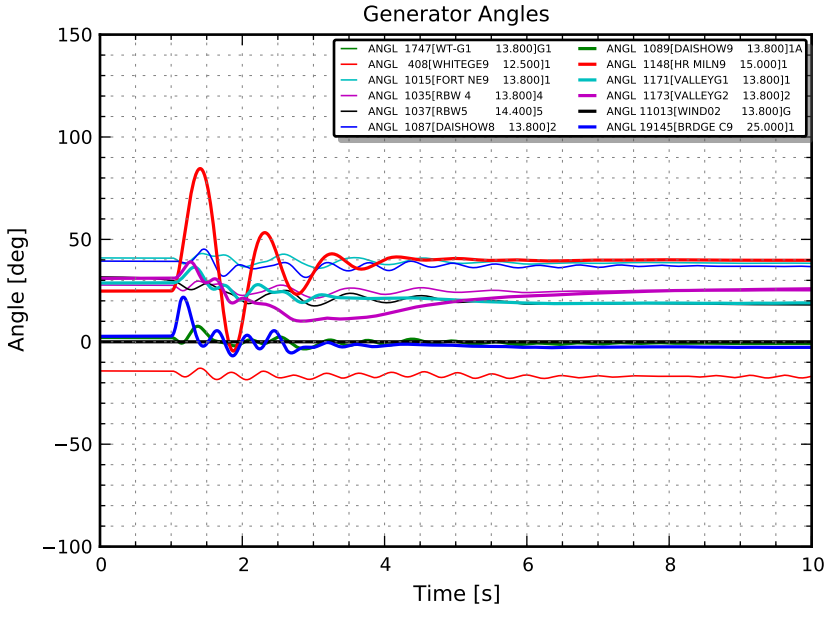


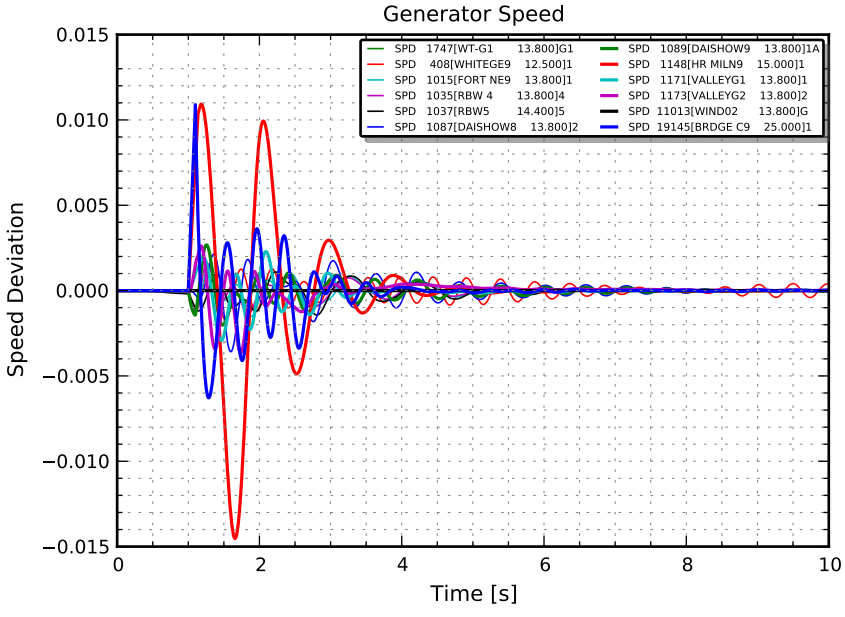


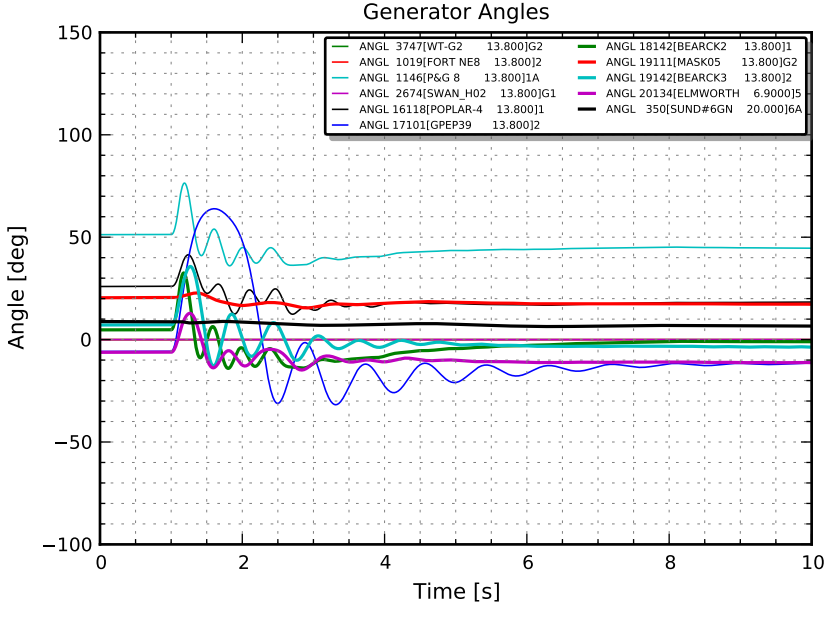
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_B.

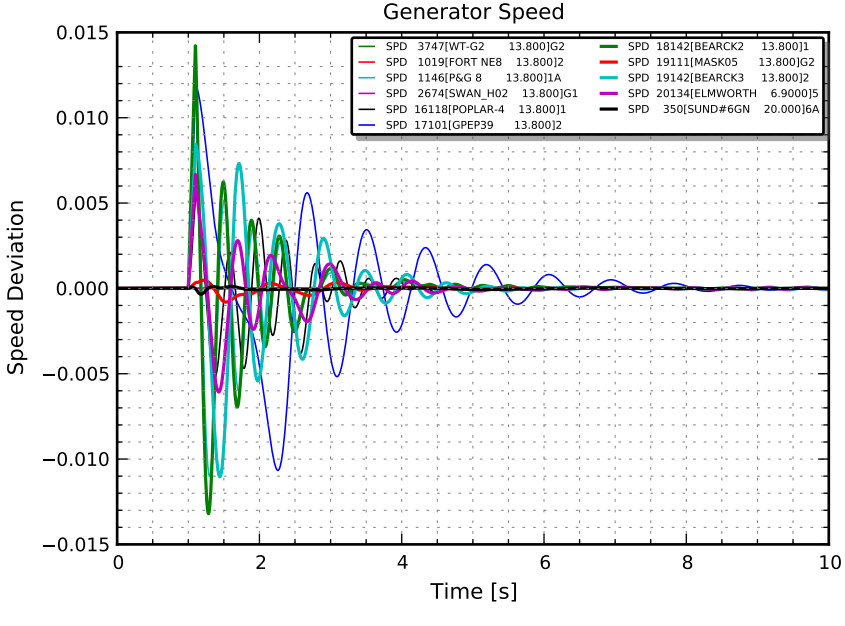
Study Area Generators

Appendix C2A
Figure: 021 (B. 2)





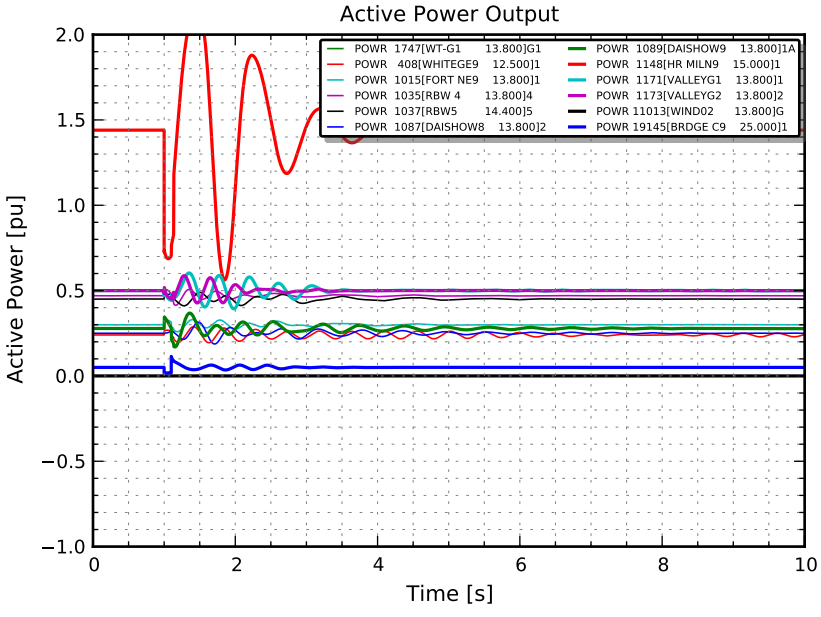


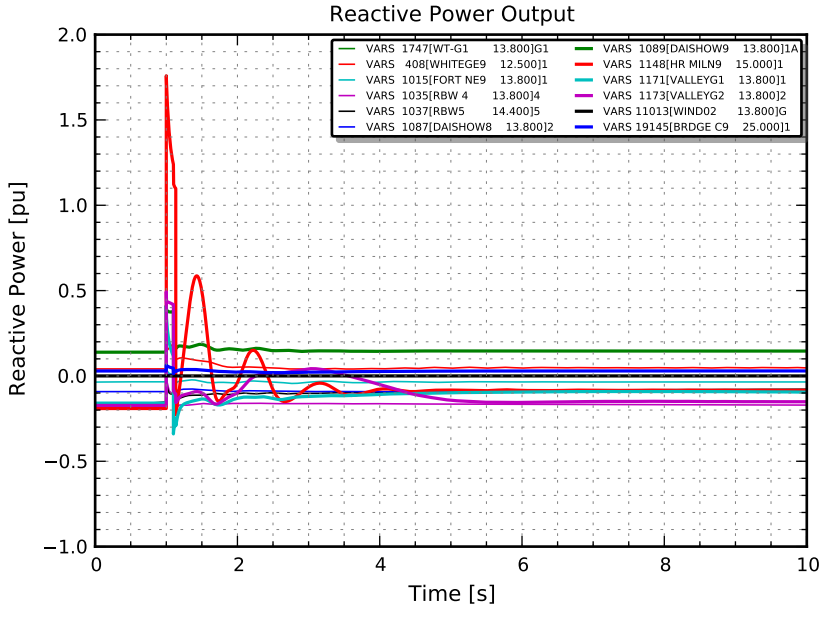


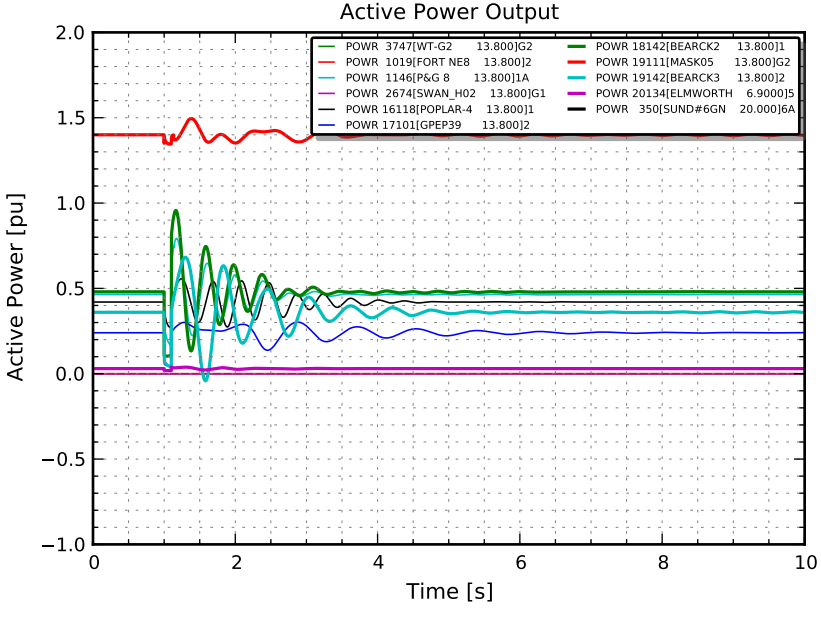
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_B.

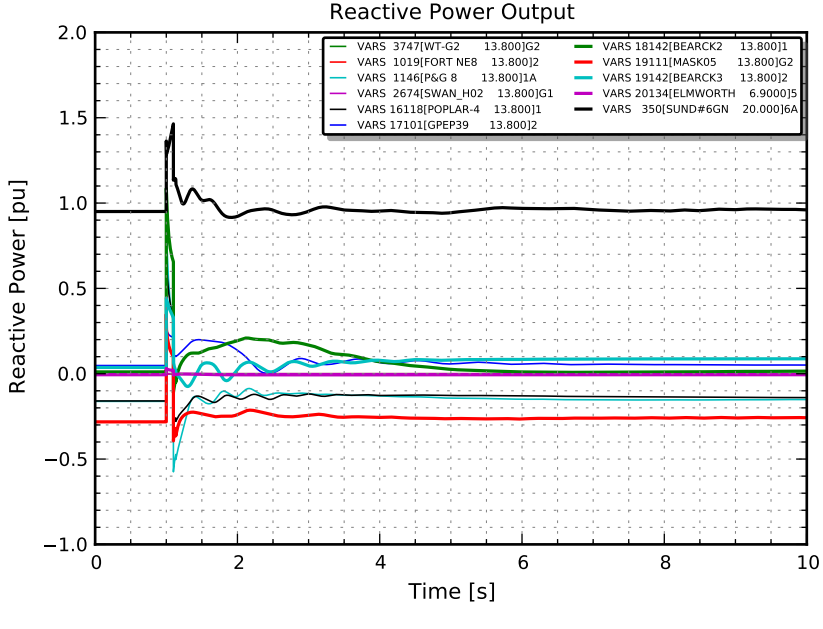
Study Area Generators

Appendix C2A
Figure: 021 (B. 3)





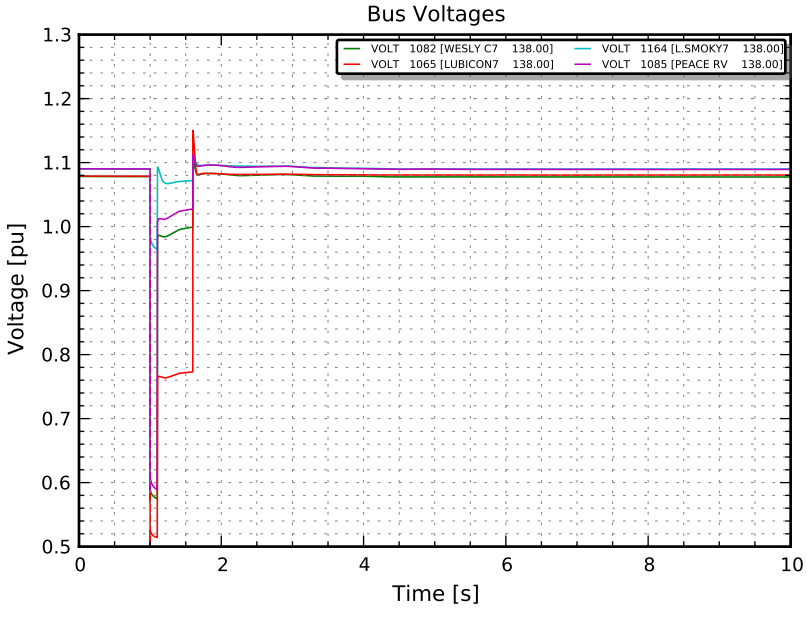


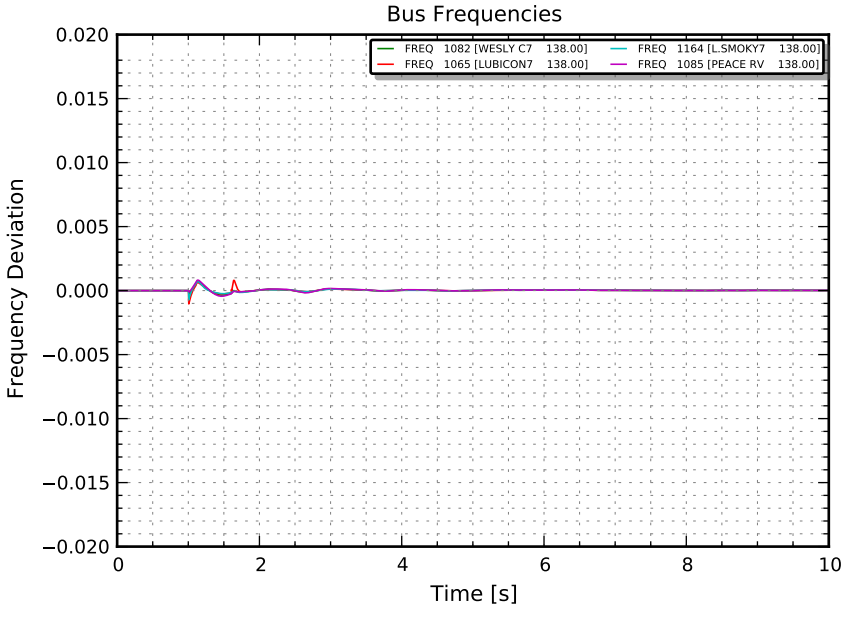


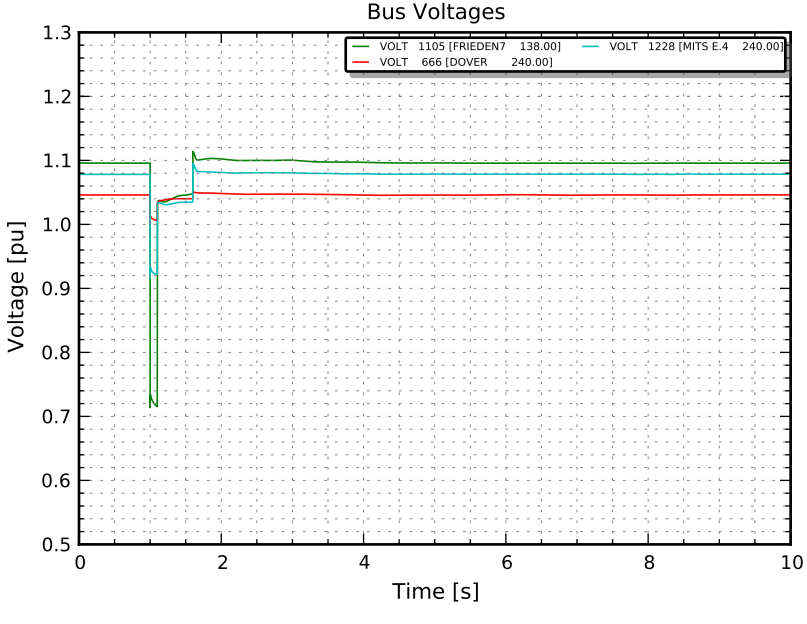
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 022 7L63 HOTCHKISS to LUBICON_A.

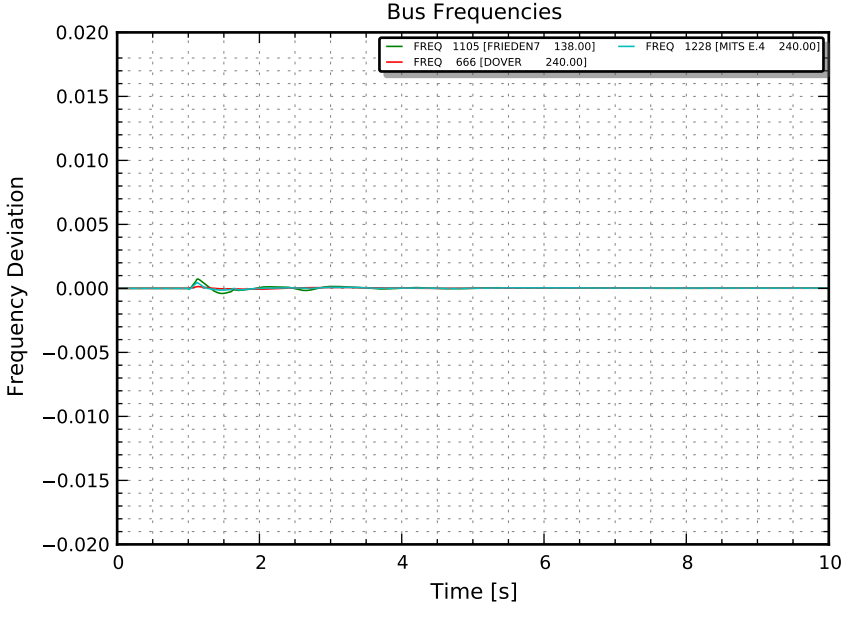
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 022 (A. 1)





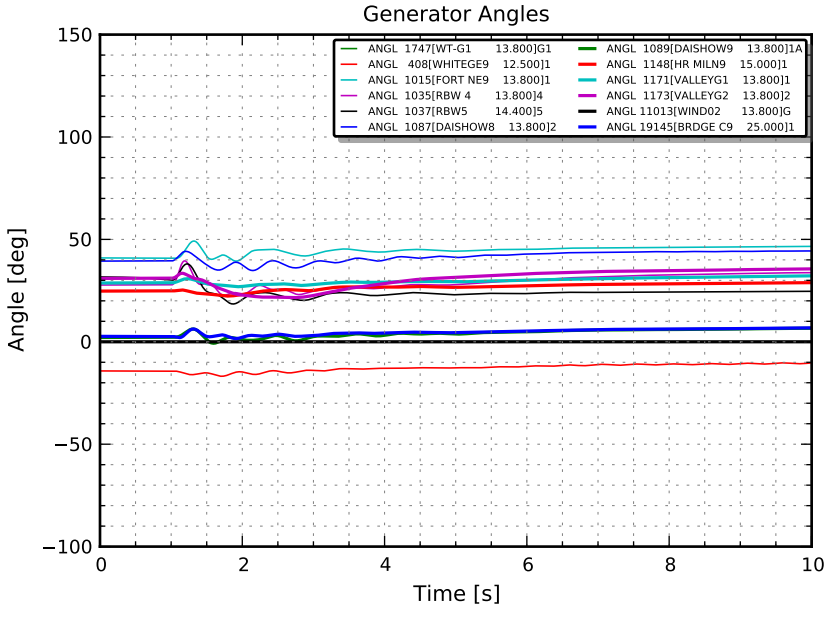


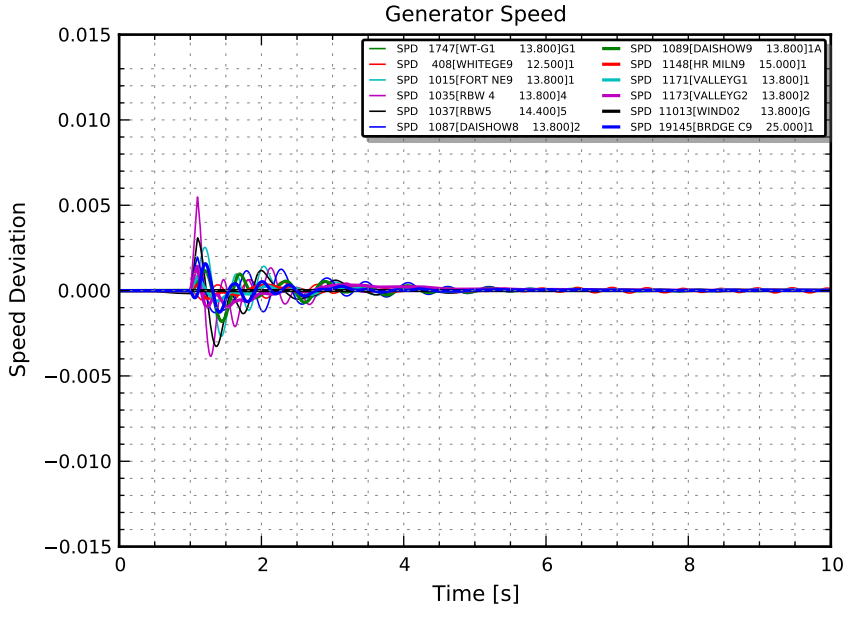


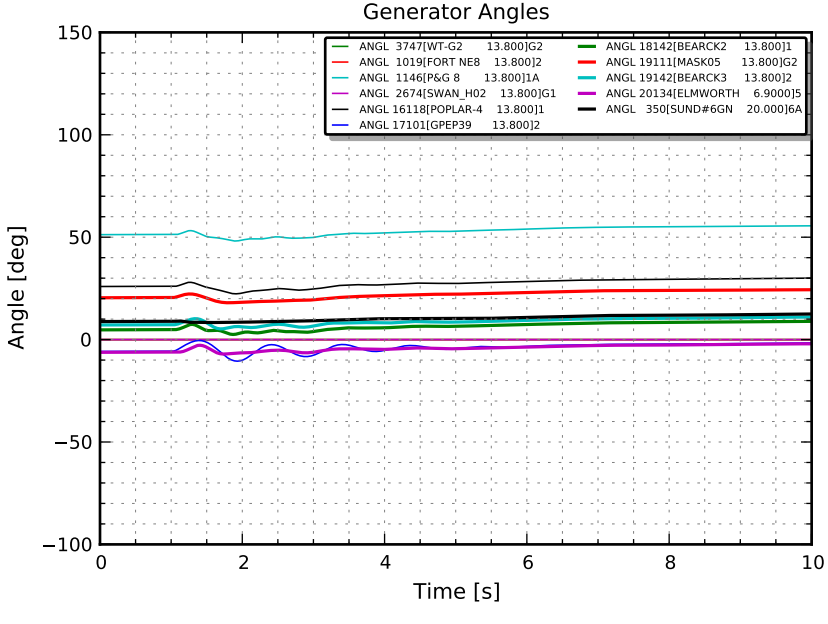
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 022 7L63 HOTCHKISS to LUBICON_A.

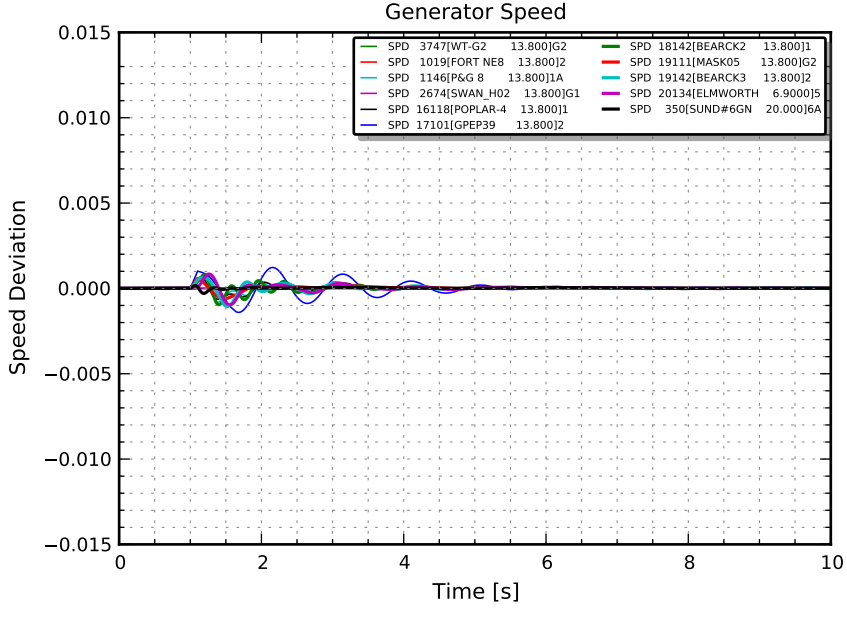
Study Area Generators

Appendix C2A
Figure: 022 (A. 2)





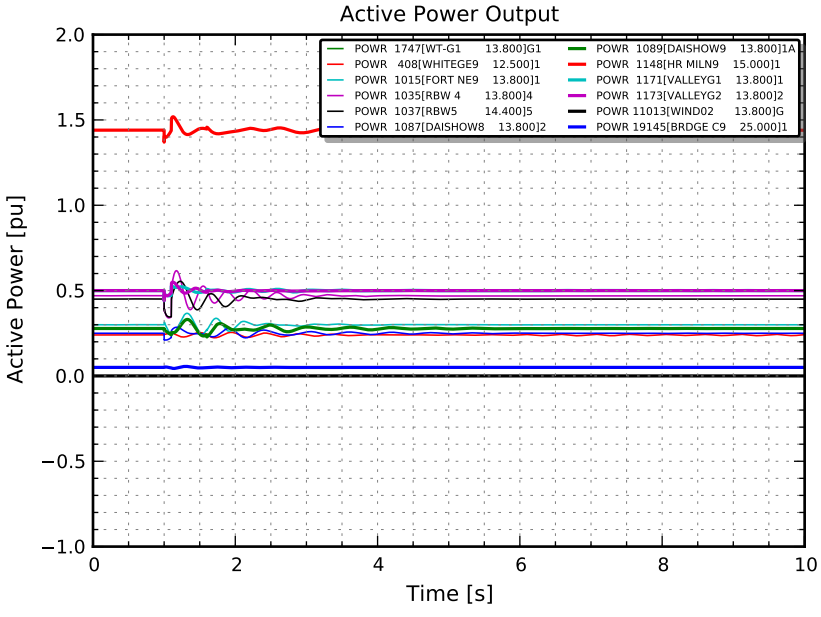


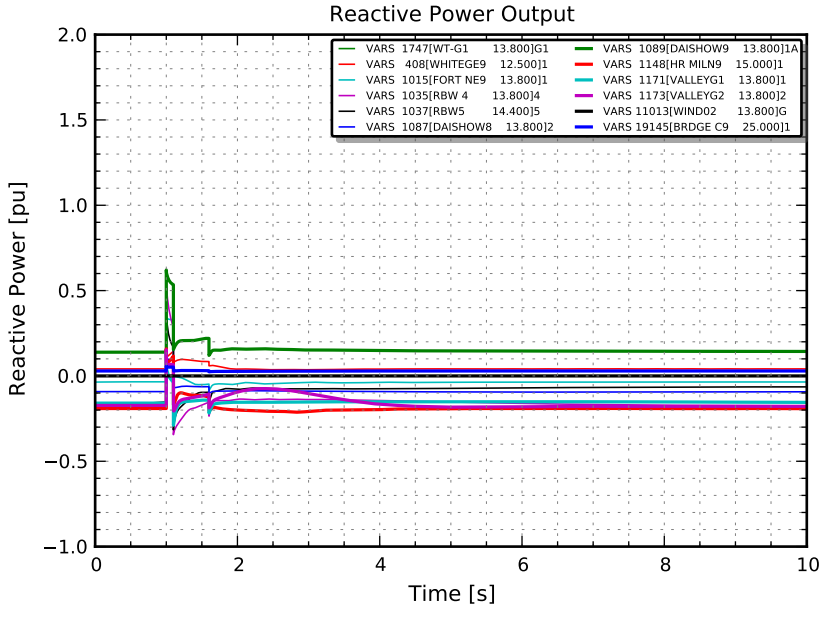


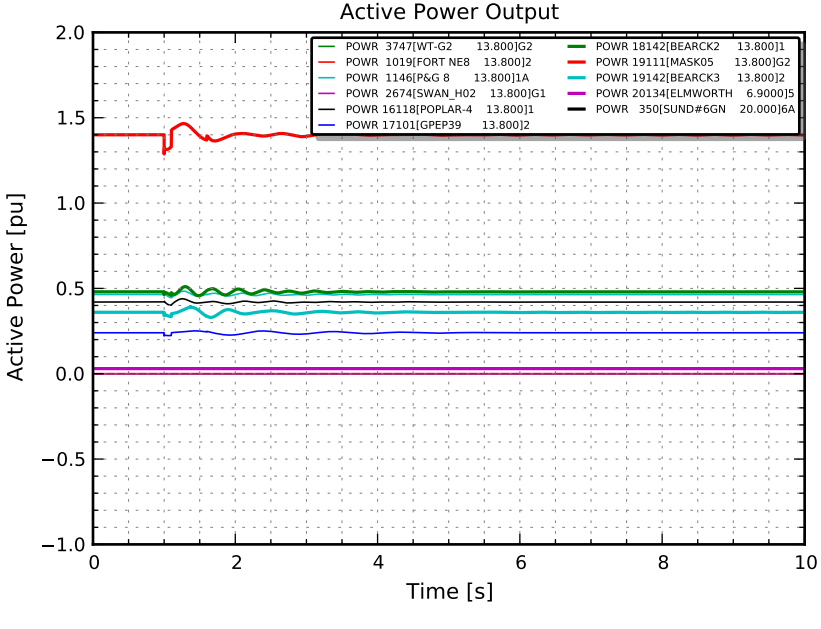
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 022 7L63 HOTCHKISS to LUBICON_A.

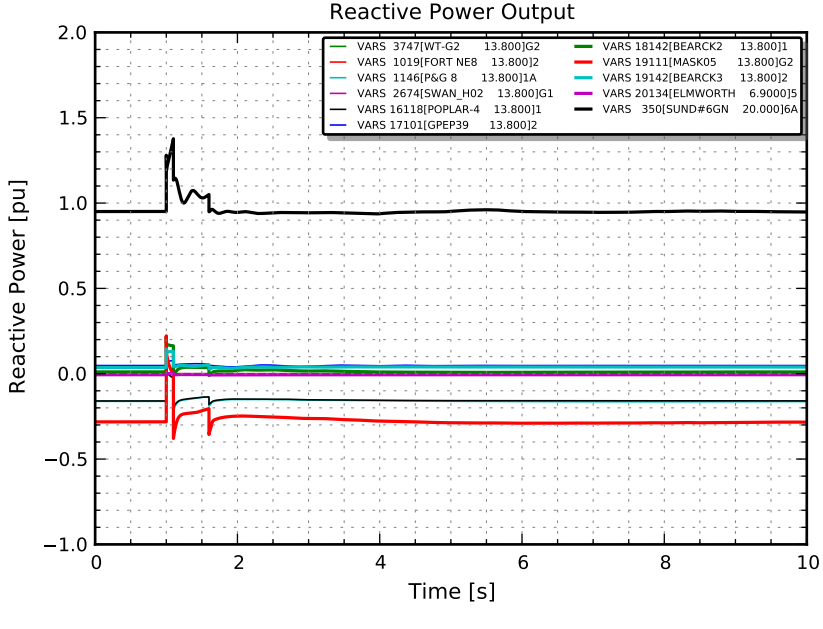
Study Area Generators

Appendix C2A
Figure: 022 (A. 3)





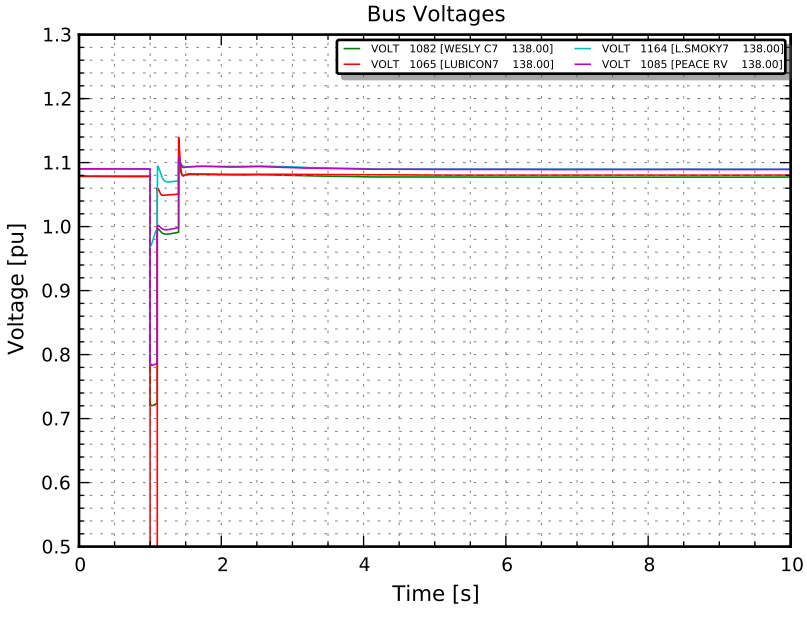


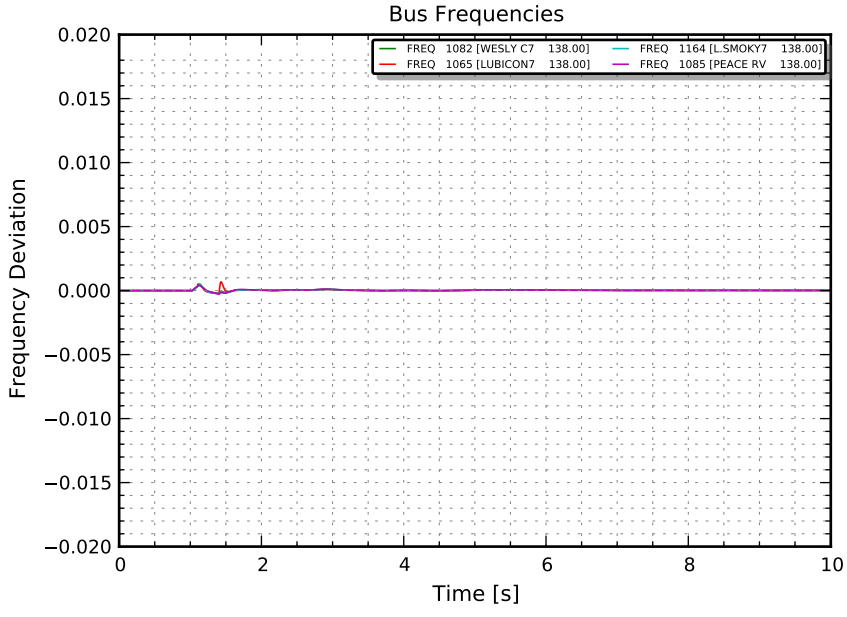


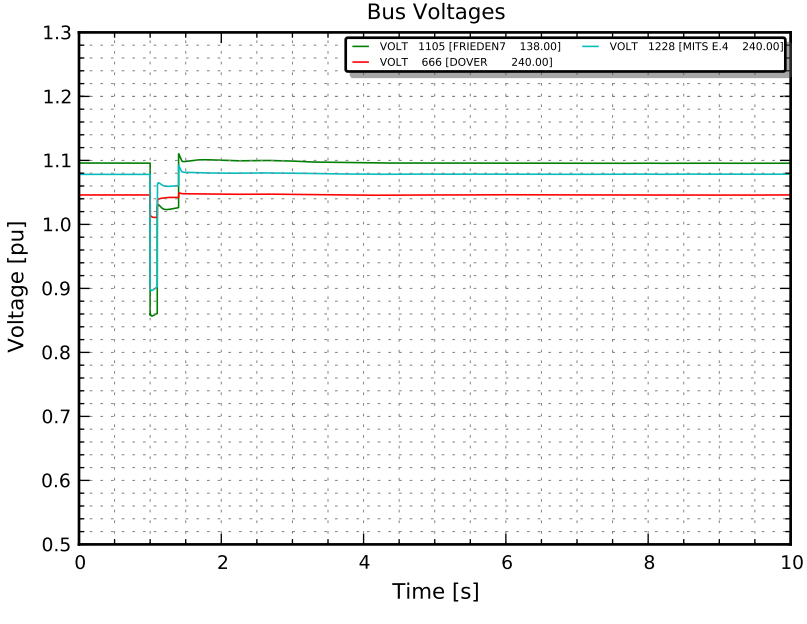
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 022 7L63 HOTCHKISS to LUBICON_B.

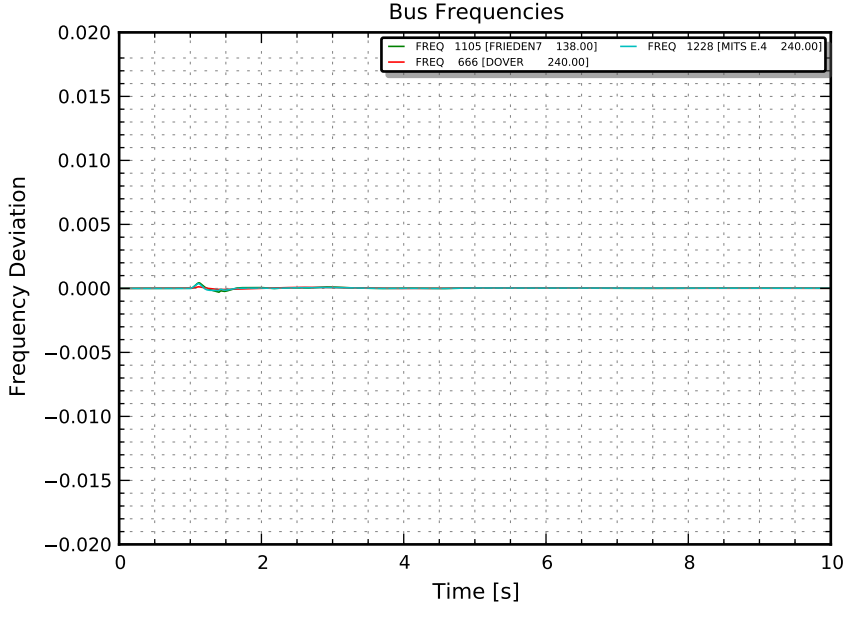
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 022 (B. 1)





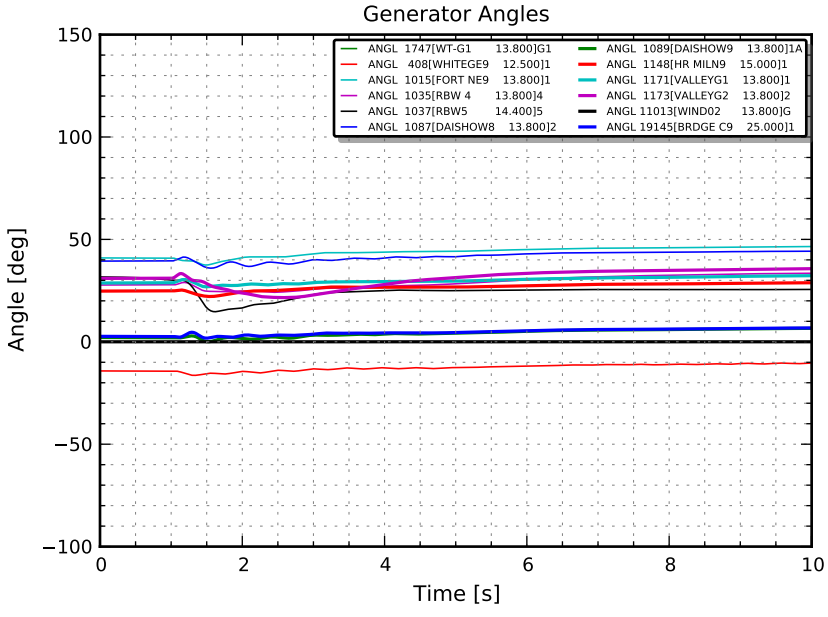


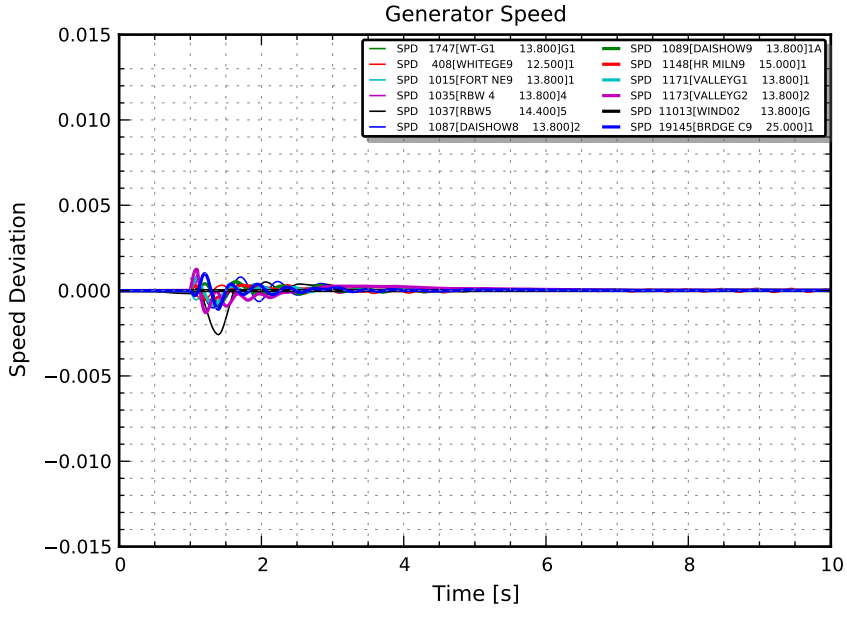


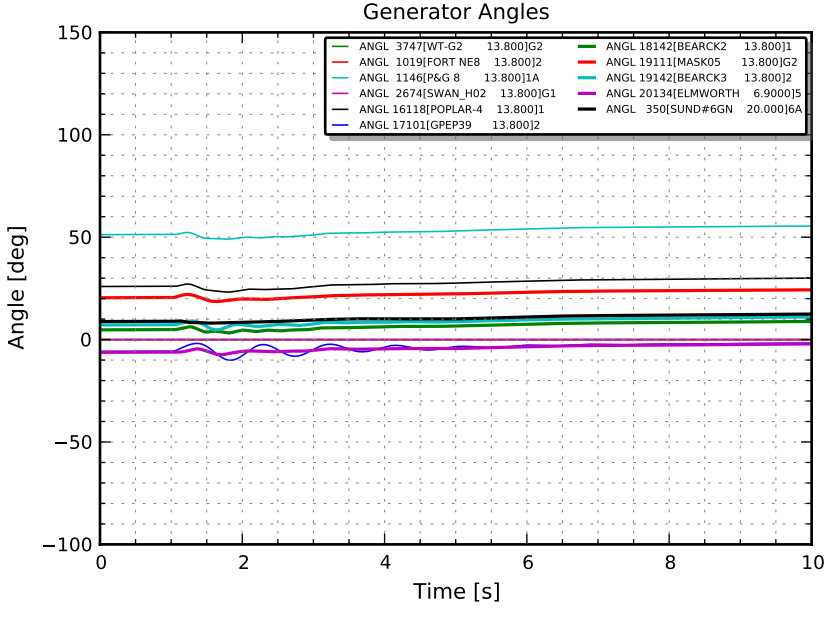
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 022 7L63 HOTCHKISS to LUBICON_B.

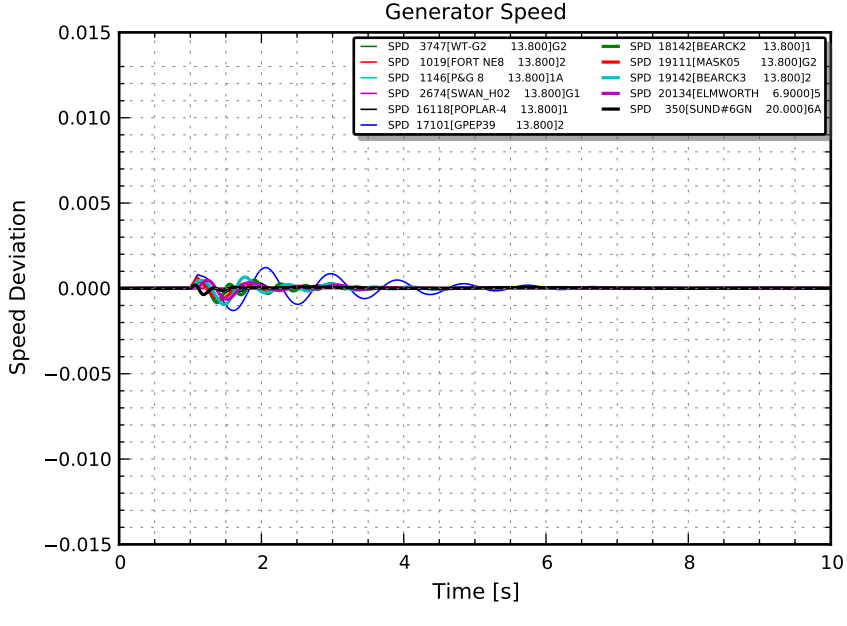
Study Area Generators

Appendix C2A
Figure: 022 (B. 2)





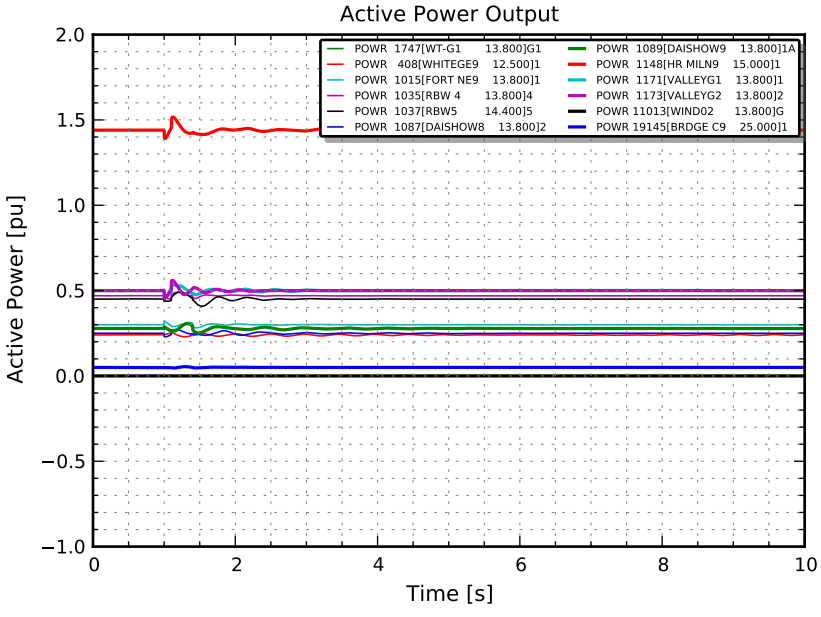


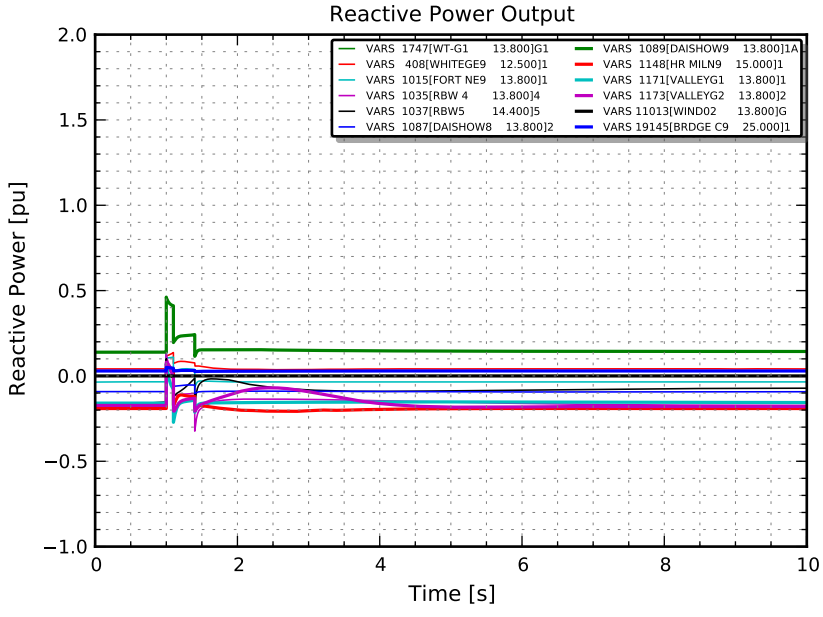


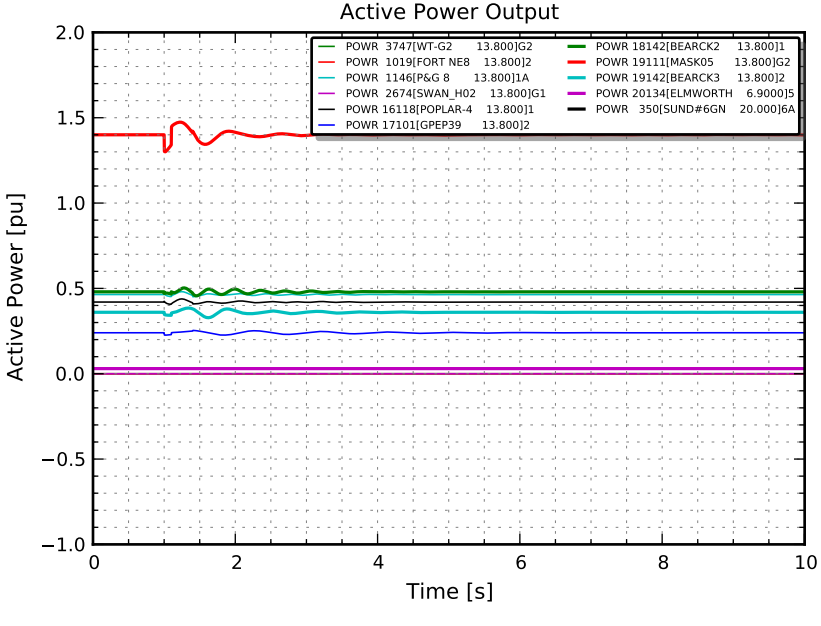
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 022 7L63 HOTCHKISS to LUBICON_B.

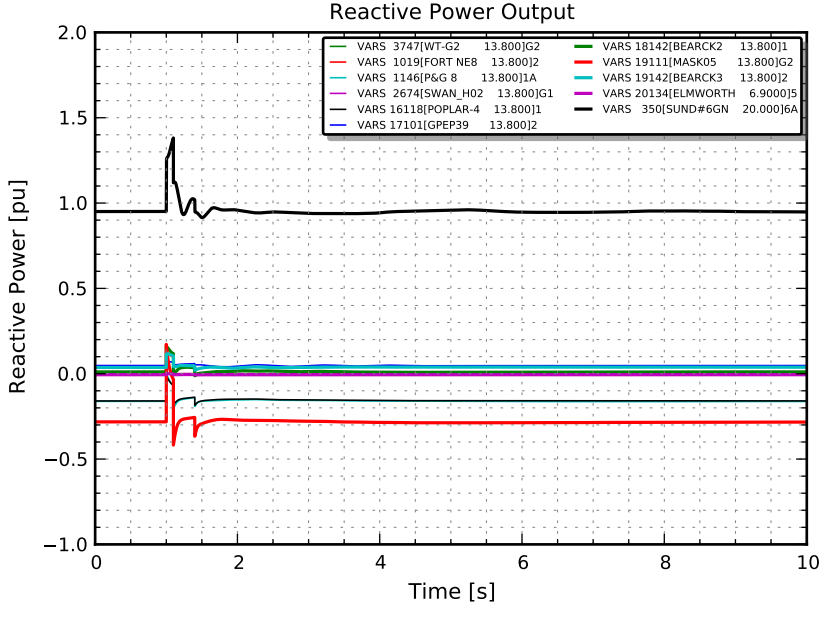
Study Area Generators

Appendix C2A
Figure: 022 (B. 3)





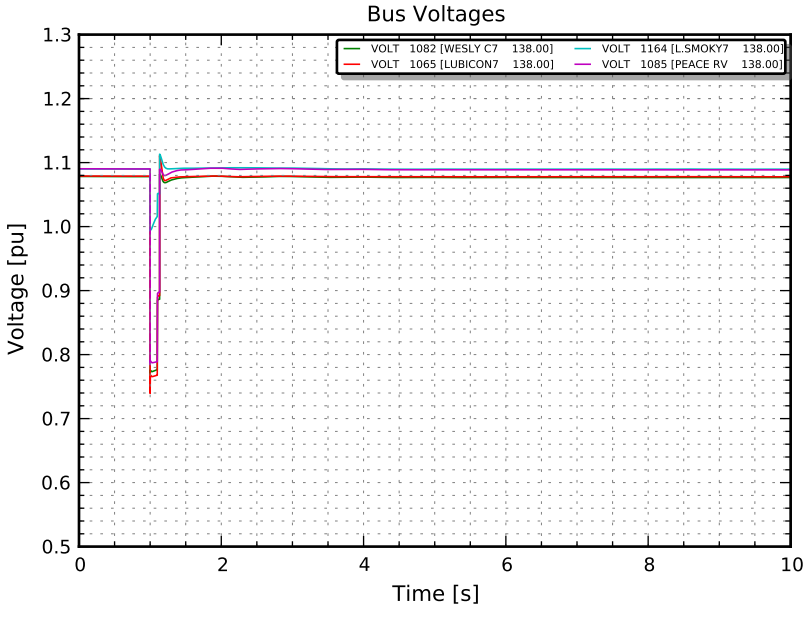


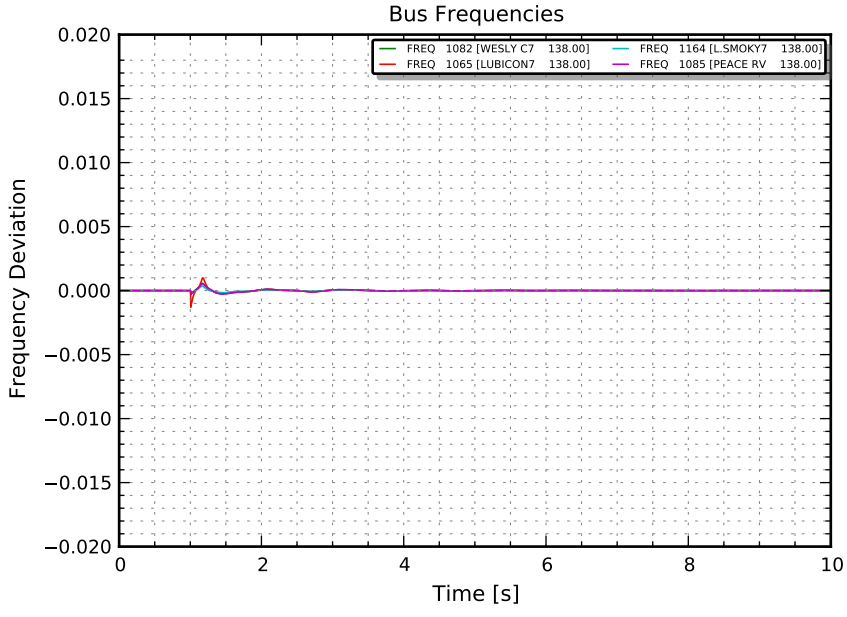


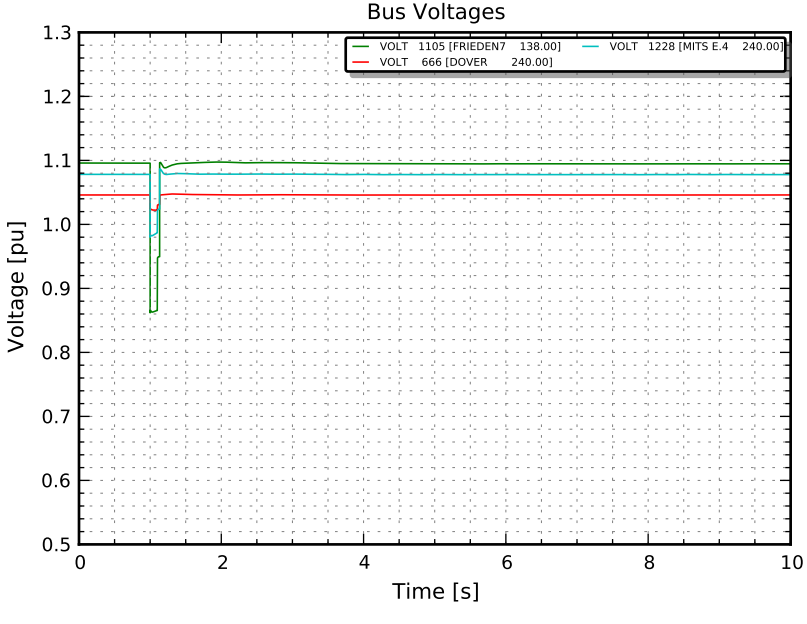
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 023 7L58 KEGRIVER to Meikle_A.

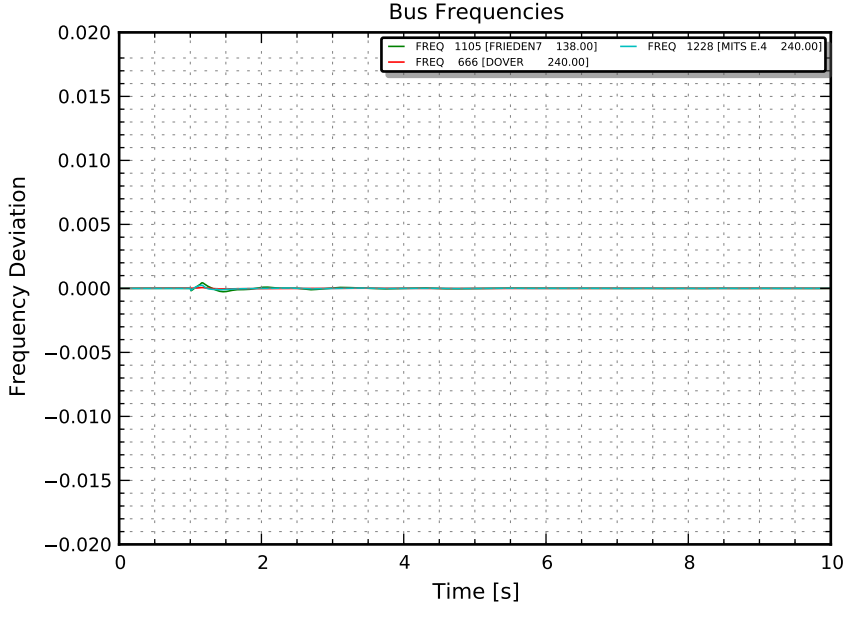
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 023 (A. 1)





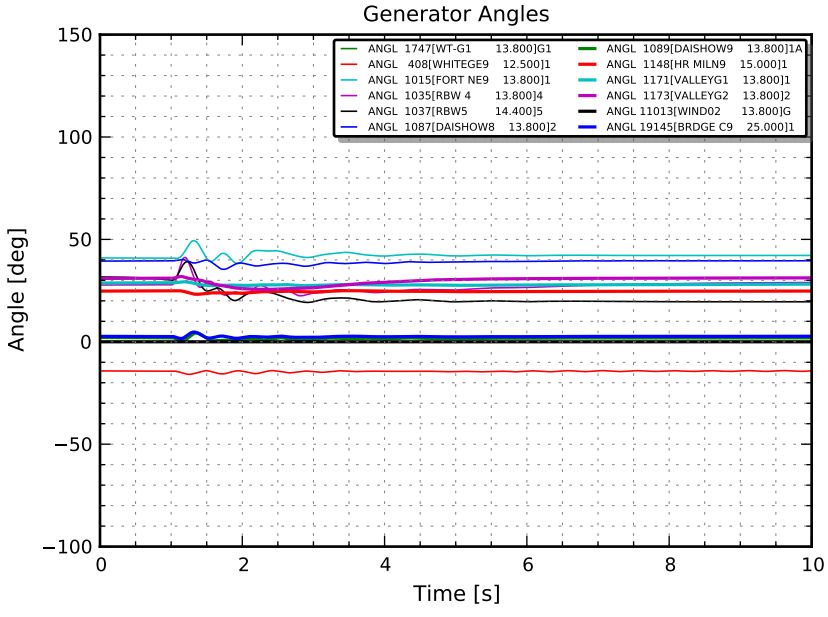


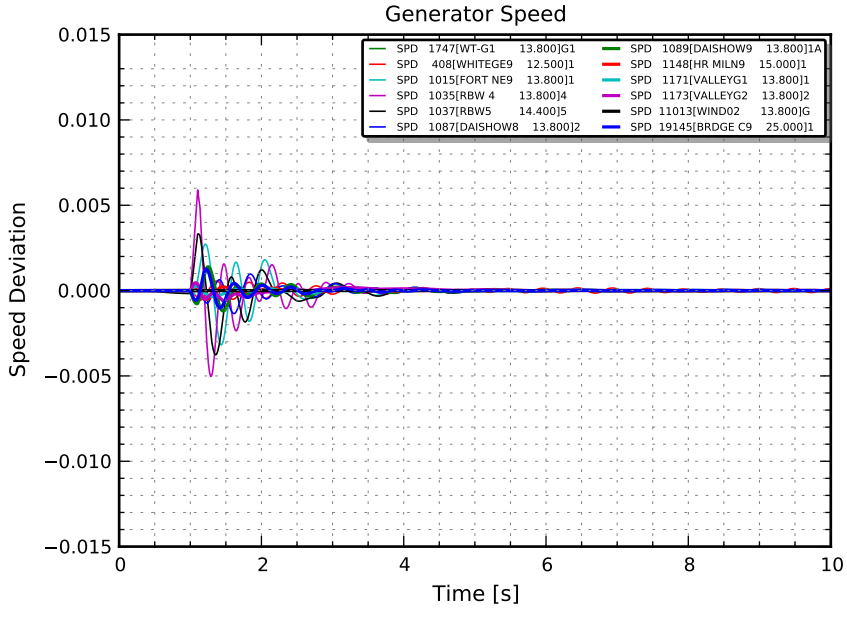


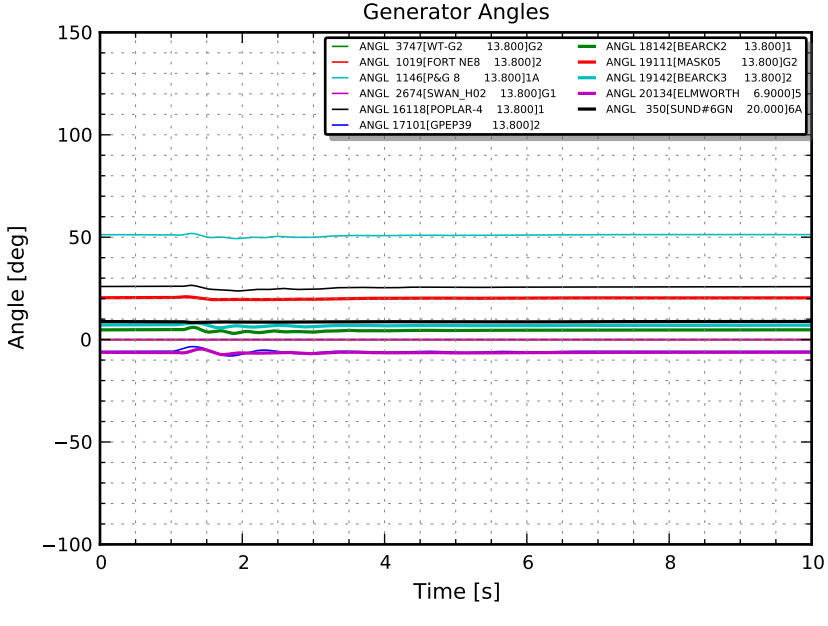
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 023 7L58 KEGRIVER to Meikle_A.

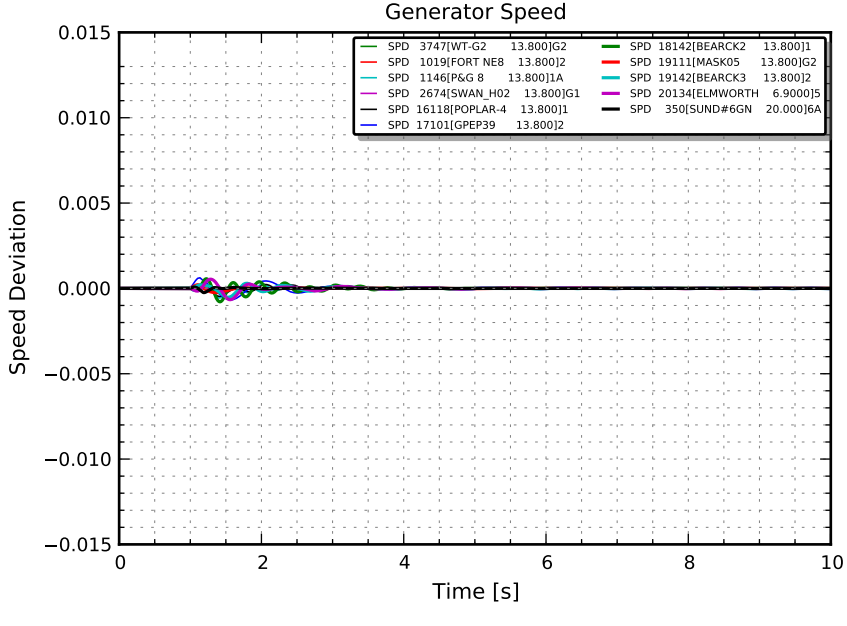
Study Area Generators

Appendix C2A
Figure: 023 (A. 2)





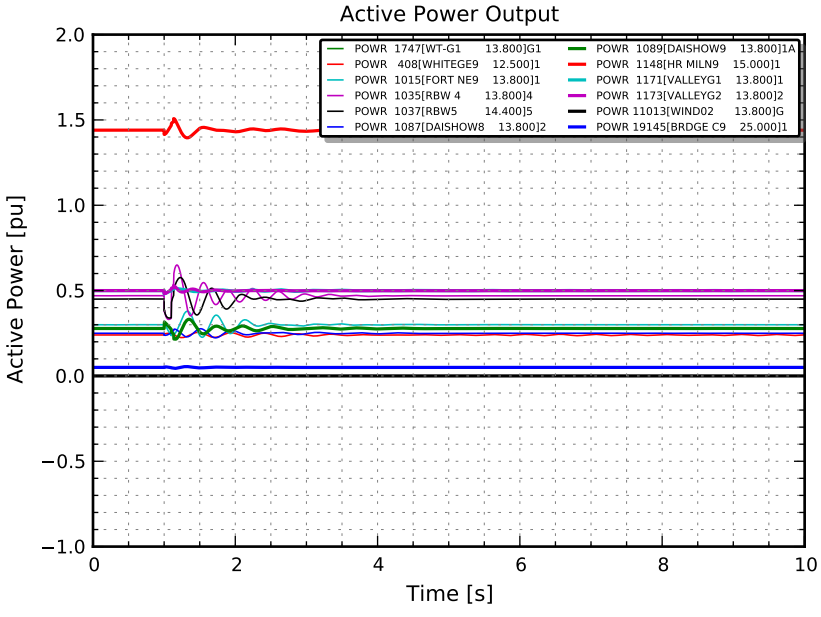


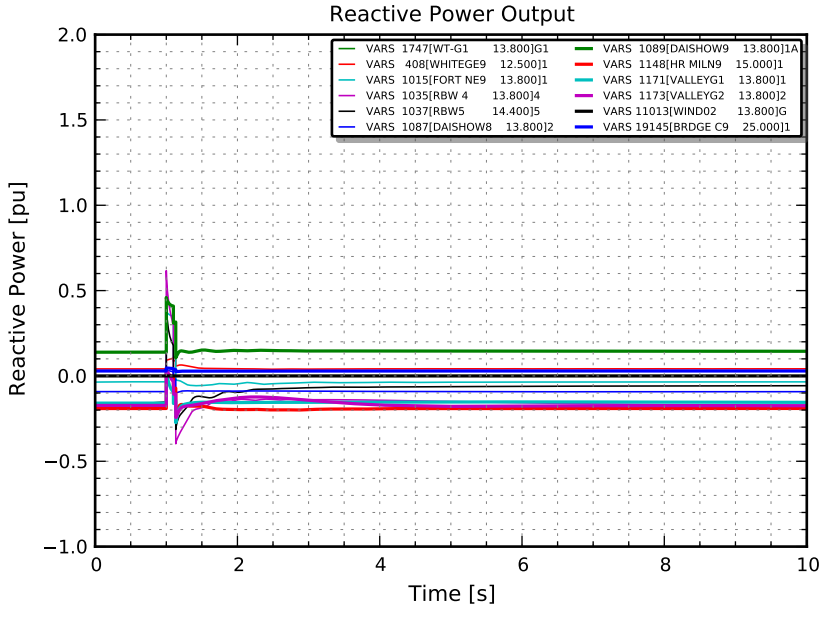


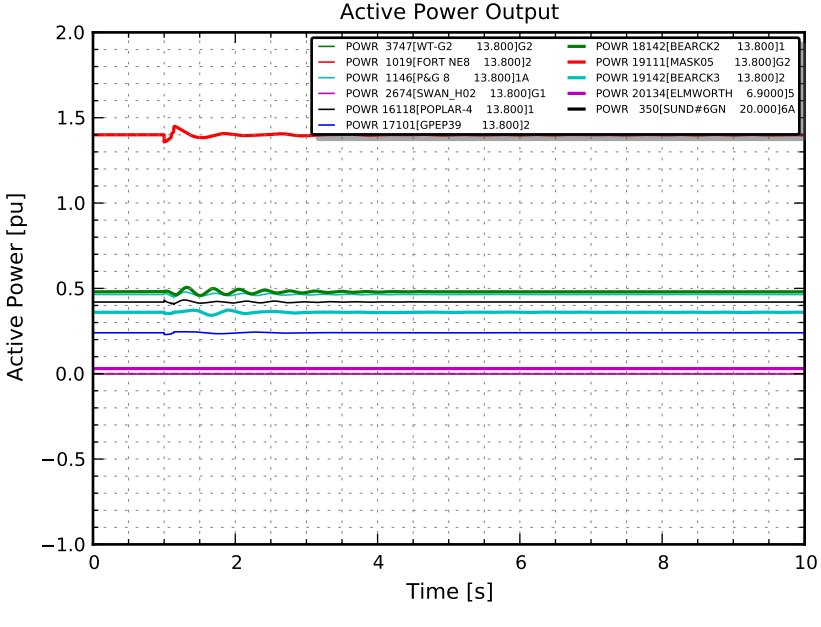
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 023 7L58 KEGRIVER to Meikle_A.

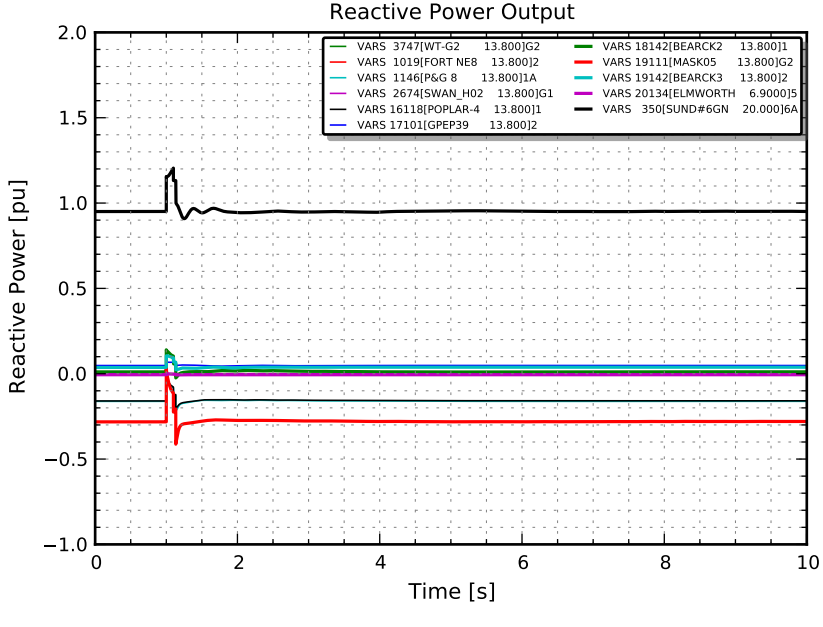
Study Area Generators

Appendix C2A
Figure: 023 (A. 3)





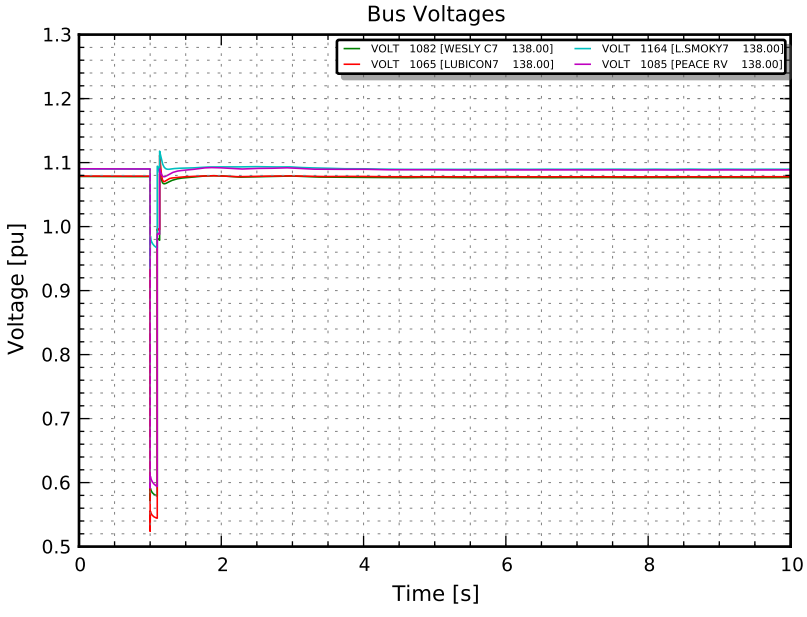


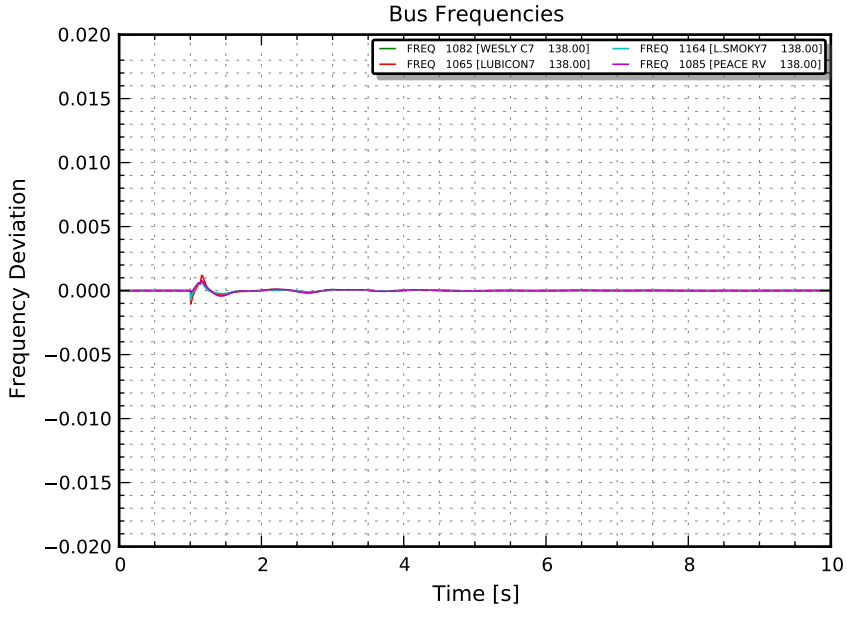


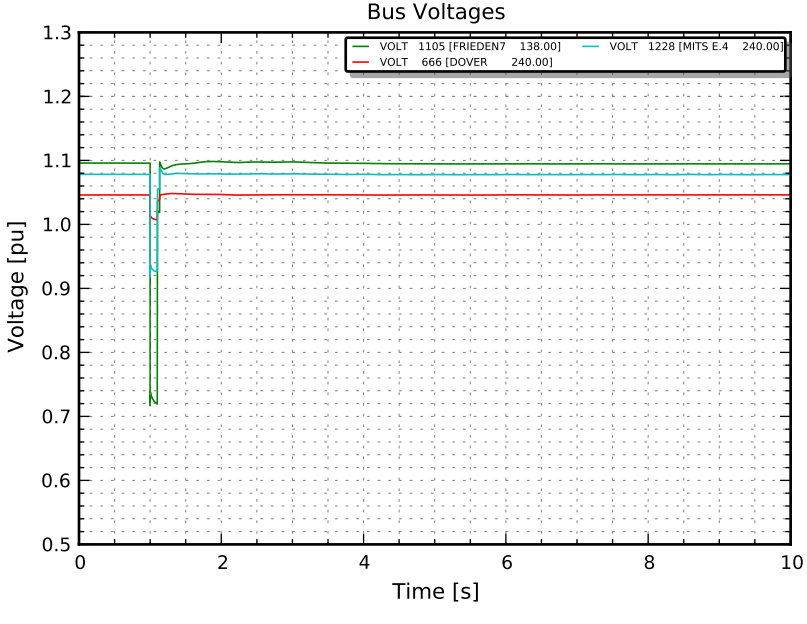
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 023 7L58 KEGRIVER to Meikle_B.

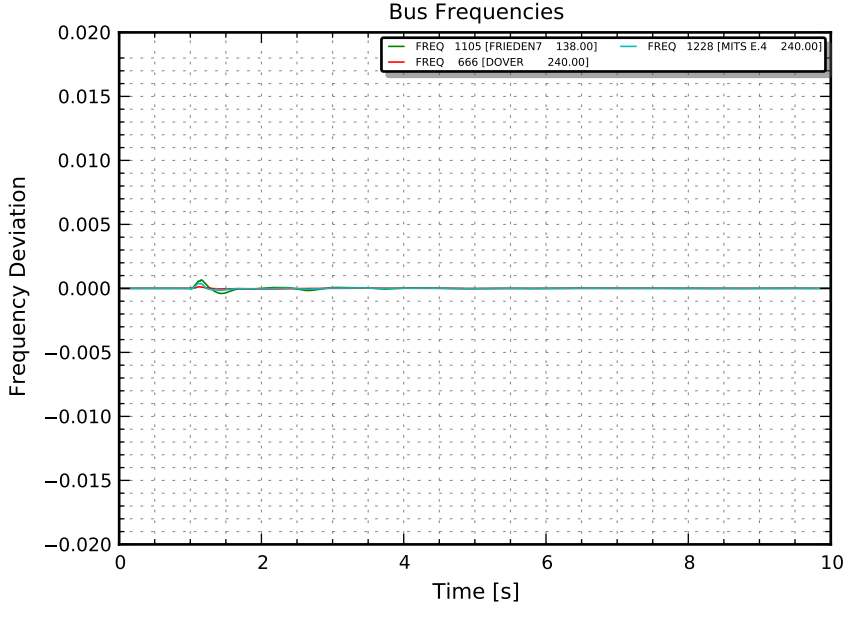
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 023 (B. 1)





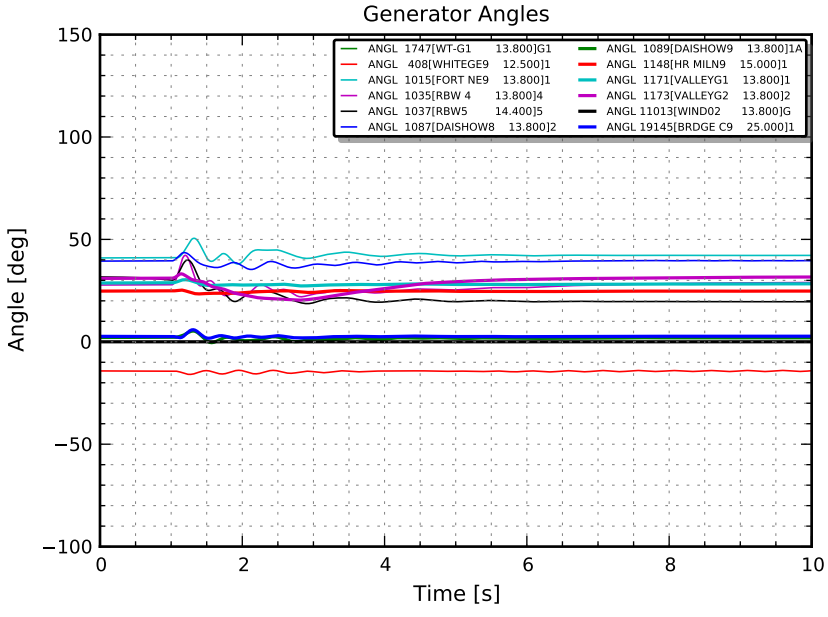


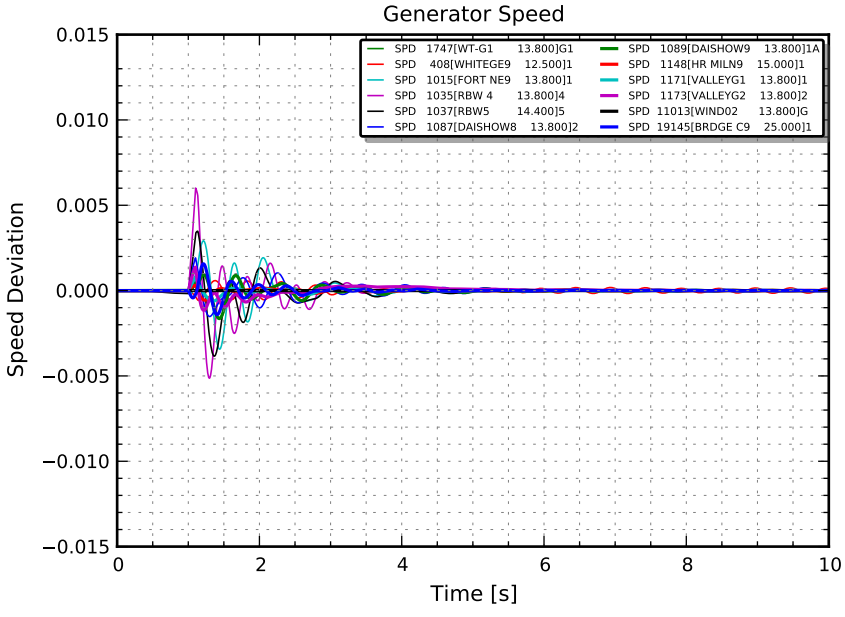


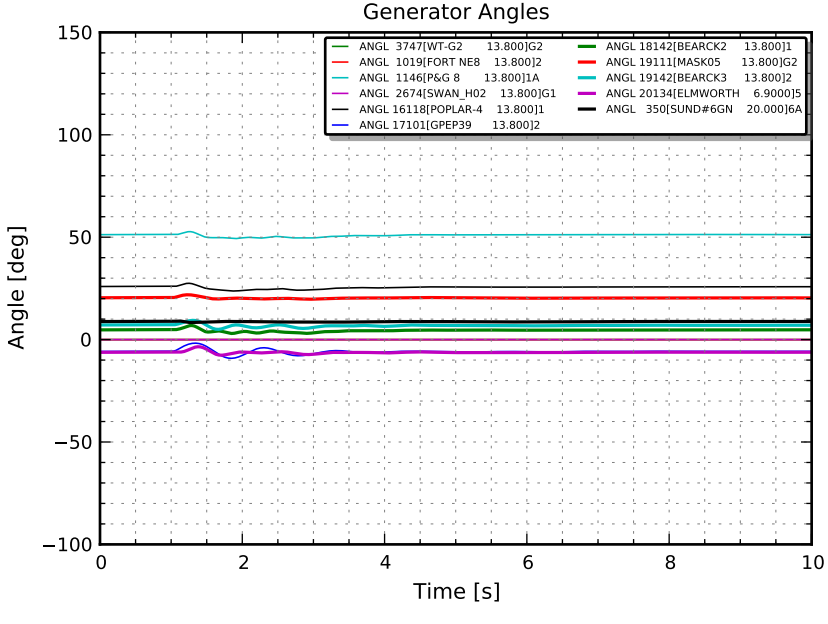
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 023 7L58 KEGRIVER to Meikle_B.

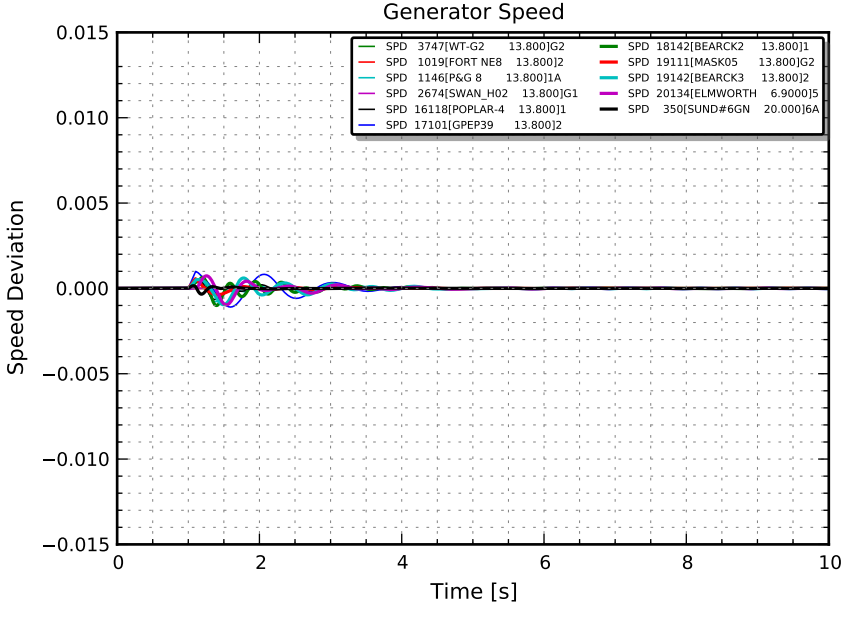
Study Area Generators

Appendix C2A
Figure: 023 (B. 2)





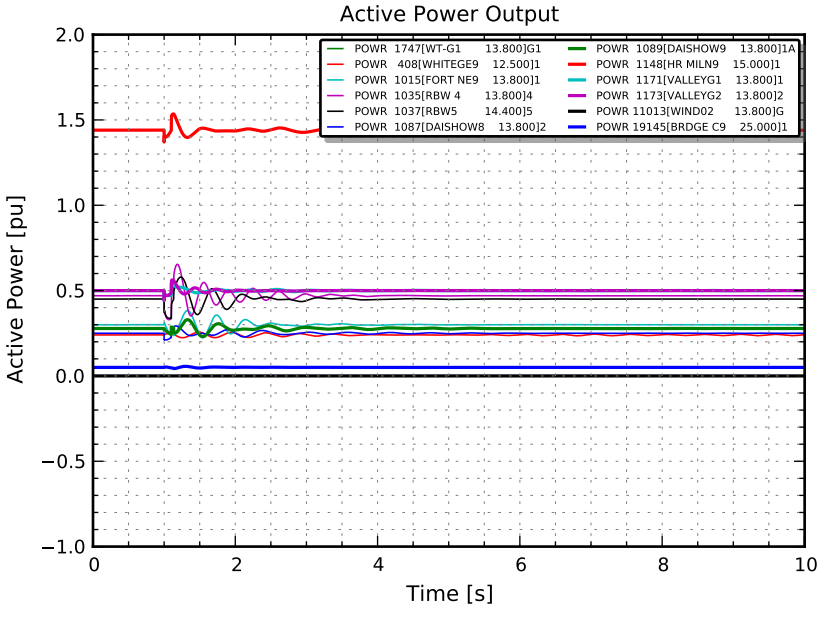


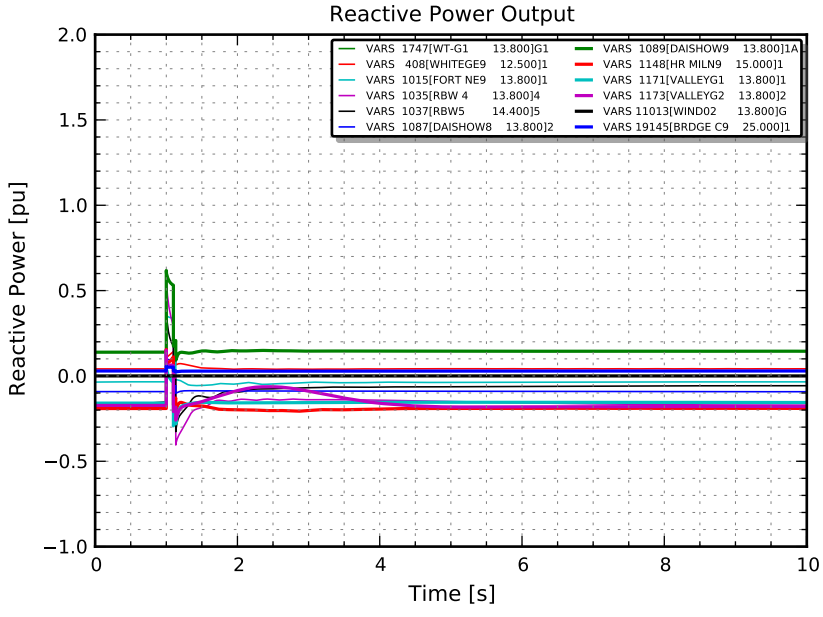


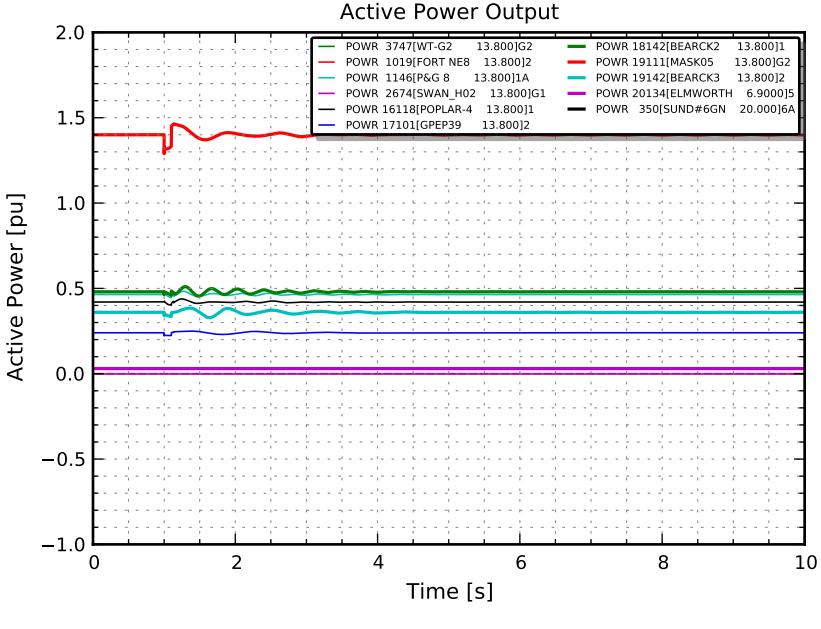
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 023 7L58 KEGRIVER to Meikle_B.

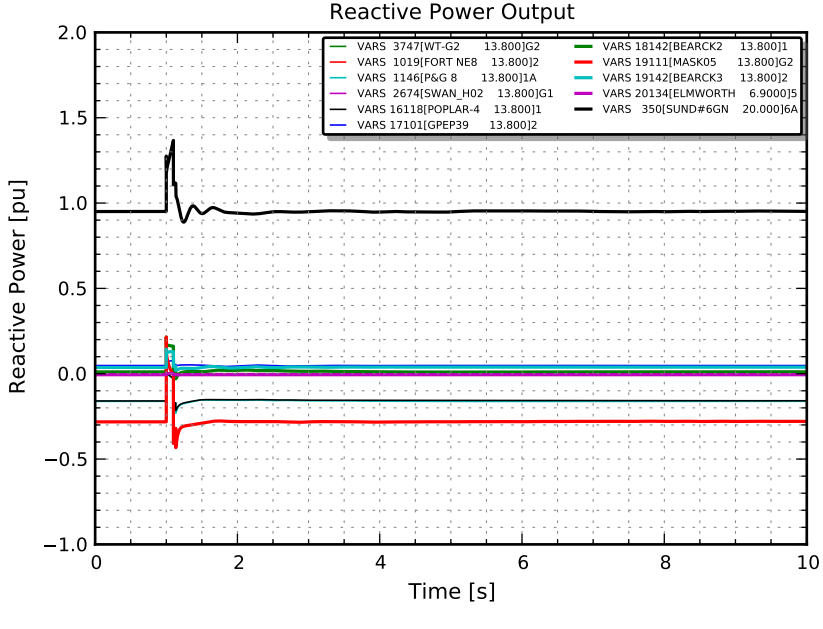
Study Area Generators

Appendix C2A
Figure: 023 (B. 3)





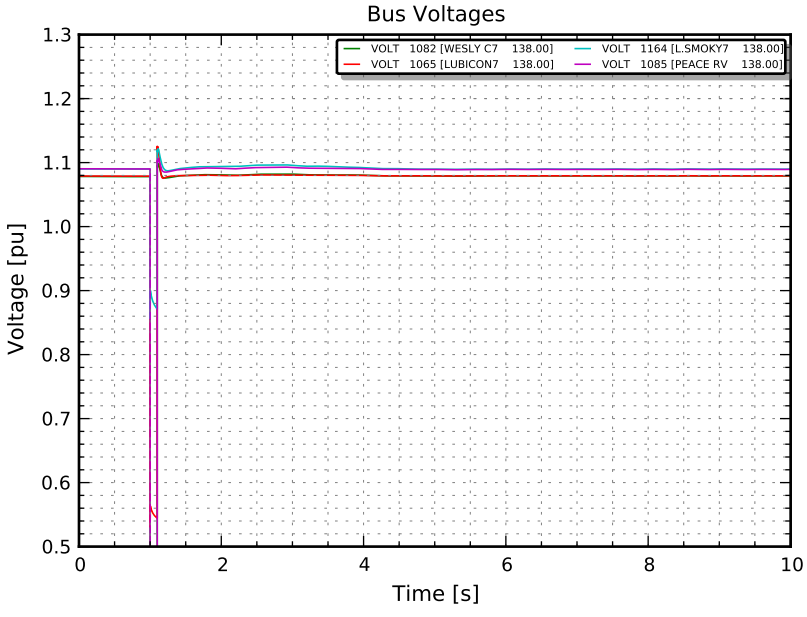


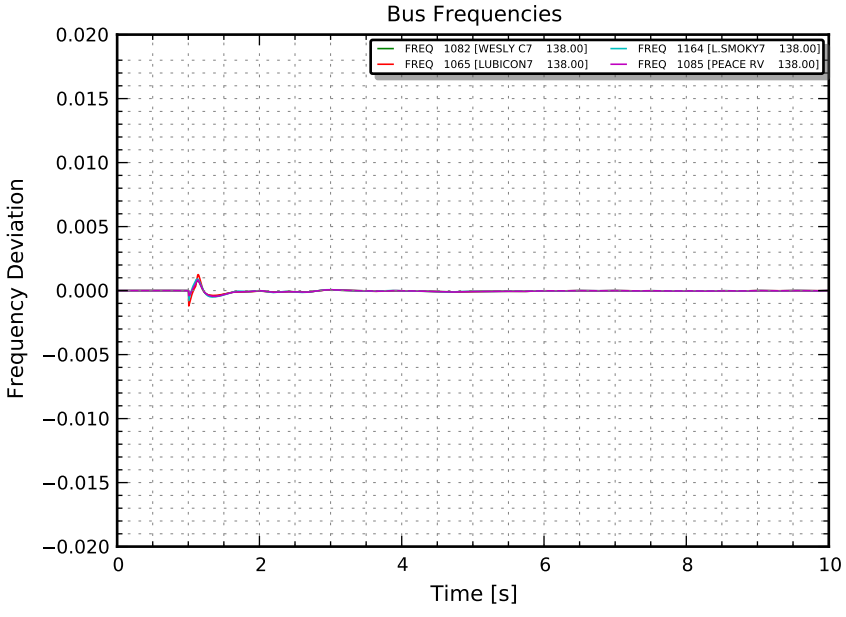


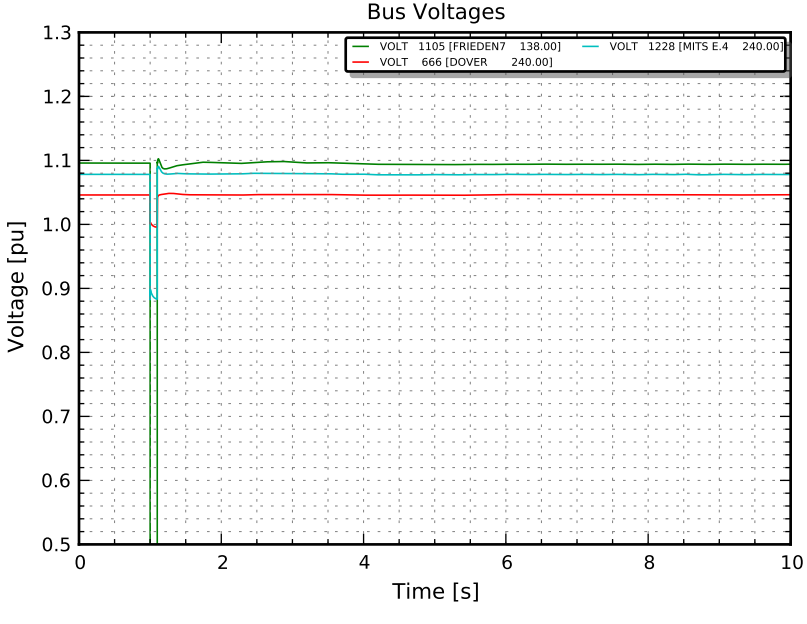
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 024 7L04 WESTPEACE to DAISHOWA_A.

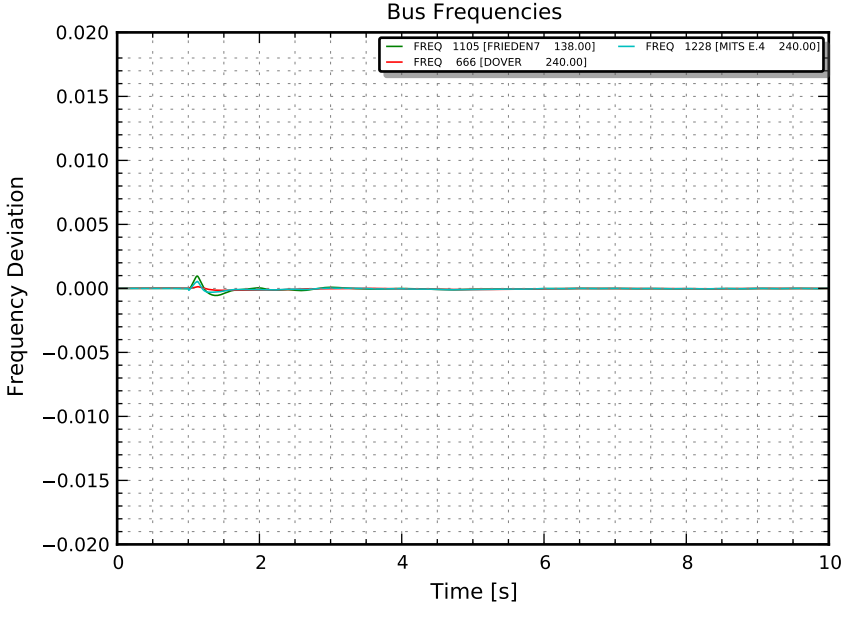
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 024 (A. 1)





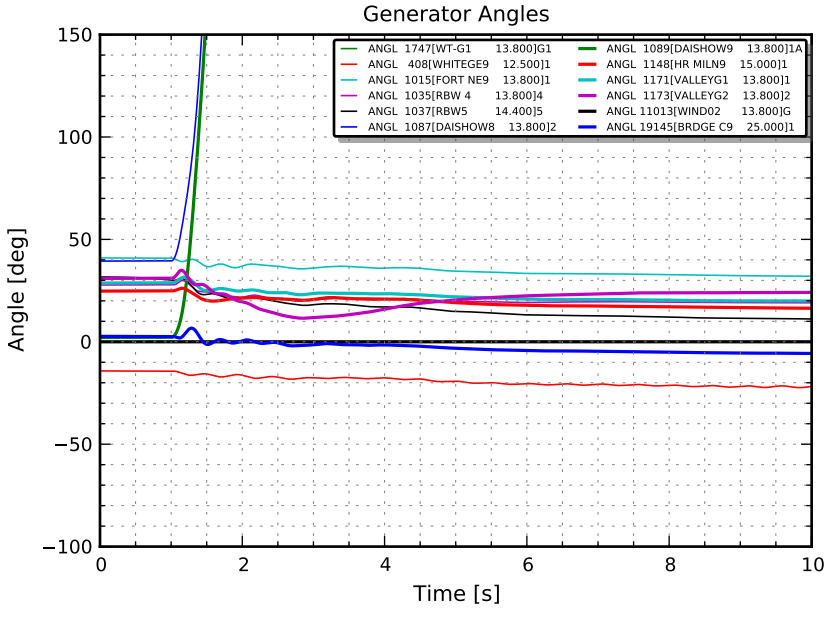


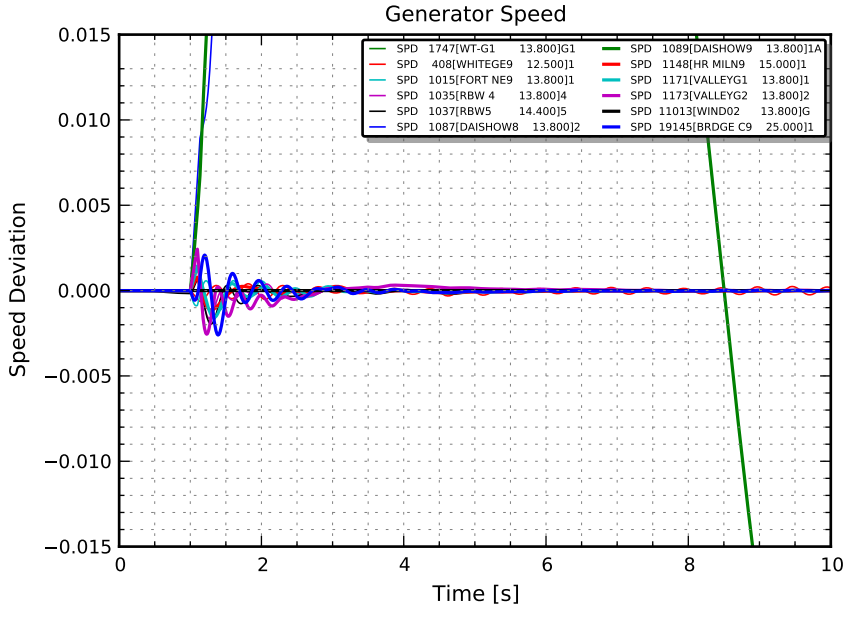


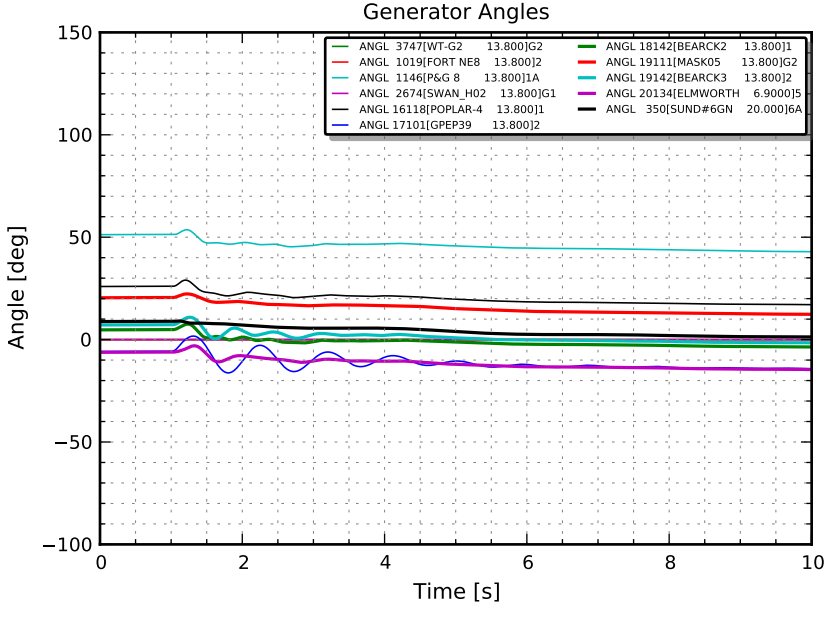
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 024 7L04 WESTPEACE to DAISHOWA_A.

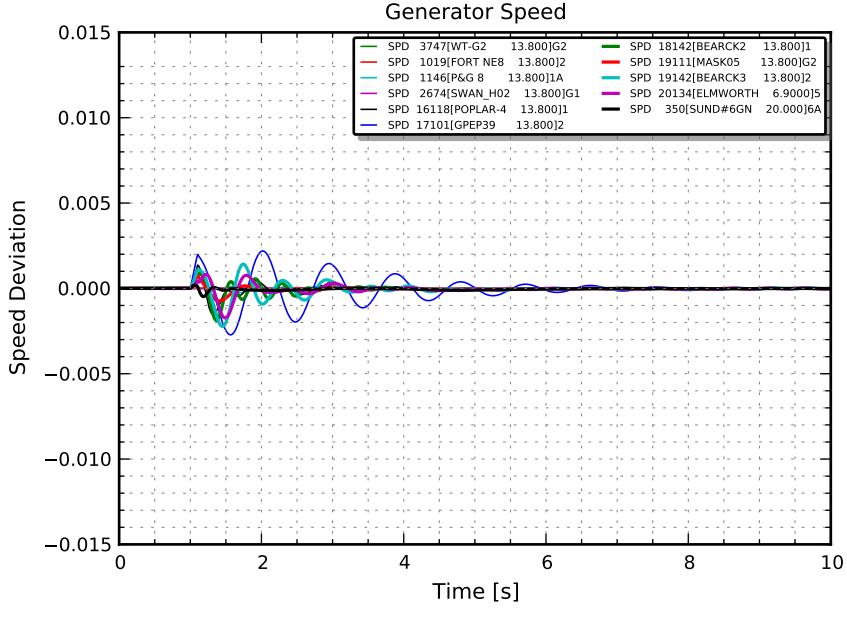
Study Area Generators

Appendix C2A
Figure: 024 (A. 2)





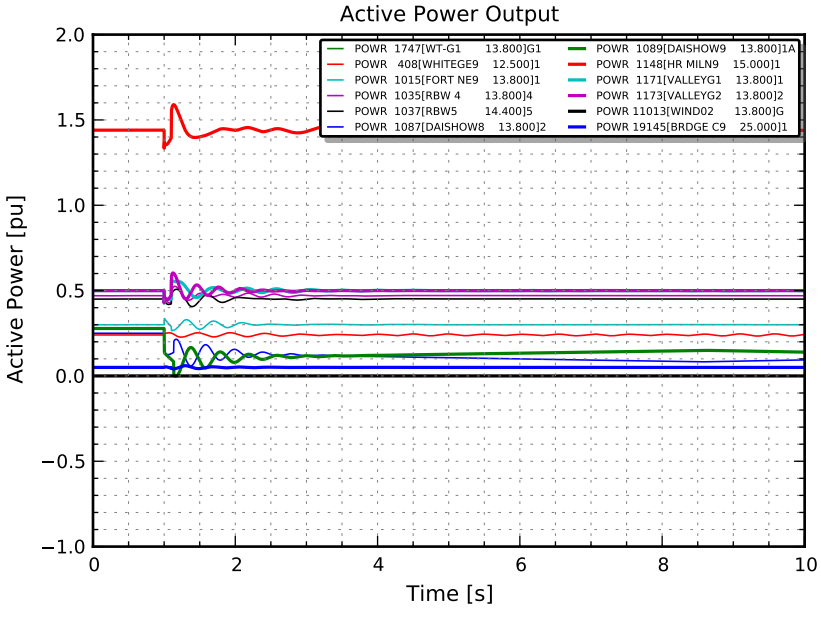


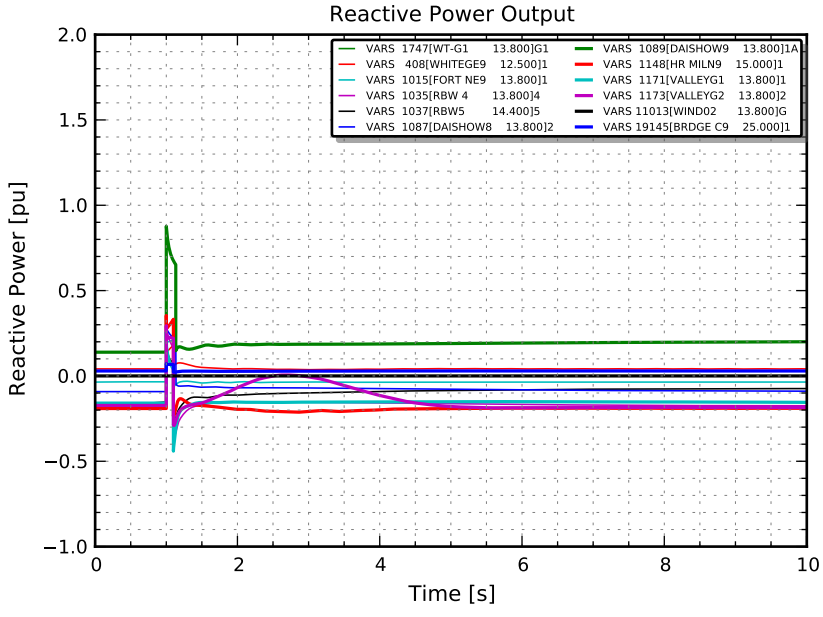


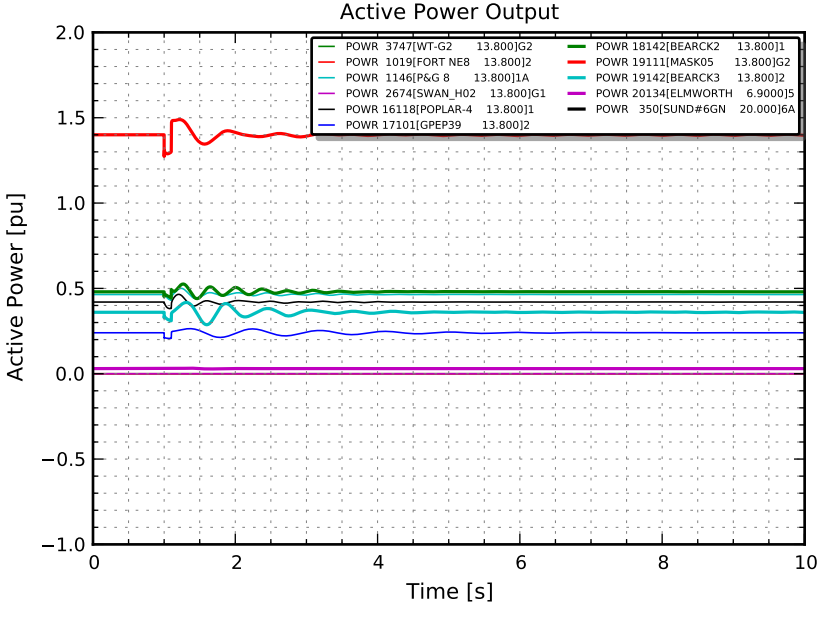
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 024 7L04 WESTPEACE to DAISHOWA_A.

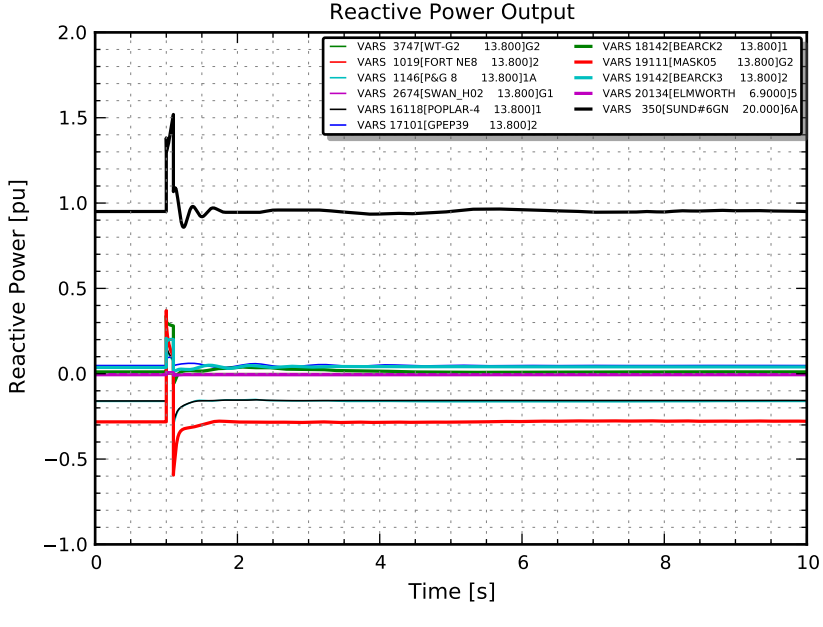
Study Area Generators

Appendix C2A
Figure: 024 (A. 3)





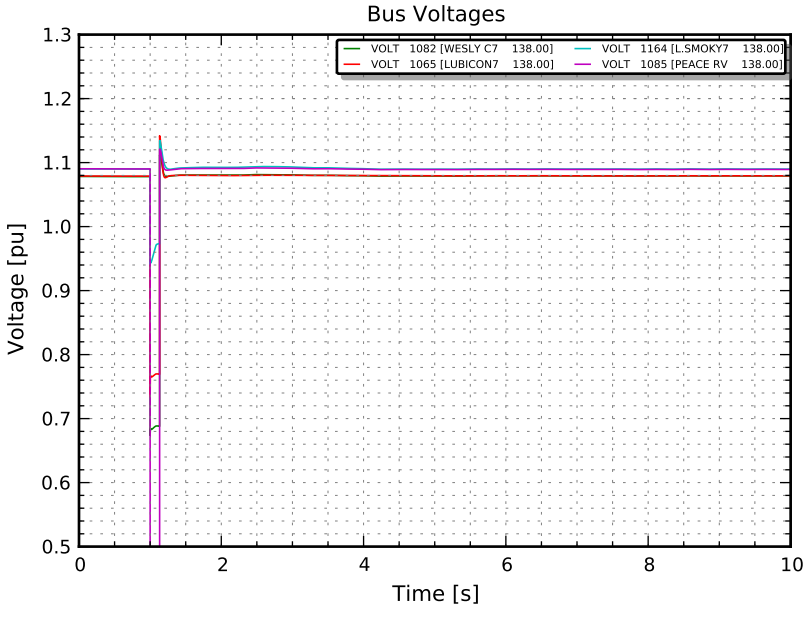


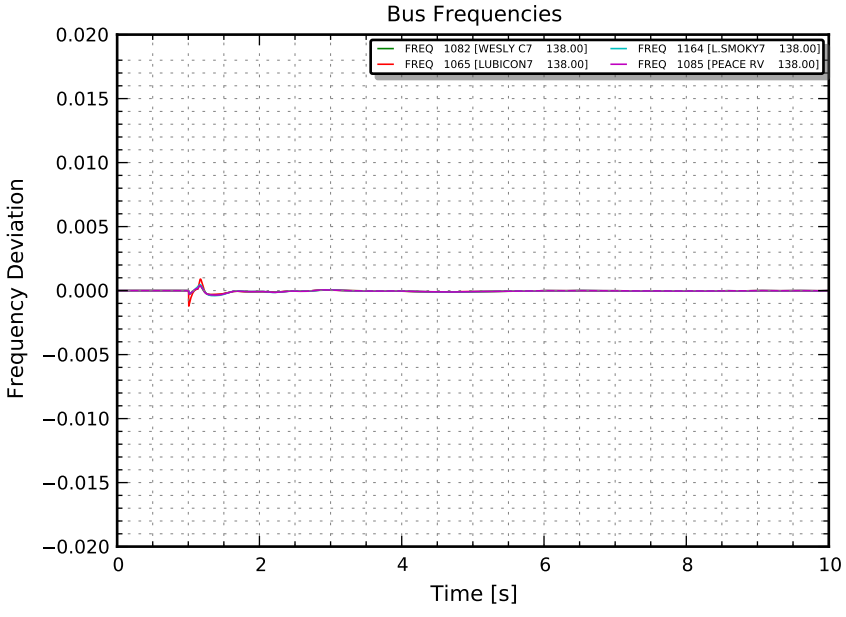


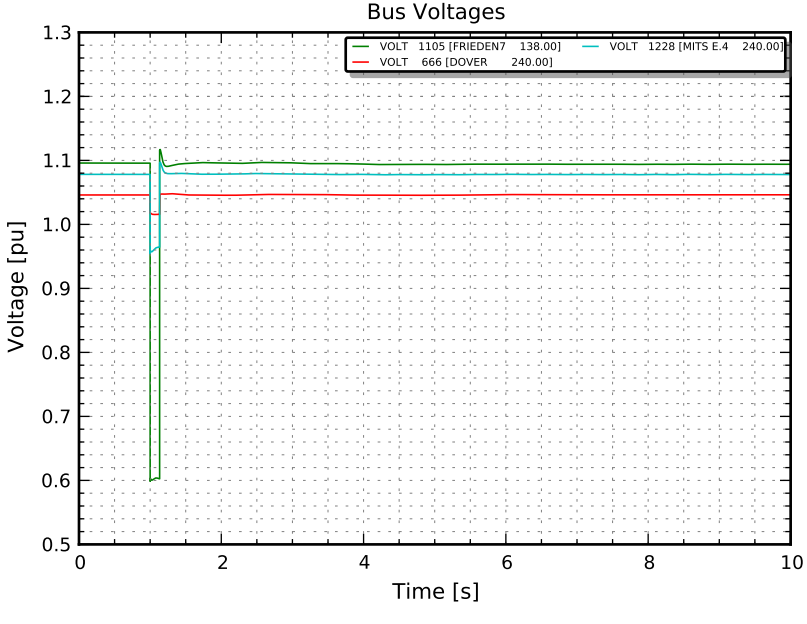
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 024 7L04 WESTPEACE to DAISHOWA_B.

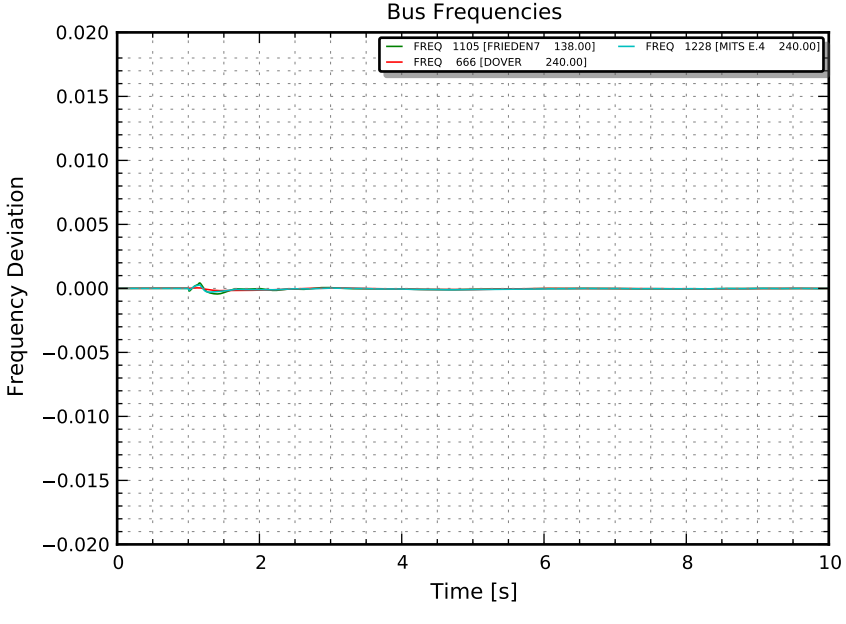
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 024 (B. 1)





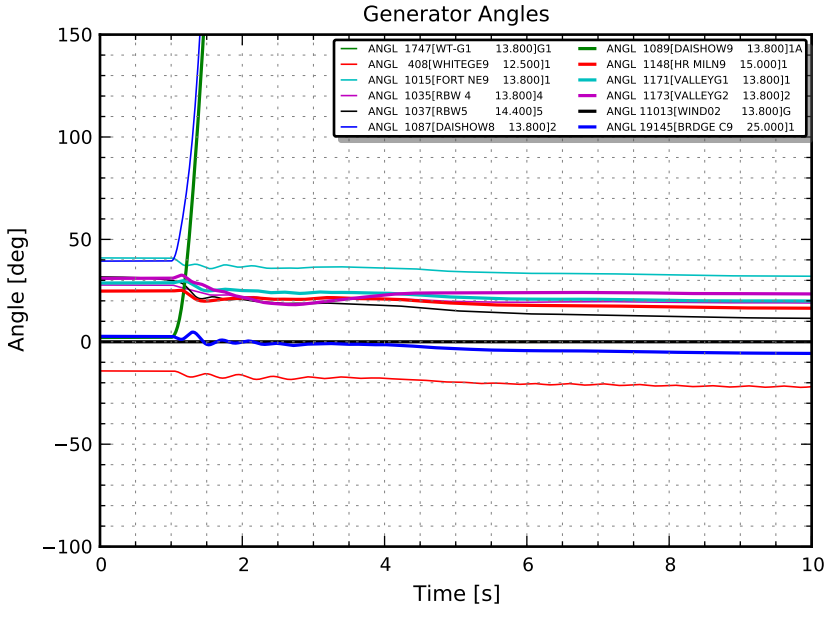


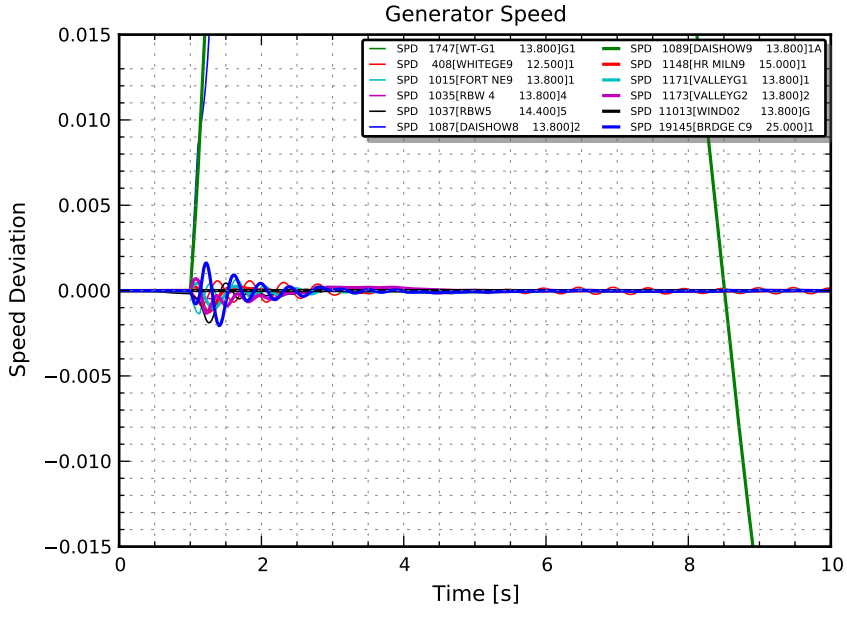


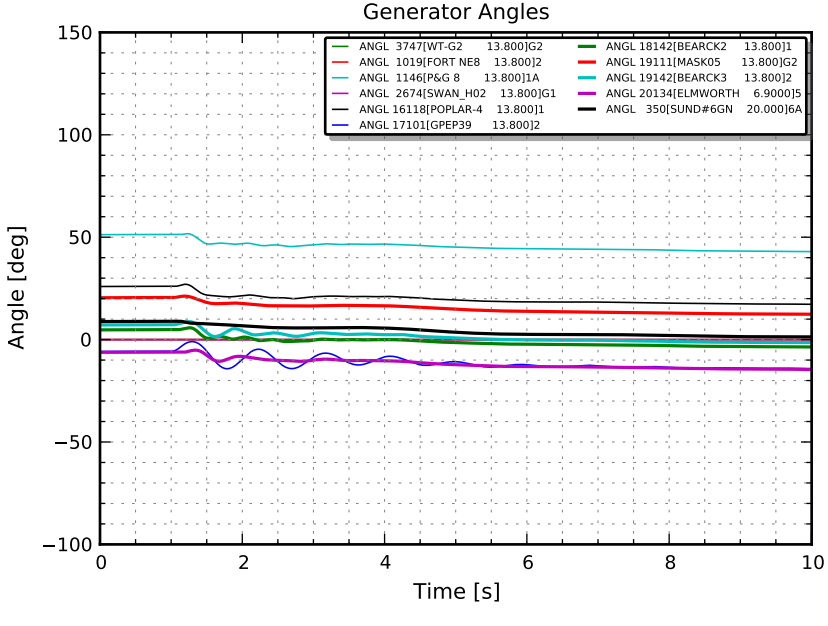
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 024 7L04 WESTPEACE to DAISHOWA_B.

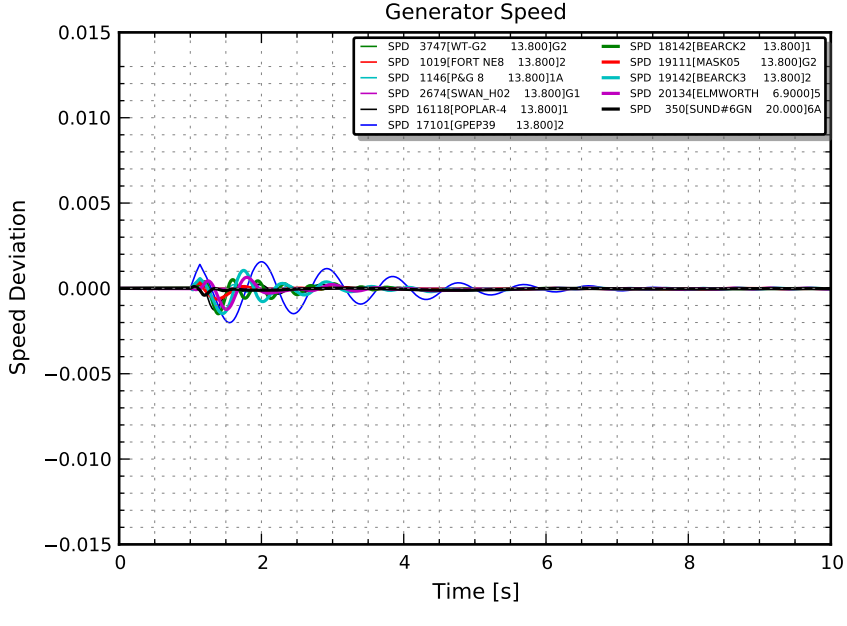
Study Area Generators

Appendix C2A
Figure: 024 (B. 2)





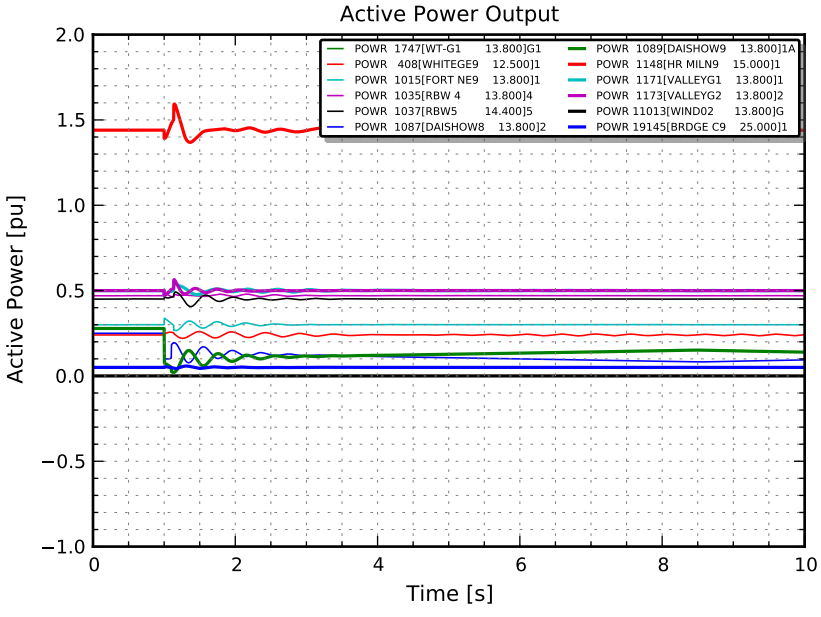


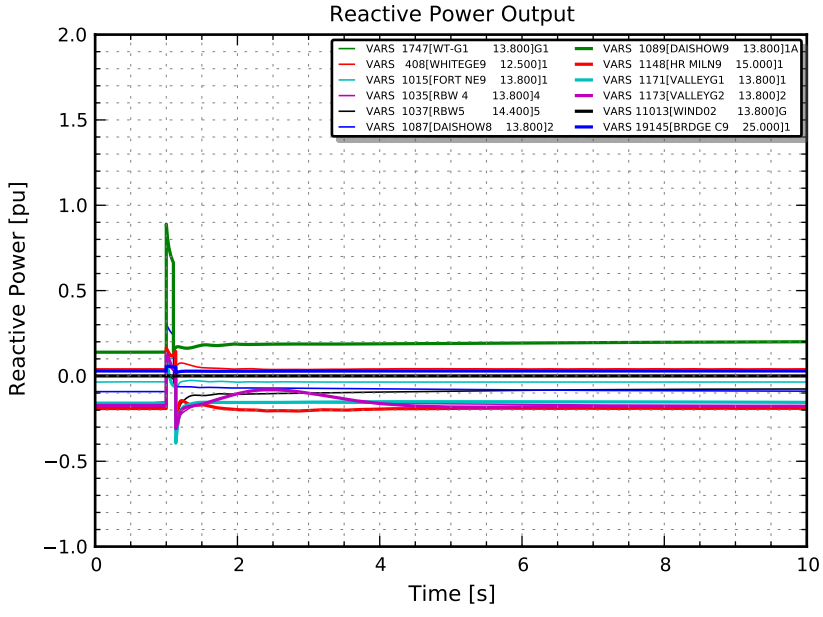


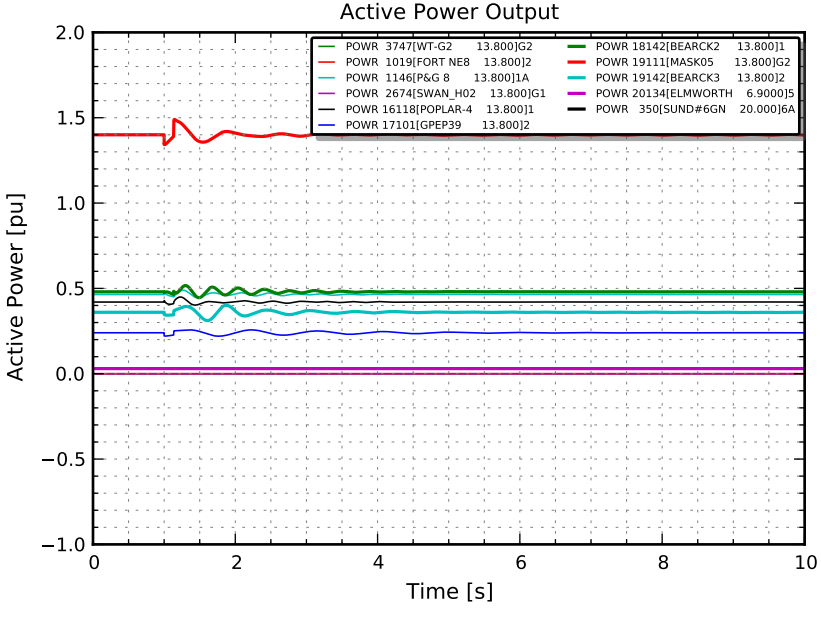
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 024 7L04 WESTPEACE to DAISHOWA_B.

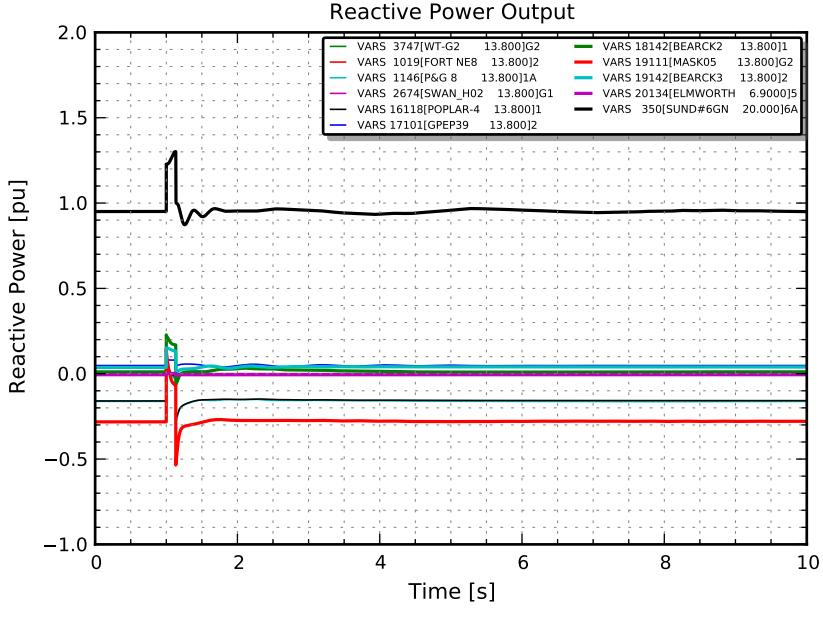
Study Area Generators

Appendix C2A
Figure: 024 (B. 3)





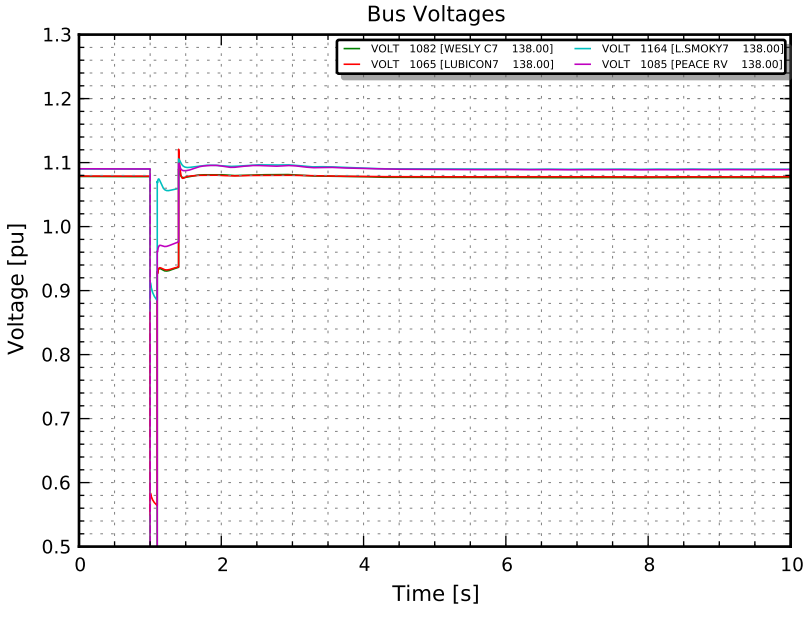


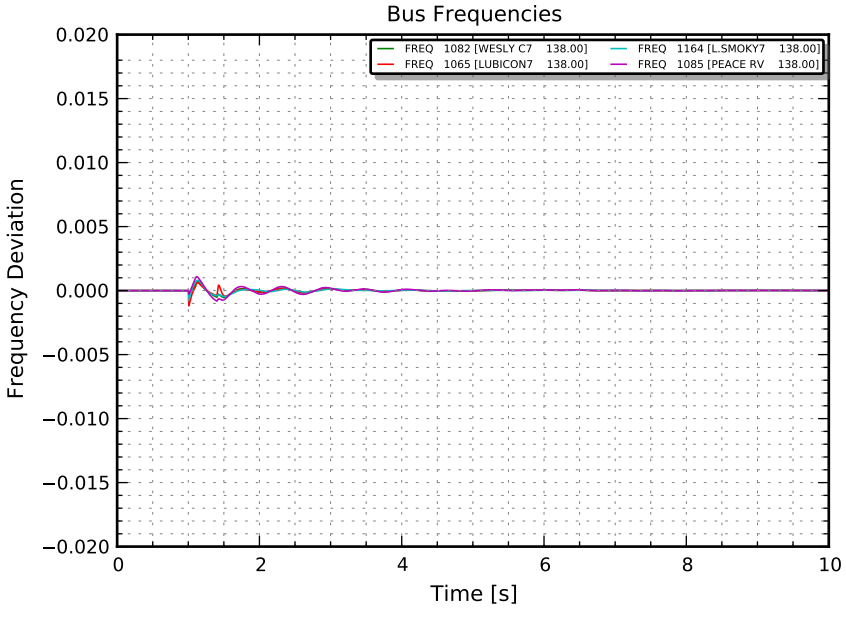


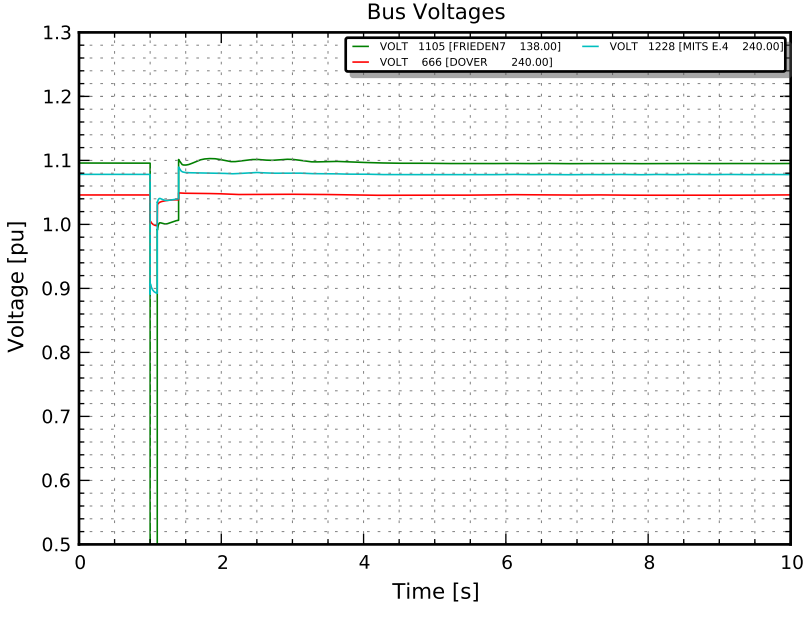
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 025 7L51 WESTPEACE to HOTCHKISS_A.

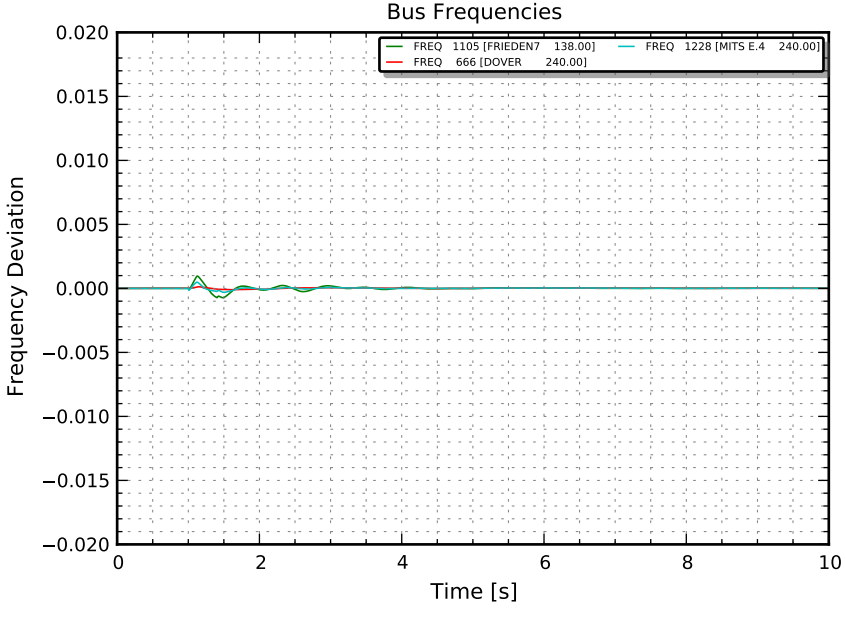
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 025 (A. 1)





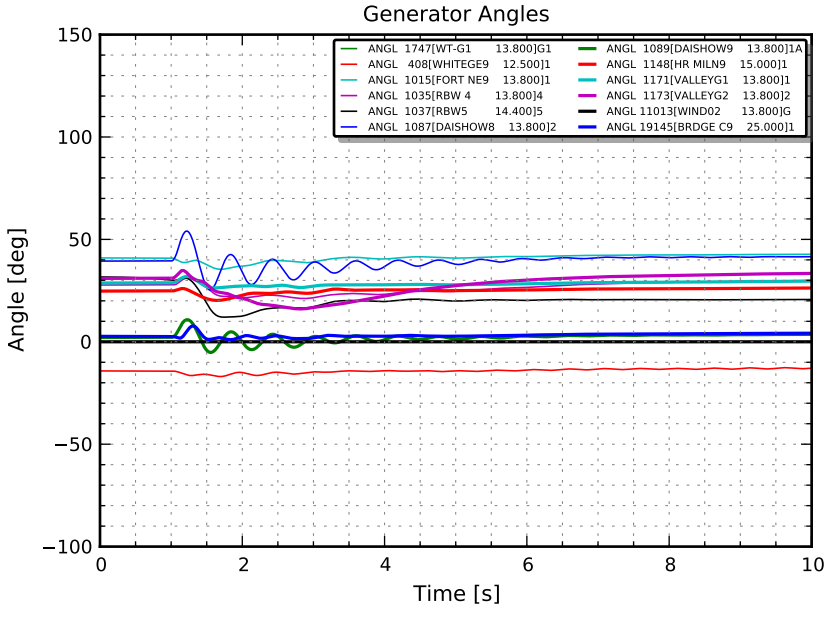


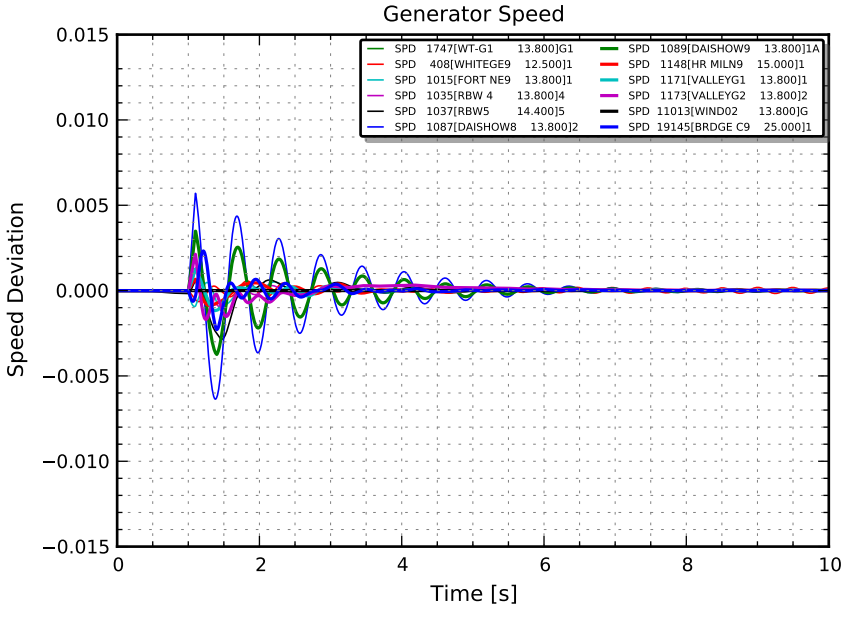


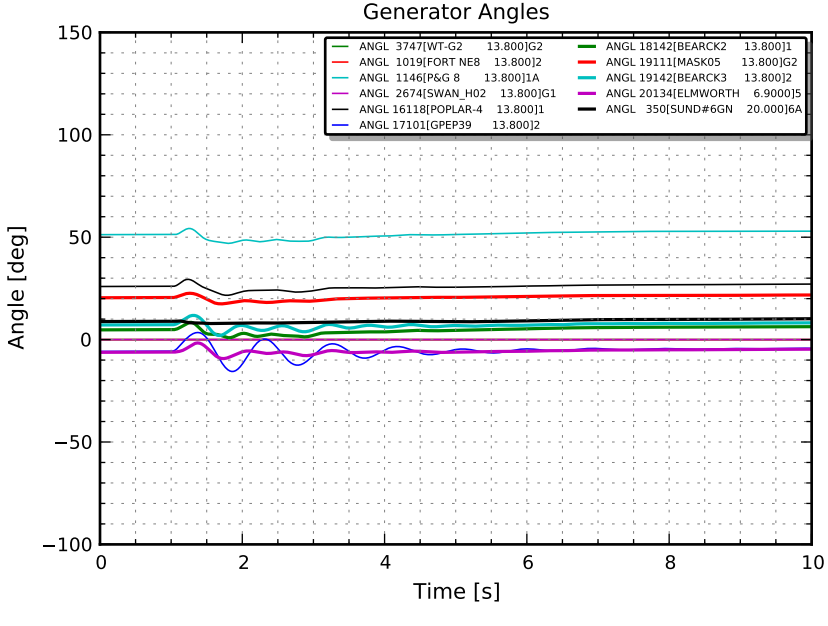
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 025 7L51 WESTPEACE to HOTCHKISS_A.

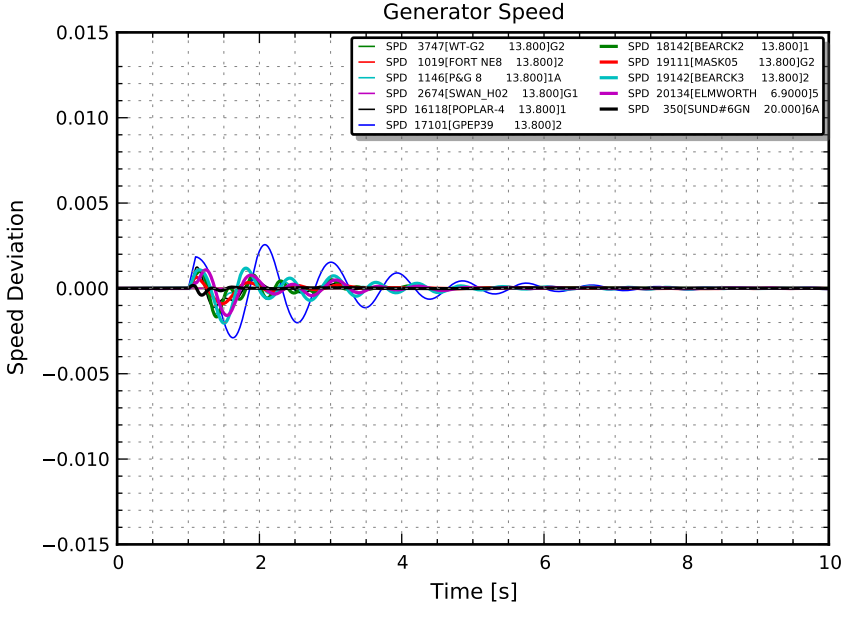
Study Area Generators

Appendix C2A
Figure: 025 (A. 2)





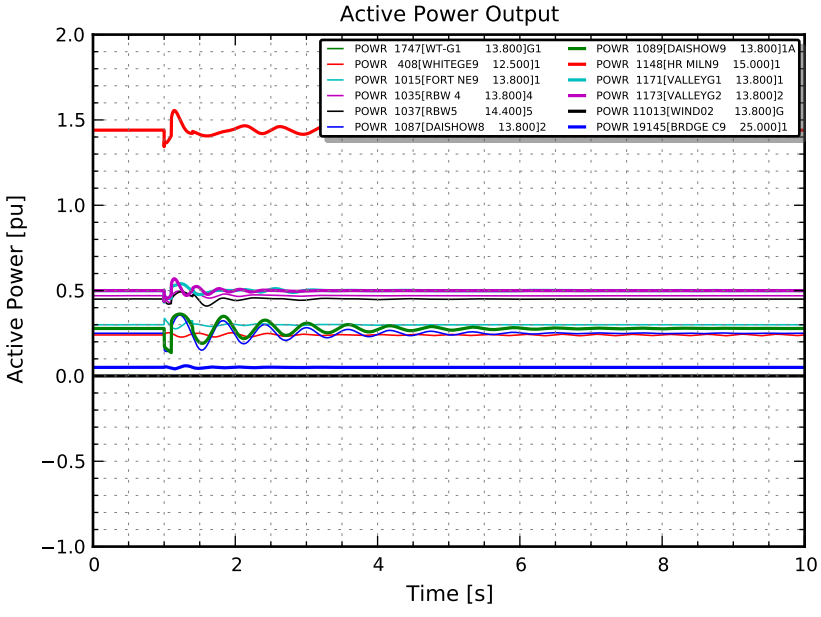


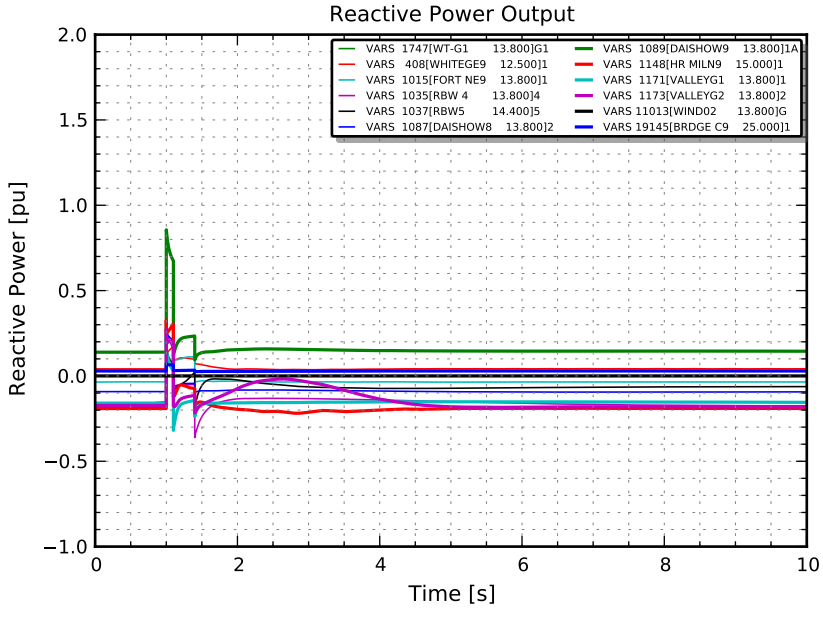


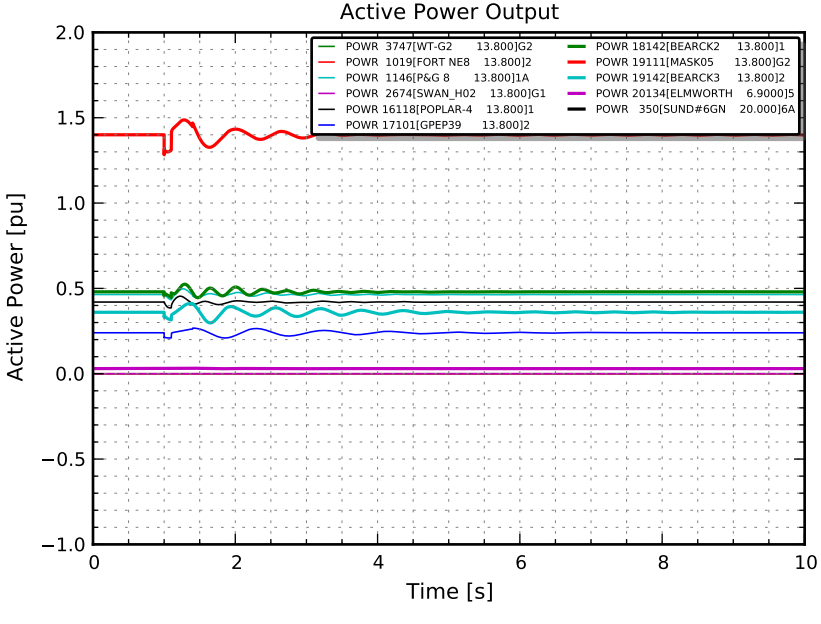
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 025 7L51 WESTPEACE to HOTCHKISS_A.

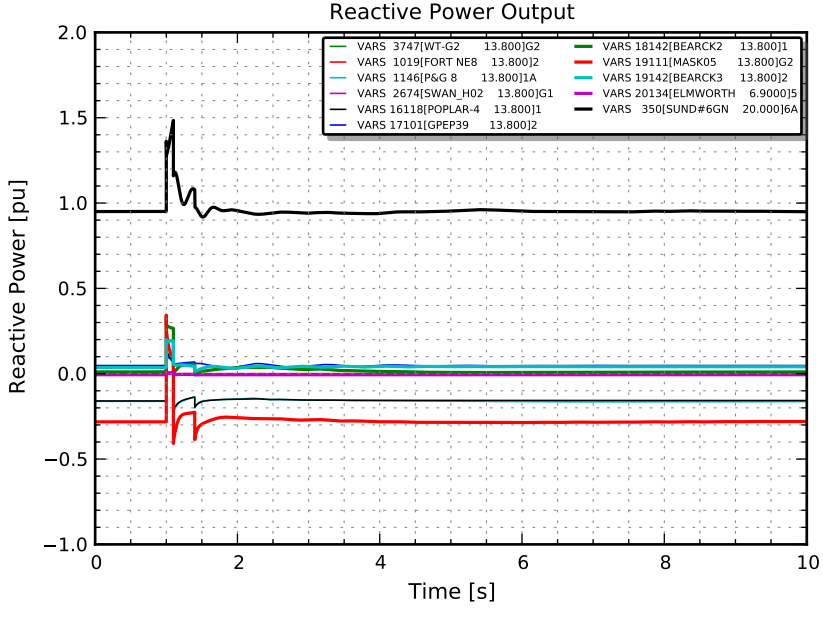
Study Area Generators

Appendix C2A
Figure: 025 (A. 3)





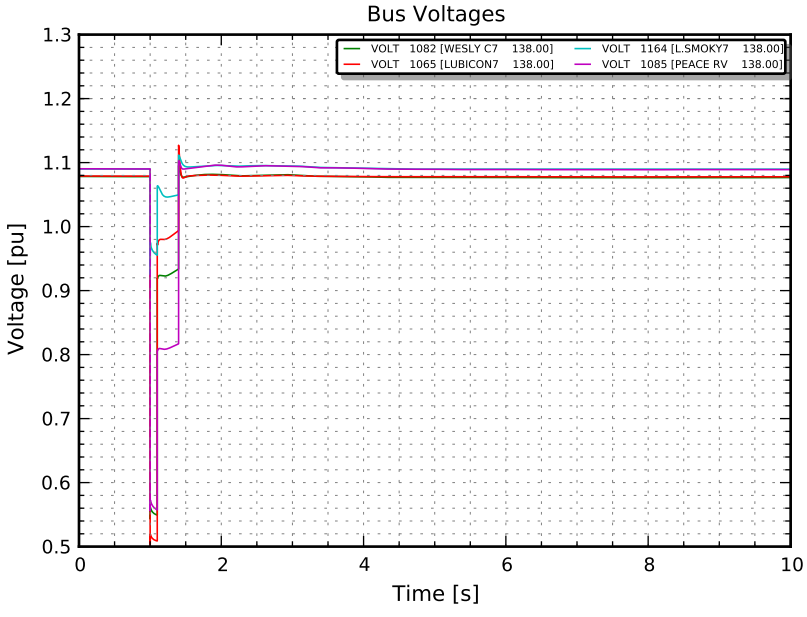


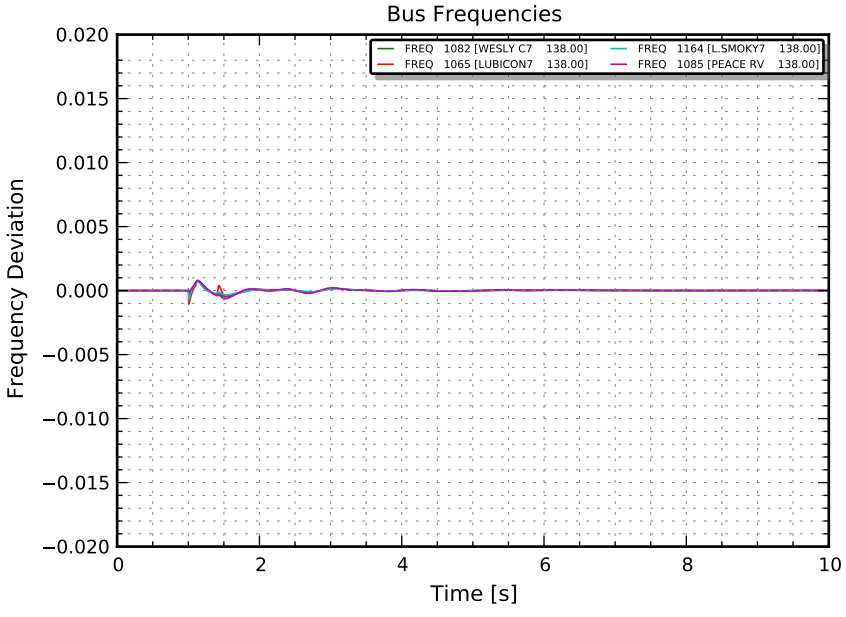


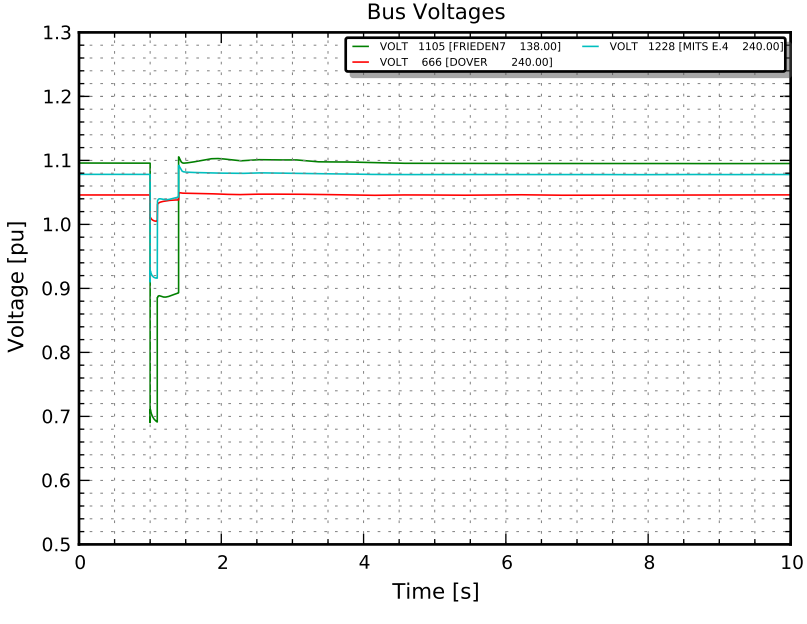
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 025 7L51 WESTPEACE to HOTCHKISS_B.

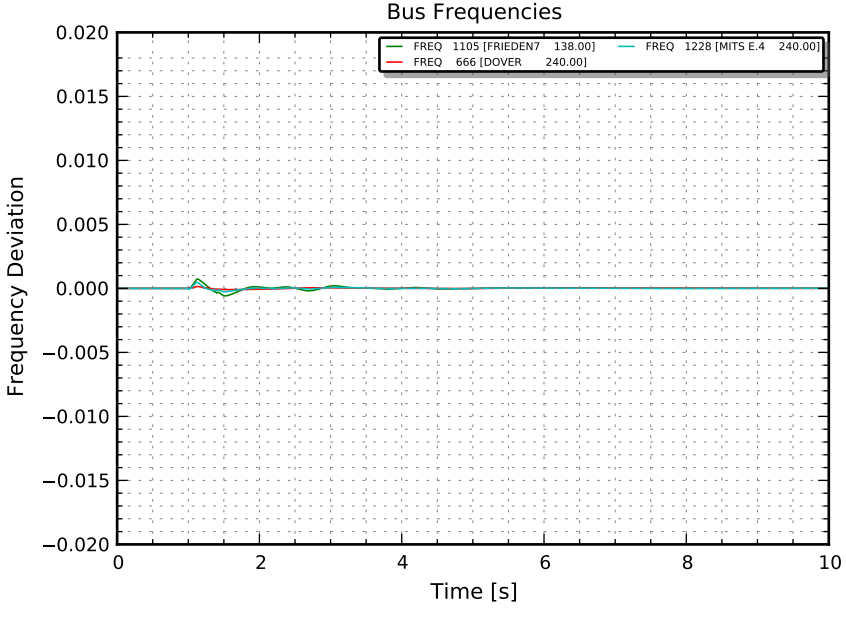
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 025 (B. 1)





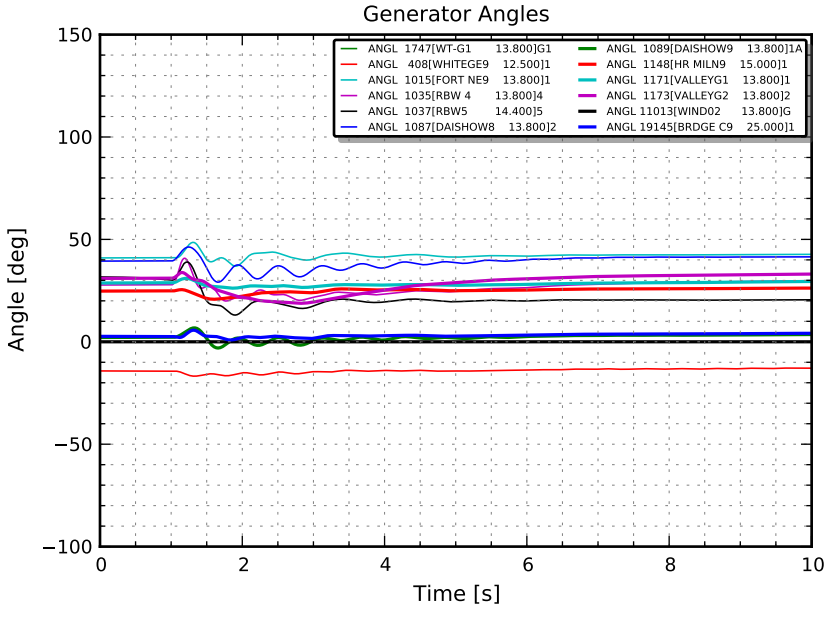


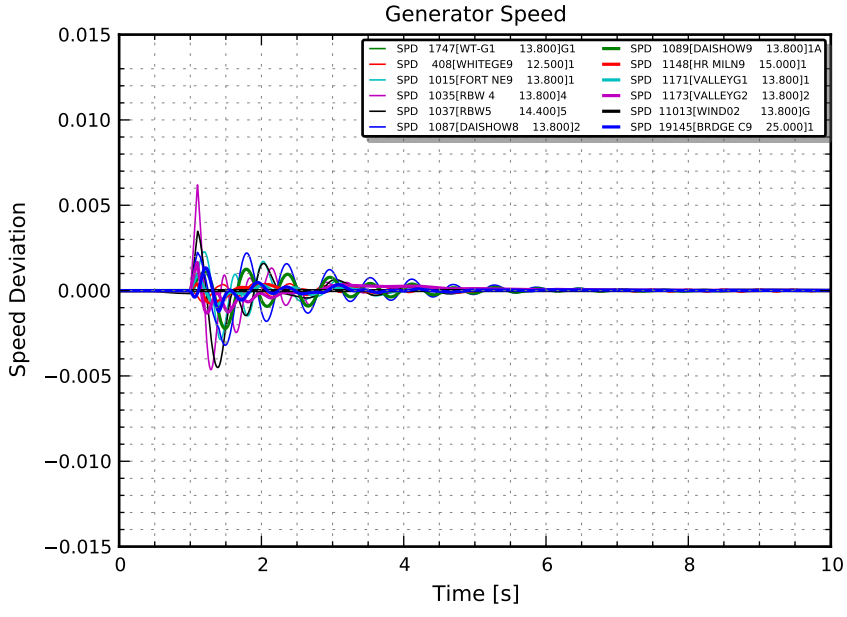


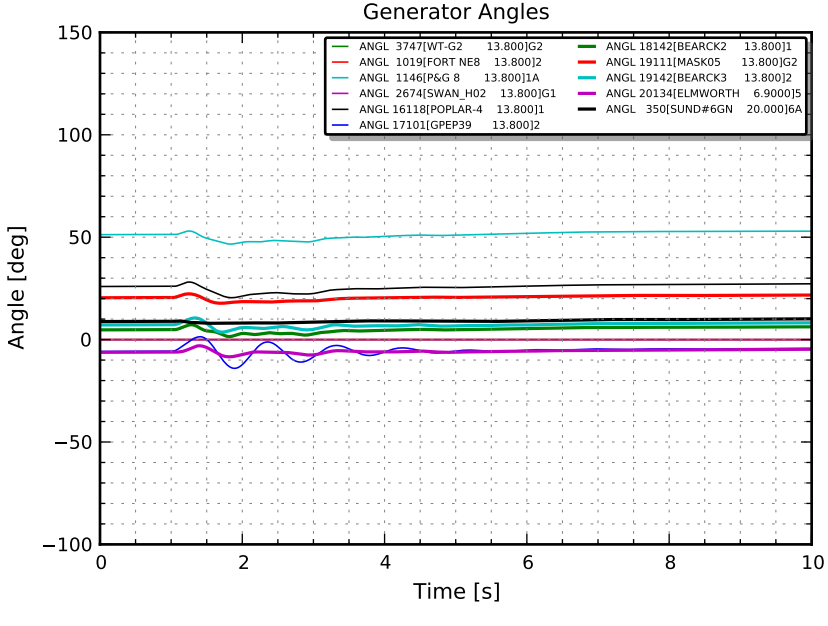
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 025 7L51 WESTPEACE to HOTCHKISS_B.

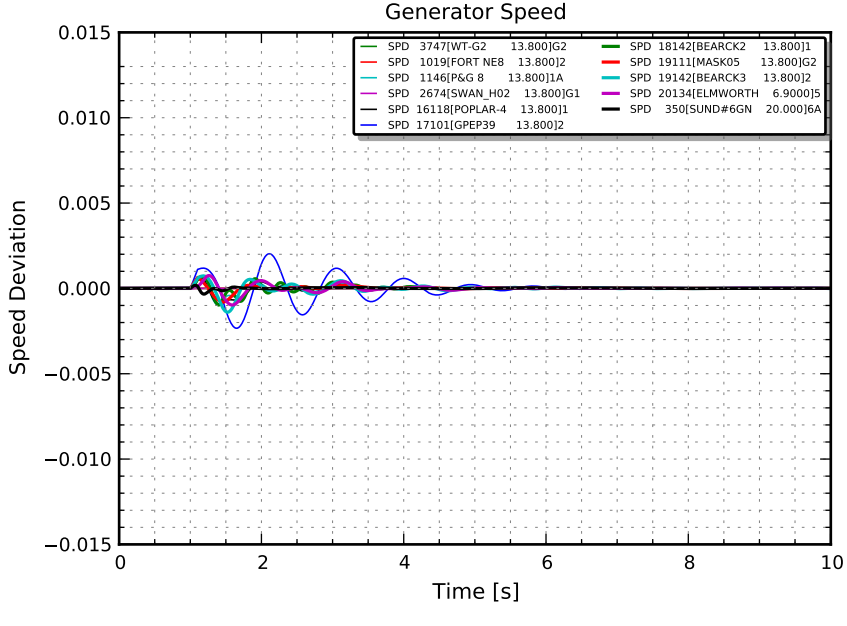
Study Area Generators

Appendix C2A
Figure: 025 (B. 2)





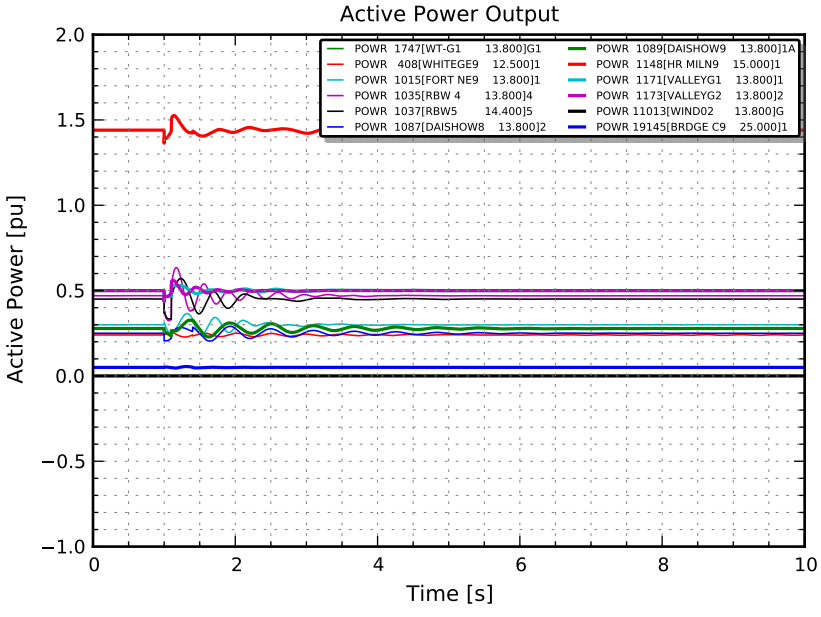


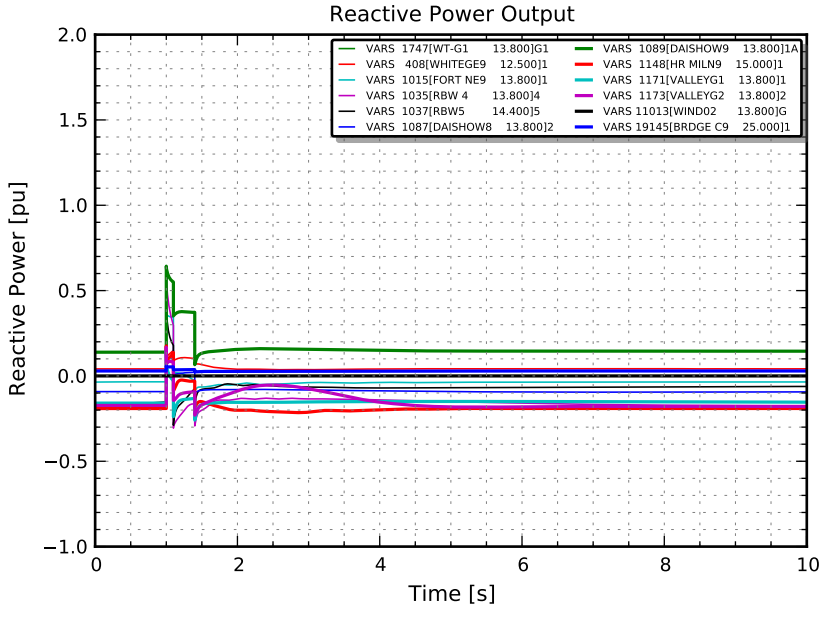


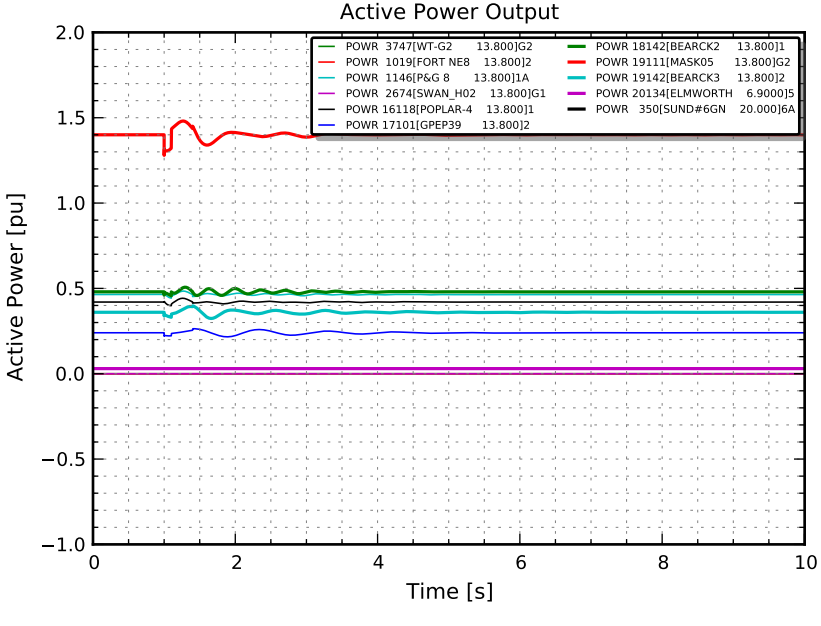
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 025 7L51 WESTPEACE to HOTCHKISS_B.

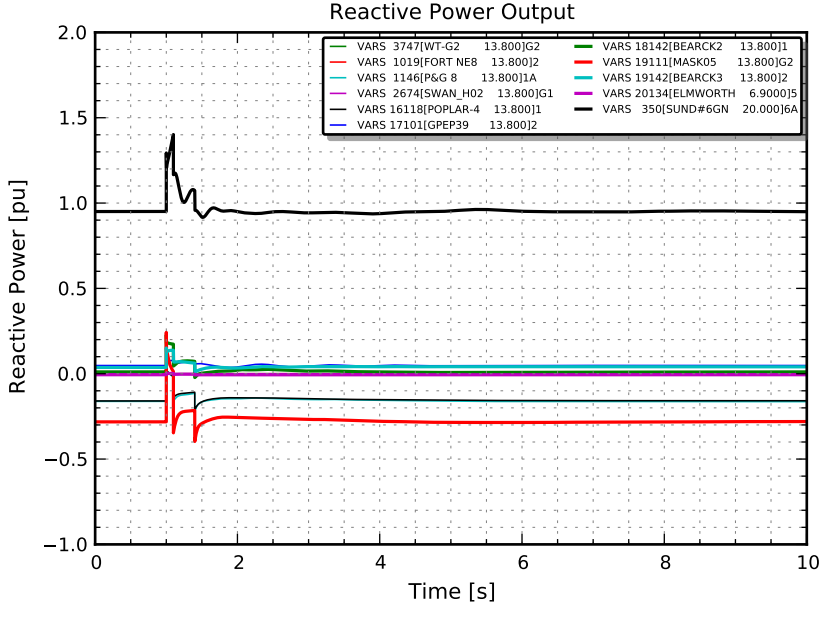
Study Area Generators

Appendix C2A
Figure: 025 (B. 3)





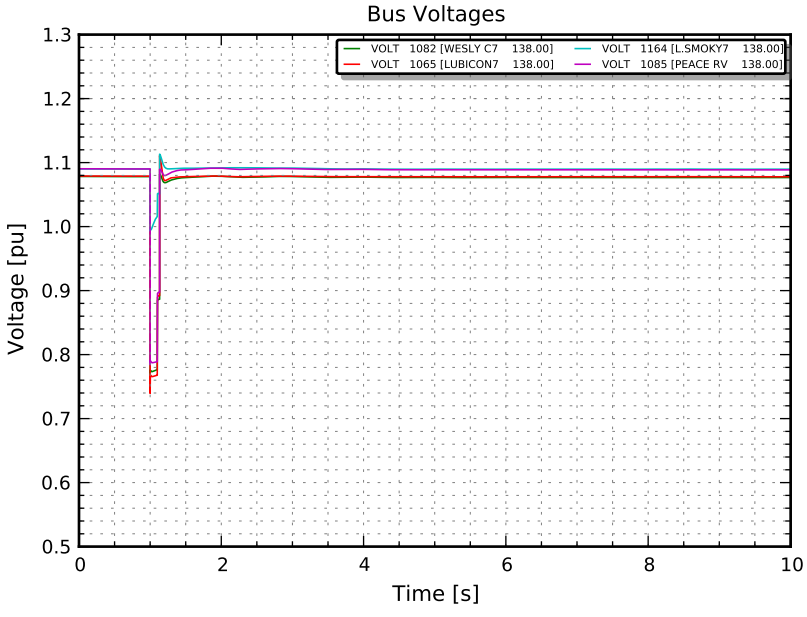


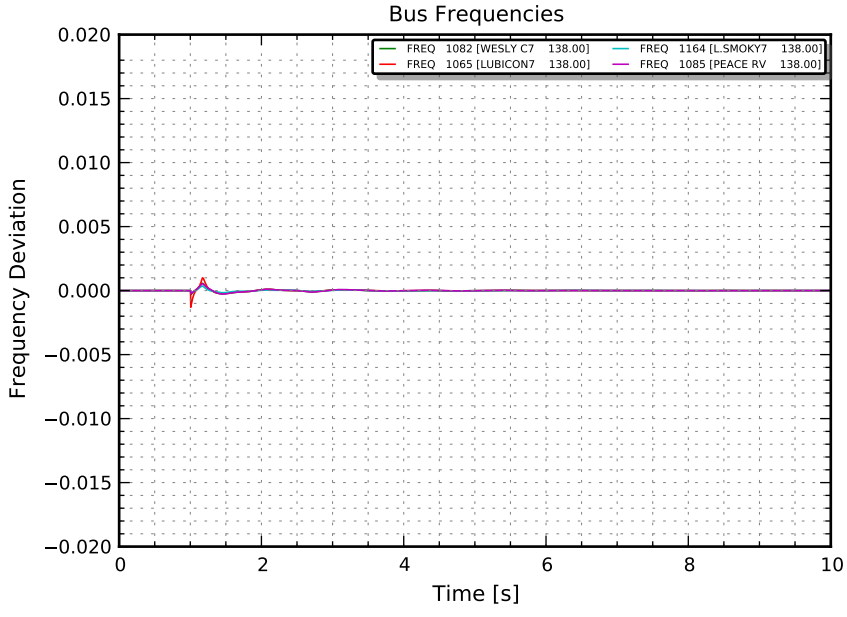


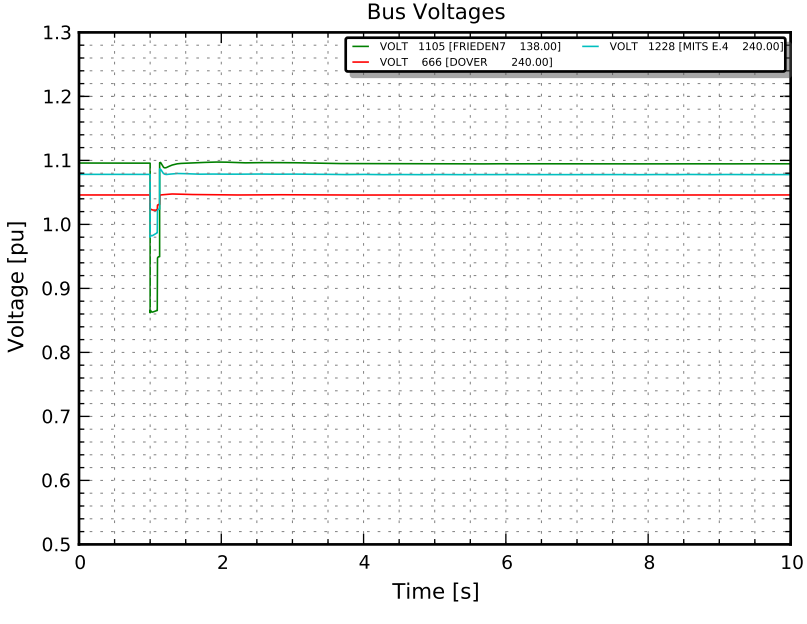
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 026 7L58 KEGRIVER to Meikle_A.

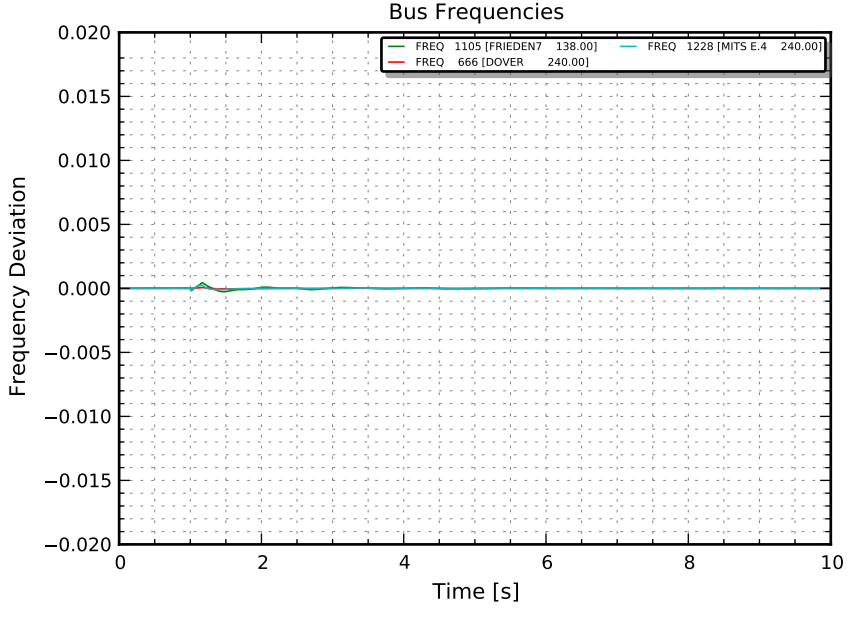
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 026 (A. 1)





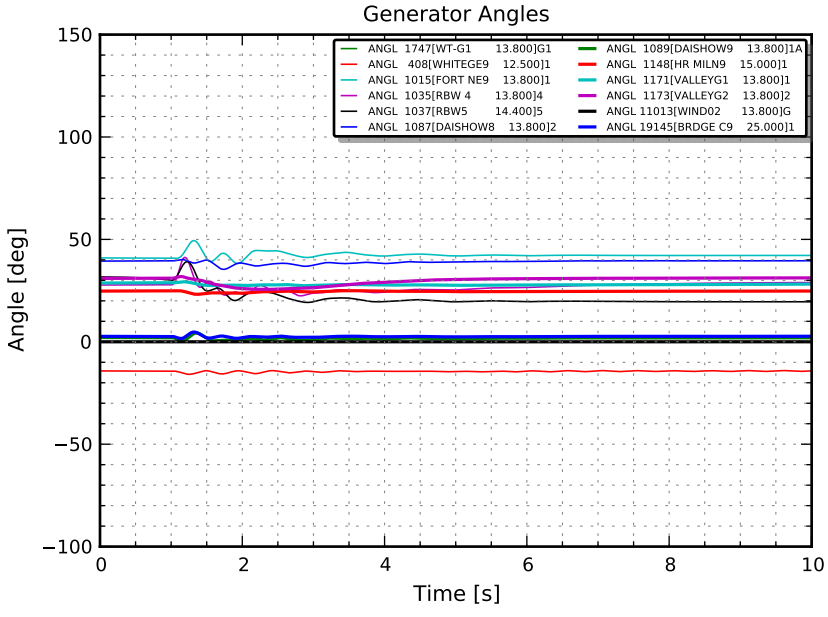


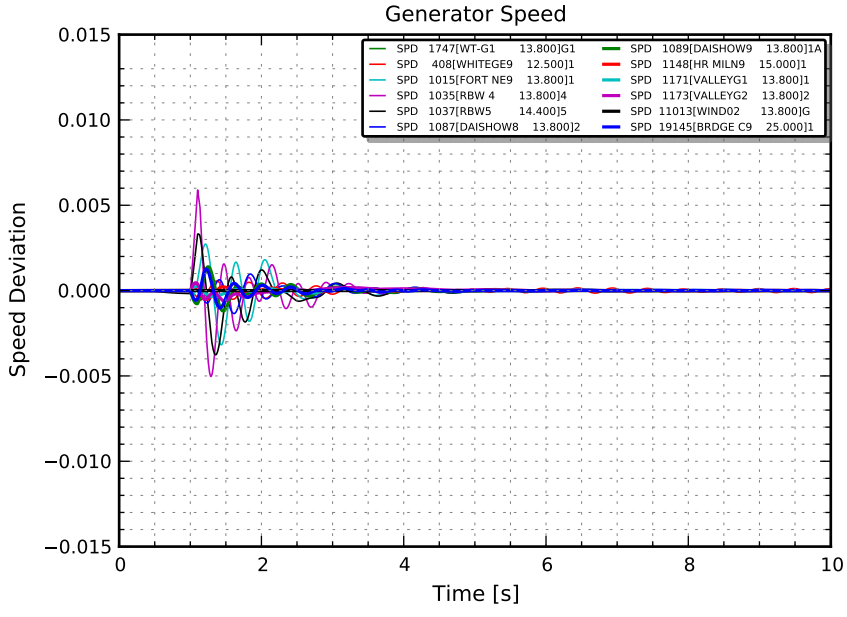


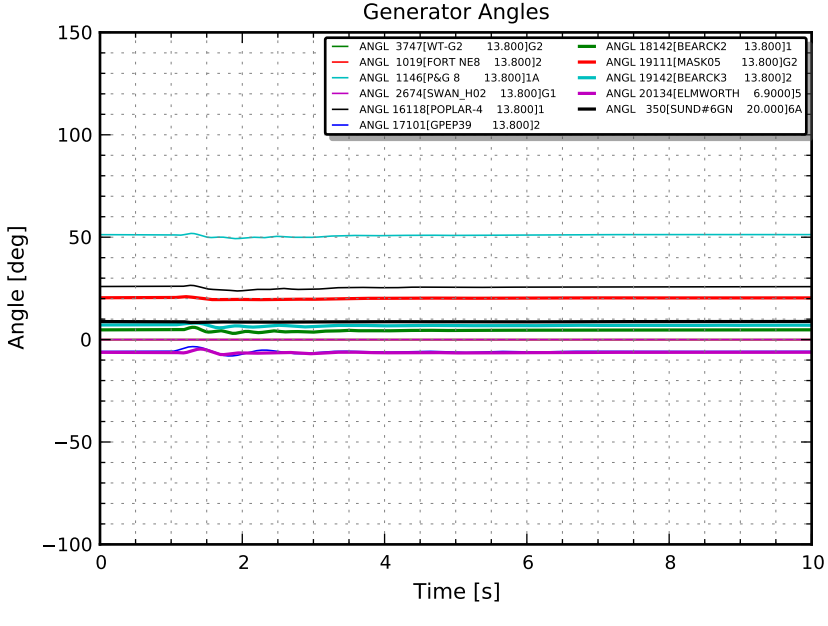
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 026 7L58 KEGRIVER to Meikle_A.

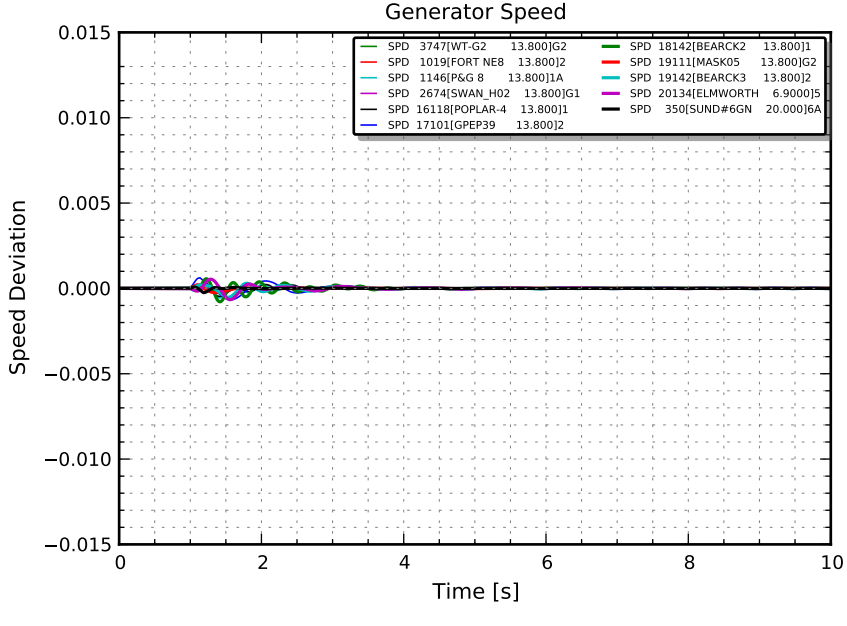
Study Area Generators

Appendix C2A
Figure: 026 (A. 2)





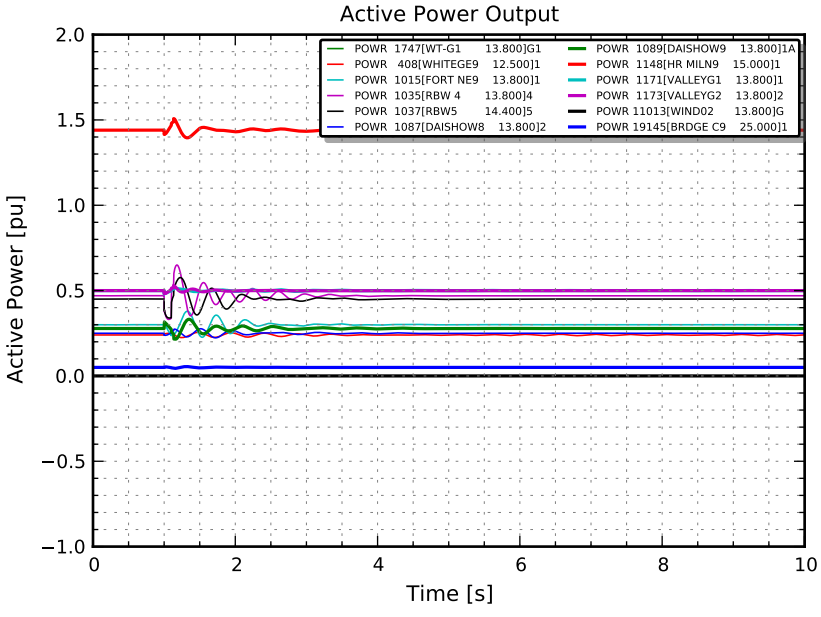


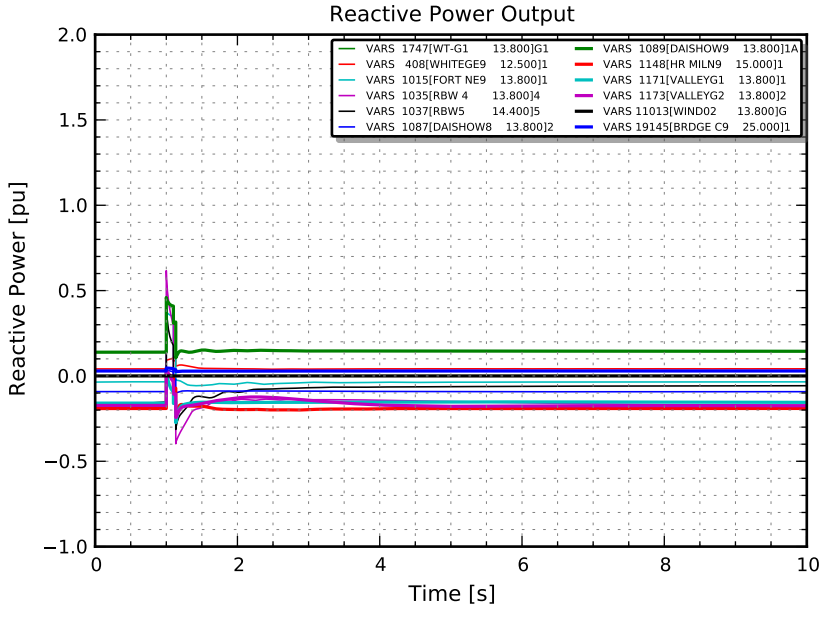


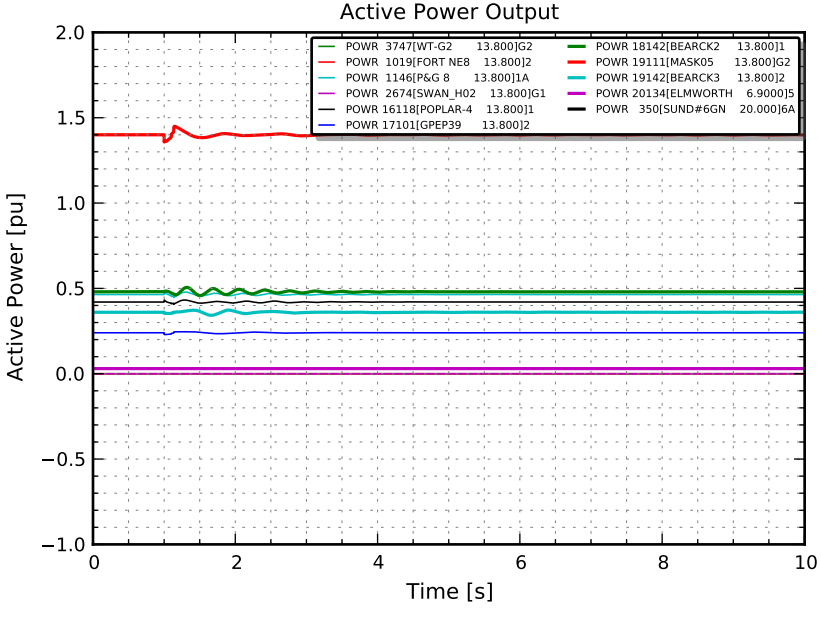
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 026 7L58 KEGRIVER to Meikle_A.

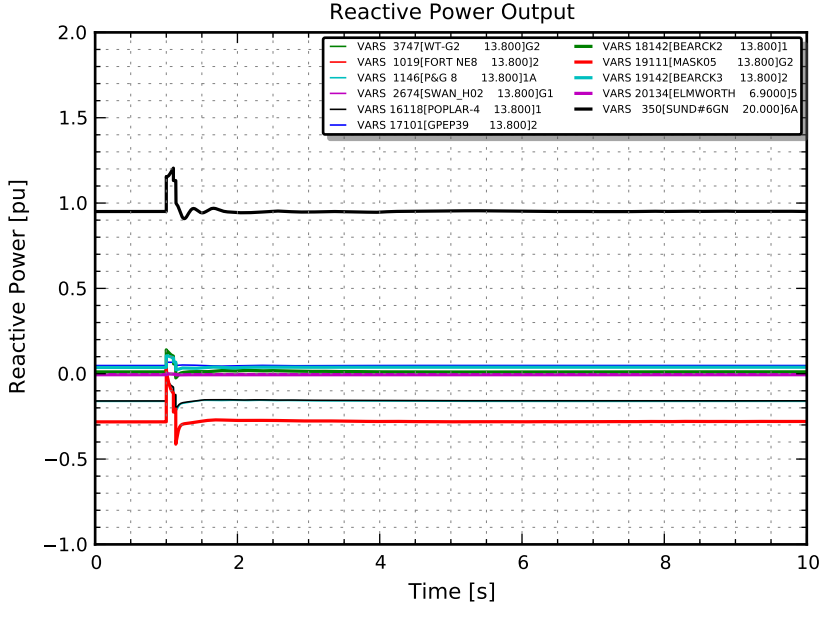
Study Area Generators

Appendix C2A
Figure: 026 (A. 3)





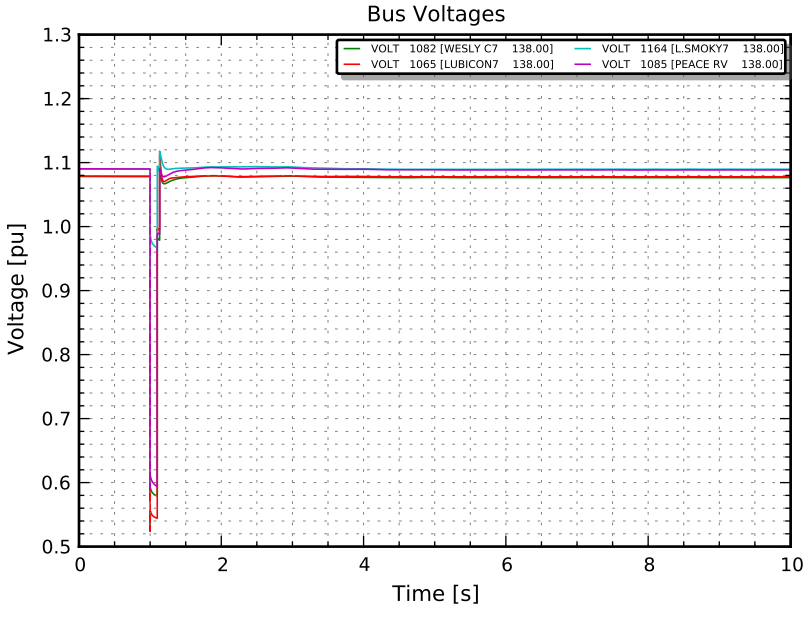


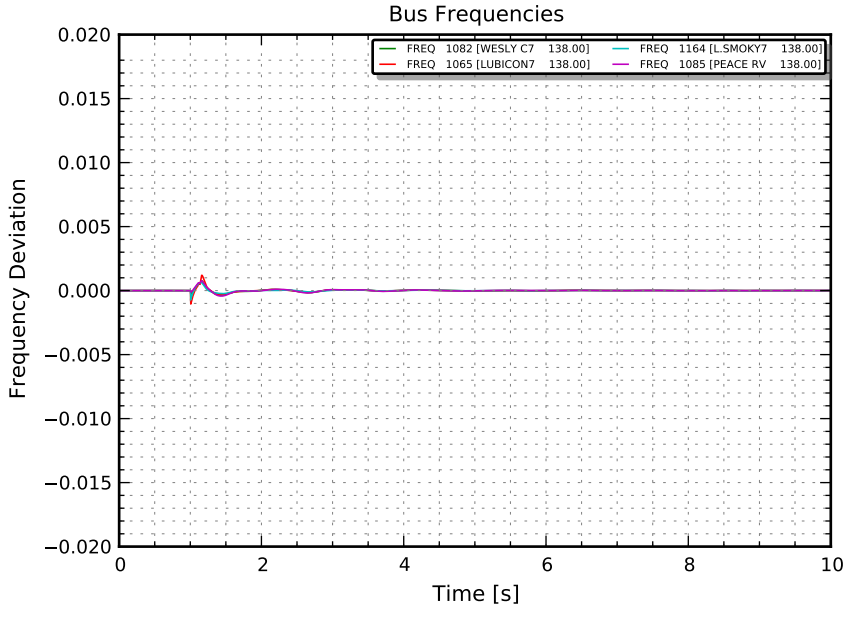


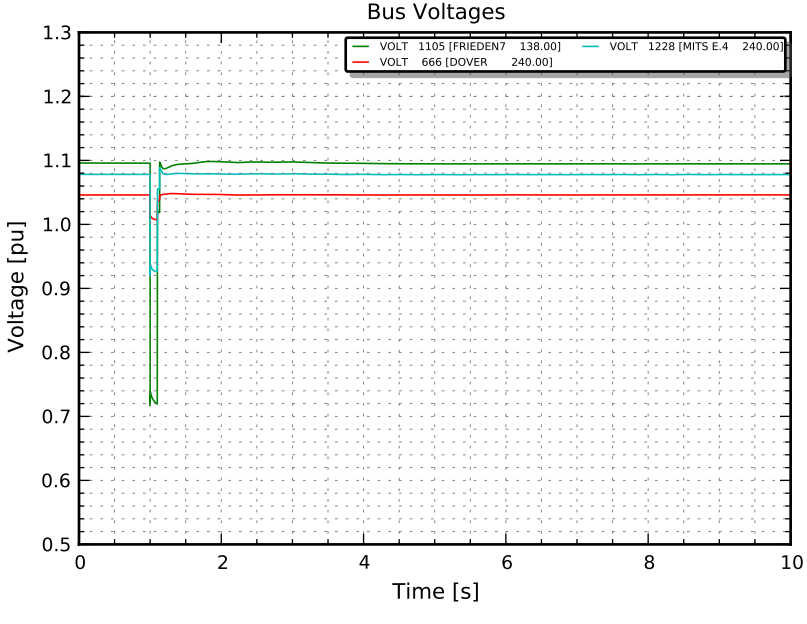
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 026 7L58 KEGRIVER to Meikle_B.

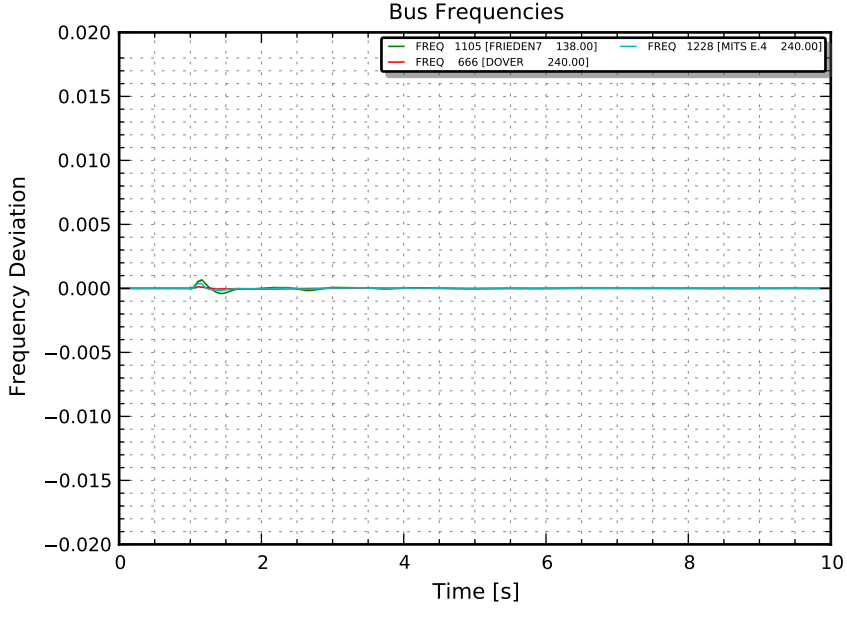
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 026 (B. 1)





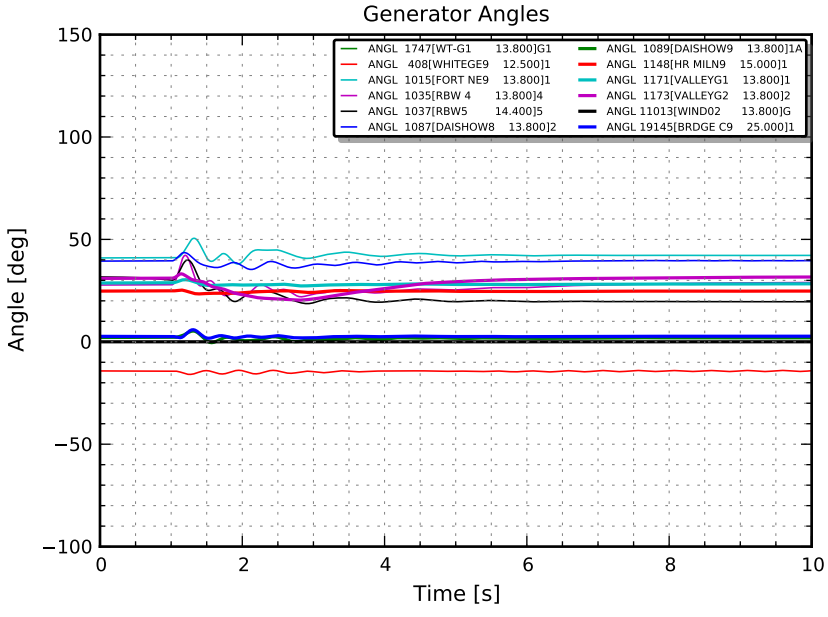


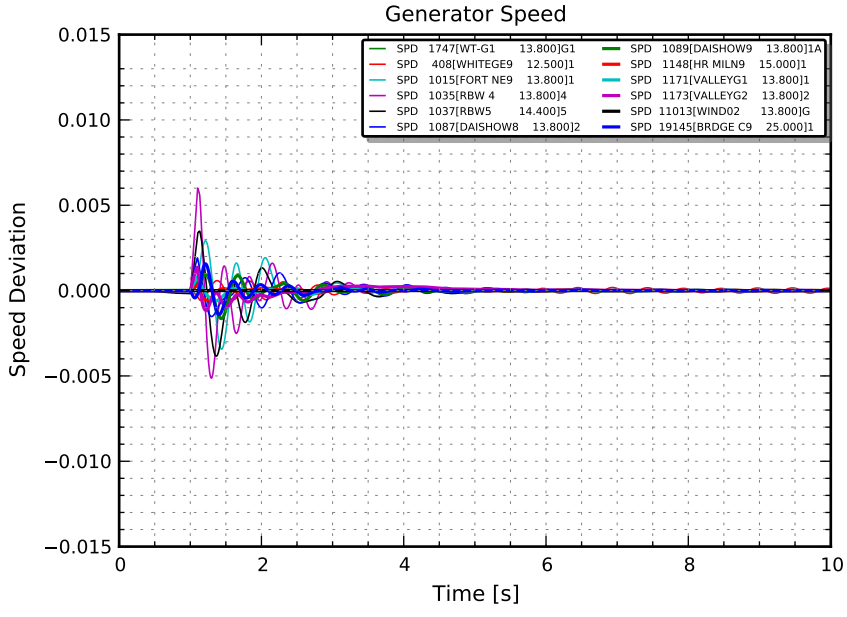


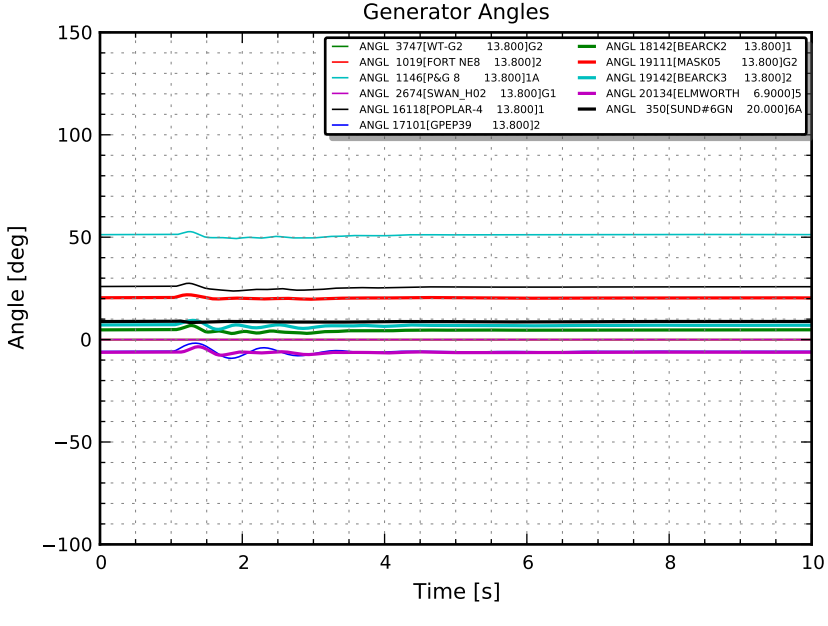
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 026 7L58 KEGRIVER to Meikle_B.

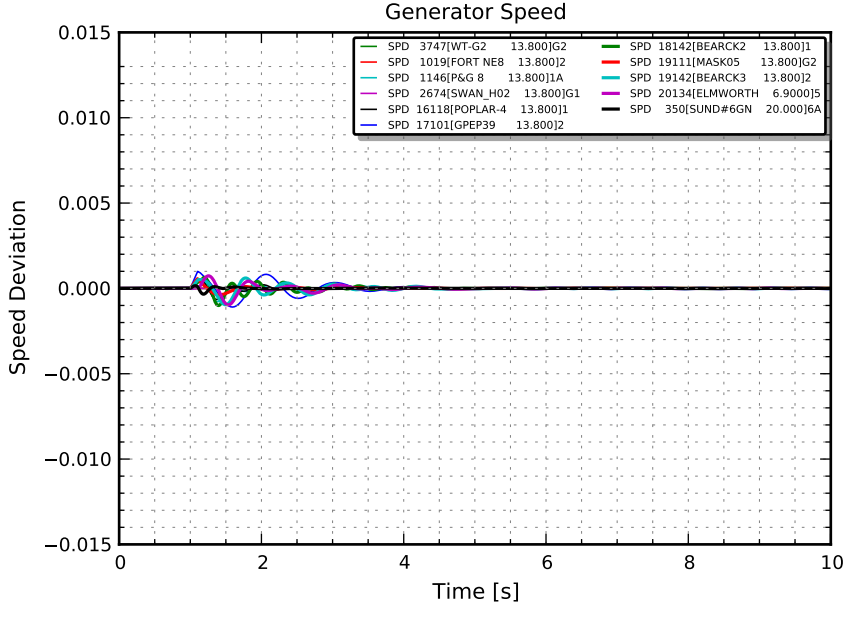
Study Area Generators

Appendix C2A
Figure: 026 (B. 2)





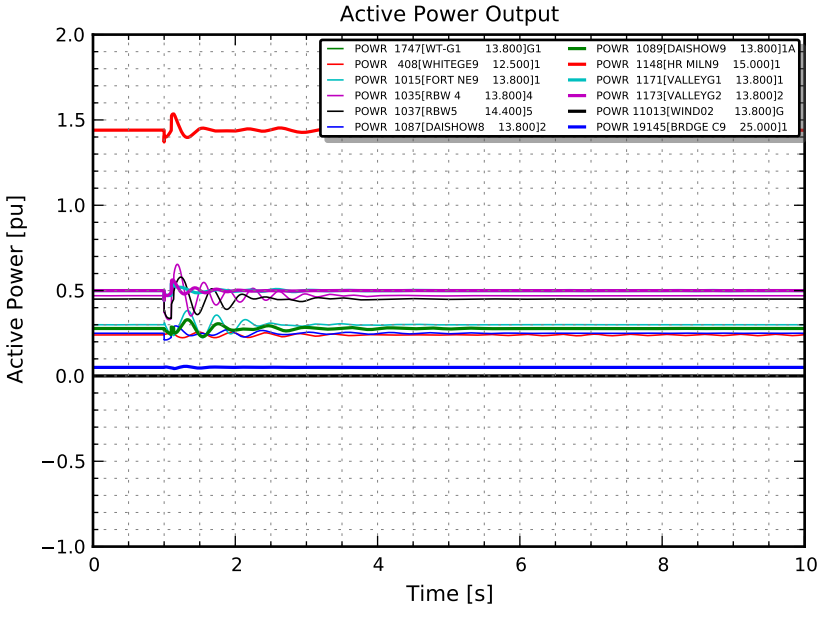


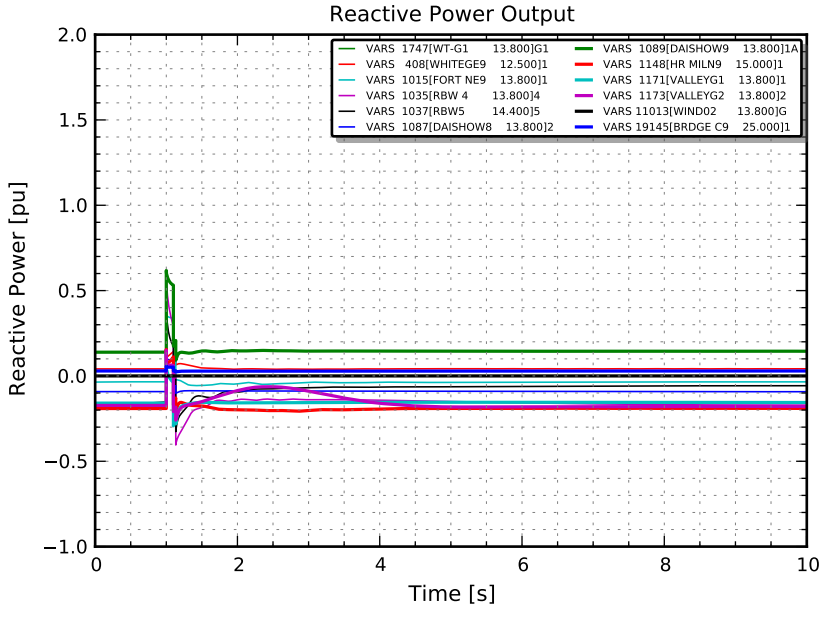


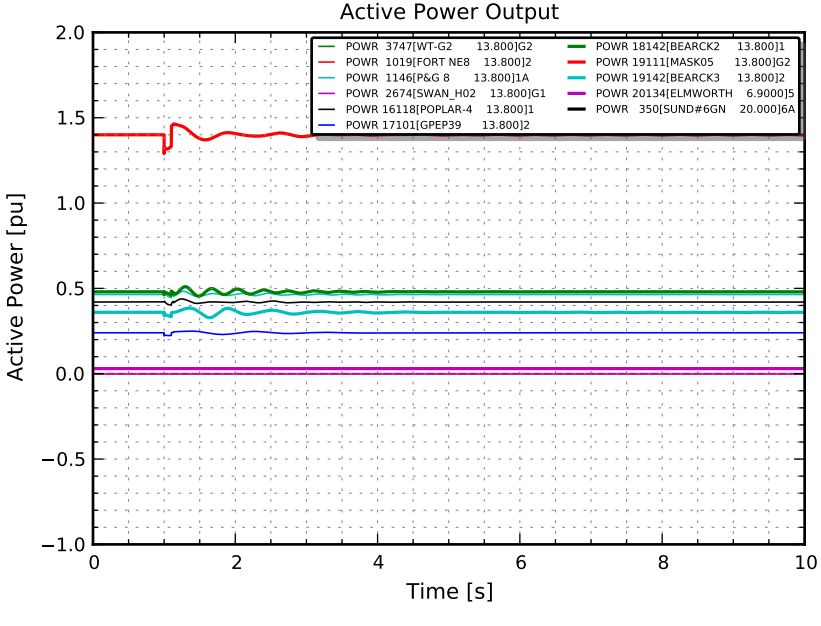
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 026 7L58 KEGRIVER to Meikle_B.

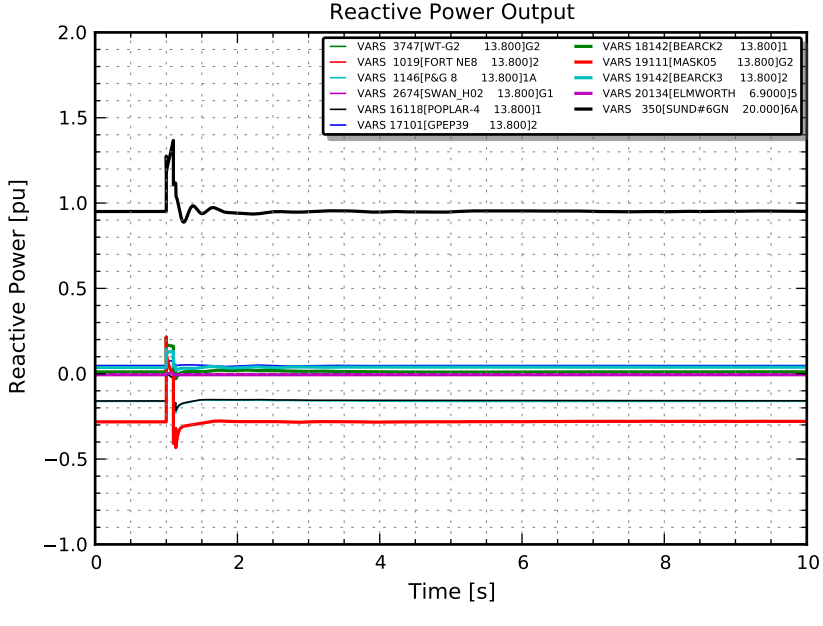
Study Area Generators

Appendix C2A
Figure: 026 (B. 3)





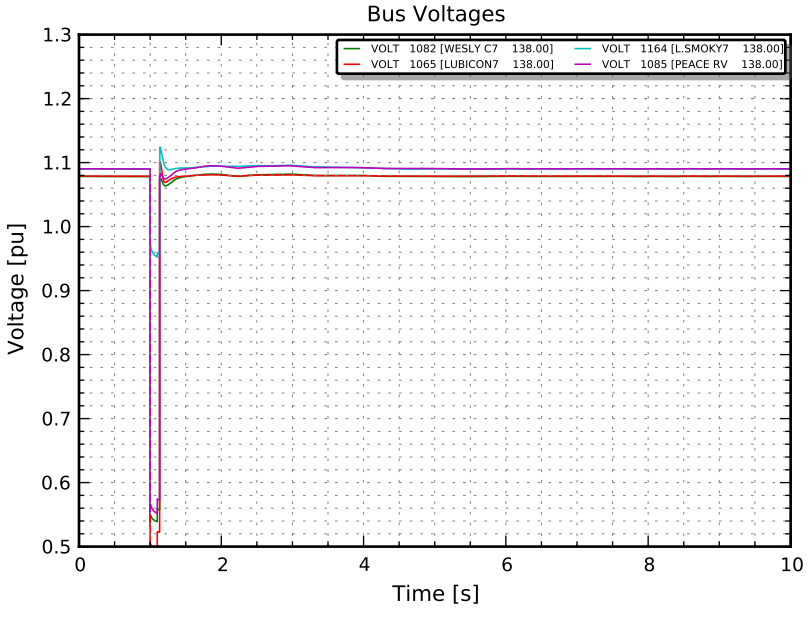


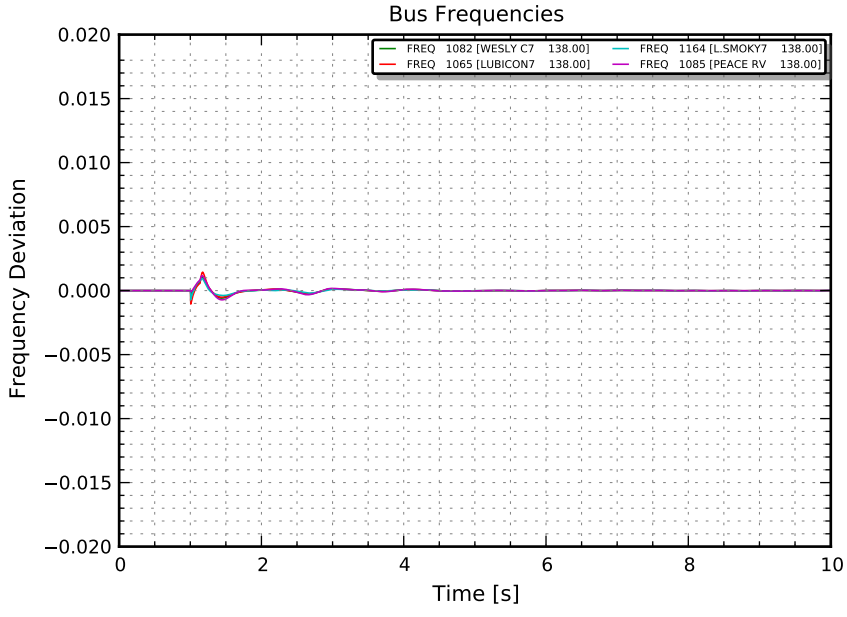


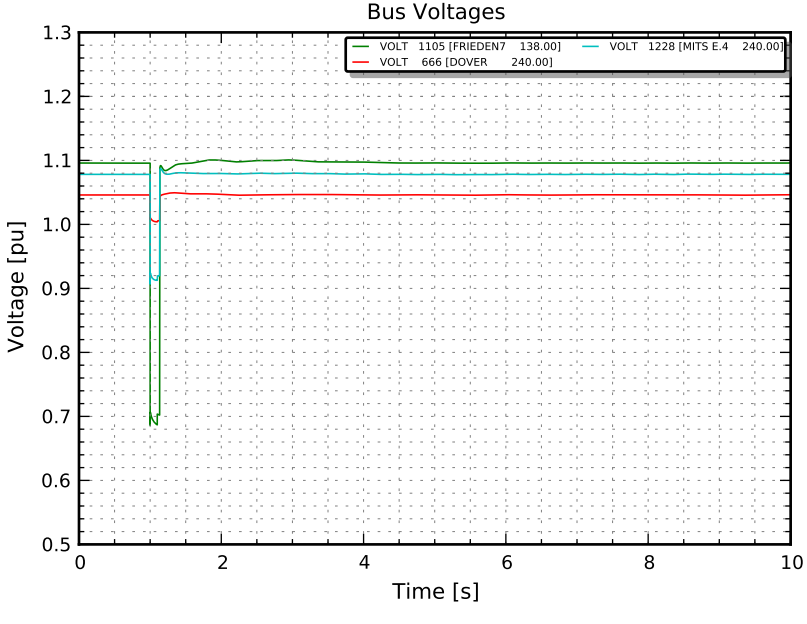
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 027 7L120 HOTCHKISS to Meikle_A.

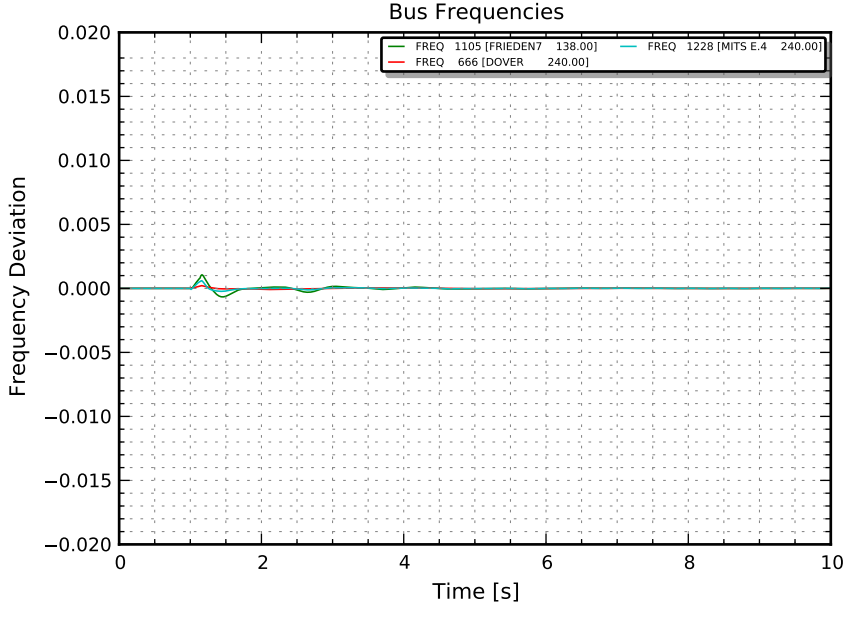
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 027 (A. 1)





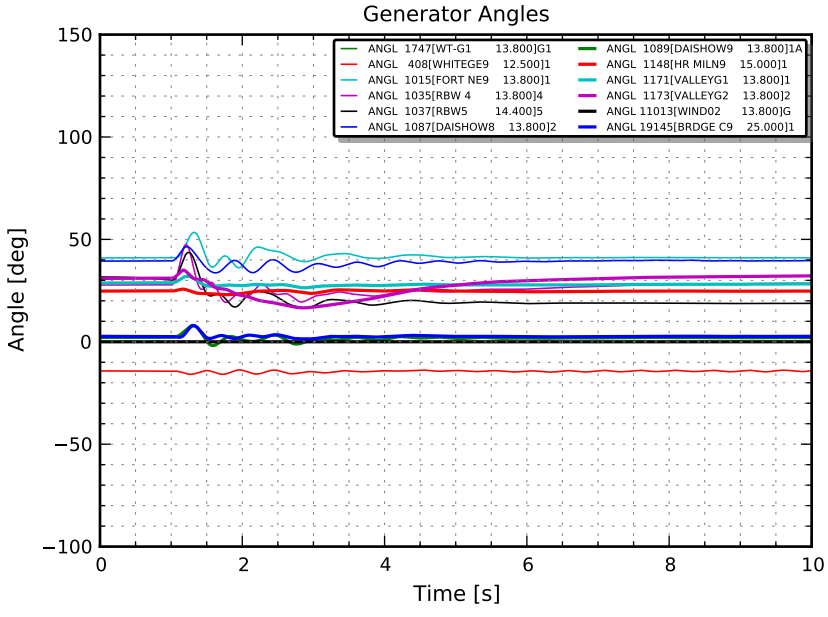


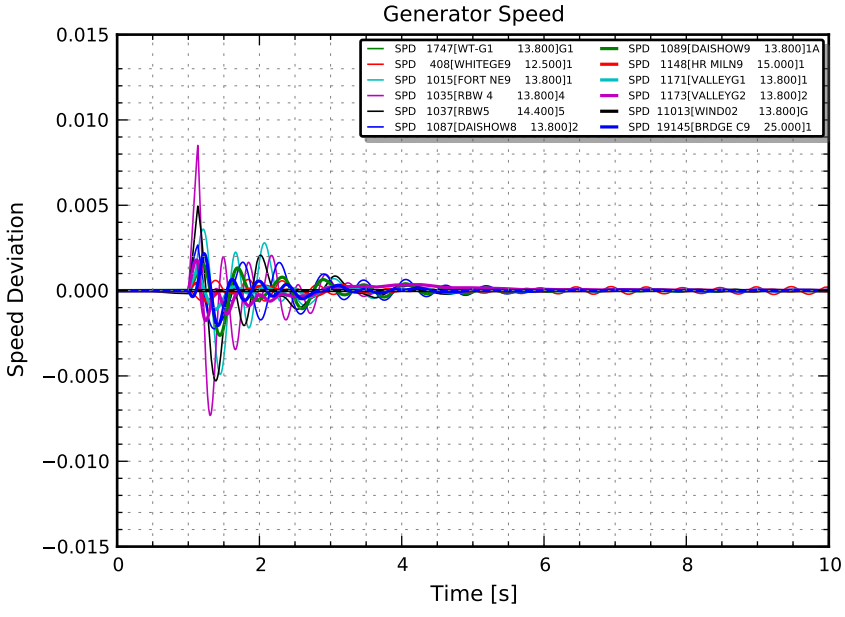


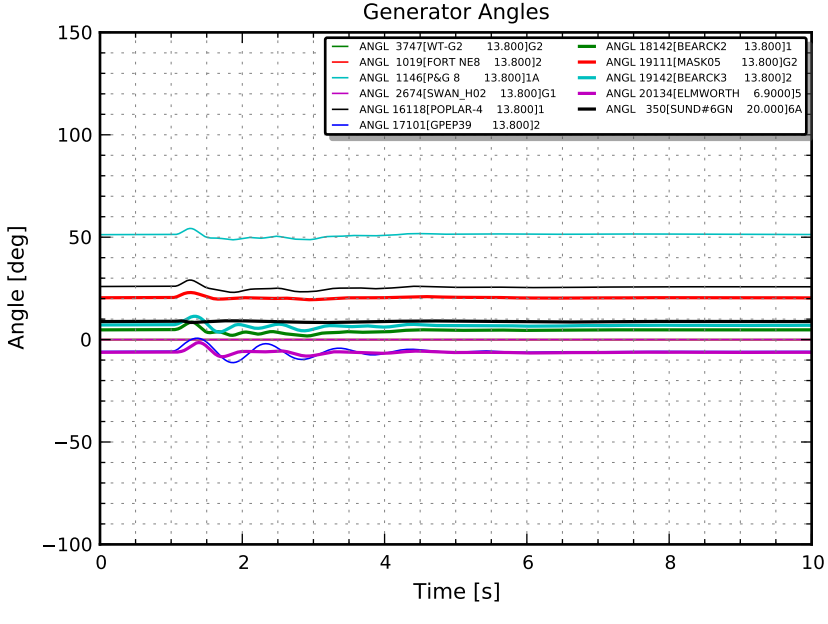
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 027 7L120 HOTCHKISS to Meikle_A.

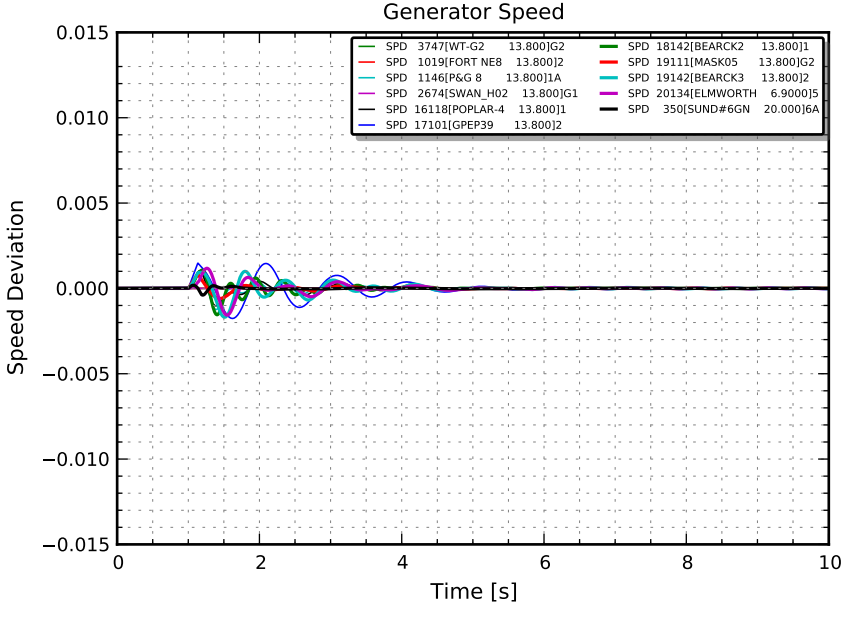
Study Area Generators

Appendix C2A
Figure: 027 (A. 2)





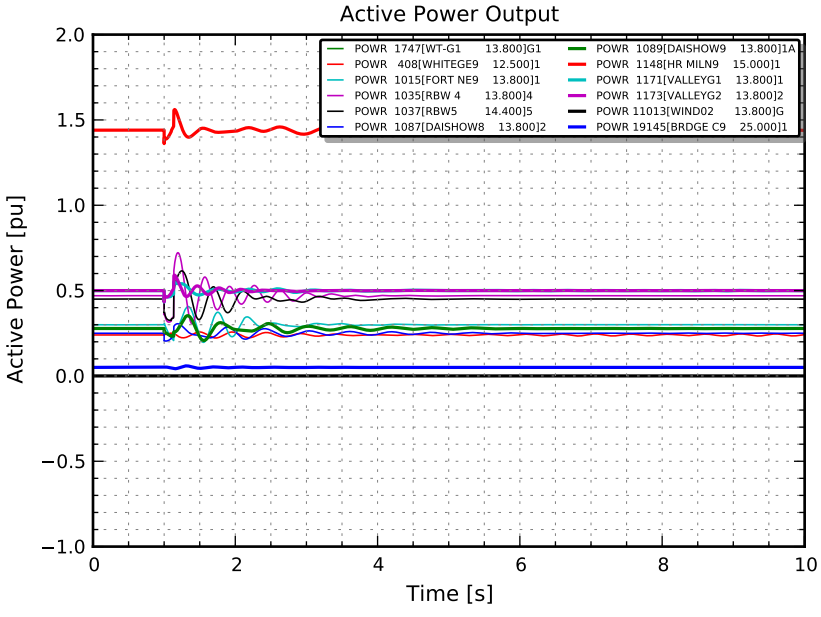


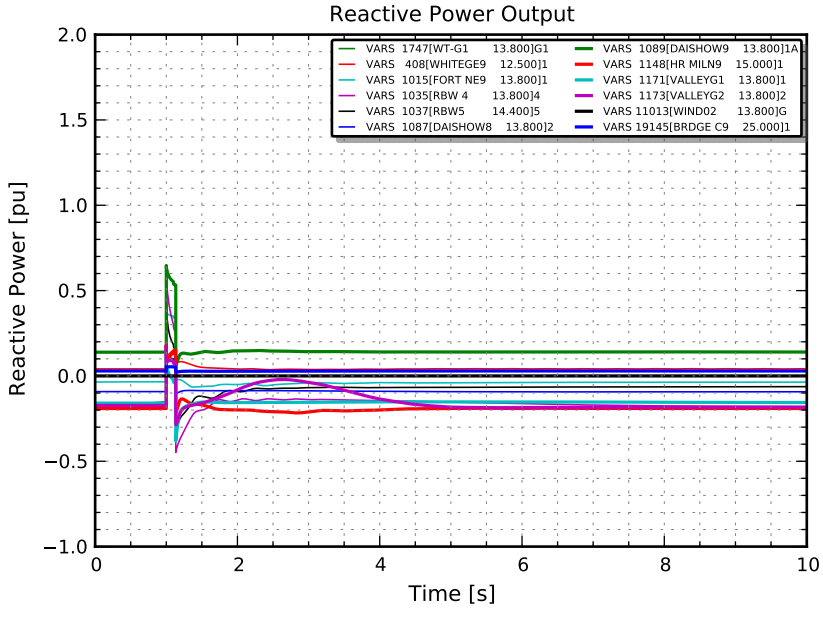


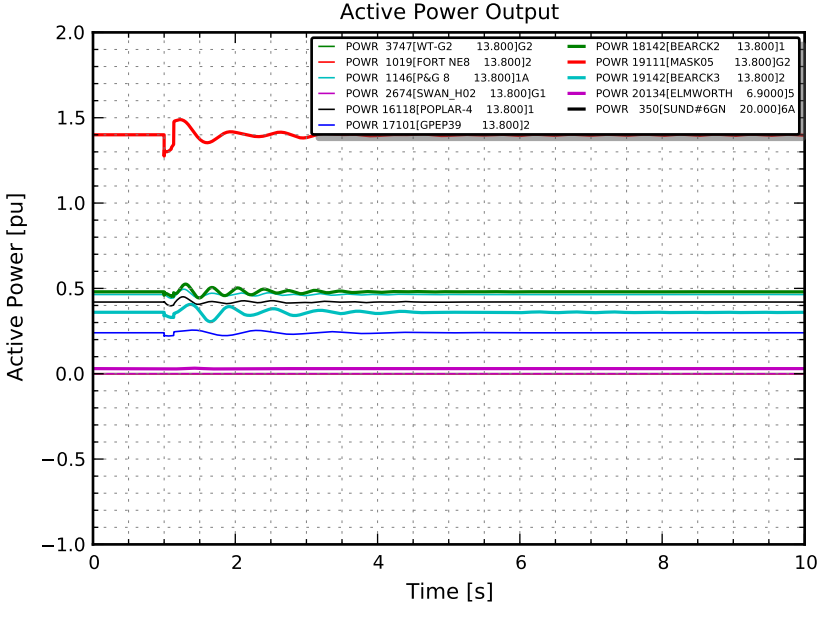
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 027 7L120 HOTCHKISS to Meikle_A.

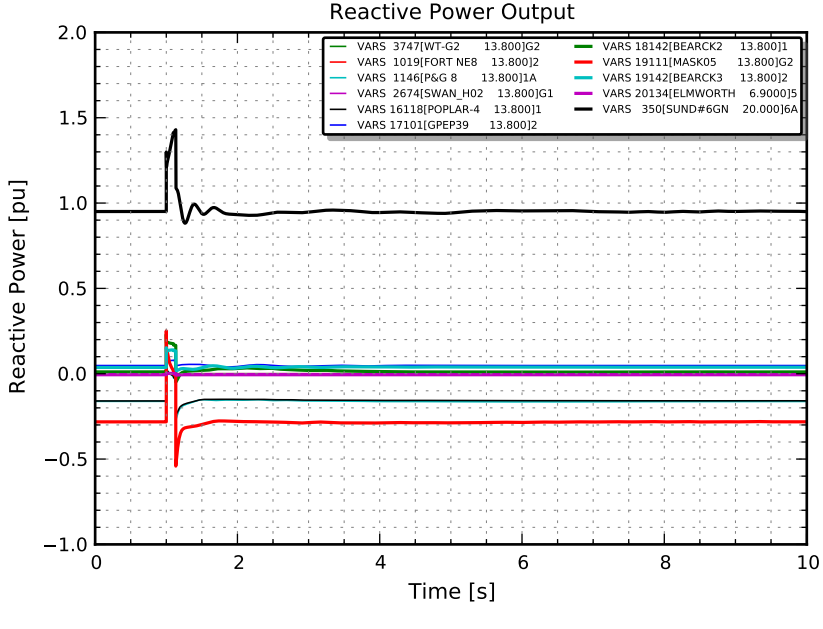
Study Area Generators

Appendix C2A
Figure: 027 (A. 3)





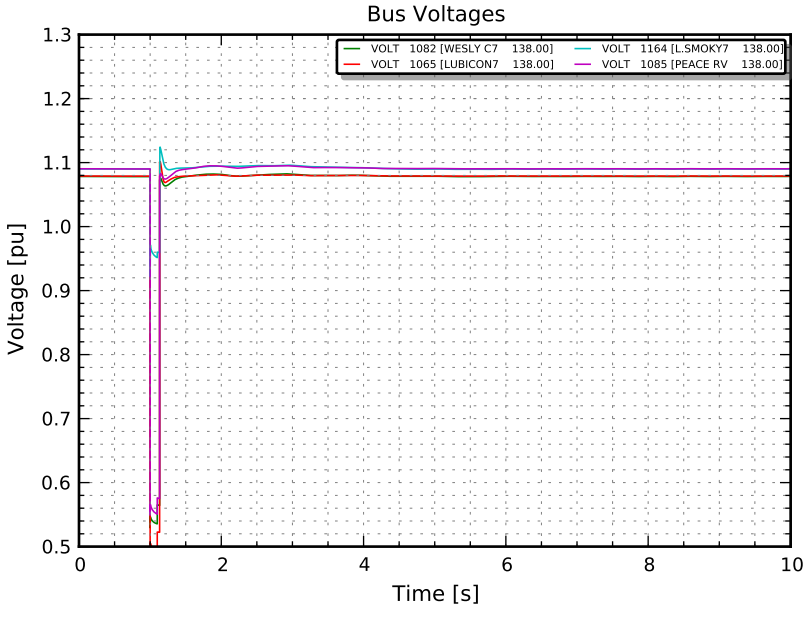


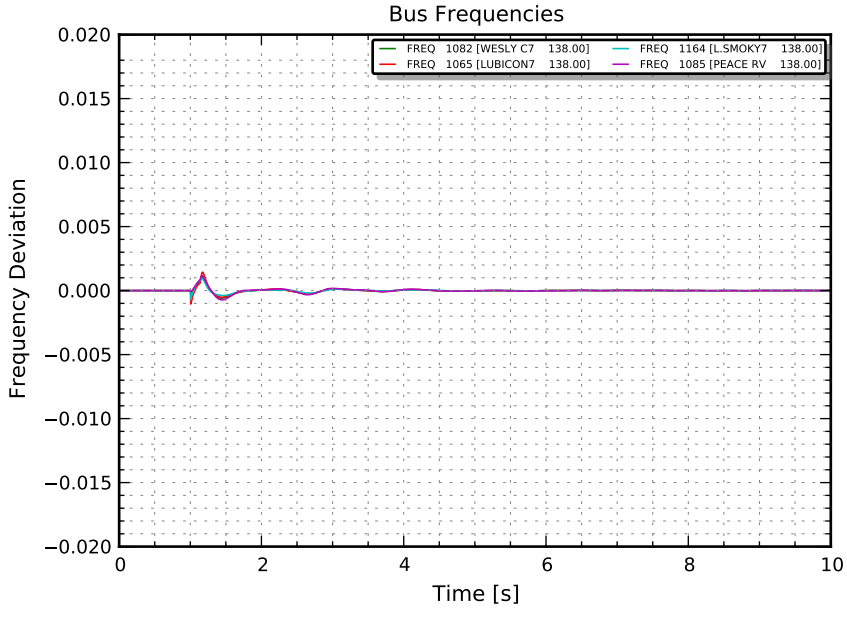


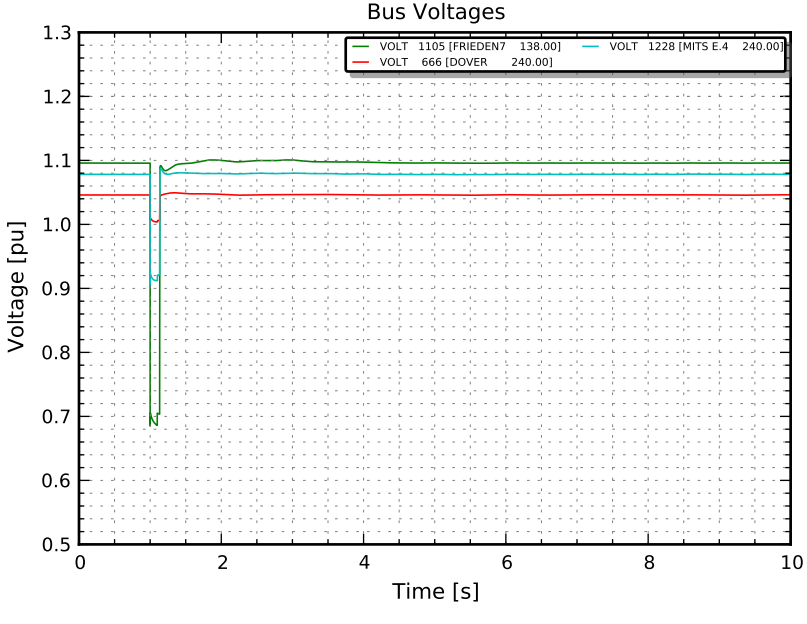
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 027 7L120 HOTCHKISS to Meikle_B.

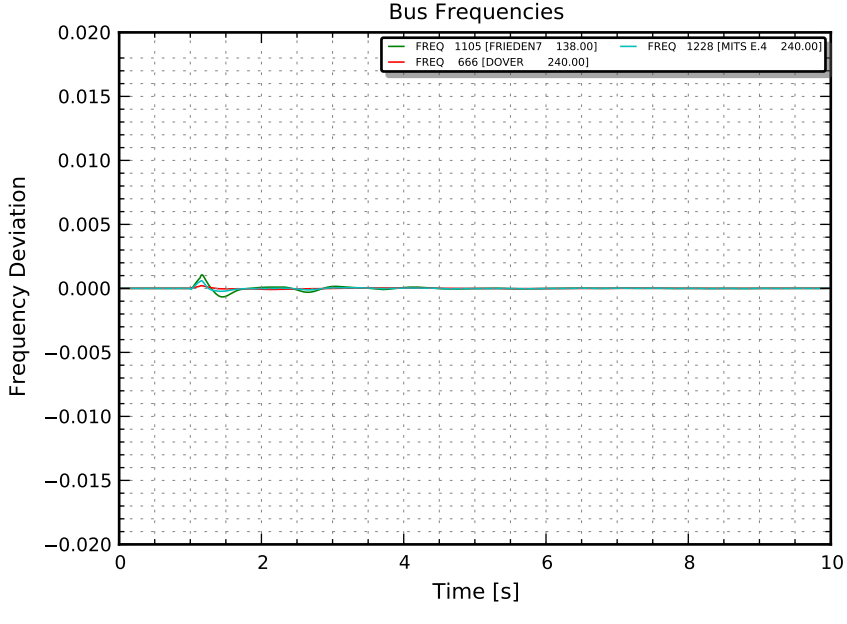
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 027 (B. 1)





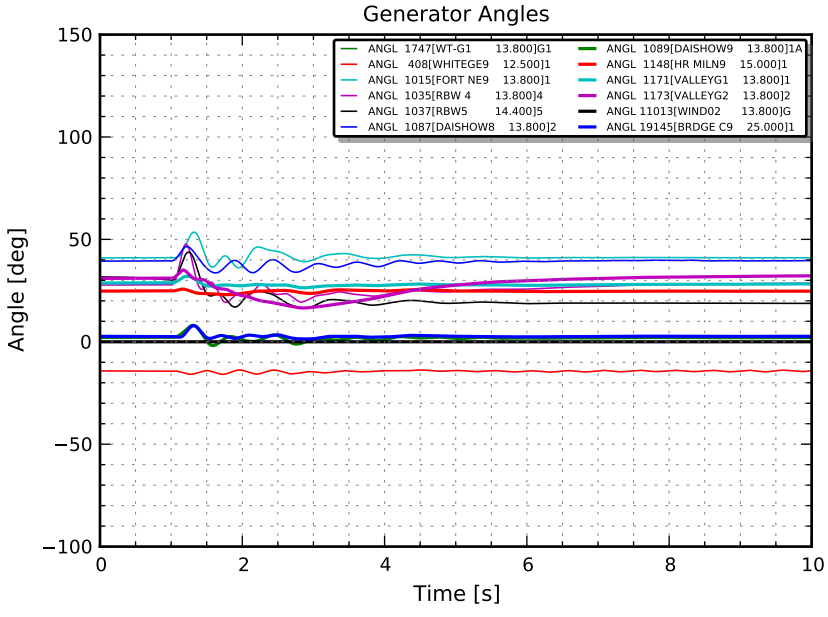


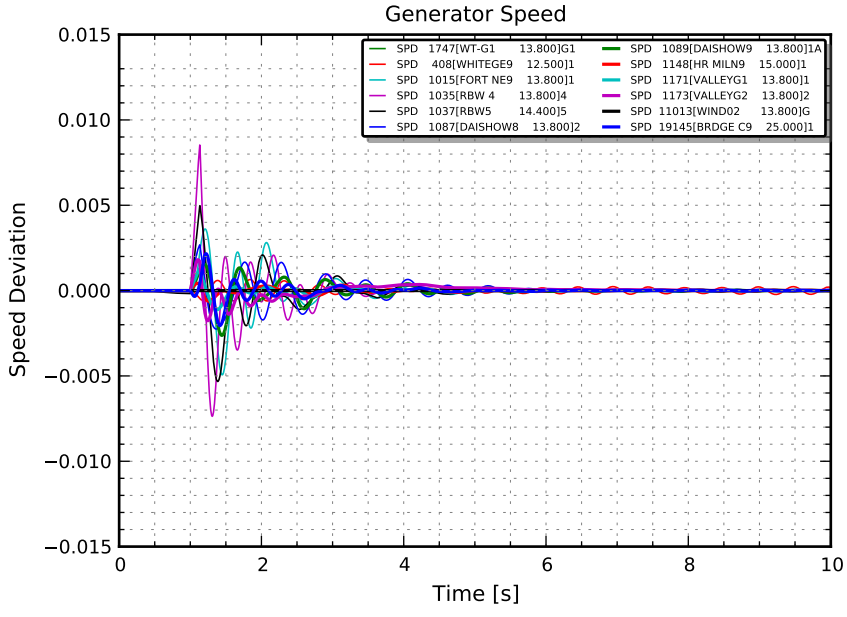


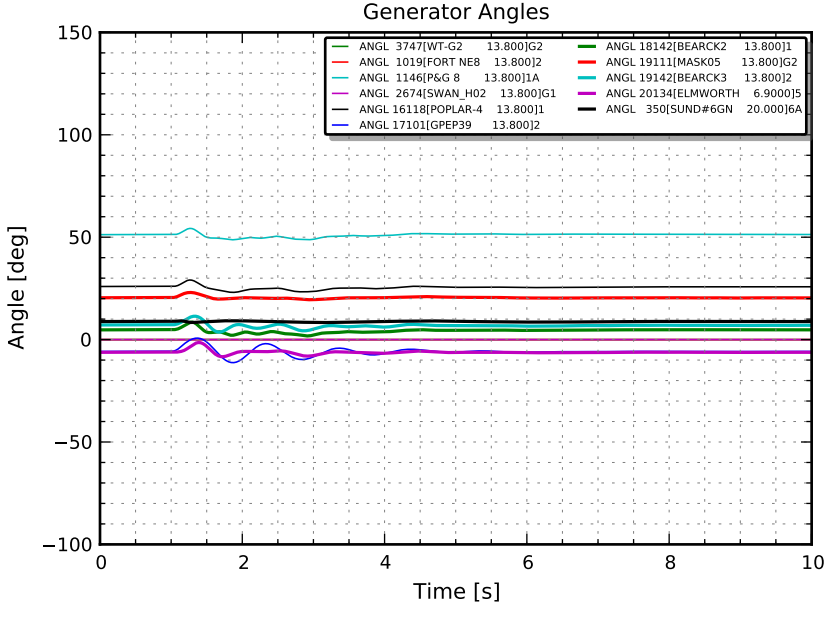
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 027 7L120 HOTCHKISS to Meikle_B.

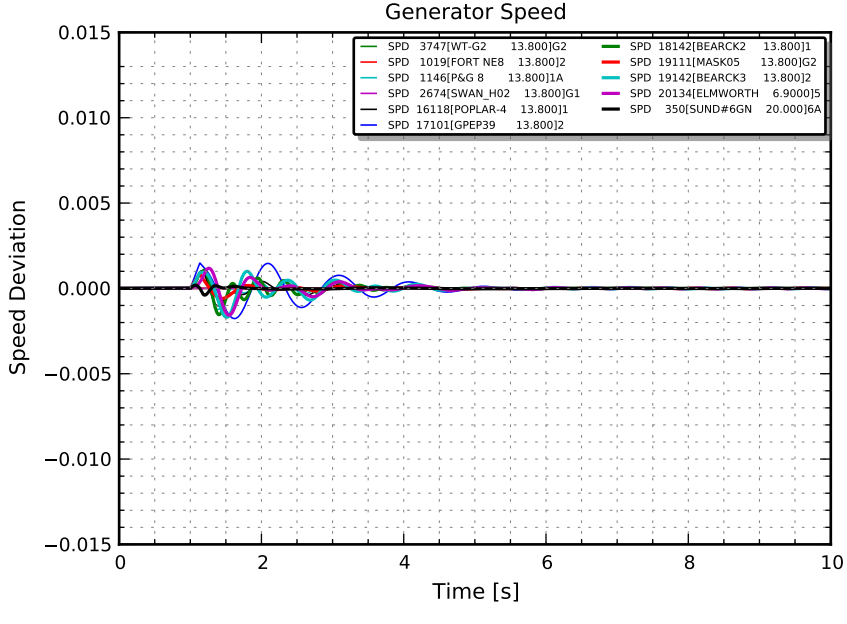
Study Area Generators

Appendix C2A
Figure: 027 (B. 2)





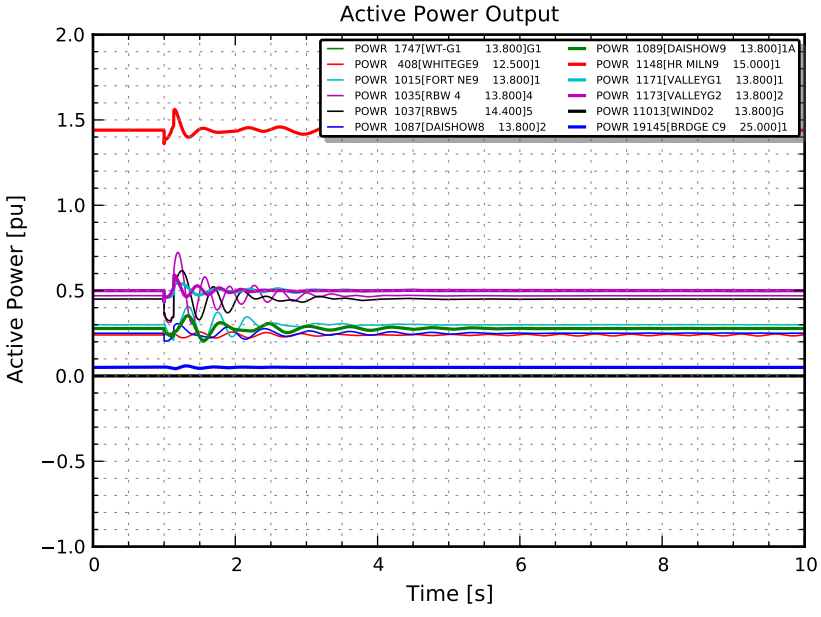


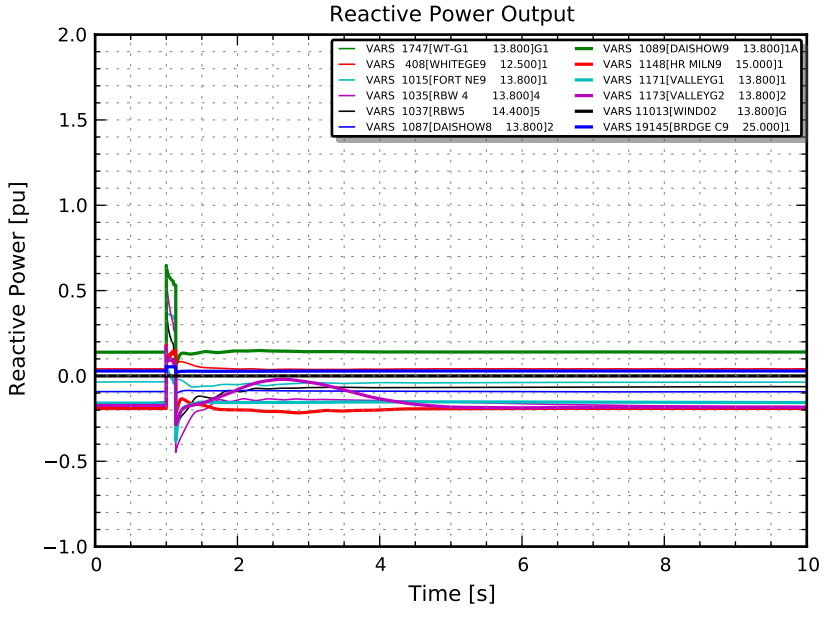


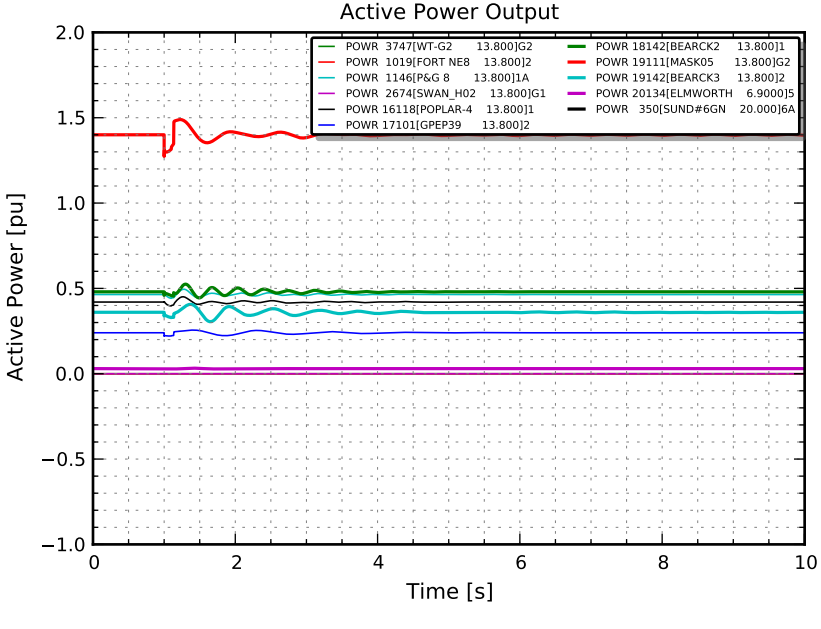
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 027 7L120 HOTCHKISS to Meikle_B.

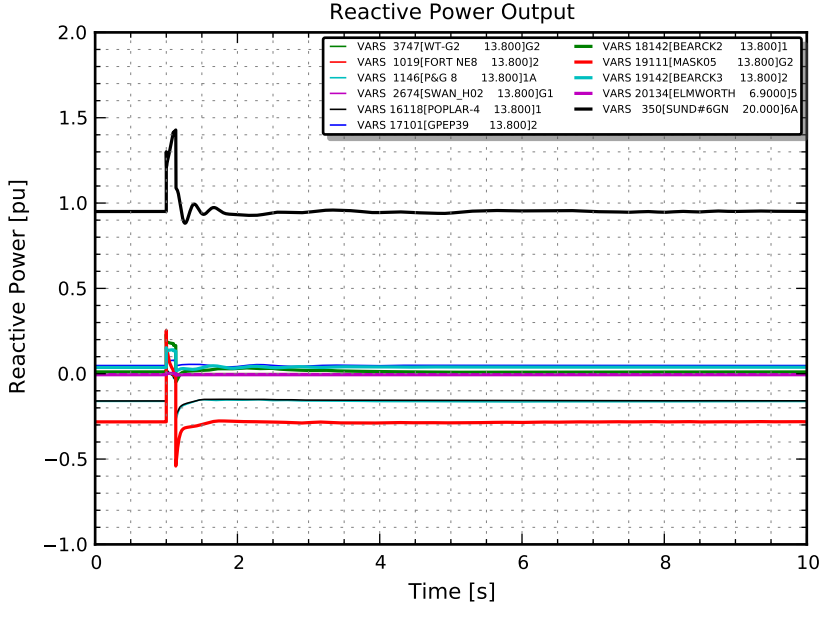
Study Area Generators

Appendix C2A
Figure: 027 (B. 3)





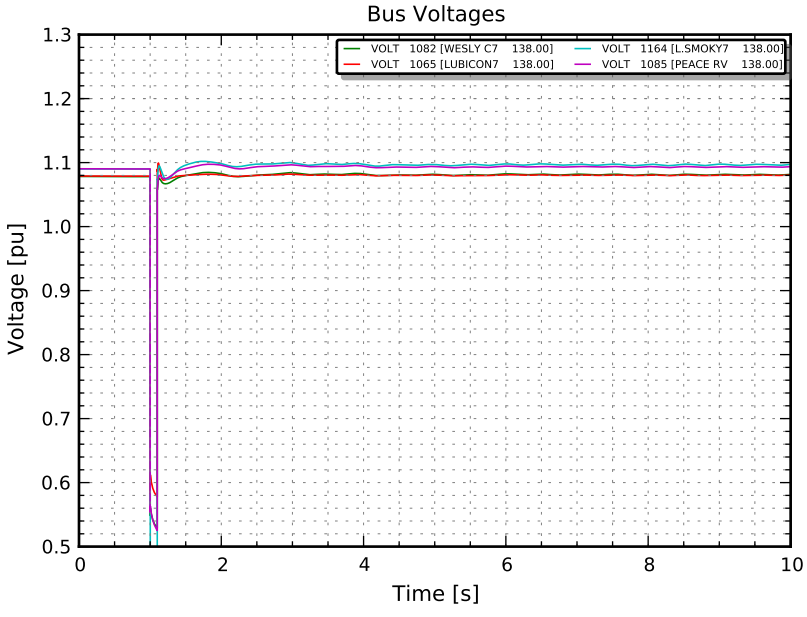


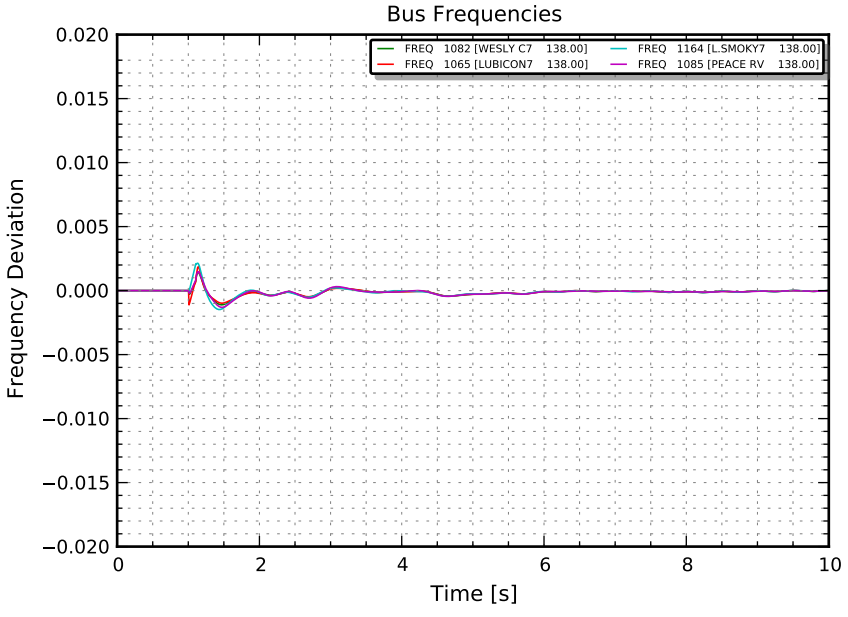


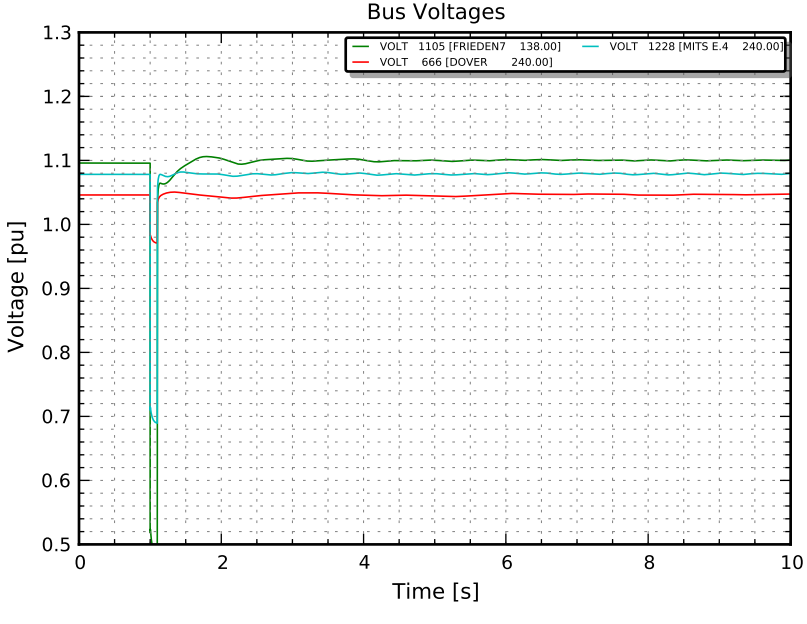
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 028 7L01 LITTLESMOKY to Sturgeon_A.

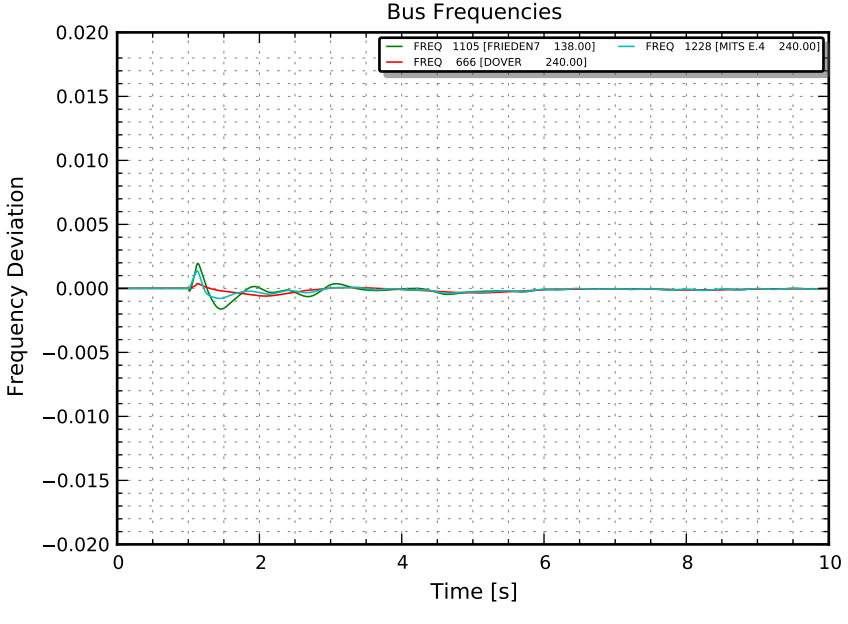
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 028 (A. 1)





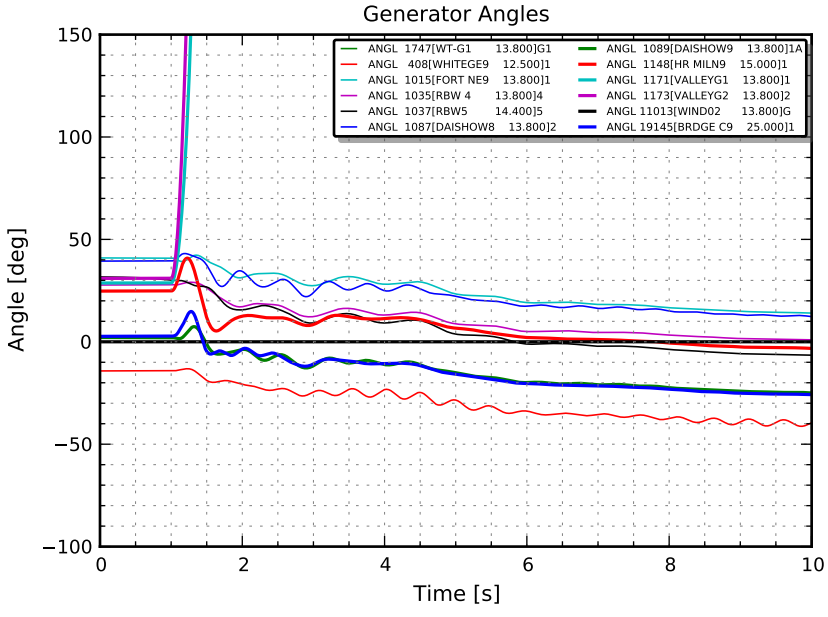


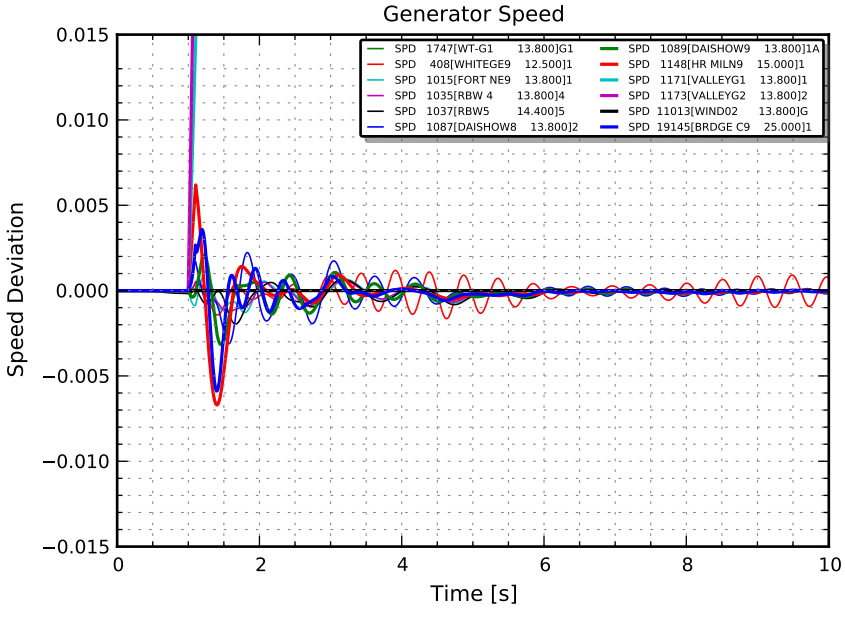


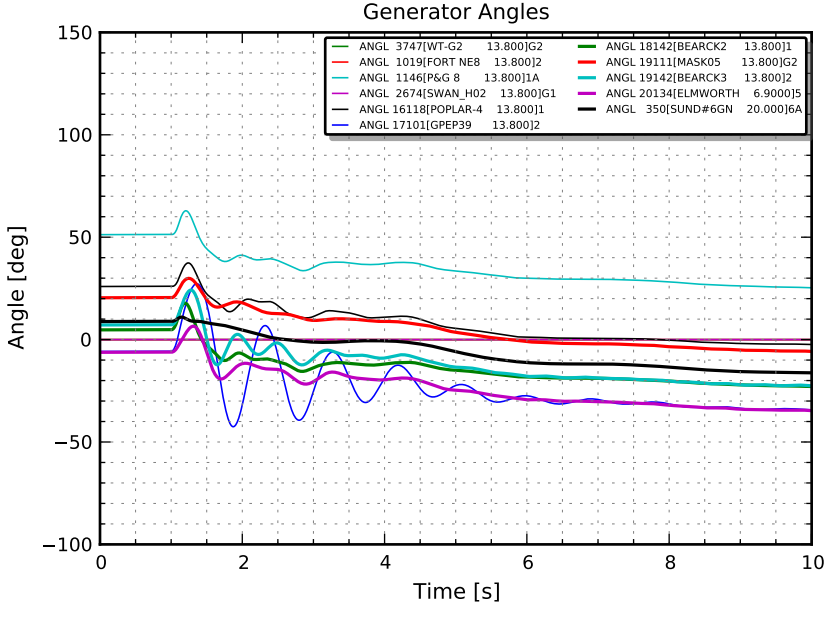
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 028 7L01 LITTLESMOKY to Sturgeon_A.

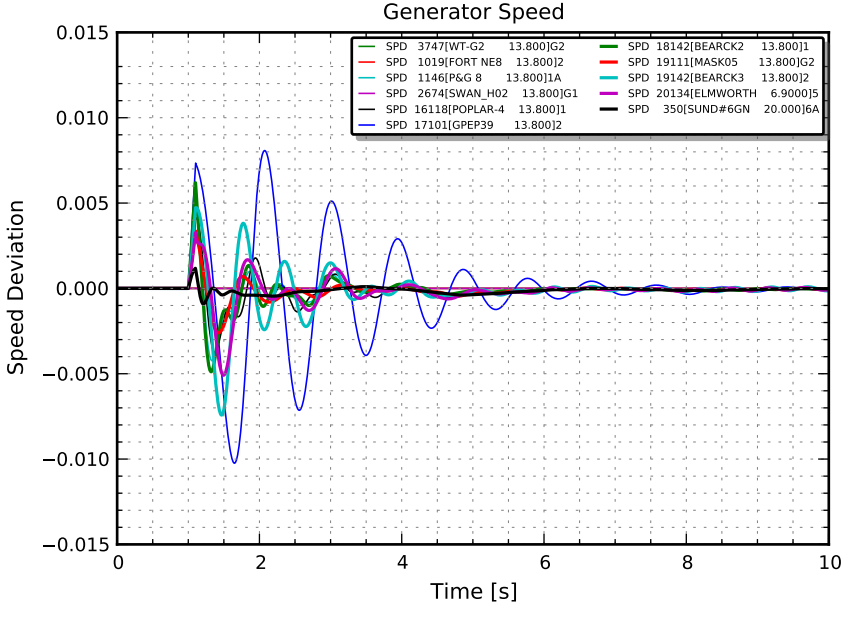
Study Area Generators

Appendix C2A
Figure: 028 (A. 2)





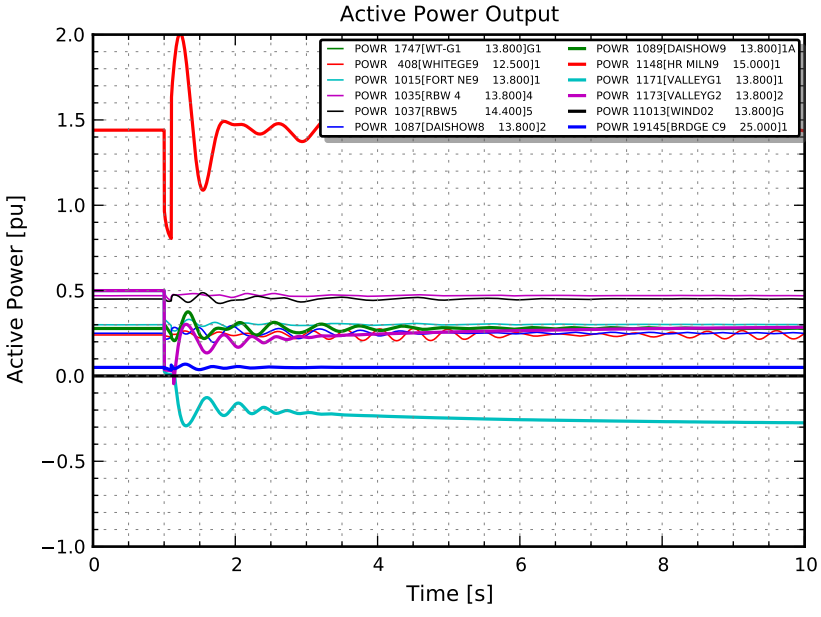


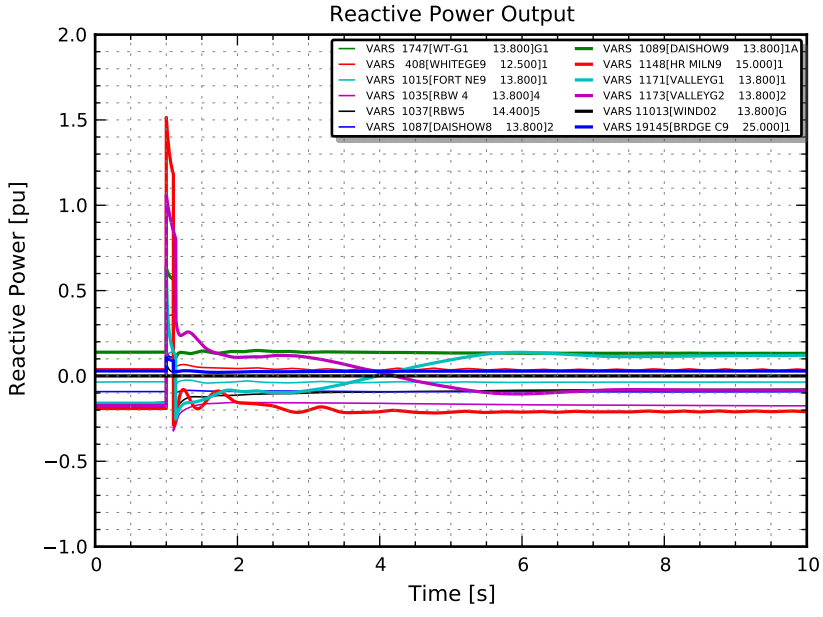


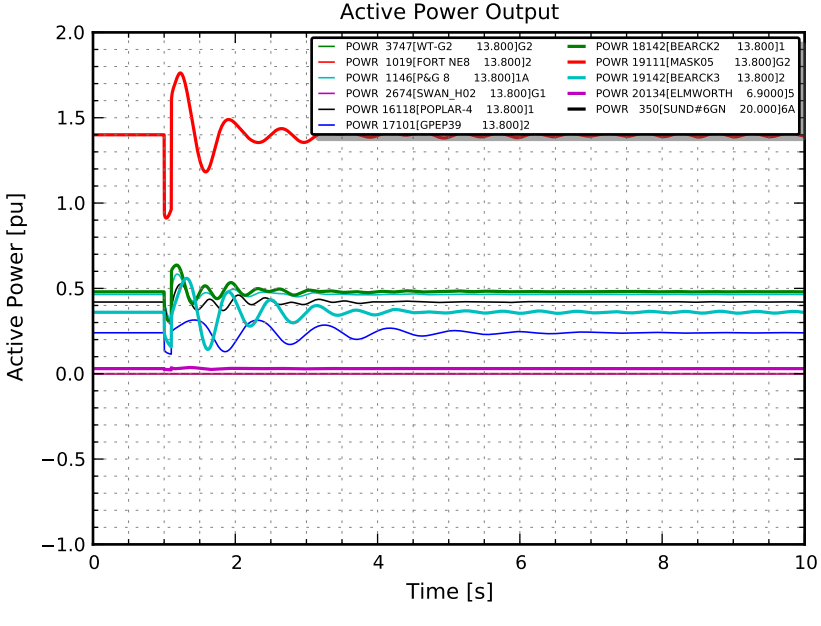
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 028 7L01 LITTLESMOKY to Sturgeon_A.

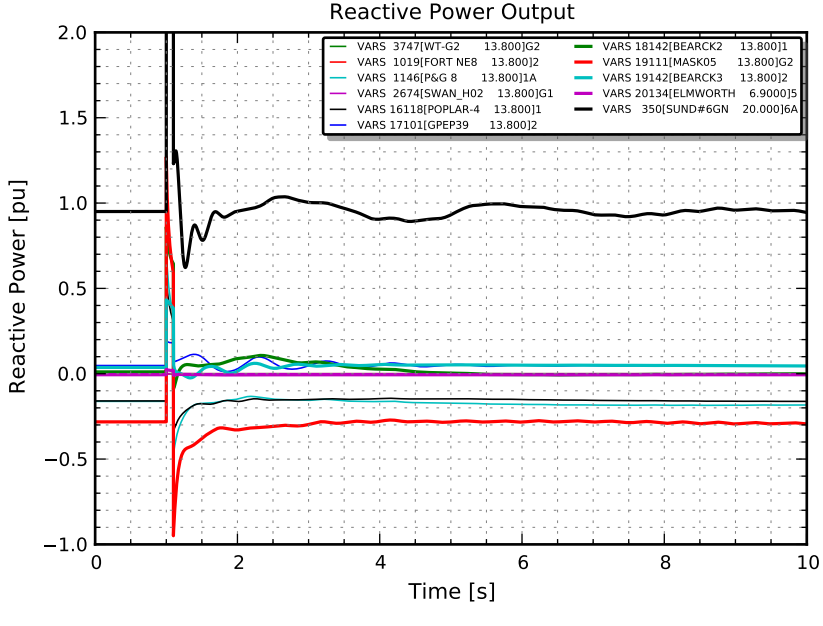
Study Area Generators

Appendix C2A
Figure: 028 (A. 3)





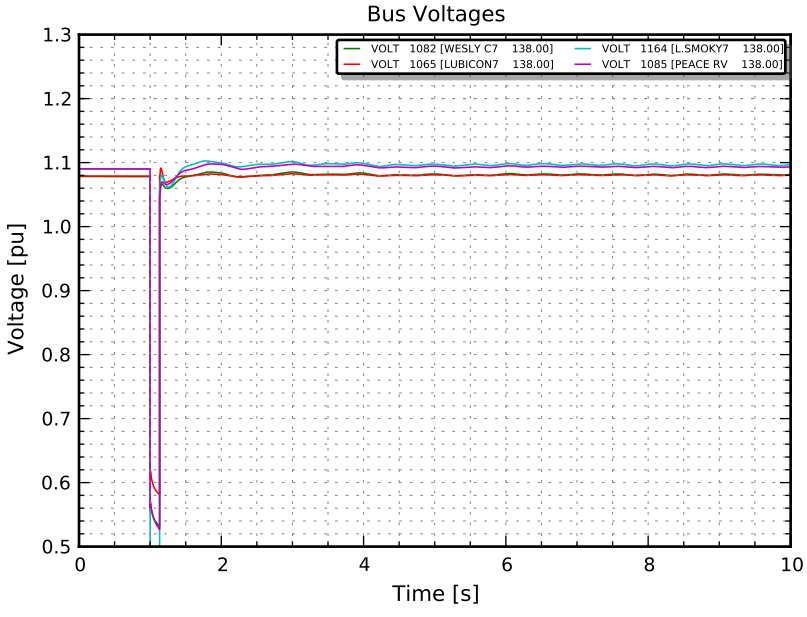


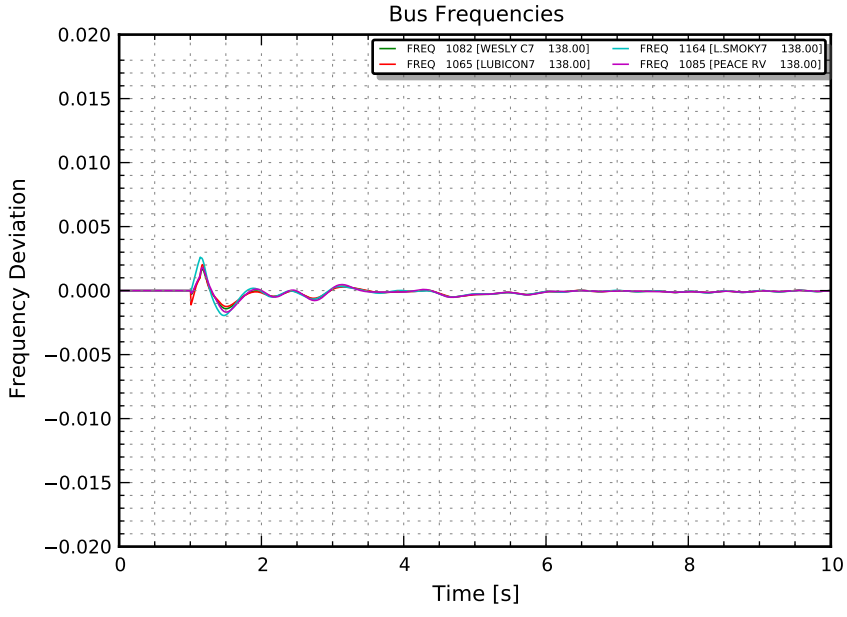


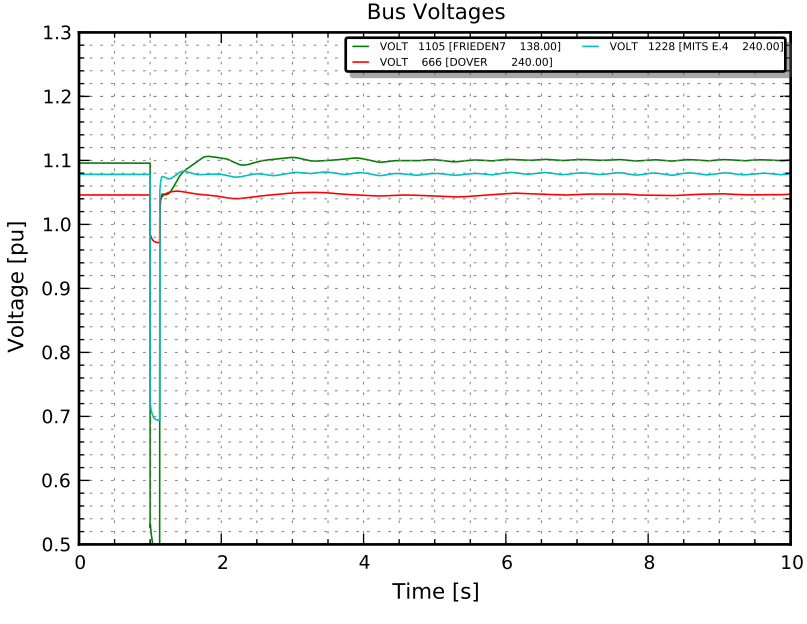
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 028 7L01 LITTLESMOKY to Sturgeon_B.

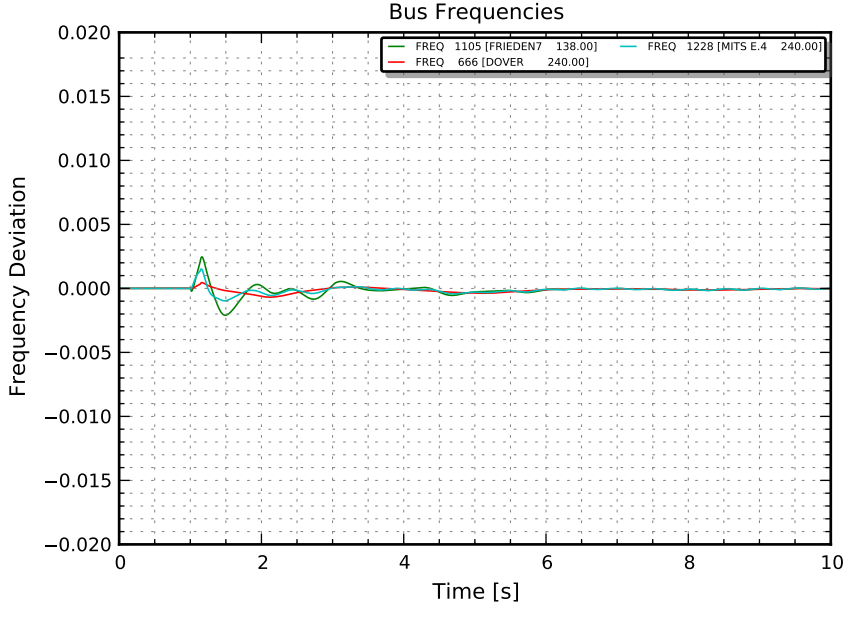
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 028 (B. 1)





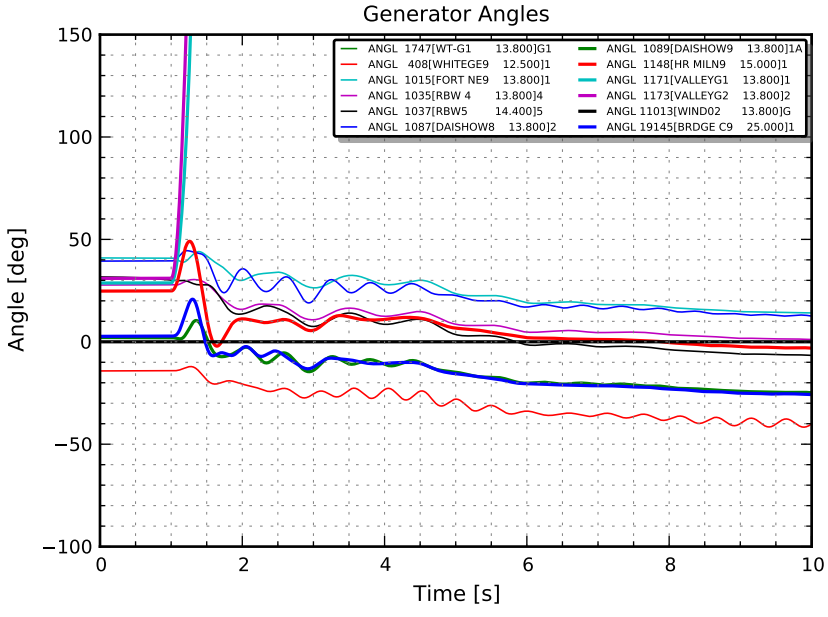


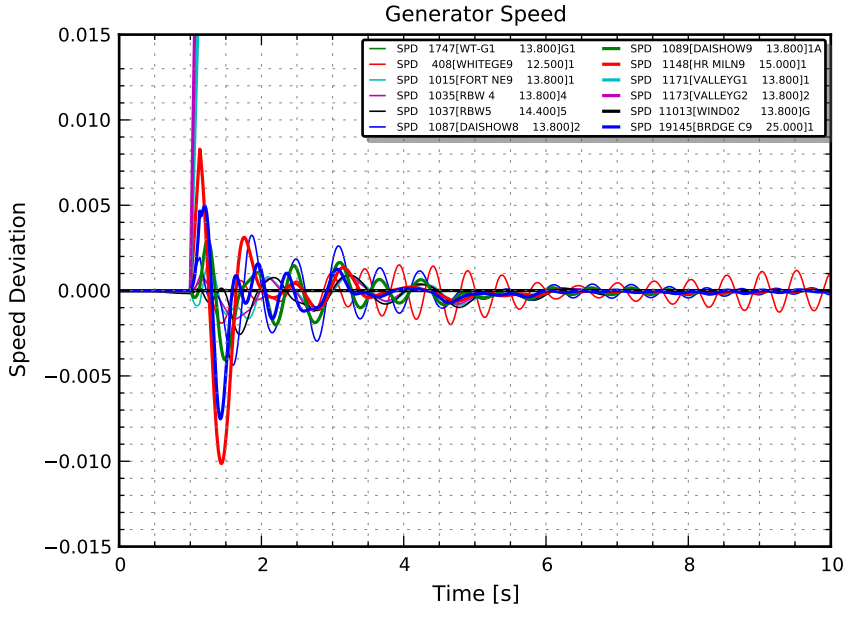


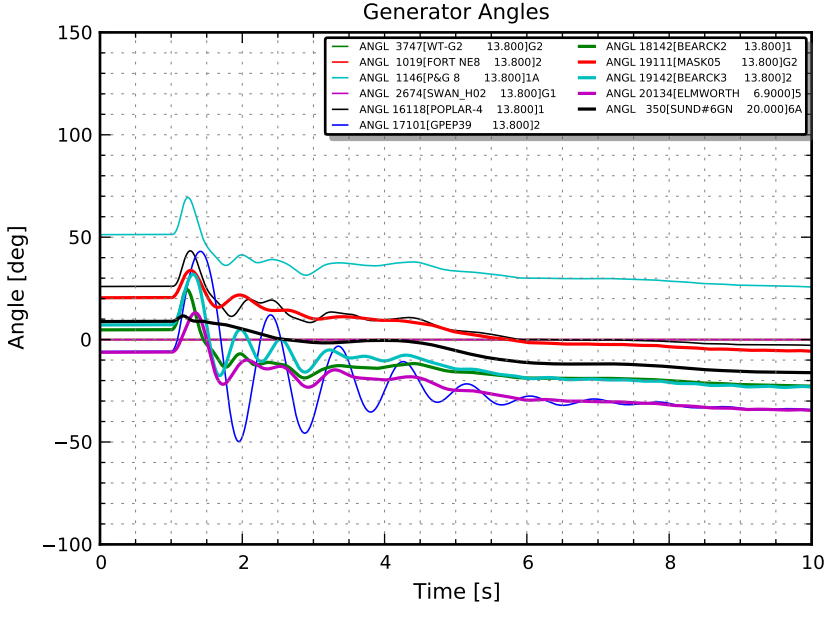
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 028 7L01 LITTLESMOKY to Sturgeon_B.

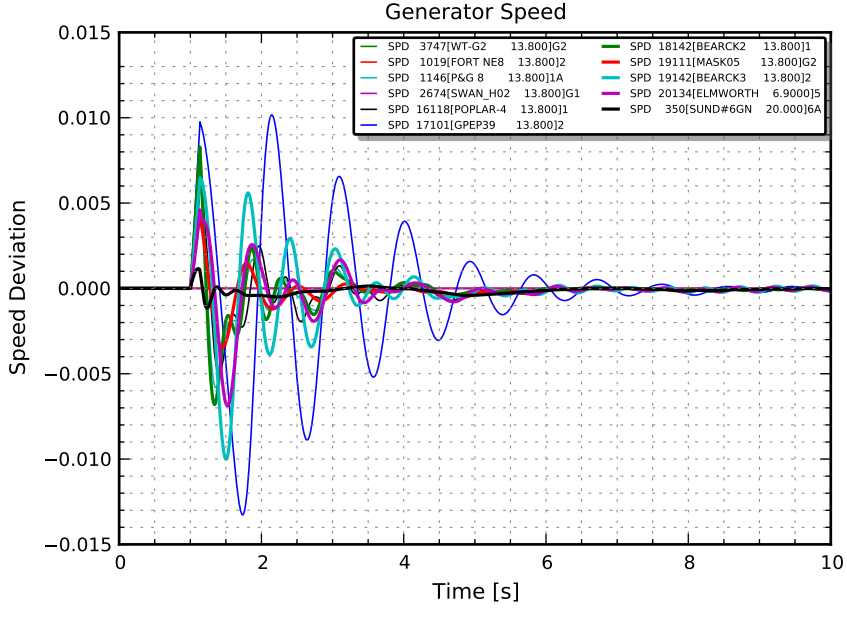
Study Area Generators

Appendix C2A
Figure: 028 (B. 2)





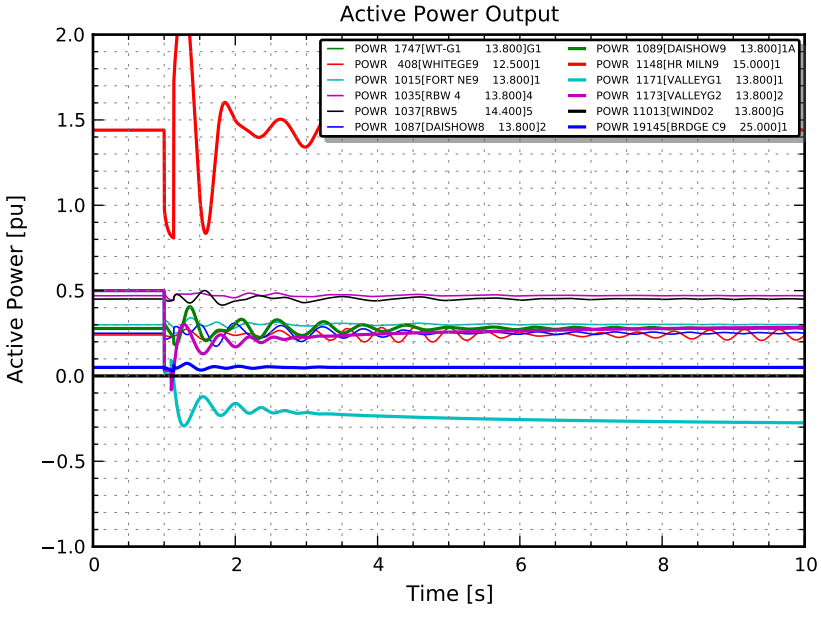


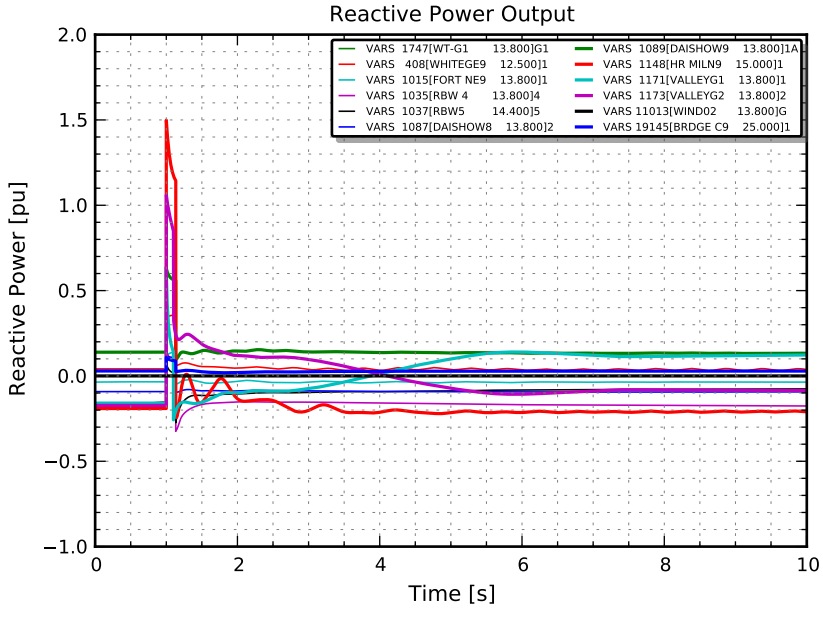


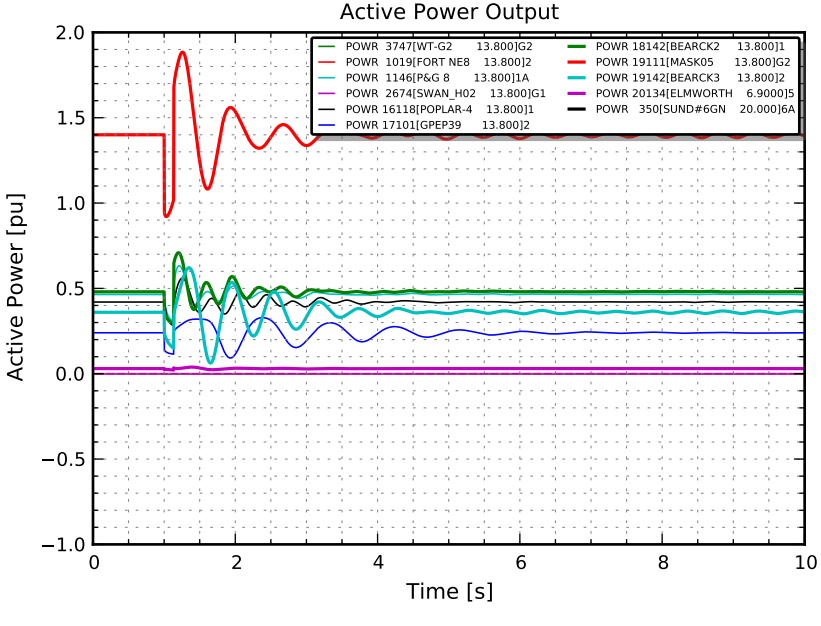
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 028 7L01 LITTLESMOKY to Sturgeon_B.

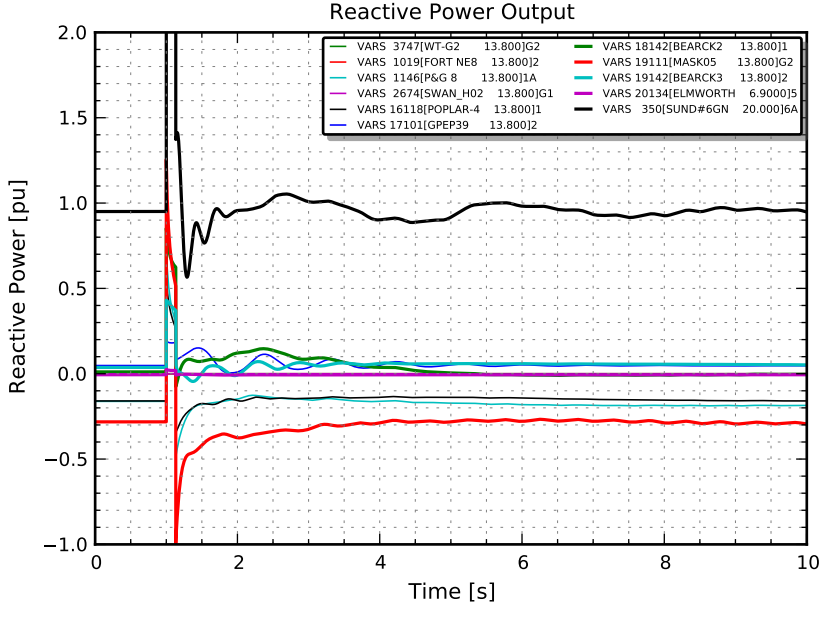
Study Area Generators

Appendix C2A
Figure: 028 (B. 3)





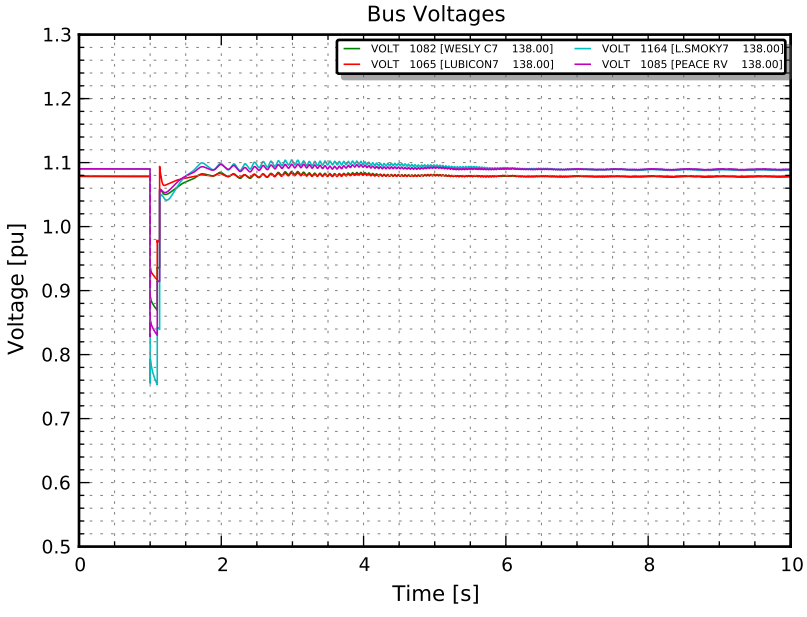


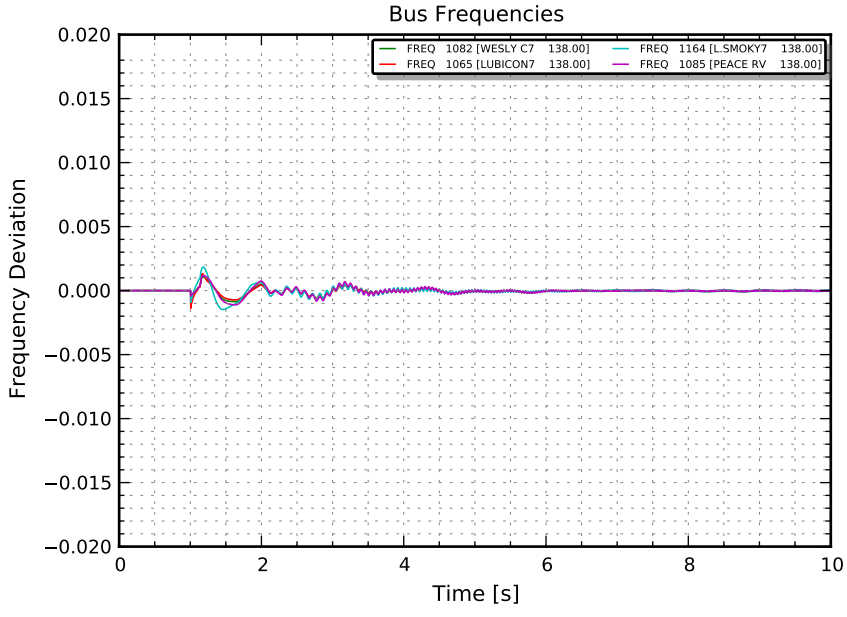


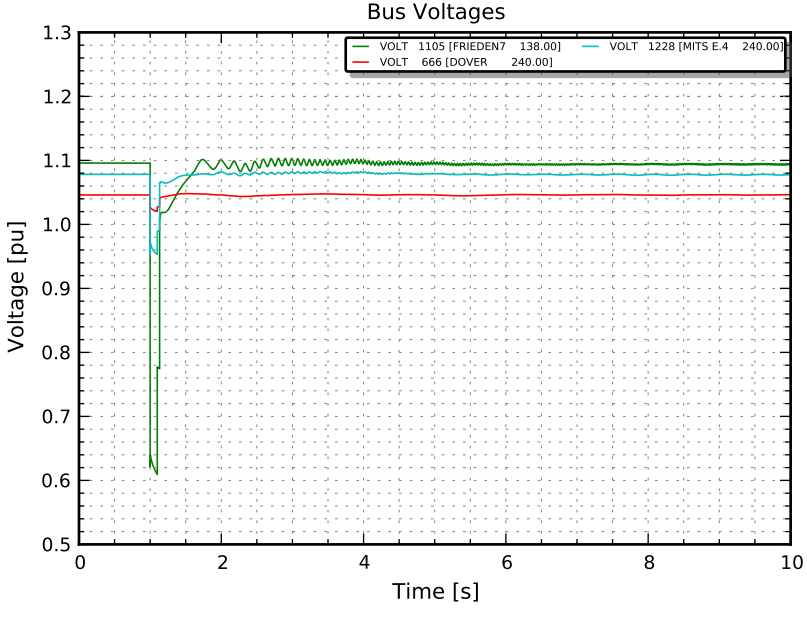
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_A.

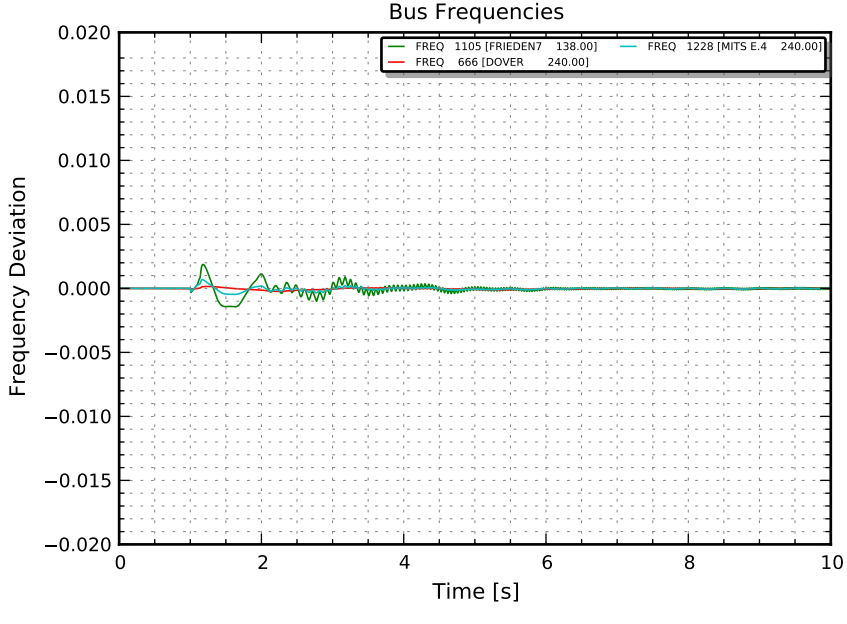
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 029 (A. 1)





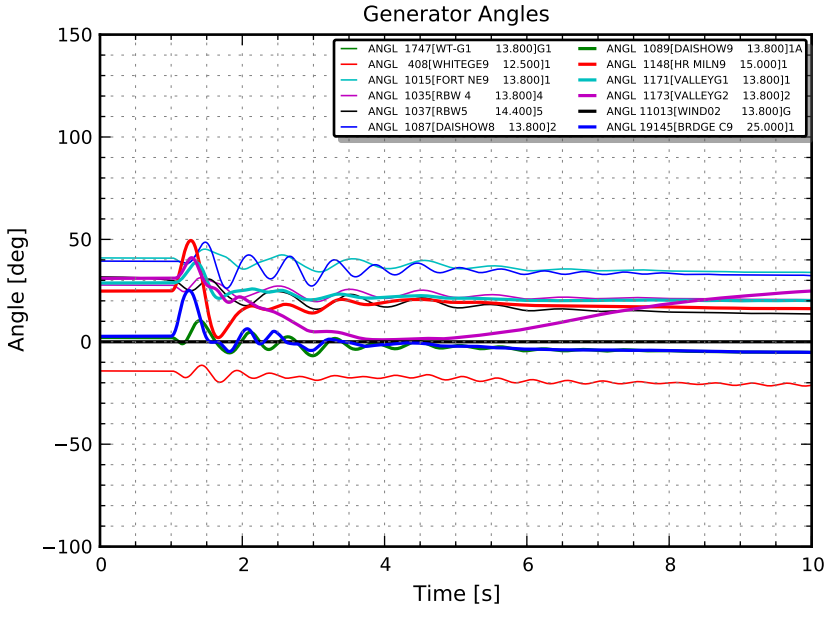


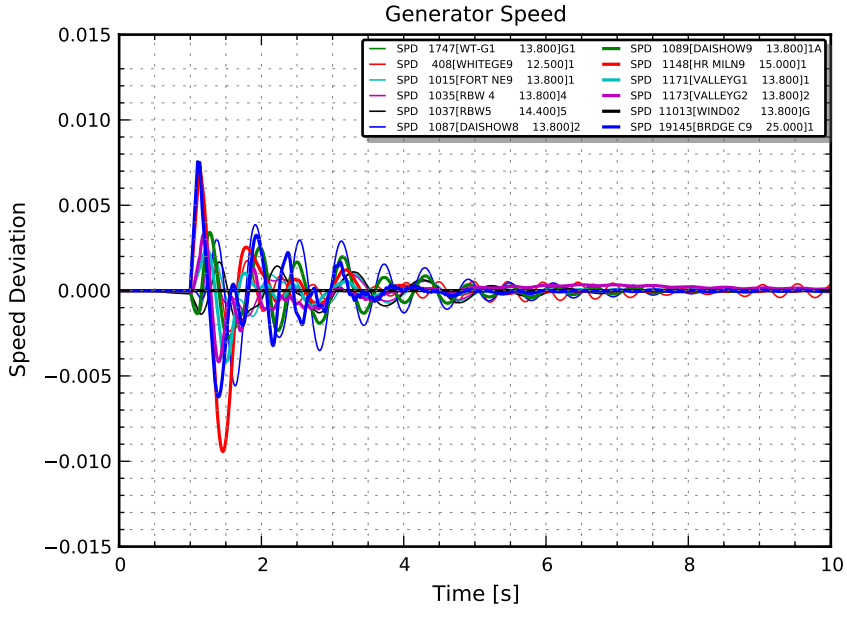


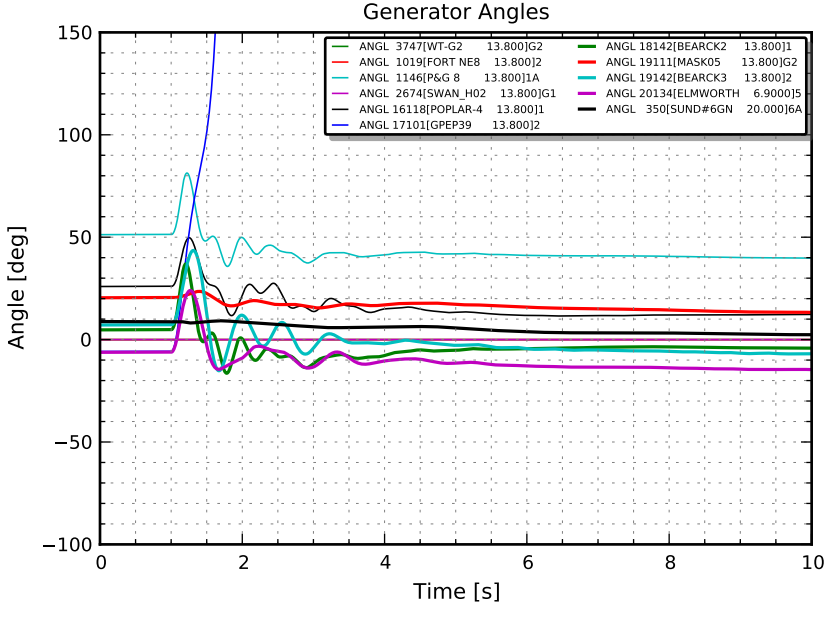
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_A.

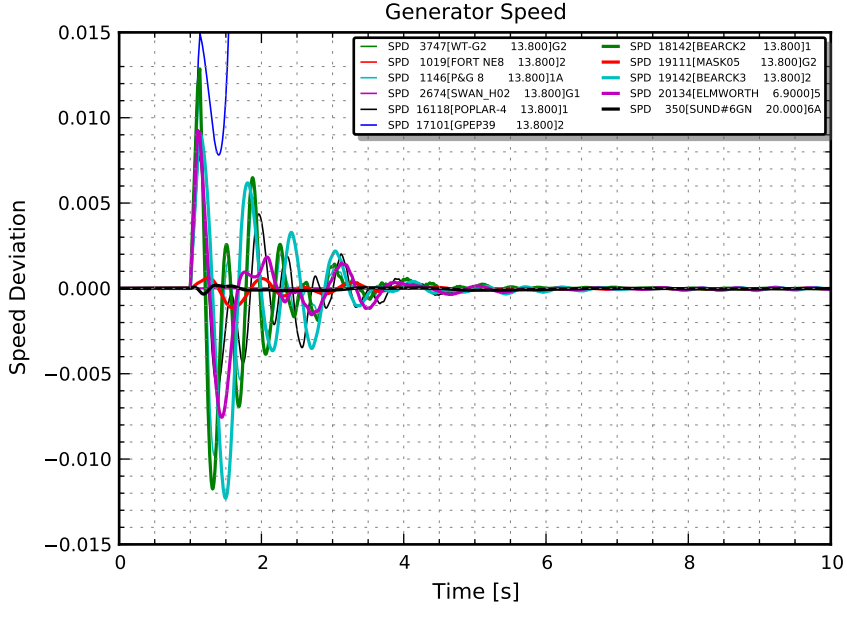
Study Area Generators

Appendix C2A
Figure: 029 (A. 2)





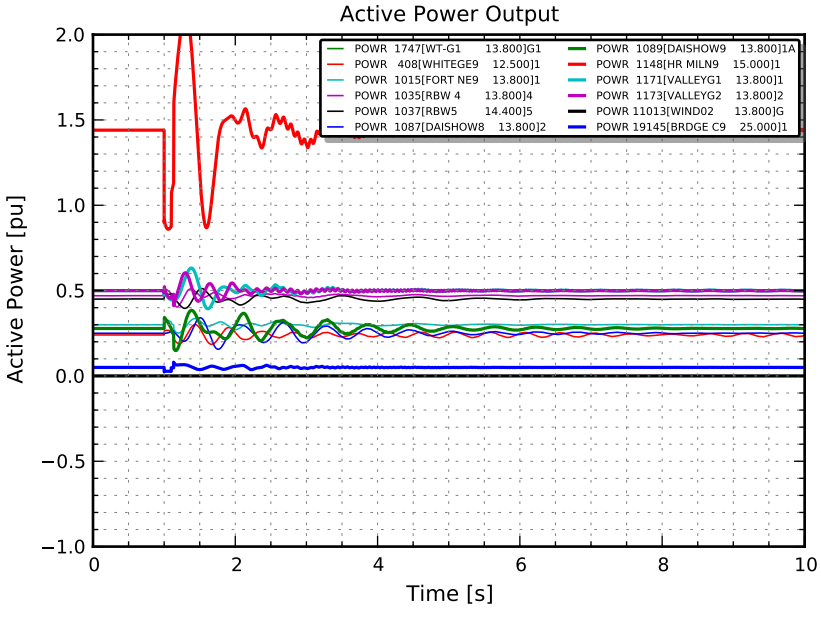


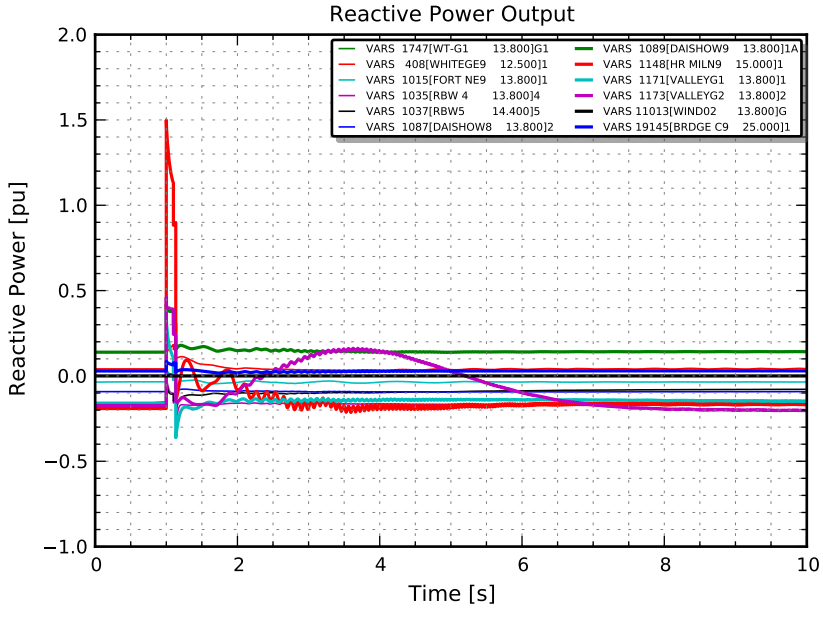


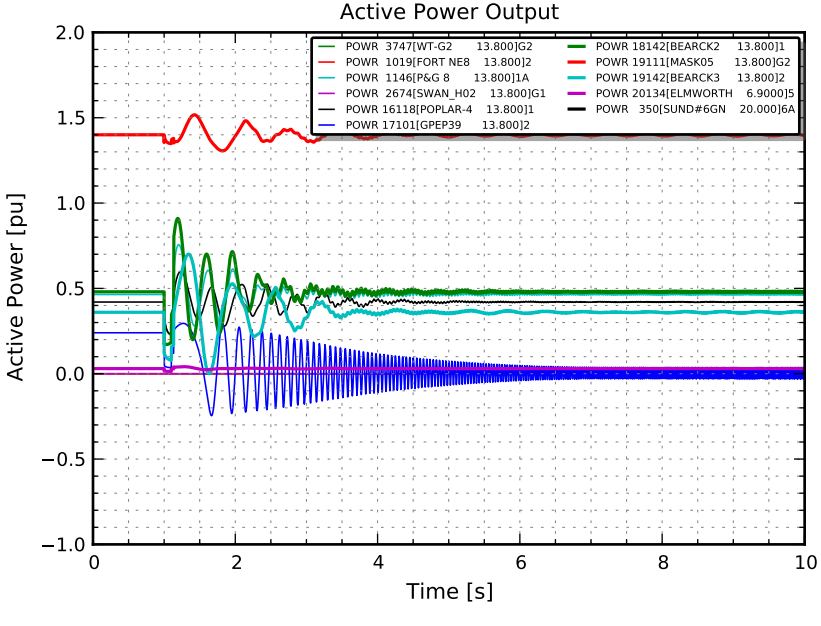
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_A.

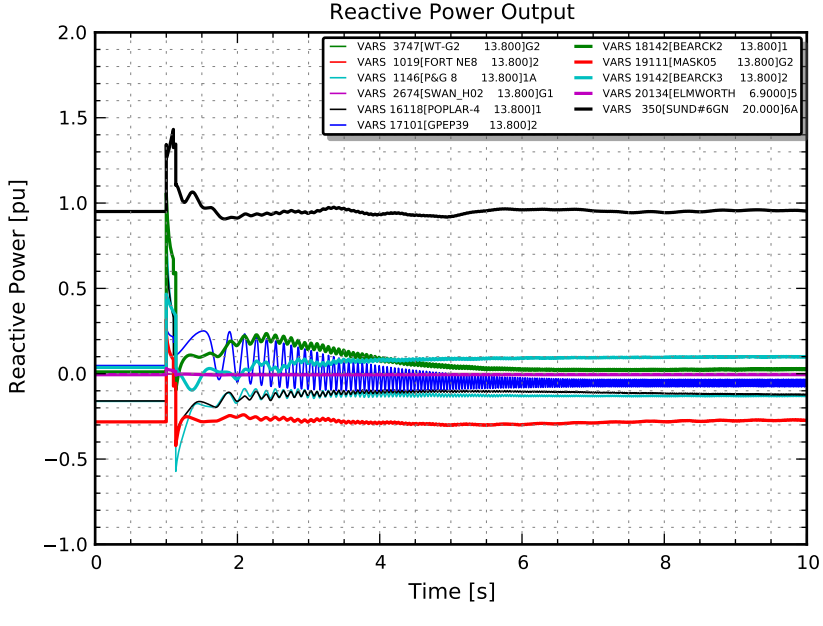
Study Area Generators

Appendix C2A
Figure: 029 (A. 3)





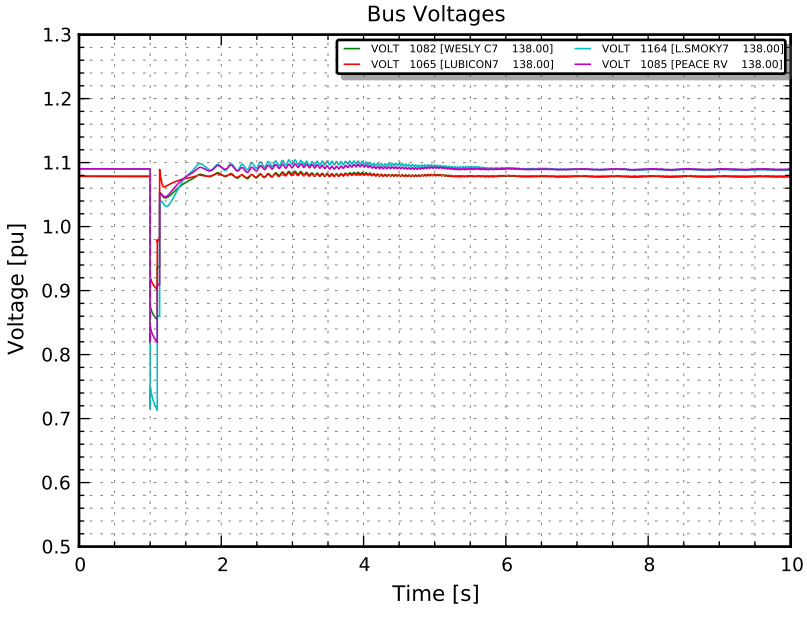


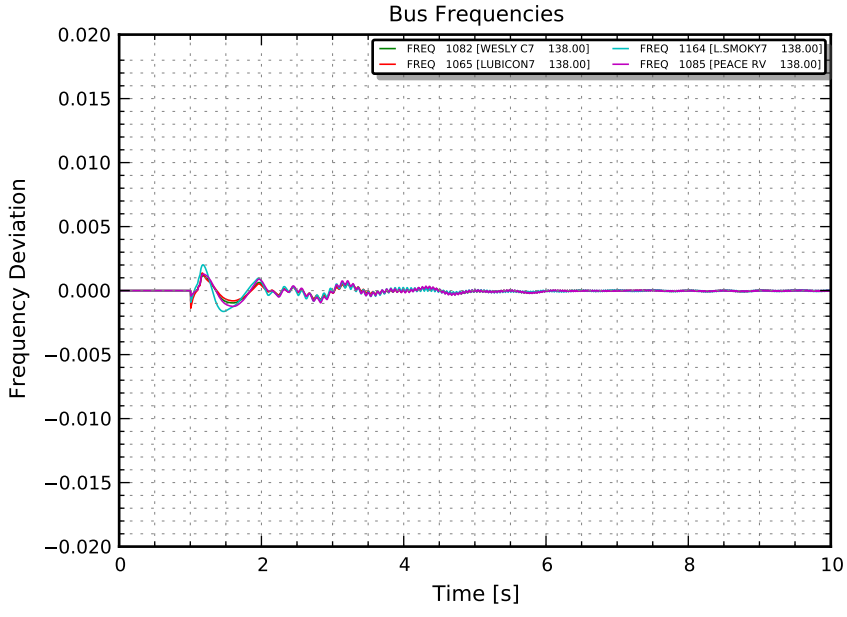


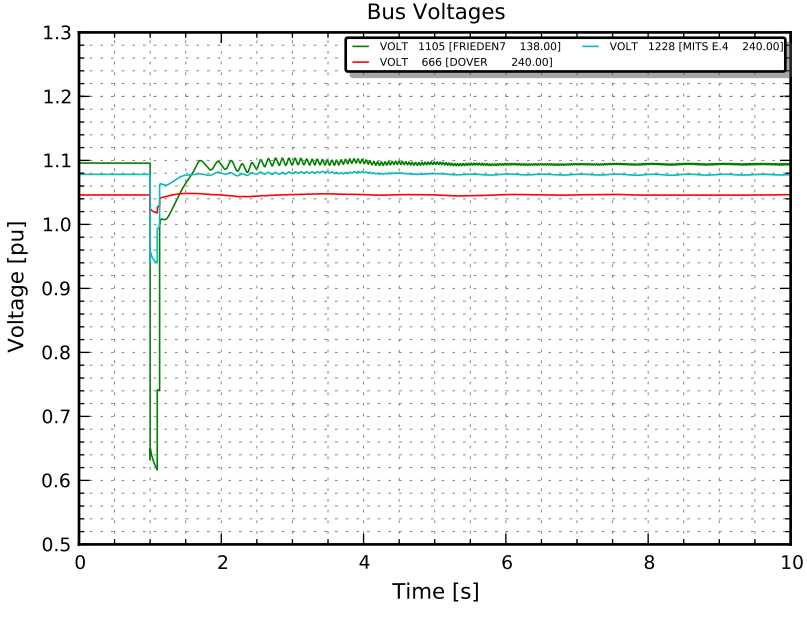
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_B.

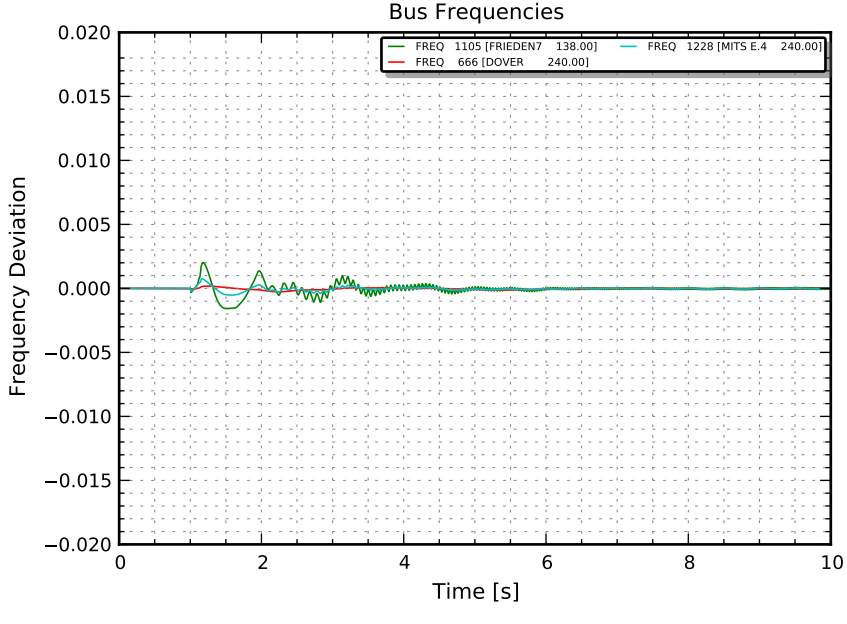
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 029 (B. 1)





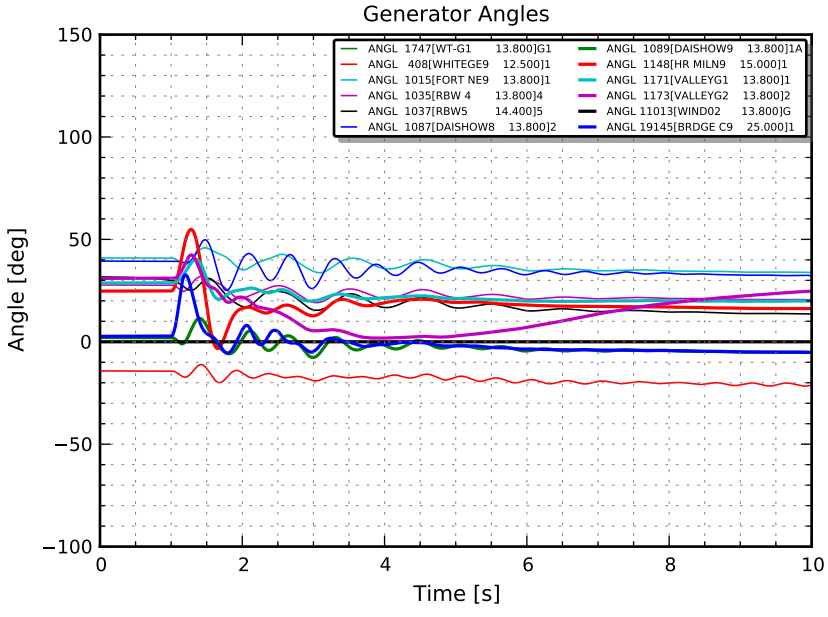


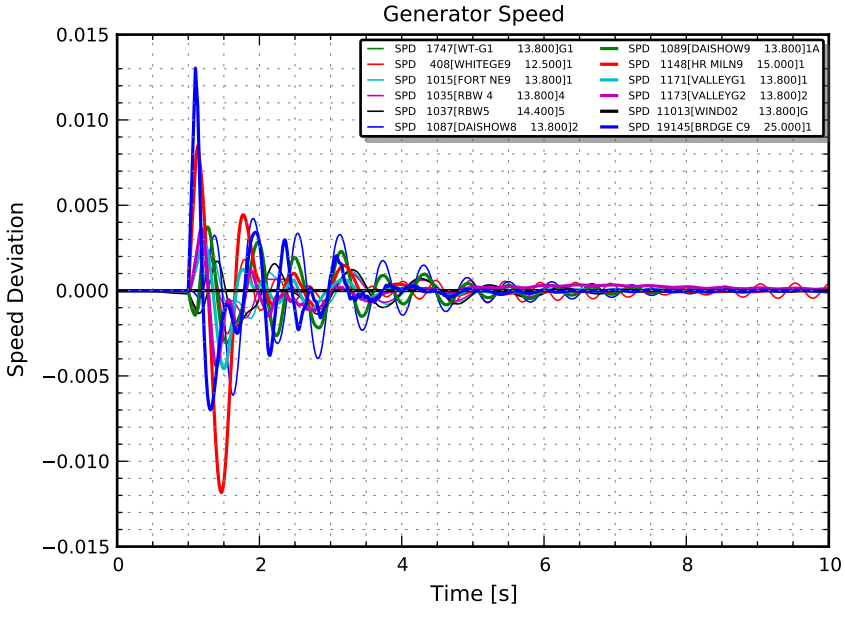


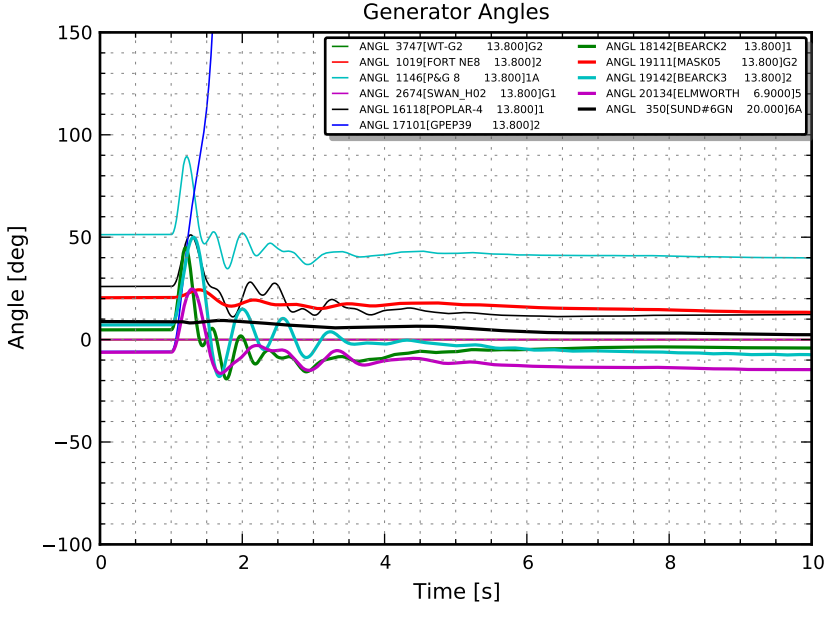
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_B.

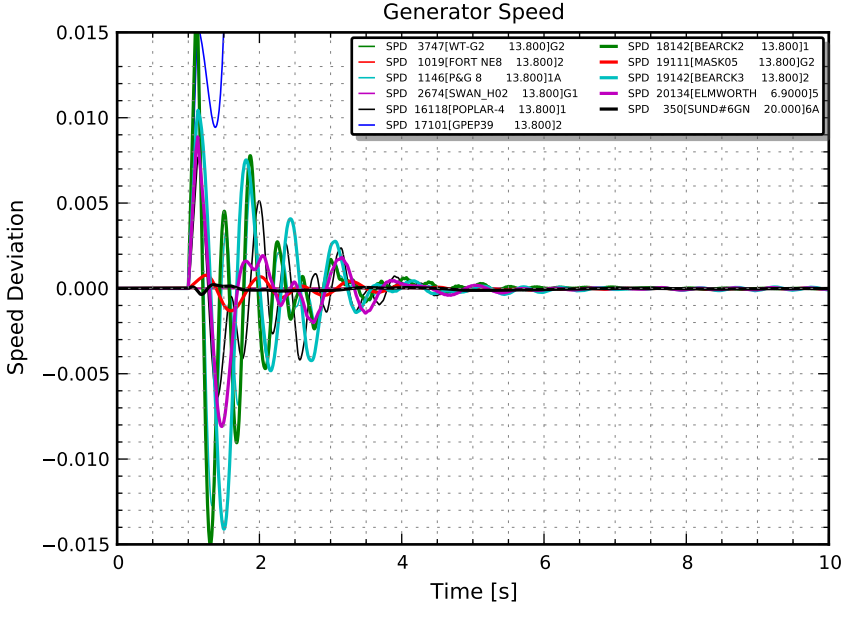
Study Area Generators

Appendix C2A
Figure: 029 (B. 2)





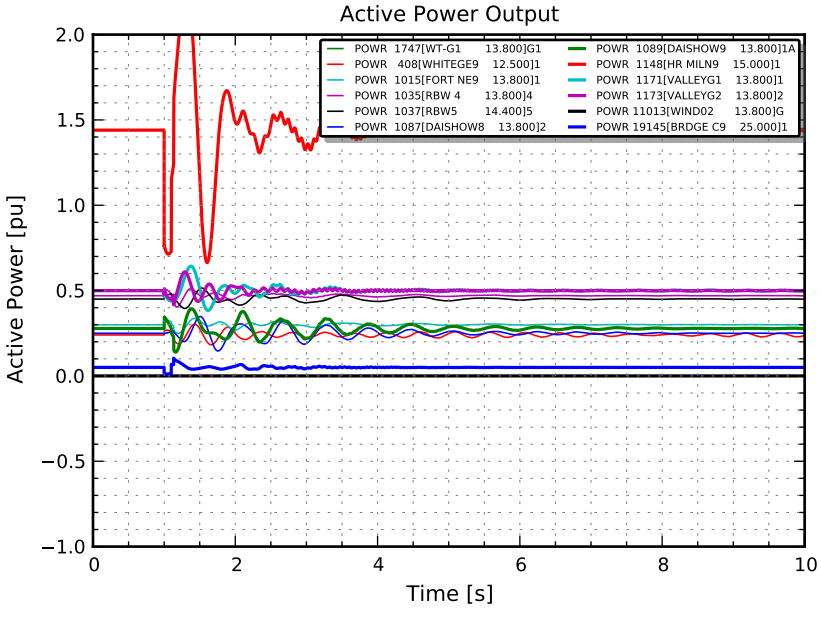


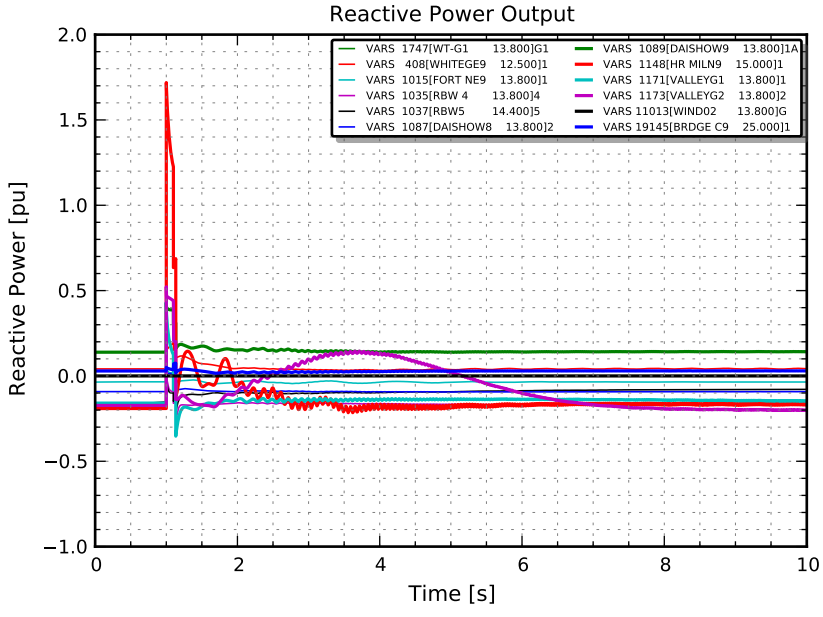


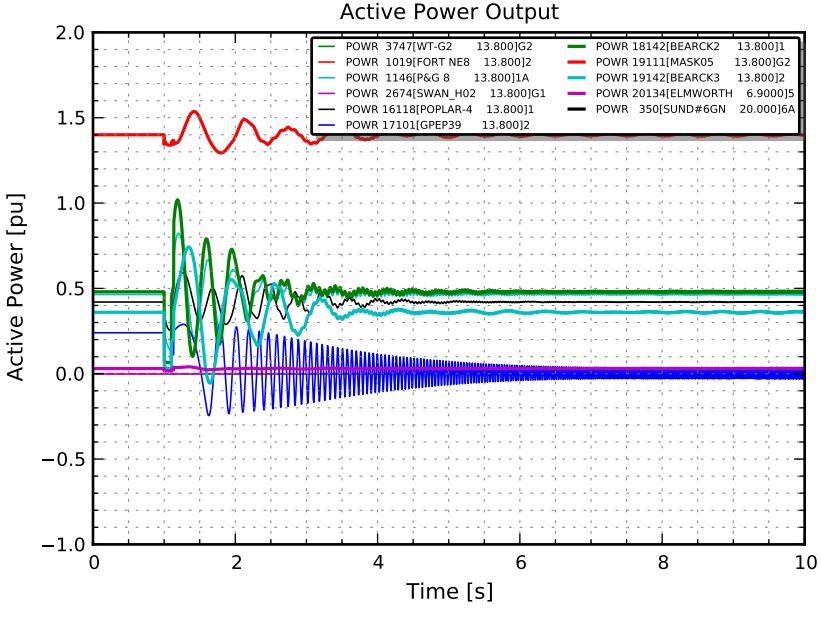
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_B.

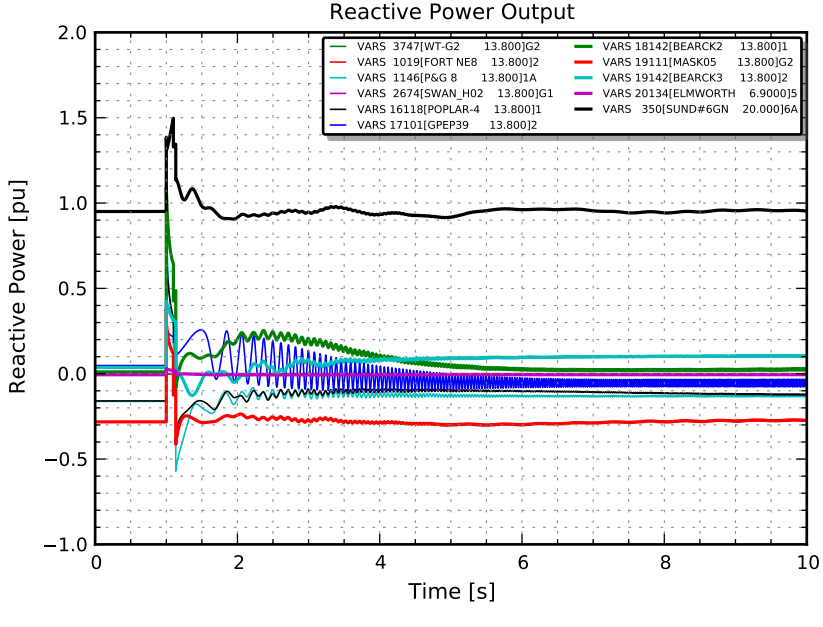
Study Area Generators

Appendix C2A
Figure: 029 (B. 3)





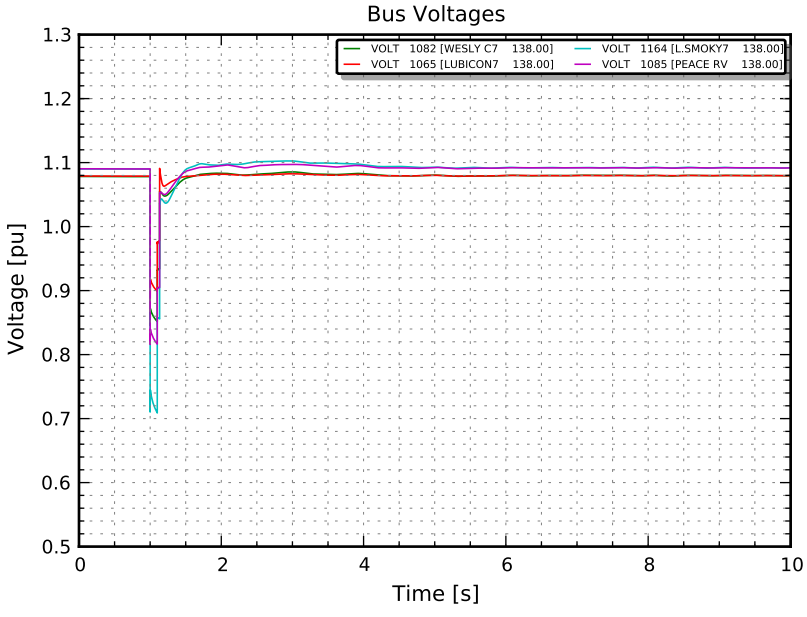


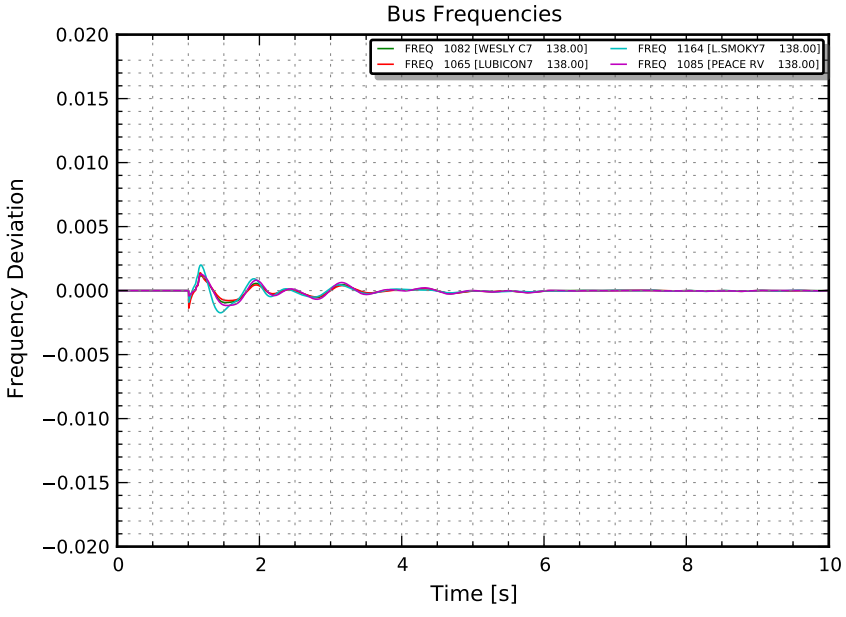


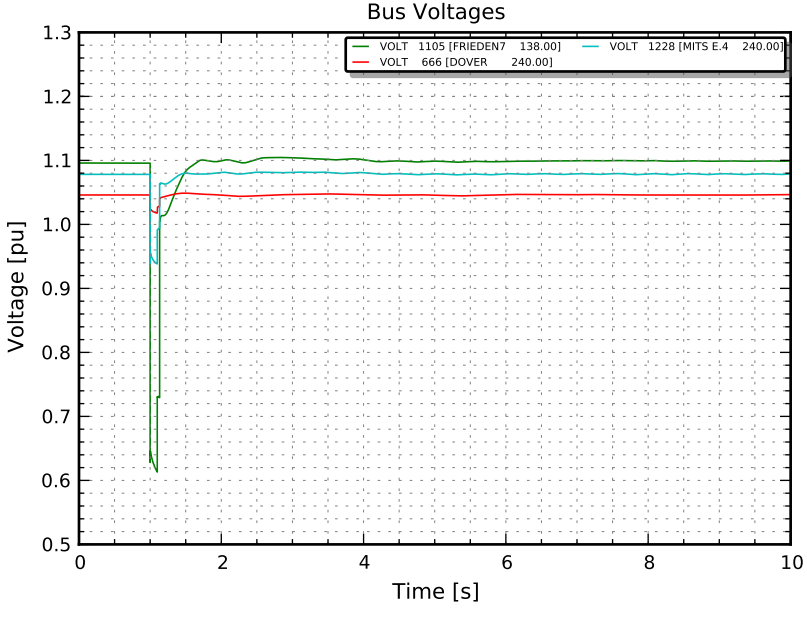
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_A.

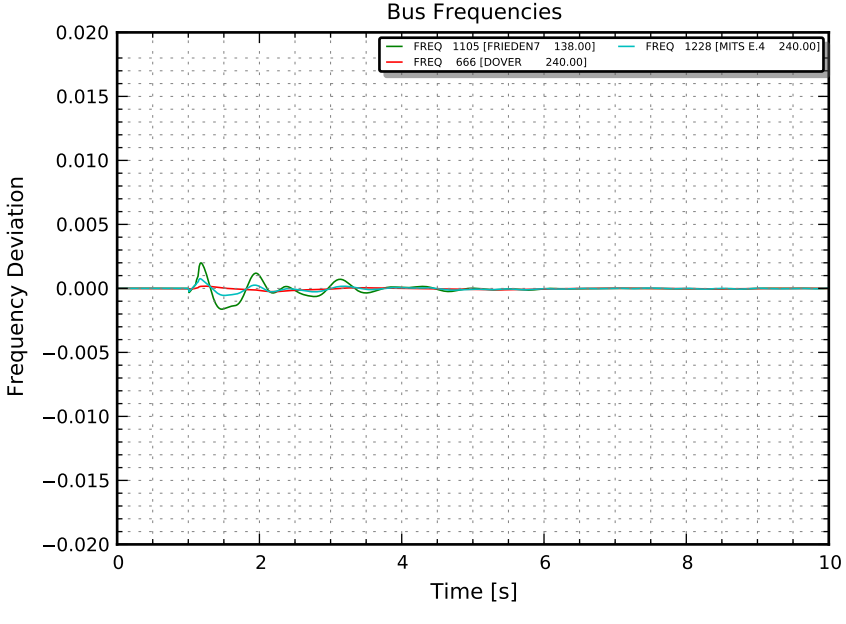
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 030 (A. 1)





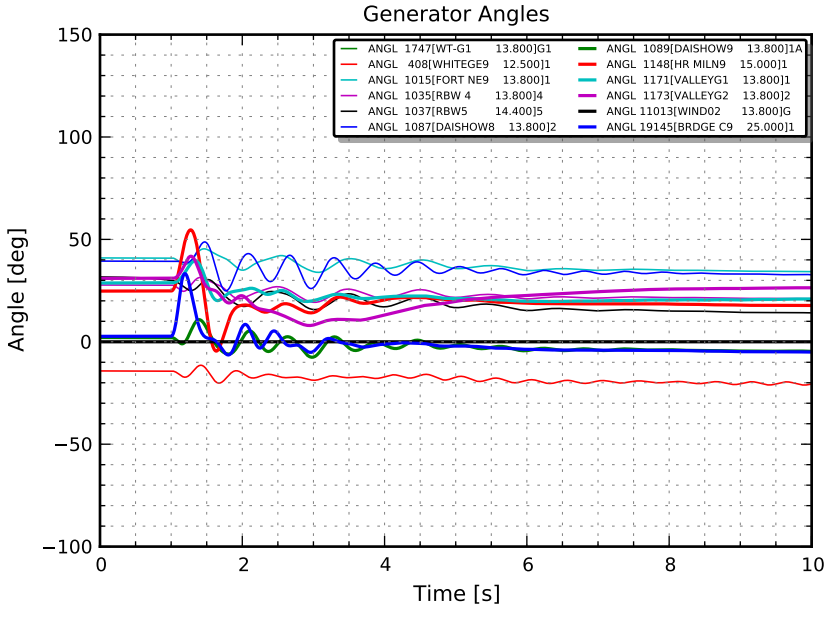


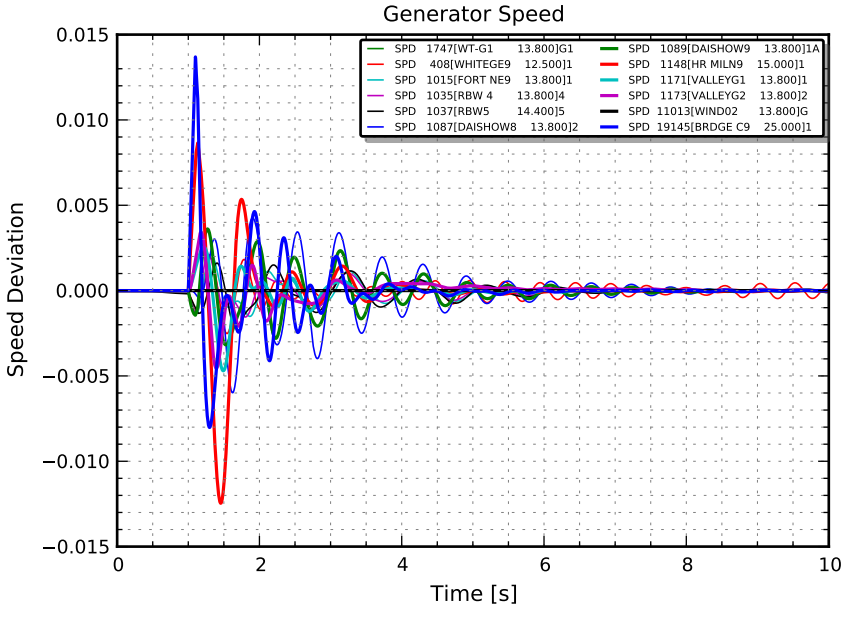


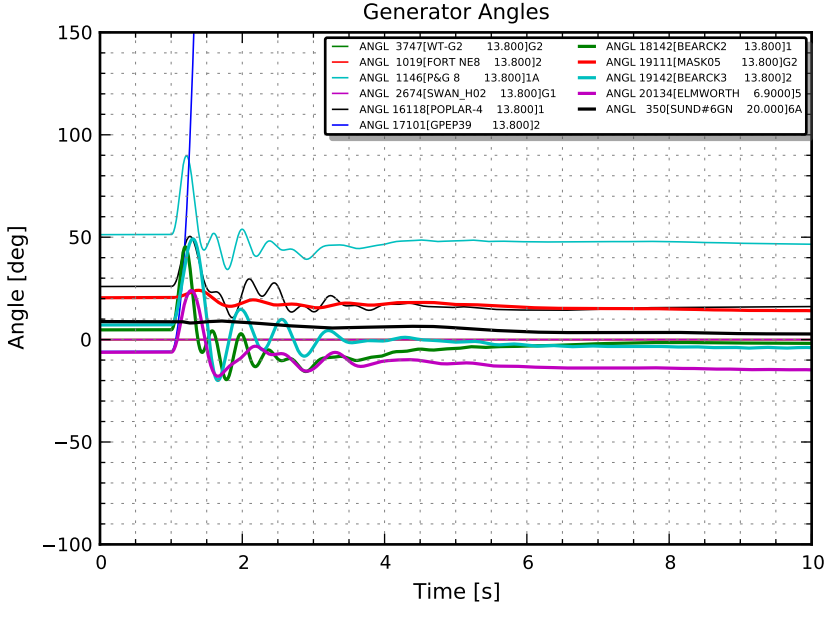
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_A.

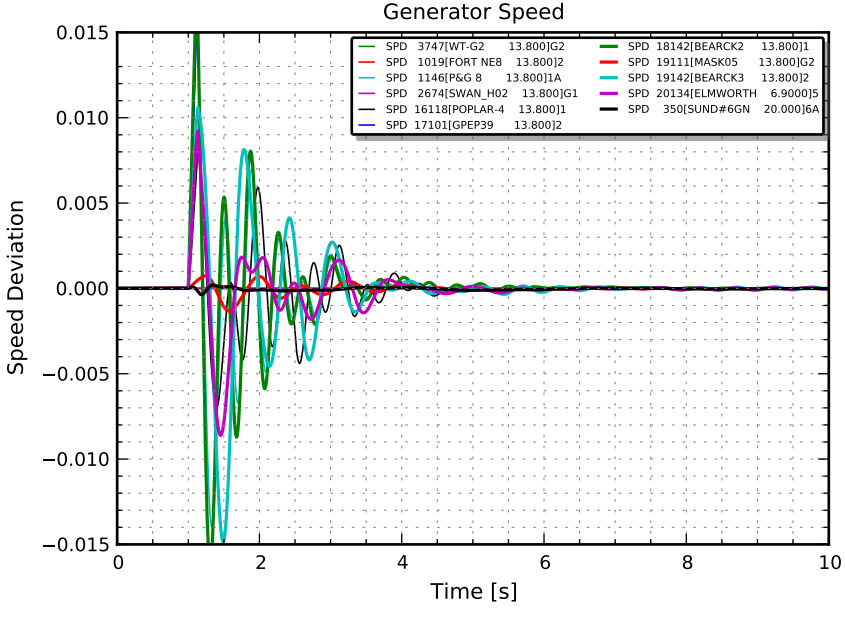
Study Area Generators

Appendix C2A
Figure: 030 (A. 2)





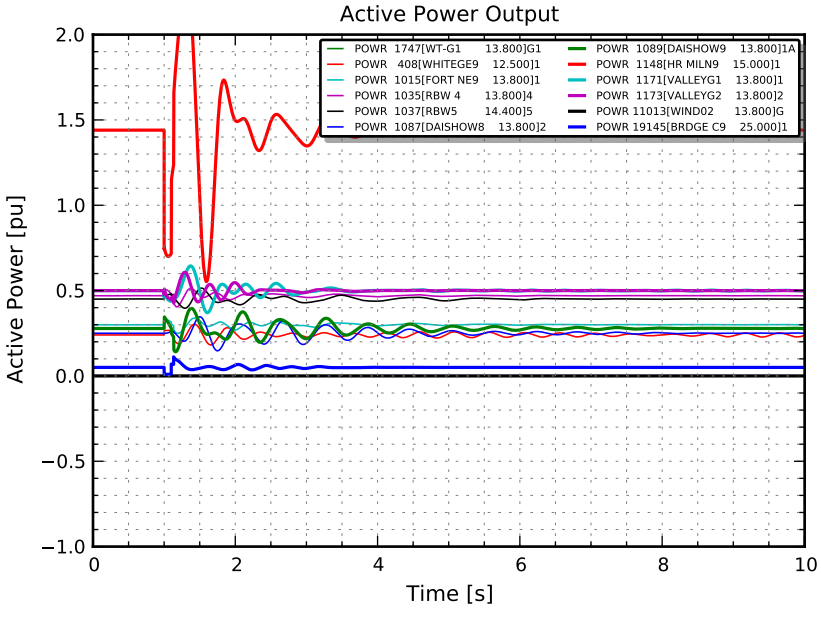


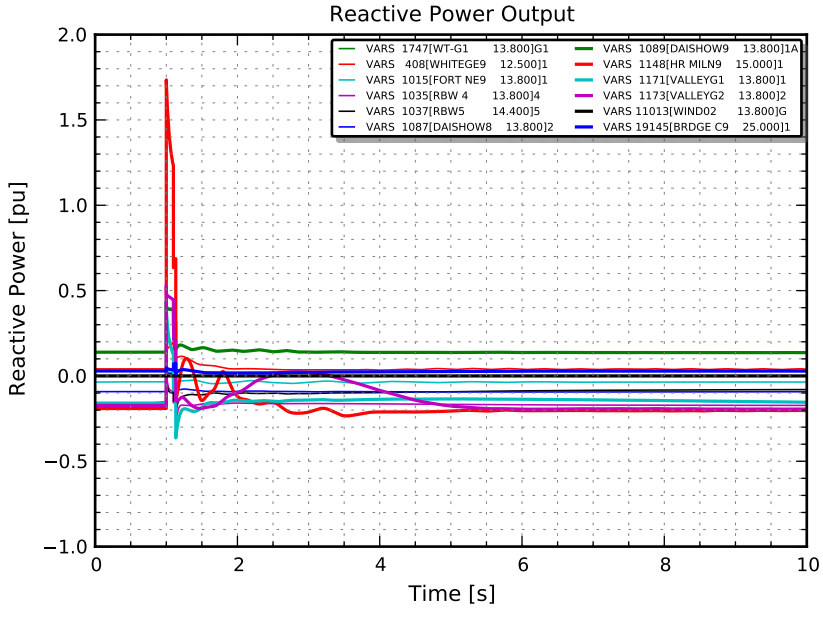


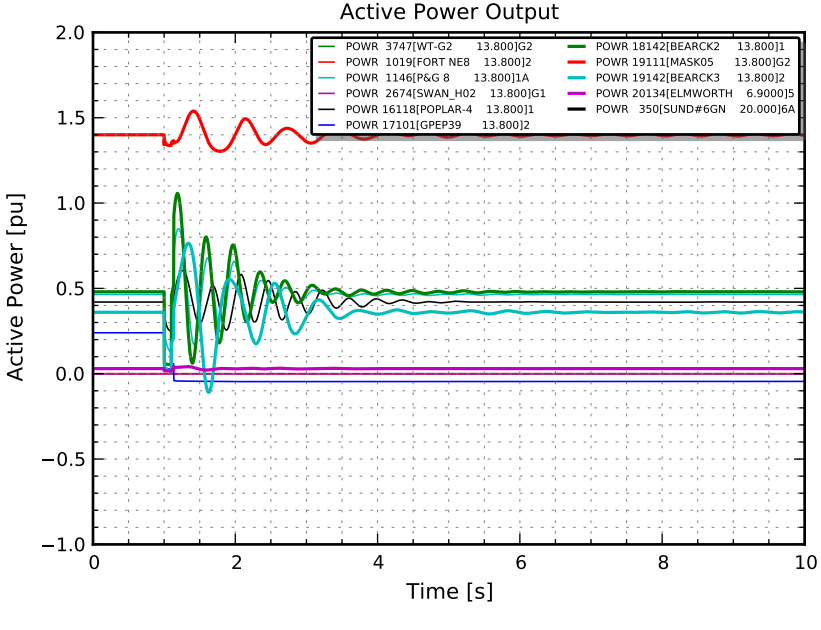
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_A.

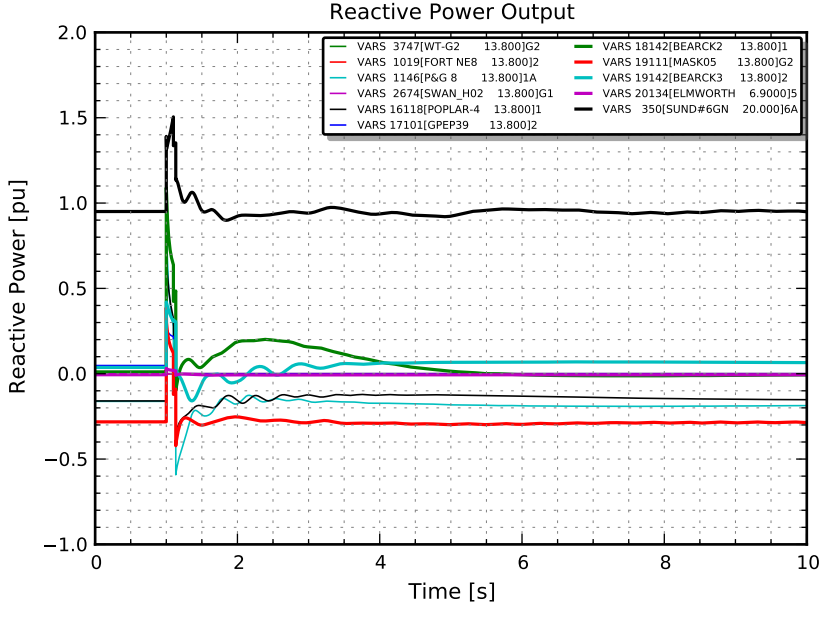
Study Area Generators

Appendix C2A
Figure: 030 (A. 3)





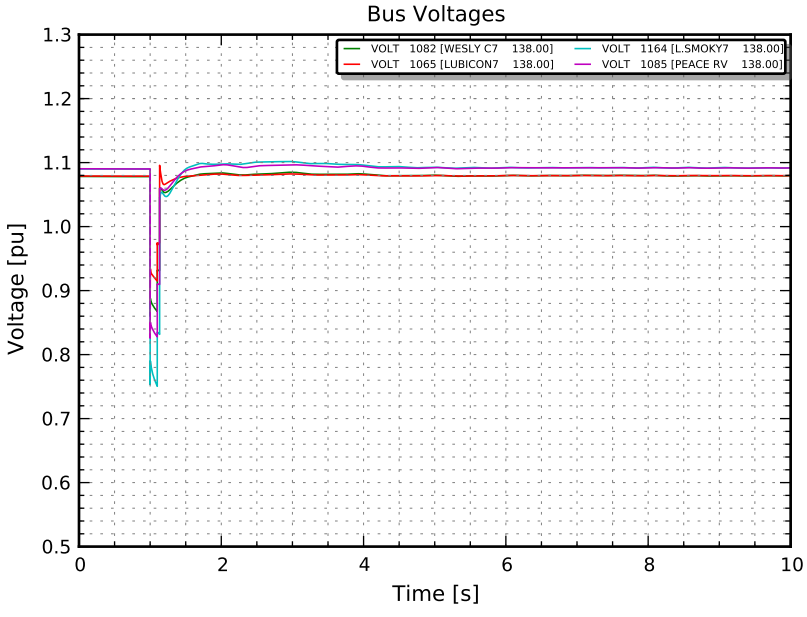


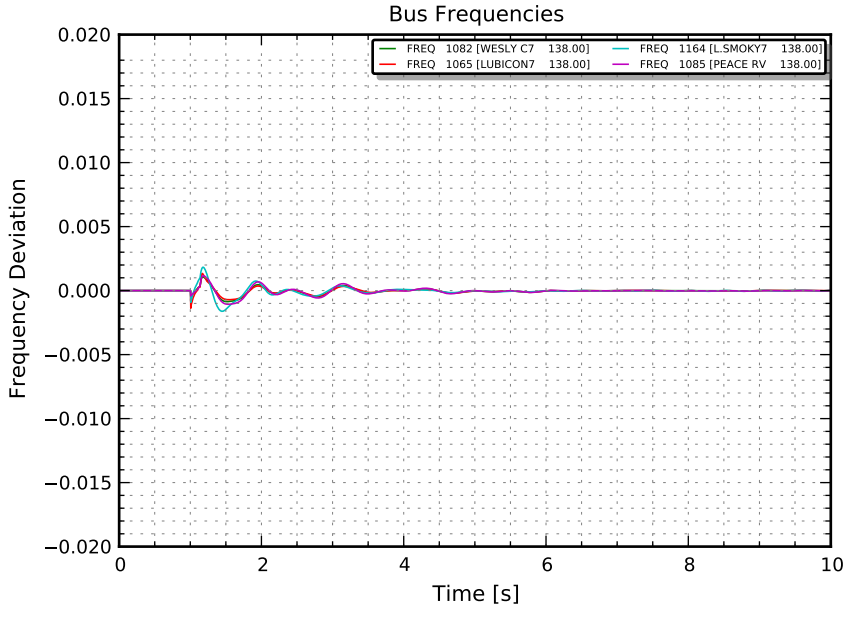


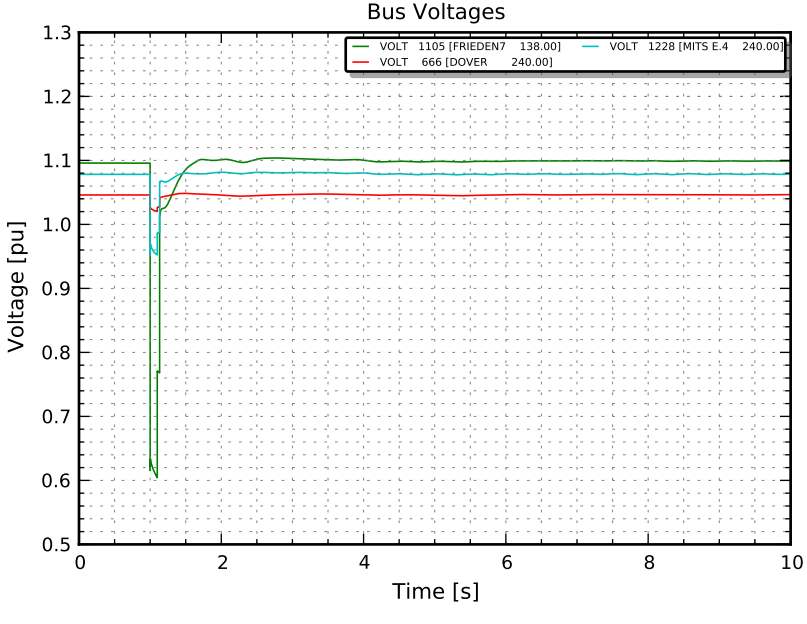
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_B.

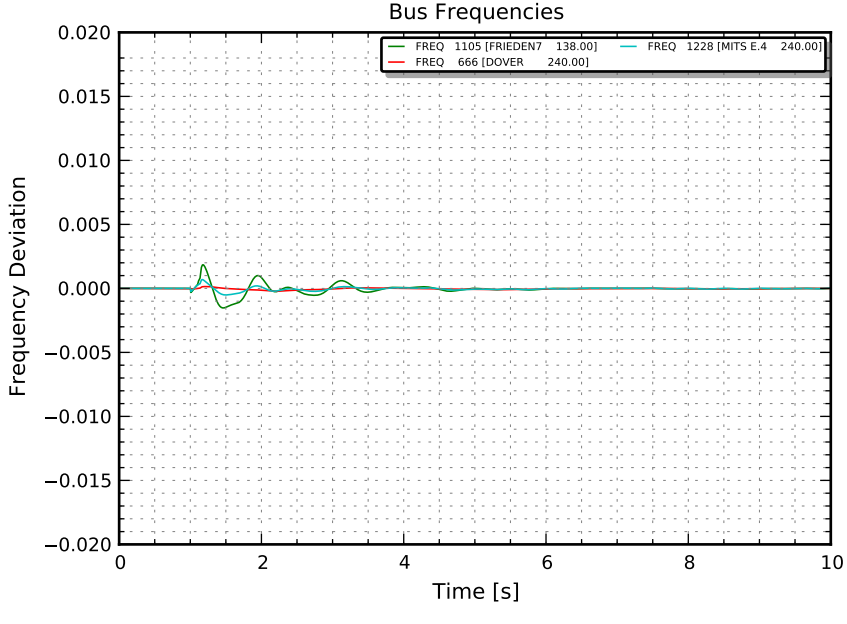
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 030 (B. 1)





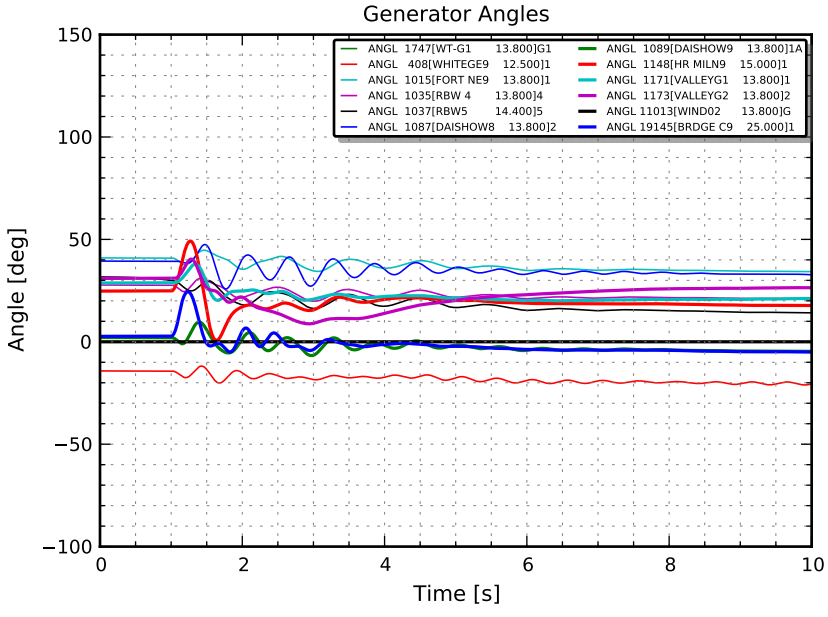


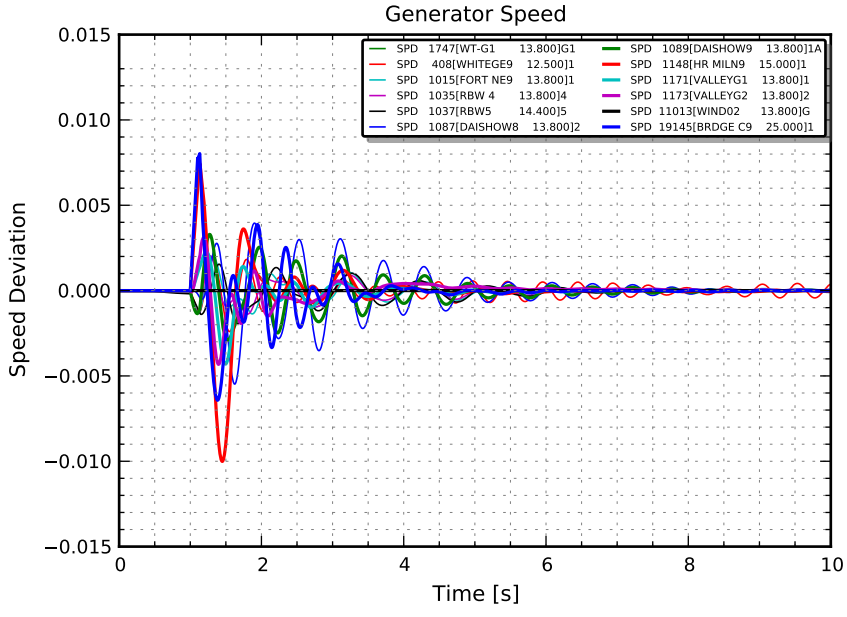


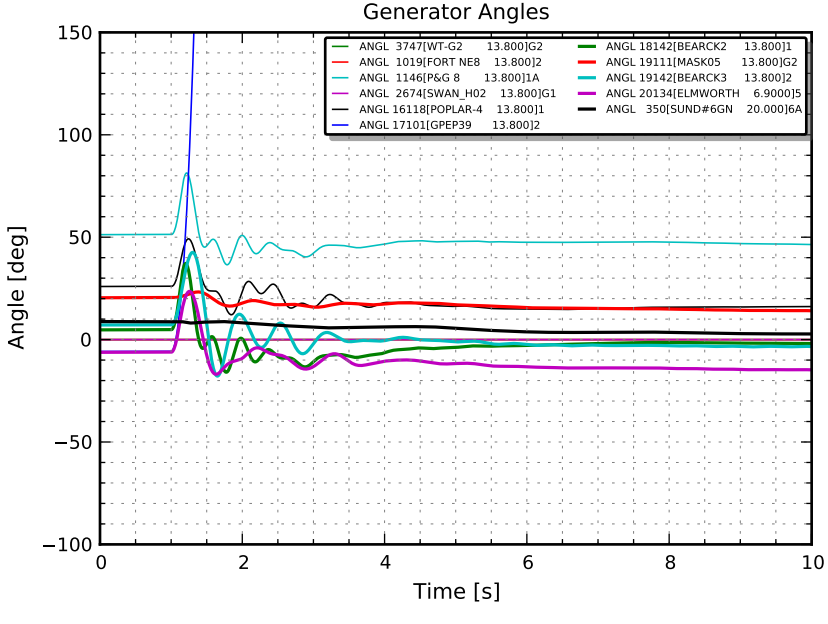
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_B.

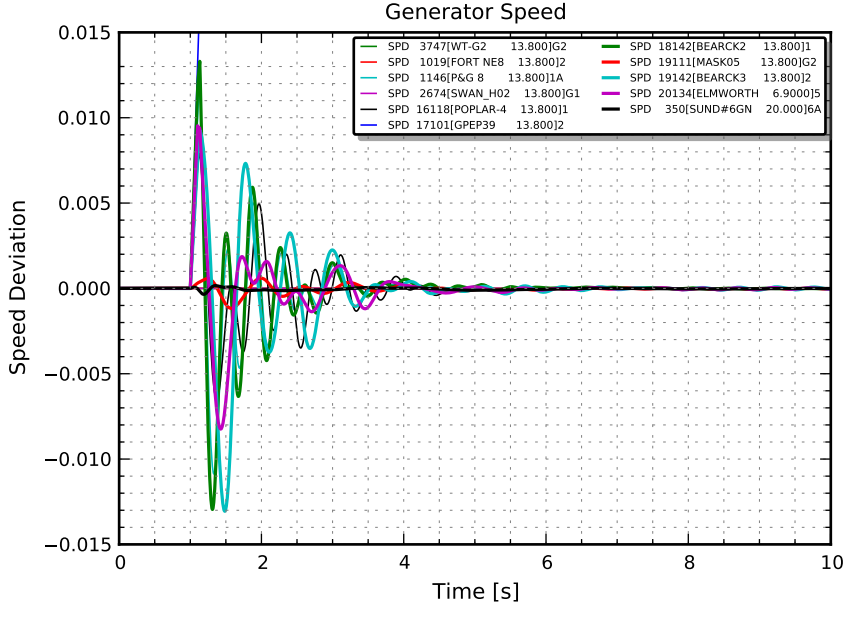
Study Area Generators

Appendix C2A
Figure: 030 (B. 2)





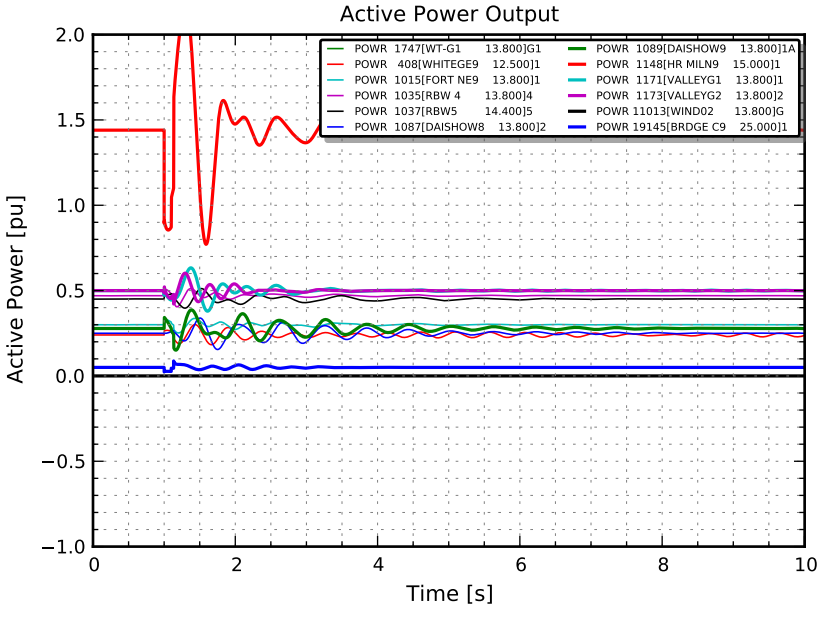


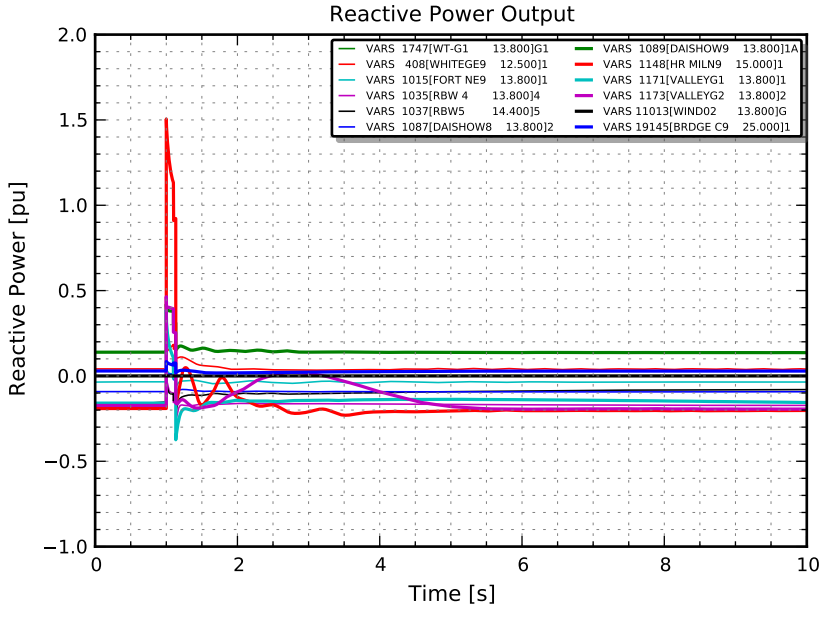


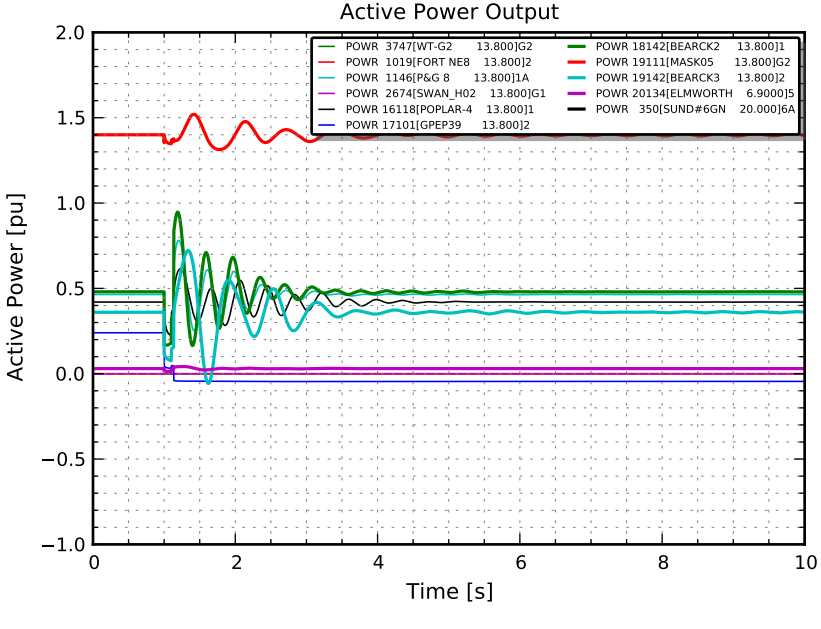
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_B.

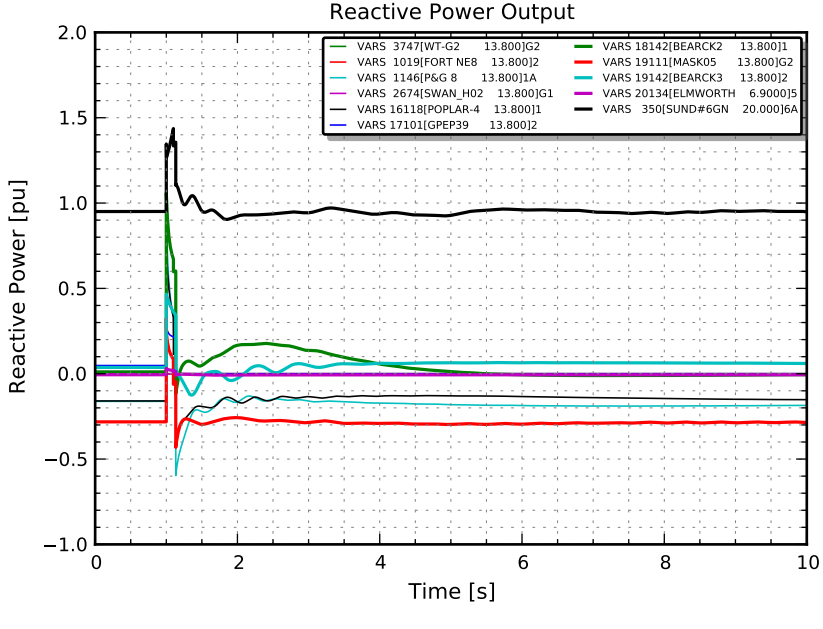
Study Area Generators

Appendix C2A
Figure: 030 (B. 3)





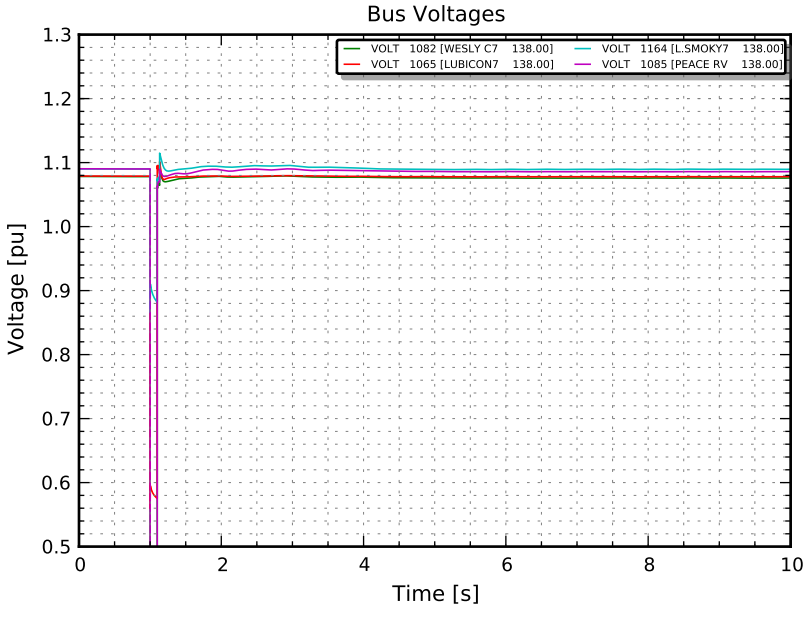


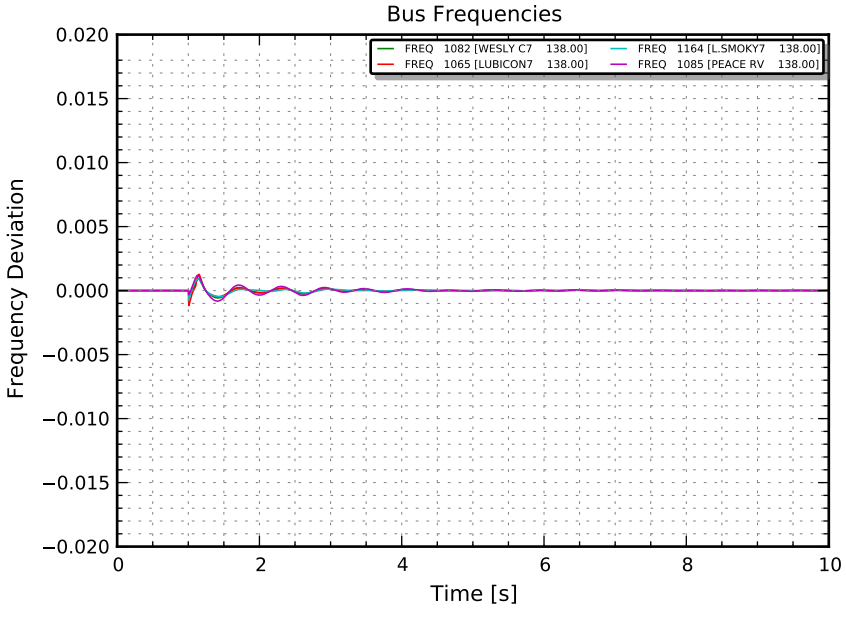


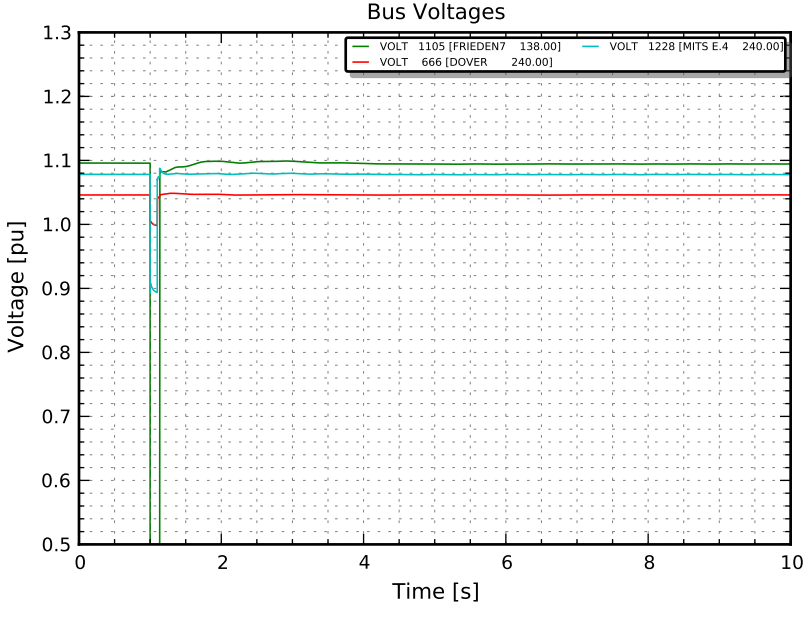
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_A.

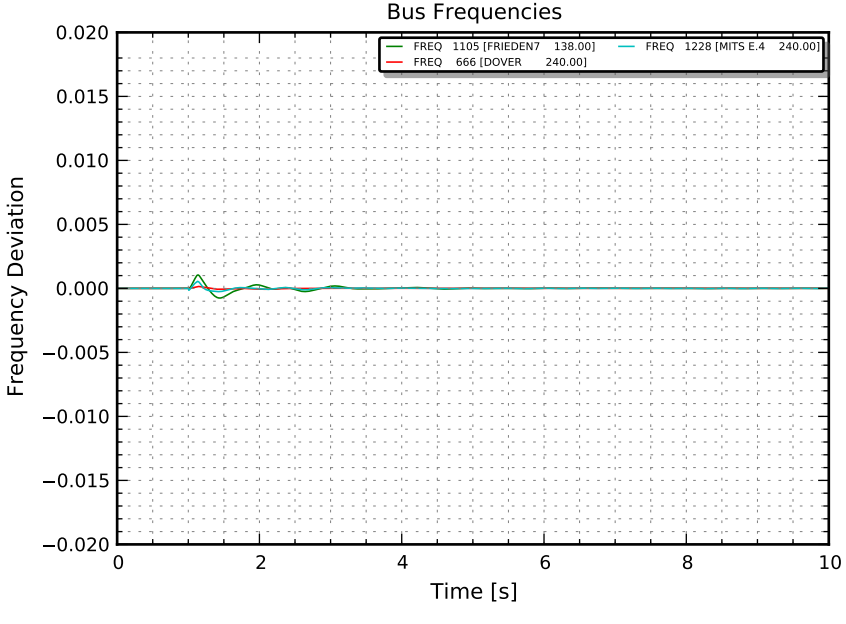
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 031 (A. 1)





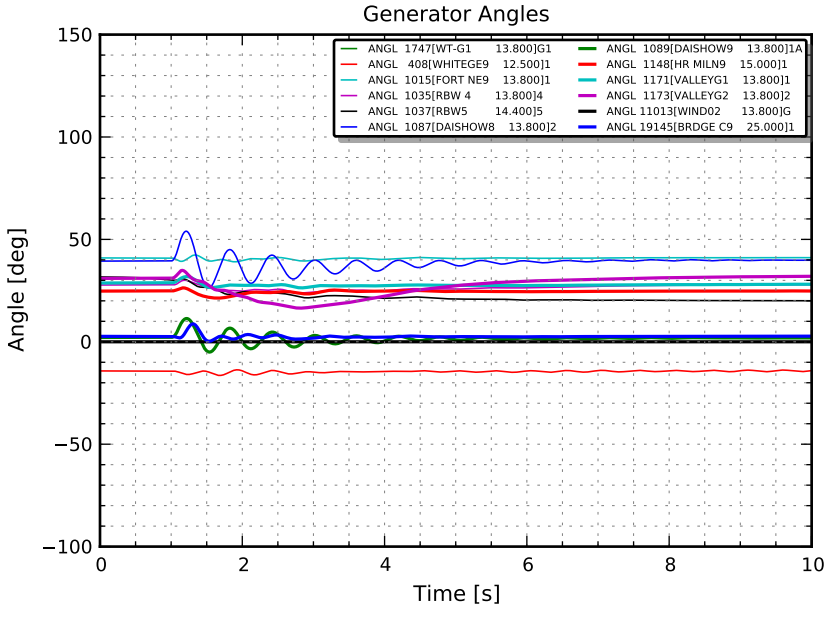


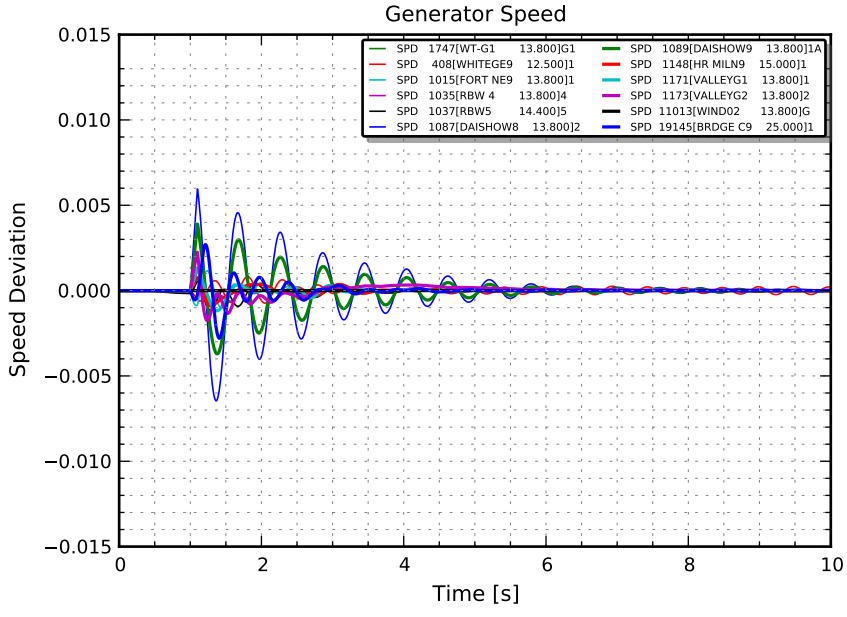


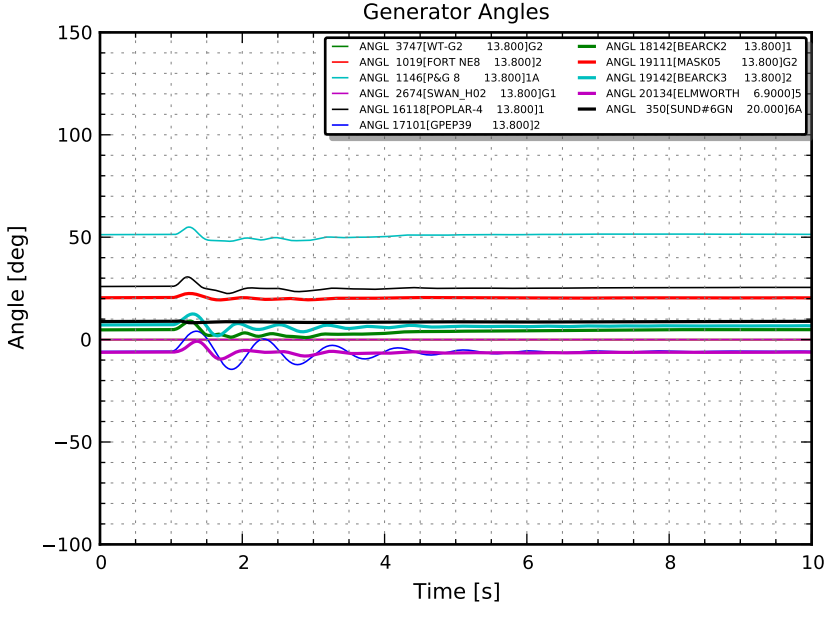
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_A.

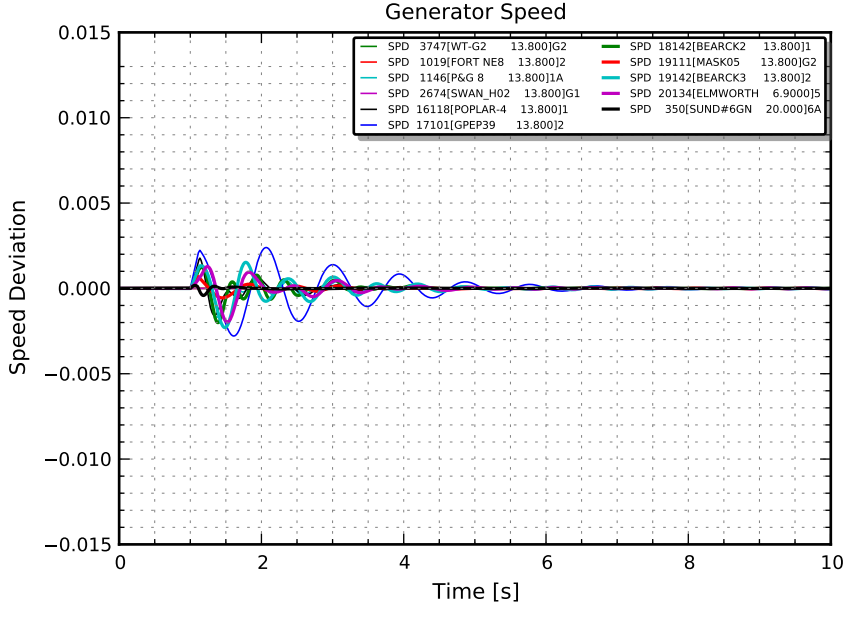
Study Area Generators

Appendix C2A
Figure: 031 (A. 2)





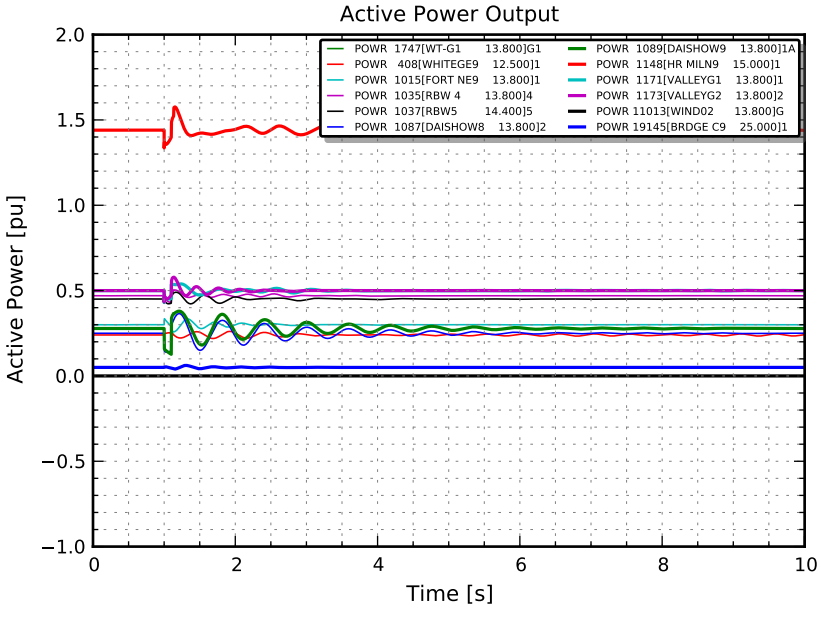


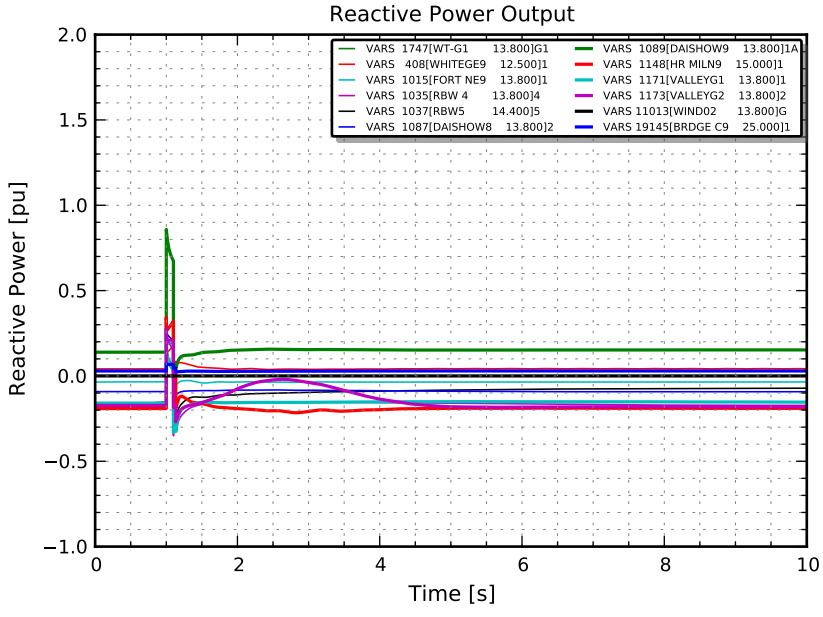


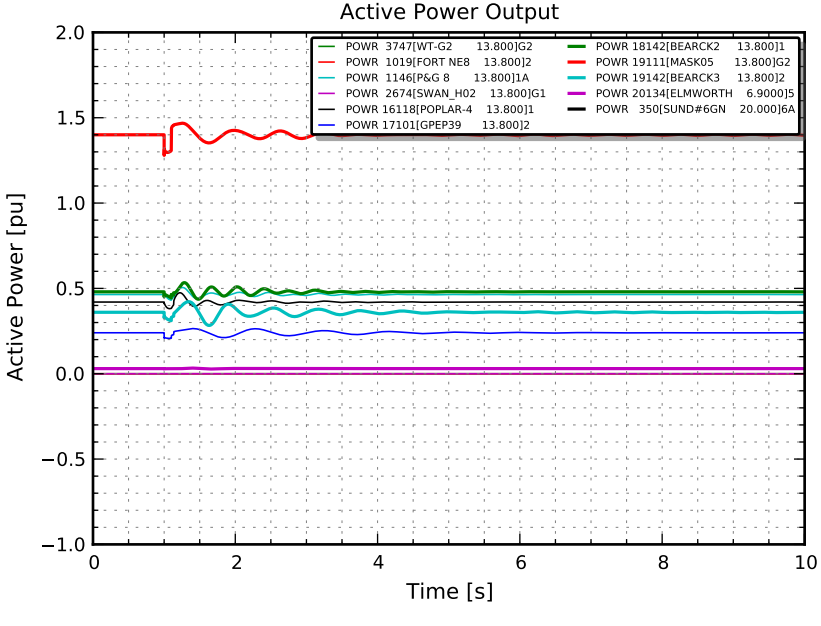
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_A.

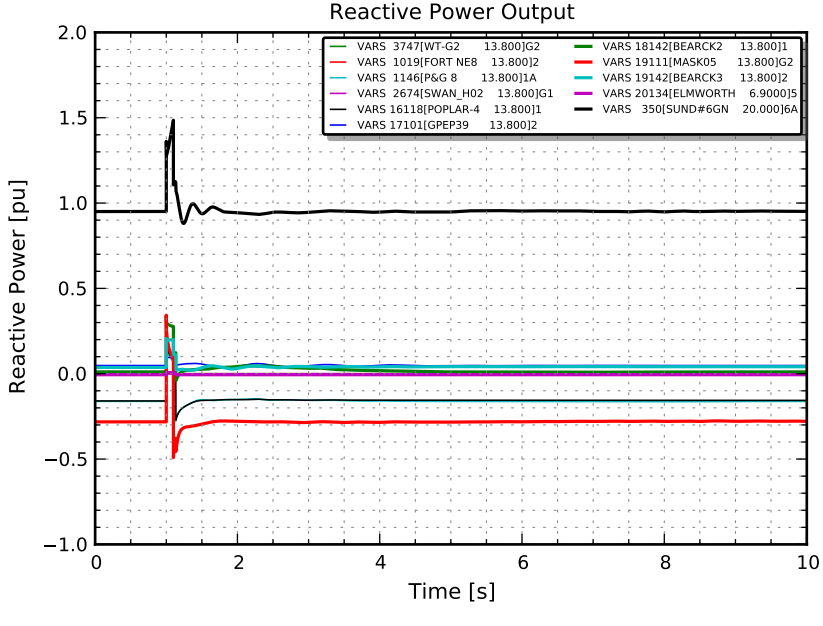
Study Area Generators

Appendix C2A
Figure: 031 (A. 3)





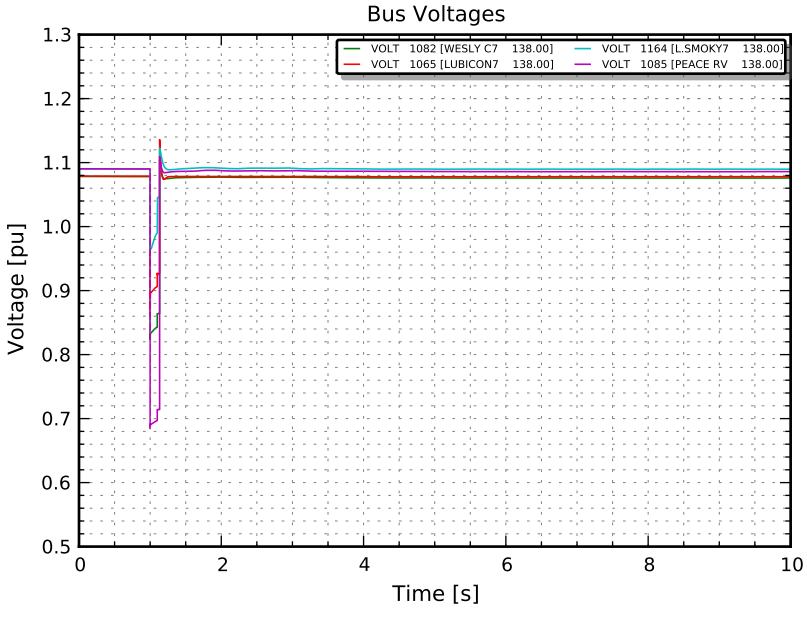


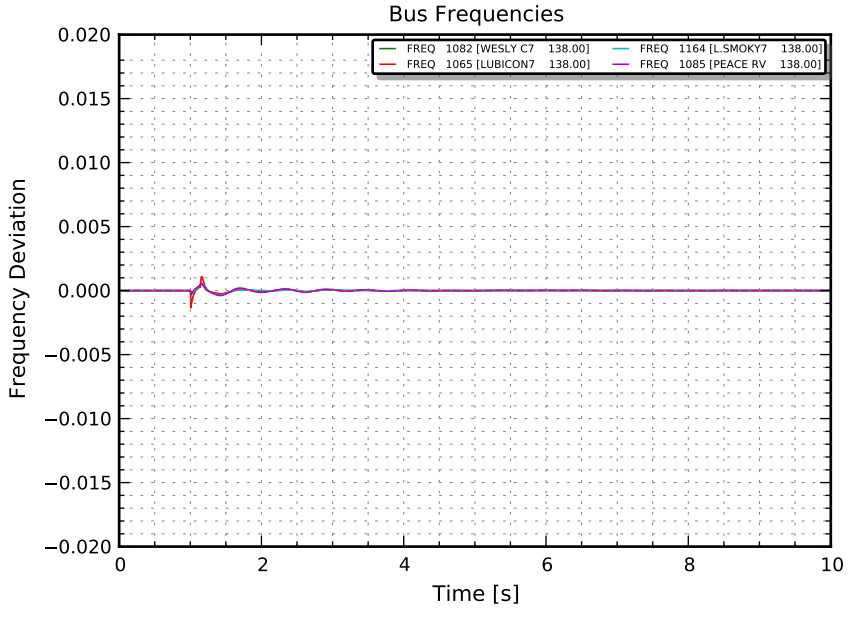


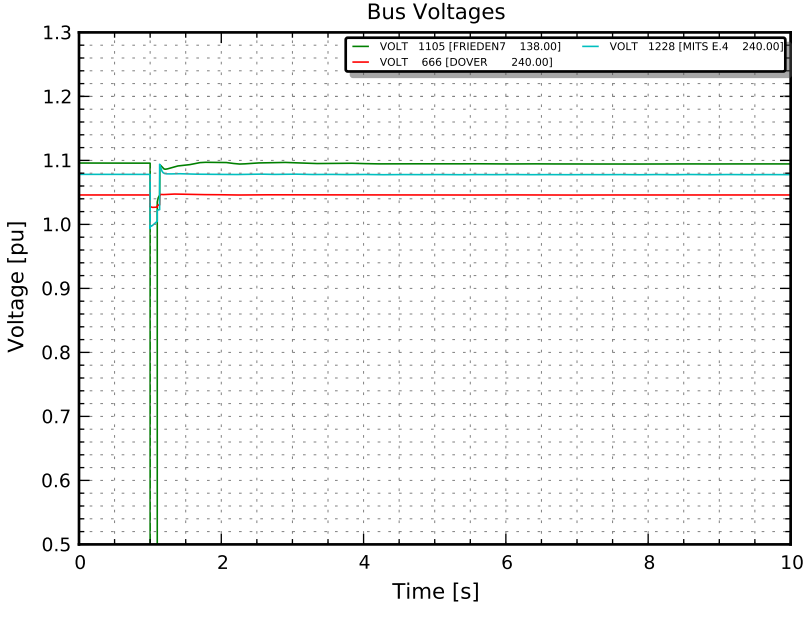
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_B.

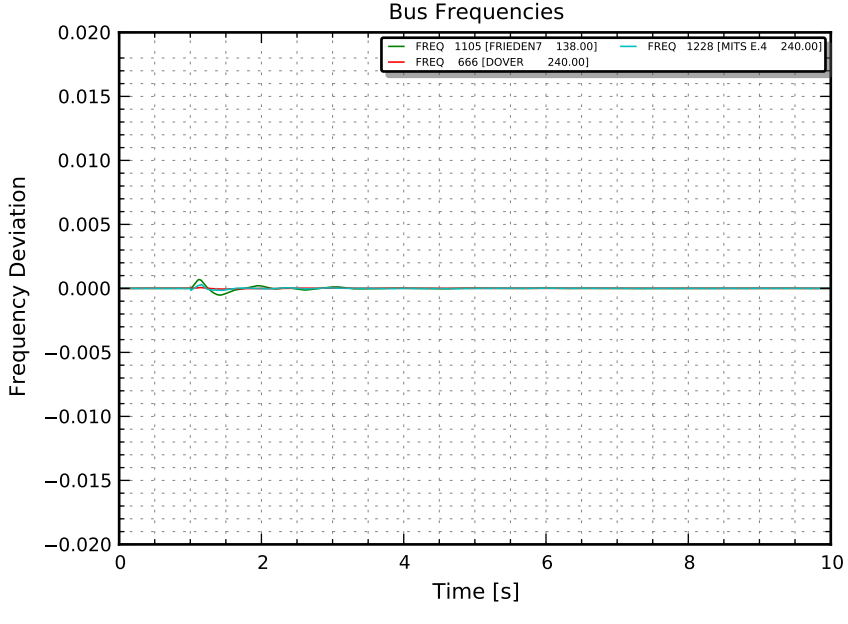
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 031 (B. 1)





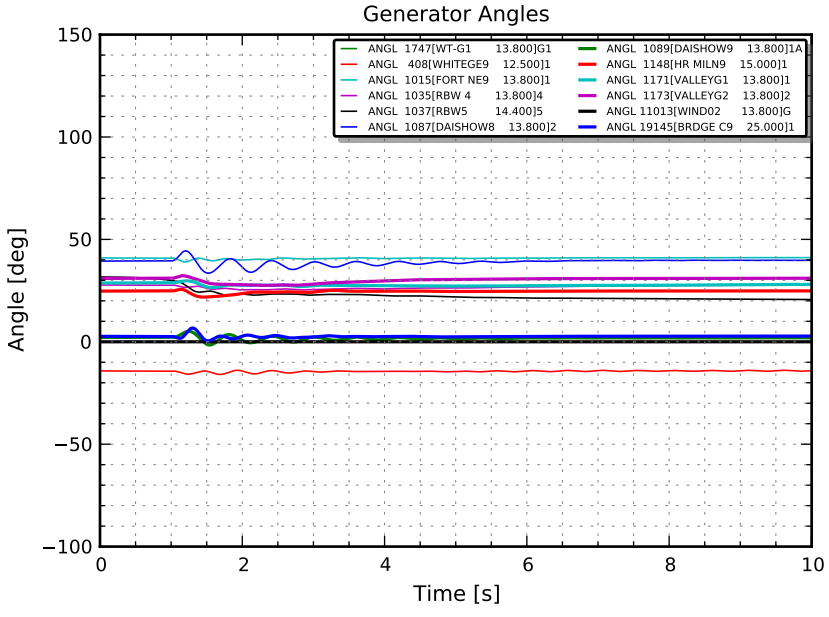


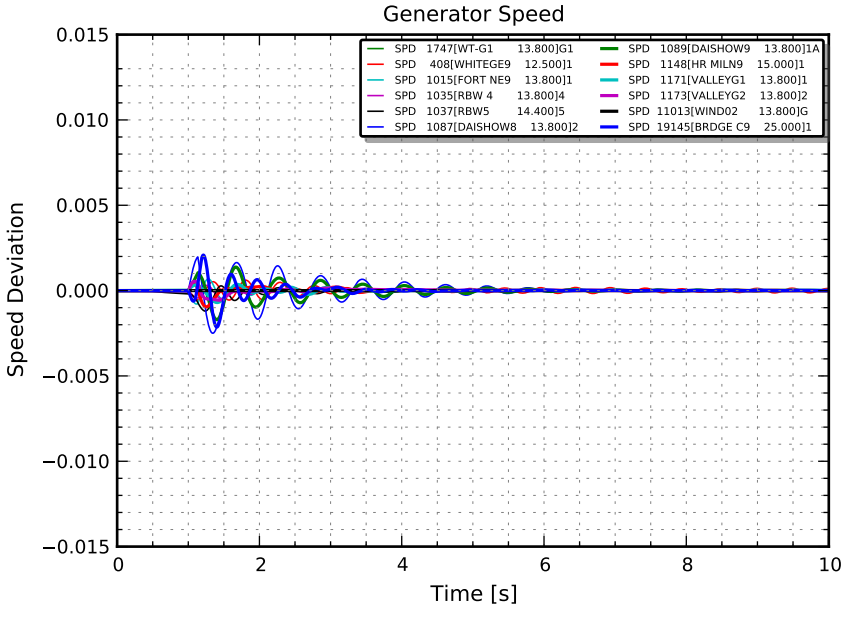


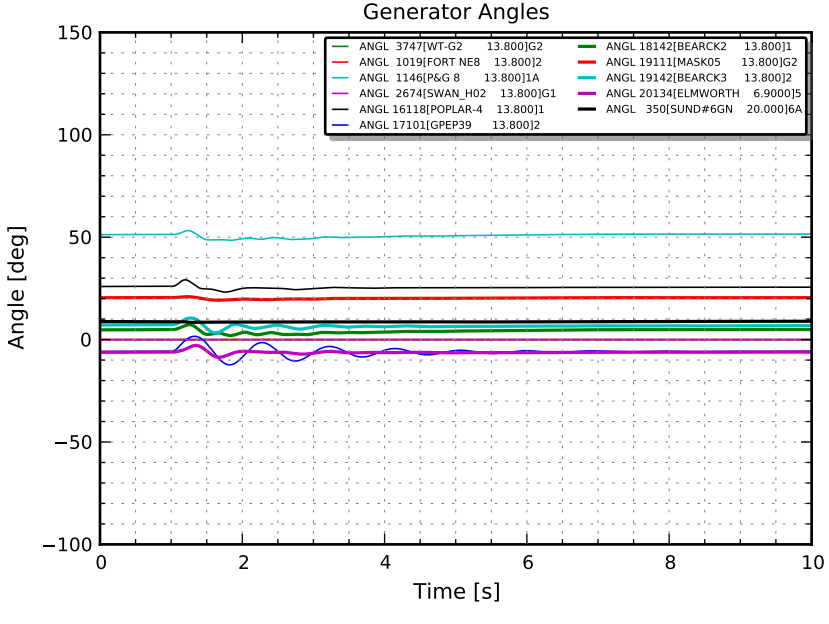
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_B.

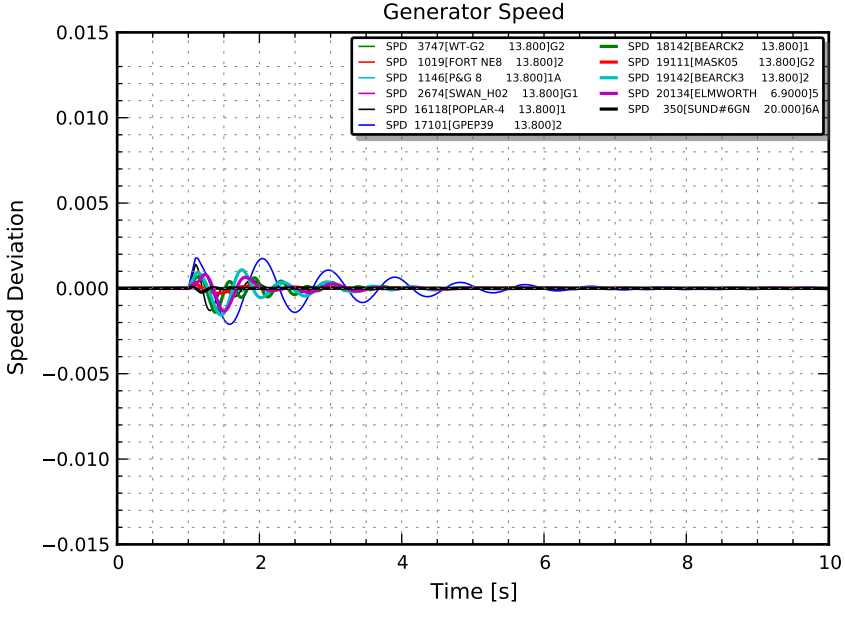
Study Area Generators

Appendix C2A
Figure: 031 (B. 2)





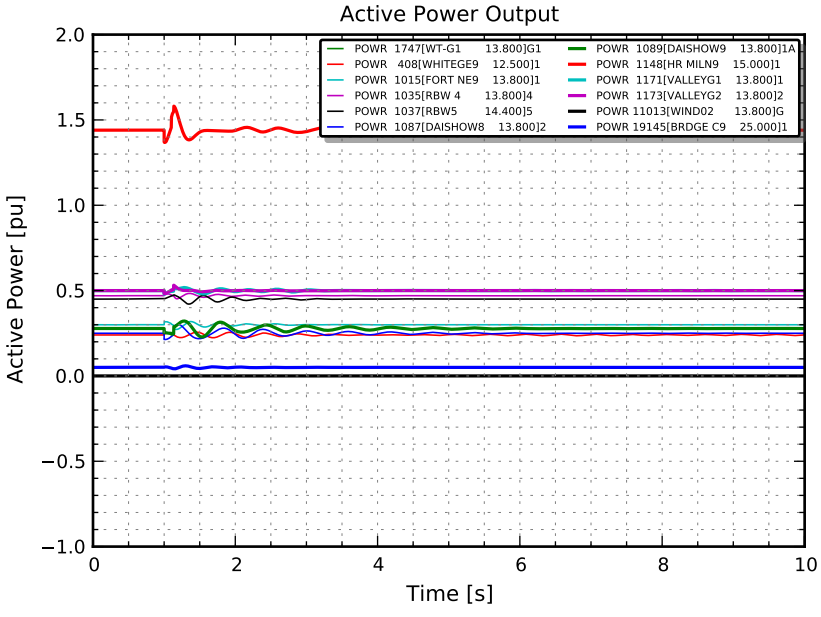


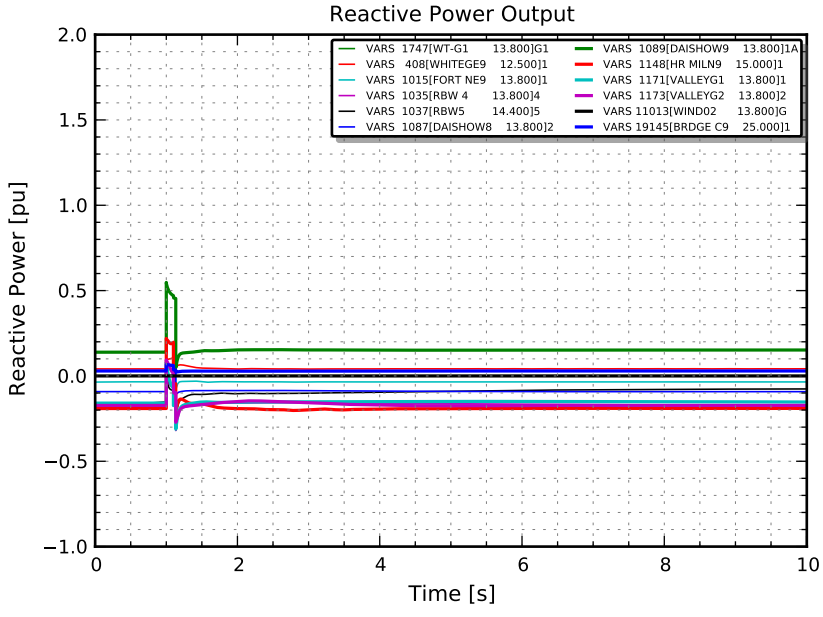


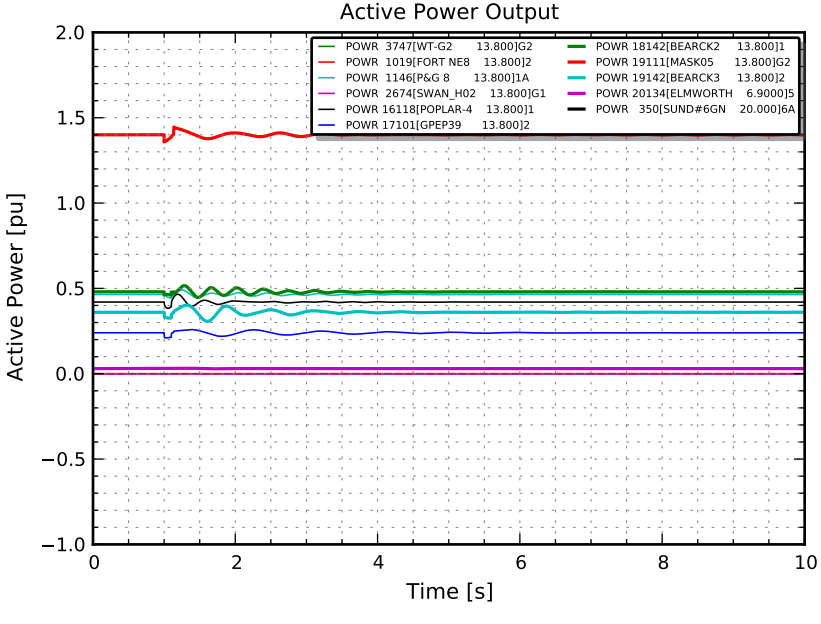
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_B.

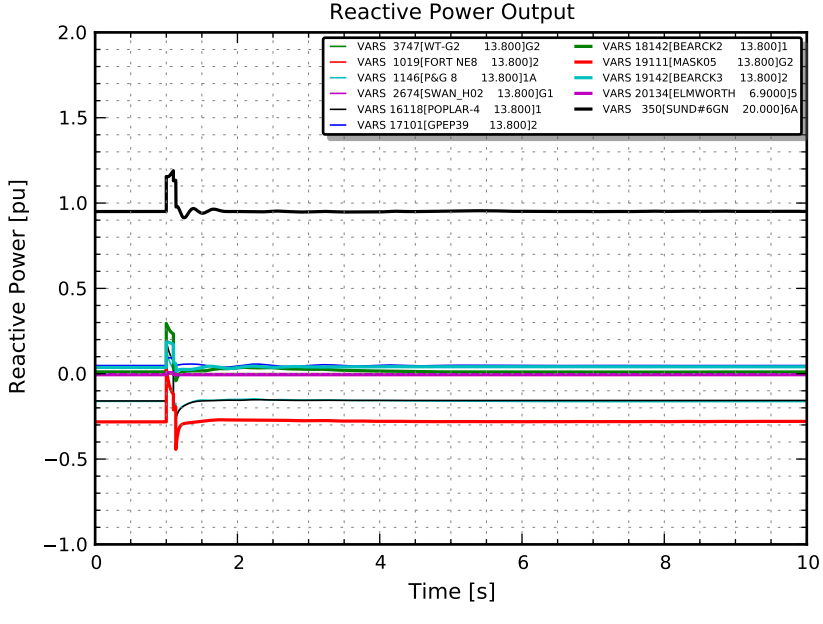
Study Area Generators

Appendix C2A
Figure: 031 (B. 3)





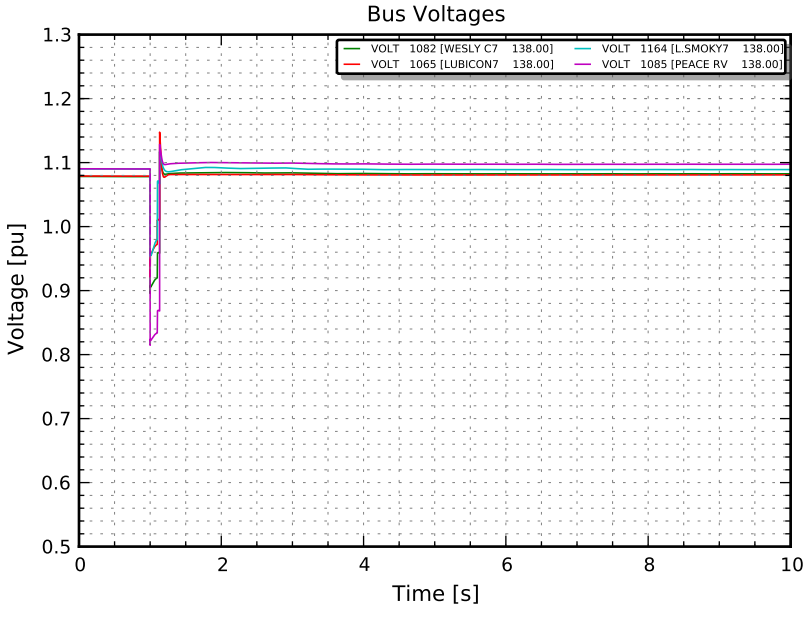


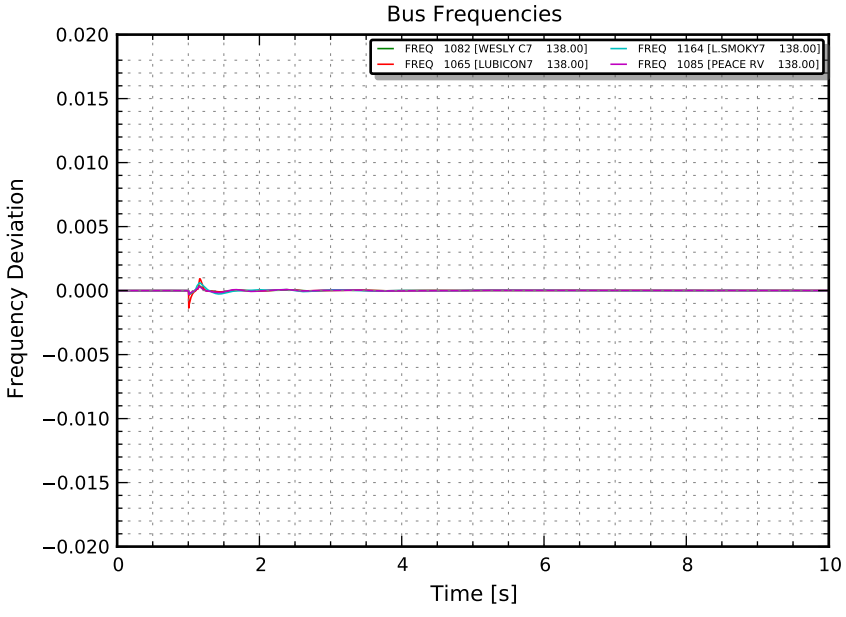


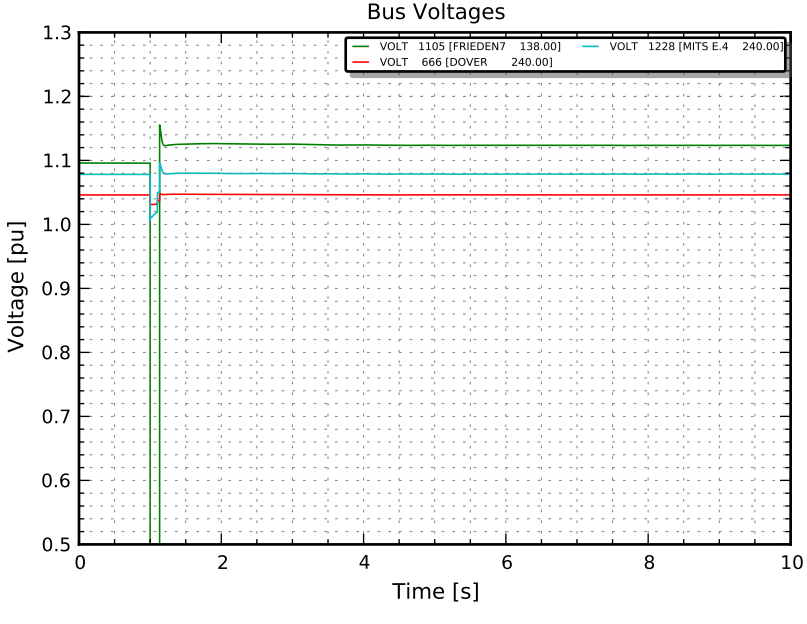
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 032 7L73 RYCROFT to FRIEDENSTAL_A.

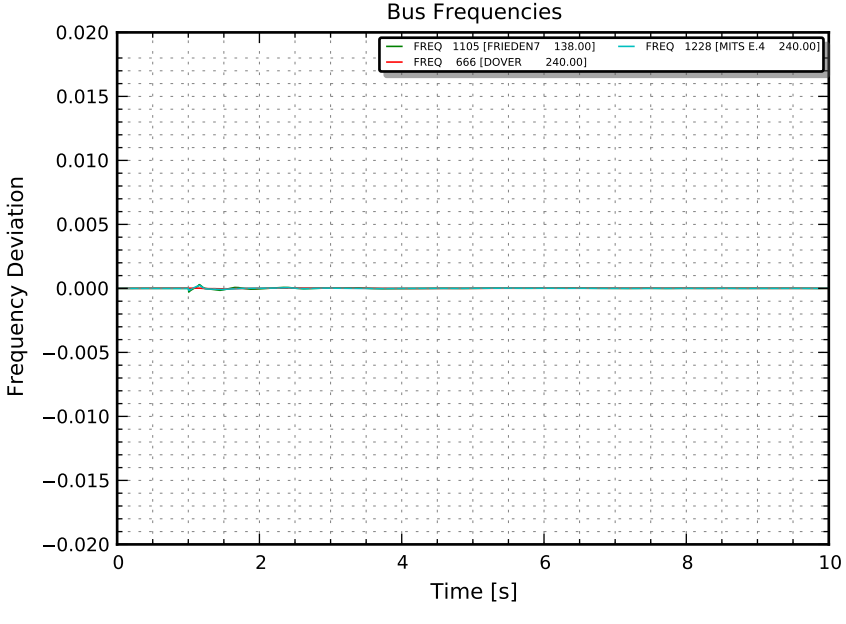
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 032 (A. 1)





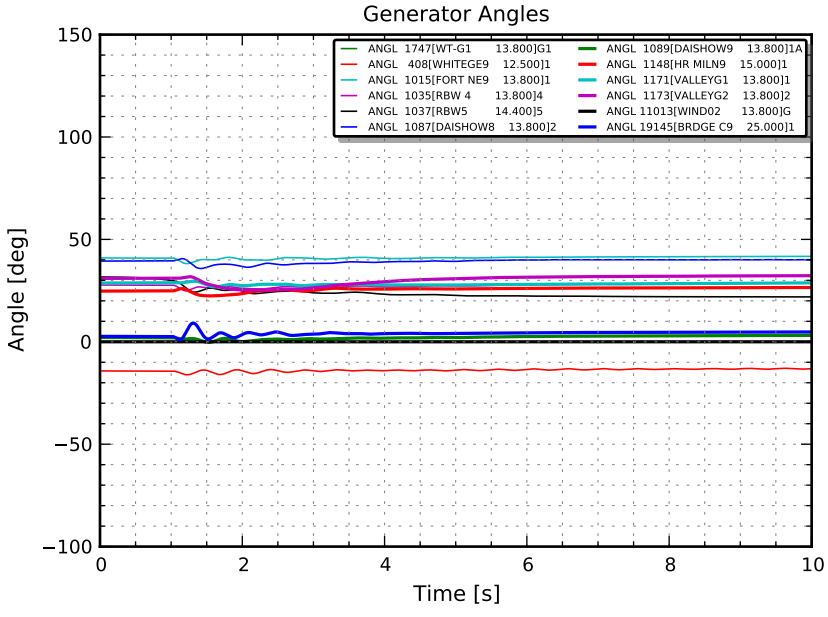


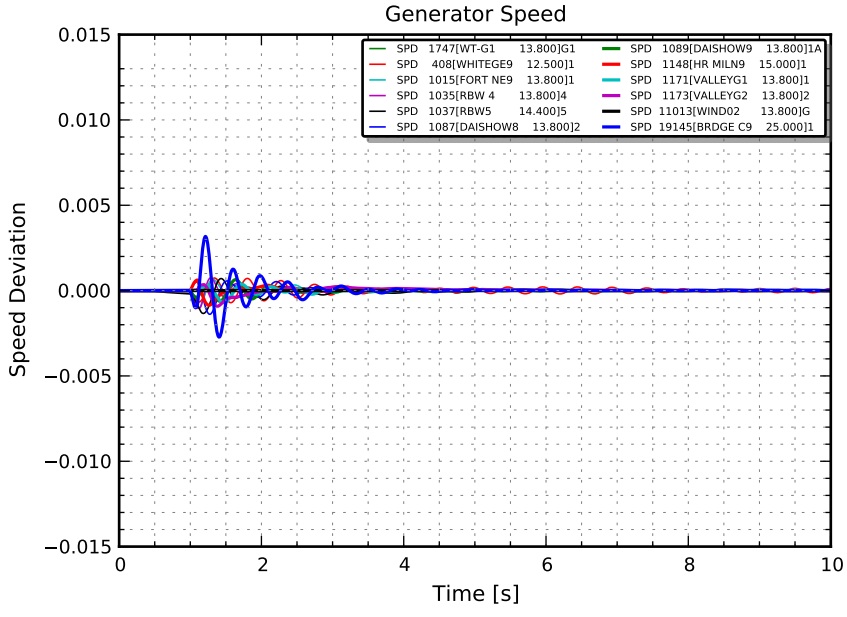


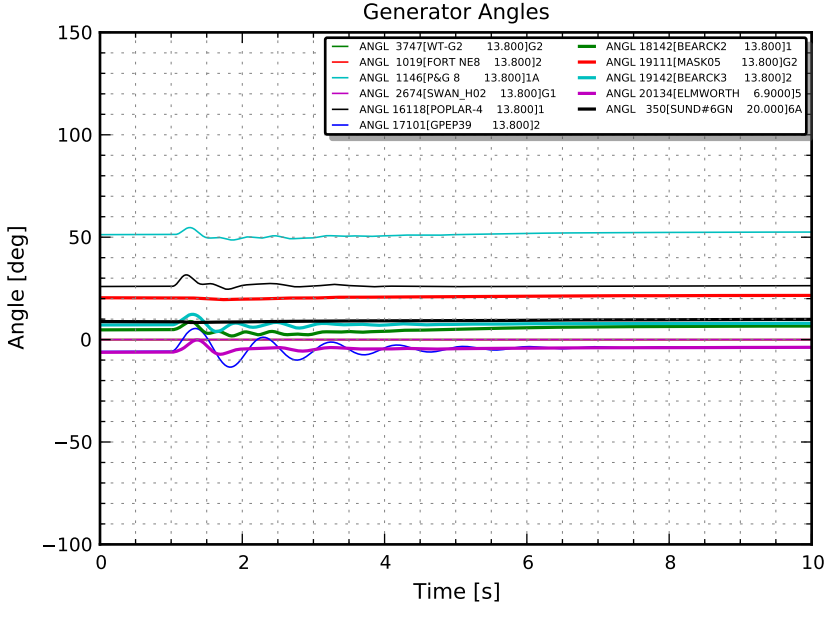
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 032 7L73 RYCROFT to FRIEDENSTAL_A.

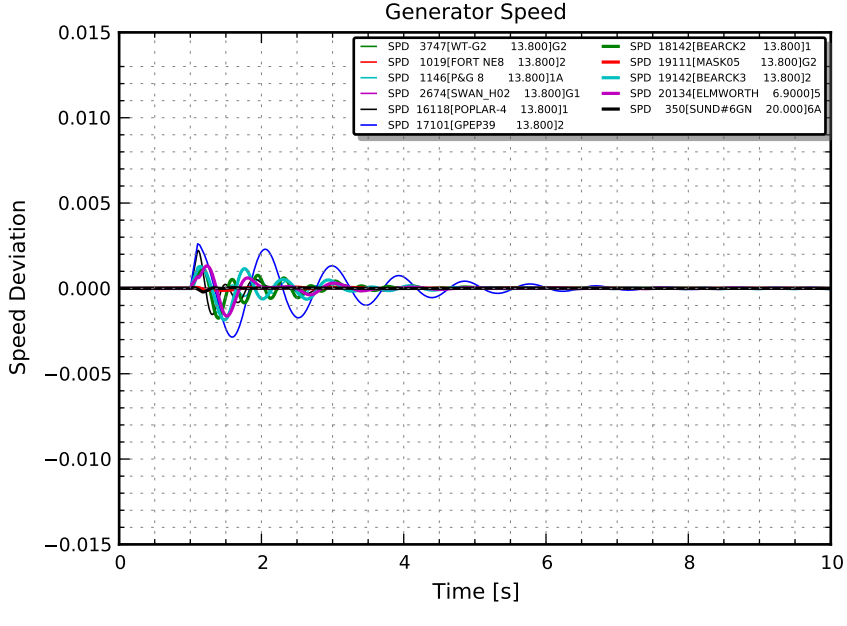
Study Area Generators

Appendix C2A
Figure: 032 (A. 2)





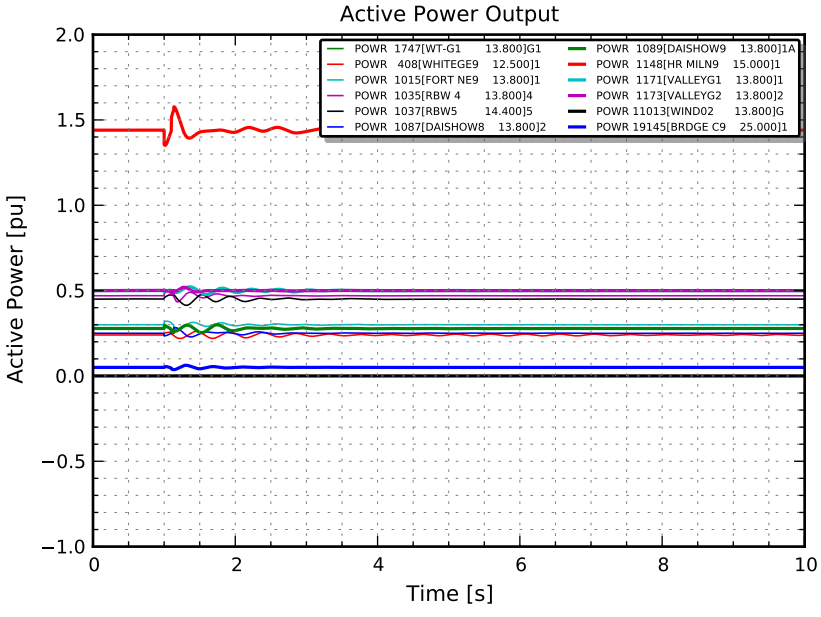


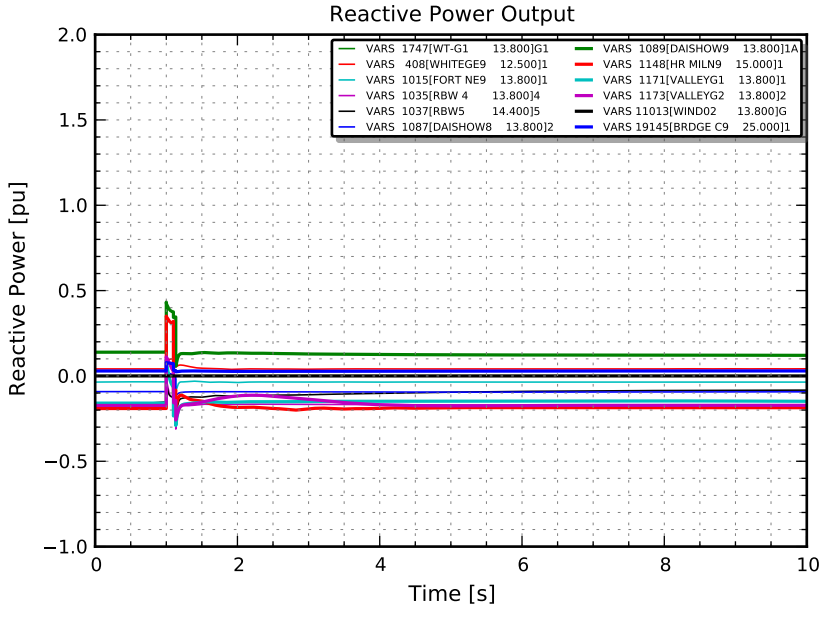


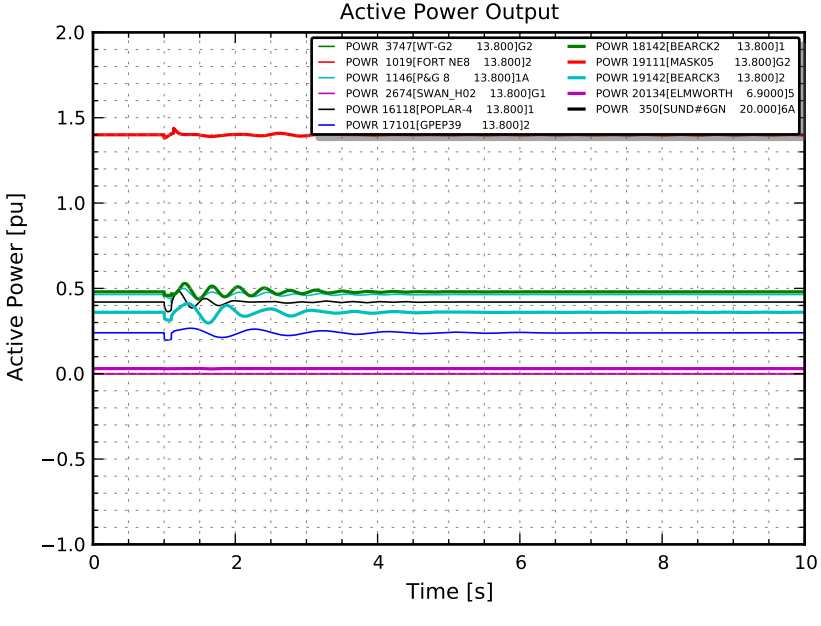
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 032 7L73 RYCROFT to FRIEDENSTAL_A.

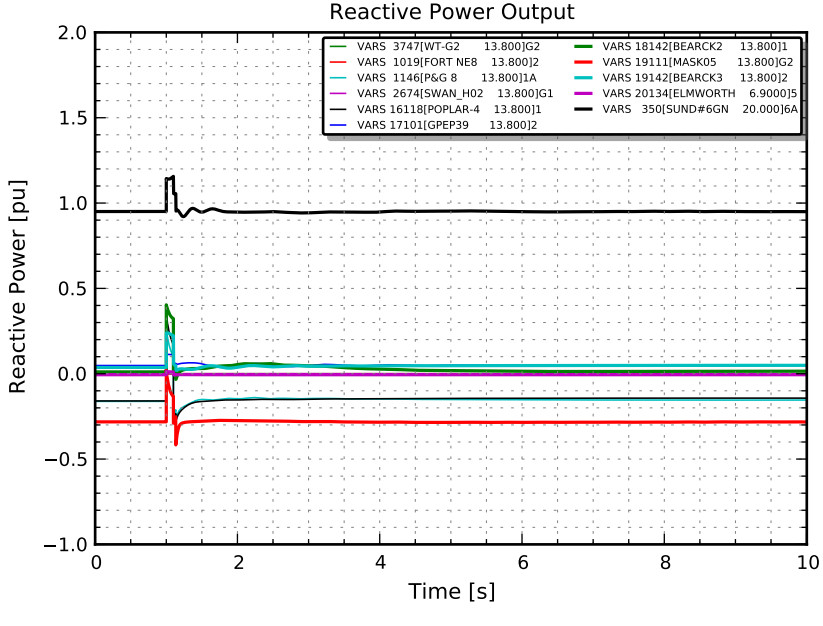
Study Area Generators

Appendix C2A
Figure: 032 (A. 3)





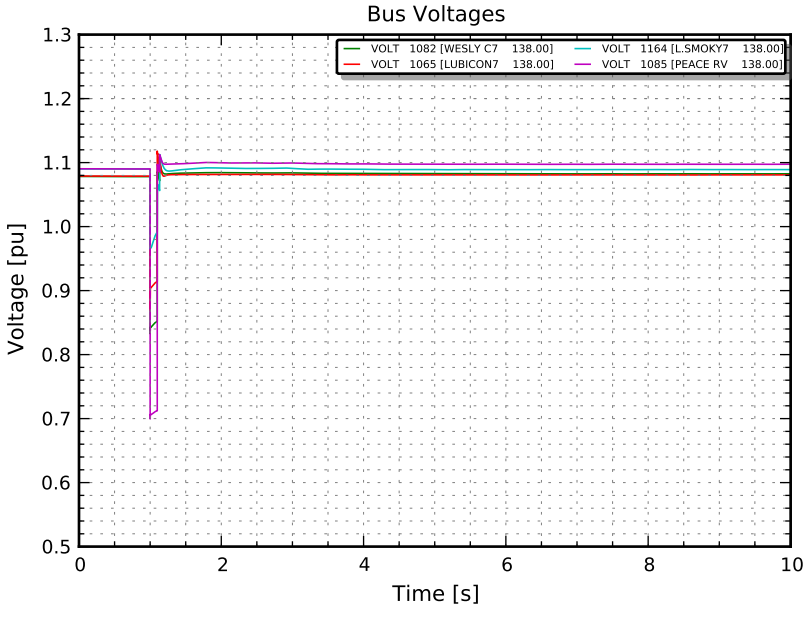


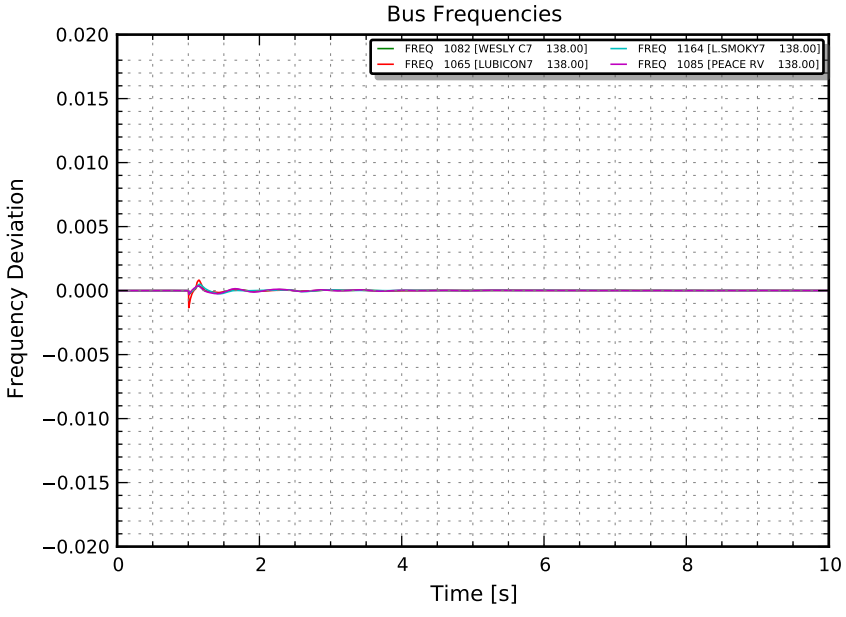


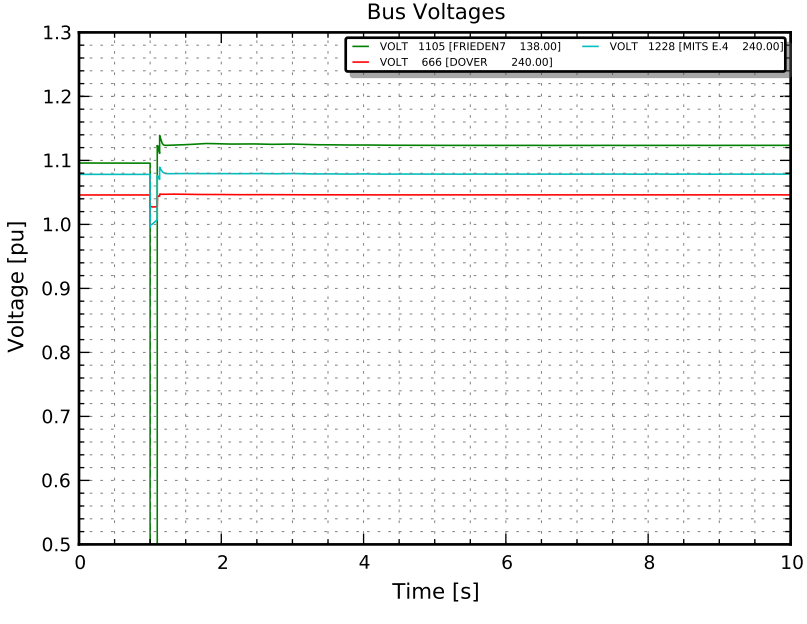
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 032 7L73 RYCROFT to FRIEDENSTAL_B.

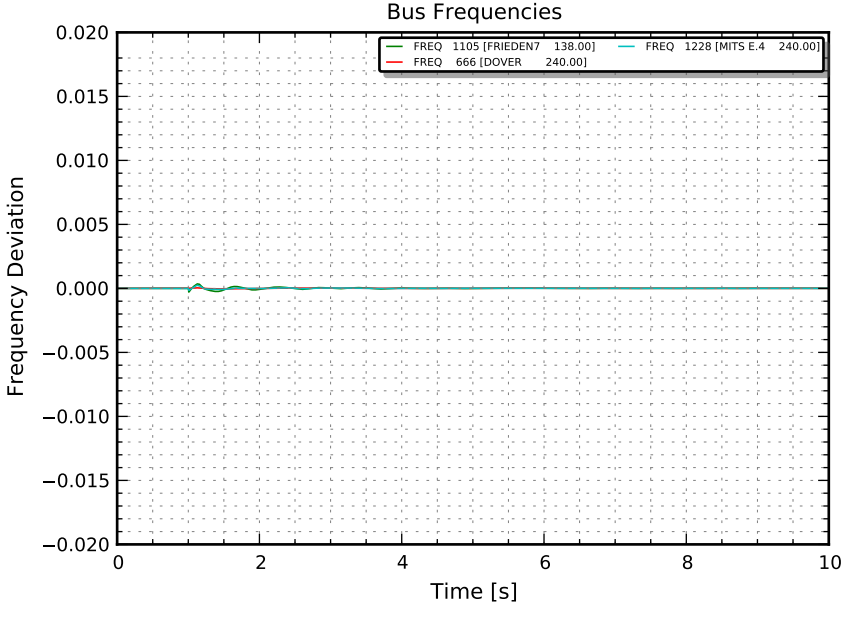
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 032 (B. 1)





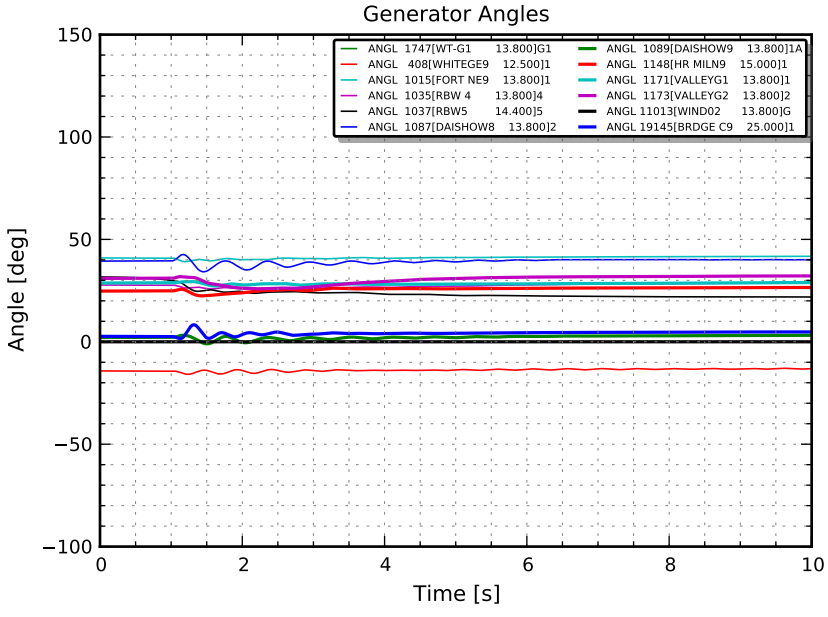


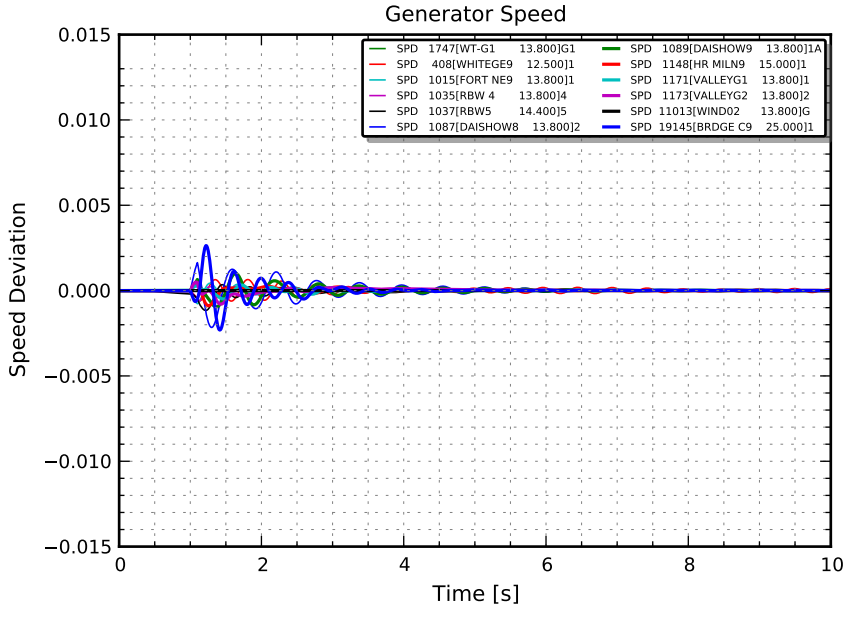


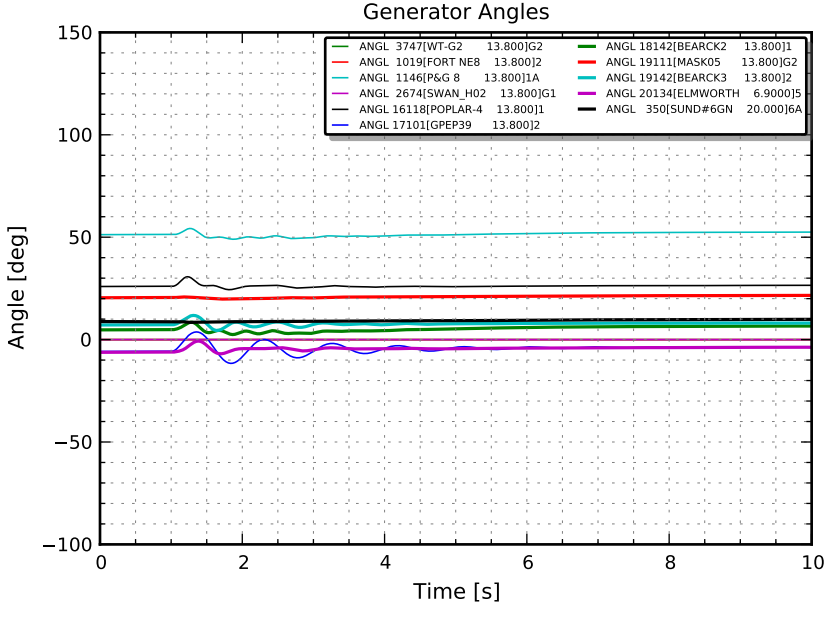
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 032 7L73 RYCROFT to FRIEDENSTAL_B.

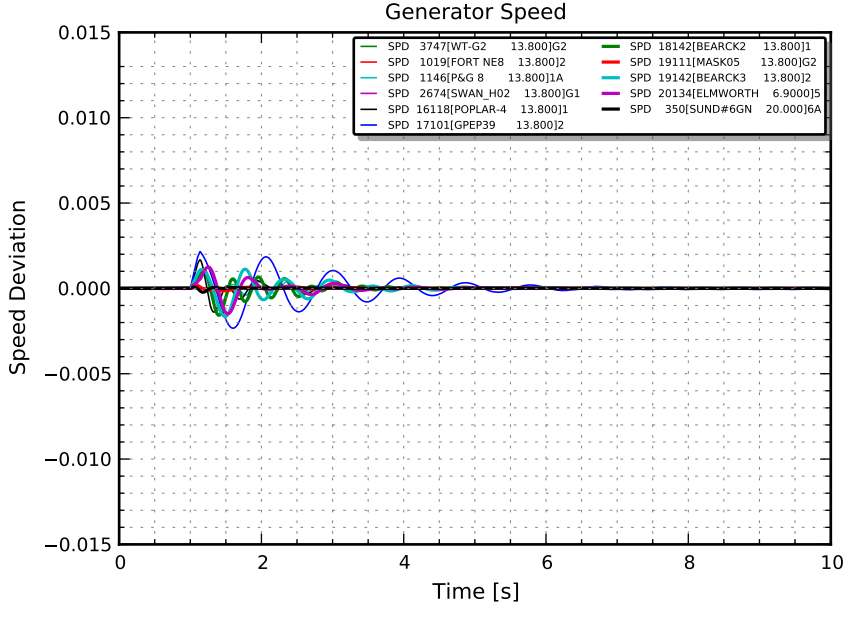
Study Area Generators

Appendix C2A
Figure: 032 (B. 2)





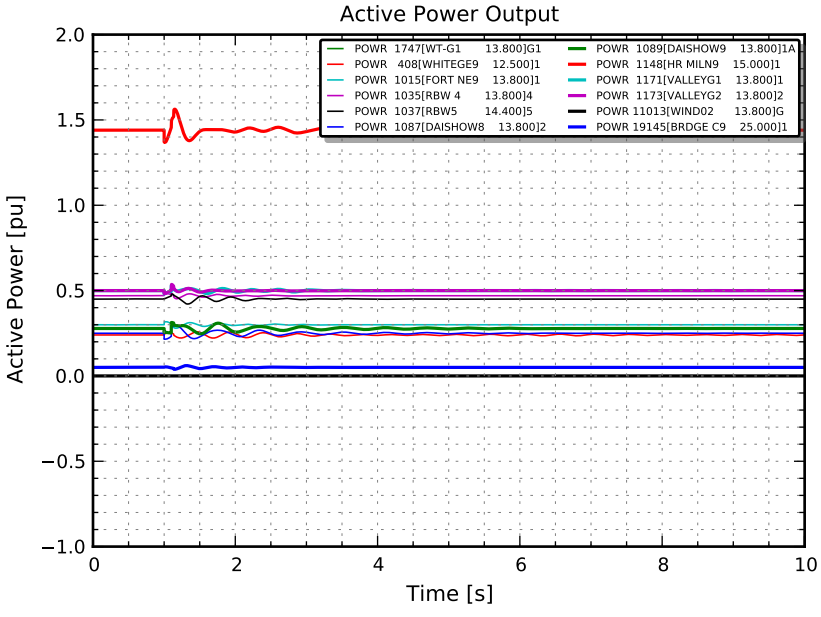


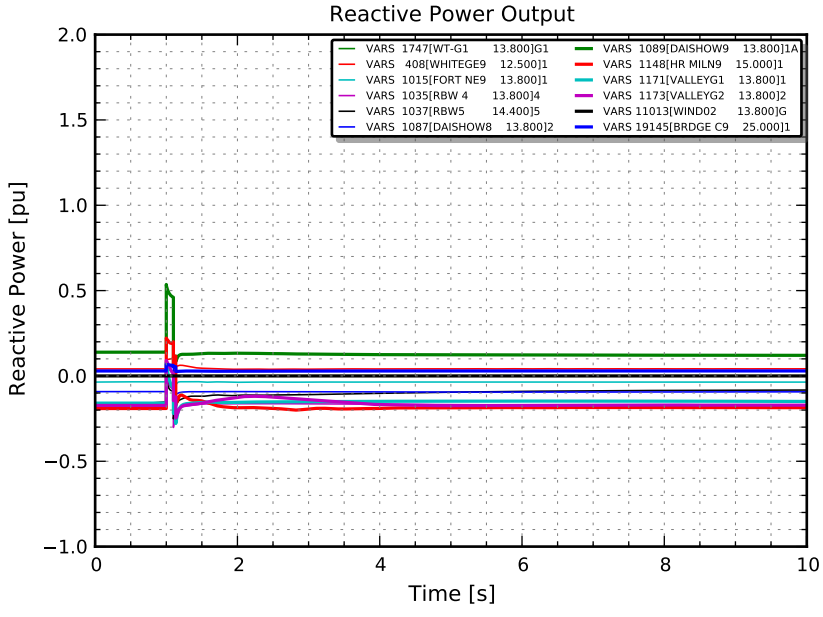


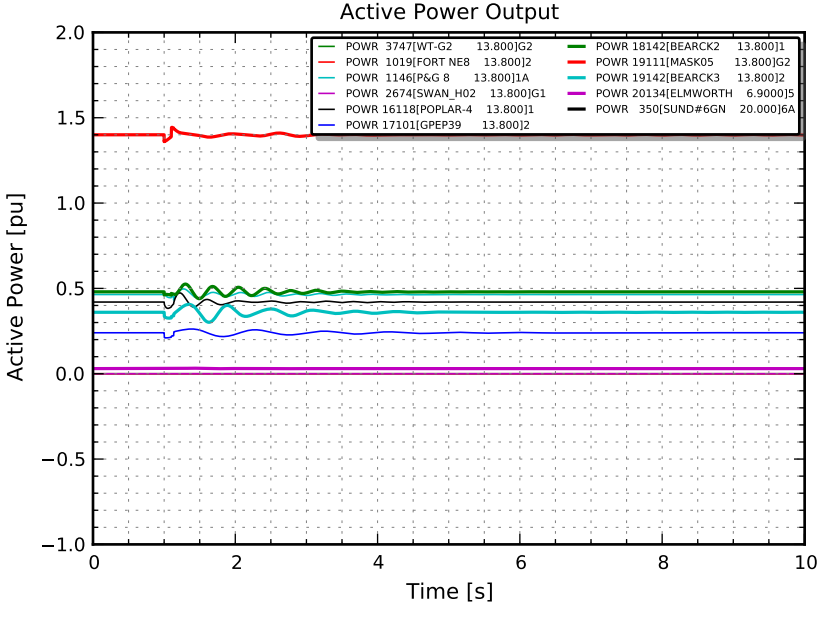
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 032 7L73 RYCROFT to FRIEDENSTAL_B.

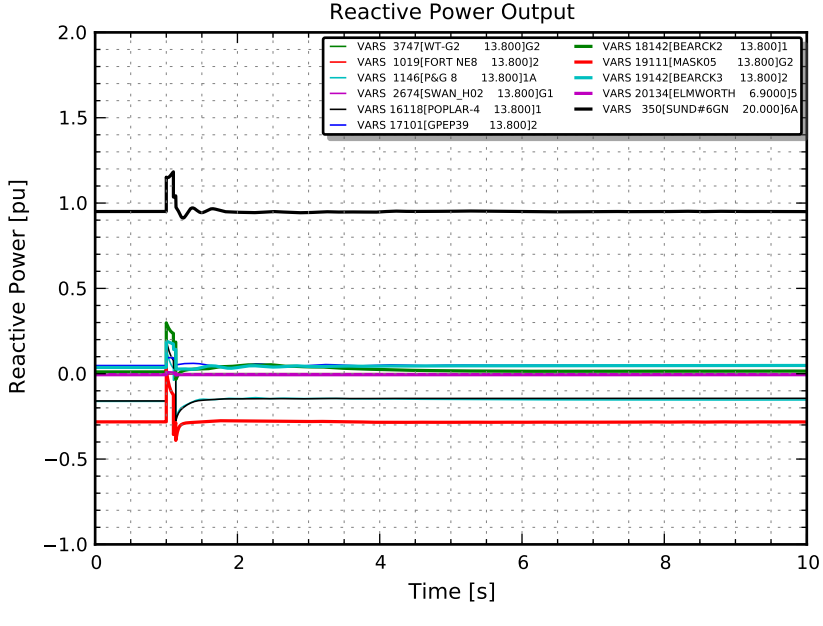
Study Area Generators

Appendix C2A
Figure: 032 (B. 3)





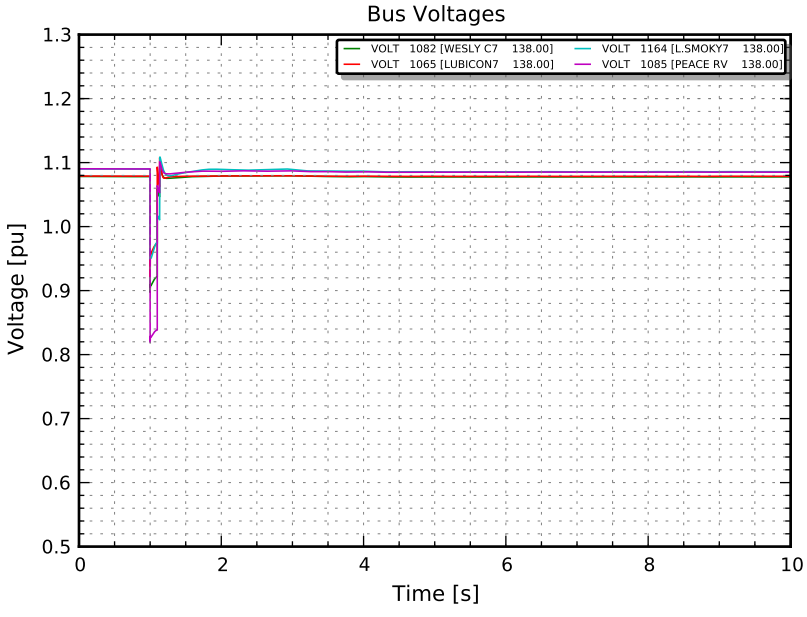


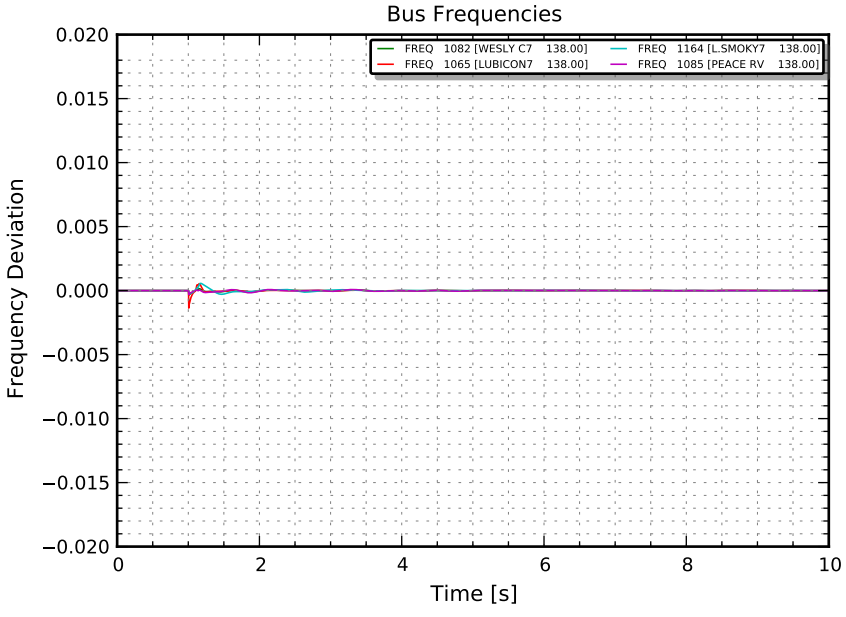


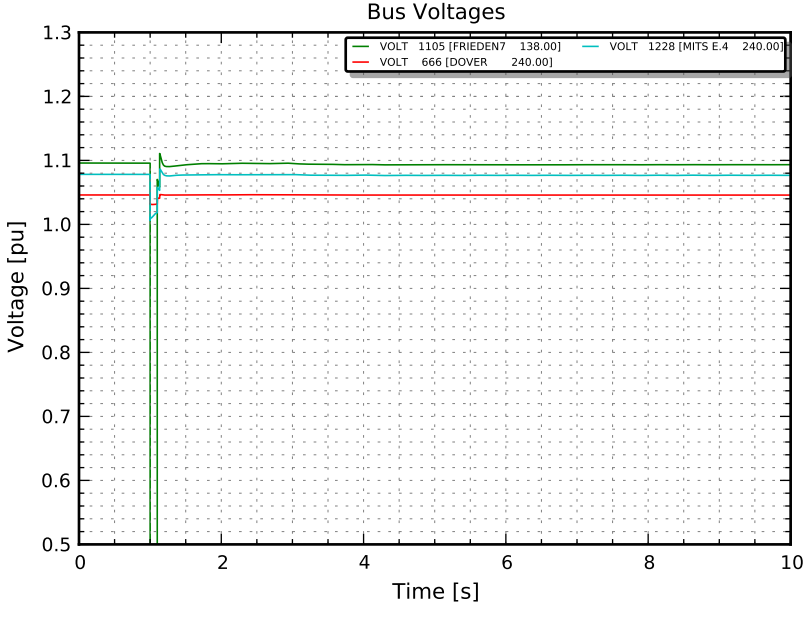
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_A.

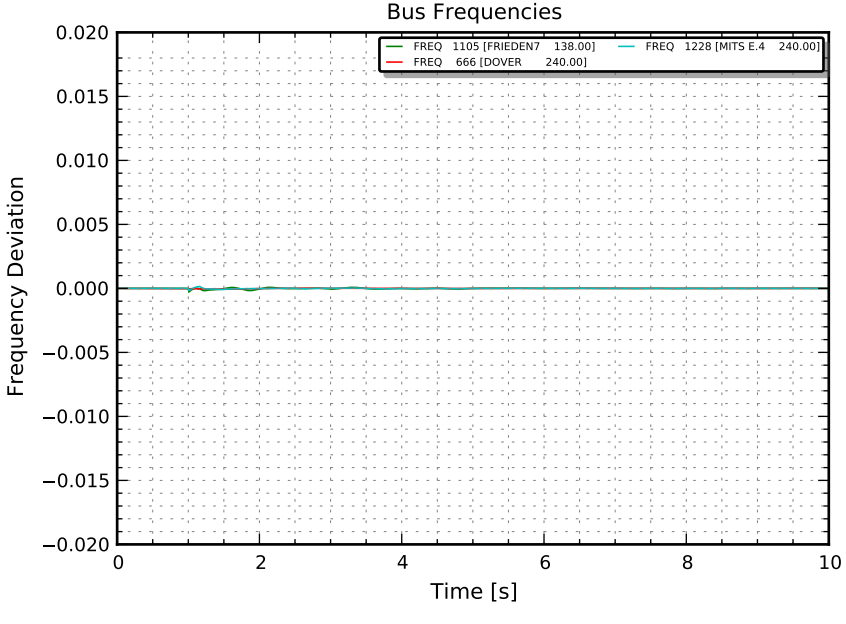
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 033 (A. 1)





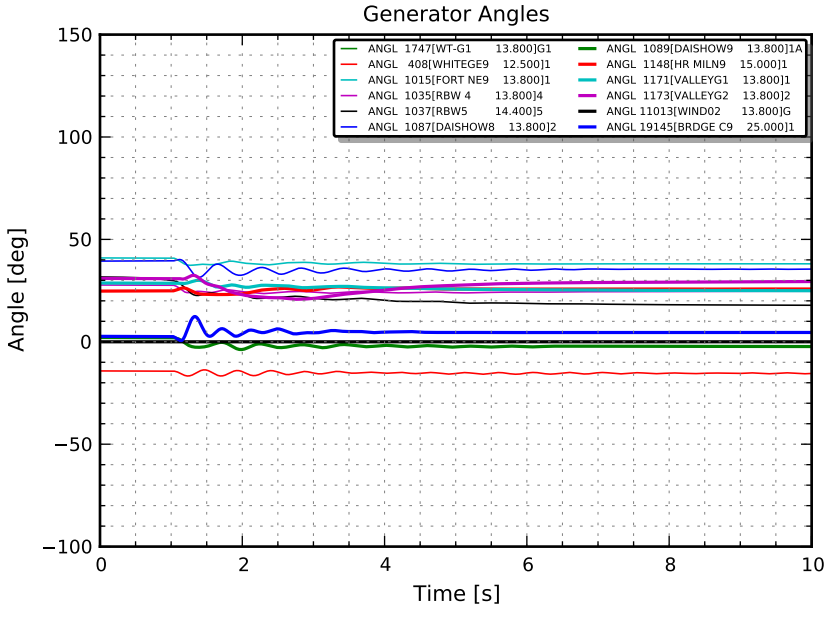


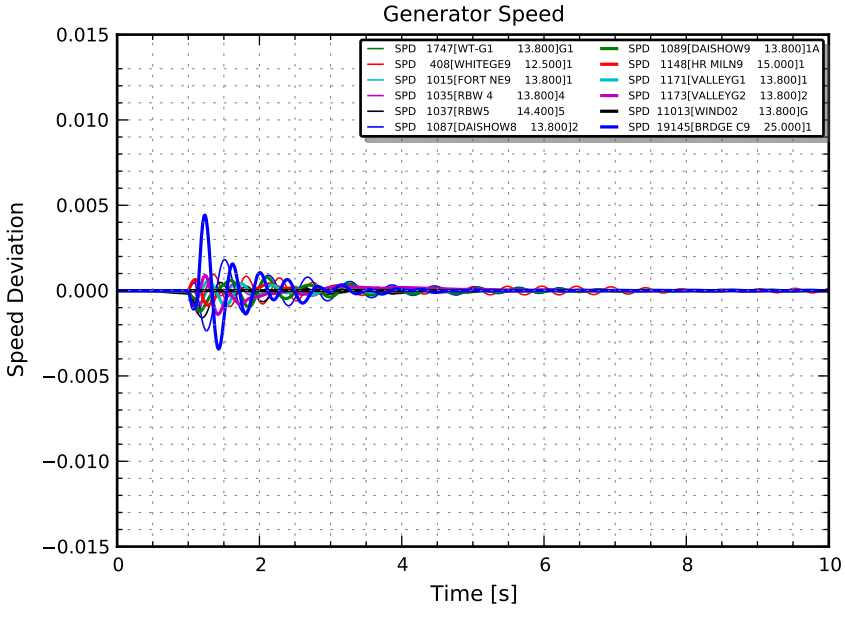


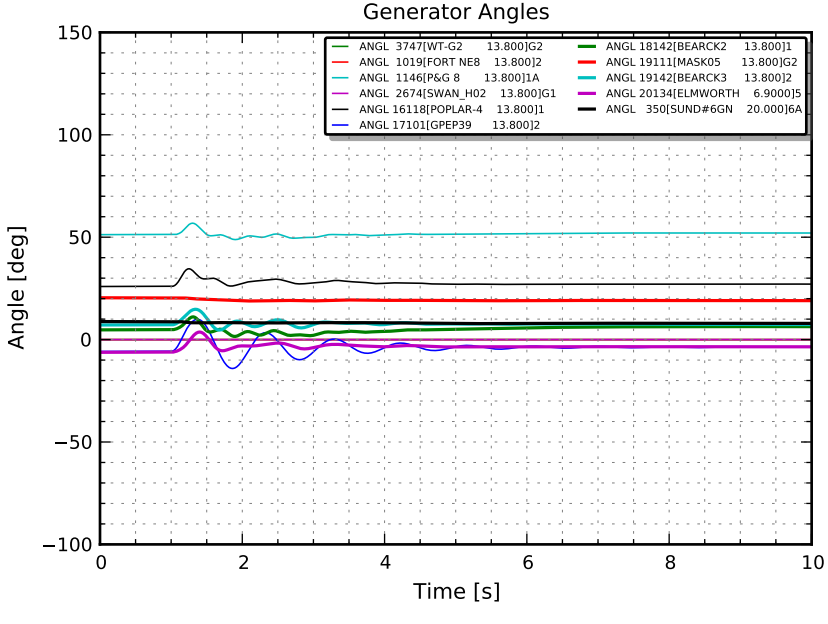
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_A.

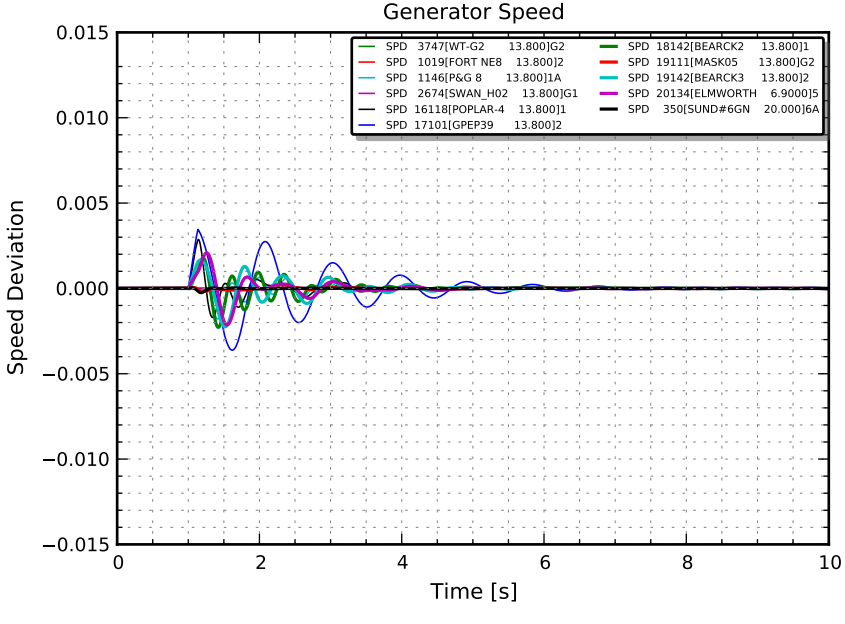
Study Area Generators

Appendix C2A
Figure: 033 (A. 2)





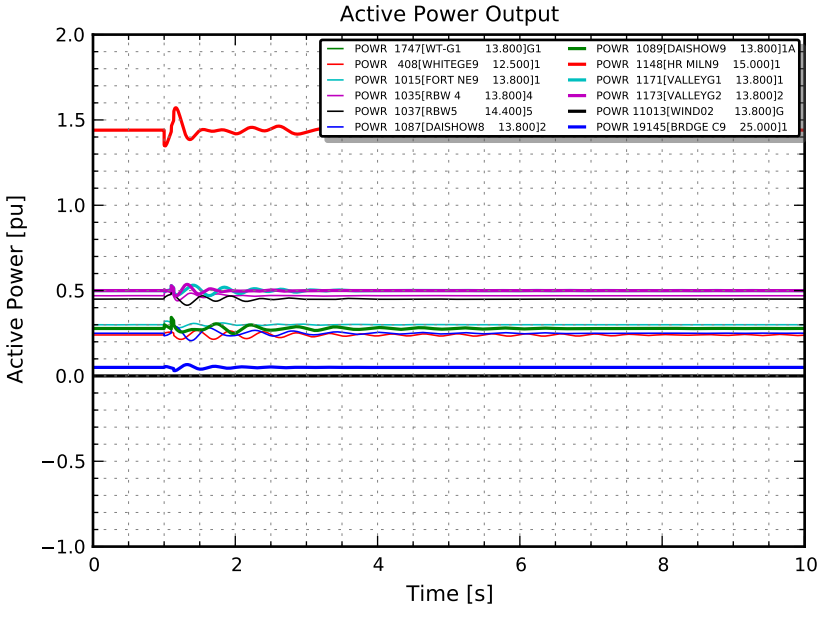


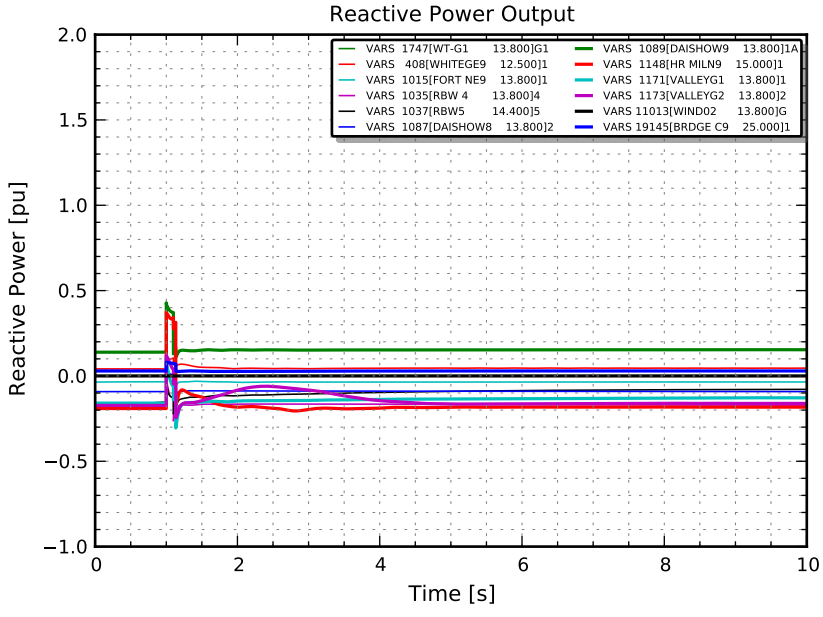


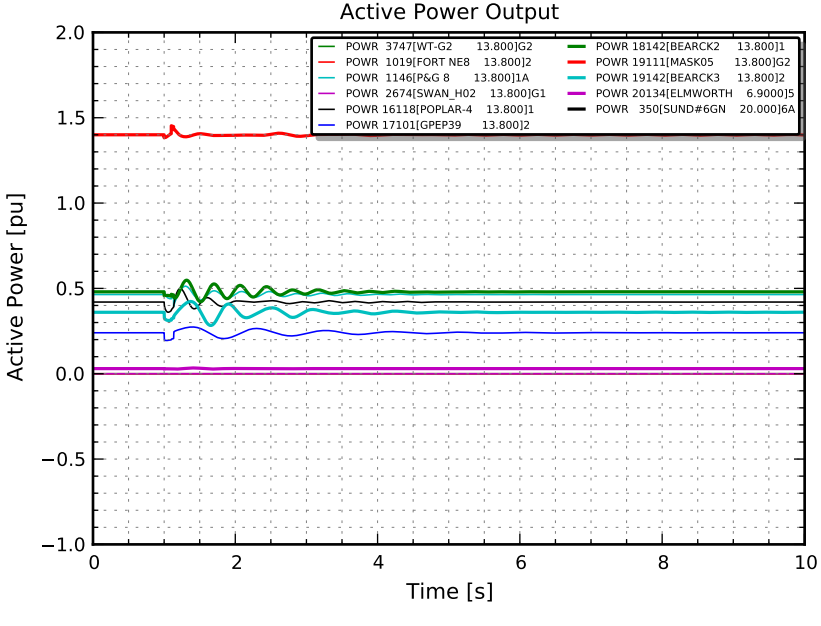
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_A.

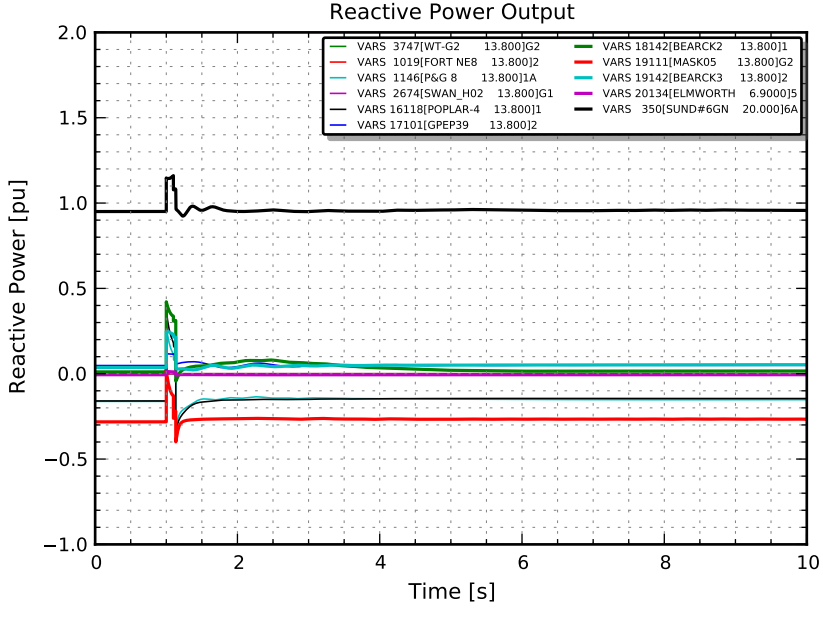
Study Area Generators

Appendix C2A
Figure: 033 (A. 3)





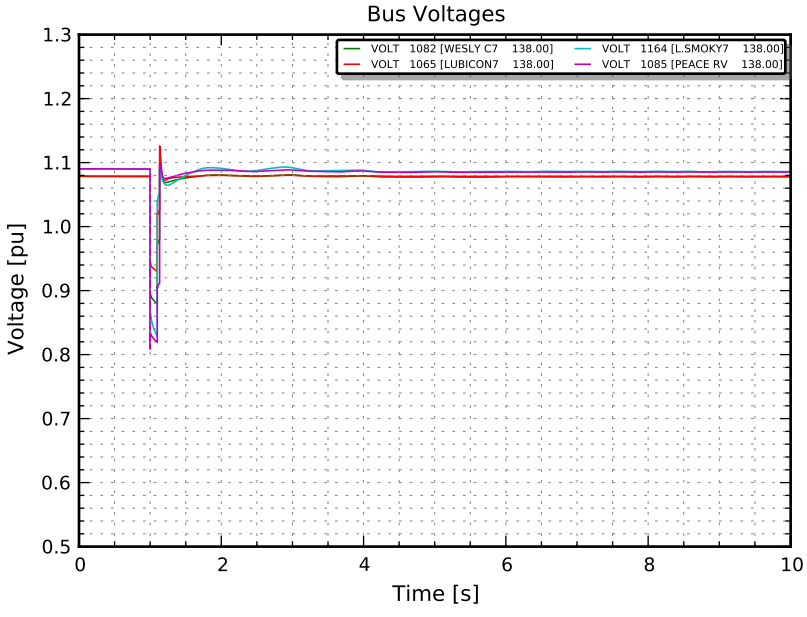


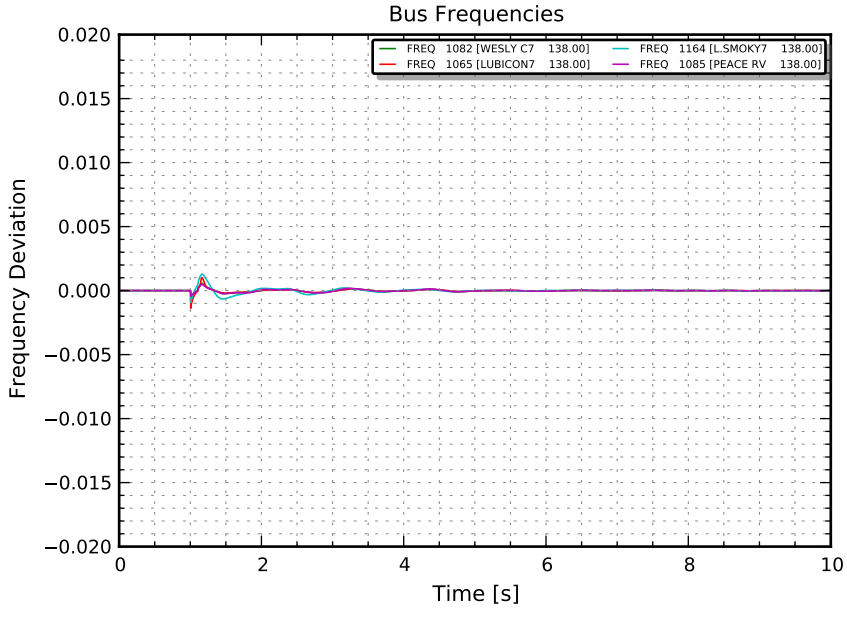


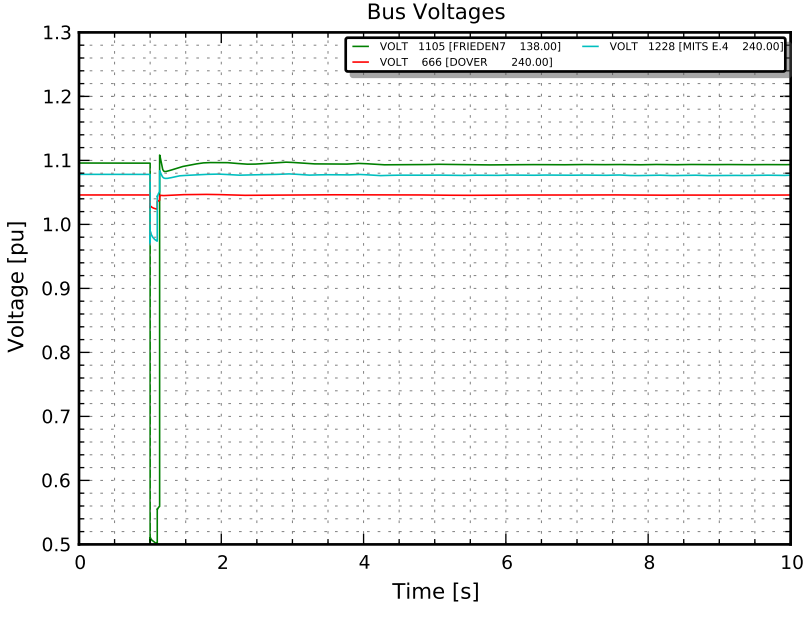
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_B.

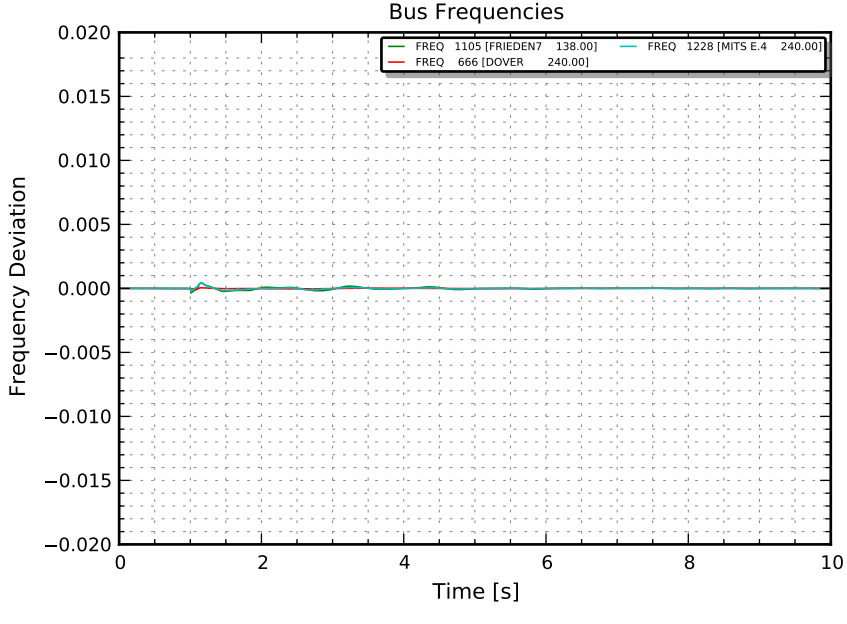
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 033 (B. 1)





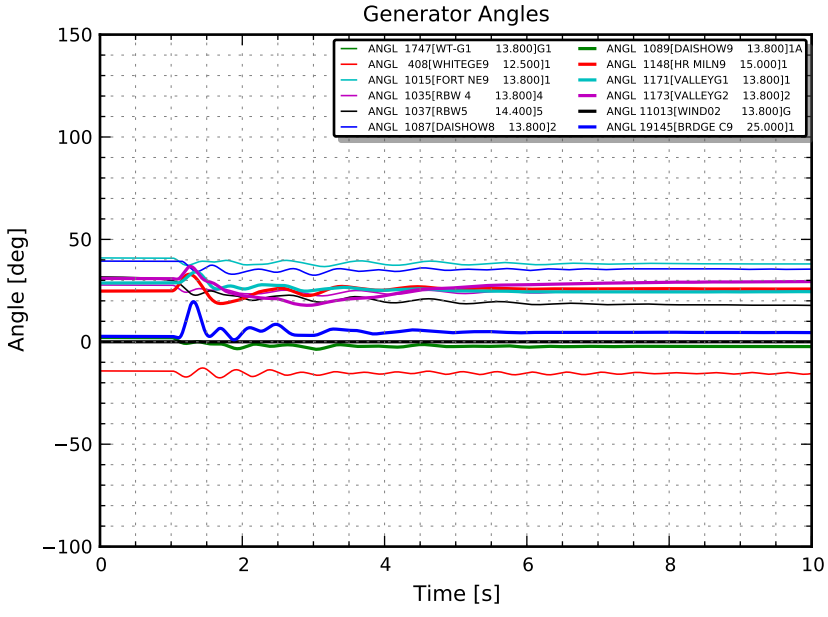


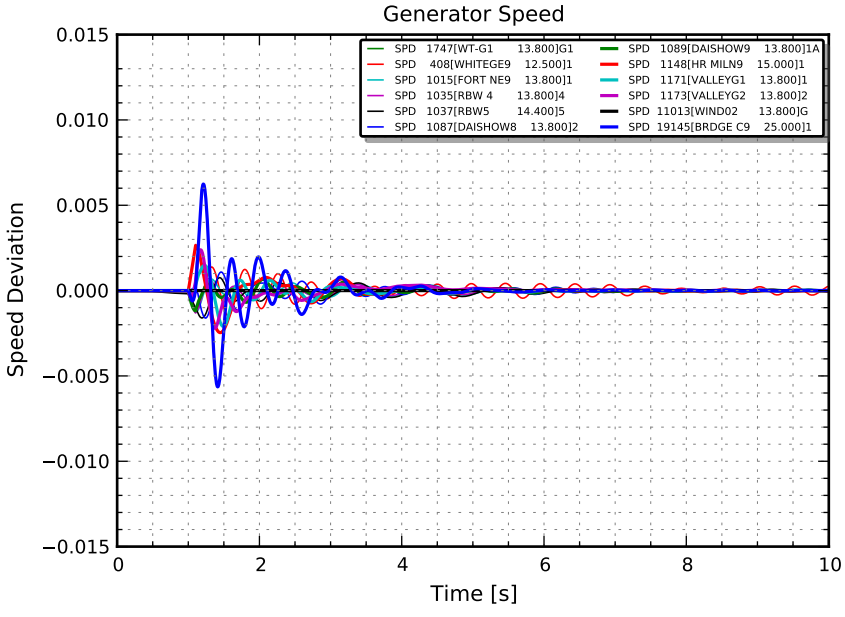


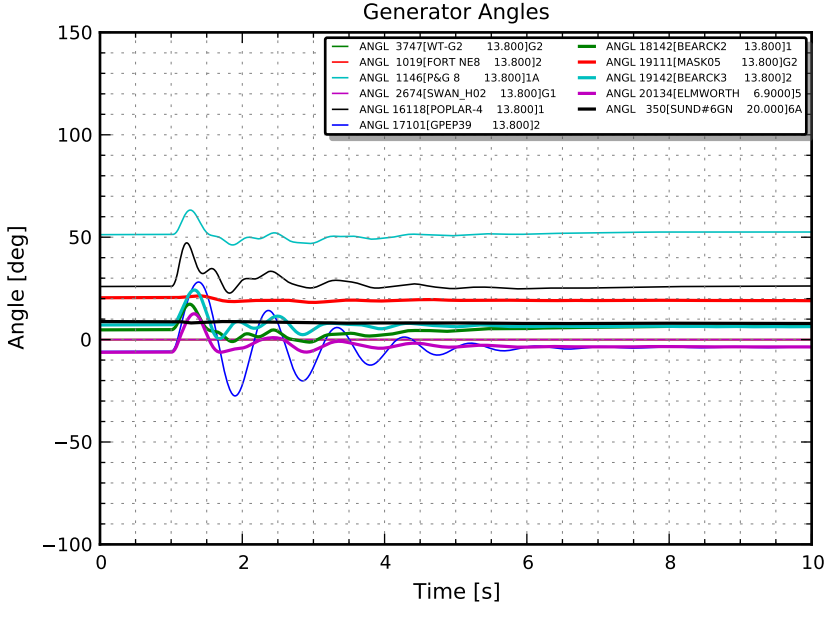
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_B.

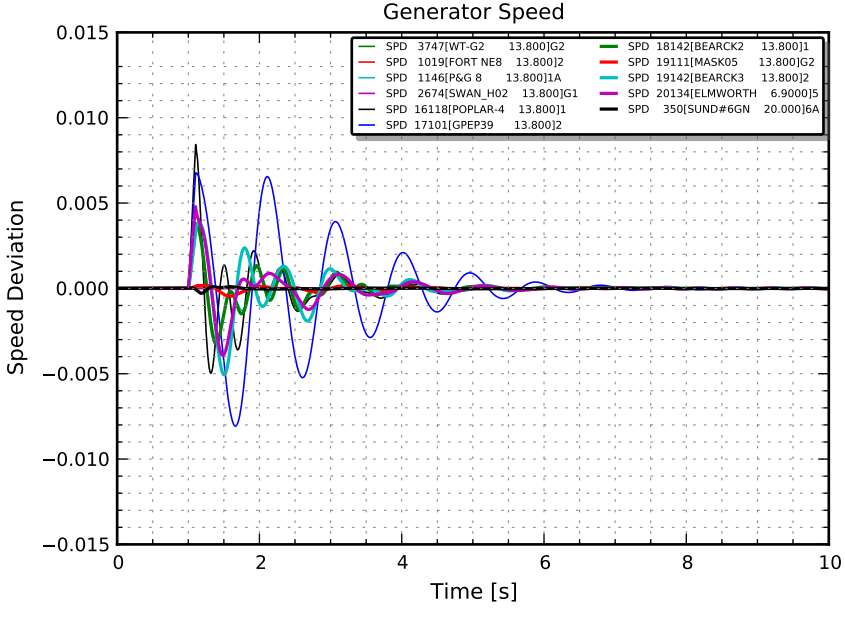
Study Area Generators

Appendix C2A
Figure: 033 (B. 2)





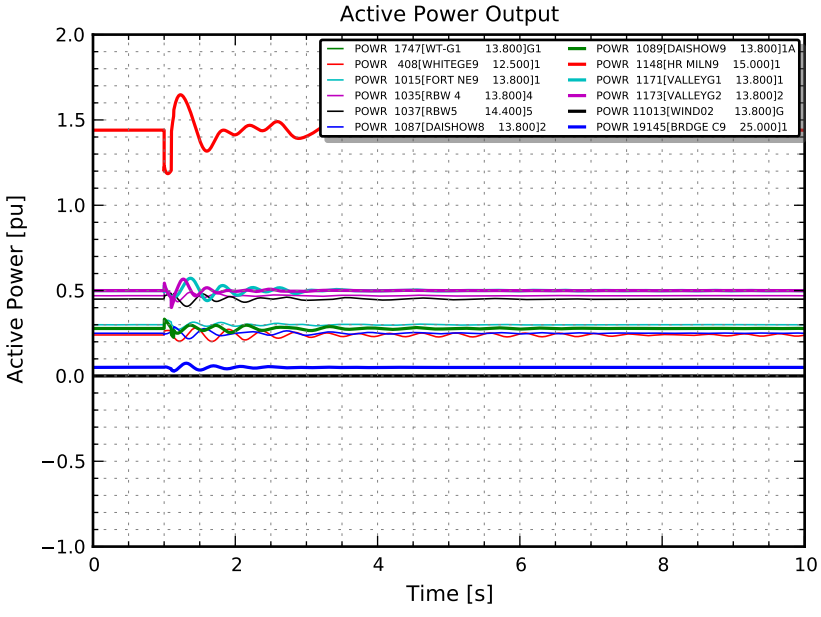


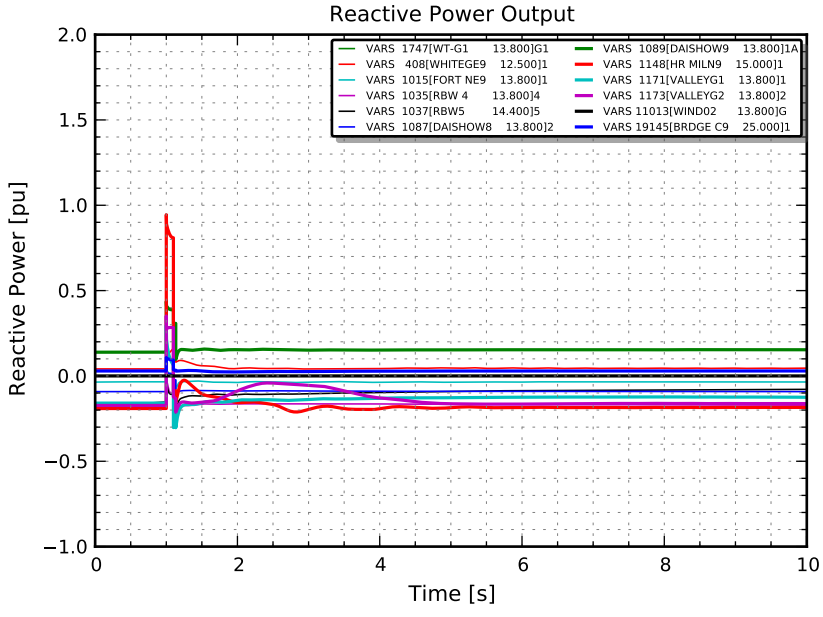


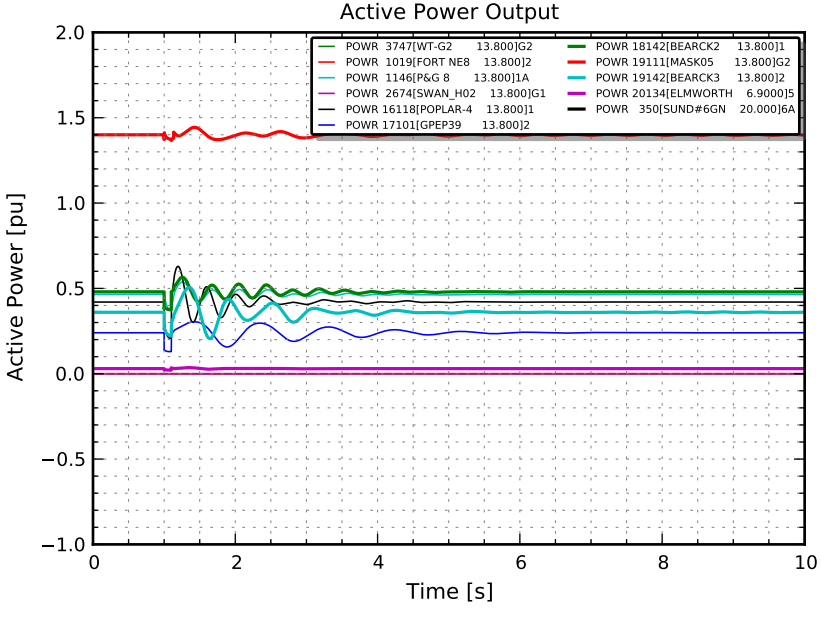
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_B.

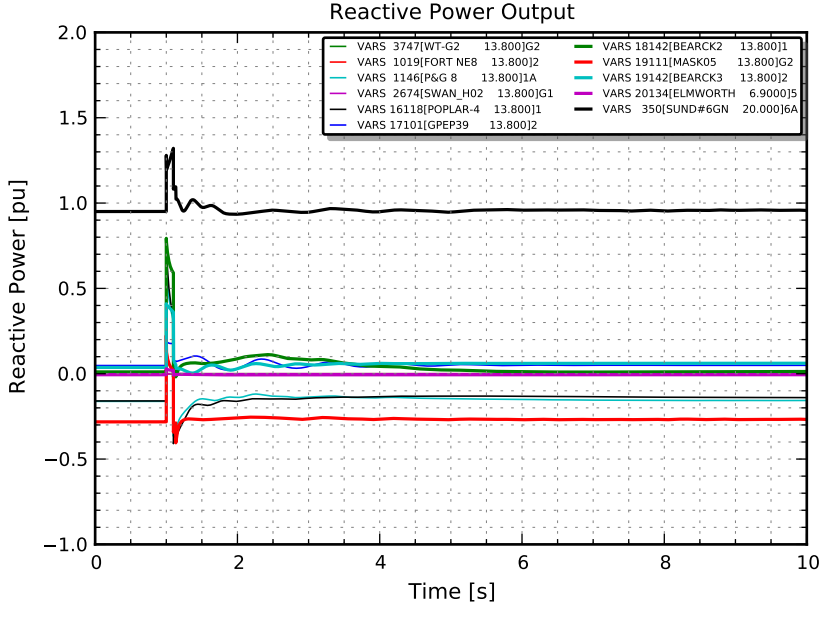
Study Area Generators

Appendix C2A
Figure: 033 (B. 3)





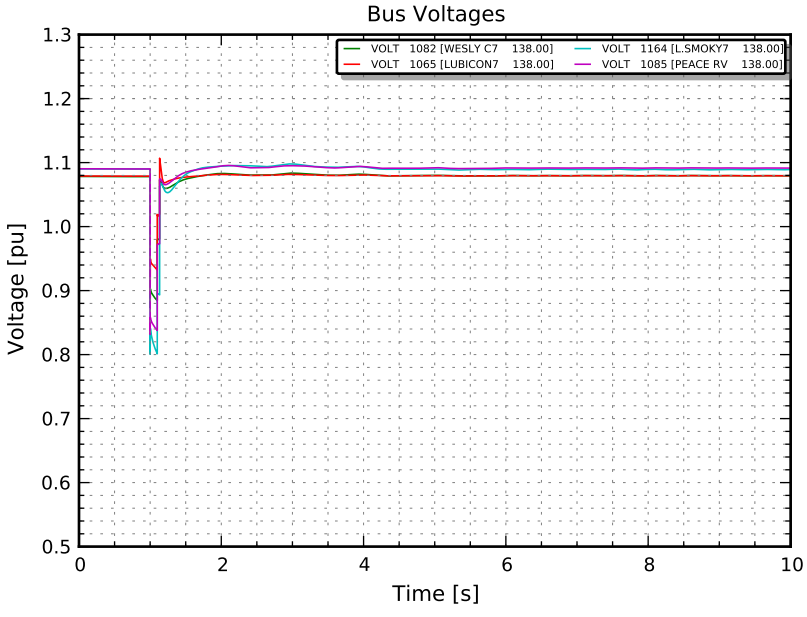


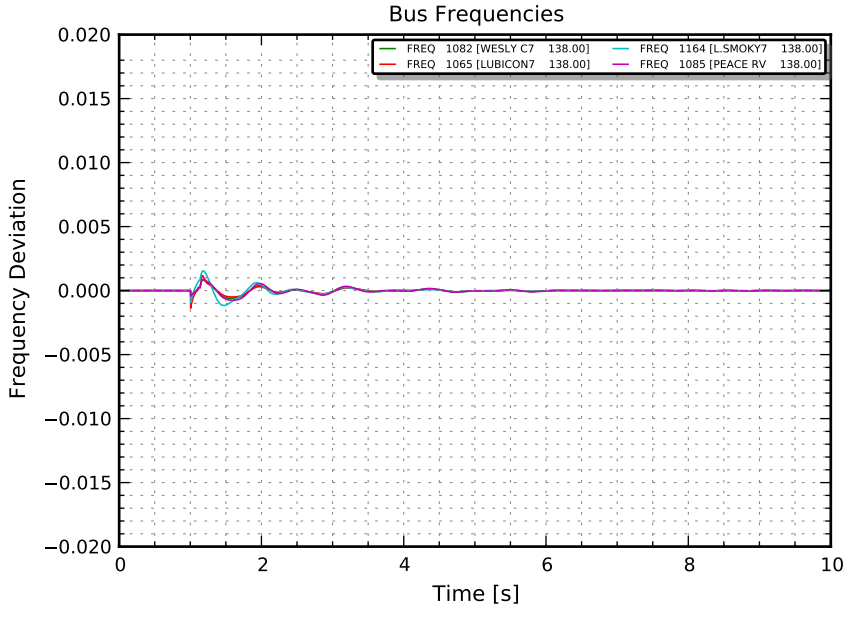


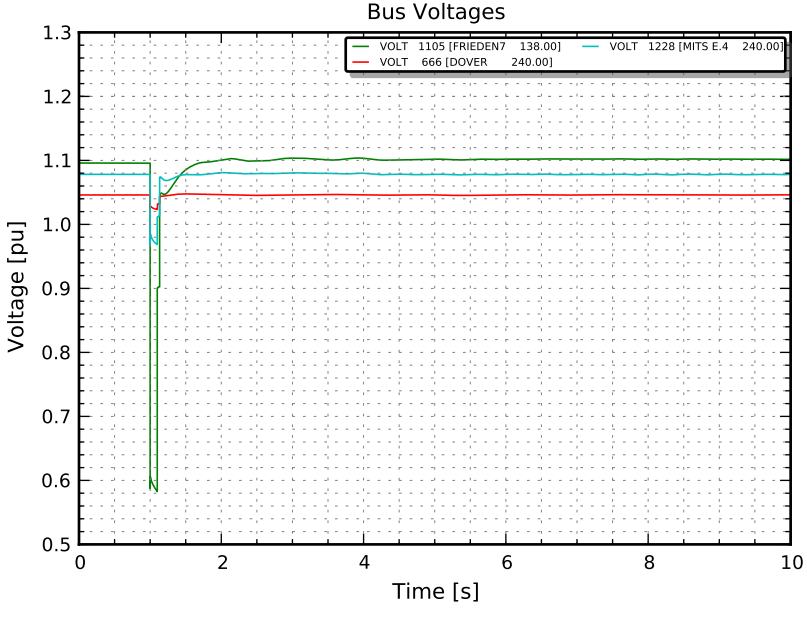
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_A.

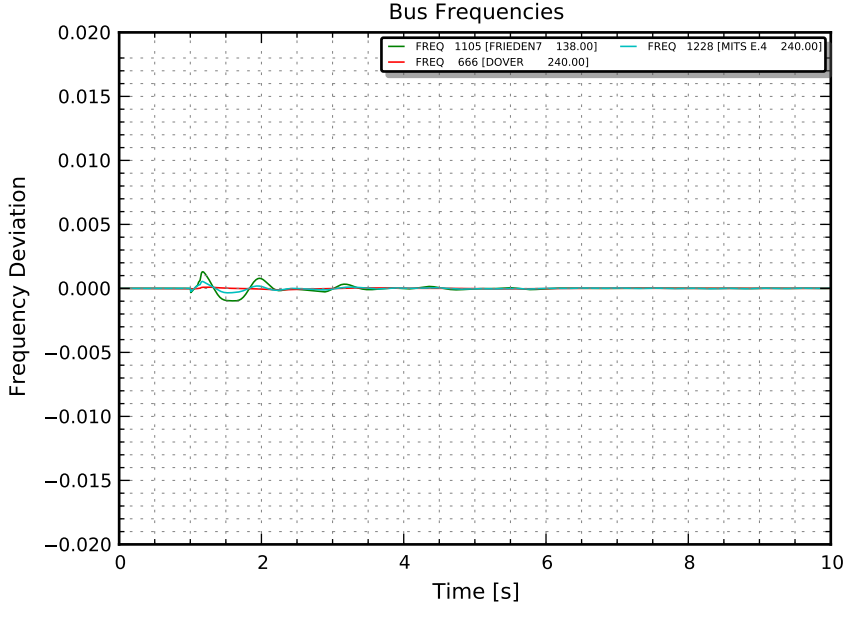
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 034 (A. 1)





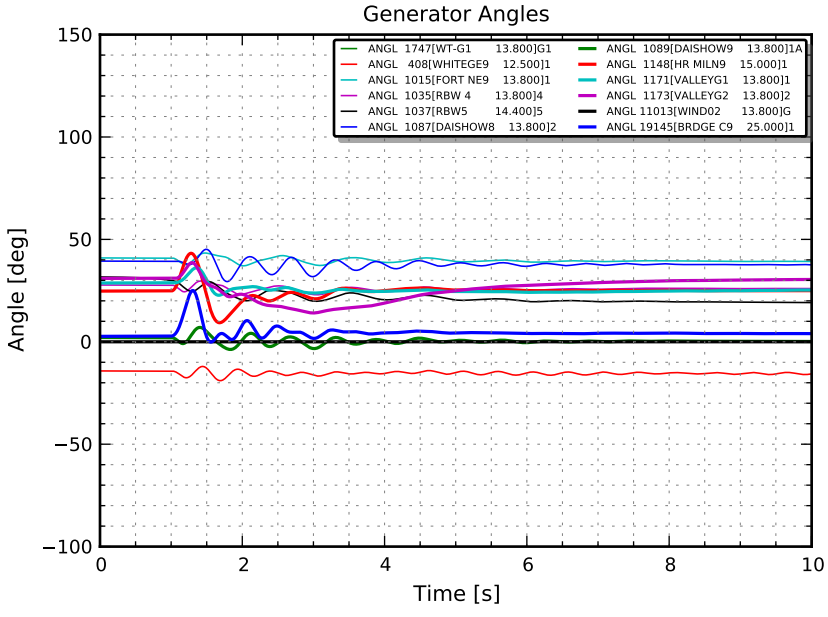


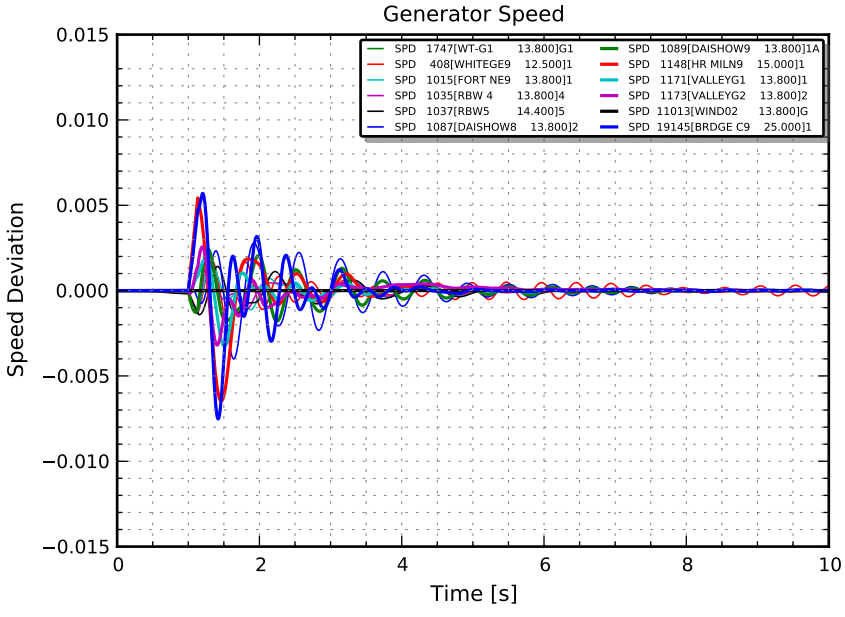


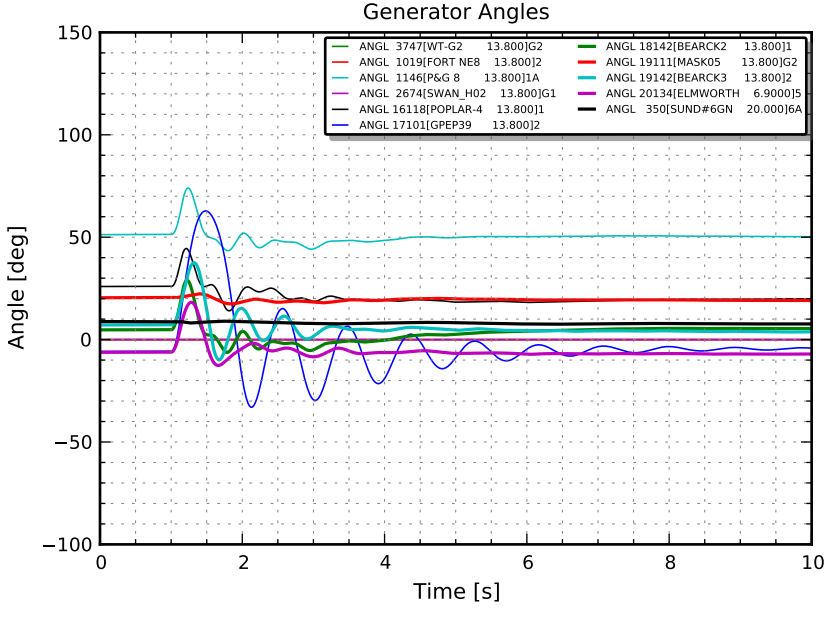
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_A.

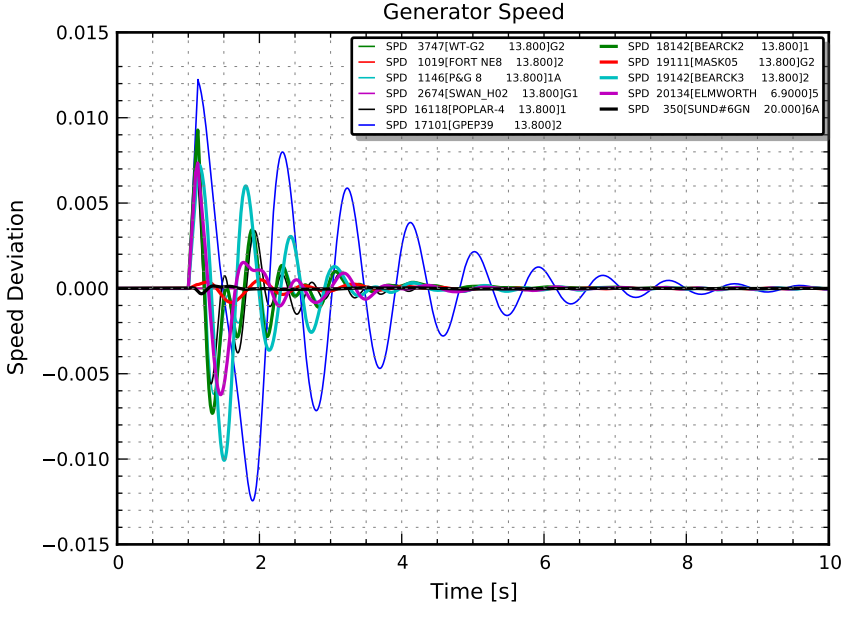
Study Area Generators

Appendix C2A
Figure: 034 (A. 2)





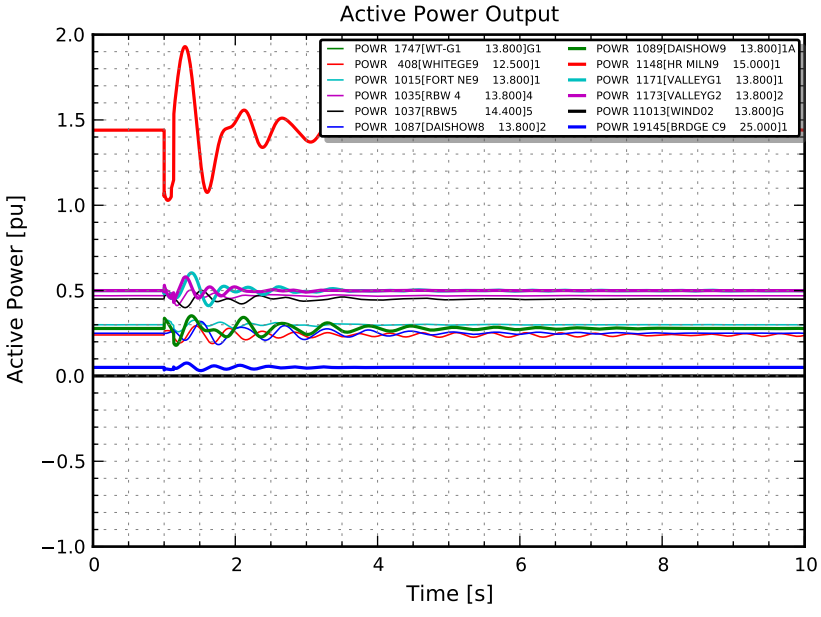


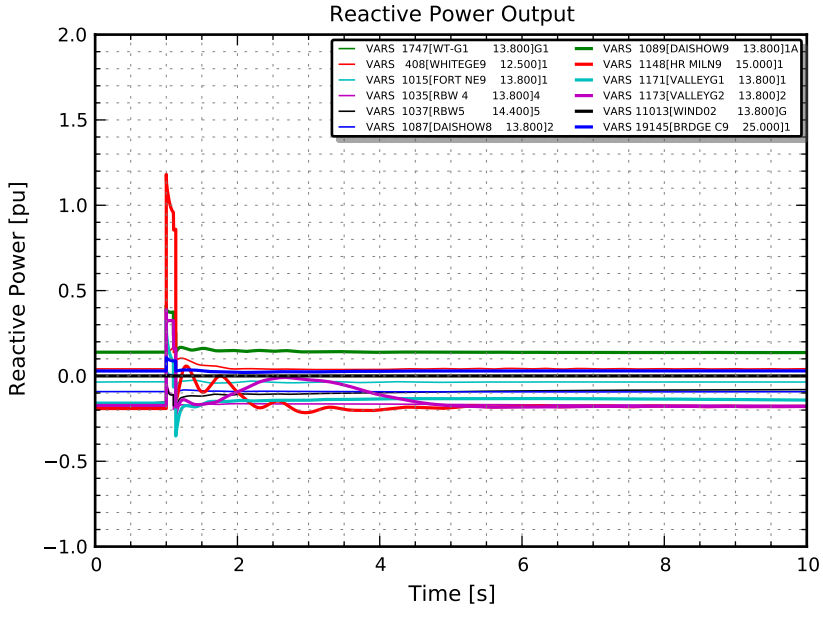


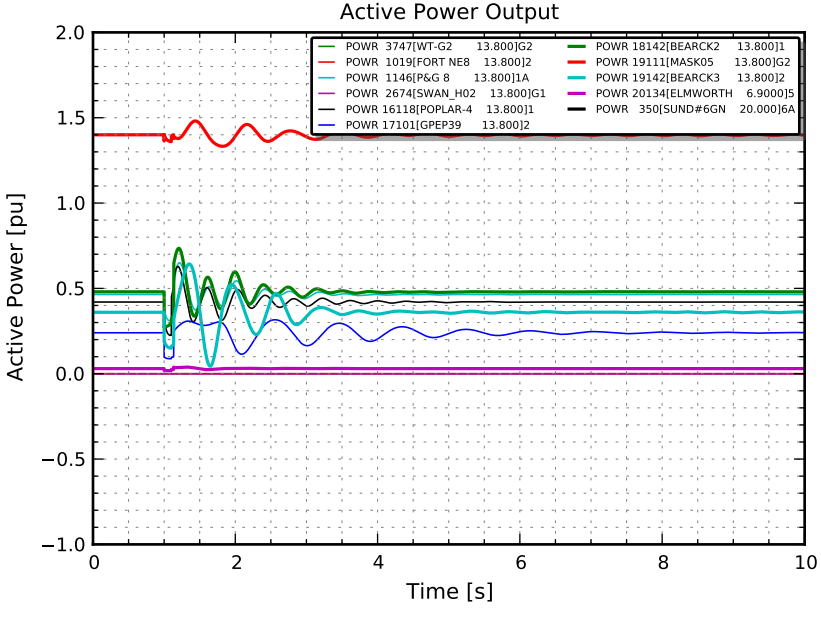
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_A.

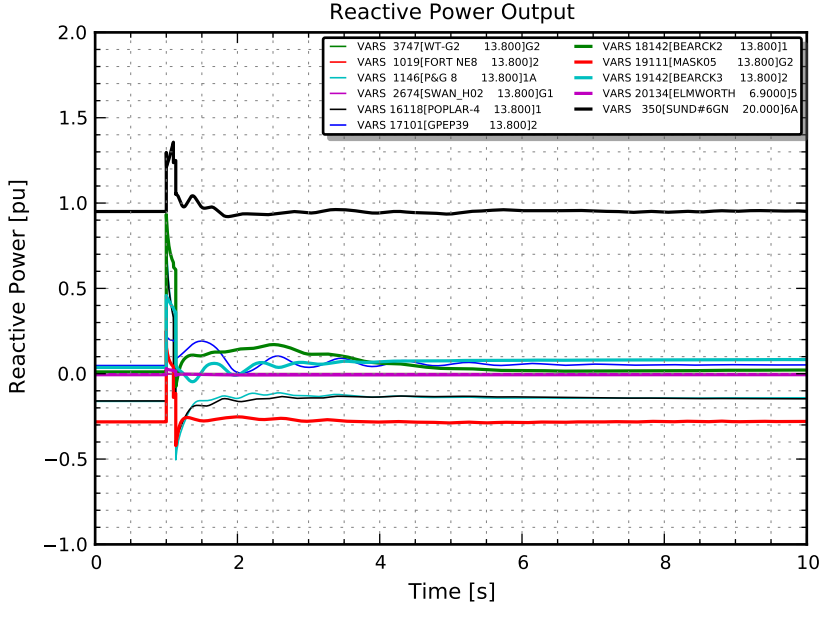
Study Area Generators

Appendix C2A
Figure: 034 (A. 3)





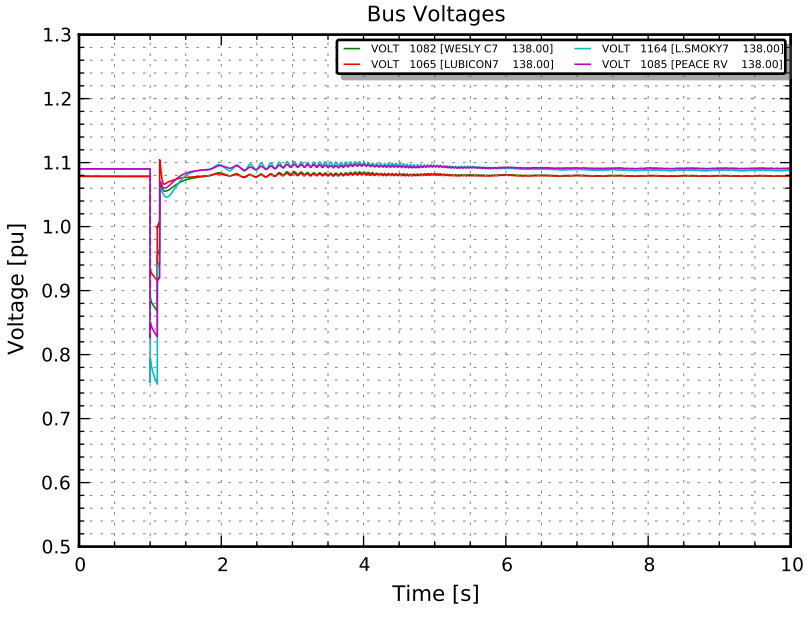


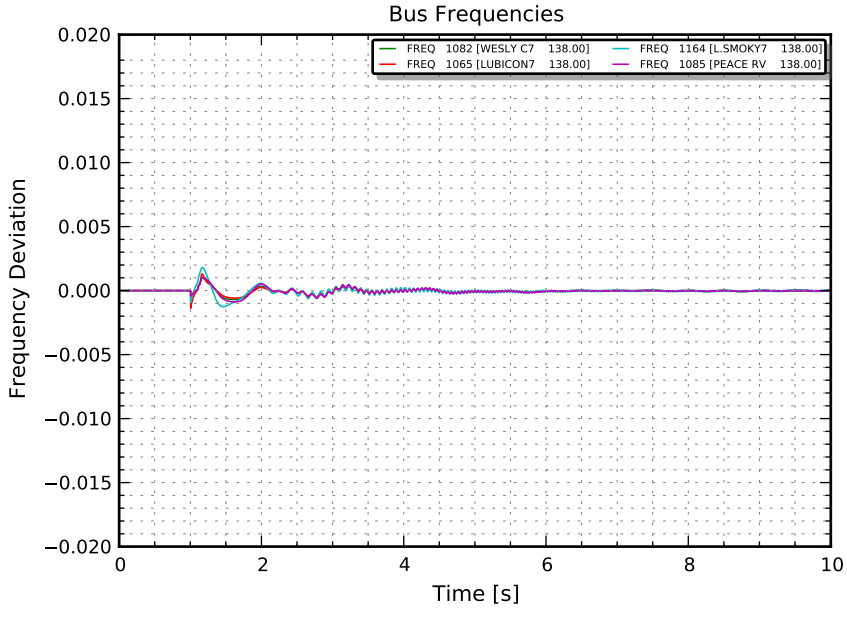


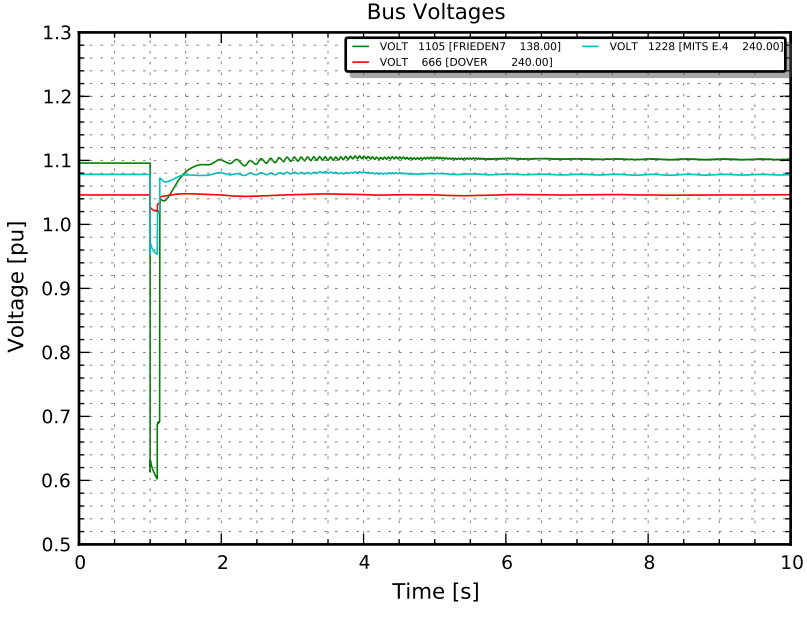
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_B.

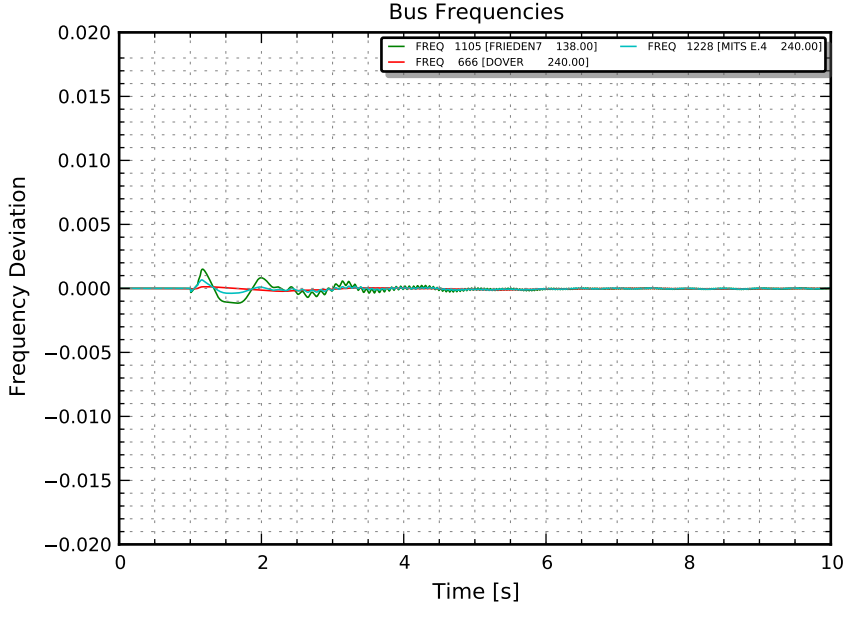
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 034 (B. 1)





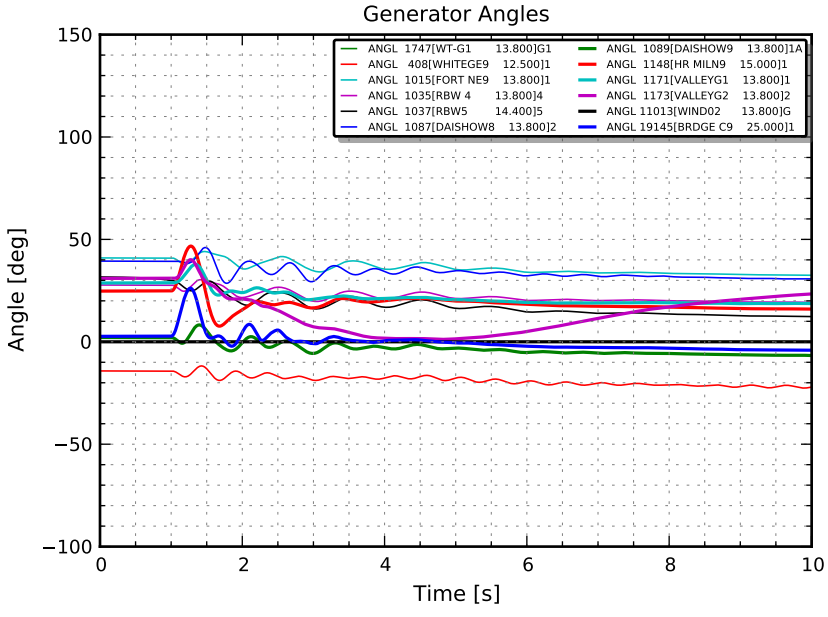


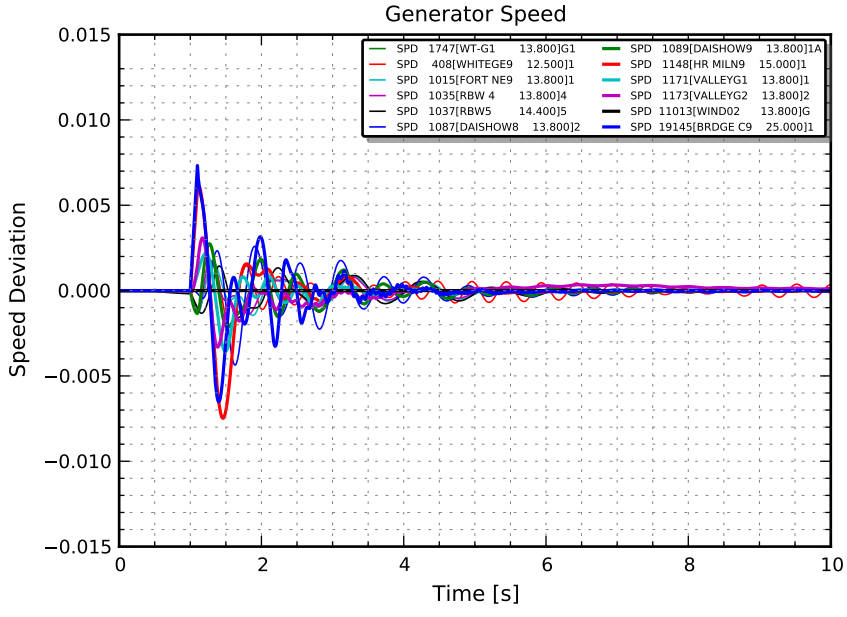


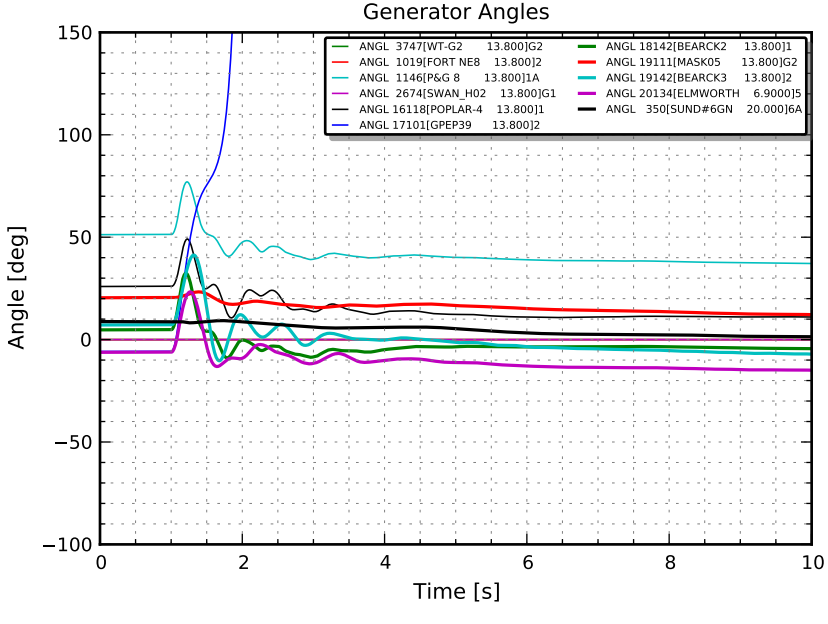
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_B.

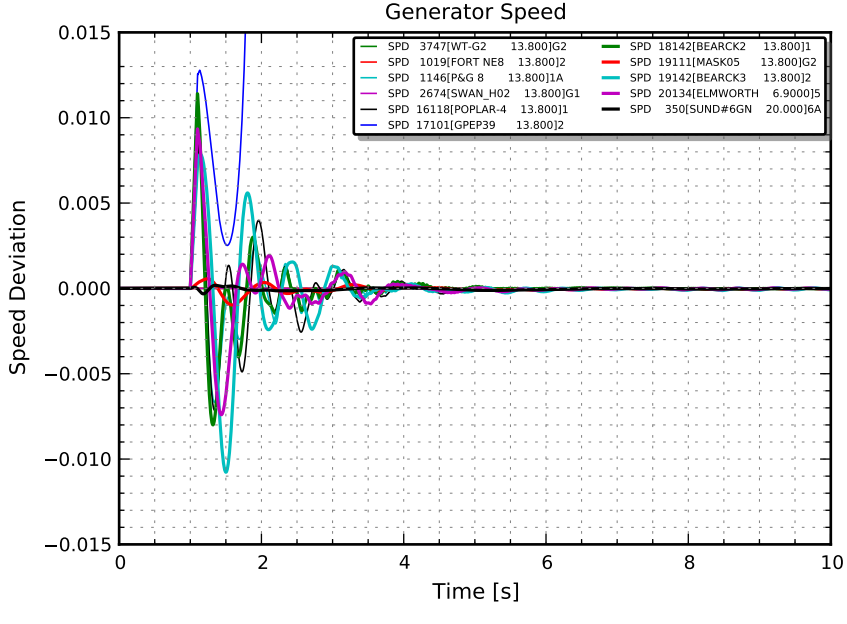
Study Area Generators

Appendix C2A
Figure: 034 (B. 2)





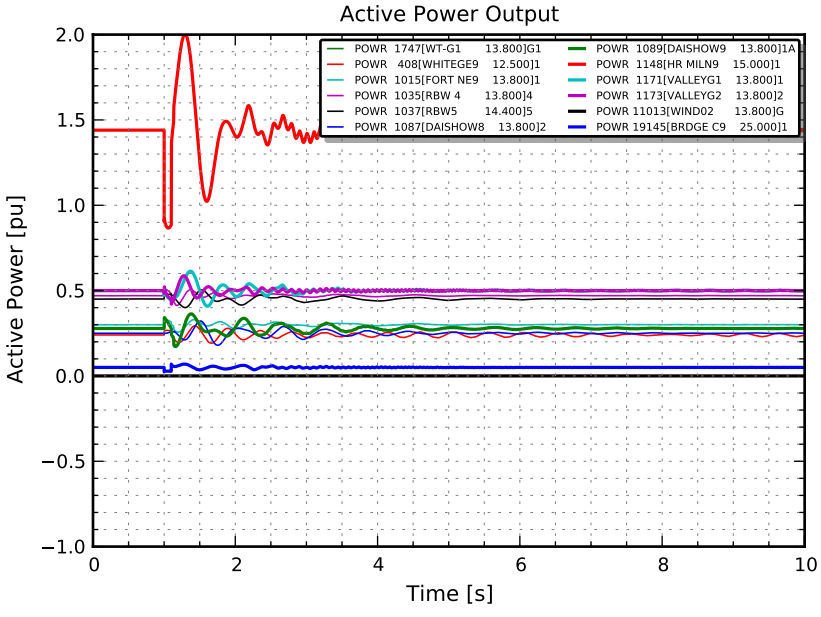


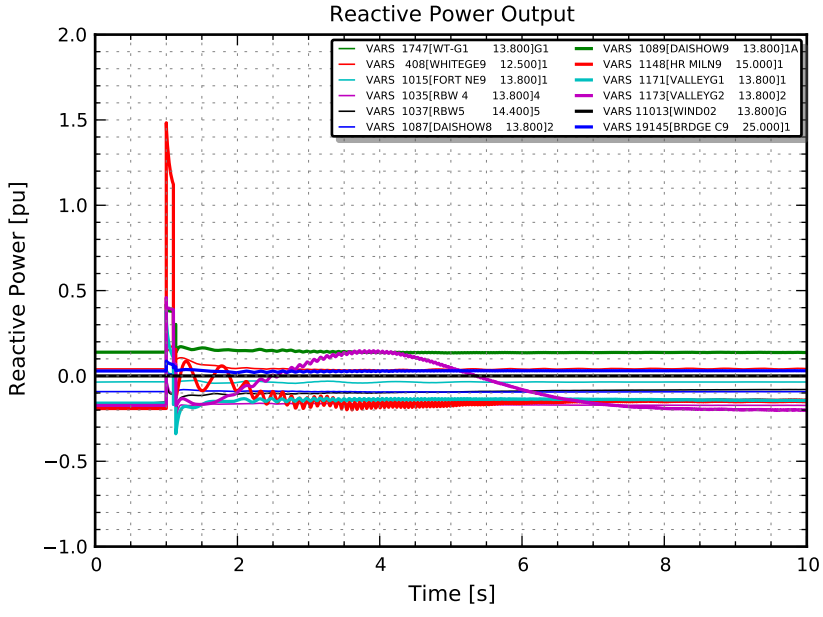


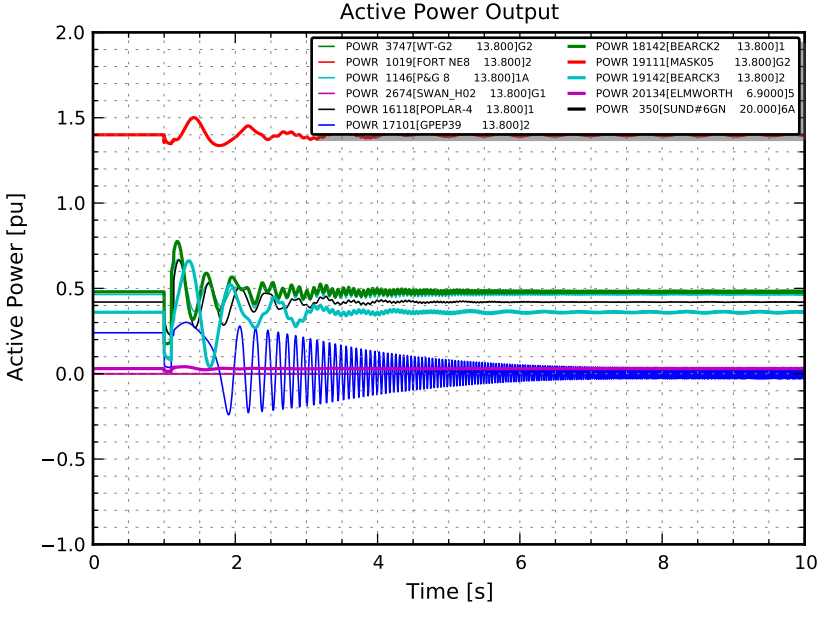
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_B.

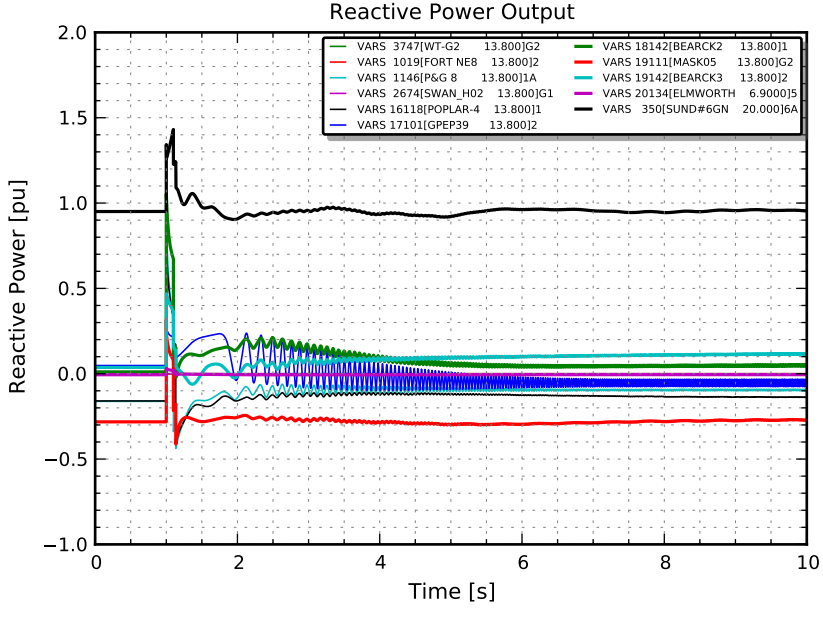
Study Area Generators

Appendix C2A
Figure: 034 (B. 3)





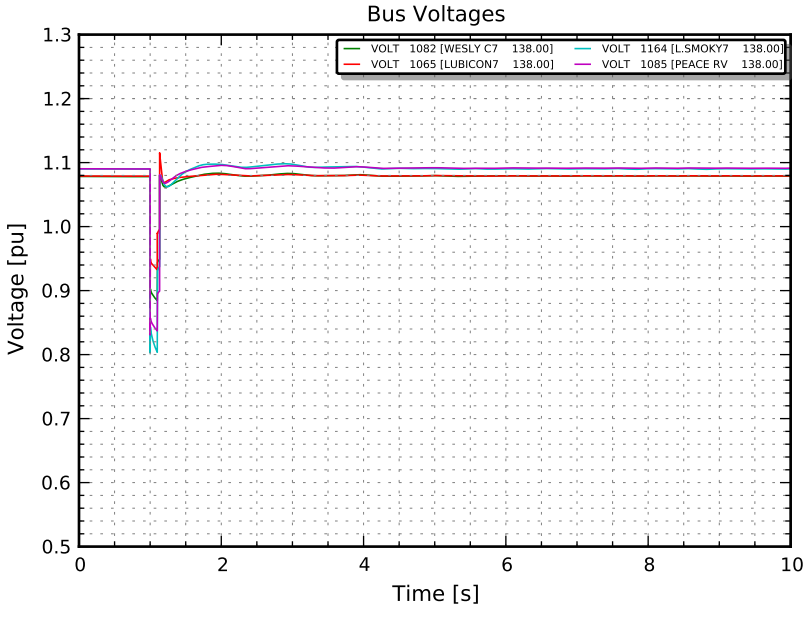


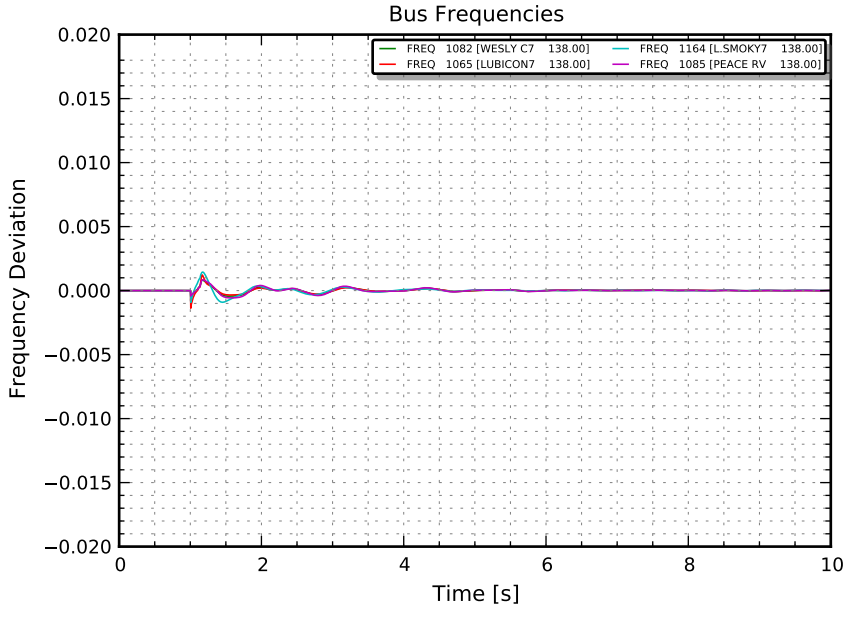


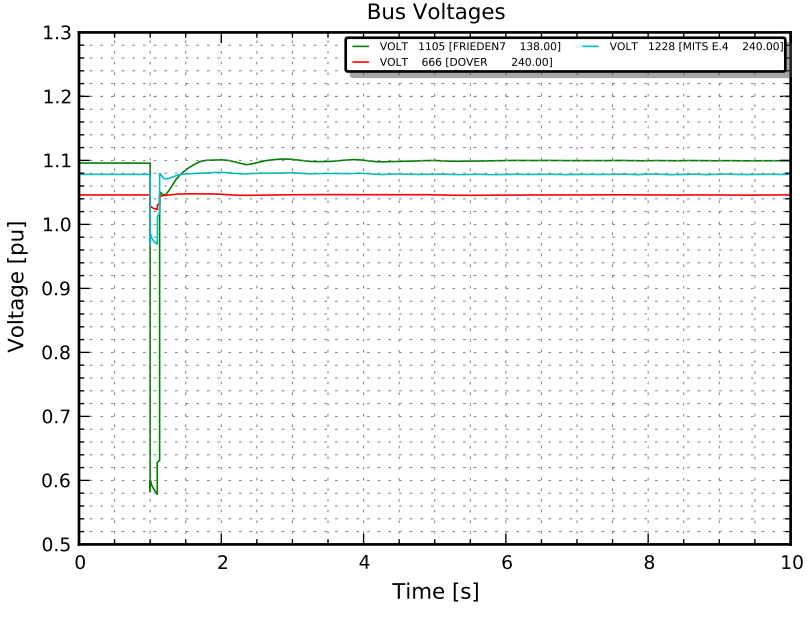
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_A.

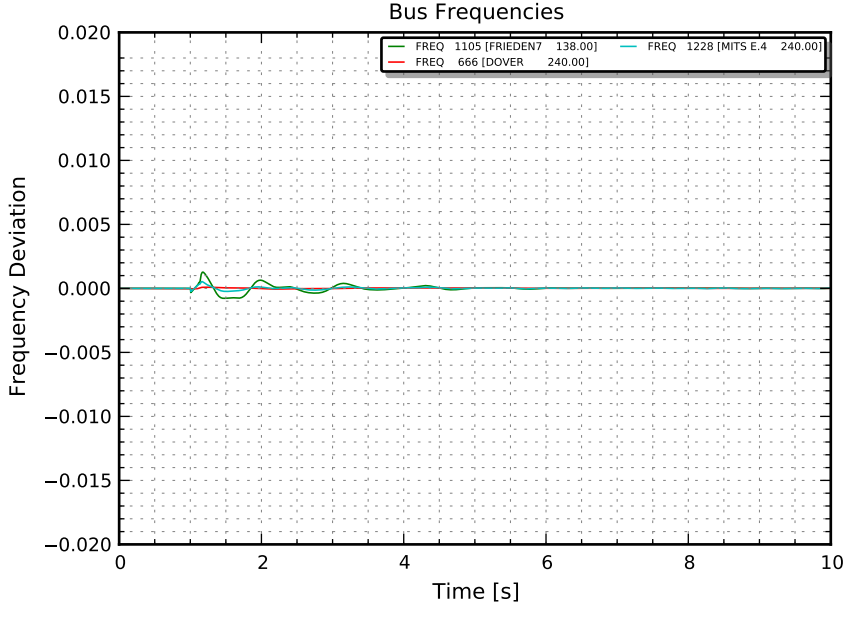
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 035 (A. 1)





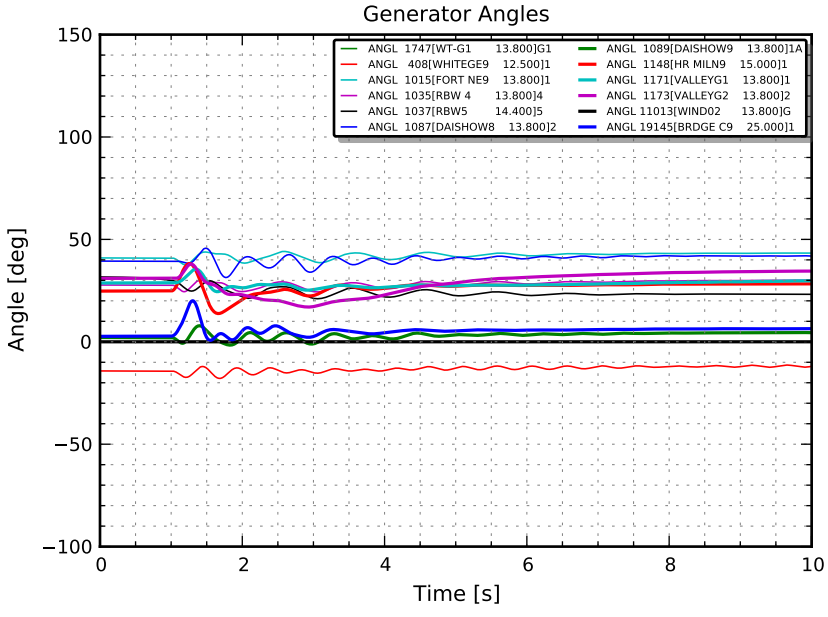


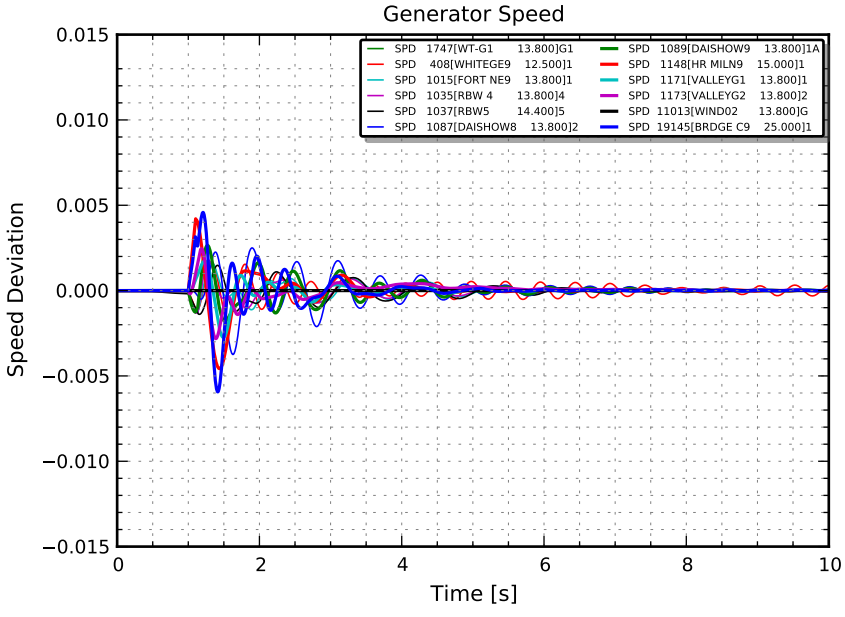


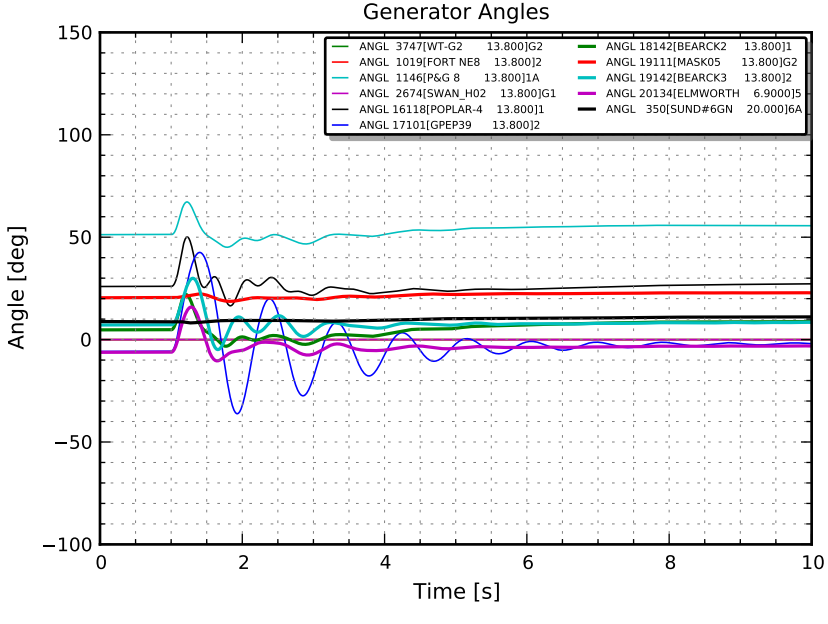
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_A.

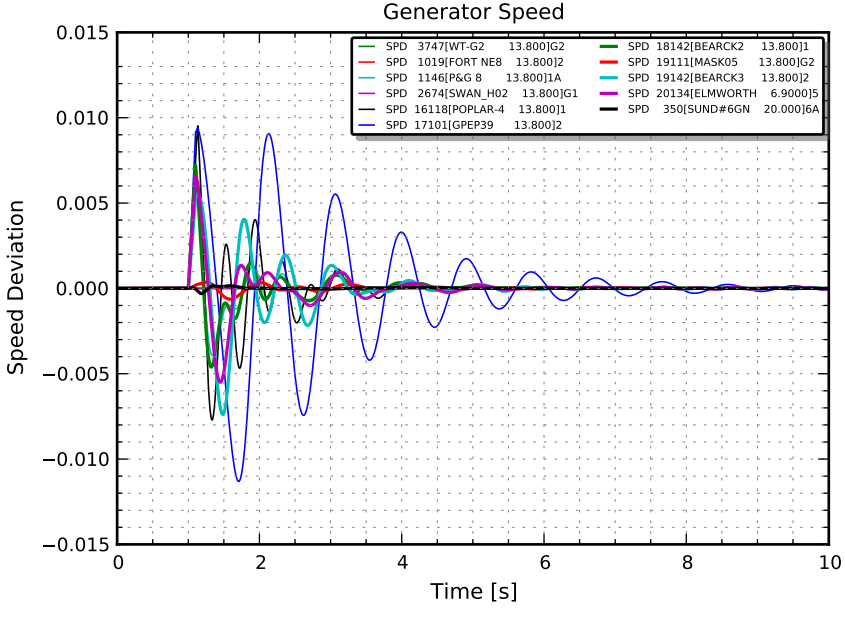
Study Area Generators

Appendix C2A
Figure: 035 (A. 2)





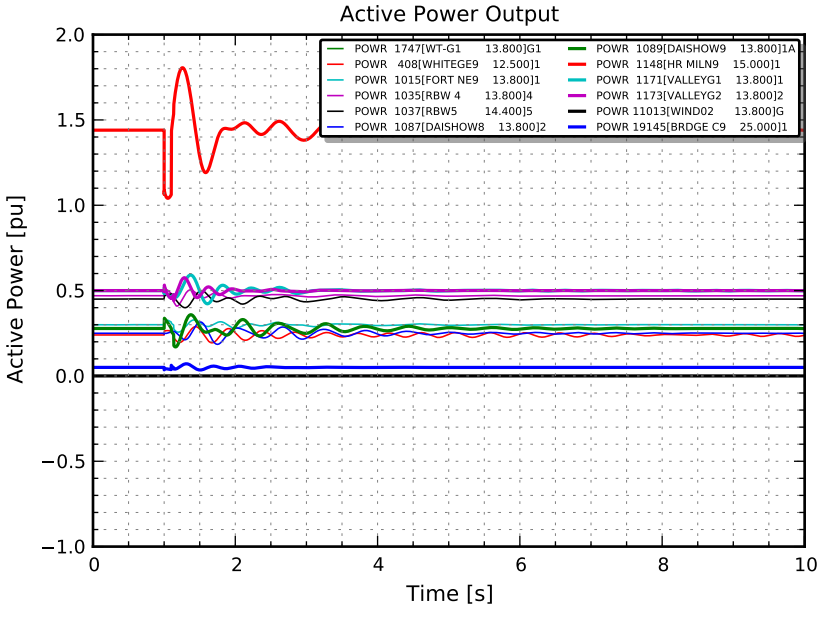


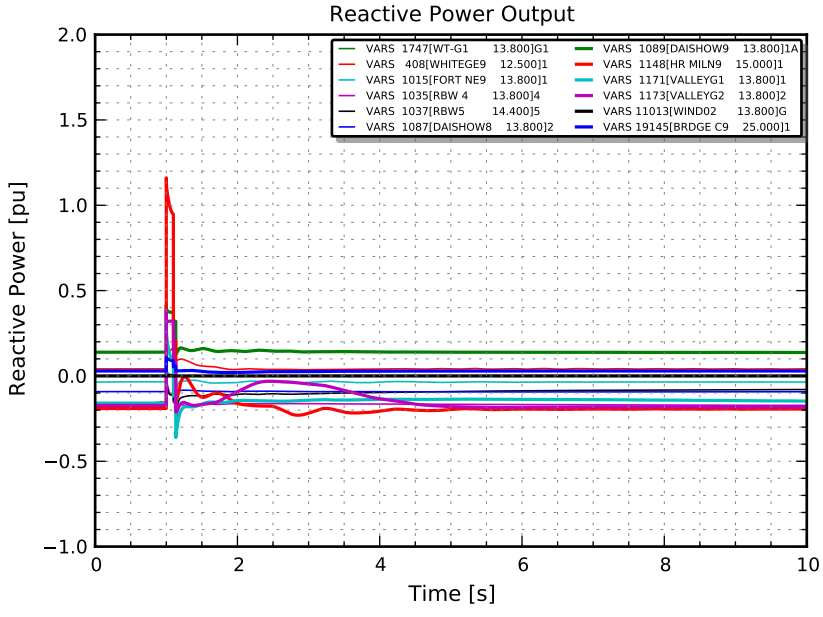


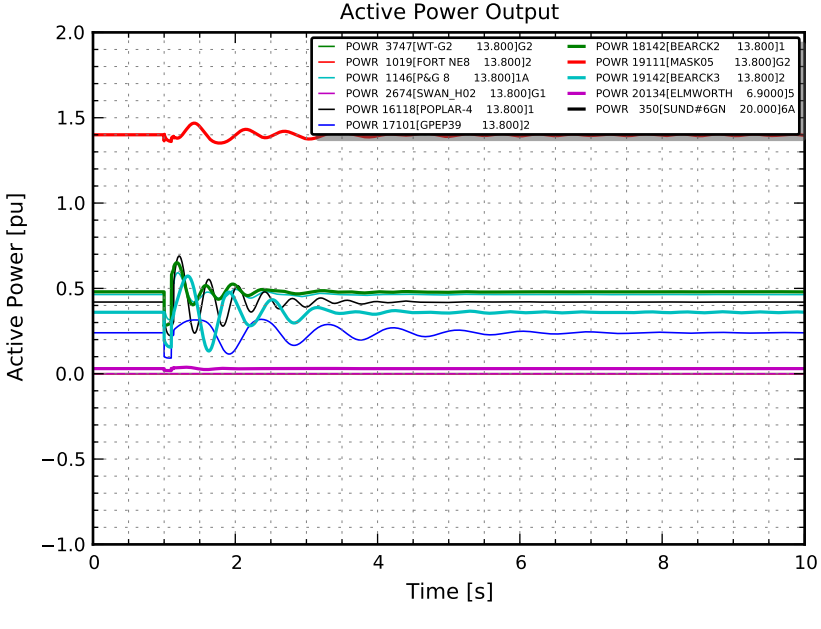
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_A.

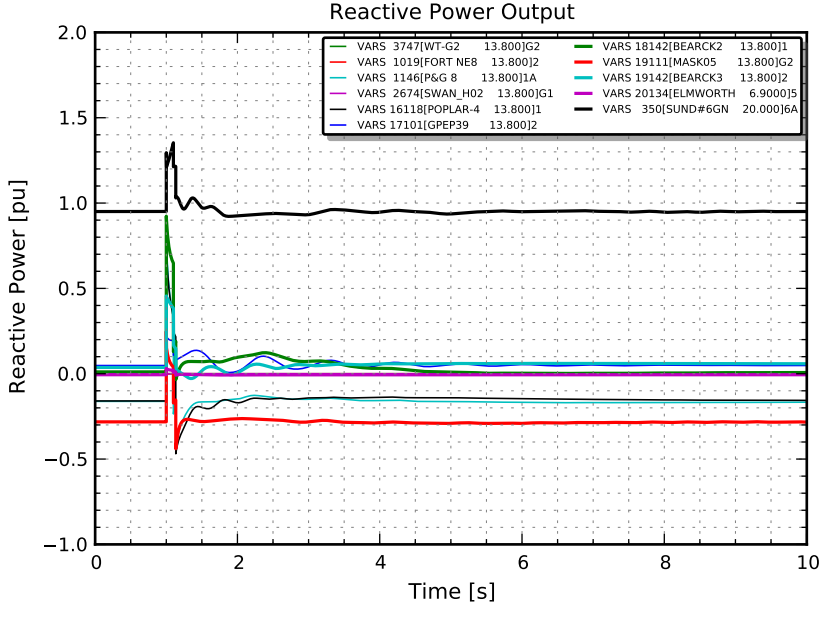
Study Area Generators

Appendix C2A
Figure: 035 (A. 3)





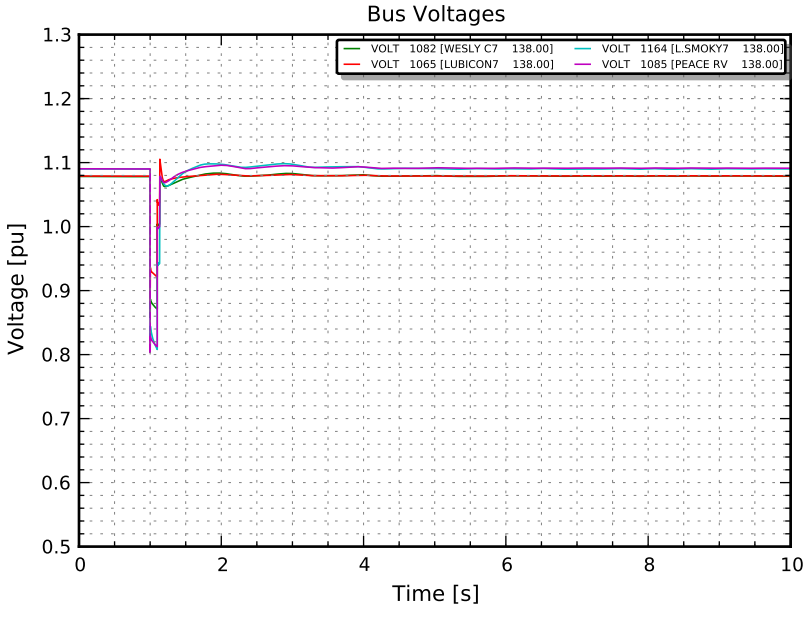


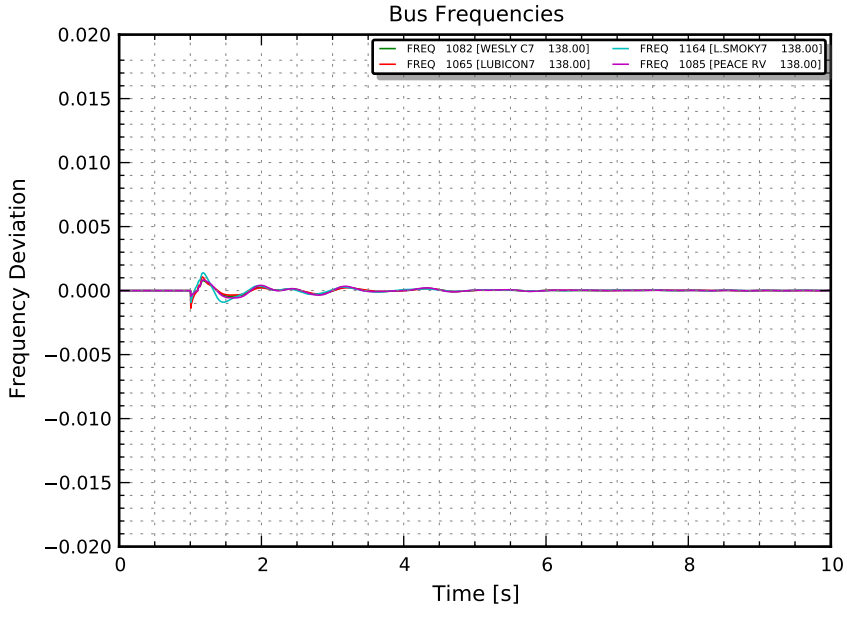


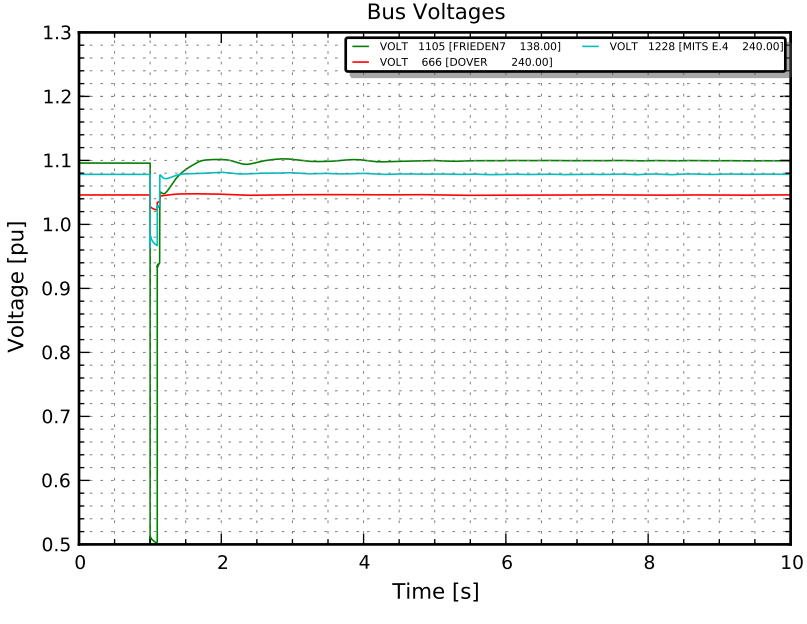
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_B.

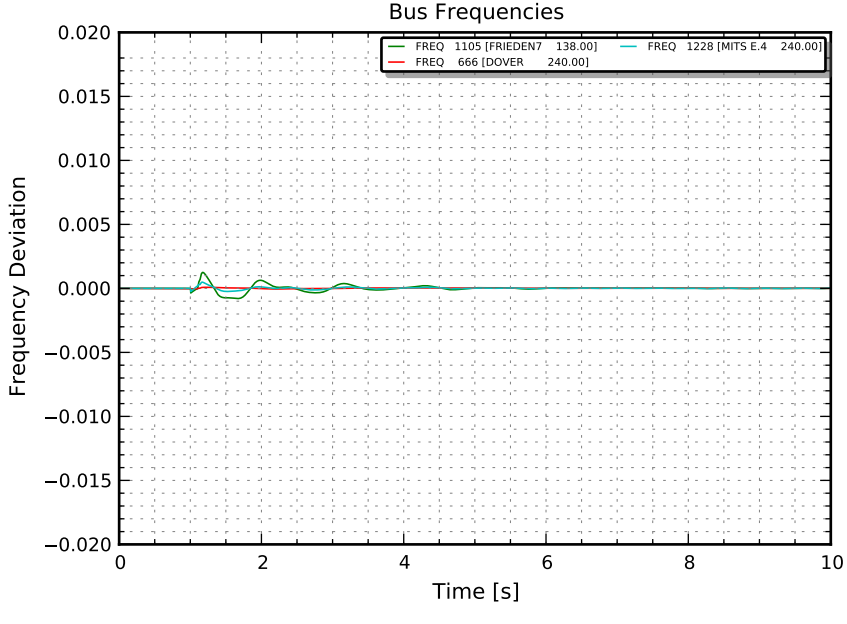
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 035 (B. 1)





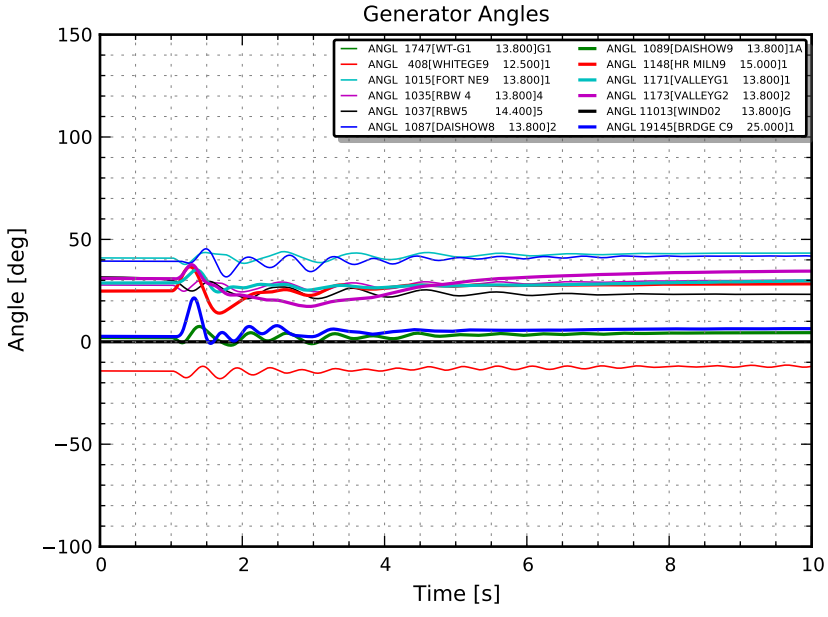


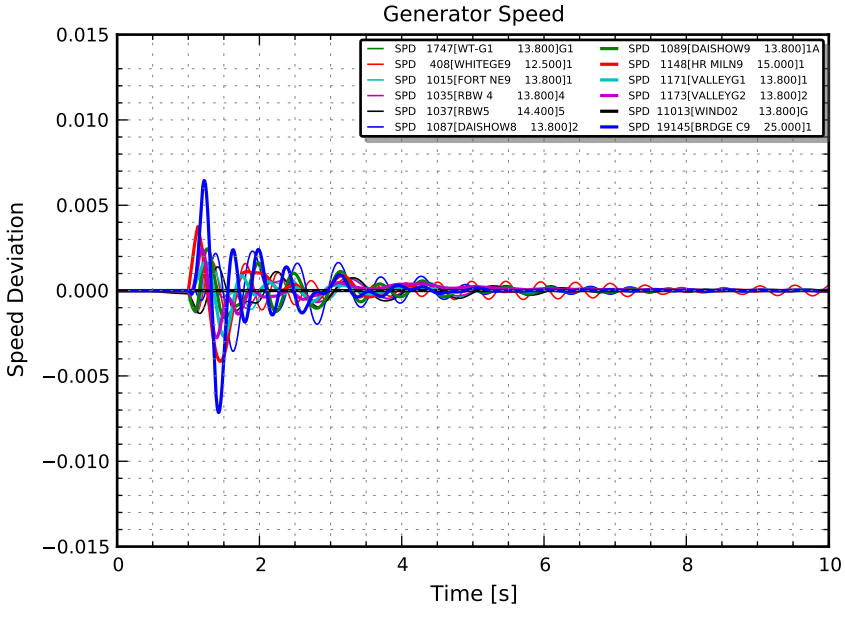


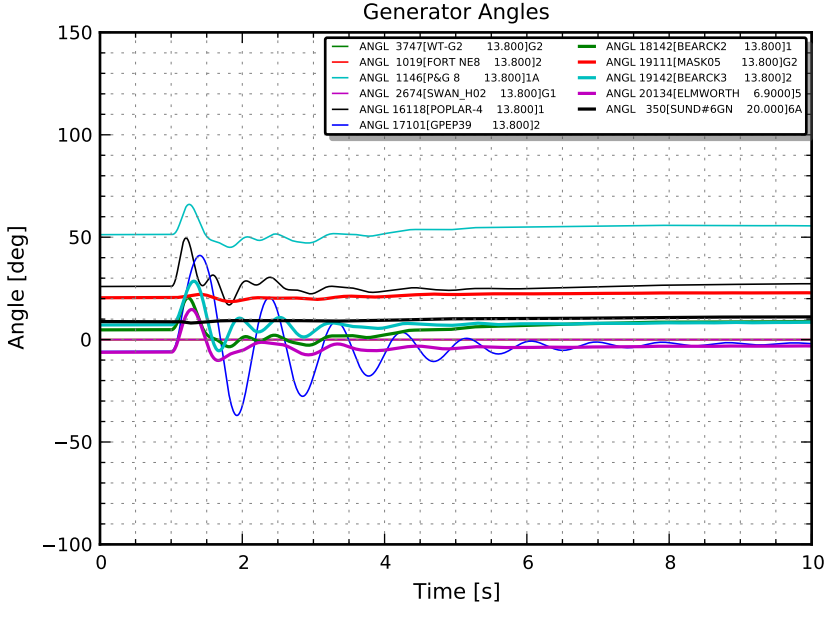
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_B.

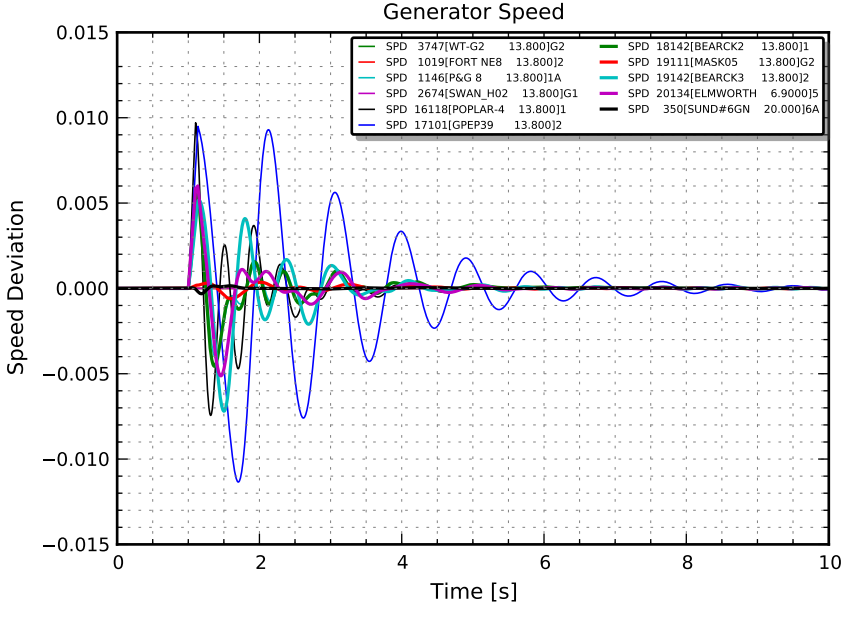
Study Area Generators

Appendix C2A
Figure: 035 (B. 2)





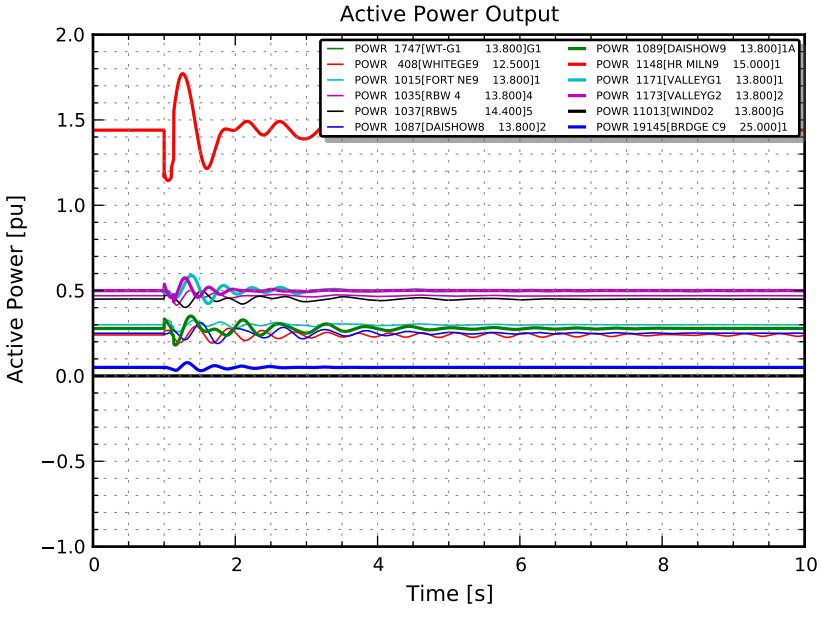


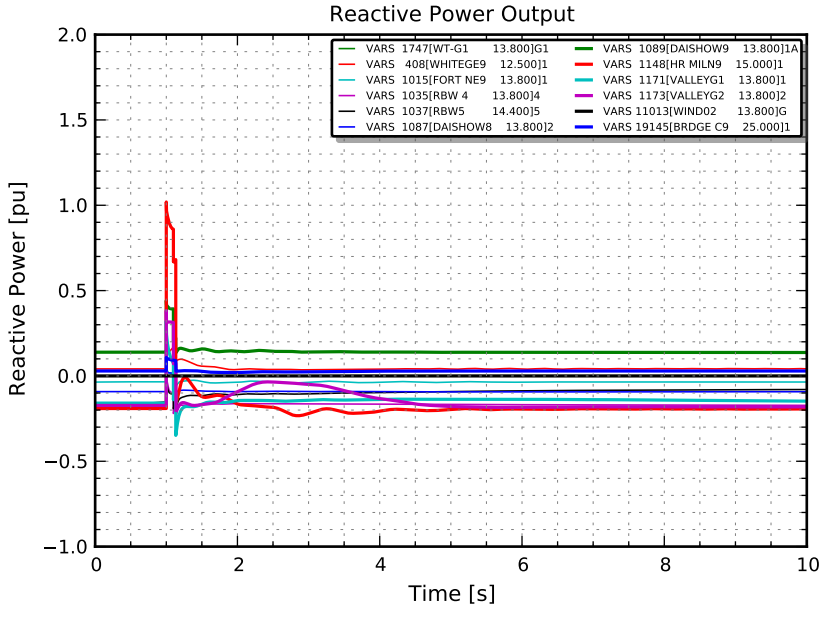


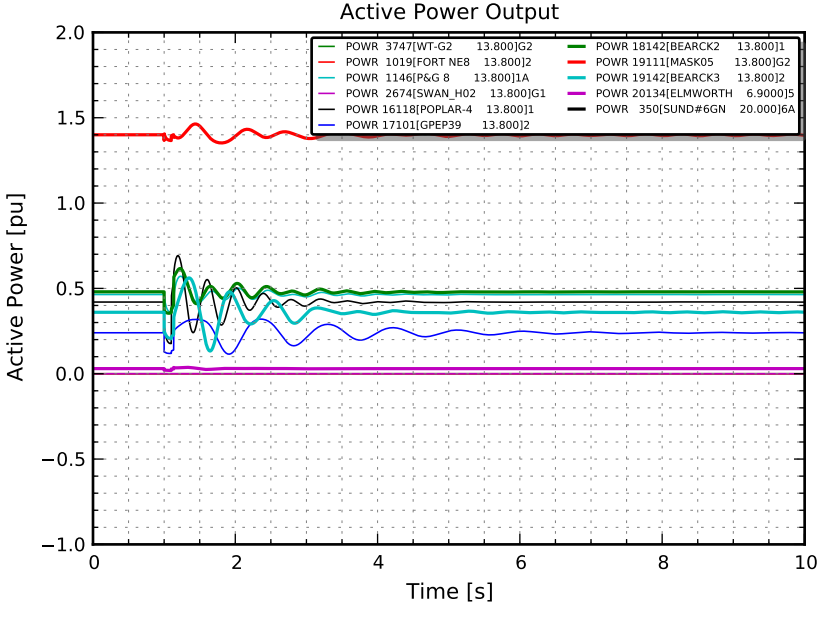
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_B.

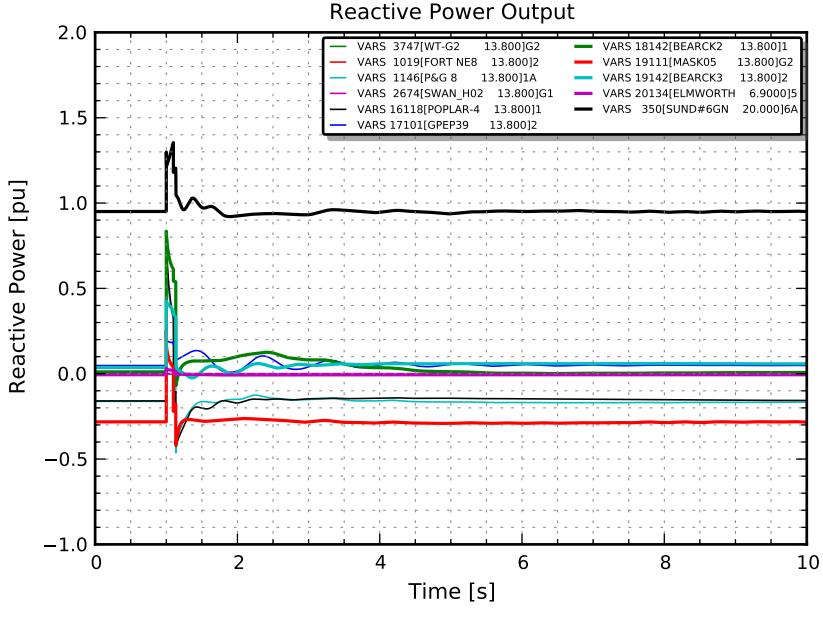
Study Area Generators

Appendix C2A
Figure: 035 (B. 3)





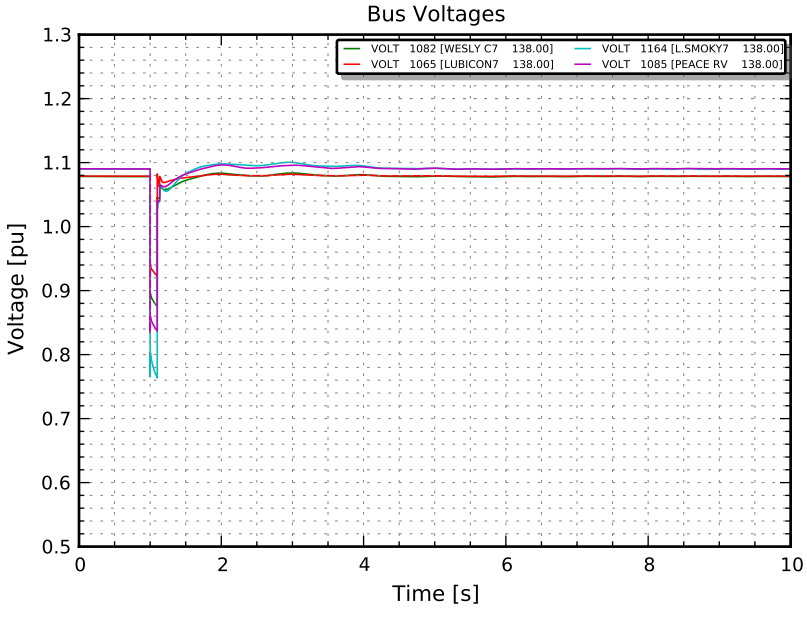


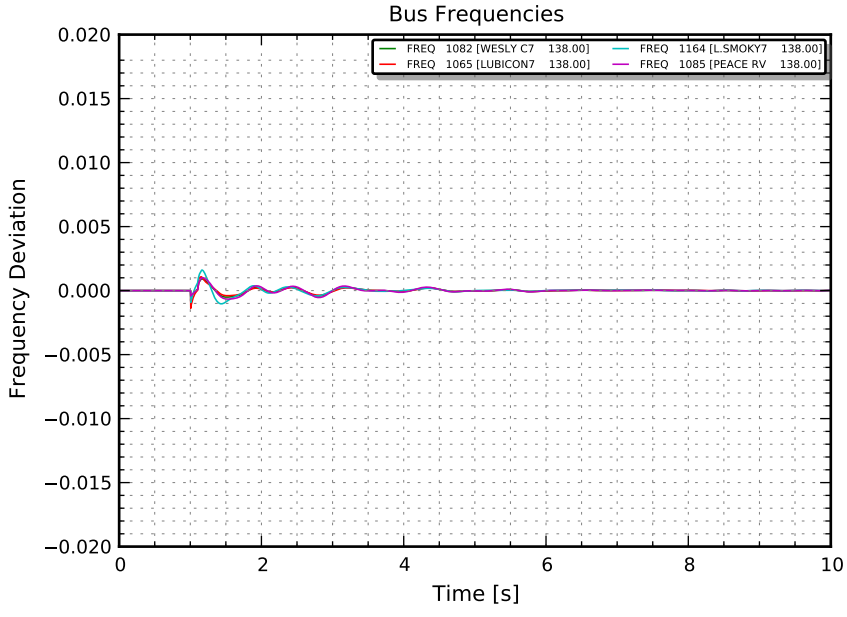


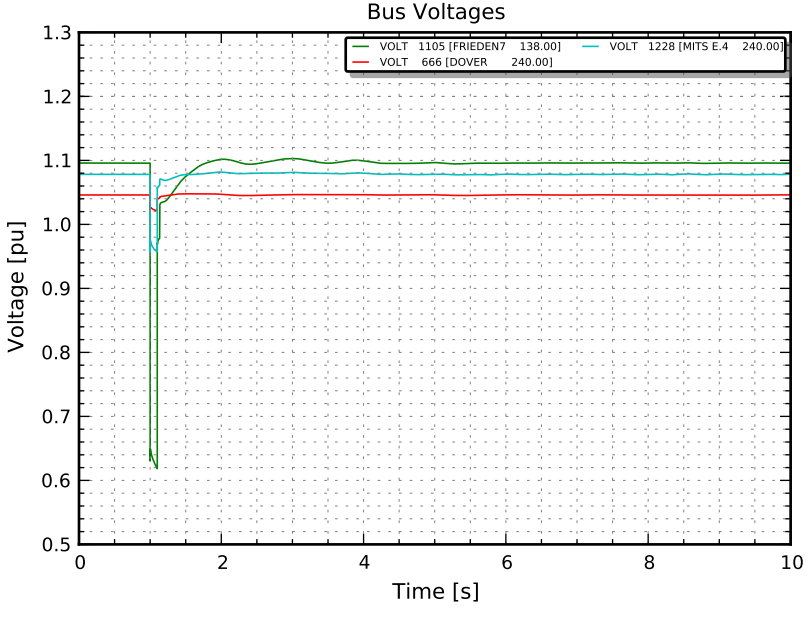
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_A.

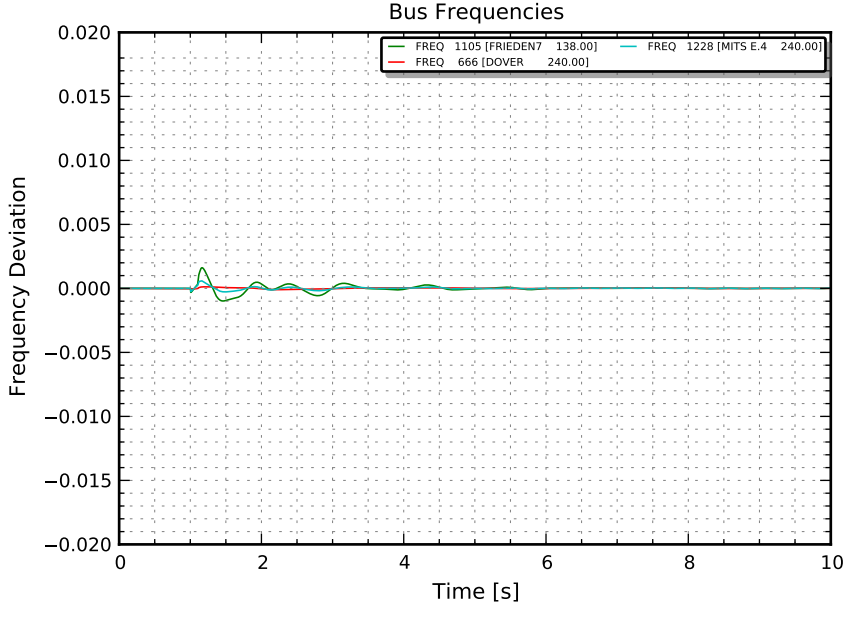
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 036 (A. 1)





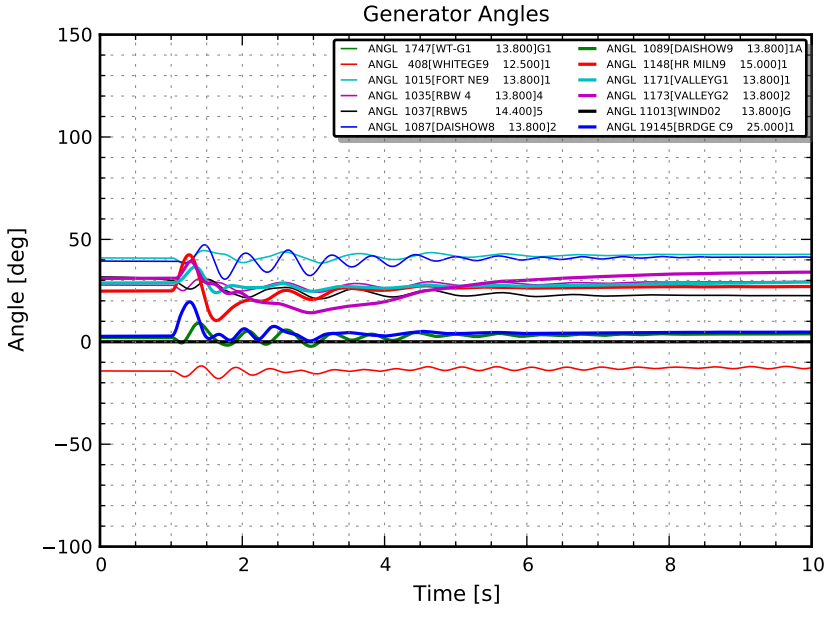


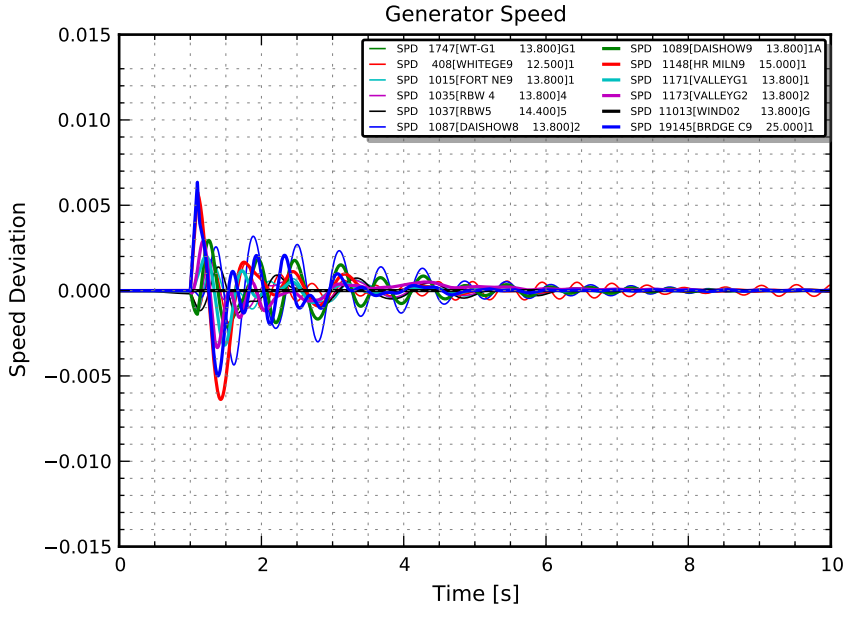


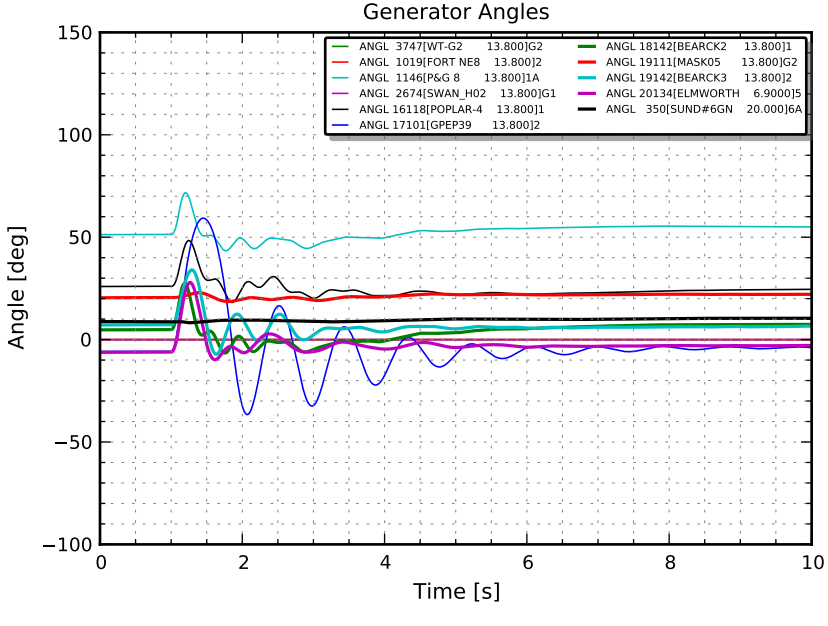
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_A.

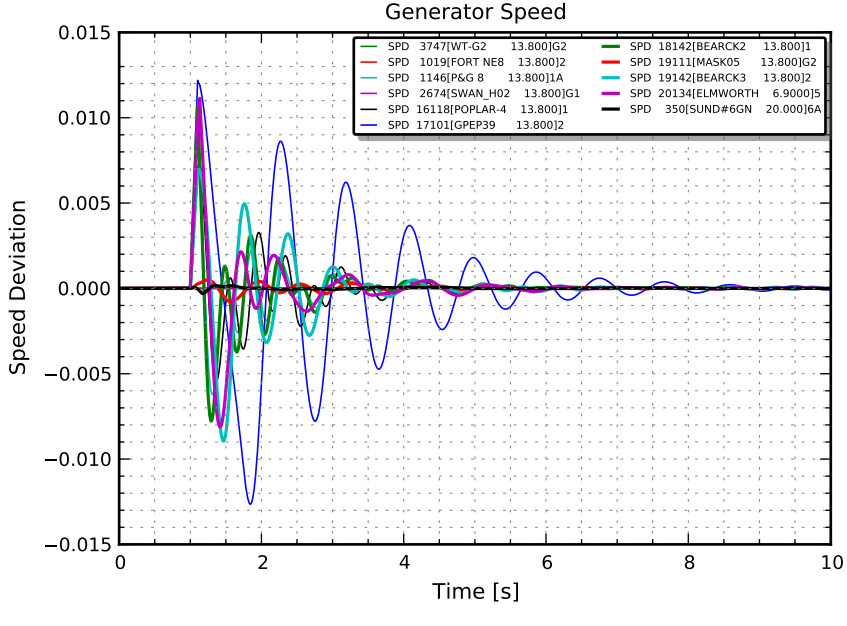
Study Area Generators

Appendix C2A
Figure: 036 (A. 2)





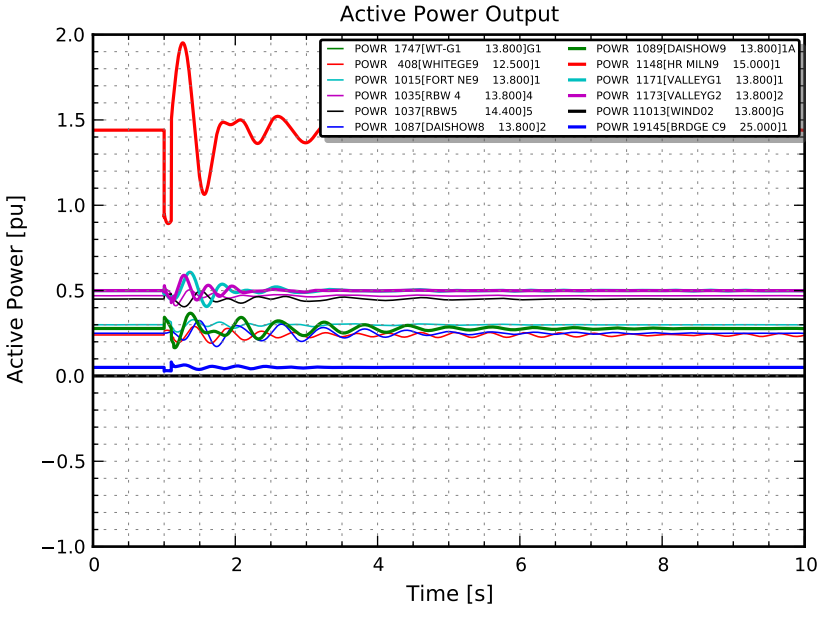


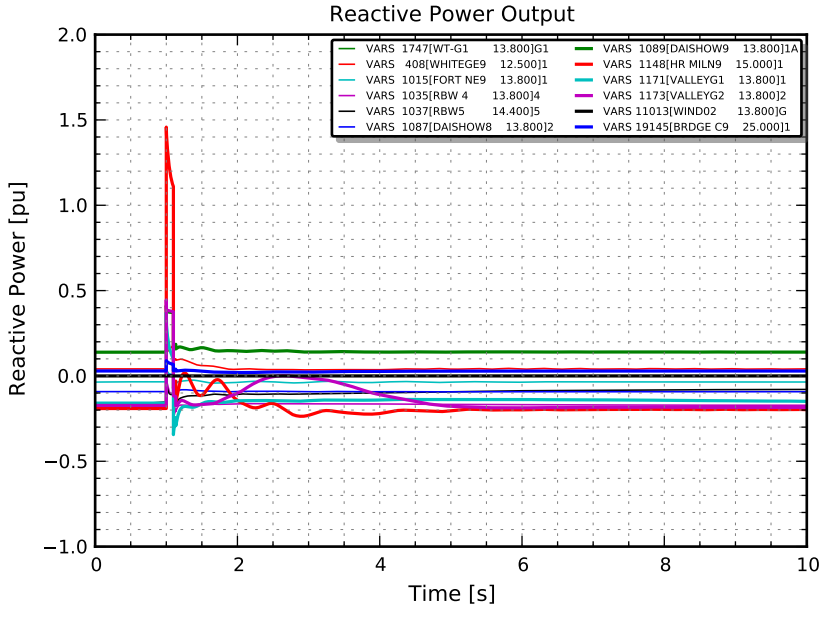


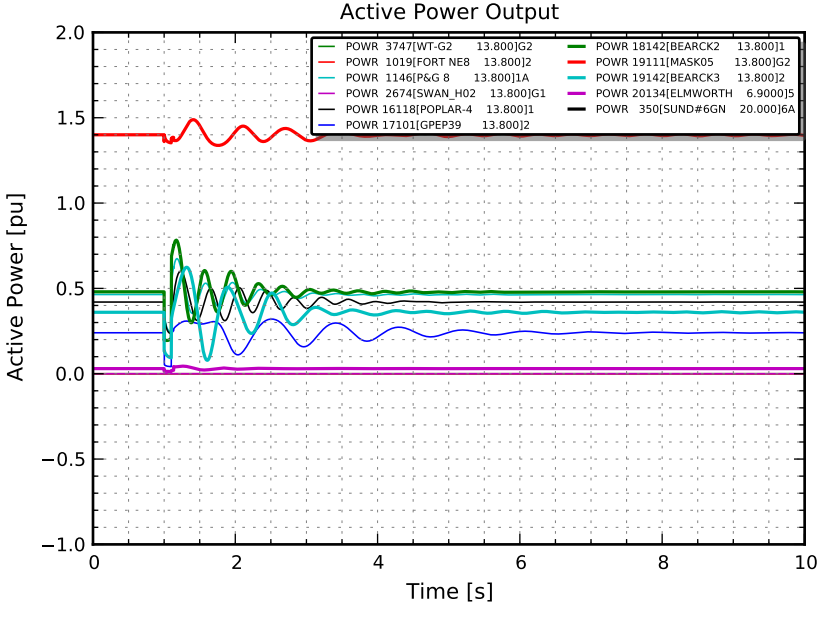
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_A.

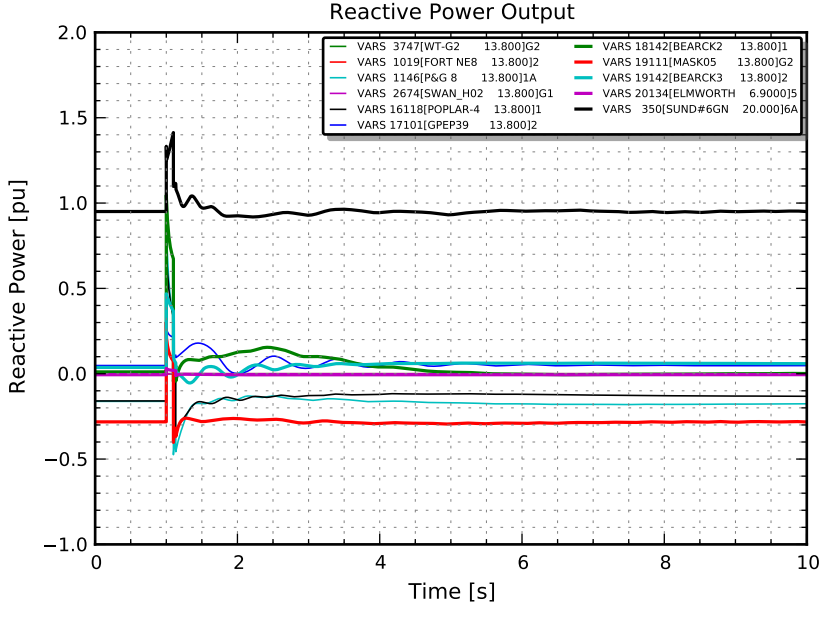
Study Area Generators

Appendix C2A
Figure: 036 (A. 3)





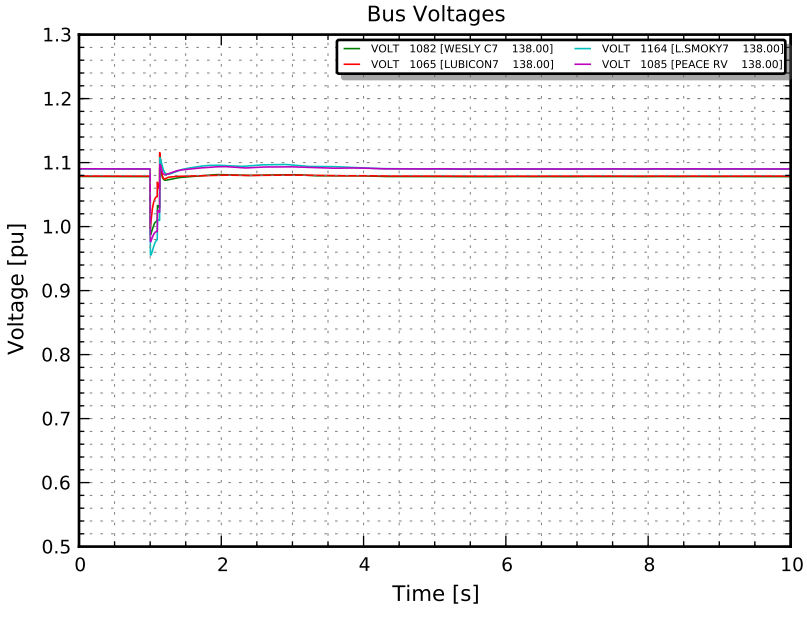


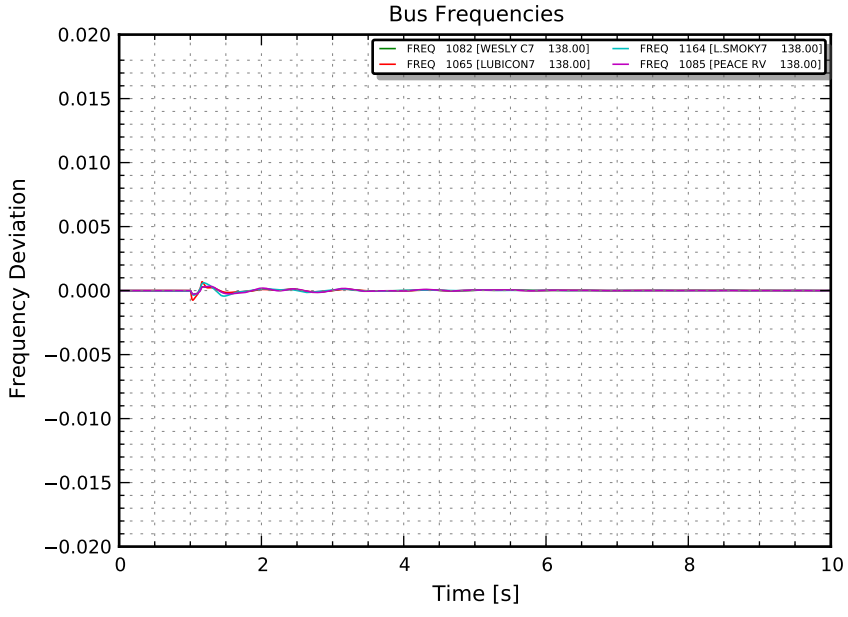


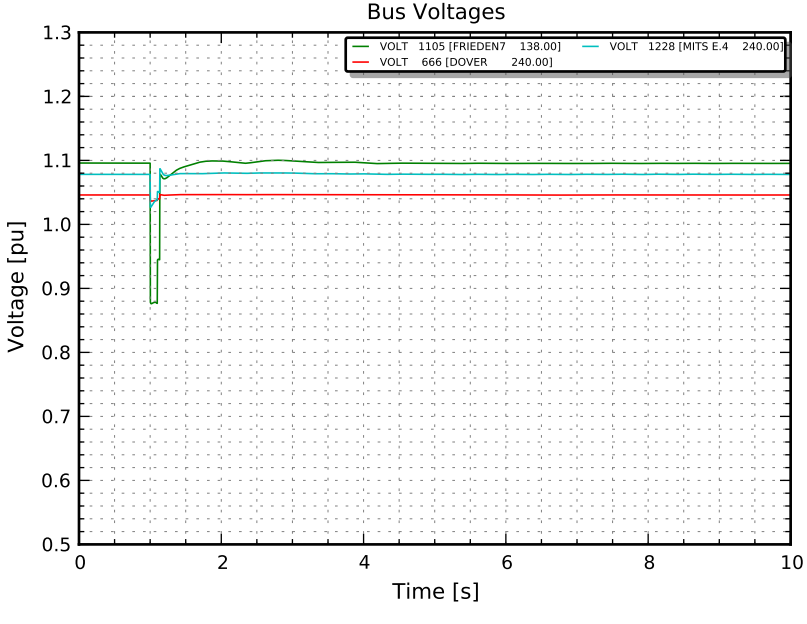
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_B.

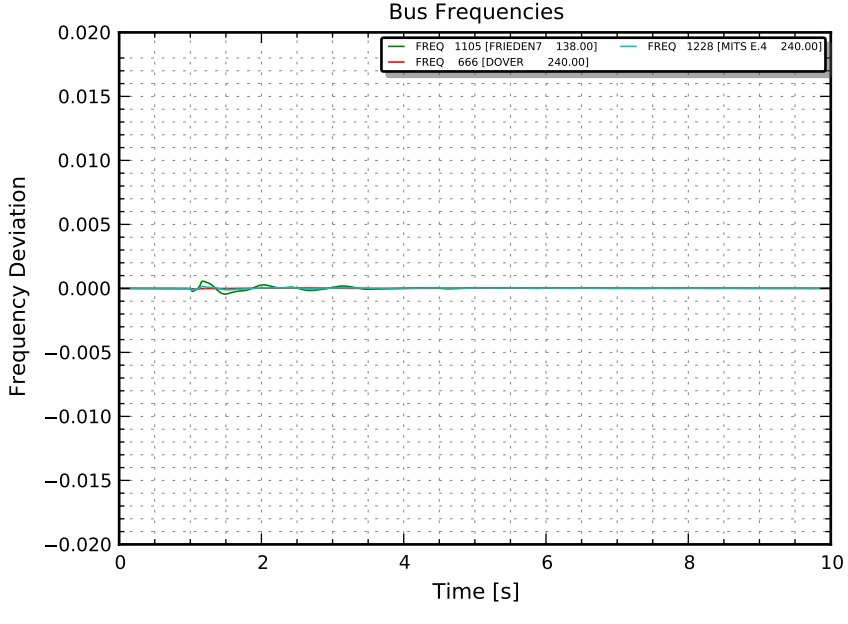
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 036 (B. 1)





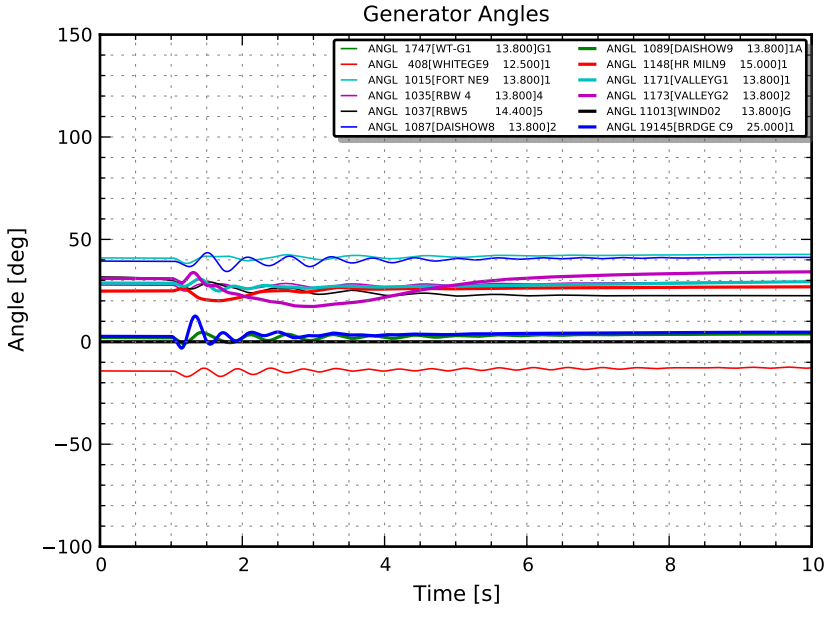


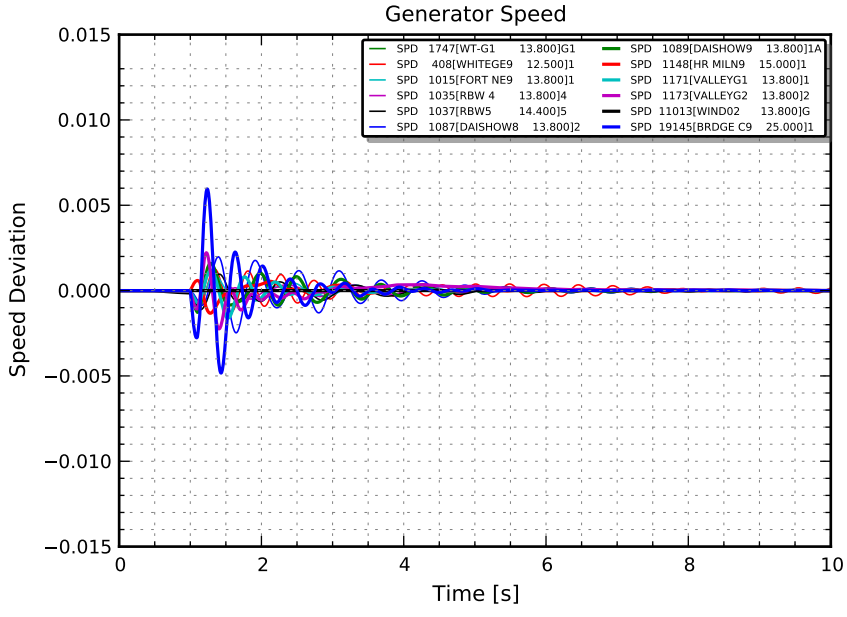


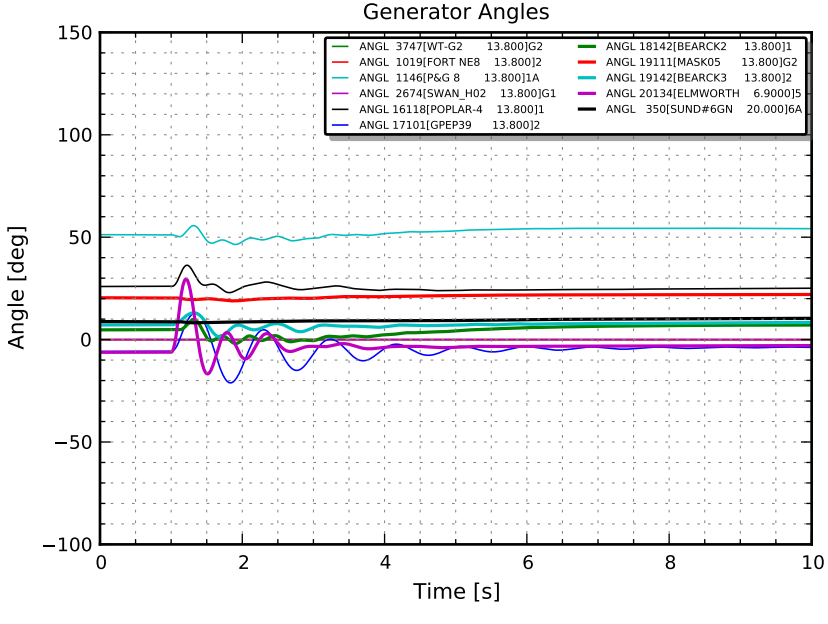
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_B.

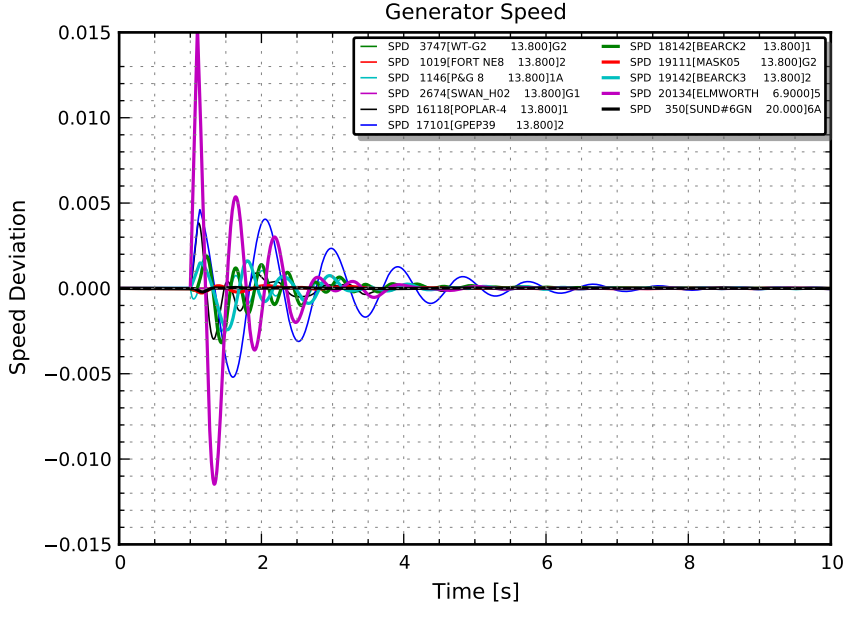
Study Area Generators

Appendix C2A
Figure: 036 (B. 2)





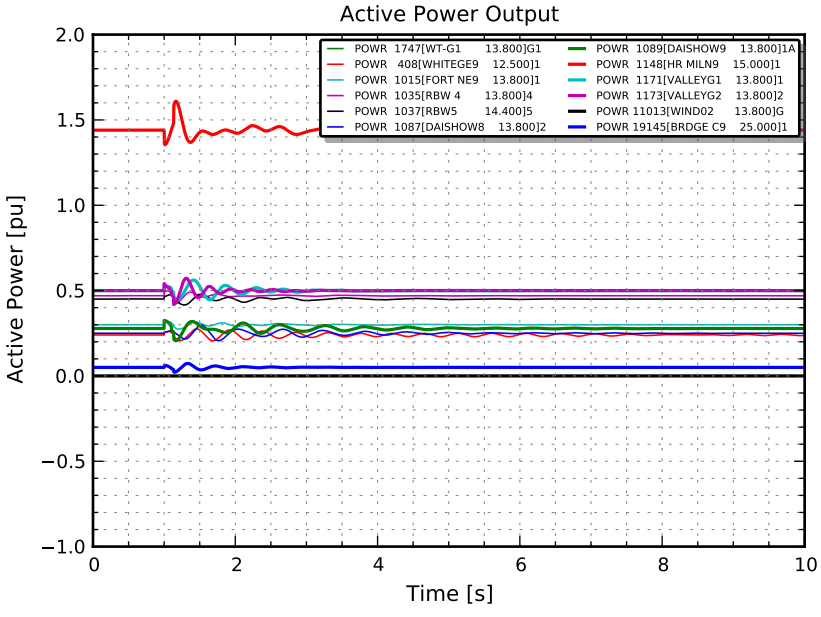


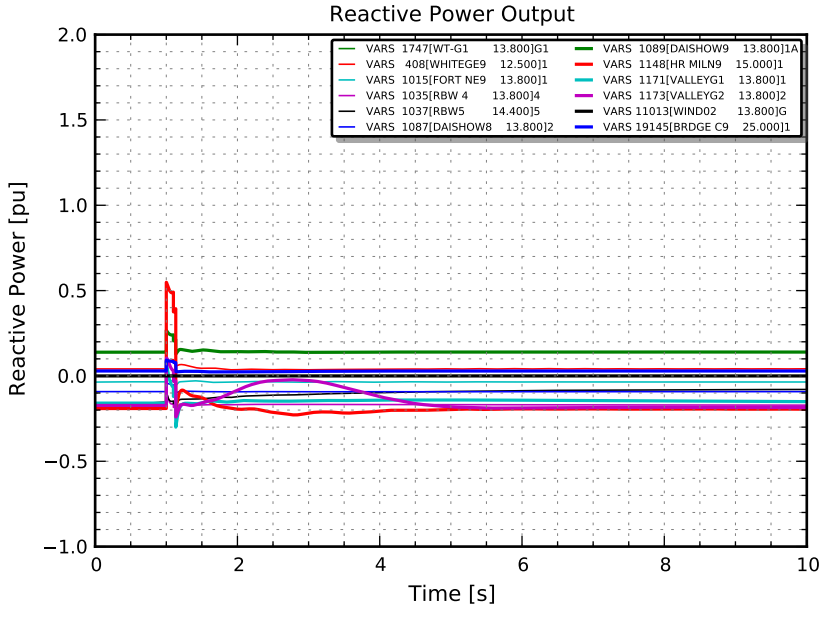


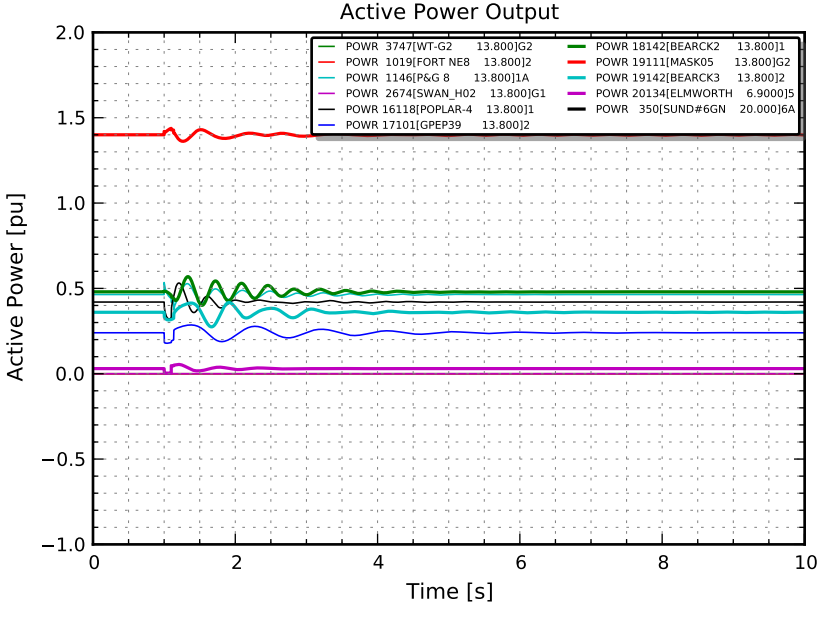
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_B.

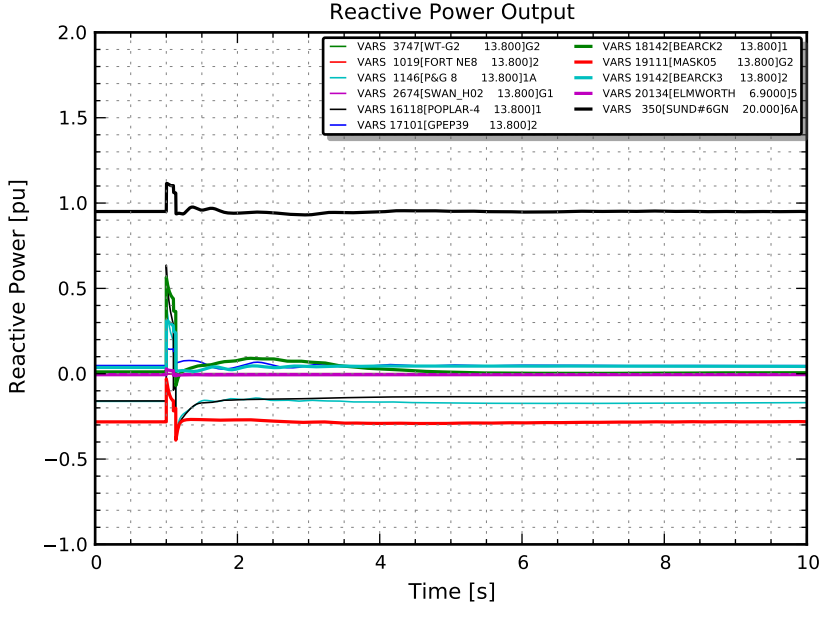
Study Area Generators

Appendix C2A
Figure: 036 (B. 3)





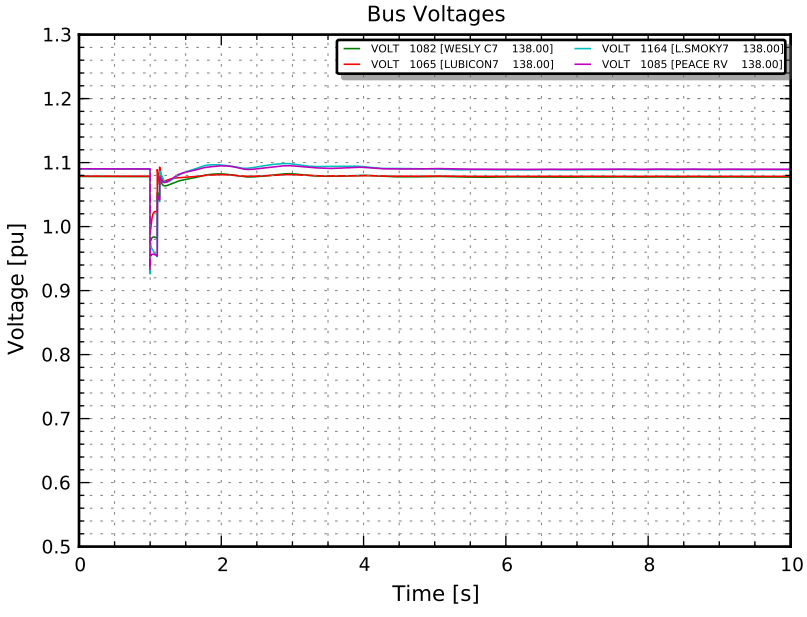


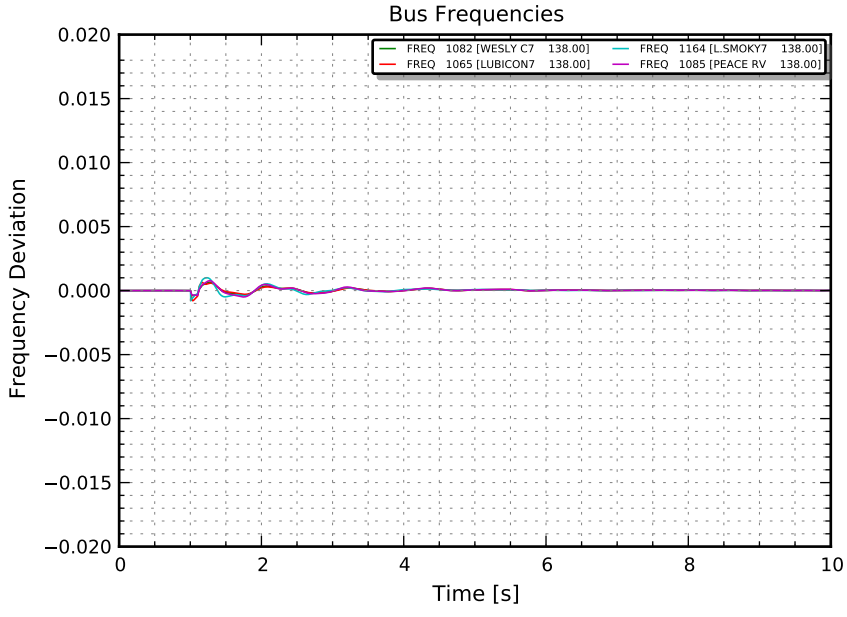


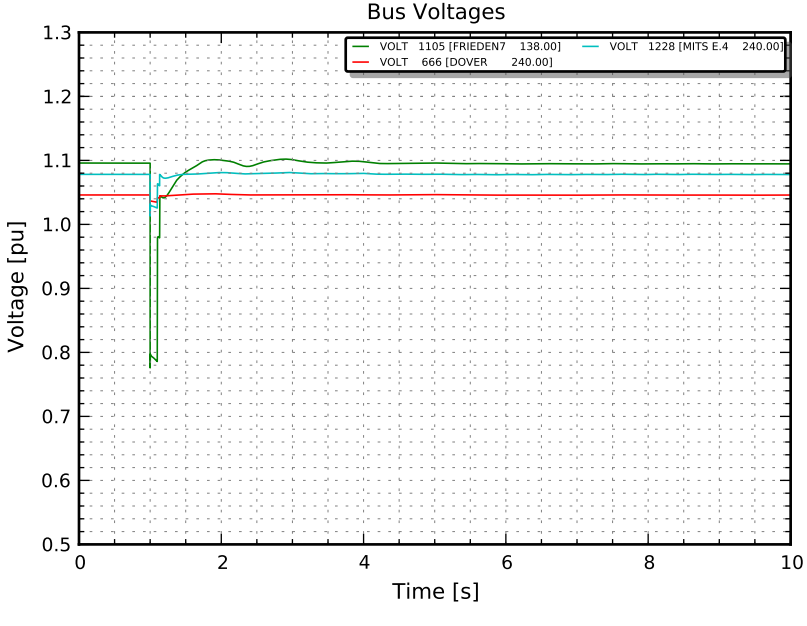
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 037 7L07 POPLARHILL to ELMWORTH_A.

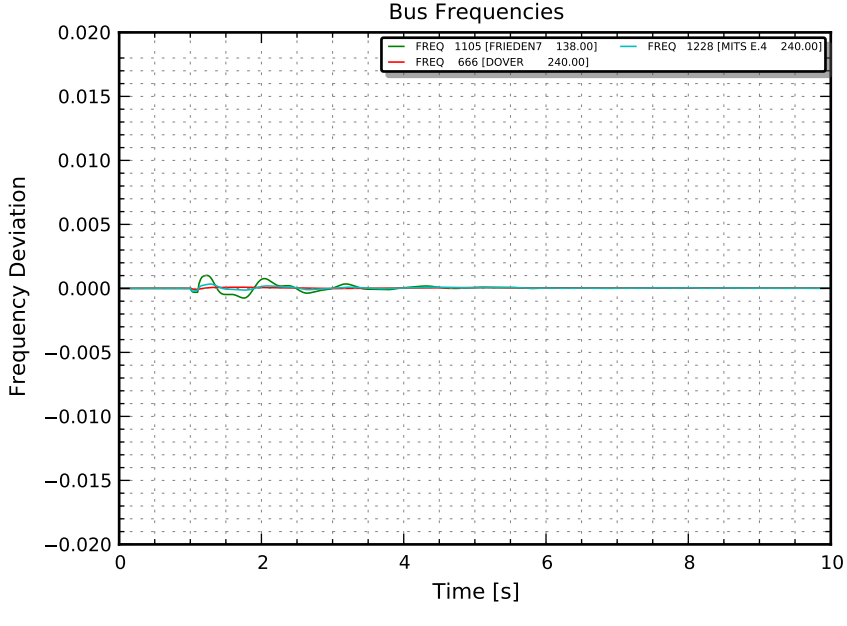
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 037 (A. 1)





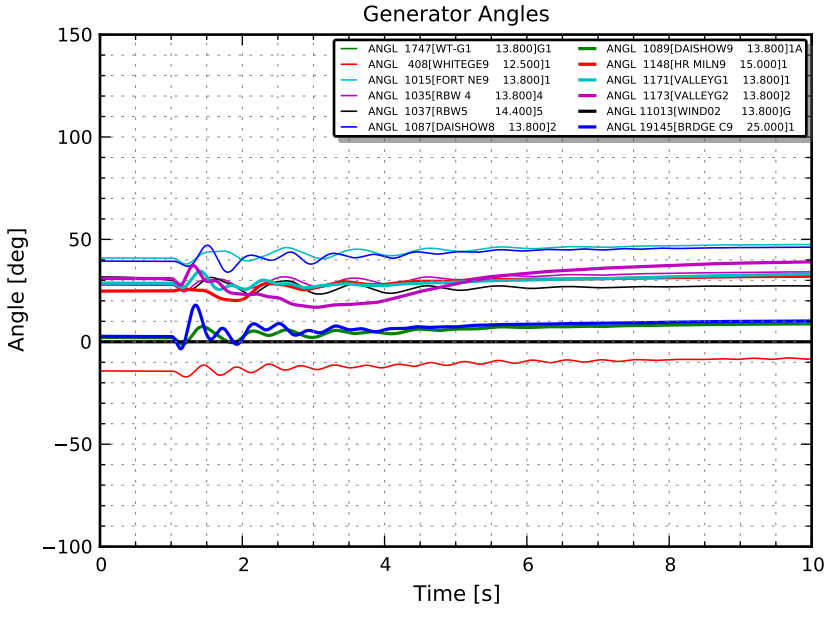


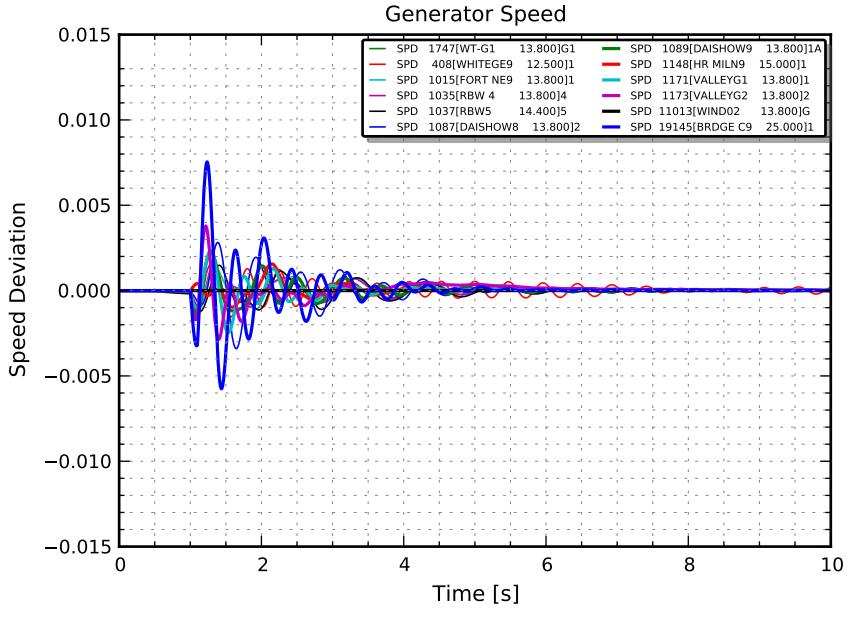


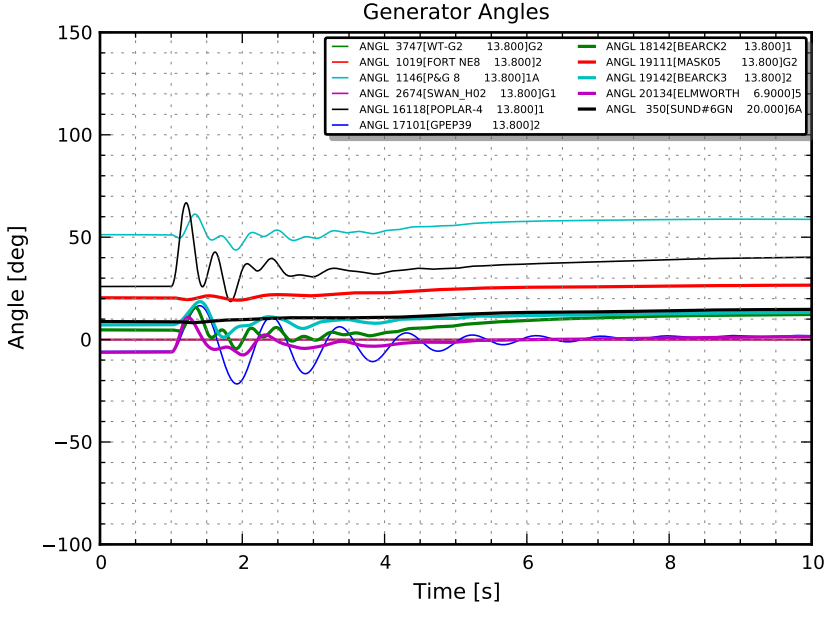
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 037 7L07 POPLARHILL to ELMWORTH_A.

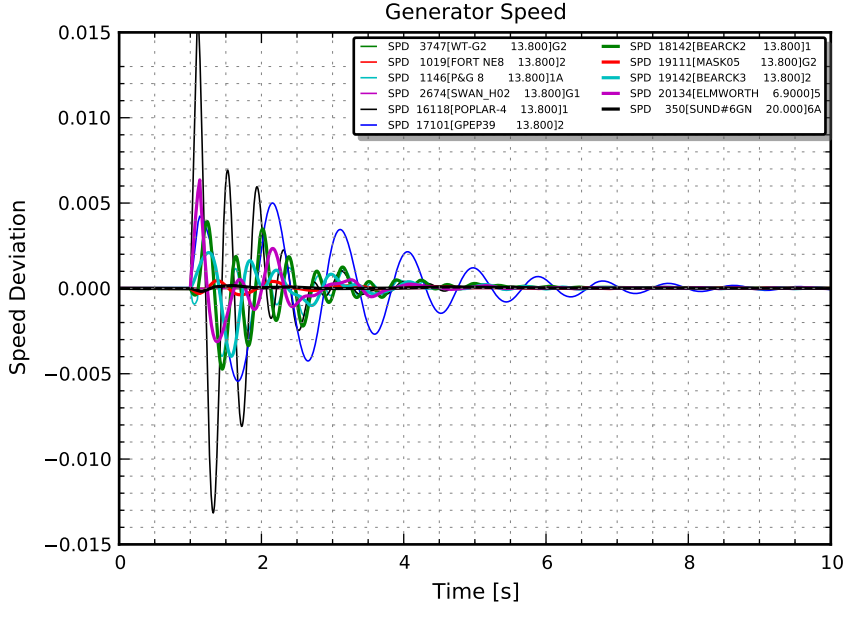
Study Area Generators

Appendix C2A
Figure: 037 (A. 2)





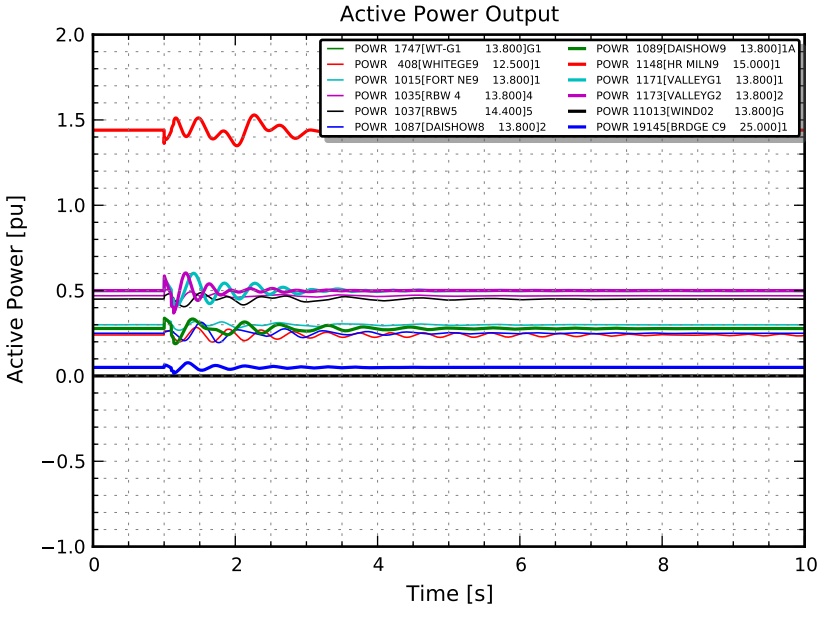


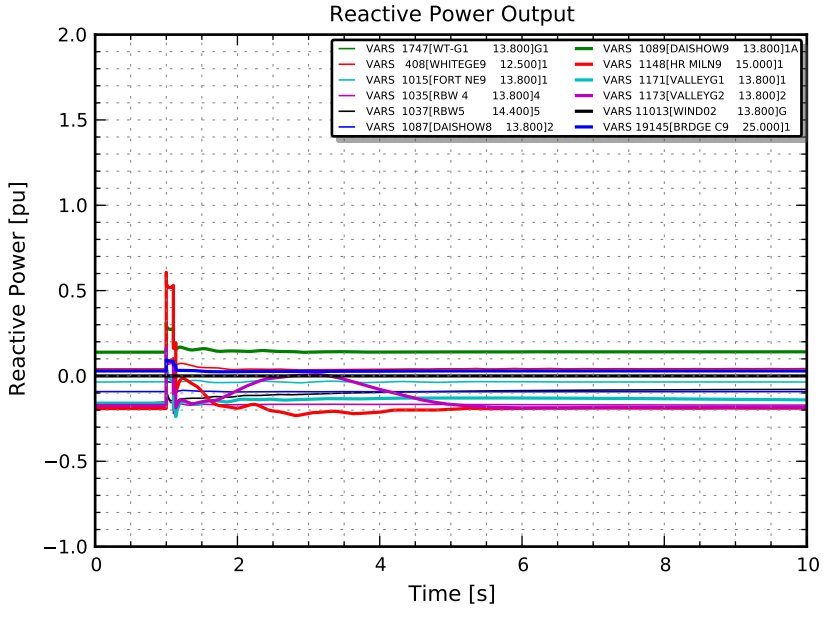


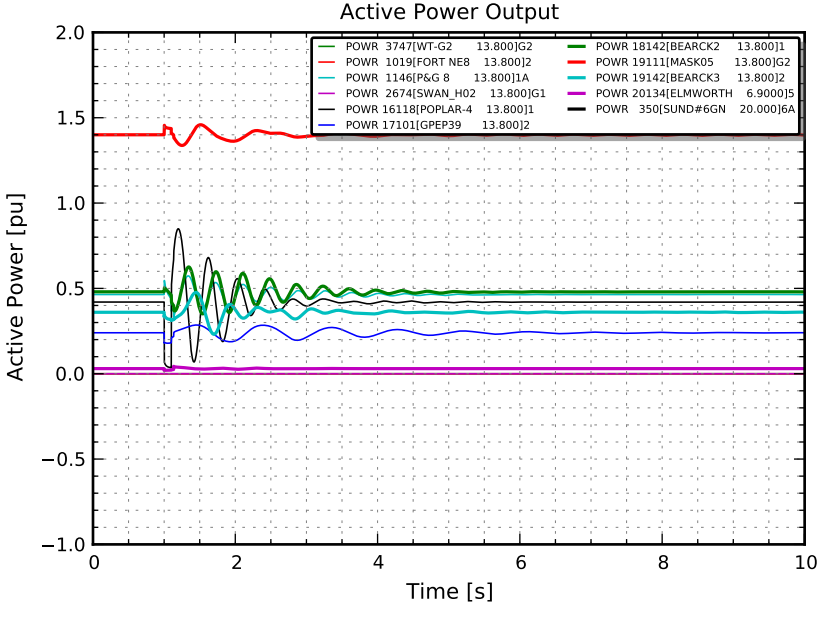
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 037 7L07 POPLARHILL to ELMWORTH_A.

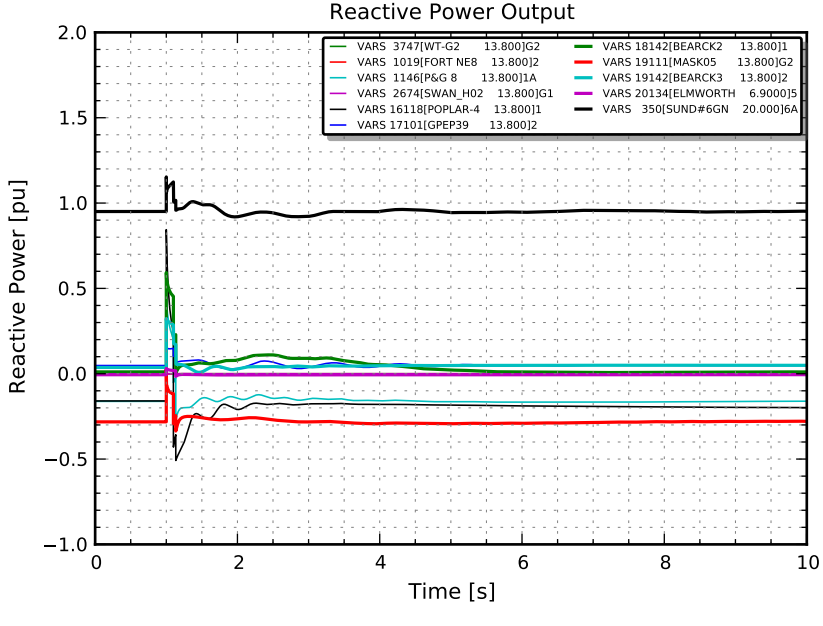
Study Area Generators

Appendix C2A
Figure: 037 (A. 3)





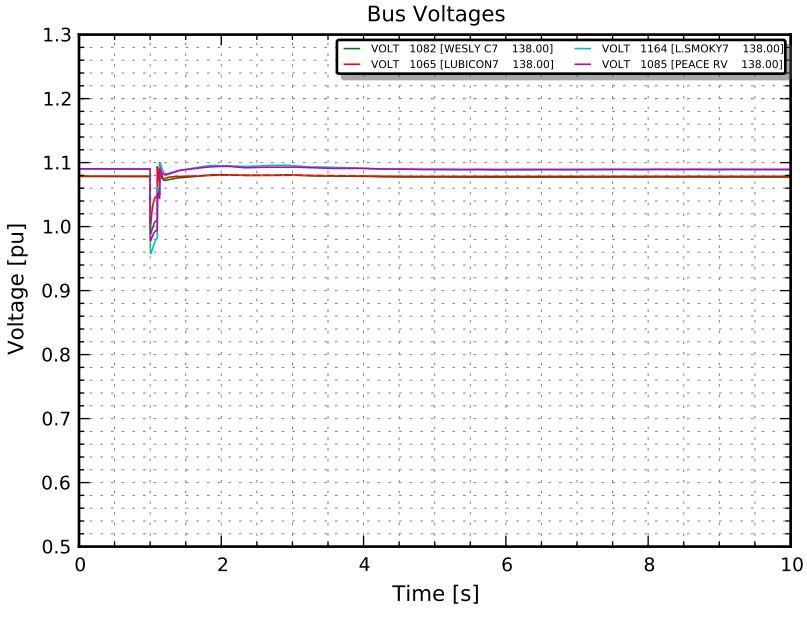


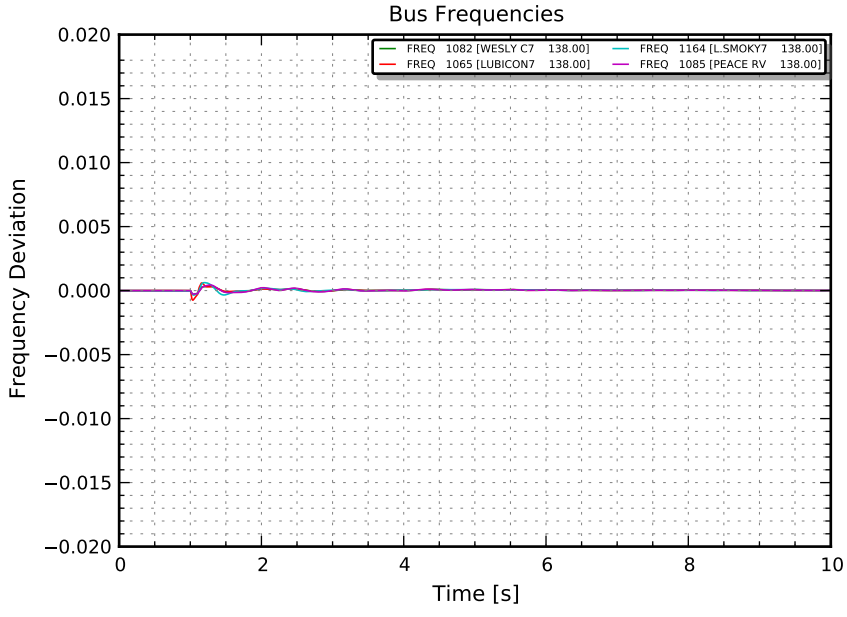


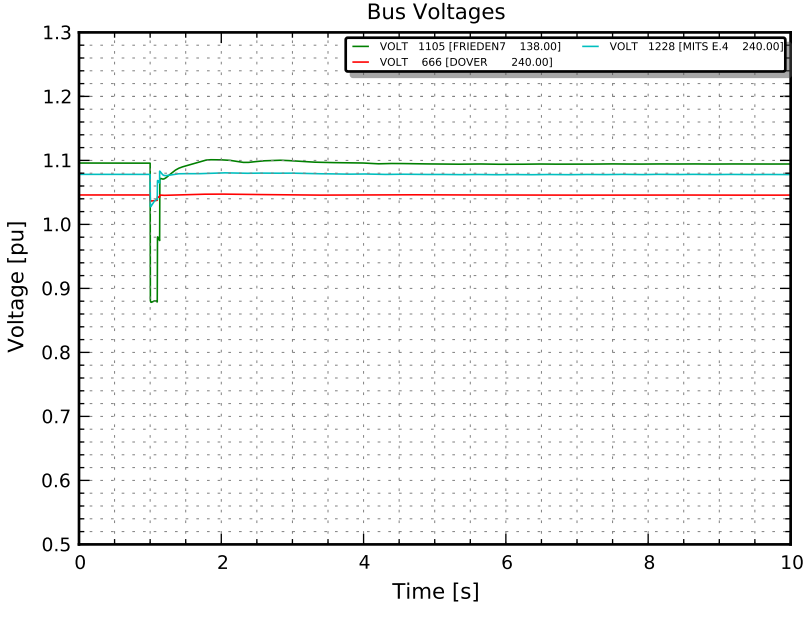
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 037 7L07 POPLARHILL to ELMWORTH_B.

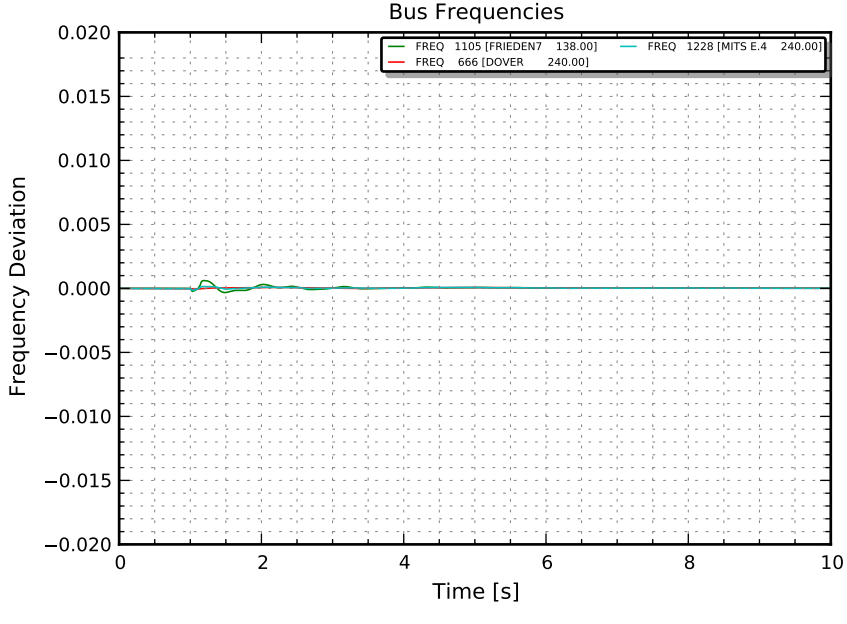
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 037 (B. 1)





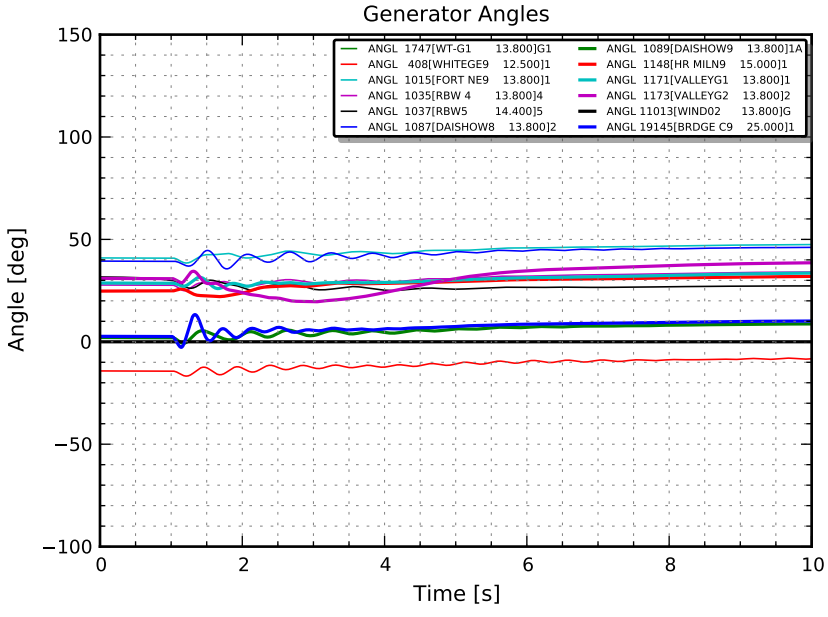


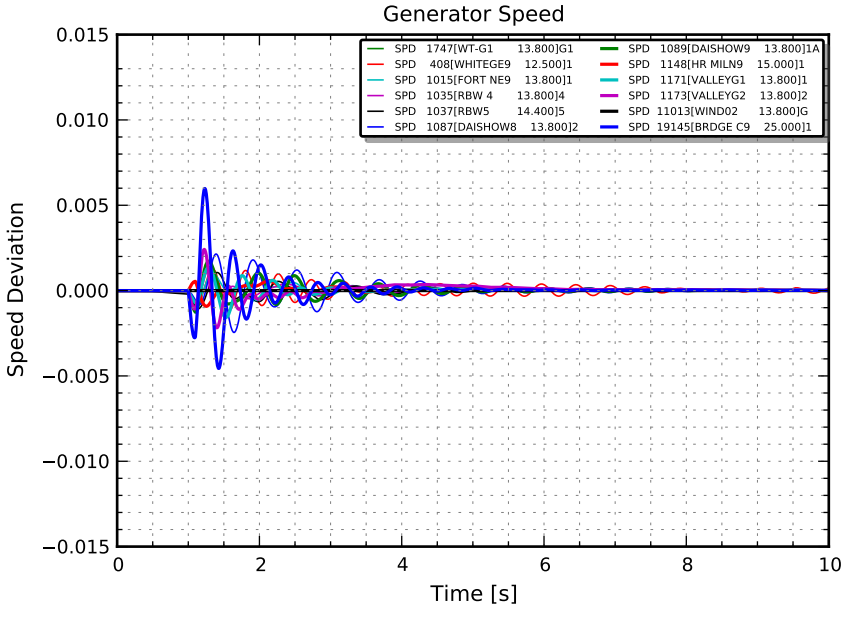


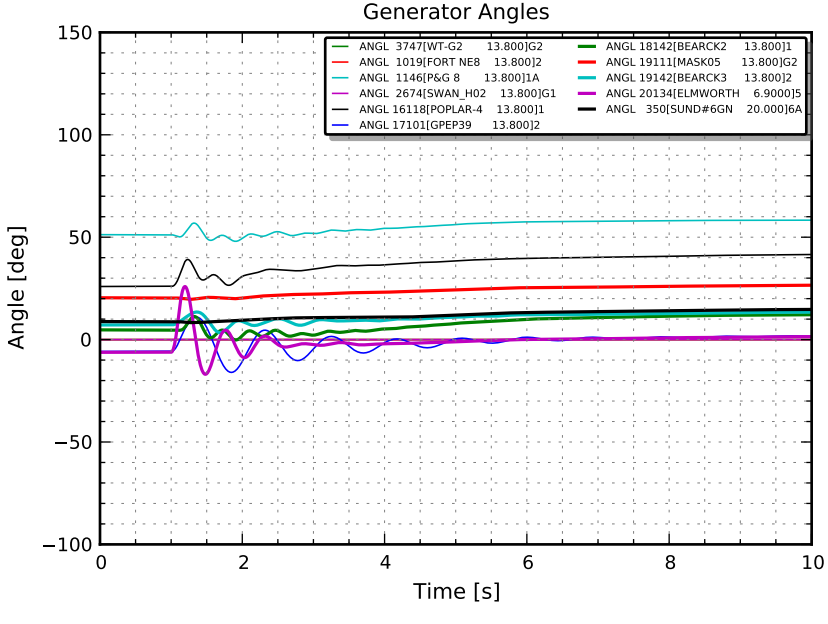
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 037 7L07 POPLARHILL to ELMWORTH_B.

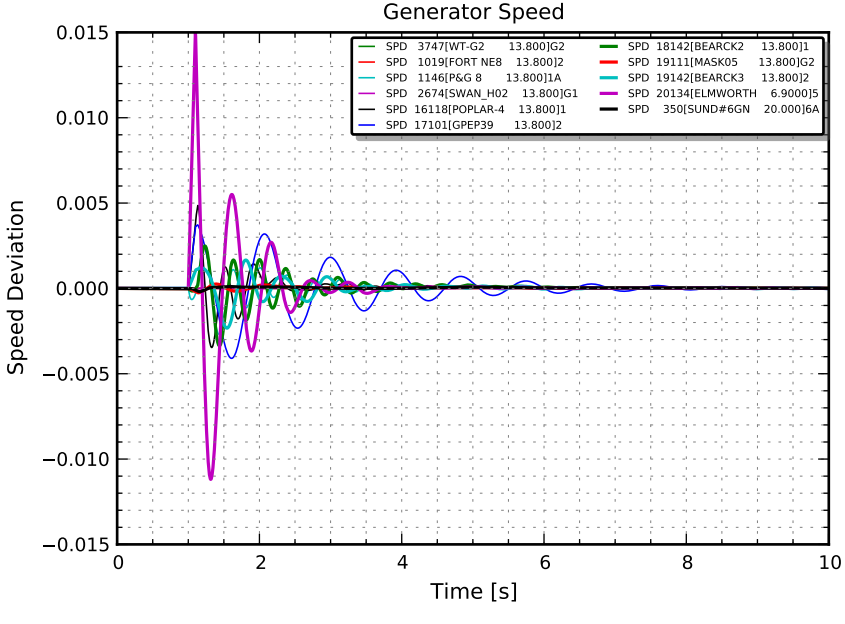
Study Area Generators

Appendix C2A
Figure: 037 (B. 2)





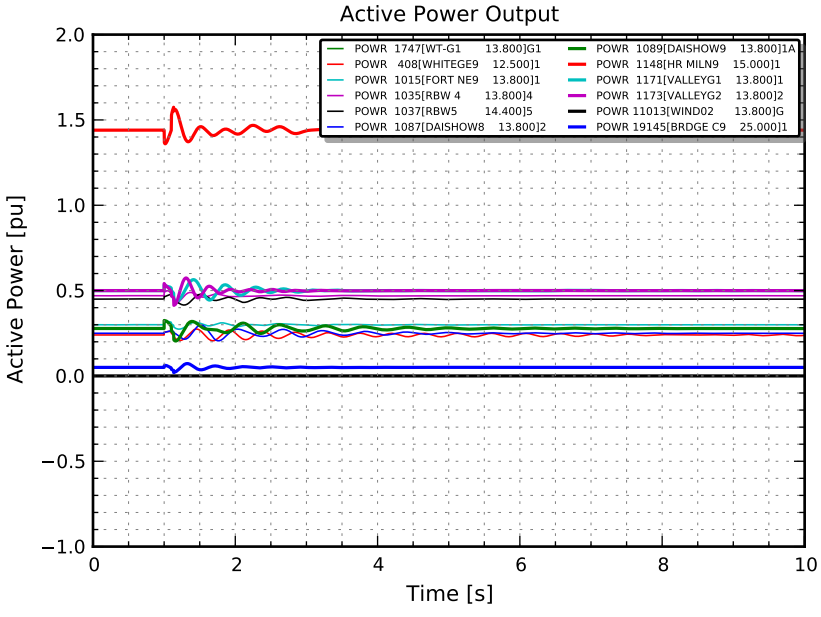


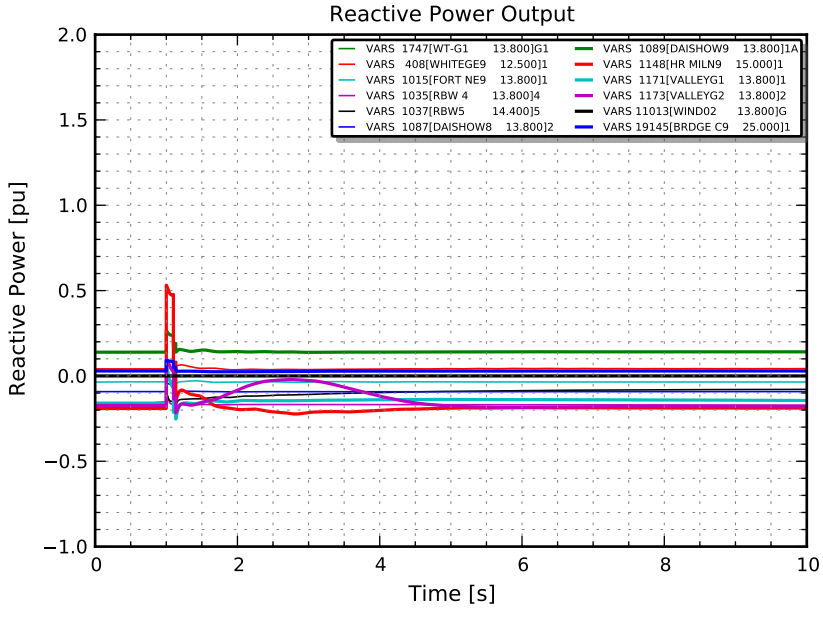


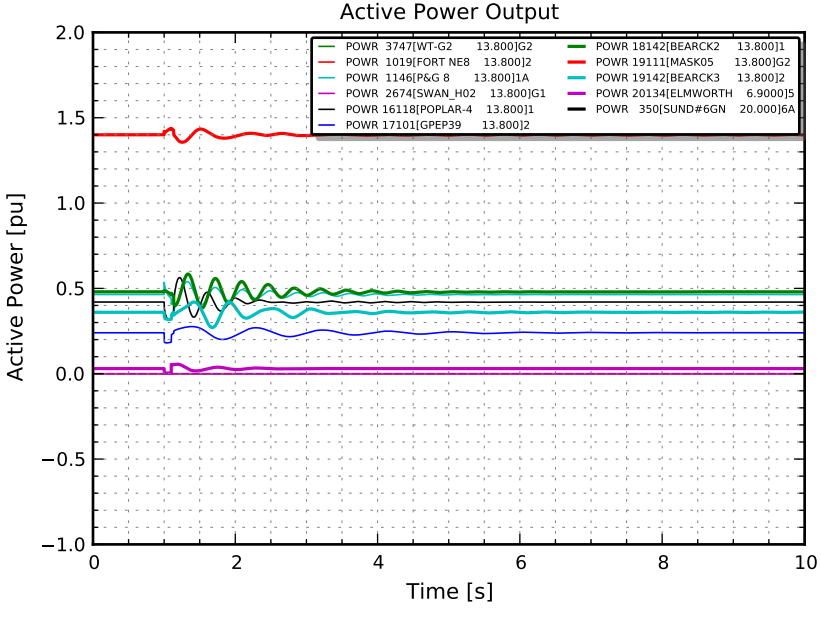
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 037 7L07 POPLARHILL to ELMWORTH_B.

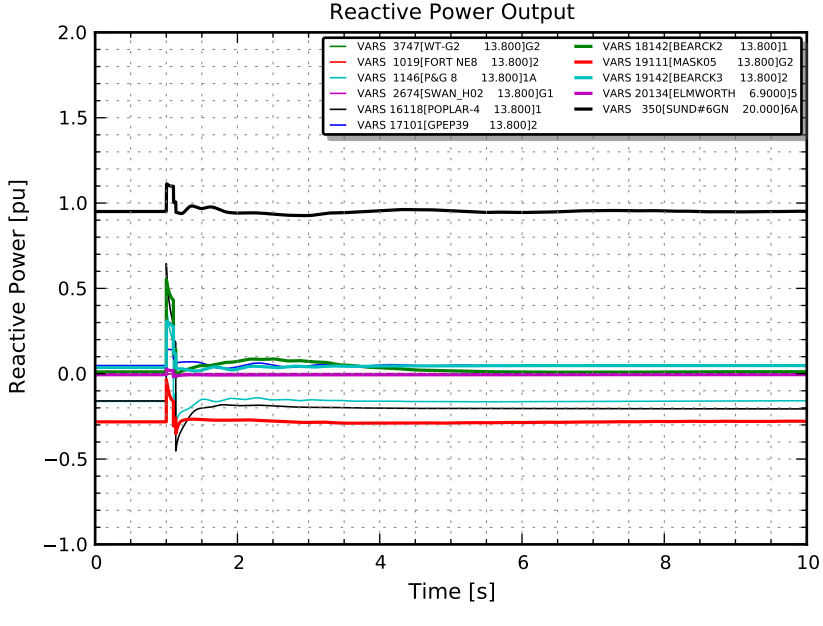
Study Area Generators

Appendix C2A
Figure: 037 (B. 3)





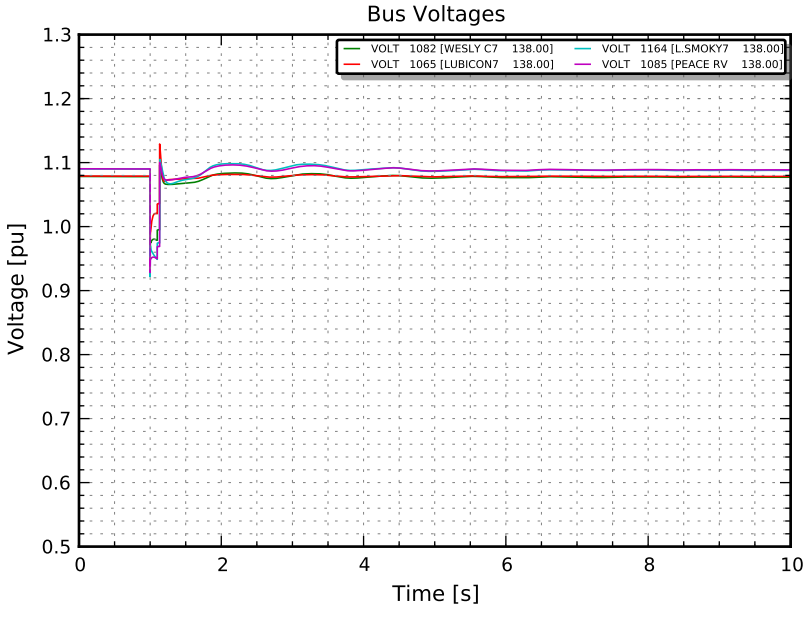


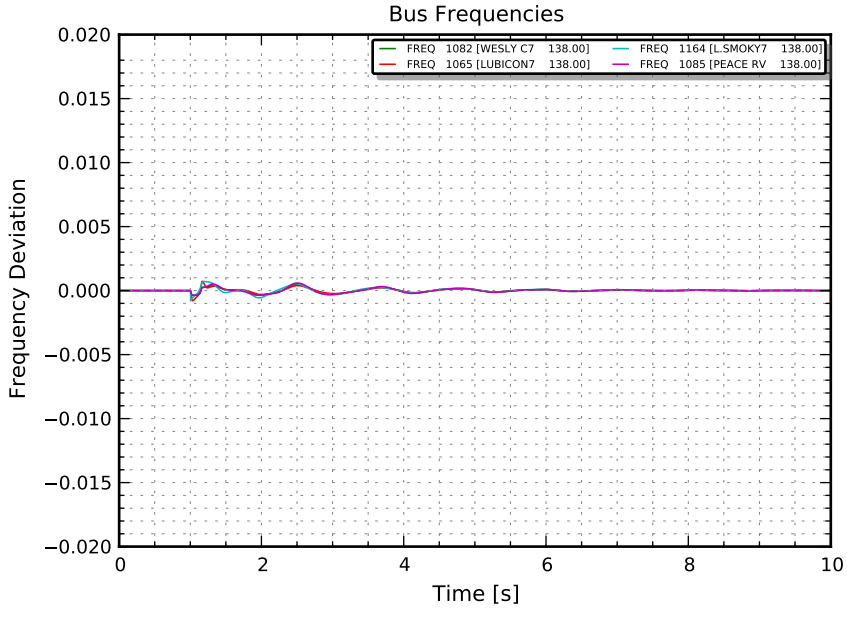


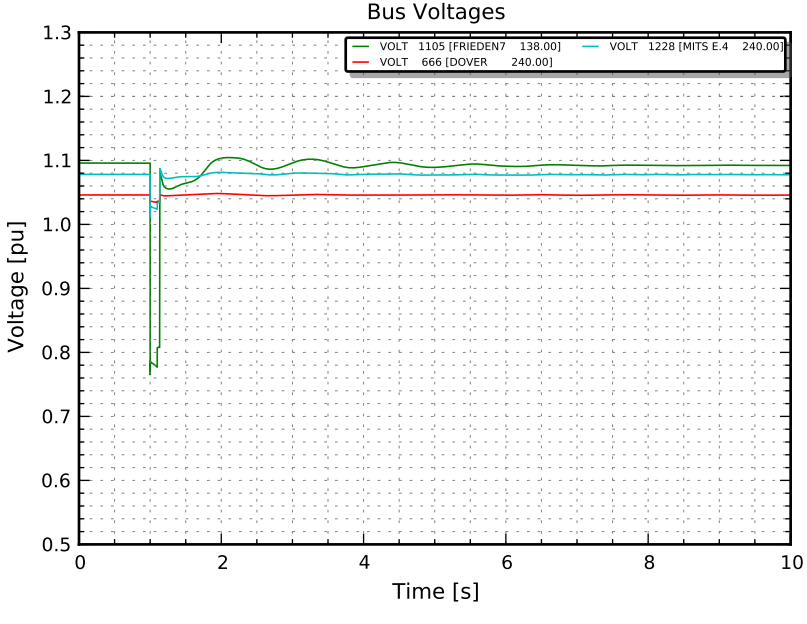
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_A.

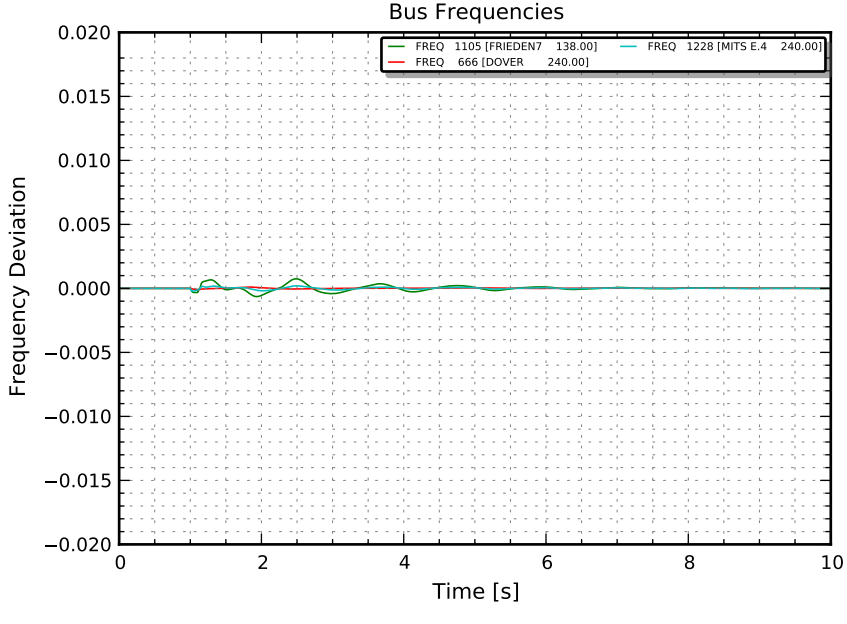
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 038 (A. 1)





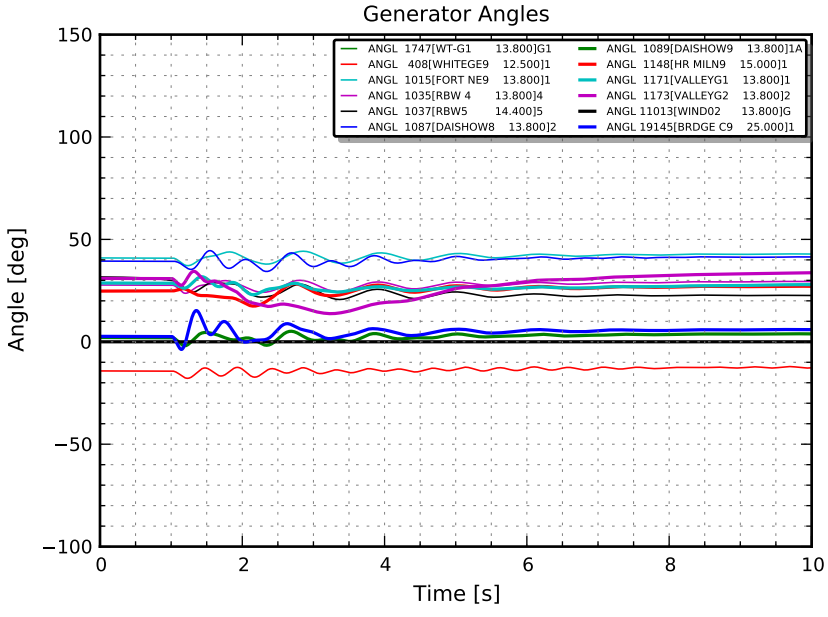


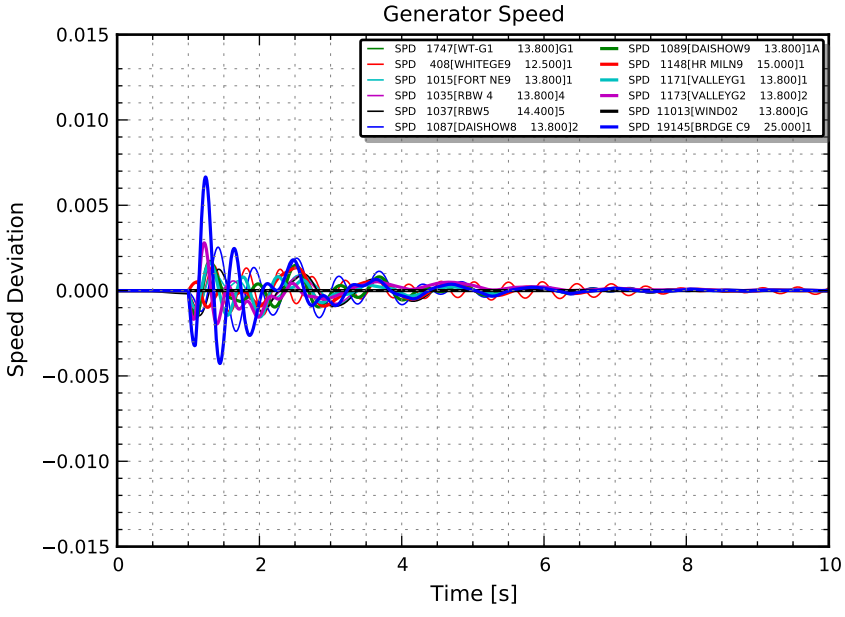


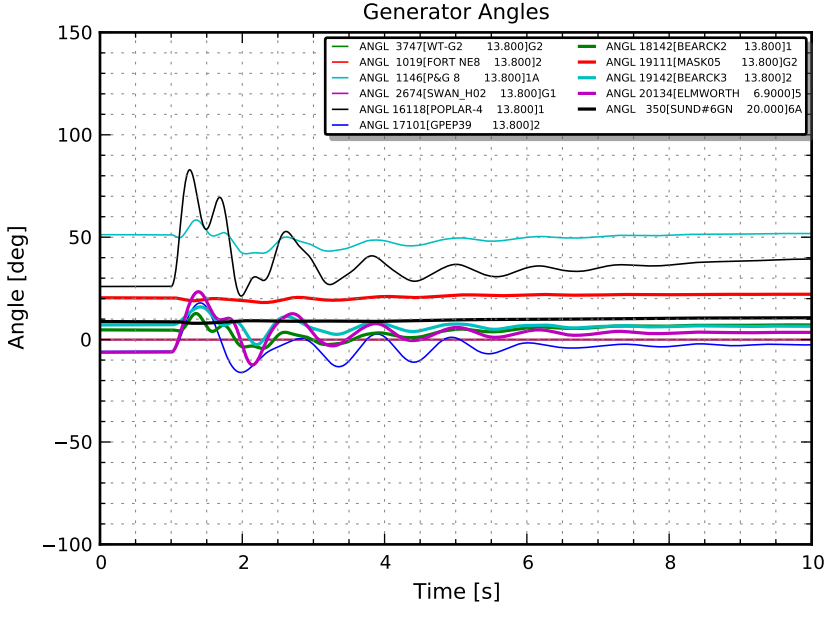
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_A.

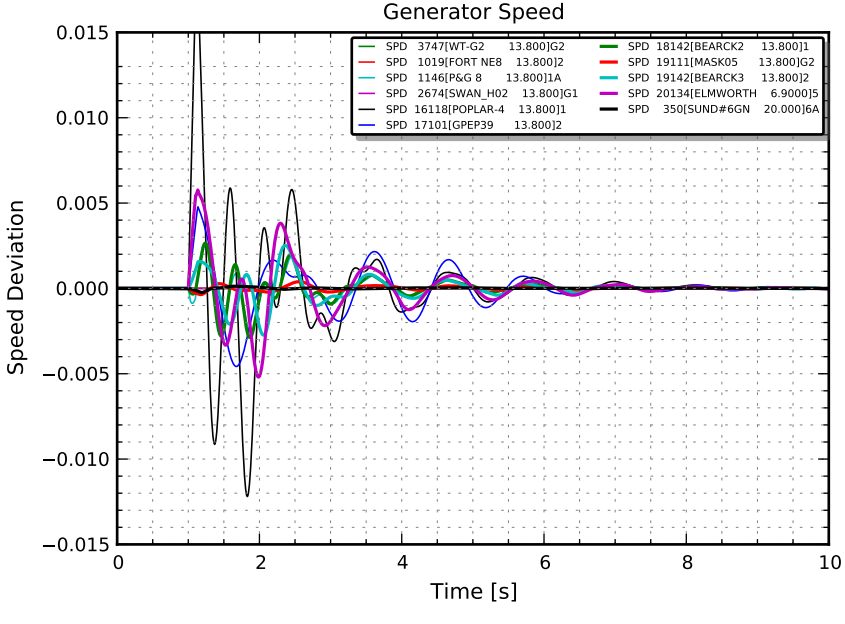
Study Area Generators

Appendix C2A
Figure: 038 (A. 2)





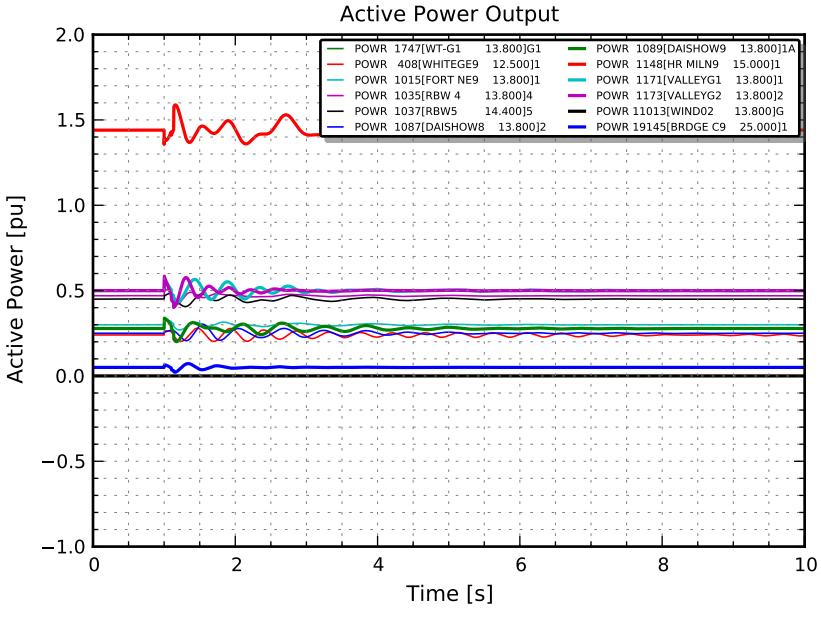


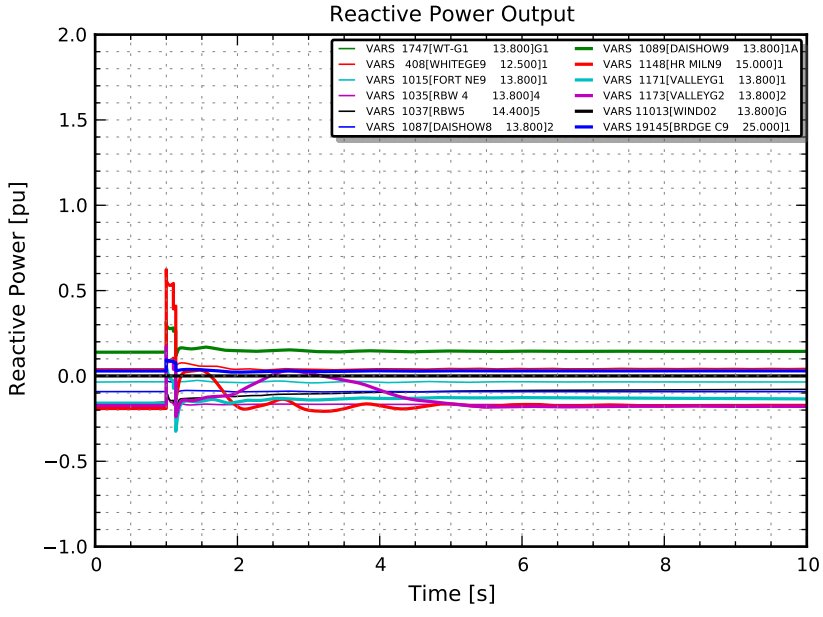


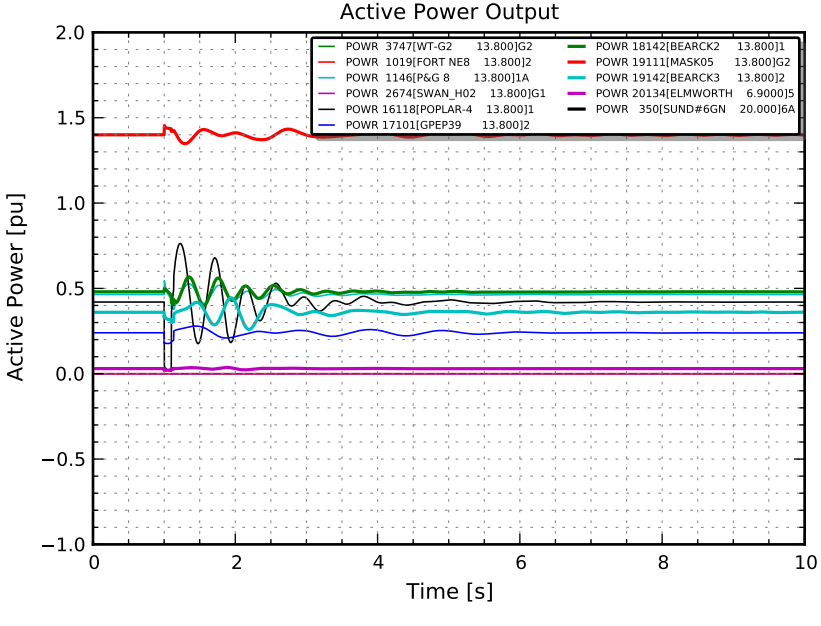
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_A.

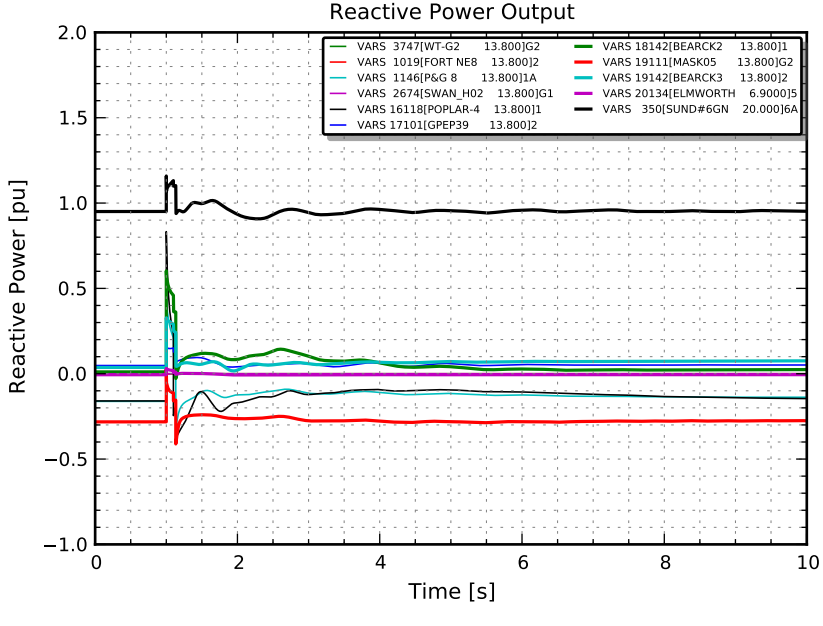
Study Area Generators

Appendix C2A
Figure: 038 (A. 3)





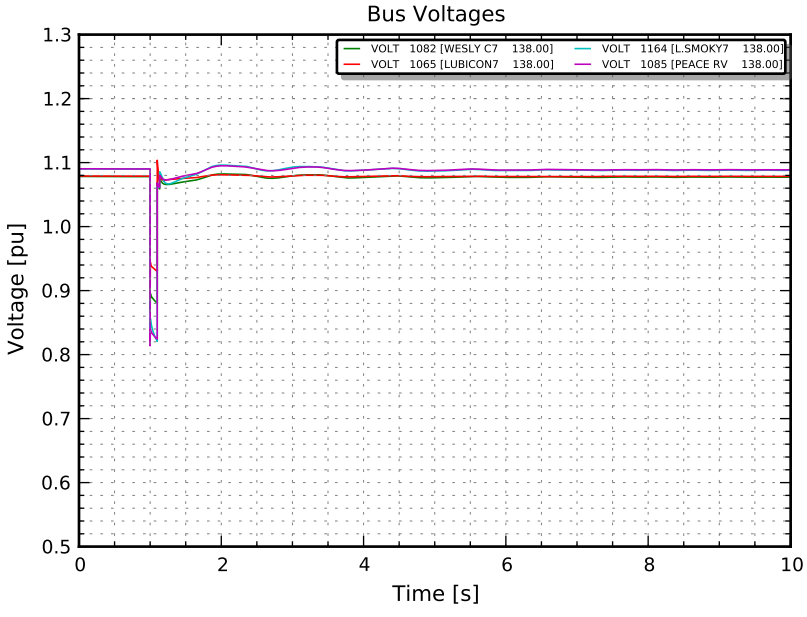


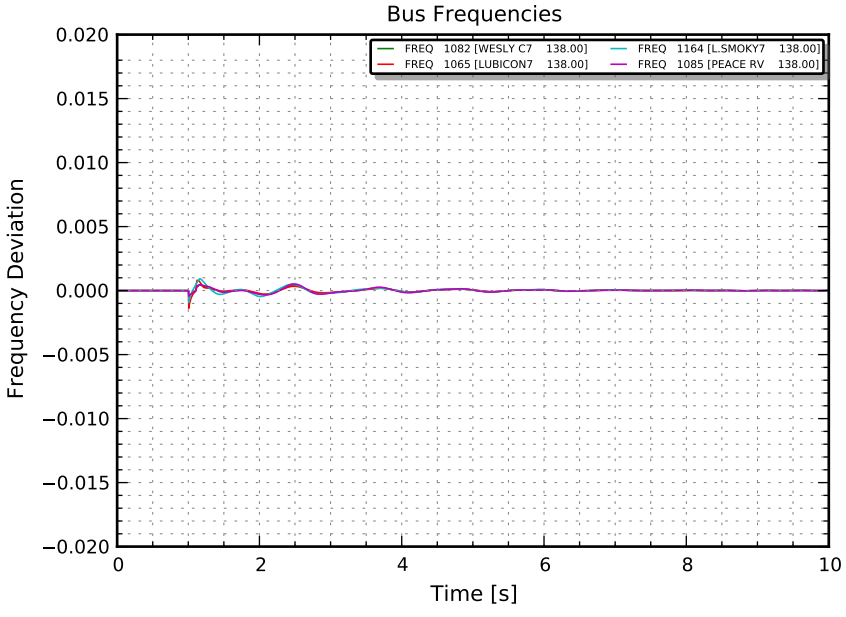


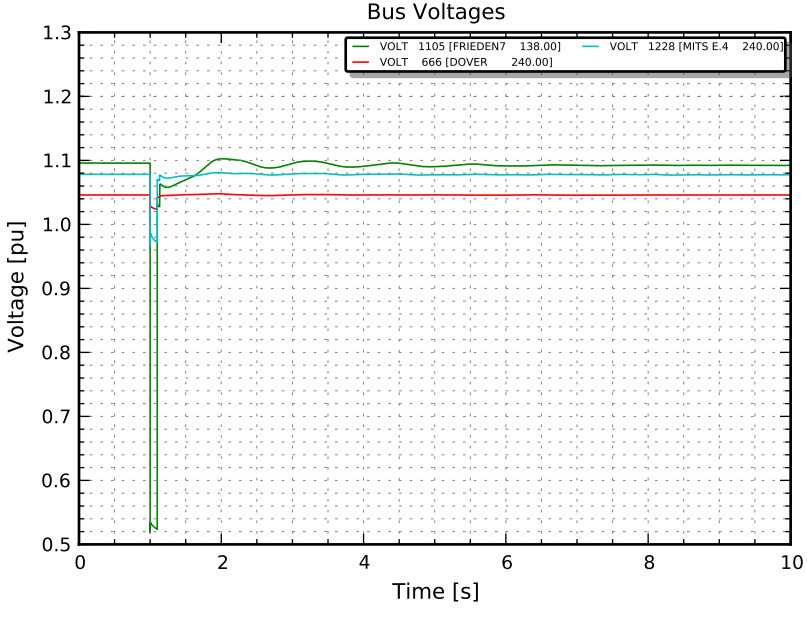
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_B.

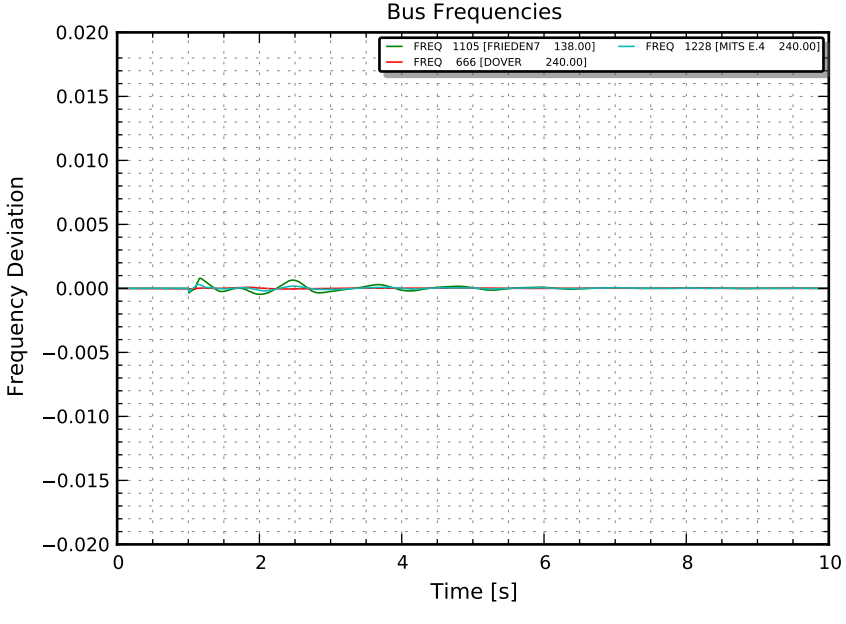
Study Area Bus Voltages and Frequencies

Appendix C2A
Figure: 038 (B. 1)





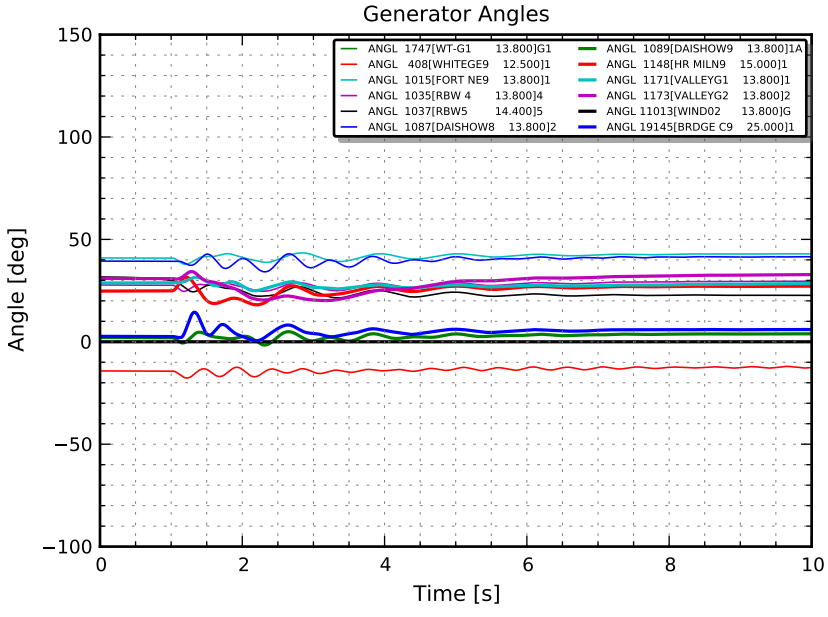


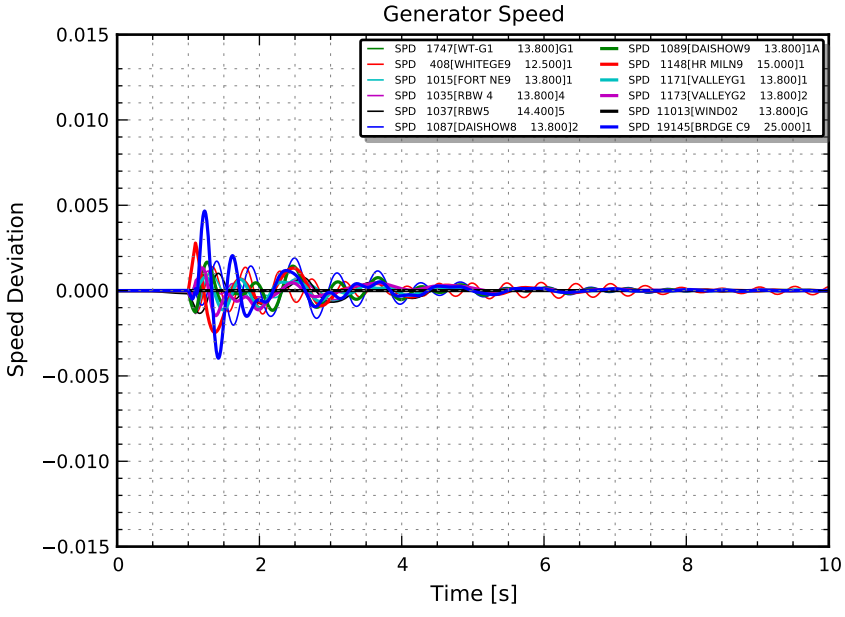


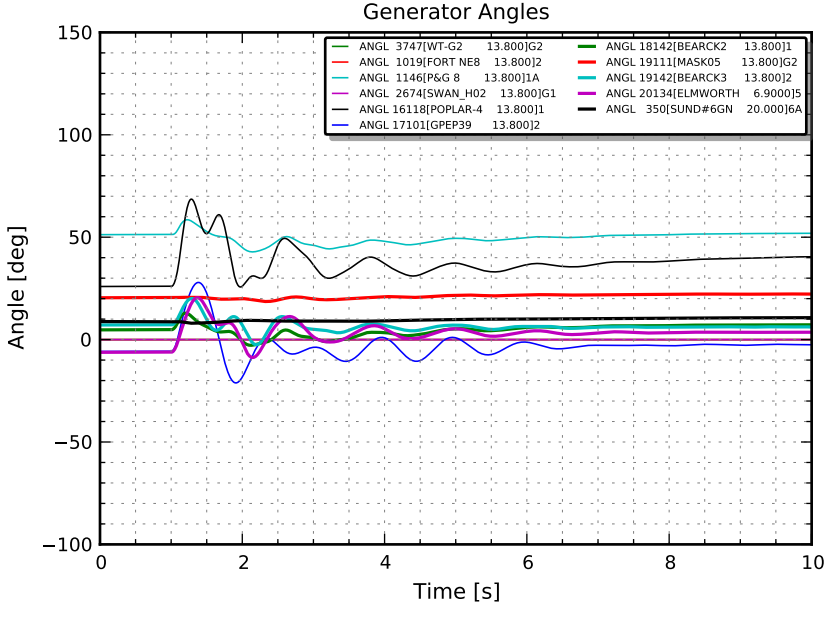
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_B.

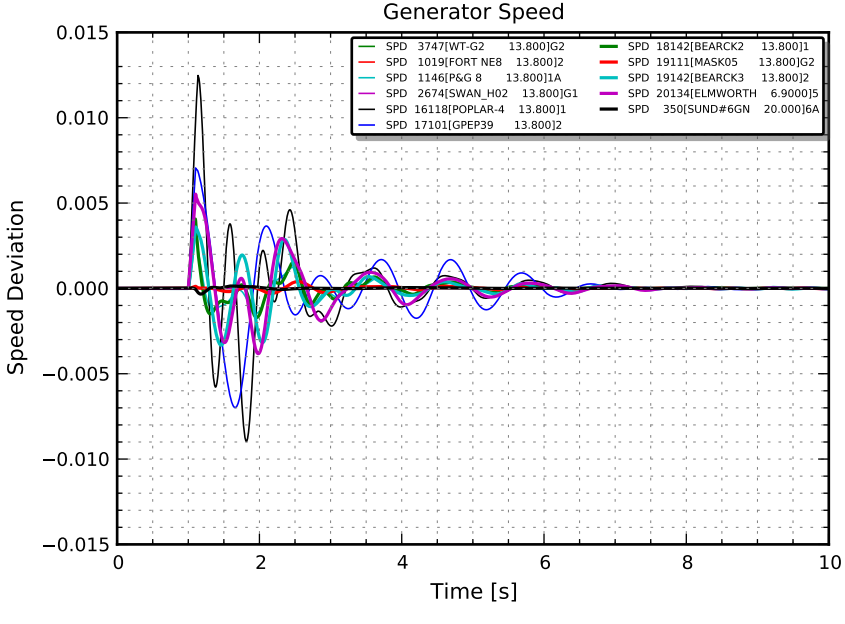
Study Area Generators

Appendix C2A
Figure: 038 (B. 2)





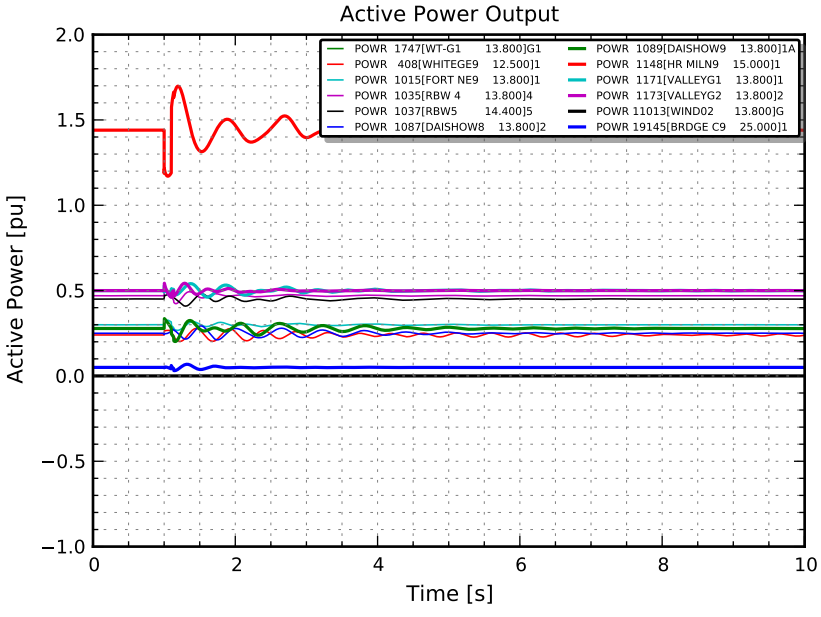


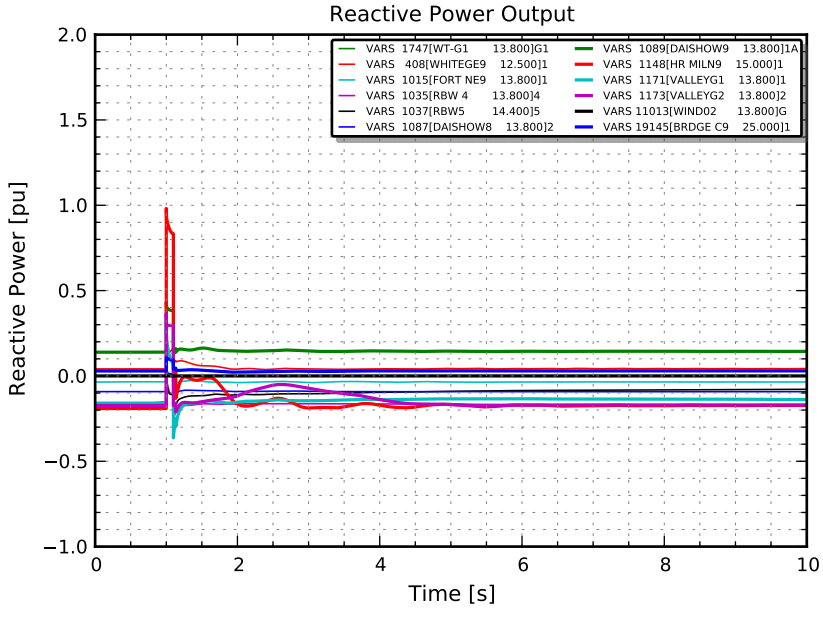


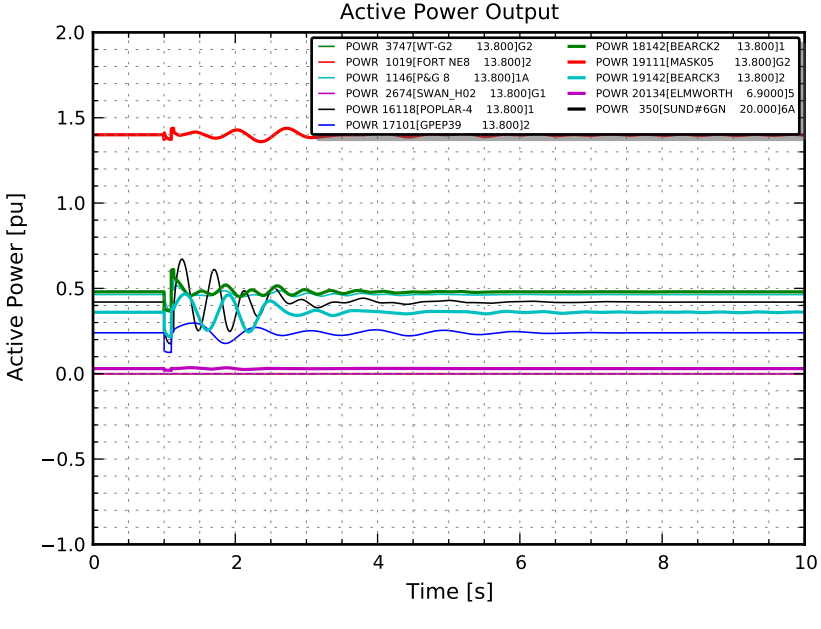
CASE 01 2014 WP Mgen
SCEN 01 Base Case
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_B.

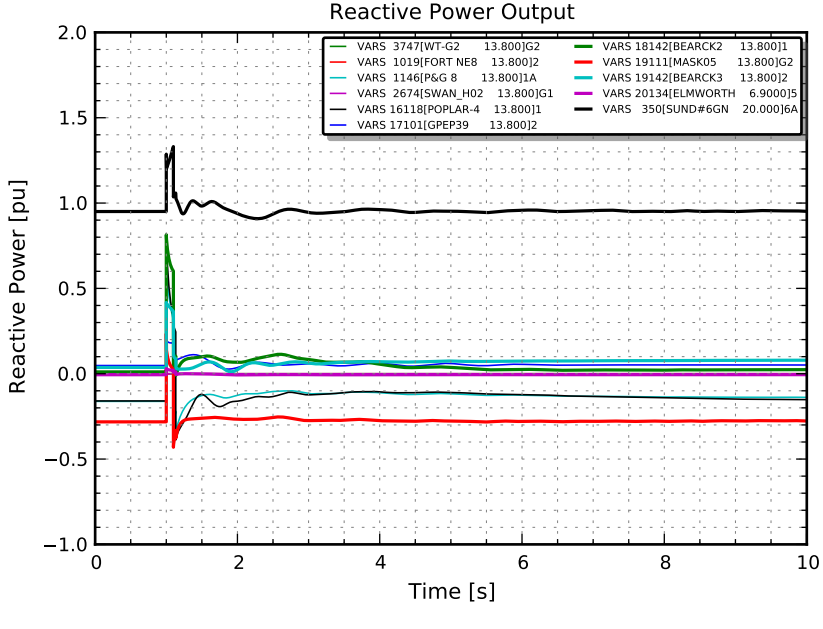
Study Area Generators

Appendix C2A
Figure: 038 (B. 3)





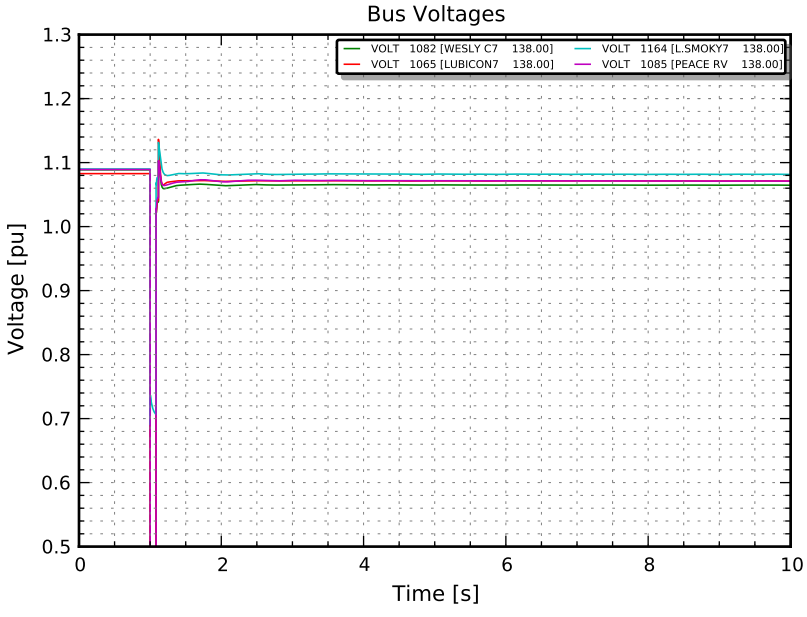


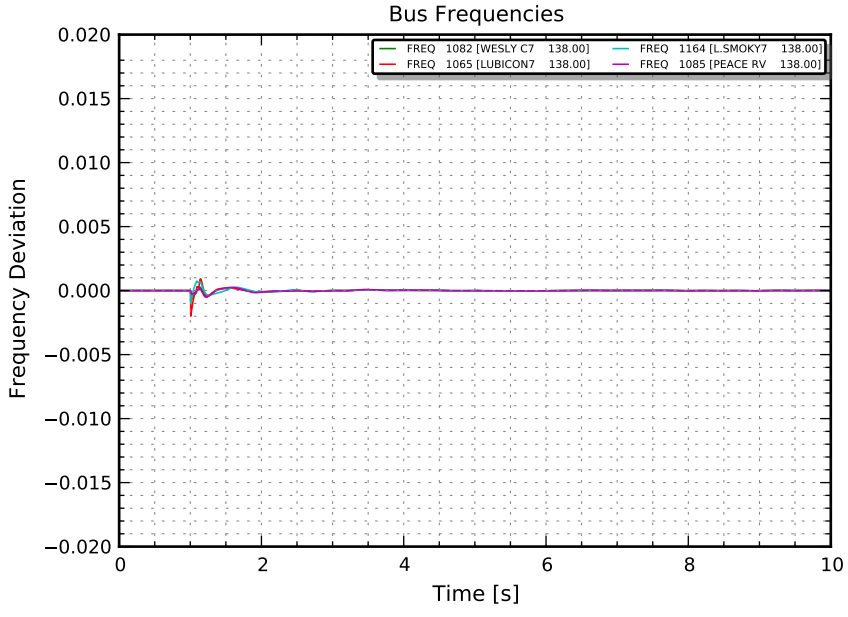


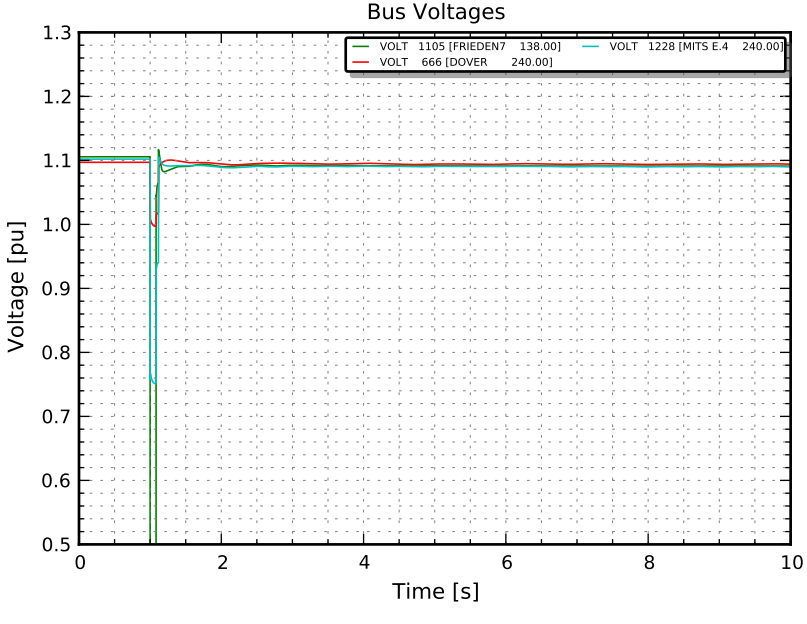
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 001 9L15 WESLEYCREEK to Brintnell_A.

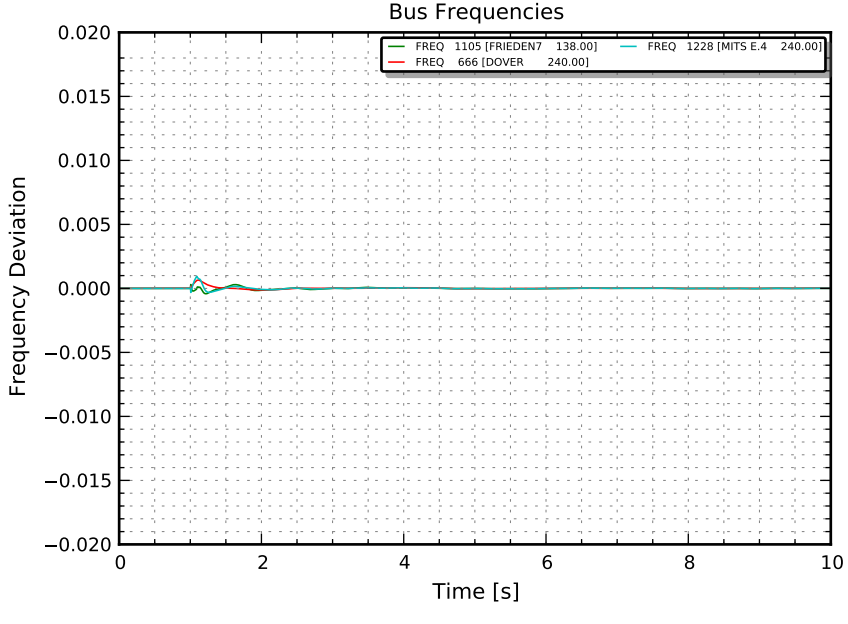
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 001 (A. 1)





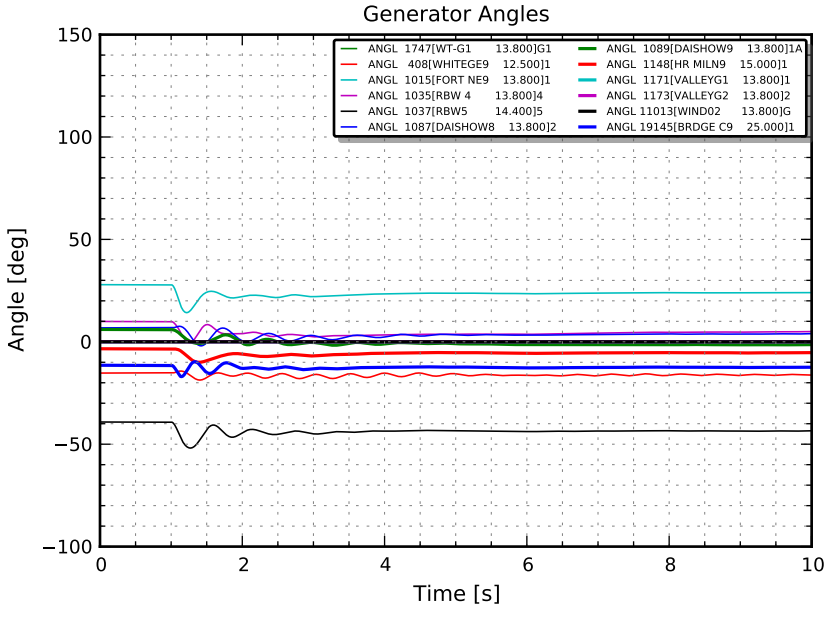


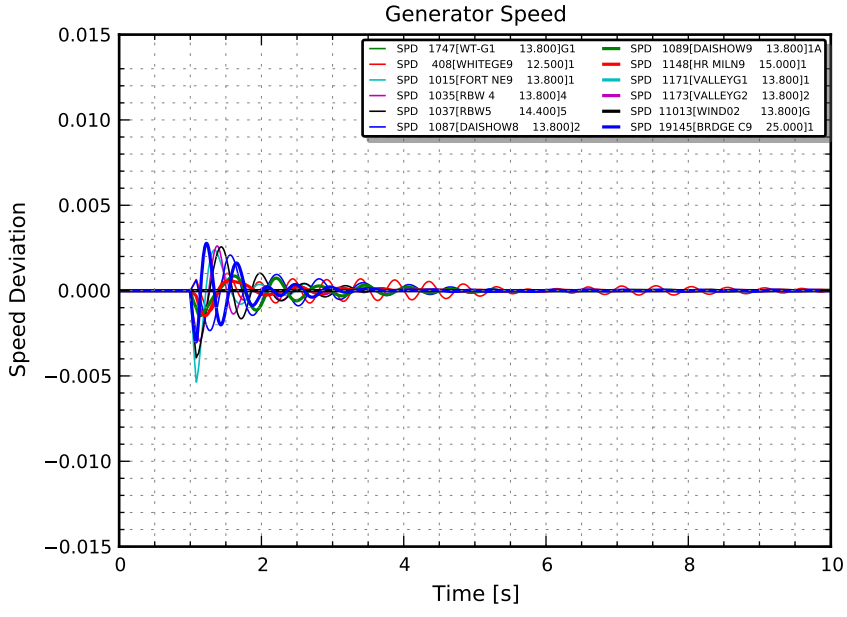


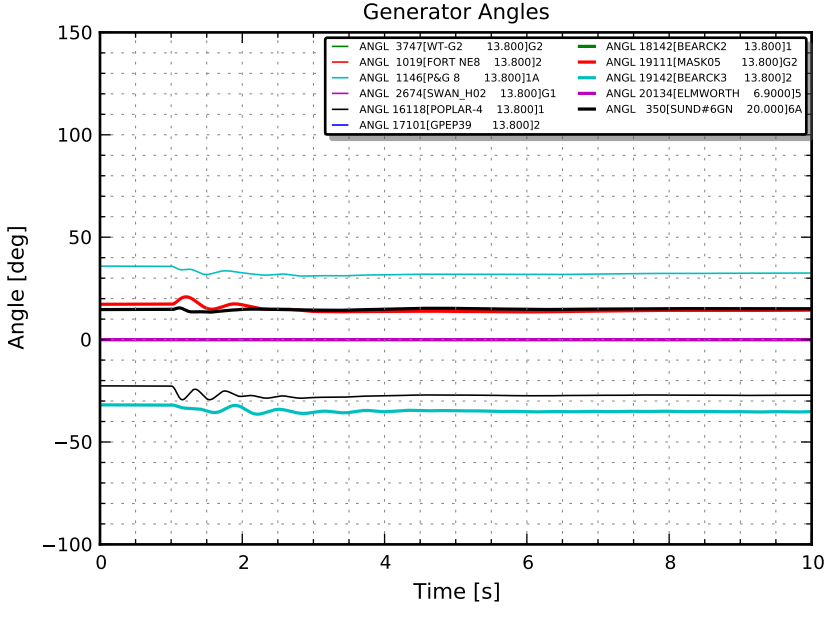
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 001 9L15 WESLEYCREEK to Brintnell_A.

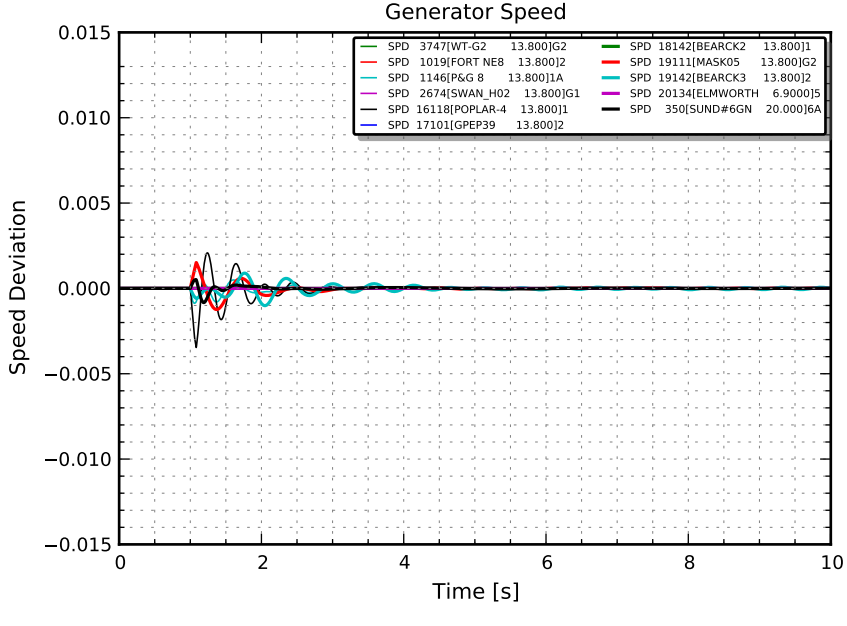
Study Area Generators

Appendix C2B
Figure: 001 (A. 2)





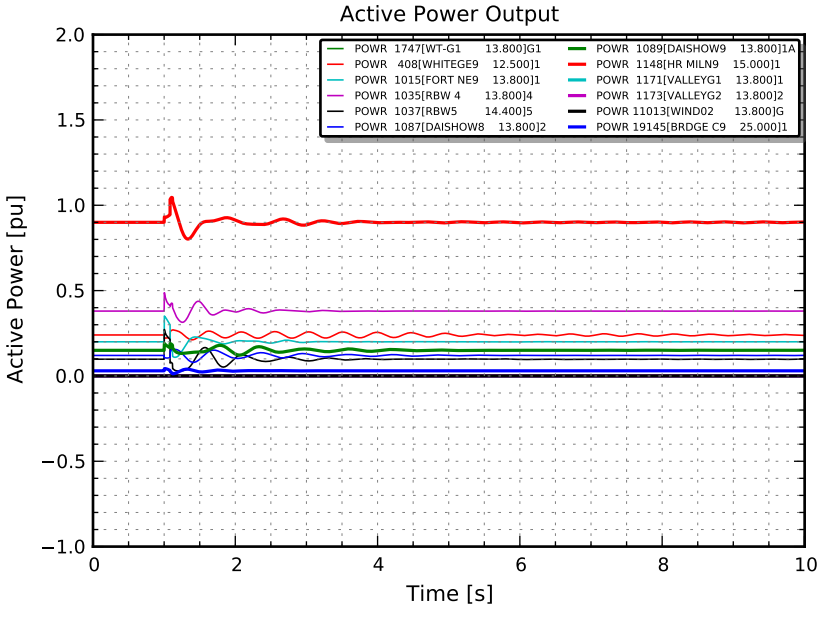


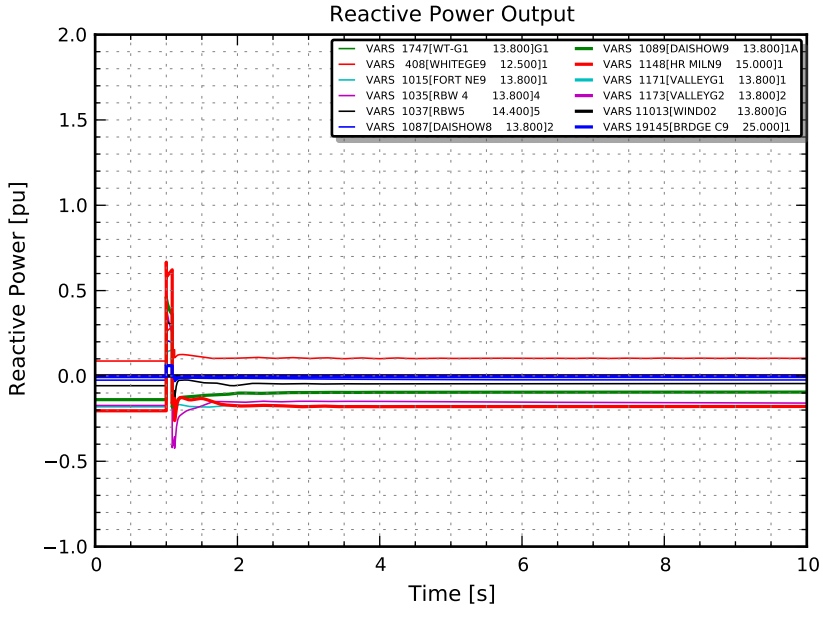


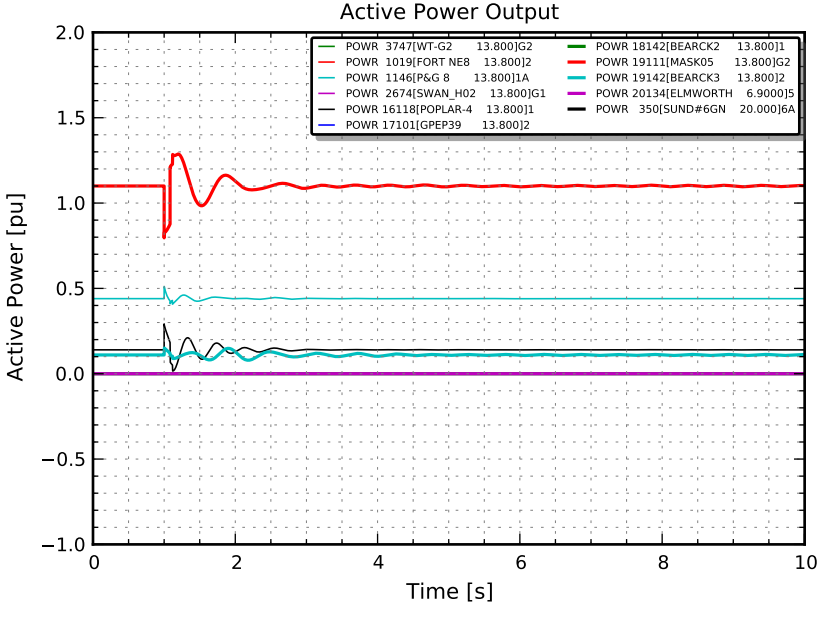
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 001 9L15 WESLEYCREEK to Brintnell_A.

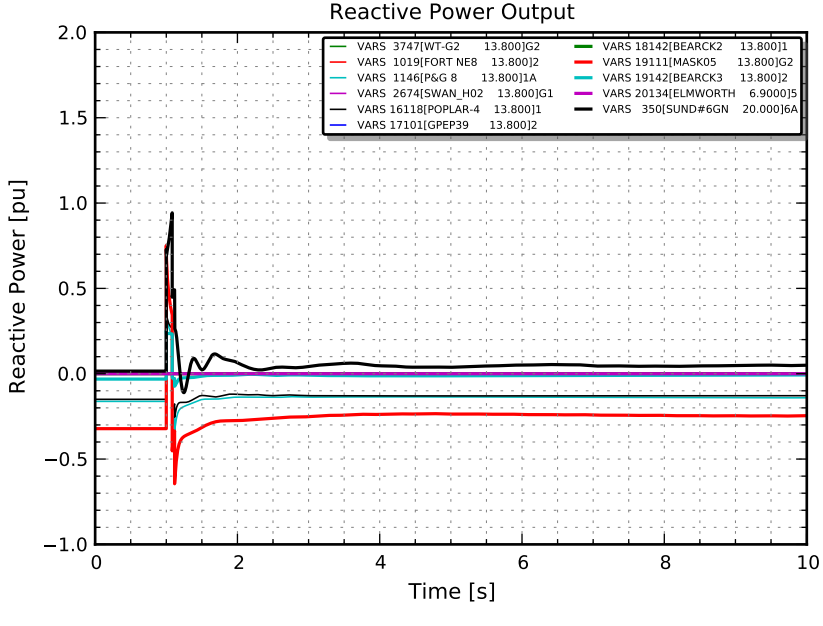
Study Area Generators

Appendix C2B
Figure: 001 (A. 3)





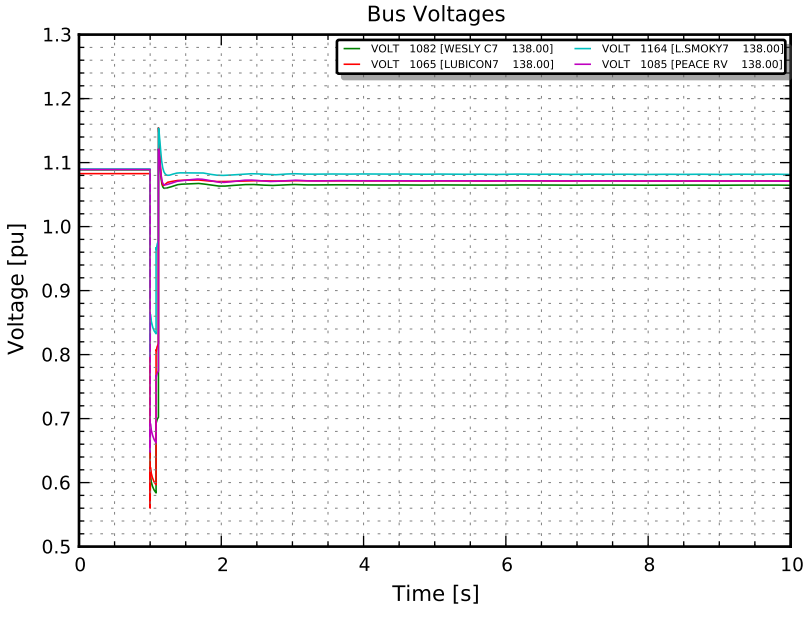


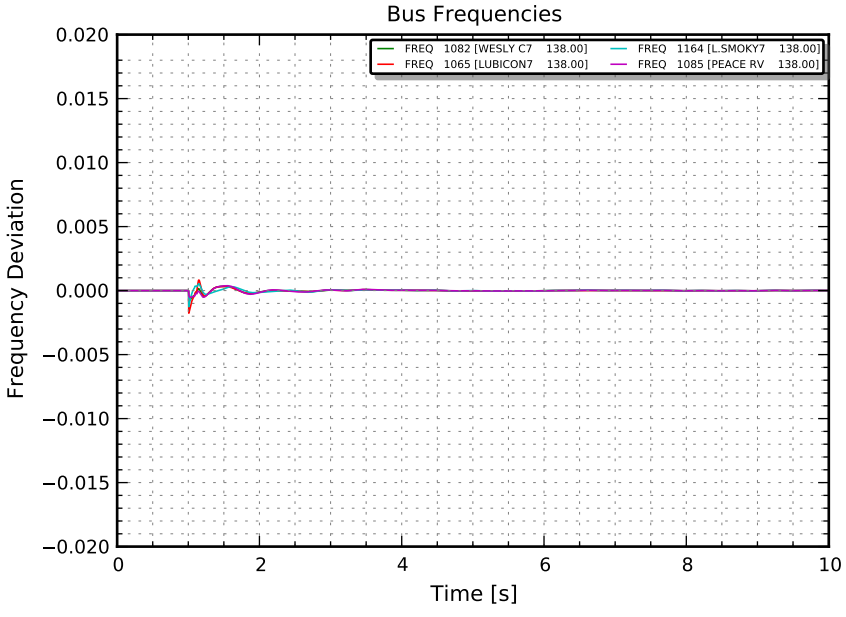


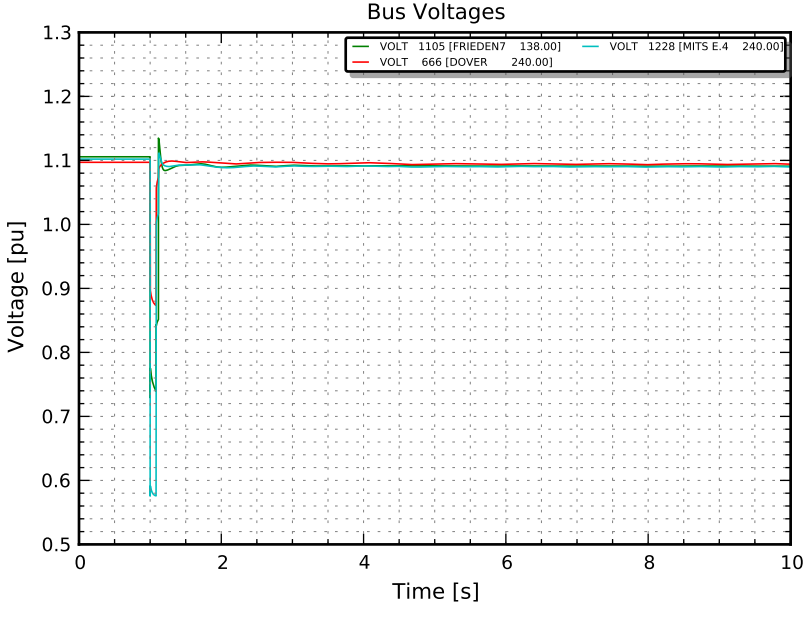
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 001 9L15 WESLEYCREEK to Brintnell_B.

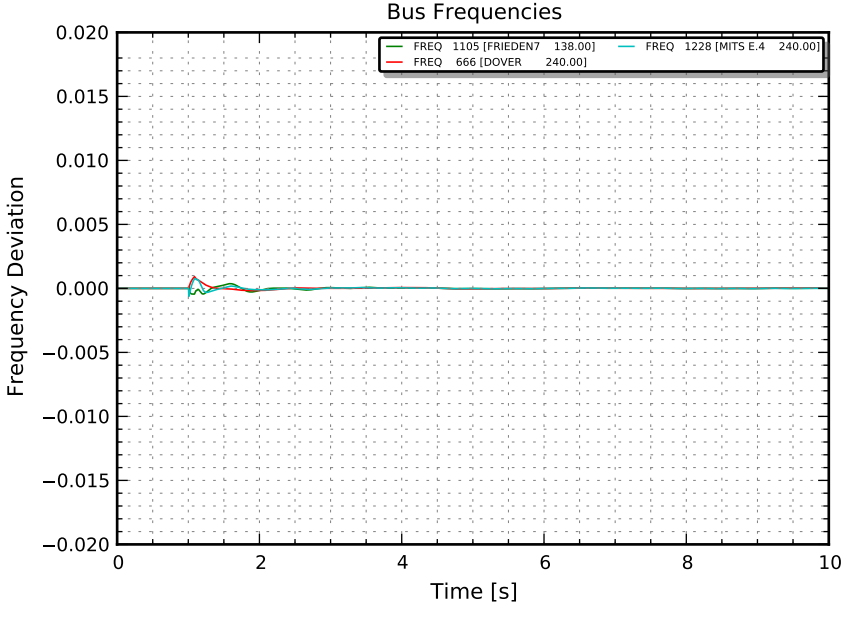
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 001 (B. 1)





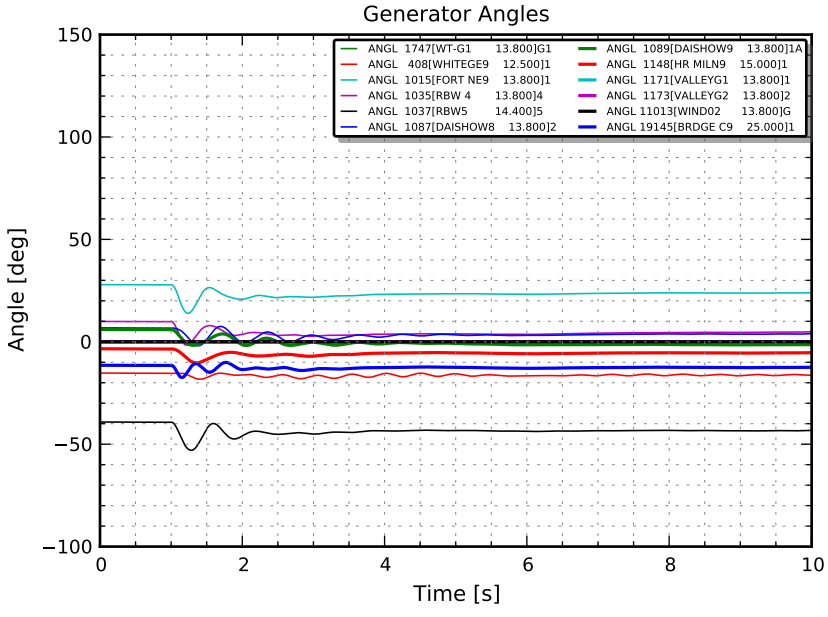


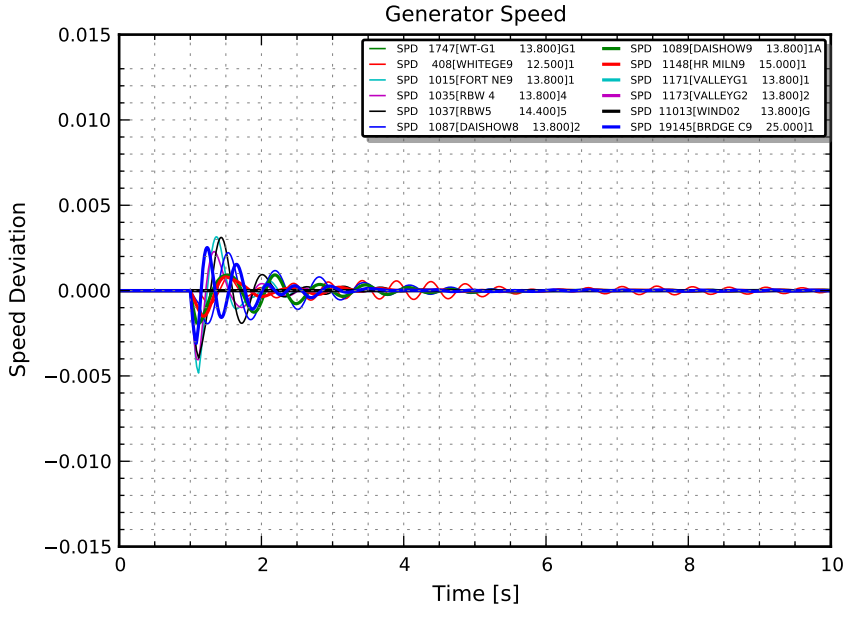


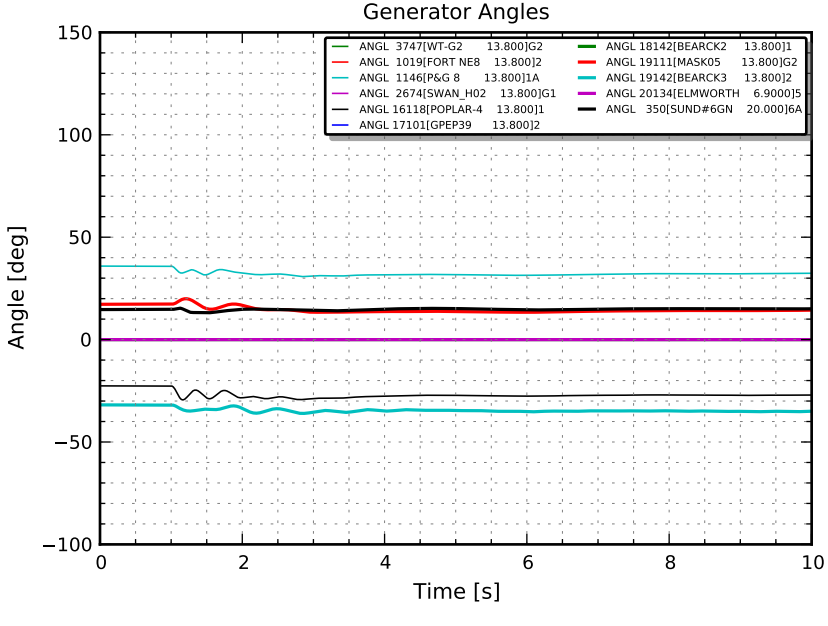
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 001 9L15 WESLEYCREEK to Brintnell_B.

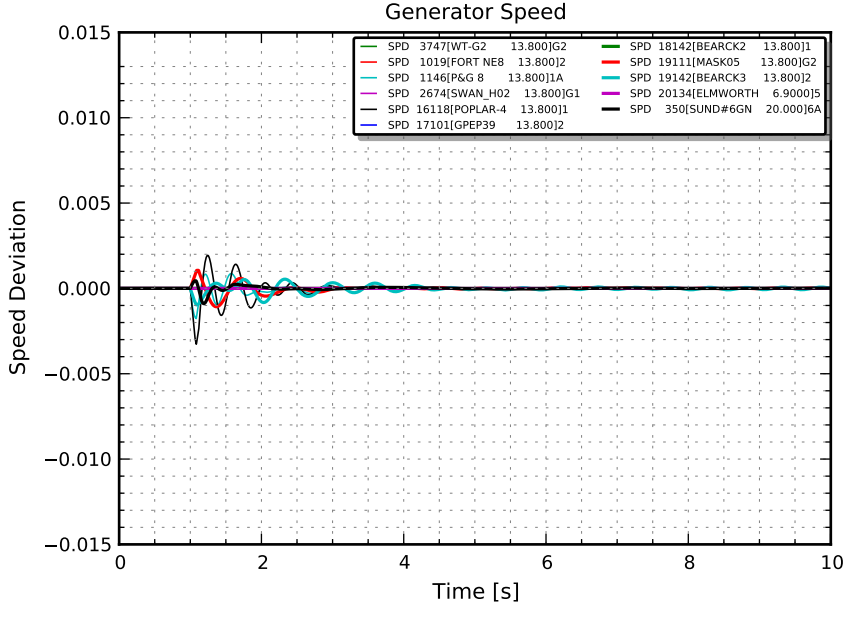
Study Area Generators

Appendix C2B
Figure: 001 (B. 2)





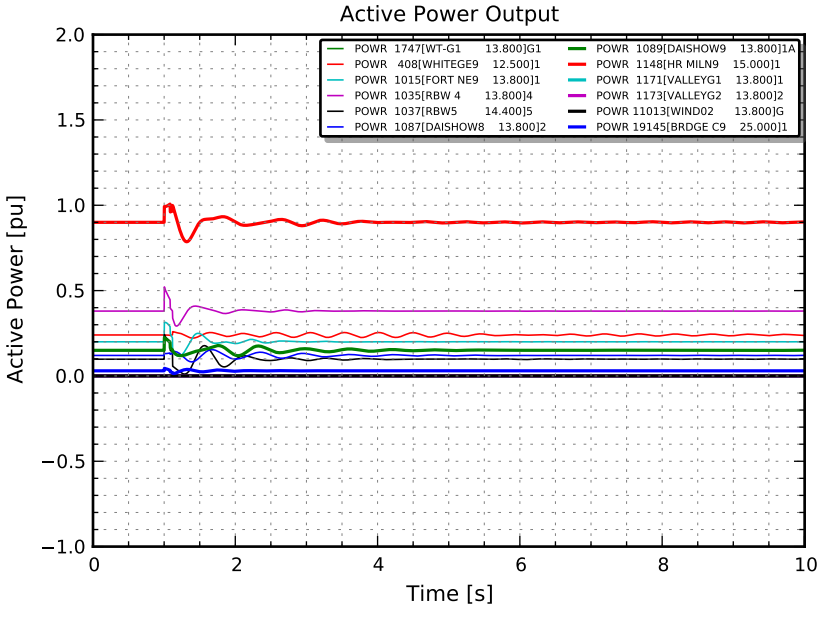


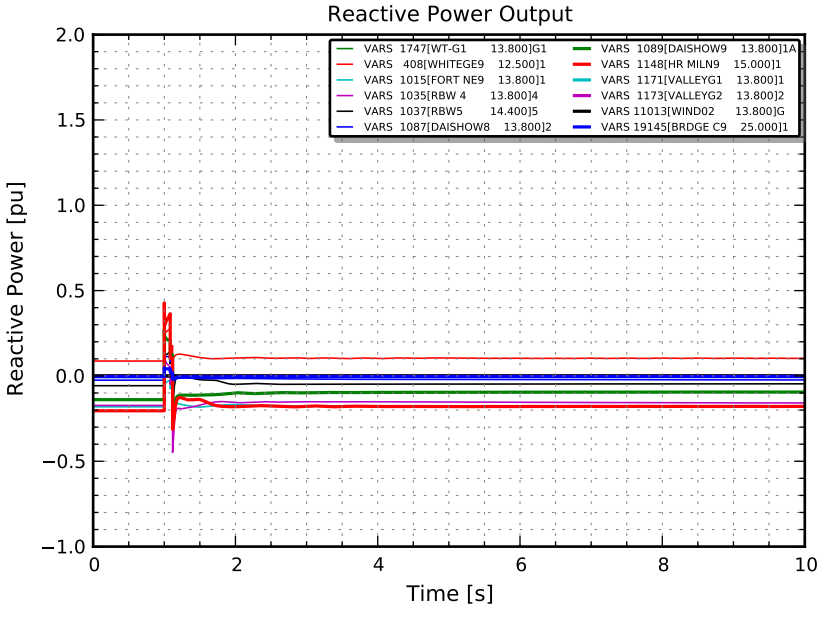


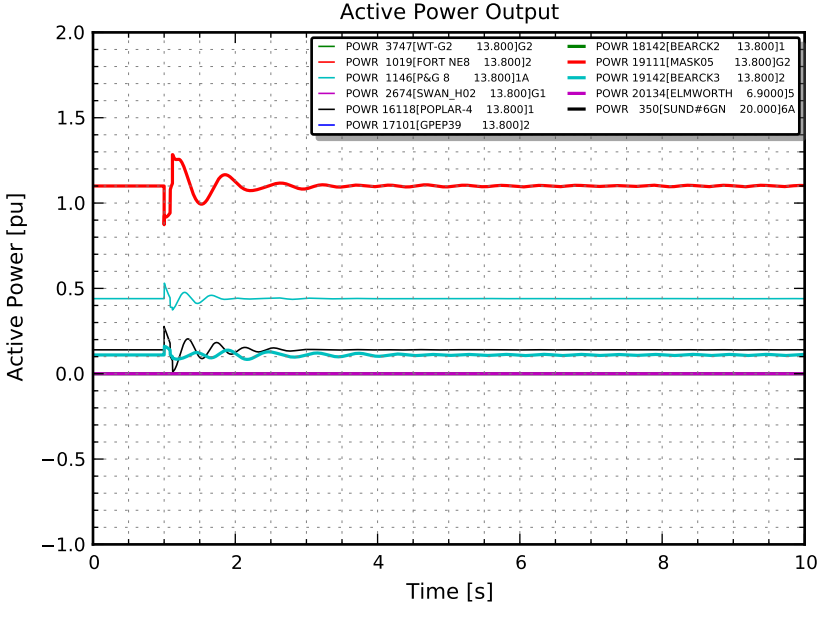
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 001 9L15 WESLEYCREEK to Brintnell_B.

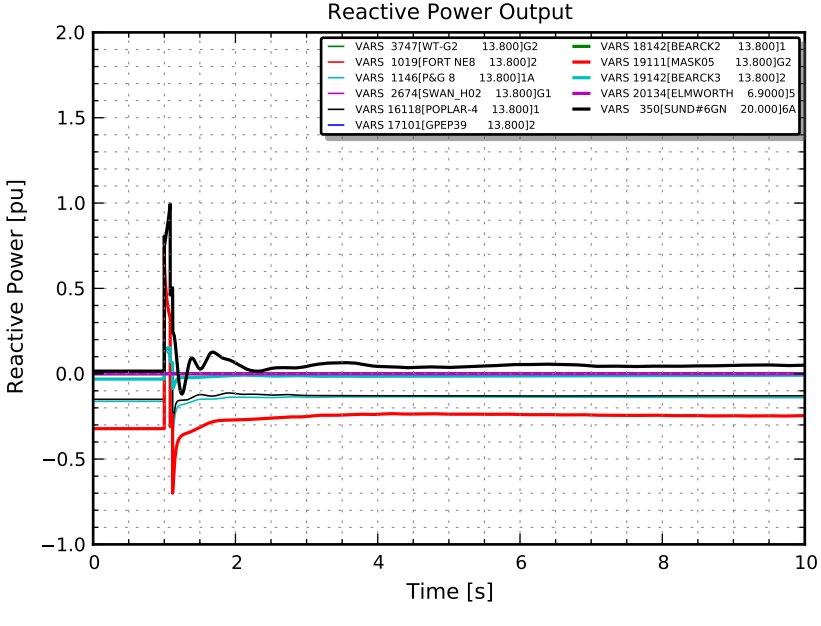
Study Area Generators

Appendix C2B
Figure: 001 (B. 3)





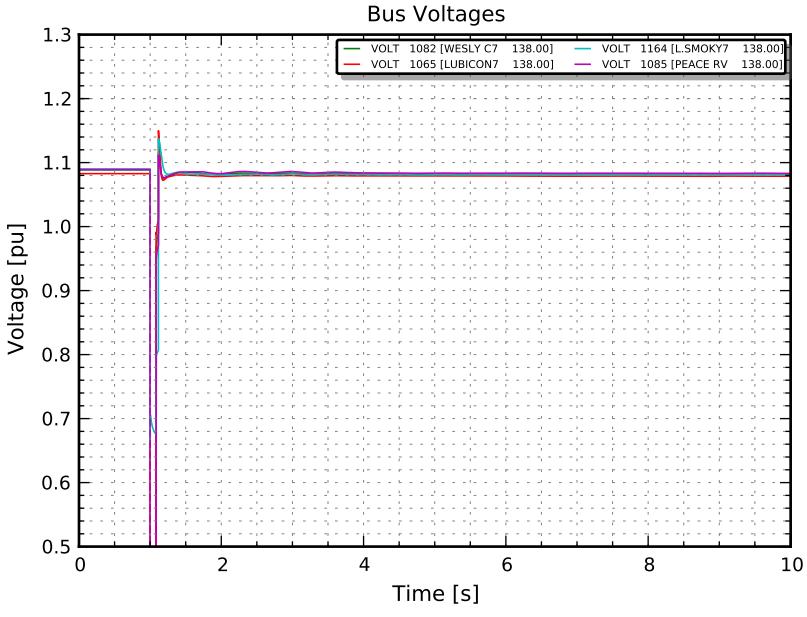


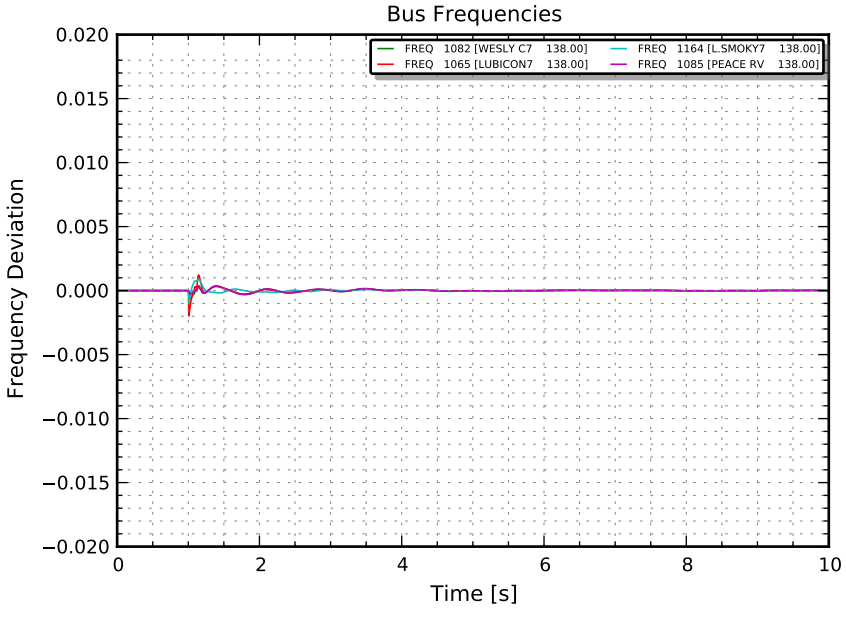


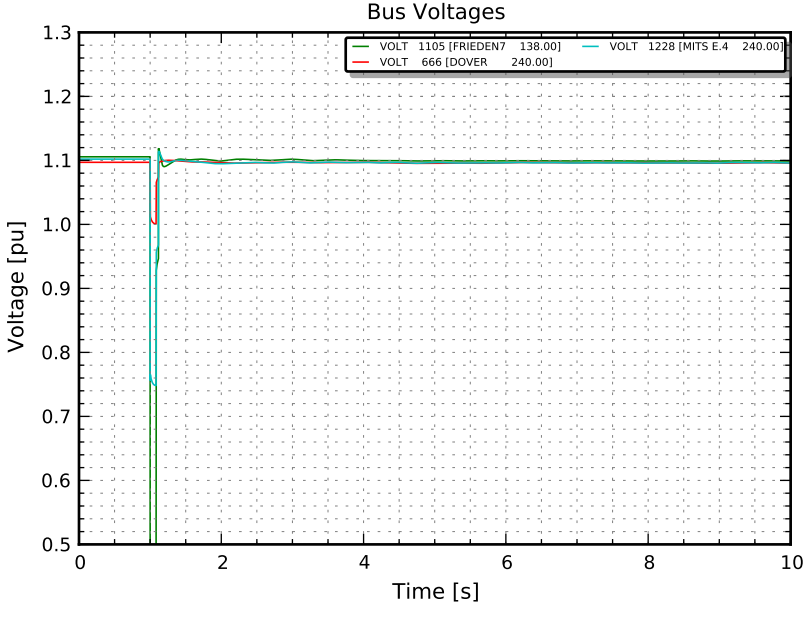
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_A.

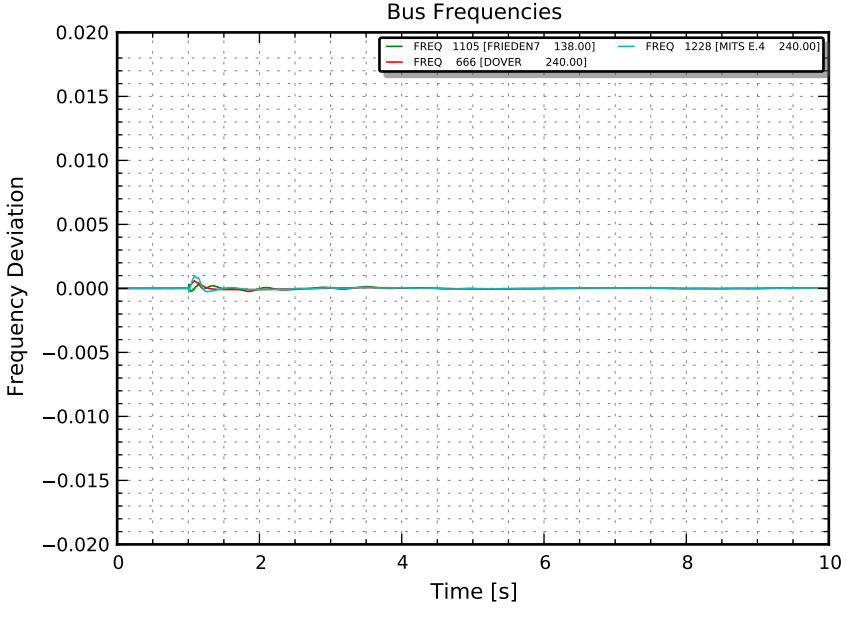
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 002 (A. 1)





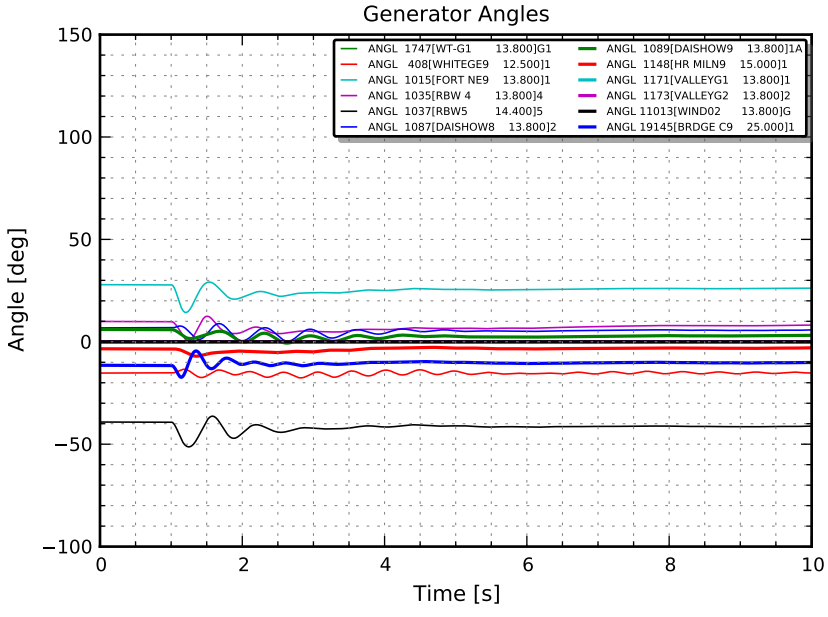


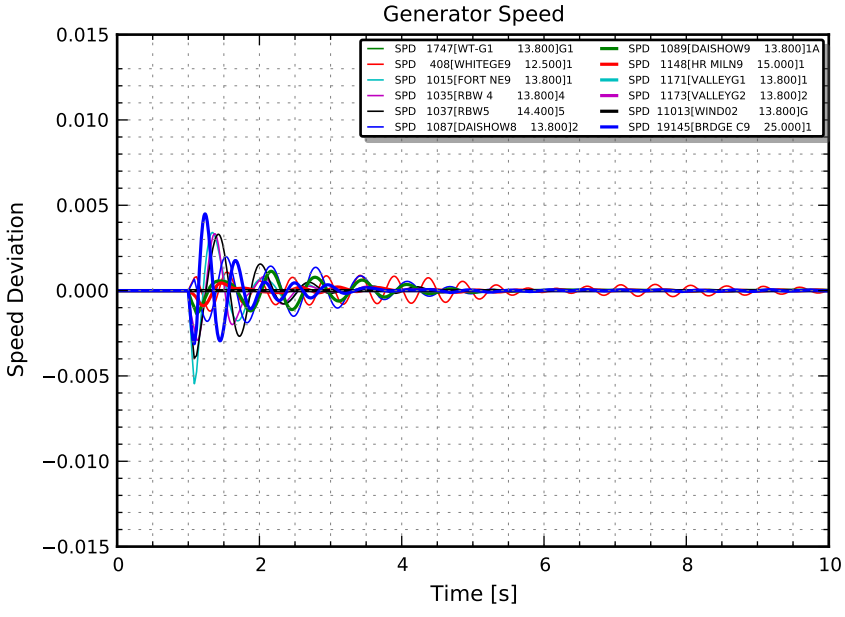


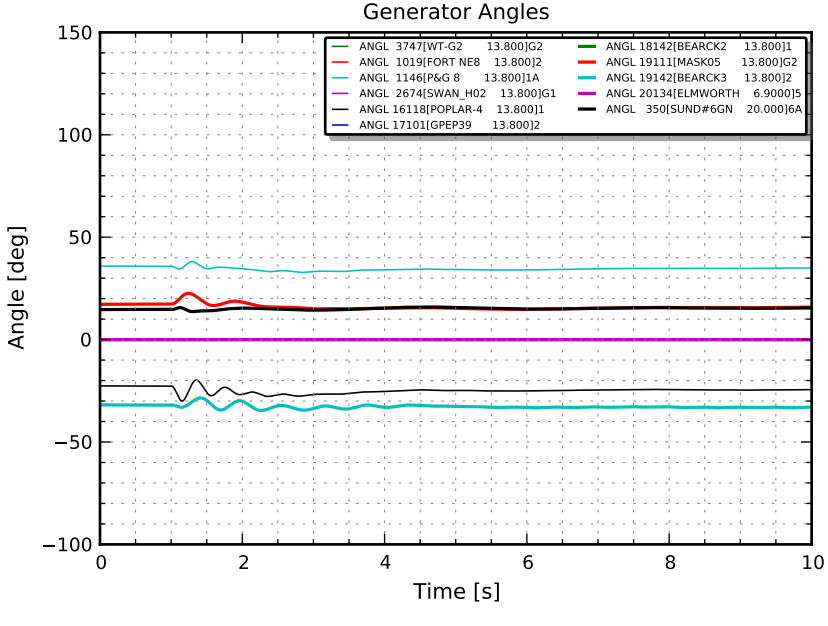
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_A.

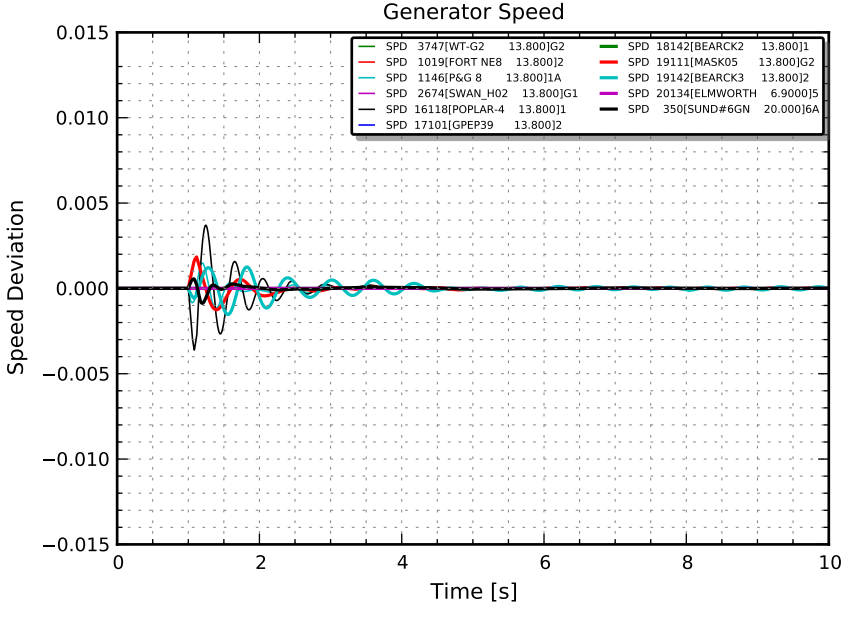
Study Area Generators

Appendix C2B
Figure: 002 (A. 2)





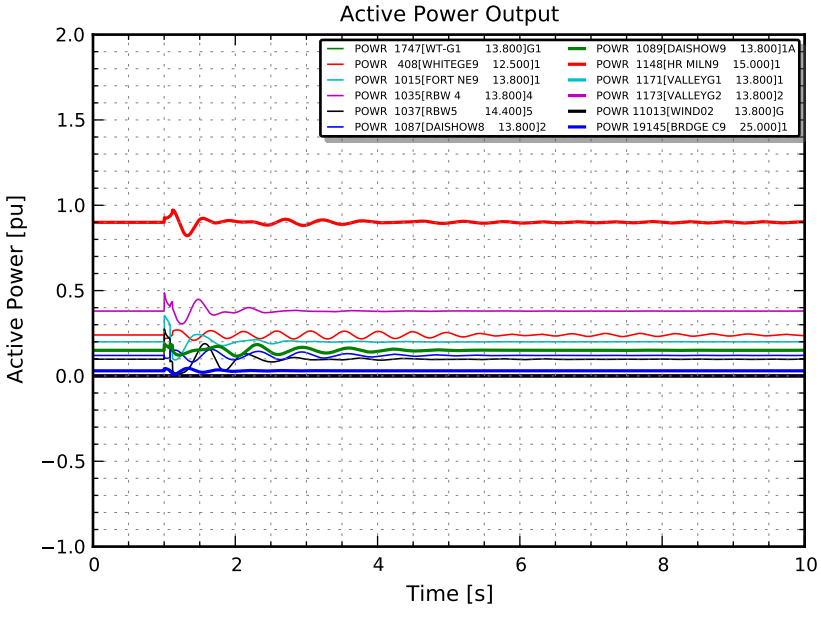


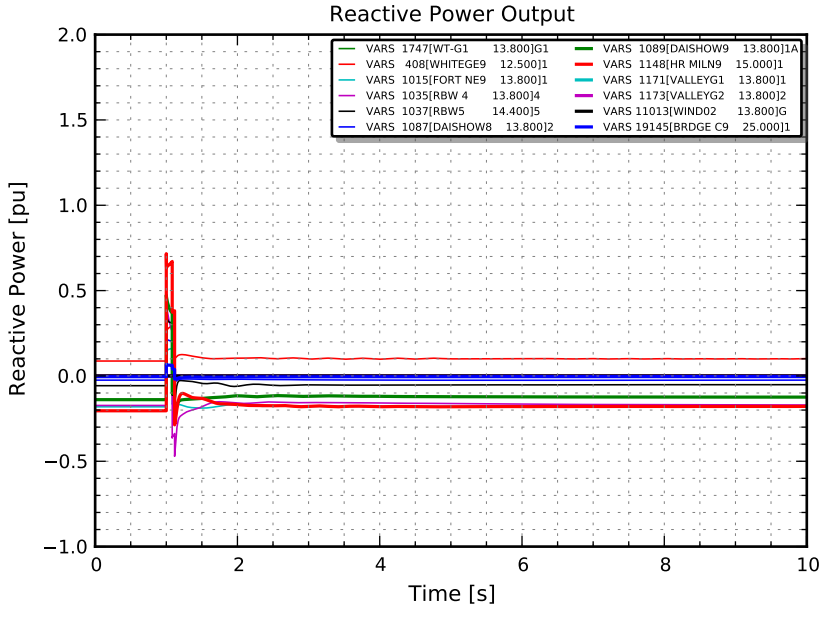


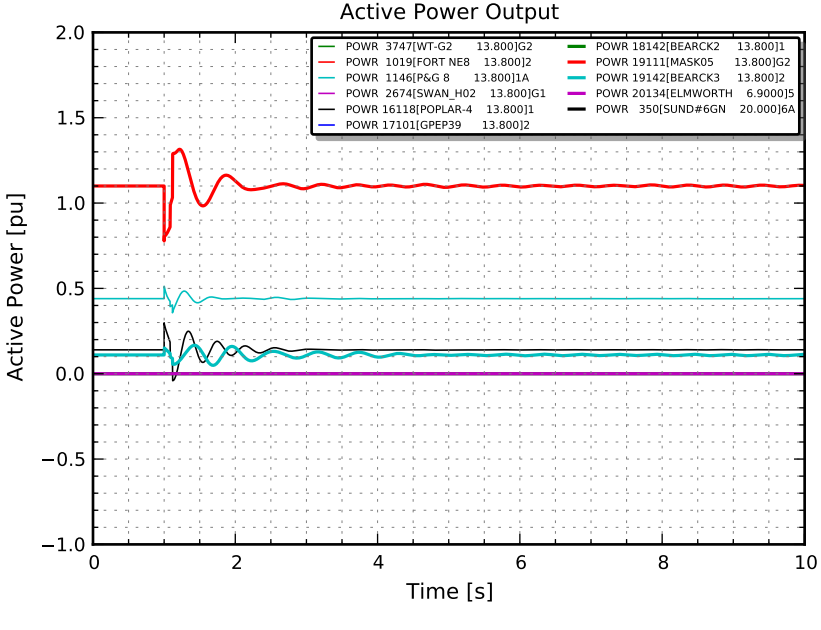
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_A.

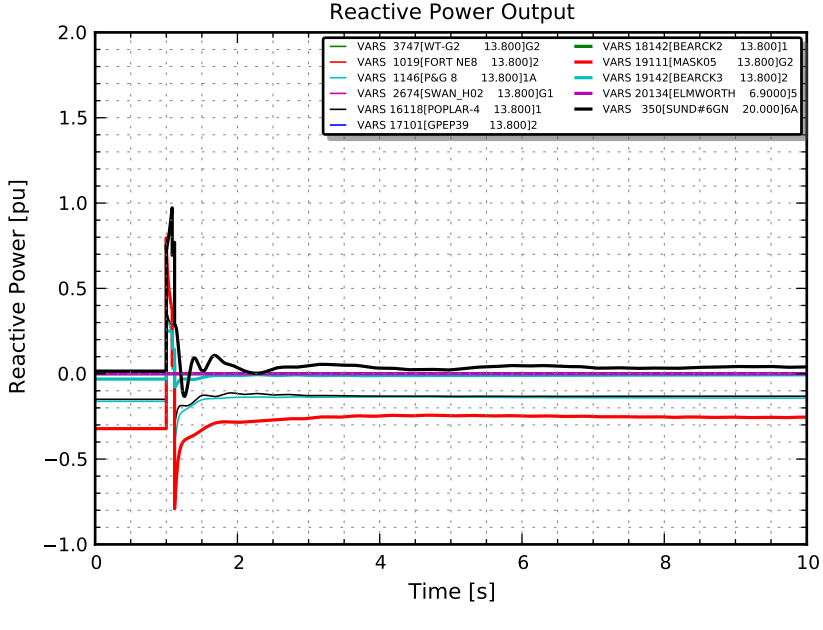
Study Area Generators

Appendix C2B
Figure: 002 (A. 3)





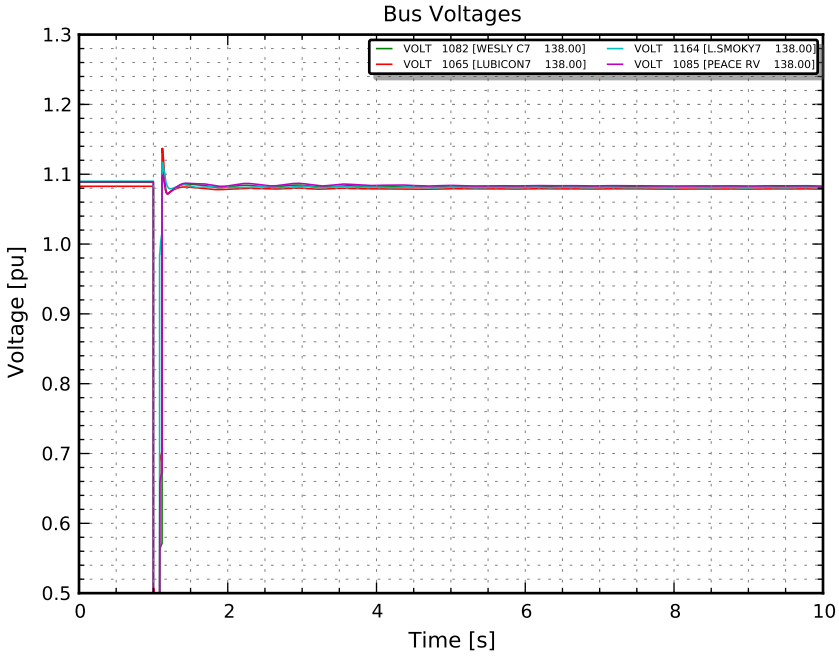


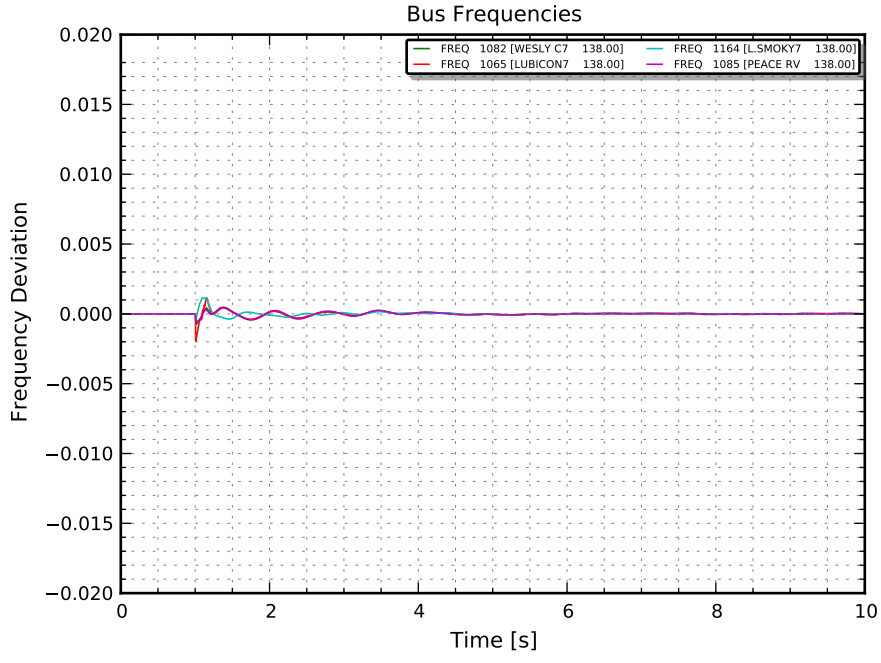


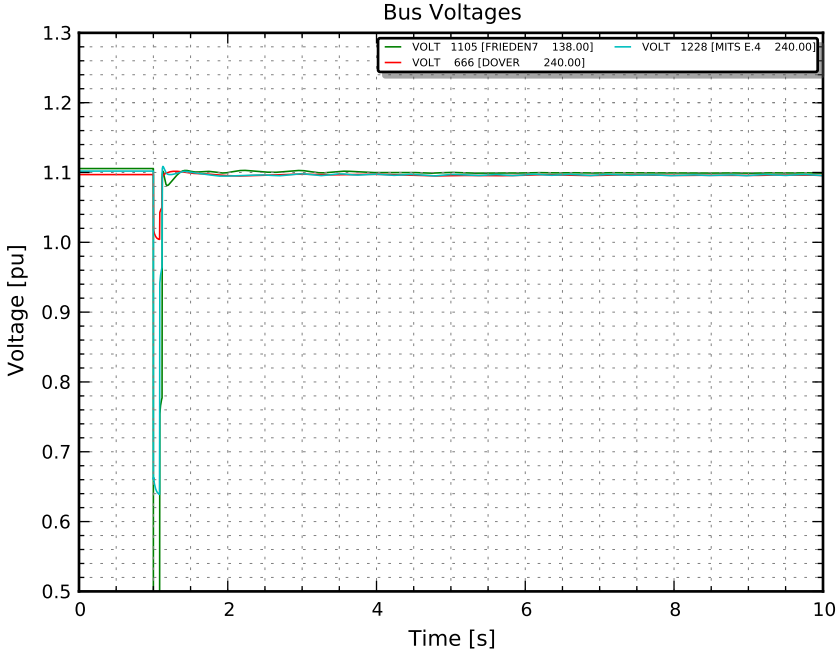
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_B.

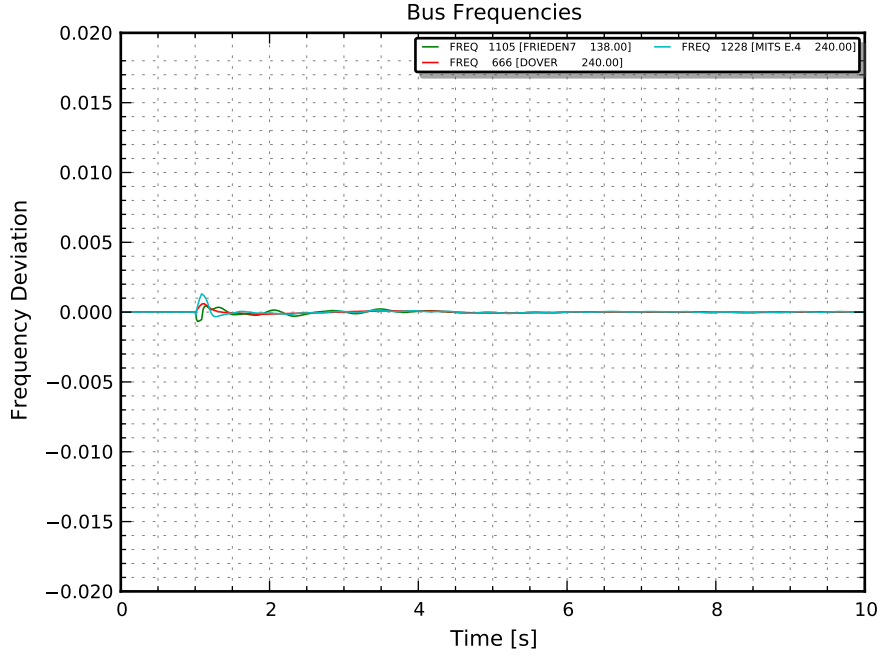
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 002 (B. 1)





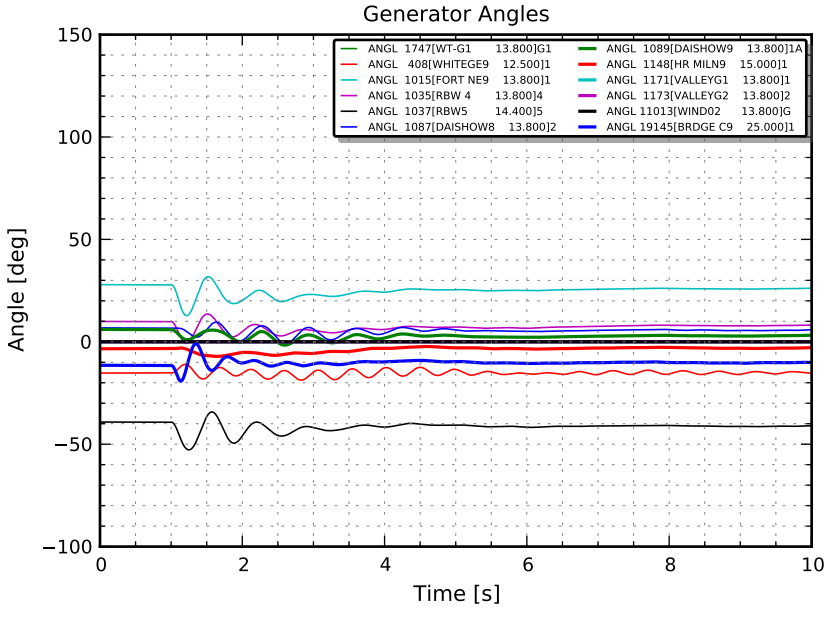


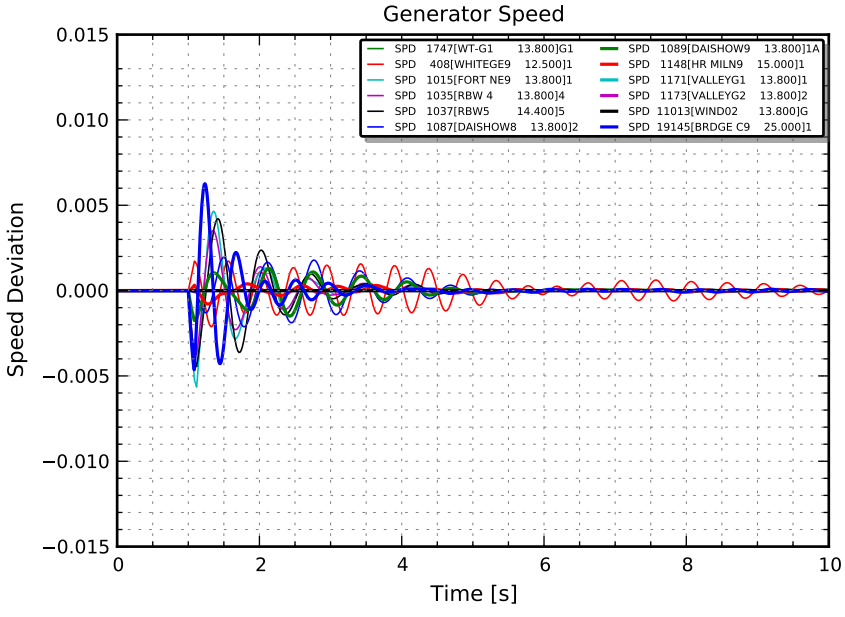


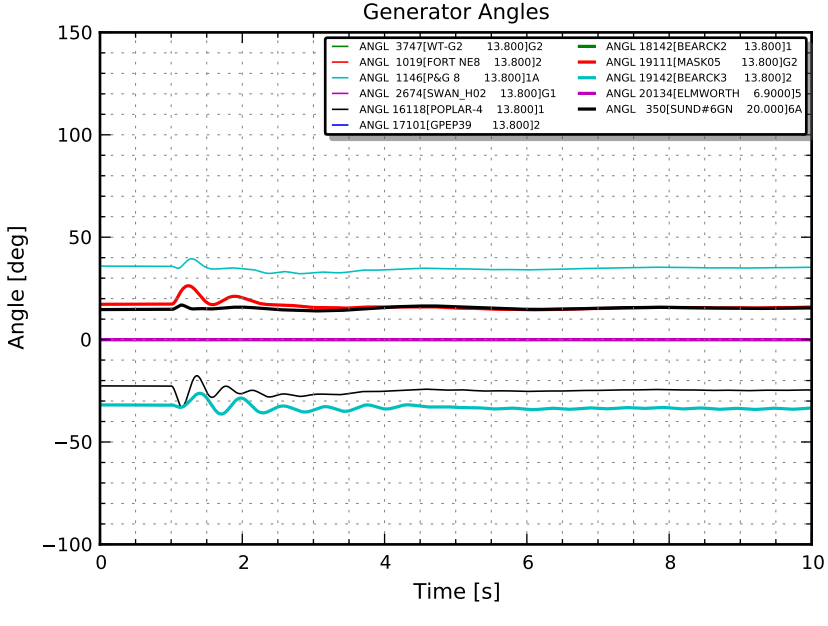
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_B.

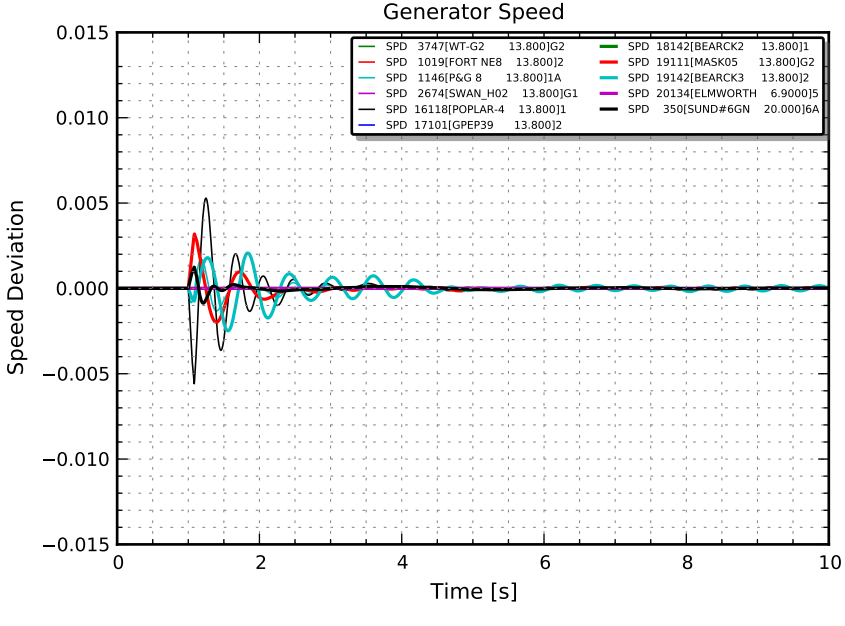
Study Area Generators

Appendix C2B
Figure: 002 (B. 2)





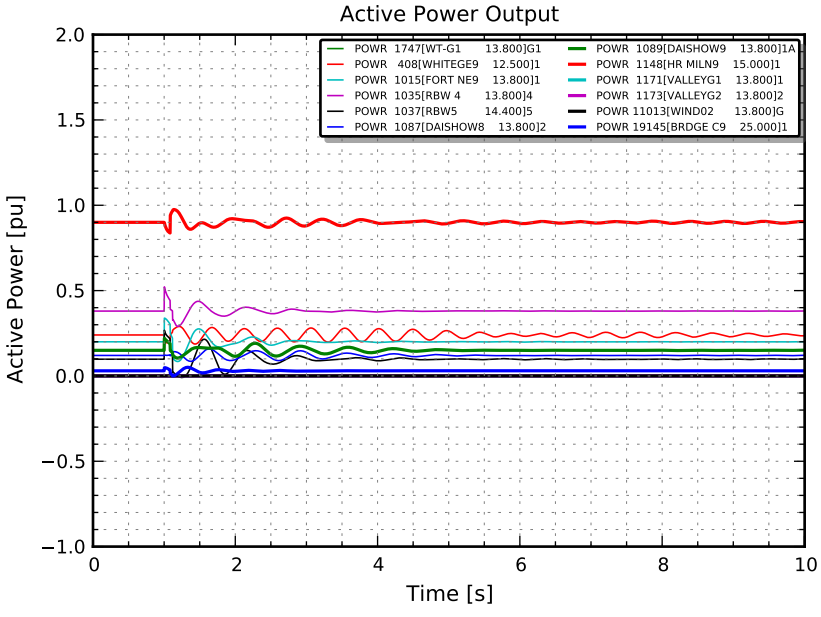


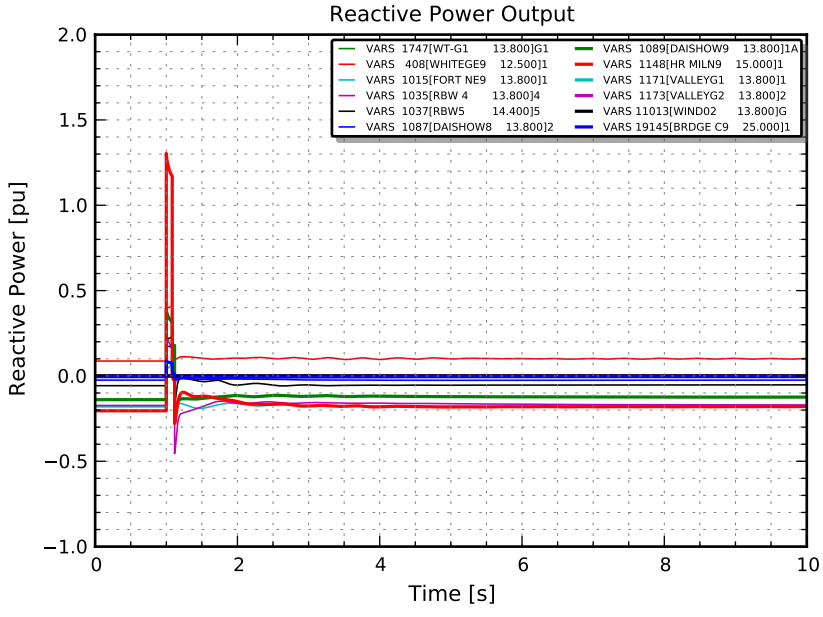


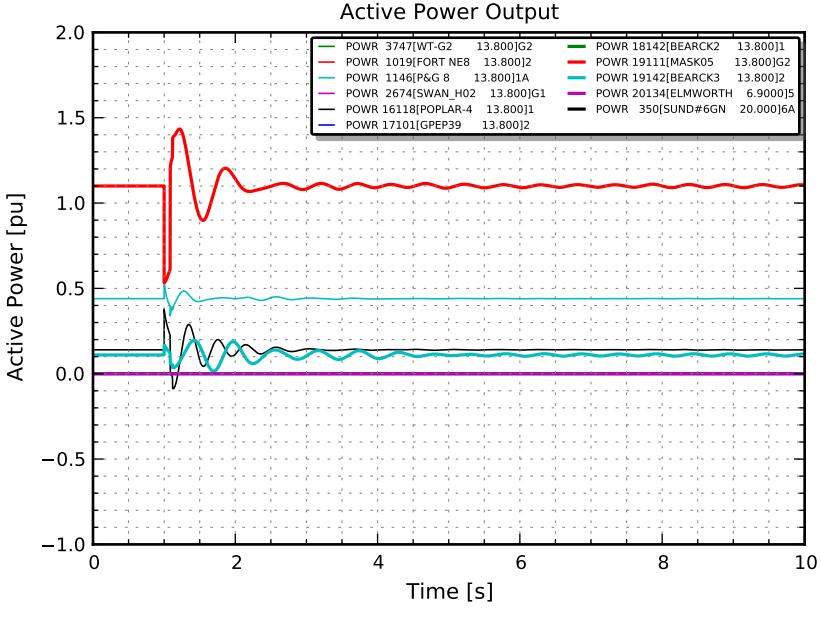
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_B.

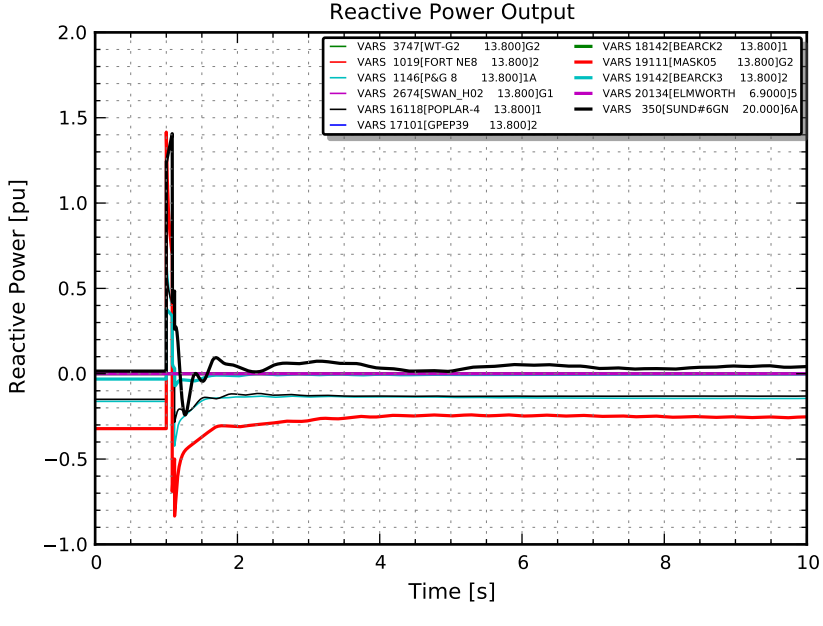
Study Area Generators

Appendix C2B
Figure: 002 (B. 3)





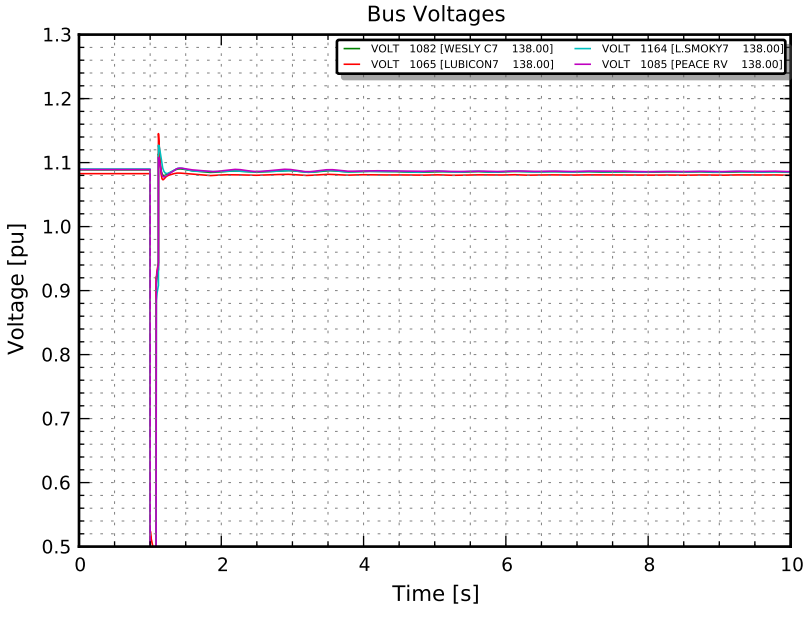


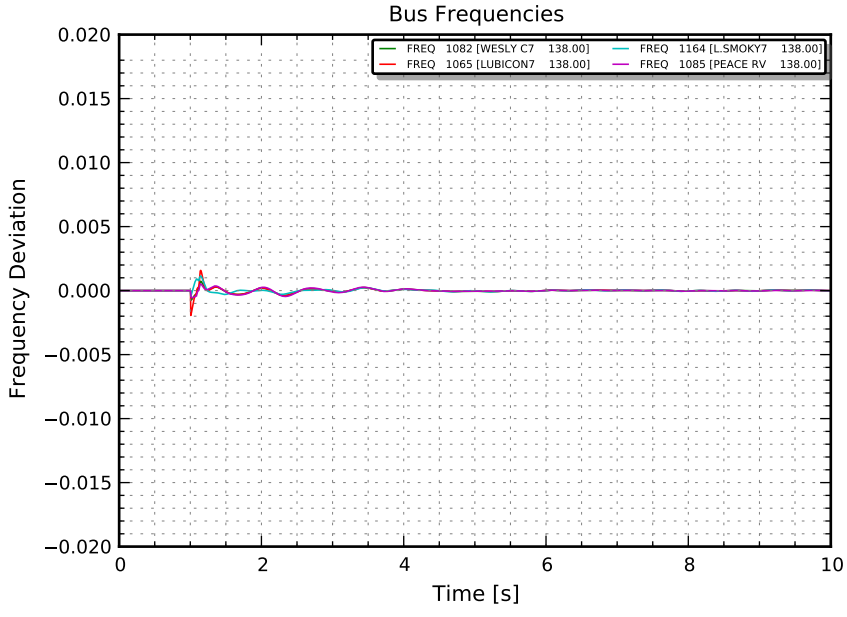


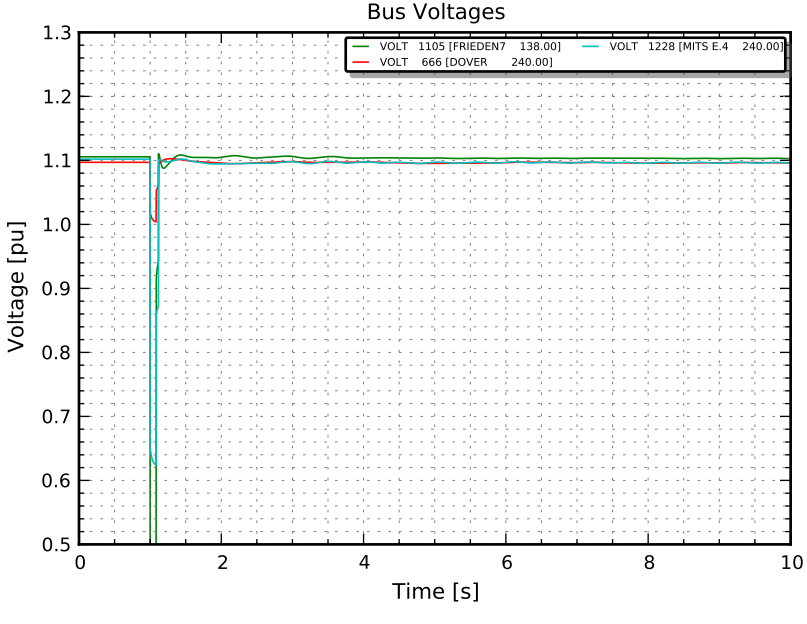
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_A.

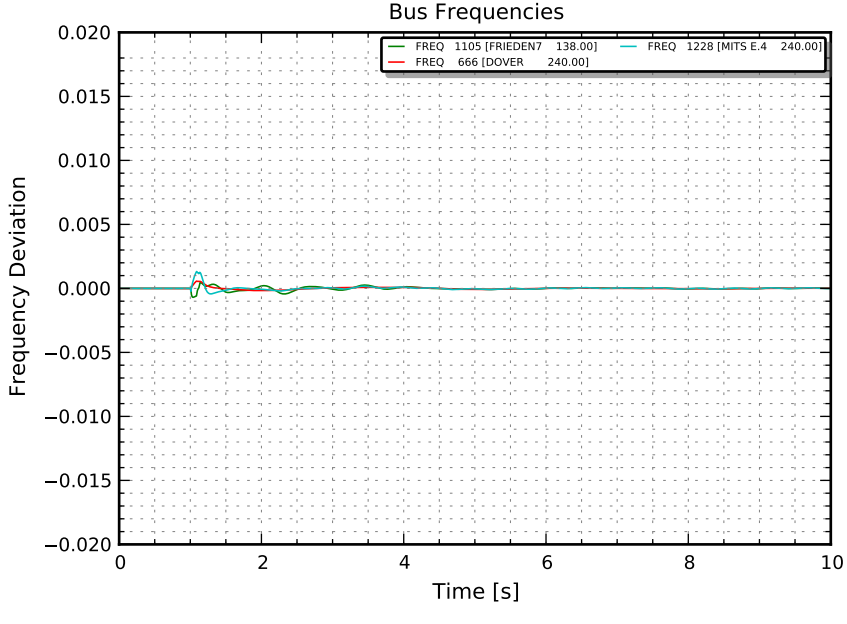
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 003 (A. 1)





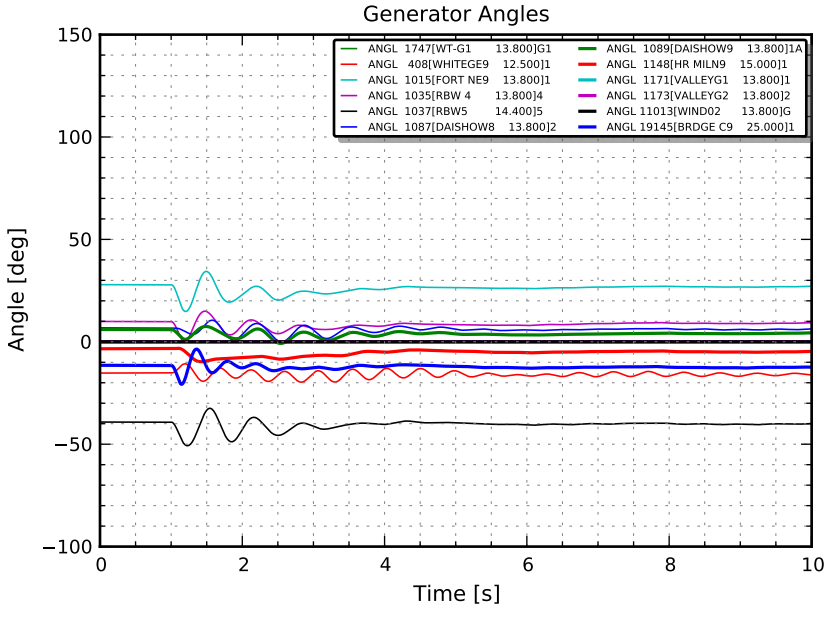


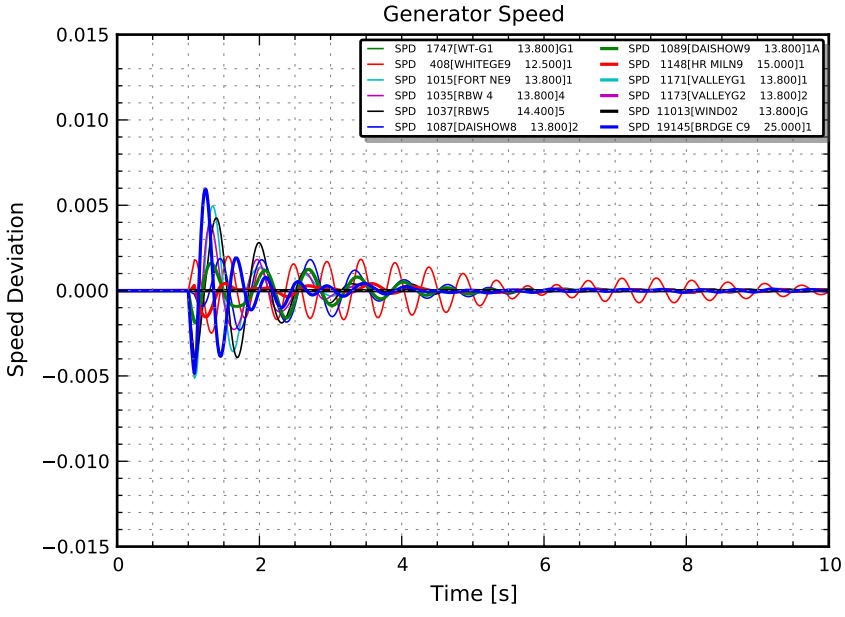


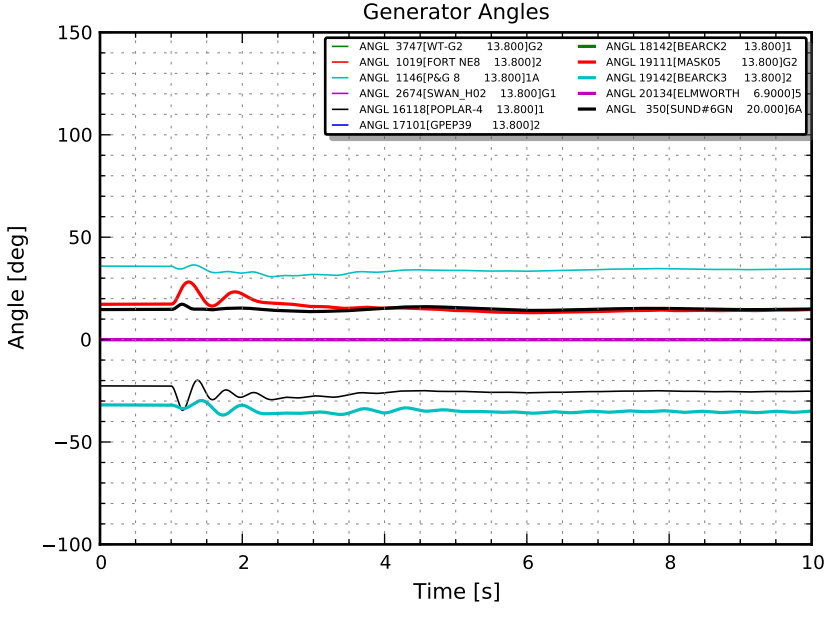
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_A.

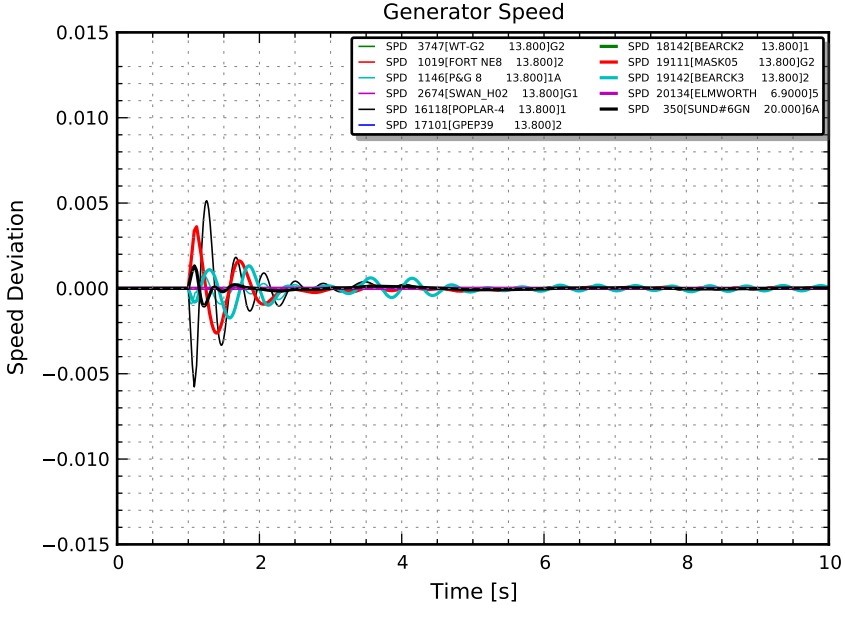
Study Area Generators

Appendix C2B
Figure: 003 (A. 2)





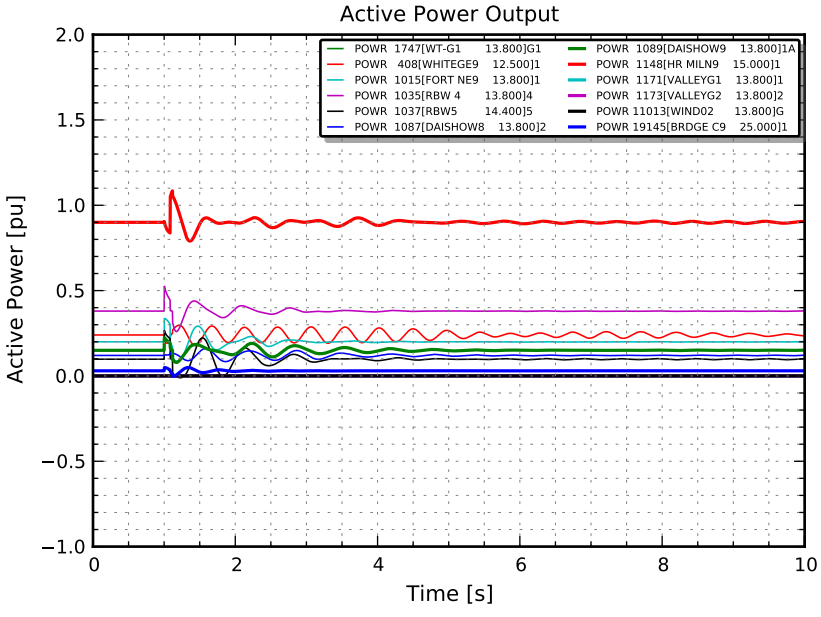


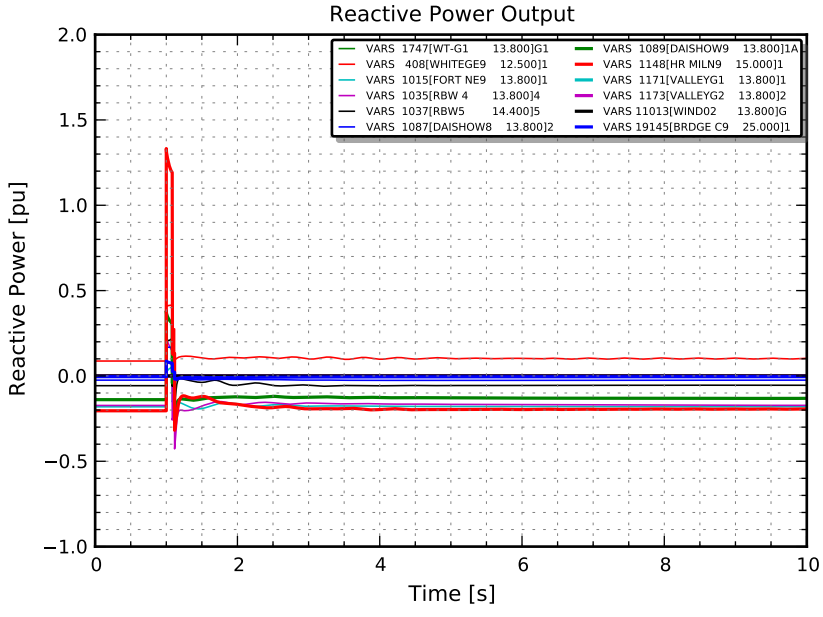


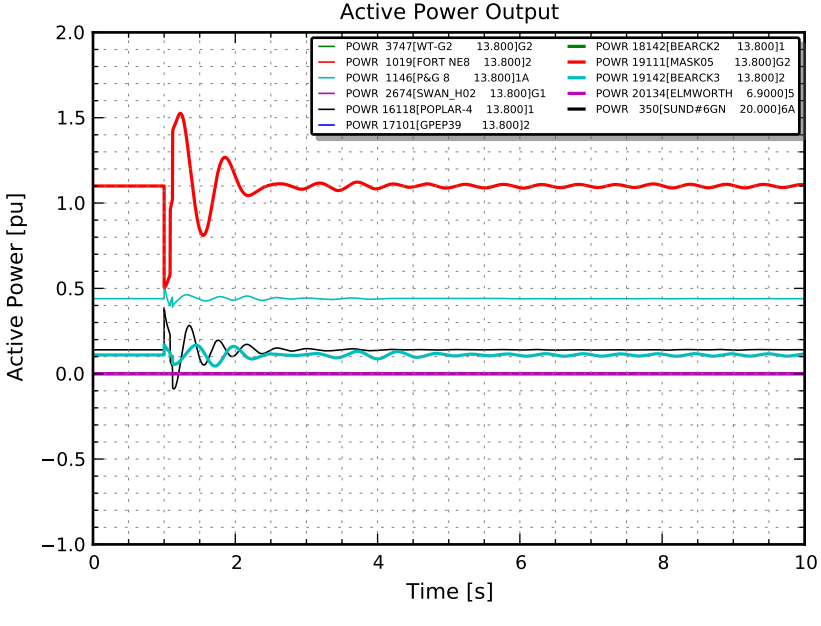
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_A.

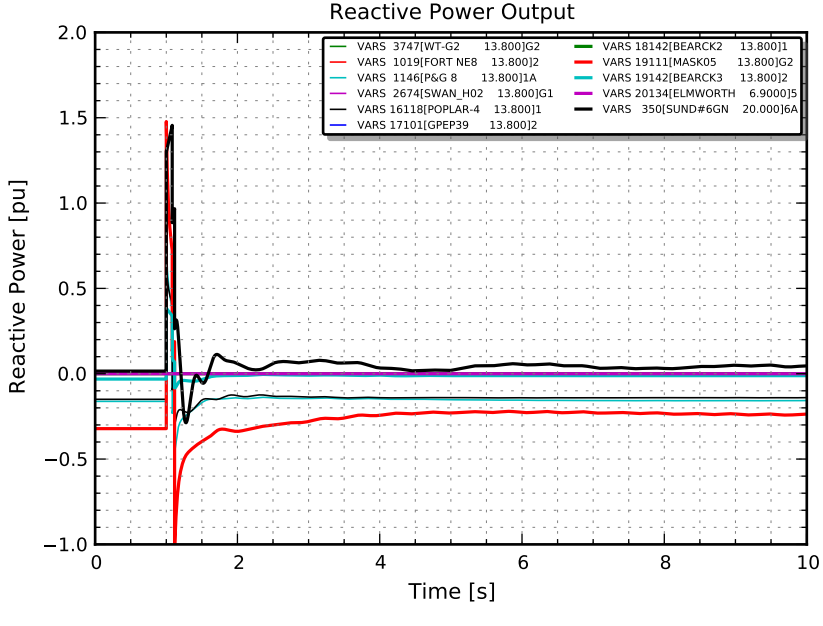
Study Area Generators

Appendix C2B
Figure: 003 (A. 3)





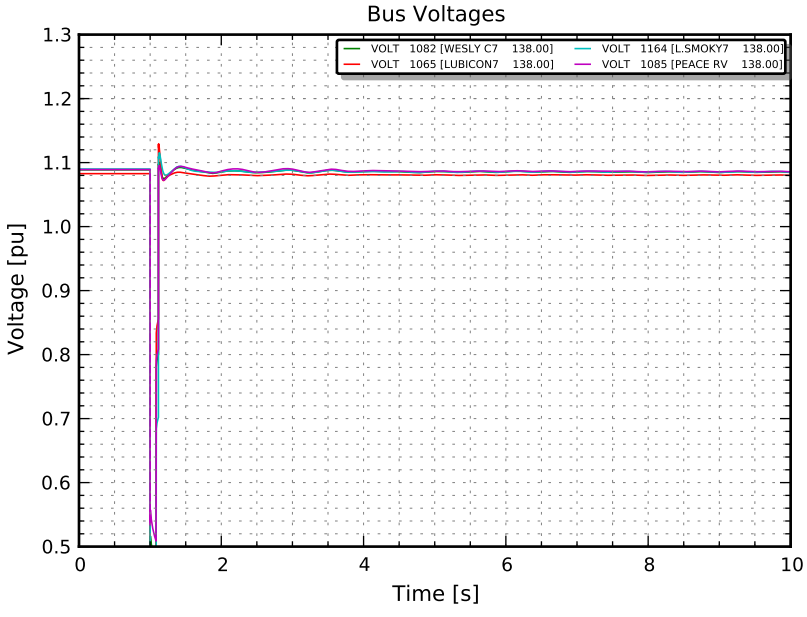


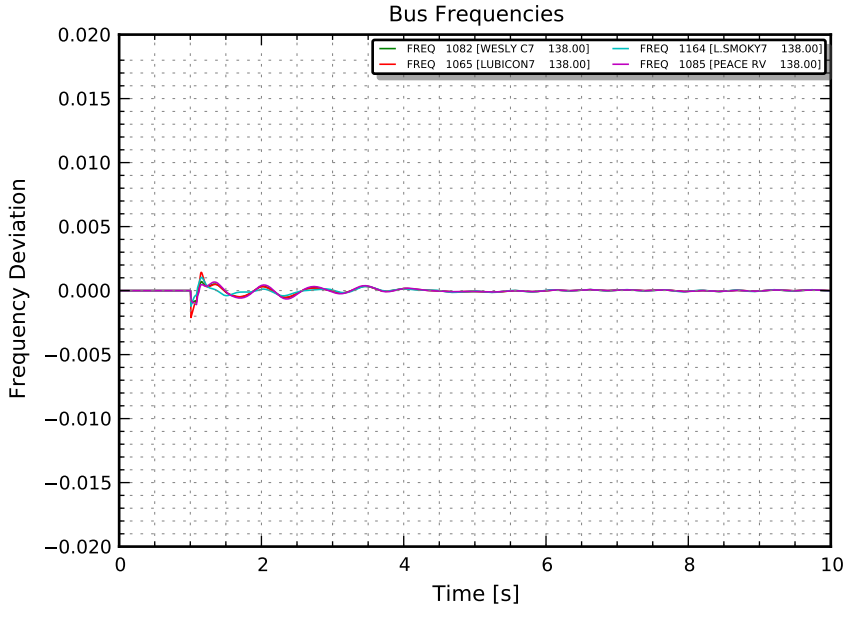


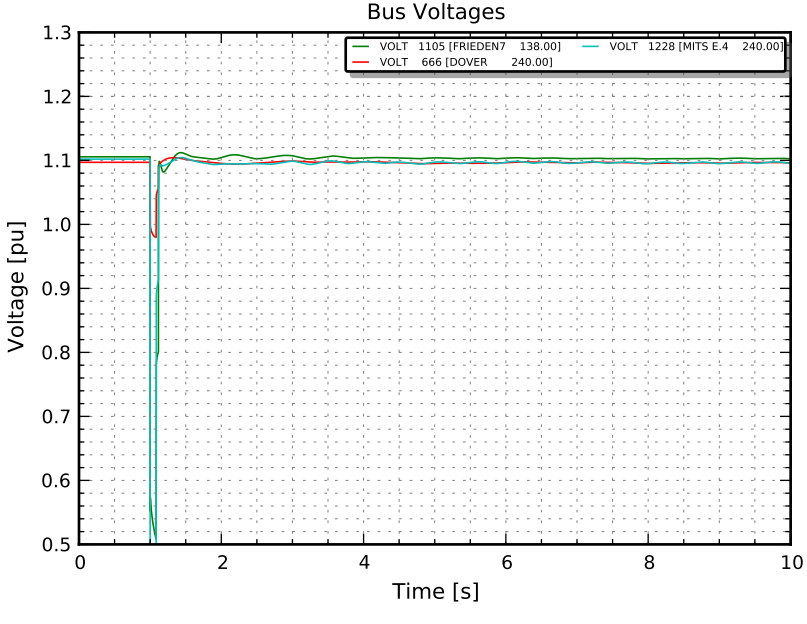
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_B.

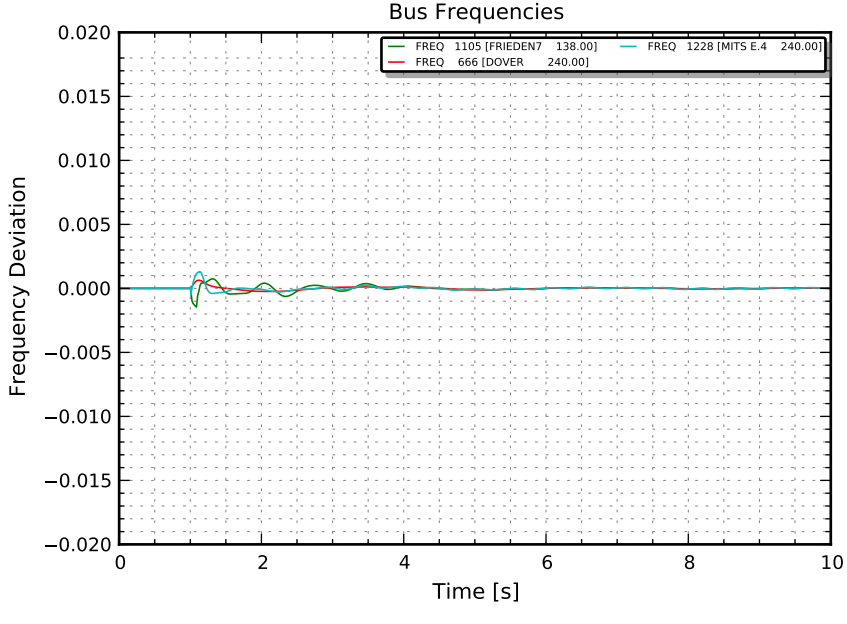
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 003 (B. 1)





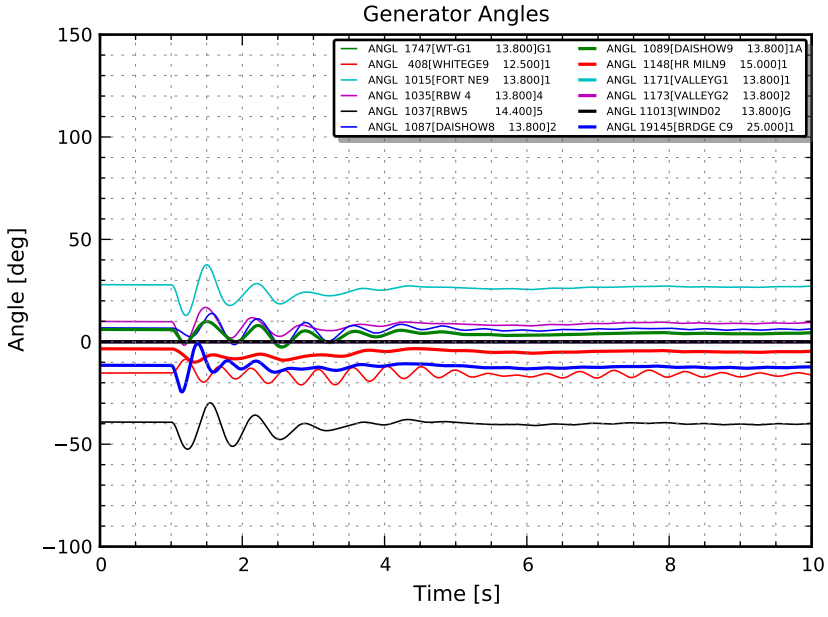


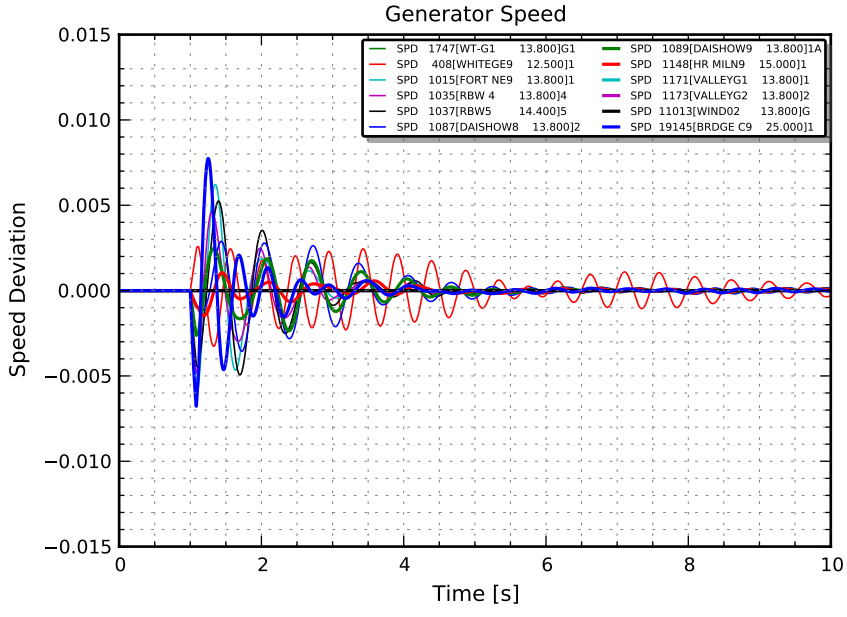


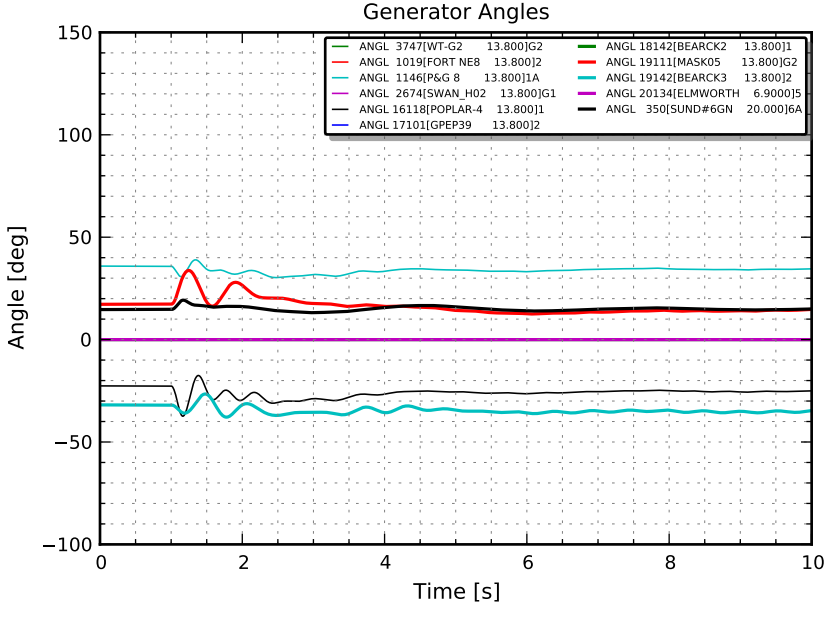
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_B.

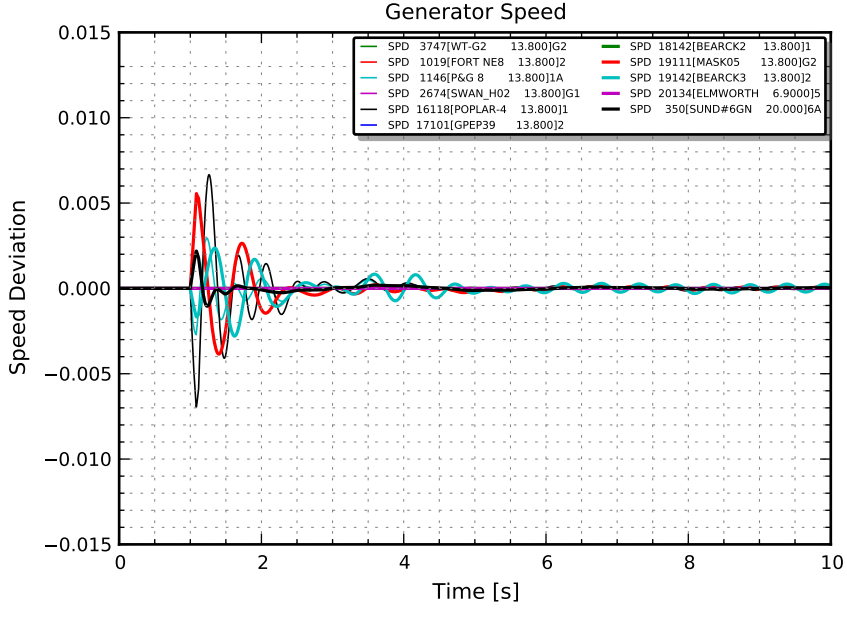
Study Area Generators

Appendix C2B
Figure: 003 (B. 2)





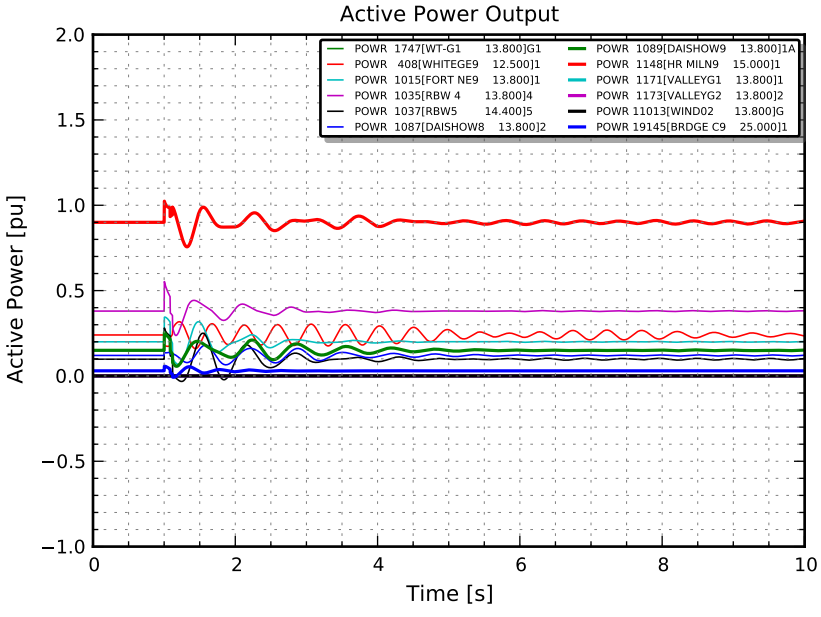


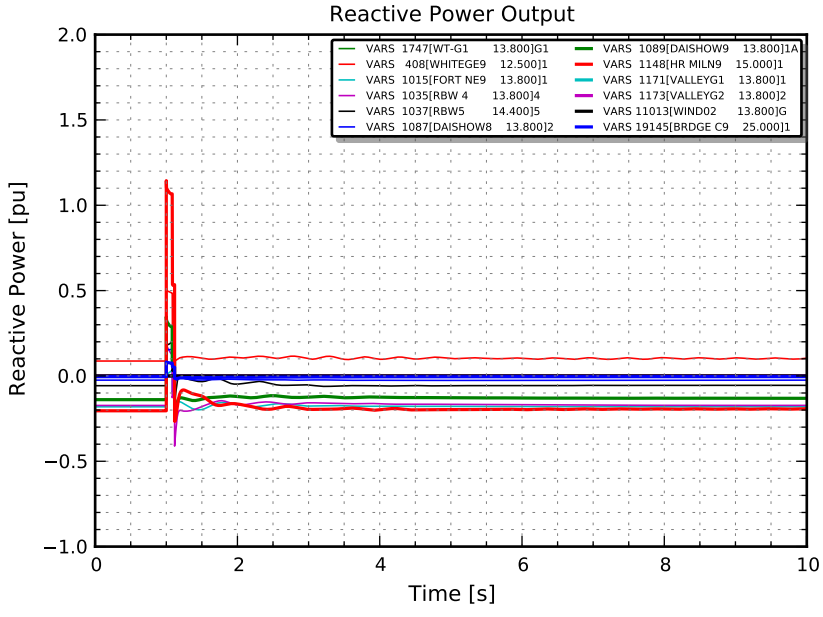


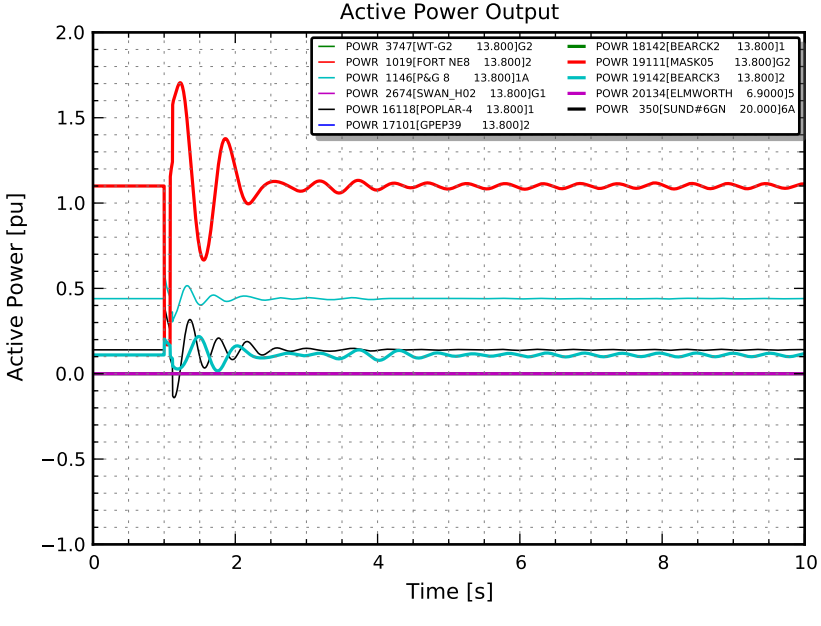
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_B.

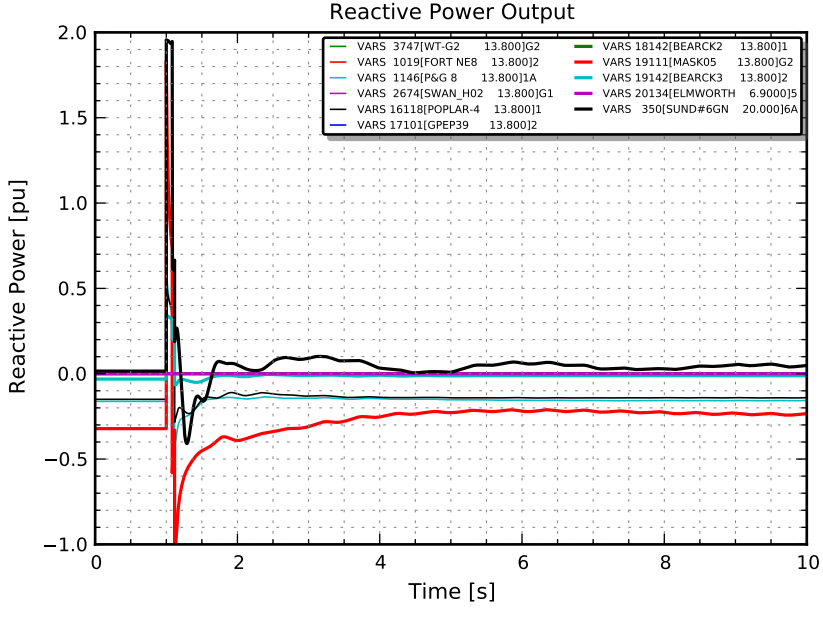
Study Area Generators

Appendix C2B
Figure: 003 (B. 3)





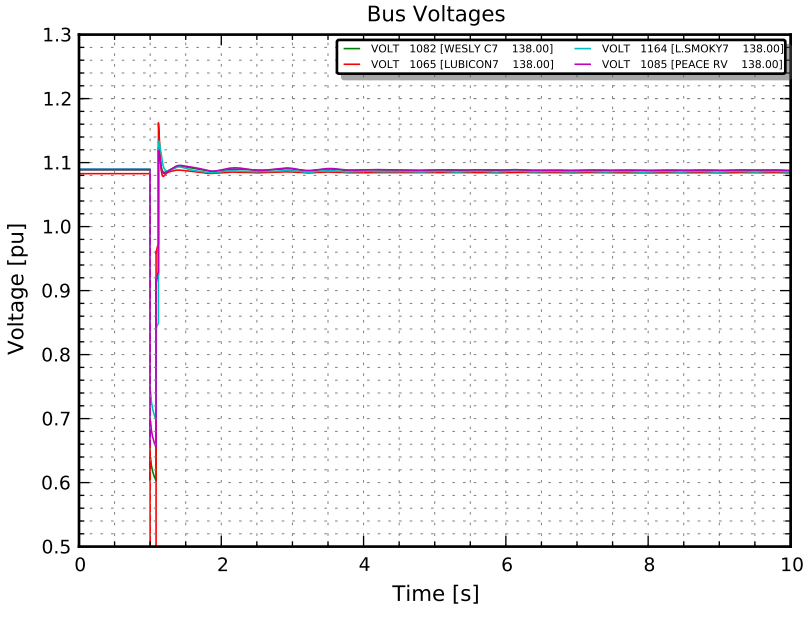


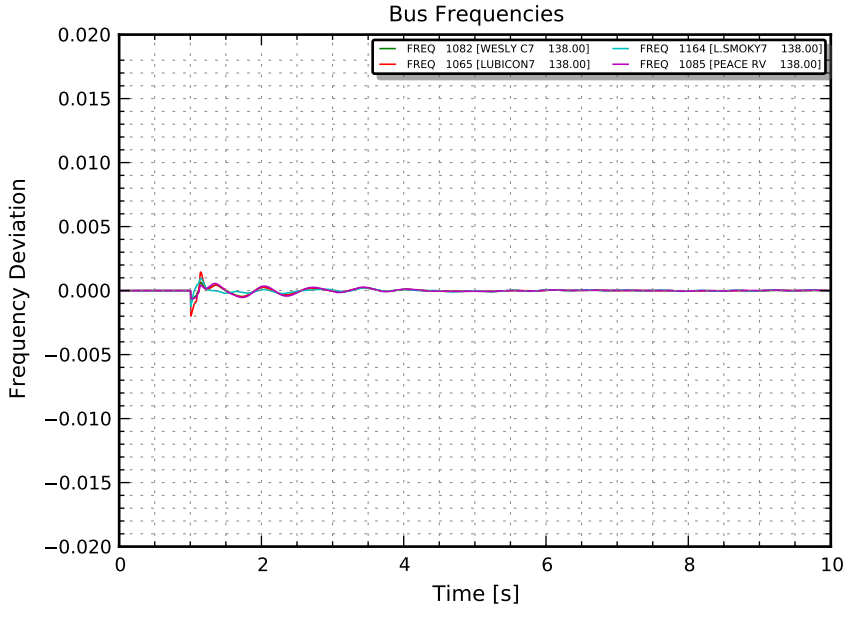


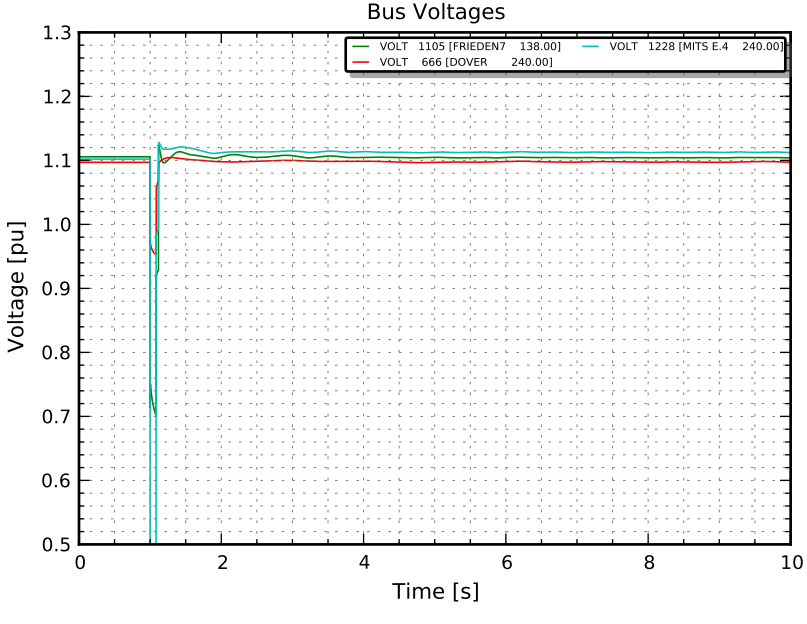
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 004 9L40 MITSUE to LOUISECREEK_A.

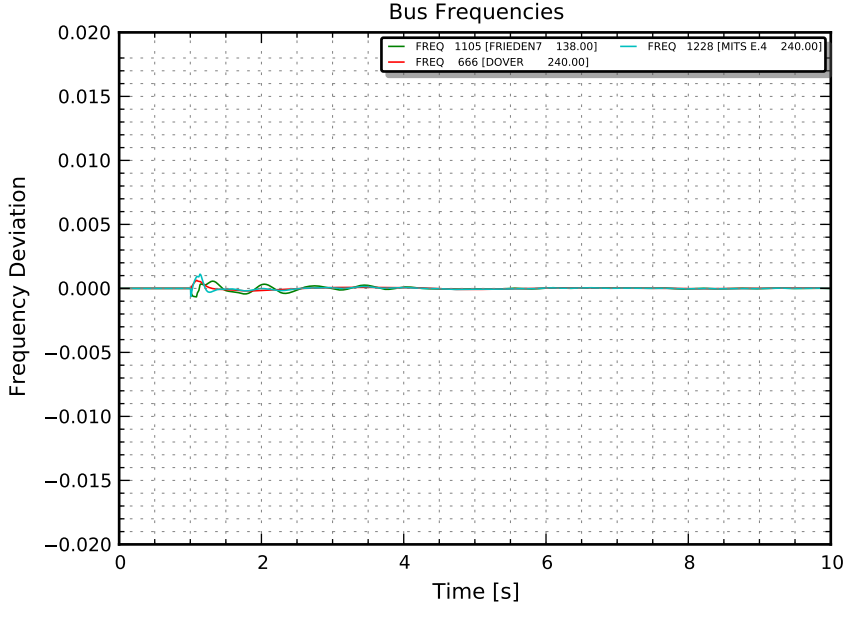
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 004 (A. 1)





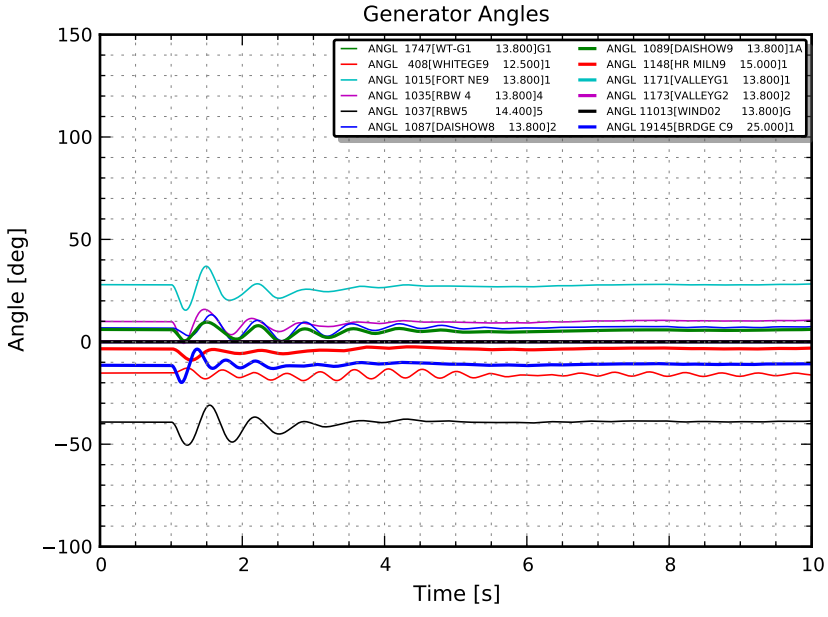


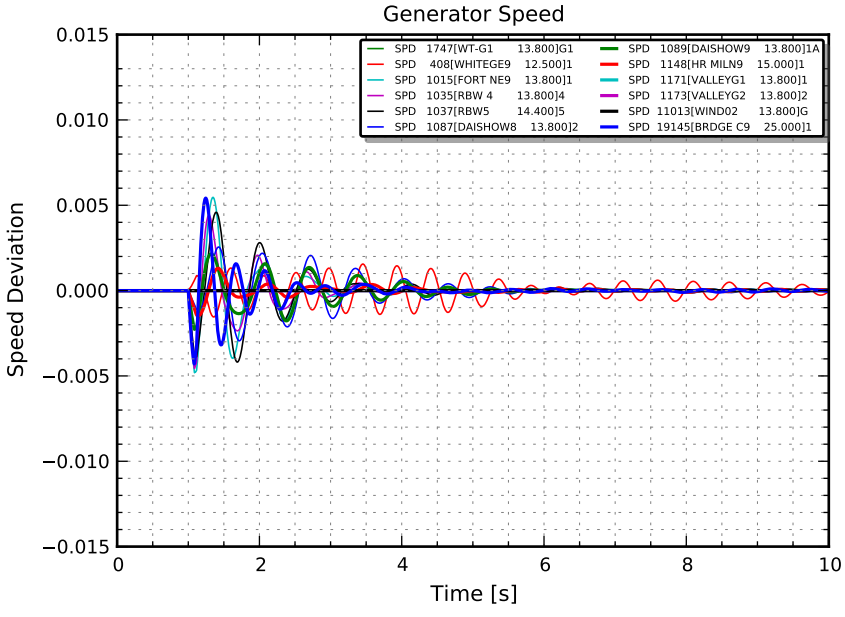


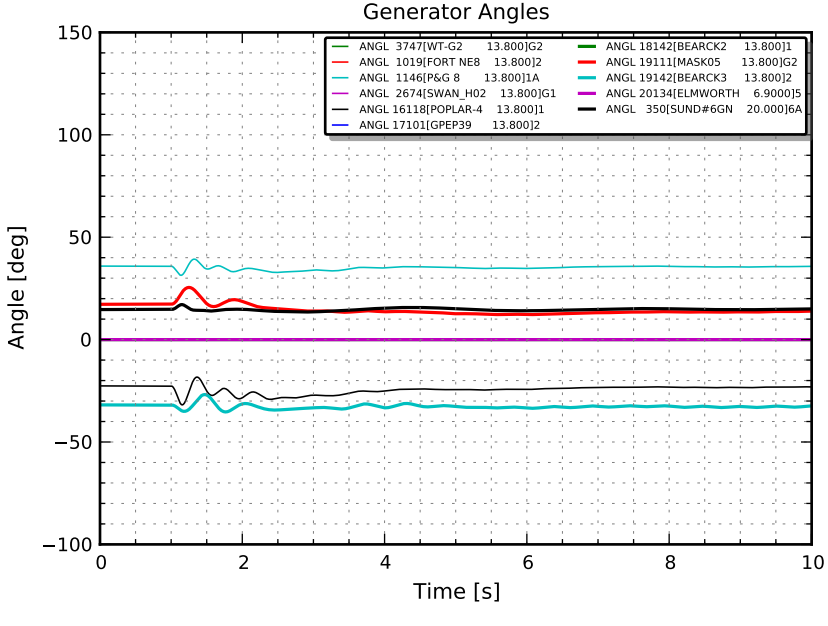
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 004 9L40 MITSUE to LOUISECREEK_A.

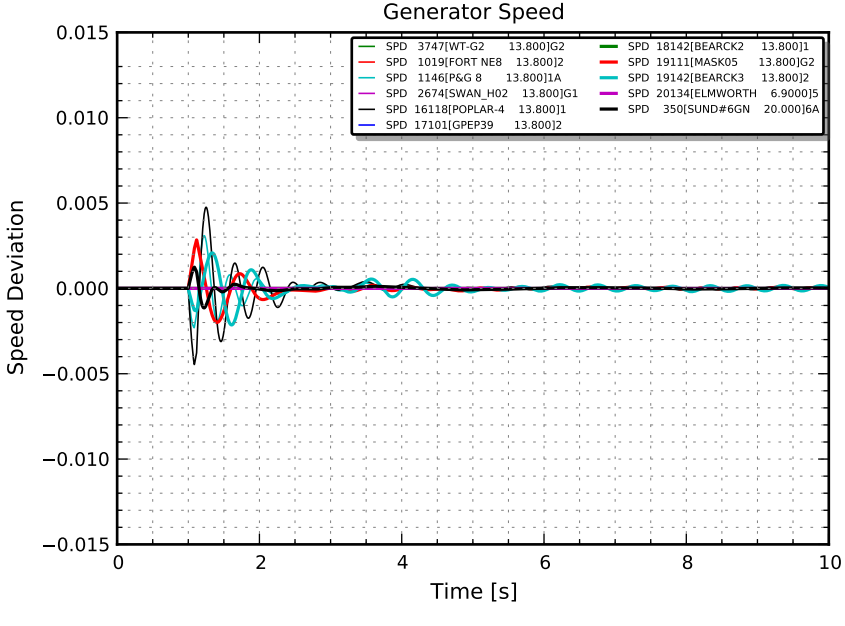
Study Area Generators

Appendix C2B
Figure: 004 (A. 2)





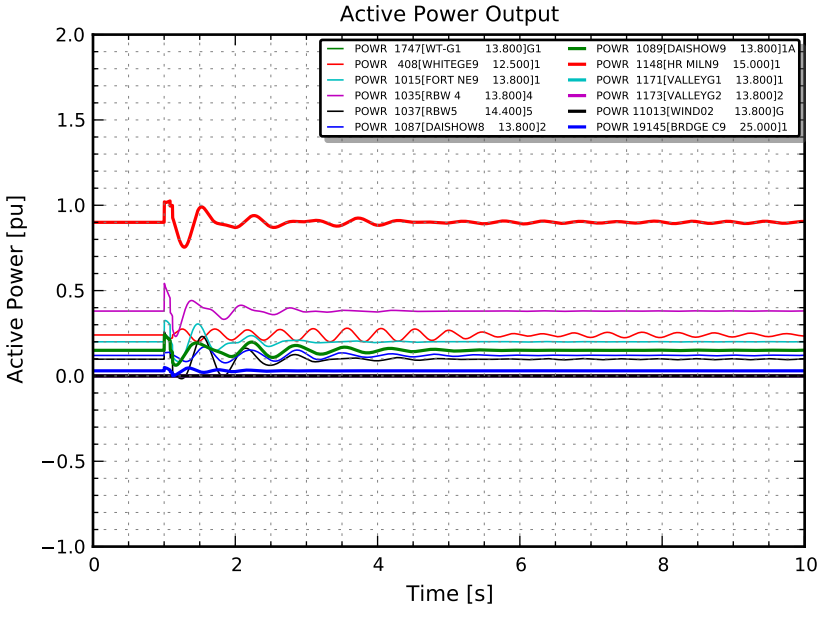


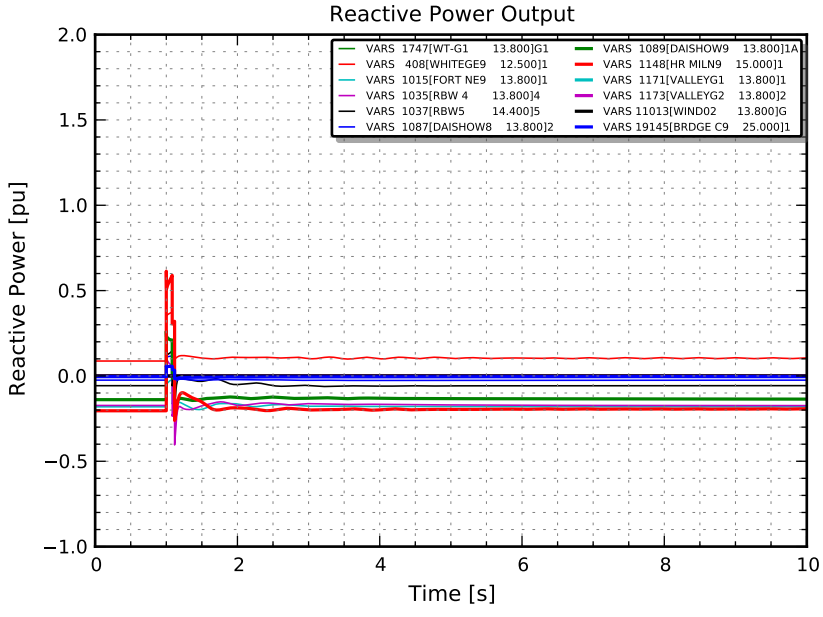


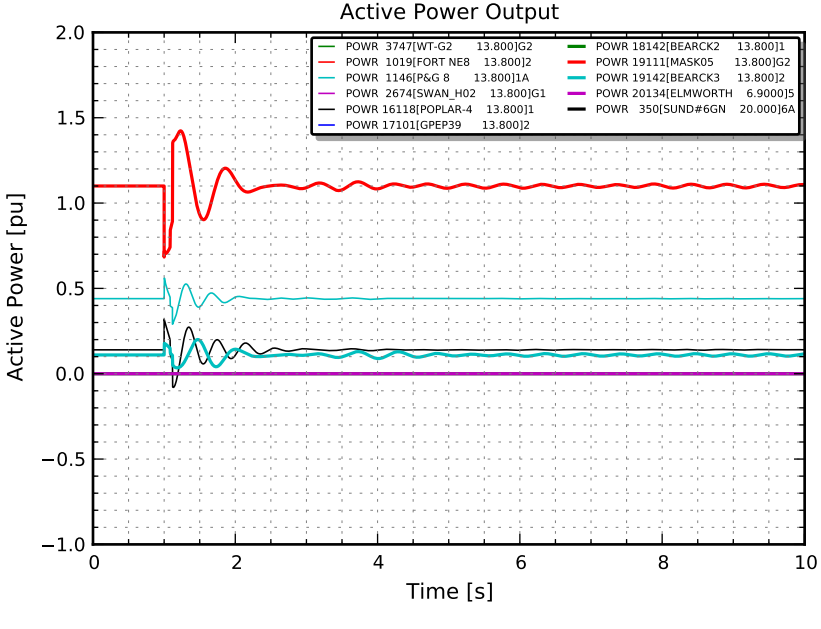
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 004 9L40 MITSUE to LOUISECREEK_A.

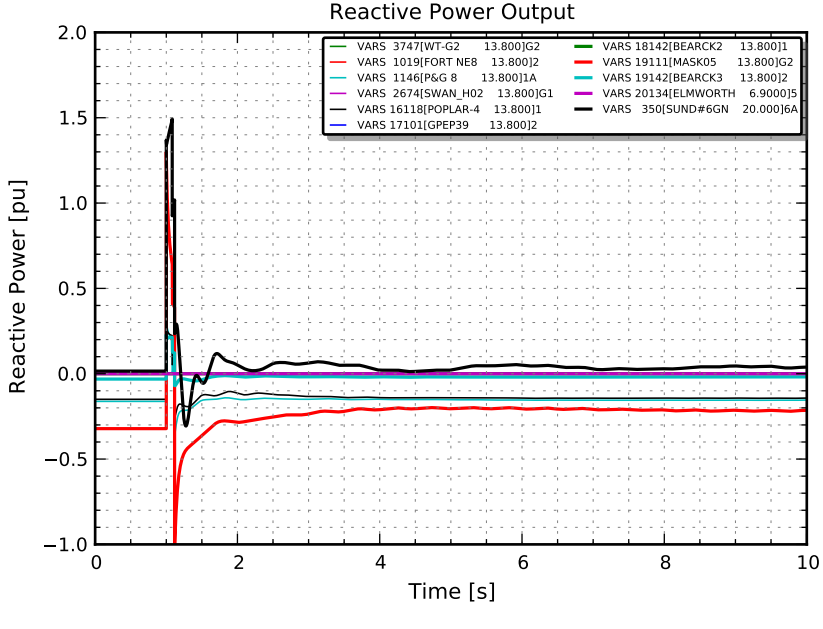
Study Area Generators

Appendix C2B
Figure: 004 (A. 3)





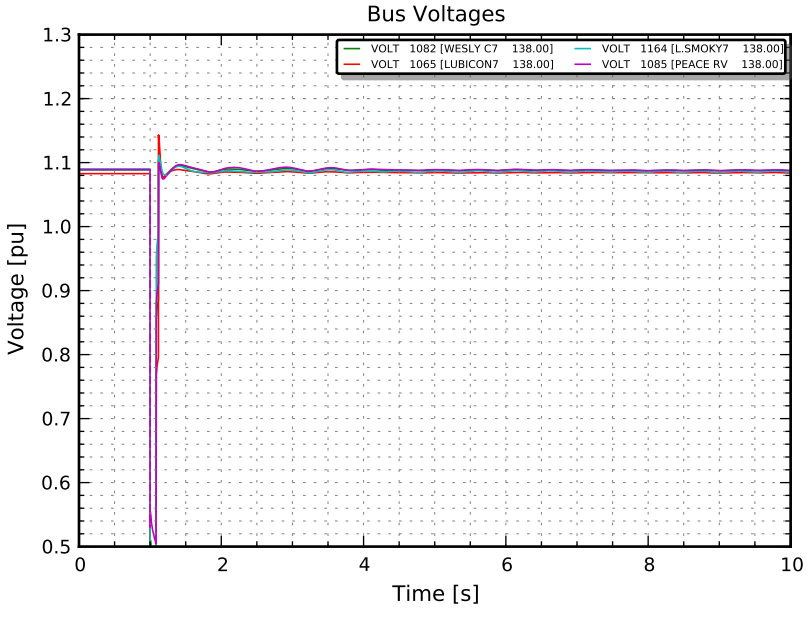


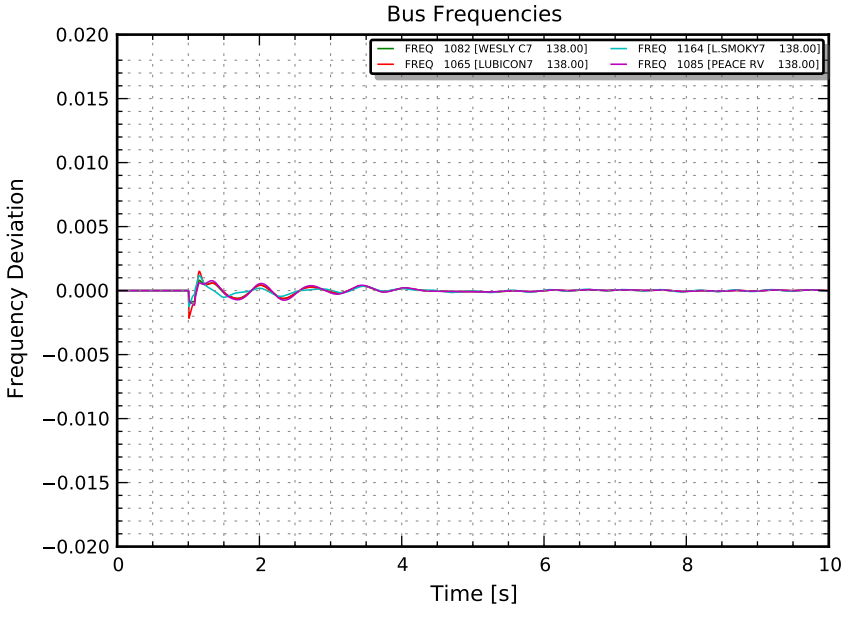


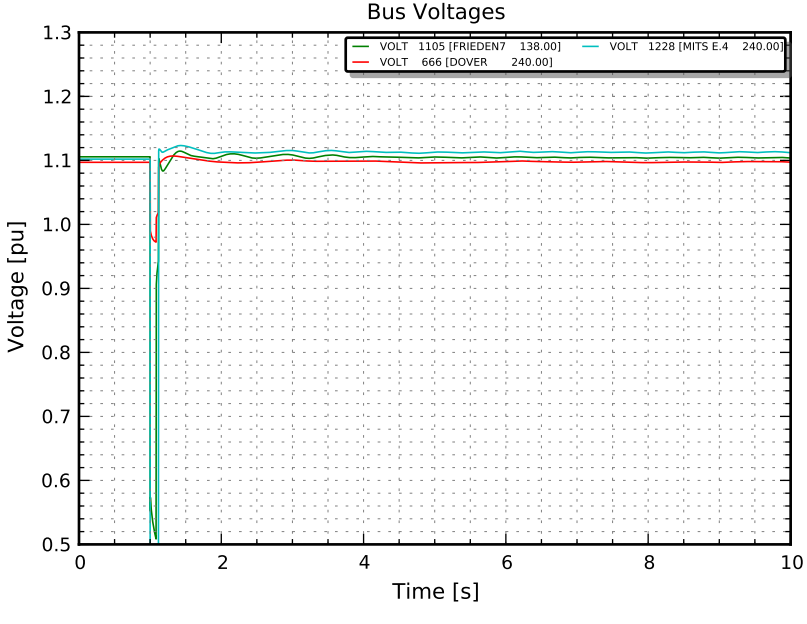
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 004 9L40 MITSUE to LOUISECREEK_B.

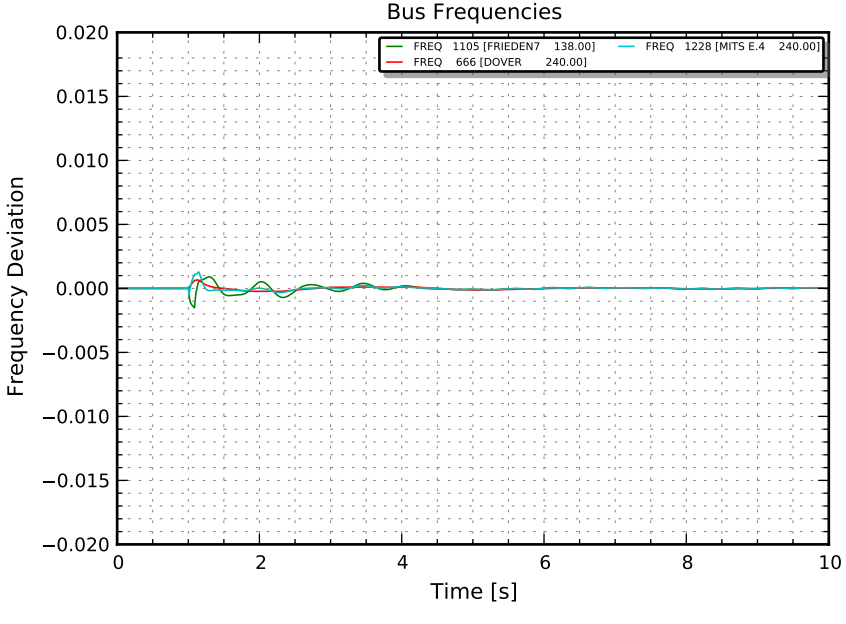
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 004 (B. 1)





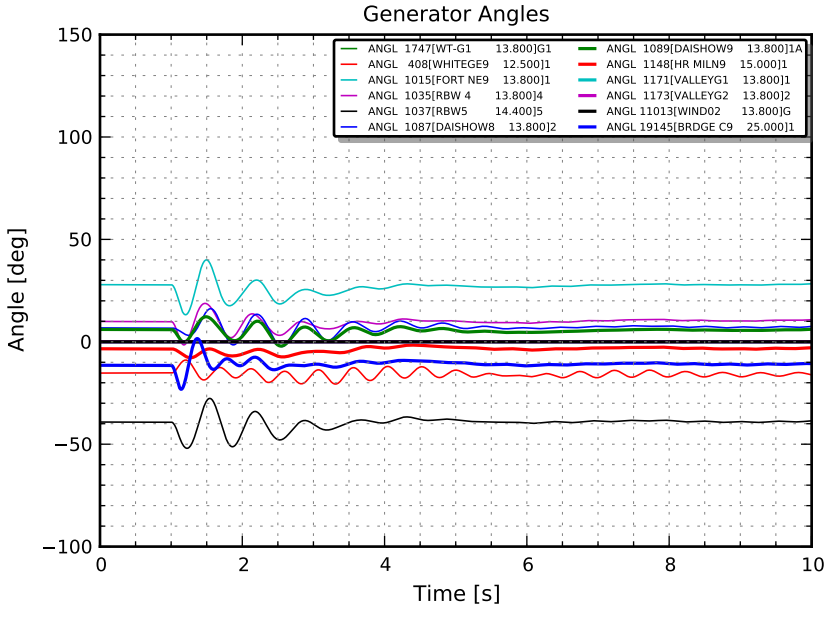


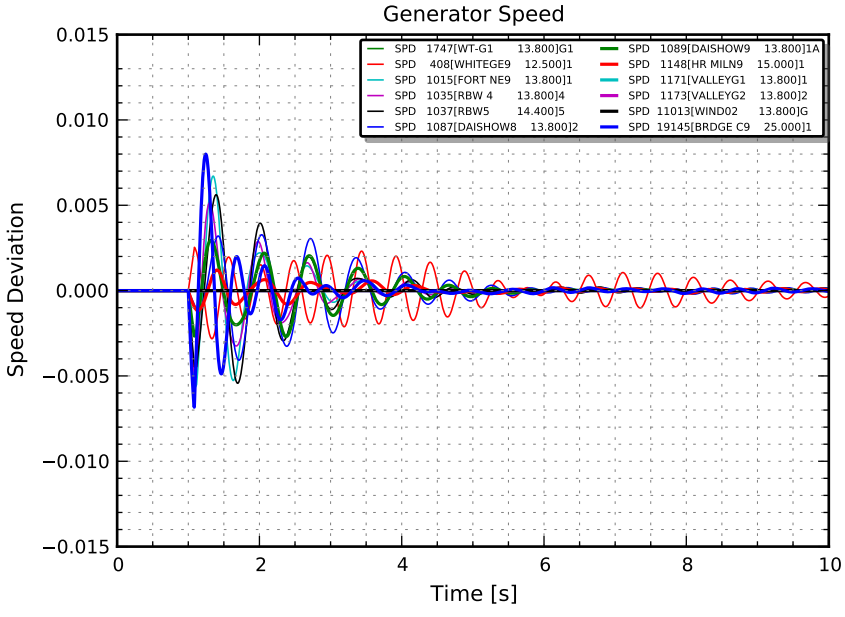


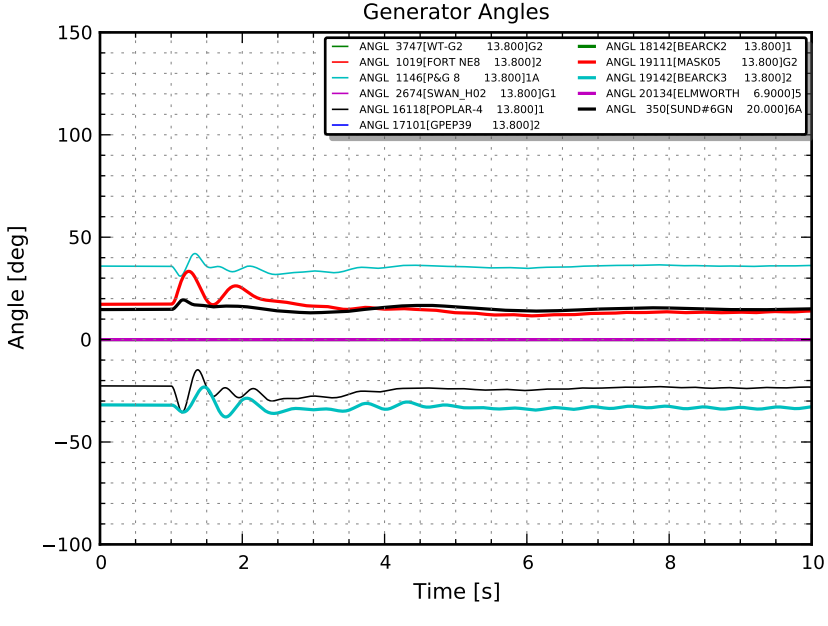
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 004 9L40 MITSUE to LOUISECREEK_B.

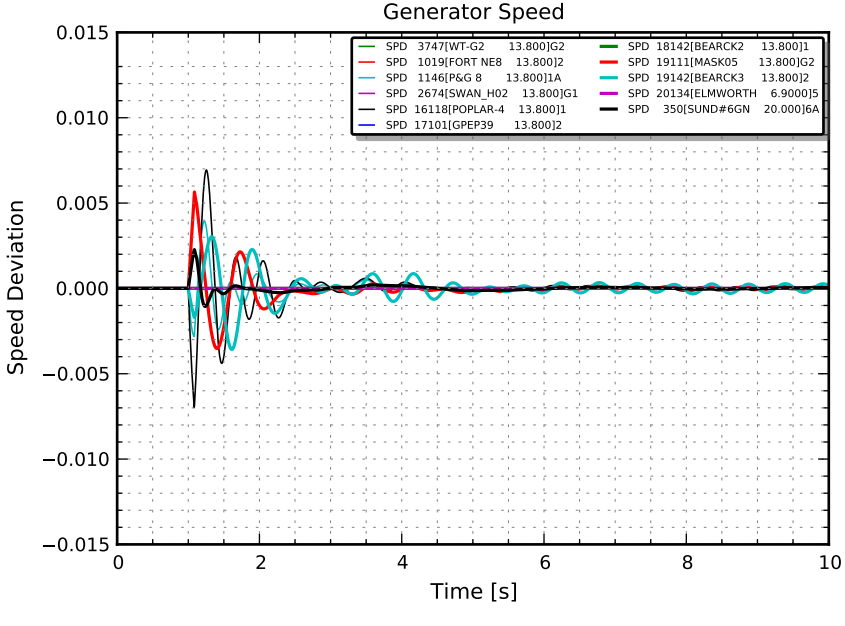
Study Area Generators

Appendix C2B
Figure: 004 (B. 2)





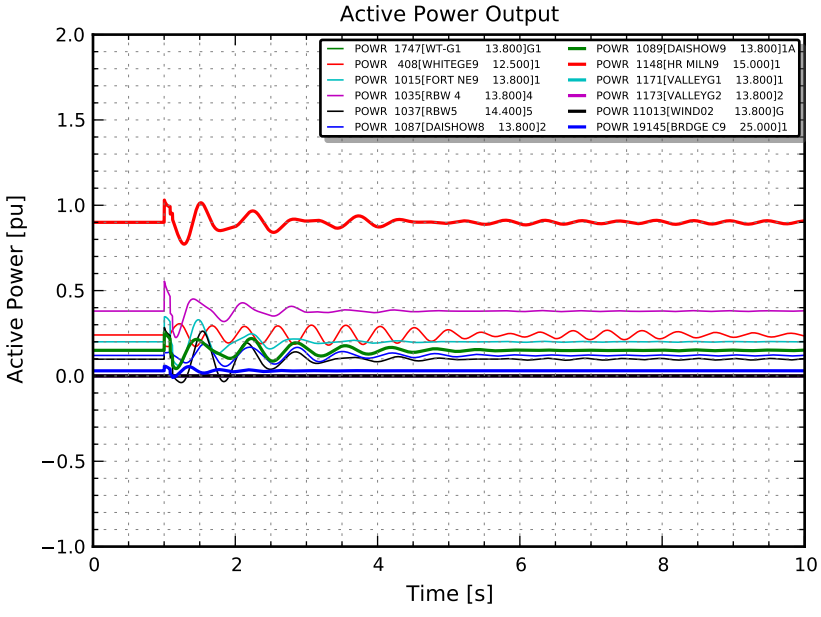


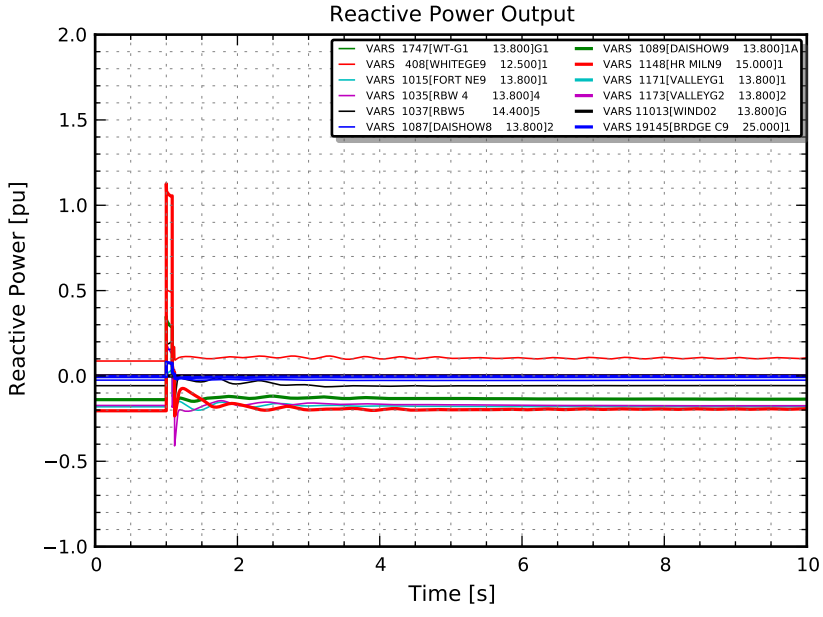


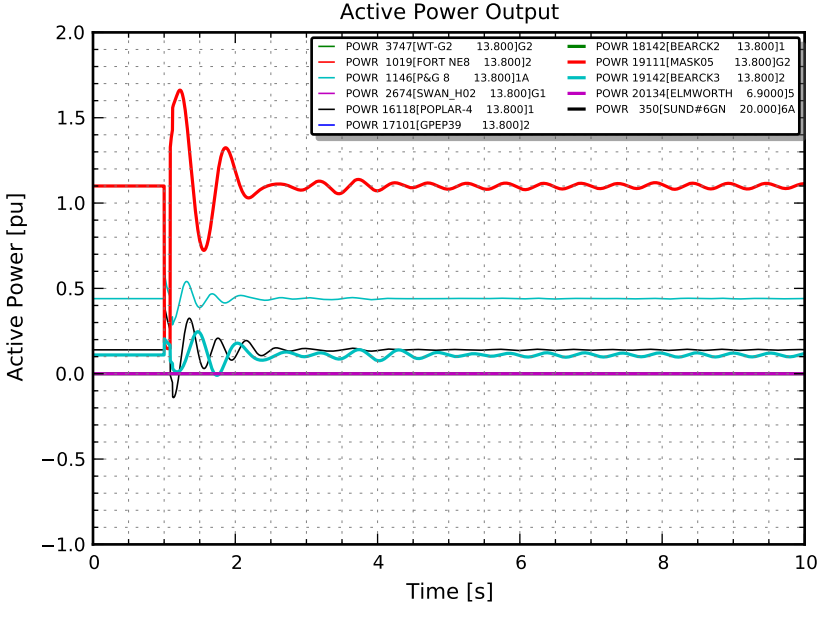
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 004 9L40 MITSUE to LOUISECREEK_B.

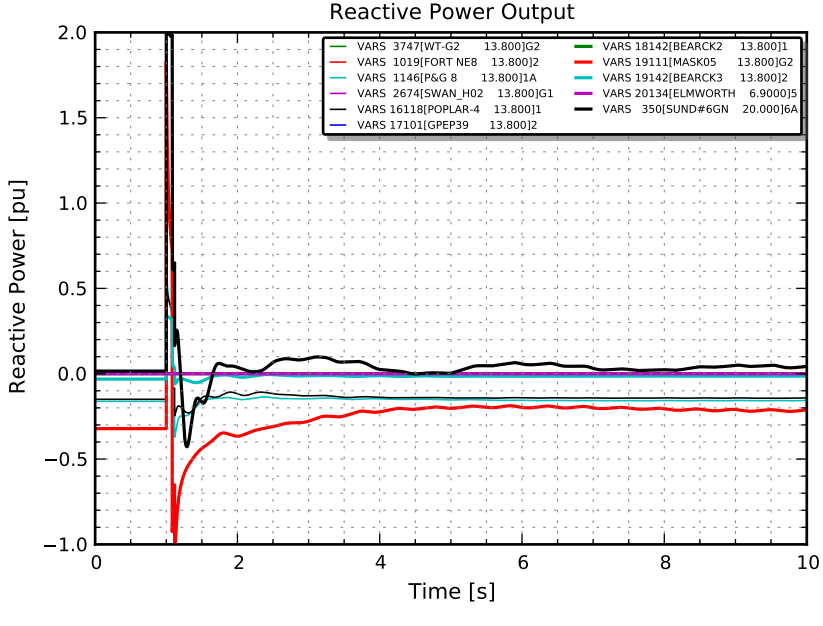
Study Area Generators

Appendix C2B
Figure: 004 (B. 3)





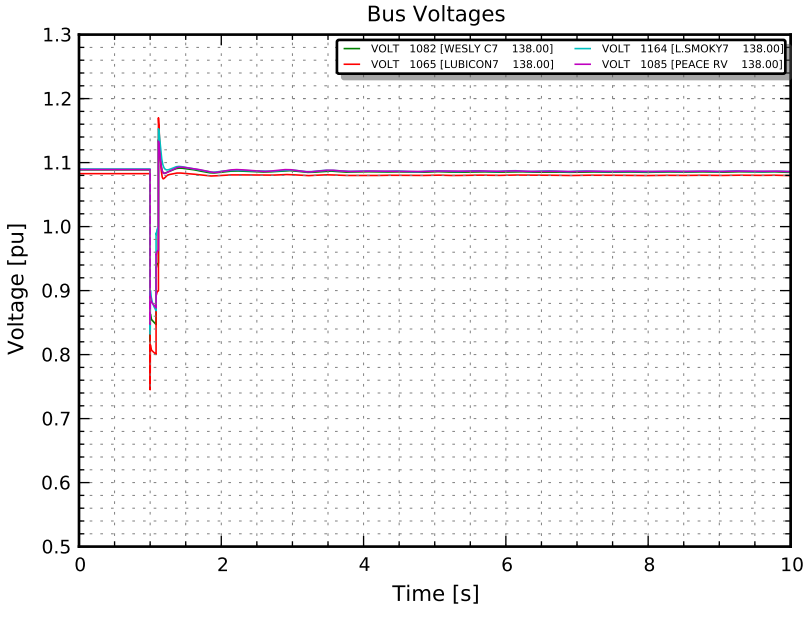


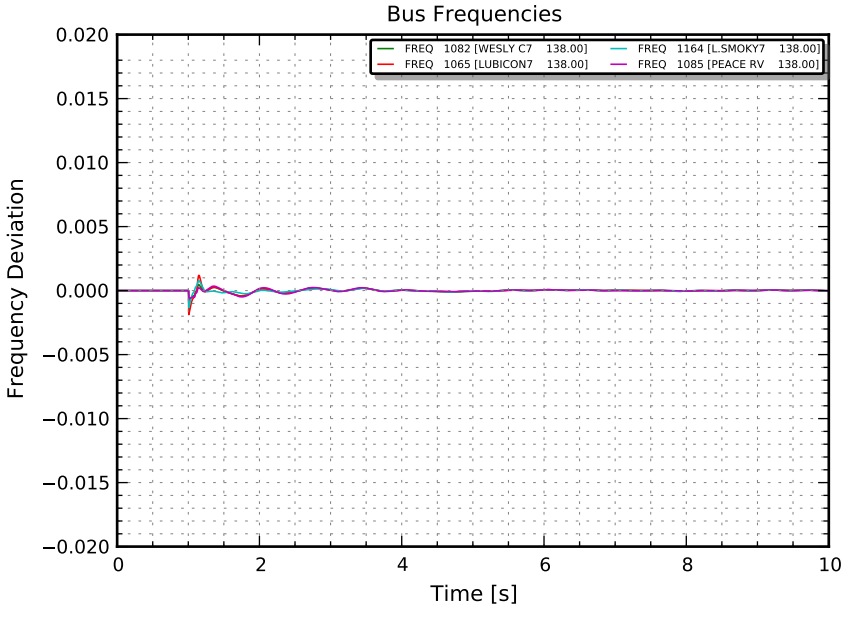


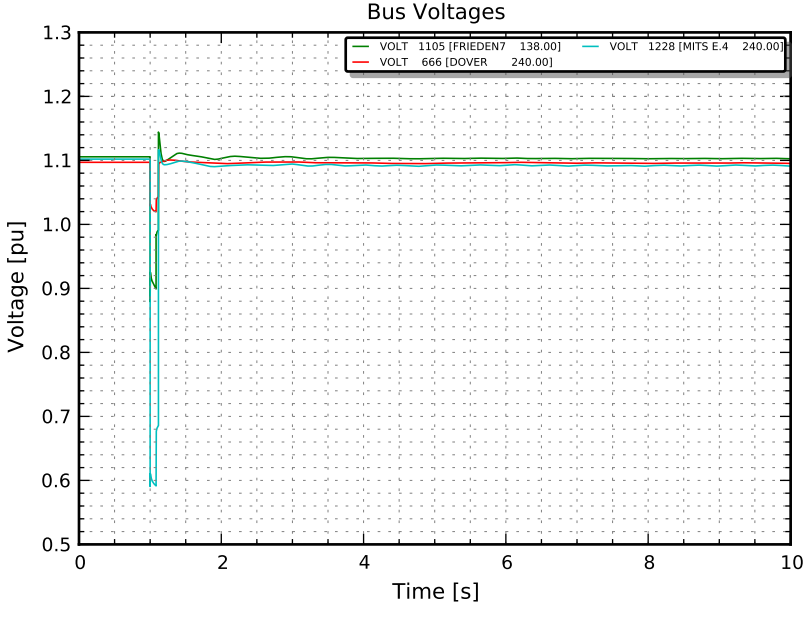
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 005 913L NORTHBARRHEAD to MITSUE_A.

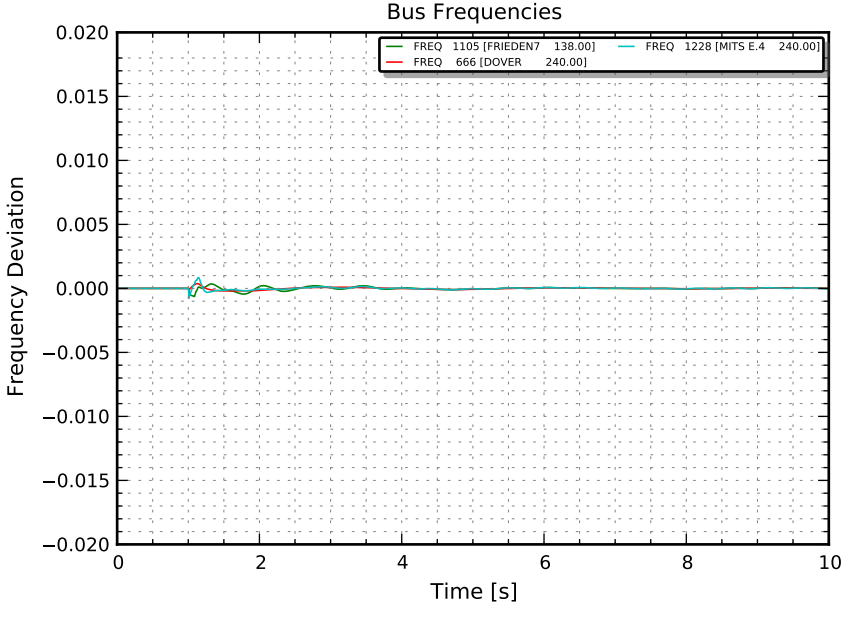
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 005 (A. 1)





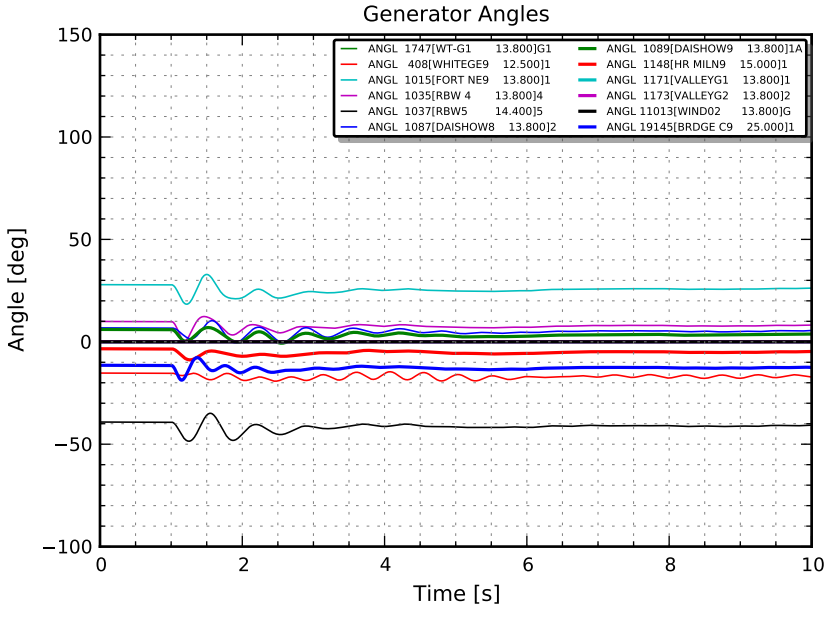


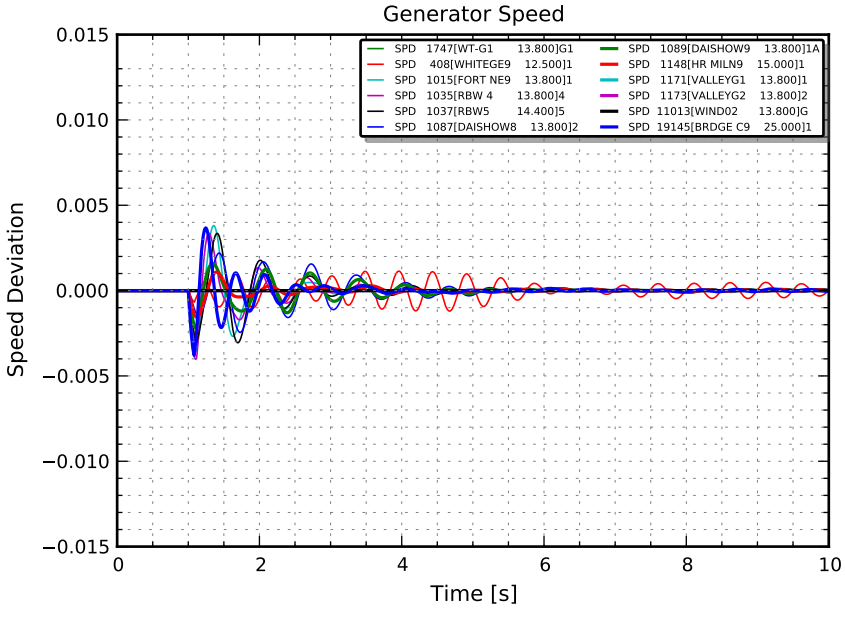


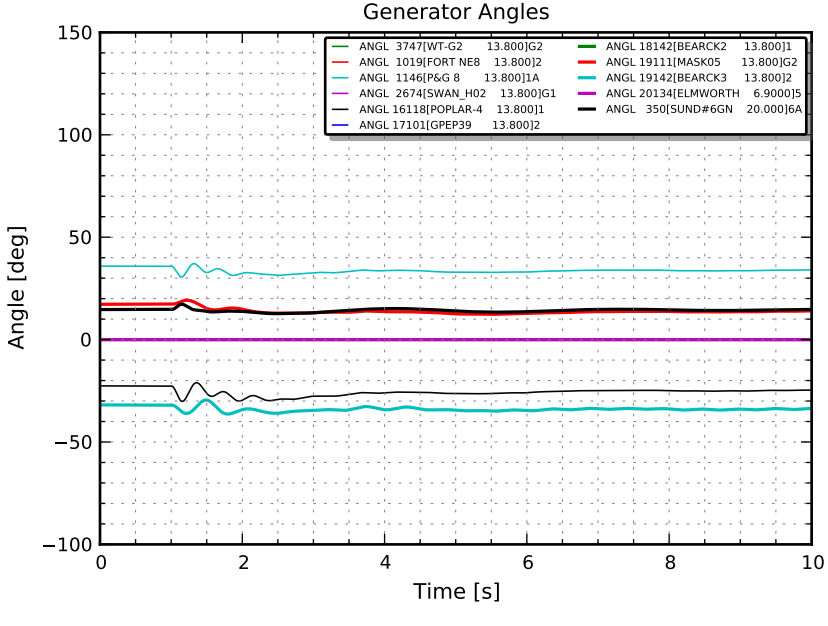
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 005 913L NORTHBARRHEAD to MITSUE_A.

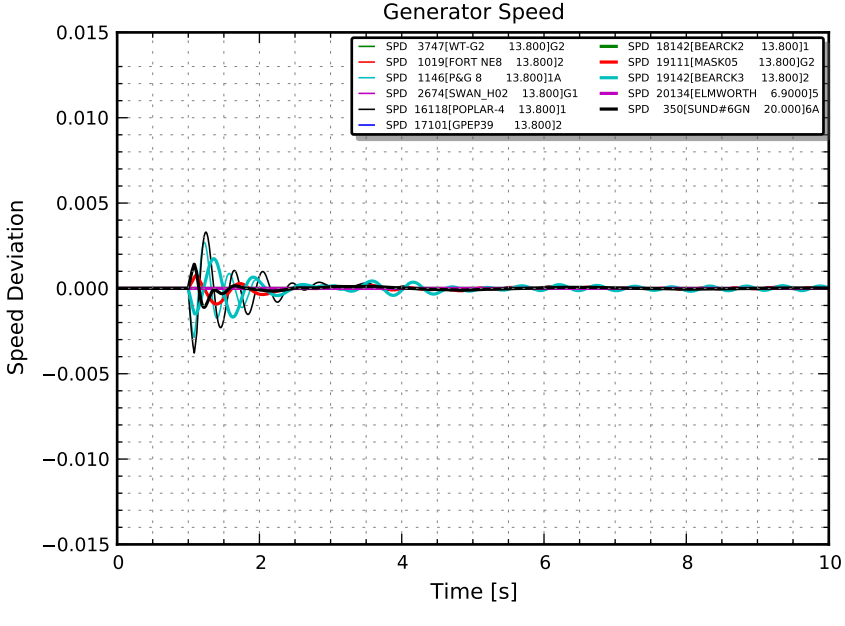
Study Area Generators

Appendix C2B
Figure: 005 (A. 2)





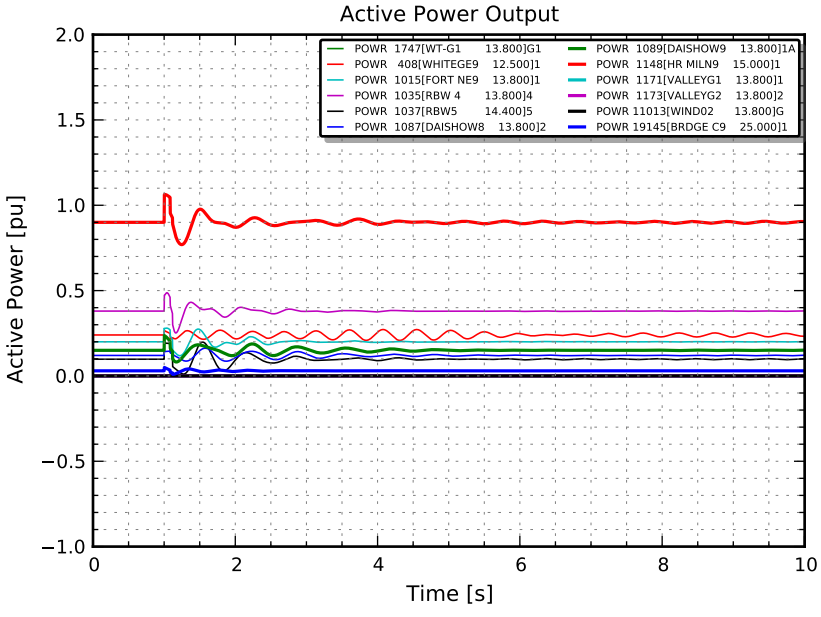


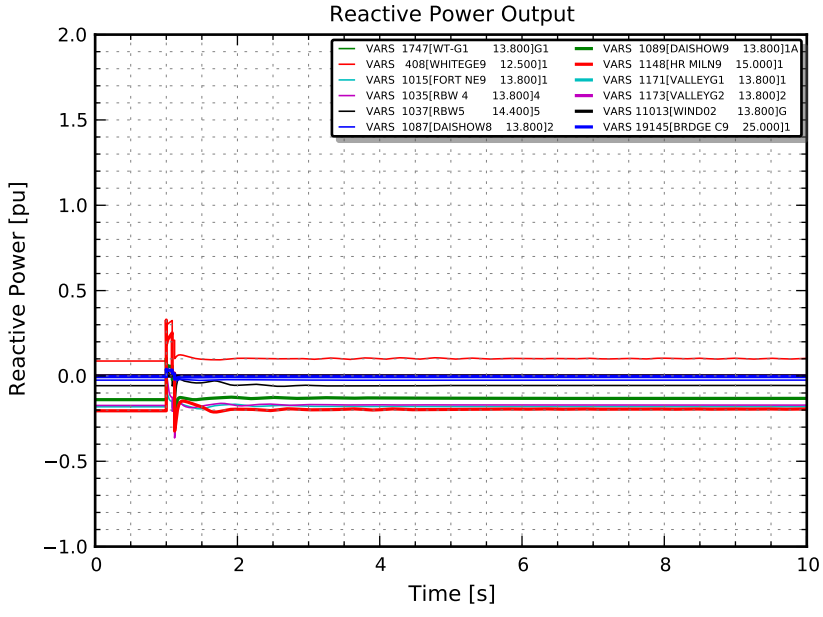


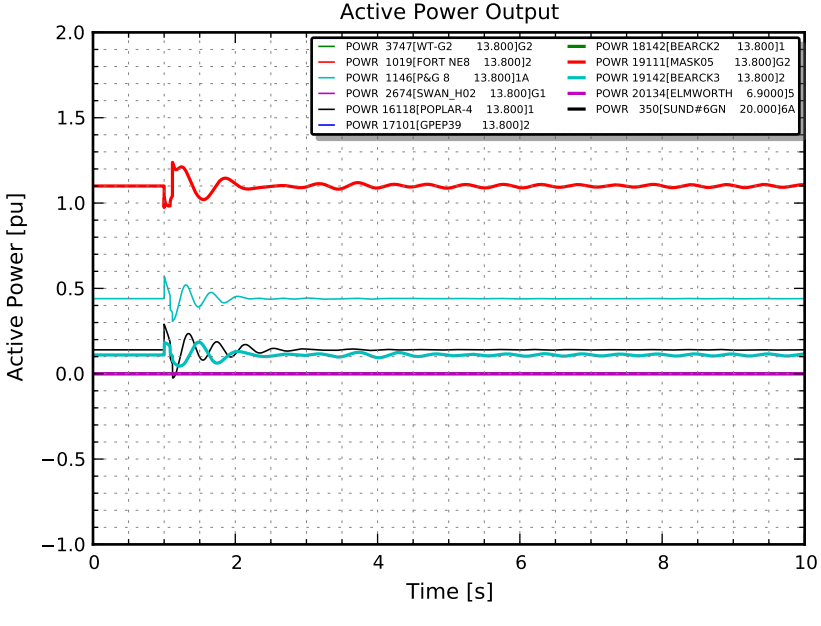
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 005 913L NORTHBARRHEAD to MITSUE_A.

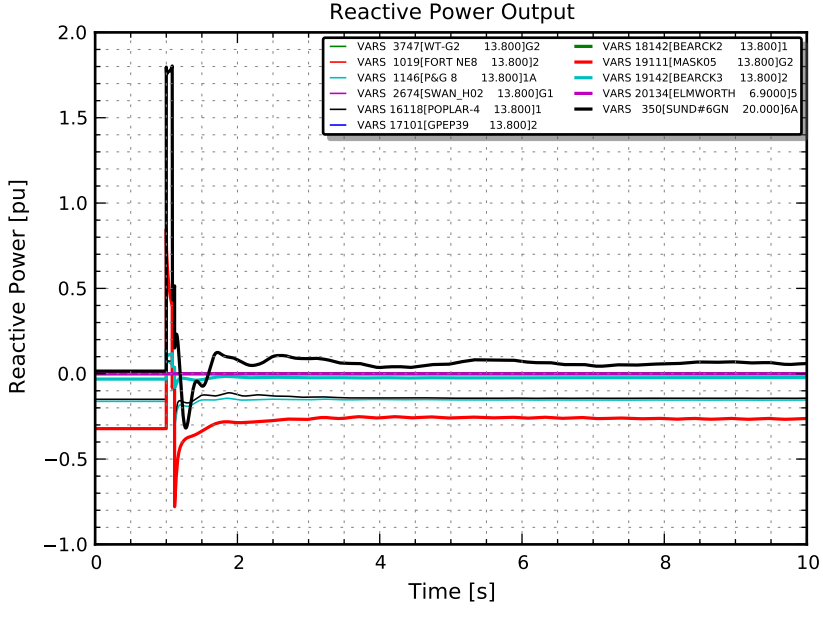
Study Area Generators

Appendix C2B
Figure: 005 (A. 3)





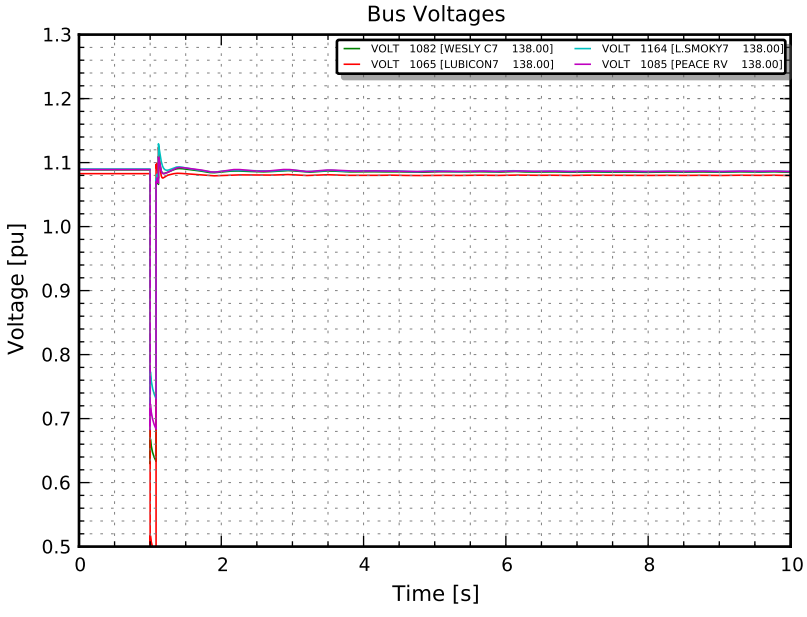


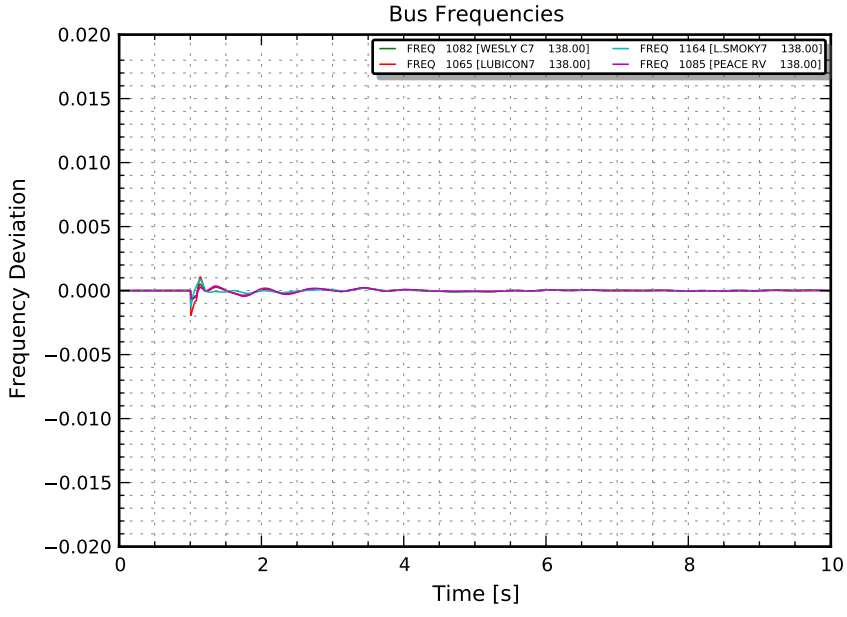


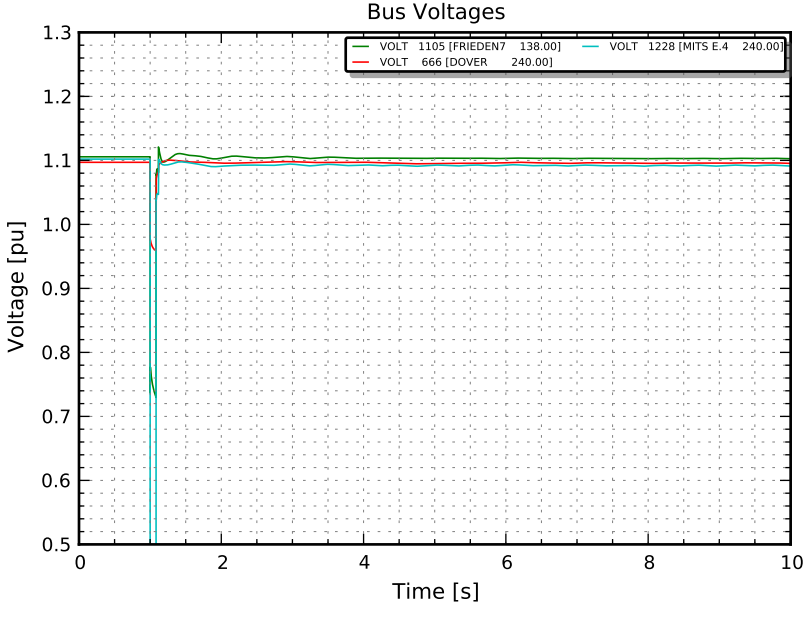
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 005 913L NORTHBARRHEAD to MITSUE_B.

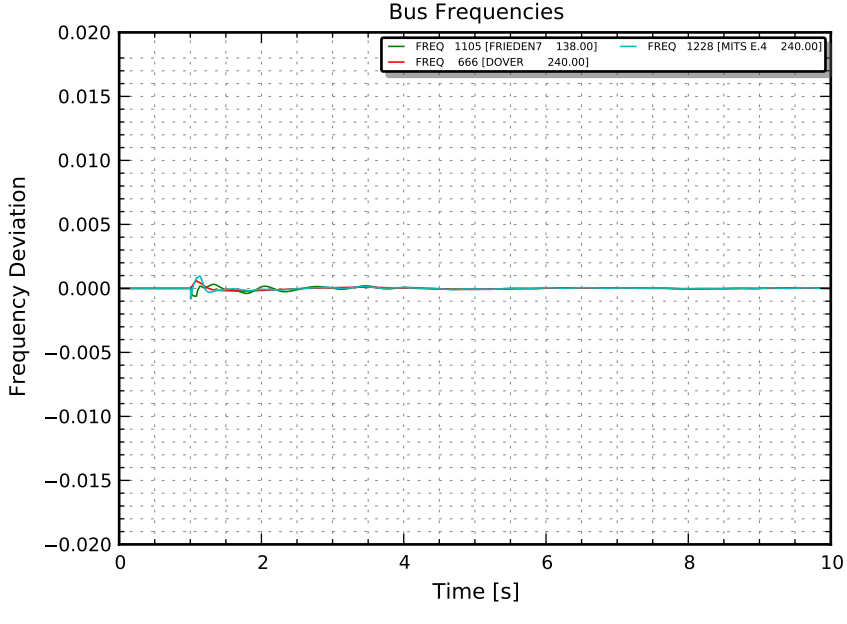
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 005 (B. 1)





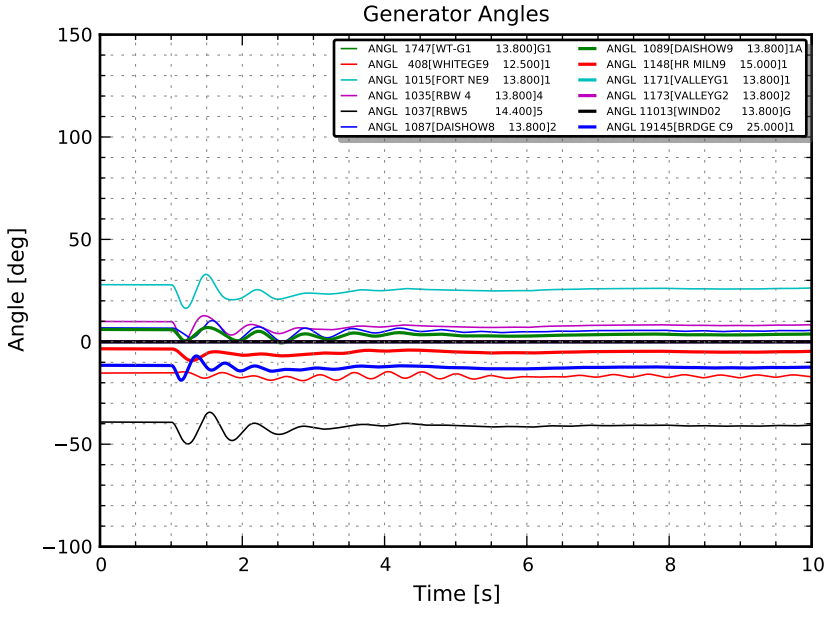


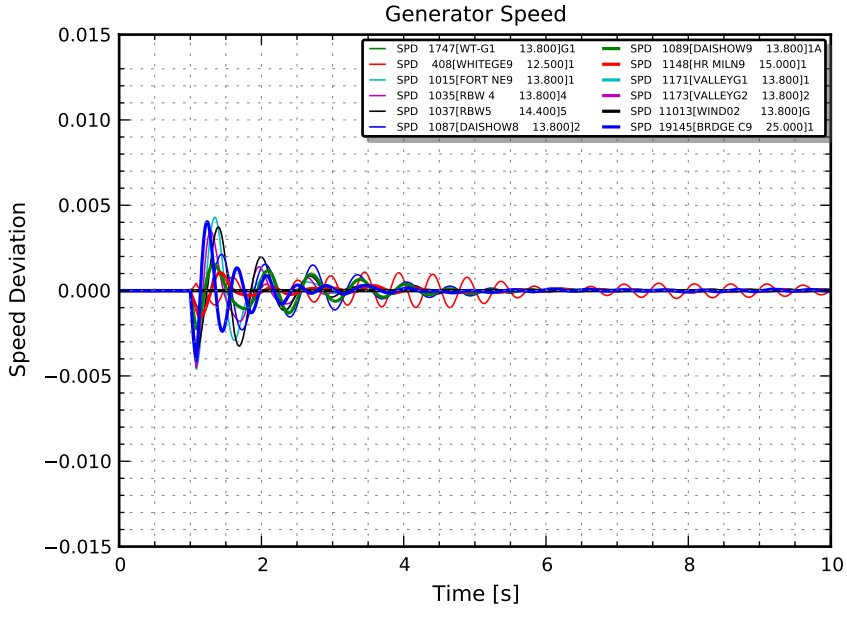


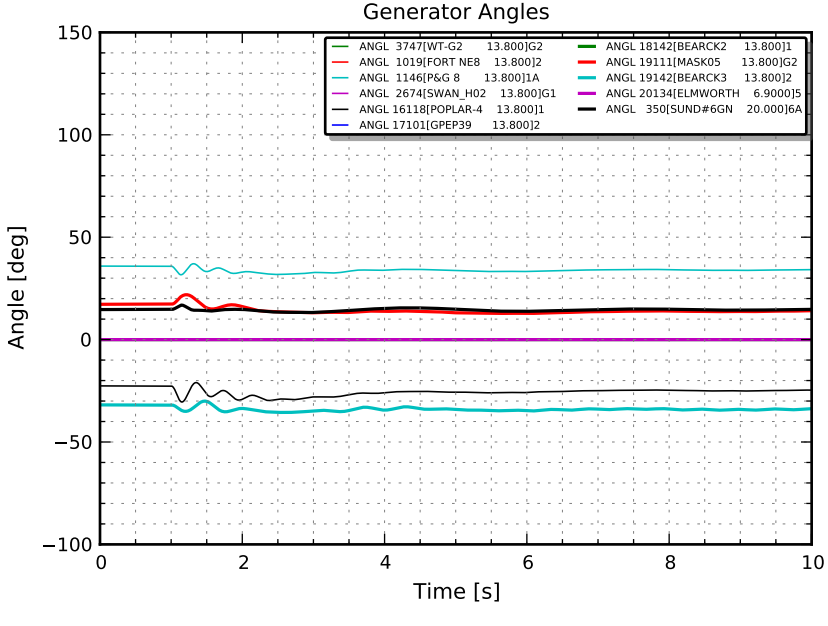
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 005 913L NORTHBARRHEAD to MITSUE_B.

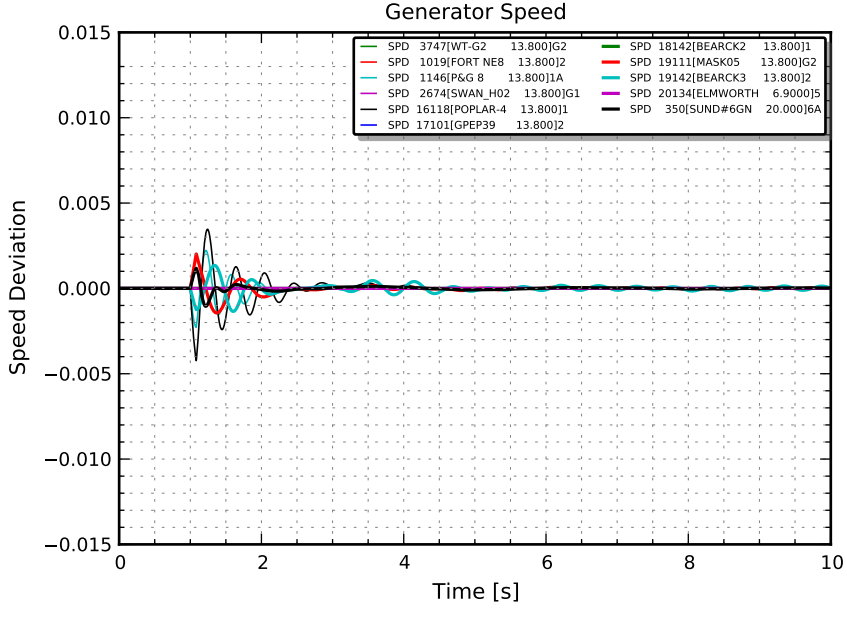
Study Area Generators

Appendix C2B
Figure: 005 (B. 2)





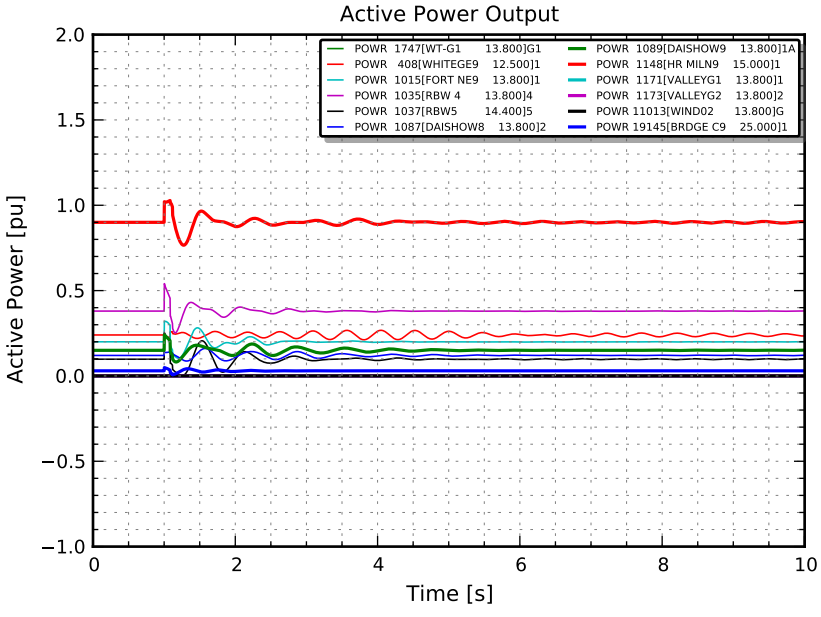


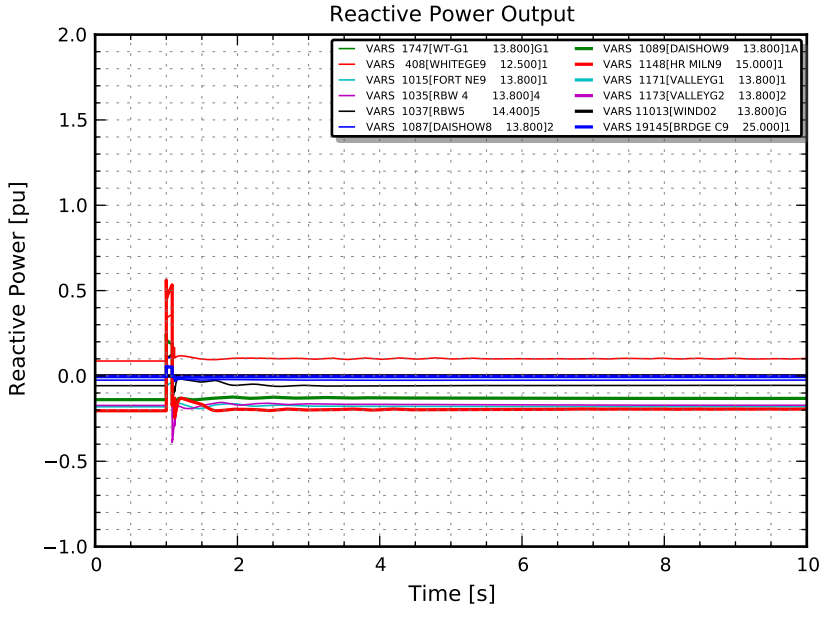


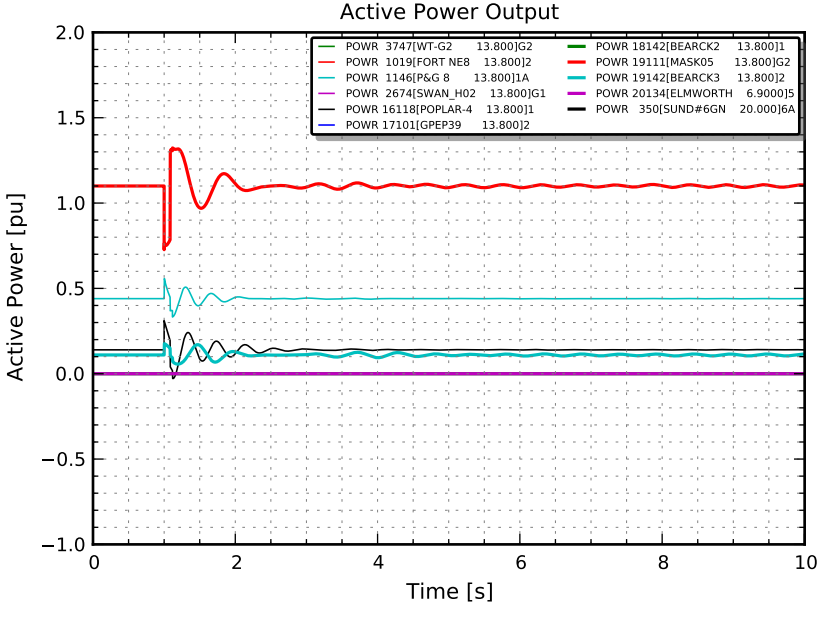
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 005 913L NORTHBARRHEAD to MITSUE_B.

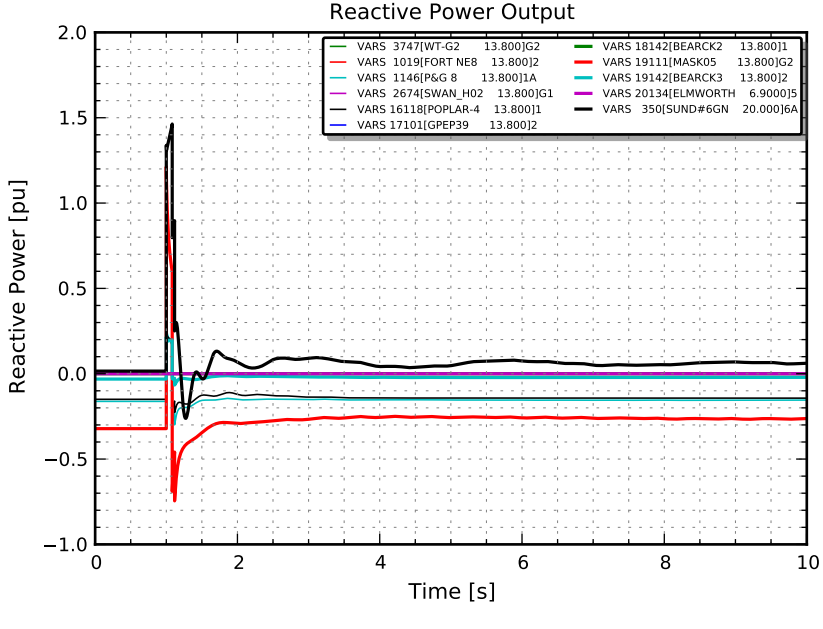
Study Area Generators

Appendix C2B
Figure: 005 (B. 3)





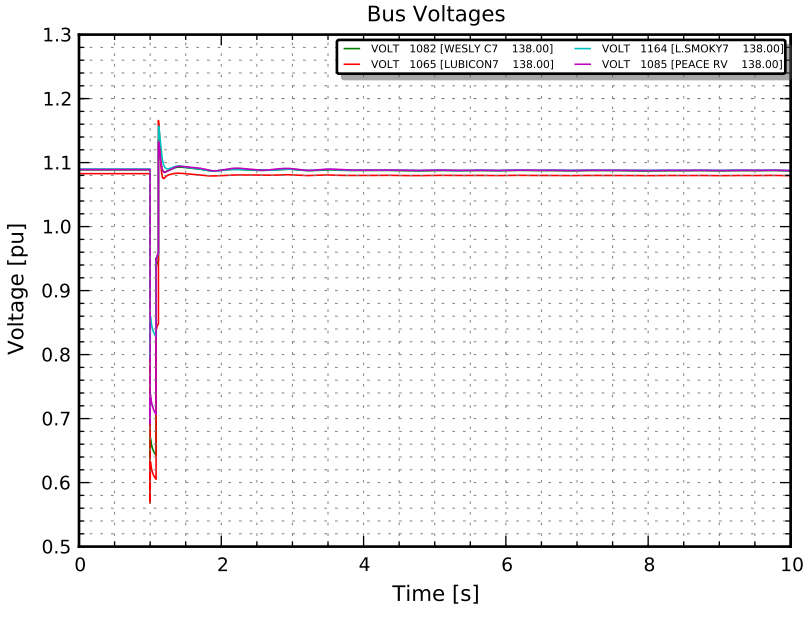


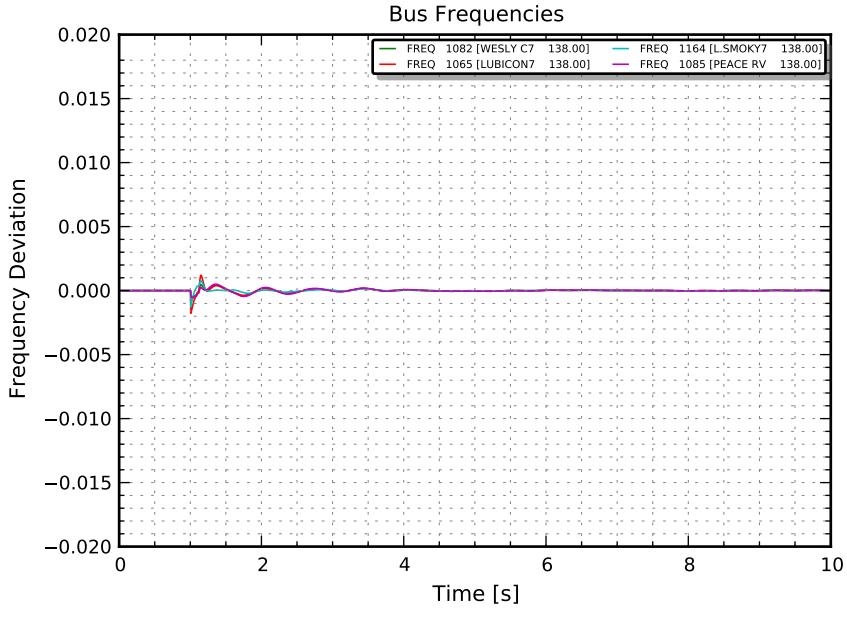


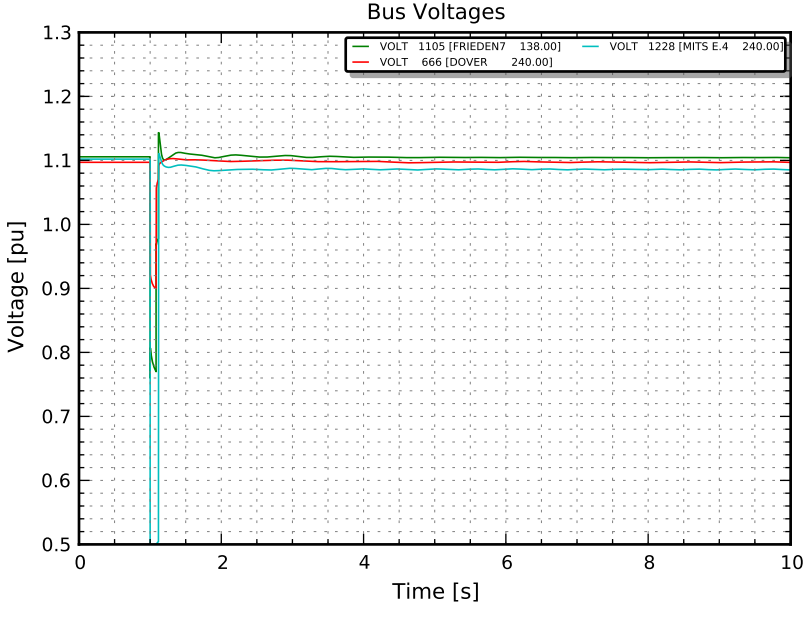
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 006 9L56 WABASCA to MITSUE_A.

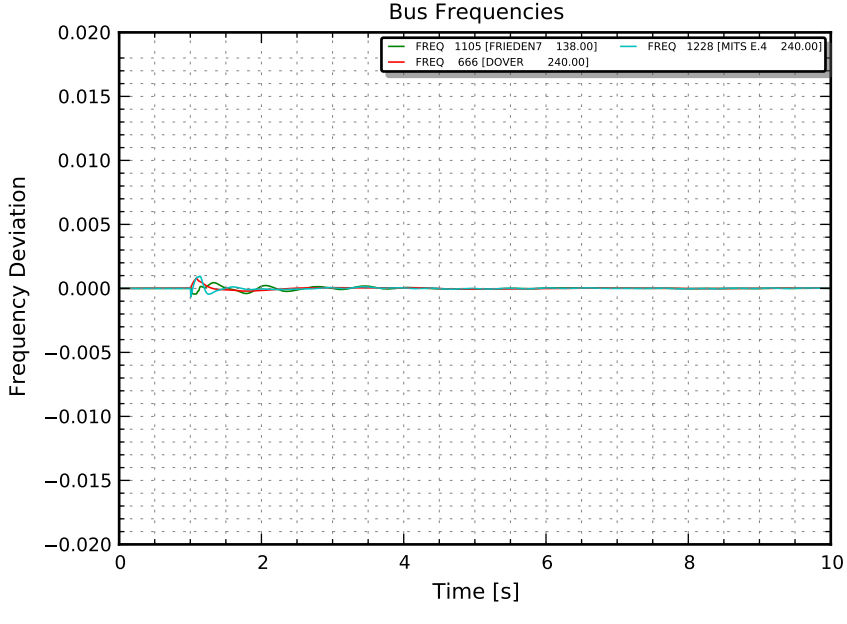
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 006 (A. 1)





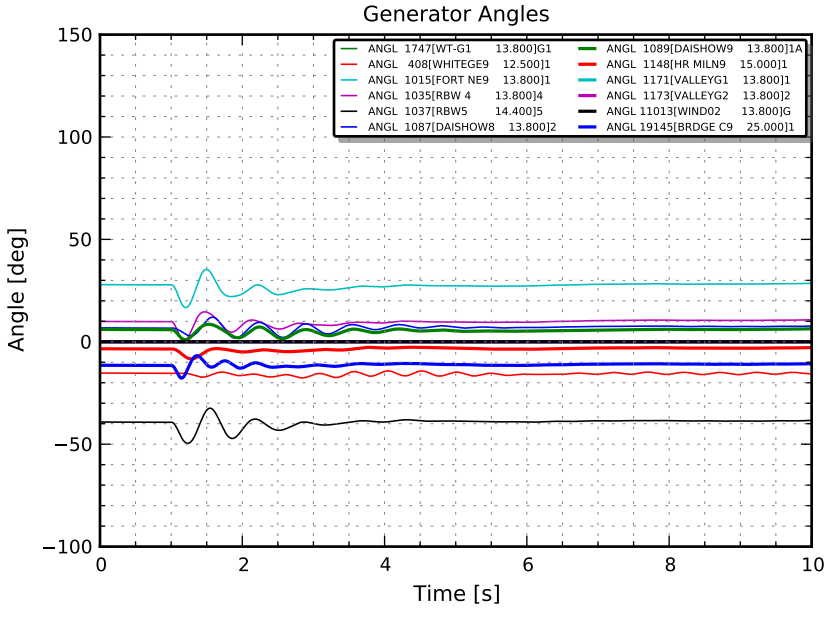


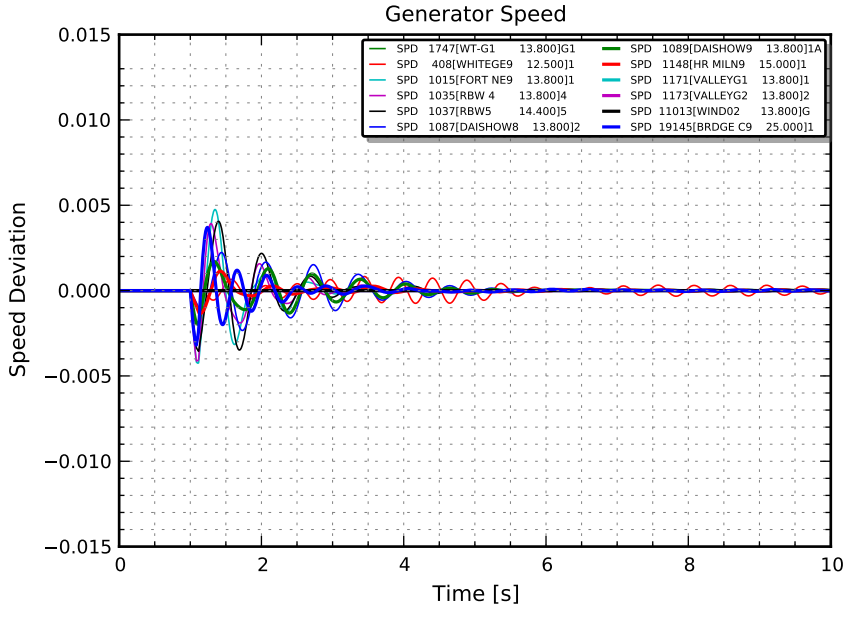


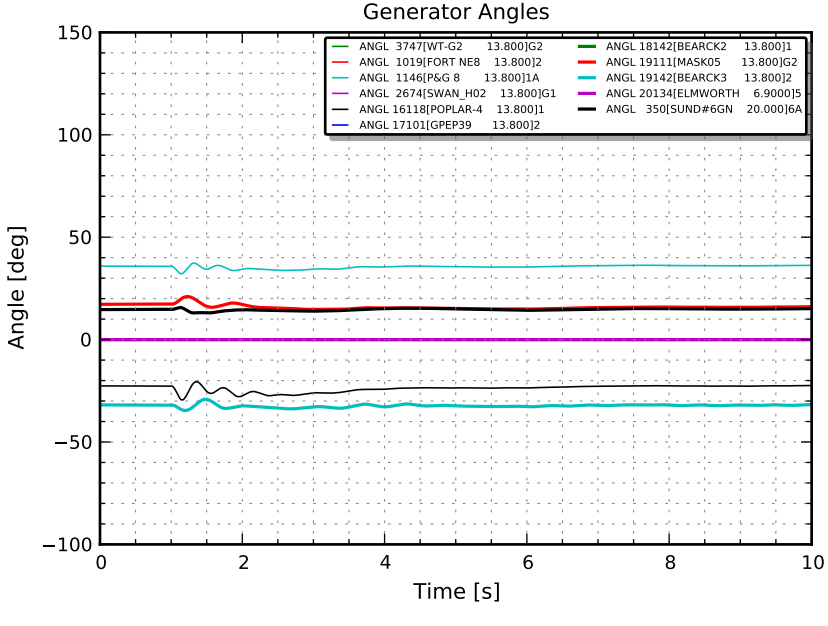
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 006 9L56 WABASCA to MITSUE_A.

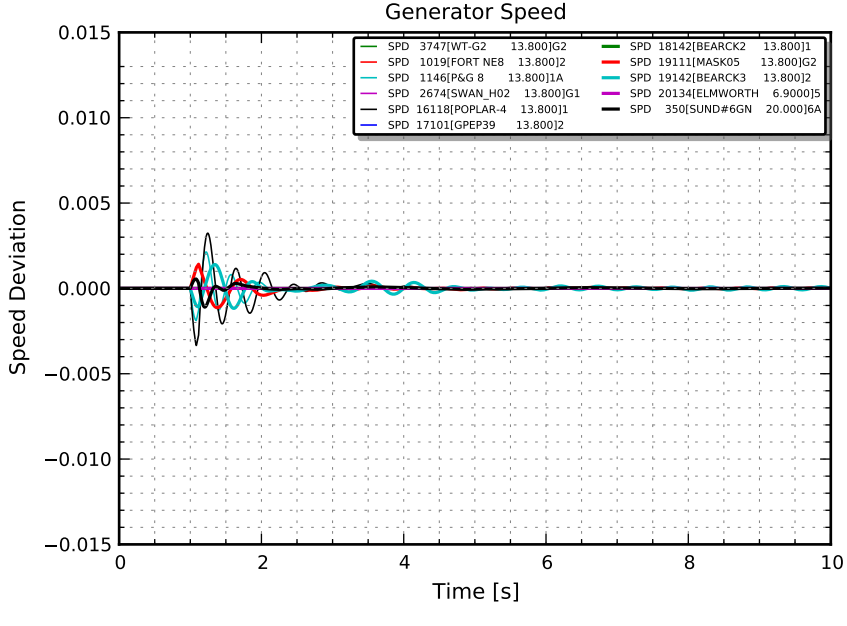
Study Area Generators

Appendix C2B
Figure: 006 (A. 2)





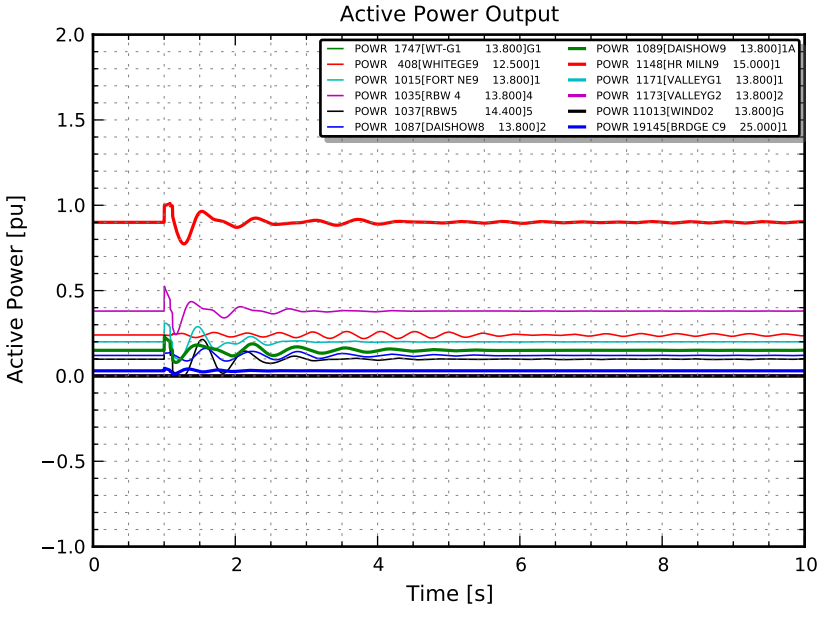


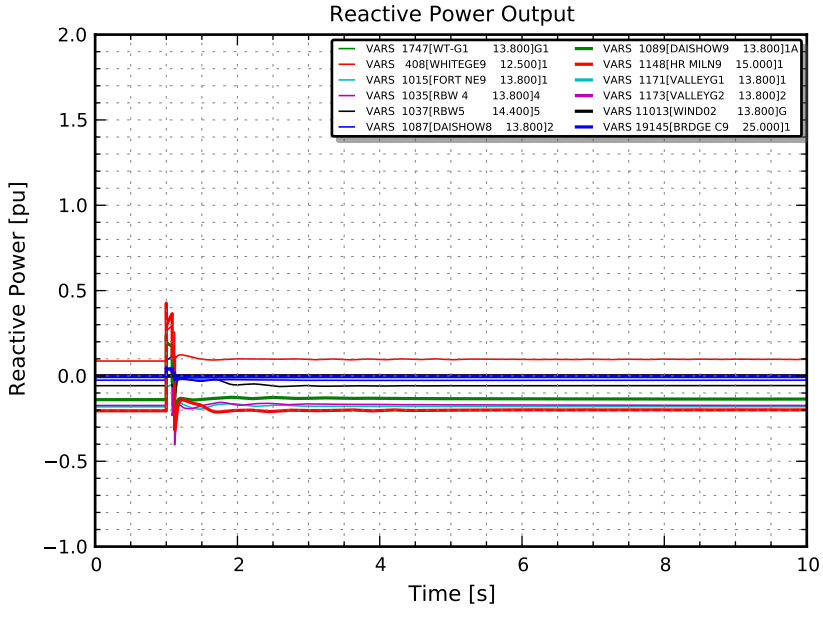


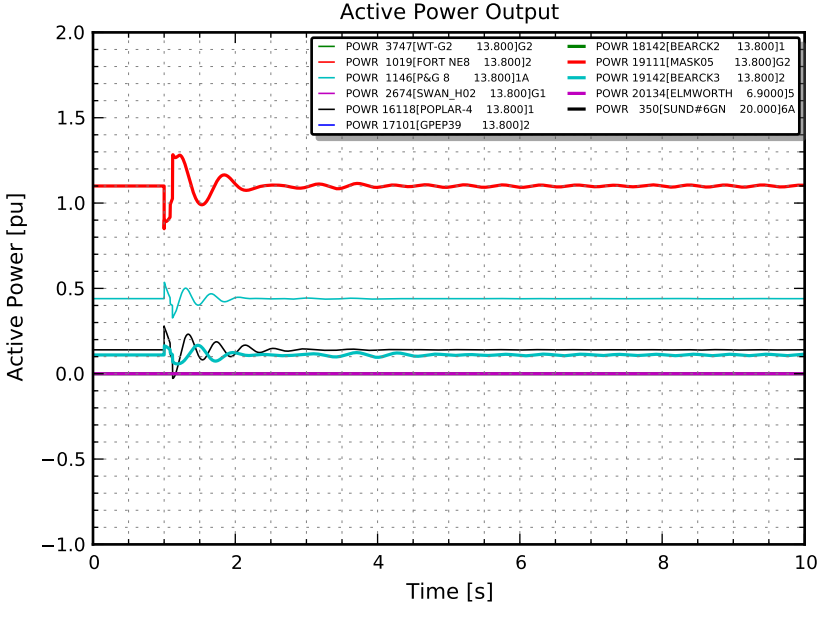
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 006 9L56 WABASCA to MITSUE_A.

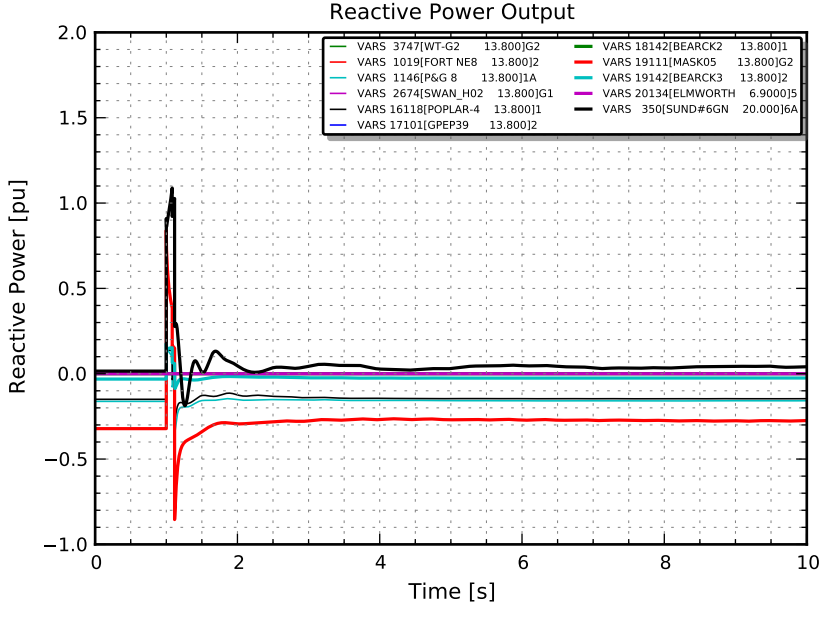
Study Area Generators

Appendix C2B
Figure: 006 (A. 3)





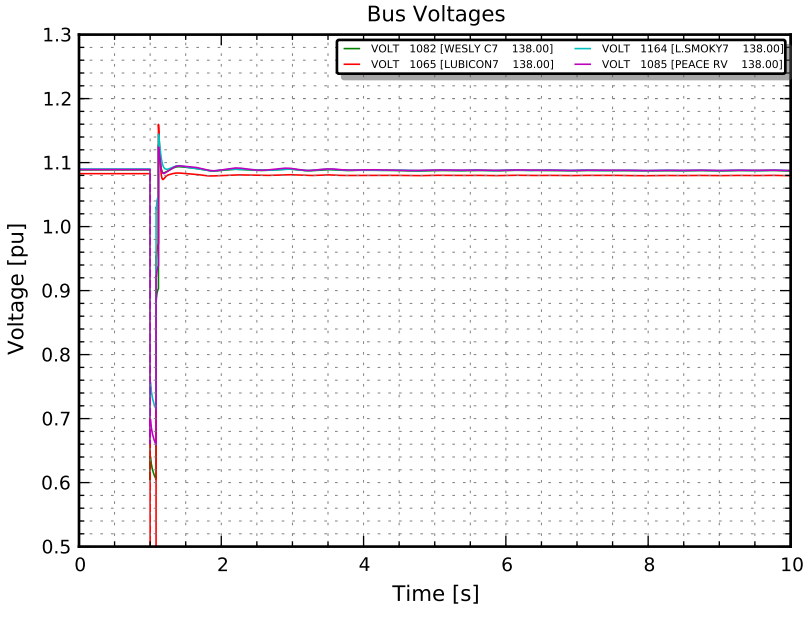


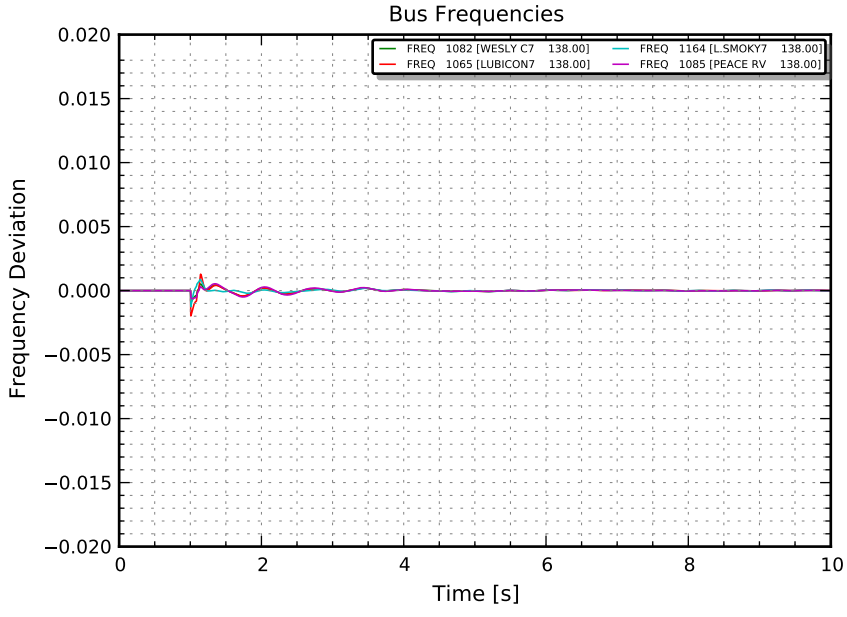


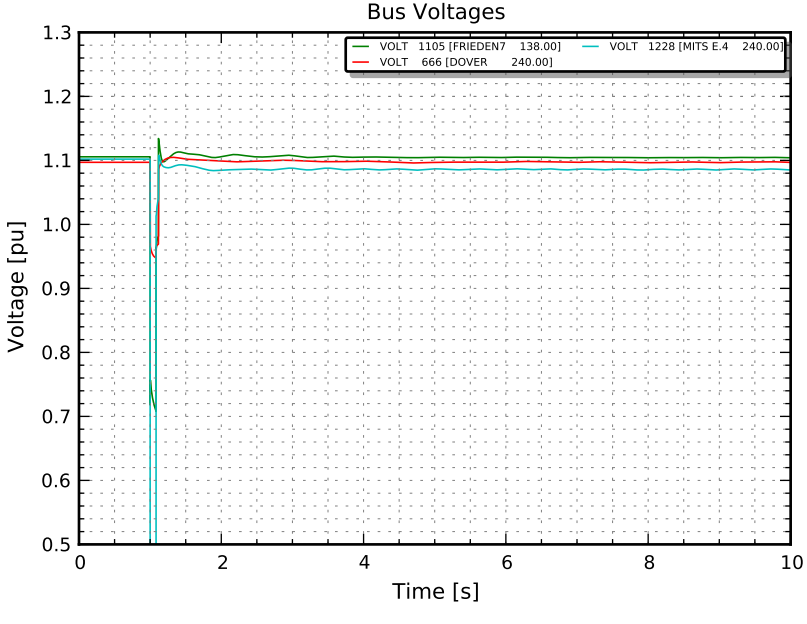
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 006 9L56 WABASCA to MITSUE_B.

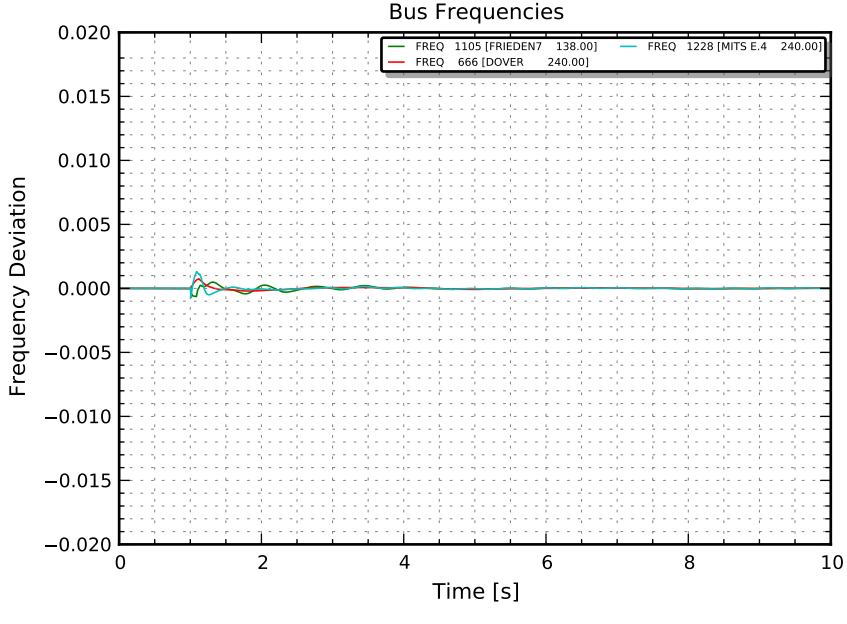
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 006 (B. 1)





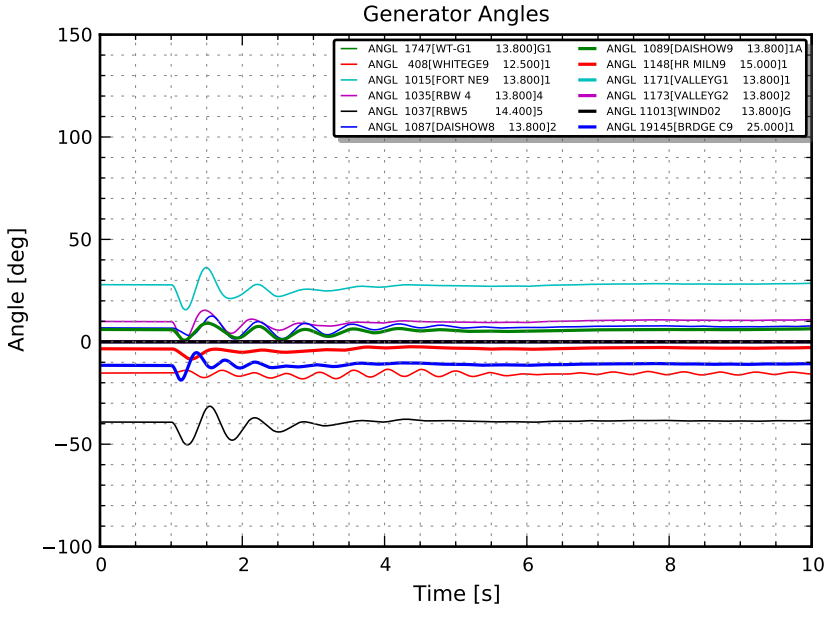


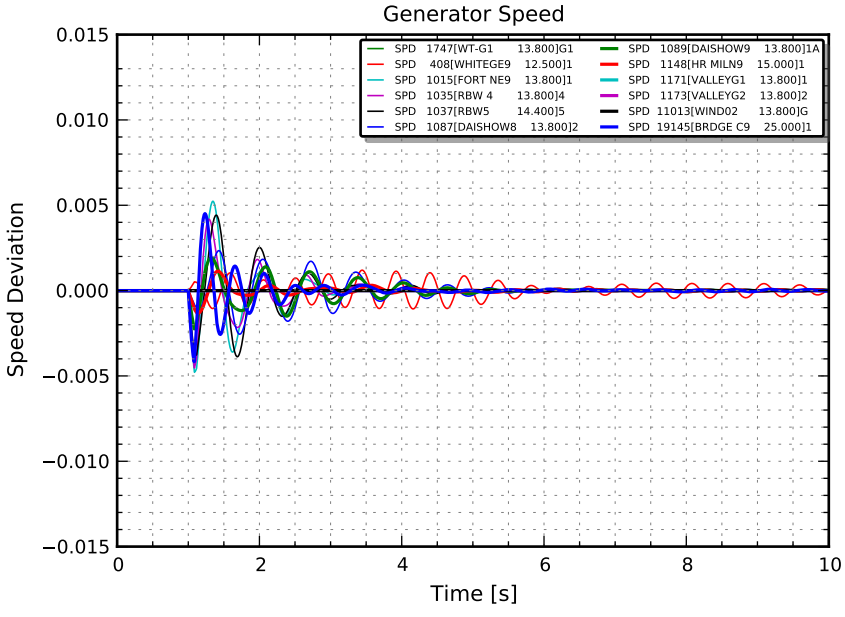


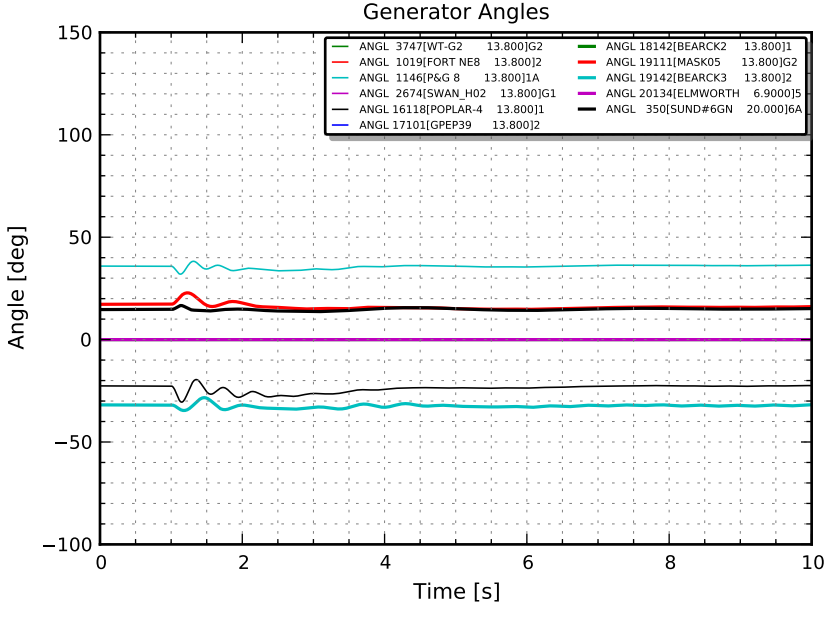
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 006 9L56 WABASCA to MITSUE_B.

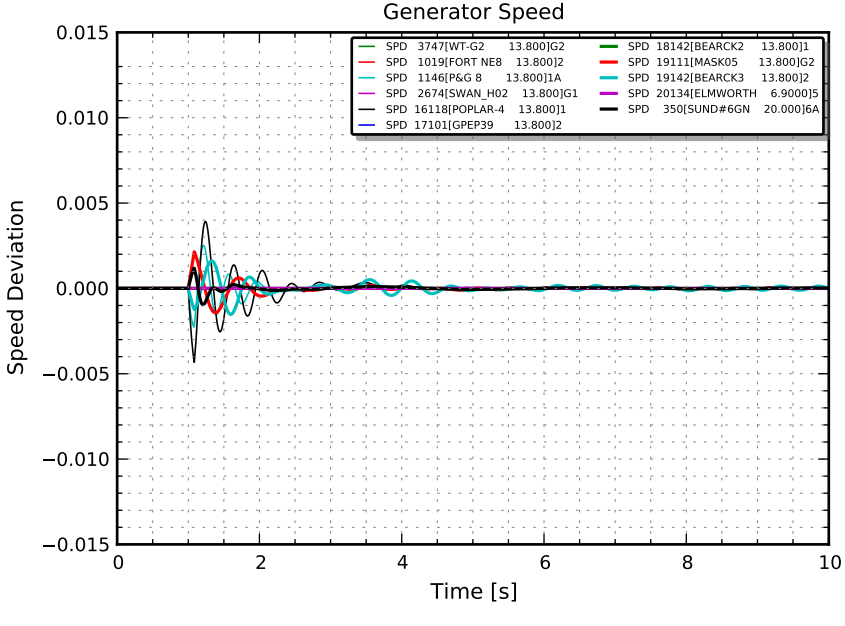
Study Area Generators

Appendix C2B
Figure: 006 (B. 2)





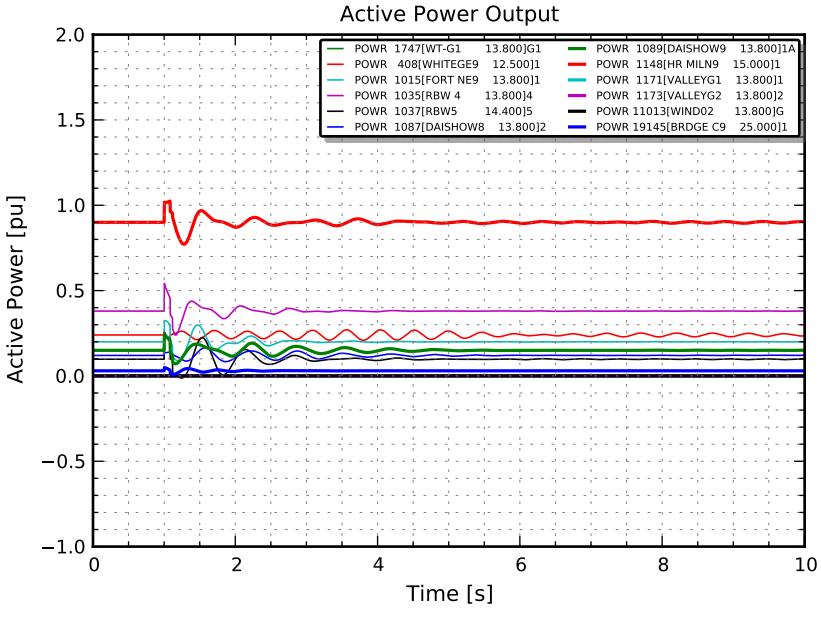


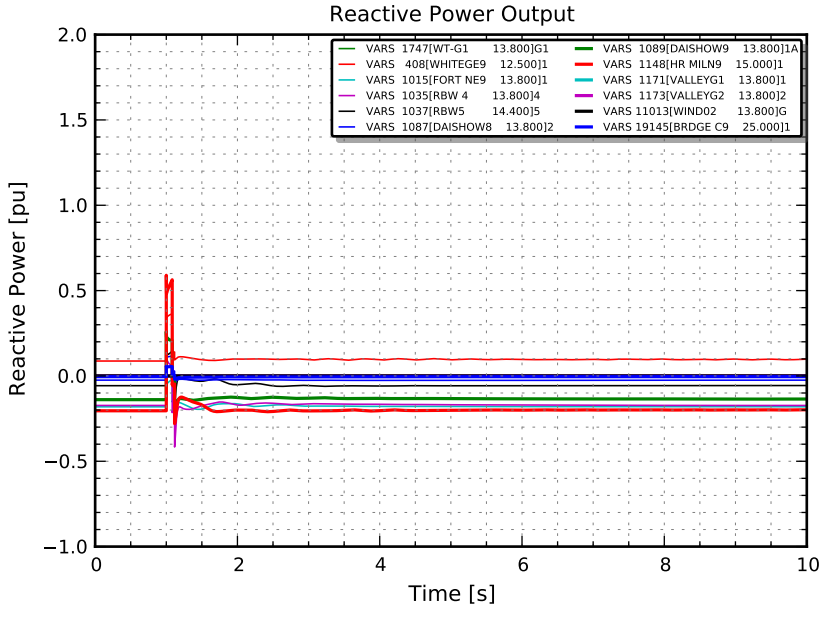


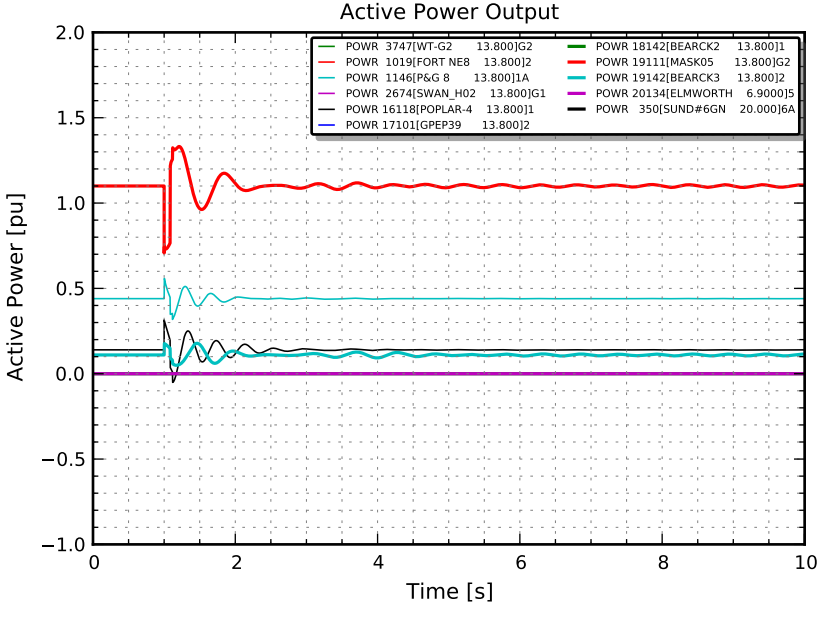
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 006 9L56 WABASCA to MITSUE_B.

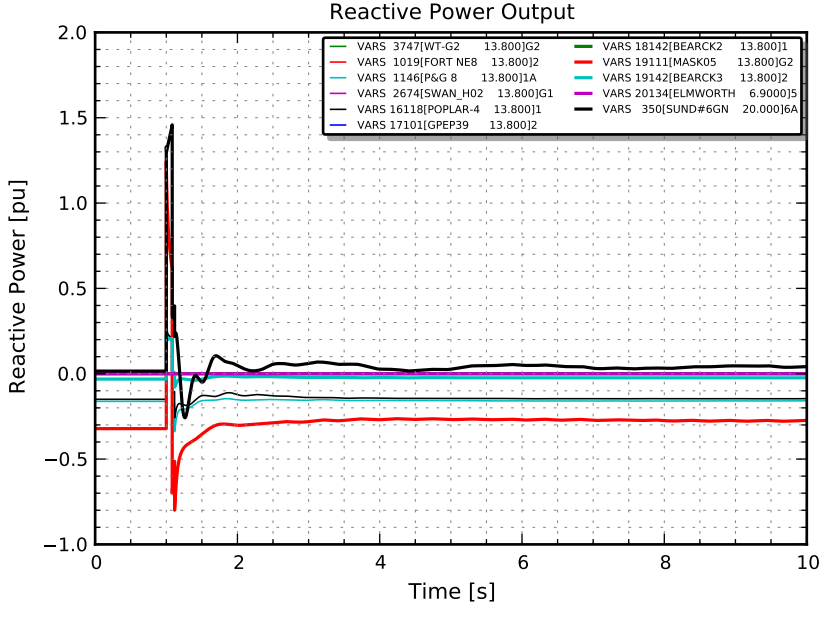
Study Area Generators

Appendix C2B
Figure: 006 (B. 3)





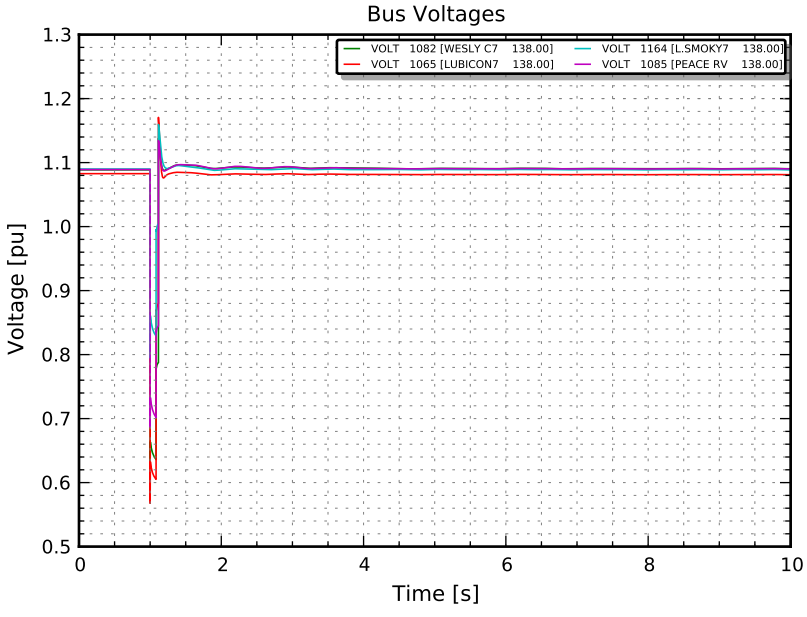


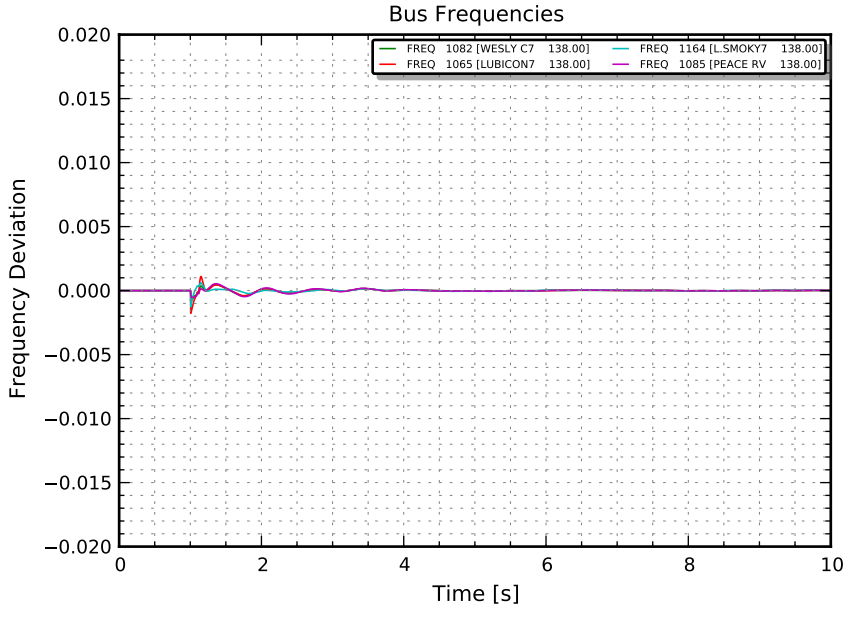


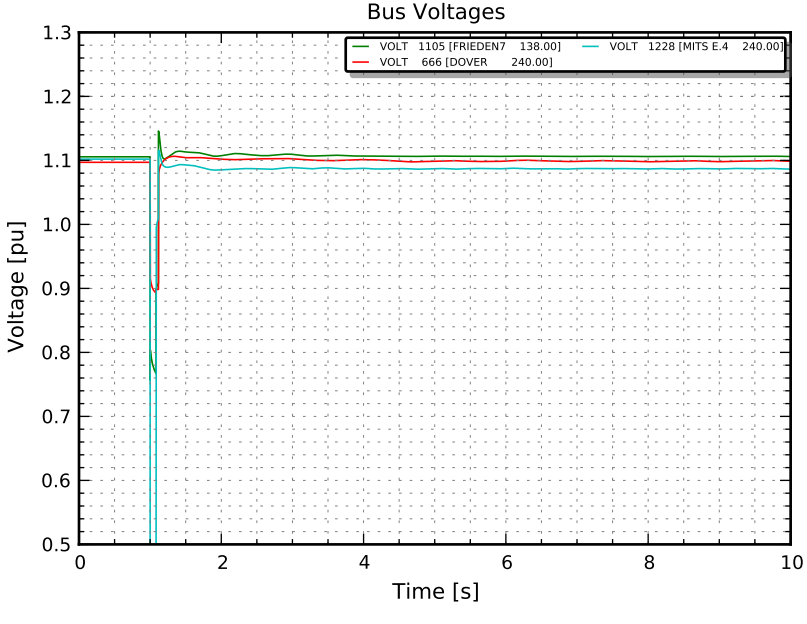
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 007 9L10 WABASCA to Brintnell_A.

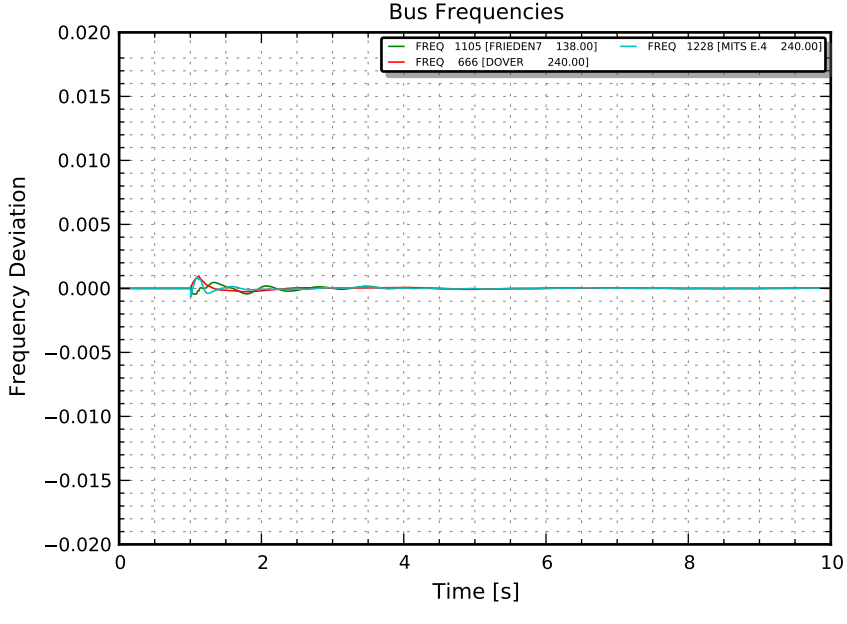
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 007 (A. 1)





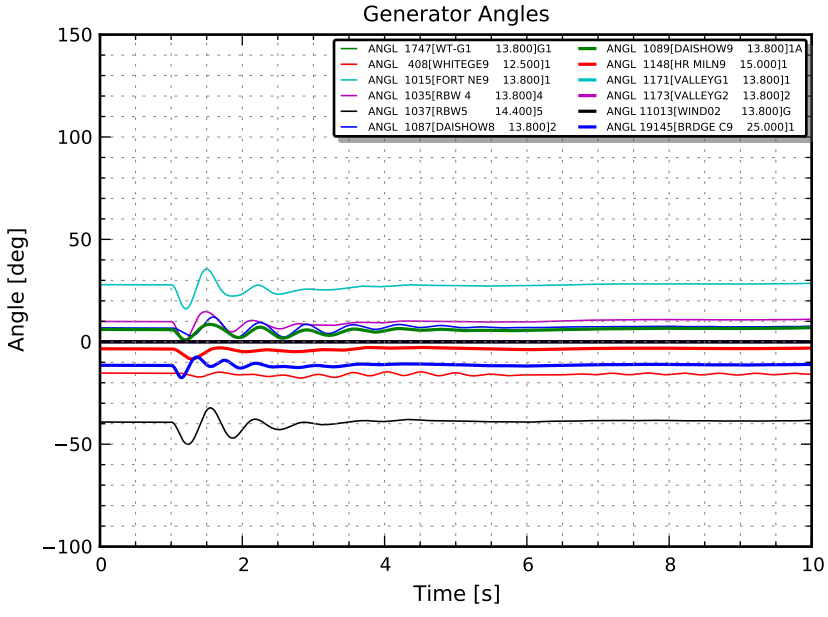


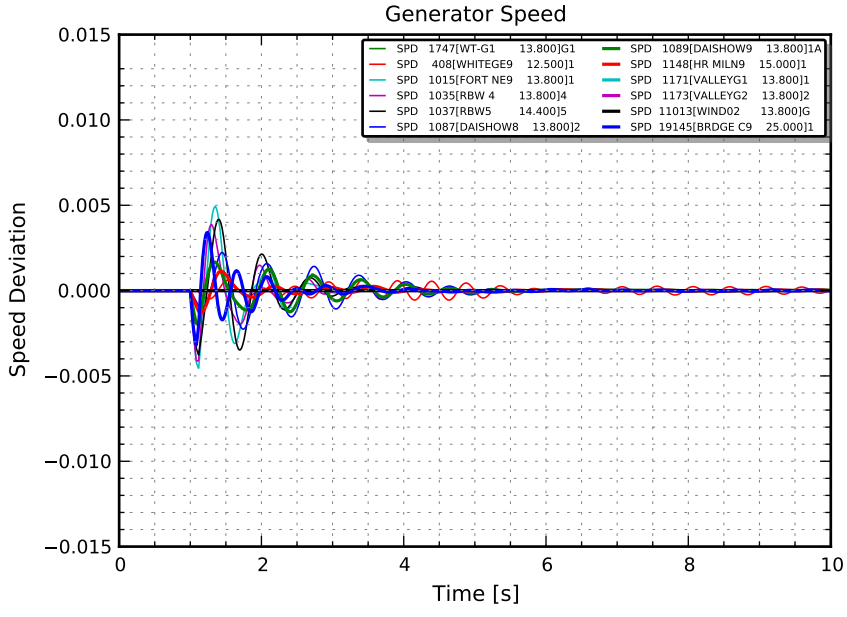


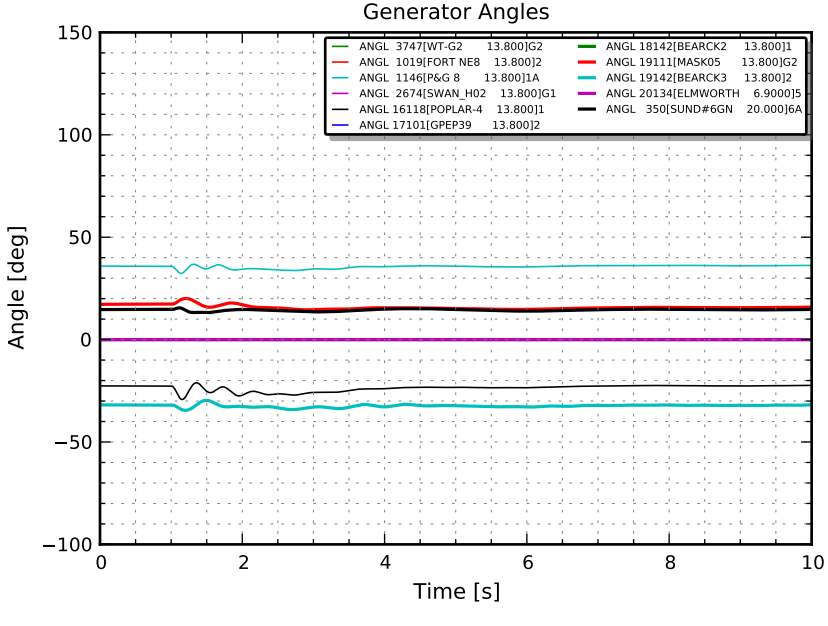
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 007 9L10 WABASCA to Brintnell_A.

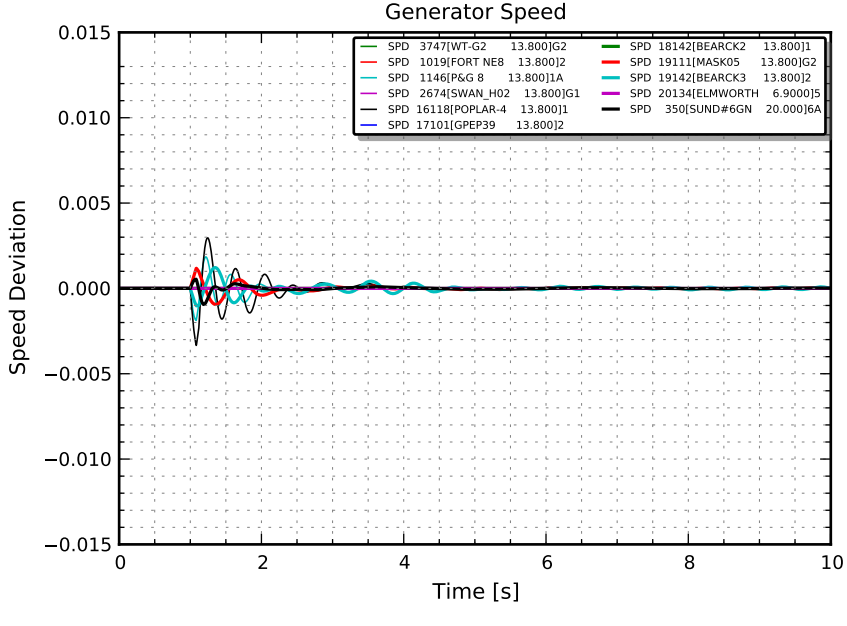
Study Area Generators

Appendix C2B
Figure: 007 (A. 2)





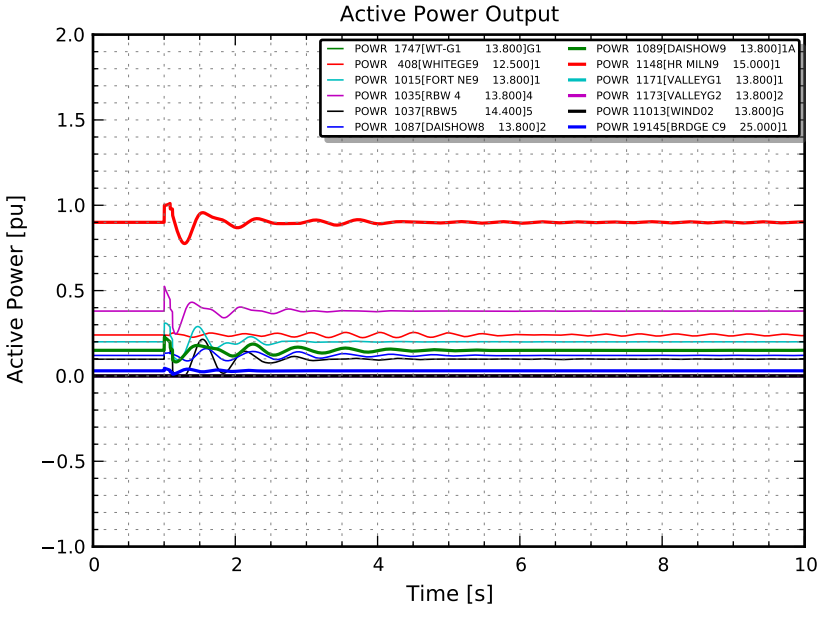


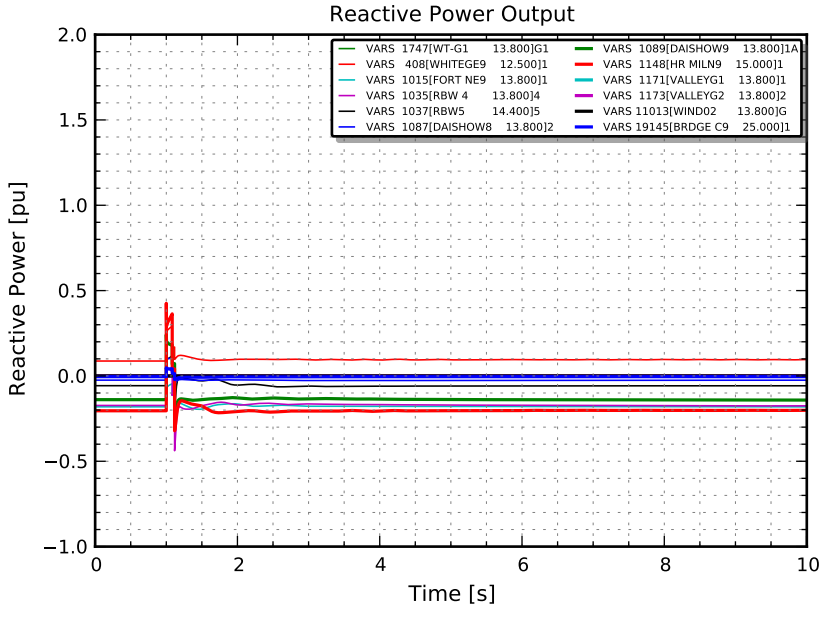


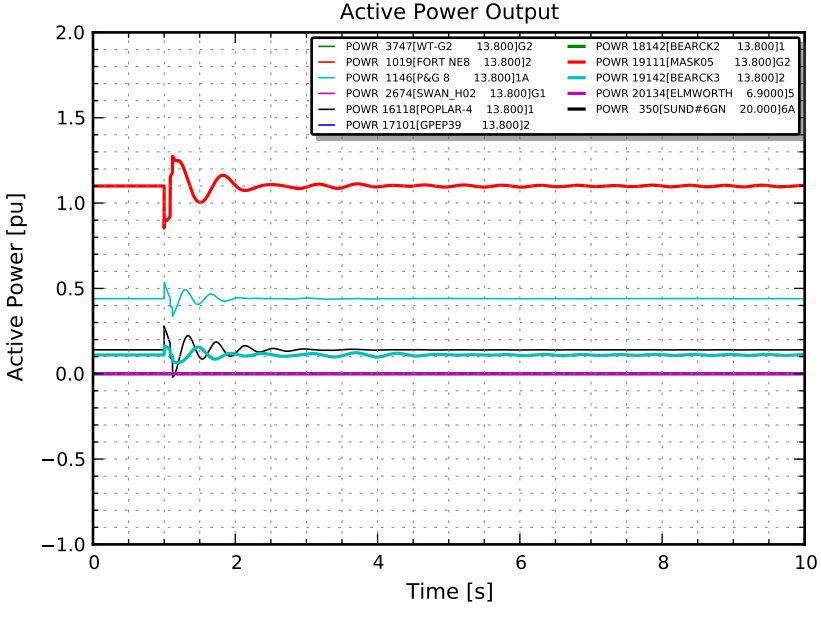
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 007 9L10 WABASCA to Brintnell_A.

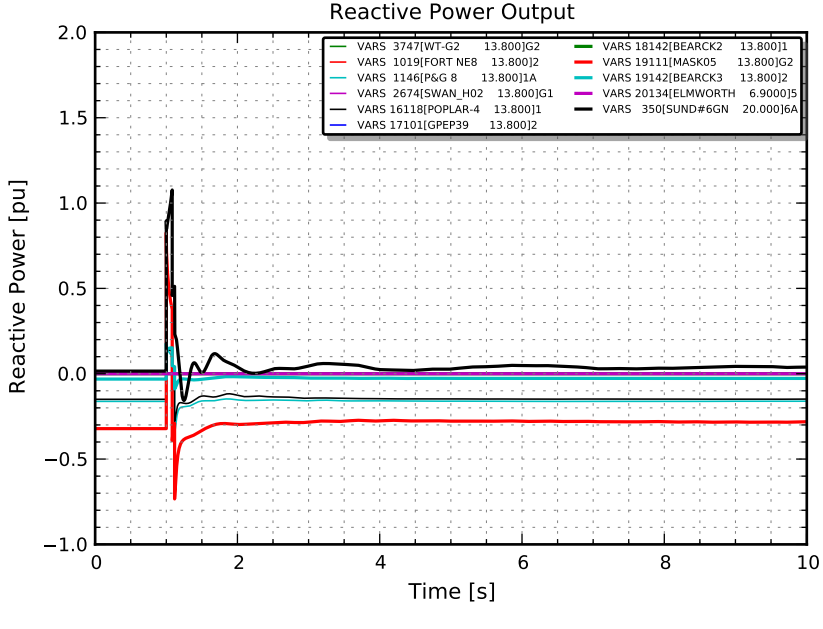
Study Area Generators

Appendix C2B
Figure: 007 (A. 3)





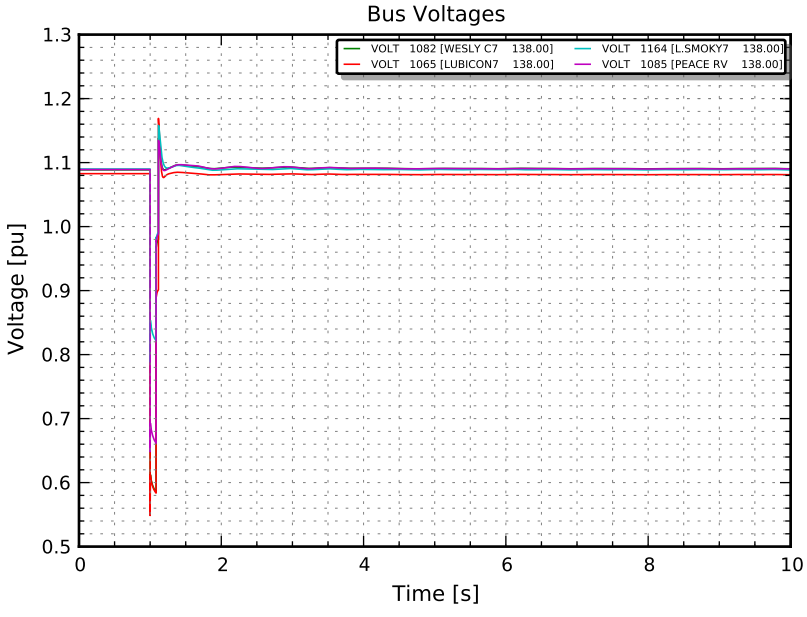


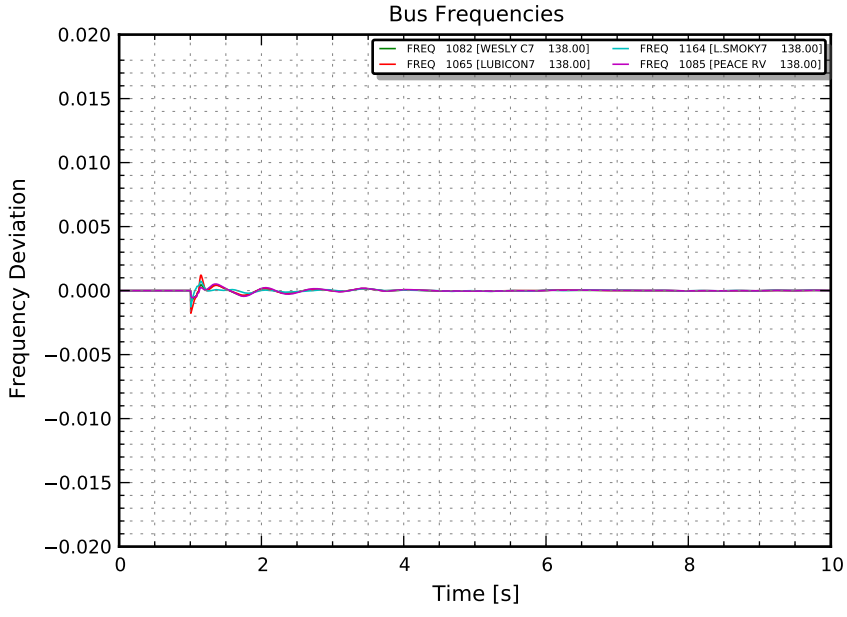


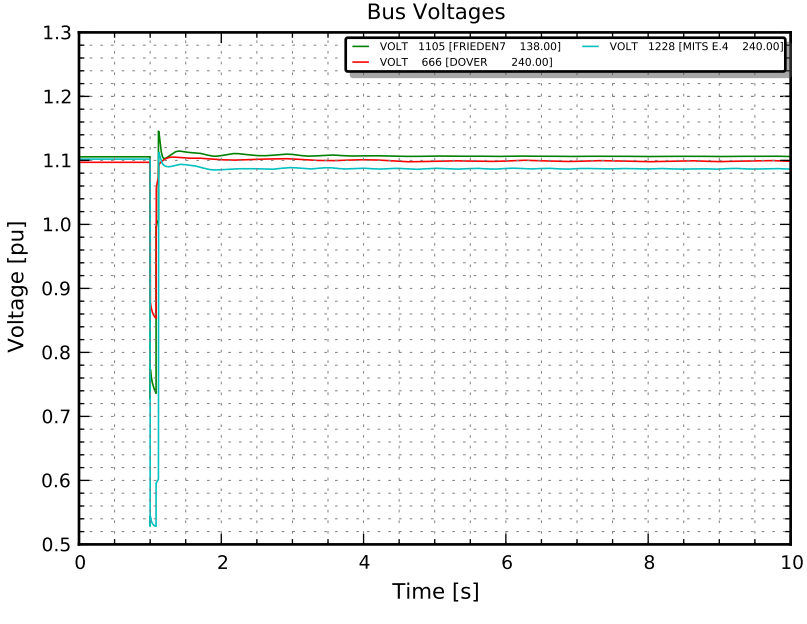
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 007 9L10 WABASCA to Brintnell_B.

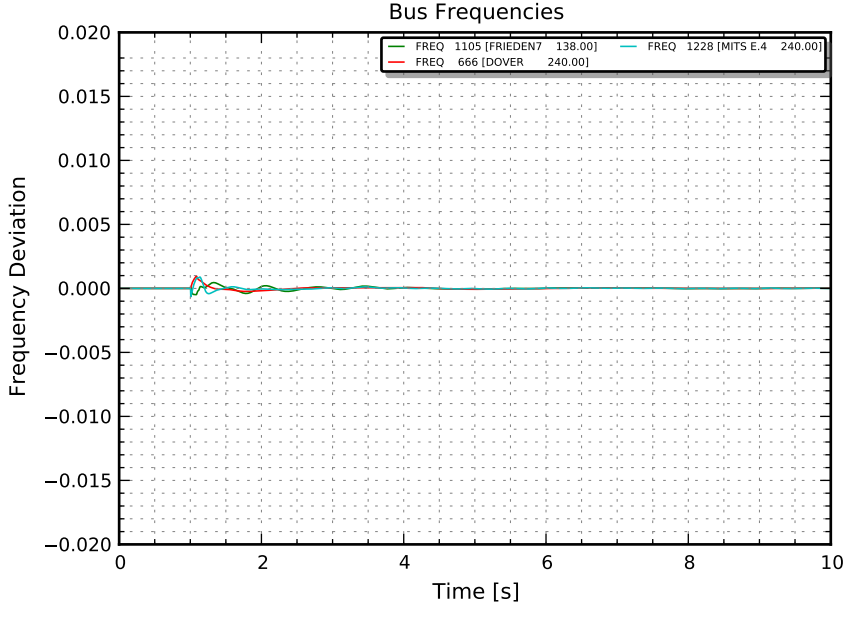
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 007 (B. 1)





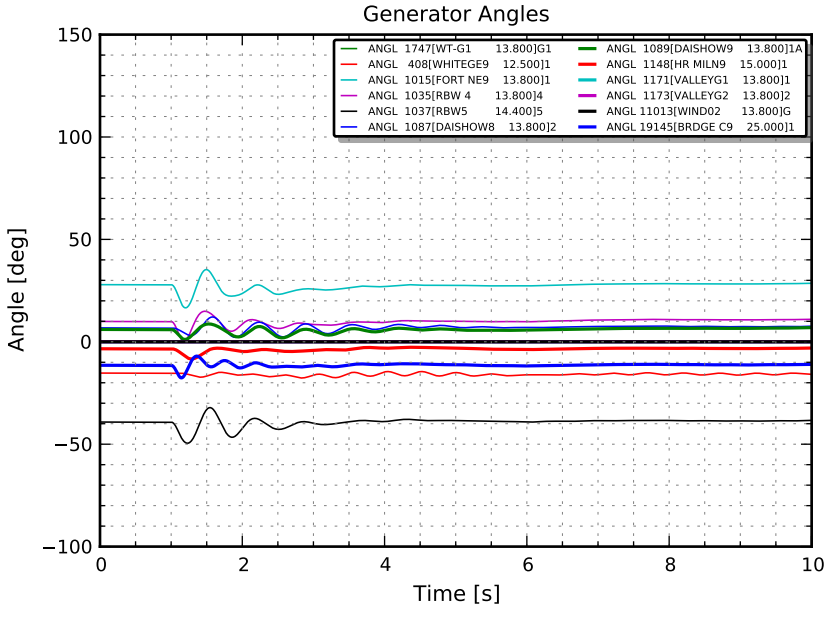


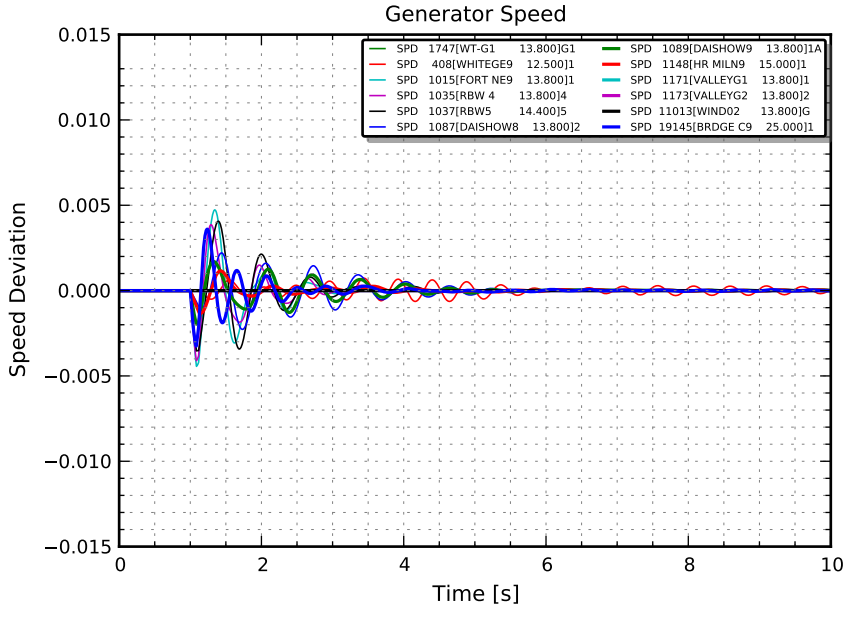


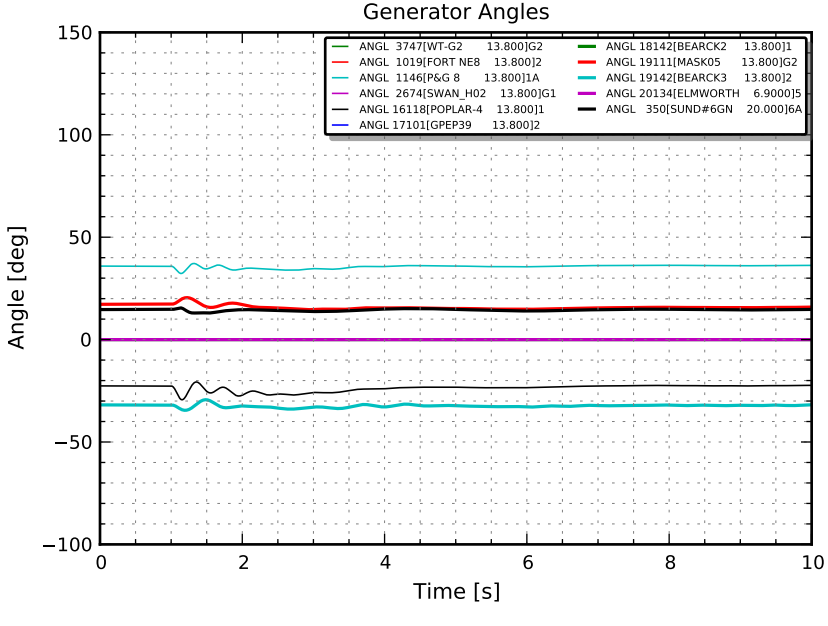
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 007 9L10 WABASCA to Brintnell_B.

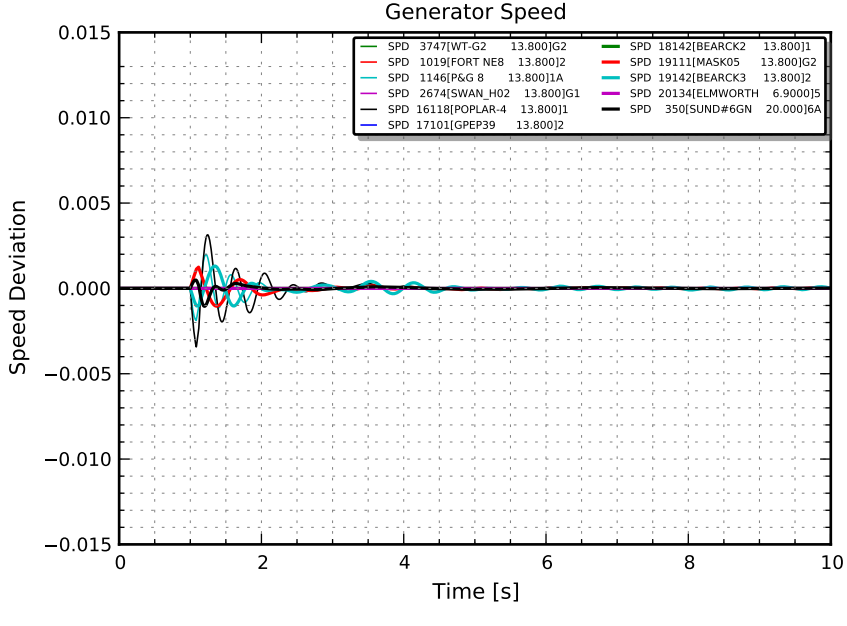
Study Area Generators

Appendix C2B
Figure: 007 (B. 2)





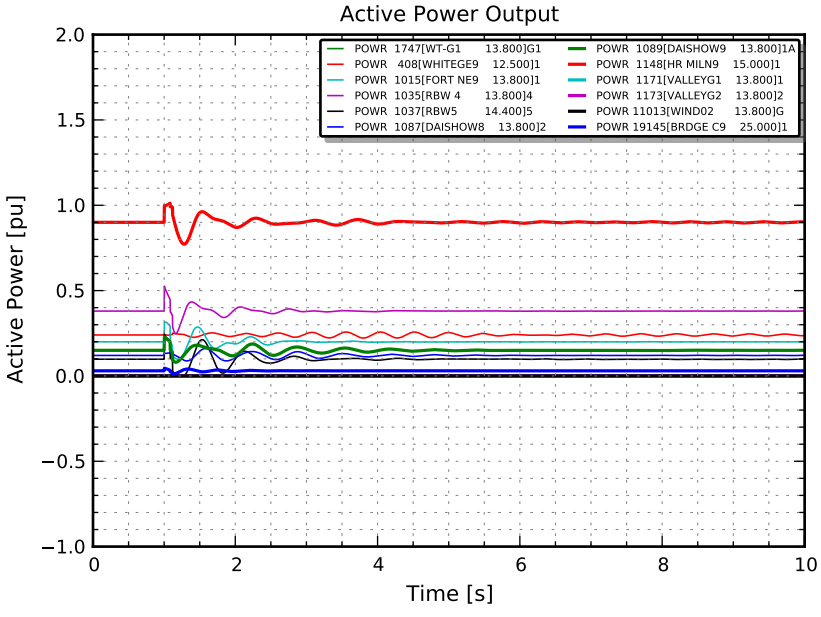


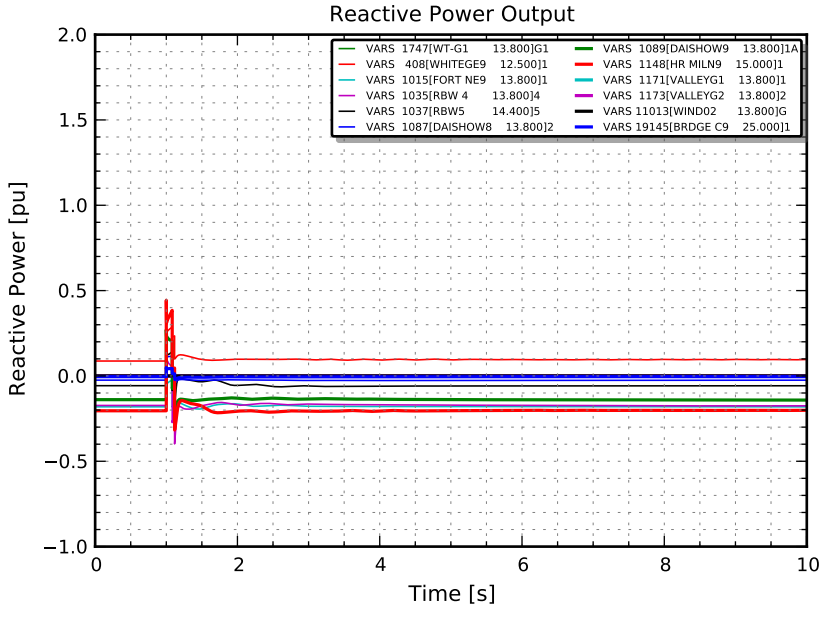


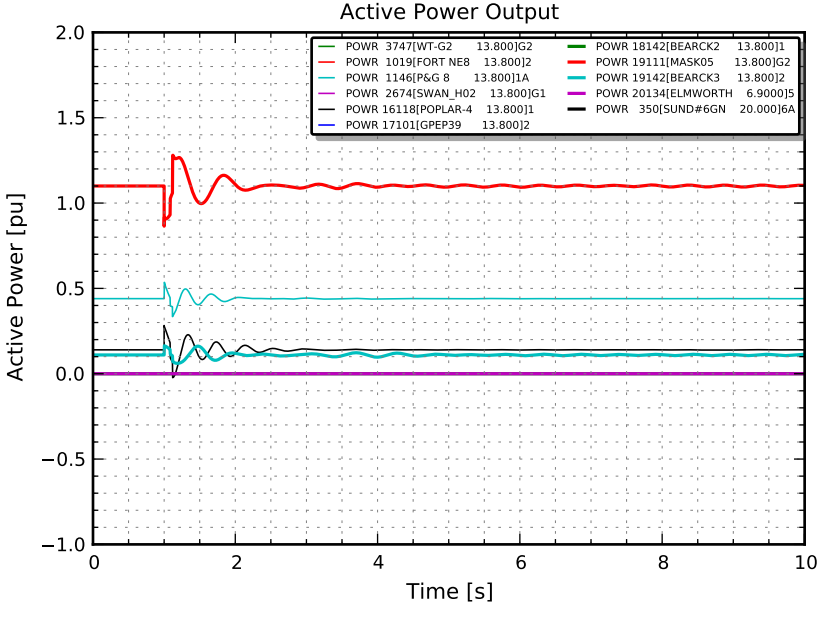
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 007 9L10 WABASCA to Brintnell_B.

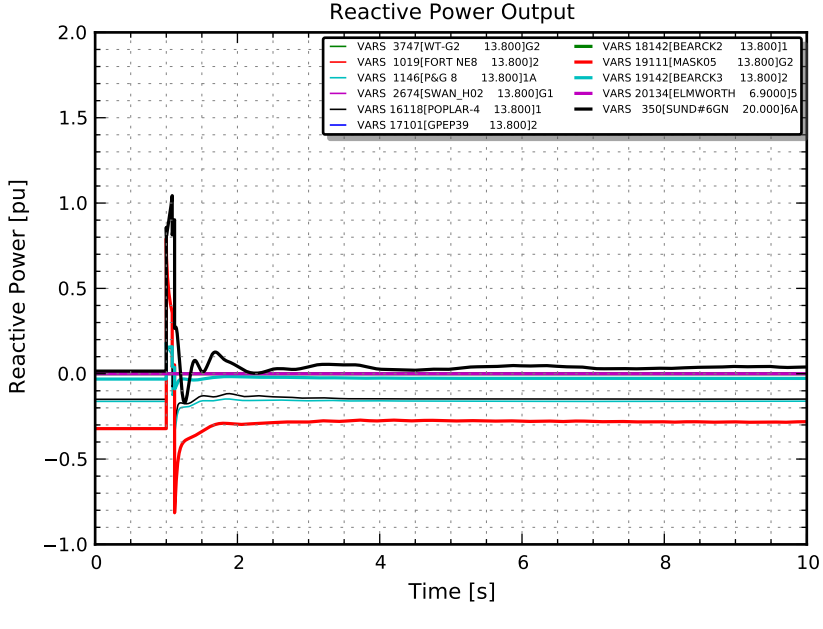
Study Area Generators

Appendix C2B
Figure: 007 (B. 3)





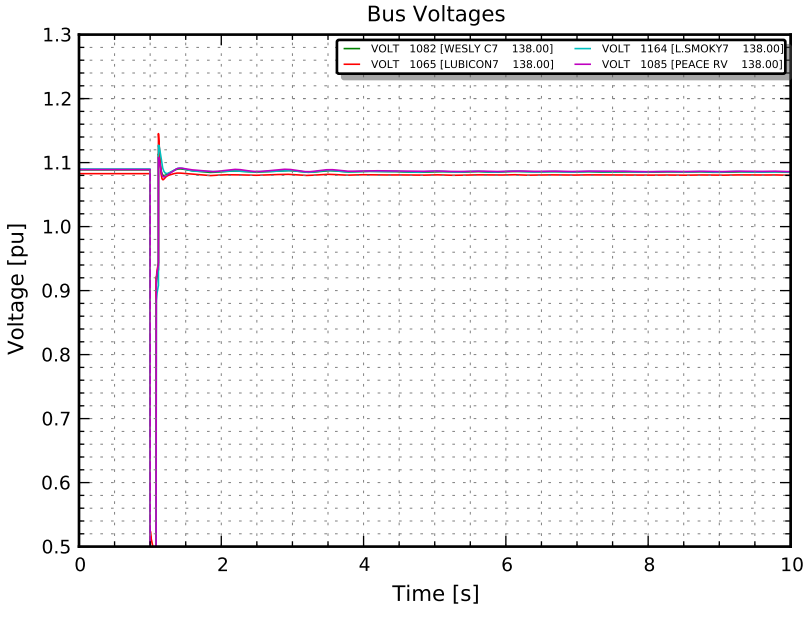


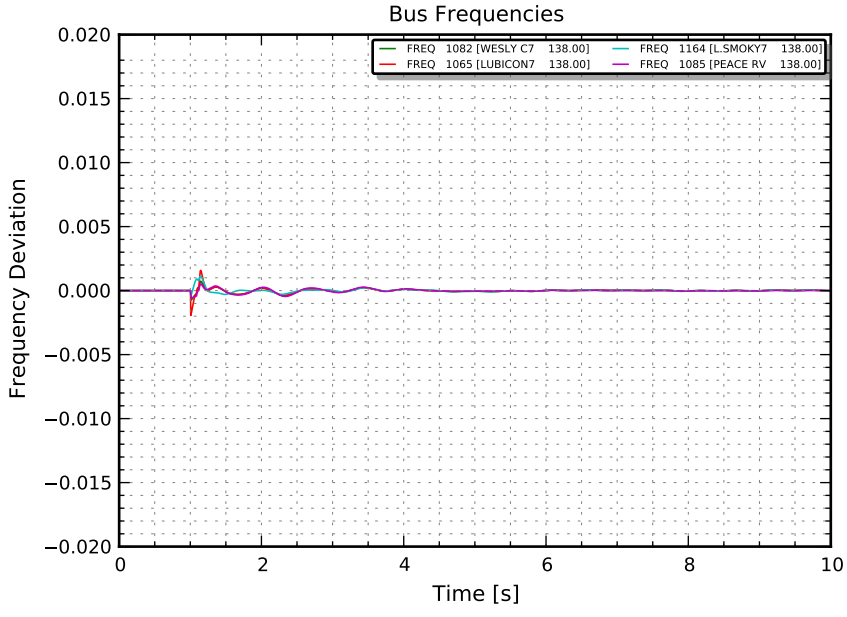


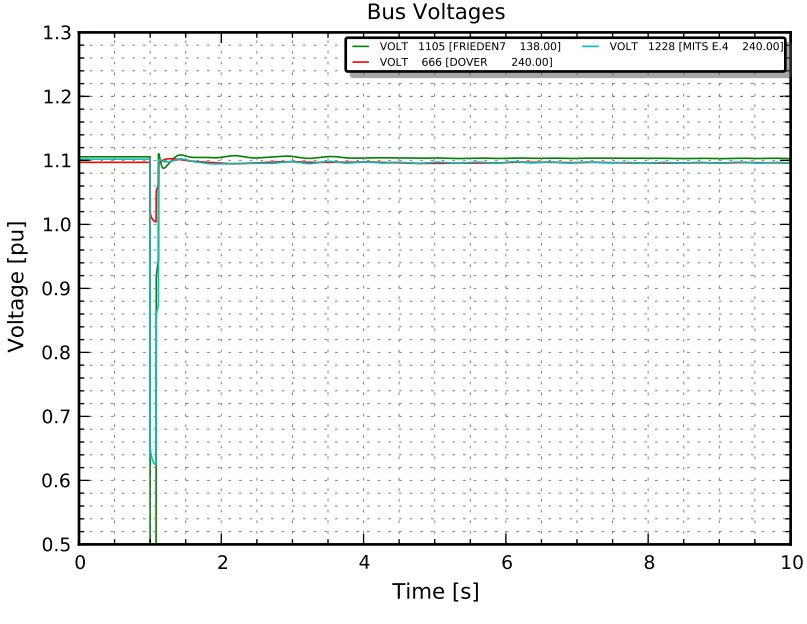
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_A.

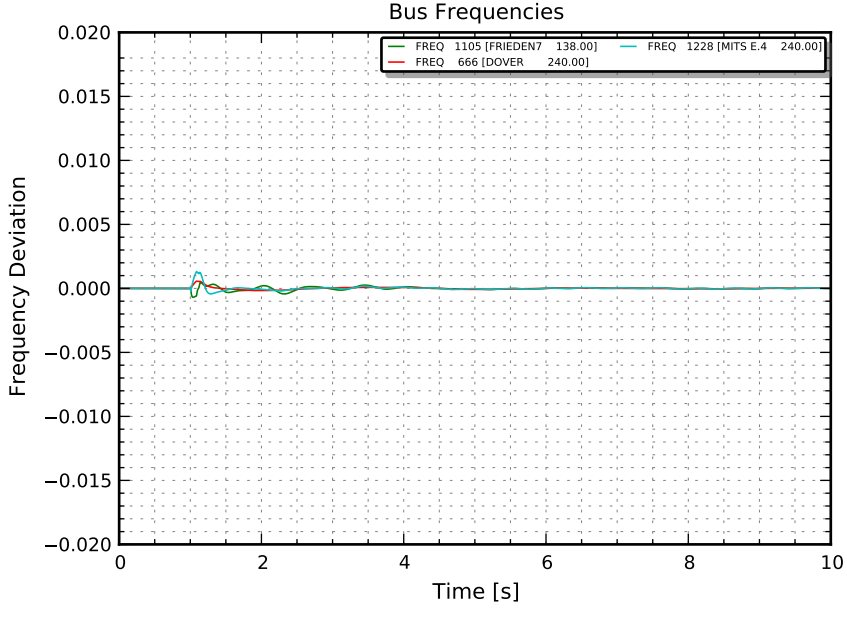
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 008 (A. 1)





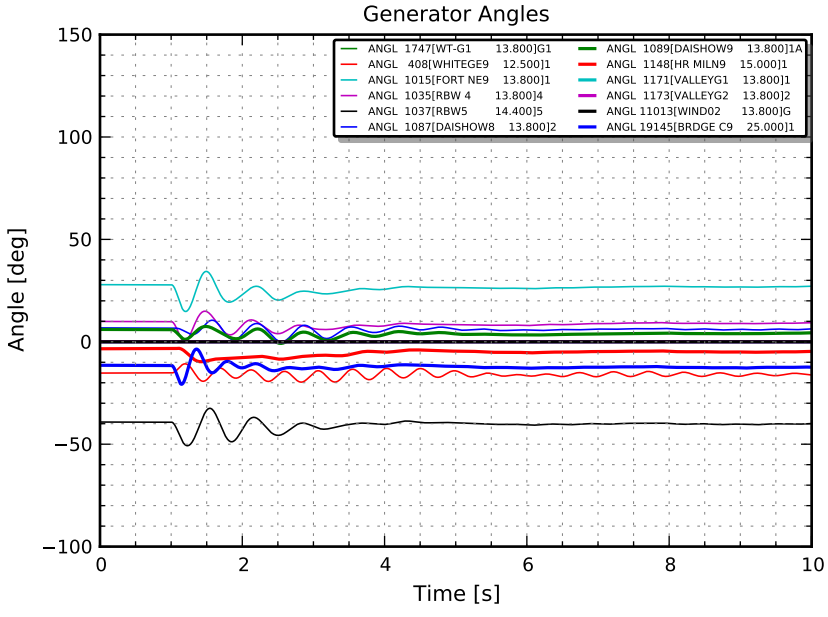


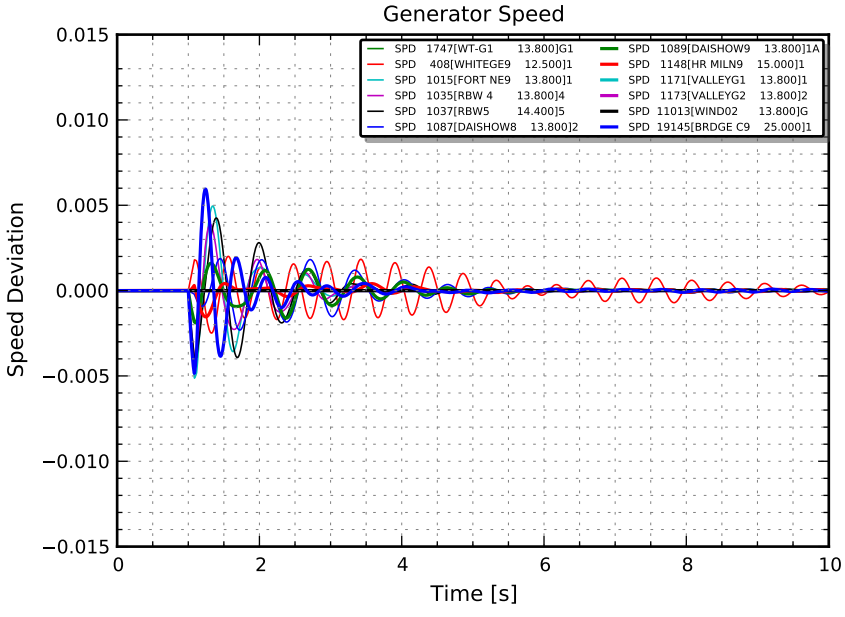


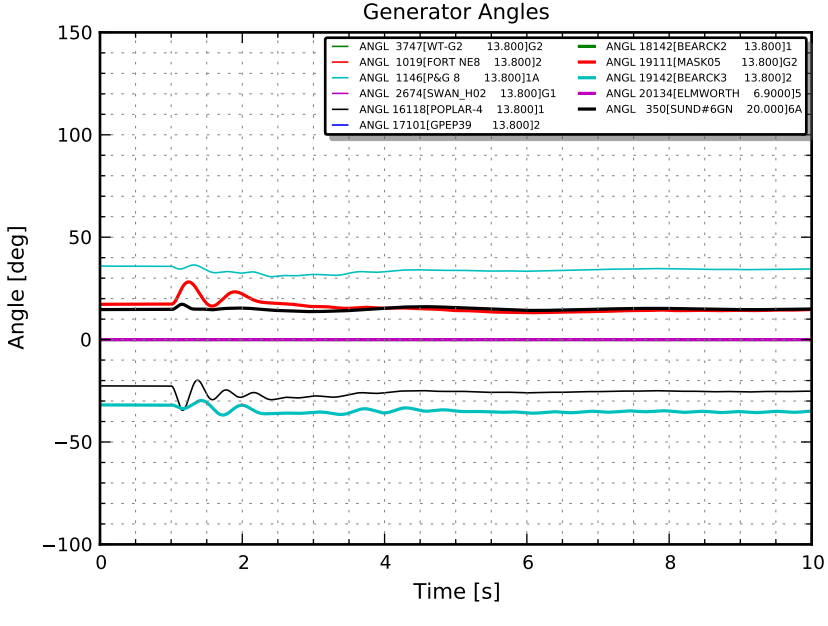
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_A.

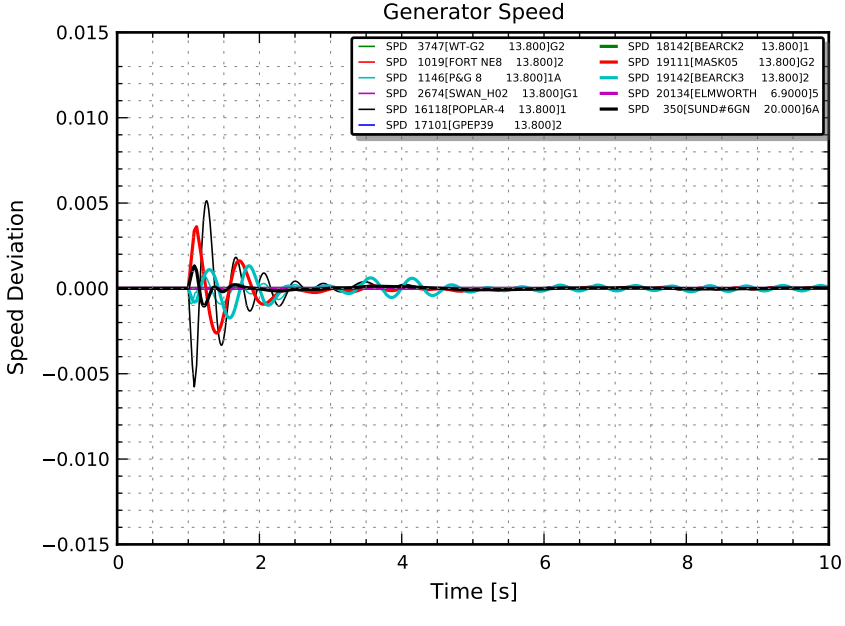
Study Area Generators

Appendix C2B
Figure: 008 (A. 2)





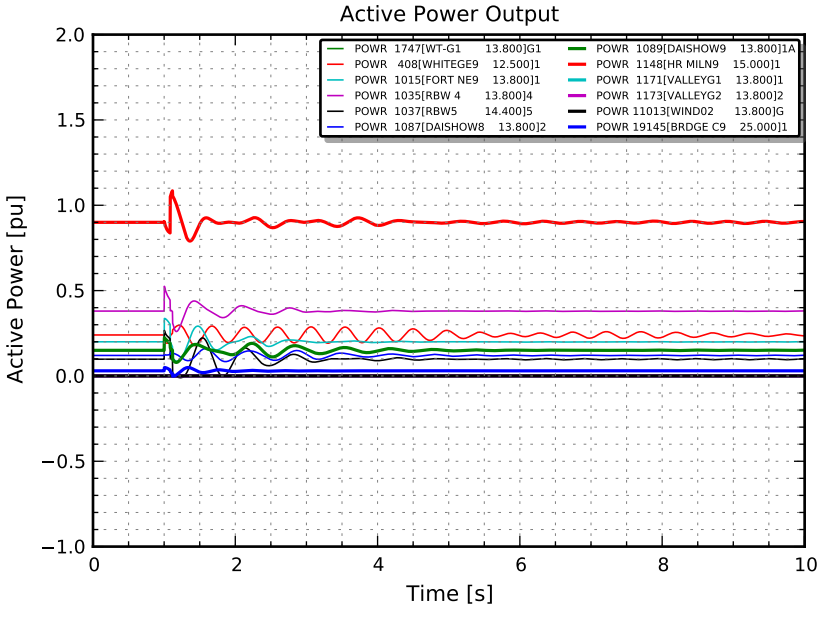


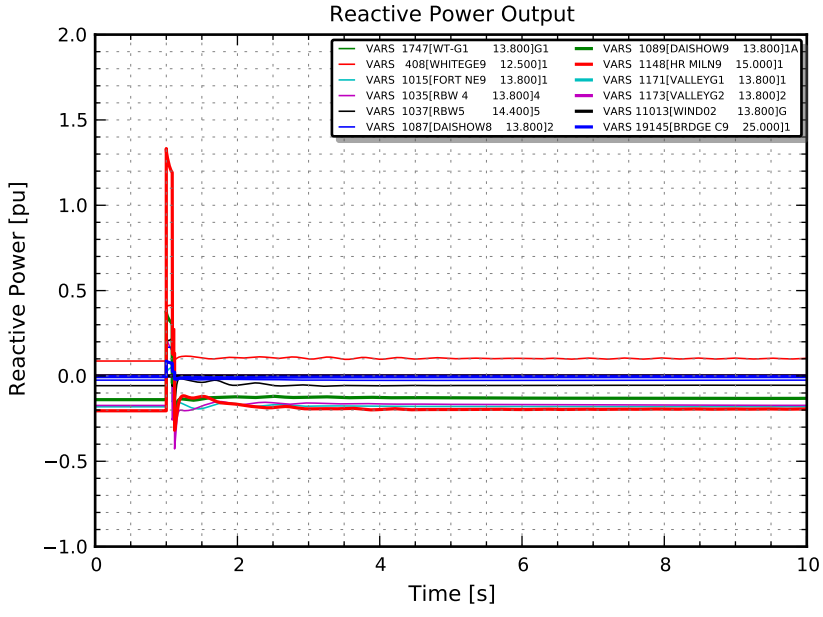


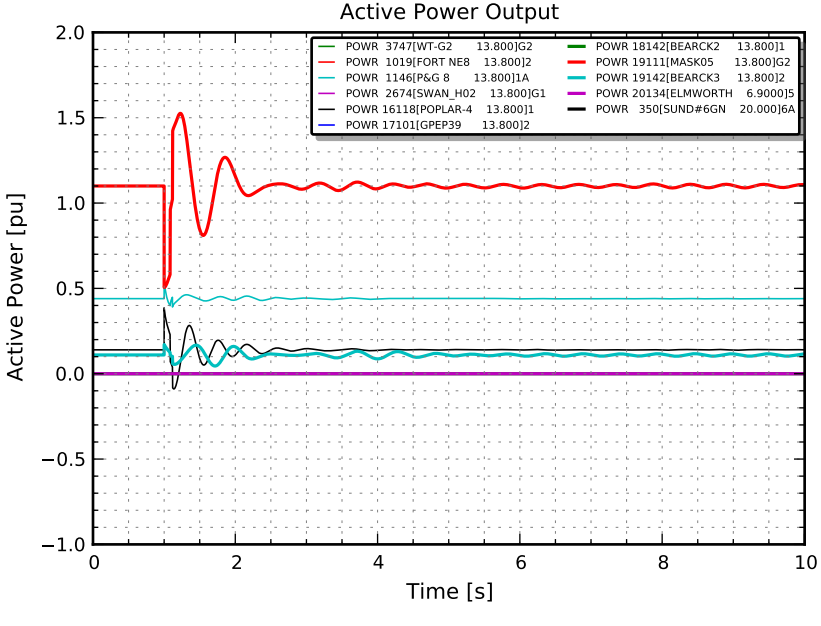
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_A.

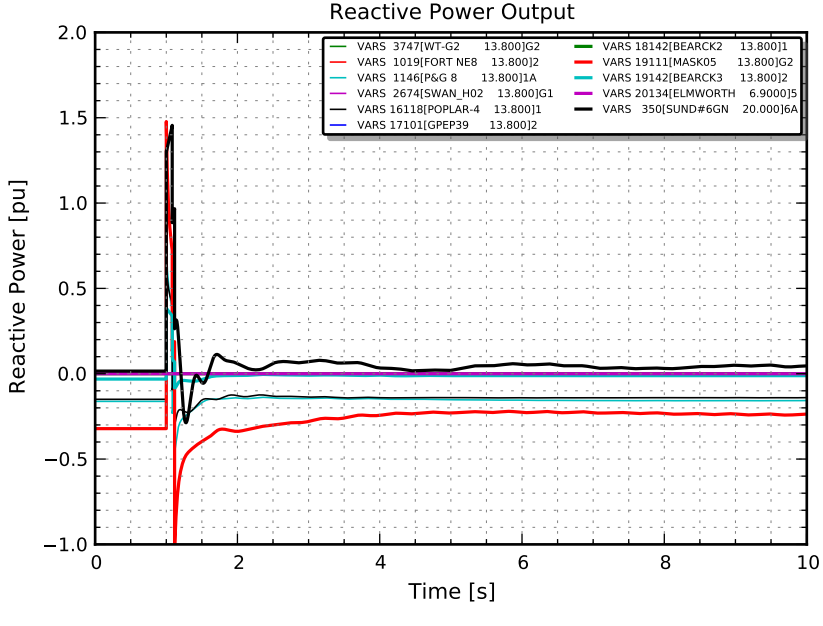
Study Area Generators

Appendix C2B
Figure: 008 (A. 3)





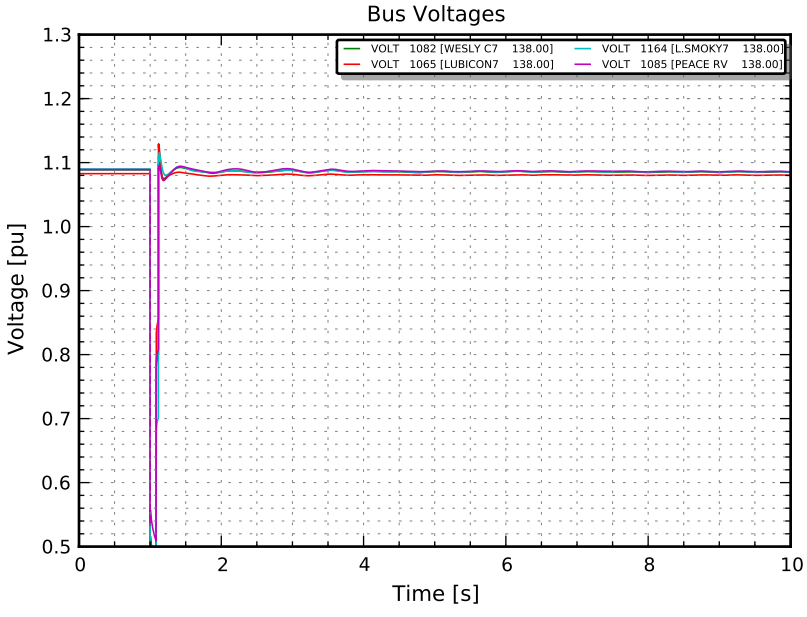


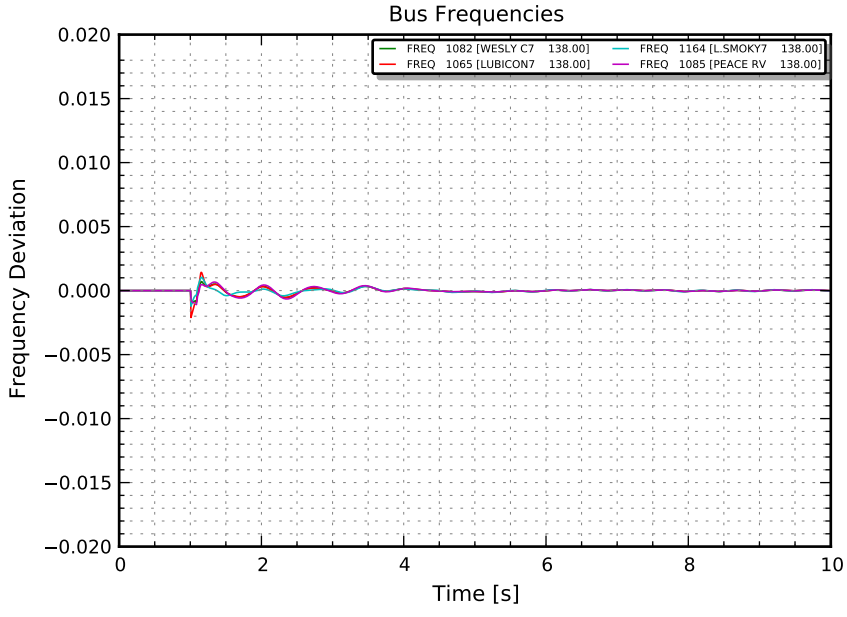


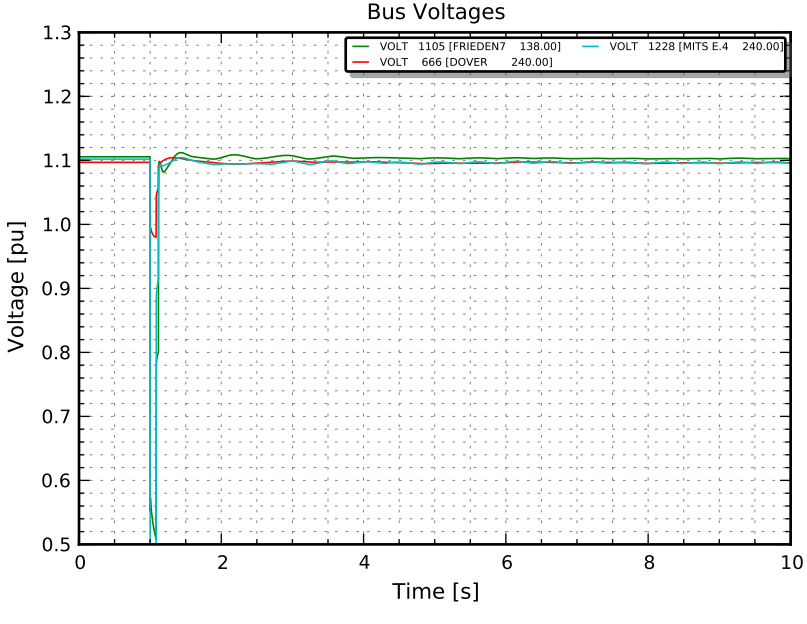
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_B.

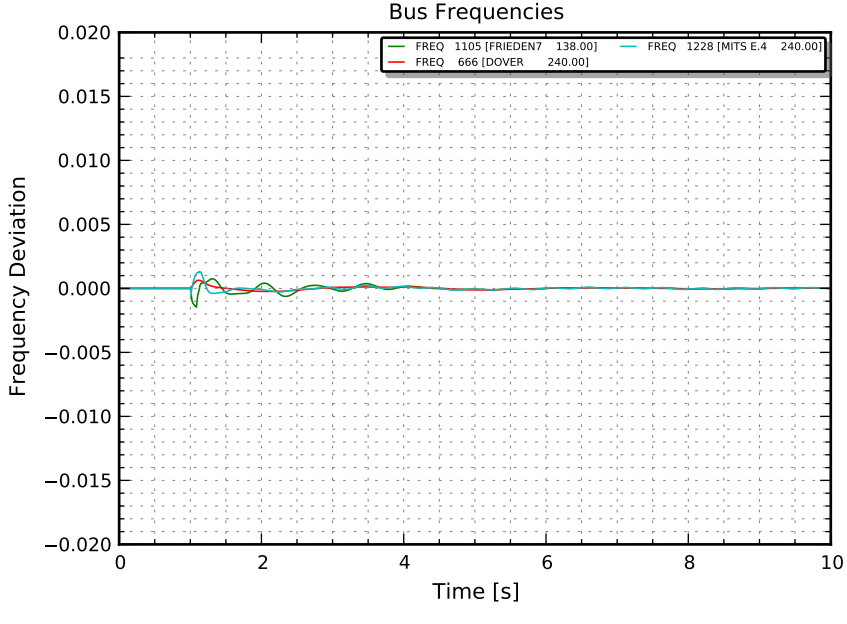
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 008 (B. 1)





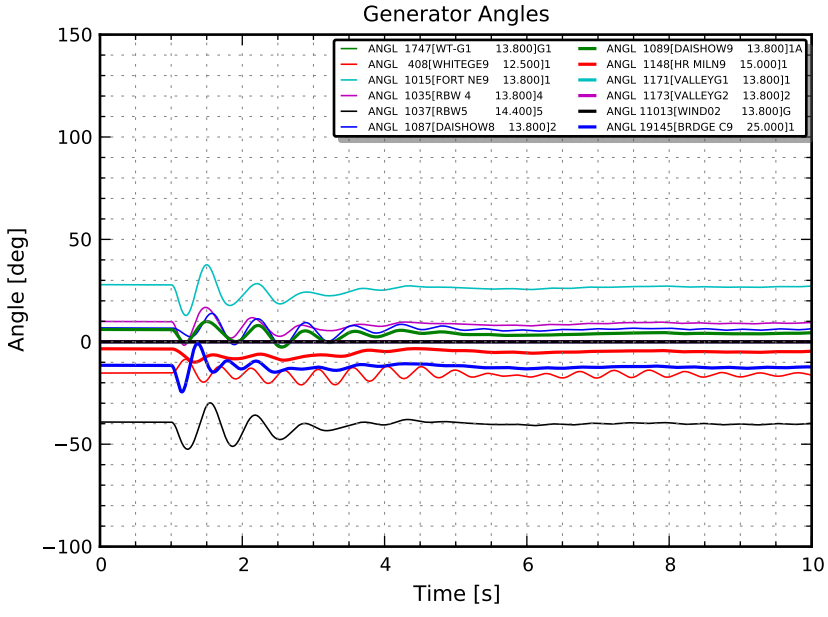


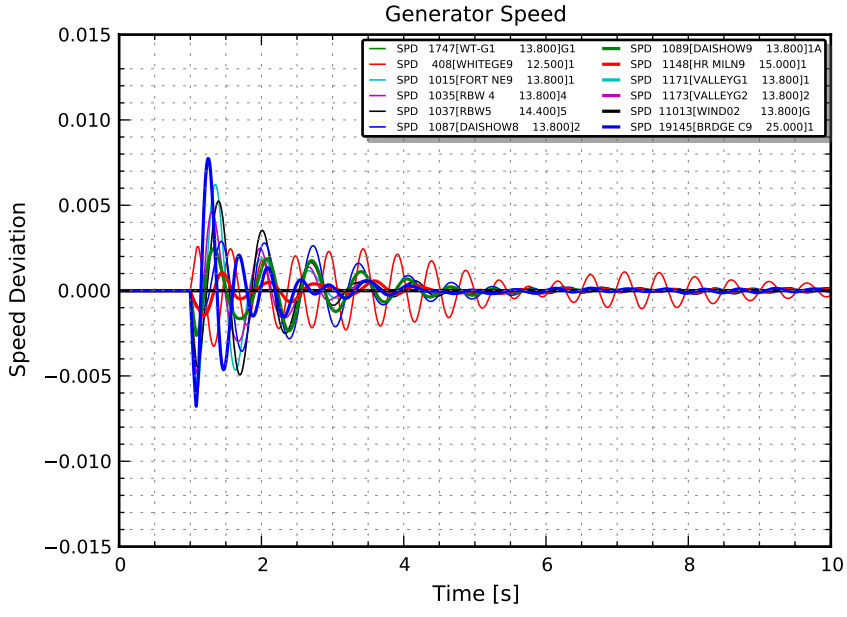


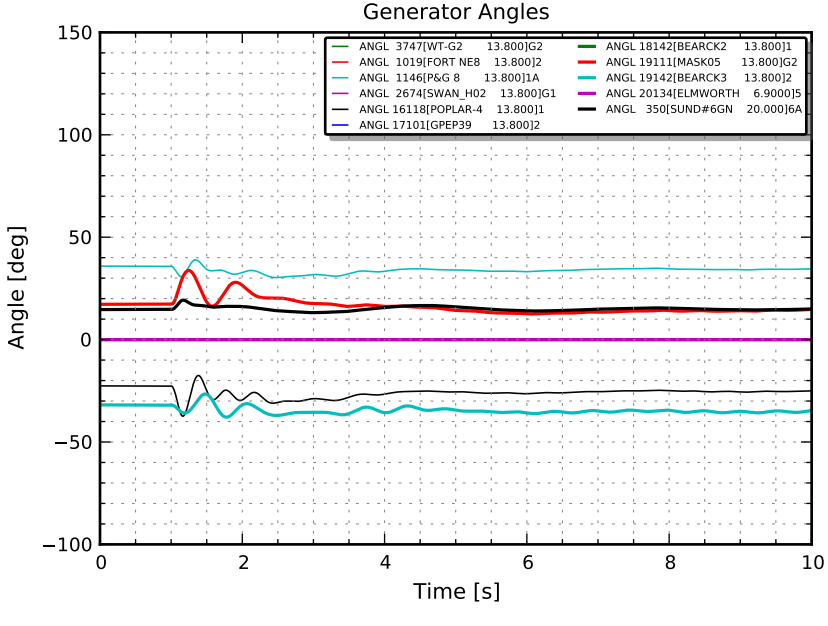
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_B.

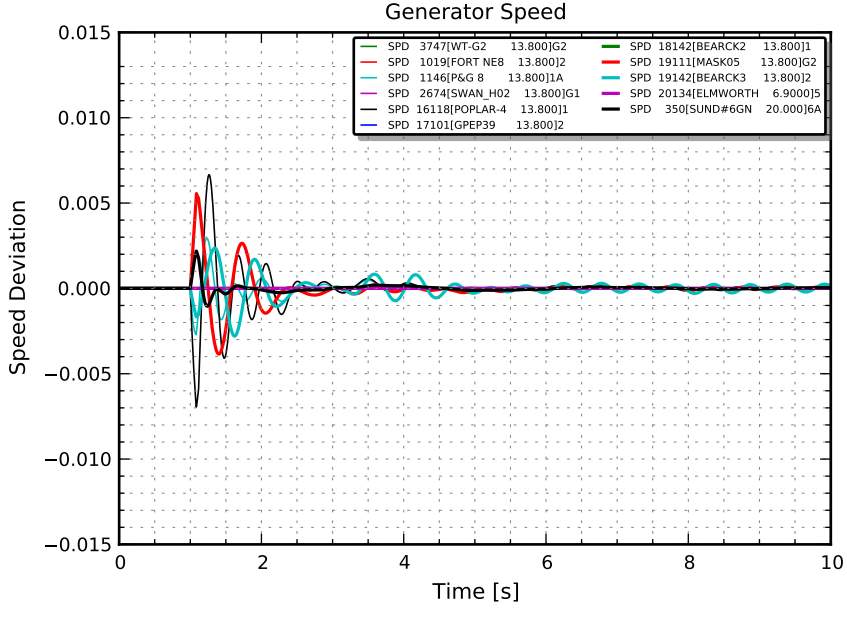
Study Area Generators

Appendix C2B
Figure: 008 (B. 2)





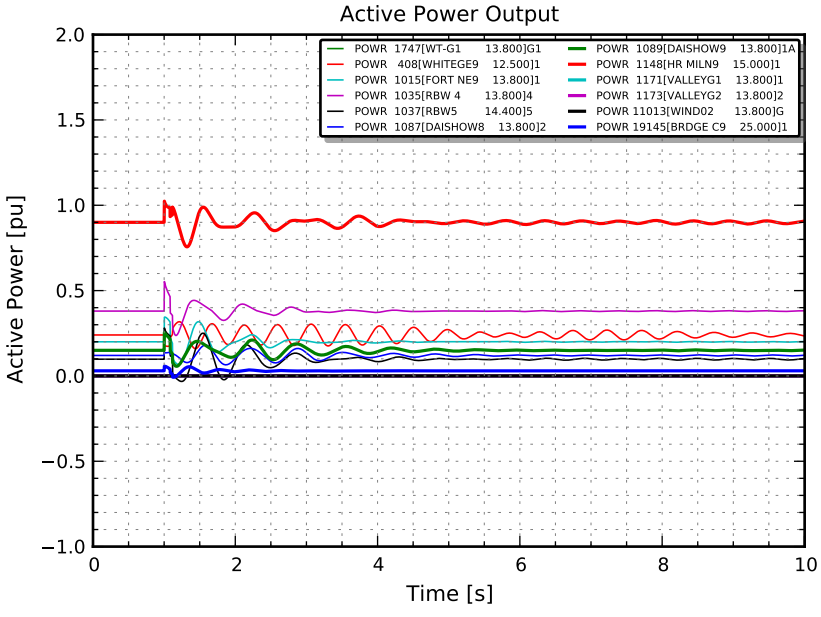


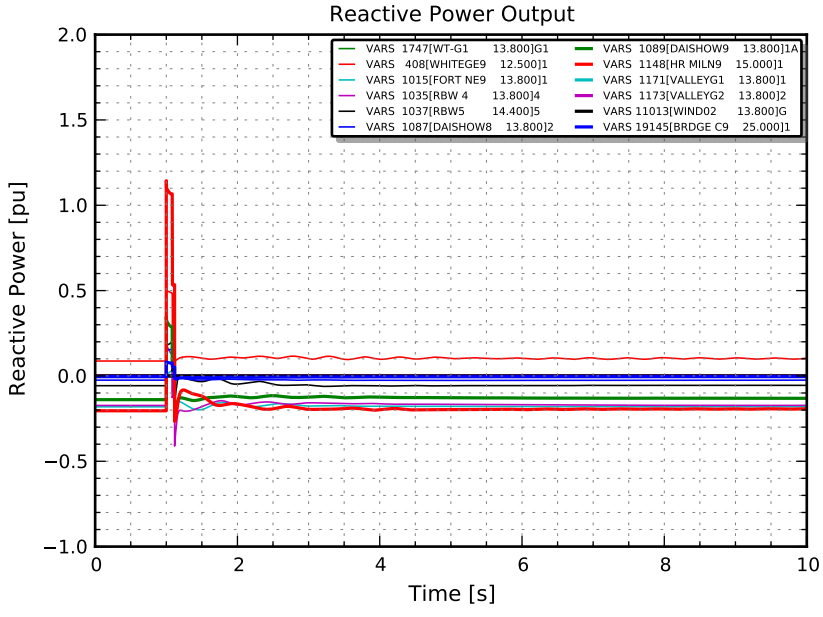


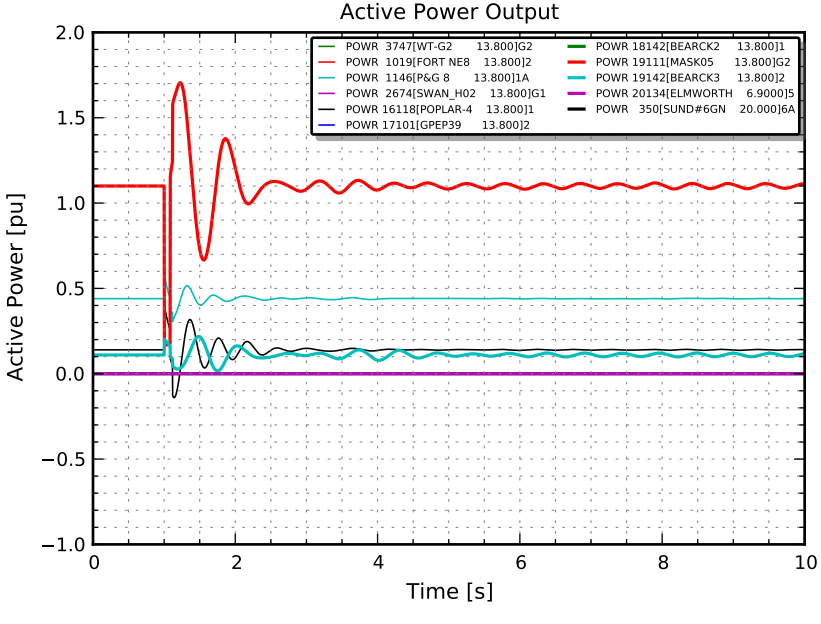
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_B.

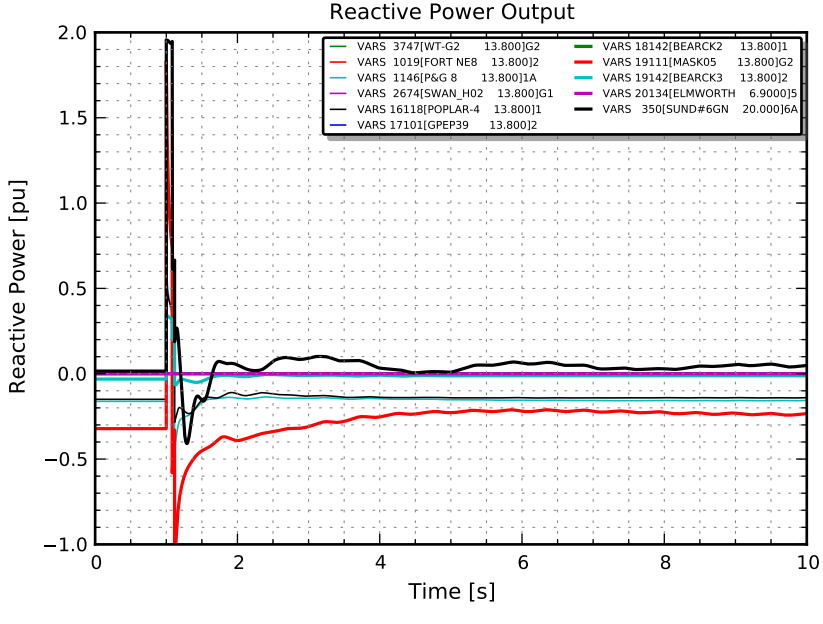
Study Area Generators

Appendix C2B
Figure: 008 (B. 3)





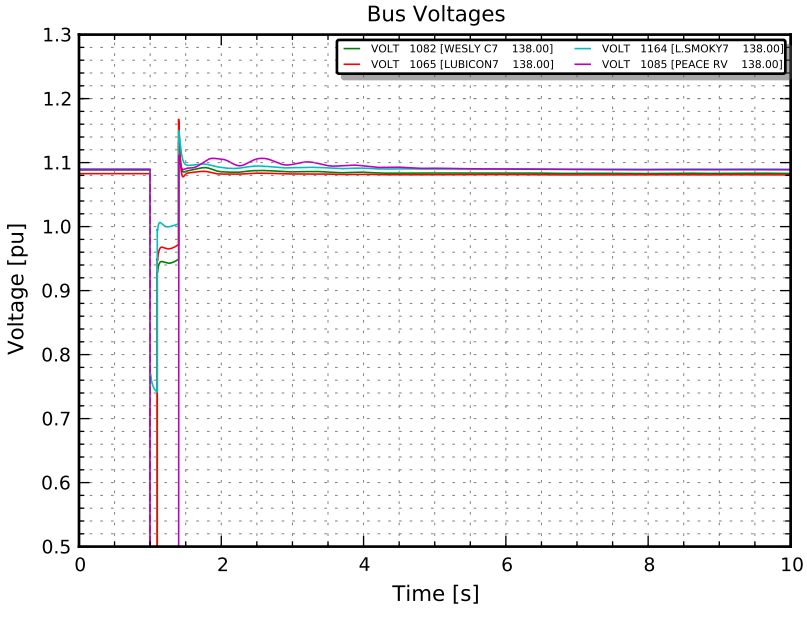


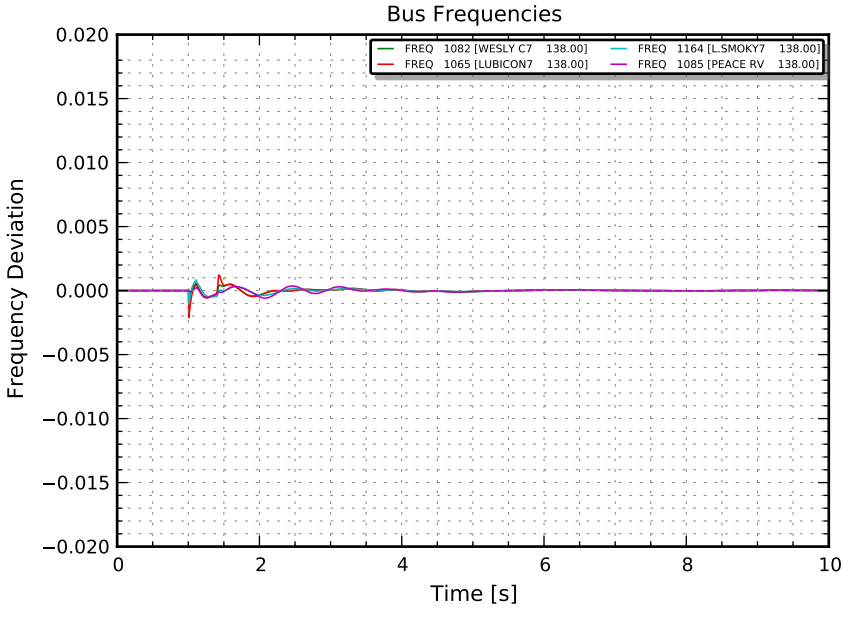


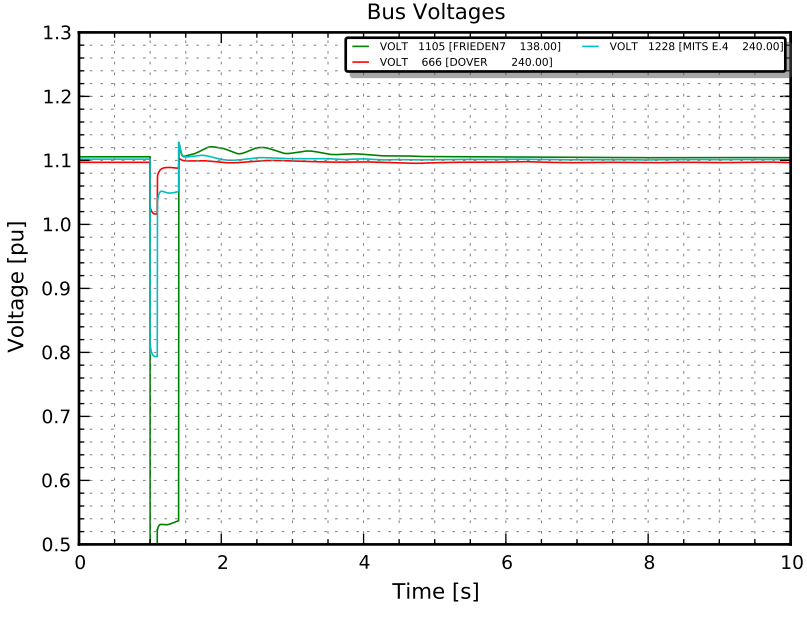
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 009 7L27 WESLEYCREEK to WESTPEACE_A.

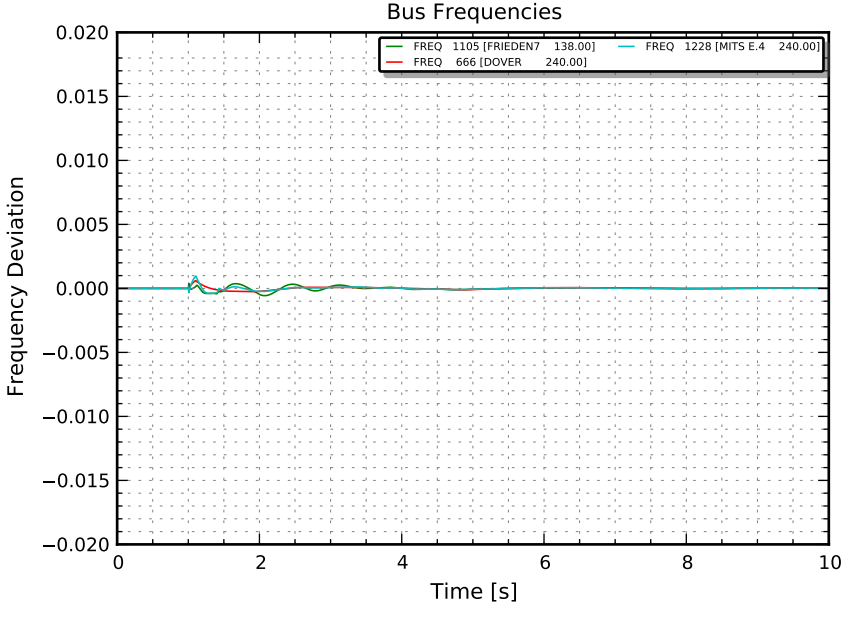
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 009 (A. 1)





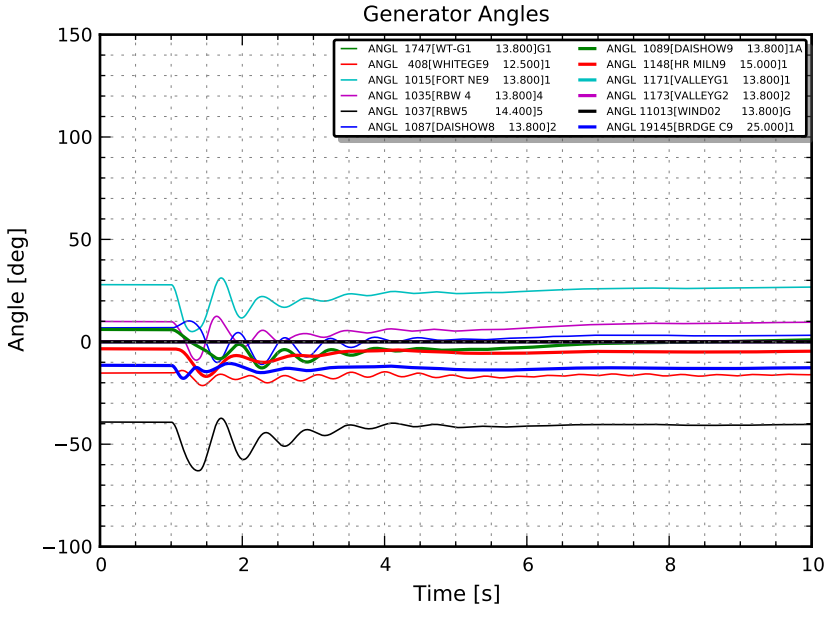


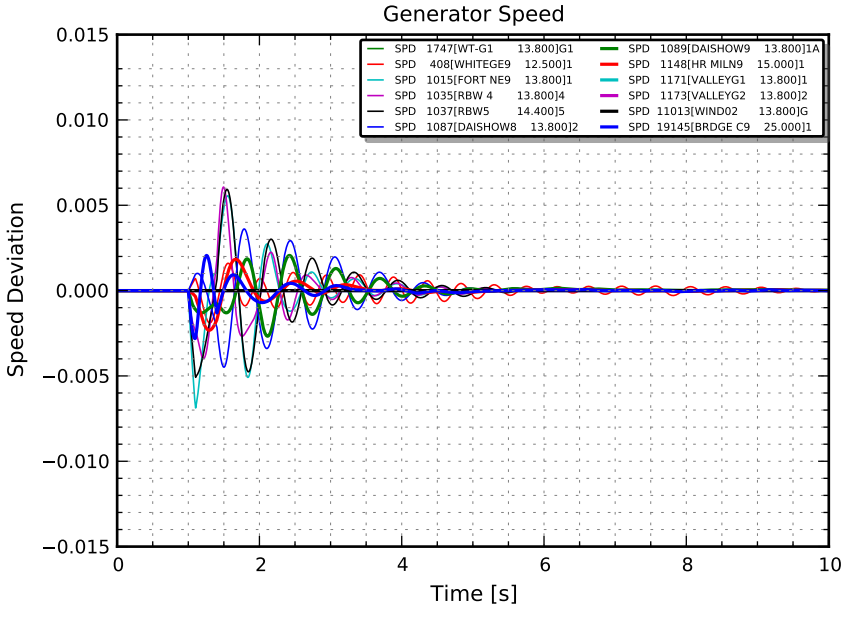


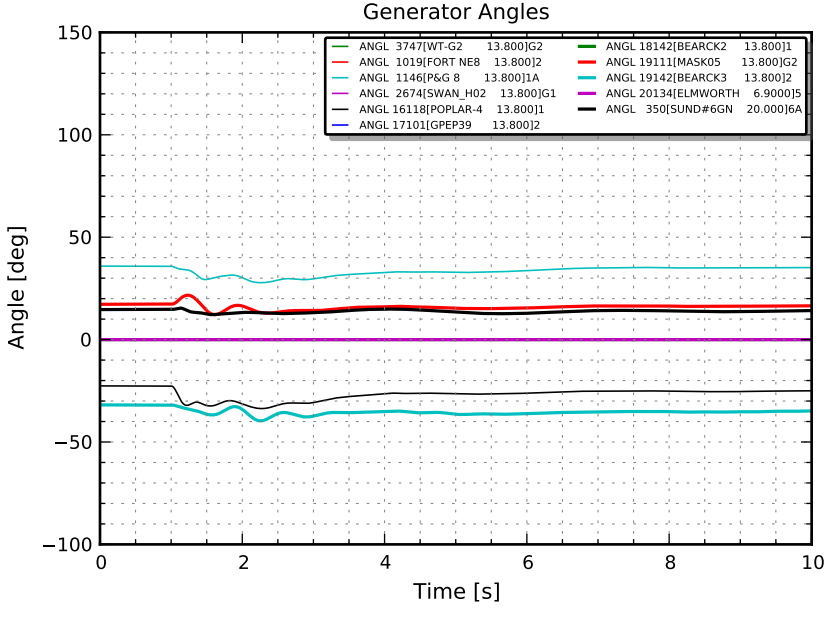
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 009 7L27 WESLEYCREEK to WESTPEACE_A.

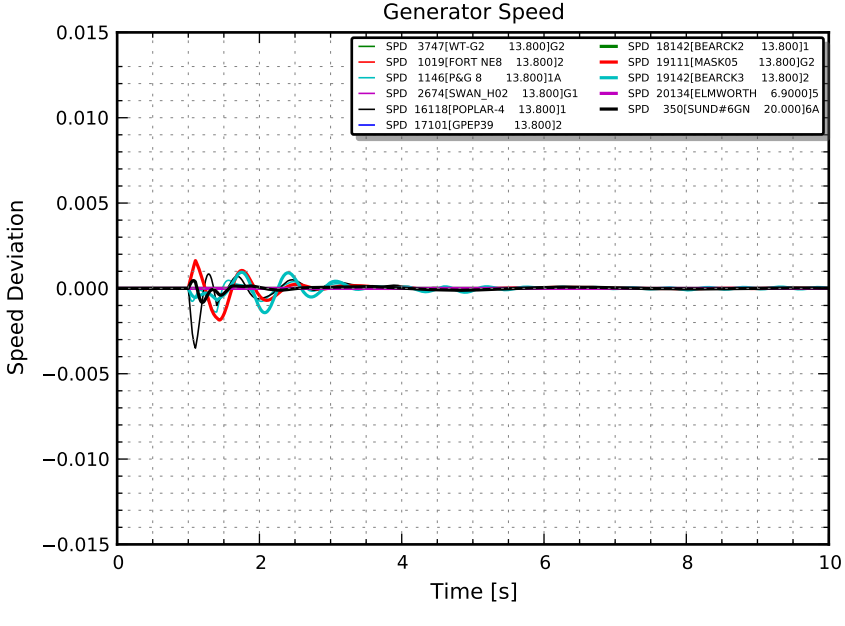
Study Area Generators

Appendix C2B
Figure: 009 (A. 2)





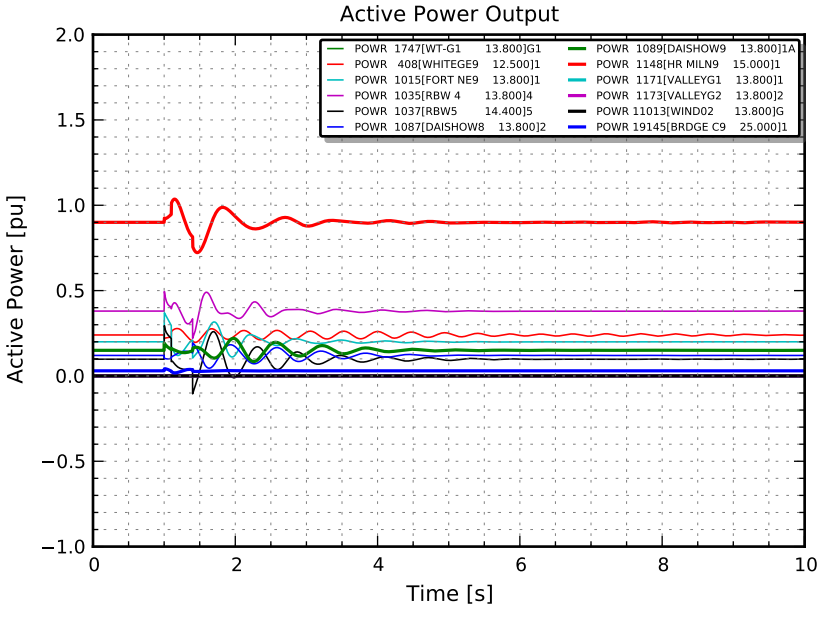


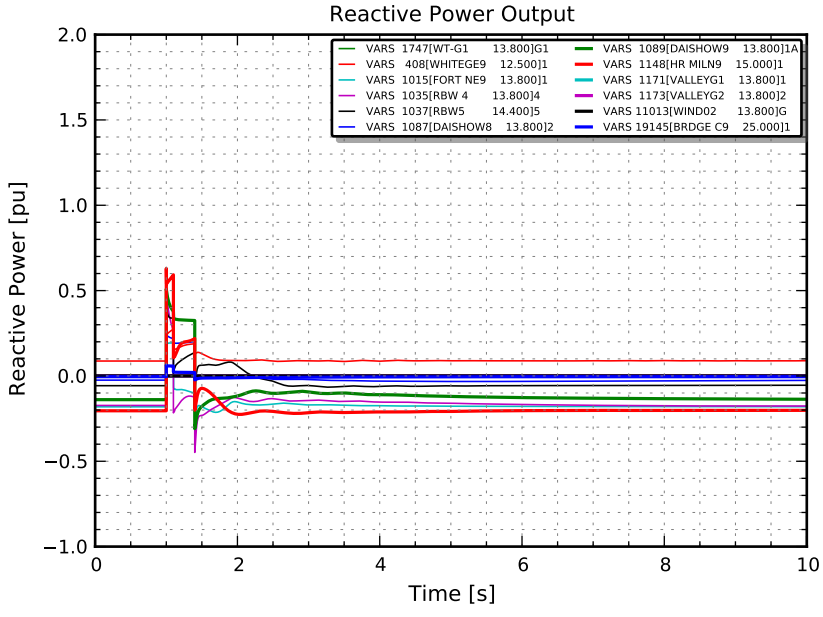


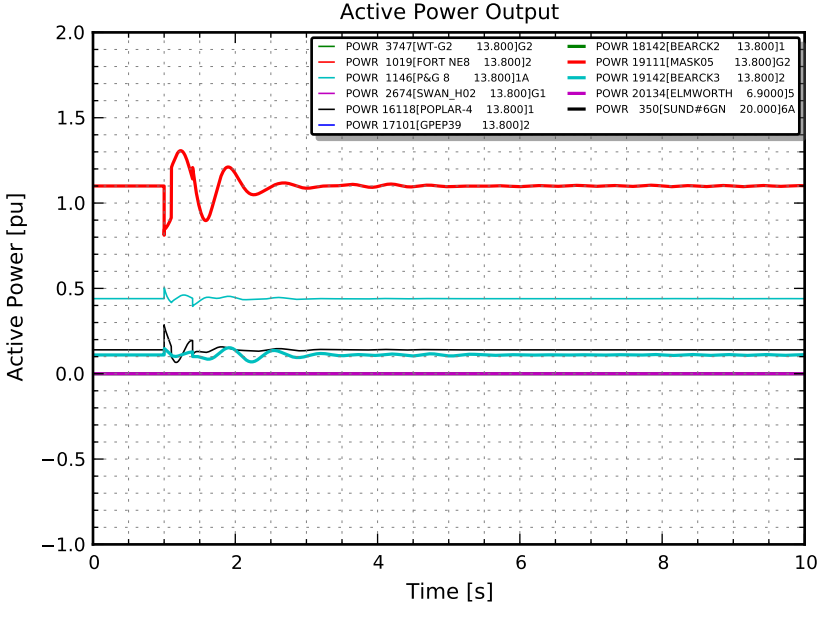
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 009 7L27 WESLEYCREEK to WESTPEACE_A.

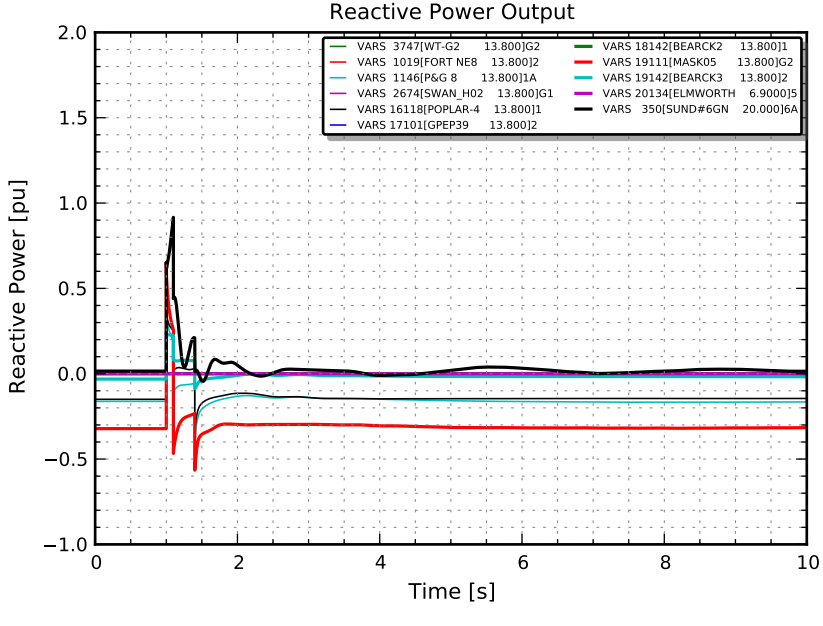
Study Area Generators

Appendix C2B
Figure: 009 (A. 3)





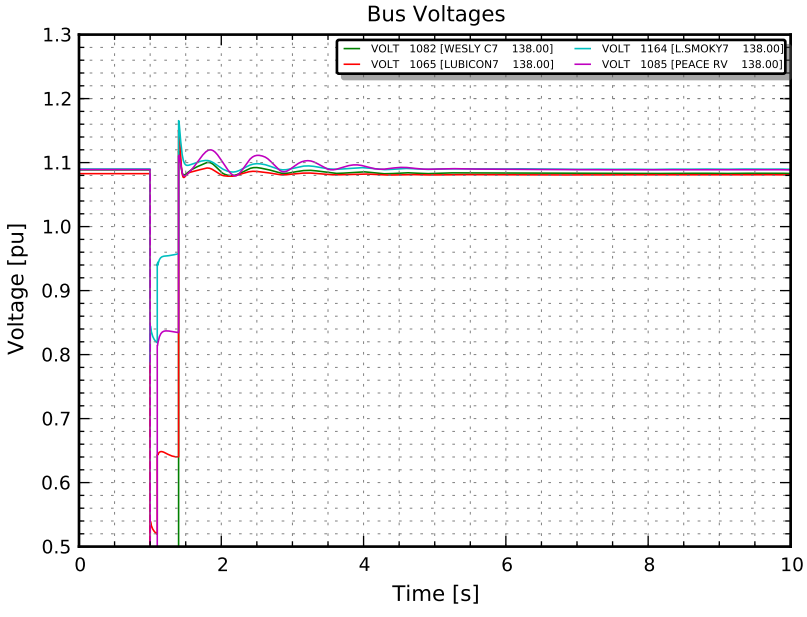


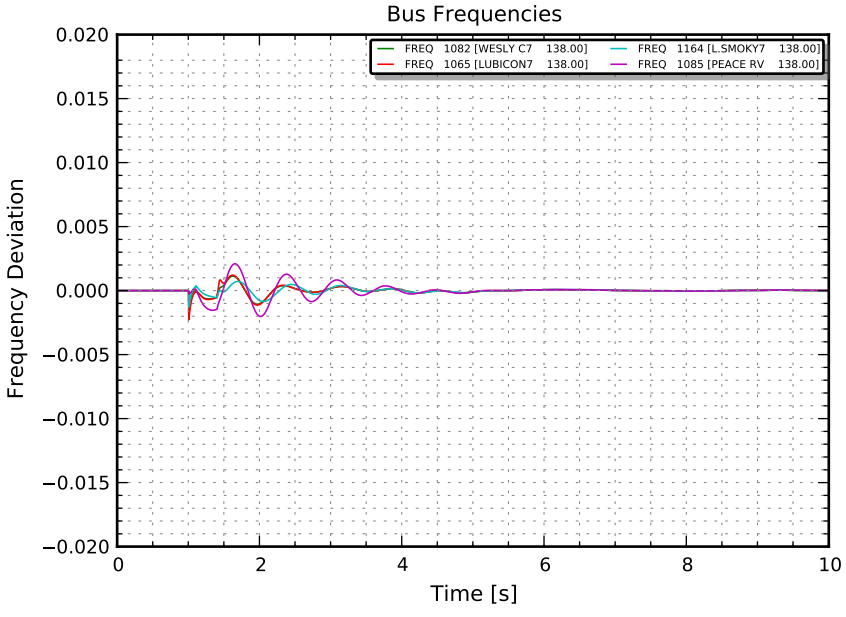


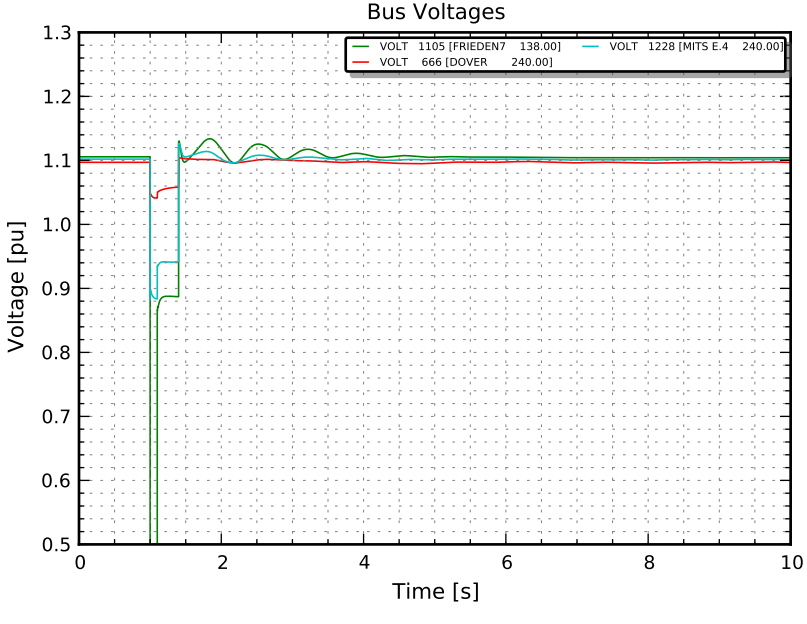
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 009 7L27 WESLEYCREEK to WESTPEACE_B.

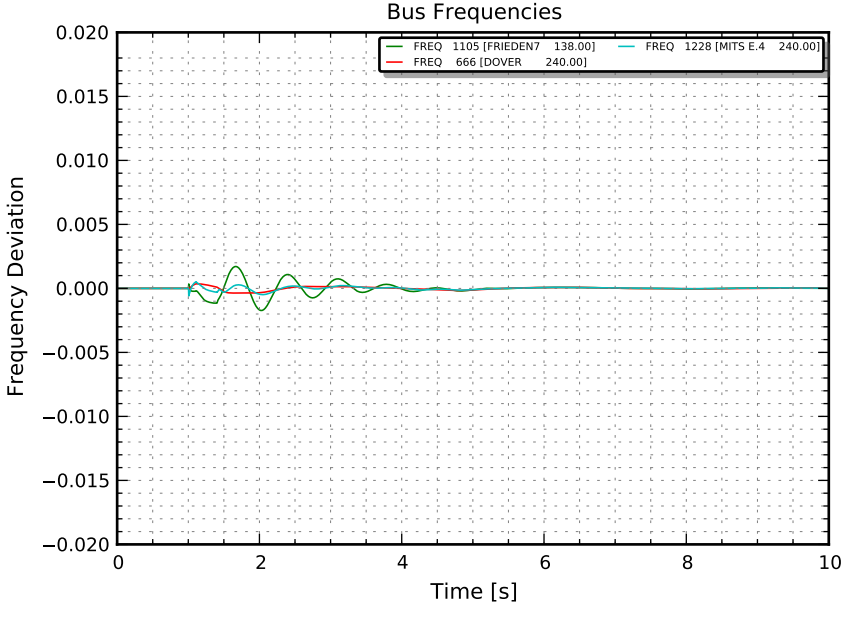
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 009 (B. 1)





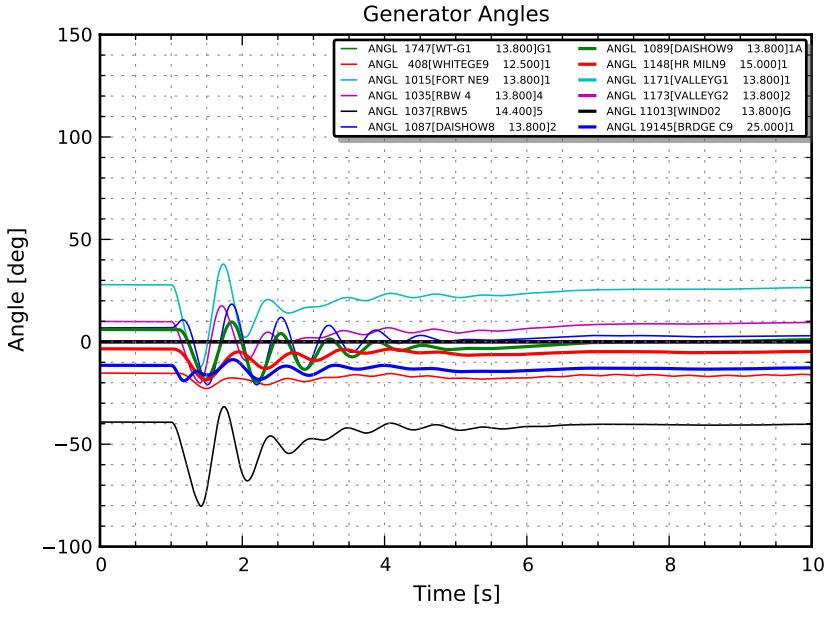


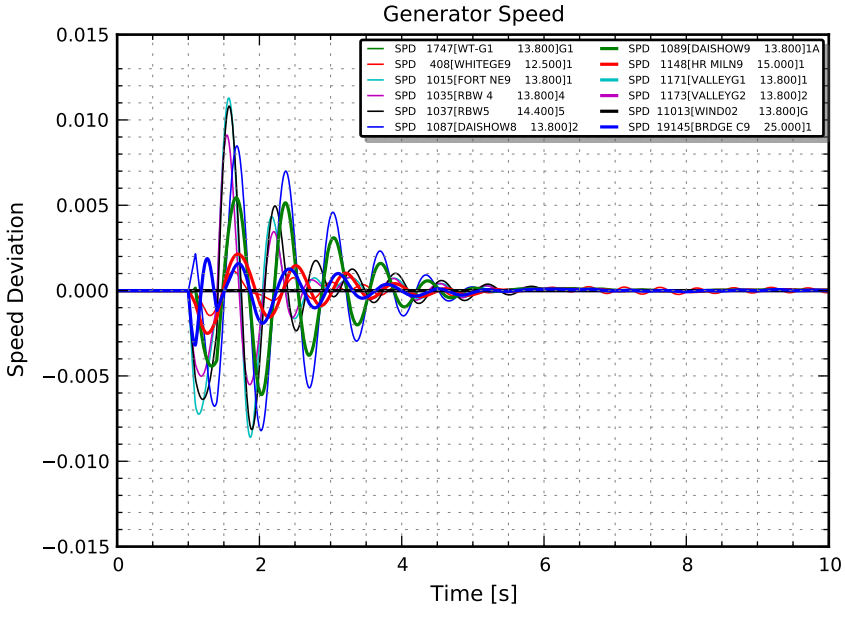


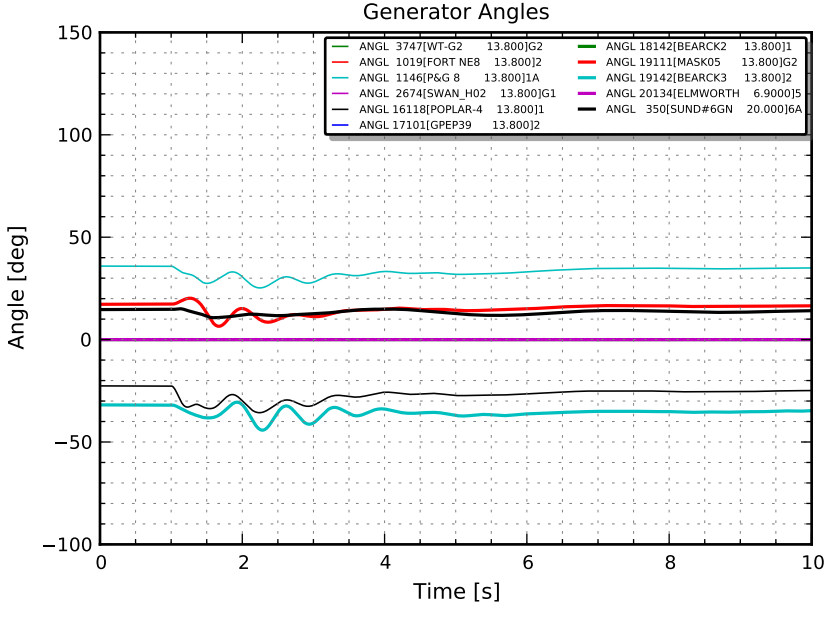
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 009 7L27 WESLEYCREEK to WESTPEACE_B.

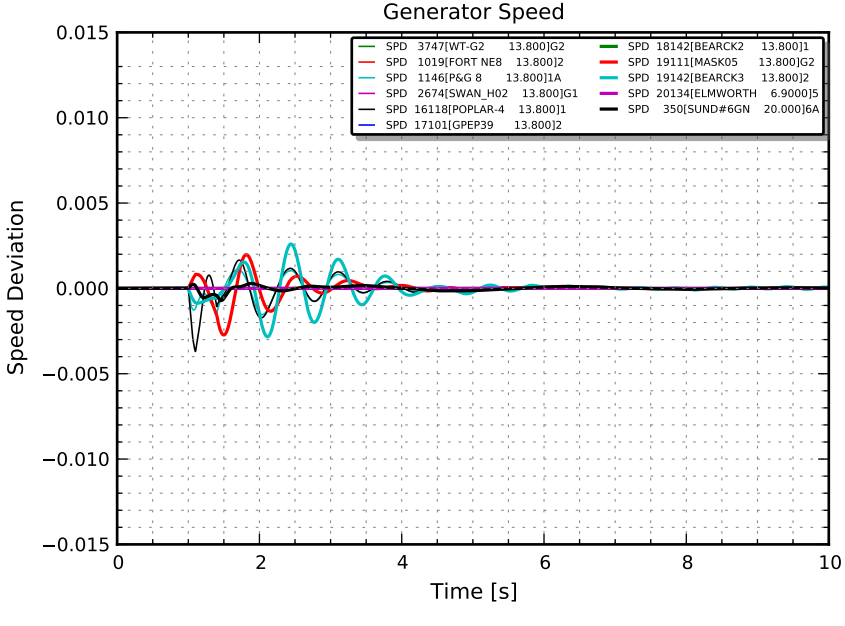
Study Area Generators

Appendix C2B
Figure: 009 (B. 2)





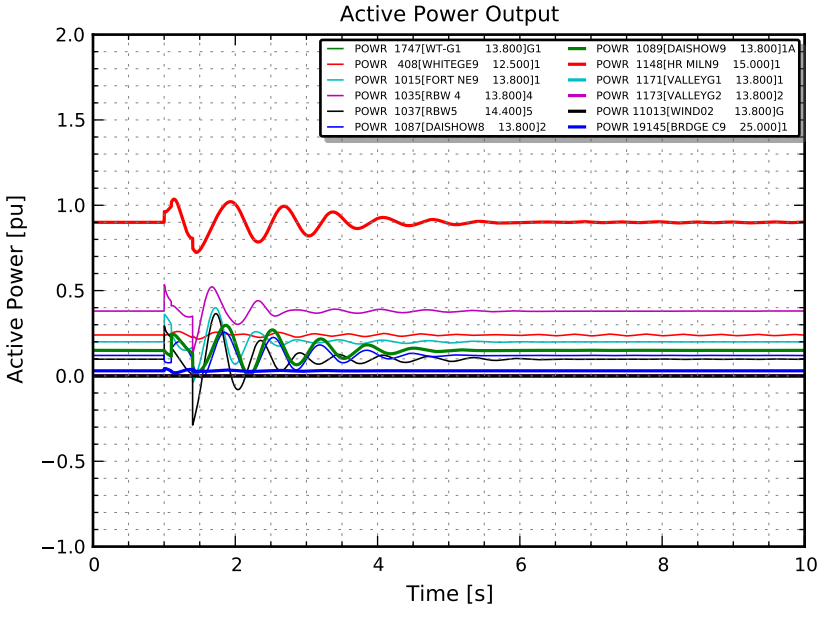


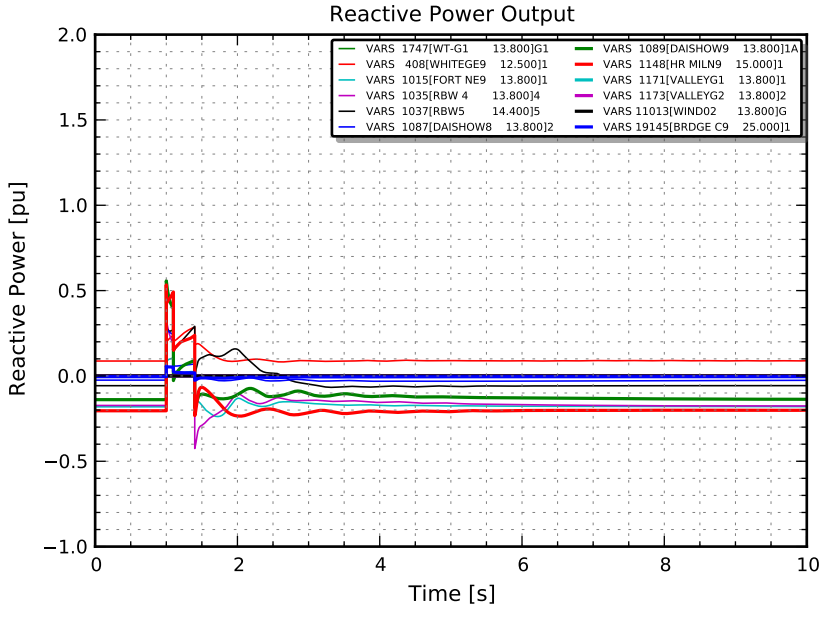


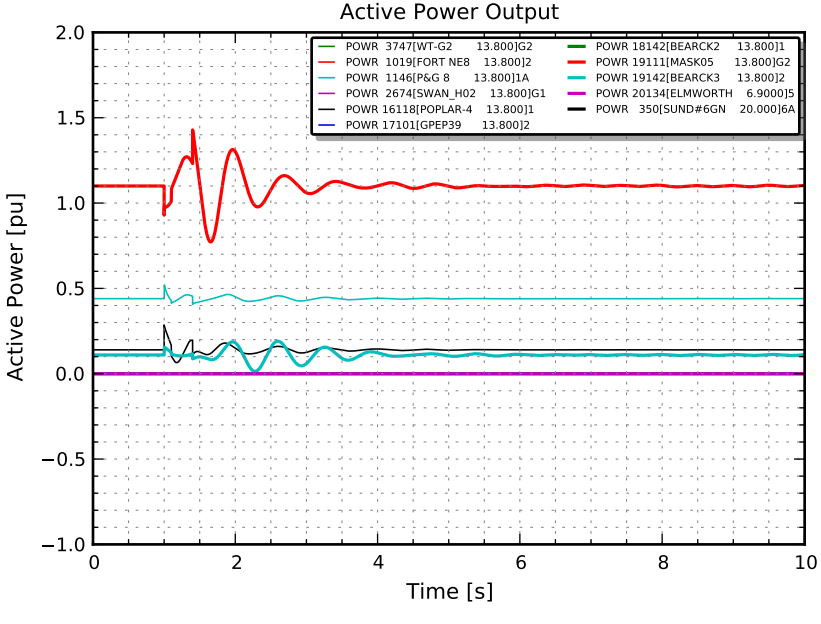
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 009 7L27 WESLEYCREEK to WESTPEACE_B.

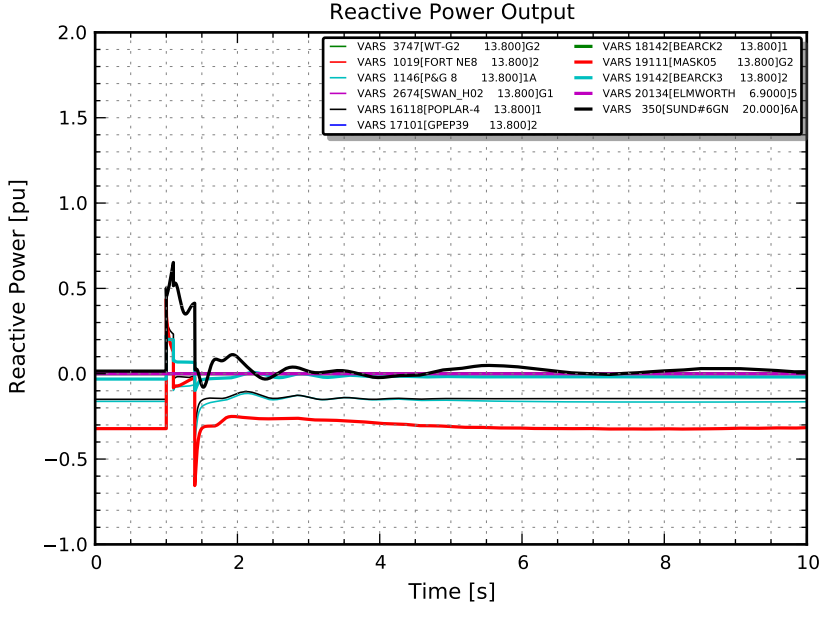
Study Area Generators

Appendix C2B
Figure: 009 (B. 3)





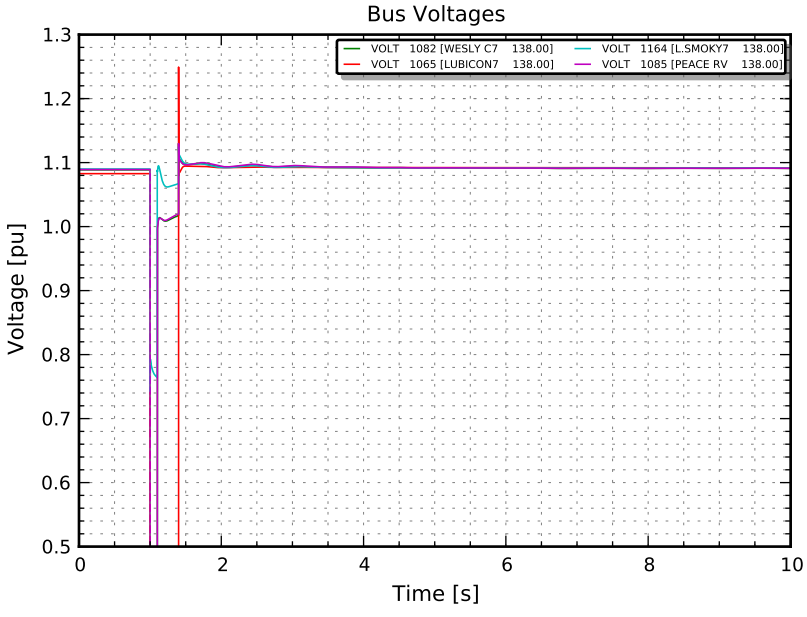


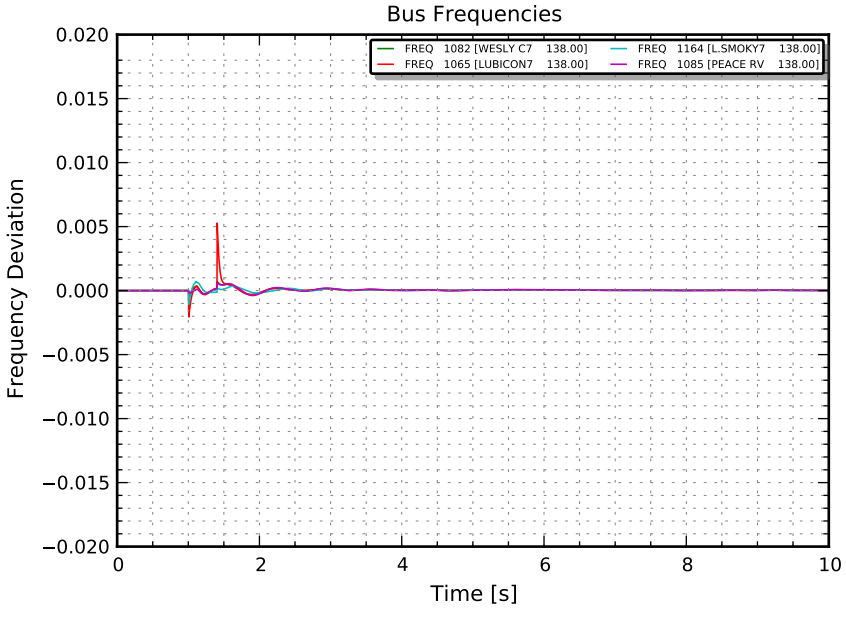


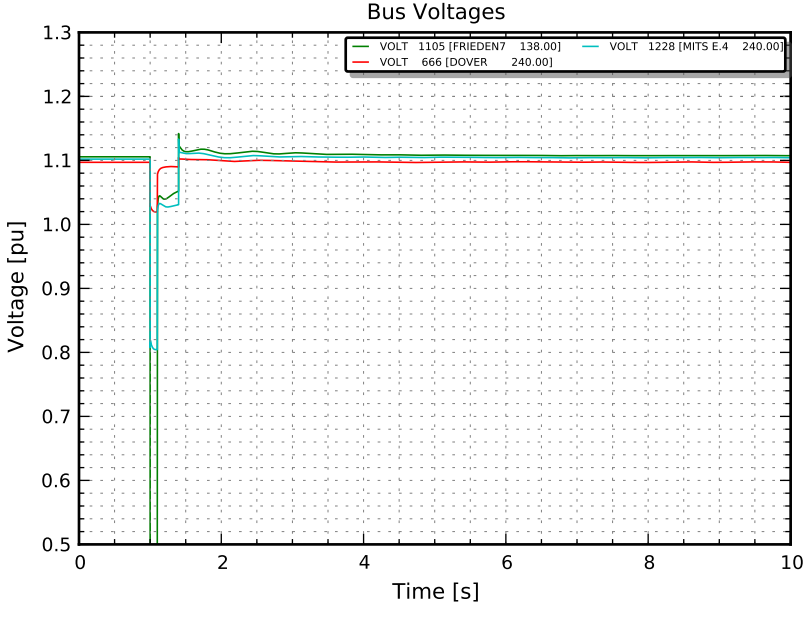
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 010 7L12 WESLEYCREEK to LUBICON_A.

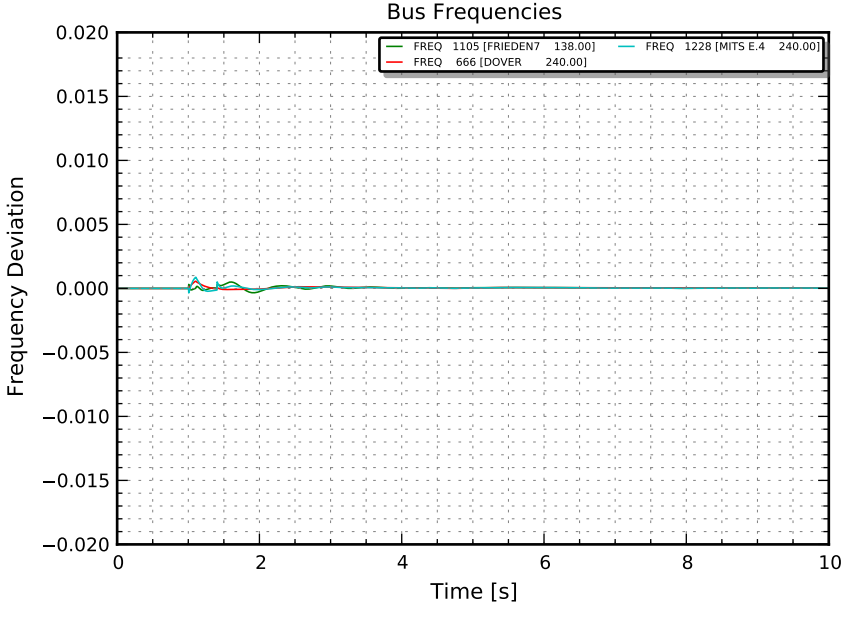
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 010 (A. 1)





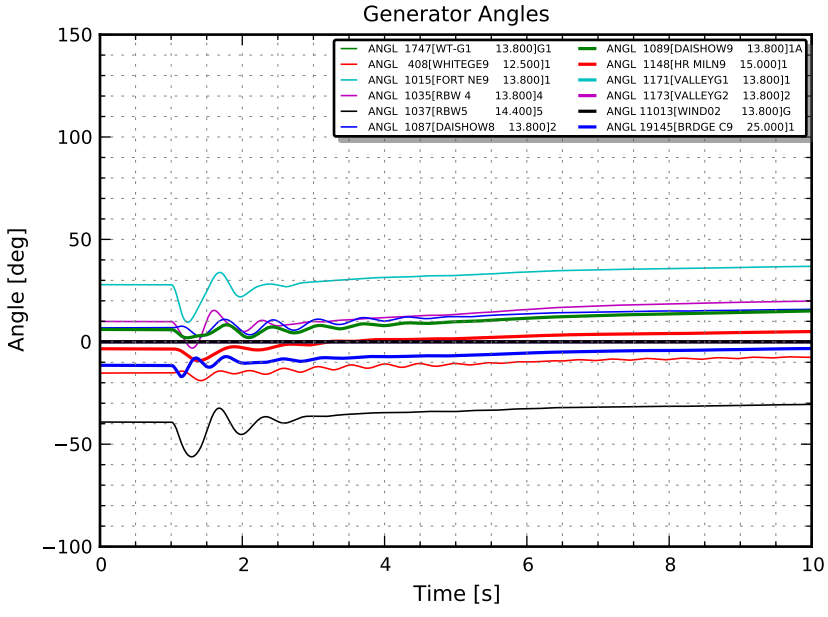


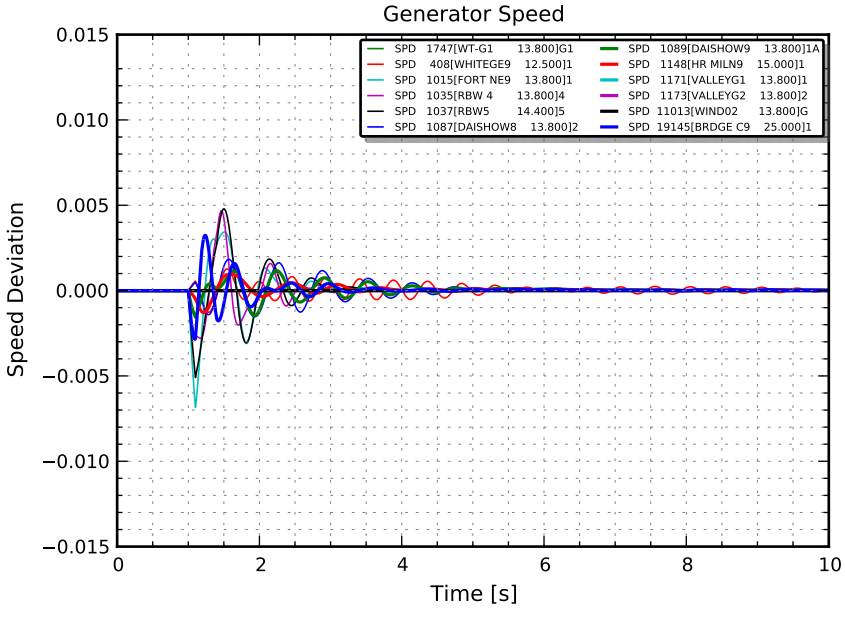


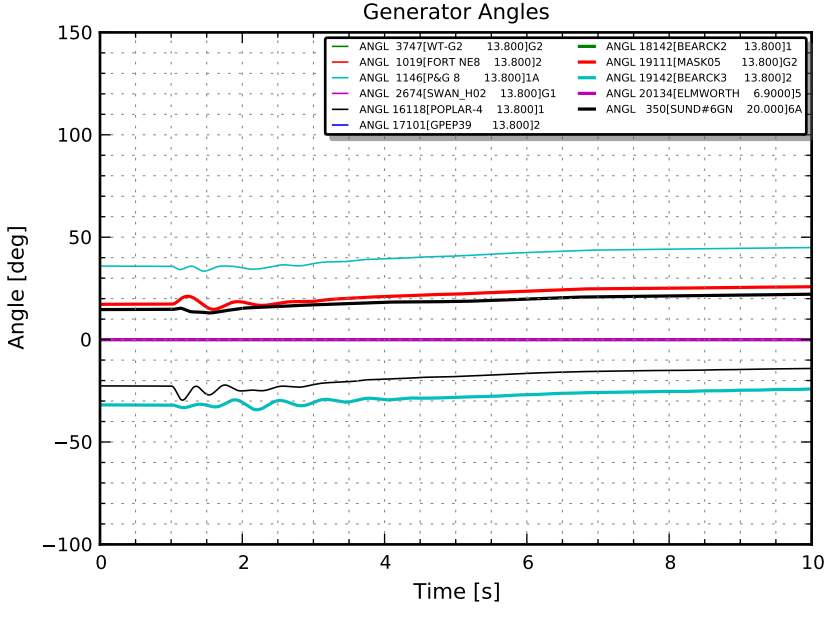
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 010 7L12 WESLEYCREEK to LUBICON_A.

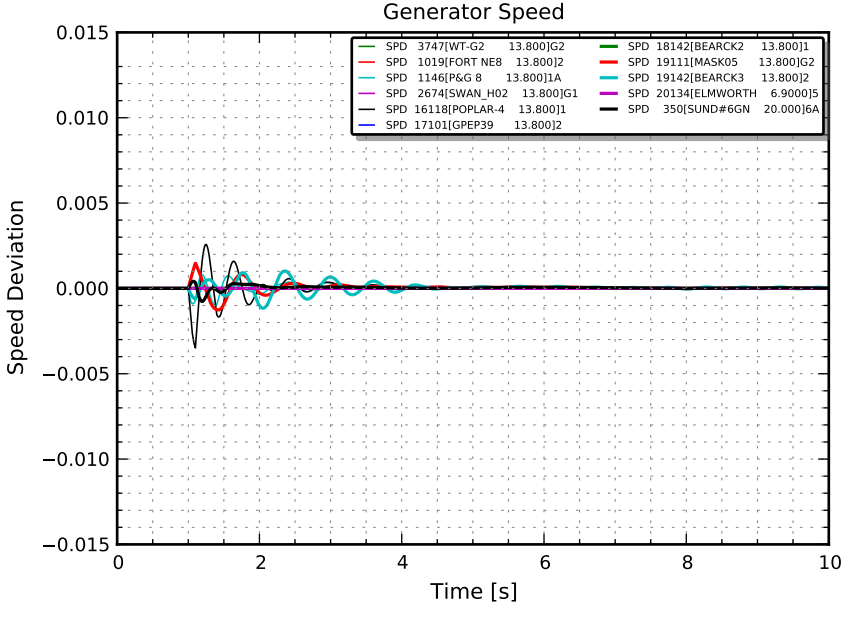
Study Area Generators

Appendix C2B
Figure: 010 (A. 2)





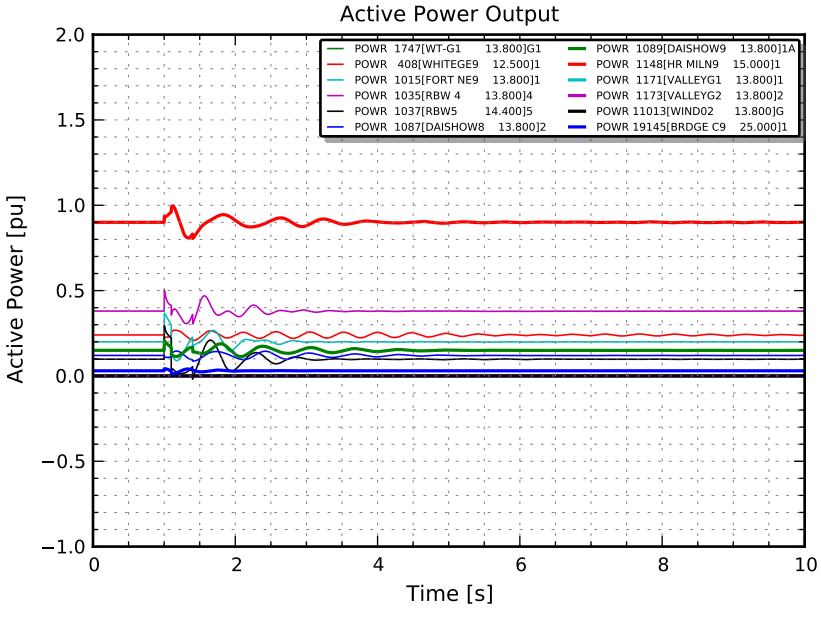


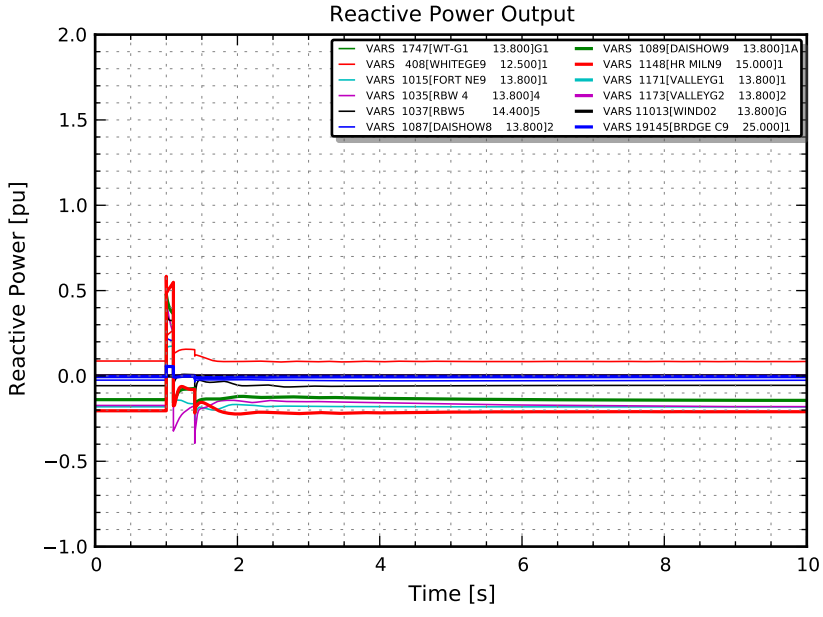


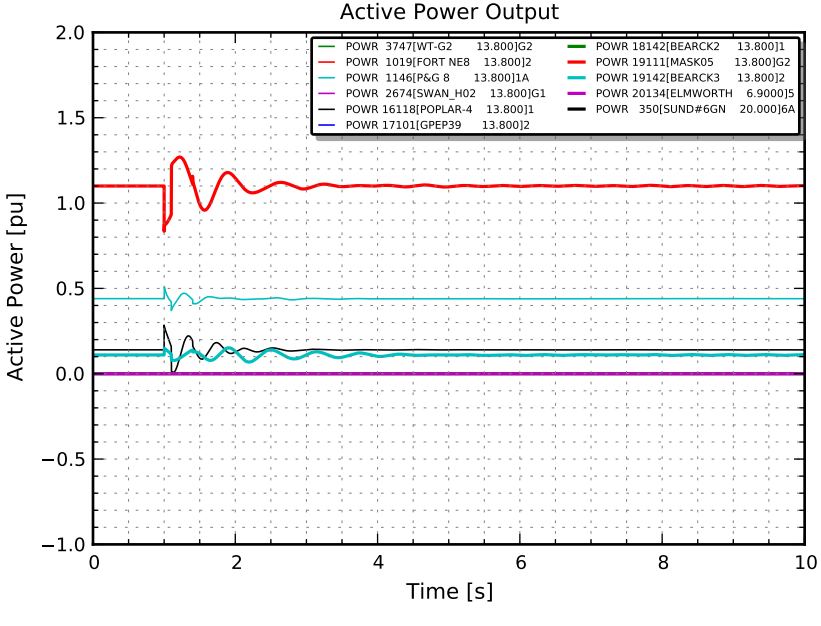
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 010 7L12 WESLEYCREEK to LUBICON_A.

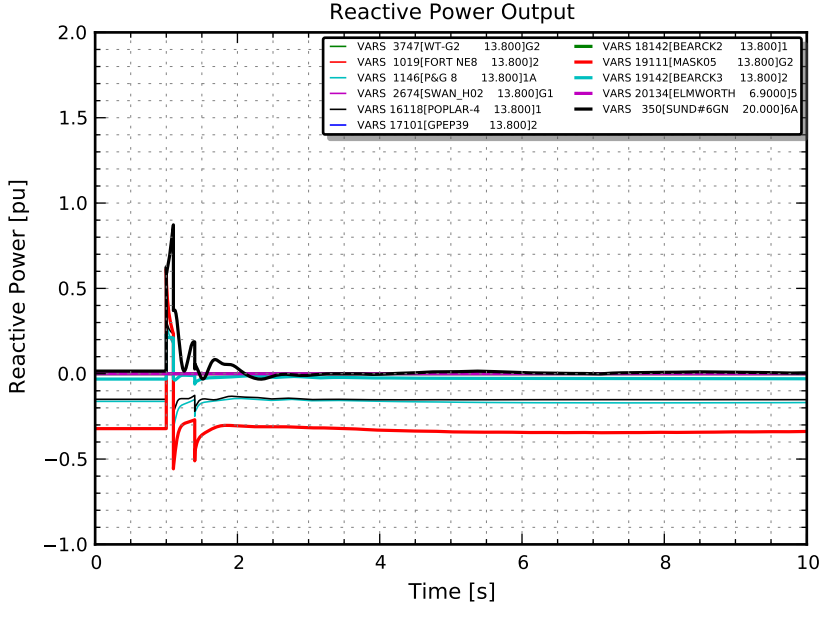
Study Area Generators

Appendix C2B
Figure: 010 (A. 3)





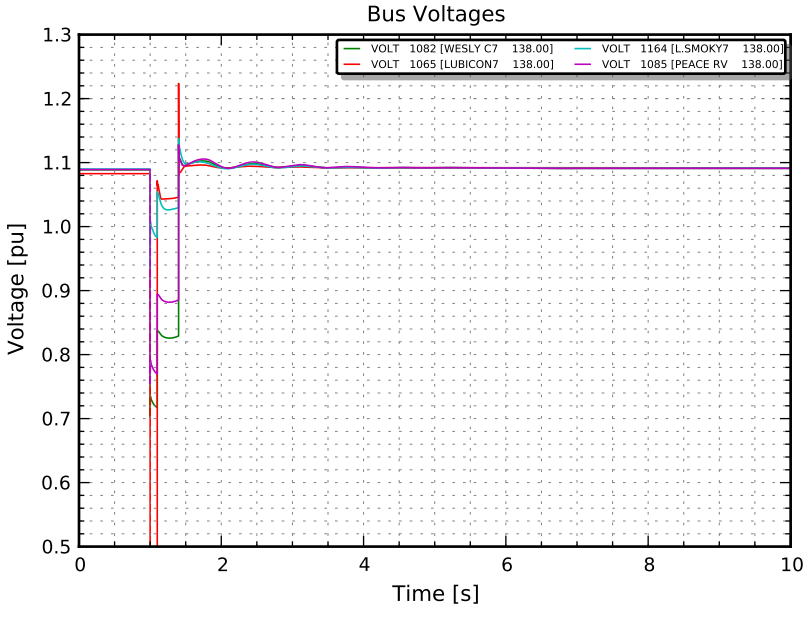


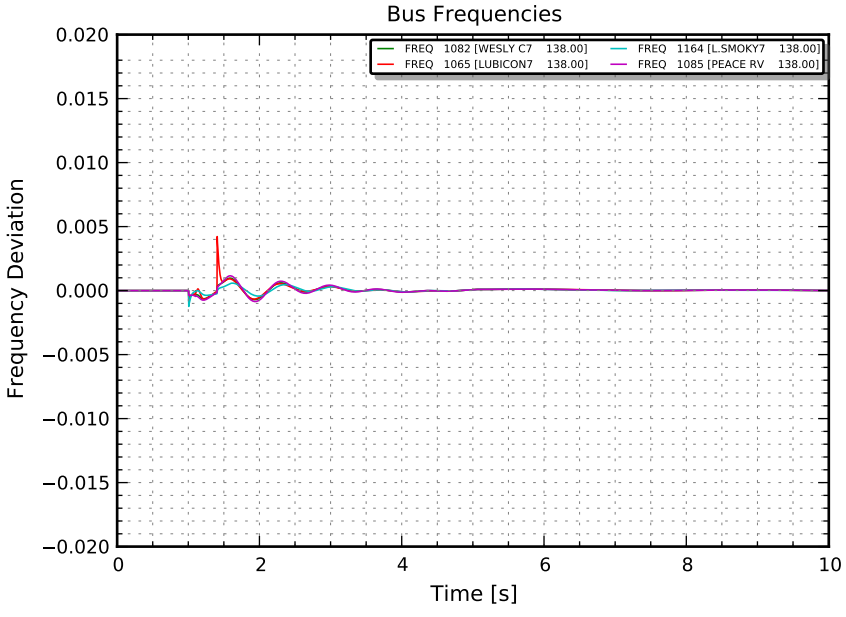


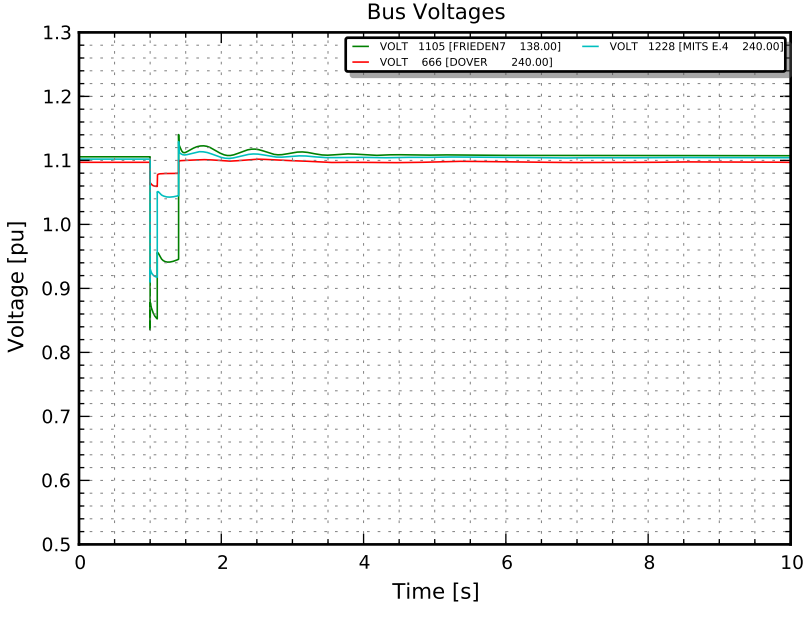
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 010 7L12 WESLEYCREEK to LUBICON_B.

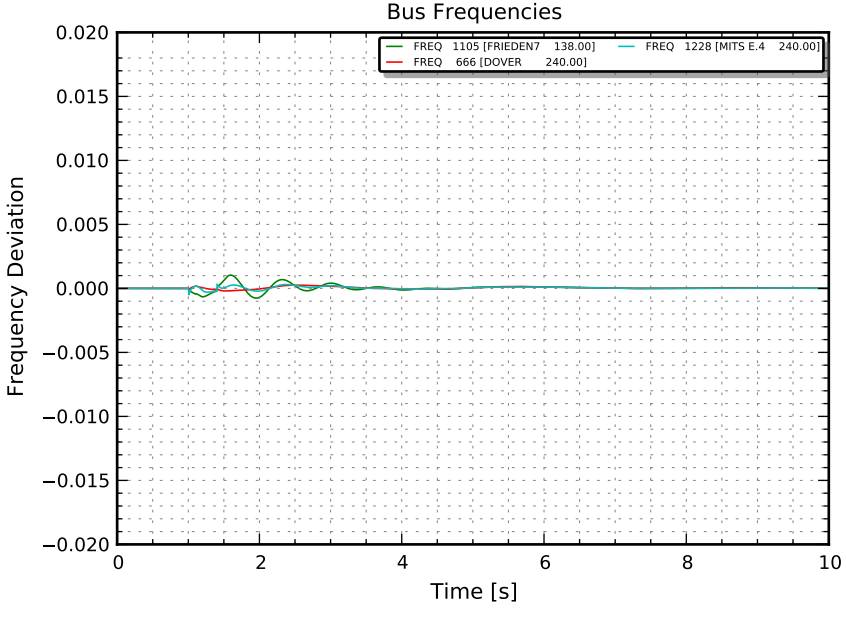
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 010 (B. 1)





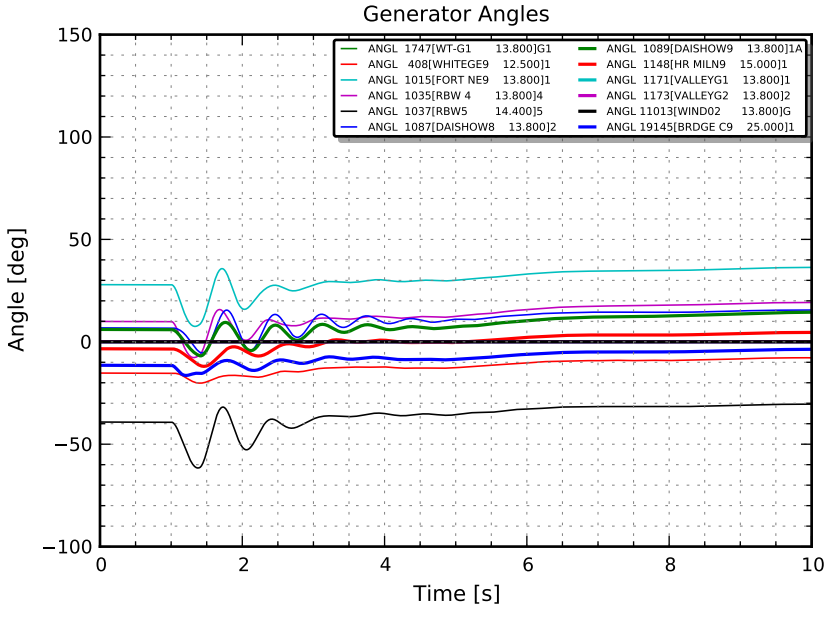


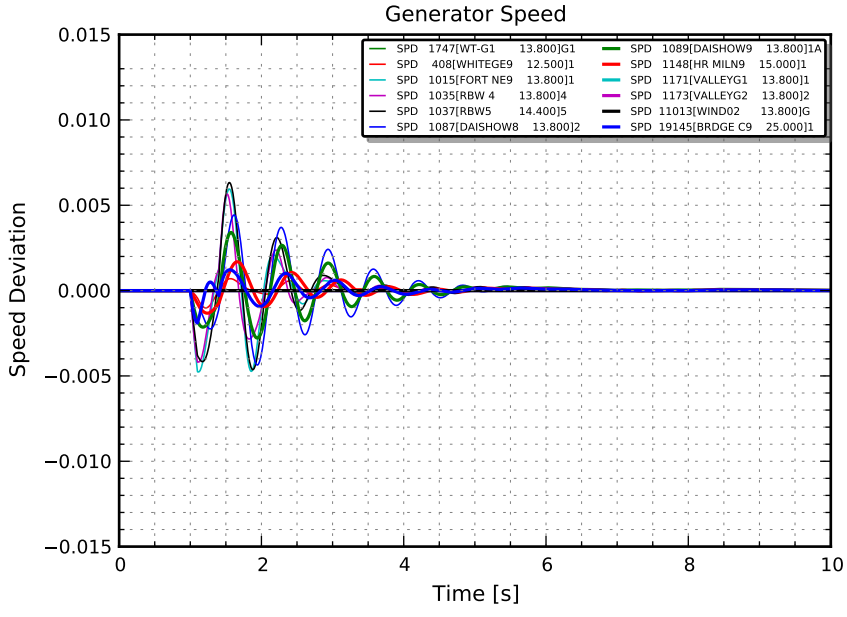


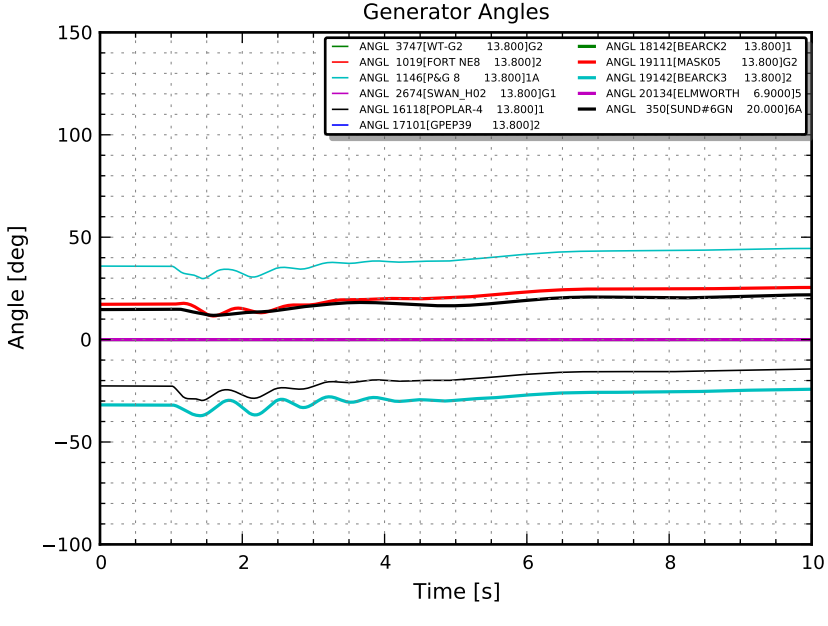
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 010 7L12 WESLEYCREEK to LUBICON_B.

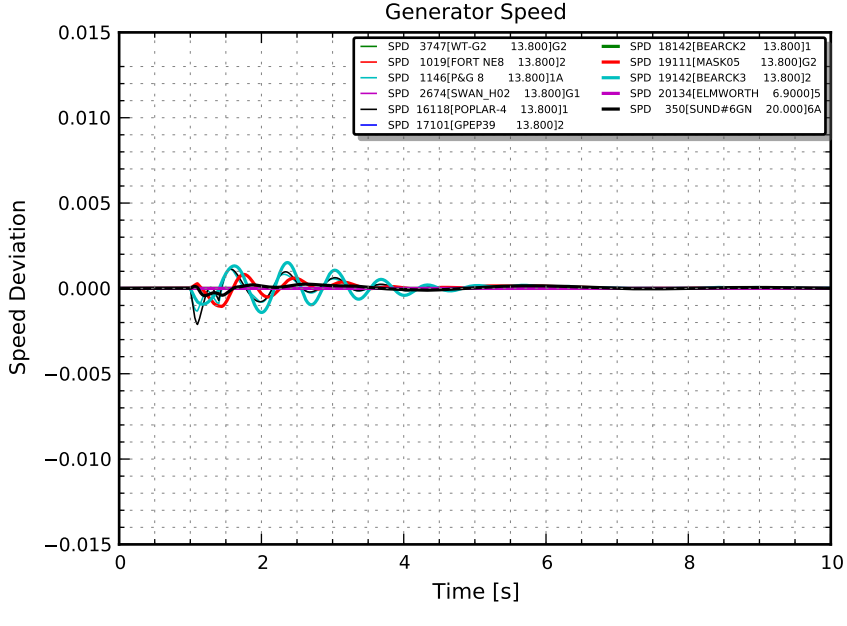
Study Area Generators

Appendix C2B
Figure: 010 (B. 2)





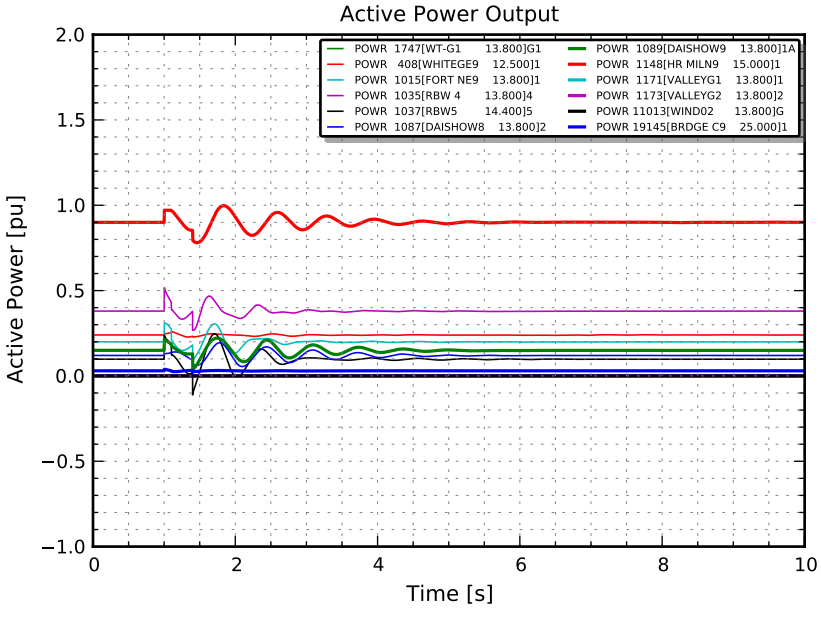


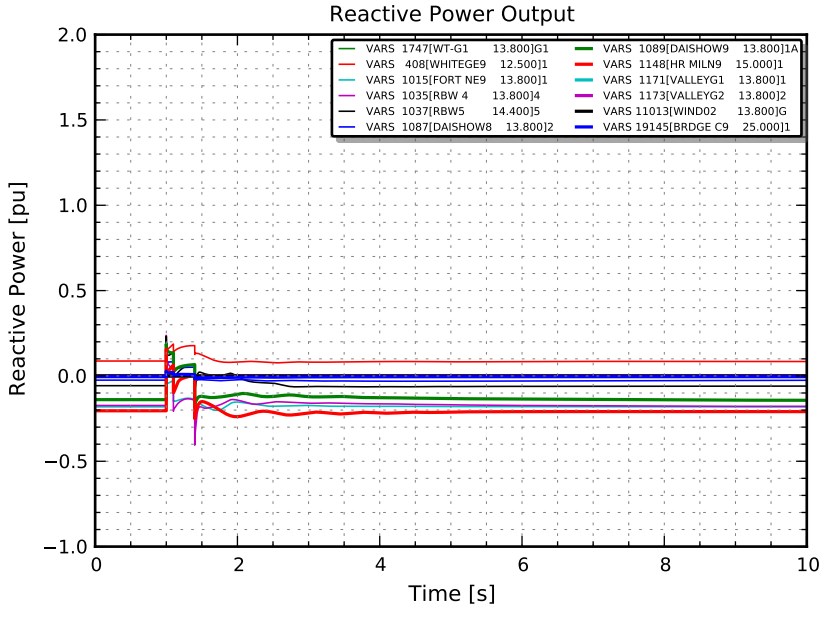


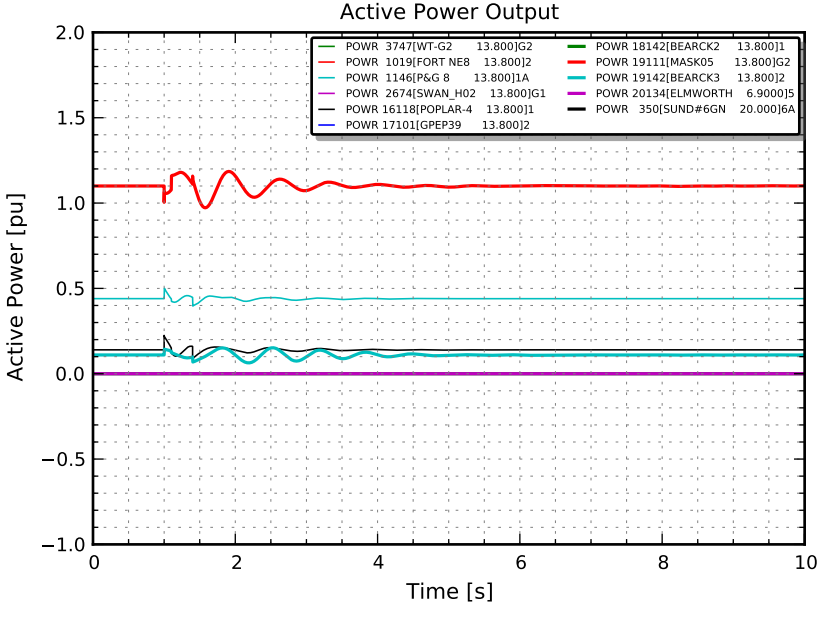
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 010 7L12 WESLEYCREEK to LUBICON_B.

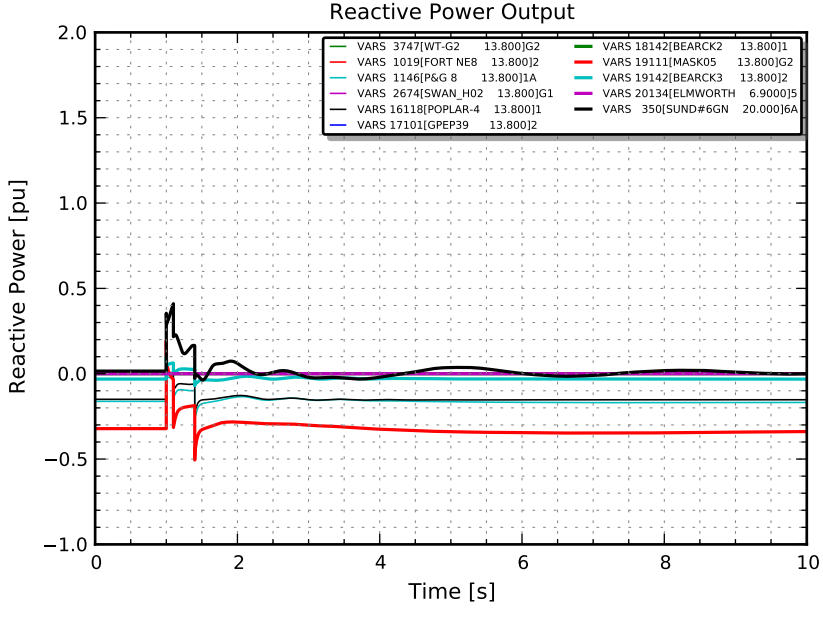
Study Area Generators

Appendix C2B
Figure: 010 (B. 3)





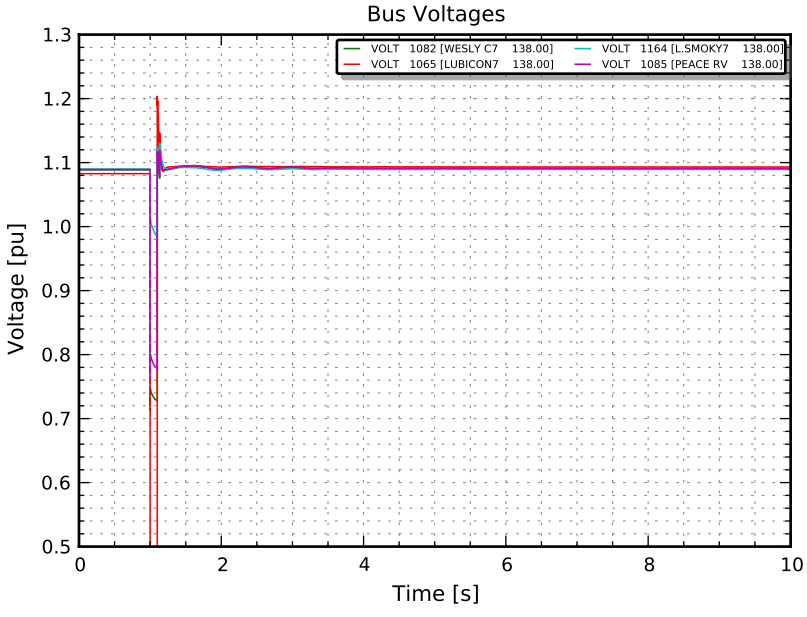


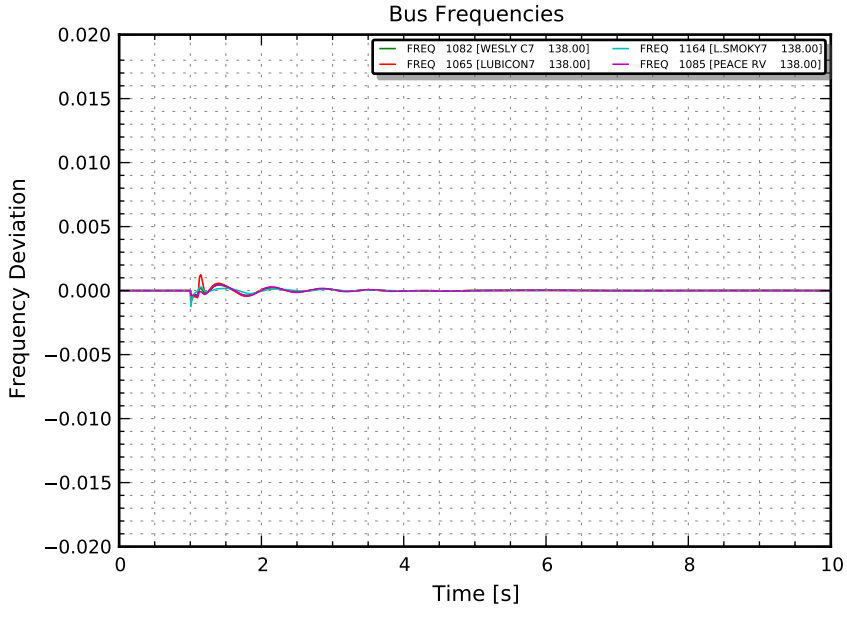


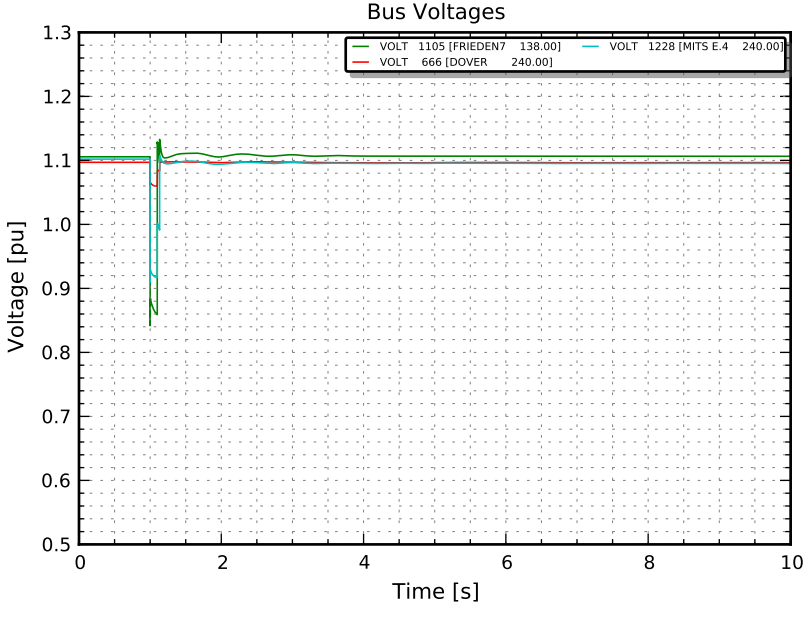
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 011 7L61 LUBICON to NIPISI_A.

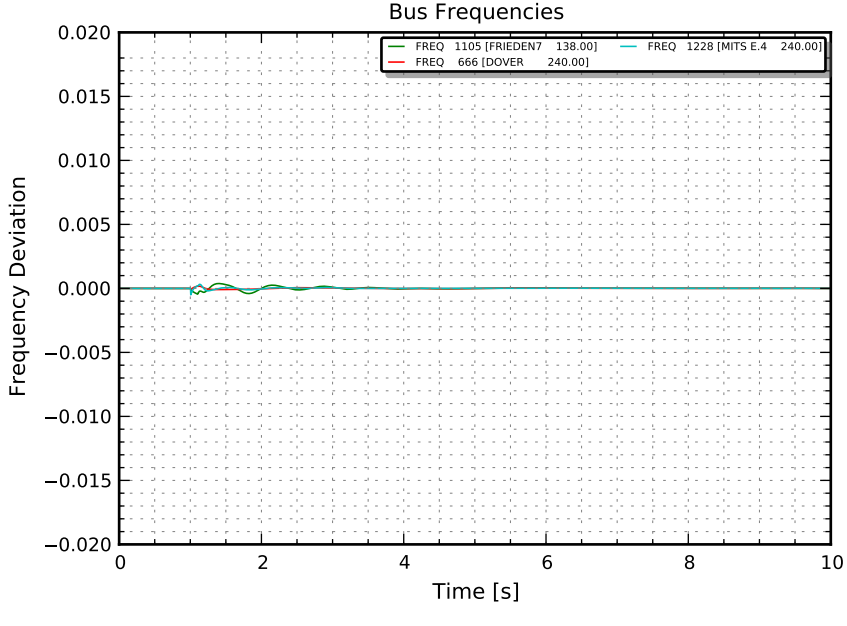
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 011 (A. 1)





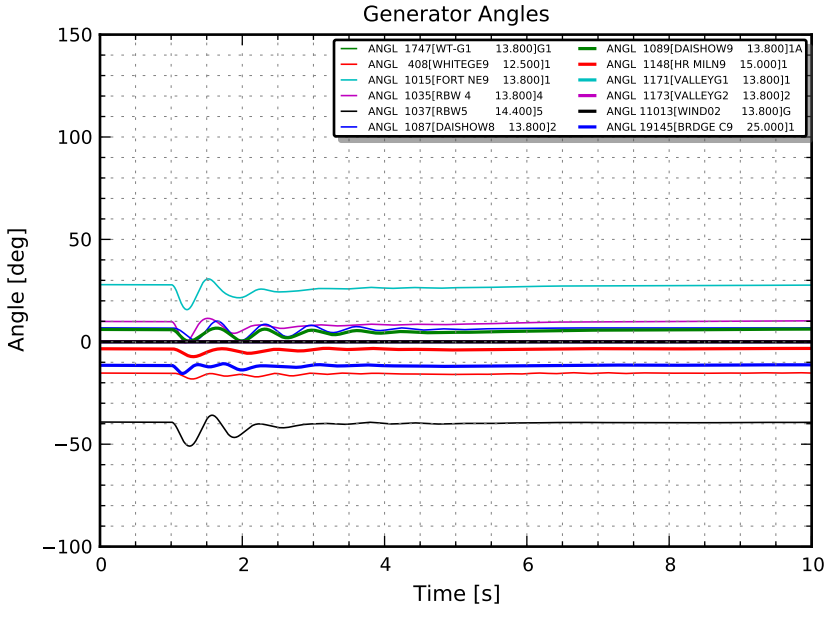


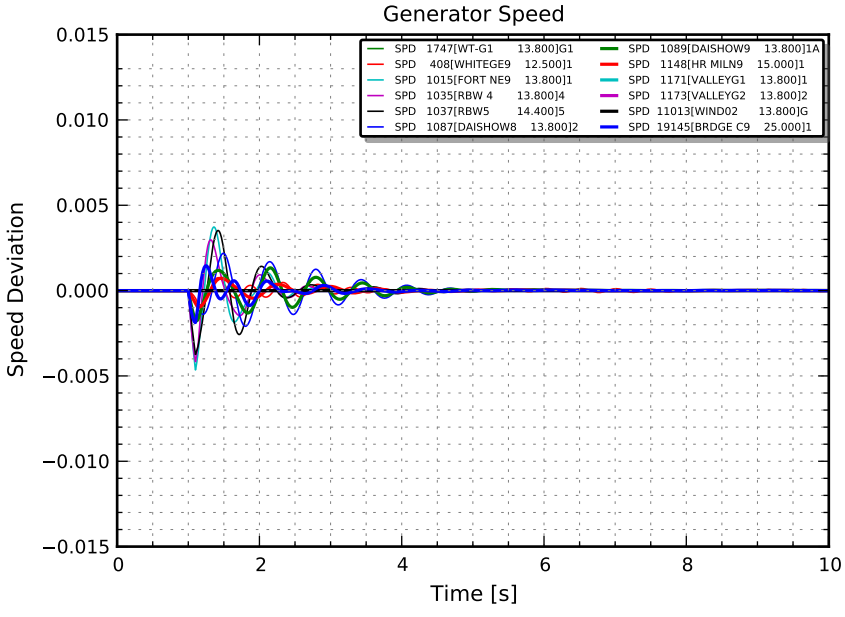


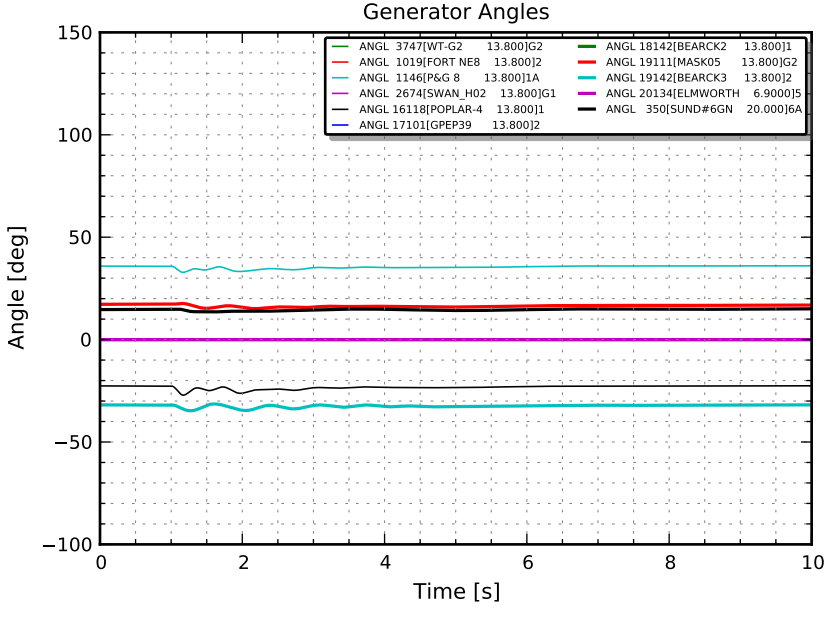
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 011 7L61 LUBICON to NIPISI_A.

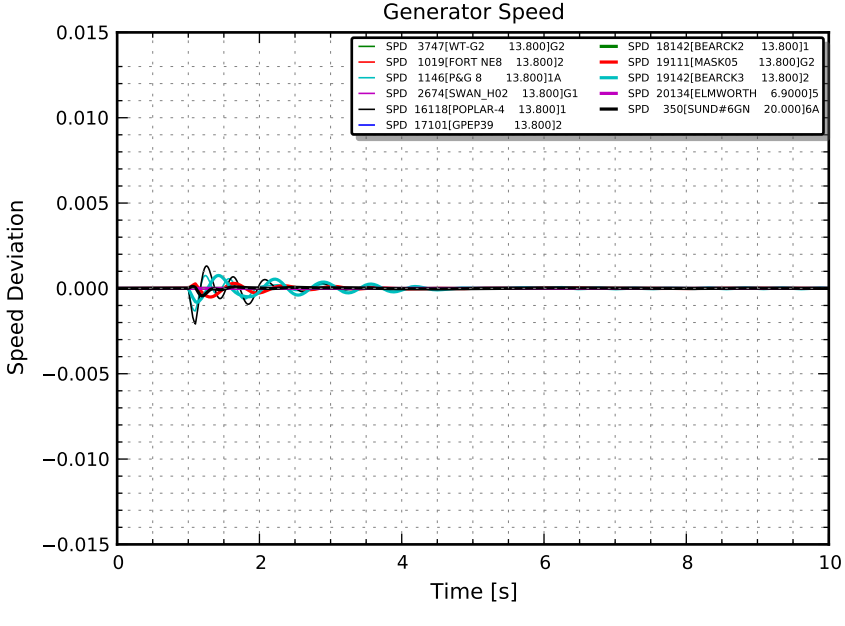
Study Area Generators

Appendix C2B
Figure: 011 (A. 2)





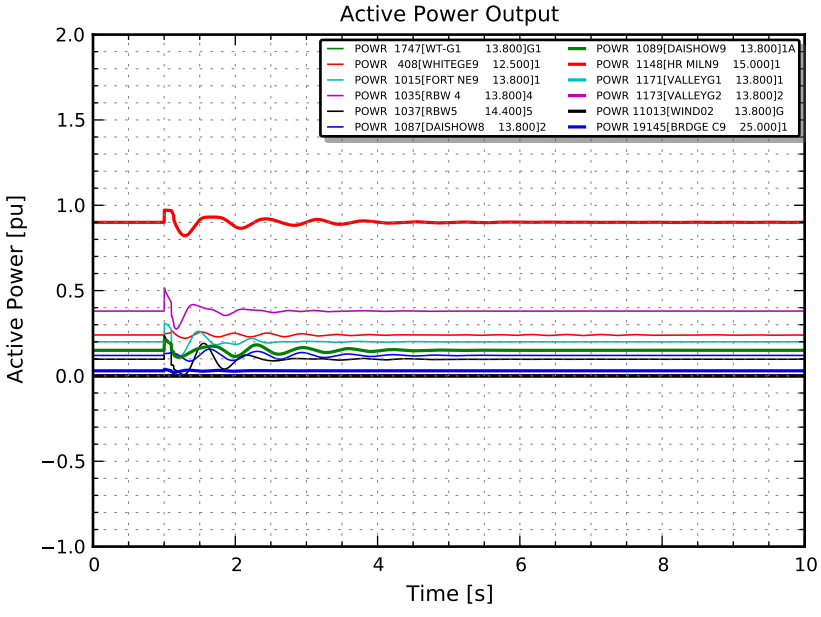


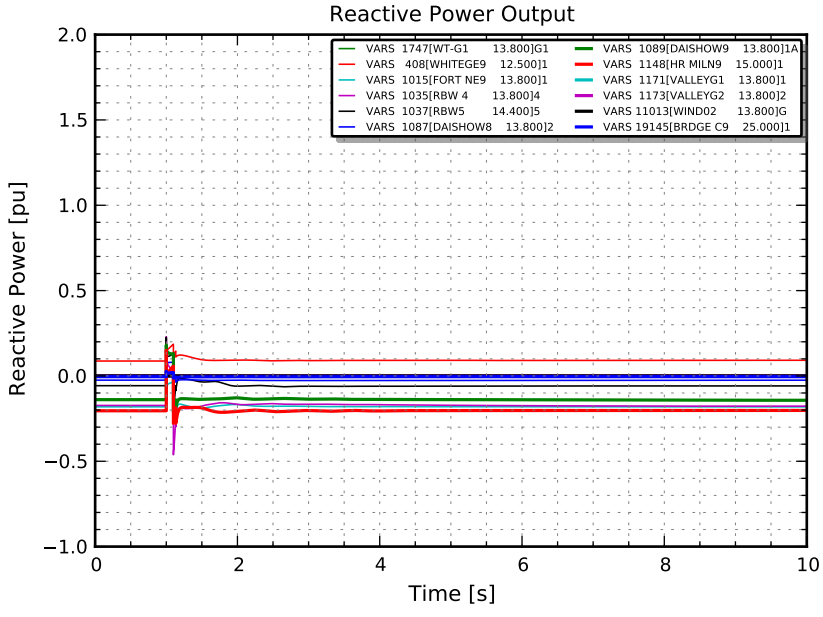


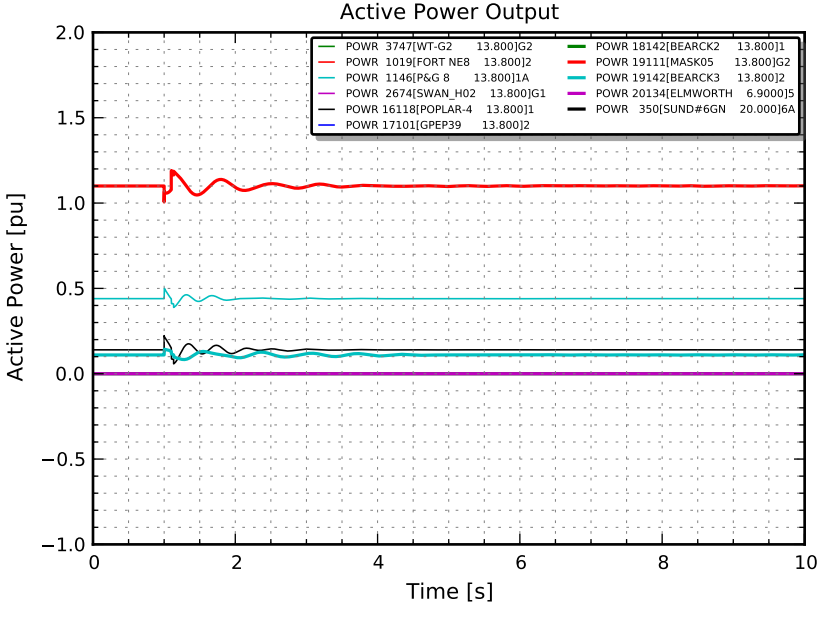
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 011 7L61 LUBICON to NIPISI_A.

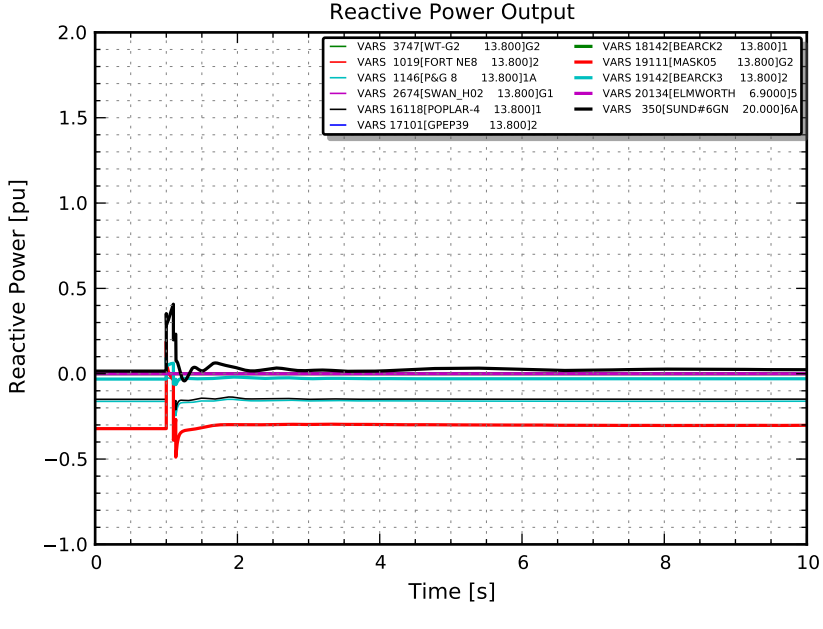
Study Area Generators

Appendix C2B
Figure: 011 (A. 3)





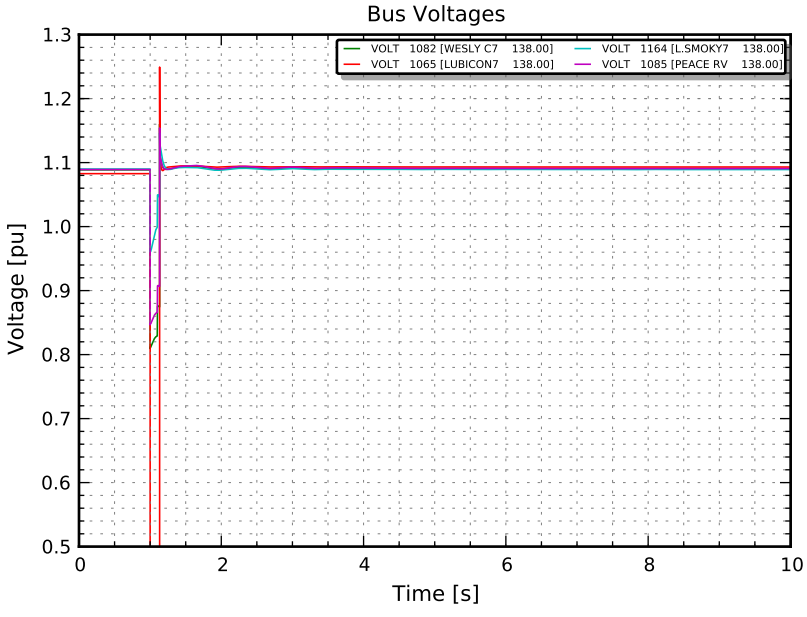


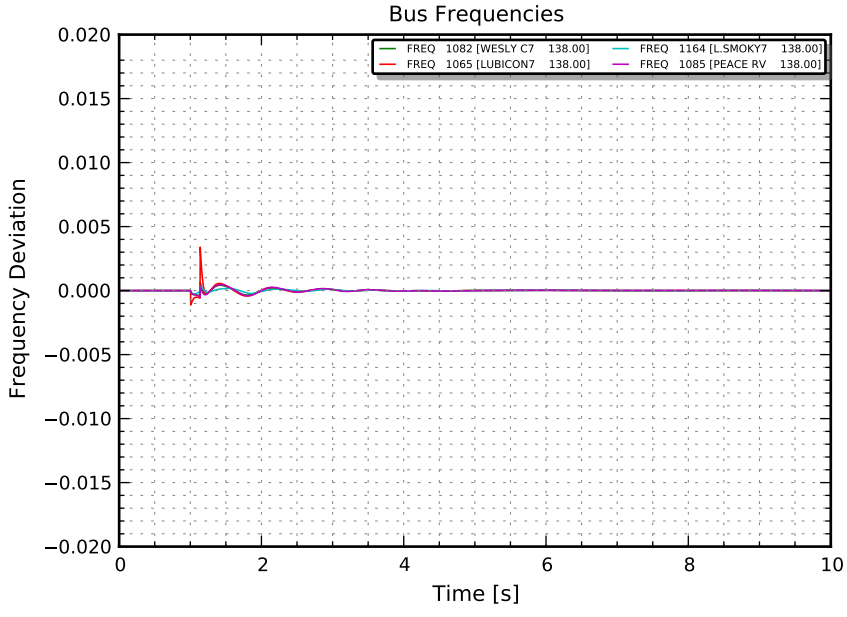


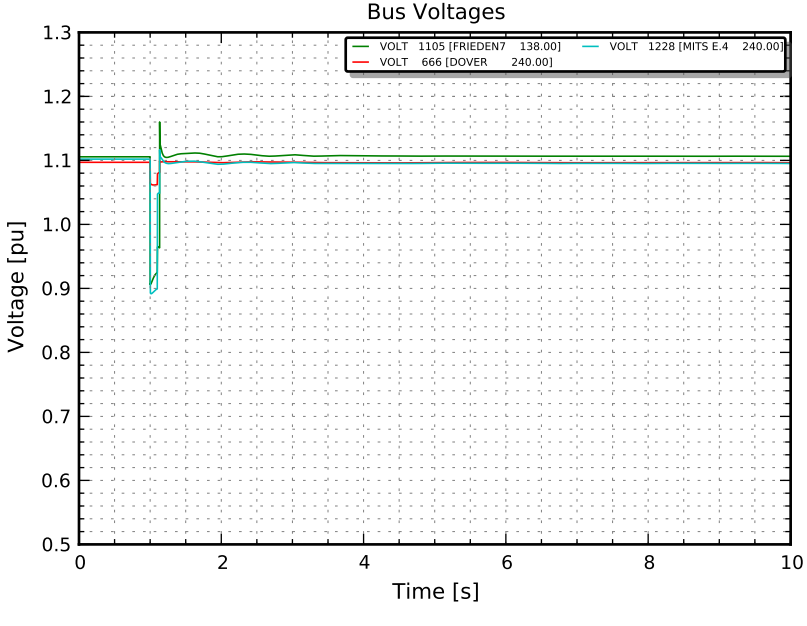
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 011 7L61 LUBICON to NIPISI_B.

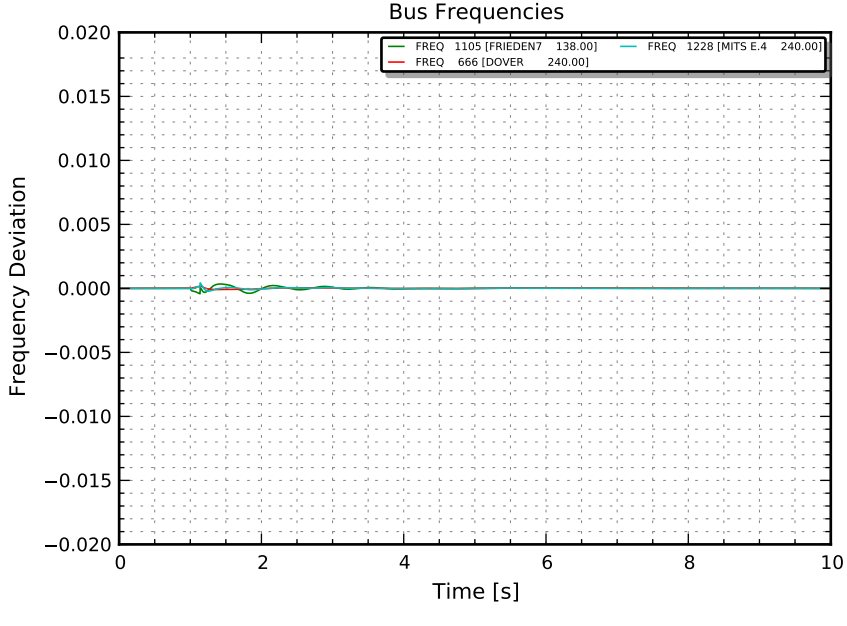
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 011 (B. 1)





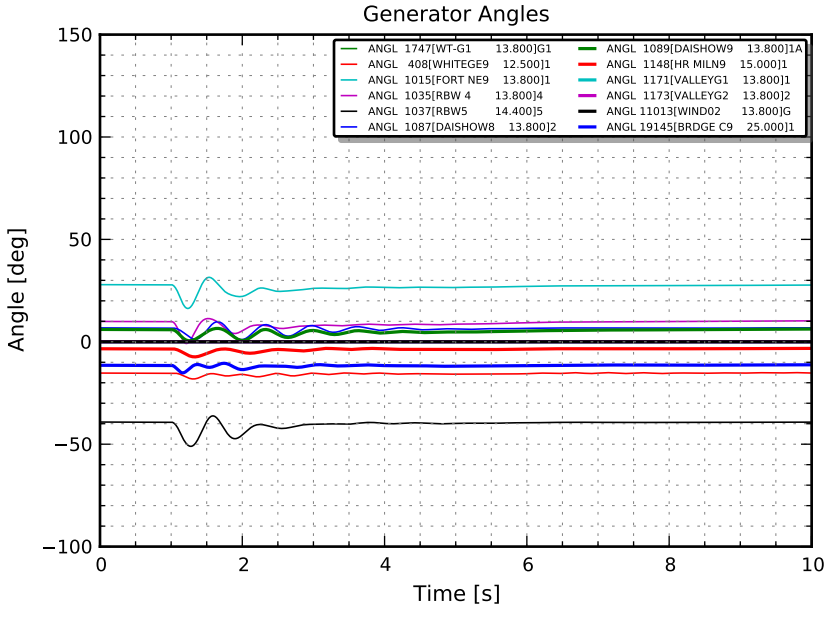


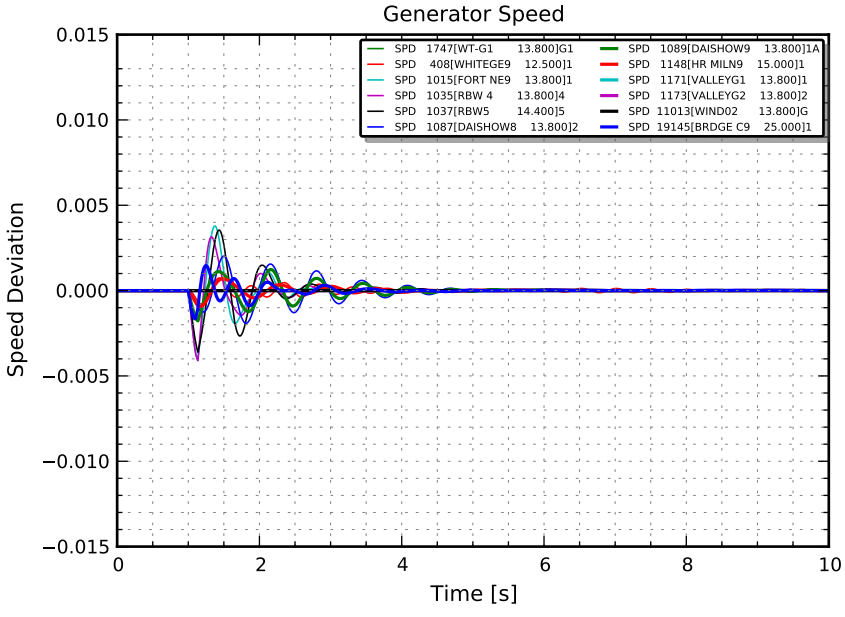


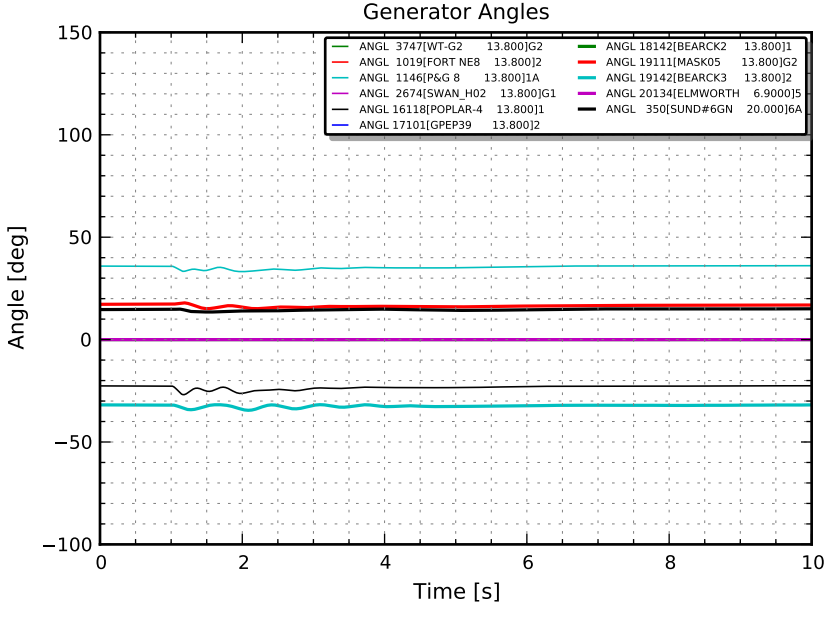
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 011 7L61 LUBICON to NIPISI_B.

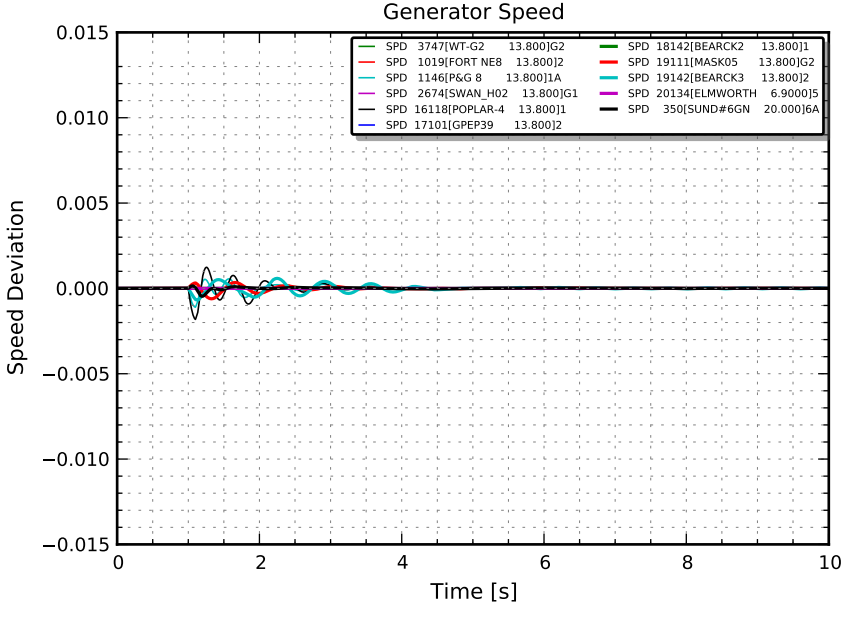
Study Area Generators

Appendix C2B
Figure: 011 (B. 2)





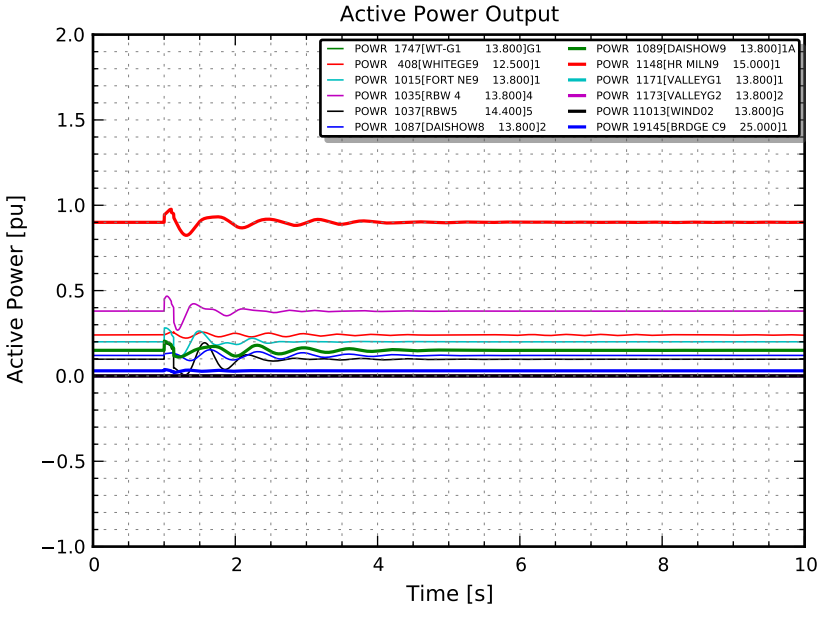


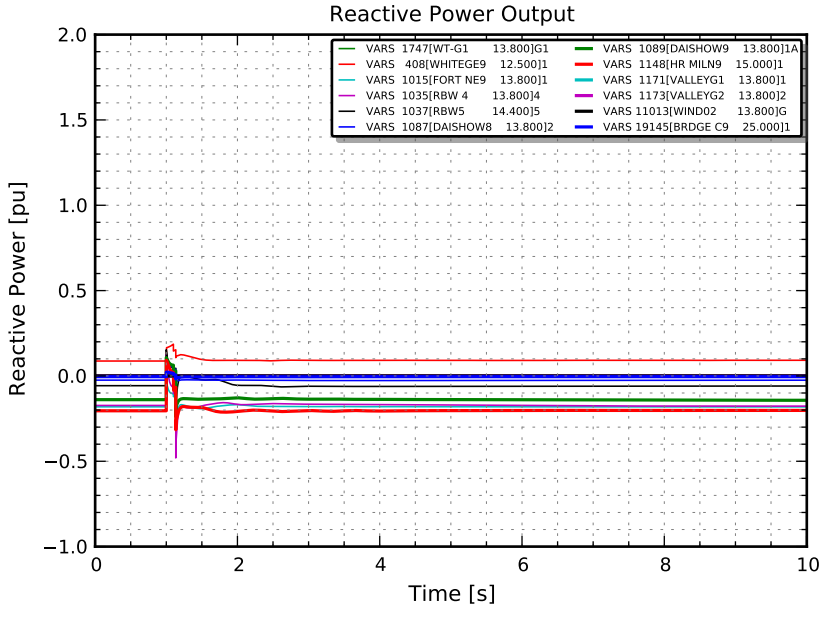


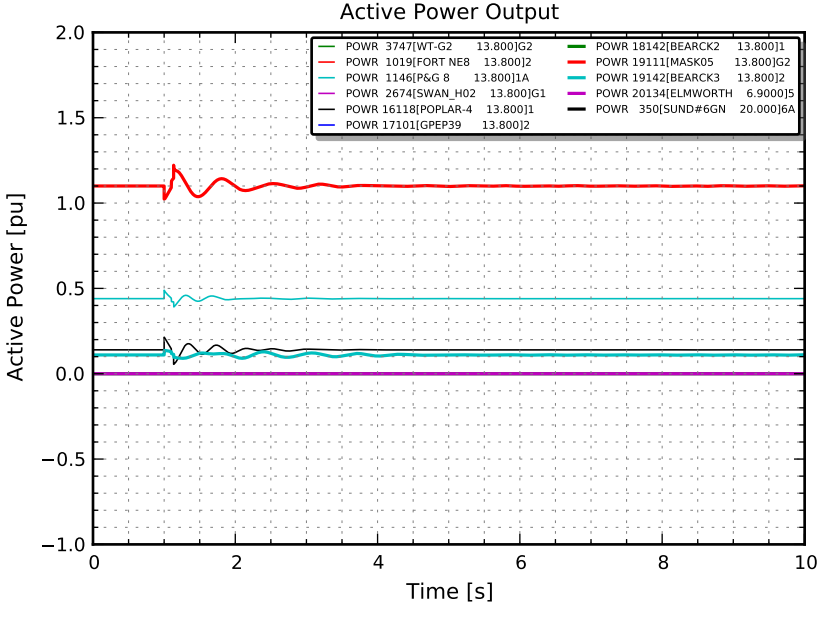
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 011 7L61 LUBICON to NIPISI_B.

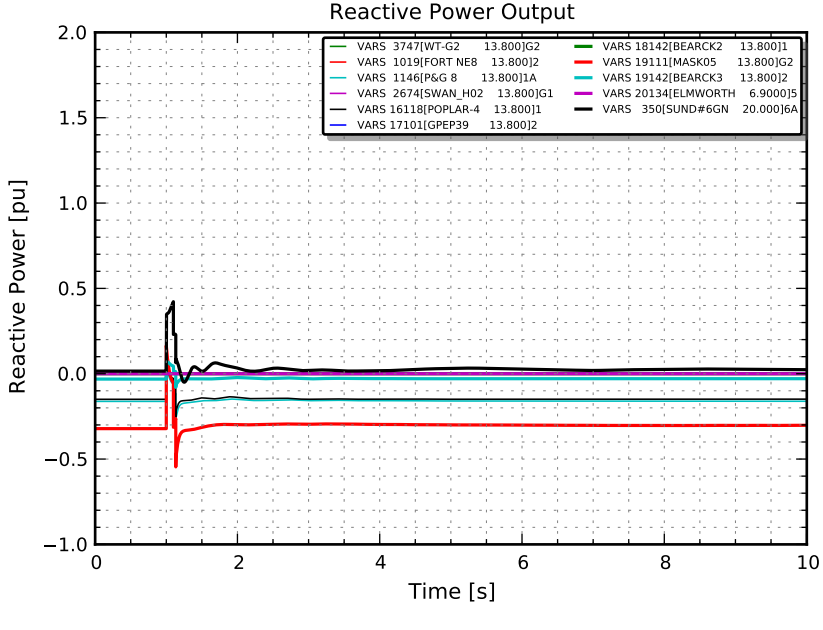
Study Area Generators

Appendix C2B
Figure: 011 (B. 3)





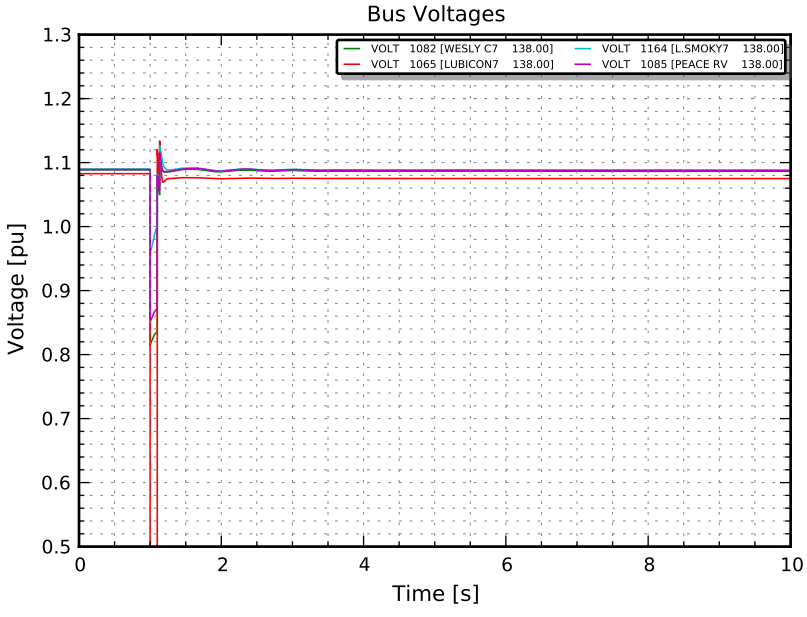


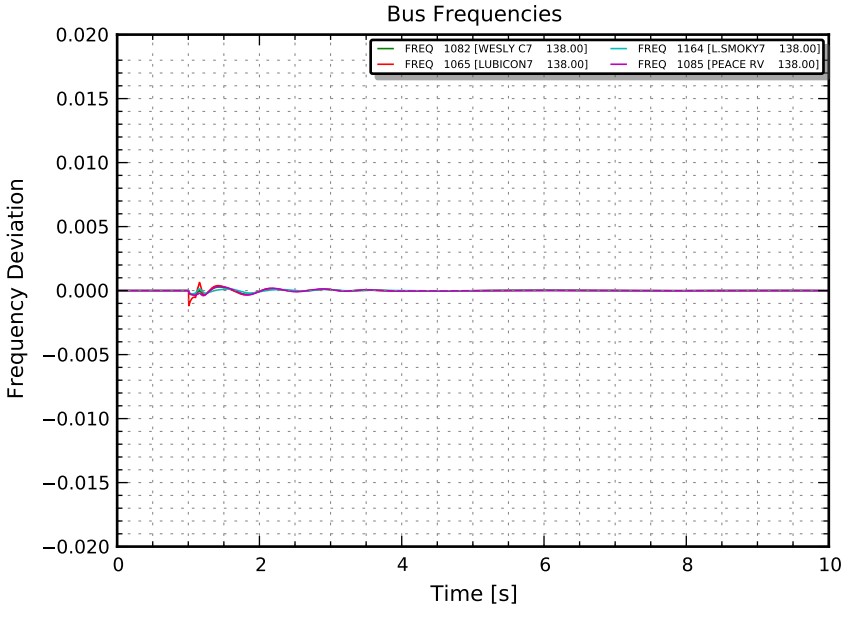


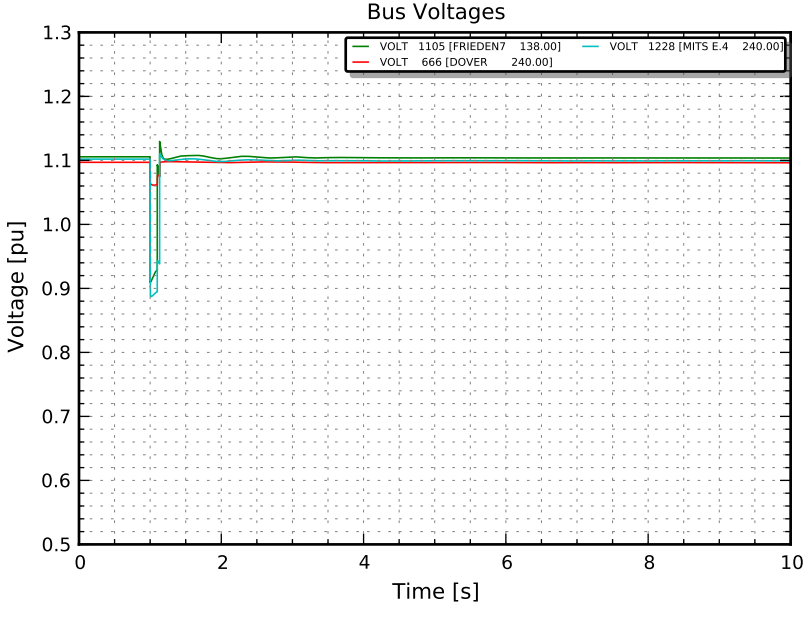
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 012 7L23 NIPISI to MITSUE_A.

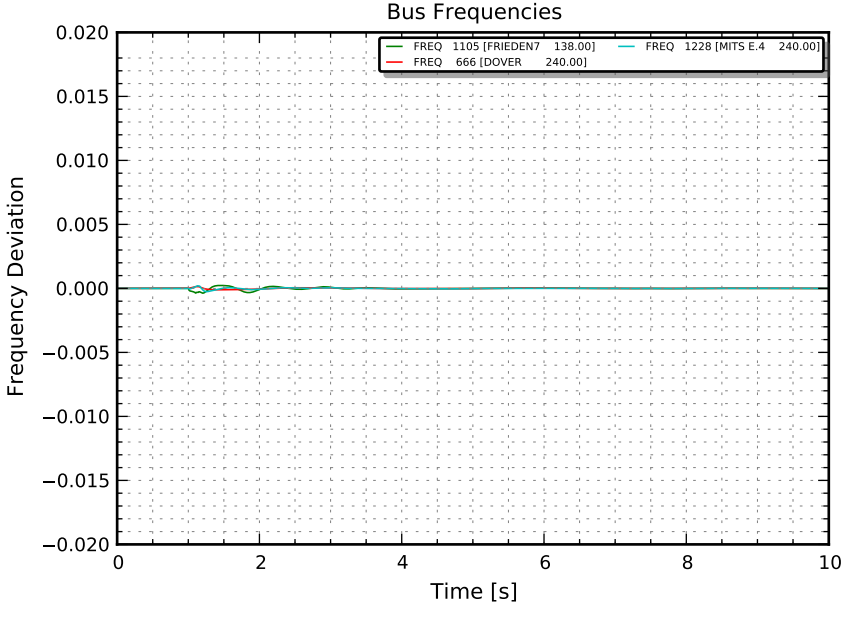
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 012 (A. 1)





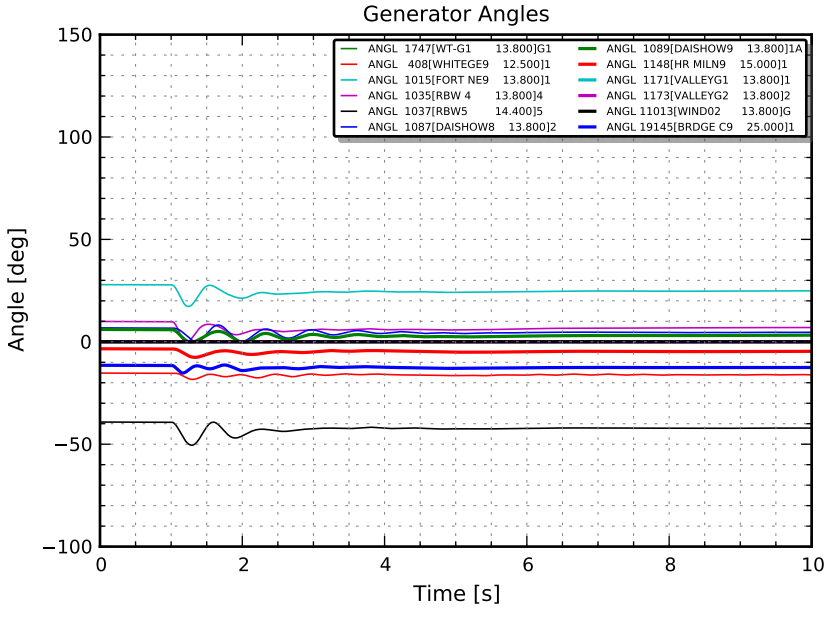


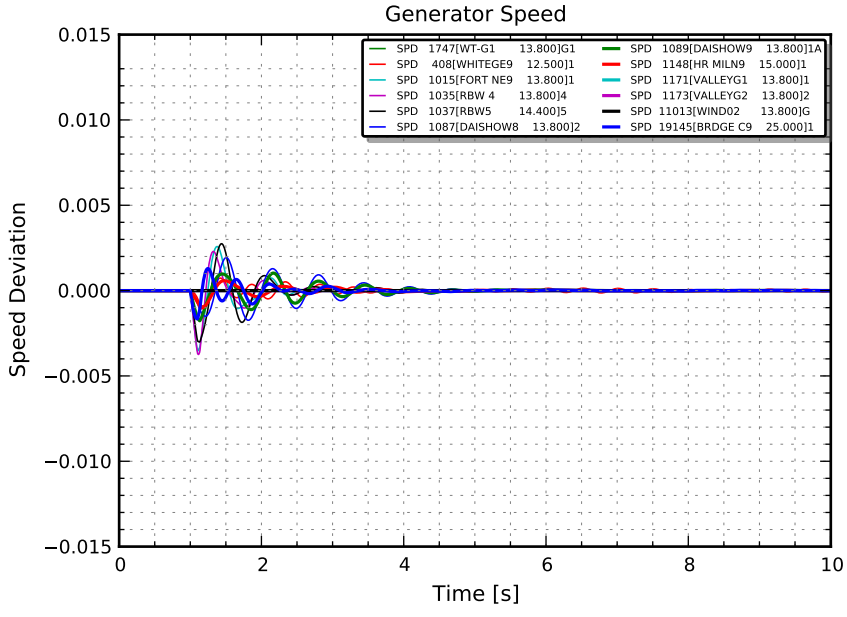


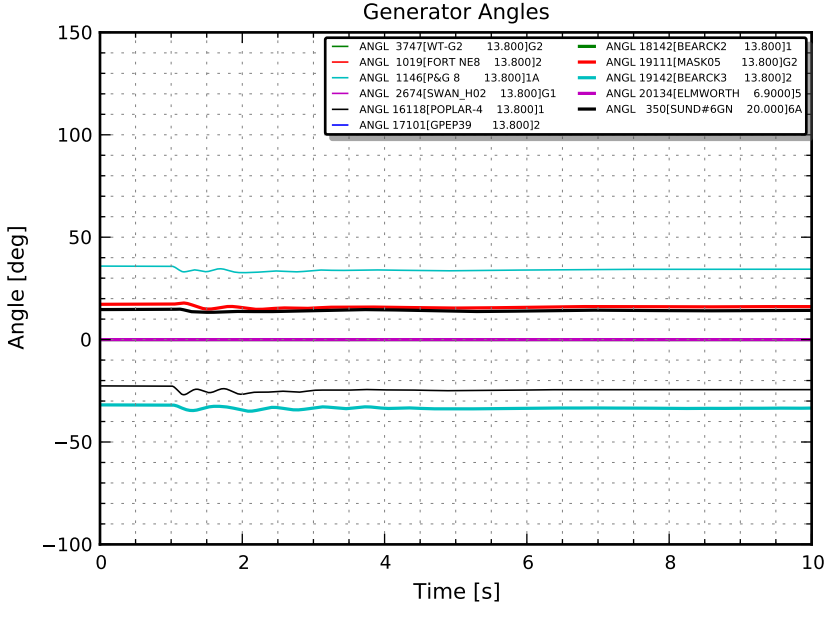
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 012 7L23 NIPISI to MITSUE_A.

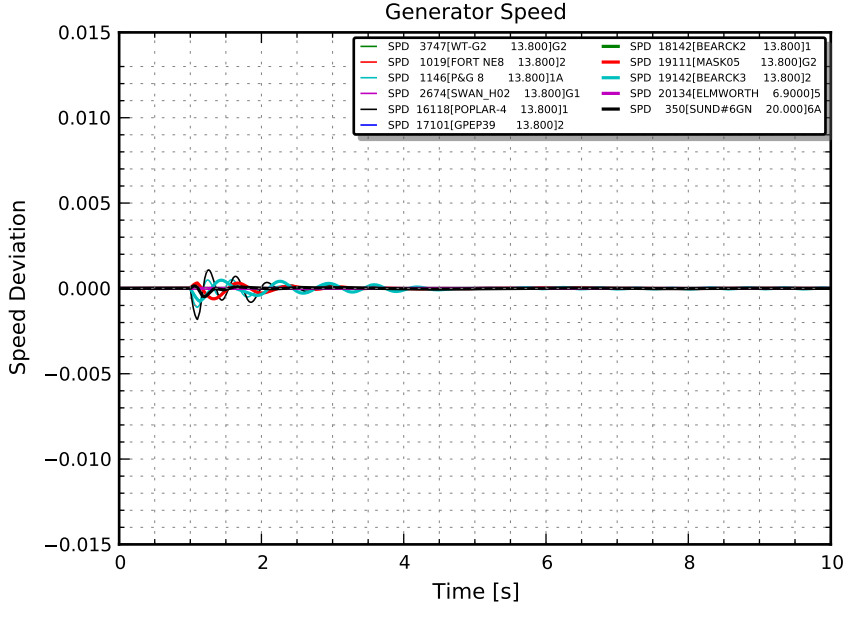
Study Area Generators

Appendix C2B
Figure: 012 (A. 2)





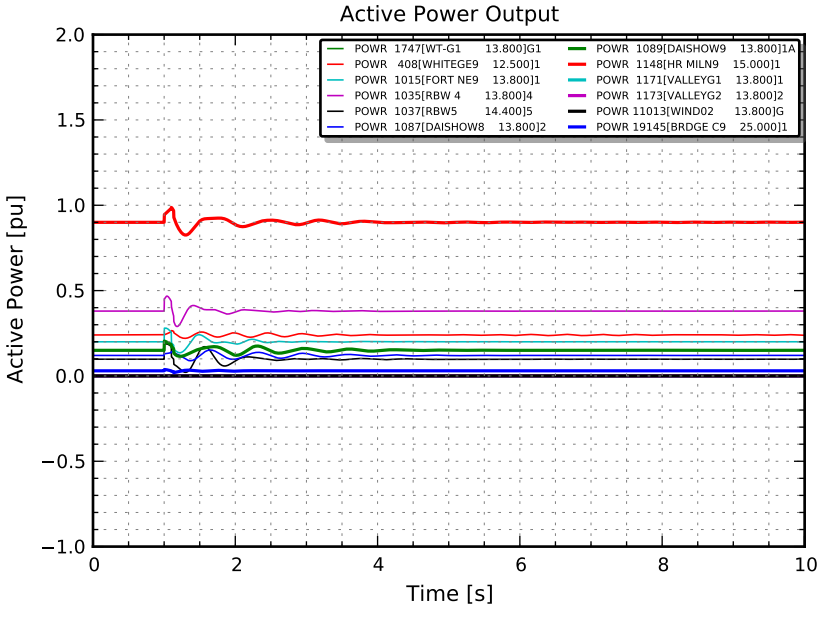


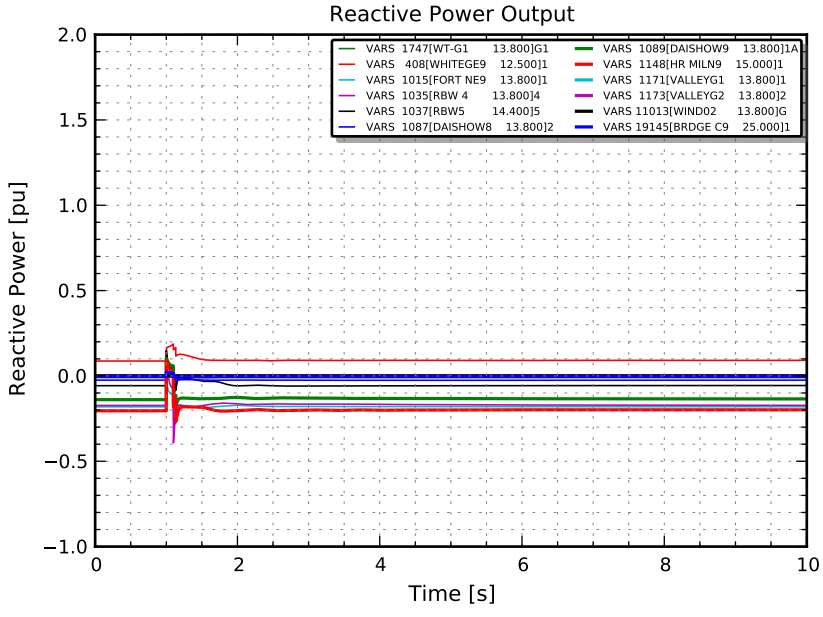


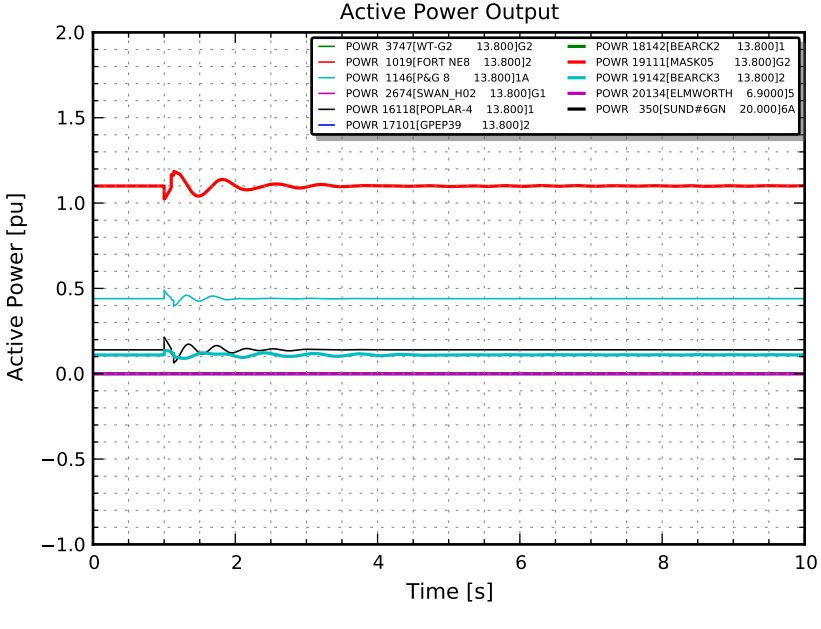
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 012 7L23 NIPISI to MITSUE_A.

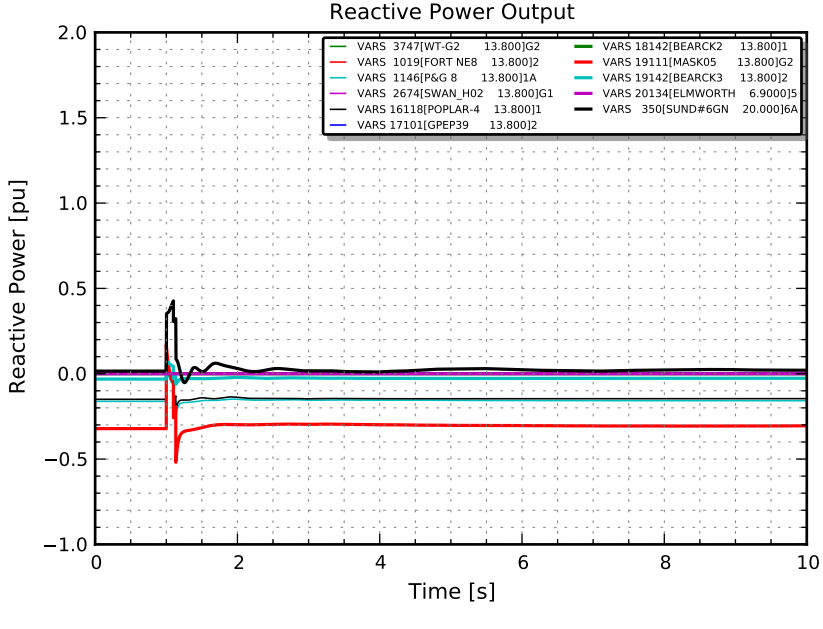
Study Area Generators

Appendix C2B
Figure: 012 (A. 3)





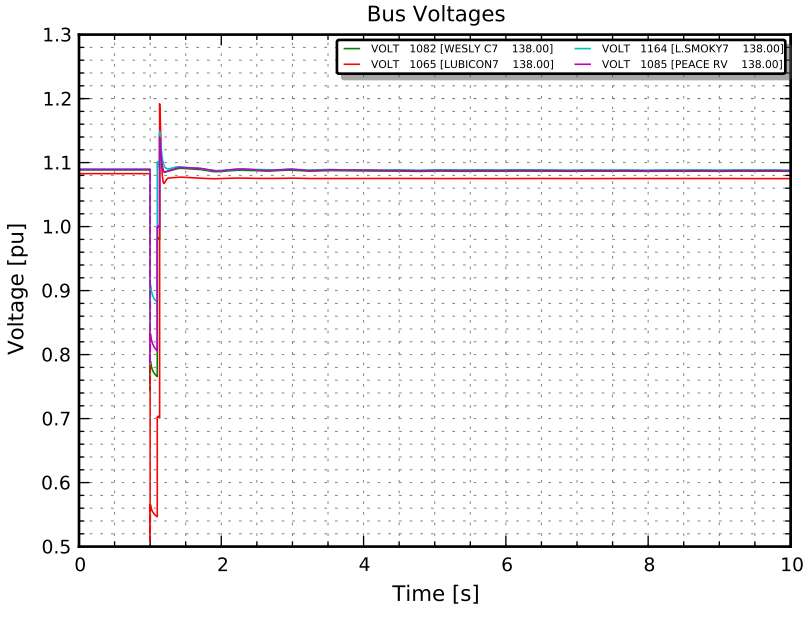


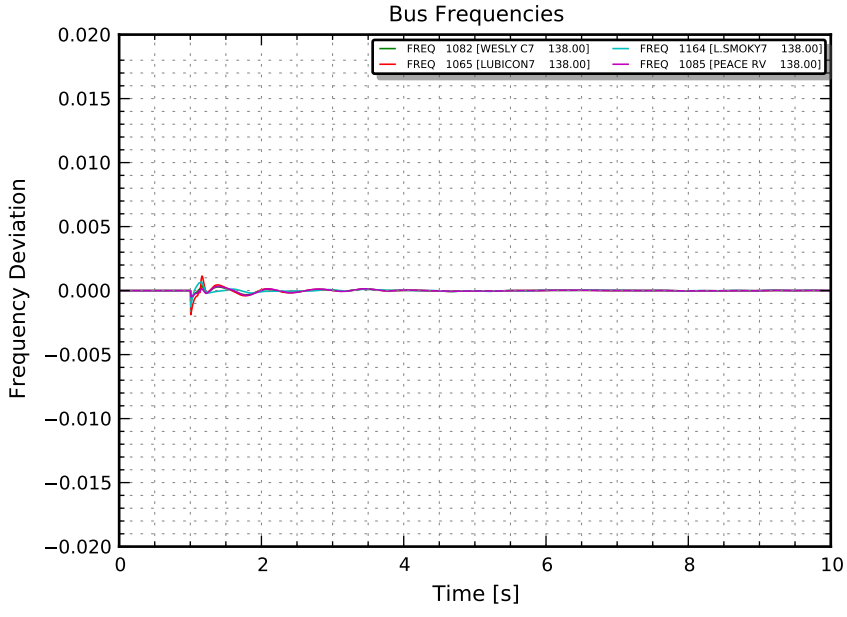


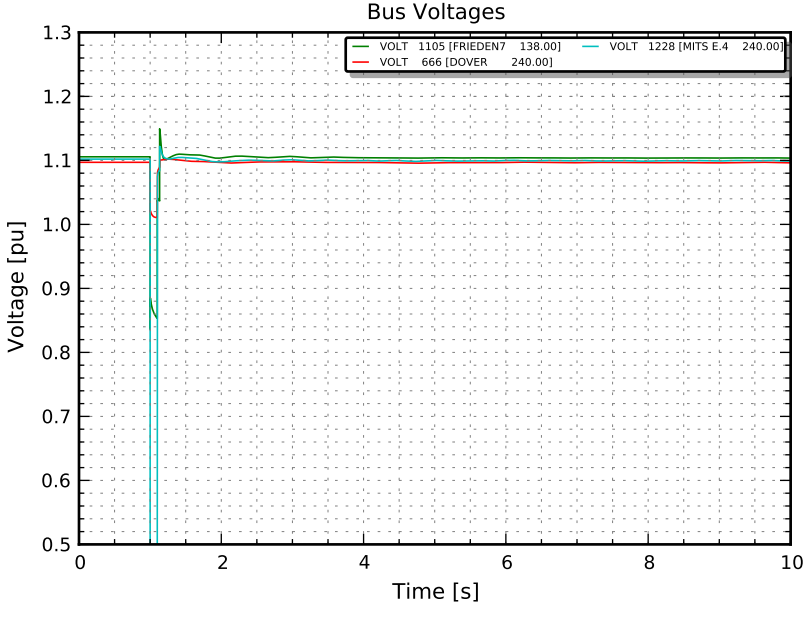
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 012 7L23 NIPISI to MITSUE_B.

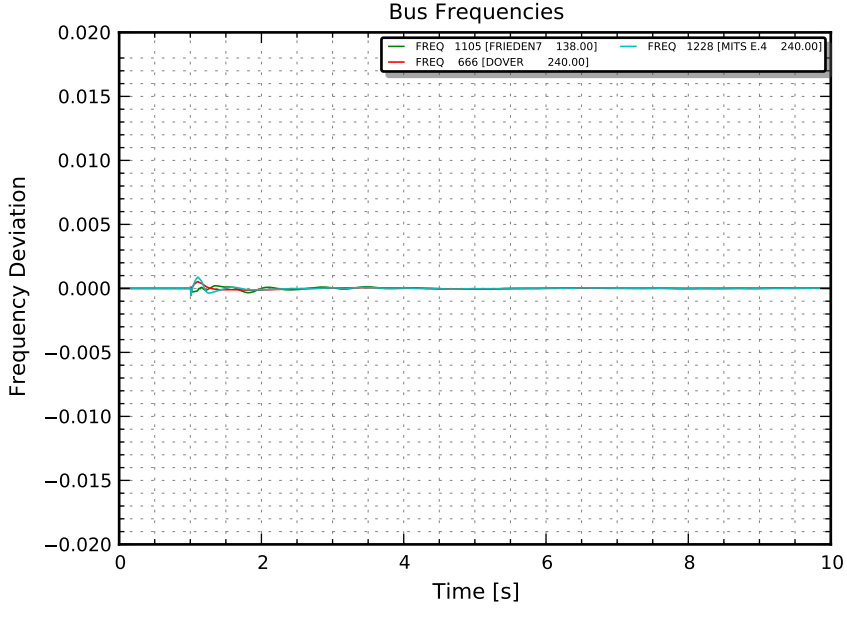
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 012 (B. 1)





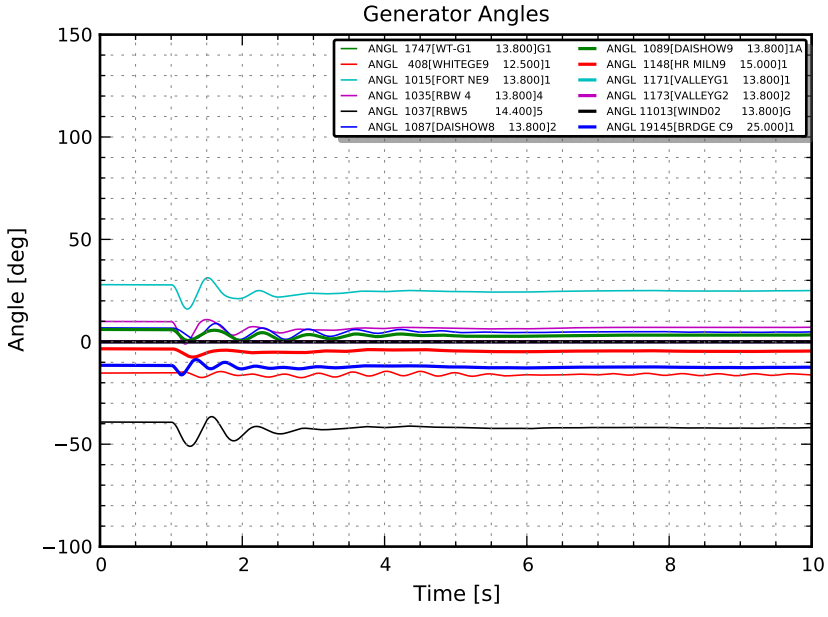


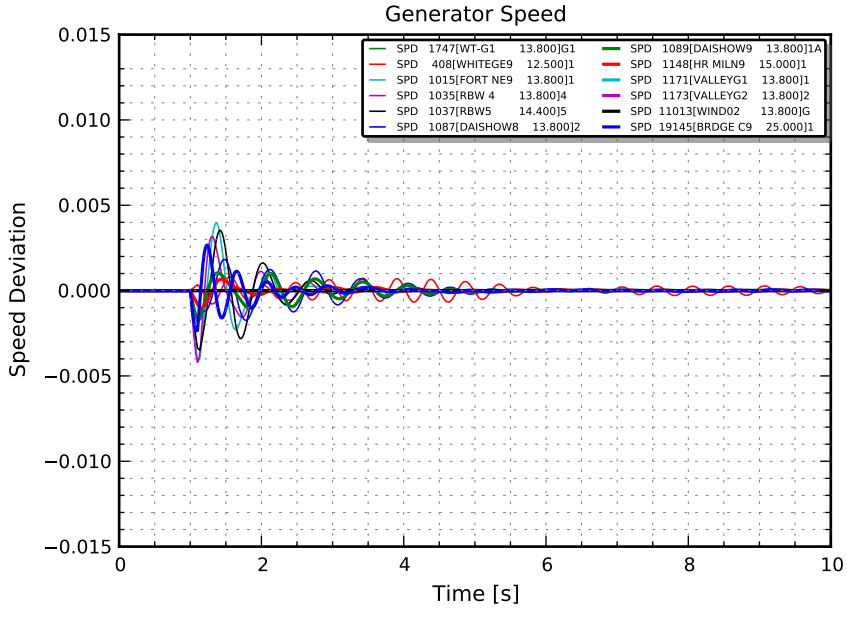


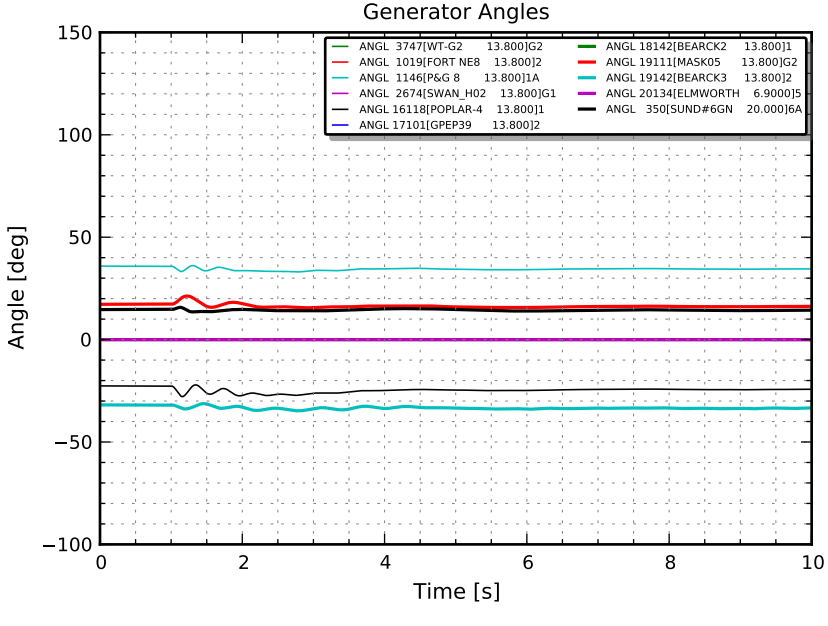
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 012 7L23 NIPISI to MITSUE_B.

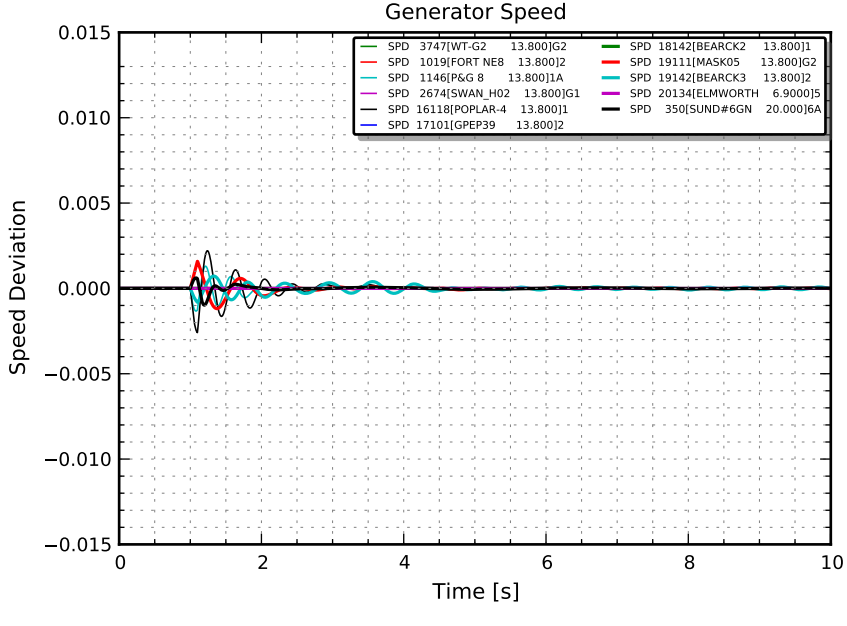
Study Area Generators

Appendix C2B
Figure: 012 (B. 2)





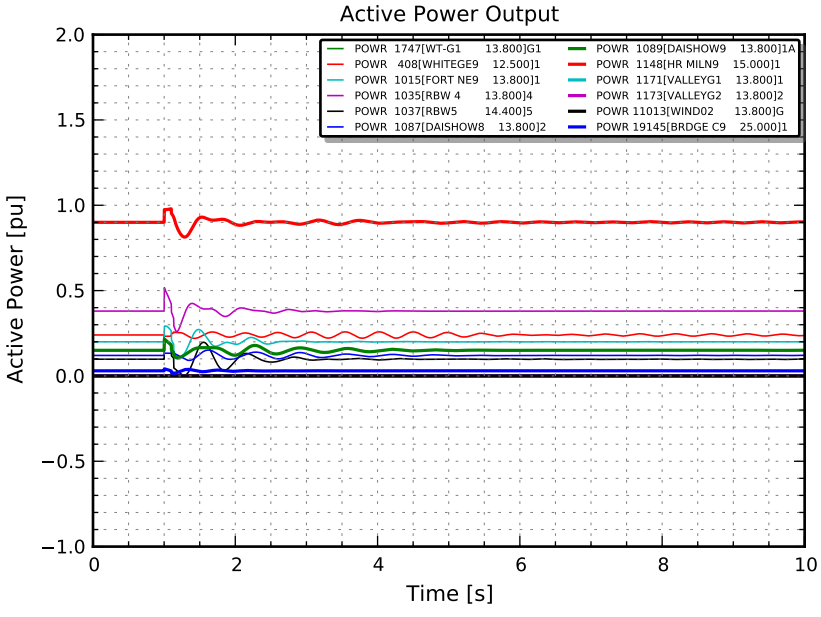


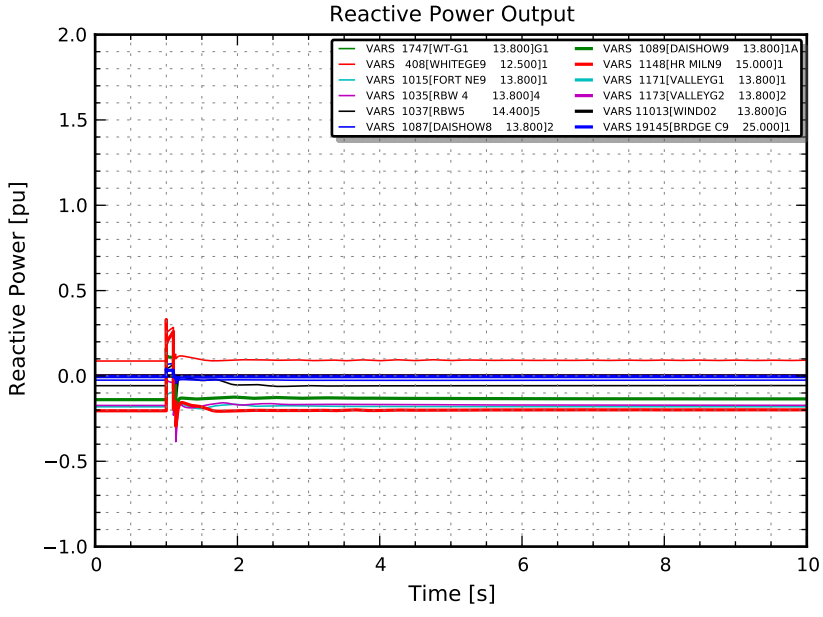


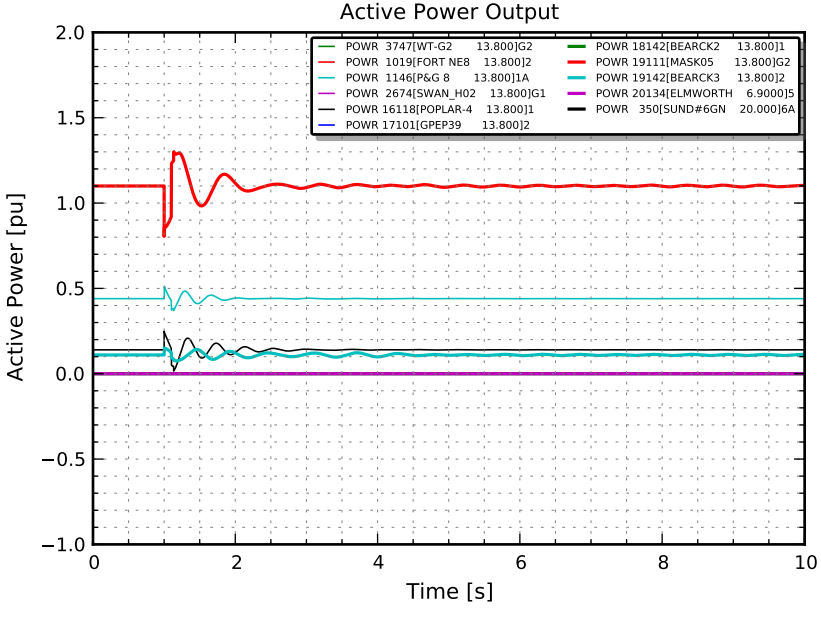
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 012 7L23 NIPISI to MITSUE_B.

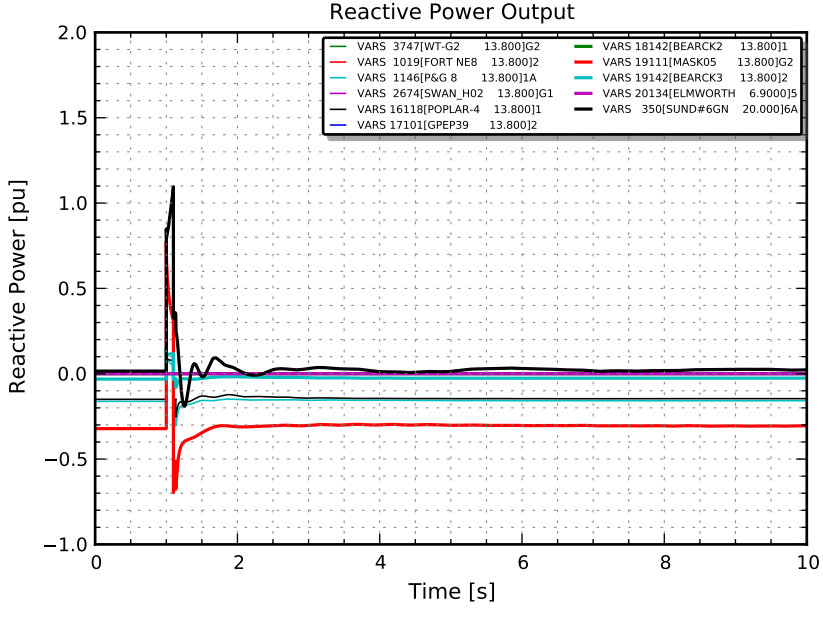
Study Area Generators

Appendix C2B
Figure: 012 (B. 3)





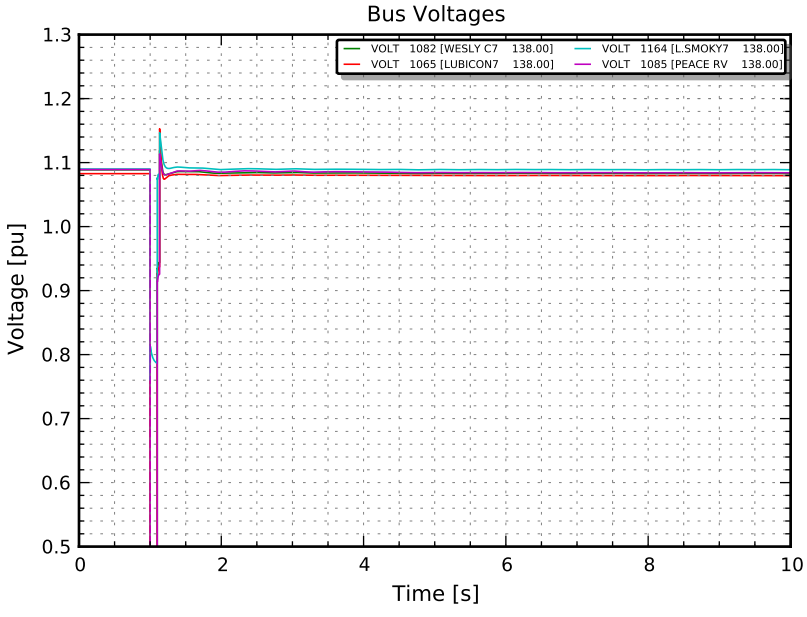


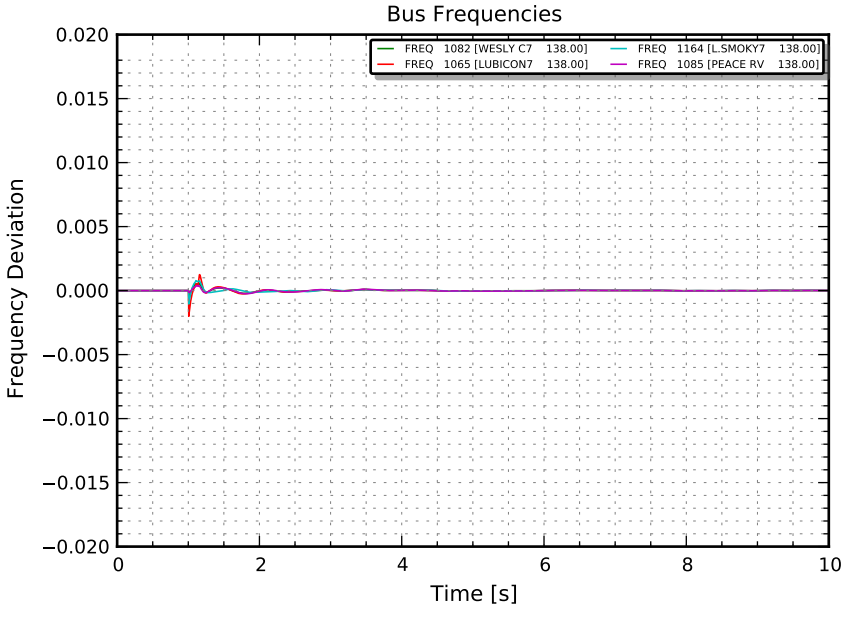


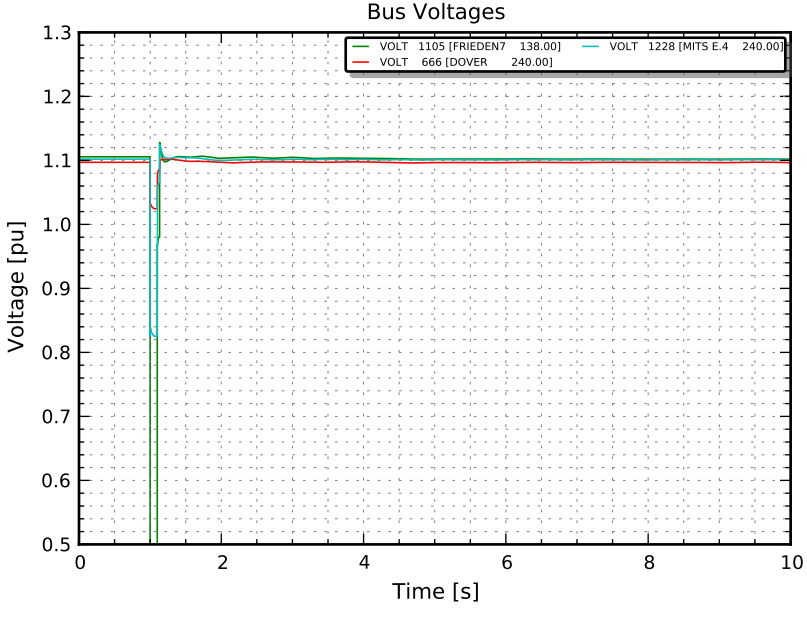
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 013 7L131 WESLEYCREEK to Meikle_A.

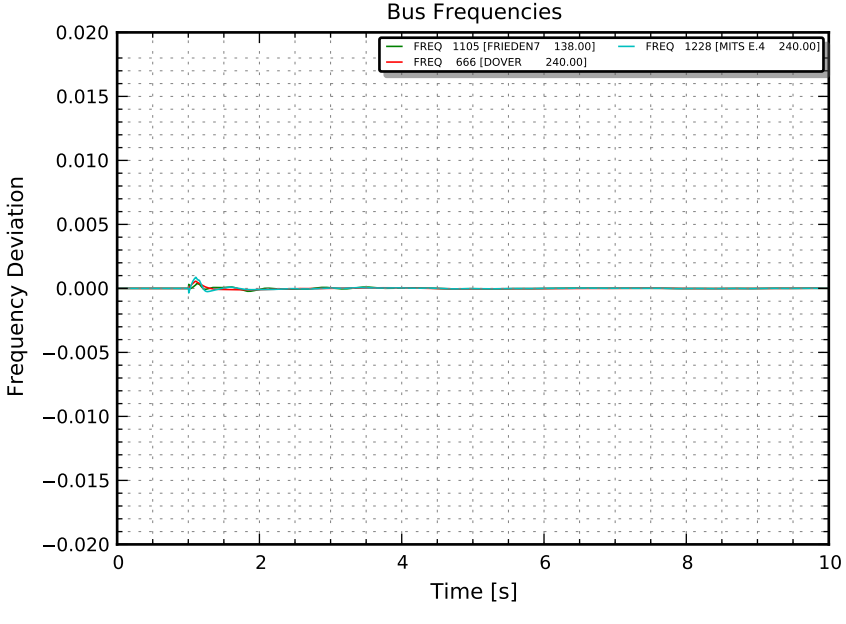
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 013 (A. 1)





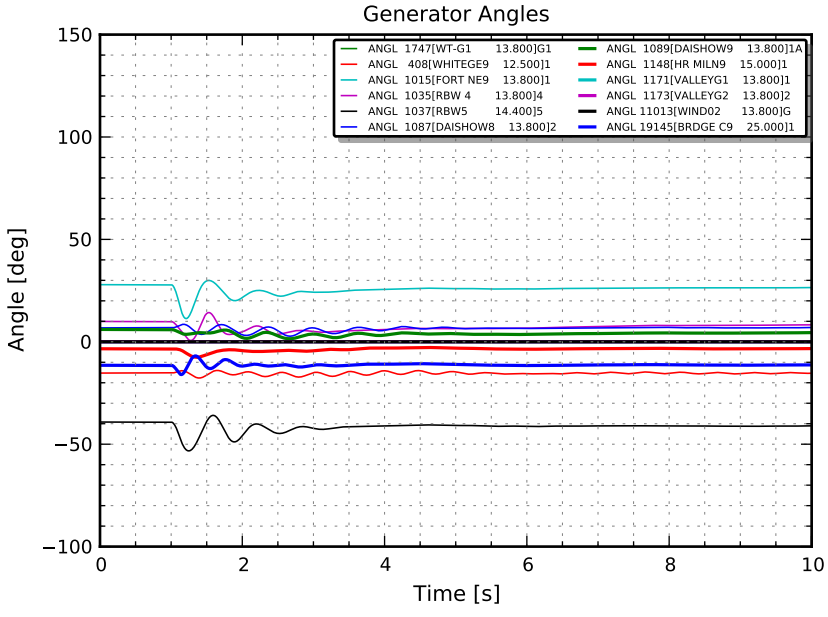


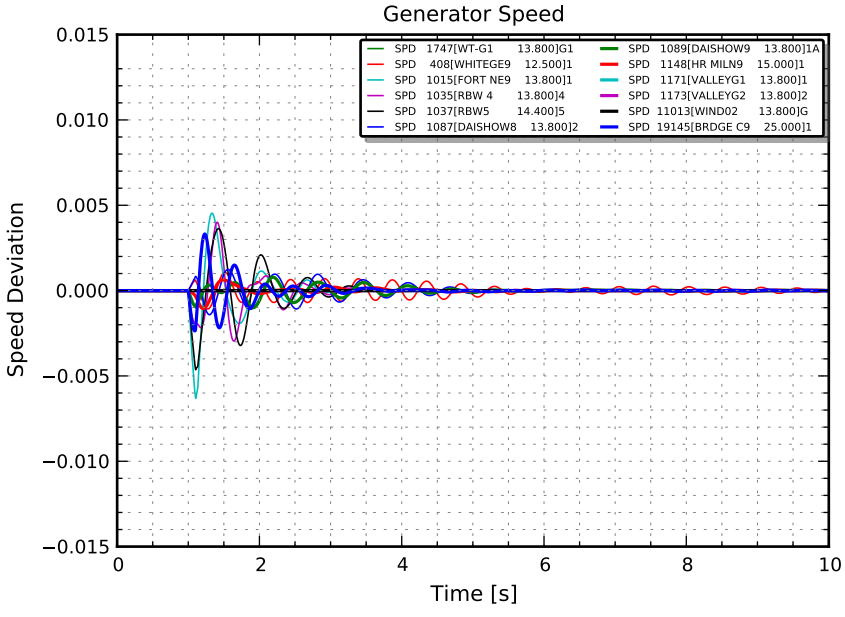


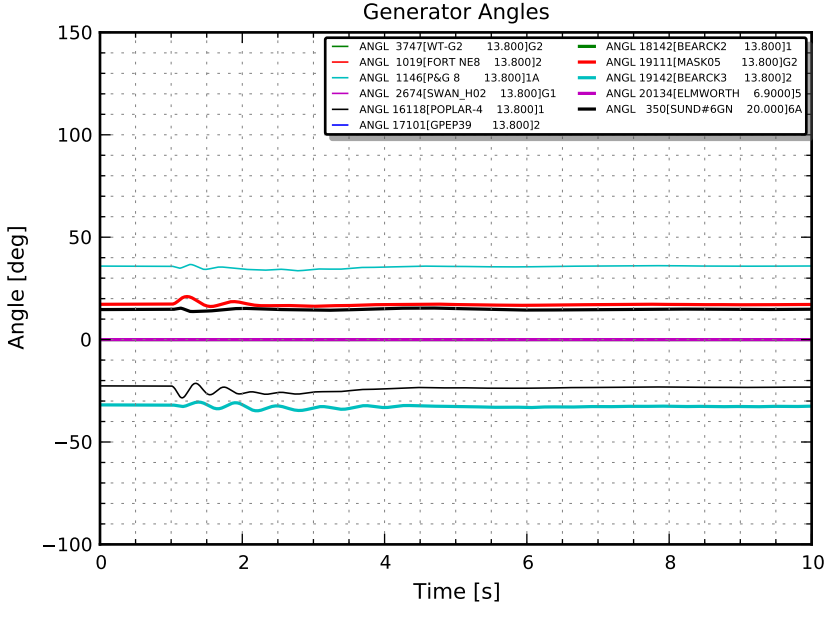
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 013 7L131 WESLEYCREEK to Meikle_A.

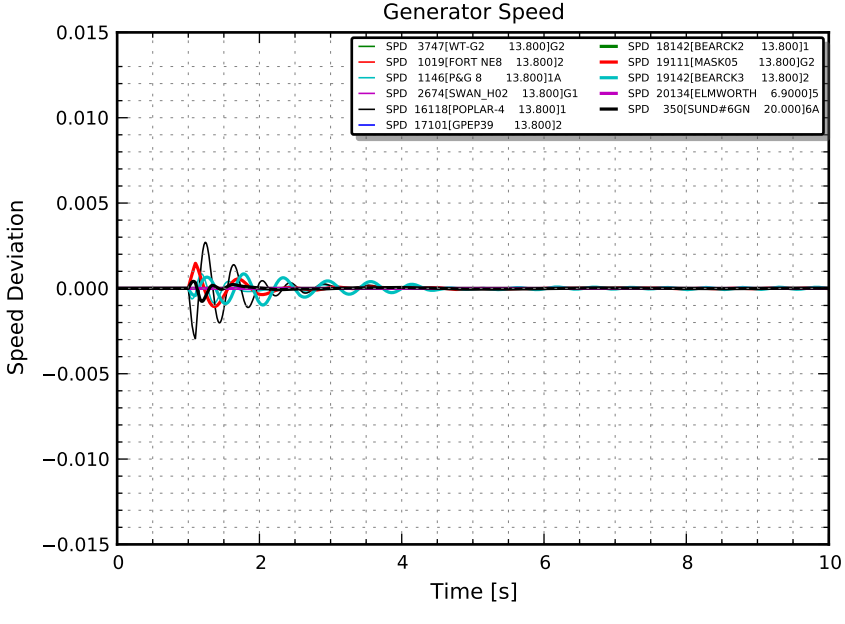
Study Area Generators

Appendix C2B
Figure: 013 (A. 2)





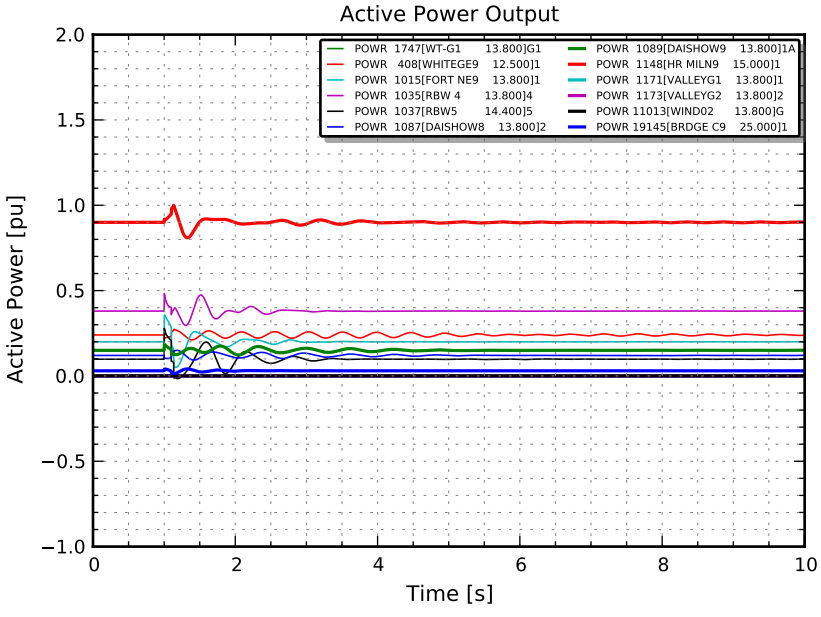


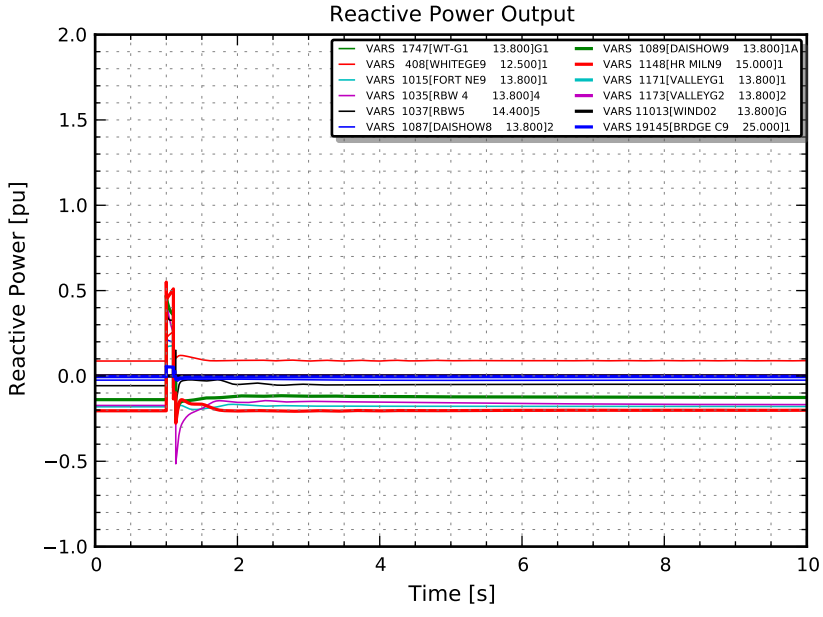


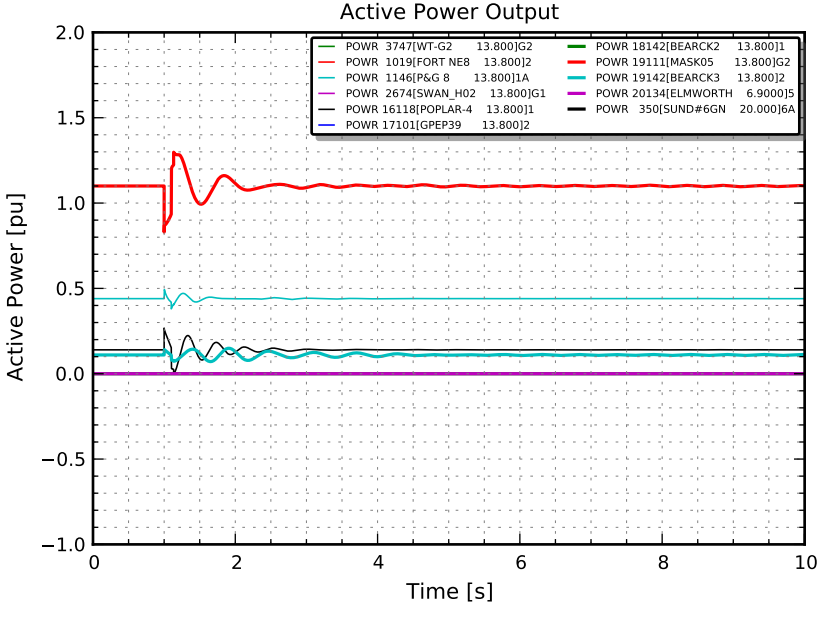
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 013 7L131 WESLEYCREEK to Meikle_A.

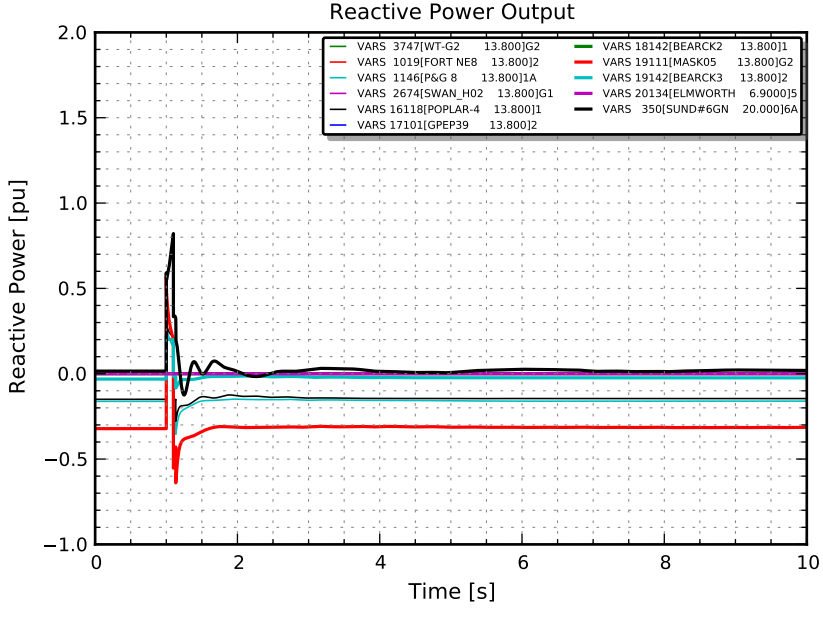
Study Area Generators

Appendix C2B
Figure: 013 (A. 3)





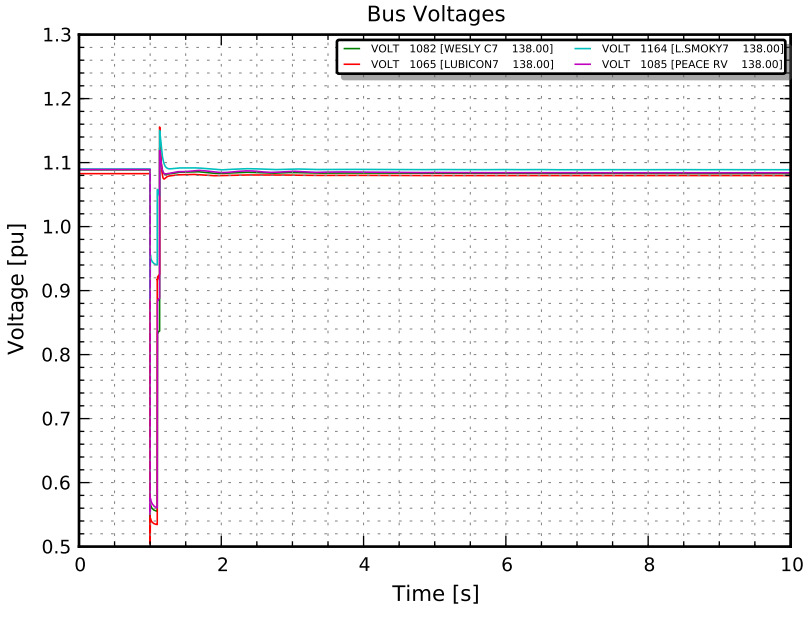


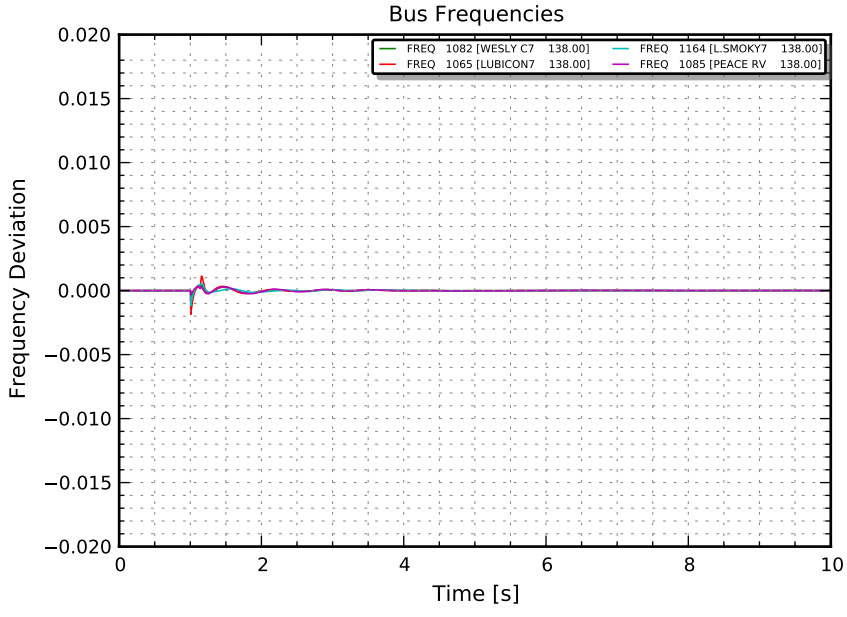


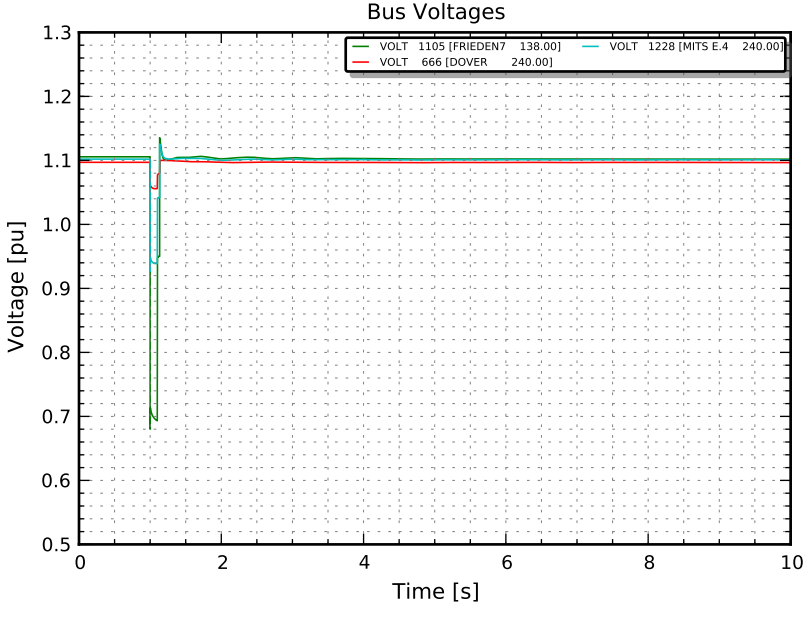
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 013 7L131 WESLEYCREEK to Meikle_B.

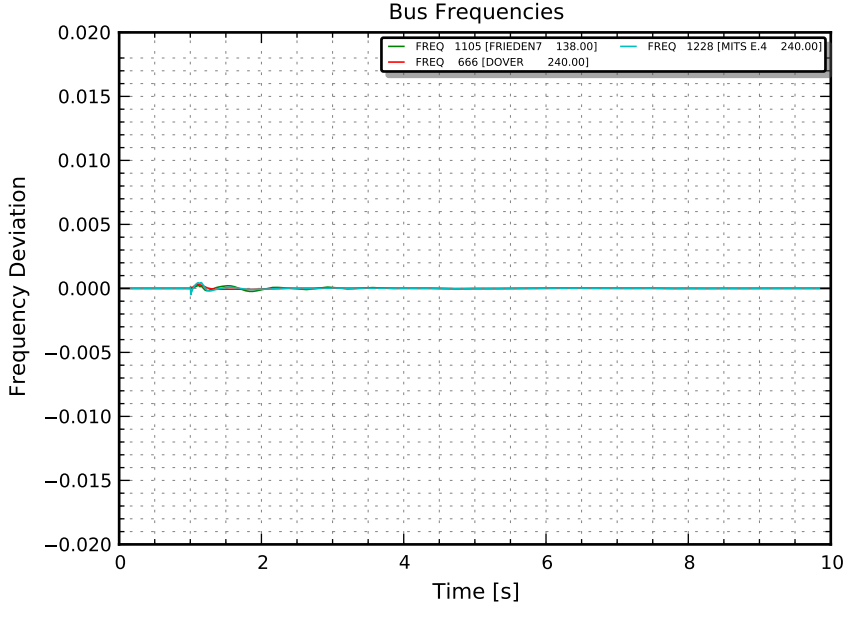
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 013 (B. 1)





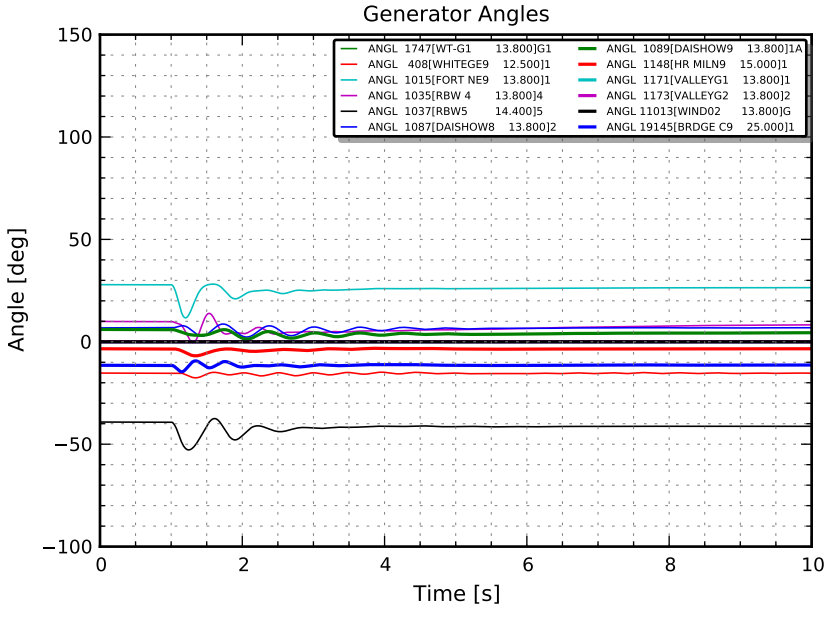


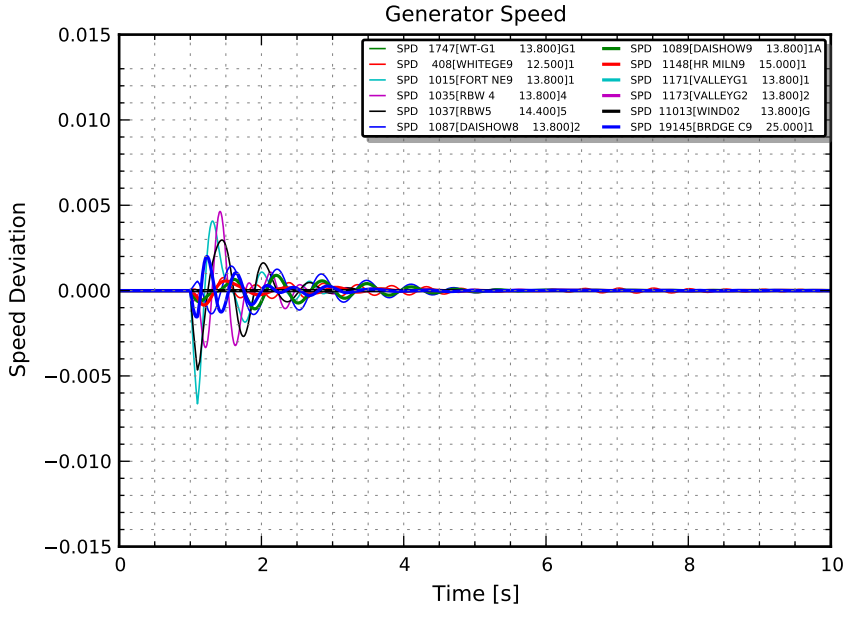


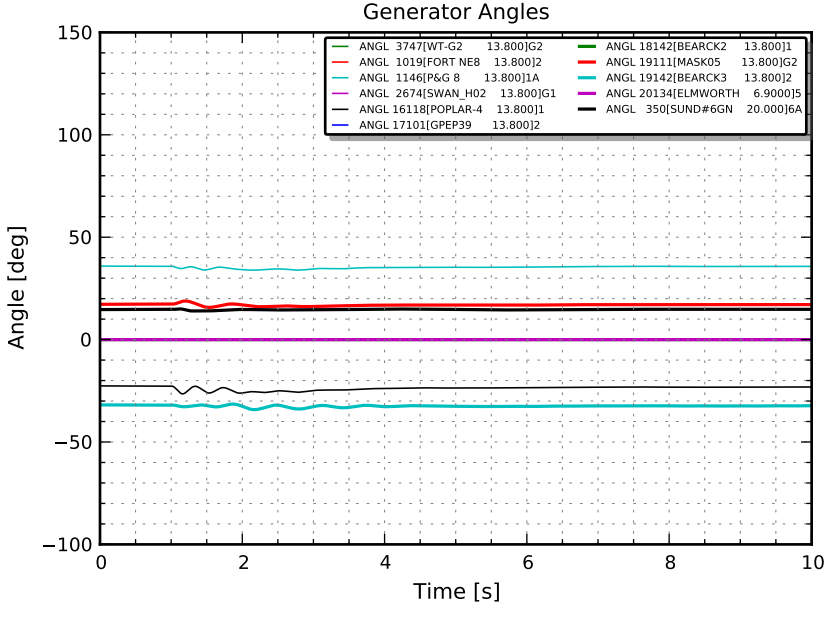
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 013 7L131 WESLEYCREEK to Meikle_B.

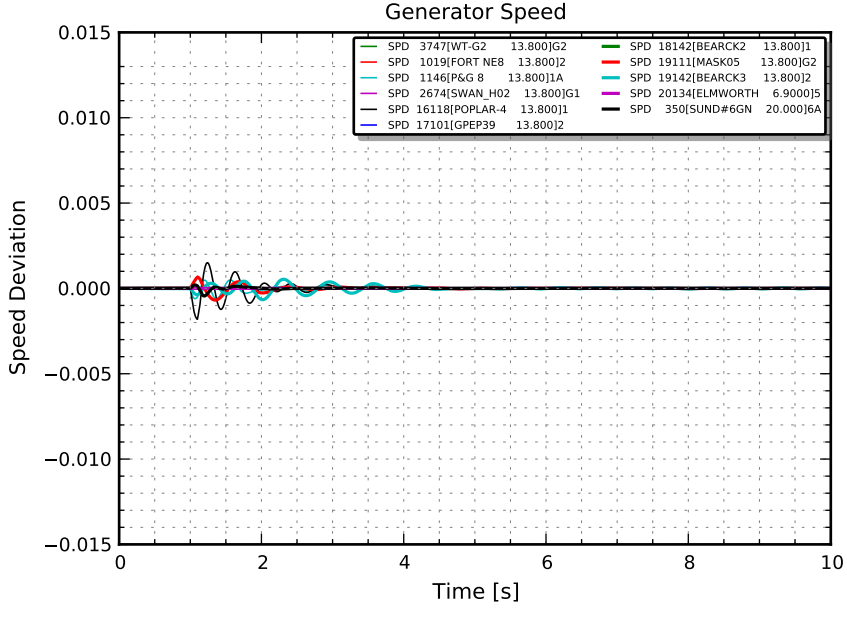
Study Area Generators

Appendix C2B
Figure: 013 (B. 2)





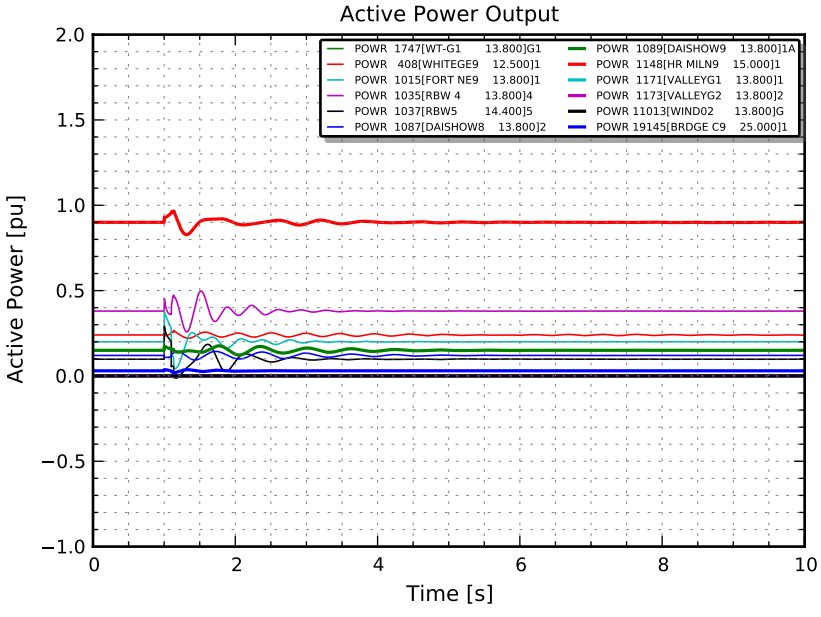


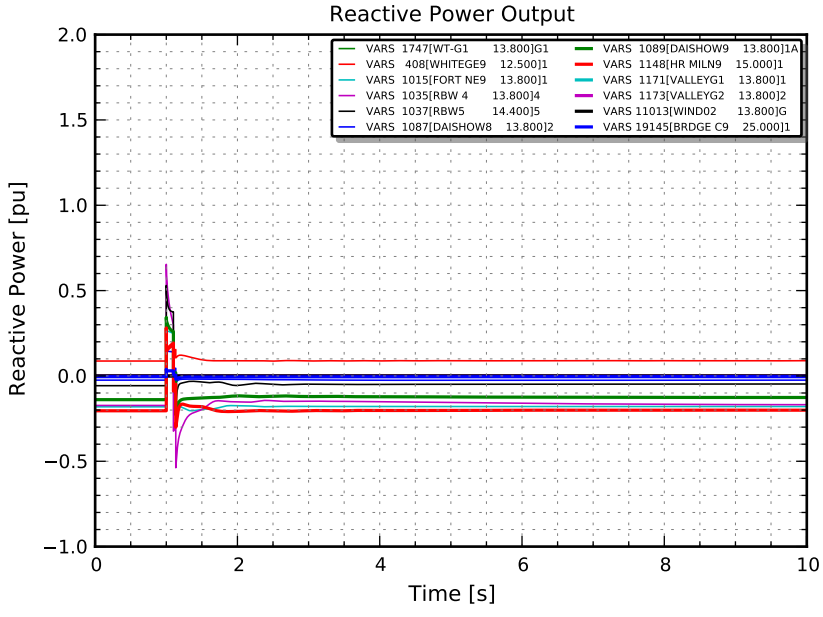


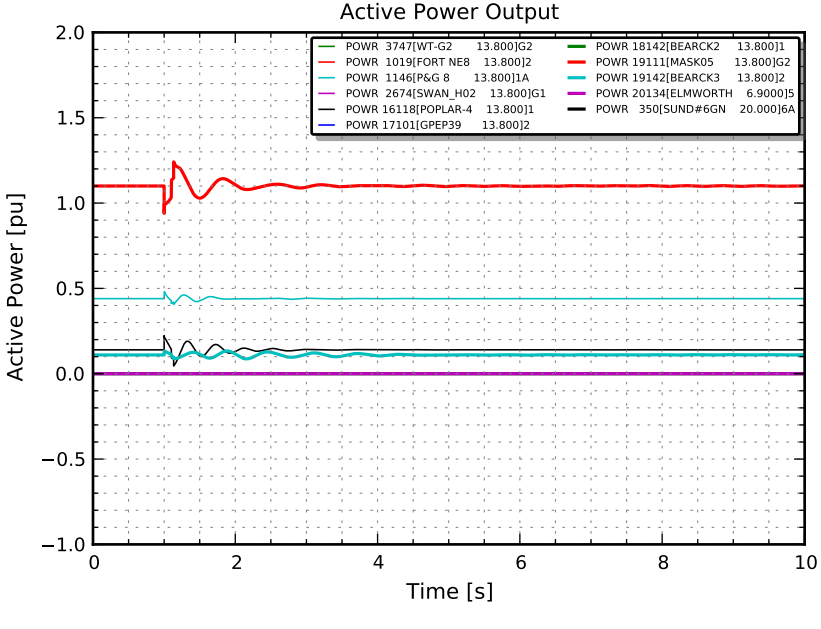
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 013 7L131 WESLEYCREEK to Meikle_B.

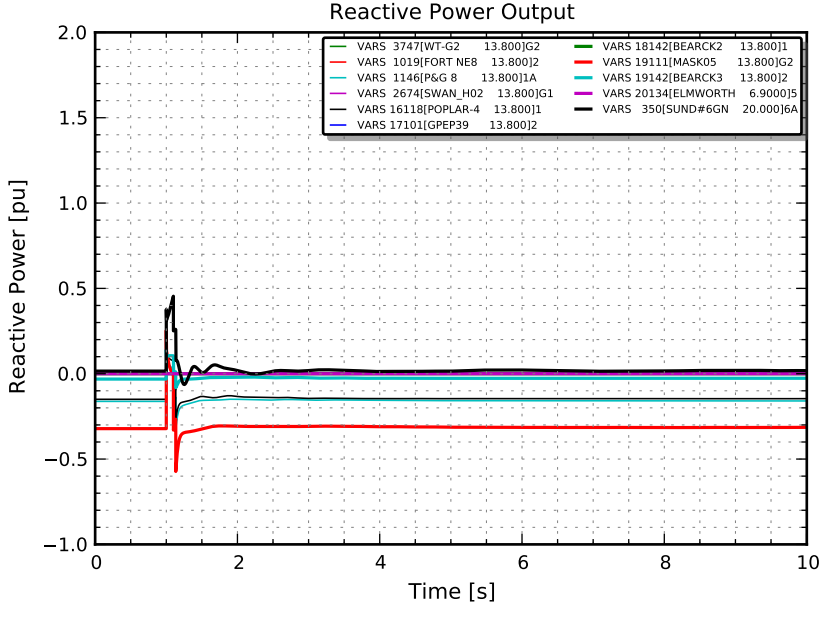
Study Area Generators

Appendix C2B
Figure: 013 (B. 3)





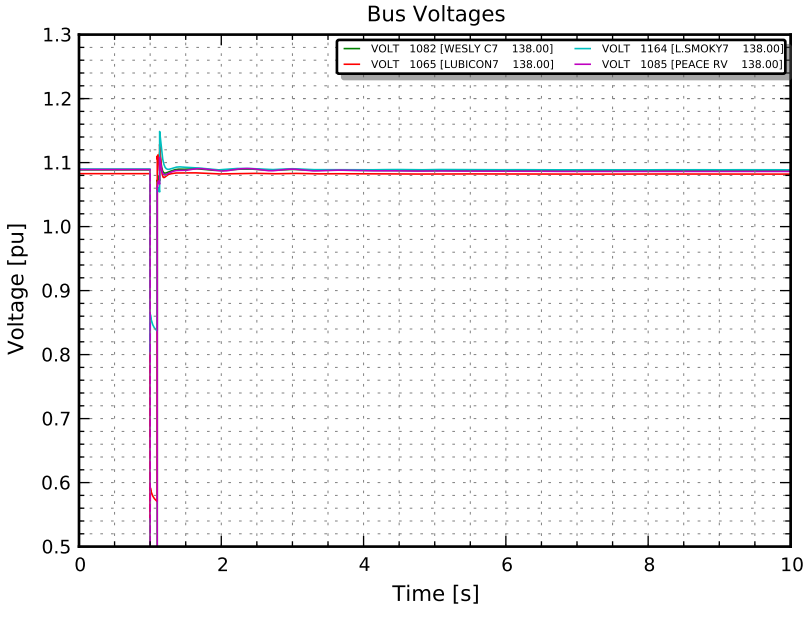


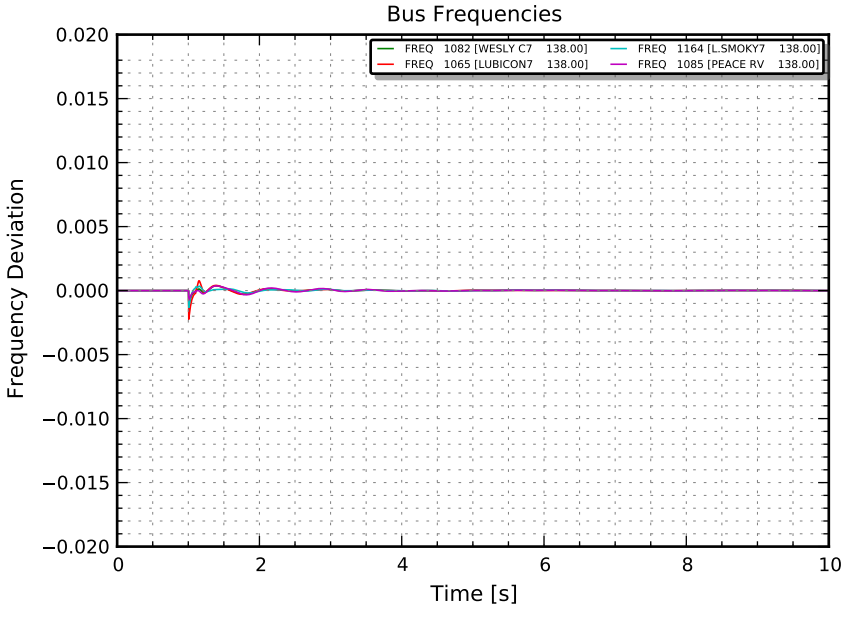


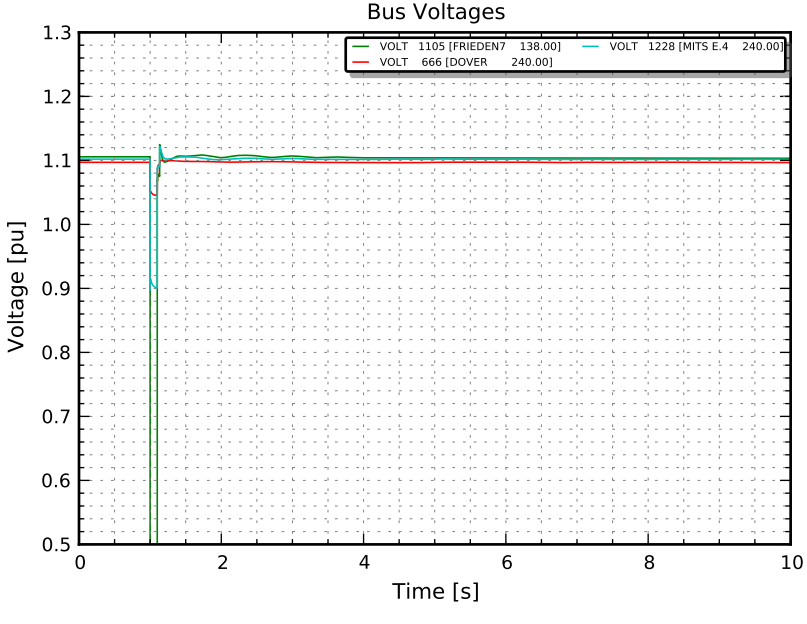
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_A.

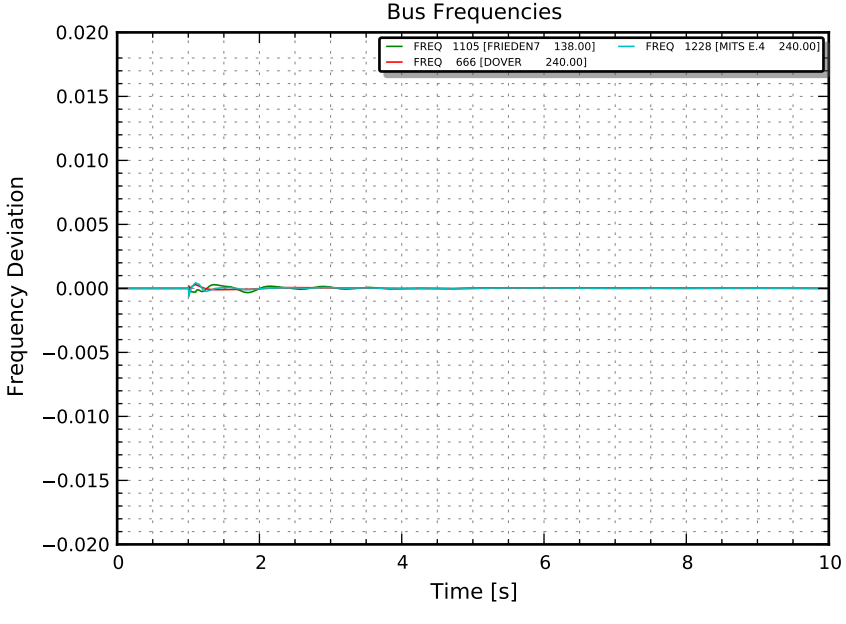
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 014 (A. 1)





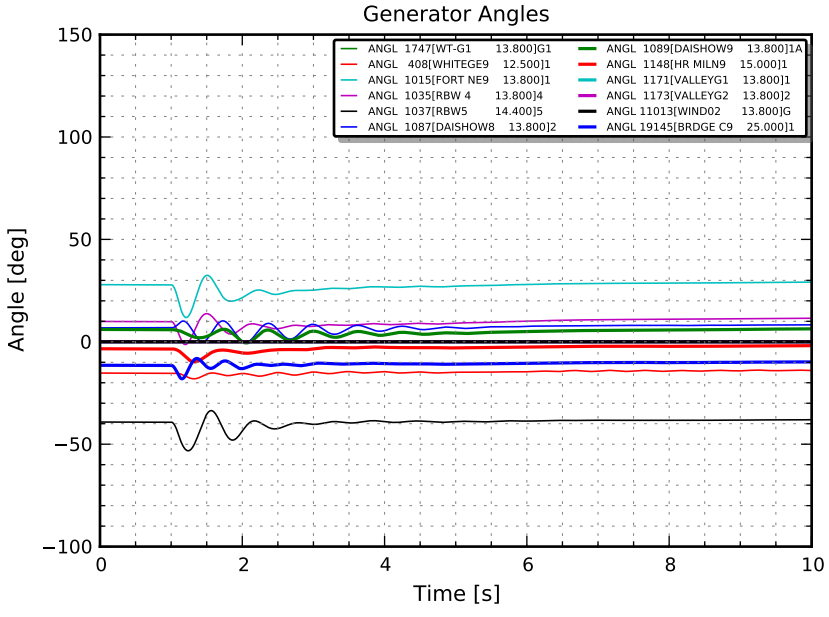


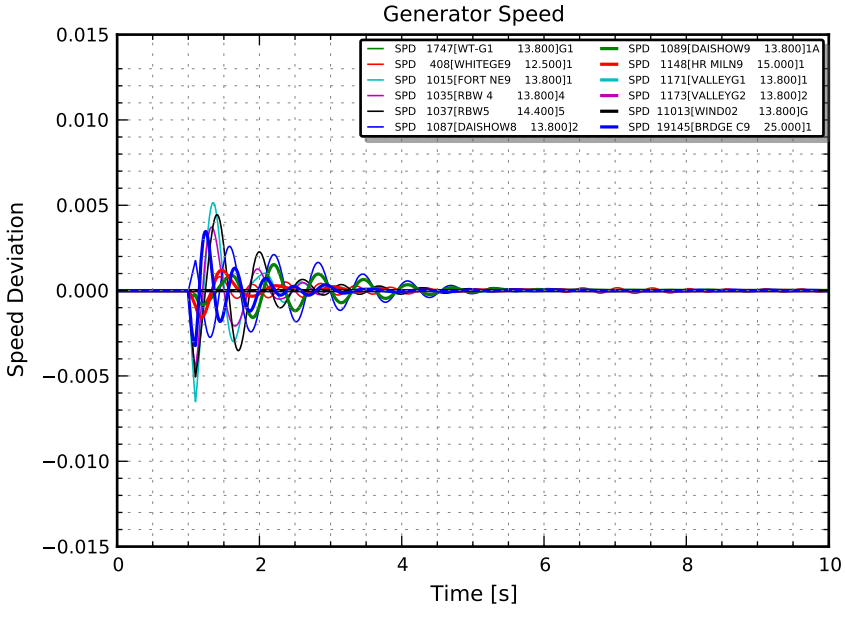


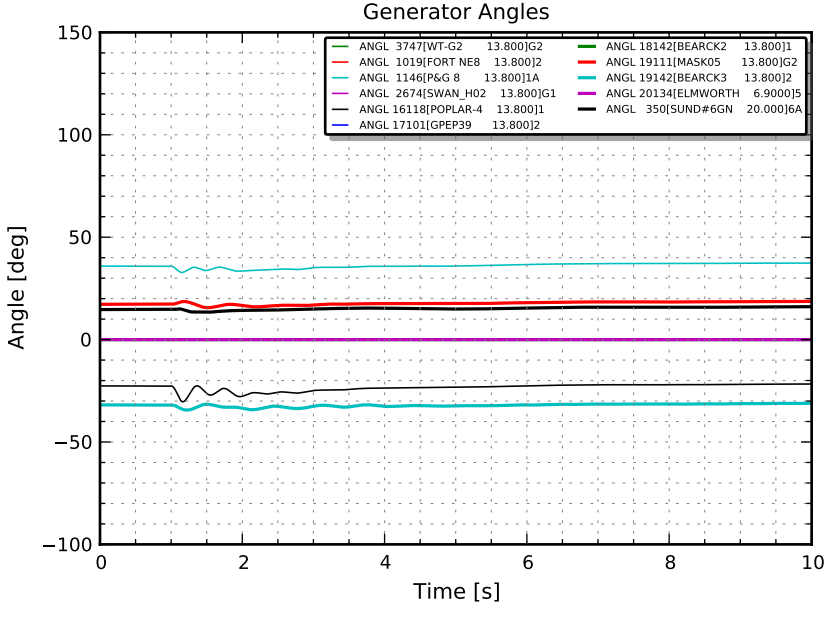
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_A.

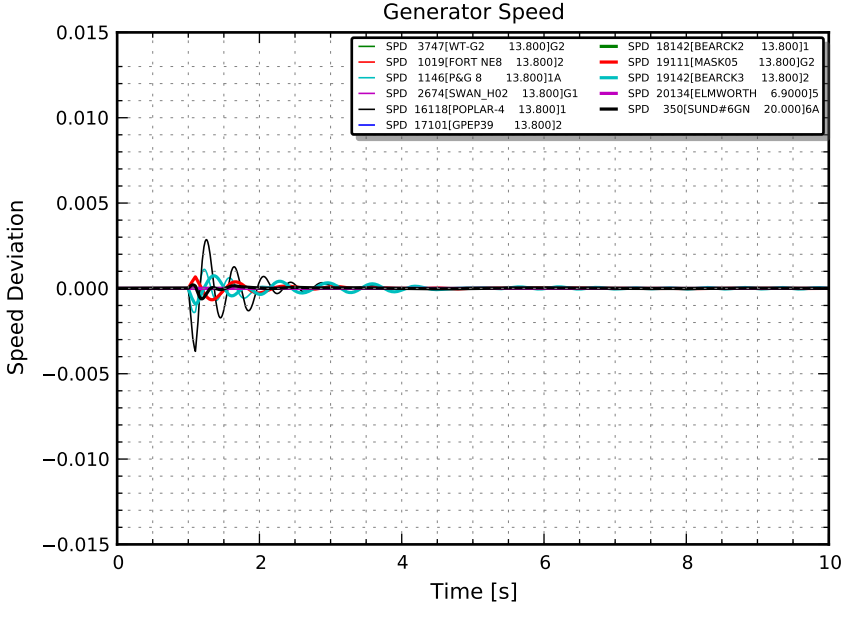
Study Area Generators

Appendix C2B
Figure: 014 (A. 2)





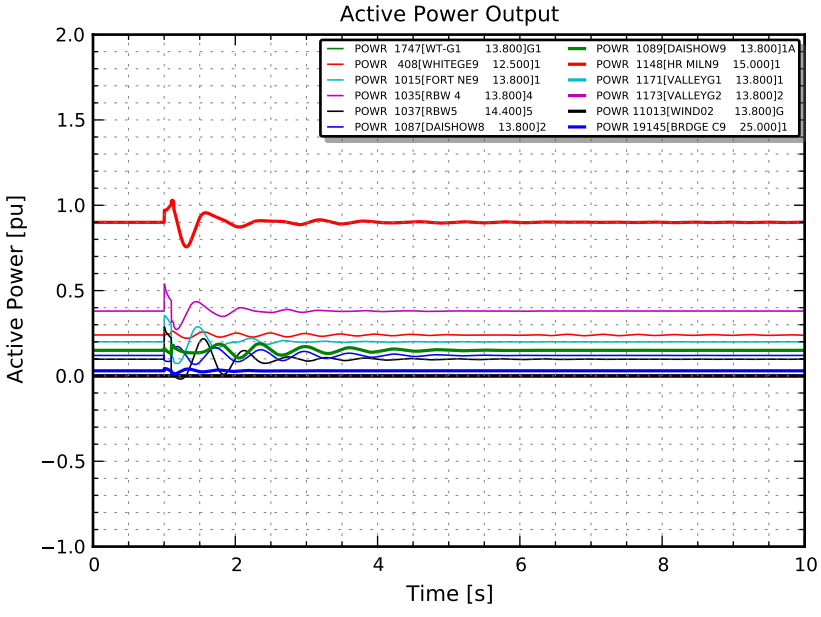


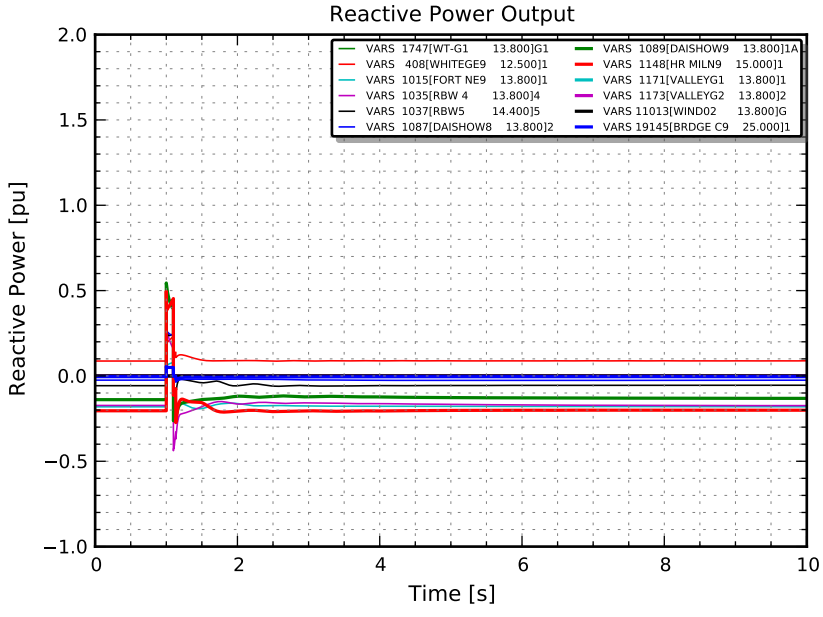


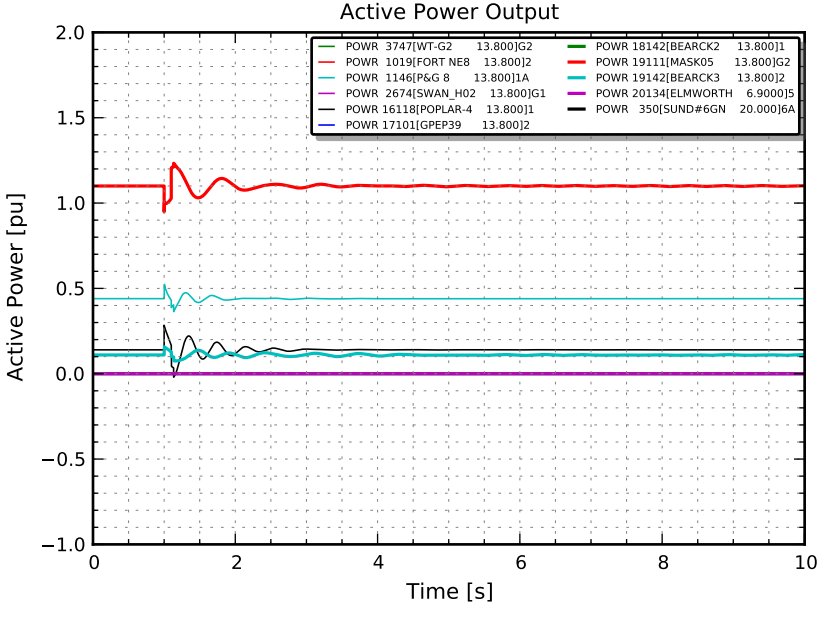
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_A.

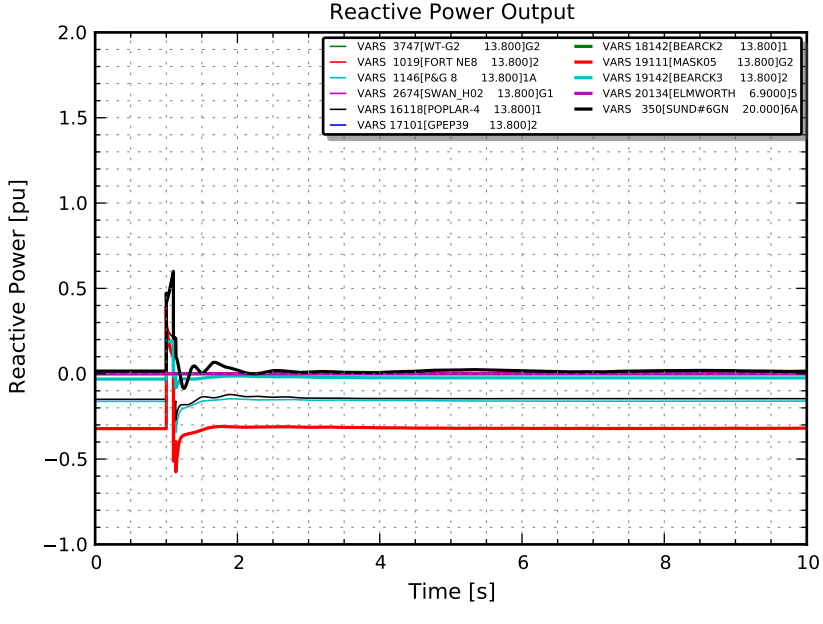
Study Area Generators

Appendix C2B
Figure: 014 (A. 3)





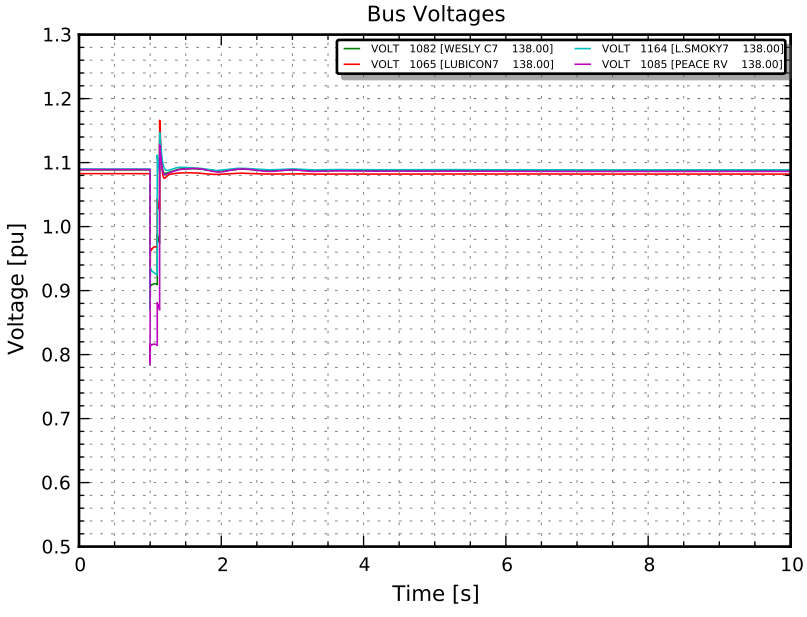


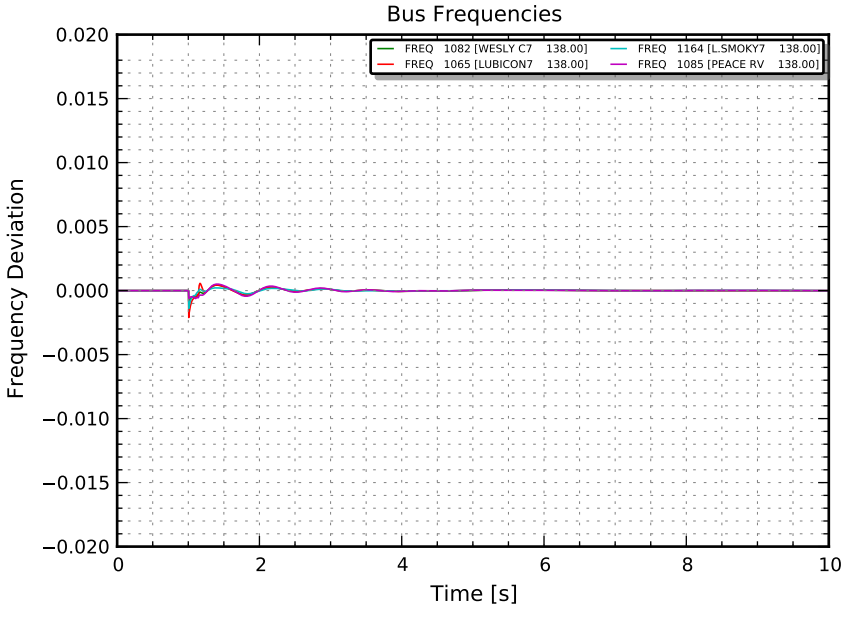


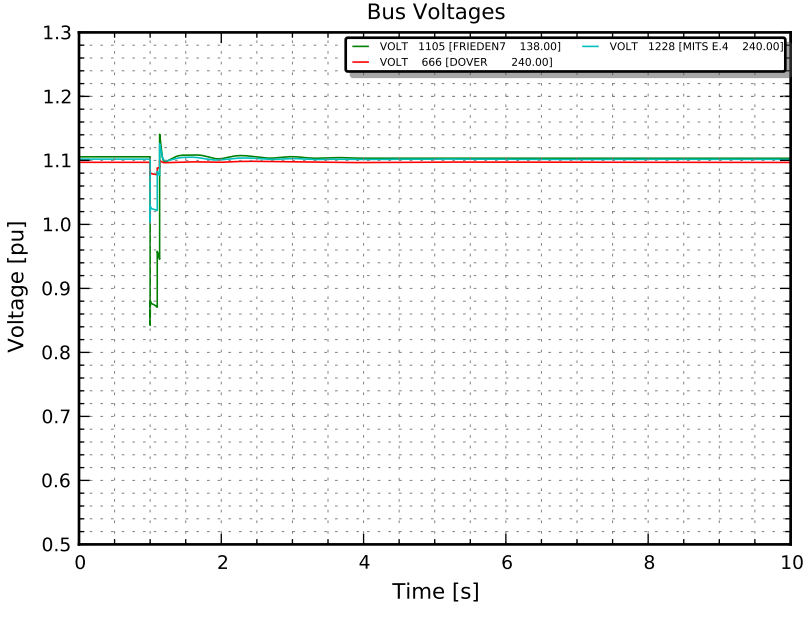
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_B.

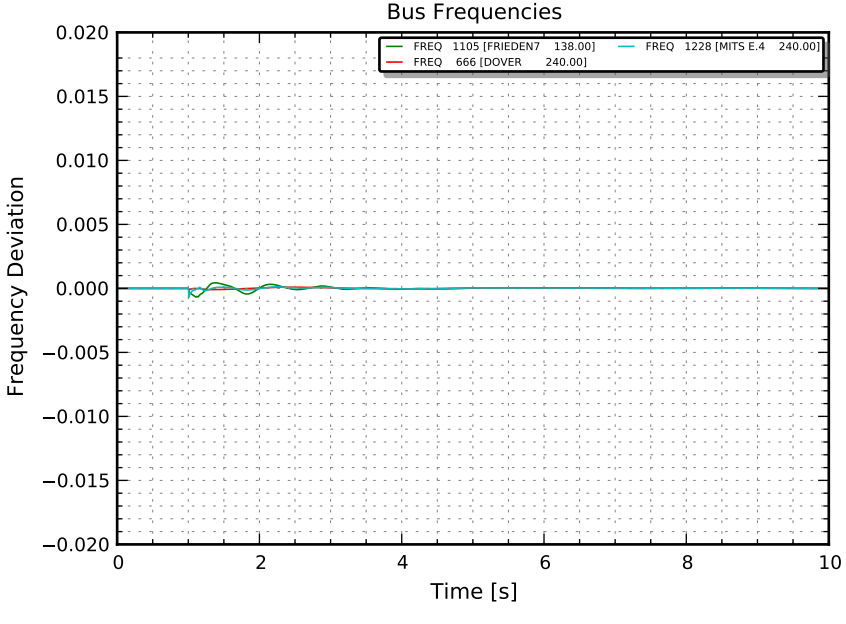
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 014 (B. 1)





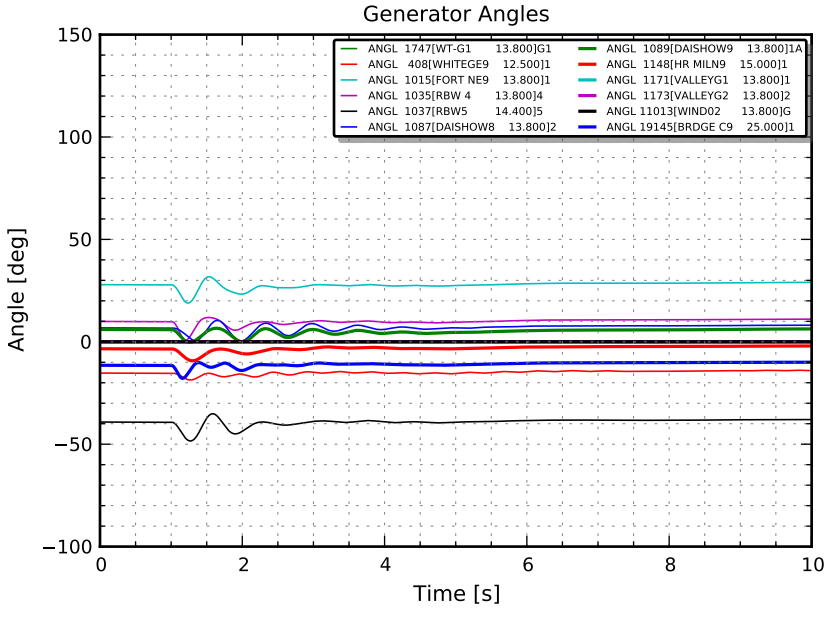


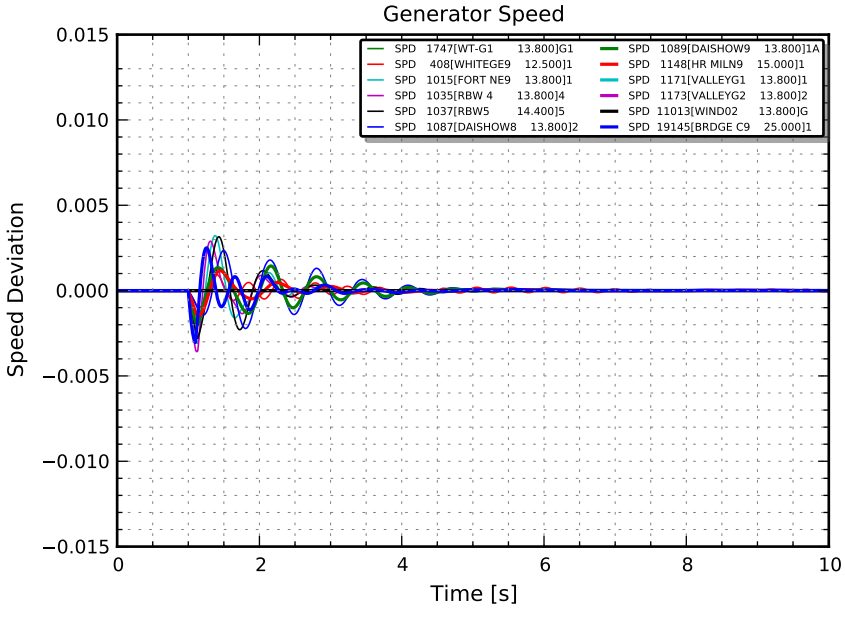


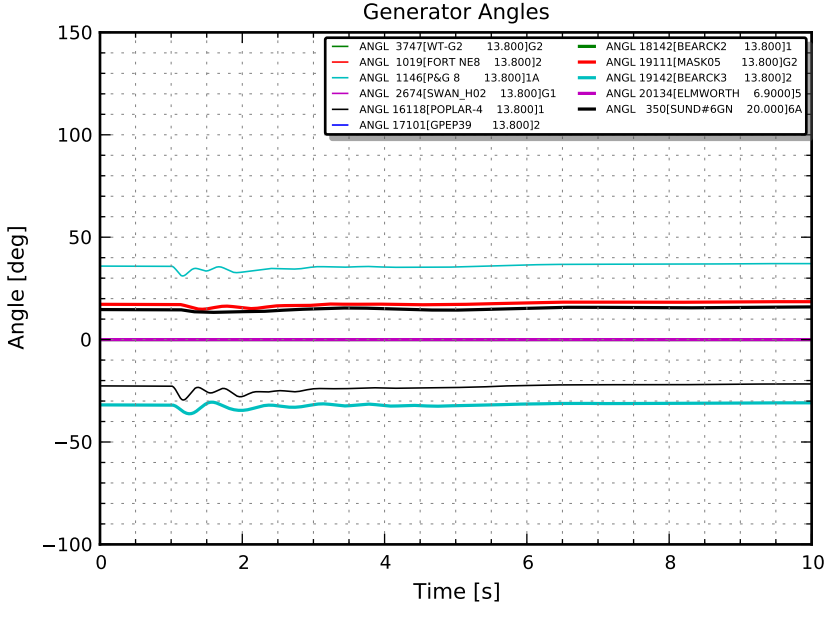
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_B.

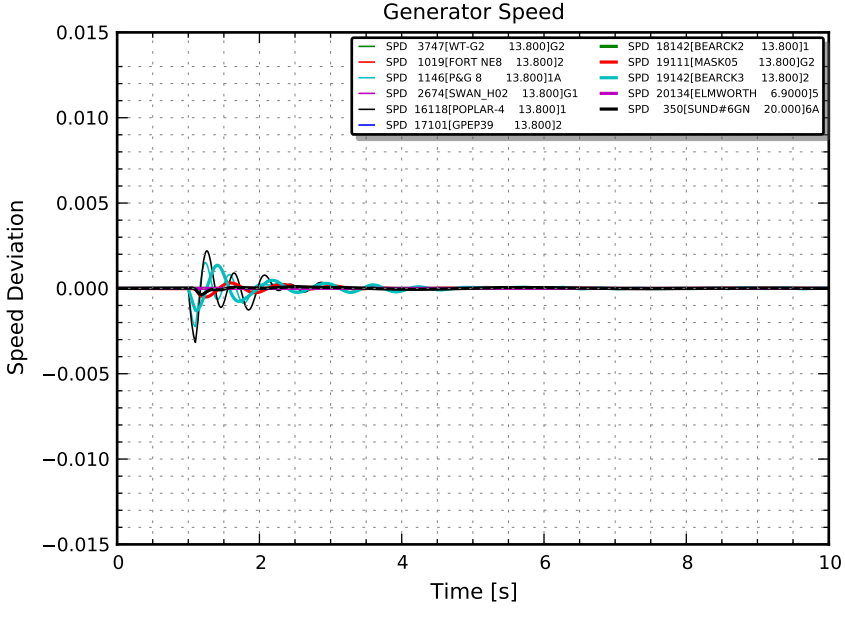
Study Area Generators

Appendix C2B
Figure: 014 (B. 2)





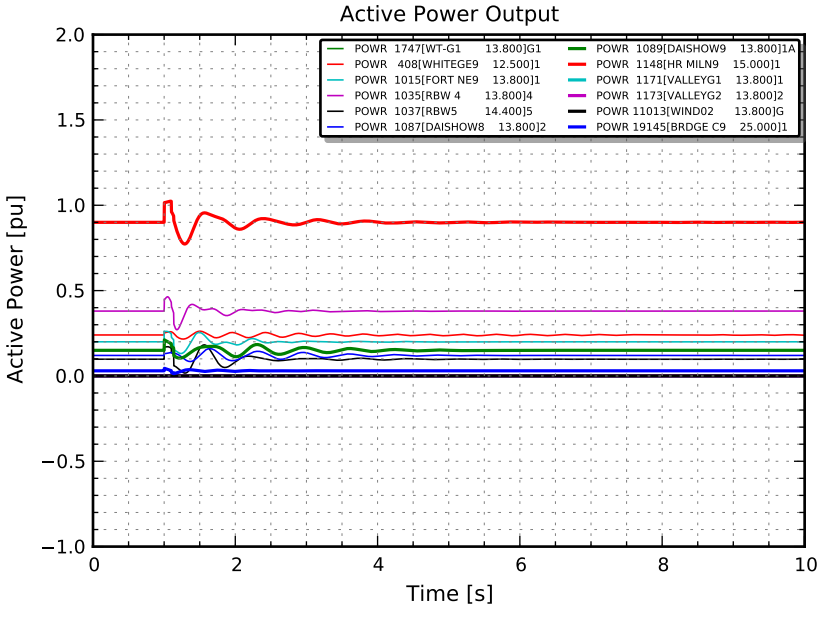


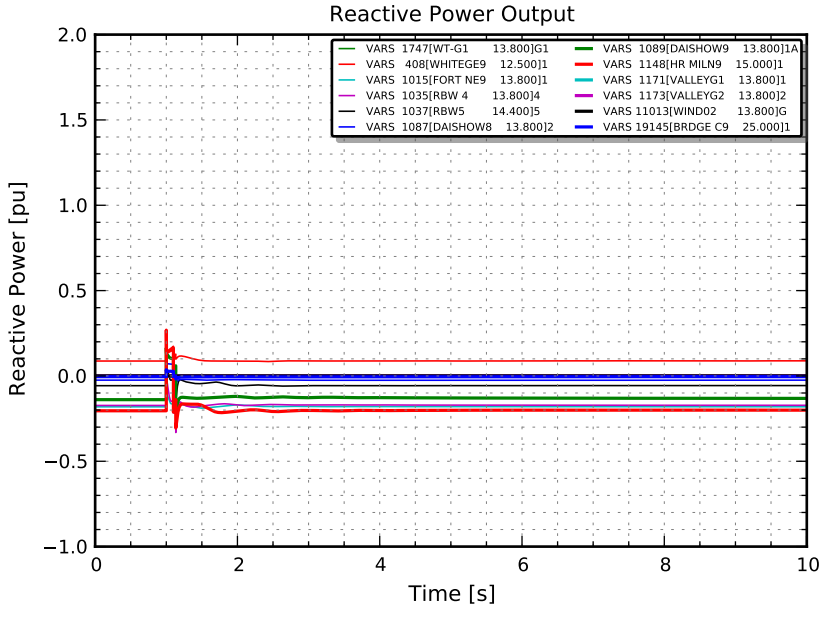


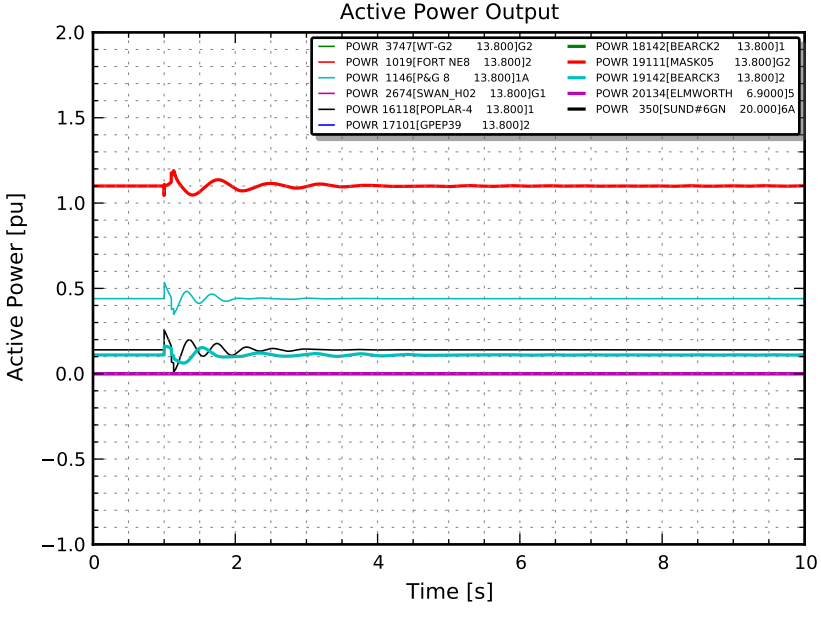
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_B.

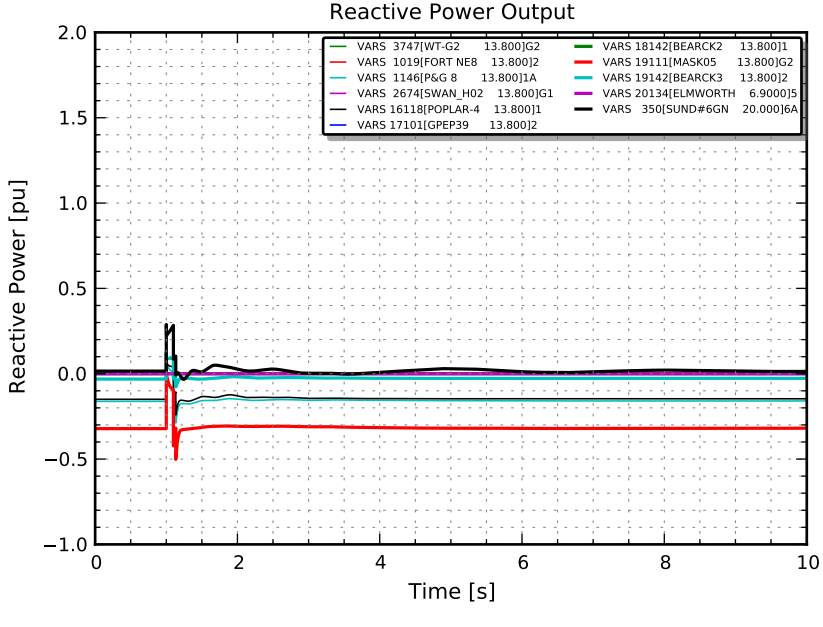
Study Area Generators

Appendix C2B
Figure: 014 (B. 3)





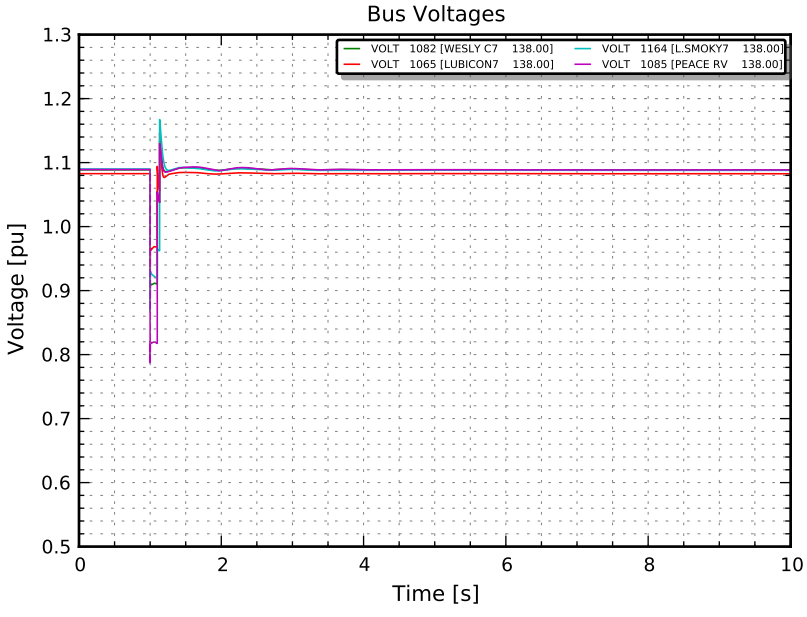


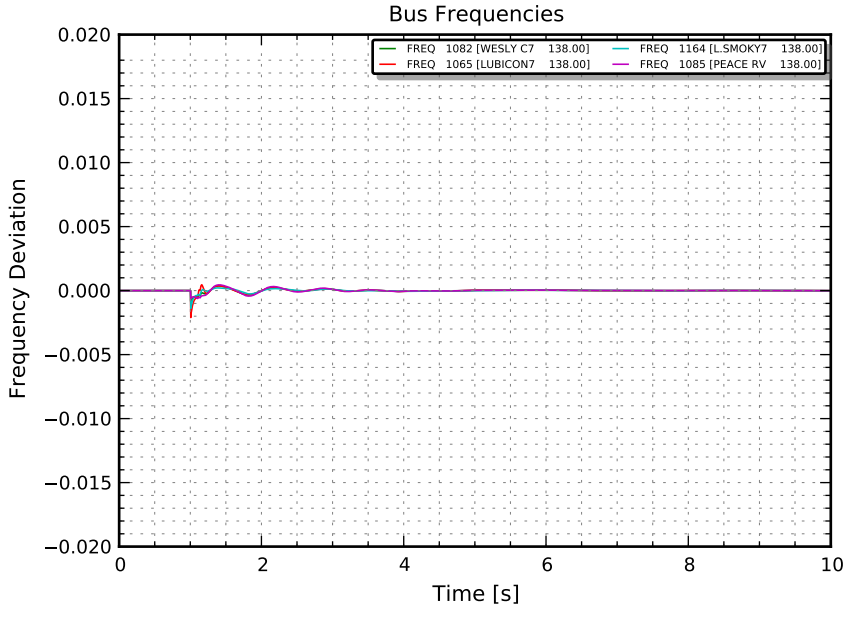


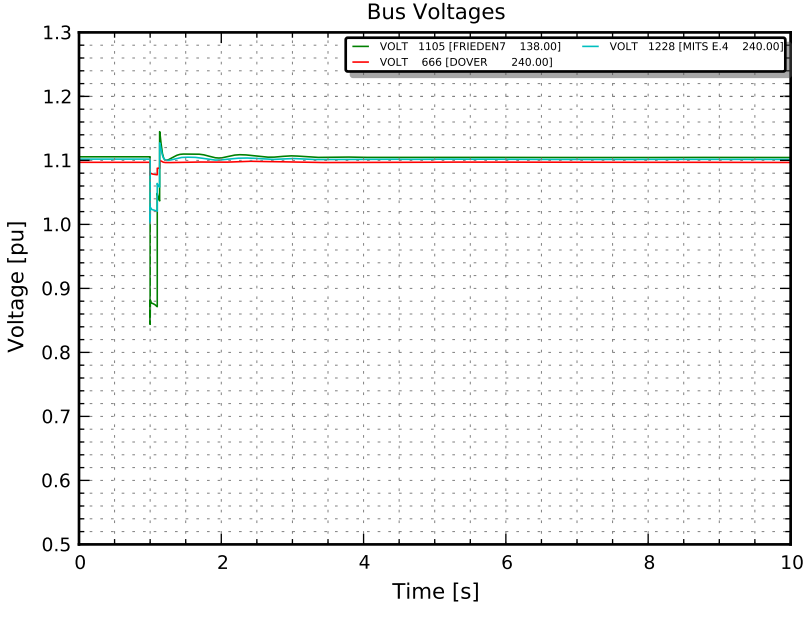
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_A.

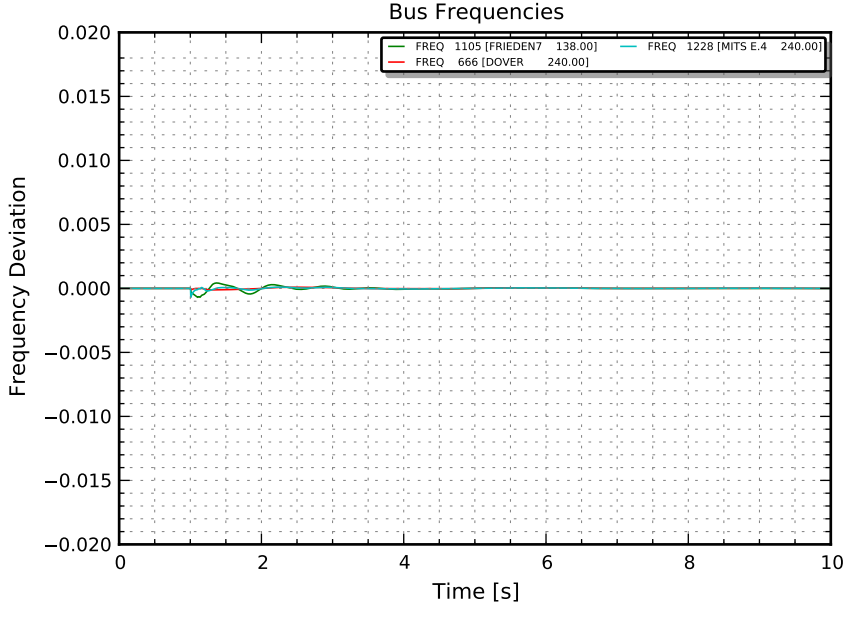
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 015 (A. 1)





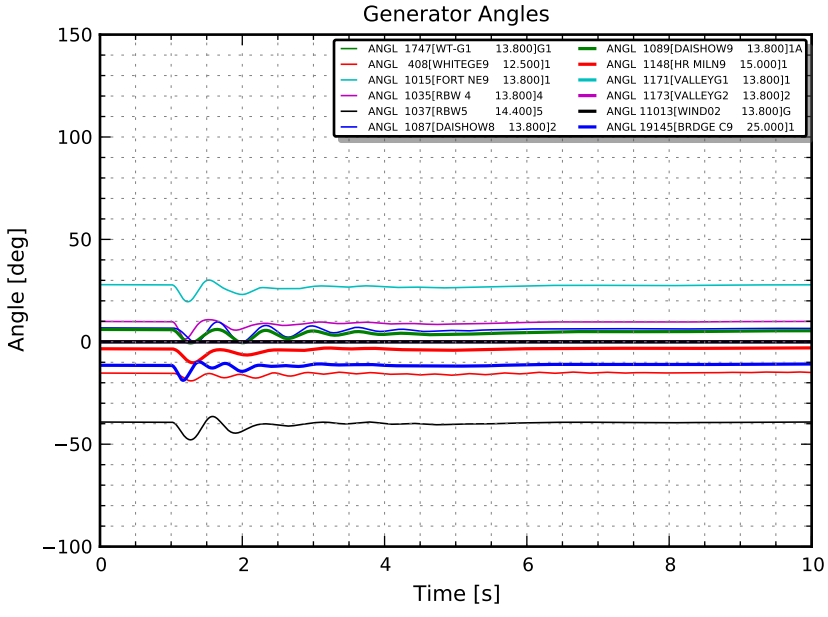


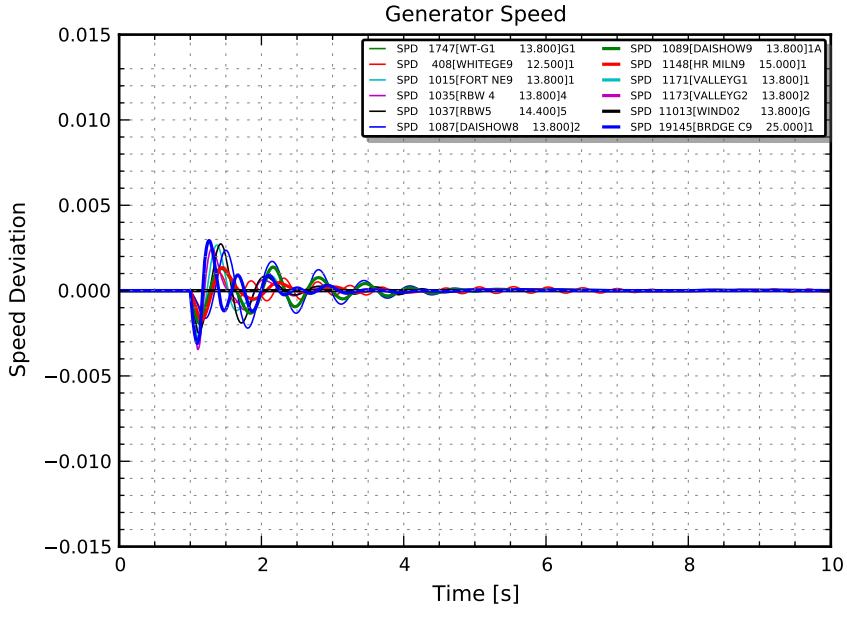


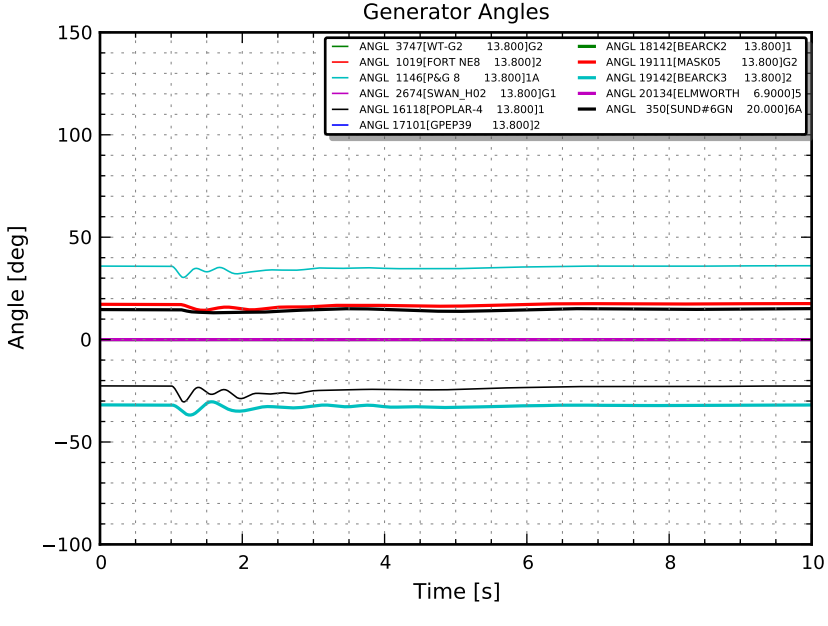
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_A.

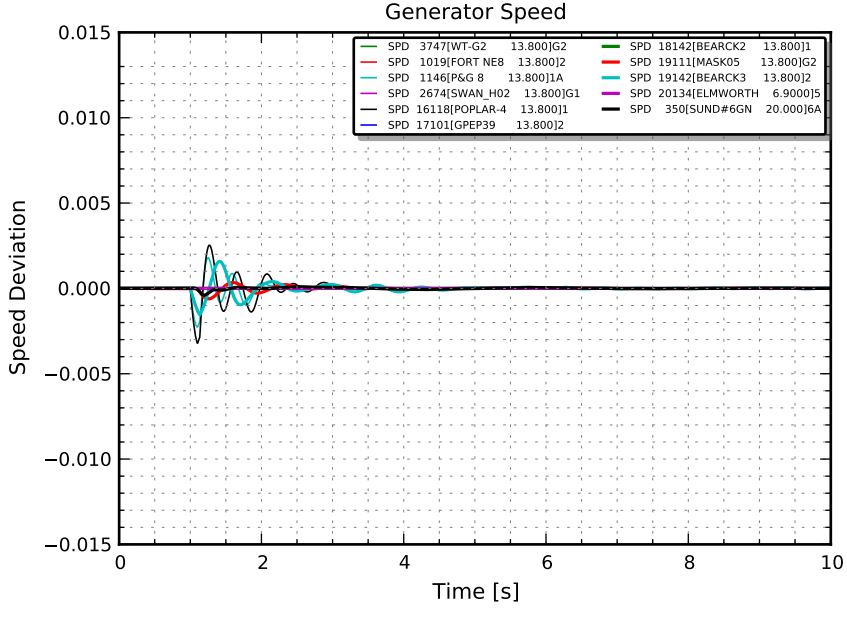
Study Area Generators

Appendix C2B
Figure: 015 (A. 2)





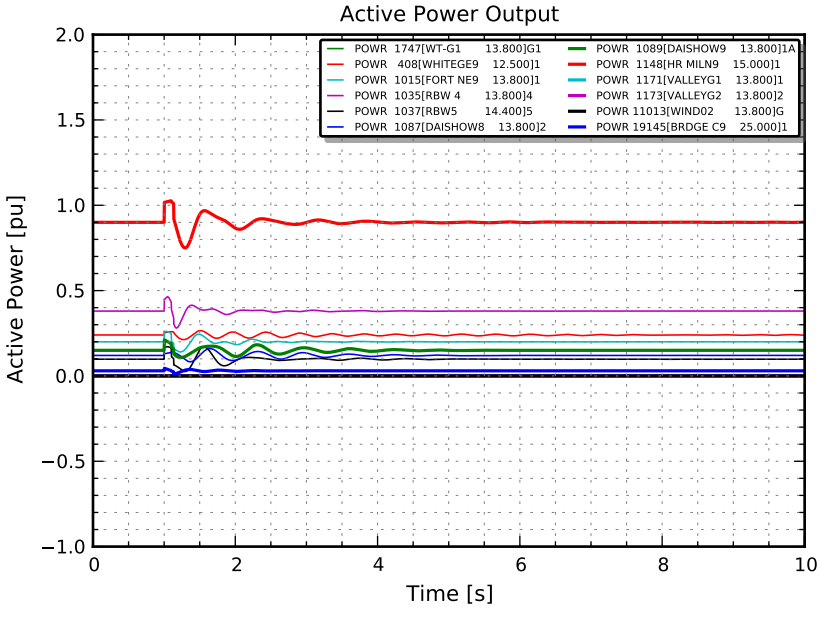


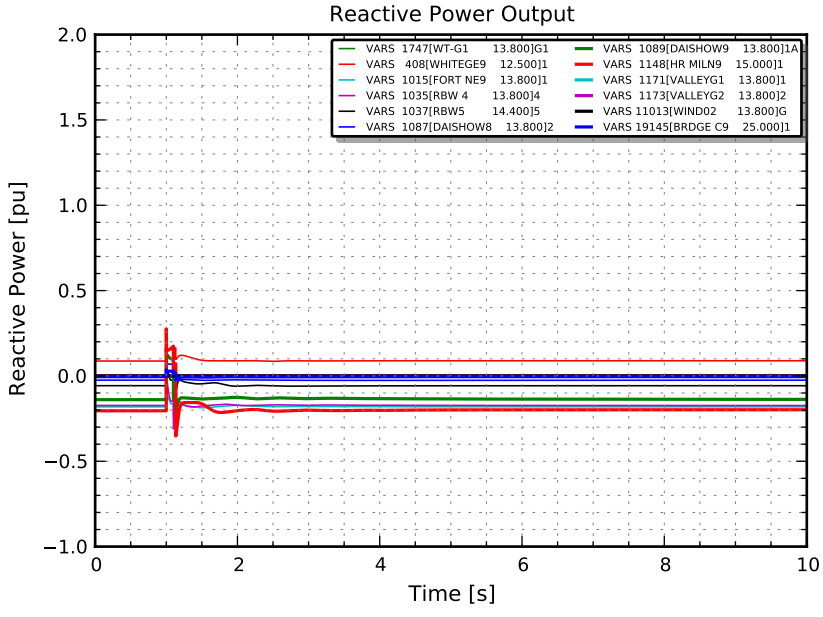


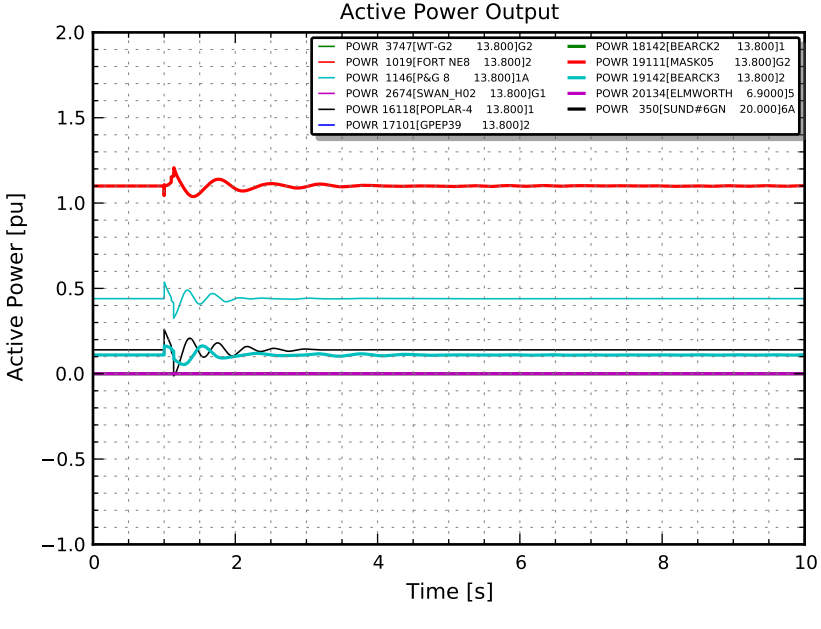
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_A.

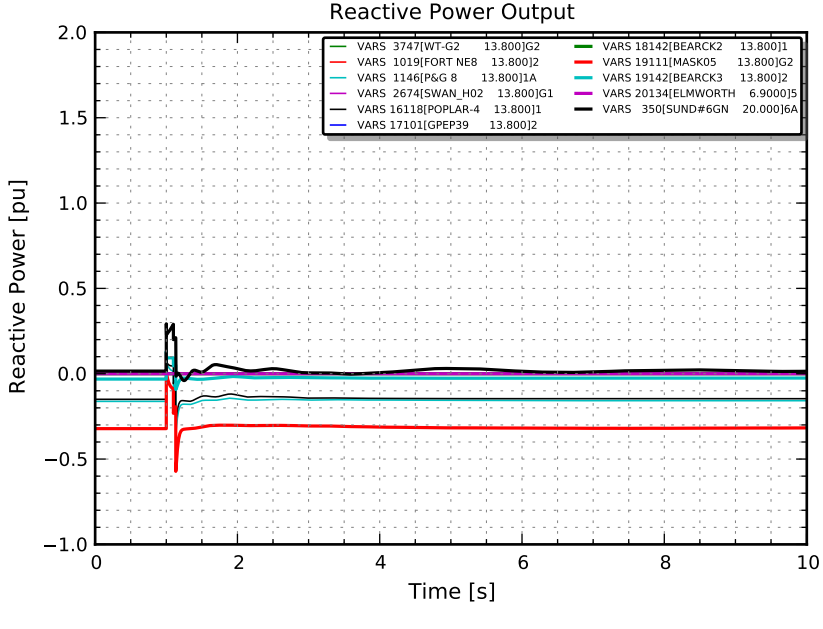
Study Area Generators

Appendix C2B
Figure: 015 (A. 3)





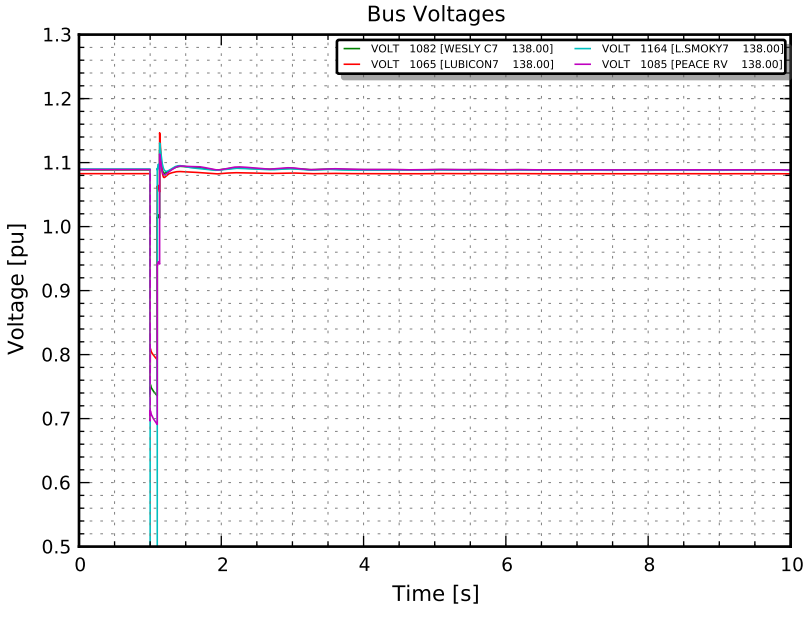


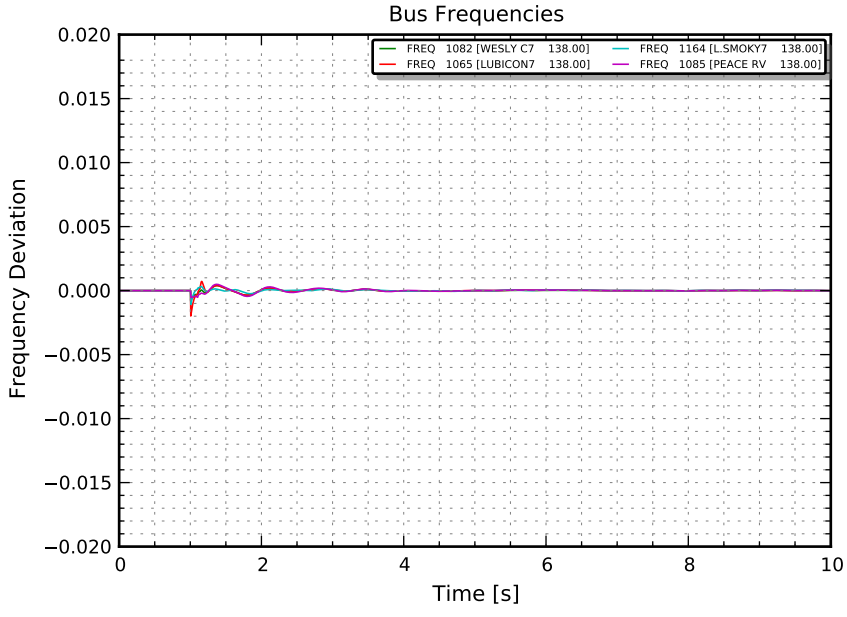


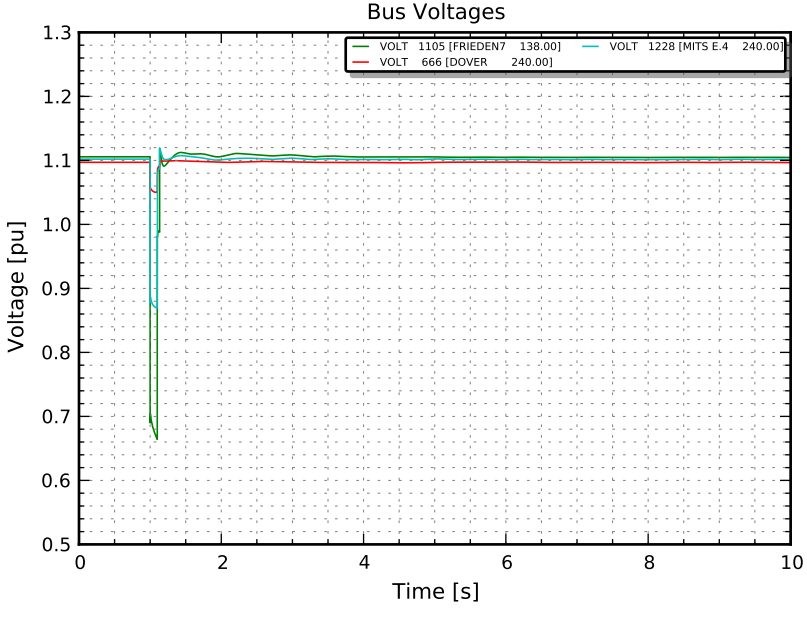
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_B.

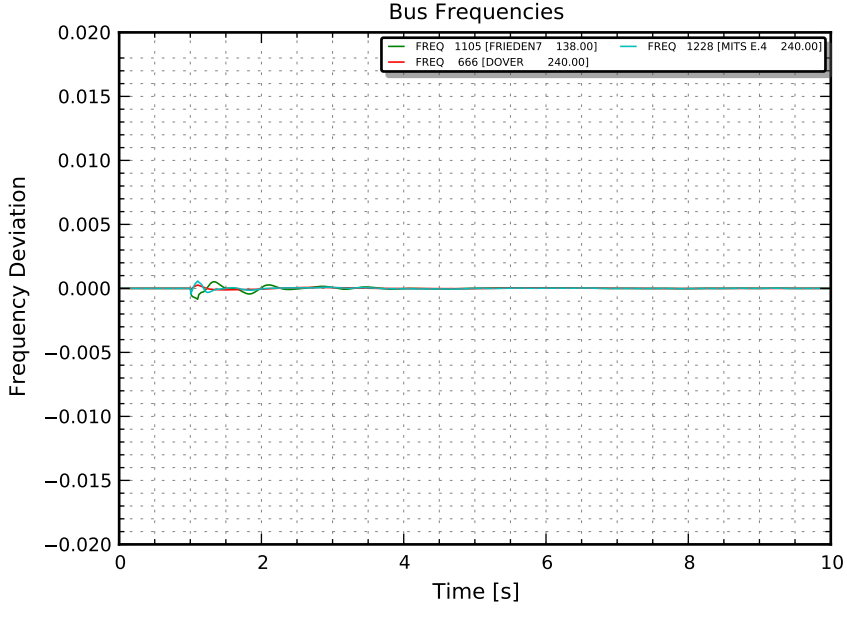
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 015 (B. 1)





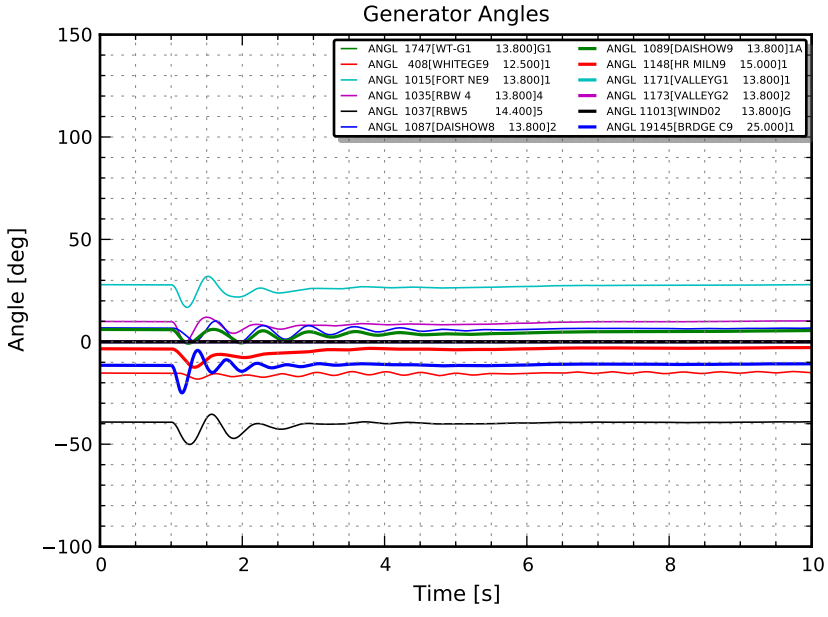


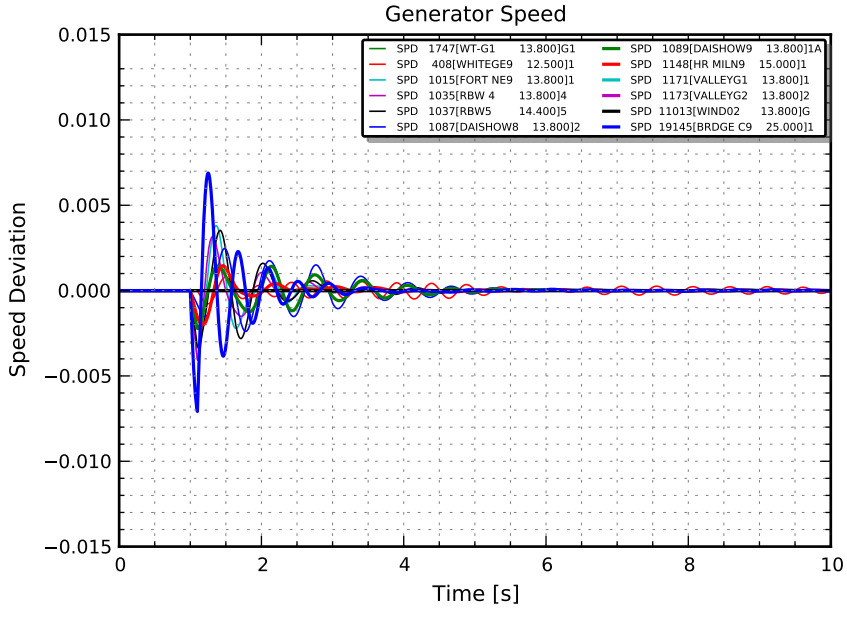


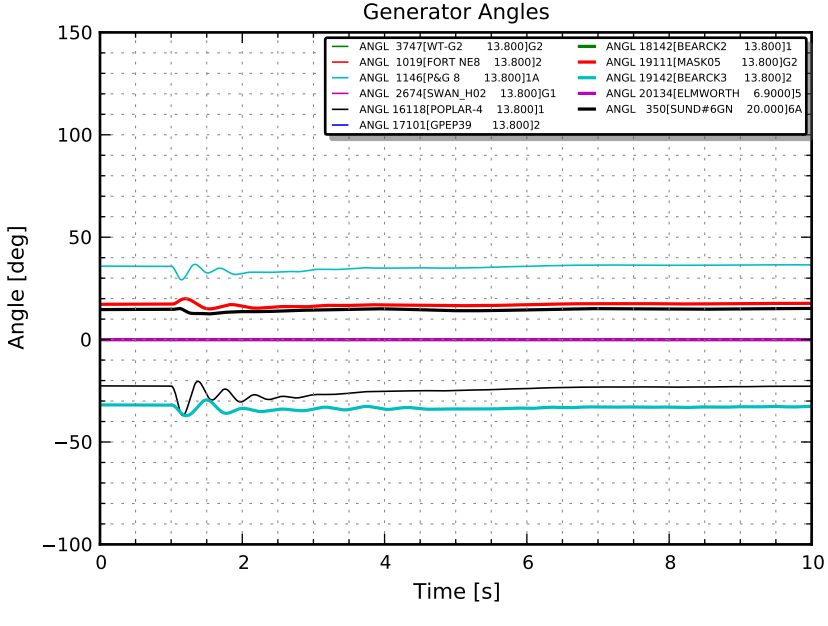
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_B.

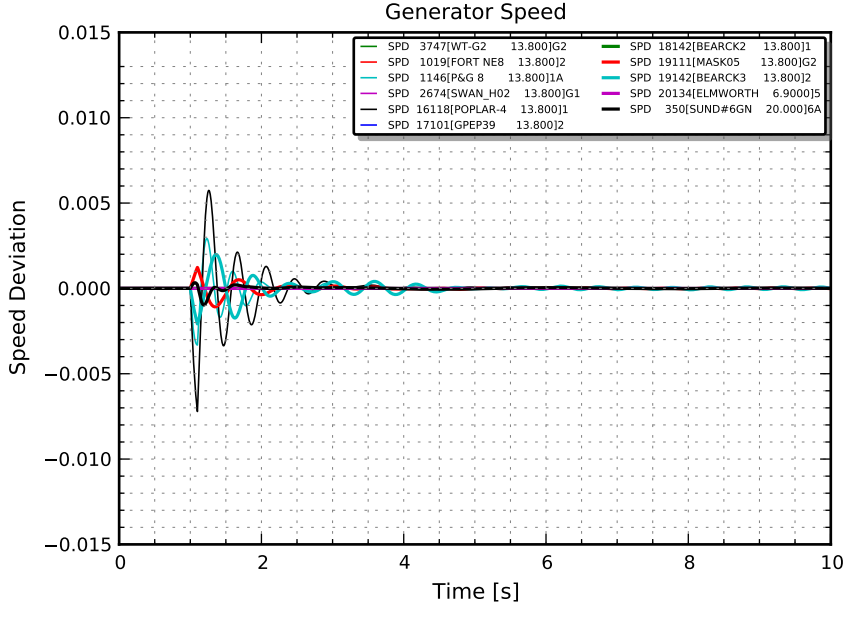
Study Area Generators

Appendix C2B
Figure: 015 (B. 2)





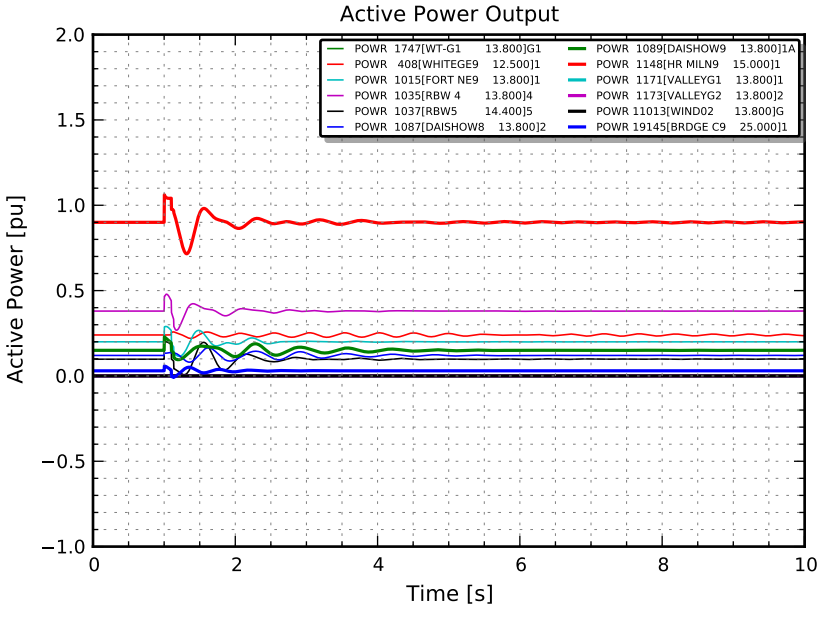


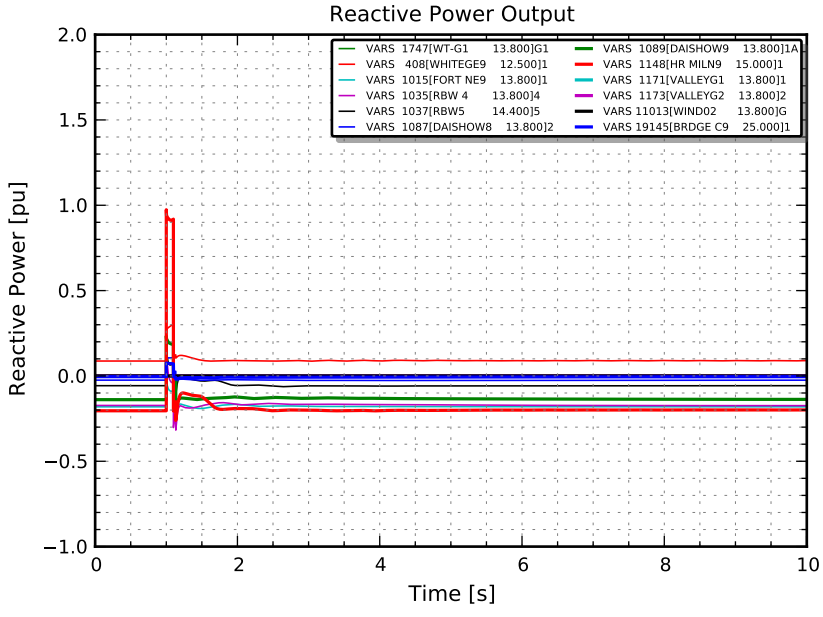


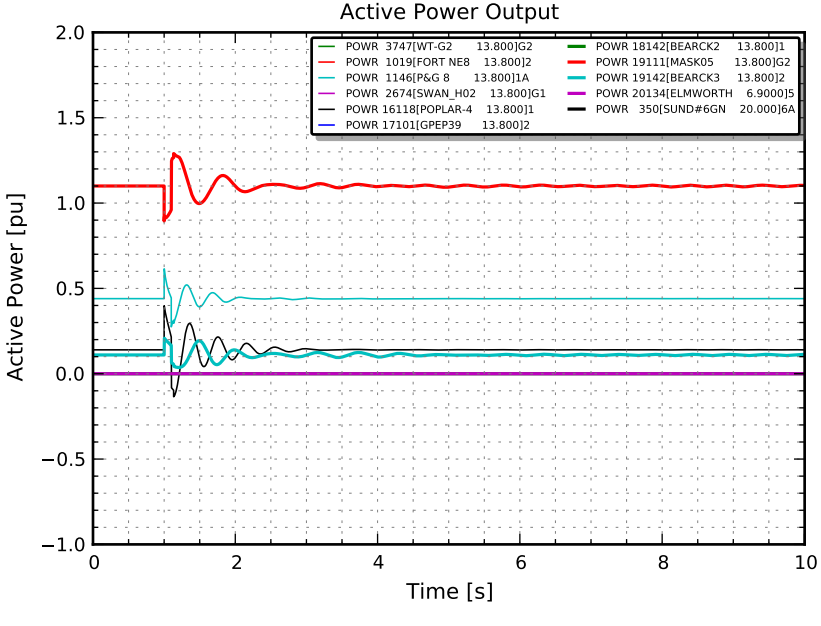
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_B.

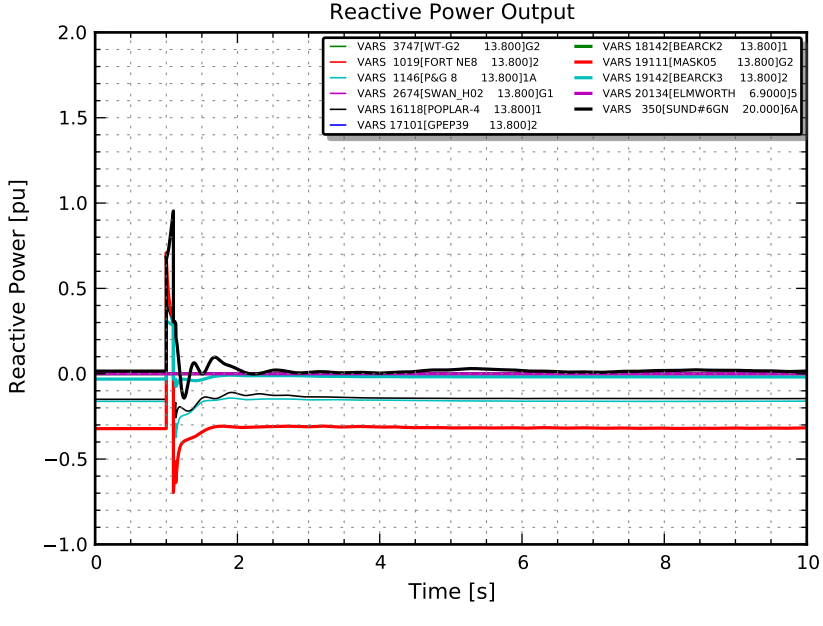
Study Area Generators

Appendix C2B
Figure: 015 (B. 3)





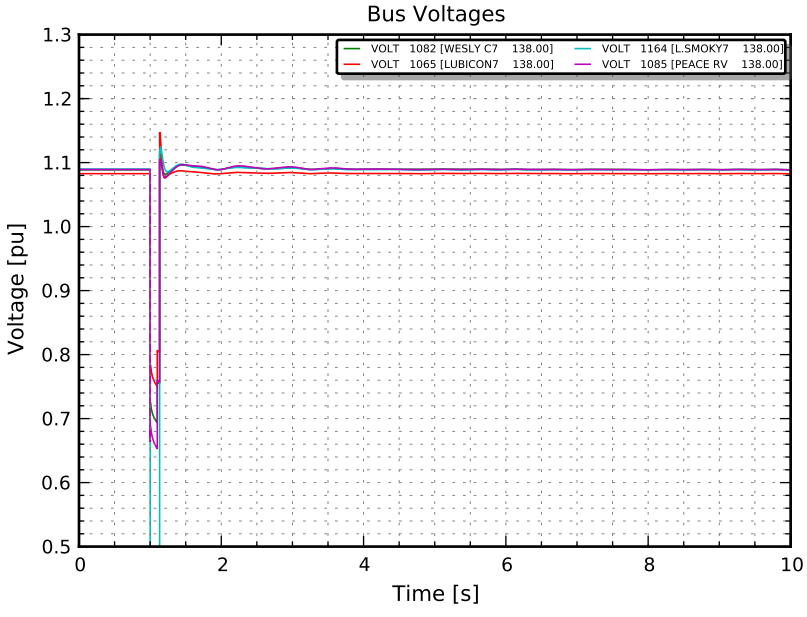


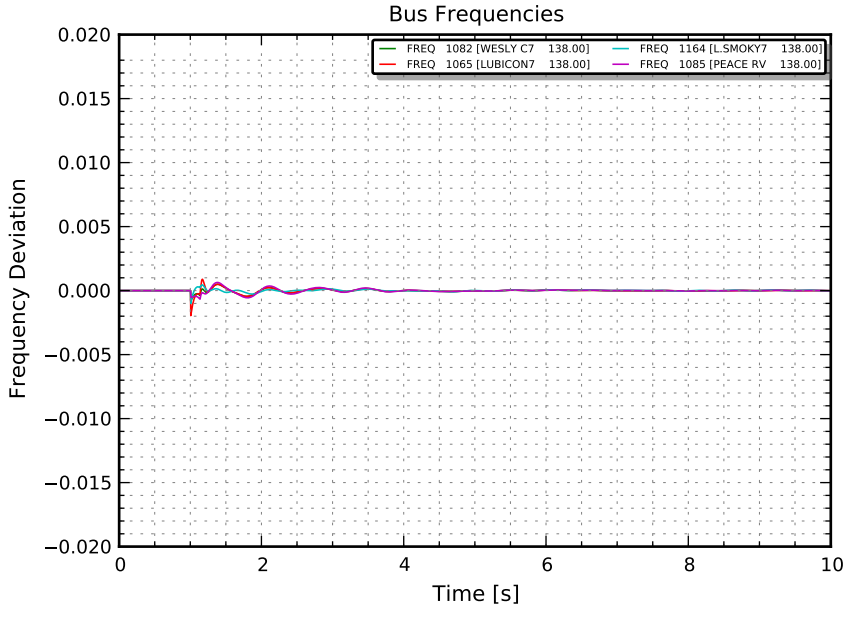


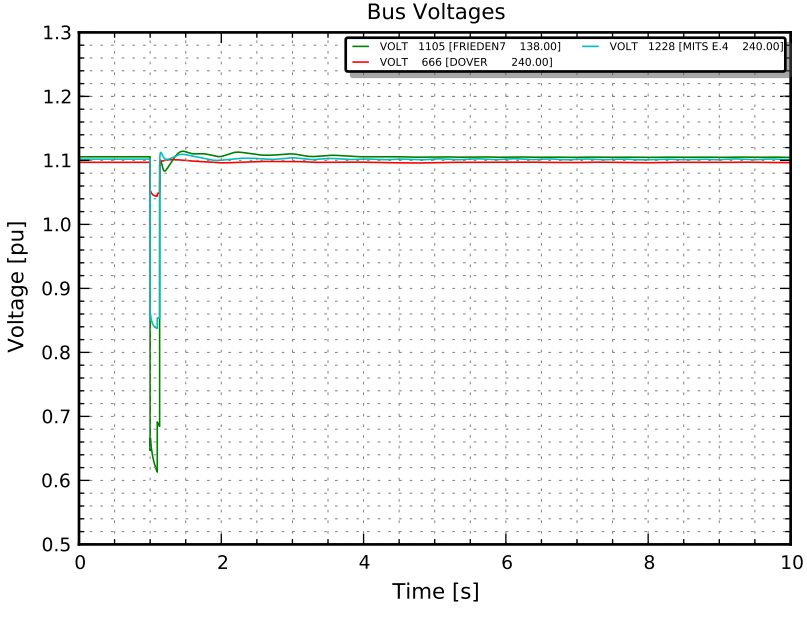
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_A.

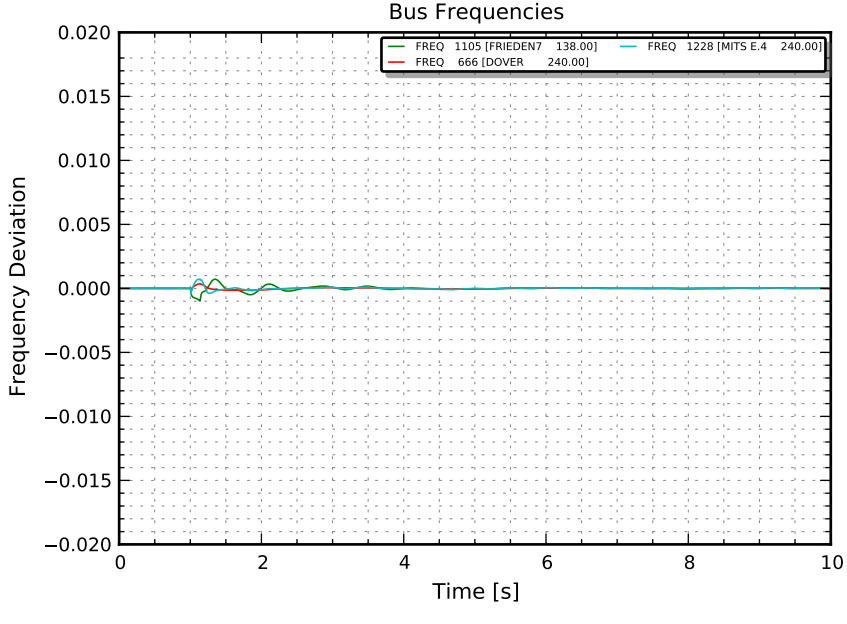
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 016 (A. 1)





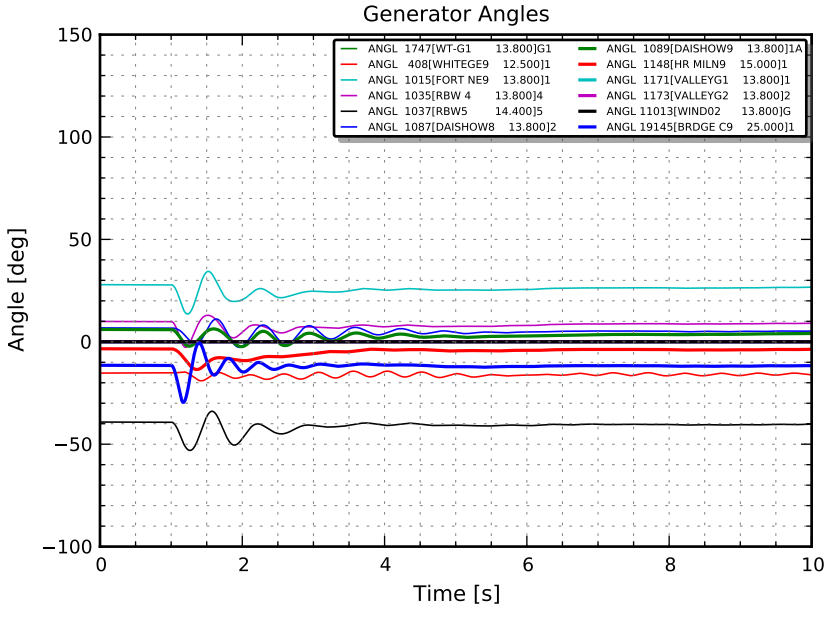


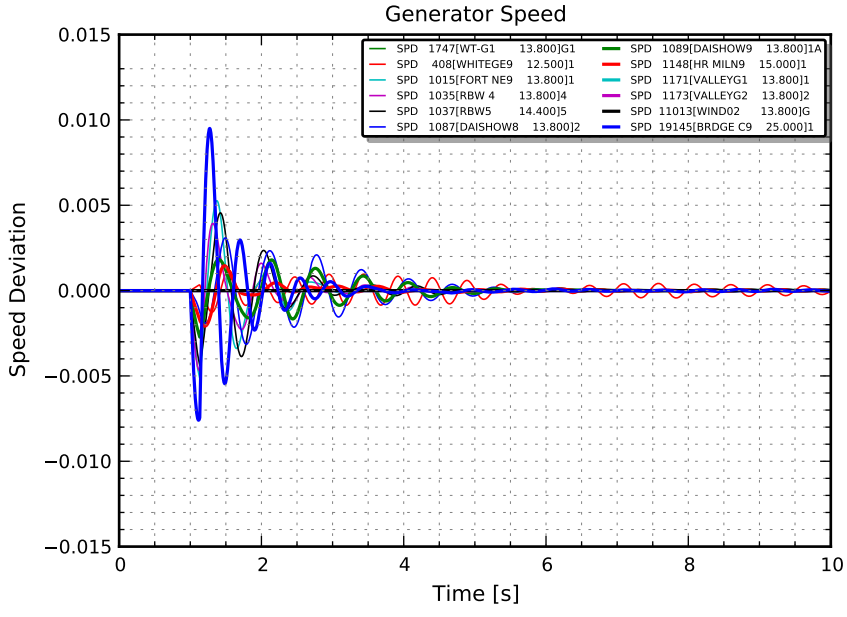


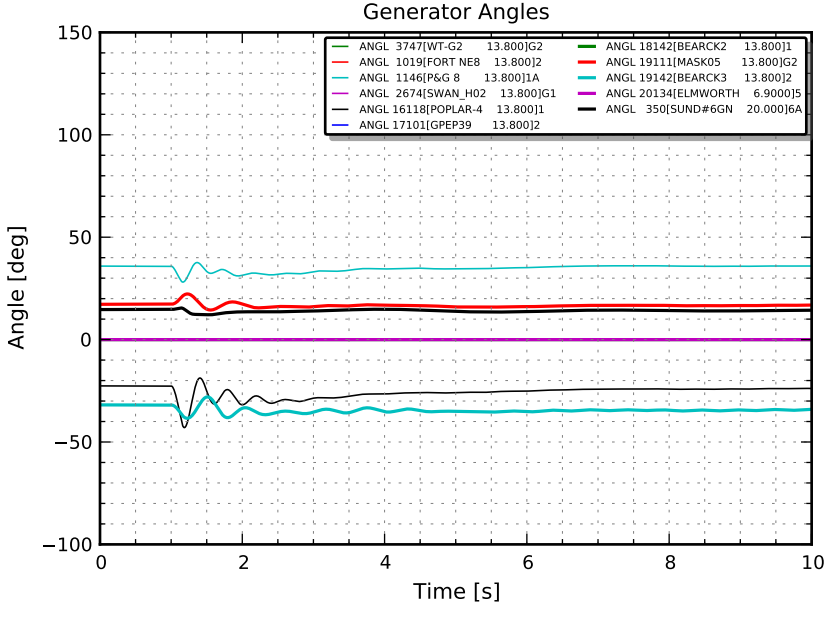
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_A.

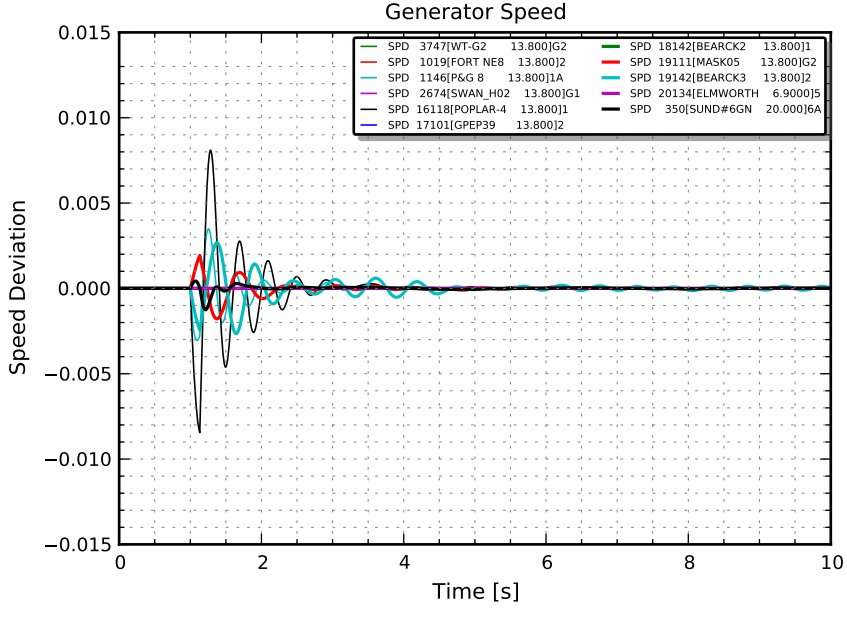
Study Area Generators

Appendix C2B
Figure: 016 (A. 2)





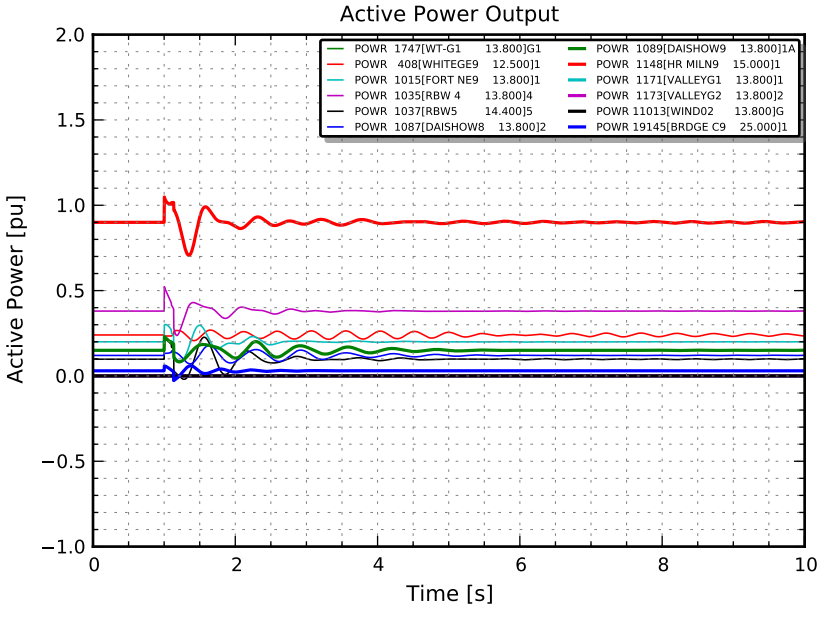


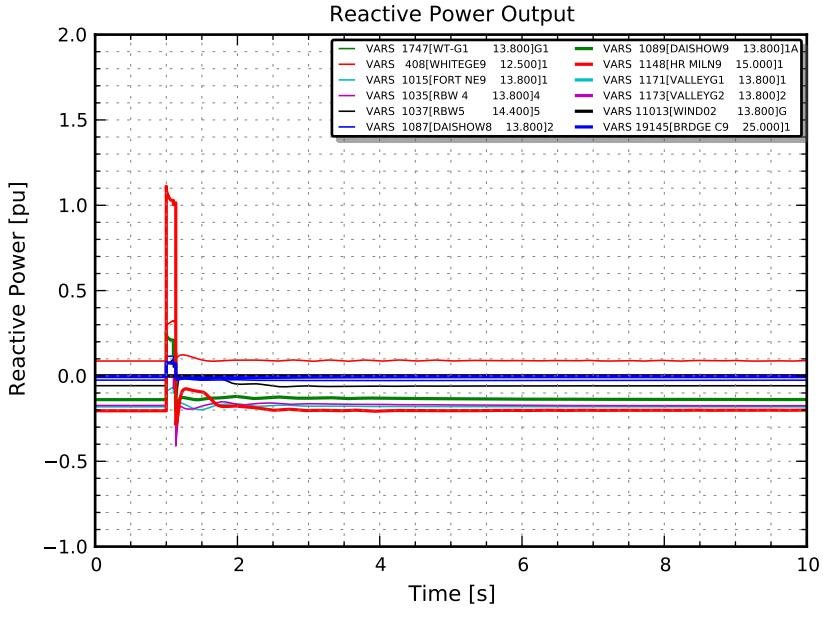


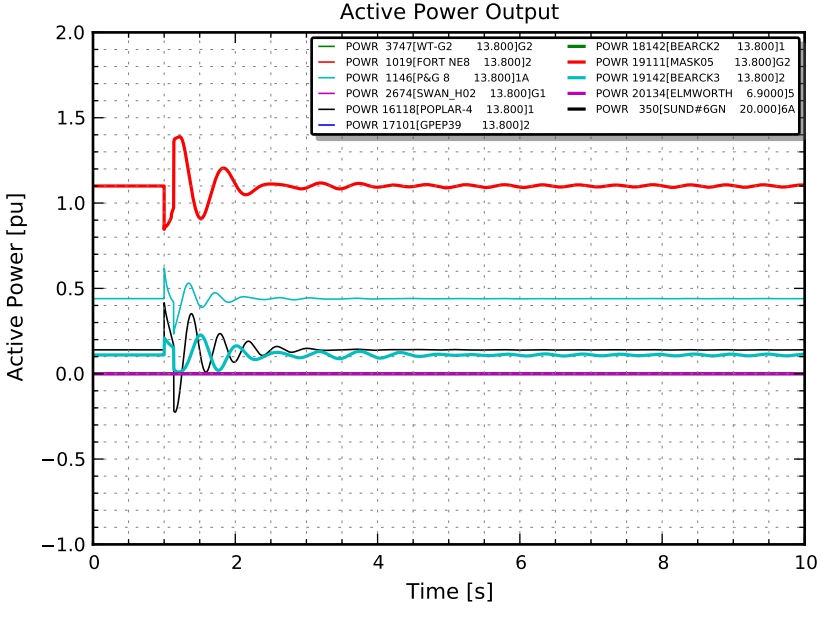
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_A.

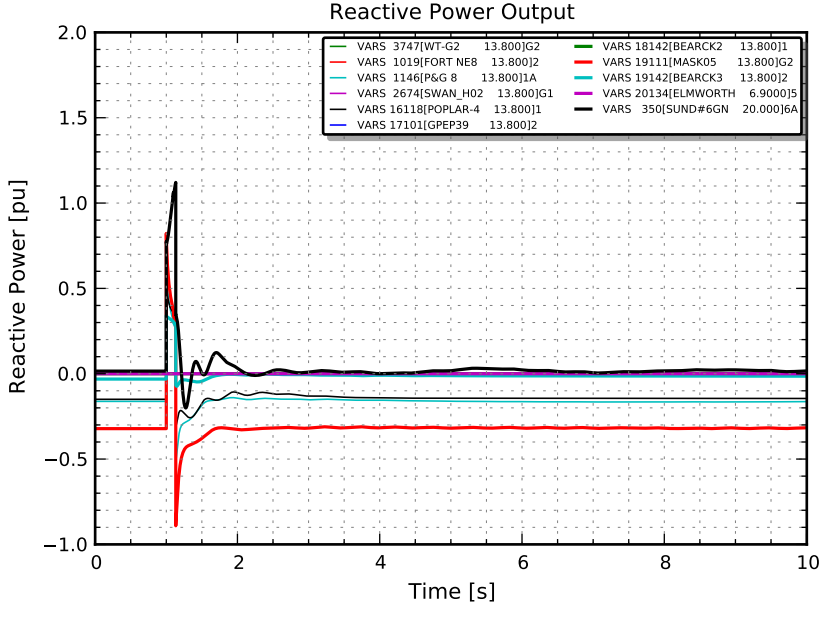
Study Area Generators

Appendix C2B
Figure: 016 (A. 3)





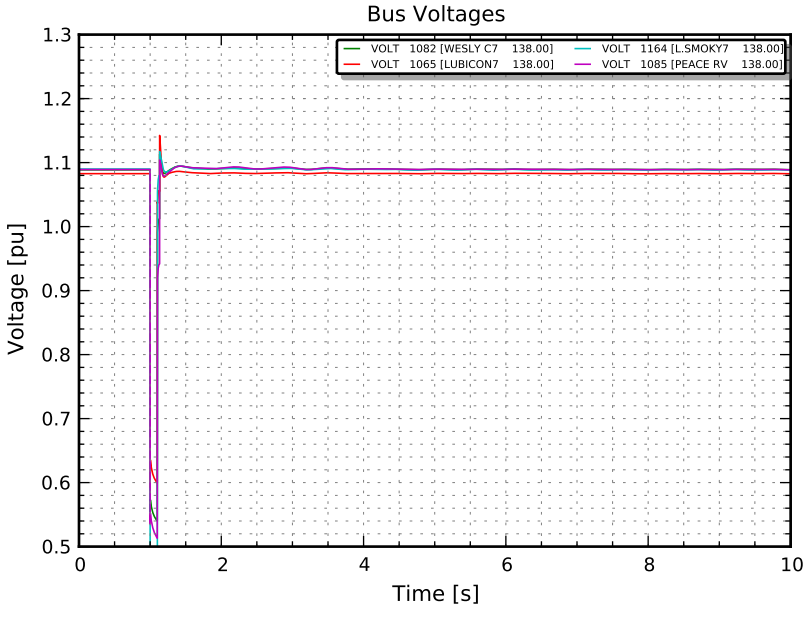


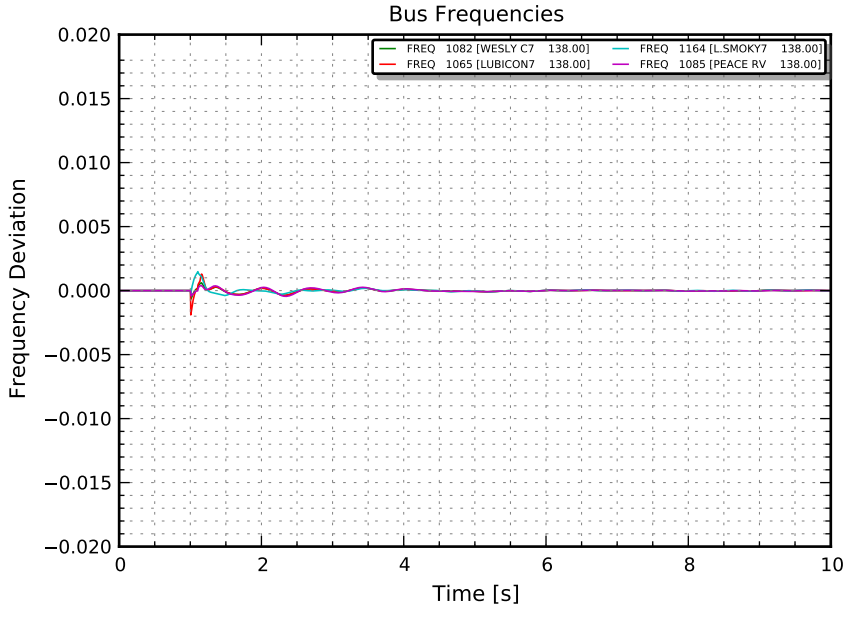


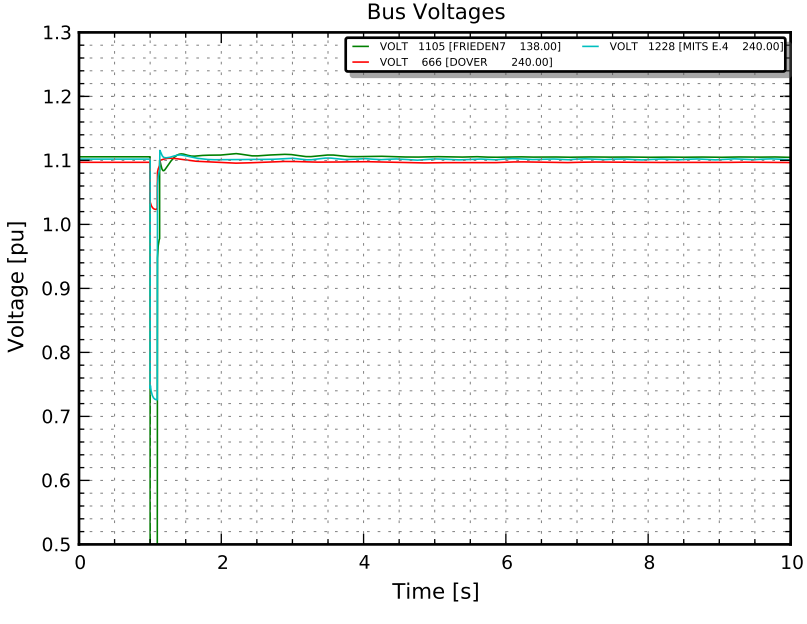
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_B.

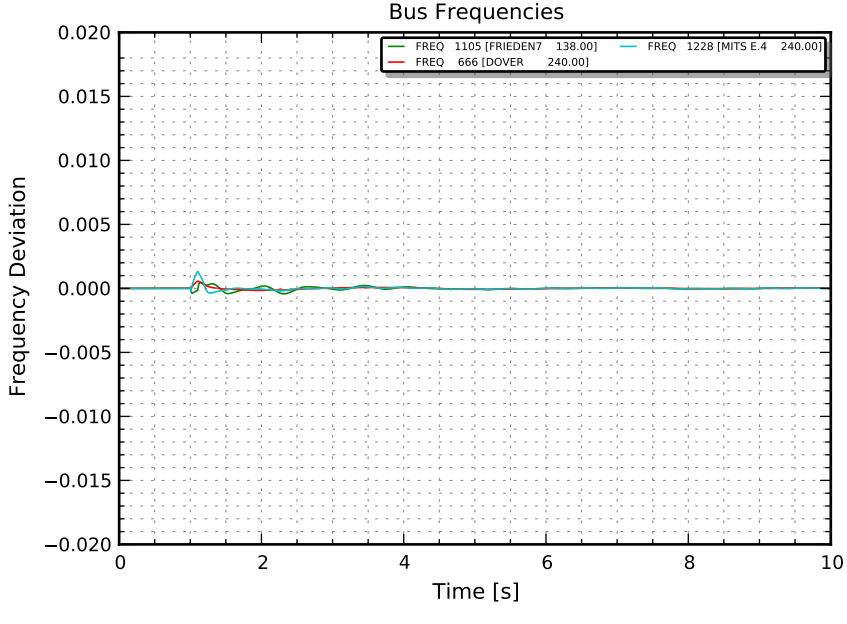
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 016 (B. 1)





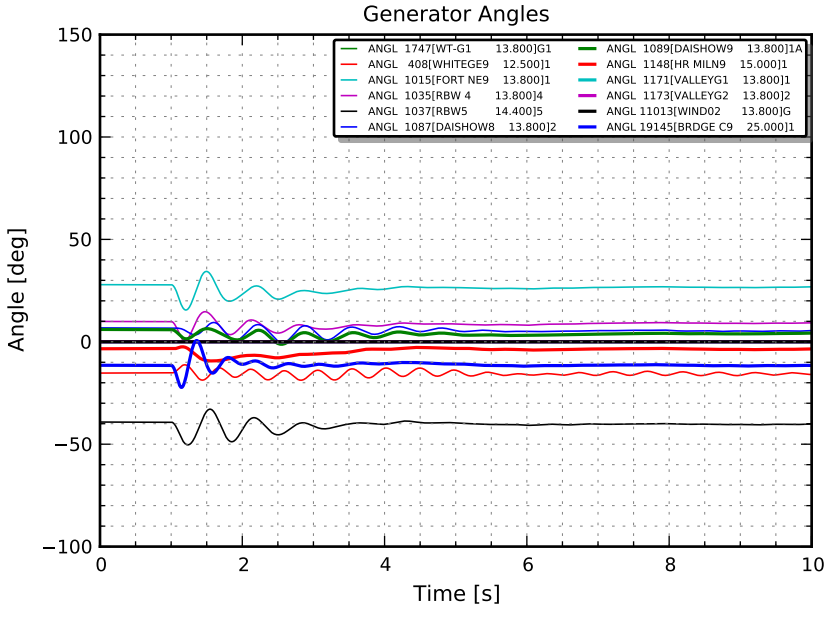


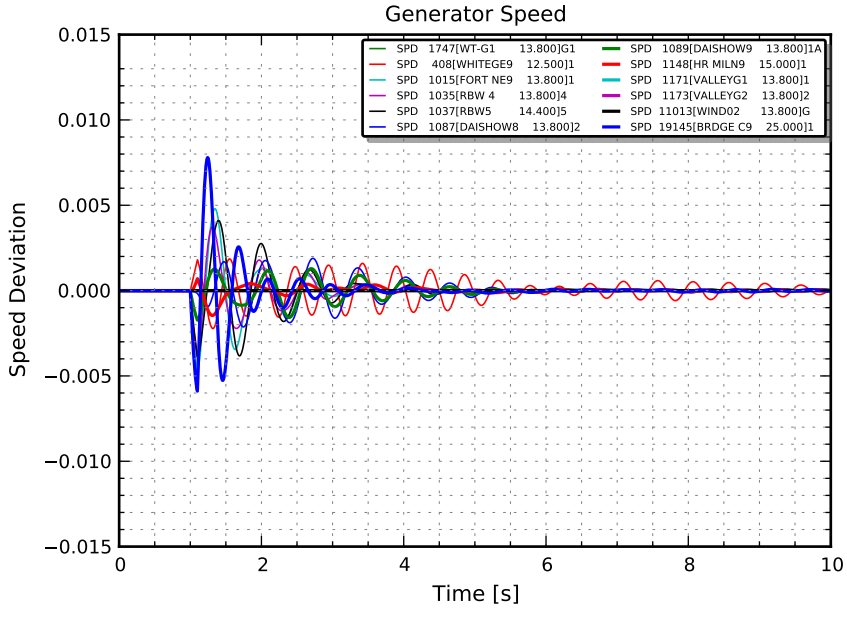


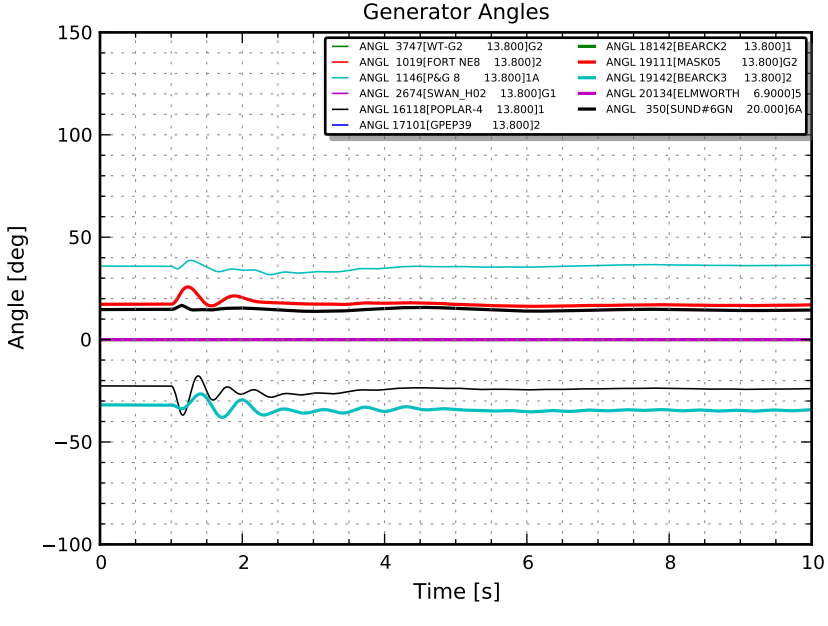
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_B.

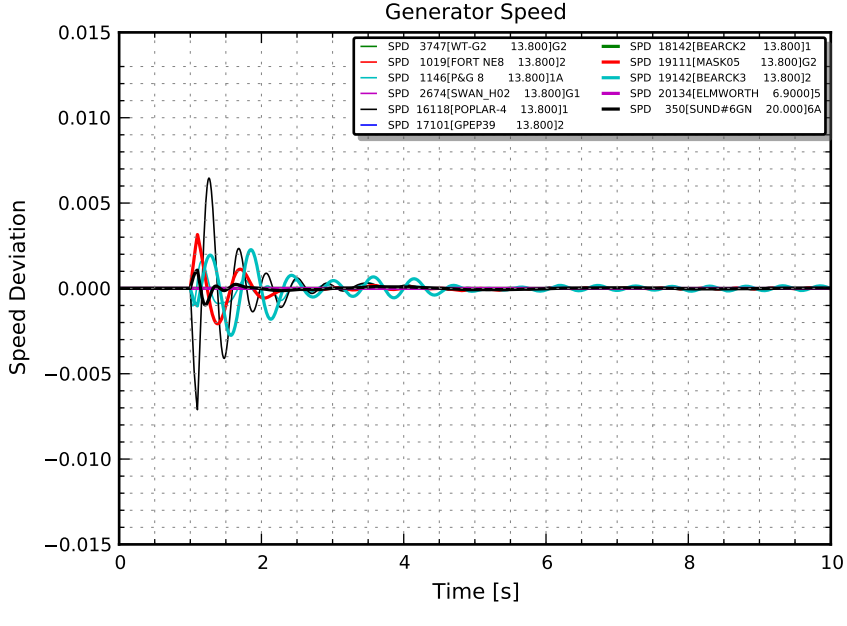
Study Area Generators

Appendix C2B
Figure: 016 (B. 2)





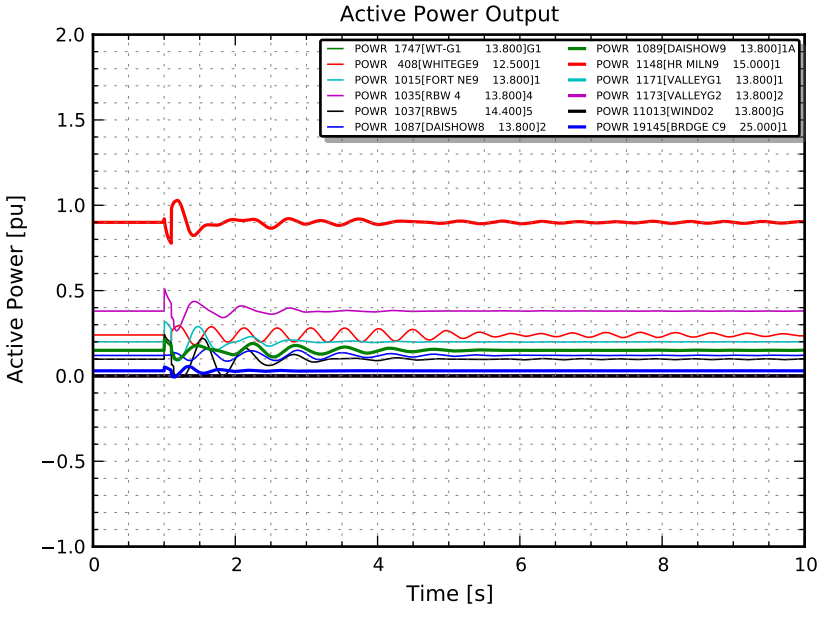


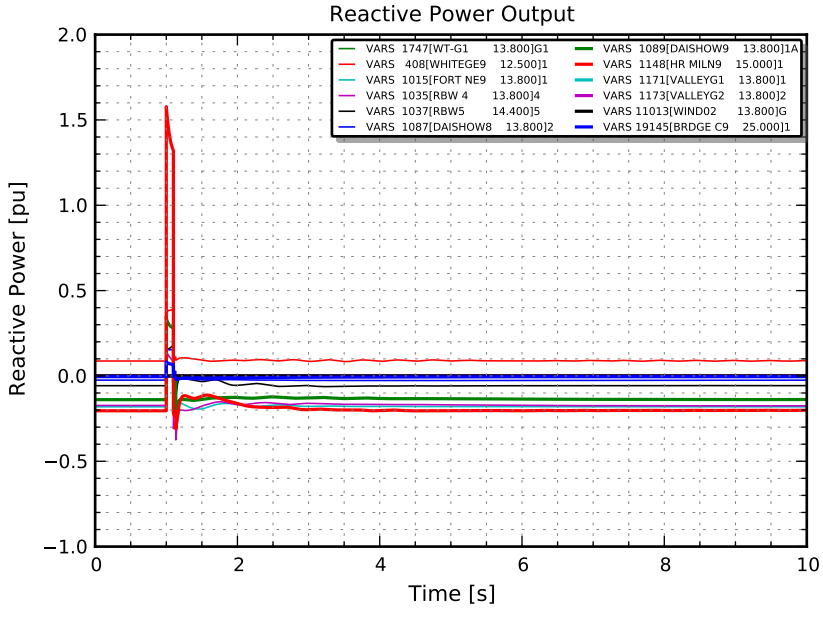


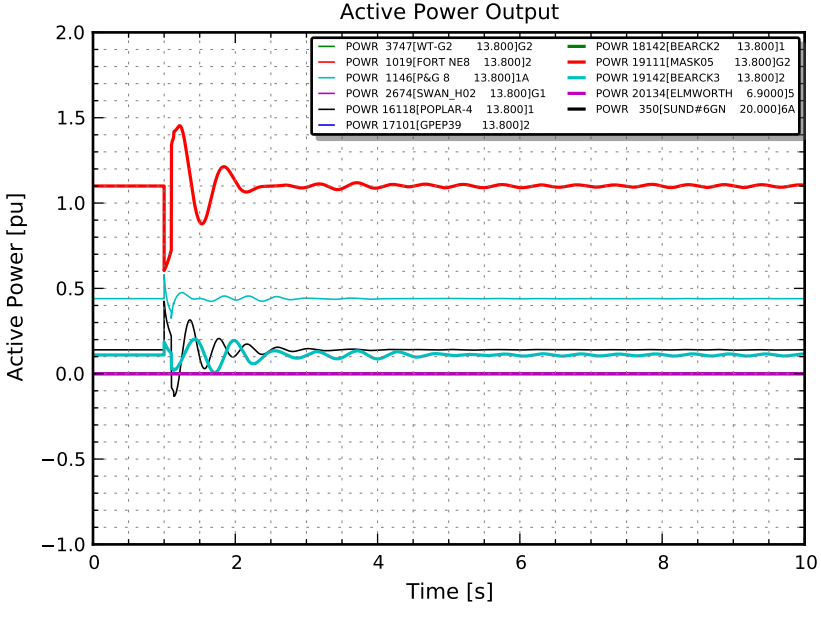
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_B.

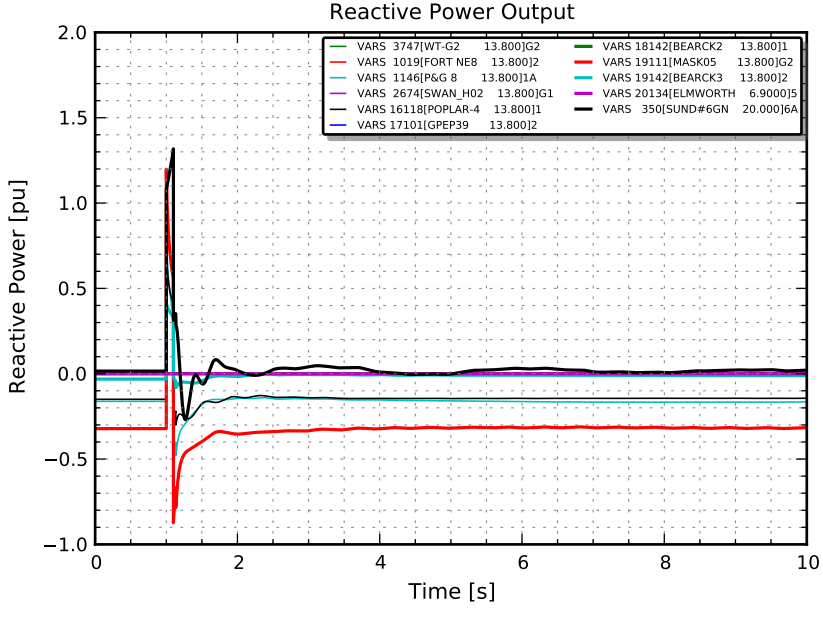
Study Area Generators

Appendix C2B
Figure: 016 (B. 3)





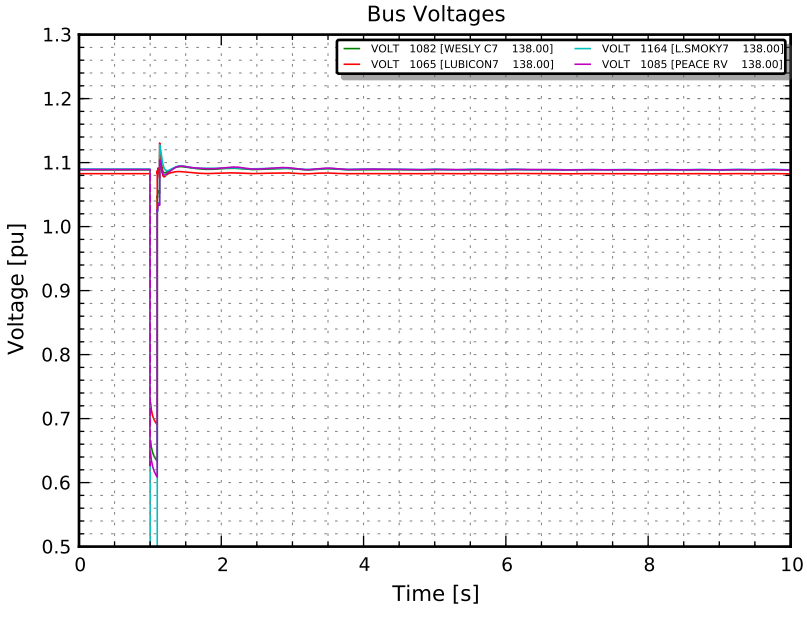


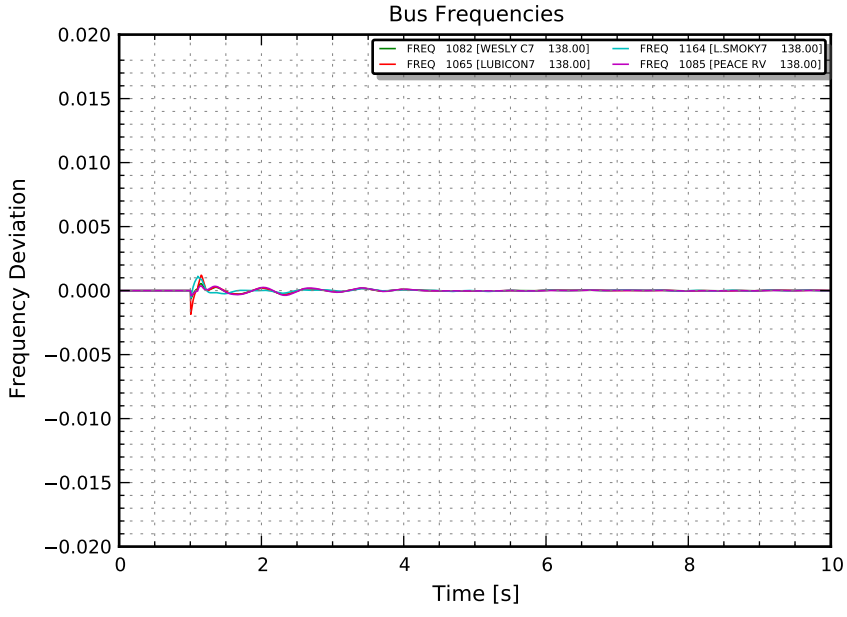


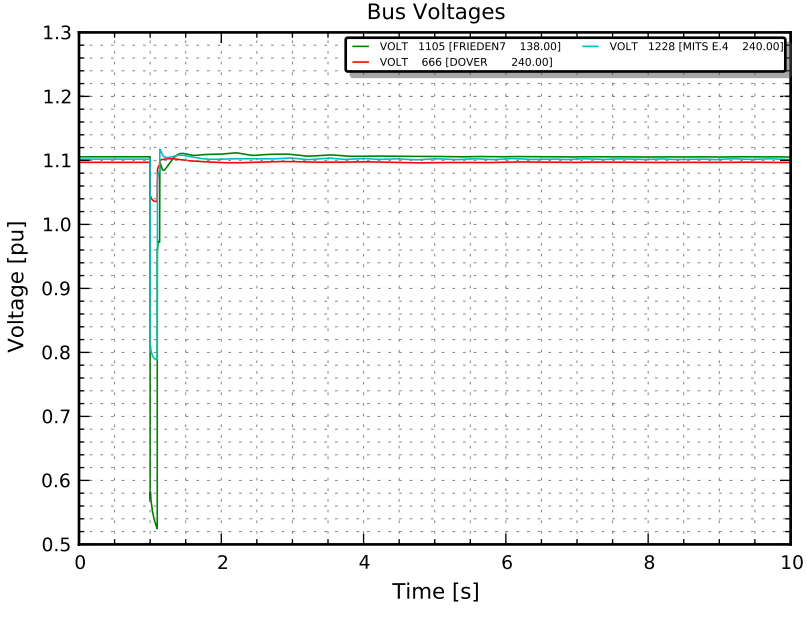
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_A.

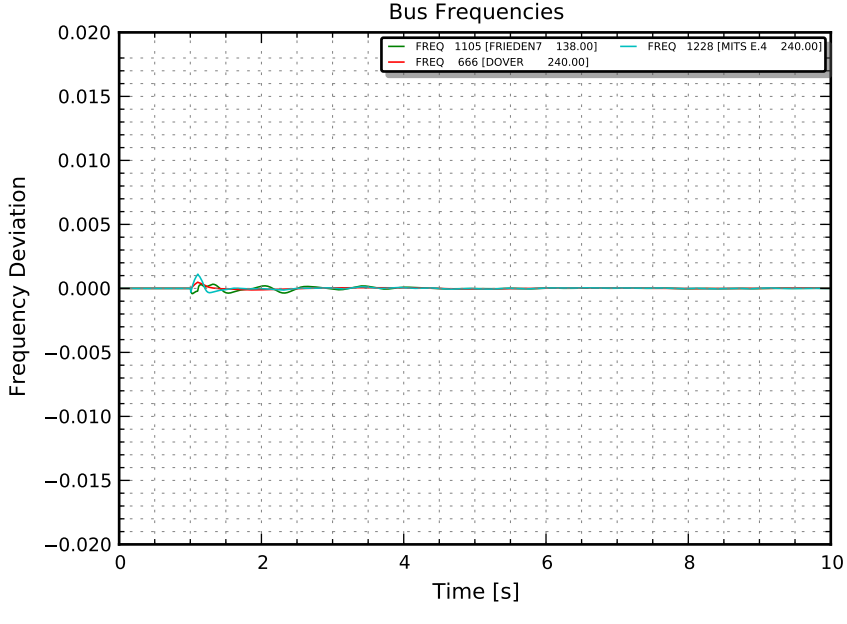
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 017 (A. 1)





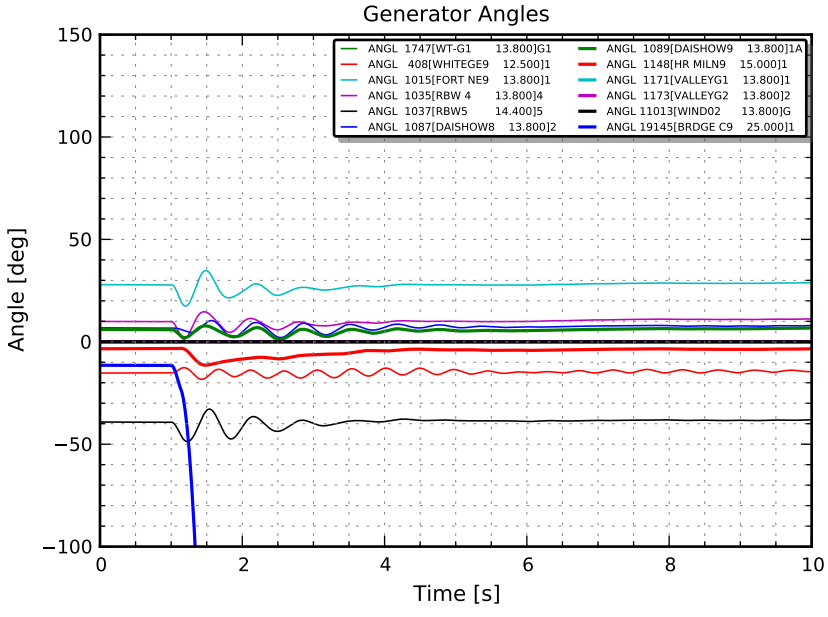


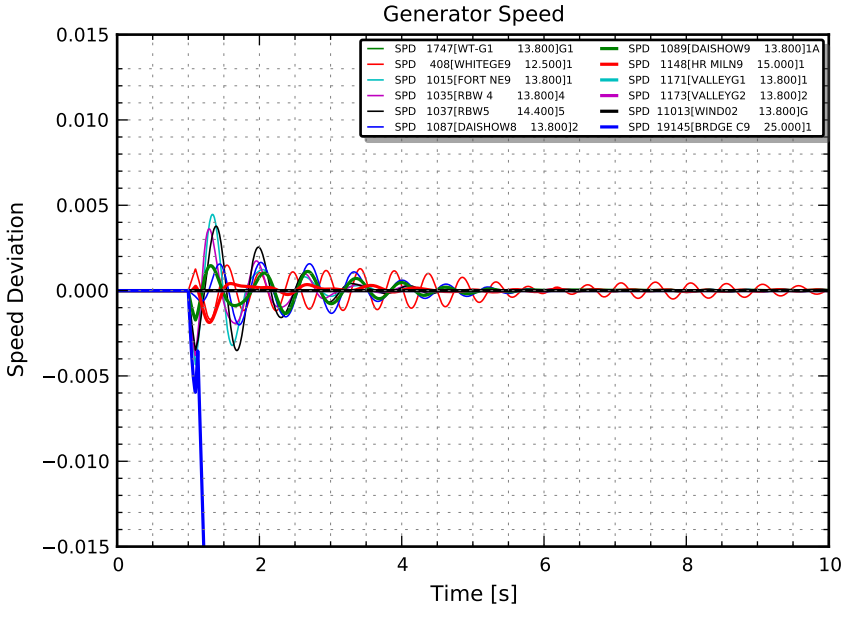


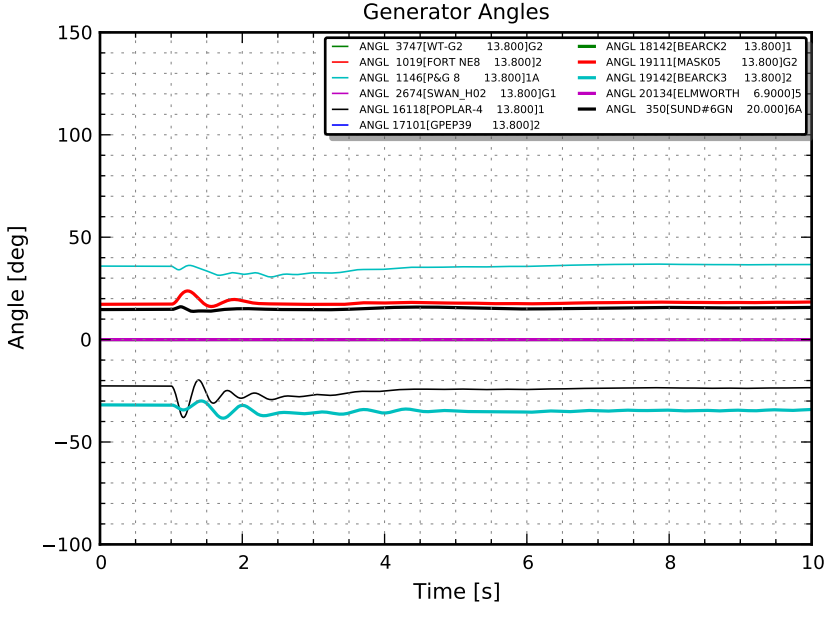
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_A.

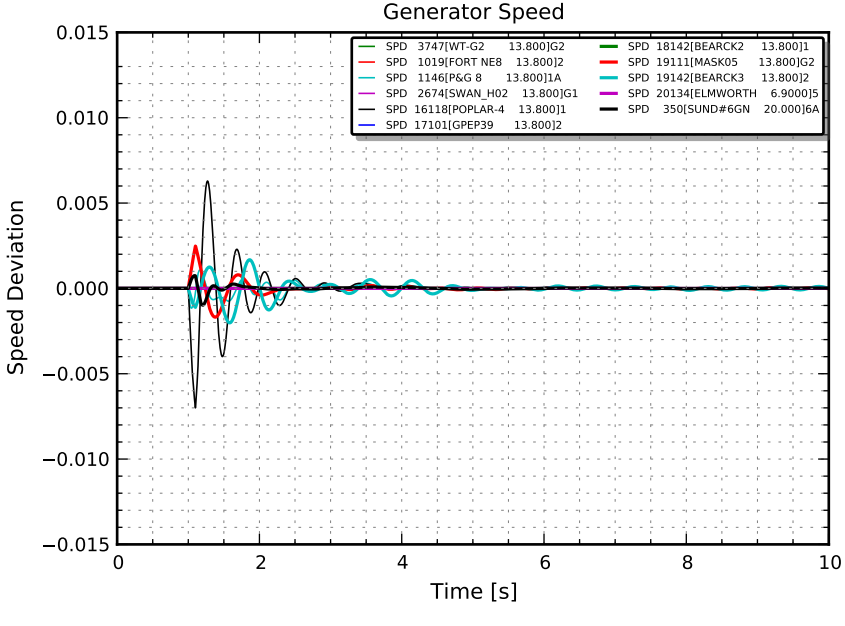
Study Area Generators

Appendix C2B
Figure: 017 (A. 2)





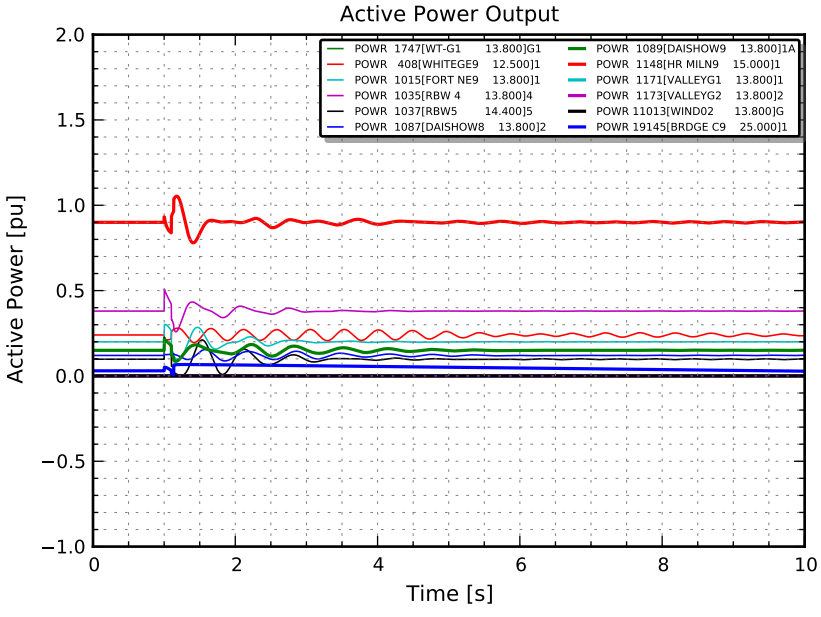


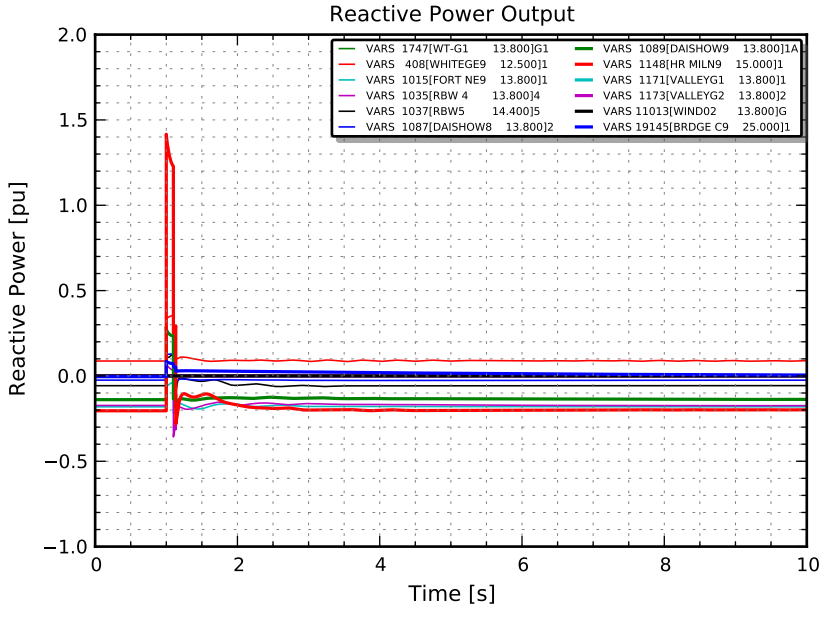


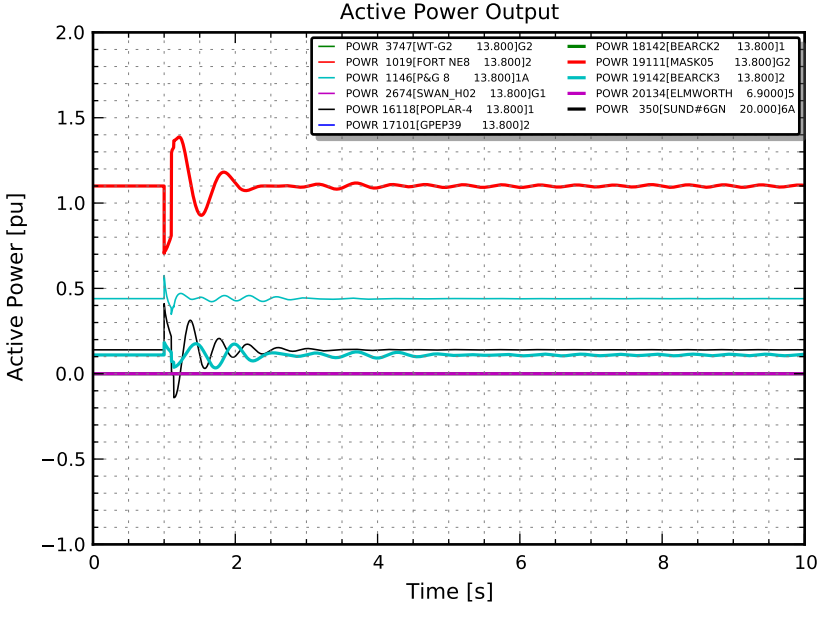
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_A.

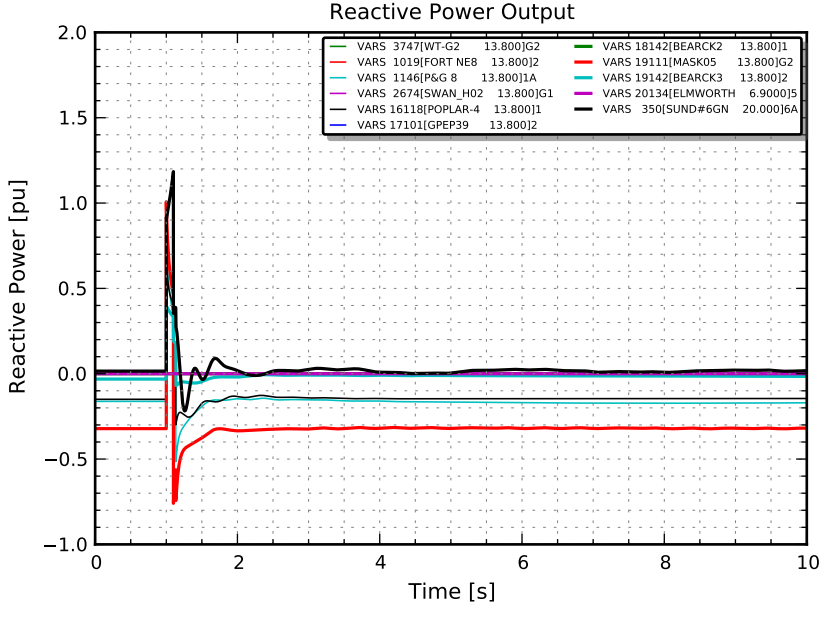
Study Area Generators

Appendix C2B
Figure: 017 (A. 3)





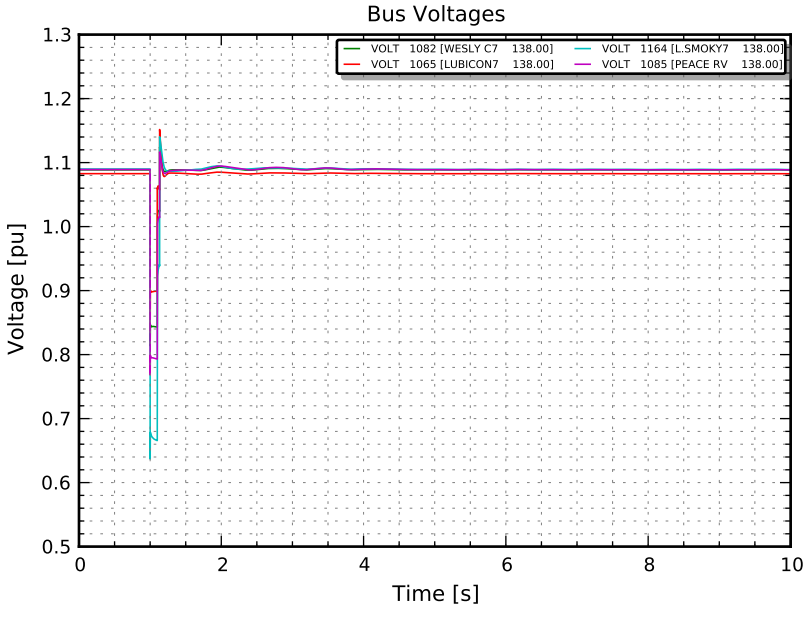


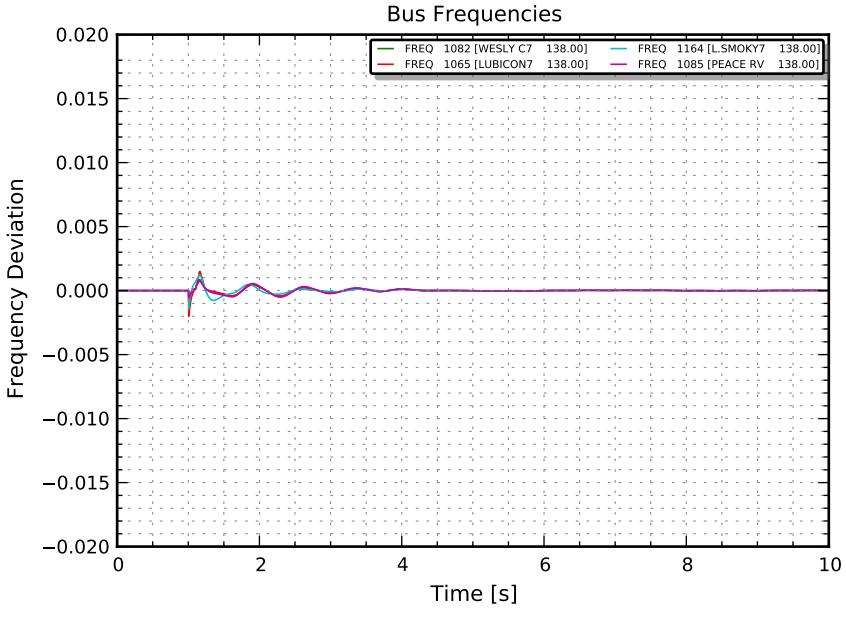


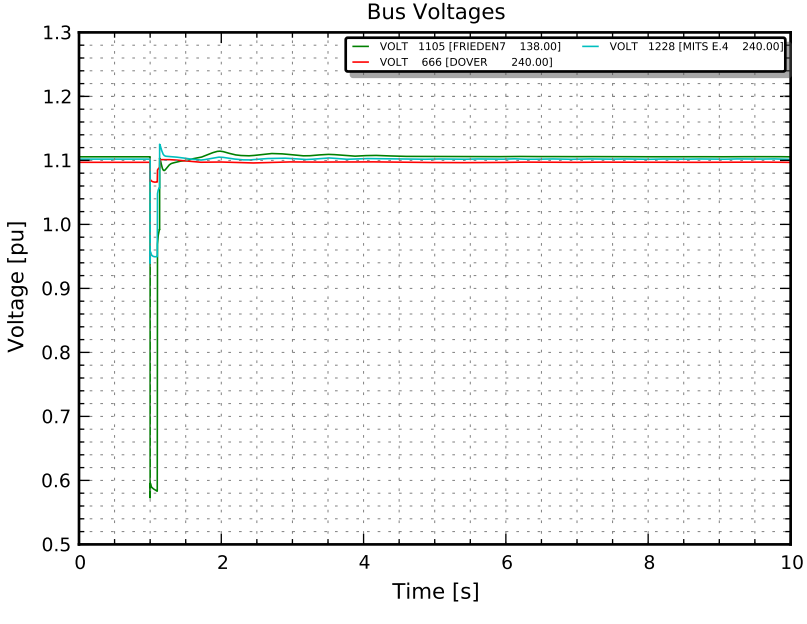
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_B.

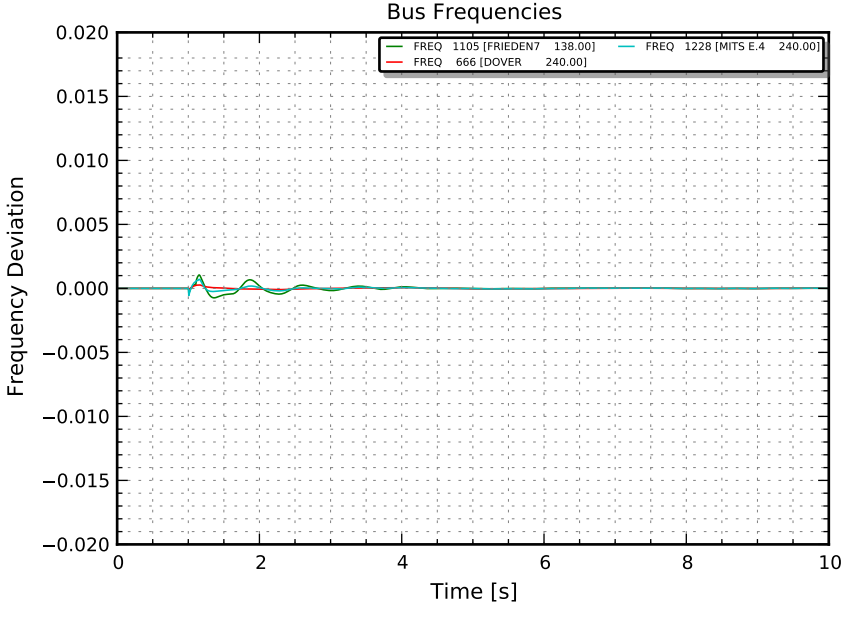
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 017 (B. 1)





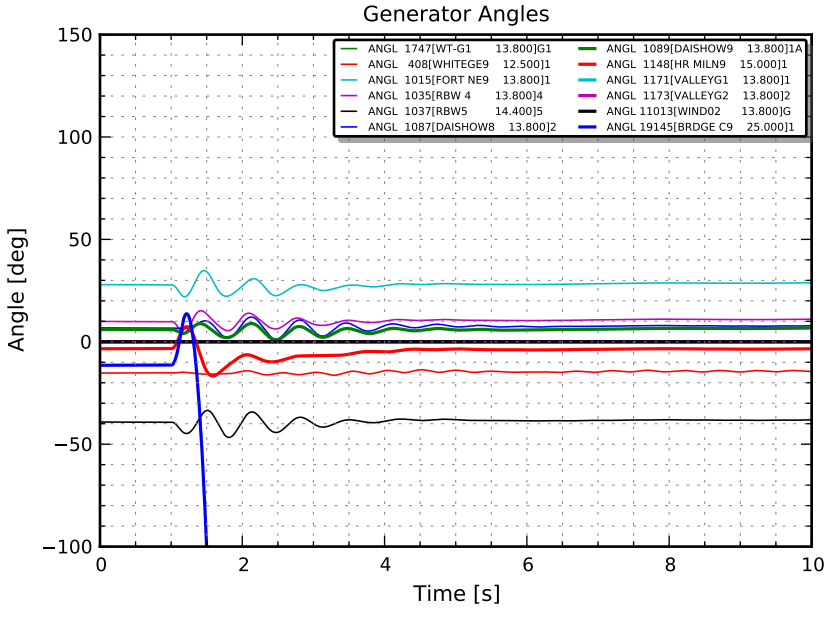


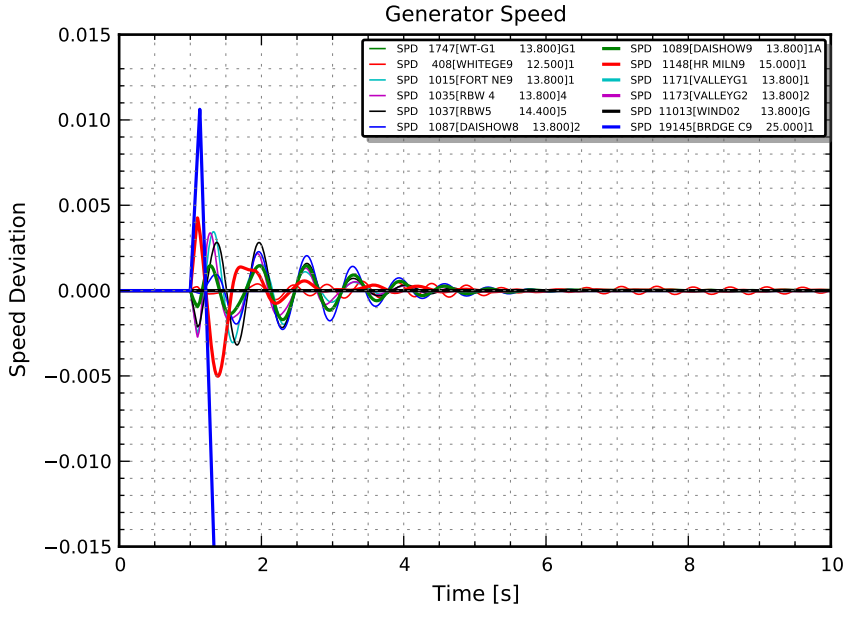


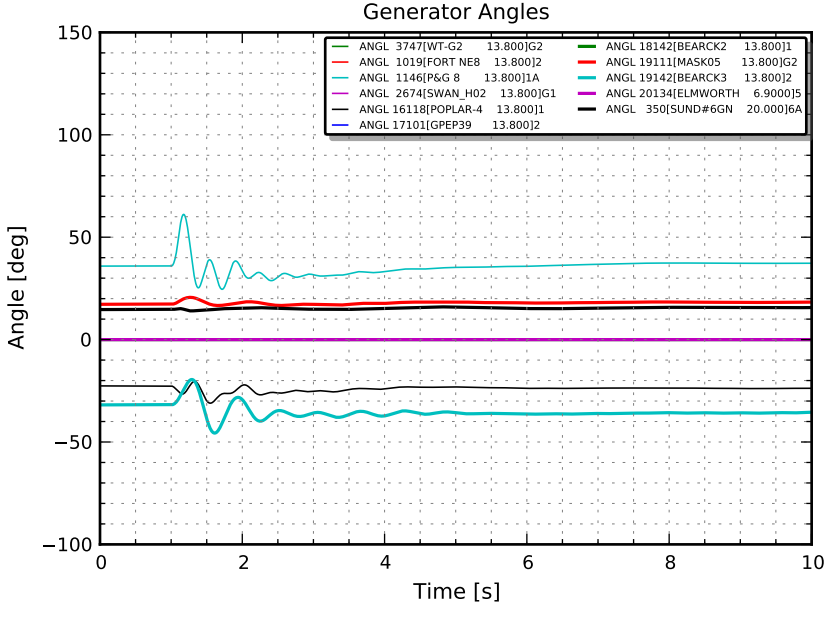
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_B.

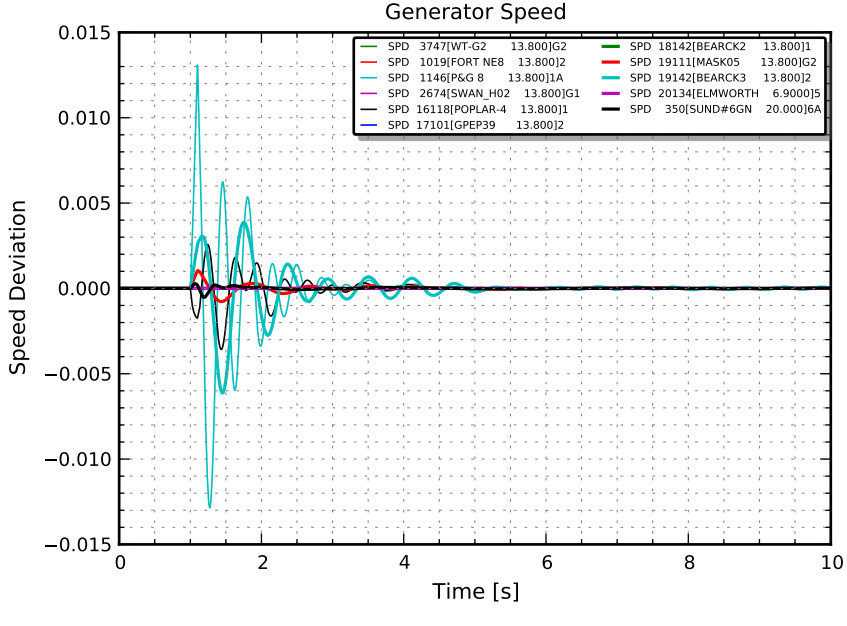
Study Area Generators

Appendix C2B
Figure: 017 (B. 2)





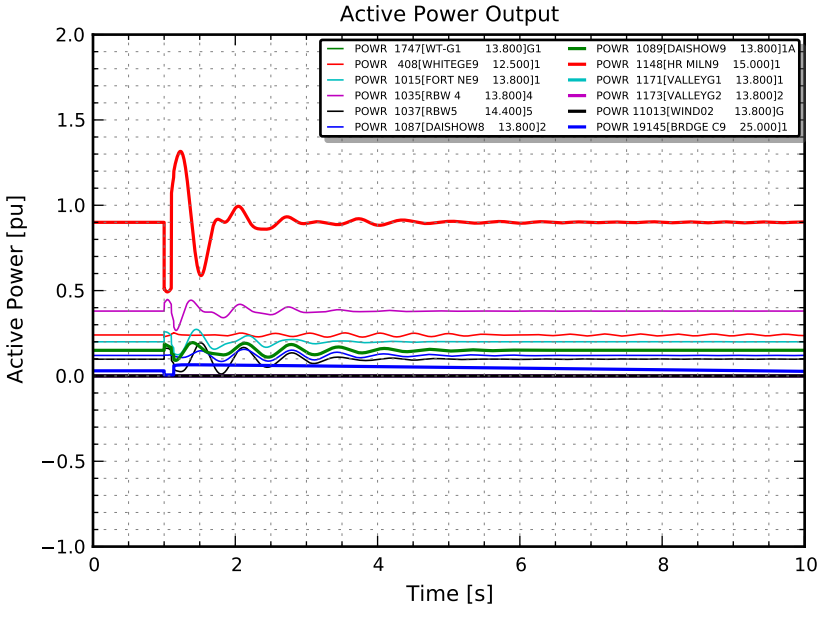


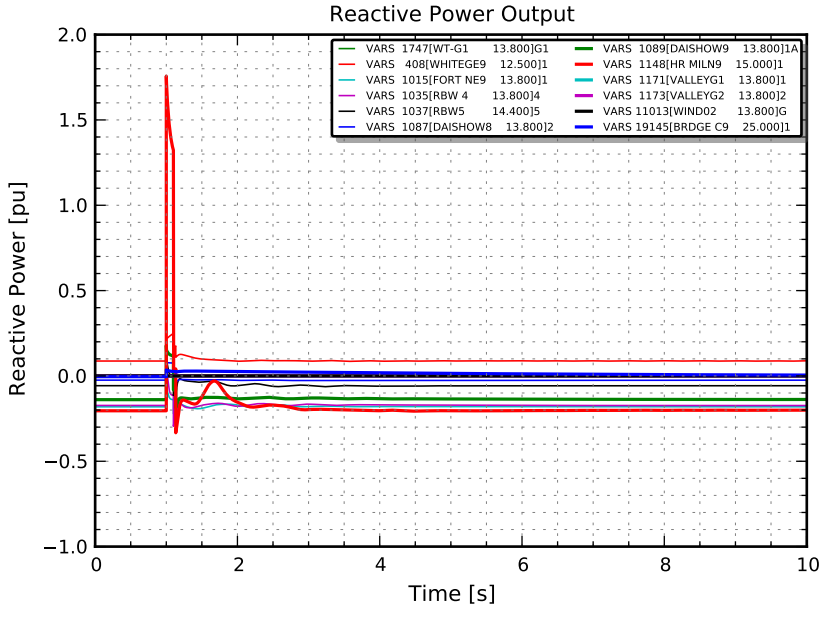


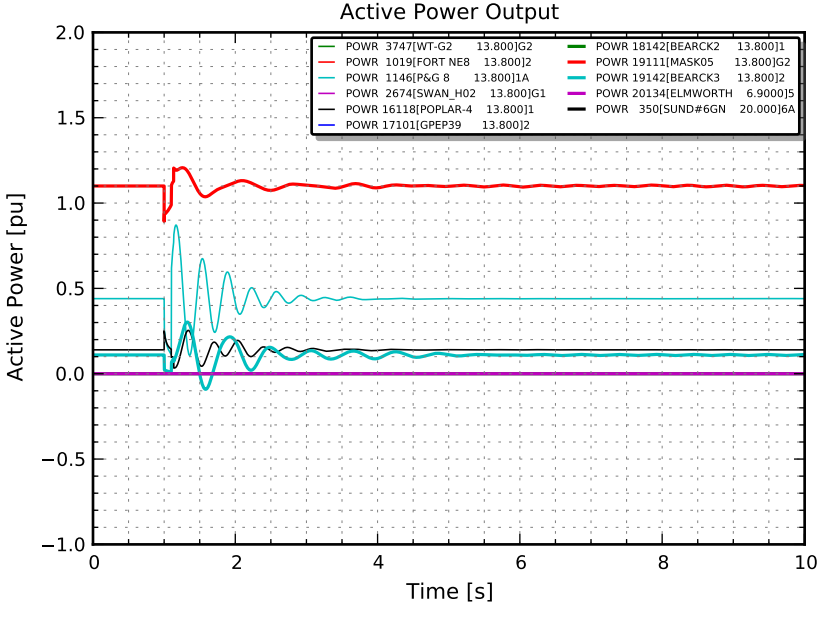
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_B.

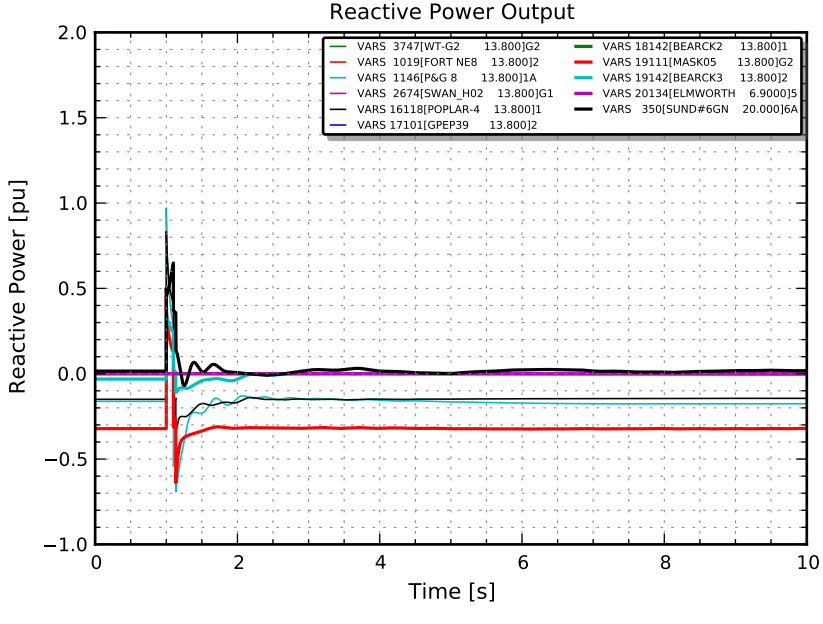
Study Area Generators

Appendix C2B
Figure: 017 (B. 3)





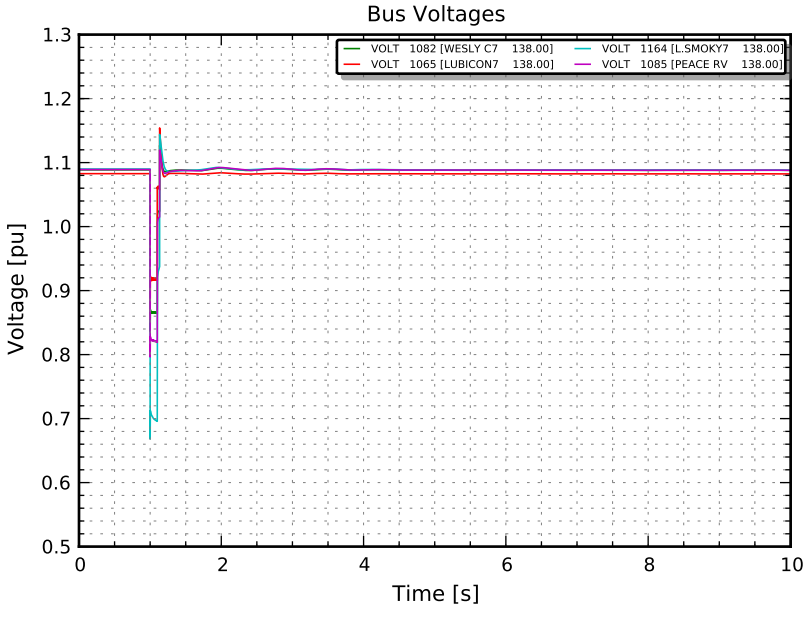


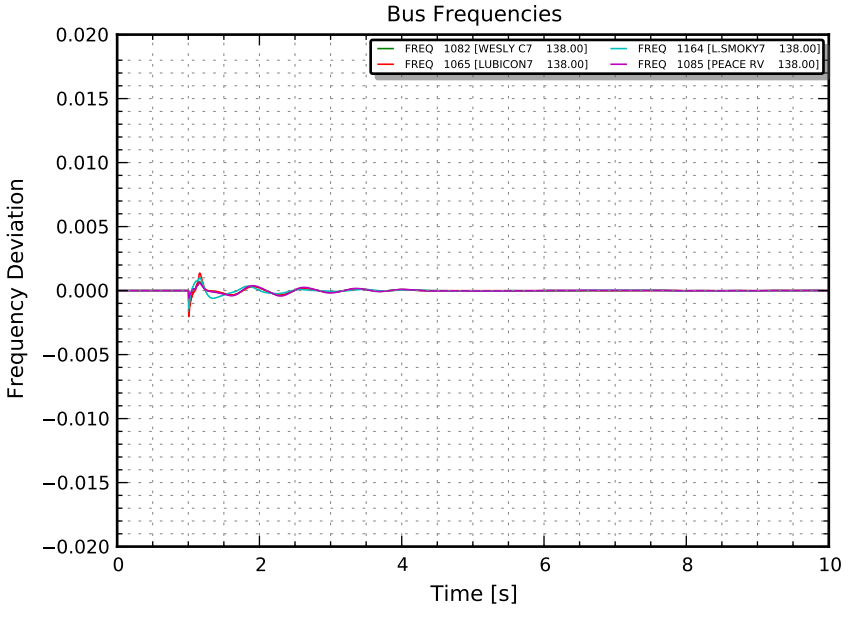


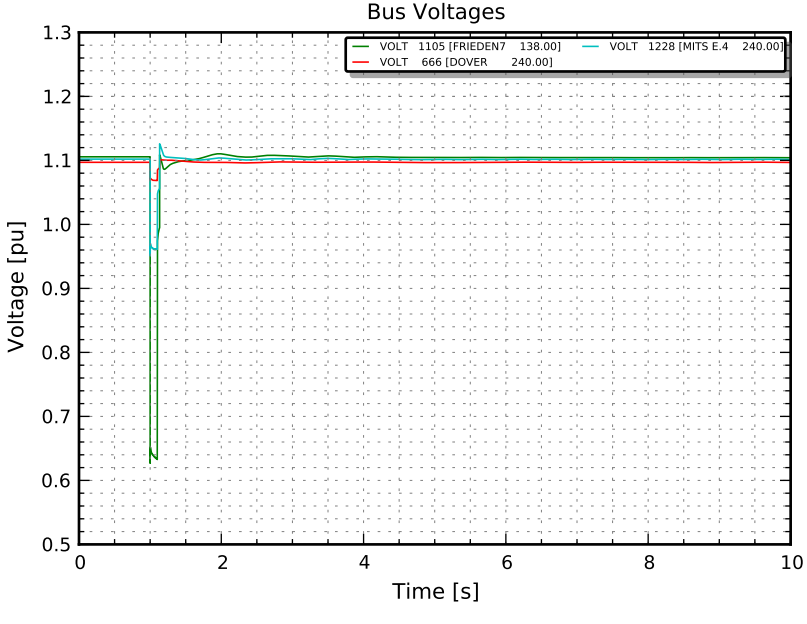
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_A.

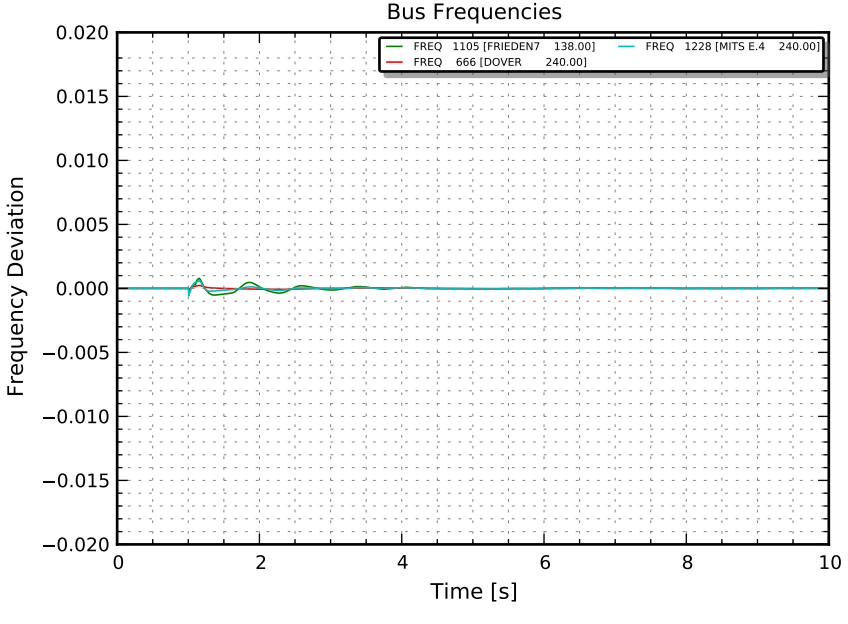
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 018 (A. 1)





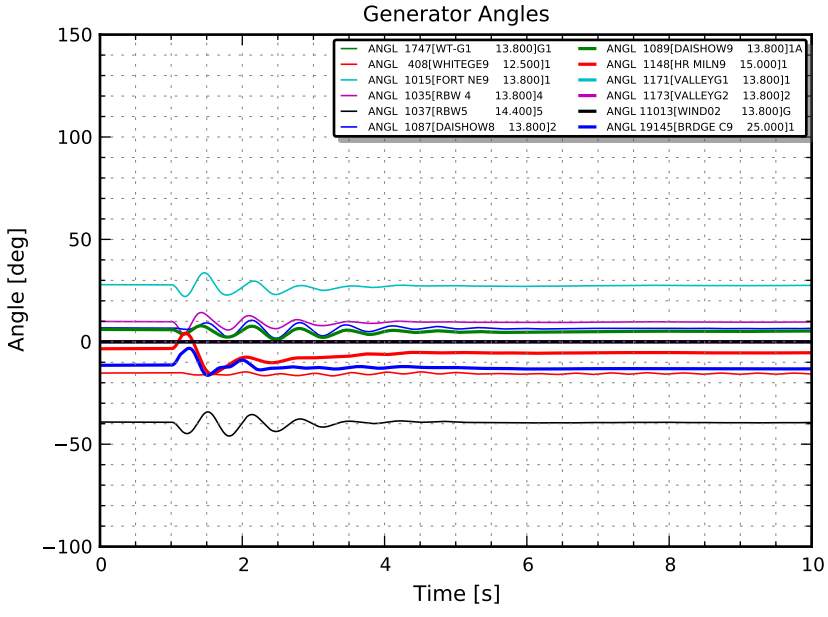


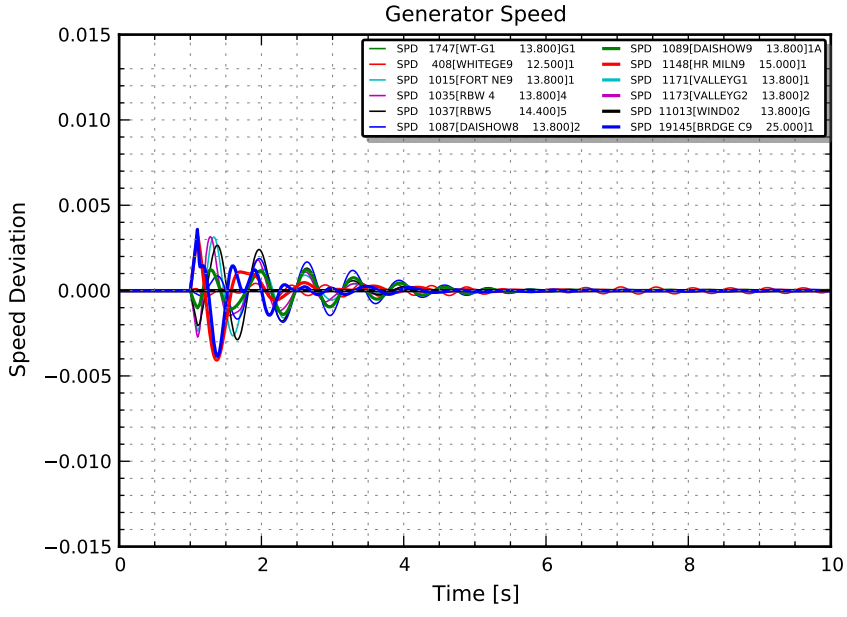


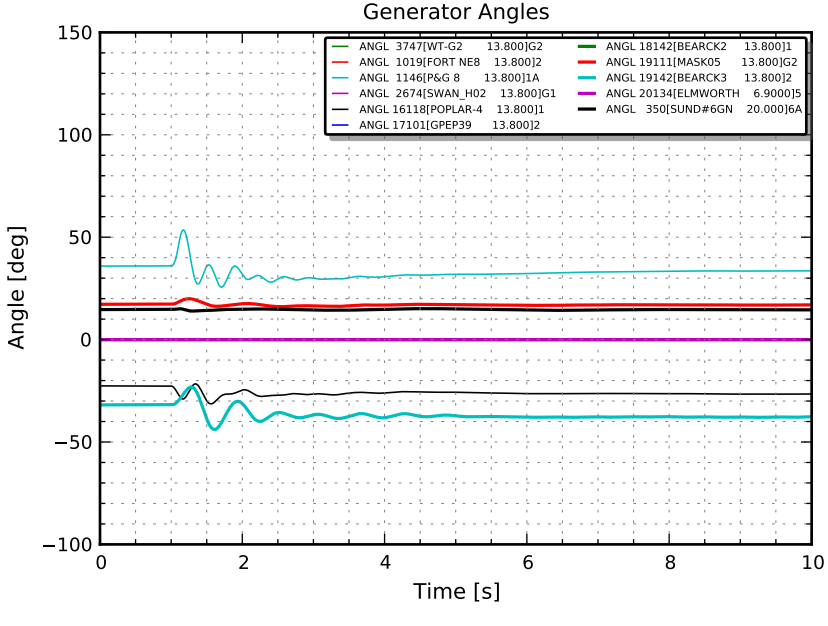
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_A.

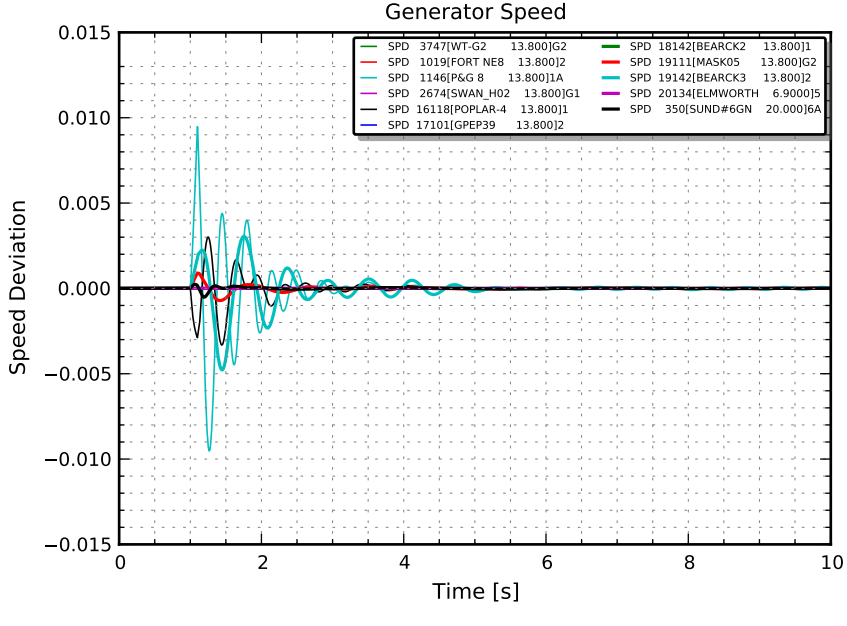
Study Area Generators

Appendix C2B
Figure: 018 (A. 2)





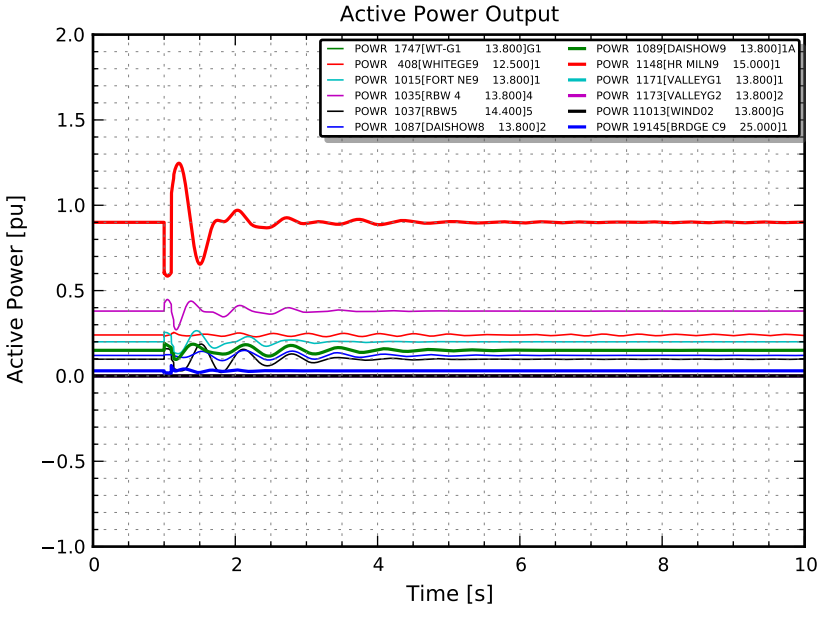


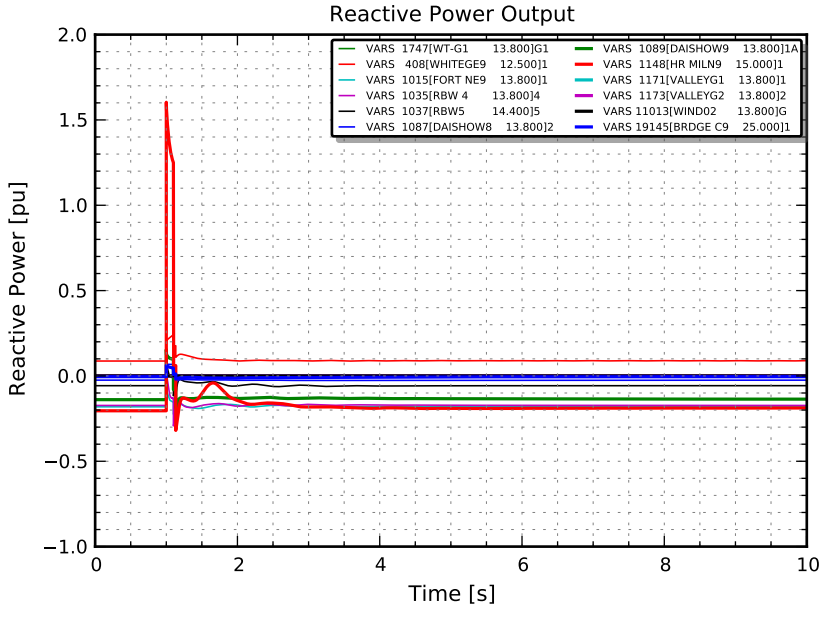


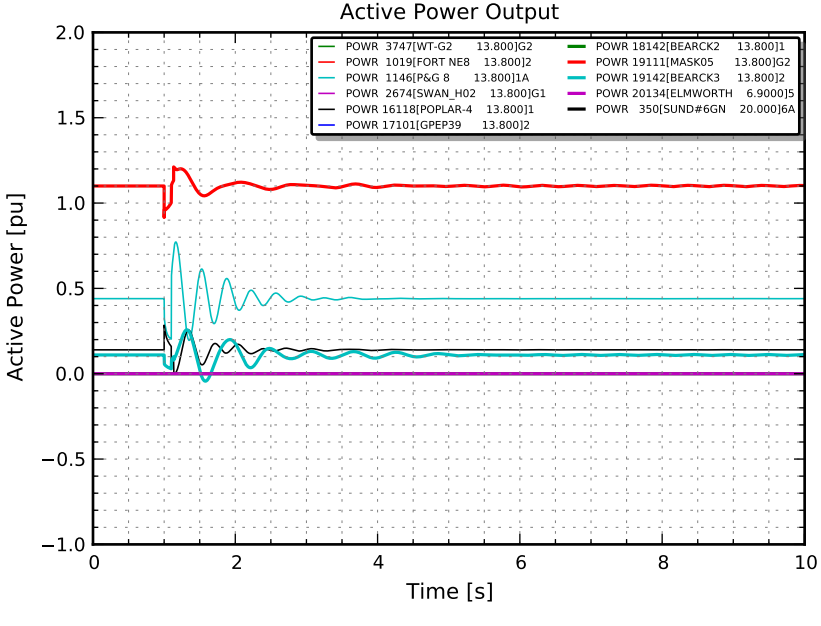
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_A.

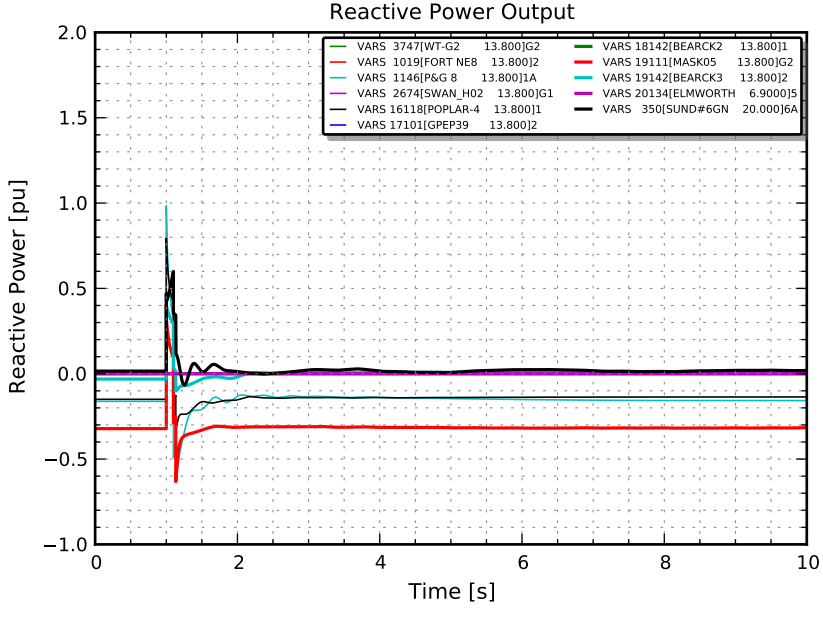
Study Area Generators

Appendix C2B
Figure: 018 (A. 3)





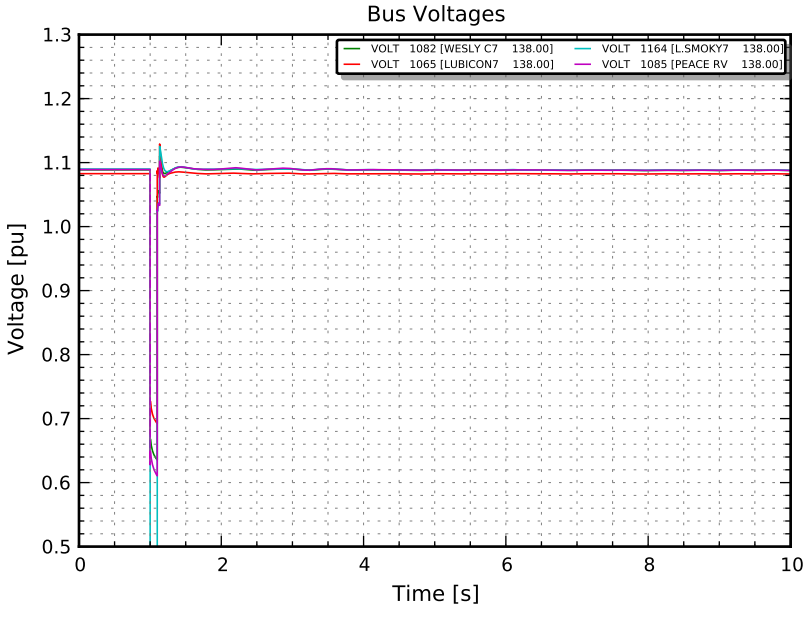


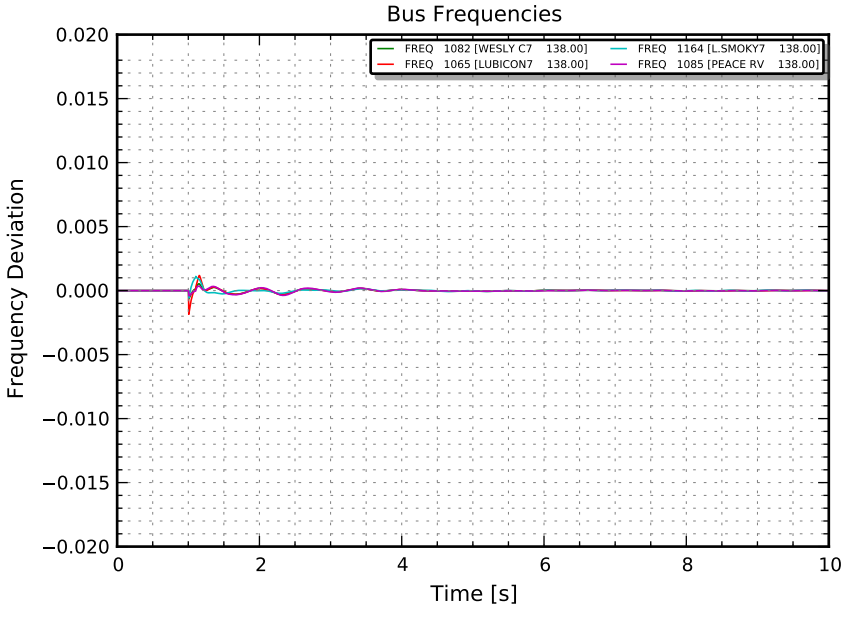


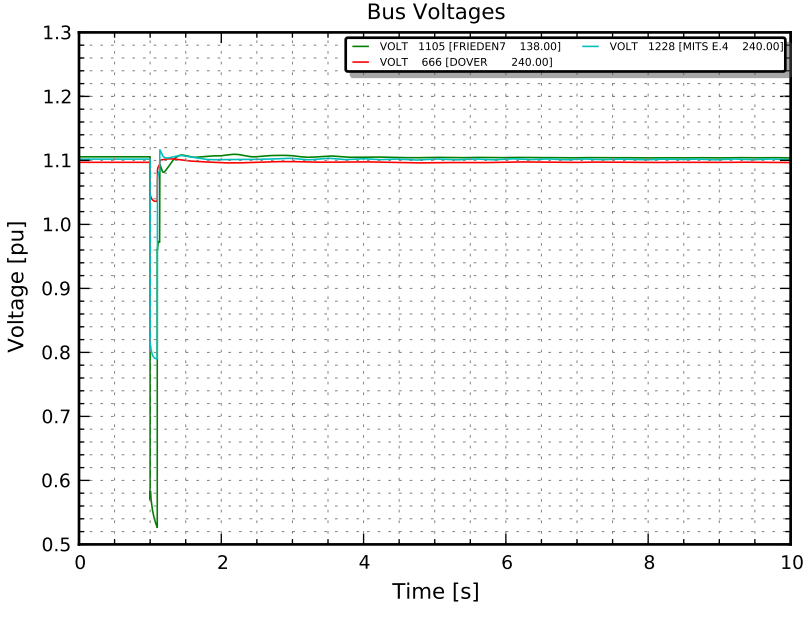
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_B.

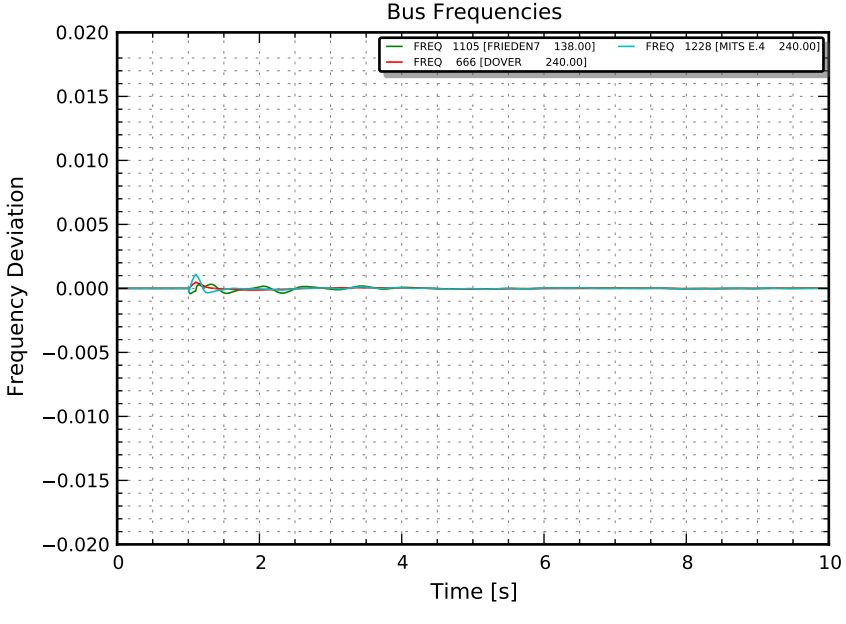
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 018 (B. 1)





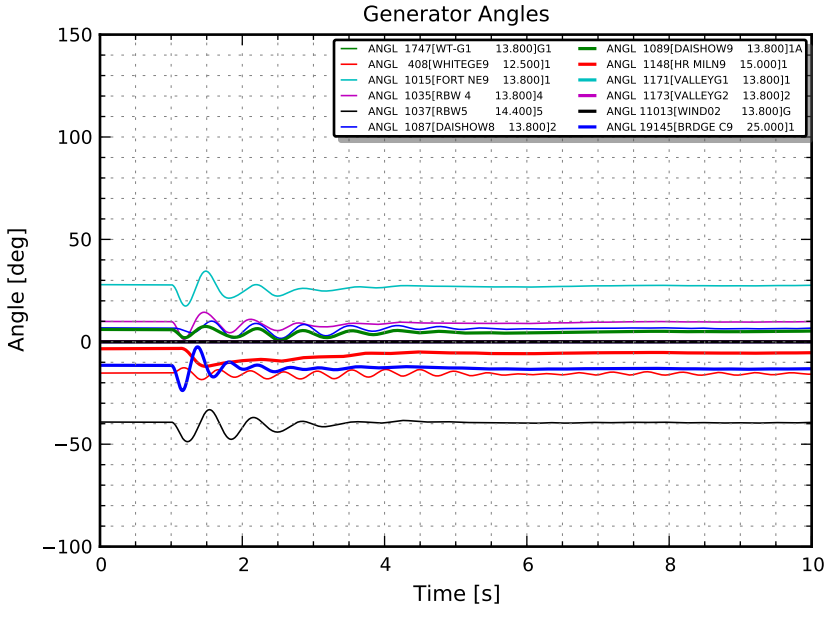


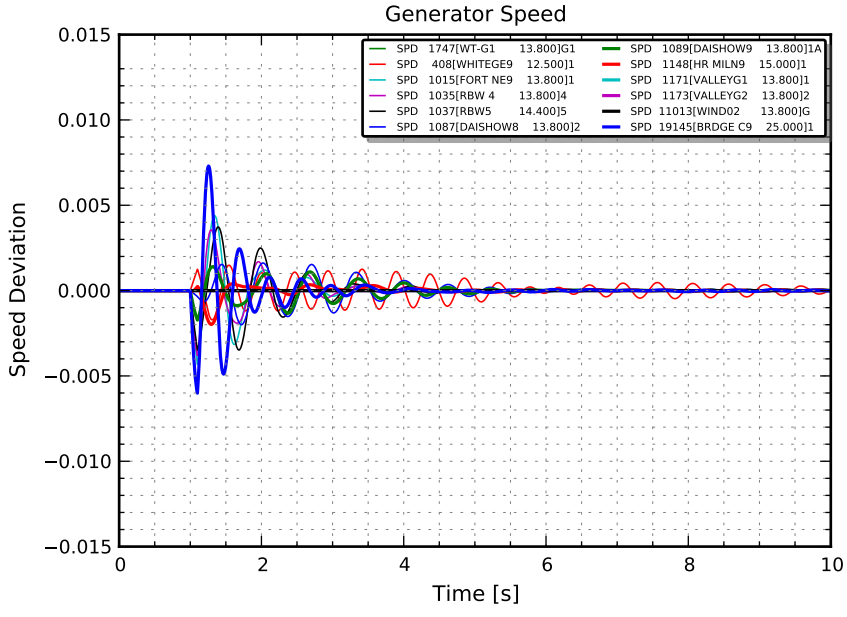


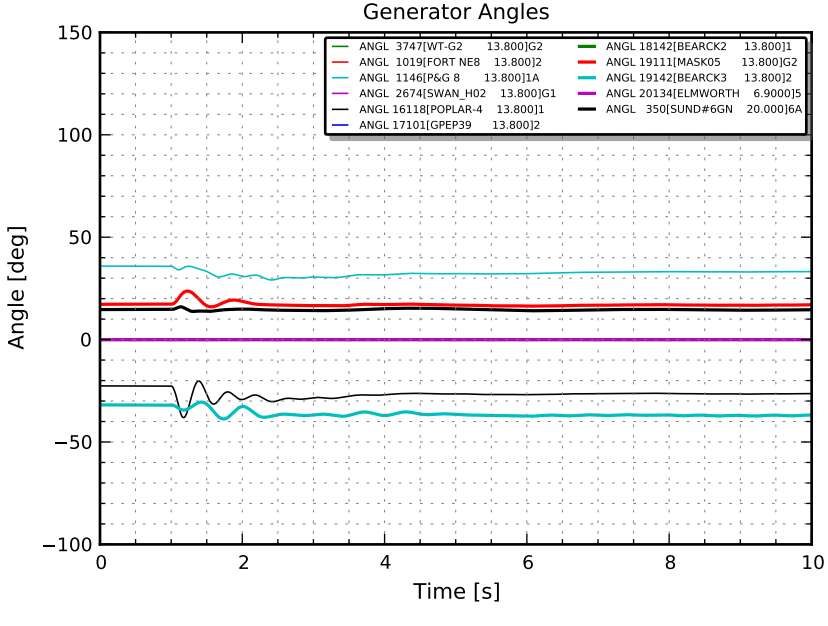
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_B.

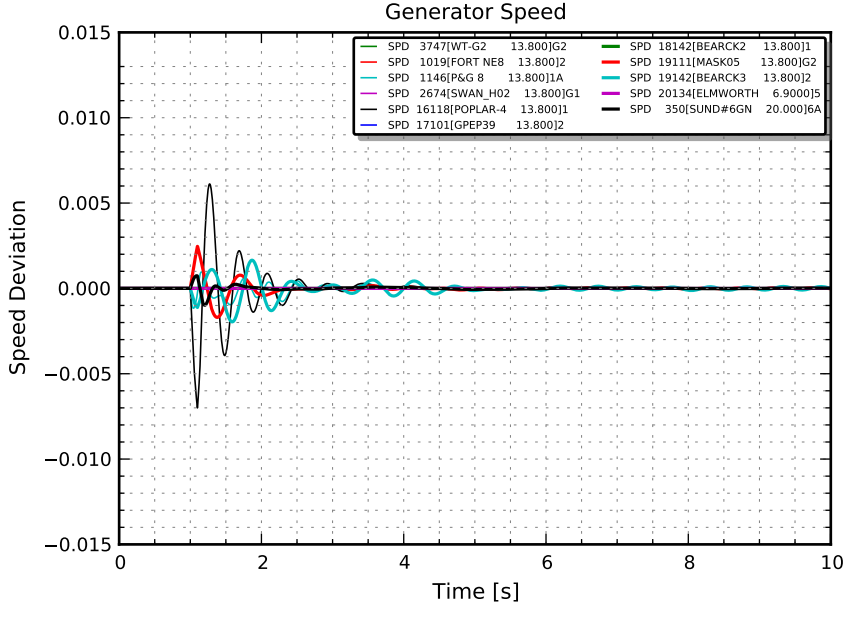
Study Area Generators

Appendix C2B
Figure: 018 (B. 2)





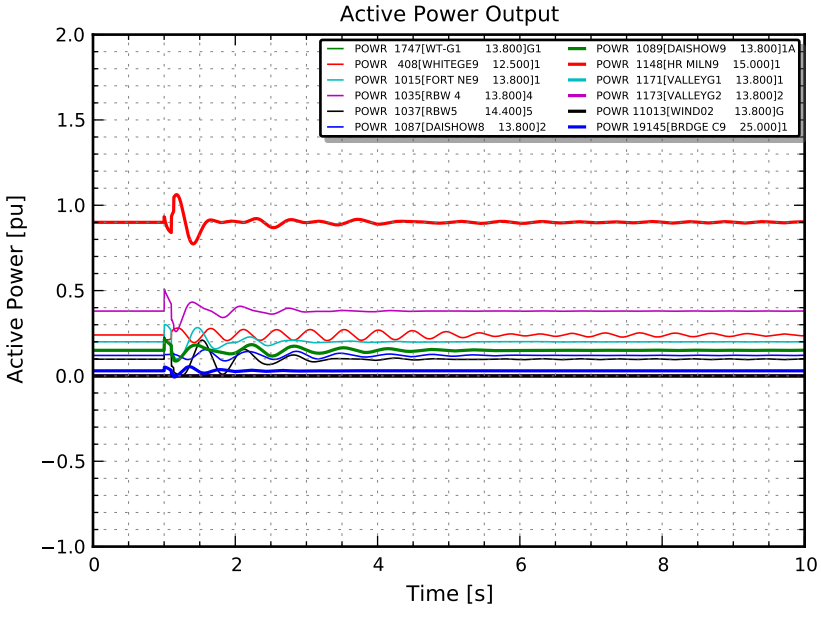


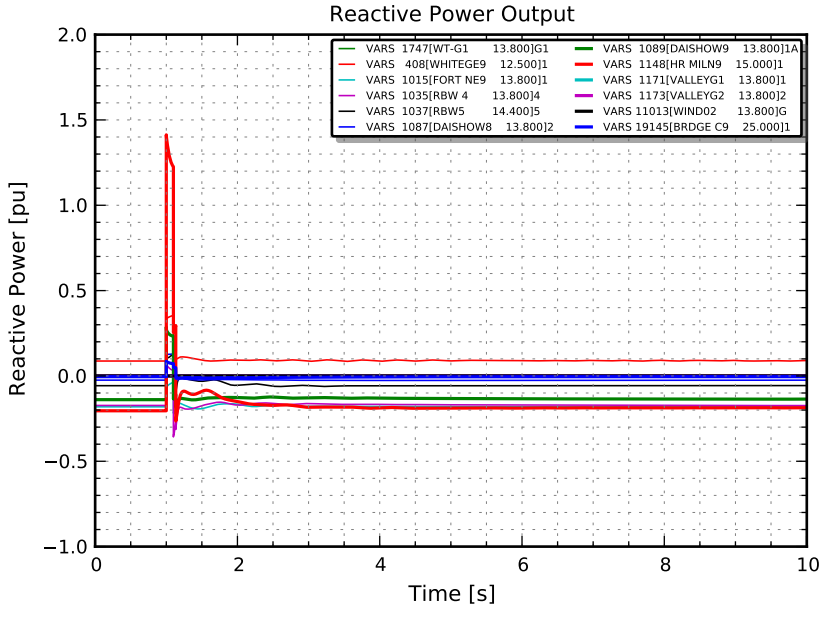


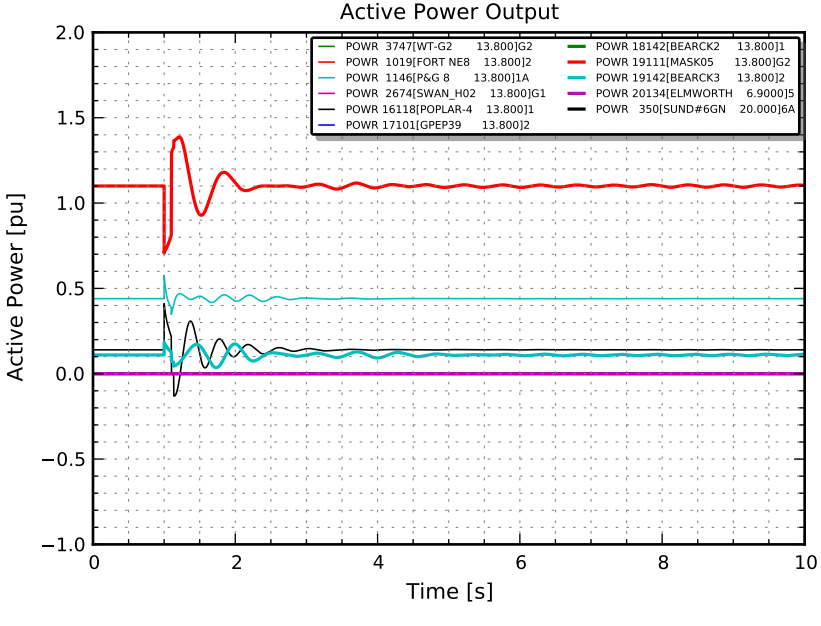
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_B.

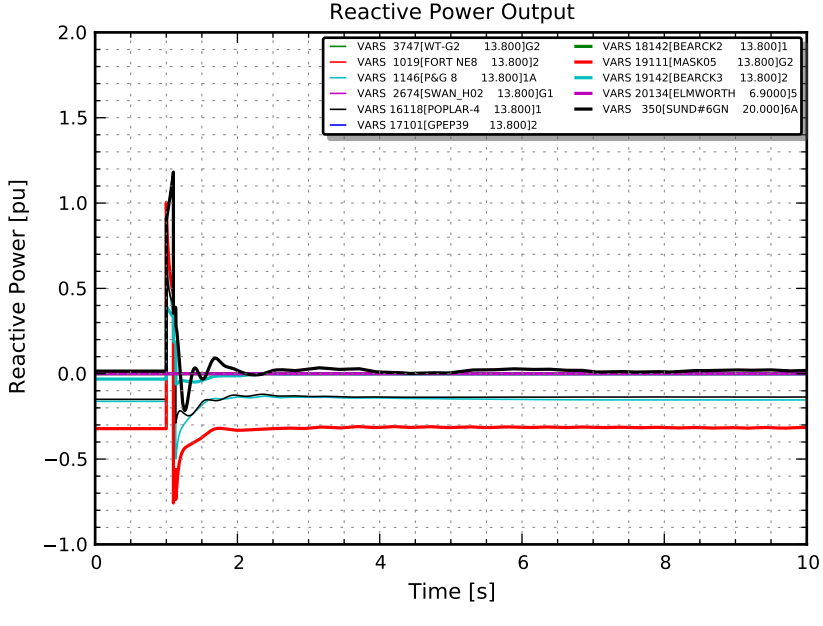
Study Area Generators

Appendix C2B
Figure: 018 (B. 3)





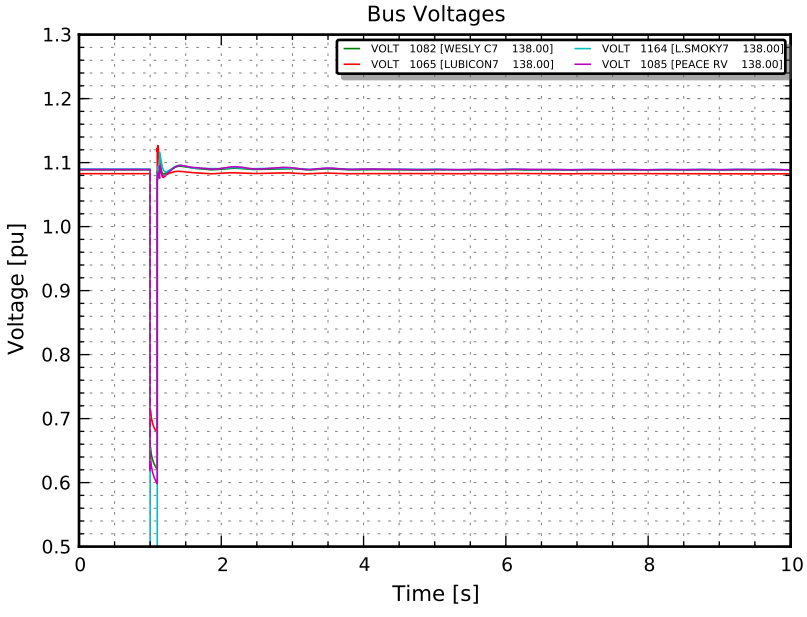


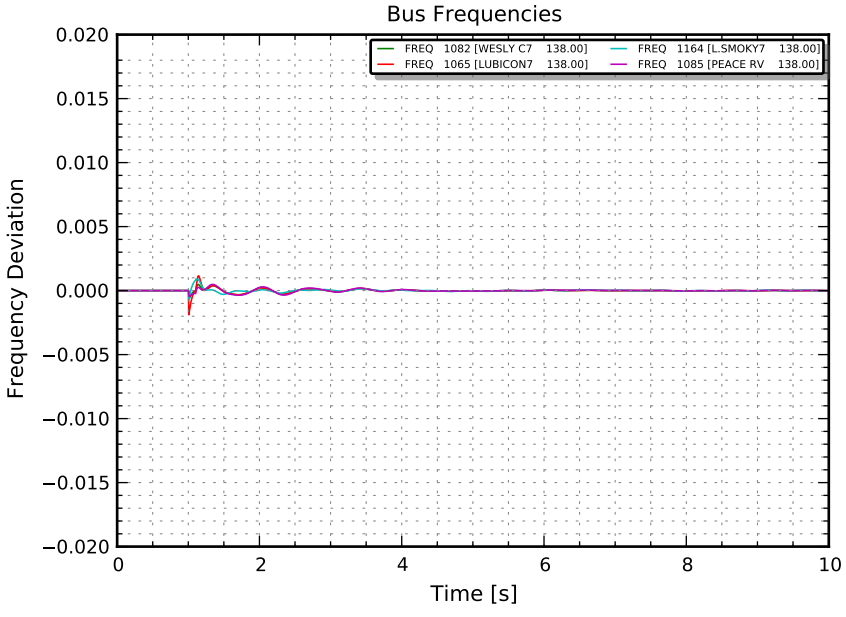


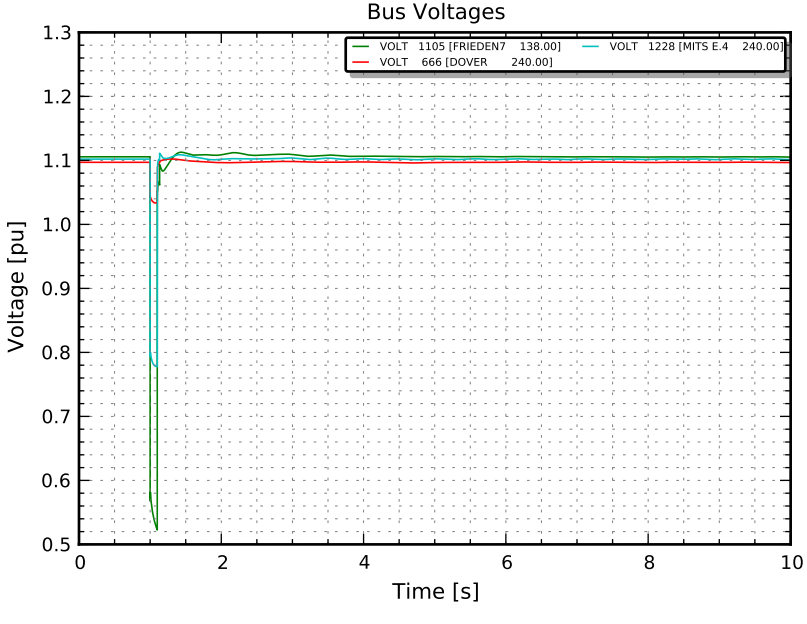
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 019 7L40 LITTLESMOKY to SIMONETTE_A.

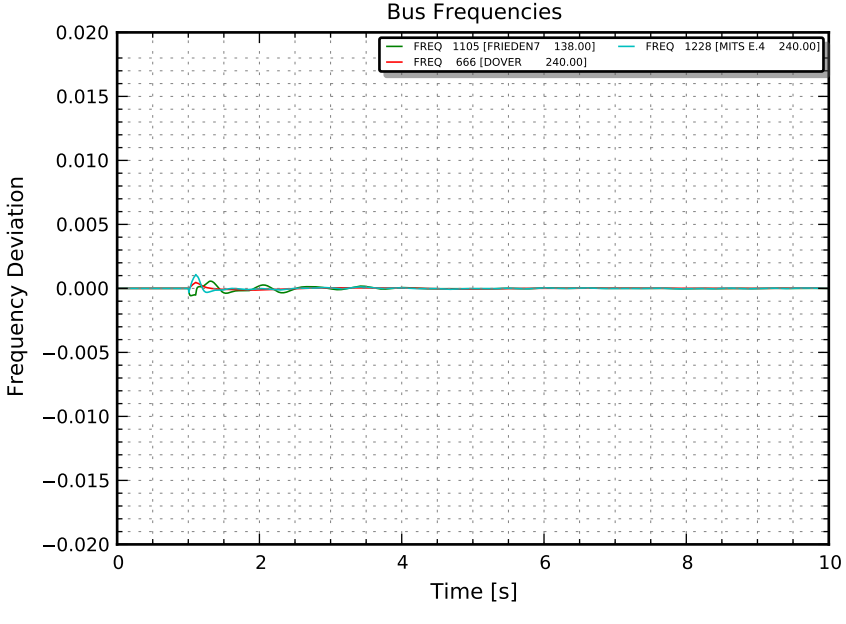
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 019 (A. 1)





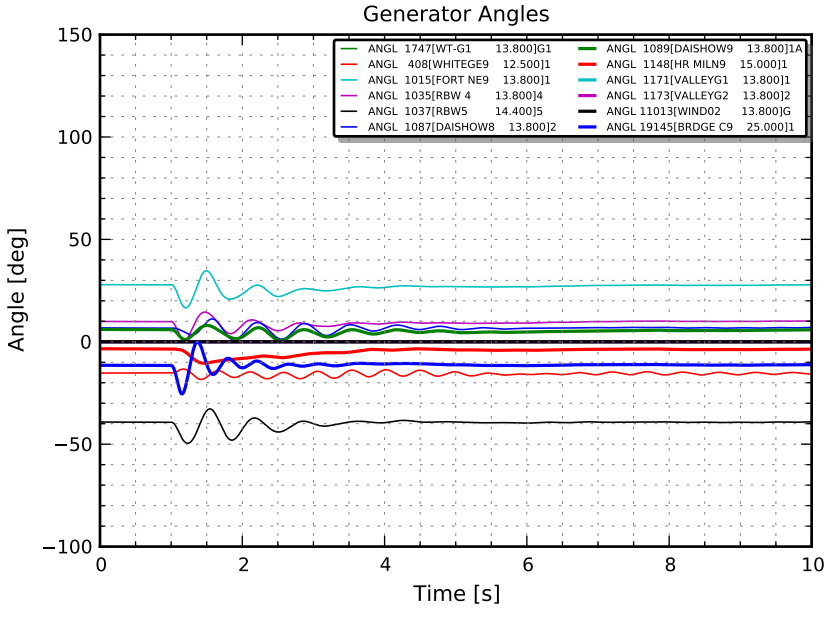


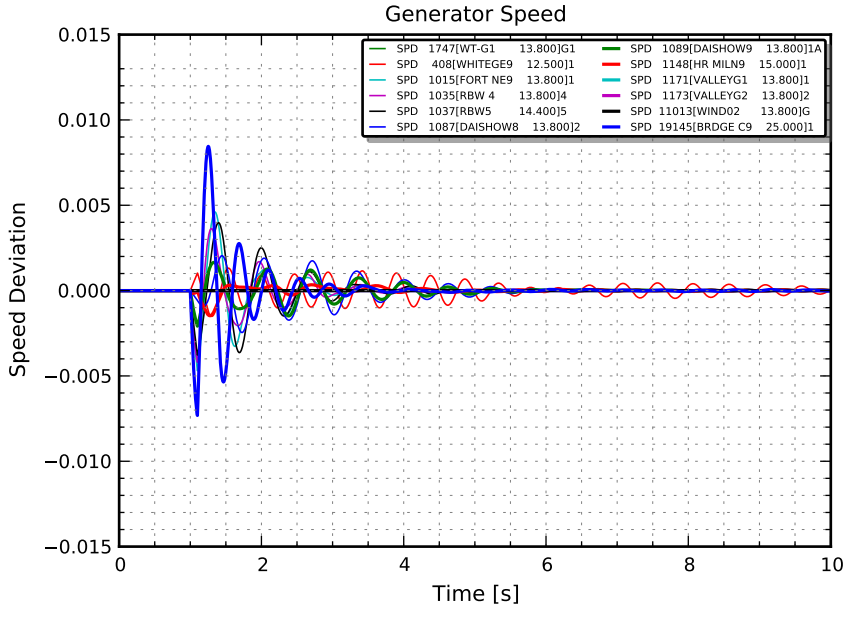


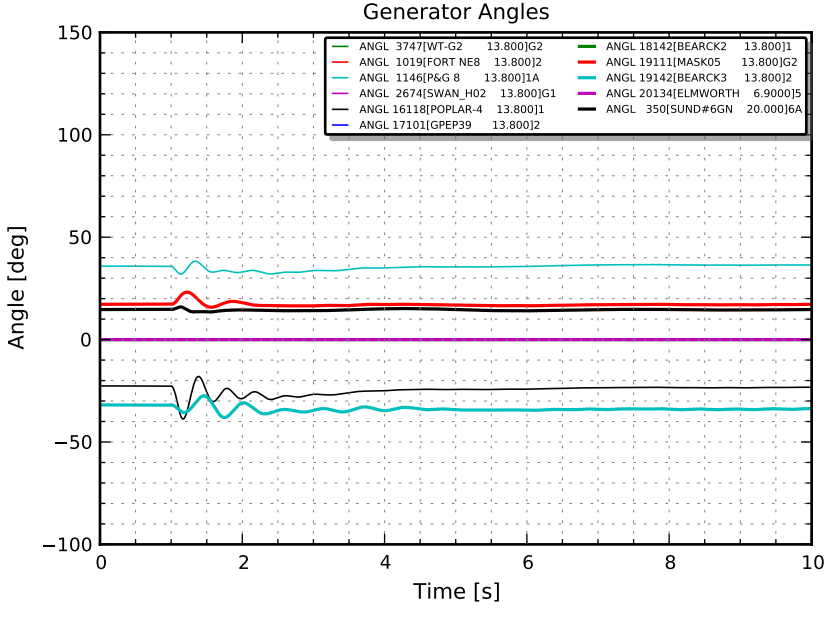
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 019 7L40 LITTLESMOKY to SIMONETTE_A.

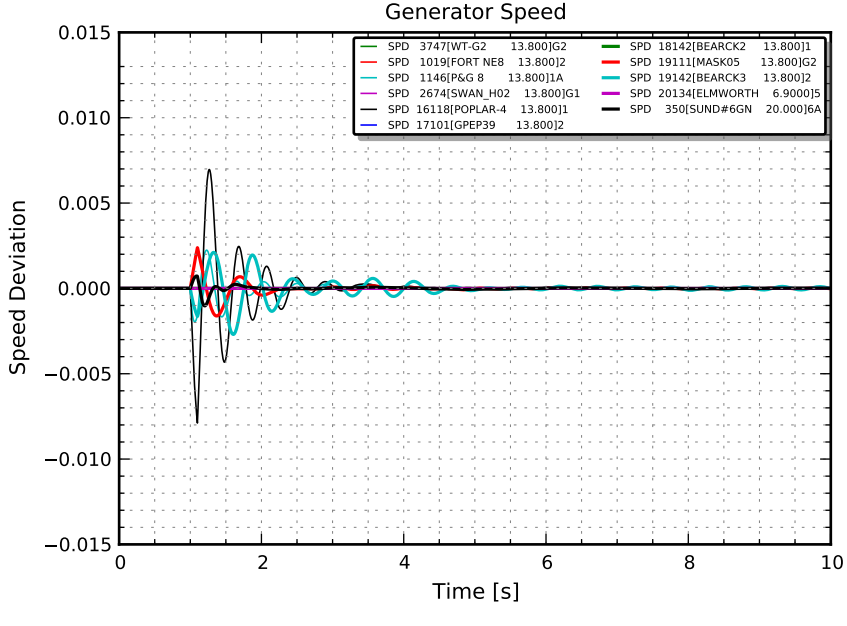
Study Area Generators

Appendix C2B
Figure: 019 (A. 2)





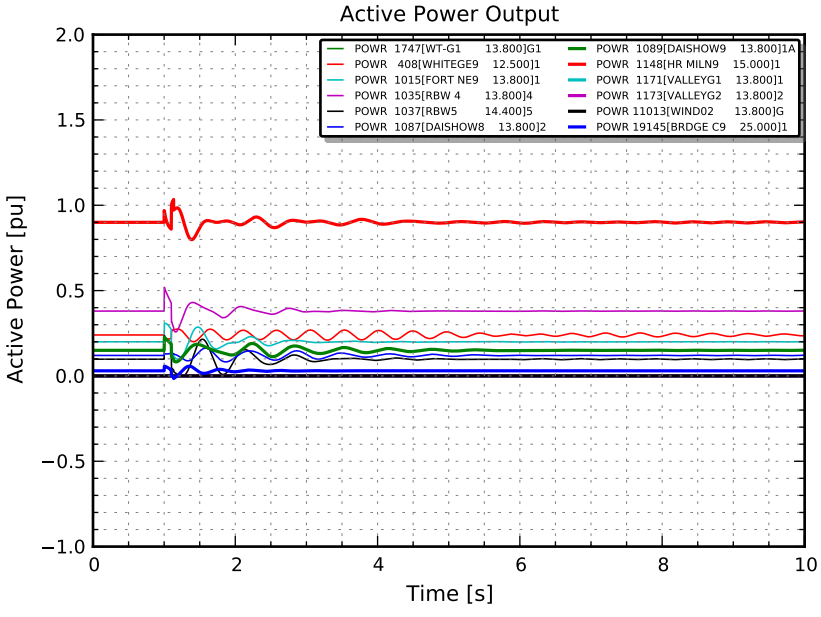


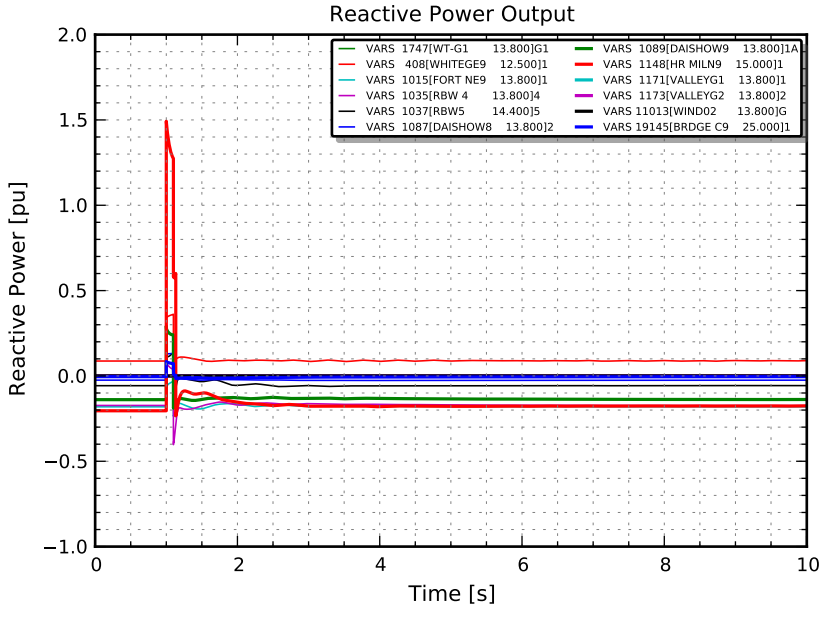


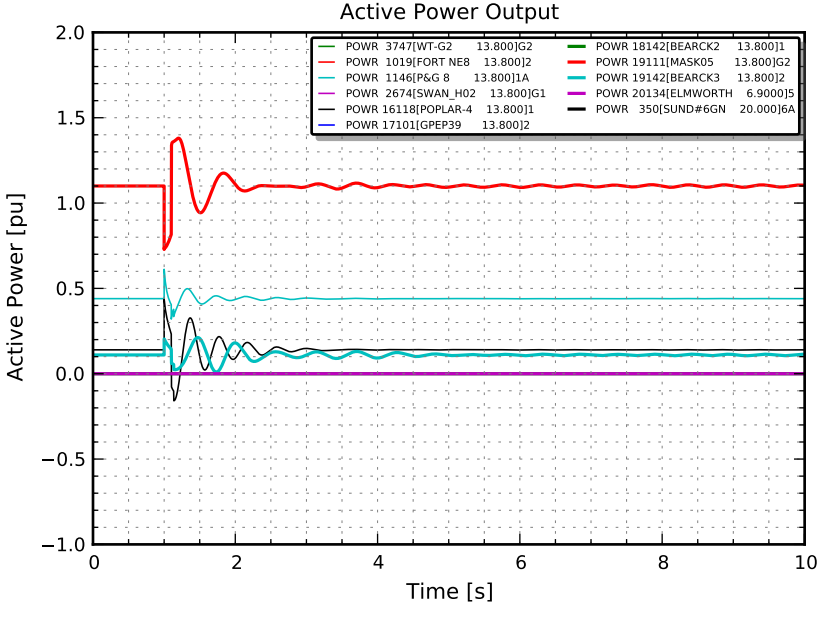
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 019 7L40 LITTLESMOKY to SIMONETTE_A.

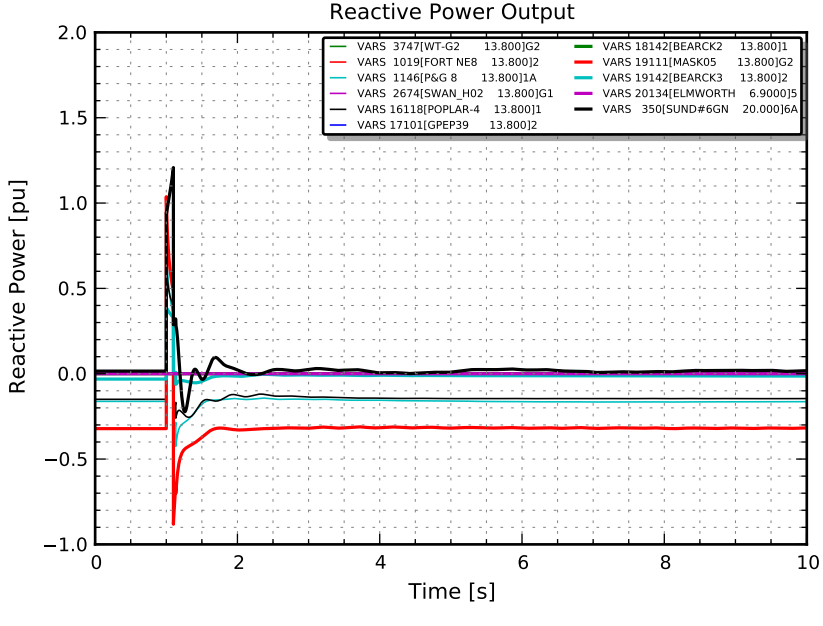
Study Area Generators

Appendix C2B
Figure: 019 (A. 3)





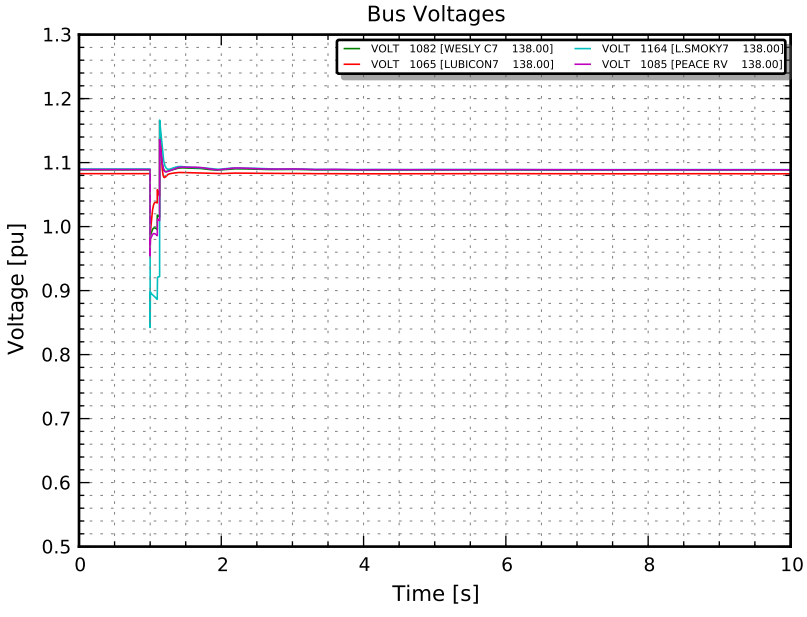


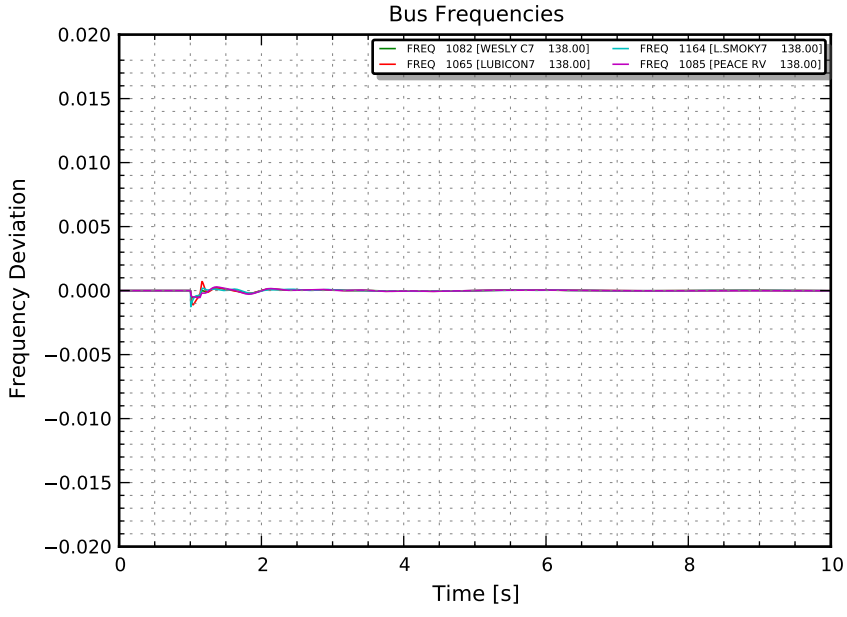


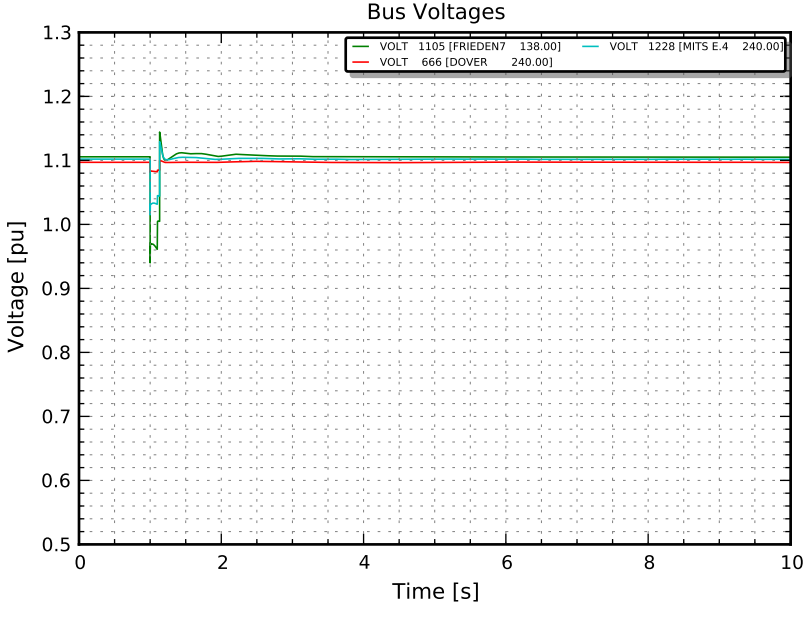
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 019 7L40 LITTLESMOKY to SIMONETTE_B.

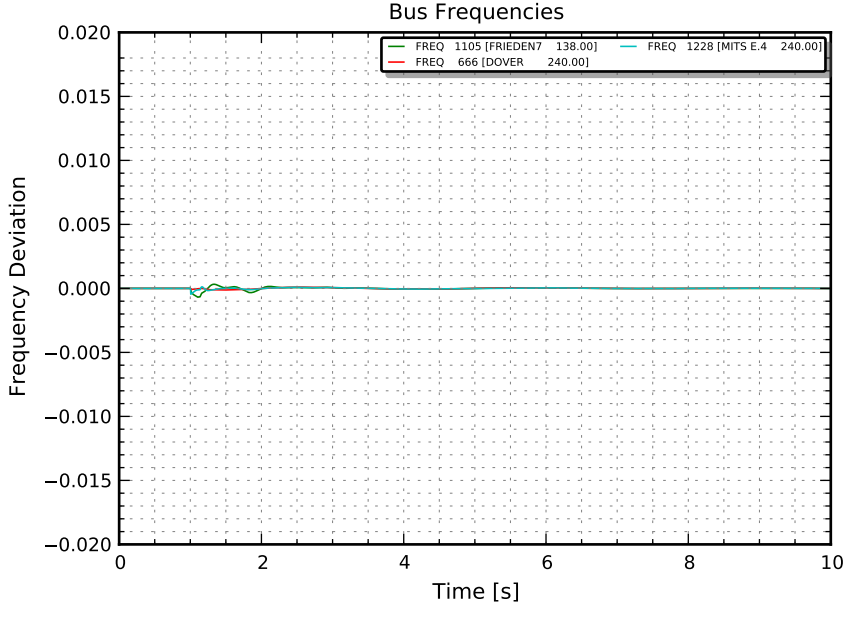
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 019 (B. 1)





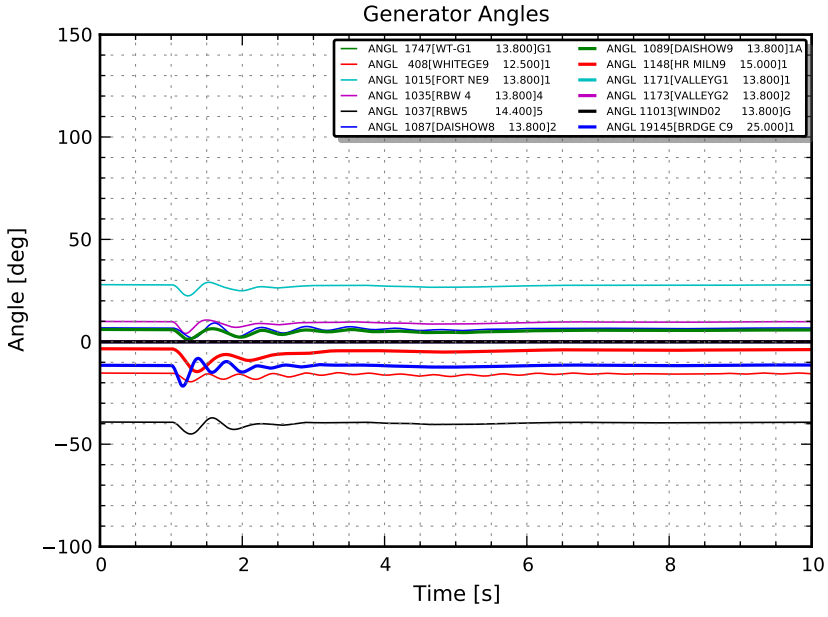


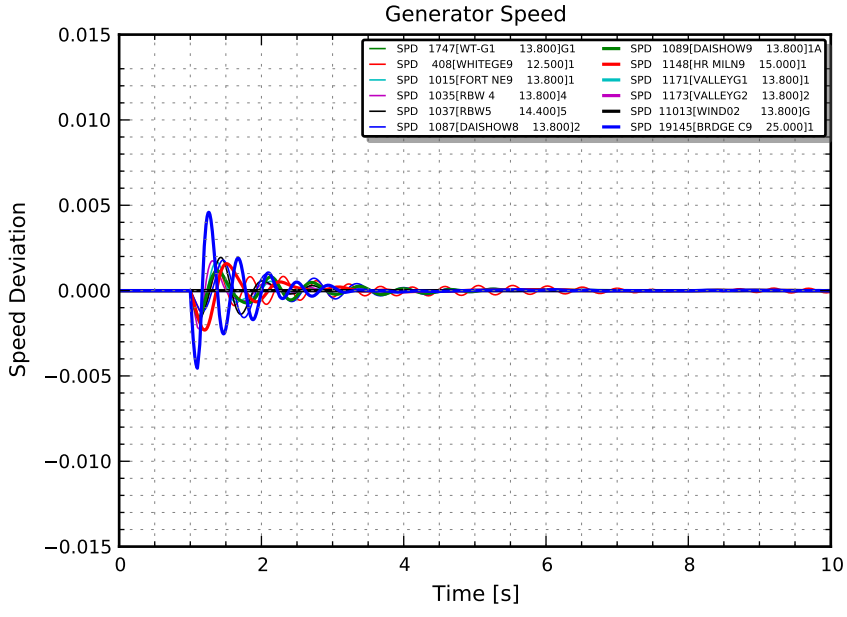


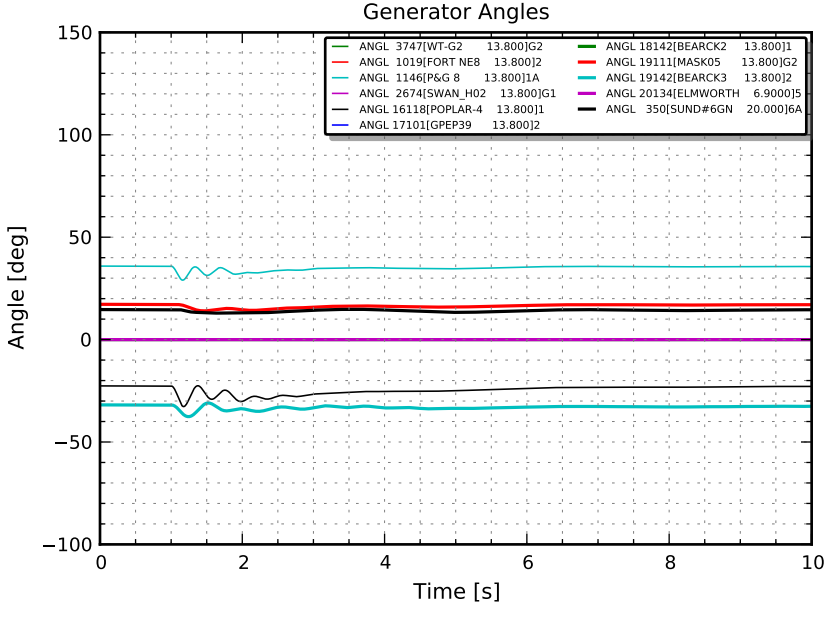
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 019 7L40 LITTLESMOKY to SIMONETTE_B.

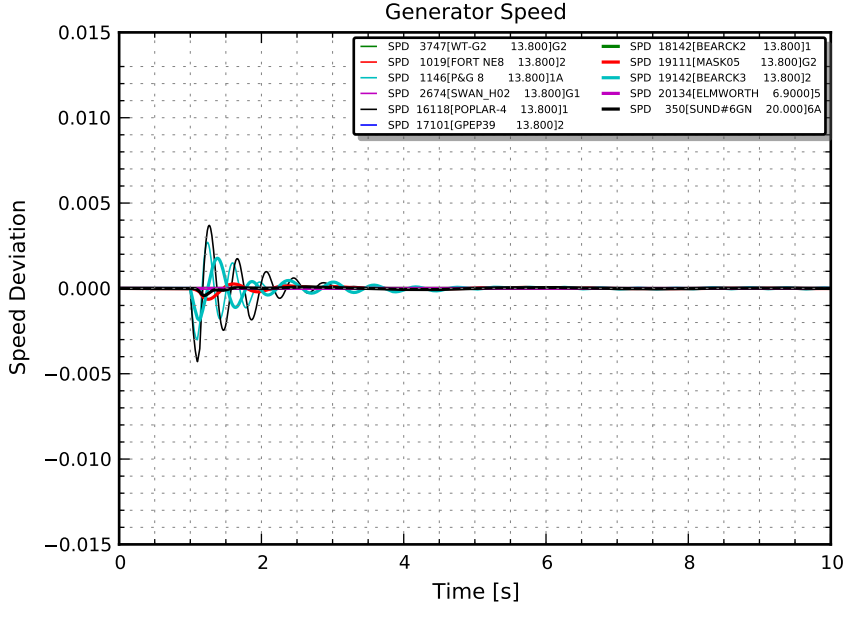
Study Area Generators

Appendix C2B
Figure: 019 (B. 2)





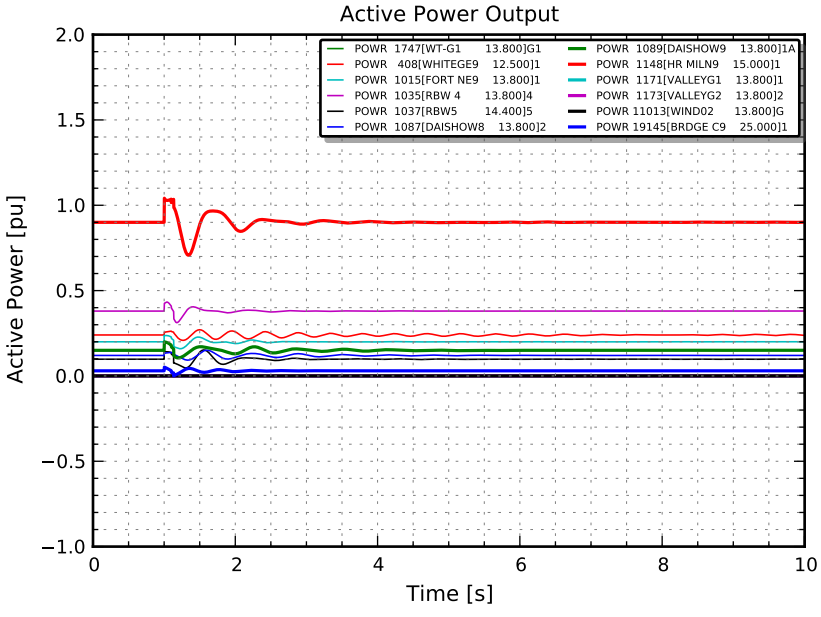


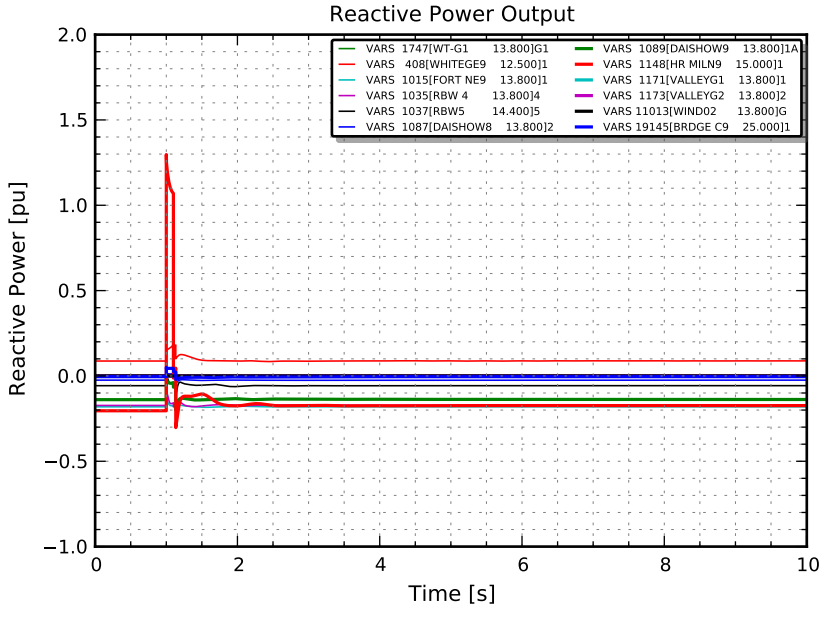


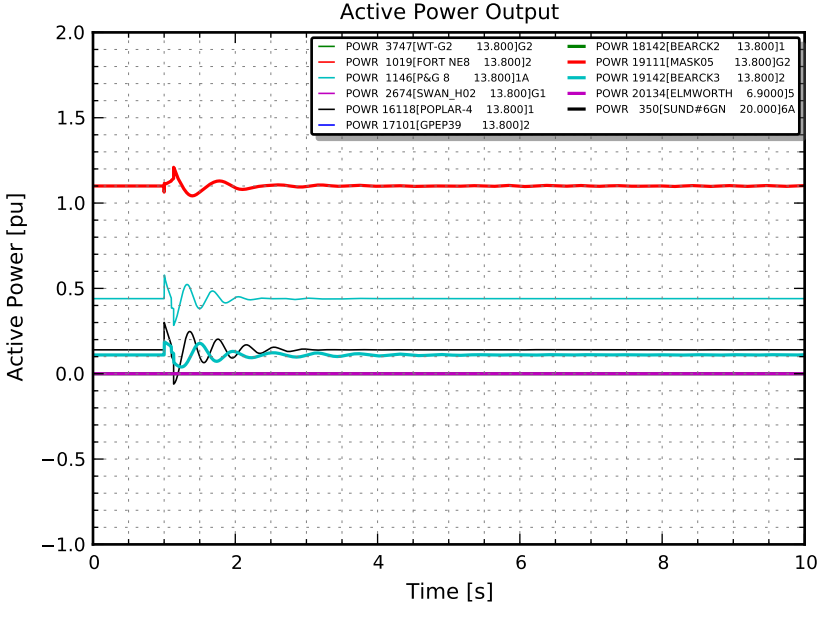
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 019 7L40 LITTLESMOKY to SIMONETTE_B.

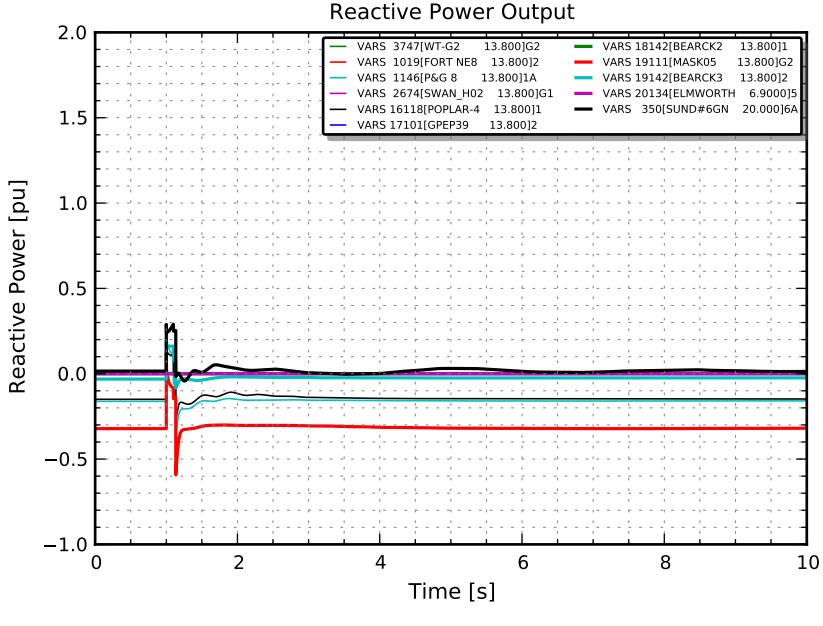
Study Area Generators

Appendix C2B
Figure: 019 (B. 3)





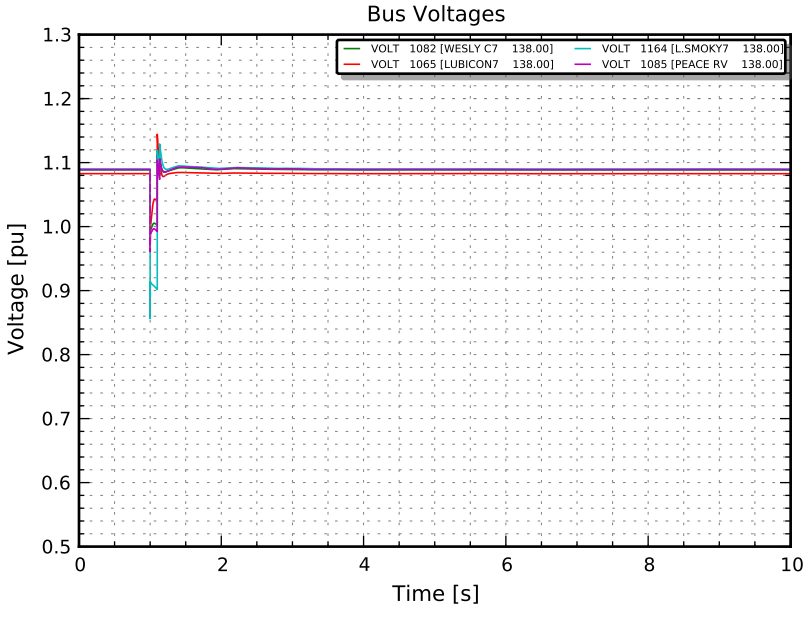


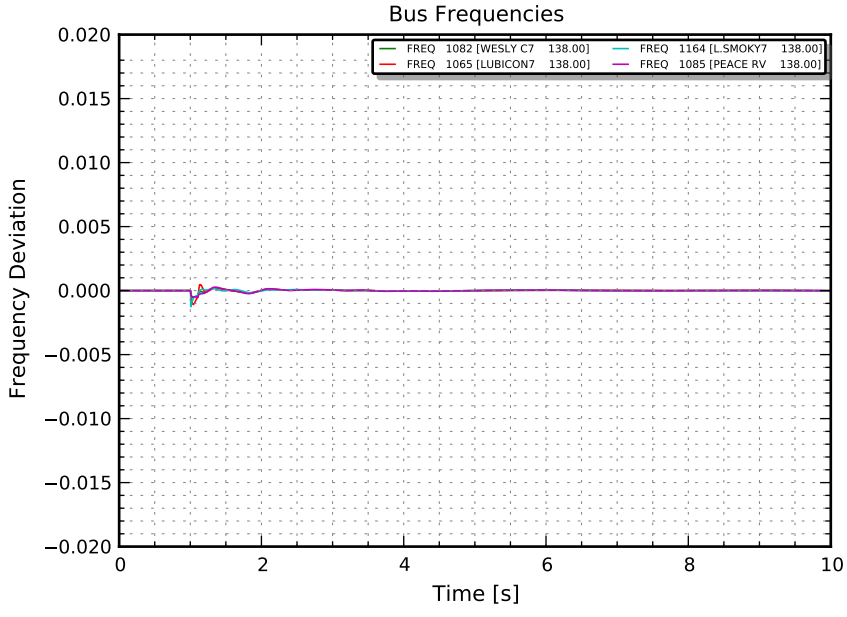


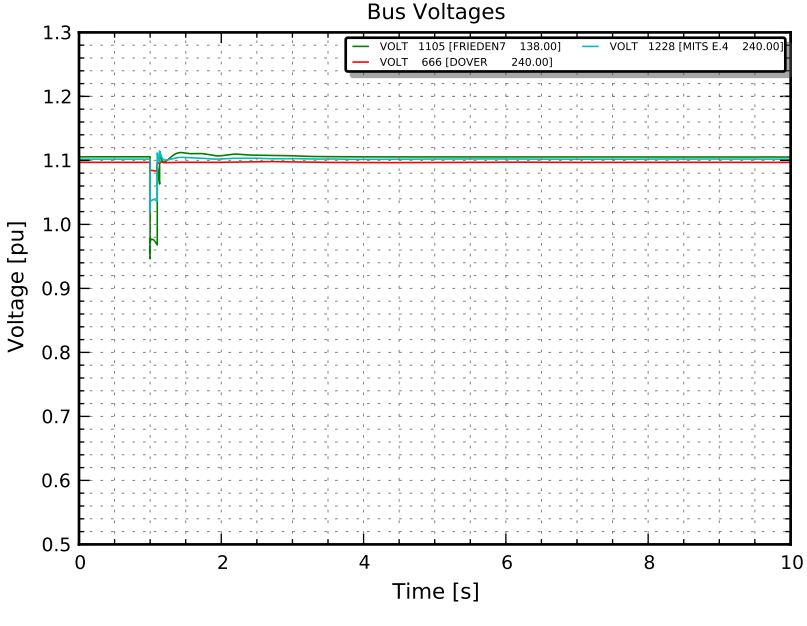
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 020 7L80 SIMONETTE to HR MILNER_A.

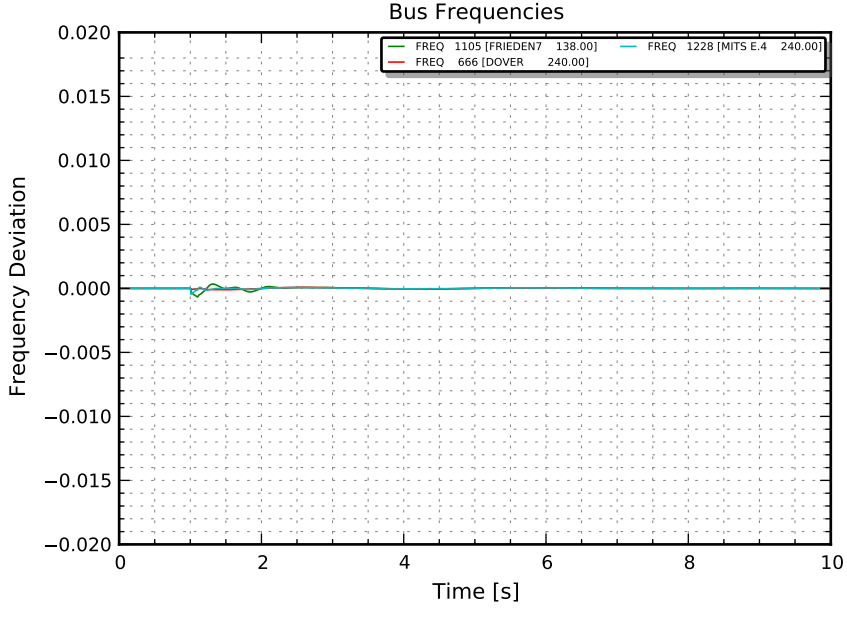
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 020 (A. 1)





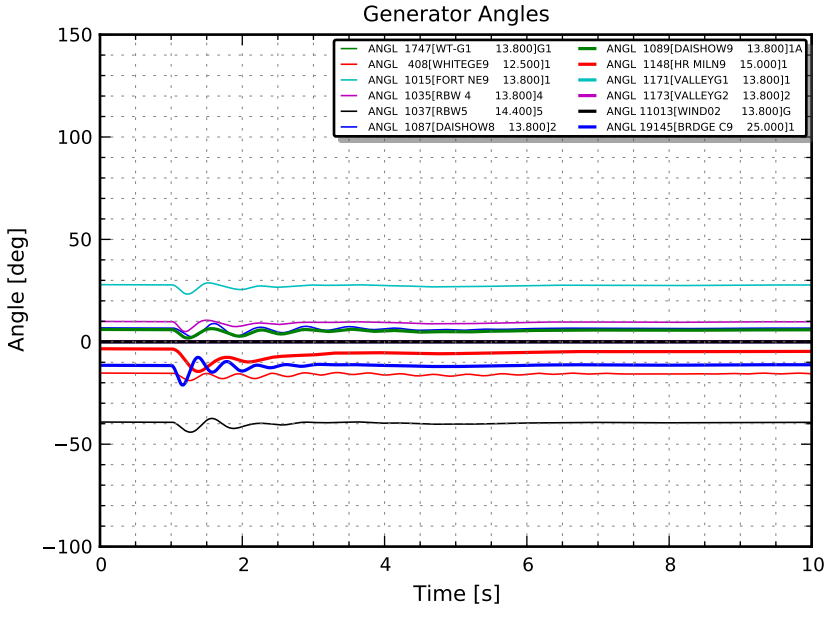


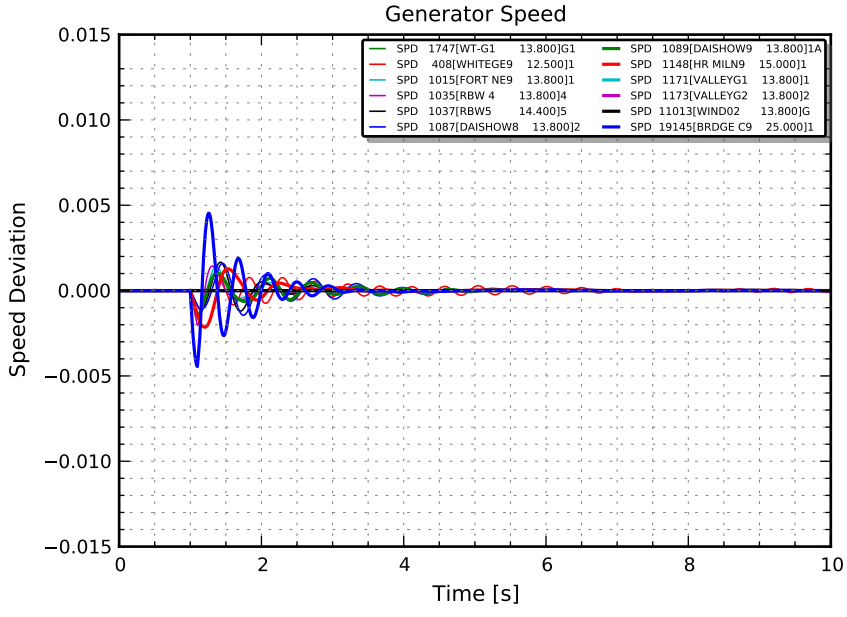


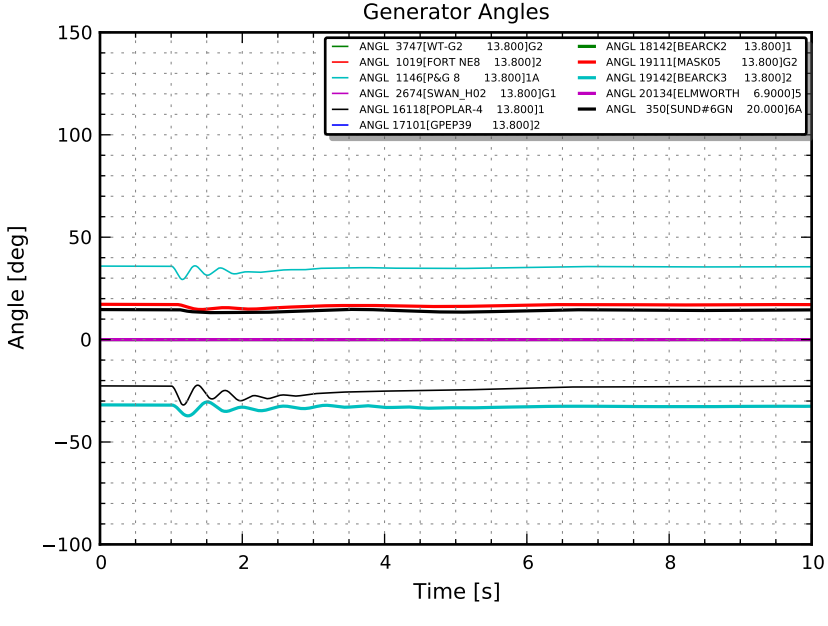
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 020 7L80 SIMONETTE to HR MILNER_A.

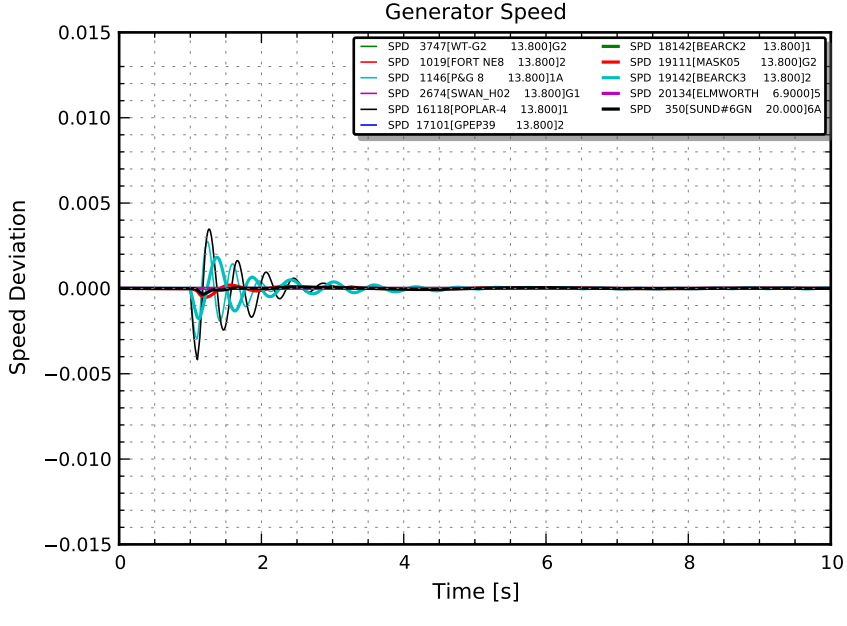
Study Area Generators

Appendix C2B
Figure: 020 (A. 2)





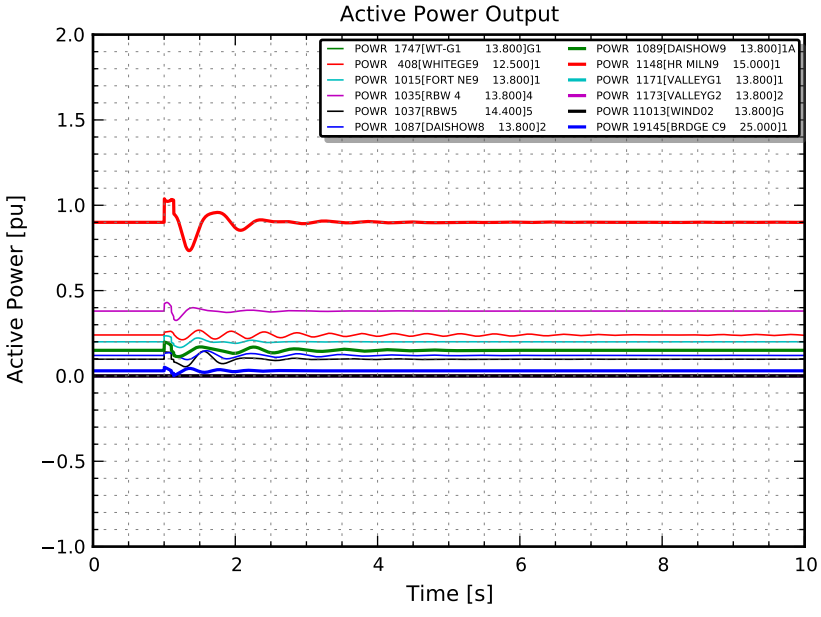


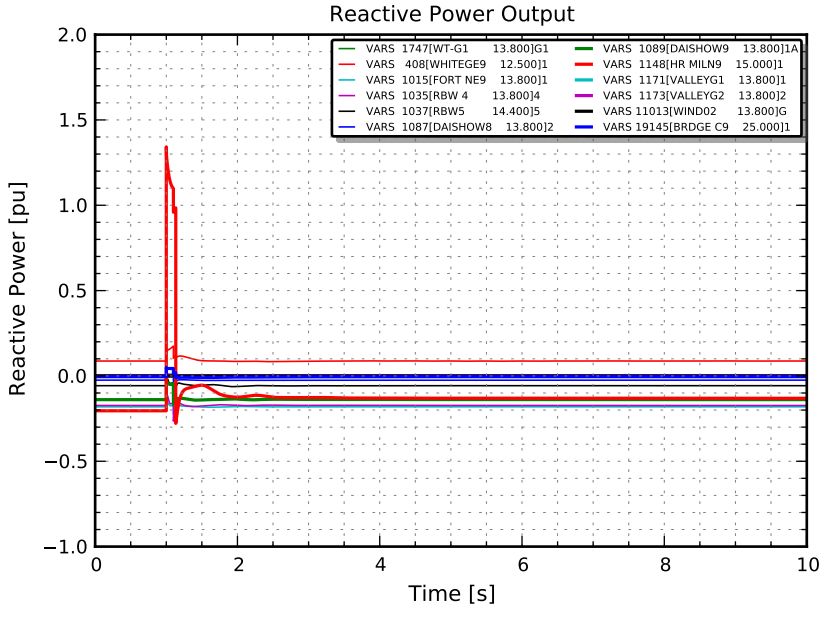


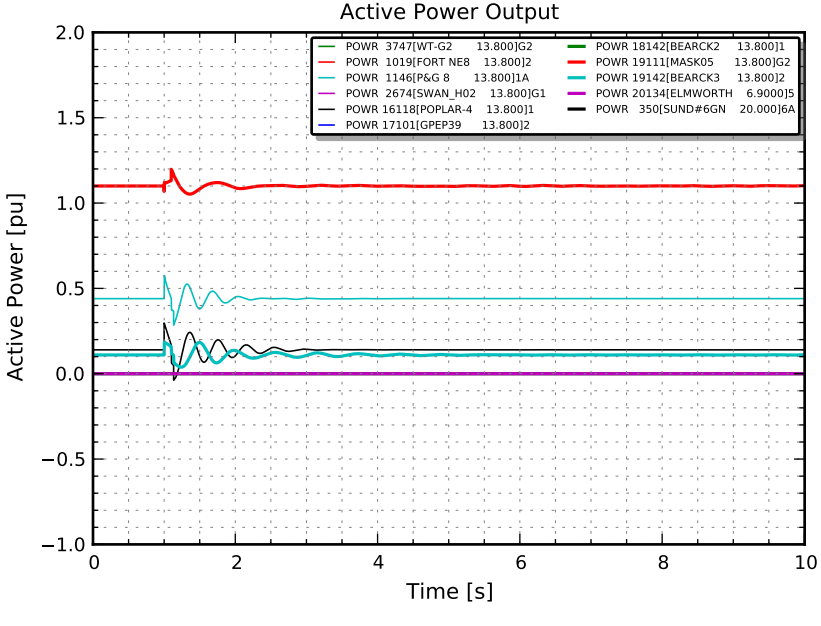
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 020 7L80 SIMONETTE to HR MILNER_A.

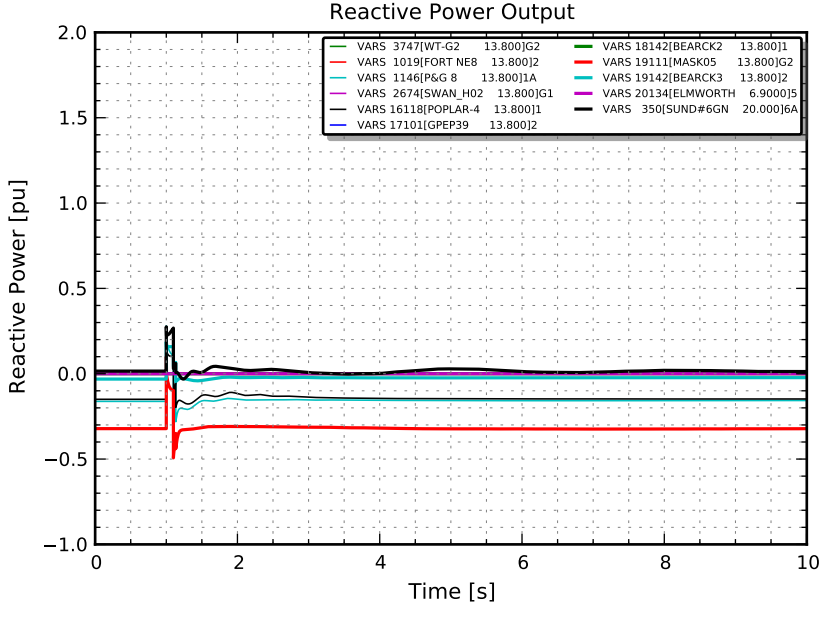
Study Area Generators

Appendix C2B
Figure: 020 (A. 3)





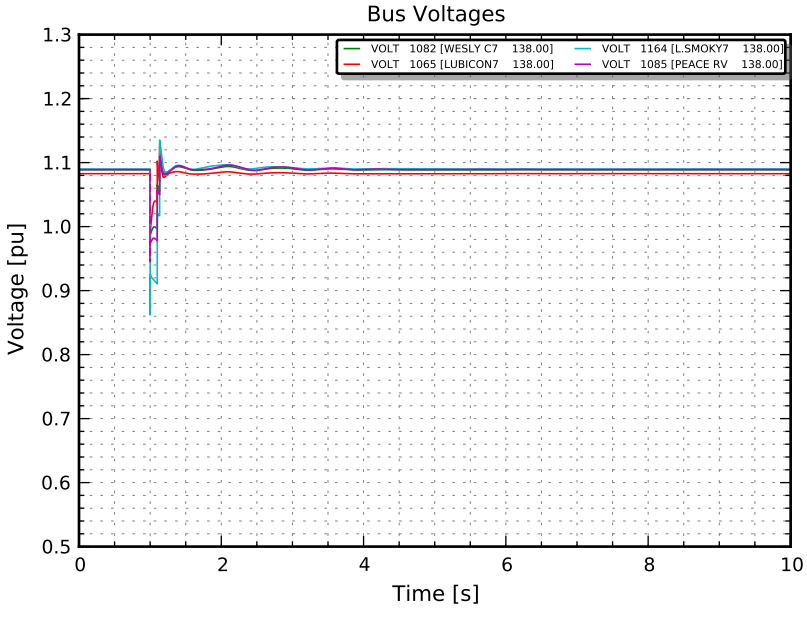


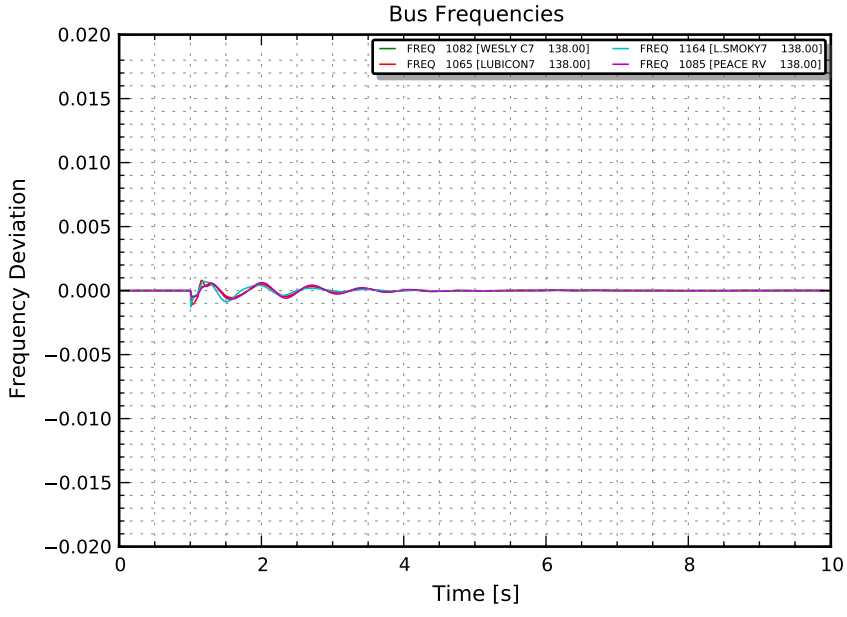


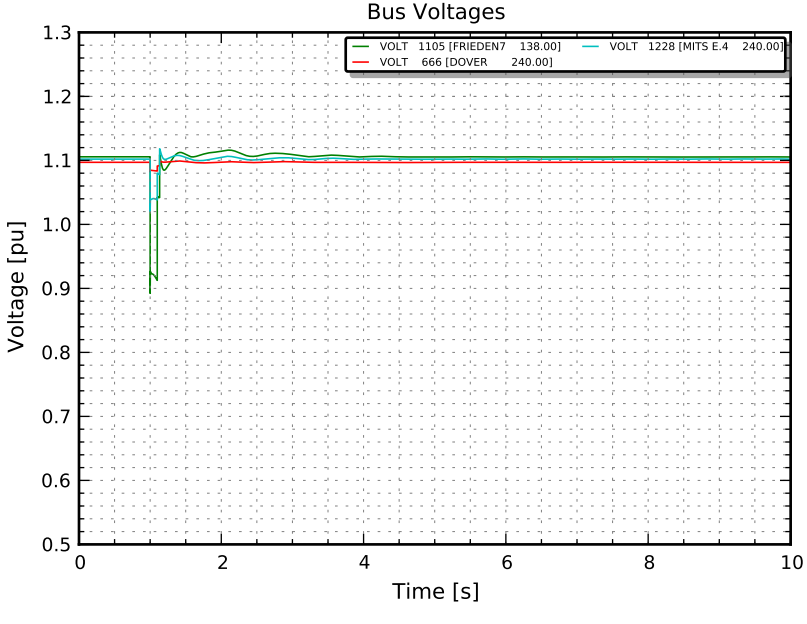
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 020 7L80 SIMONETTE to HR MILNER_B.

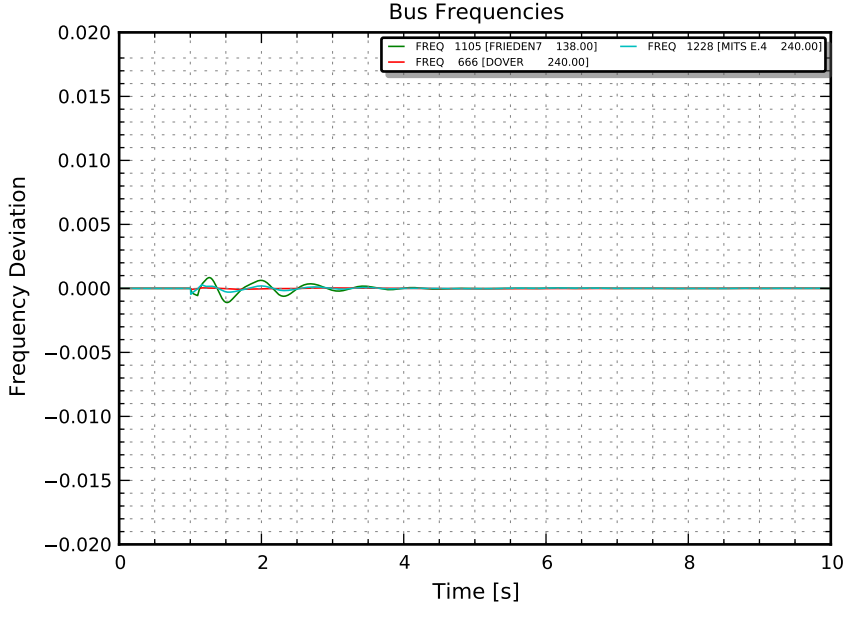
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 020 (B. 1)





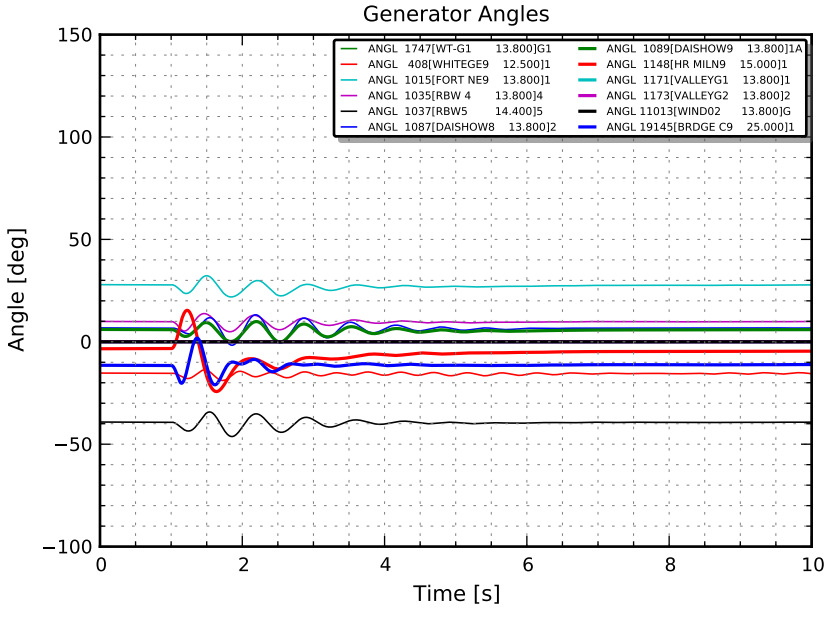


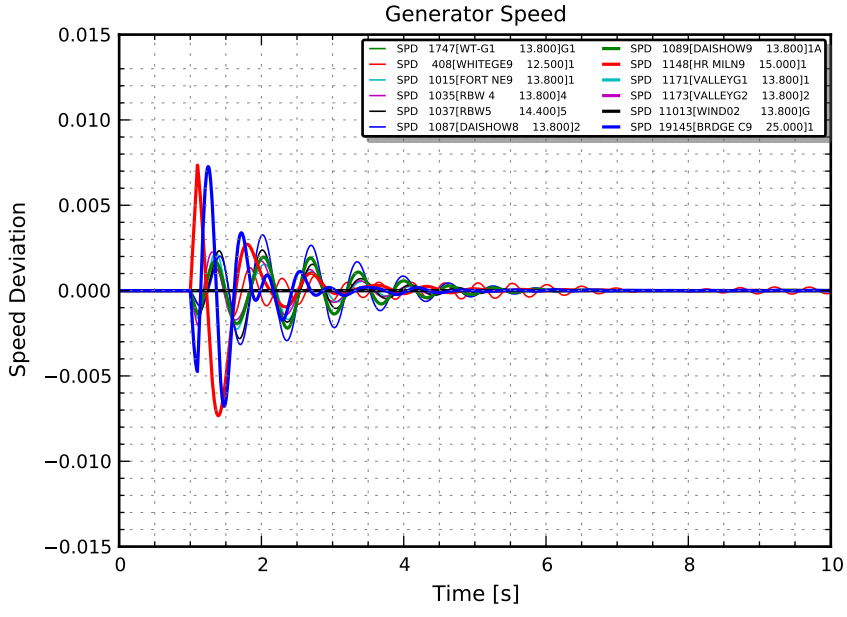


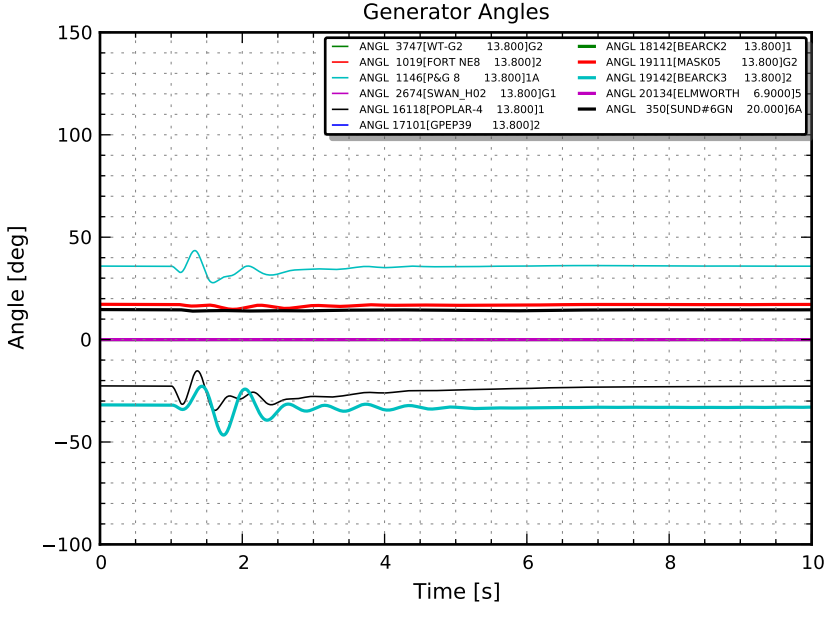
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 020 7L80 SIMONETTE to HR MILNER_B.

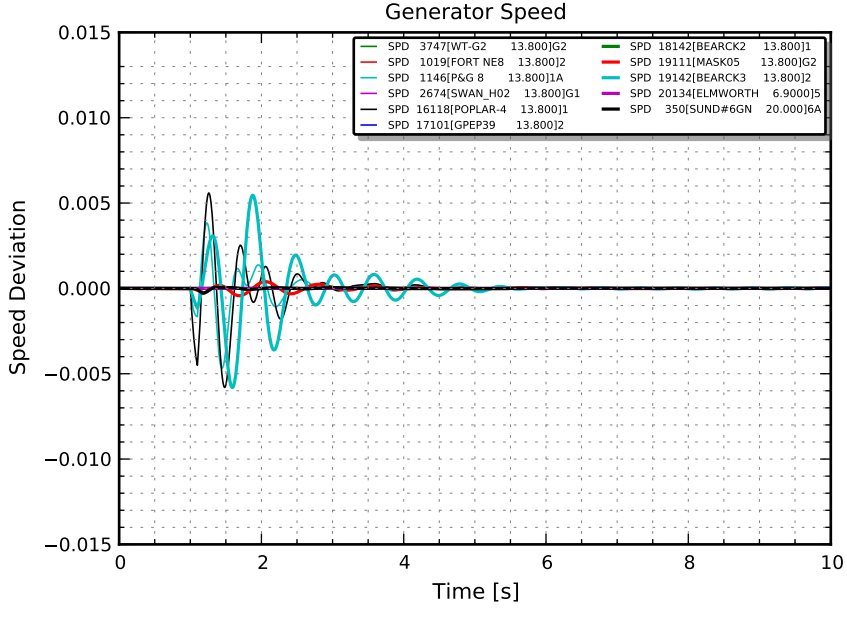
Study Area Generators

Appendix C2B
Figure: 020 (B. 2)





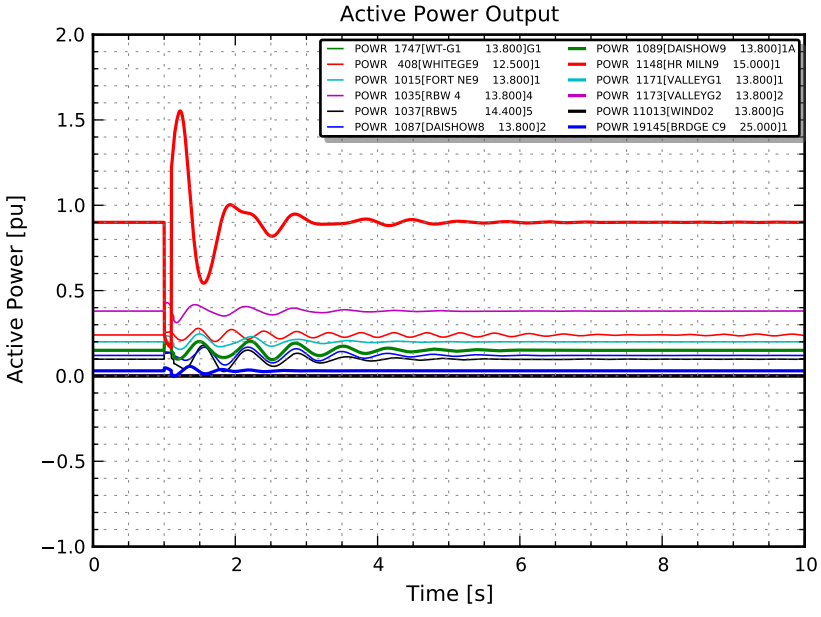


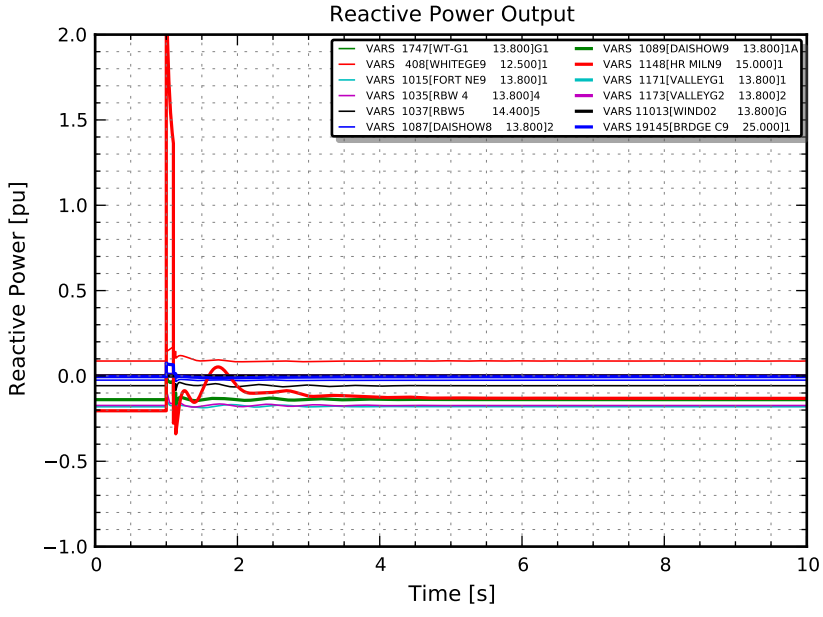


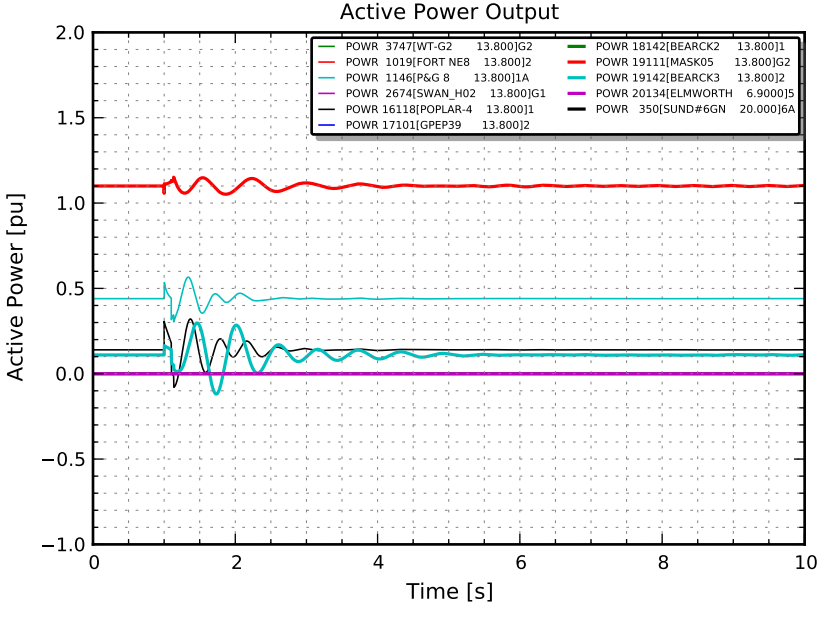
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 020 7L80 SIMONETTE to HR MILNER_B.

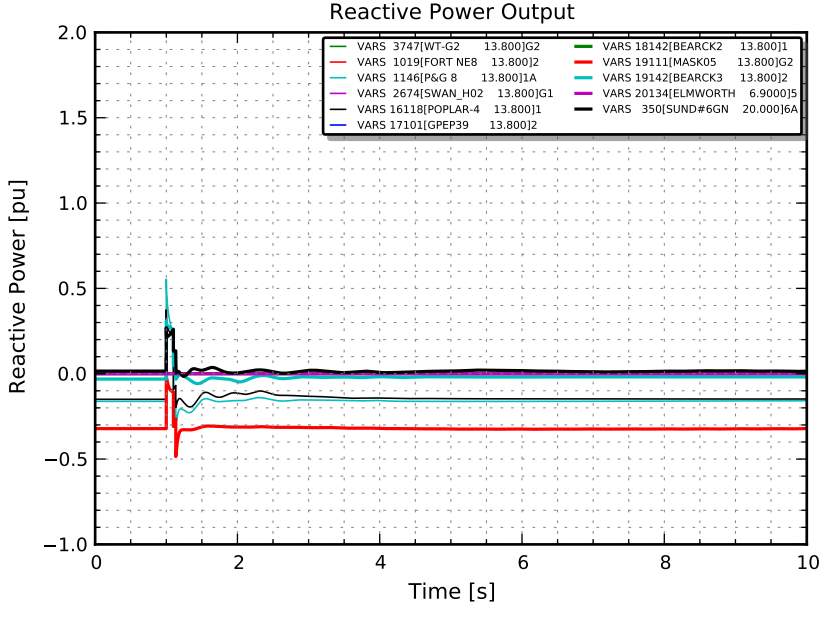
Study Area Generators

Appendix C2B
Figure: 020 (B. 3)





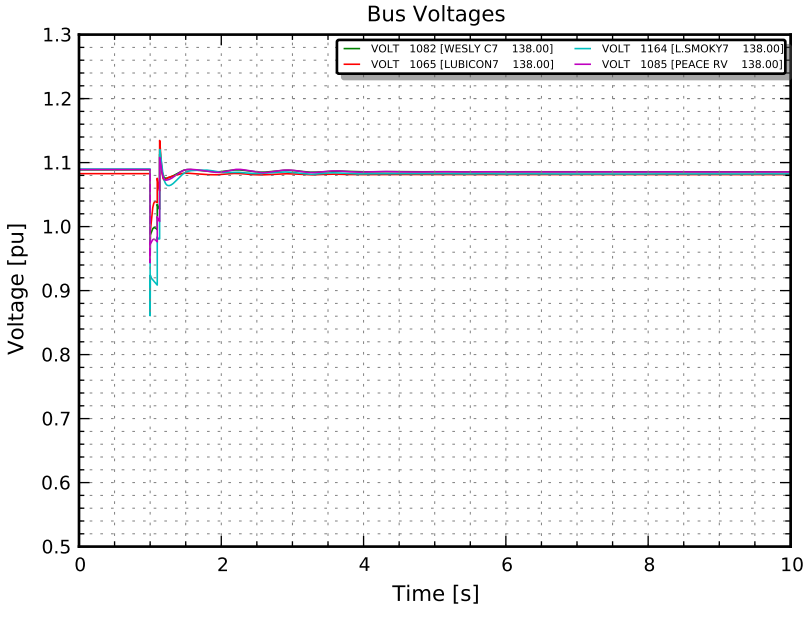


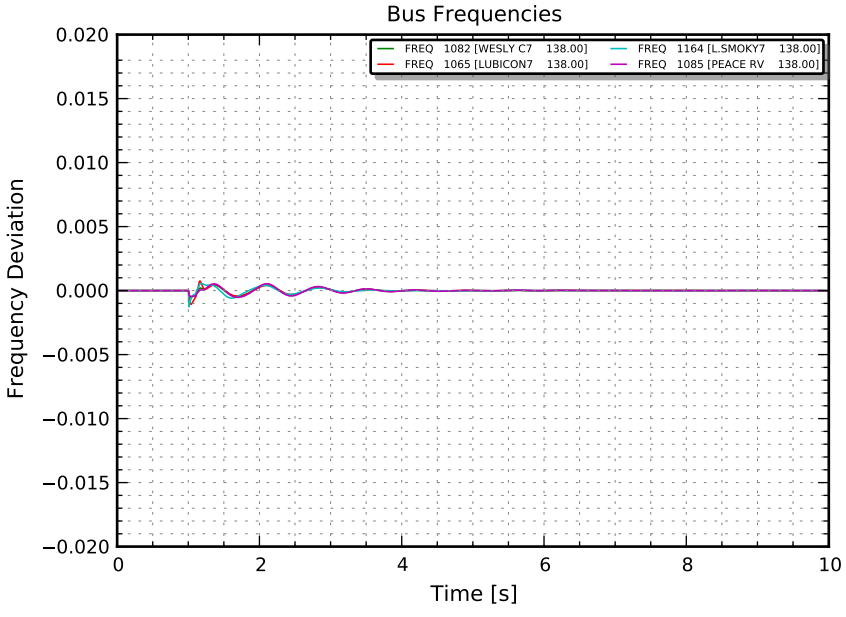


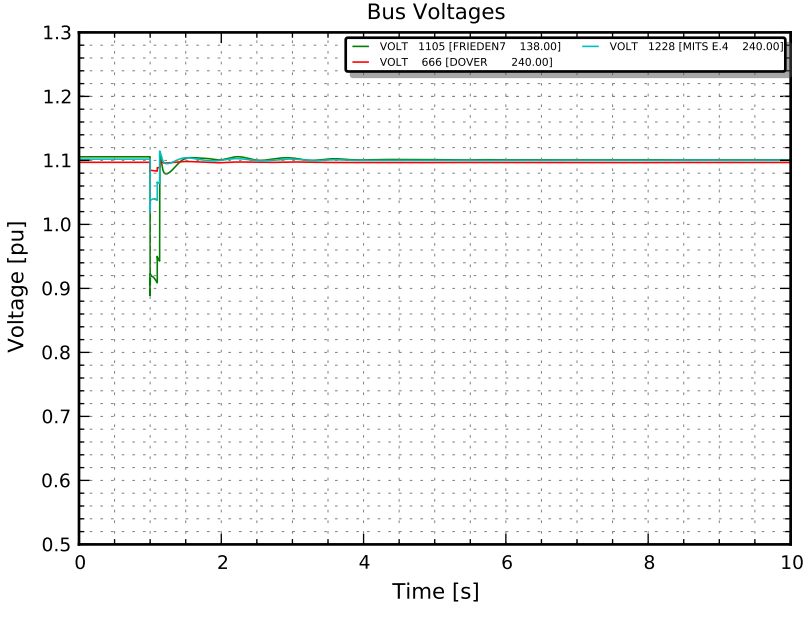
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_A.

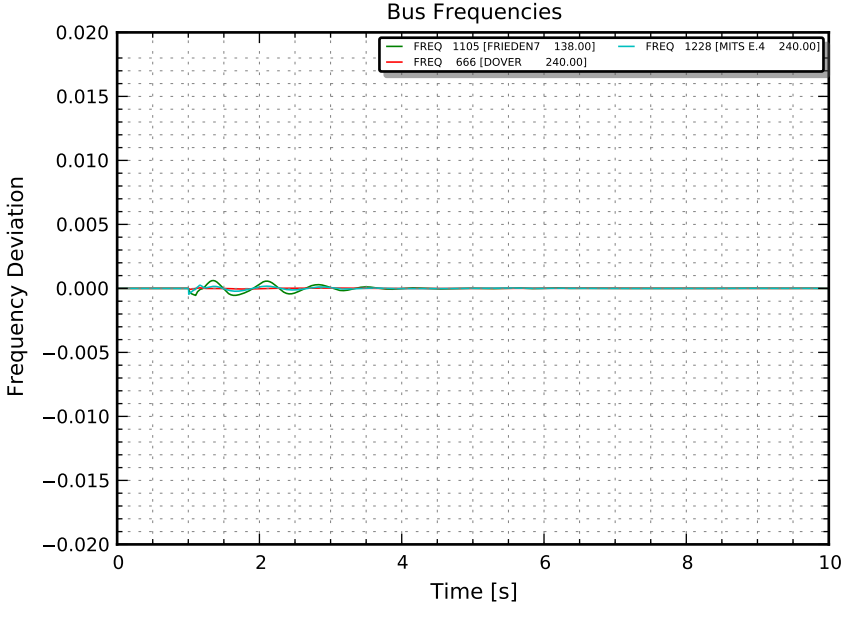
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 021 (A. 1)





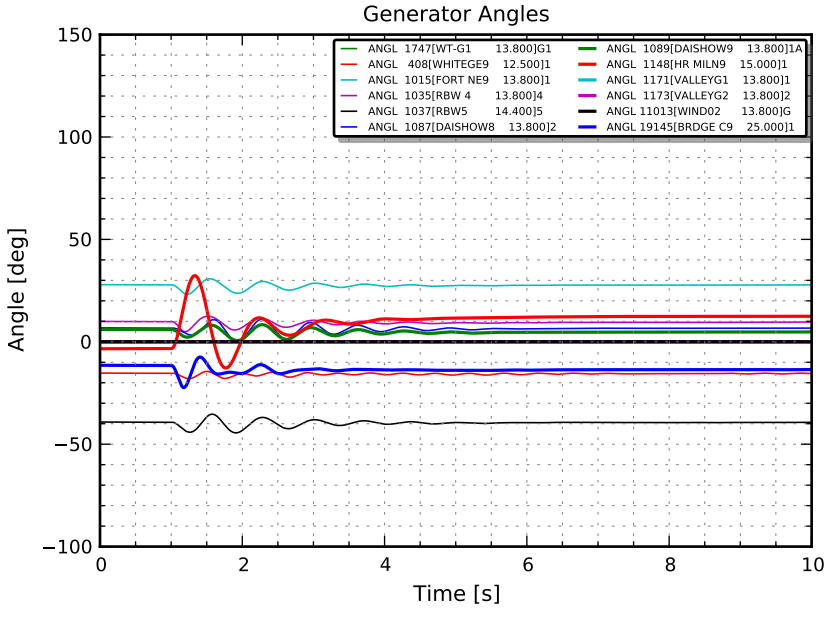


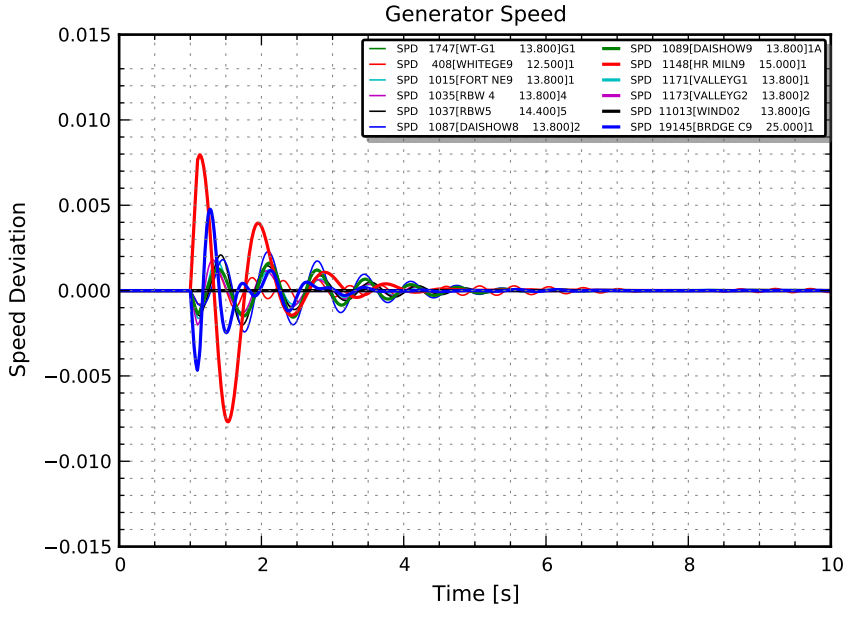


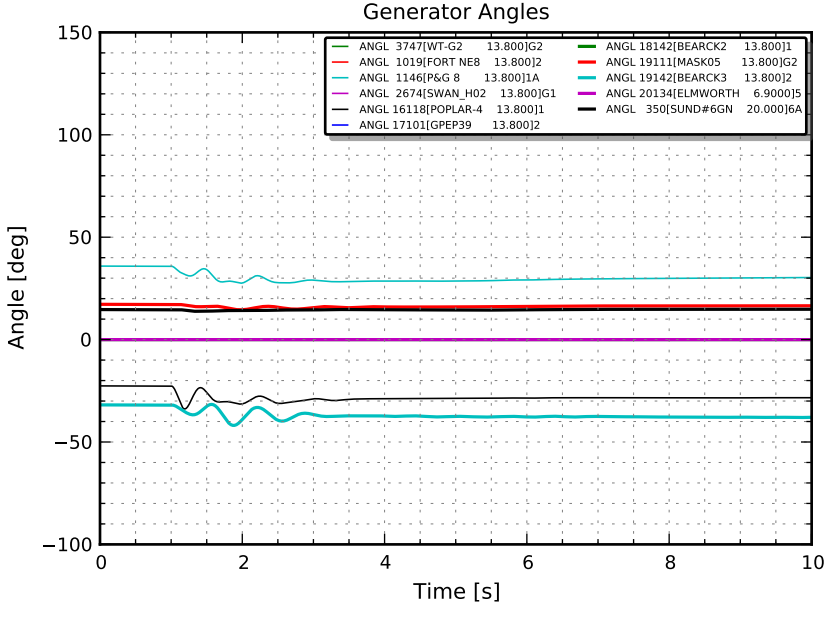
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_A.

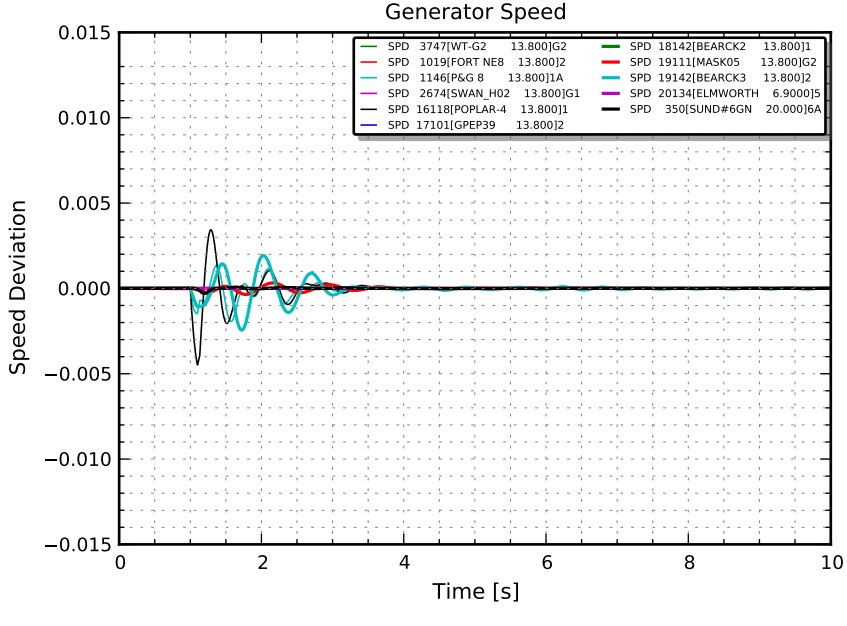
Study Area Generators

Appendix C2B
Figure: 021 (A. 2)





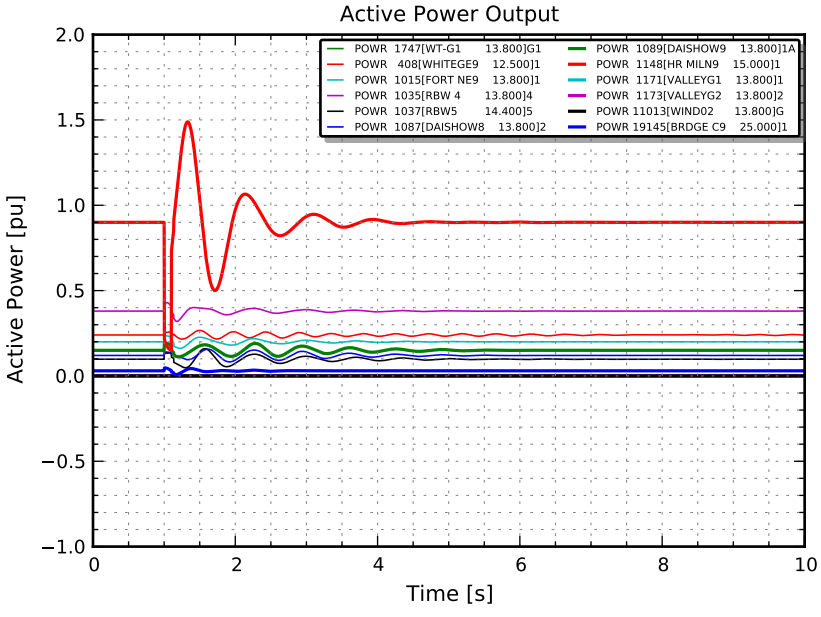


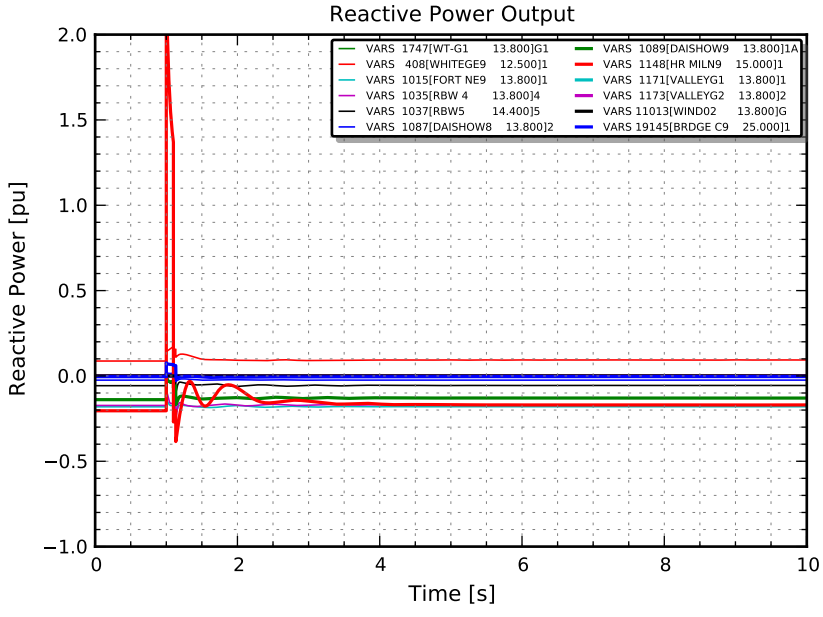


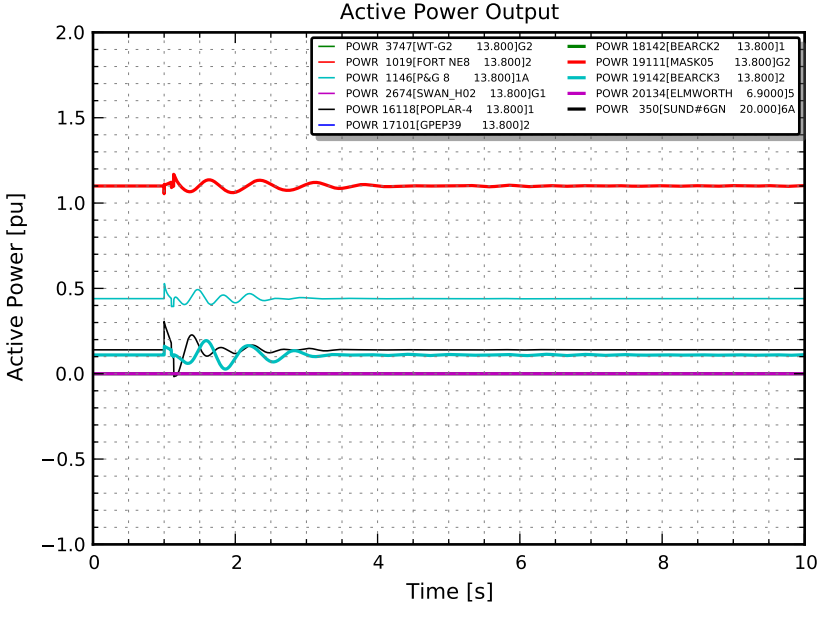
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_A.

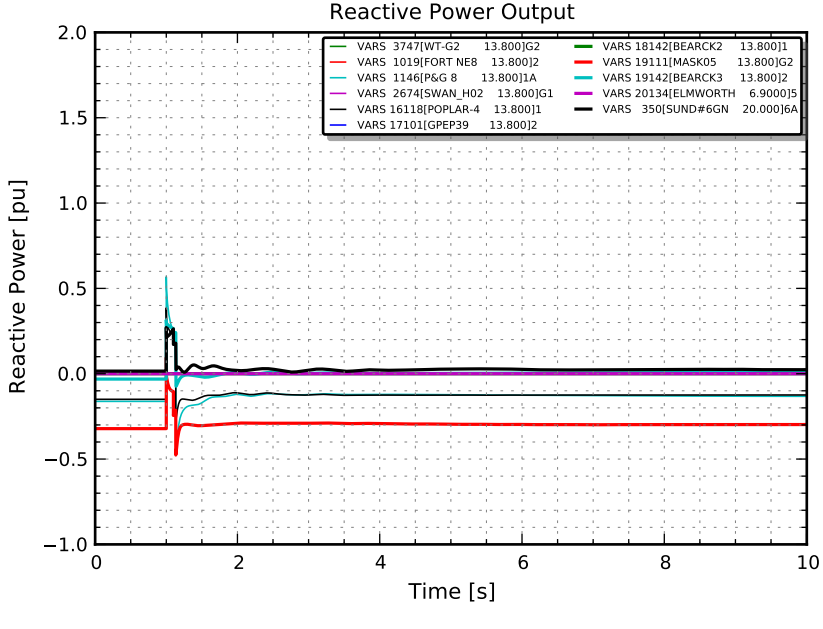
Study Area Generators

Appendix C2B
Figure: 021 (A. 3)





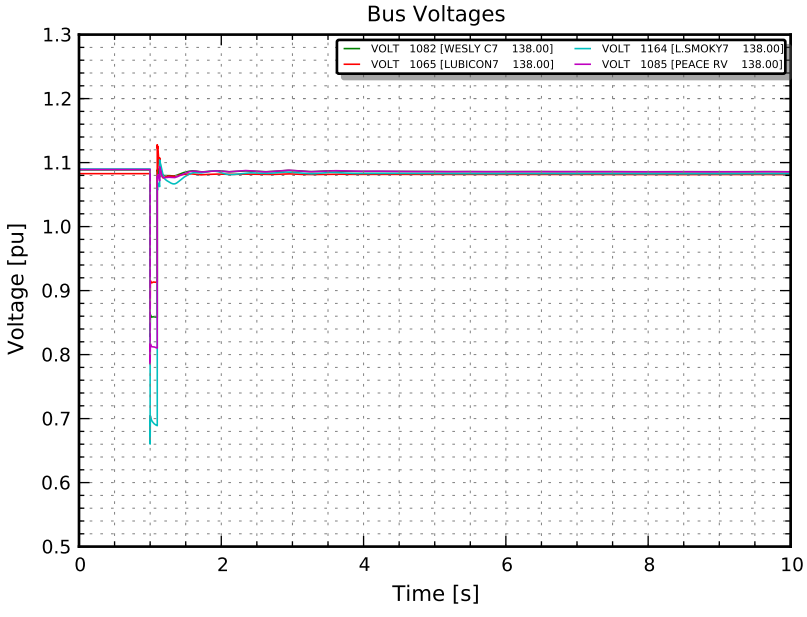


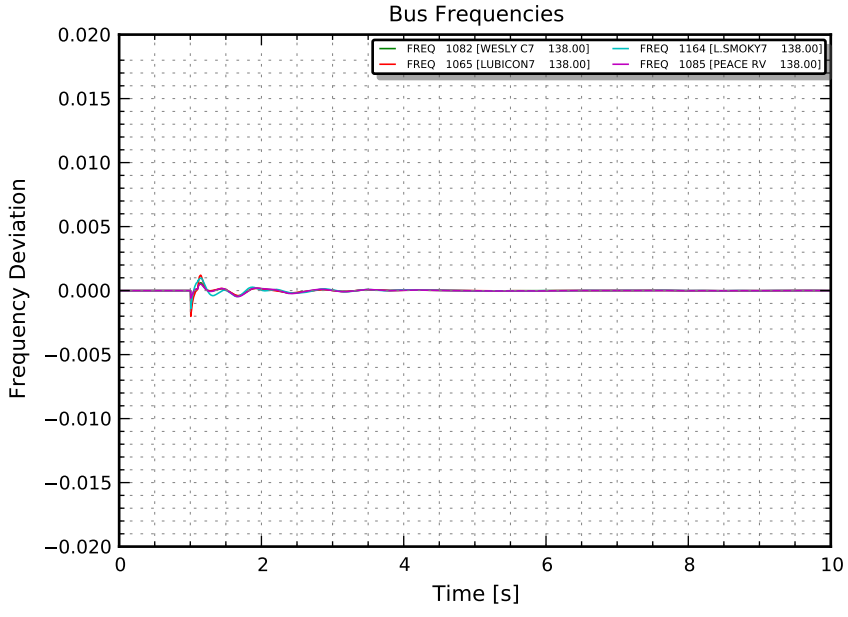


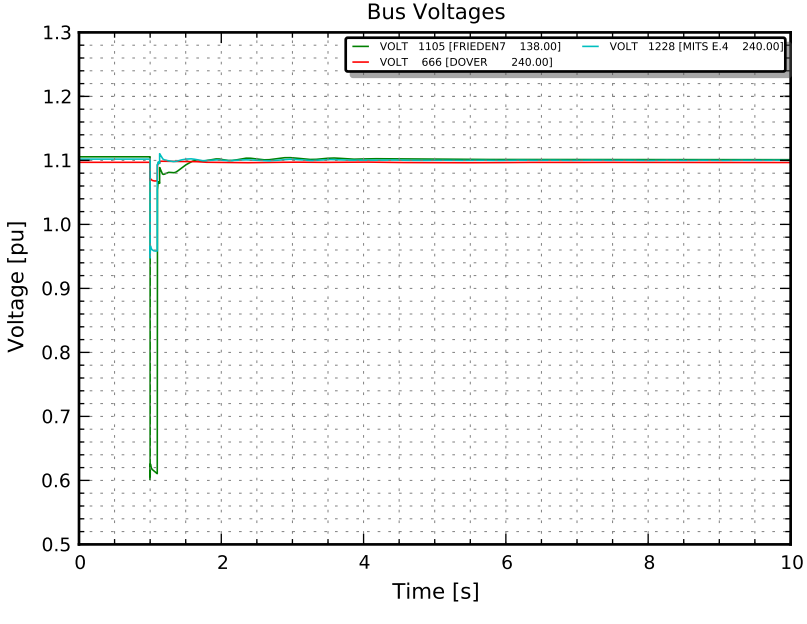
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_B.

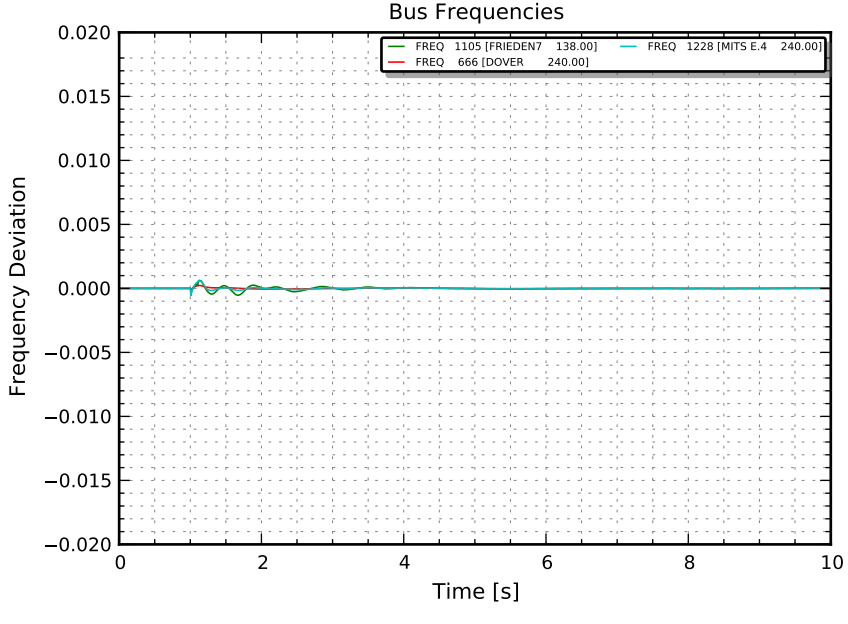
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 021 (B. 1)





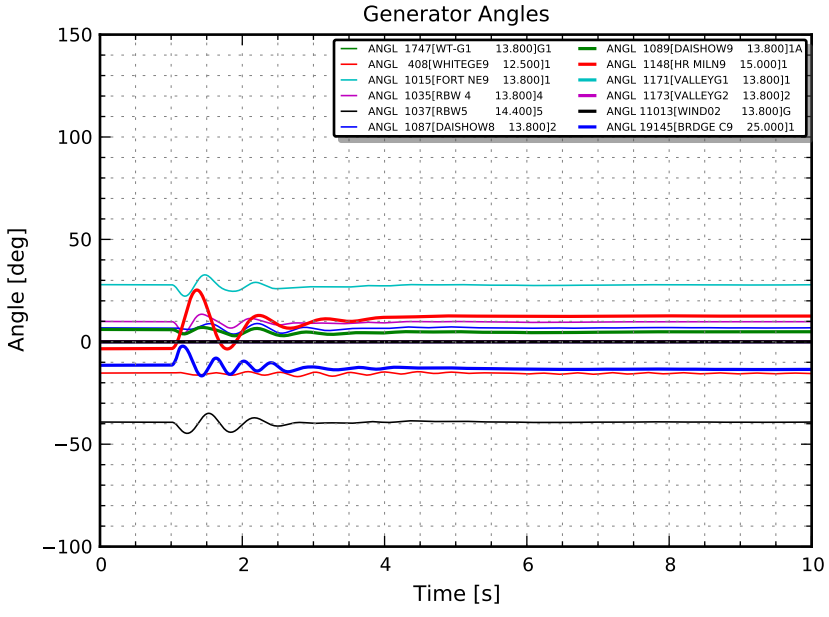


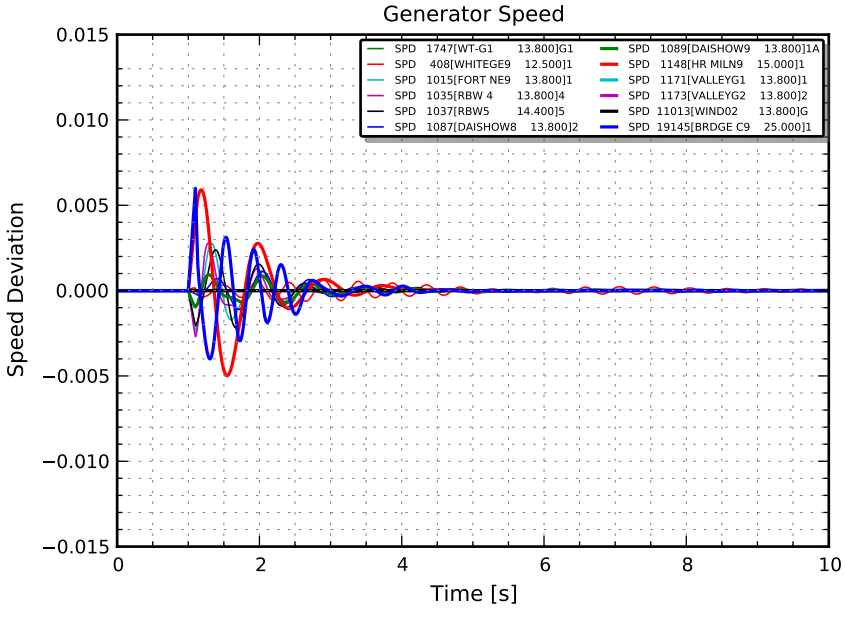


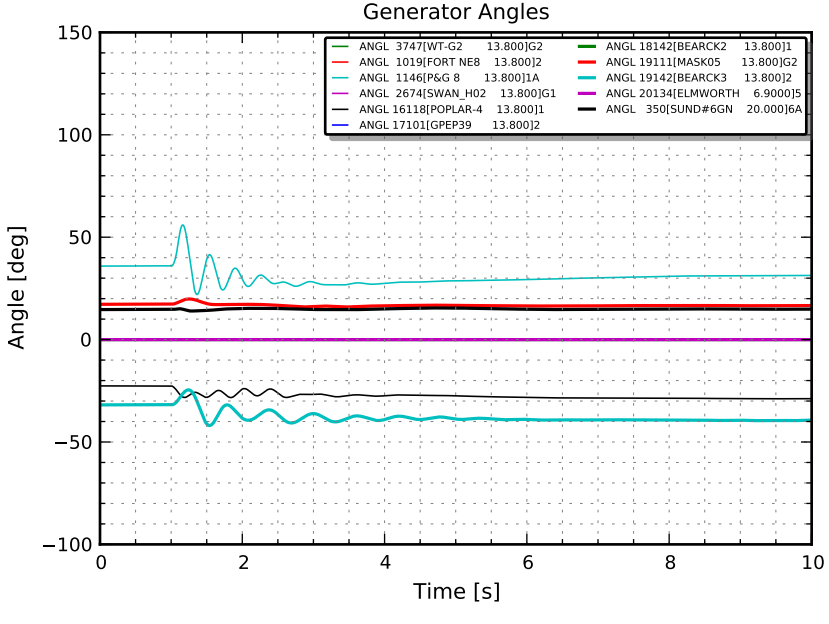
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_B.

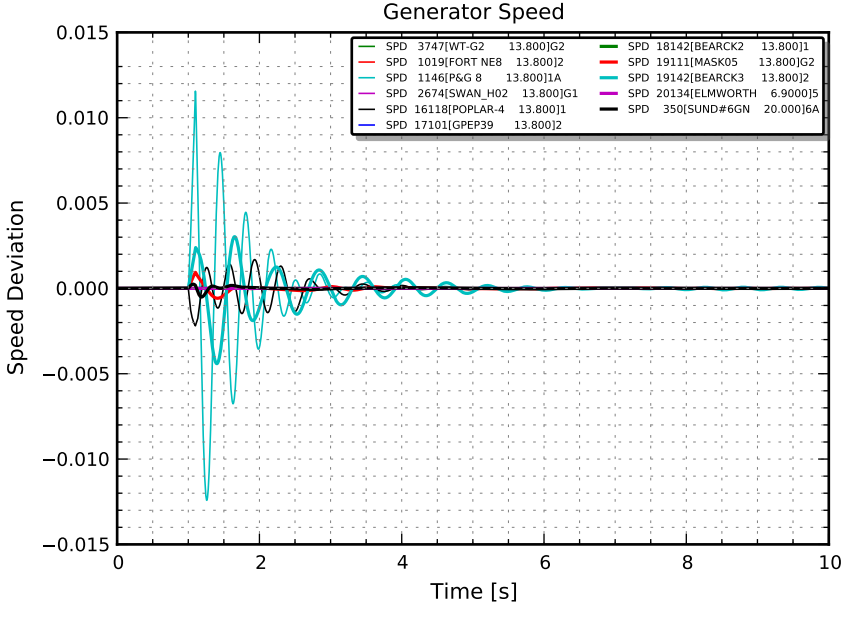
Study Area Generators

Appendix C2B
Figure: 021 (B. 2)





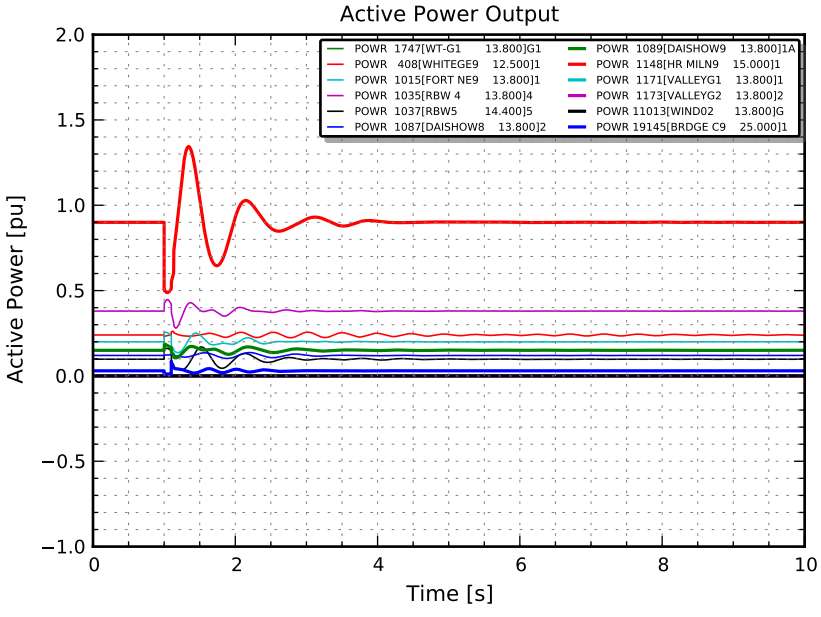


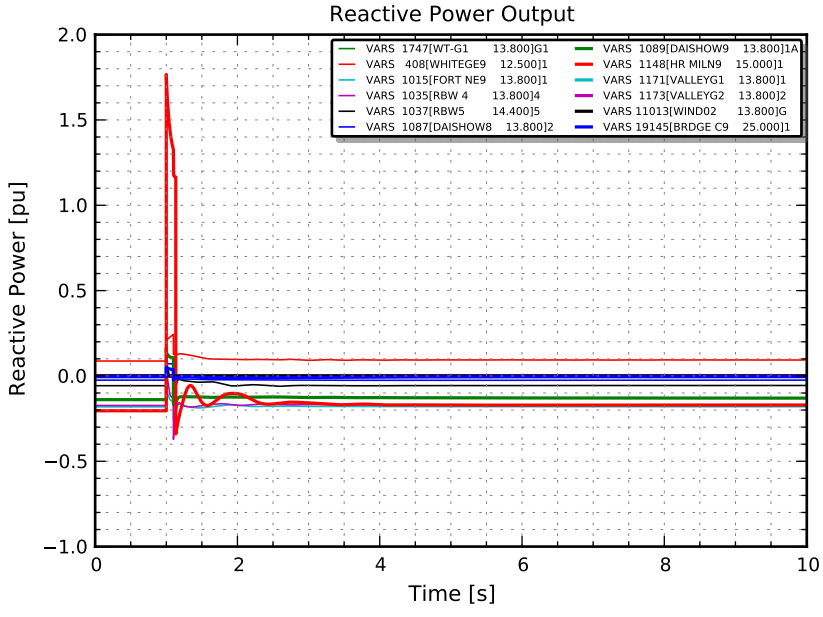


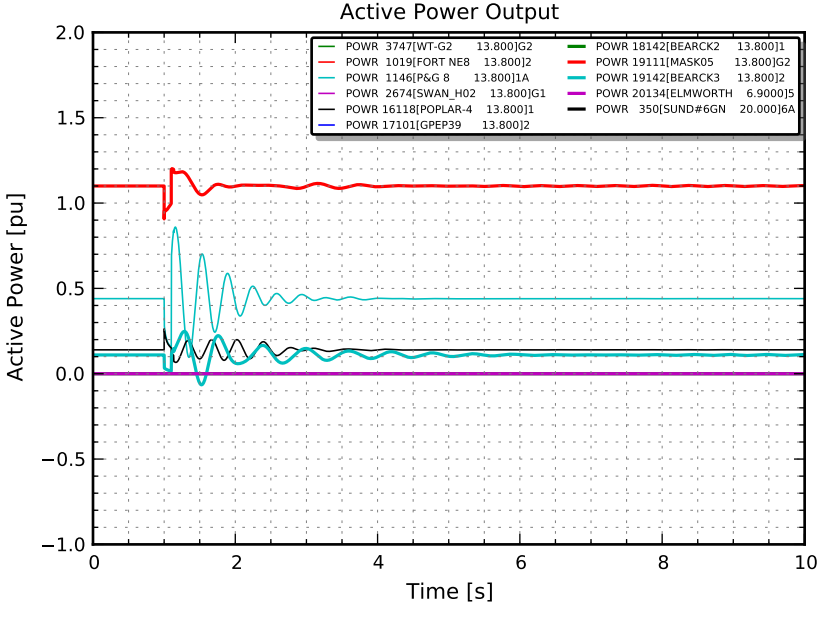
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_B.

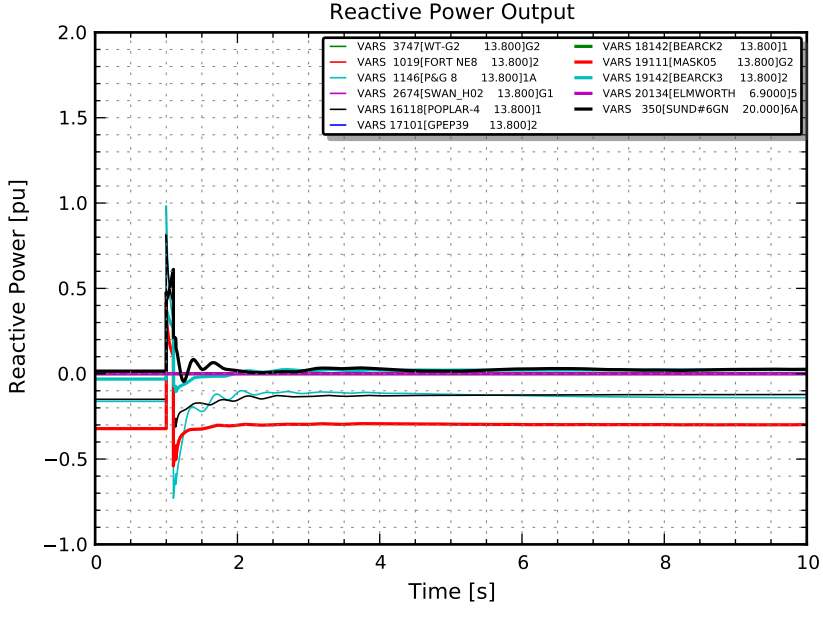
Study Area Generators

Appendix C2B
Figure: 021 (B. 3)





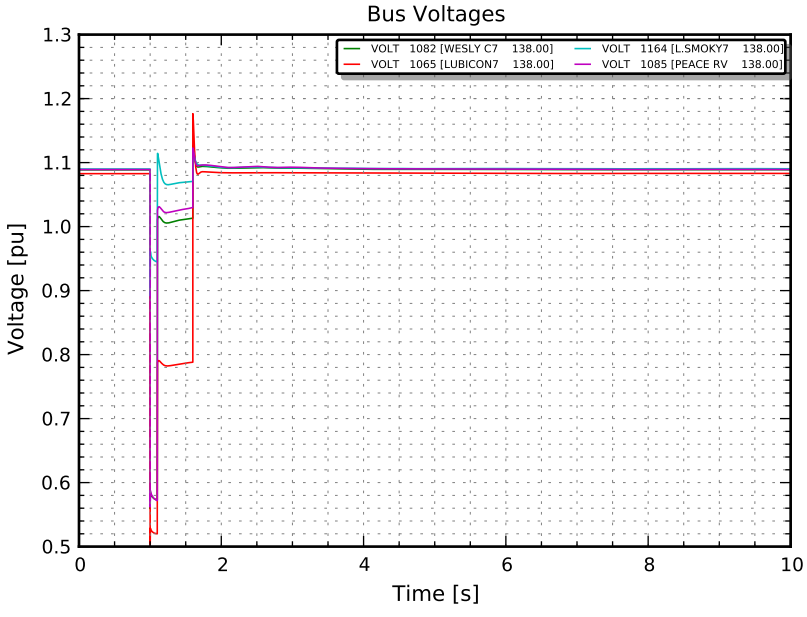


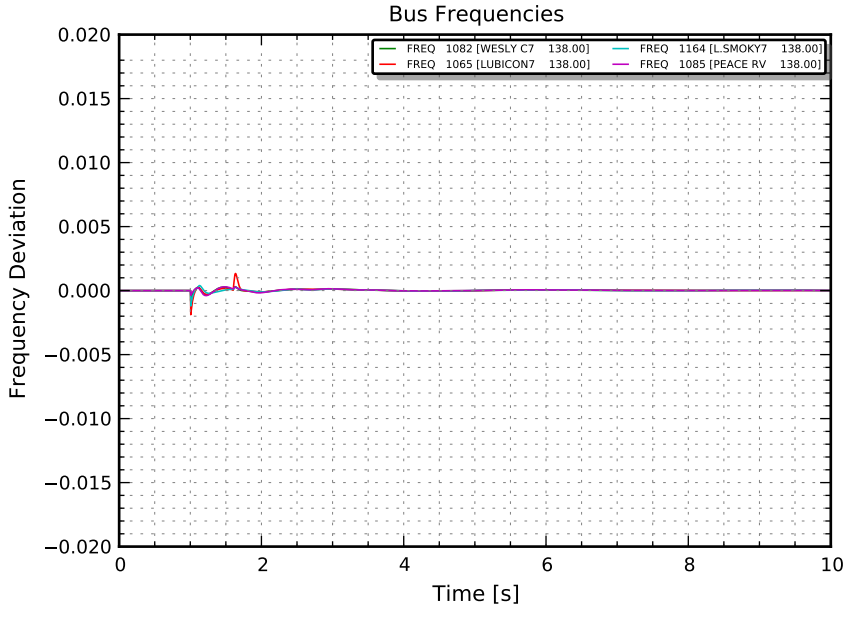


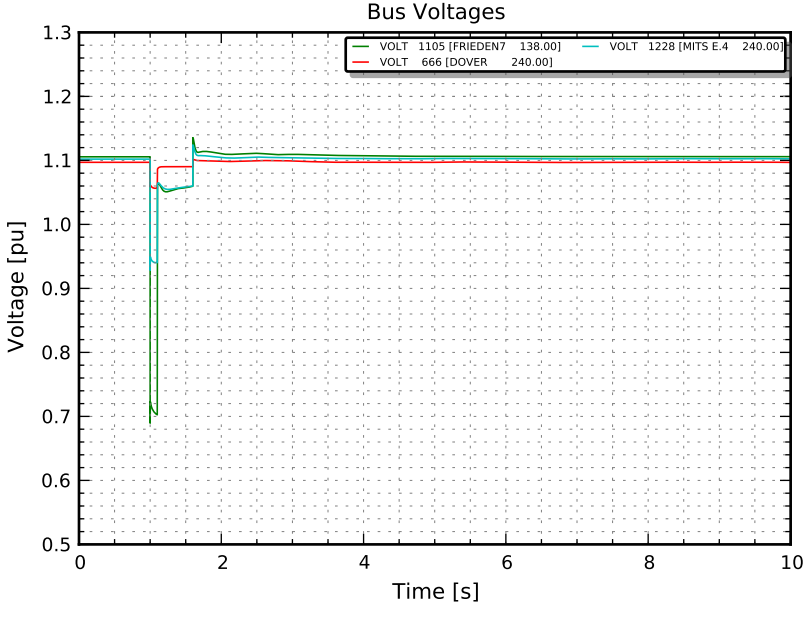
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 022 7L63 HOTCHKISS to LUBICON_A.

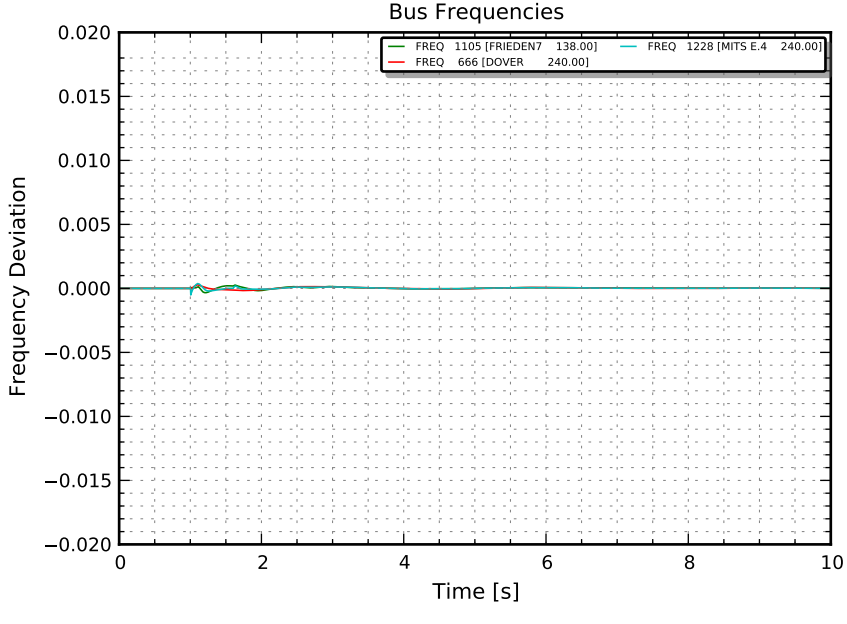
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 022 (A. 1)





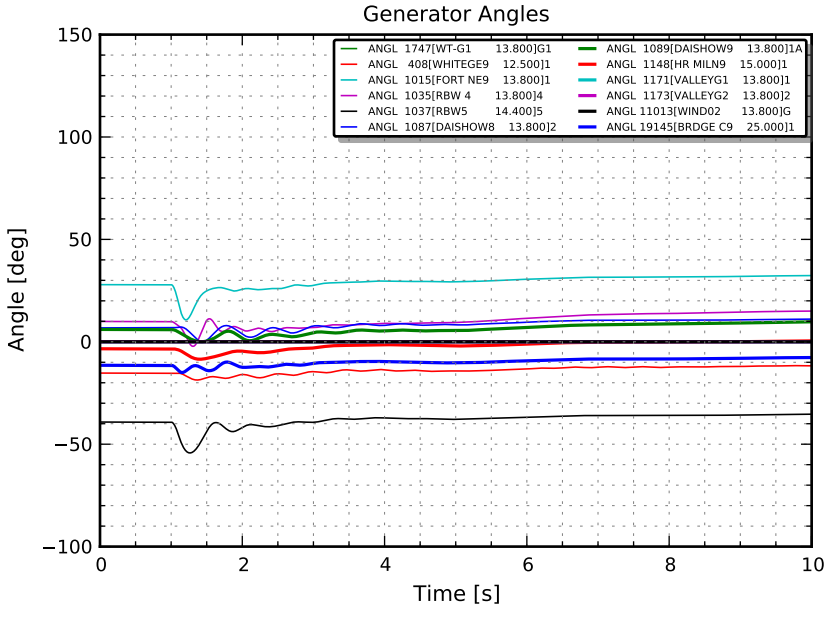


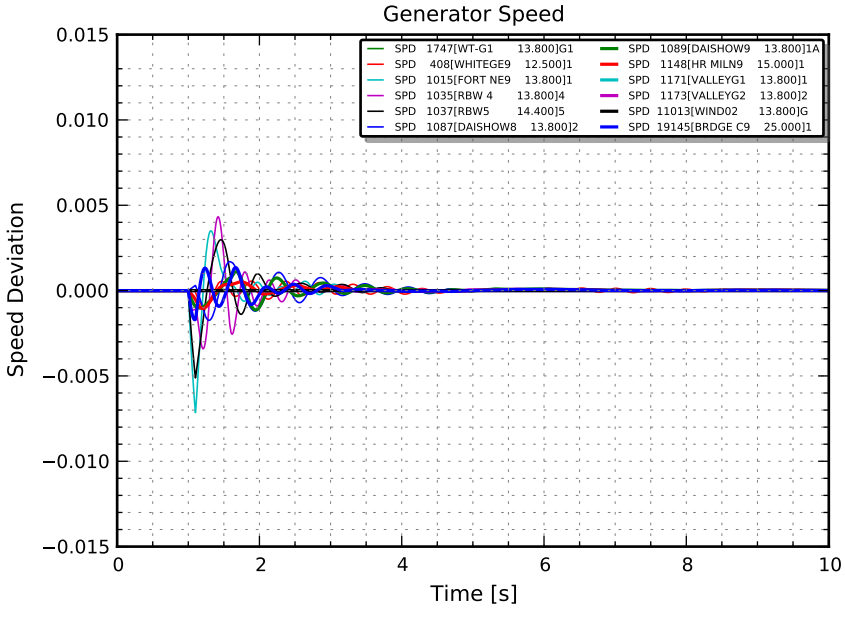


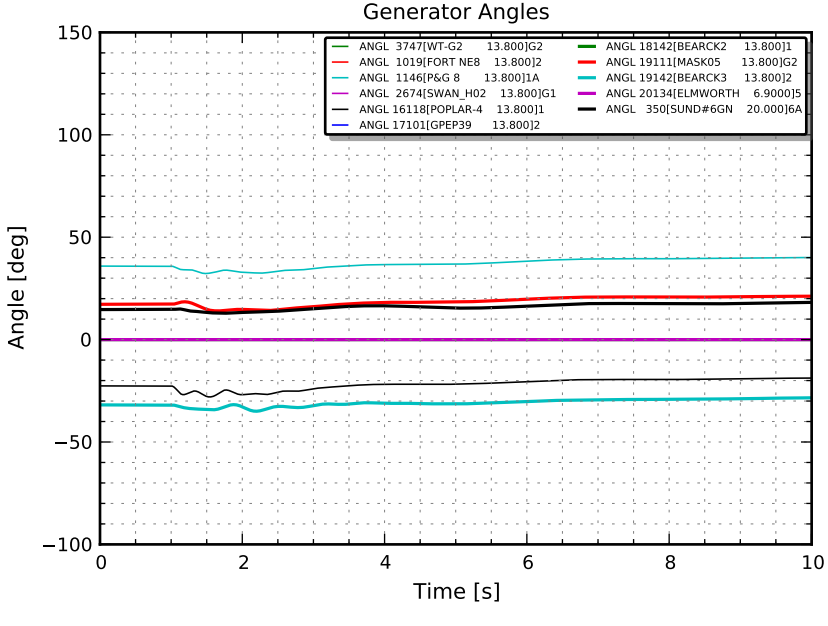
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 022 7L63 HOTCHKISS to LUBICON_A.

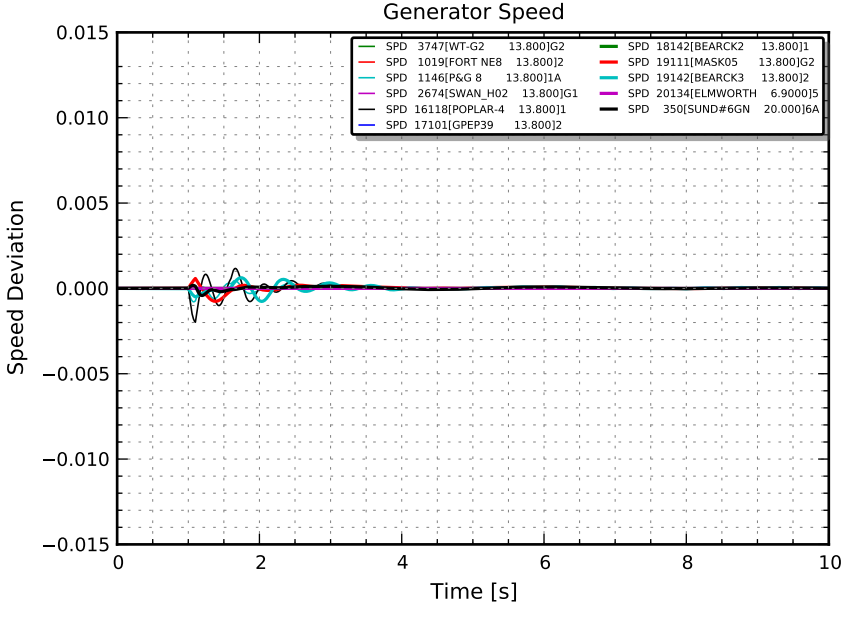
Study Area Generators

Appendix C2B
Figure: 022 (A. 2)





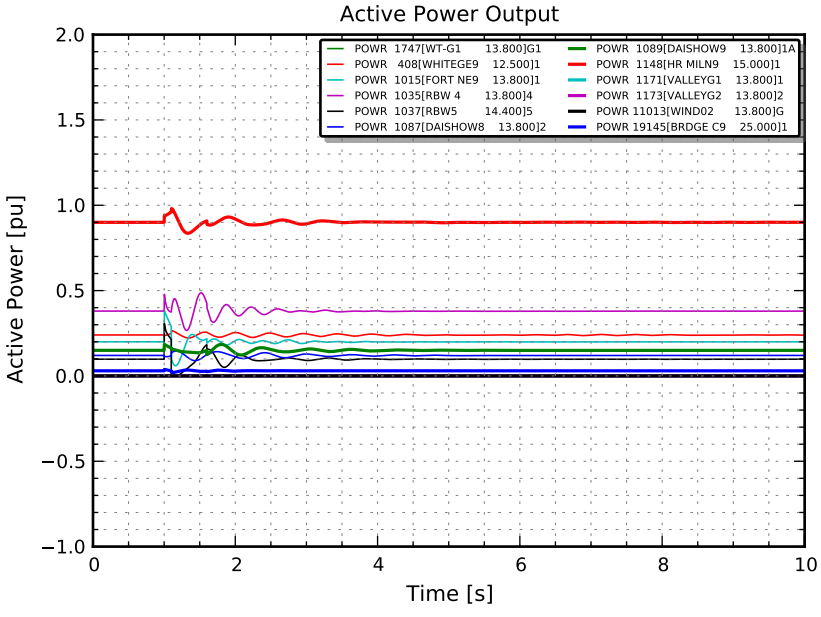


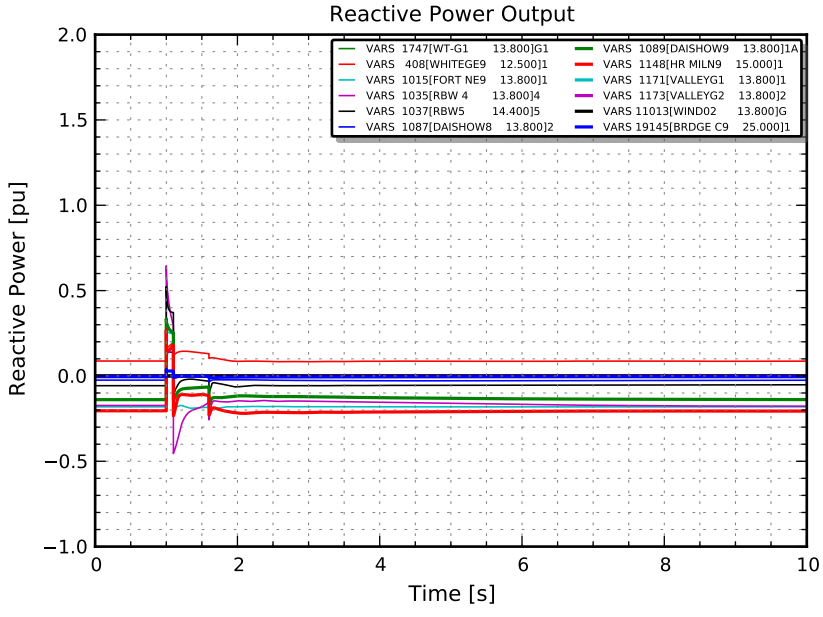


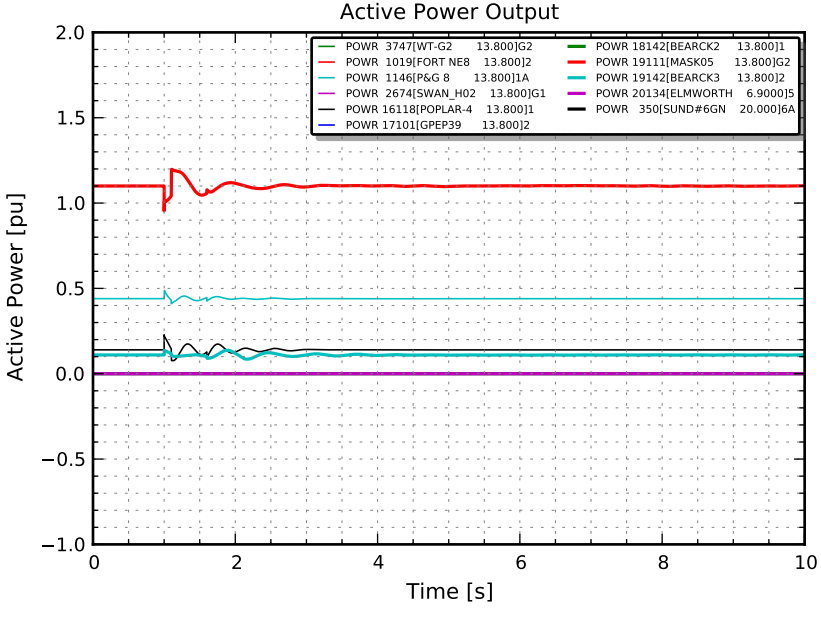
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 022 7L63 HOTCHKISS to LUBICON_A.

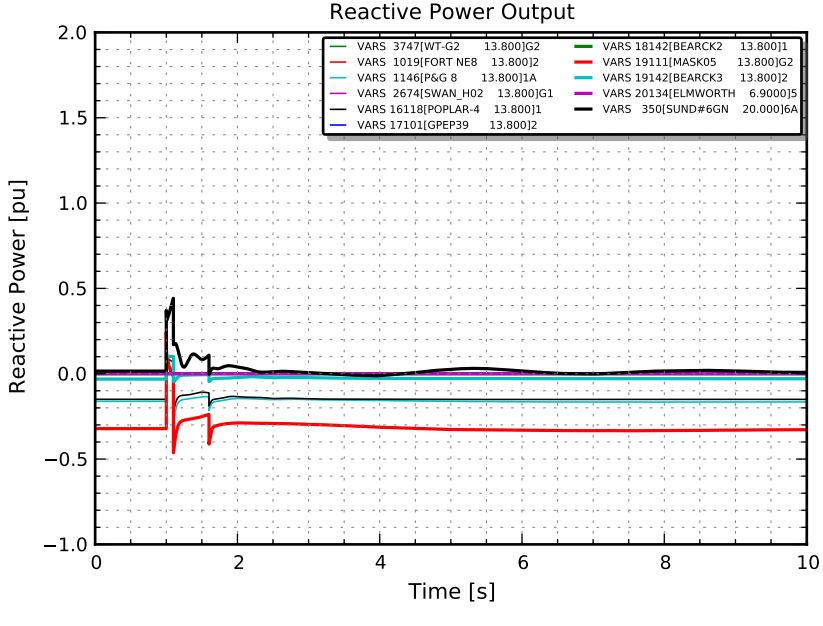
Study Area Generators

Appendix C2B
Figure: 022 (A. 3)





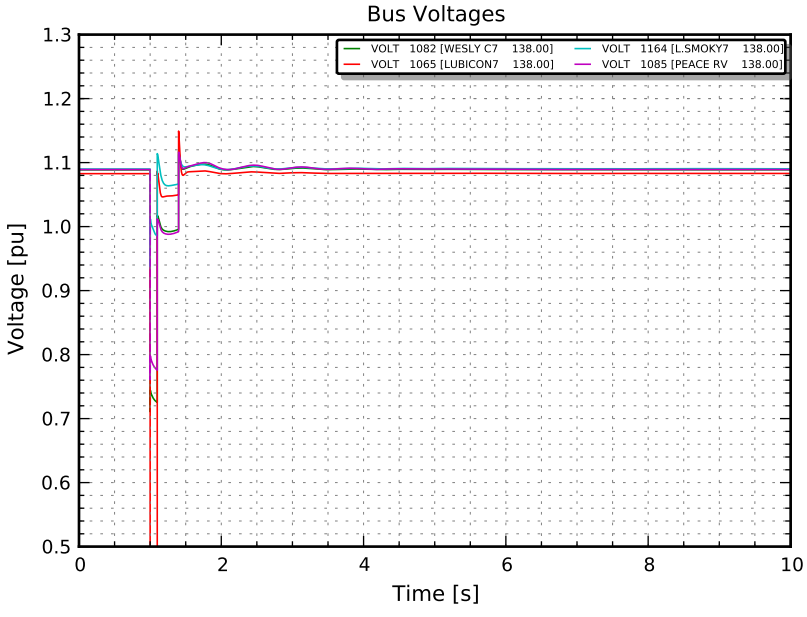


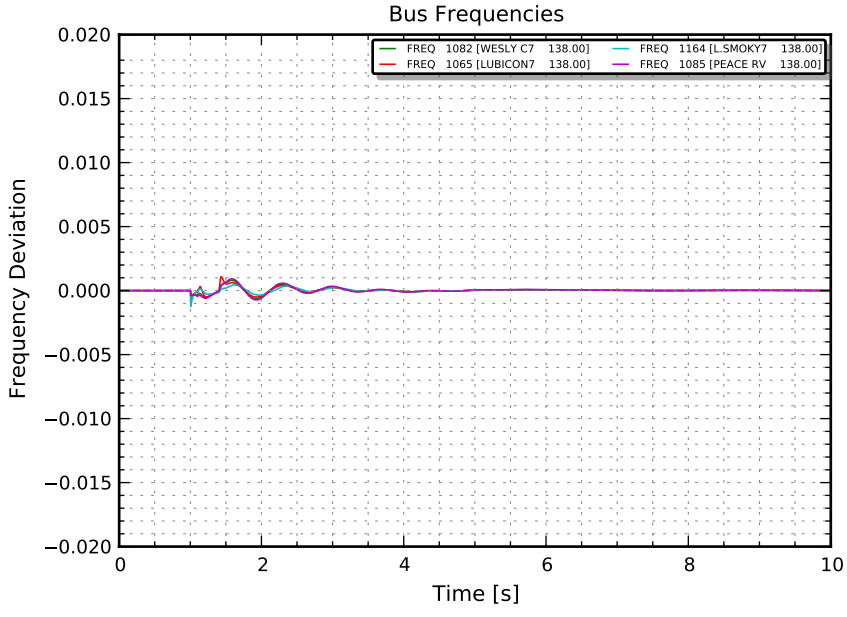


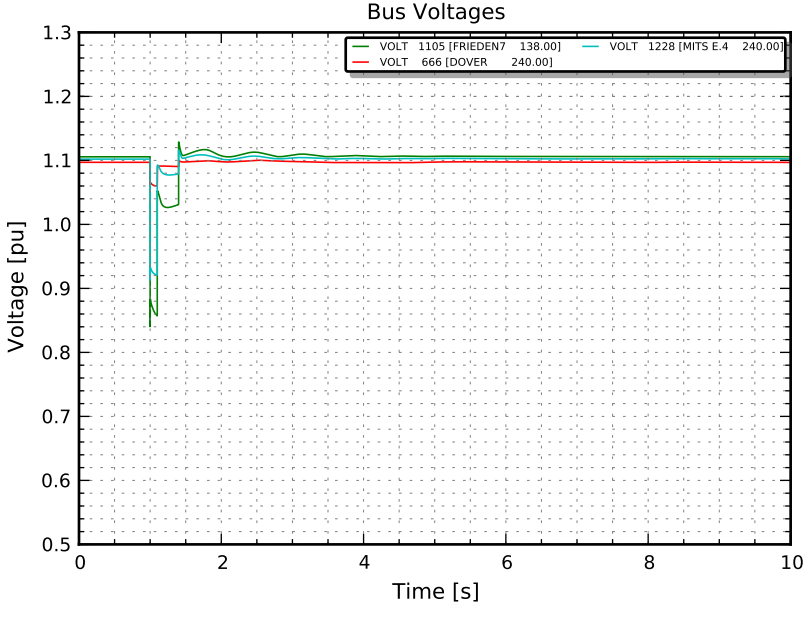
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 022 7L63 HOTCHKISS to LUBICON_B.

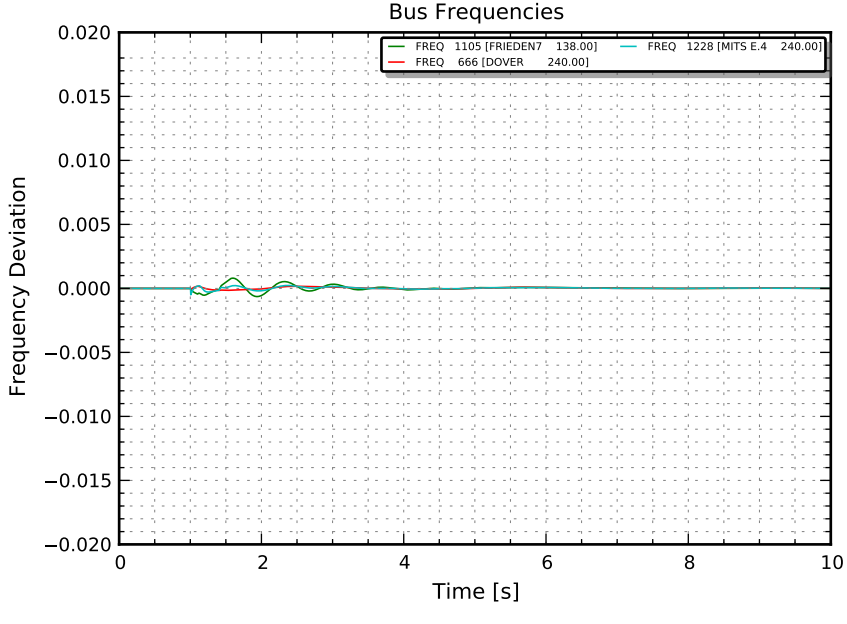
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 022 (B. 1)





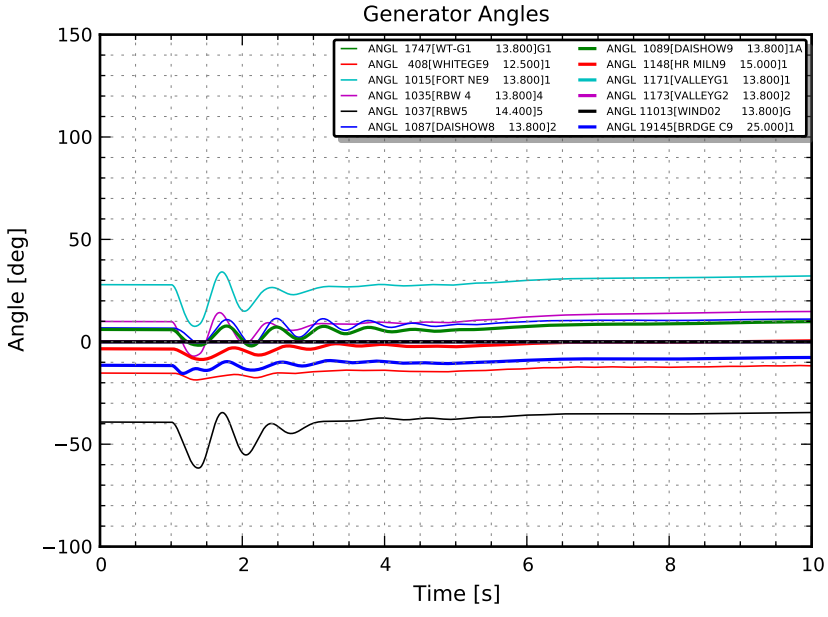


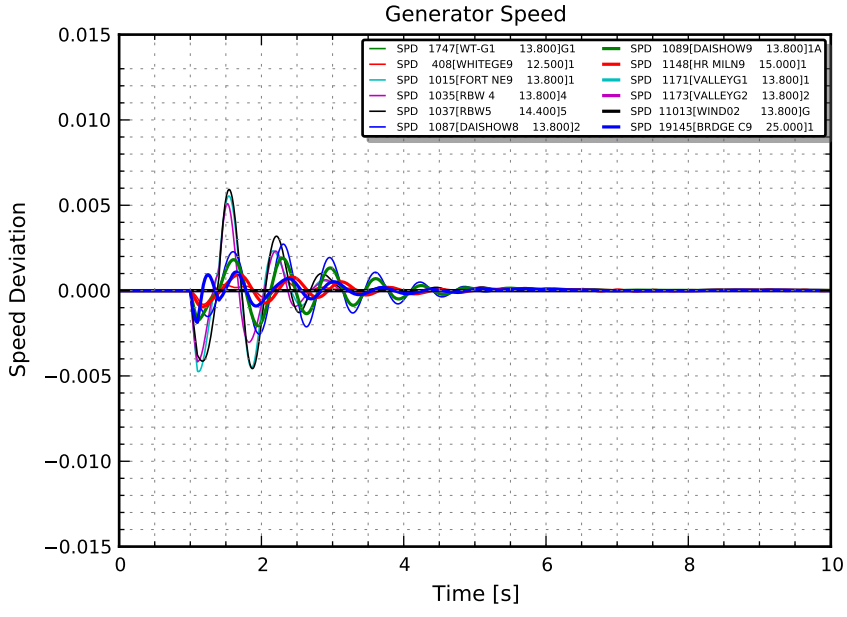


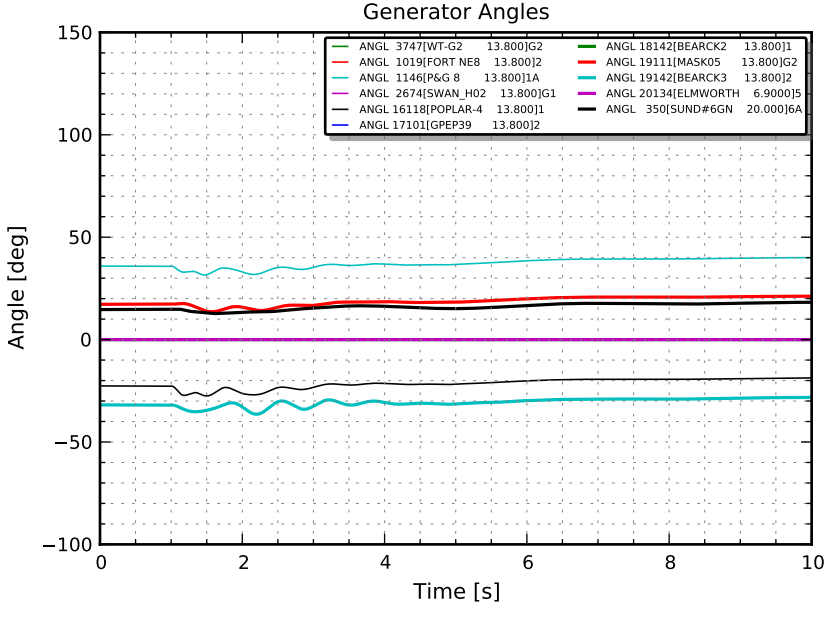
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 022 7L63 HOTCHKISS to LUBICON_B.

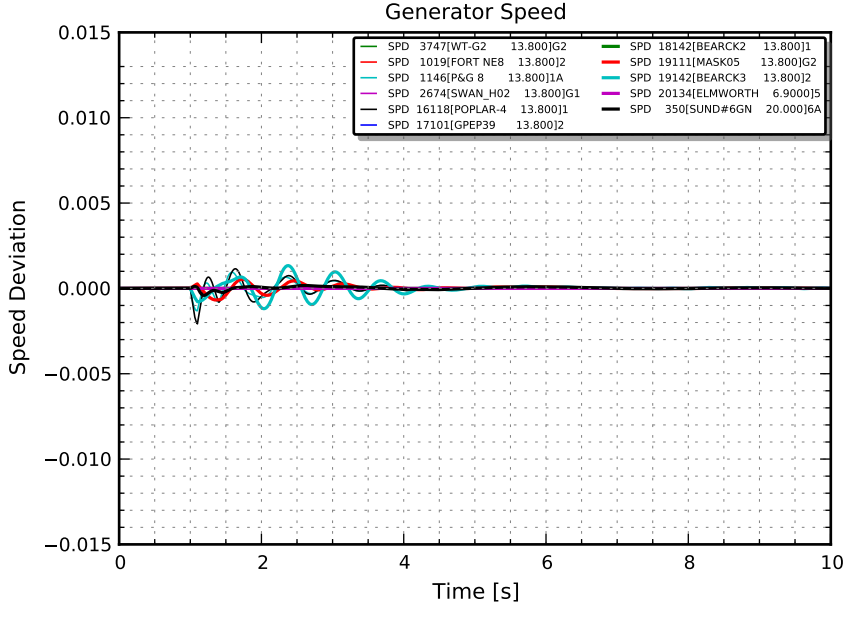
Study Area Generators

Appendix C2B
Figure: 022 (B. 2)





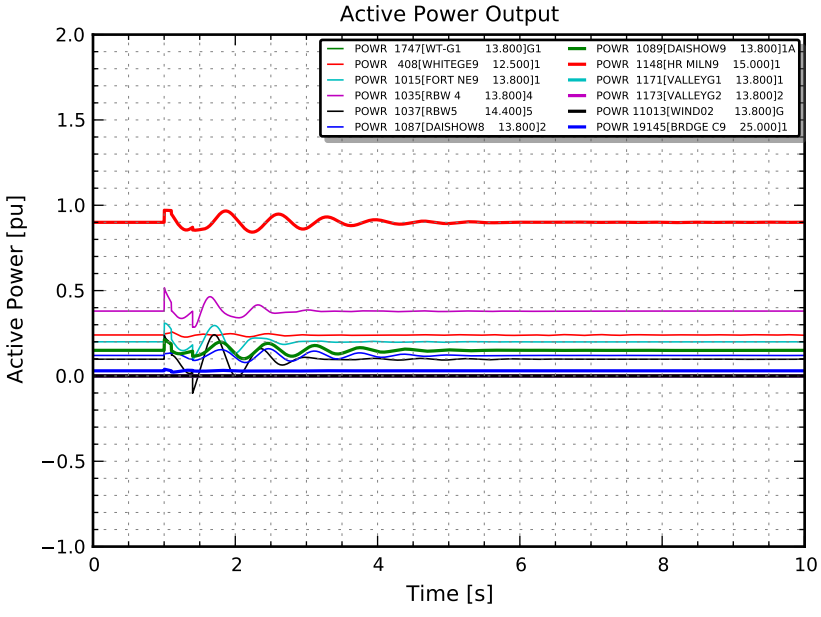


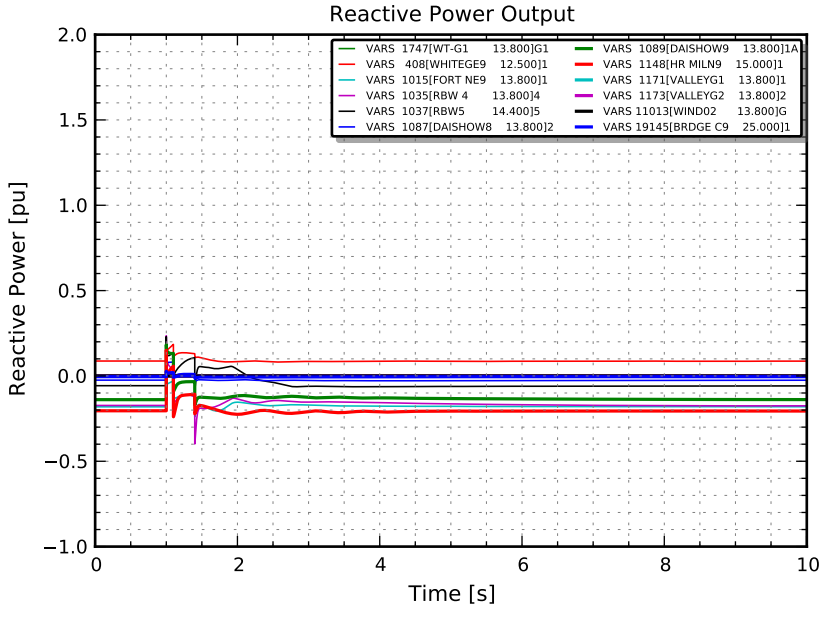


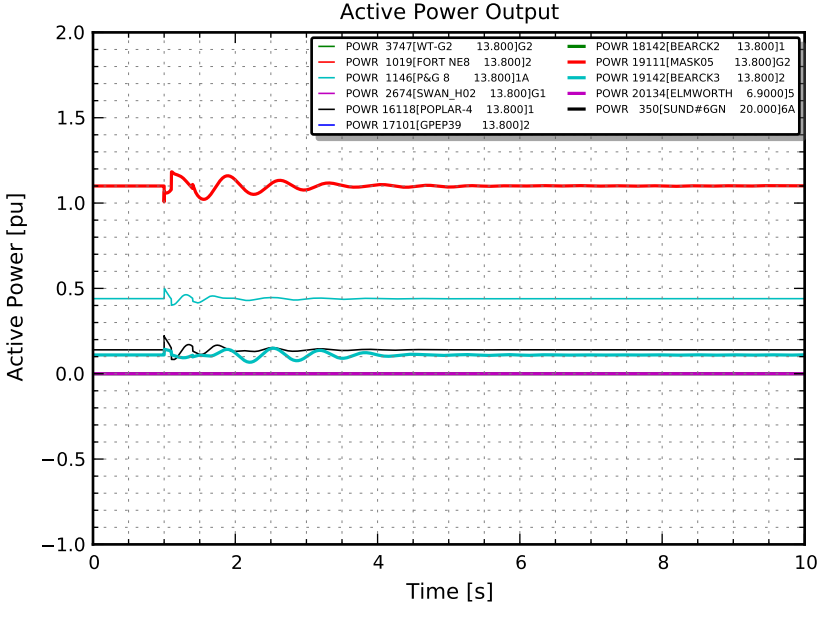
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 022 7L63 HOTCHKISS to LUBICON_B.

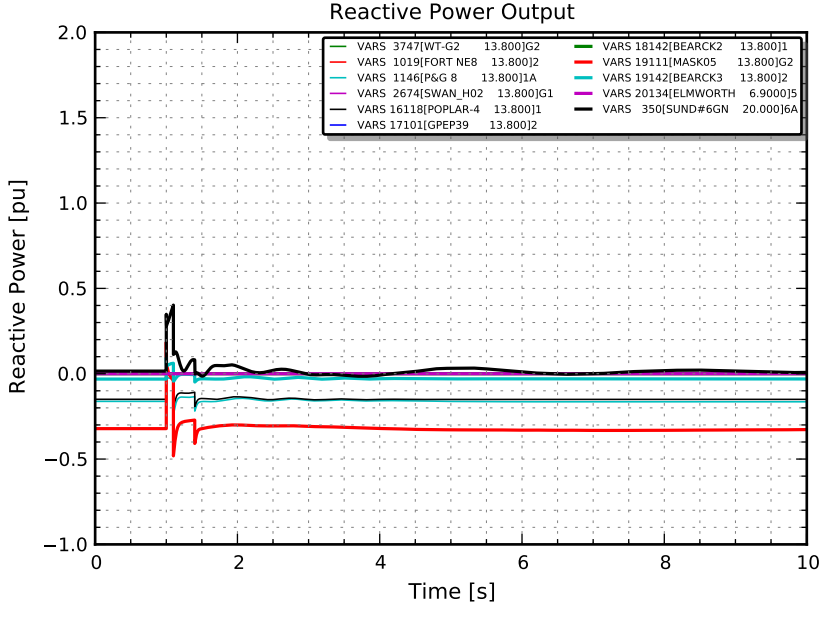
Study Area Generators

Appendix C2B
Figure: 022 (B. 3)





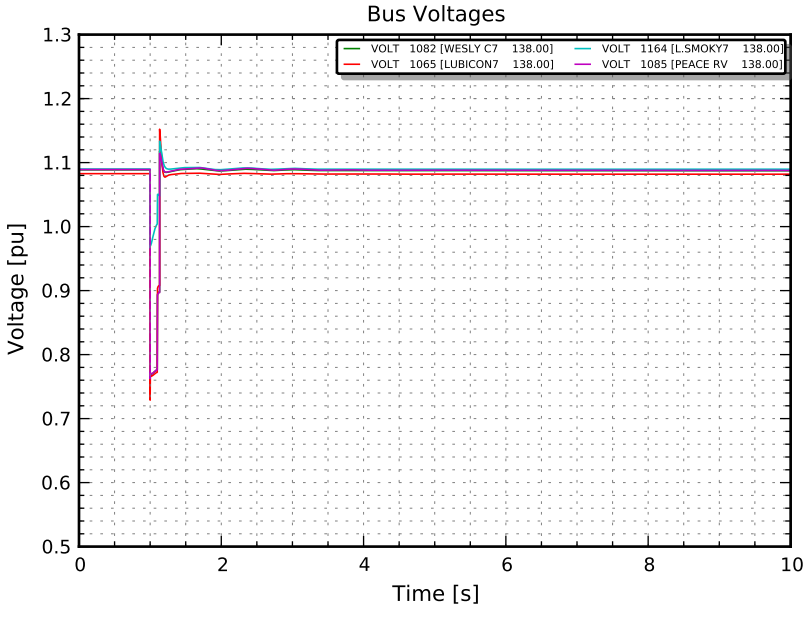


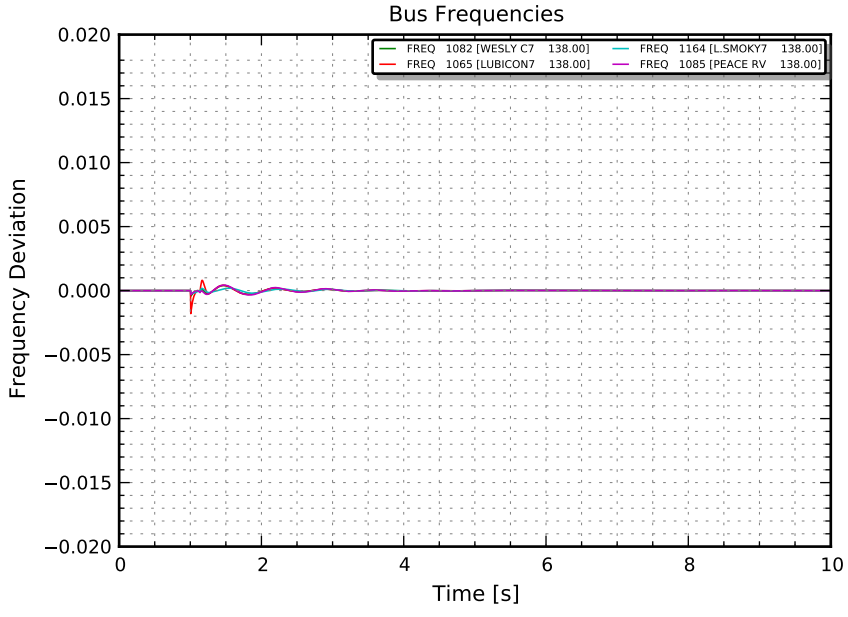


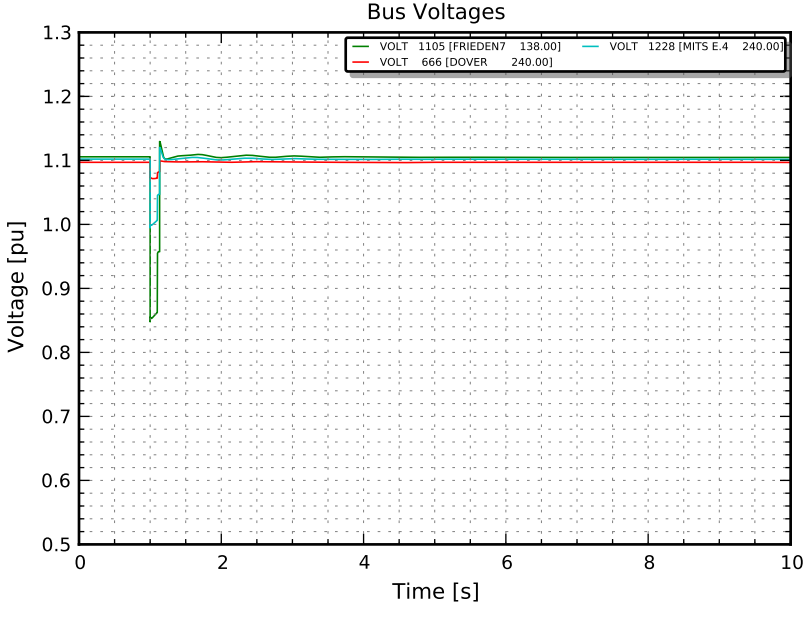
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 023 7L58 KEGRIVER to Meikle_A.

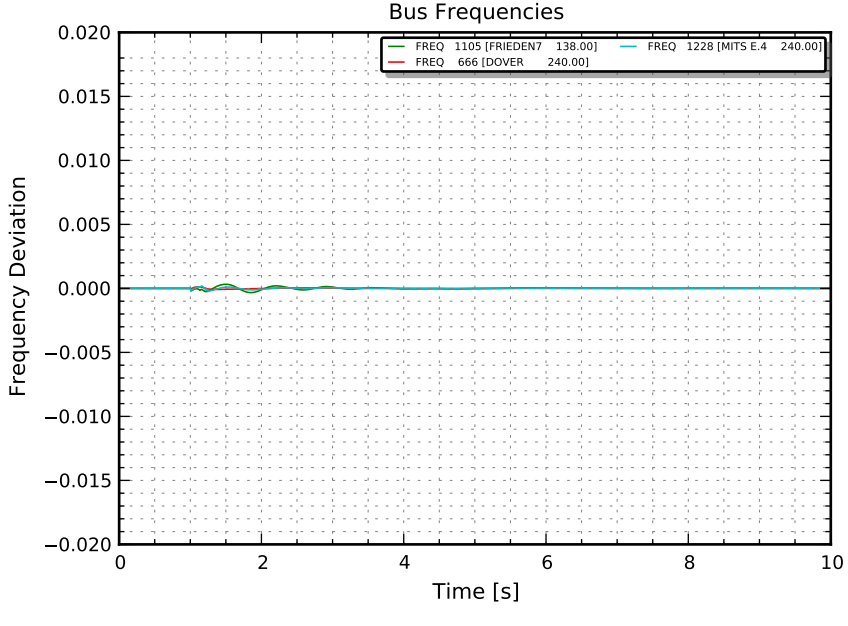
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 023 (A. 1)





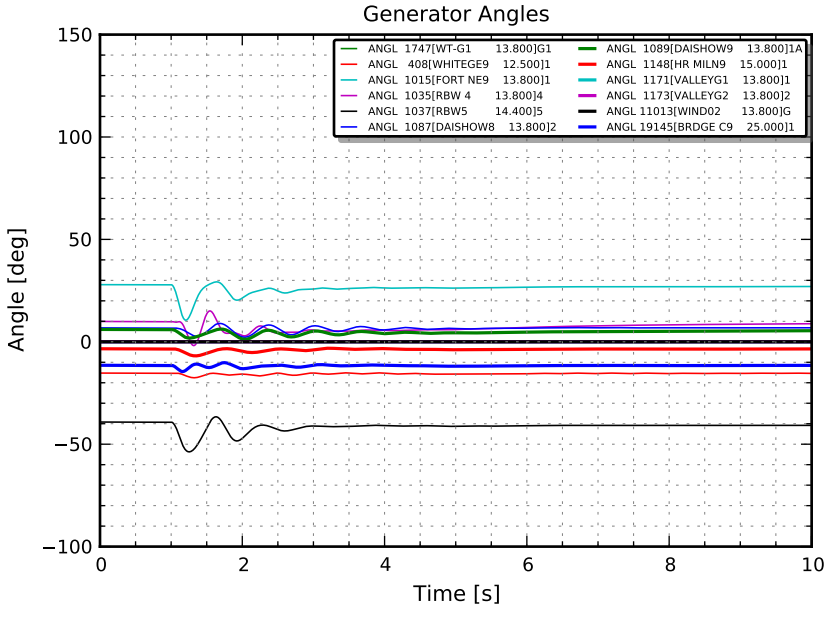


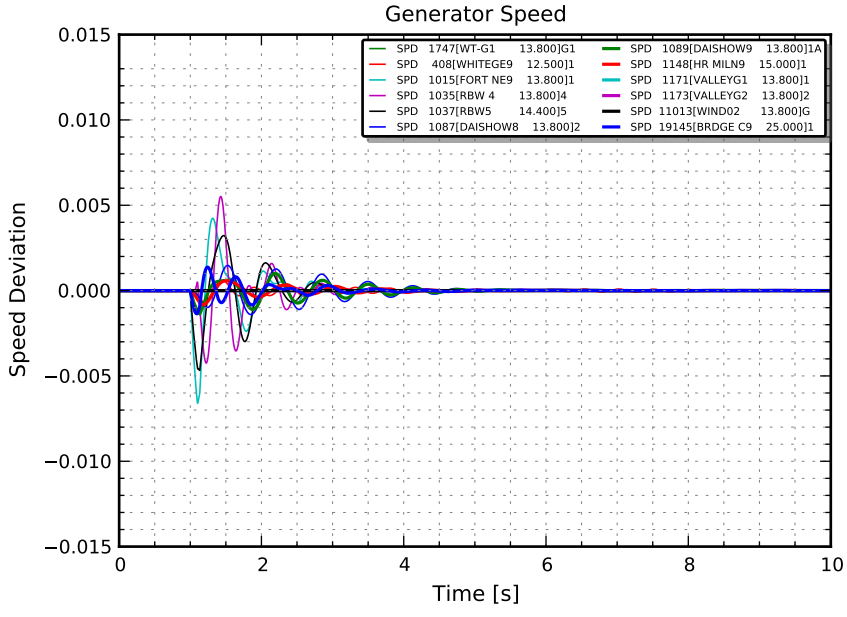


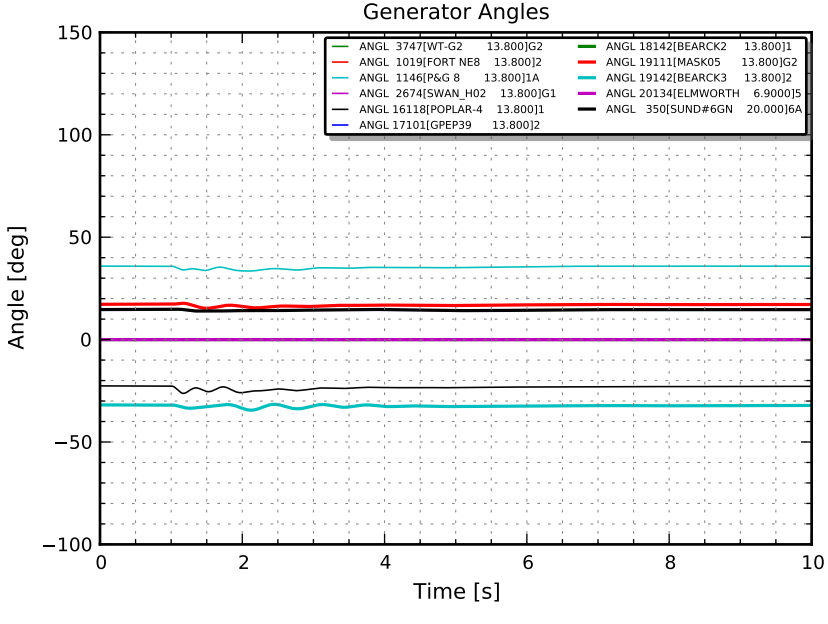
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 023 7L58 KEGRIVER to Meikle_A.

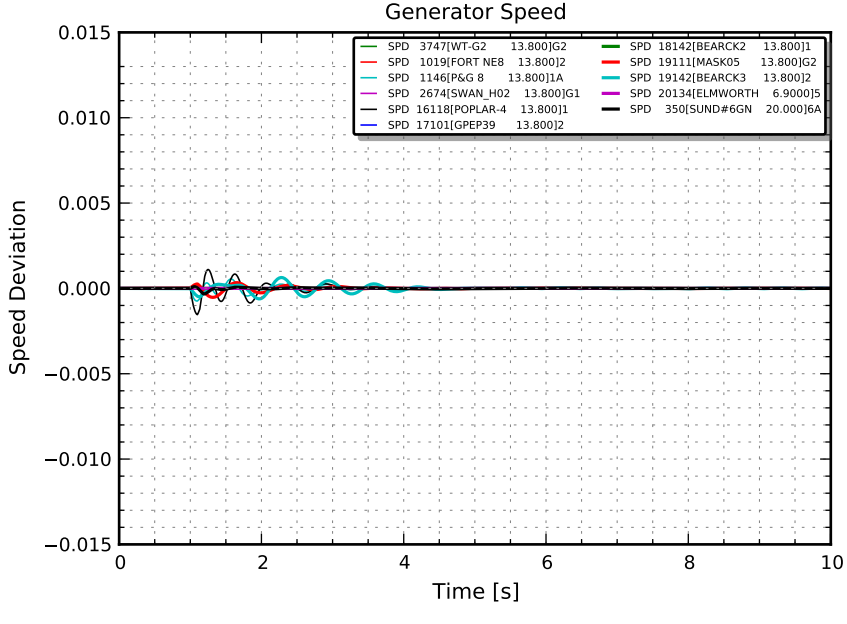
Study Area Generators

Appendix C2B
Figure: 023 (A. 2)





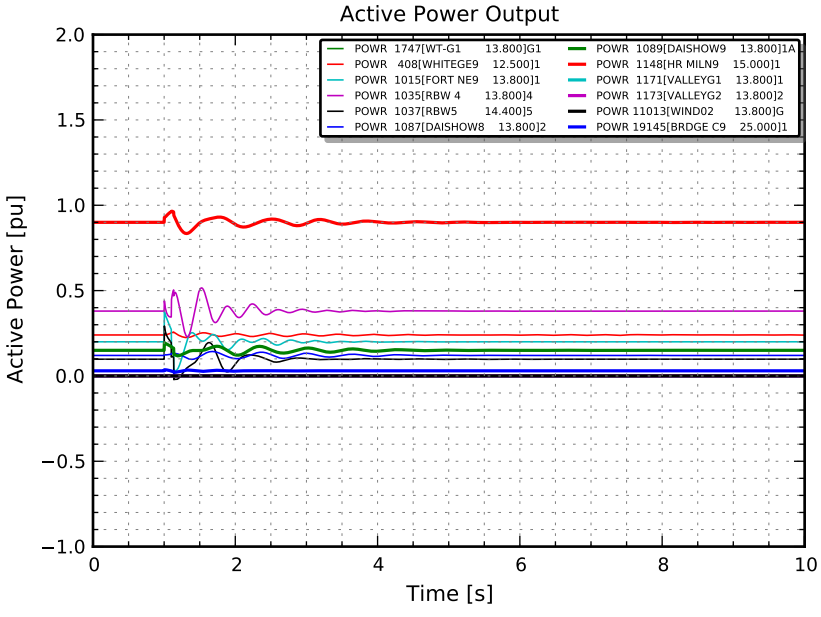


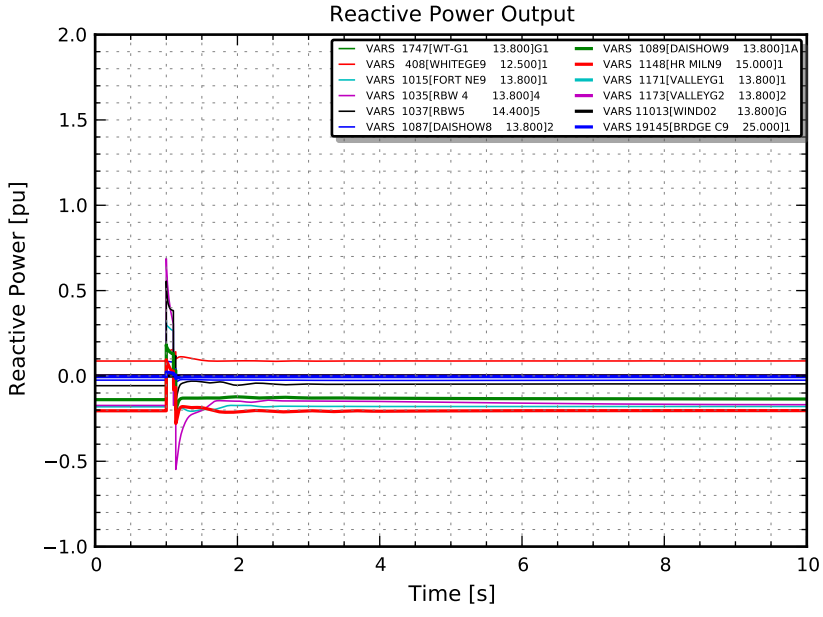


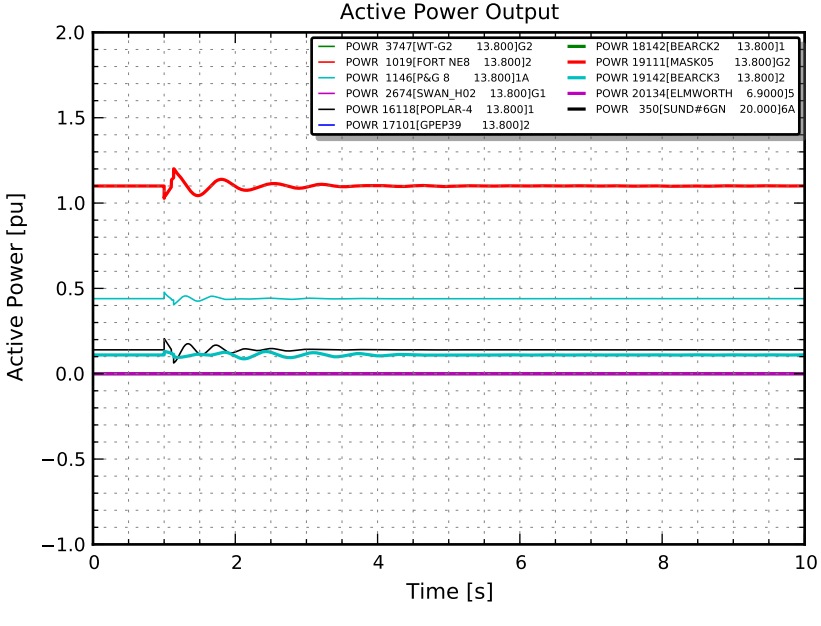
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 023 7L58 KEGRIVER to Meikle_A.

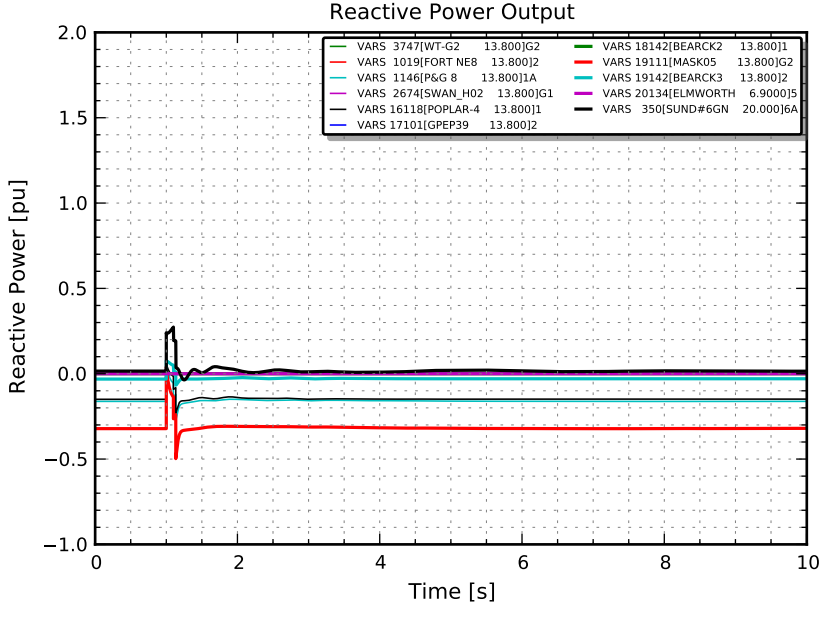
Study Area Generators

Appendix C2B
Figure: 023 (A. 3)





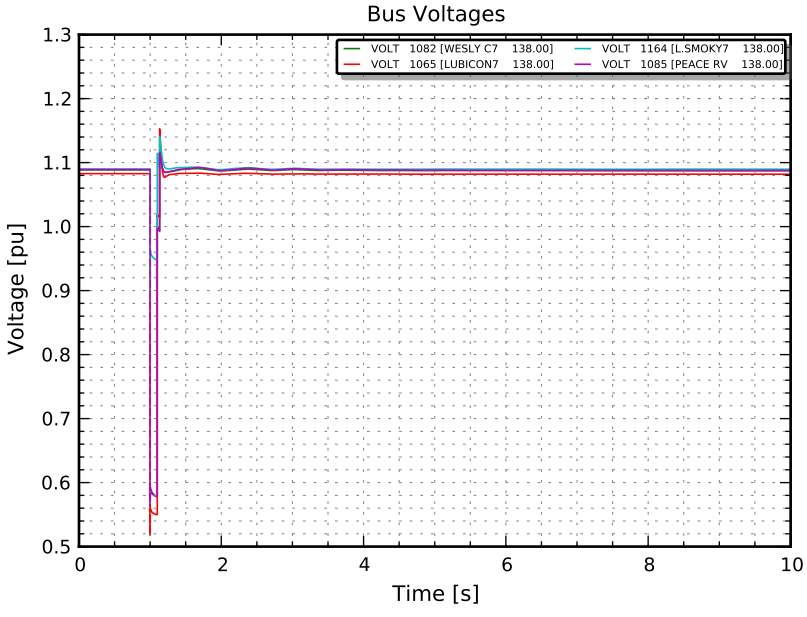


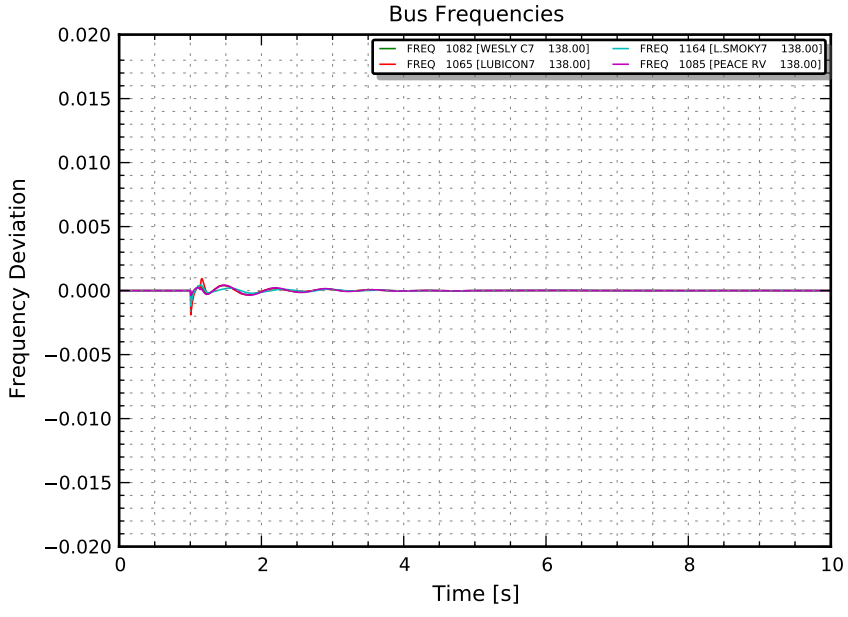


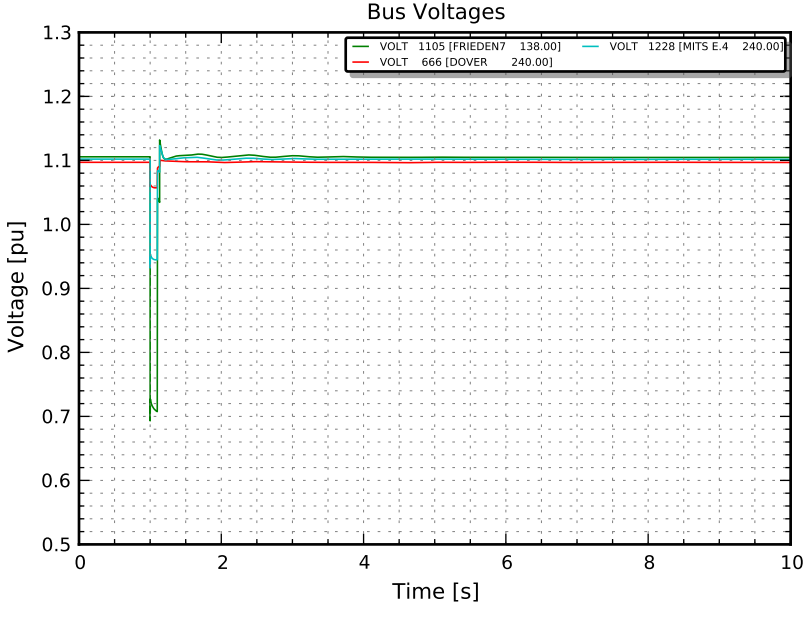
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 023 7L58 KEGRIVER to Meikle_B.

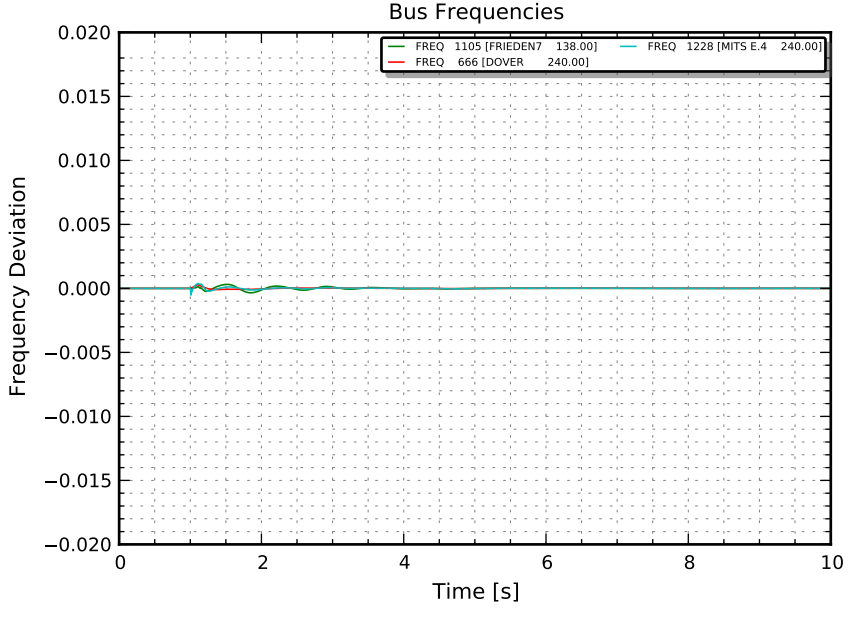
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 023 (B. 1)





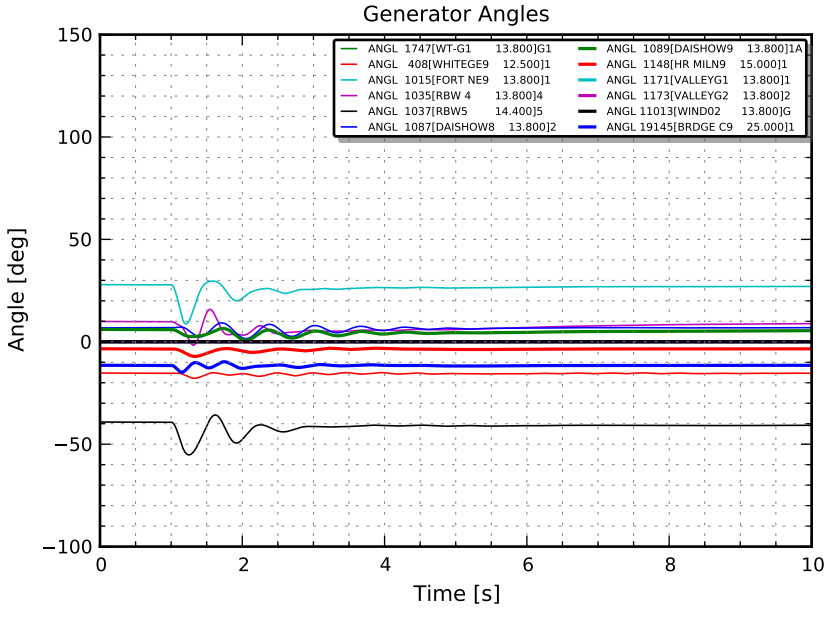


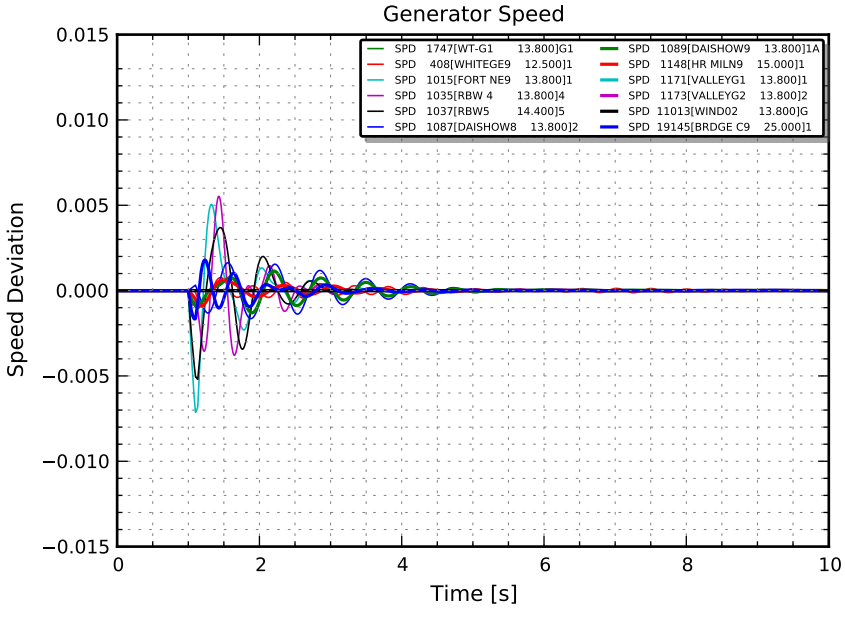


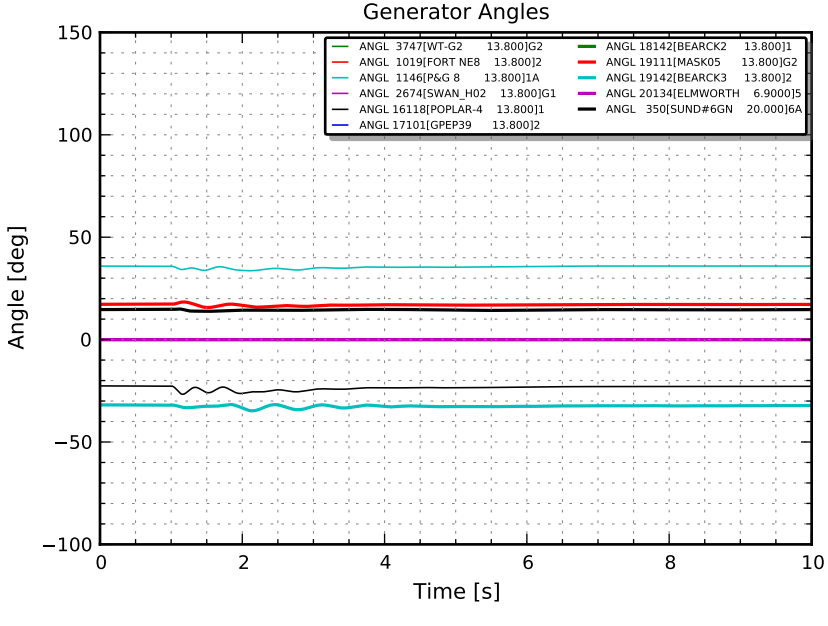
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 023 7L58 KEGRIVER to Meikle_B.

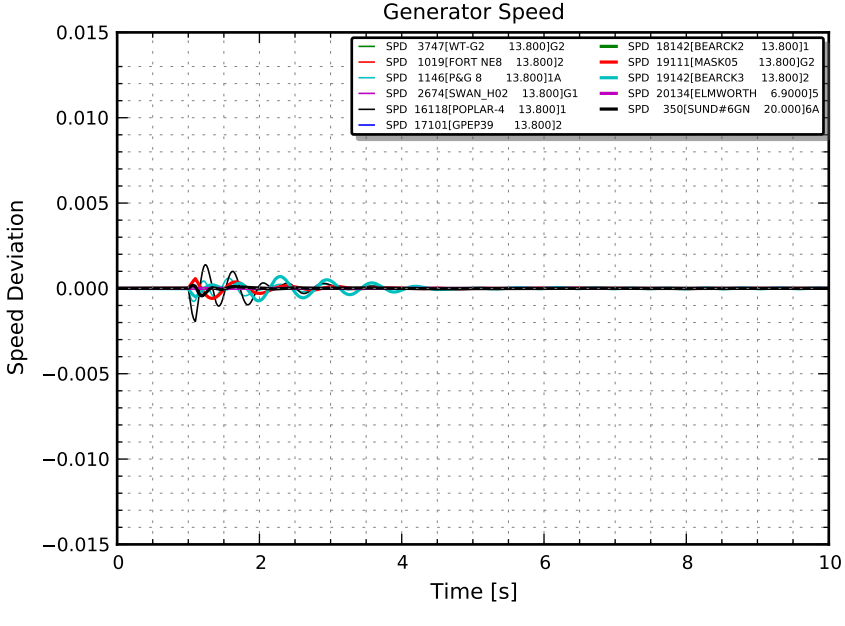
Study Area Generators

Appendix C2B
Figure: 023 (B. 2)





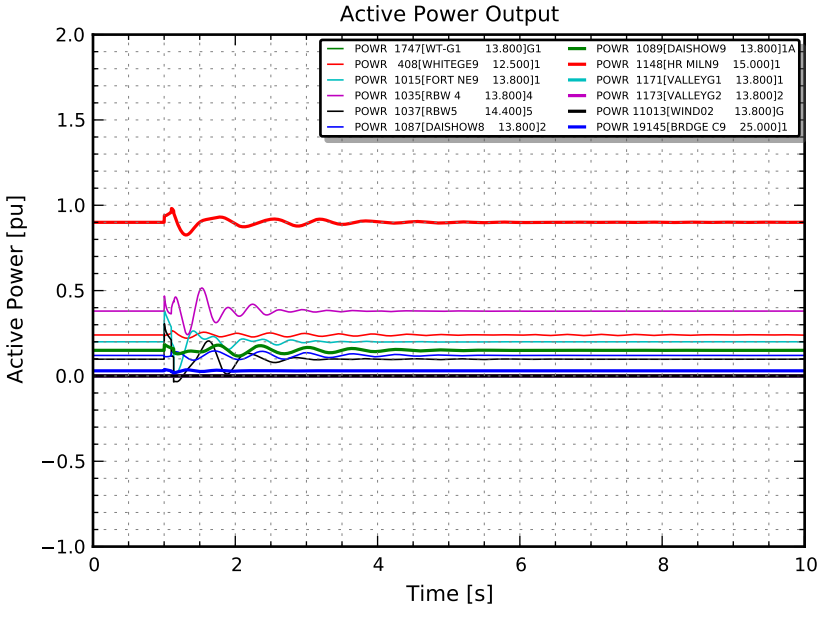


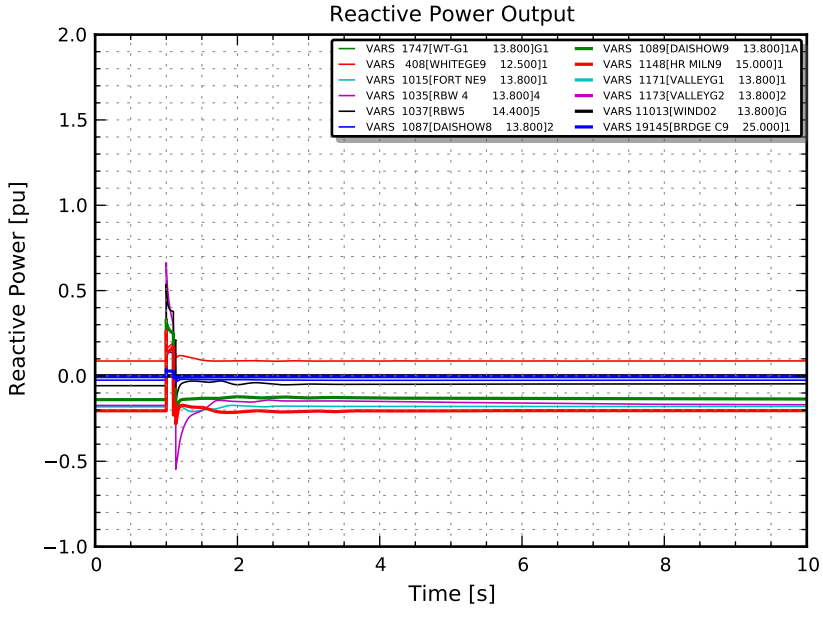


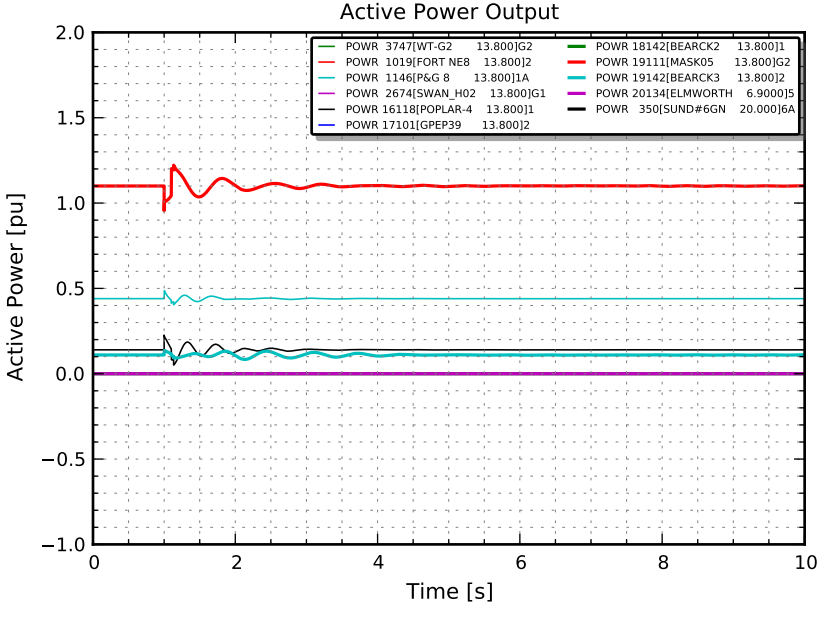
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 023 7L58 KEGRIVER to Meikle_B.

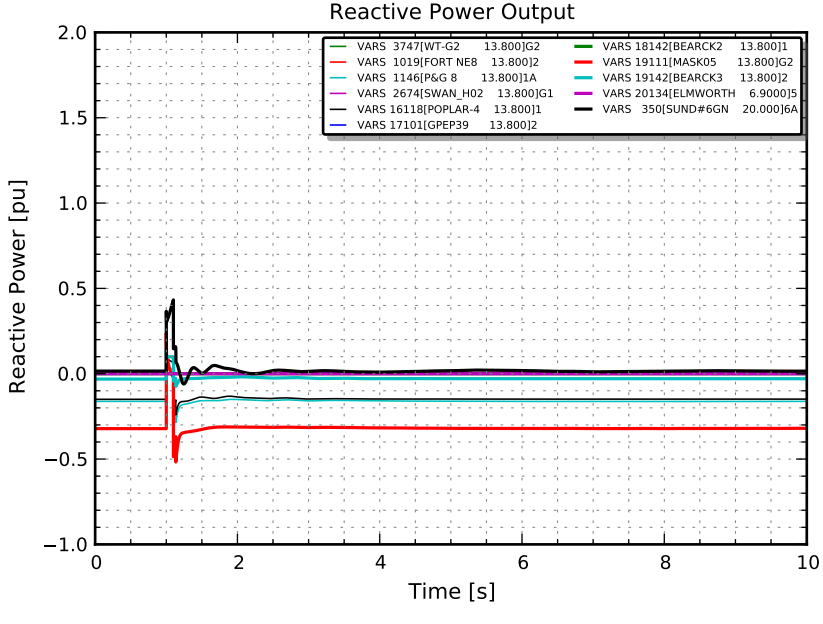
Study Area Generators

Appendix C2B
Figure: 023 (B. 3)





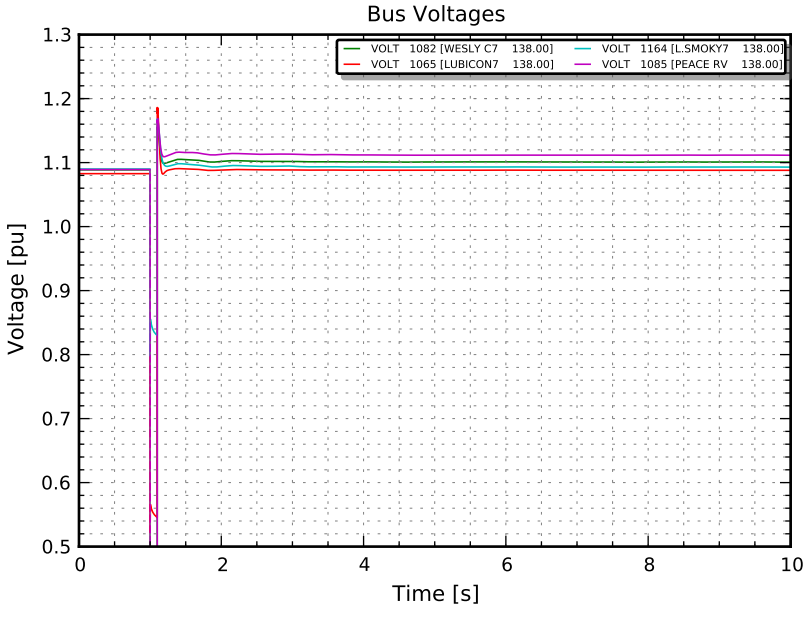


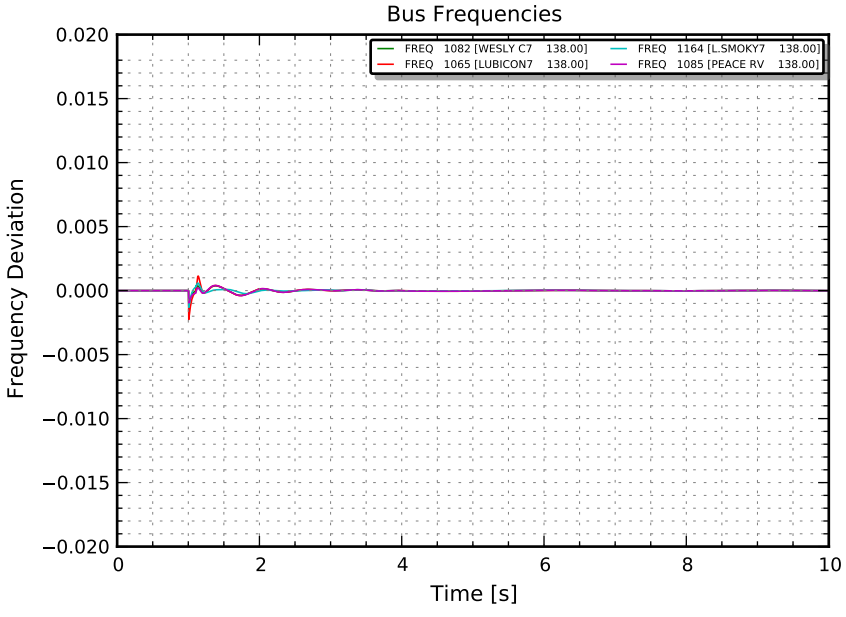


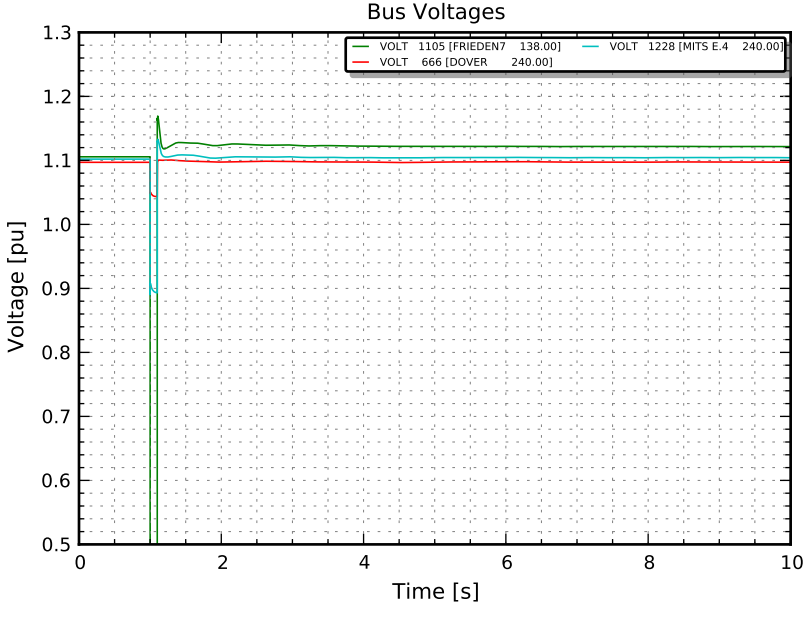
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 024 7L04 WESTPEACE to DAISHOWA_A.

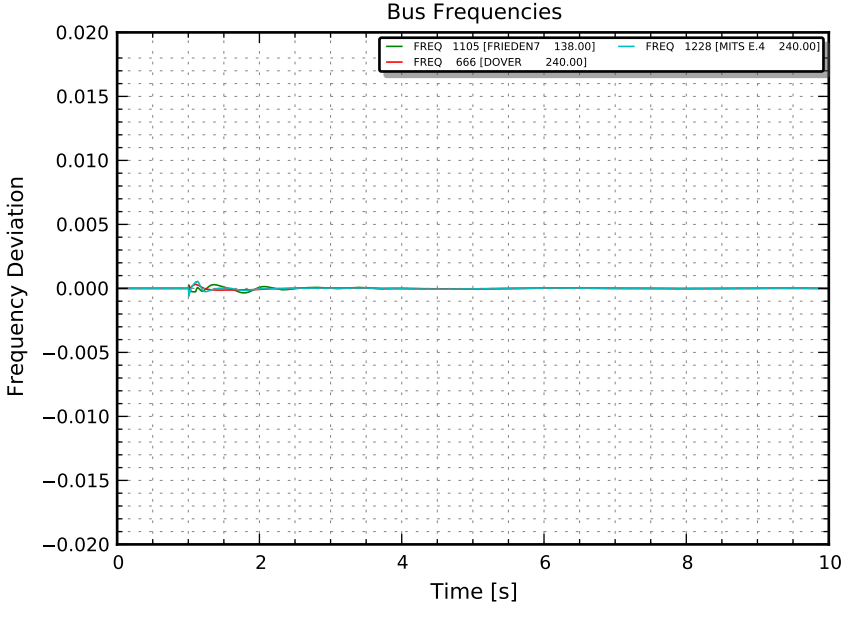
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 024 (A. 1)





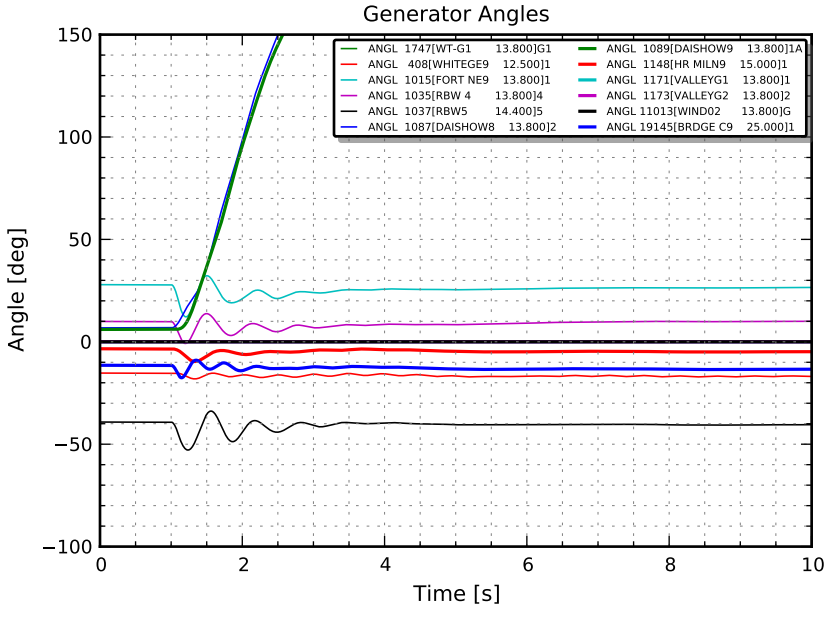


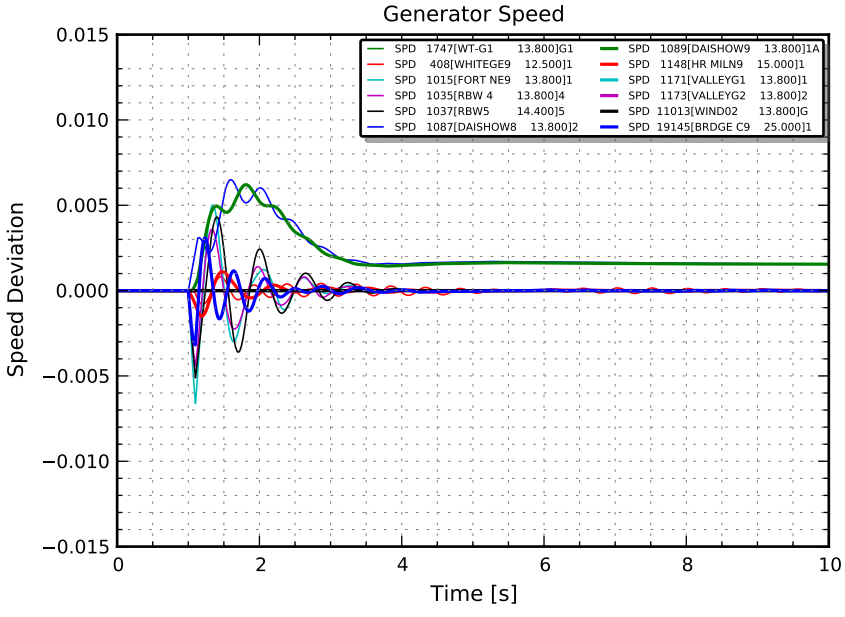


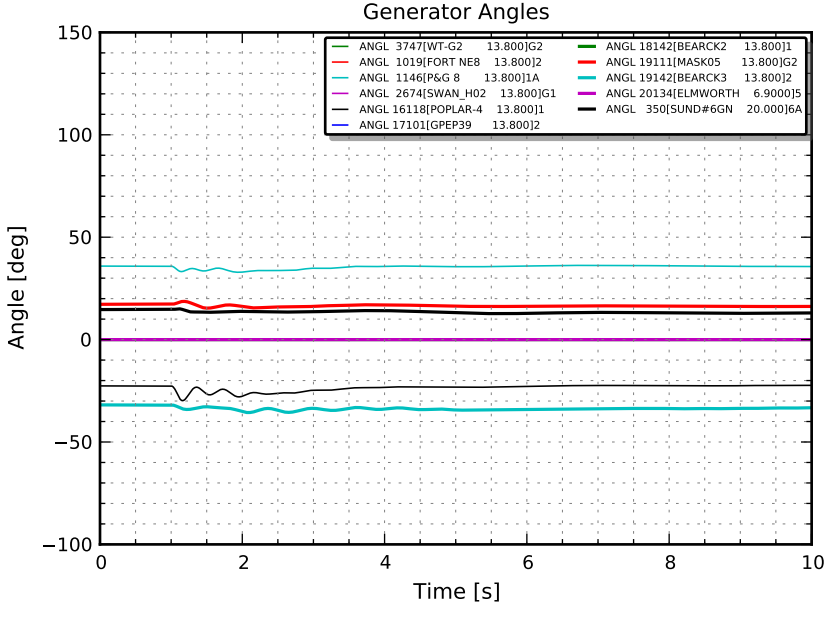
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 024 7L04 WESTPEACE to DAISHOWA_A.

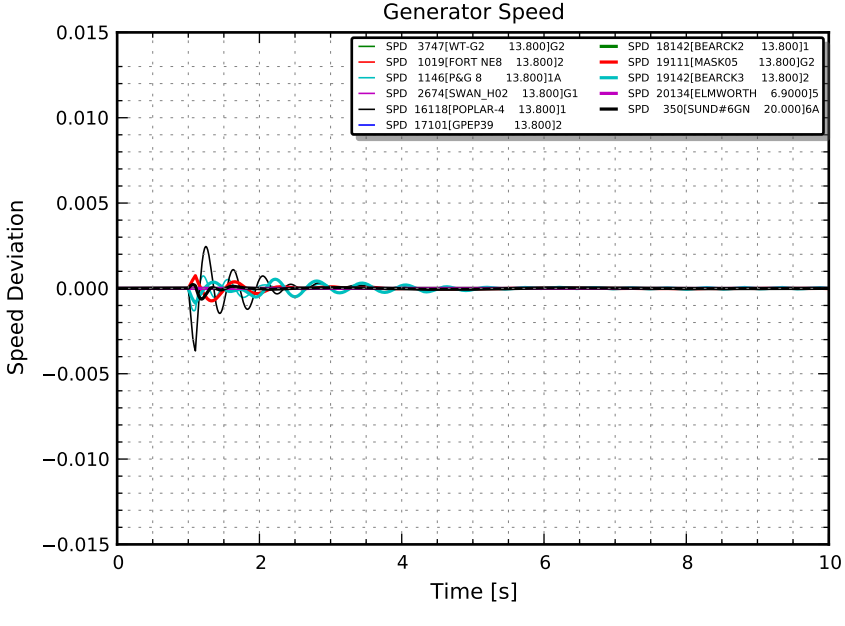
Study Area Generators

Appendix C2B
Figure: 024 (A. 2)





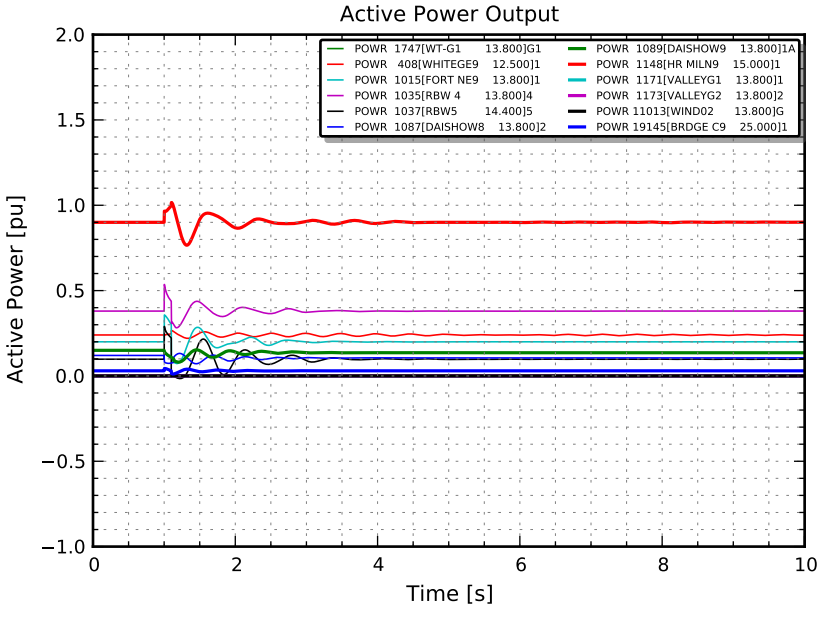


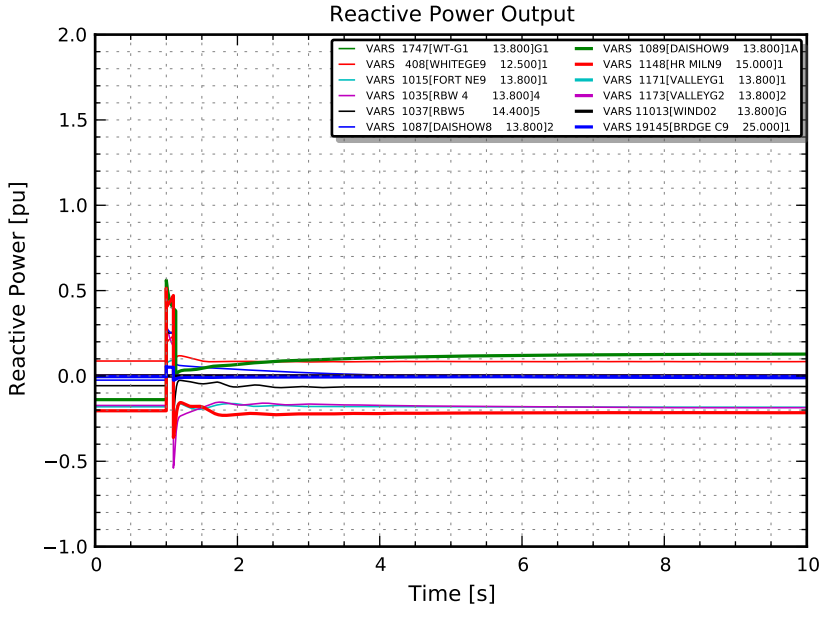


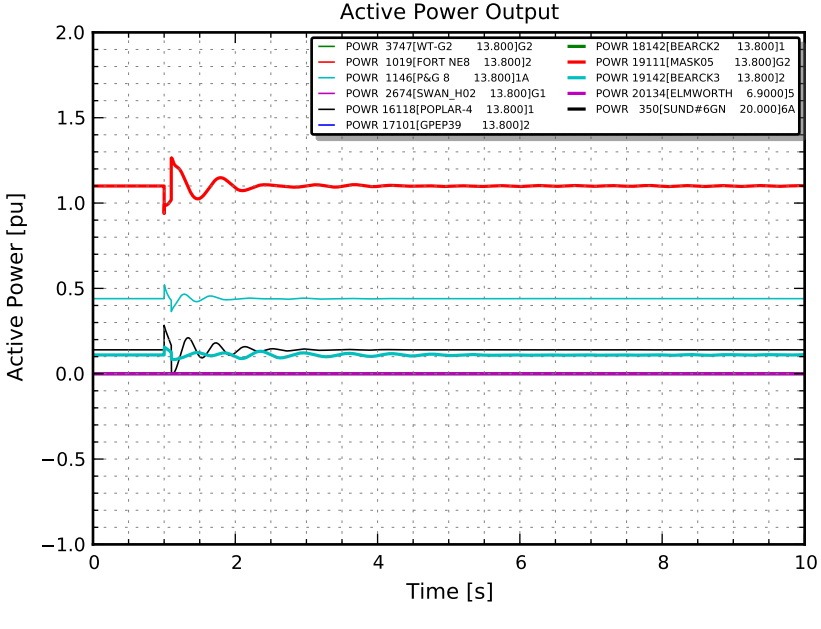
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 024 7L04 WESTPEACE to DAISHOWA_A.

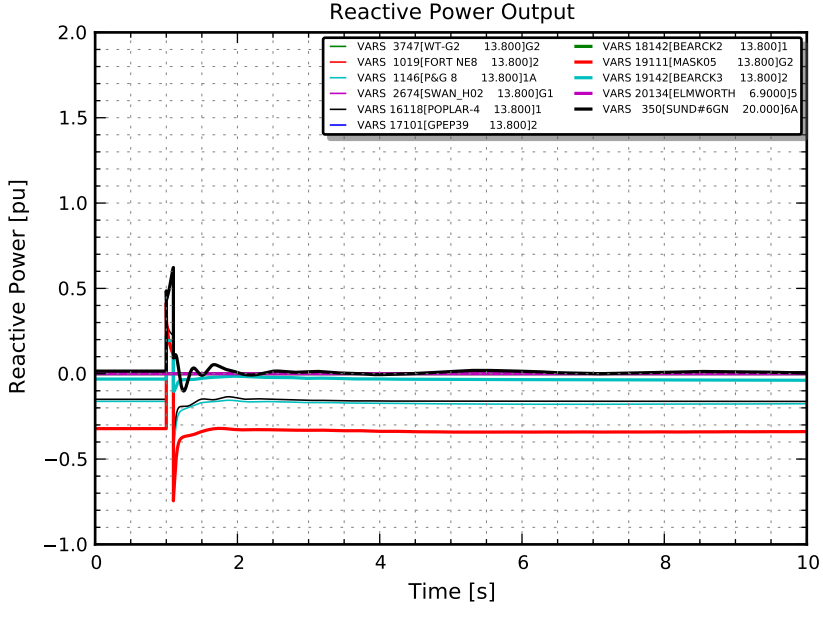
Study Area Generators

Appendix C2B
Figure: 024 (A. 3)





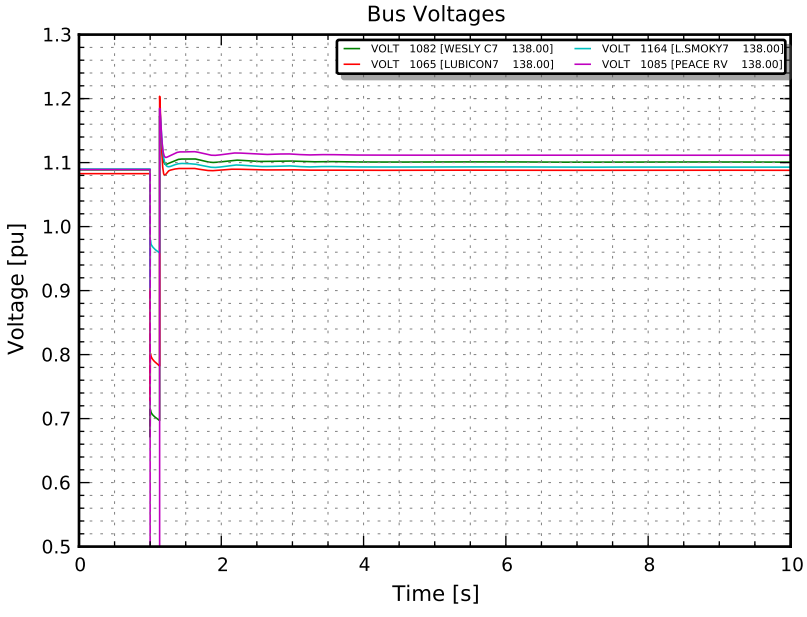


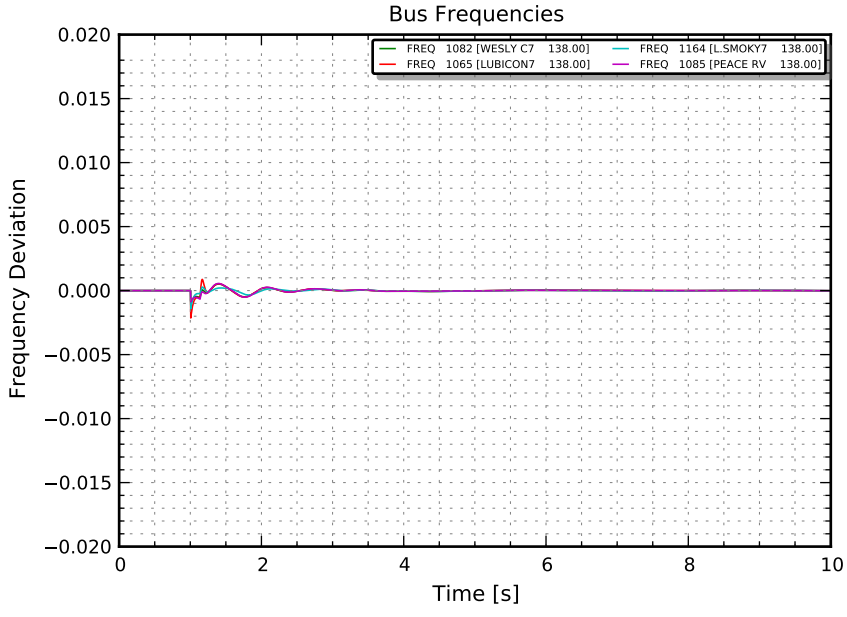


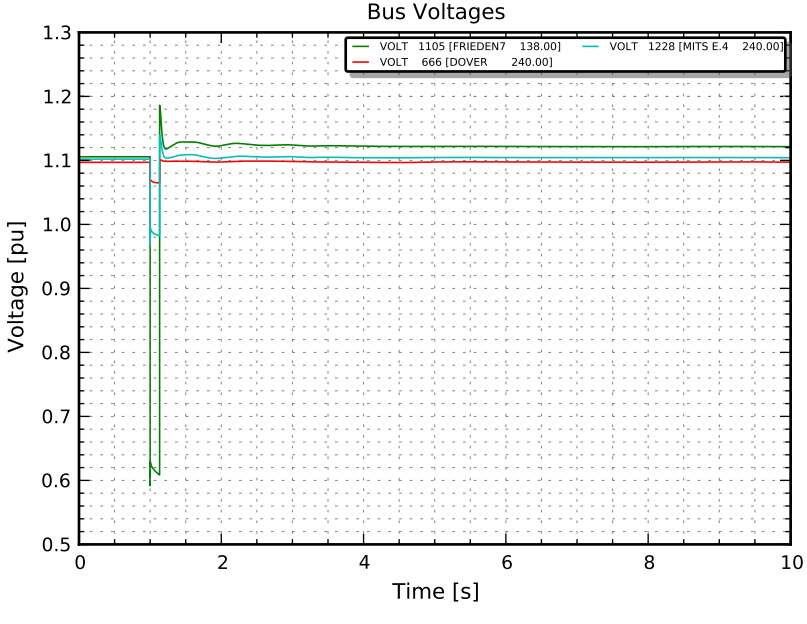
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 024 7L04 WESTPEACE to DAISHOWA_B.

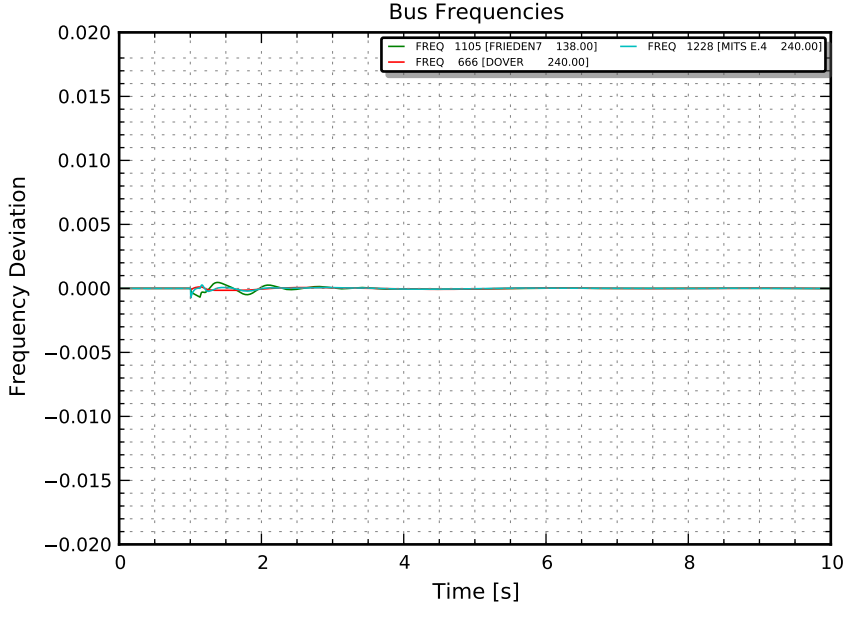
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 024 (B. 1)





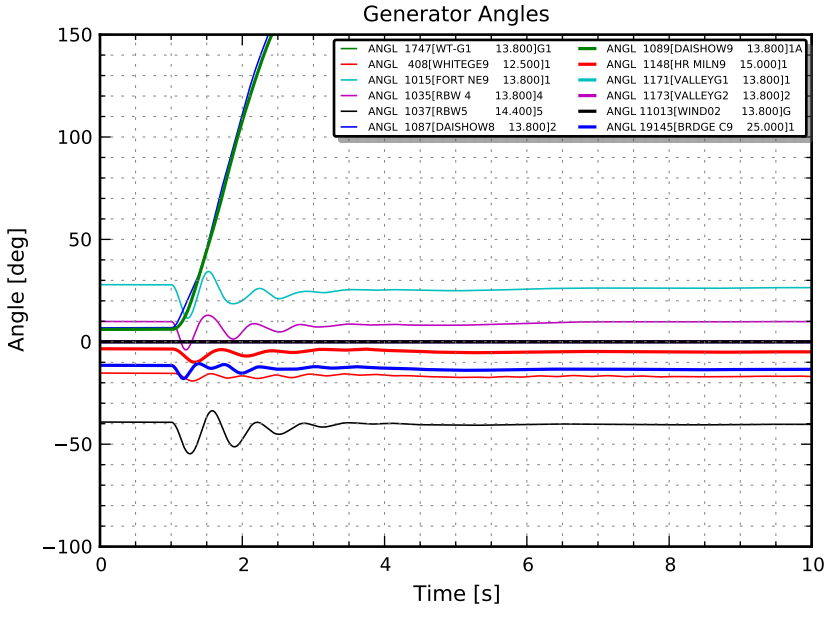


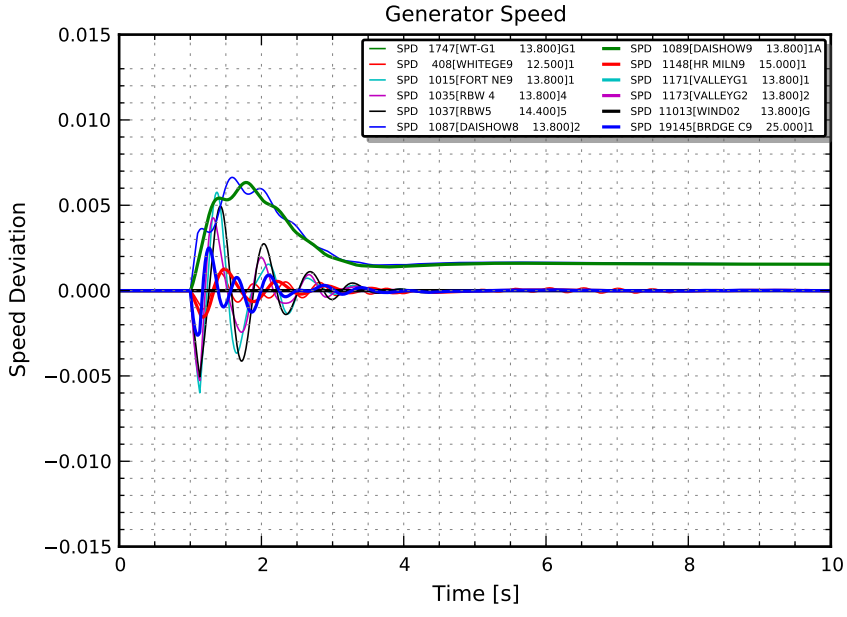


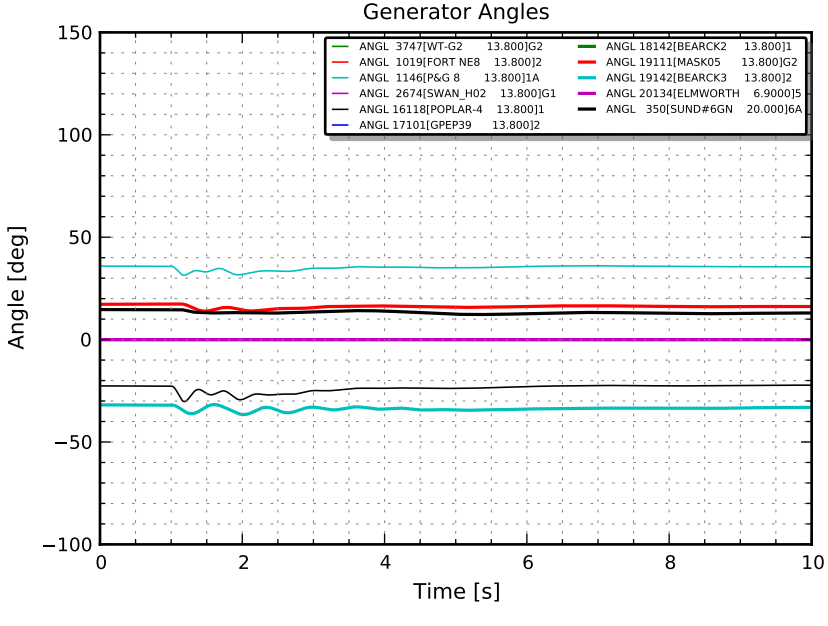
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 024 7L04 WESTPEACE to DAISHOWA_B.

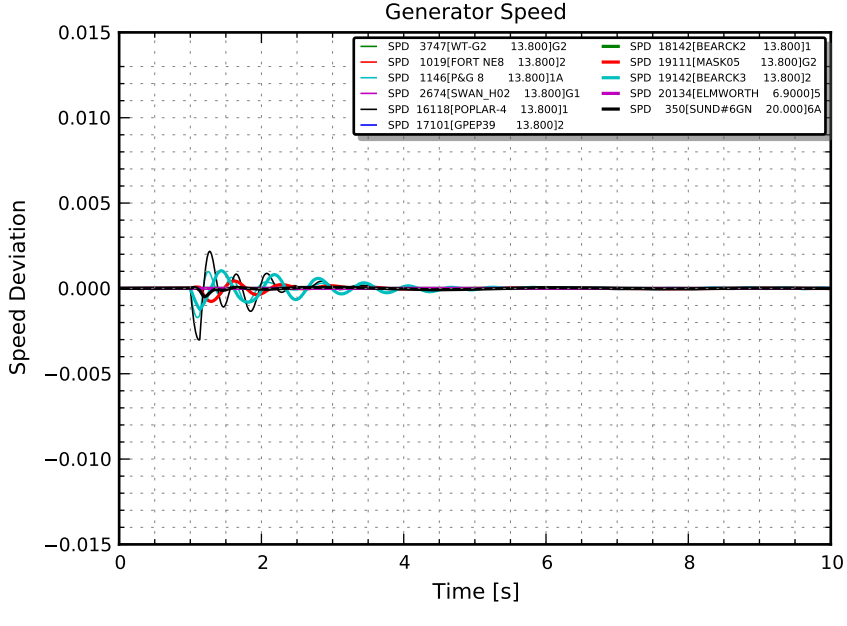
Study Area Generators

Appendix C2B
Figure: 024 (B. 2)





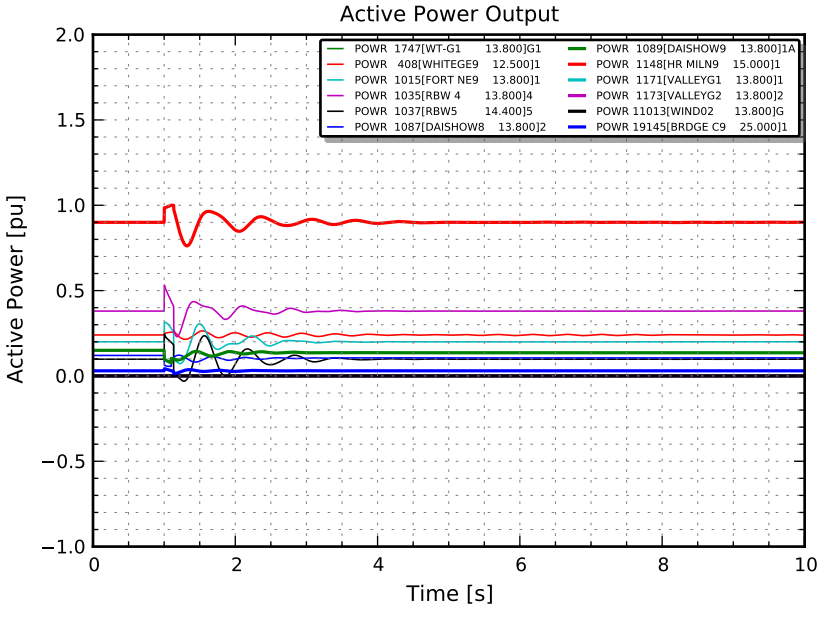


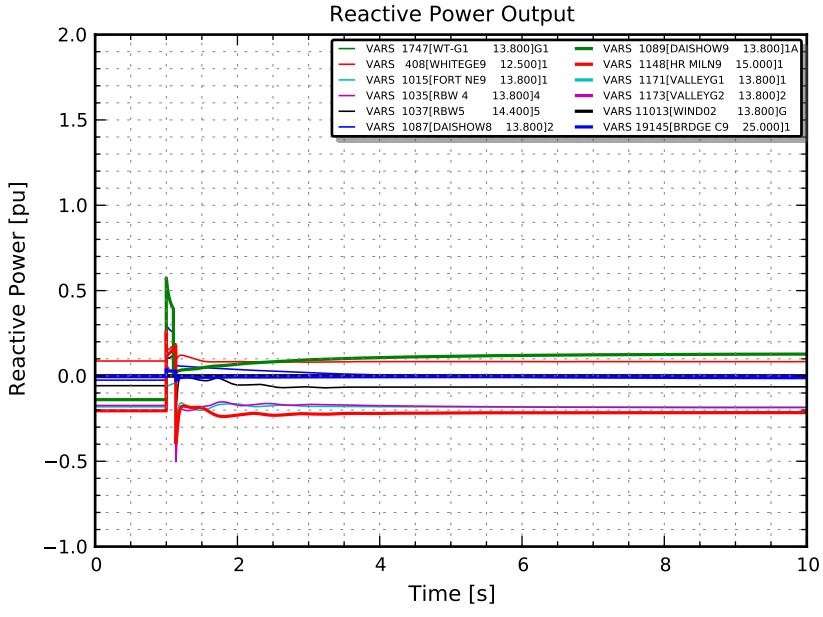


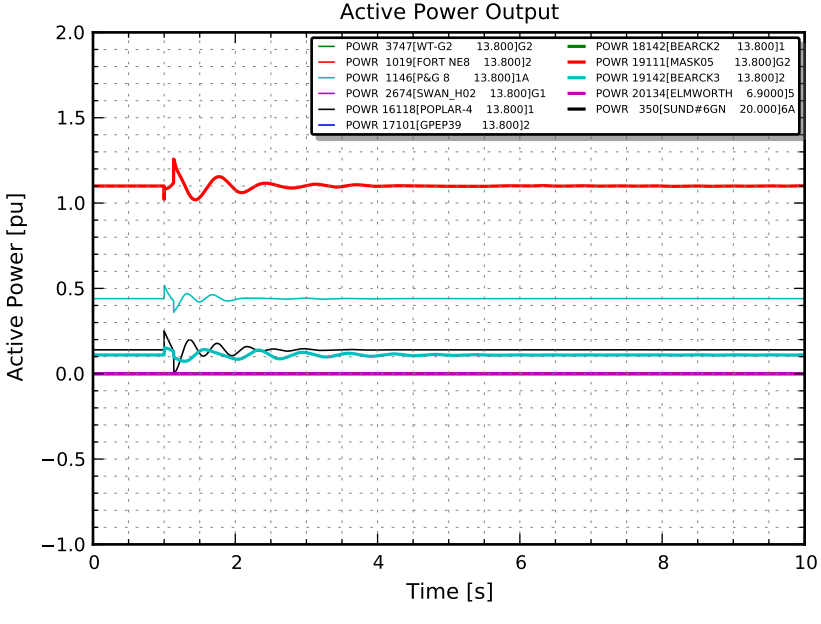
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 024 7L04 WESTPEACE to DAISHOWA_B.

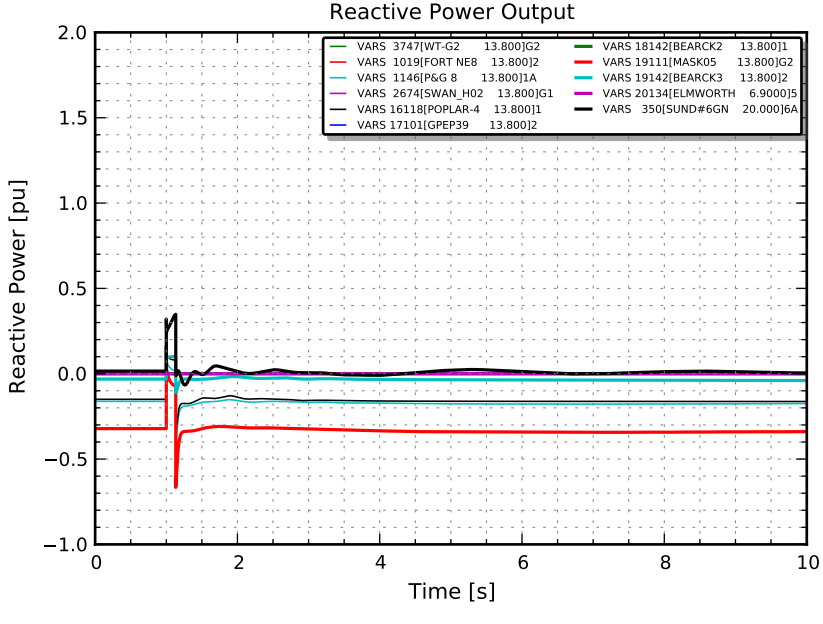
Study Area Generators

Appendix C2B
Figure: 024 (B. 3)





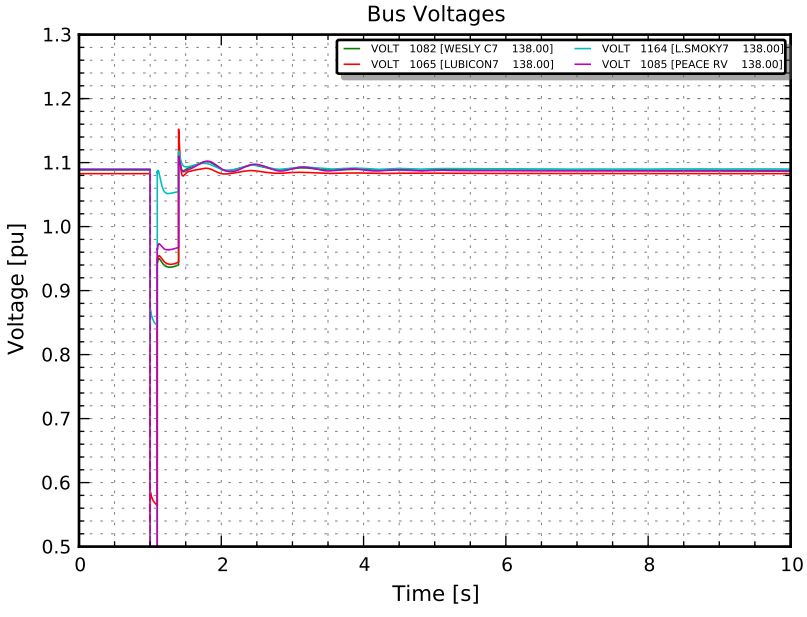


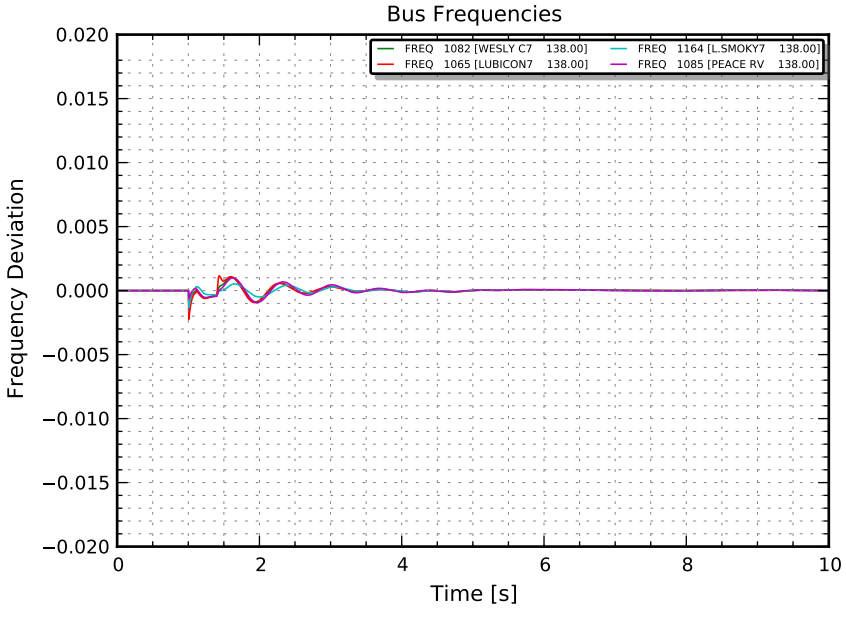


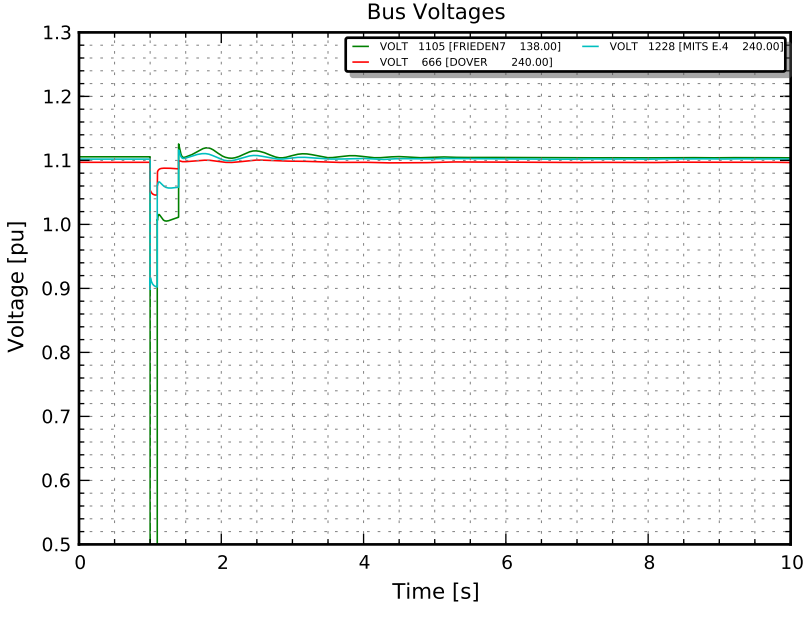
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 025 7L51 WESTPEACE to HOTCHKISS_A.

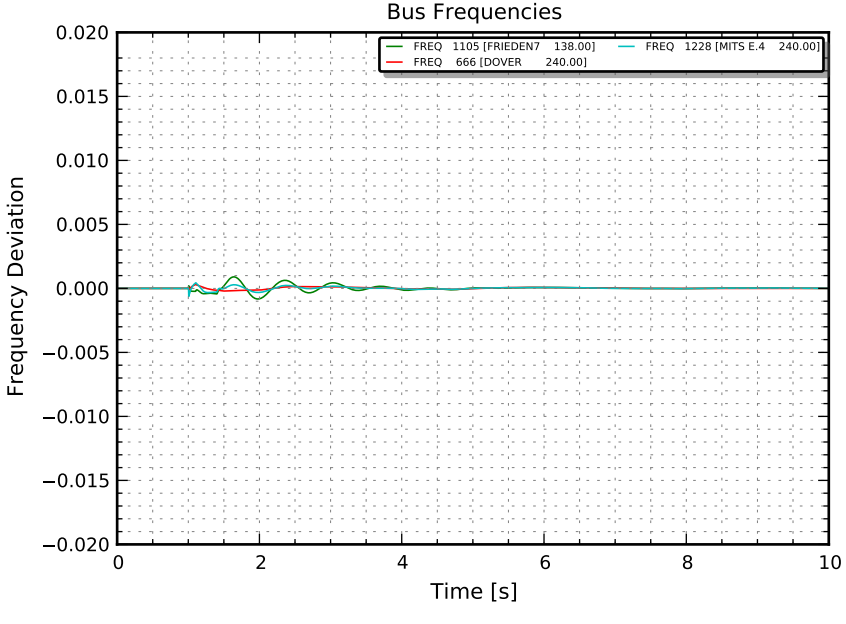
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 025 (A. 1)





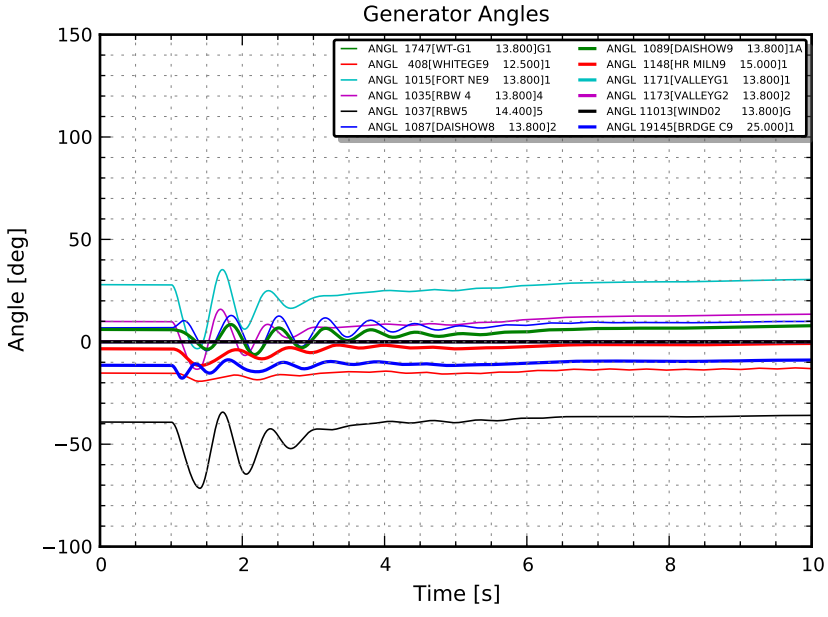


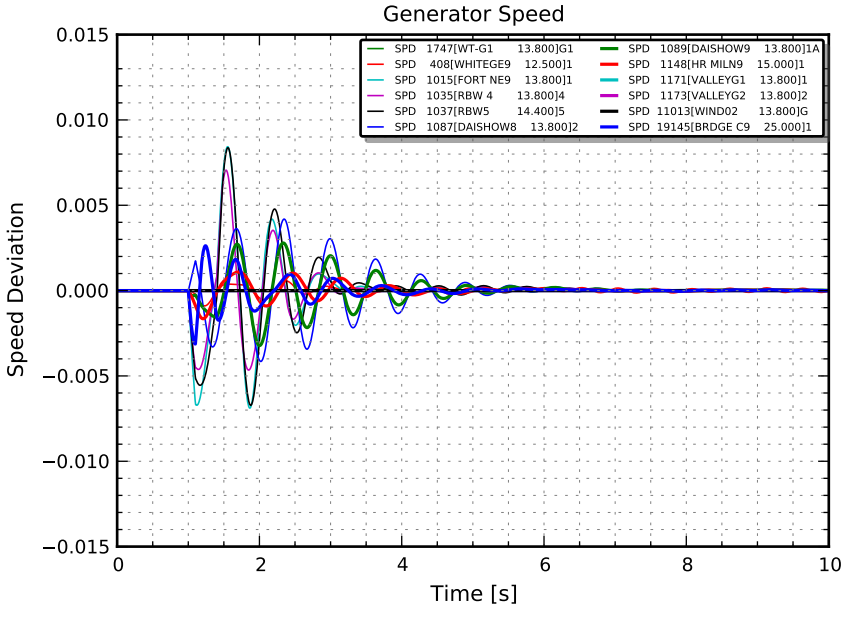


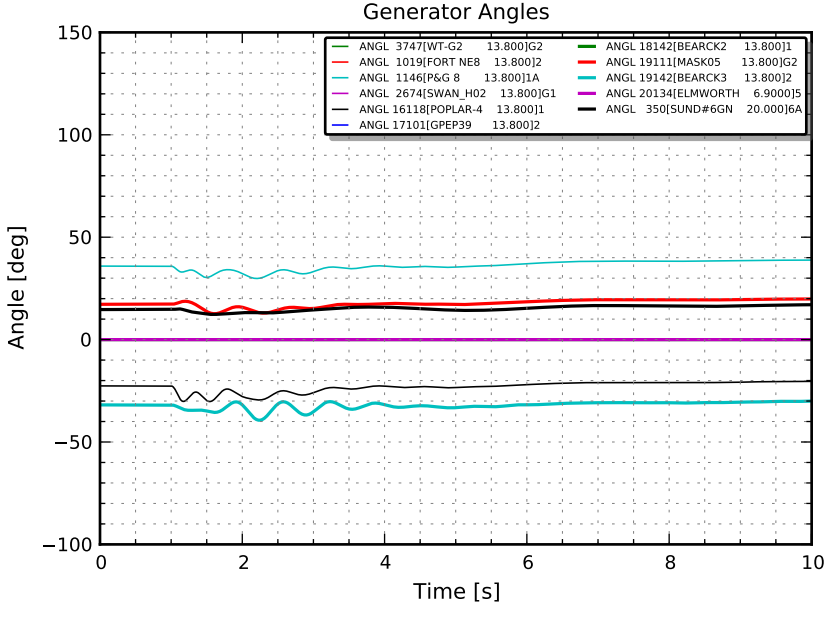
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 025 7L51 WESTPEACE to HOTCHKISS_A.

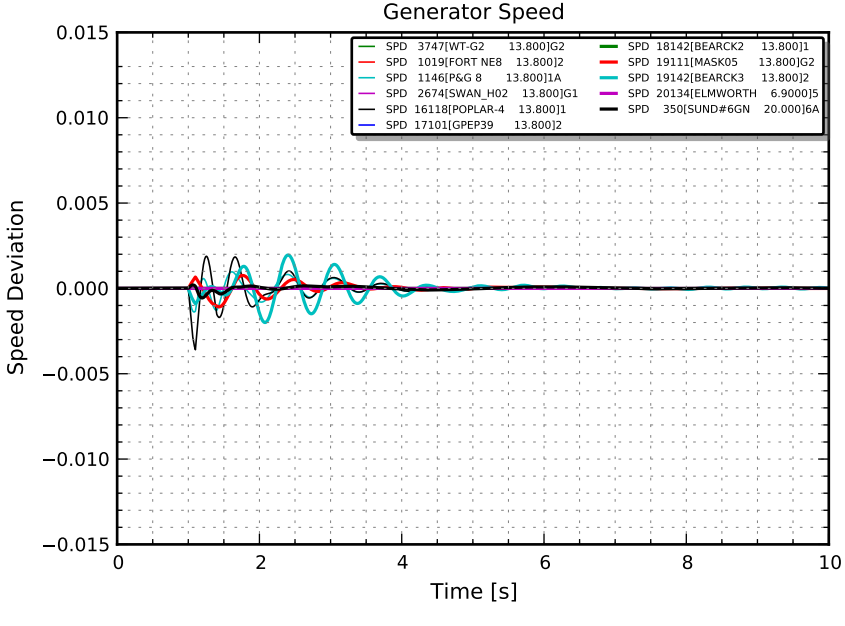
Study Area Generators

Appendix C2B
Figure: 025 (A. 2)





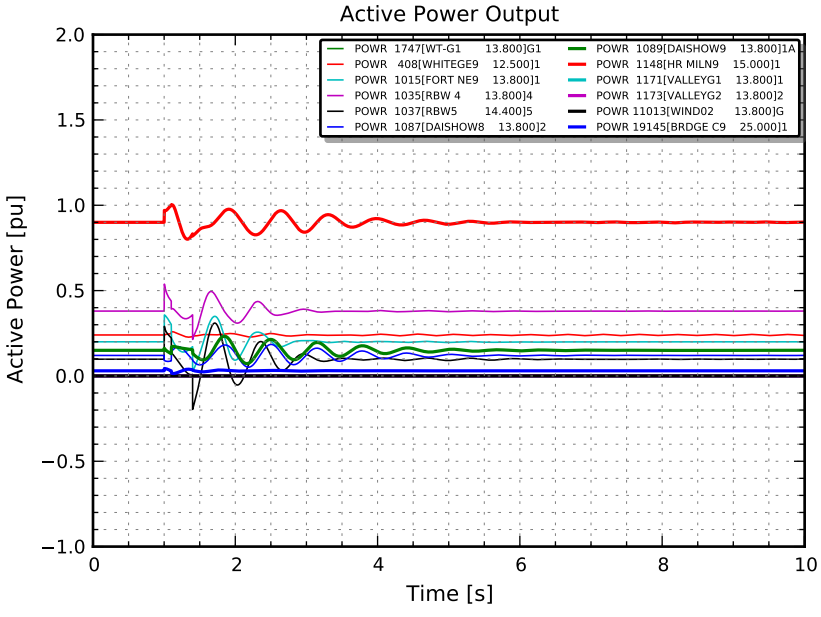


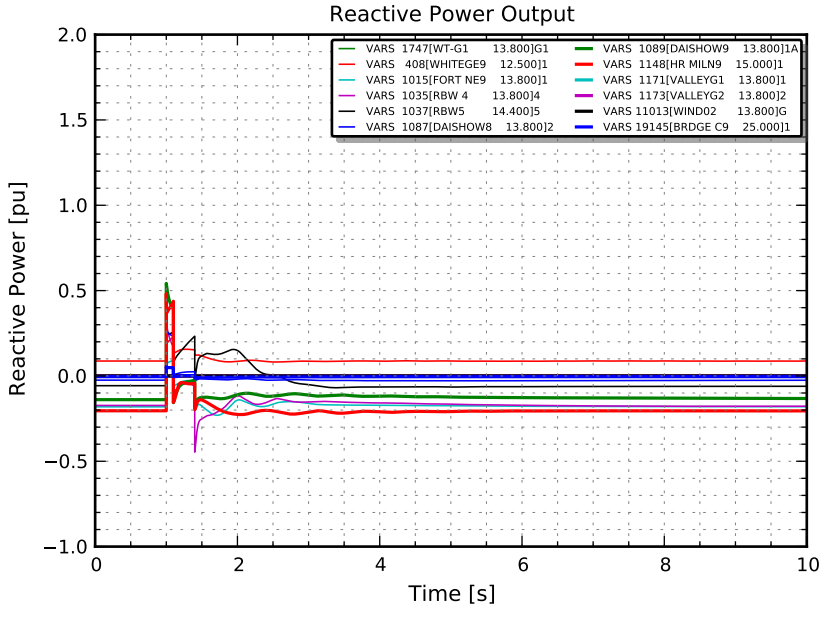


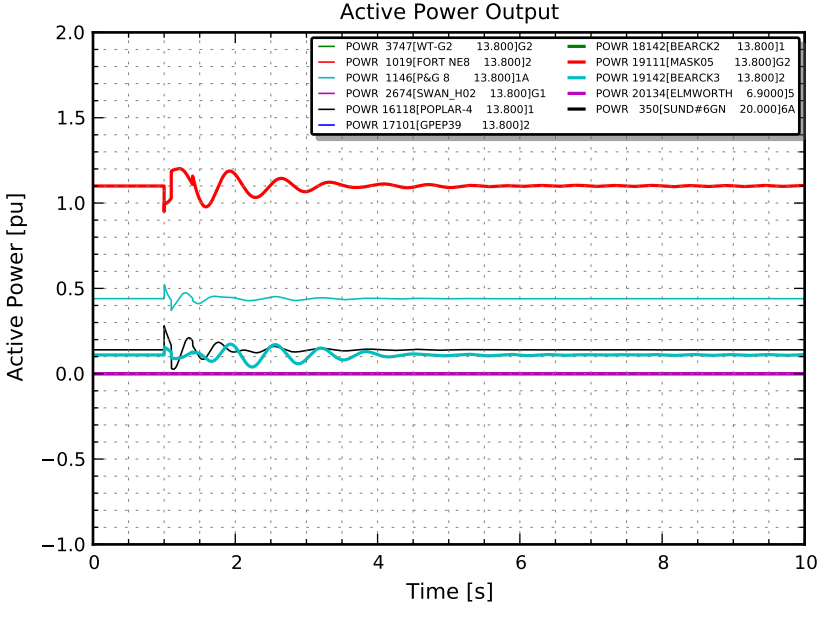
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 025 7L51 WESTPEACE to HOTCHKISS_A.

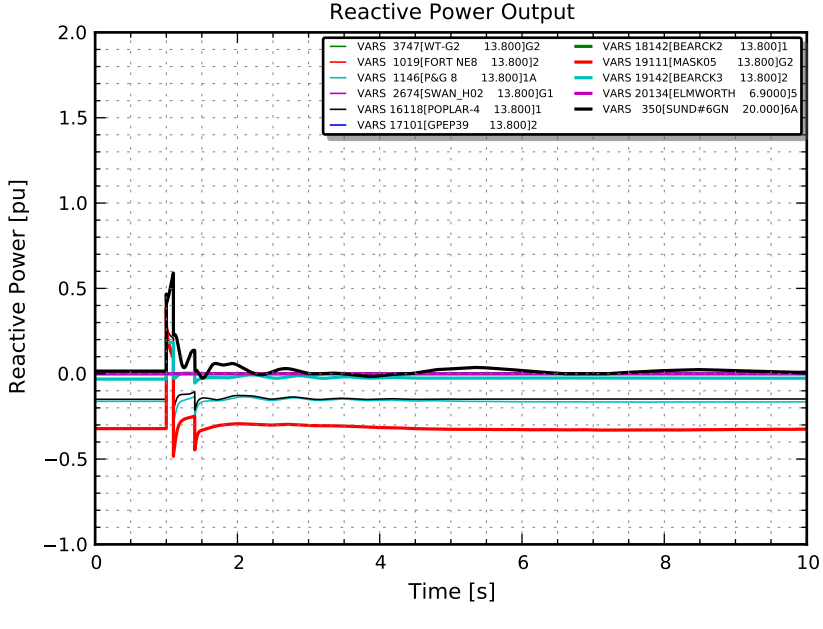
Study Area Generators

Appendix C2B
Figure: 025 (A. 3)





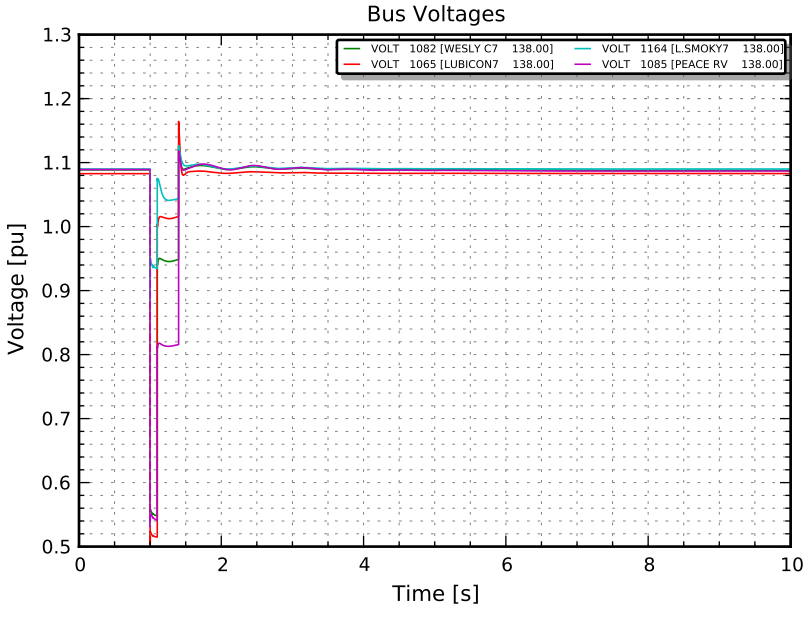


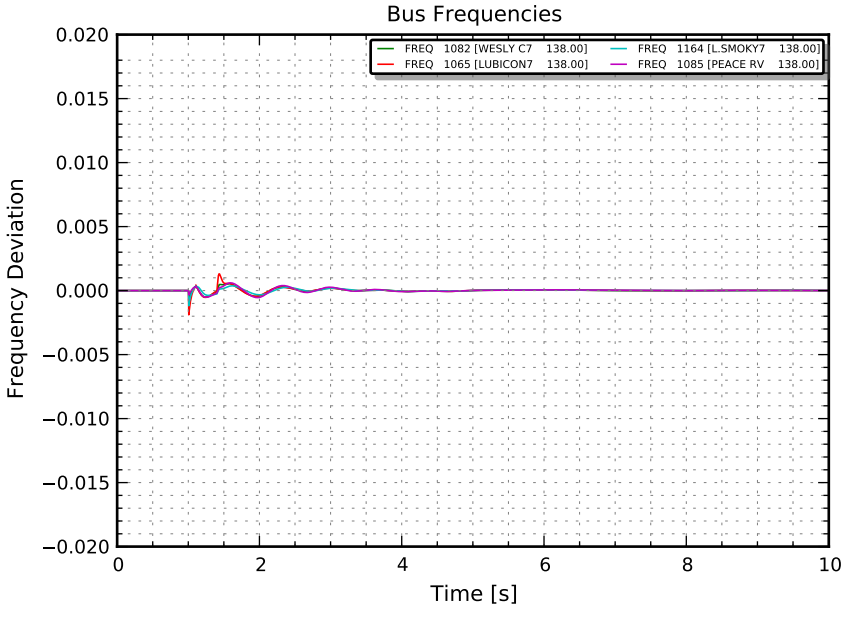


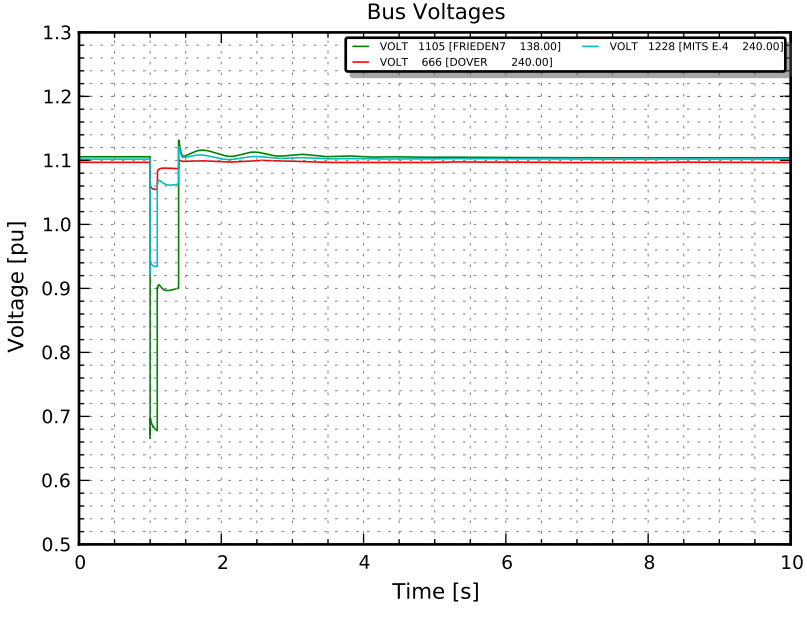
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 025 7L51 WESTPEACE to HOTCHKISS_B.

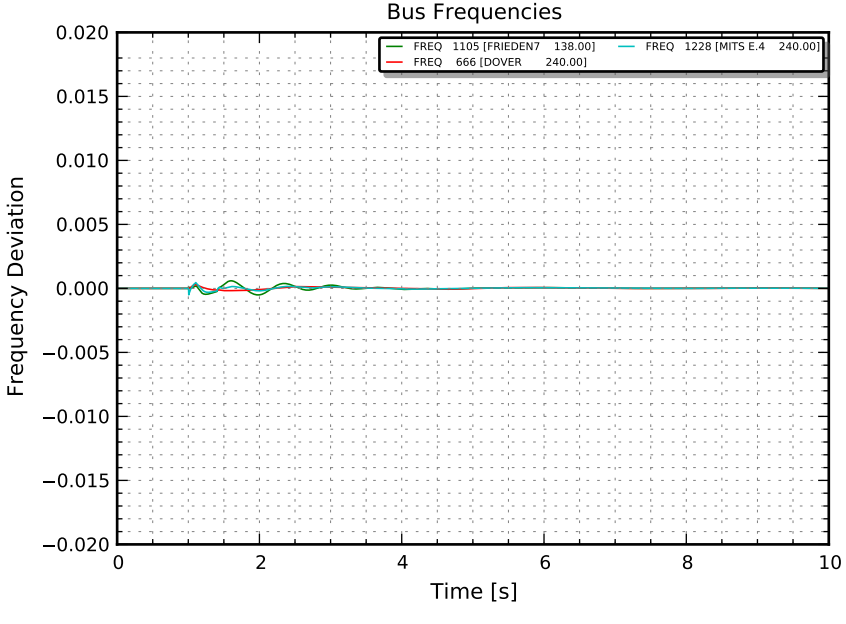
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 025 (B. 1)





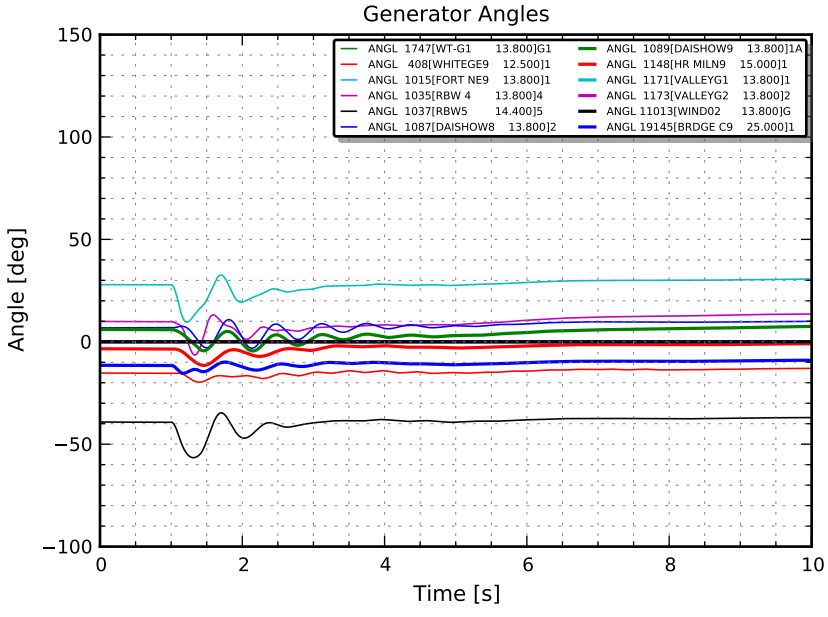


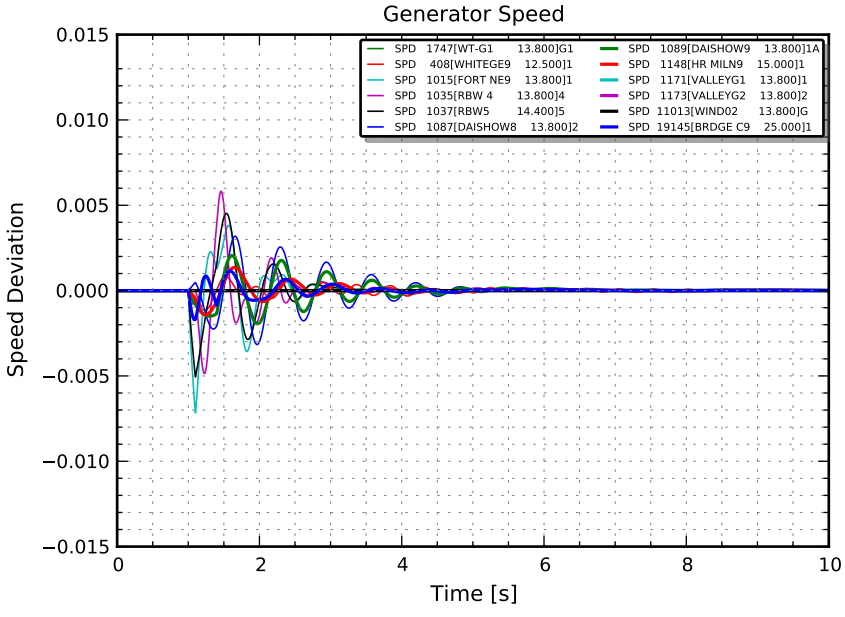


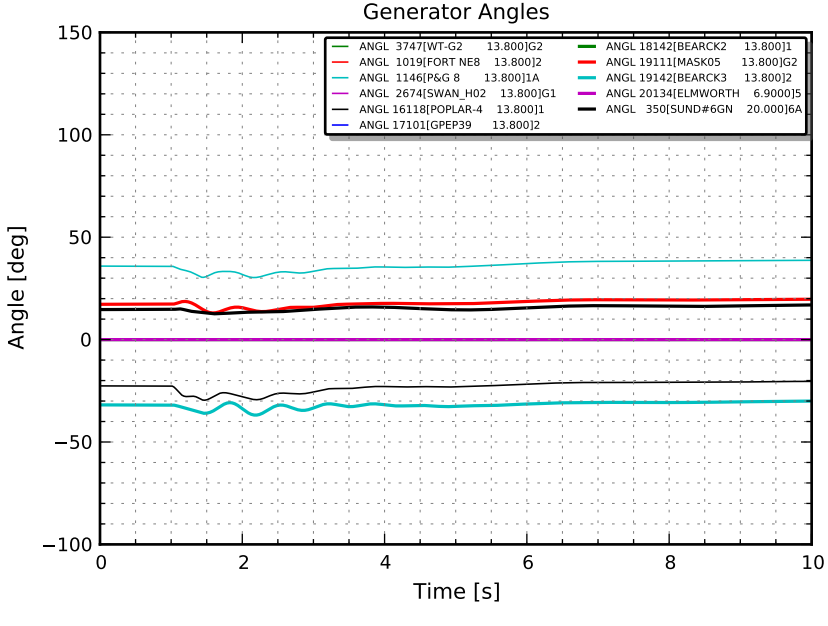
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 025 7L51 WESTPEACE to HOTCHKISS_B.

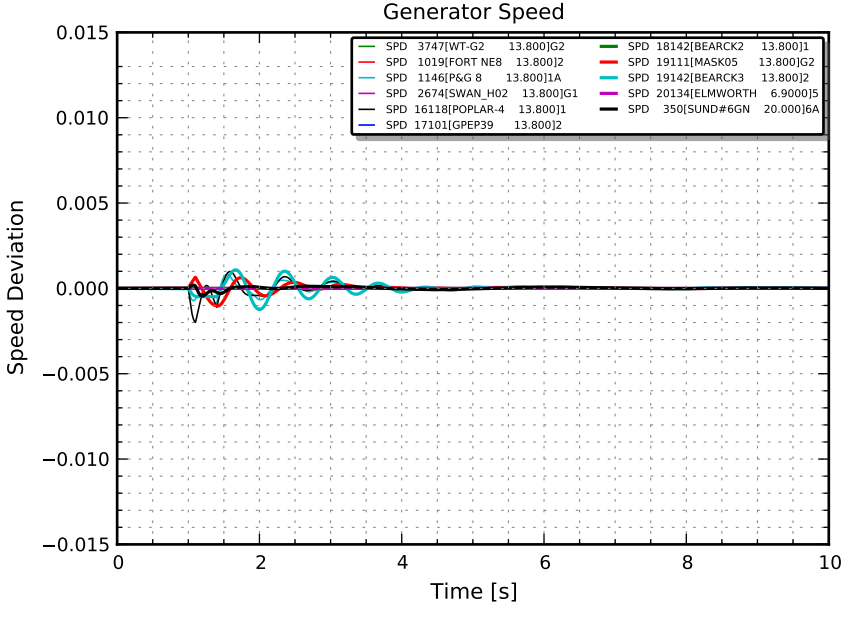
Study Area Generators

Appendix C2B
Figure: 025 (B. 2)





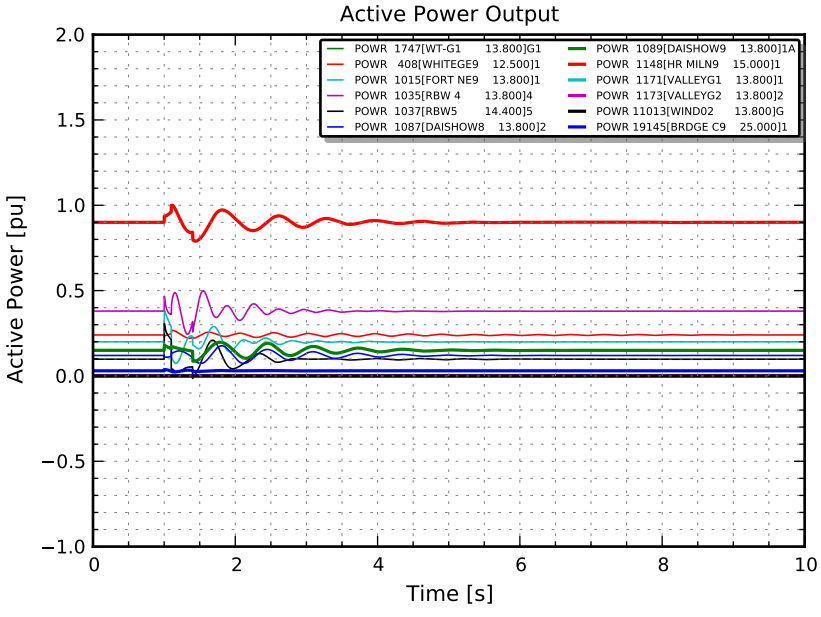


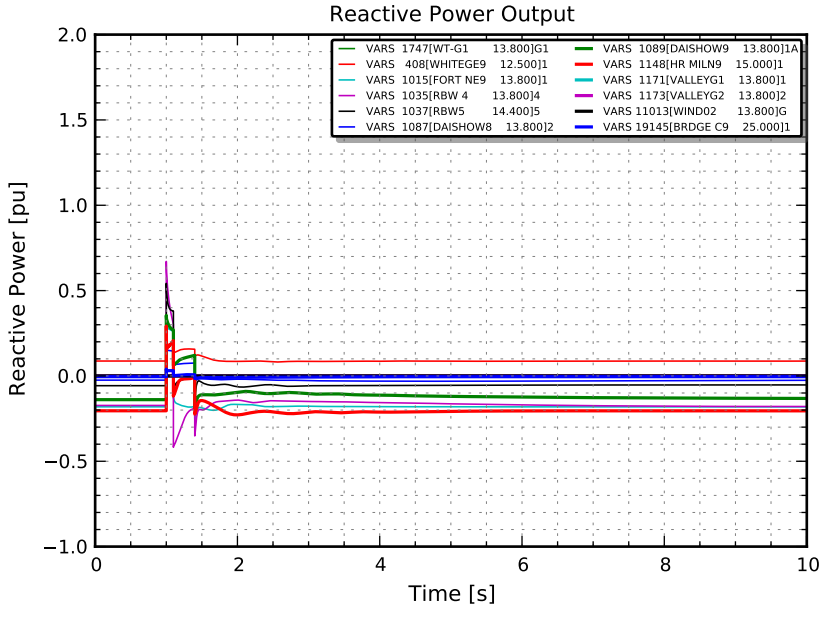


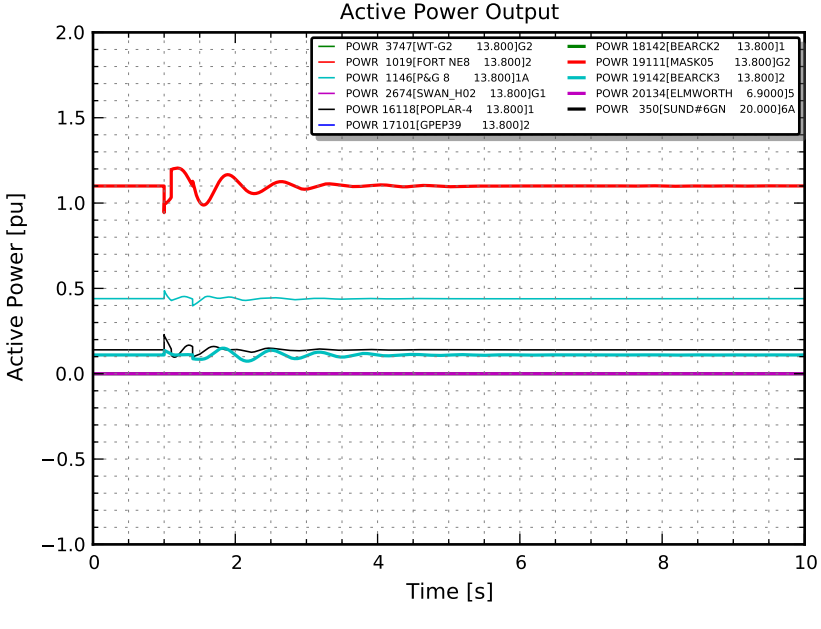
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 025 7L51 WESTPEACE to HOTCHKISS_B.

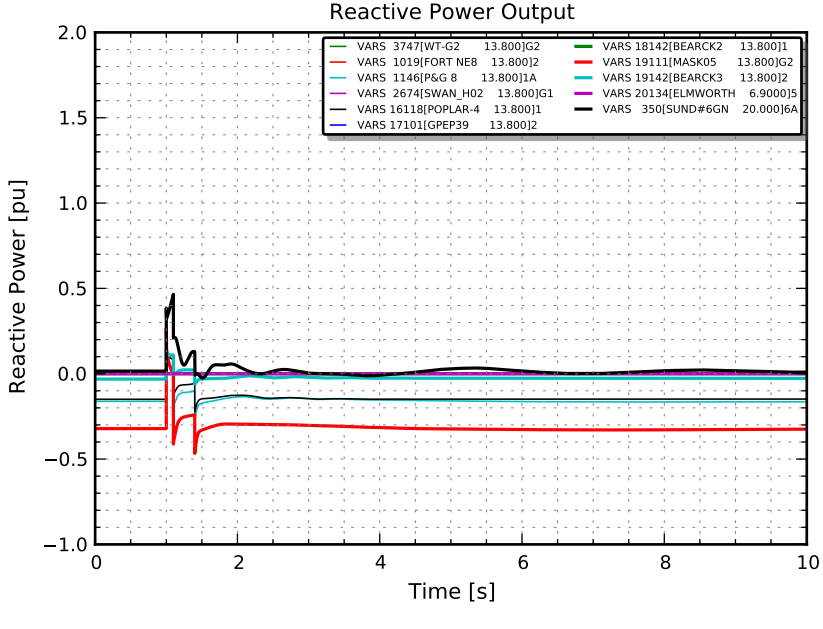
Study Area Generators

Appendix C2B
Figure: 025 (B. 3)





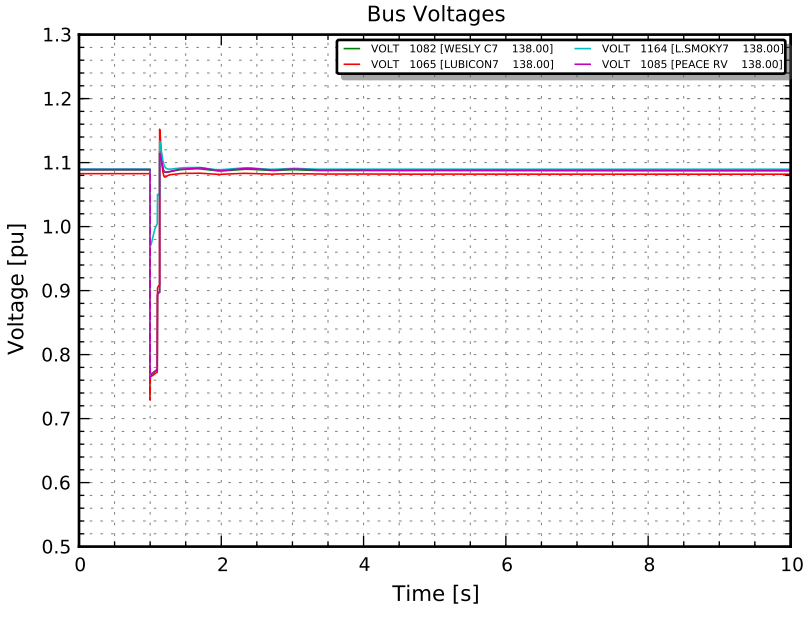


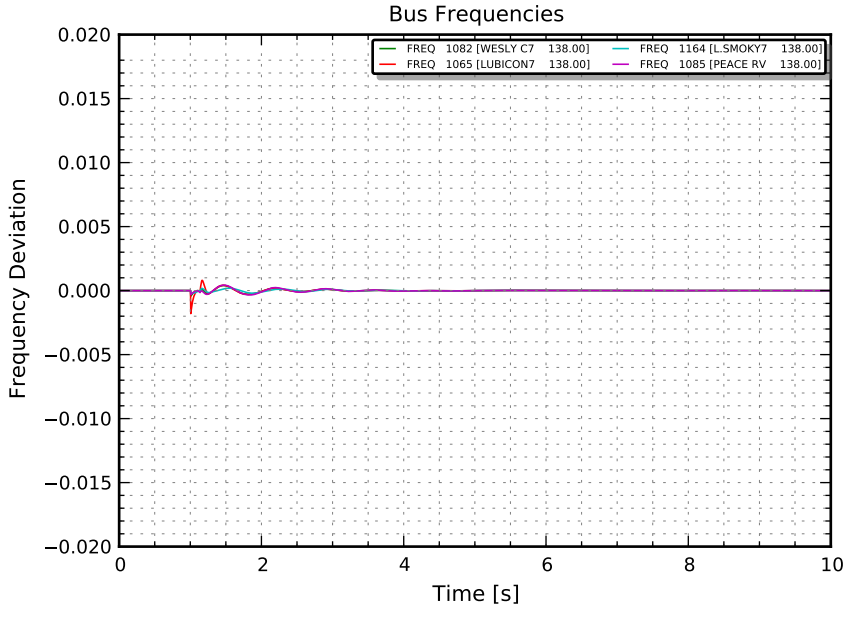


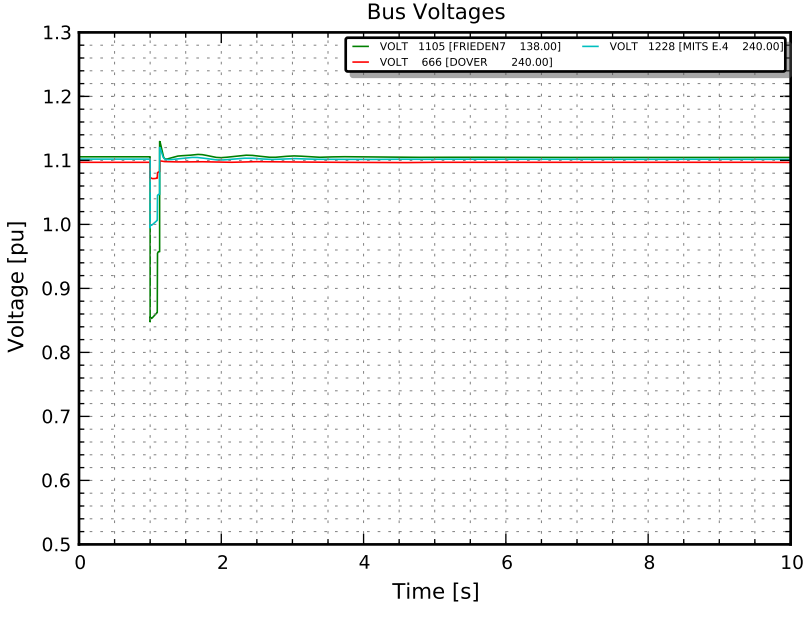
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 026 7L58 KEGRIVER to Meikle_A.

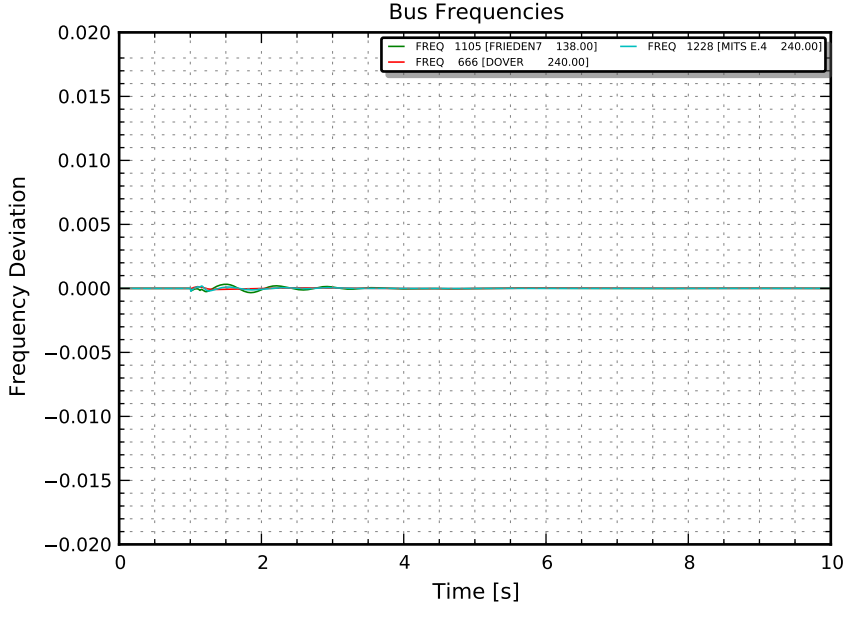
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 026 (A. 1)





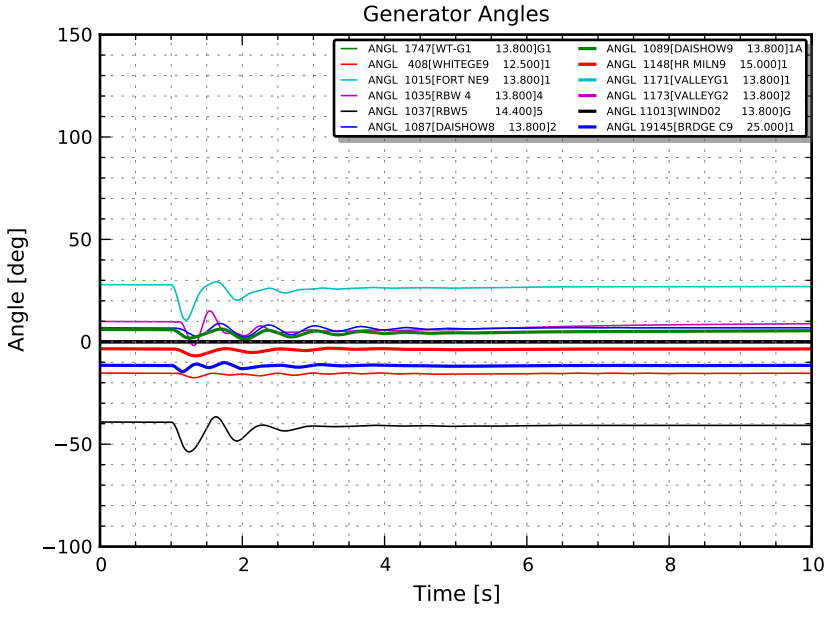


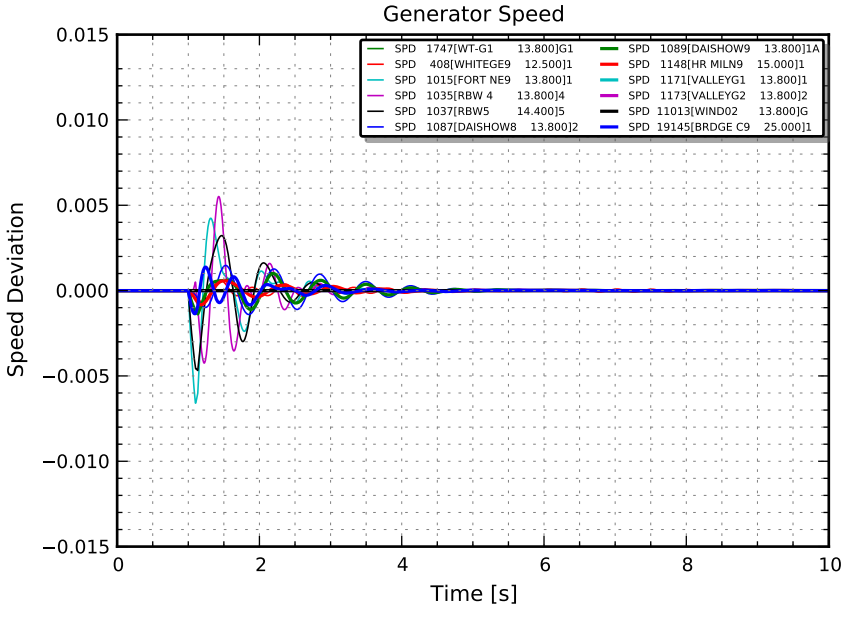


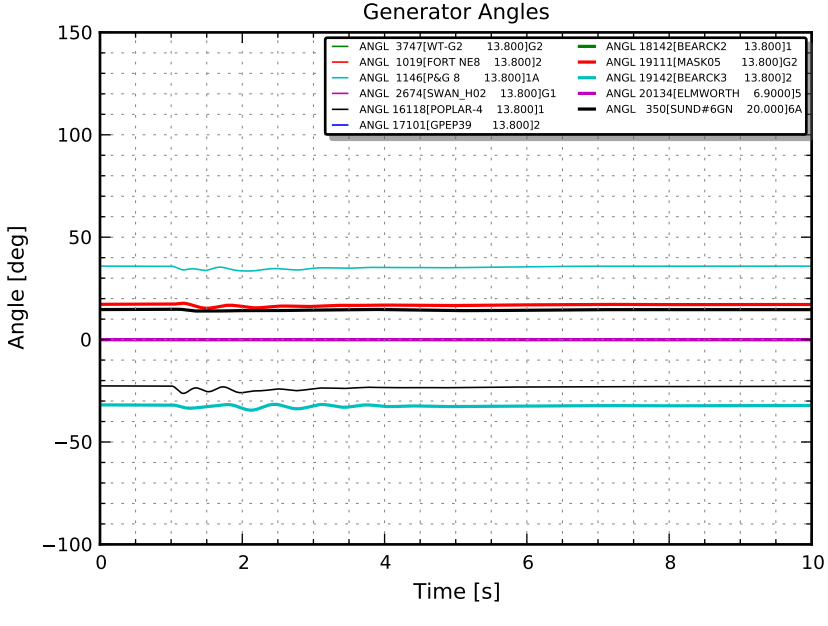
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 026 7L58 KEGRIVER to Meikle_A.

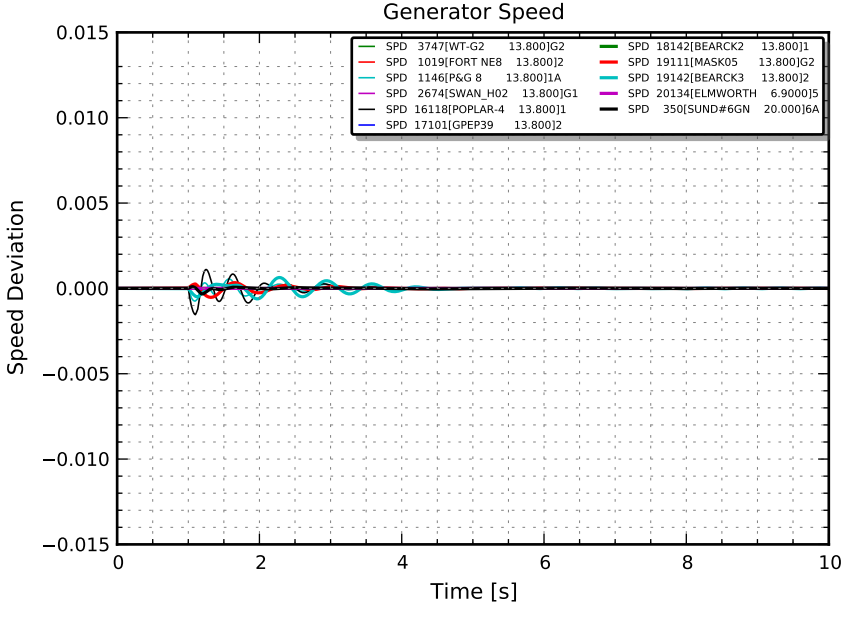
Study Area Generators

Appendix C2B
Figure: 026 (A. 2)





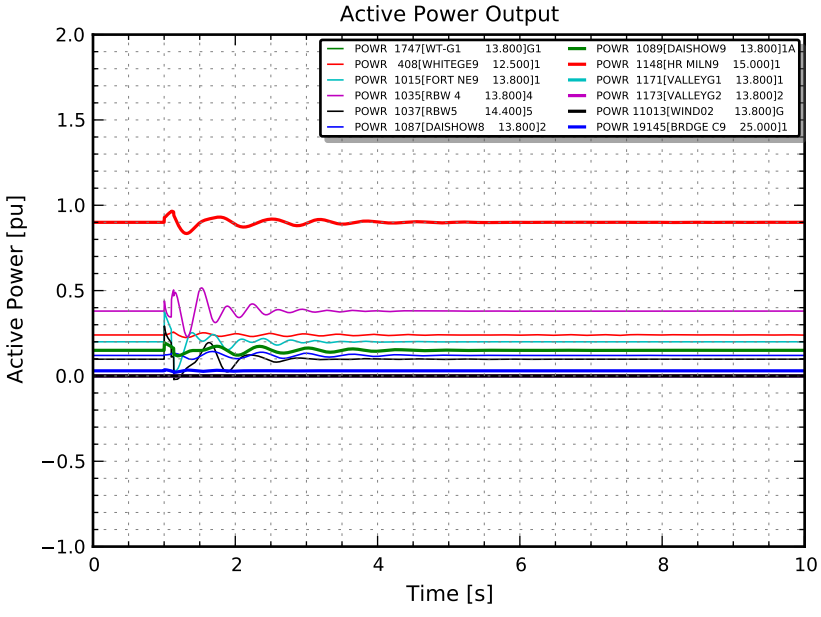


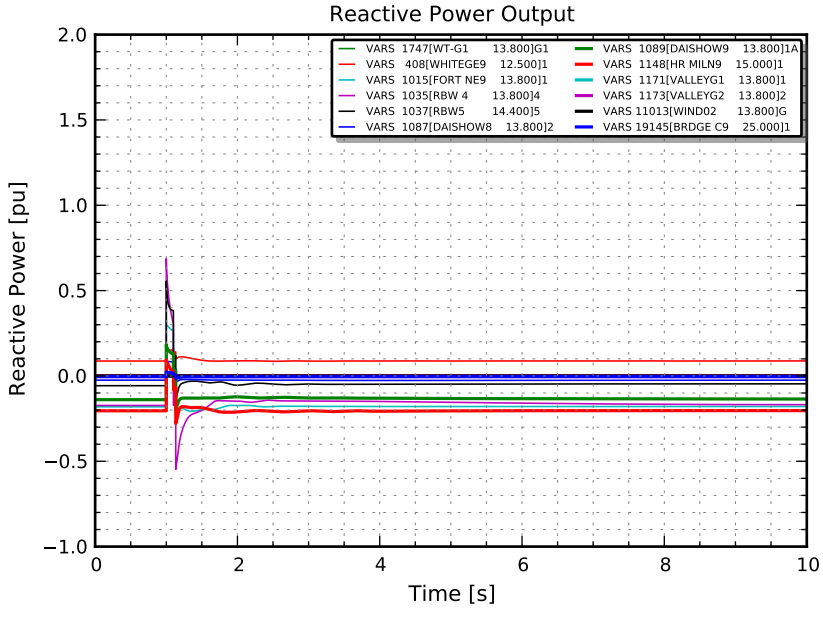


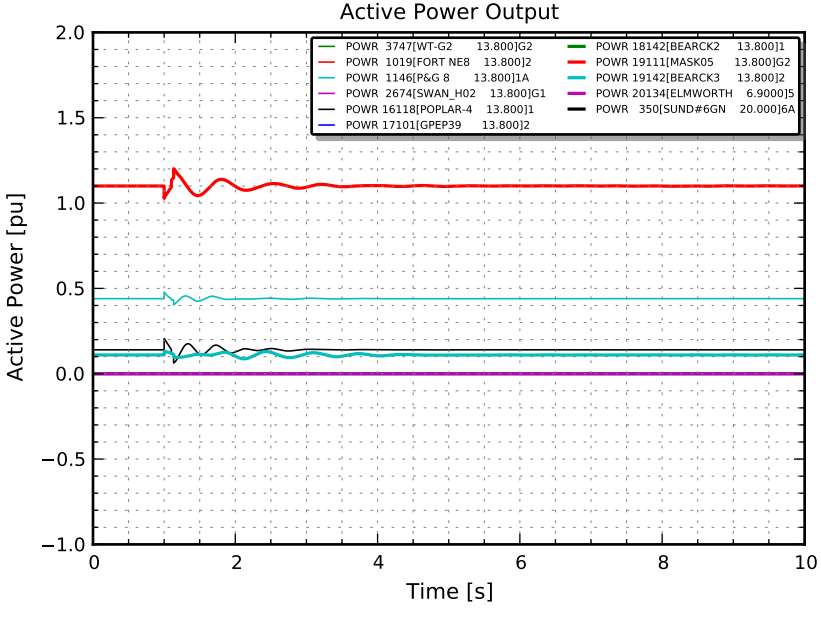
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 026 7L58 KEGRIVER to Meikle_A.

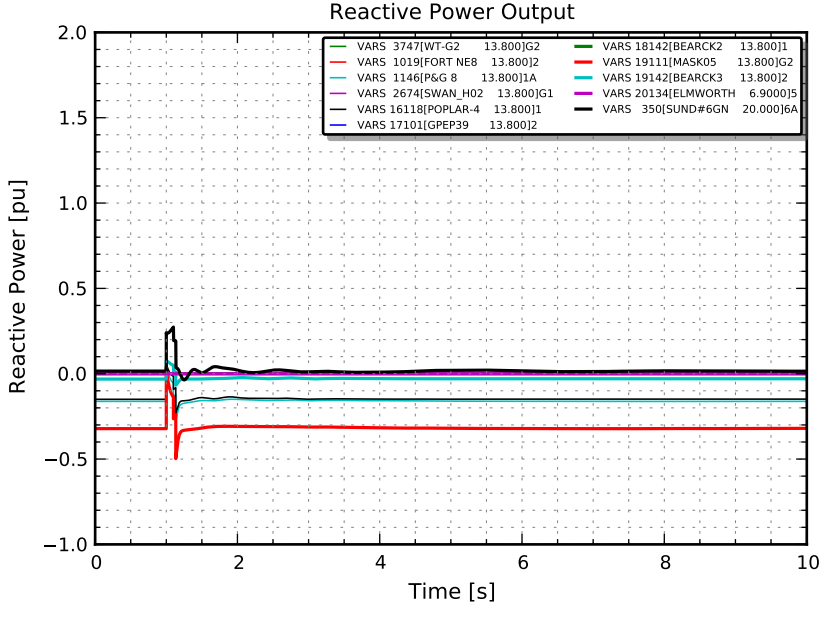
Study Area Generators

Appendix C2B
Figure: 026 (A. 3)





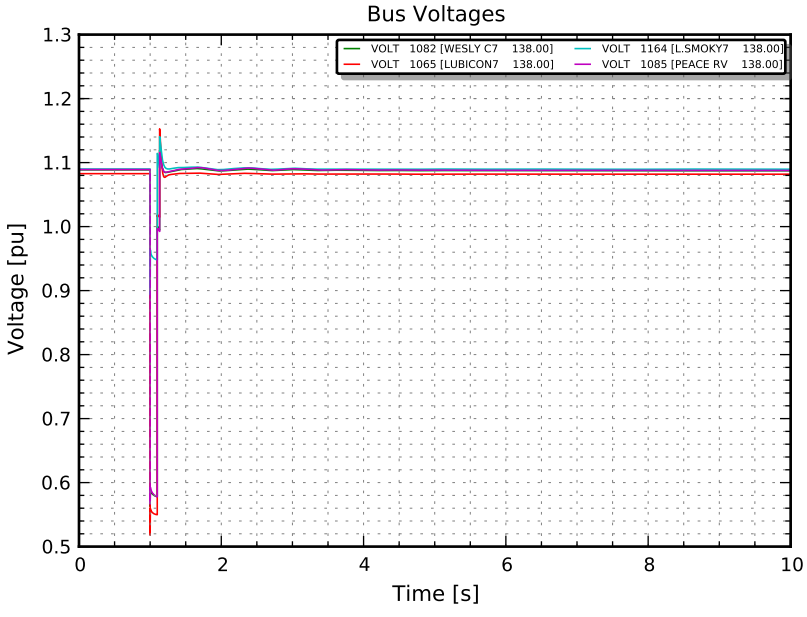


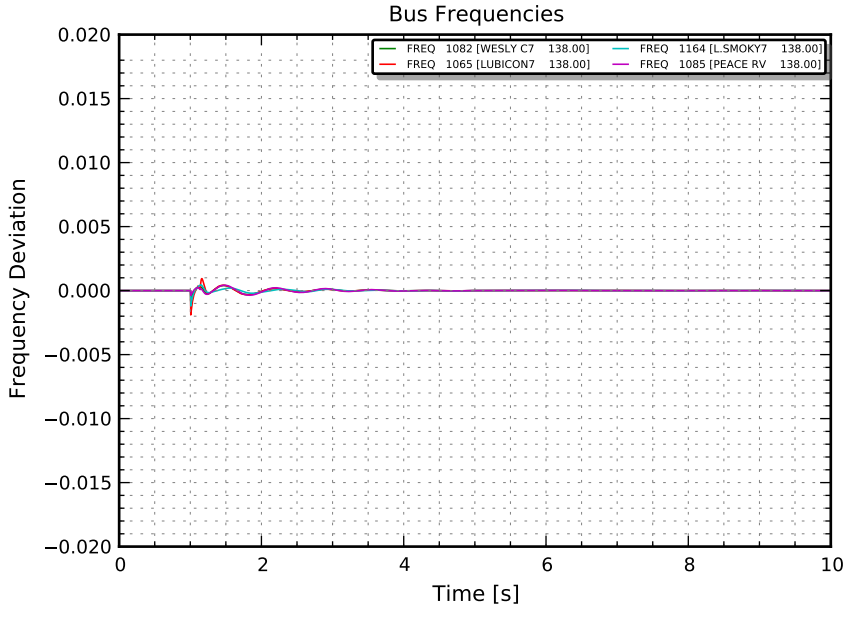


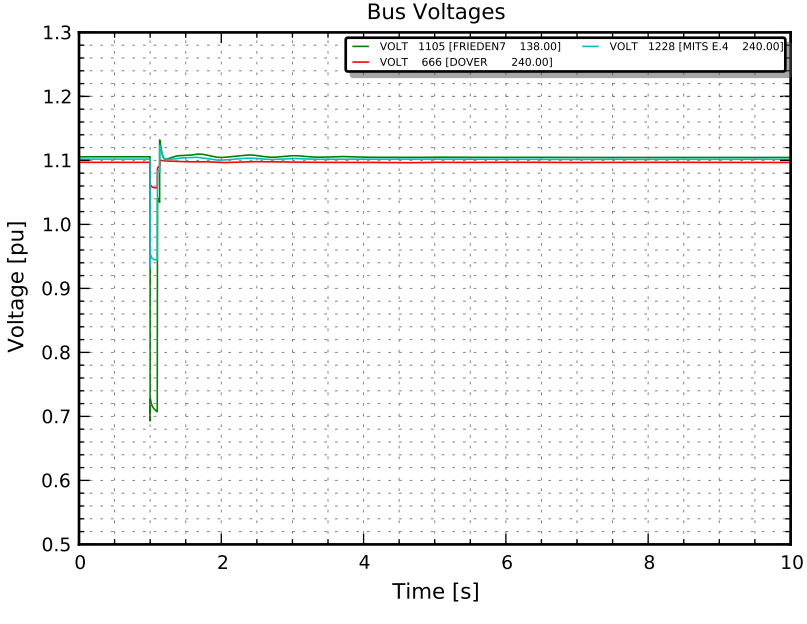
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 026 7L58 KEGRIVER to Meikle_B.

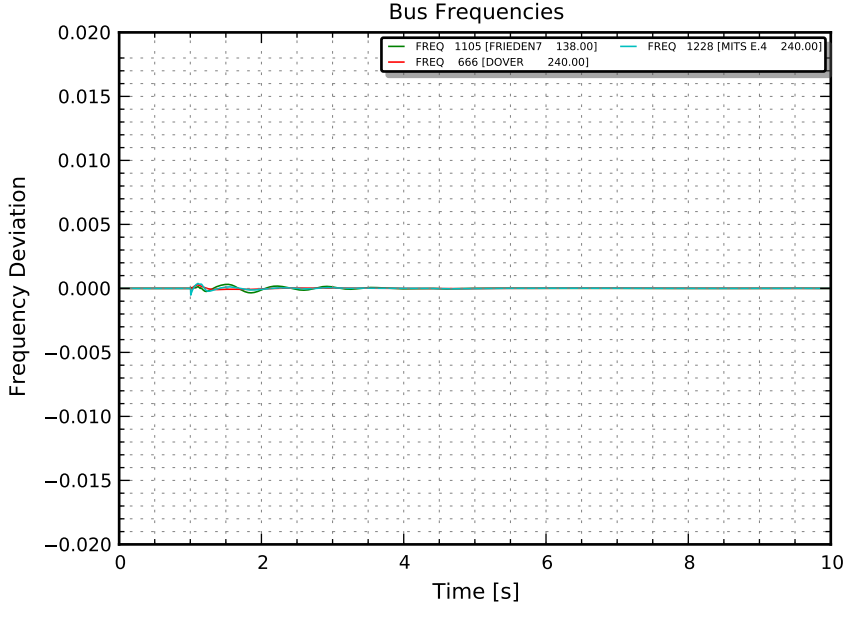
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 026 (B. 1)





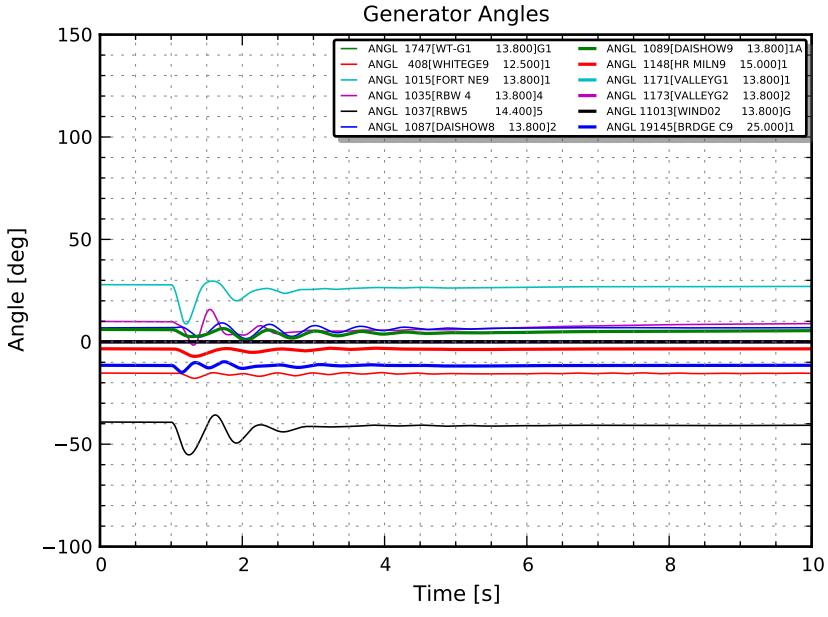


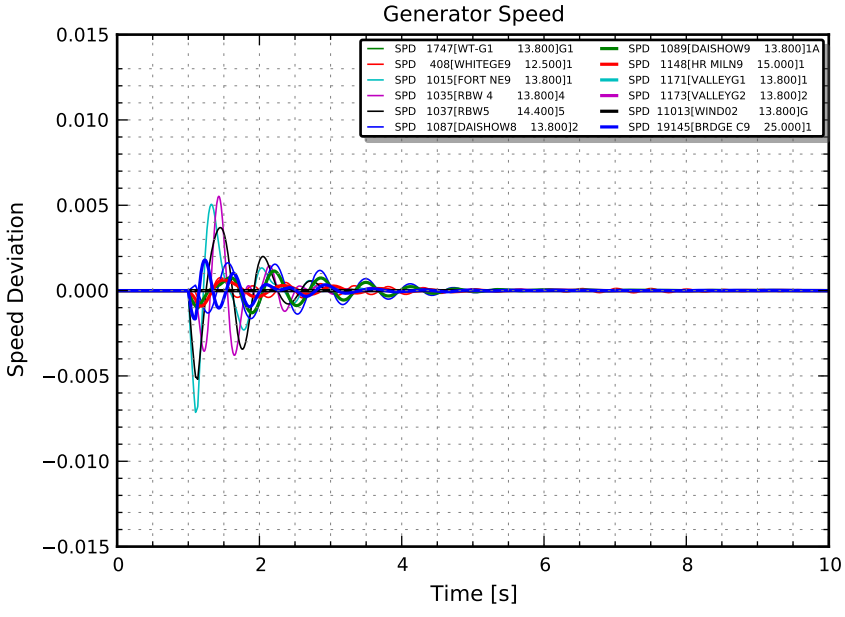


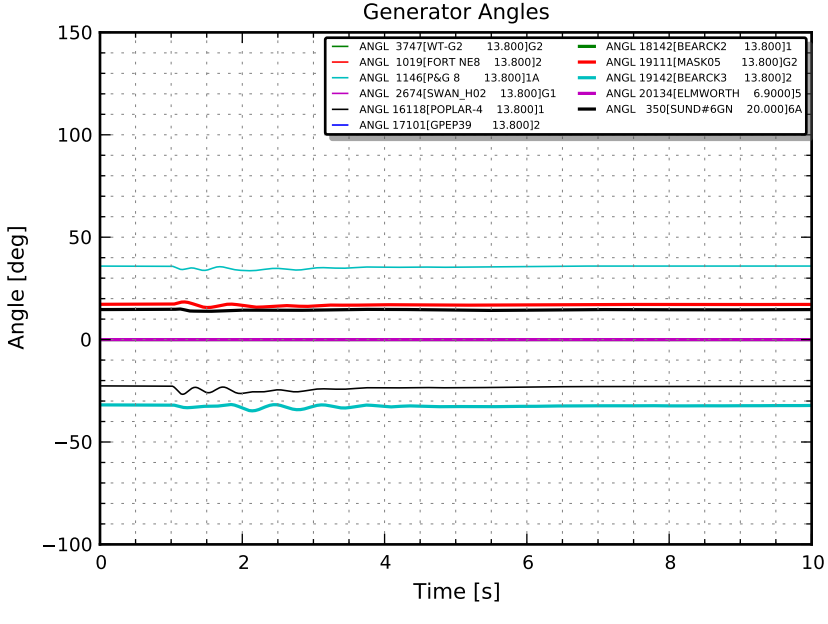
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 026 7L58 KEGRIVER to Meikle_B.

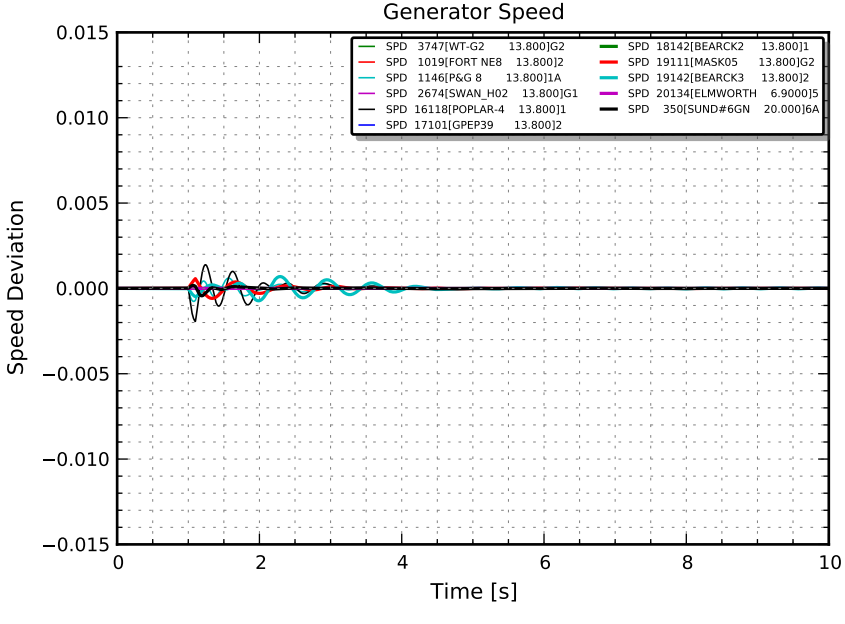
Study Area Generators

Appendix C2B
Figure: 026 (B. 2)





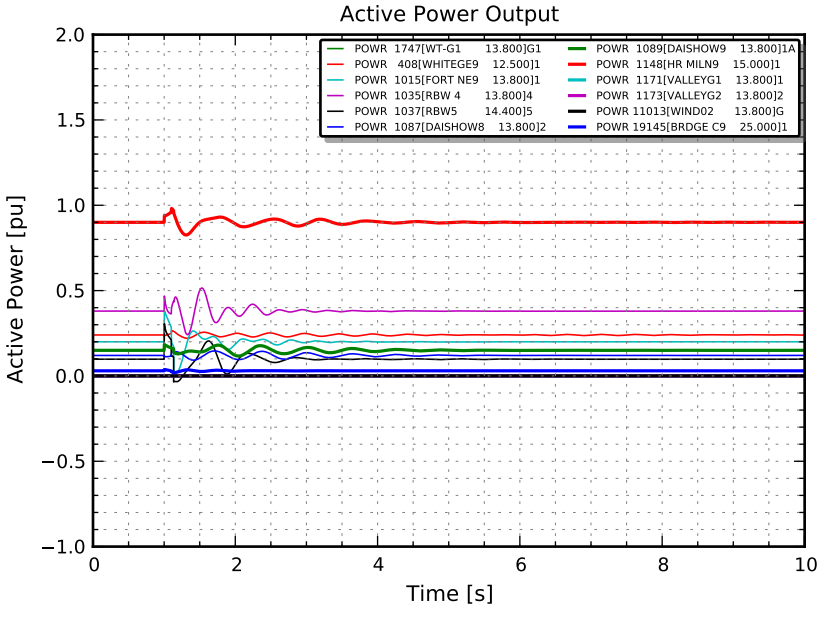


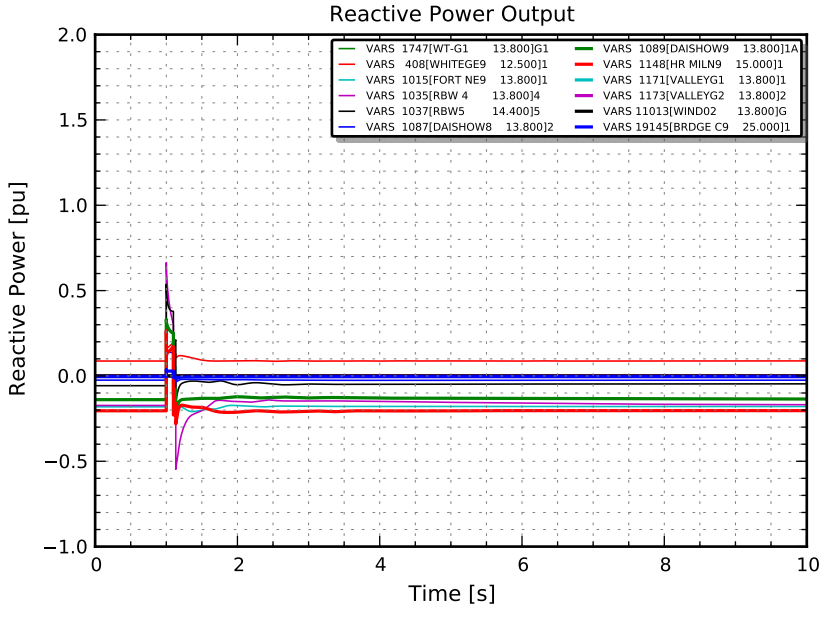


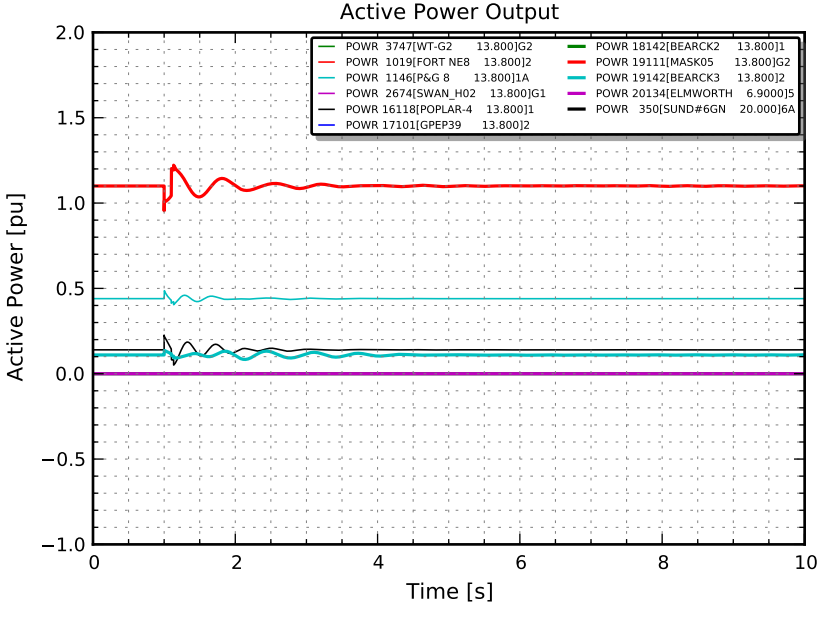
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 026 7L58 KEGRIVER to Meikle_B.

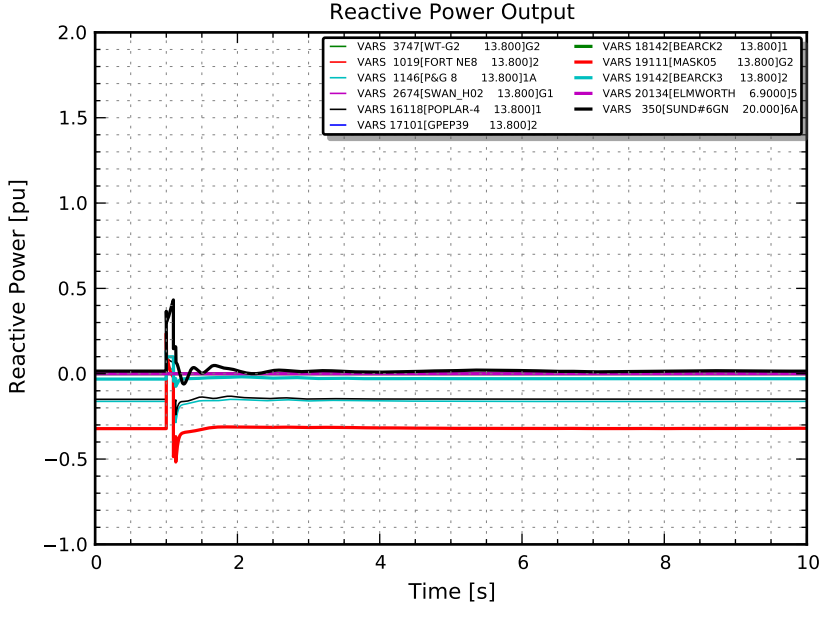
Study Area Generators

Appendix C2B
Figure: 026 (B. 3)





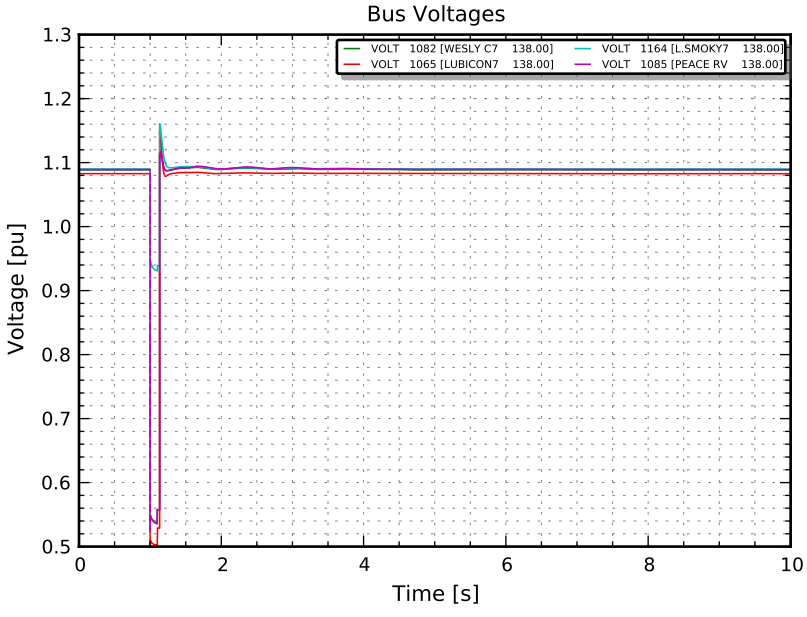


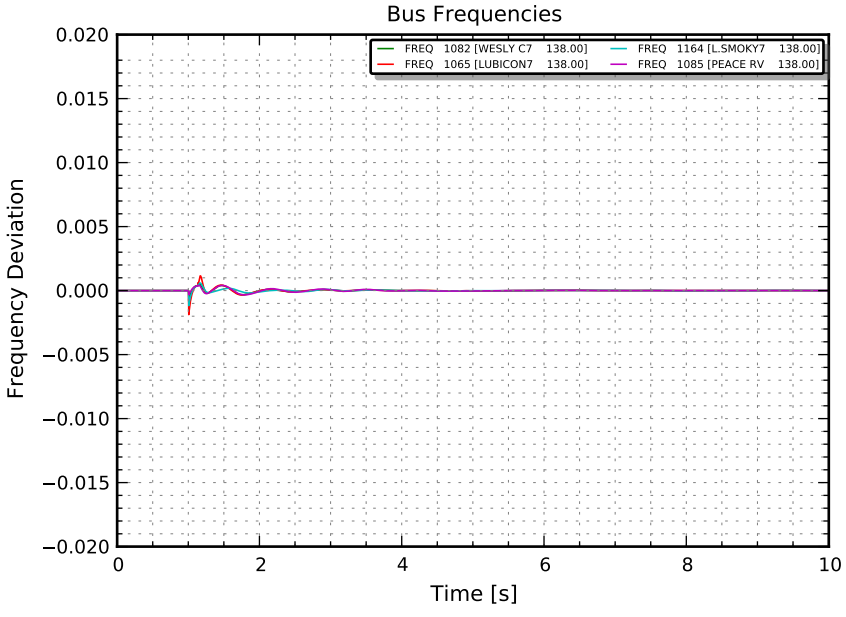


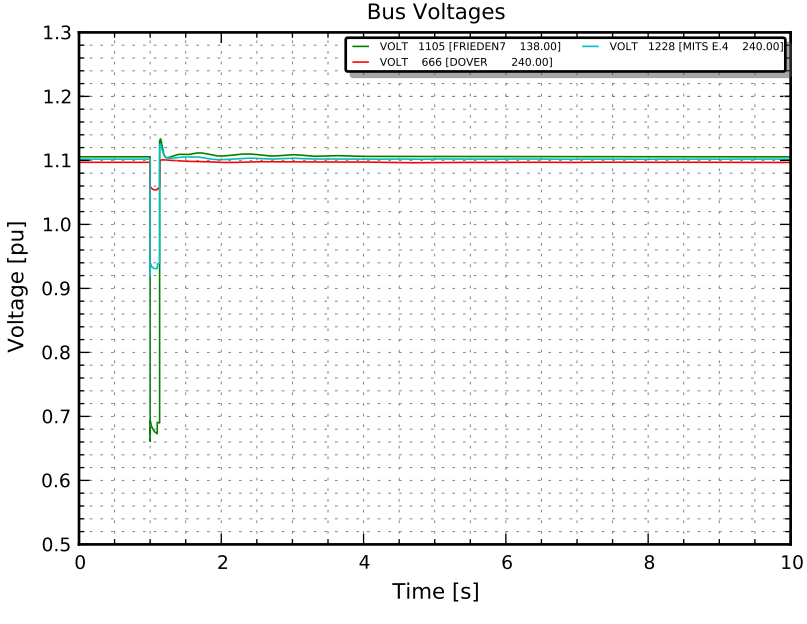
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 027 7L120 HOTCHKISS to Meikle_A.

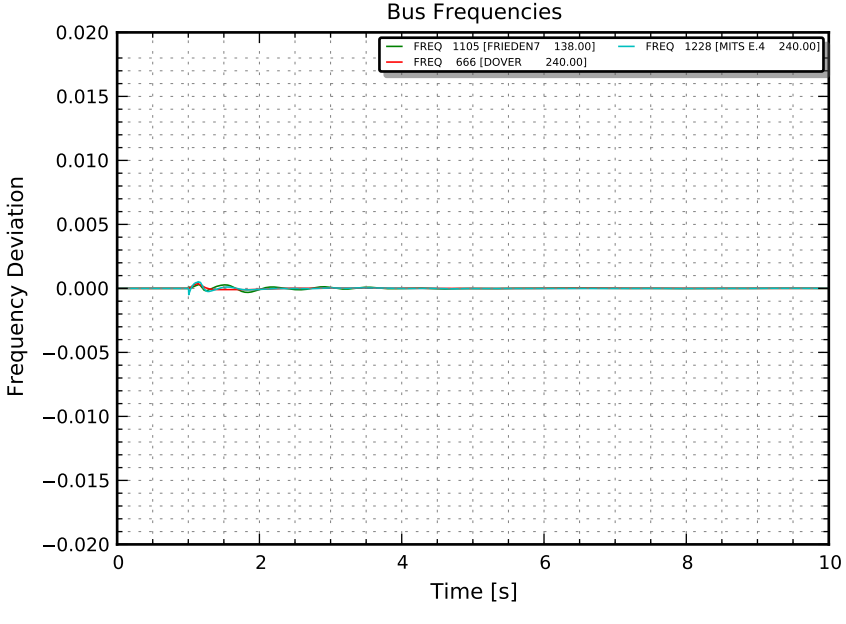
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 027 (A. 1)





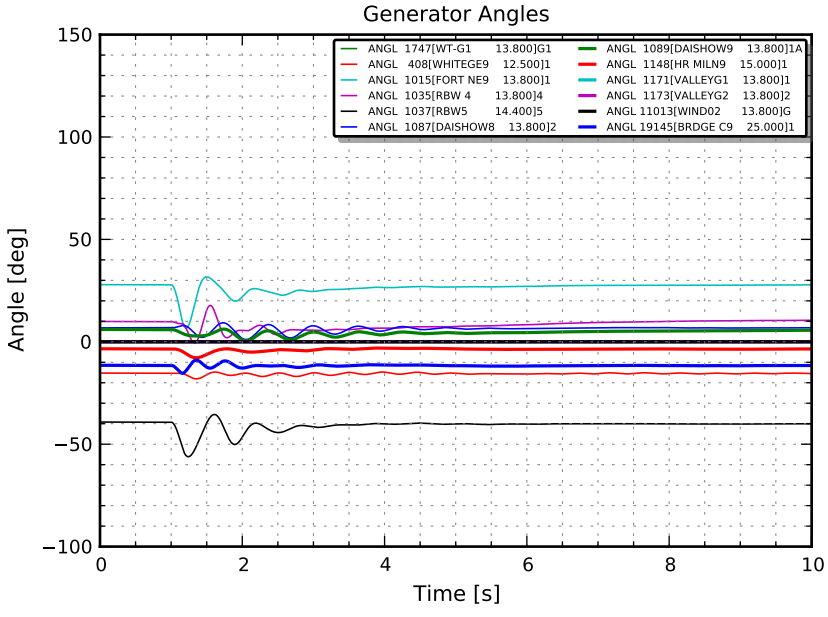


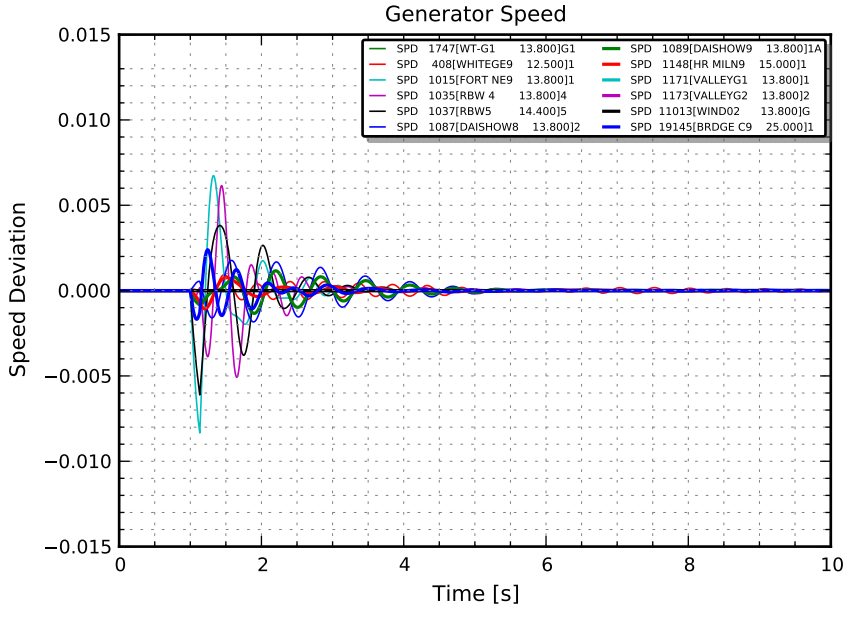


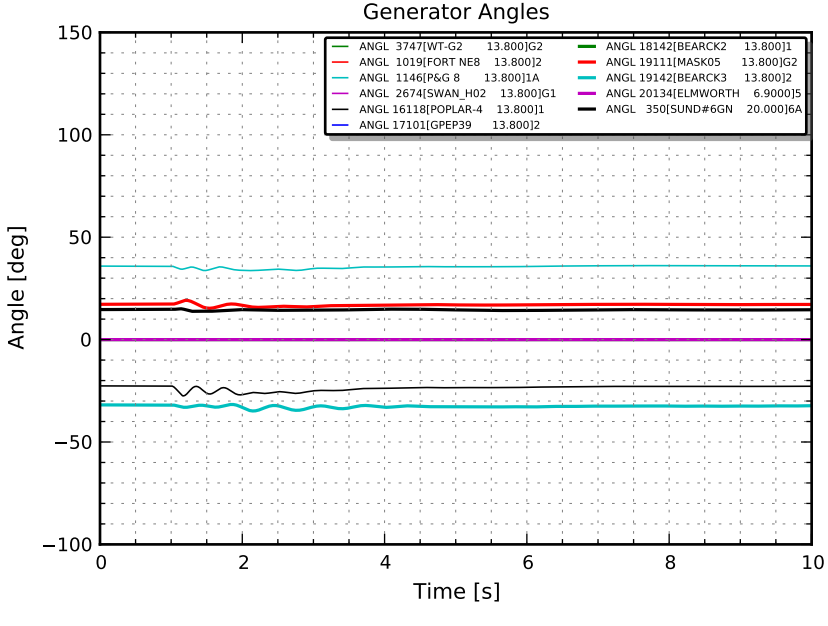
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 027 7L120 HOTCHKISS to Meikle_A.

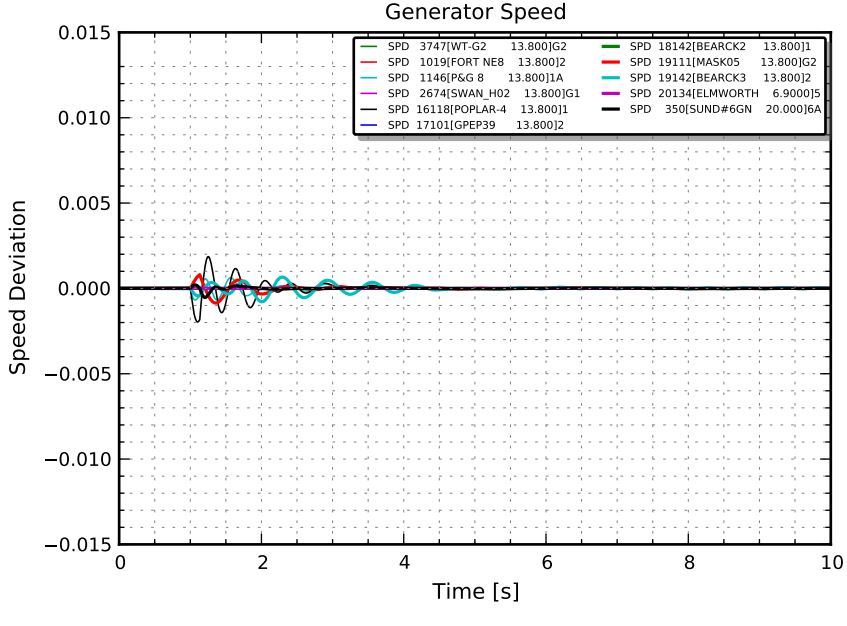
Study Area Generators

Appendix C2B
Figure: 027 (A. 2)





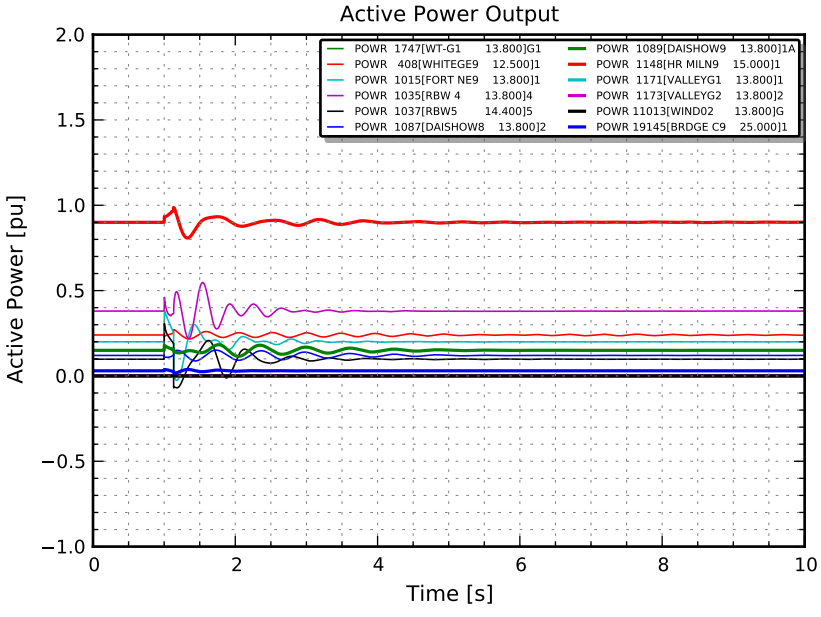


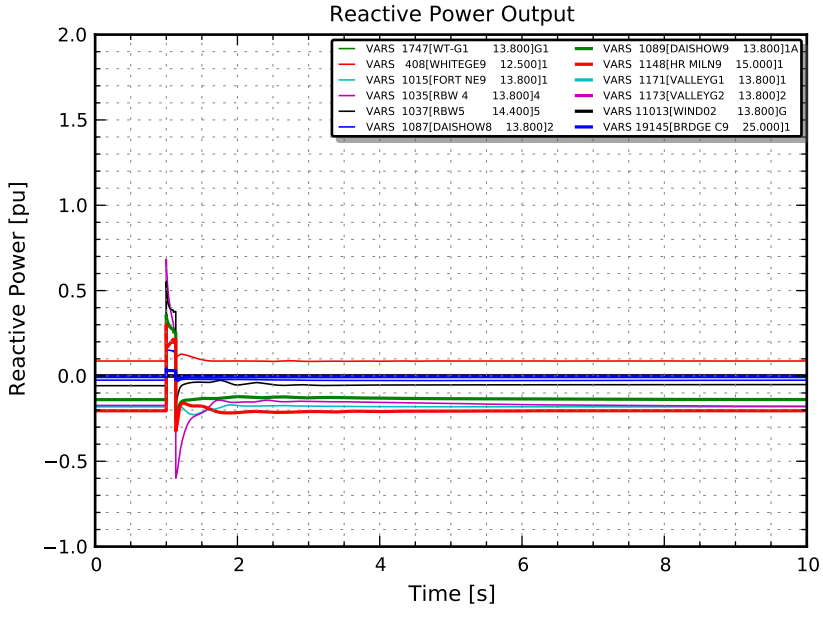


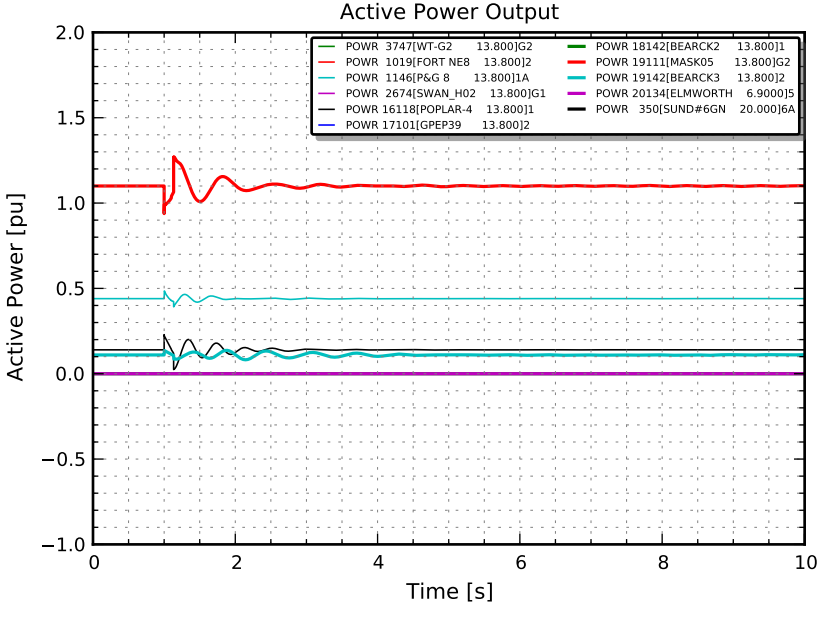
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 027 7L120 HOTCHKISS to Meikle_A.

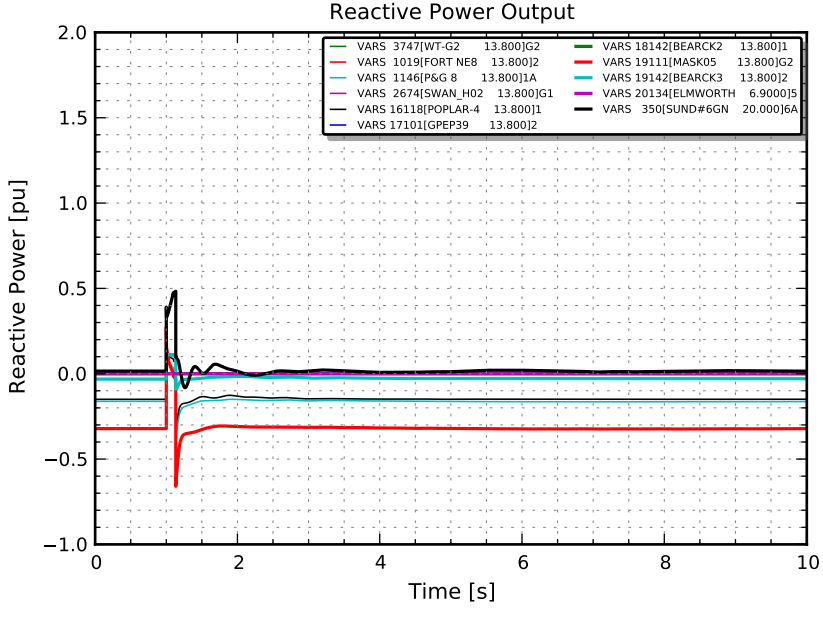
Study Area Generators

Appendix C2B
Figure: 027 (A. 3)





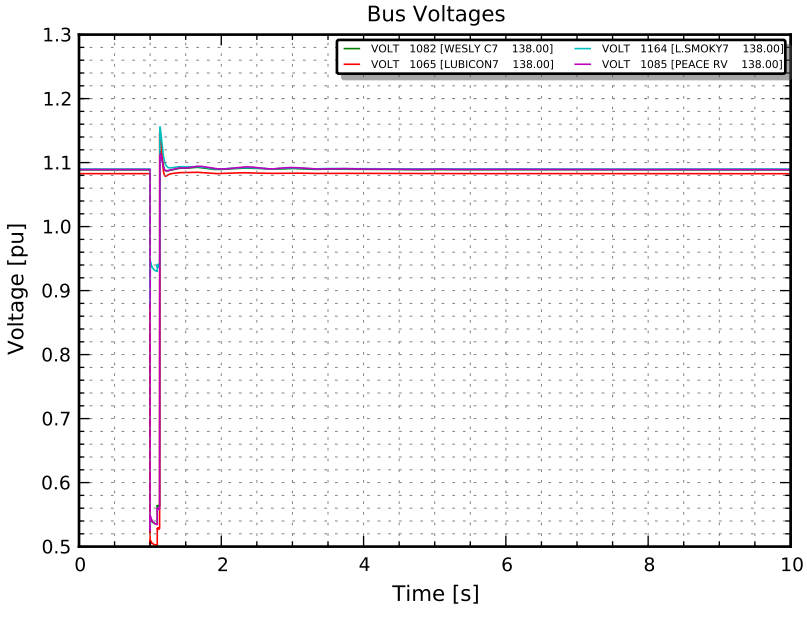


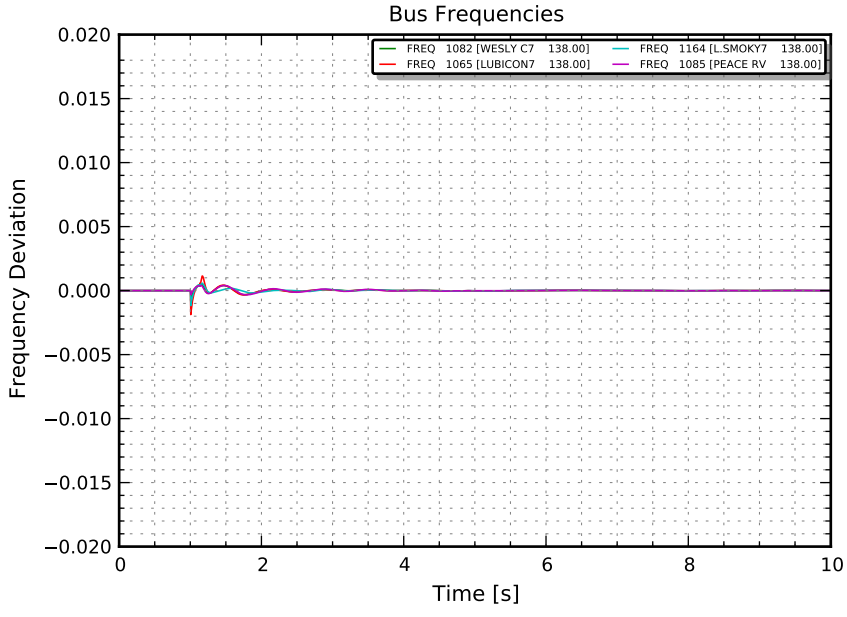


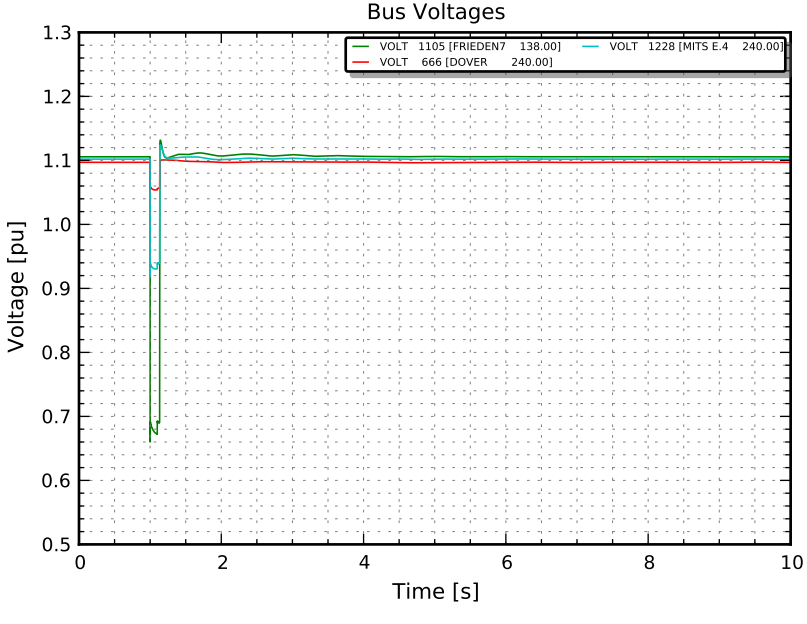
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 027 7L120 HOTCHKISS to Meikle_B.

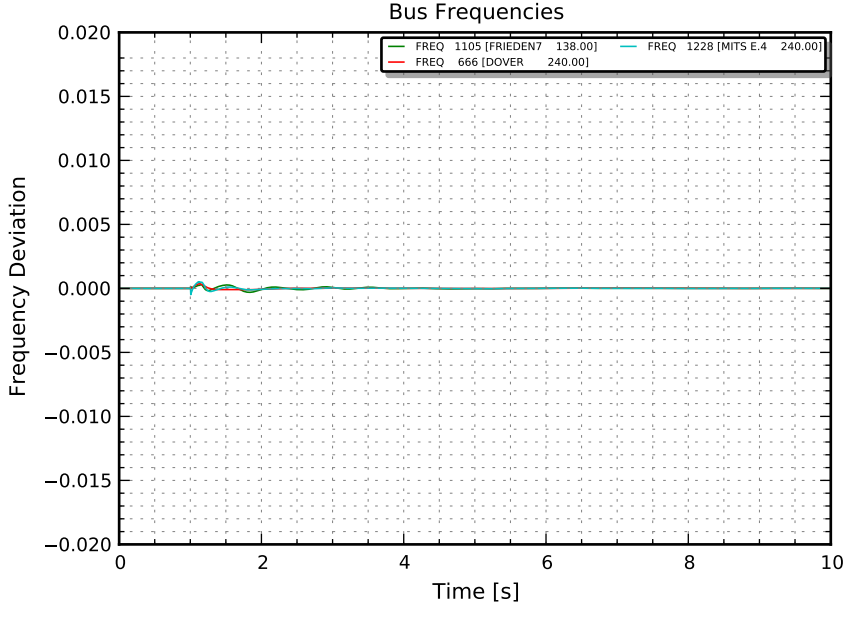
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 027 (B. 1)





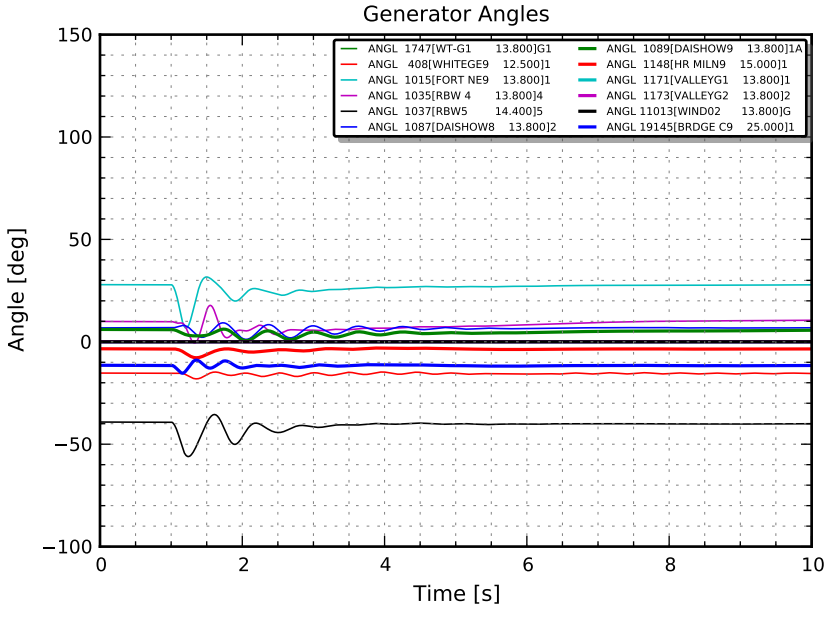


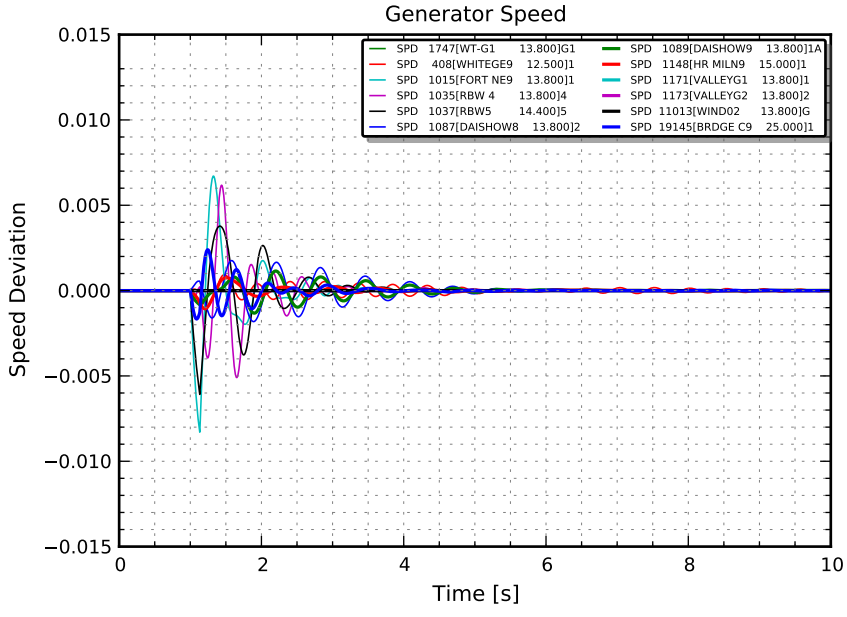


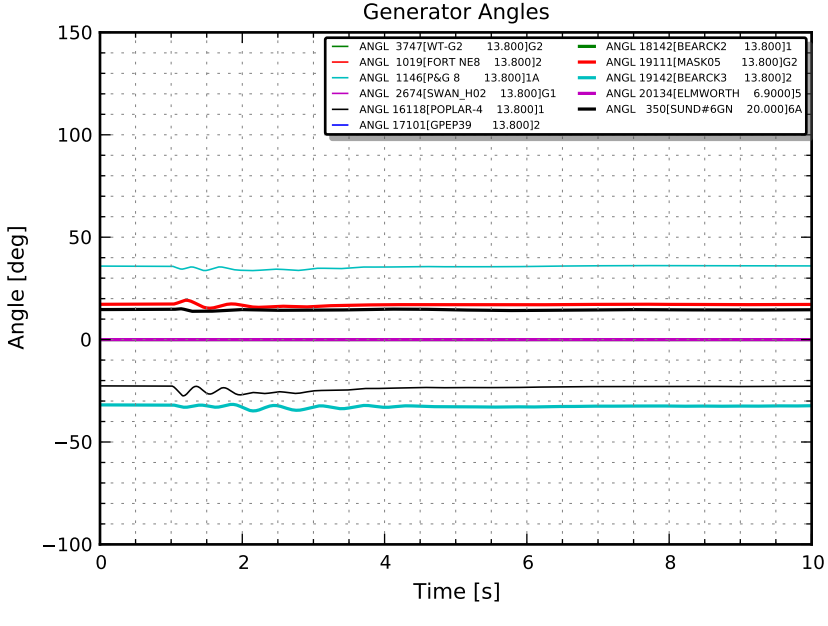
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 027 7L120 HOTCHKISS to Meikle_B.

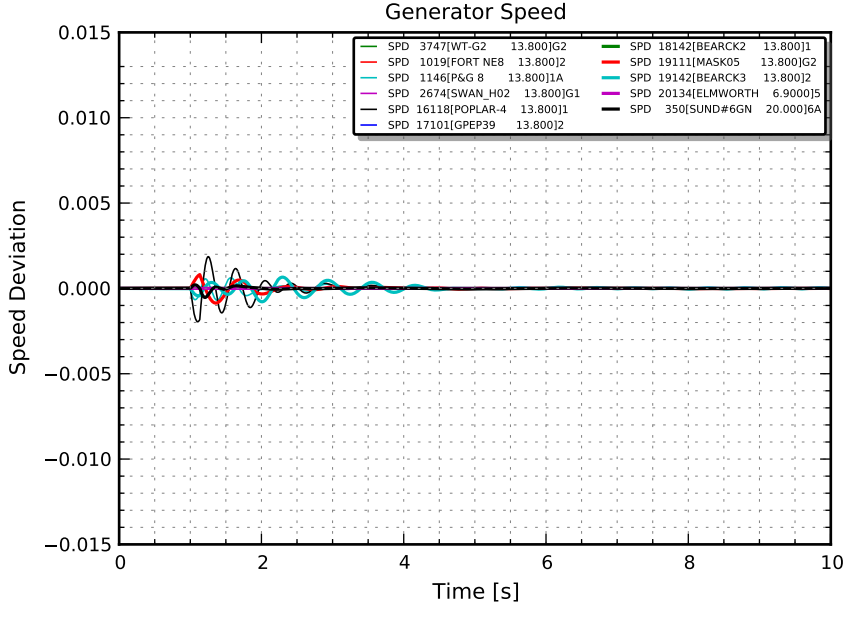
Study Area Generators

Appendix C2B
Figure: 027 (B. 2)





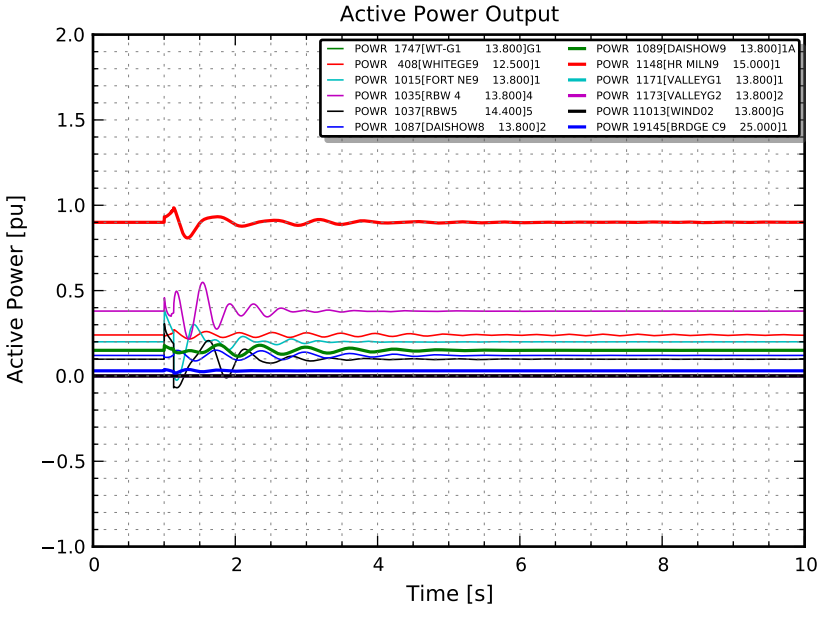


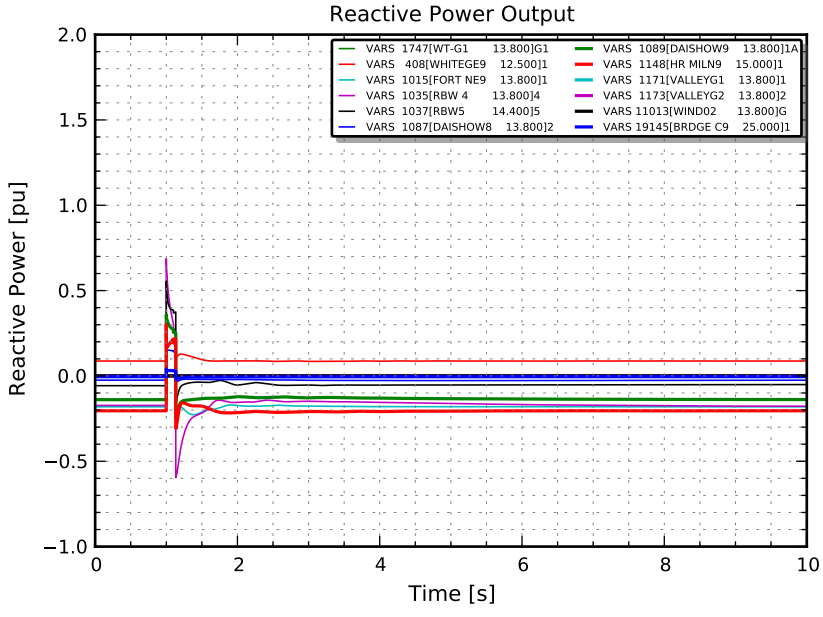


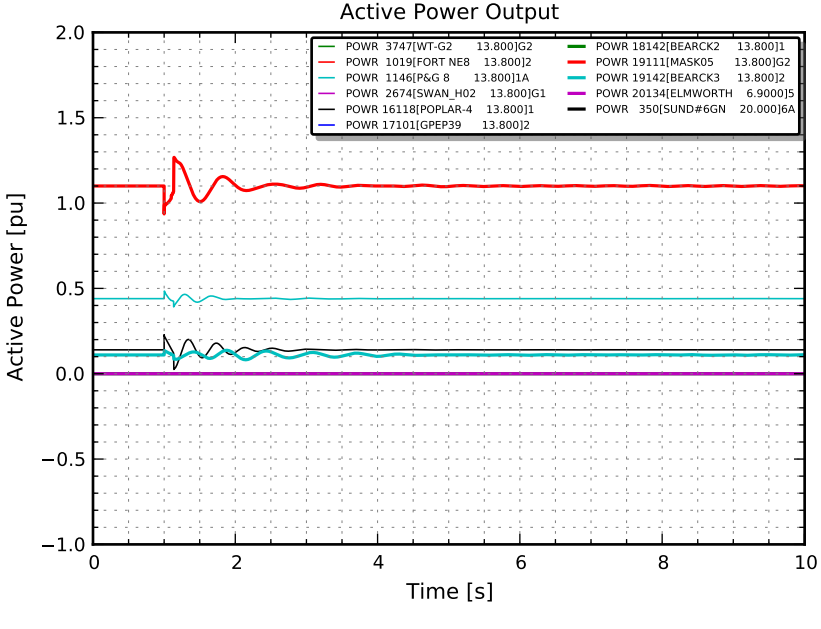
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 027 7L120 HOTCHKISS to Meikle_B.

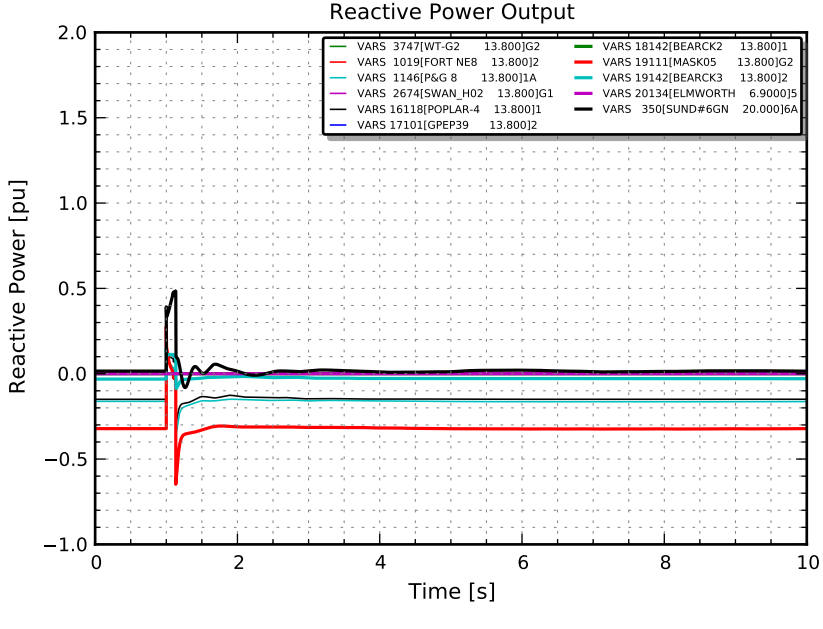
Study Area Generators

Appendix C2B
Figure: 027 (B. 3)





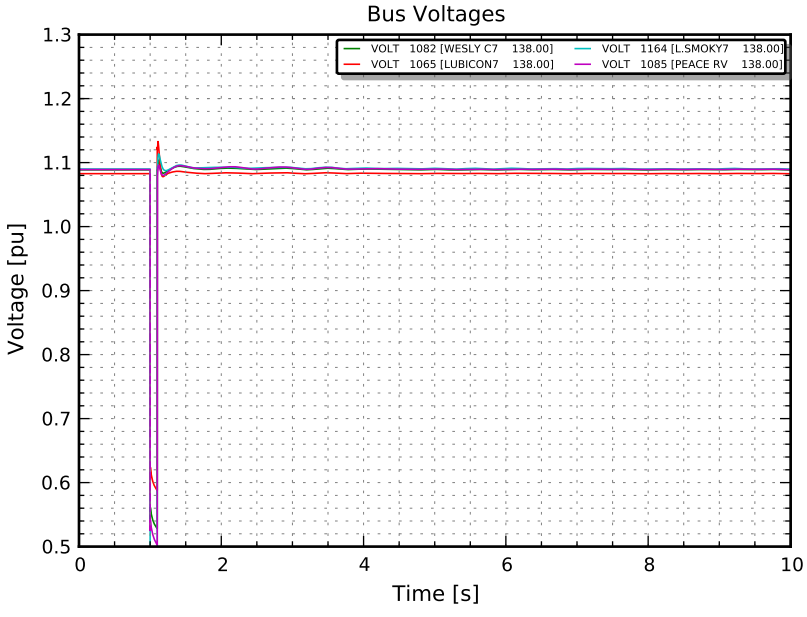


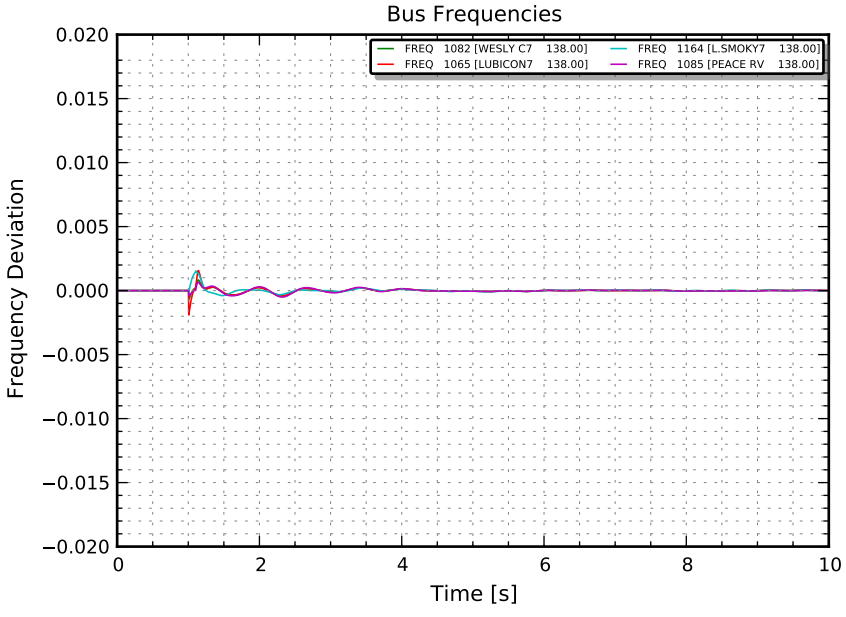


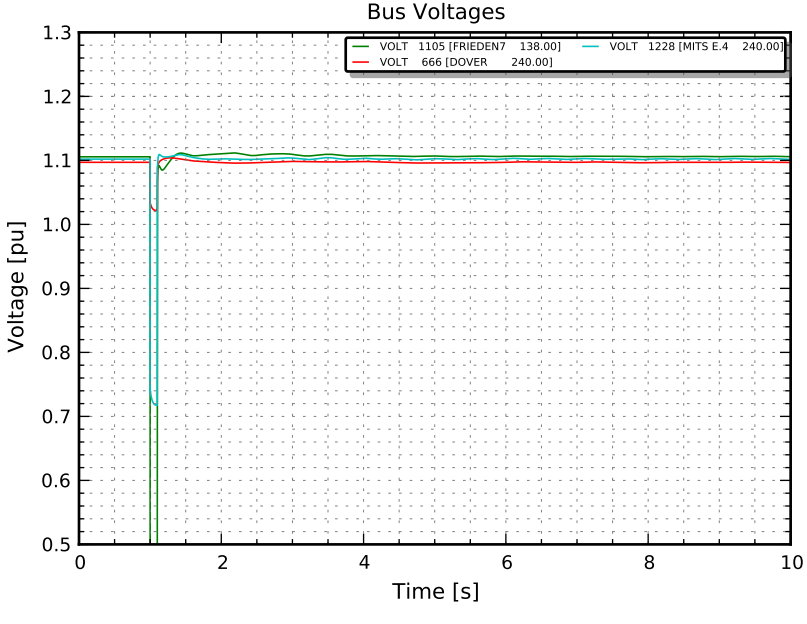
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 028 7L01 LITTLESMOKY to Sturgeon_A.

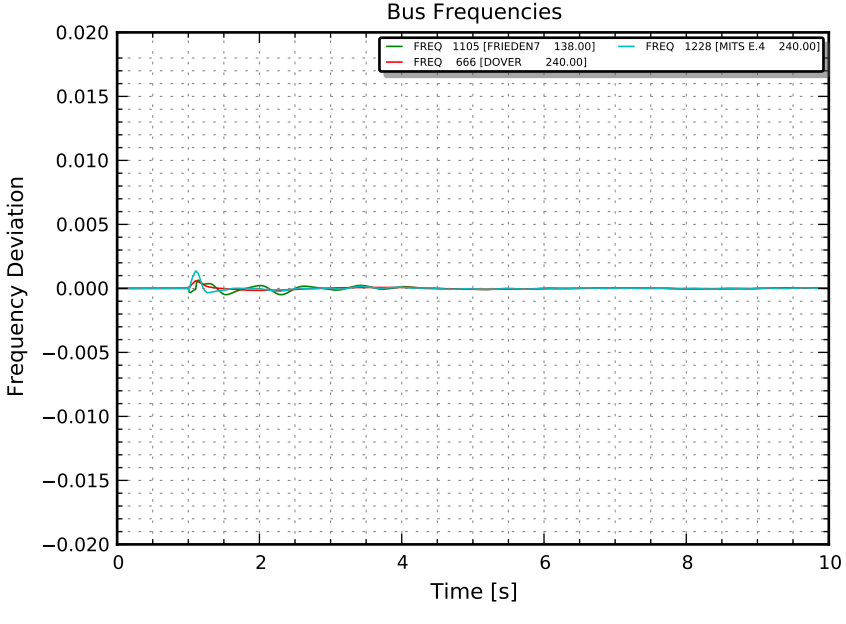
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 028 (A. 1)





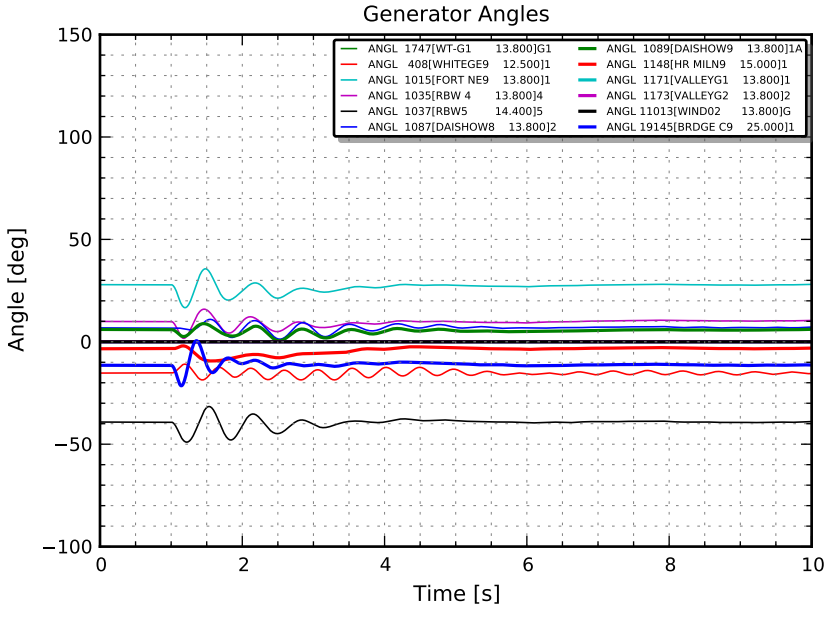


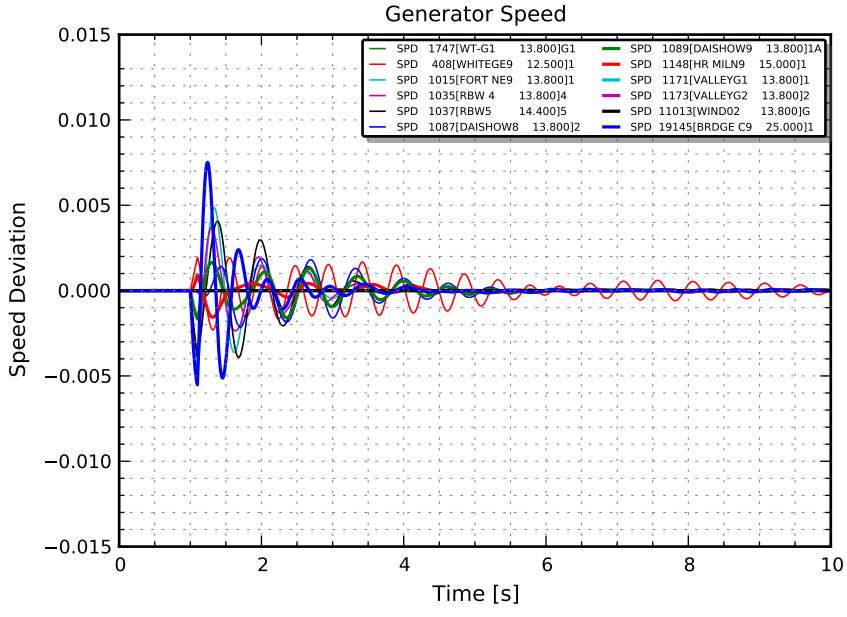


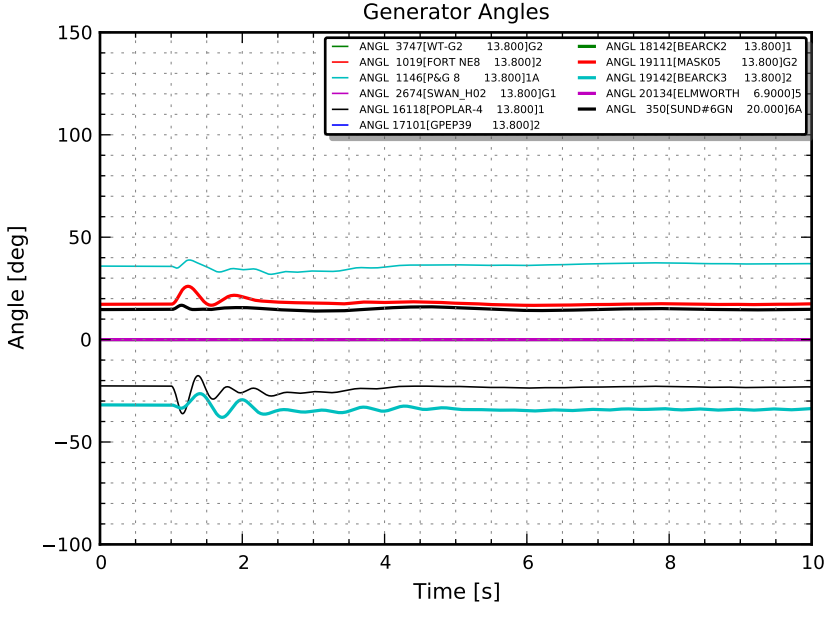
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 028 7L01 LITTLESMOKY to Sturgeon_A.

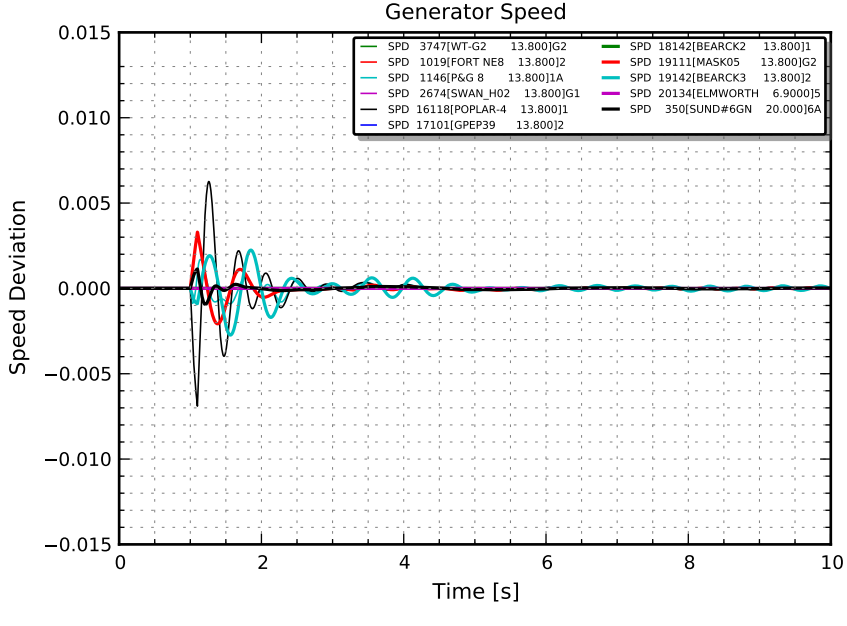
Study Area Generators

Appendix C2B
Figure: 028 (A. 2)





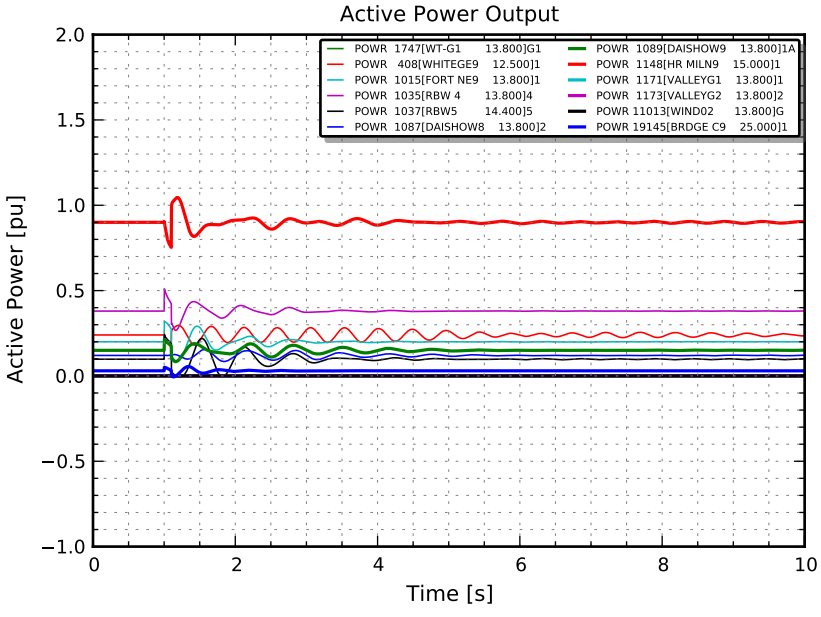


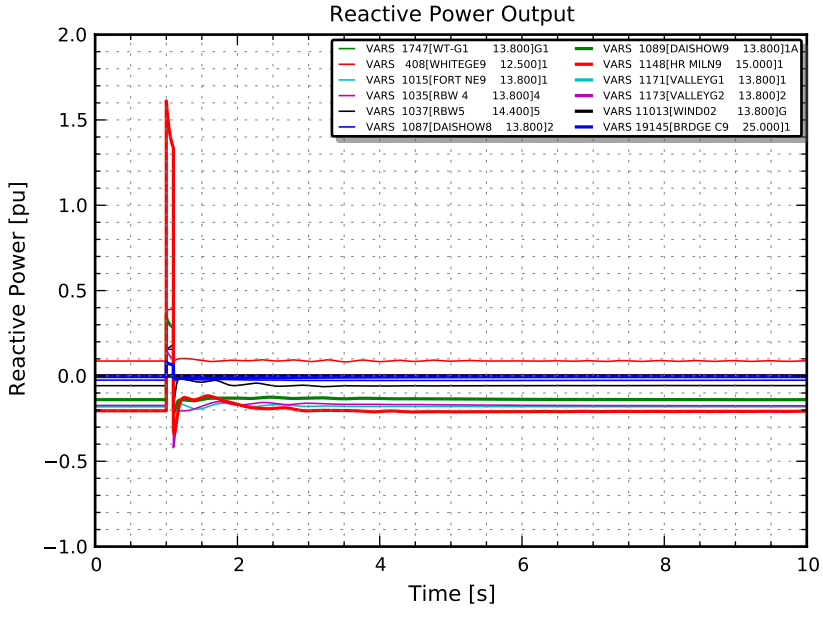


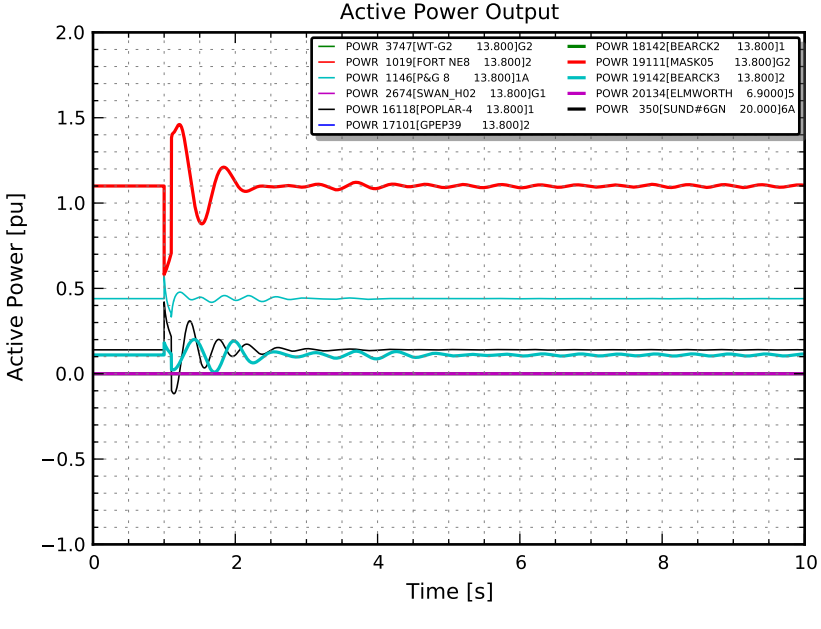
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 028 7L01 LITTLESMOKY to Sturgeon_A.

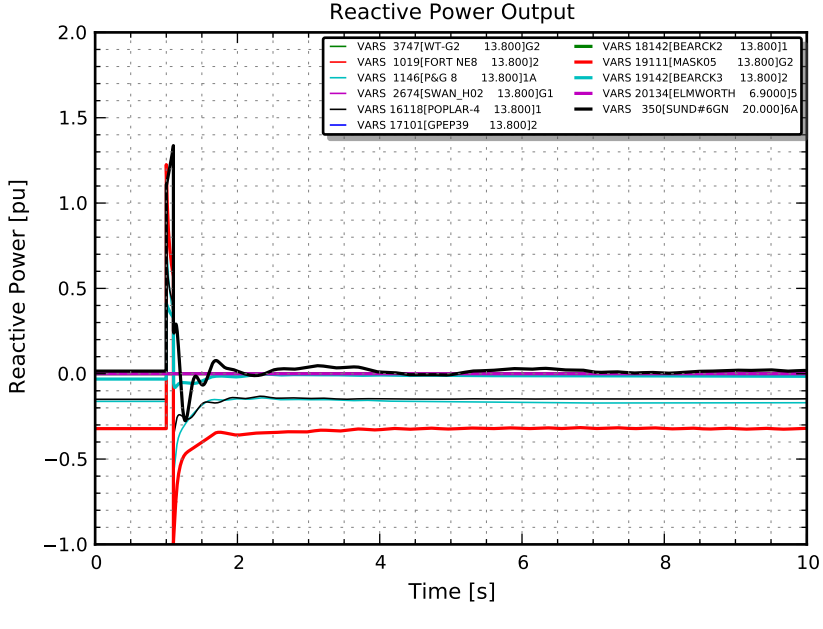
Study Area Generators

Appendix C2B
Figure: 028 (A. 3)





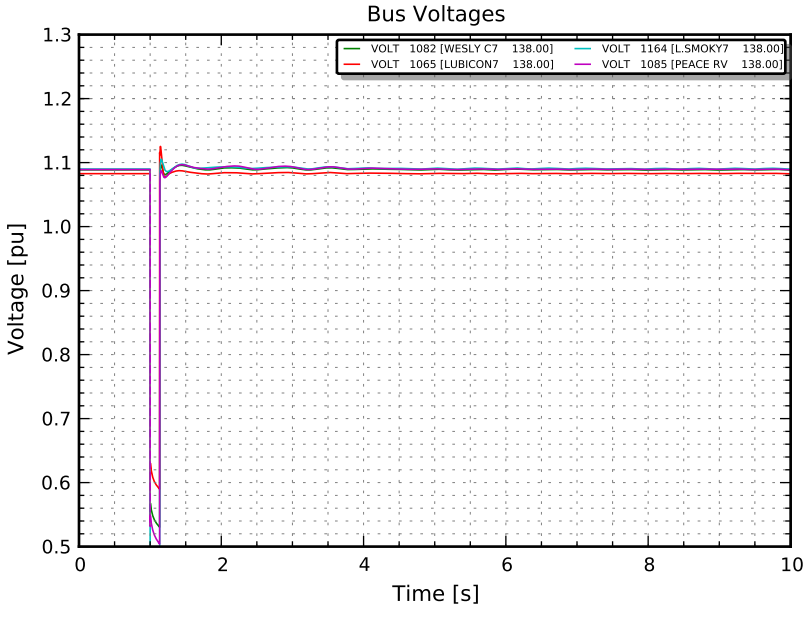


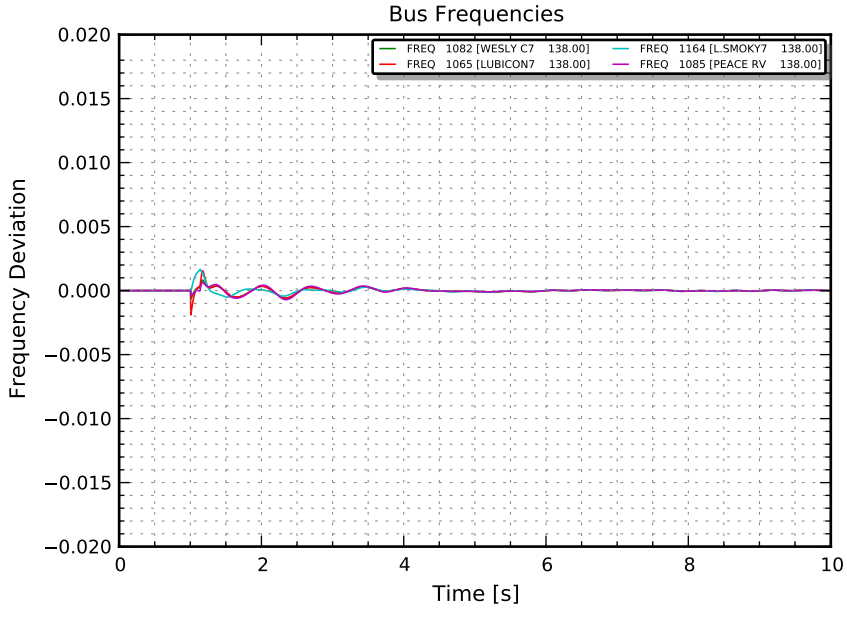


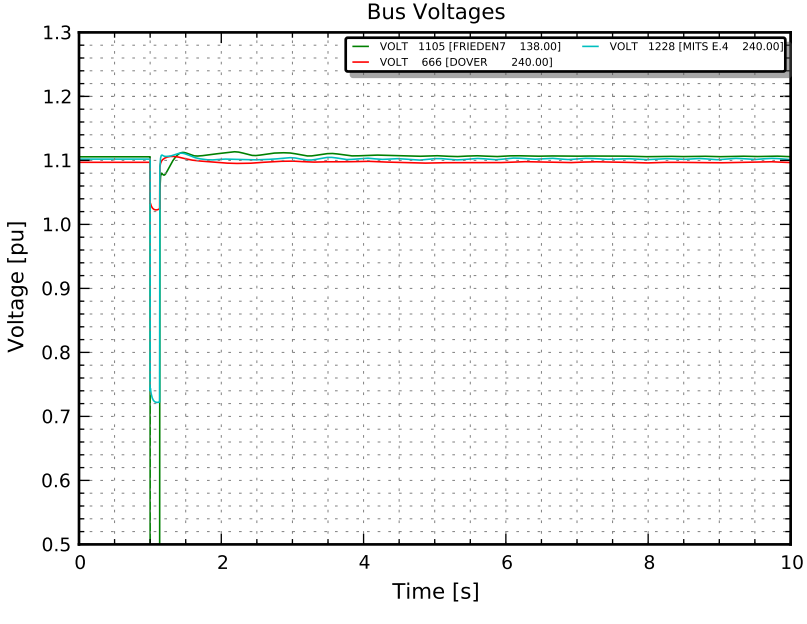
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 028 7L01 LITTLESMOKY to Sturgeon_B.

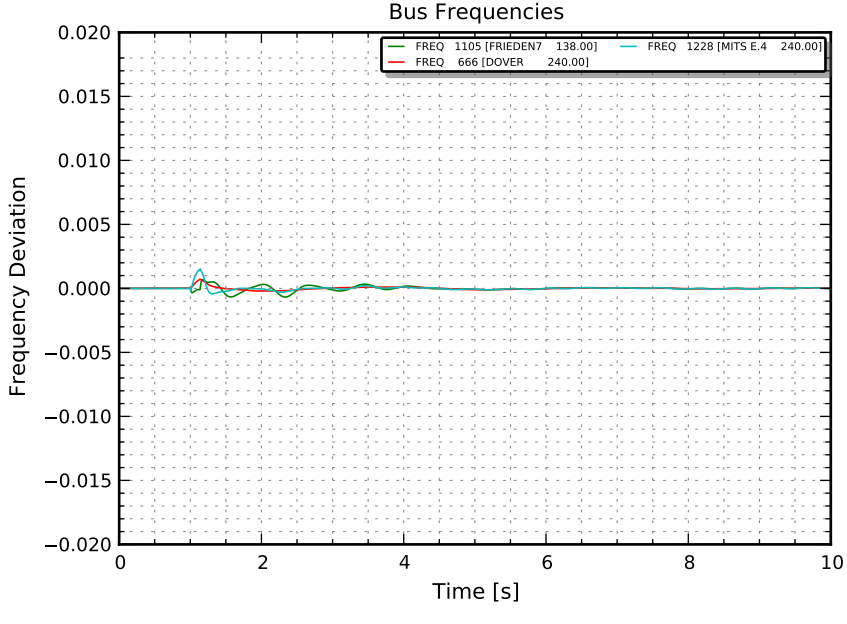
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 028 (B. 1)





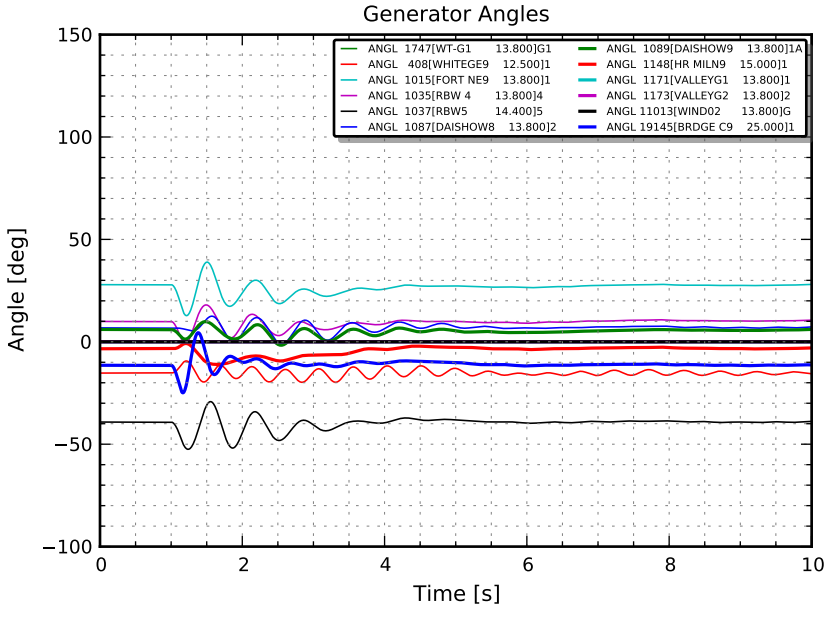


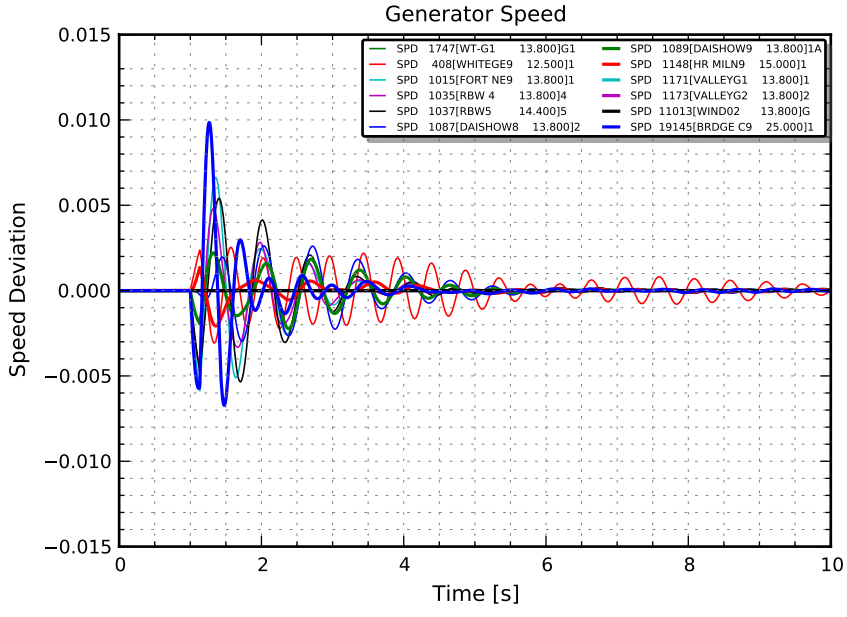


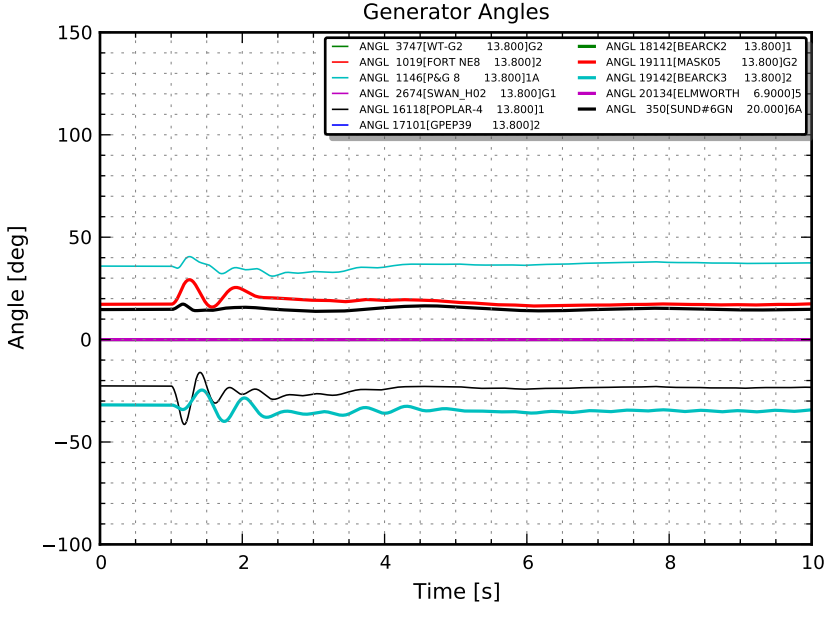
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 028 7L01 LITTLESMOKY to Sturgeon_B.

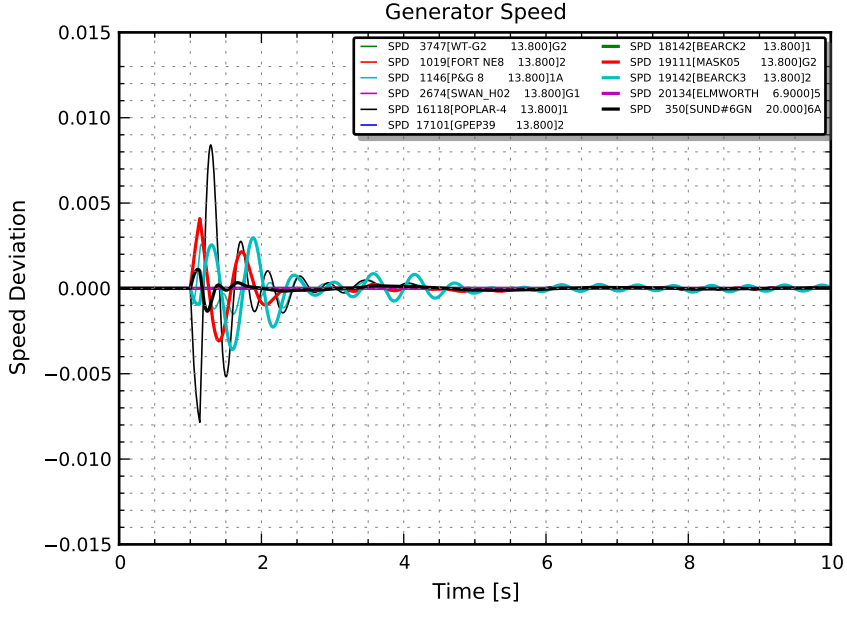
Study Area Generators

Appendix C2B
Figure: 028 (B. 2)





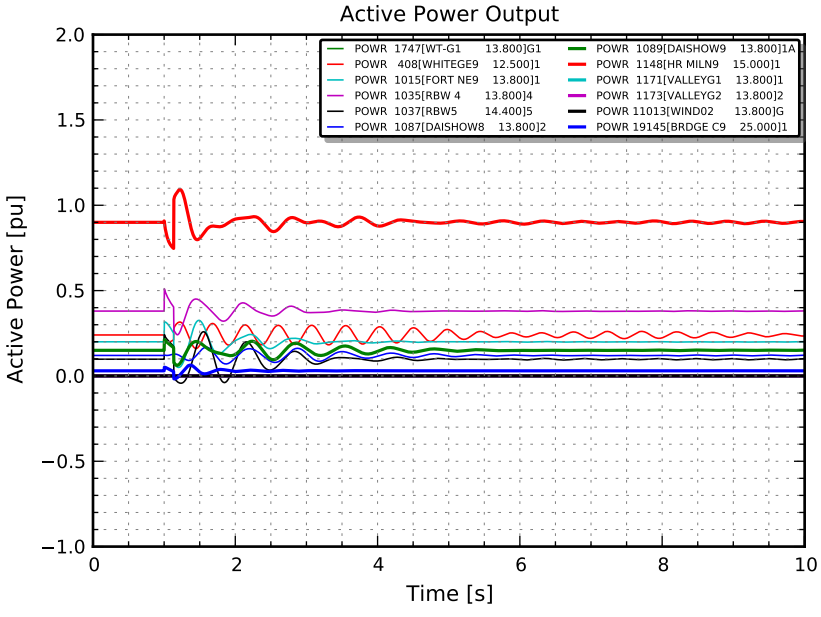


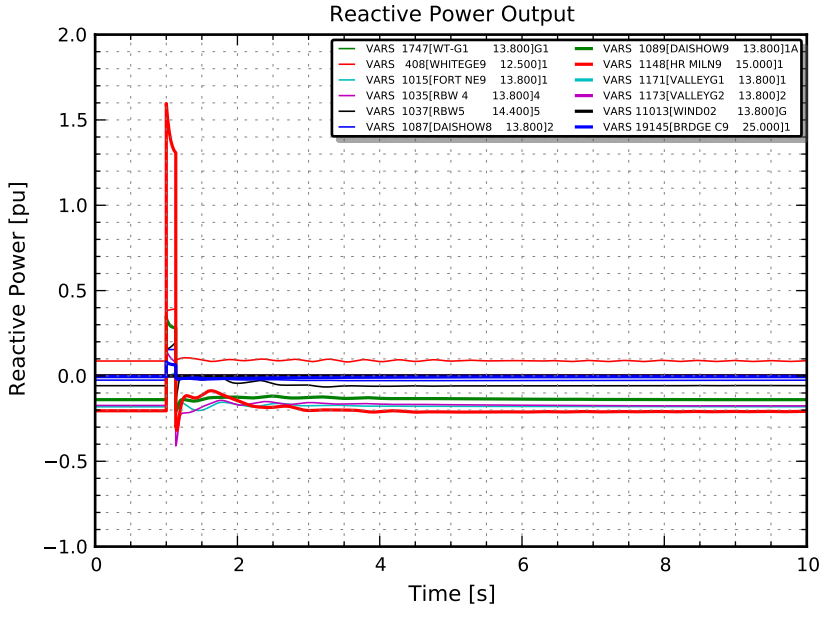


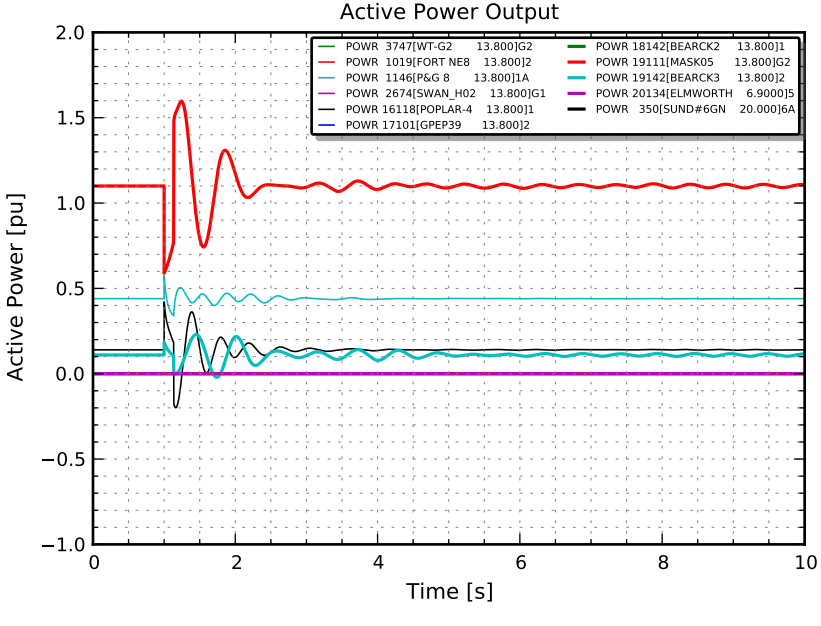
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 028 7L01 LITTLESMOKY to Sturgeon_B.

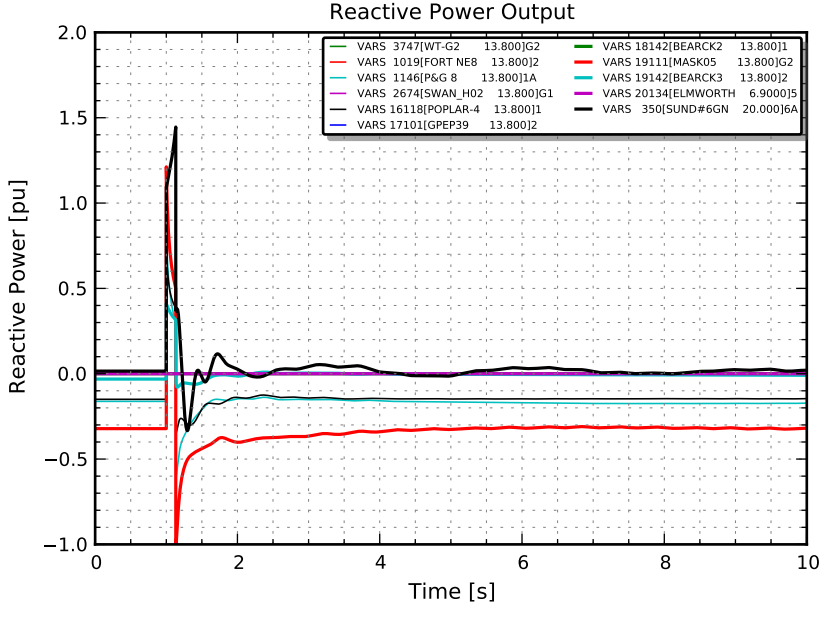
Study Area Generators

Appendix C2B
Figure: 028 (B. 3)





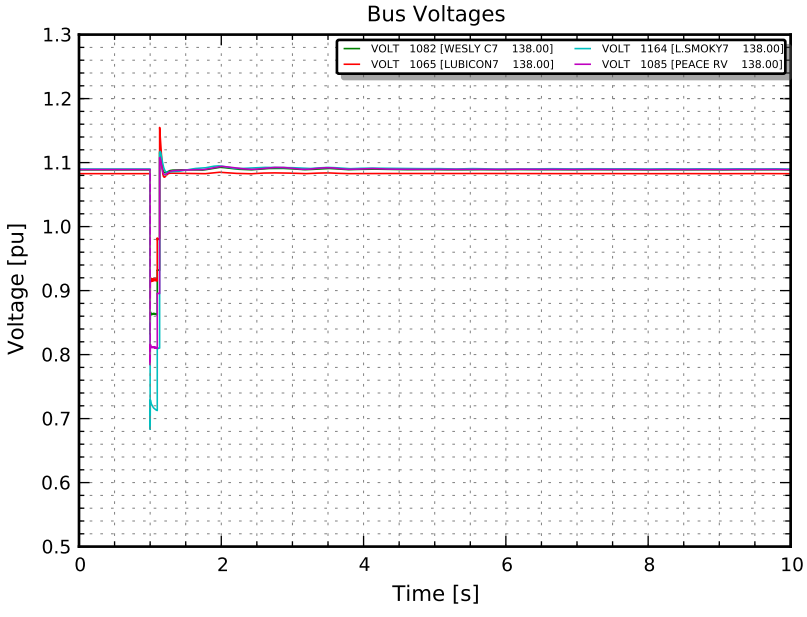


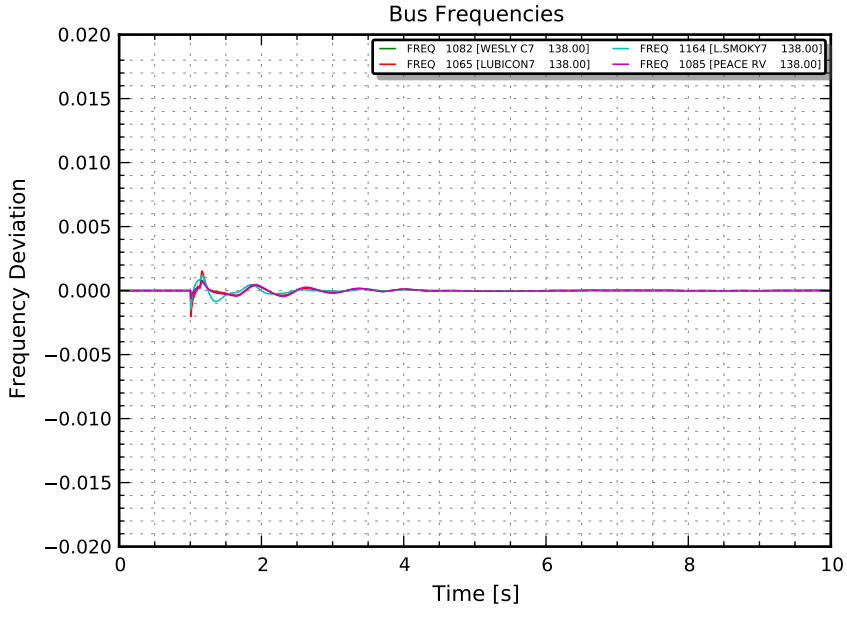


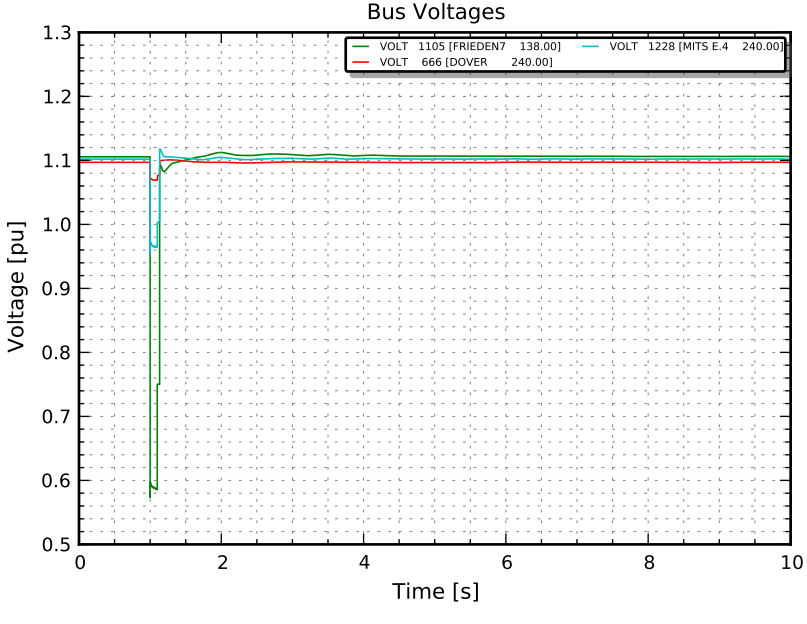
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_A.

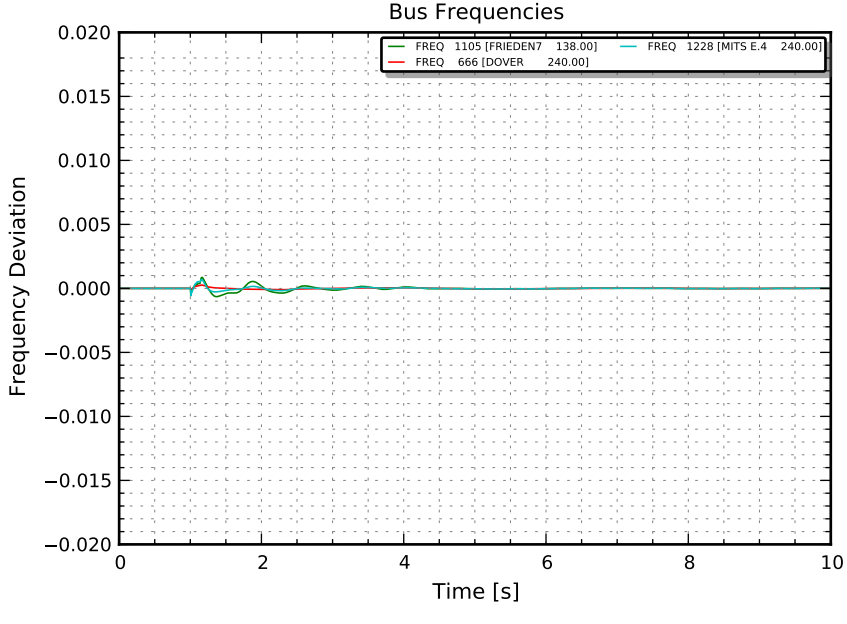
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 029 (A. 1)





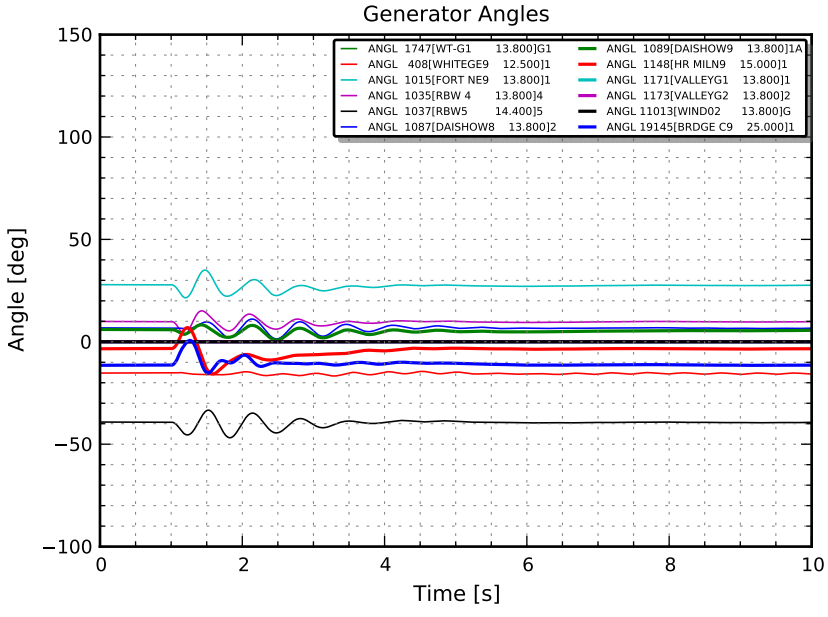


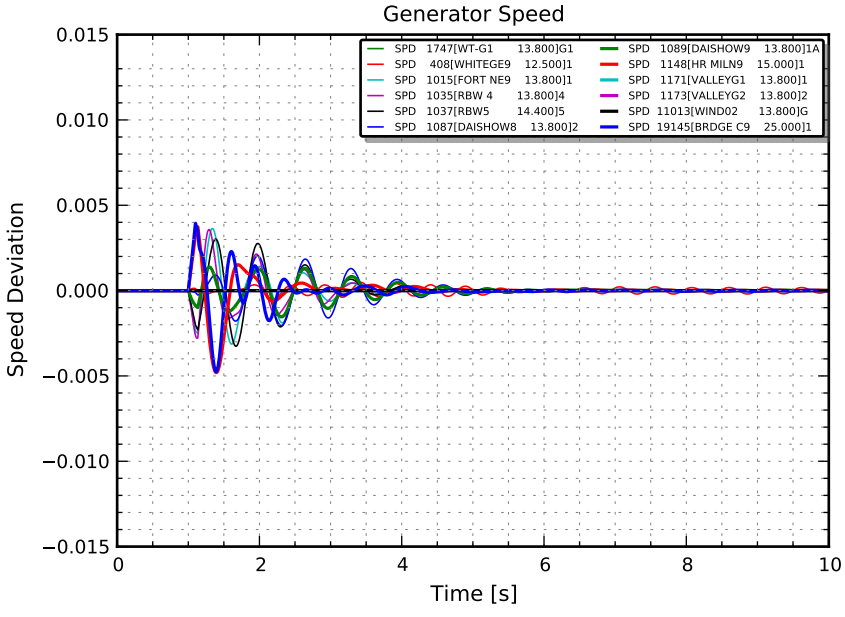


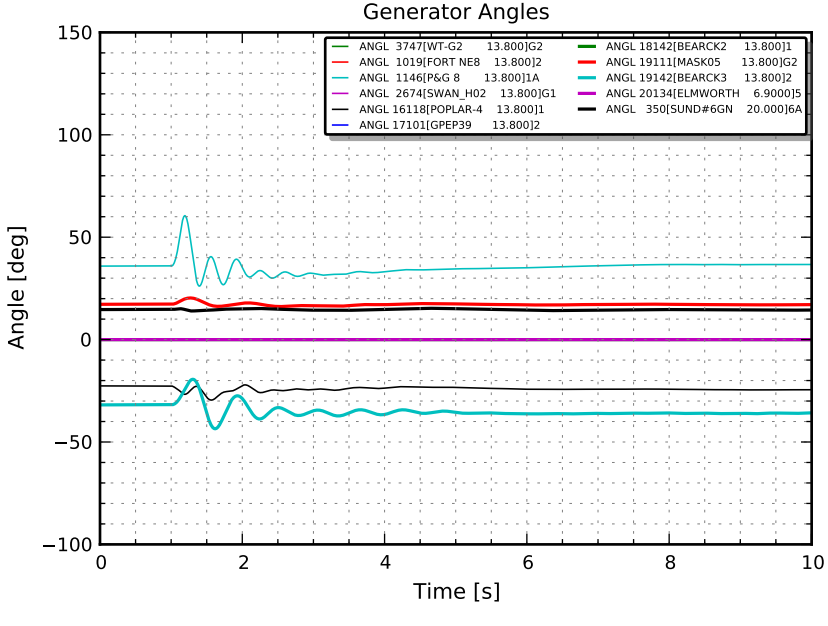
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_A.

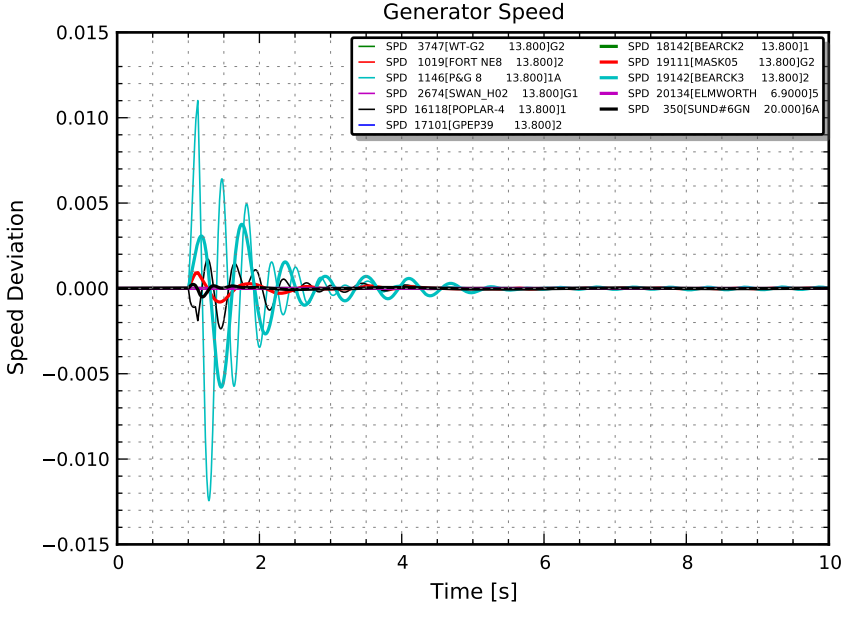
Study Area Generators

Appendix C2B
Figure: 029 (A. 2)





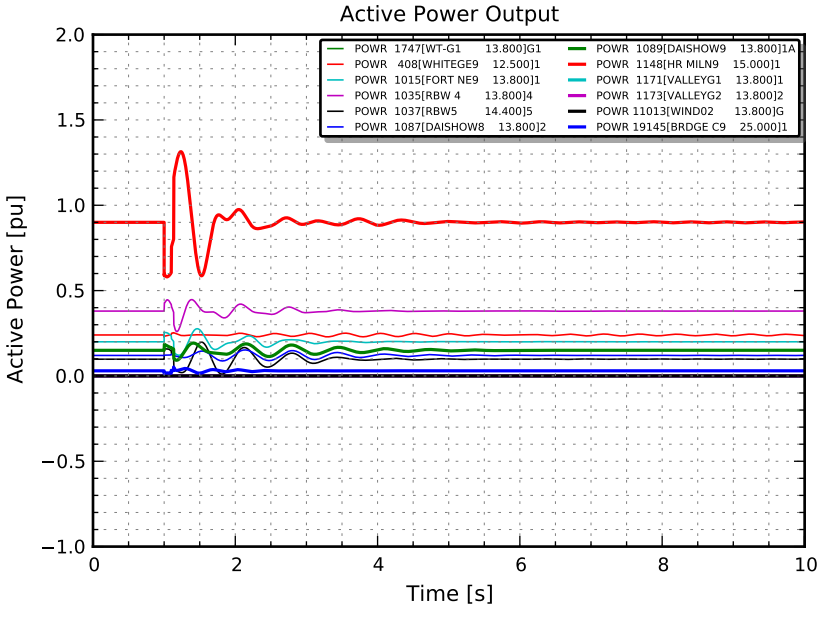


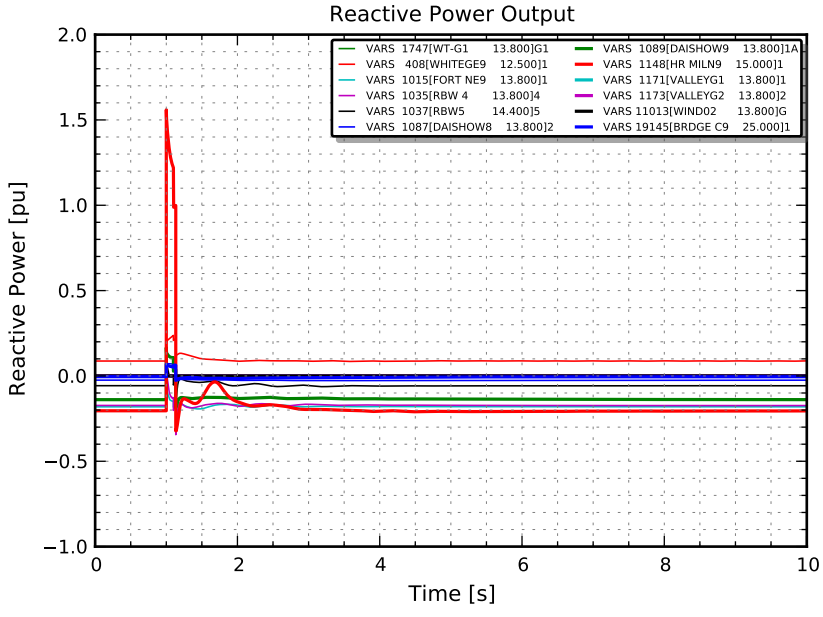


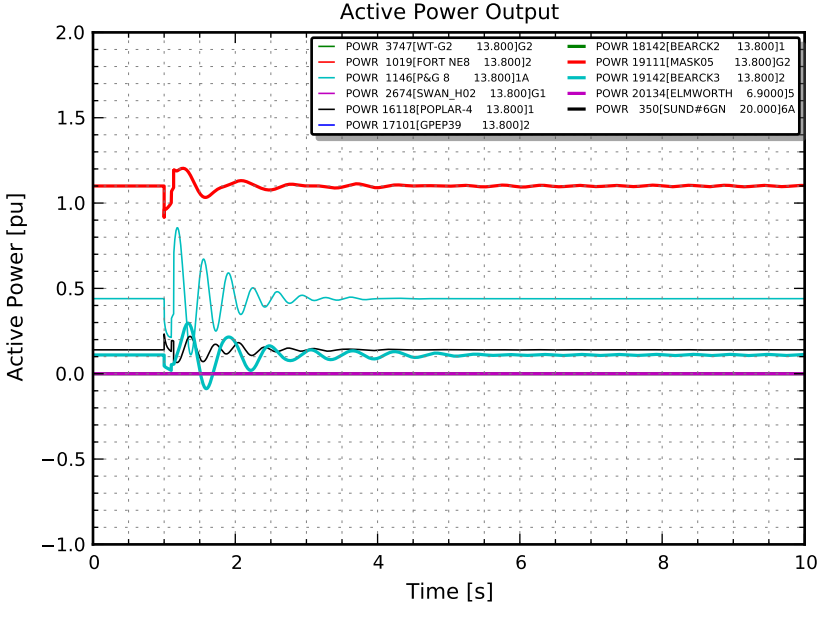
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_A.

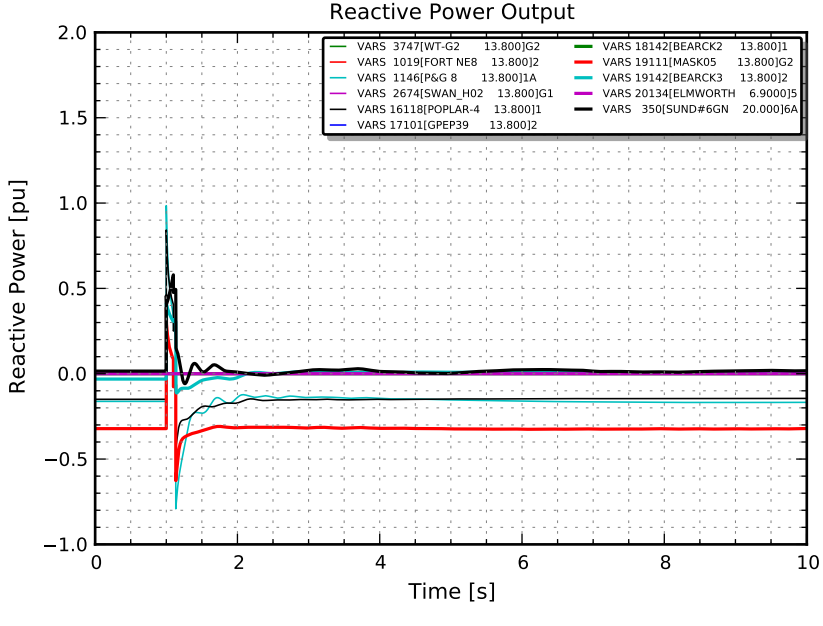
Study Area Generators

Appendix C2B
Figure: 029 (A. 3)





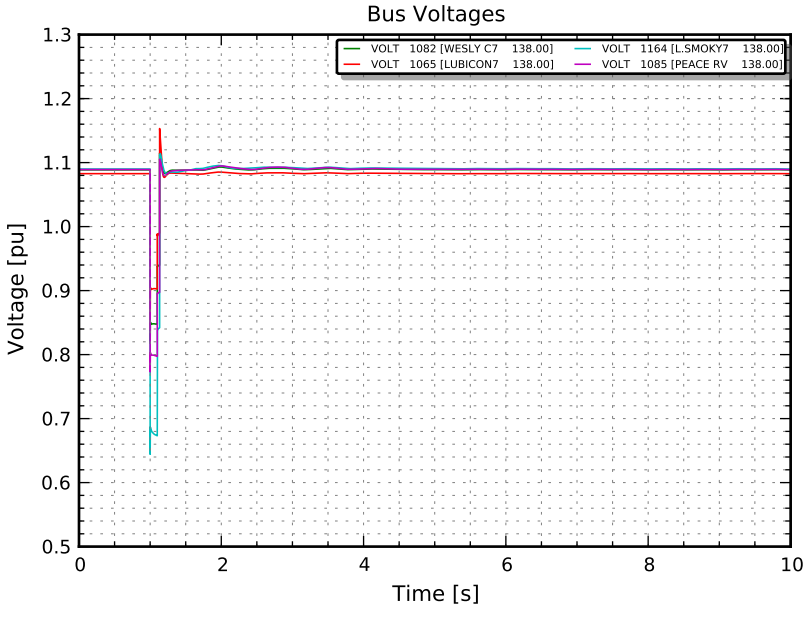


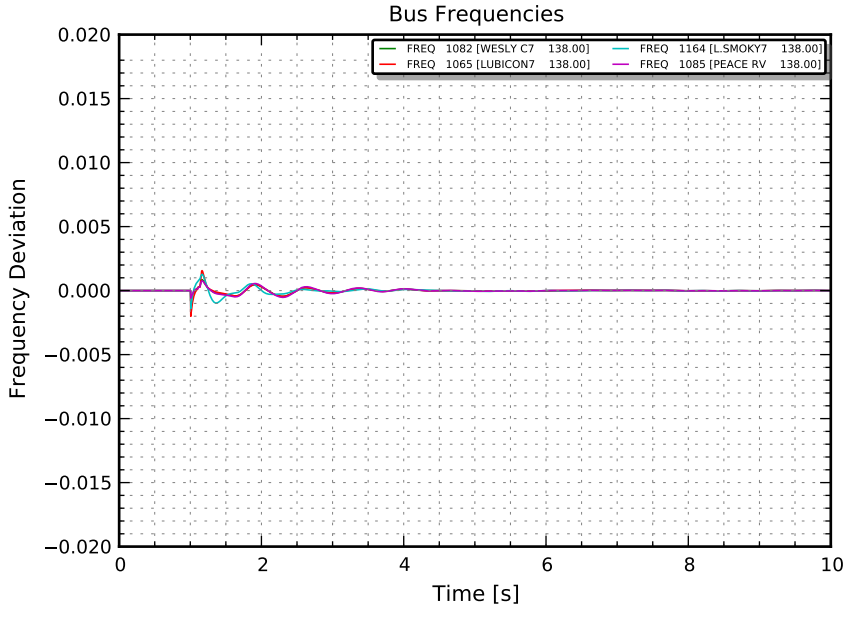


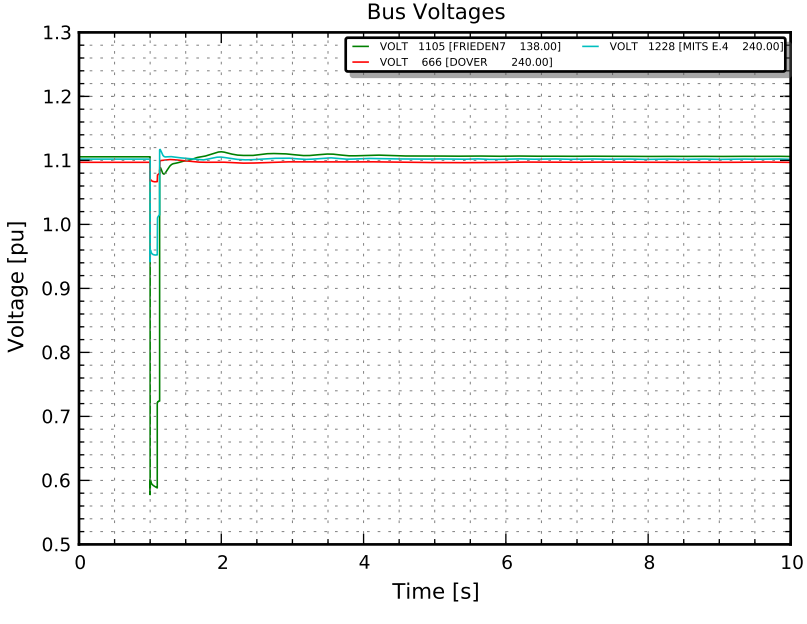
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_B.

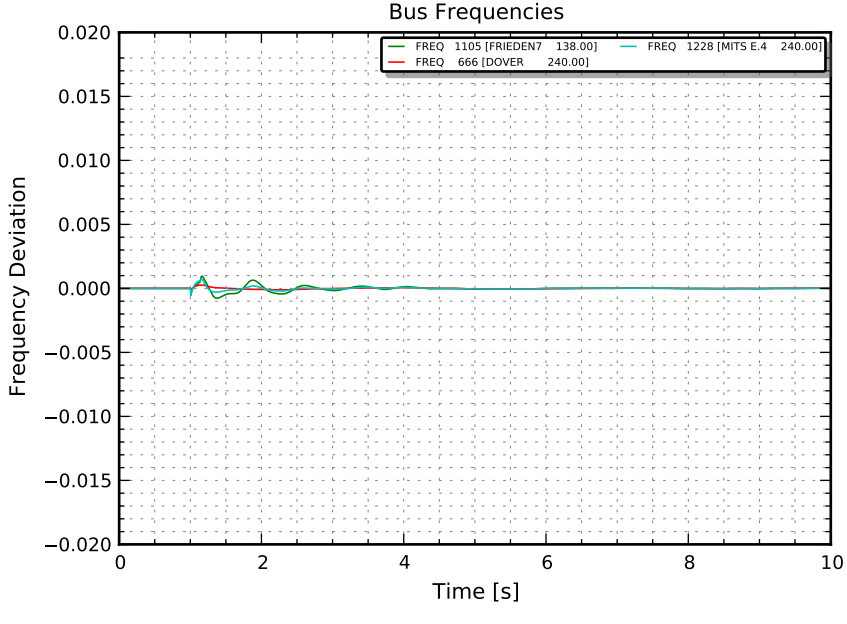
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 029 (B. 1)





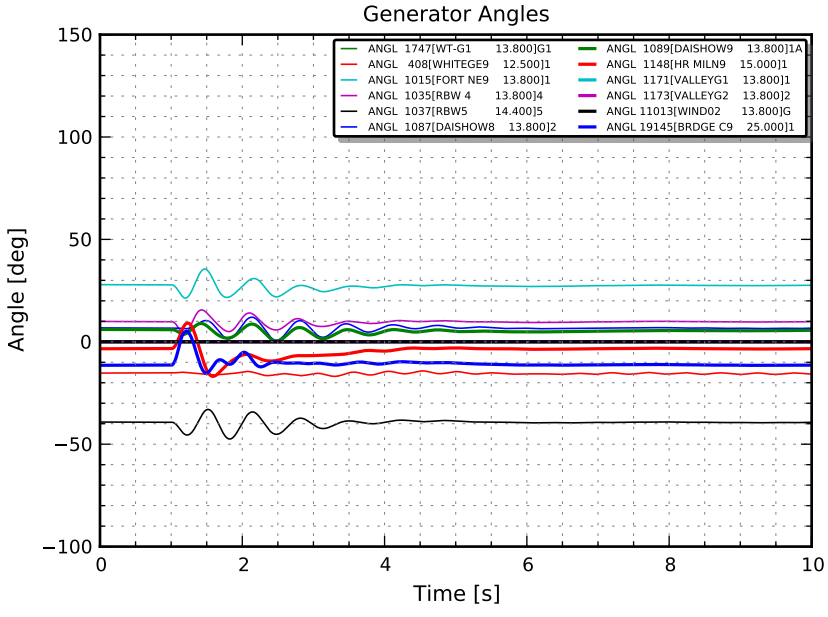


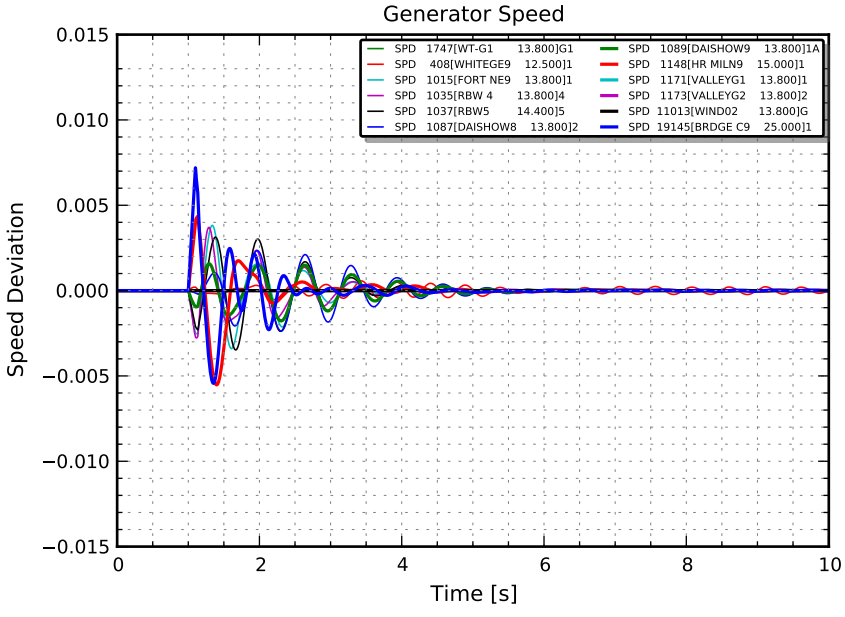


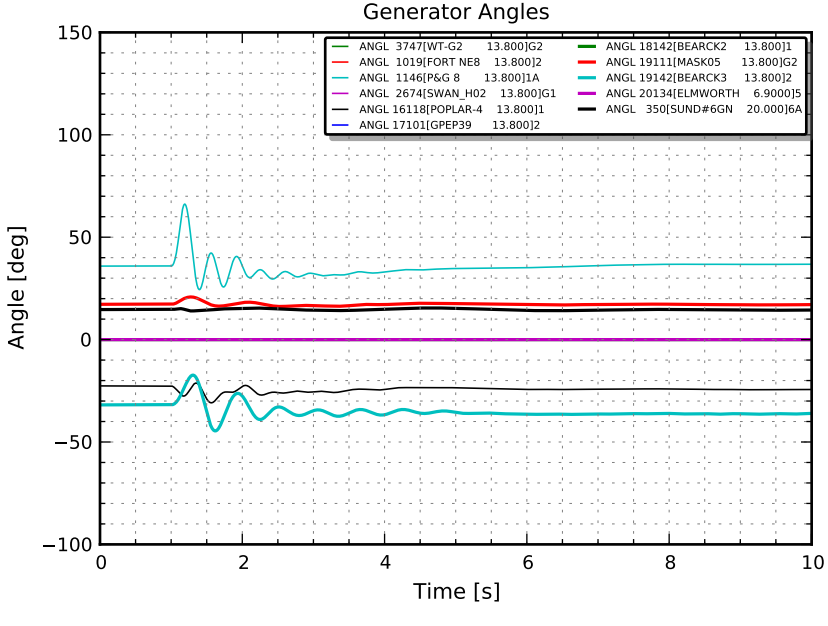
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_B.

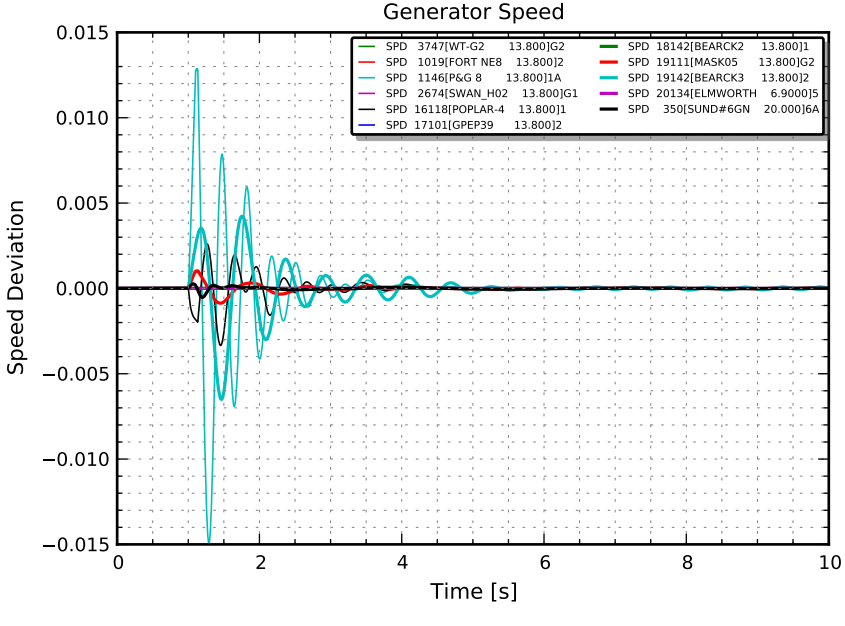
Study Area Generators

Appendix C2B
Figure: 029 (B. 2)





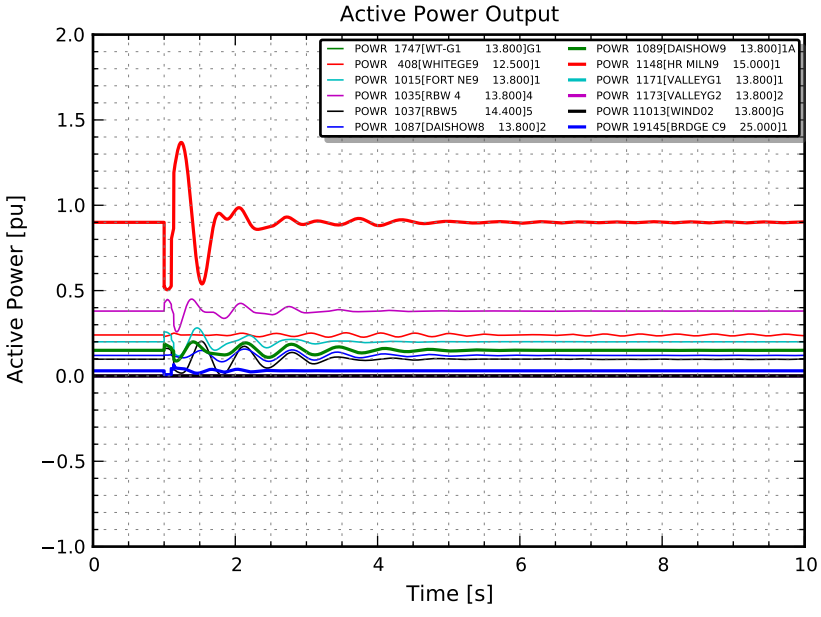


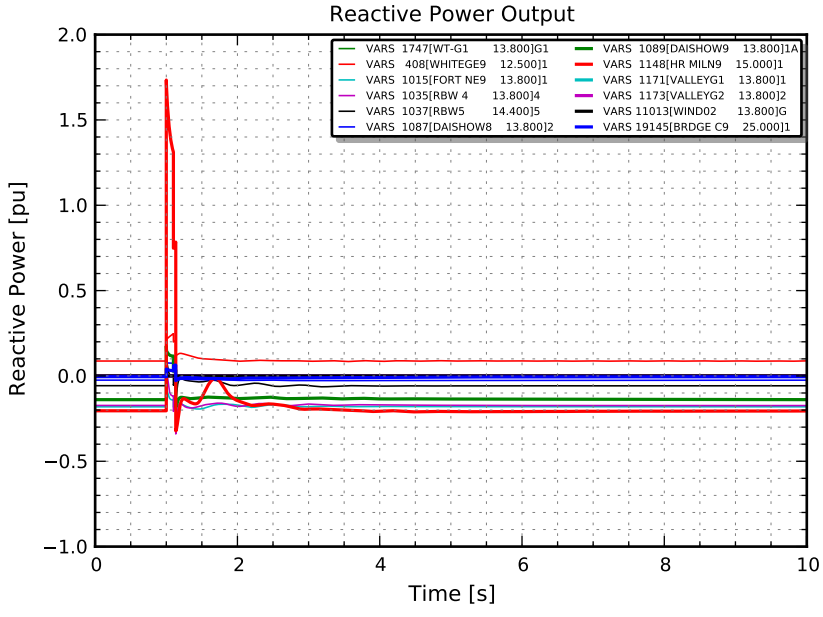


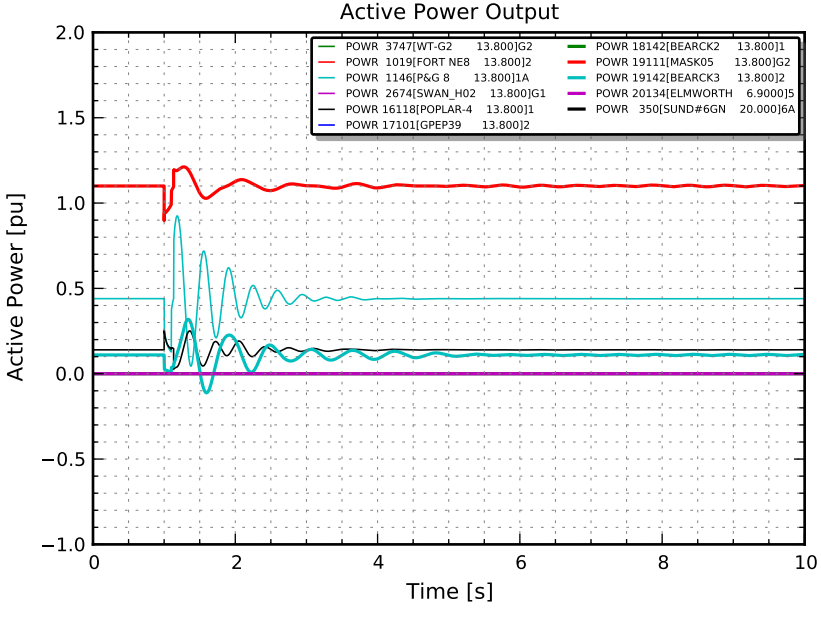
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_B.

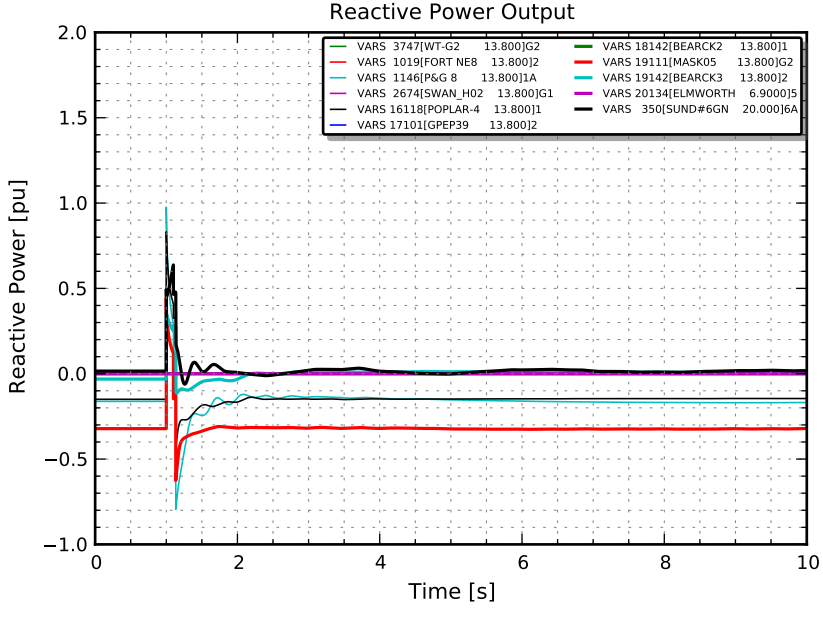
Study Area Generators

Appendix C2B
Figure: 029 (B. 3)





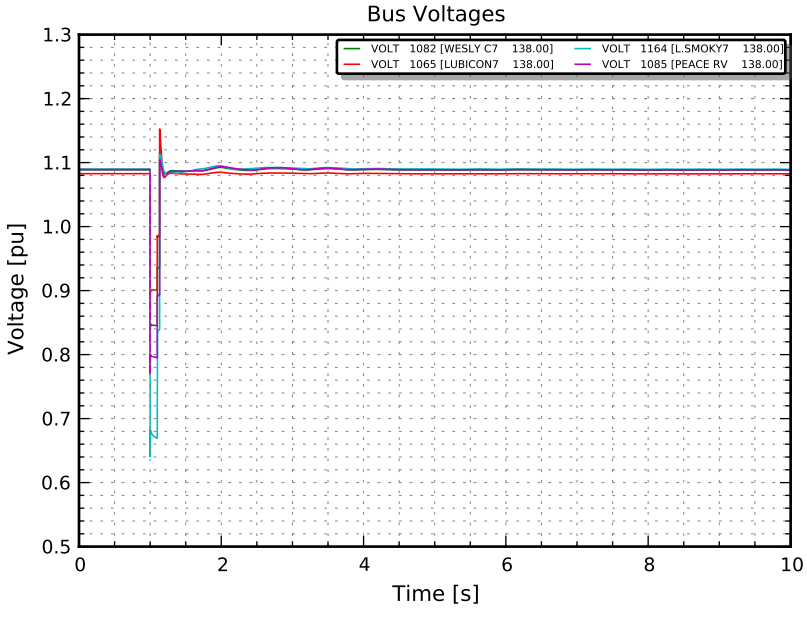


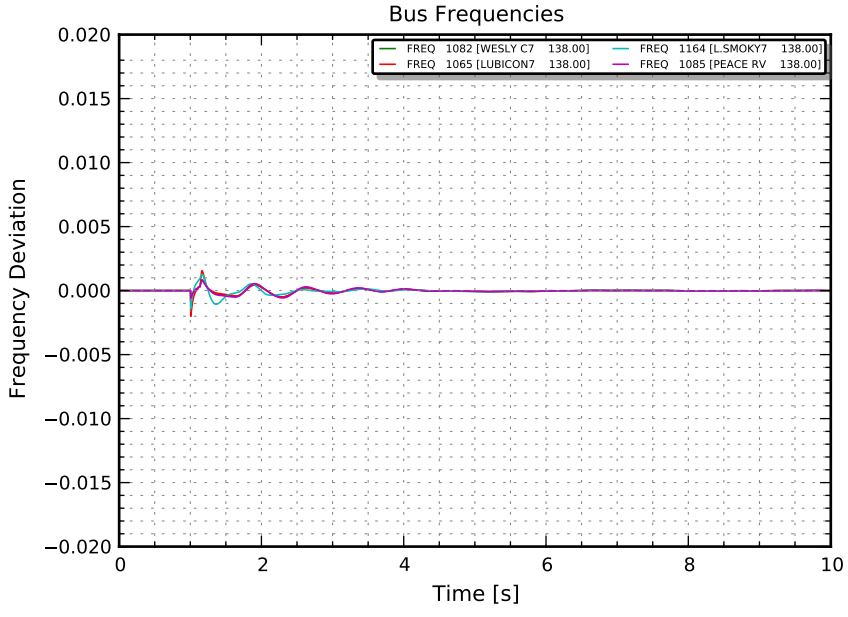


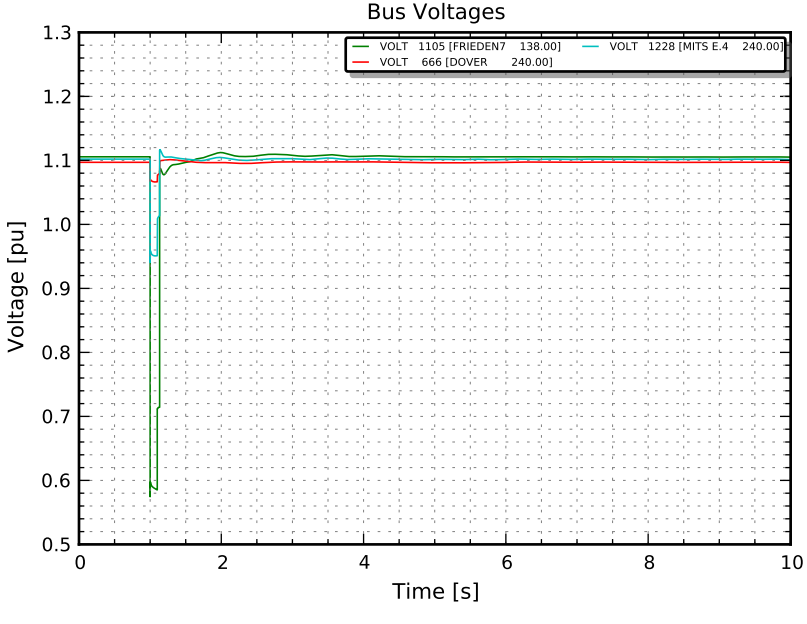
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_A.

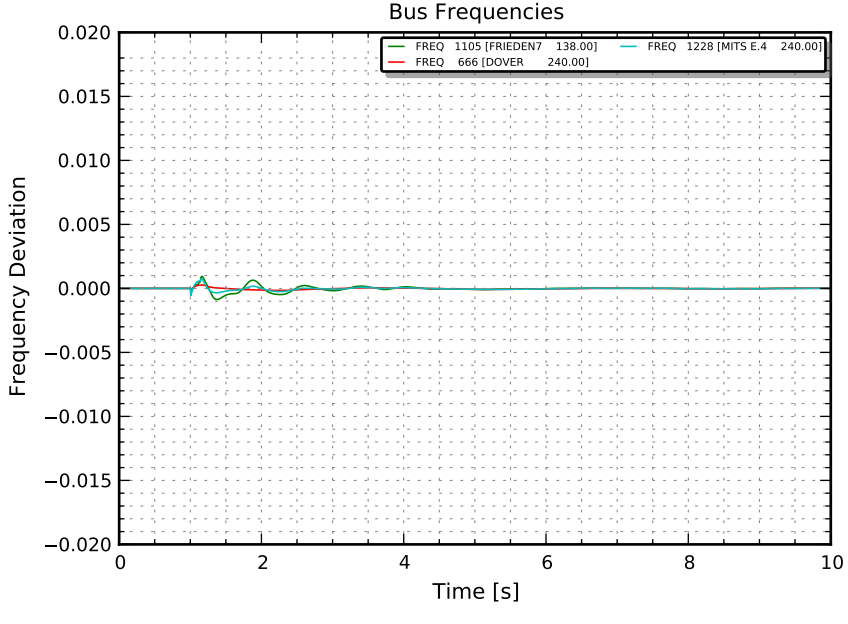
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 030 (A. 1)





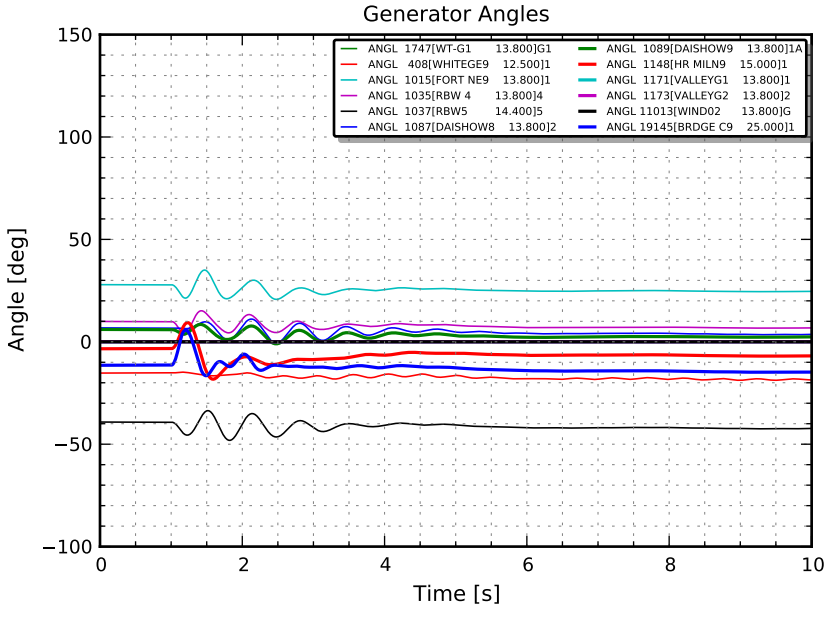


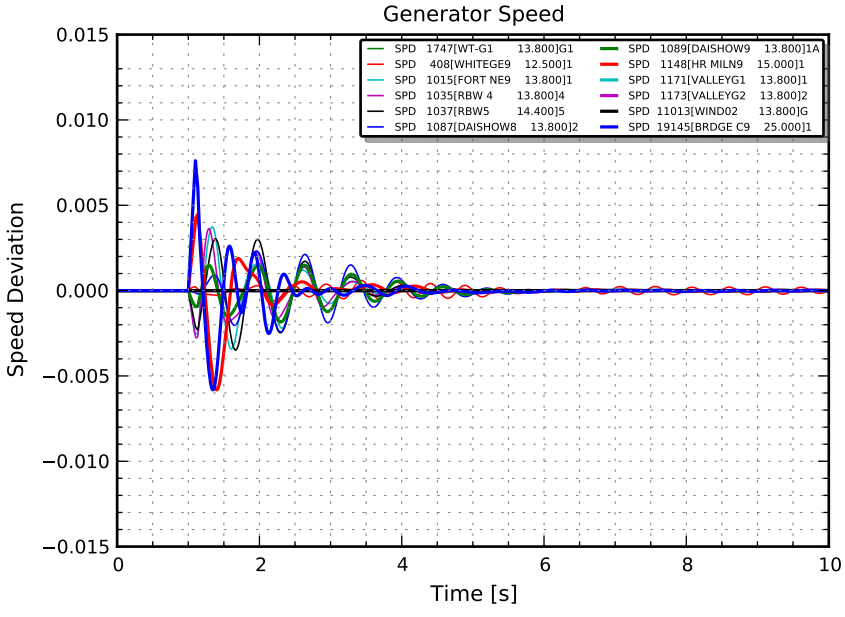


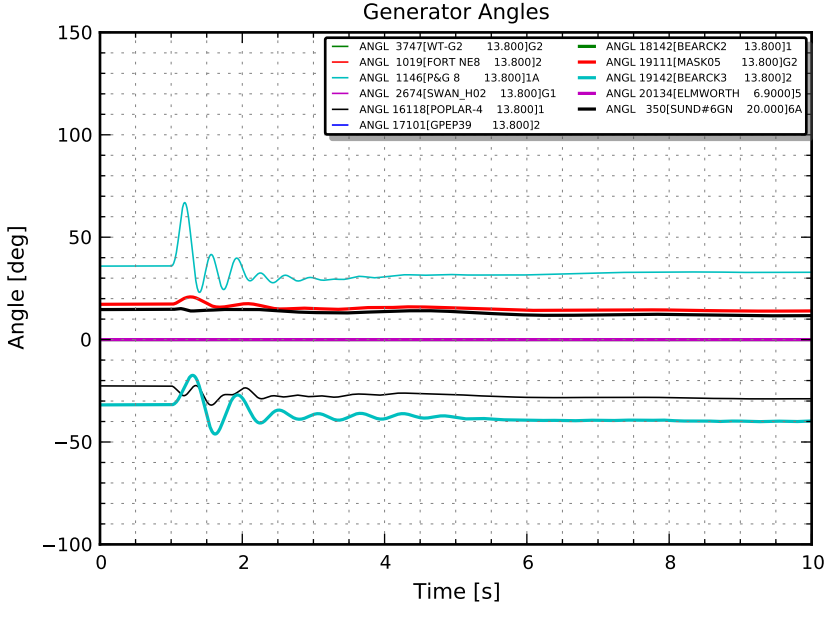
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_A.

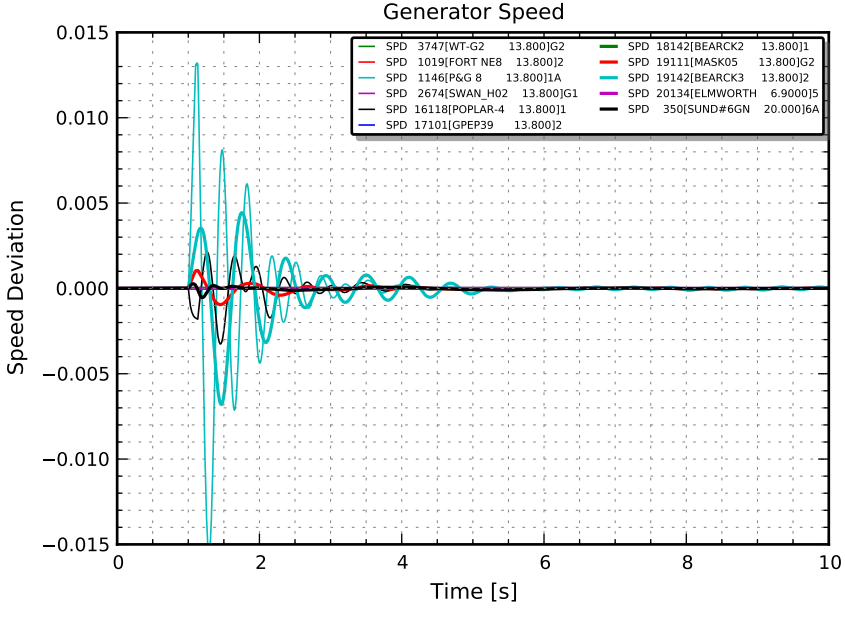
Study Area Generators

Appendix C2B
Figure: 030 (A. 2)





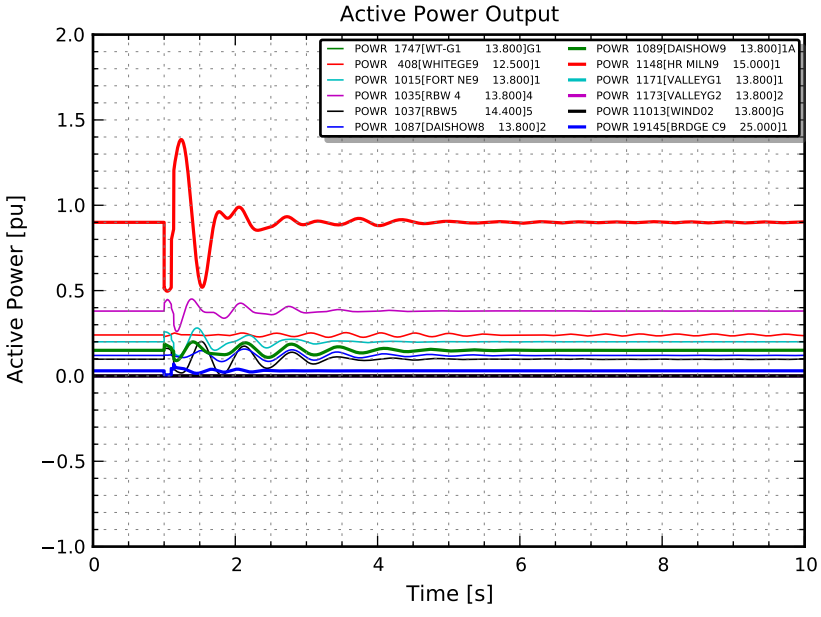


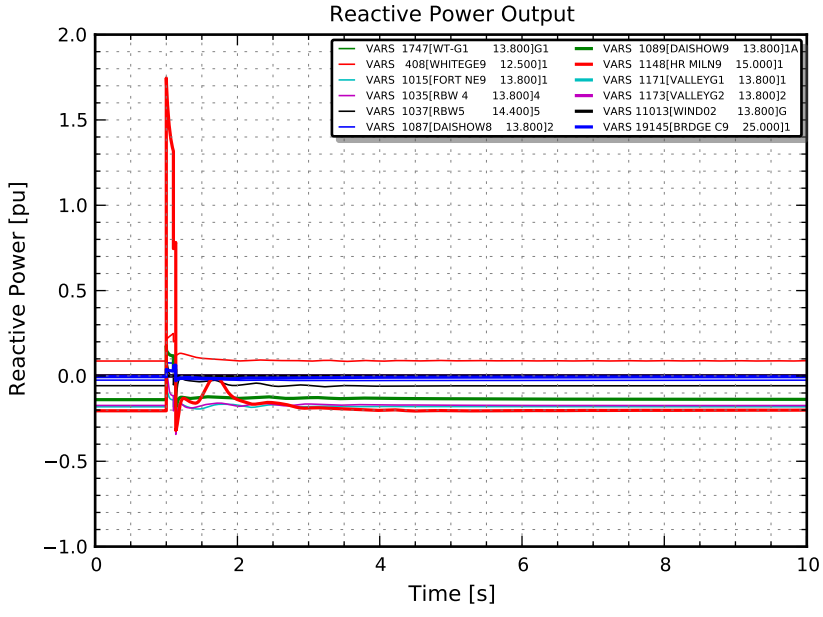


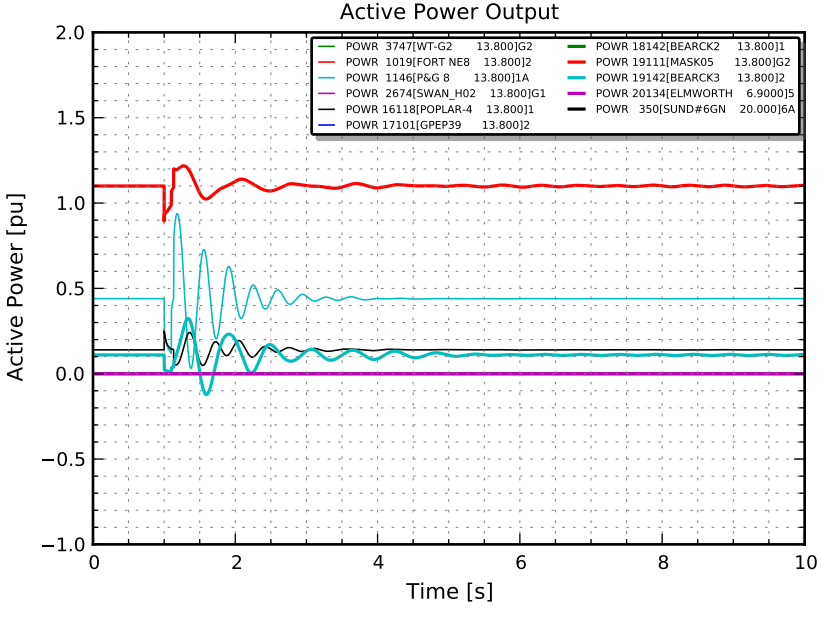
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_A.

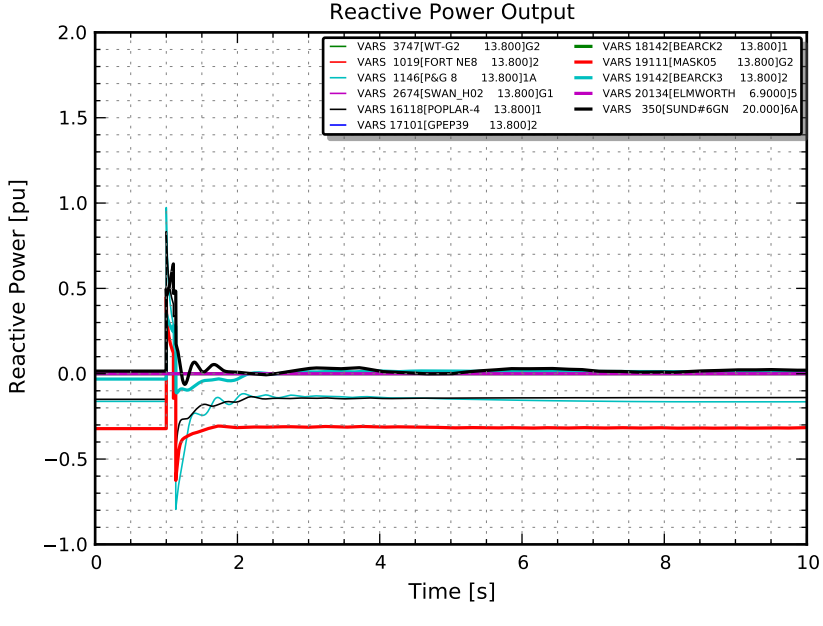
Study Area Generators

Appendix C2B
Figure: 030 (A. 3)





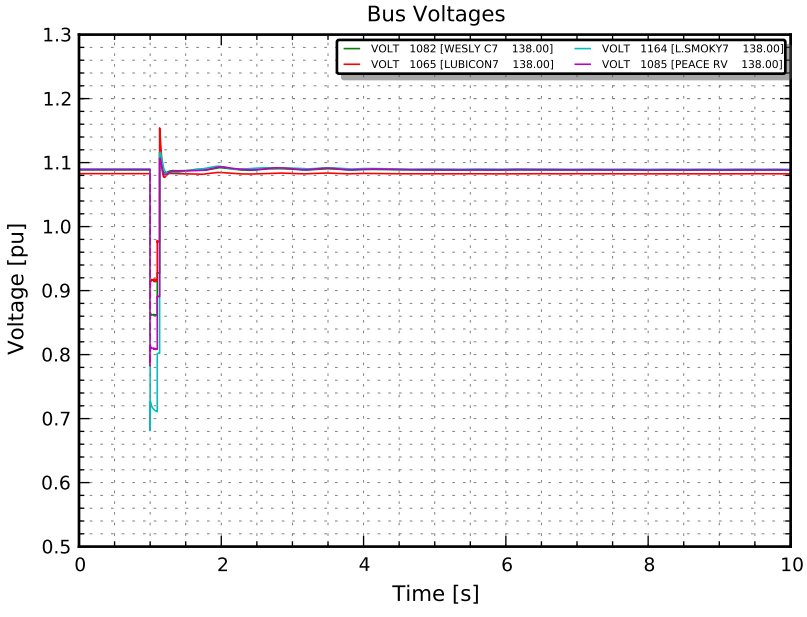


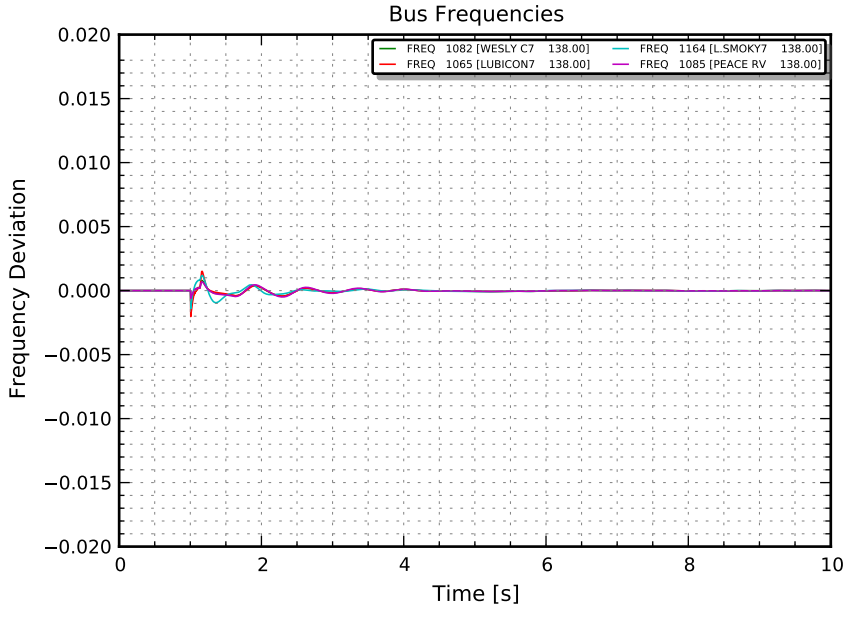


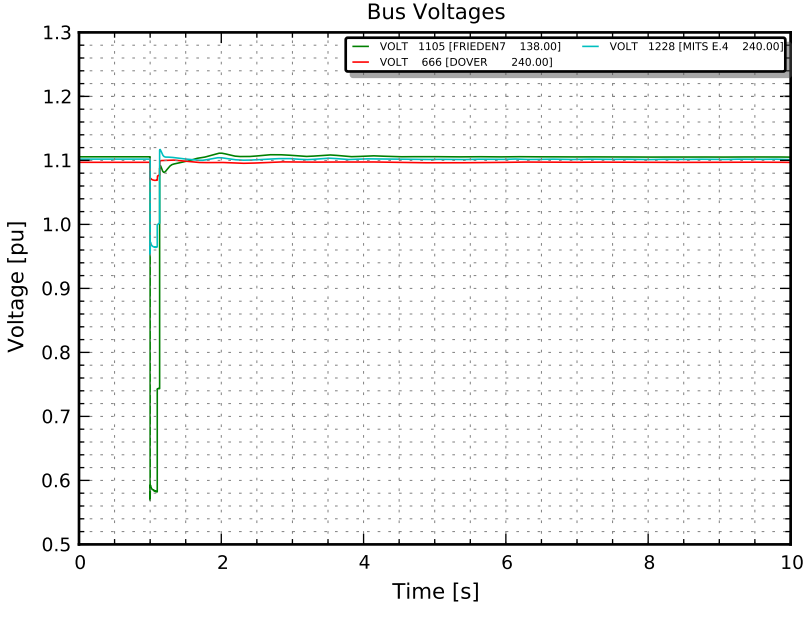
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_B.

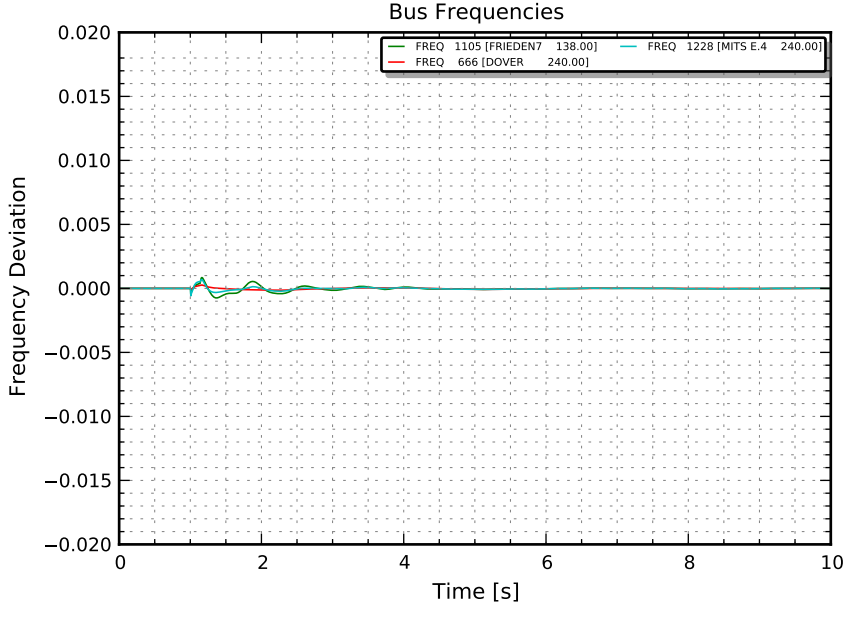
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 030 (B. 1)





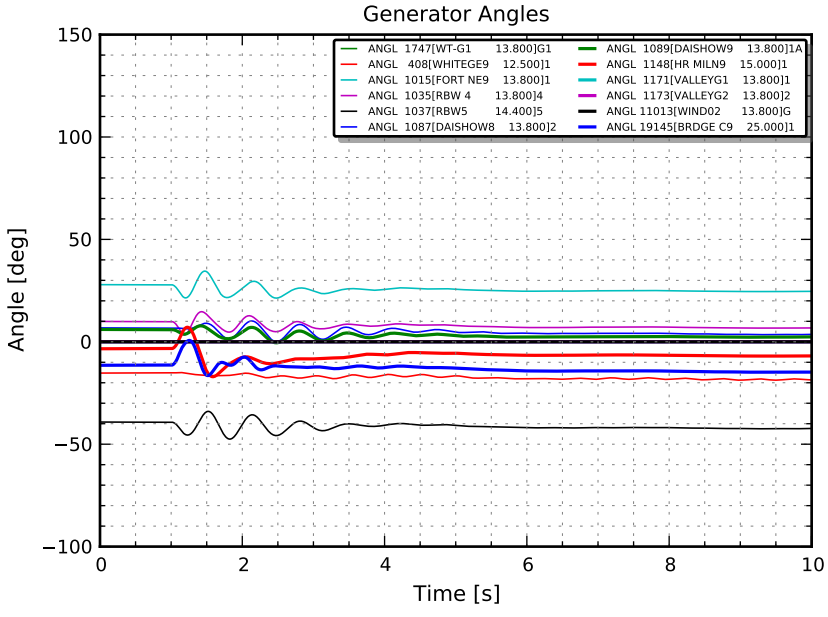


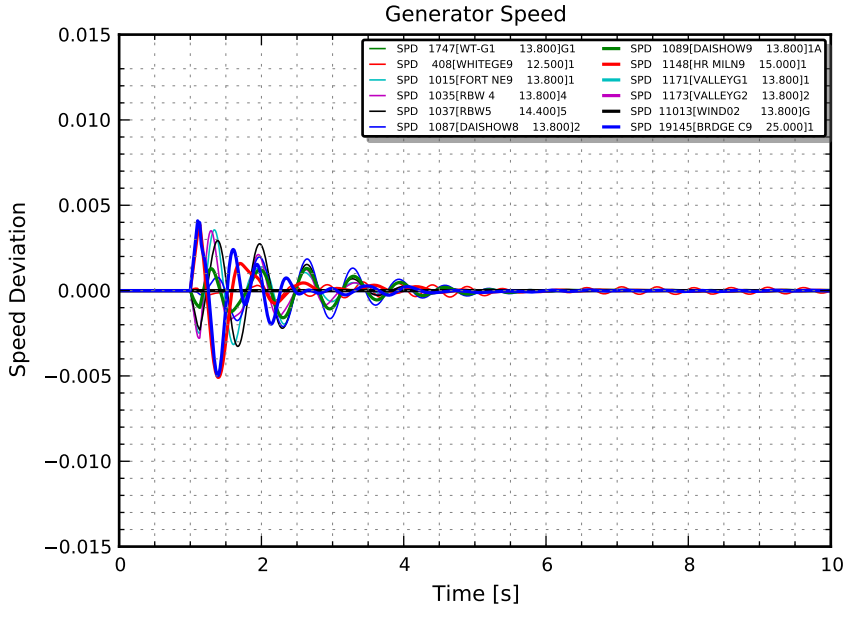


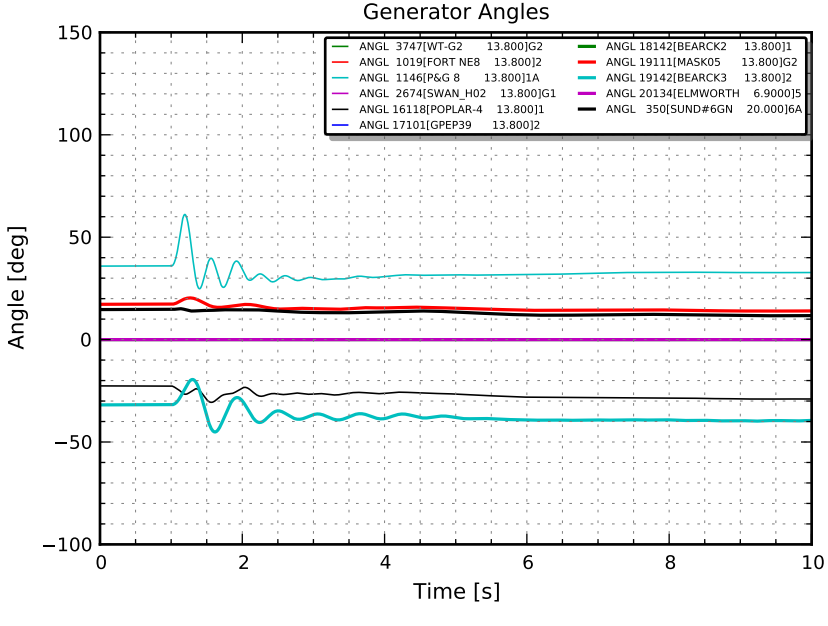
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_B.

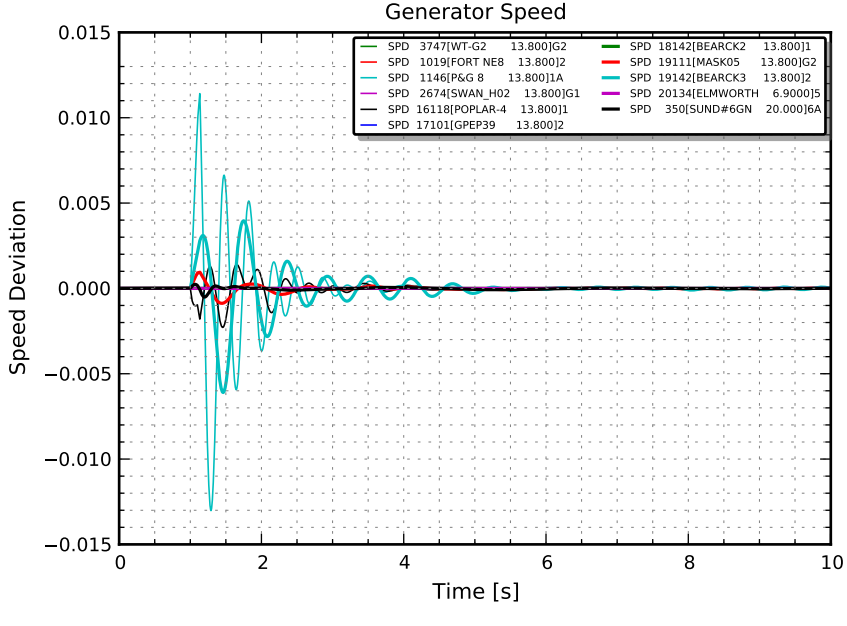
Study Area Generators

Appendix C2B
Figure: 030 (B. 2)





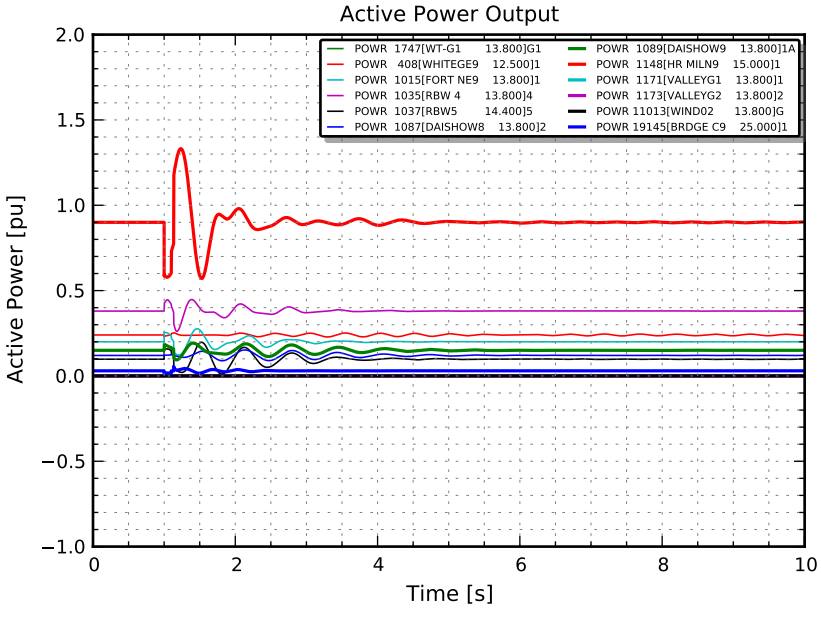


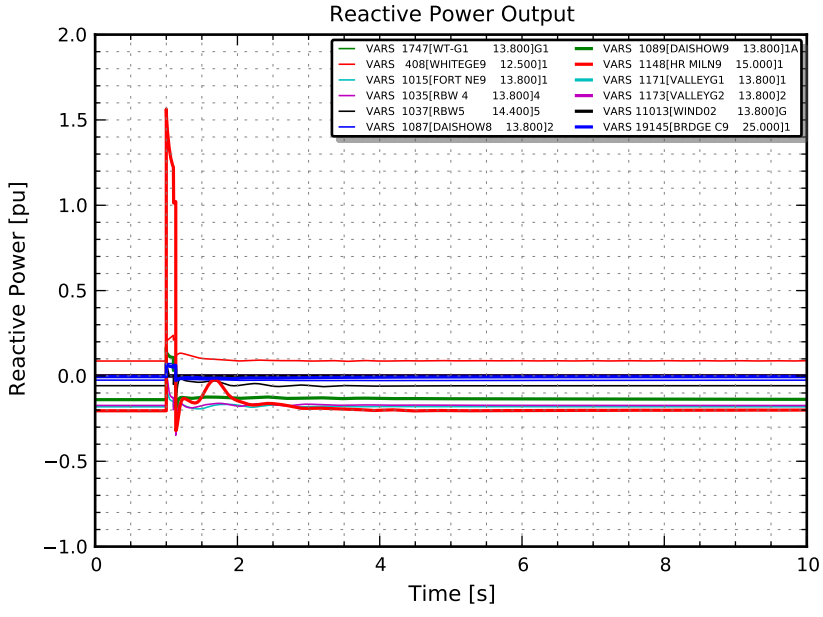


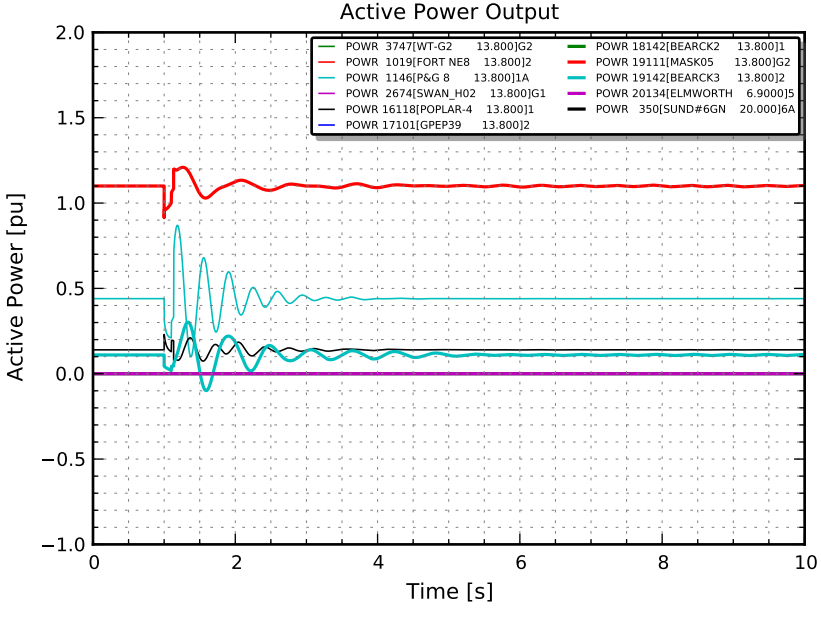
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_B.

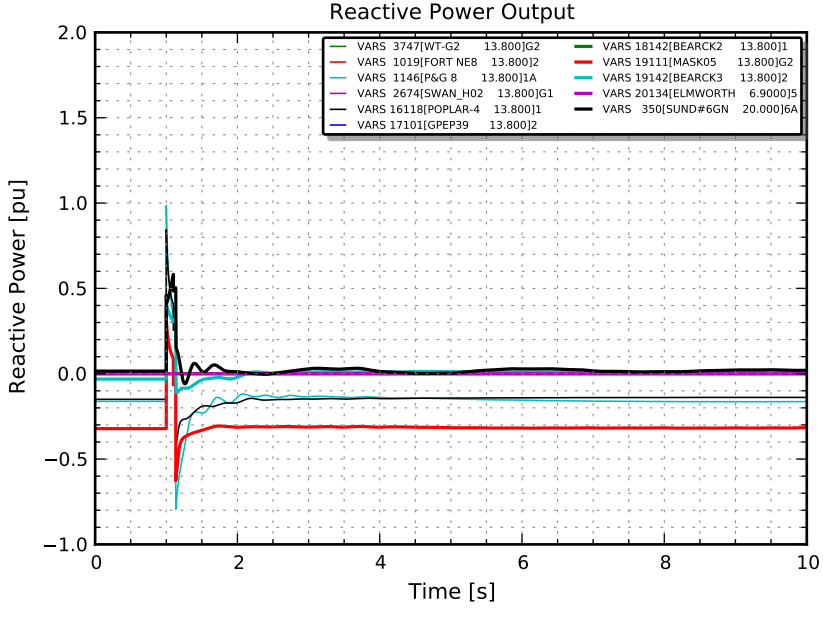
Study Area Generators

Appendix C2B
Figure: 030 (B. 3)





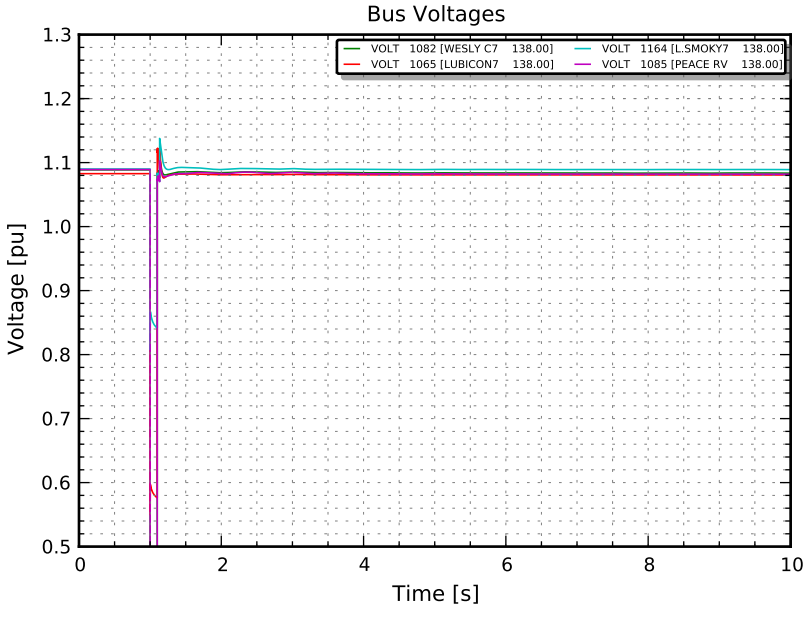


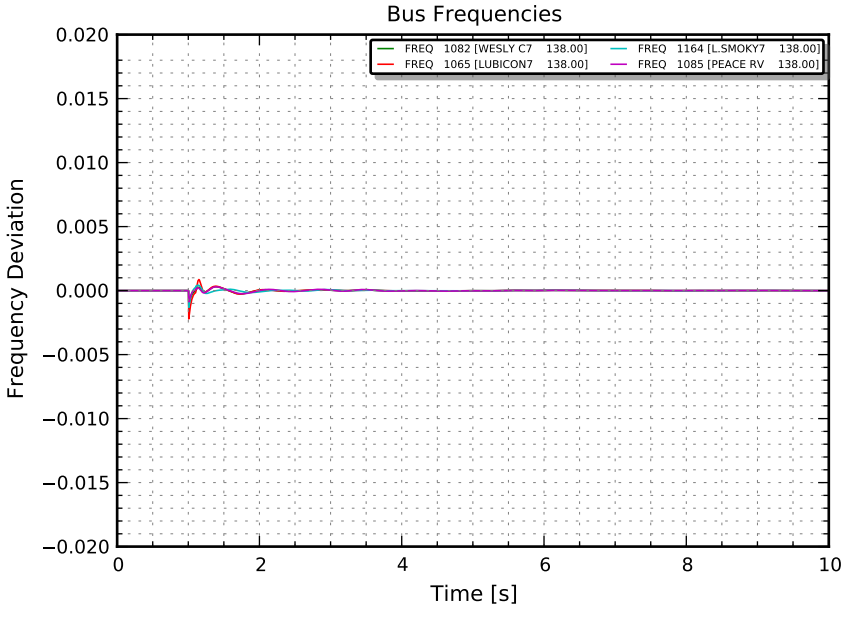


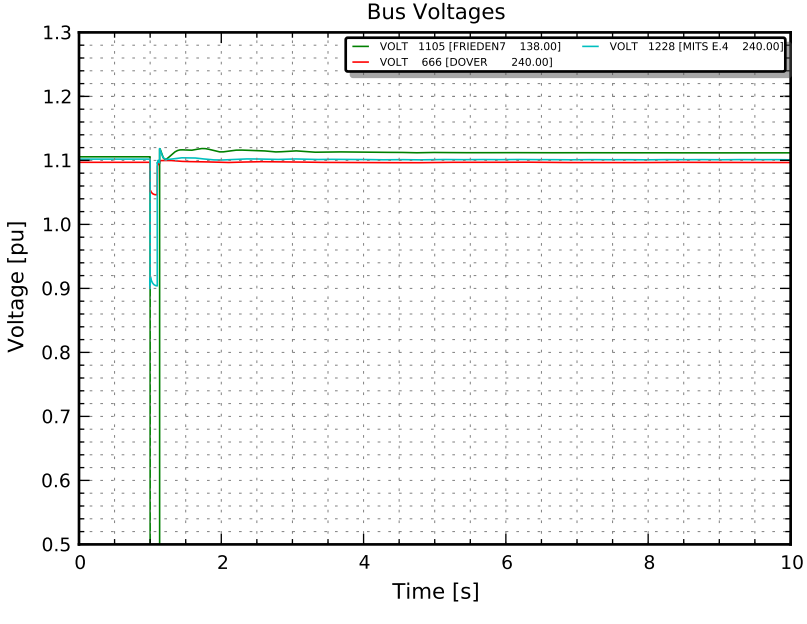
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_A.

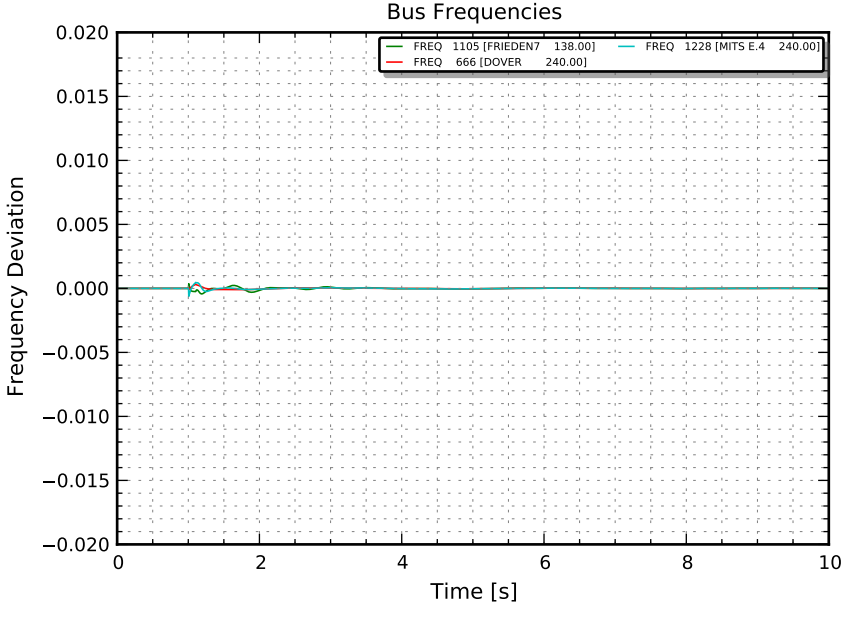
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 031 (A. 1)





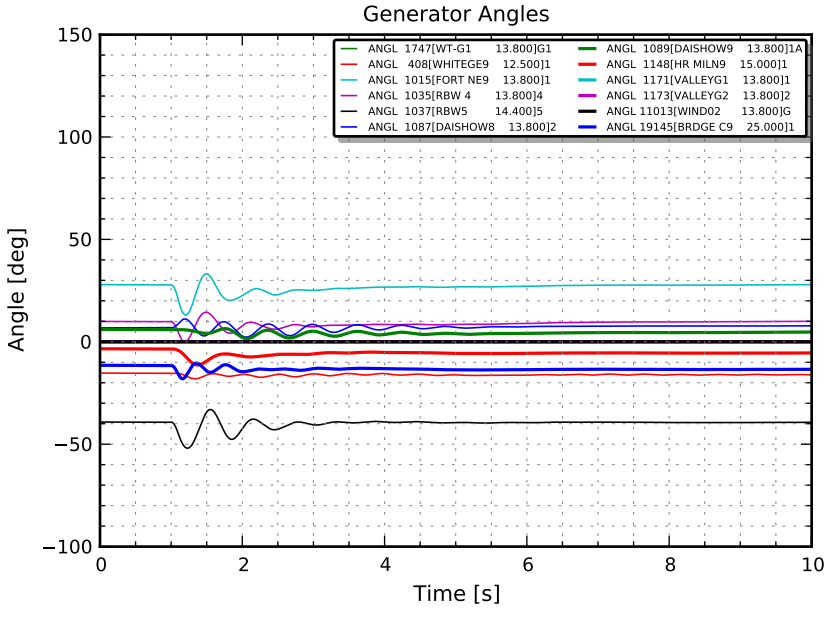


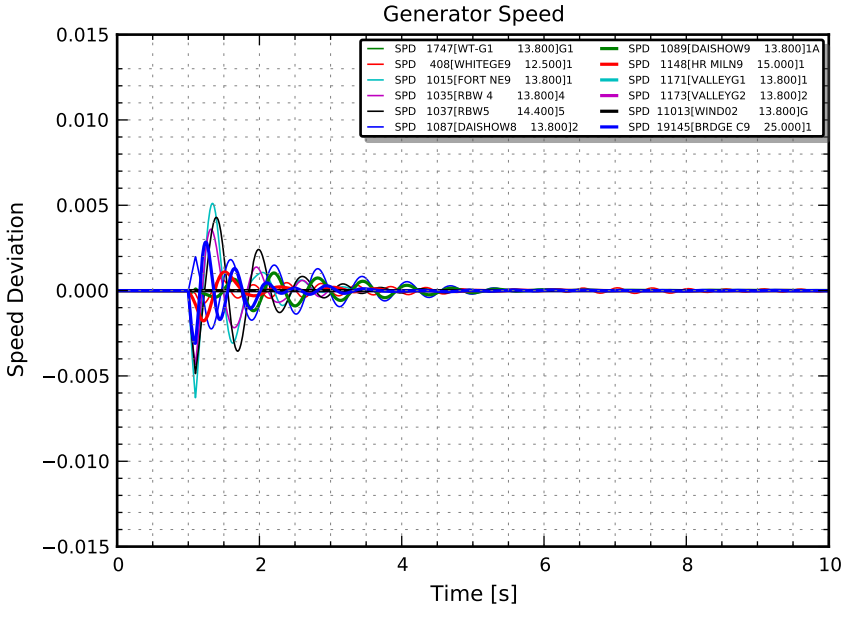


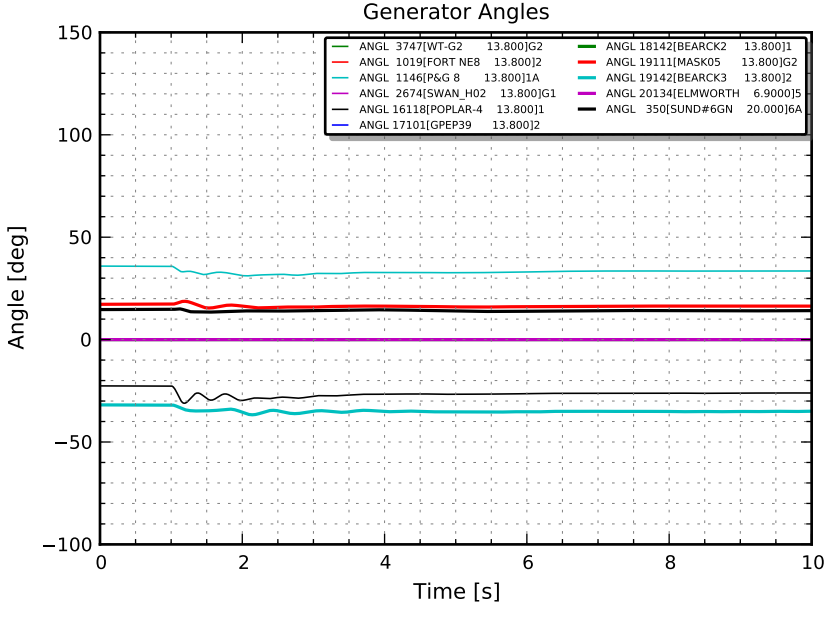
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_A.

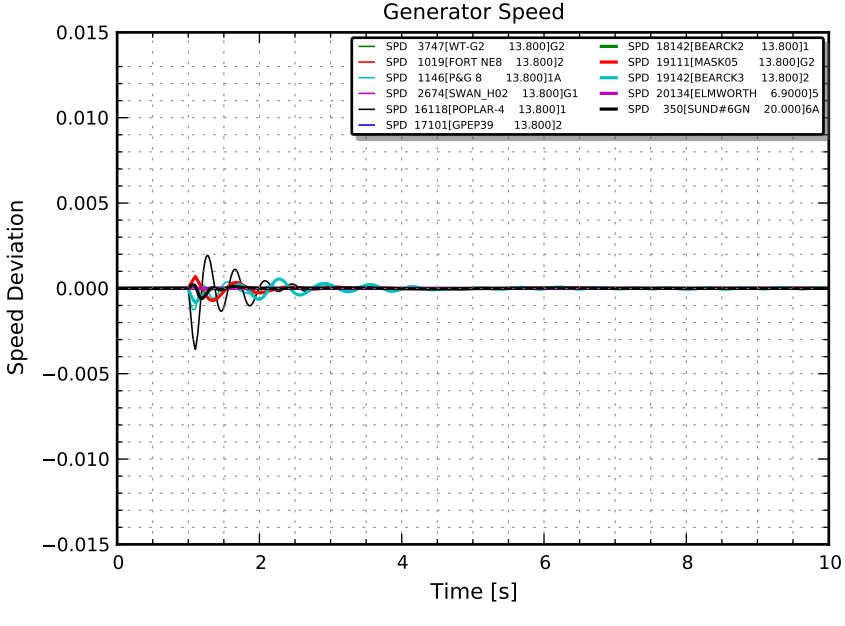
Study Area Generators

Appendix C2B
Figure: 031 (A. 2)





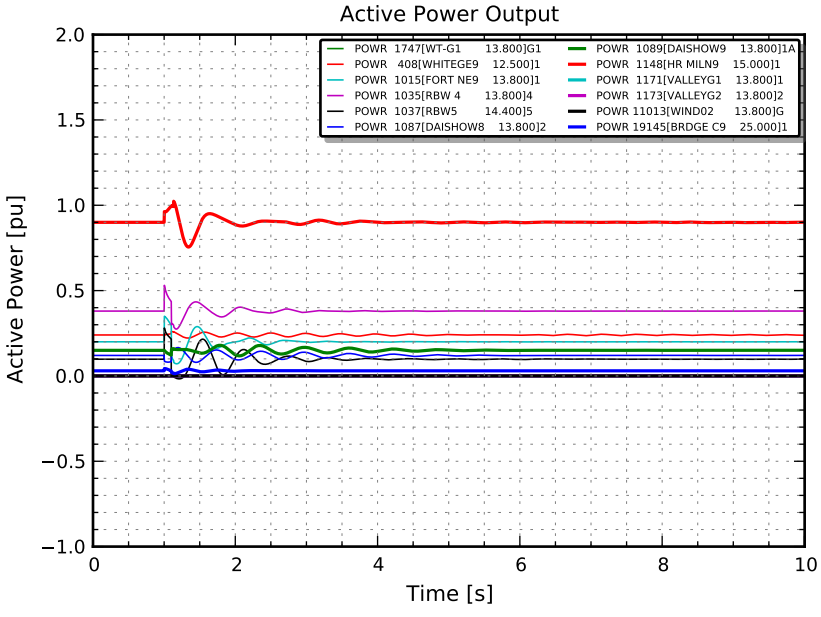


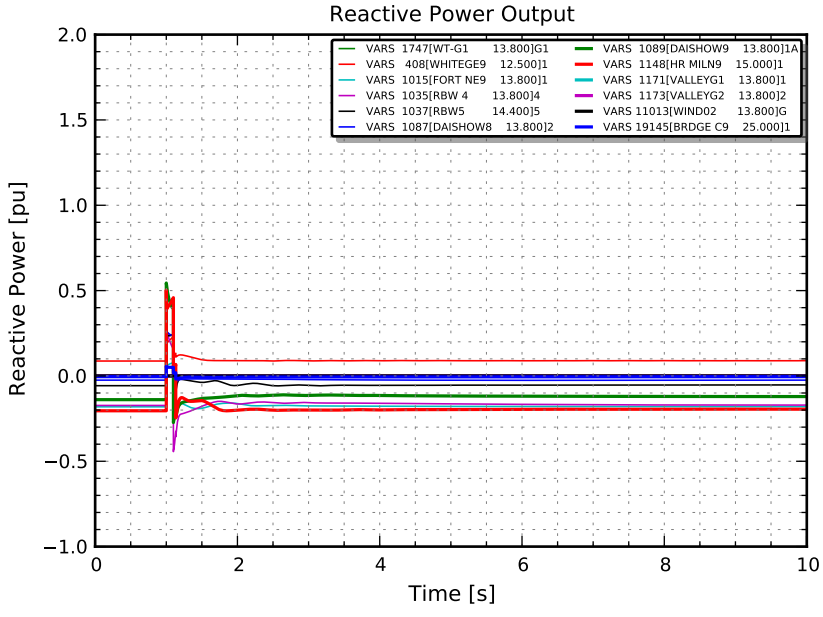


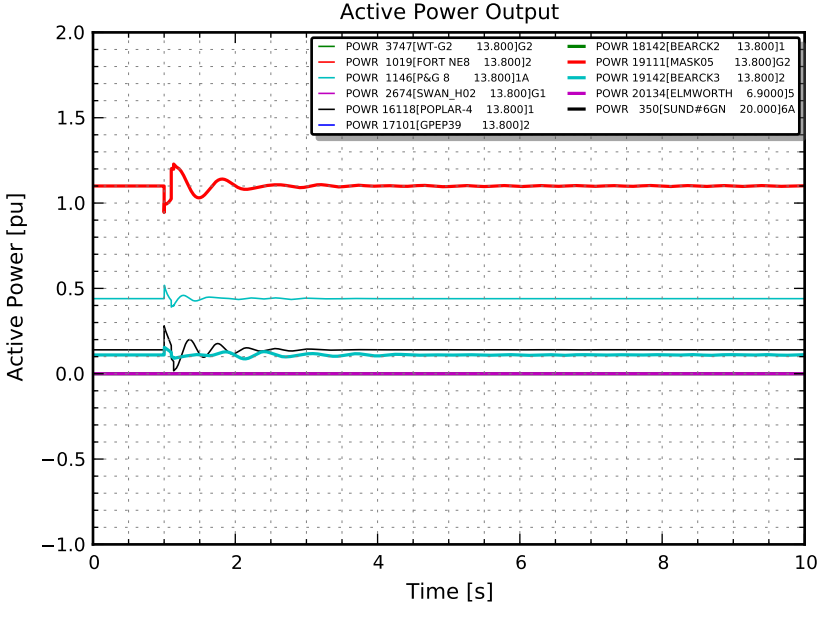
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_A.

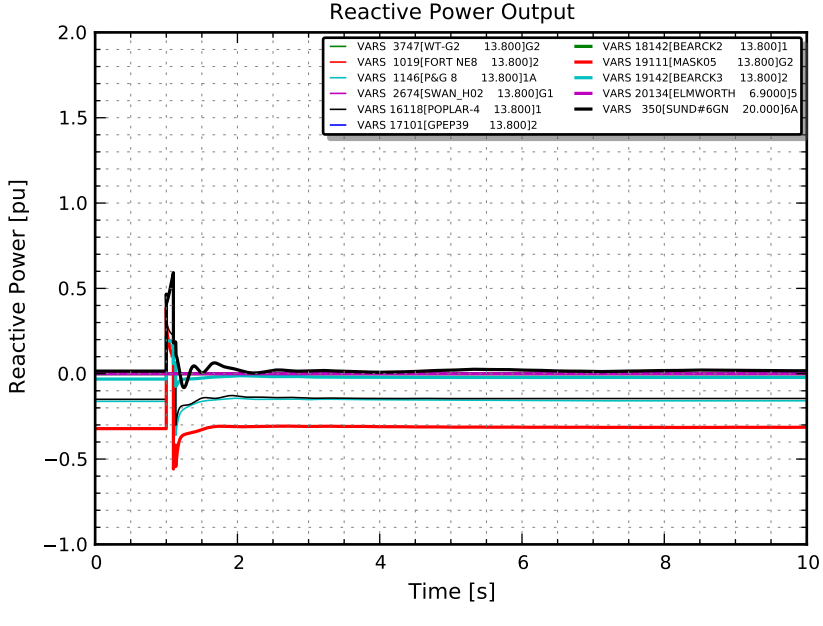
Study Area Generators

Appendix C2B
Figure: 031 (A. 3)





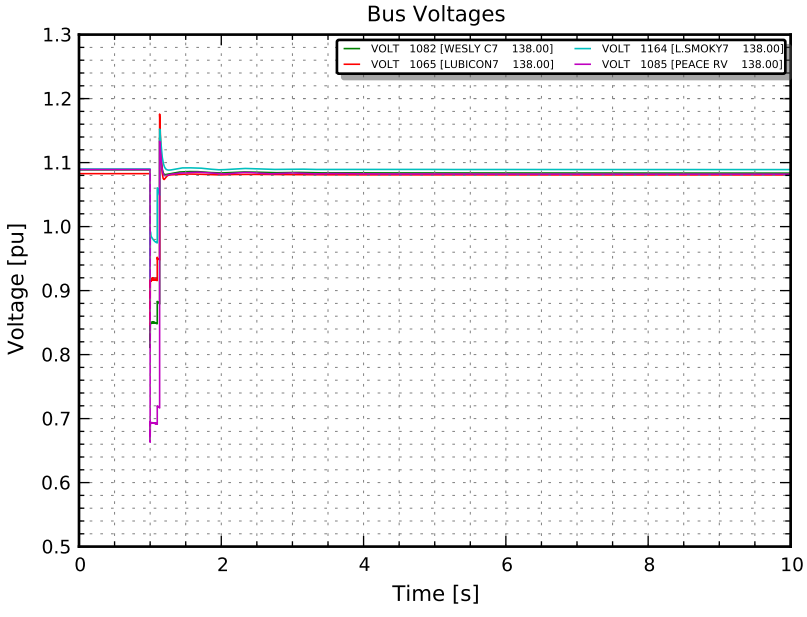


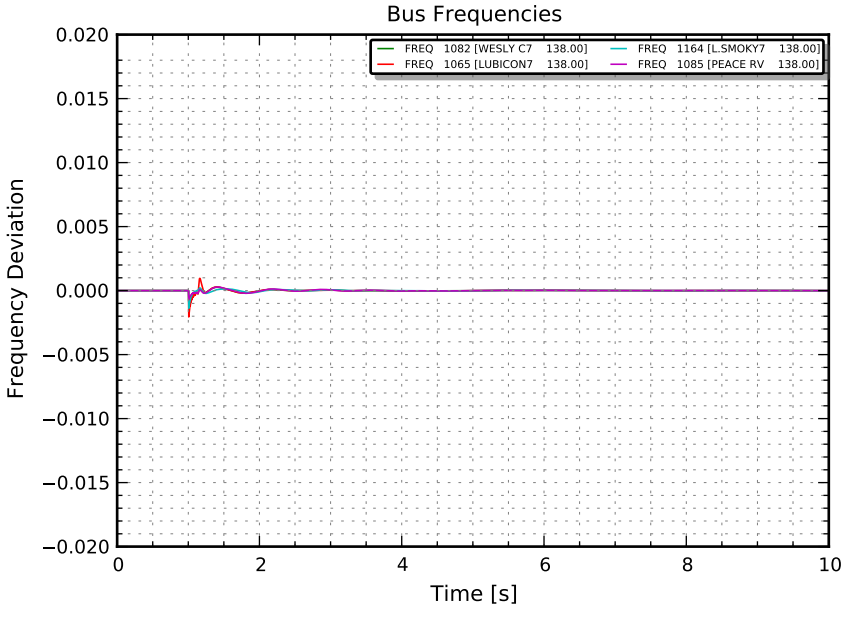


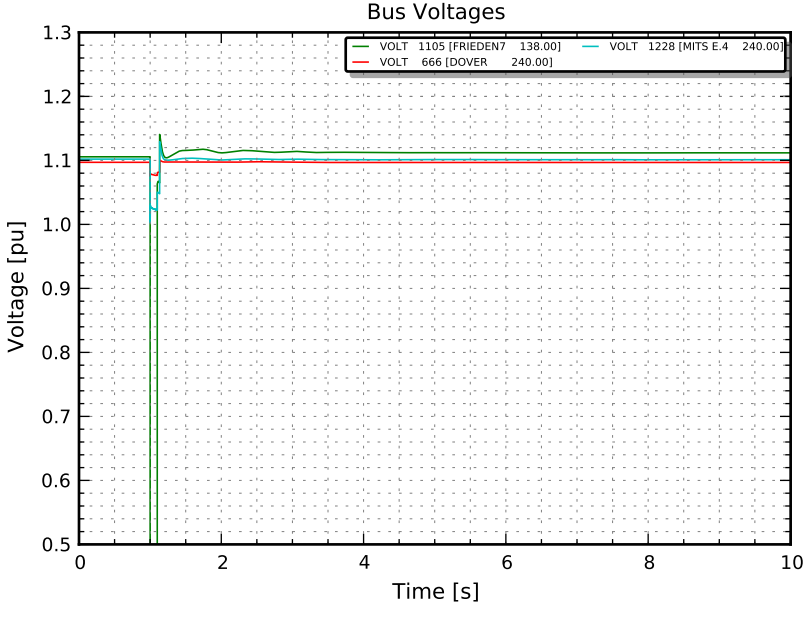
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_B.

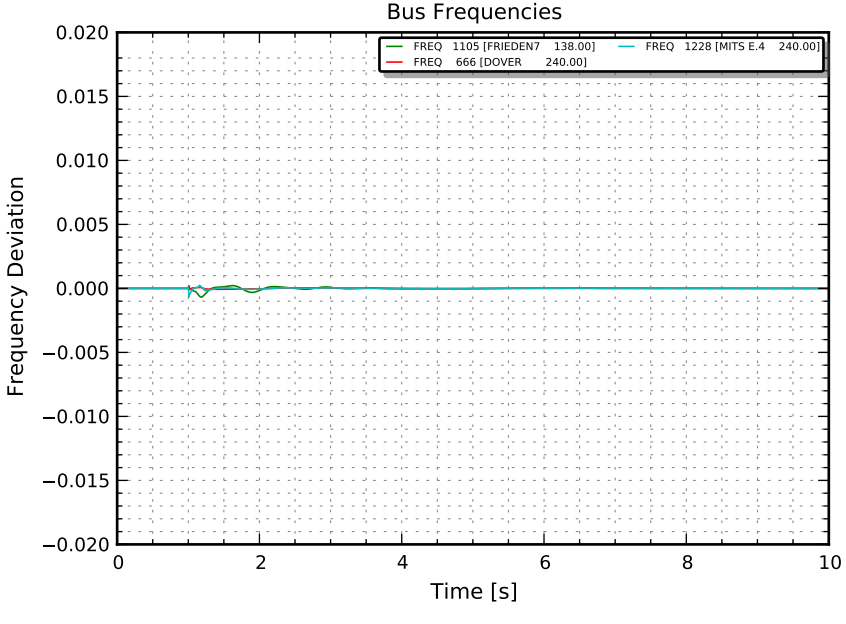
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 031 (B. 1)





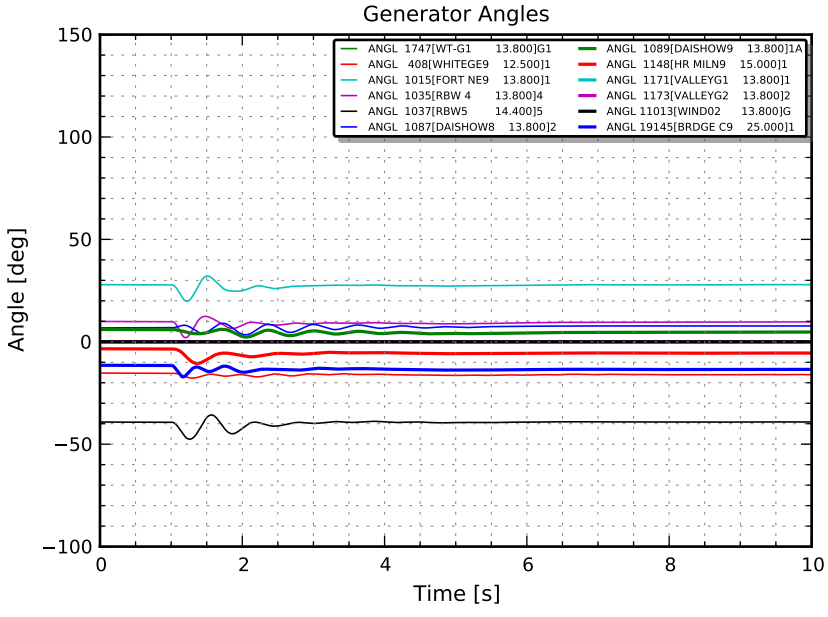


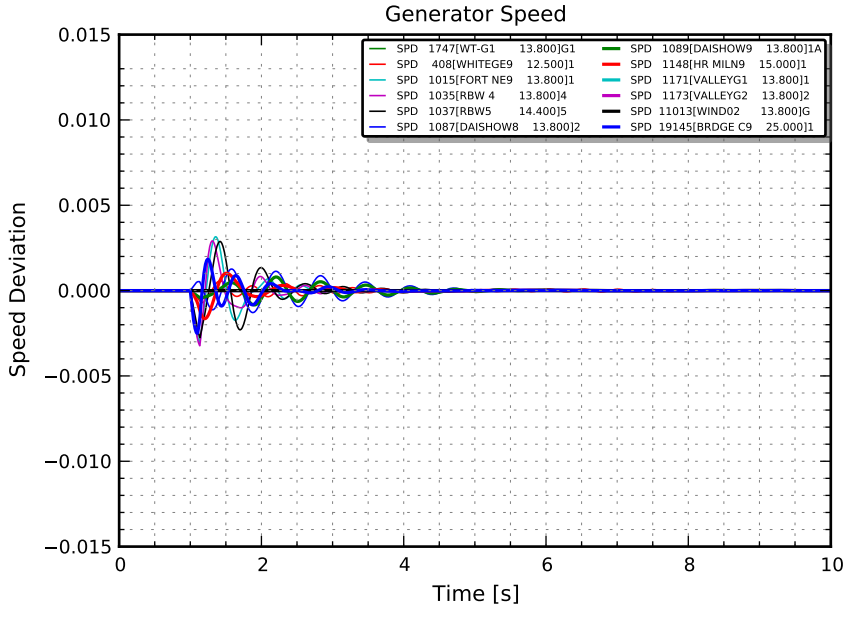


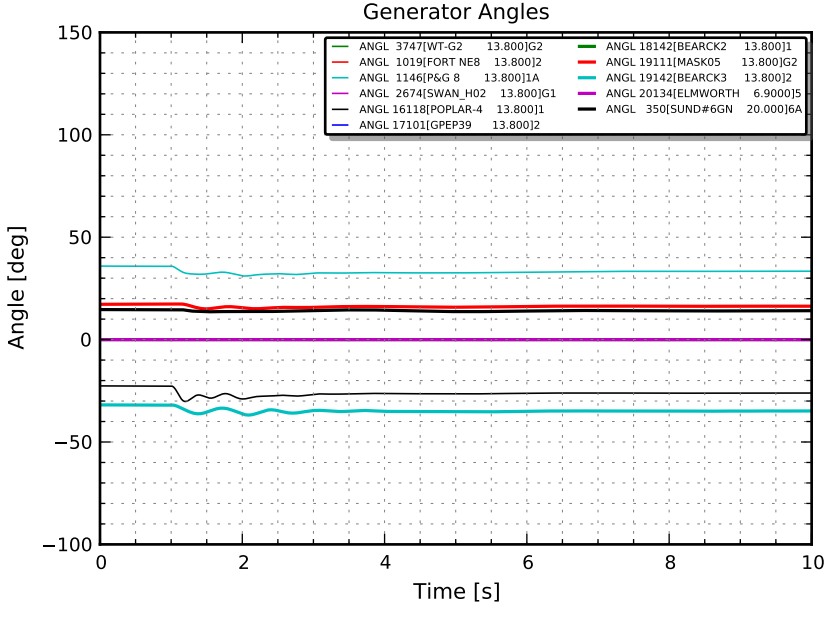
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_B.

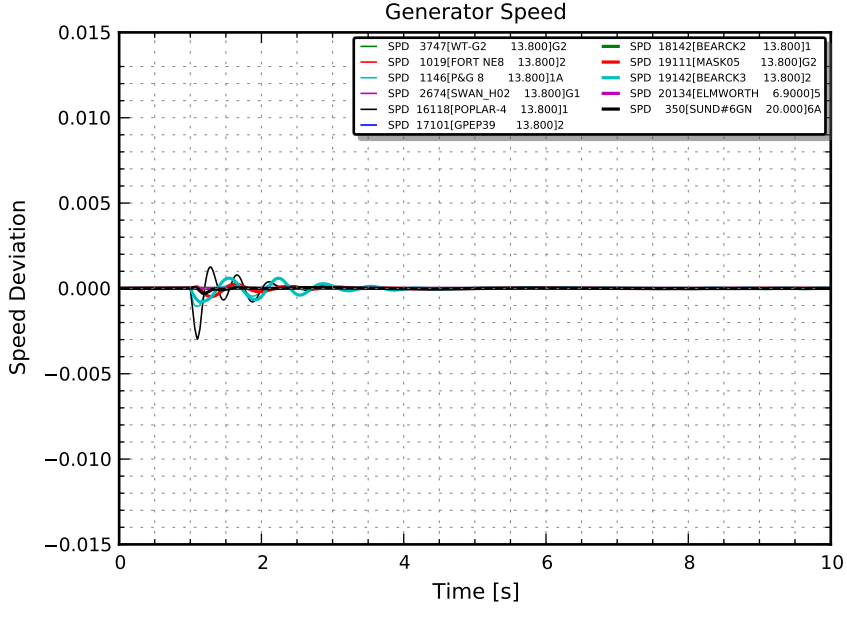
Study Area Generators

Appendix C2B
Figure: 031 (B. 2)





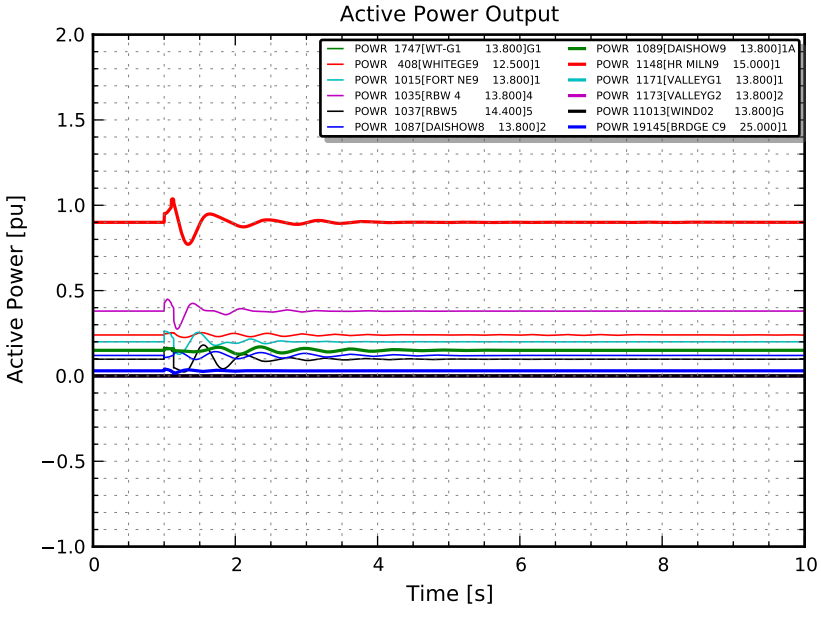


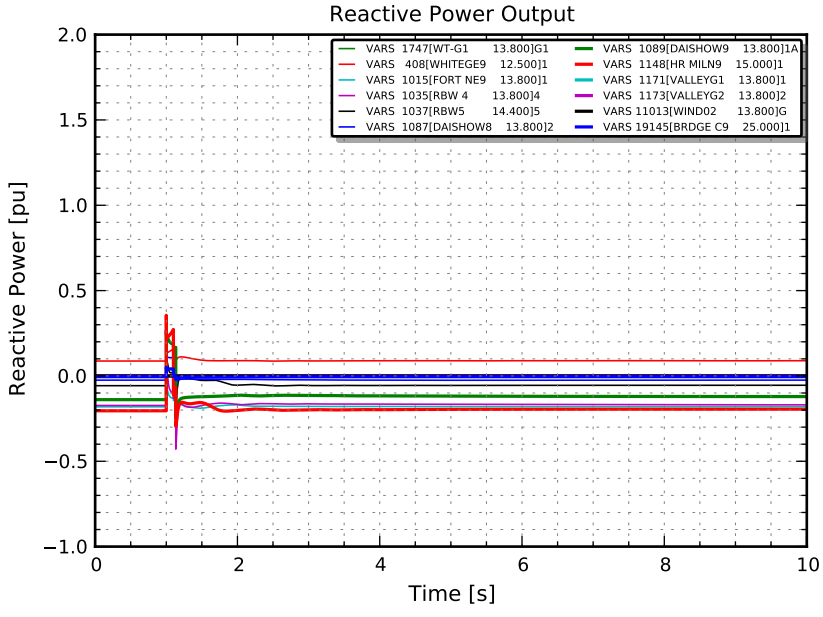


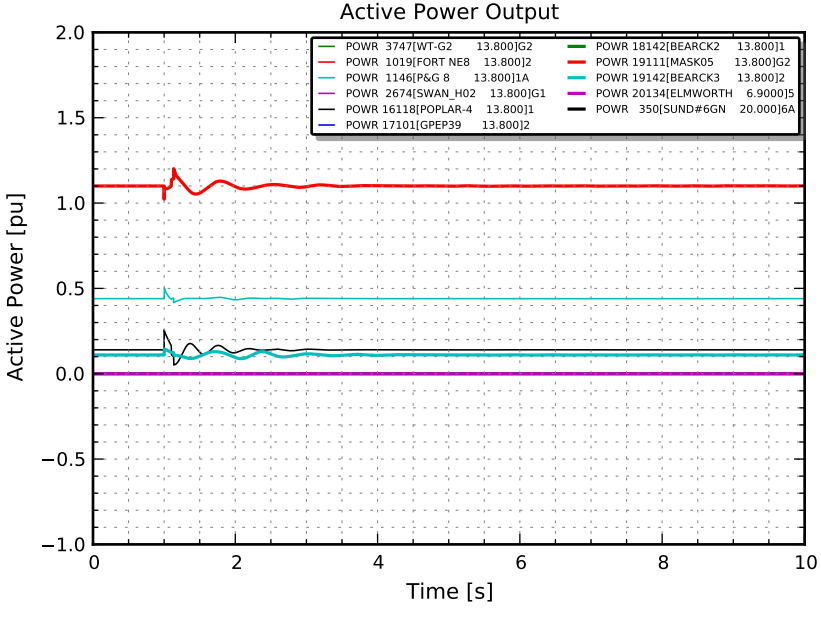
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_B.

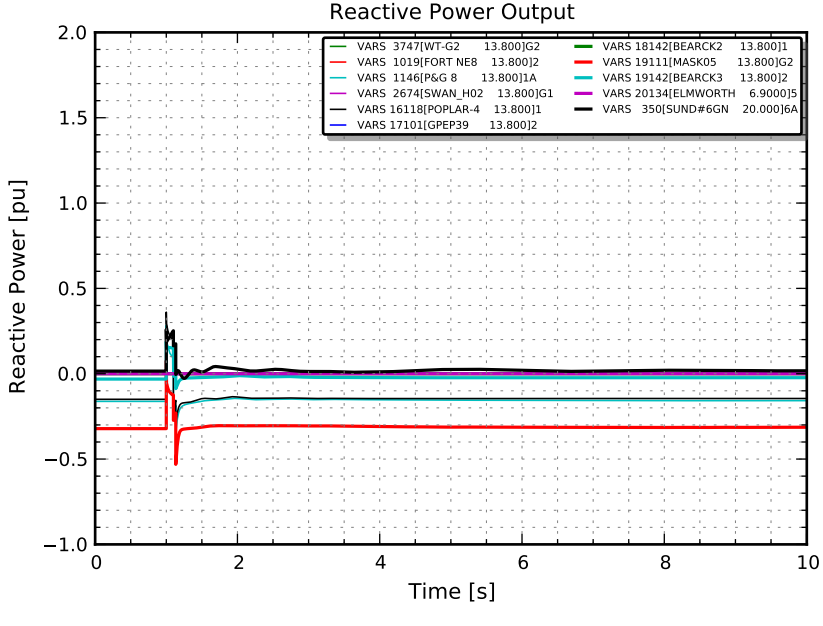
Study Area Generators

Appendix C2B
Figure: 031 (B. 3)





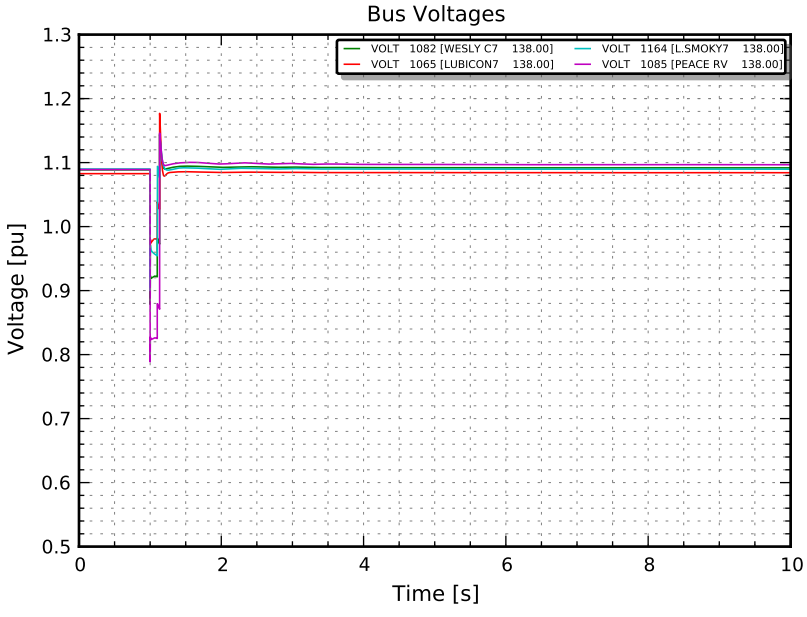


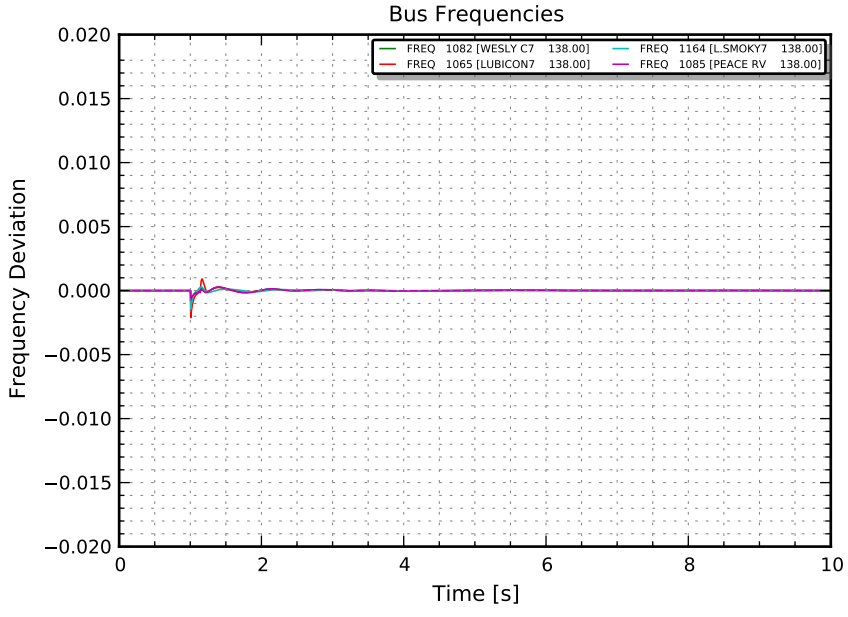


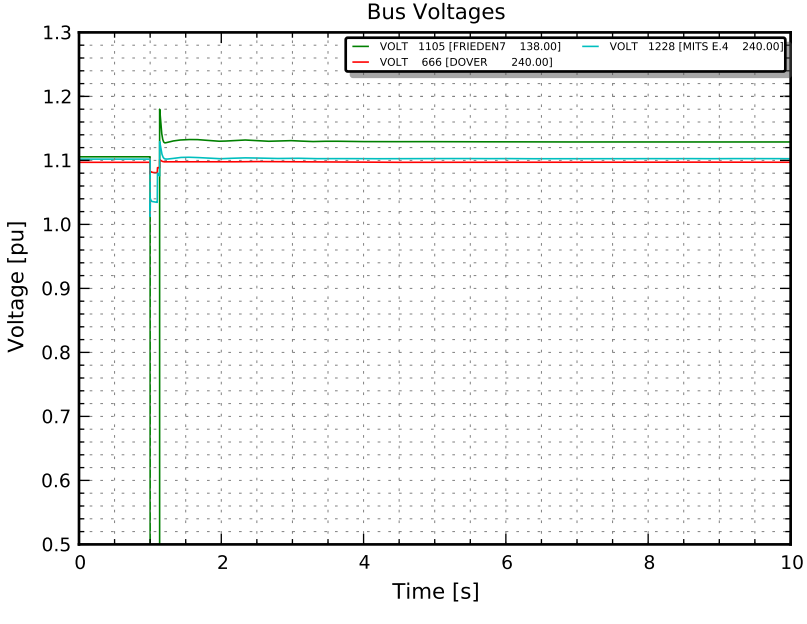
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 032 7L73 RYCROFT to FRIEDENSTAL_A.

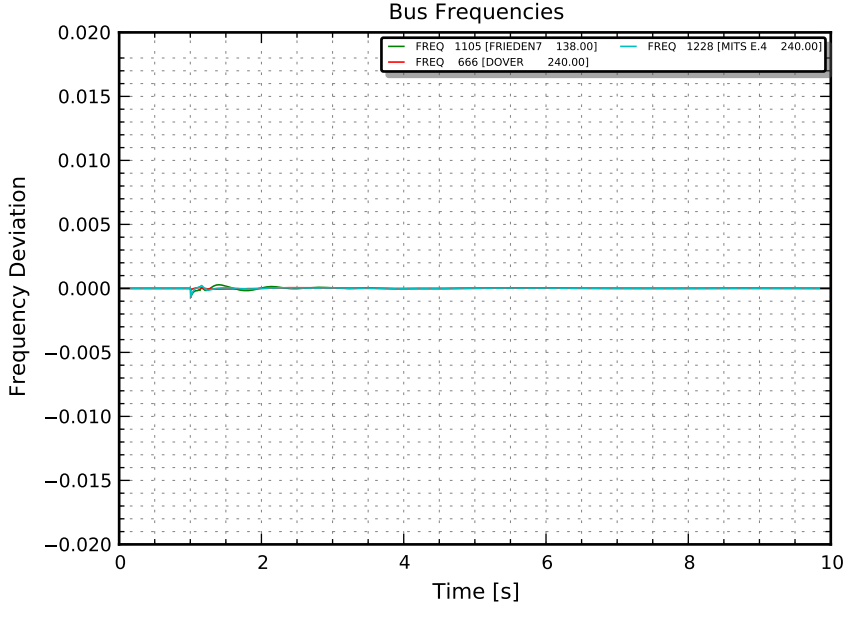
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 032 (A. 1)





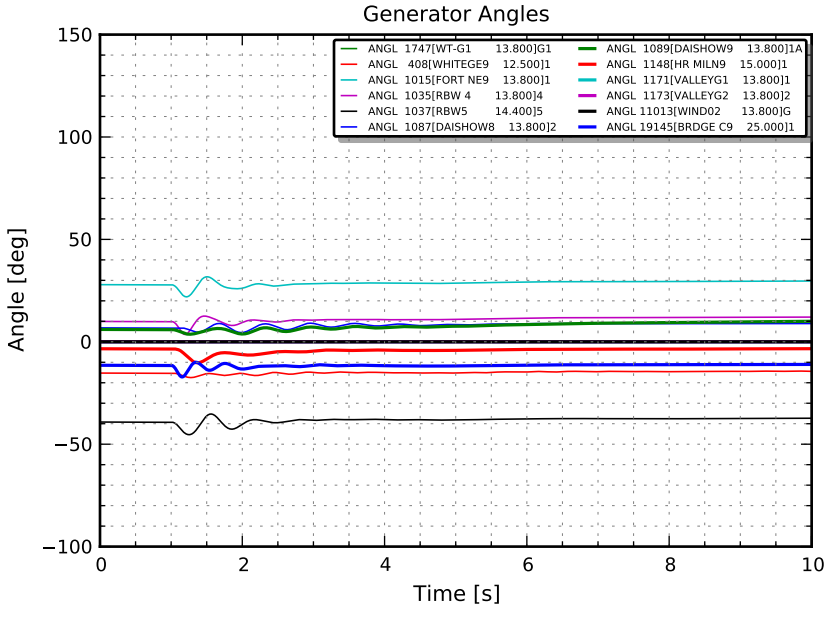


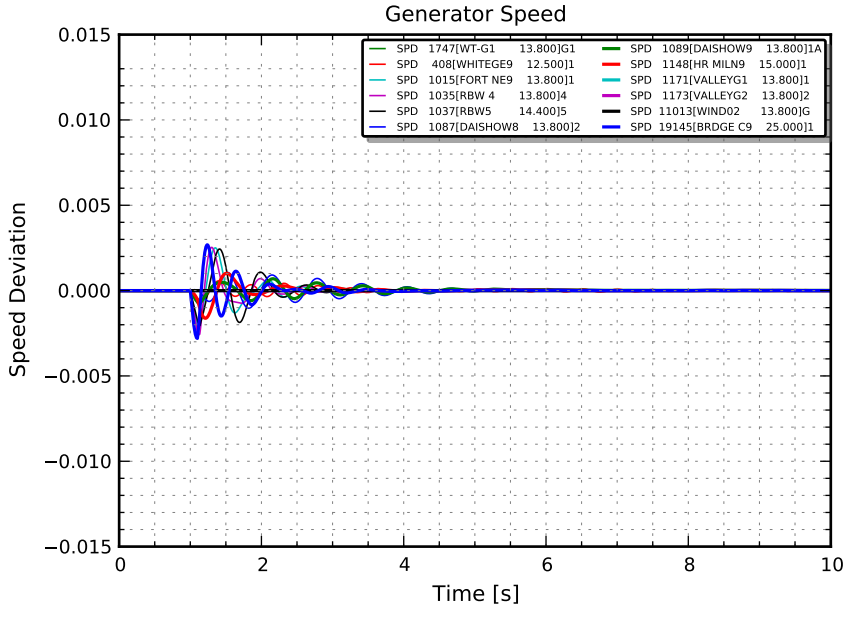


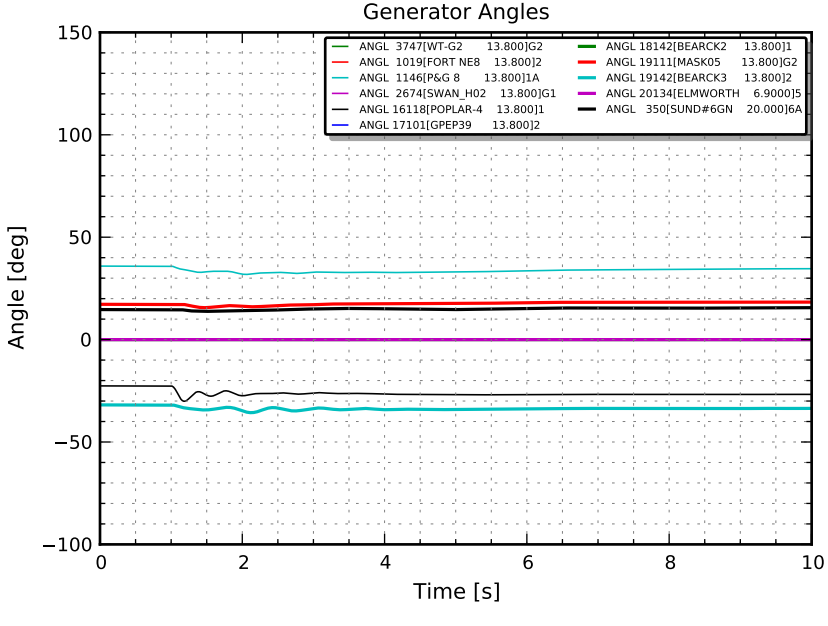
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 032 7L73 RYCROFT to FRIEDENSTAL_A.

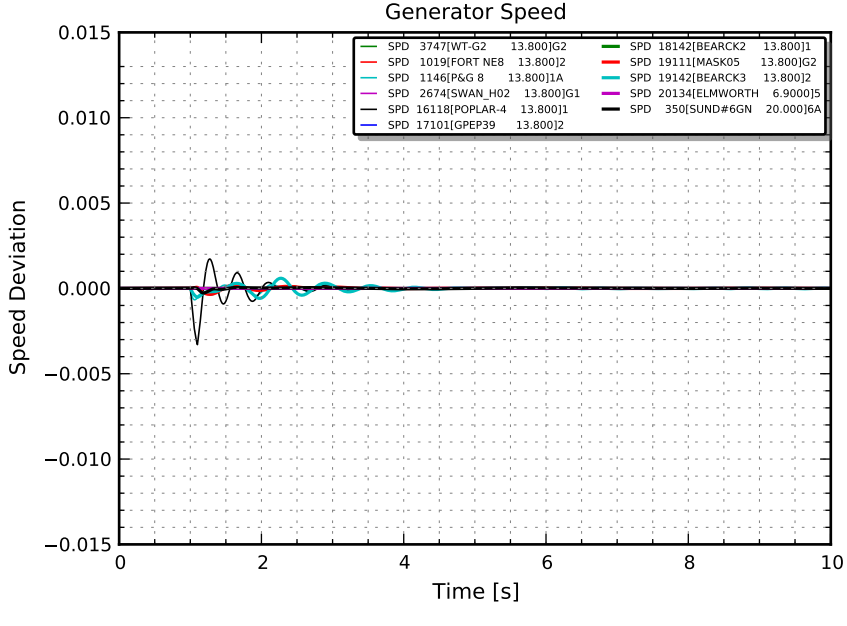
Study Area Generators

Appendix C2B
Figure: 032 (A. 2)





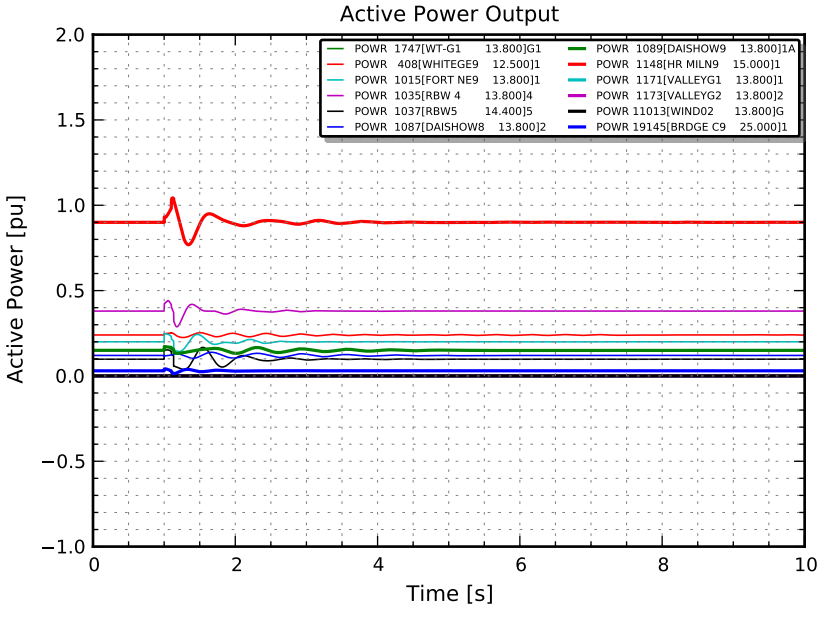


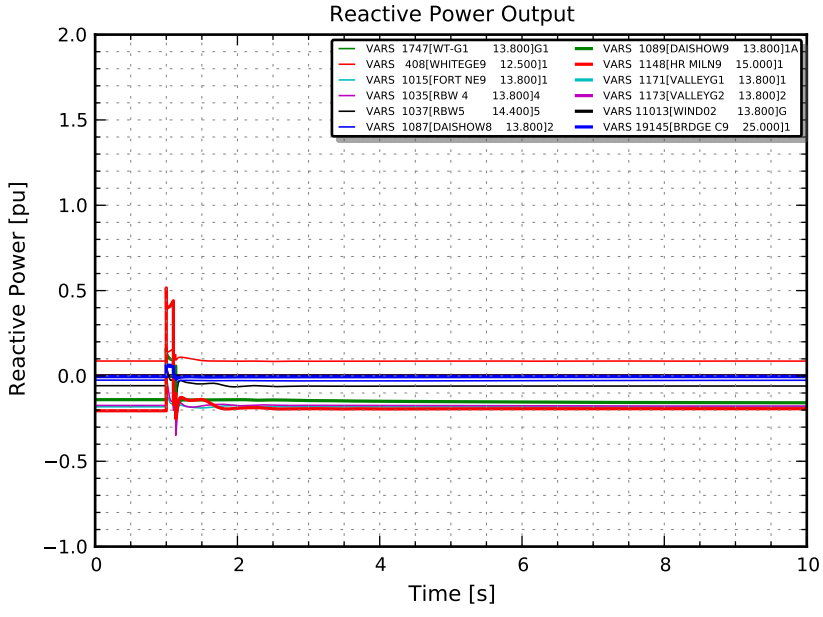


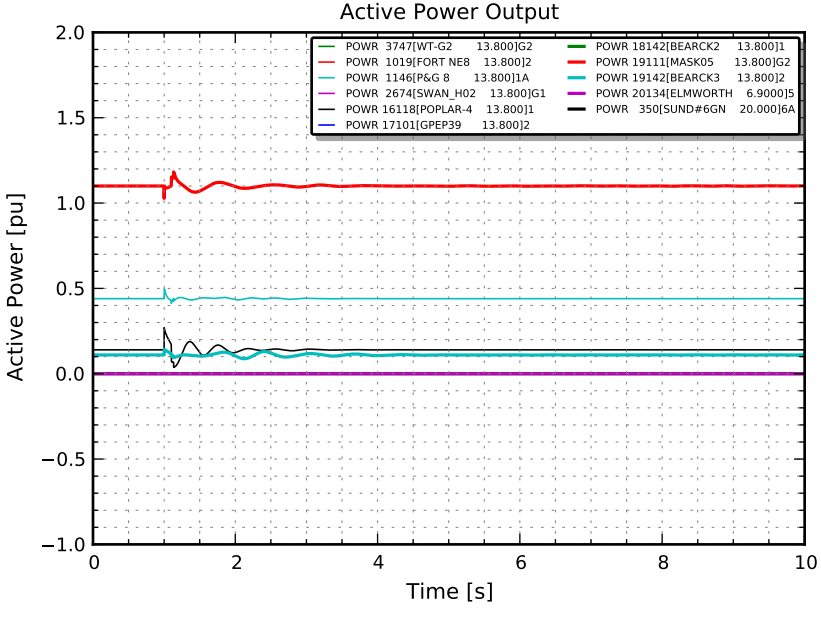
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 032 7L73 RYCROFT to FRIEDENSTAL_A.

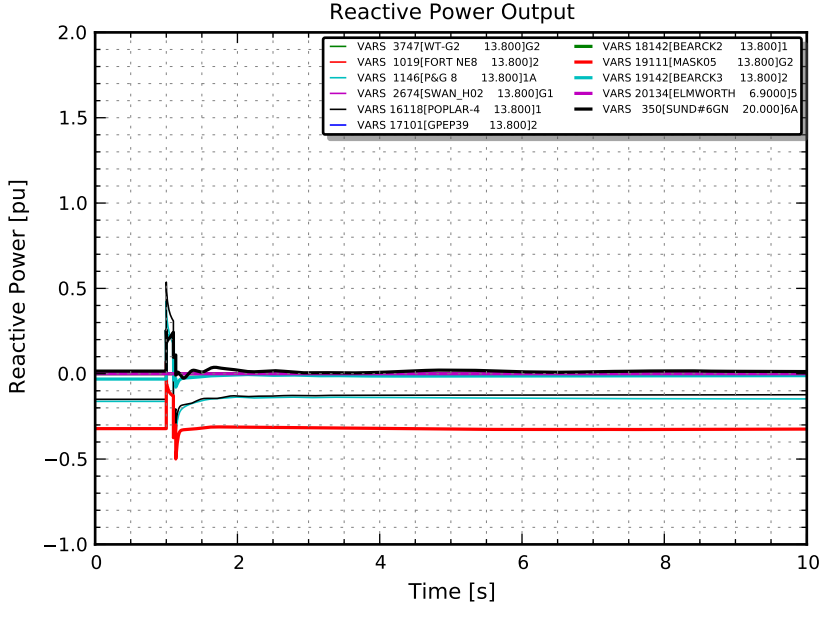
Study Area Generators

Appendix C2B
Figure: 032 (A. 3)





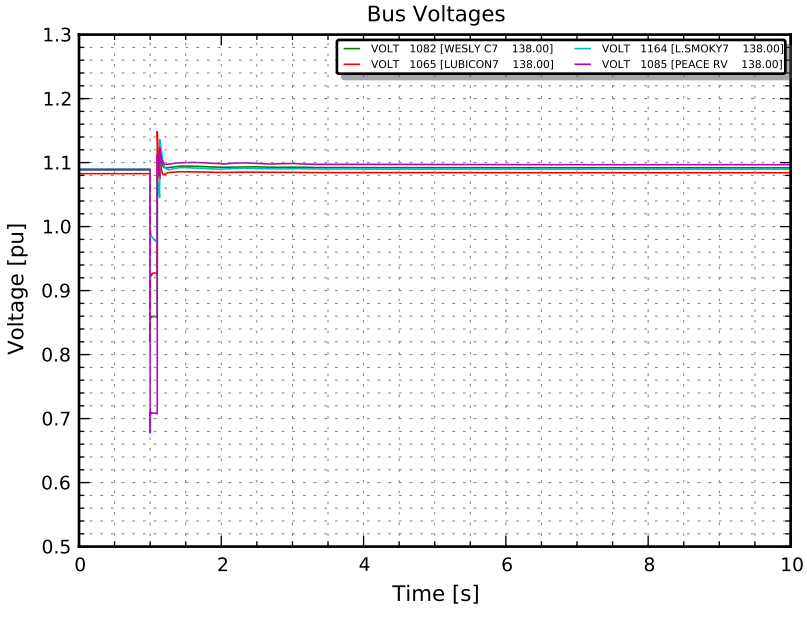


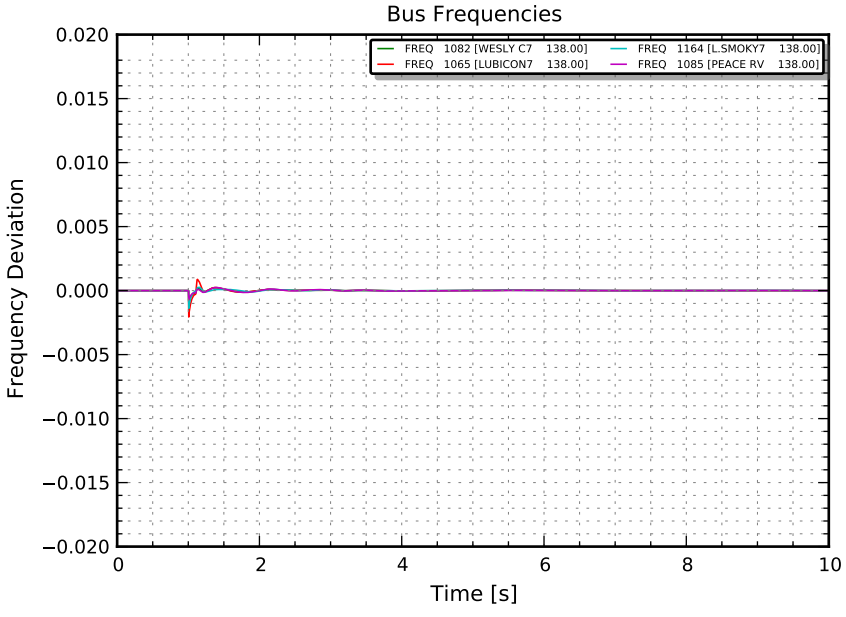


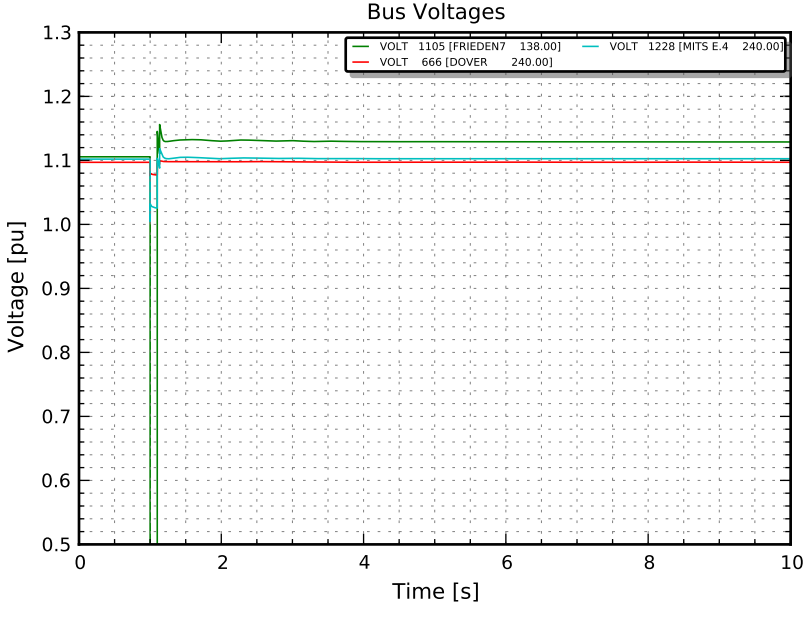
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 032 7L73 RYCROFT to FRIEDENSTAL_B.

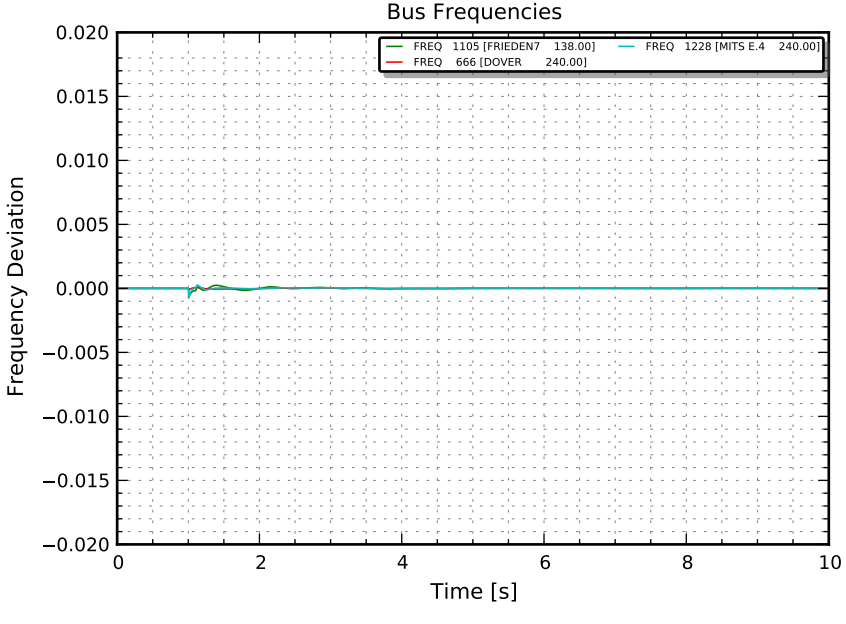
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 032 (B. 1)





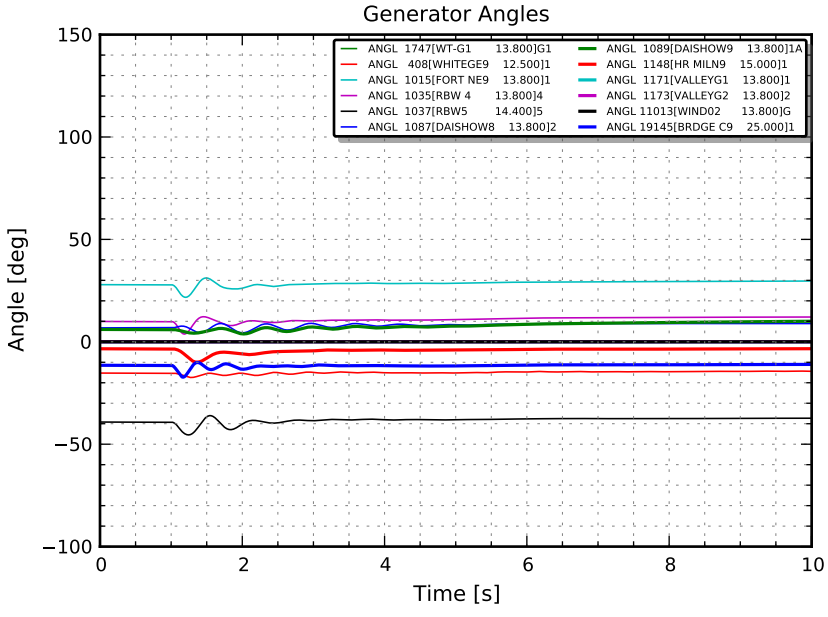


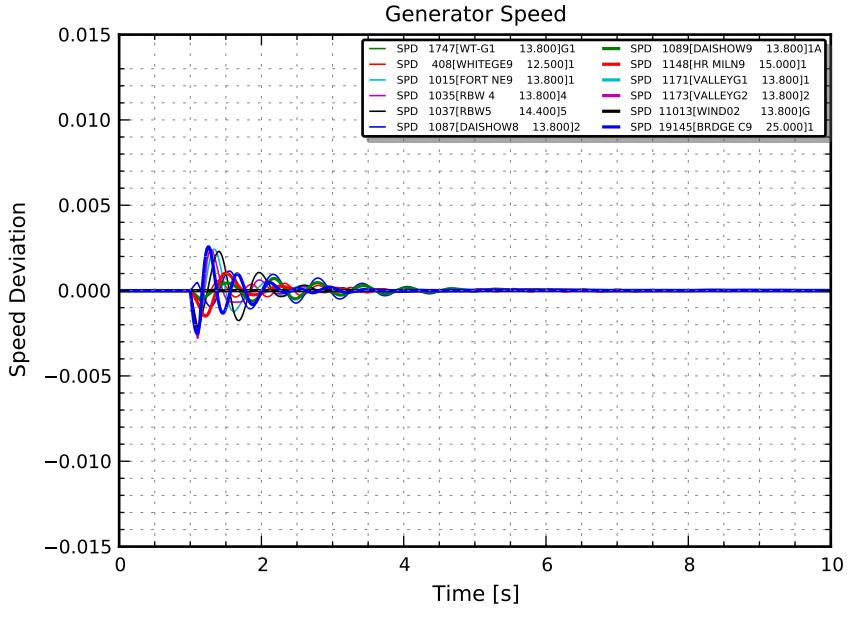


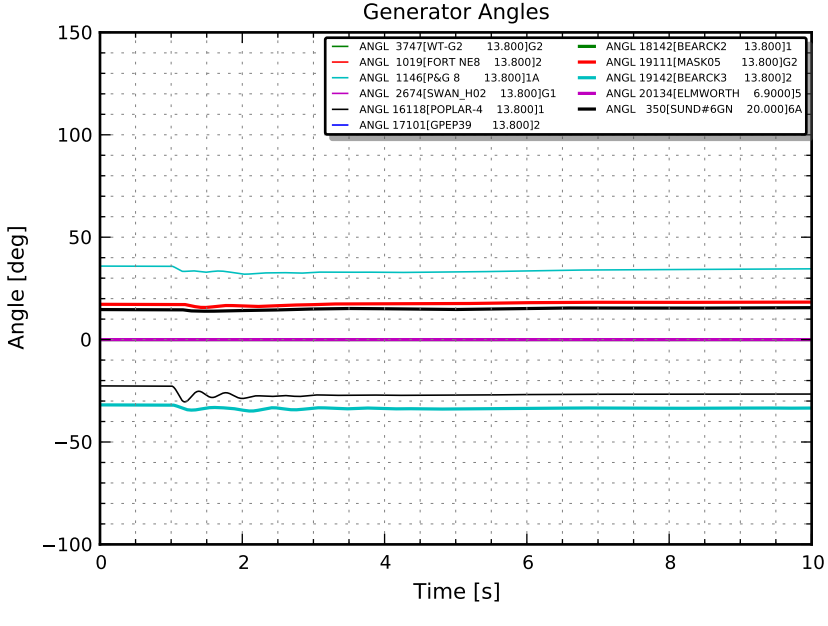
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 032 7L73 RYCROFT to FRIEDENSTAL_B.

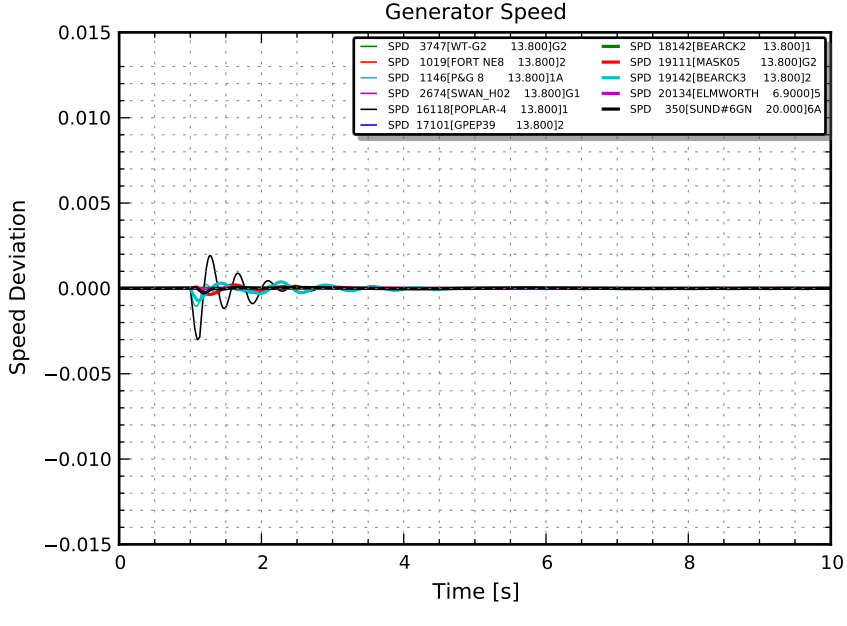
Study Area Generators

Appendix C2B
Figure: 032 (B. 2)





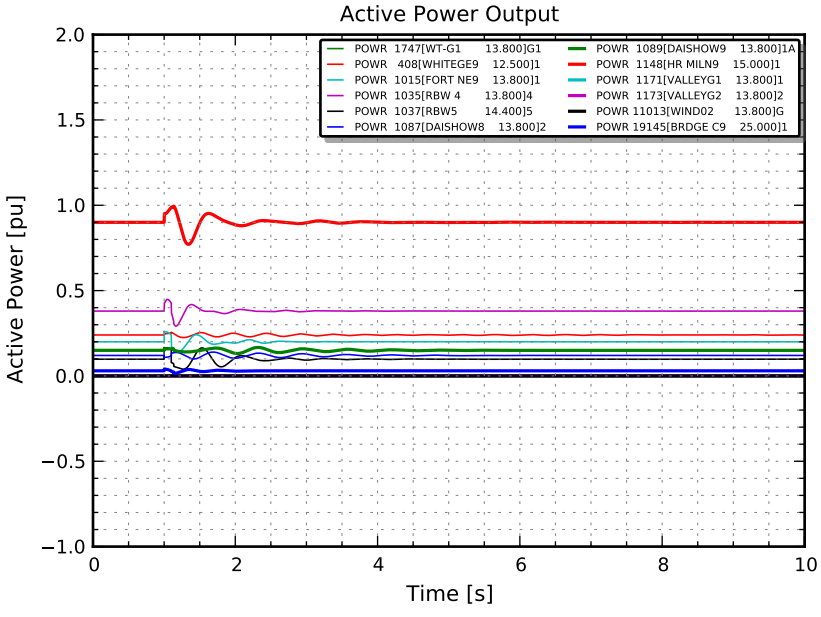


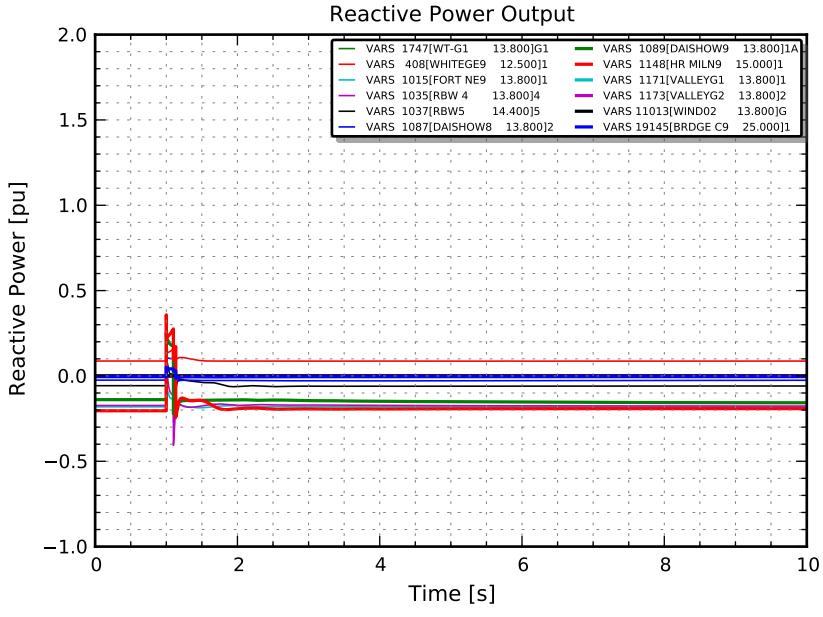


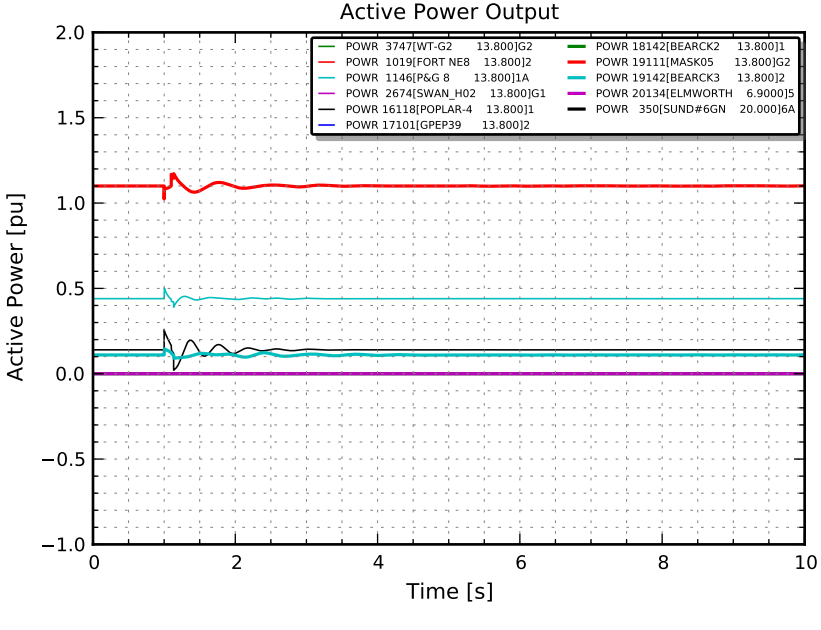
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 032 7L73 RYCROFT to FRIEDENSTAL_B.

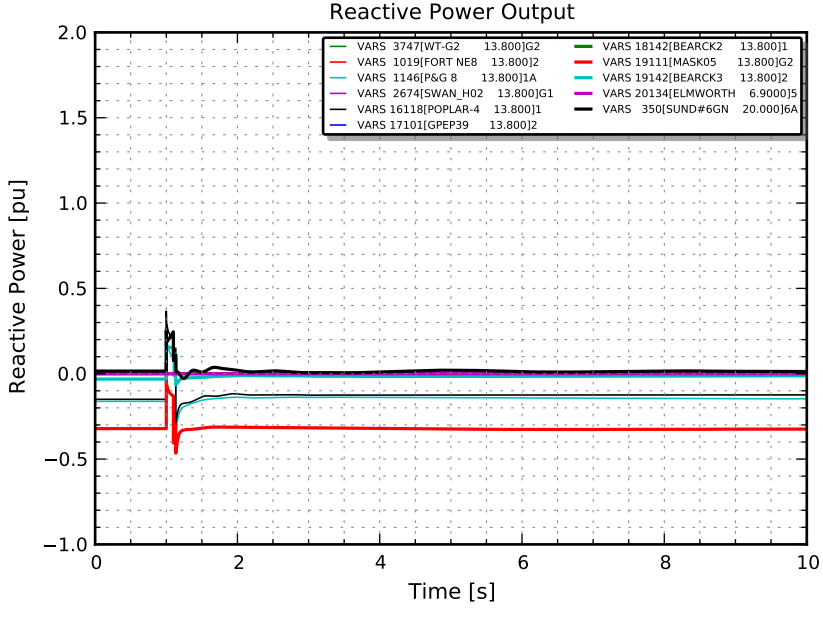
Study Area Generators

Appendix C2B
Figure: 032 (B. 3)





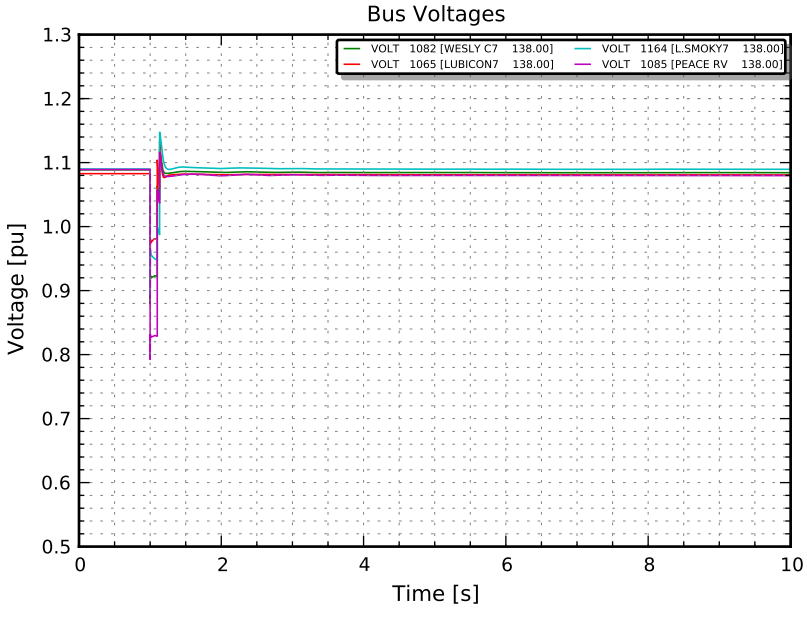


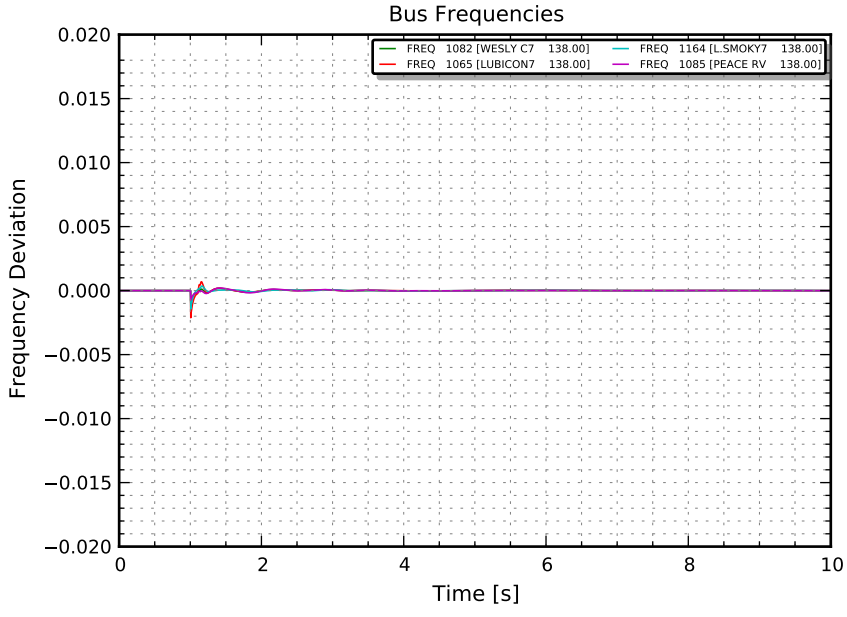


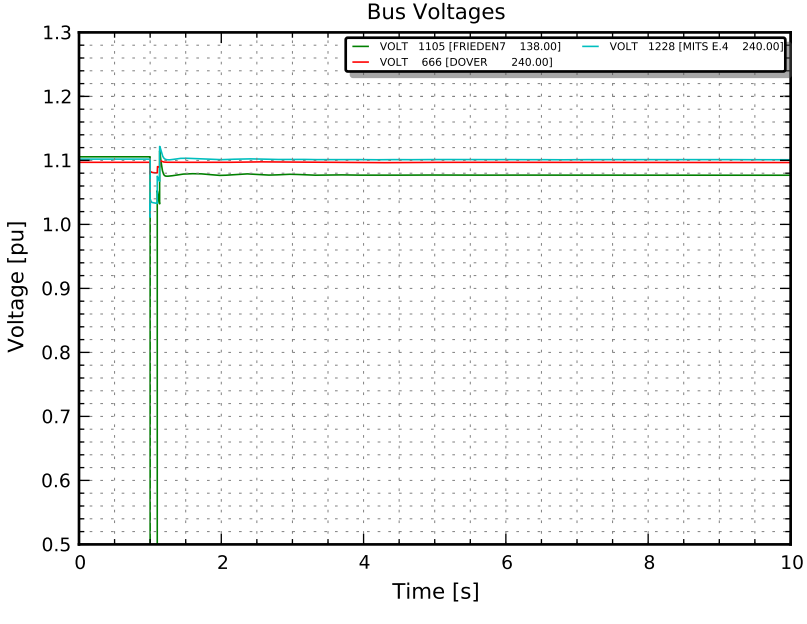
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_A.

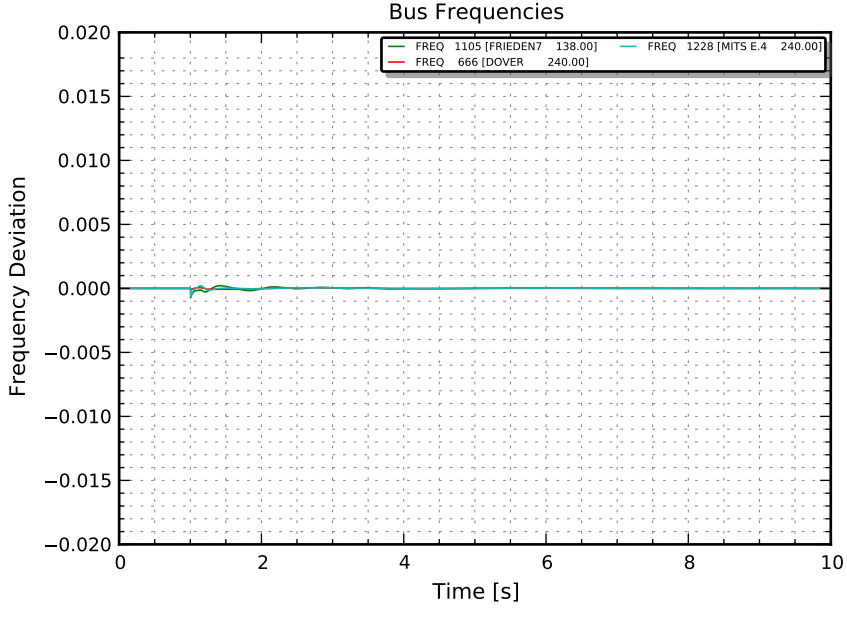
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 033 (A. 1)





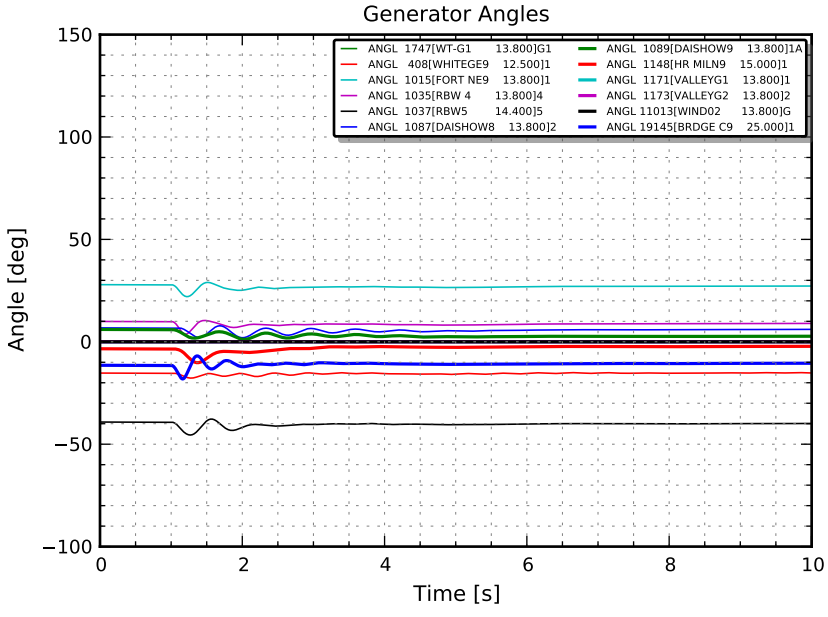


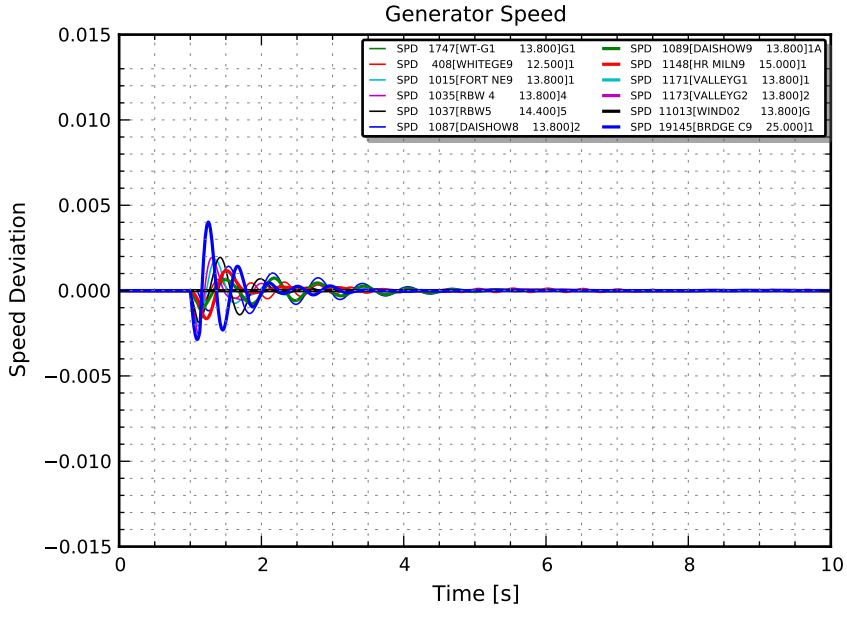


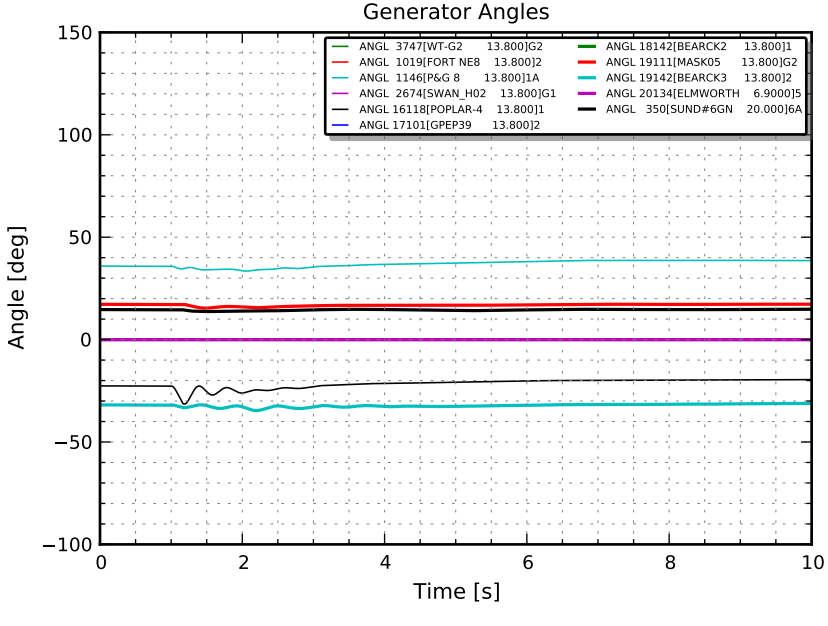
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_A.

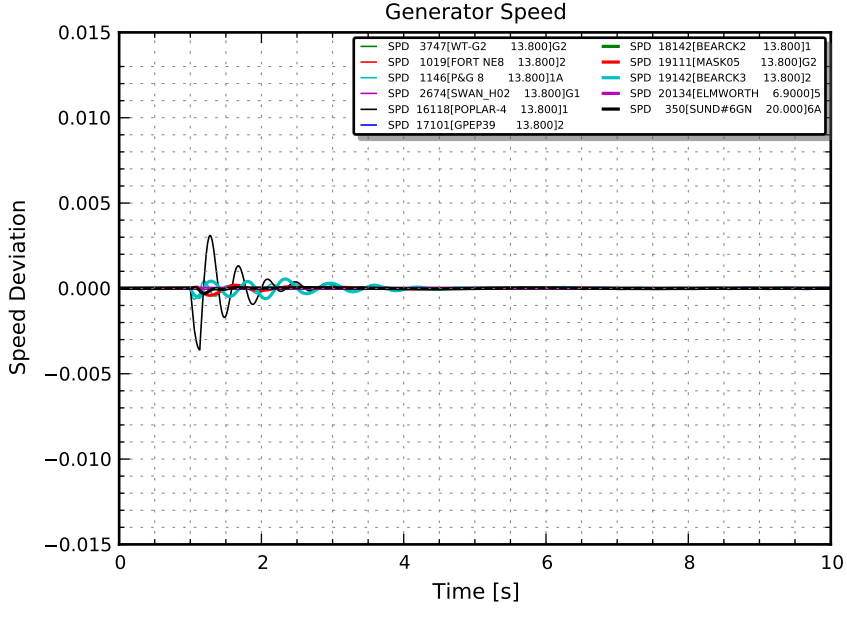
Study Area Generators

Appendix C2B
Figure: 033 (A. 2)





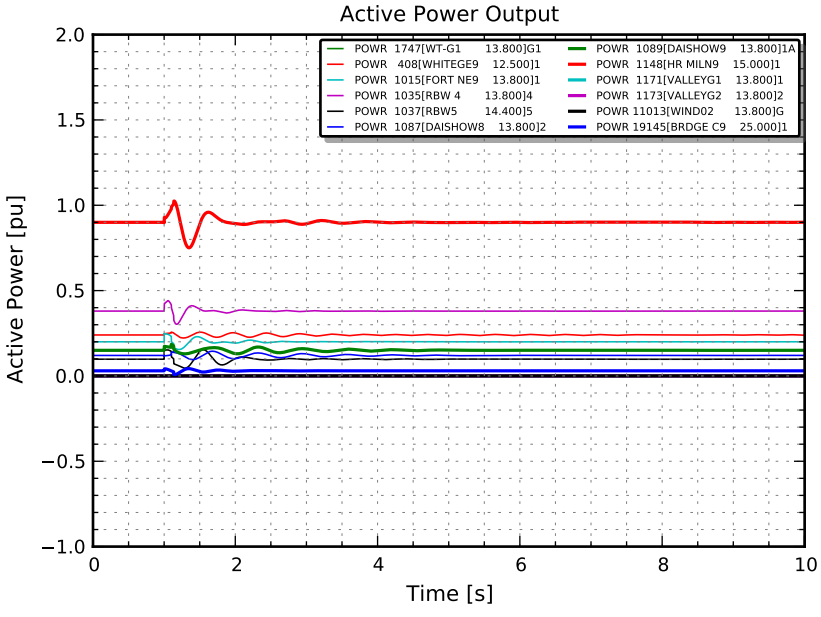


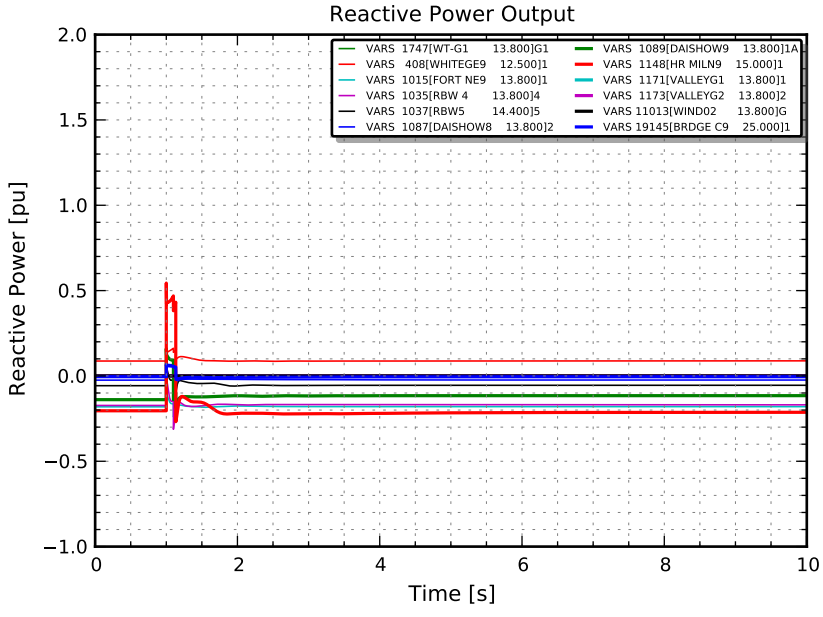


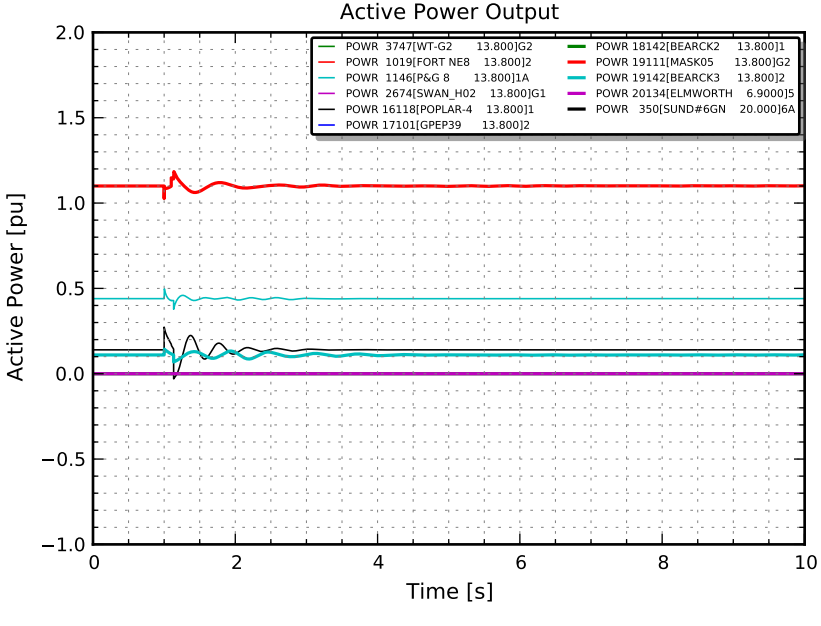
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_A.

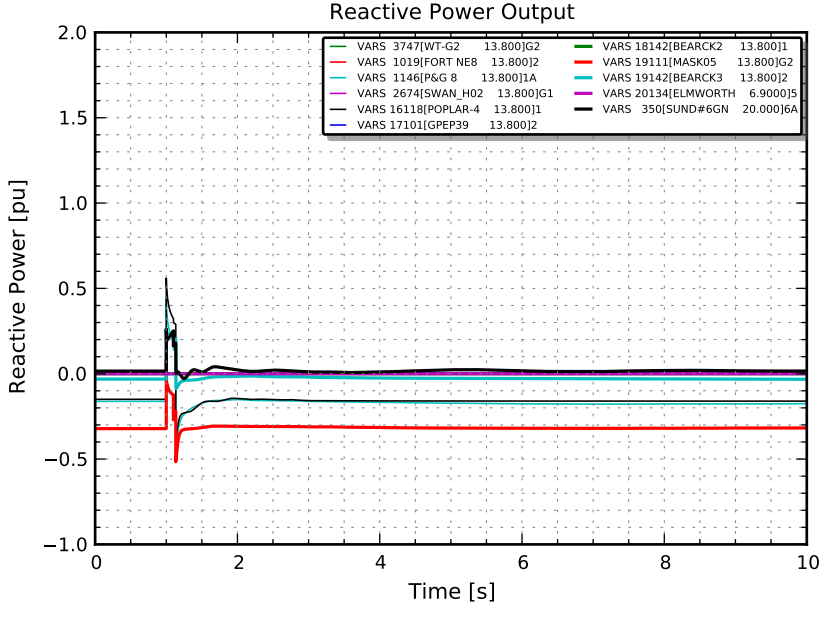
Study Area Generators

Appendix C2B
Figure: 033 (A. 3)





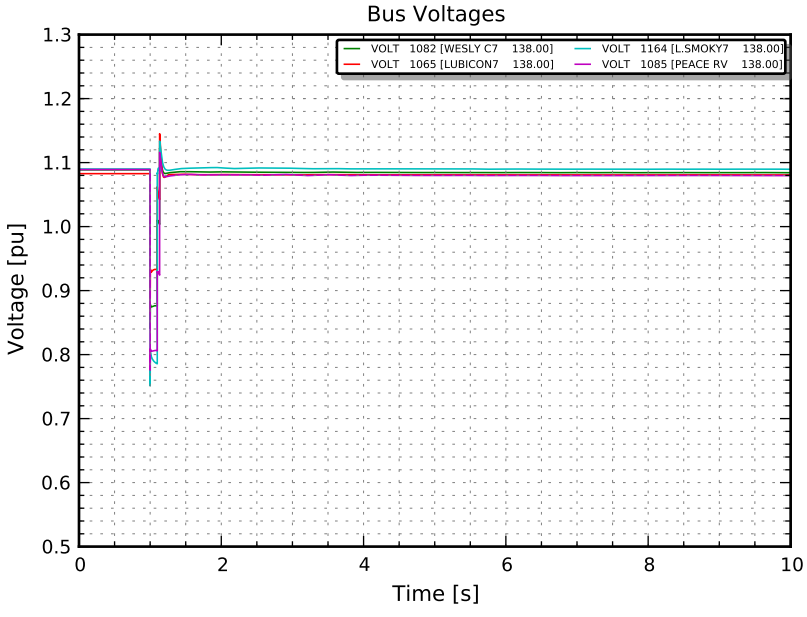


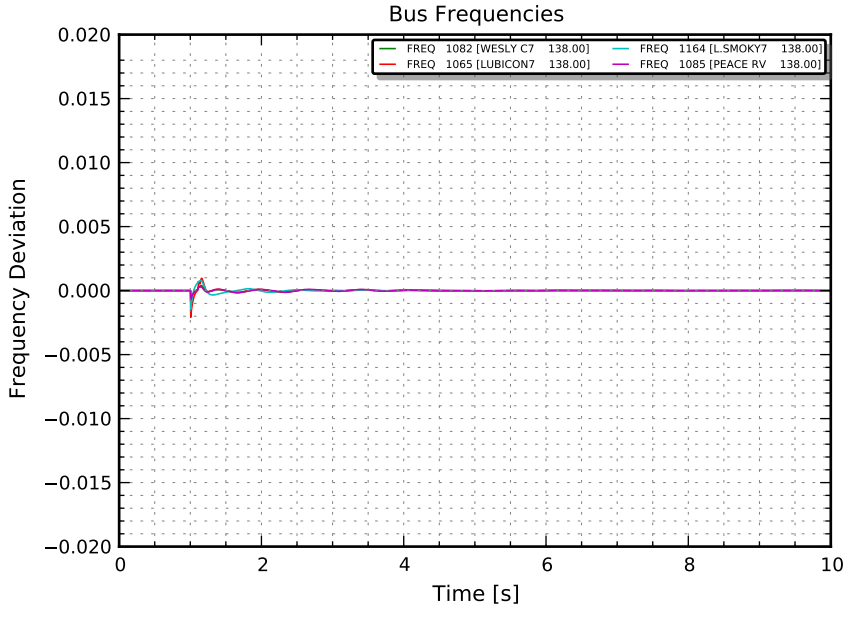


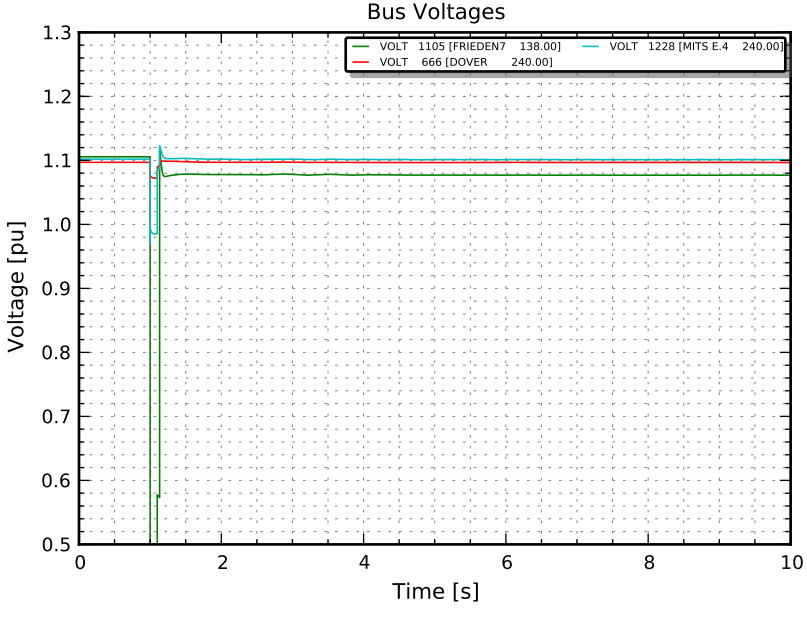
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_B.

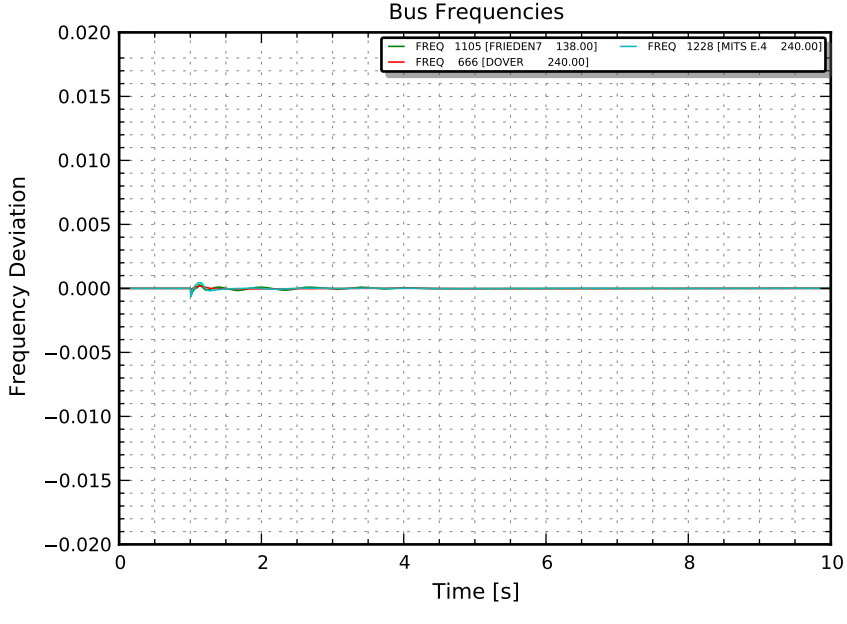
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 033 (B. 1)





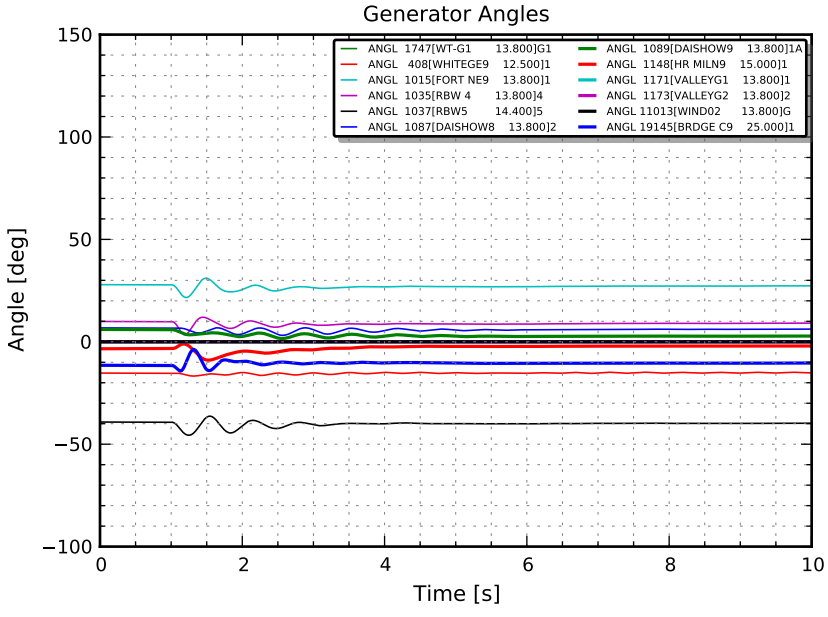


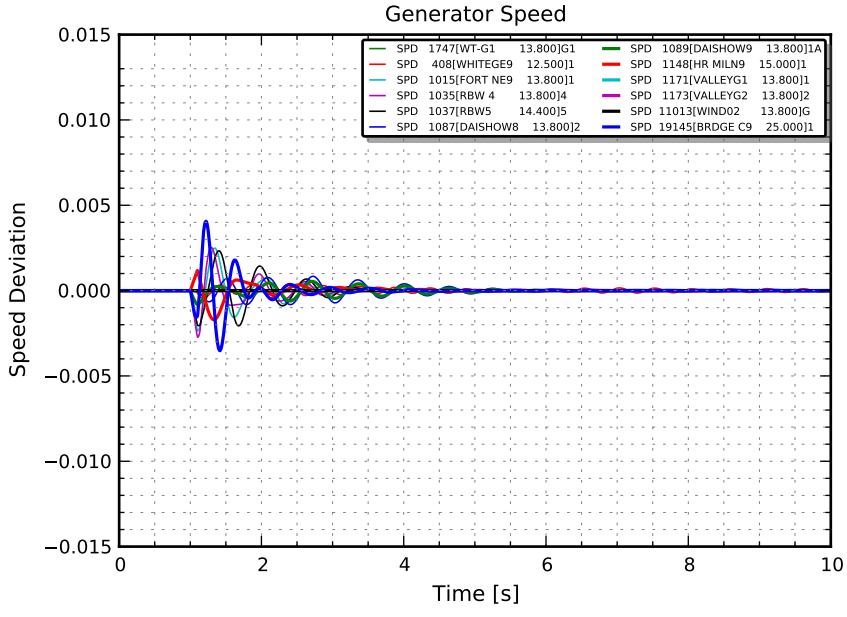


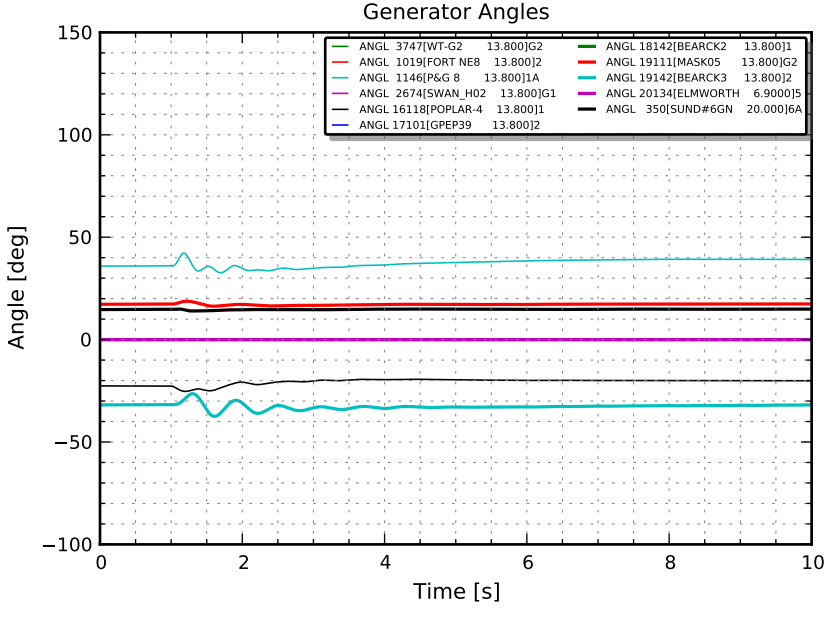
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_B.

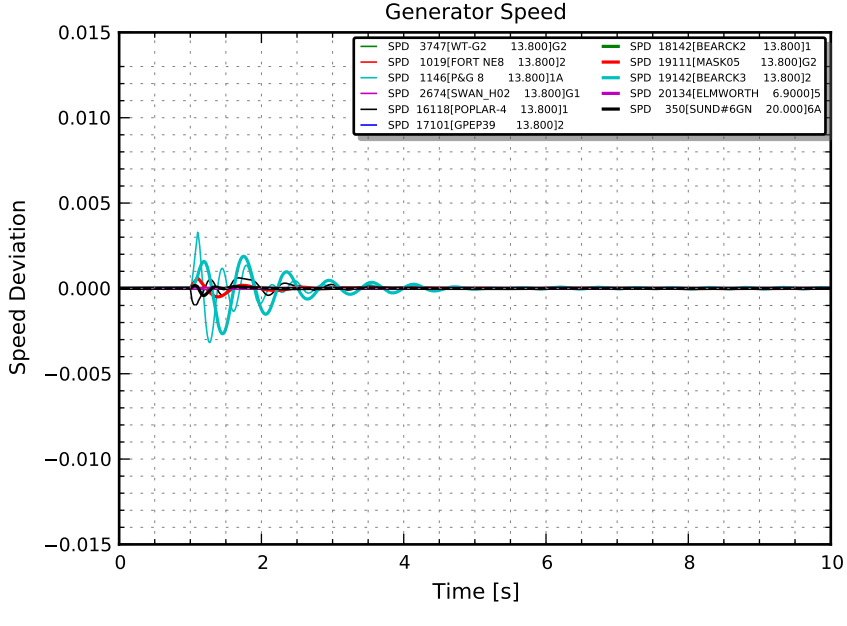
Study Area Generators

Appendix C2B
Figure: 033 (B. 2)





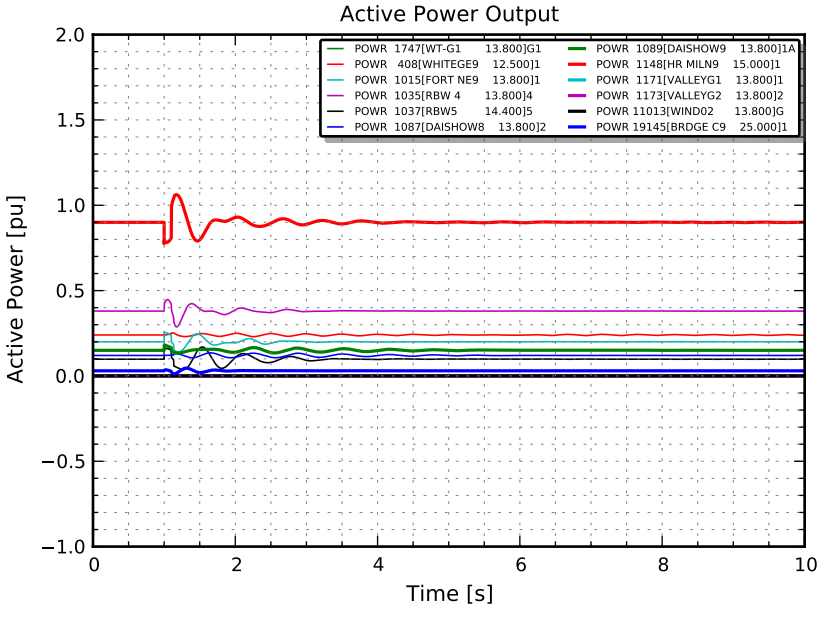


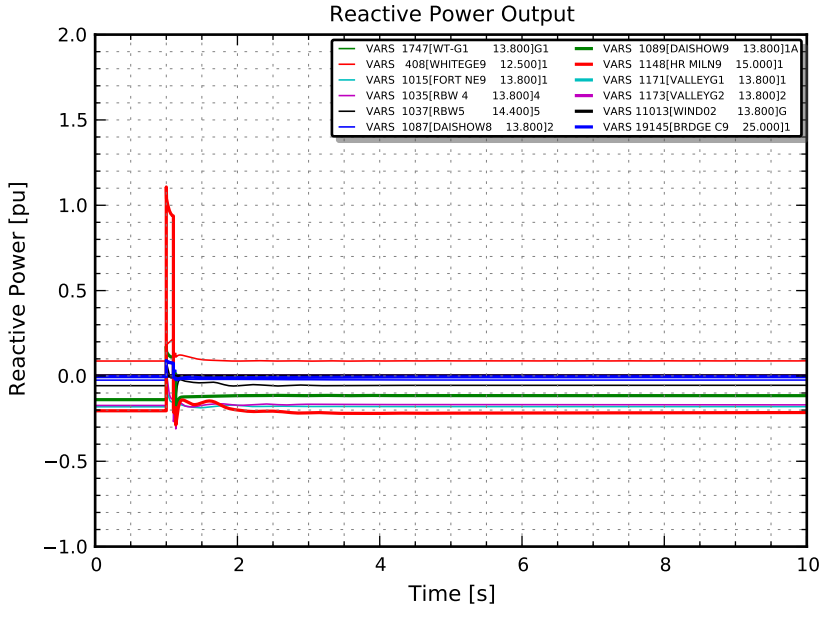


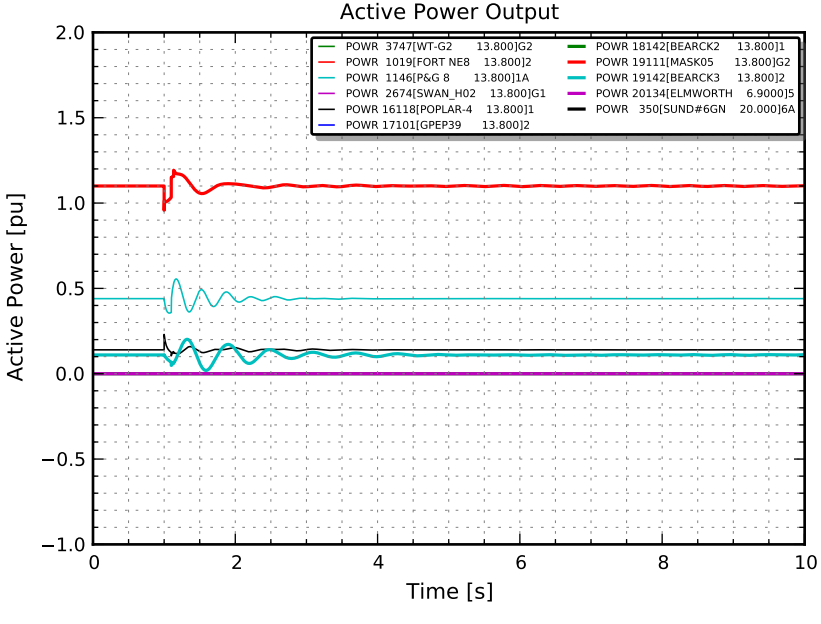
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_B.

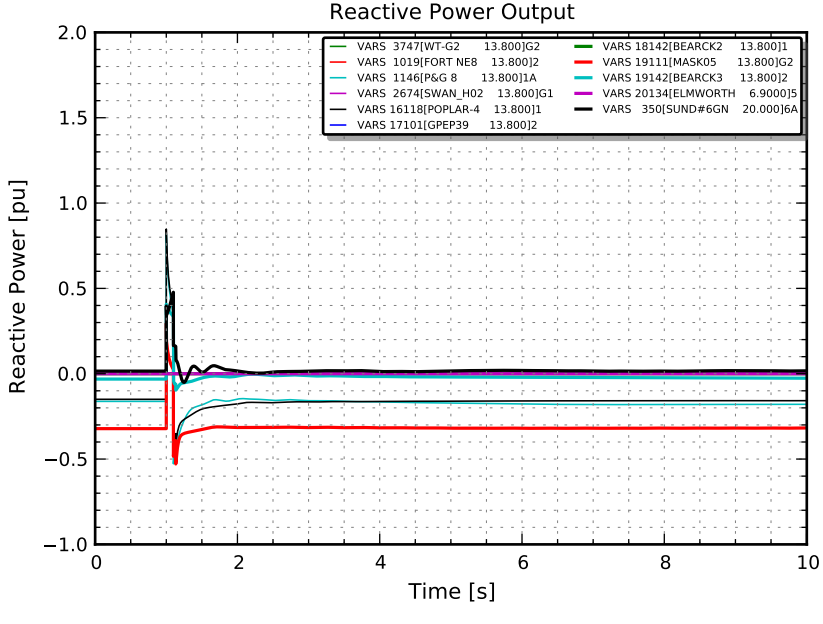
Study Area Generators

Appendix C2B
Figure: 033 (B. 3)





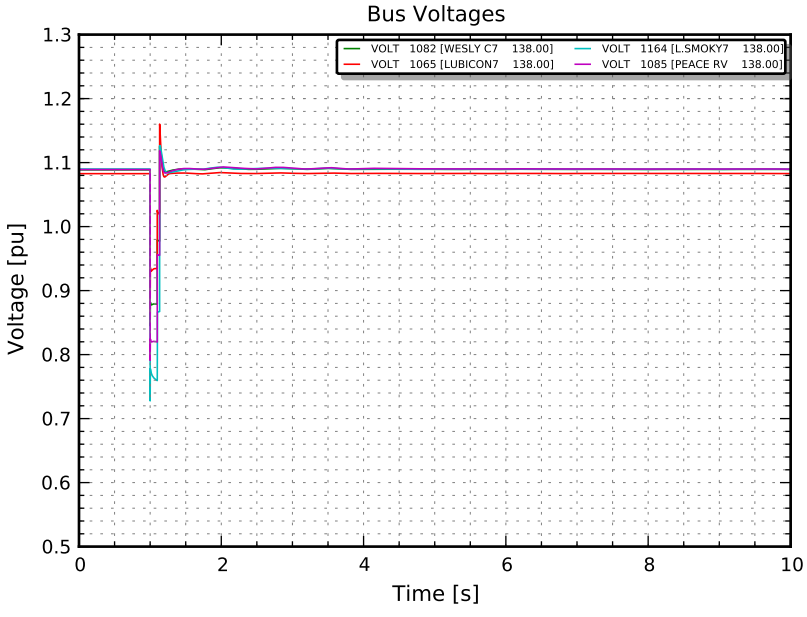


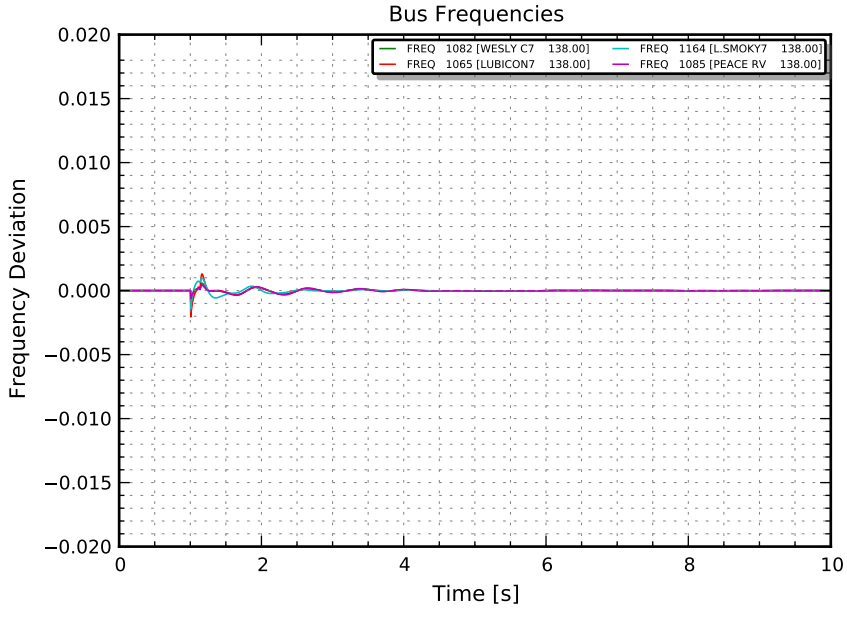


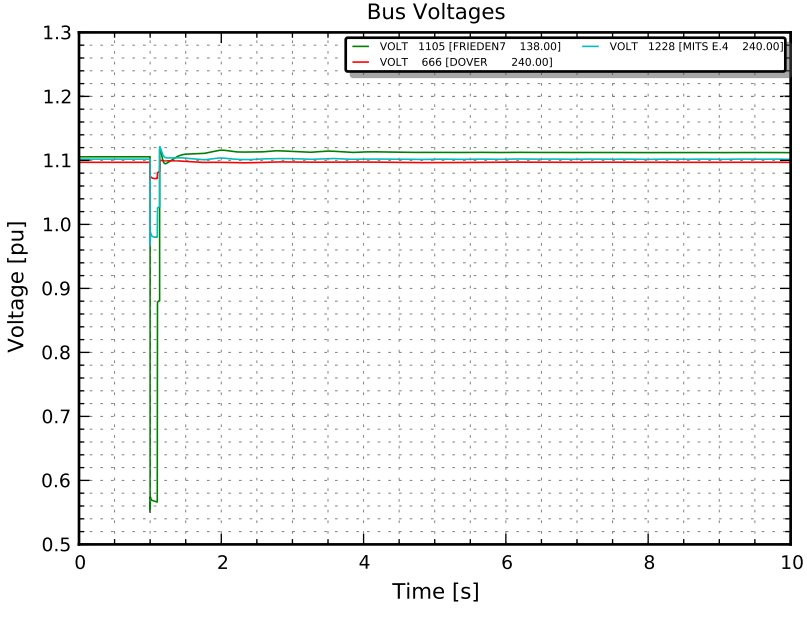
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_A.

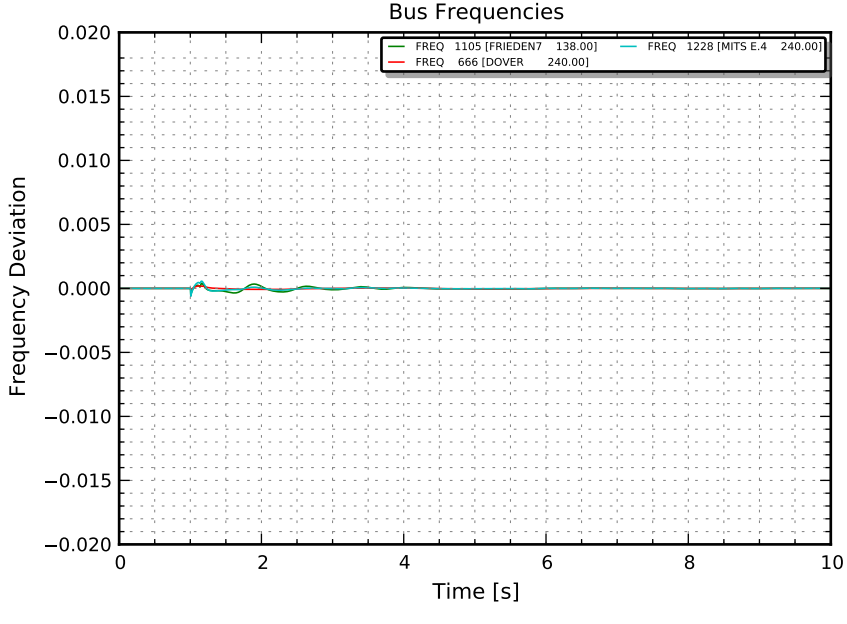
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 034 (A. 1)





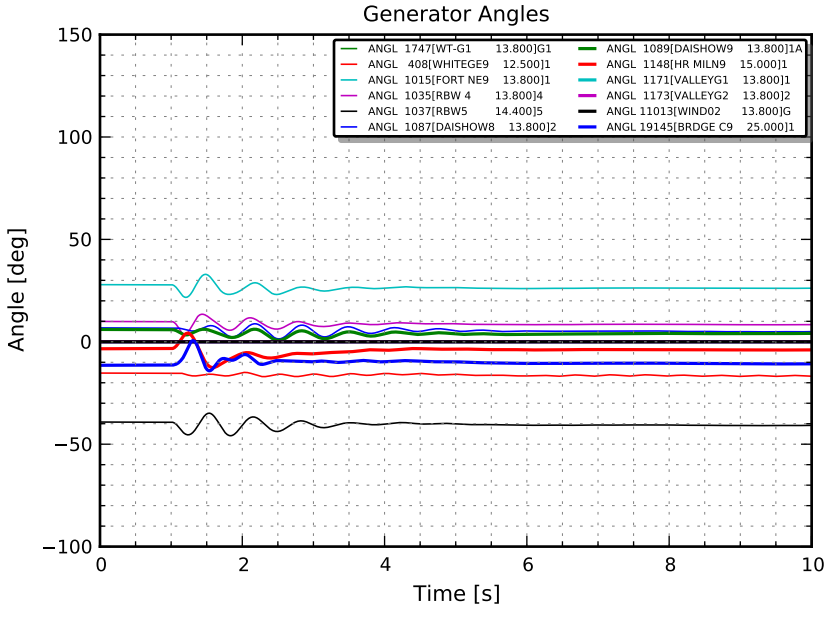


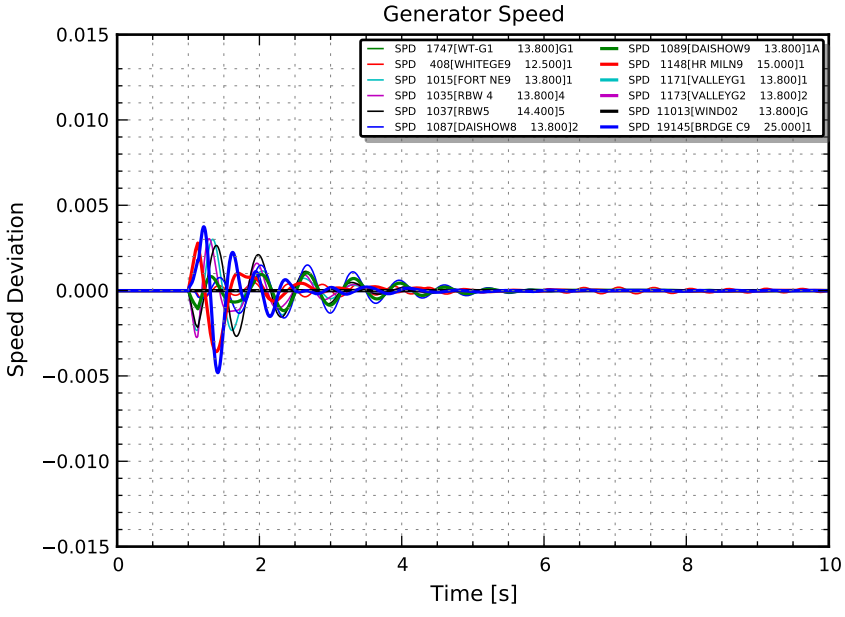


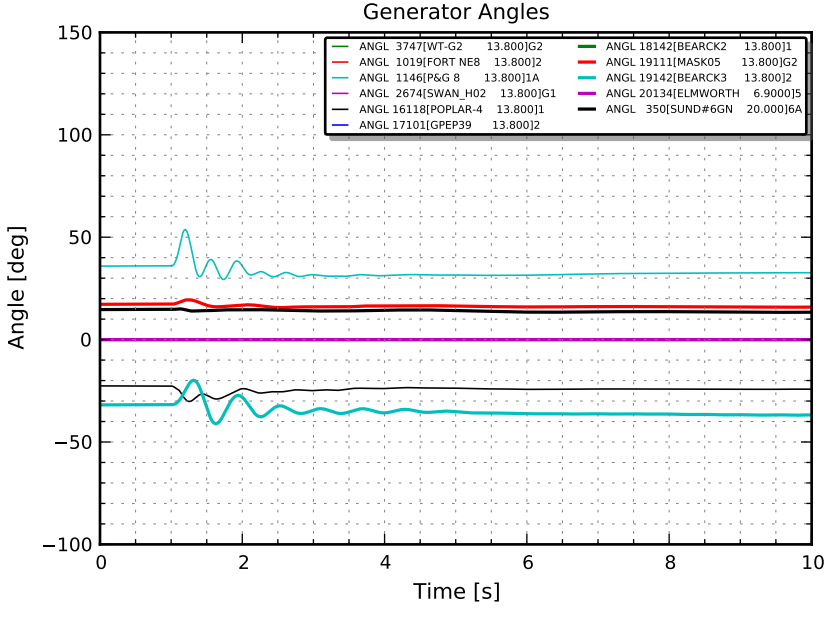
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_A.

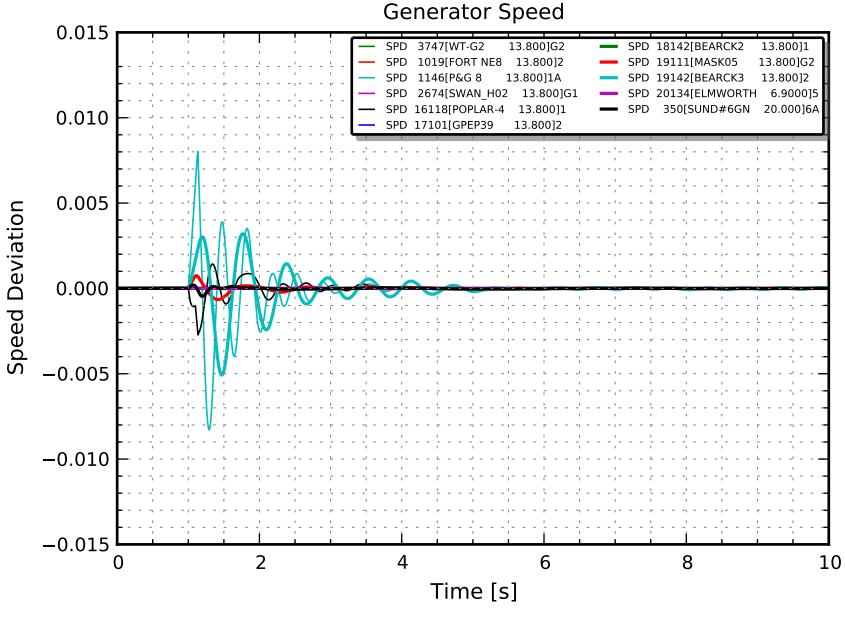
Study Area Generators

Appendix C2B
Figure: 034 (A. 2)





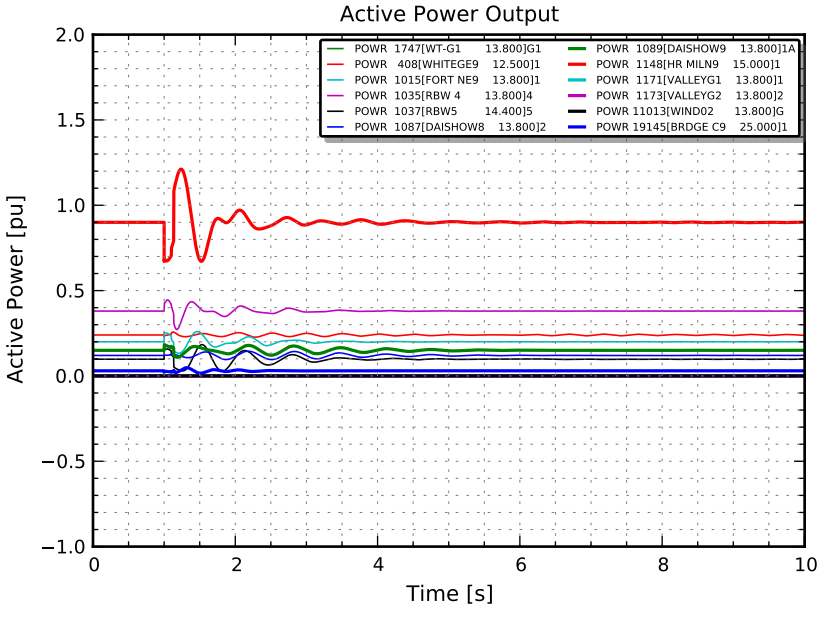


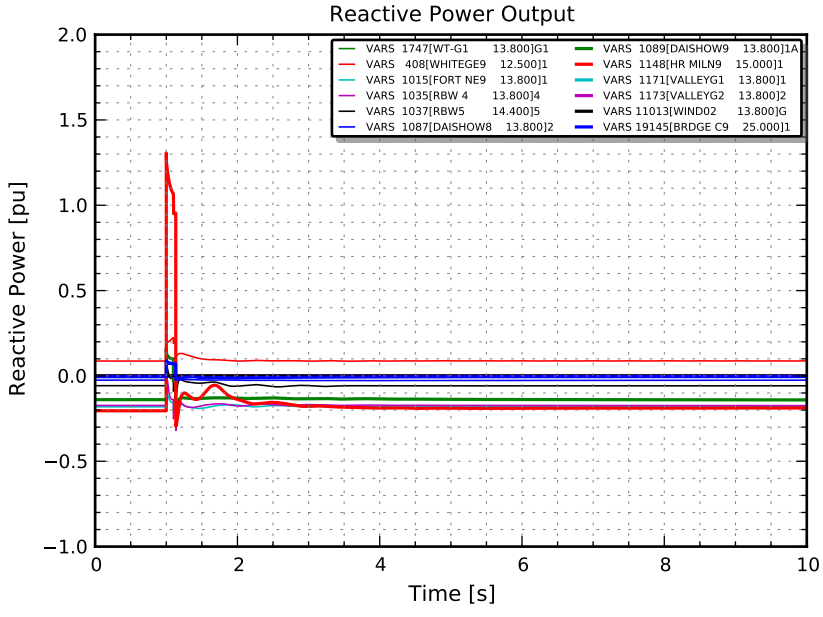


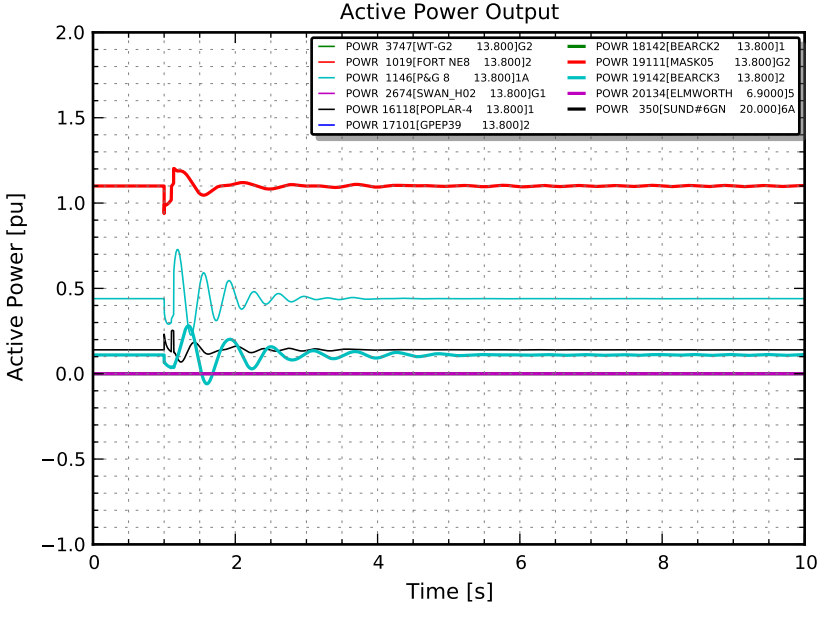
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_A.

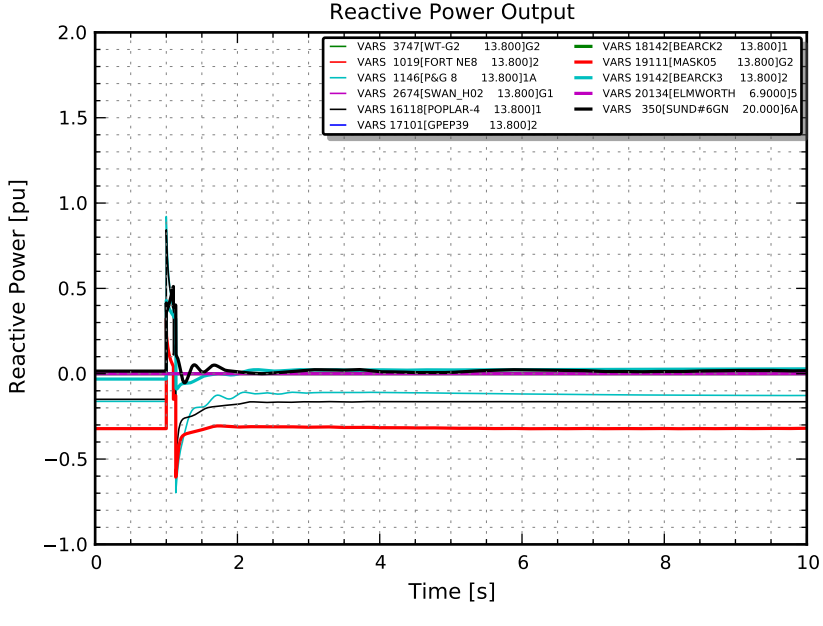
Study Area Generators

Appendix C2B
Figure: 034 (A. 3)





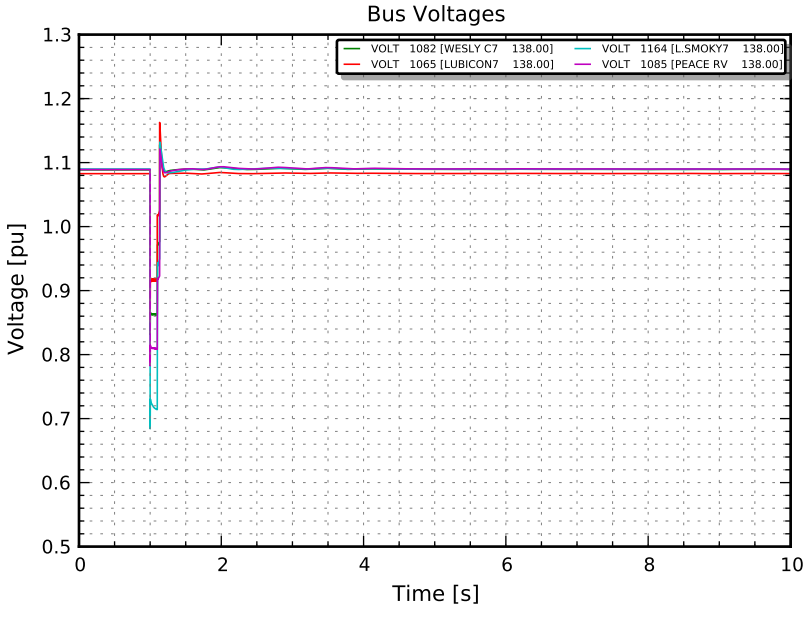


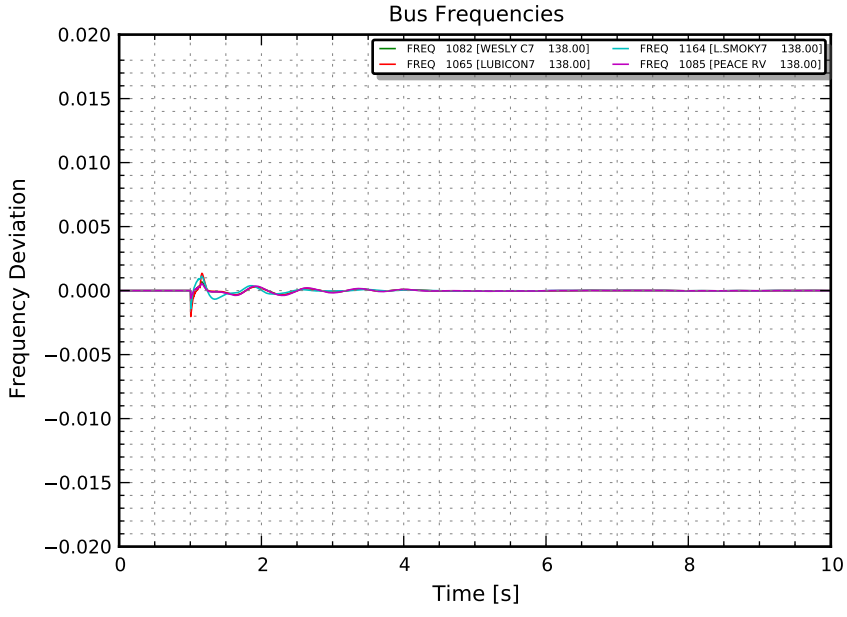


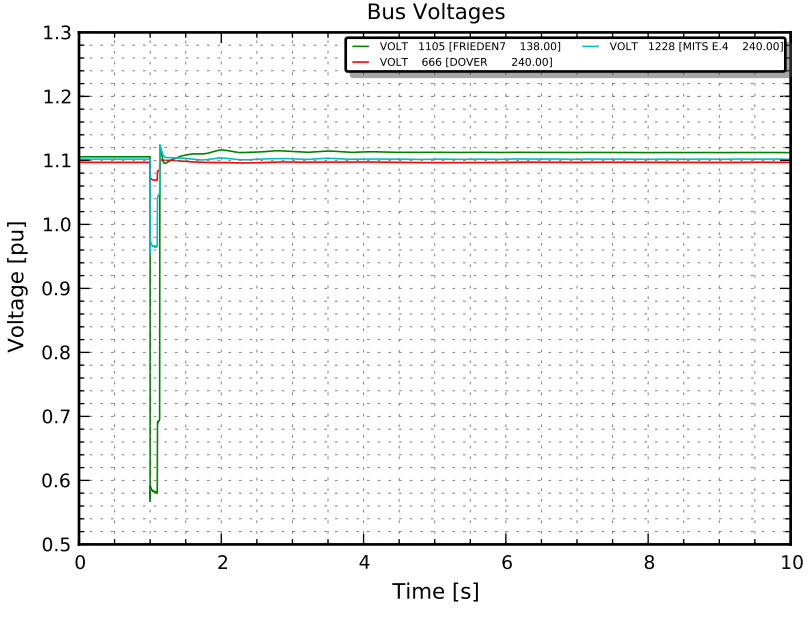
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_B.

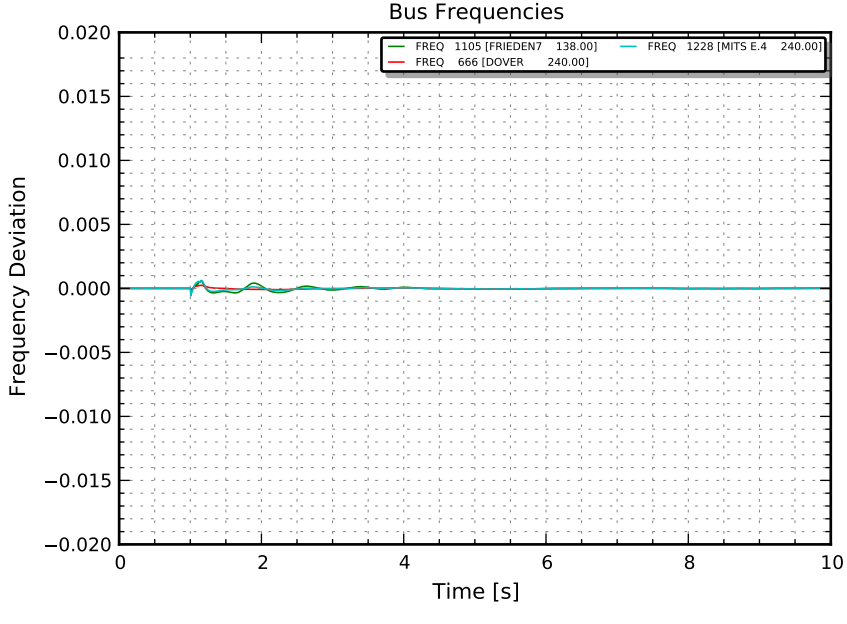
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 034 (B. 1)





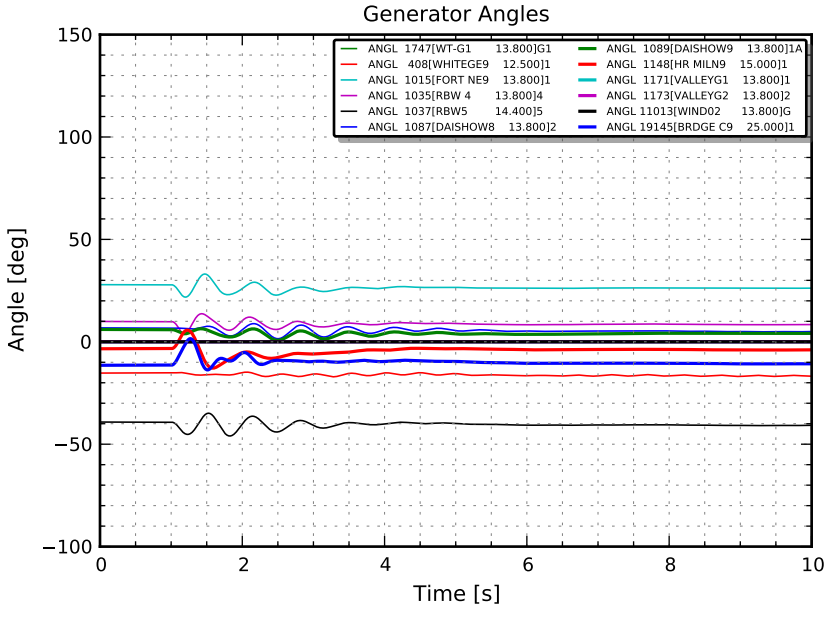


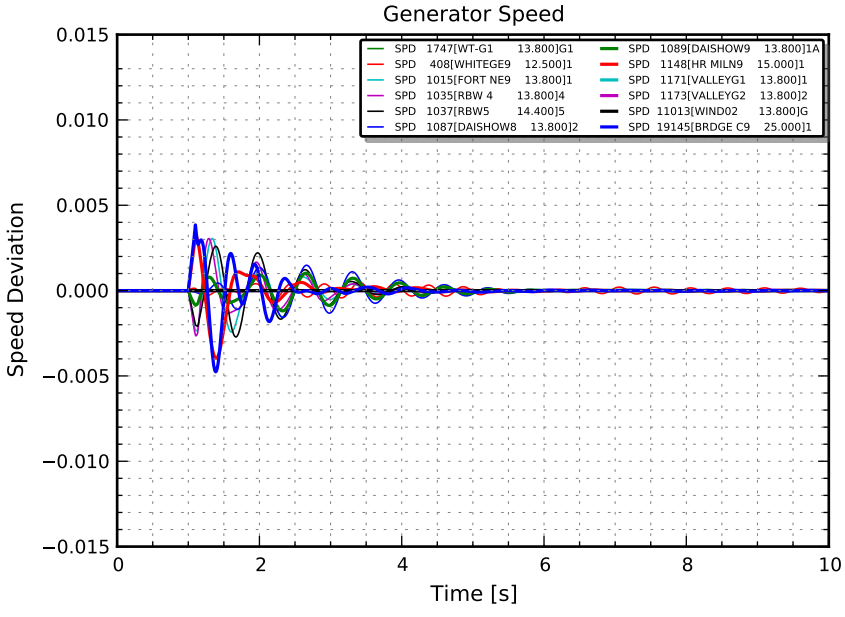


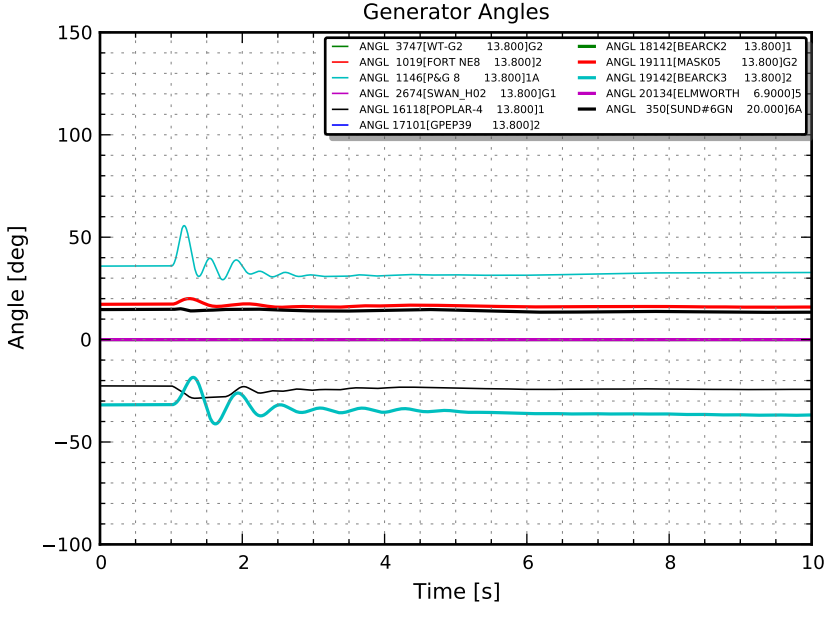
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_B.

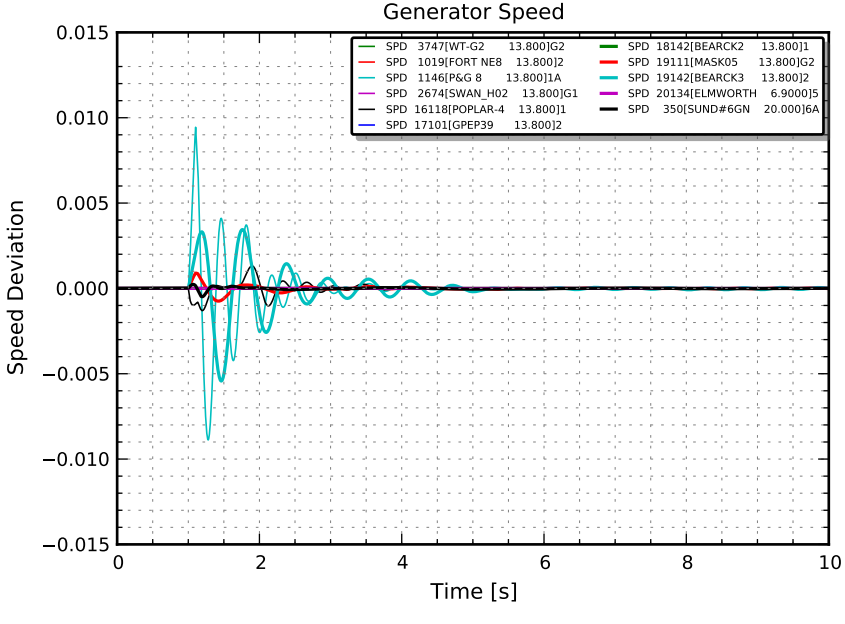
Study Area Generators

Appendix C2B
Figure: 034 (B. 2)





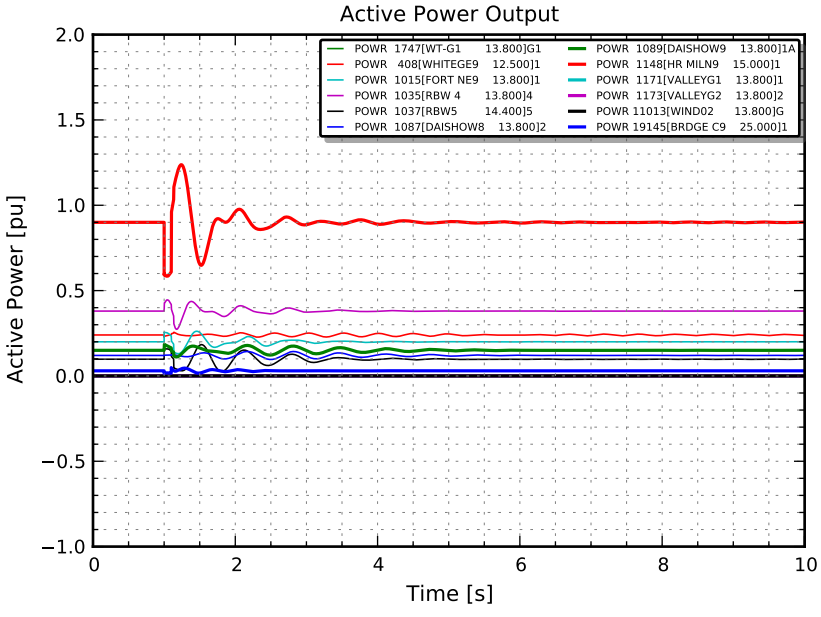


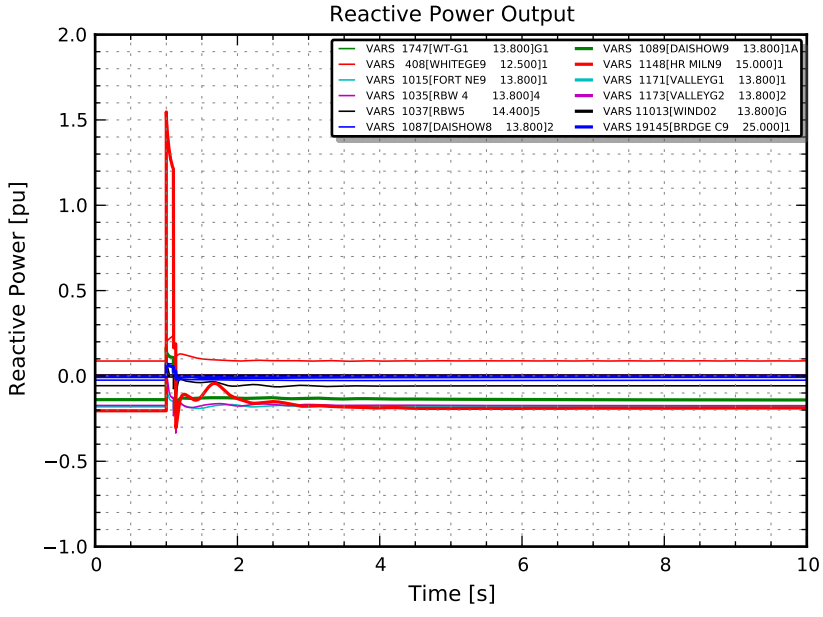


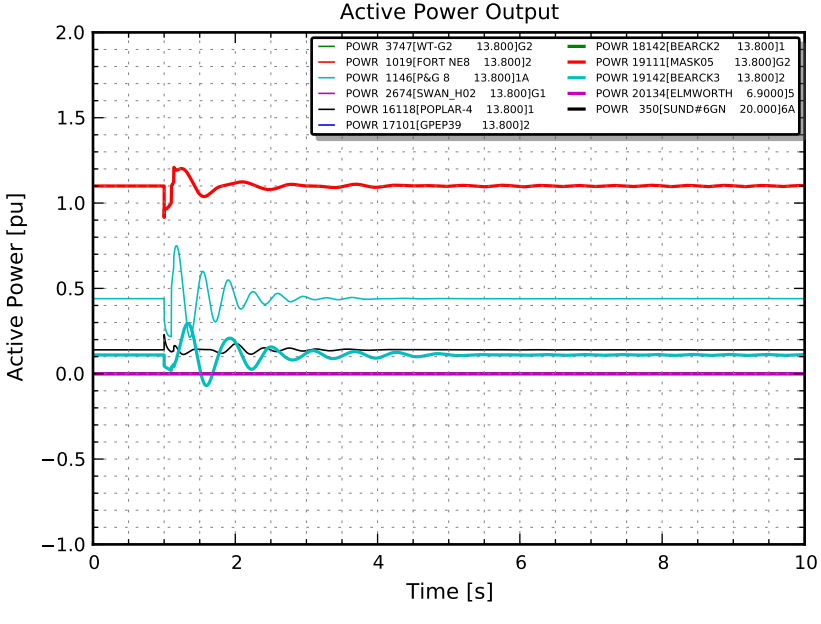
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_B.

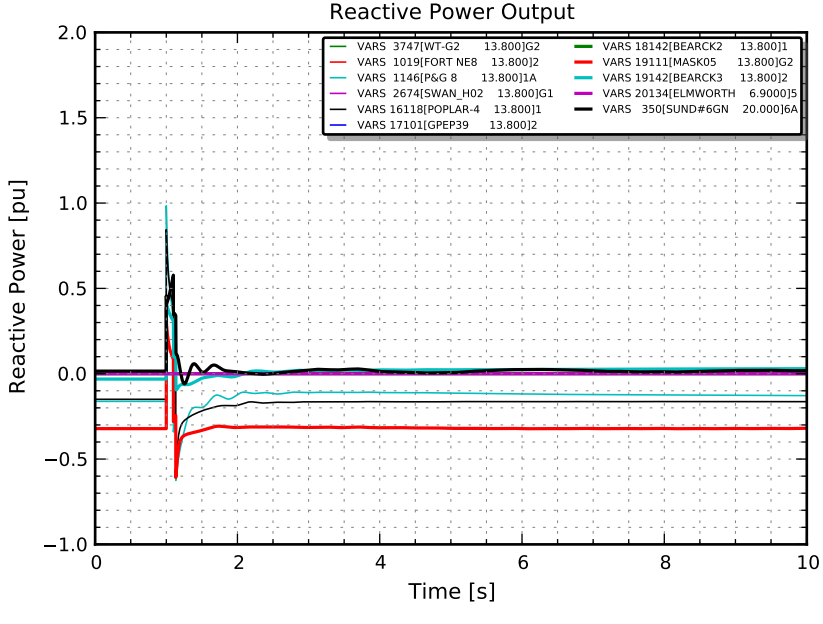
Study Area Generators

Appendix C2B
Figure: 034 (B. 3)





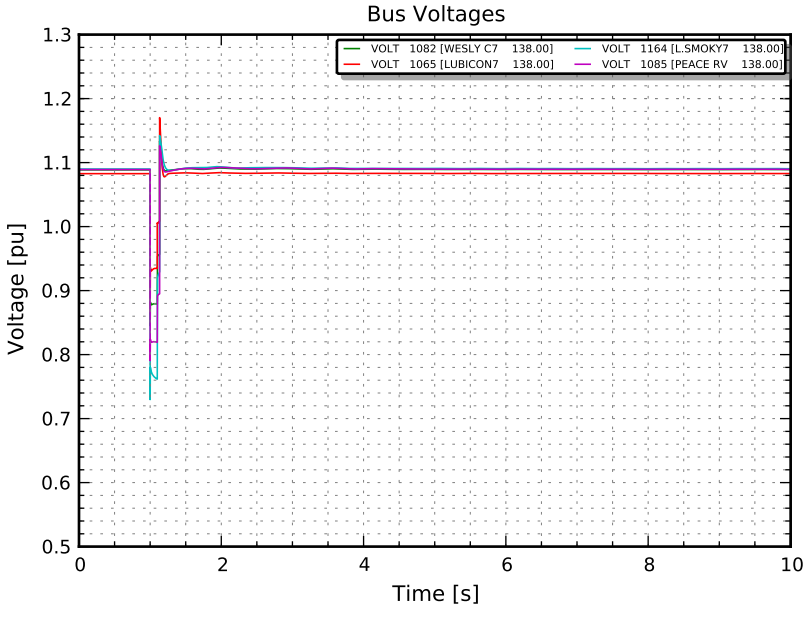


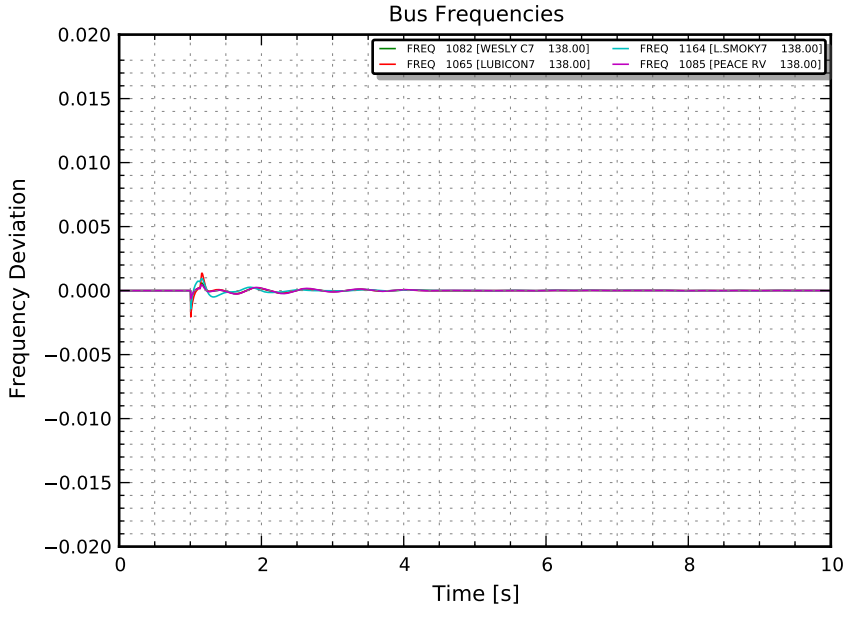


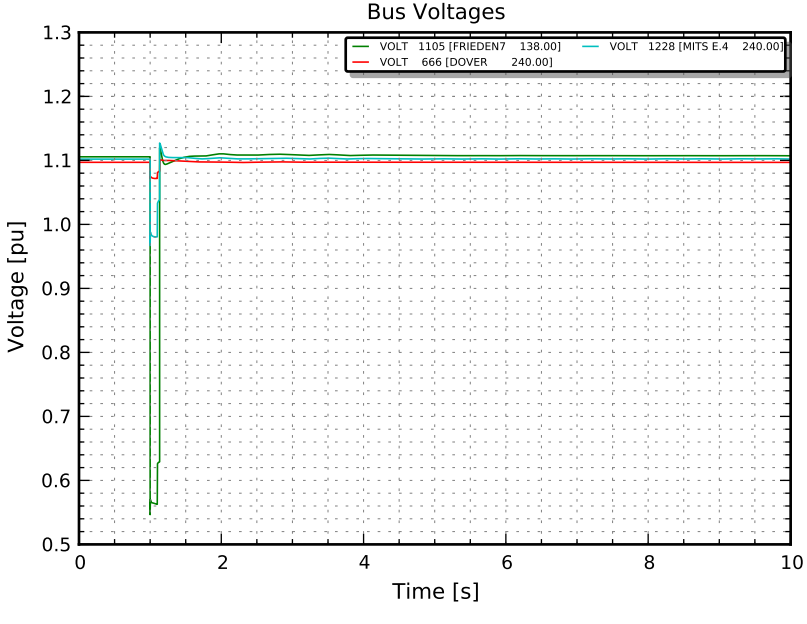
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_A.

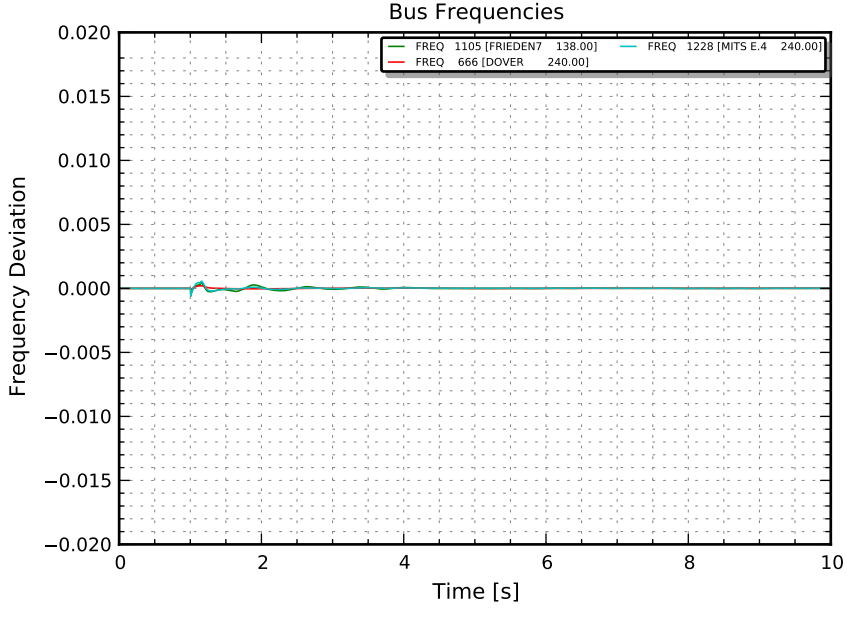
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 035 (A. 1)





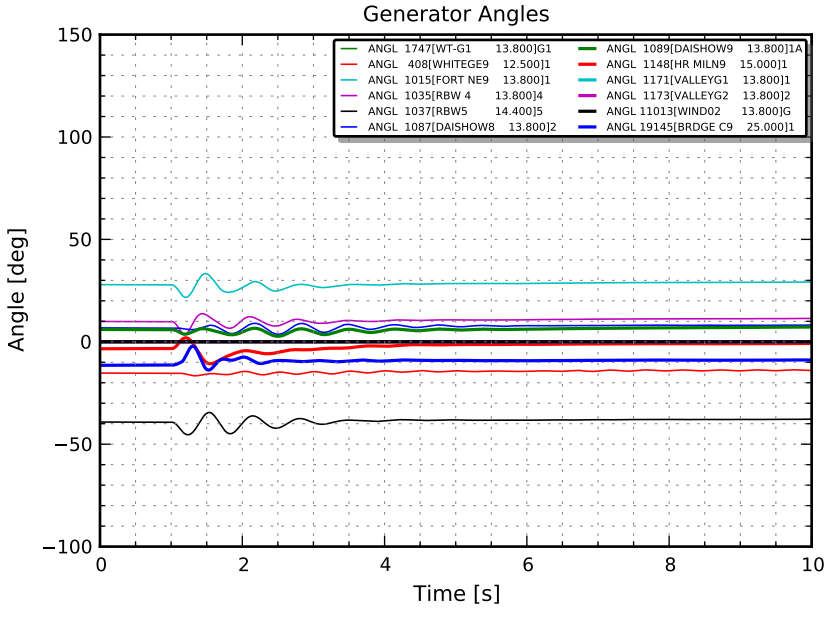


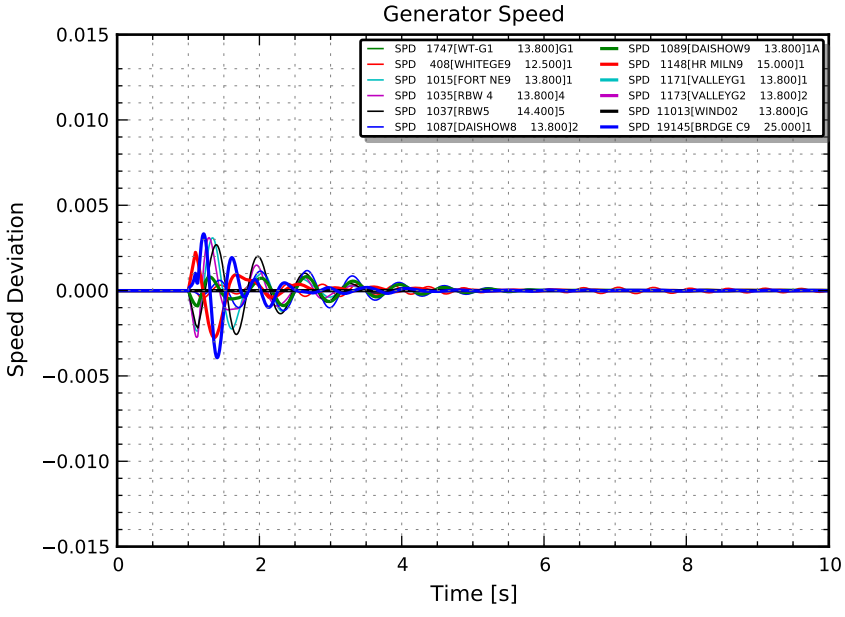


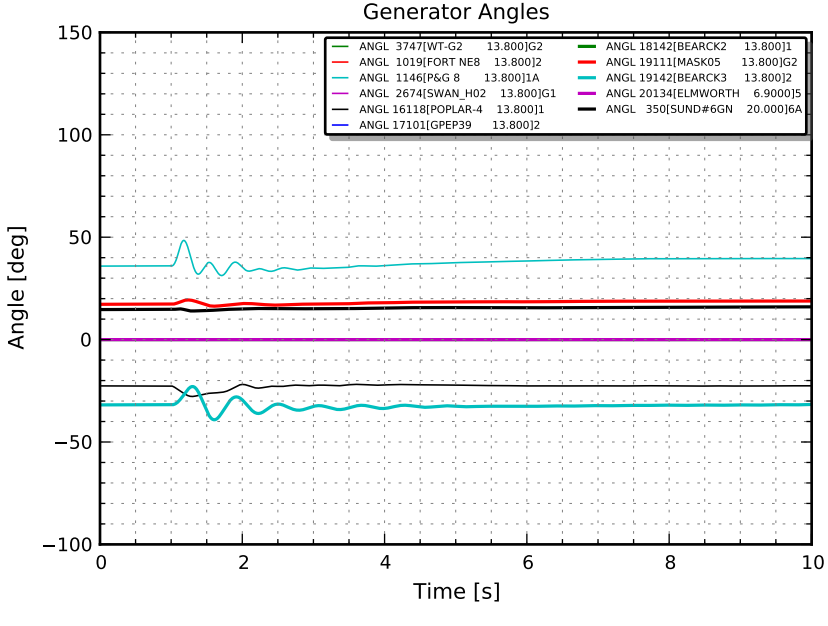
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_A.

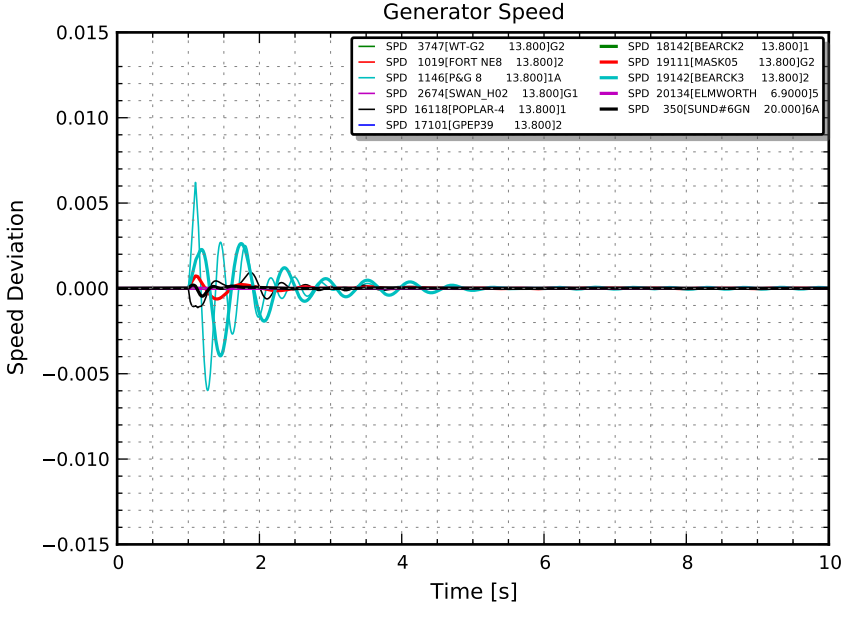
Study Area Generators

Appendix C2B
Figure: 035 (A. 2)





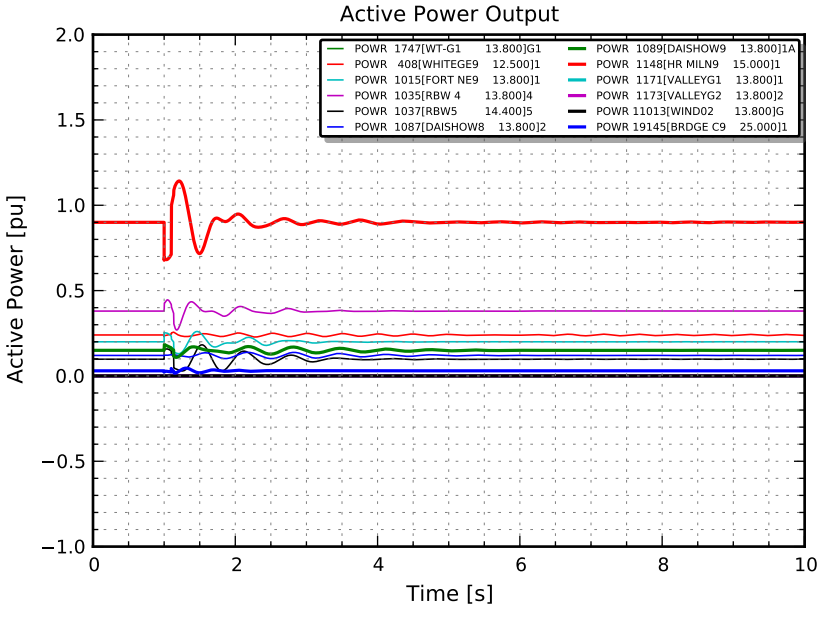


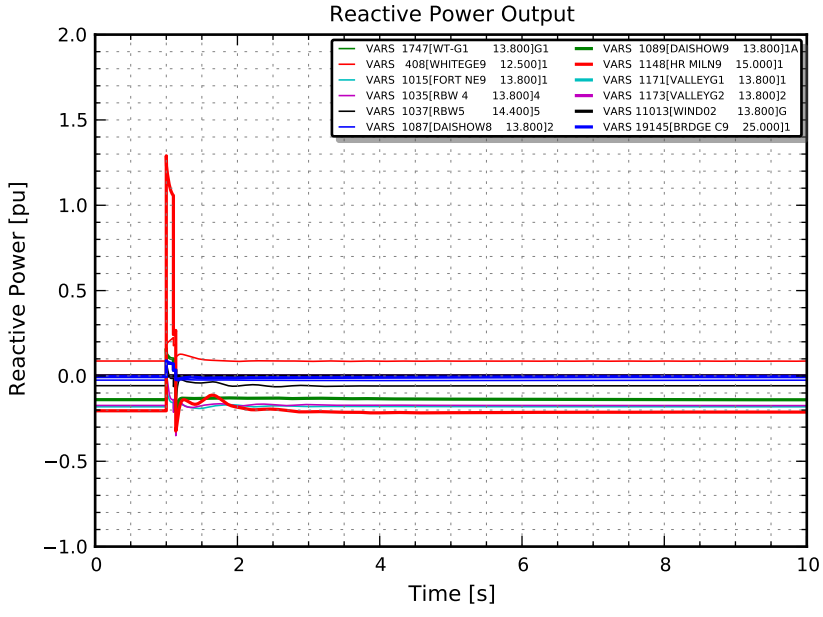


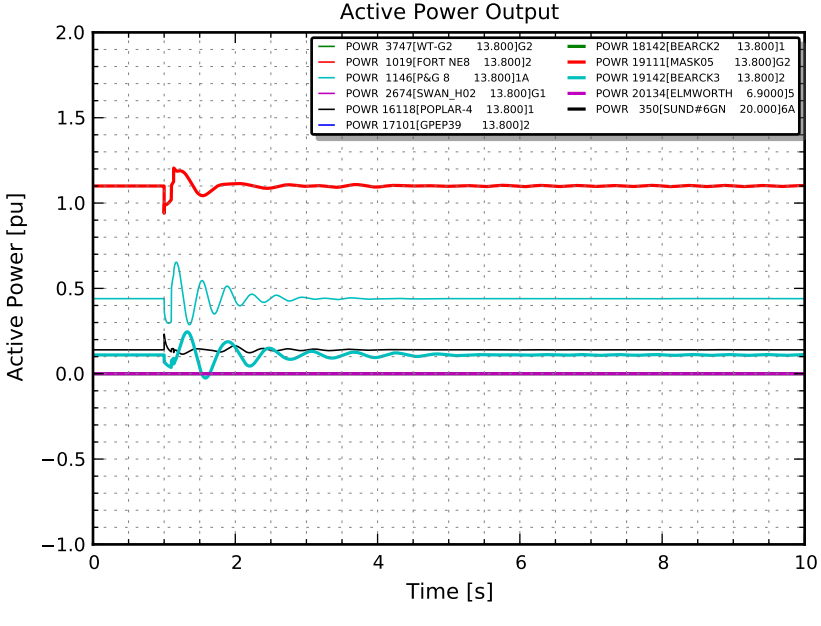
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_A.

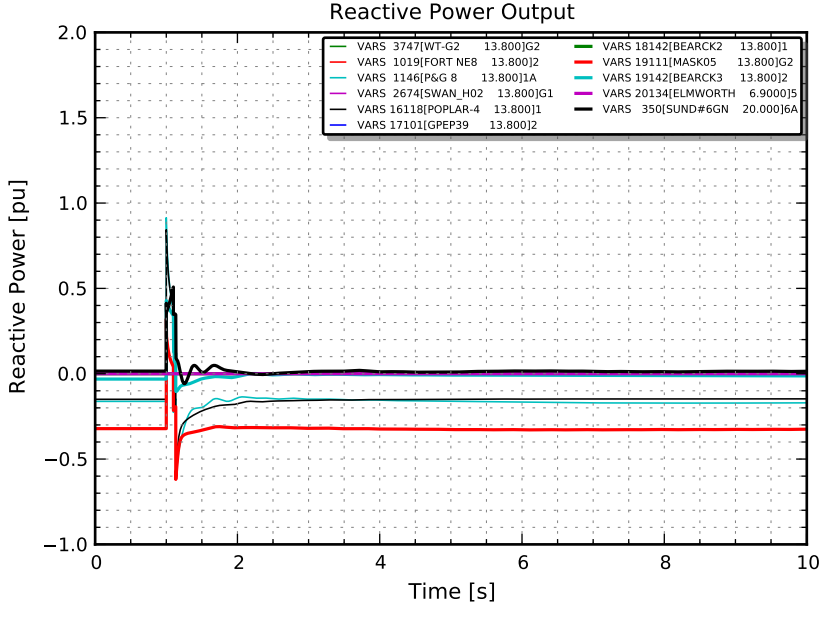
Study Area Generators

Appendix C2B
Figure: 035 (A. 3)





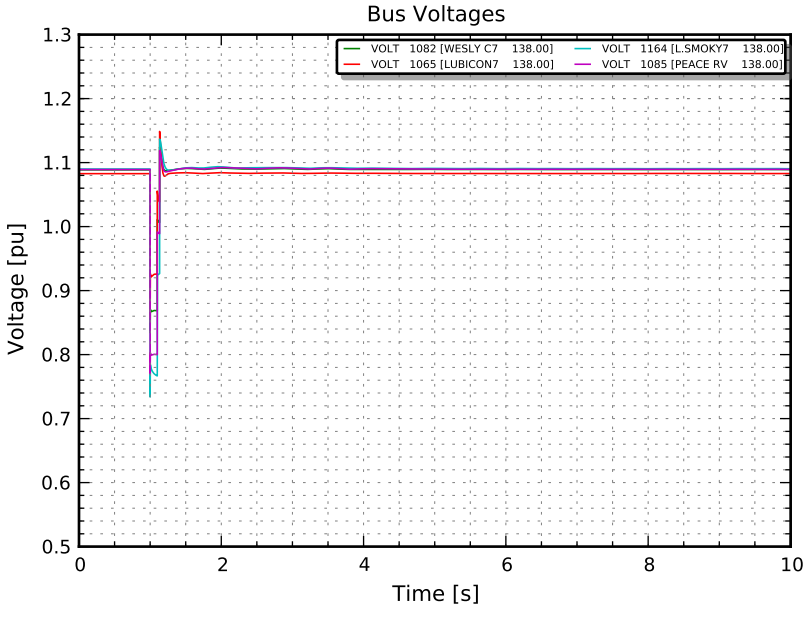


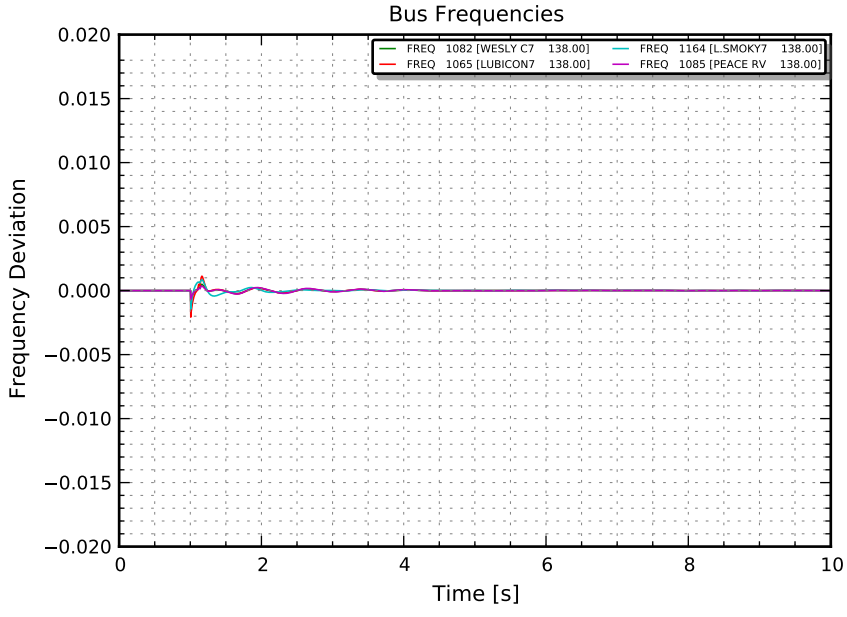


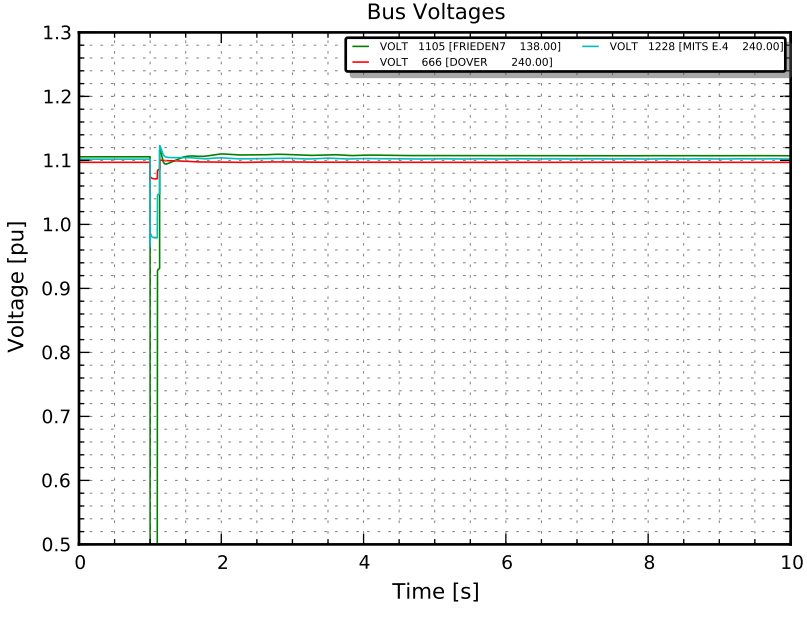
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_B.

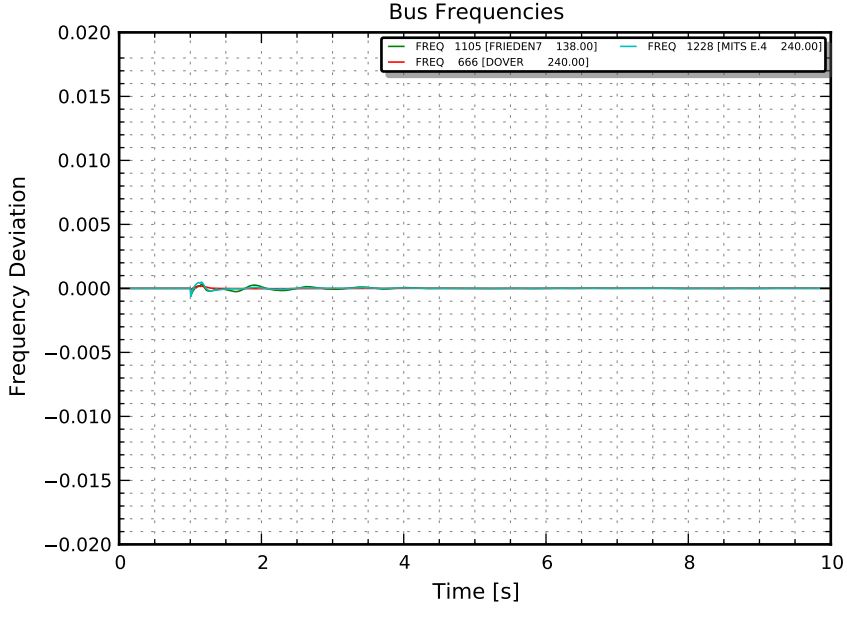
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 035 (B. 1)





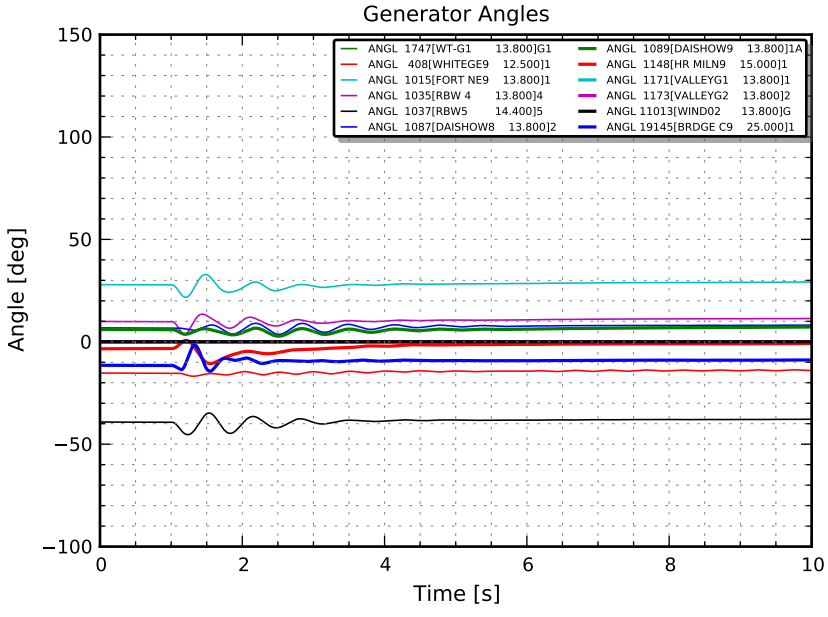


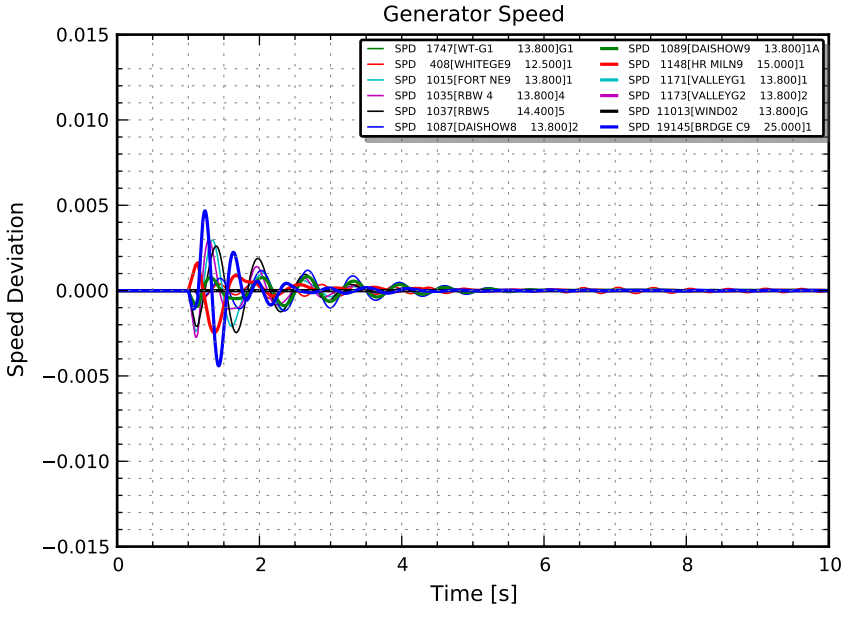


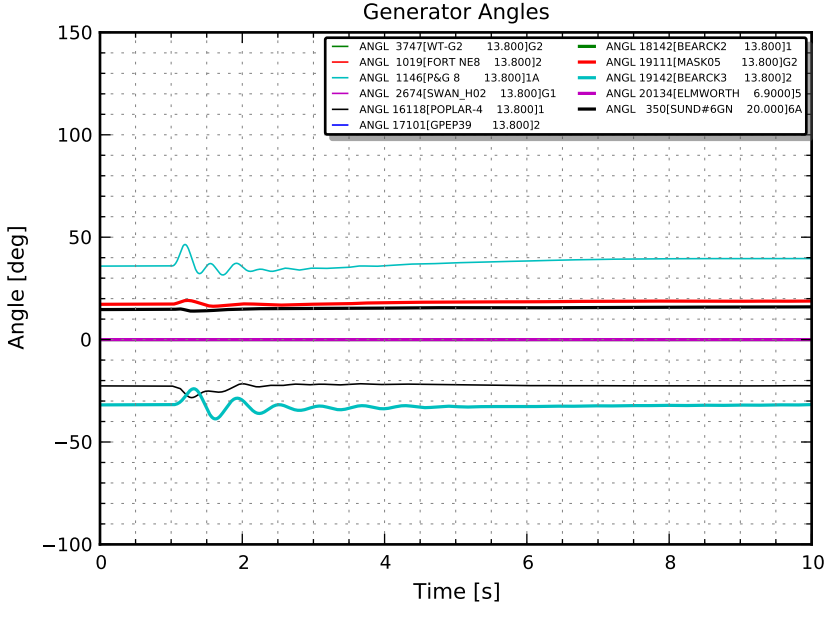
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_B.

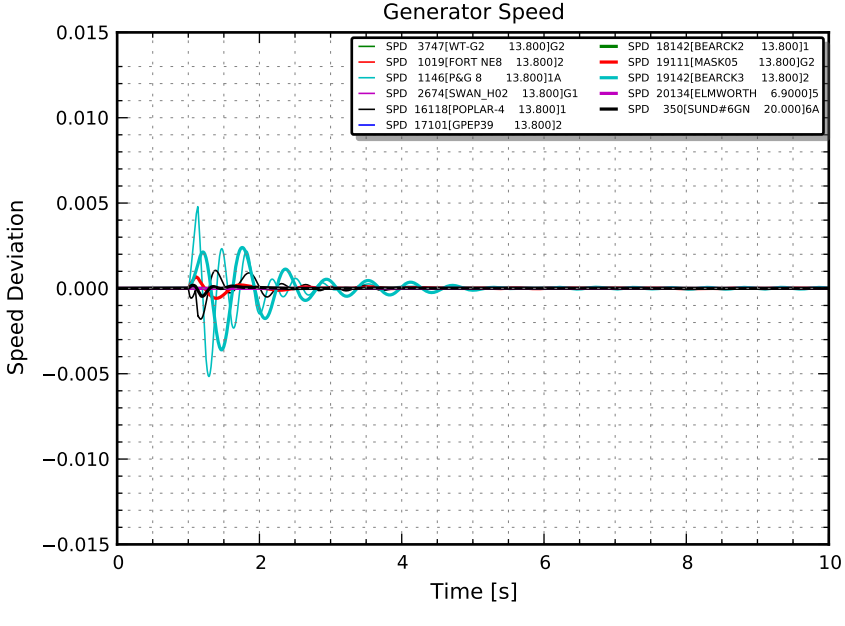
Study Area Generators

Appendix C2B
Figure: 035 (B. 2)





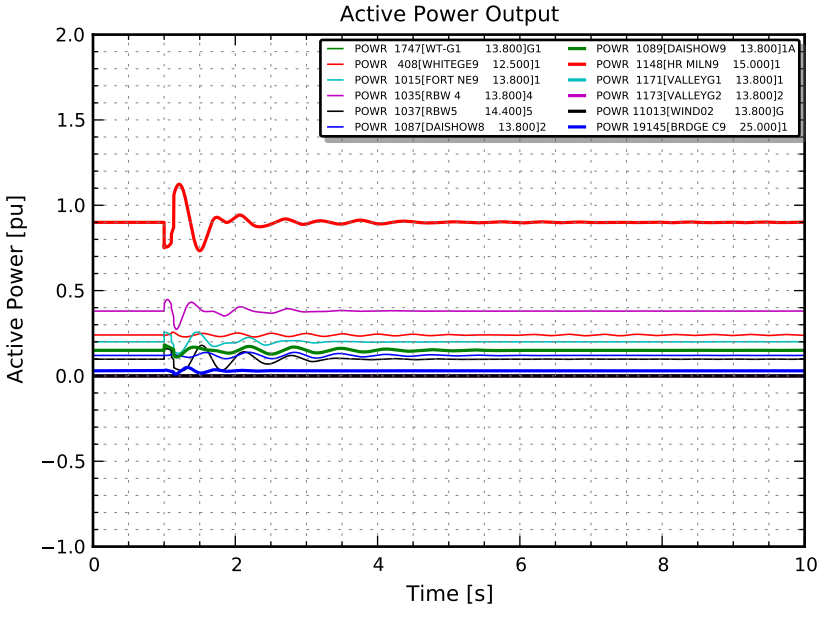


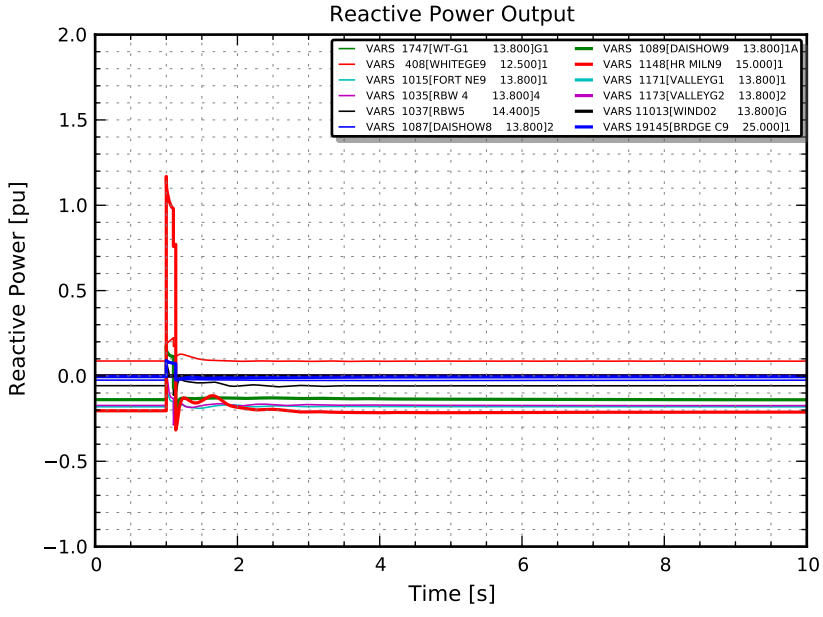


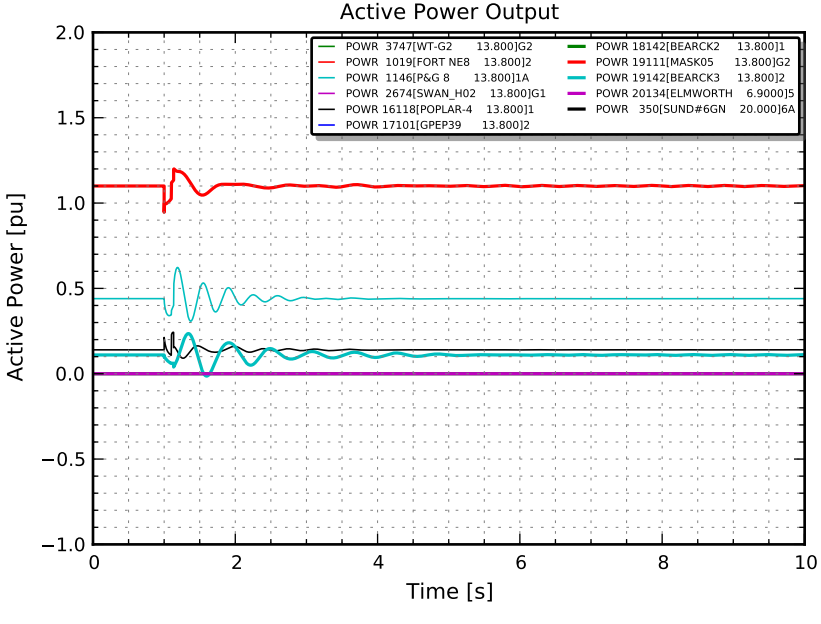
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_B.

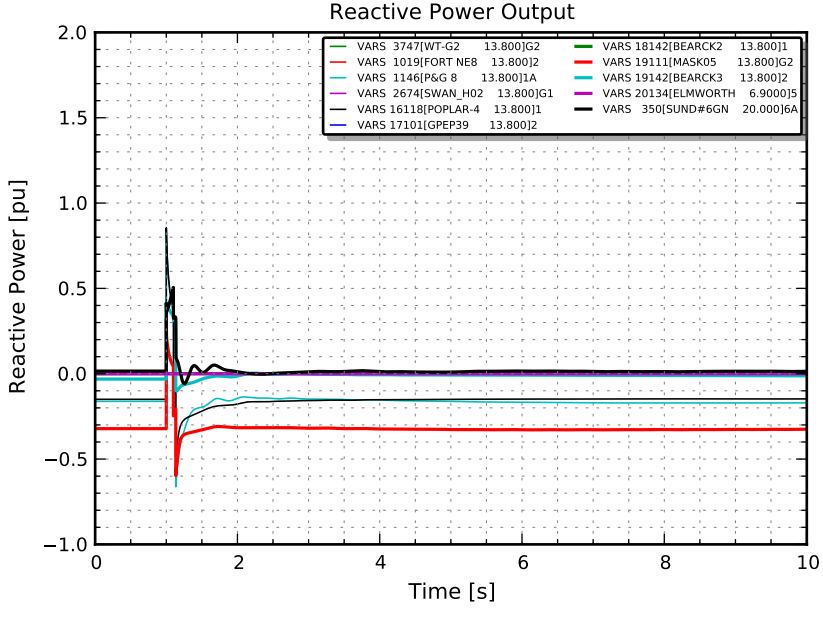
Study Area Generators

Appendix C2B
Figure: 035 (B. 3)





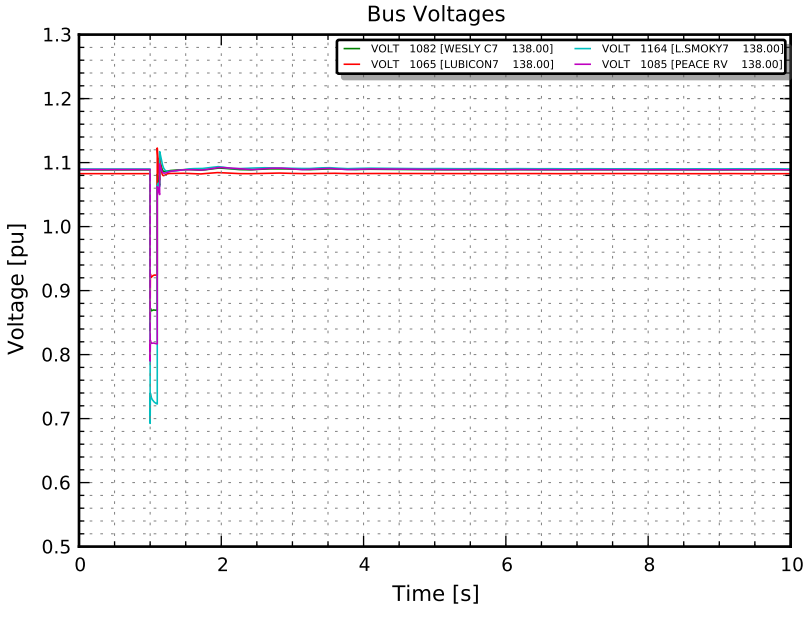


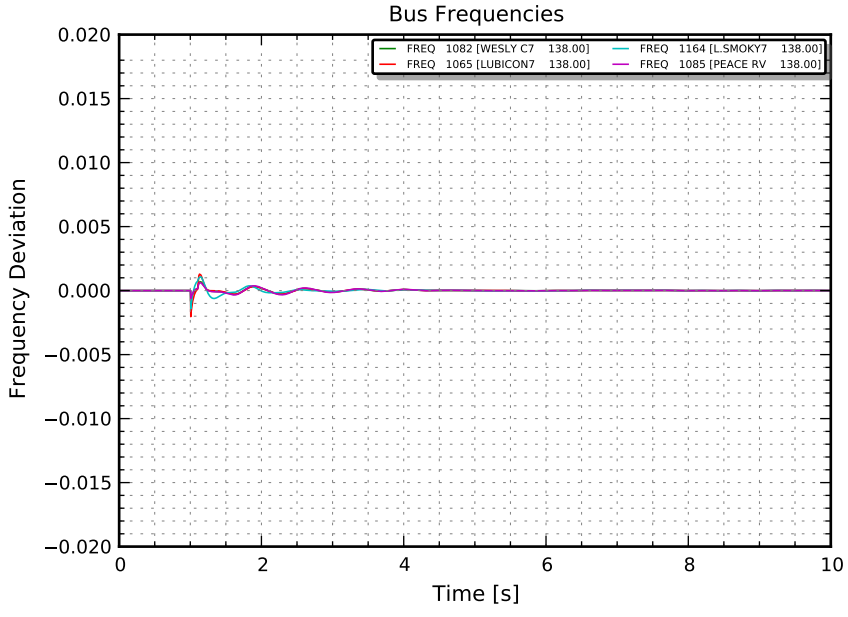


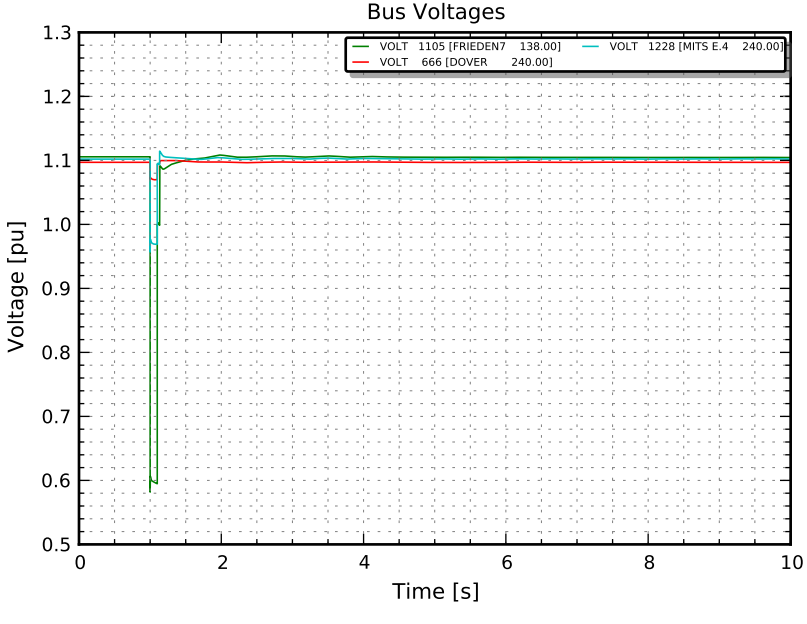
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_A.

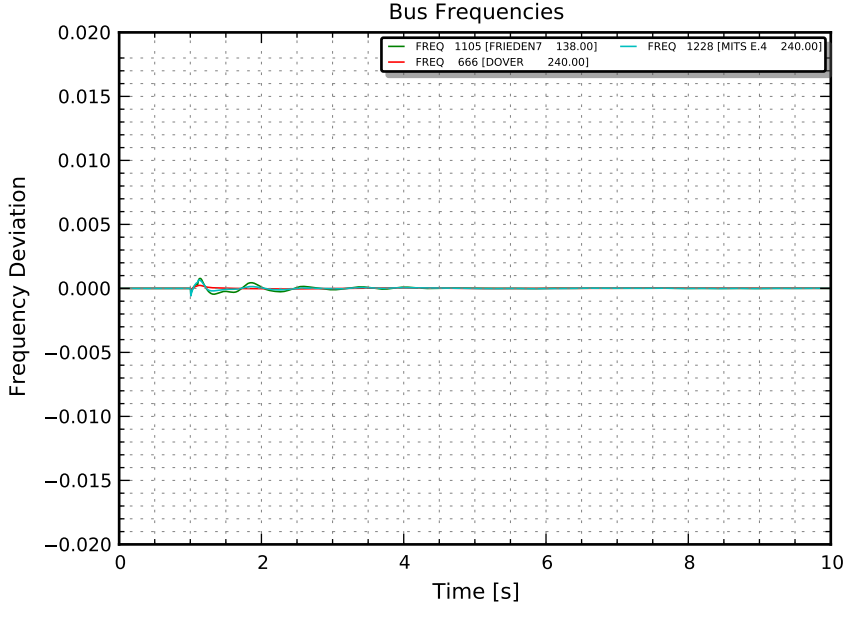
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 036 (A. 1)





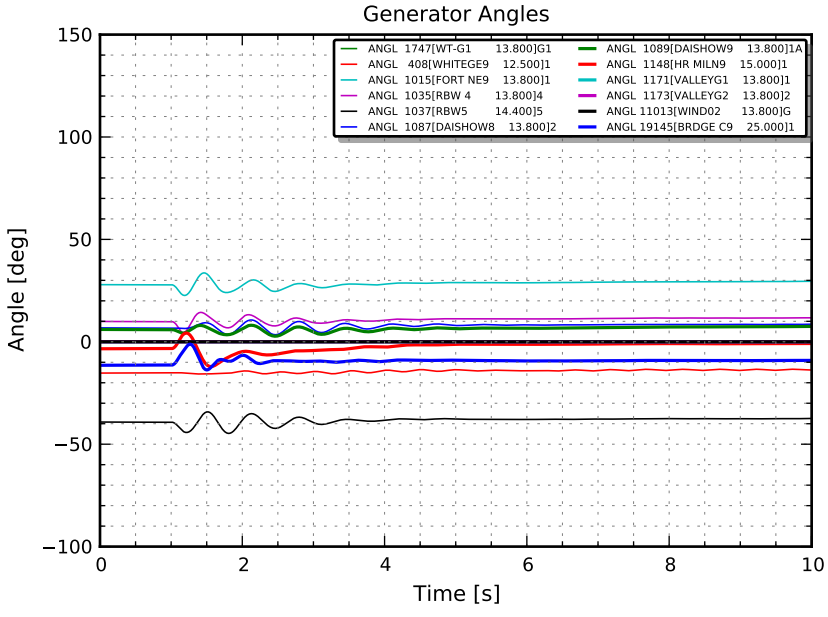


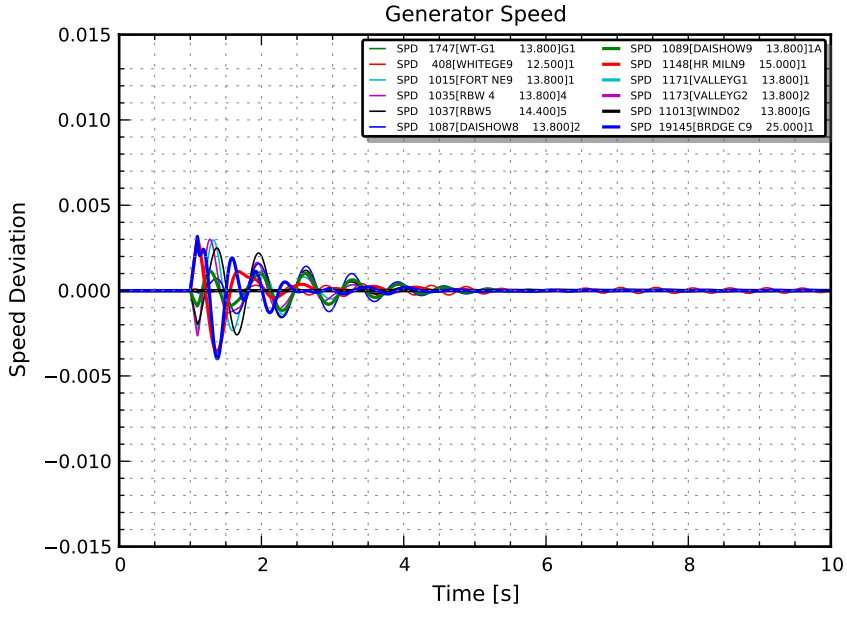


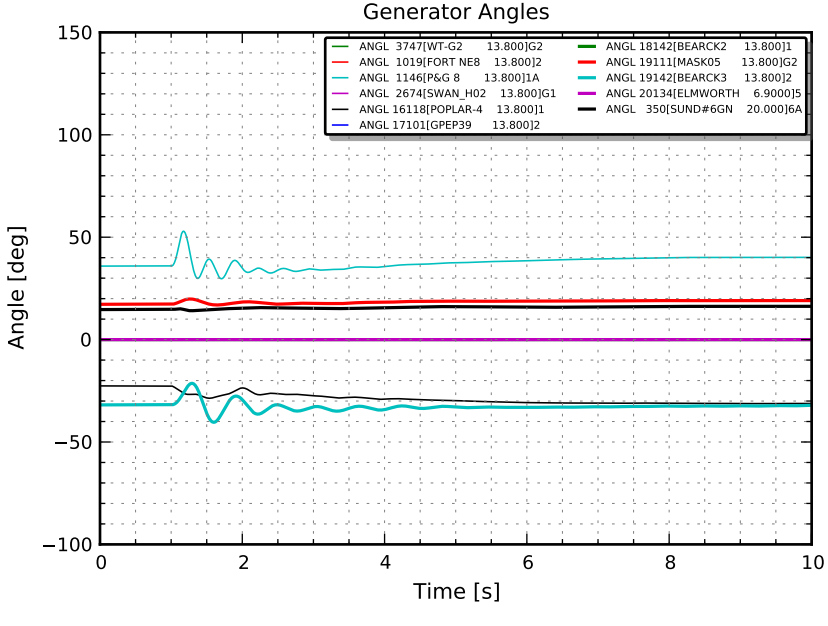
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_A.

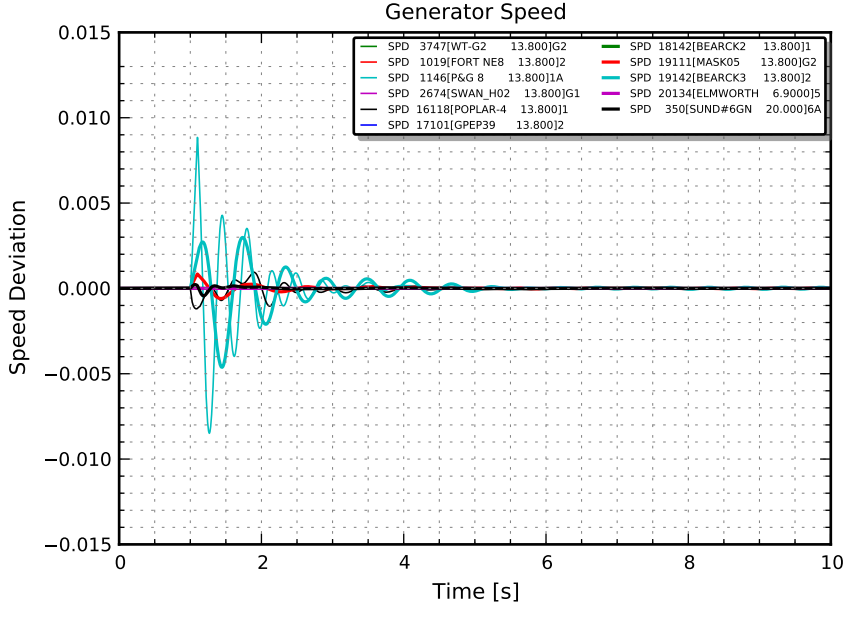
Study Area Generators

Appendix C2B
Figure: 036 (A. 2)





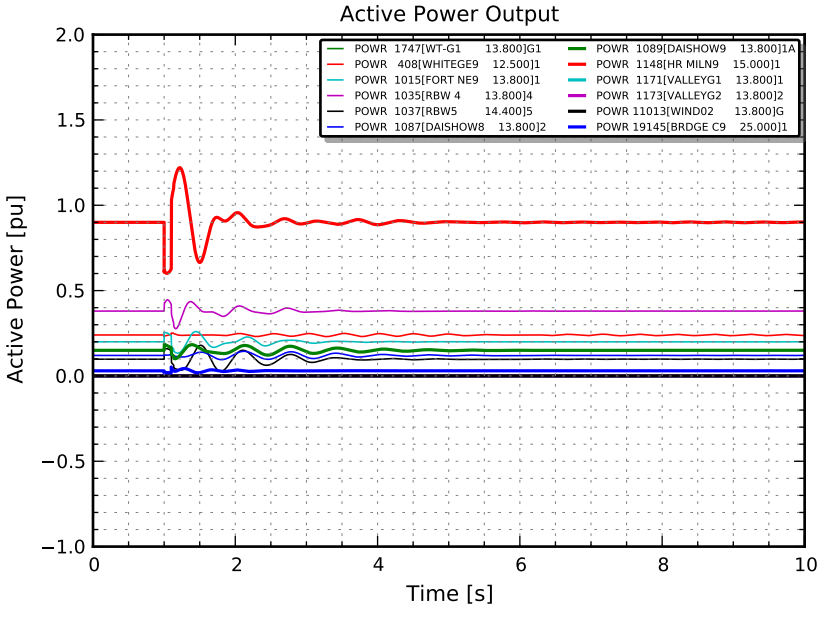


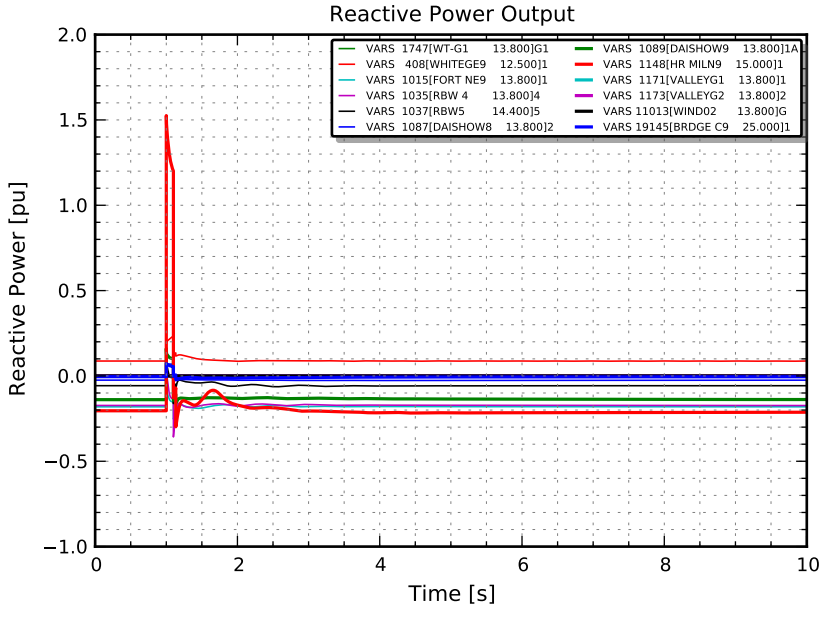


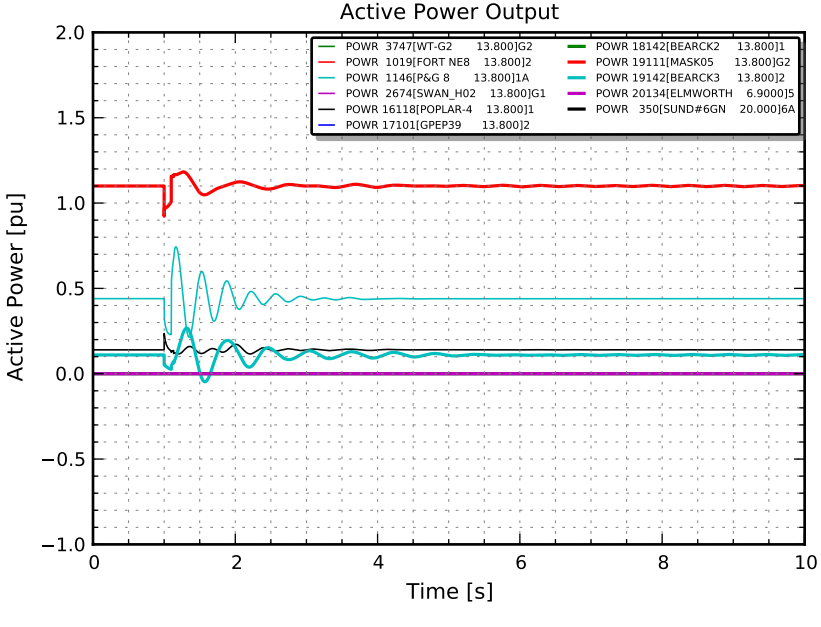
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_A.

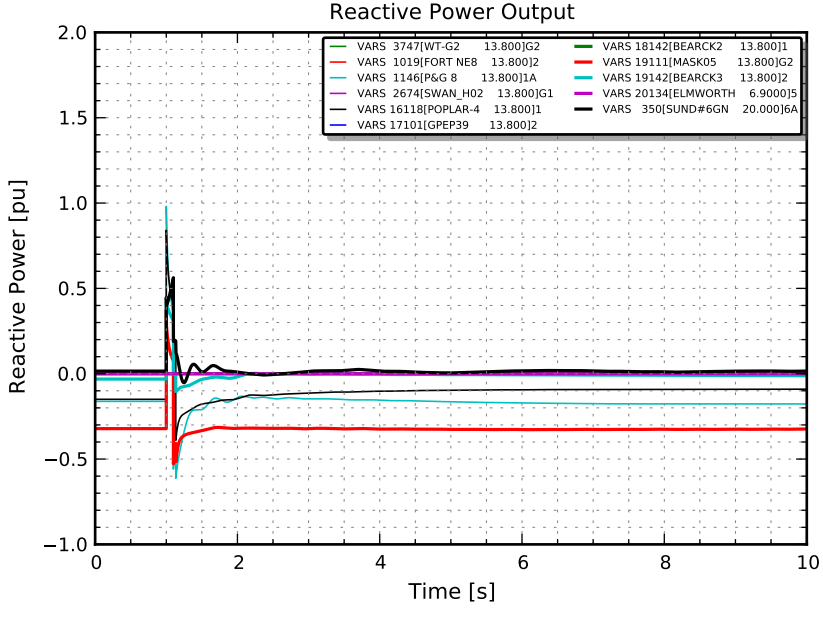
Study Area Generators

Appendix C2B
Figure: 036 (A. 3)





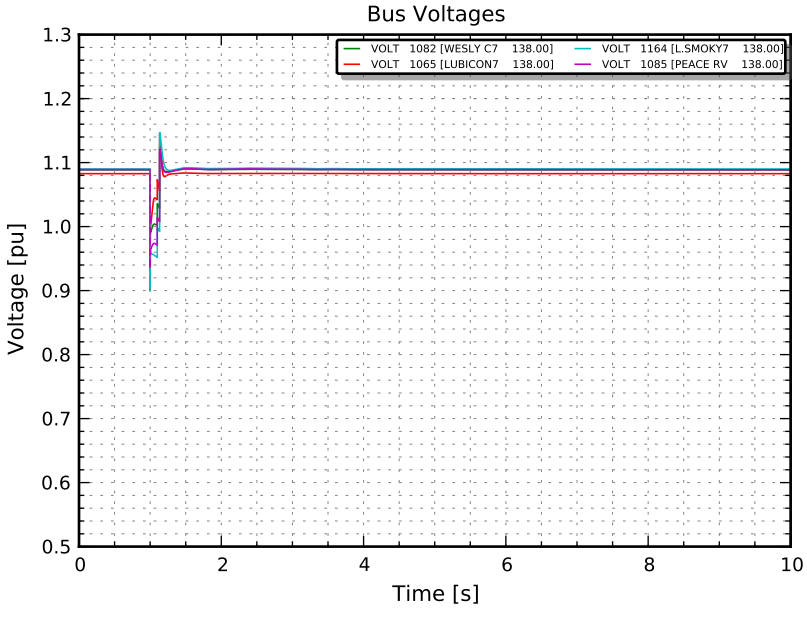


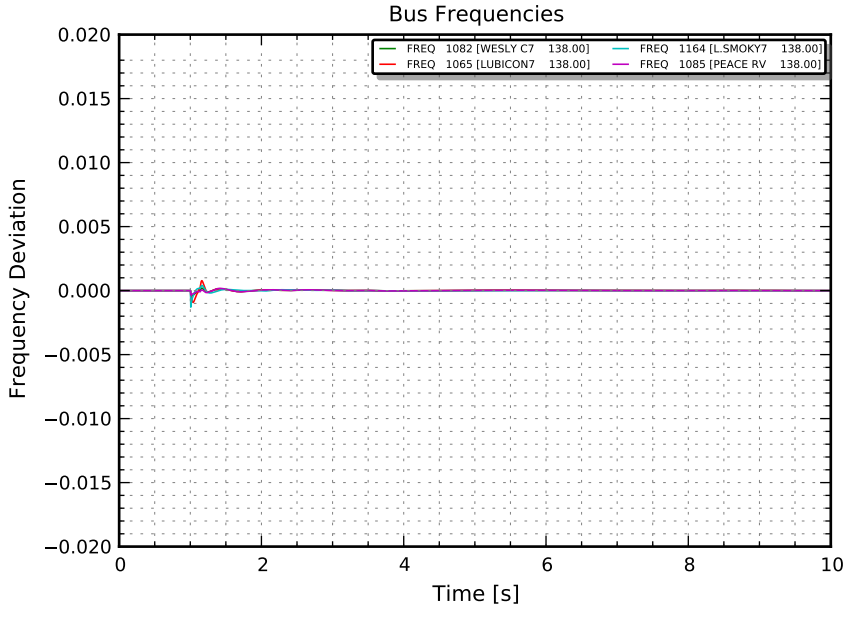


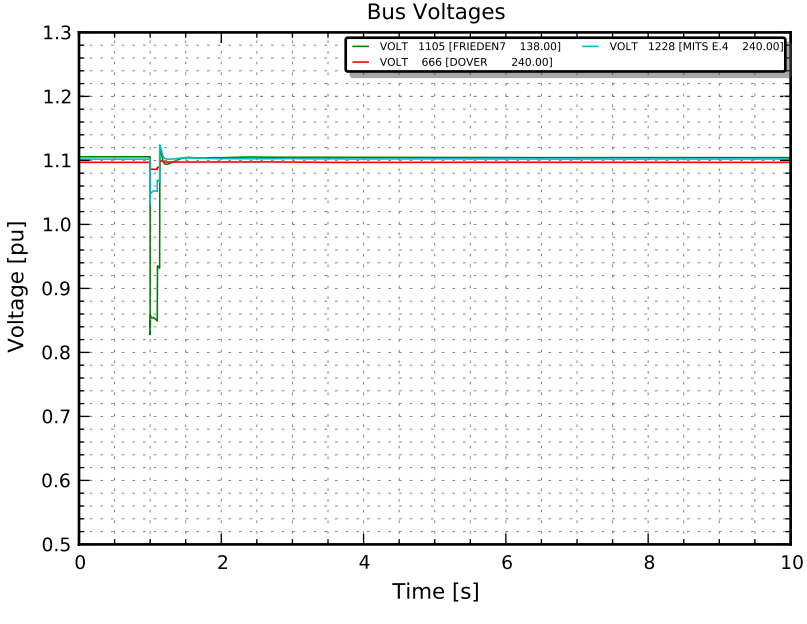
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_B.

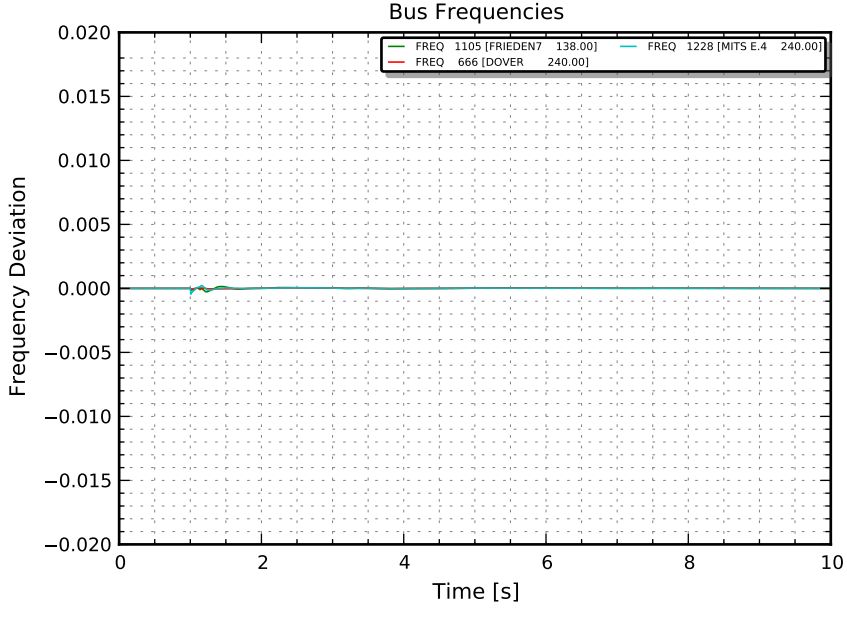
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 036 (B. 1)





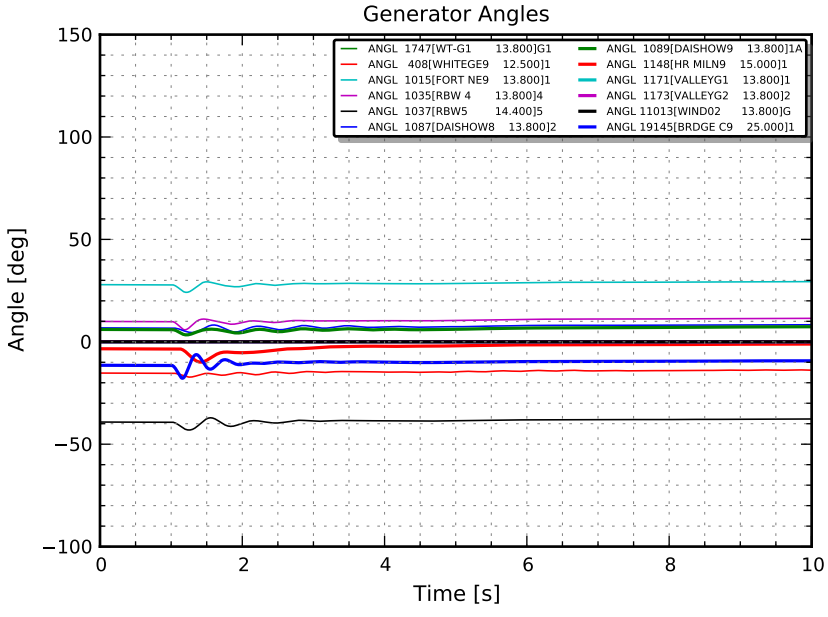


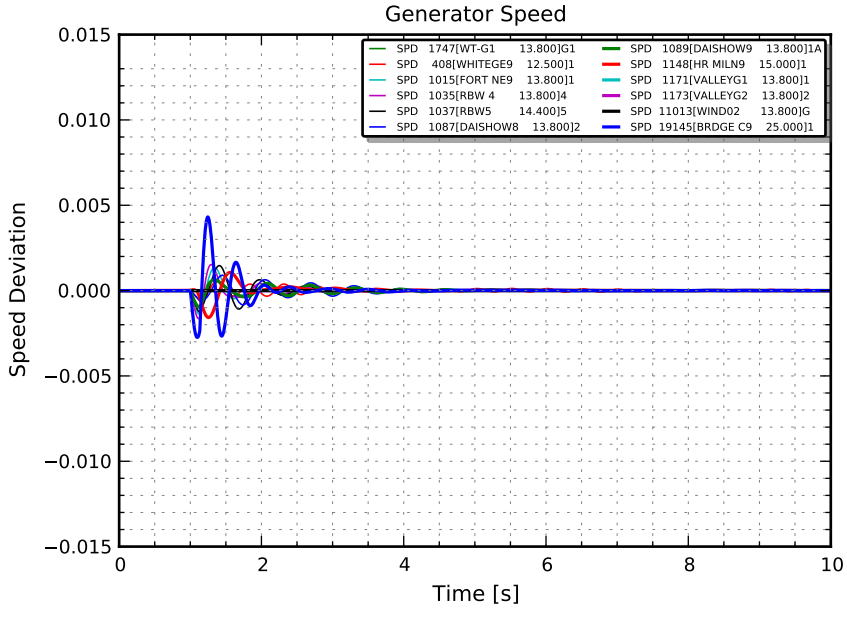


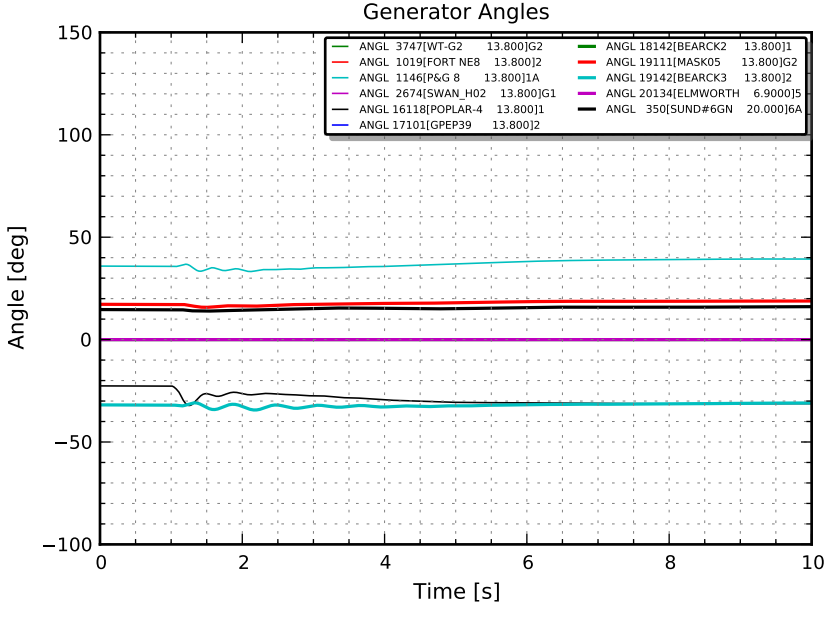
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_B.

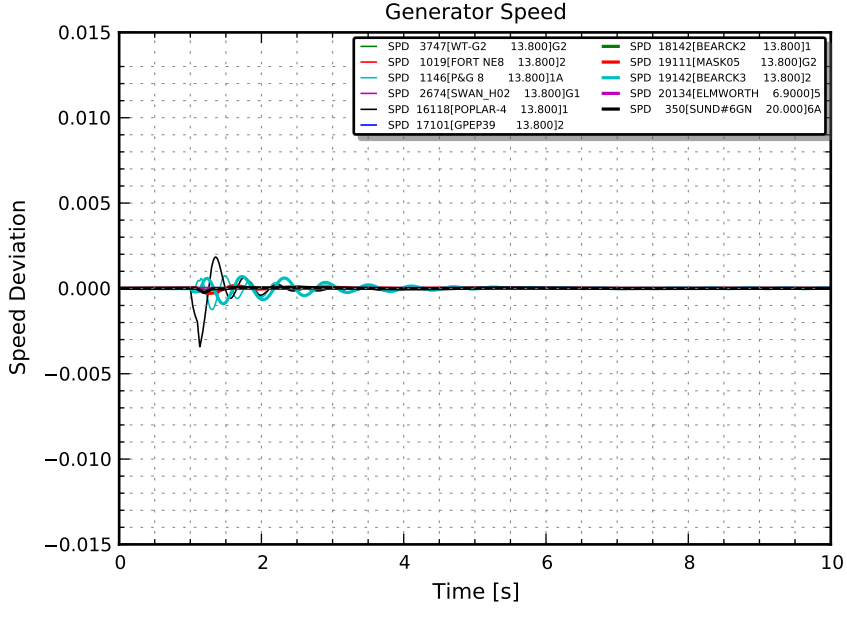
Study Area Generators

Appendix C2B
Figure: 036 (B. 2)





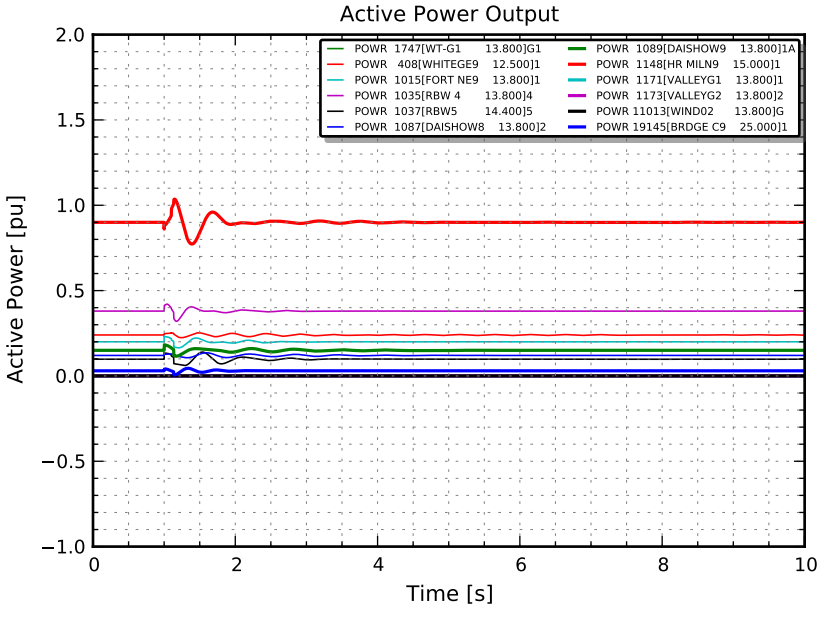


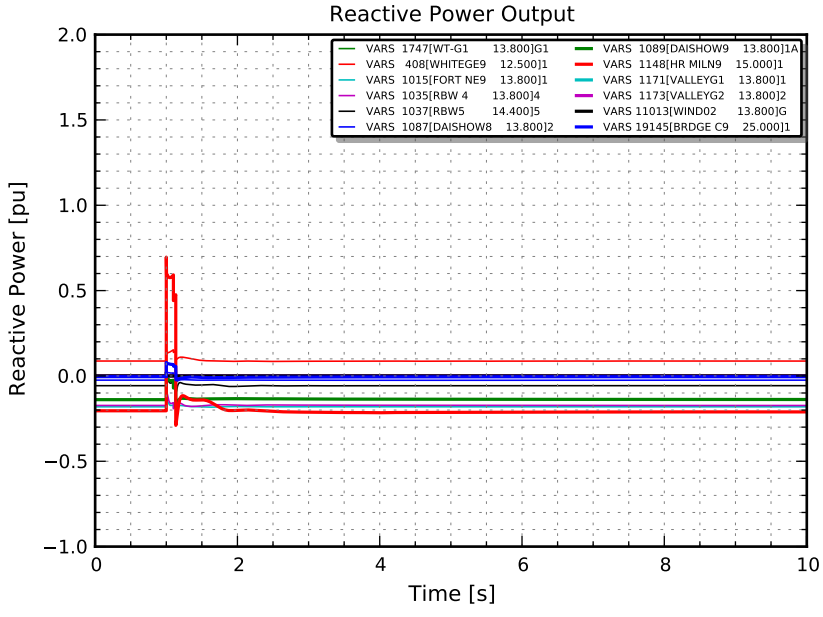


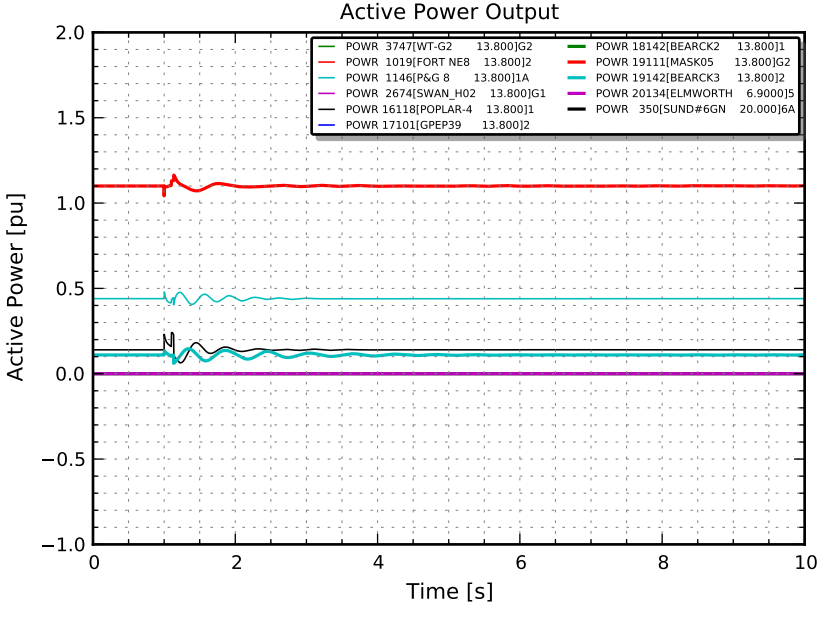
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_B.

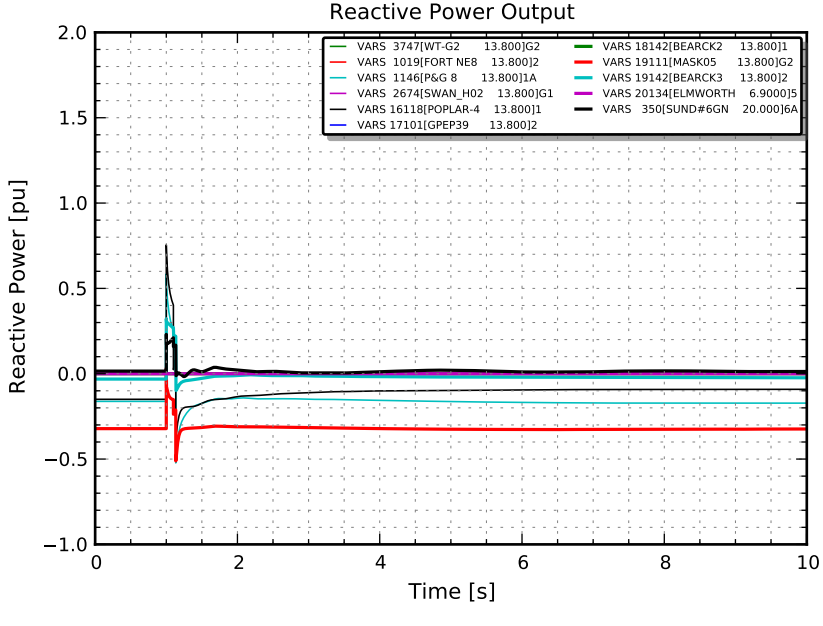
Study Area Generators

Appendix C2B
Figure: 036 (B. 3)





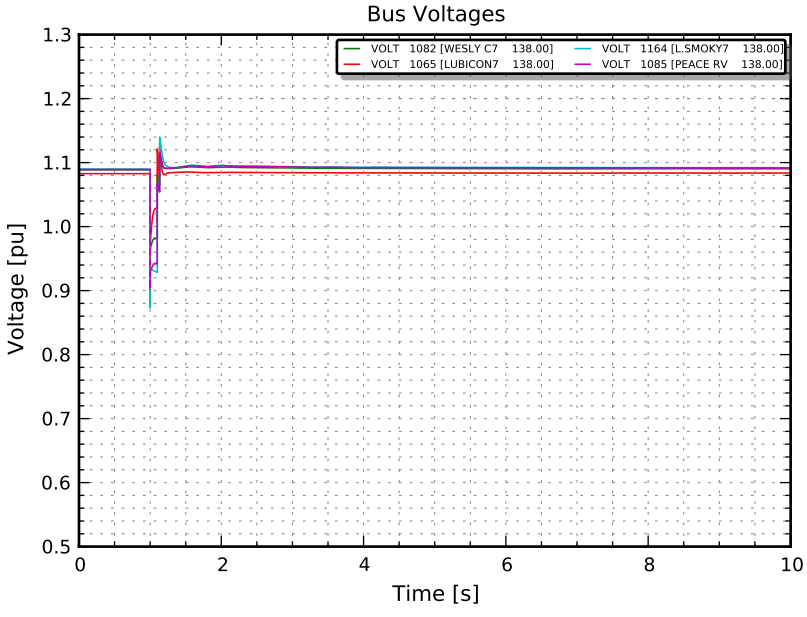


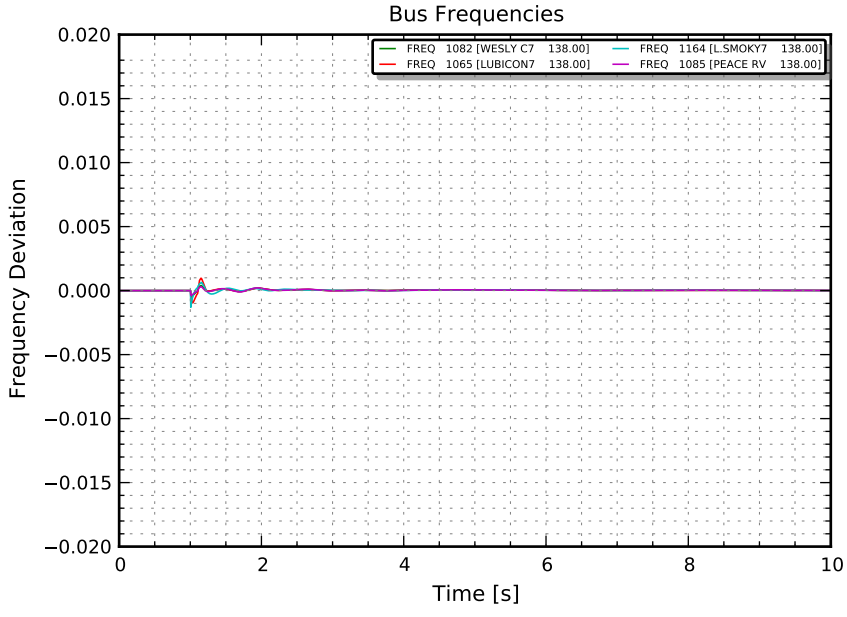


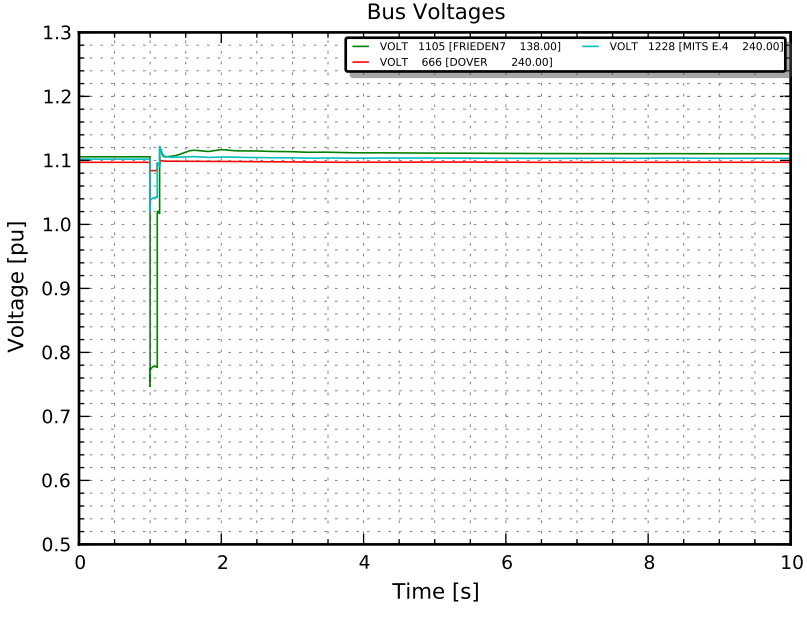
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 037 7L07 POPLARHILL to ELMWORTH_A.

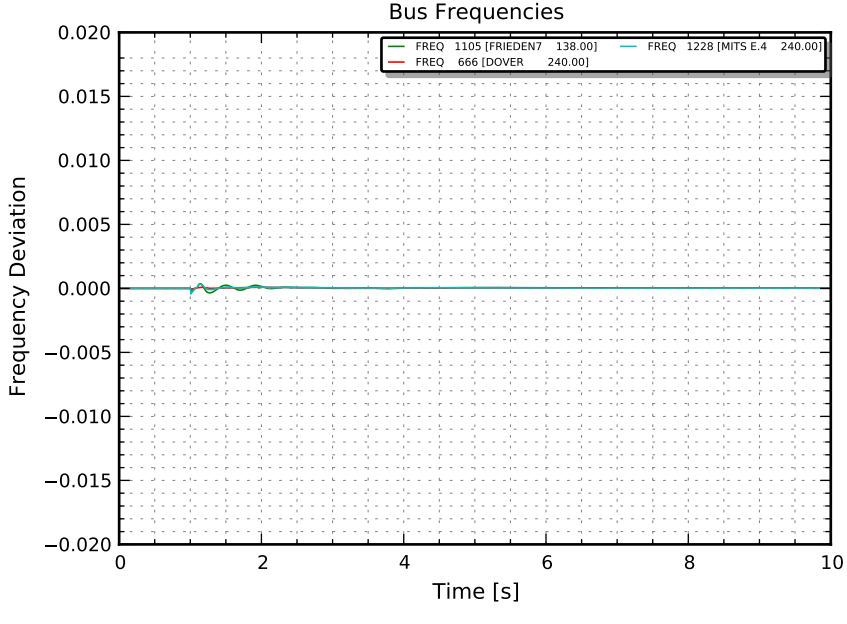
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 037 (A. 1)





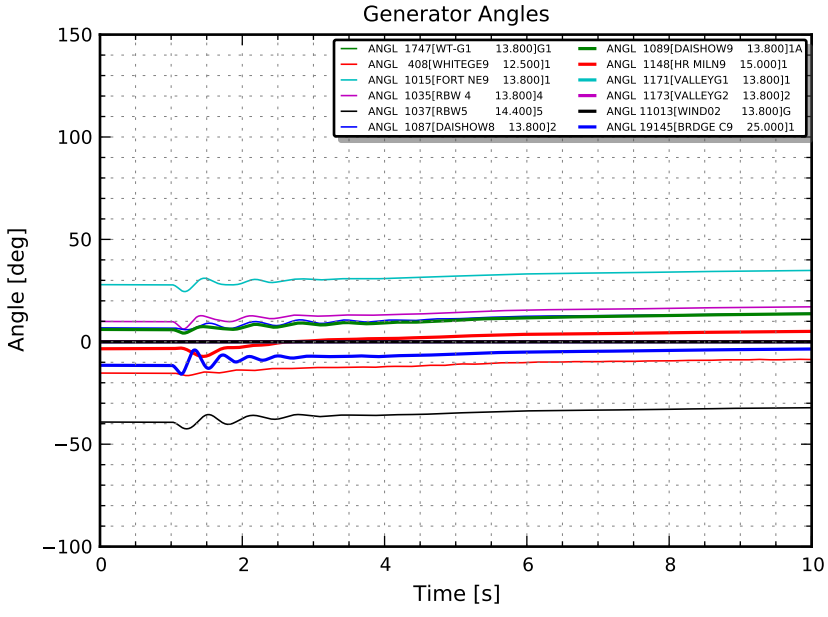


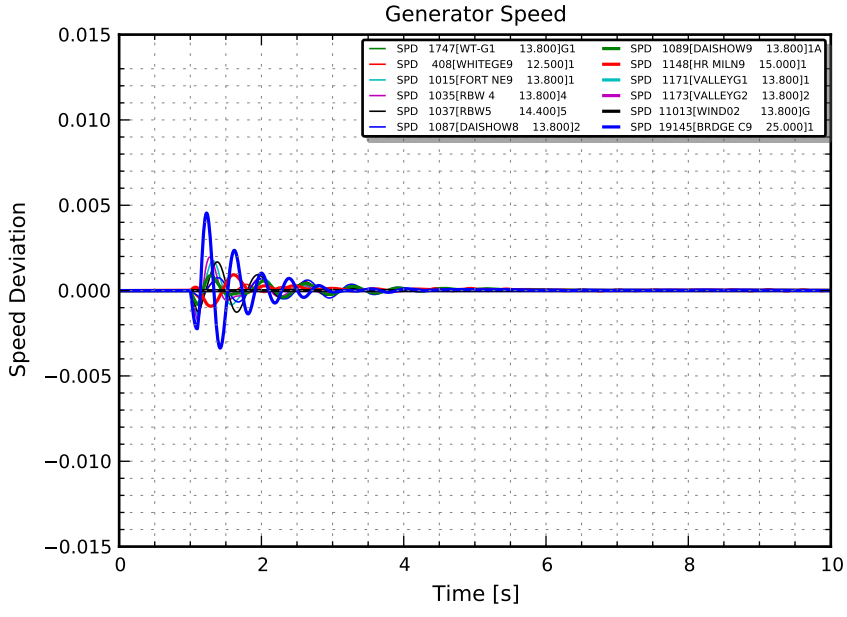


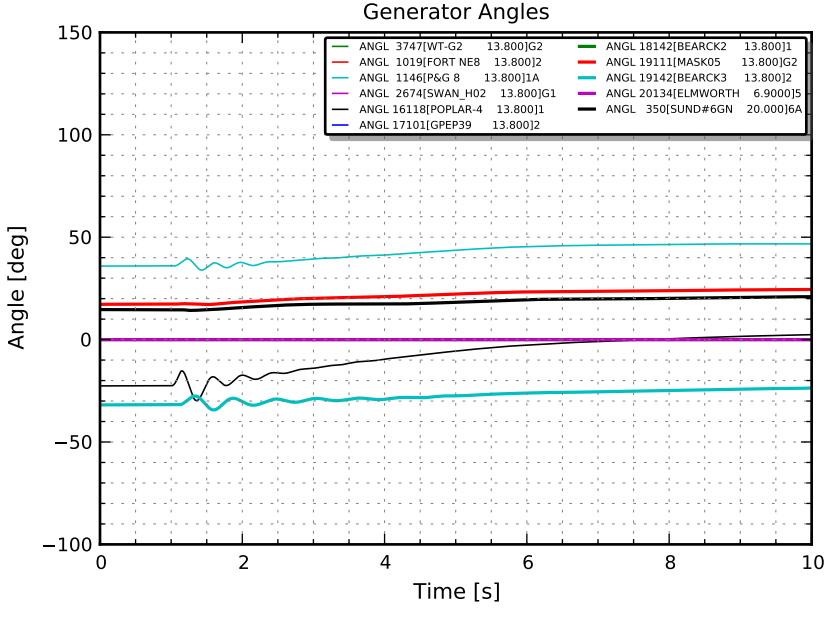
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 037 7L07 POPLARHILL to ELMWORTH_A.

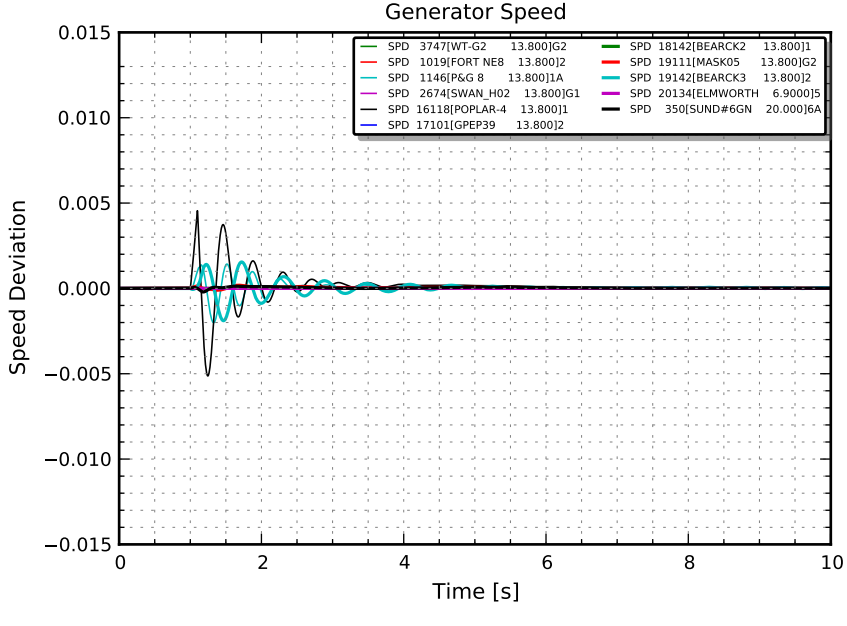
Study Area Generators

Appendix C2B
Figure: 037 (A. 2)





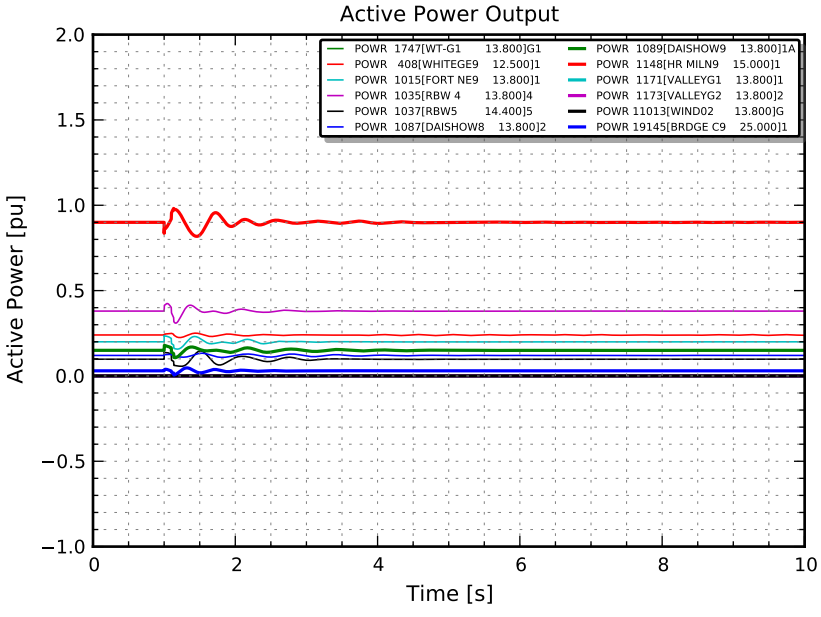


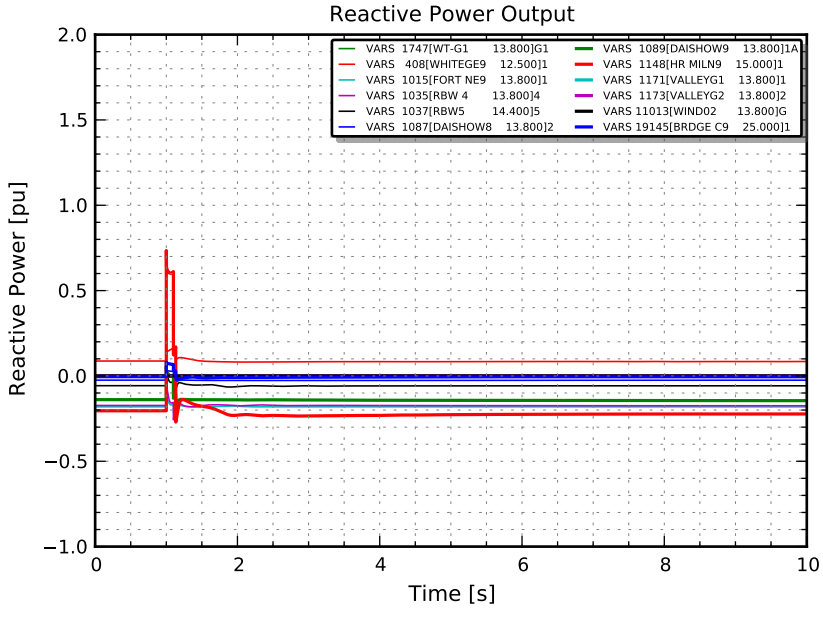


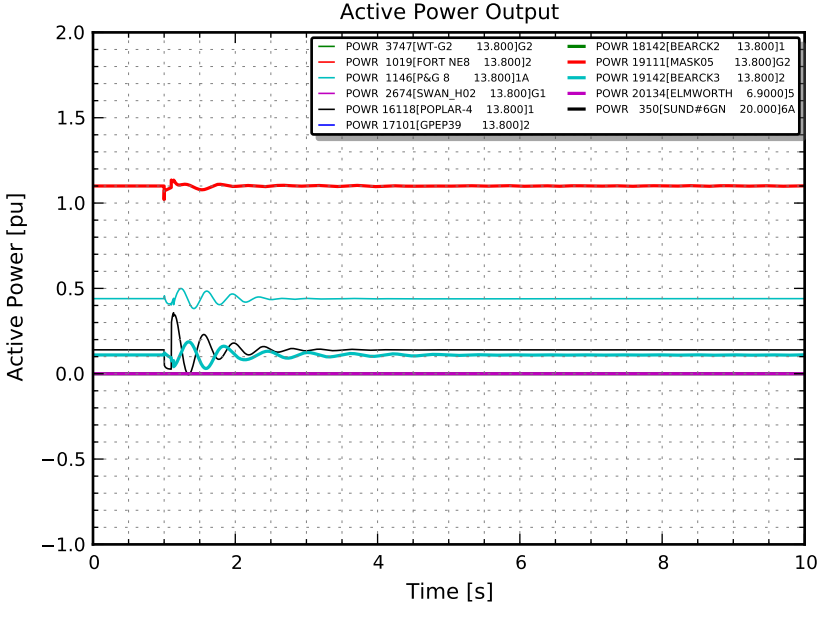
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 037 7L07 POPLARHILL to ELMWORTH_A.

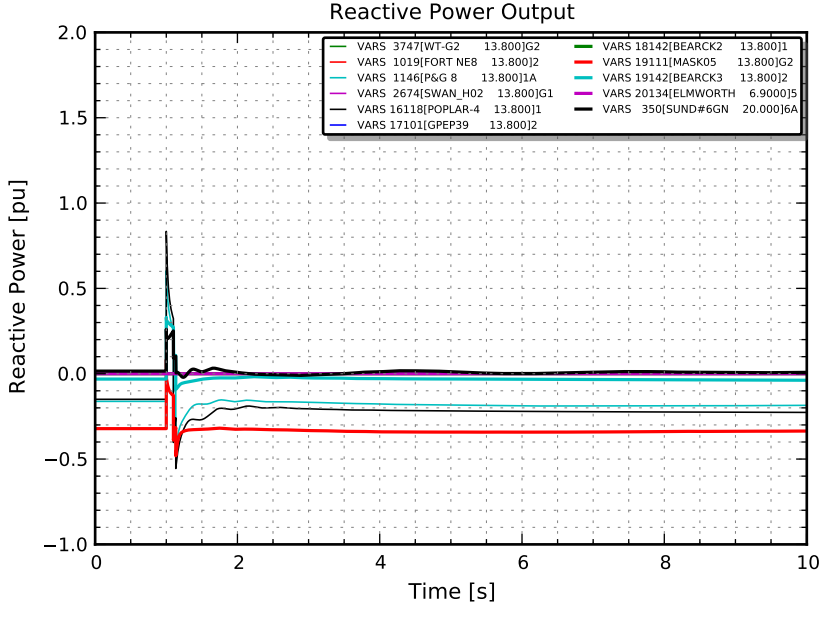
Study Area Generators

Appendix C2B
Figure: 037 (A. 3)





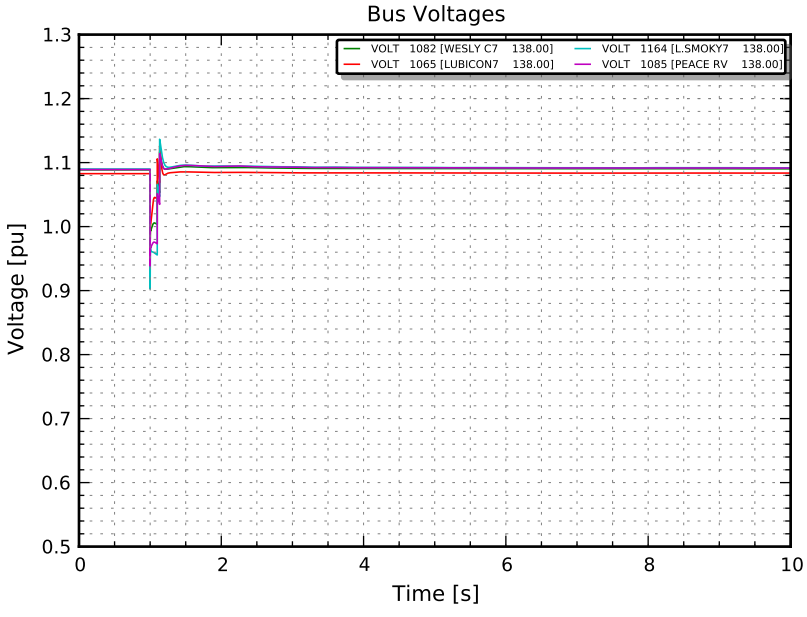


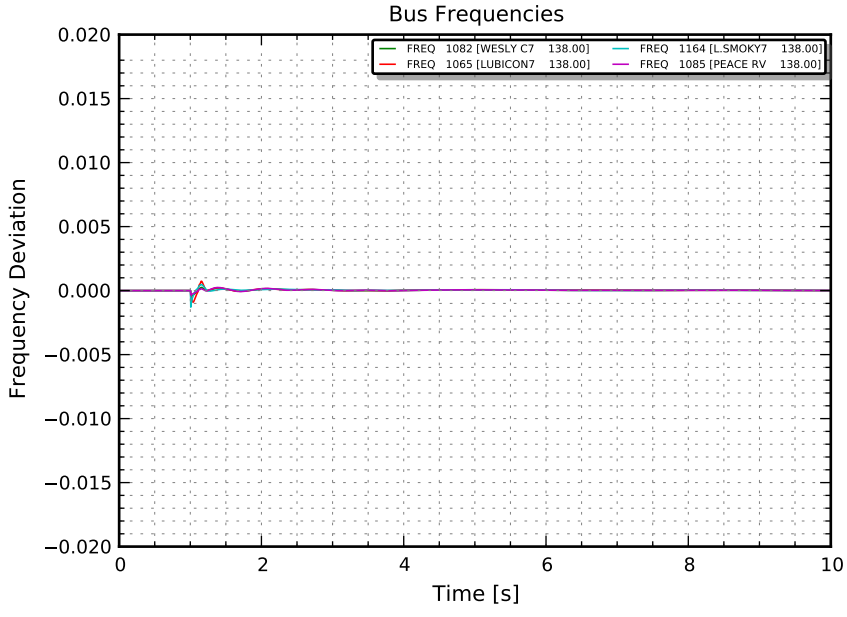


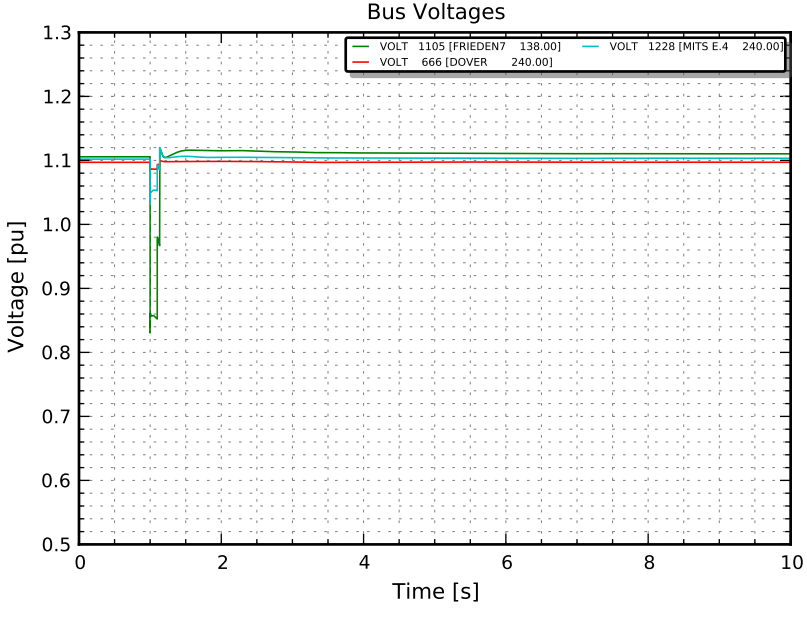
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 037 7L07 POPLARHILL to ELMWORTH_B.

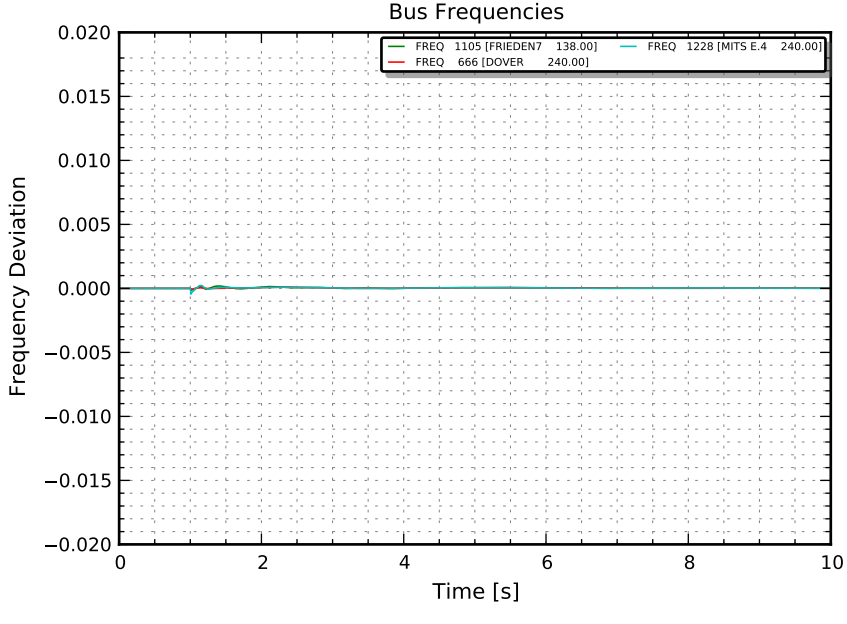
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 037 (B. 1)





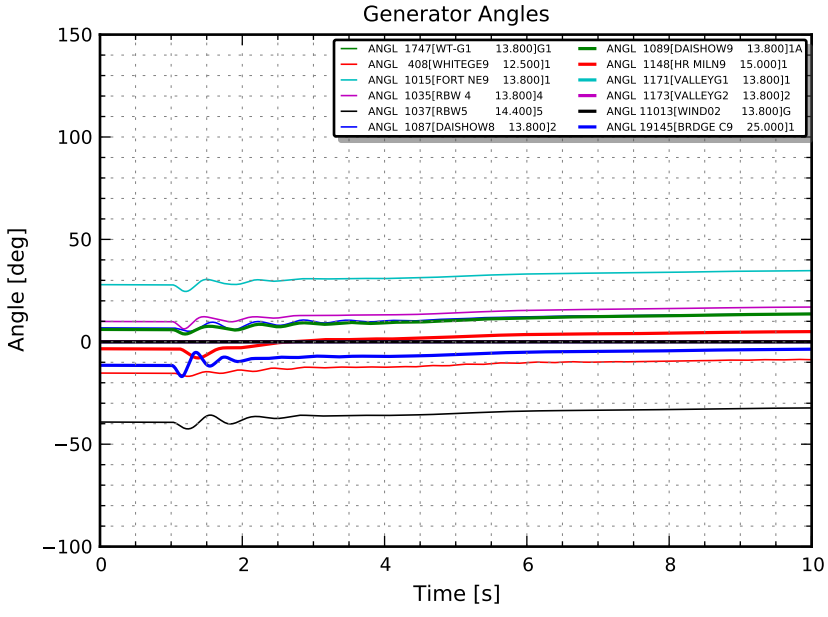


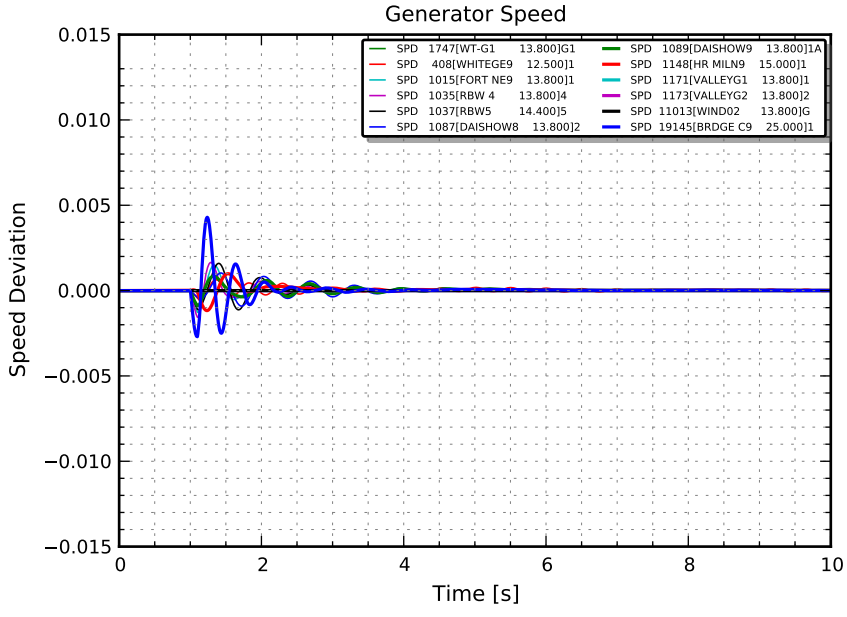


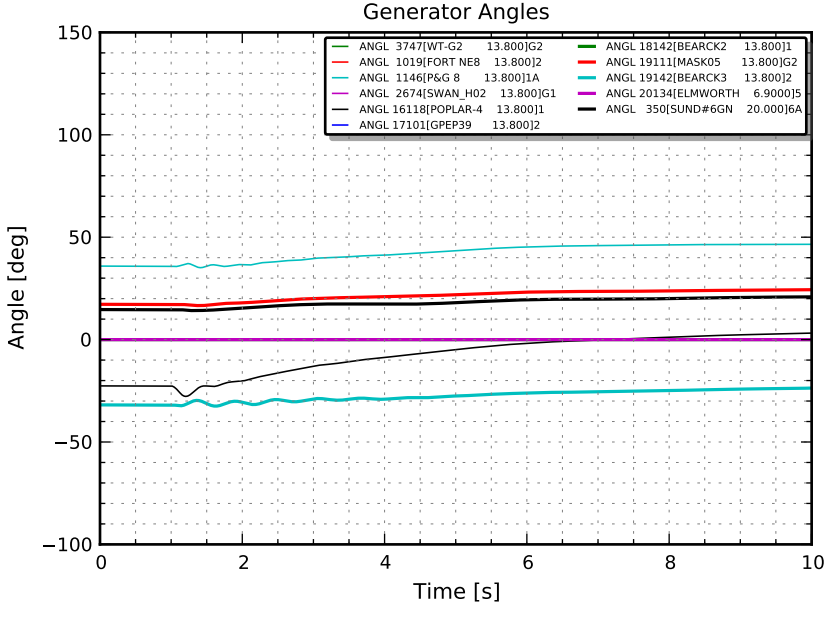
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 037 7L07 POPLARHILL to ELMWORTH_B.

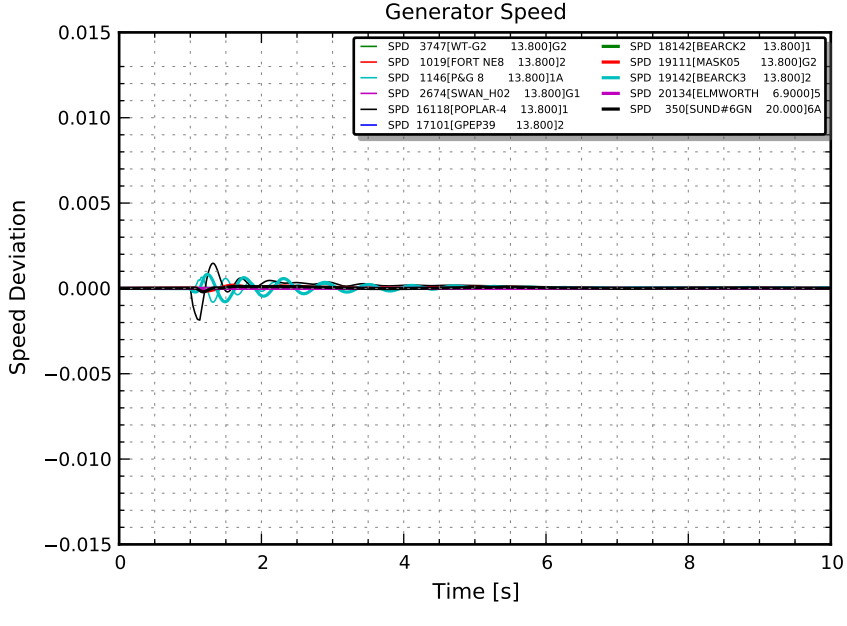
Study Area Generators

Appendix C2B
Figure: 037 (B. 2)





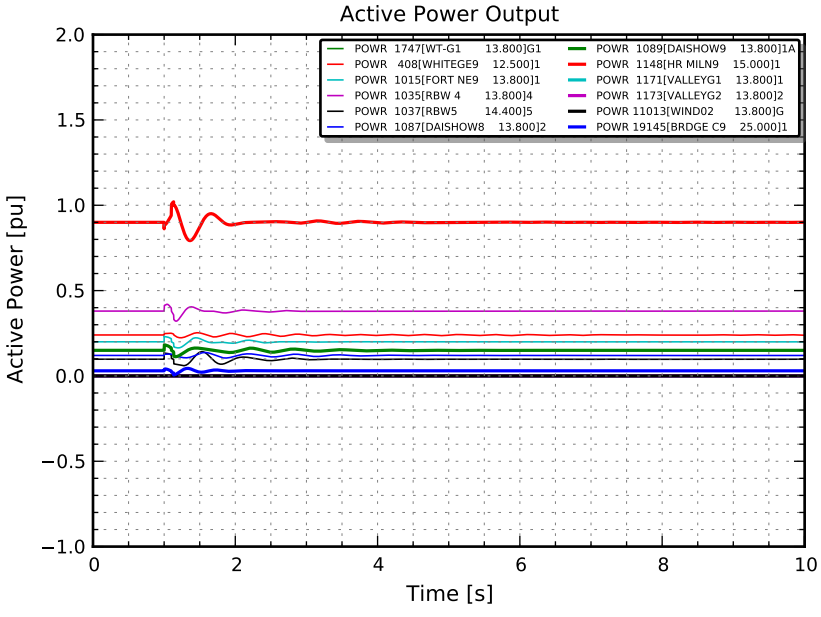


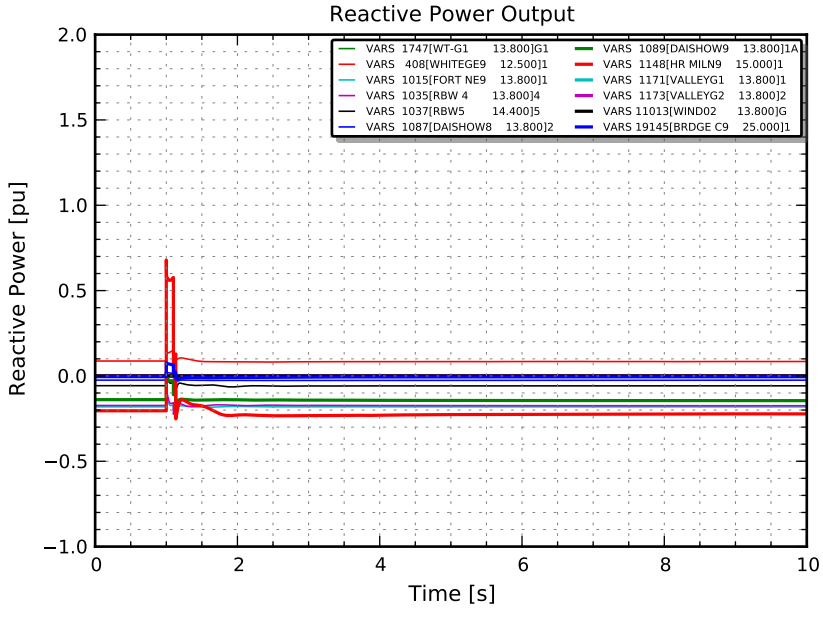


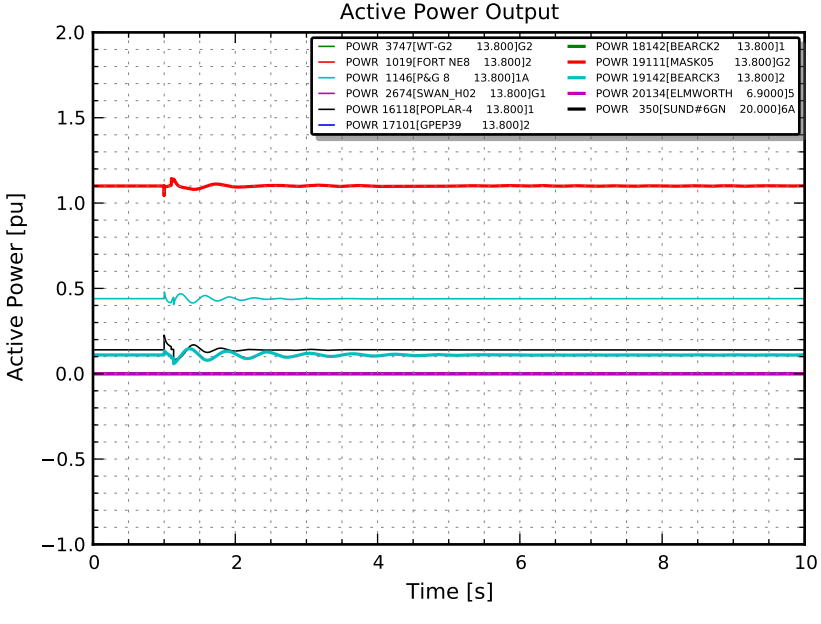
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 037 7L07 POPLARHILL to ELMWORTH_B.

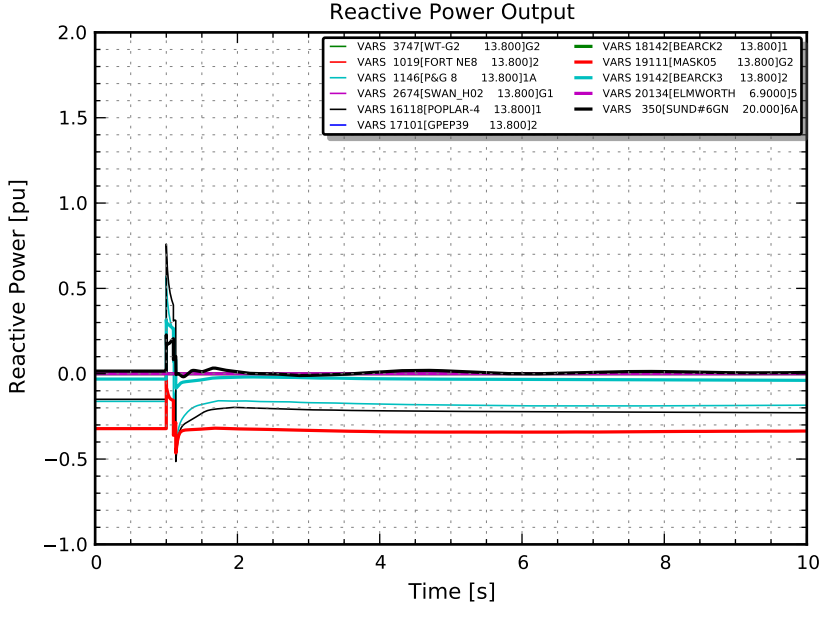
Study Area Generators

Appendix C2B
Figure: 037 (B. 3)





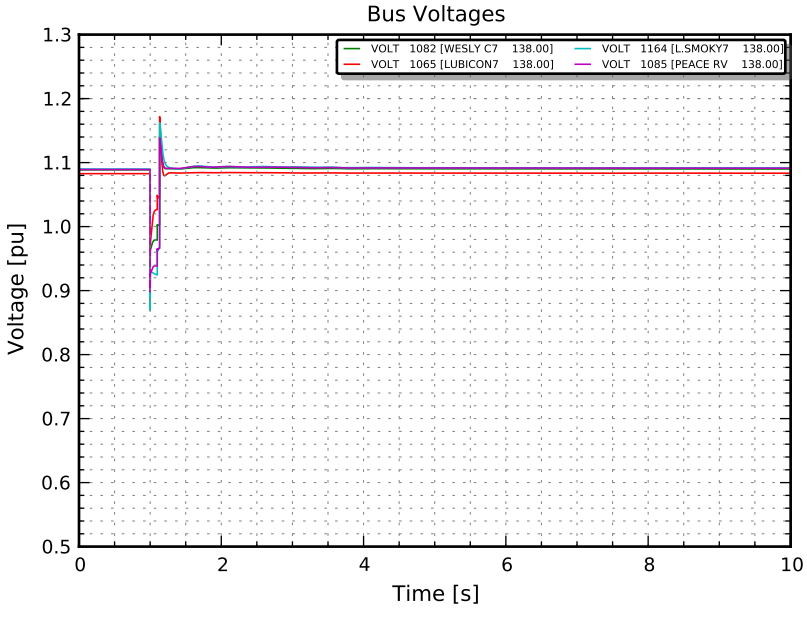


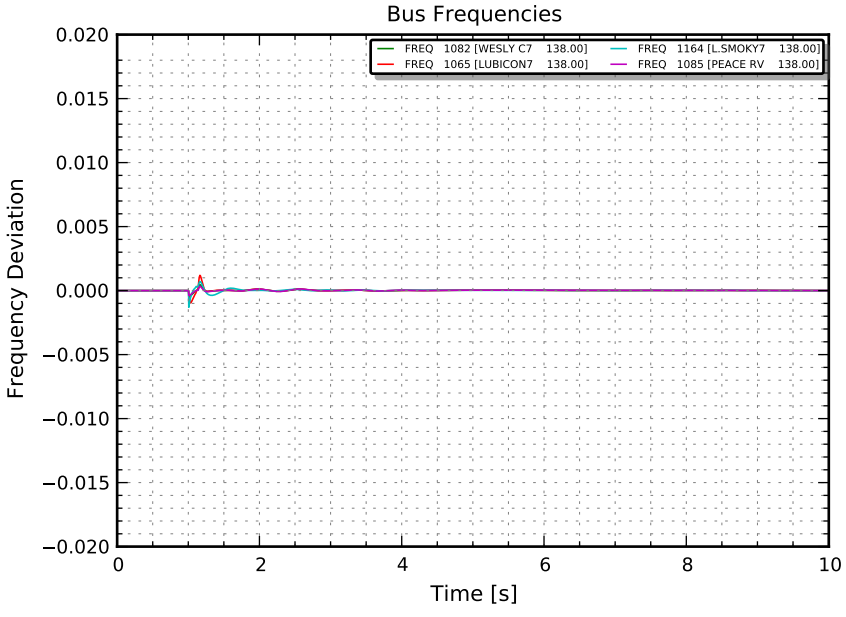


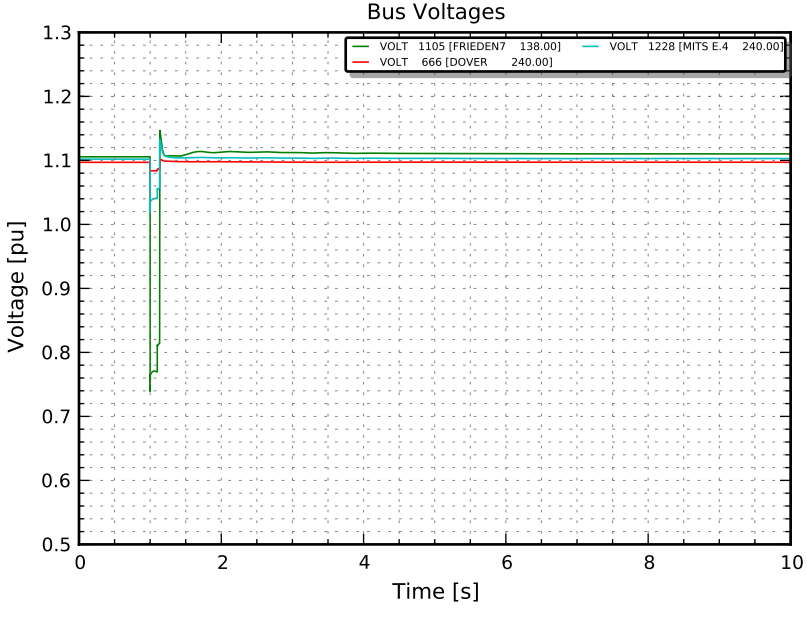
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_A.

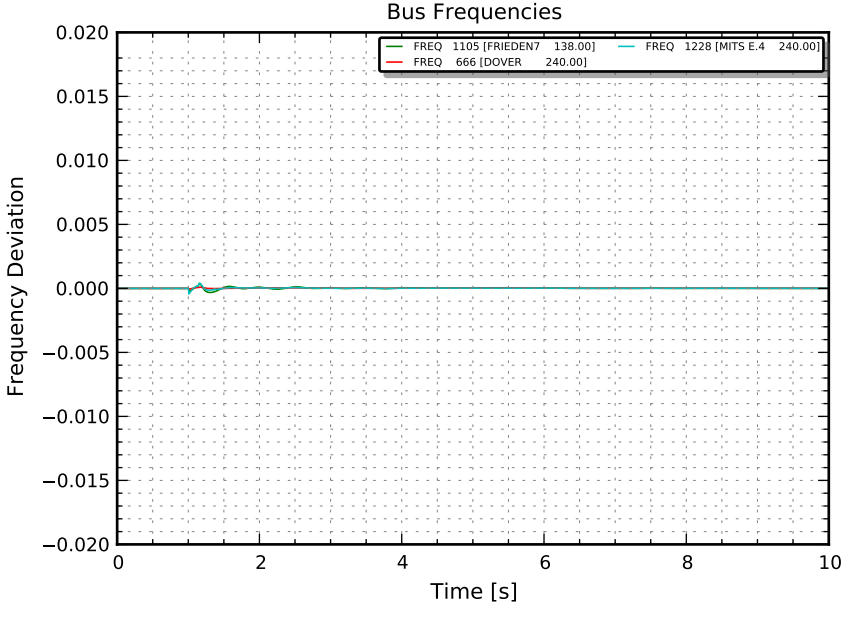
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 038 (A. 1)





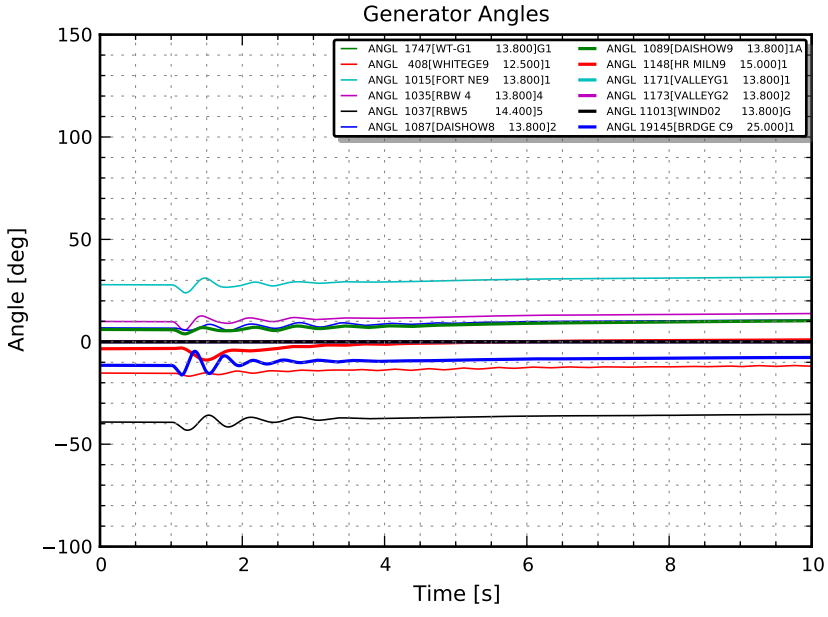


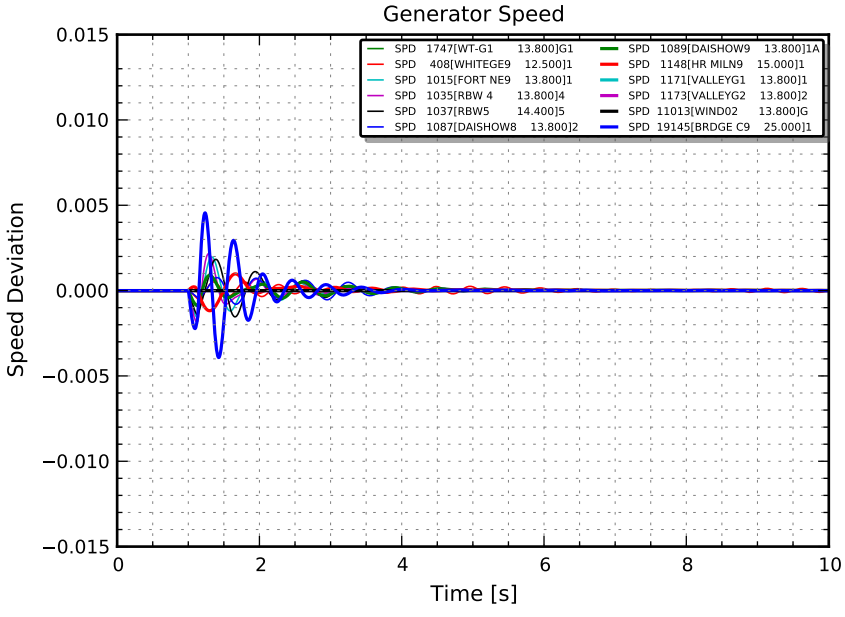


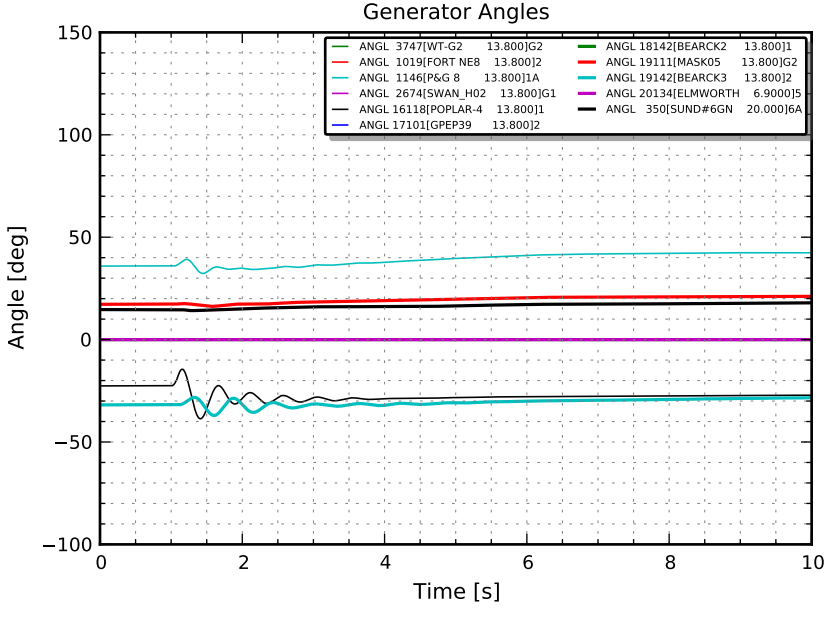
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_A.

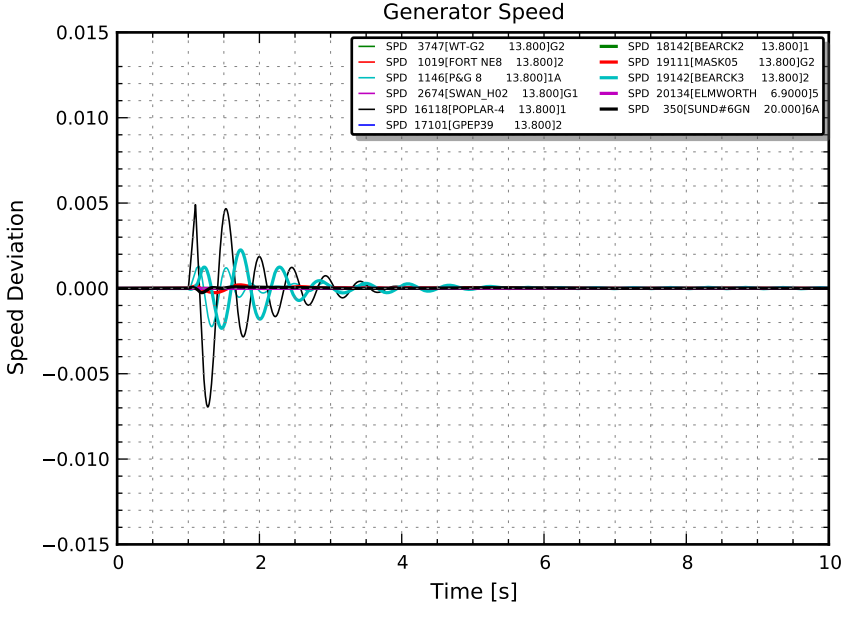
Study Area Generators

Appendix C2B
Figure: 038 (A. 2)





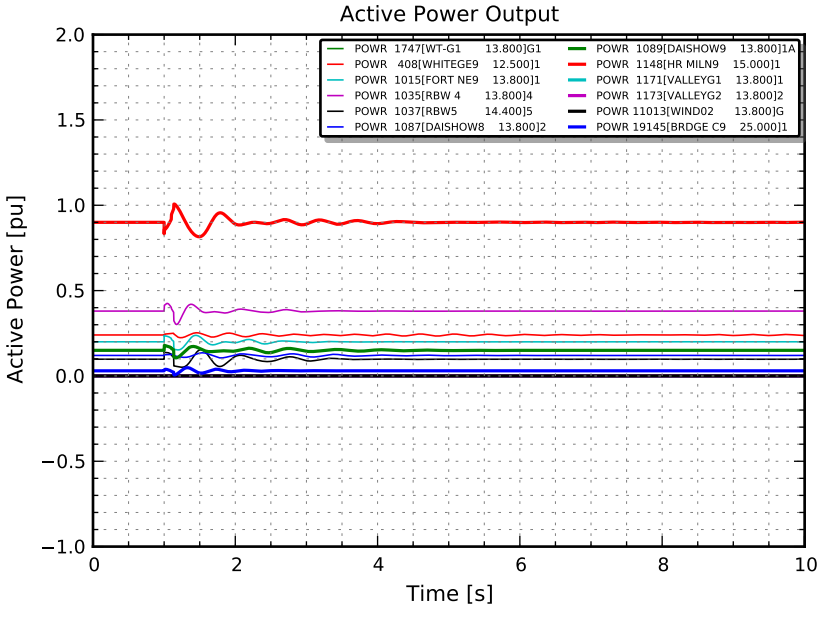


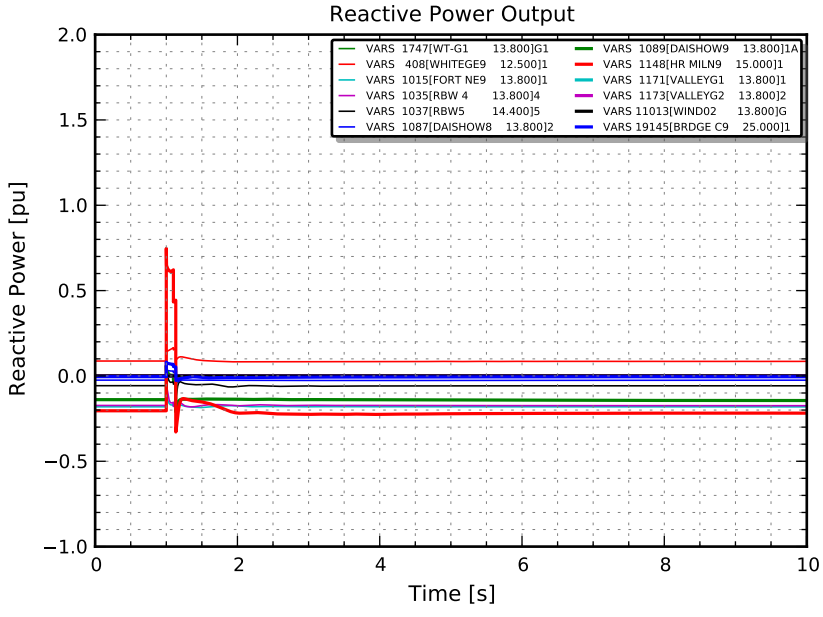


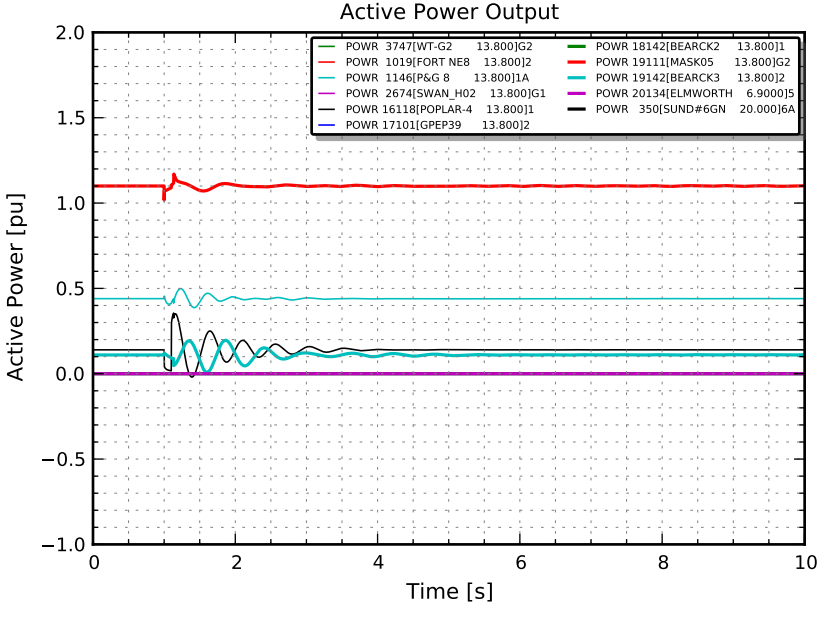
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_A.

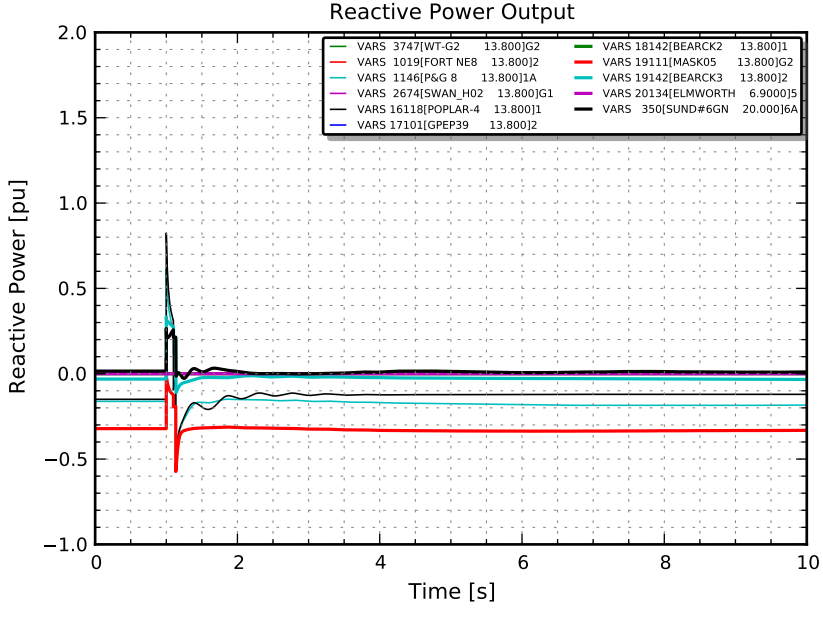
Study Area Generators

Appendix C2B
Figure: 038 (A. 3)





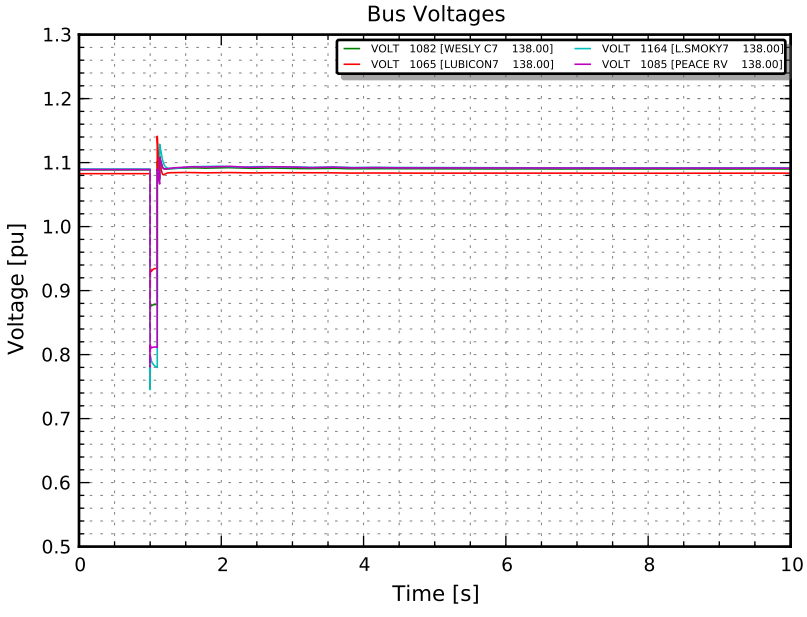


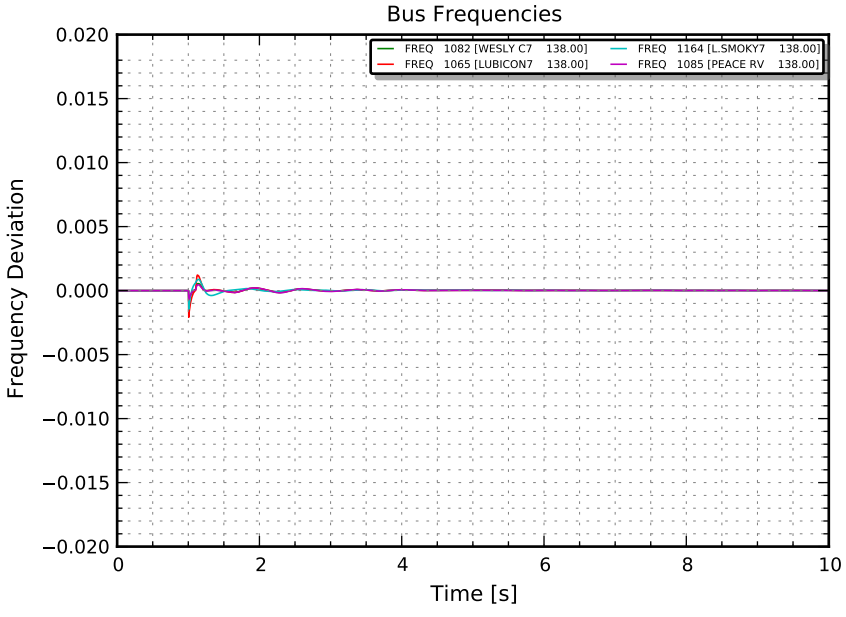


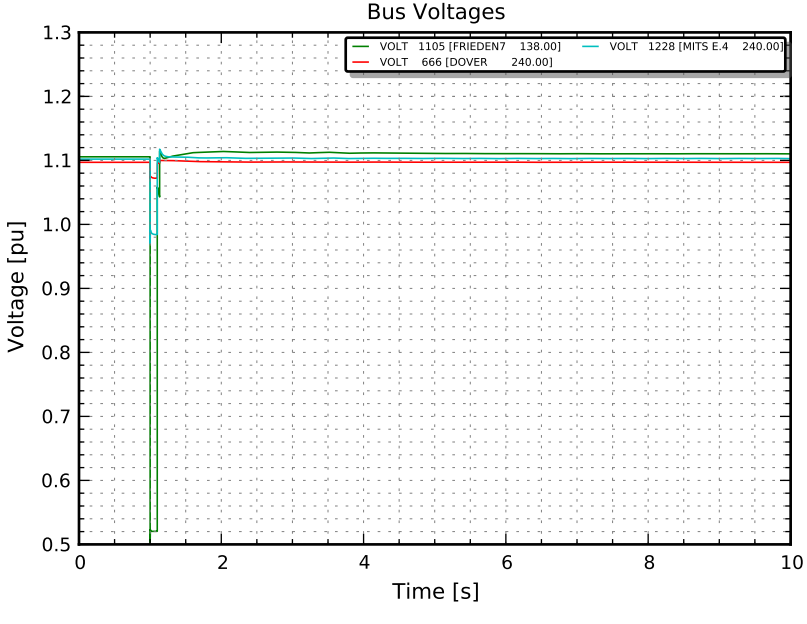
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_B.

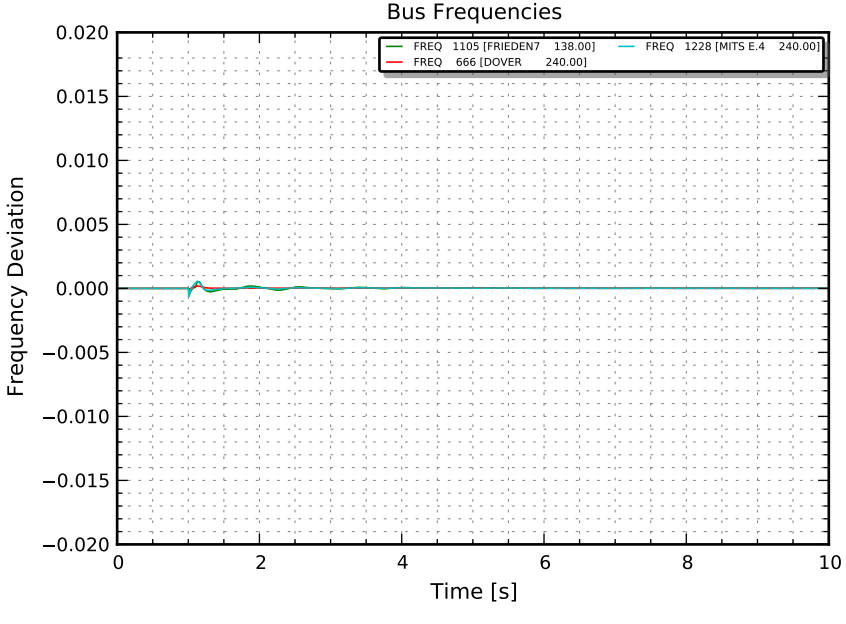
Study Area Bus Voltages and Frequencies

Appendix C2B
Figure: 038 (B. 1)





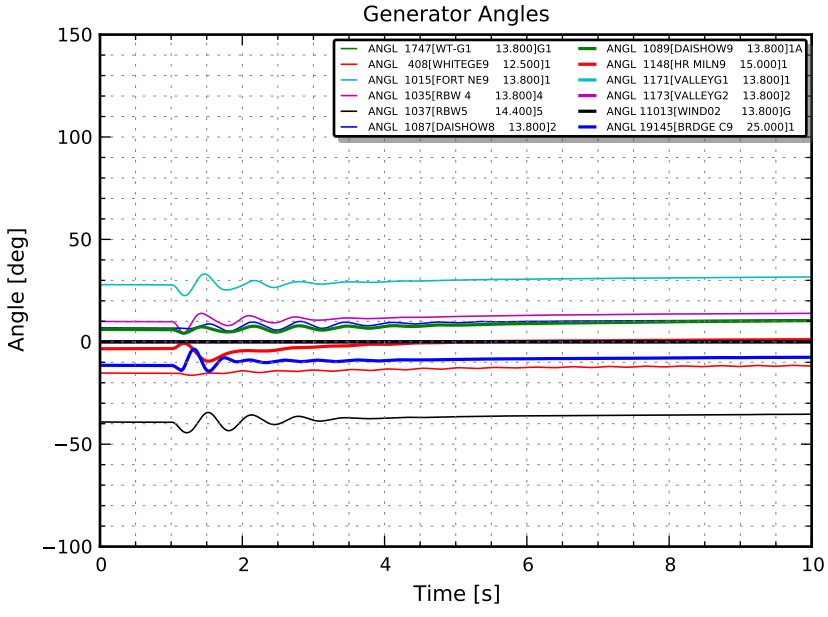


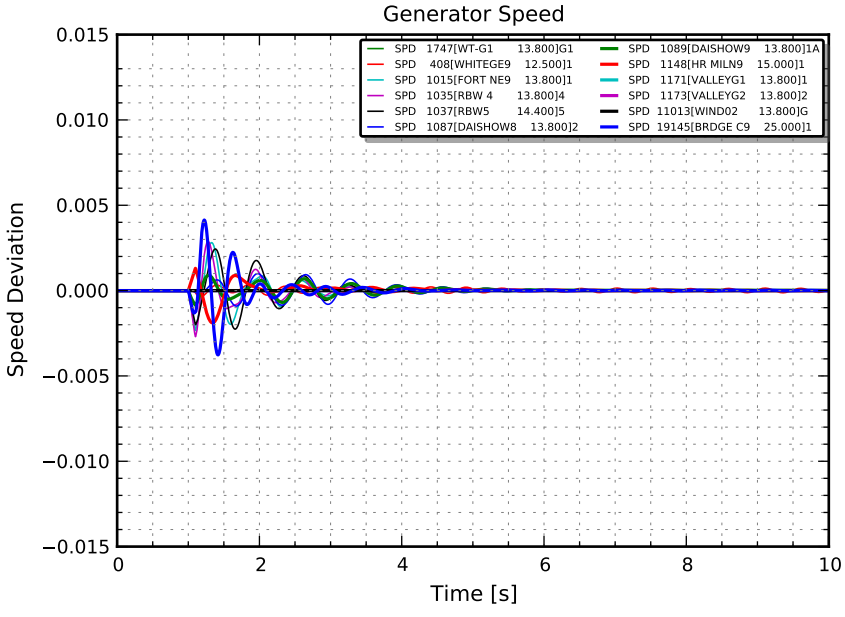


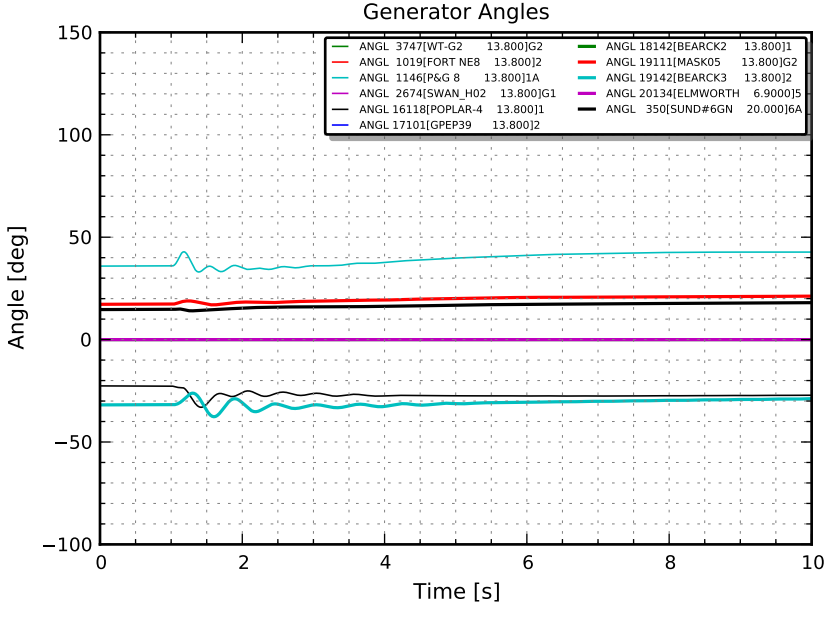
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_B.

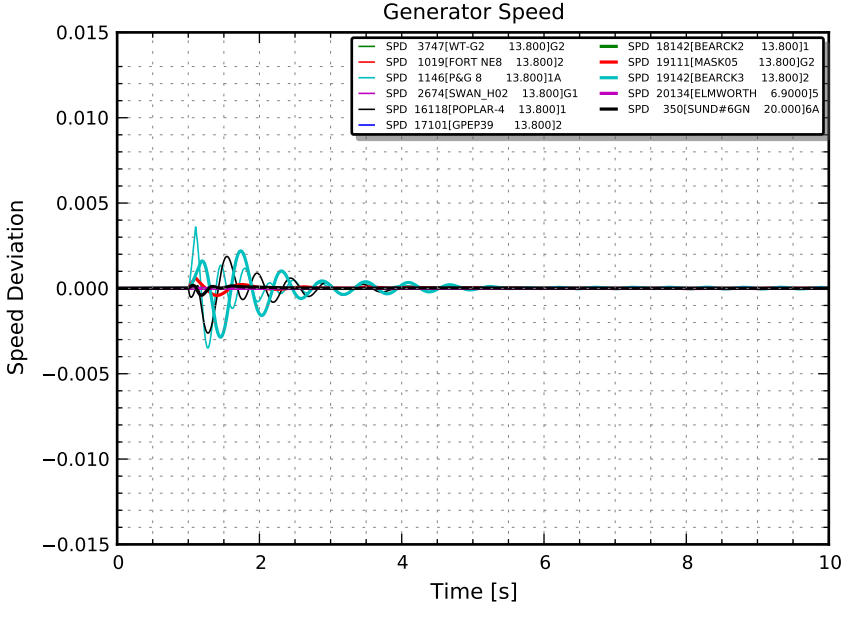
Study Area Generators

Appendix C2B
Figure: 038 (B. 2)





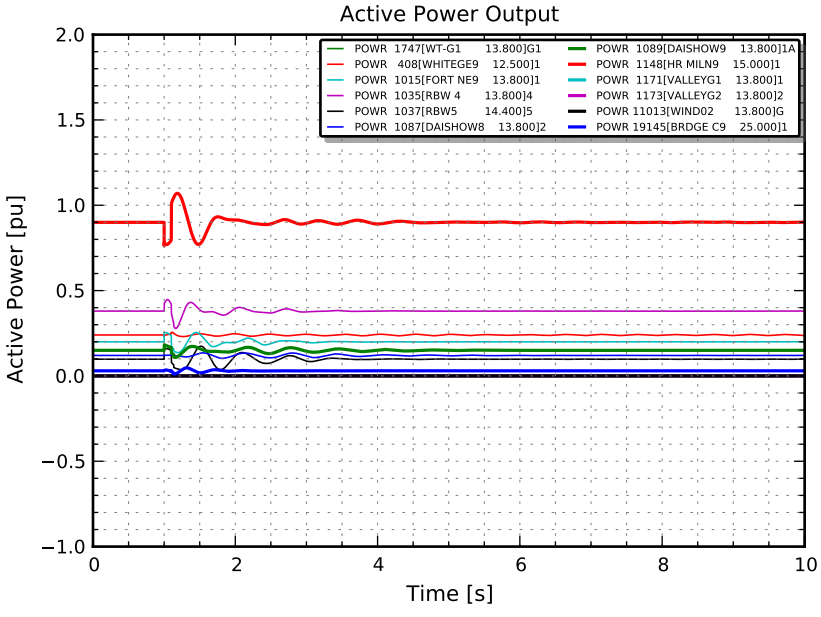


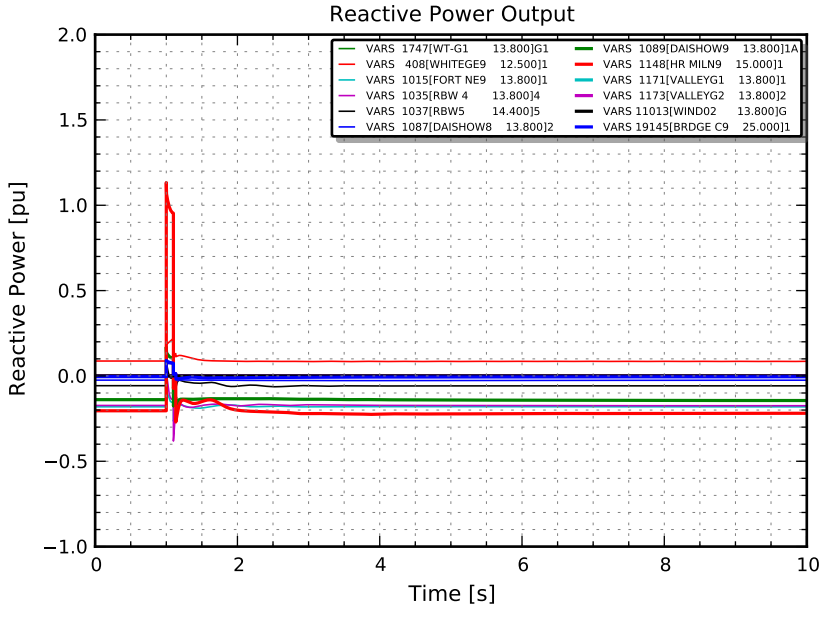


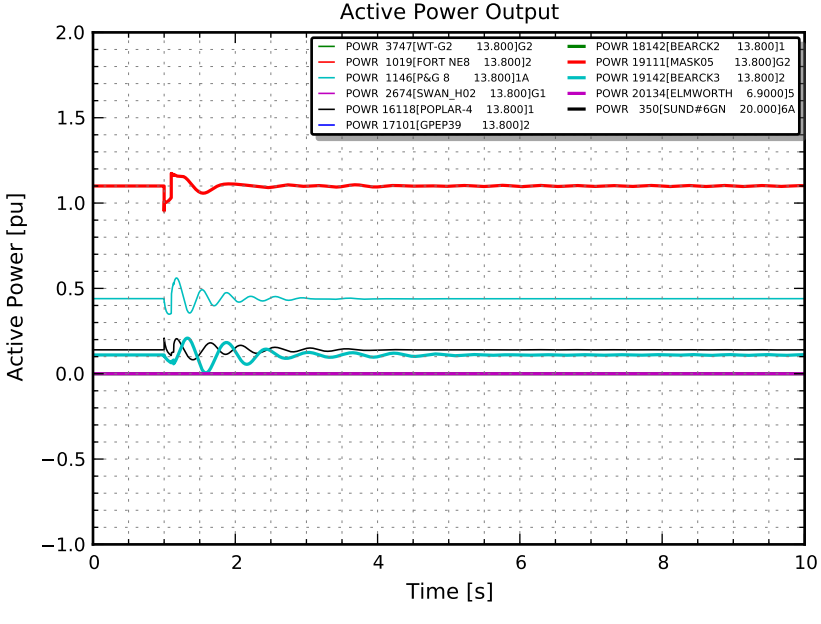
CASE 02 2014 SL Mgen
SCEN 01 Base Case
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_B.

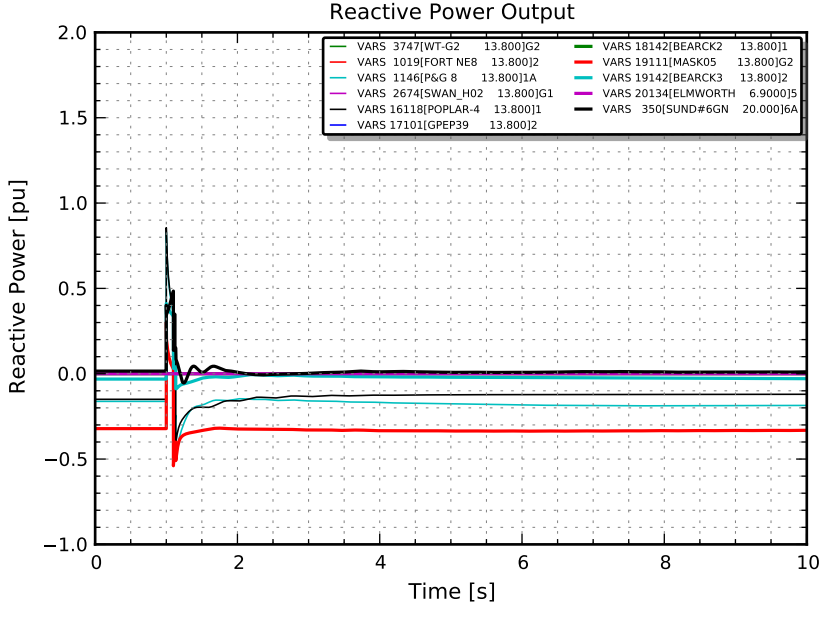
Study Area Generators

Appendix C2B
Figure: 038 (B. 3)









Attachment D

Project 1290 Power Flow Analysis Results

Appendix D-1 - Background

The Steady state power flow analysis was prepared for the system with Project 1290 under normal operating conditions and for those contingencies identified in Table D-1 and D-2 below:

Table D-1: Contingency List – Category B

Contin-gency	System Condition	Outage	From Substation	To Substation
0	All transmission elements in service (N-0)	-	-	-
1	Line 9L15 out of service (N-1)	9L15	WESLEYCREEK	Brintnell
2	Line 9L11 out of service (N-1)	9L11	WESLEYCREEK	LITTLESMOKY
3	Line 9L05 out of service (N-1)	9L05	LITTLESMOKY	LOUISECREEK
4	Line 9L40 out of service (N-1)	9L40	MITSUE	LOUISECREEK
5	Line 913L out of service (N-1)	913L	NORTHBARRHEAD	MITSUE
6	Line 9L56 out of service (N-1)	9L56	WABASCA	MITSUE
7	Line 9L10 out of service (N-1)	9L10	WABASCA	Brintnell
8	Line 9L02 out of service (N-1)	9L02	LITTLESMOKY	LOUISECREEK
9	Line 7L27 out of service (N-1)	7L27	WESLEYCREEK	WESTPEACE
10	Line 7L12 out of service (N-1)	7L12	WESLEYCREEK	LUBICON
11	Line 7L61 out of service (N-1)	7L61	LUBICON	NIPISI
12	Line 7L23 out of service (N-1)	7L23	NIPISI	MITSUE
13	Line 7L131 out of service (N-1)	7L131	WESLEYCREEK	Meikle
14	Line 7L06 out of service (N-1)	7L06	WESTPEACE	HIGHPRAIRIE
15	Line 7L48 out of service (N-1)	7L48	HIGHPRAIRIE	VALLEYVIEW
16	Line 7L54 out of service (N-1)	7L54	VALLEYVIEW	LITTLESMOKY
17	Line 7L45 out of service (N-1)	7L45	LITTLESMOKY	BIGMOUNTAIN
18	Line 7L46 out of service (N-1)	7L46	BIGMOUNTAIN	LITTLESMOKY
19	Line 7L40 out of service (N-1)	7L40	LITTLESMOKY	SIMONETTE
20	Line 7L80 out of service (N-1)	7L80	SIMONETTE	HR MILNER
21	Line 7L20 out of service (N-1)	7L20	HR MILNER	BIGMOUNTAIN
22	Line 7L63 out of service (N-1)	7L63	HOTCHKISS	LUBICON
23	Line 7L58 out of service (N-1)	7L58	KEGRIVER	Meikle
24	Line 7L04 out of service (N-1)	7L04	WESTPEACE	DAISHOWA
25	Line 7L51 out of service (N-1)	7L51	WESTPEACE	HOTCHKISS
26	Line 7L58 out of service (N-1)	7L58	KEGRIVER	Meikle
27	Line 7L120 out of service (N-1)	7L120	HOTCHKISS	Meikle
28	Line 7L01 out of service (N-1)	7L01	LITTLESMOKY	Sturgeon
29	Line 7L44 out of service (N-1)	7L44	FLYINGSHOTLAKE	BIGMOUNTAIN
30	Line 7L33 out of service (N-1)	7L33	BIGMOUNTAIN	FLYINGSHOTLAKE
31	Line 7L75 out of service (N-1)	7L75	WESTPEACE	FRIEDENSTAL
32	Line 7L73 out of service (N-1)	7L73	RYCROFT	FRIEDENSTAL
33	Line 7L68 out of service (N-1)	7L68	RYCROFT	CLAIRMONTLAKE
34	Line 7L84 out of service (N-1)	7L84	CRYSTALLAKE	FLYINGSHOTLAKE
35	Line 7L39 out of service (N-1)	7L39	CRYSTALLAKE	CLAIRMONTLAKE

Contin-gency	System Condition	Outage	From Substation	To Substation
36	Line 7L03 out of service (N-1)	7L03	FLYINGSHOTLAKE	ELMWORTH
37	Line 7L07 out of service (N-1)	7L07	POPLARHILL	ELMWORTH
38	Line 7L22 out of service (N-1)	7L22	POPLARHILL	CLAIRMONTLAKE

Table D-2 Contingency List – Category C

Contin-gency	System Condition	Outage	From Substation	To Substation
40	C Cont 7L106 and 7L131	7L106	Wesley Creek 834S	Meikle 905S
		7L131	Wesley Creek 834S	Meikle 905S
		7L58	Meikle 905S	Keg River 789S
		7L12	Wesley Creek 834S	Seal Lake 869S
41	C Cont 7L120 and 7L138	7L120	Meikle 905S	Hotchkiss 788S
		7L138	Meikle 905S	Hotchkiss 788S
		7L62	Meikle 905S	Kemp River 797S

The Steady state power flow analysis of the system after connecting Project 1290 was prepared for normal operating conditions and for those contingencies identified in Table D1 and D2 above. Please note that contingencies involving elements that are not applicable to the given Alternative of Project 1290 interconnection are excluded.

Each contingency was analyzed for Post Transient conditions, Post Auto Adjustment conditions and if required, for Post Manual Adjustment conditions. If the Post Auto Adjustment conditions returned voltages to +-5% band, the Post Manual Adjustment was not required and is not shown herein.

Five operating scenarios were considered with respect to Project 1290, namely the:

1) 2014 Winter Peak Load
2) 2014 Summer Light Load
3) 2014 Summer Peak Load

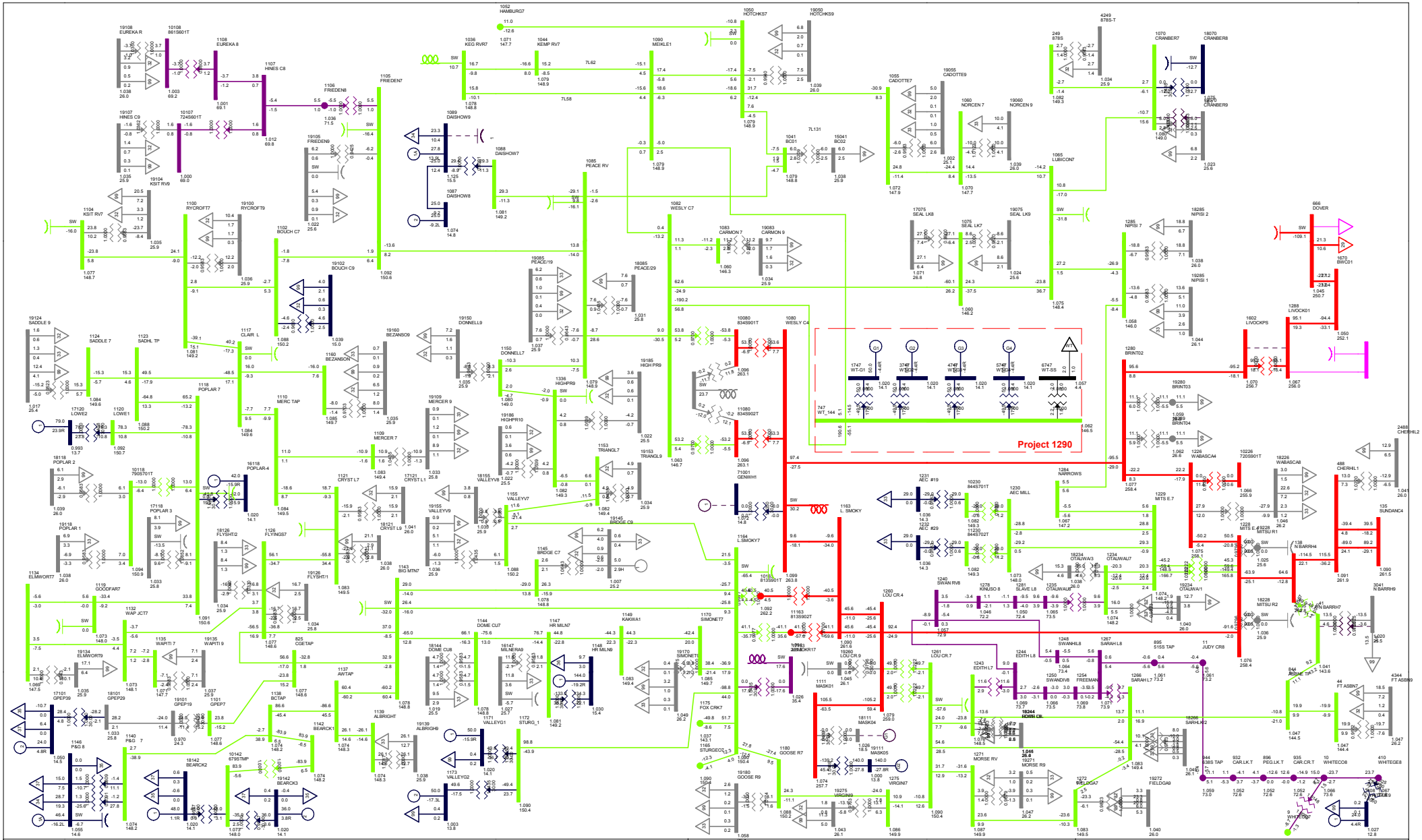
Alternatives included:

1) Alternative 3 – tap to 7L106 line – the preferred alternative

The results as shown in this Appendix are further explained in Table D-3

Table D-3 A Summary of the Results provided in Appendix D-2-x.

Appendix	Cases	Notes
Appendix D-2-A	SLDs for 2014 Winter Peak Load Scenario for normal system and Contingencies. Alternative 3 – tap connection to 7L106 line. All SLD's are shown for: - post transient (_A suffix) and - post auto (_B suffix)	"CONT 000 All elements in service" designates system under normal operation (no contingencies)
Appendix D-2-B	SLDs for 2014 Summer Low Load Scenario for normal system and Contingencies. Alternative 3 – tap connection to 7L106 line. All SLD's are shown for: - post transient (_A suffix) and - post auto (_B suffix)	" CONT 000 All elements in service " designates system under normal operation (no contingencies)
Appendix D-2-C	SLDs for 2014 Summer Peak Load Scenario for normal system and Contingencies. Alternative 3 – tap connection to 7L106 line. All SLD's are shown for: - post transient (_A suffix) and - post auto (_B suffix)	" CONT 000 All elements in service " designates system under normal operation (no contingencies)



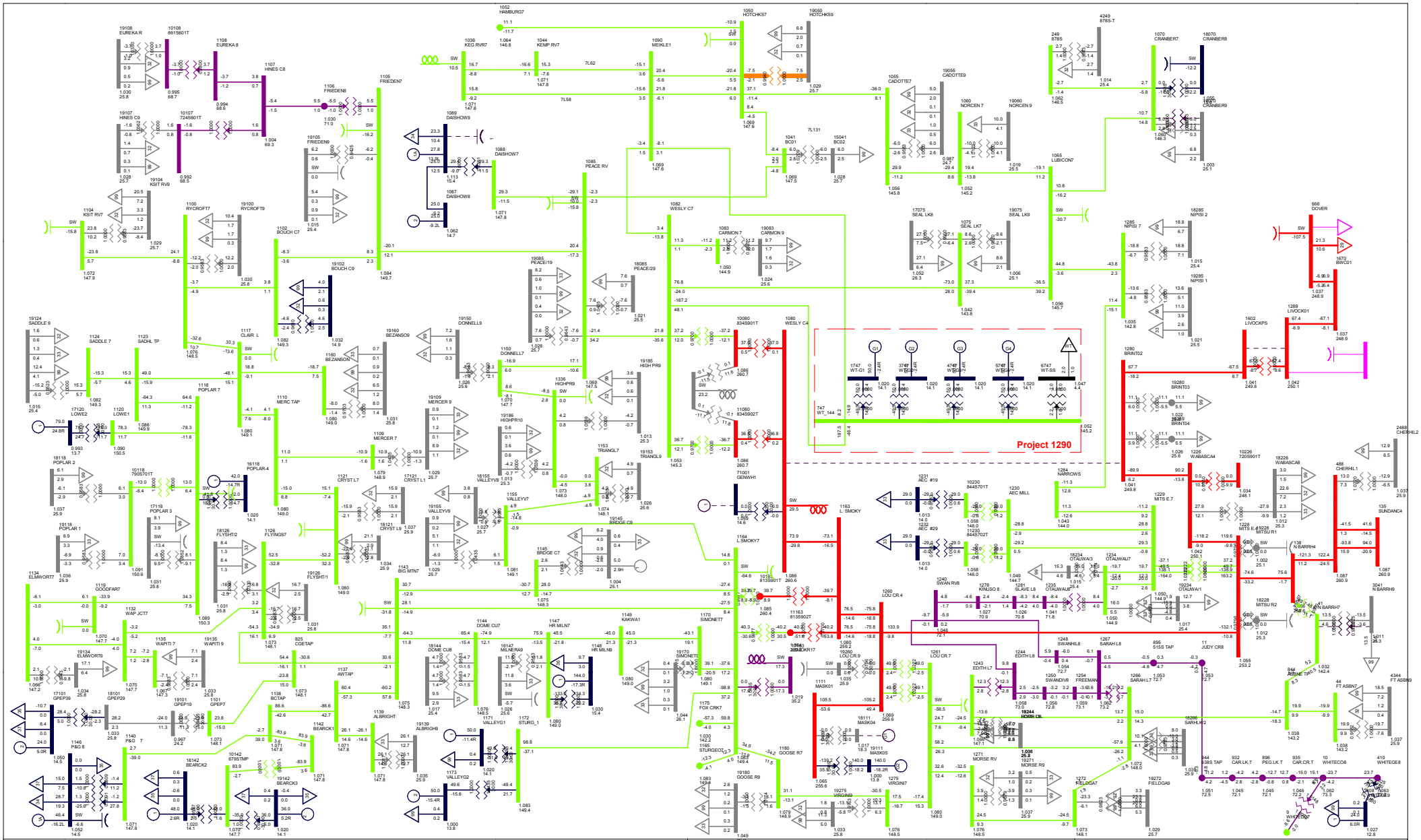
Appendix D2A

Figure: 1

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 000 All elements in service_A.

Whitetail Project 1290 Interconnection Study



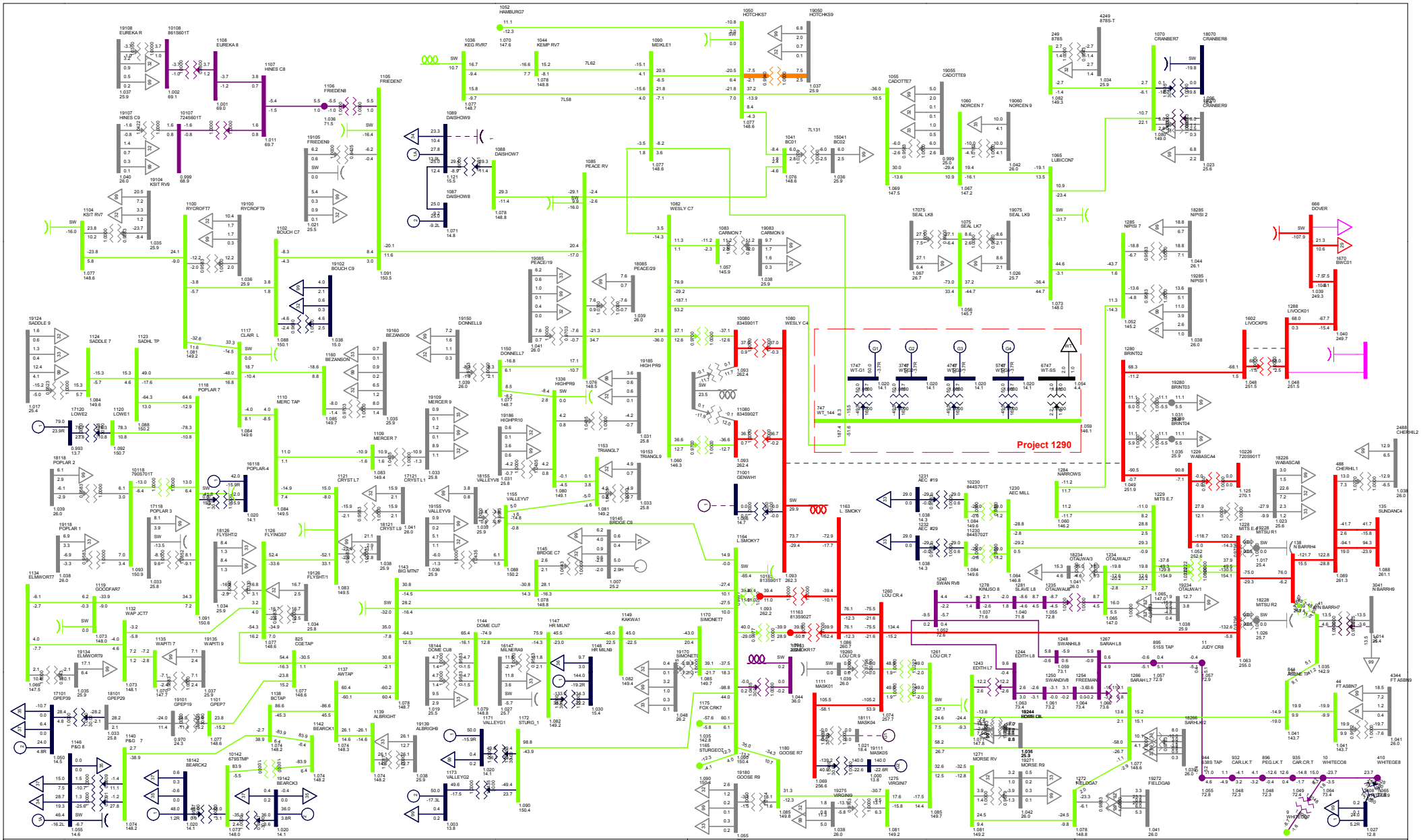
Appendix D2A

Figure: 3

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 001 9L15 WESLEYCREEK to Brintnell_A.

Whitetail Project 1290 Interconnection Study



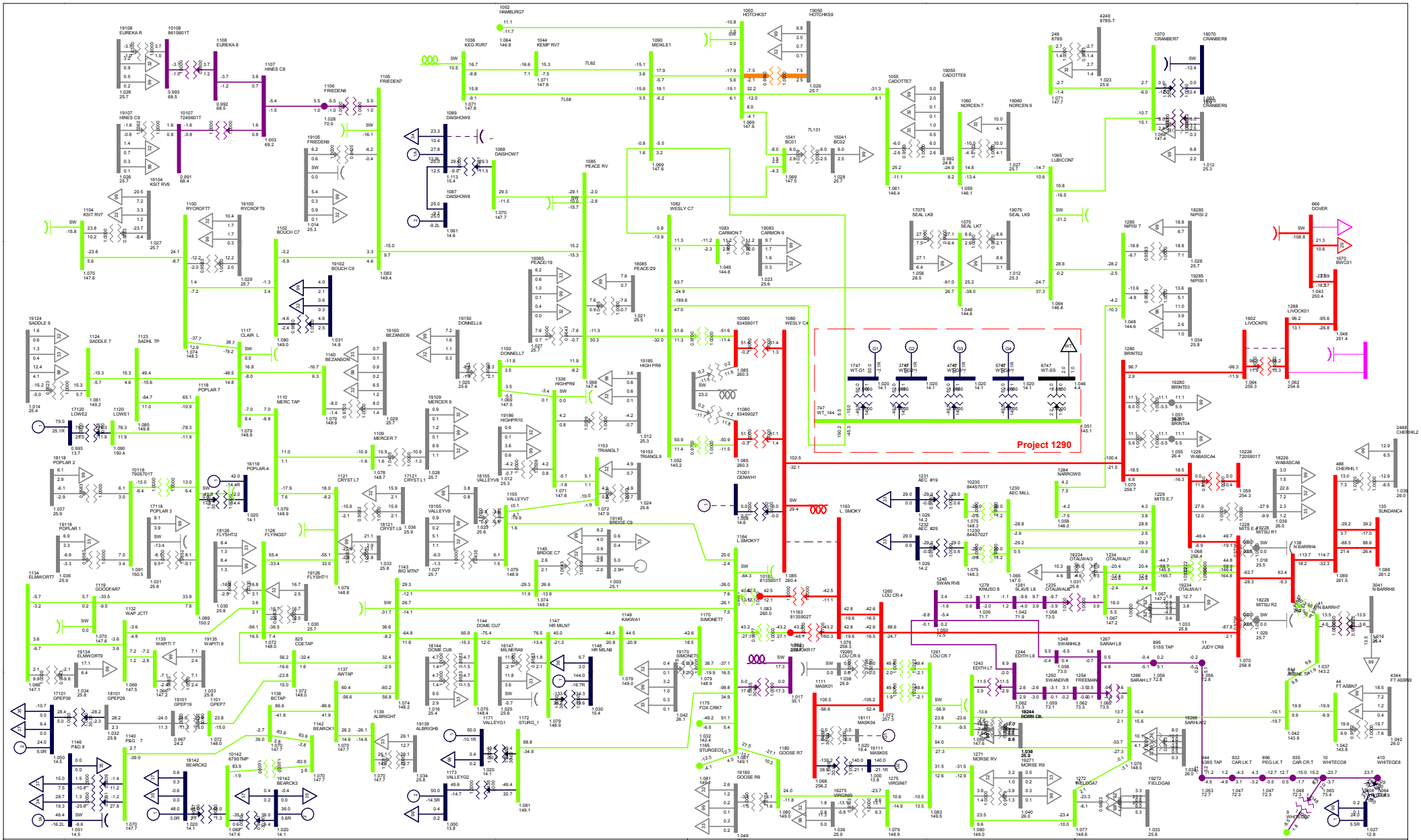
Appendix D2A

Figure: 4

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 001 9L15 WESLEYCREEK to Brintnell_B.

Whitetail Project 1290 Interconnection Study



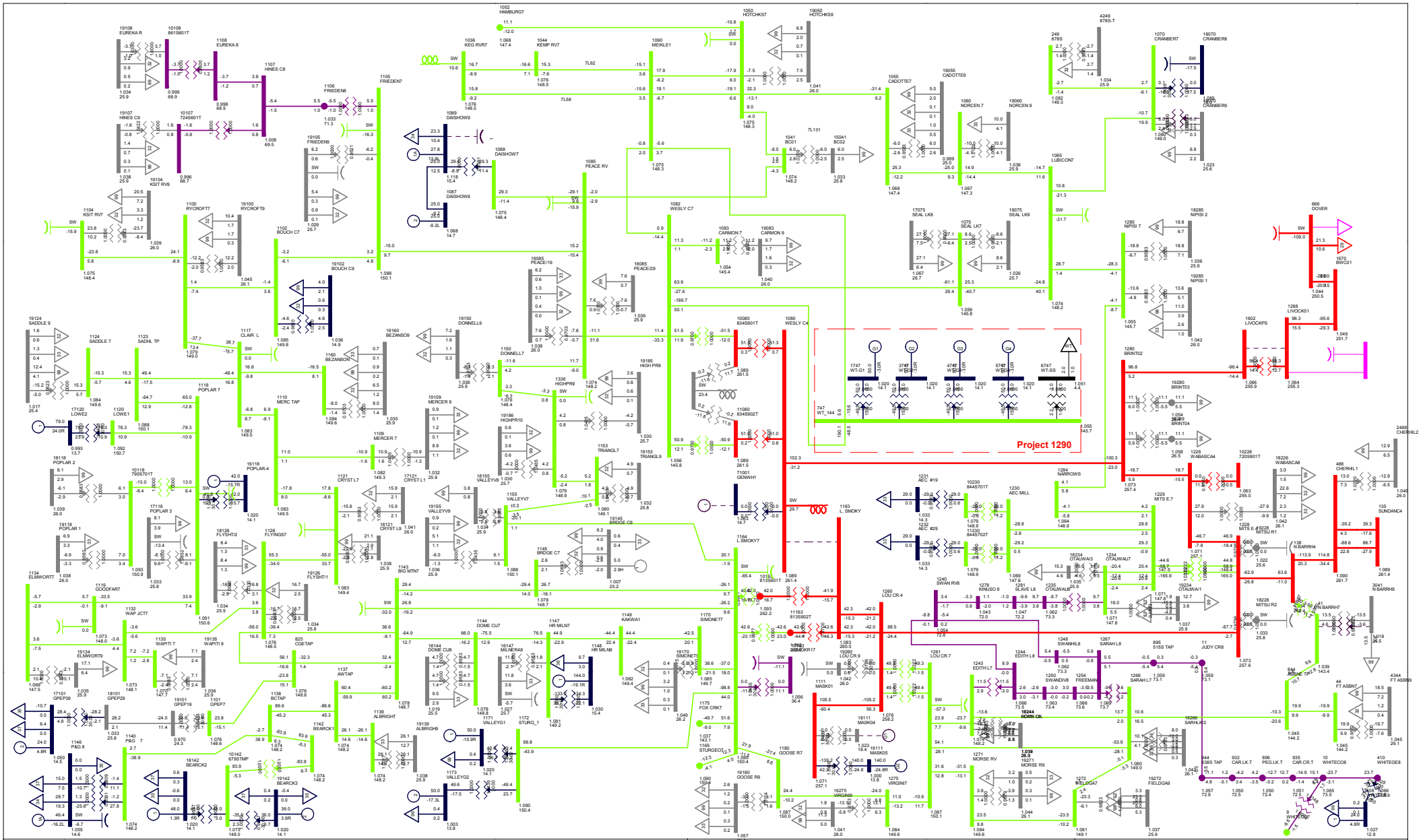
Appendix D2A

Figure: 5

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_A.

Whitetail Project 1290 Interconnection Study



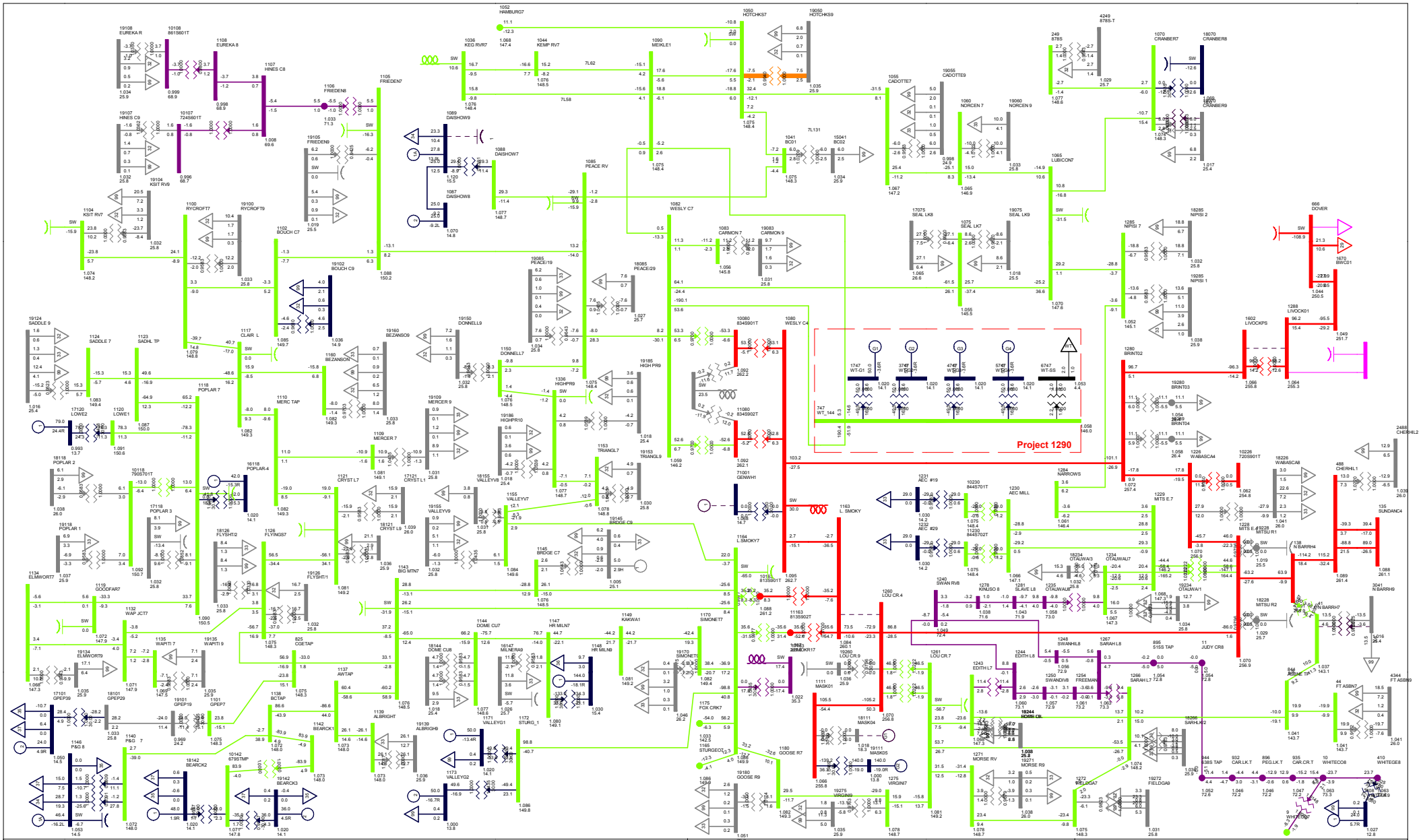
Appendix D2A

Figure: 6

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_B.

Whitetail Project 1290 Interconnection Study



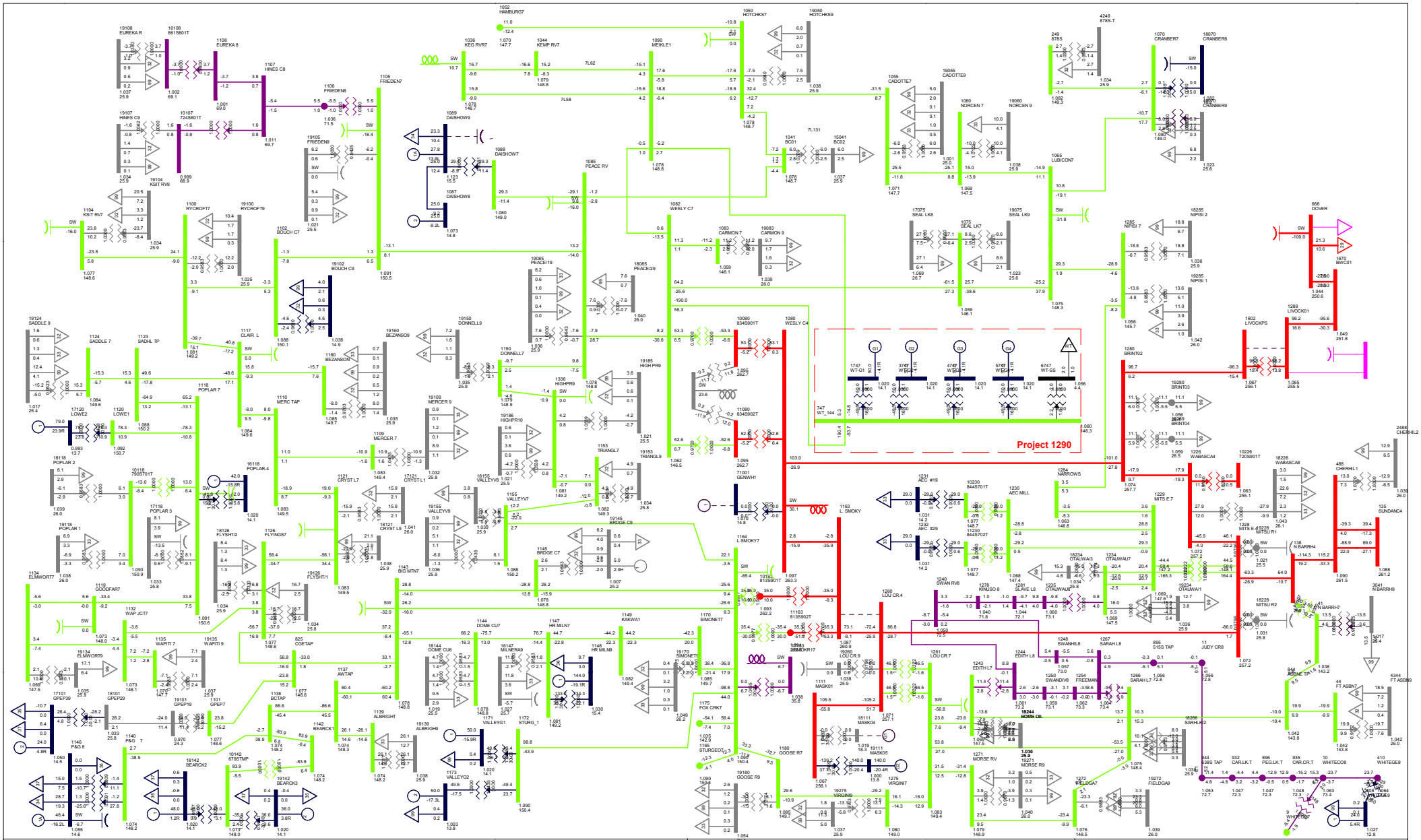
Appendix D2A

Figure: 7

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_A.

Whitetail Project 1290 Interconnection Study



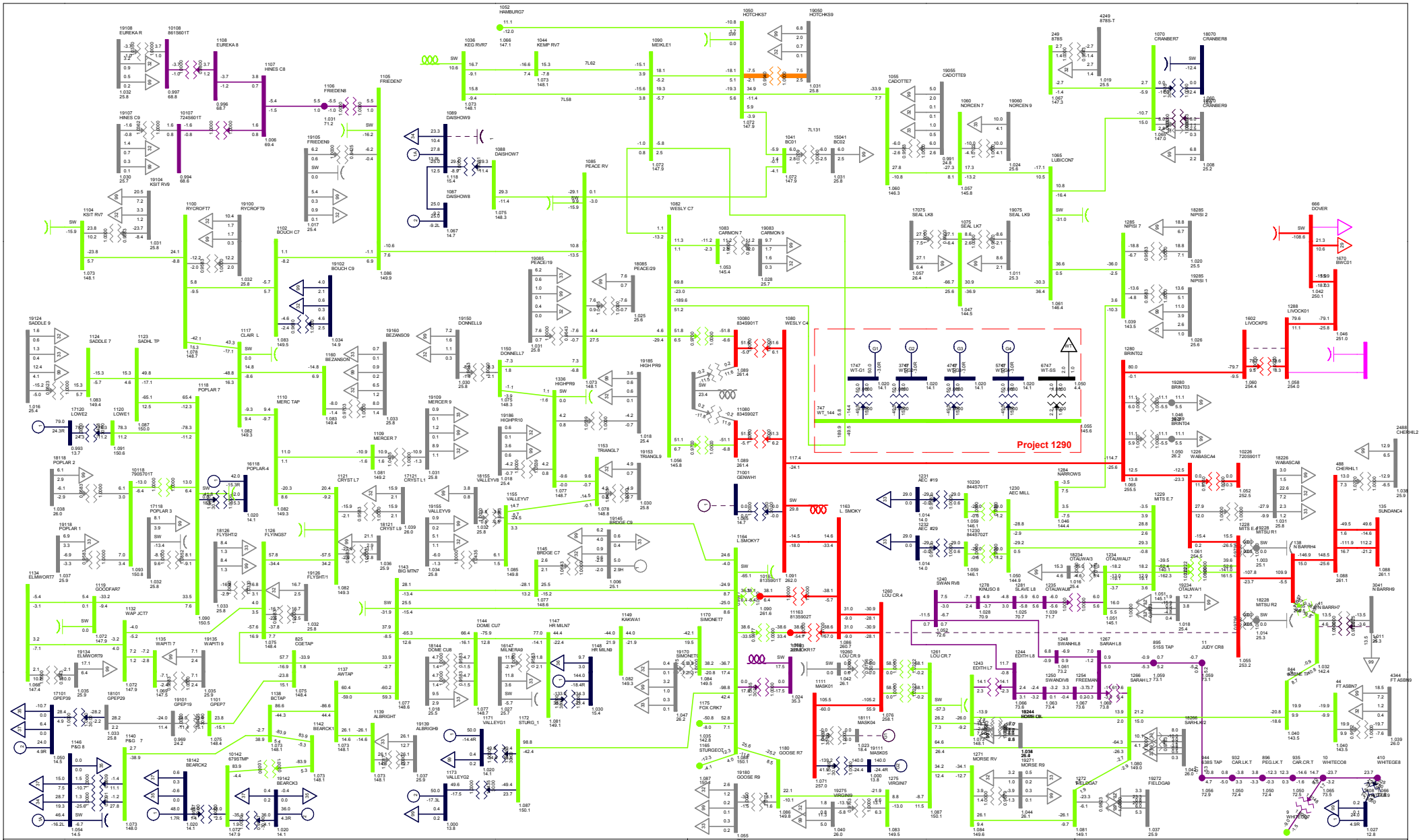
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_B.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 8



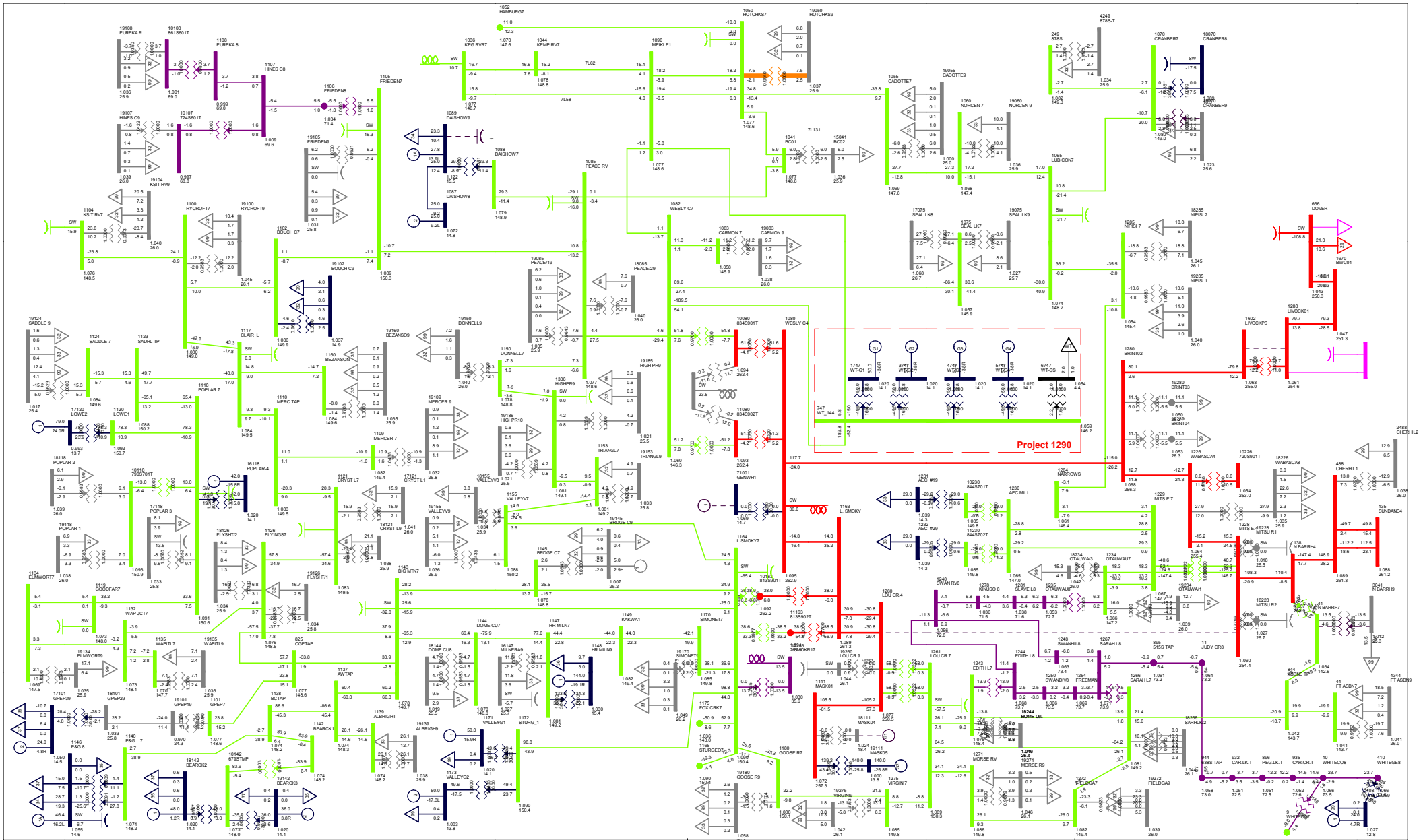
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 004 9L40 MITSUE to LOUISECREEK_A.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 9



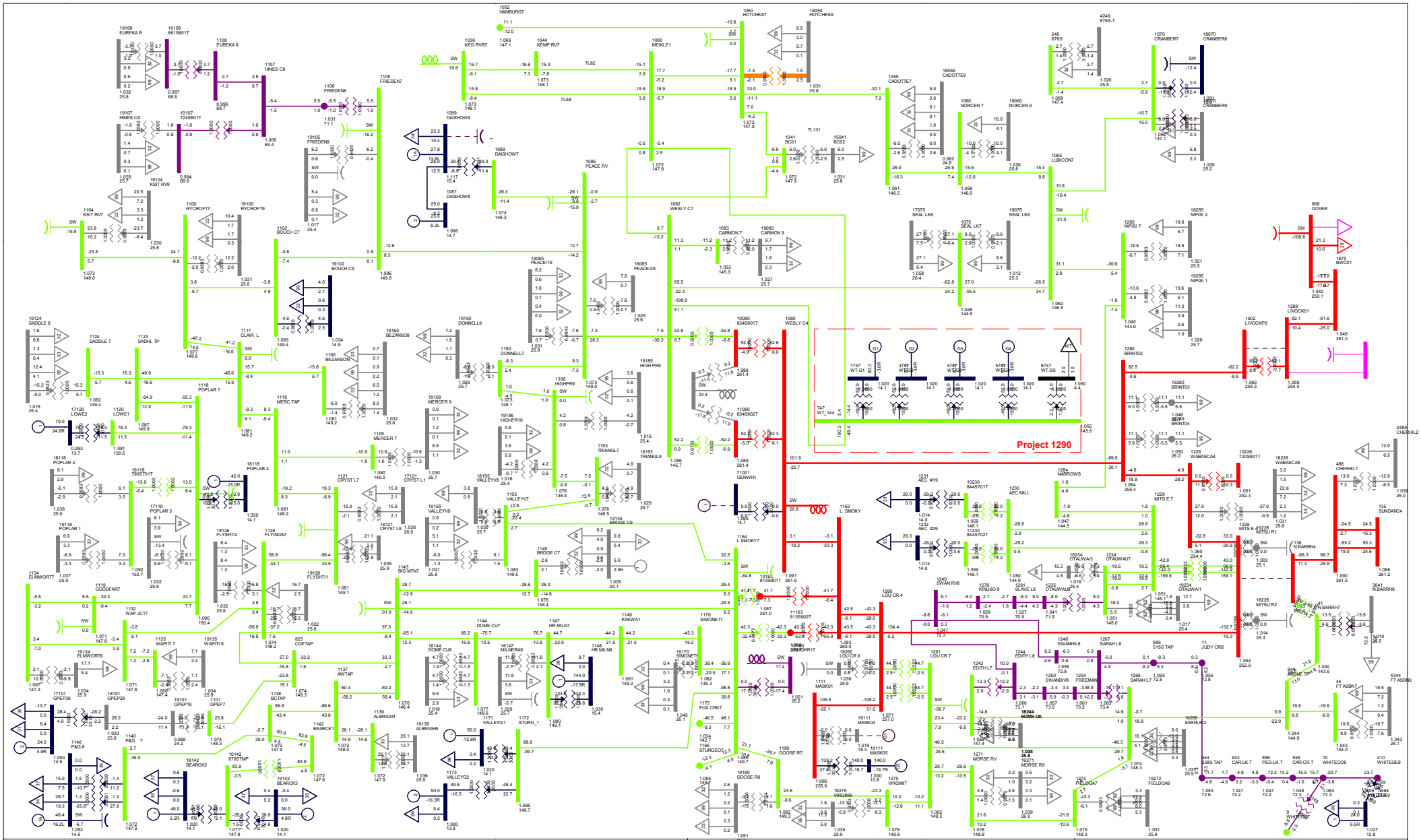
Appendix D2A

Figure: 10

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 004 9L40 MITSUE to LOUISECREEK_B.

Whitetail Project 1290 Interconnection Study



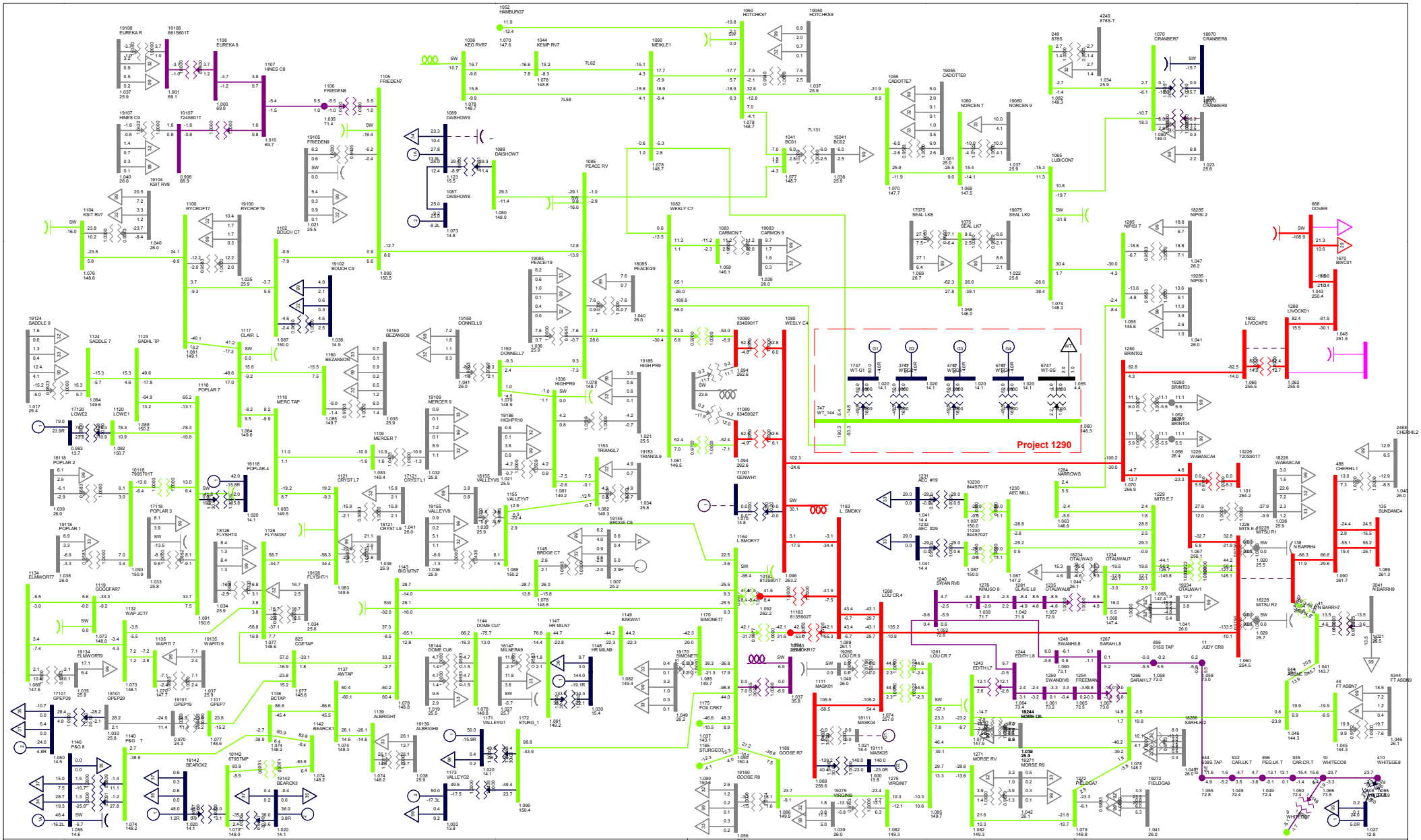
Appendix D2A

Figure: 11

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 005 913L NORTHBARRHEAD to MITSUE_A.

Whitetail Project 1290 Interconnection Study



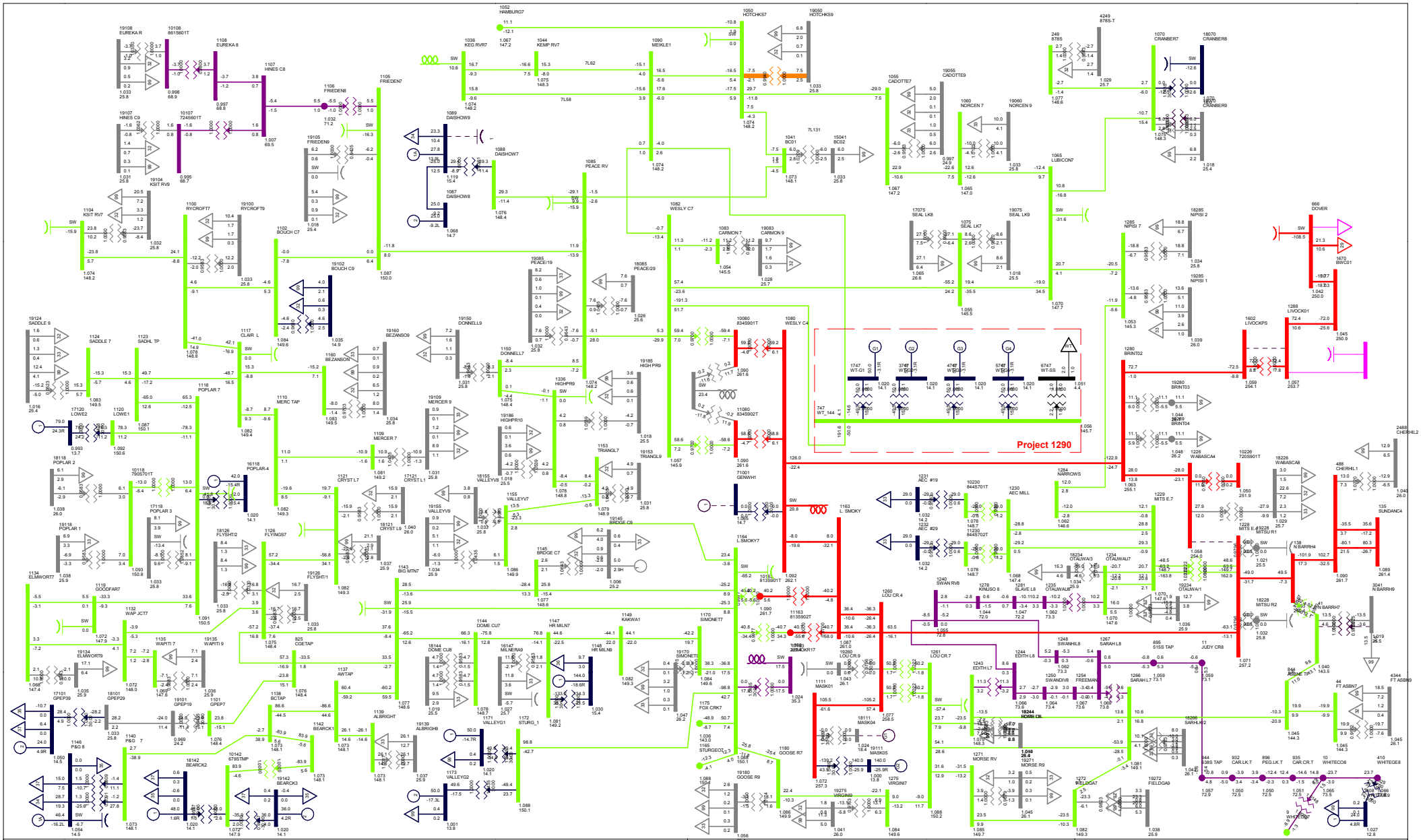
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 005 913L NORTHBARRHEAD to MITSUE_B.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 12



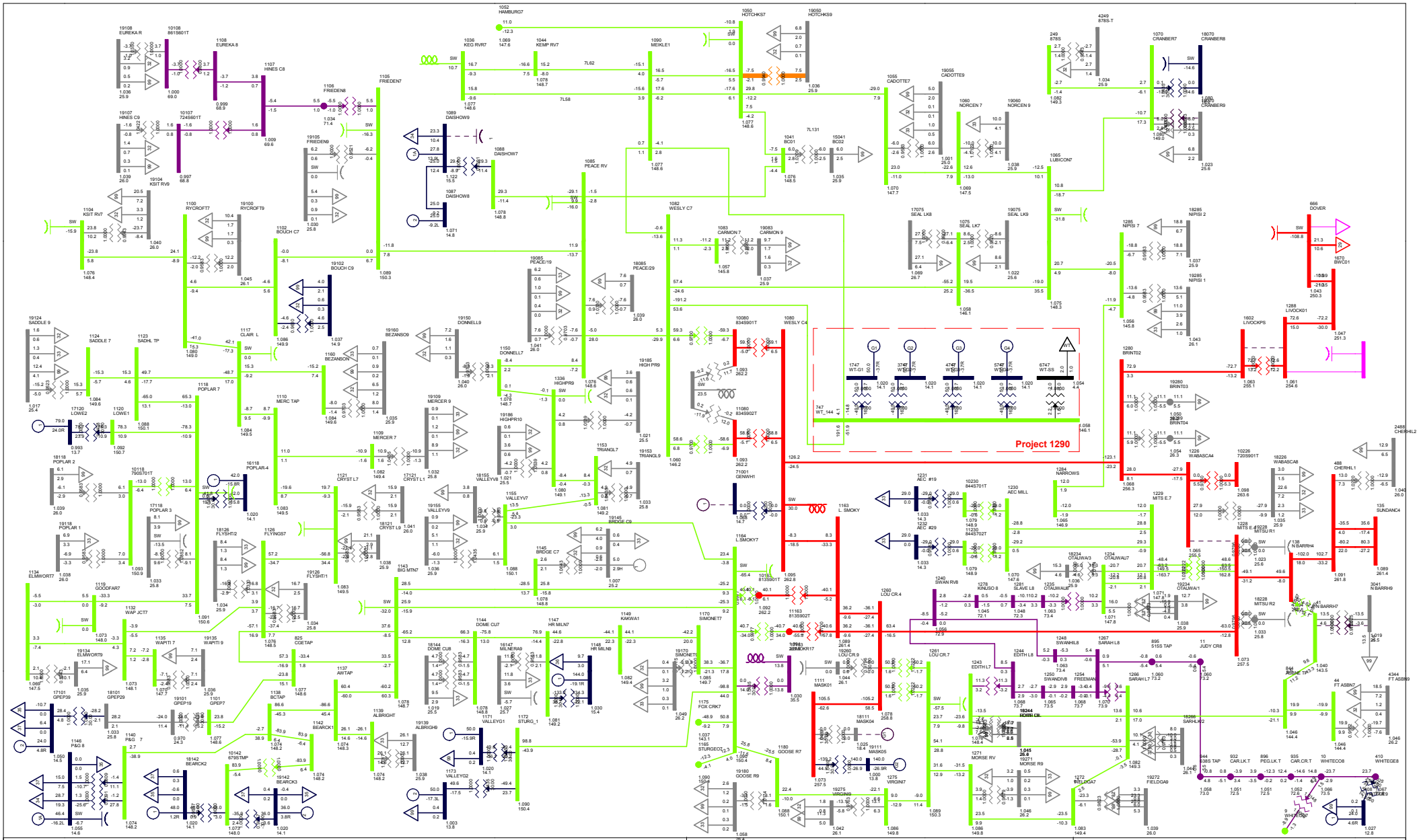
Appendix D2A

Figure: 13

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 006 9L56 WABASCA to MITSUE_A.

Whitetail Project 1290 Interconnection Study



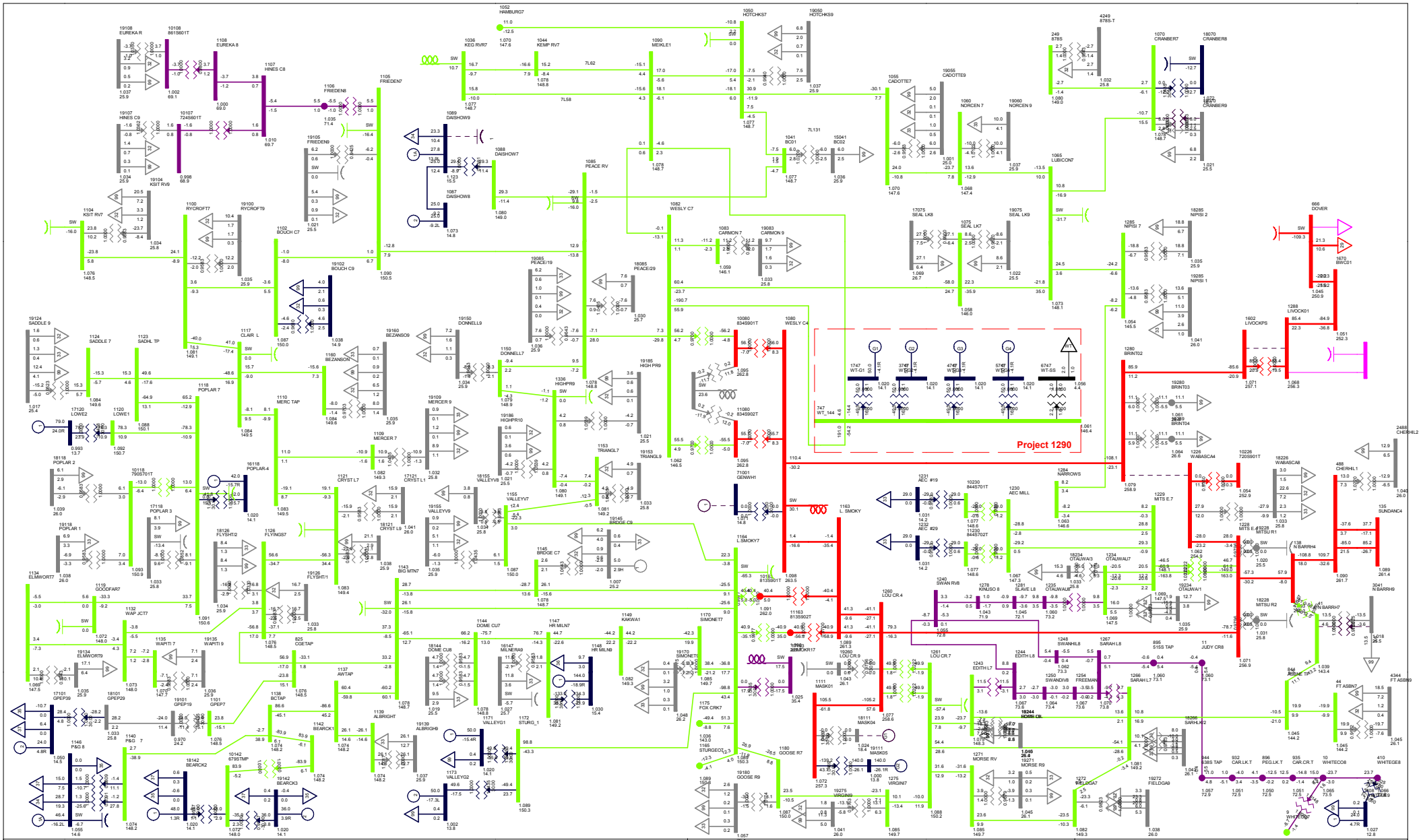
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 006 9L56 WABASCA to MITSUE_B.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 14



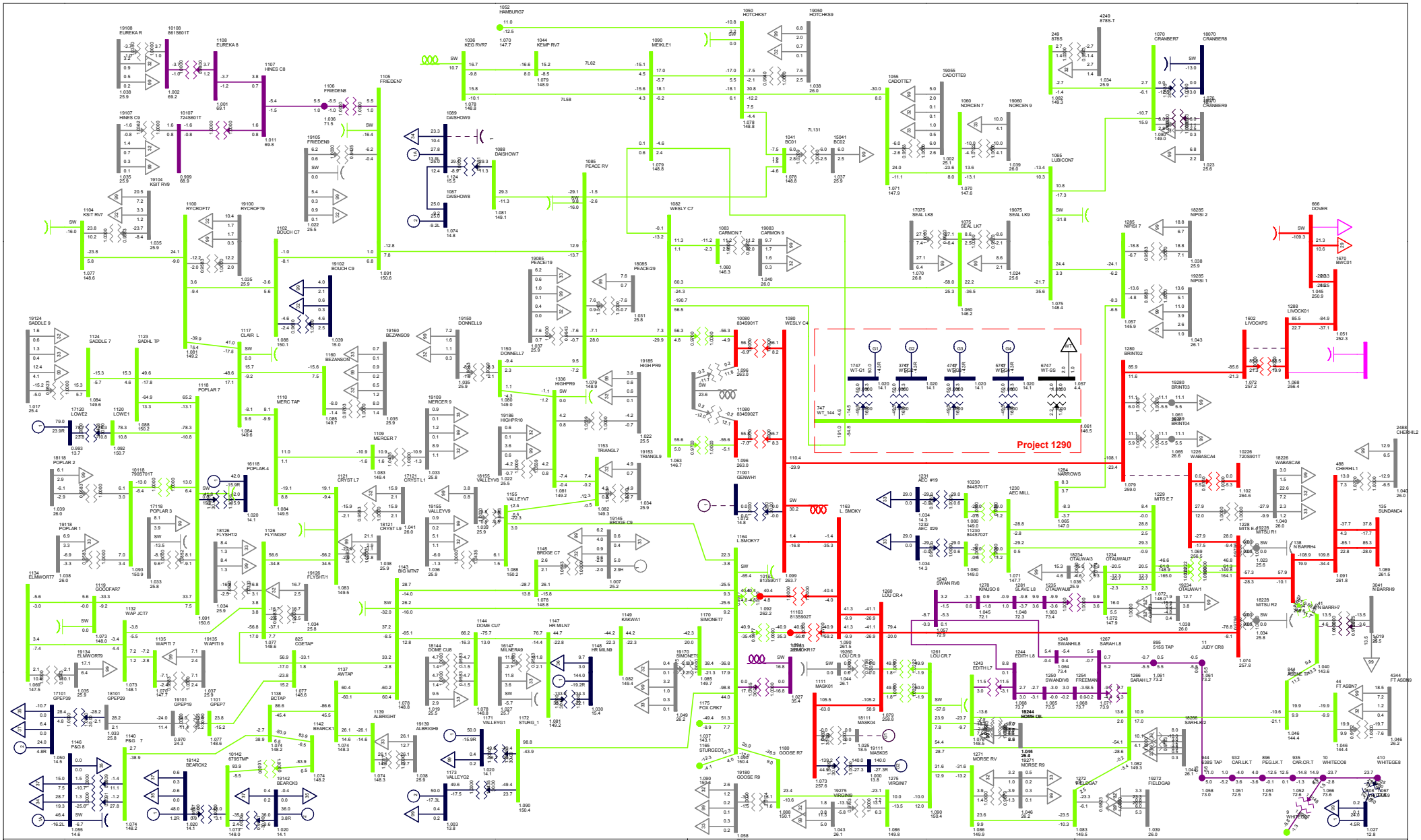
Appendix D2A

Figure: 15

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 007 9L10 WABASCA to Brintnell_A.

Whitetail Project 1290 Interconnection Study



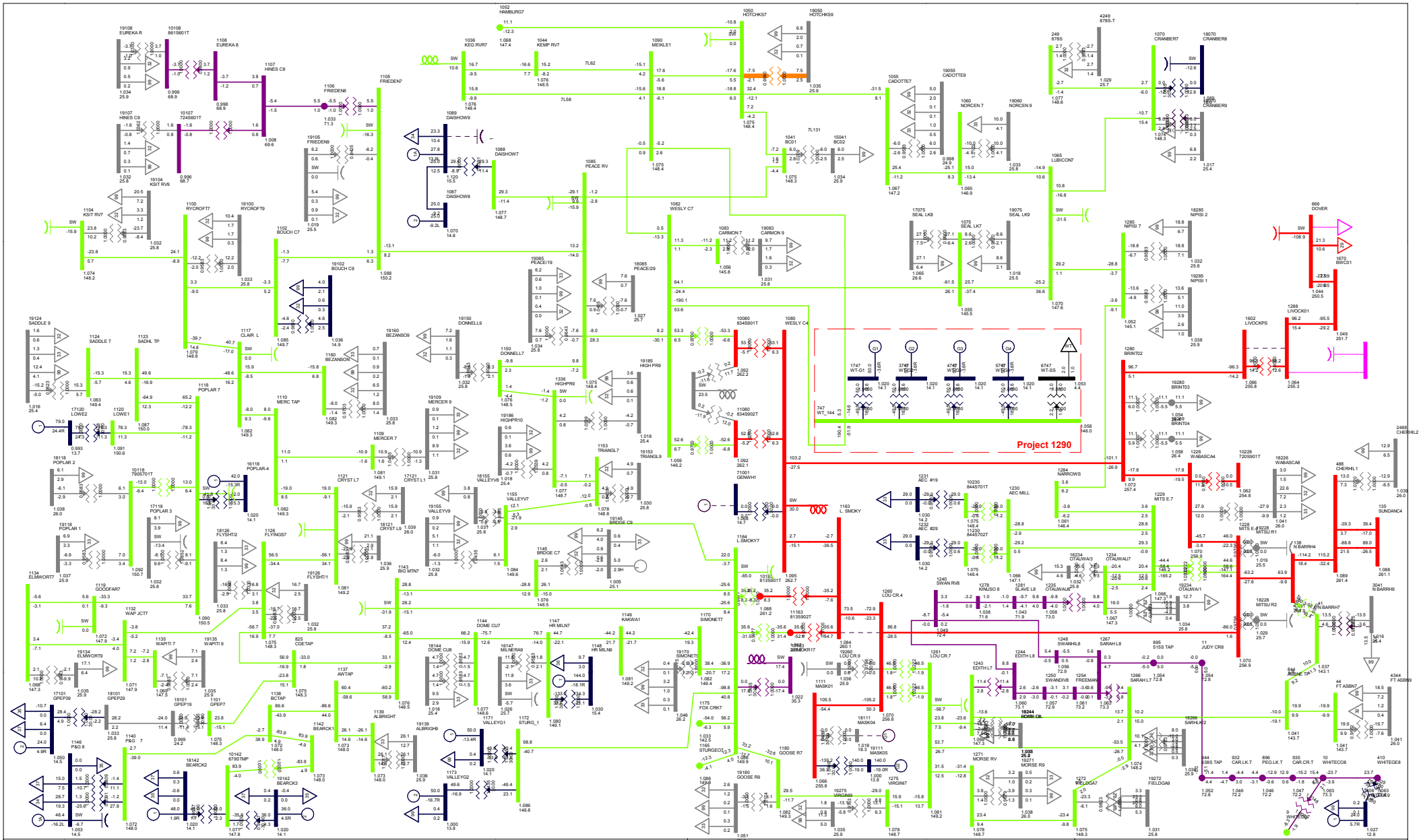
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 007 9L10 WABASCA to Brintnell_B.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 16



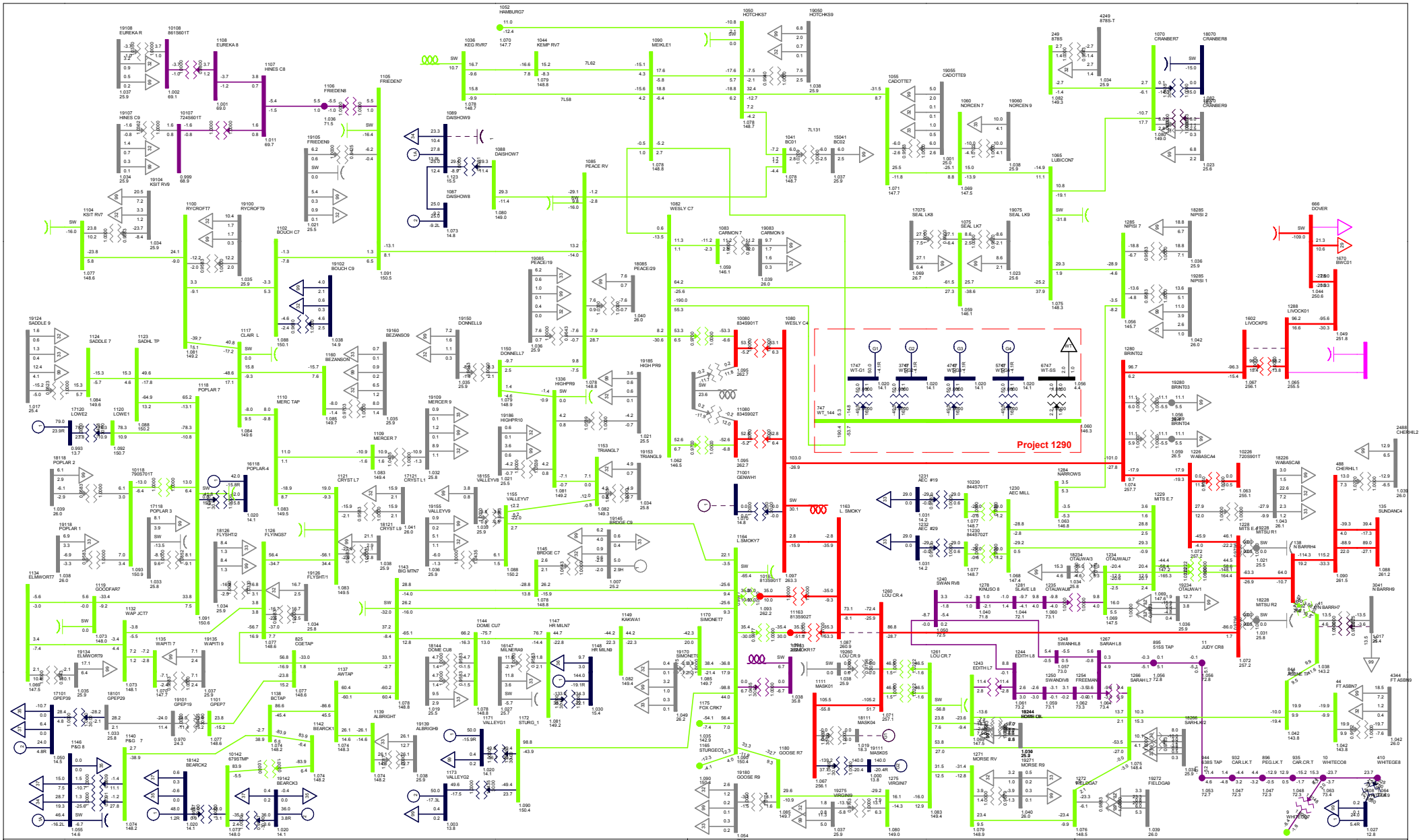
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_A.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 17



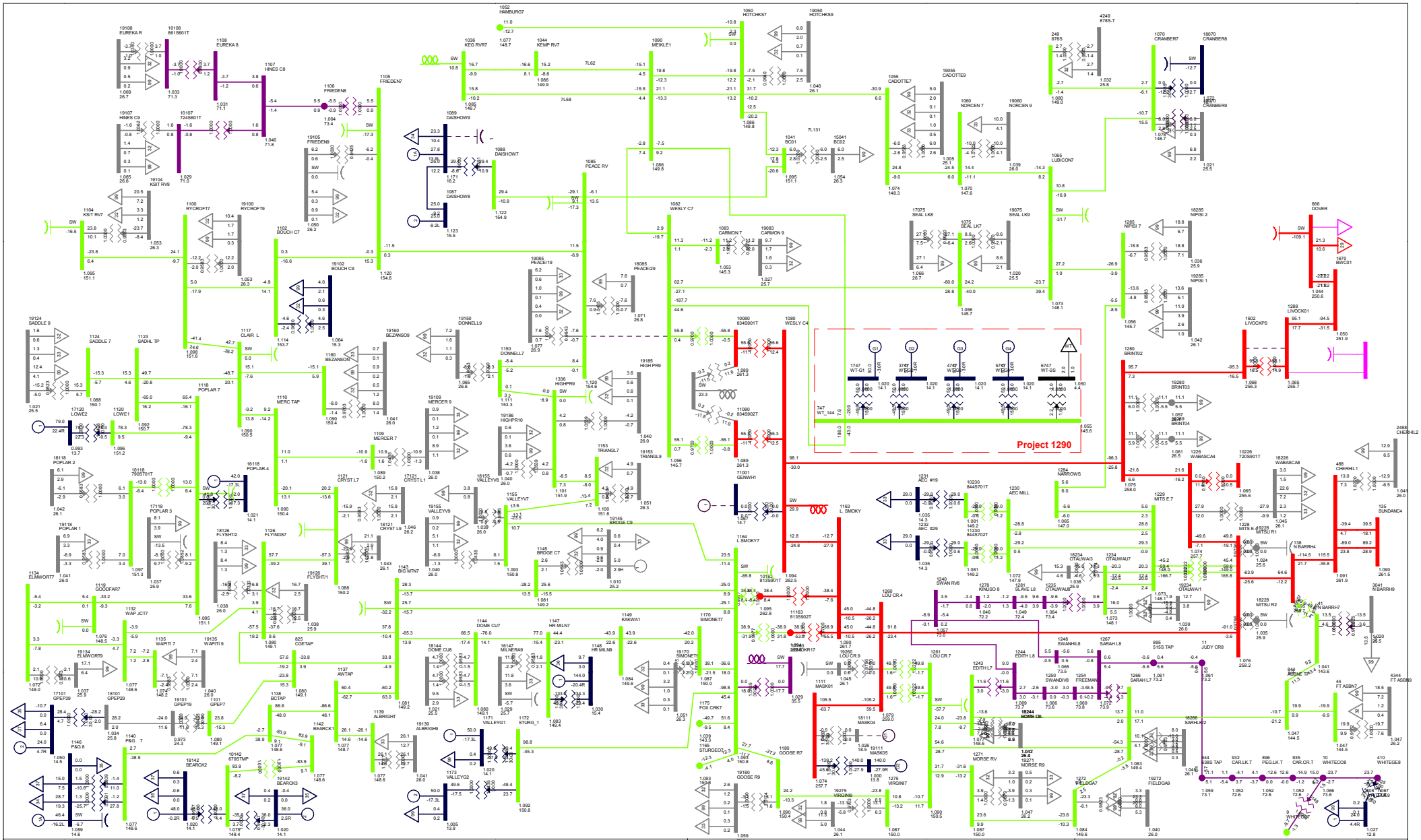
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_B.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 18



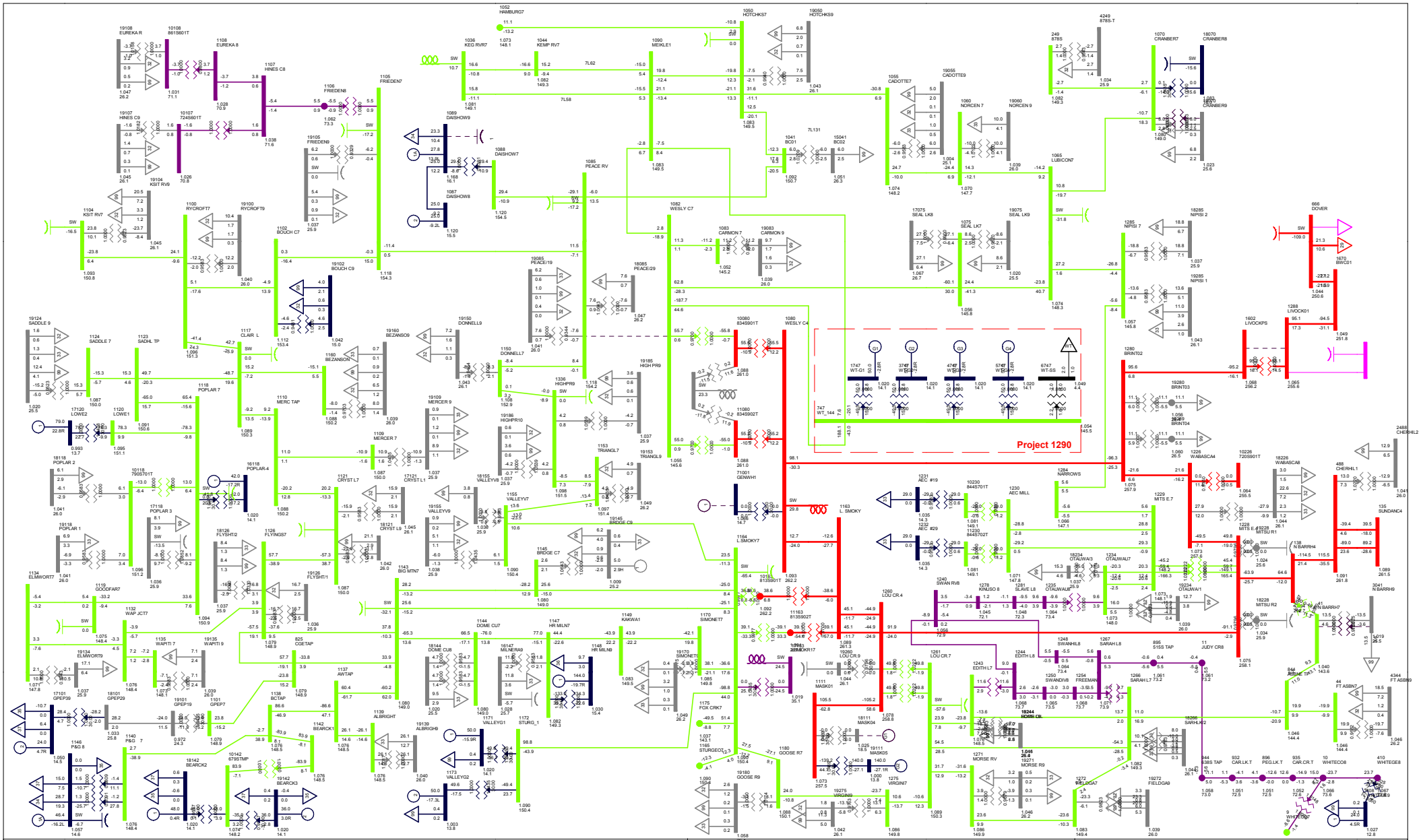
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 009 7L27 WESLEYCREEK to WESTPEACE_A.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 19



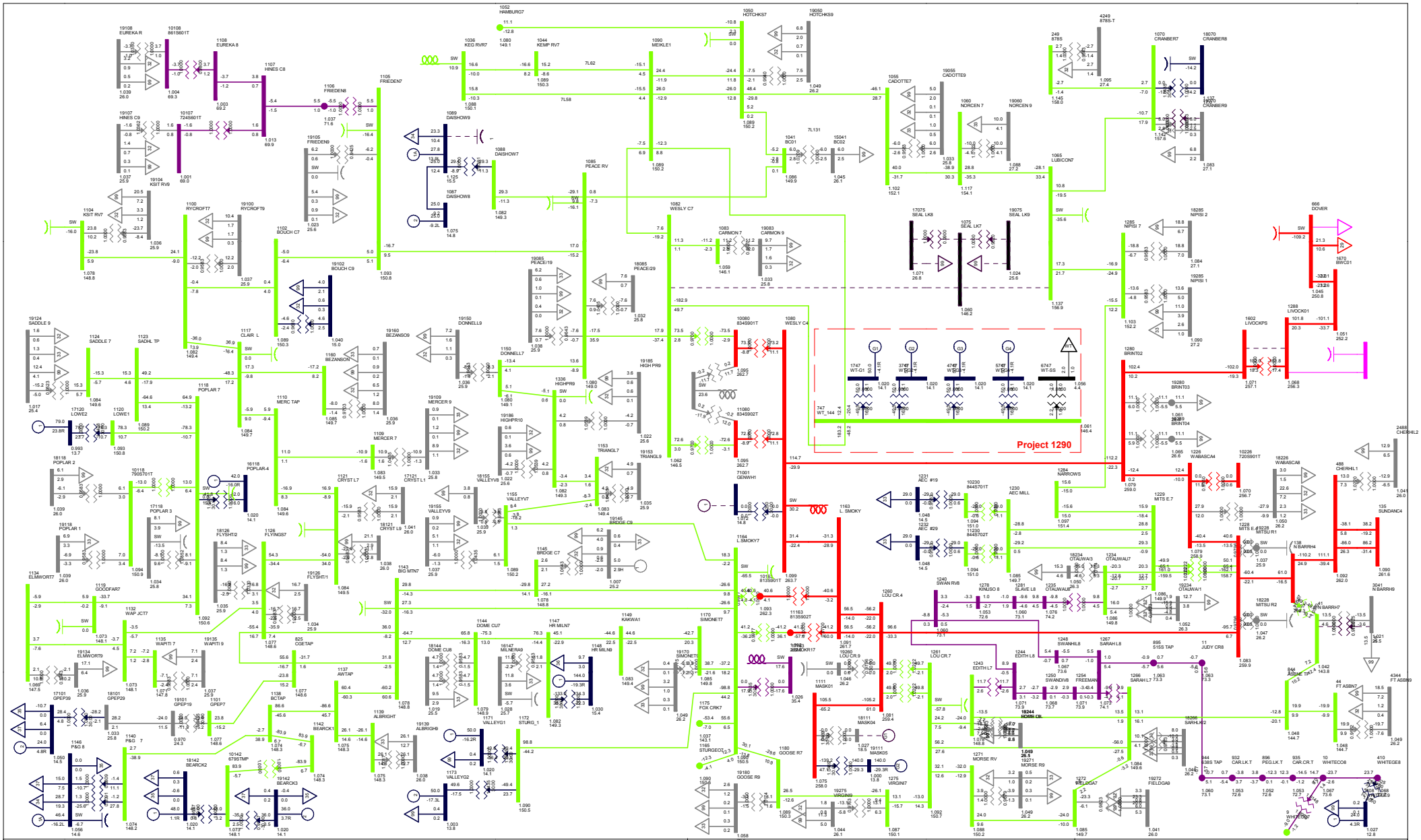
Appendix D2A

Figure: 20

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 009 7L27 WESLEYCREEK to WESTPEACE_B.

Whitetail Project 1290 Interconnection Study



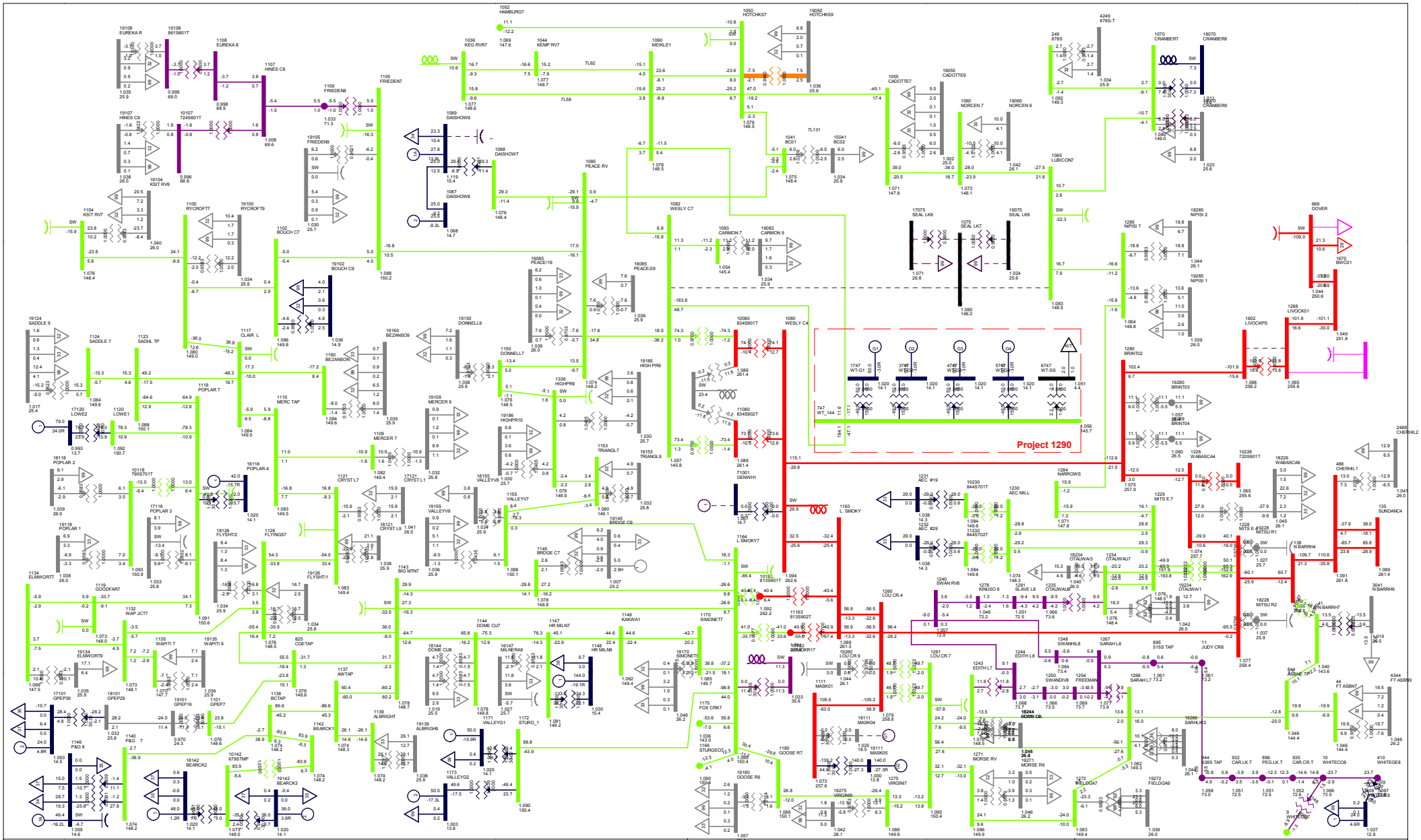
Appendix D2A

Figure: 21

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 010 7L12 WESLEYCREEK to LUBICON_A.

Whitetail Project 1290 Interconnection Study



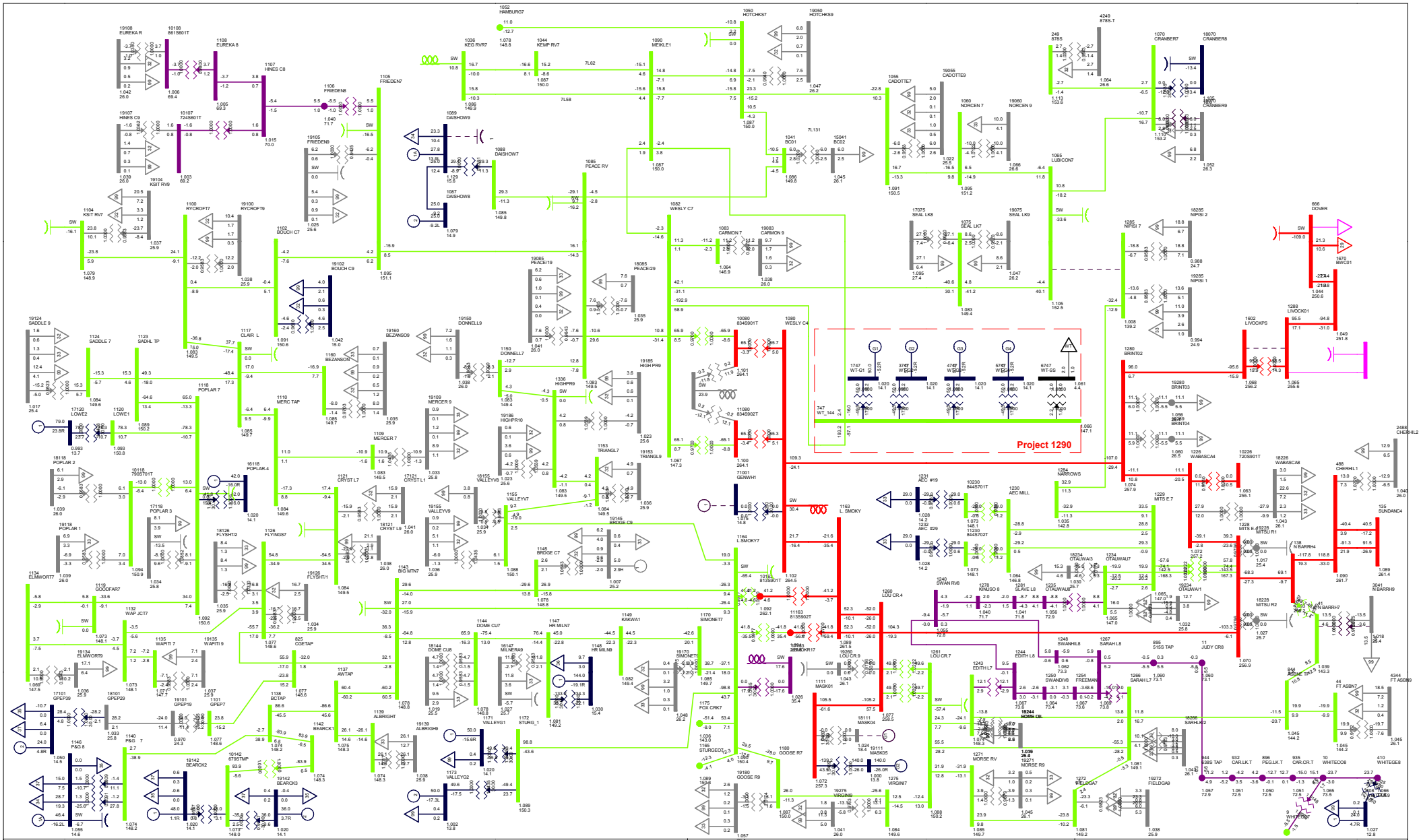
Appendix D2A

Figure: 22

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 010 7L12 WESLEYCREEK to LUBICON_B.

Whitetail Project 1290 Interconnection Study



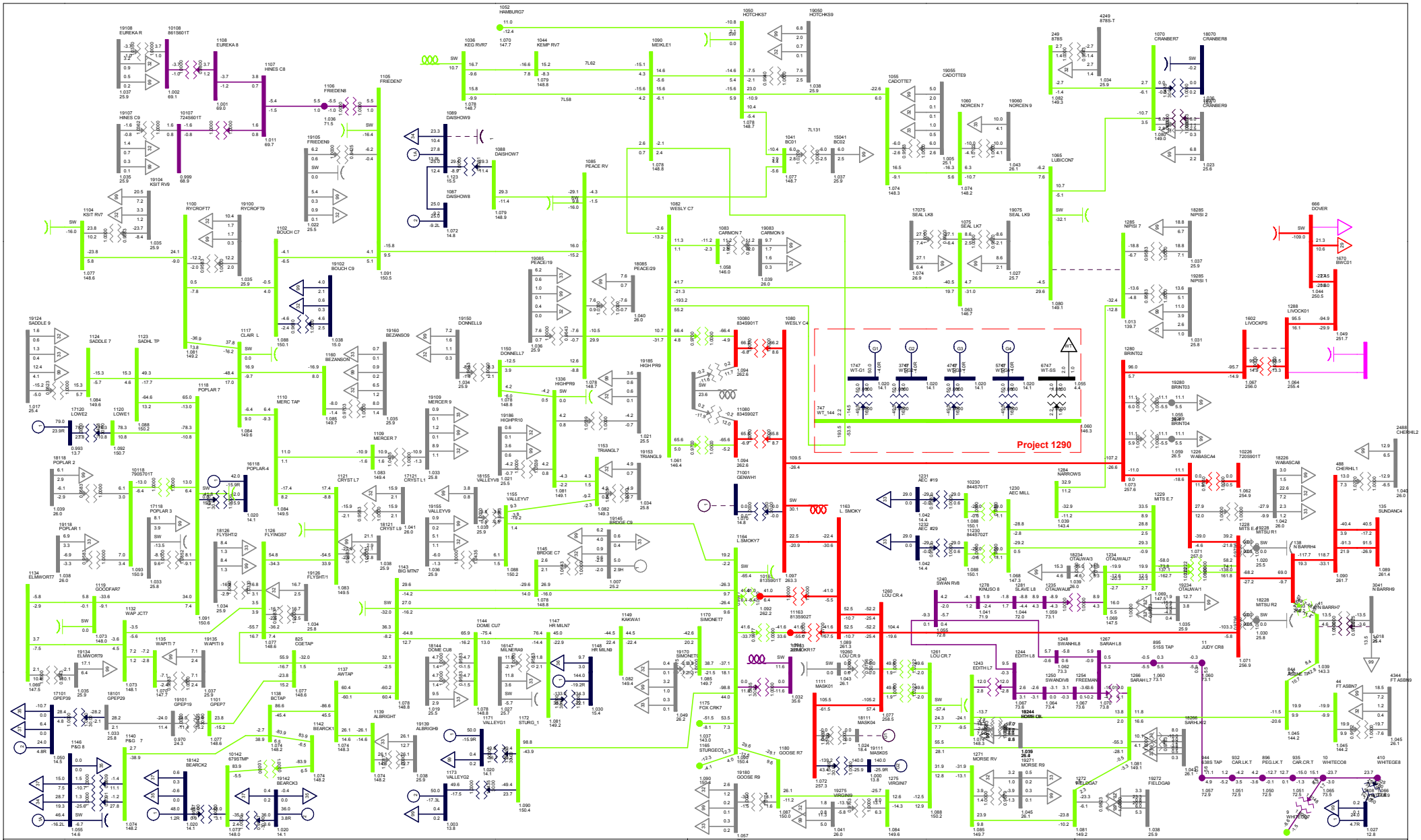
Appendix D2A

Figure: 23

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 011 7L61 LUBICON to NIPISI_A.

Whitetail Project 1290 Interconnection Study



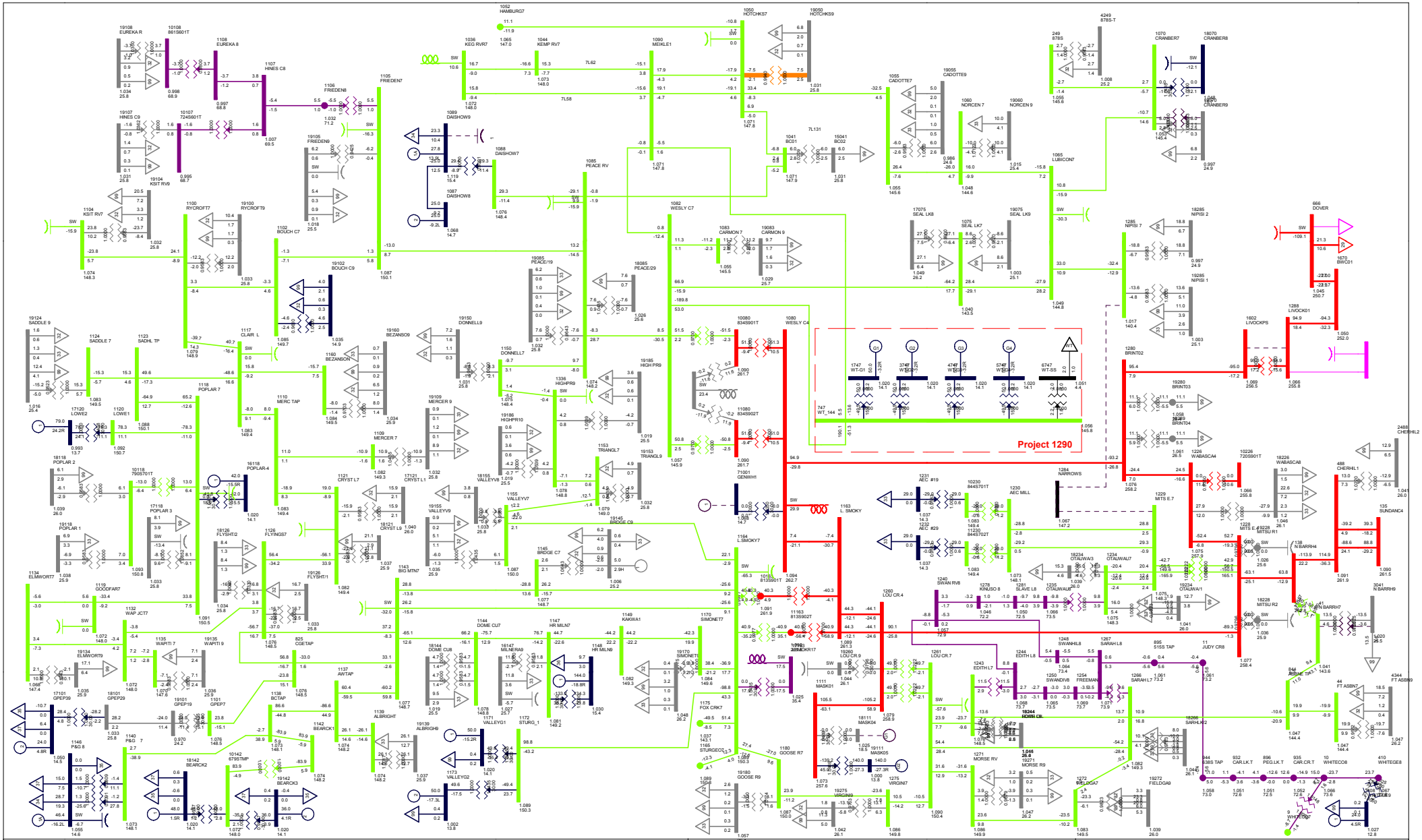
Appendix D2A

Figure: 24

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 011 7L61 LUBICON to NIPISI_B.

Whitetail Project 1290 Interconnection Study



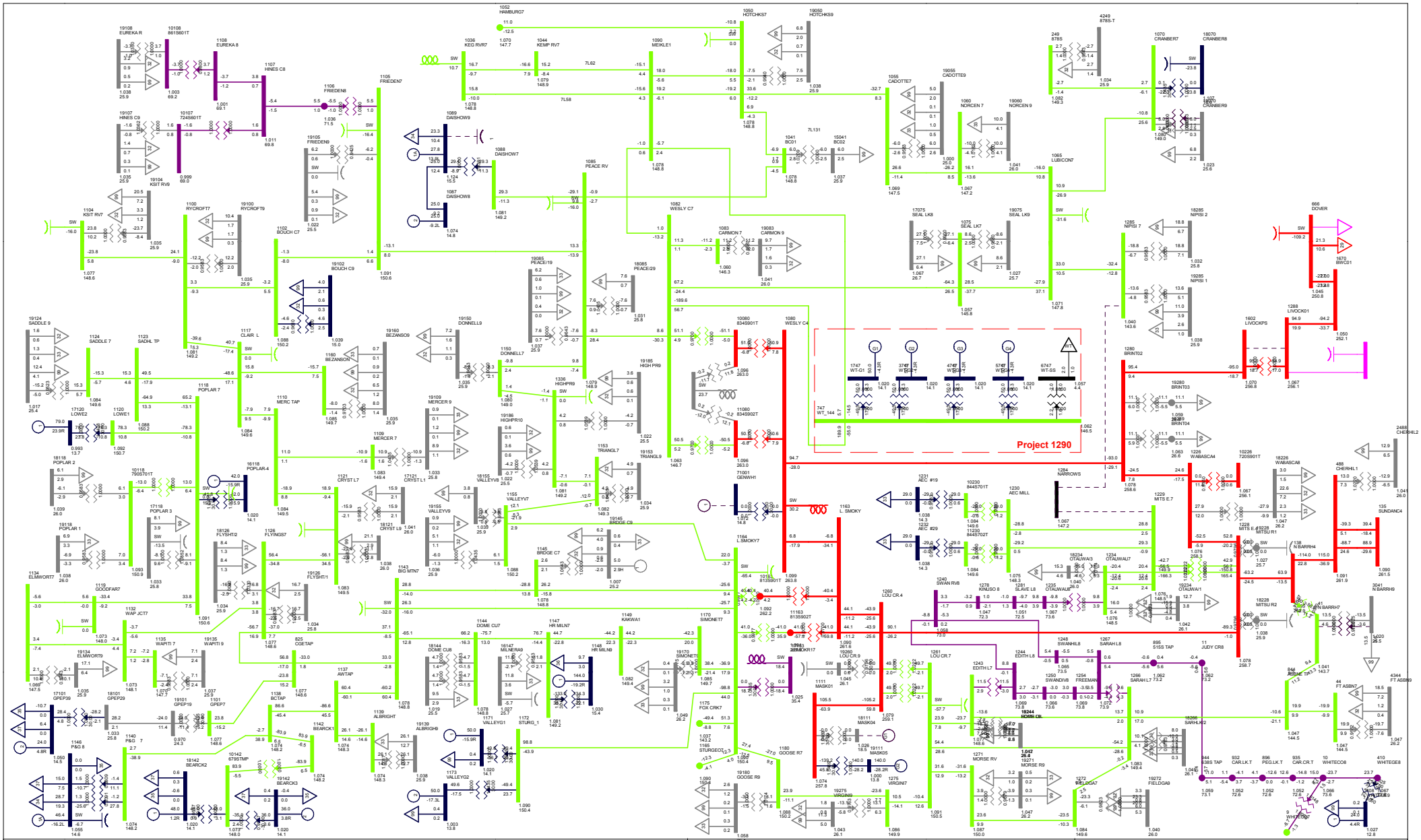
Appendix D2A

Figure: 25

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 012 7L23 NIPISI to MITSUE_A.

Whitetail Project 1290 Interconnection Study



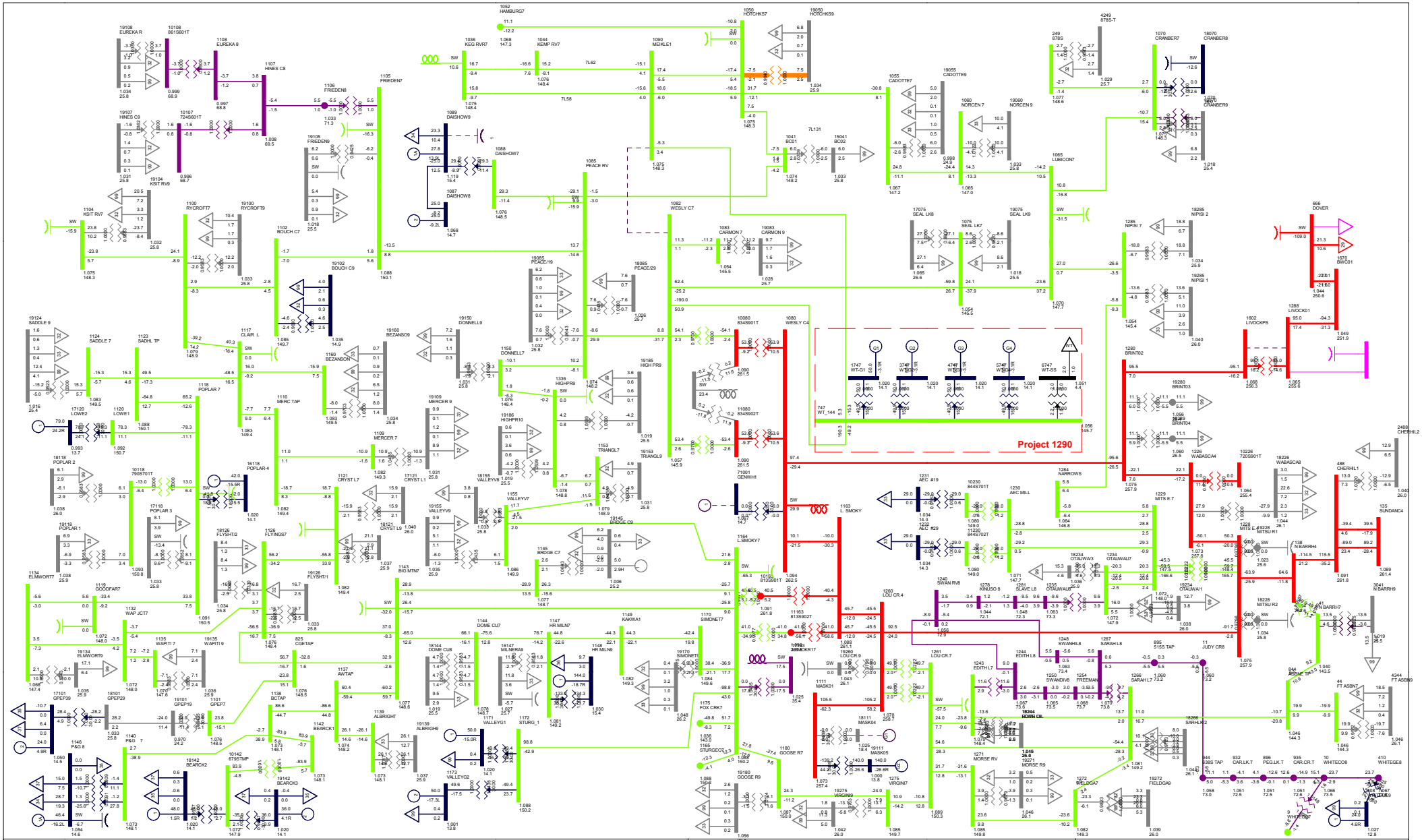
Appendix D2A

Figure: 26

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 012 7L23 NIPISI to MITSUE_B.

Whitetail Project 1290 Interconnection Study



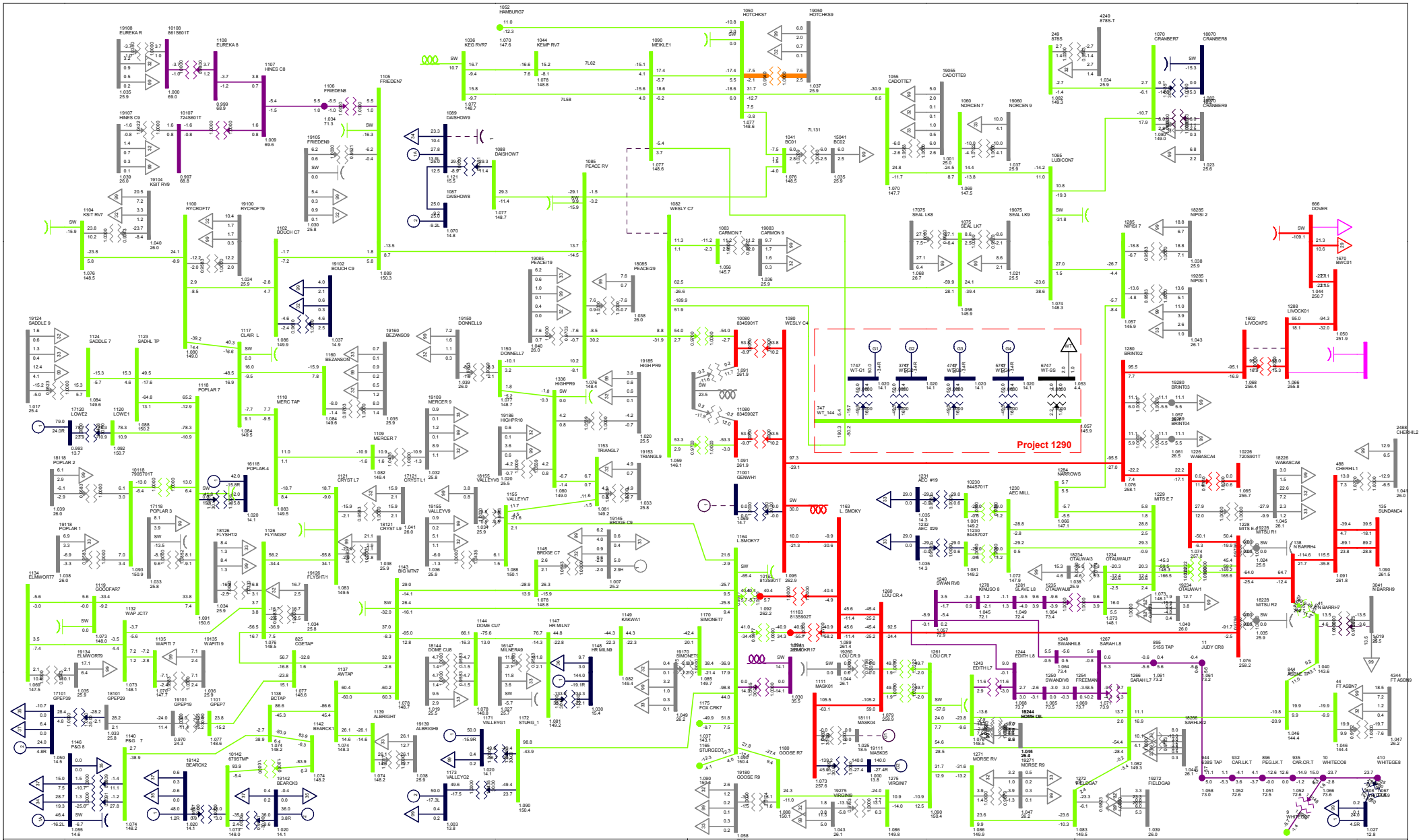
Appendix D2A

Figure: 27

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 013 7L131 WESLEYCREEK to Meikle_A.

Whitetail Project 1290 Interconnection Study



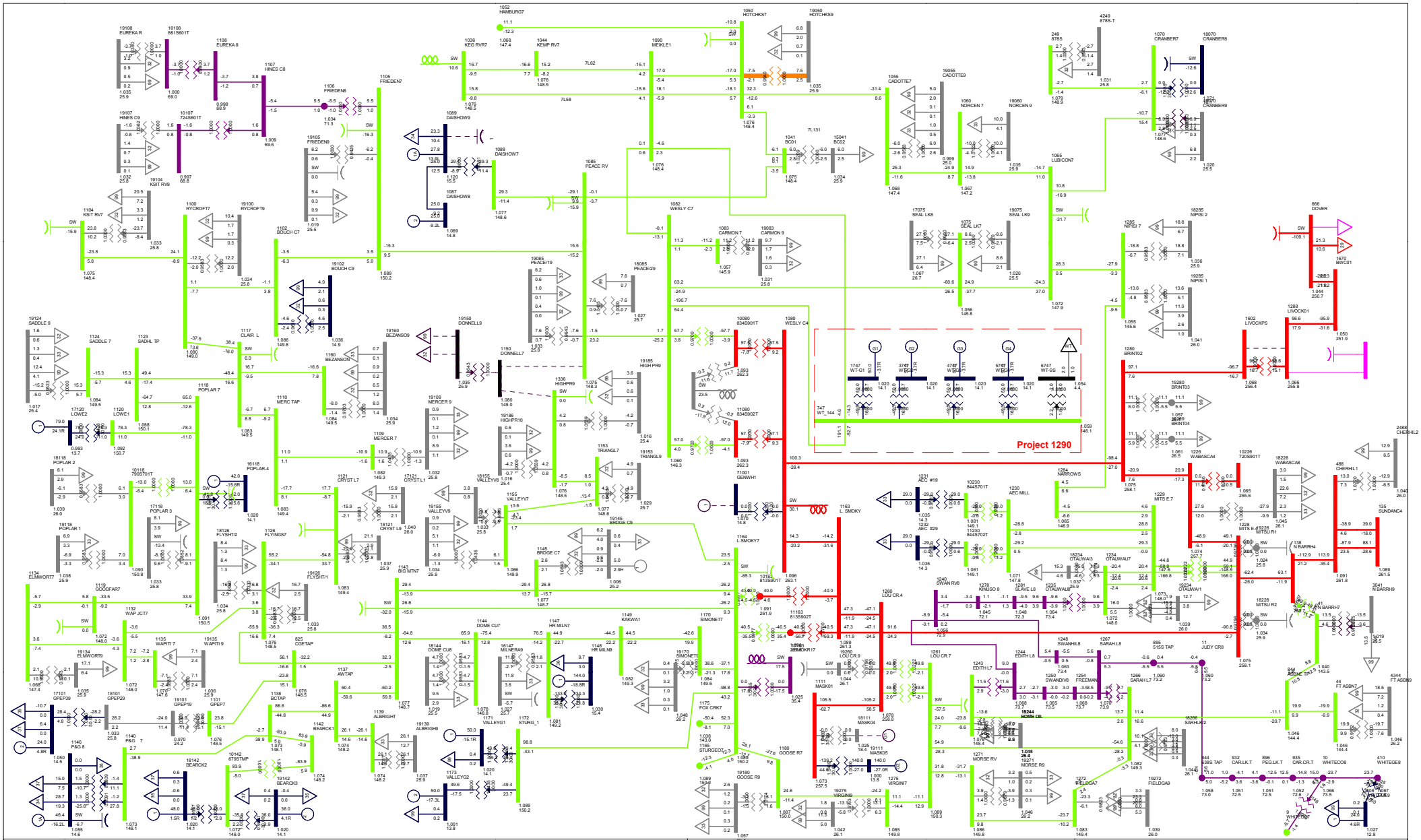
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 013 7L131 WESLEYCREEK to Meikle_B.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 28



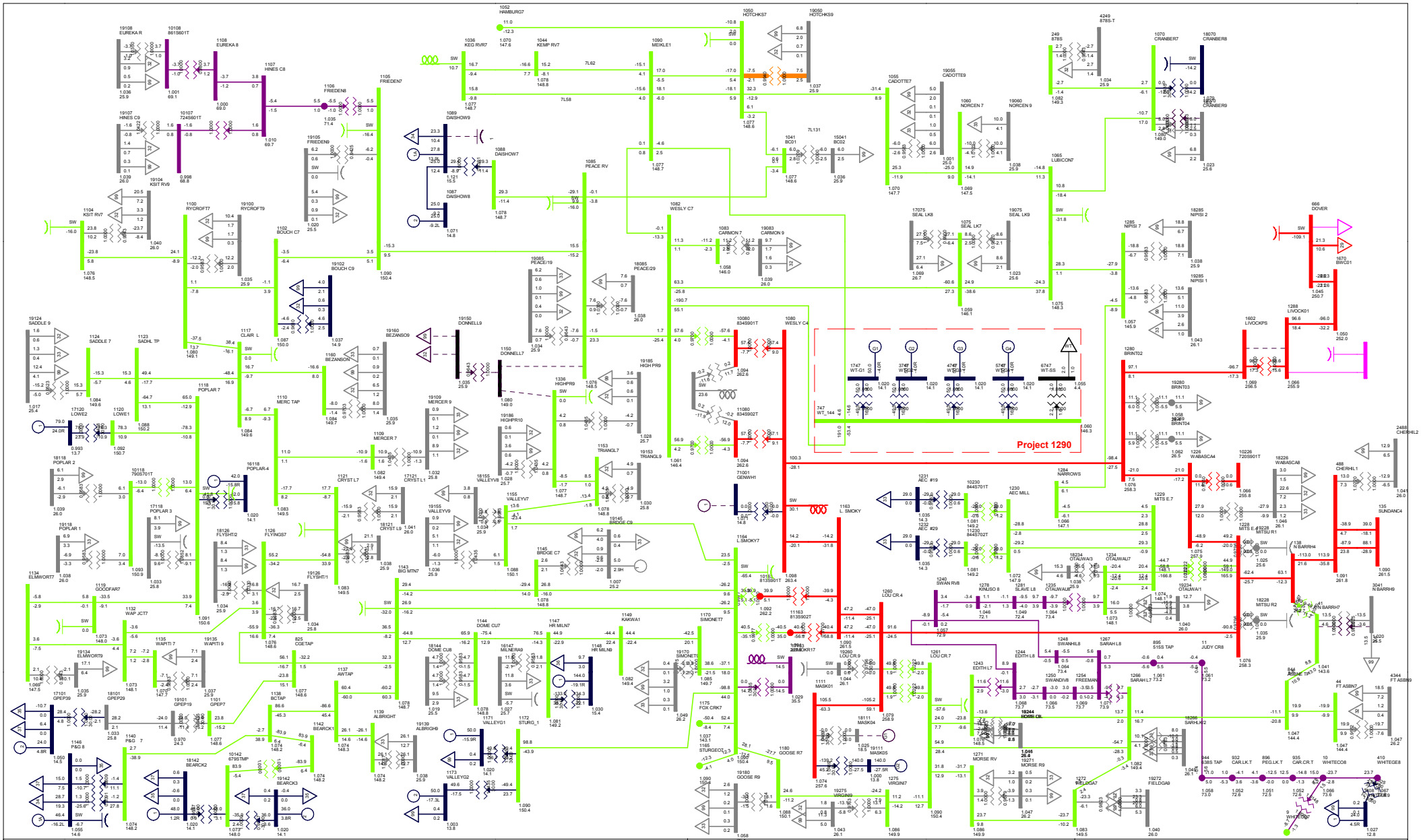
Appendix D2A

Figure: 29

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_A.

Whitetail Project 1290 Interconnection Study



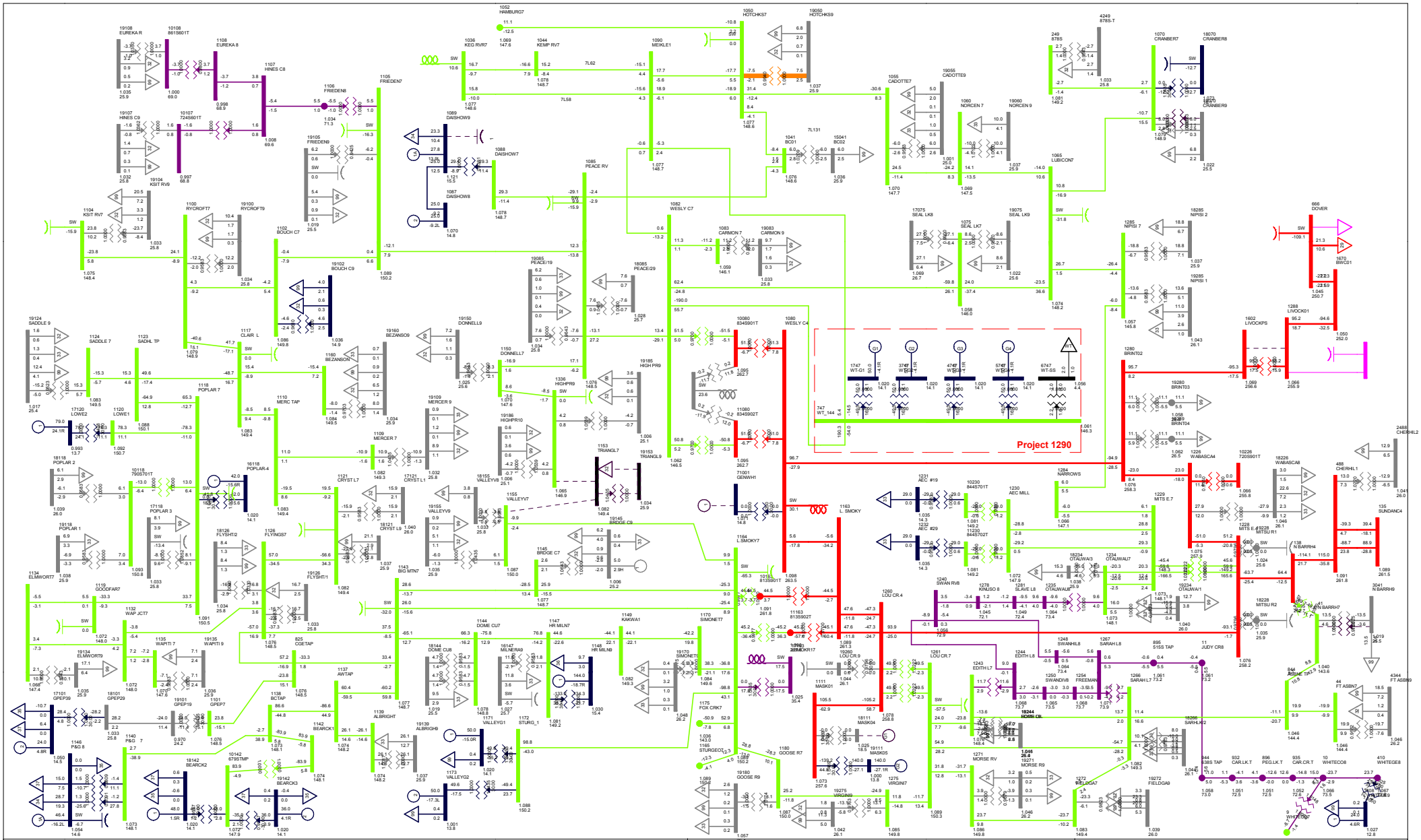
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_B.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 30



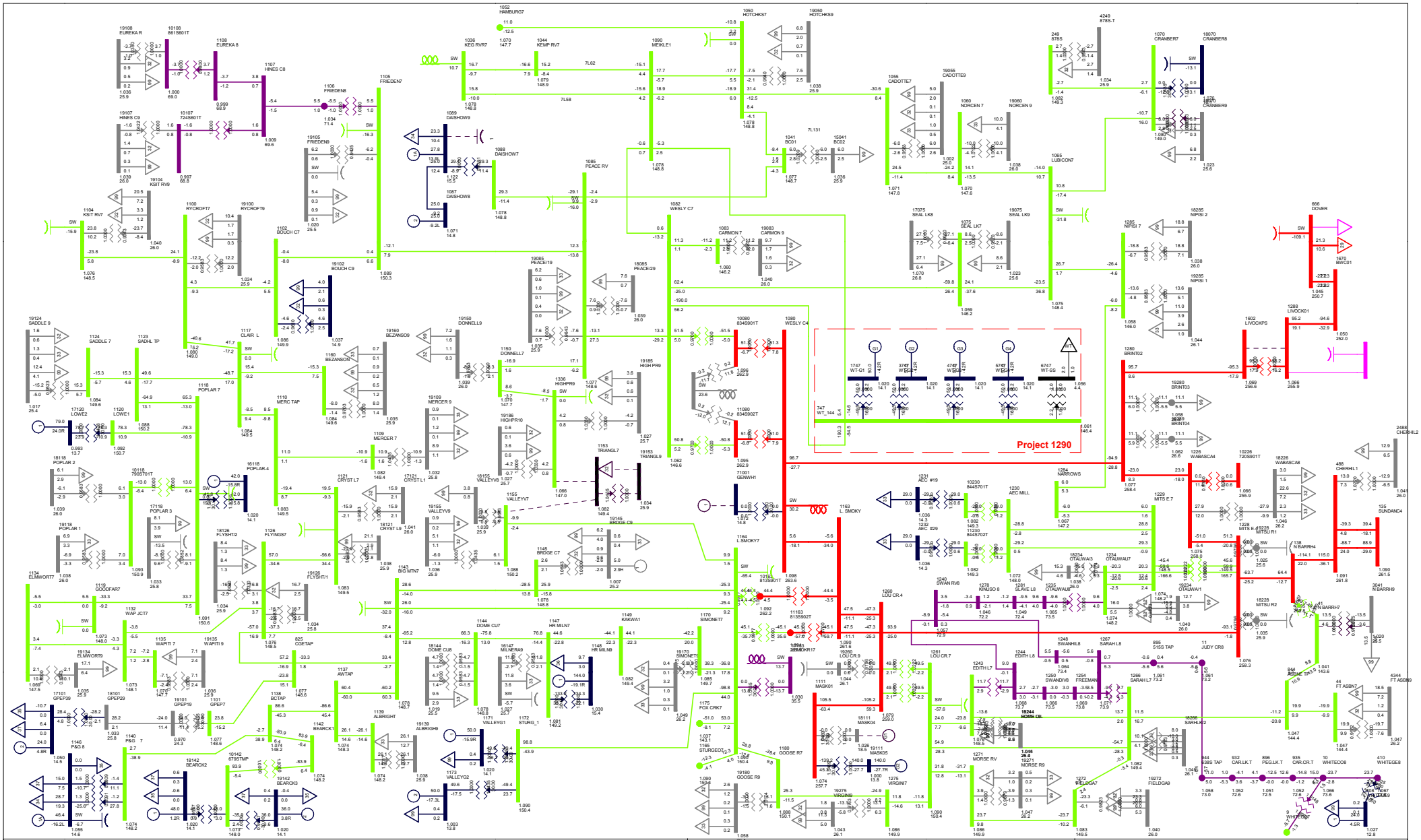
Appendix D2A

Figure: 31

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_A.

Whitetail Project 1290 Interconnection Study



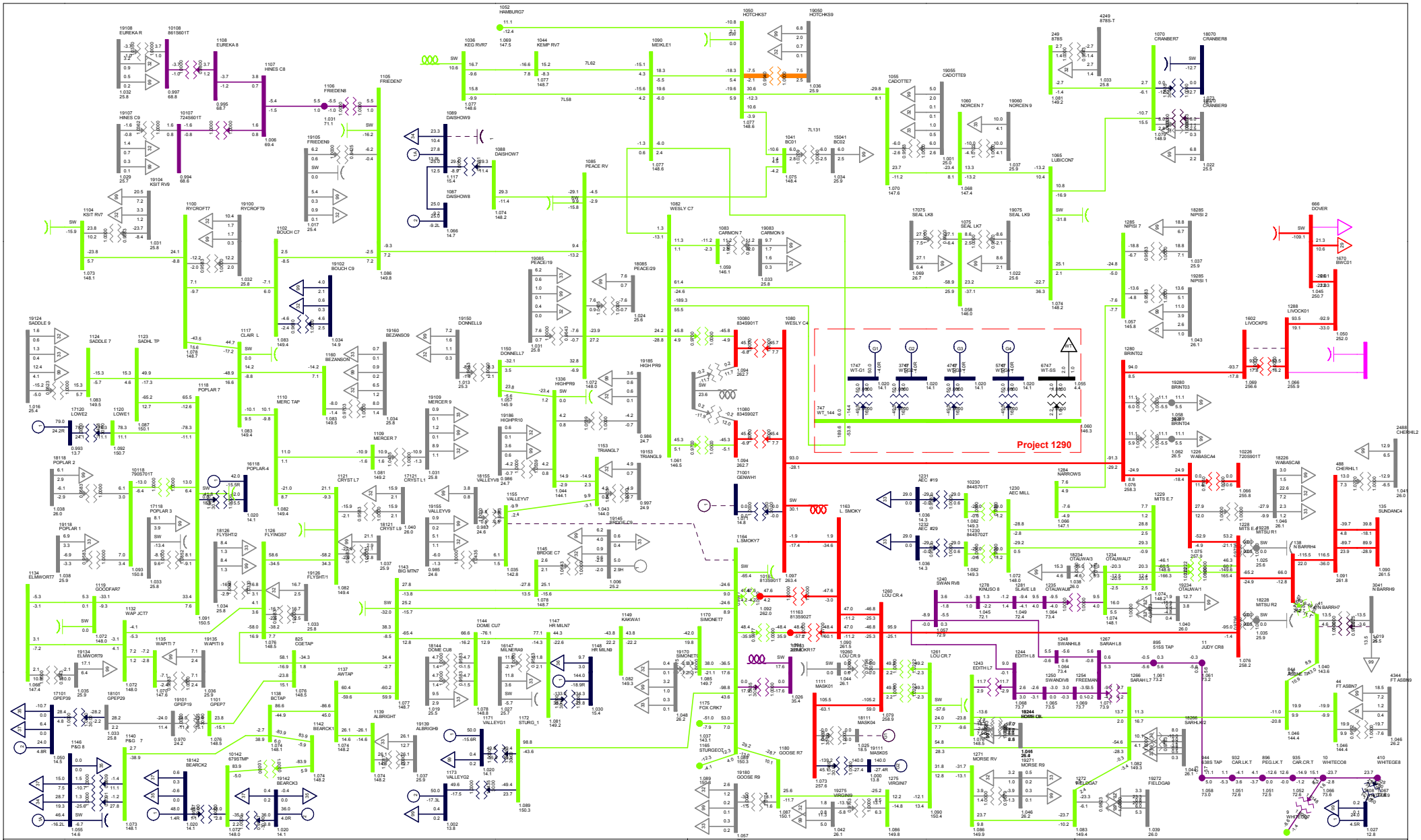
Appendix D2A

Figure: 32

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_B.

Whitetail Project 1290 Interconnection Study



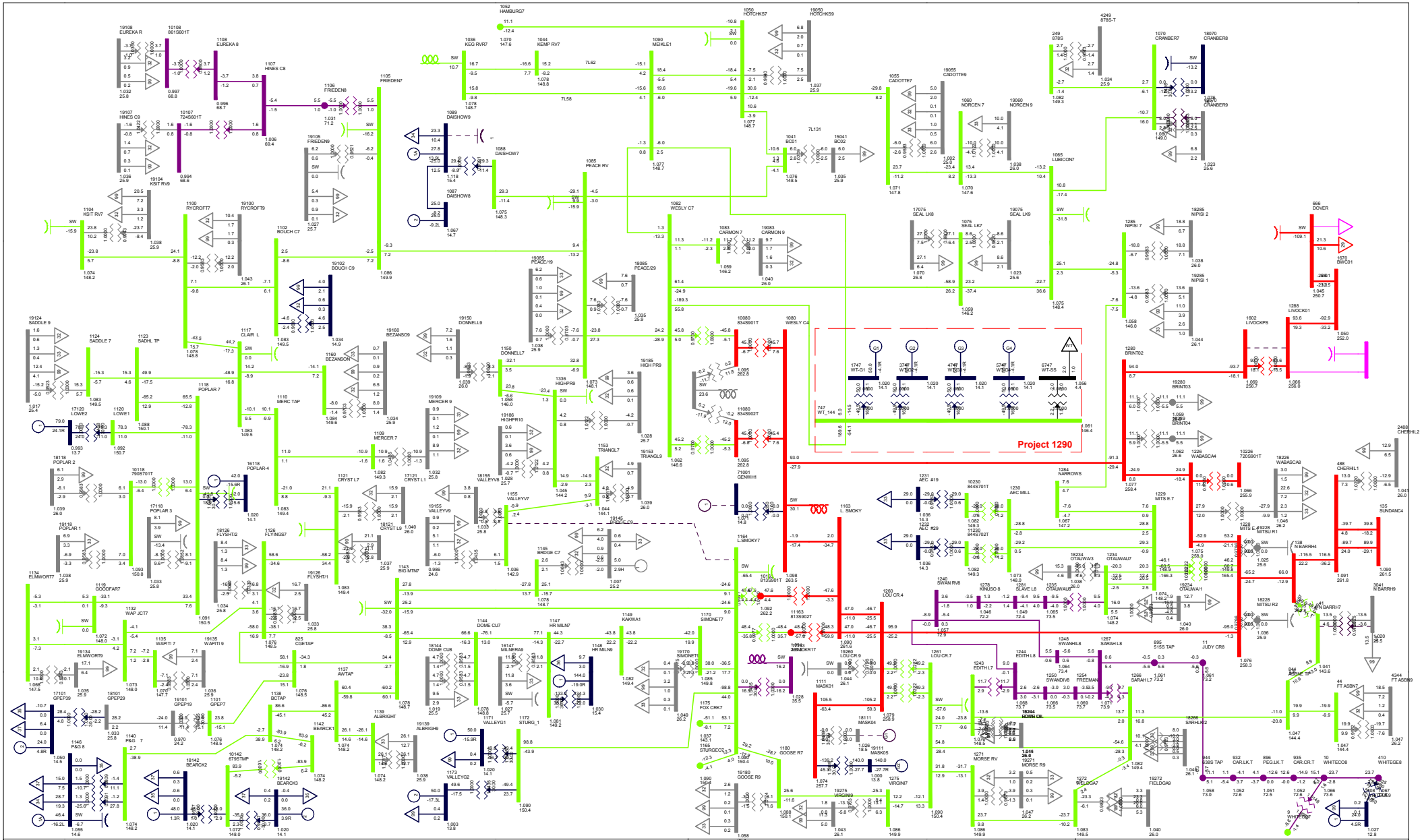
Appendix D2A

Figure: 33

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_A.

Whitetail Project 1290 Interconnection Study



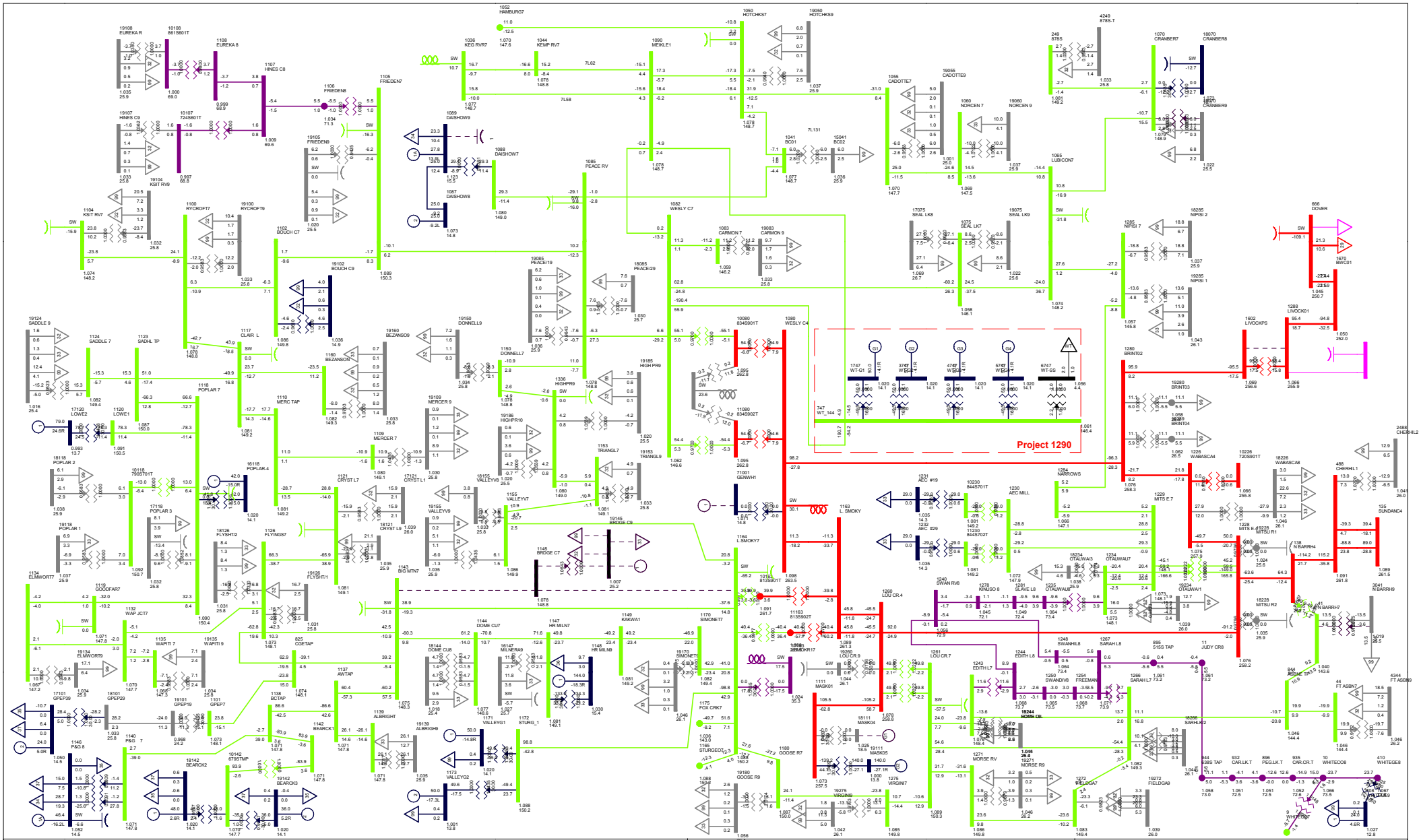
Appendix D2A

Figure: 34

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_B.

Whitetail Project 1290 Interconnection Study



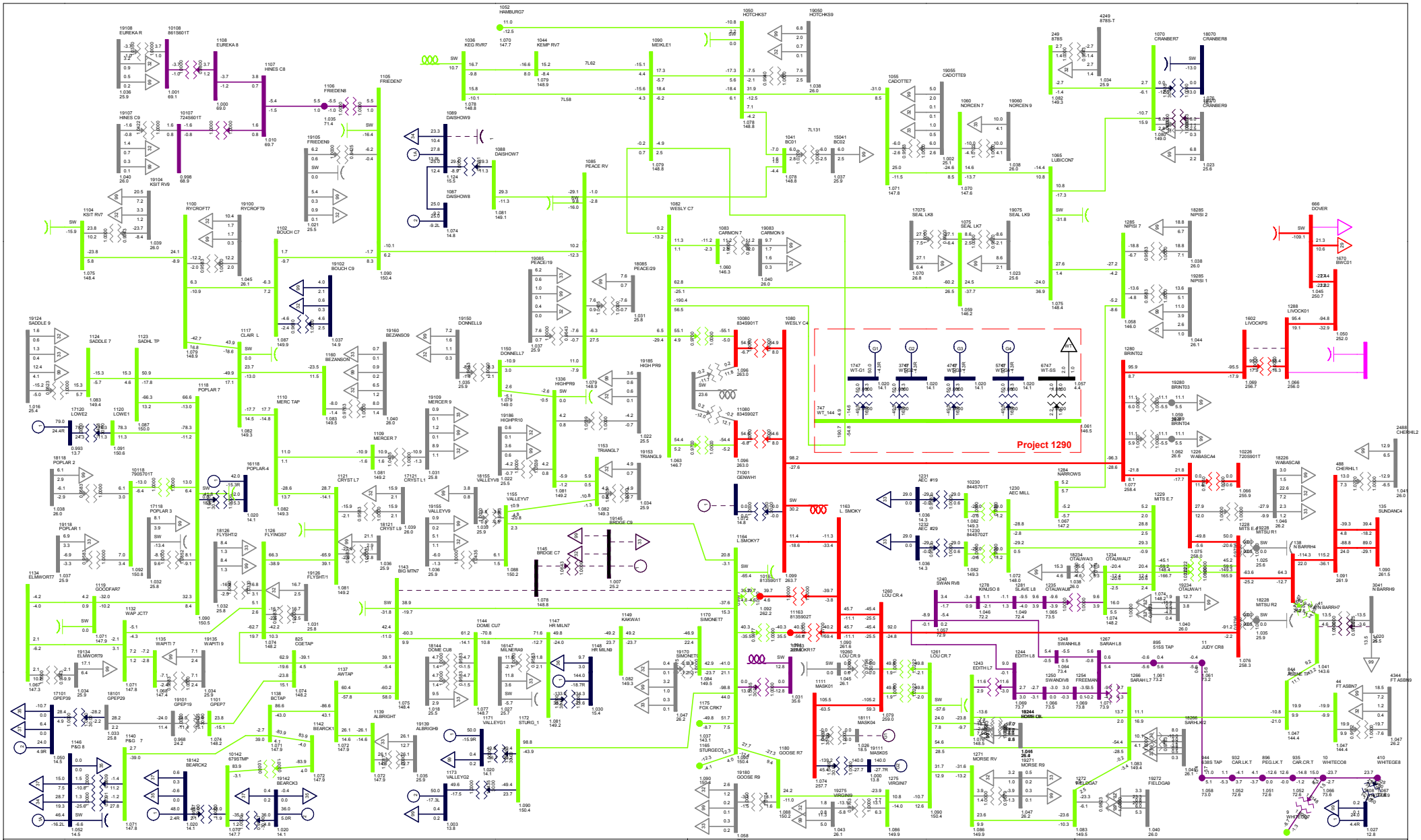
Appendix D2A

Figure: 35

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_A.

Whitetail Project 1290 Interconnection Study



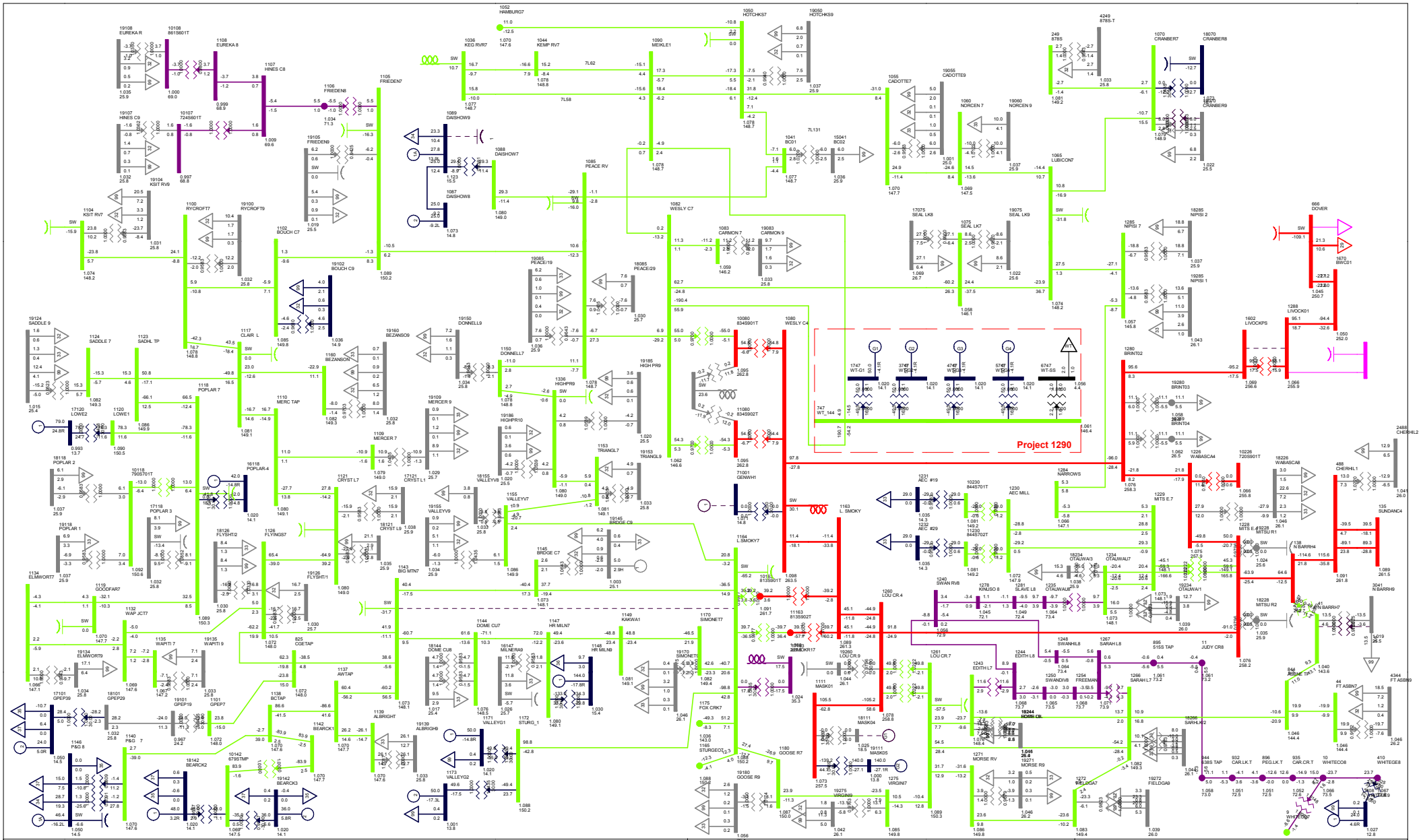
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_B.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 36



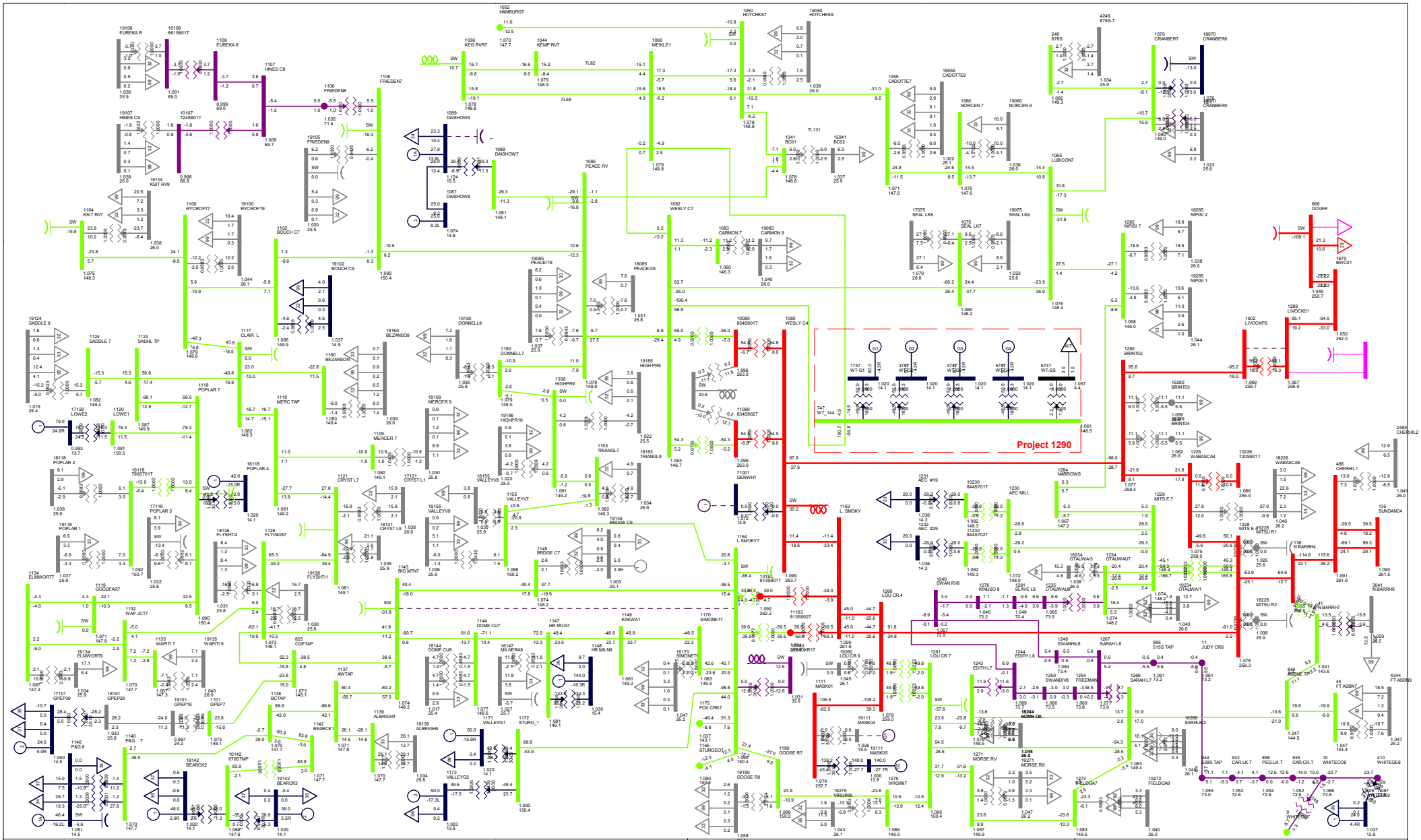
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_A.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 37



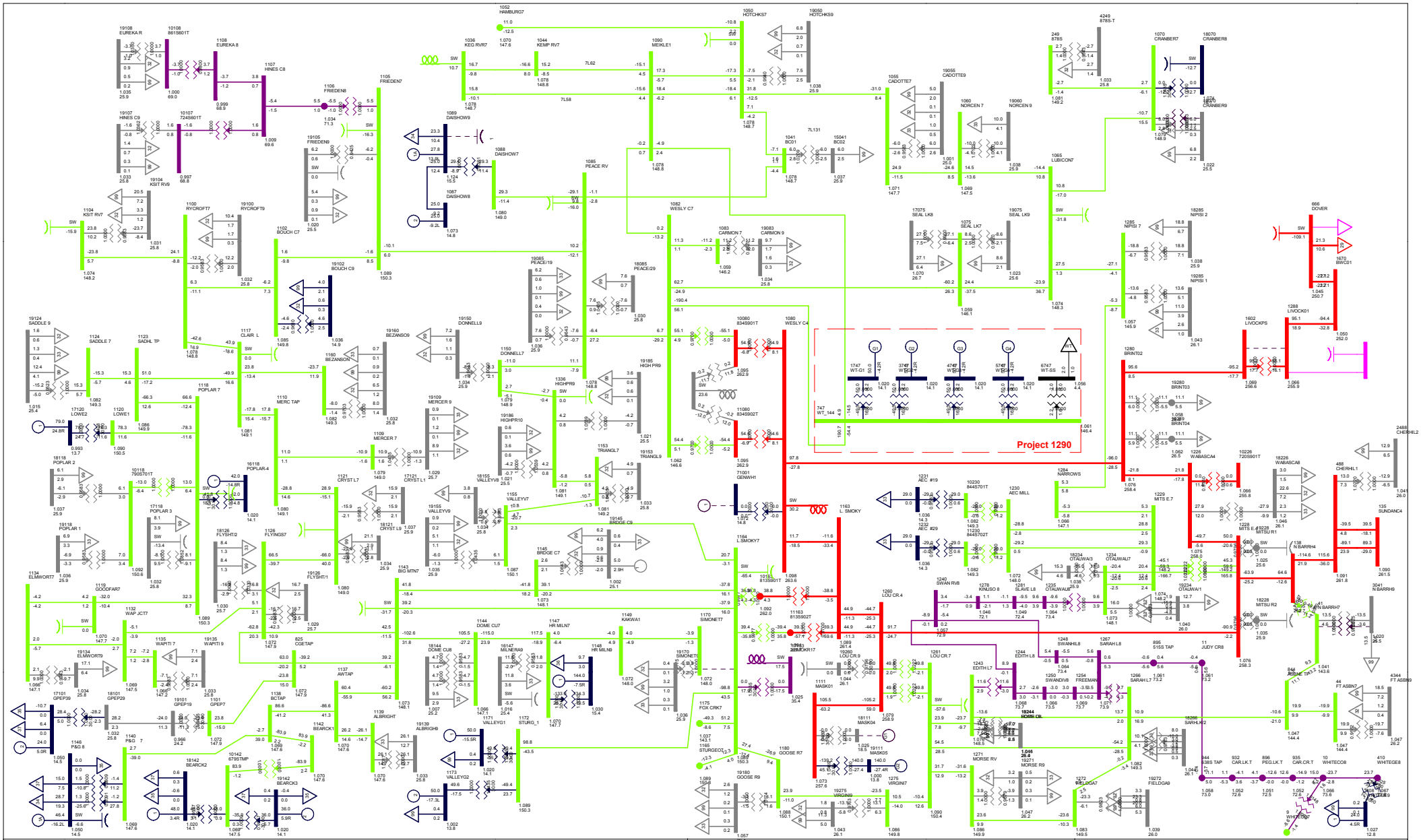
Appendix D2A

Figure: 38

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_B.

Whitetail Project 1290 Interconnection Study



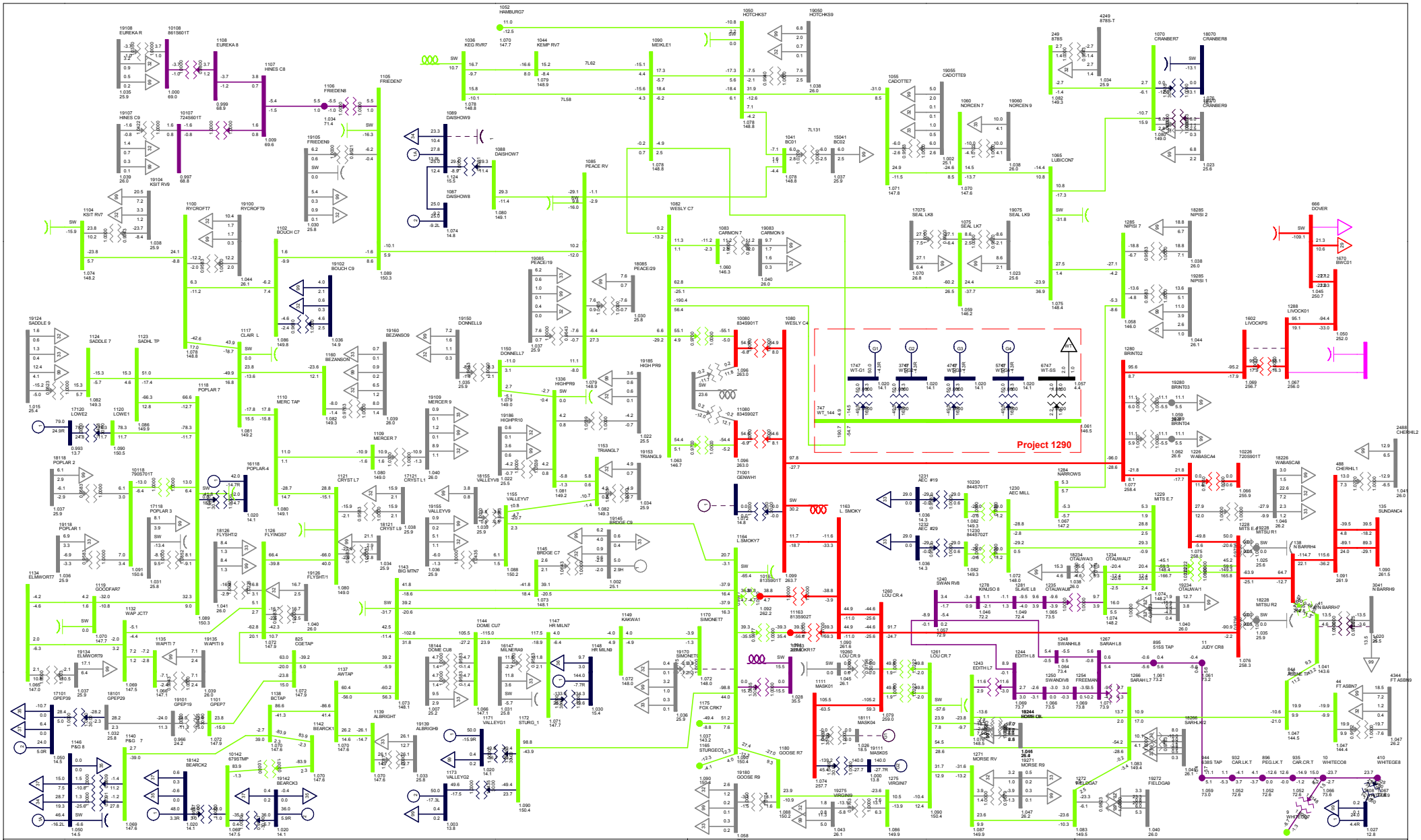
Appendix D2A

Figure: 39

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 019 7L40 LITTLESMOKY to SIMONETTE_A.

Whitetail Project 1290 Interconnection Study



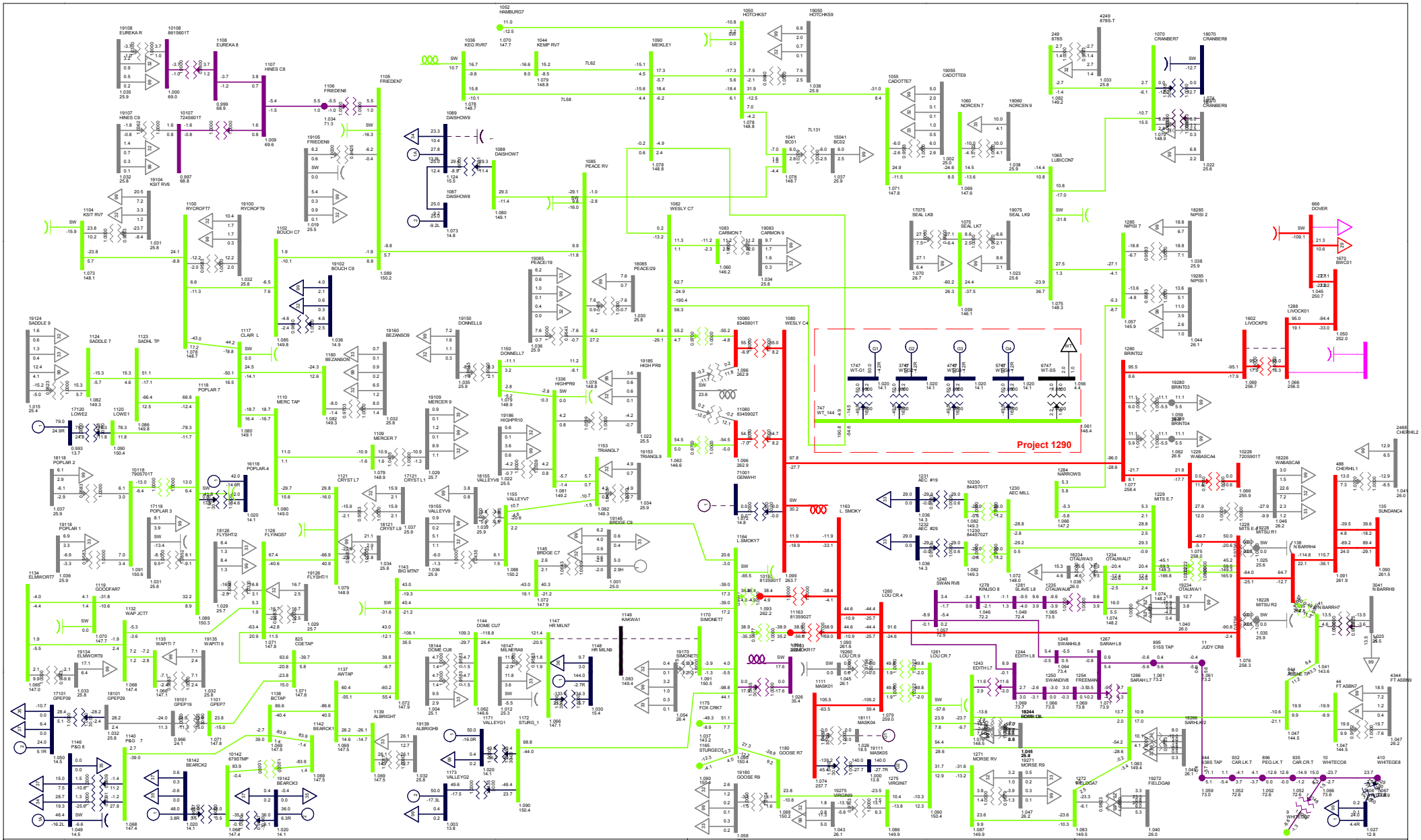
Appendix D2A

Figure: 40

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 019 7L40 LITTLESMOKY to SIMONETTE_B.

Whitetail Project 1290 Interconnection Study



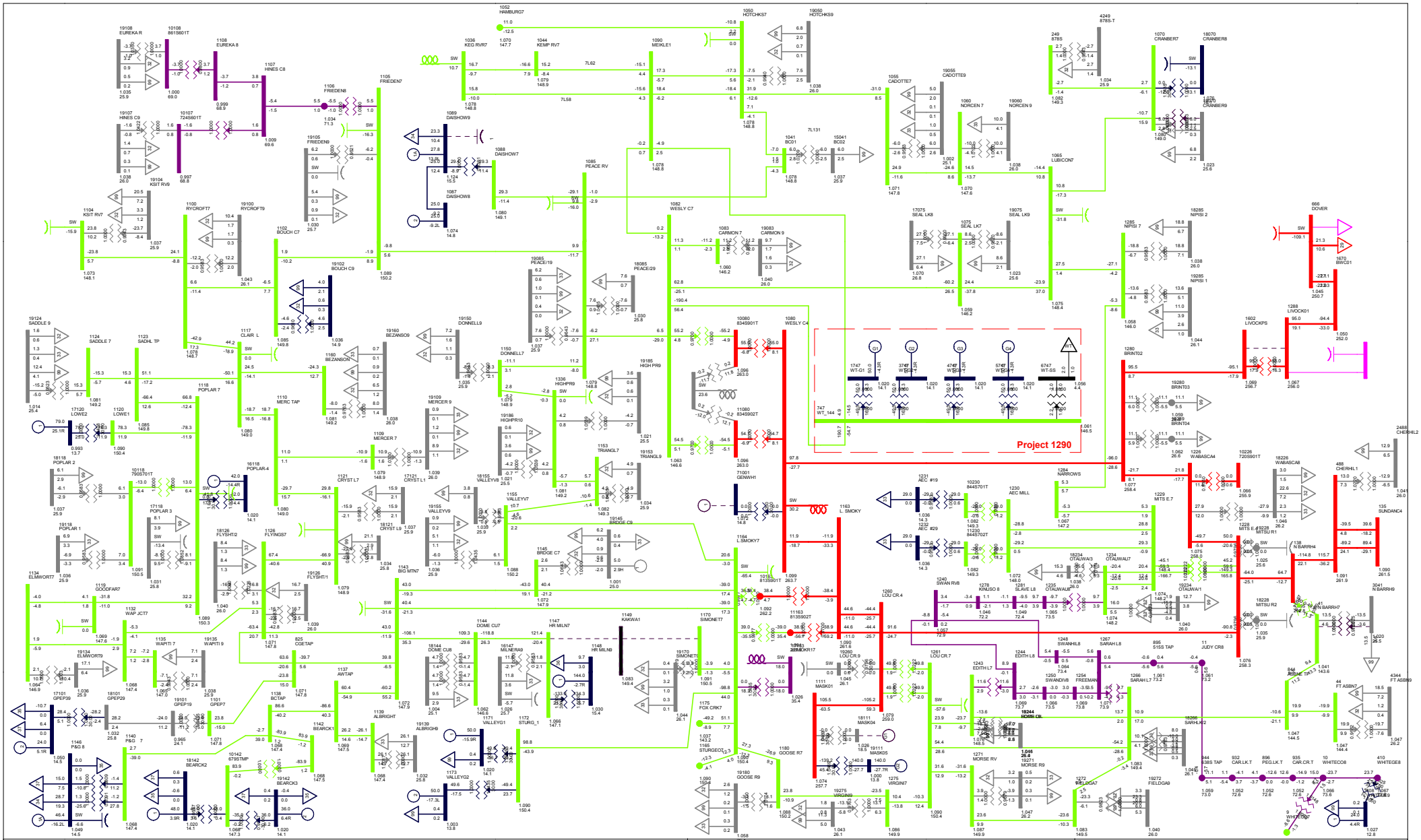
Appendix D2A

Figure: 41

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 020 7L80 SIMONETTE to HR MILNER_A.

Whitetail Project 1290 Interconnection Study



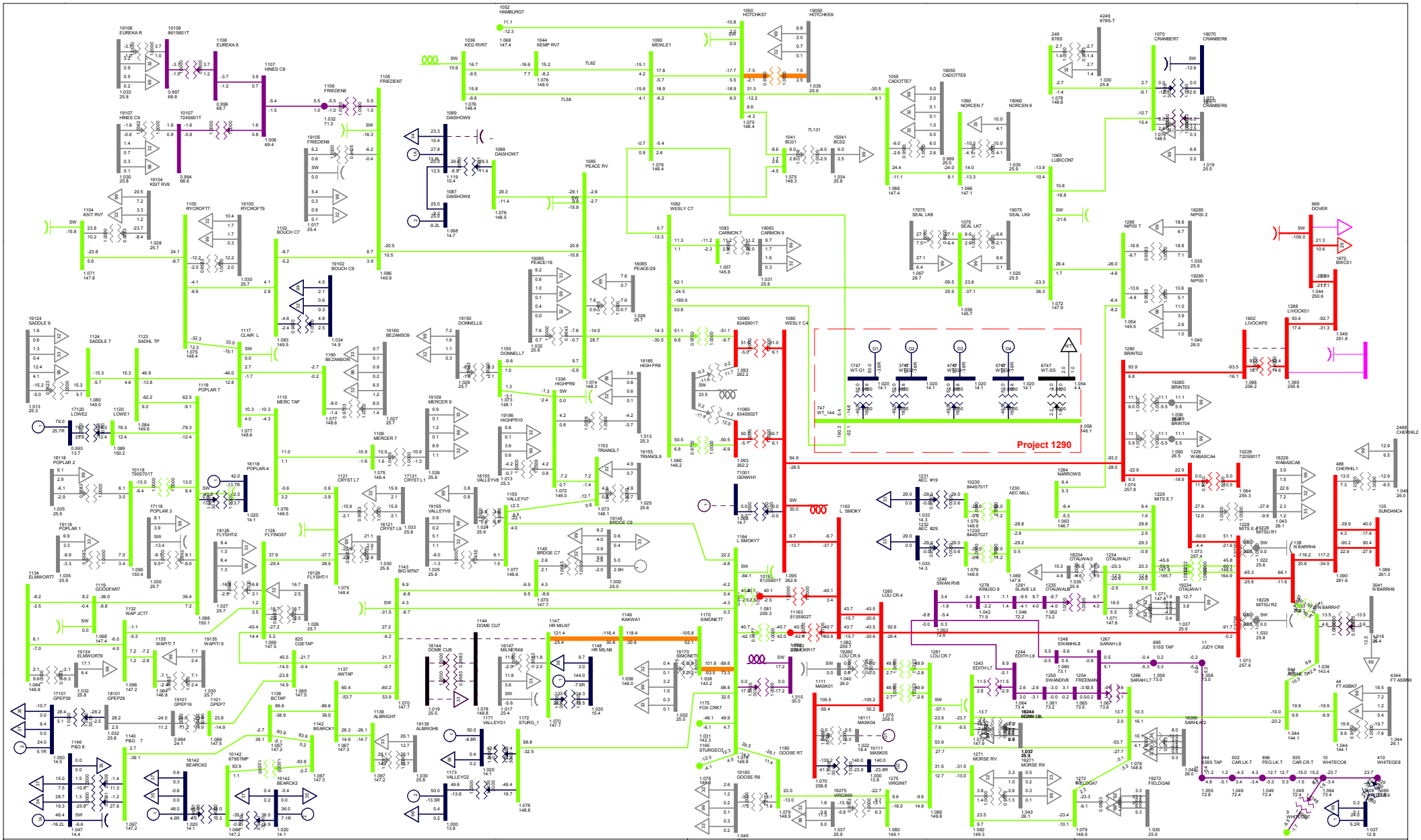
Appendix D2A

Figure: 42

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 020 7L80 SIMONETTE to HR MILNER_B.

Whitetail Project 1290 Interconnection Study



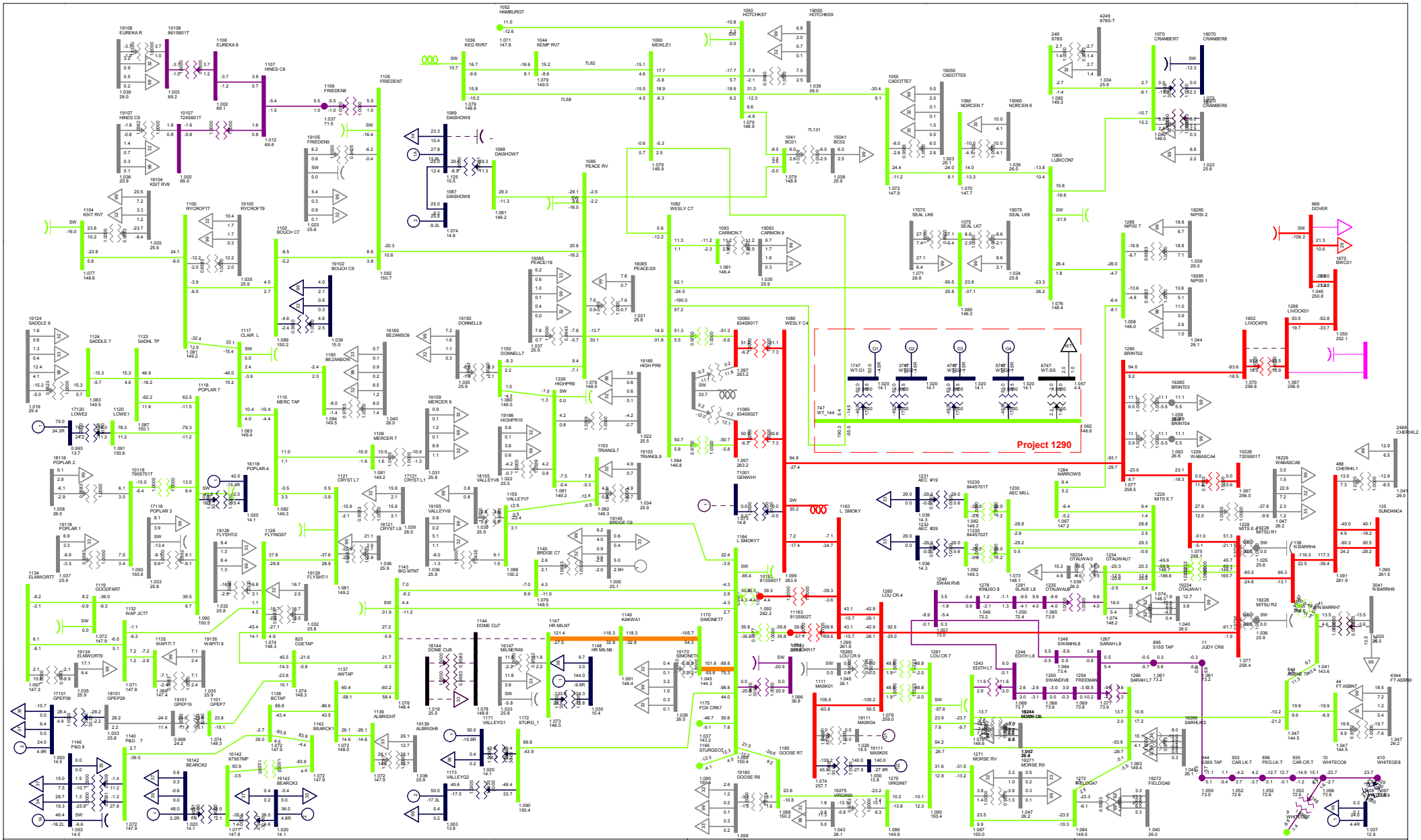
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_A.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 43



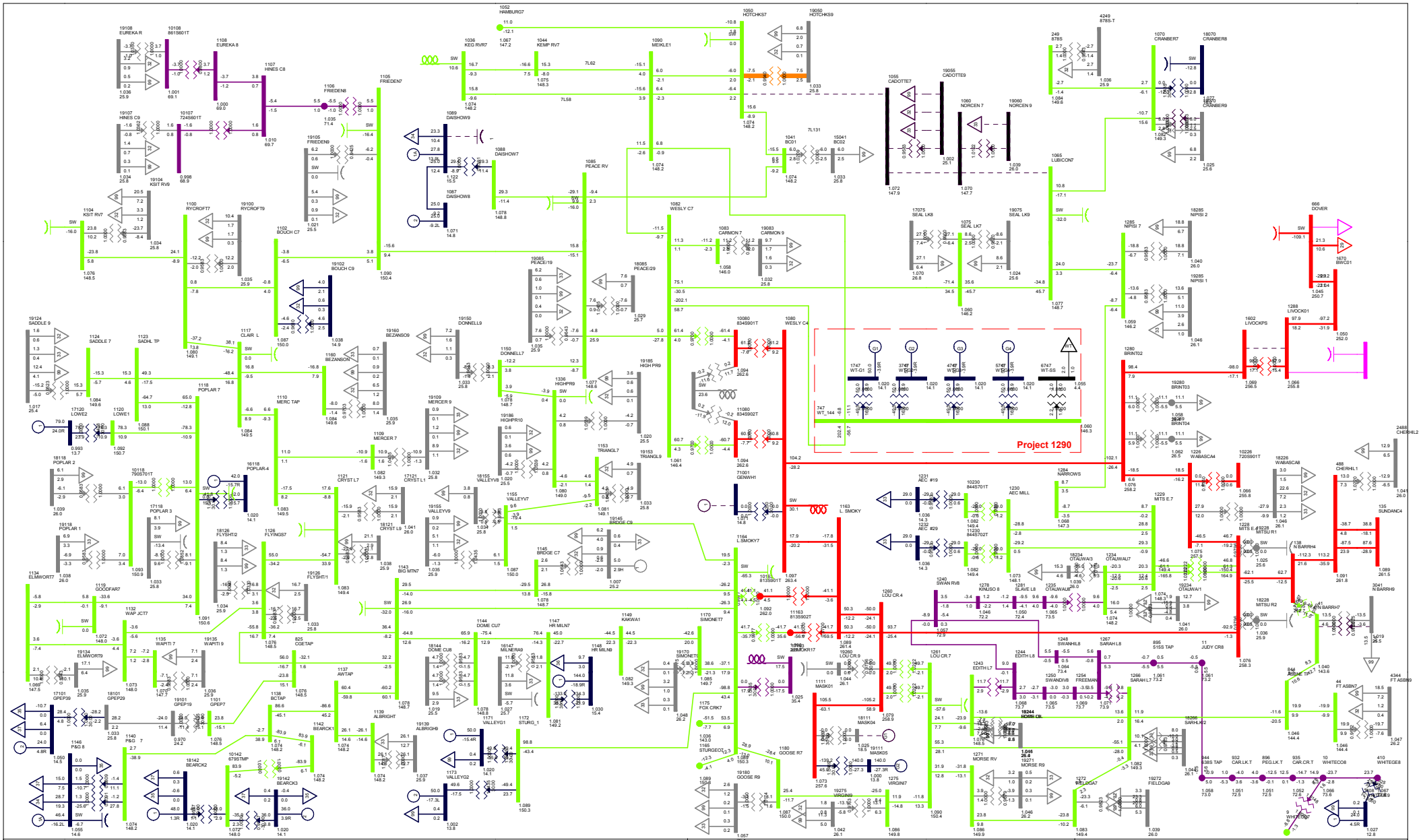
Appendix D2A

Figure: 44

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_B.

Whitetail Project 1290 Interconnection Study



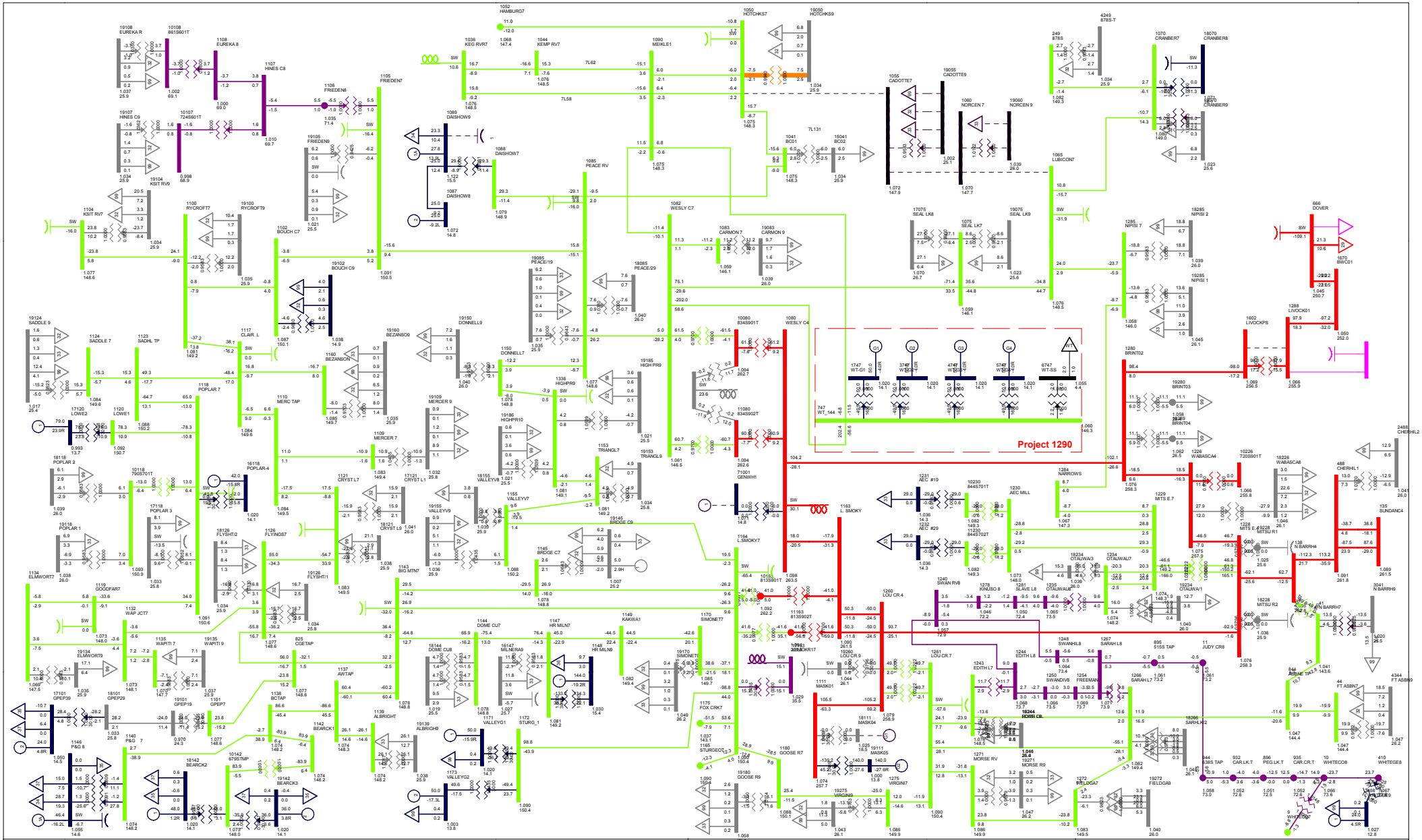
Appendix D2A

Figure: 45

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 022 7L63 HOTCHKISS to LUBICON_A.

Whitetail Project 1290 Interconnection Study



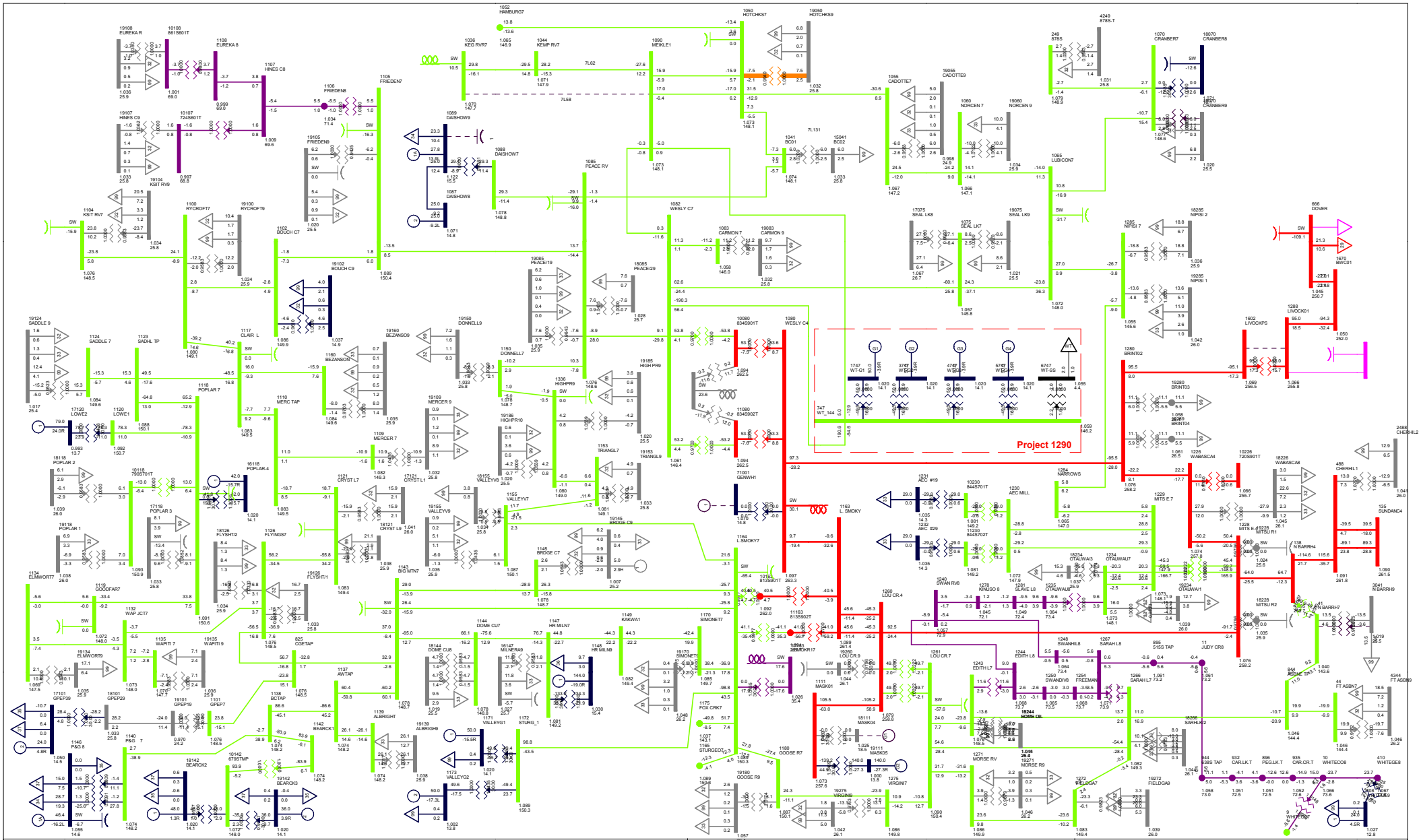
Appendix D2A

Figure: 46

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 022 7L63 HOTCHKISS to LUBICON_B.

Whitetail Project 1290 Interconnection Study



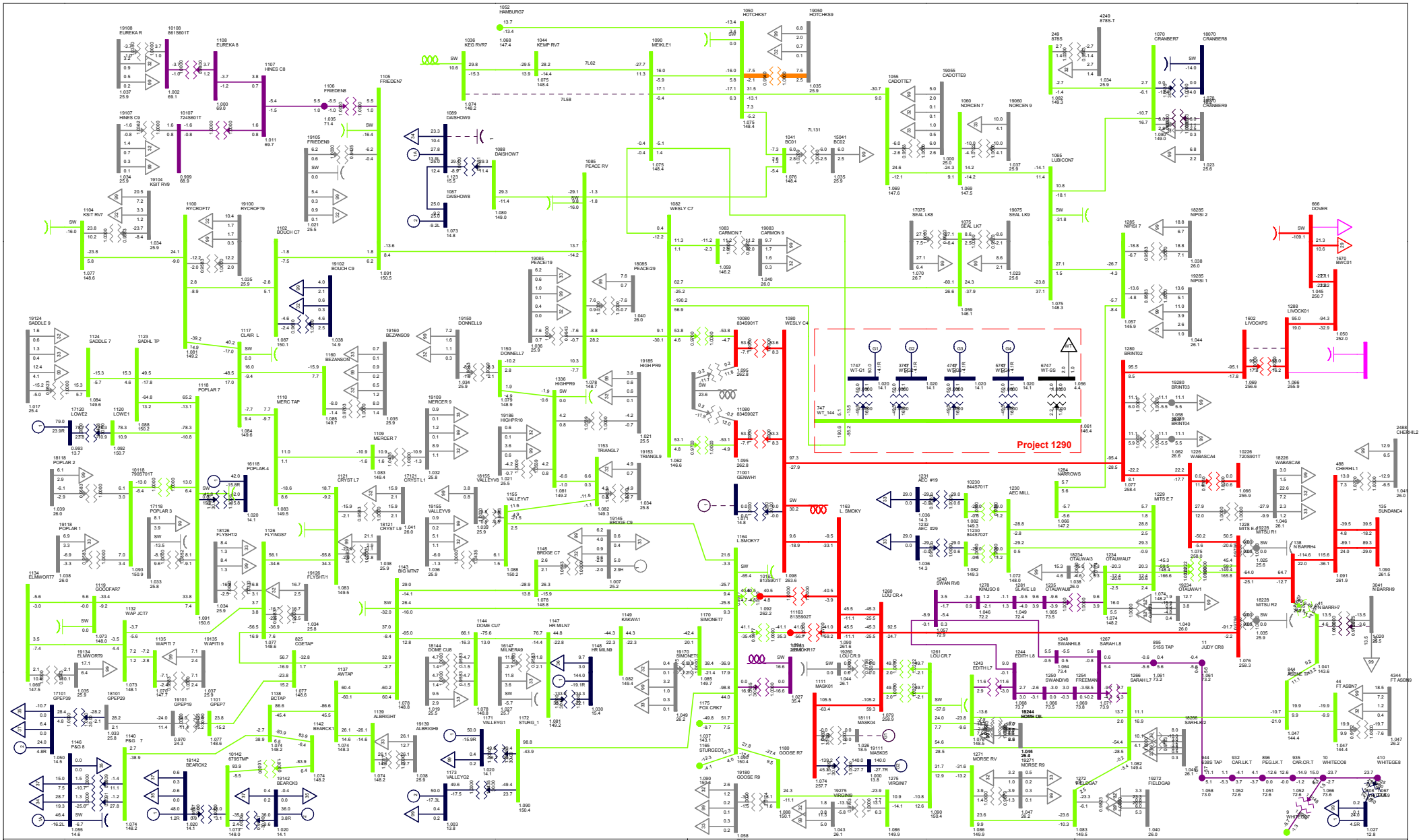
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 023 7L58 KEGRIVER to Meikle_A.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 47



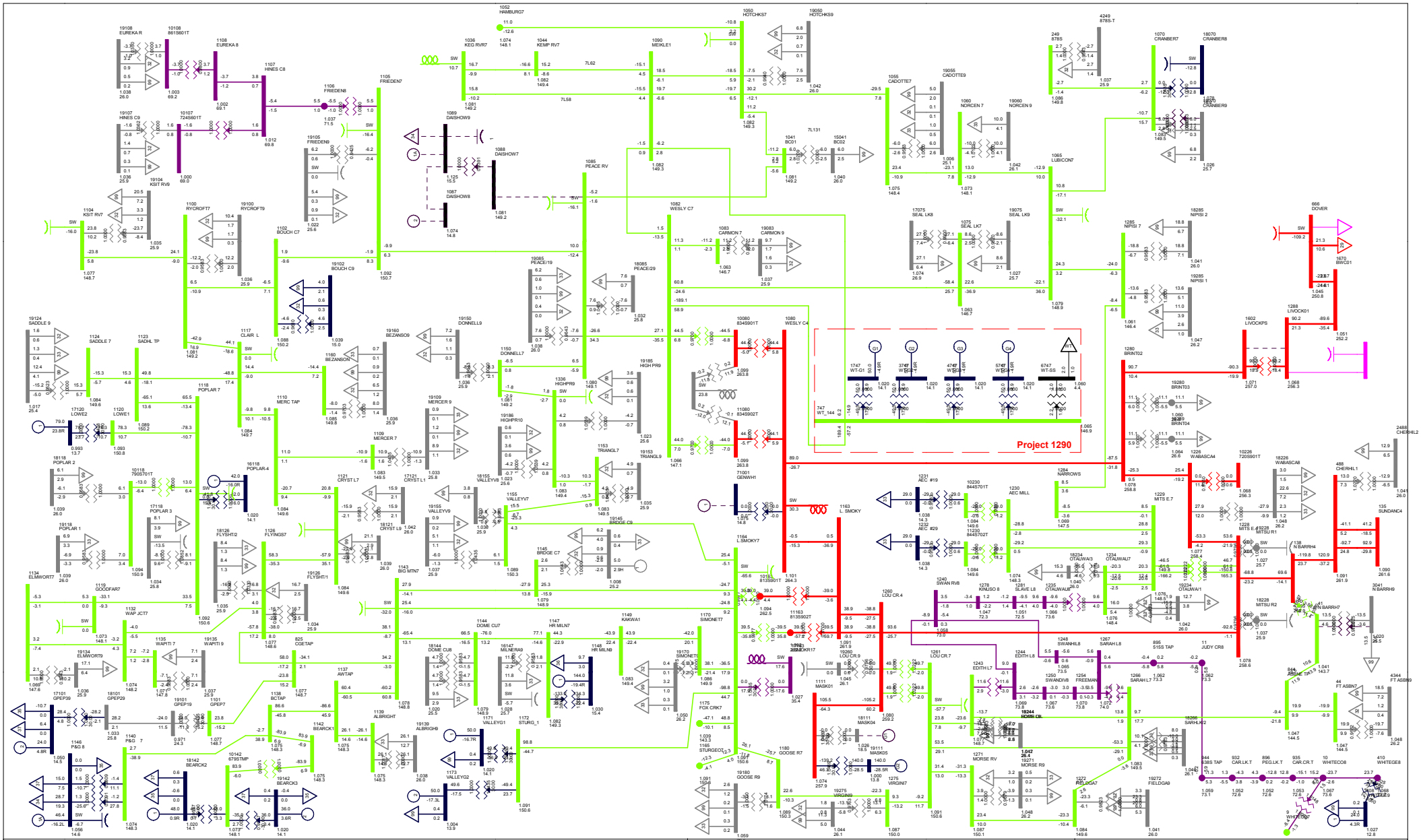
Appendix D2A

Figure: 48

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 023 7L58 KEGRIVER to Meikle_B.

Whitetail Project 1290 Interconnection Study



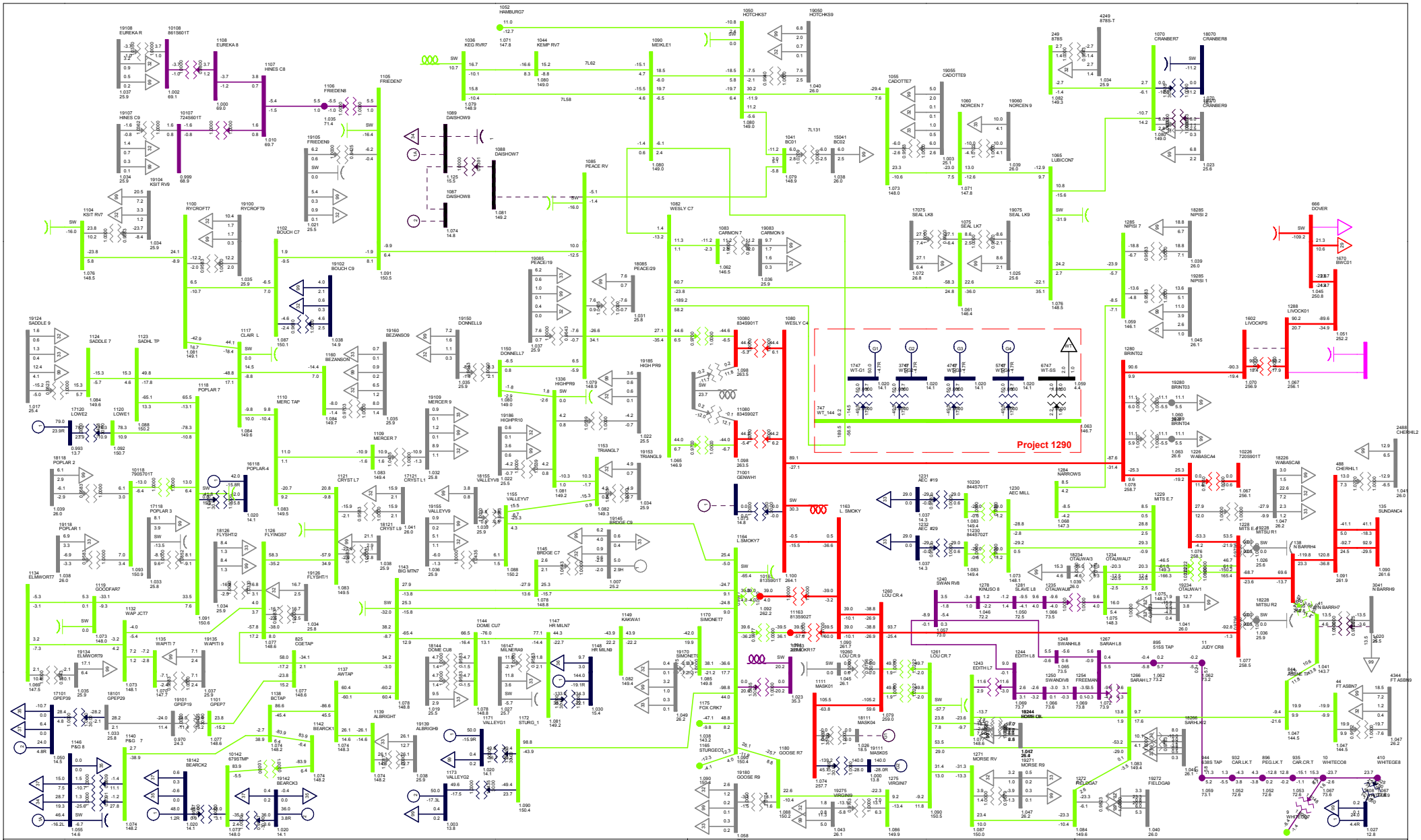
Appendix D2A

Figure: 49

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 024 7L04 WESTPEACE to DAISHOWA_A.

Whitetail Project 1290 Interconnection Study



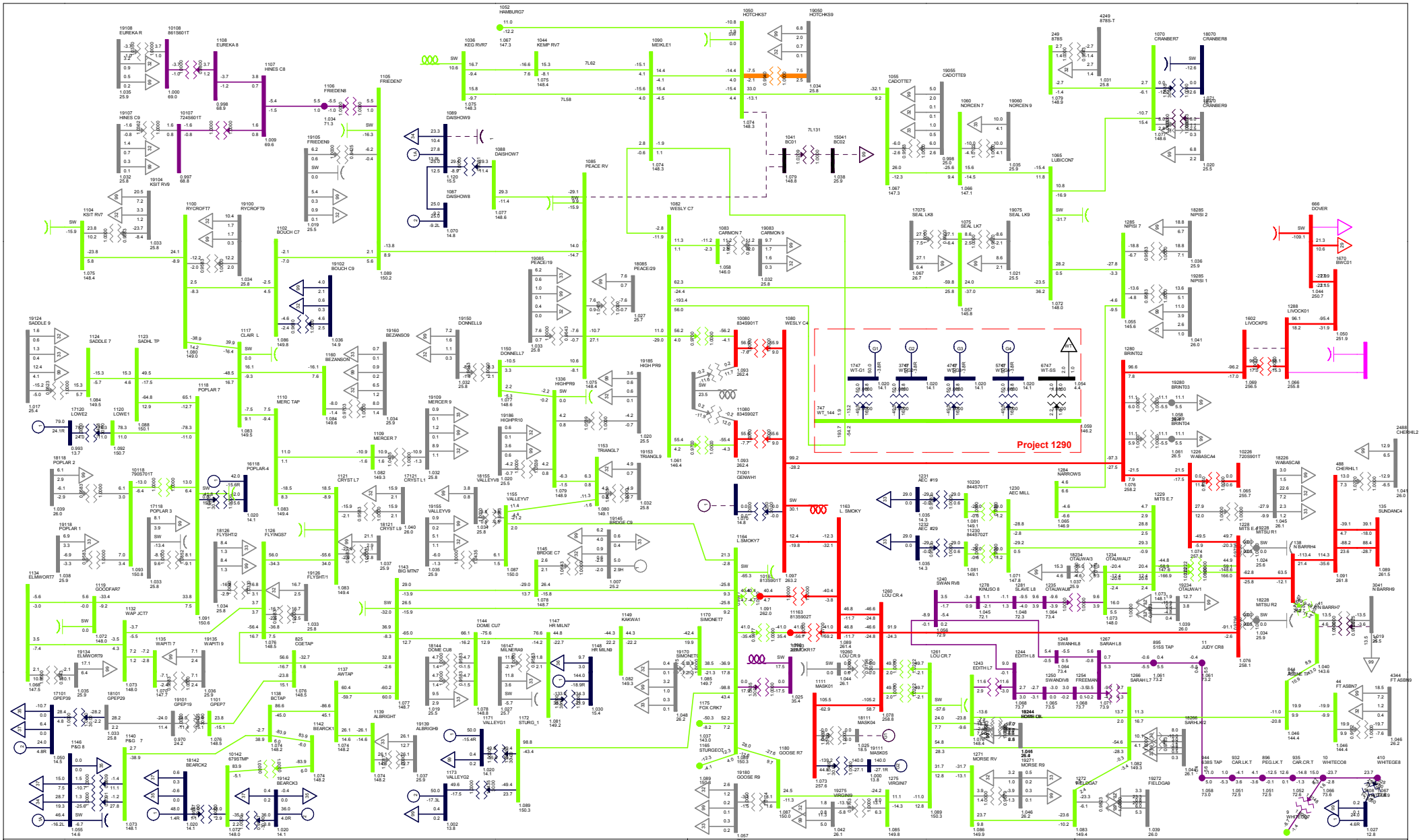
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 024 7L04 WESTPEACE to DAISHOWA_B.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 50



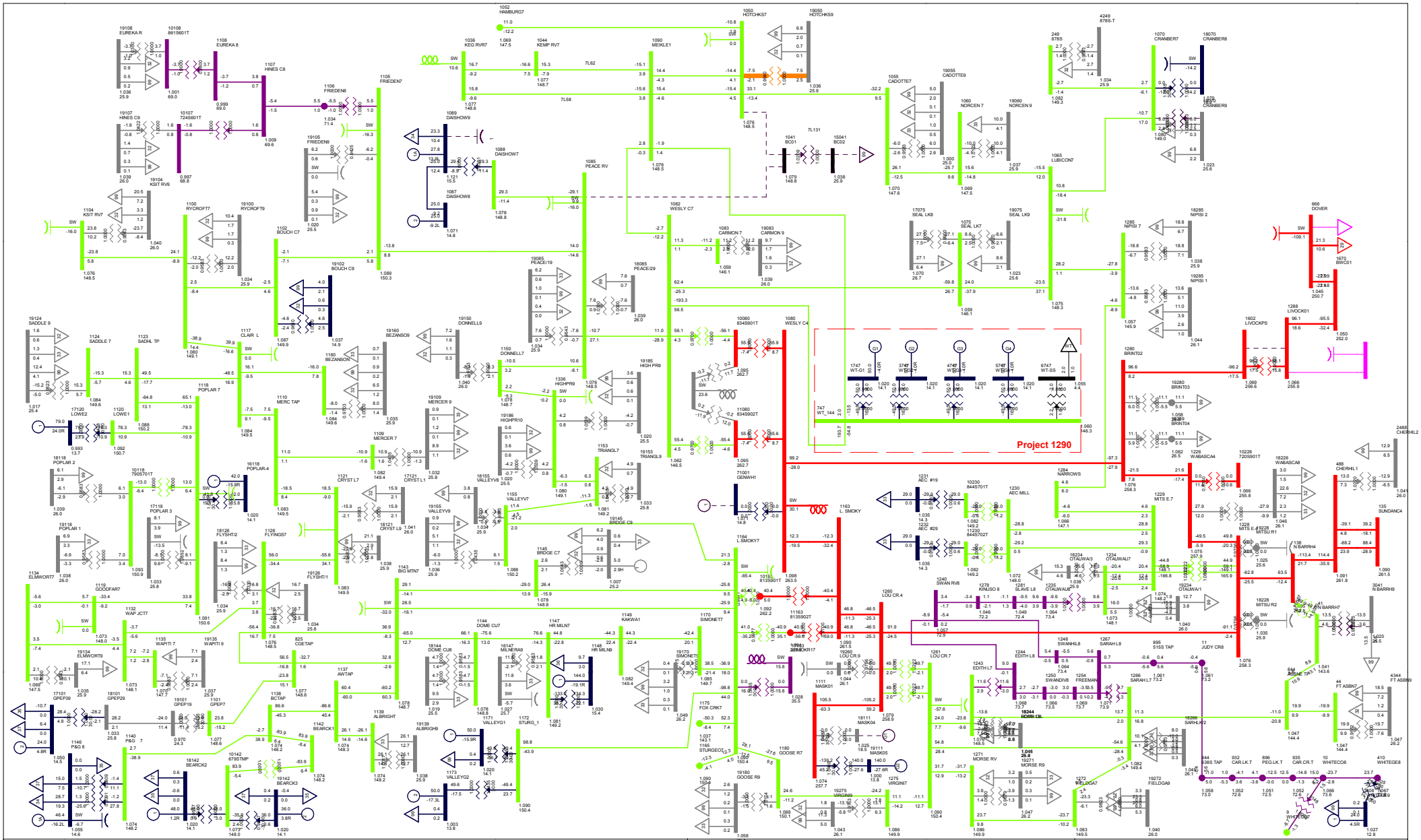
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 025 7L51 WESTPEACE to HOTCHKISS_A.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 51



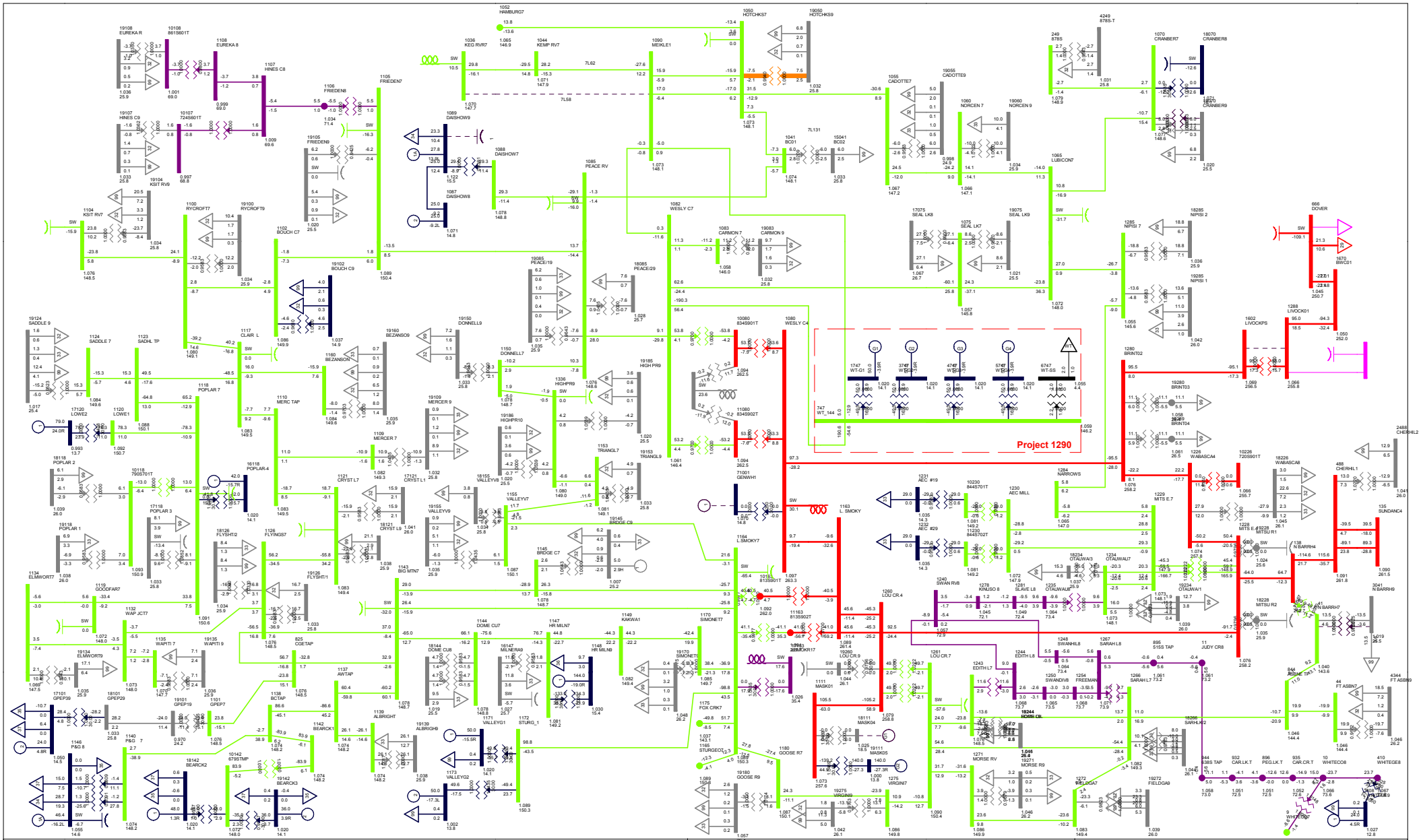
Appendix D2A

Figure: 52

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 025 7L51 WESTPEACE to HOTCHKISS_B.

Whitetail Project 1290 Interconnection Study



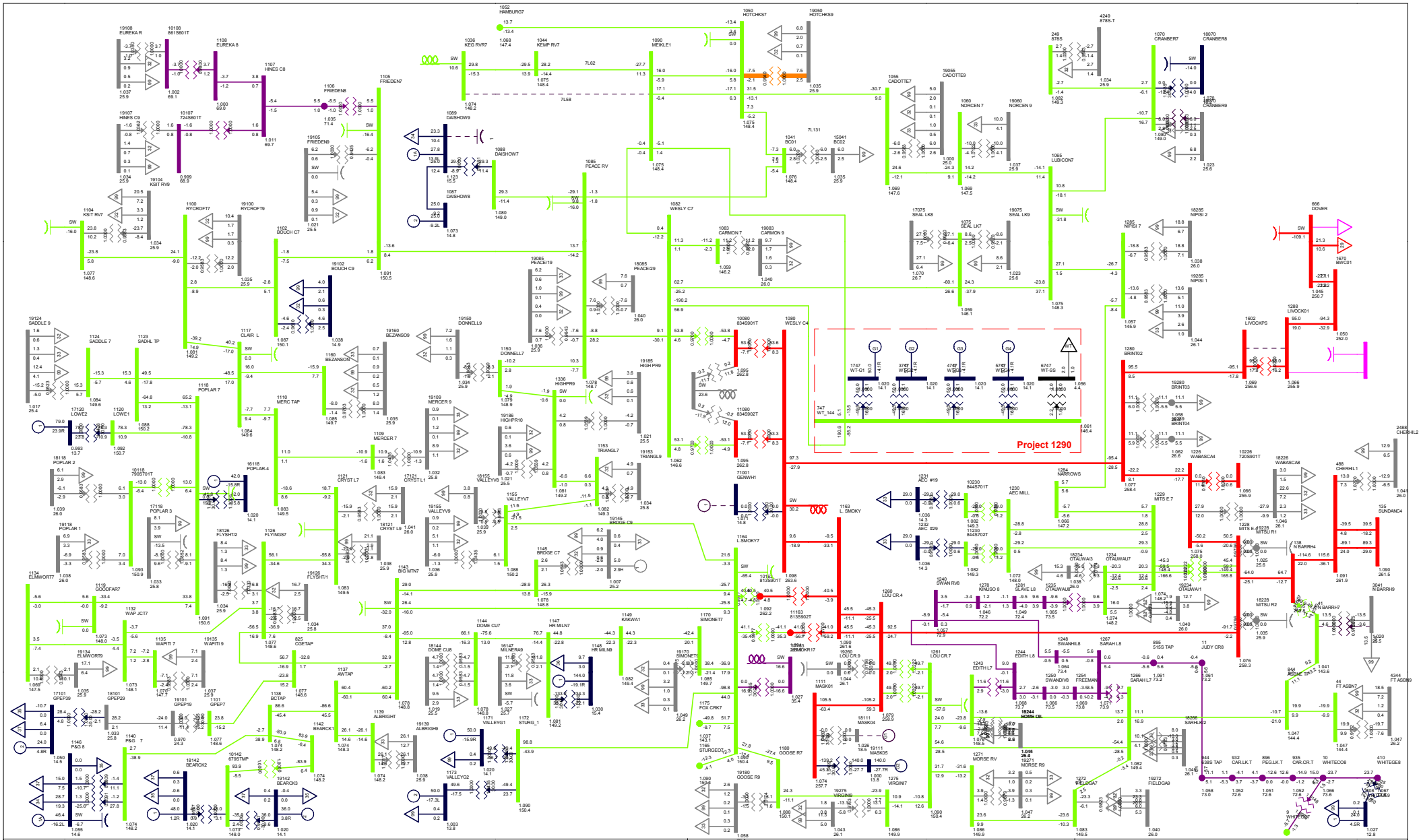
Appendix D2A

Figure: 53

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 026 7L58 KEGRIVER to Meikle_A.

Whitetail Project 1290 Interconnection Study



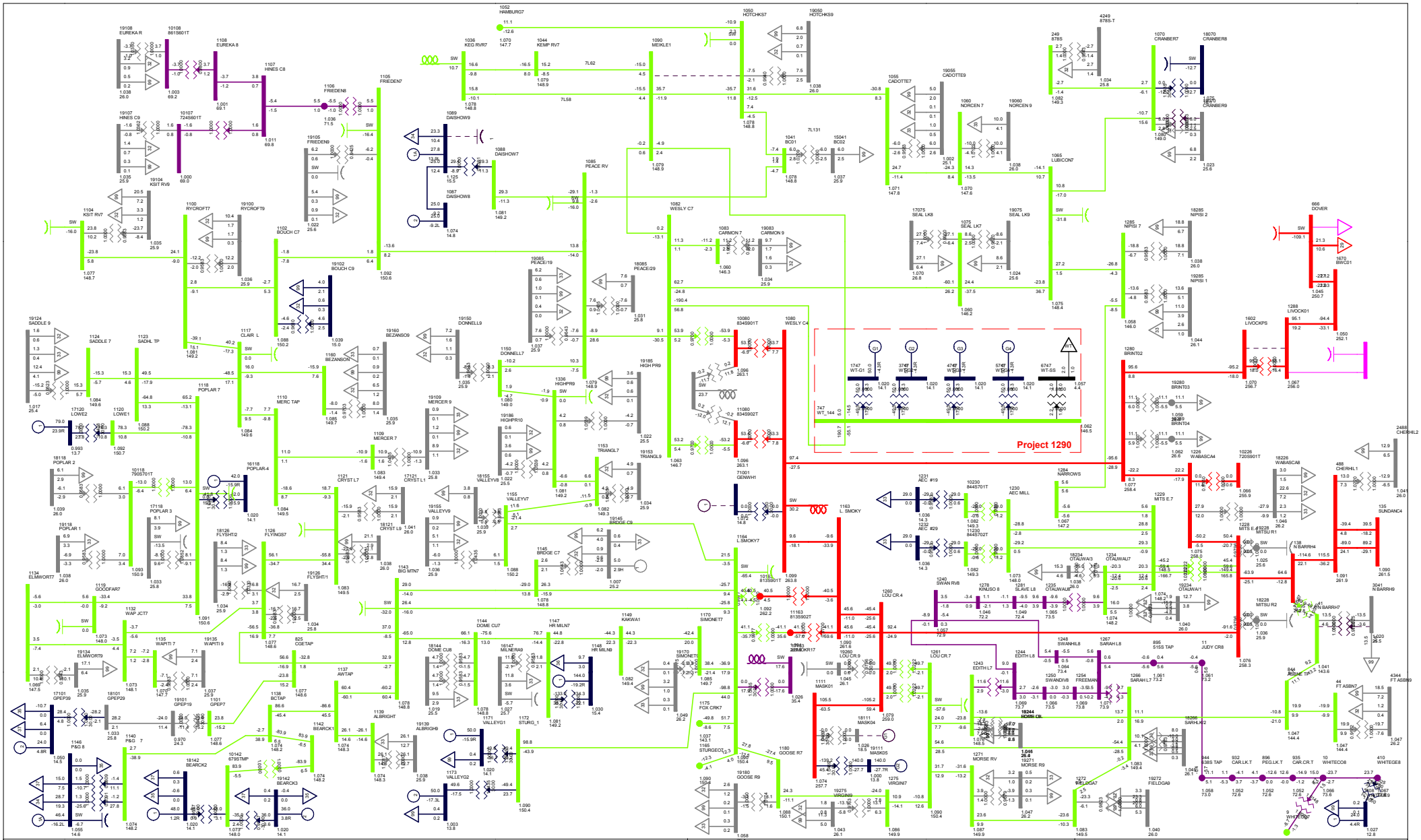
Appendix D2A

Figure: 54

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 026 7L58 KEGRIVER to Meikle_B.

Whitetail Project 1290 Interconnection Study



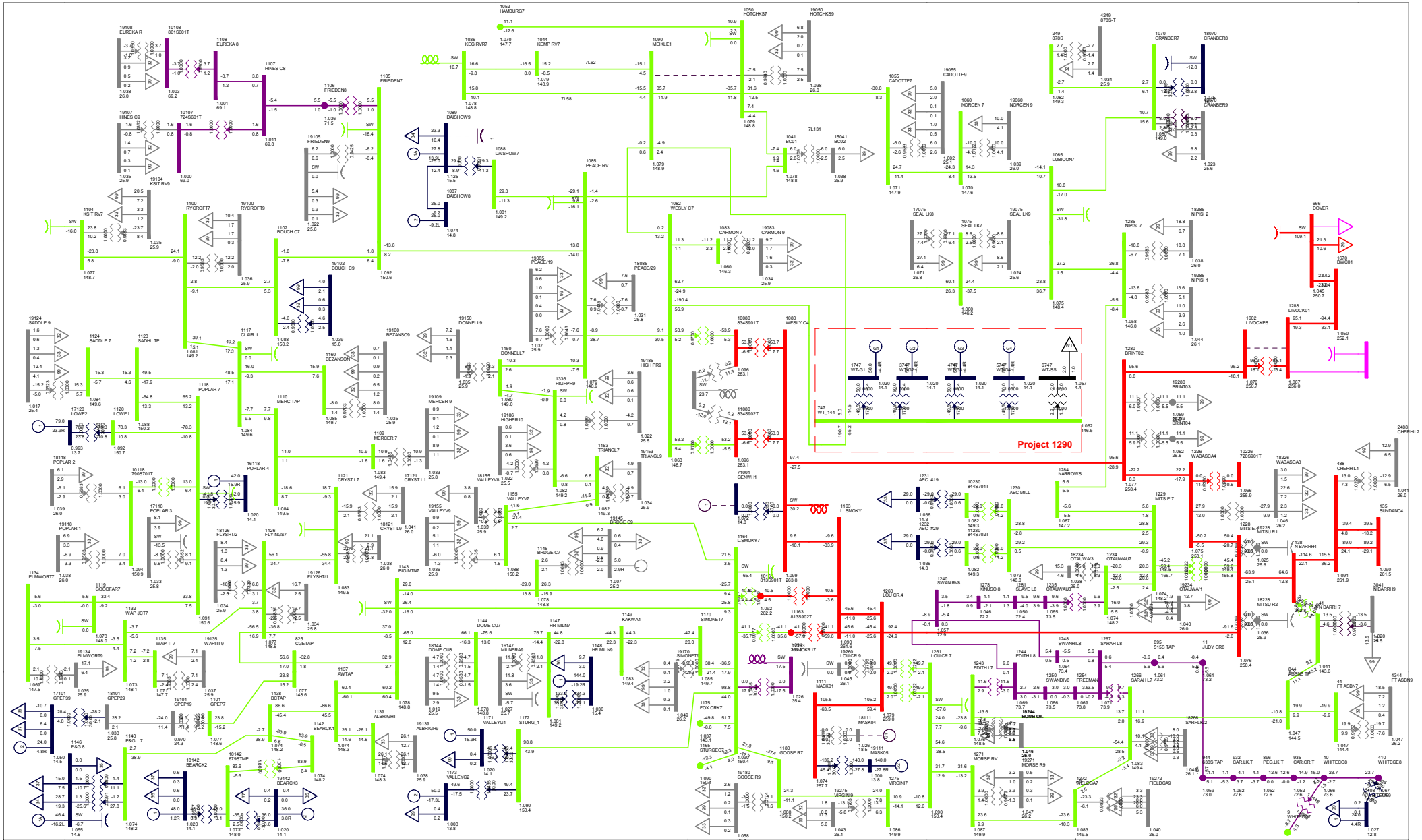
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 027 7L120 HOTCHKISS to Meikle_A.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 55



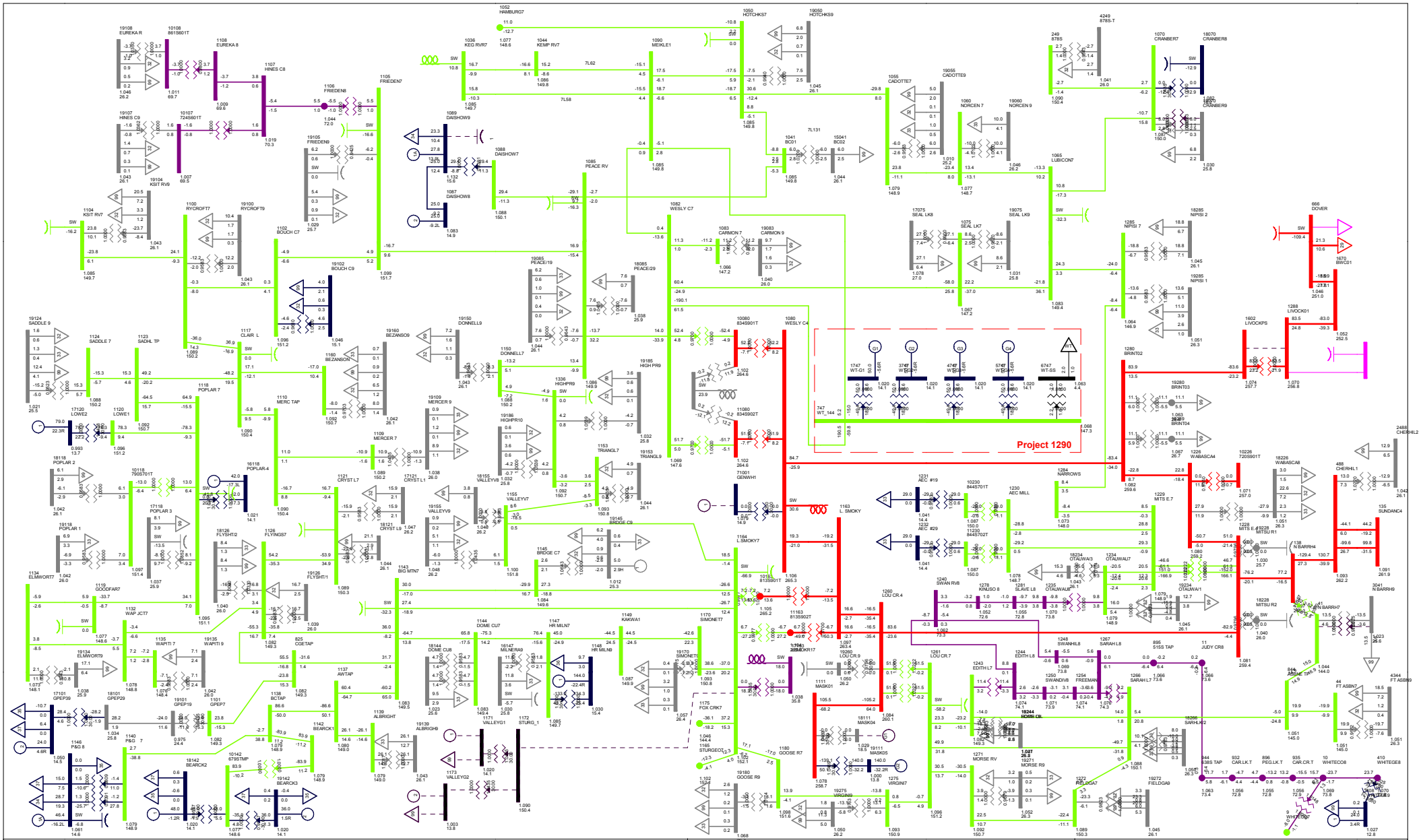
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 027 7L120 HOTCHKISS to Meikle_B.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 56



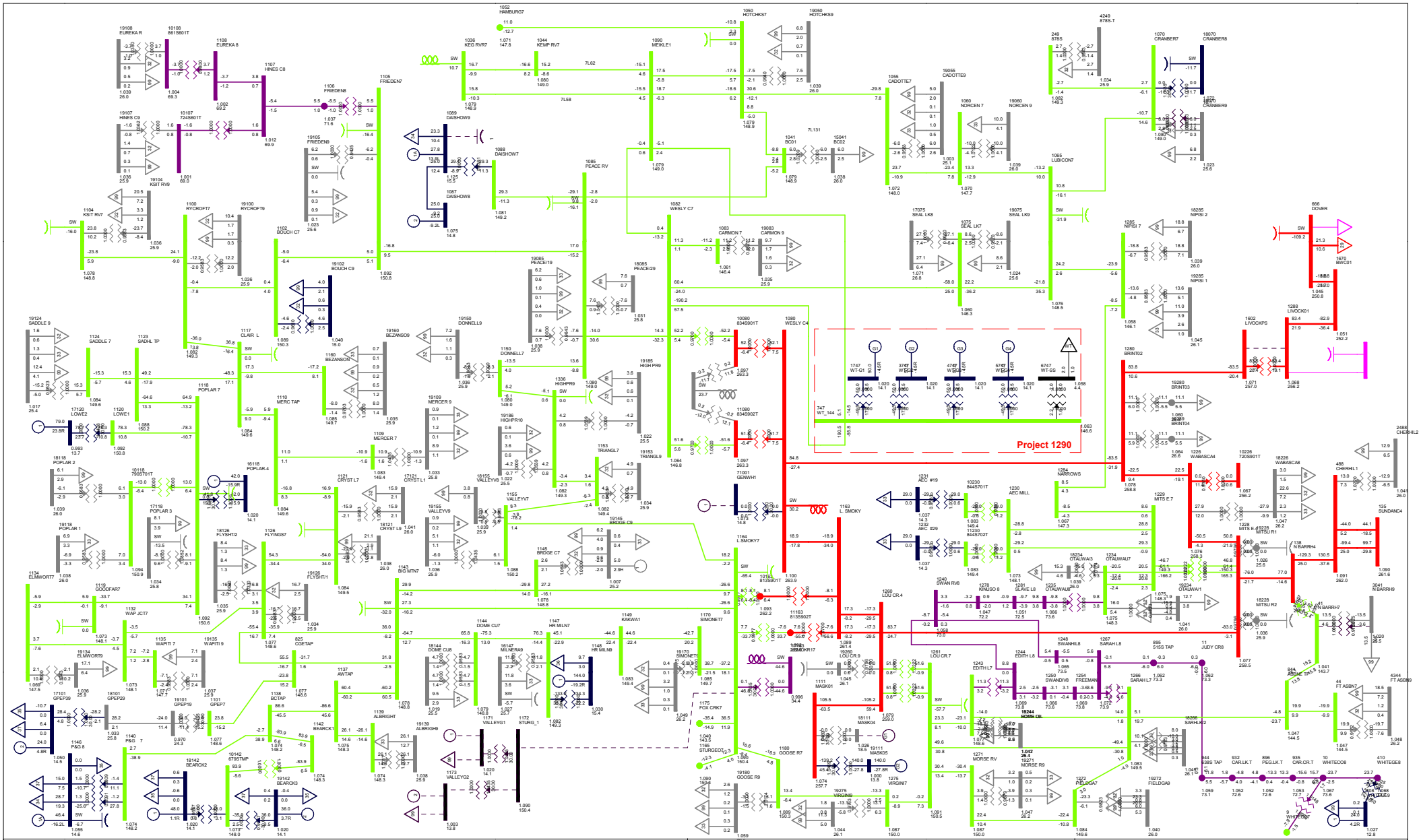
Appendix D2A

Figure: 57

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 028 7L01 LITTLESMOKY to Sturgeon_A.

Whitetail Project 1290 Interconnection Study



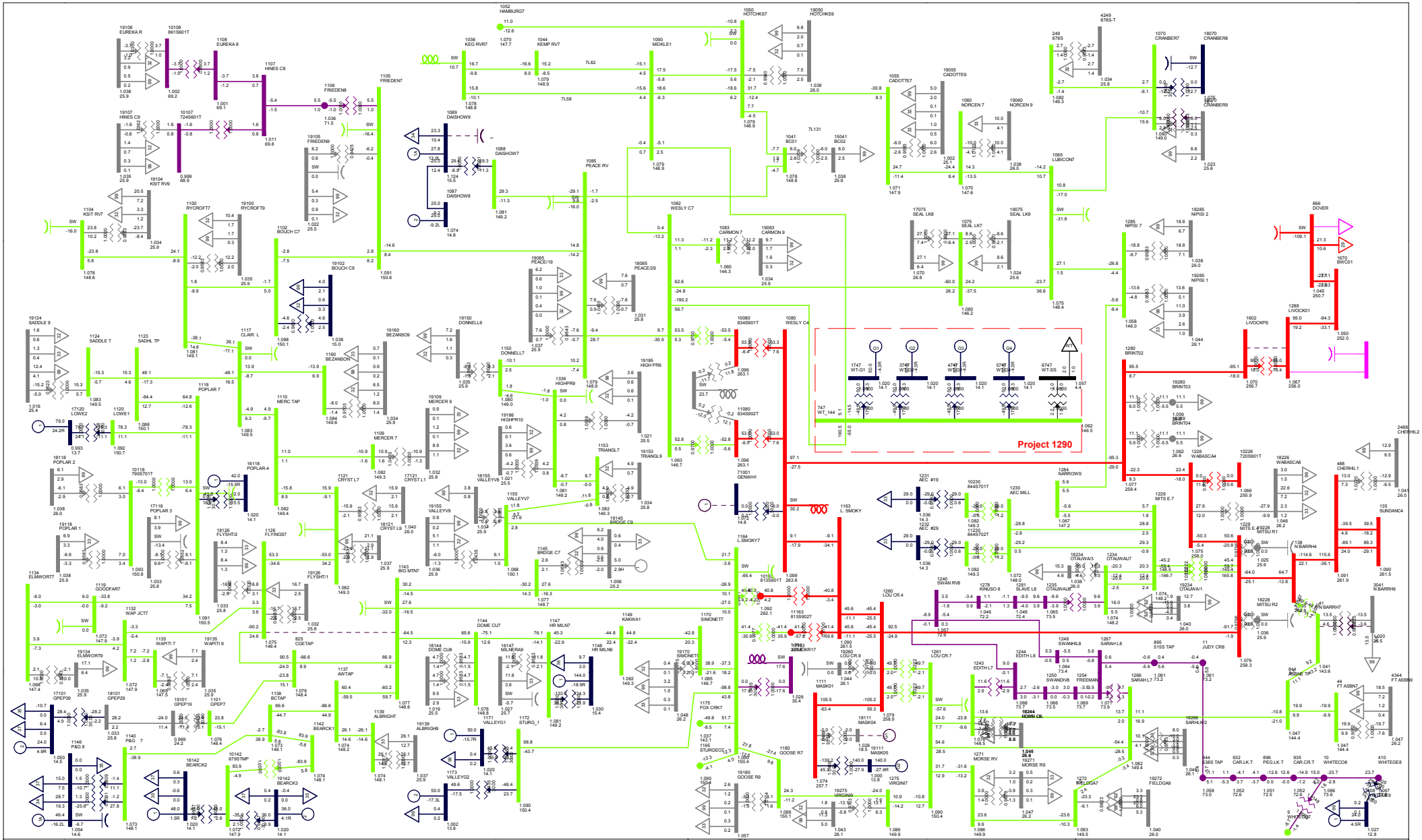
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 028 7L01 LITTLESMOKY to Sturgeon_B.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 58



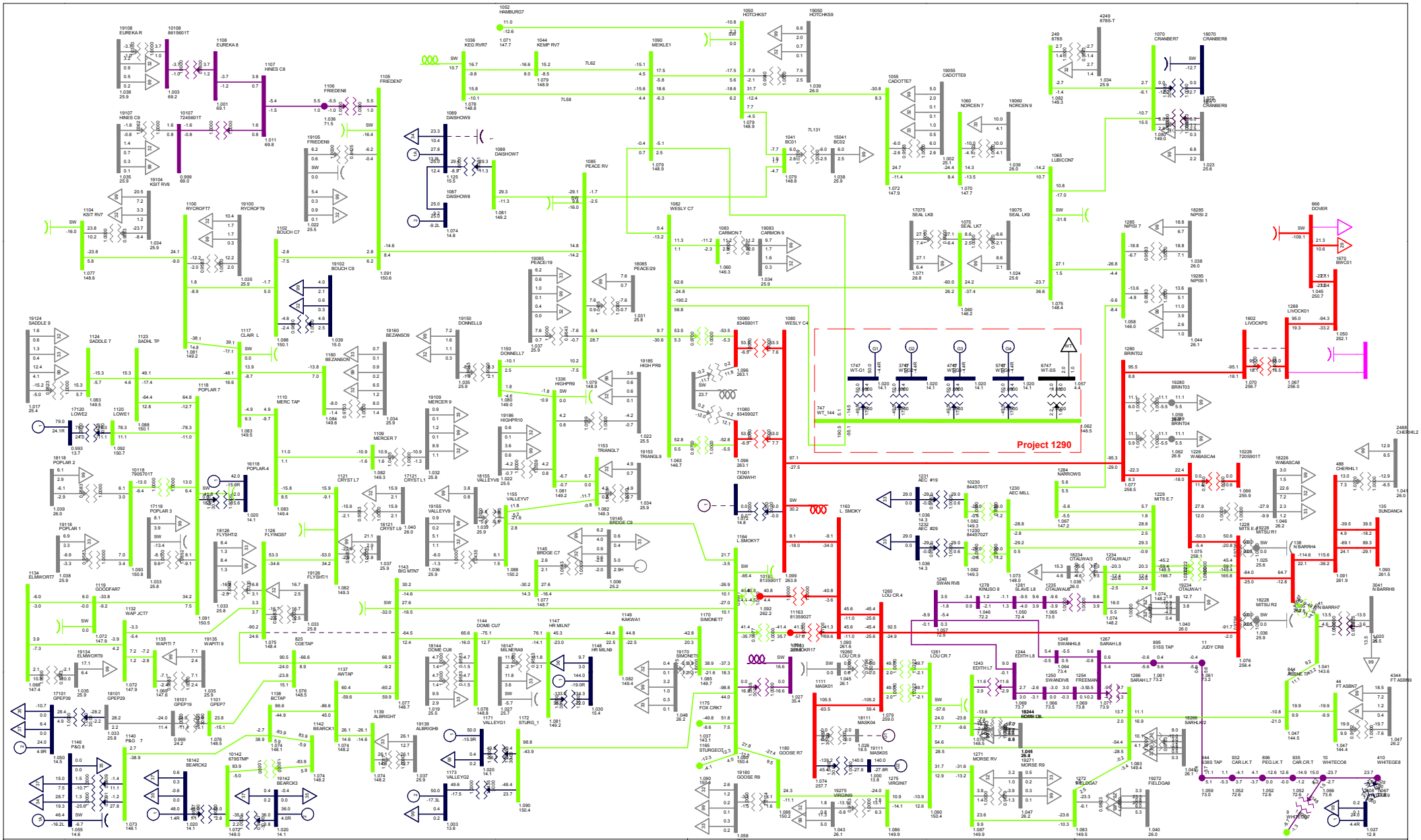
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_A.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 59



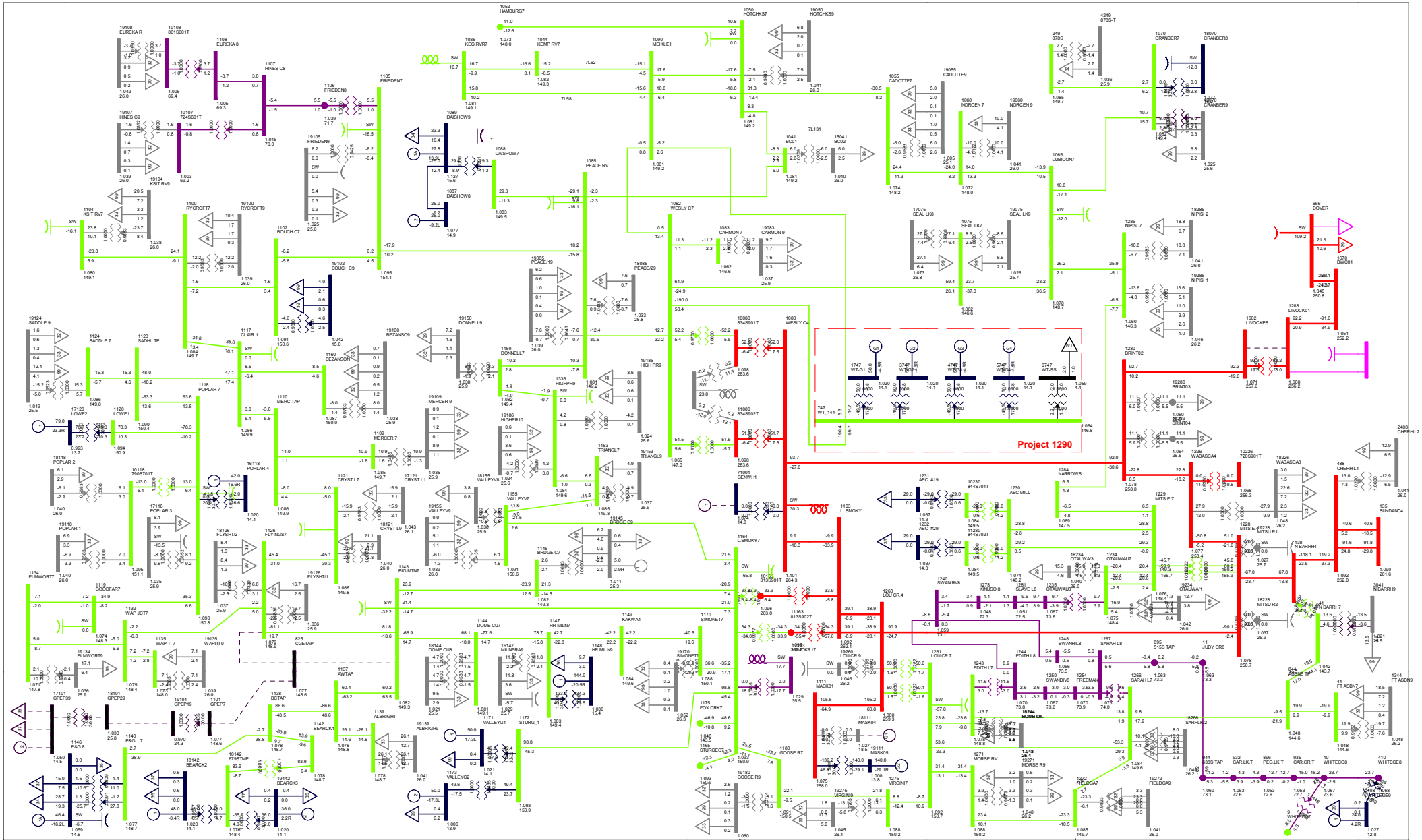
Appendix D2A

Figure: 60

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_B.

Whitetail Project 1290 Interconnection Study



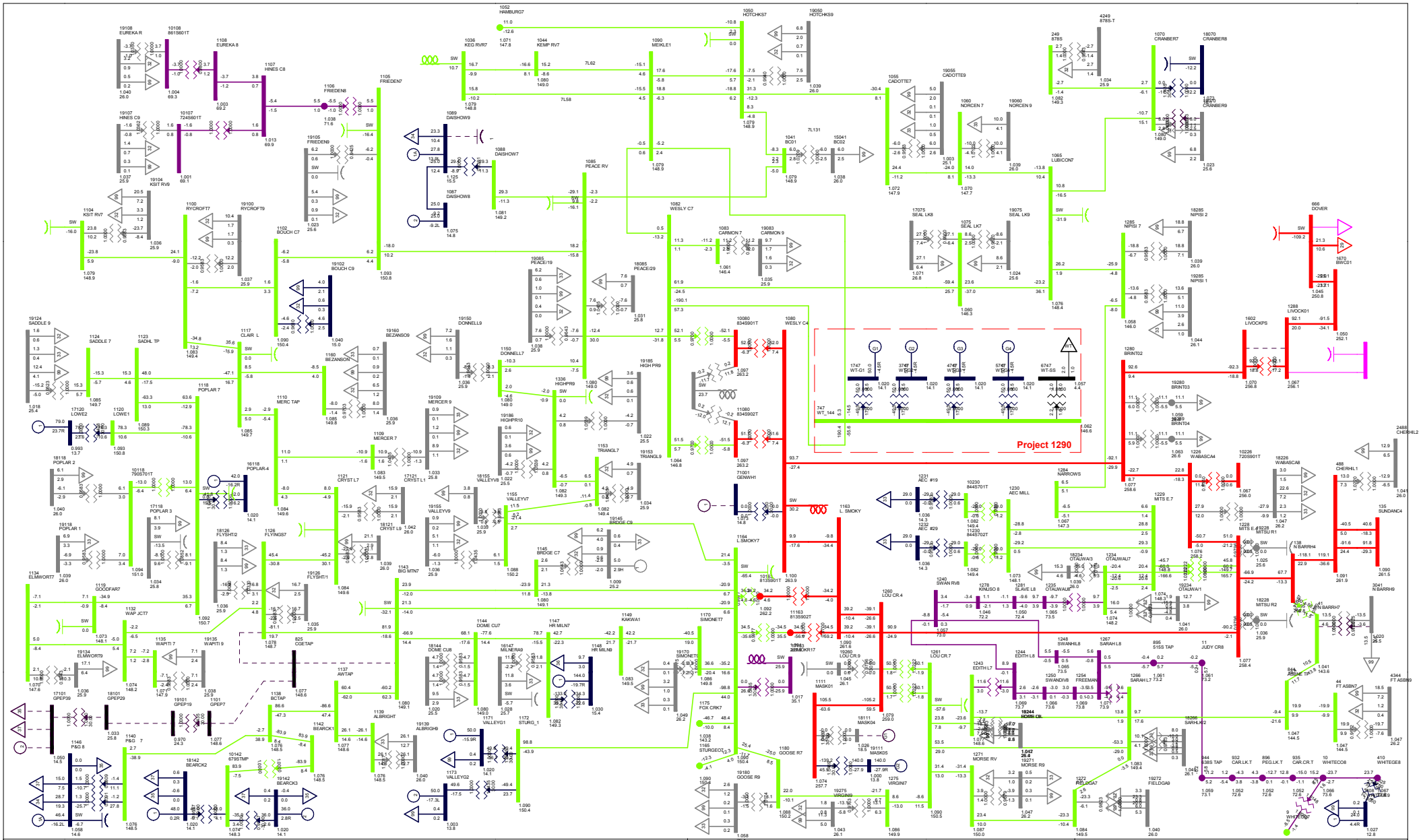
Appendix D2A

Figure: 61

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_A.

Whitetail Project 1290 Interconnection Study



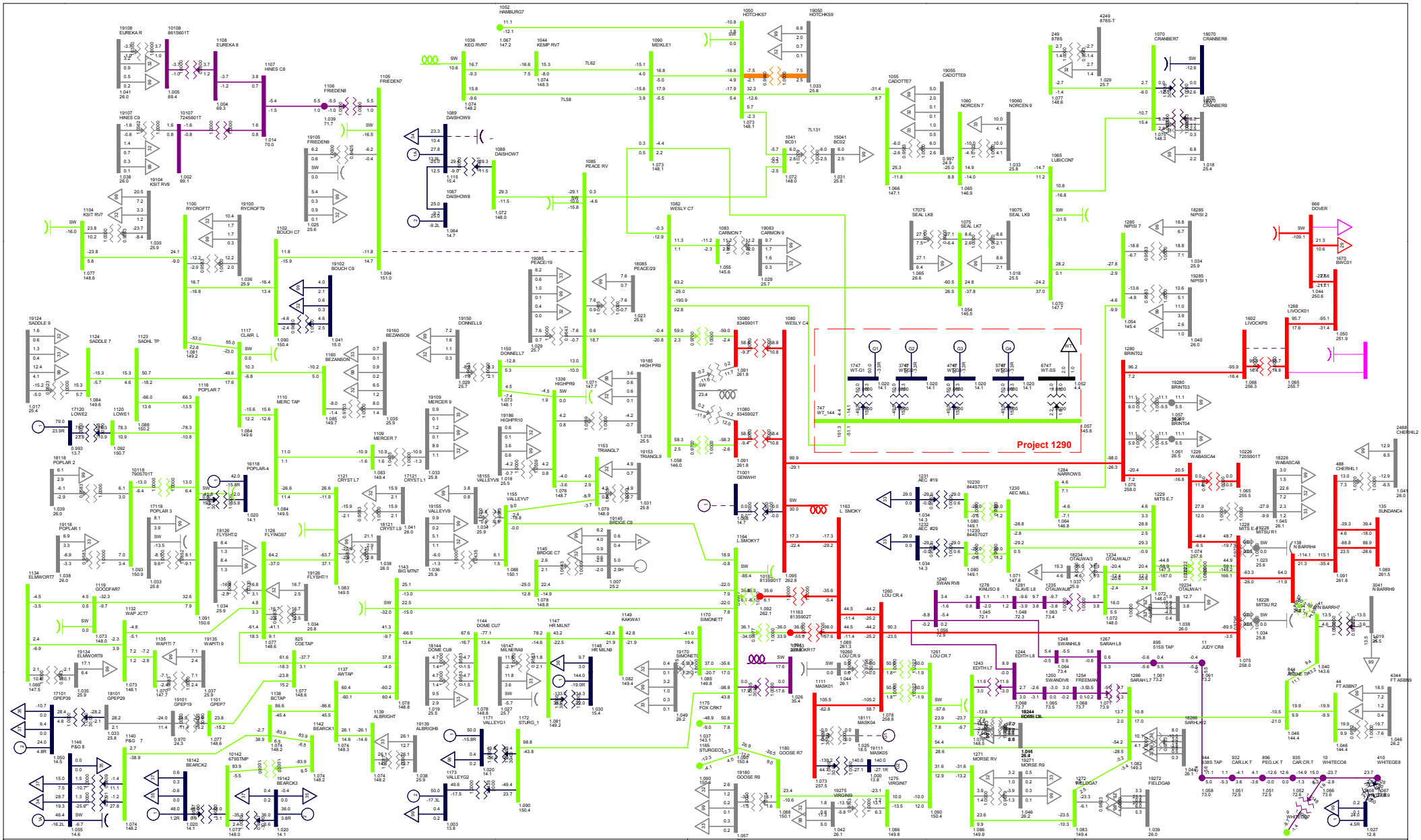
Appendix D2A

Figure: 62

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_B.

Whitetail Project 1290 Interconnection Study



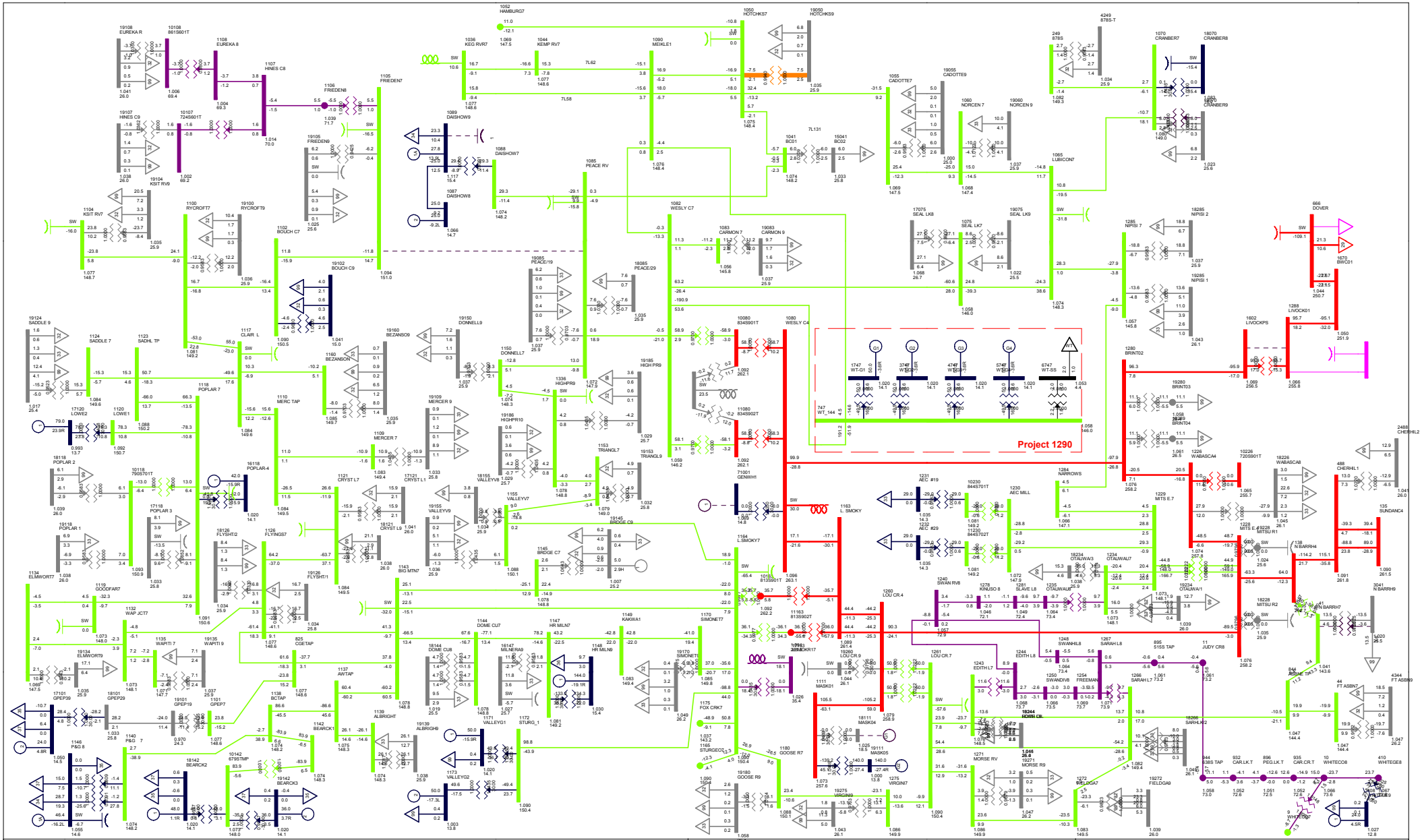
Appendix D2A

Figure: 63

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_A.

Whitetail Project 1290 Interconnection Study



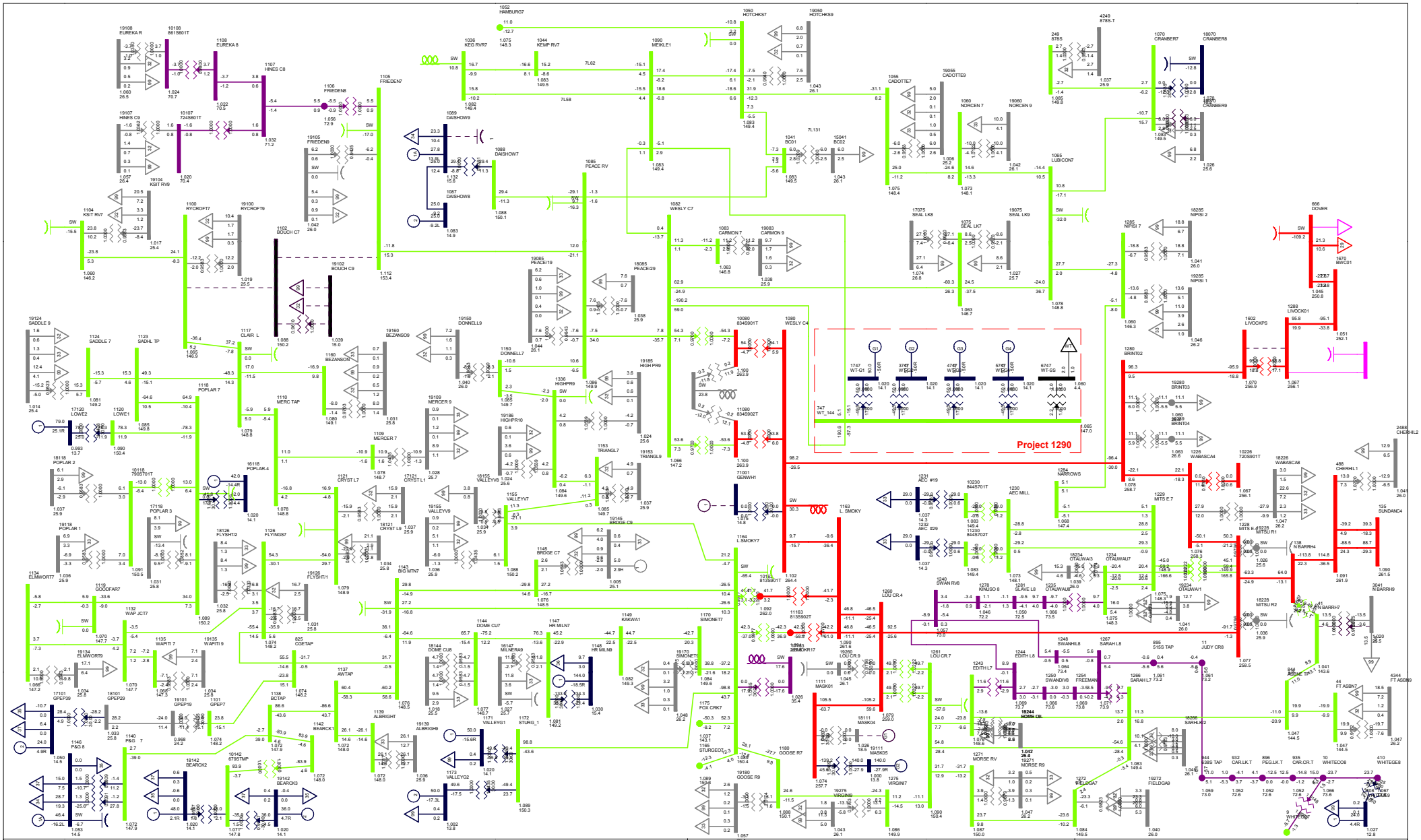
Appendix D2A

Figure: 64

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_B.

Whitetail Project 1290 Interconnection Study



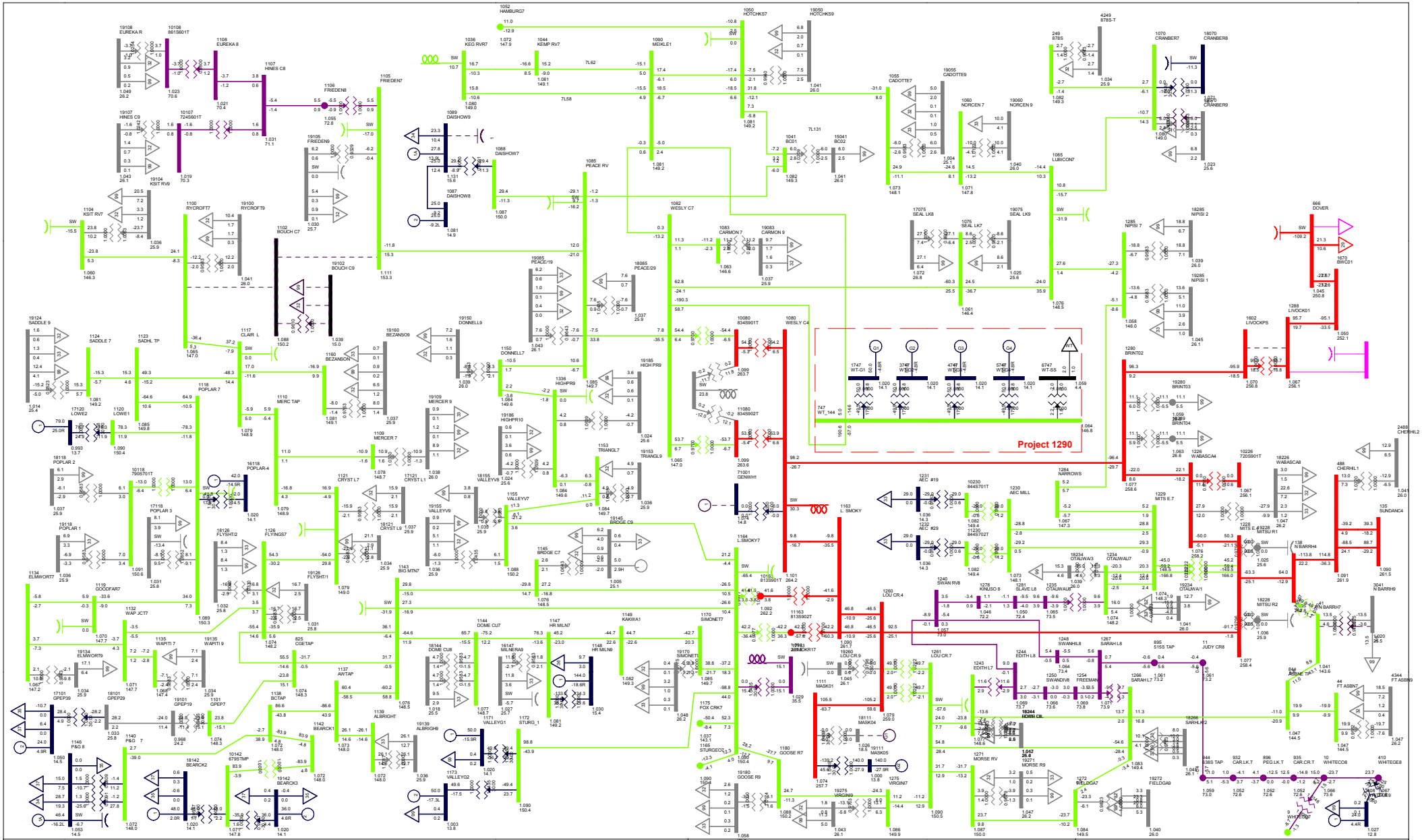
Appendix D2A

Figure: 65

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 032 7L73 RYCROFT to FRIEDENSTAL_A.

Whitetail Project 1290 Interconnection Study



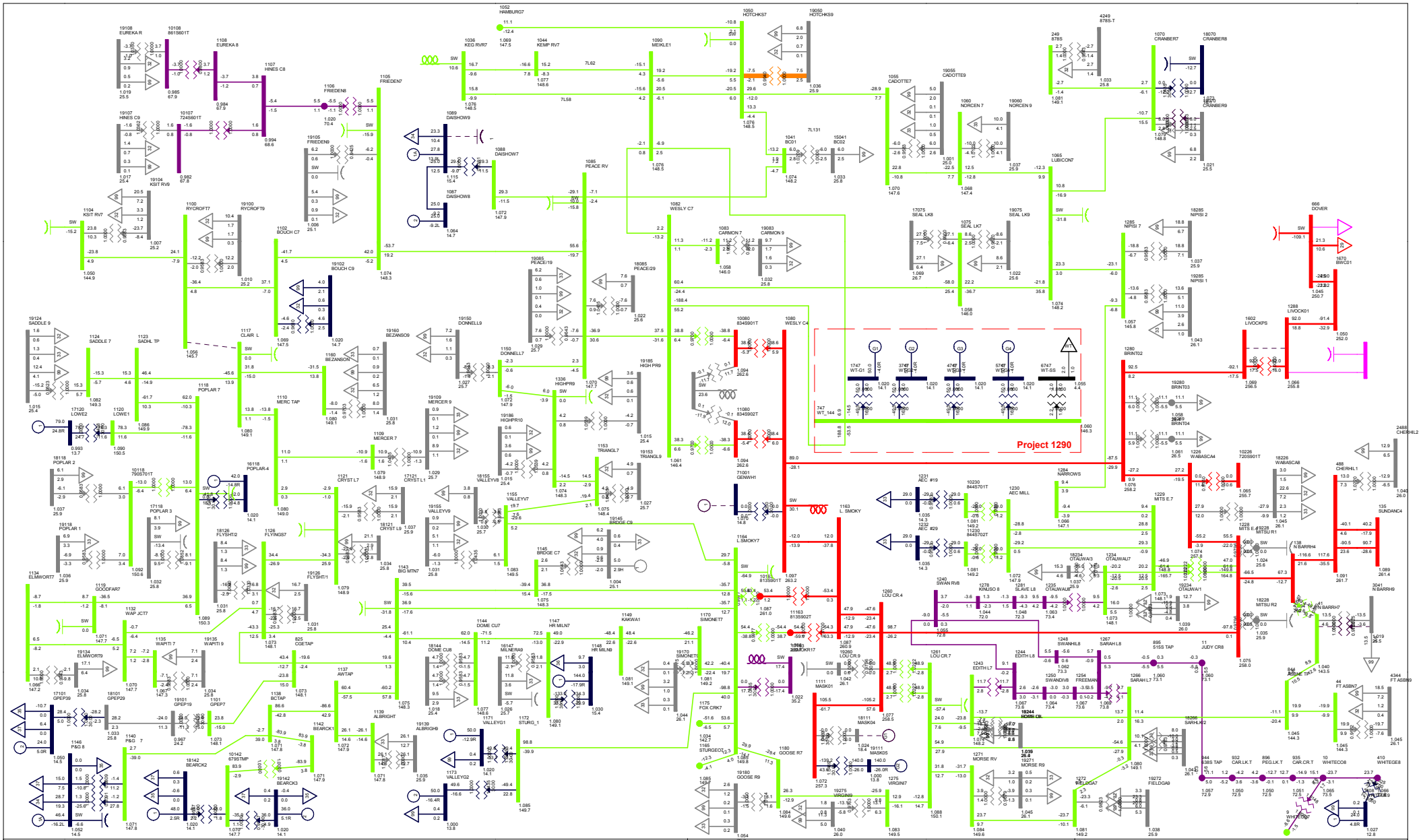
Appendix D2A

Figure: 66

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 032 7L73 RYCROFT to FRIEDENSTAL_B.

Whitetail Project 1290 Interconnection Study



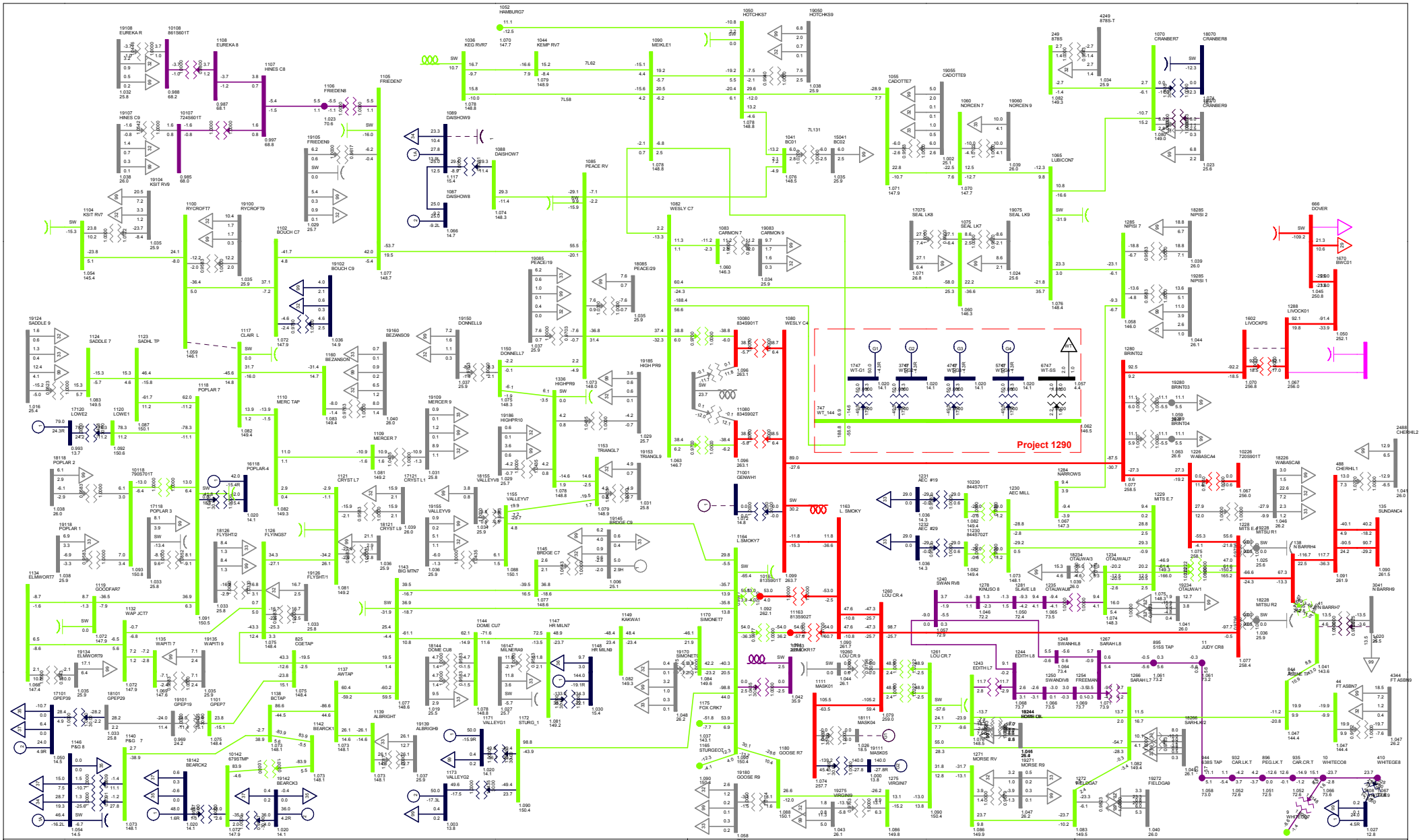
Appendix D2A

Figure: 67

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_A.

Whitetail Project 1290 Interconnection Study



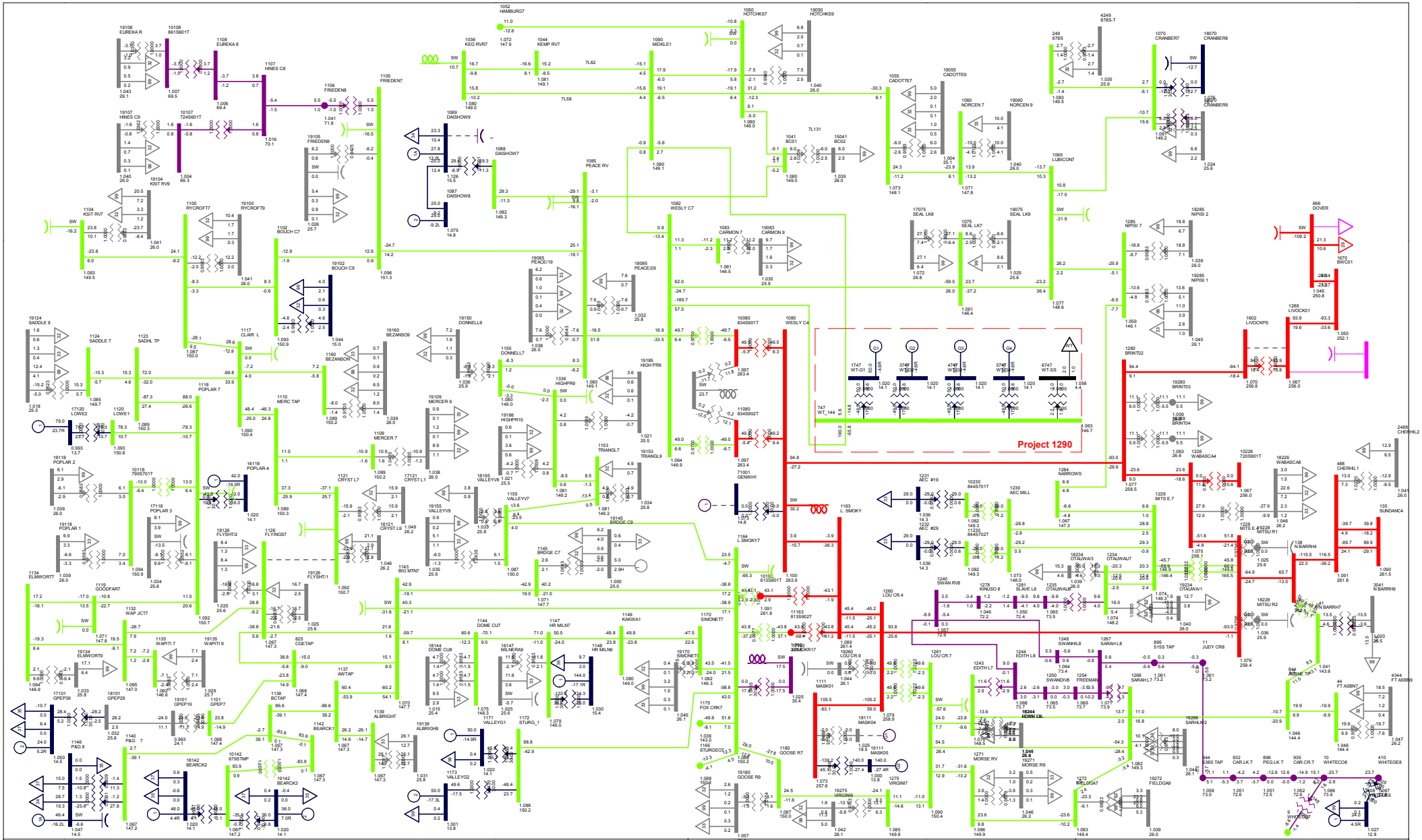
Appendix D2A

Figure: 68

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_B.

Whitetail Project 1290 Interconnection Study



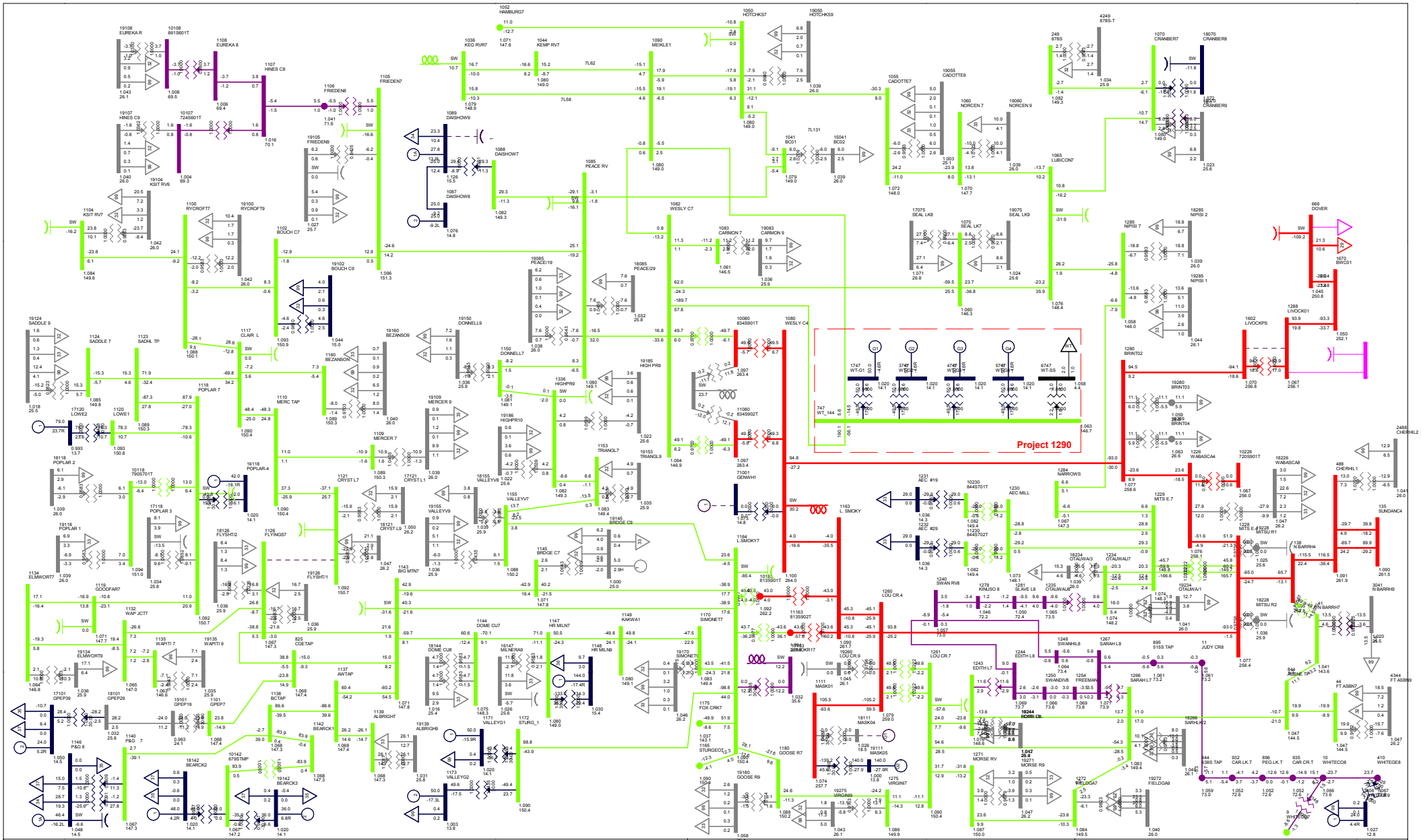
Appendix D2A

Figure: 69

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_A.

Whitetail Project 1290 Interconnection Study



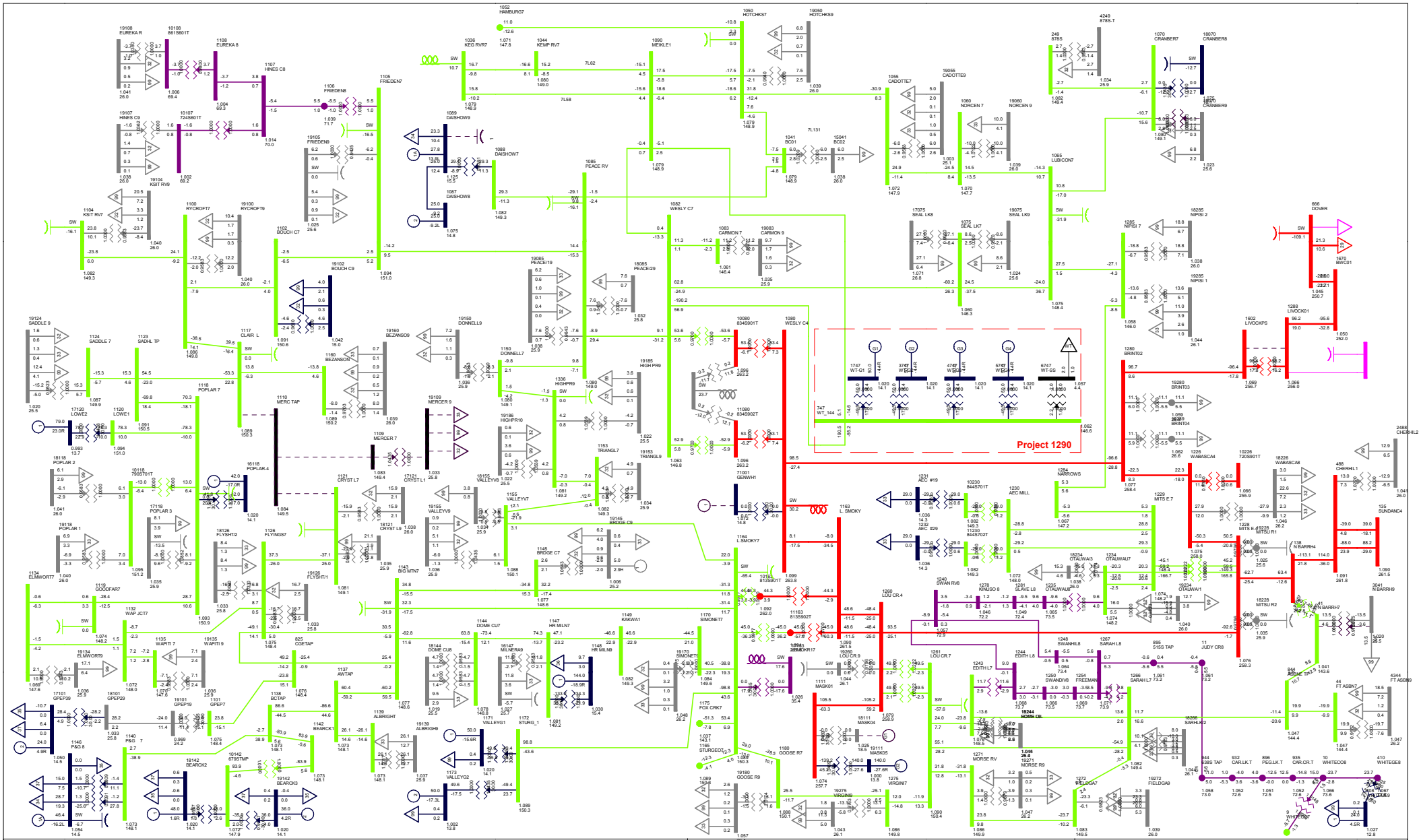
Appendix D2A

Figure: 70

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_B.

Whitetail Project 1290 Interconnection Study



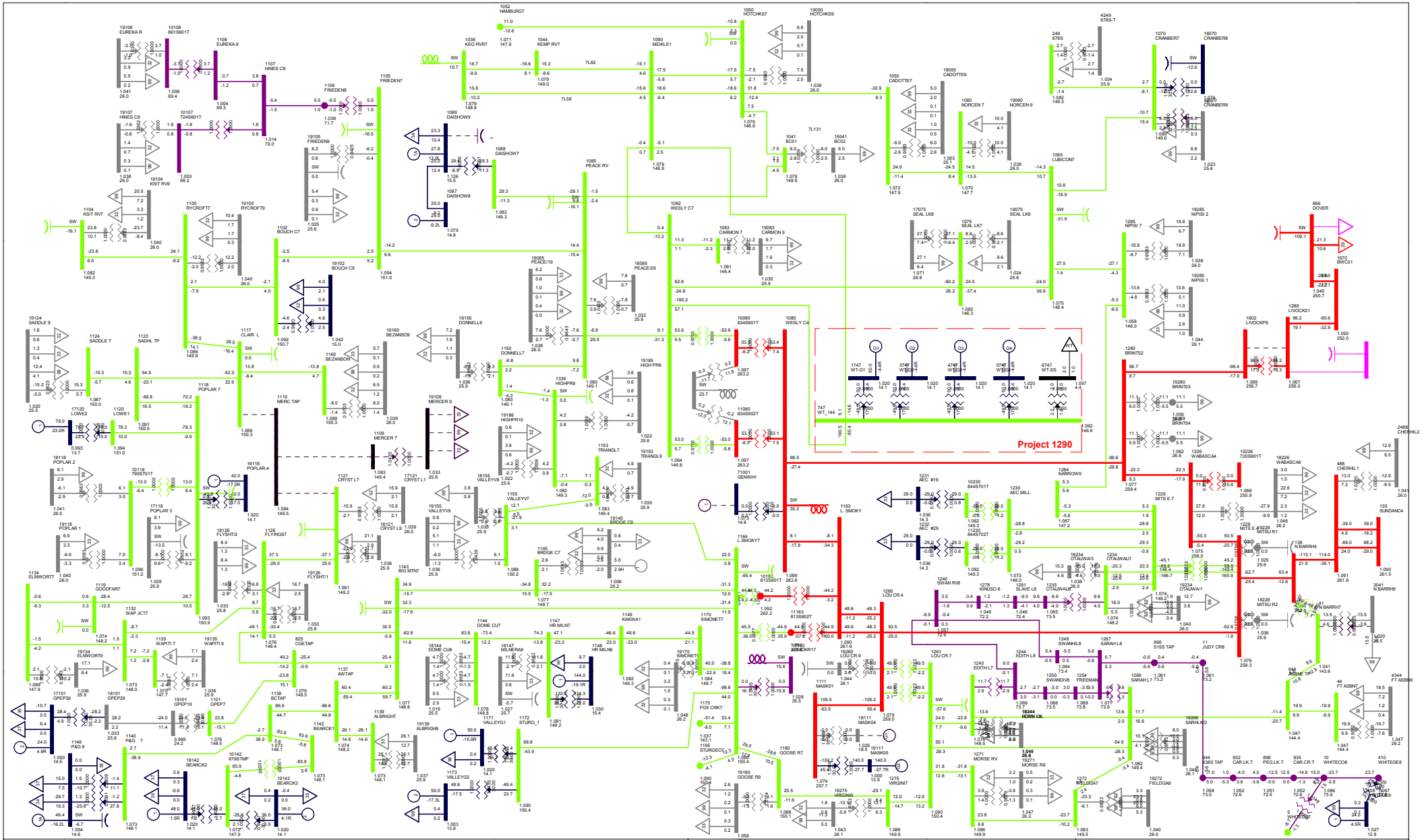
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_A.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 71



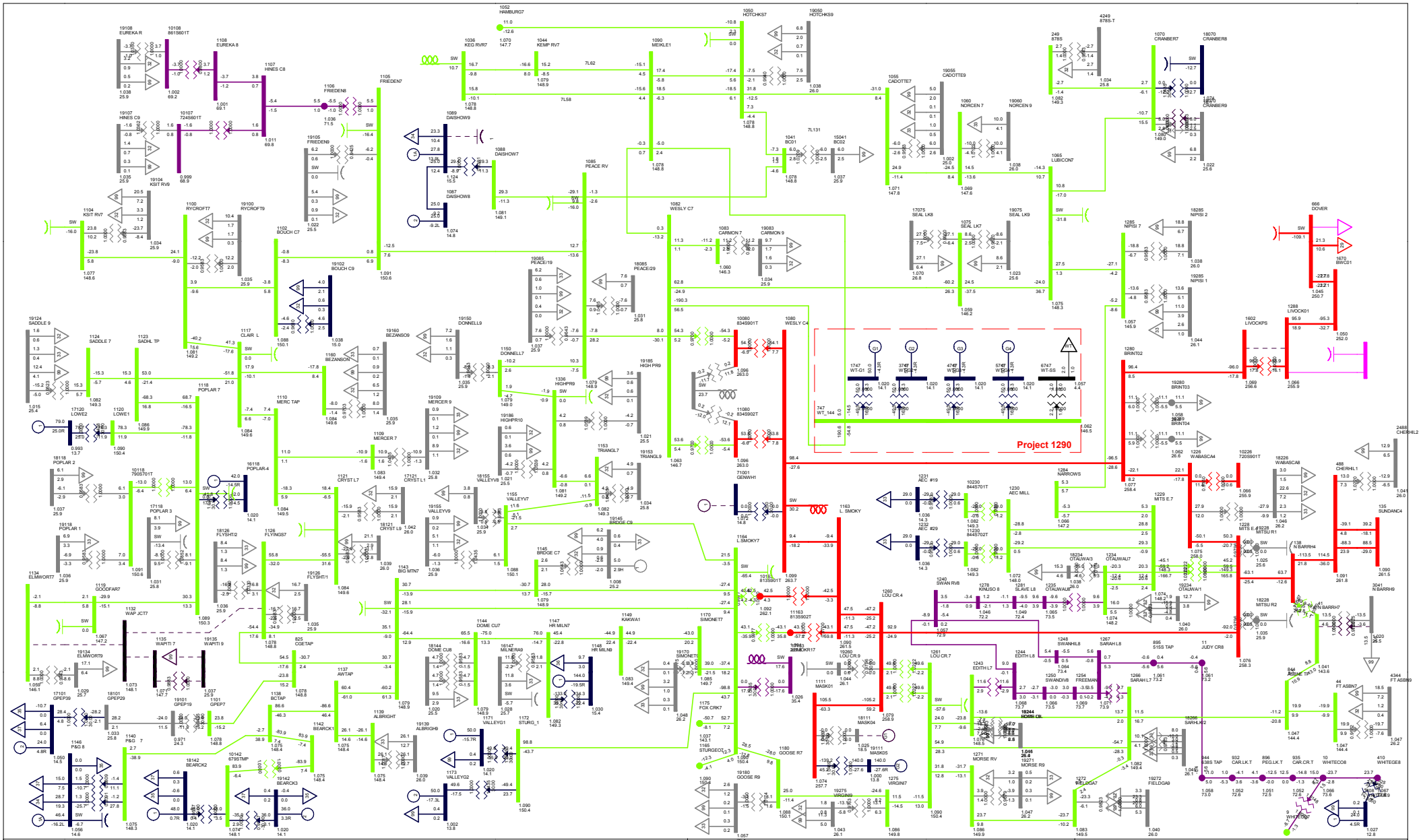
Appendix D2A

Figure: 72

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_B.

Whitetail Project 1290 Interconnection Study



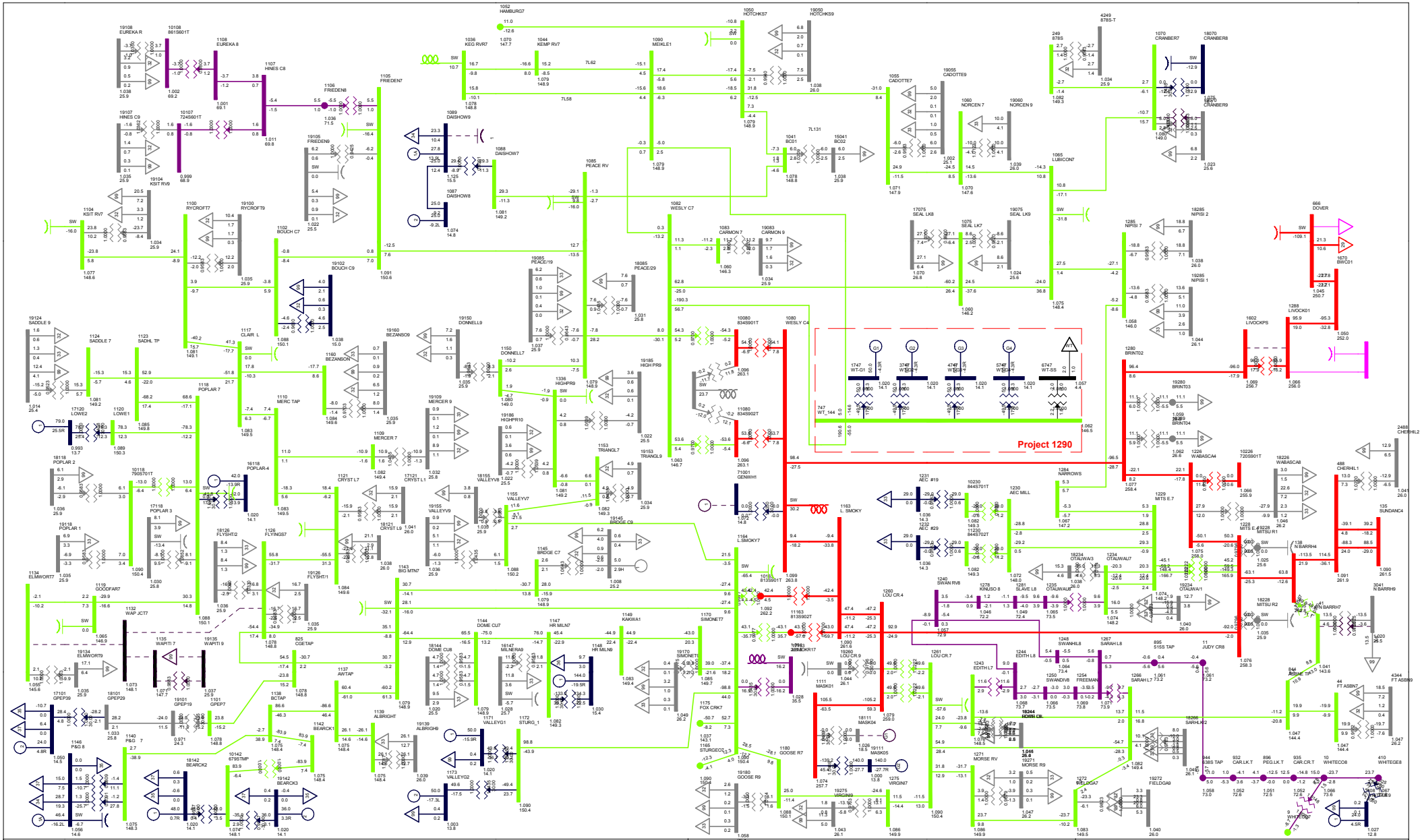
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_A.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 73



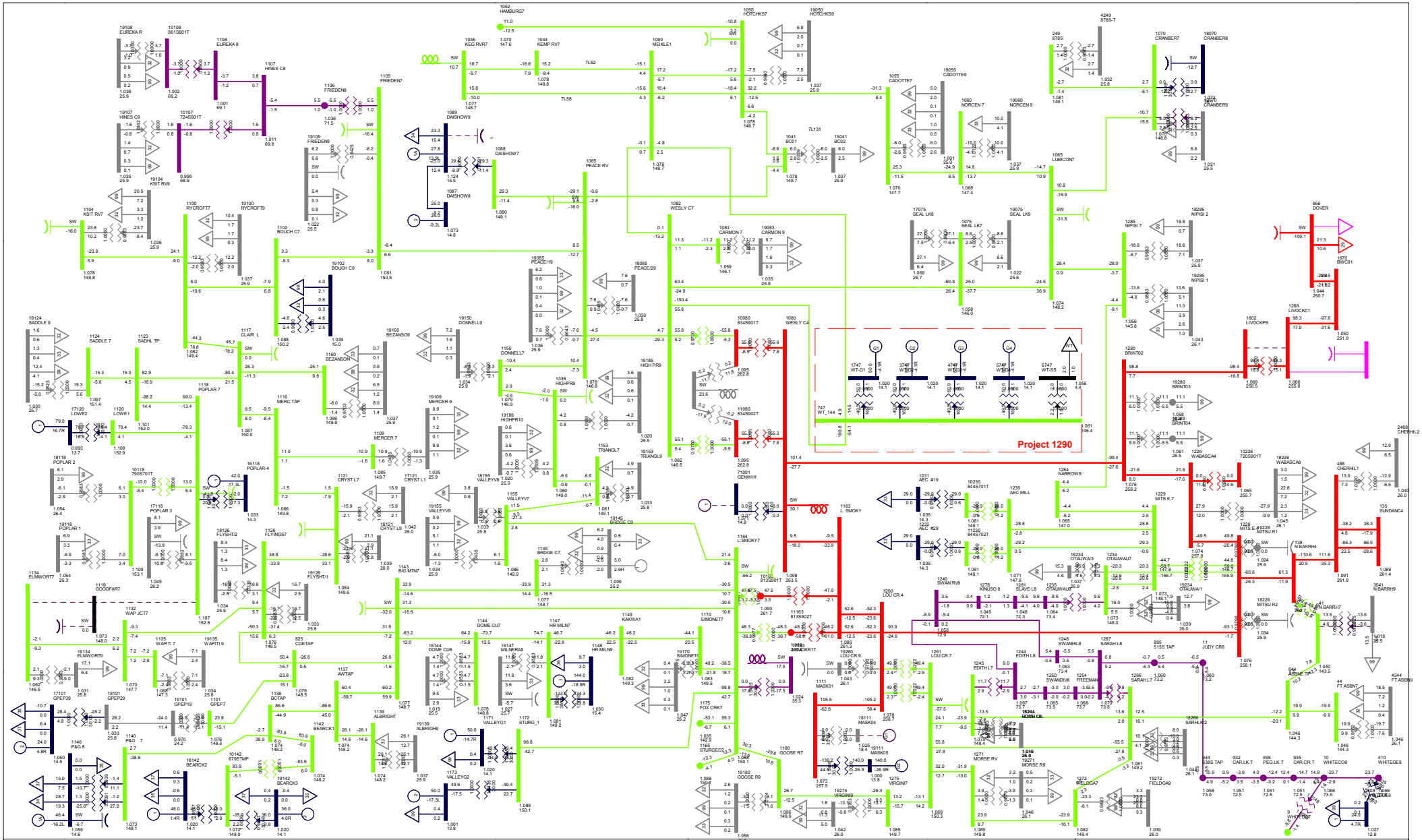
Appendix D2A

Figure: 74

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_B.

Whitetail Project 1290 Interconnection Study



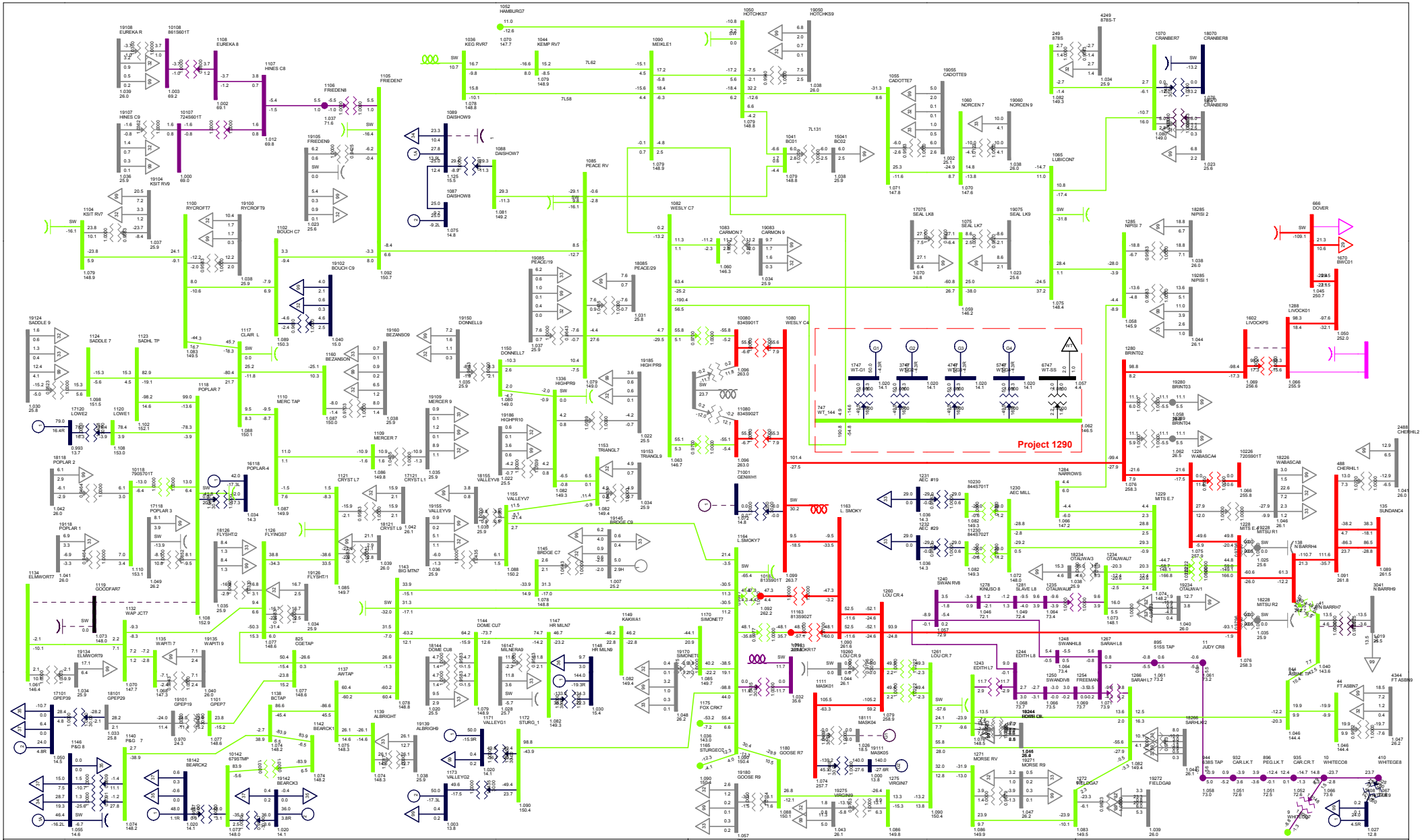
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 037 7L07 POPLARHILL to ELMWORTH_A.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 75



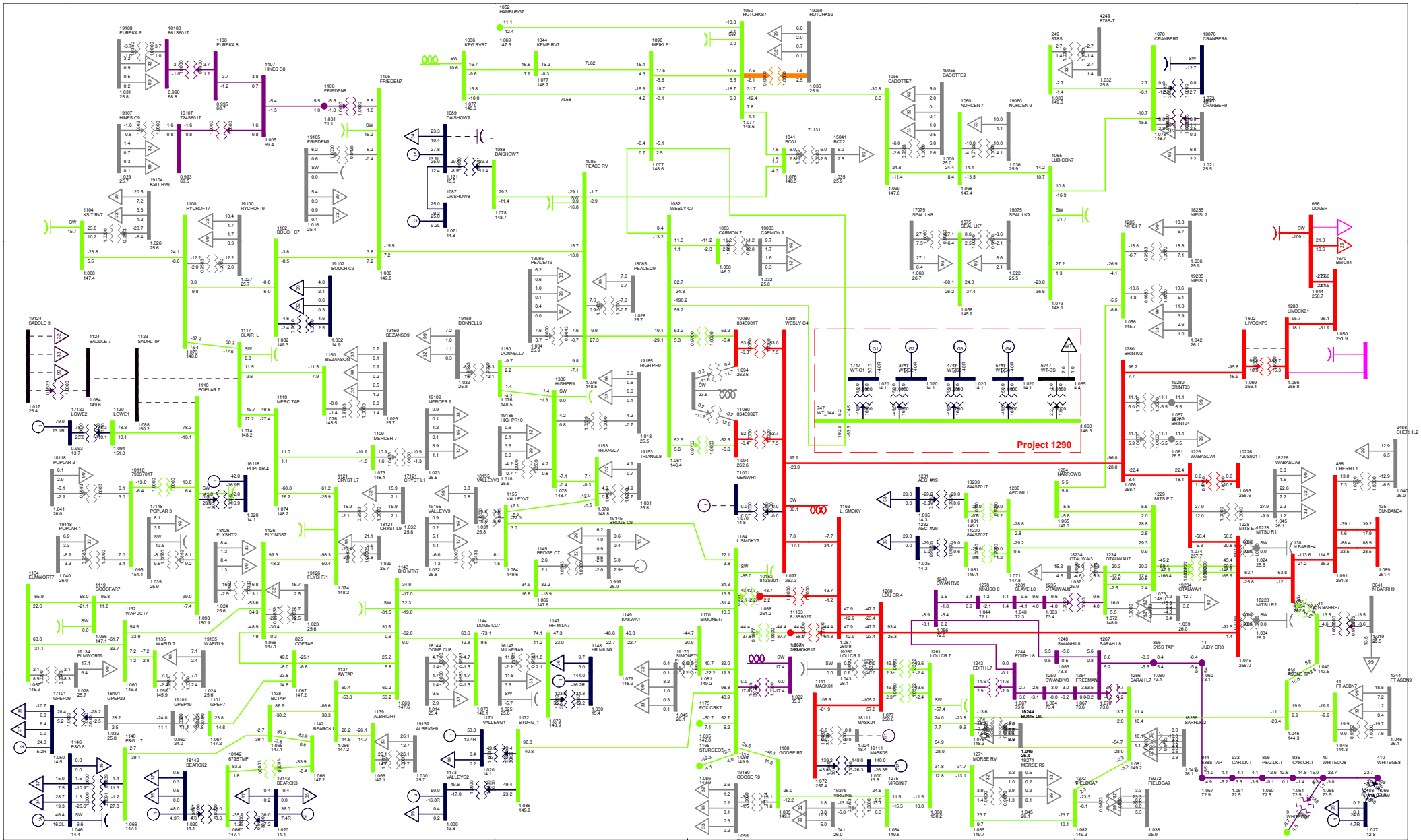
Appendix D2A

Figure: 76

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 037 7L07 POPLARHILL to ELMWORTH_B.

Whitetail Project 1290 Interconnection Study



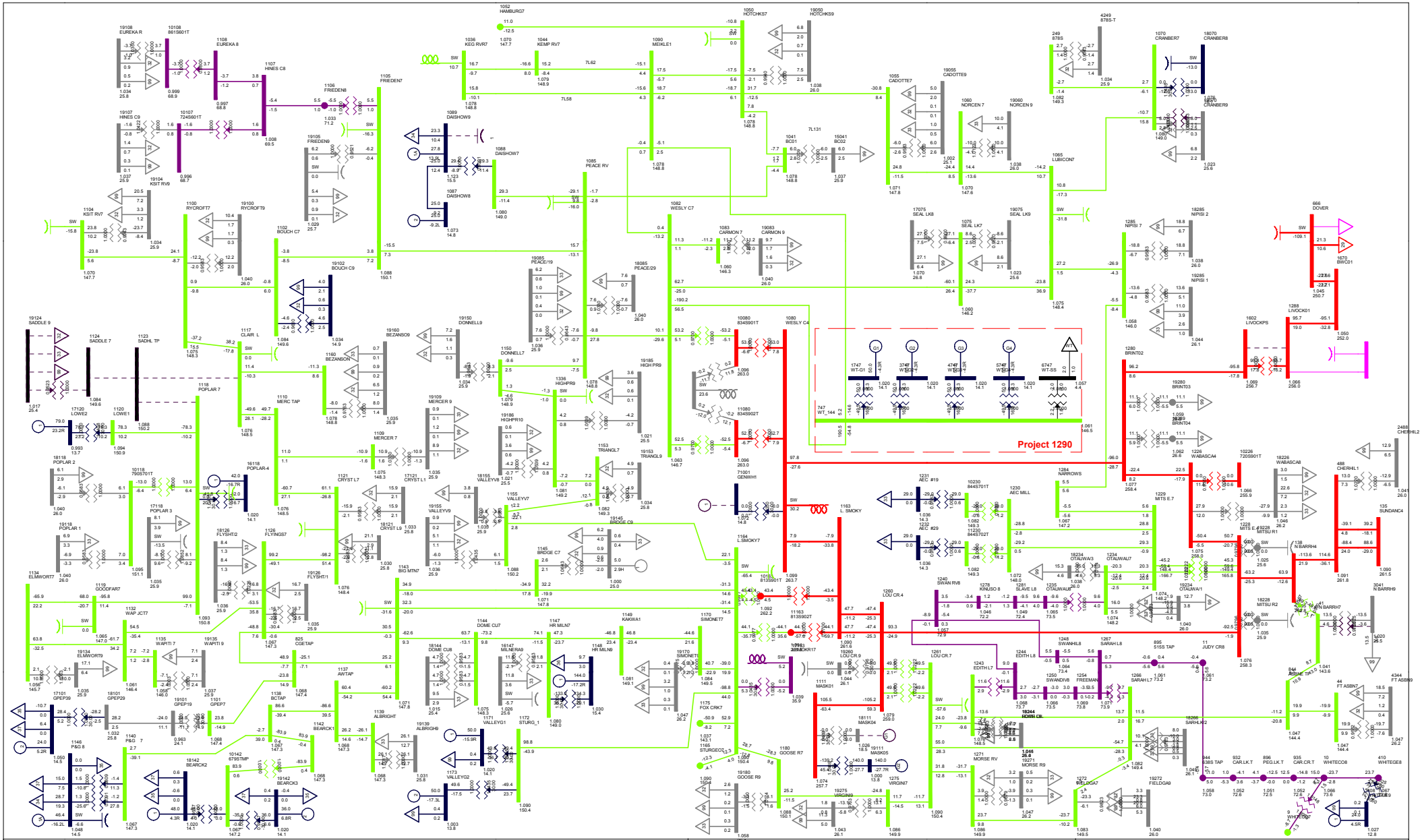
Appendix D2A

Figure: 77

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_A.

Whitetail Project 1290 Interconnection Study



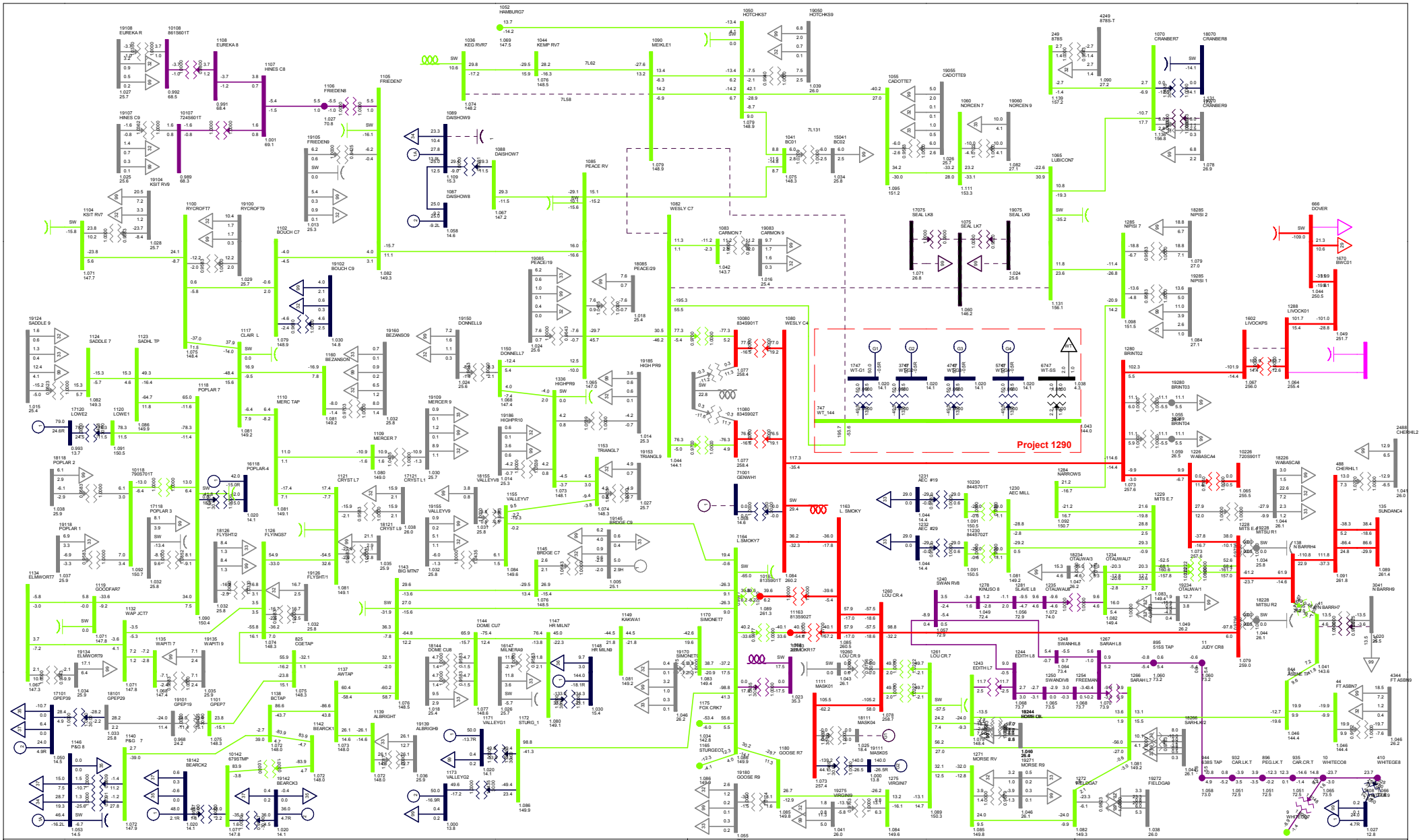
Appendix D2A

Figure: 78

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_B.

Whitetail Project 1290 Interconnection Study



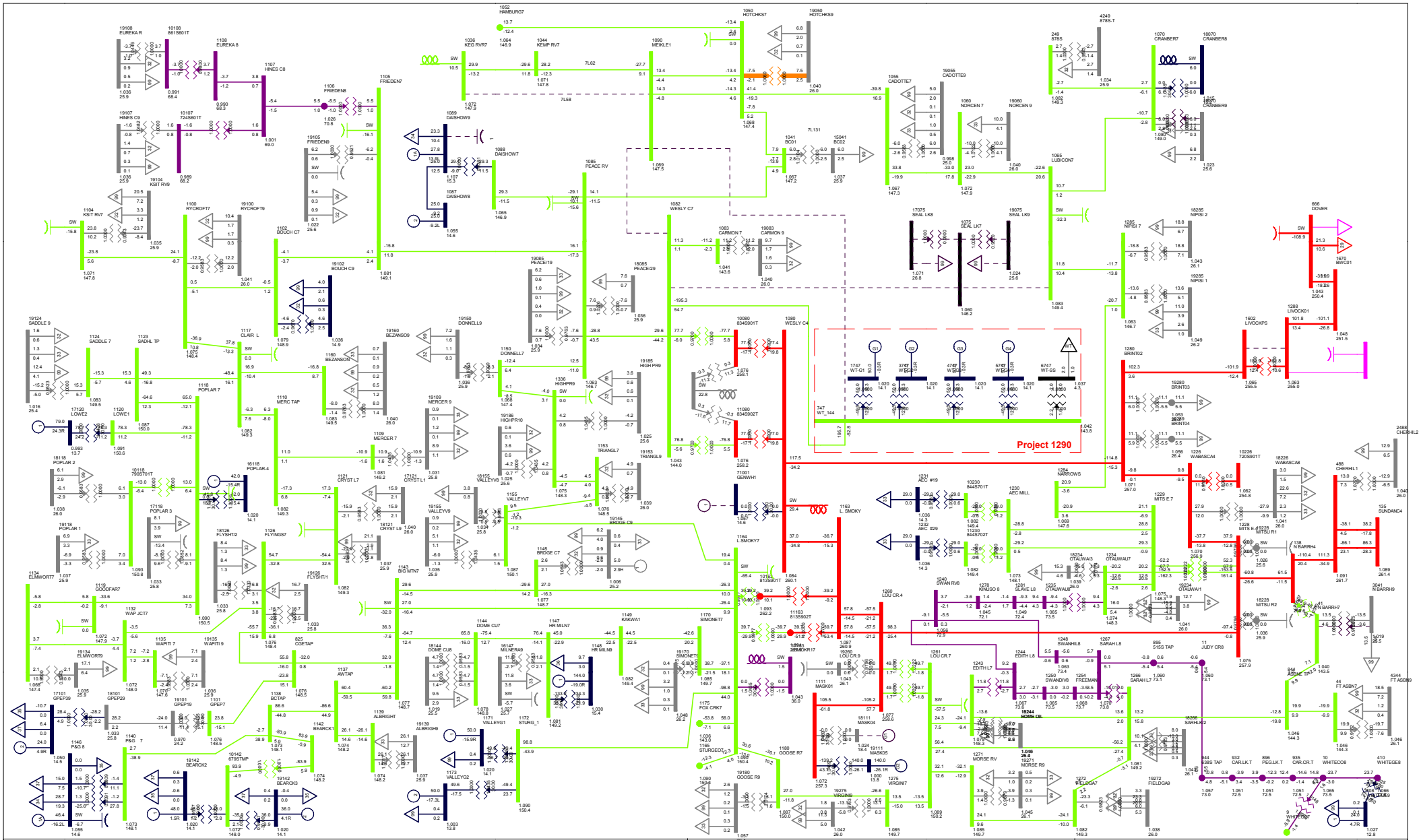
Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 040 C Cont 7L106 7L131 (TAP)_A.

Whitetail Project 1290 Interconnection Study

Appendix D2A

Figure: 79



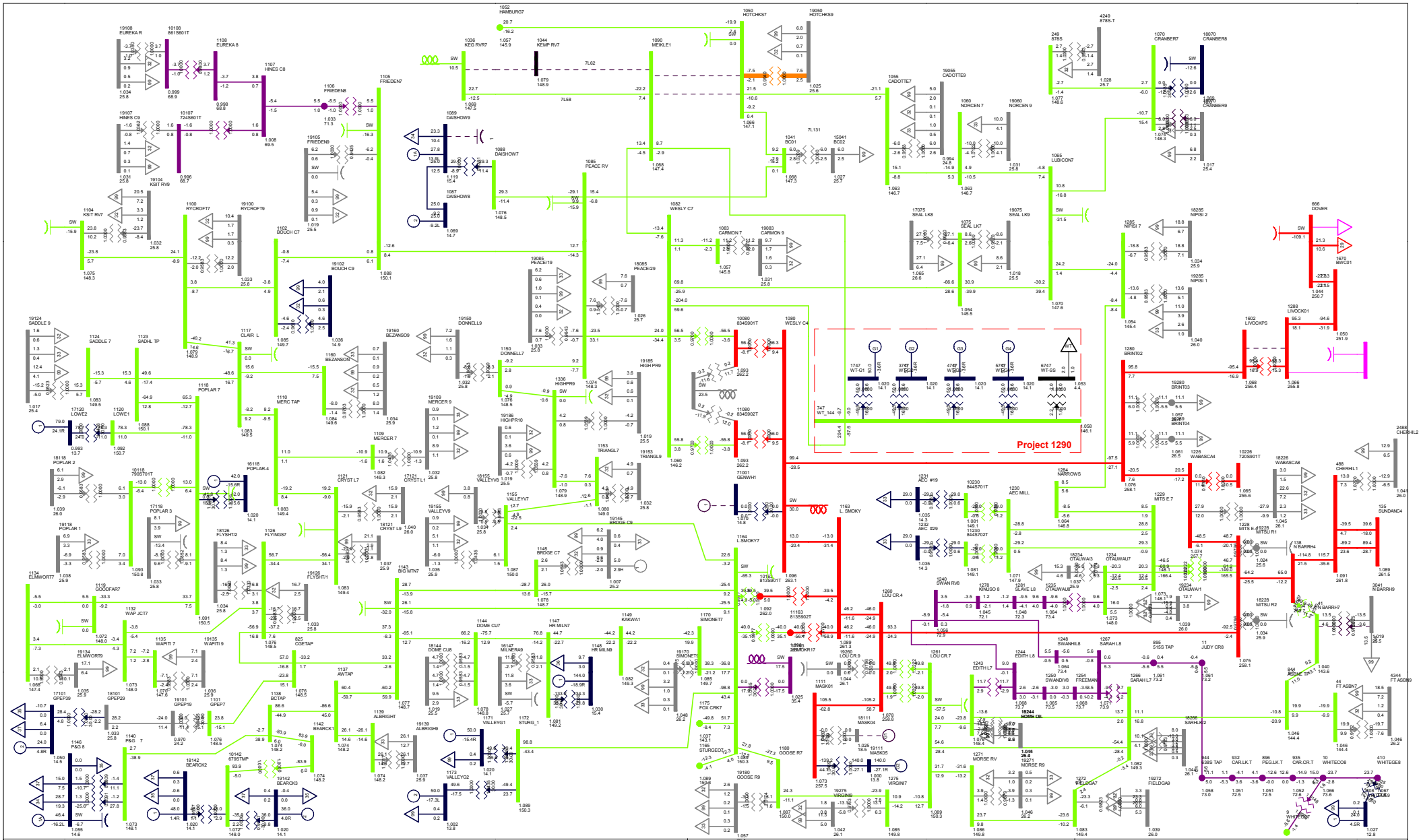
Appendix D2A

Figure: 80

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 040 C Cont 7L106 7L131 (TAP)_B.

Whitetail Project 1290 Interconnection Study



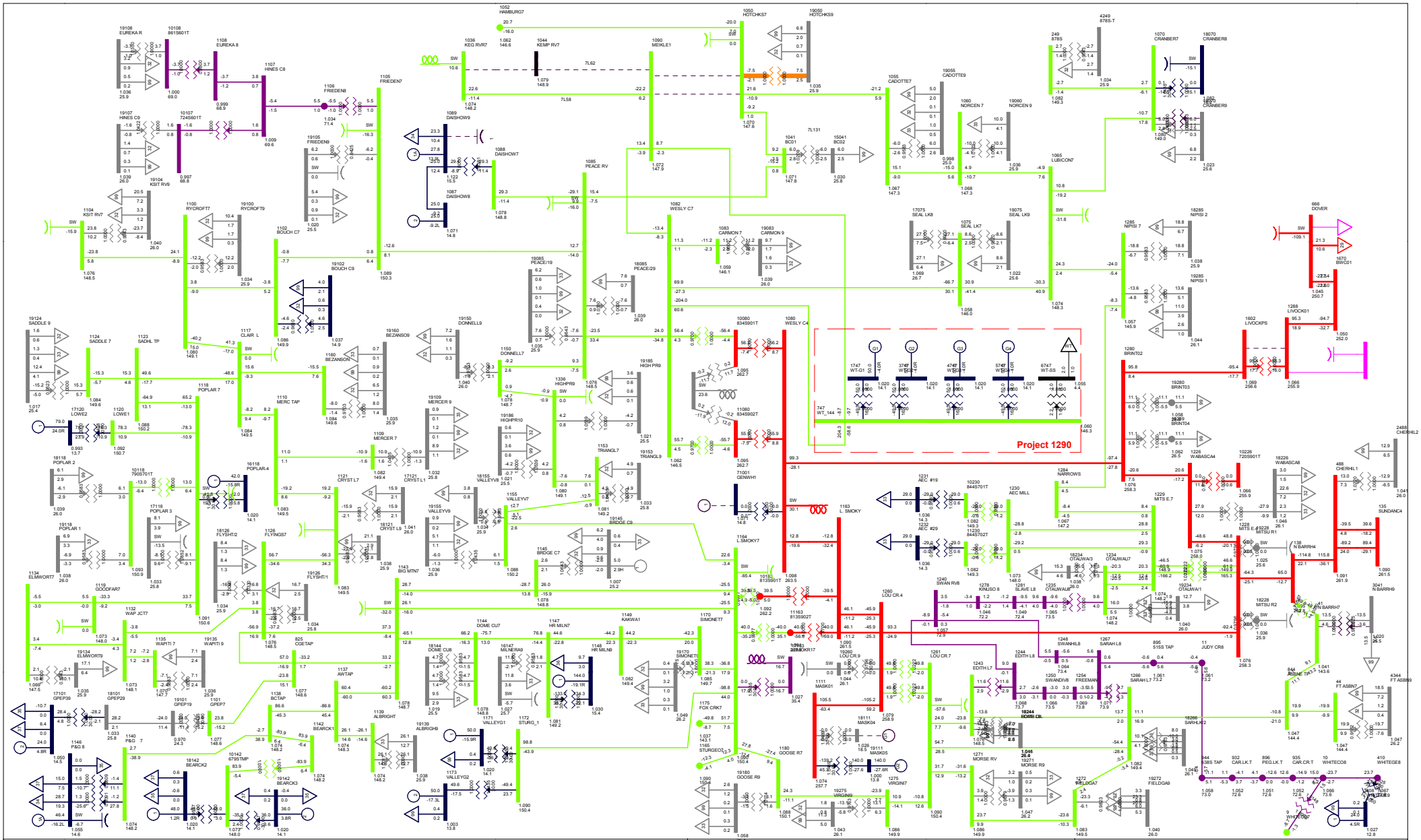
Appendix D2A

Figure: 81

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 041 C Cont 7L120 7L138 (TAP)_A.

Whitetail Project 1290 Interconnection Study



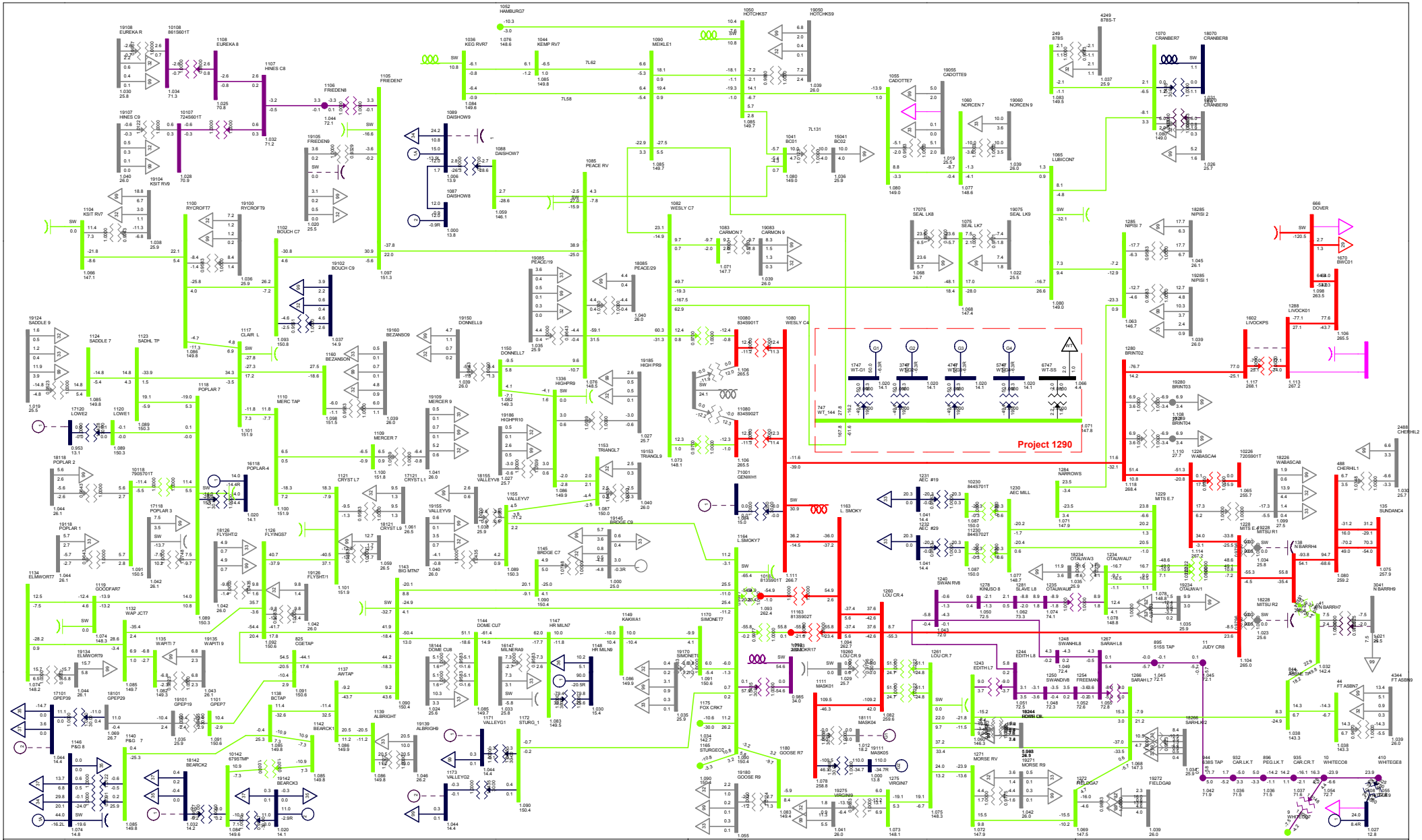
Appendix D2A

Figure: 82

Study Case Description

CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 041 C Cont 7L120 7L138 (TAP)_B.

Whitetail Project 1290 Interconnection Study



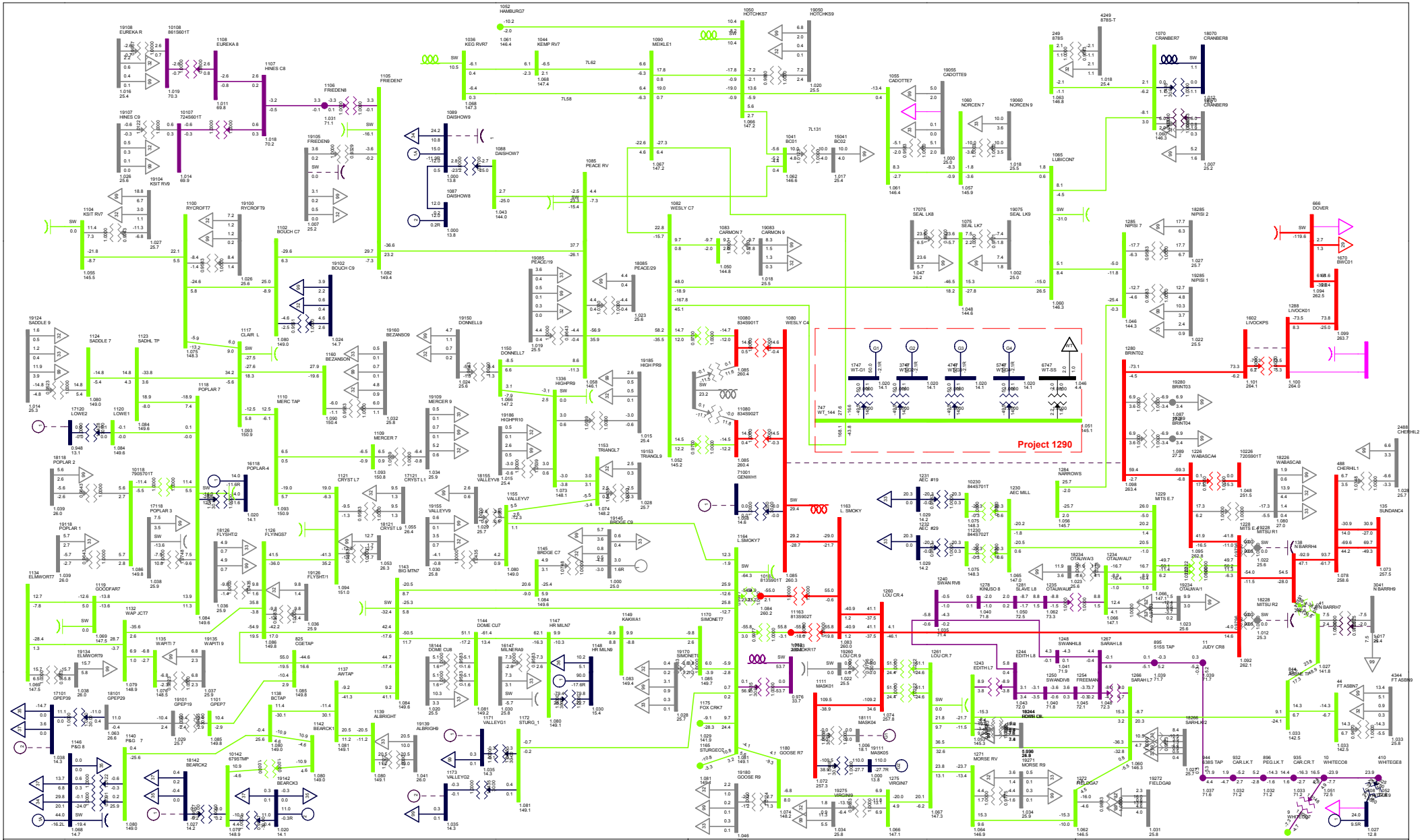
Appendix D2B

Figure: 1

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 000 All elements in service_A.

Whitetail Project 1290 Interconnection Study



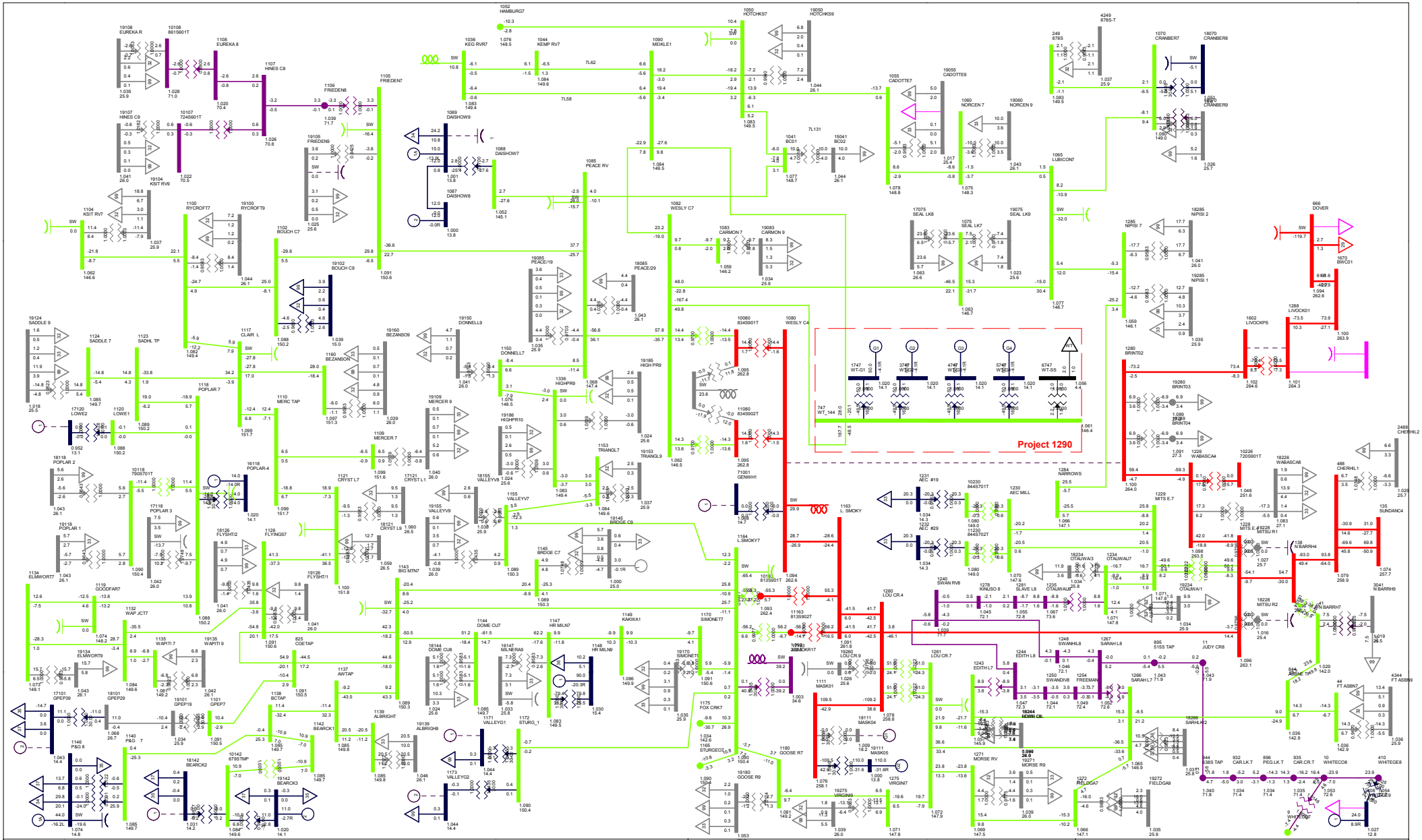
Appendix D2B

Figure: 3

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 001 9Lib WESLEYCREEK to Brintnell_A.

Whitetail Project 1290 Interconnection Study



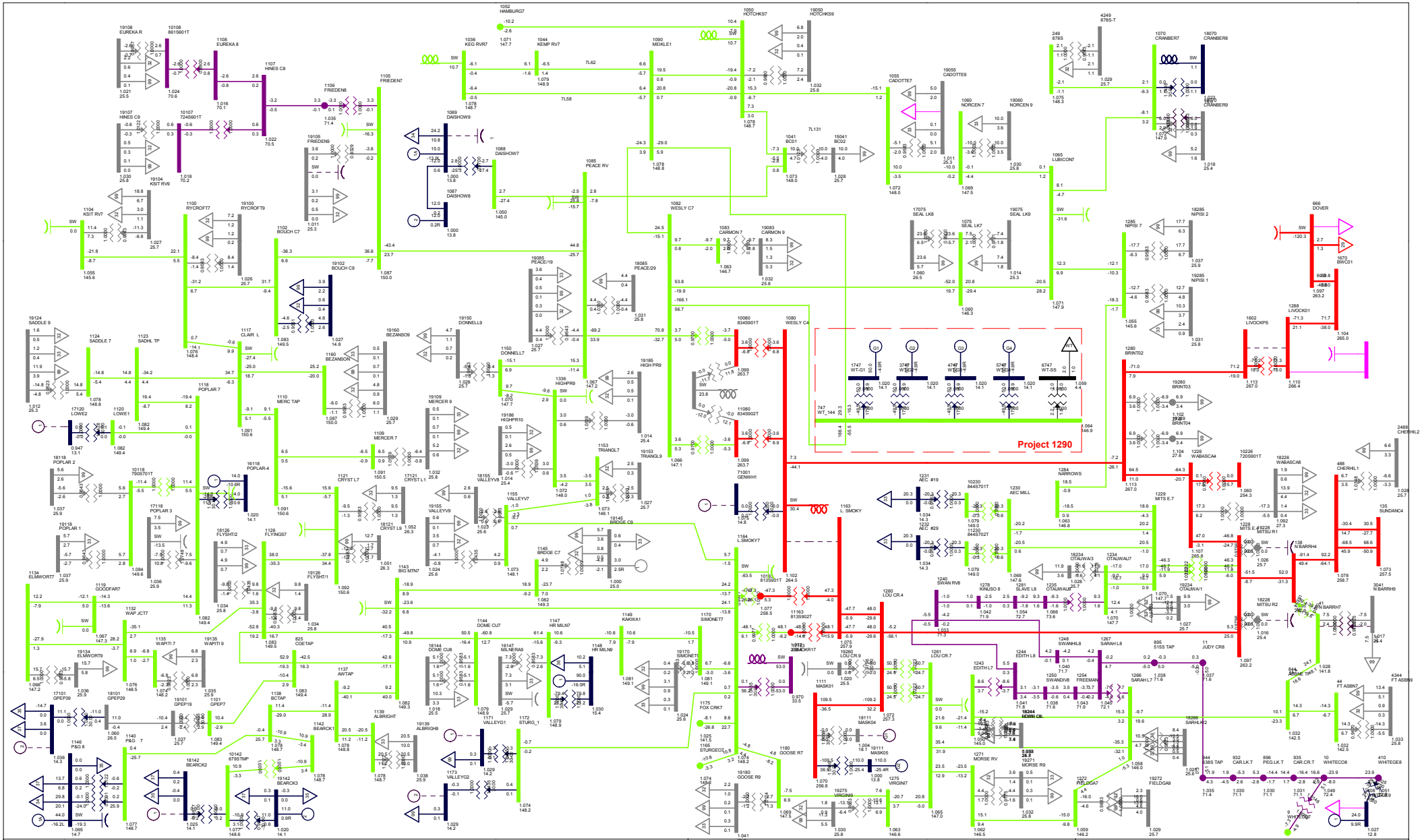
Appendix D2B

Figure: 4

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 001 9Lrb WESLEYCREEK to Brintnell_B.

Whitetail Project 1290 Interconnection Study



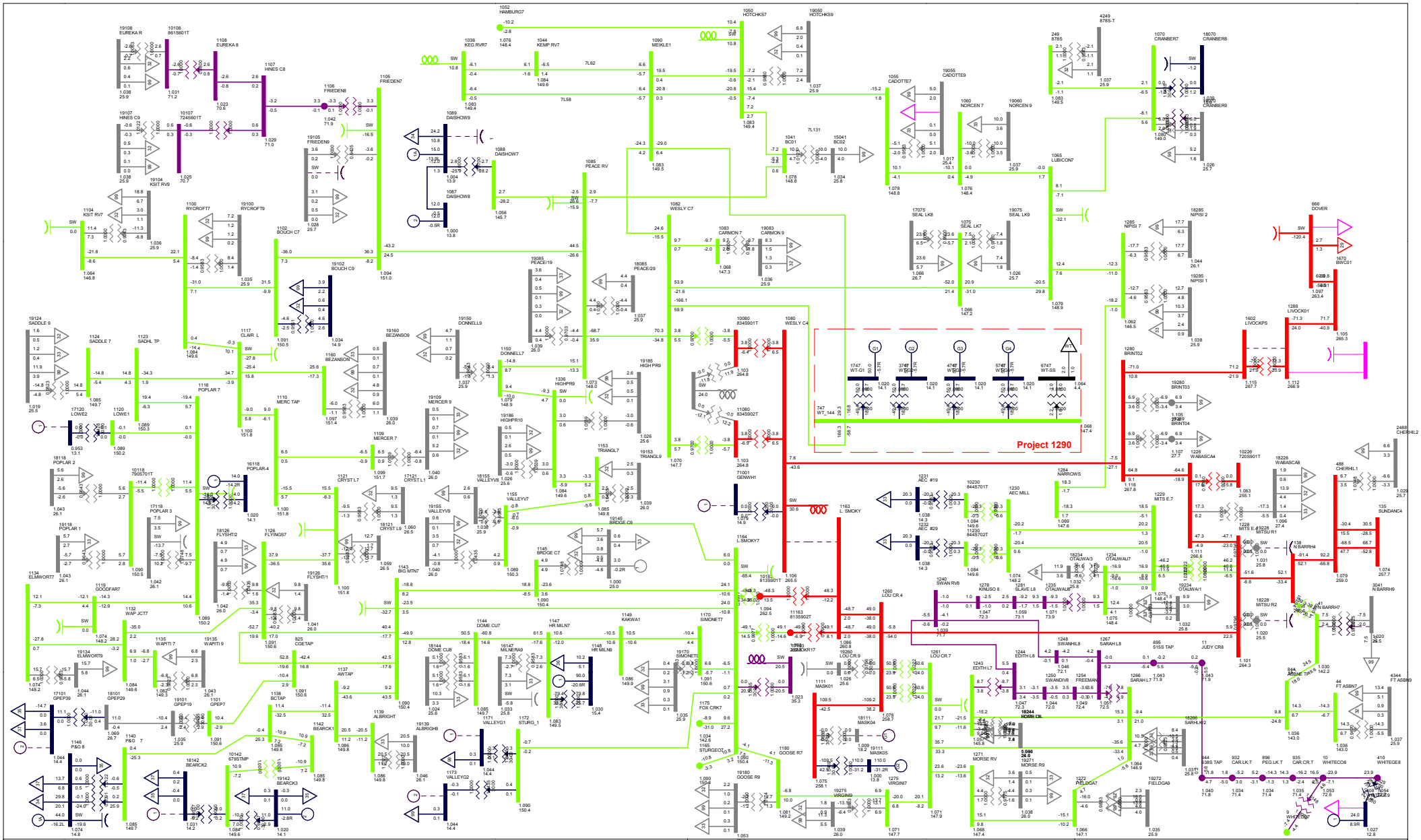
Appendix D2B

Figure: 5

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 002 9L11WESLEYCREEK to LITTLESMOKY_A.

Whitetail Project 1290 Interconnection Study



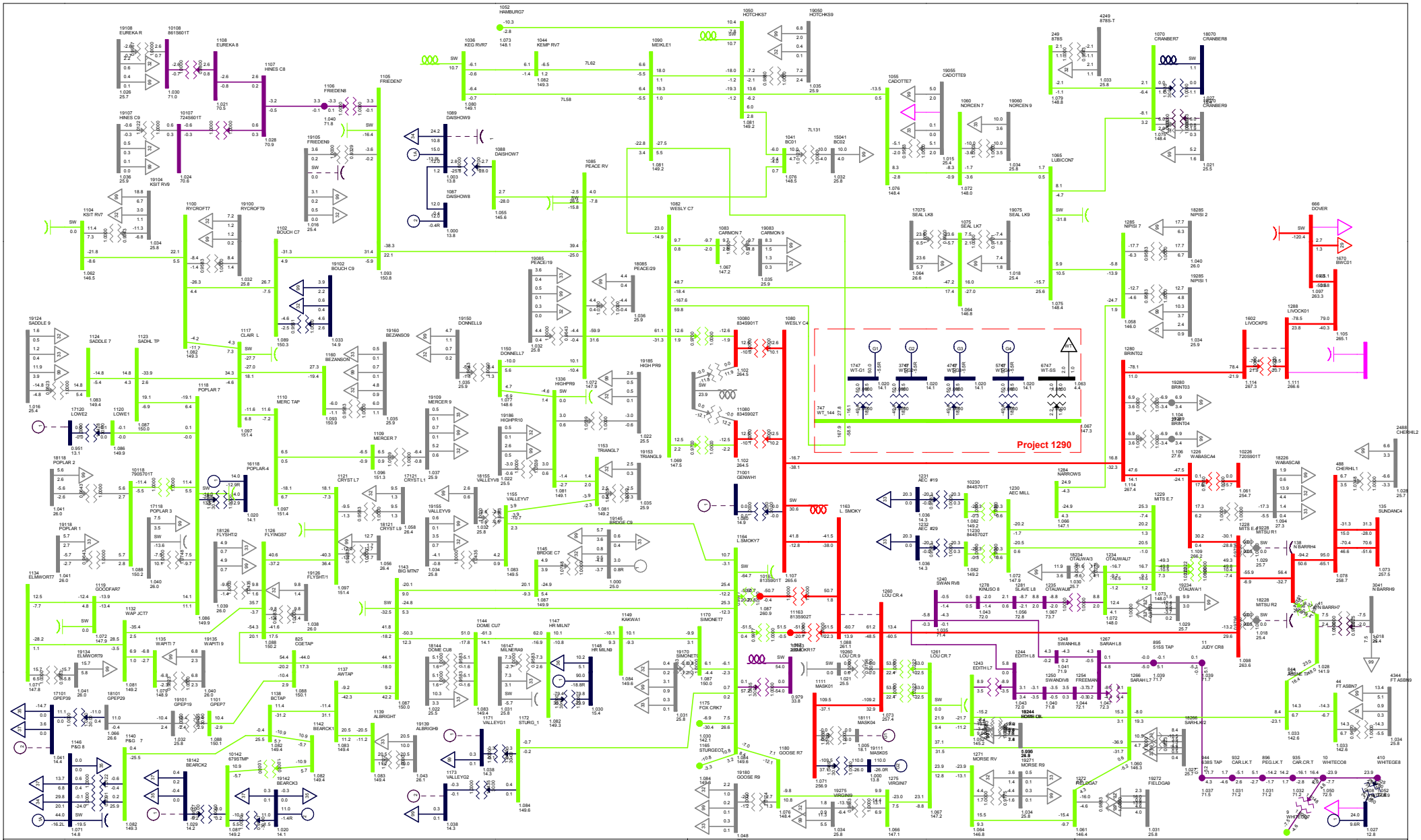
Appendix D2B

Figure: 6

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 002 9LIT WESLEYCREEK to LITTLESMOKY_B.

Whitetail Project 1290 Interconnection Study



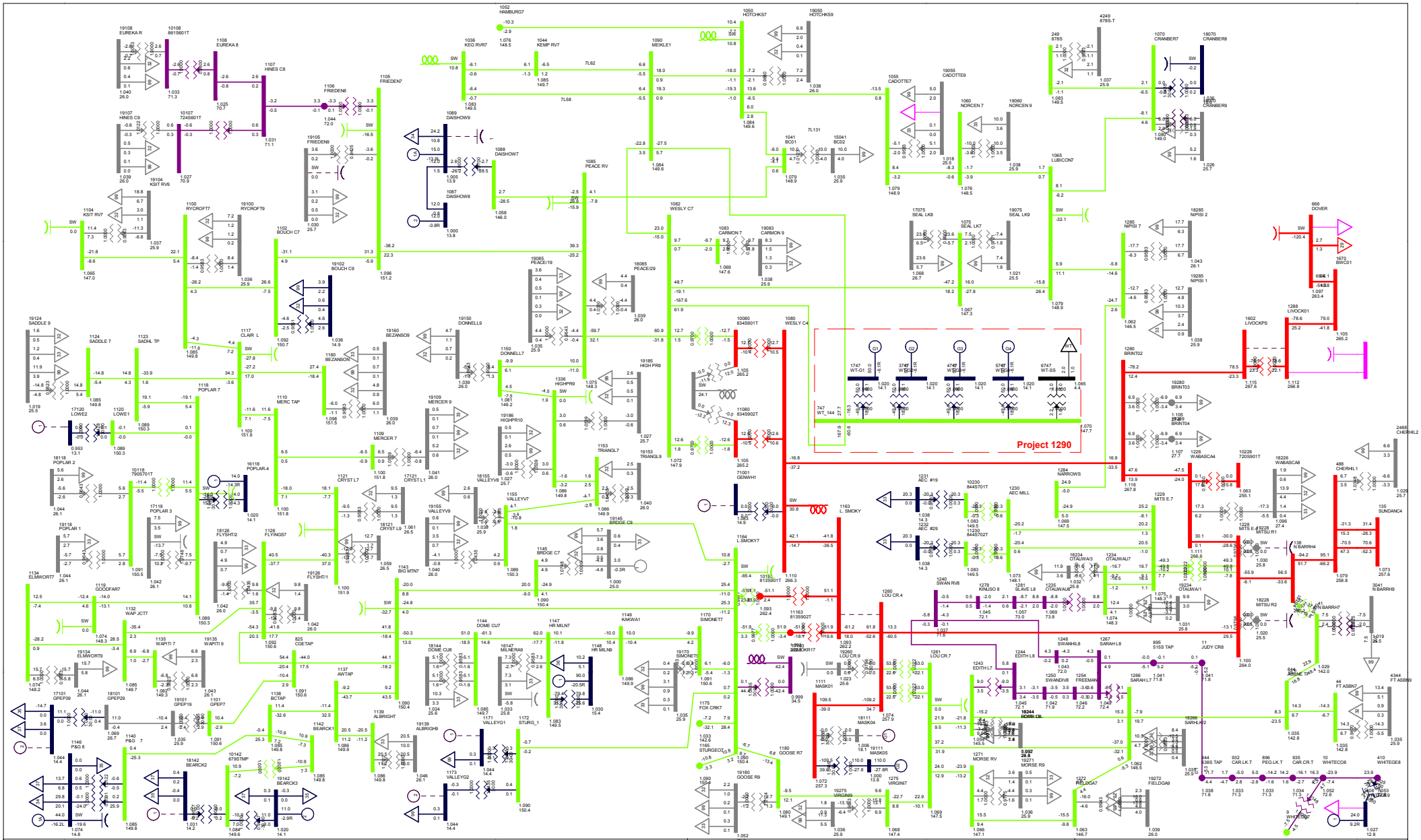
Appendix D2B

Figure: 7

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 003 9LG5 LT1 LESMOKY to LOUISECREEK_A.

Whitetail Project 1290 Interconnection Study



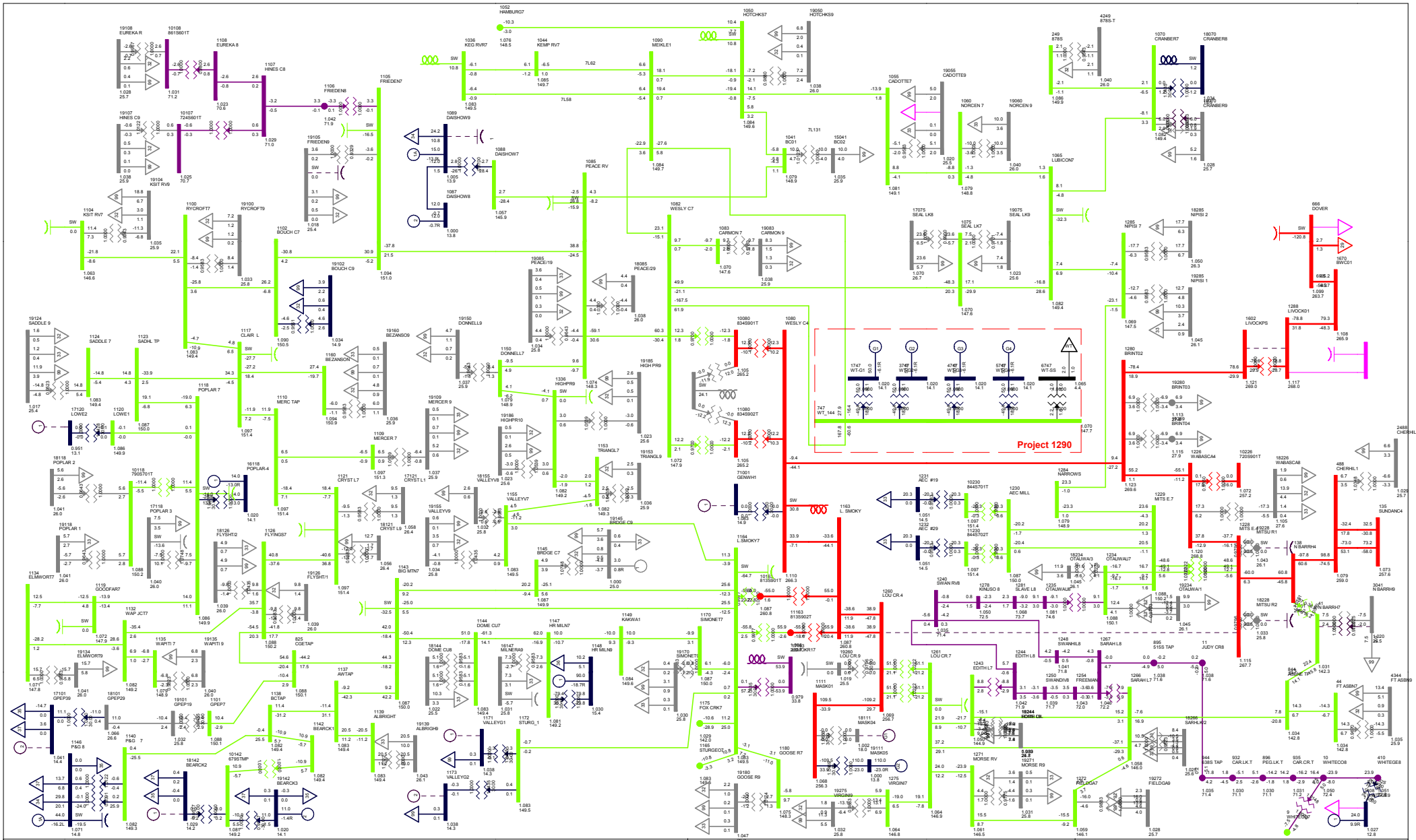
Appendix D2B

Figure: 8

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 003 9LO5 LI1 LESMOKY to LOUISECREEK_B.

Whitetail Project 1290 Interconnection Study



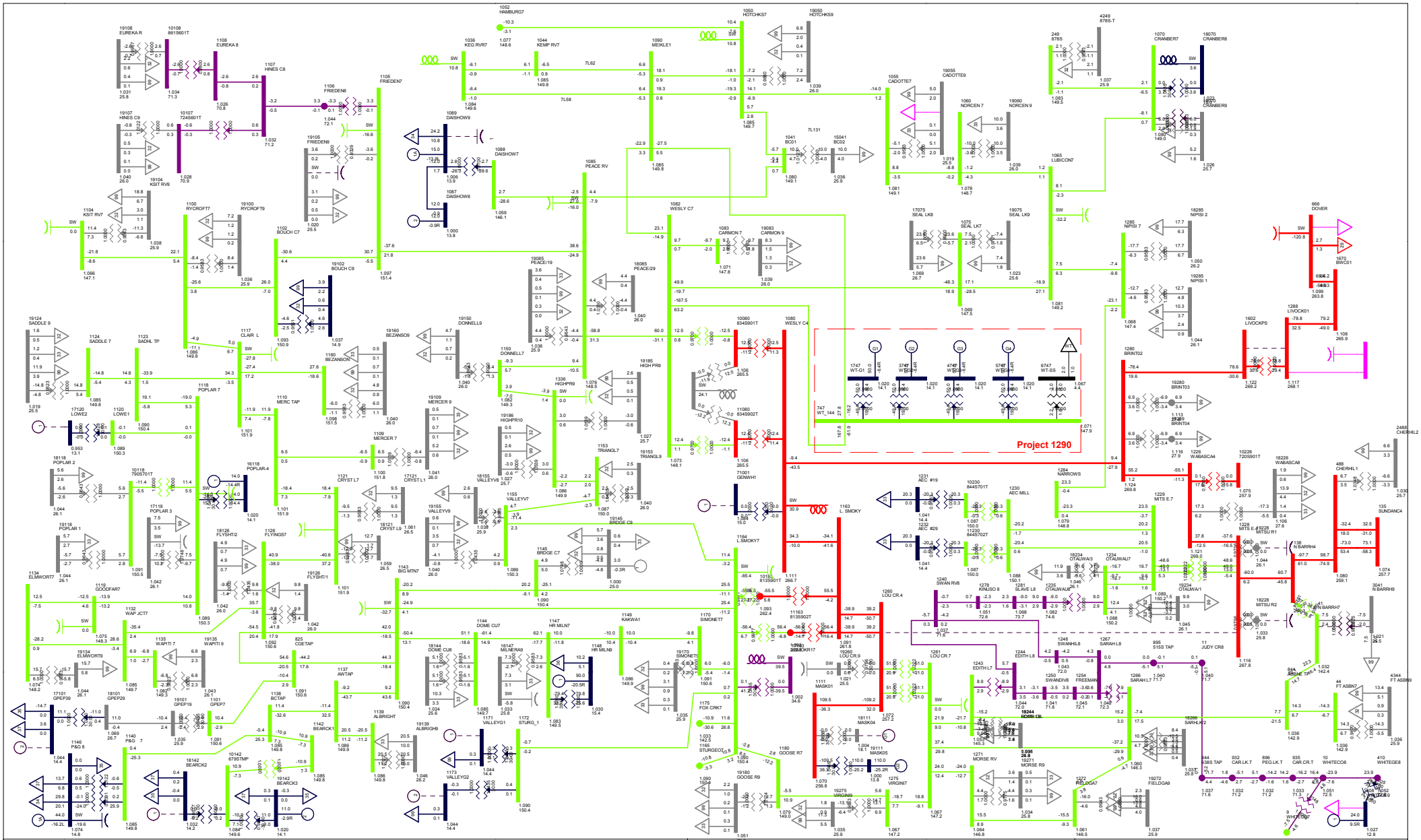
Appendix D2B

Figure: 9

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 004 9L40 MITSUE to LOUISECREEK_A.

Whitetail Project 1290 Interconnection Study



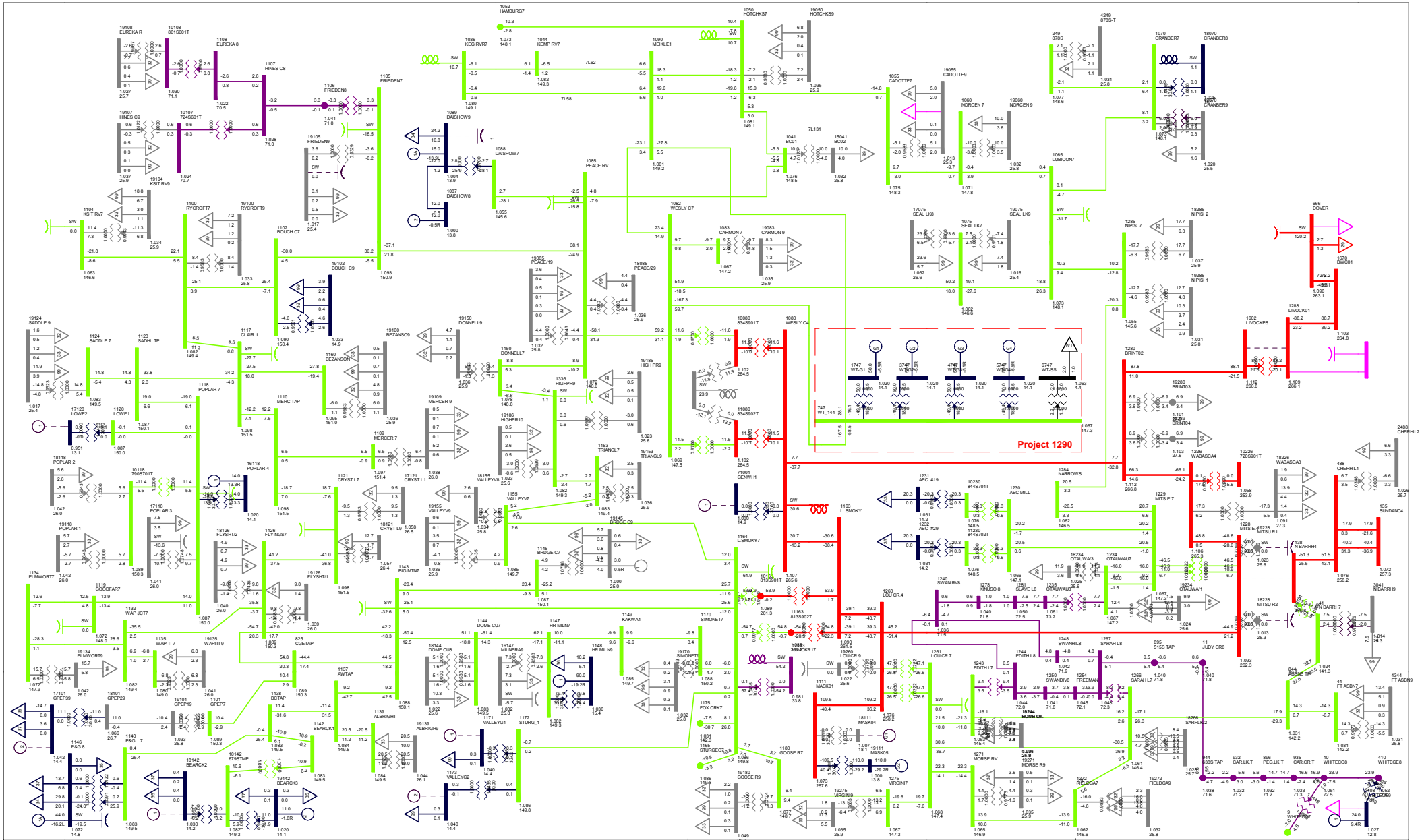
Appendix D2B

Figure: 10

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 004 9L4U MITSUE to LOUISECREEK_B.

Whitetail Project 1290 Interconnection Study



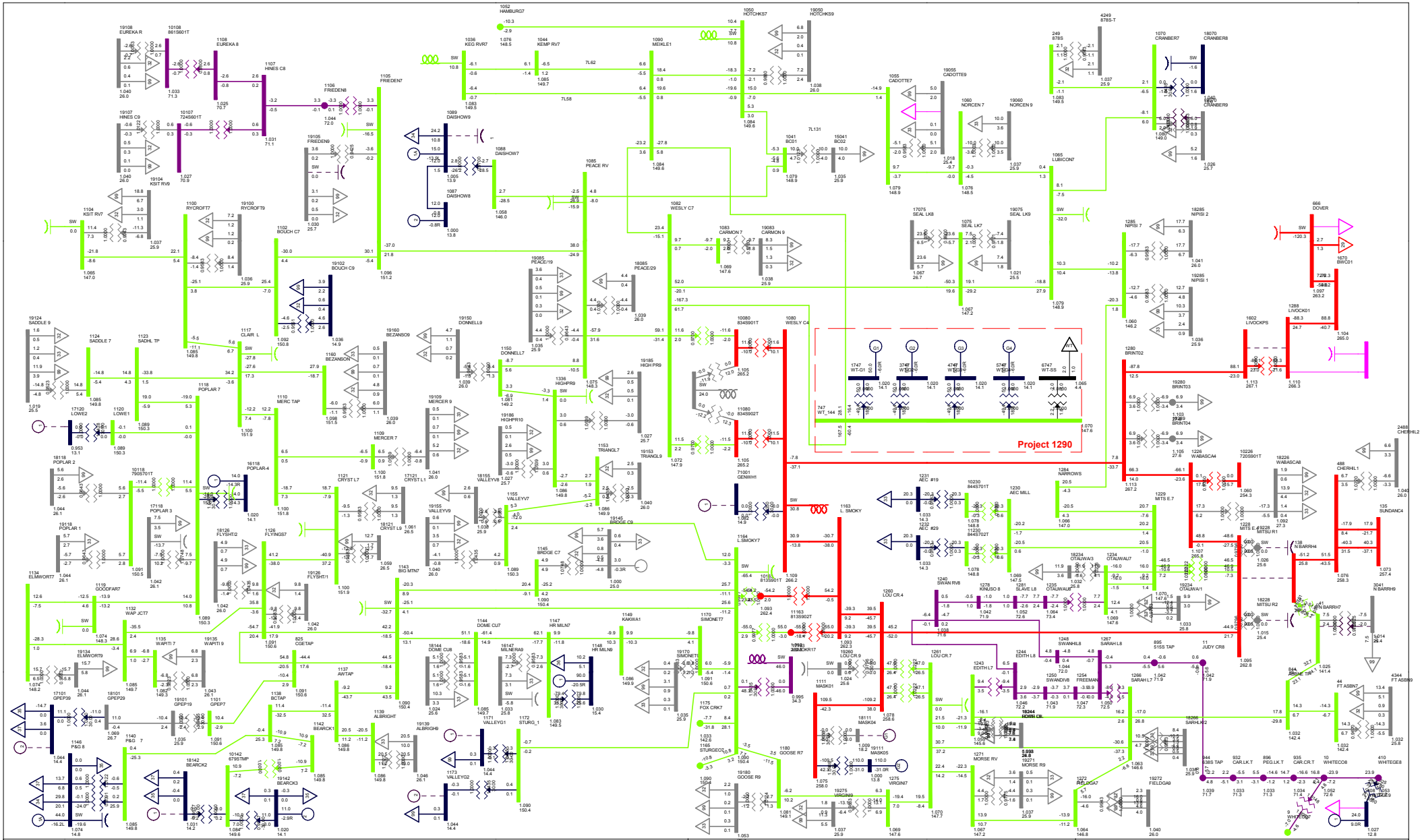
Appendix D2B

Figure: 11

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 005 91SL NORTHBARRHEAD to MITSUE_A.

Whitetail Project 1290 Interconnection Study



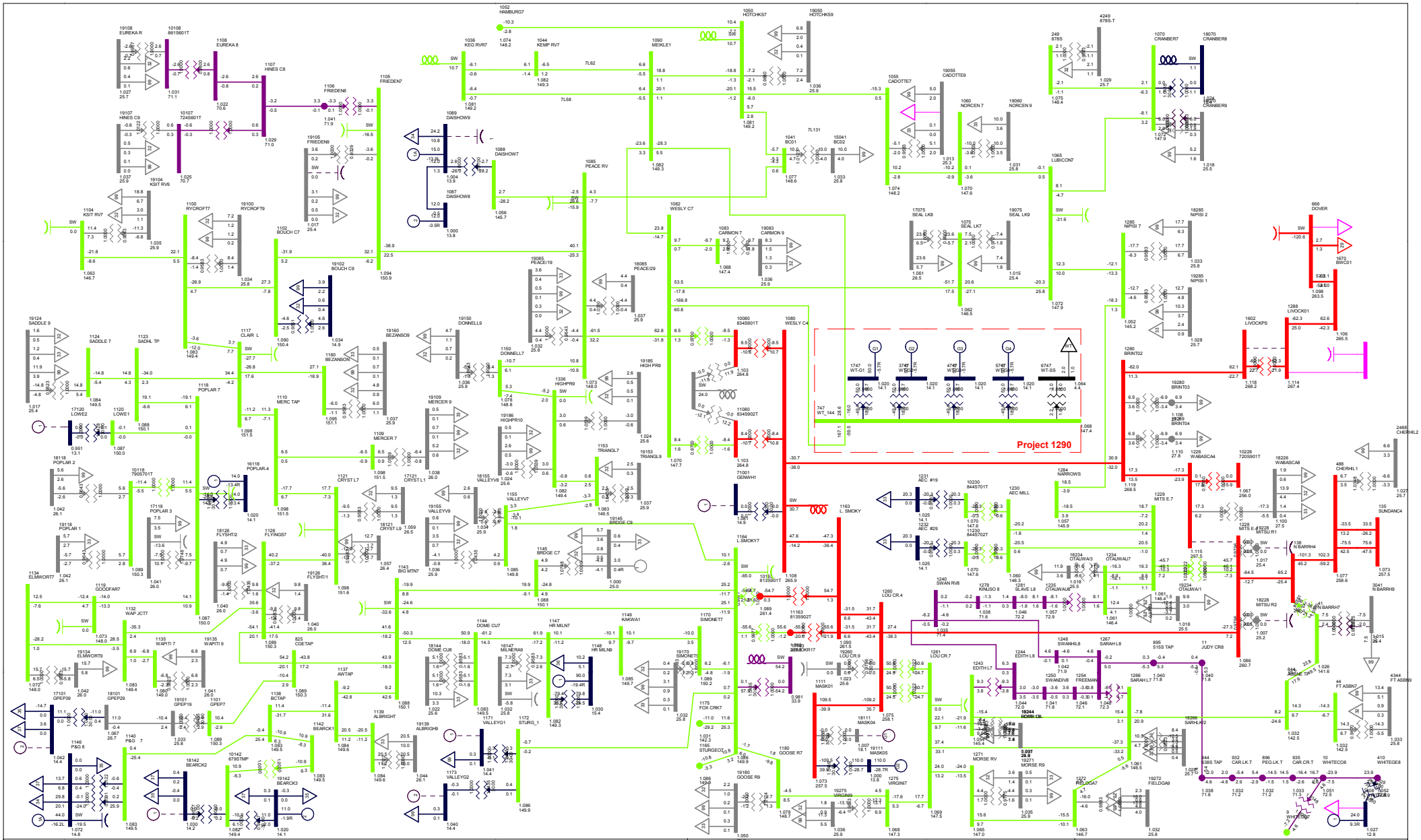
Appendix D2B

Figure: 12

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 005 91SL NORTHBARRHEAD to MITSUE_B.

Whitetail Project 1290 Interconnection Study



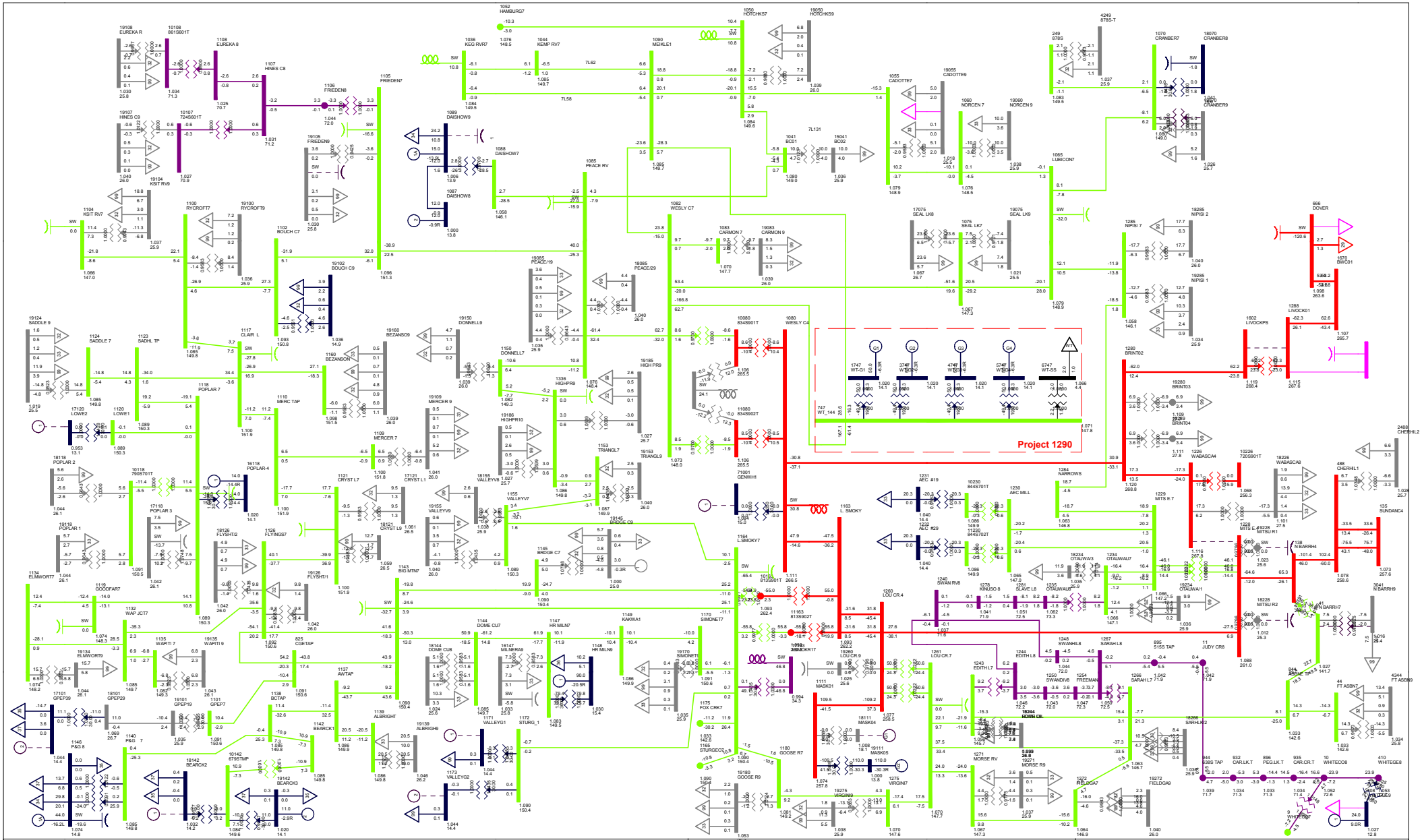
Appendix D2B

Figure: 13

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 006 9Lso WABASCA to MITSUE_A.

Whitetail Project 1290 Interconnection Study



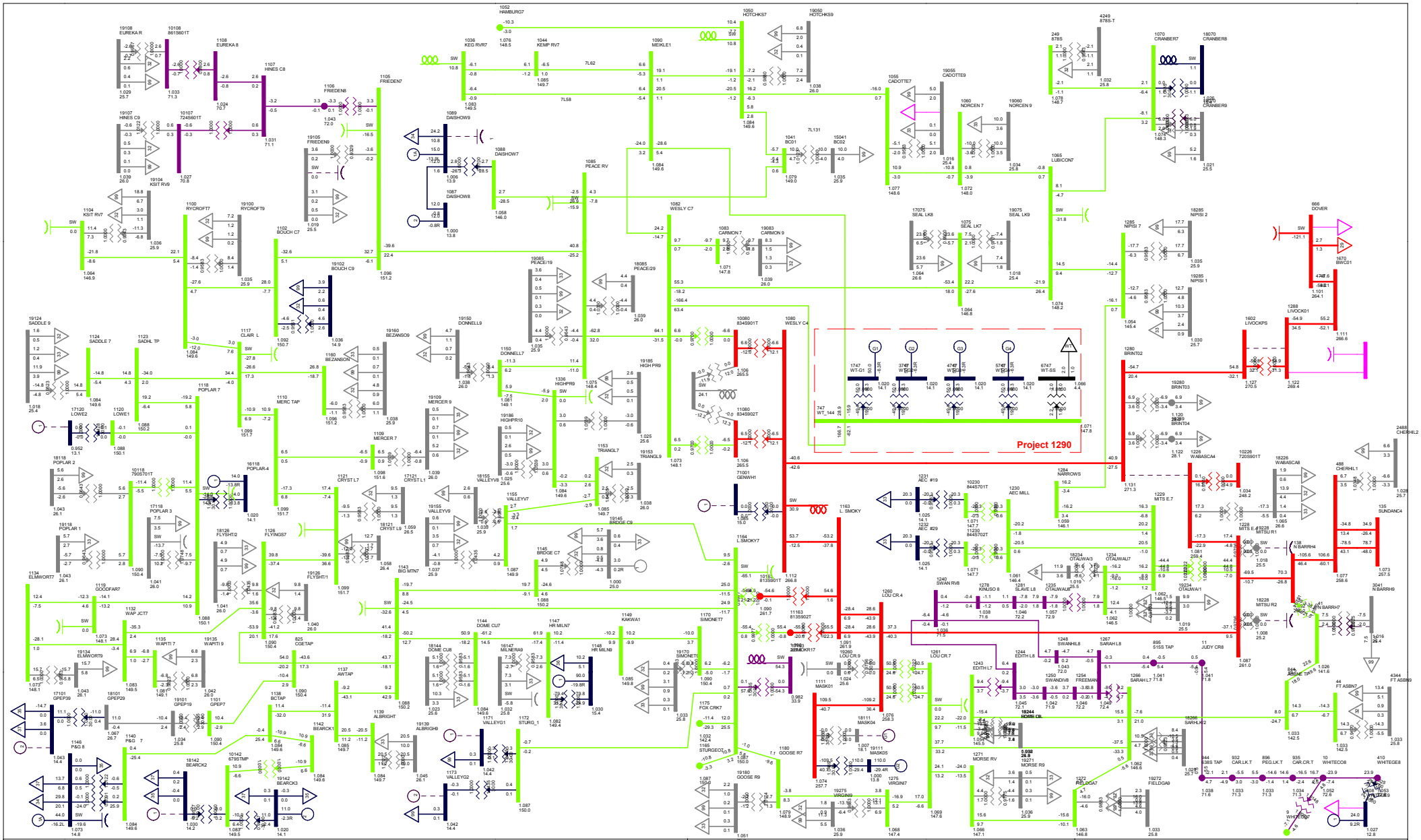
Appendix D2B

Figure: 14

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 006 9Lso WABASCA to MITSUE_B.

Whitetail Project 1290 Interconnection Study



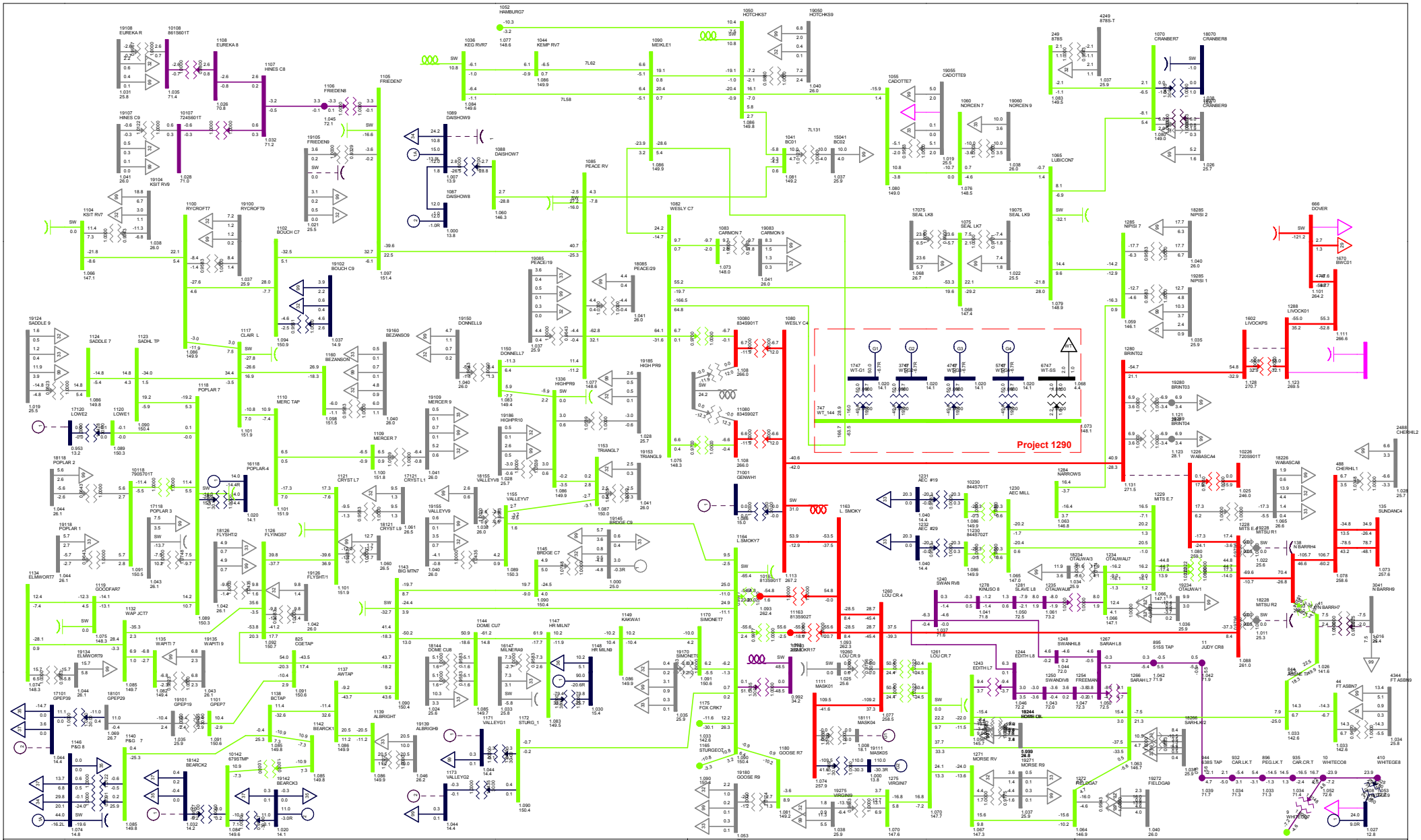
Appendix D2B

Figure: 15

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 007 9L to WABASCA to Brintnell_A.

Whitetail Project 1290 Interconnection Study



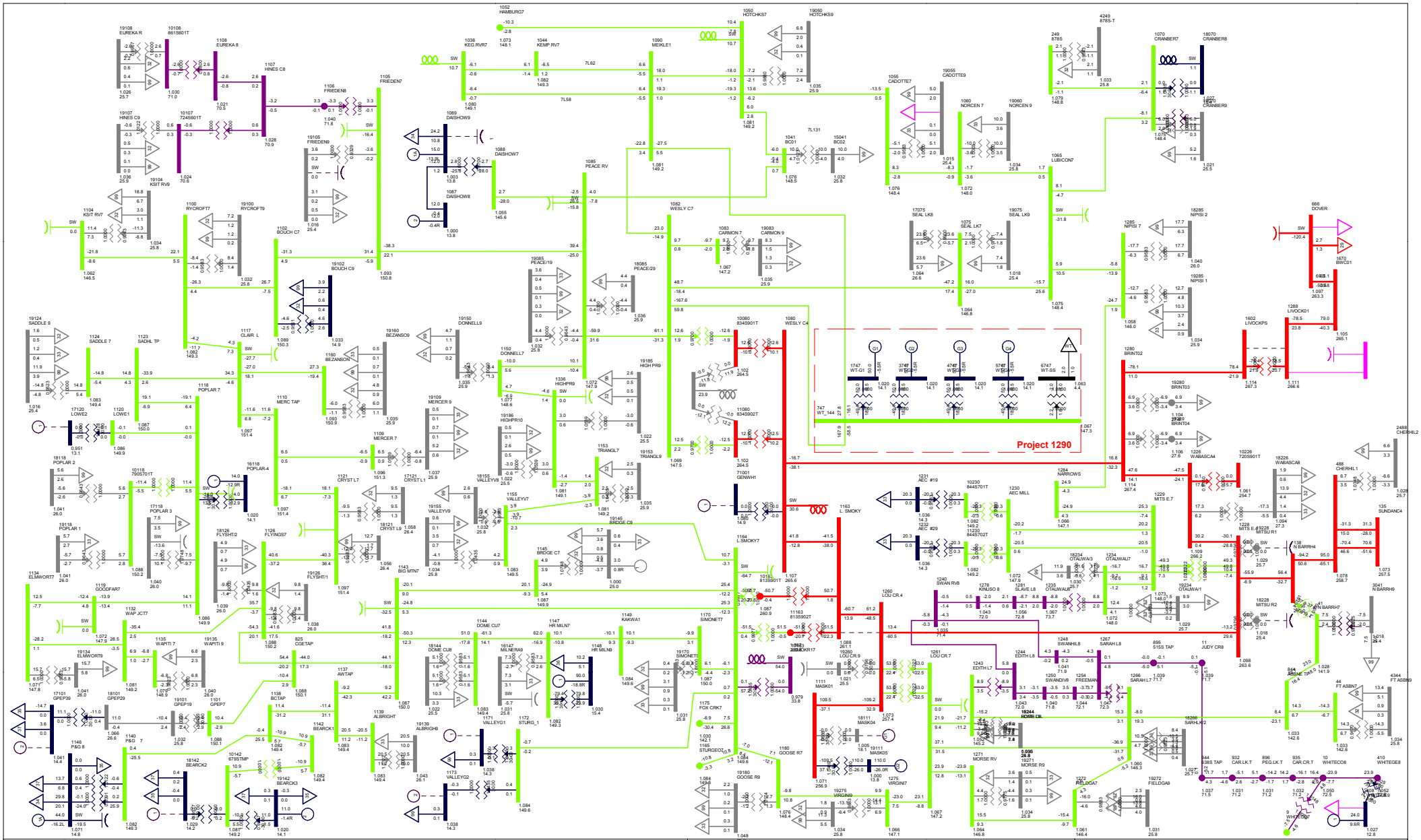
Appendix D2B

Figure: 16

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 007 9L to WABASCA to Brintnell_B.

Whitetail Project 1290 Interconnection Study



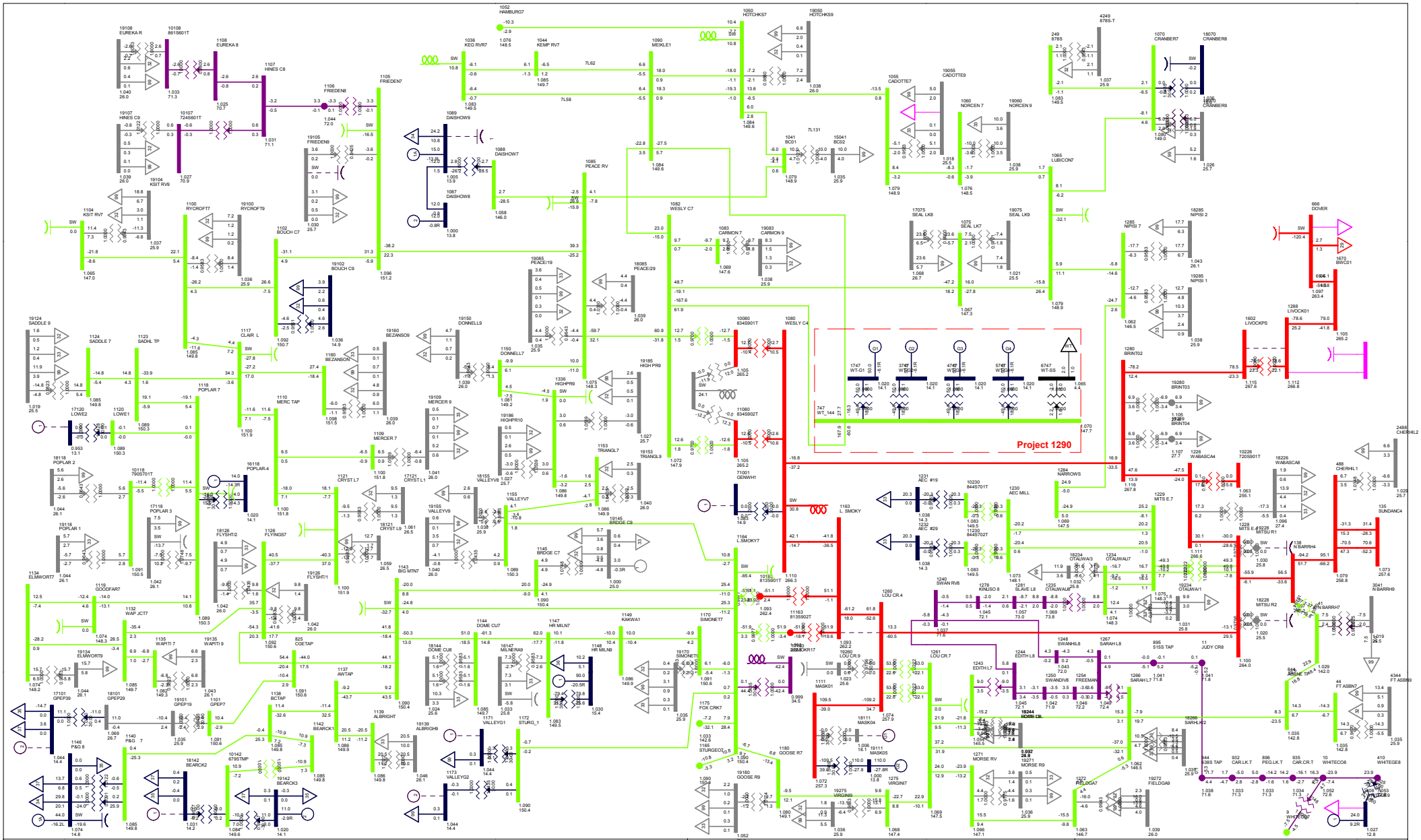
Appendix D2B

Figure: 17

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 008 9LU2 LI1 LESMOKY to LOUISECREEK_A.

Whitetail Project 1290 Interconnection Study



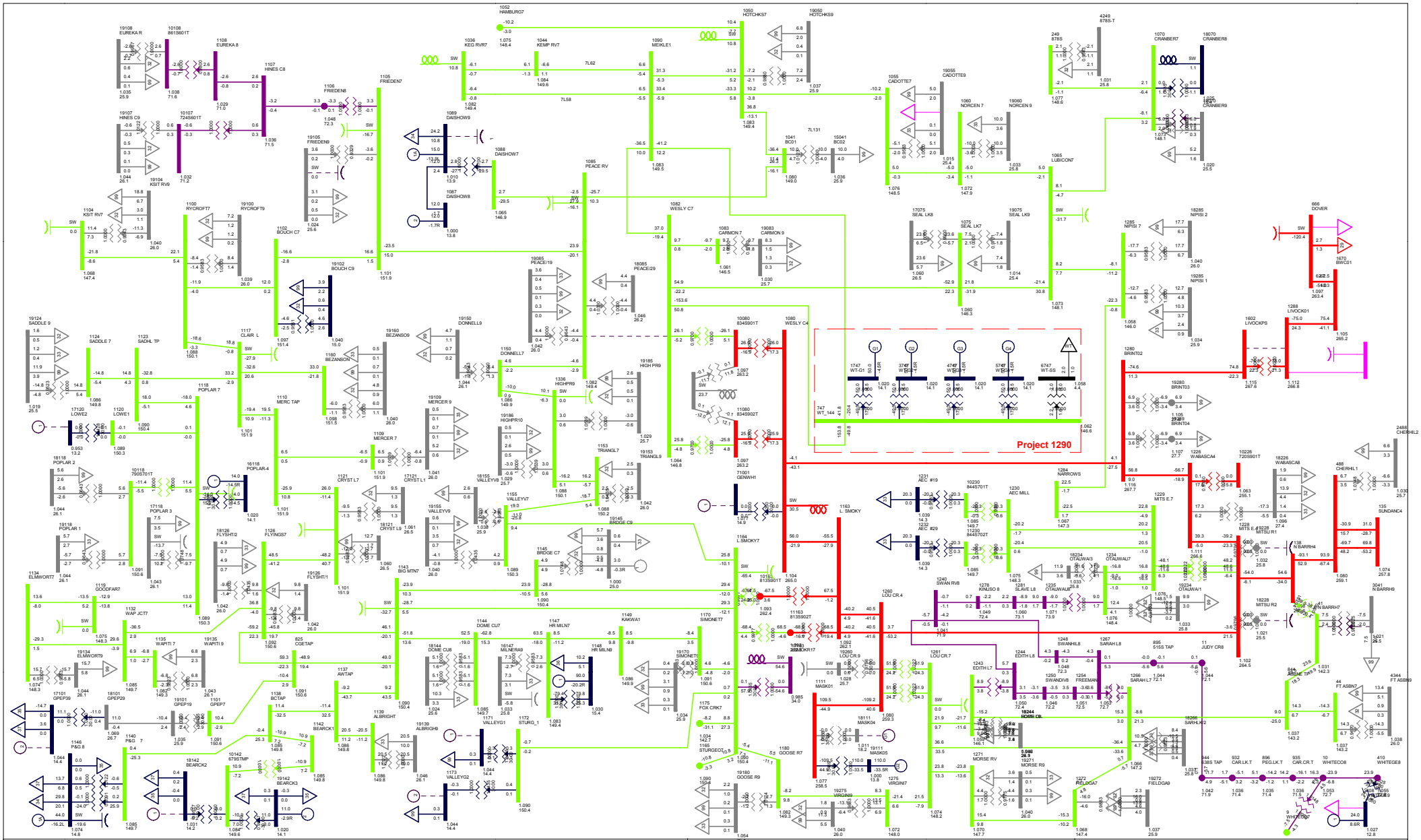
Appendix D2B

Figure: 18

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 008 9L02 LIN LESMOKY to LOUISECREEK_B.

Whitetail Project 1290 Interconnection Study



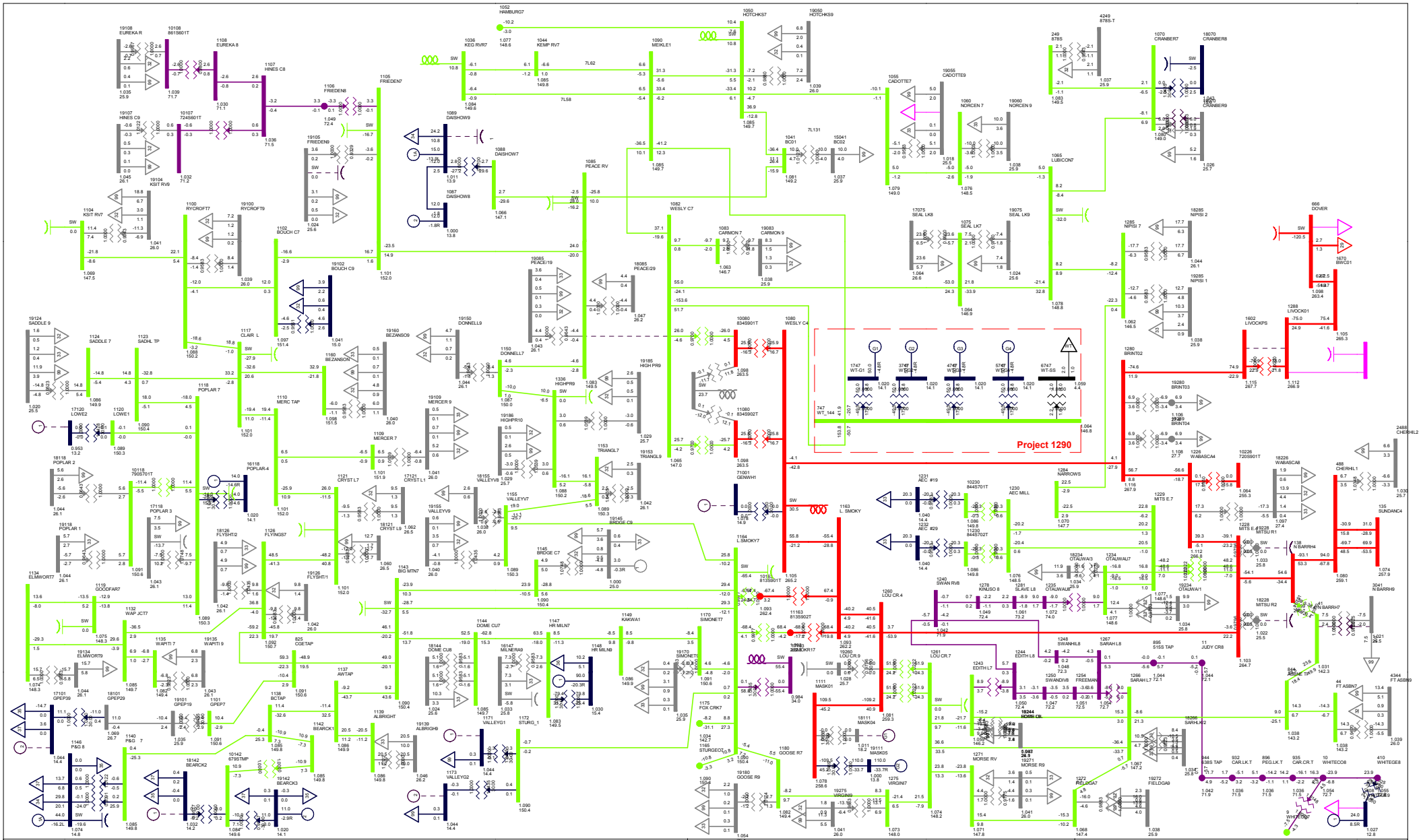
Appendix D2B

Figure: 19

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 009 7Lz7 WESLEYCREEK to WESTPEACE_A.

Whitetail Project 1290 Interconnection Study



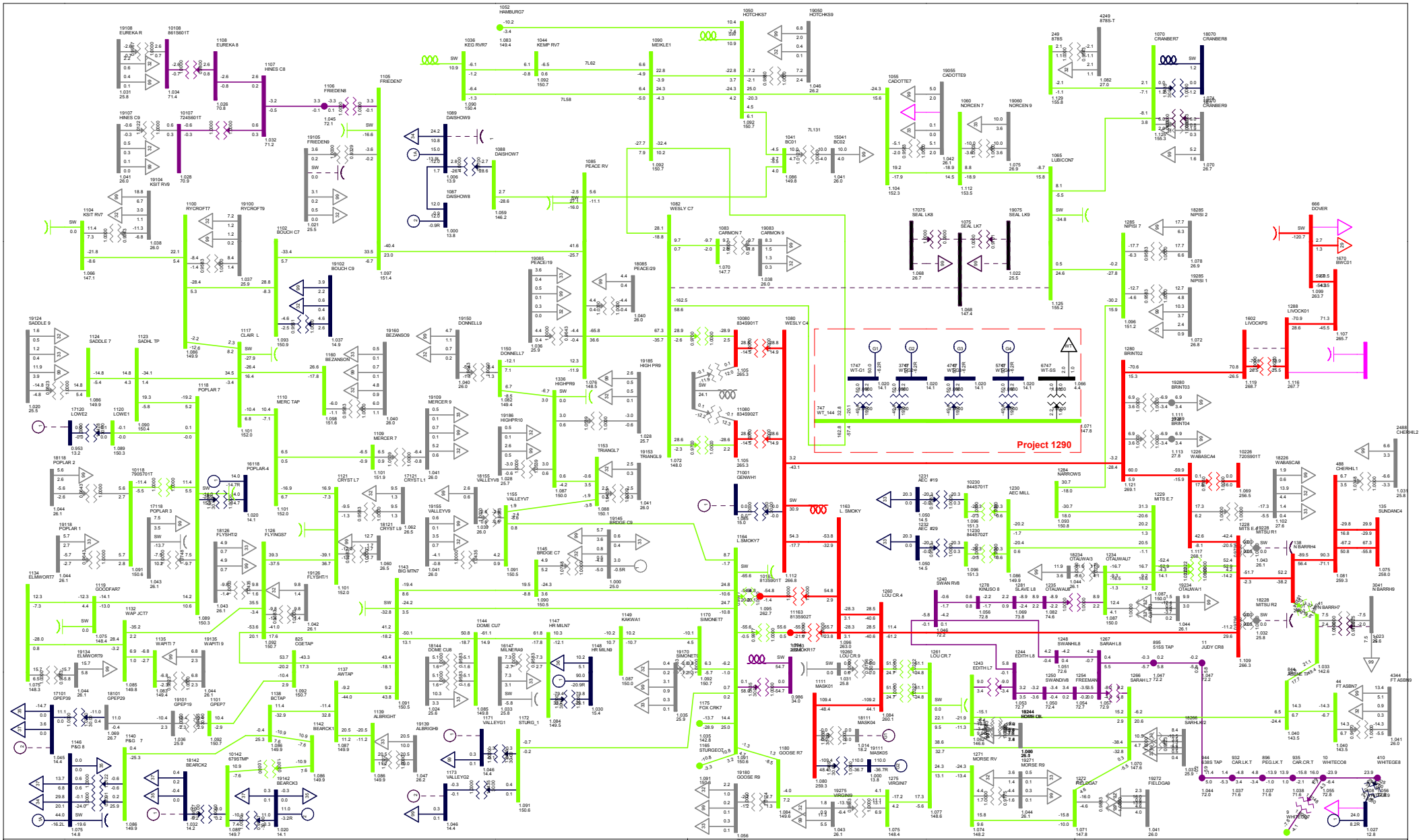
Appendix D2B

Figure: 20

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 009 7Le? WESLEYCREEK to WESTPEACE_B.

Whitetail Project 1290 Interconnection Study



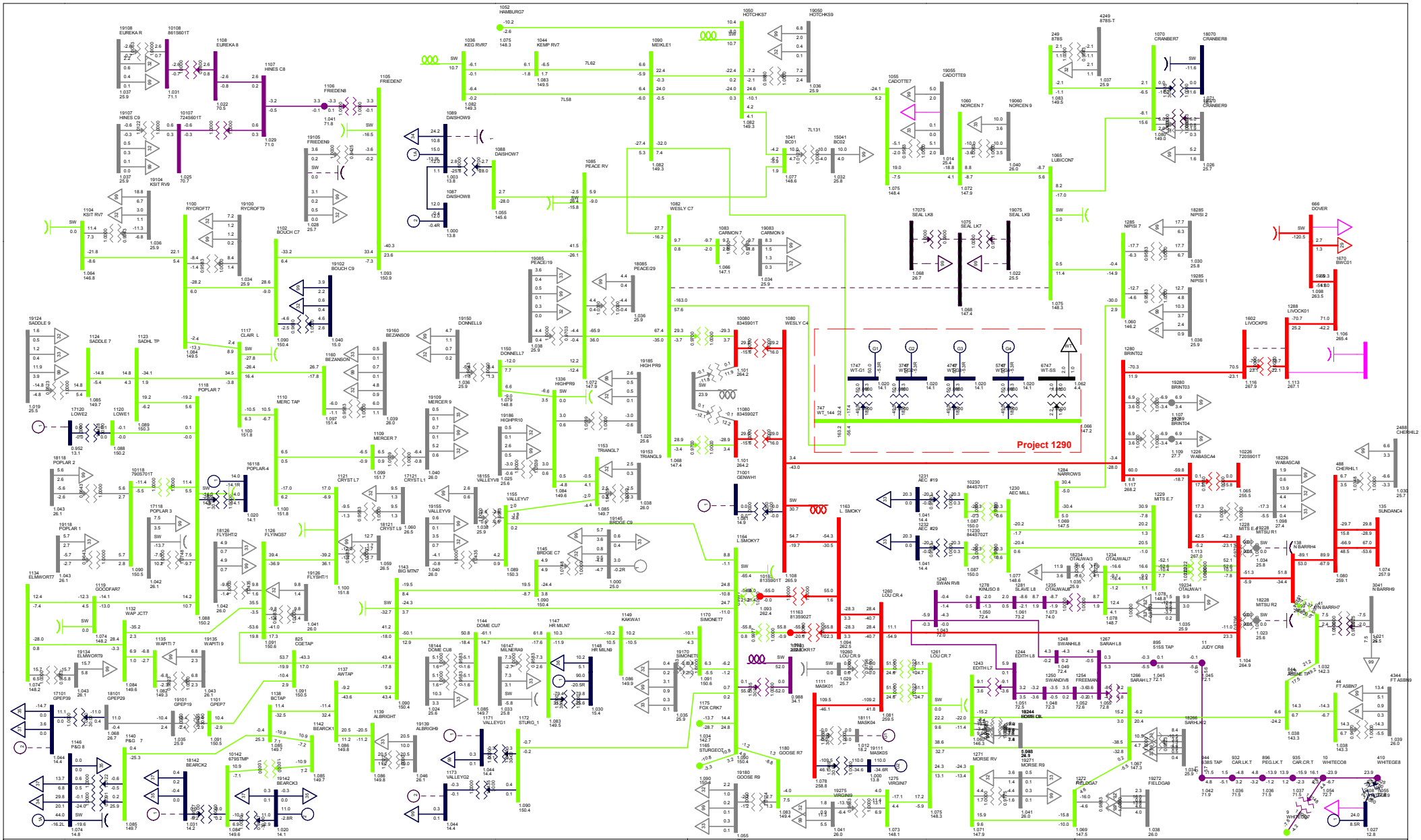
Appendix D2B

Figure: 21

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 010 7L12 WESLEYCREEK to LUBICON_A.

Whitetail Project 1290 Interconnection Study



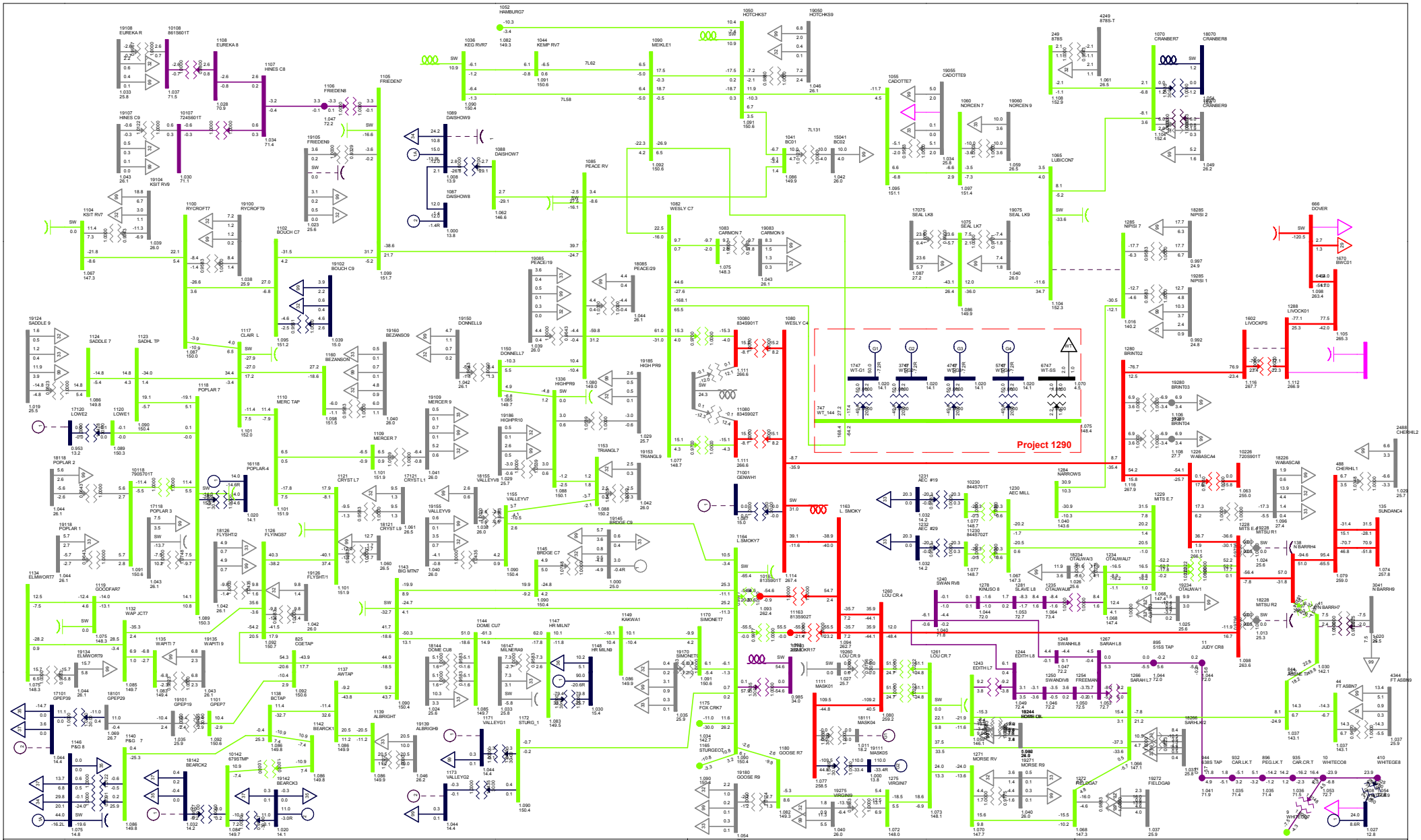
Appendix D2B

Figure: 22

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 010 7L12 WESLEYCREEK to LUBICON_B.

Whitetail Project 1290 Interconnection Study



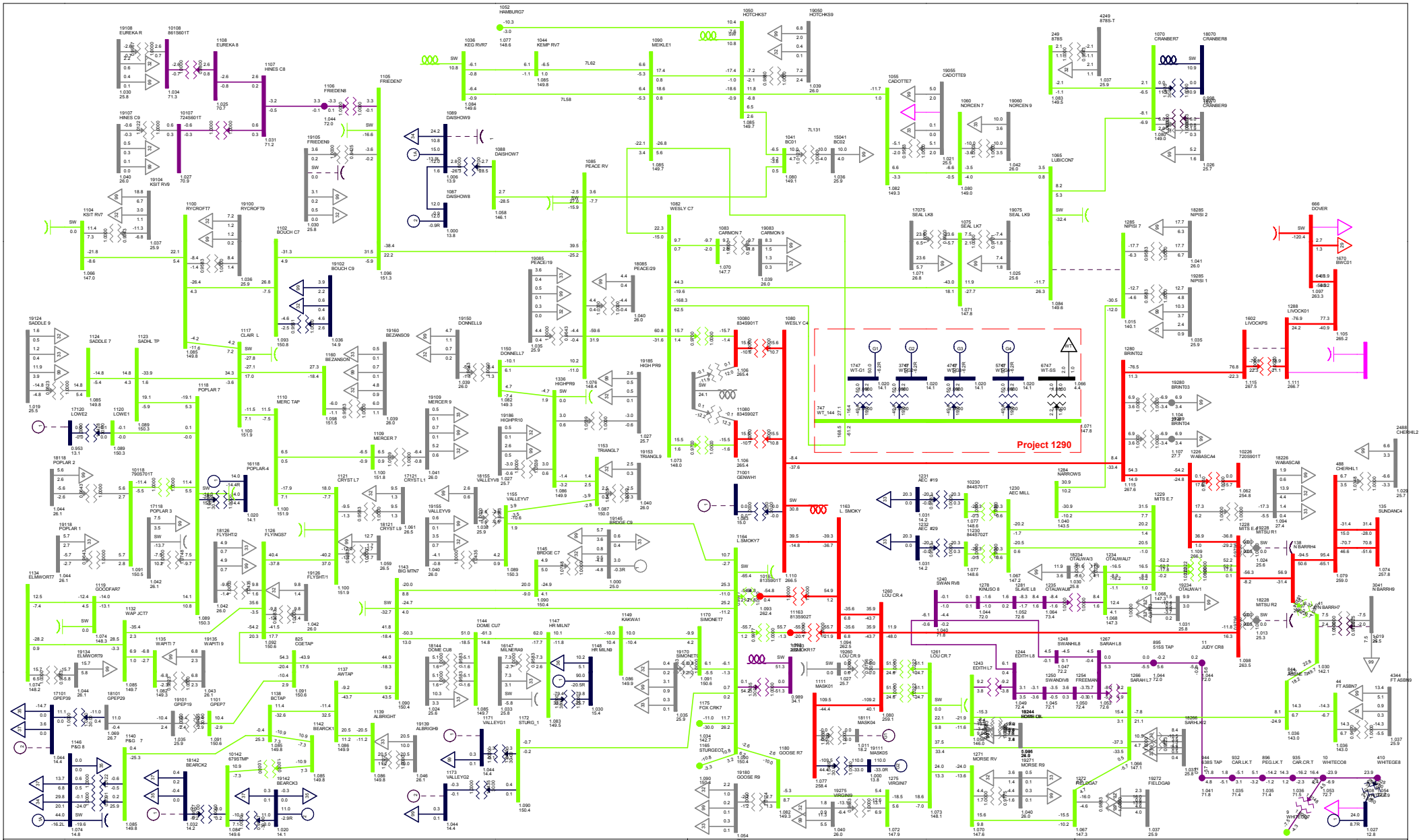
Appendix D2B

Figure: 23

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 011 7Lo1 LUBICON to NIPISI_A.

Whitetail Project 1290 Interconnection Study



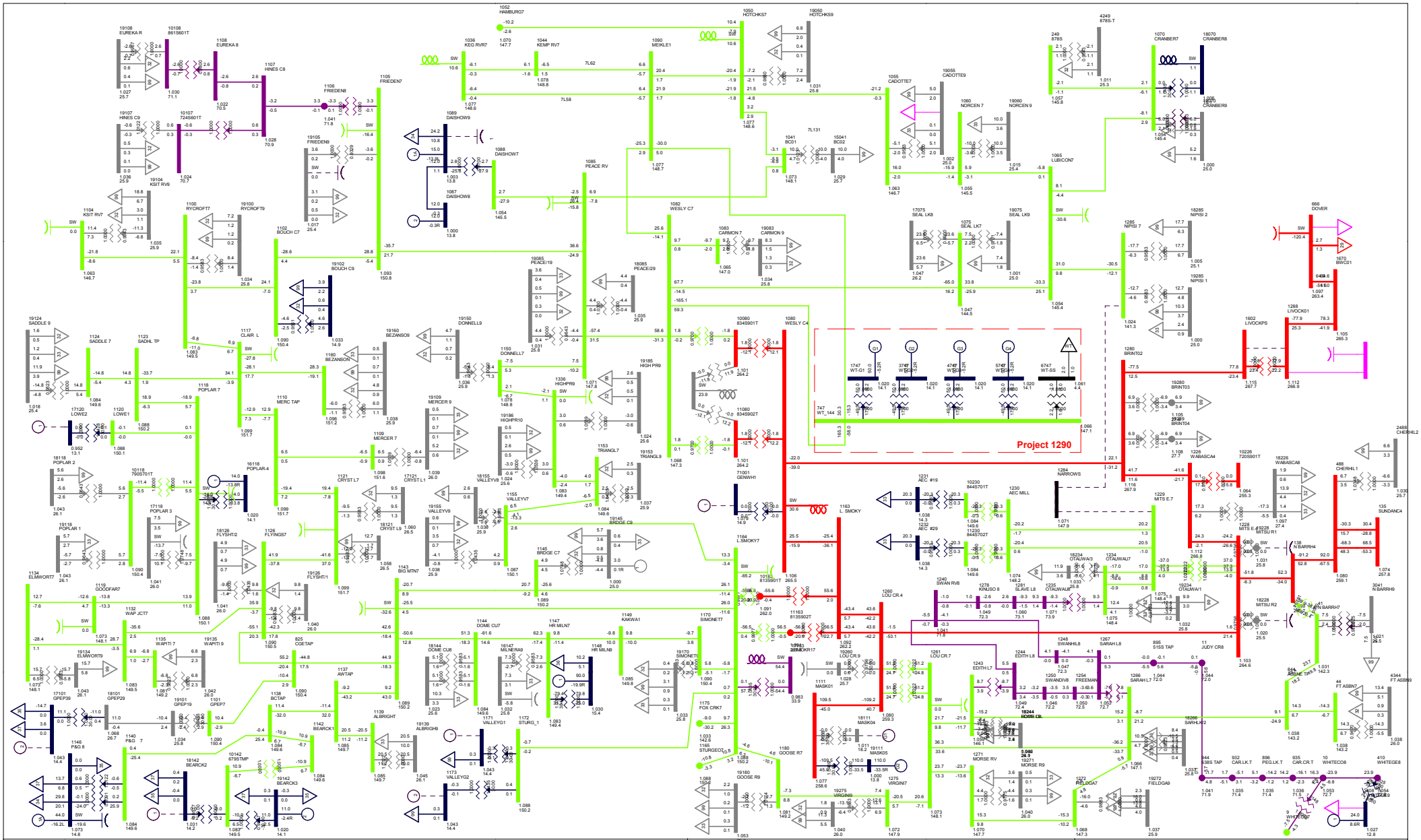
Appendix D2B

Figure: 24

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 011 7Lo1 LUBICON to NIPISI_B.

Whitetail Project 1290 Interconnection Study



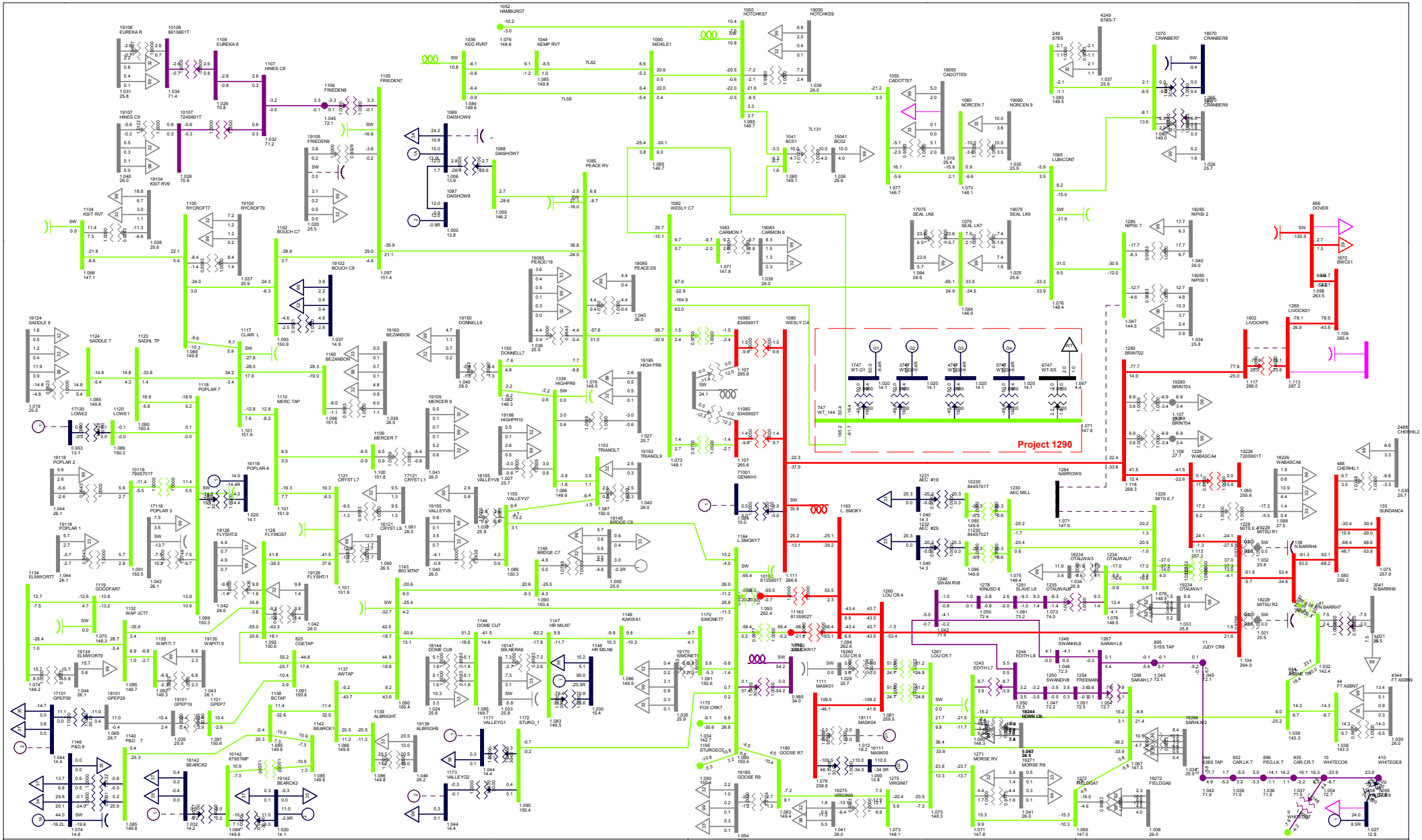
Appendix D2B

Figure: 25

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 012 7L23 NIPISI to MITSUE_A.

Whitetail Project 1290 Interconnection Study



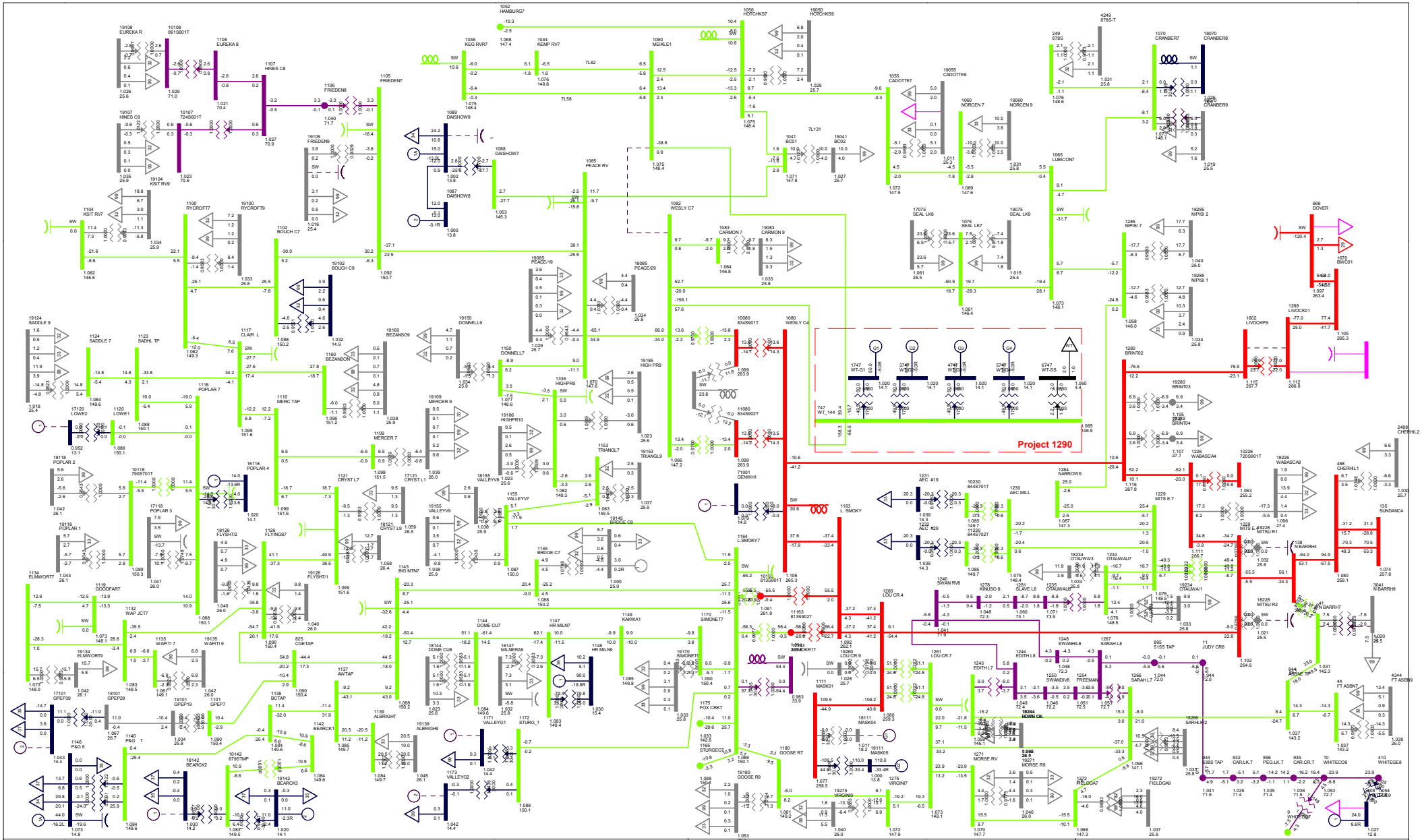
Appendix D2B

Figure: 26

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 012 7L23 NIPISI to MITSUE_B.

Whitetail Project 1290 Interconnection Study



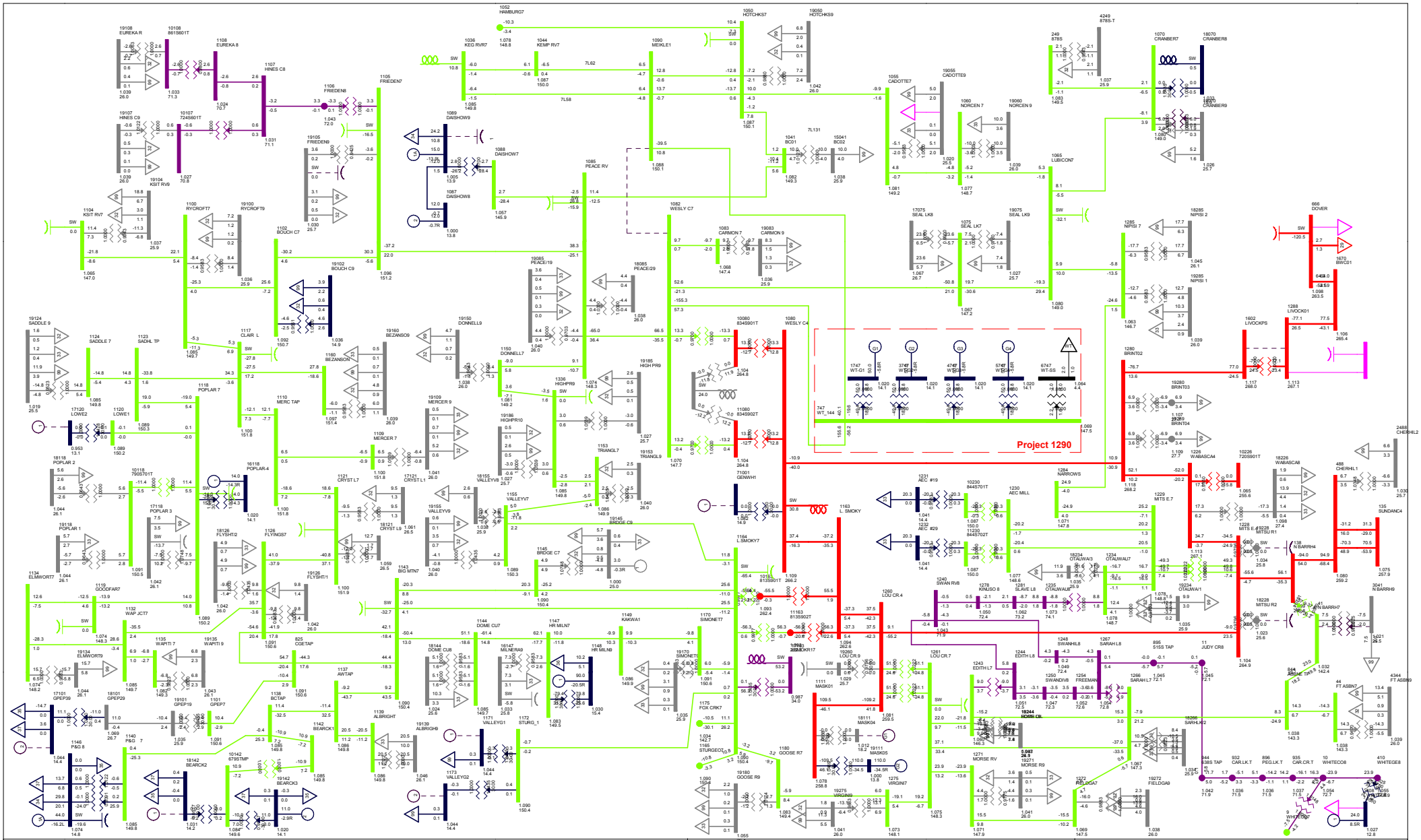
Appendix D2B

Figure: 27

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 013 7L131 WESLEYCREEK to Meikle_A.

Whitetail Project 1290 Interconnection Study



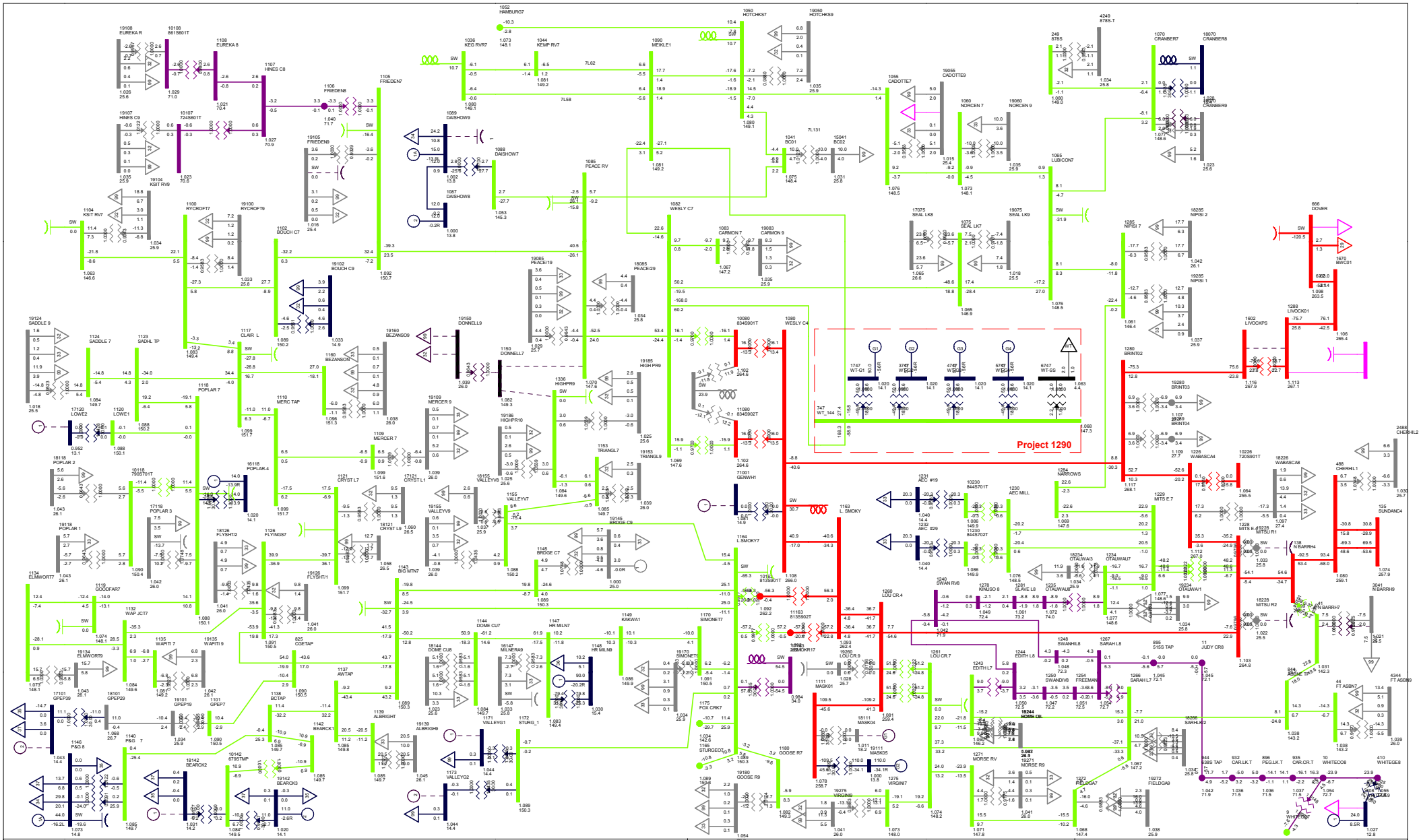
Appendix D2B

Figure: 28

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 013 7L131 WESLEYCREEK to Meikle_B.

Whitetail Project 1290 Interconnection Study



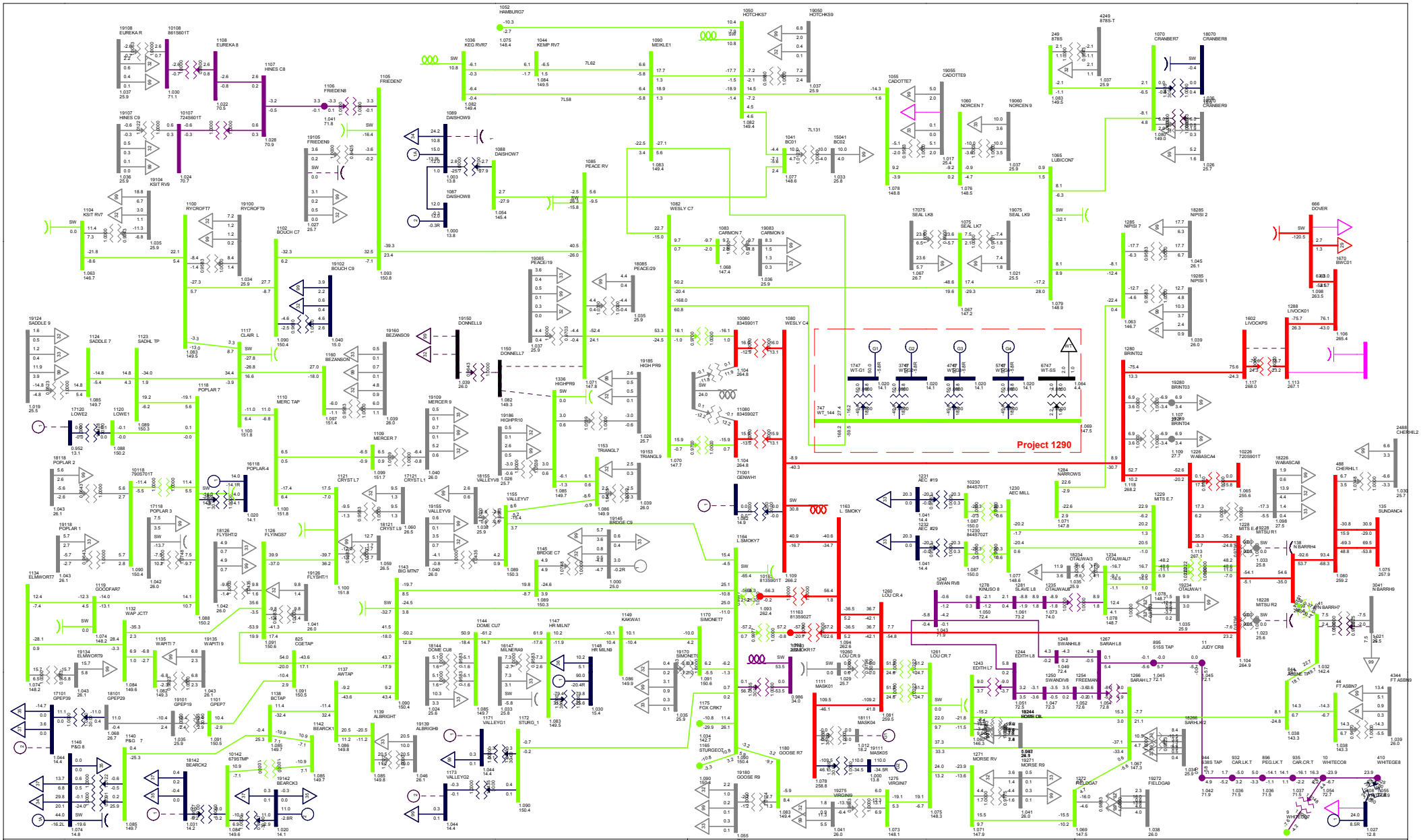
Appendix D2B

Figure: 29

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 014 7Lo6 WESTPEACE to HIGHPRAIRIE_A.

Whitetail Project 1290 Interconnection Study



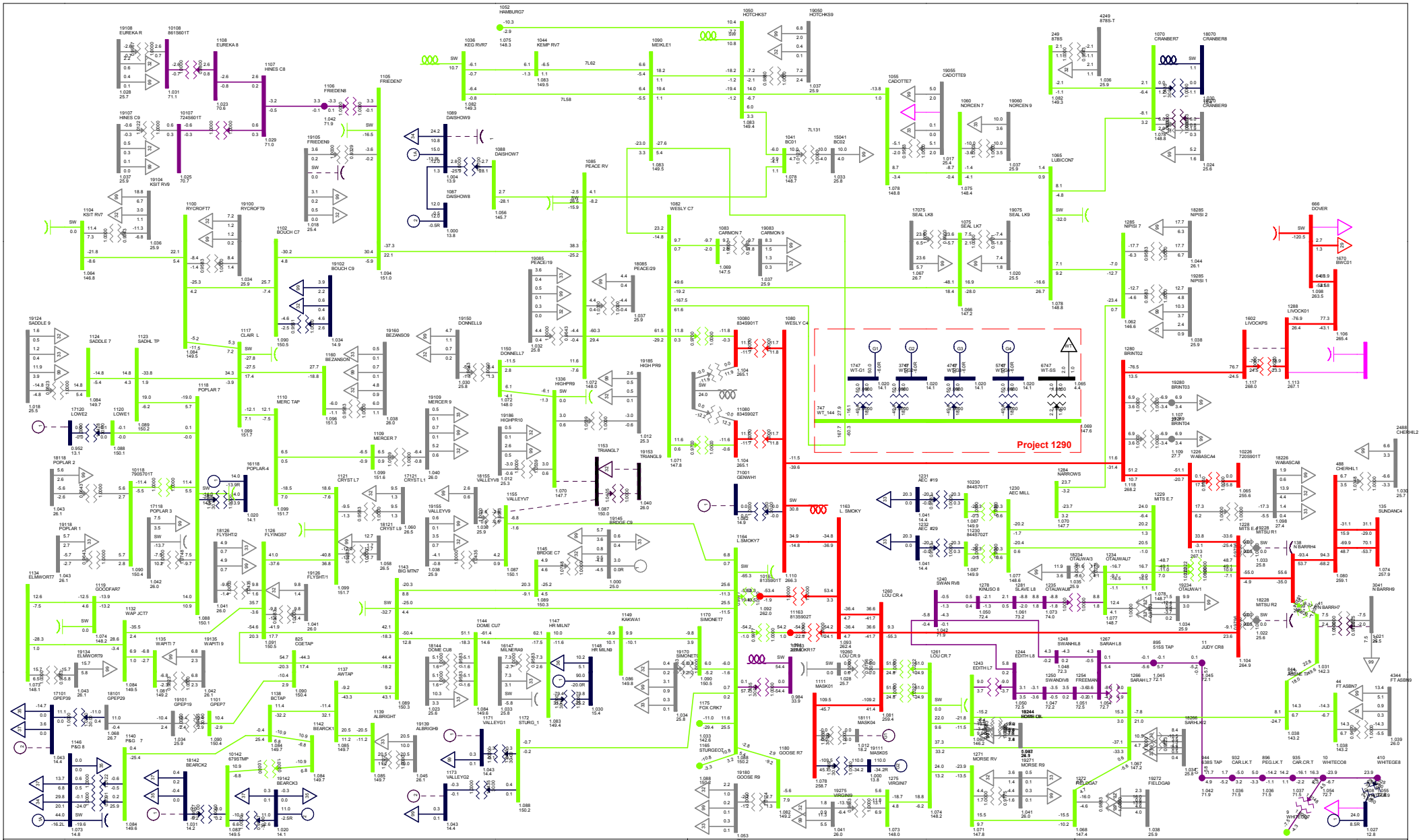
Appendix D2B

Figure: 30

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 014 7Lo6 WESTPEACE to HIGHPRAIRIE_B.

Whitetail Project 1290 Interconnection Study



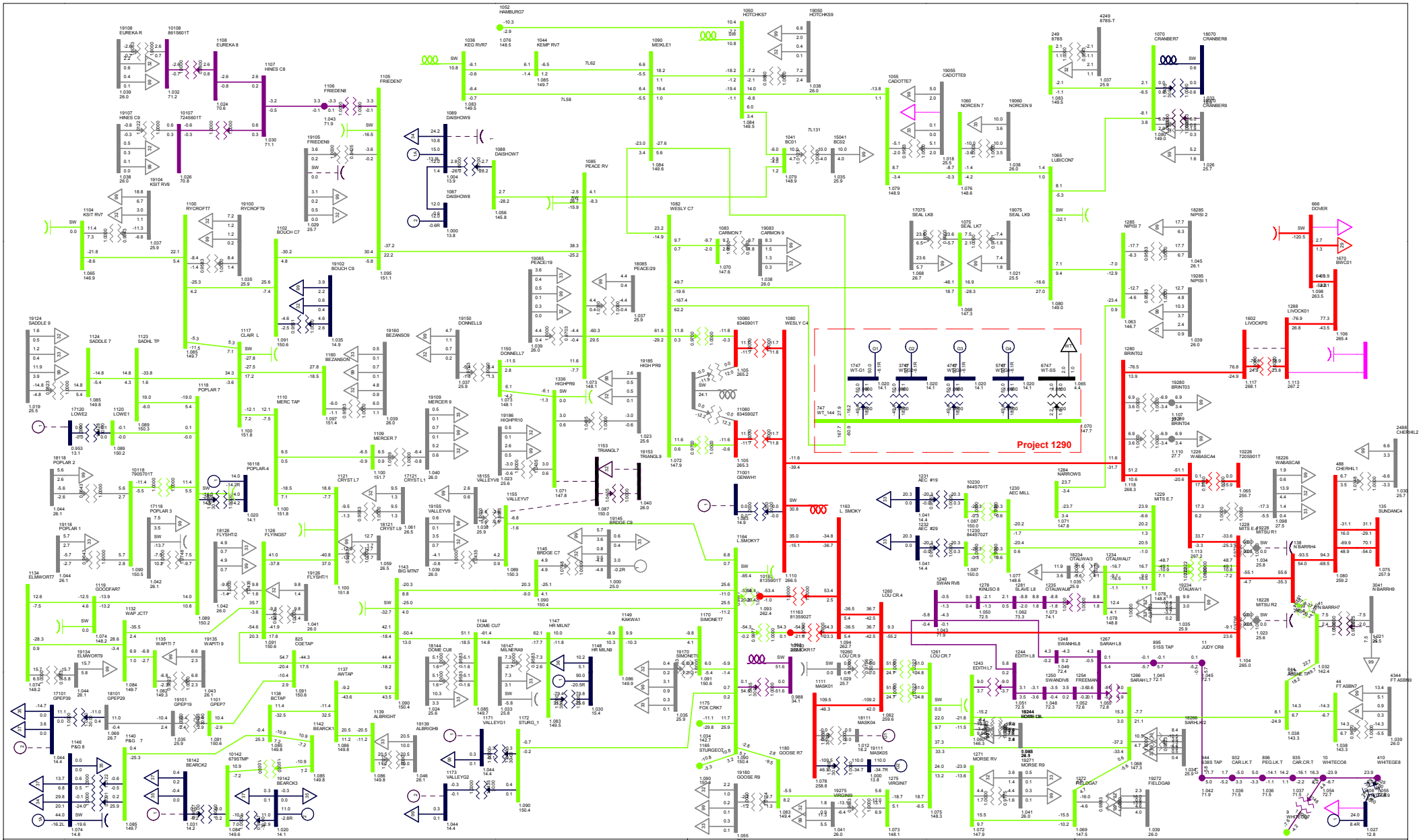
Appendix D2B

Figure: 31

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 015 7L46 HIGHPRAIRIE to VALLEYVIEW_A.

Whitetail Project 1290 Interconnection Study



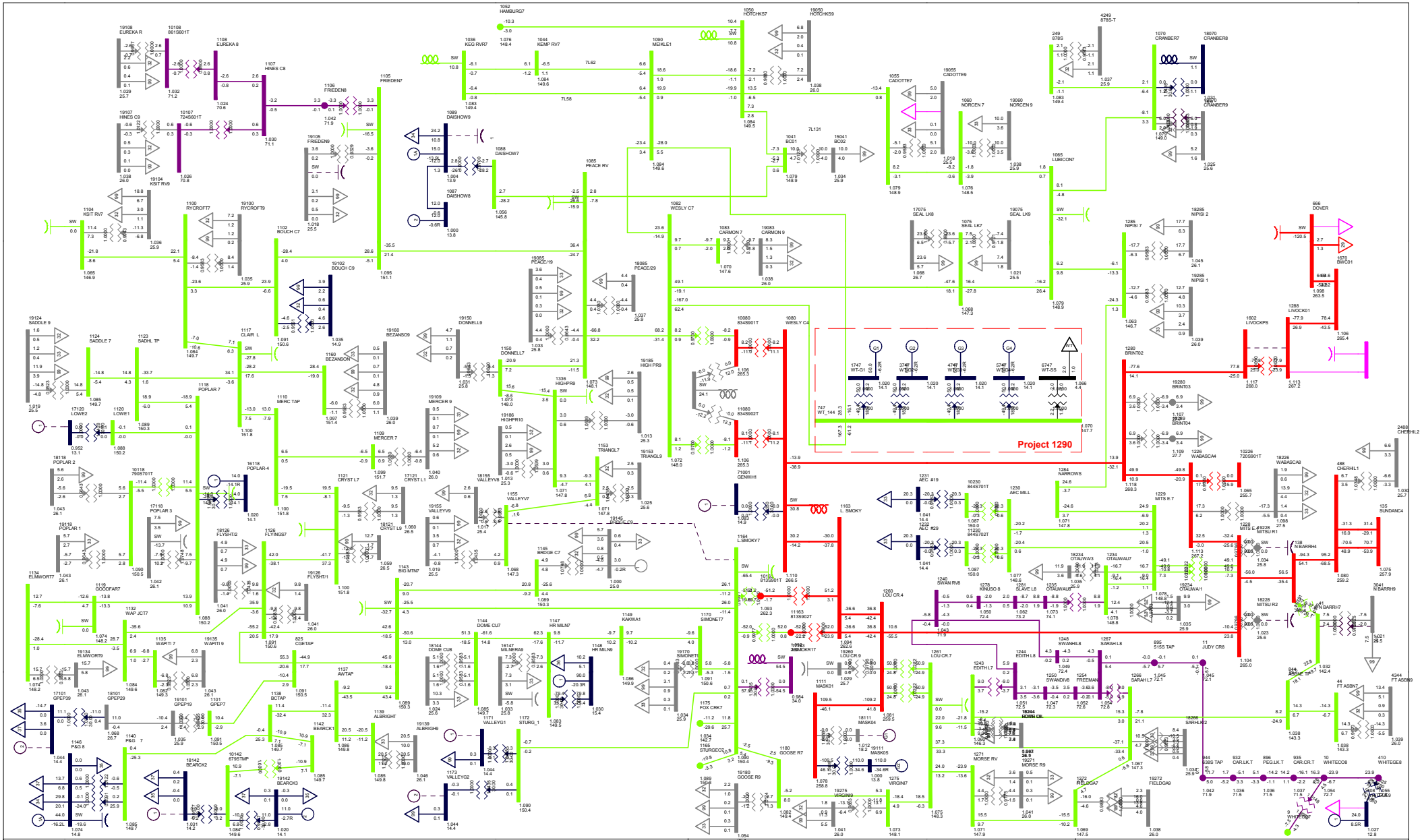
Appendix D2B

Figure: 32

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 015 7L46 HIGHPRAIRIE to VALLEYVIEW_B.

Whitetail Project 1290 Interconnection Study



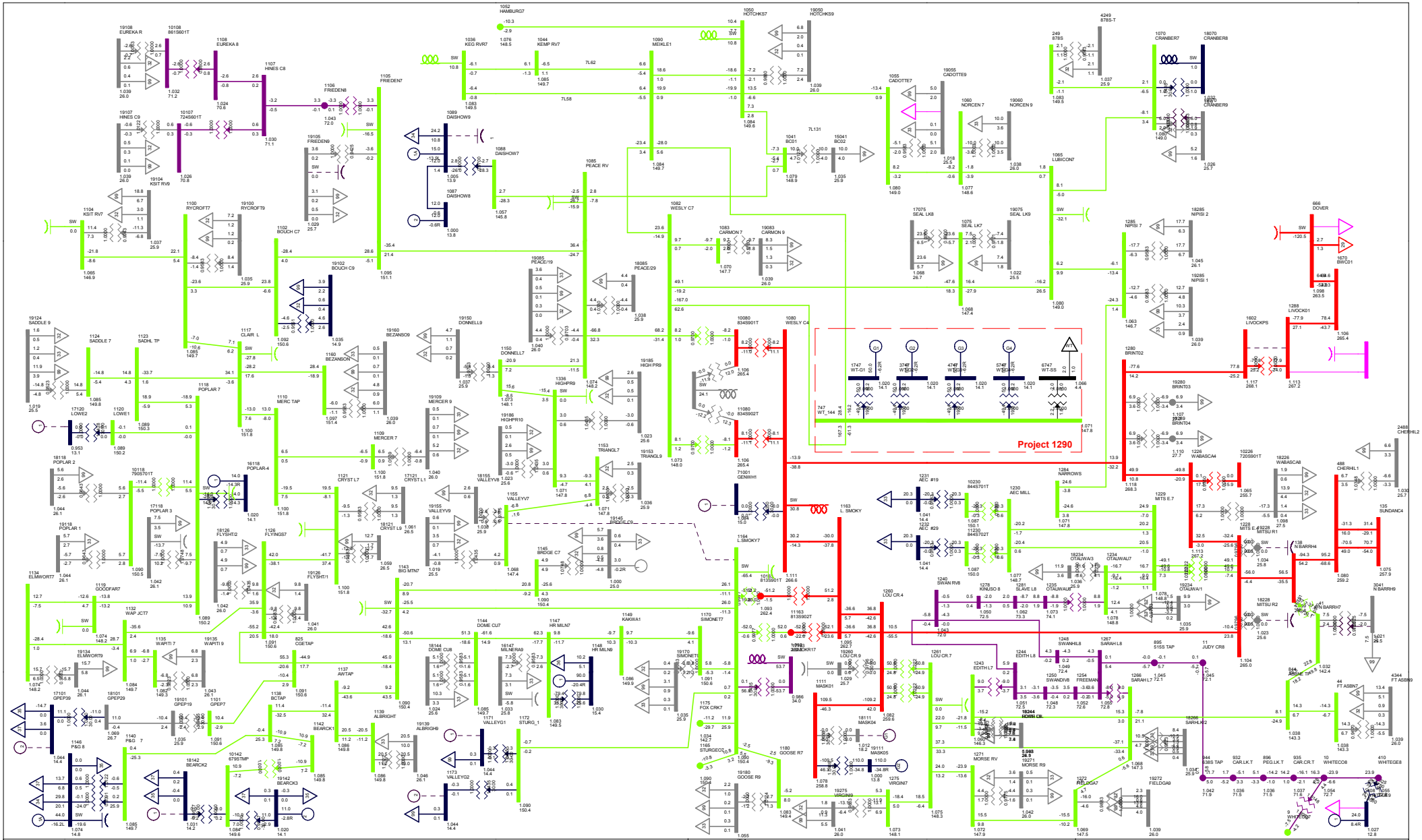
Appendix D2B

Figure: 33

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 016 7Lo4 VALLEYVIEW to LITTLESMOKY_A.

Whitetail Project 1290 Interconnection Study



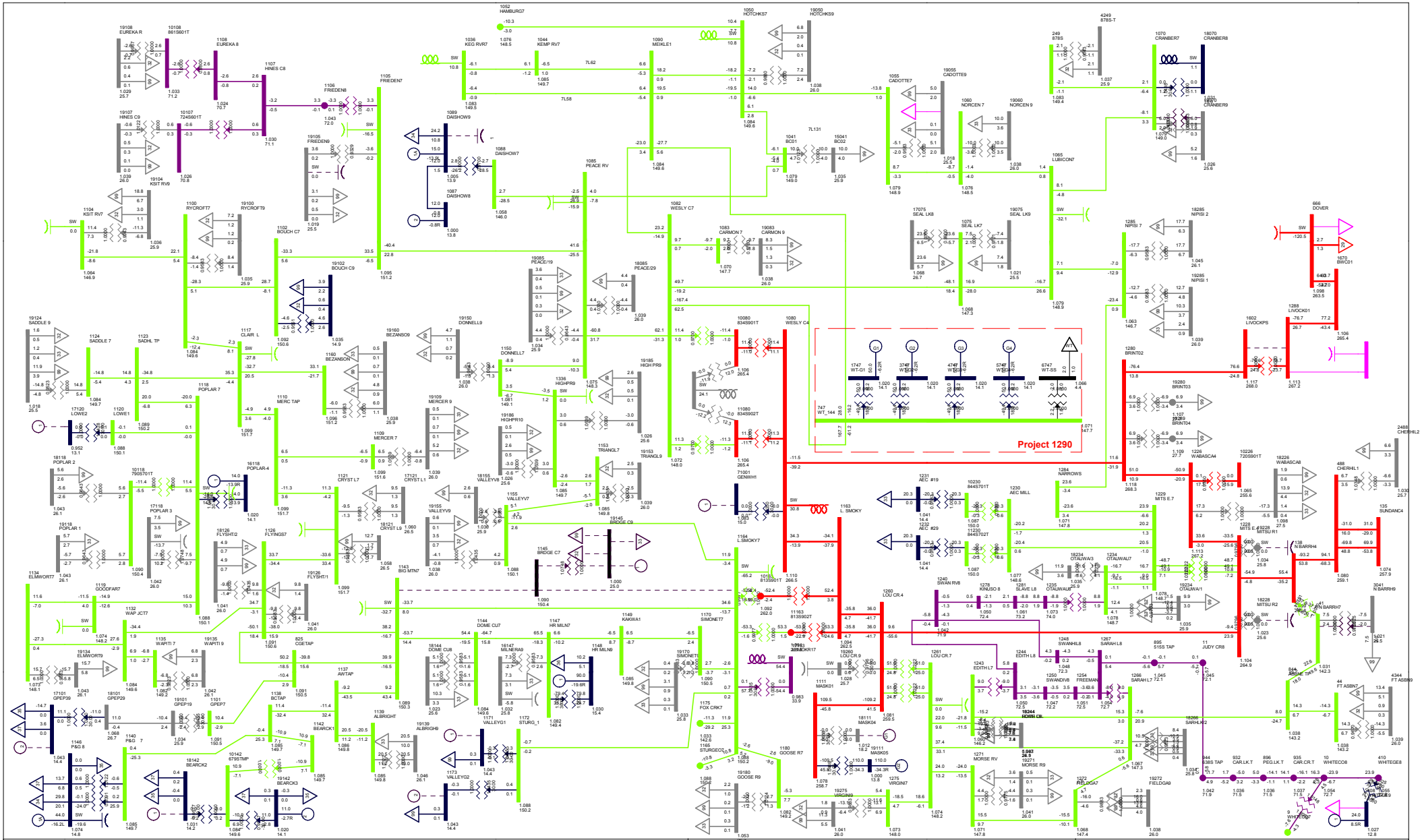
Appendix D2B

Figure: 34

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 016 7Lo4 VALLEYVIEW to LITTLESMOKY_B.

Whitetail Project 1290 Interconnection Study



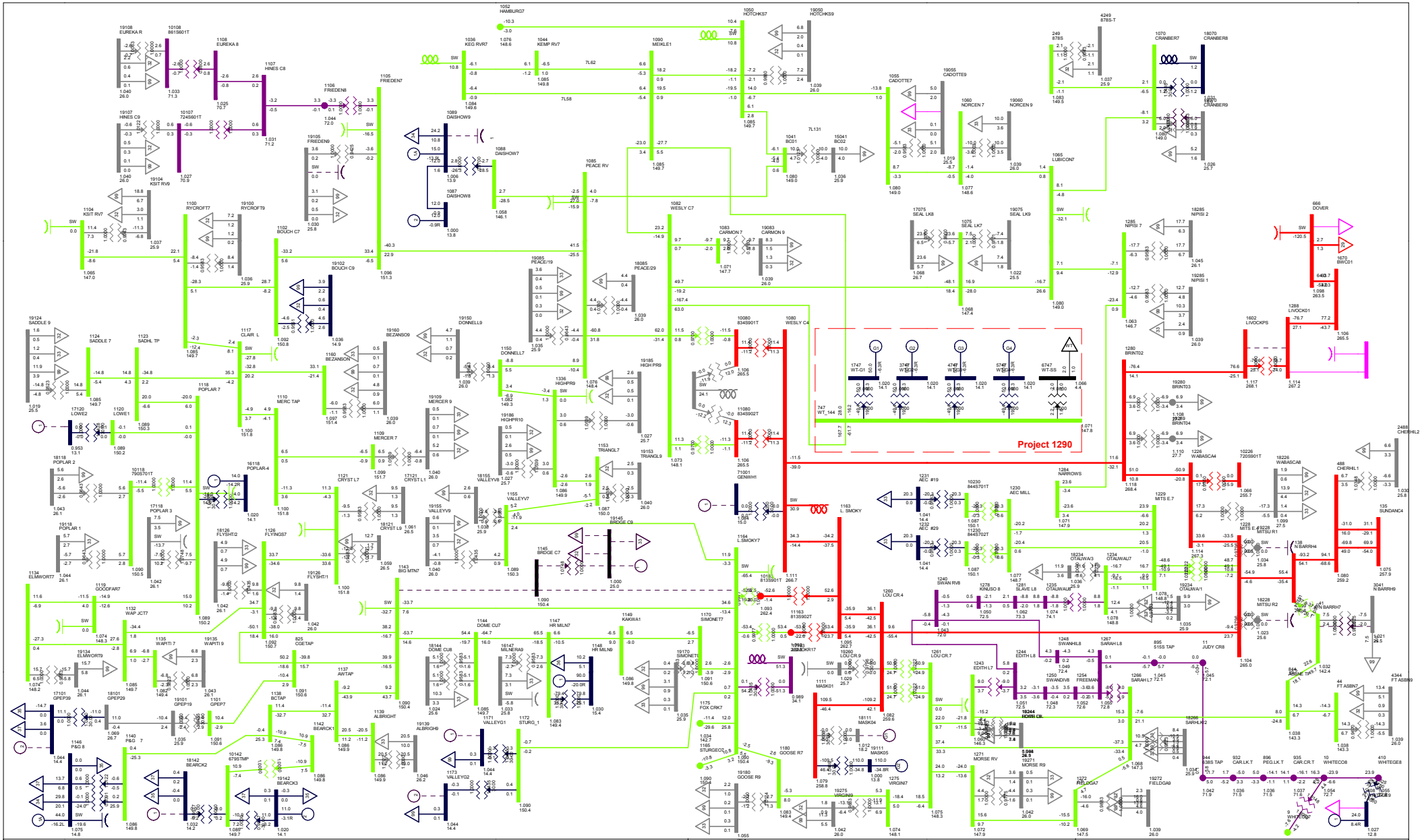
Appendix D2B

Figure: 35

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 017 7L45 ETT LESMOKY to BIGMOUNTAIN_A.

Whitetail Project 1290 Interconnection Study



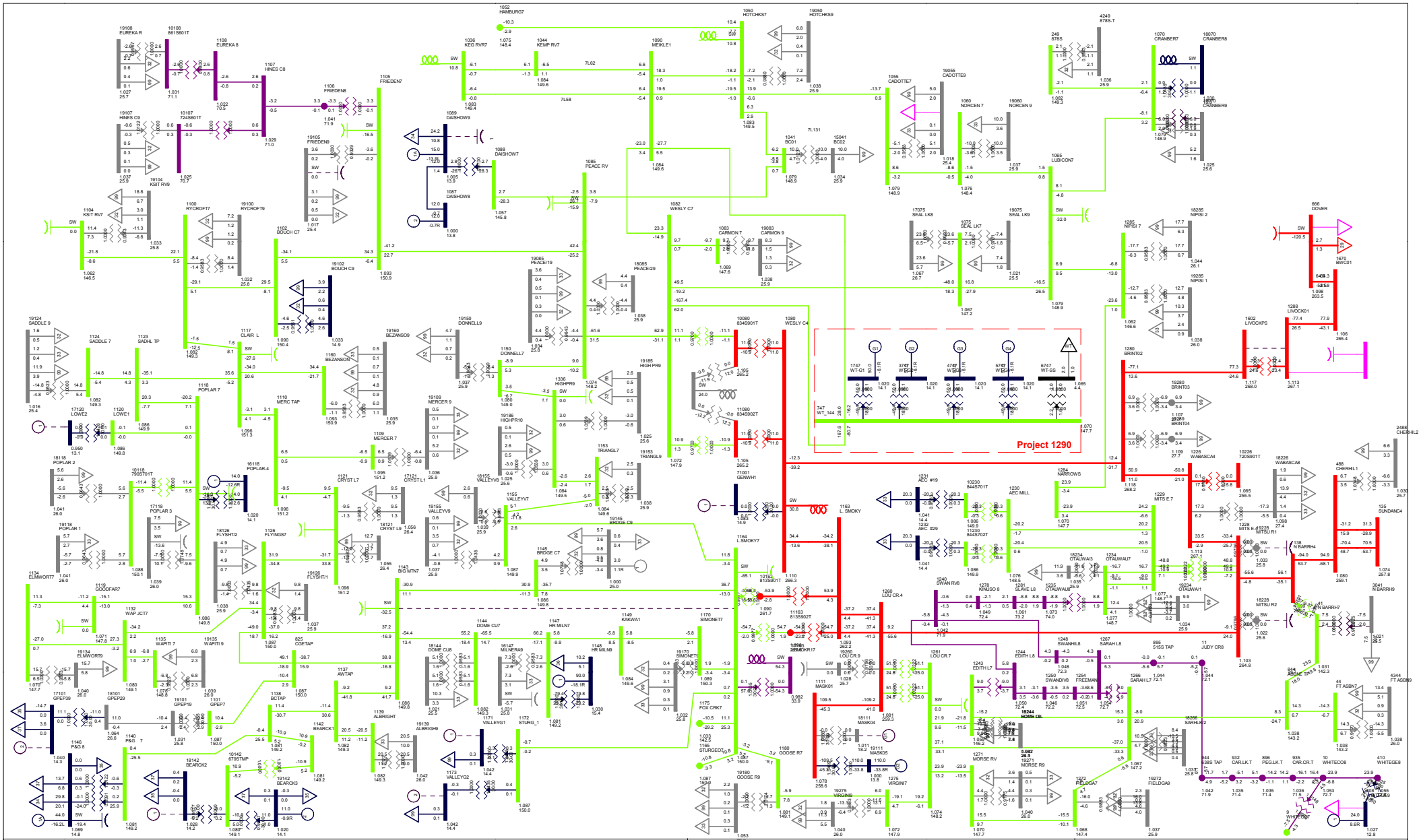
Appendix D2B

Figure: 36

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 017 7L45 [illegible] LESMOKY to BIGMOUNTAIN_B.

Whitetail Project 1290 Interconnection Study



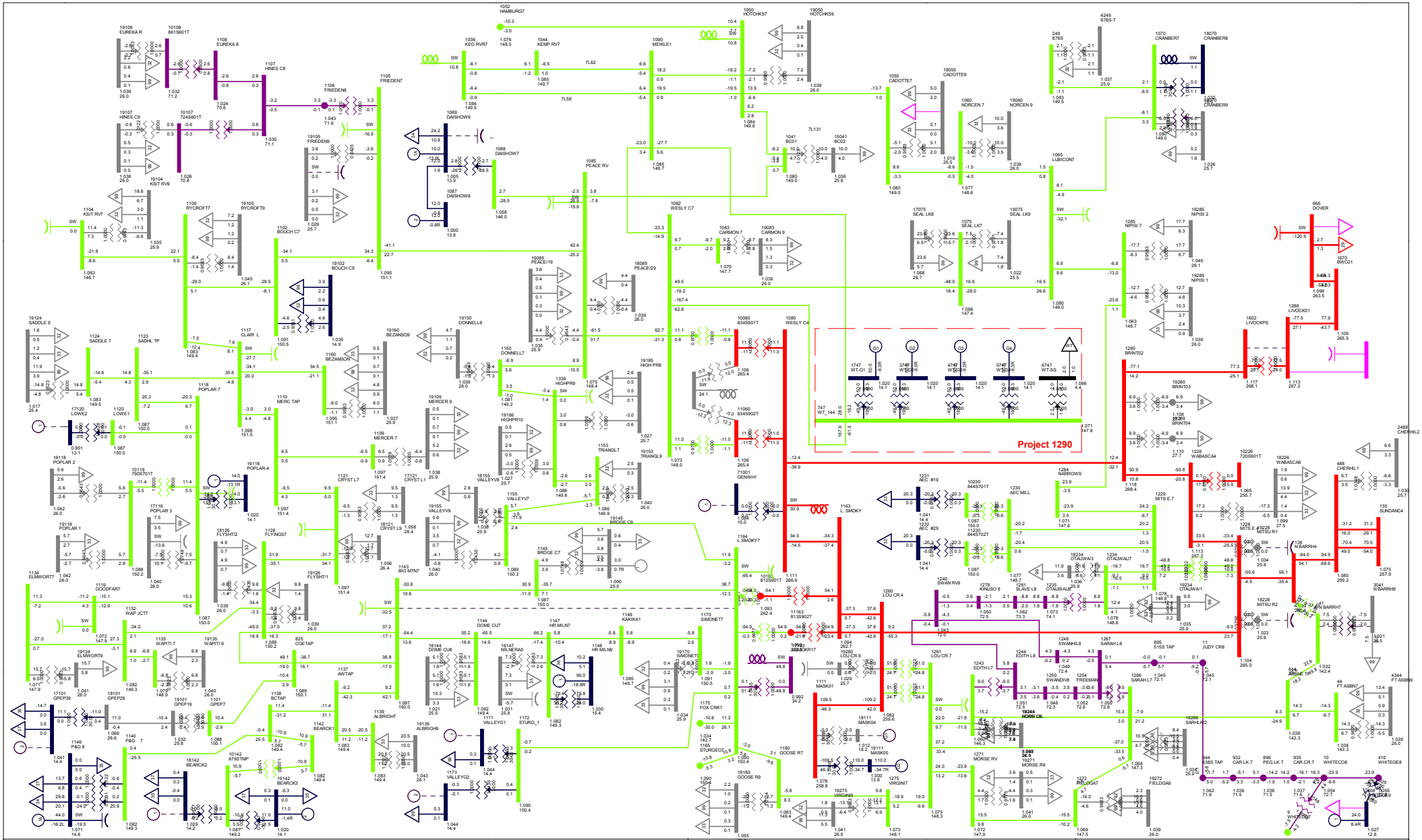
Appendix D2B

Figure: 37

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_A.

Whitetail Project 1290 Interconnection Study



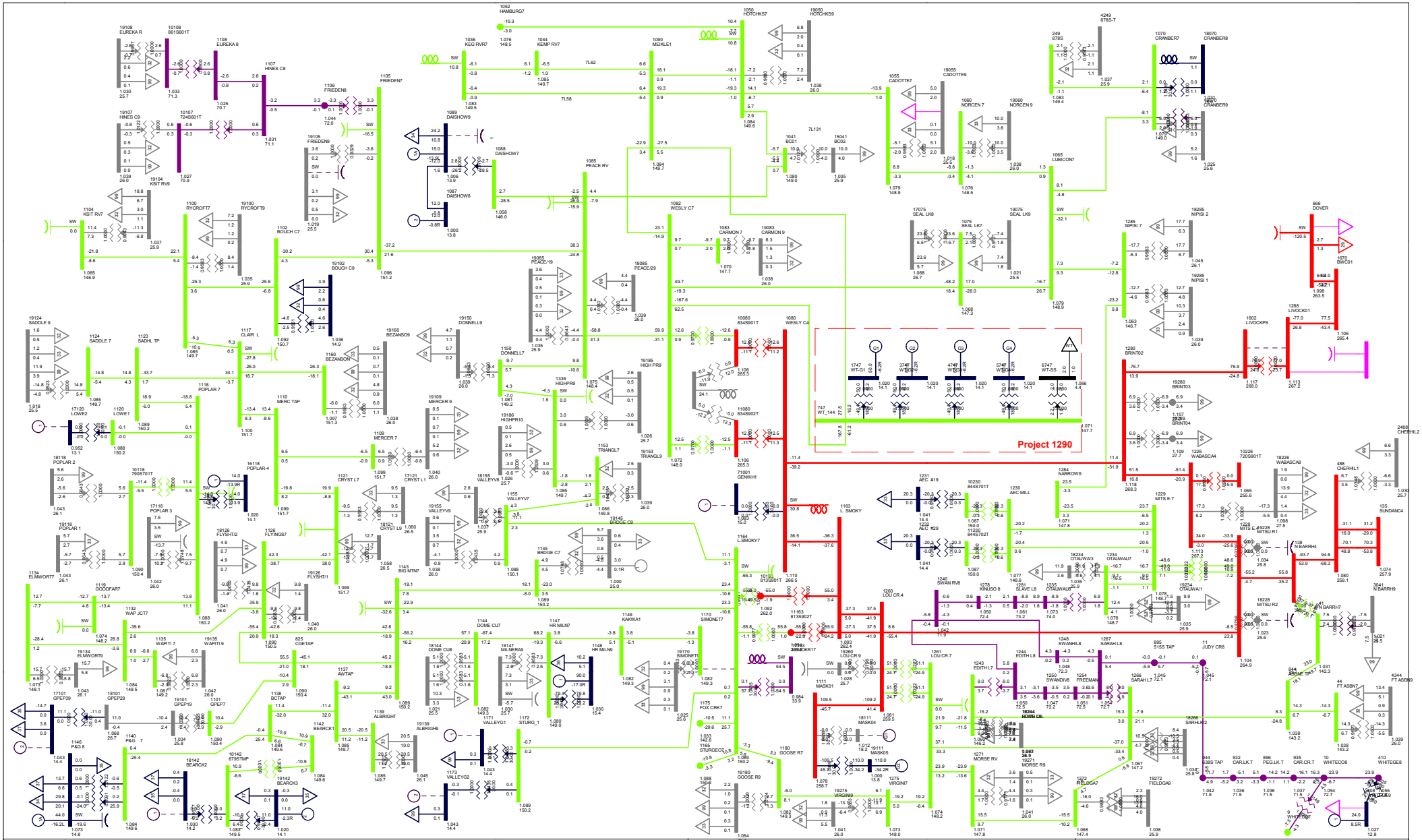
Appendix D2B

Figure: 38

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_B.

Whitetail Project 1290 Interconnection Study



Appendix D2B

Figure: 39

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 019 7L40 LI I LESMOKY to SIMONETTE_A.

Whitetail Project 1290 Interconnection Study

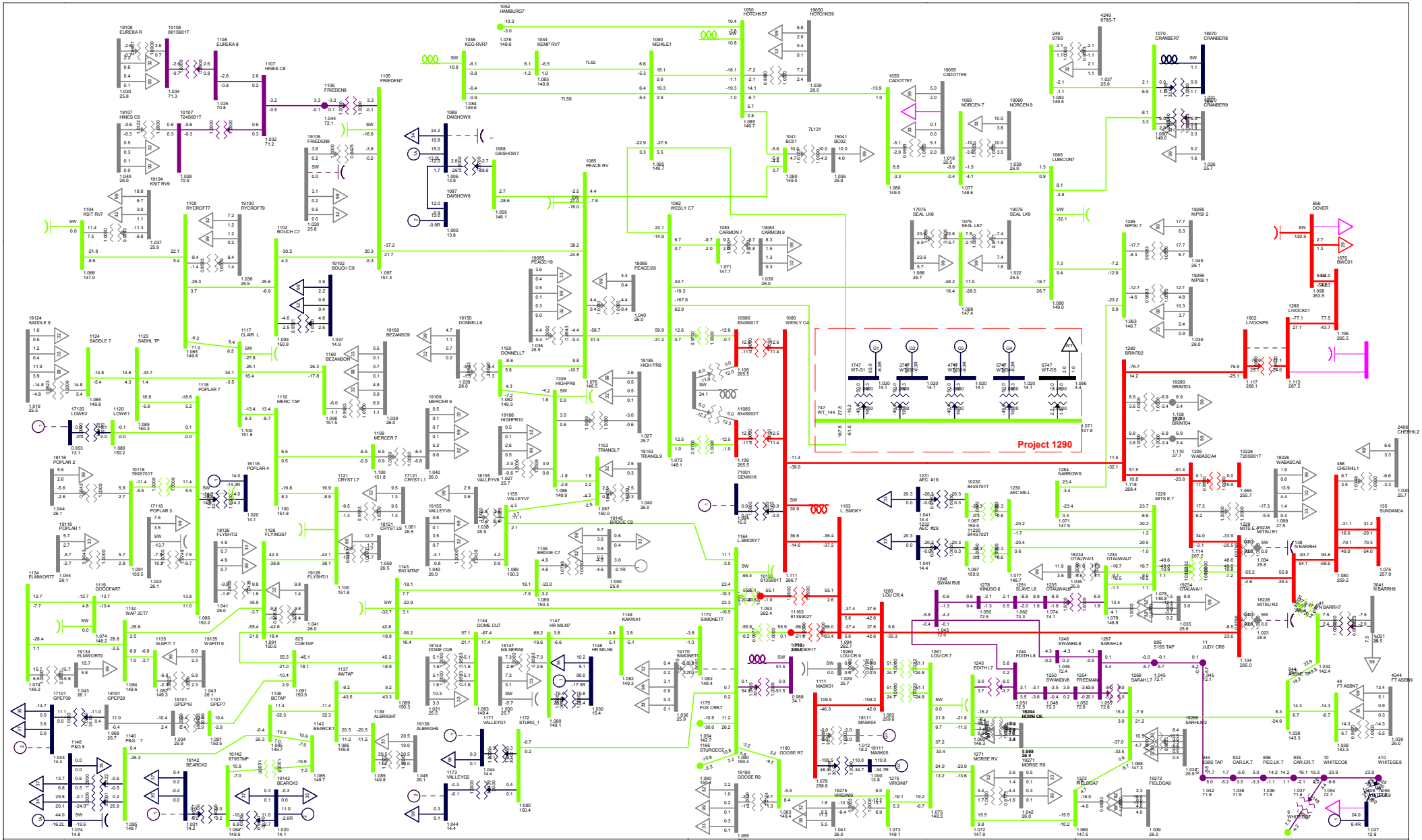


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Figure: 40

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 019 7L40 LI1 LESMOKY to SIMONETTE_B.

Whitetail Project 1290 Interconnection Study

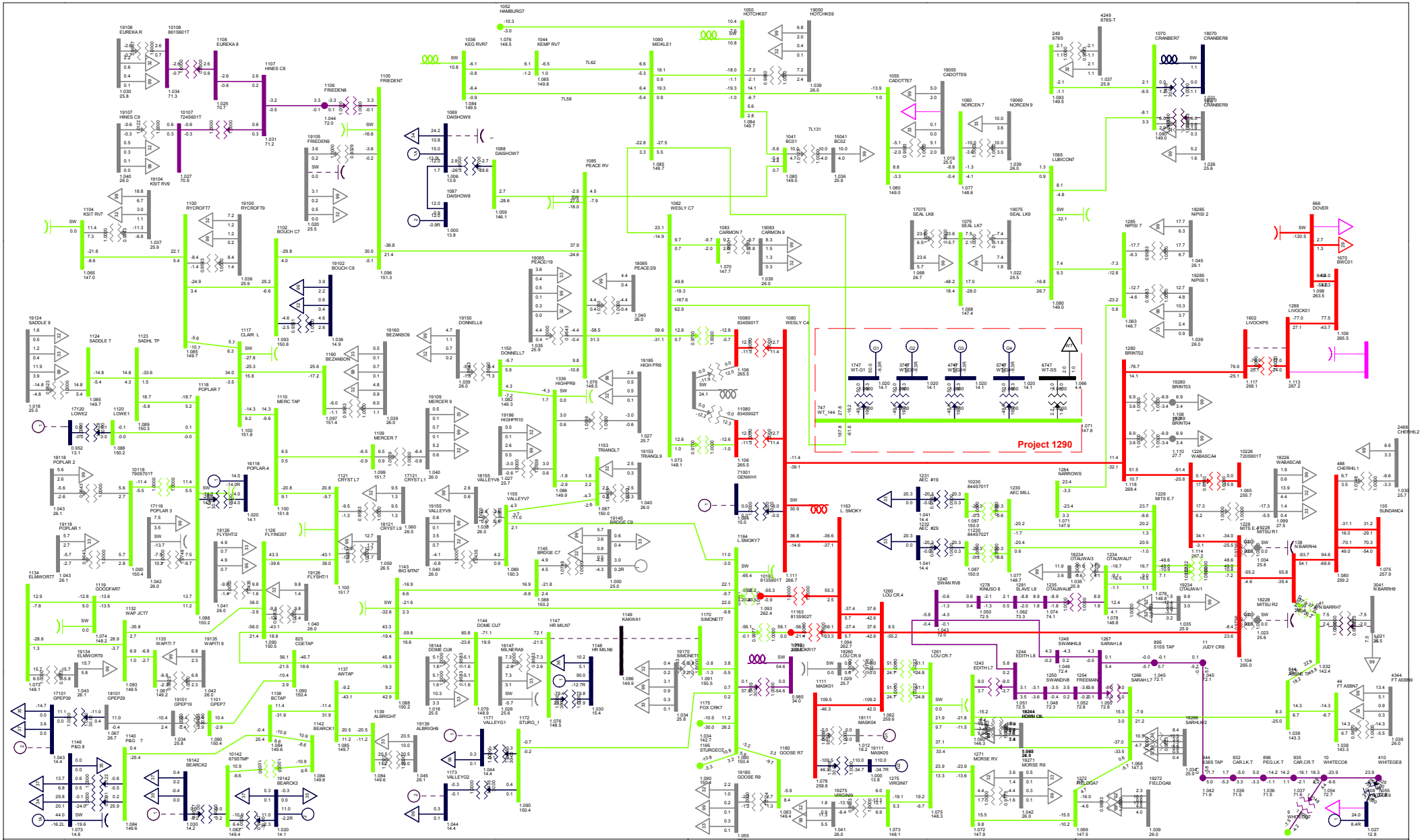

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Figure: 41

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 020 7Lou SIMONETTE to HR MILNER_A.

Whitetail Project 1290 Interconnection Study

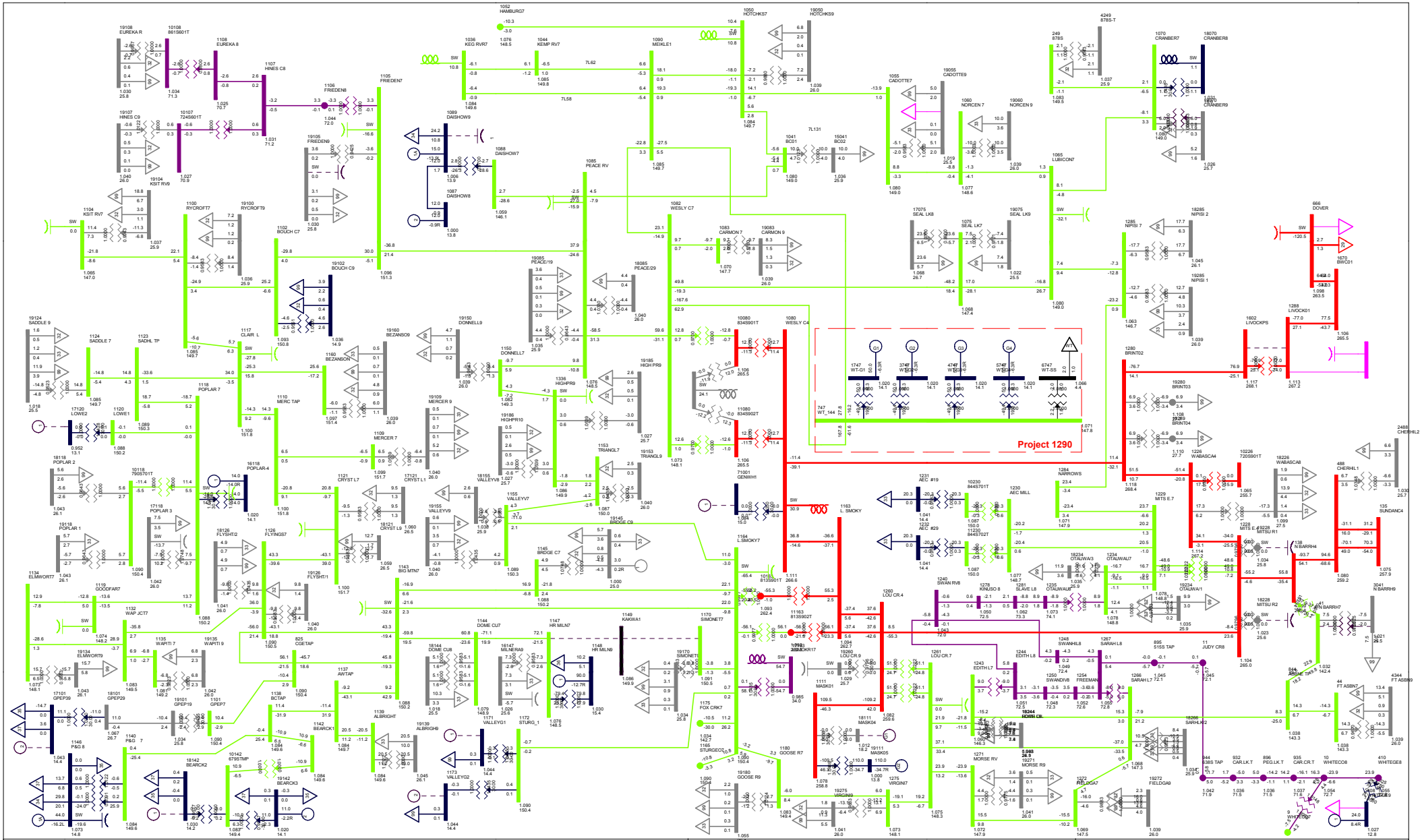

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Figure: 42

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 020 7Lou SIMONETTE to HR MILNER_B.

Whitetail Project 1290 Interconnection Study

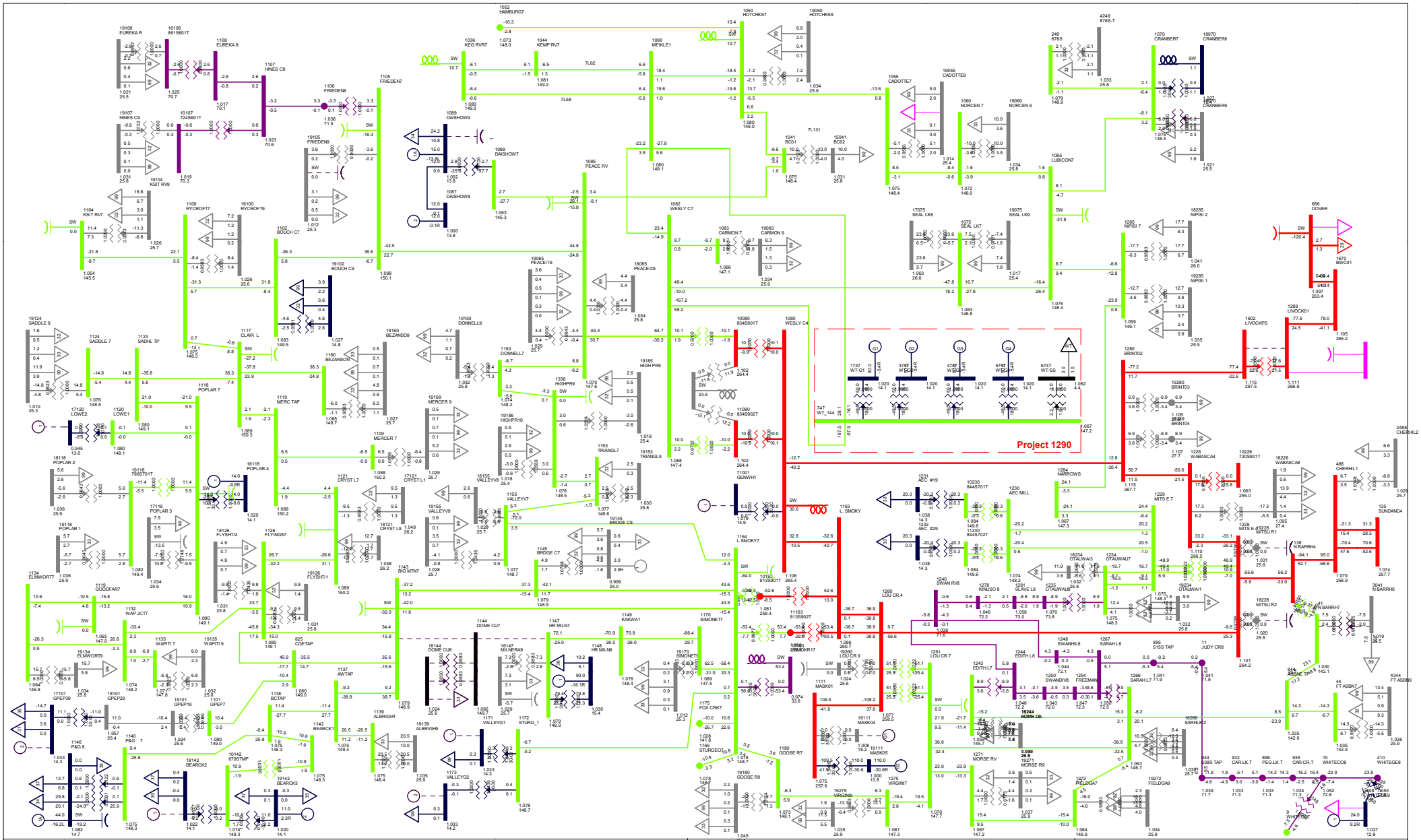

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Figure: 43

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 021 7Lz0 HR MILNER to BIGMOUNTAIN_A.

Whitetail Project 1290 Interconnection Study

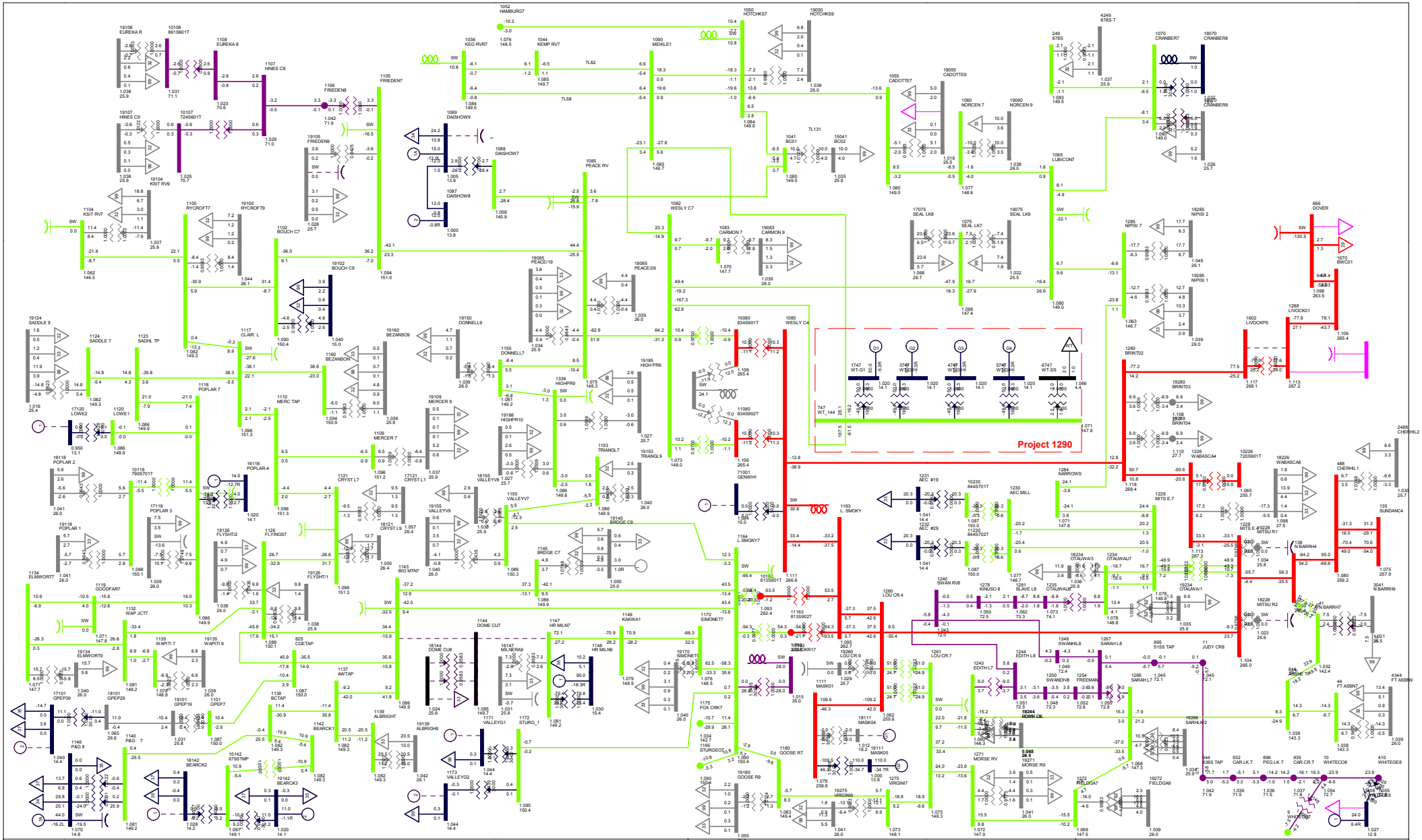

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Figure: 44

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 021 7Lz0 HR MILNER to BIGMOUNTAIN_B.

Whitetail Project 1290 Interconnection Study

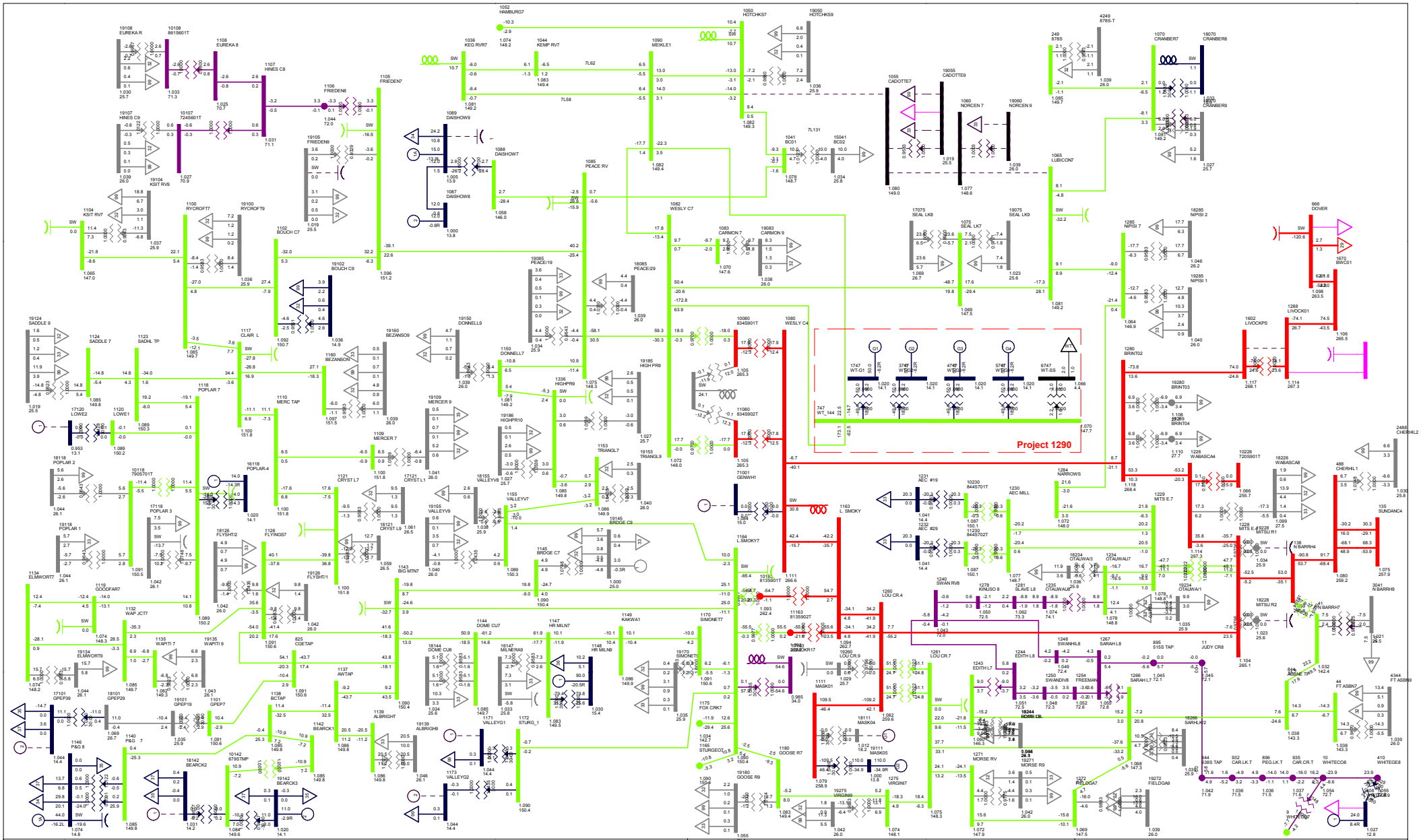

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Figure: 45

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 022 7Le3 HOTCHKISS to LUBICON_A.

Whitetail Project 1290 Interconnection Study

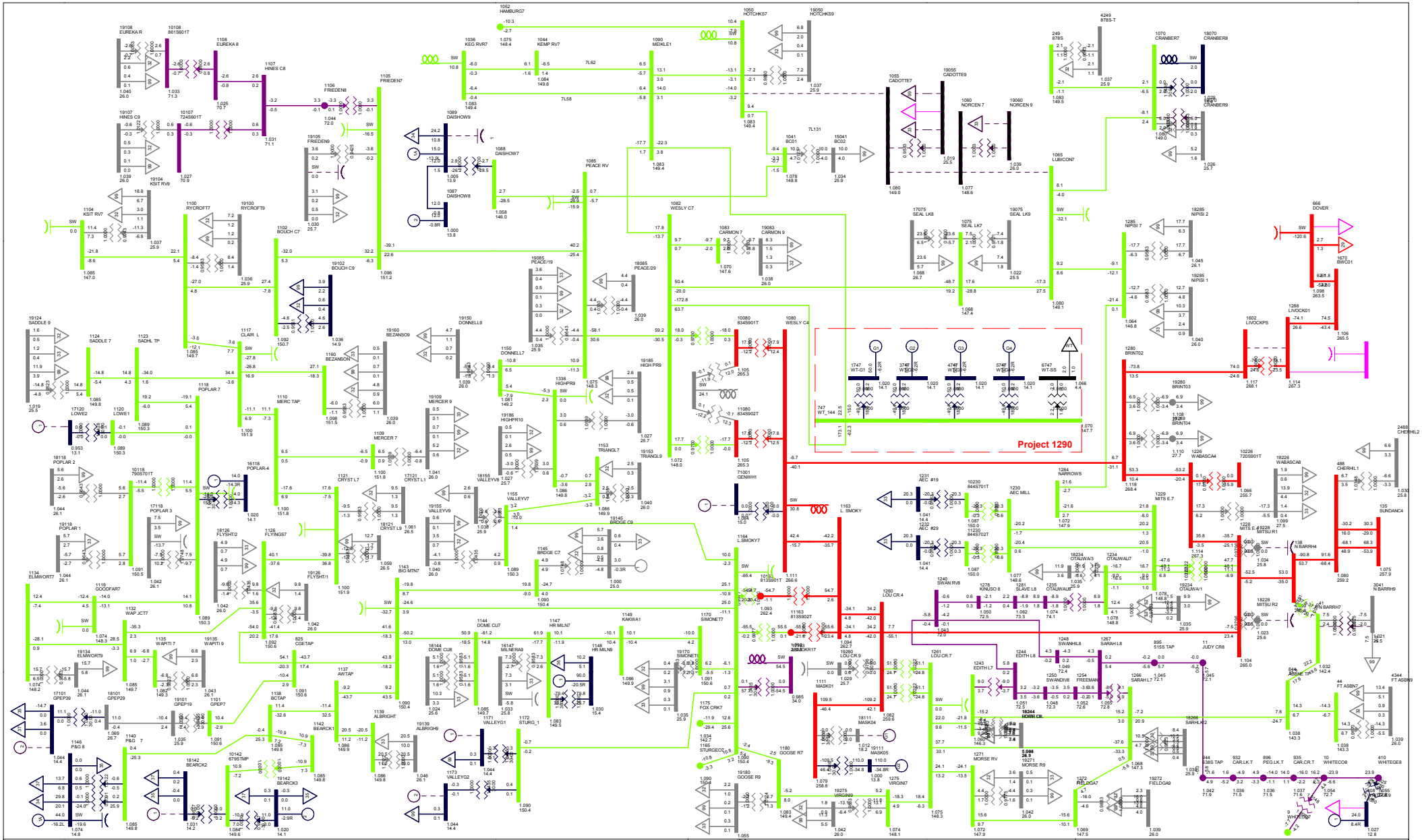

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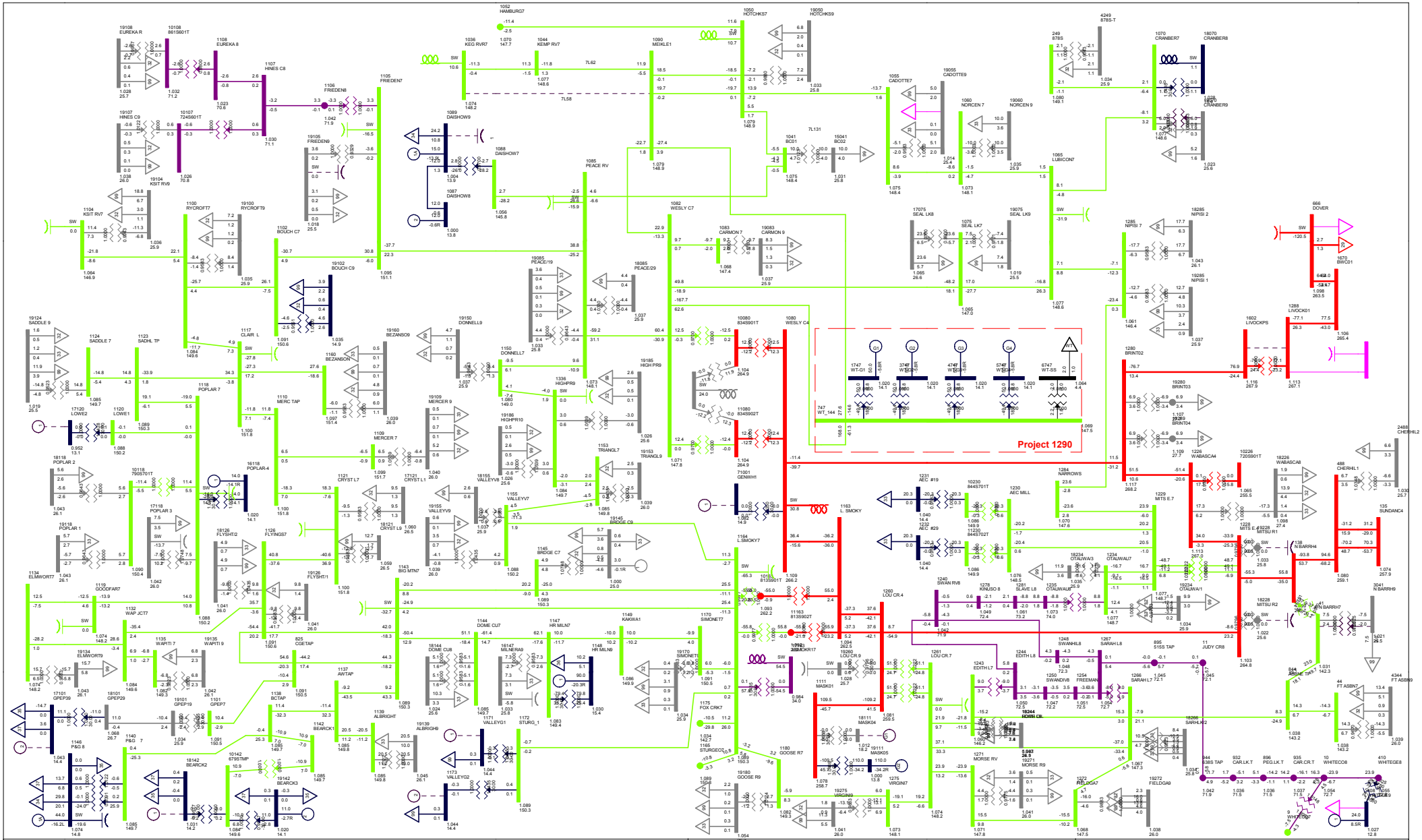
Figure: 46

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 022 7L63 HOTCHKISS to LUBICON_B.

Whitetail Project 1290 Interconnection Study



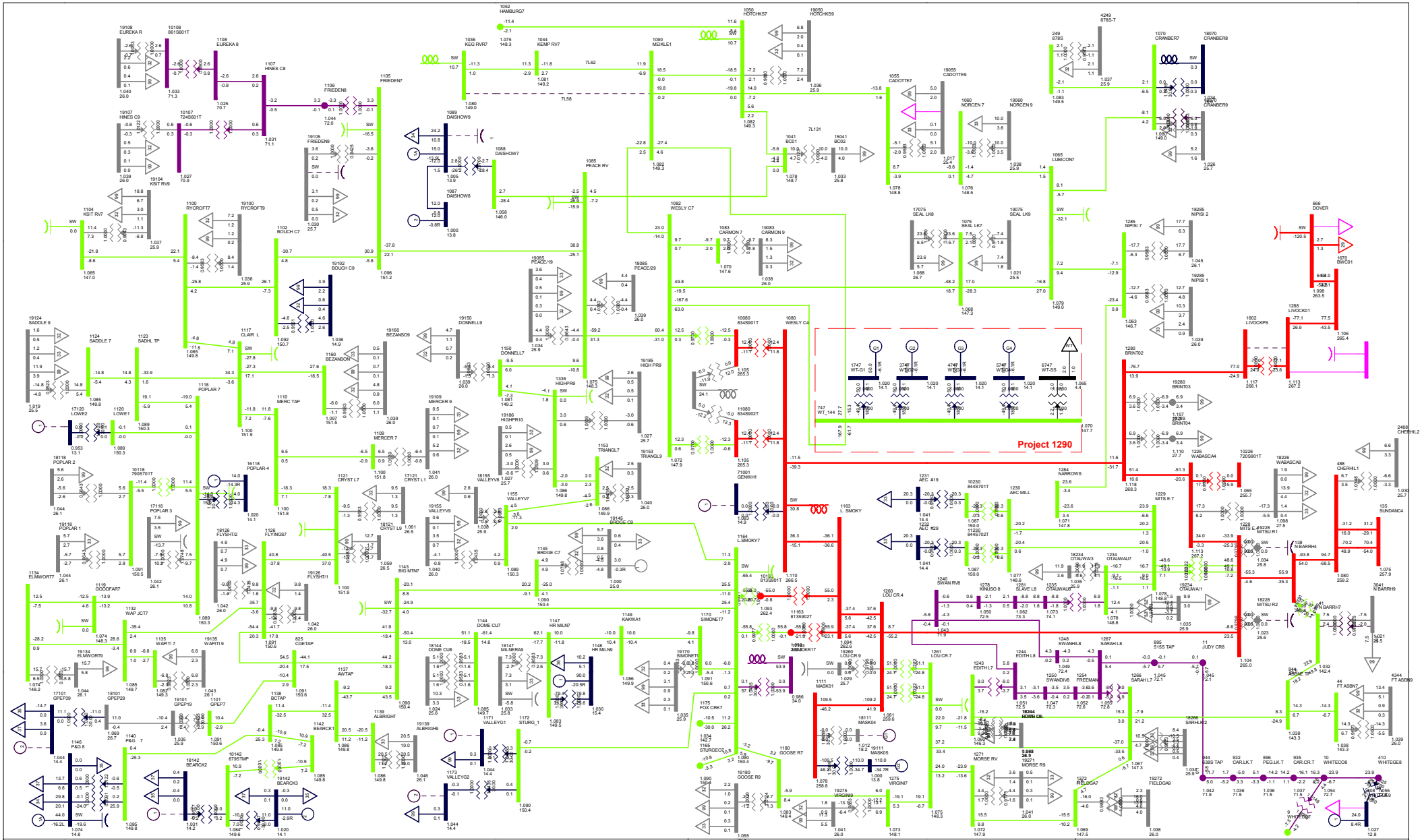
Appendix D2B

Figure: 47

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 023 7Lss REGRIVER to Meikle_A.

Whitetail Project 1290 Interconnection Study



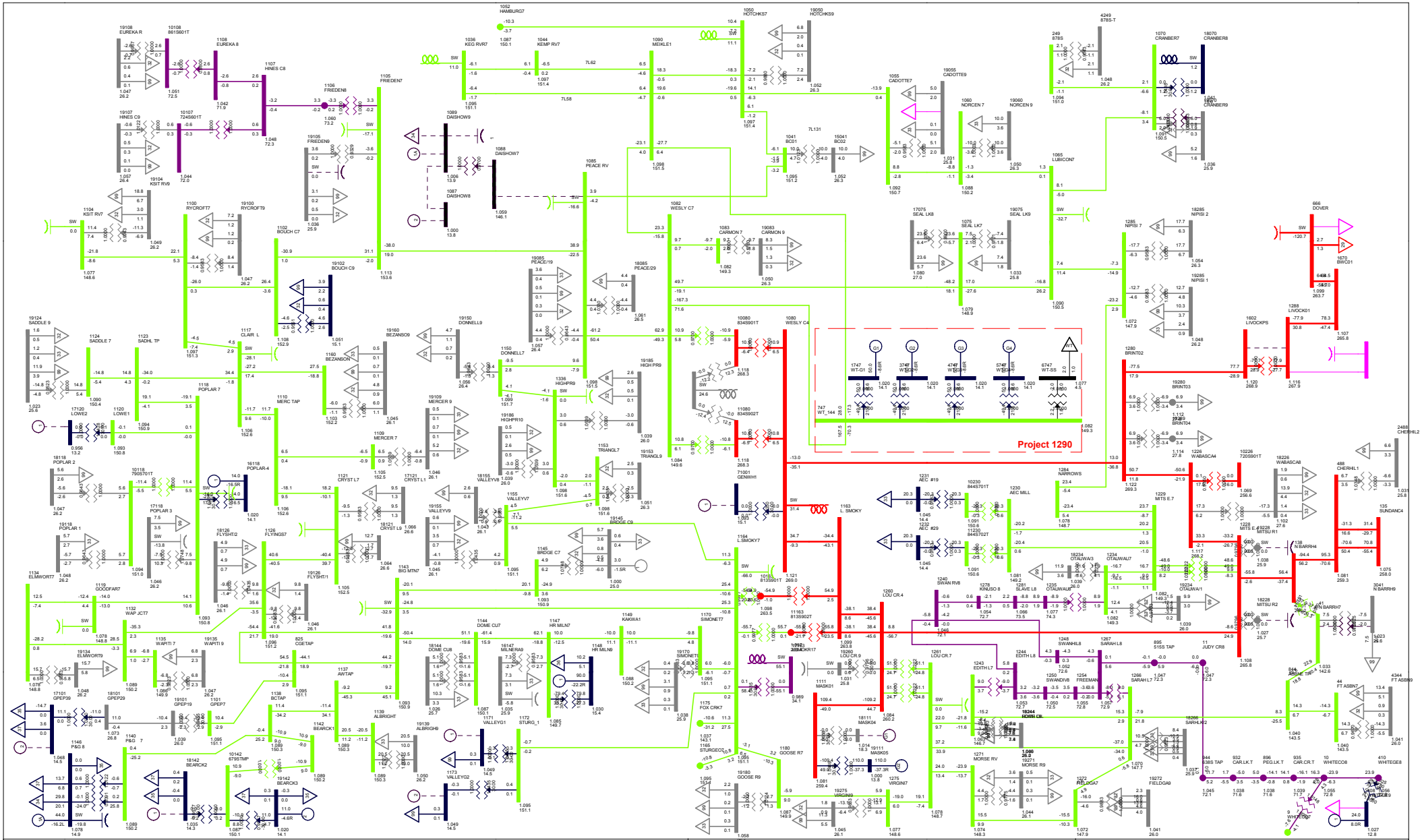
Appendix D2B

Figure: 48

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 023 7Lss REGRIVER to Meikle_B.

Whitetail Project 1290 Interconnection Study



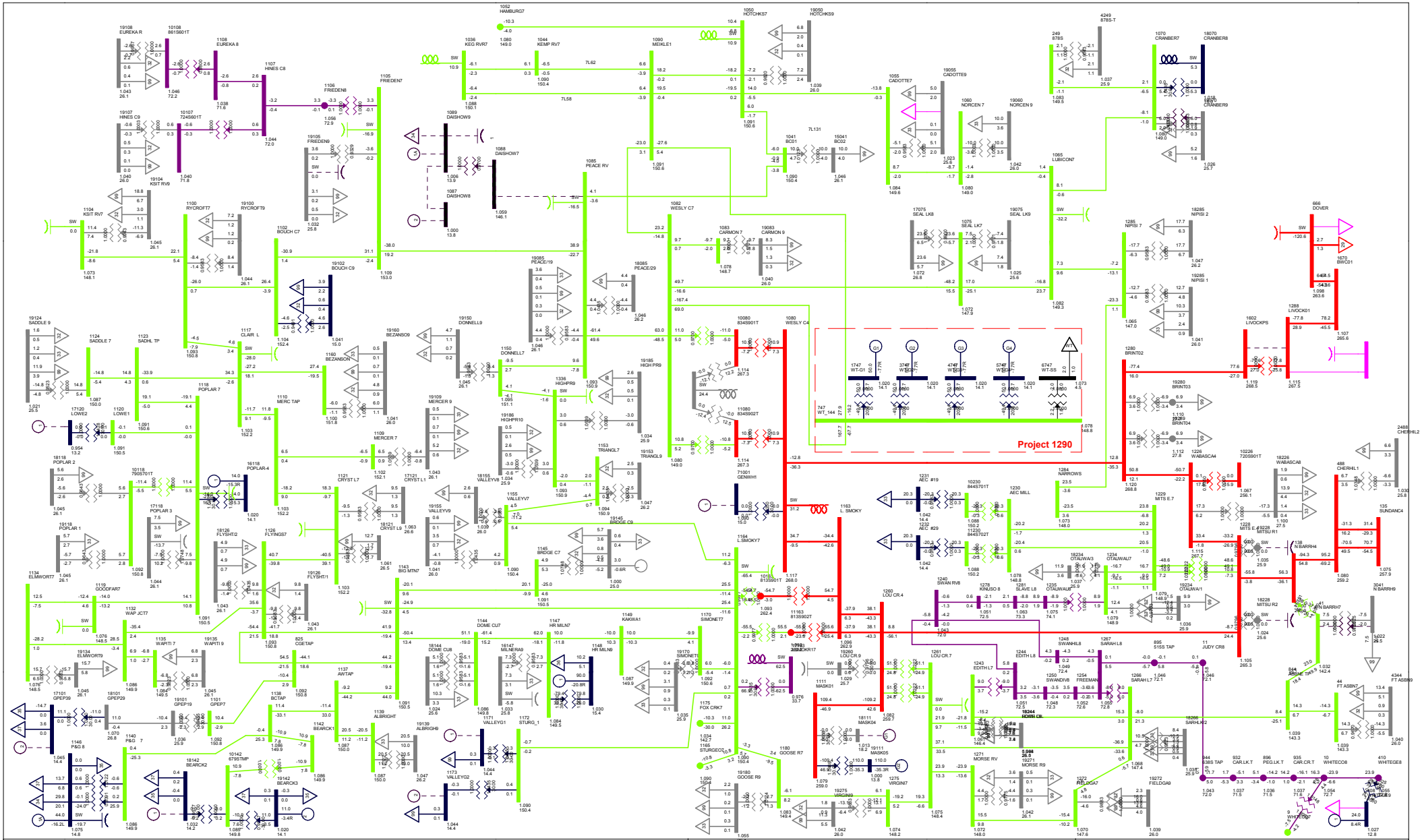
Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 024 7Lu4 WESTPEACE to DAISHOWA_A.

Whitetail Project 1290 Interconnection Study

Appendix D2B

Figure: 49



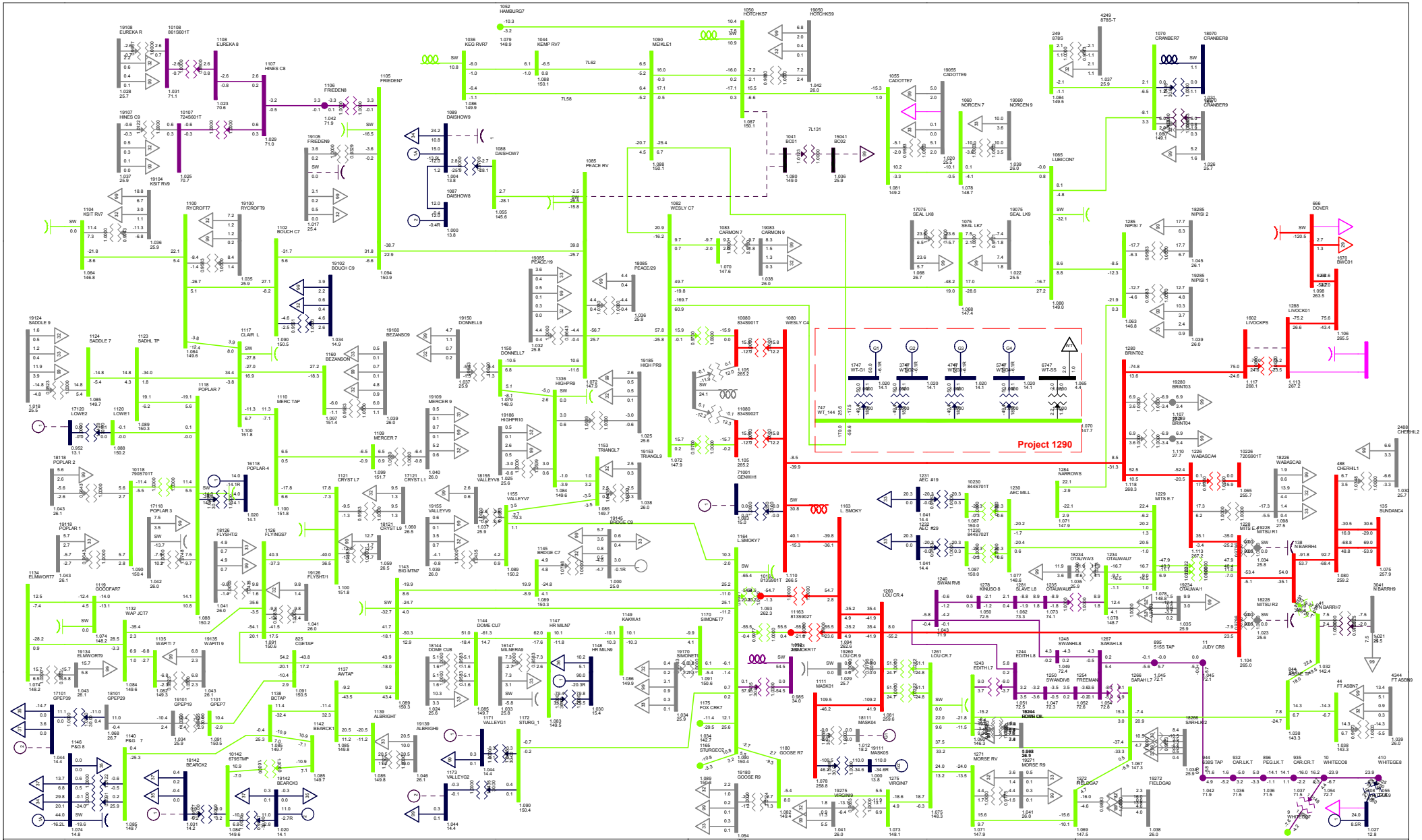
Appendix D2B

Figure: 50

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 024 7Lu4 WESTPEACE to DAISHOWA_B.

Whitetail Project 1290 Interconnection Study



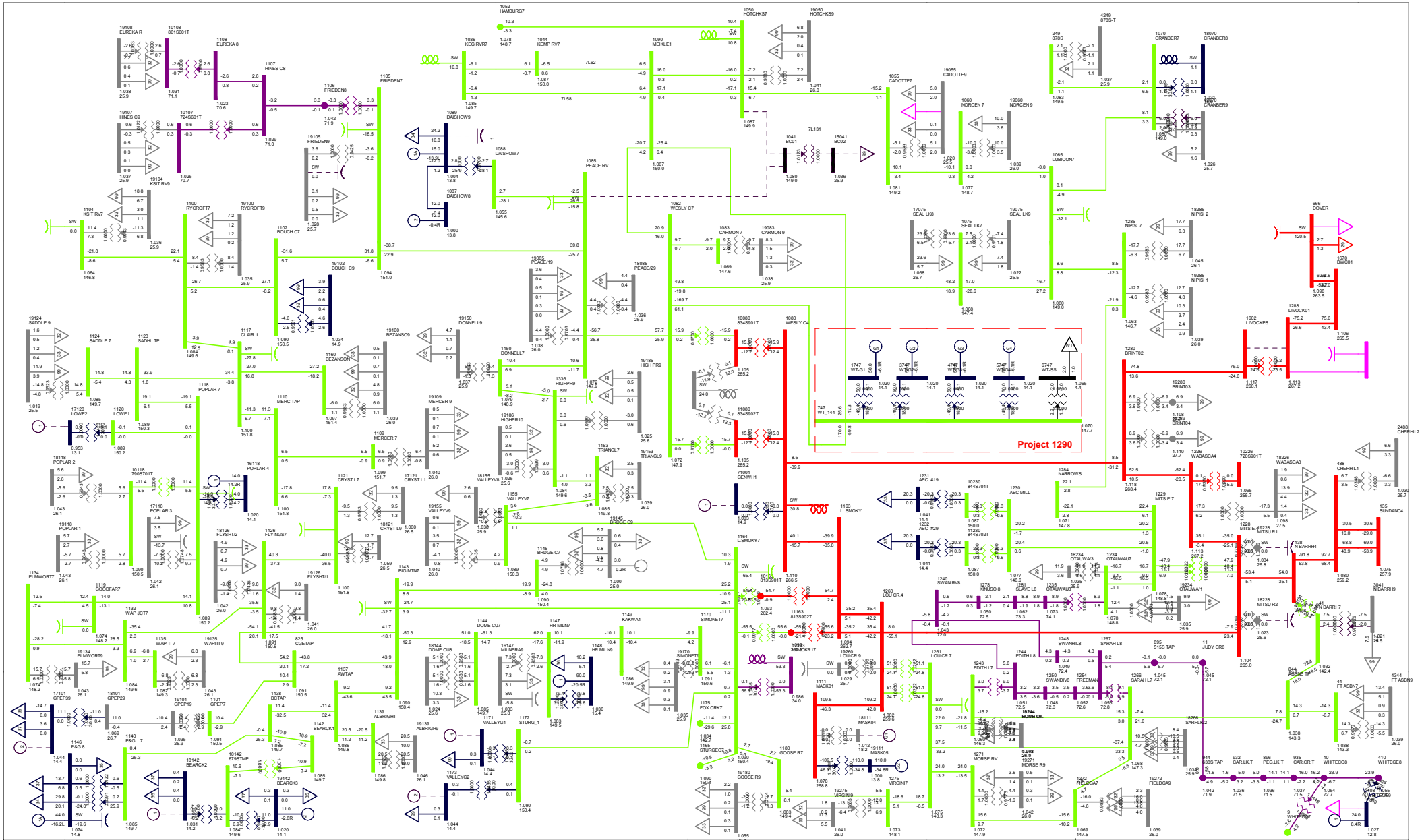
Appendix D2B

Figure: 51

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 025 7L91 WESTPEACE to HOTCHKISS_A.

Whitetail Project 1290 Interconnection Study



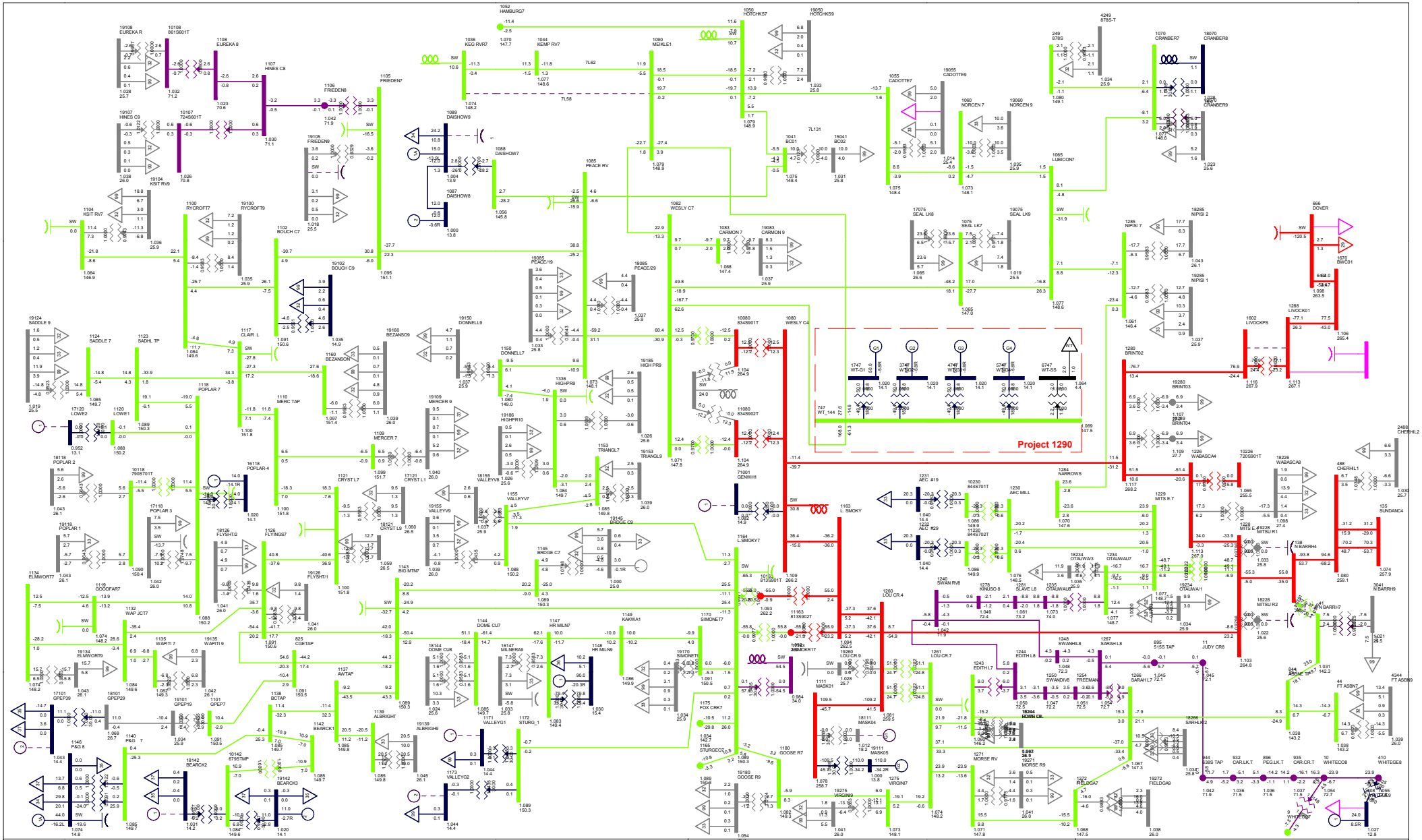
Appendix D2B

Figure: 52

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 025 7LST WESTPEACE to HOTCHKISS_B.

Whitetail Project 1290 Interconnection Study



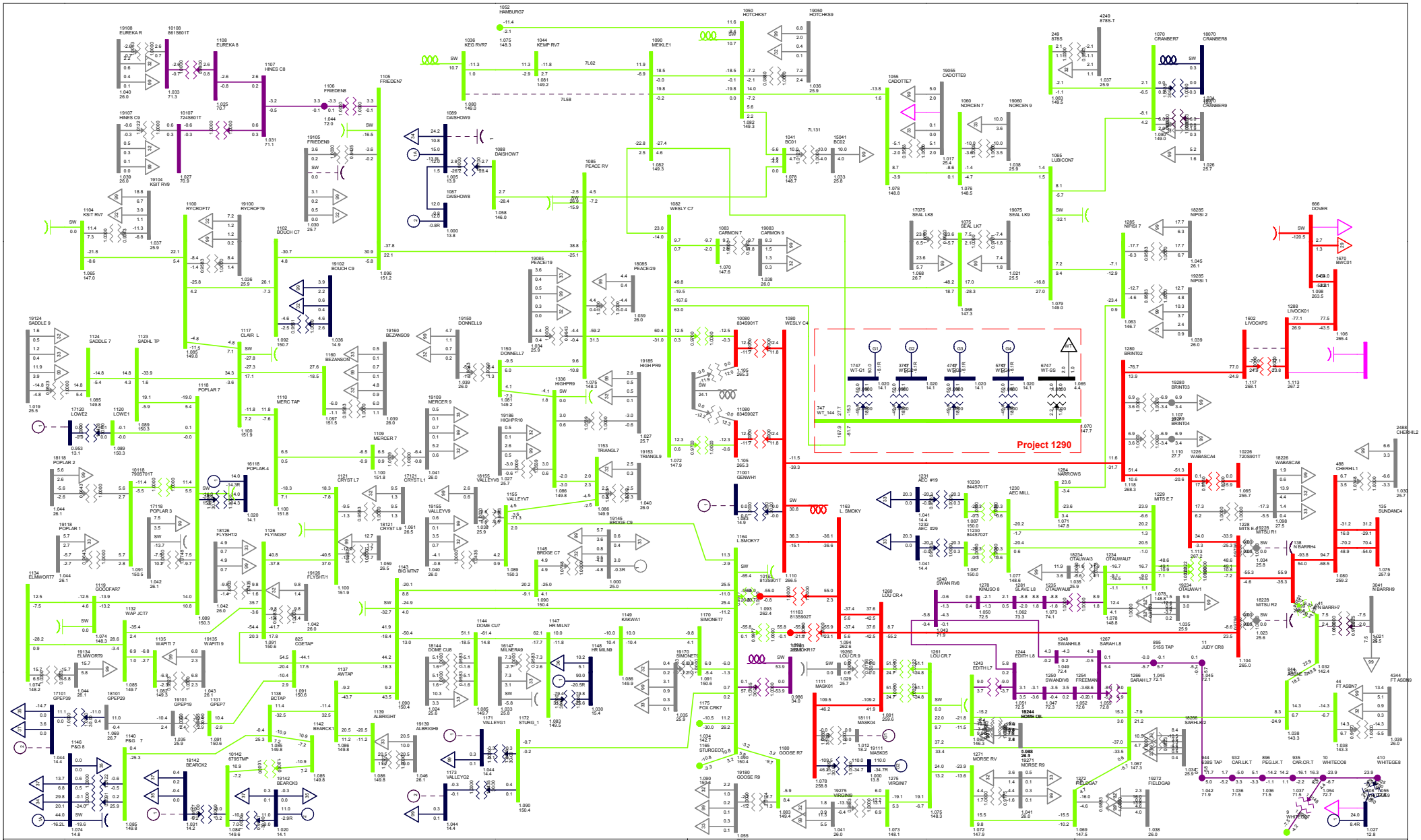
Appendix D2B

Figure: 53

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 026 7Lss REGRIVER to Meikle_A.

Whitetail Project 1290 Interconnection Study



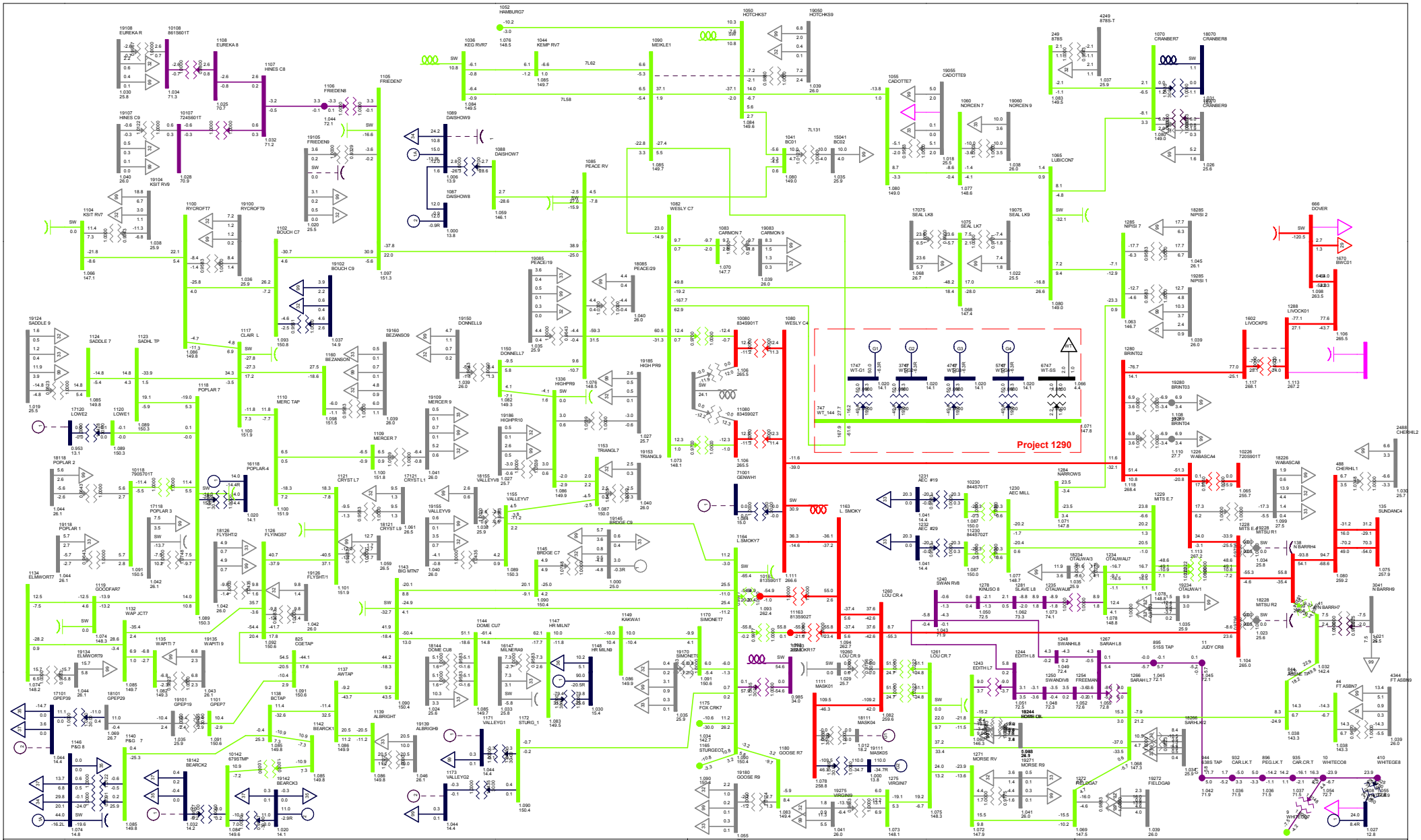
Appendix D2B

Figure: 54

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 026 7Lss REGRIVER to Meikle_B.

Whitetail Project 1290 Interconnection Study



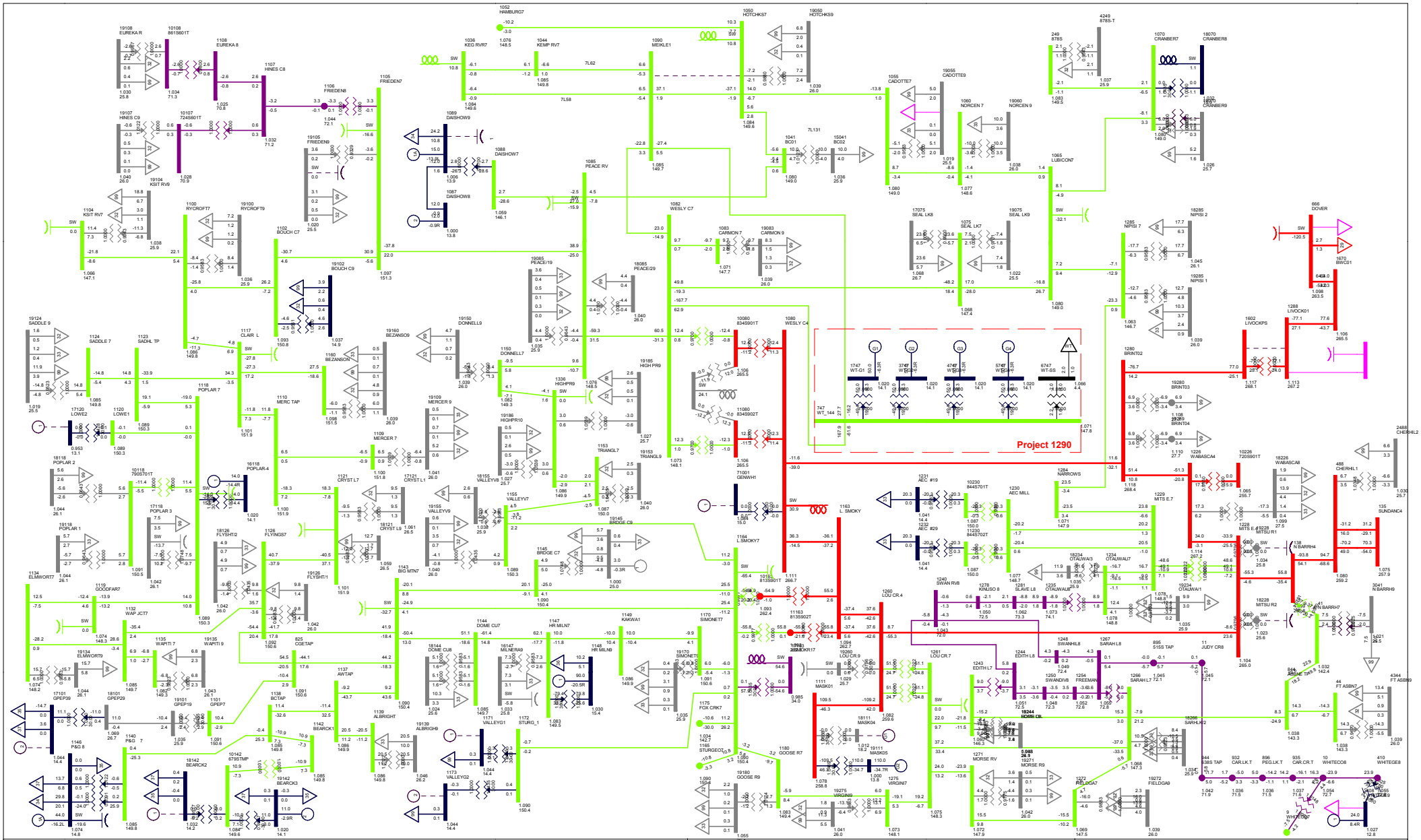
Appendix D2B

Figure: 55

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 027 7L120 HOTCHKISS to Meikle_A.

Whitetail Project 1290 Interconnection Study



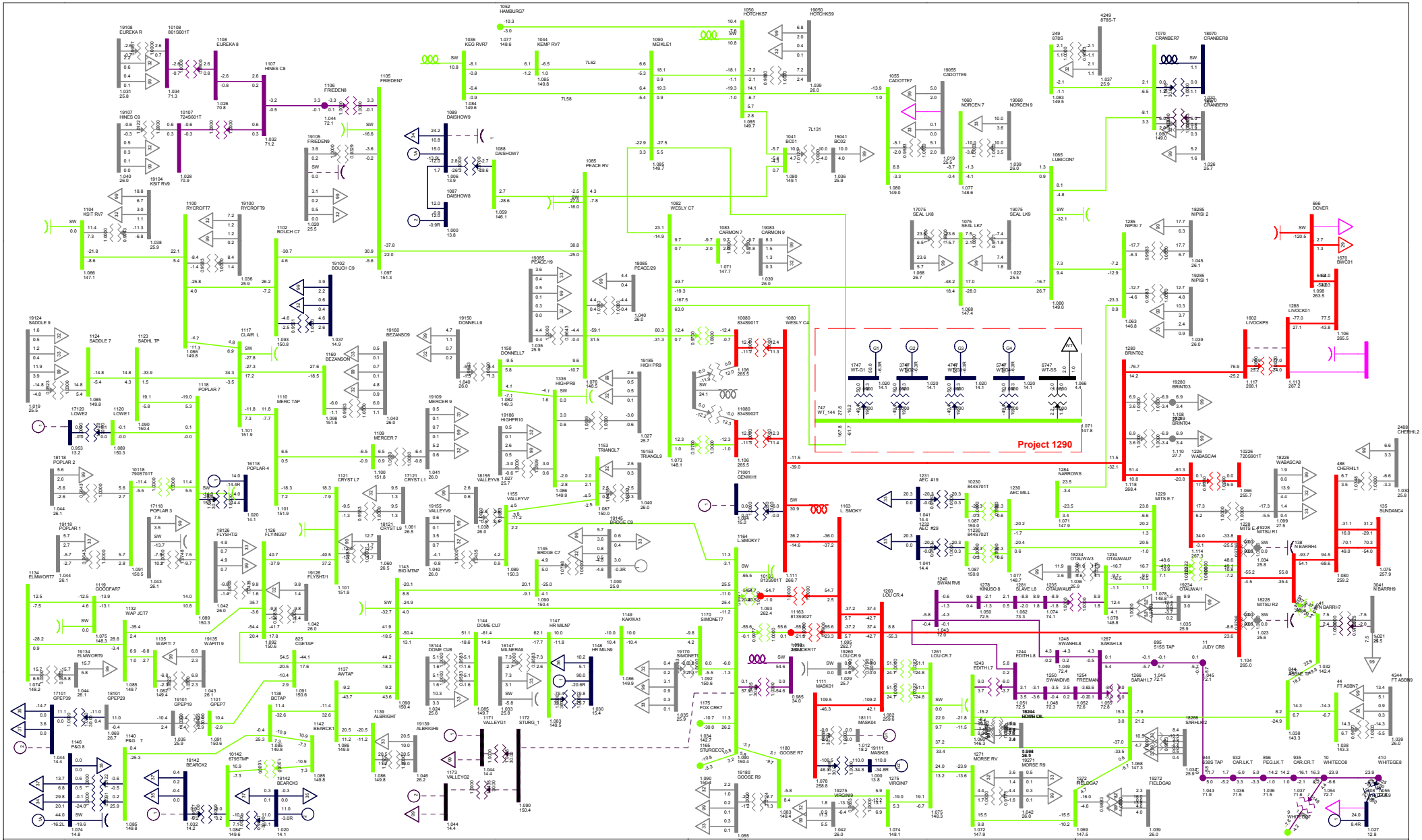
Appendix D2B

Figure: 56

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 027 7L120 HOTCHKISS to Meikle_B.

Whitetail Project 1290 Interconnection Study



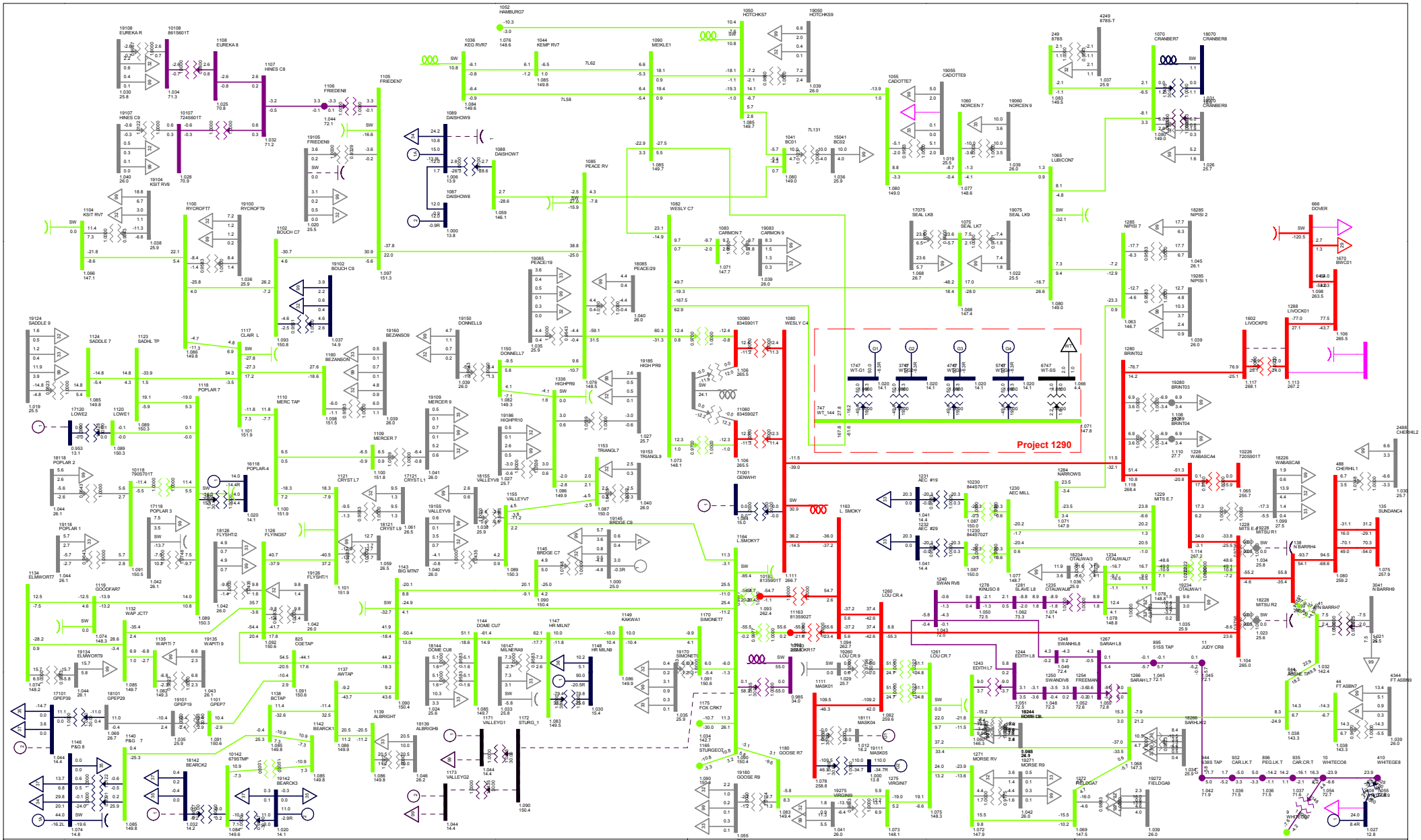
Appendix D2B

Figure: 57

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 028 7LoT LIT LESMOKY to Sturgeon_A.

Whitetail Project 1290 Interconnection Study



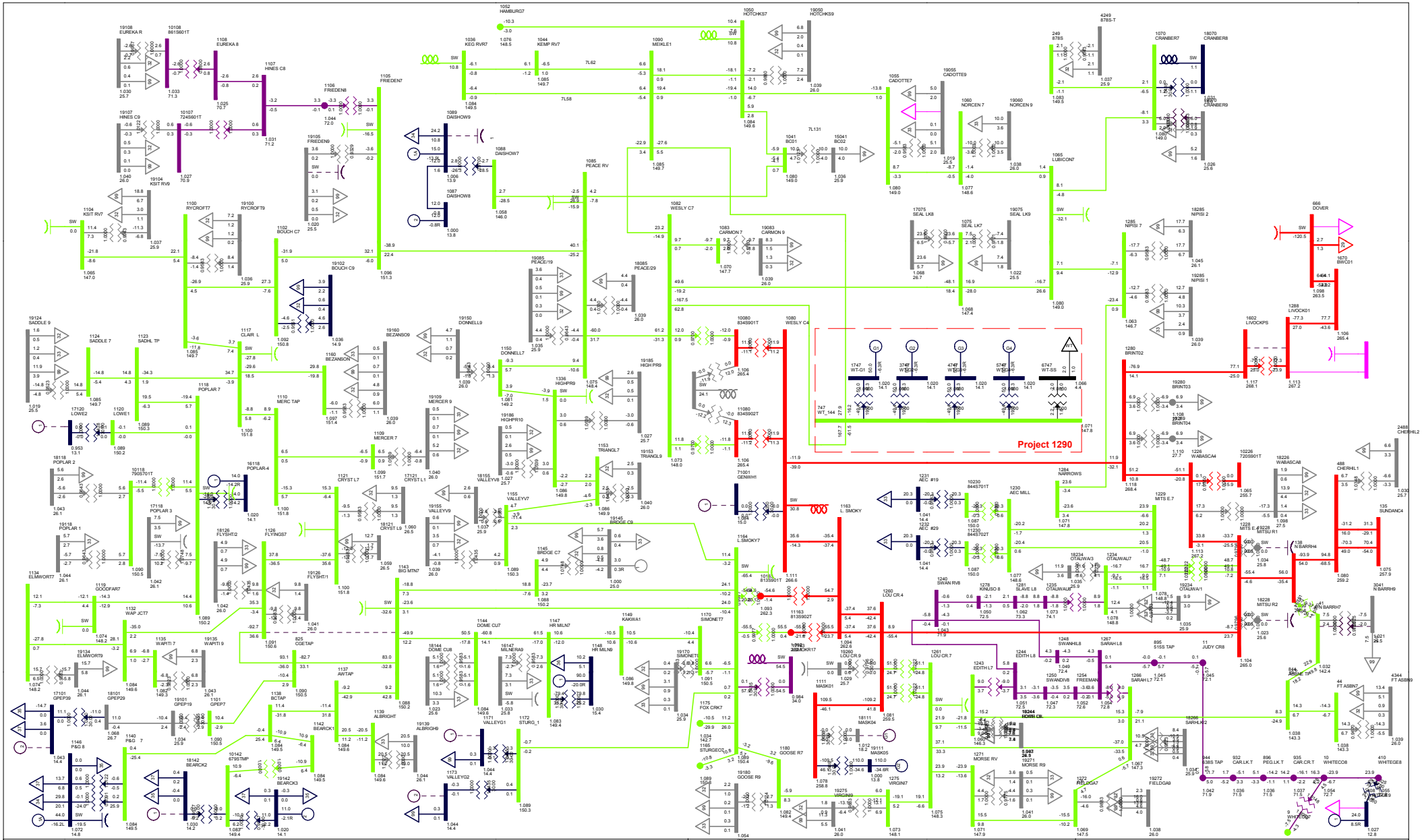
Appendix D2B

Figure: 58

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 028 7LoT LIn LESMOKY to Sturgeon_B.

Whitetail Project 1290 Interconnection Study



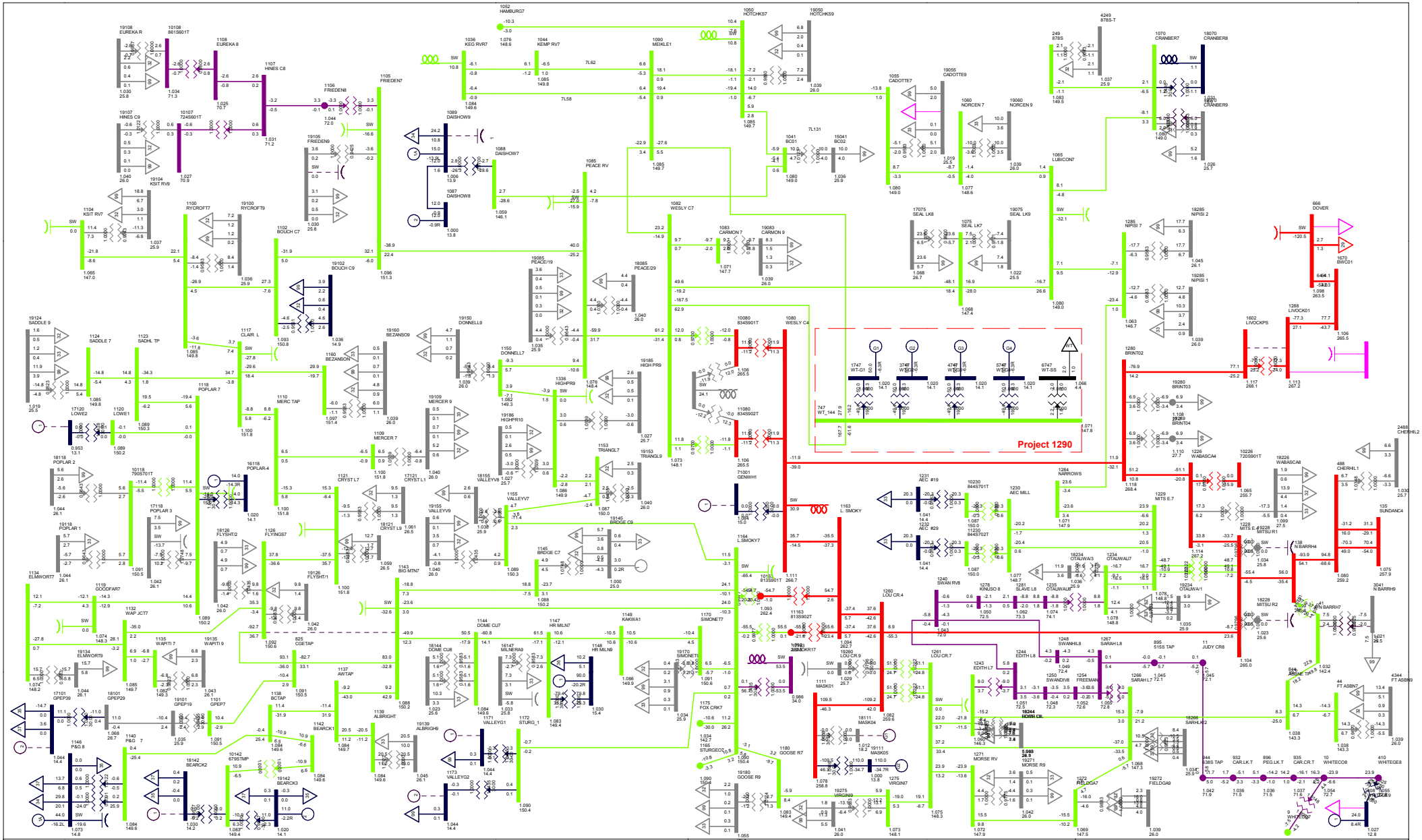
Appendix D2B

Figure: 59

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 029 7L44 FLTINGSHOTLAKE to BIGMOUNTAIN_A.

Whitetail Project 1290 Interconnection Study



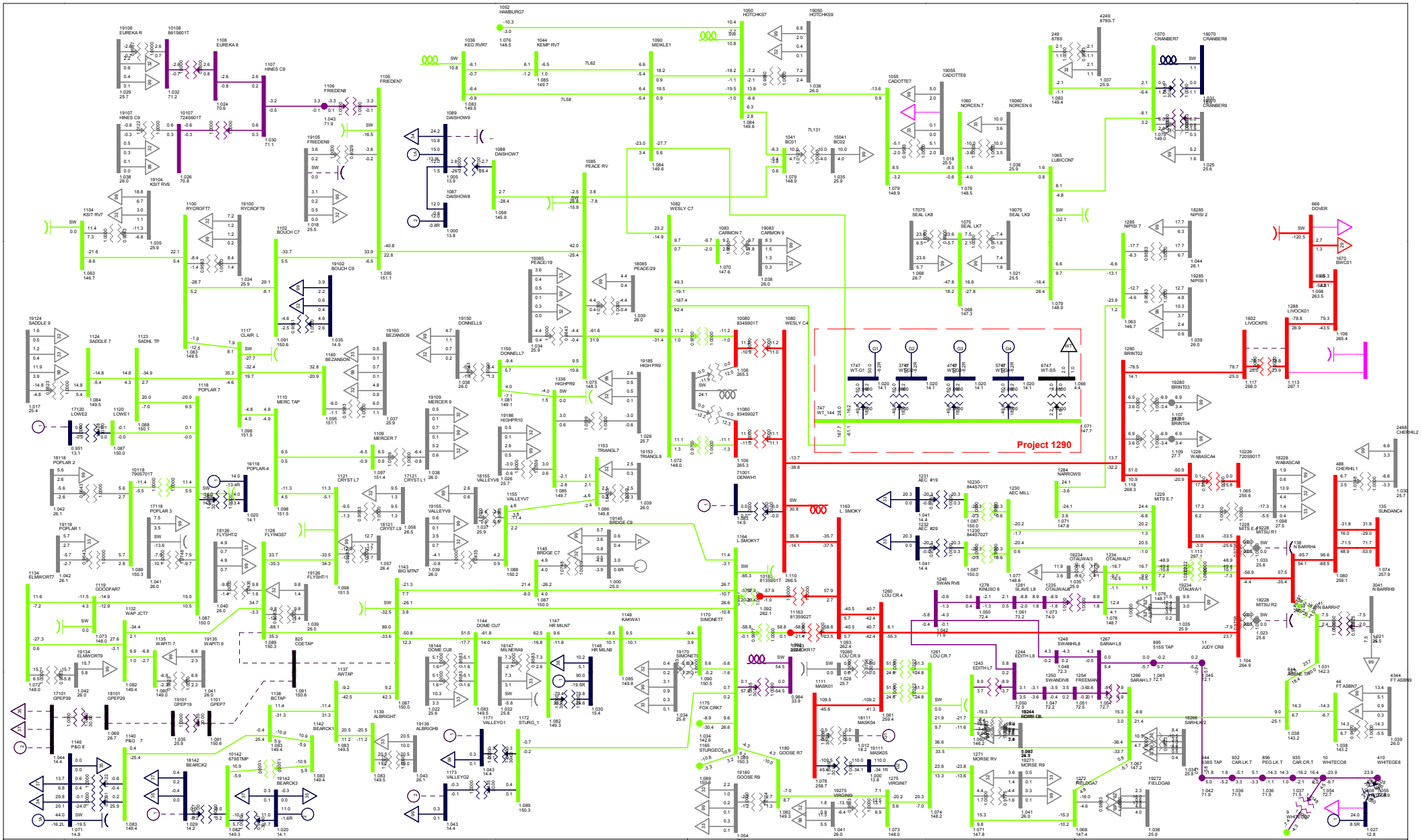
Appendix D2B

Figure: 60

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 029 7L44 FLTINGSHOTLAKE to BIGMOUNTAIN_B.

Whitetail Project 1290 Interconnection Study



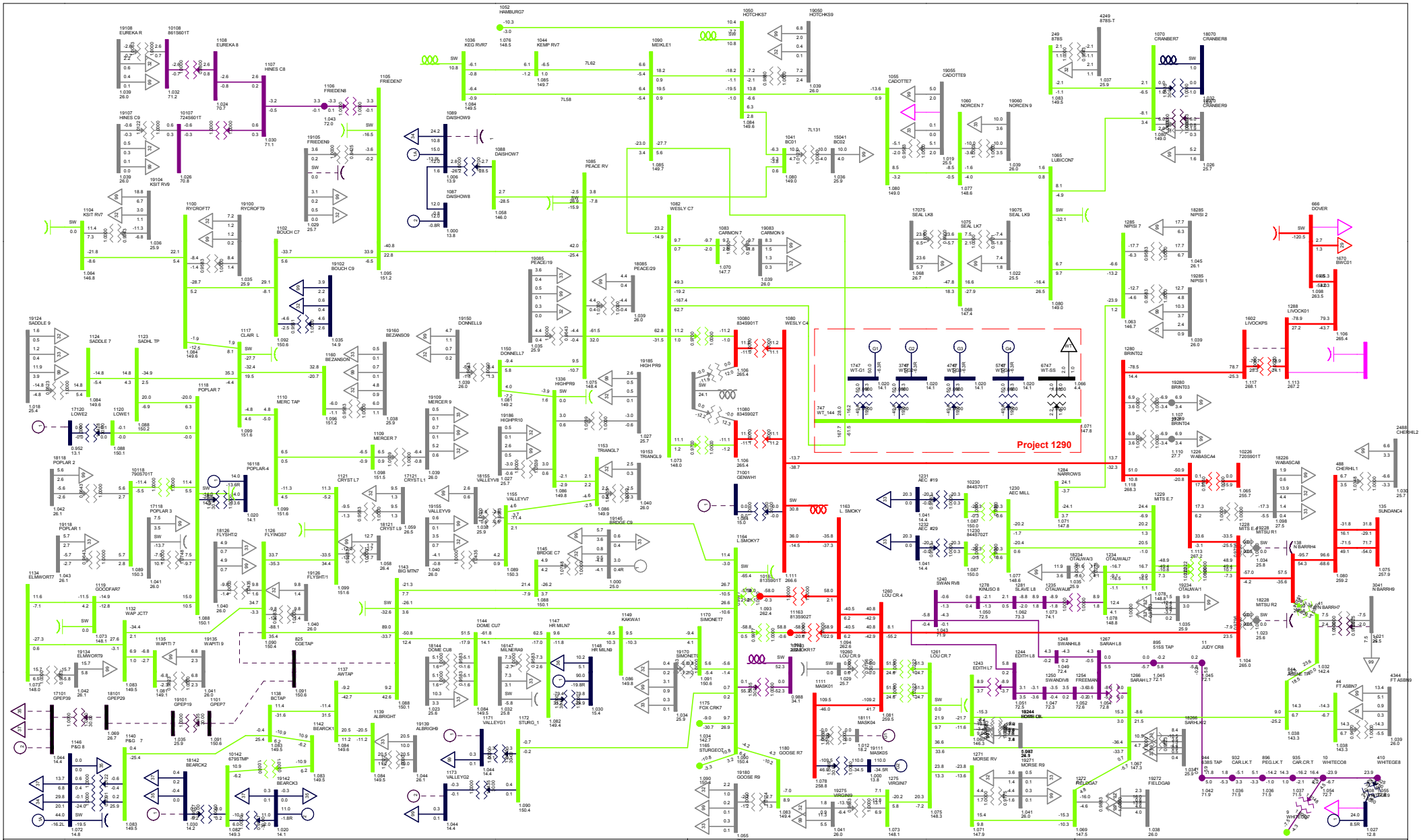
Appendix D2B

Figure: 61

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_A.

Whitetail Project 1290 Interconnection Study



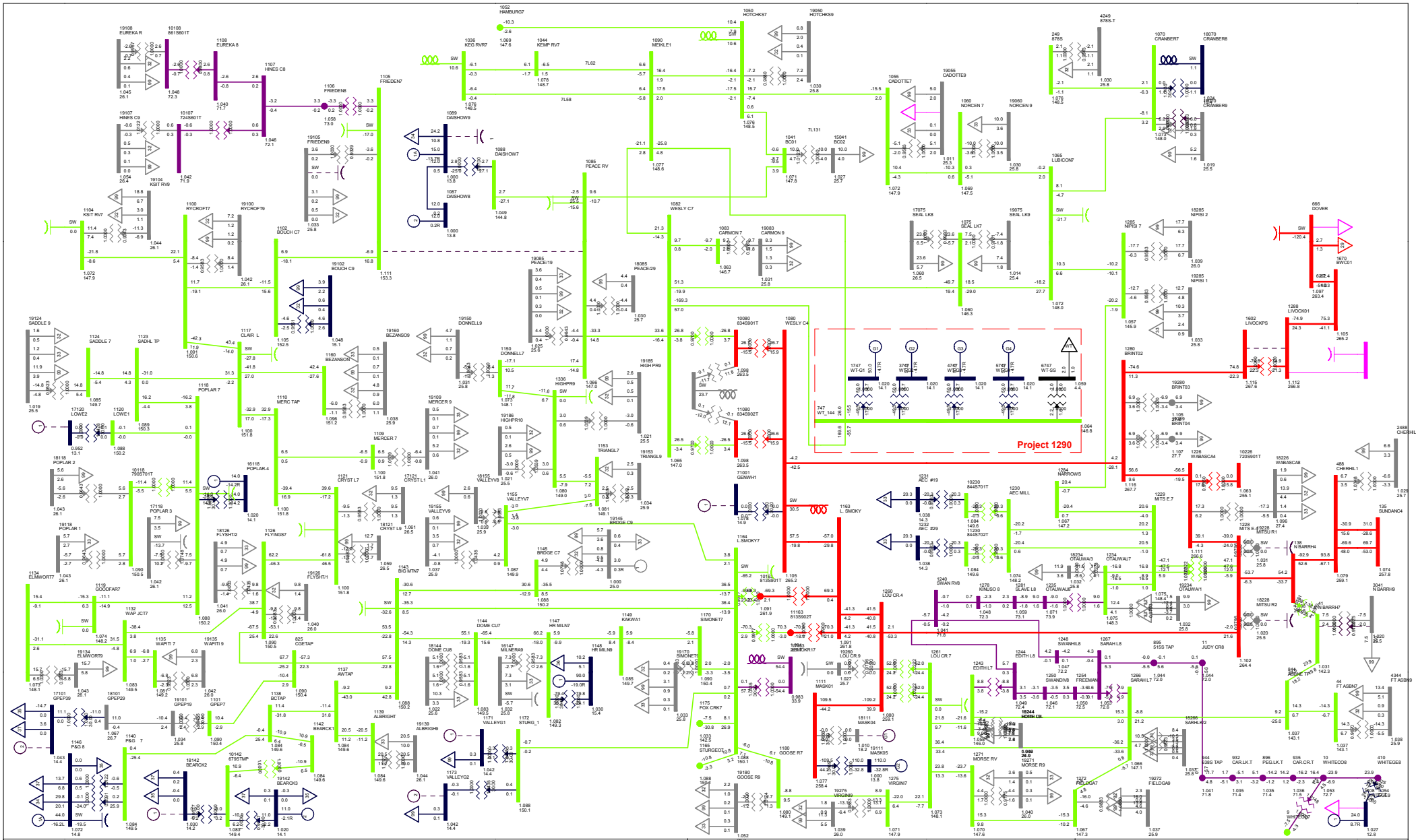
Appendix D2B

Figure: 62

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_B.

Whitetail Project 1290 Interconnection Study



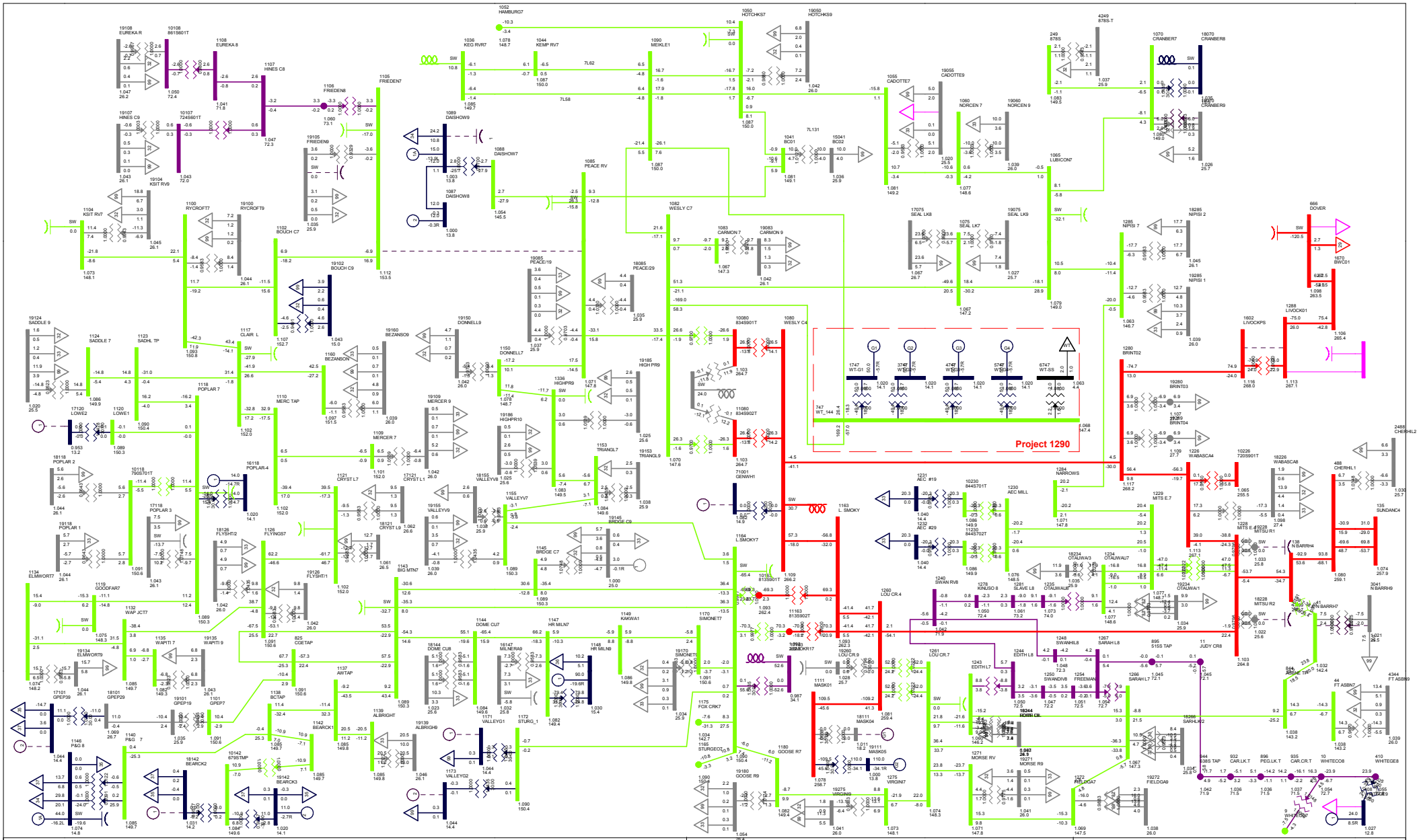
Appendix D2B

Figure: 63

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 031 7Lr5 WESTPEACE to FRIEDENSTAL_A.

Whitetail Project 1290 Interconnection Study



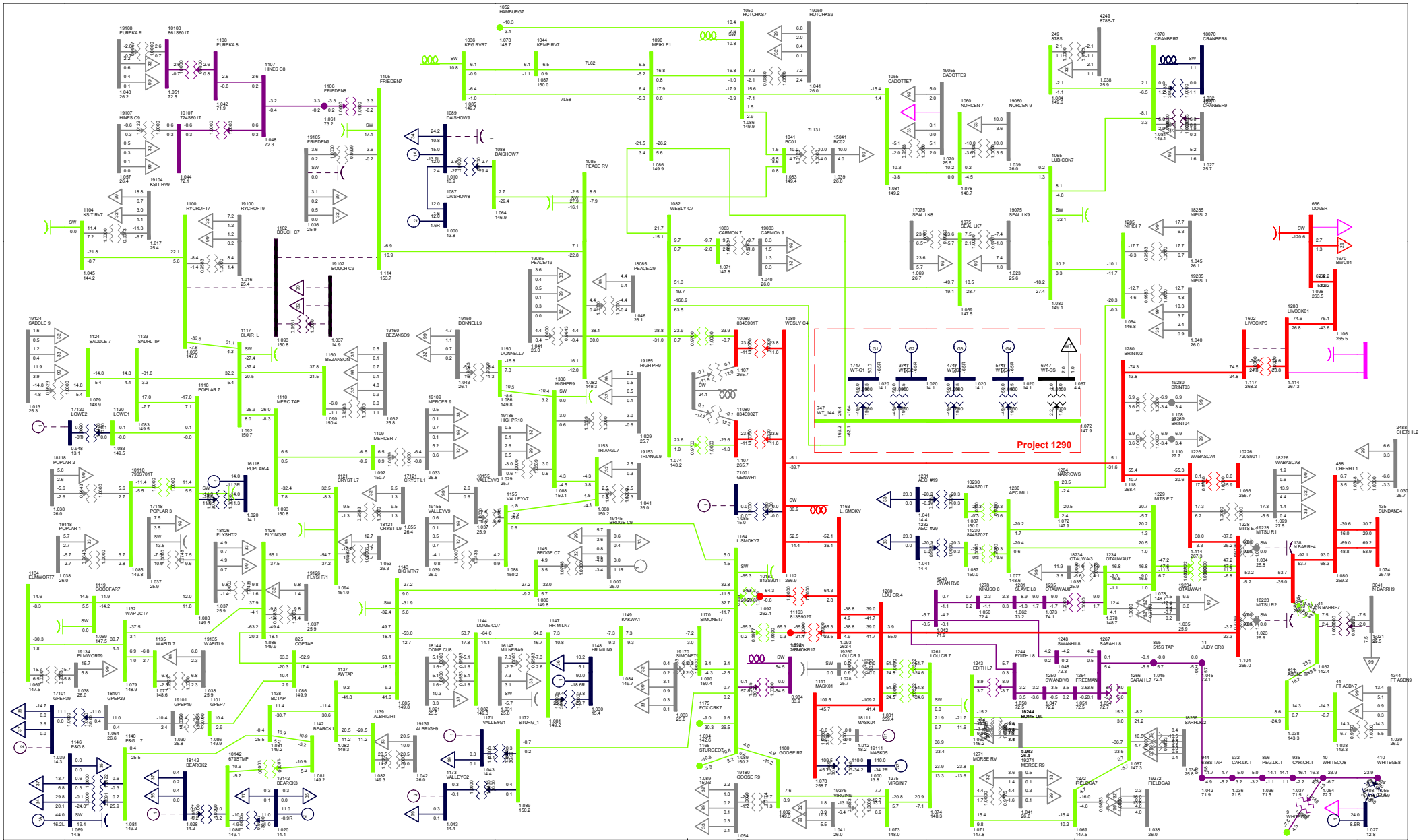
Appendix D2B

Figure: 64

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 031 7LR5 WESTPEACE to FRIEDENSTAL_B.

Whitetail Project 1290 Interconnection Study



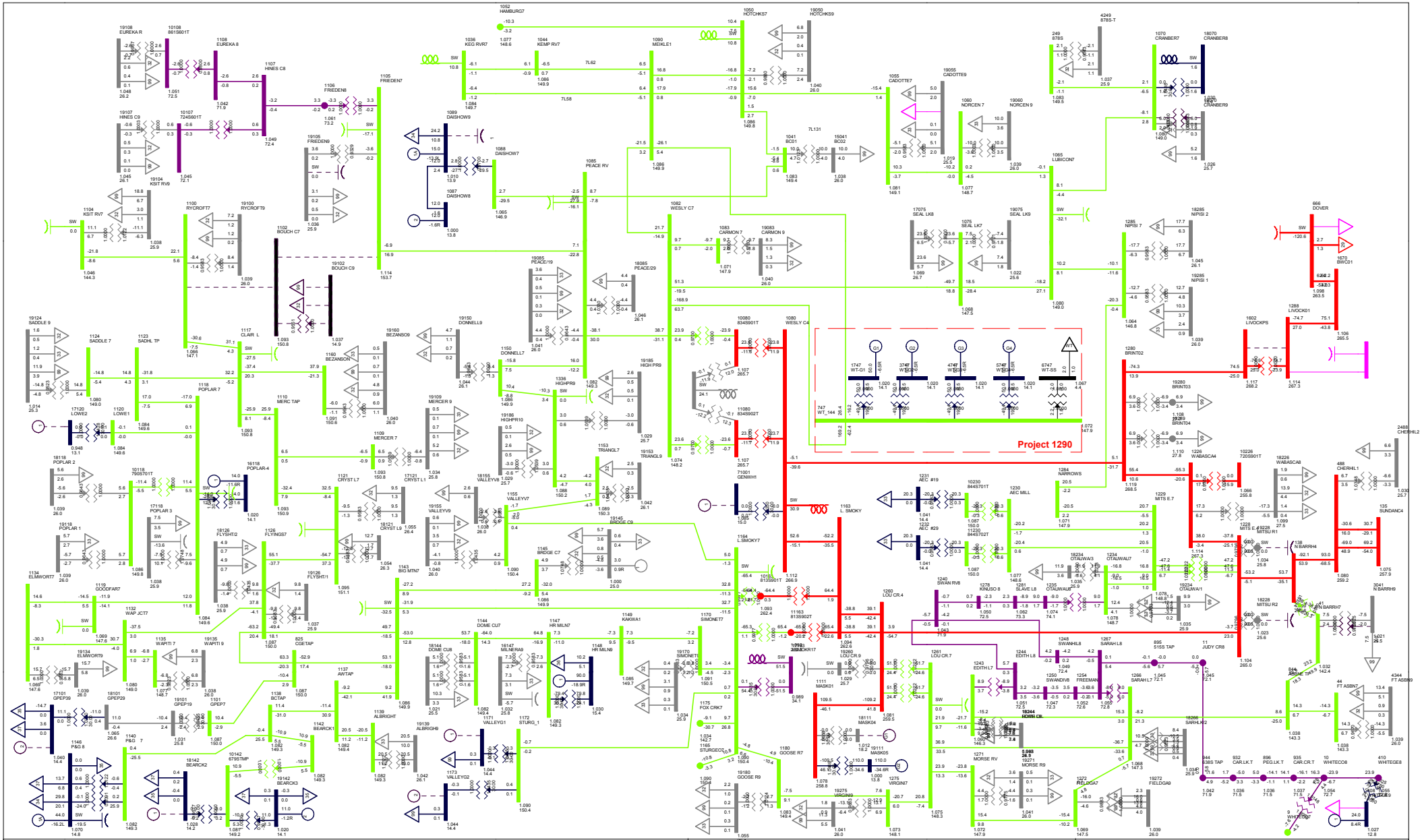
Appendix D2B

Figure: 65

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 032 7LR3 RYCROFT to FRIEDENSTAL_A.

Whitetail Project 1290 Interconnection Study



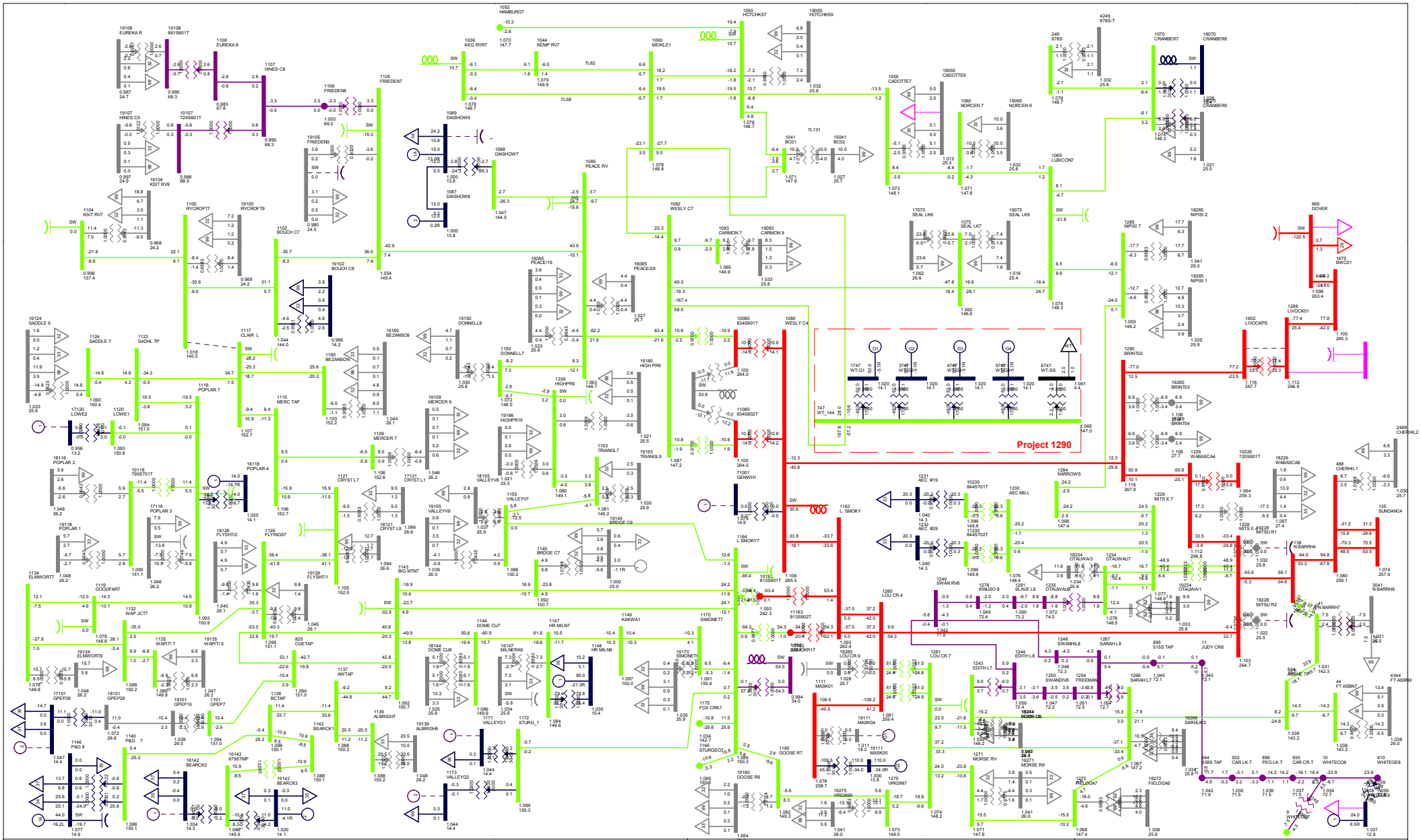
Appendix D2B

Figure: 66

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 032 7L73 RYCROFT to FRIEDENSTAL_B.

Whitetail Project 1290 Interconnection Study



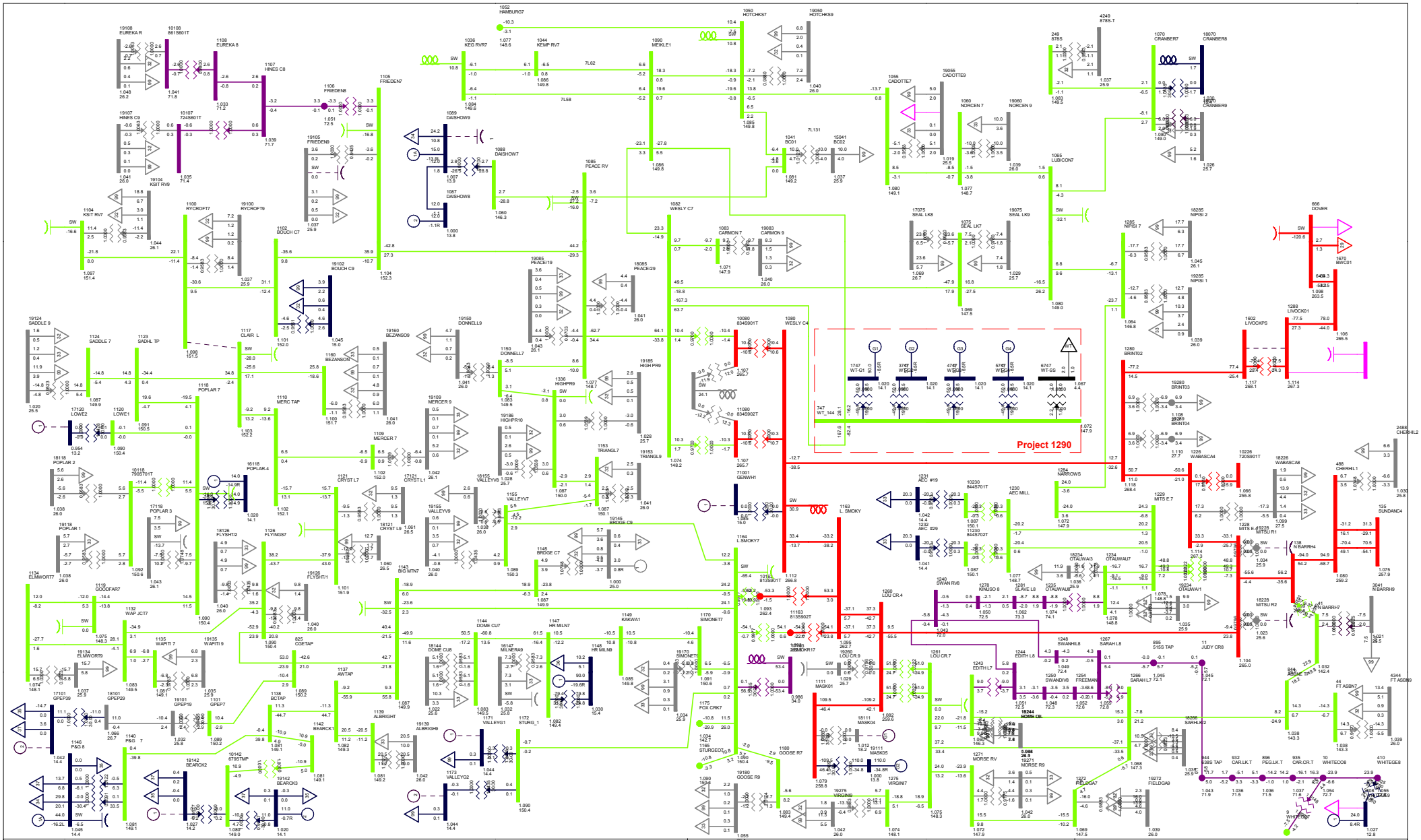
Appendix D2B

Figure: 67

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 033 7Loo RYCROFT to CLAIRMONTLAKE_A.

Whitetail Project 1290 Interconnection Study



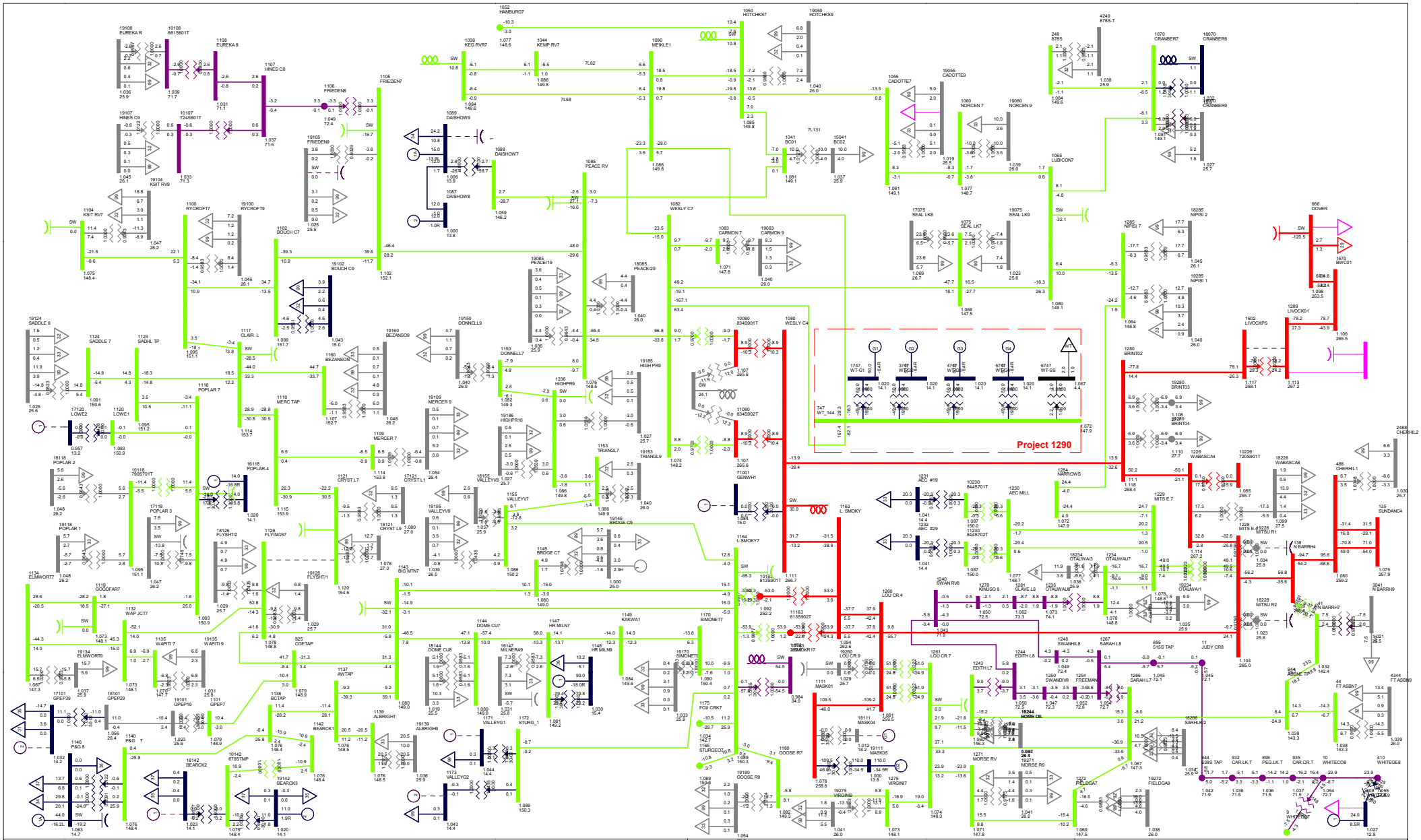
Appendix D2B

Figure: 68

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 033 7Loo RYCROFT to CLAIRMONTLAKE_B.

Whitetail Project 1290 Interconnection Study



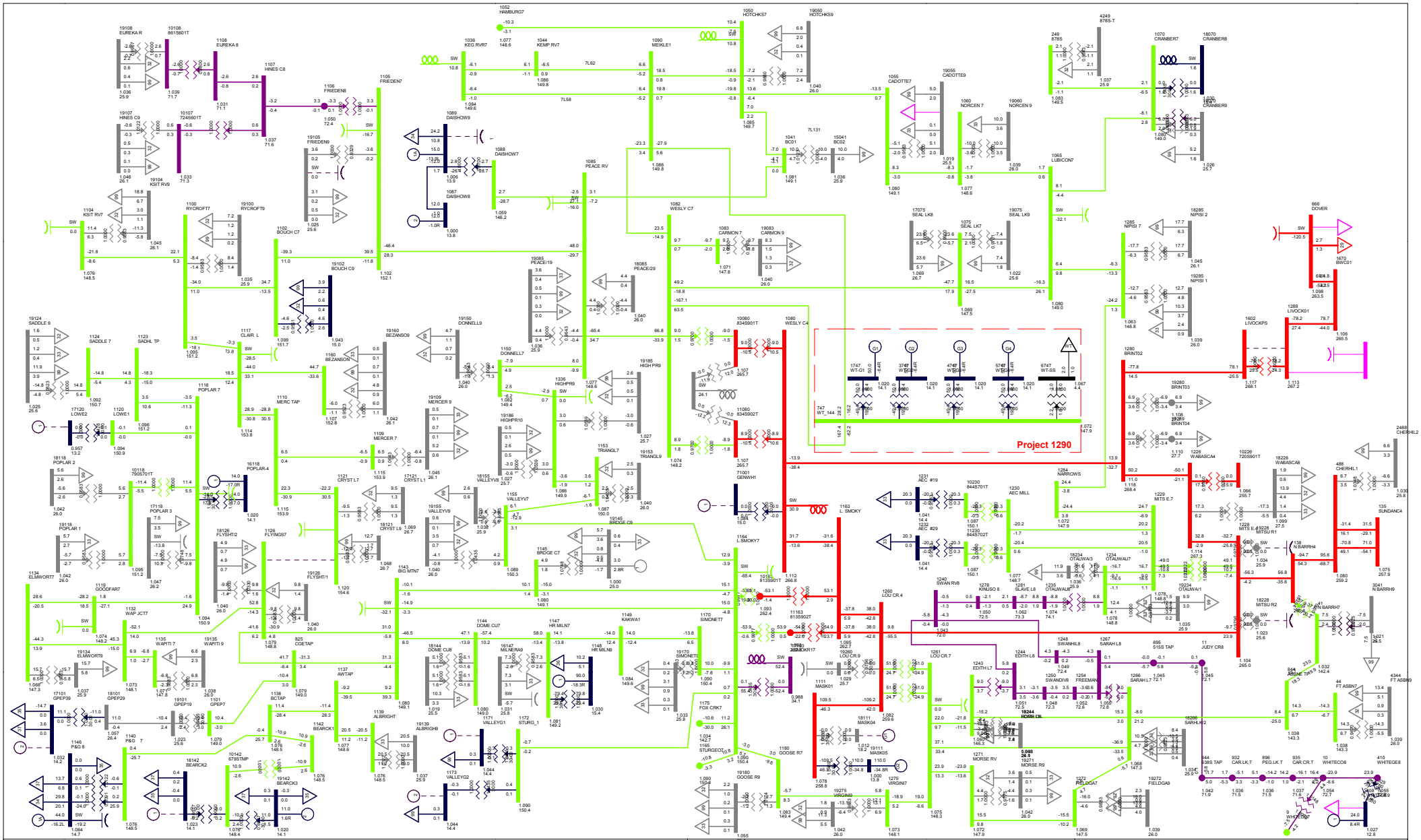
Appendix D2B

Figure: 69

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 034 7Log CRTSTALLAKE to FLYINGSHOTLAKE_A.

Whitetail Project 1290 Interconnection Study



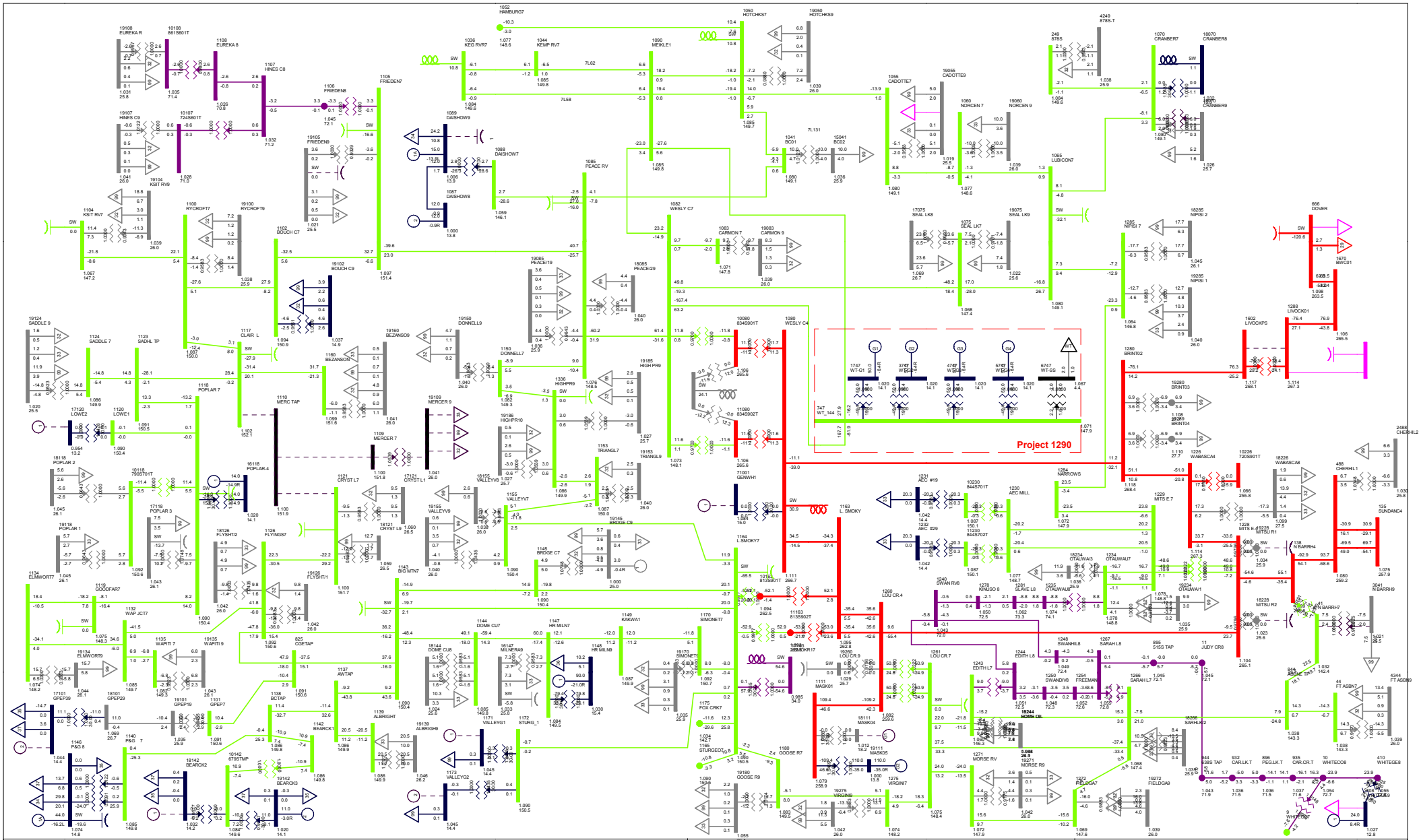
Appendix D2B

Figure: 70

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 034 7Log CRTSTALLAKE to FLYINGSHOTLAKE_B.

Whitetail Project 1290 Interconnection Study



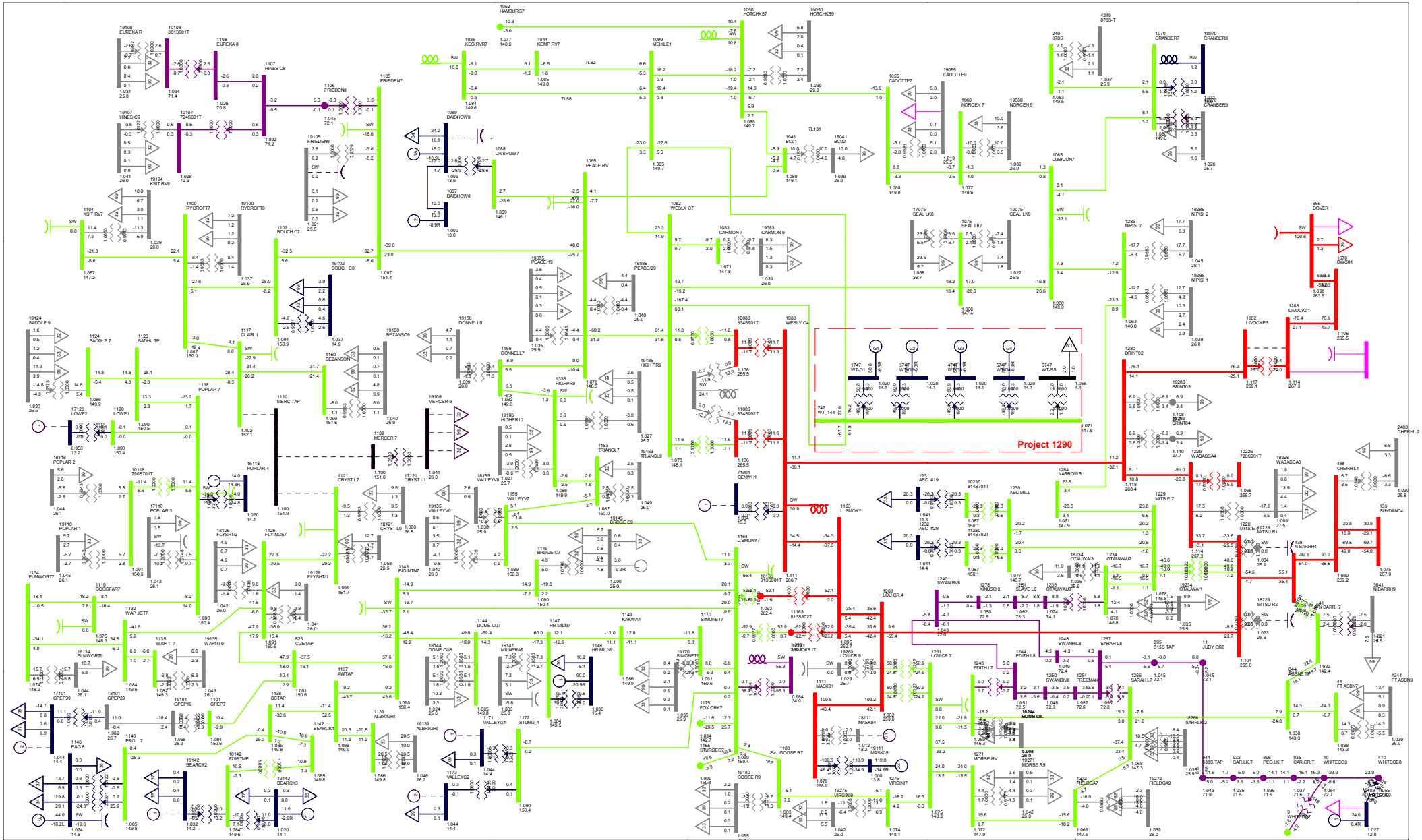
Appendix D2B

Figure: 71

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_A.

Whitetail Project 1290 Interconnection Study



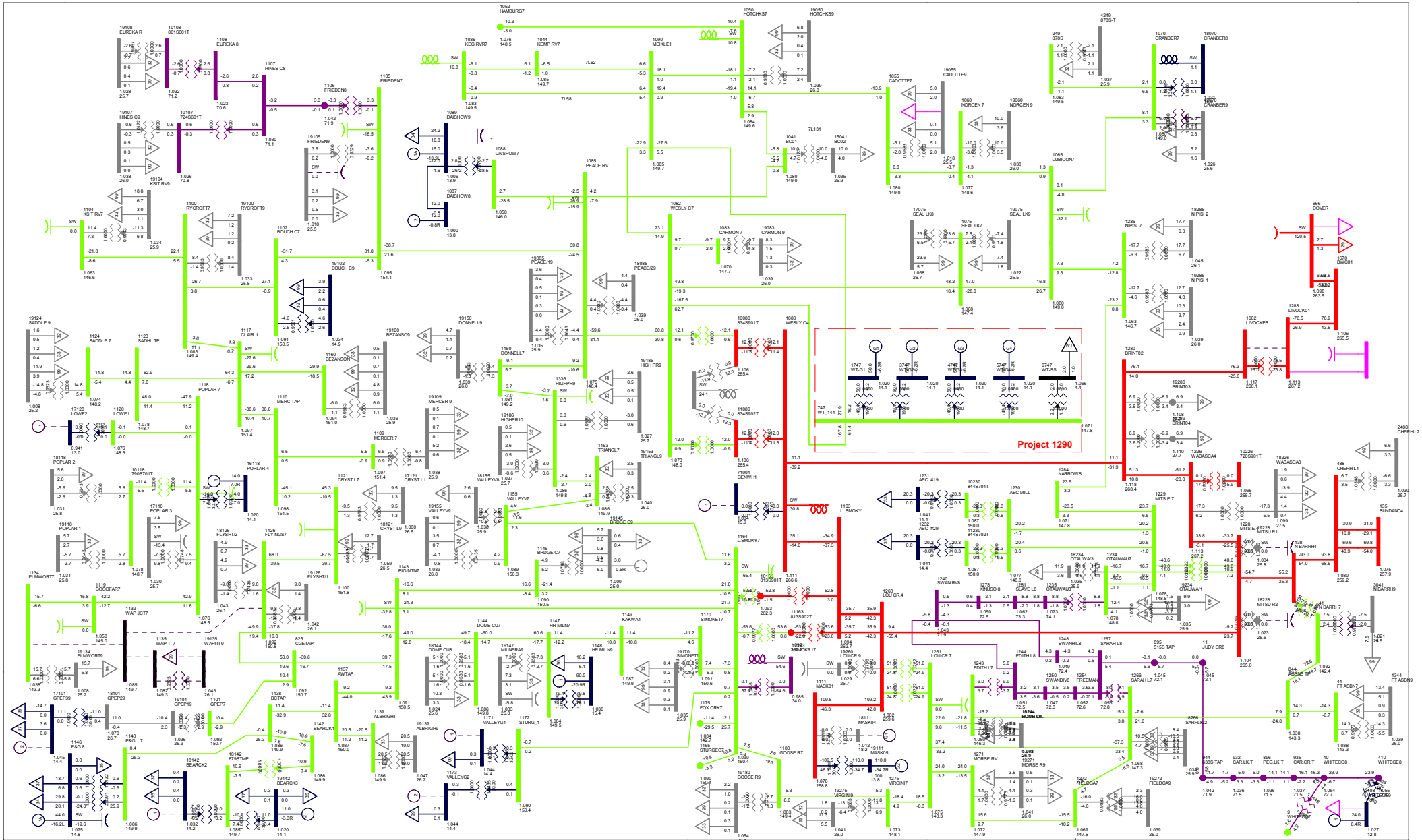
Appendix D2B

Figure: 72

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_B.

Whitetail Project 1290 Interconnection Study



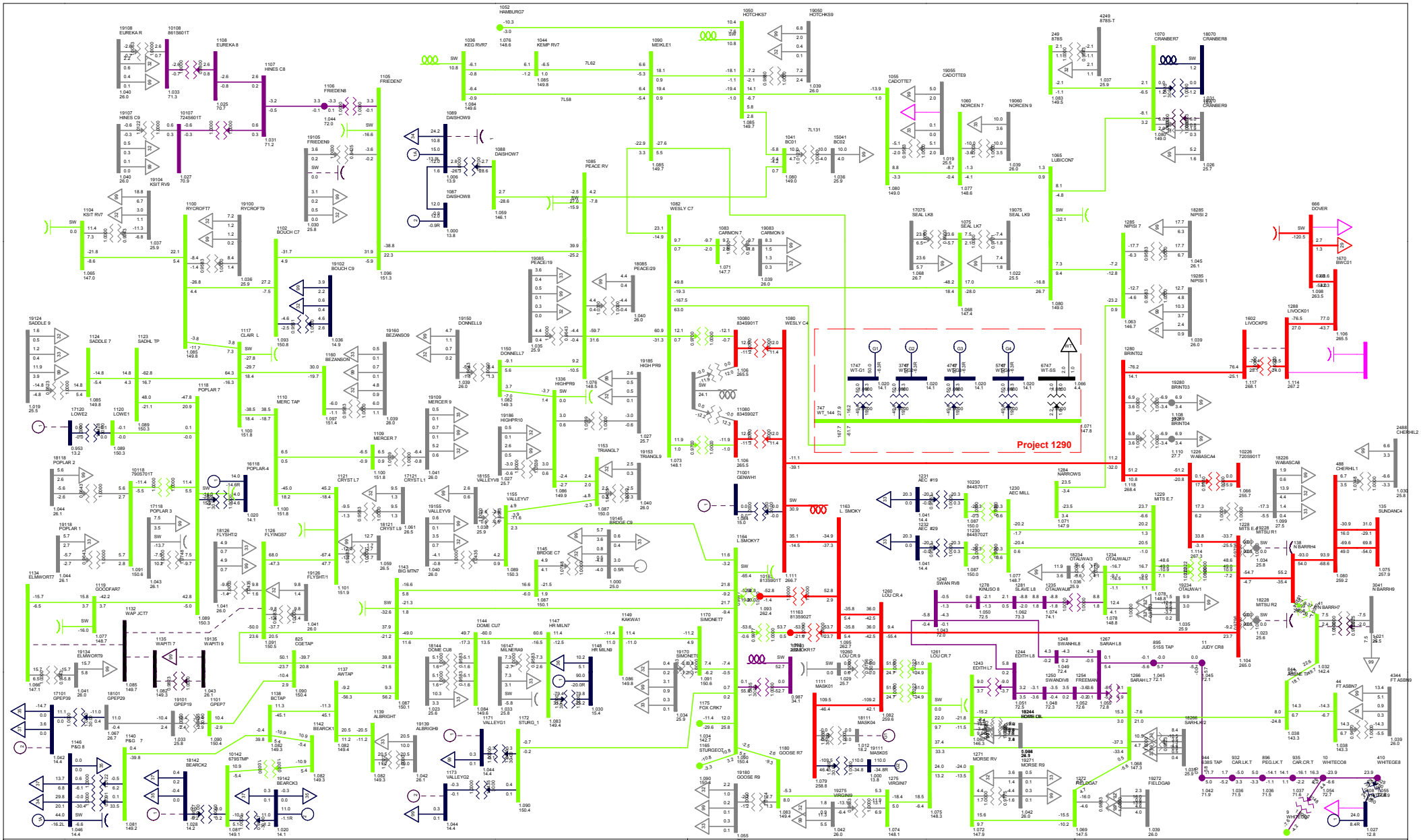
Appendix D2B

Figure: 73

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 036 7LO3 FLTINGSHOTLAKE to ELMWORTH_A.

Whitetail Project 1290 Interconnection Study



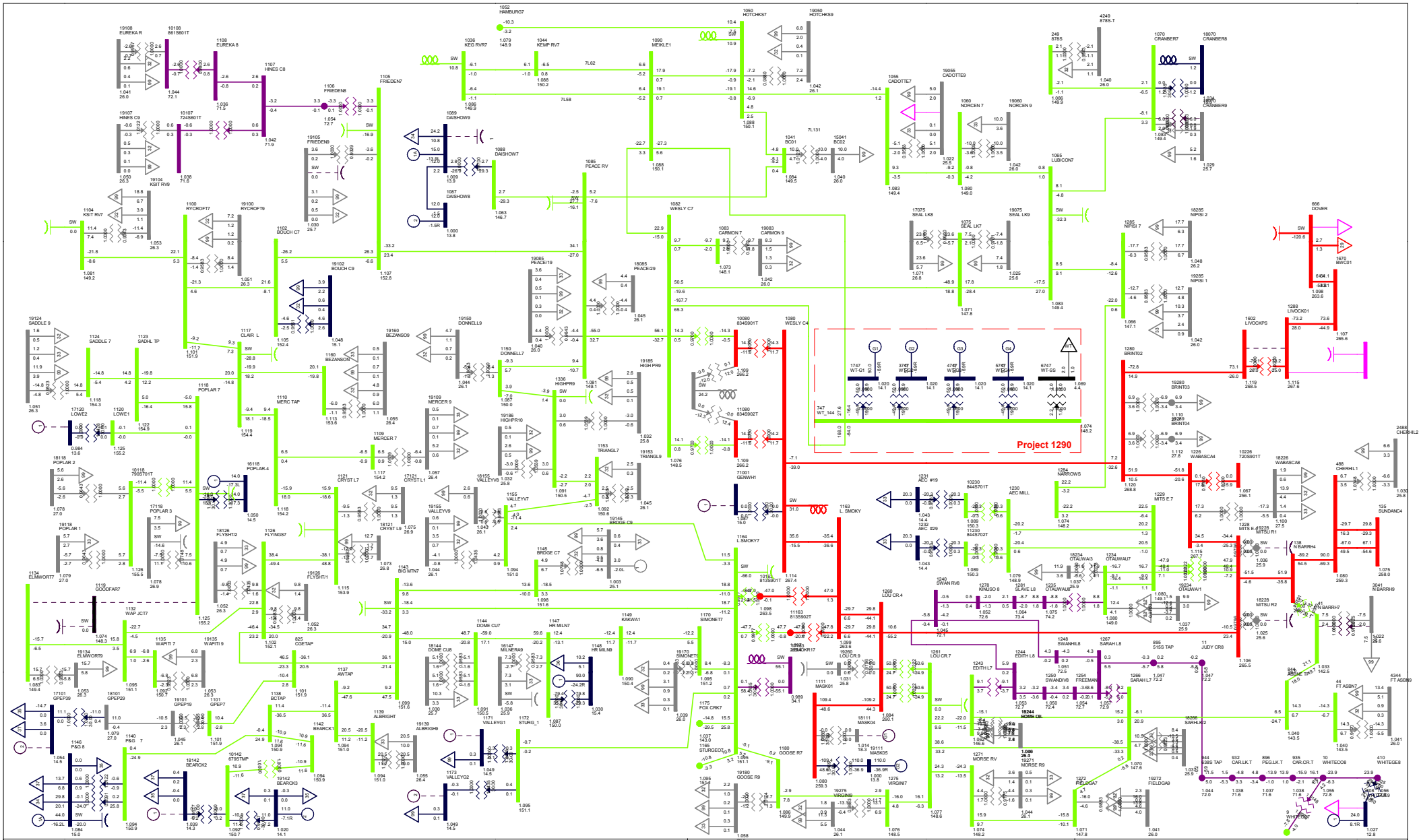
Appendix D2B

Figure: 74

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 036 7LU3 FLTINGSHOTLAKE to ELMWORTH_B.

Whitetail Project 1290 Interconnection Study



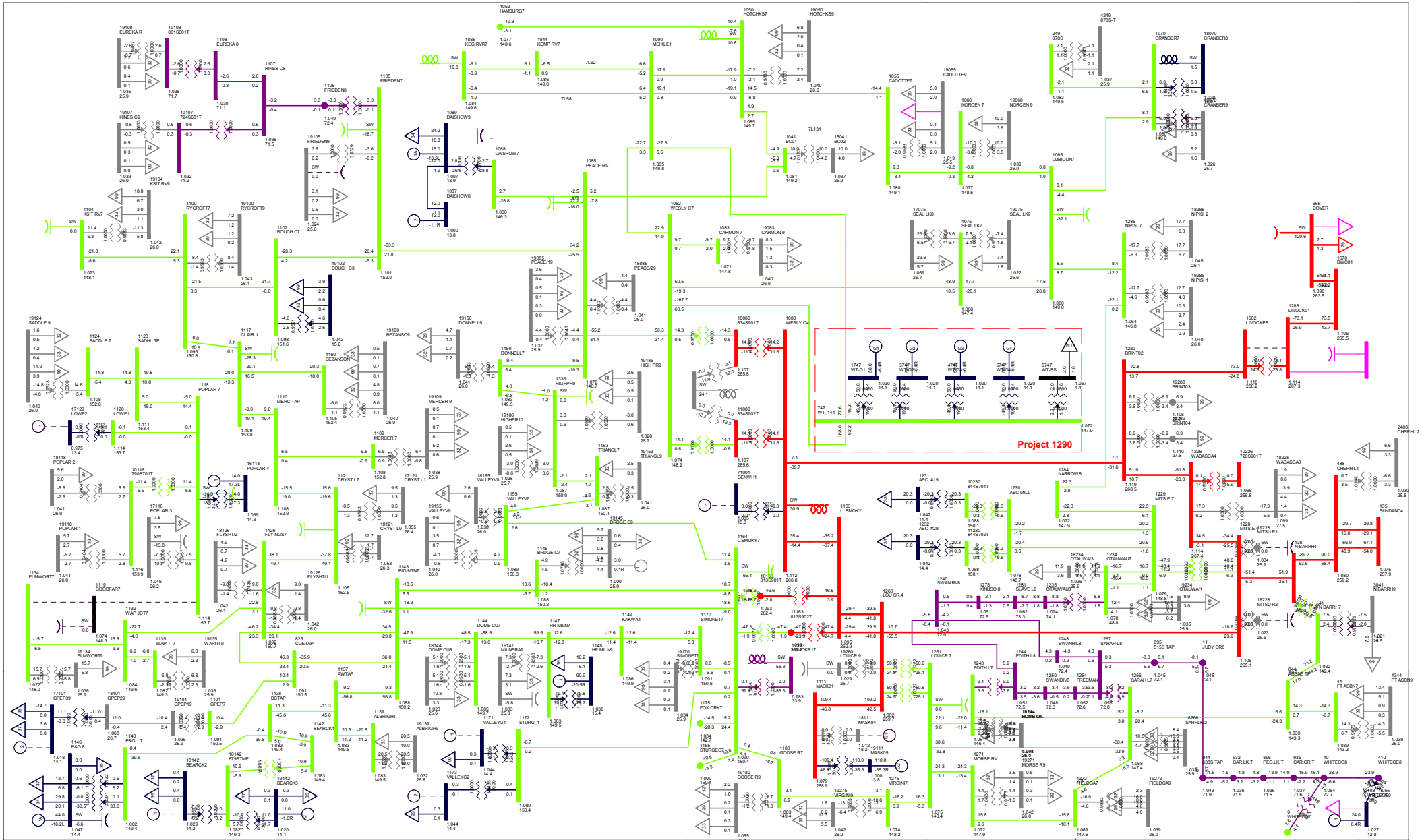
Appendix D2B

Figure: 75

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 037 7Lu7 POPLARHILL to ELMWORTH_A.

Whitetail Project 1290 Interconnection Study



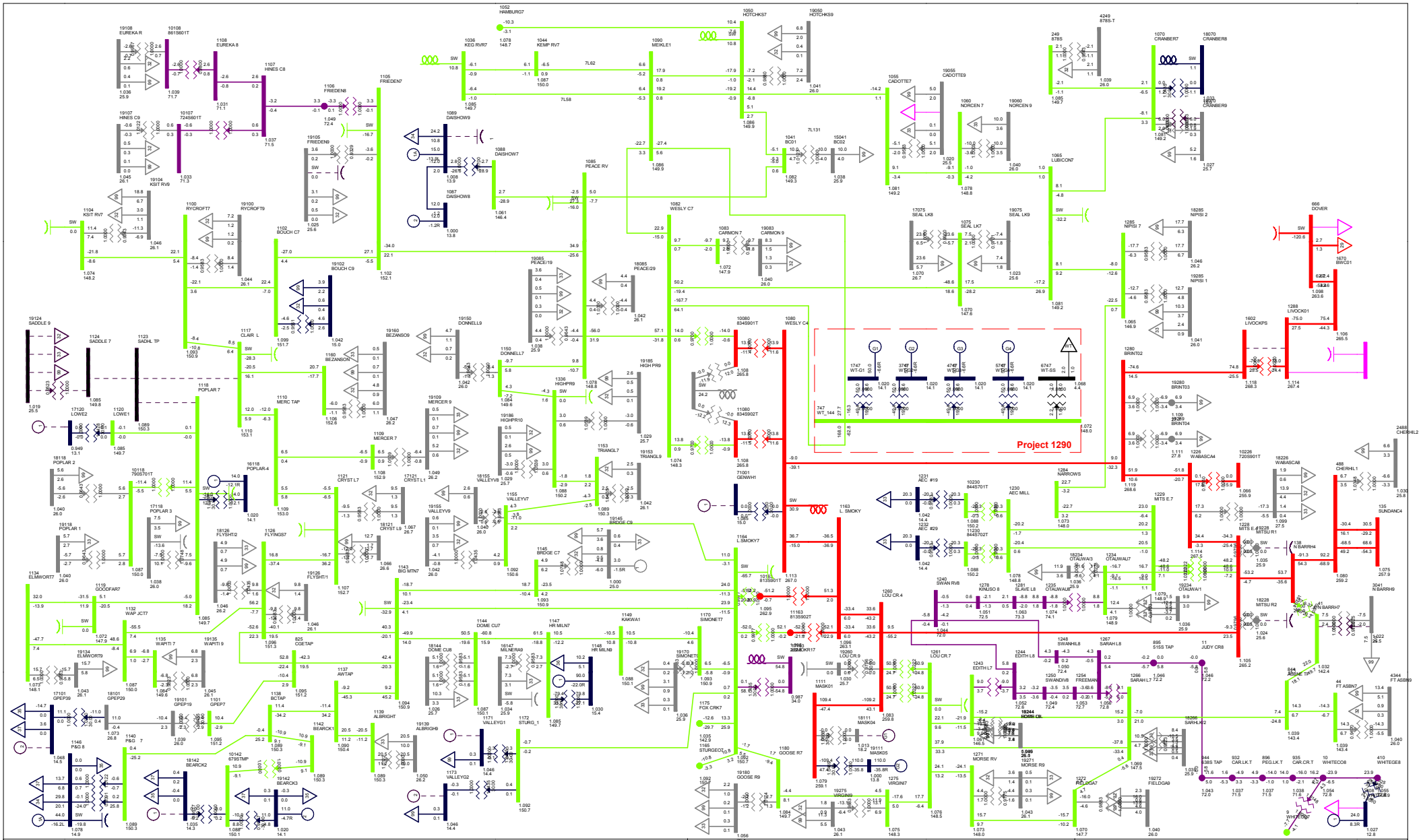
Appendix D2B

Figure: 76

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 037 7LO7 POPLARHILL to ELMWORTH_B.

Whitetail Project 1290 Interconnection Study



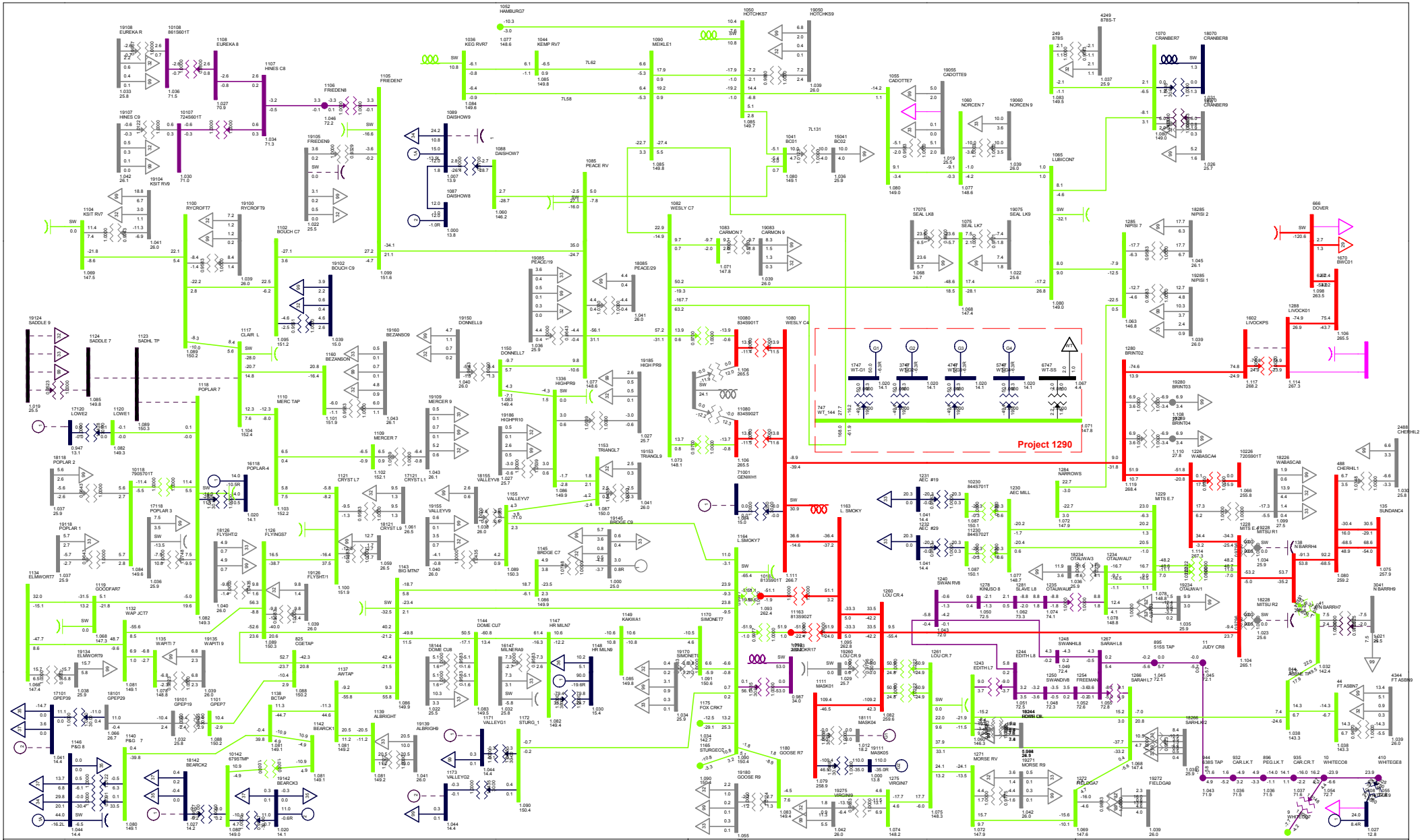
Appendix D2B

Figure: 77

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 038 7Lzz PORLARHILL to CLAIRMONTLAKE_A.

Whitetail Project 1290 Interconnection Study



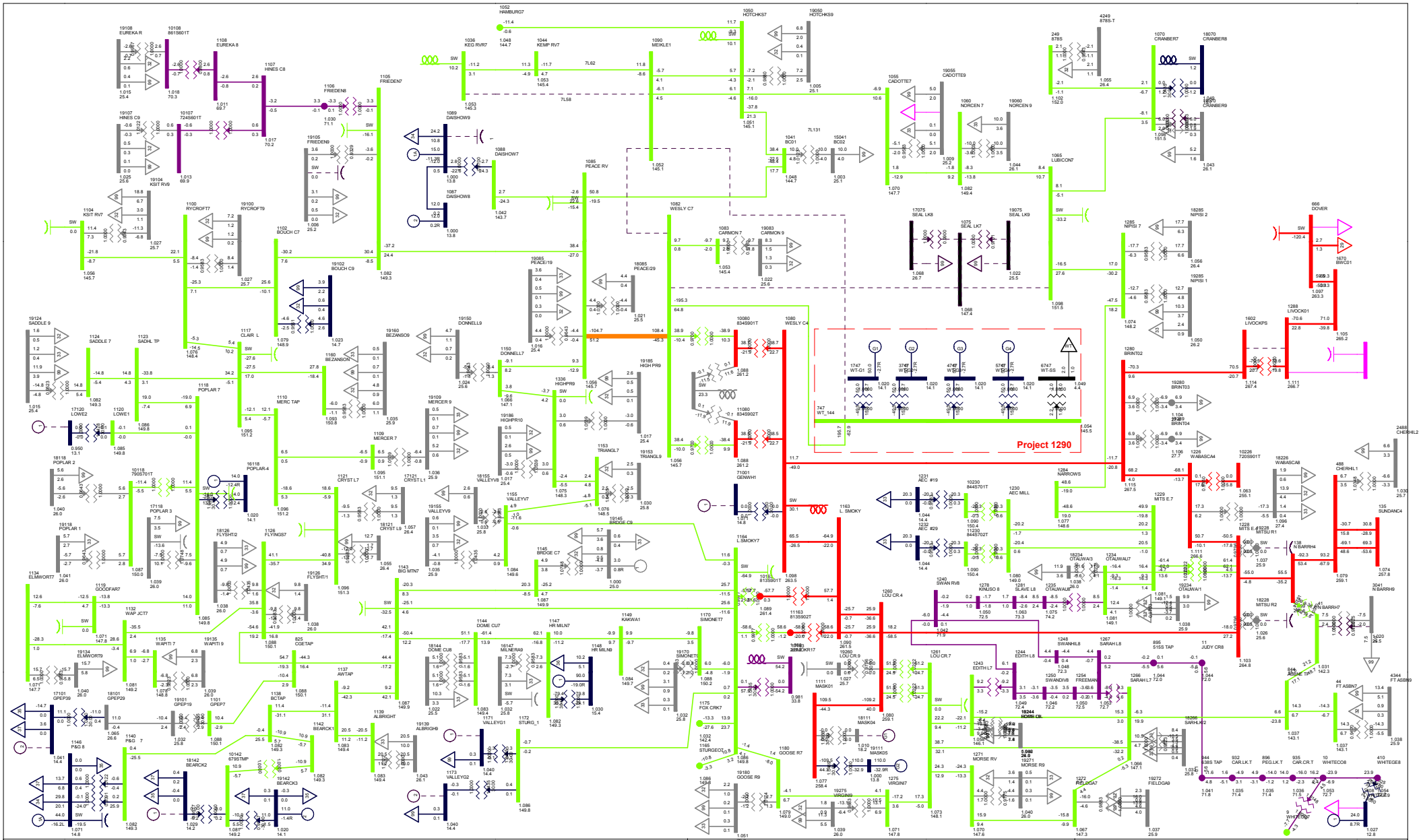
Appendix D2B

Figure: 78

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 038 7Lz2 POPLARHILL to CLAIRMONTLAKE_B.

Whitetail Project 1290 Interconnection Study



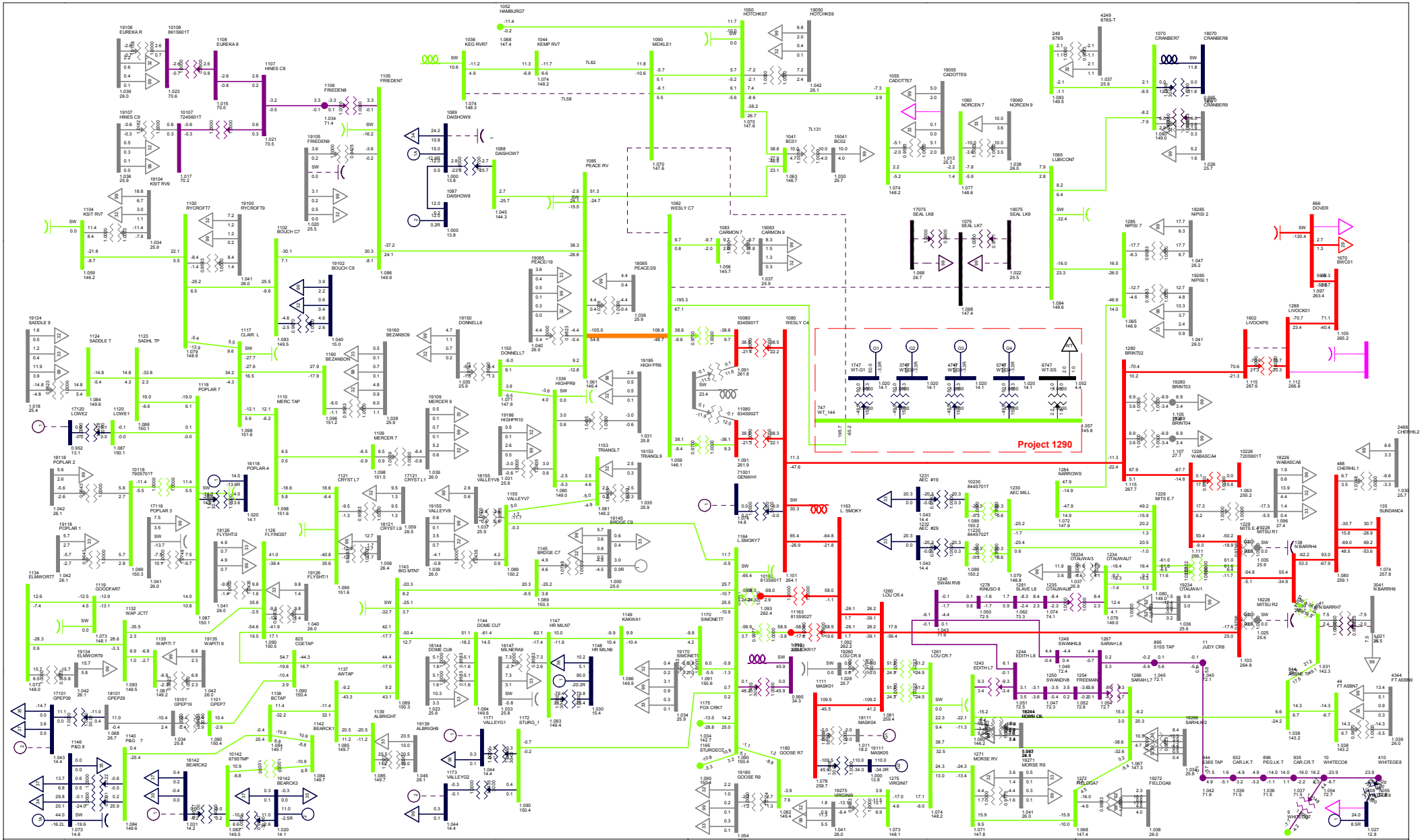
Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 040 C Cont 7L106 7L131 (TAP)_A.

Whitetail Project 1290 Interconnection Study

Appendix D2B

Figure: 79



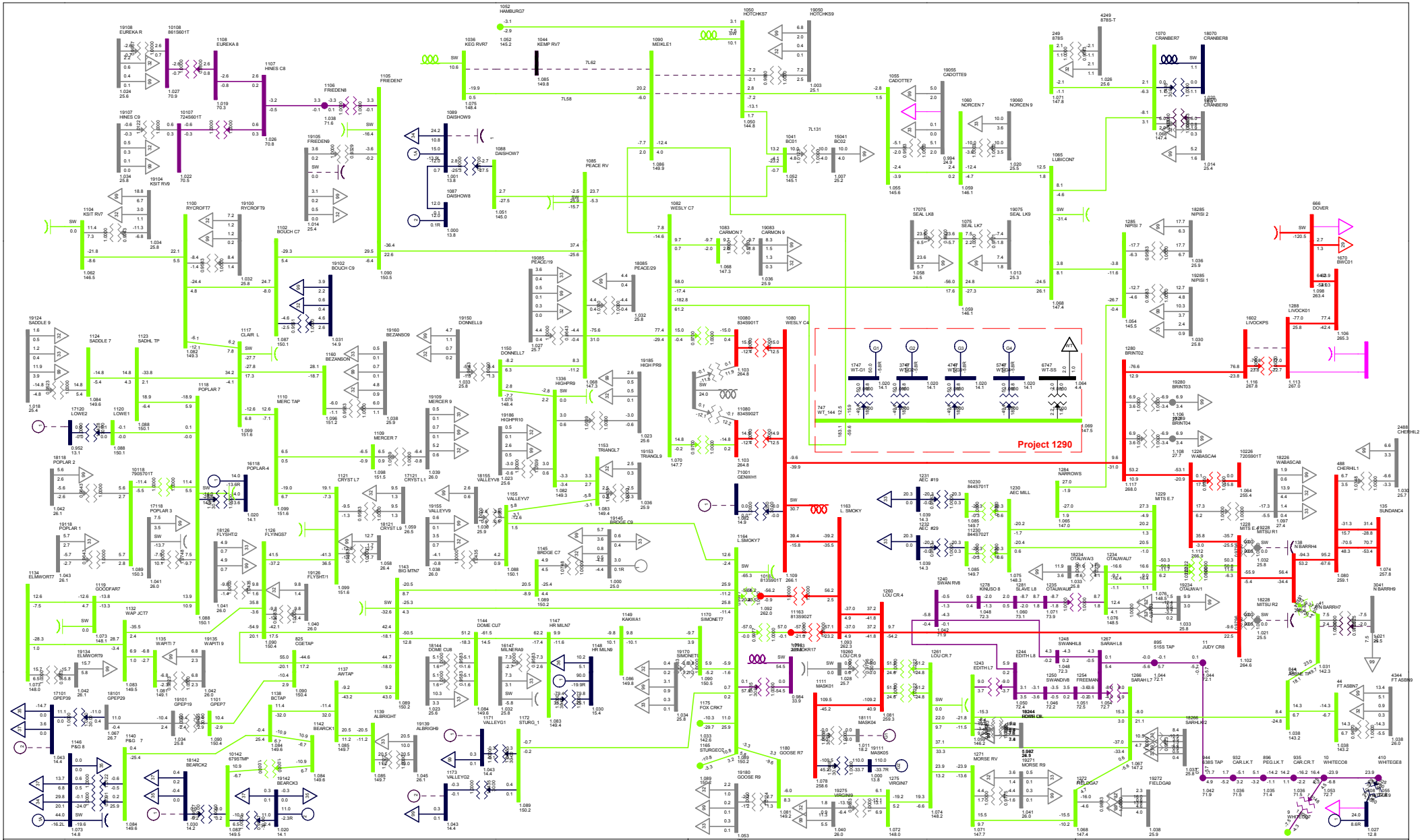
Appendix D2B

Figure: 80

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 040 C Cont 7L106 7L131 (TAP)_B.

Whitetail Project 1290 Interconnection Study



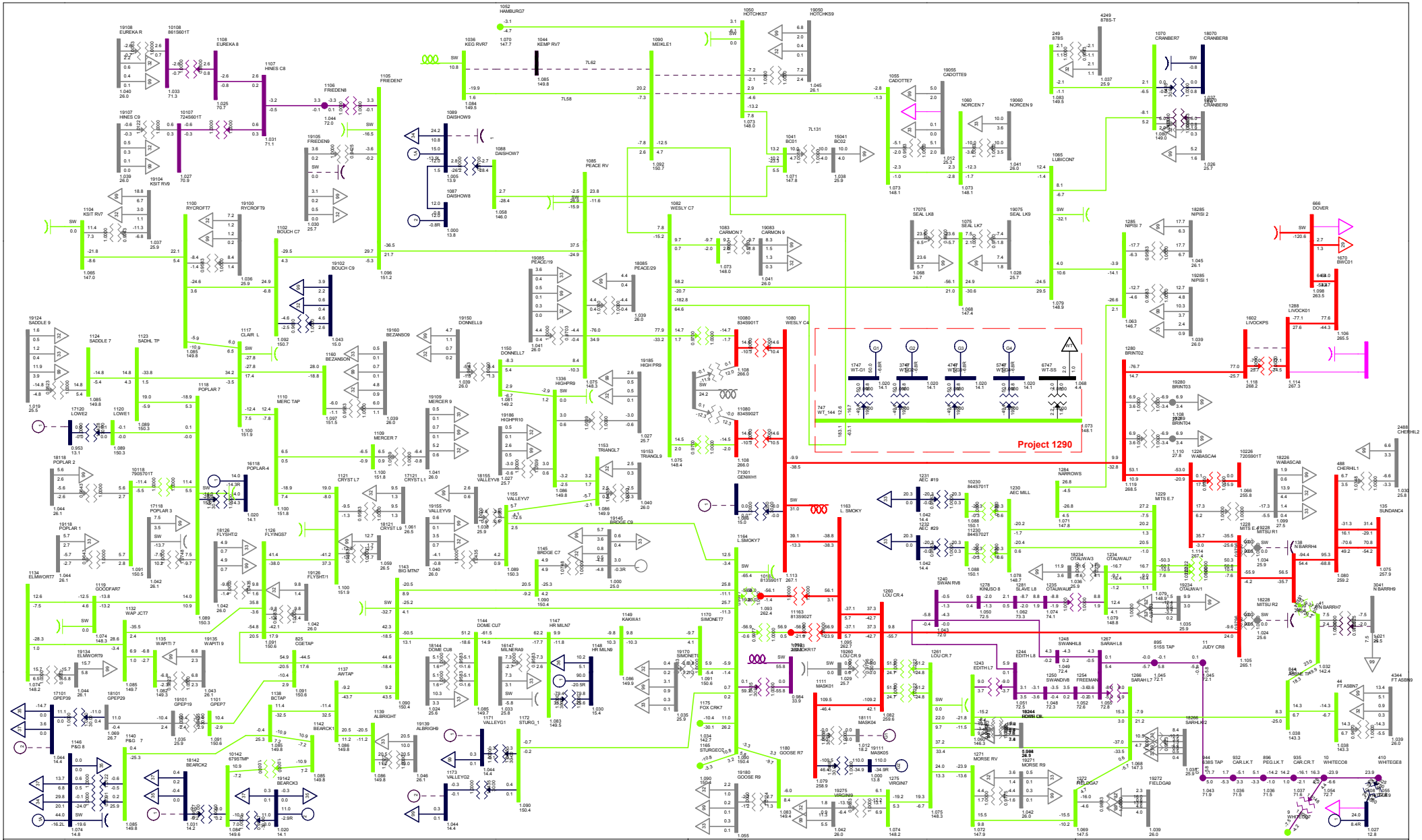
Appendix D2B

Figure: 81

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 041 C Cont 7L120 7L138 (TAP)_A.

Whitetail Project 1290 Interconnection Study



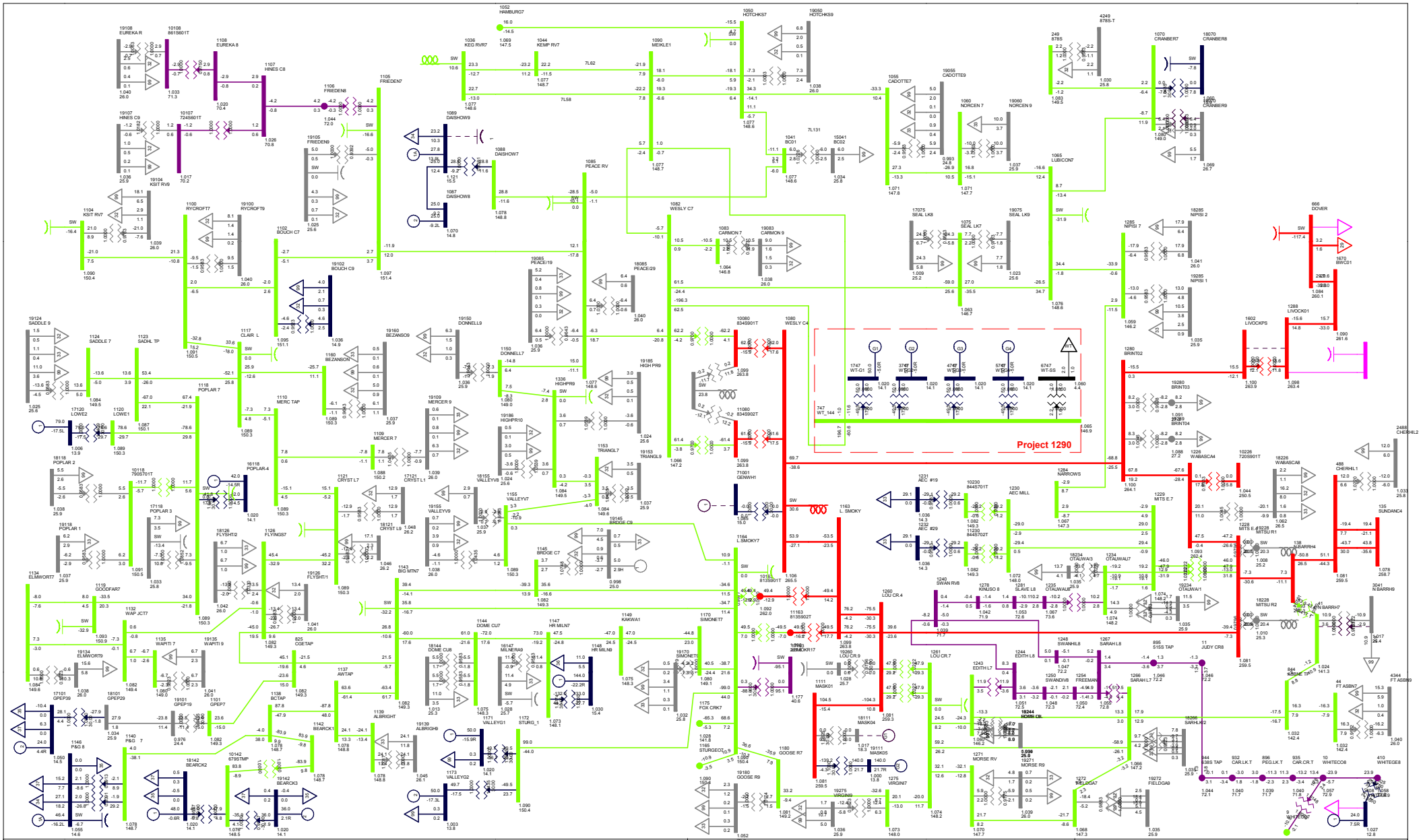
Appendix D2B

Figure: 82

Study Case Description

CASE 02 2014 SL Mgen
SCEN 02 144Tap
CONT 041 C Cont 7L120 7L138 (TAP)_B.

Whitetail Project 1290 Interconnection Study



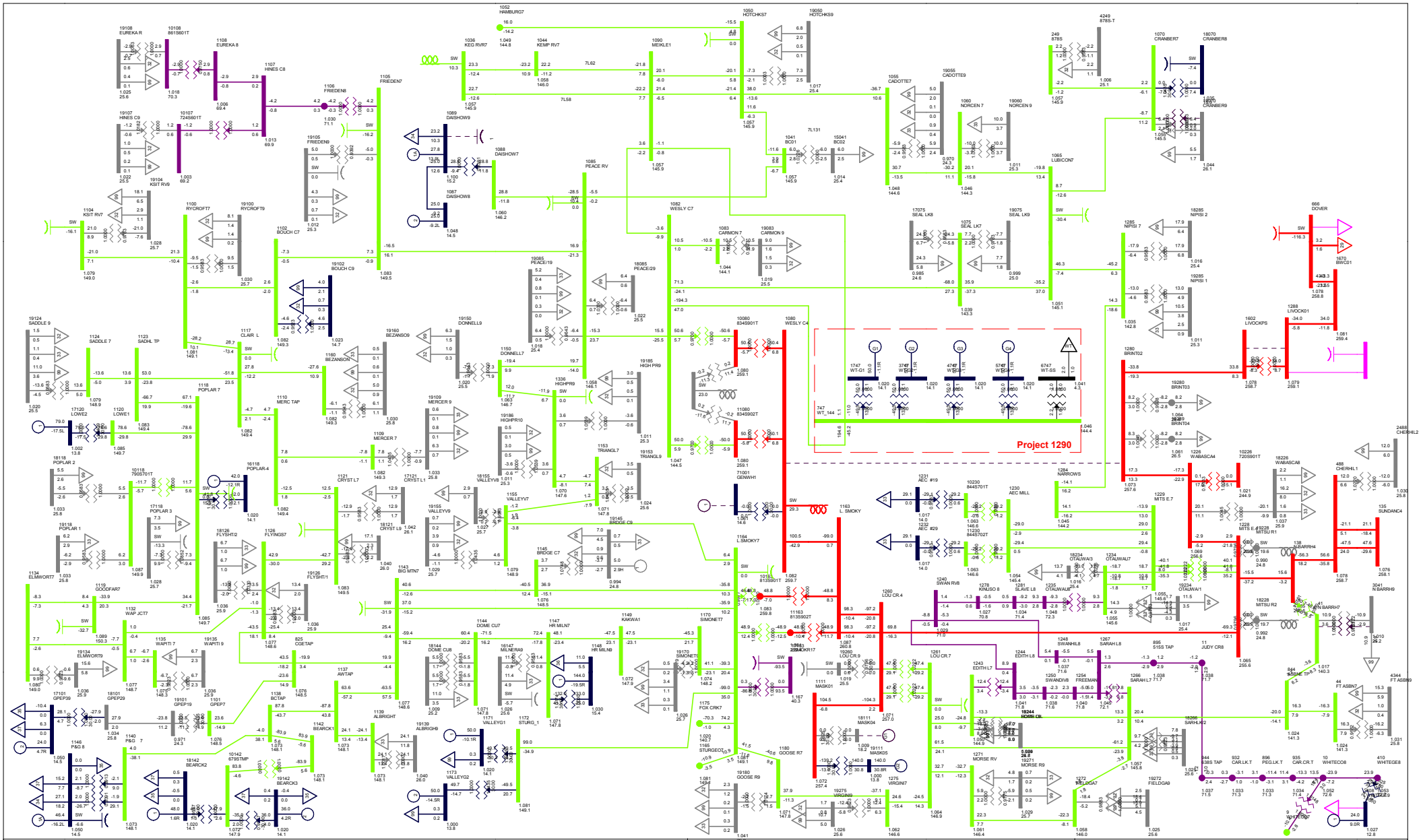
Appendix D2C

Figure: 1

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 000 All elements in service_A.

Whitetail Project 1290 Interconnection Study



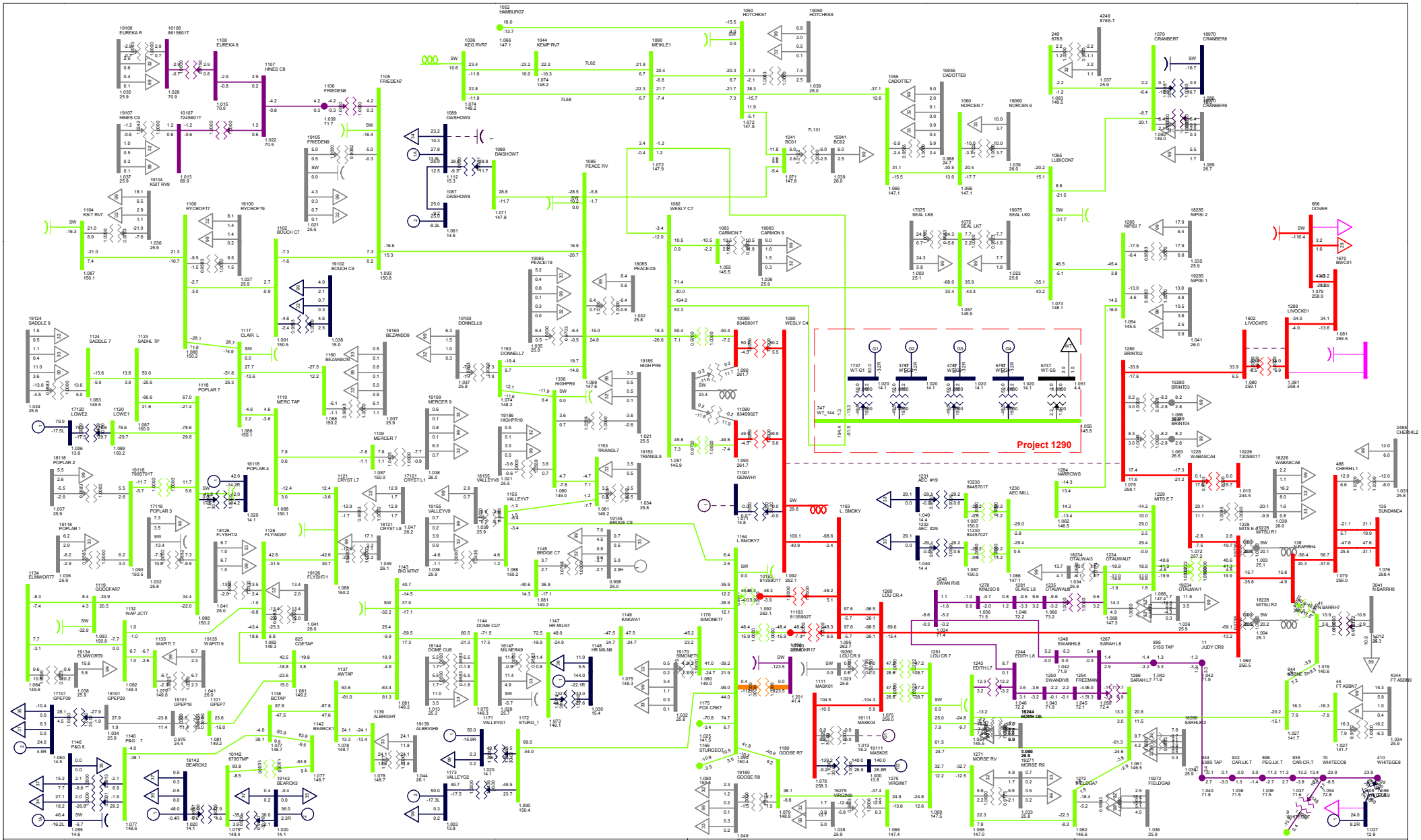
Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 001 9Lib WESLEYCREEK to Brintnell_A.

Whitetail Project 1290 Interconnection Study

Appendix D2C

Figure: 3



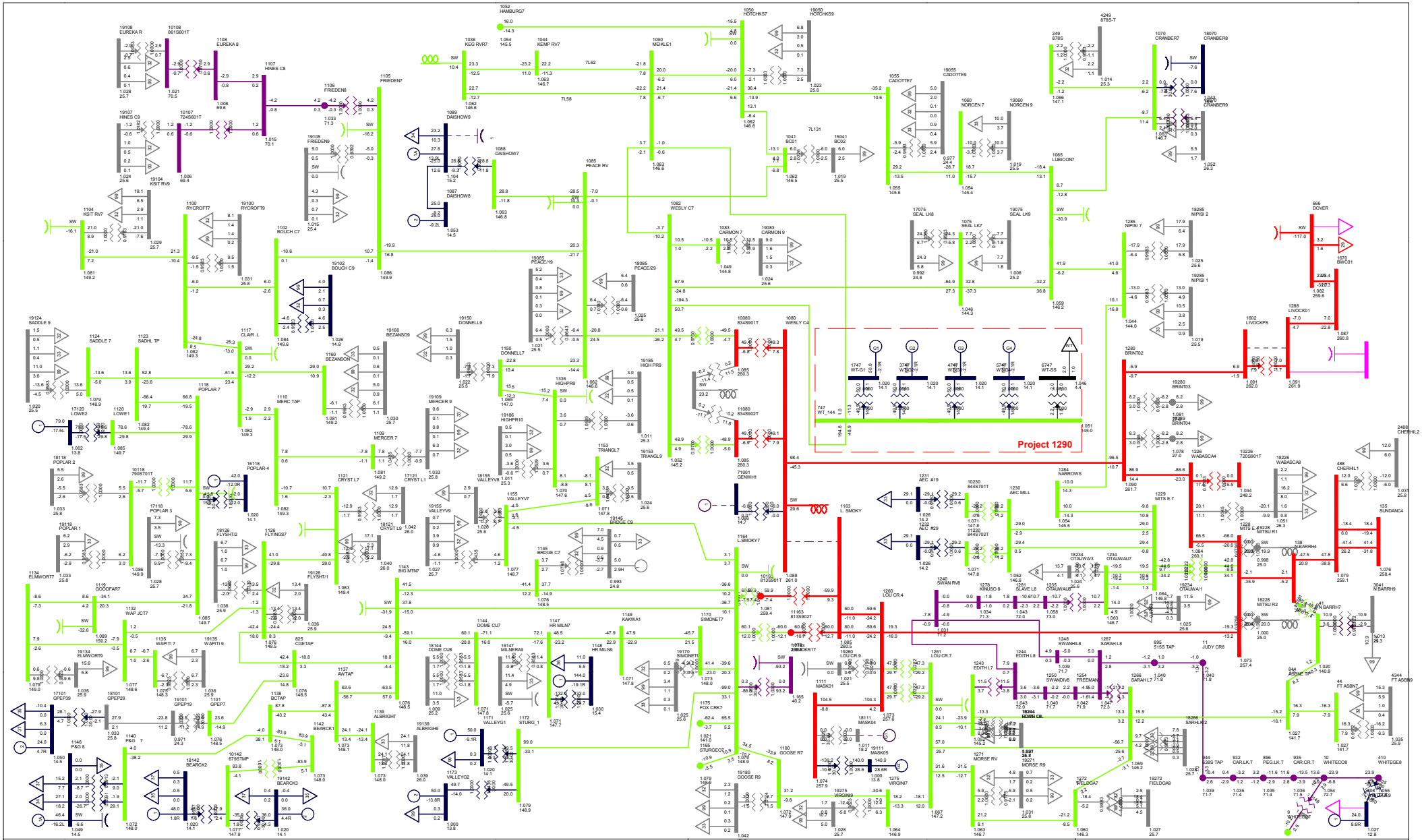
Appendix D2C

Figure: 4

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 001 9Lib WESLEYCREEK to Brintnell_B.

Whitetail Project 1290 Interconnection Study

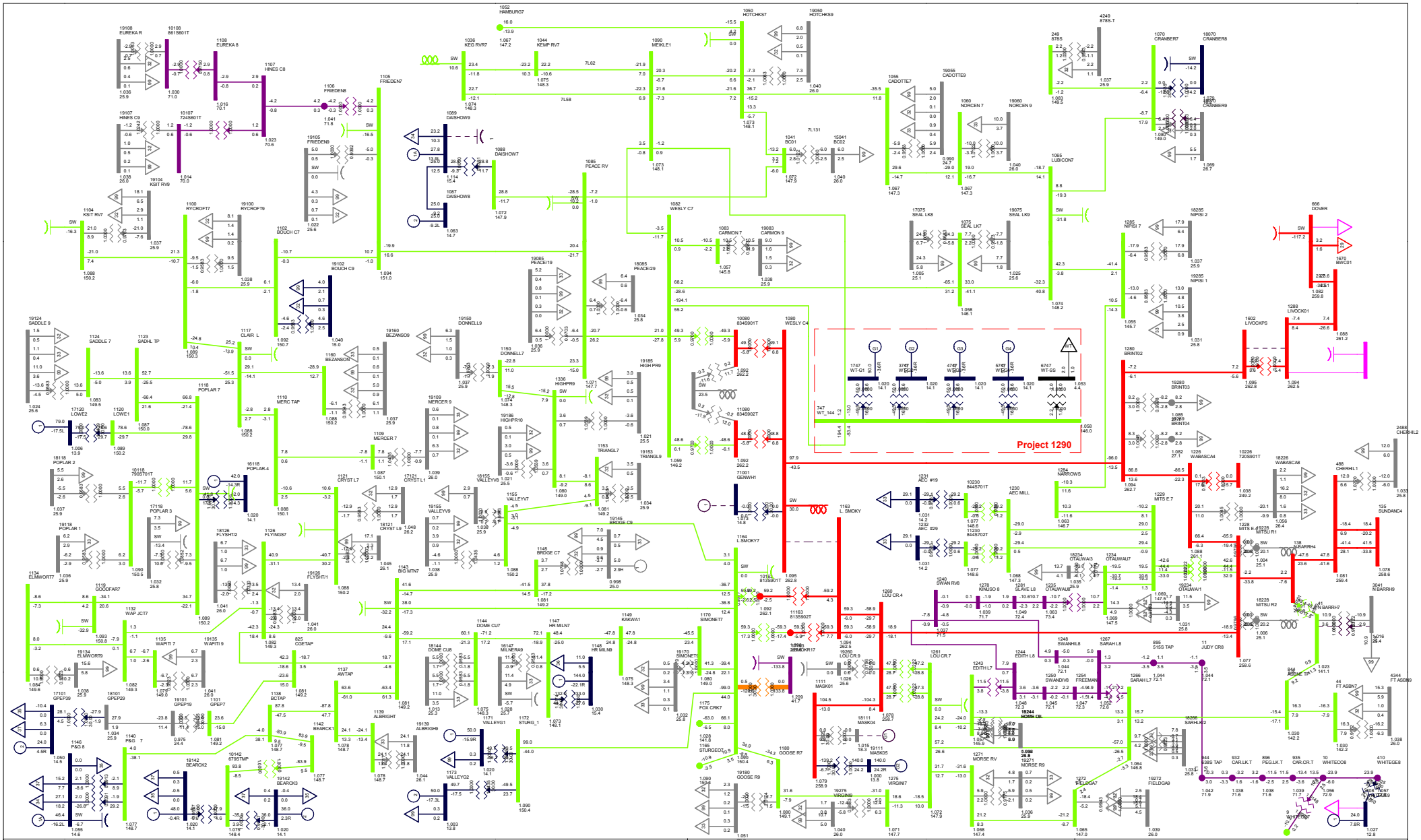


Appendix D2C Figure: 5

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 002 9LIT WESLEYCREEK to LITTLESMOKY_A.

Whitetail Project 1290 Interconnection Study



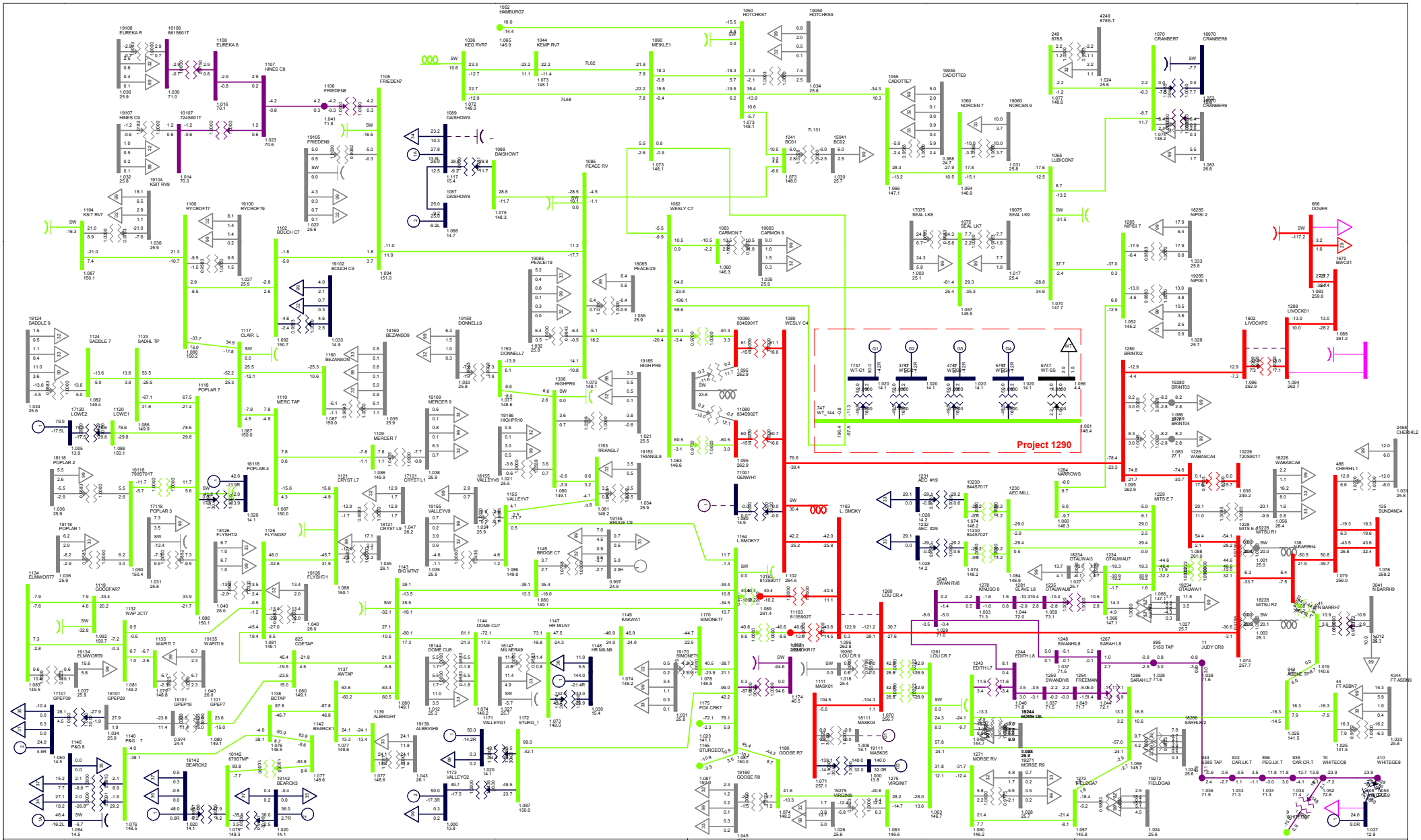
Appendix D2C

Figure: 6

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 002 9LIT WESLEYCREEK to LITTLESMOKY_B.

Whitetail Project 1290 Interconnection Study



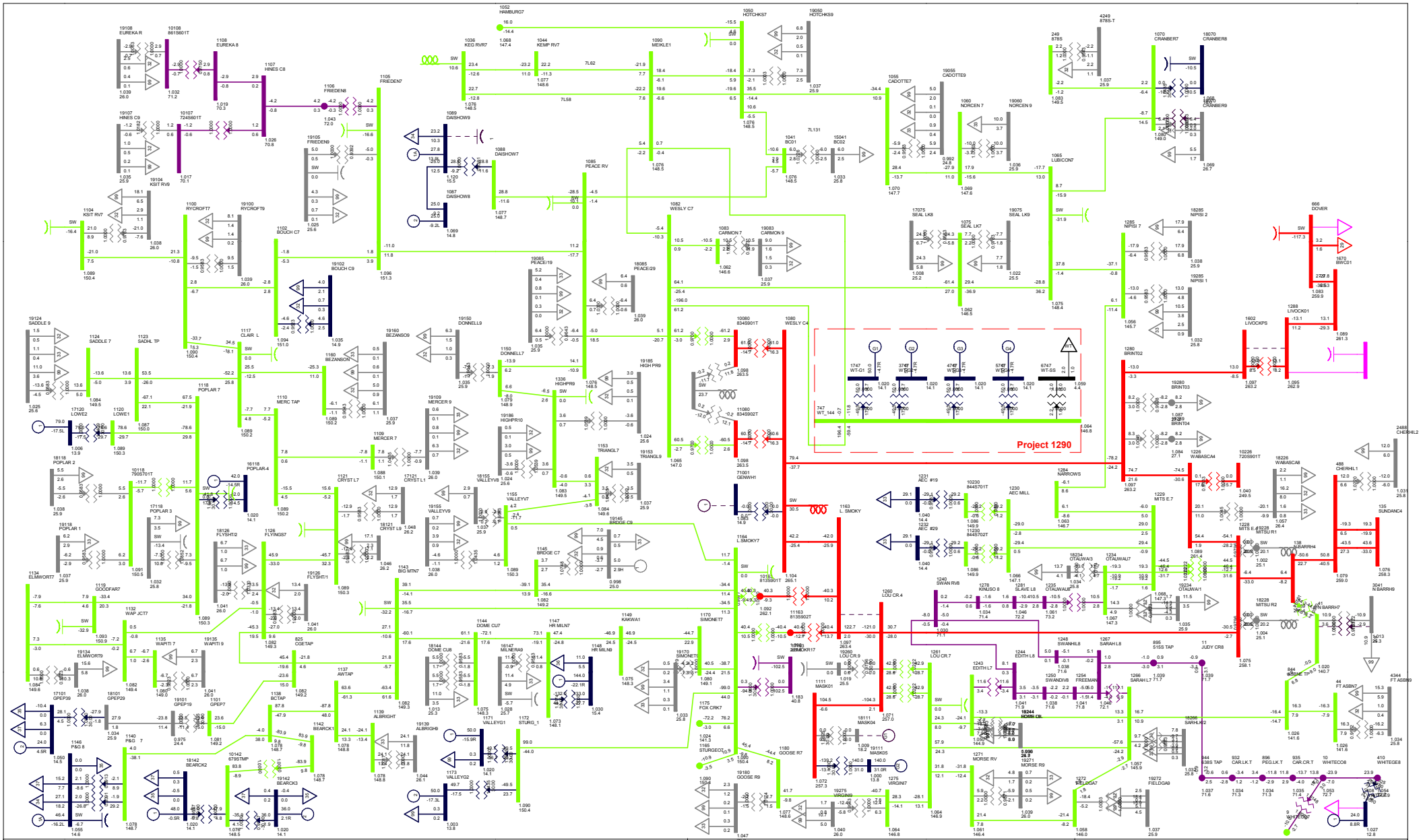
Appendix D2C

Figure: 7

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 003 9LU5 LT1 LESMOKY to LOUISECREEK_A.

Whitetail Project 1290 Interconnection Study



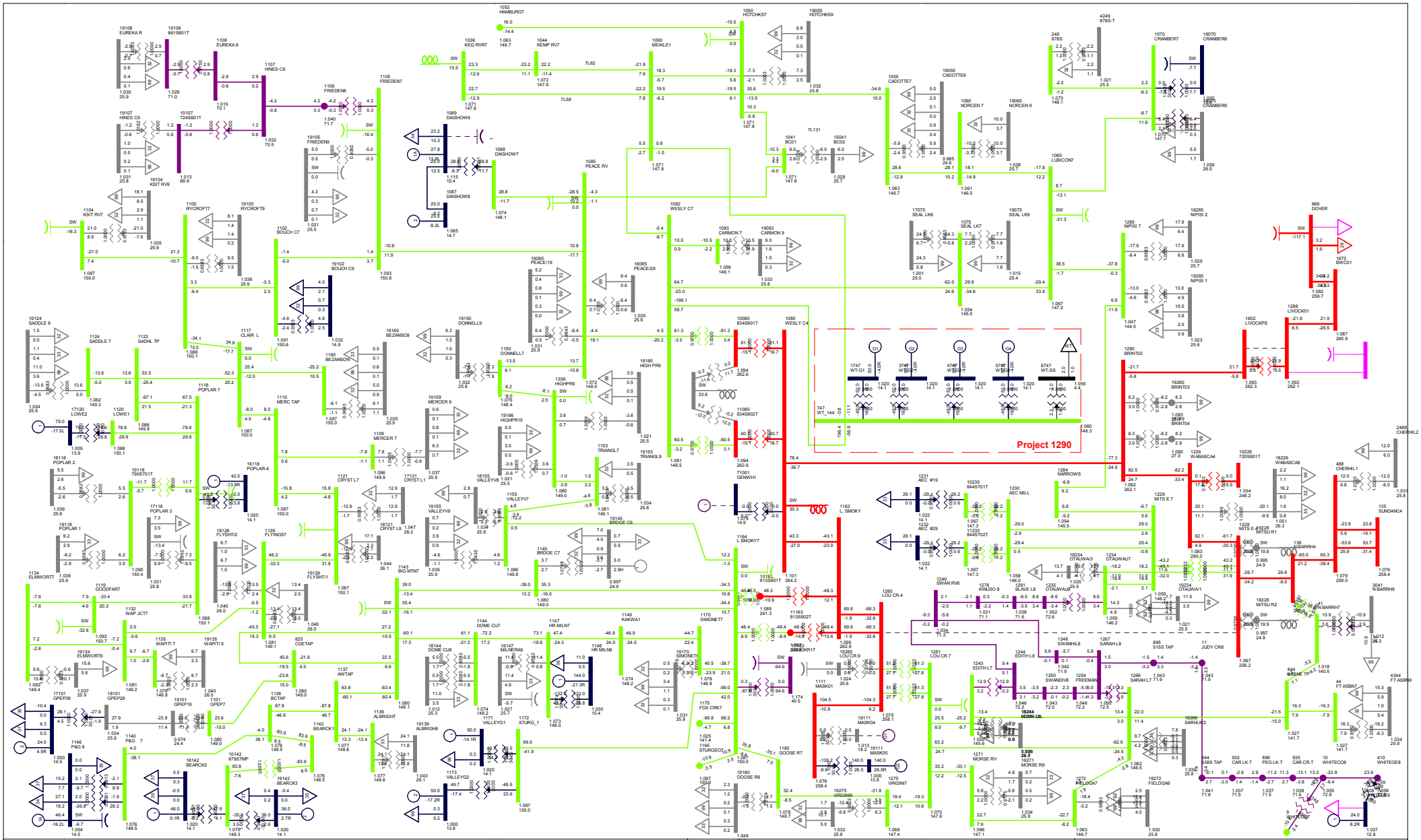
Appendix D2C

Figure: 8

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 003 9LU5 LI1 LESMOKY to LOUISECREEK_B.

Whitetail Project 1290 Interconnection Study



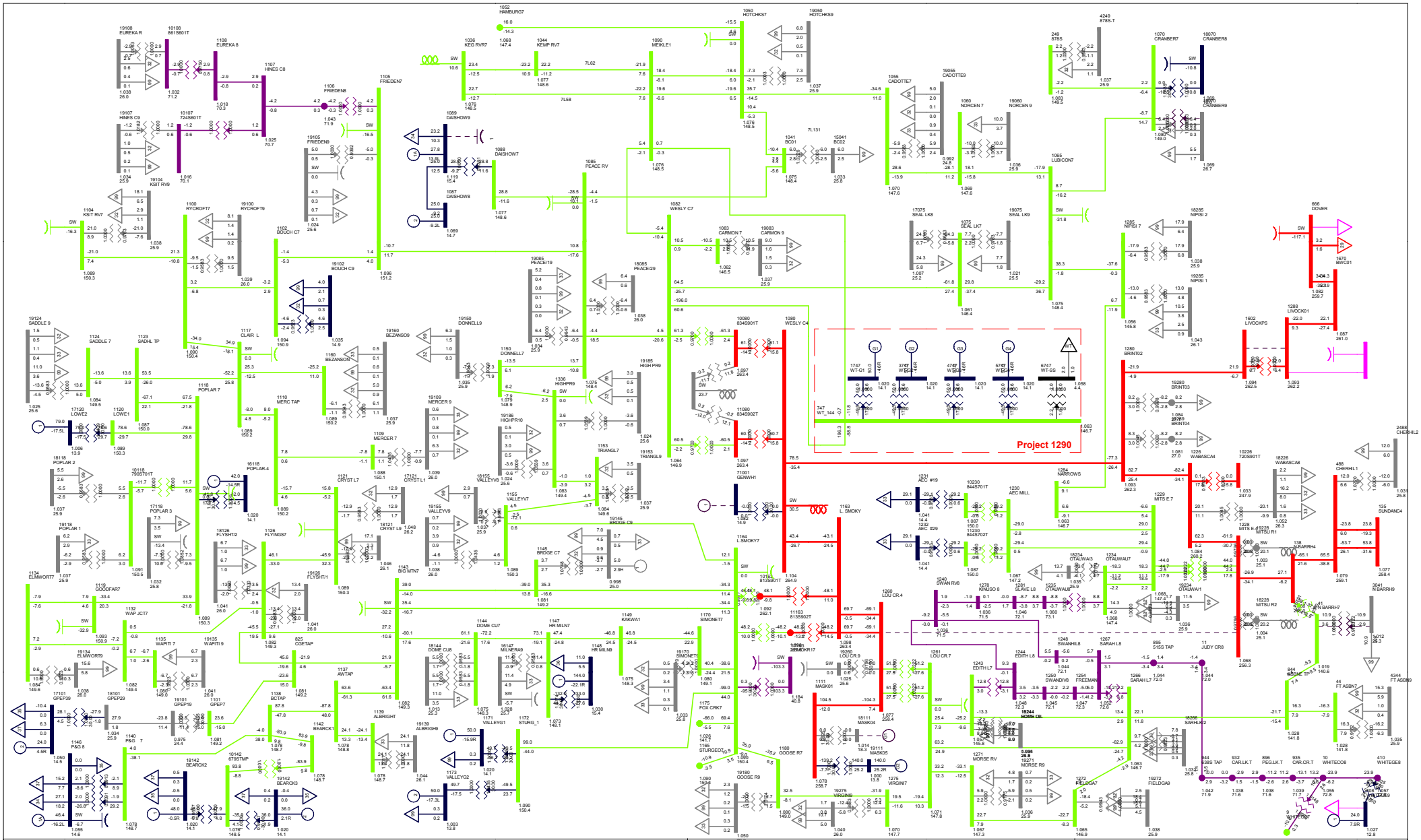
Appendix D2C

Figure: 9

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 004 9L40 MITSUE to LOUISECREEK_A.

Whitetail Project 1290 Interconnection Study



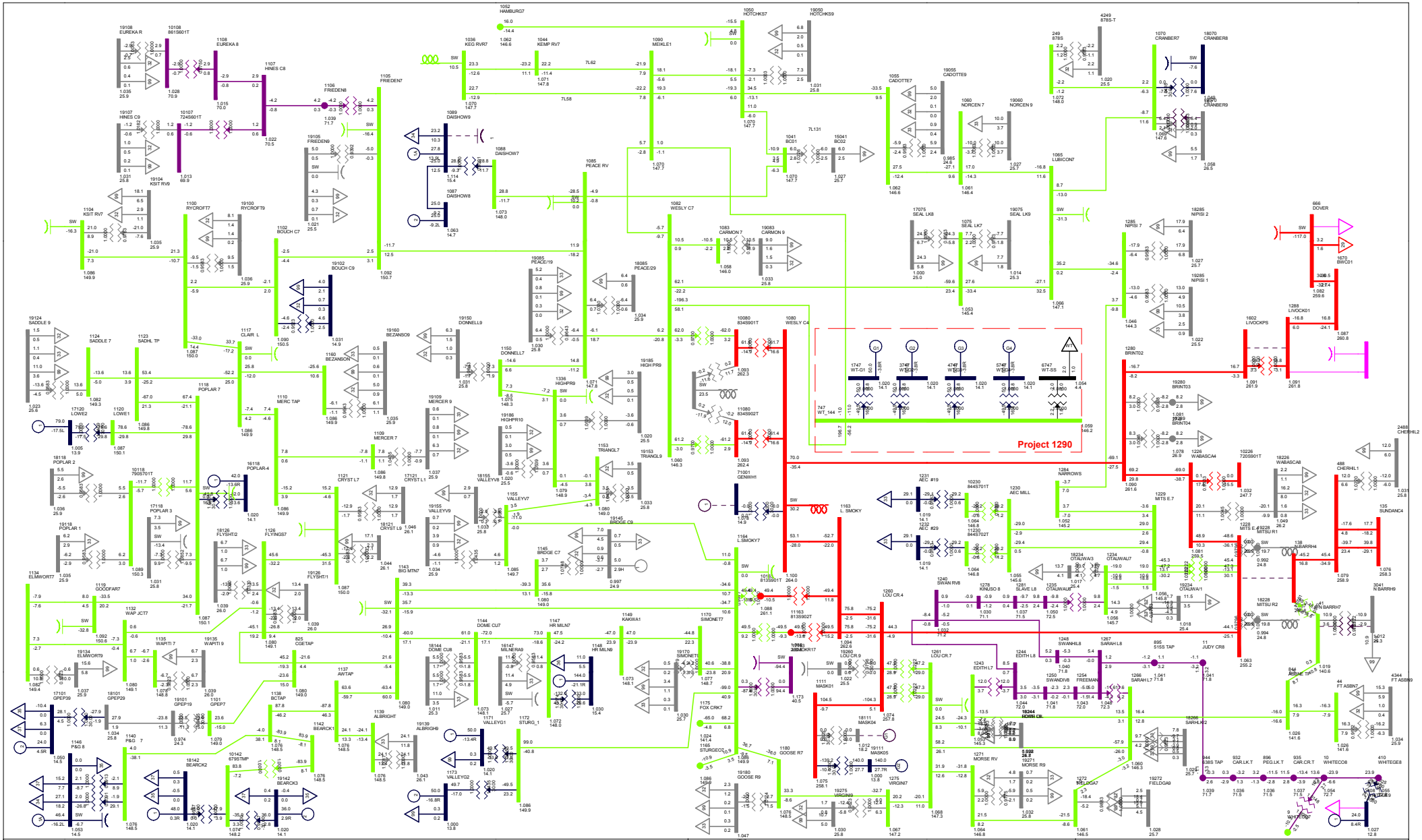
Appendix D2C

Figure: 10

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 004 9L40 MITSUE to LOUISECREEK_B.

Whitetail Project 1290 Interconnection Study



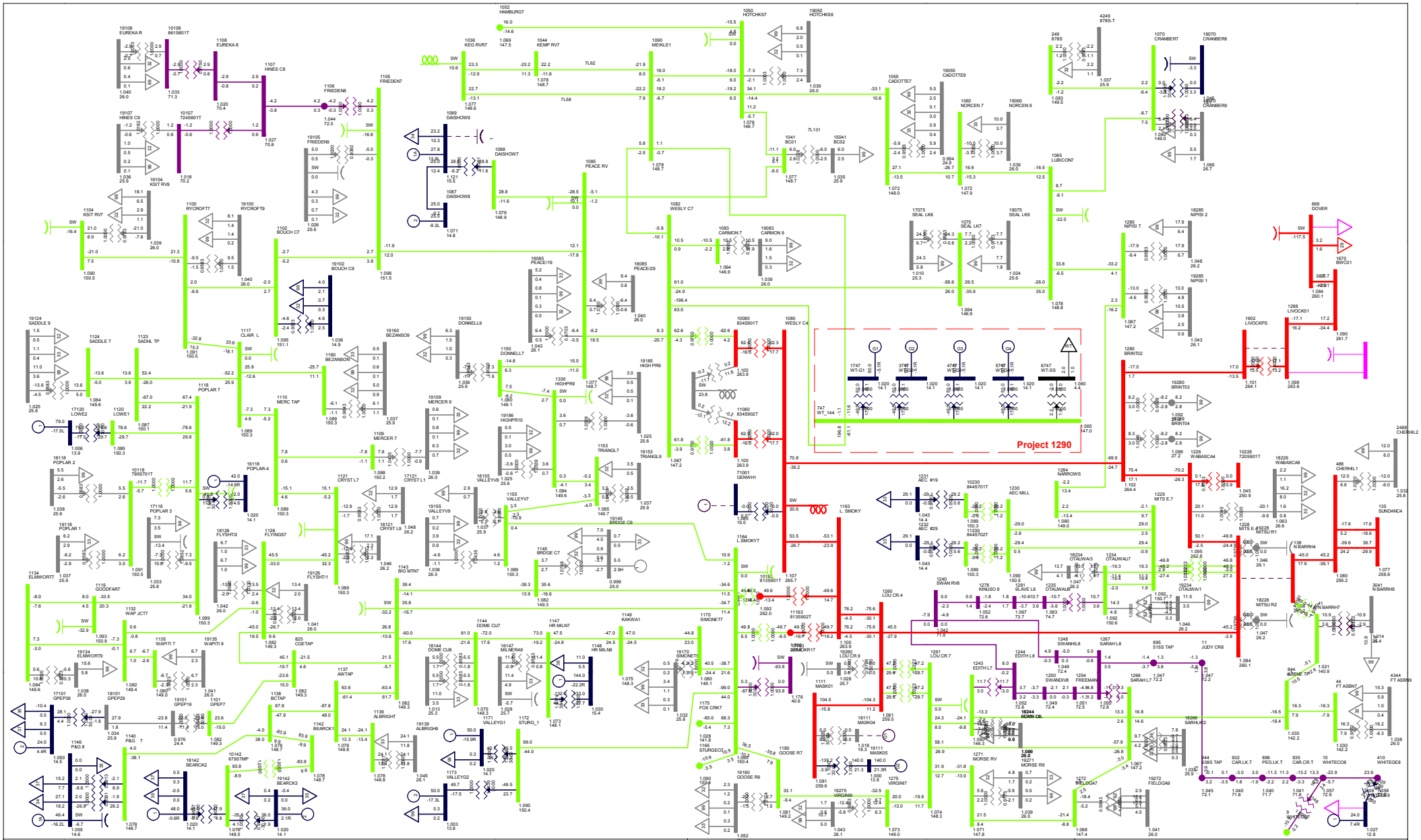
Appendix D2C

Figure: 11

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 005 913L NORTHBARRHEAD to MITSUE_A.

Whitetail Project 1290 Interconnection Study



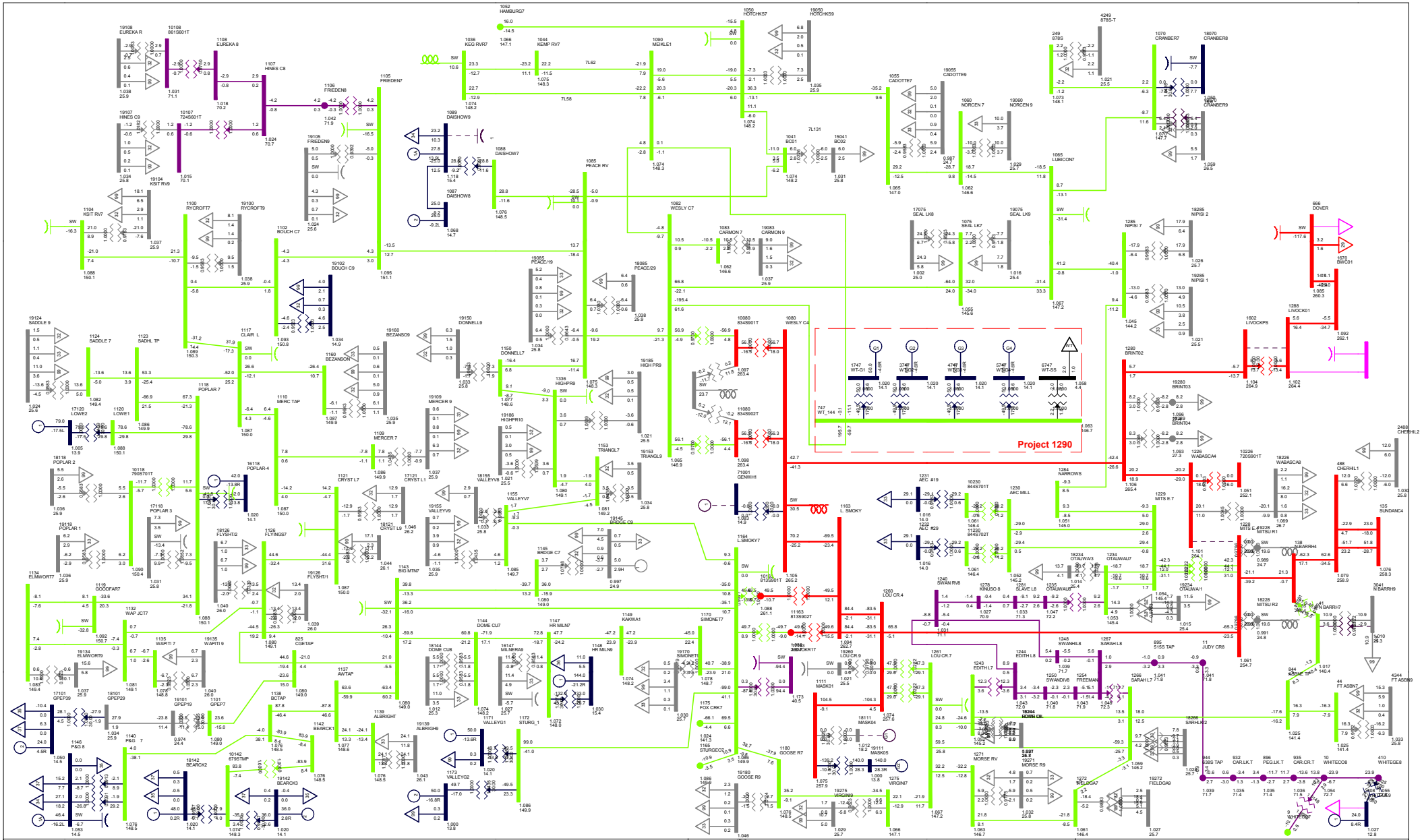
Appendix D2C

Figure: 12

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 005 9138 NORTHBARRHEAD to MITSUE_B.

Whitetail Project 1290 Interconnection Study



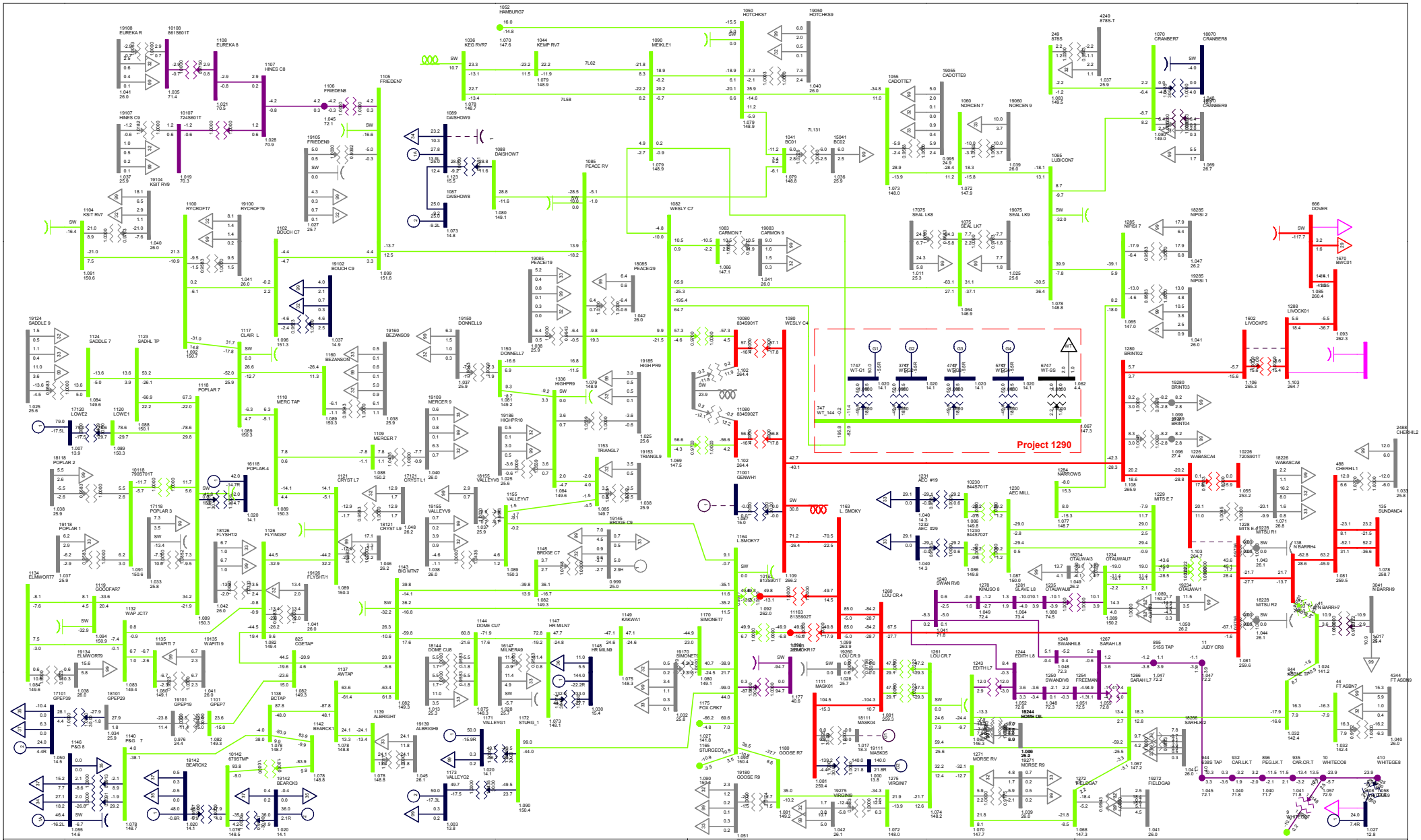
Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 006 9Lbs WABASCA to MITSUE_A.

Whitetail Project 1290 Interconnection Study

Appendix D2C

Figure: 13



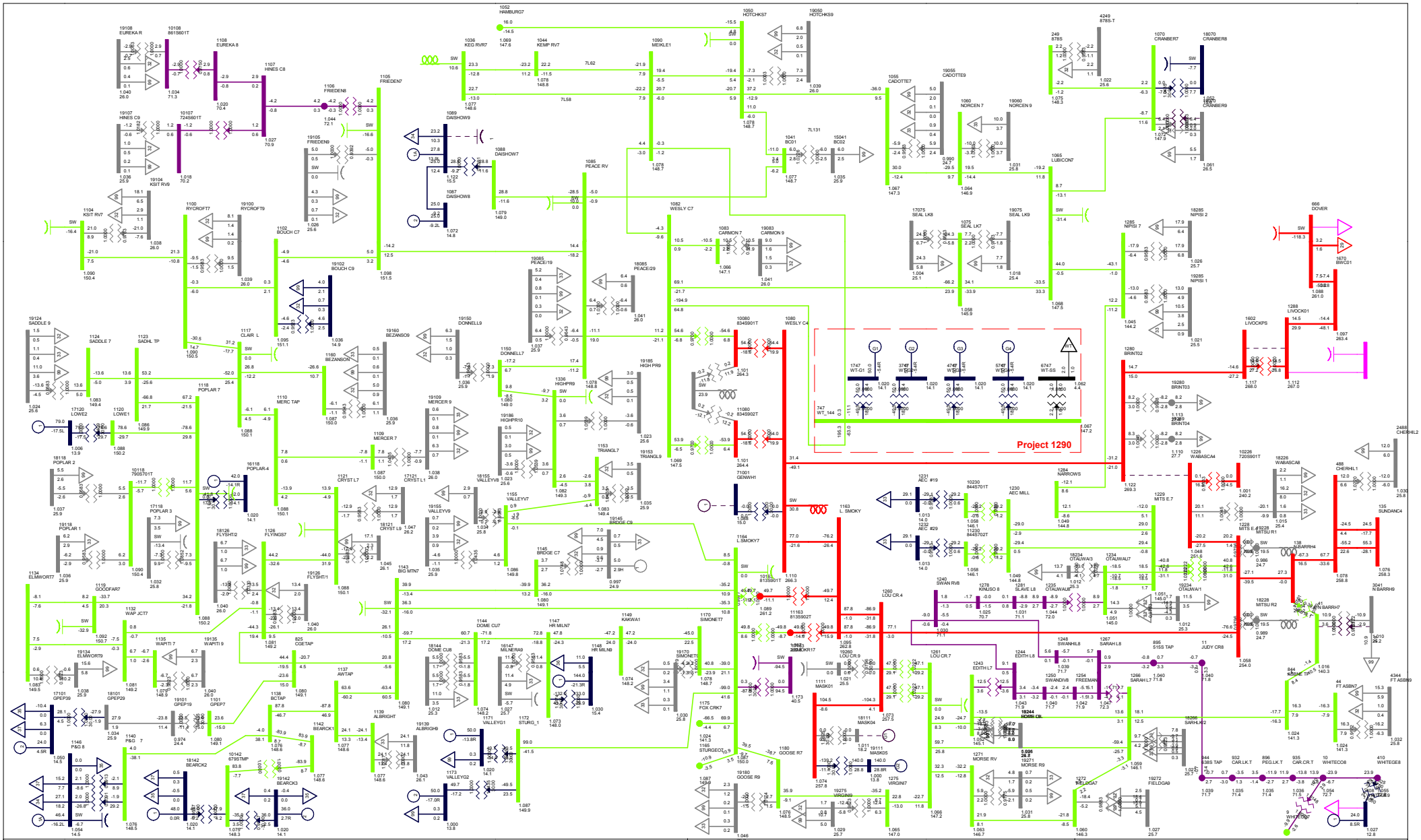
Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 006 9Lbs WABASCA to MITSUE_B.

Whitetail Project 1290 Interconnection Study

Appendix D2C

Figure: 14



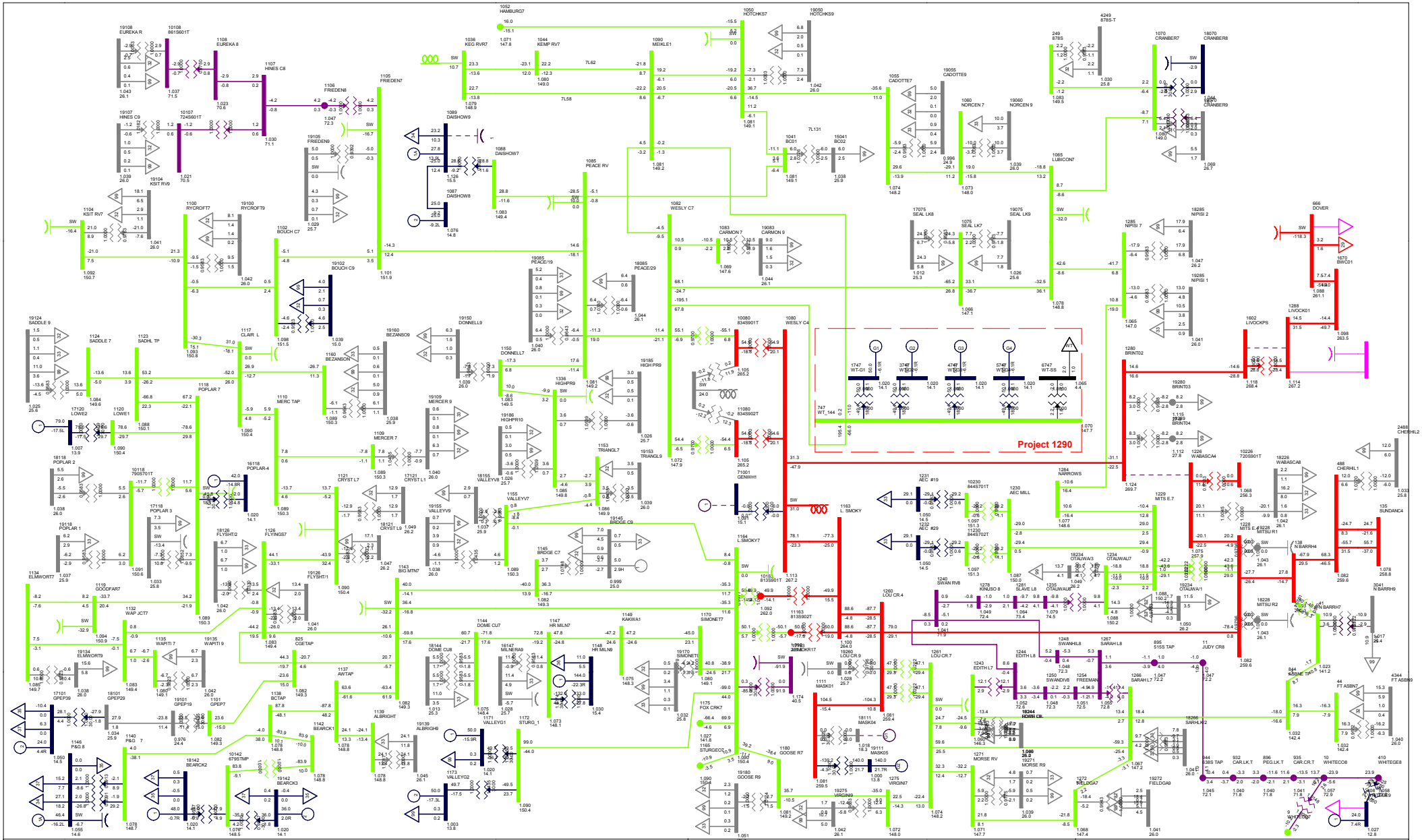
Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 007 9L10 WABASCA to Brintnell_A.

Whitetail Project 1290 Interconnection Study

Appendix D2C

Figure: 15



Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 007 9L10 WABASCA to Brintnell_B.

Whitetail Project 1290 Interconnection Study

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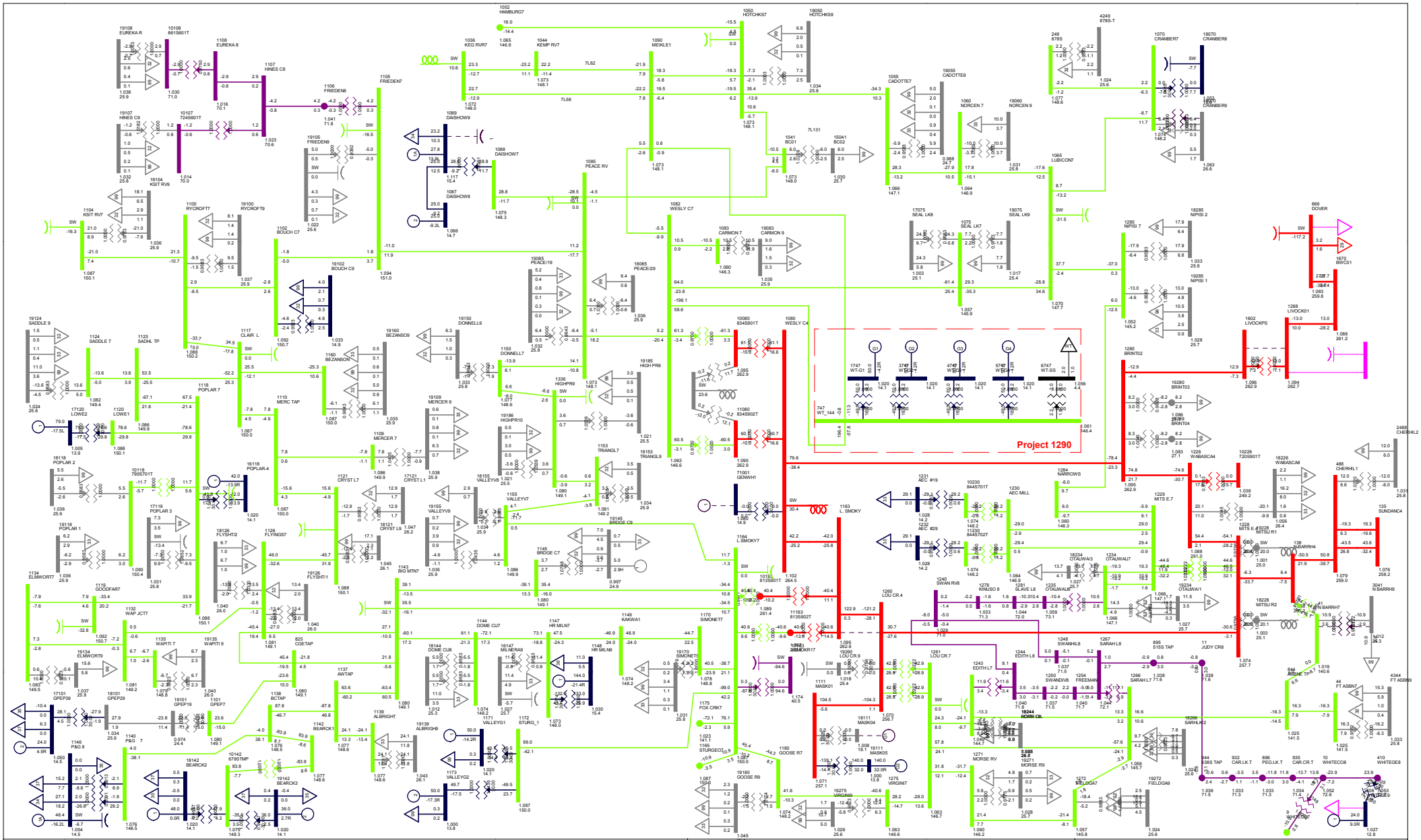
Figure: 16



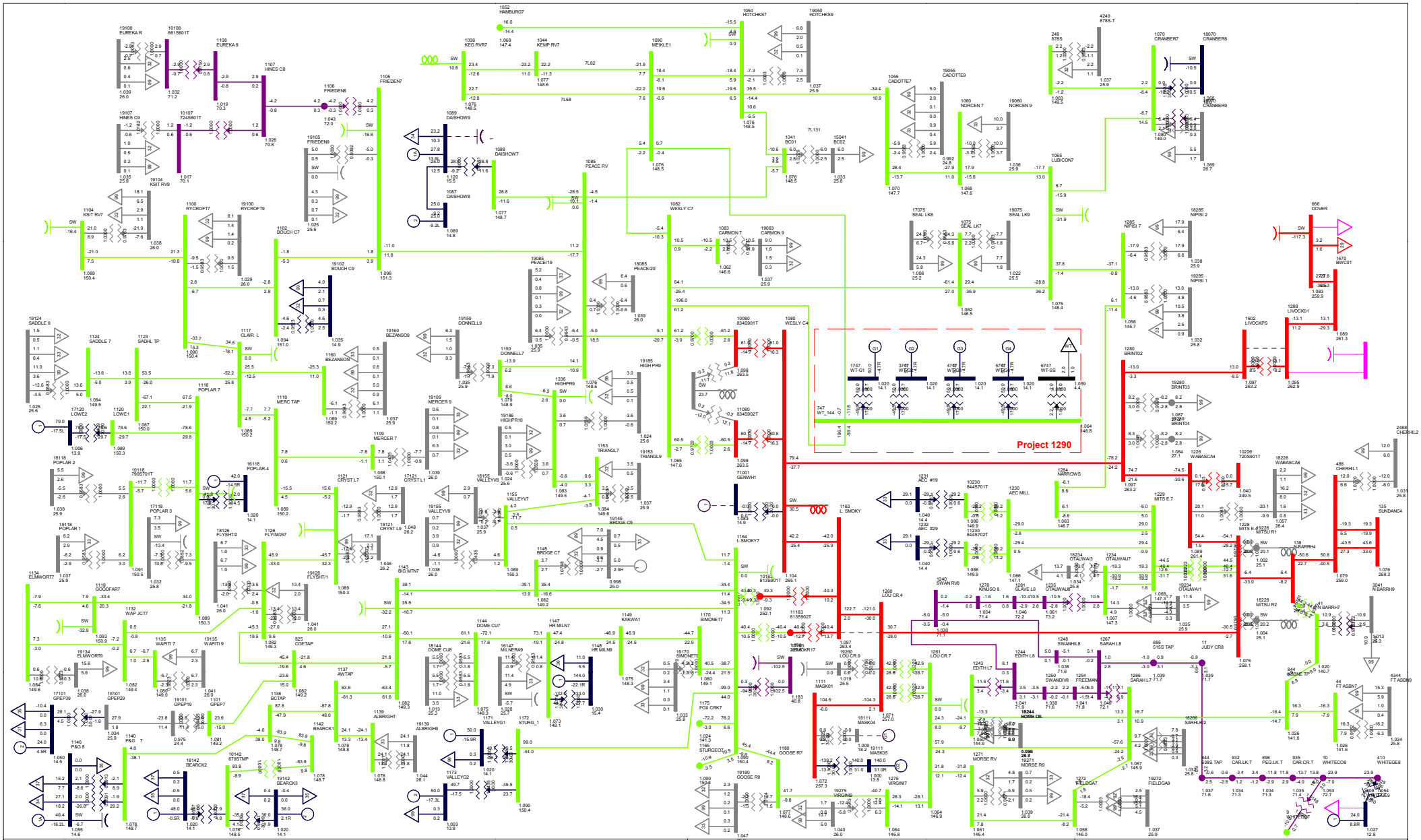
Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 008 9Lo2 LH1LESMOKY to LOUISECREEK_A.

Whitetail Project 1290 Interconnection Study

Appendix D2C

Figure: 17



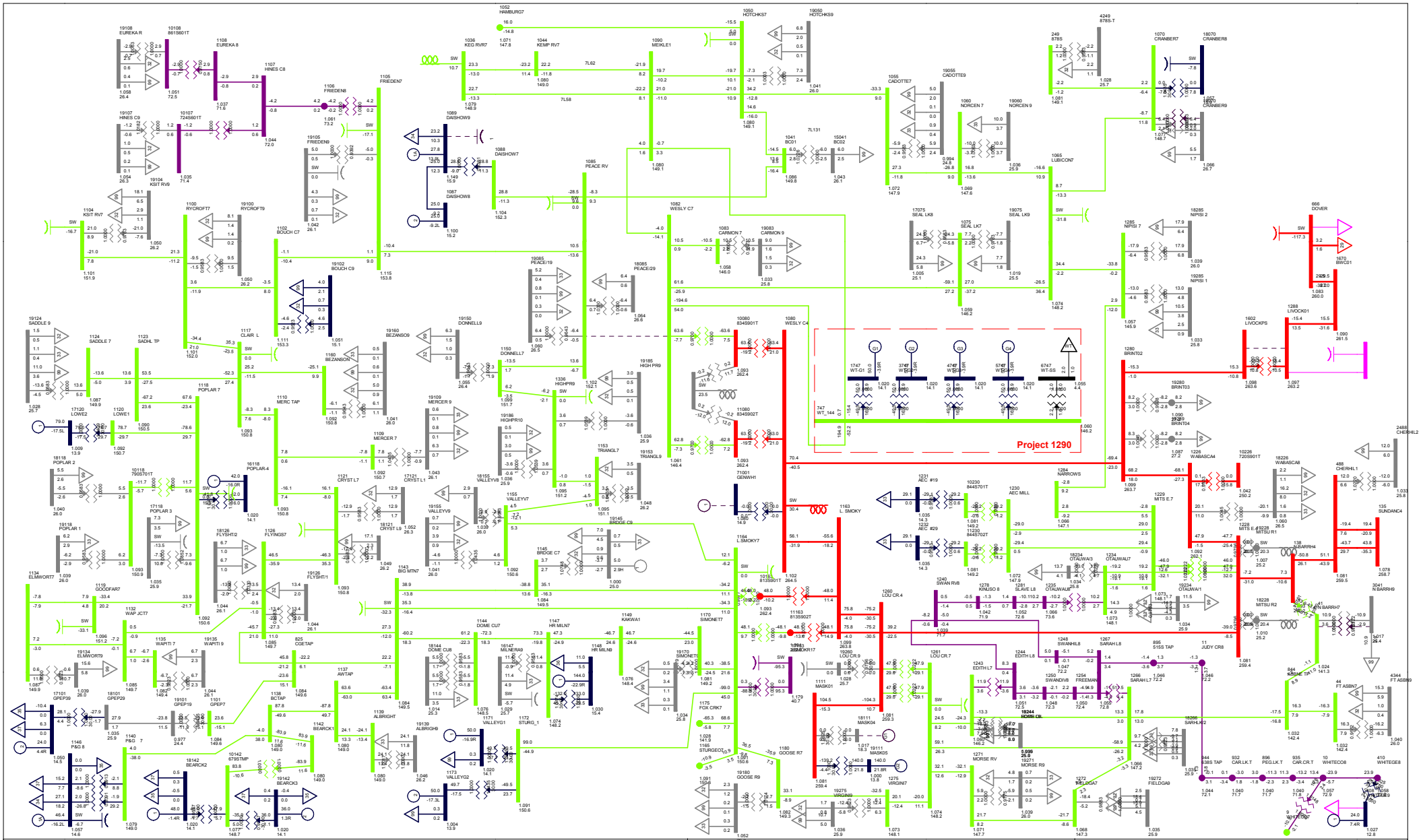
Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 008 9LO2 LH1LESMOKY to LOUISECREEK_B.

Whitetail Project 1290 Interconnection Study

Appendix D2C

Figure: 18



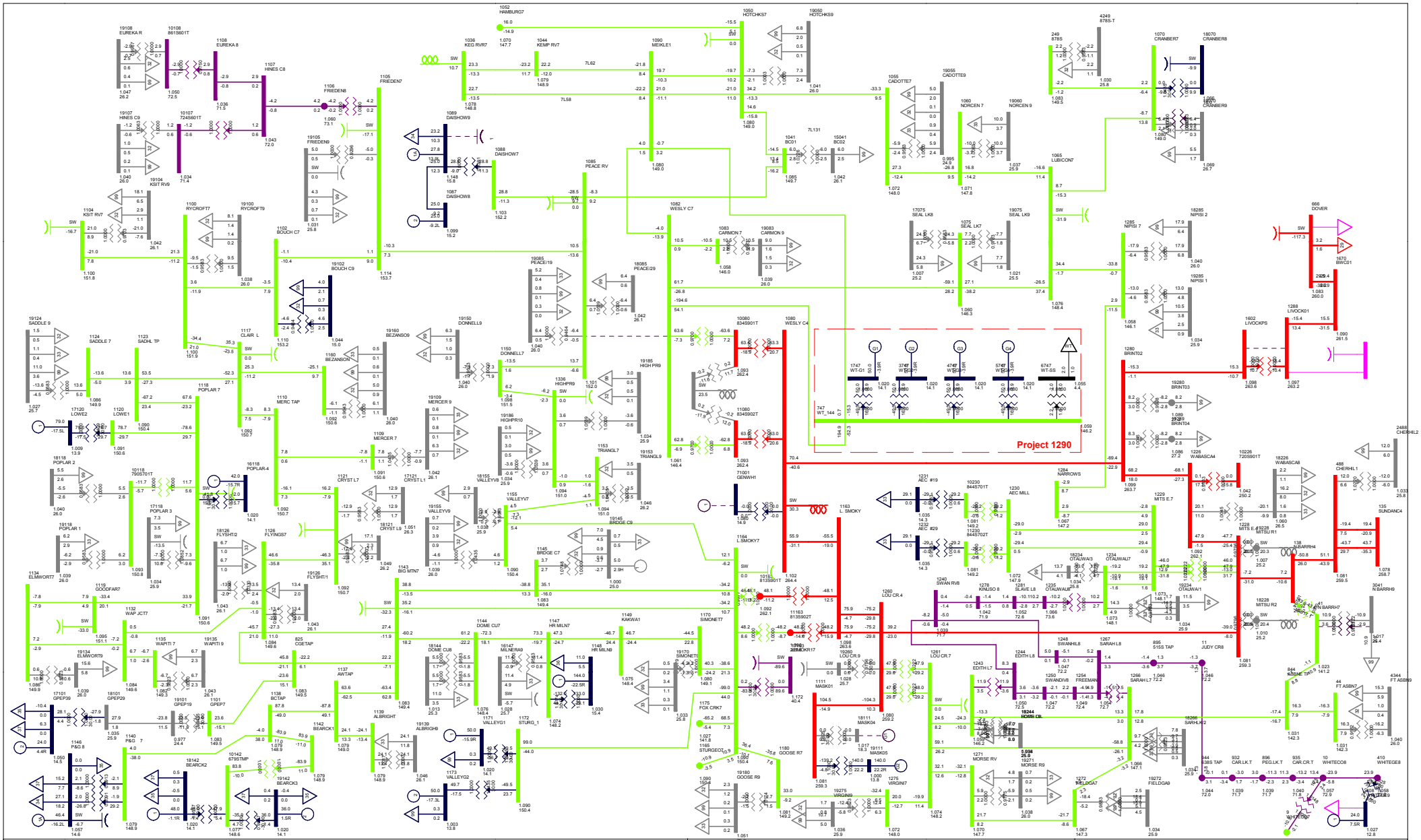
Appendix D2C

Figure: 19

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 009 7Lz7 WESLEYCREEK to WESTPEACE_A.

Whitetail Project 1290 Interconnection Study



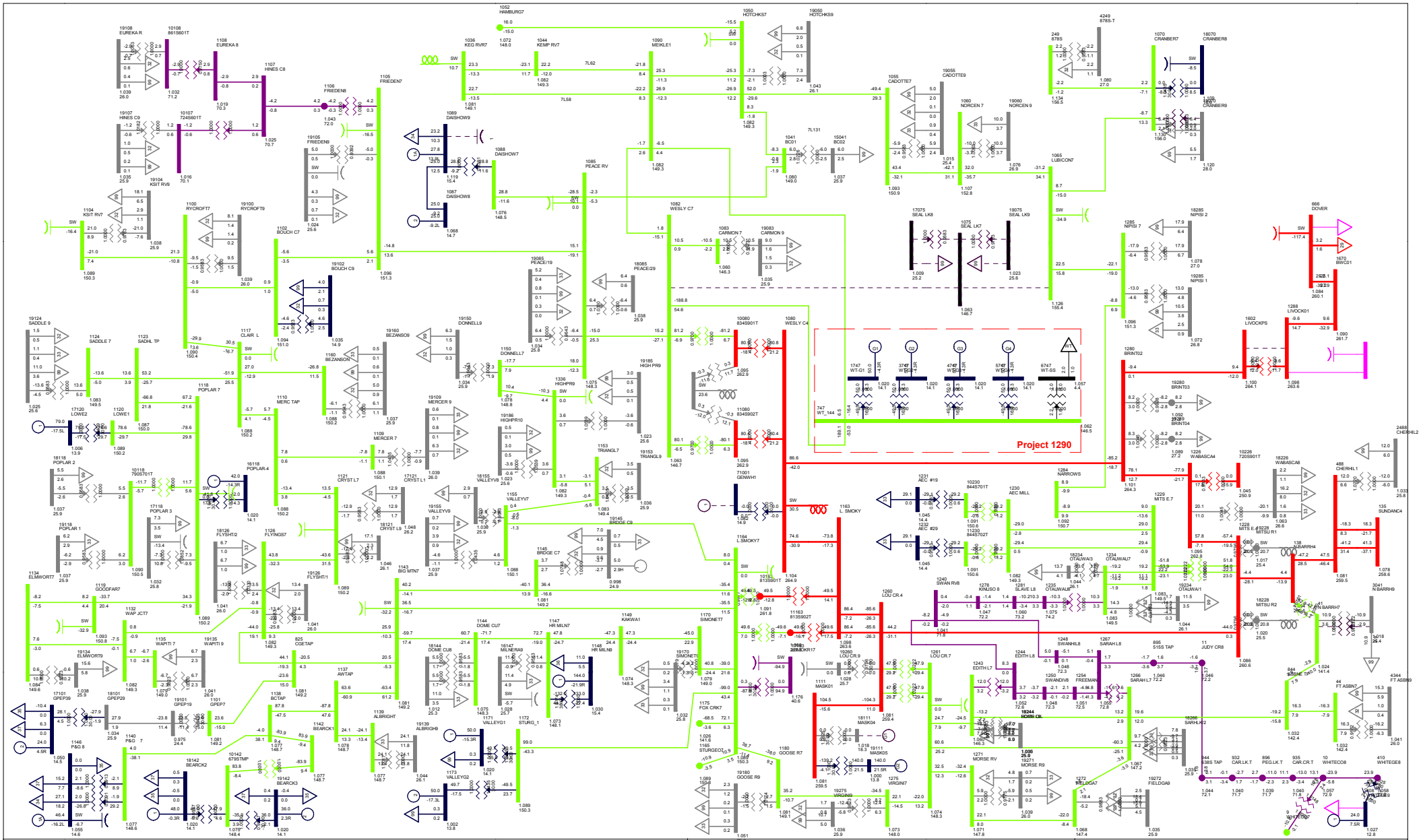
Appendix D2C

Figure: 20

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 009 7Lz7 WESLEYCREEK to WESTPEACE_B.

Whitetail Project 1290 Interconnection Study



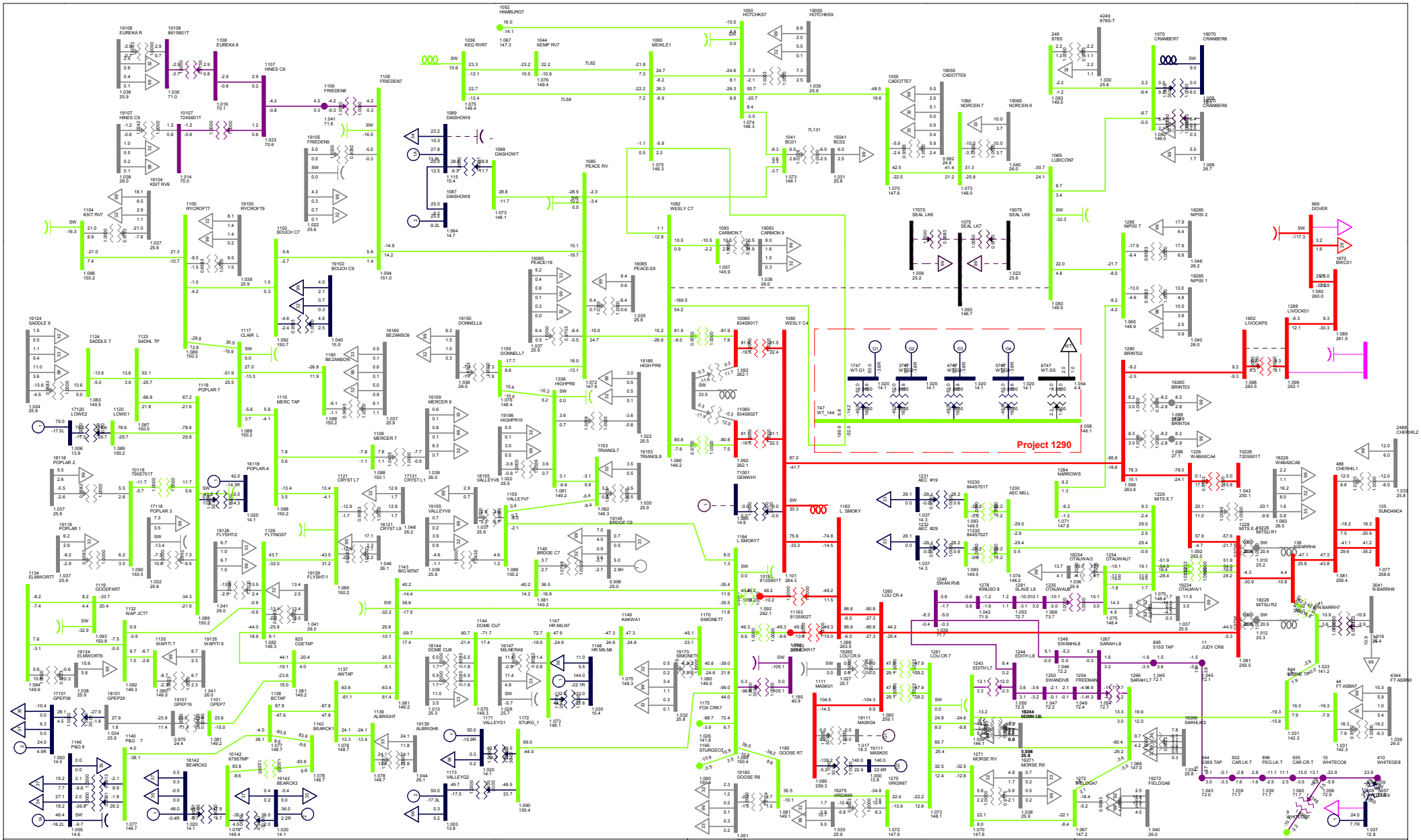
Appendix D2C

Figure: 21

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 010 7L12 WESLEYCREEK to LUBICON_A.

Whitetail Project 1290 Interconnection Study



Appendix D2C

Figure: 22

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 010 7L12 WESLEYCREEK to LUBICON_B.

Whitetail Project 1290 Interconnection Study

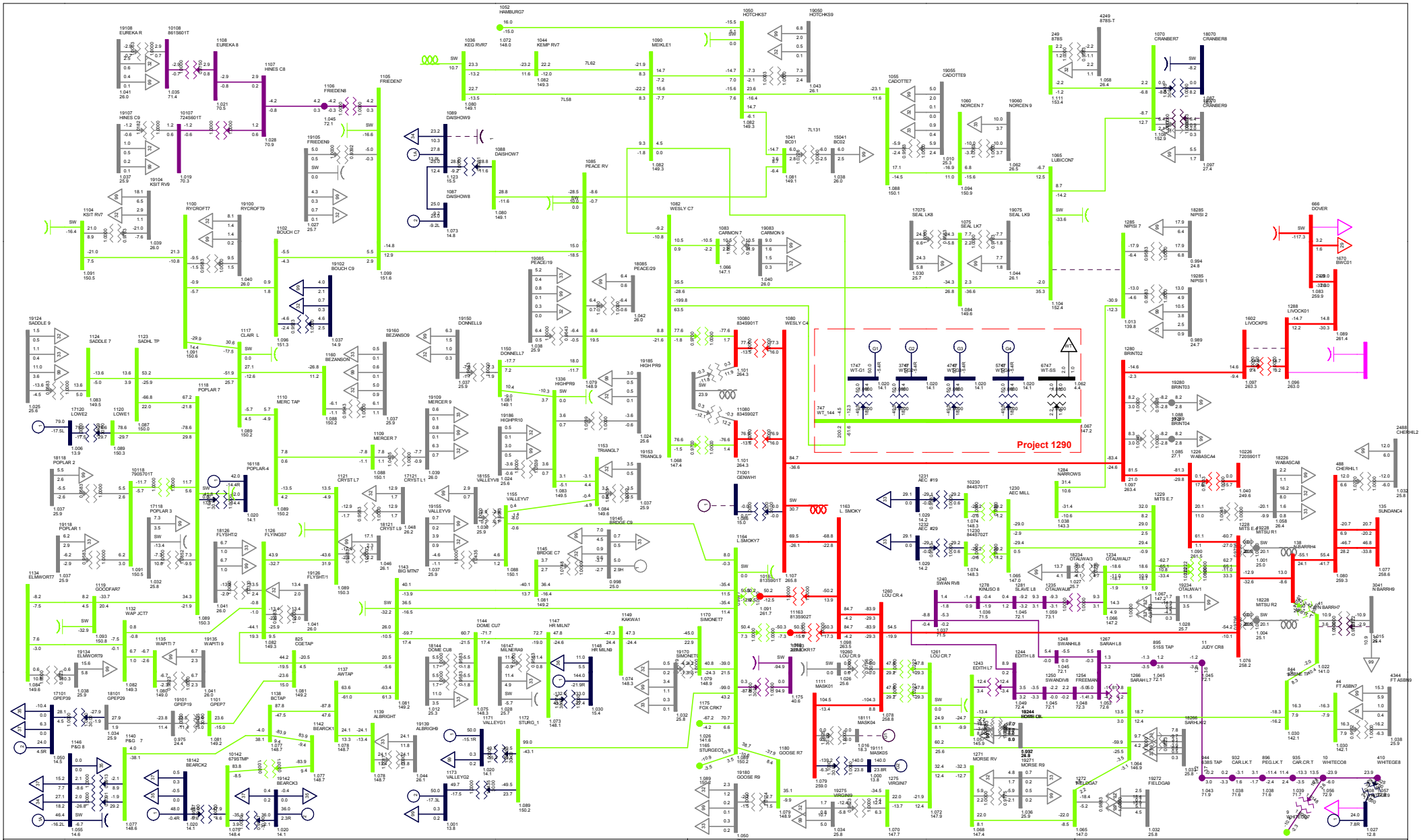


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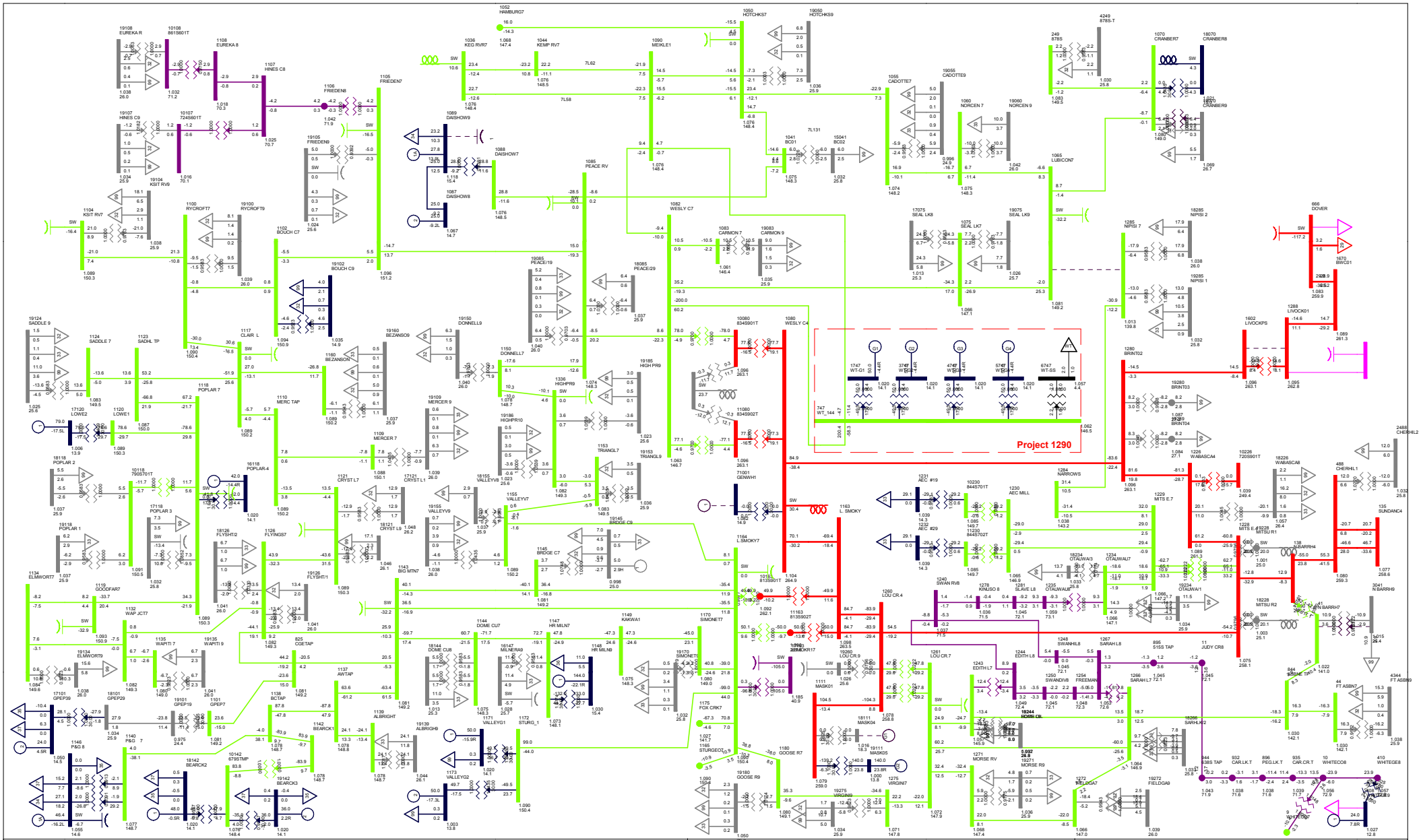
Figure: 23

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 011 7LG1 LUBICON to NIPISI_A.

Whitetail Project 1290 Interconnection Study



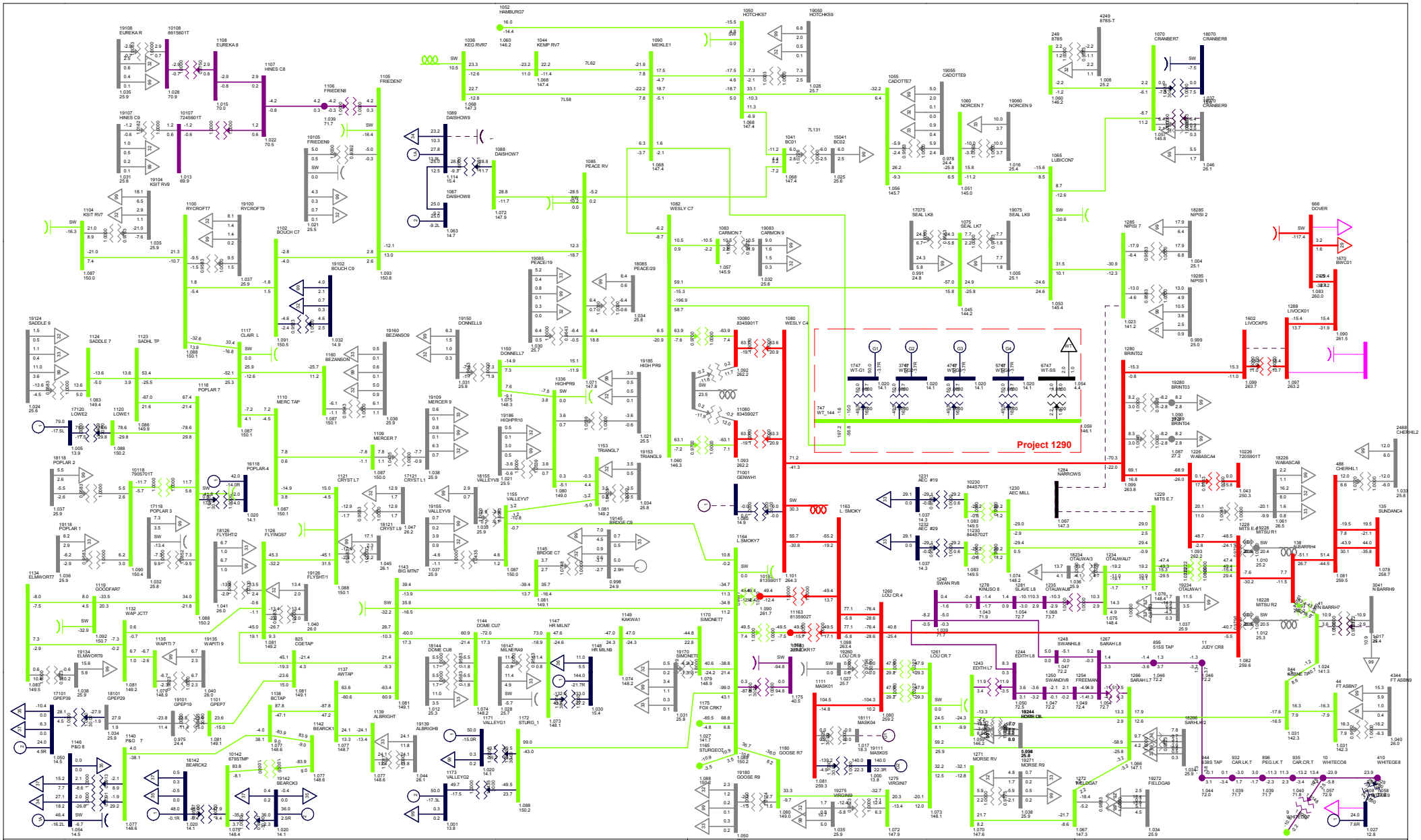
Appendix D2C

Figure: 24

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 011 7Lo1 LUBICON to NIPISI_B.

Whitetail Project 1290 Interconnection Study



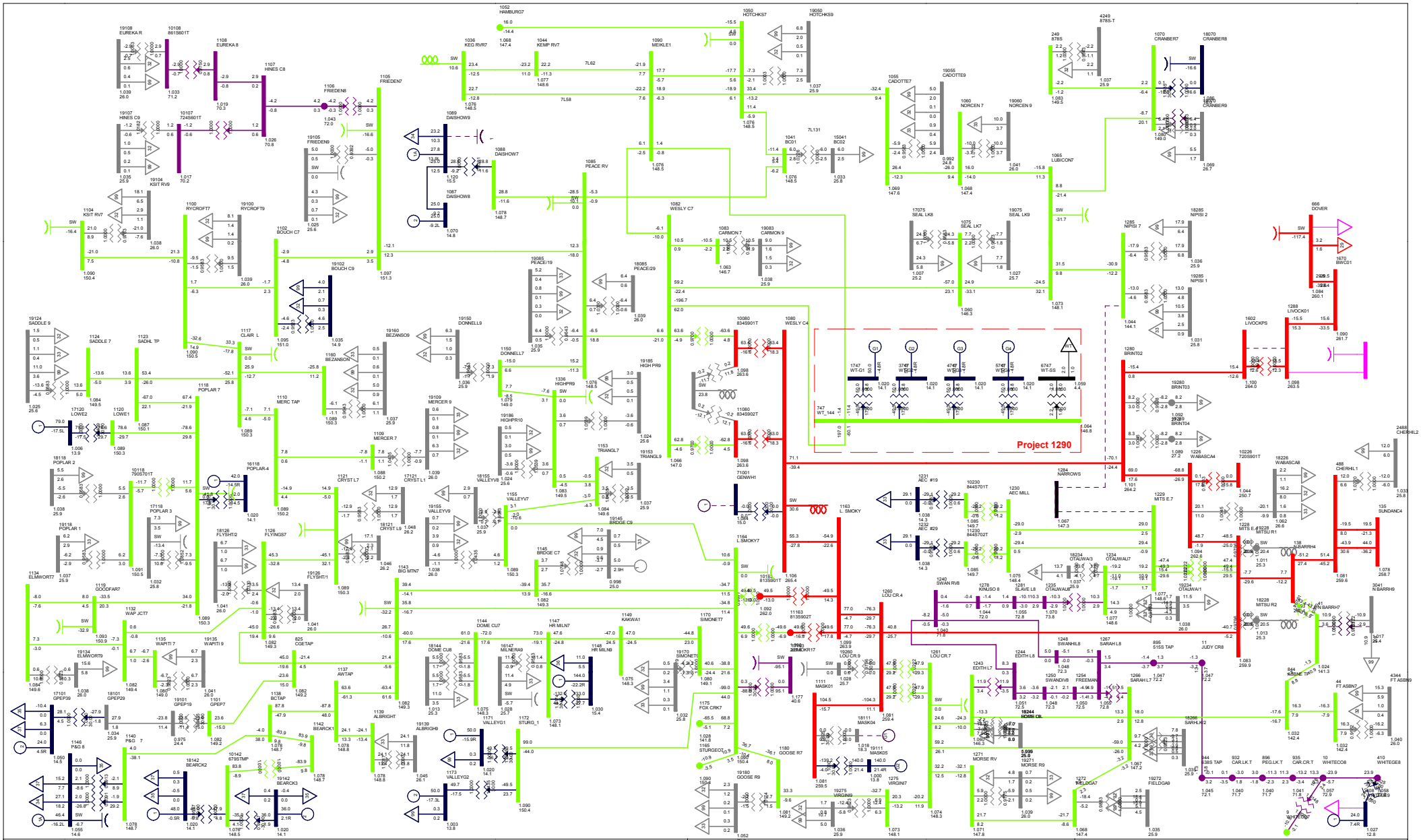
Appendix D2C

Figure: 25

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 012 7Le3 NiPiSI to MITSUE_A.

Whitetail Project 1290 Interconnection Study



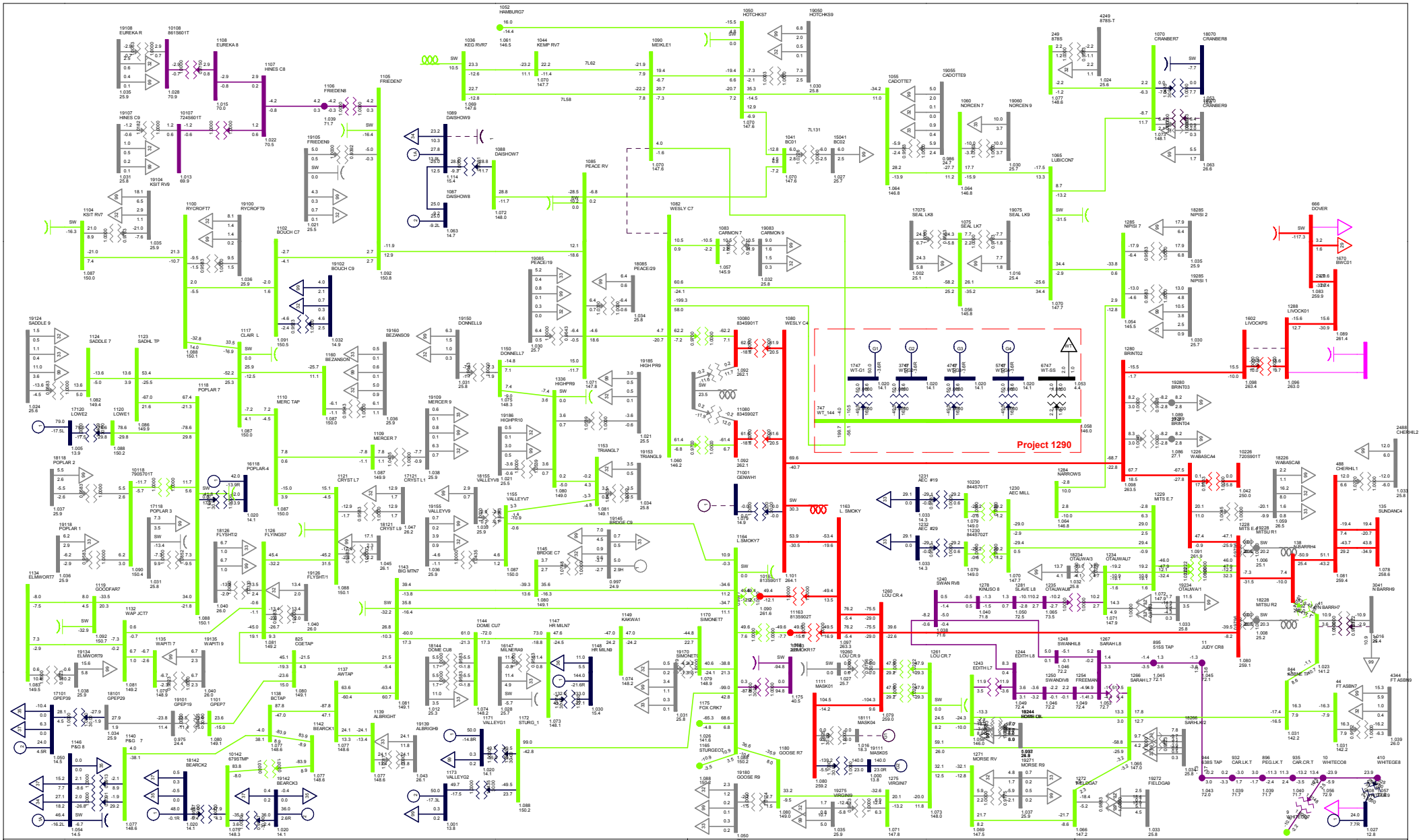
Appendix D2C

Figure: 26

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 012 7L23 NIPISI to MITSUE_B.

Whitetail Project 1290 Interconnection Study



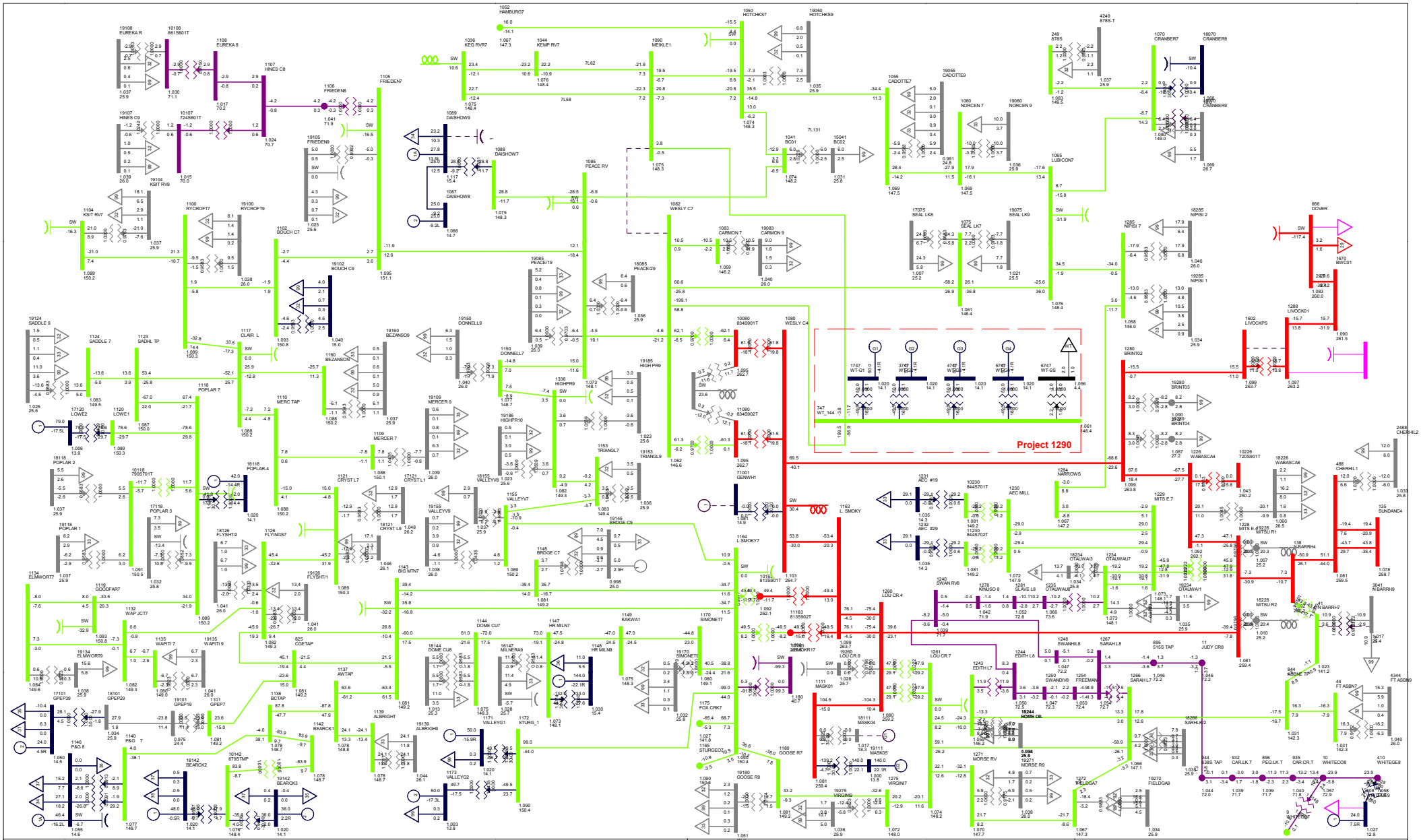
Appendix D2C

Figure: 27

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 013 7L131 WESLEYCREEK to Meikle_A.

Whitetail Project 1290 Interconnection Study



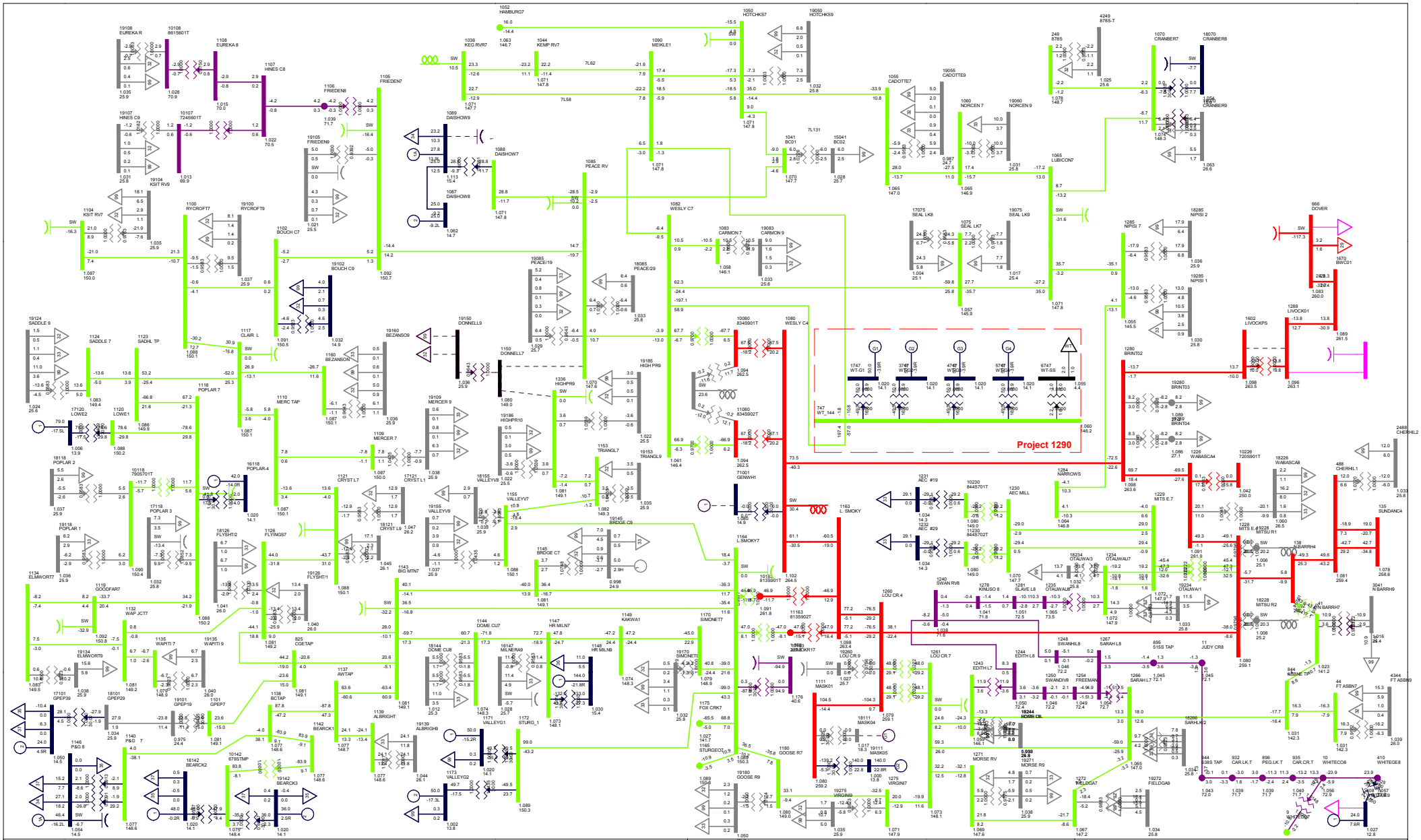
Appendix D2C

Figure: 28

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 013 7L131 WESLEYCREEK to Meikle_B.

Whitetail Project 1290 Interconnection Study



Appendix D2C

Figure: 29

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 014 7Lo6 WESTPEACE to HIGHPRAIRIE_A.

Whitetail Project 1290 Interconnection Study

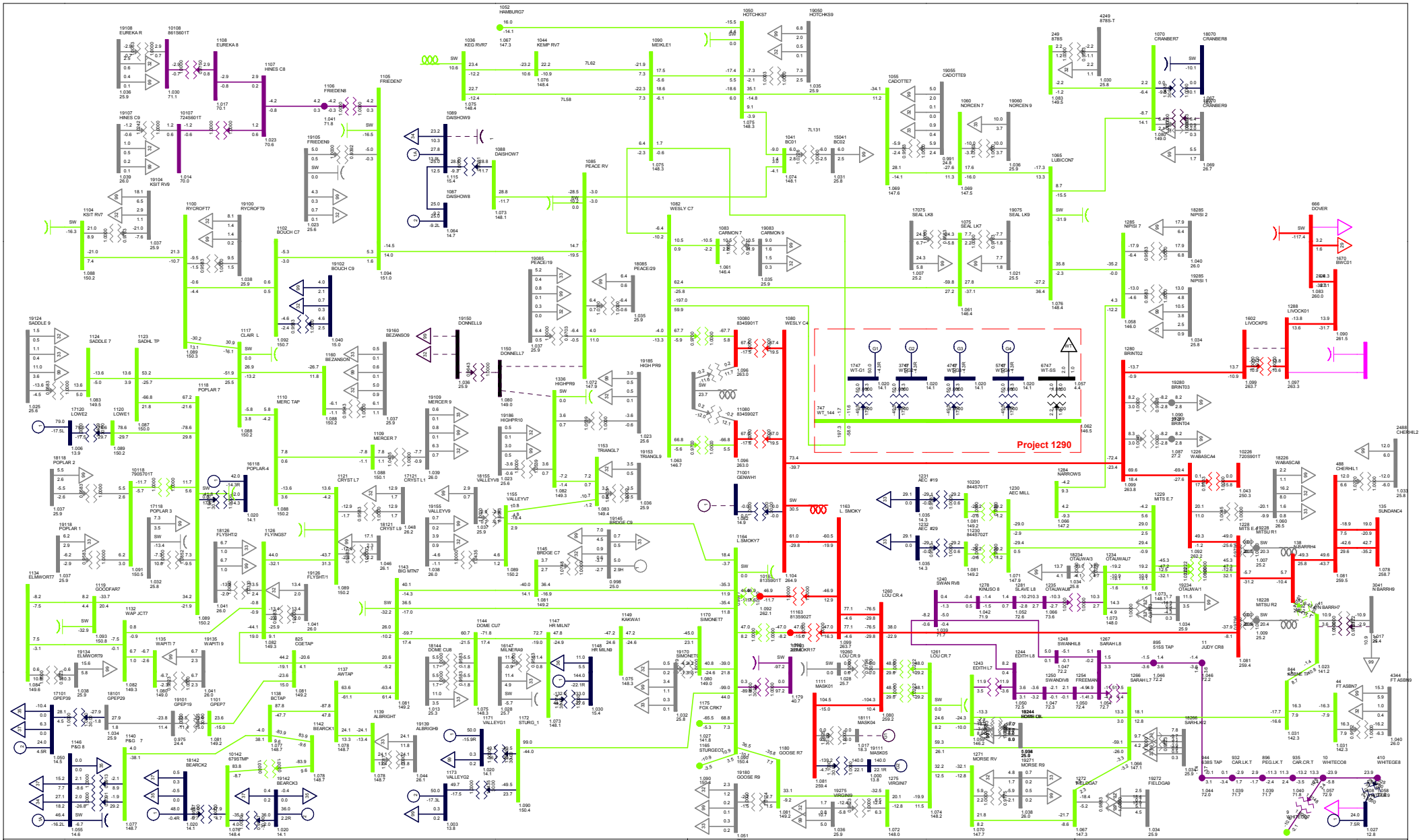


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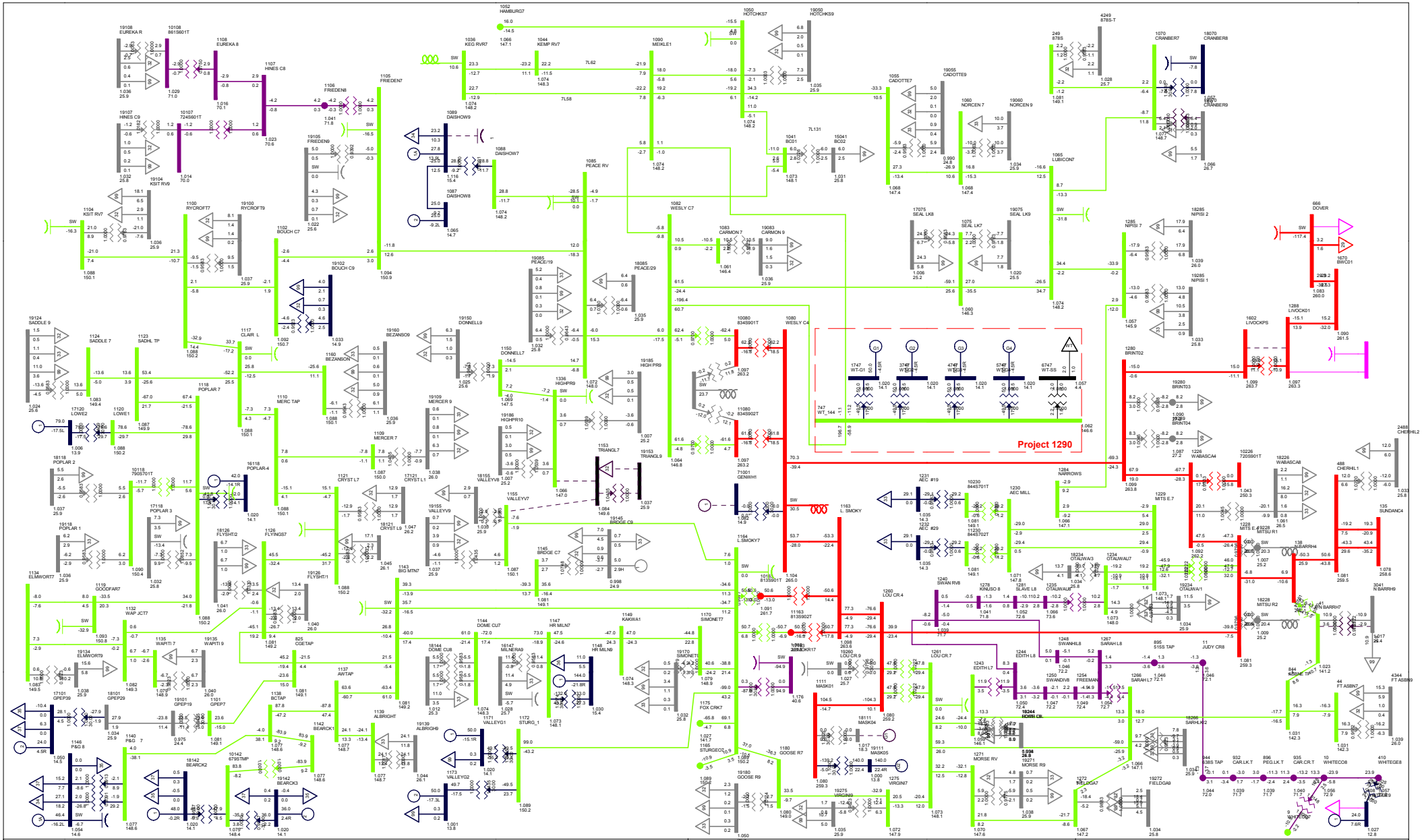
Figure: 30

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 014 7Lo6 WESTPEACE to HIGHPRAIRIE_B.

Whitetail Project 1290 Interconnection Study



Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144 Tap
CONT 015 7L46 HIGHPRAIRIE to VALLEYVIEW_A.

Whitetail Project 1290 Interconnection Study

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Figure: 31

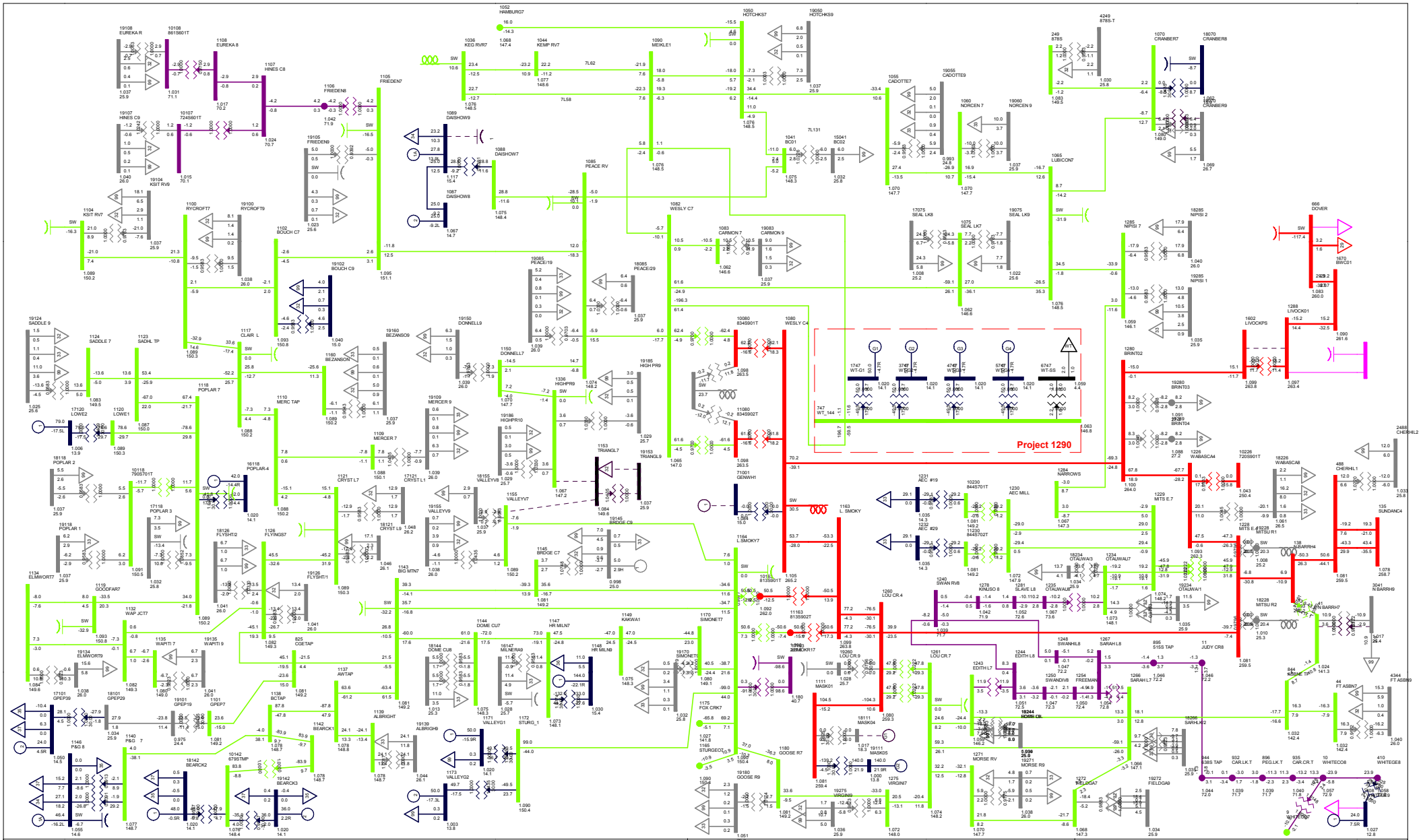

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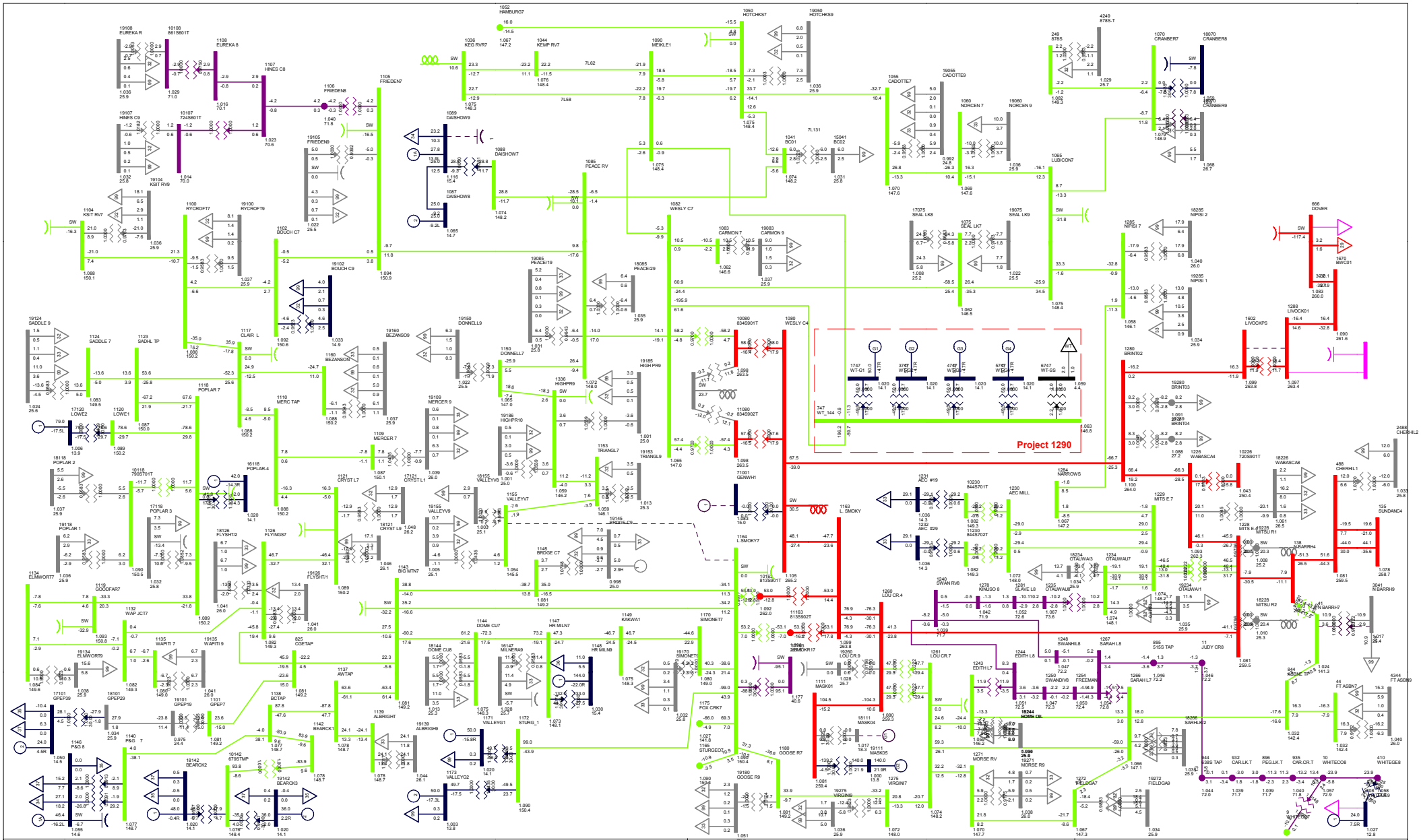
Figure: 32

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 015 7L46 HIGHPRAIRIE to VALLEYVIEW_B.

Whitetail Project 1290 Interconnection Study



Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 016 7Lo4 VALLEYVIEW to LITTLESMOKY_A.

Whitetail Project 1290 Interconnection Study

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Figure: 33

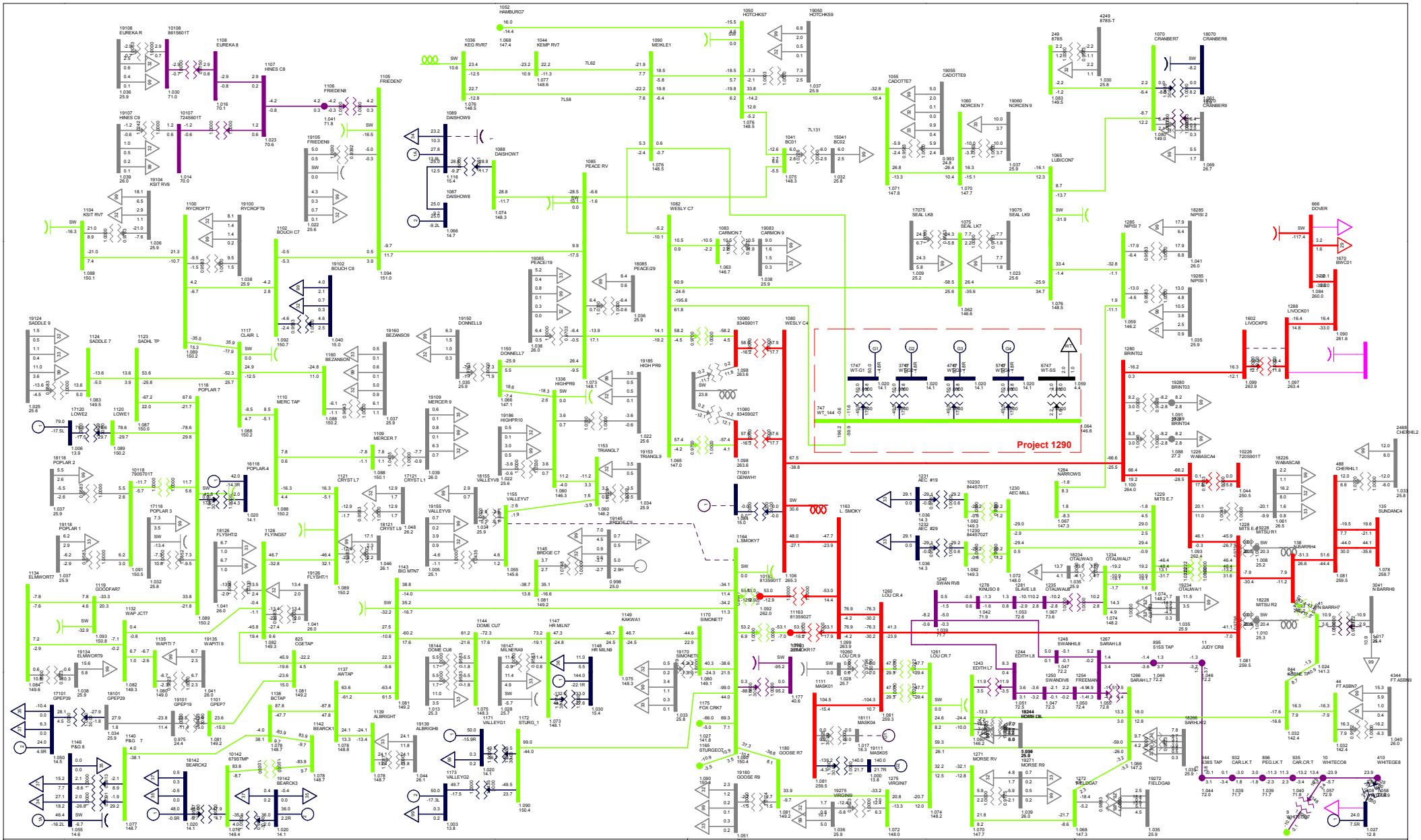

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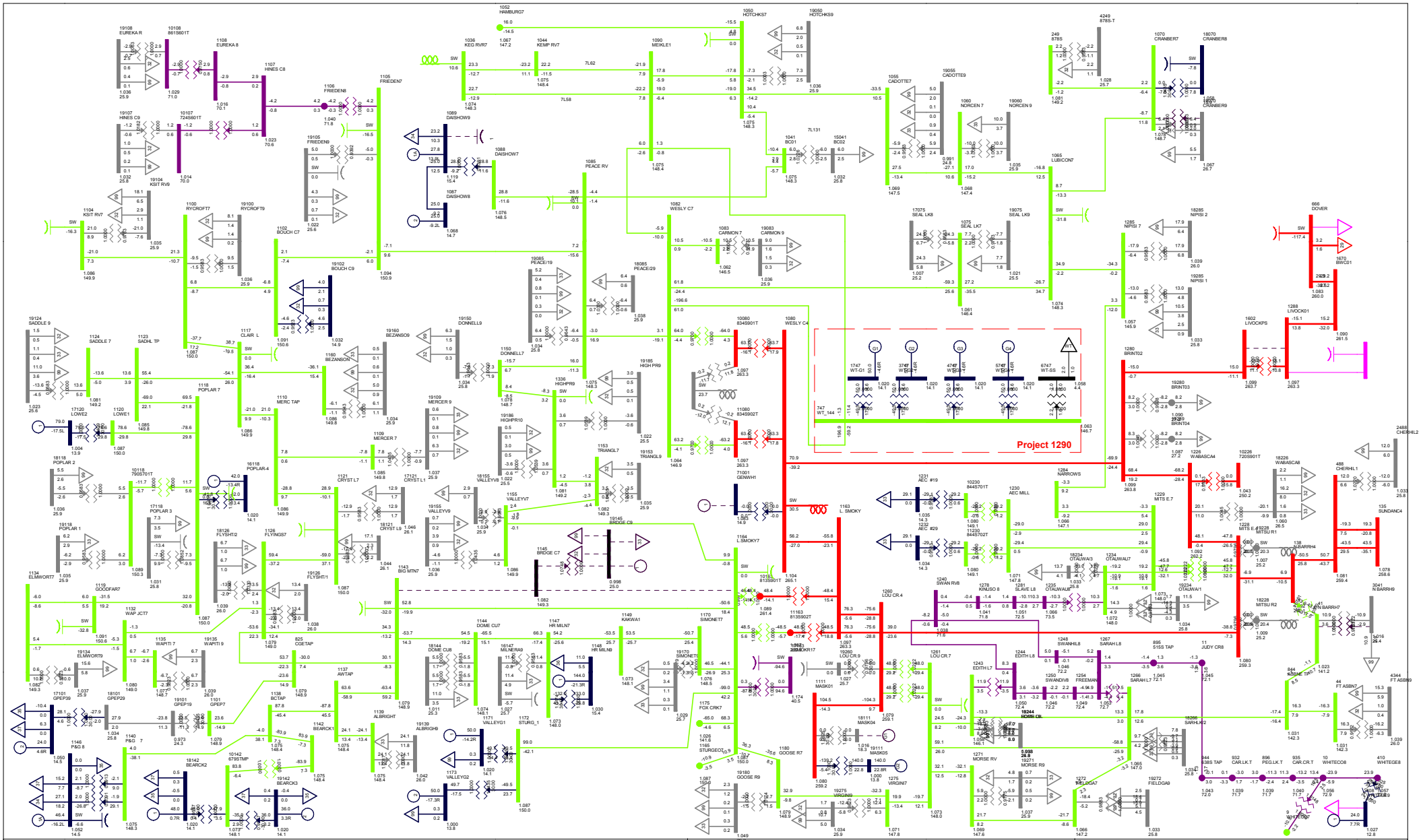
Figure: 34

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 016 7Lo4 VALLEYVIEW to LITTLESMOKY_B.

Whitetail Project 1290 Interconnection Study



Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 017 7L45 LIT LESMOKY to BIGMOUNTAIN_A.

Whitetail Project 1290 Interconnection Study

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Figure: 35

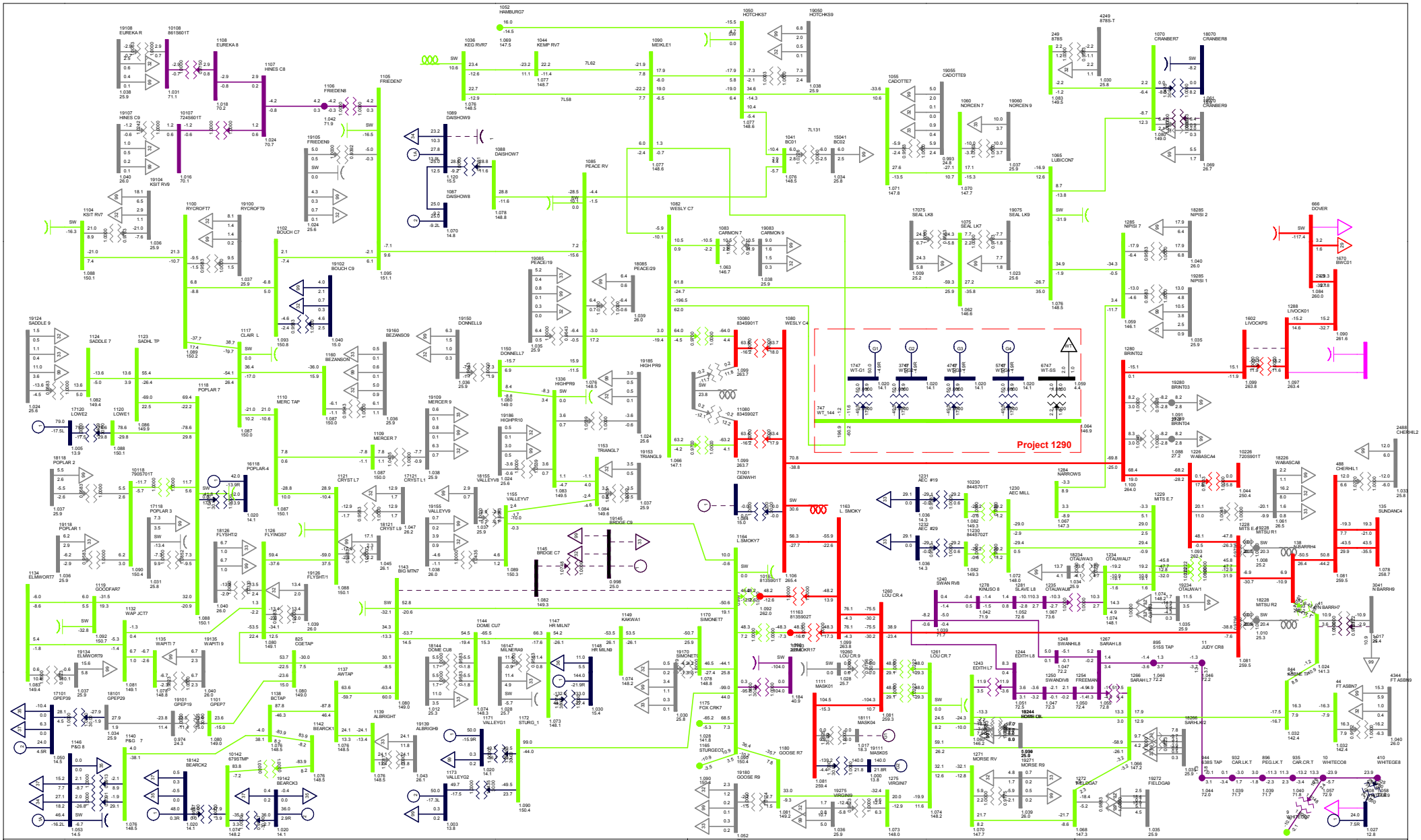

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Figure: 36

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 017 7L45 LIN LESMOKY to BIGMOUNTAIN_B.

Whitetail Project 1290 Interconnection Study

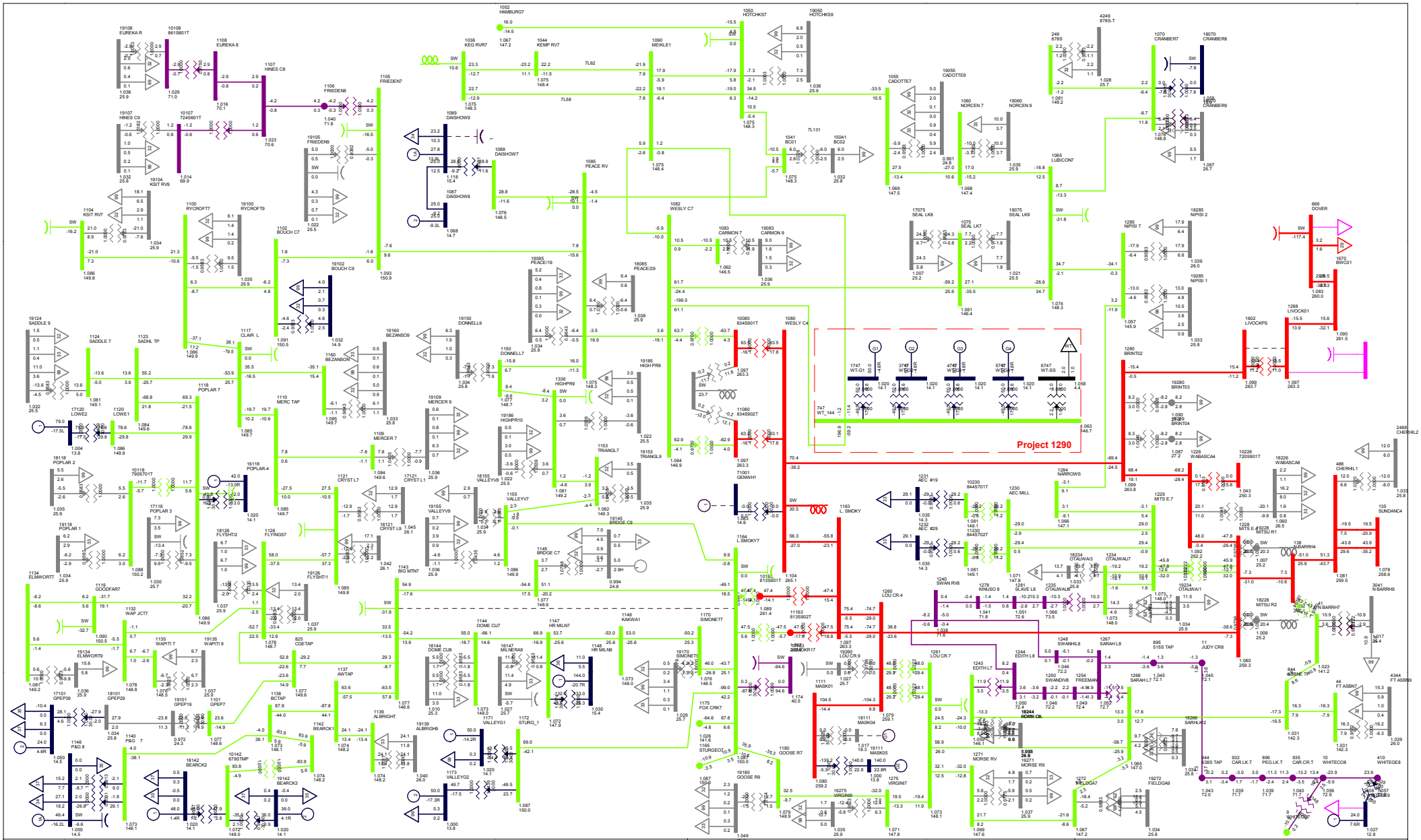

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Figure: 37

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_A.

Whitetail Project 1290 Interconnection Study

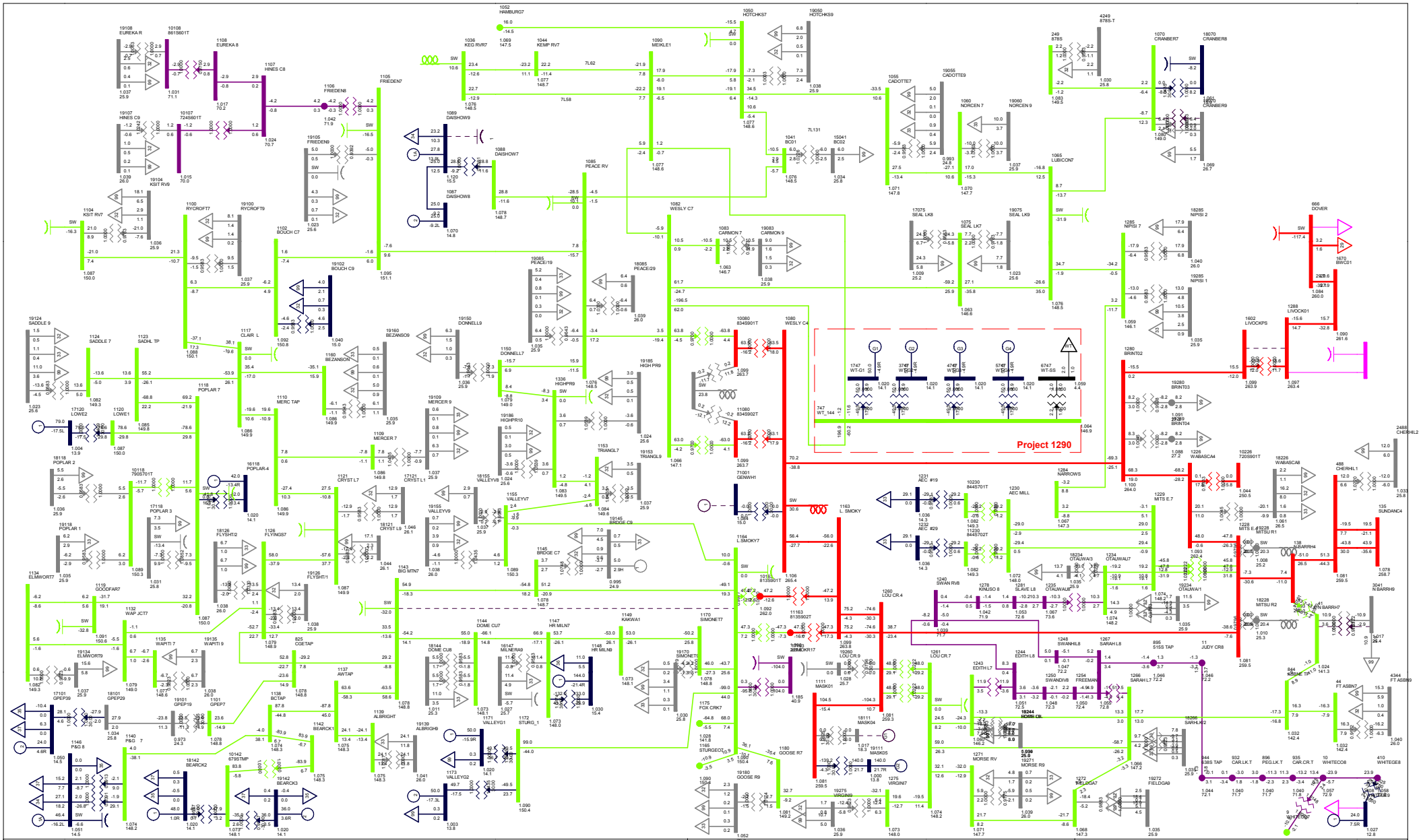

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Figure: 38

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_B.

Whitetail Project 1290 Interconnection Study

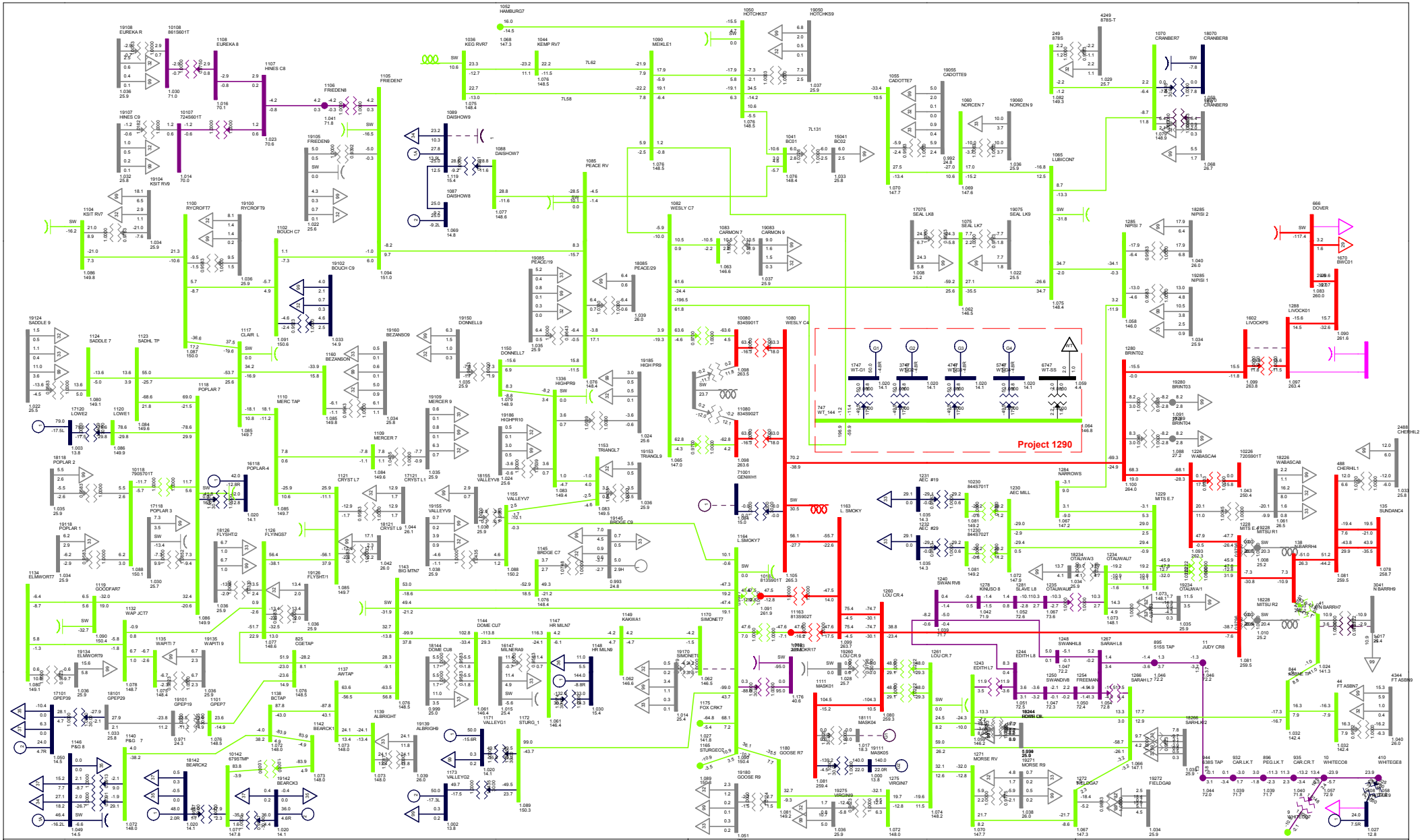

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Figure: 39

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 019 7L40 LIN LESMOKY to SIMONETTE_A.

Whitetail Project 1290 Interconnection Study

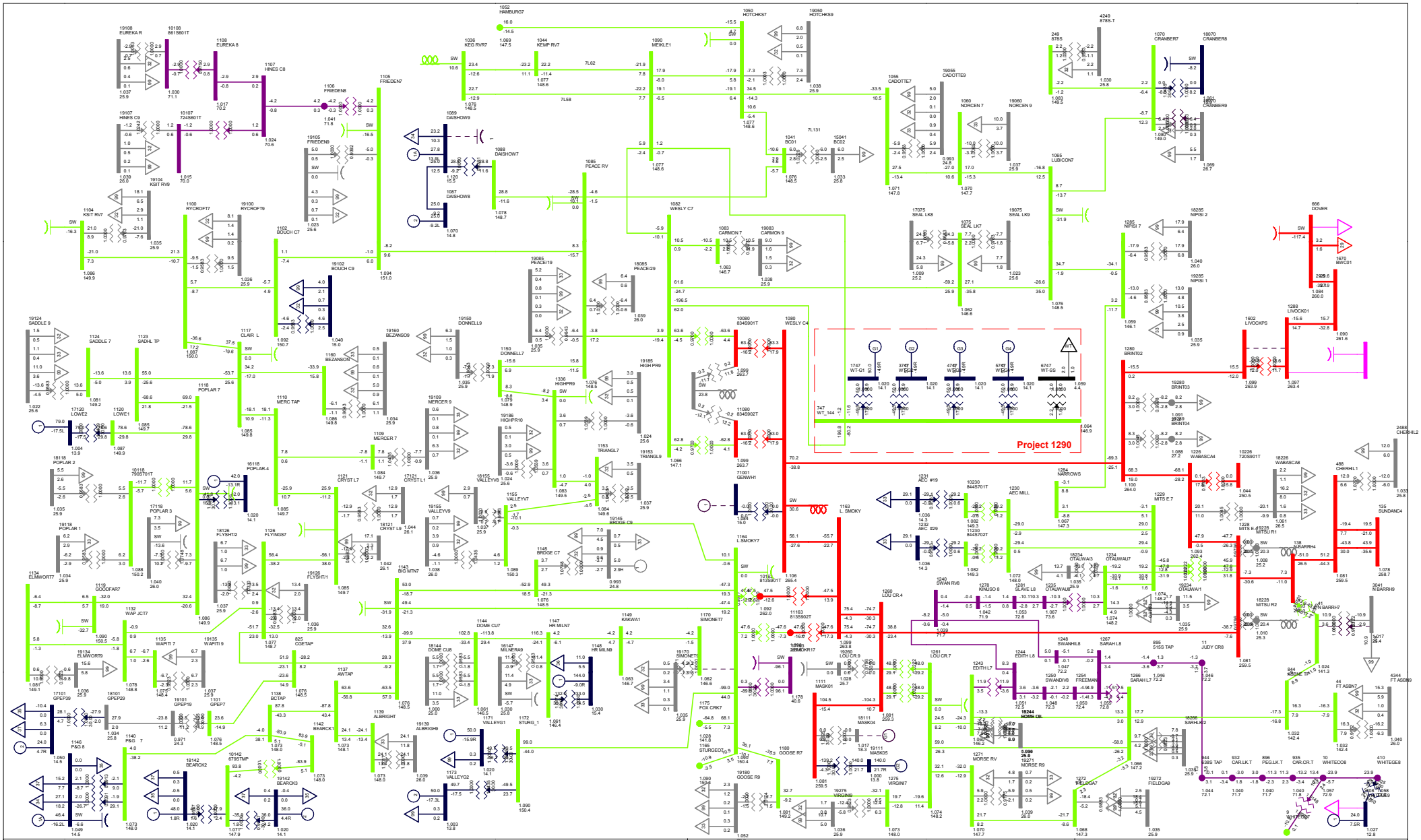

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Figure: 40

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 019 7L40 LIN LESMOKY to SIMONETTE_B.

Whitetail Project 1290 Interconnection Study

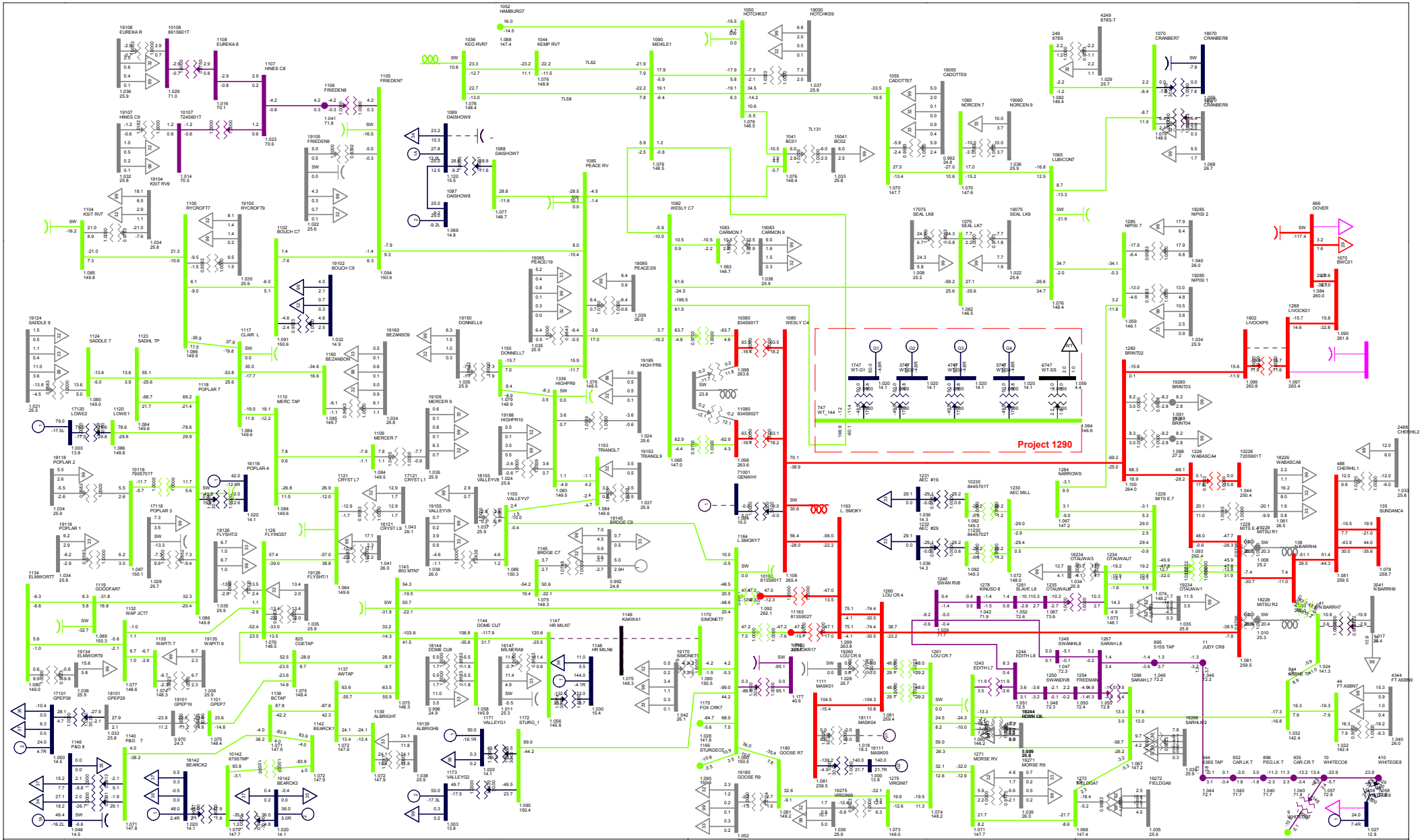

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Figure: 41

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 020 7LOU SIMONETTE to HR MILNER_A.

Whitetail Project 1290 Interconnection Study

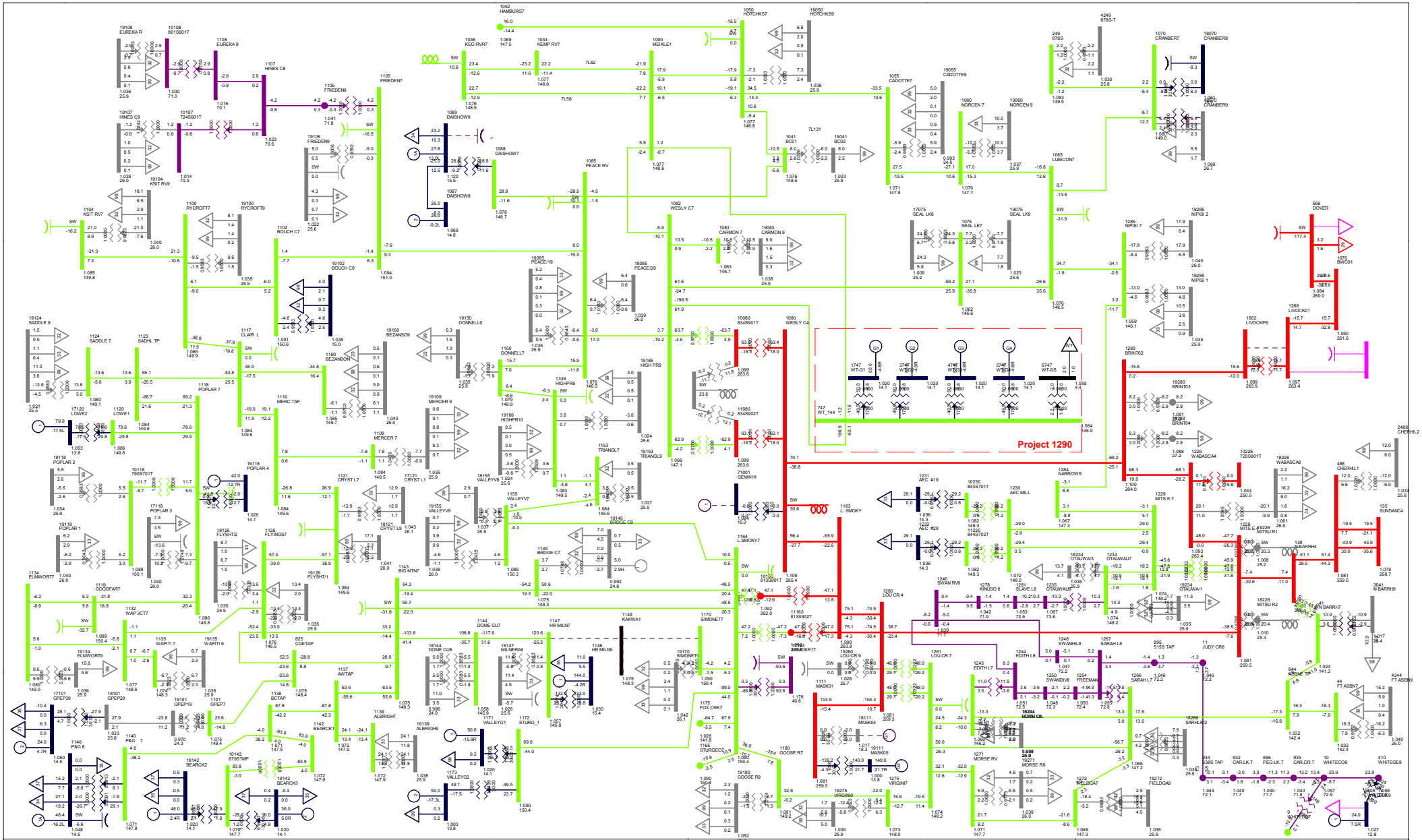

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Figure: 42

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 020 7LOU SIMONETTE to HR MILNER_B.

Whitetail Project 1290 Interconnection Study

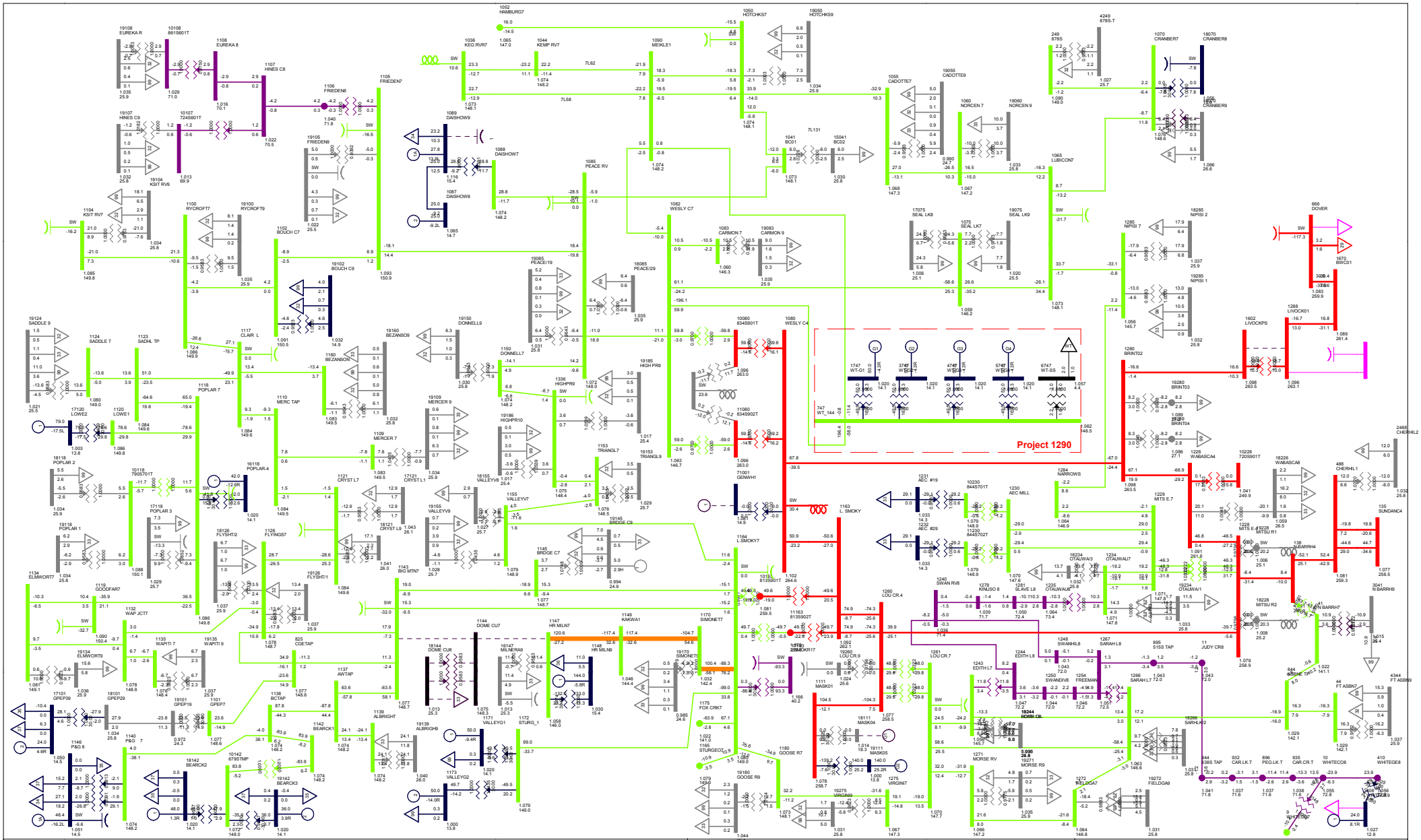

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Figure: 43

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 021 7Lzo HR MILNER to BIGMOUNTAIN_A.

Whitetail Project 1290 Interconnection Study

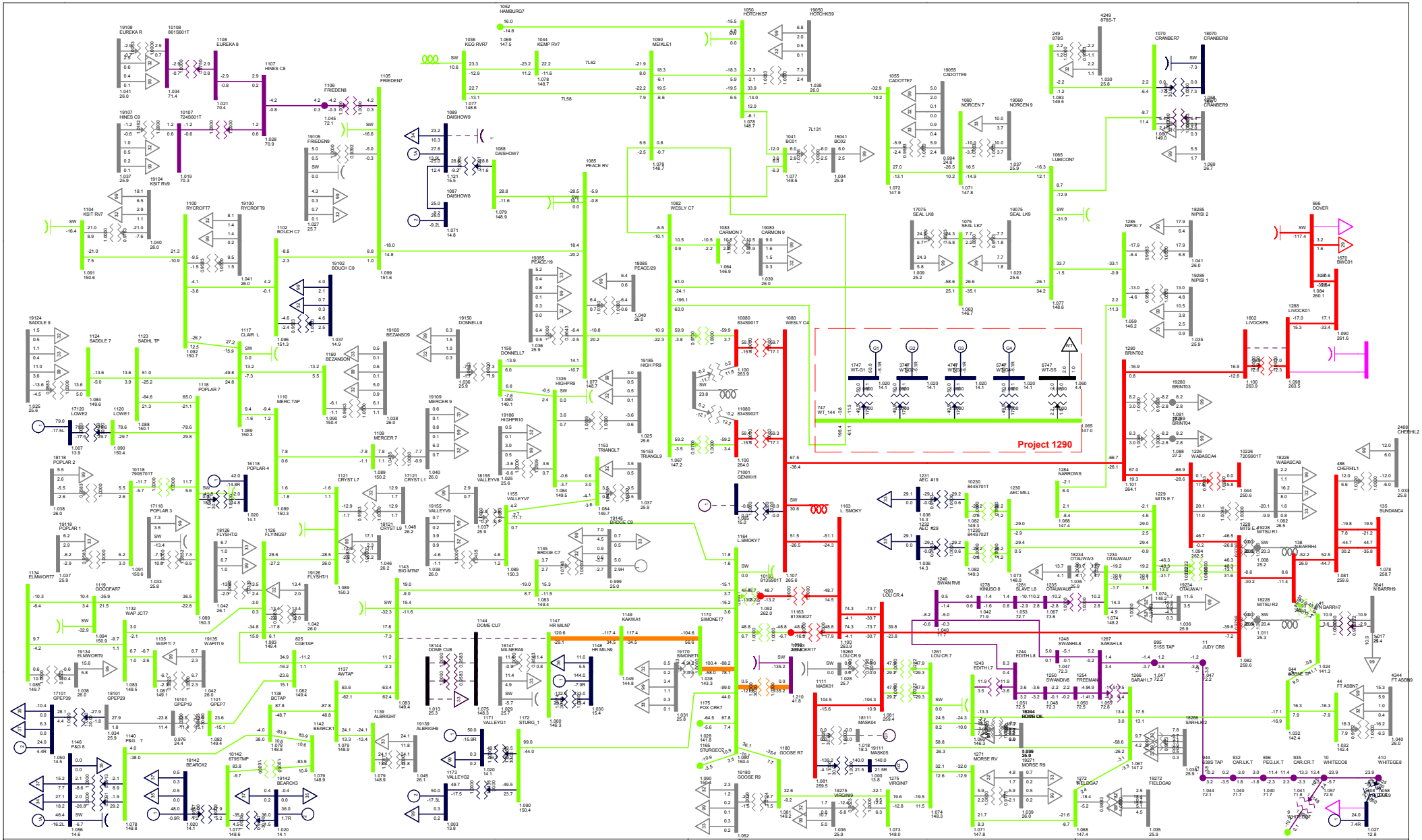

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Figure: 44

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_B.

Whitetail Project 1290 Interconnection Study

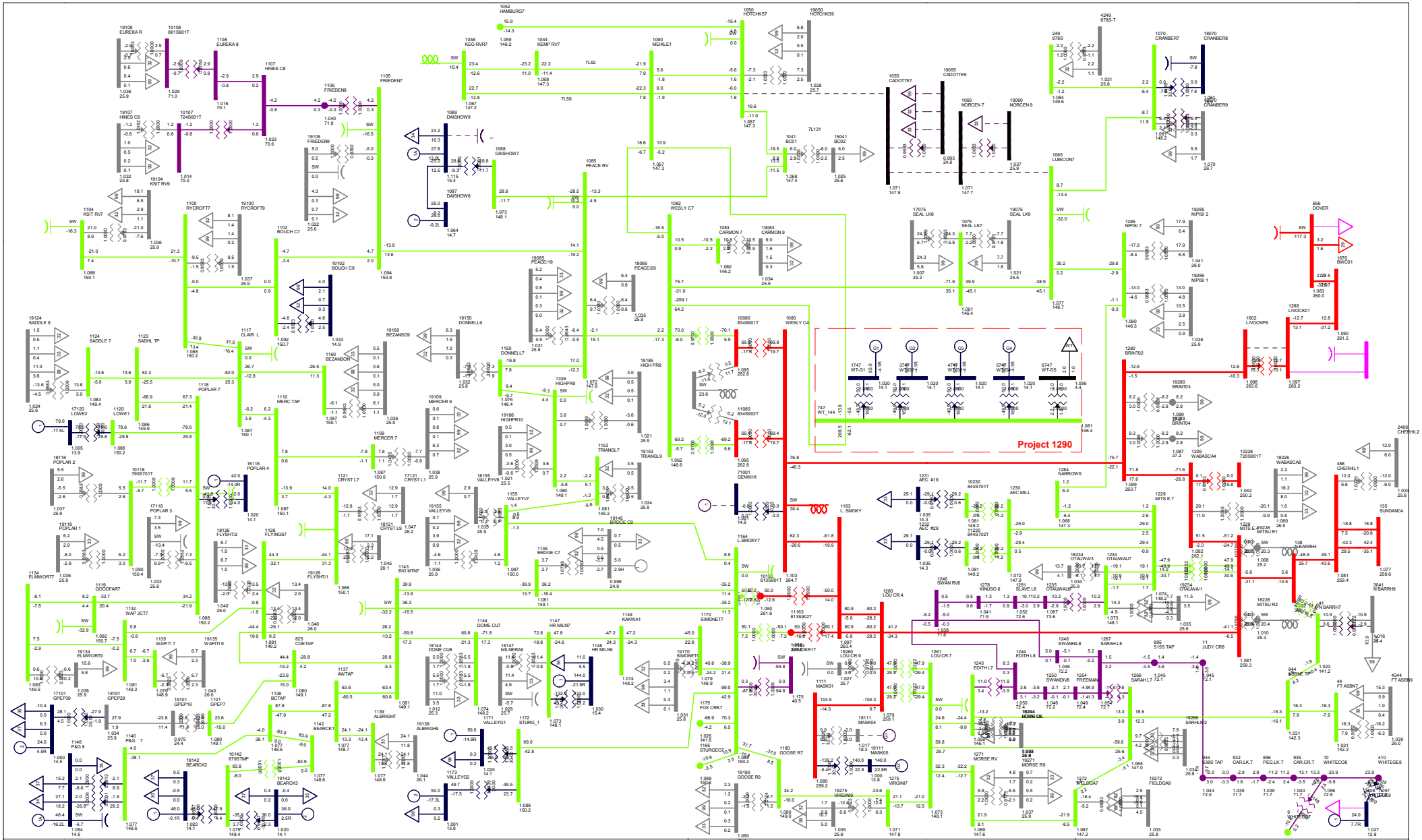

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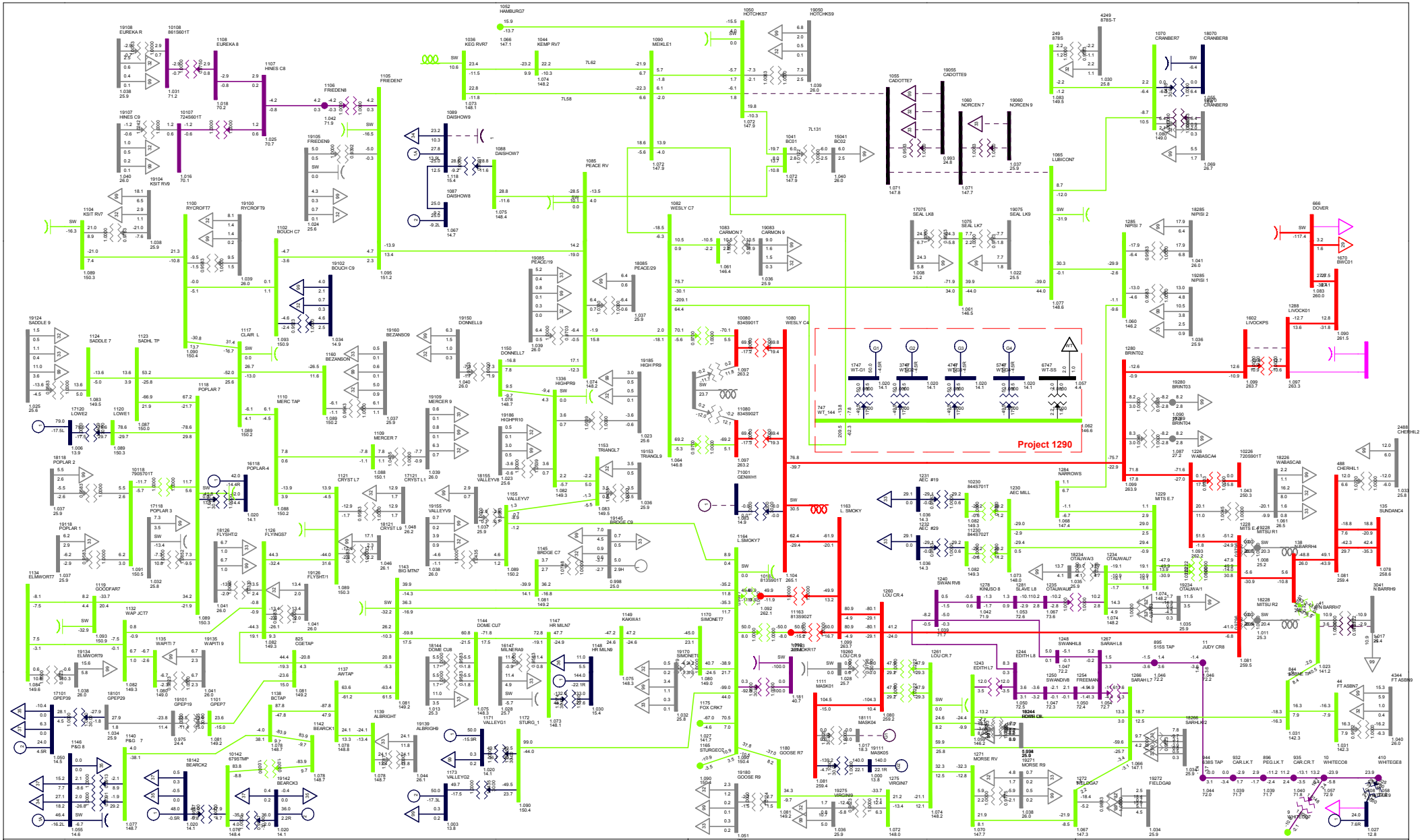
Figure: 45

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 022 7L63 HOTCHKISS to LUBICON_A.

Whitetail Project 1290 Interconnection Study



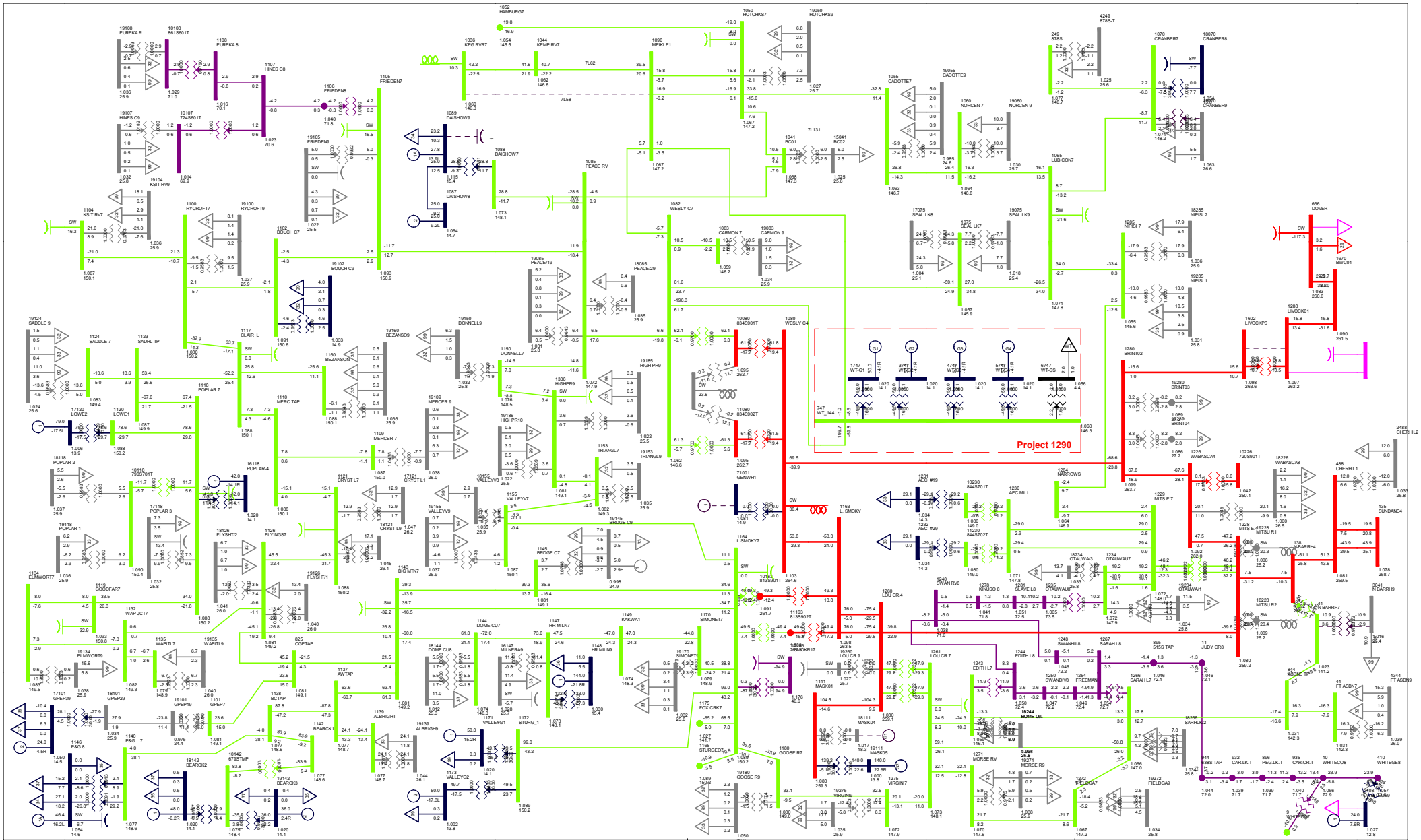
Appendix D2C

Figure: 46

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 022 7L63 HOTCHKISS to LUBICON_B.

Whitetail Project 1290 Interconnection Study



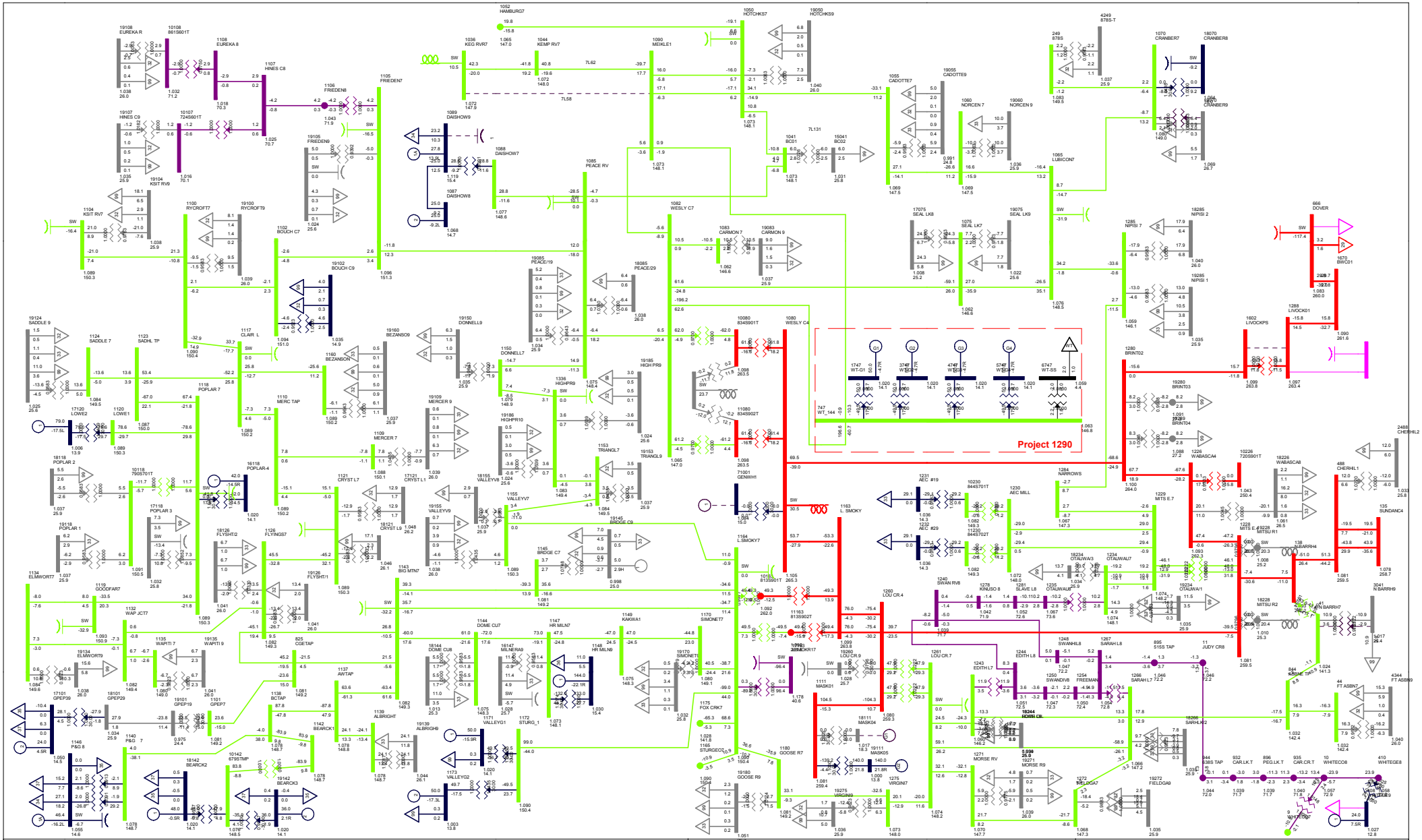
Appendix D2C

Figure: 47

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 023 7Lss REGRIVER to Meikle_A.

Whitetail Project 1290 Interconnection Study



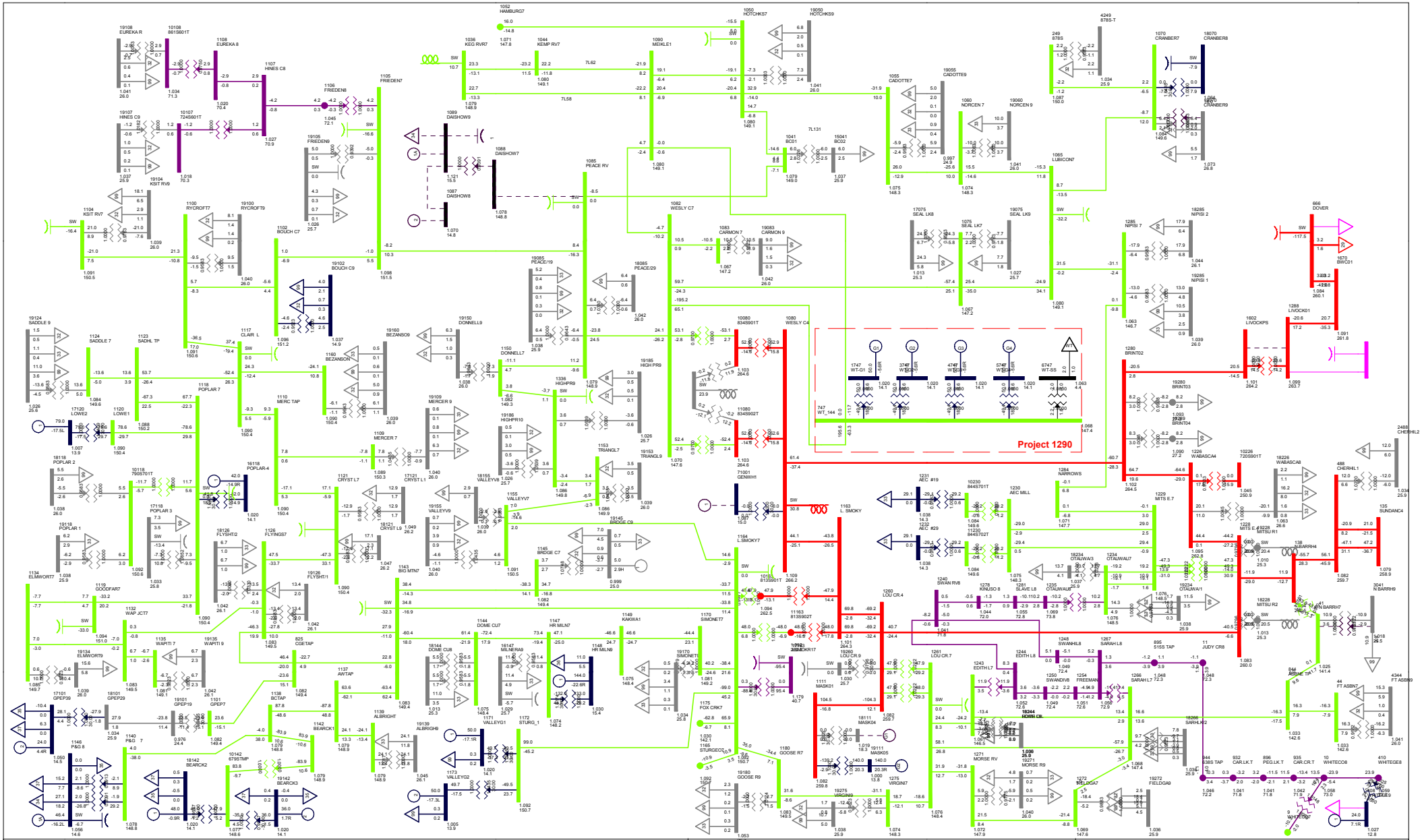
Appendix D2C

Figure: 48

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 023 7Lse REGRIVER to Meikle_B.

Whitetail Project 1290 Interconnection Study



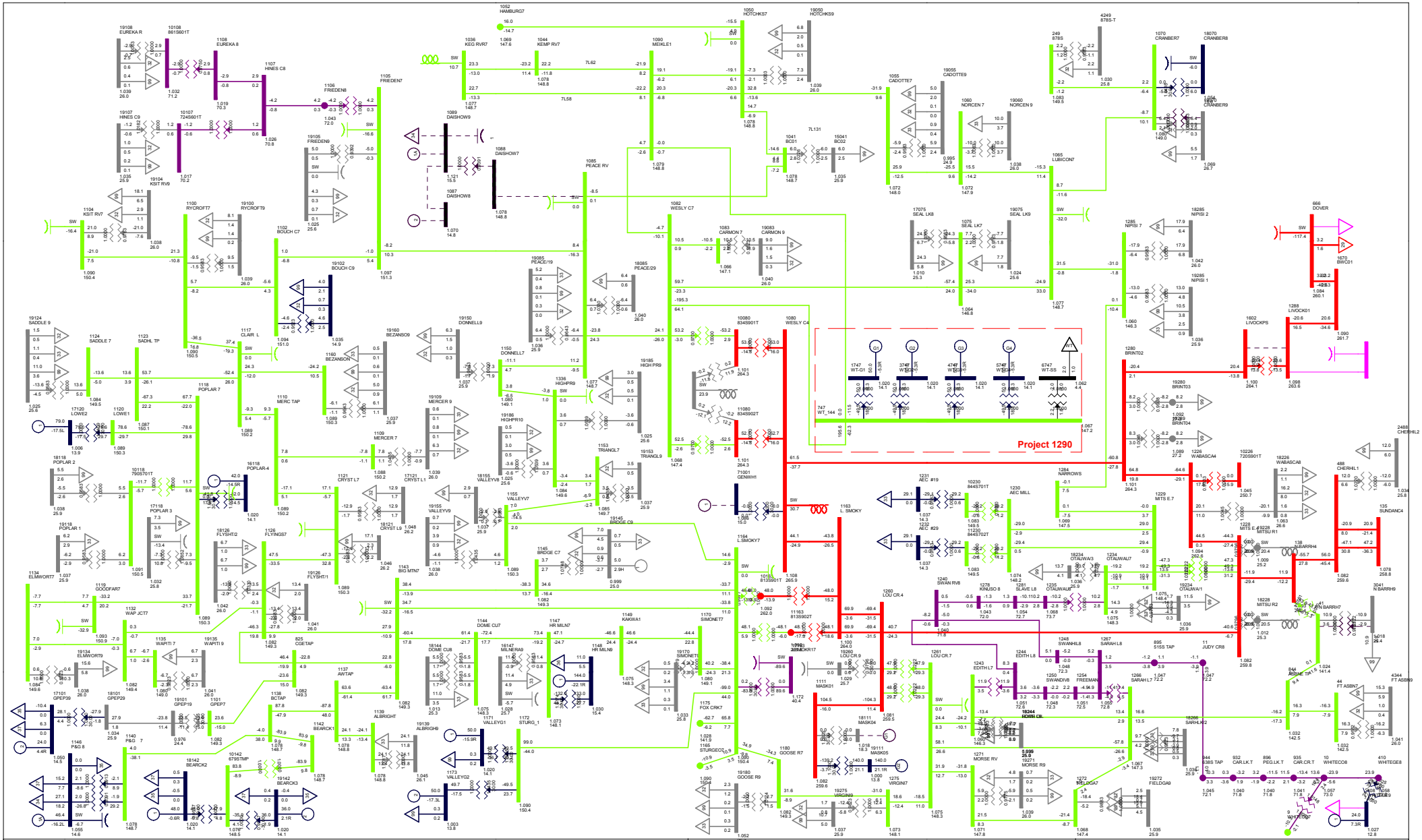
Appendix D2C

Figure: 49

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 024 7Lu4 WESTPEACE to DAISHOWA_A.

Whitetail Project 1290 Interconnection Study



Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 024 7Lu4 WESTPEACE to DAISHOWA_B.

Whitetail Project 1290 Interconnection Study

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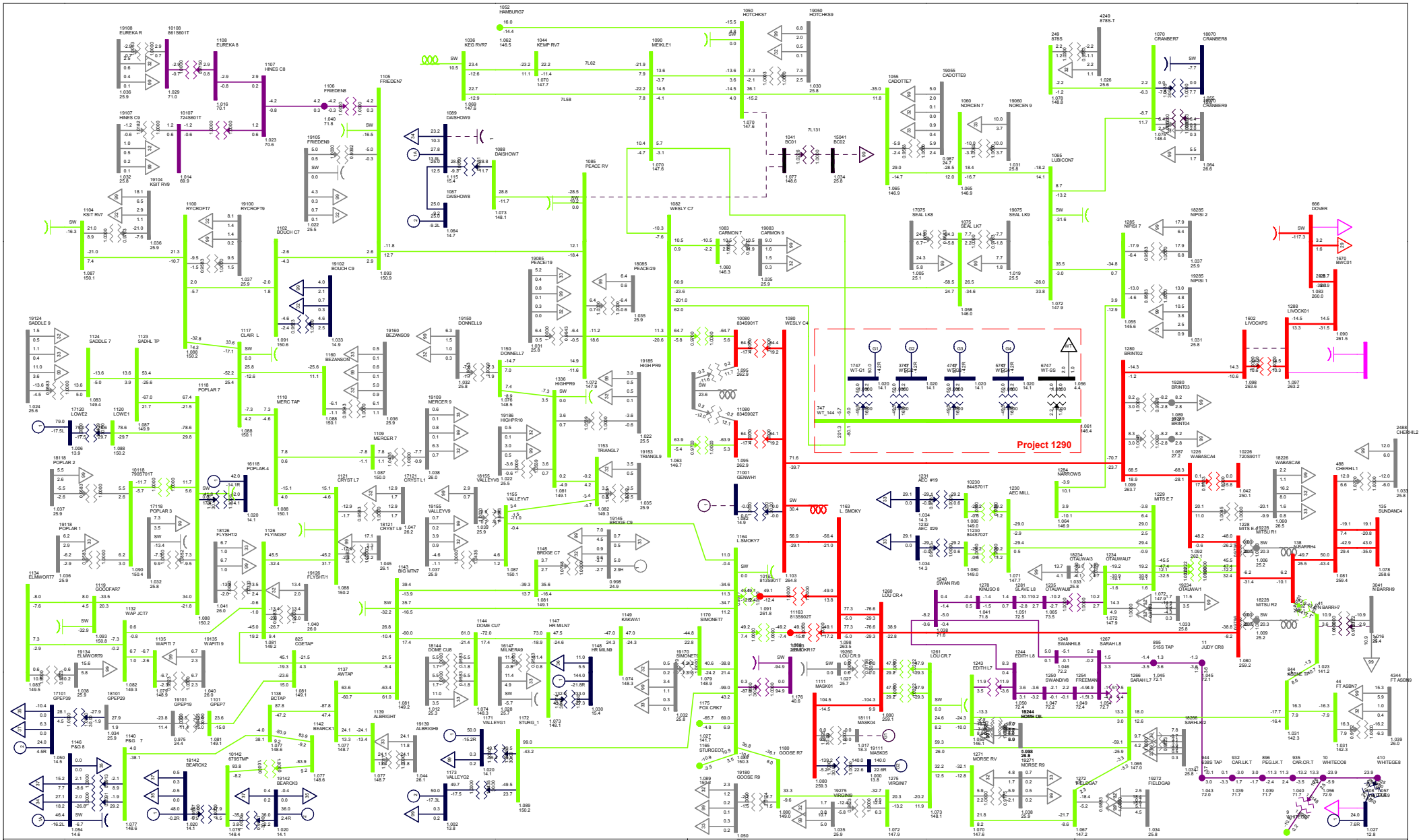


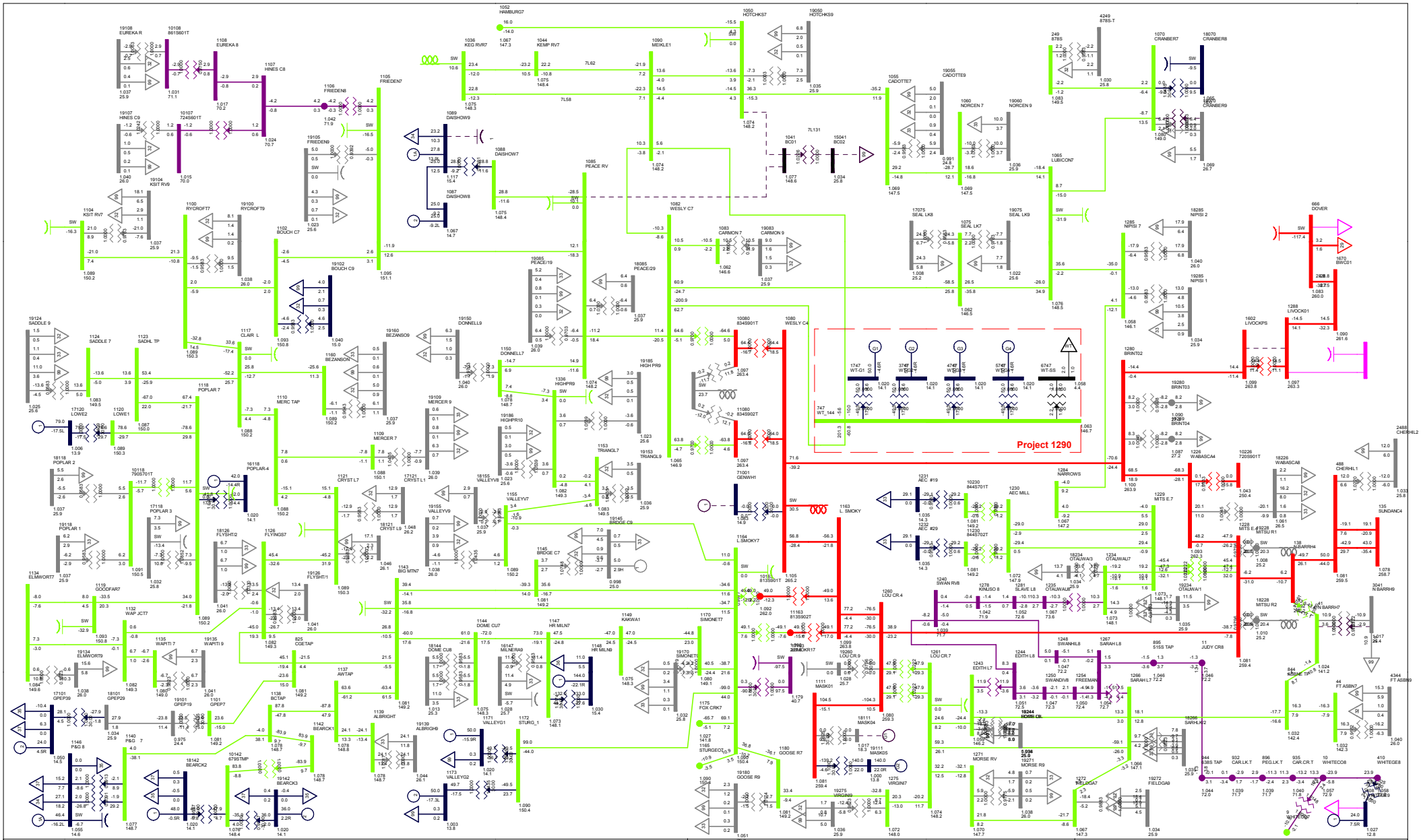
Appendix D2C

Figure: 51

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 025 7Lst WESTPEACE to HOTCHKISS_A.

Whitetail Project 1290 Interconnection Study



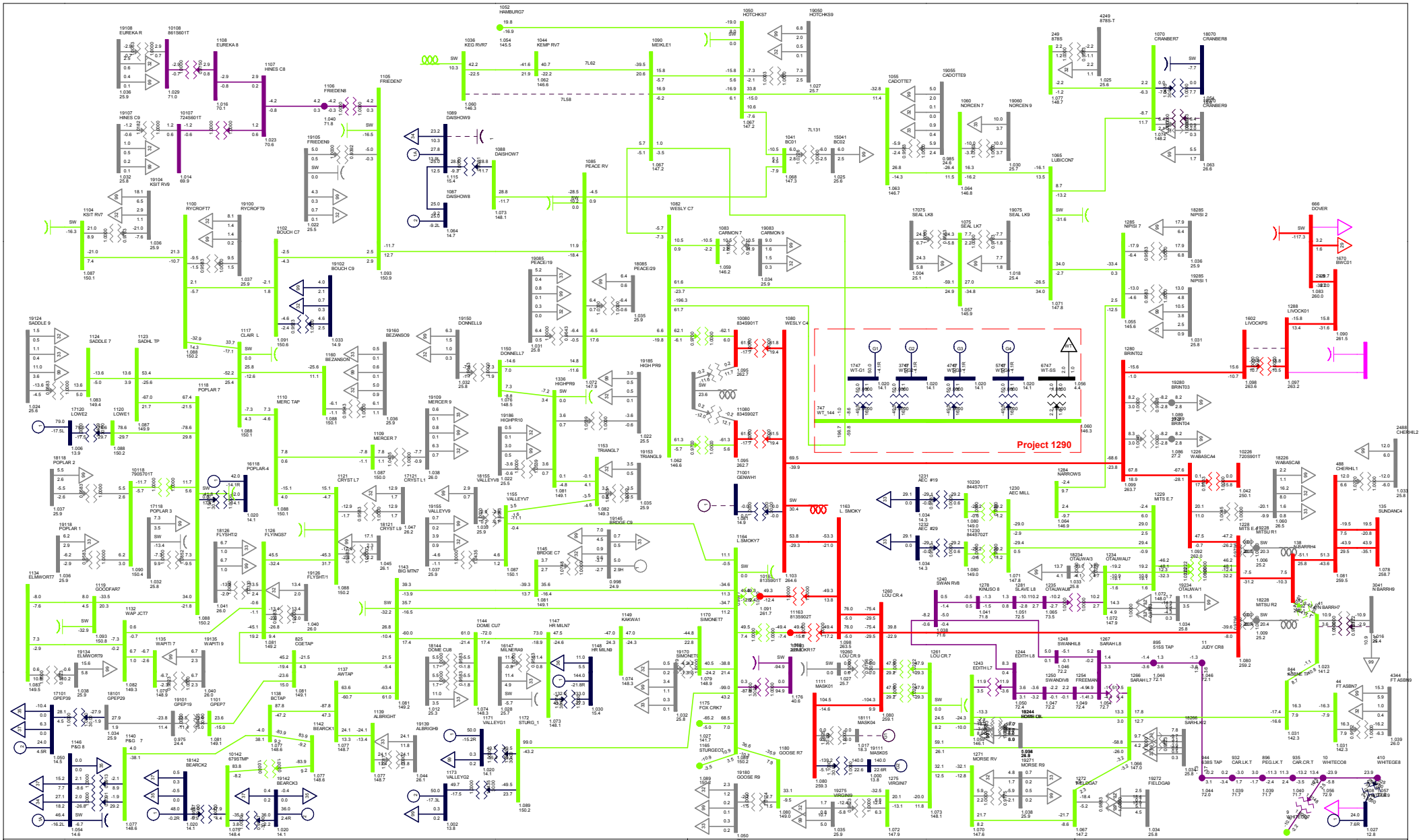
Appendix D2C

Figure: 52

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 025 7L91 WESTPEACE to HOTCHKISS_B.

Whitetail Project 1290 Interconnection Study



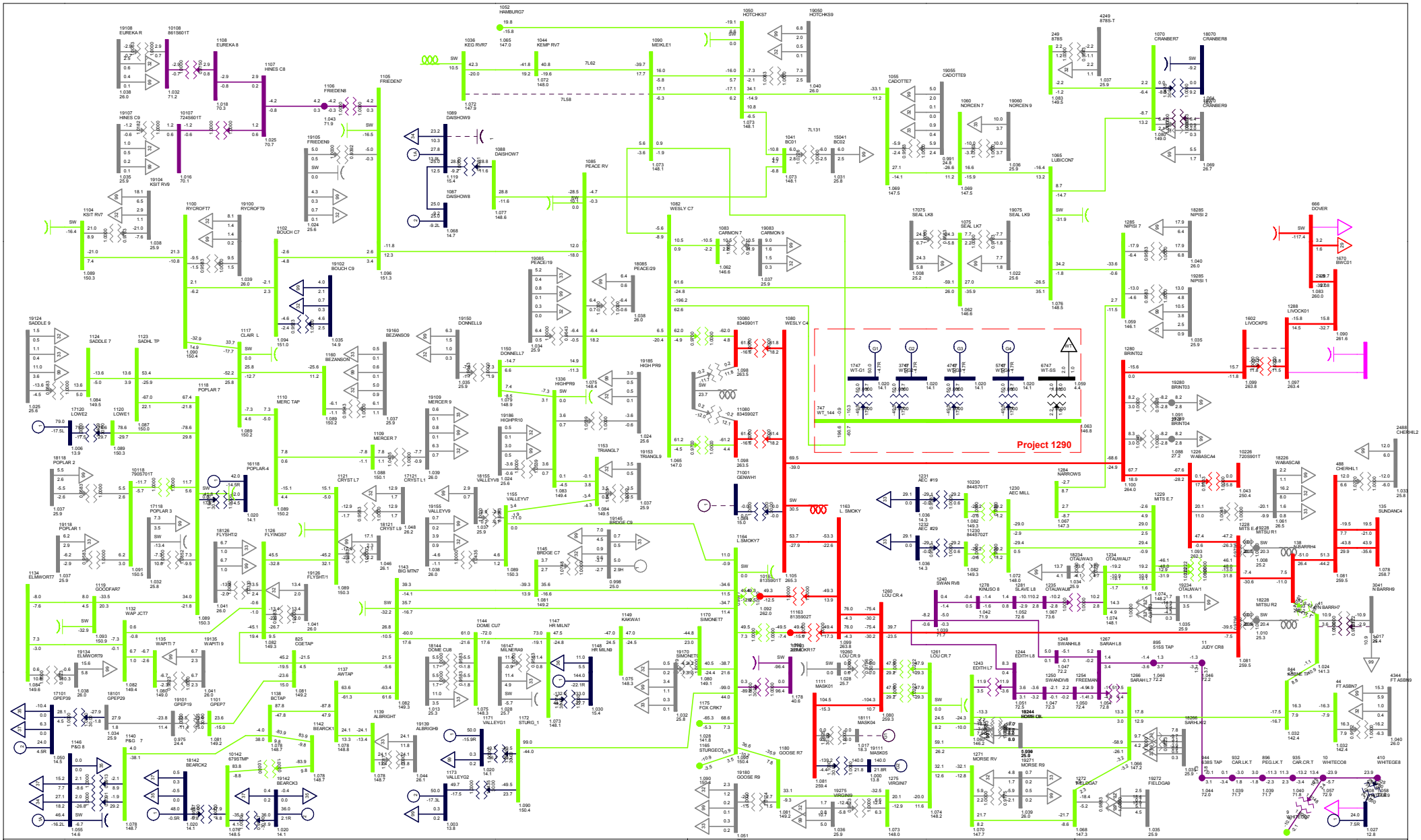
Appendix D2C

Figure: 53

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 026 7Lss RegRIVER to Meikle_A.

Whitetail Project 1290 Interconnection Study



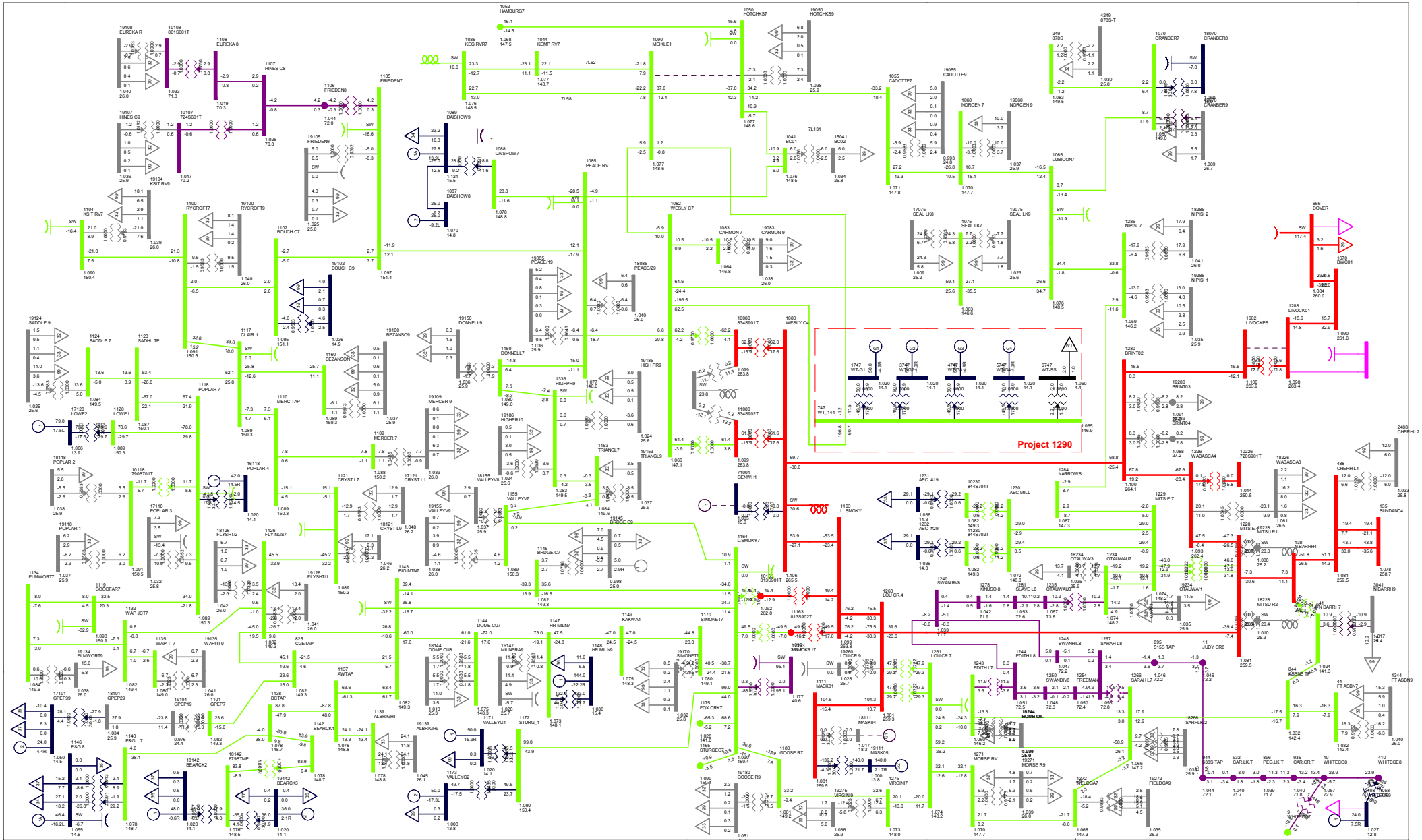
Appendix D2C

Figure: 54

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 026 7Lss REGRIVER to Meikle_B.

Whitetail Project 1290 Interconnection Study



Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 027 7L120 HOTCHKISS to Meikle_A.

Whitetail Project 1290 Interconnection Study

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Figure: 55

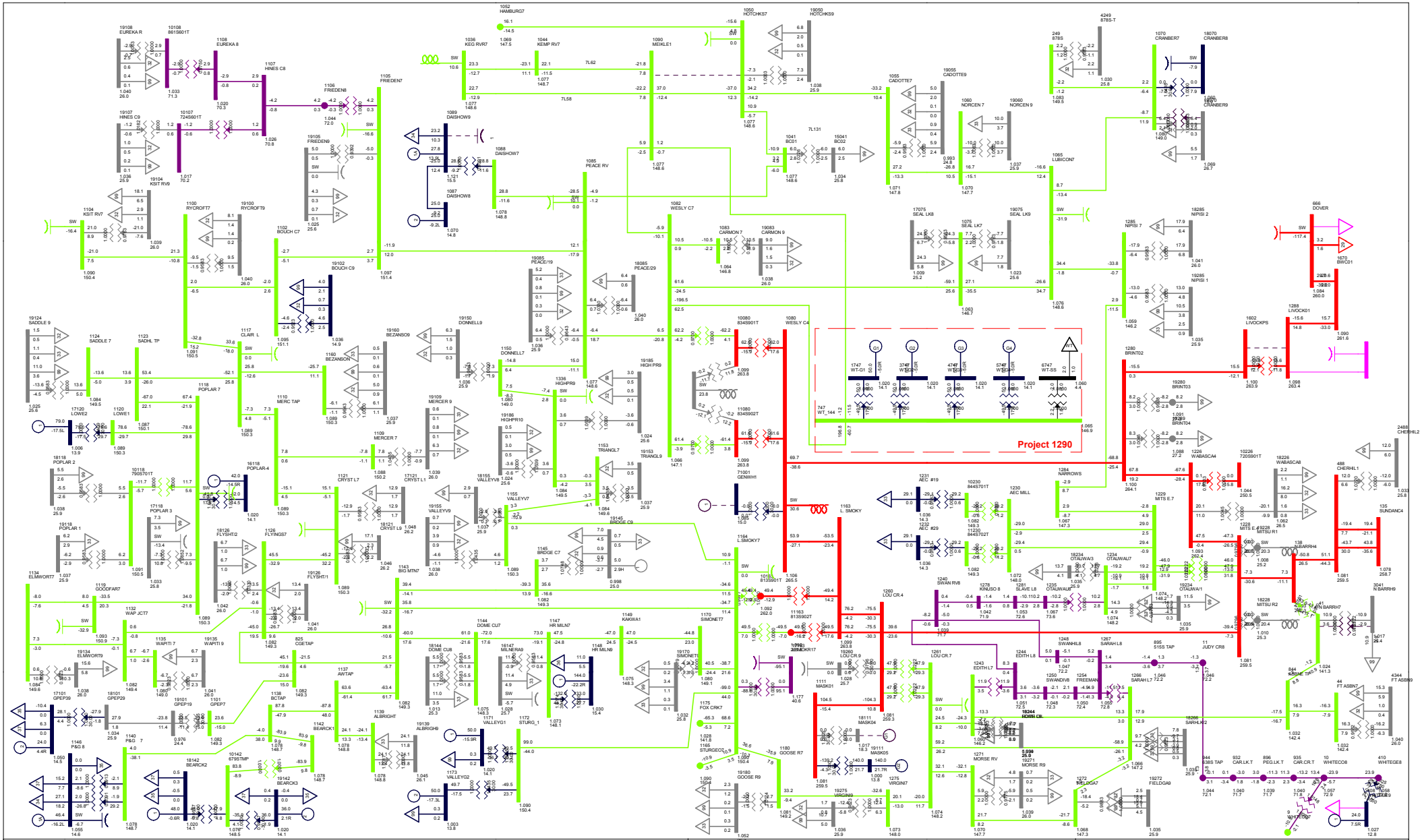

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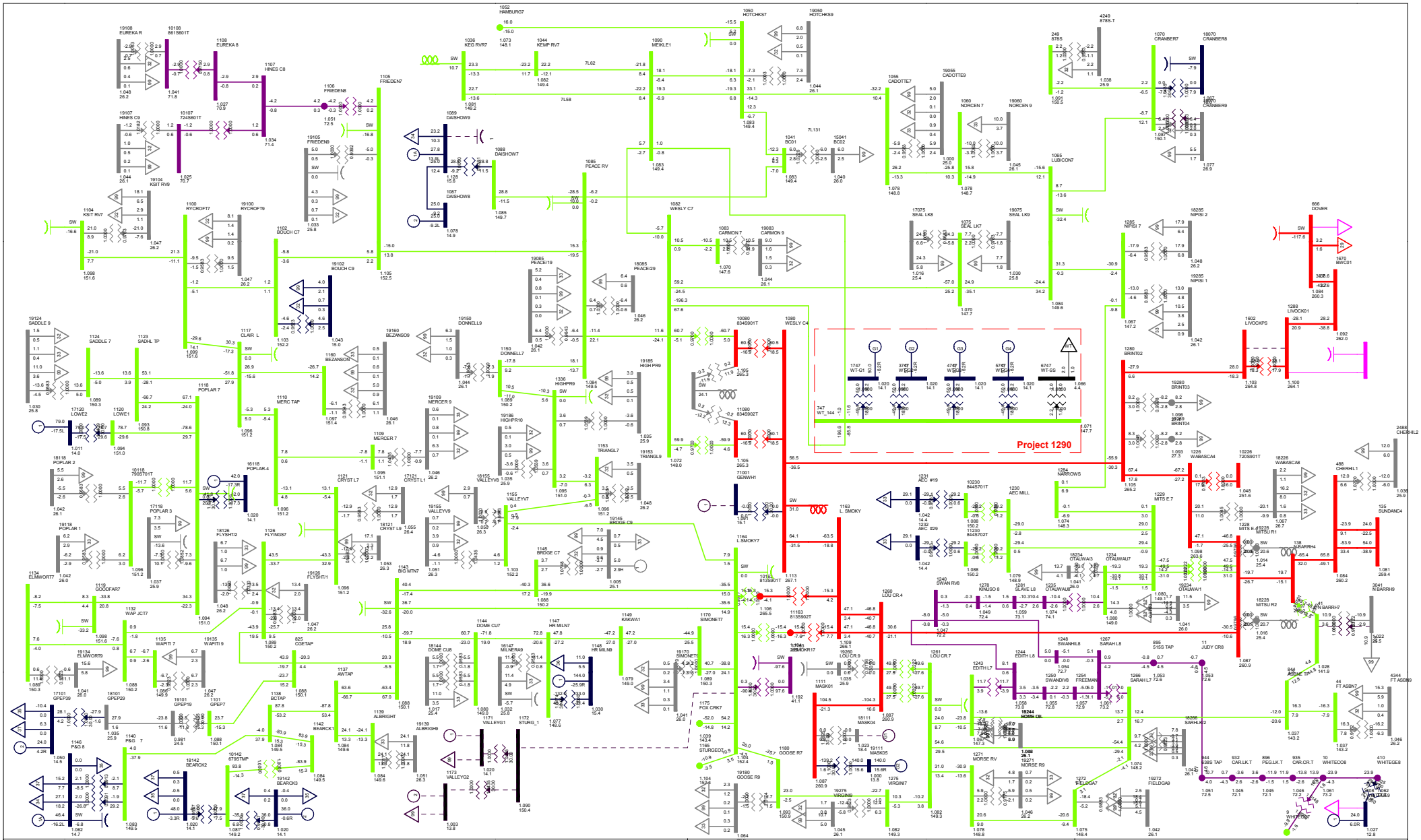
Figure: 56

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 027 7L120 HOTCHKISS to Meikle_B.

Whitetail Project 1290 Interconnection Study



Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 028 7LUTLITTLESMOKY to Sturgeon_A.

Whitetail Project 1290 Interconnection Study

Appendix D2C

Figure: 57

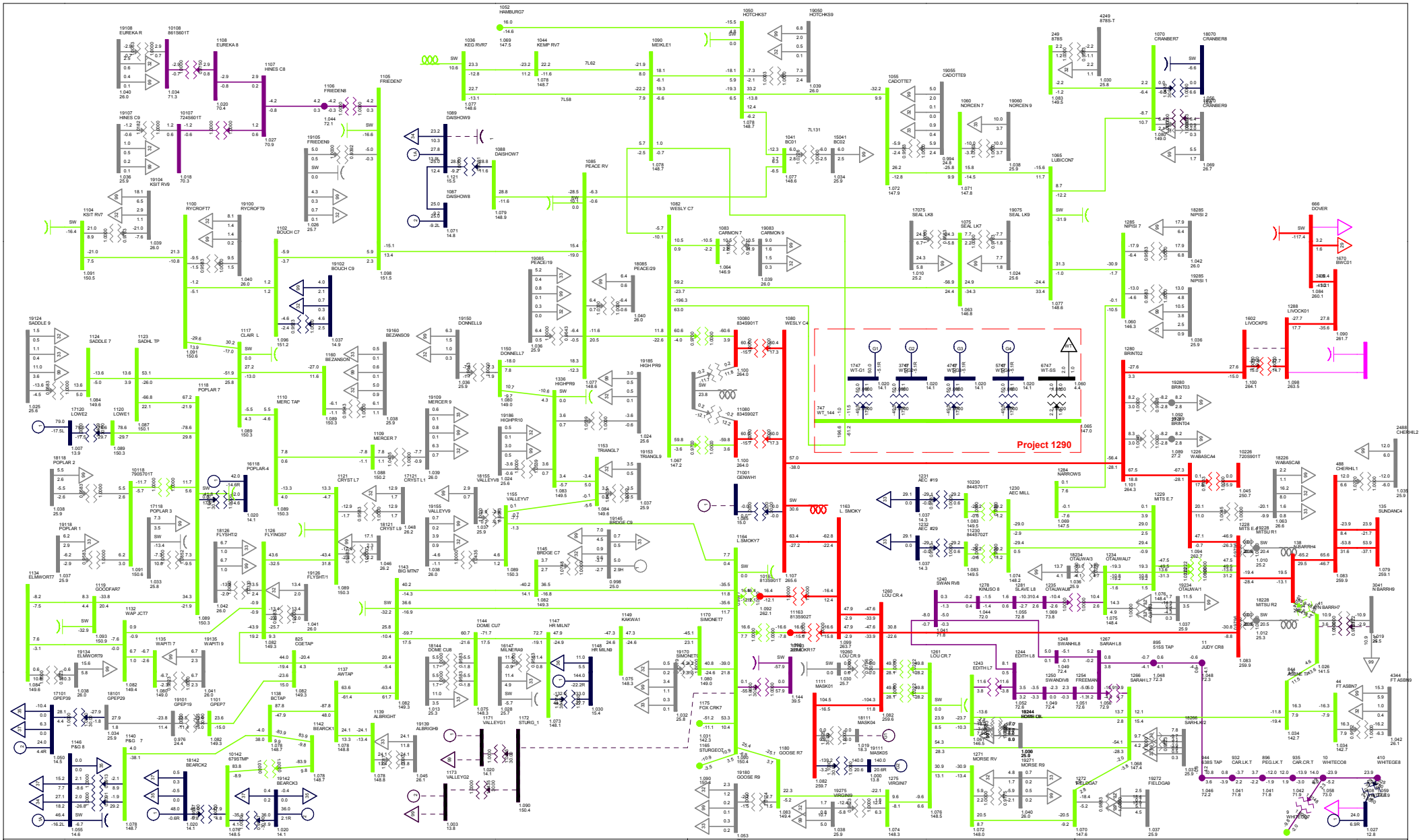


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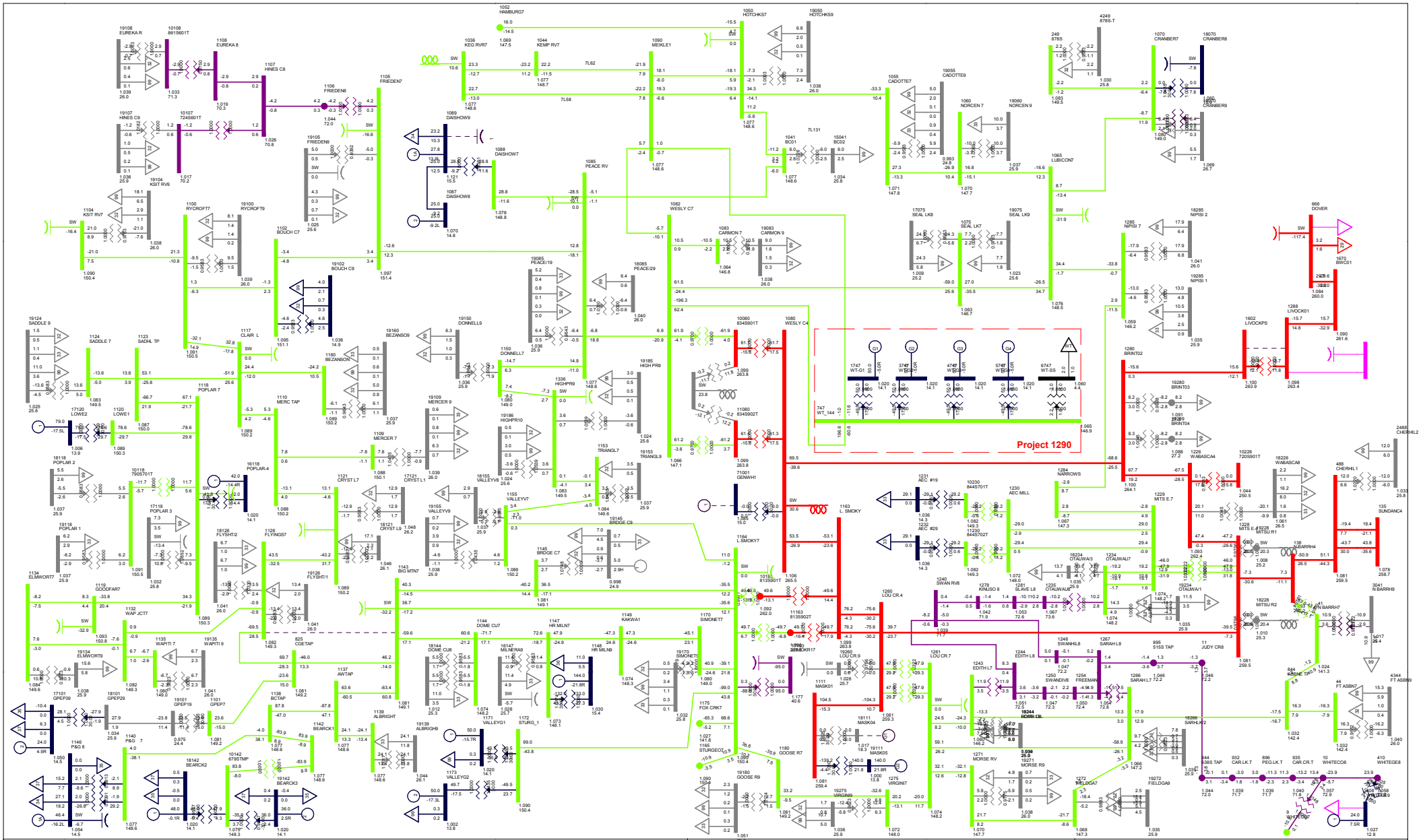
Figure: 58

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 028 7LUTHLESMOKY to Sturgeon_B.

Whitetail Project 1290 Interconnection Study



Appendix D2C

Figure: 59

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 029 7L44 FLTINGSHOTLAKE to BIGMOUNTAIN_A.

Whitetail Project 1290 Interconnection Study

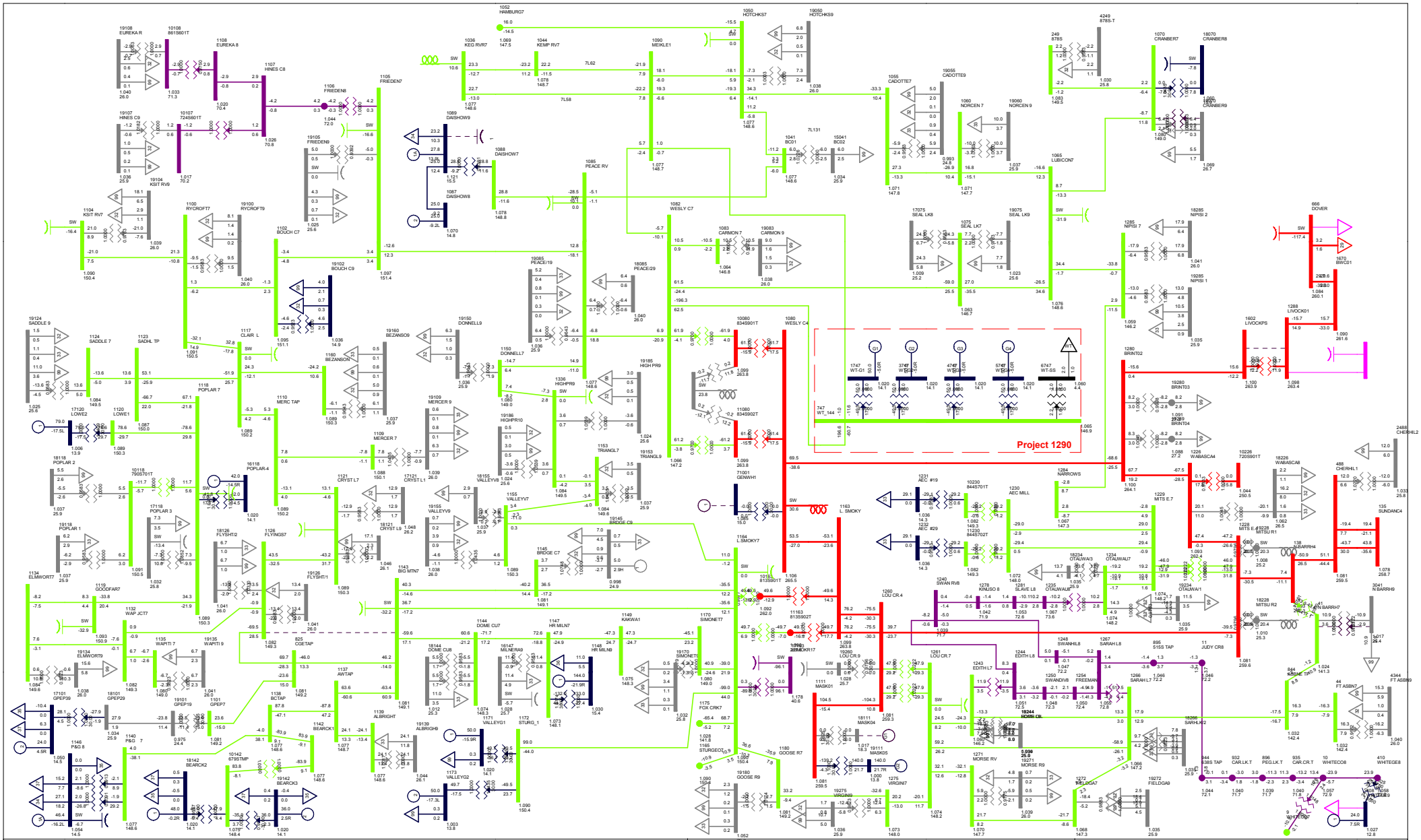


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Figure: 60

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 029 7L44 FLTINGSHOTLAKE to BIGMOUNTAIN_B.

Whitetail Project 1290 Interconnection Study

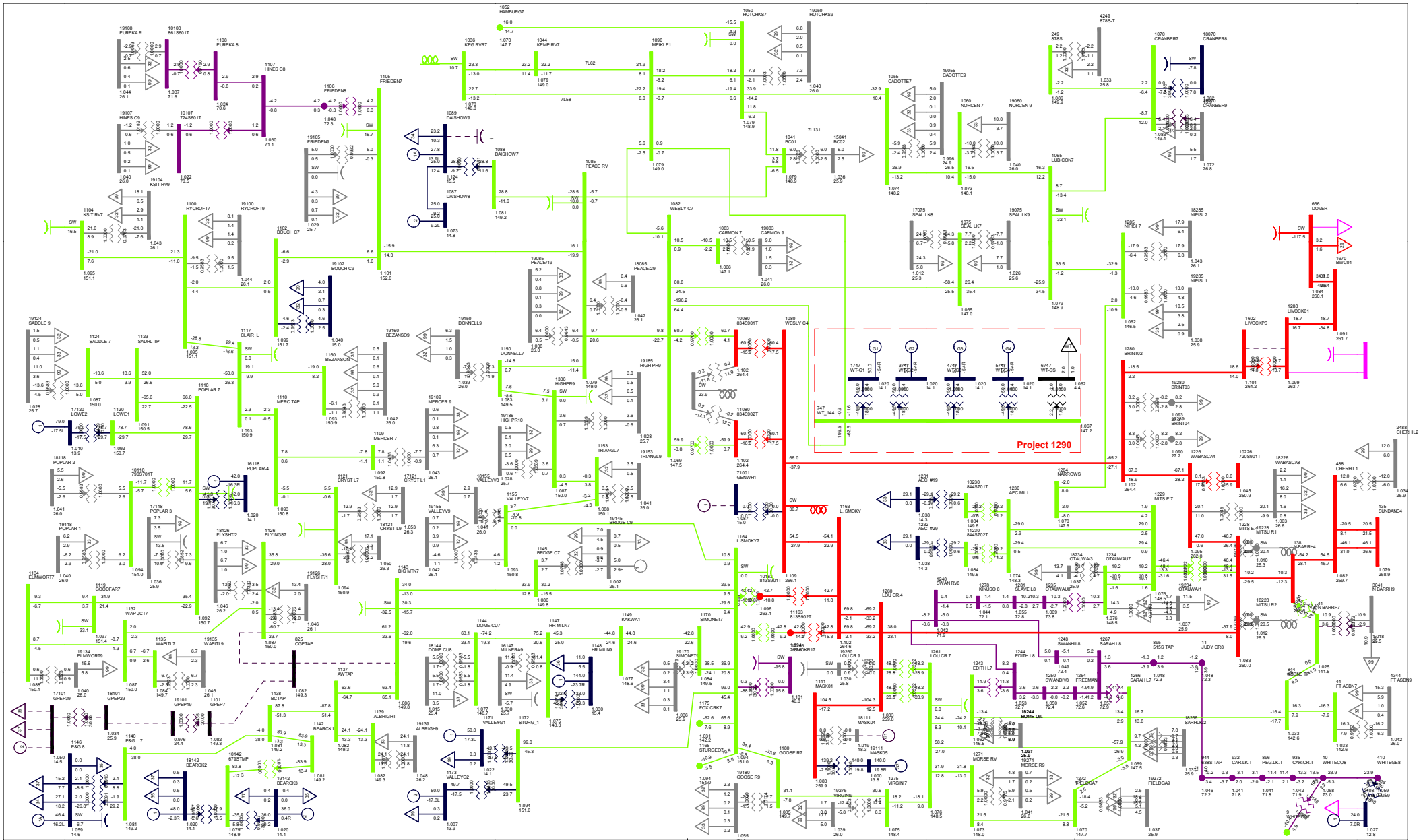

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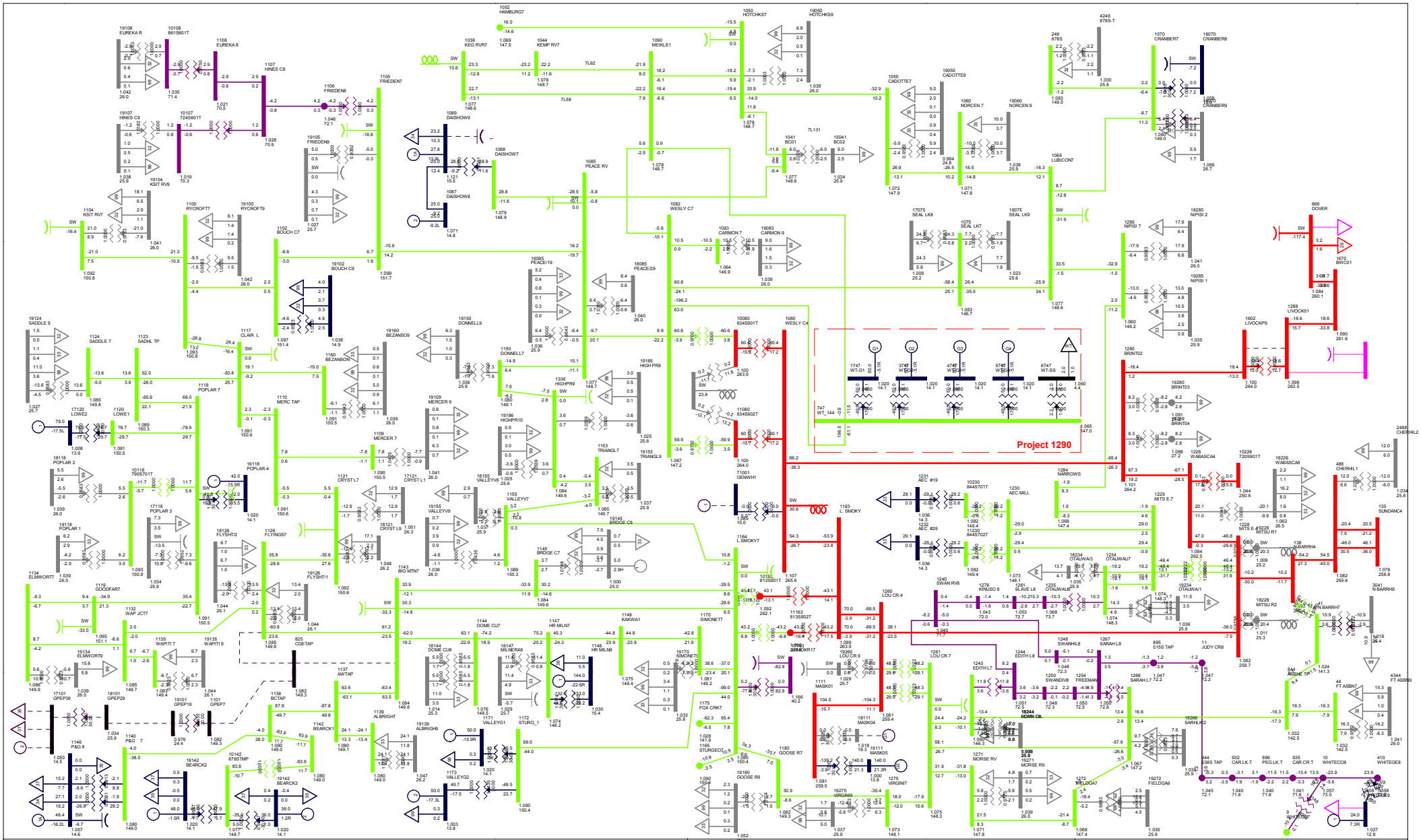
Figure: 61

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_A.

Whitetail Project 1290 Interconnection Study



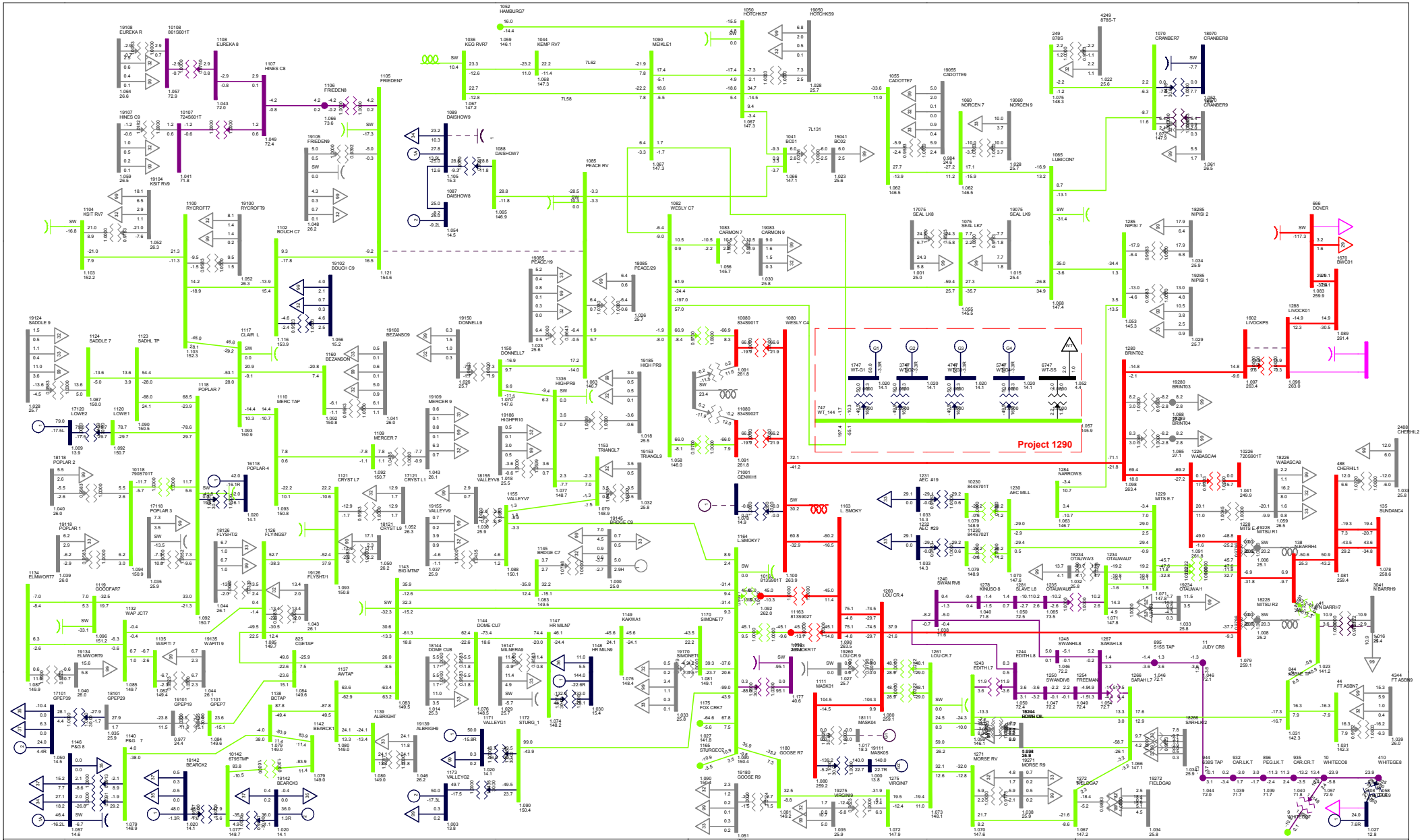
Appendix D2C

Figure: 62

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_B.

Whitetail Project 1290 Interconnection Study



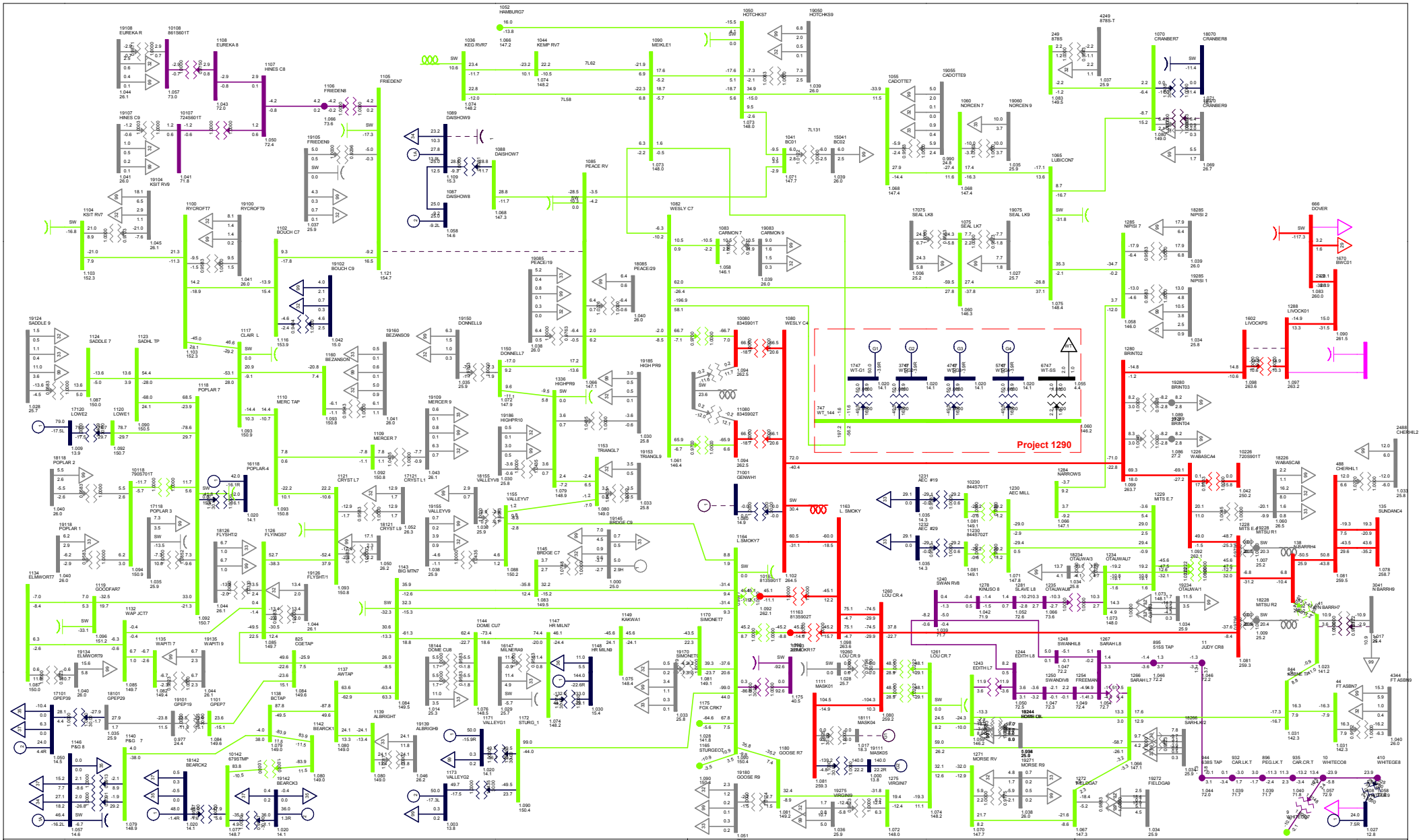
Appendix D2C

Figure: 63

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 031 7LR5 WESTPEACE to FRIEDENSTAL_A.

Whitetail Project 1290 Interconnection Study



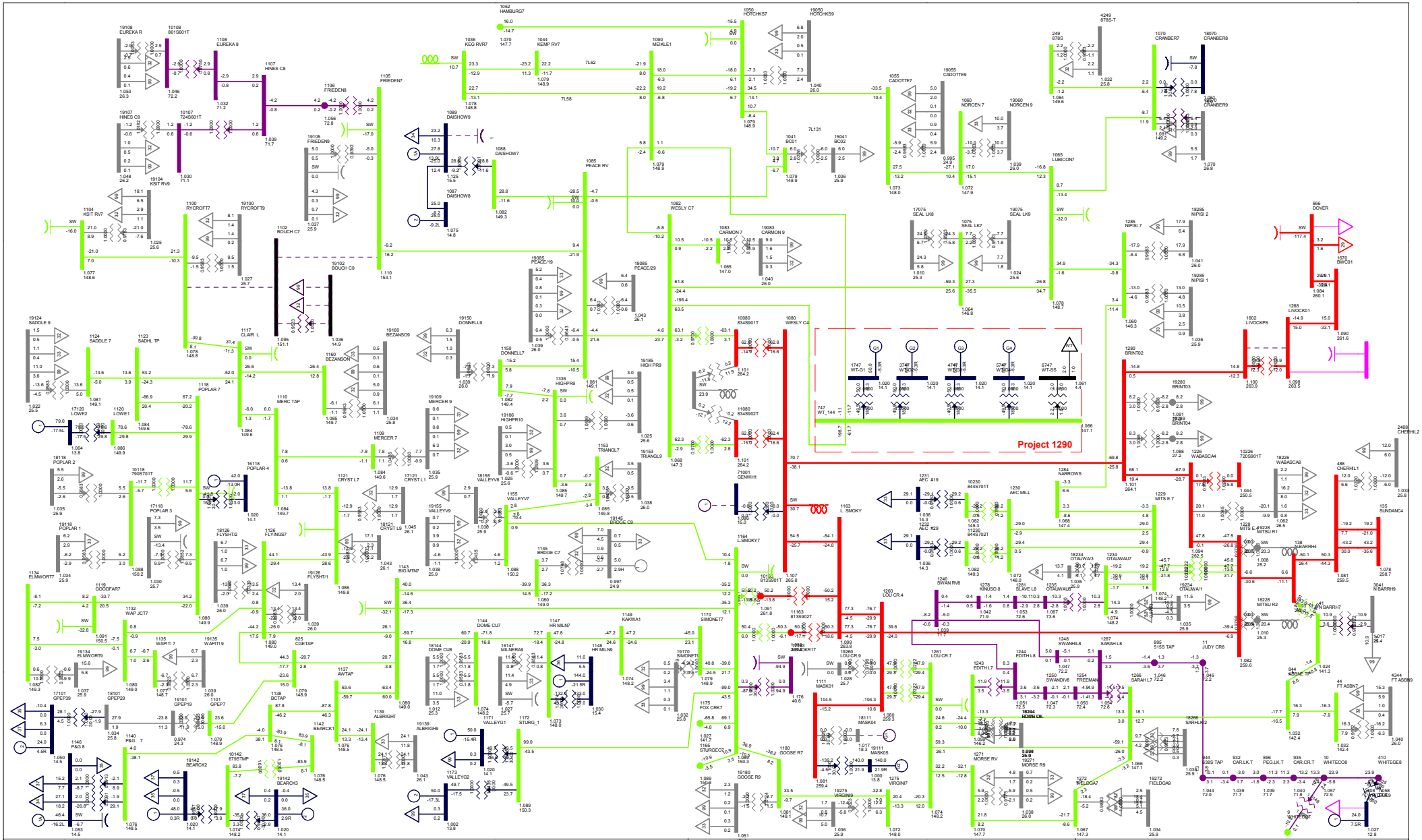
Appendix D2C

Figure: 64

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 031 7Lr9 WESTPEACE to FRIEDENSTAL_B.

Whitetail Project 1290 Interconnection Study



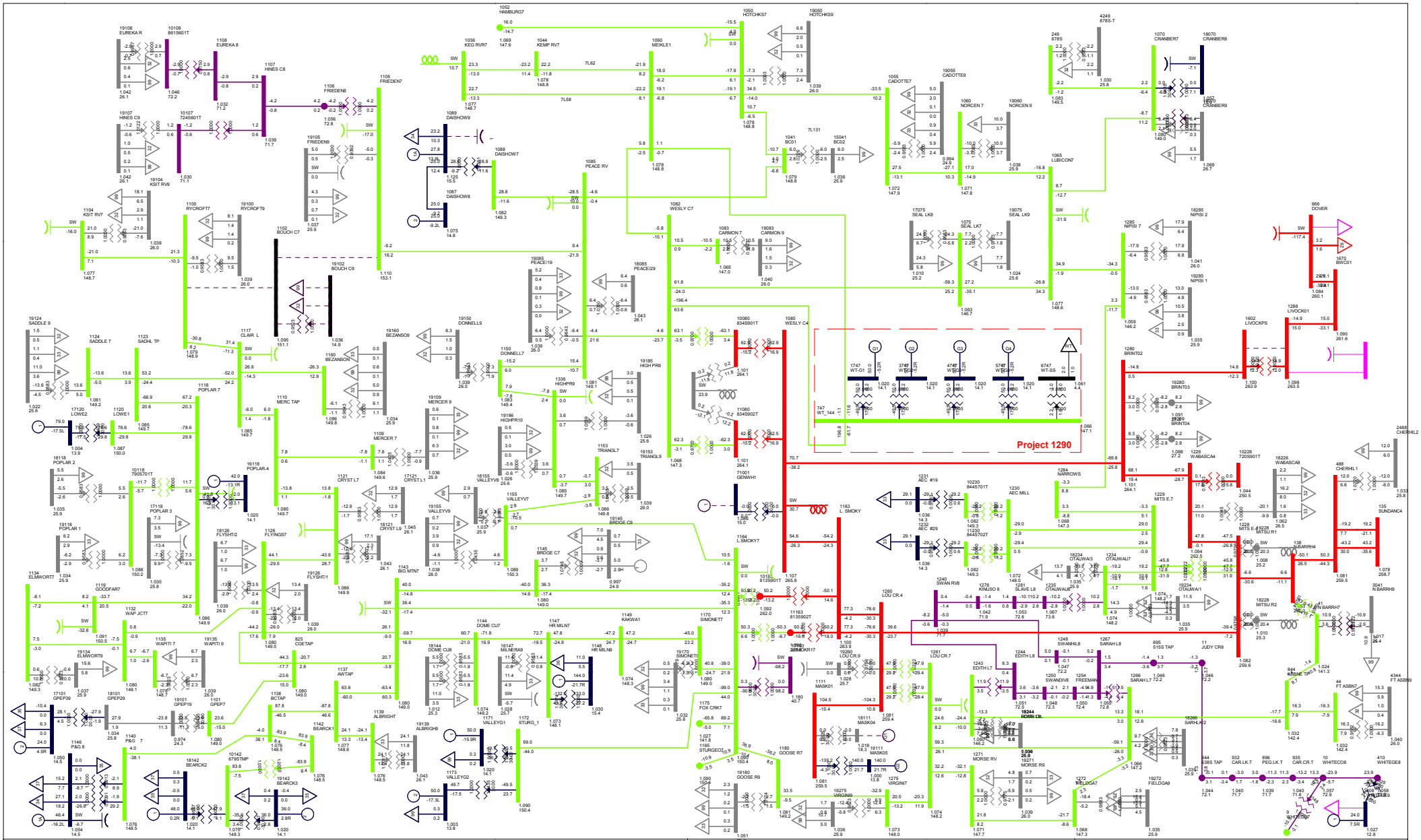
Appendix D2C

Figure: 65

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 032 7LY3 RYCROFT to FRIEDENSTAL_A.

Whitetail Project 1290 Interconnection Study



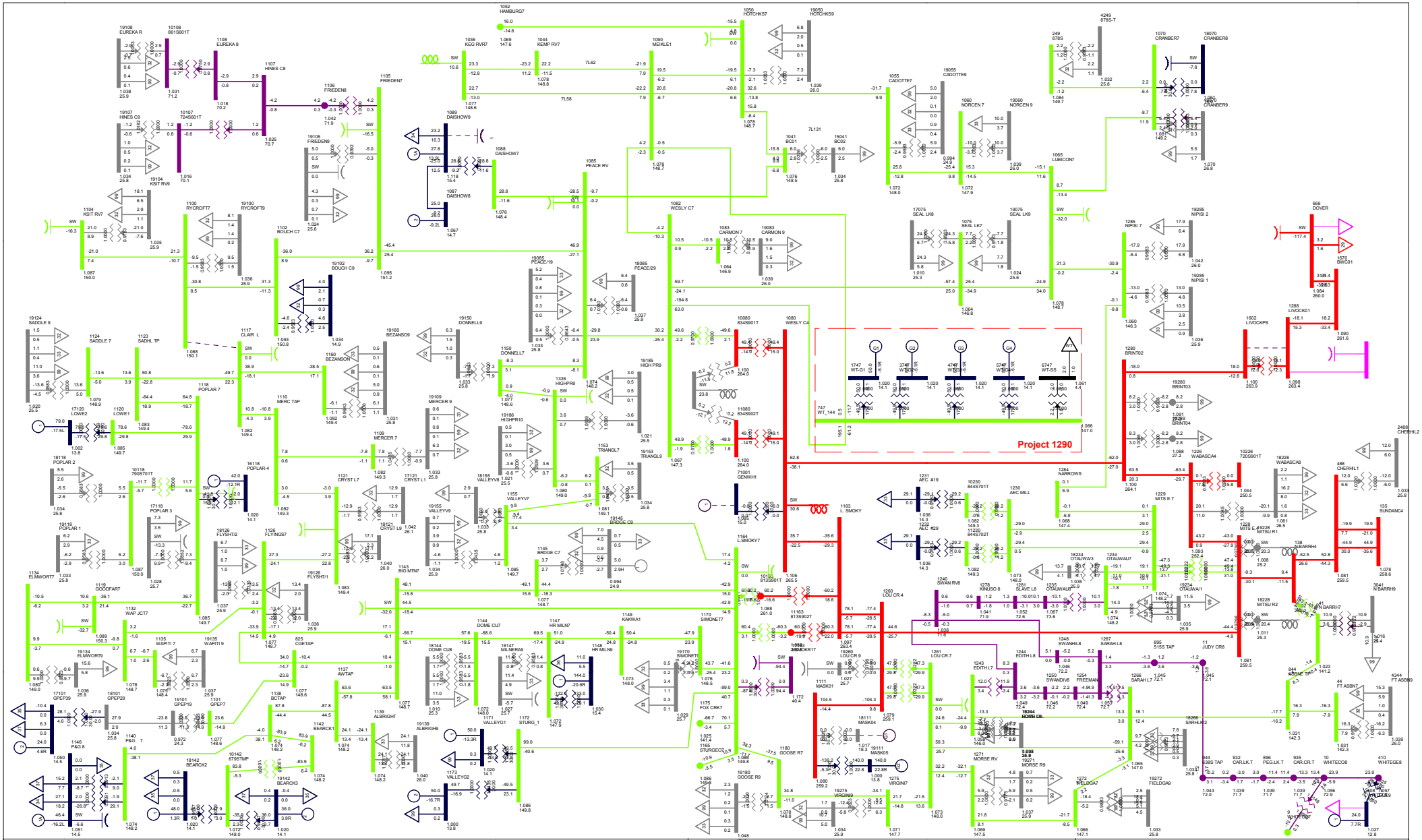
Appendix D2C

Figure: 66

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 032 7L73 RYCROFT to FRIEDENSTAL_B.

Whitetail Project 1290 Interconnection Study



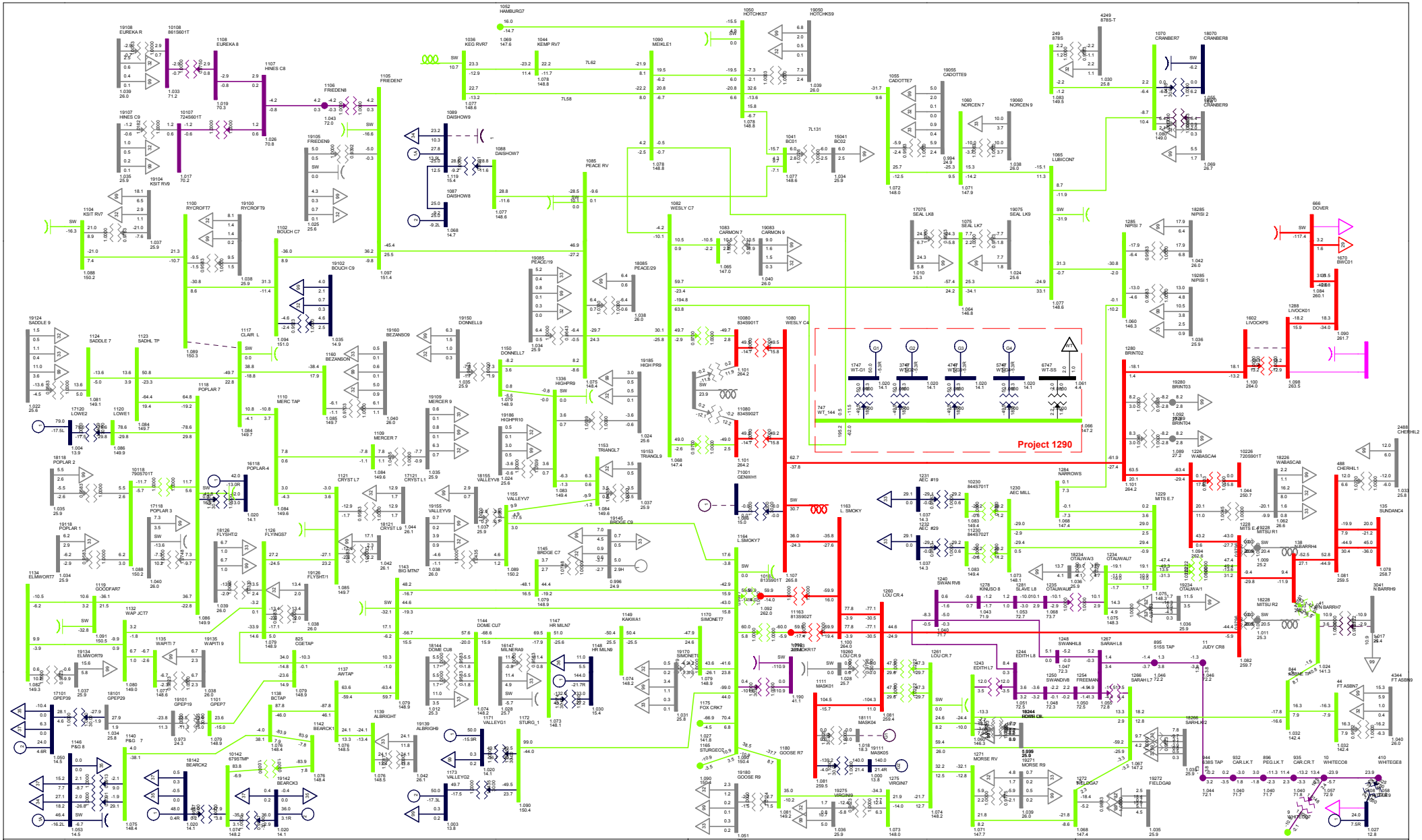
Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 033 7Loo RYCROFT to CLAIRMONTLAKE_A.

Whitetail Project 1290 Interconnection Study

Appendix D2C

Figure: 67



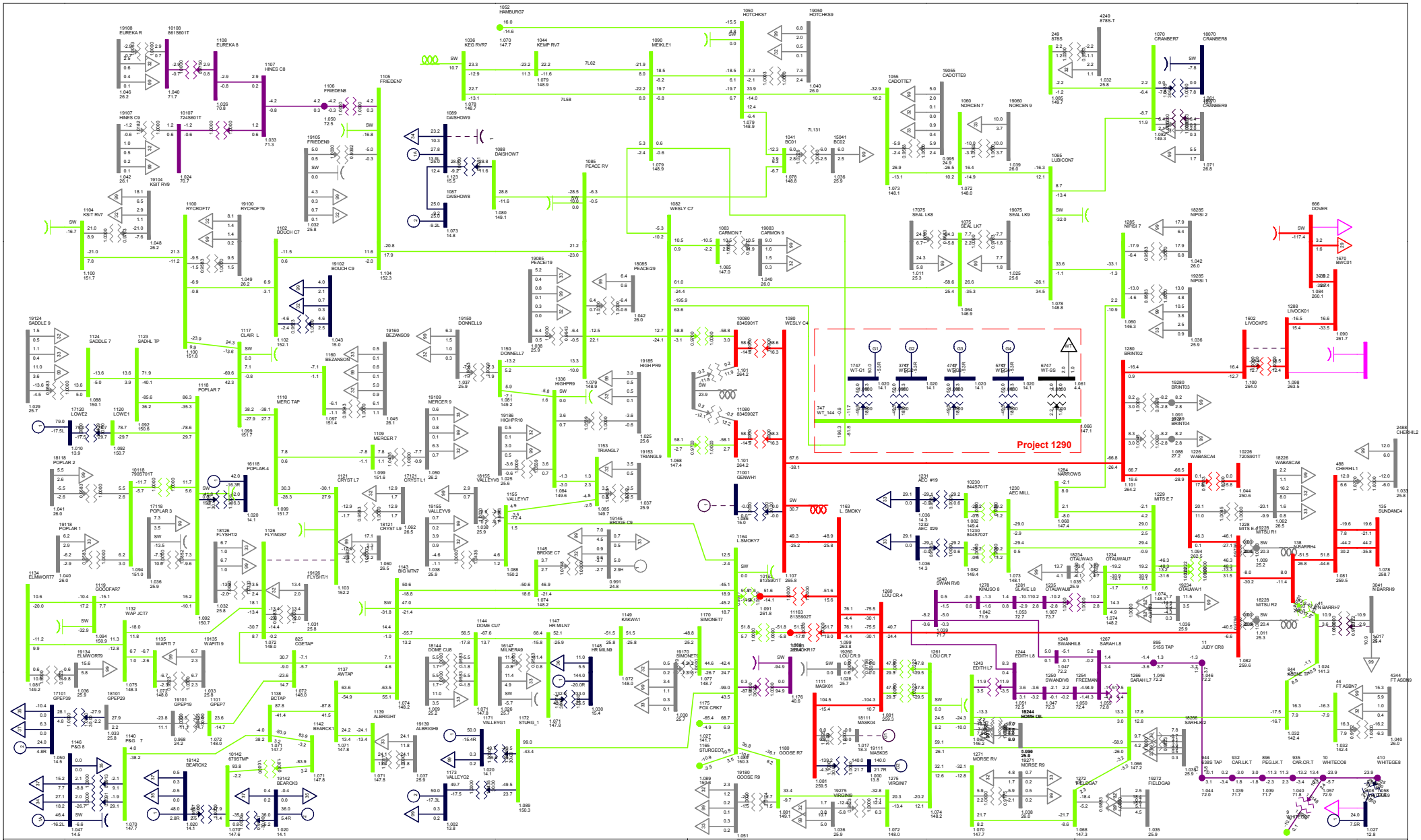
Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 033 7Loo RYCROFT to CLAIRMONTLAKE_B.

Whitetail Project 1290 Interconnection Study

Appendix D2C

Figure: 68



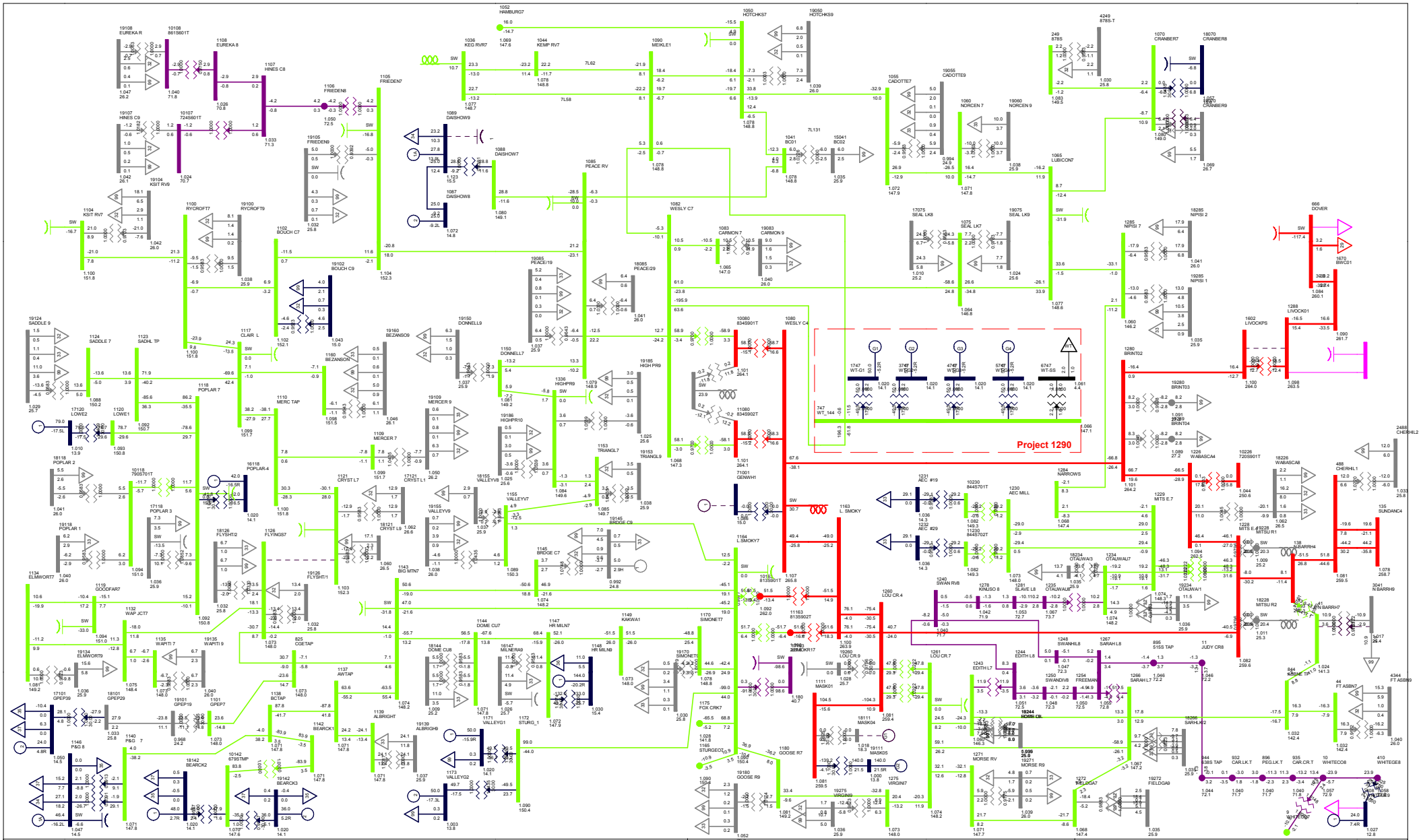
Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 034 7Lo4 CRYSTALLAKE to FLYINGSHOTLAKE_A.

Whitetail Project 1290 Interconnection Study

Appendix D2C

Figure: 69



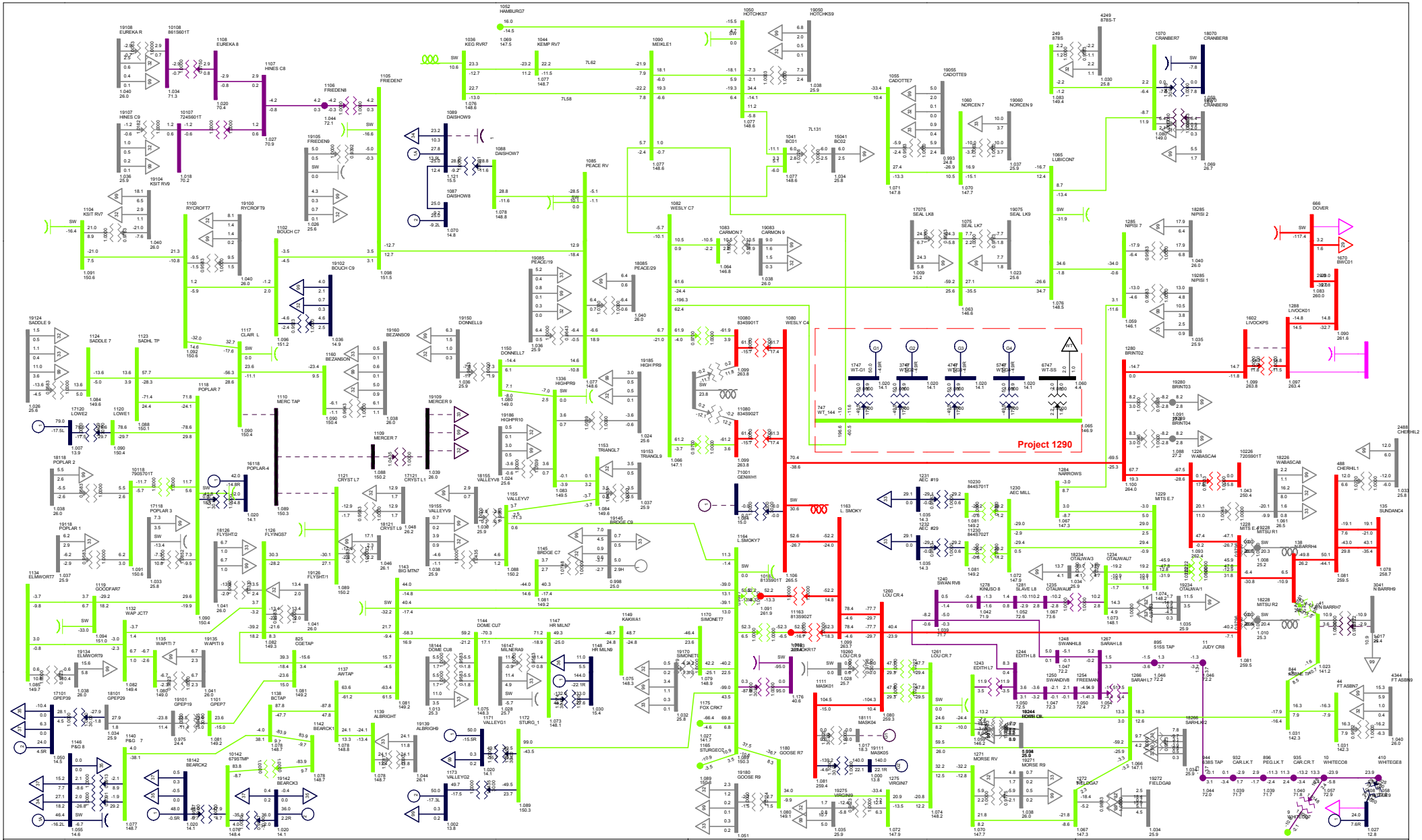
Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 034 7Lo4 CRYSTALLAKE to FLYINGSHOTLAKE_B.

Whitetail Project 1290 Interconnection Study

Appendix D2C

Figure: 70



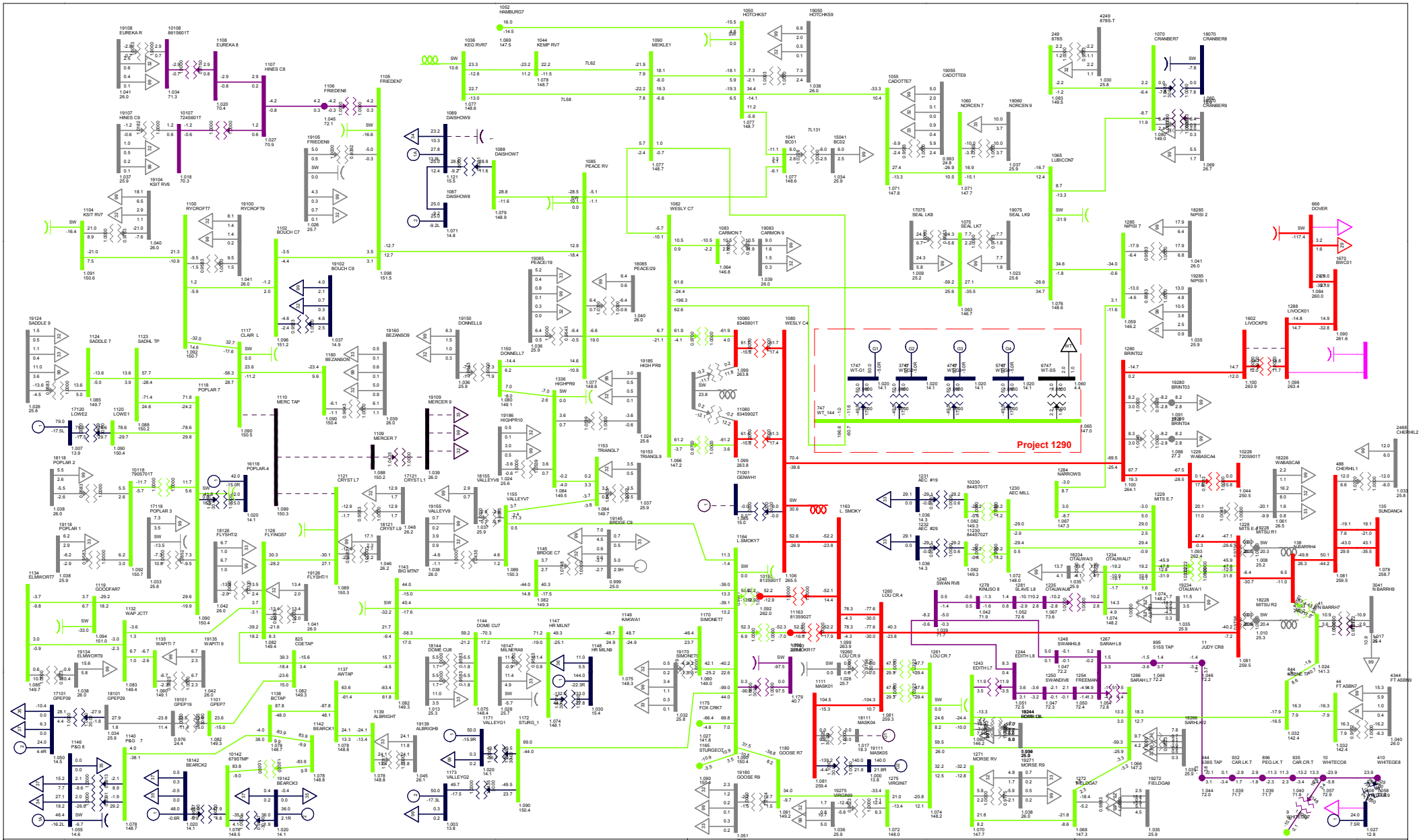
Appendix D2C

Figure: 71

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_A.

Whitetail Project 1290 Interconnection Study



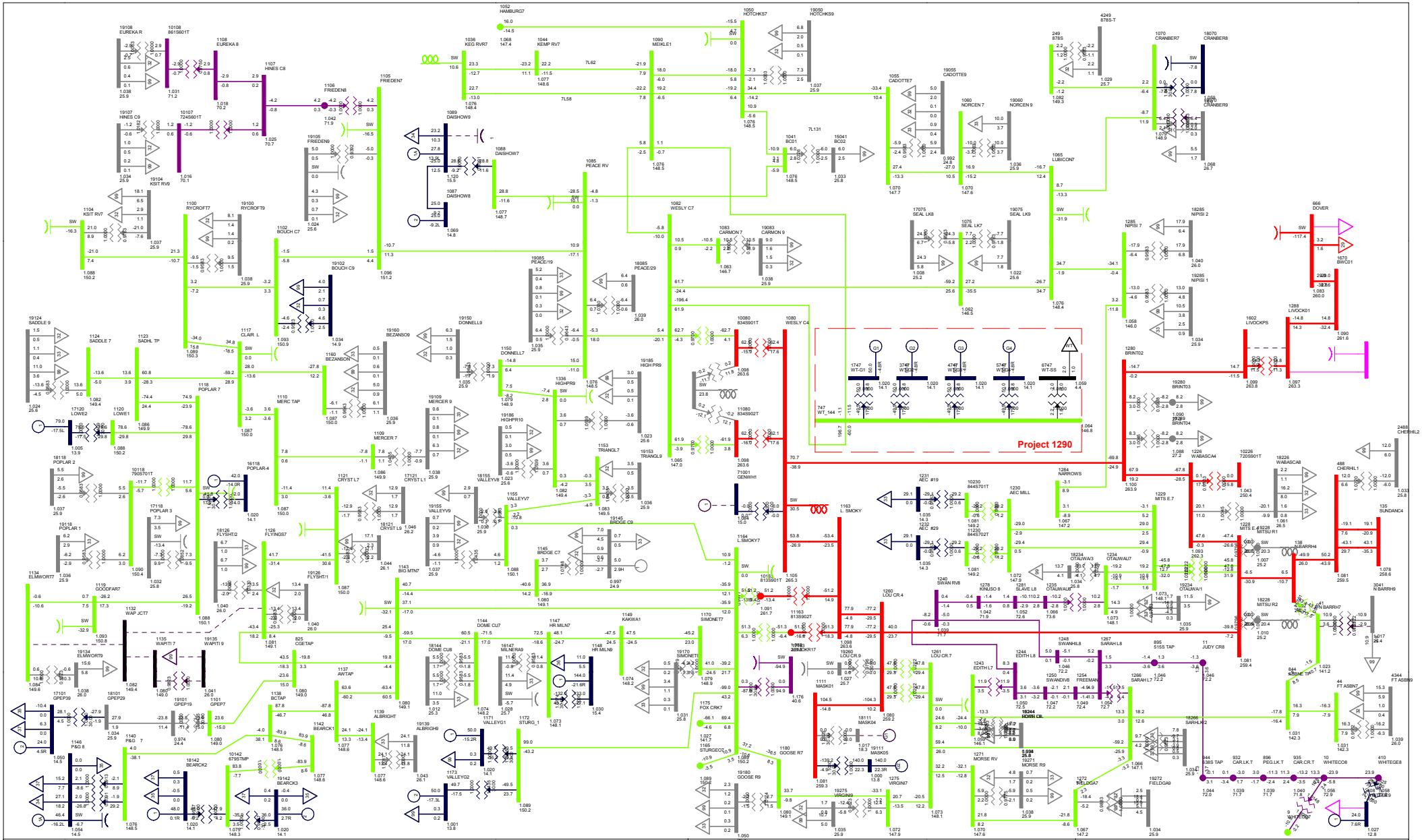
Appendix D2C

Figure: 72

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_B.

Whitetail Project 1290 Interconnection Study



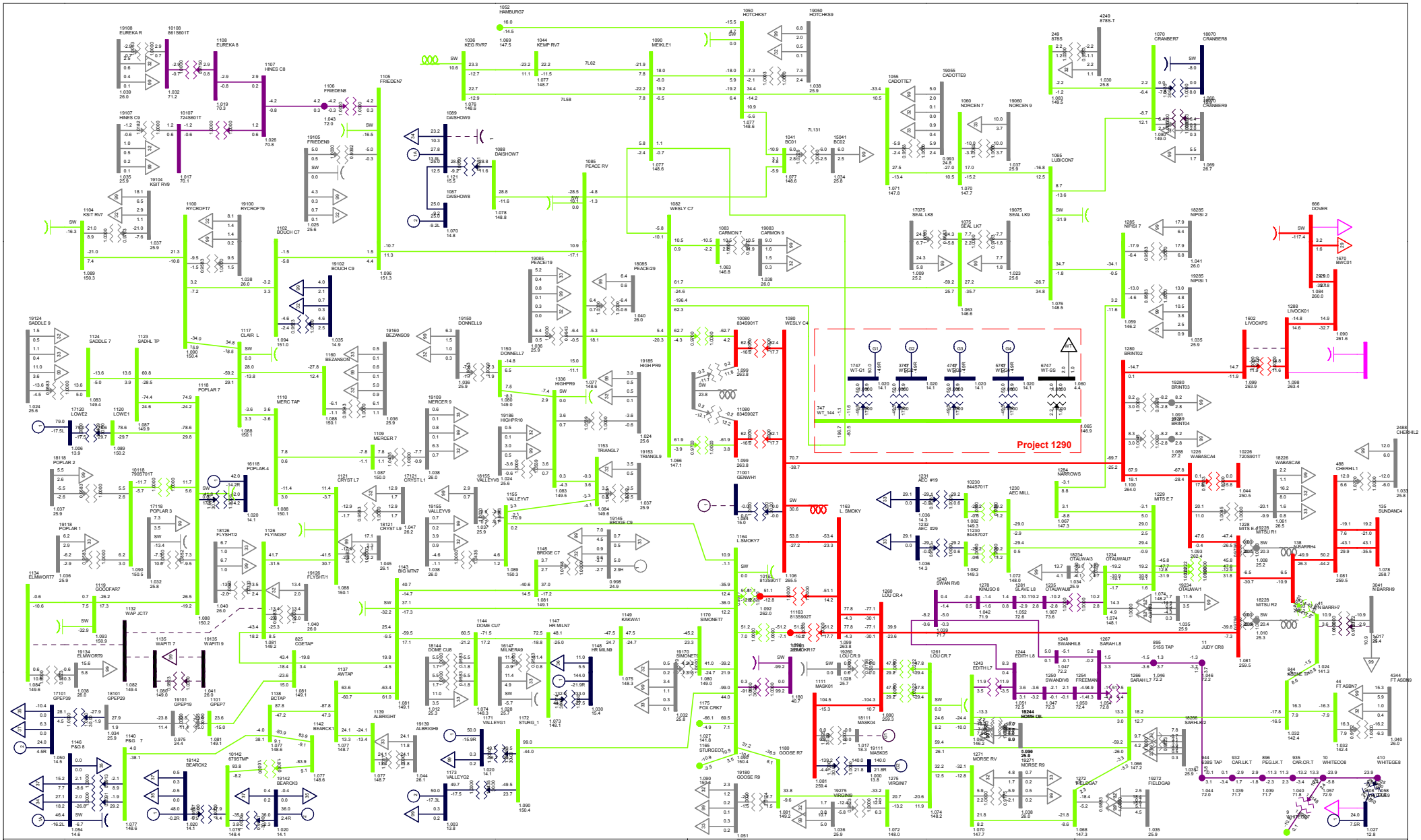
Appendix D2C

Figure: 73

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 036 7LO3 FLTINGSHOTLAKE to ELMWORTH_A.

Whitetail Project 1290 Interconnection Study



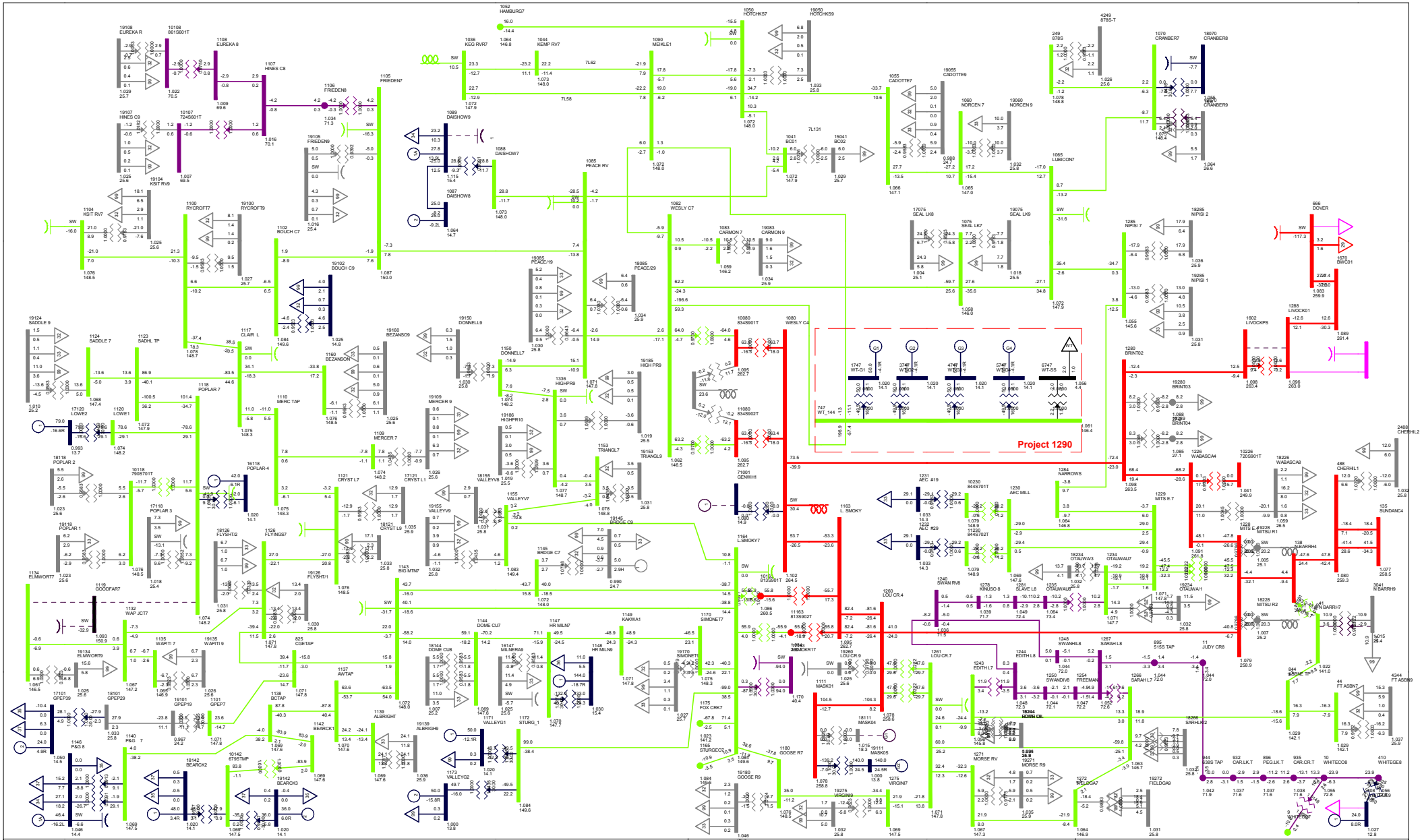
Appendix D2C

Figure: 74

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 036 7LO3 FLTINGSHOTLAKE to ELMWORTH_B.

Whitetail Project 1290 Interconnection Study



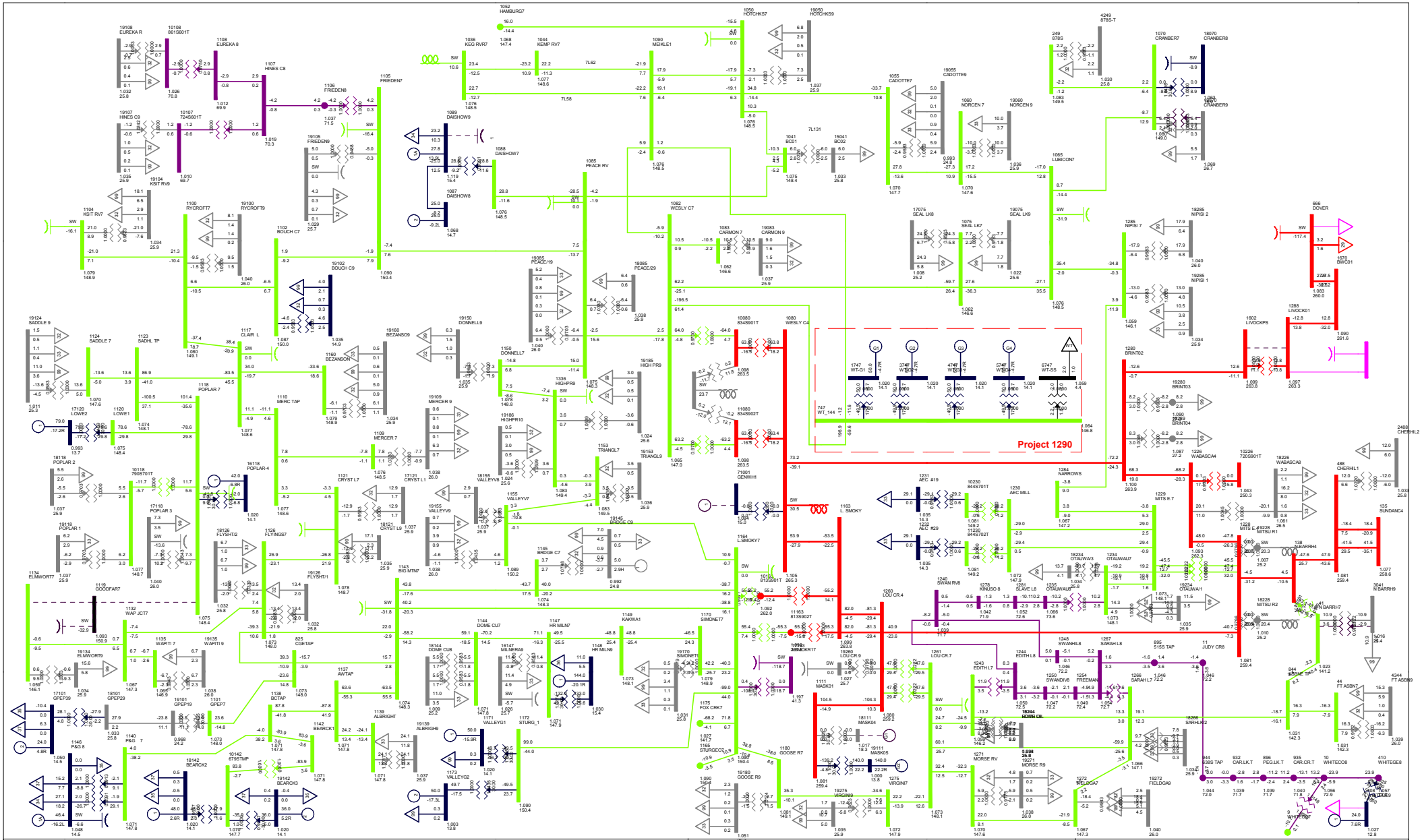
Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 037 7Lu7 POPLARHILL to ELMWORTH_A.

Whitetail Project 1290 Interconnection Study

Appendix D2C

Figure: 75



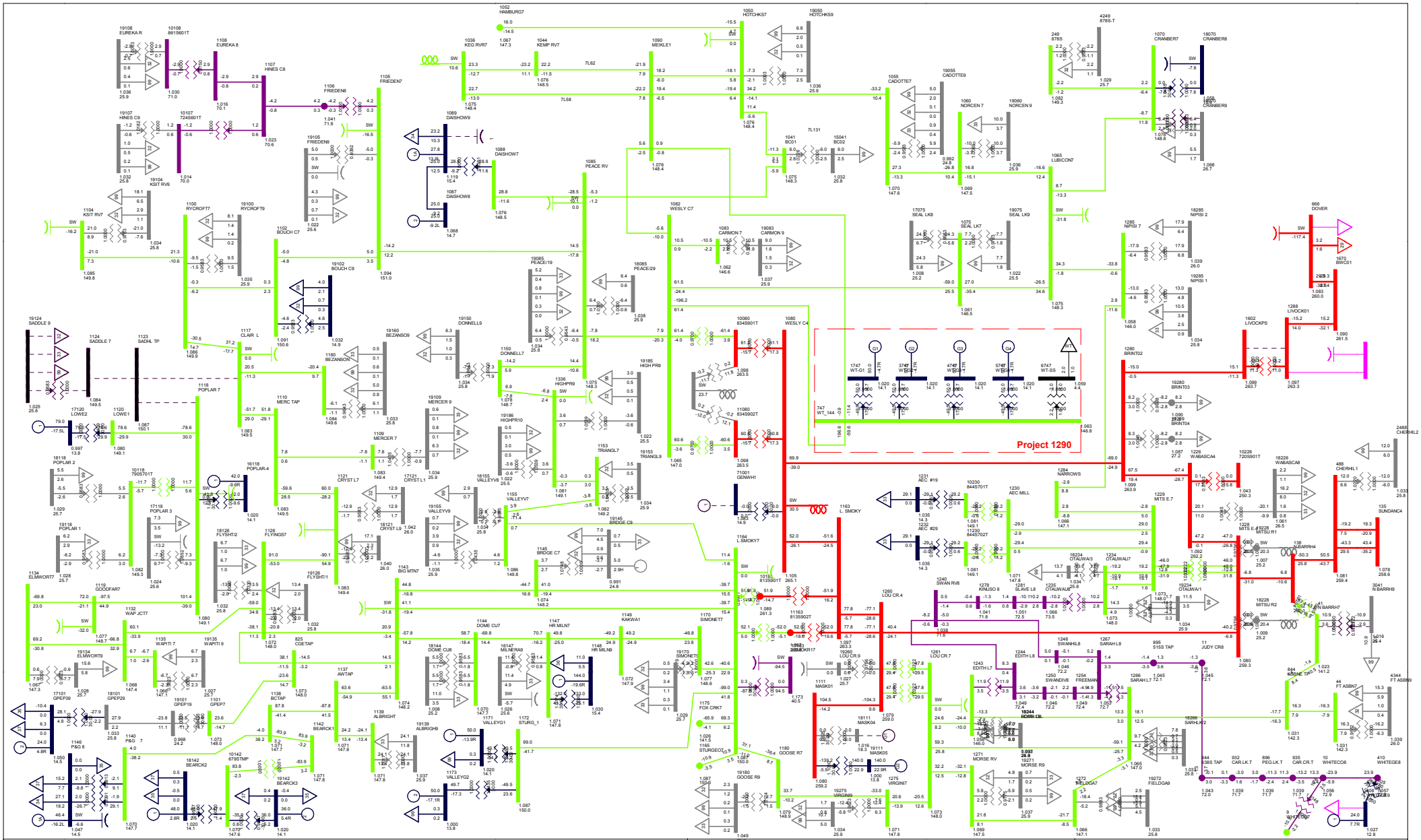
Appendix D2C

Figure: 76

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 037 7Lu7 POPLARHILL to ELMWORTH_B.

Whitetail Project 1290 Interconnection Study



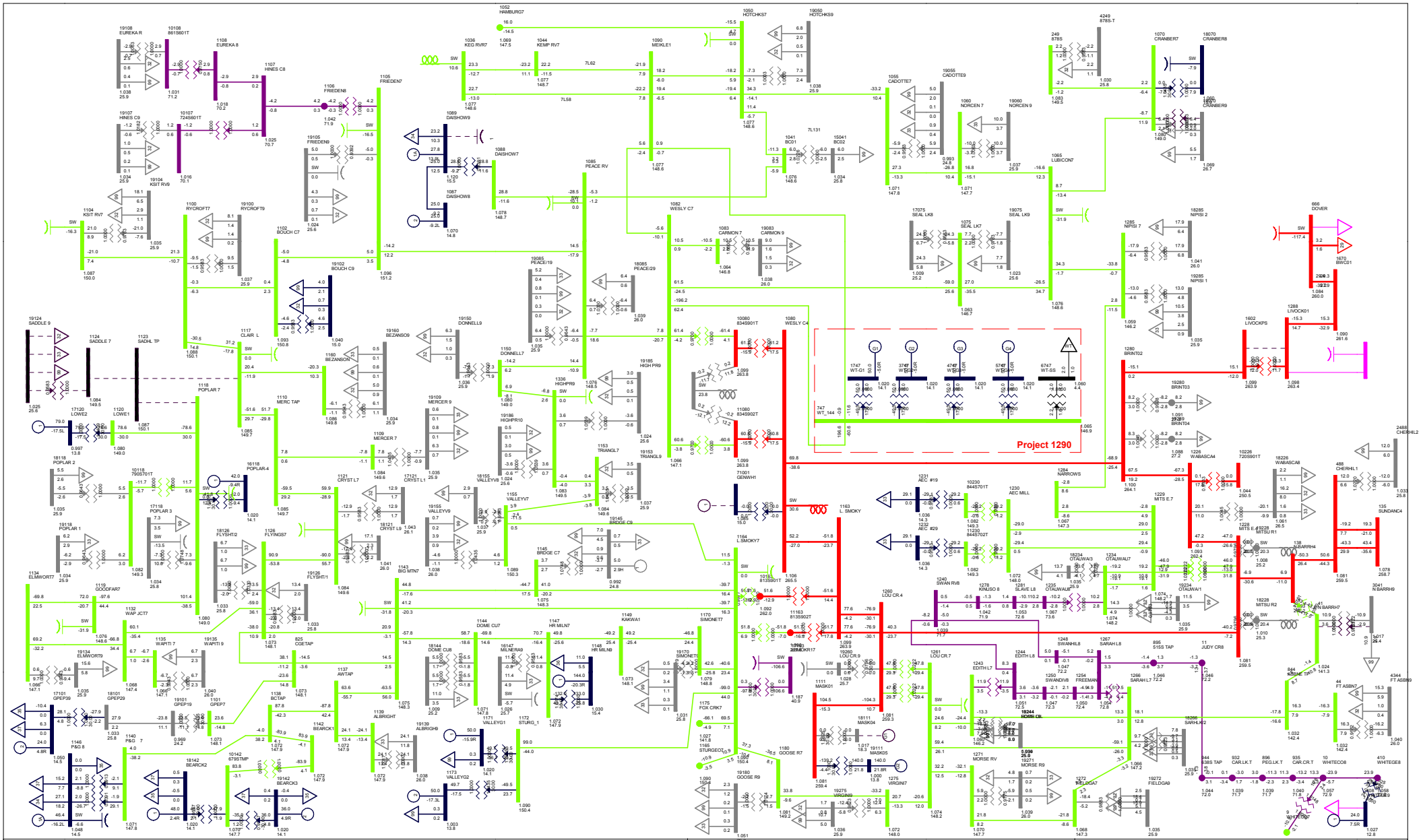
Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 038 7Ll22 POPLARHILL to CLAIRMONTLAKE_A.

Whitetail Project 1290 Interconnection Study

Appendix D2C

Figure: 77



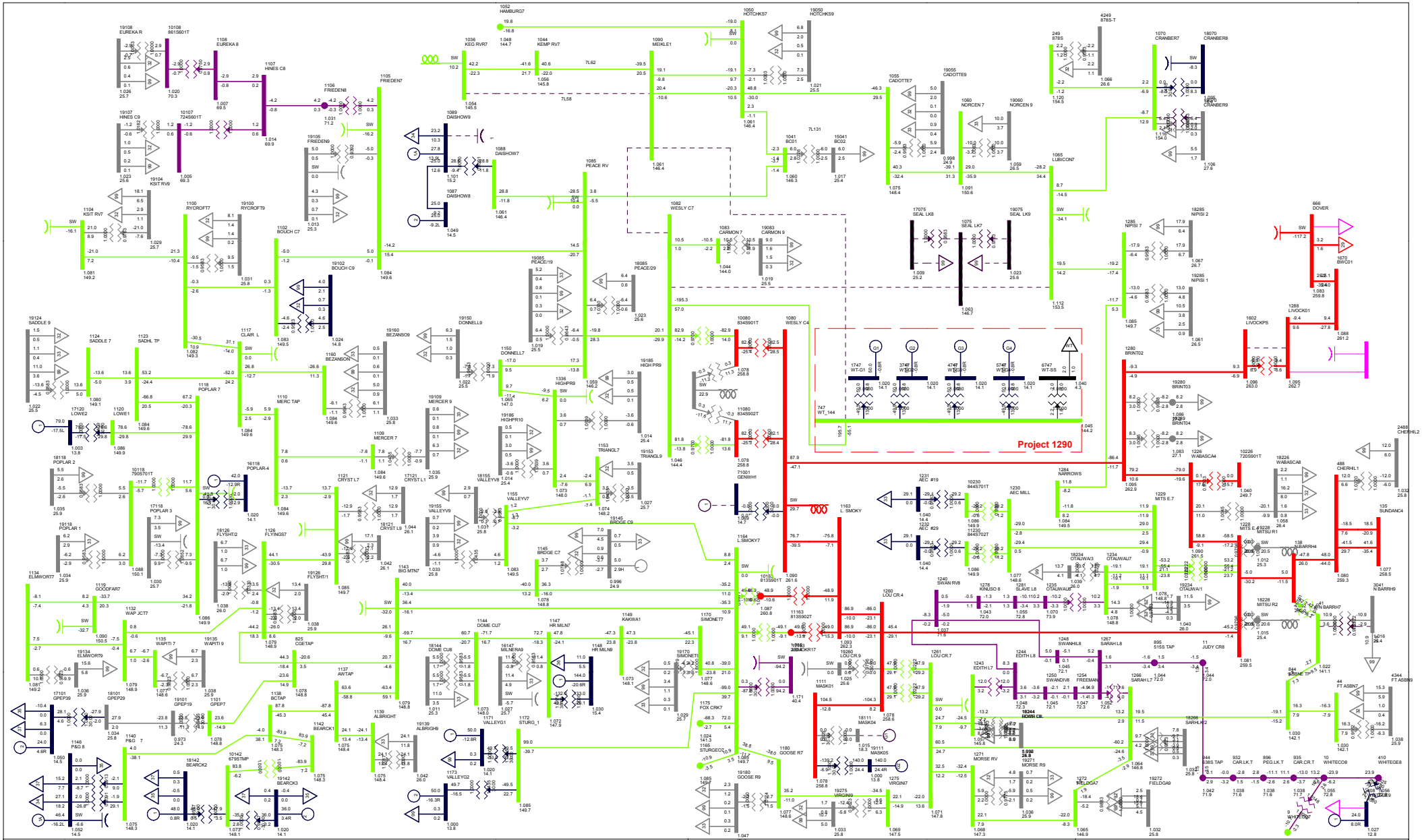
Appendix D2C

Figure: 78

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 038 7LL2 POPLARHILL to CLAIRMONTLAKE_B.

Whitetail Project 1290 Interconnection Study



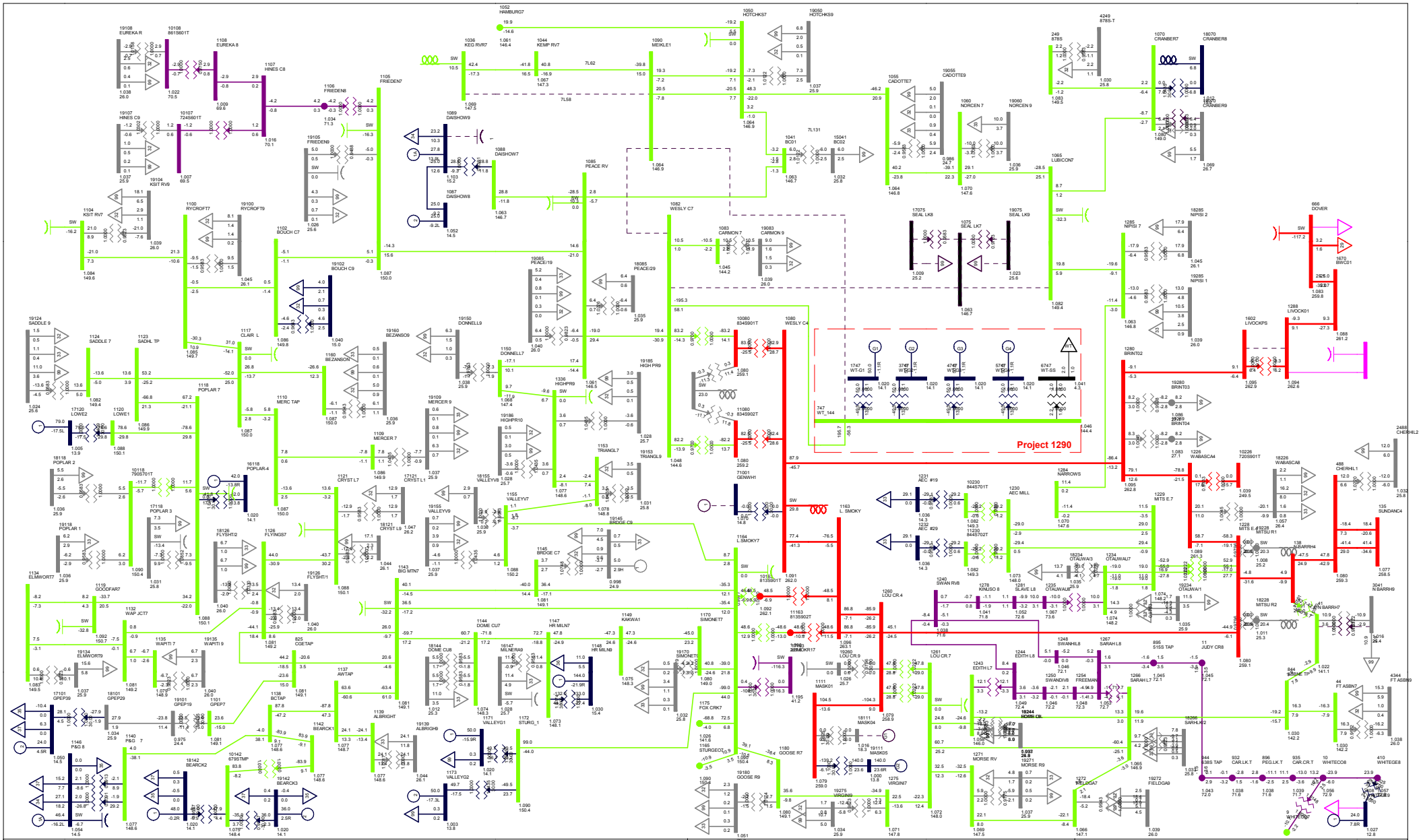
Appendix D2C

Figure: 79

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 040 C Cont 7L106 7L131 (TAP)_A.

Whitetail Project 1290 Interconnection Study



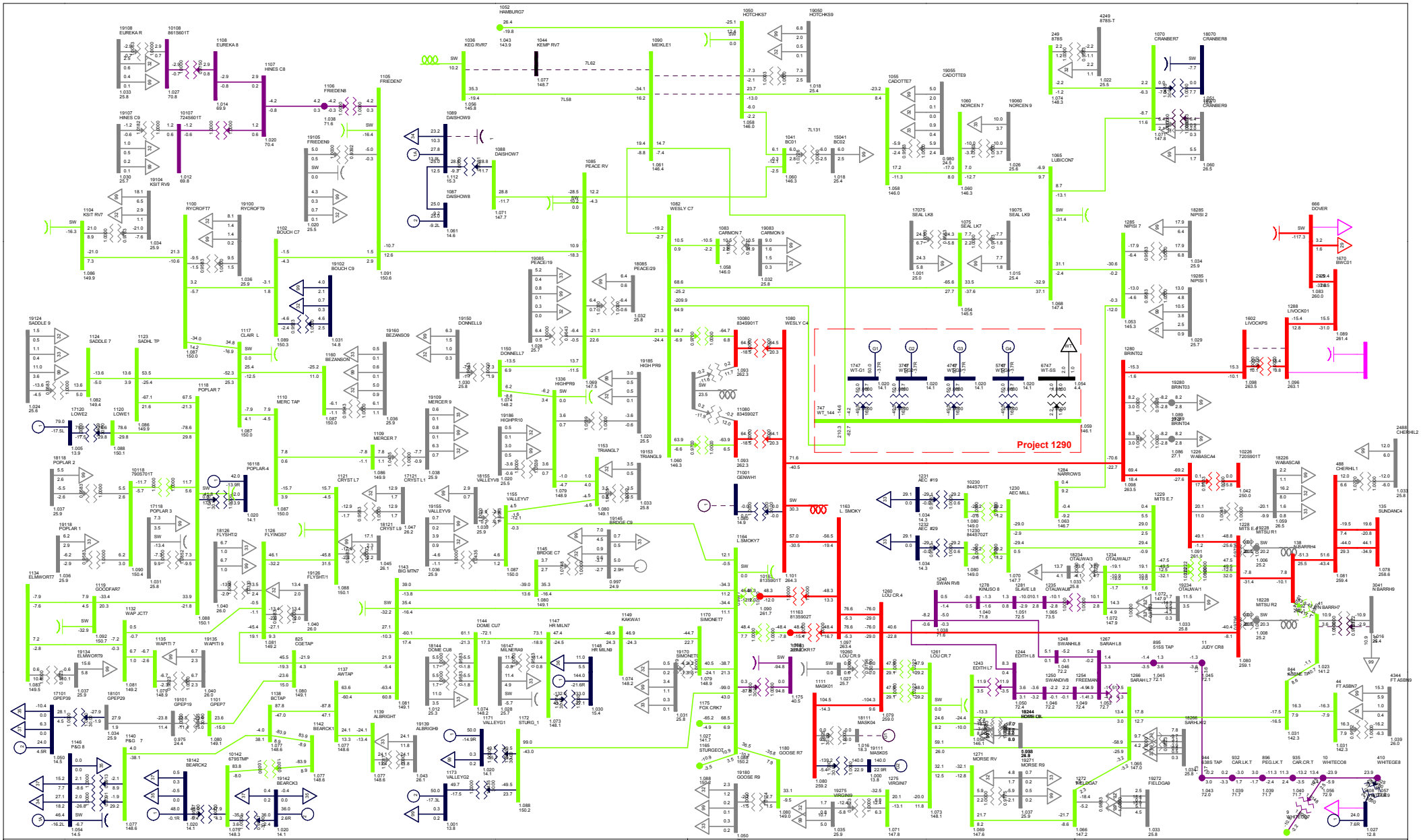
Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 040 C Cont 7L106 7L131 (TAP)_B.

Whitetail Project 1290 Interconnection Study

Appendix D2C

Figure: 80



Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 041 C Cont 7L120 7L138 (TAP)_A.

Whitetail Project 1290 Interconnection Study

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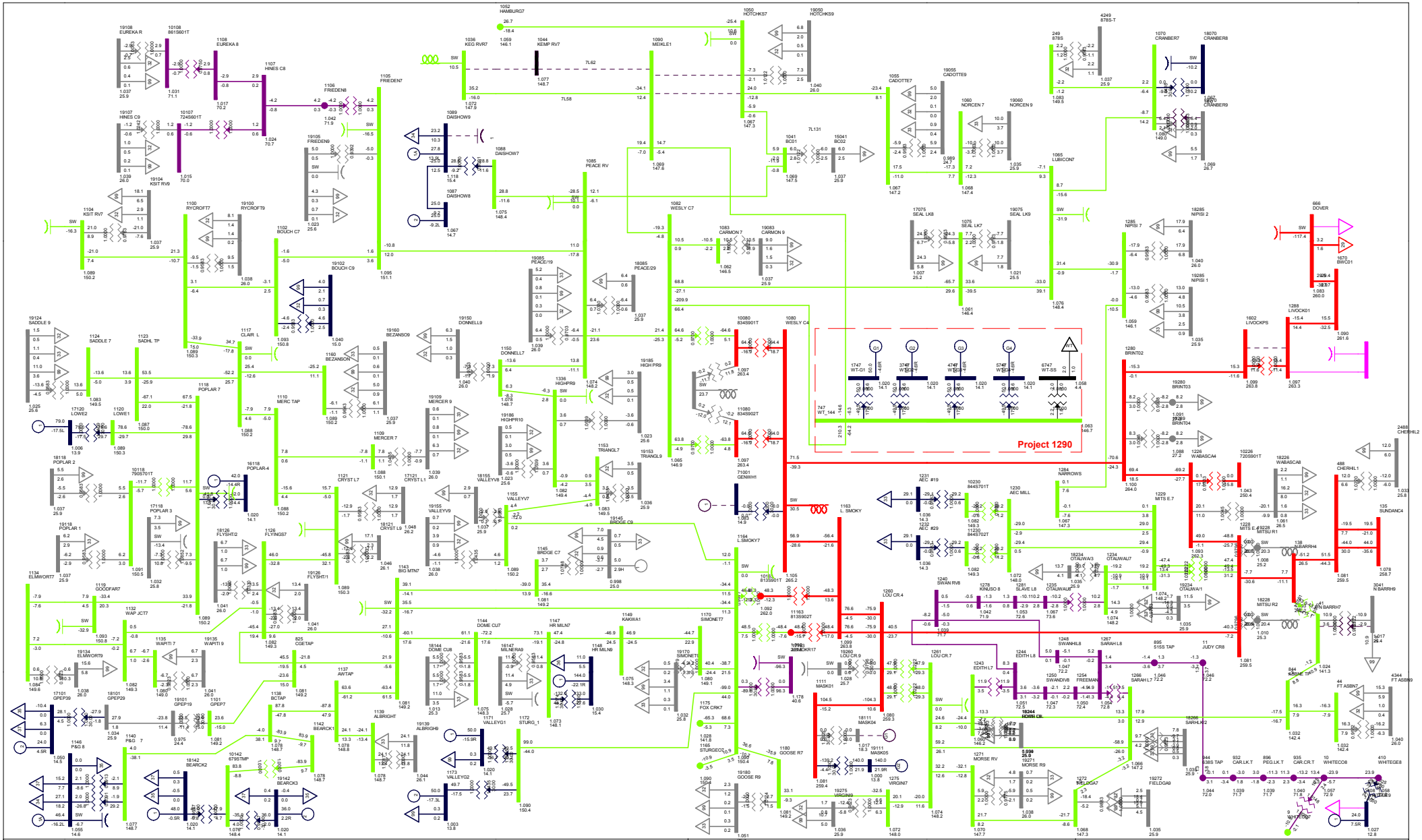
Figure: 81



Appendix D2C

Figure: 82

Study Case Description

CASE 03 2014 SP Mgen
SCEN 02 144Tap
CONT 041 C Cont 7L120 7L138 (TAP)_B.

Whitetail Project 1290 Interconnection Study

Attachment E

Project 1290 Transient Analysis Results

Appendix E-1 - Background

The transient analysis was prepared for the system with Project 1290 for contingencies identified in Table E-1 and E-2 below:

Table E-1: Contingency List – Category B

Contin-gency	System Condition	Outage	From Substation	To Substation
1	Line 9L15 out of service (N-1)	9L15	WESLEYCREEK	Brintnell
2	Line 9L11 out of service (N-1)	9L11	WESLEYCREEK	LITTLESMOKY
3	Line 9L05 out of service (N-1)	9L05	LITTLESMOKY	LOUISECREEK
4	Line 9L40 out of service (N-1)	9L40	MITSUE	LOUISECREEK
5	Line 913L out of service (N-1)	913L	NORTHBARRHEAD	MITSUE
6	Line 9L56 out of service (N-1)	9L56	WABASCA	MITSUE
7	Line 9L10 out of service (N-1)	9L10	WABASCA	Brintnell
8	Line 9L02 out of service (N-1)	9L02	LITTLESMOKY	LOUISECREEK
9	Line 7L27 out of service (N-1)	7L27	WESLEYCREEK	WESTPEACE
10	Line 7L12 out of service (N-1)	7L12	WESLEYCREEK	LUBICON
11	Line 7L61 out of service (N-1)	7L61	LUBICON	NIPISI
12	Line 7L23 out of service (N-1)	7L23	NIPISI	MITSUE
13	Line 7L131 out of service (N-1)	7L131	WESLEYCREEK	Meikle
14	Line 7L06 out of service (N-1)	7L06	WESTPEACE	HIGHPRAIRIE
15	Line 7L48 out of service (N-1)	7L48	HIGHPRAIRIE	VALLEYVIEW
16	Line 7L54 out of service (N-1)	7L54	VALLEYVIEW	LITTLESMOKY
17	Line 7L45 out of service (N-1)	7L45	LITTLESMOKY	BIGMOUNTAIN
18	Line 7L46 out of service (N-1)	7L46	BIGMOUNTAIN	LITTLESMOKY
19	Line 7L40 out of service (N-1)	7L40	LITTLESMOKY	SIMONETTE
20	Line 7L80 out of service (N-1)	7L80	SIMONETTE	HR MILNER
21	Line 7L20 out of service (N-1)	7L20	HR MILNER	BIGMOUNTAIN
22	Line 7L63 out of service (N-1)	7L63	HOTCHKISS	LUBICON
23	Line 7L58 out of service (N-1)	7L58	KEGRIVER	Meikle
24	Line 7L04 out of service (N-1)	7L04	WESTPEACE	DAISHOWA
25	Line 7L51 out of service (N-1)	7L51	WESTPEACE	HOTCHKISS
26	Line 7L58 out of service (N-1)	7L58	KEGRIVER	Meikle
27	Line 7L120 out of service (N-1)	7L120	HOTCHKISS	Meikle
28	Line 7L01 out of service (N-1)	7L01	LITTLESMOKY	Sturgeon
29	Line 7L44 out of service (N-1)	7L44	FLYINGSHOTLAKE	BIGMOUNTAIN
30	Line 7L33 out of service (N-1)	7L33	BIGMOUNTAIN	FLYINGSHOTLAKE
31	Line 7L75 out of service (N-1)	7L75	WESTPEACE	FRIEDENSTAL
32	Line 7L73 out of service (N-1)	7L73	RYCROFT	FRIEDENSTAL
33	Line 7L68 out of service (N-1)	7L68	RYCROFT	CLAIRMONTLAKE
34	Line 7L84 out of service (N-1)	7L84	CRYSTALLAKE	FLYINGSHOTLAKE
35	Line 7L39 out of service (N-1)	7L39	CRYSTALLAKE	CLAIRMONTLAKE
36	Line 7L03 out of service (N-1)	7L03	FLYINGSHOTLAKE	ELMWORTH
37	Line 7L07 out of service (N-1)	7L07	POPLARHILL	ELMWORTH
38	Line 7L22 out of service (N-1)	7L22	POPLARHILL	CLAIRMONTLAKE

The transient analysis of the system after connecting Project 1290 was prepared for contingencies identified in Table E1 above. Please note that contingencies involving elements that are not applicable to the given Project 1290 interconnection alternative are excluded.

Two operating scenarios were considered with respect to transient analysis, namely the:

1) 2014 Winter Peak Load
2) 2014 Summer Light Load

Alternatives included:

1) Alternative 3 – tap to 7L106 line – the preferred alternative

Also included as Appendix E-2-C are the results verifying operation of RAS scheme for LTO condition. This appendix shows results for both 2014 Summer Light and Winter Peak Load

The results as shown in this Appendix are further explained in Table E-3

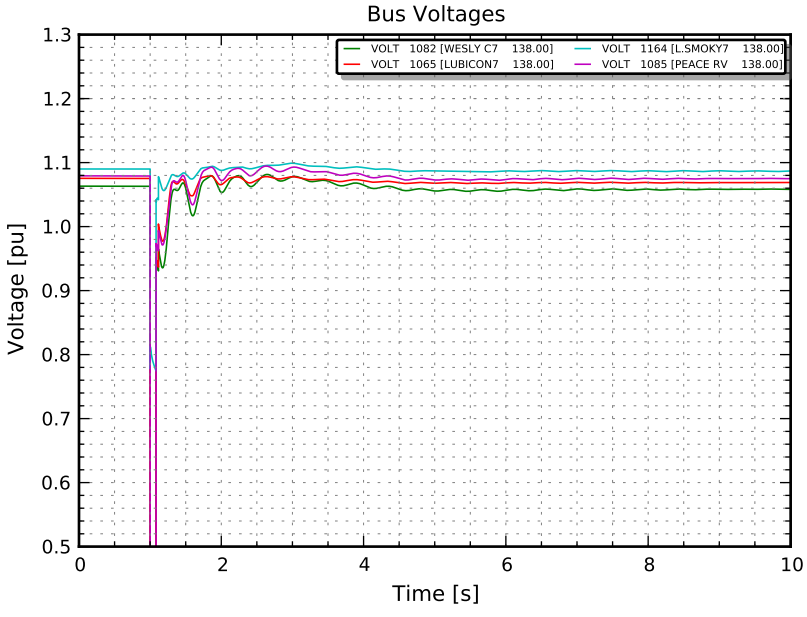
Table E-3 A Summary of the transient analysis results provided in Appendix E2.

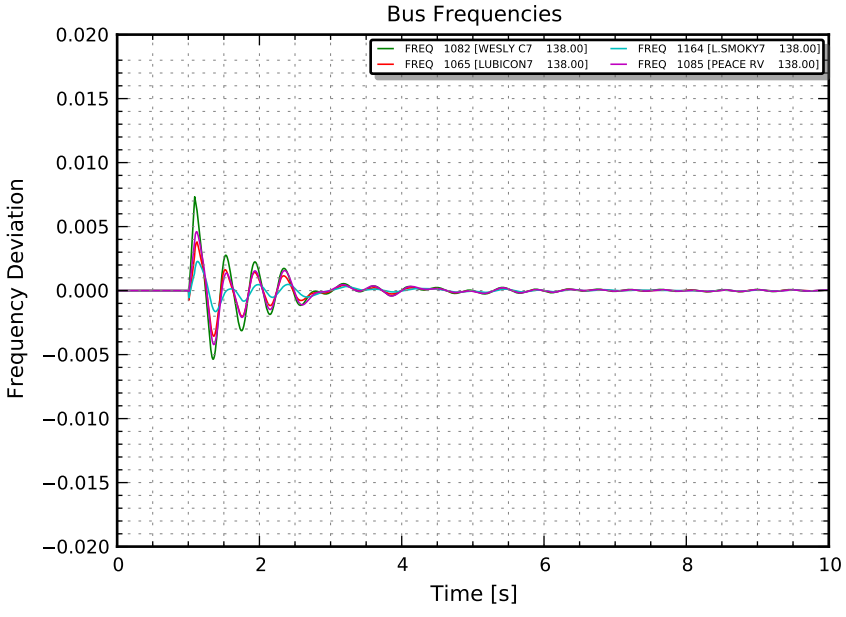
Appendix	**Cases**	**Notes**
Appendix E-2-A	Transient analysis traces for selected buses and generators for 2014 Winter Peak Load Alternative 3 – Tap connection to 7L106 line	Suffix _A denotes close end line fault while suffix _B denotes remote line end fault.
Appendix E-2-B	Transient analysis traces for selected buses and generators for 2014 Summer Light Load Alternative 3 – Tap connection to 7L106 line	Suffix _A denotes close end line fault while suffix _B denotes remote line end fault.
Appendix E-2-C	Transient analysis traces for selected buses and generators for 2014 Winter Peak Load and for 2014 Summer Light Load with RAS for 7L106 LTO condition.	“CASE 02 2014 SL” denotes the Summer Light load while “CASE 02 2014 WP” denotes the Winter Peak load condition.

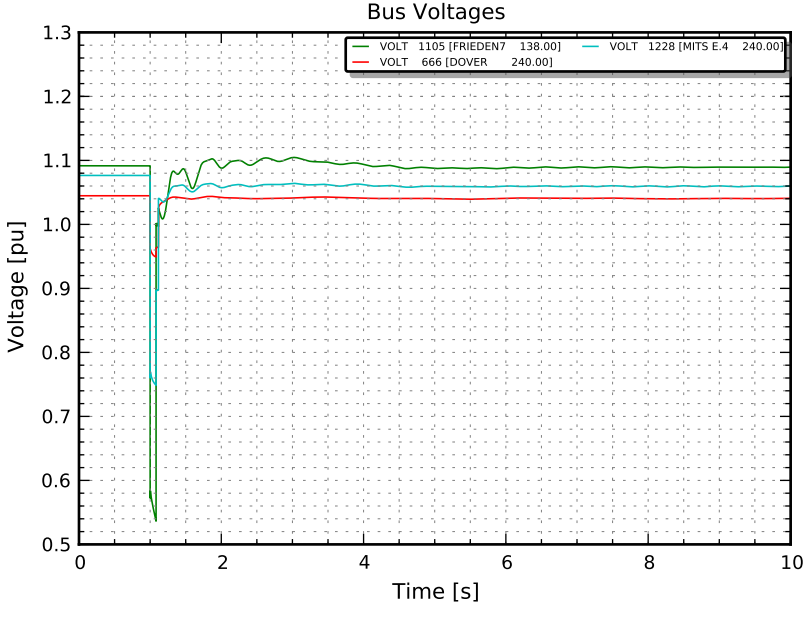
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 001 9L15 WESLEYCREEK to Brintnell_A.

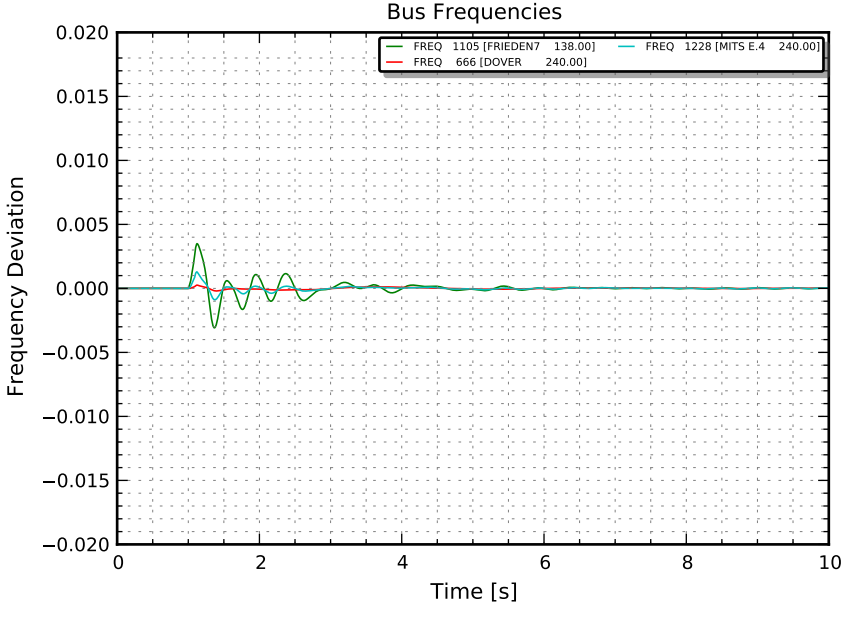
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 001 (A. 1)





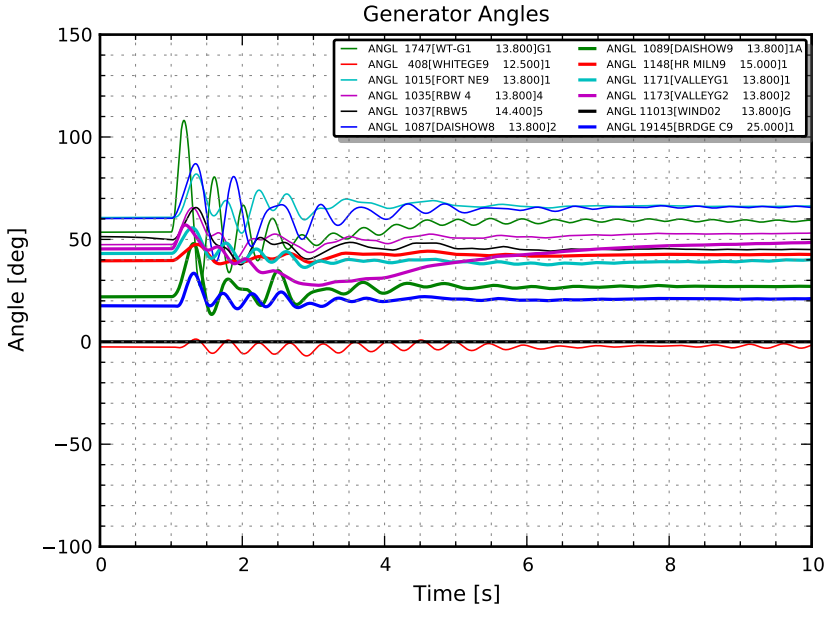


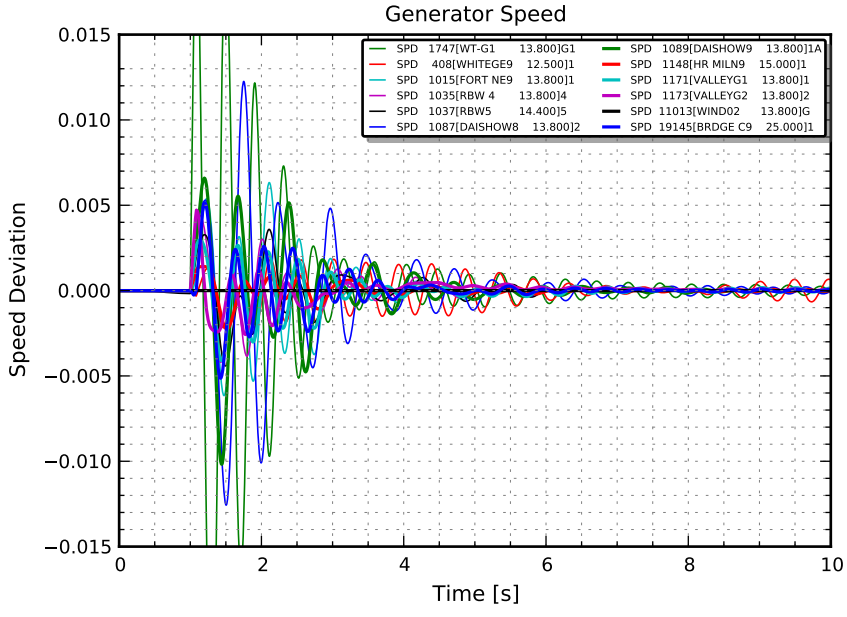


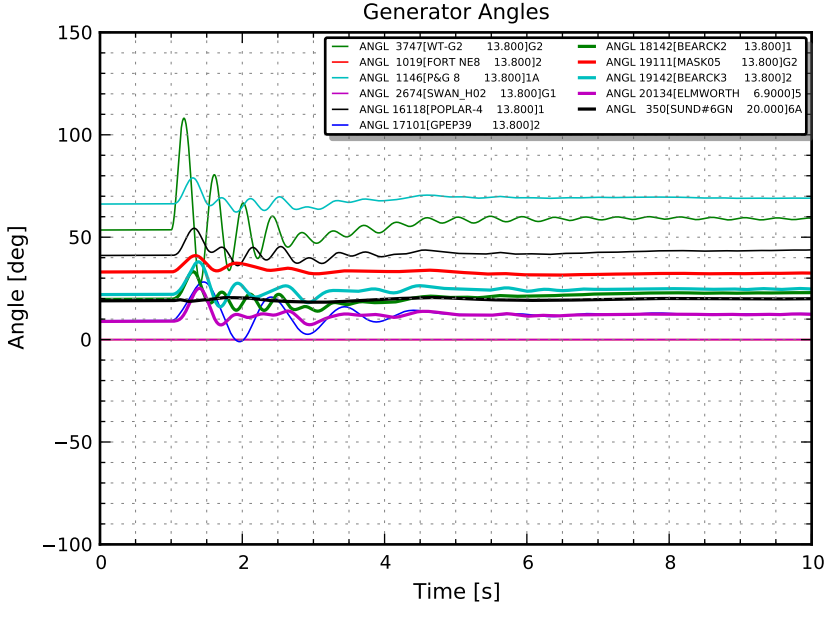
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 001 9L15 WESLEYCREEK to Brintnell_A.

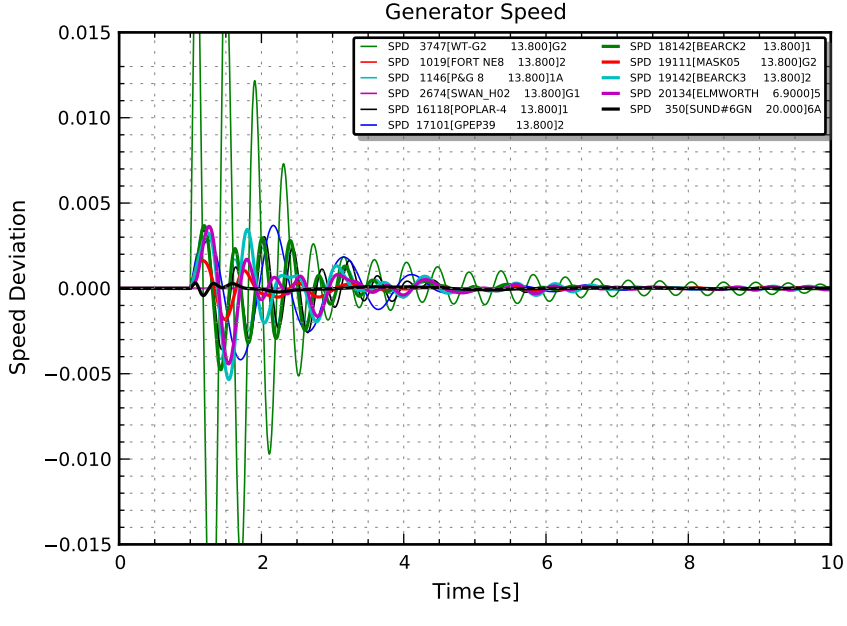
Study Area Generators

Appendix E2A
Figure: 001 (A. 2)





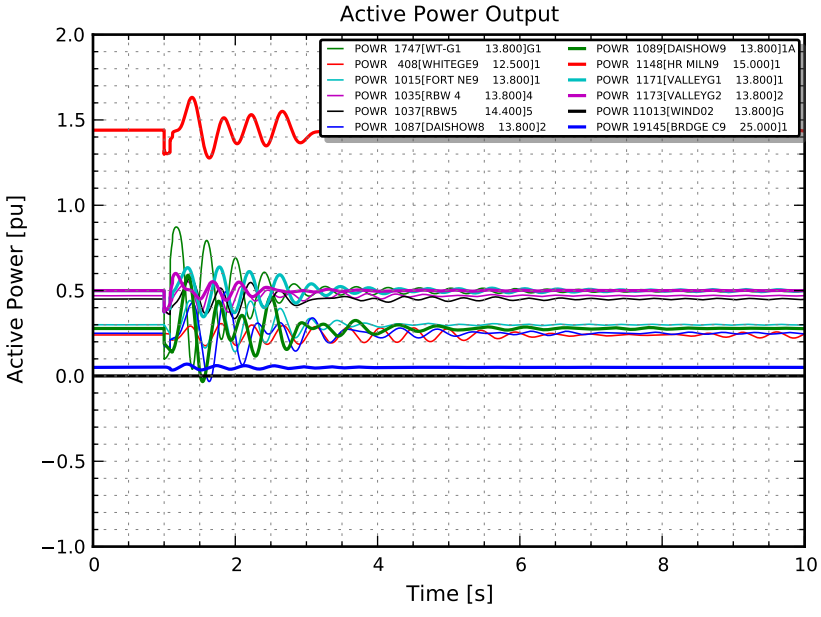


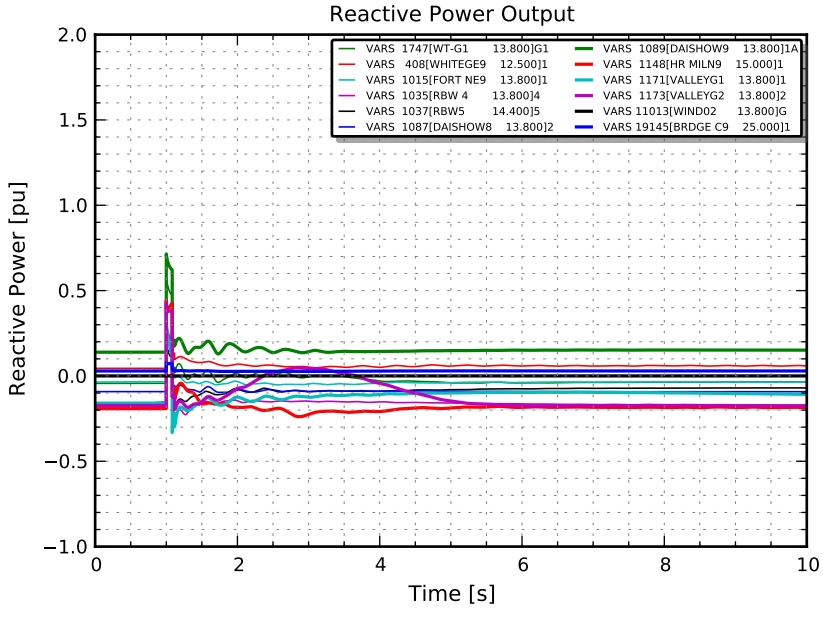


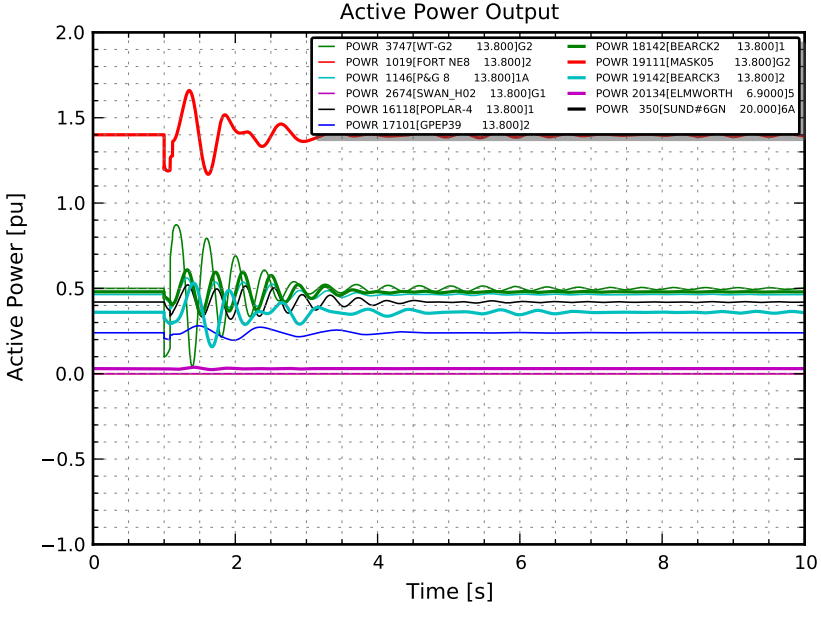
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 001 9L15 WESLEYCREEK to Brintnell_A.

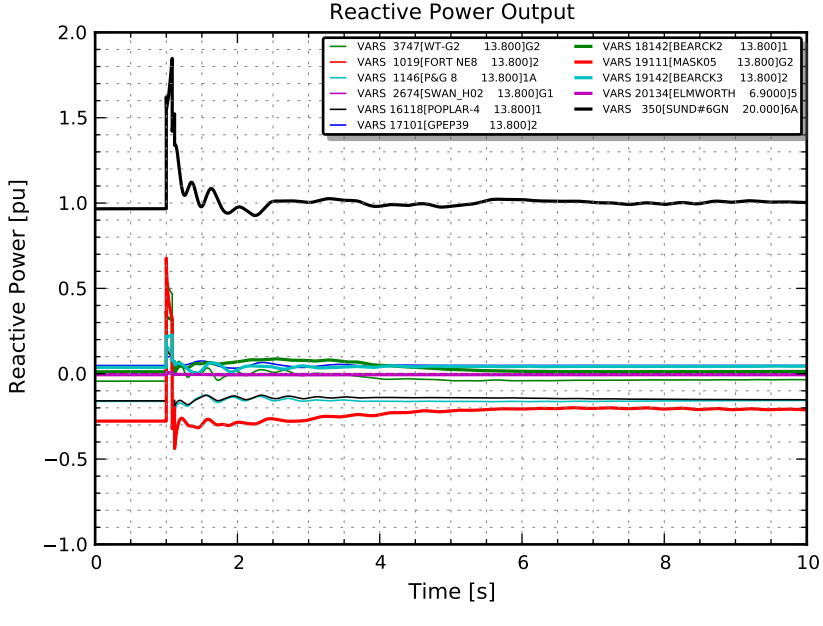
Study Area Generators

Appendix E2A
Figure: 001 (A. 3)





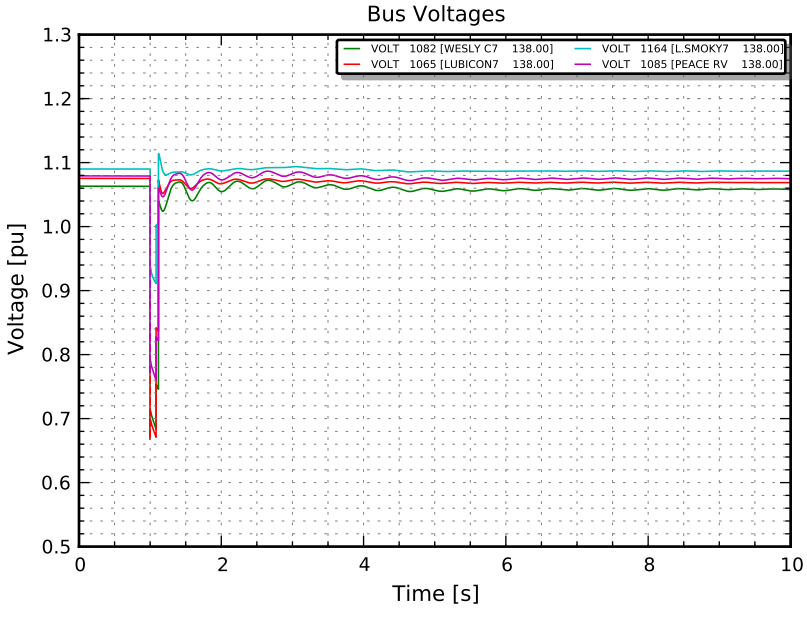


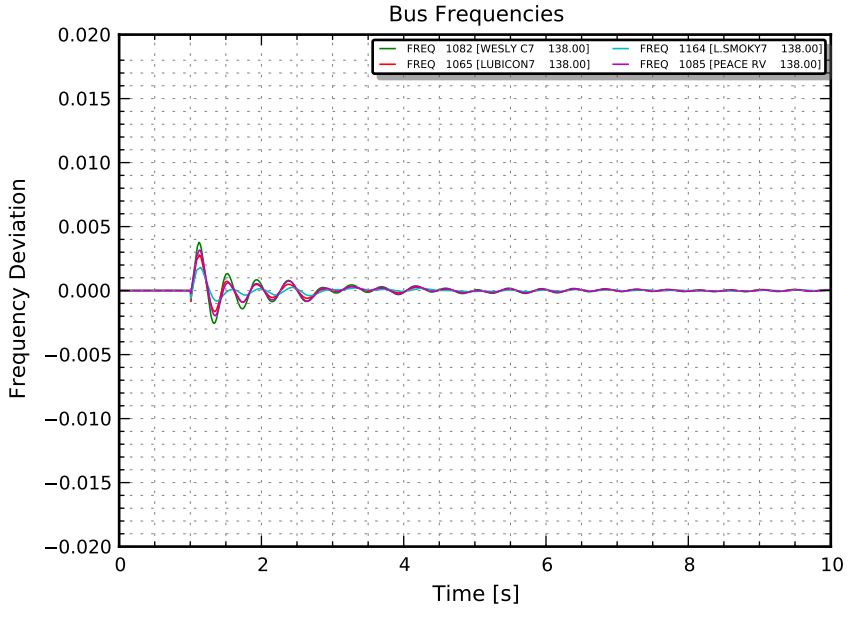


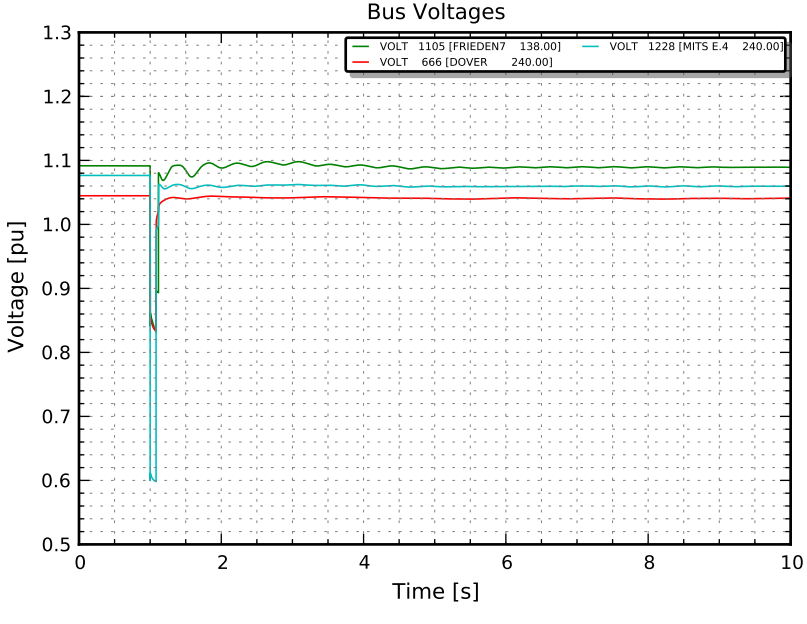
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 001 9L15 WESLEYCREEK to Brintnell_B.

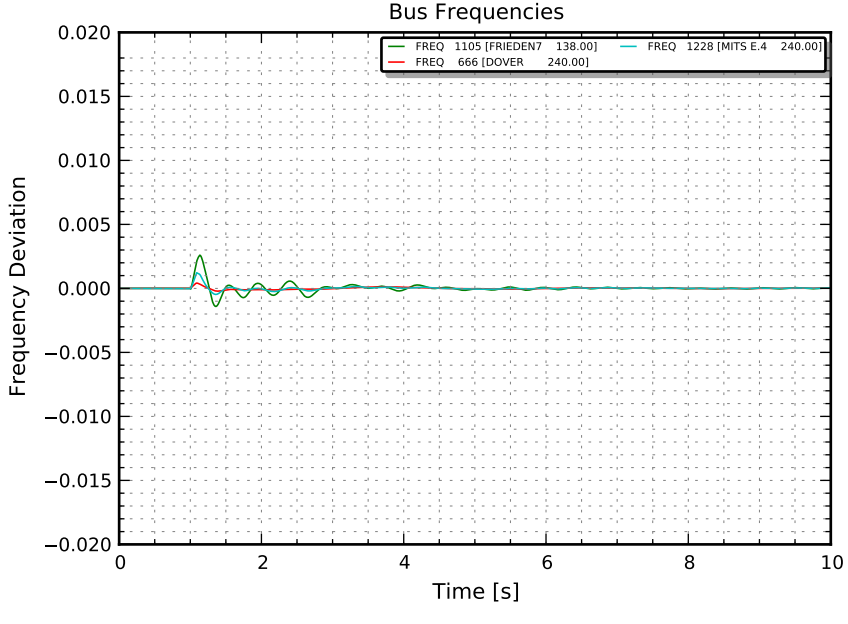
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 001 (B. 1)





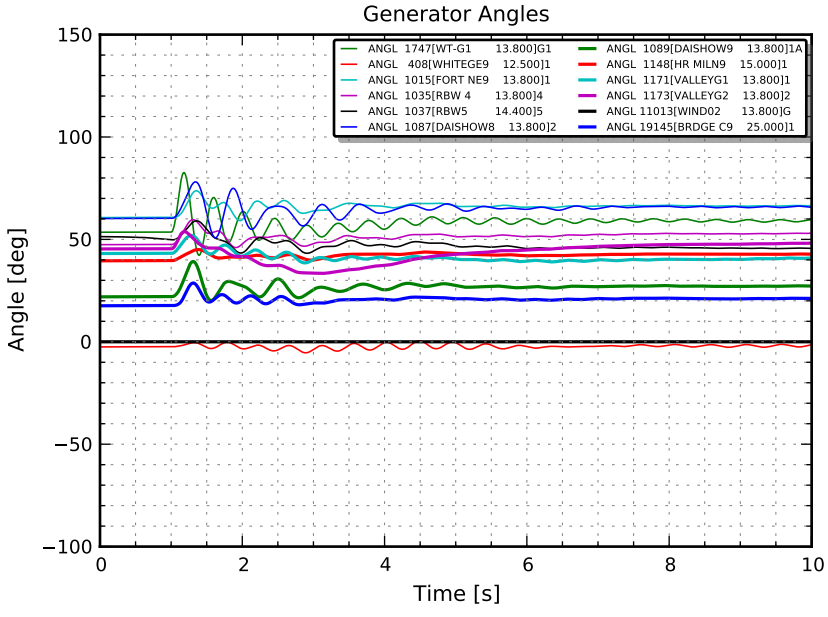


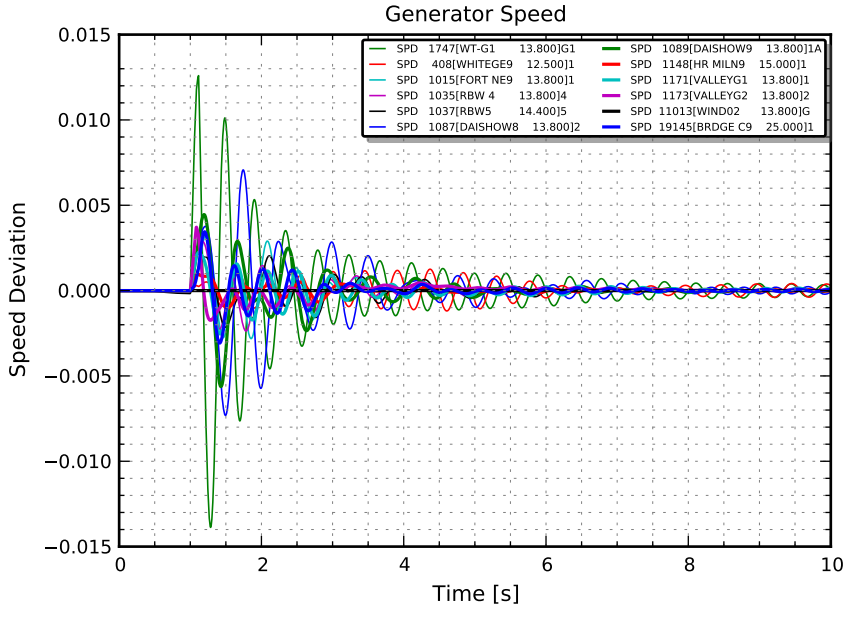


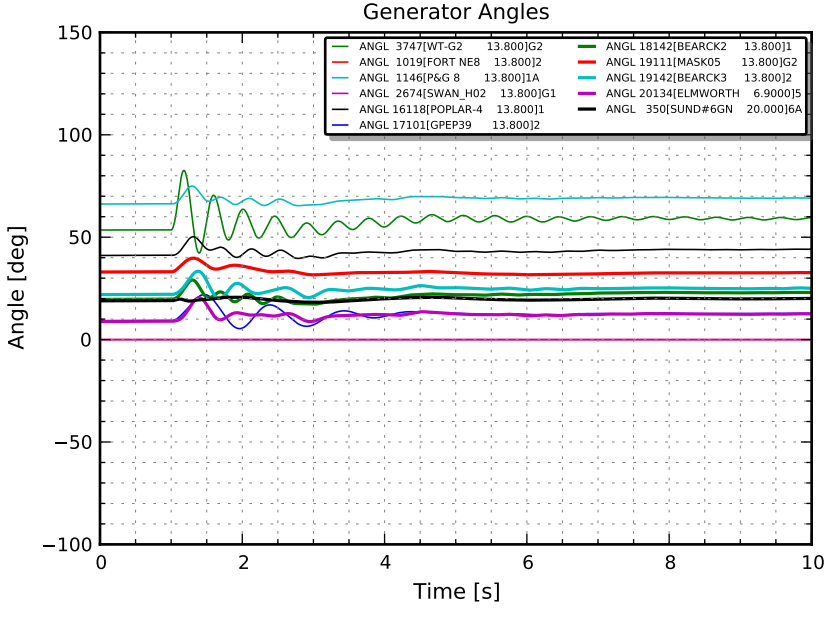
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 001 9L15 WESLEYCREEK to Brintnell_B.

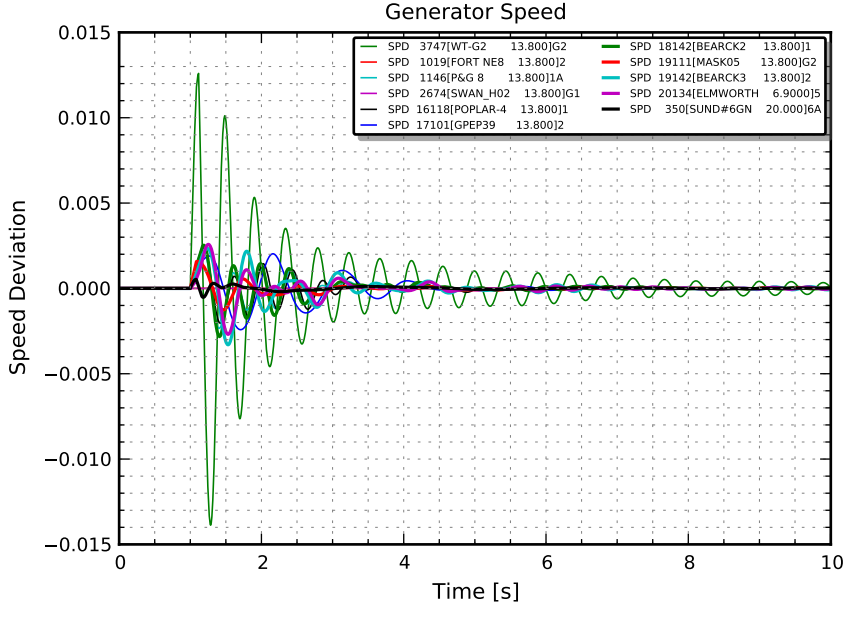
Study Area Generators

Appendix E2A
Figure: 001 (B. 2)





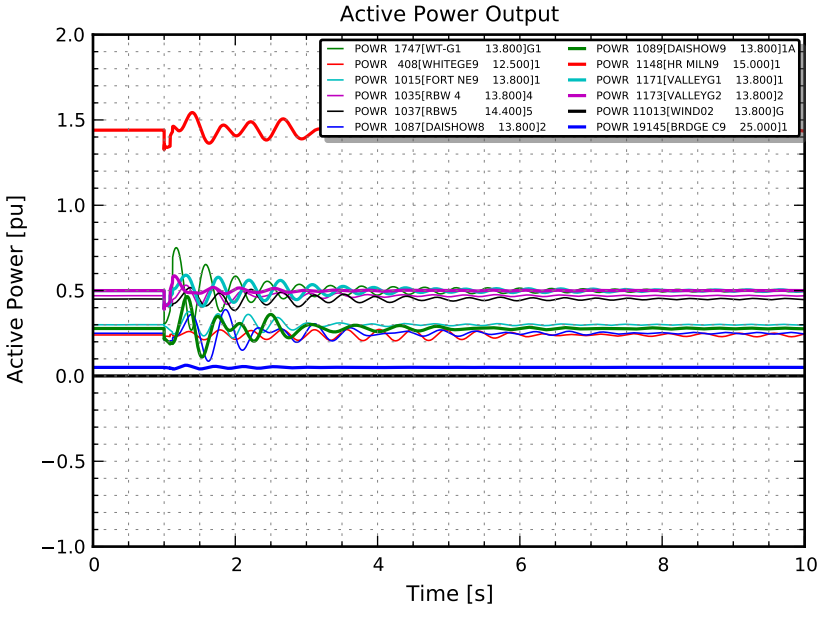


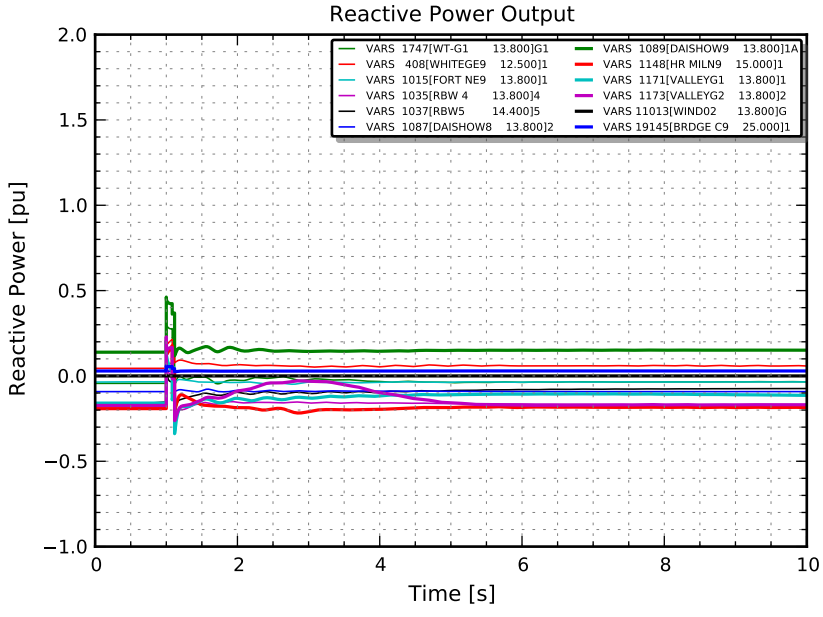


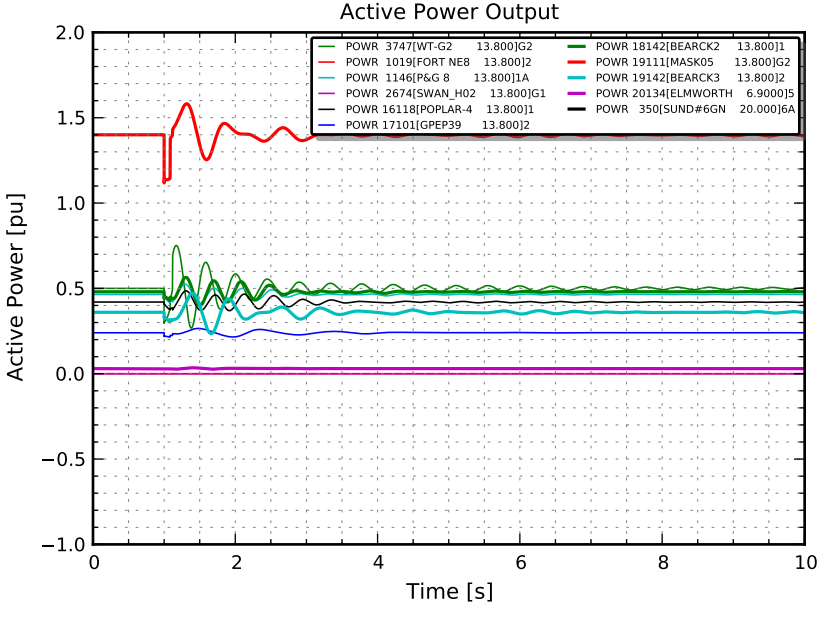
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 001 9L15 WESLEYCREEK to Brintnell_B.

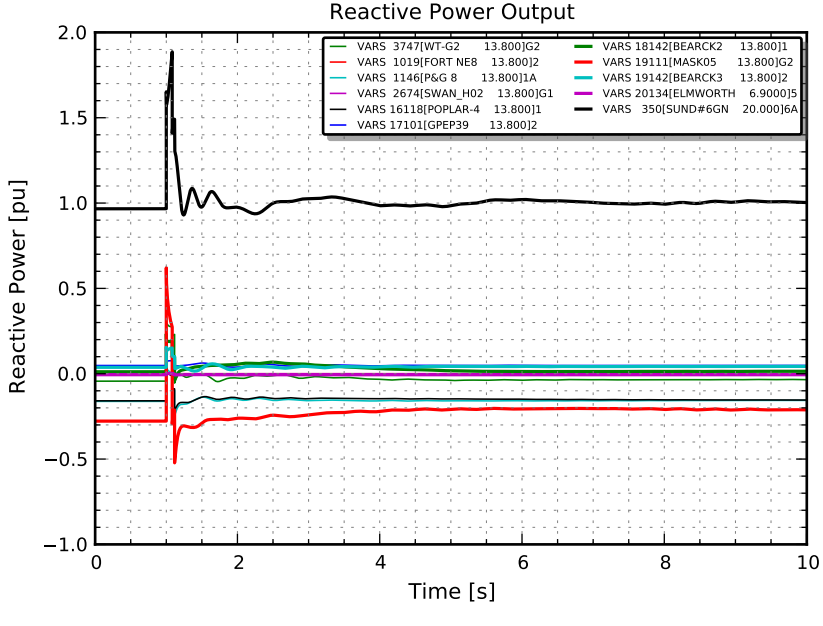
Study Area Generators

Appendix E2A
Figure: 001 (B. 3)





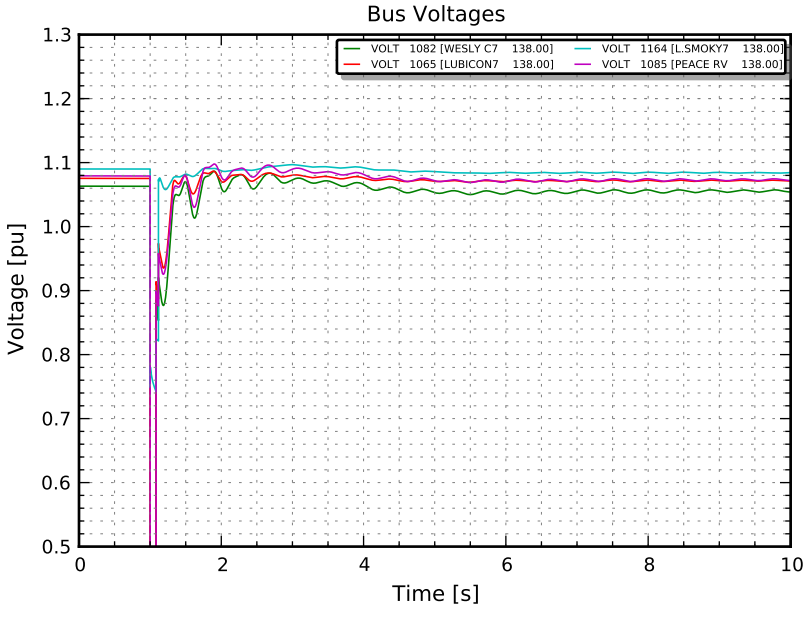


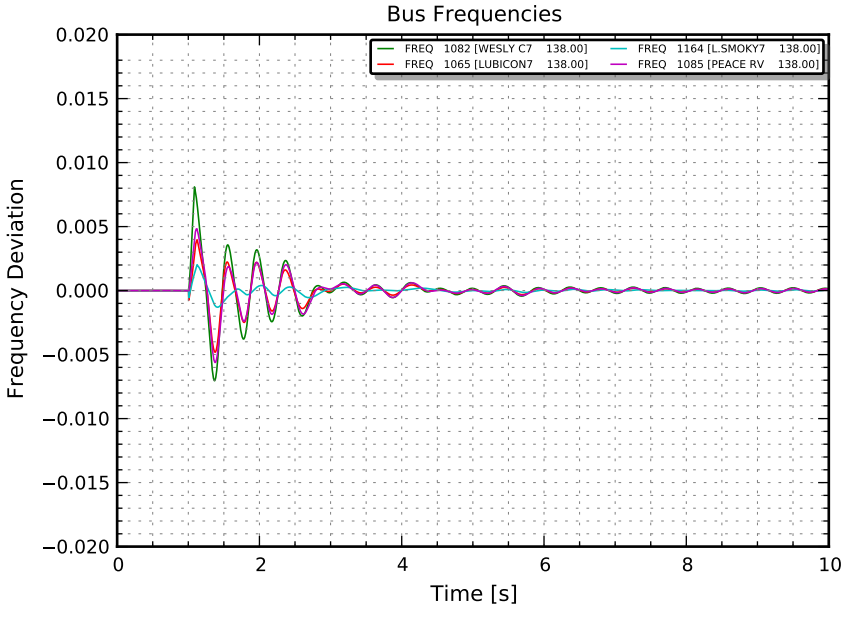


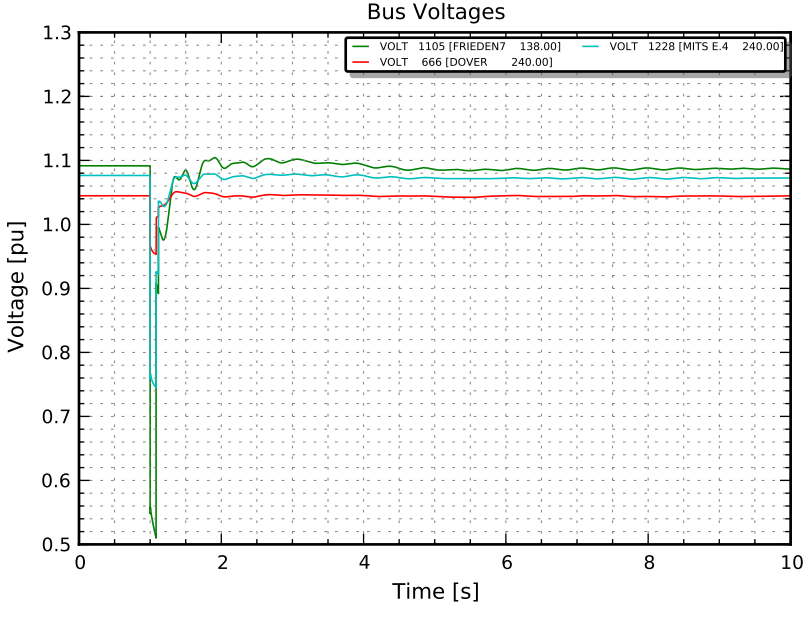
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_A.

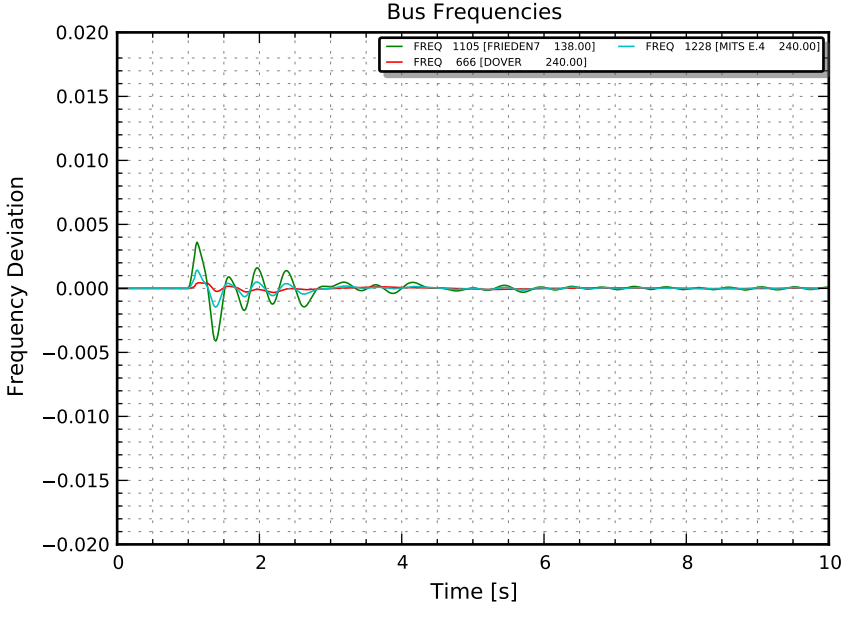
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 002 (A. 1)





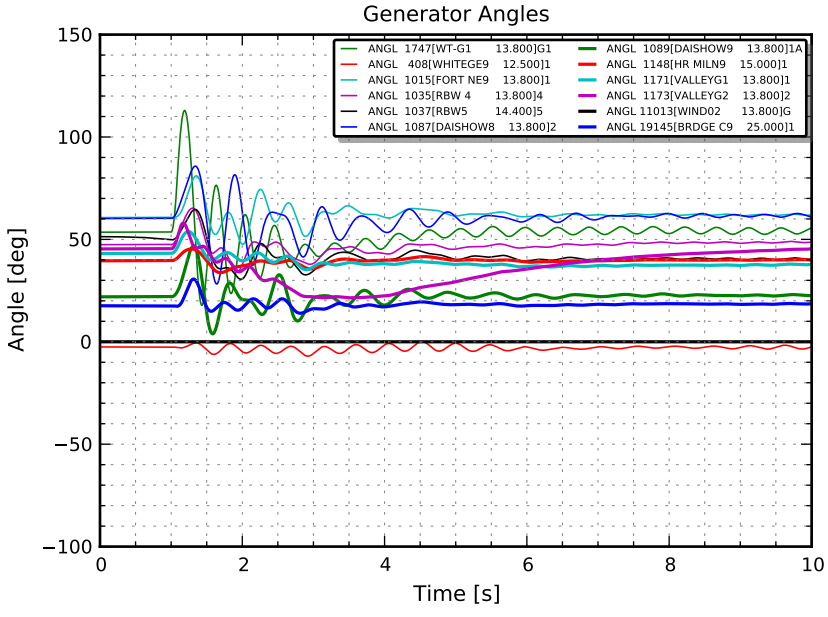


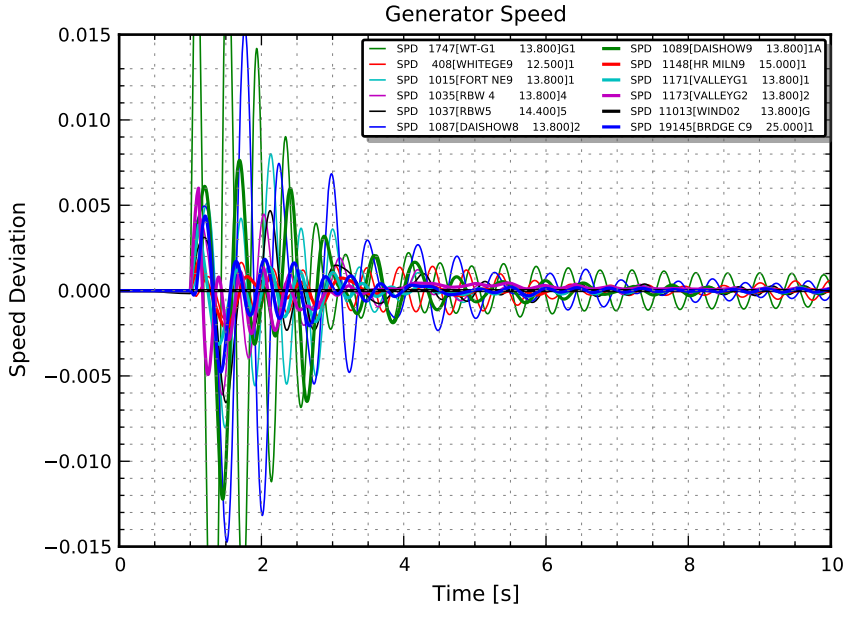


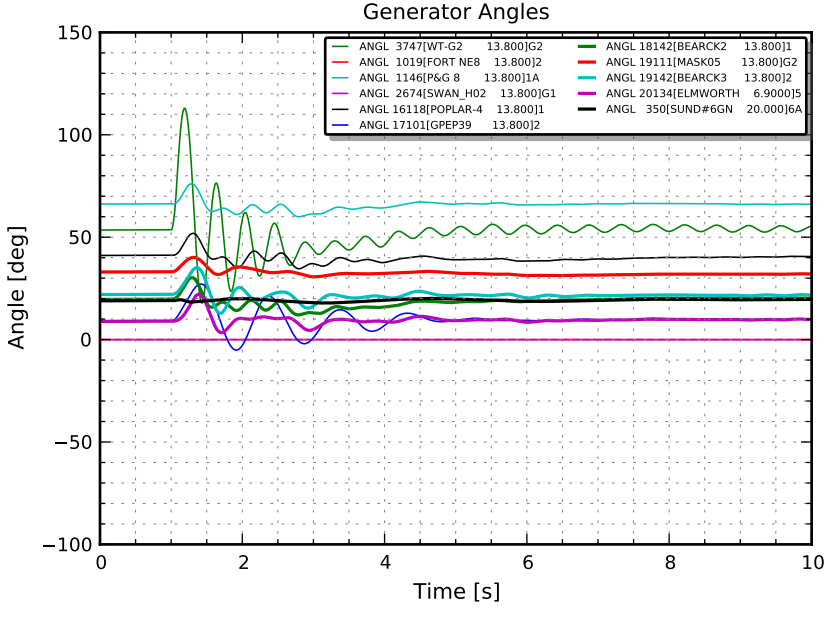
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_A.

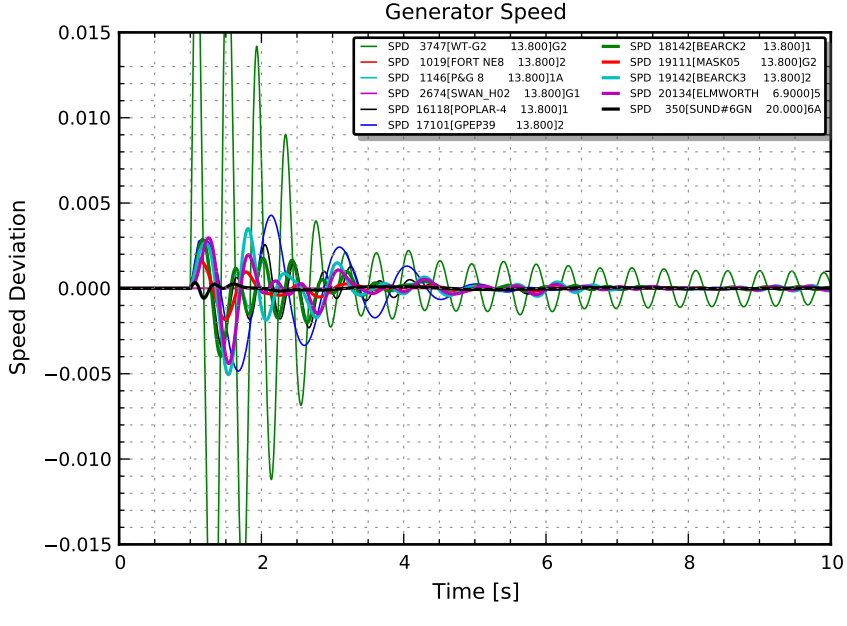
Study Area Generators

Appendix E2A
Figure: 002 (A. 2)





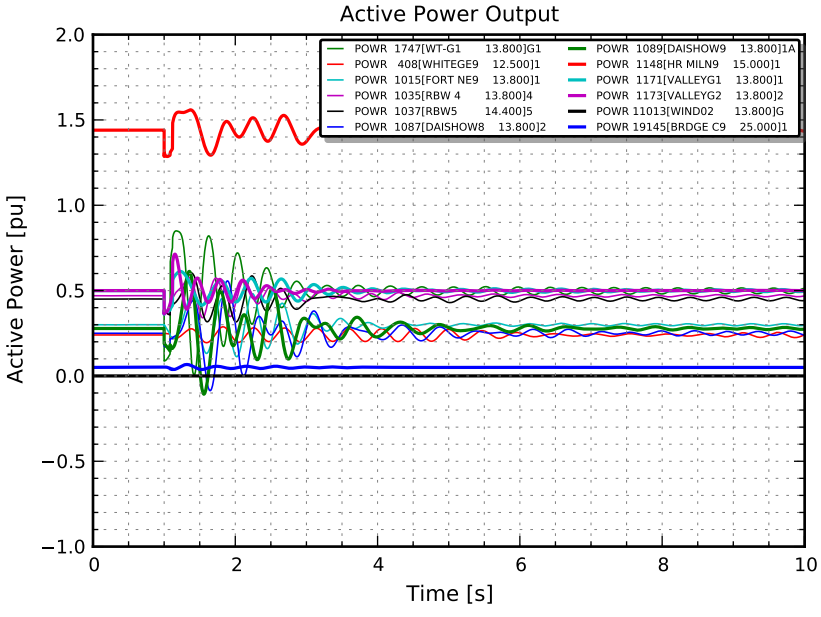


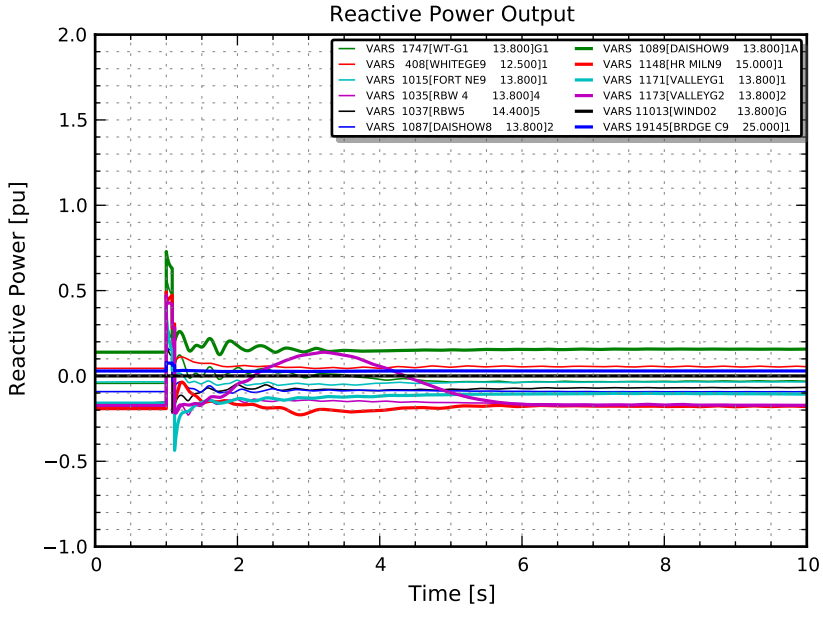


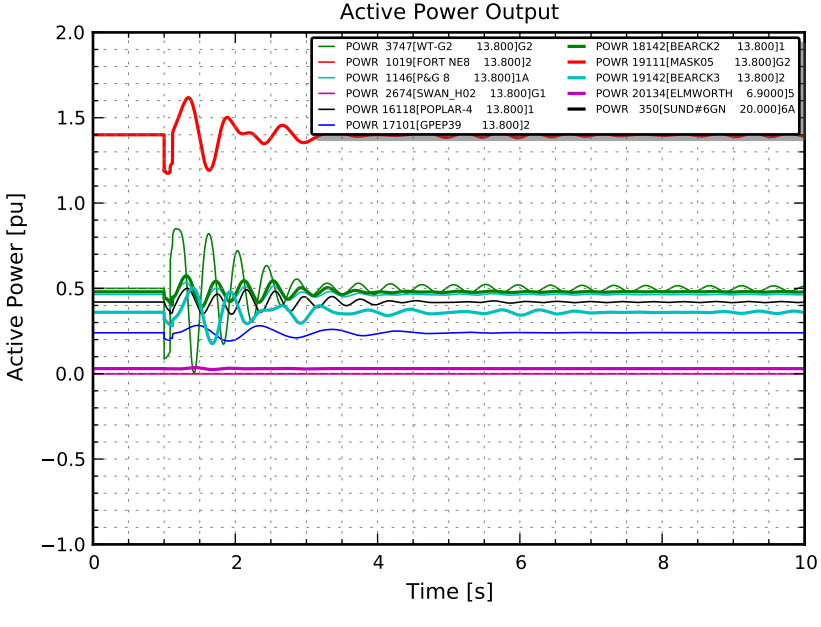
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_A.

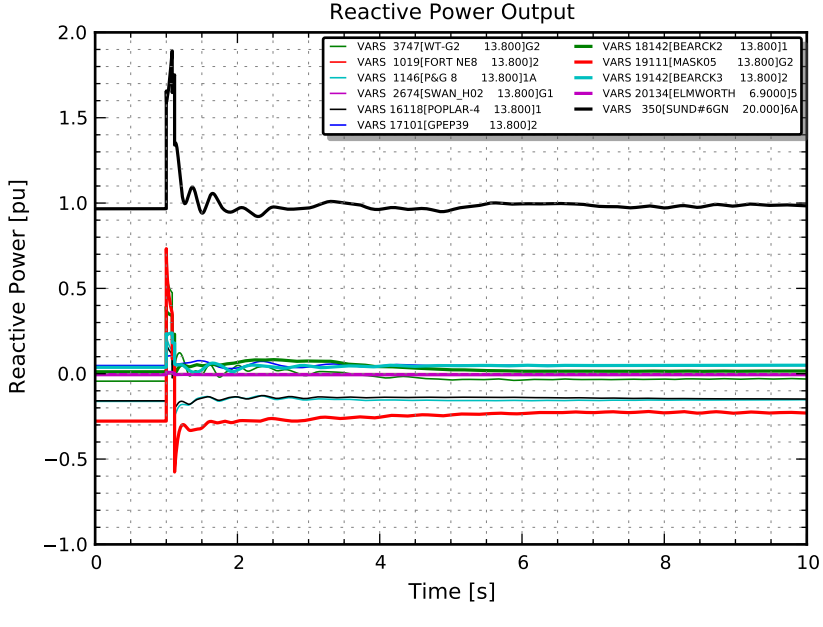
Study Area Generators

Appendix E2A
Figure: 002 (A. 3)





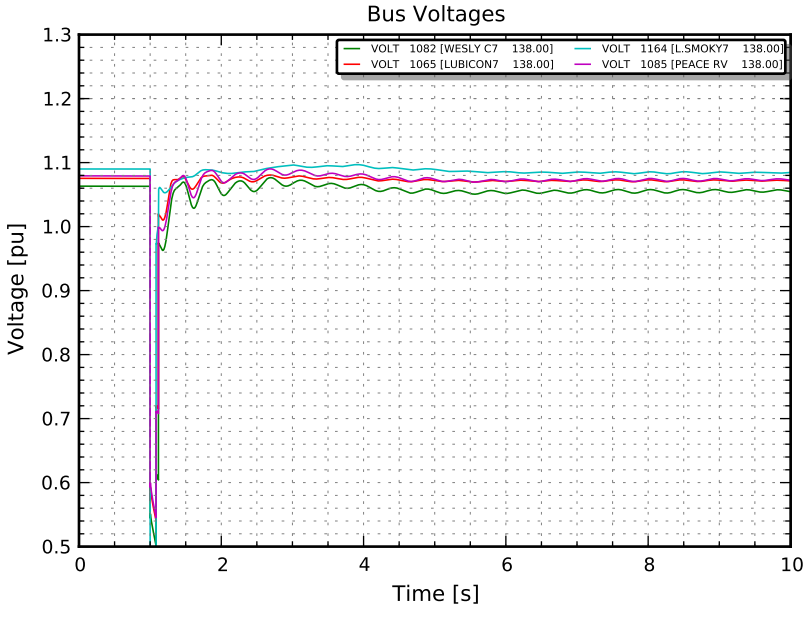


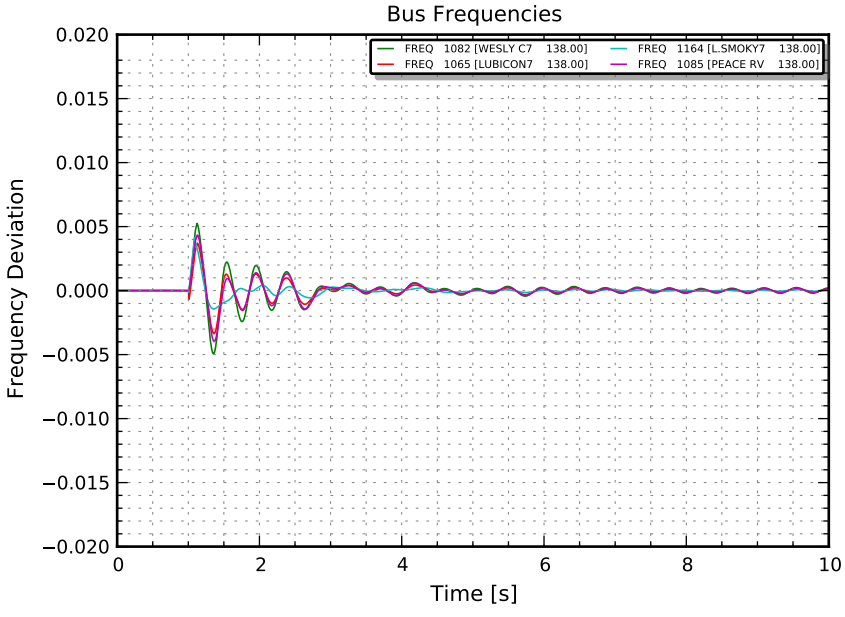


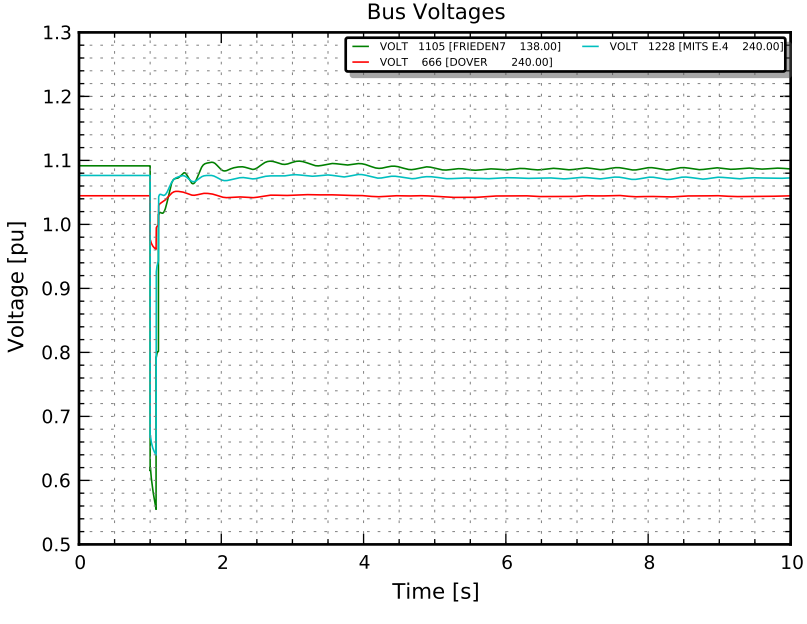
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_B.

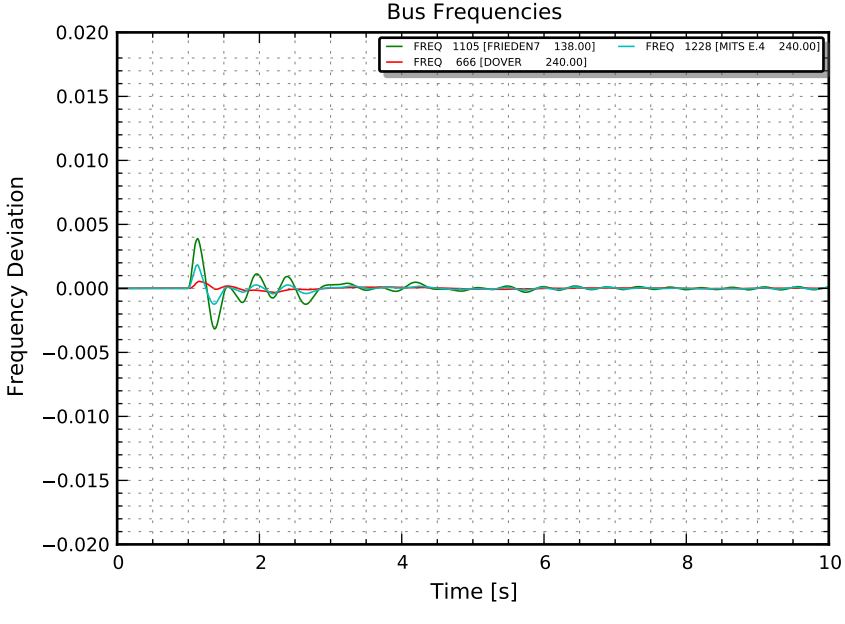
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 002 (B. 1)





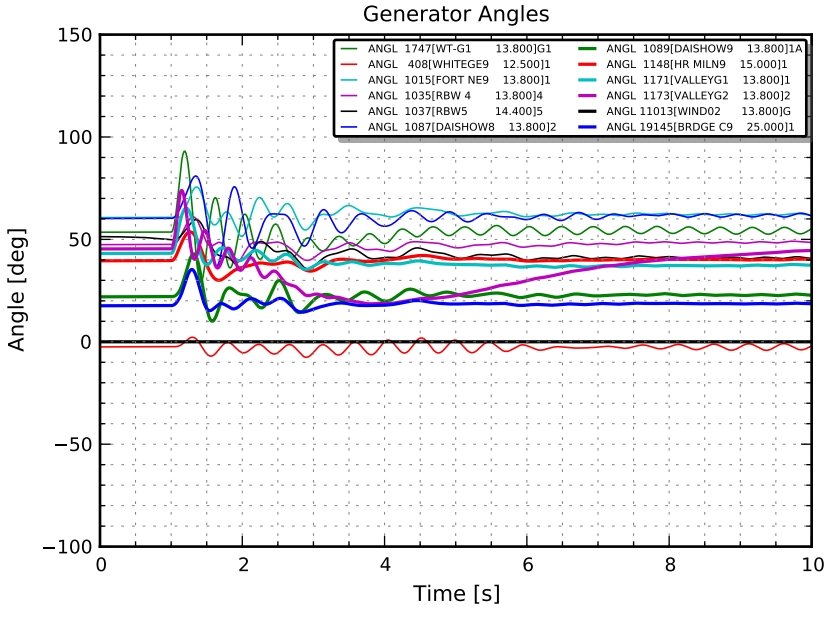


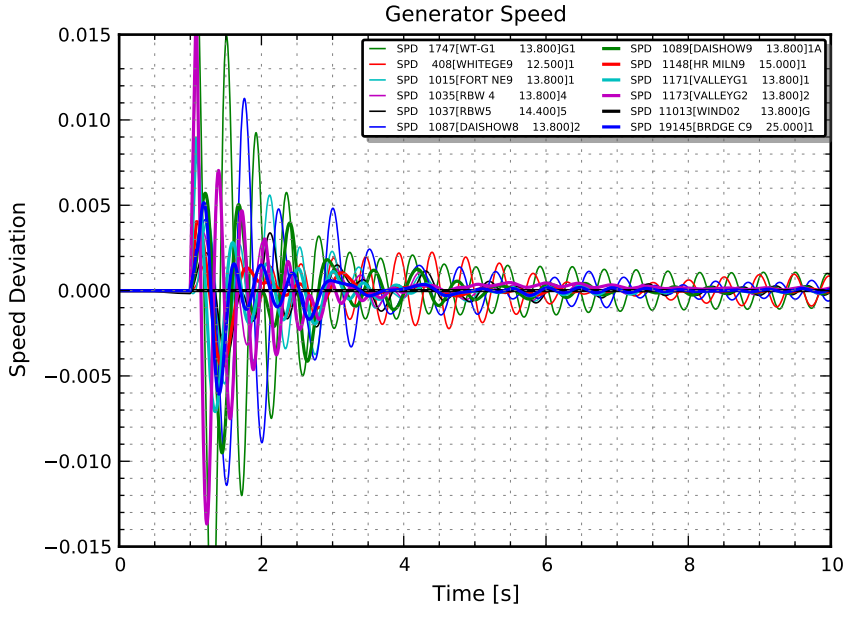


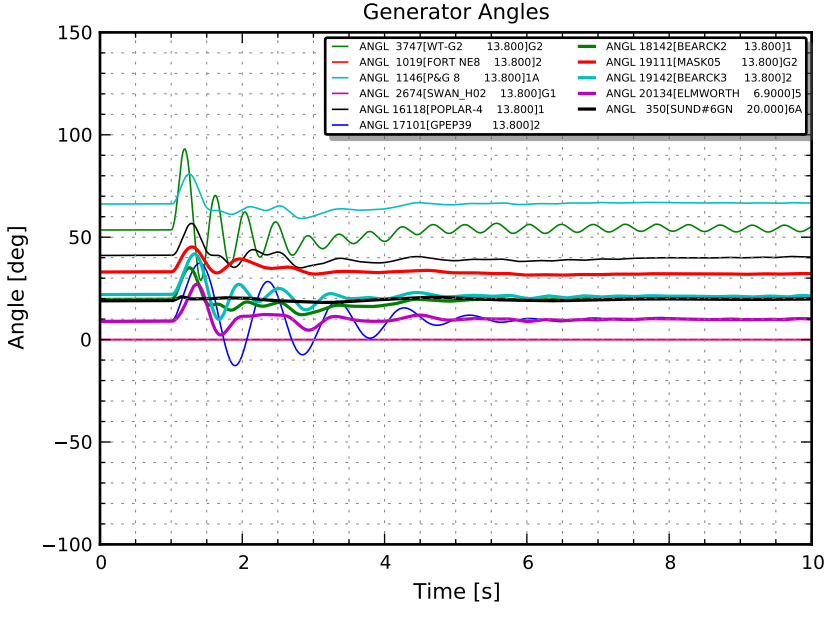
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_B.

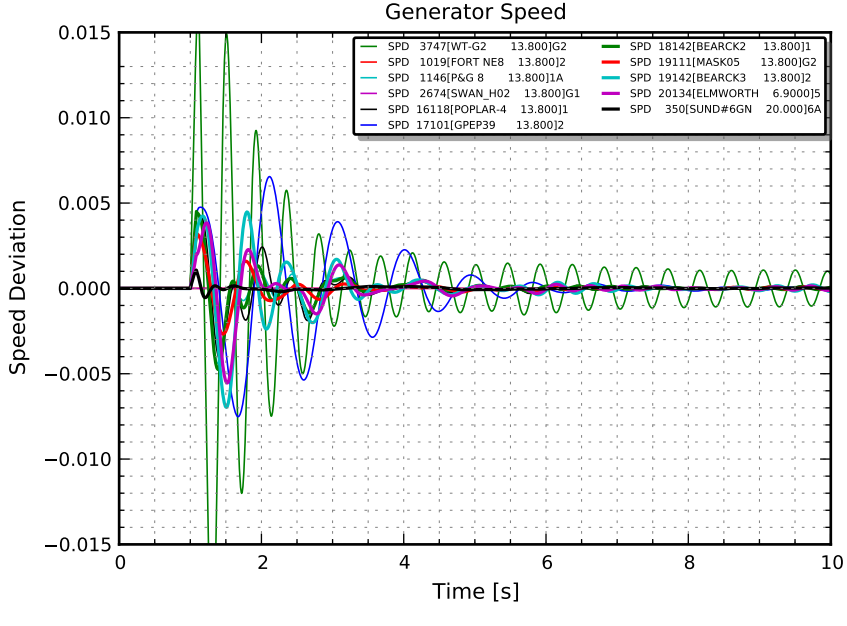
Study Area Generators

Appendix E2A
Figure: 002 (B. 2)





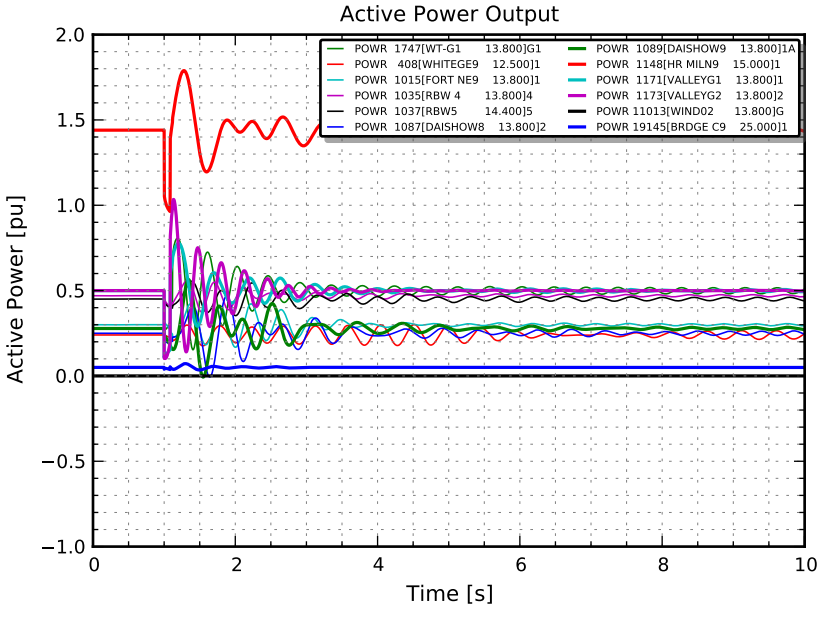


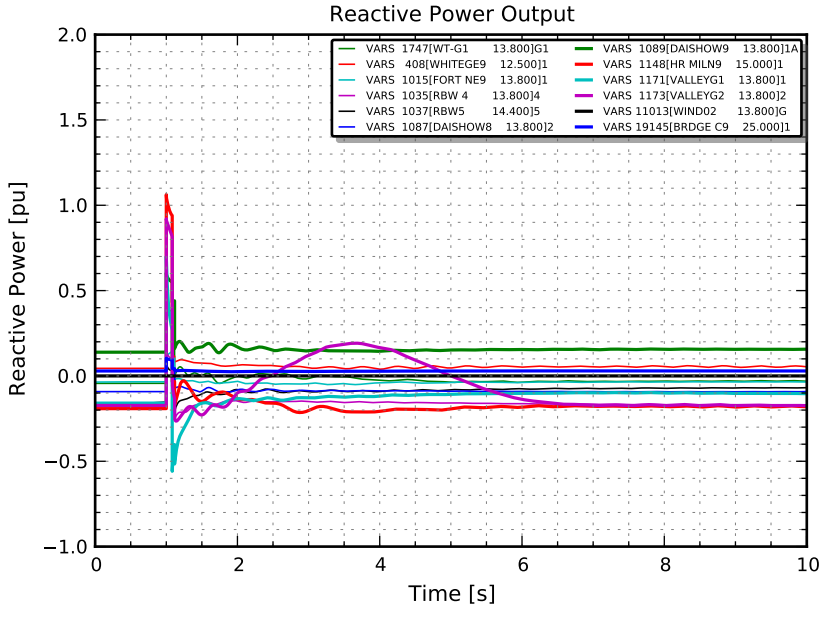


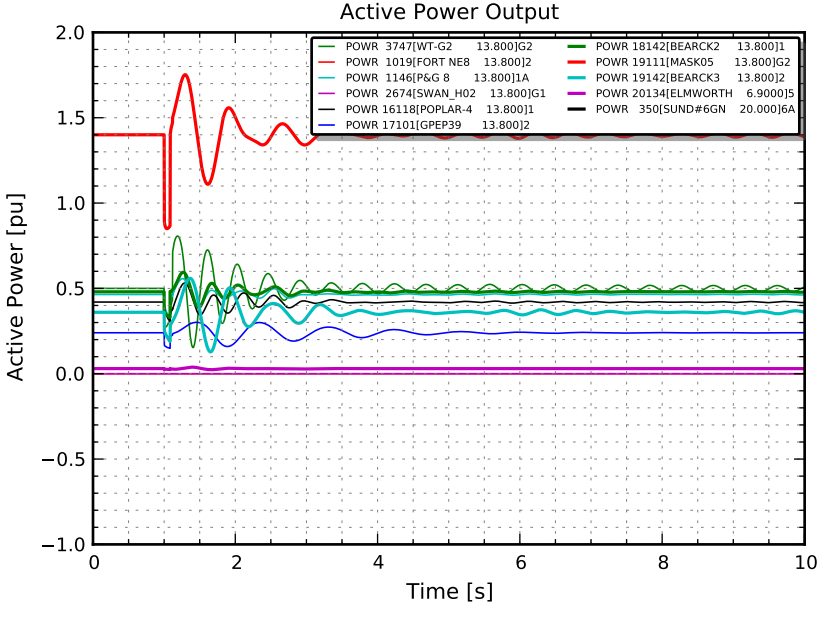
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_B.

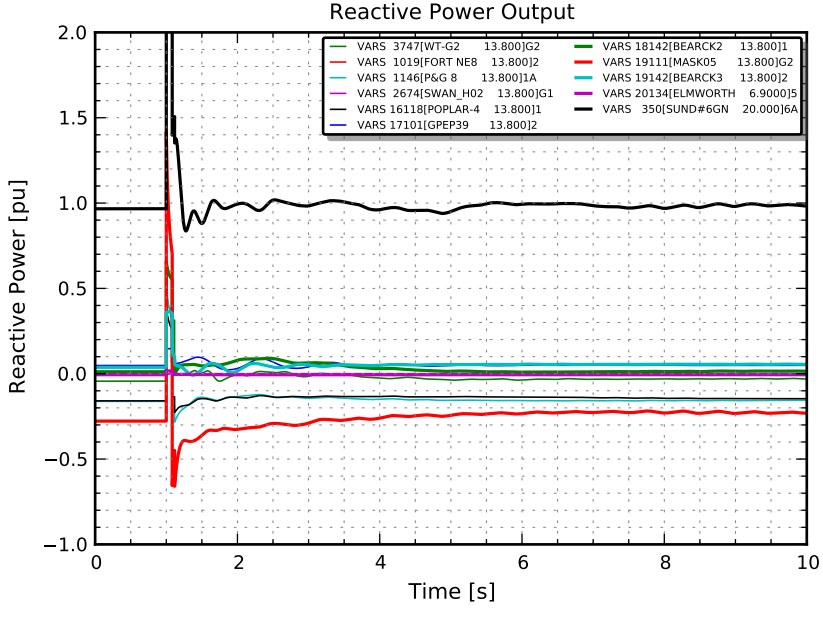
Study Area Generators

Appendix E2A
Figure: 002 (B. 3)





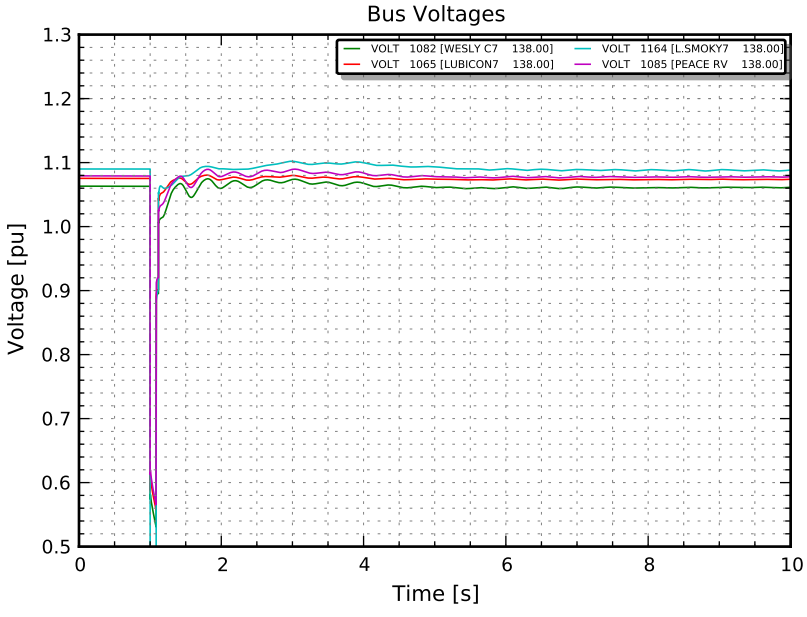


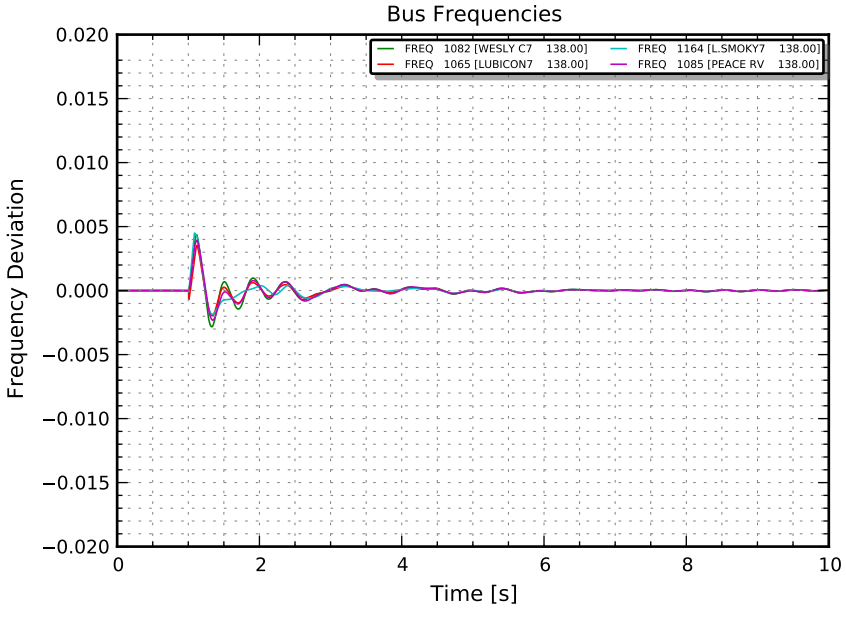


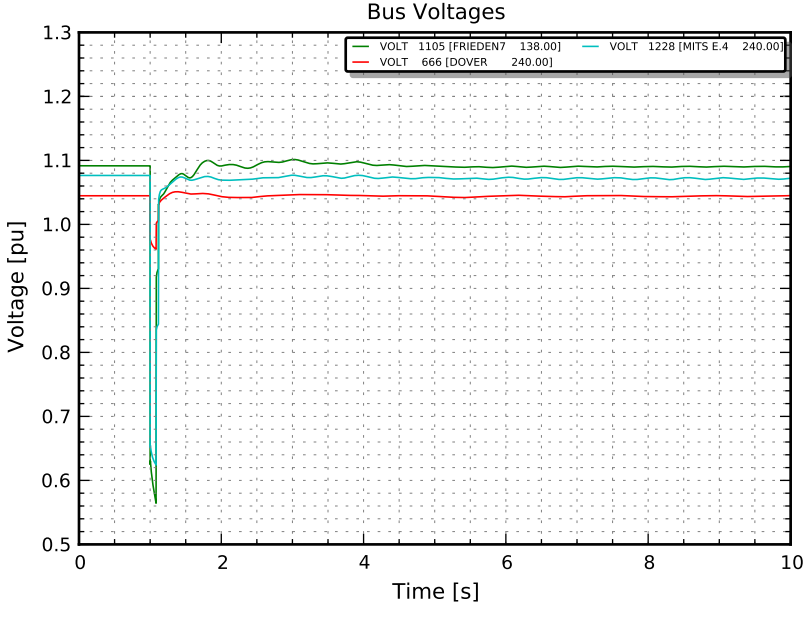
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_A.

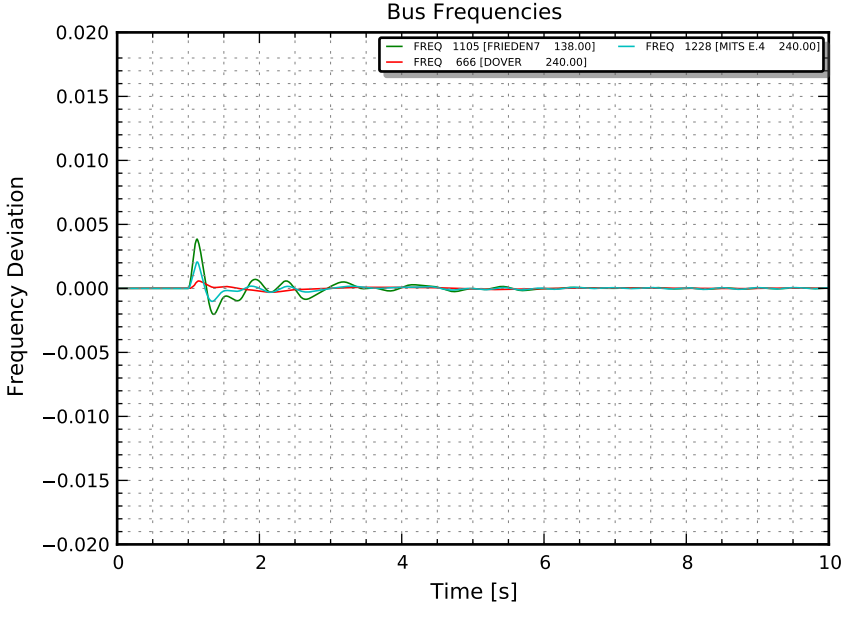
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 003 (A. 1)





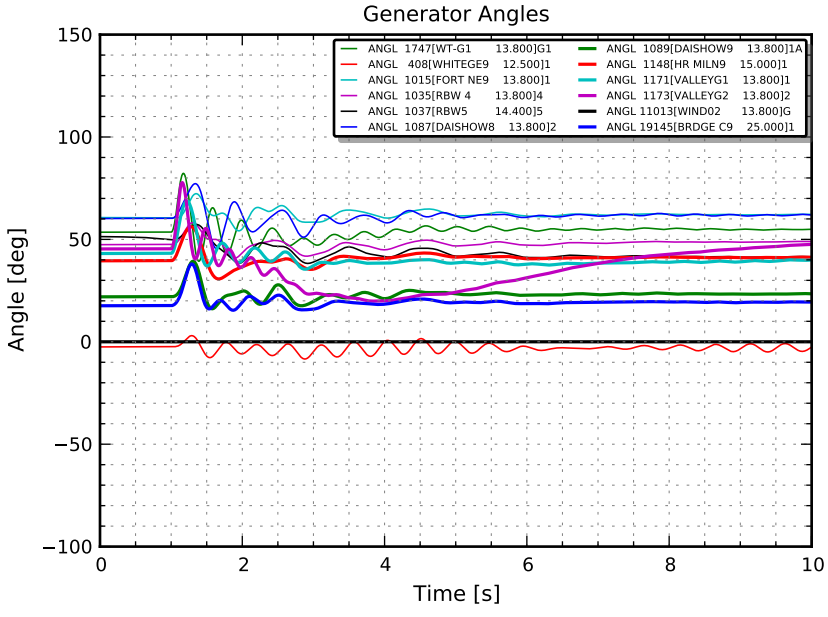


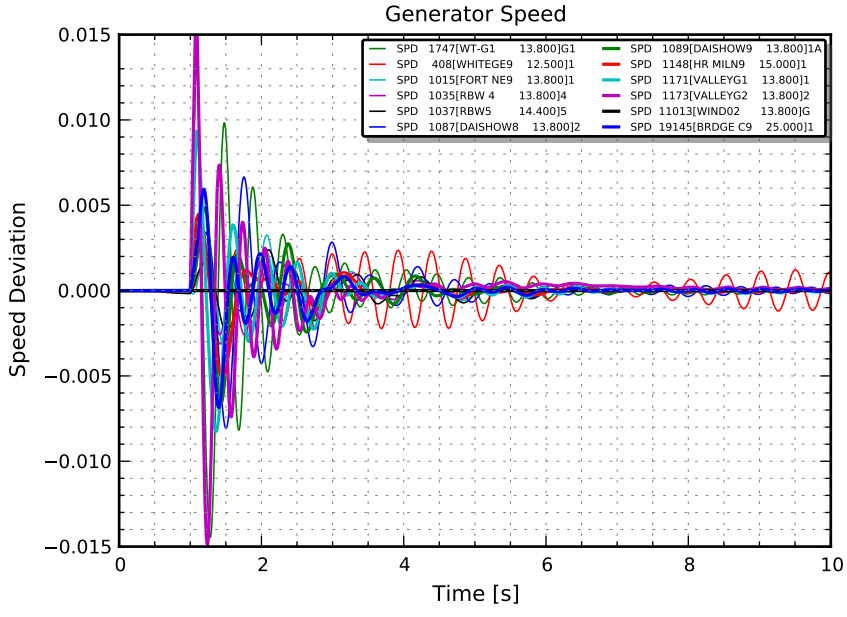


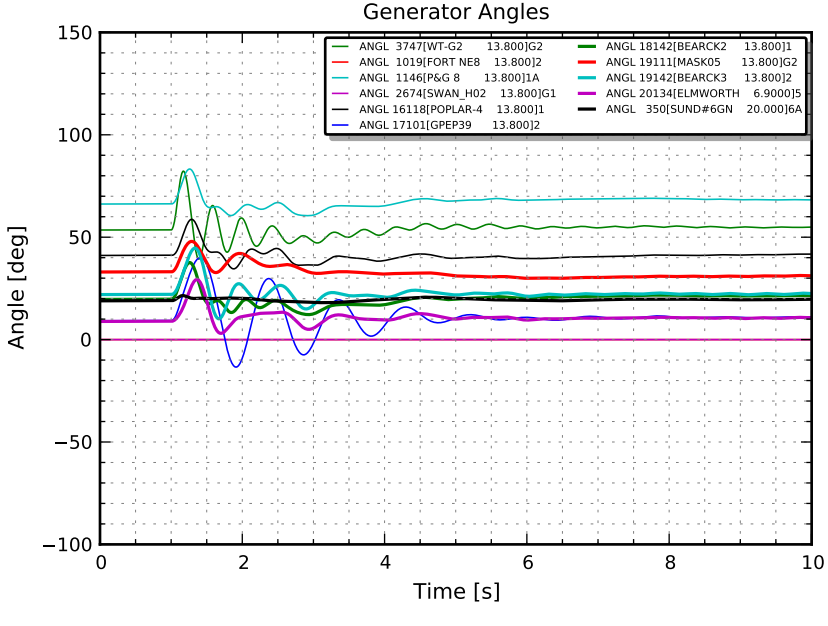
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_A.

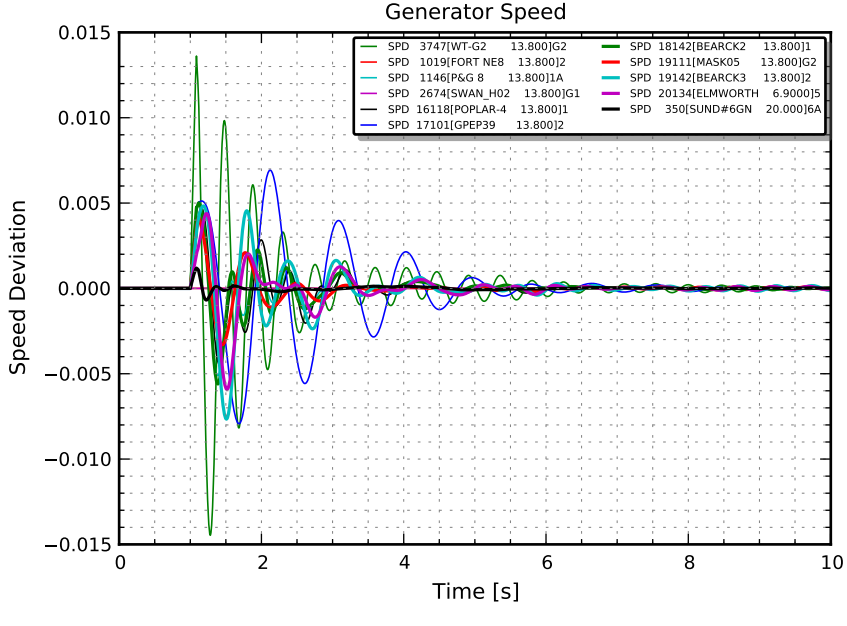
Study Area Generators

Appendix E2A
Figure: 003 (A. 2)





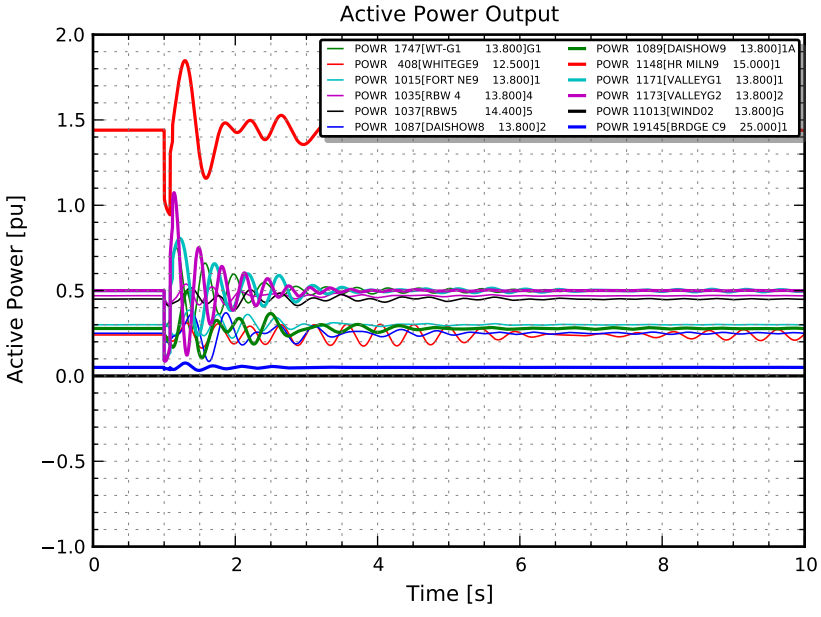


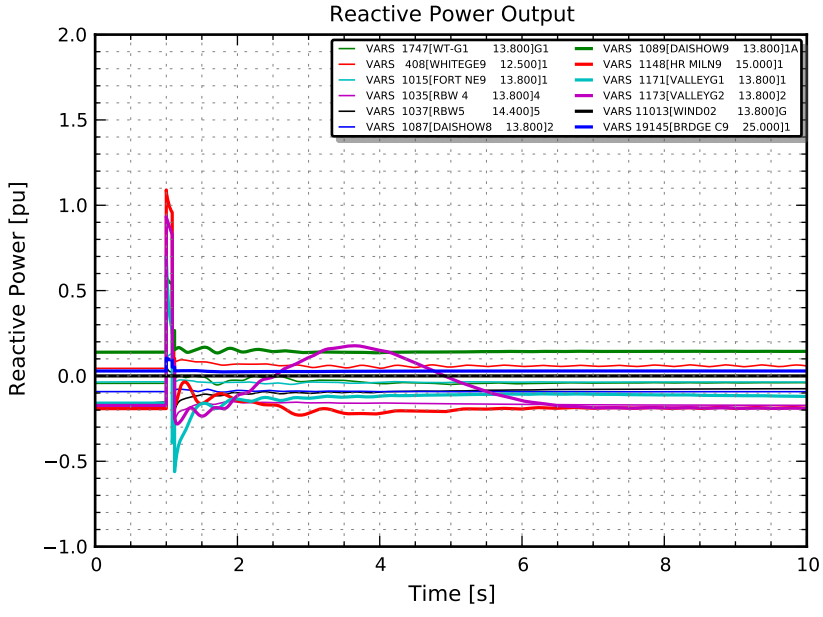


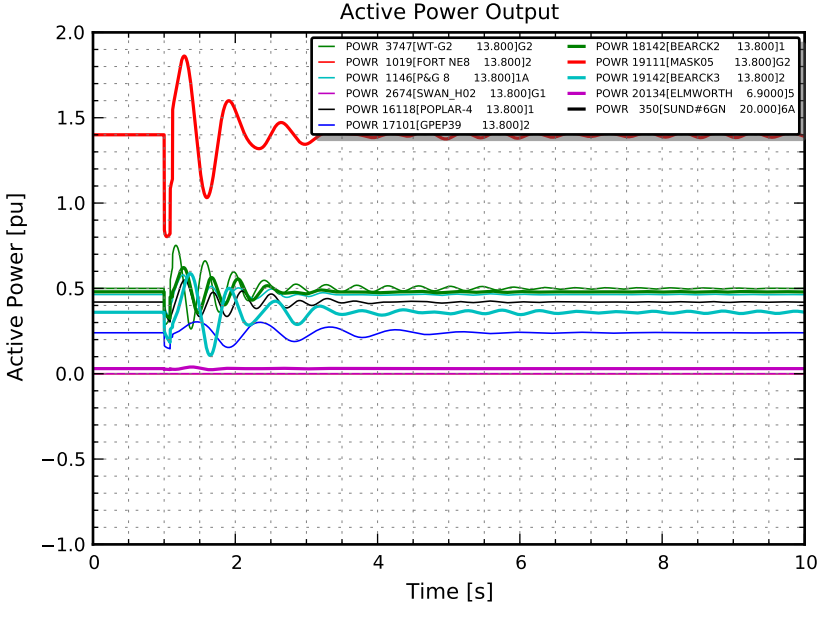
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_A.

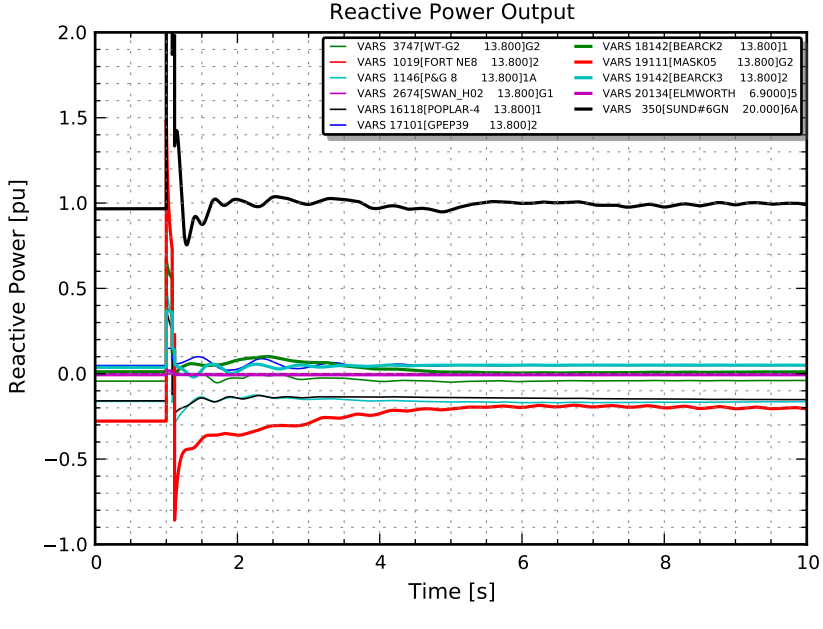
Study Area Generators

Appendix E2A
Figure: 003 (A. 3)





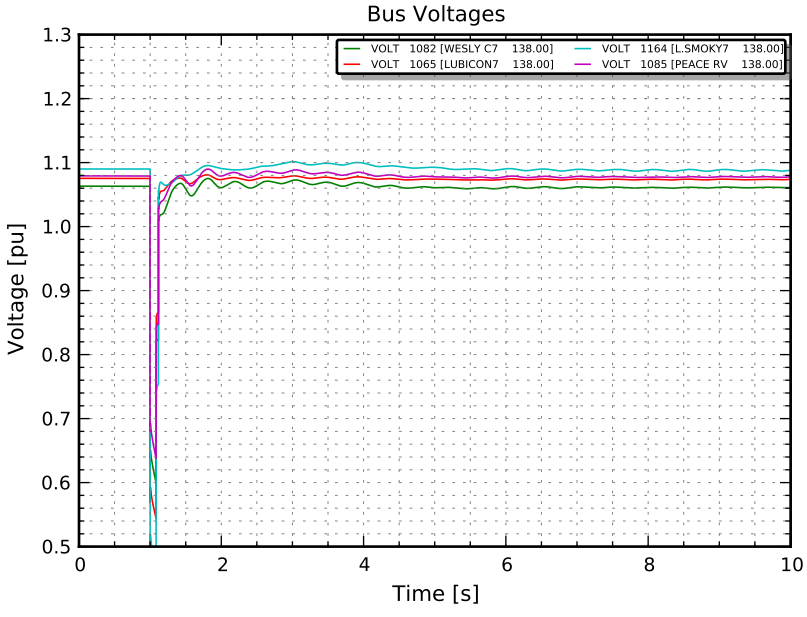


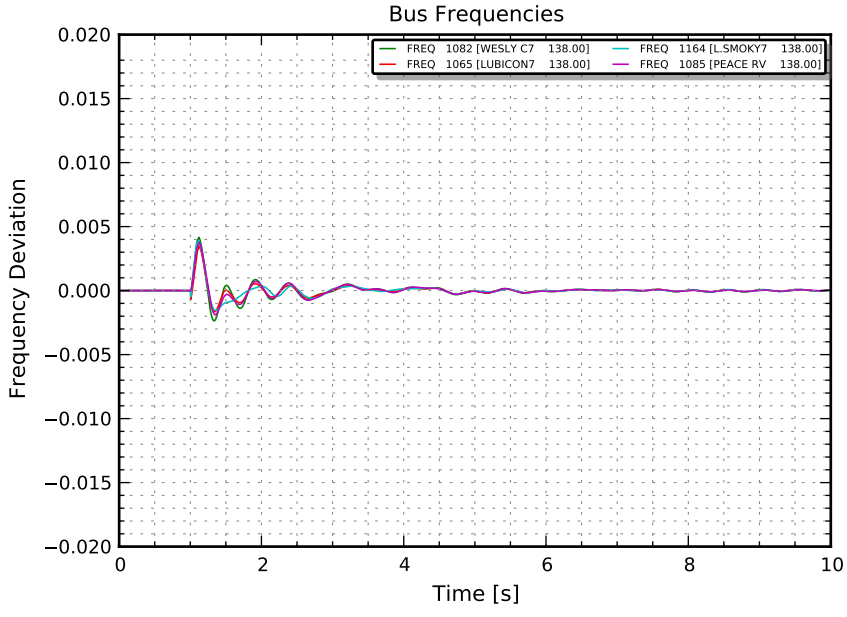


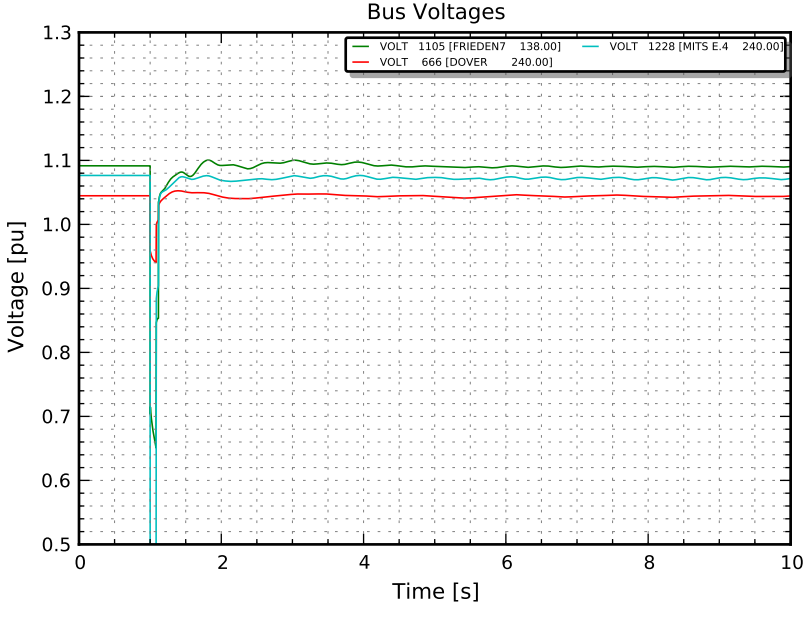
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_B.

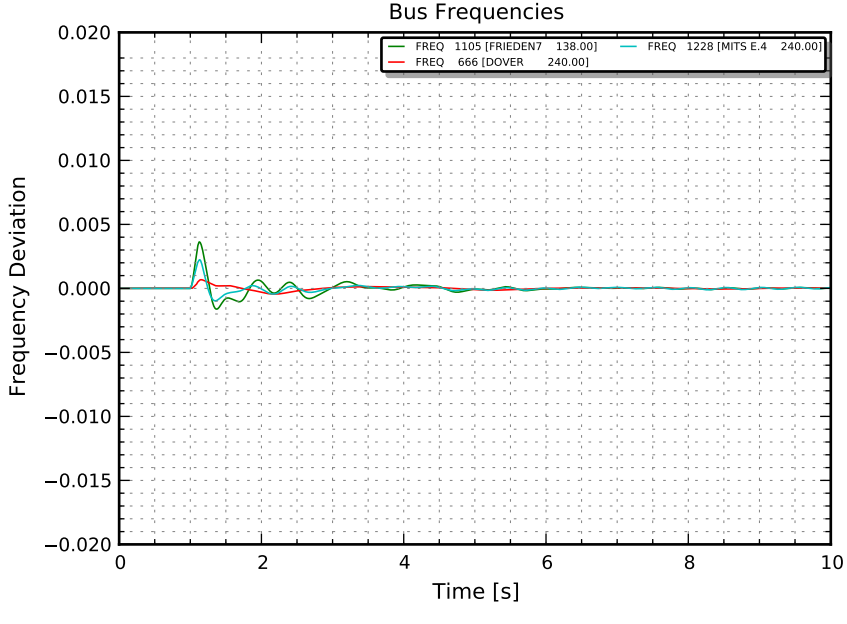
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 003 (B. 1)





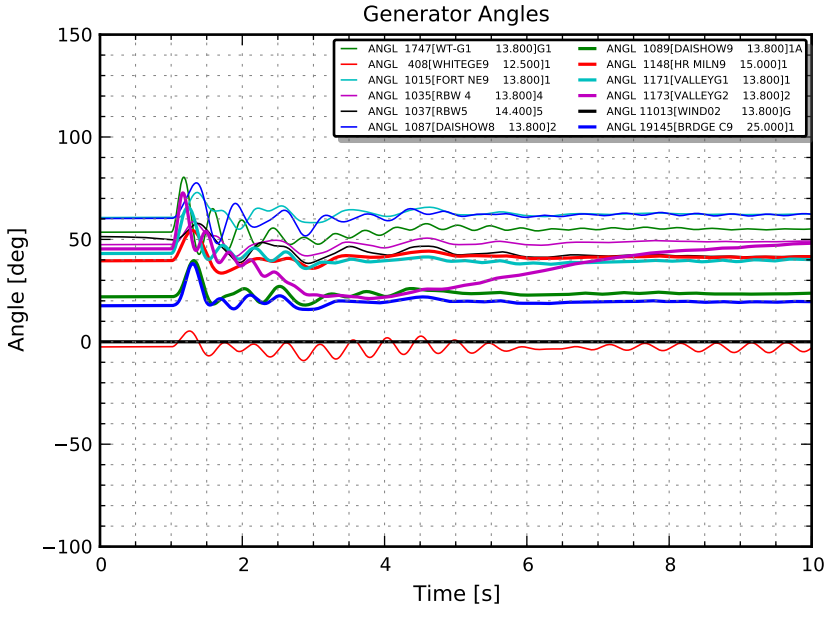


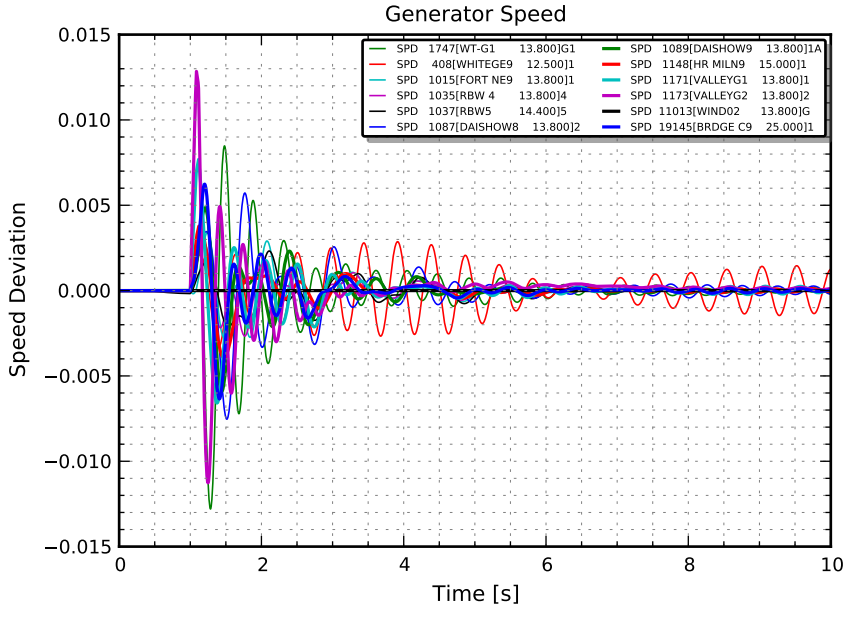


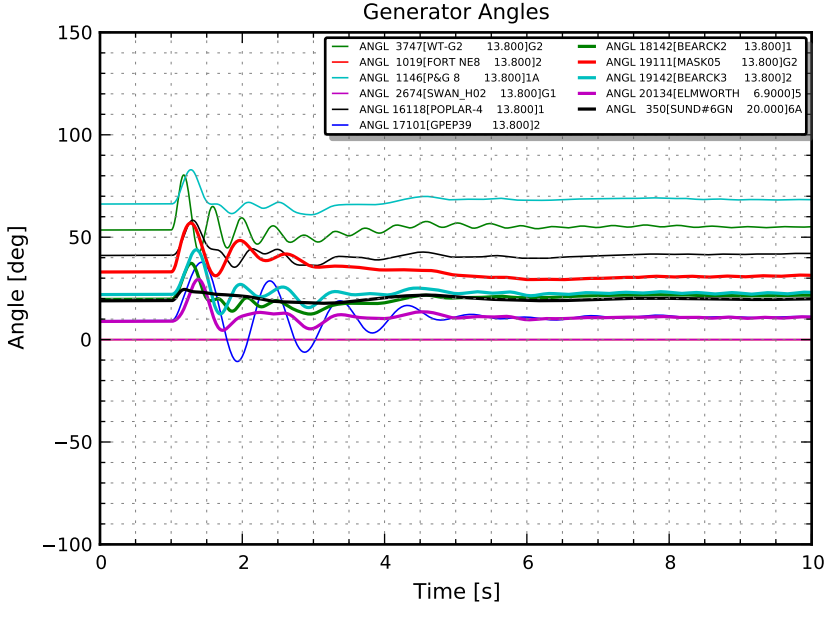
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_B.

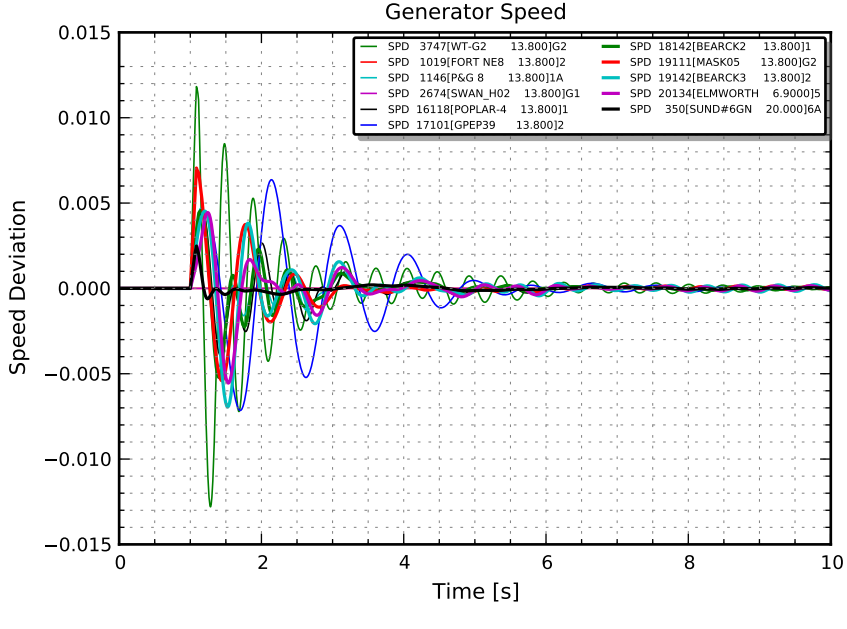
Study Area Generators

Appendix E2A
Figure: 003 (B. 2)





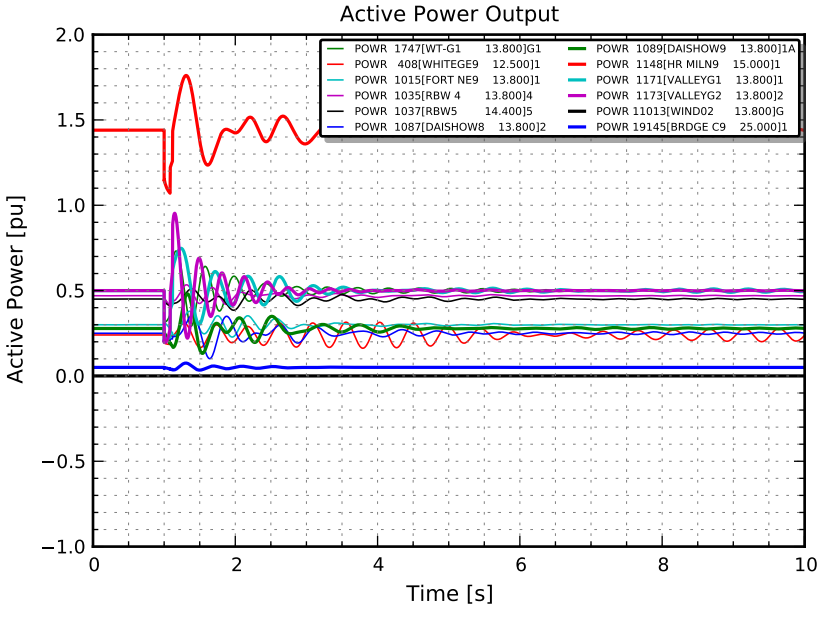


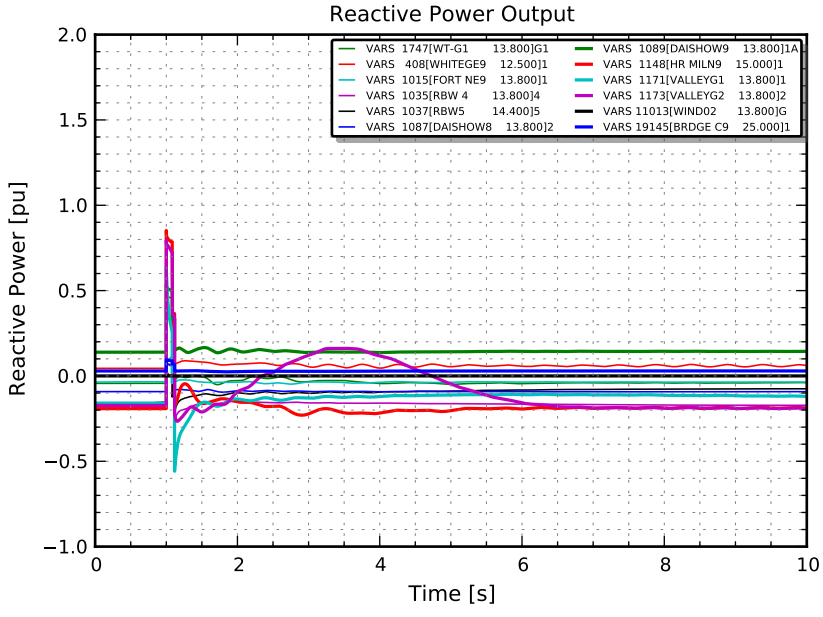


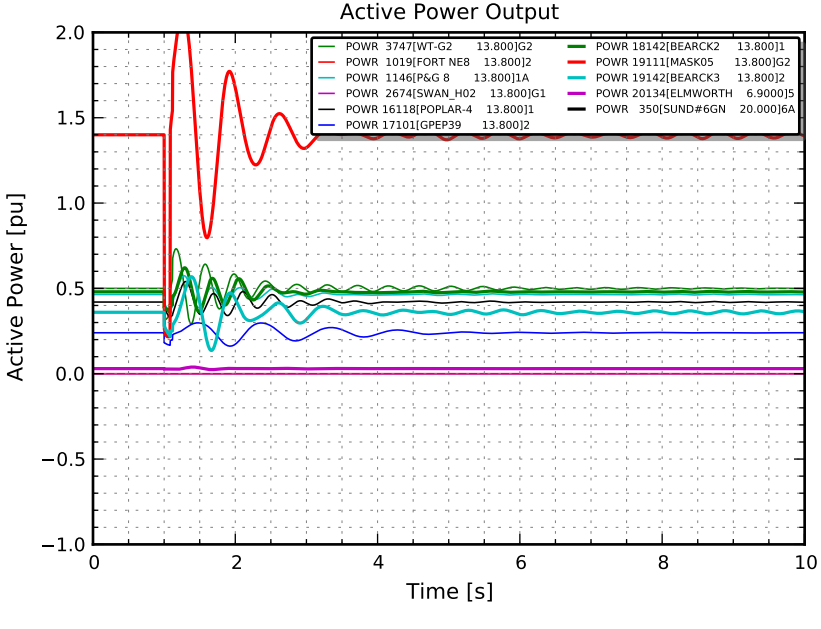
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_B.

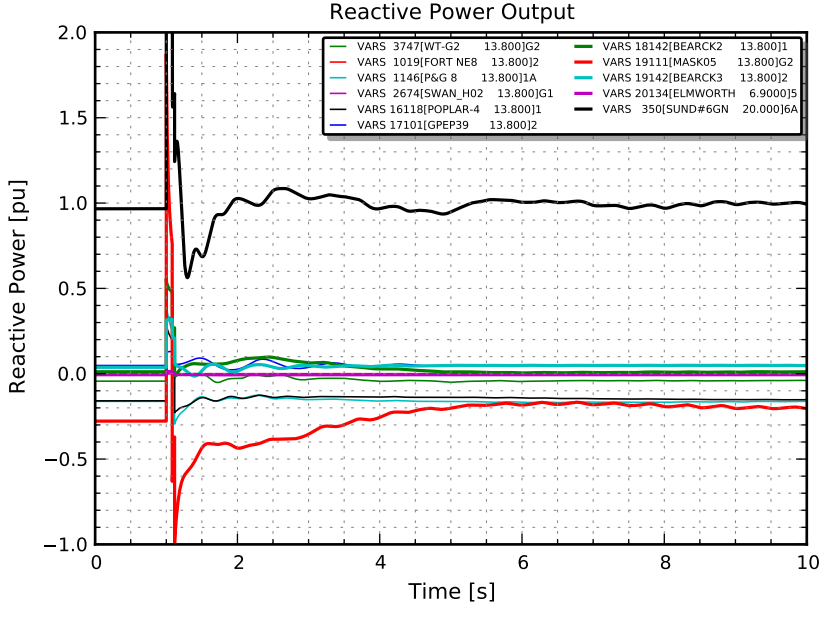
Study Area Generators

Appendix E2A
Figure: 003 (B. 3)





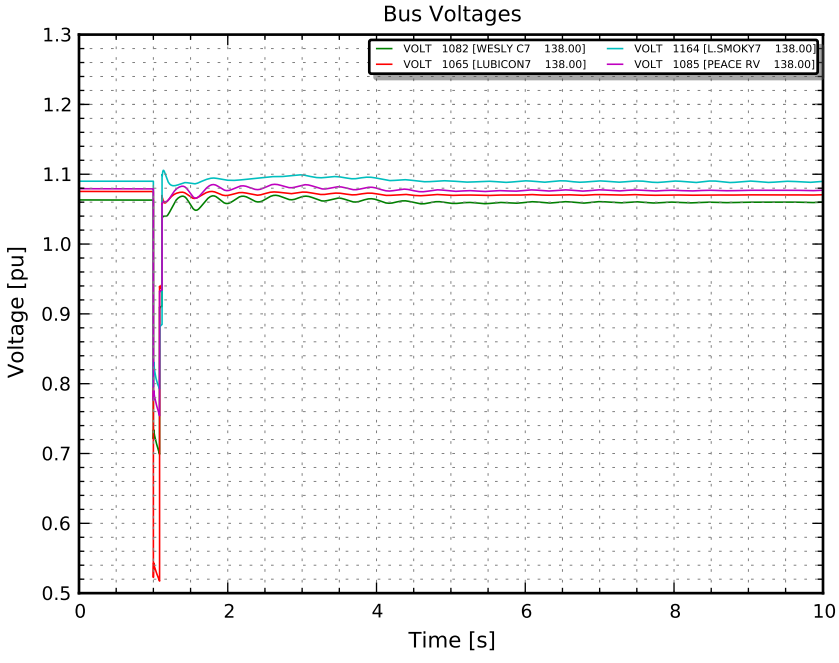


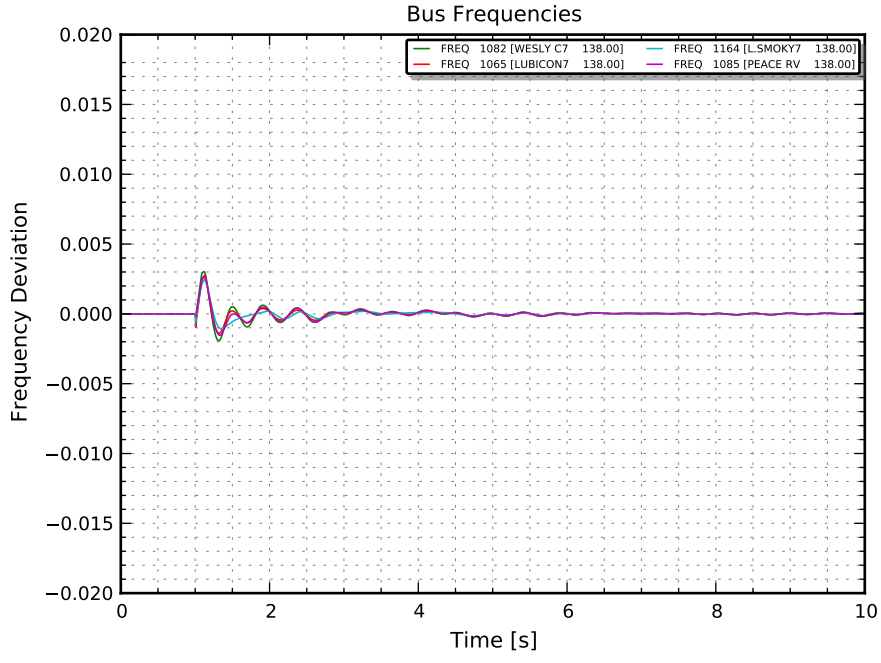


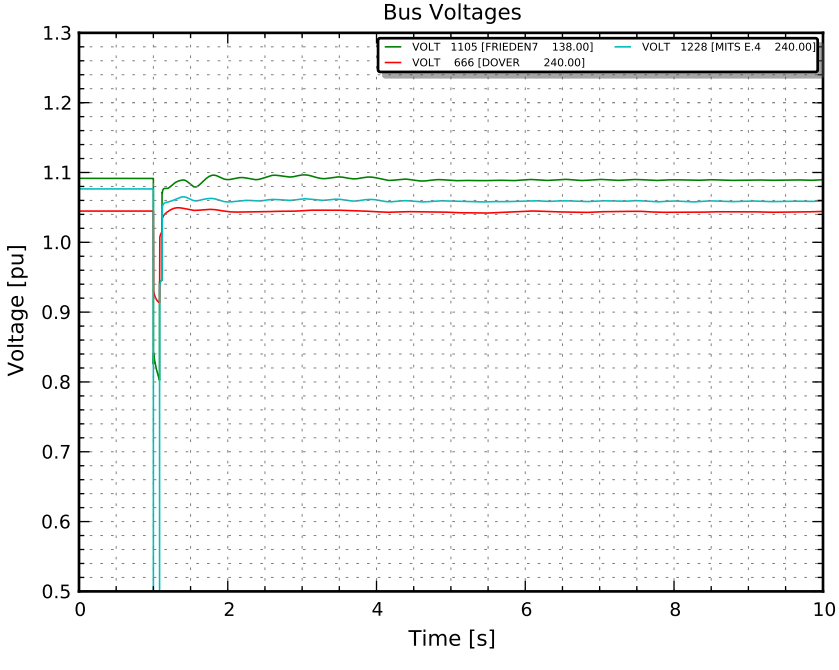
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 004 9L40 MITSUE to LOUISECREEK_A.

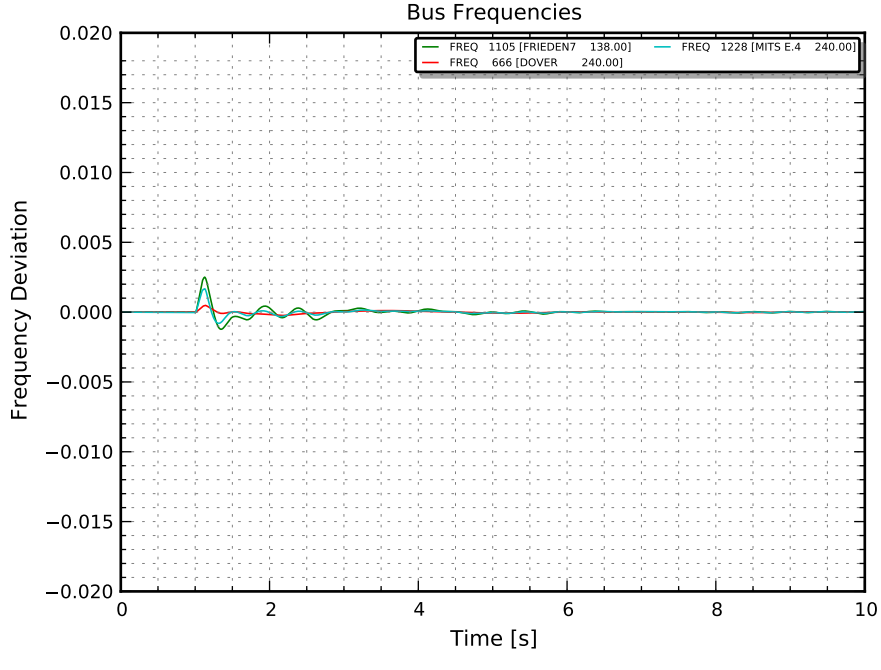
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 004 (A. 1)





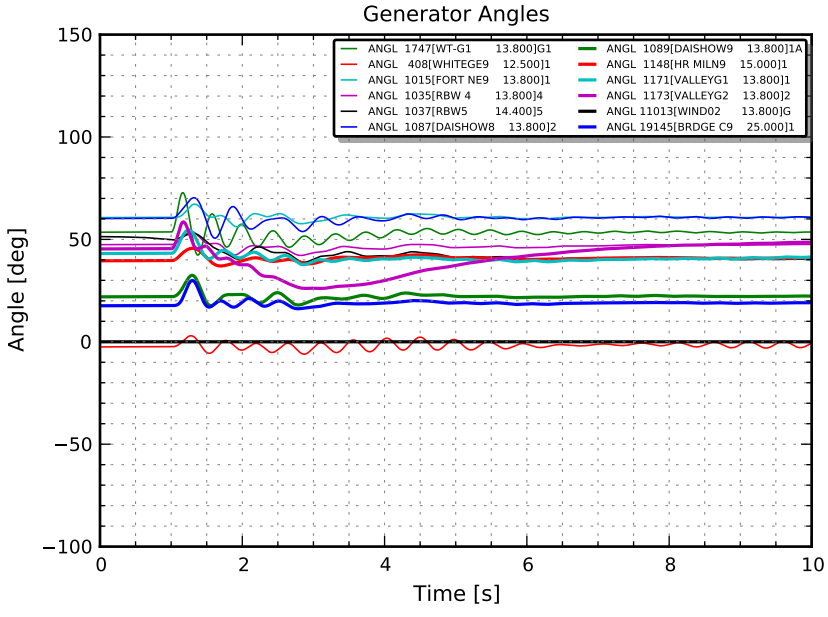


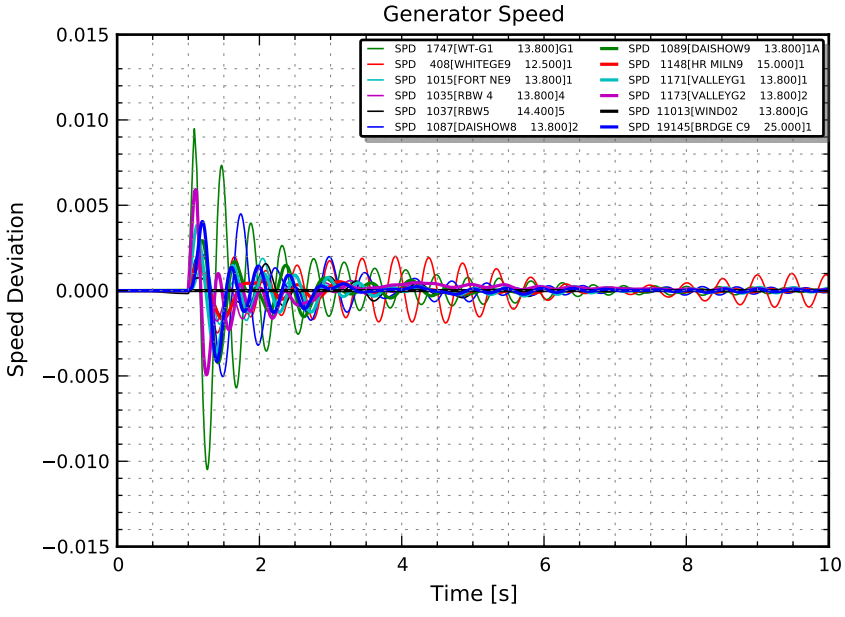


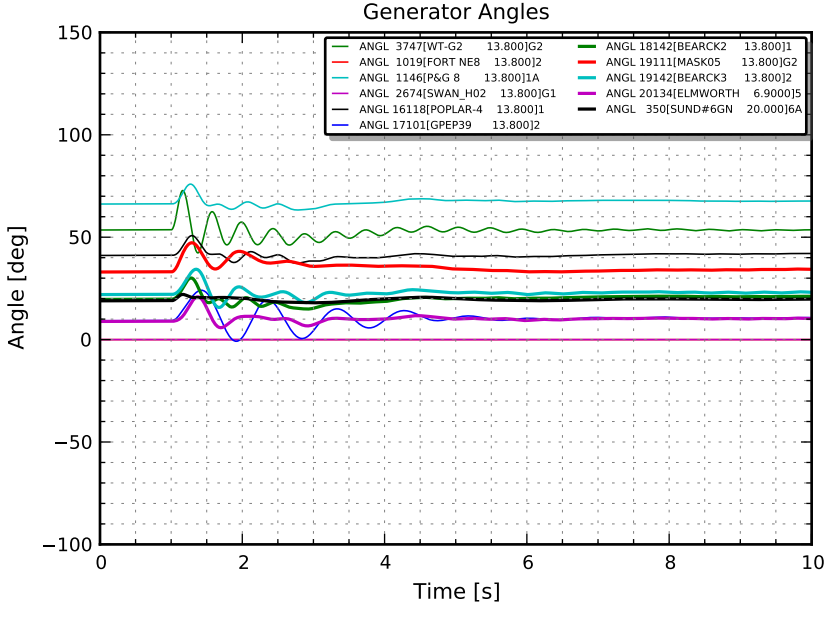
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 004 9L40 MITSUE to LOUISECREEK_A.

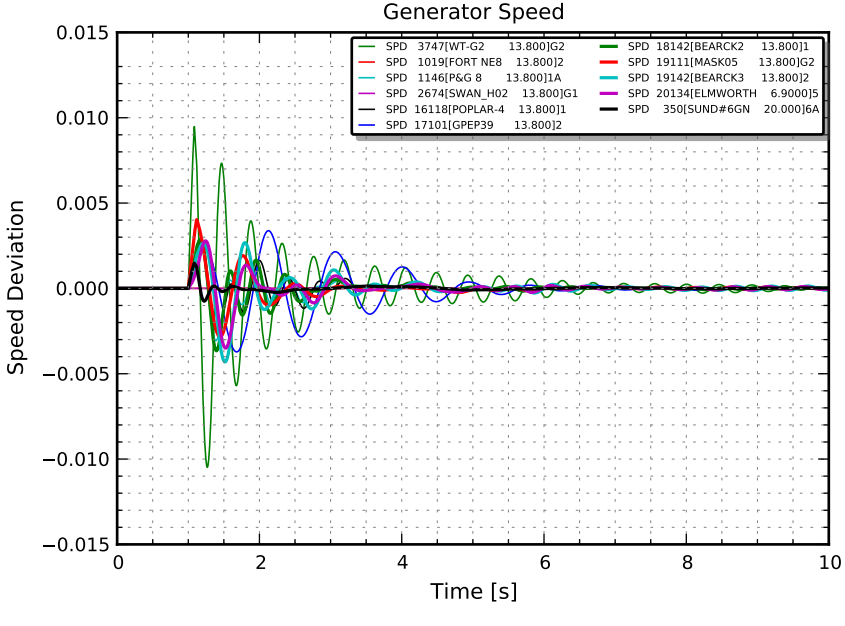
Study Area Generators

Appendix E2A
Figure: 004 (A. 2)





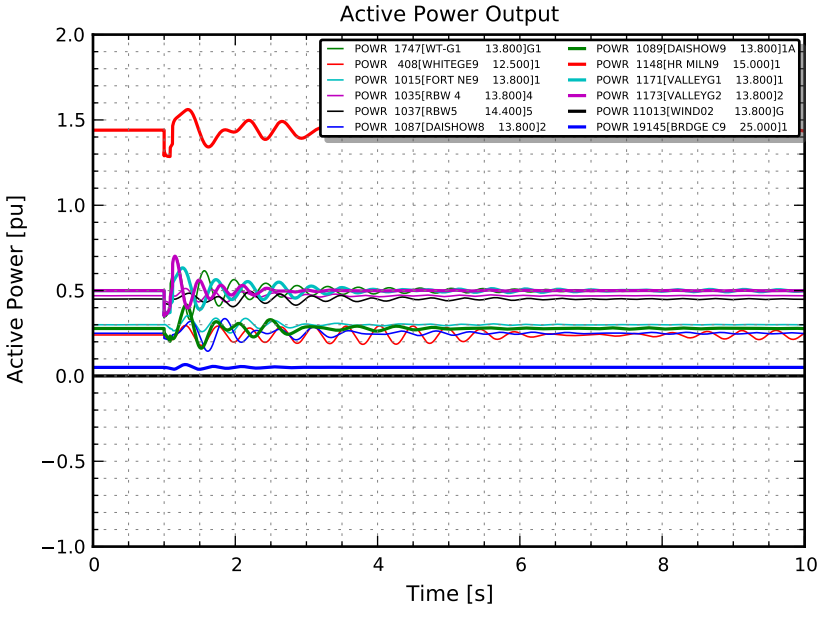


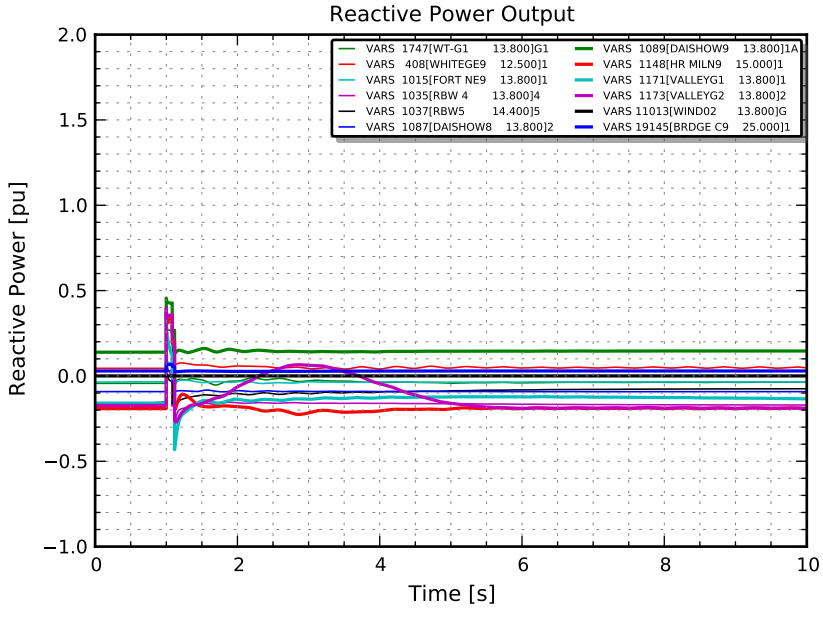


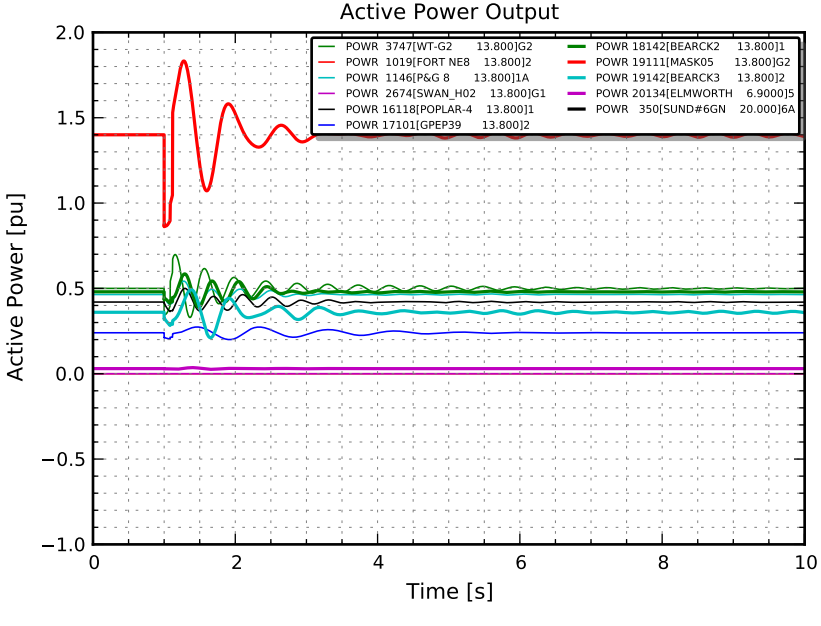
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 004 9L40 MITSUE to LOUISECREEK_A.

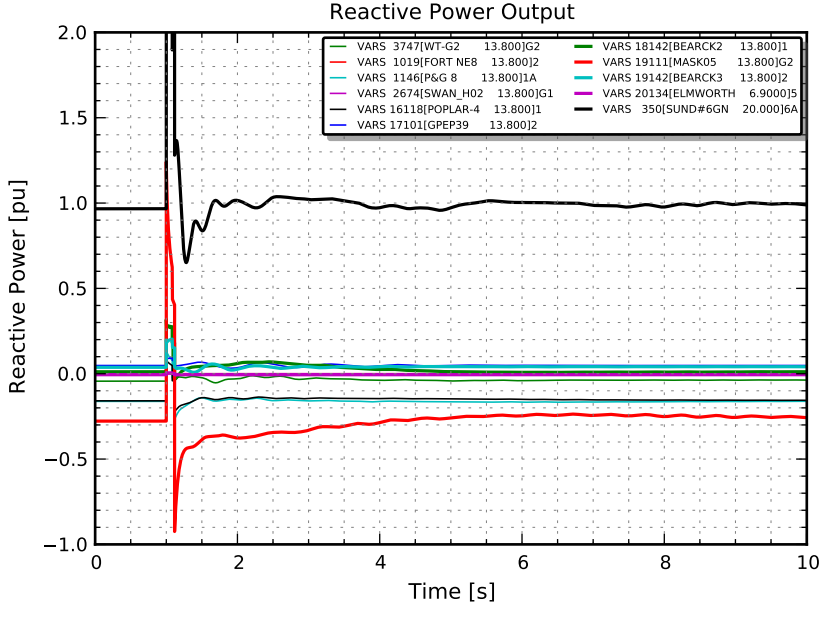
Study Area Generators

Appendix E2A
Figure: 004 (A. 3)





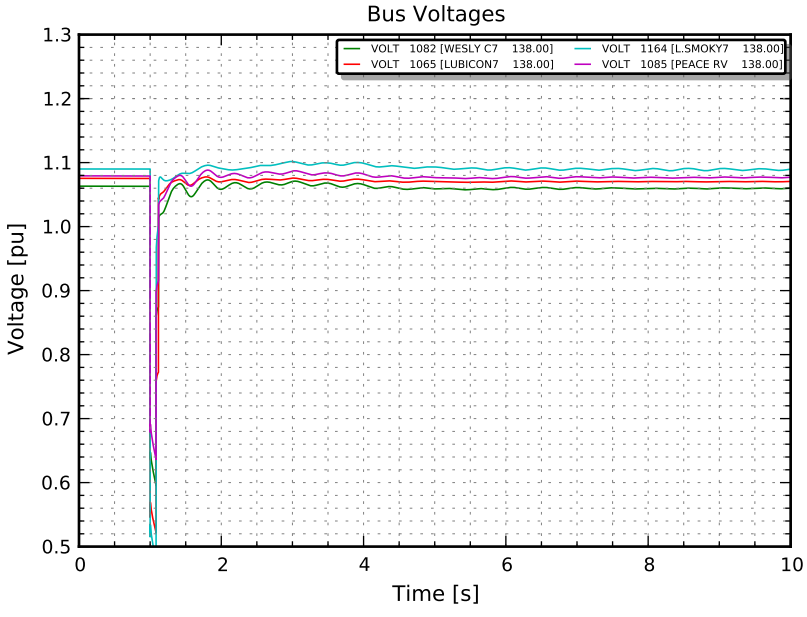


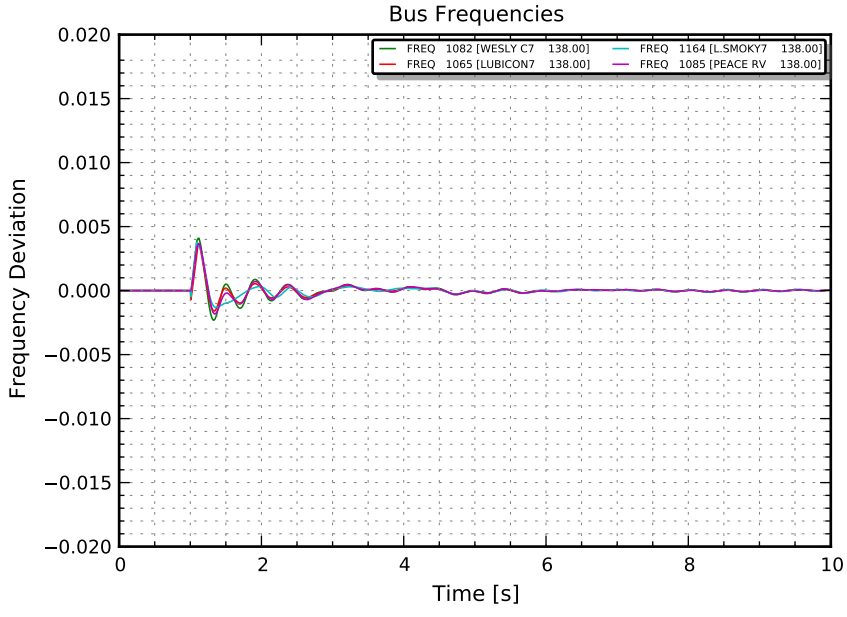


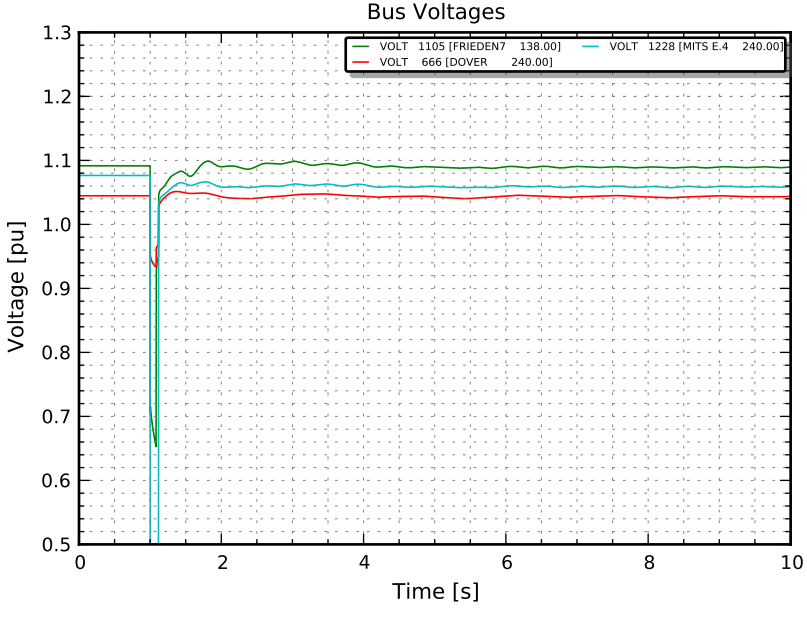
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 004 9L40 MITSUE to LOUISECREEK_B.

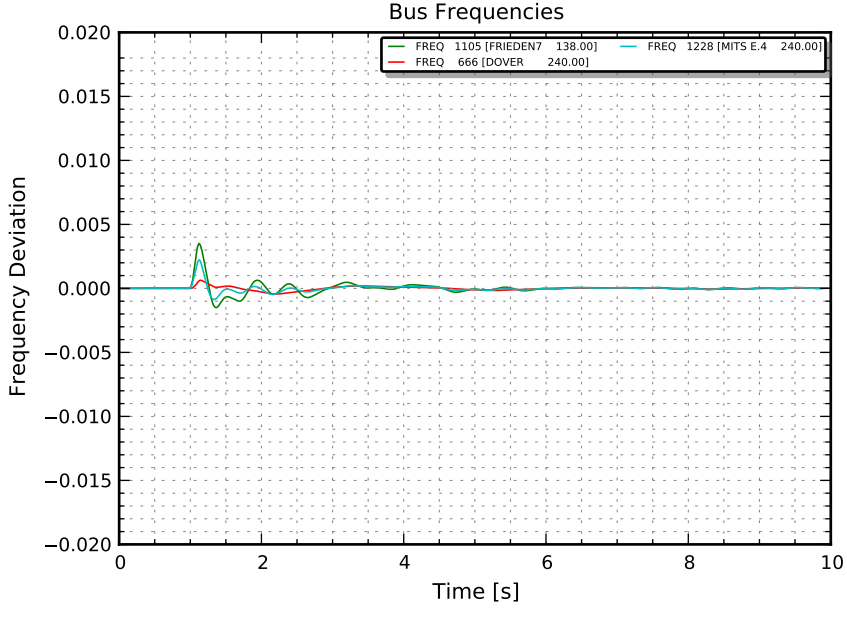
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 004 (B. 1)





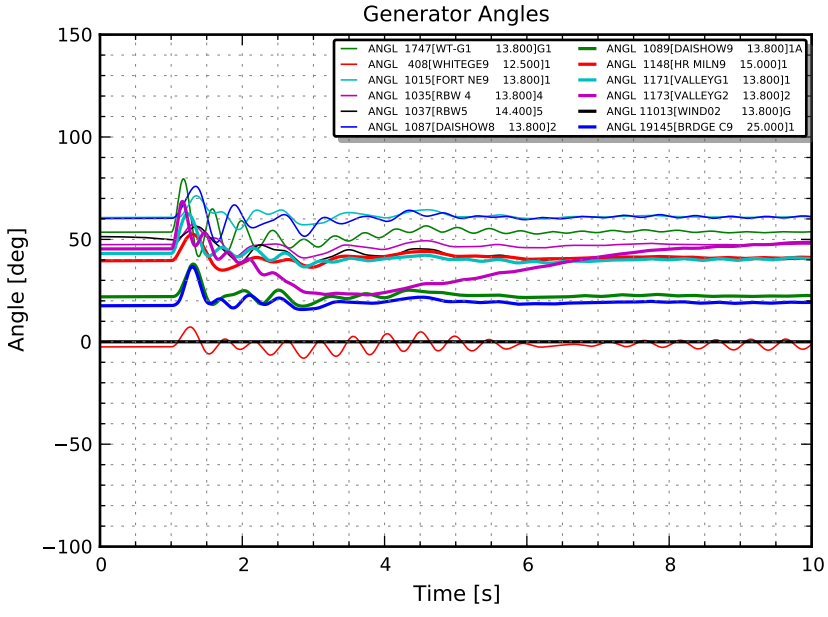


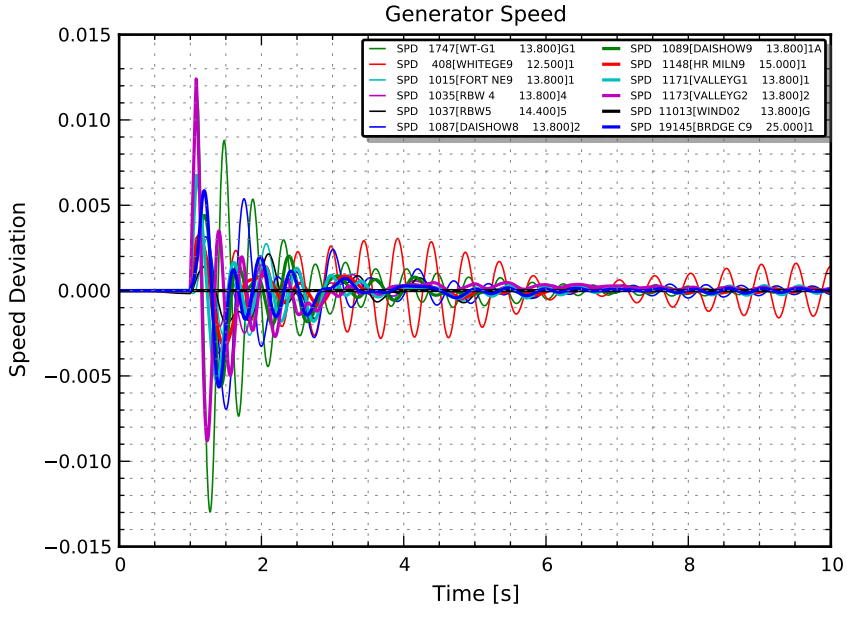


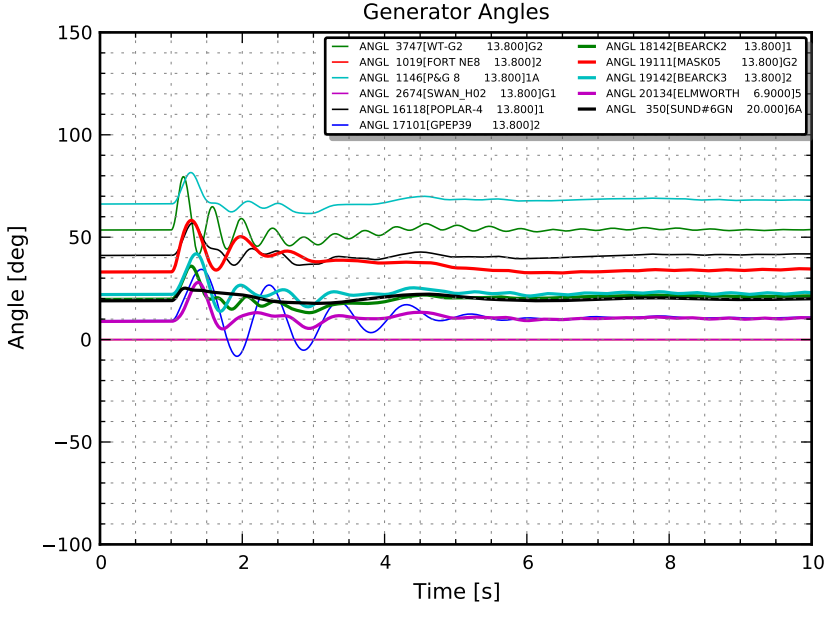
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 004 9L40 MITSUE to LOUISECREEK_B.

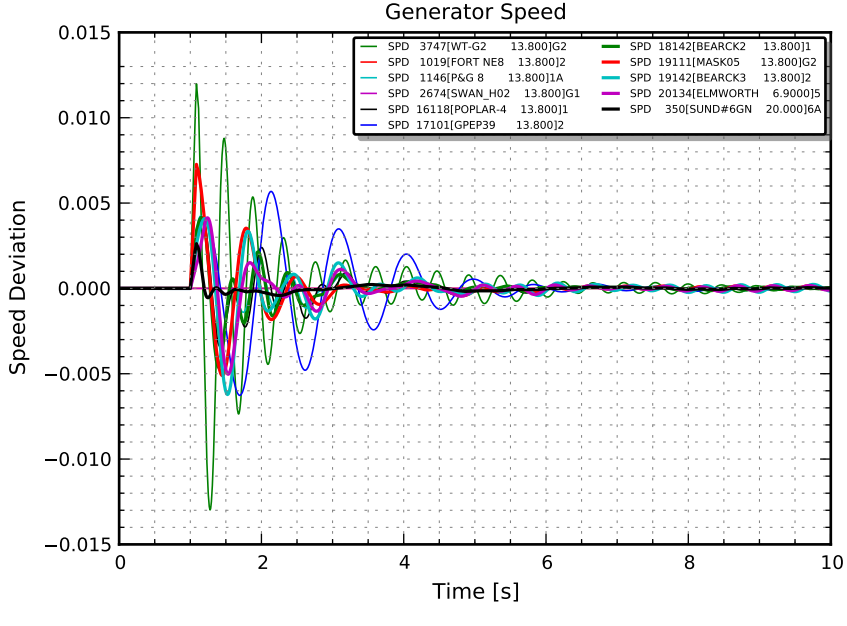
Study Area Generators

Appendix E2A
Figure: 004 (B. 2)





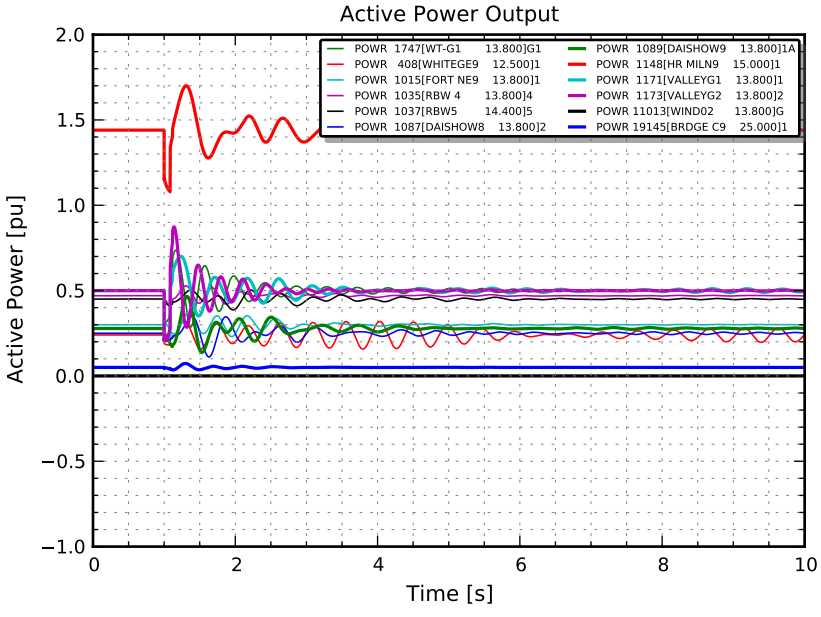


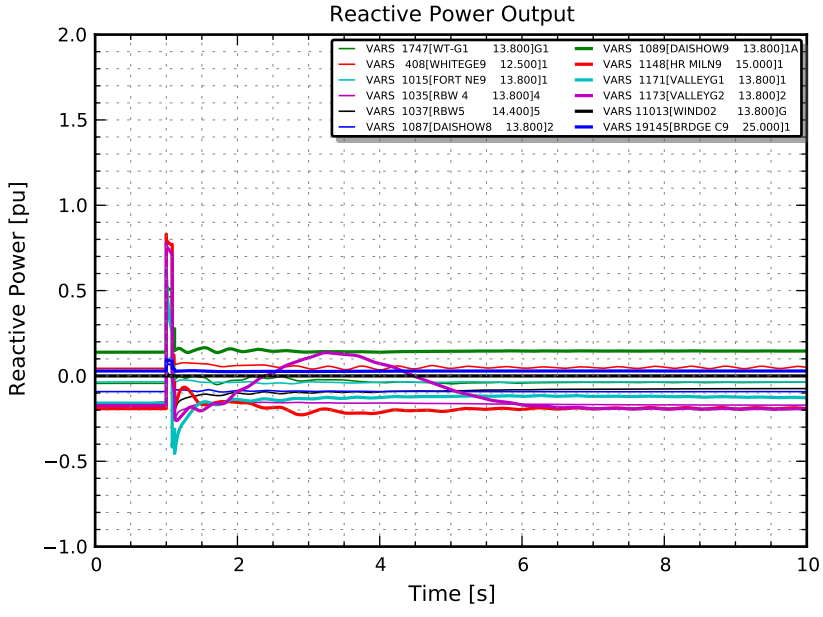


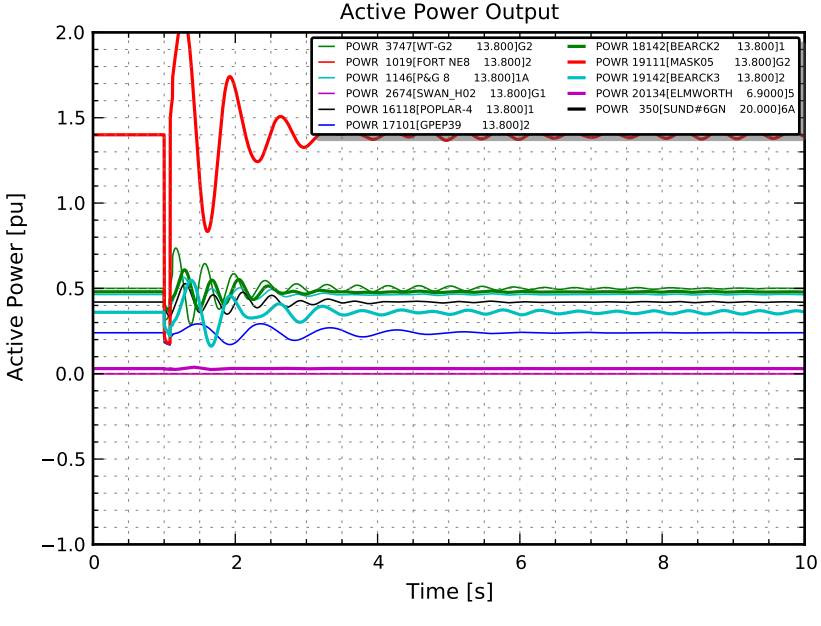
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 004 9L40 MITSUE to LOUISECREEK_B.

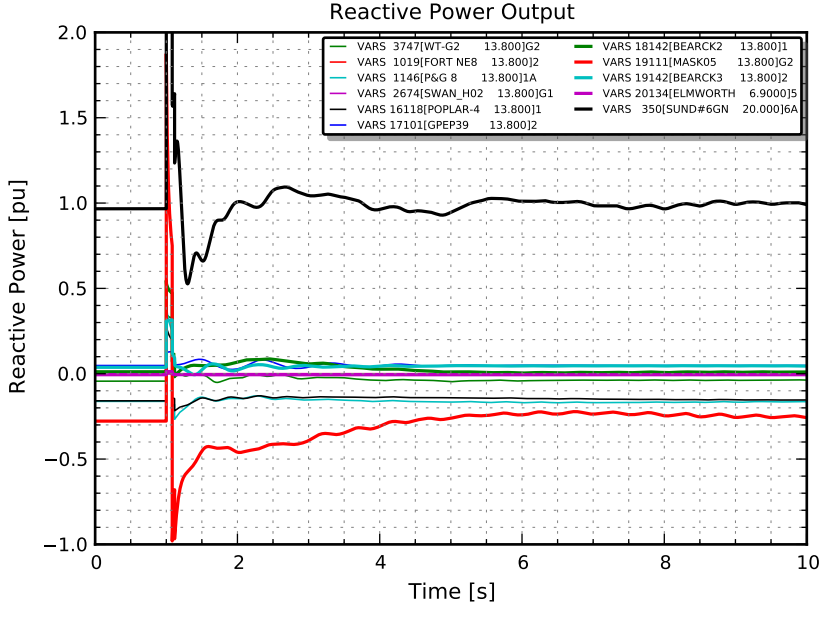
Study Area Generators

Appendix E2A
Figure: 004 (B. 3)





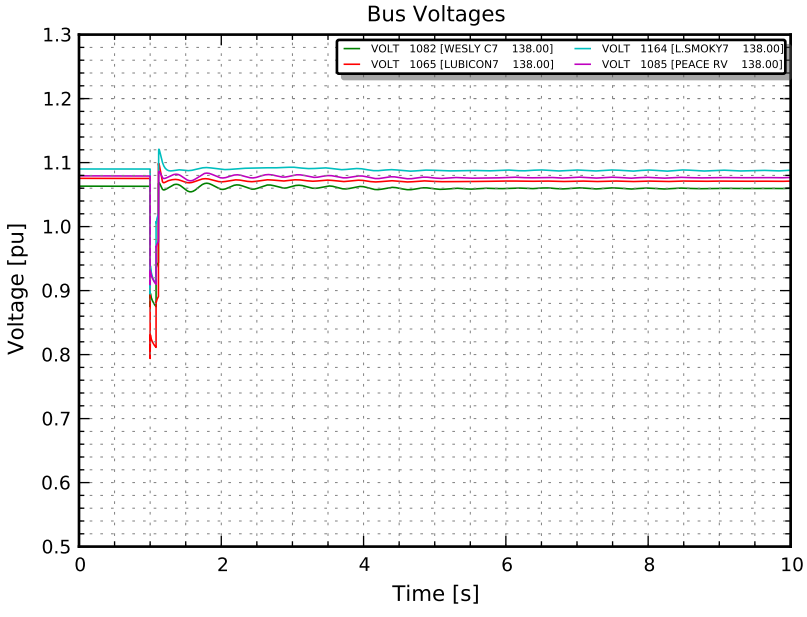


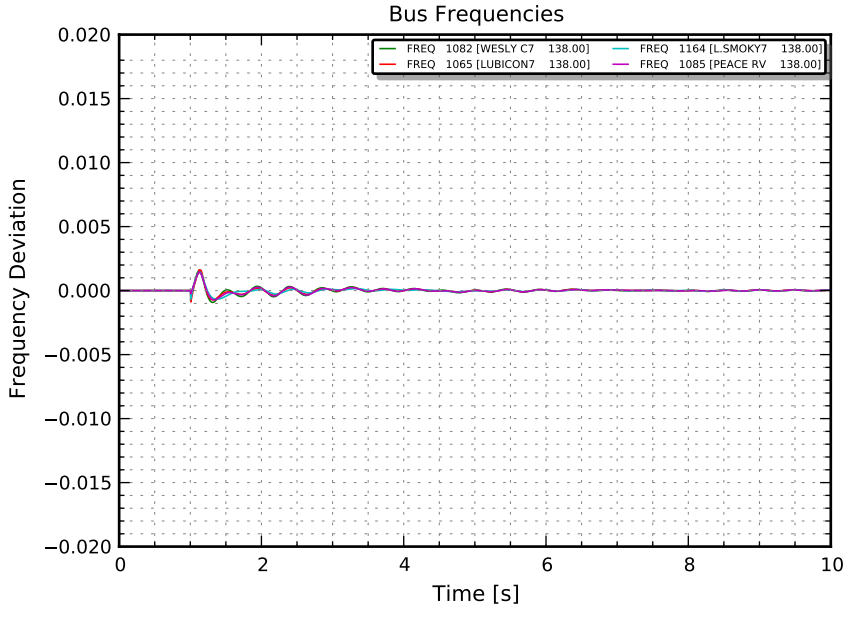


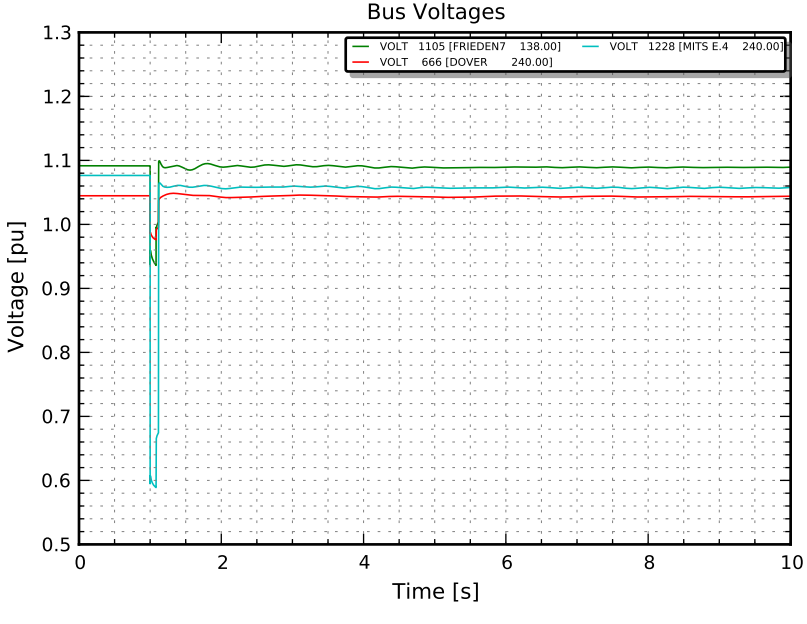
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 005 913L NORTHBARRHEAD to MITSUE_A.

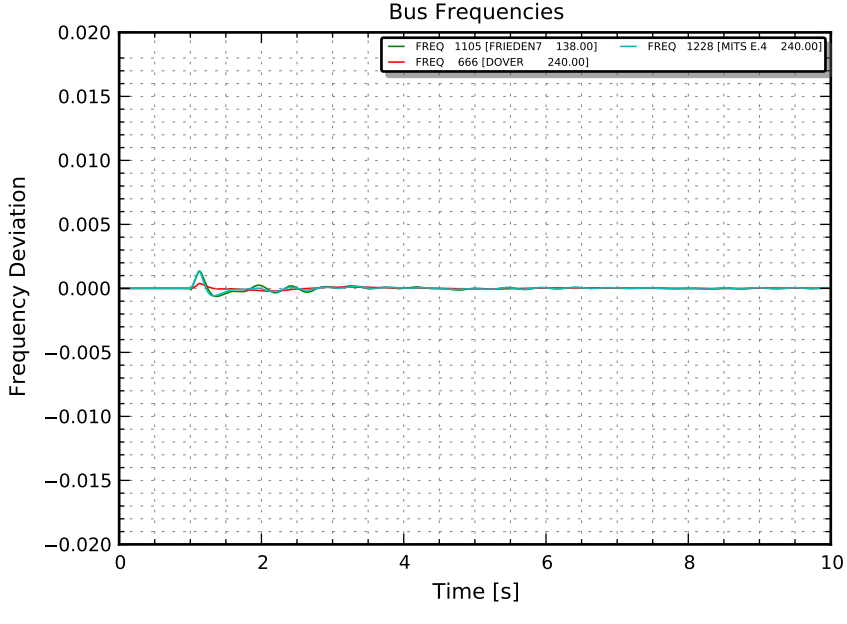
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 005 (A. 1)





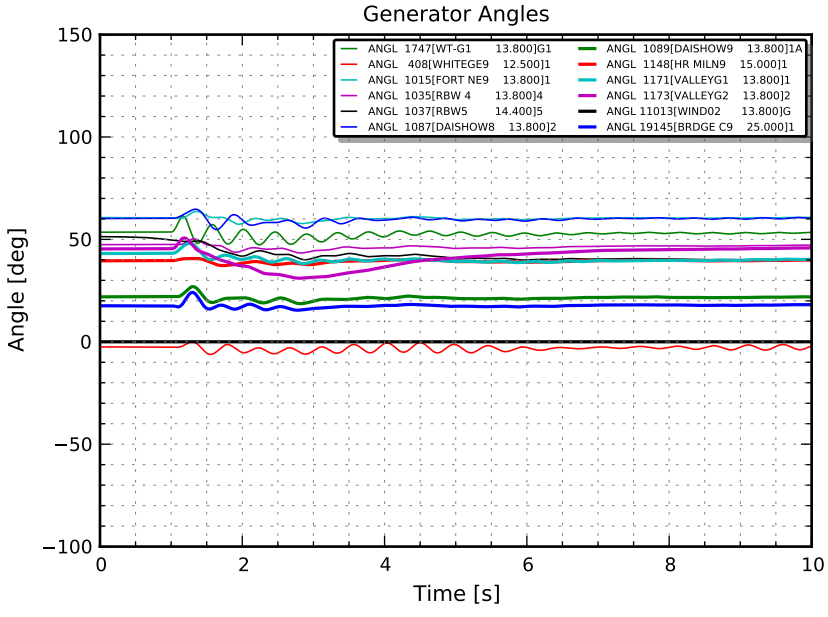


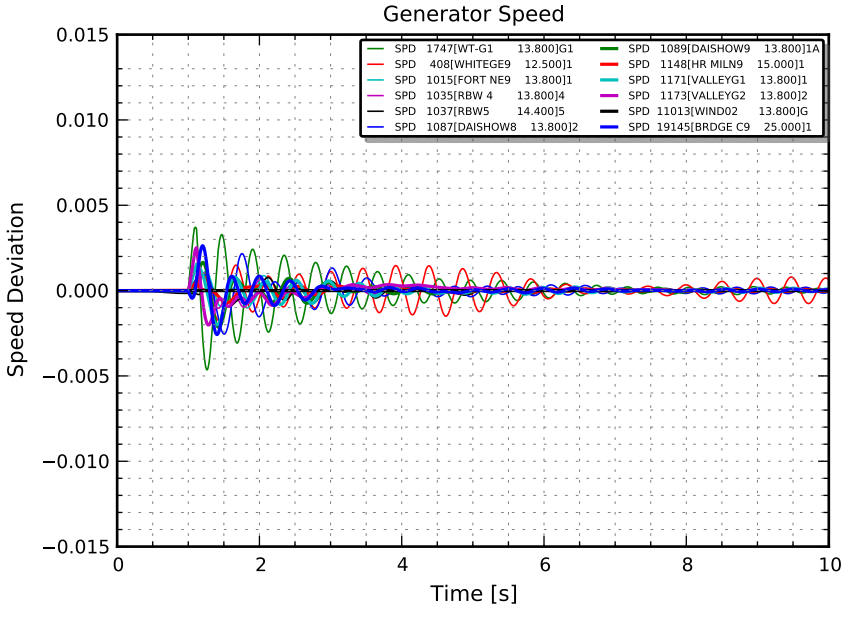


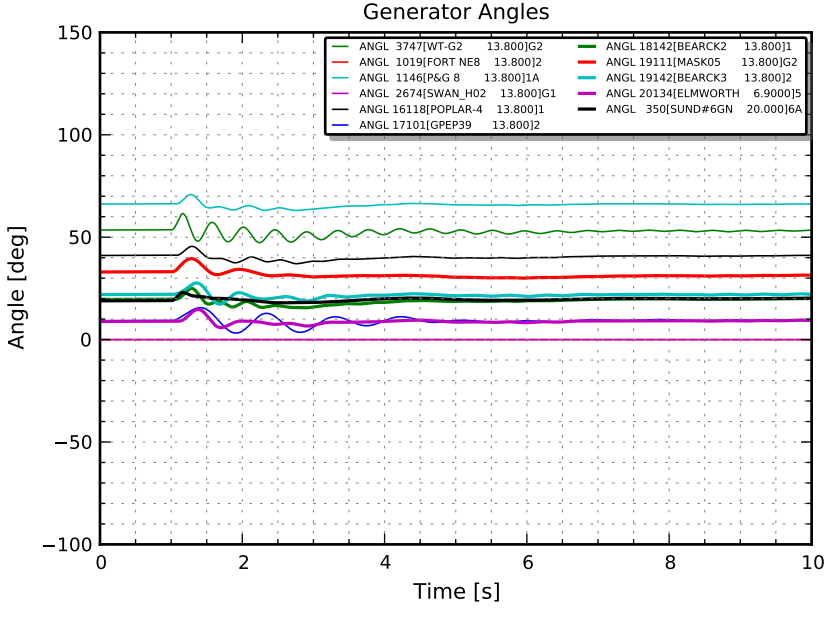
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 005 913L NORTHBARRHEAD to MITSUE_A.

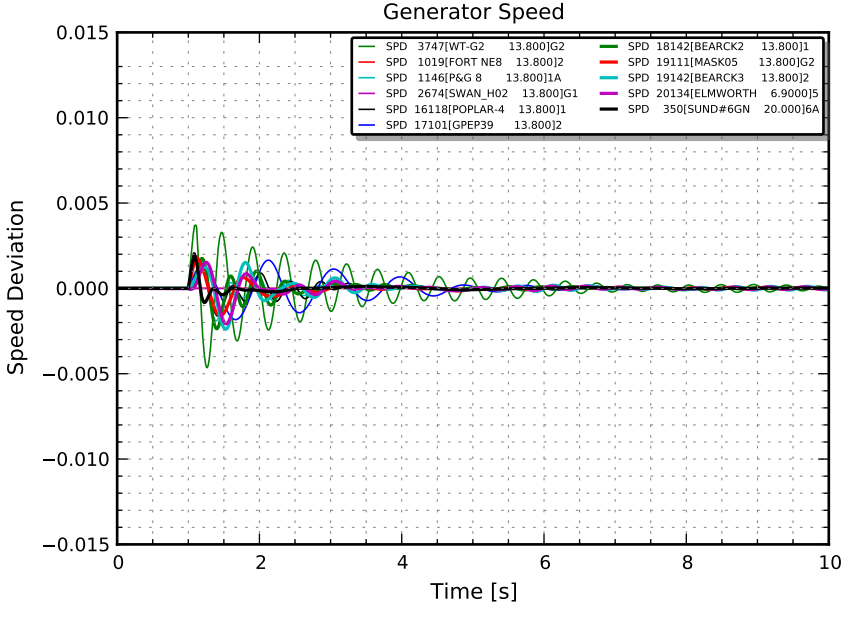
Study Area Generators

Appendix E2A
Figure: 005 (A. 2)





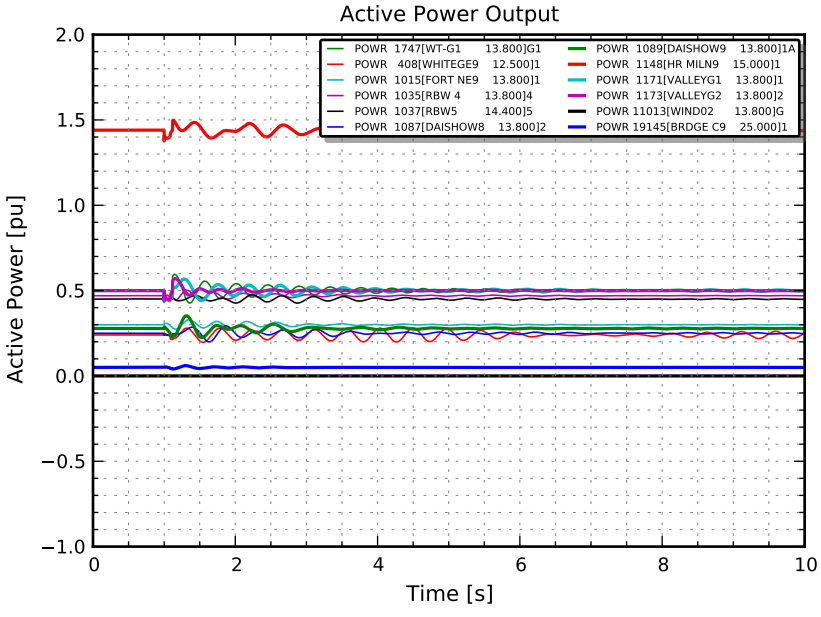


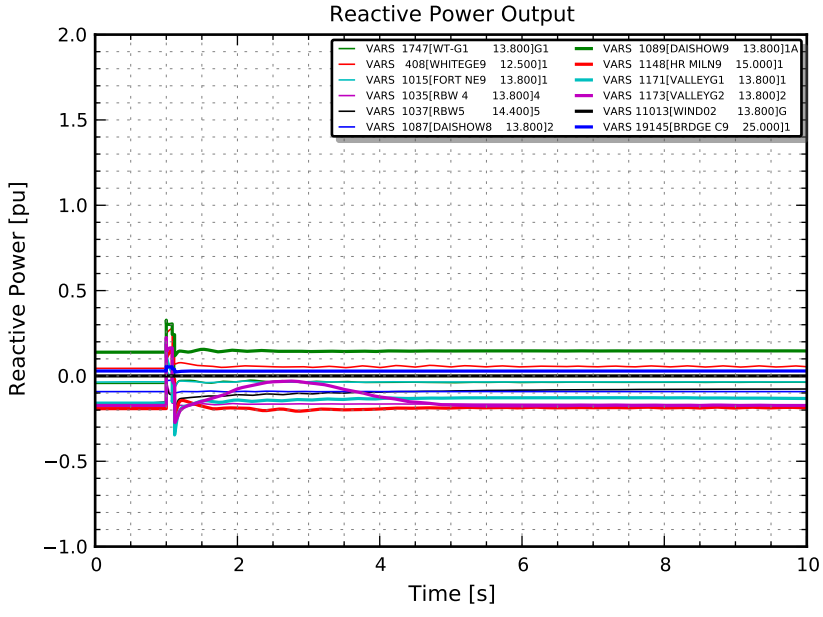


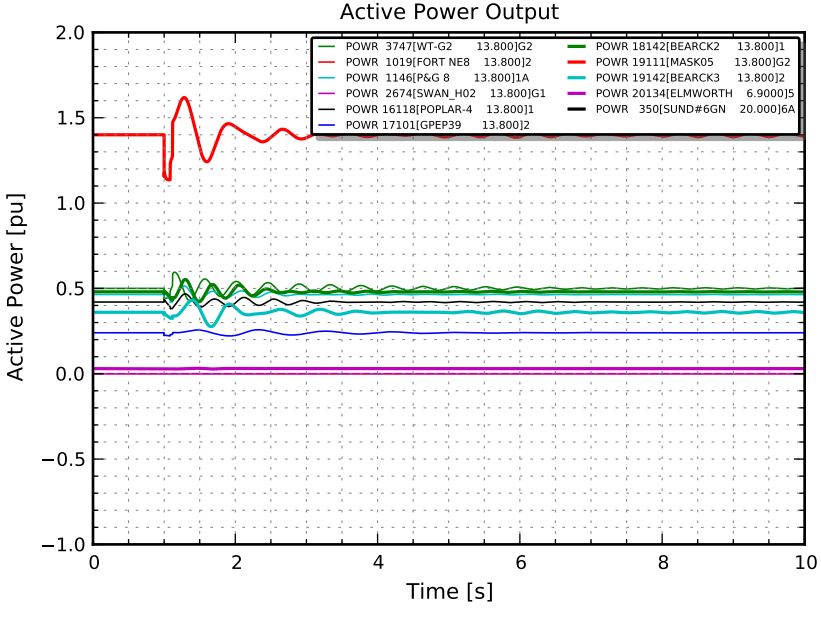
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 005 913L NORTHBARRHEAD to MITSUE_A.

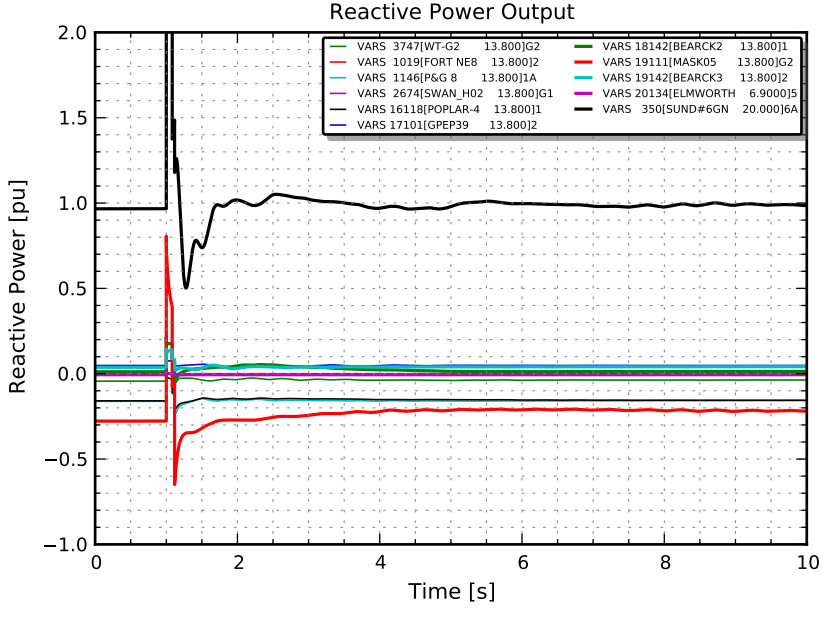
Study Area Generators

Appendix E2A
Figure: 005 (A. 3)





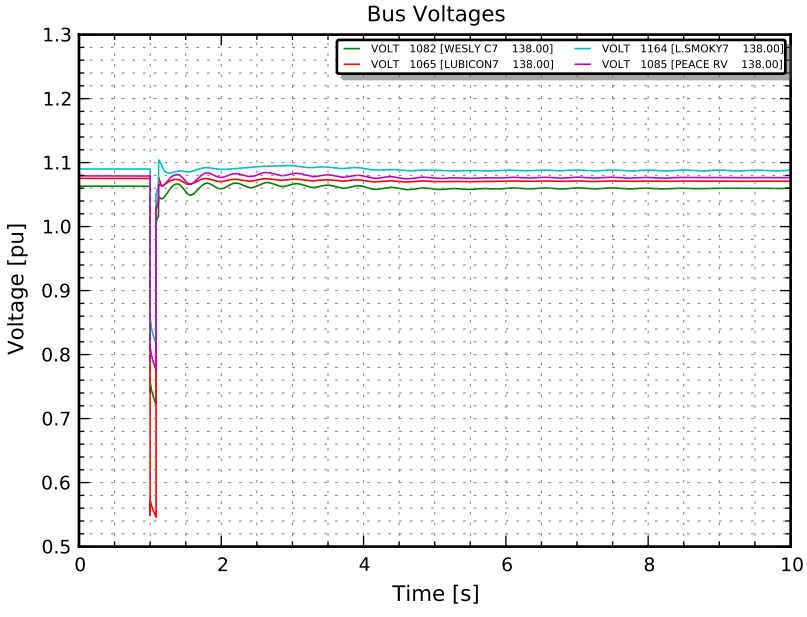


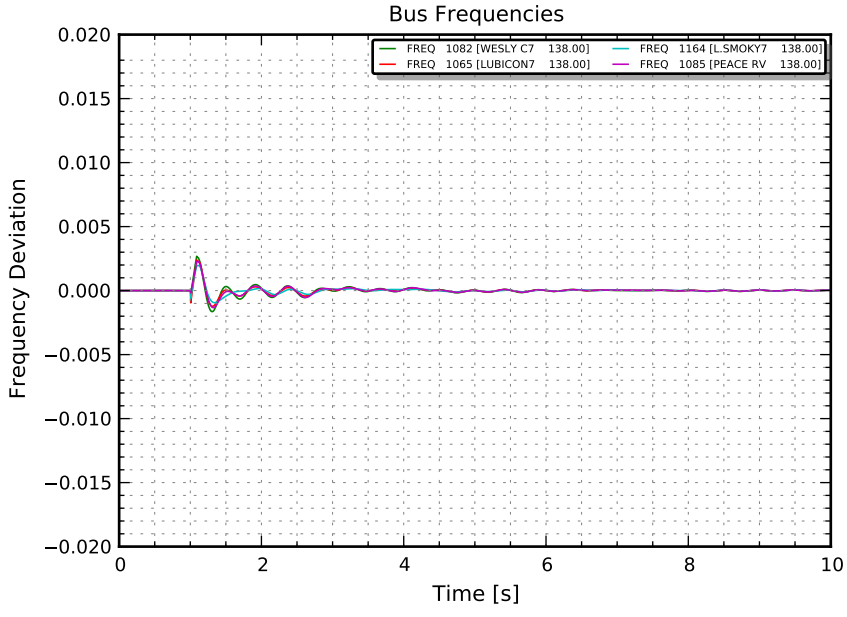


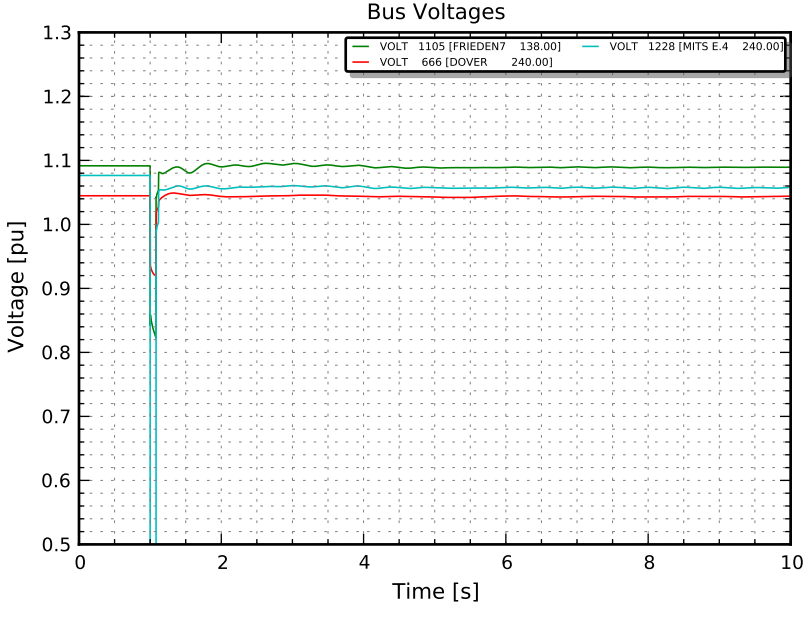
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 005 913L NORTHBARRHEAD to MITSUE_B.

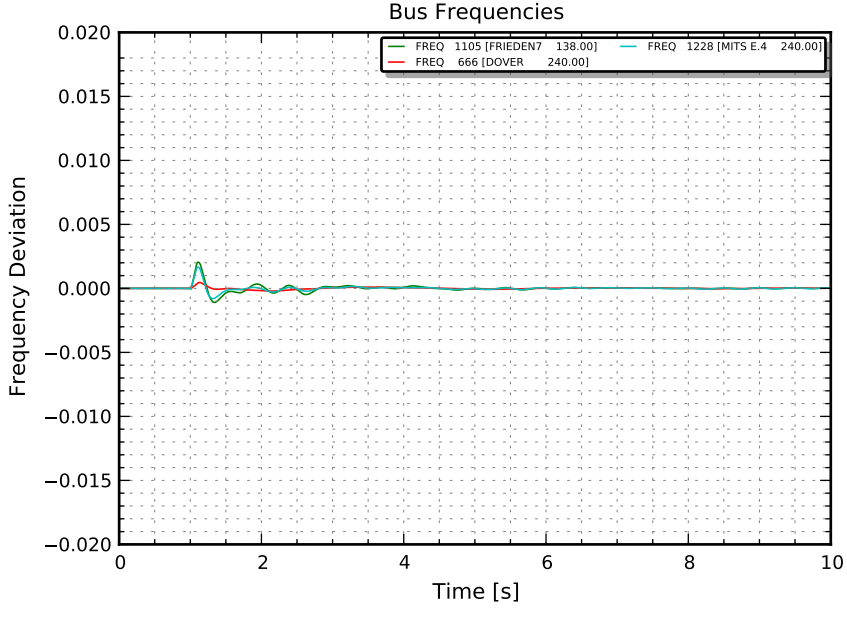
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 005 (B. 1)





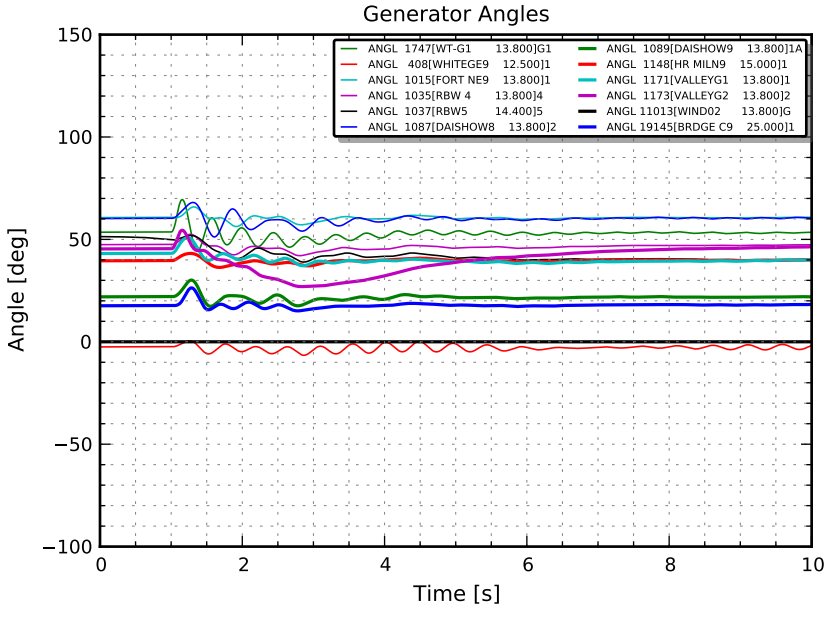


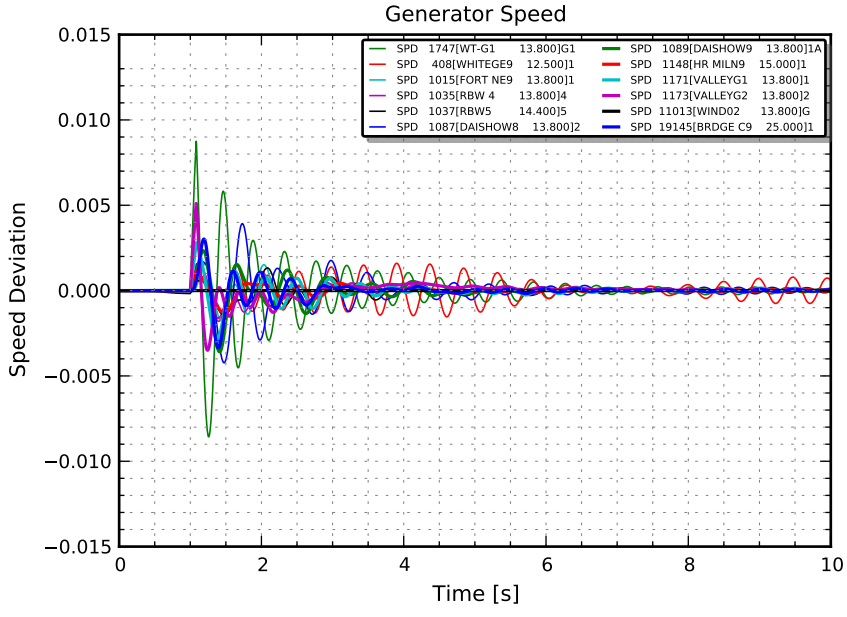


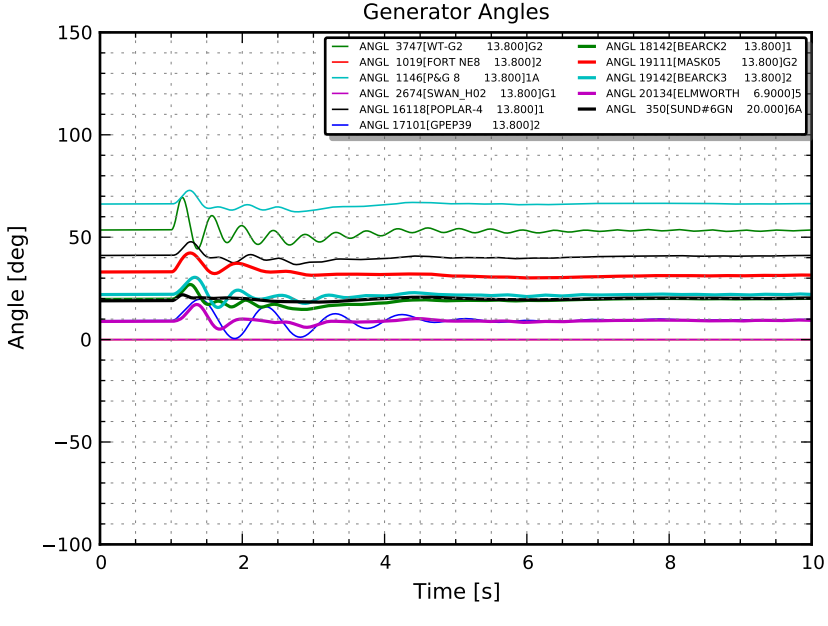
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 005 913L NORTHBARRHEAD to MITSUE_B.

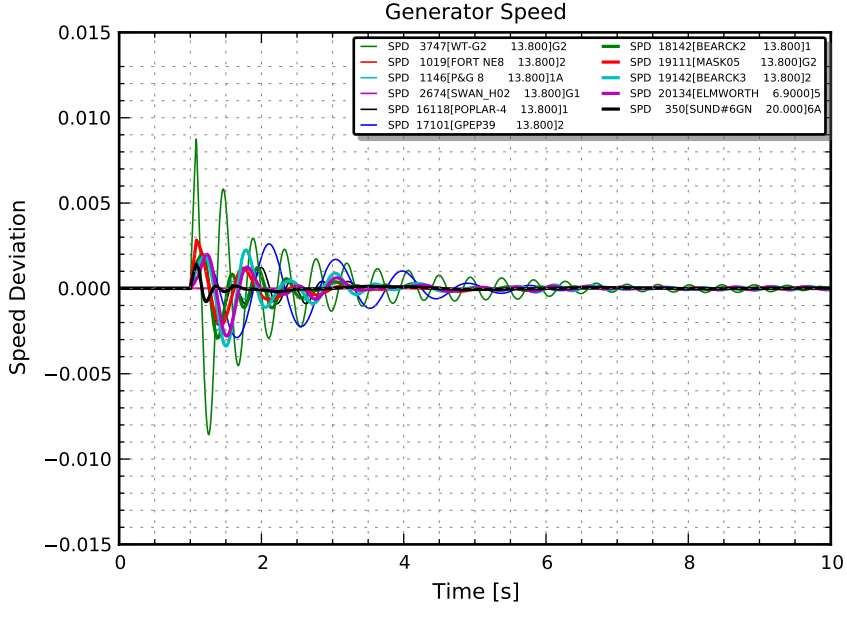
Study Area Generators

Appendix E2A
Figure: 005 (B. 2)





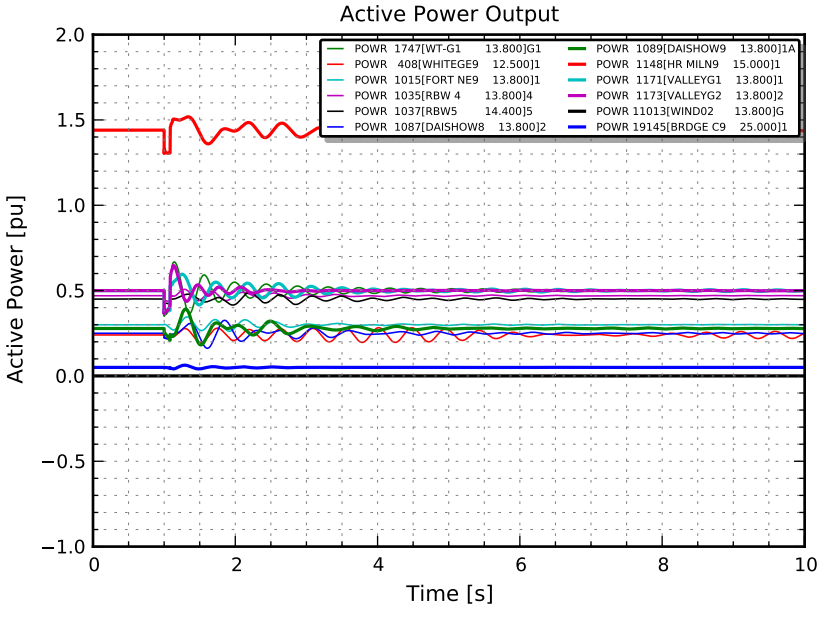


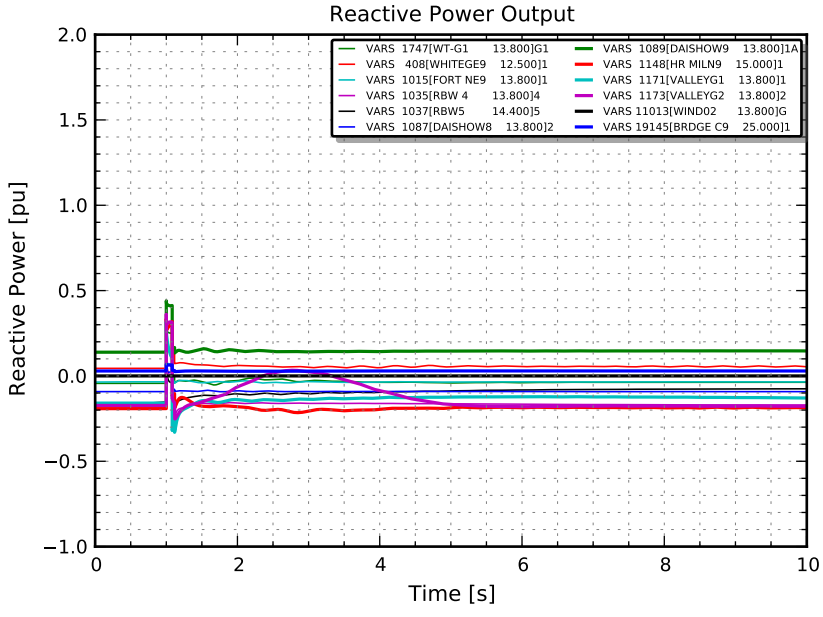


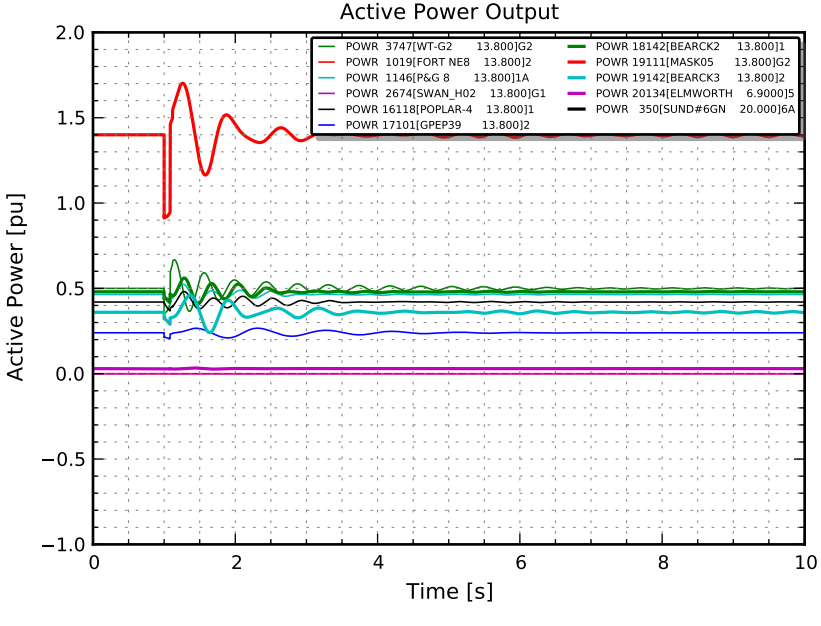
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 005 913L NORTHBARRHEAD to MITSUE_B.

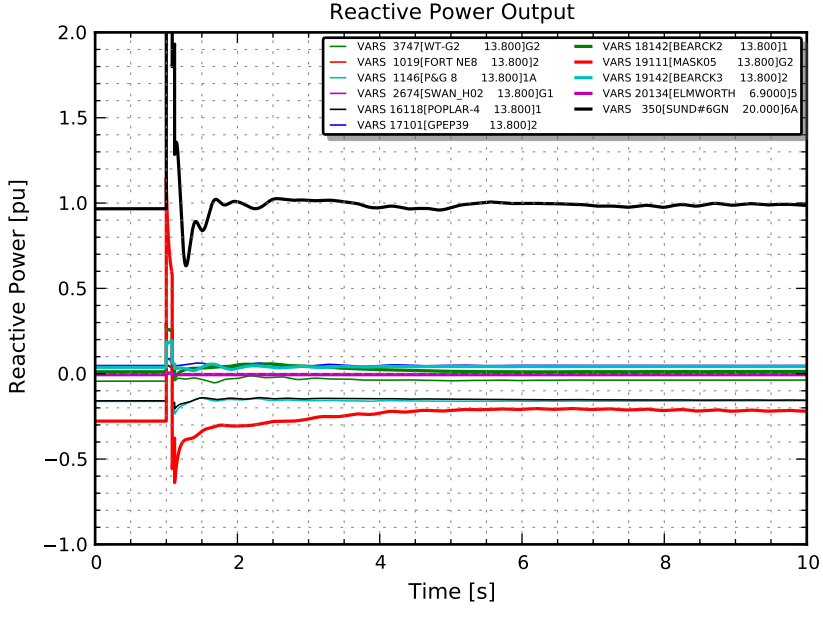
Study Area Generators

Appendix E2A
Figure: 005 (B. 3)





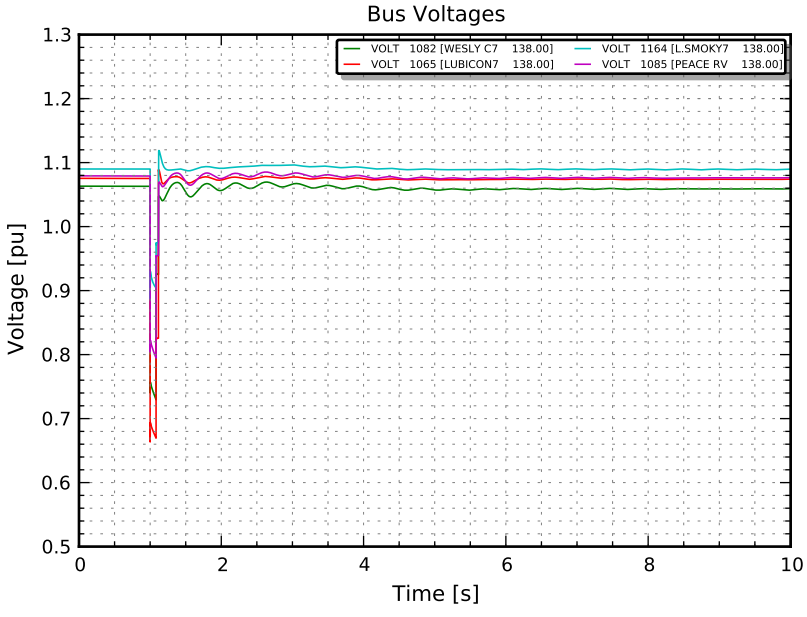


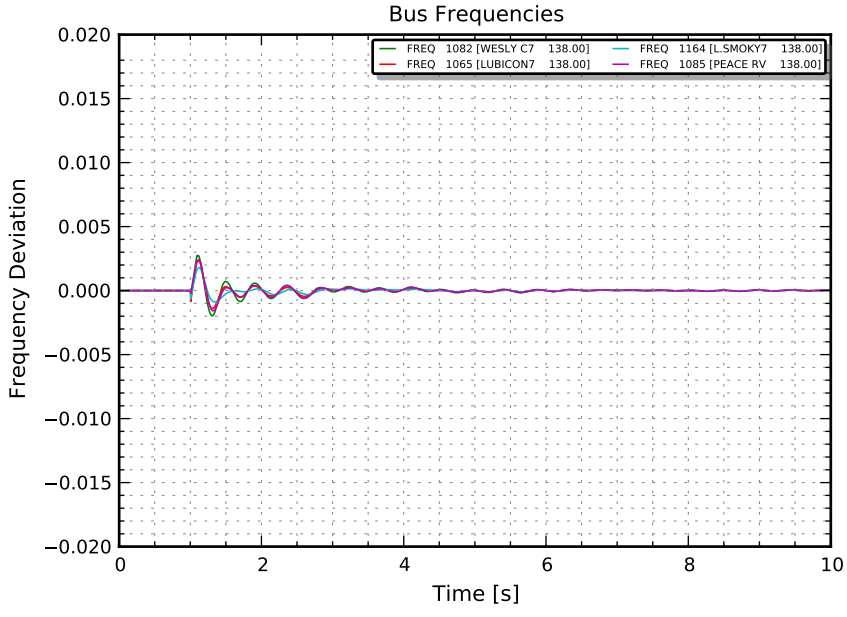


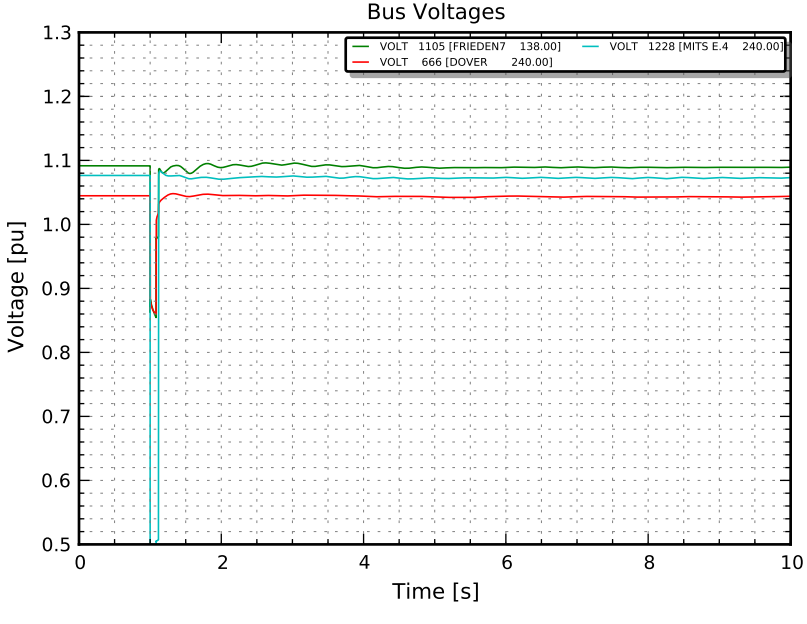
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 006 9L56 WABASCA to MITSUE_A.

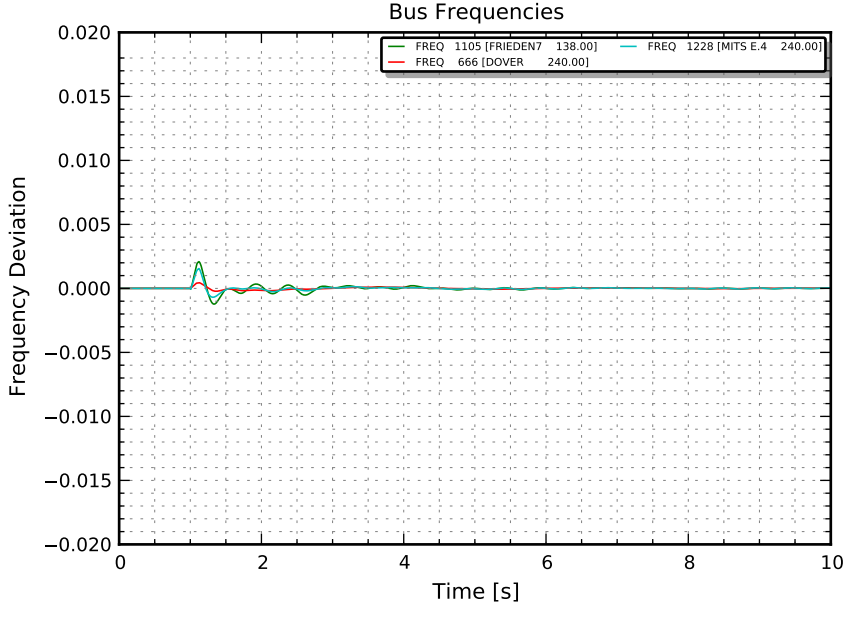
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 006 (A. 1)





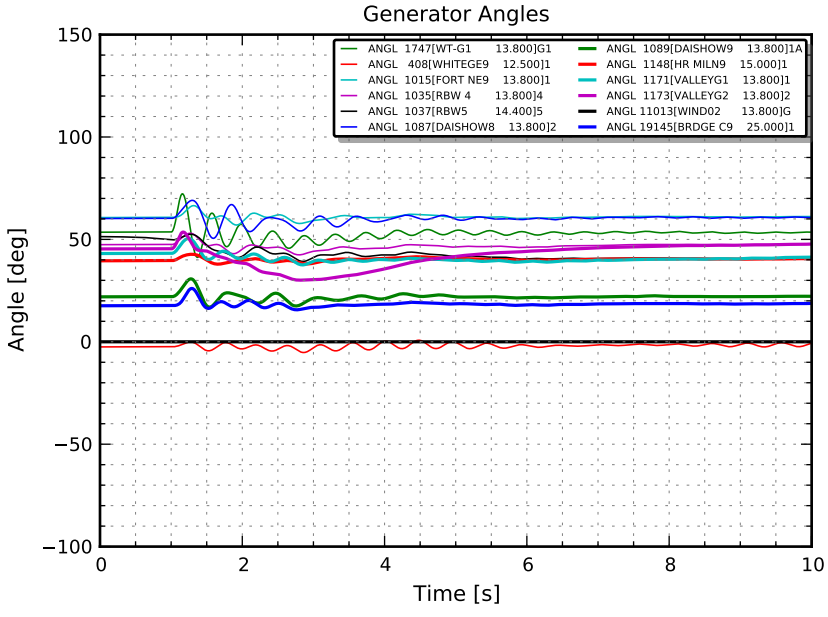


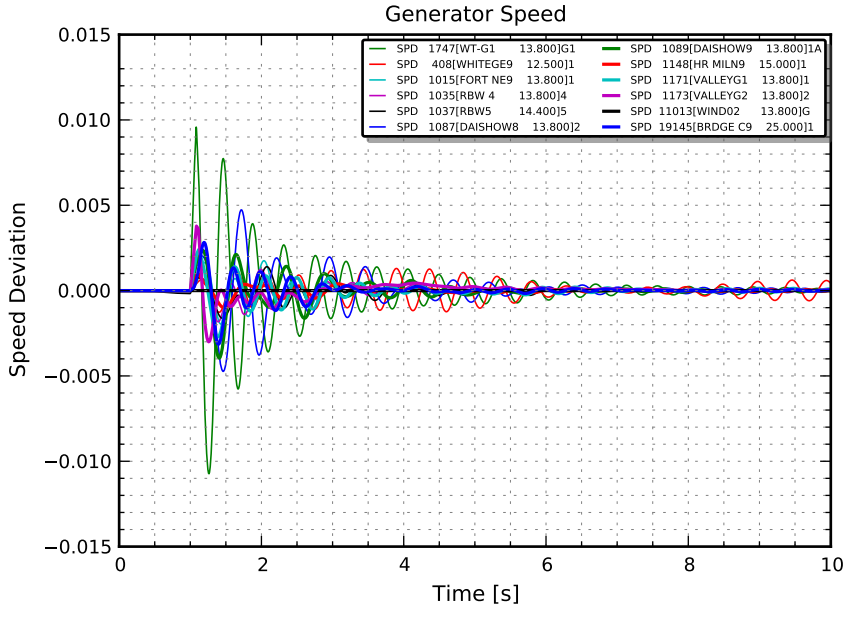


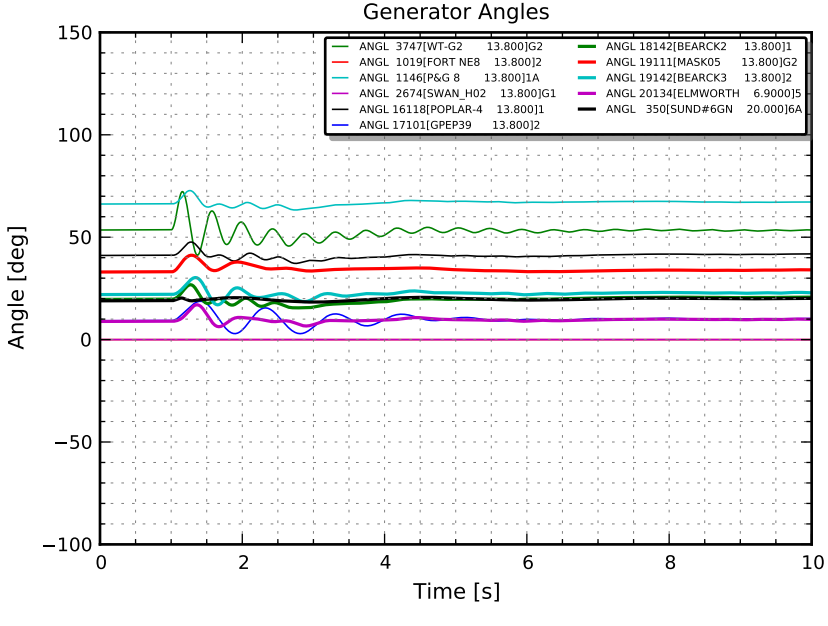
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 006 9L56 WABASCA to MITSUE_A.

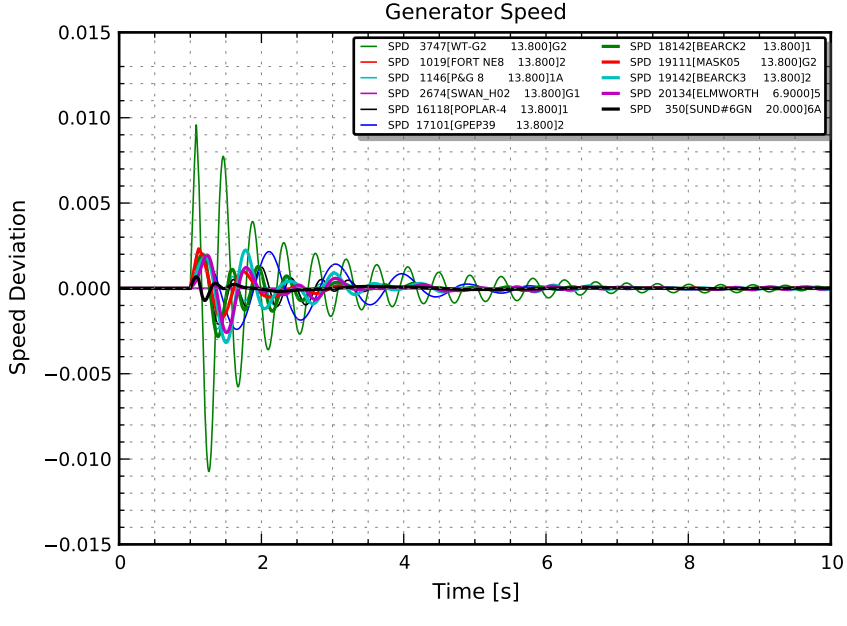
Study Area Generators

Appendix E2A
Figure: 006 (A. 2)





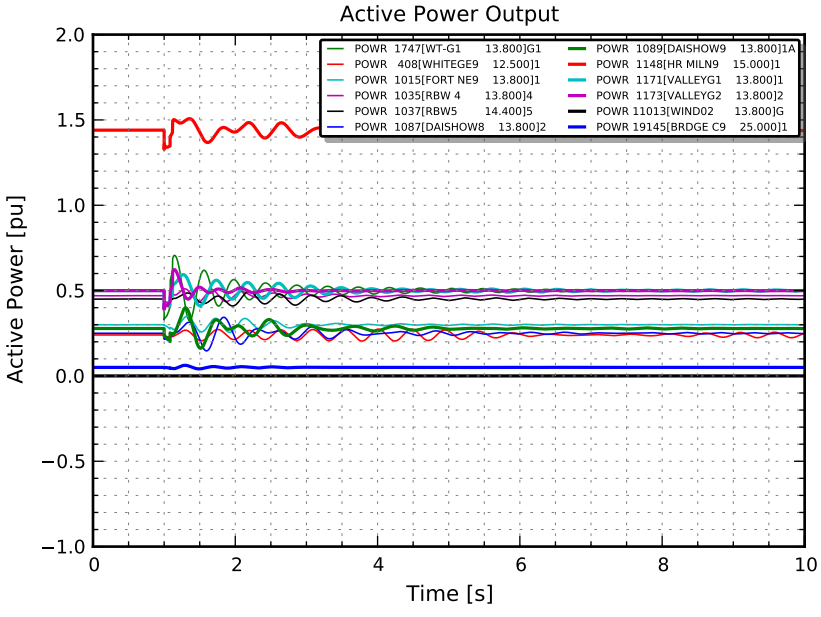


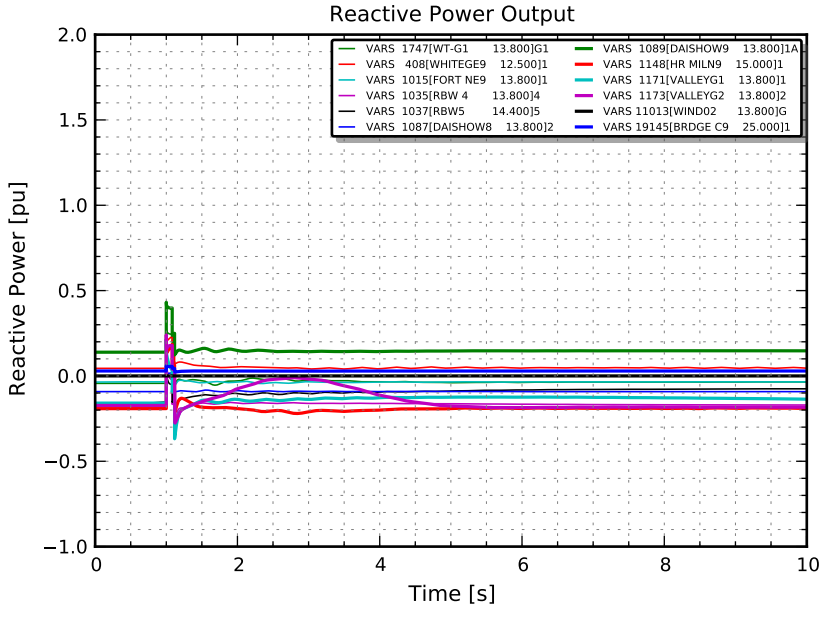


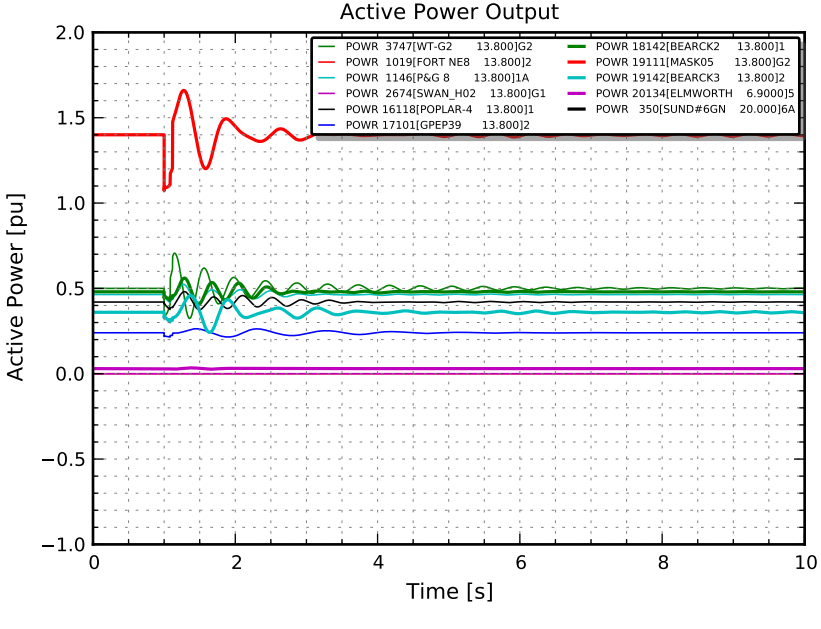
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 006 9L56 WABASCA to MITSUE_A.

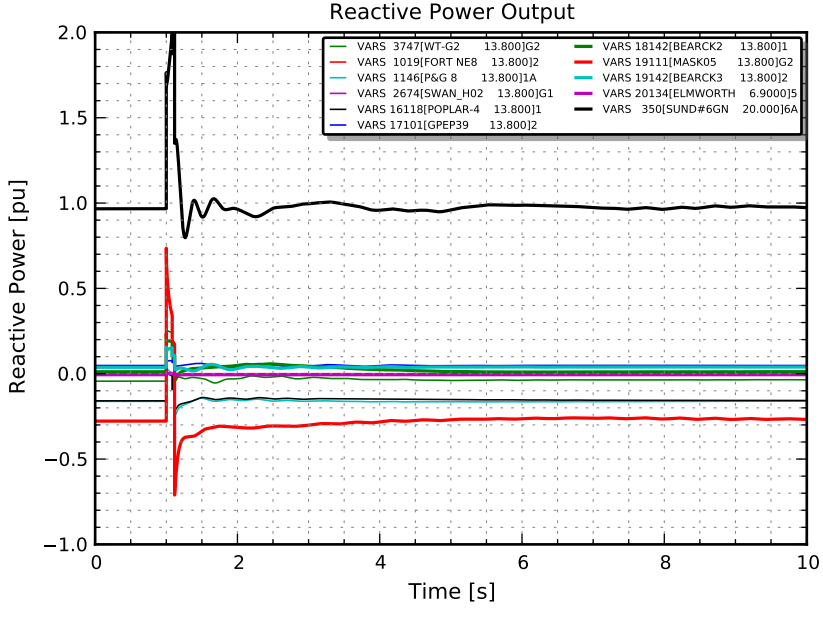
Study Area Generators

Appendix E2A
Figure: 006 (A. 3)





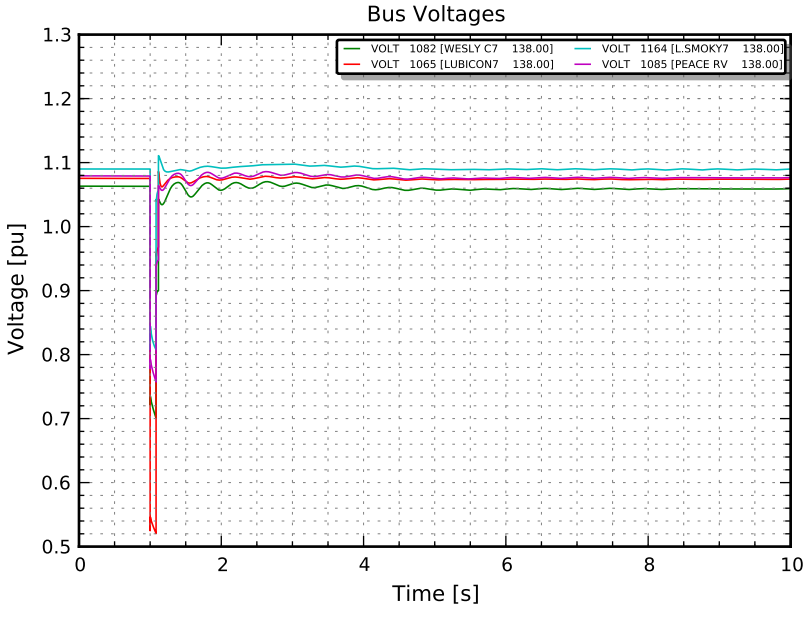


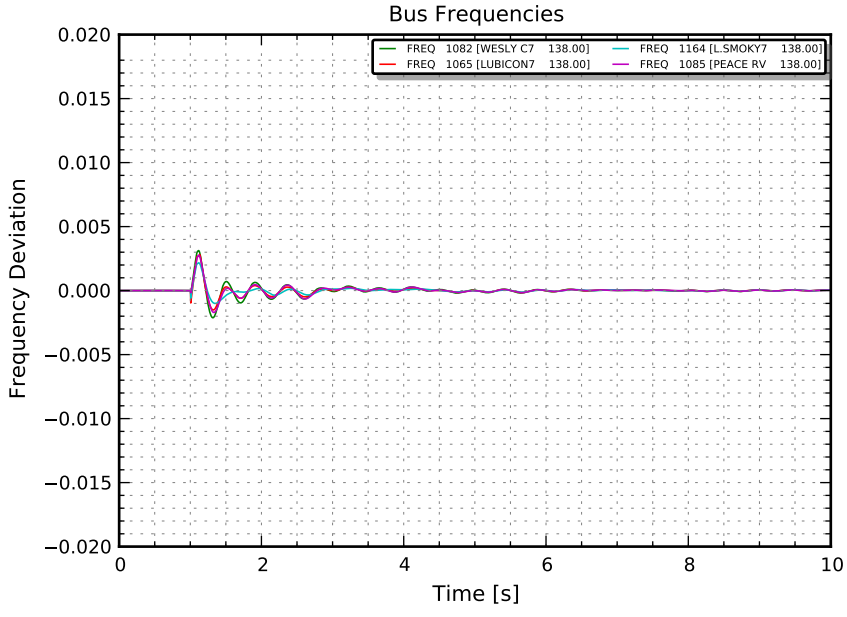


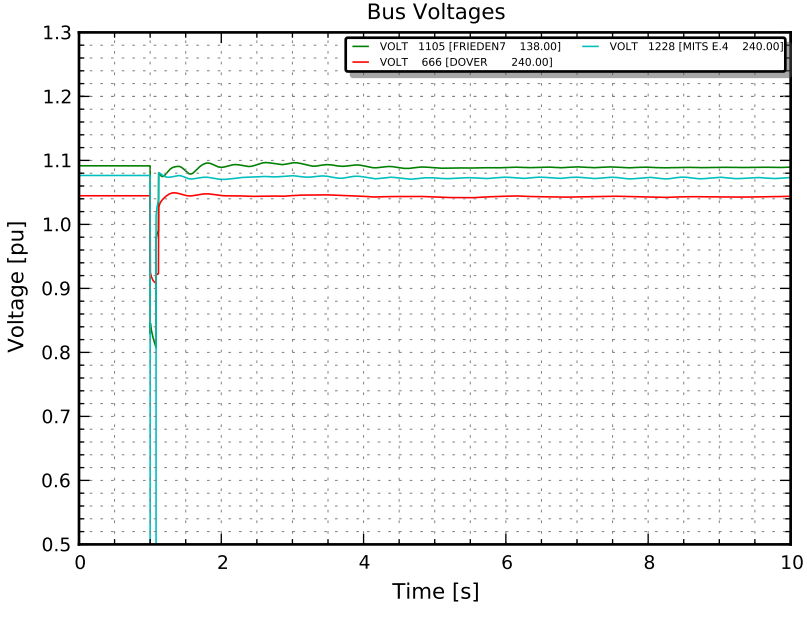
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 006 9L56 WABASCA to MITSUE_B.

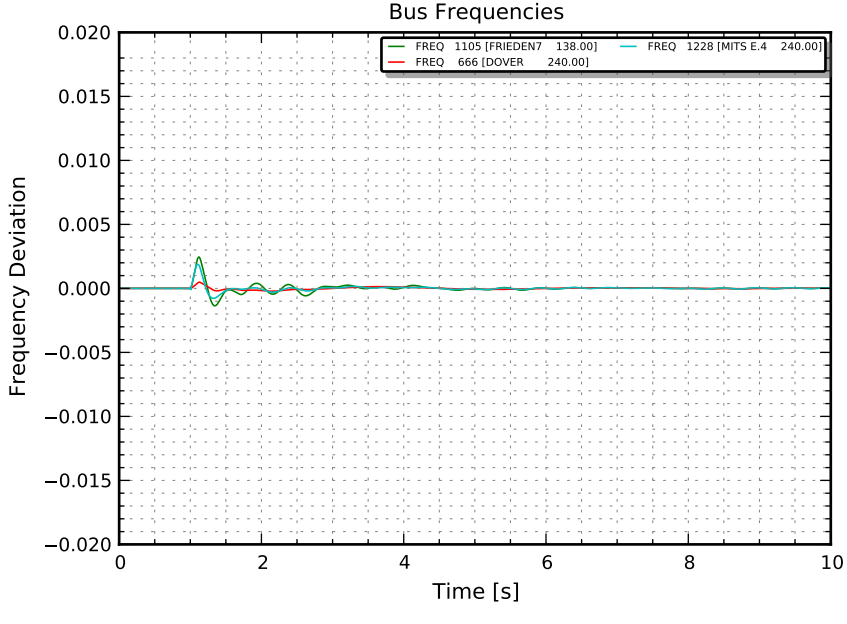
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 006 (B. 1)





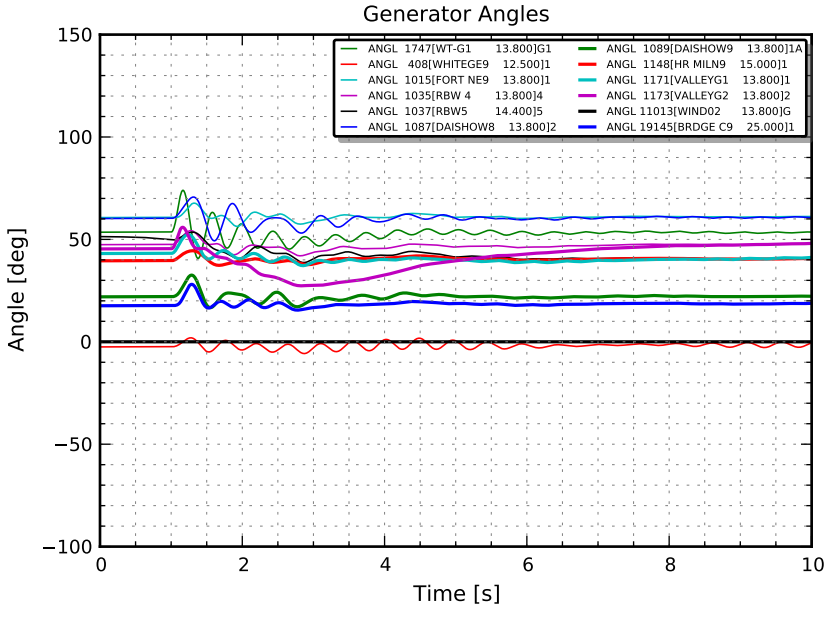


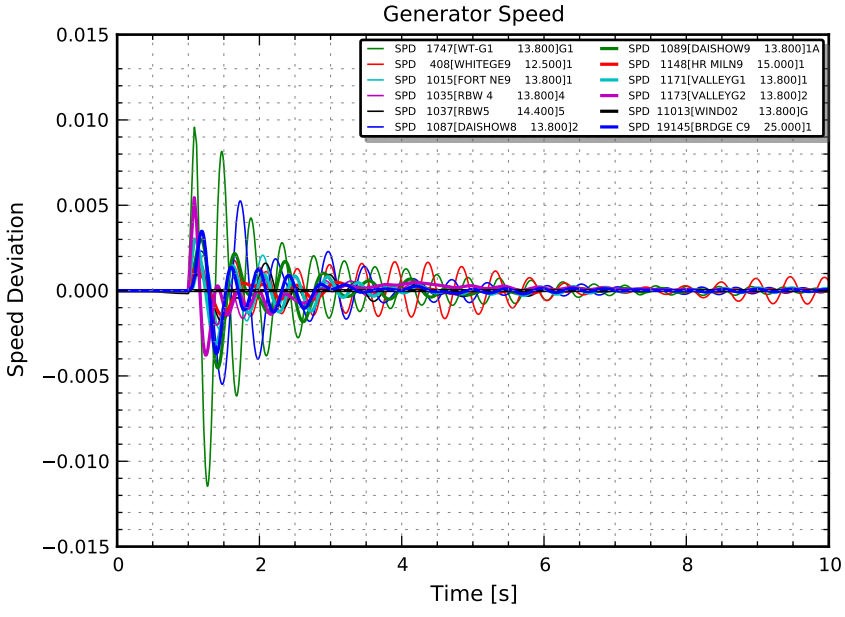


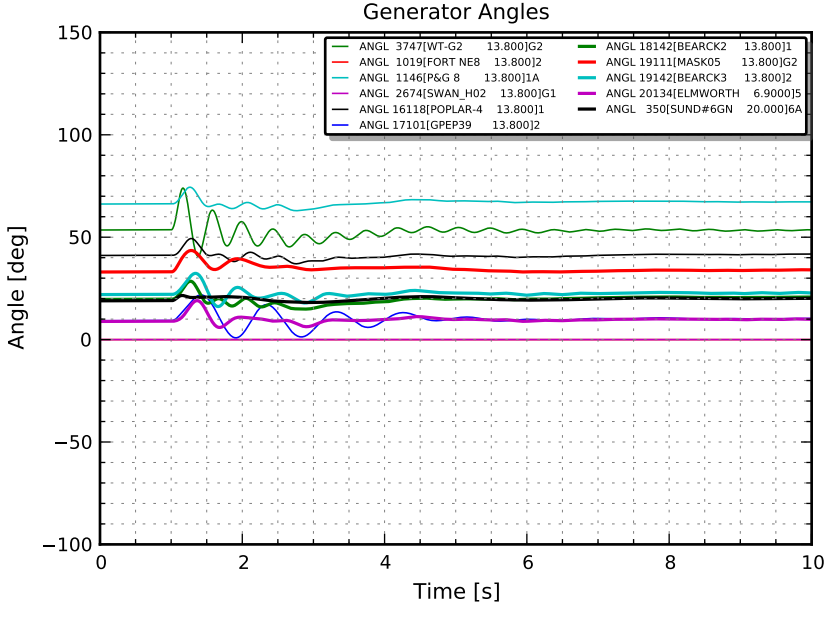
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 006 9L56 WABASCA to MITSUE_B.

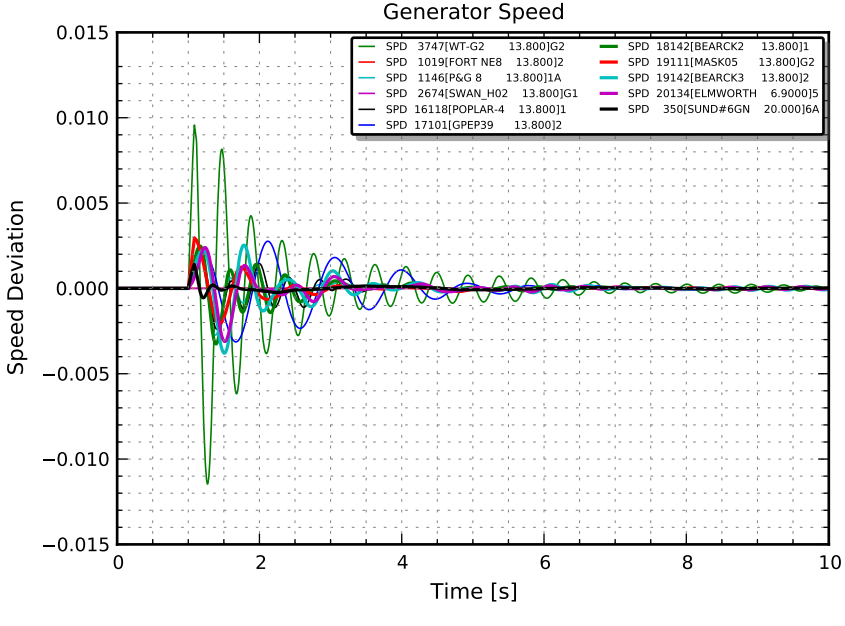
Study Area Generators

Appendix E2A
Figure: 006 (B. 2)





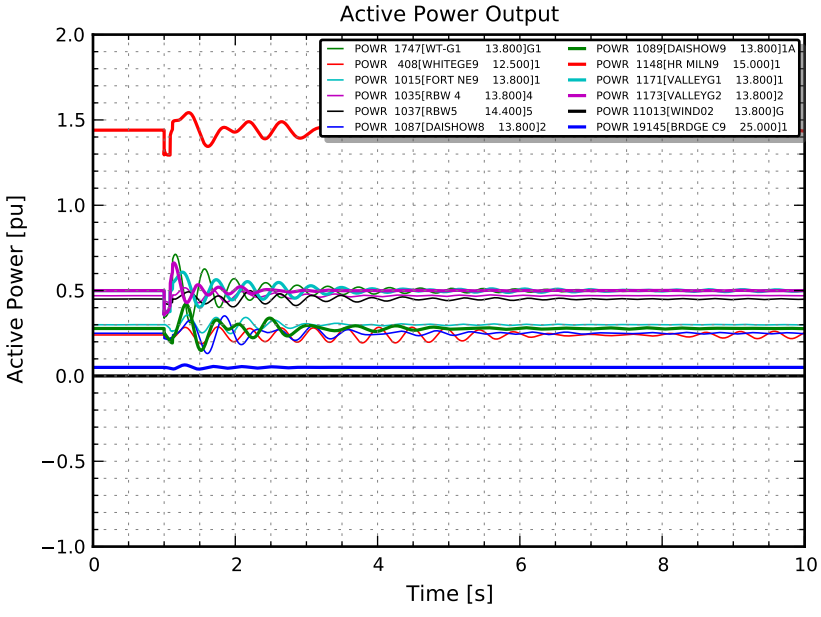


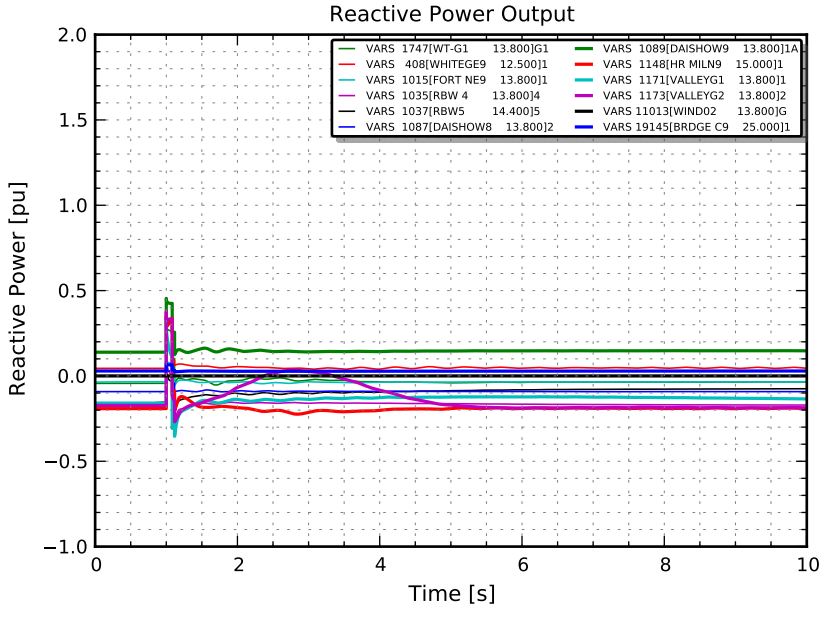


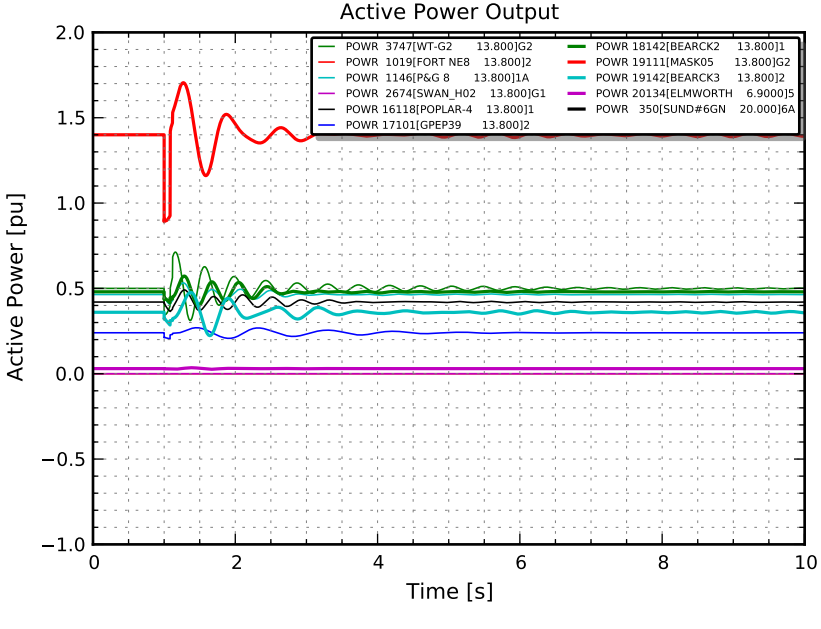
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 006 9L56 WABASCA to MITSUE_B.

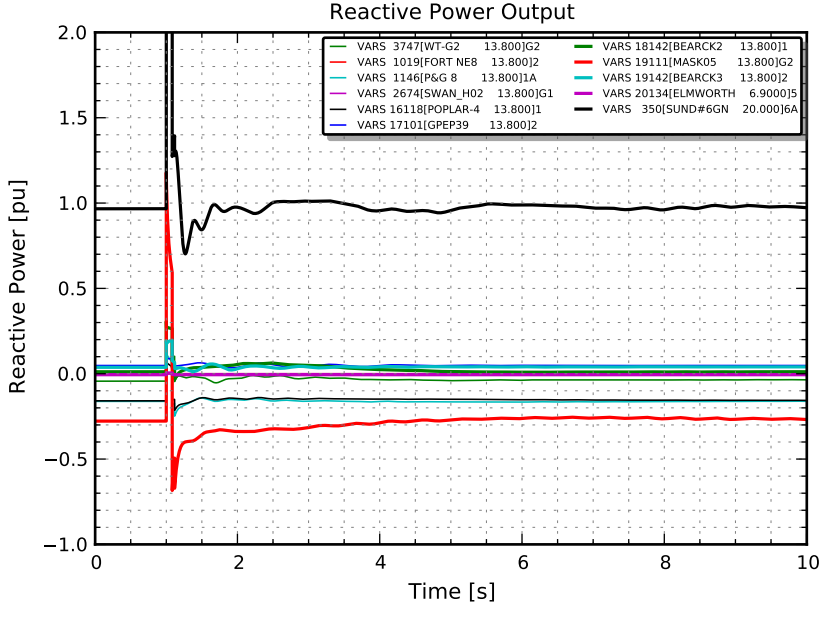
Study Area Generators

Appendix E2A
Figure: 006 (B. 3)





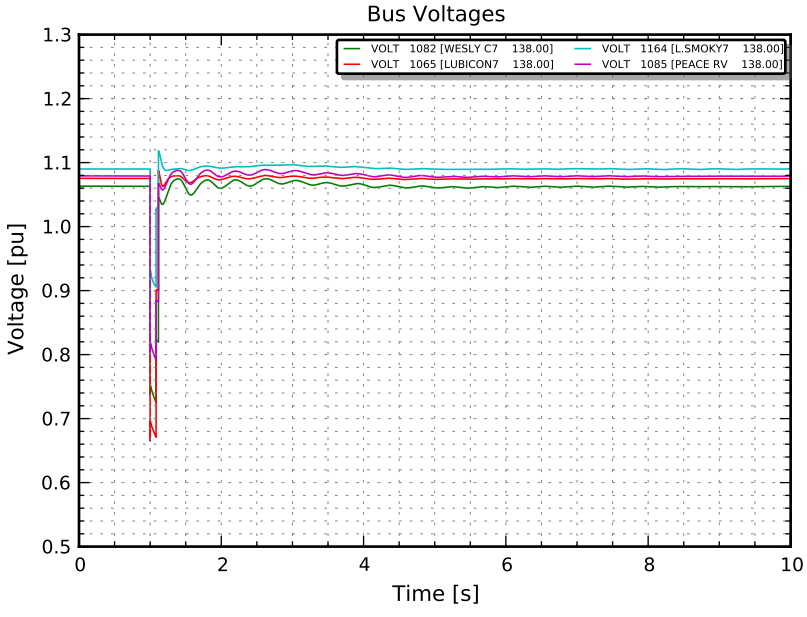


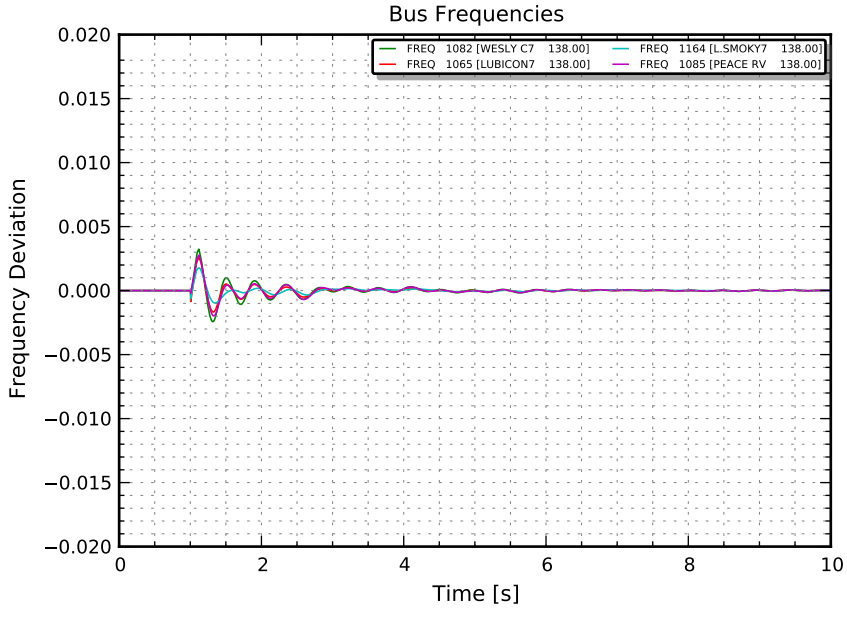


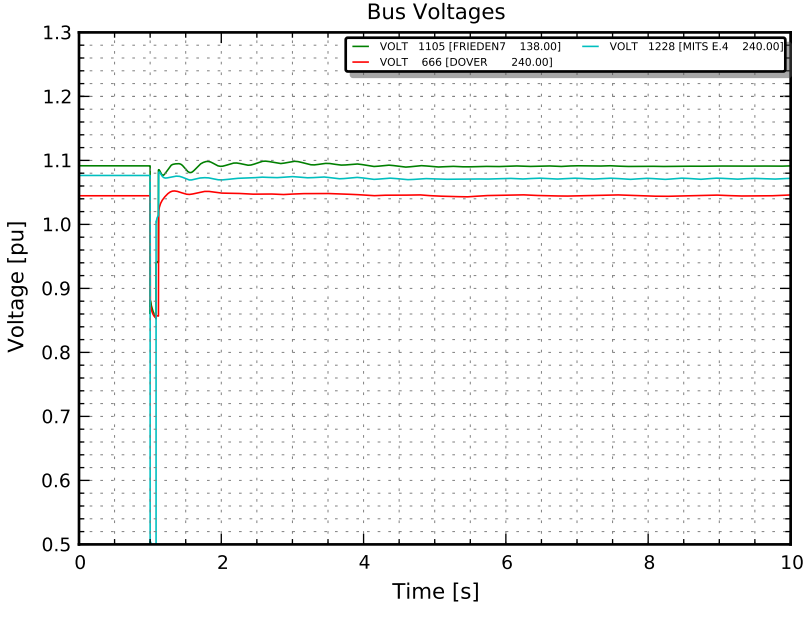
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 007 9L10 WABASCA to Brintnell_A.

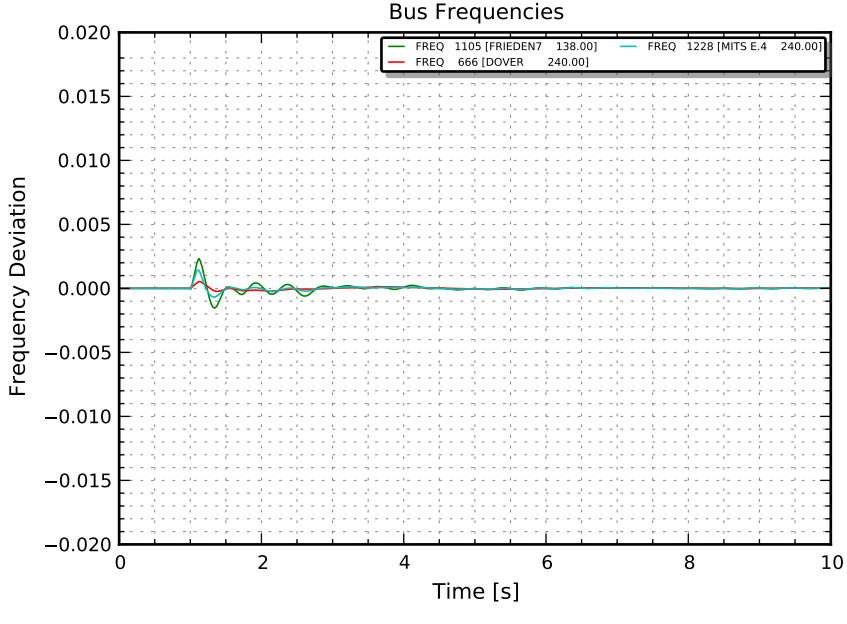
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 007 (A. 1)





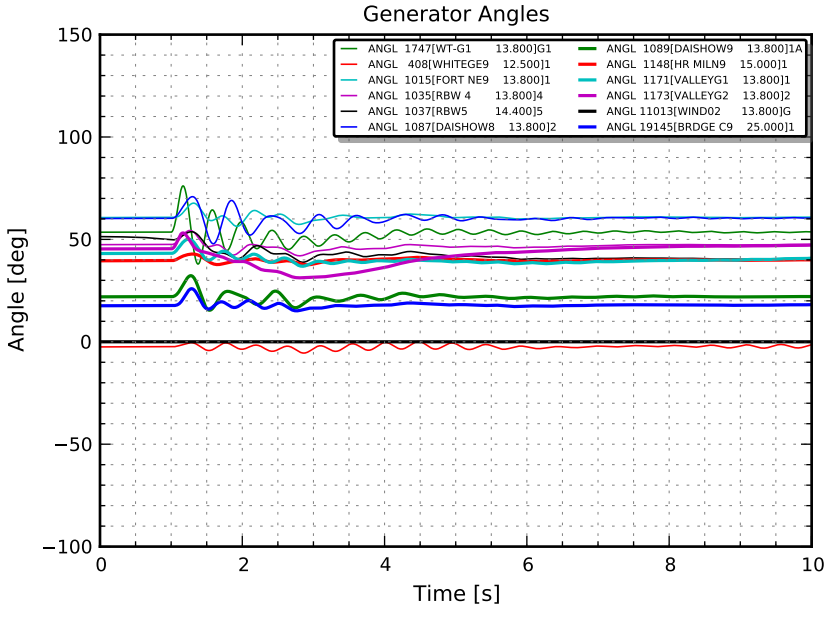


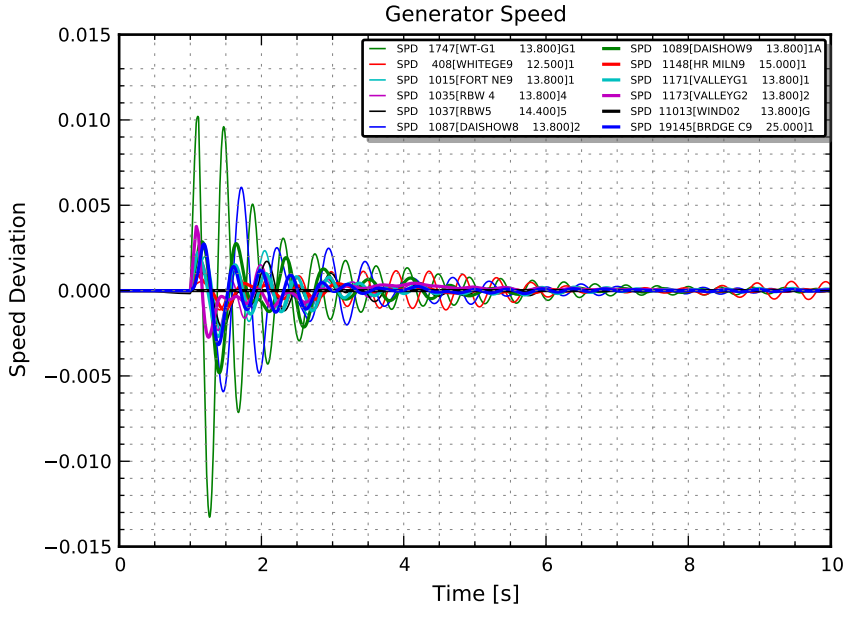


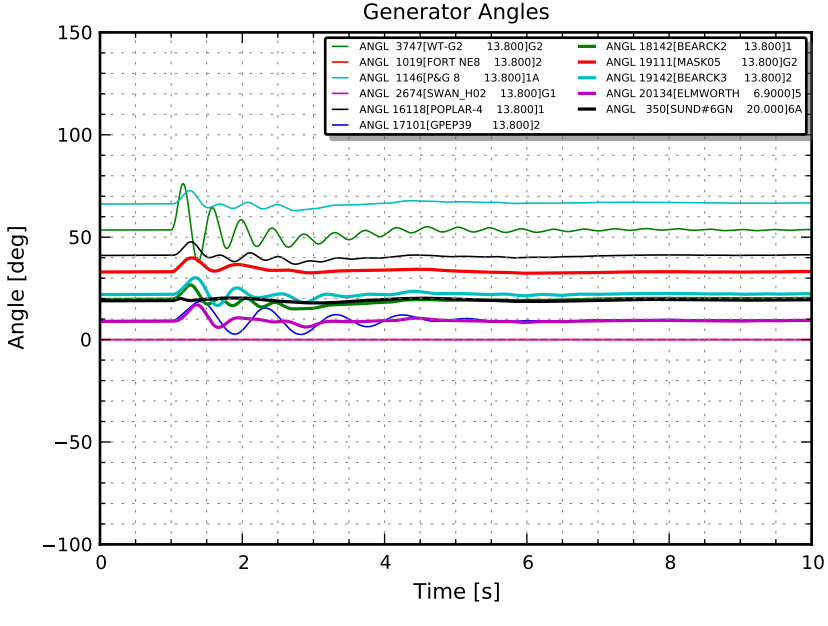
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 007 9L10 WABASCA to Brintnell_A.

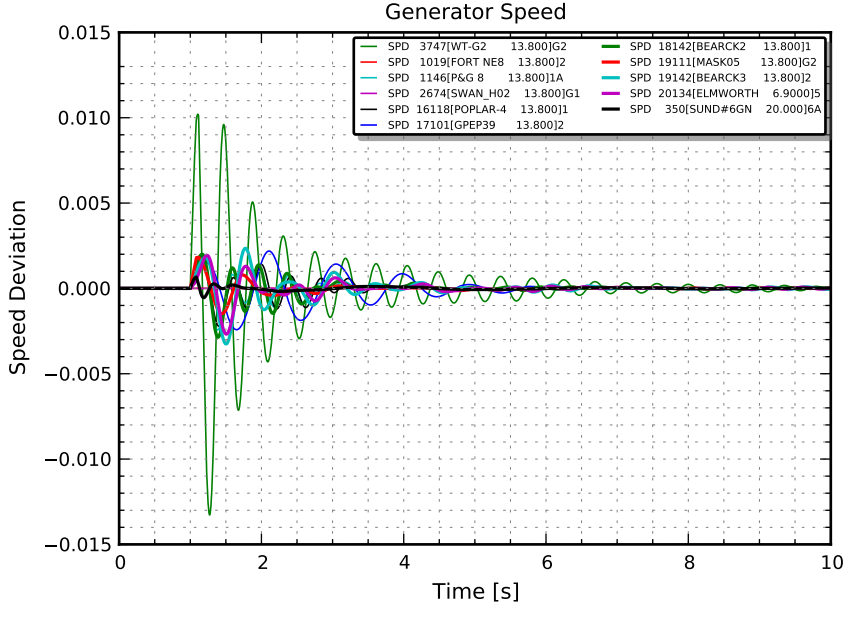
Study Area Generators

Appendix E2A
Figure: 007 (A. 2)





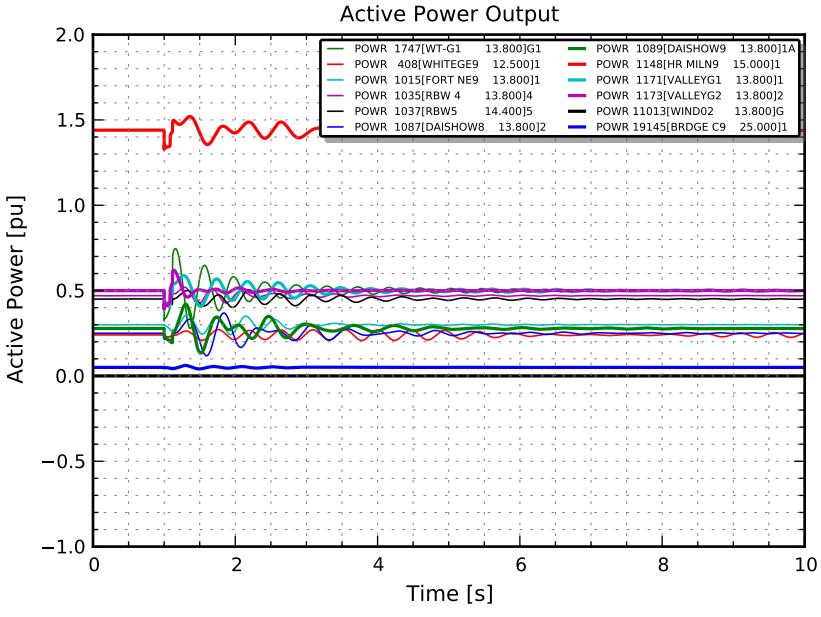


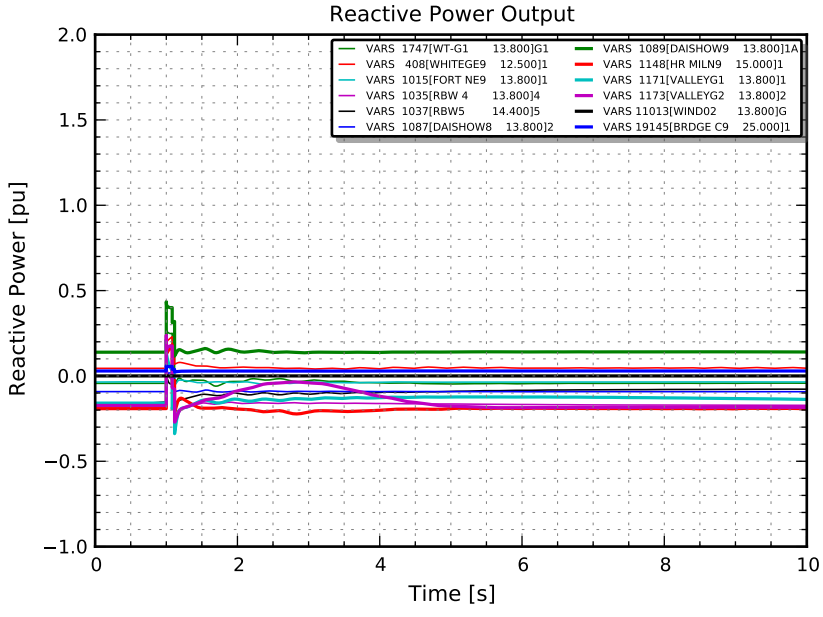


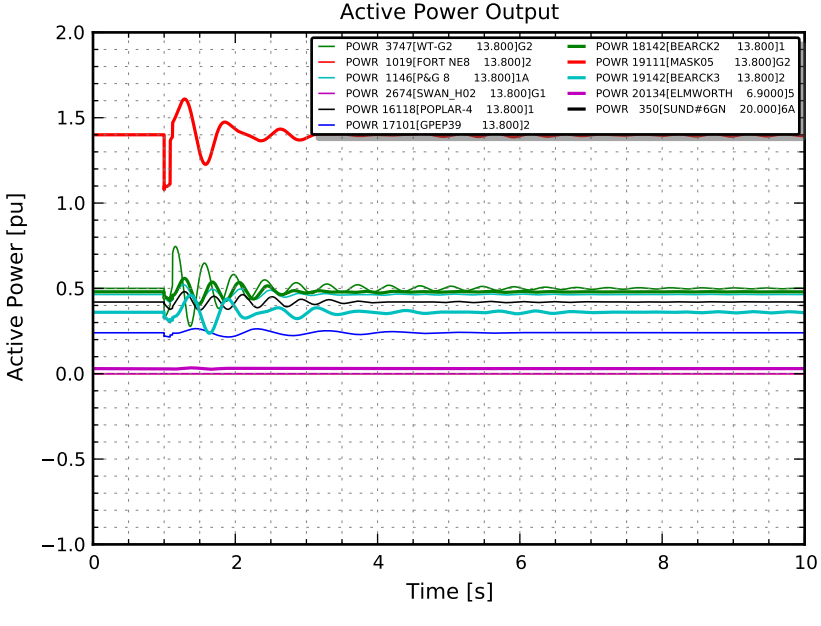
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 007 9L10 WABASCA to Brintnell_A.

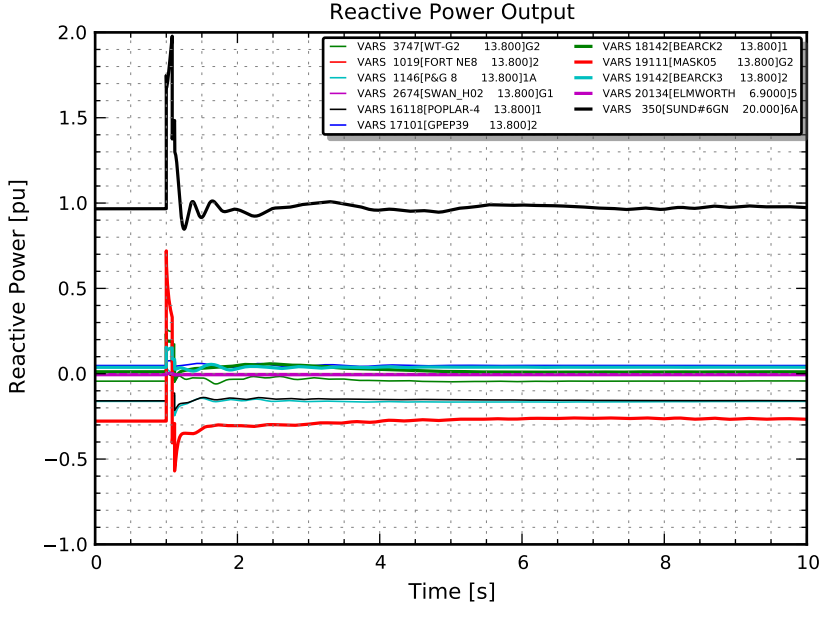
Study Area Generators

Appendix E2A
Figure: 007 (A. 3)





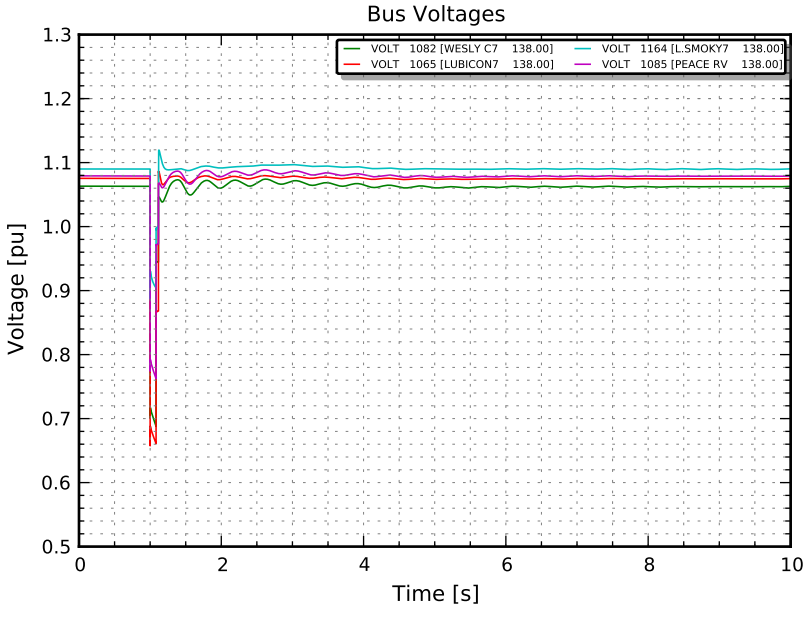


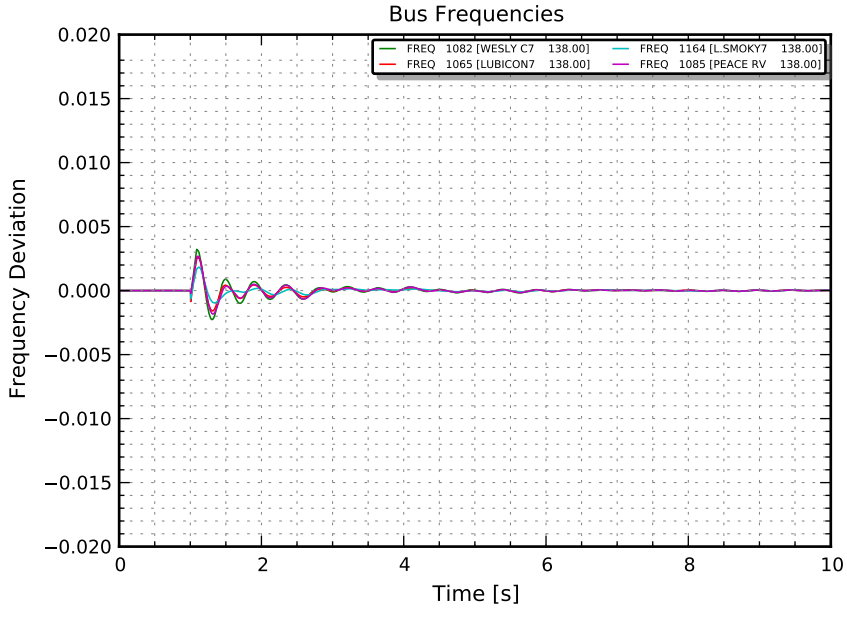


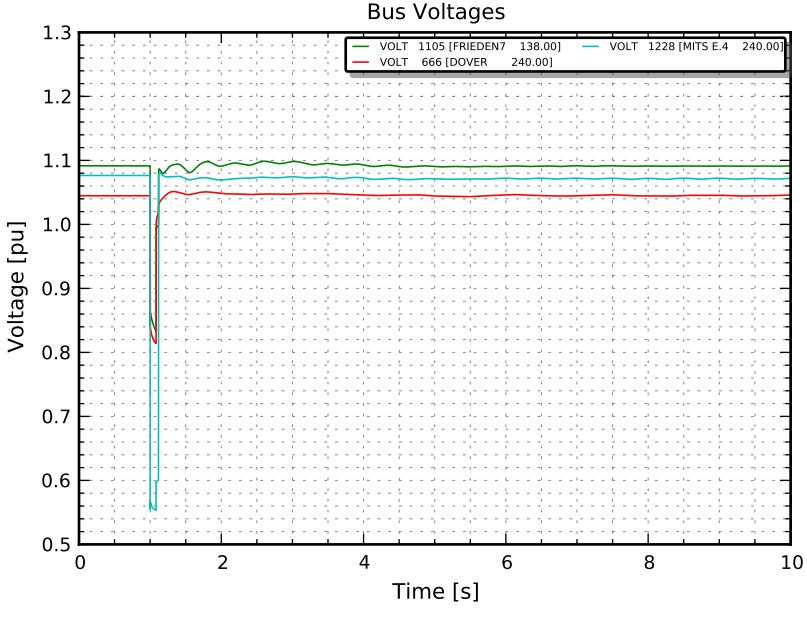
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 007 9L10 WABASCA to Brintnell_B.

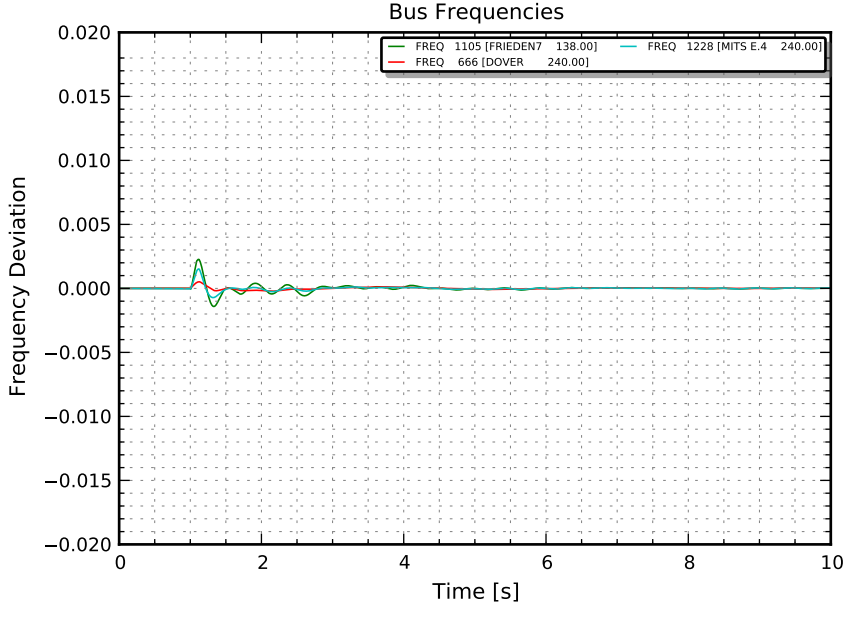
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 007 (B. 1)





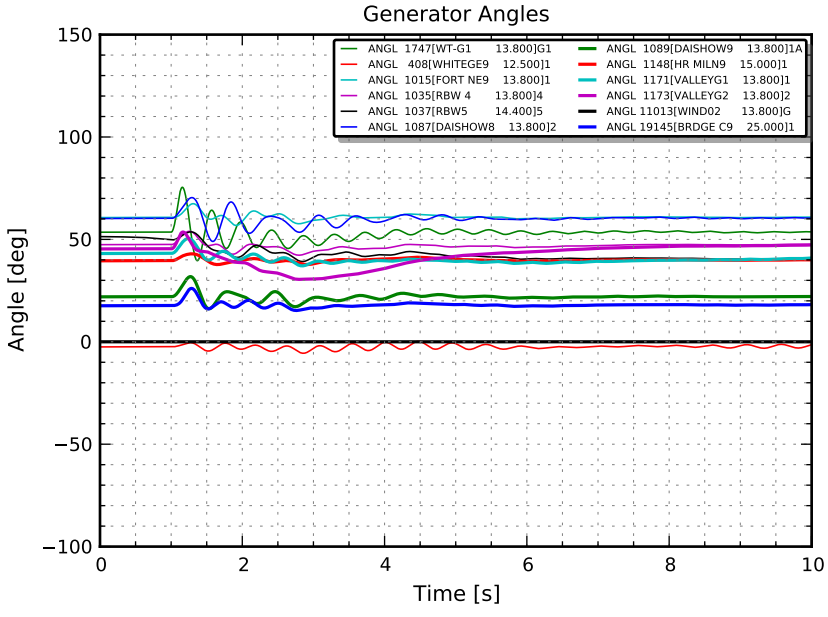


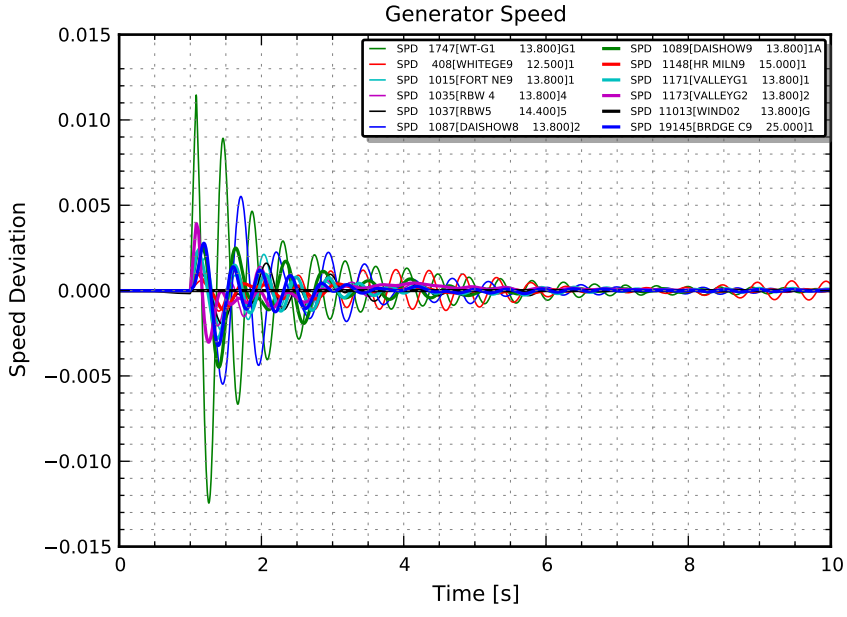


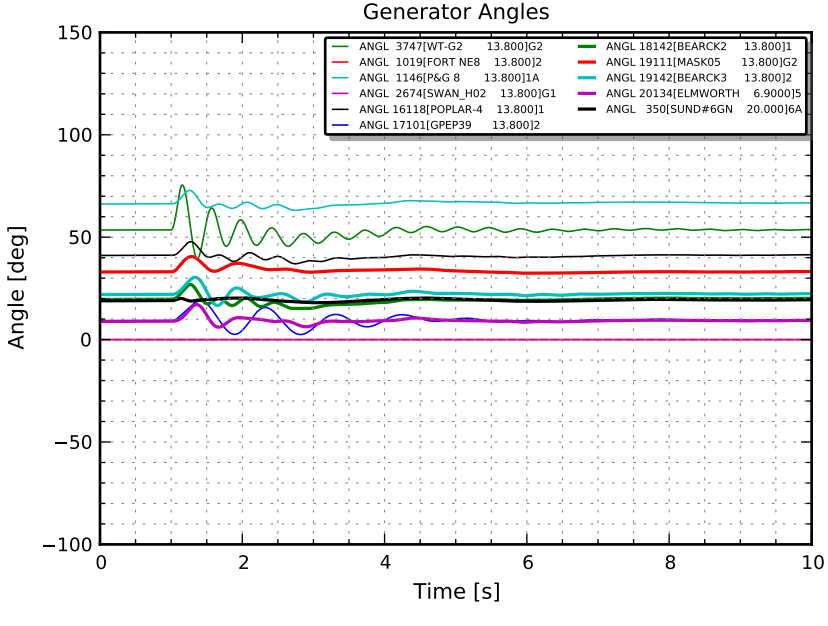
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 007 9L10 WABASCA to Brintnell_B.

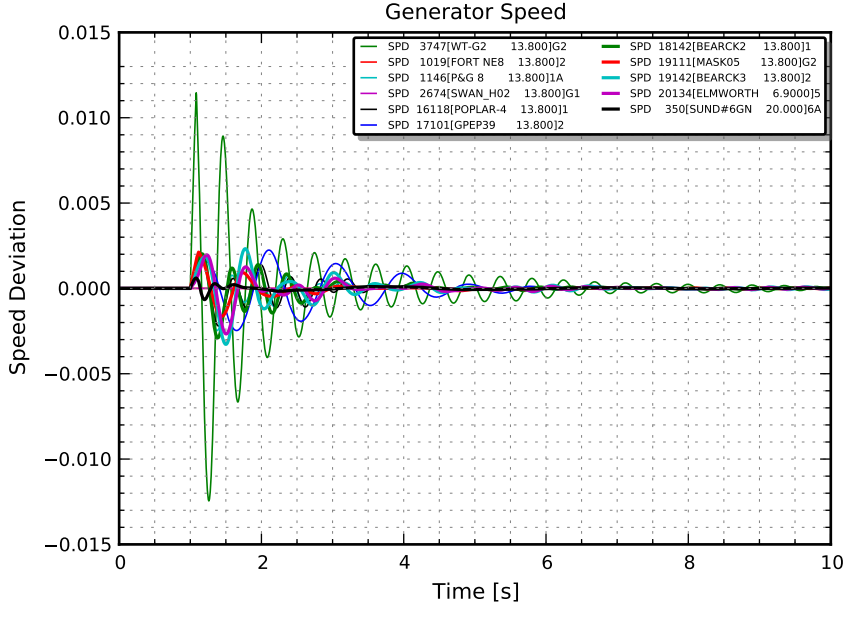
Study Area Generators

Appendix E2A
Figure: 007 (B. 2)





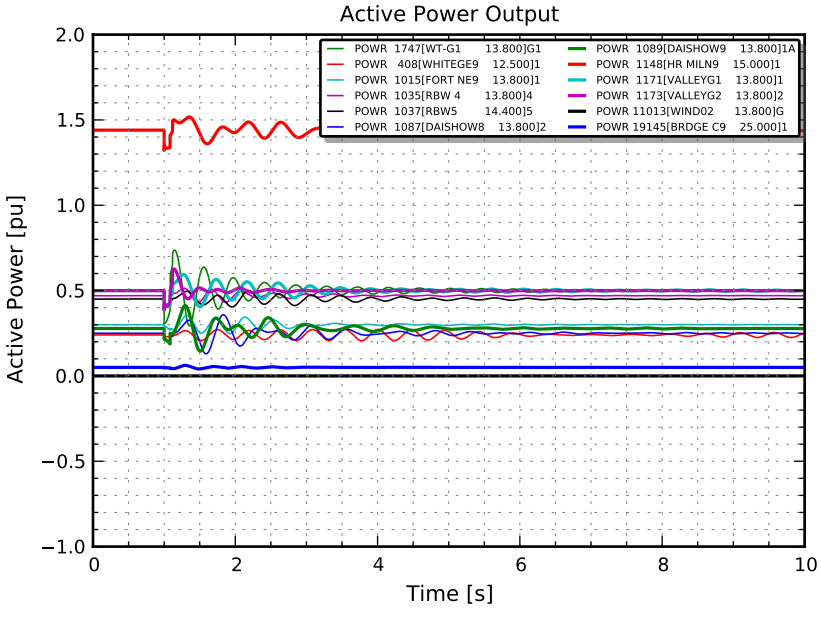


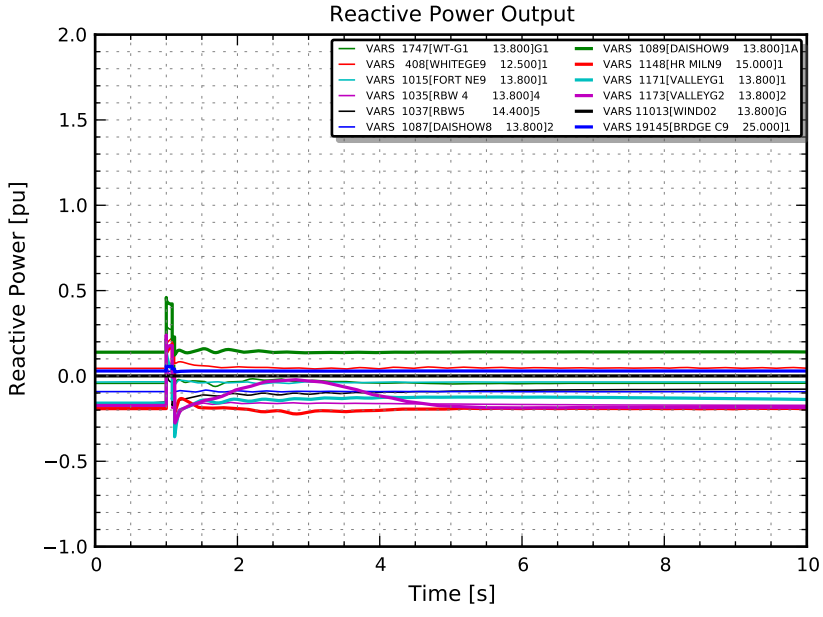


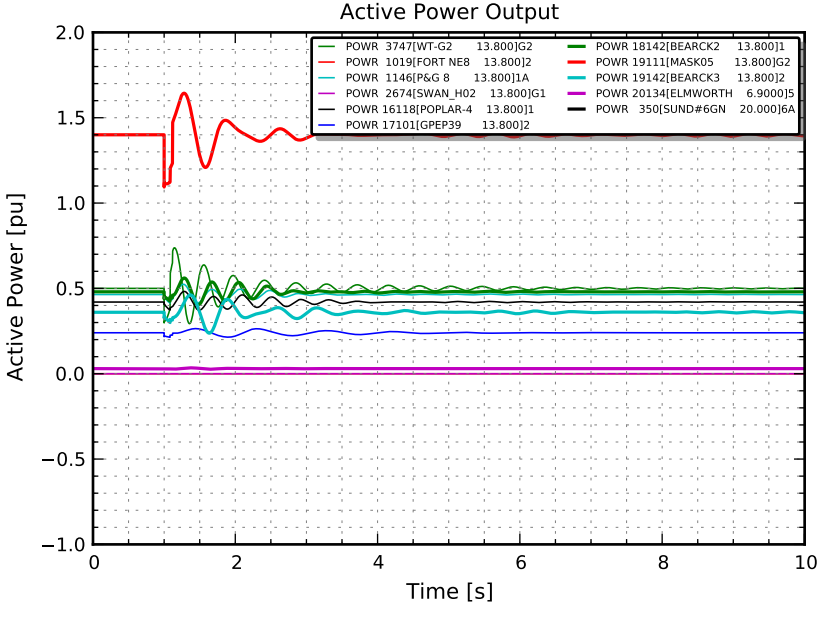
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 007 9L10 WABASCA to Brintnell_B.

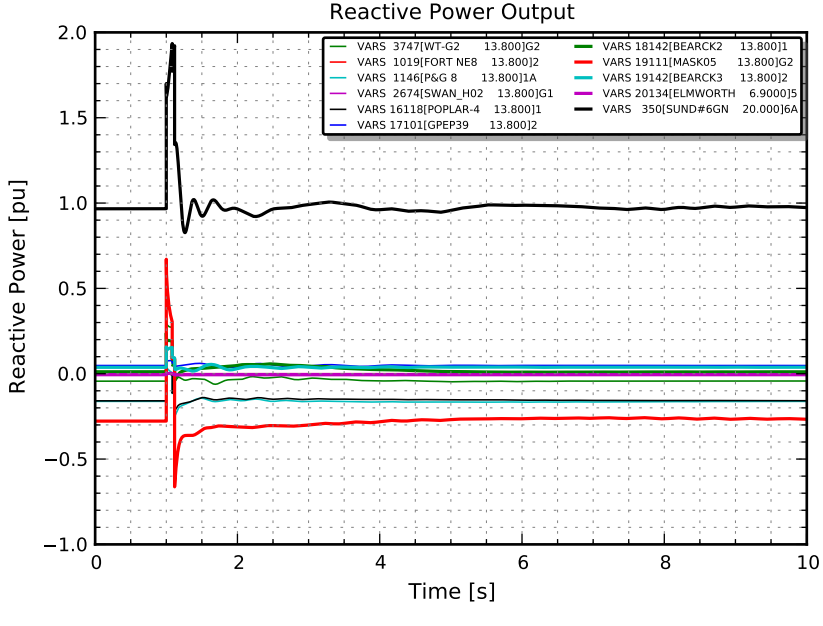
Study Area Generators

Appendix E2A
Figure: 007 (B. 3)





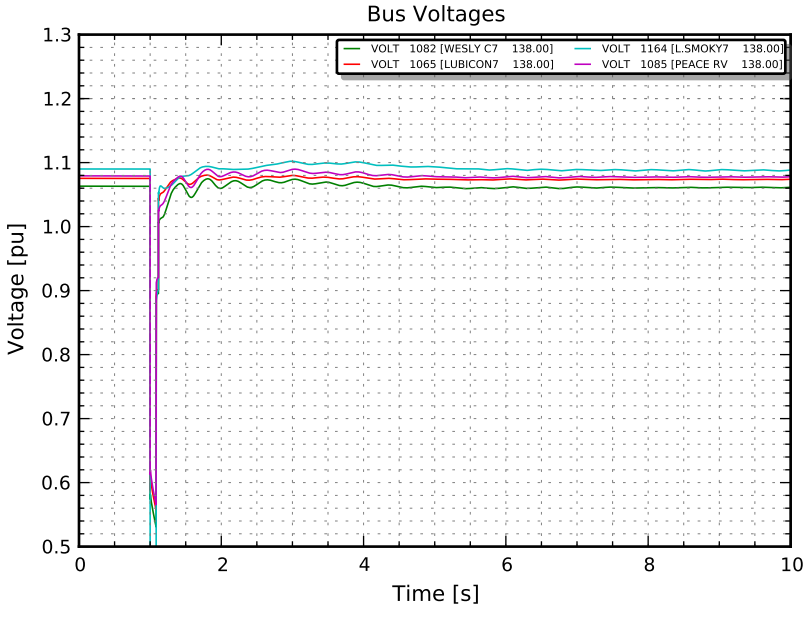


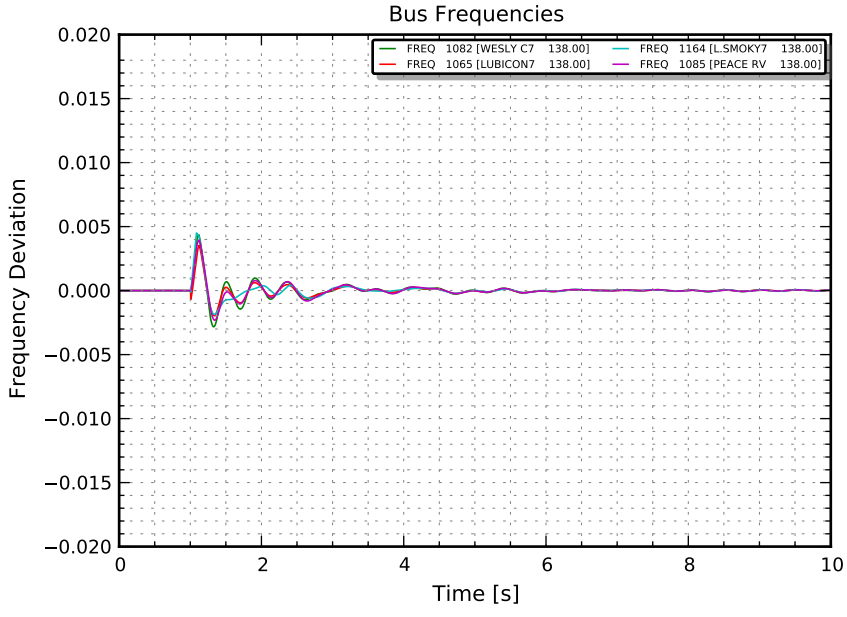


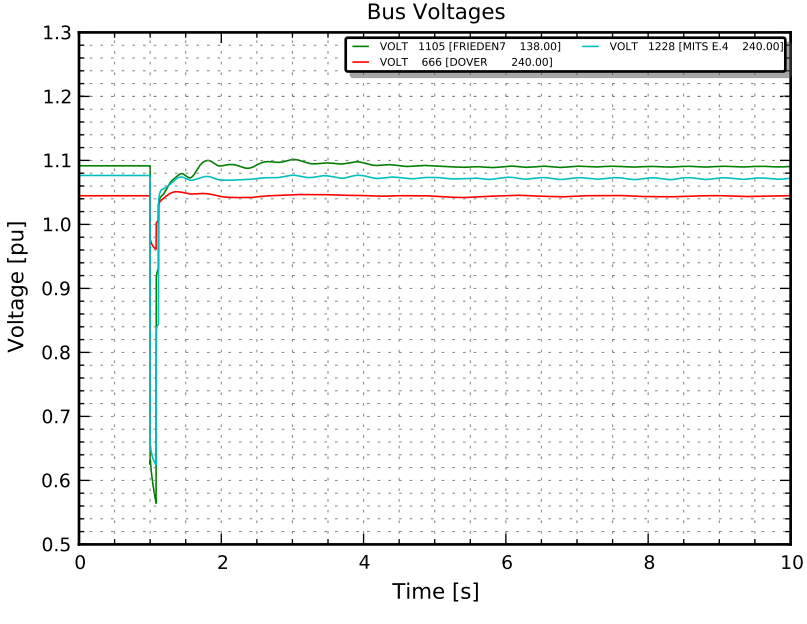
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_A.

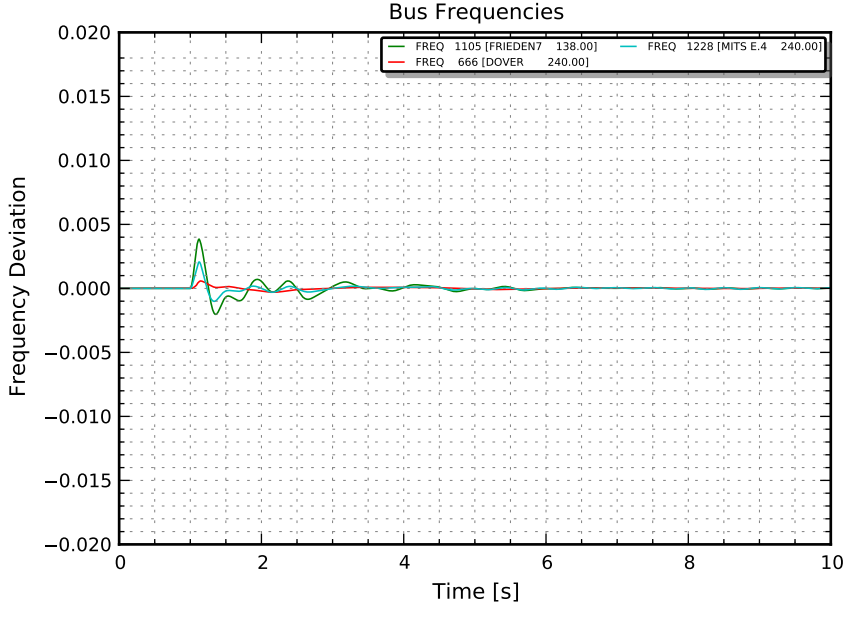
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 008 (A. 1)





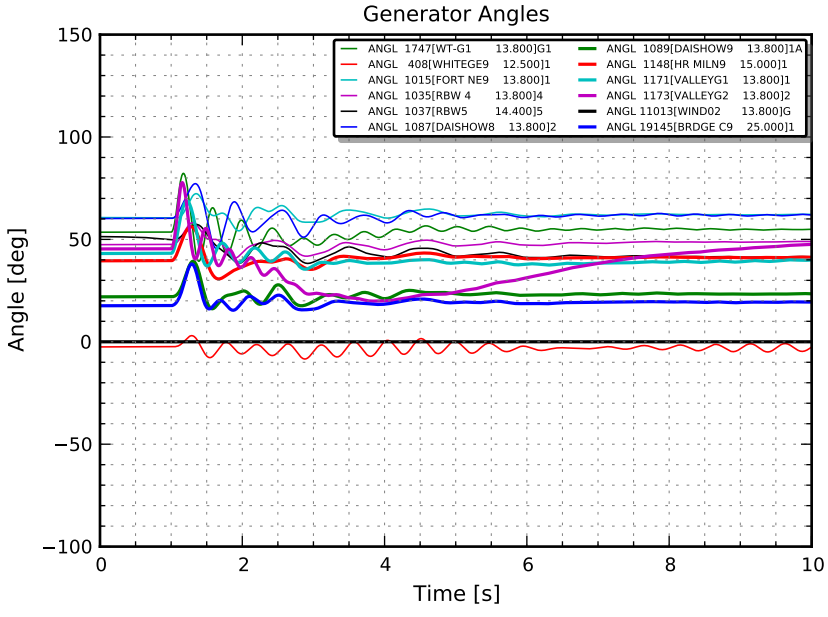


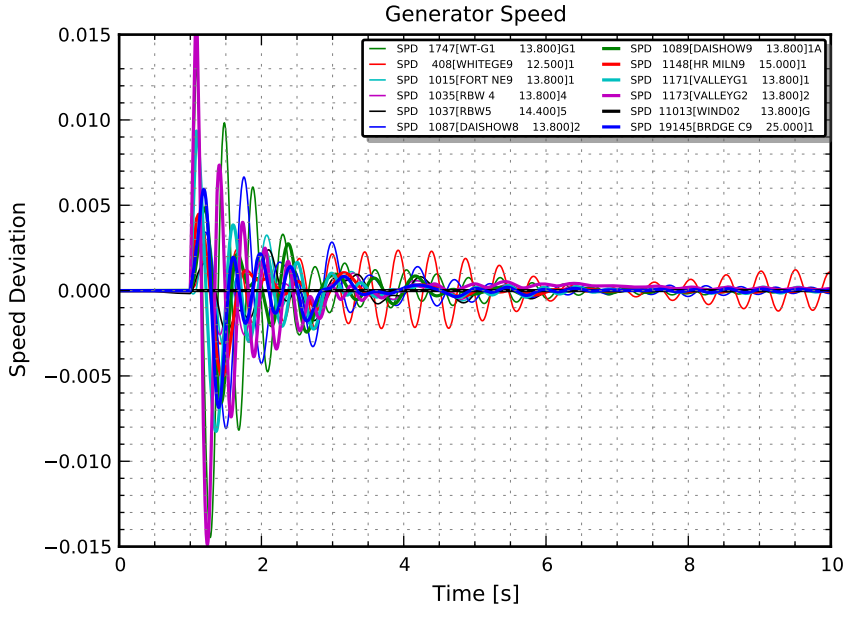


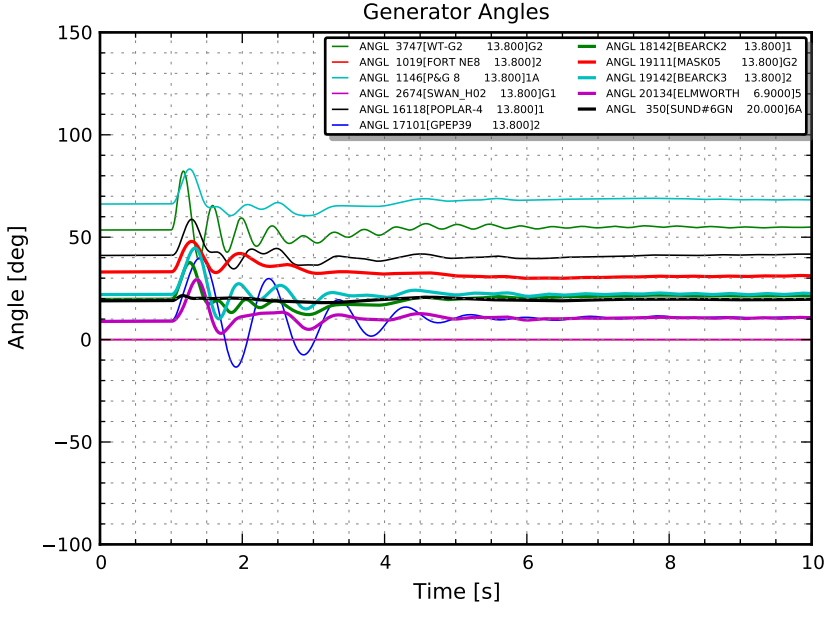
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_A.

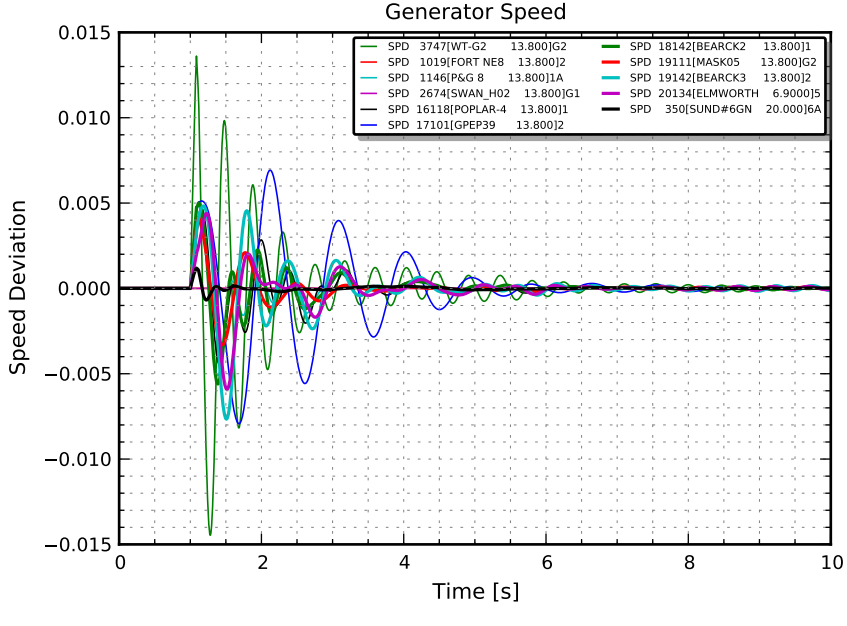
Study Area Generators

Appendix E2A
Figure: 008 (A. 2)





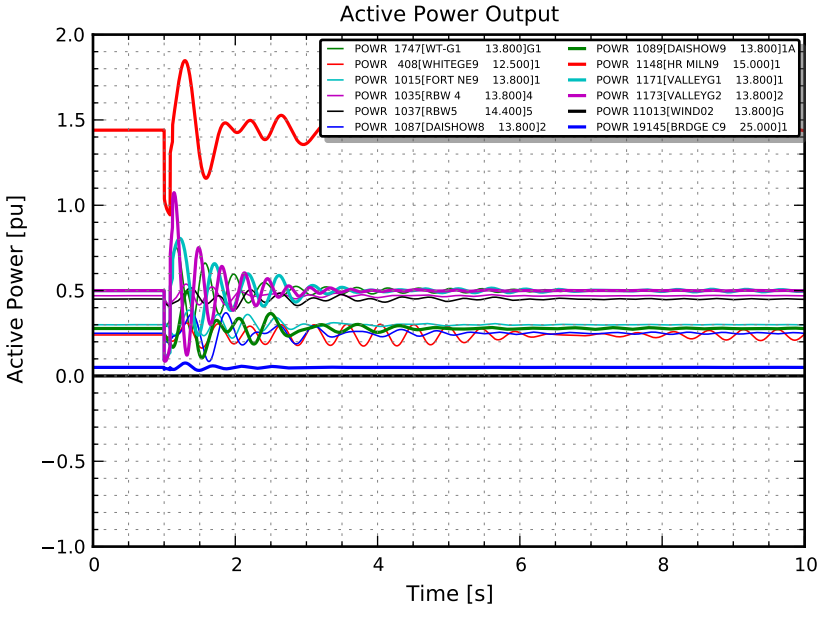


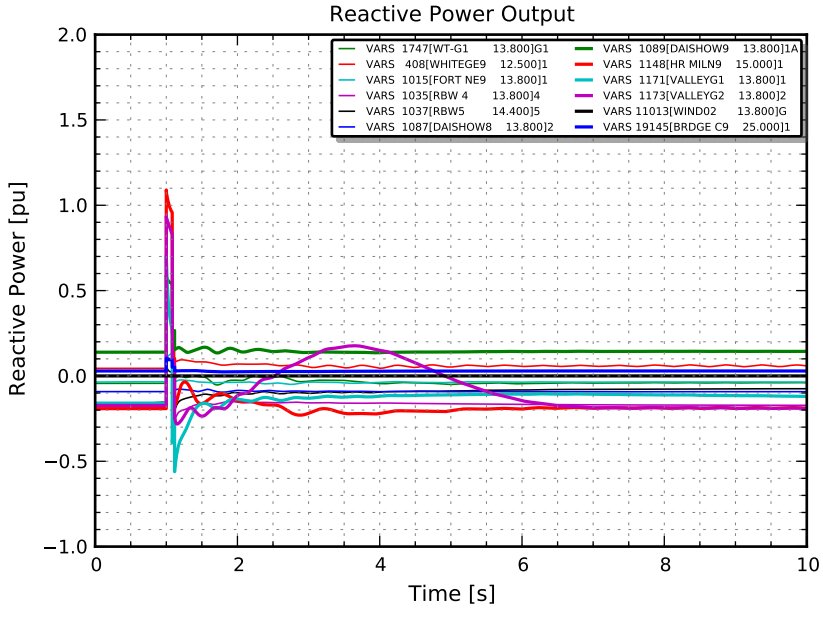


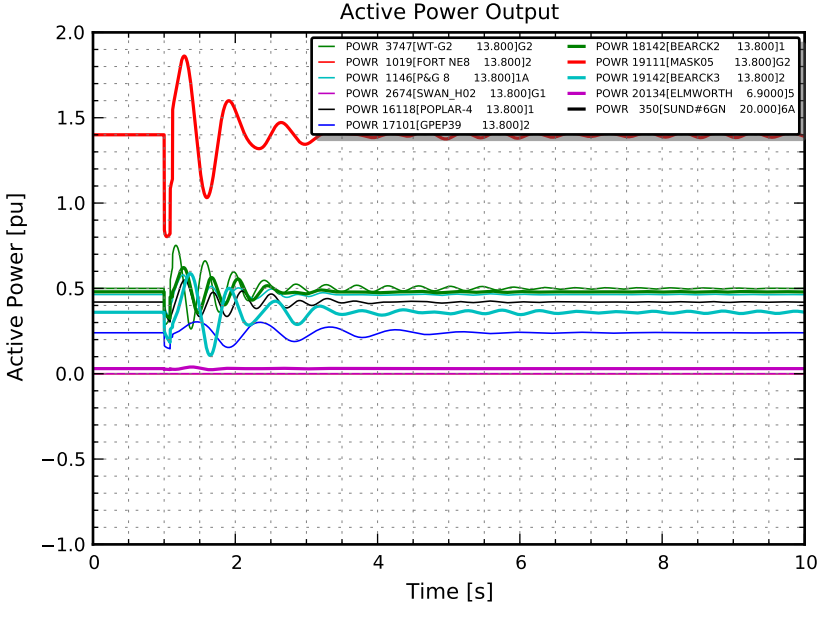
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_A.

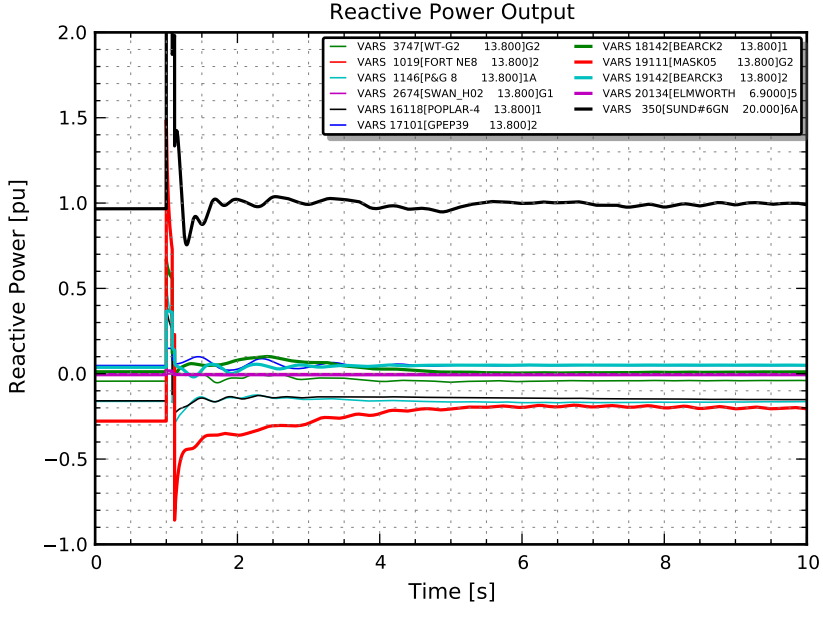
Study Area Generators

Appendix E2A
Figure: 008 (A. 3)





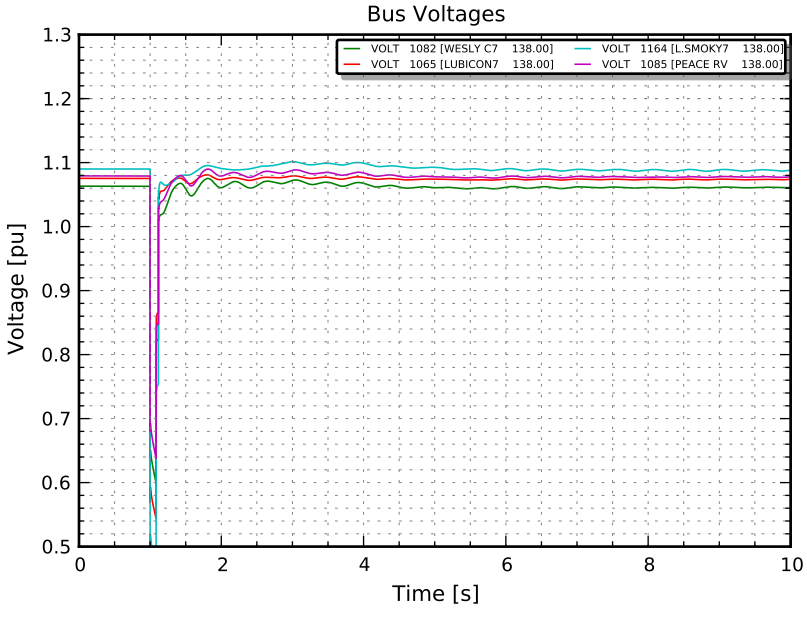


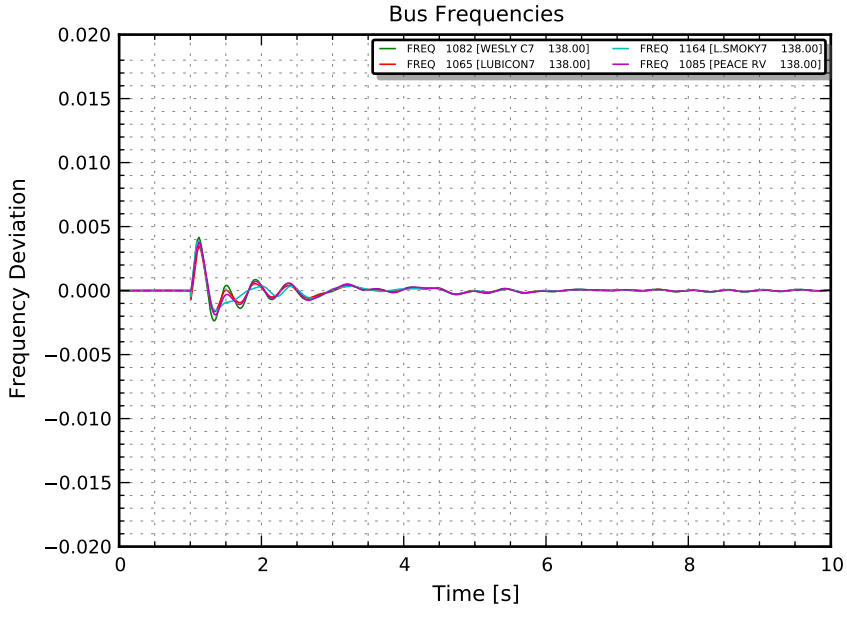


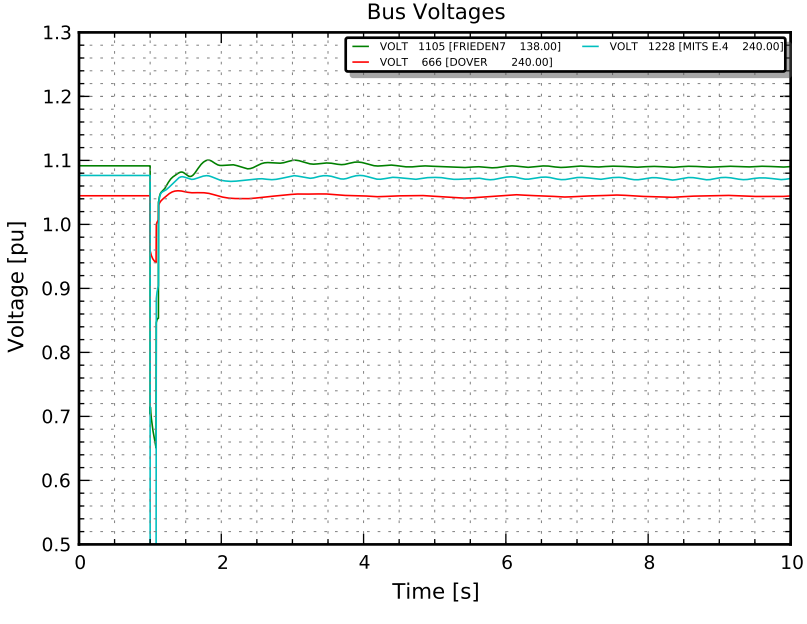
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_B.

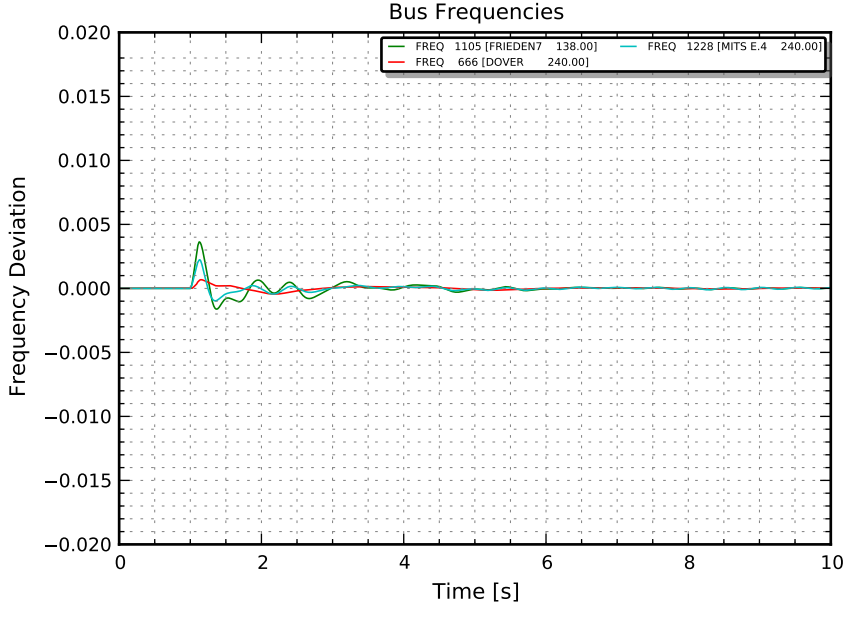
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 008 (B. 1)





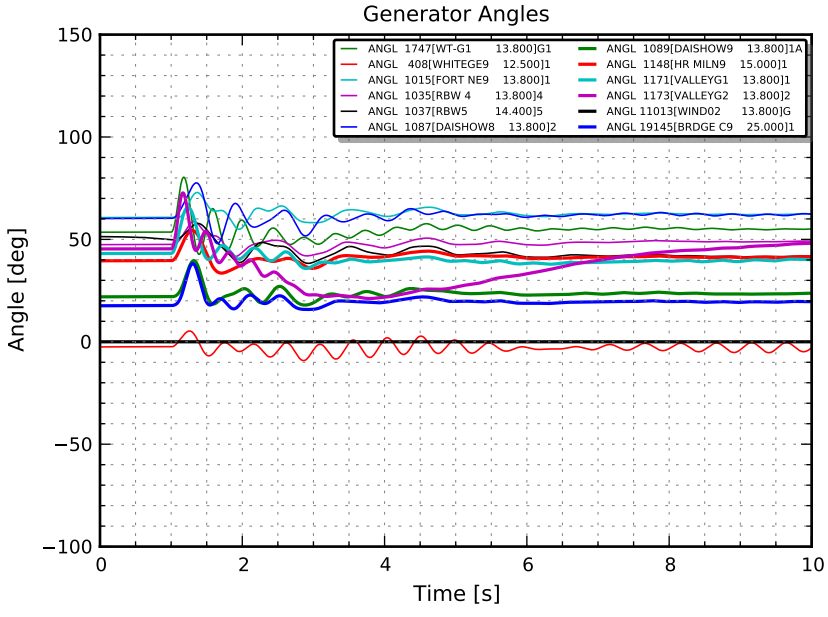


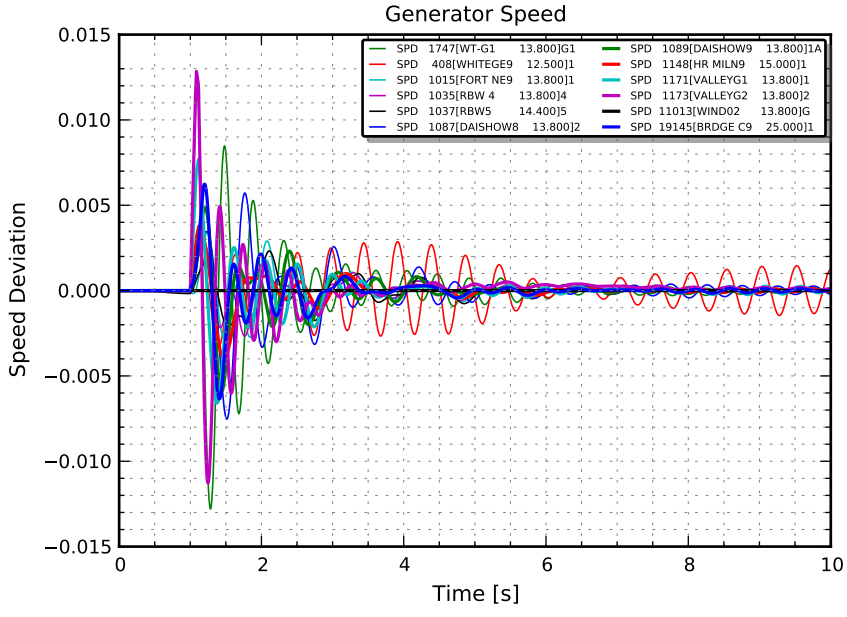


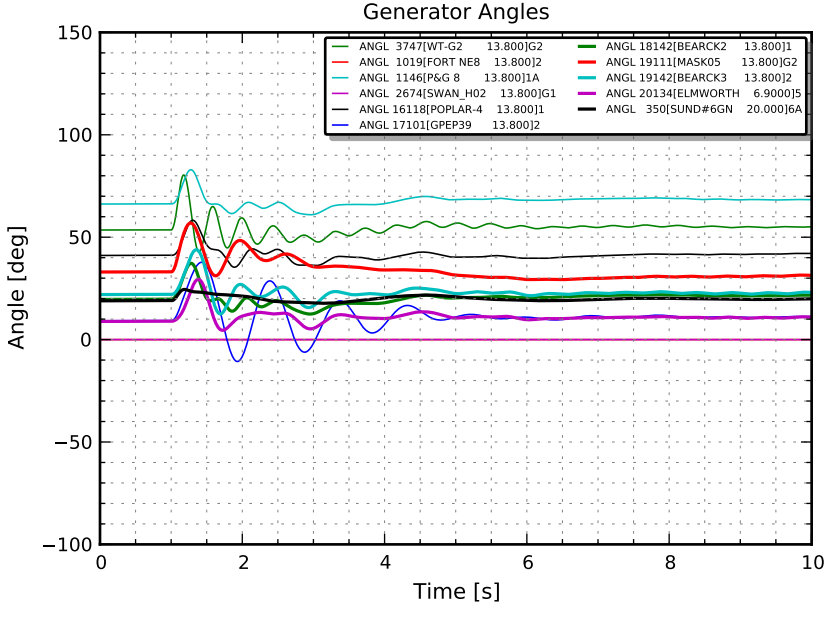
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_B.

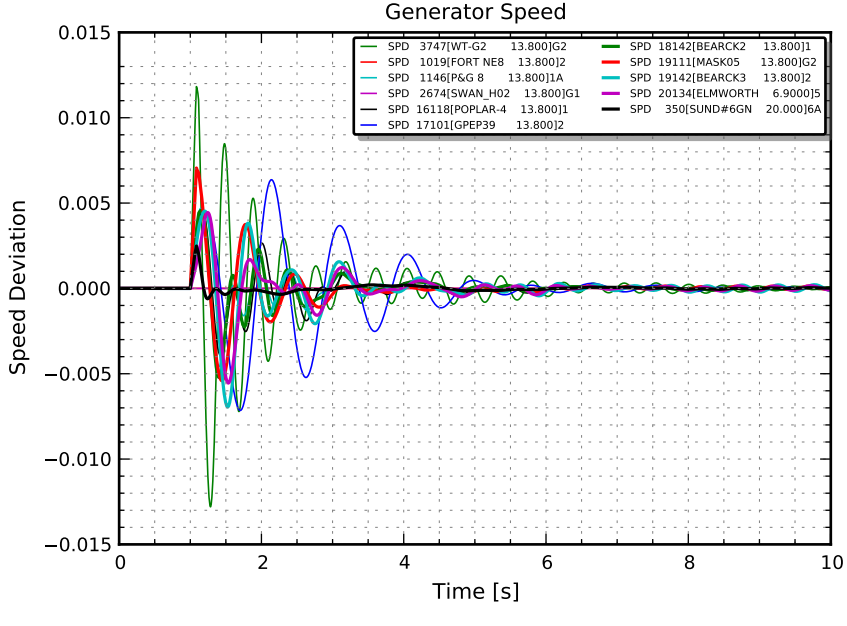
Study Area Generators

Appendix E2A
Figure: 008 (B. 2)





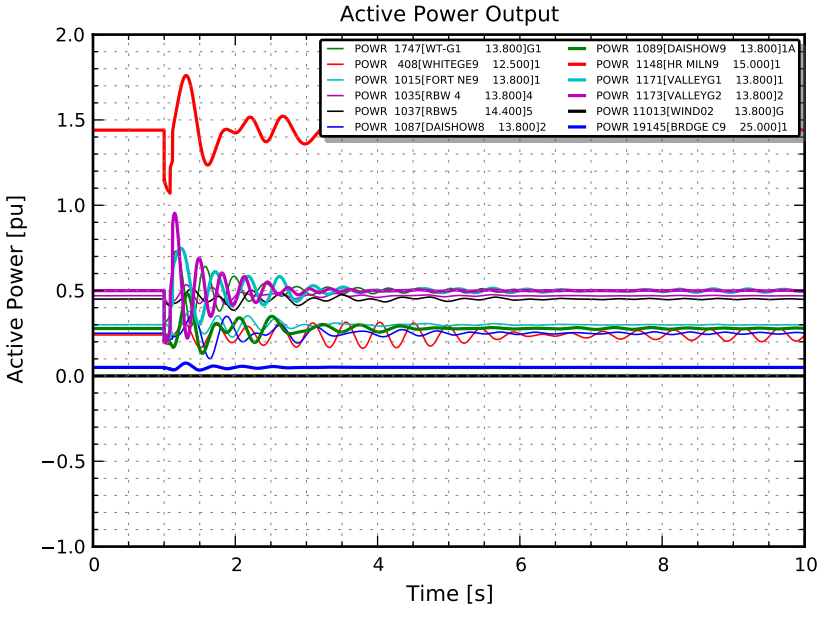


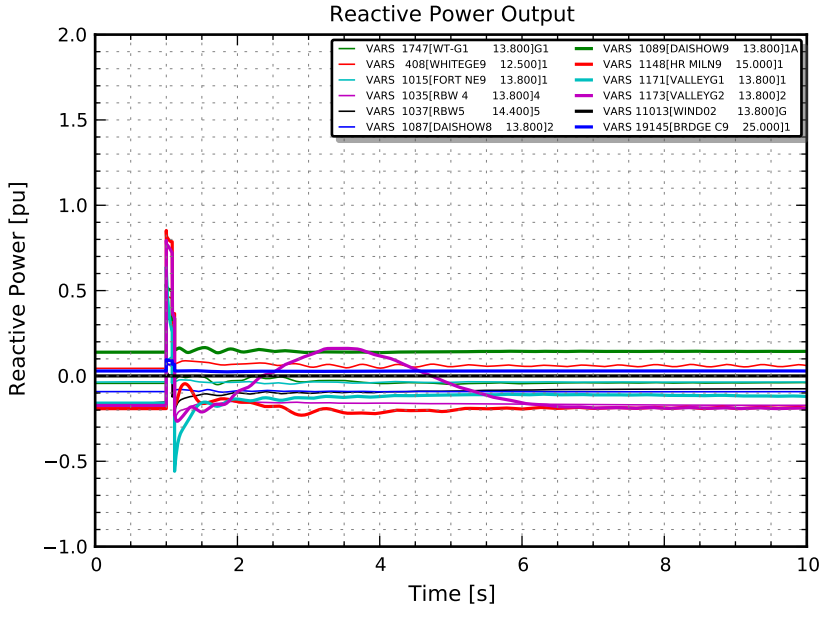


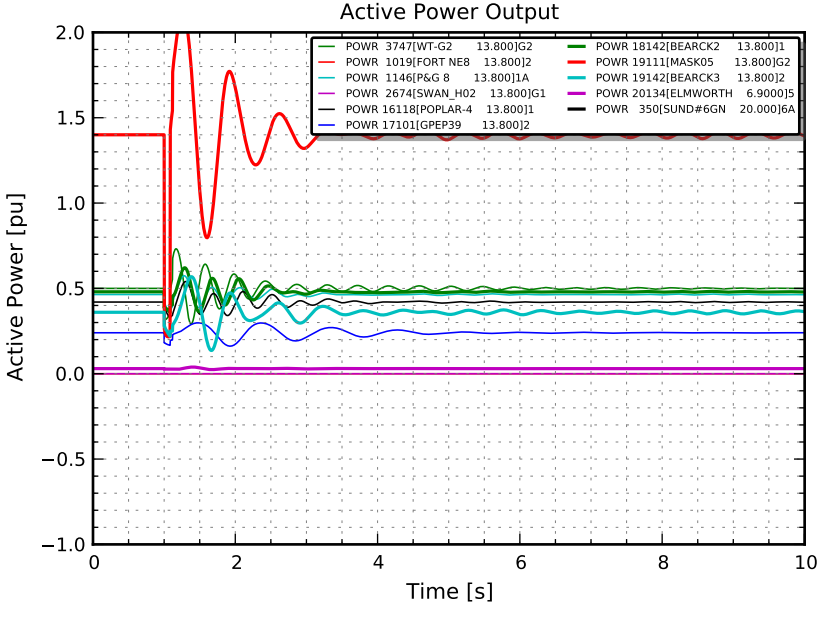
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_B.

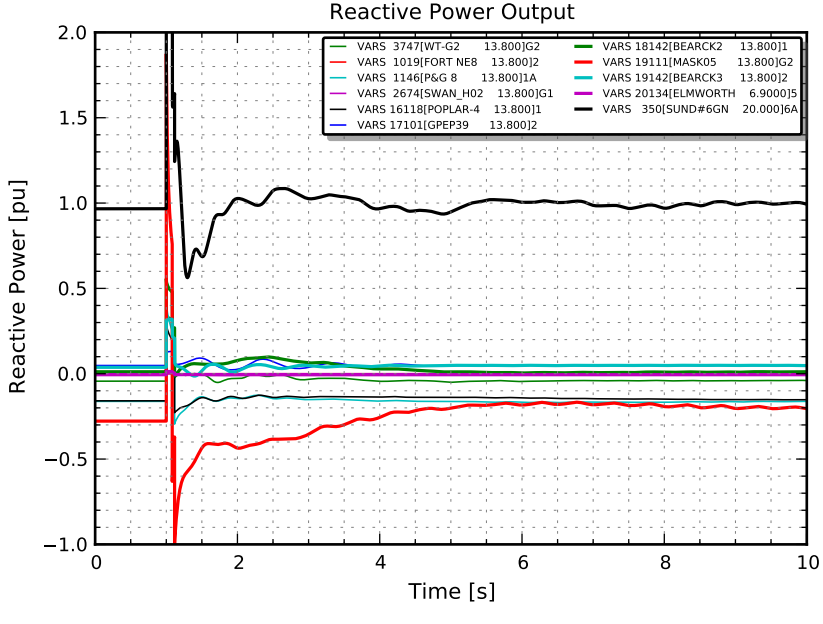
Study Area Generators

Appendix E2A
Figure: 008 (B. 3)





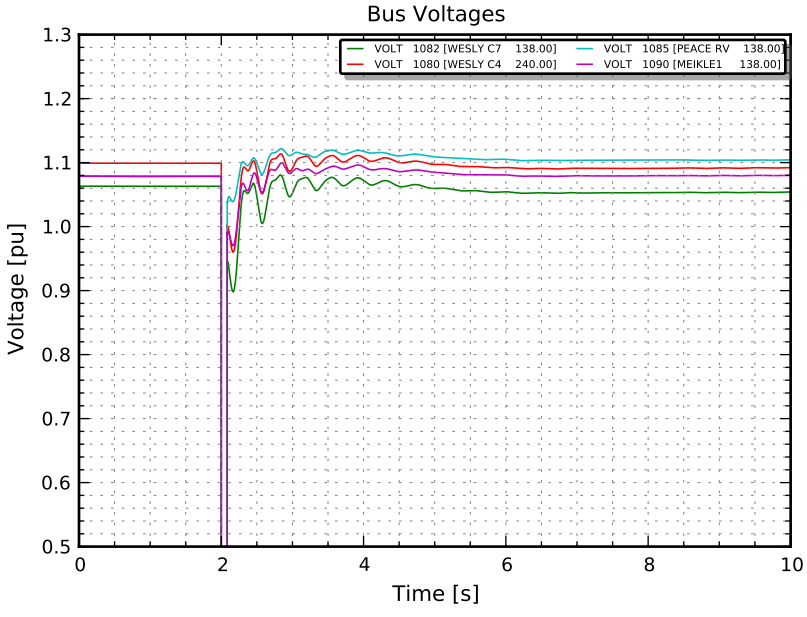


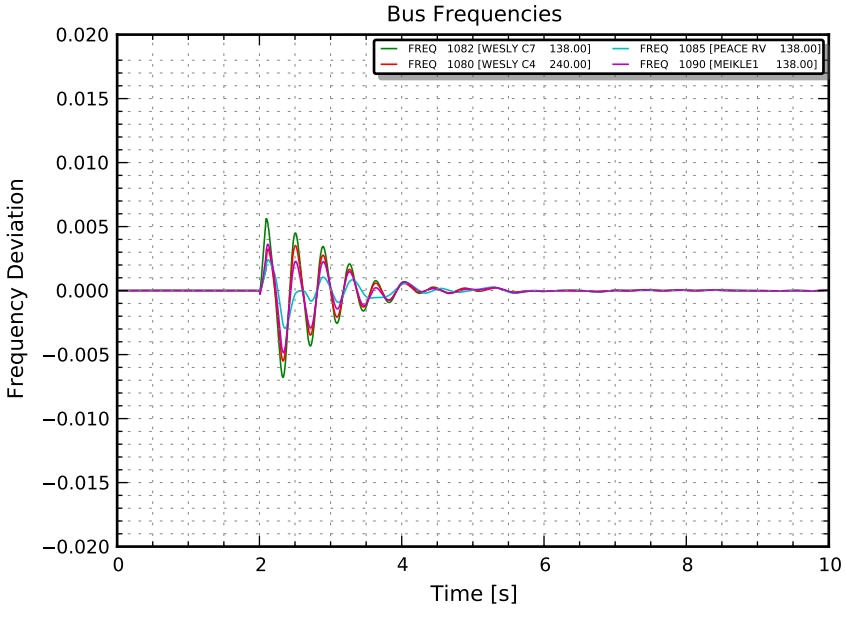


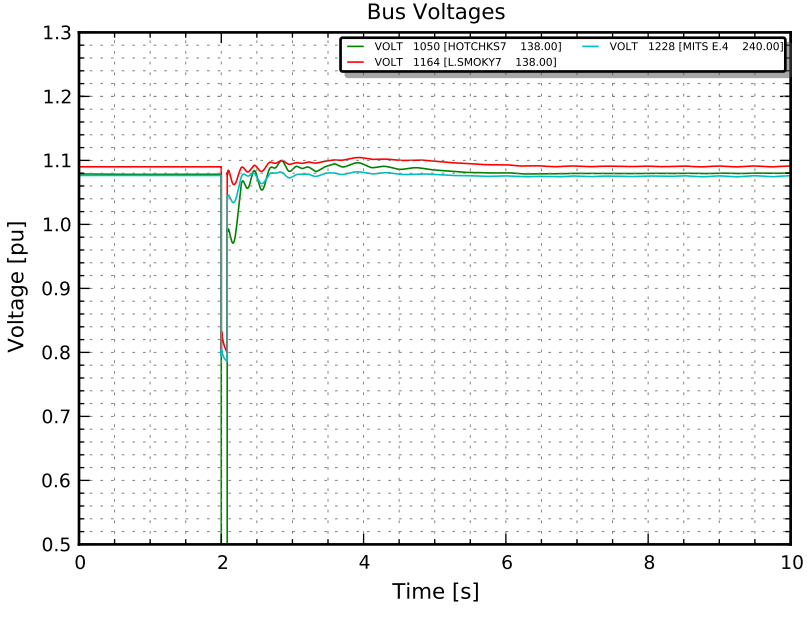
CASE 02 2014 WP Mgen
SCEN 03 144 Tap
CONT 009 7L27 WESLEYCREEK to WESTPEACE_A.

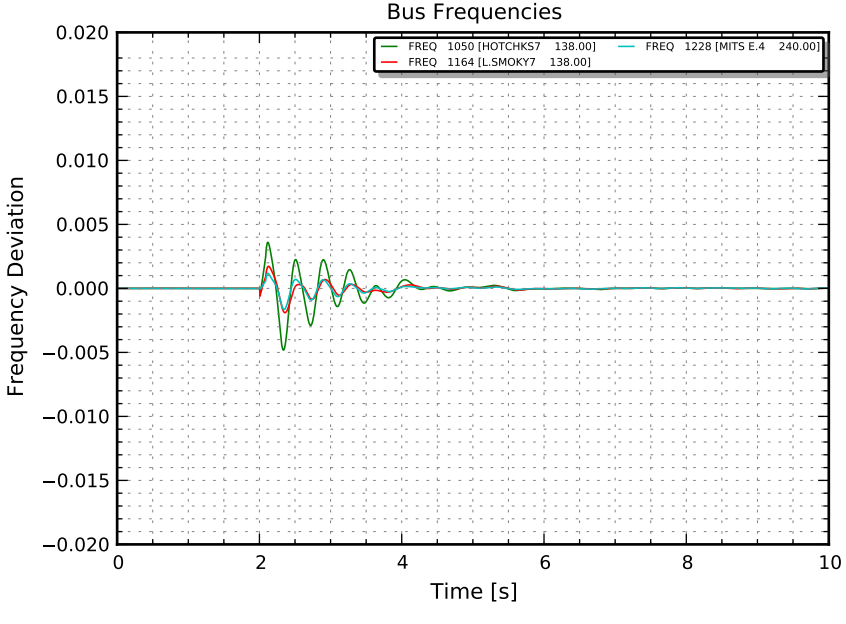
Study Area Bus Voltages and Frequencies

Appendix E3B
Figure: 009 (A. 1)





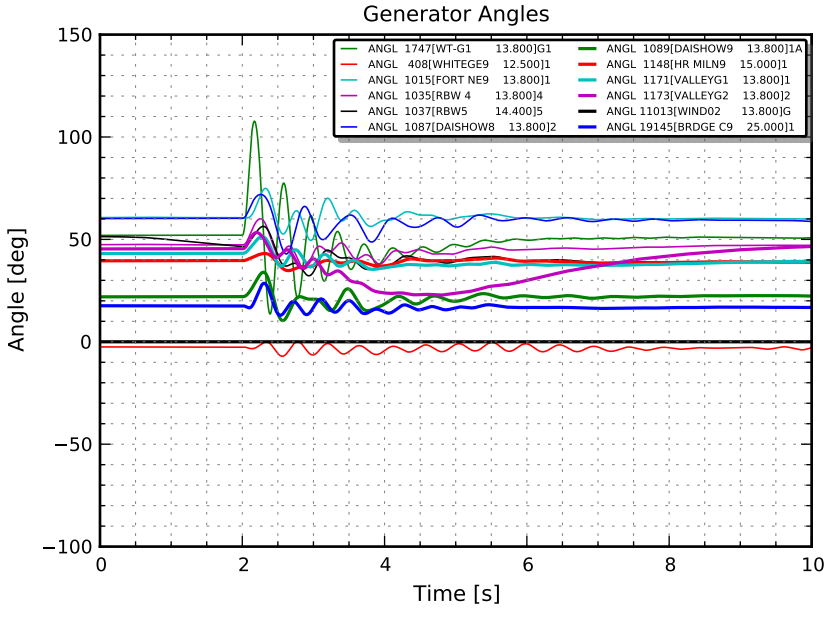


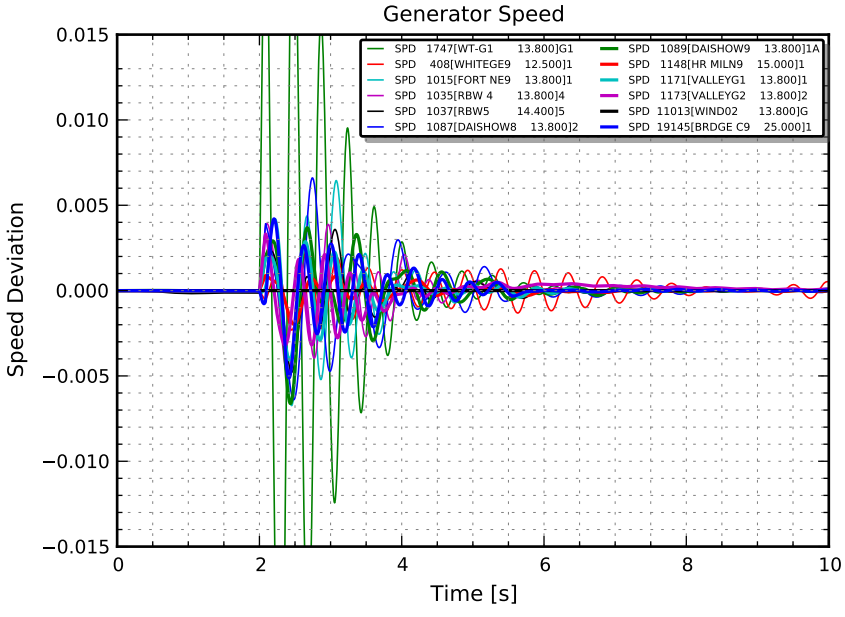


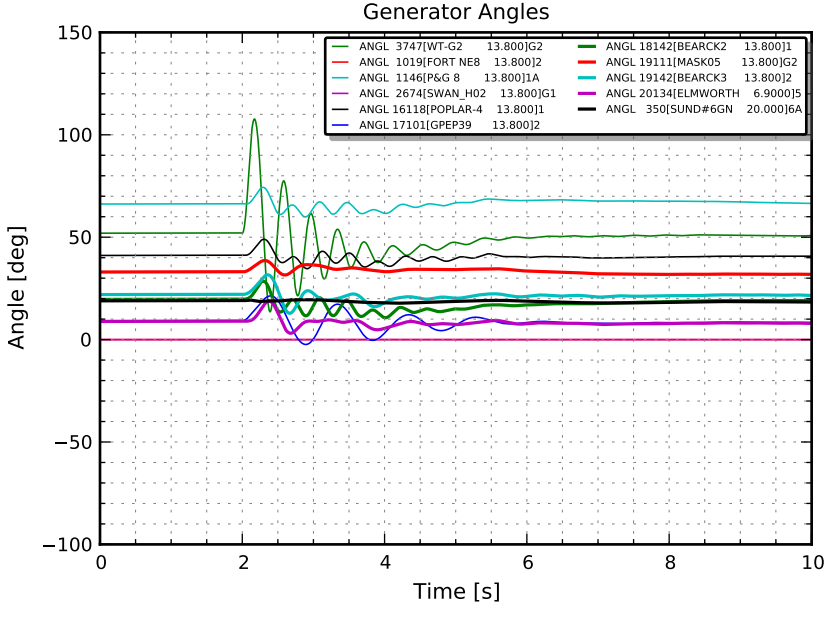
CASE 02 2014 WP Mgen
SCEN 03 144 Tap
CONT 009 7L27 WESLEYCREEK to WESTPEACE_A.

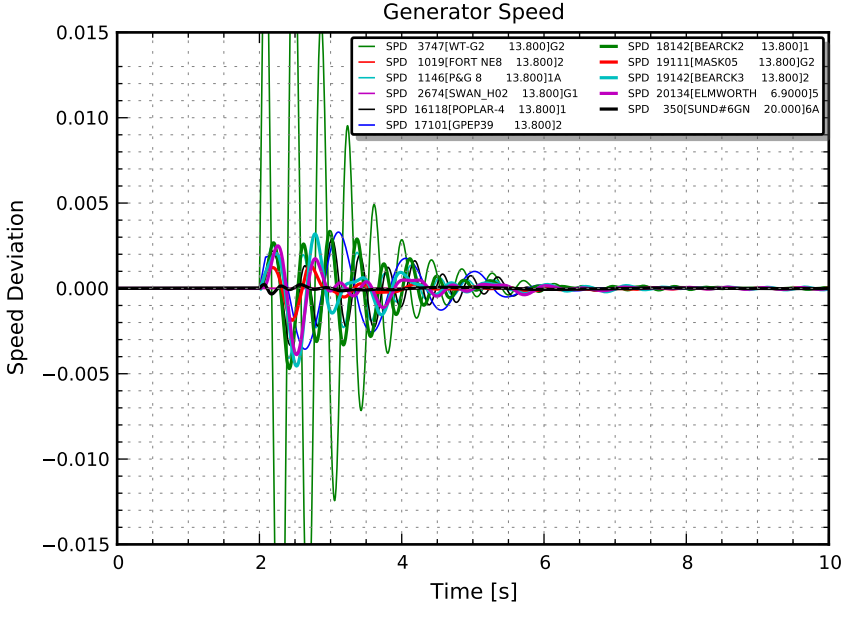
Study Area Generators

Appendix E3B
Figure: 009 (A. 2)





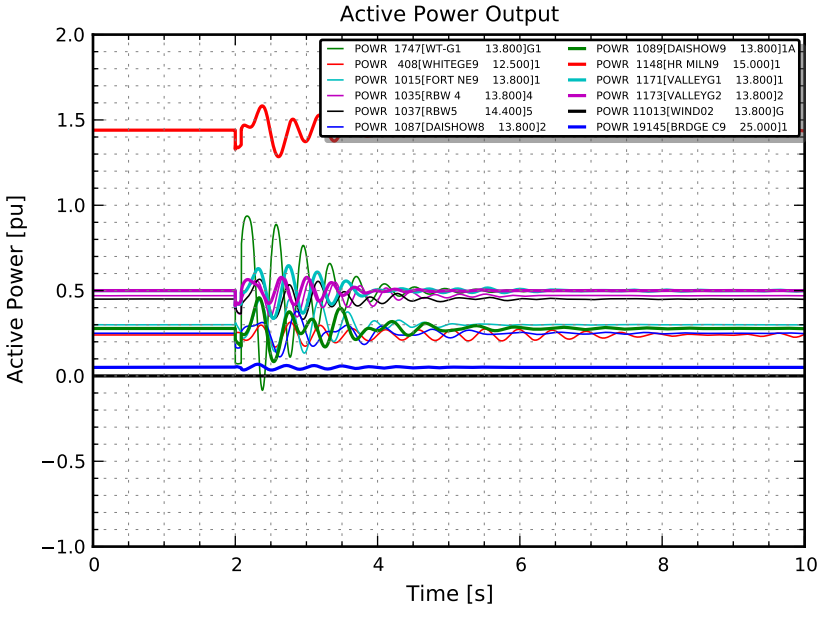


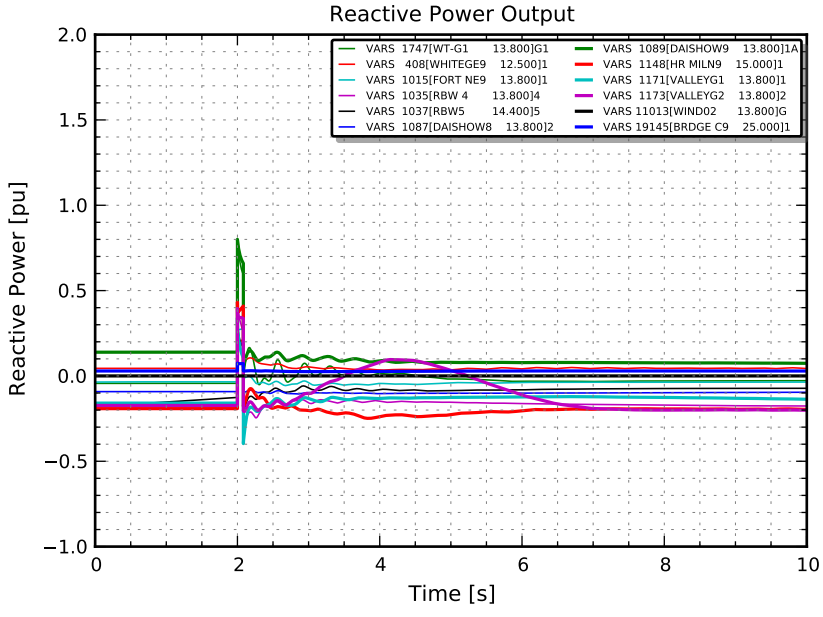


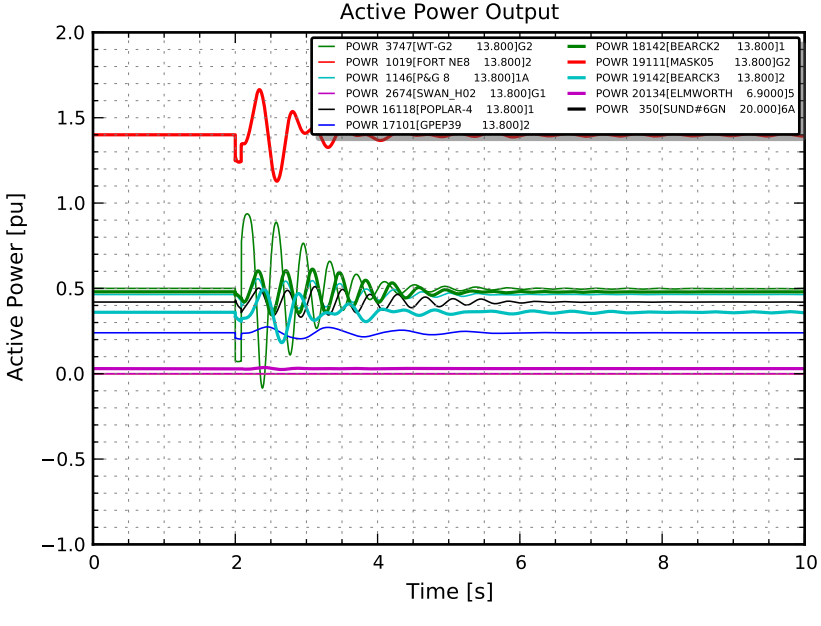
CASE 02 2014 WP Mgen
SCEN 03 144 Tap
CONT 009 7L27 WESLEYCREEK to WESTPEACE_A.

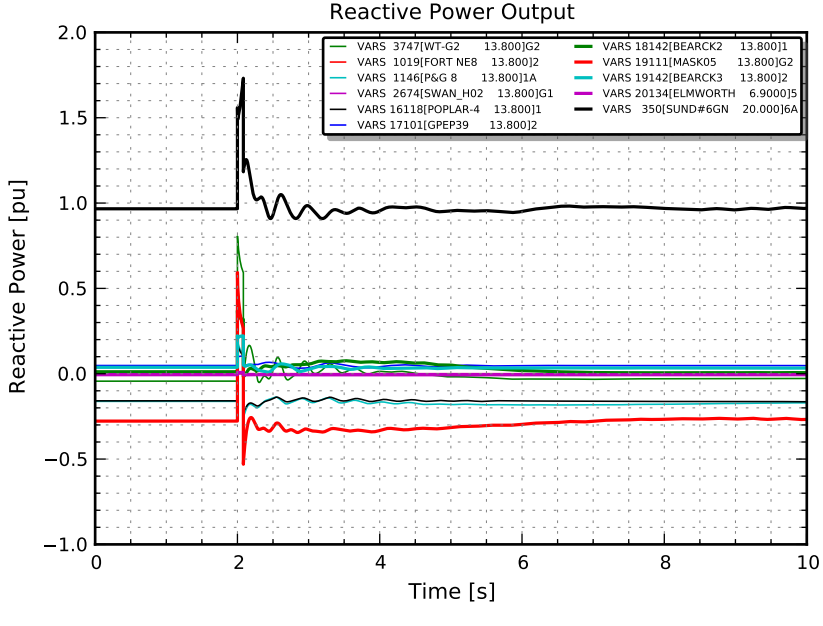
Study Area Generators

Appendix E3B
Figure: 009 (A. 3)





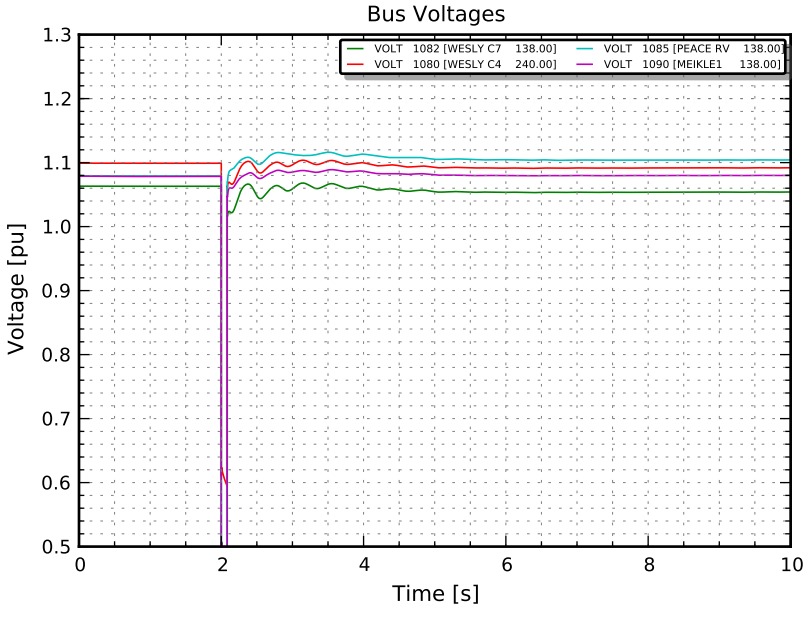


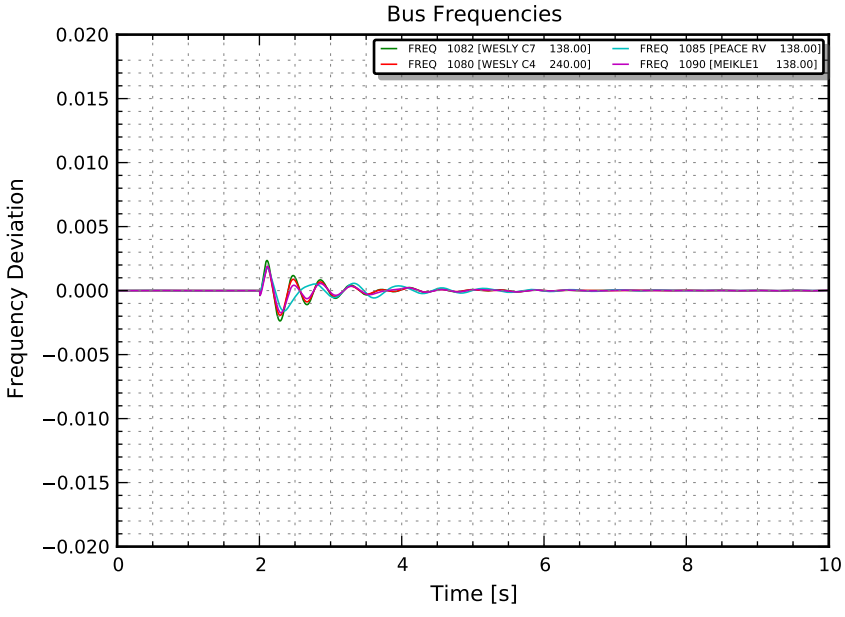


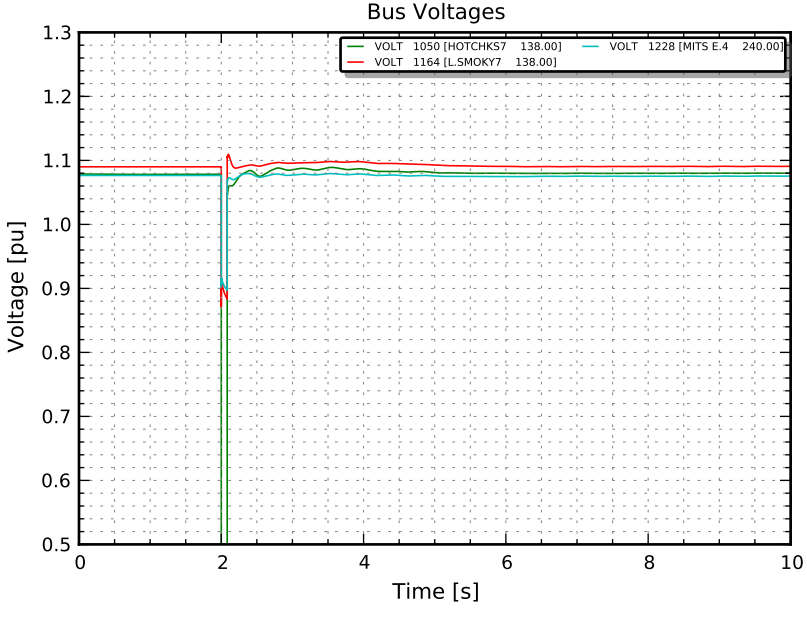
CASE 02 2014 WP Mgen
SCEN 03 144 Tap
CONT 009 7L27 WESLEYCREEK to WESTPEACE_B.

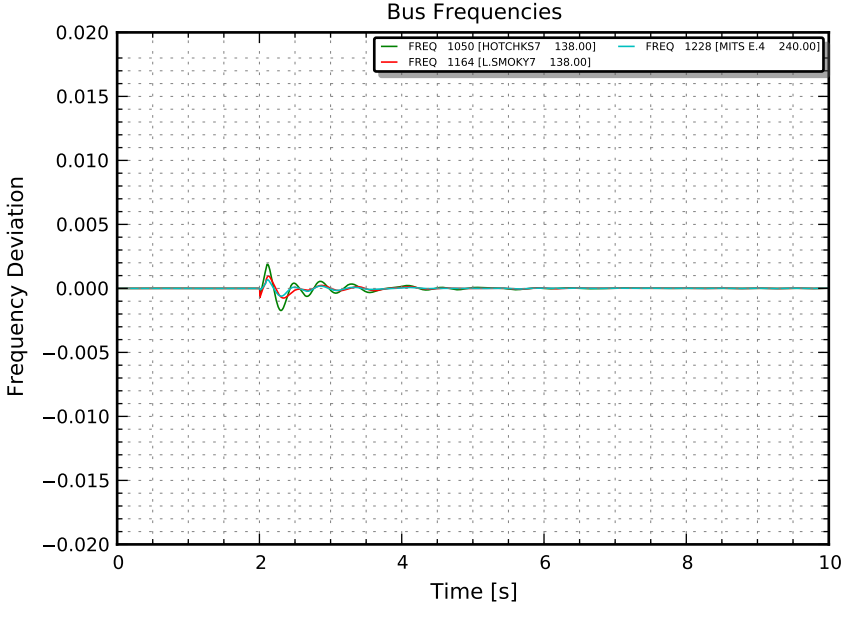
Study Area Bus Voltages and Frequencies

Appendix E3B
Figure: 009 (B. 1)





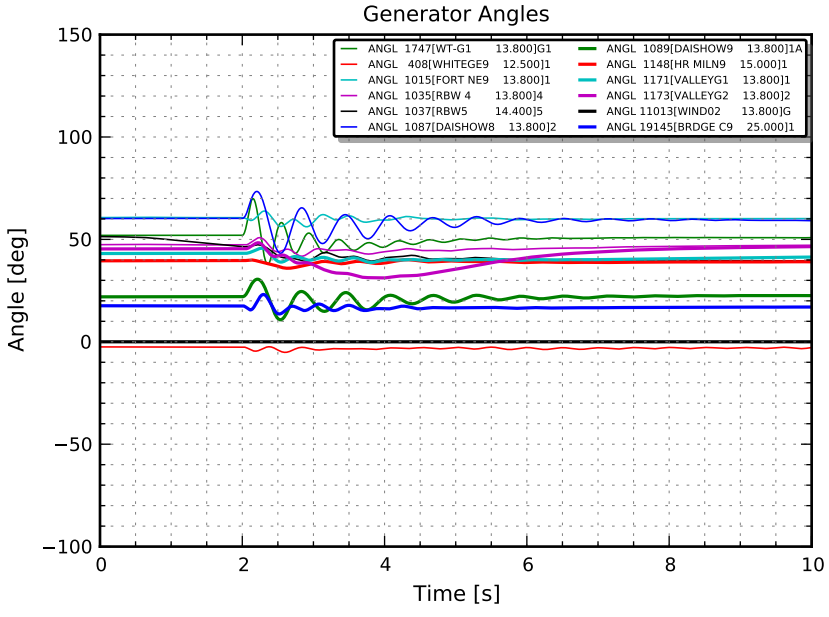


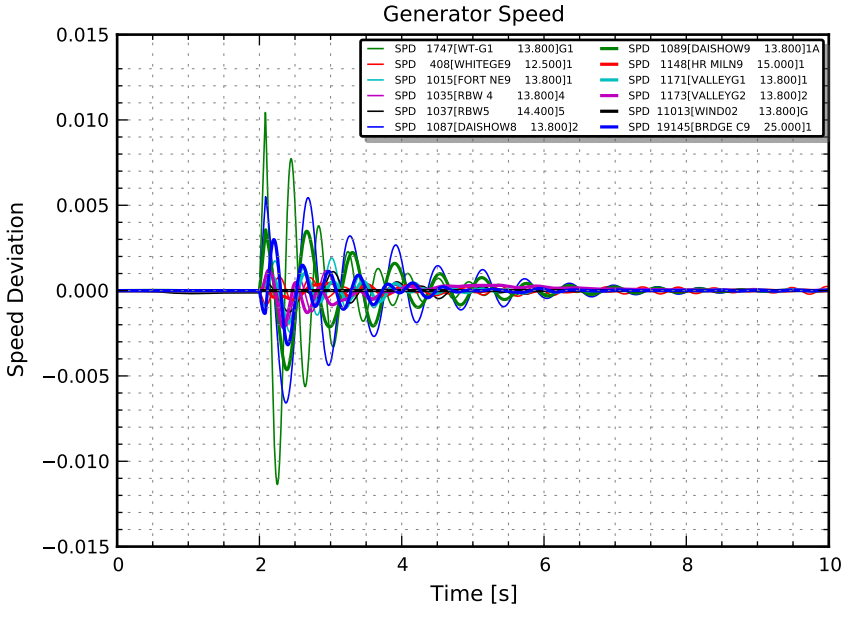


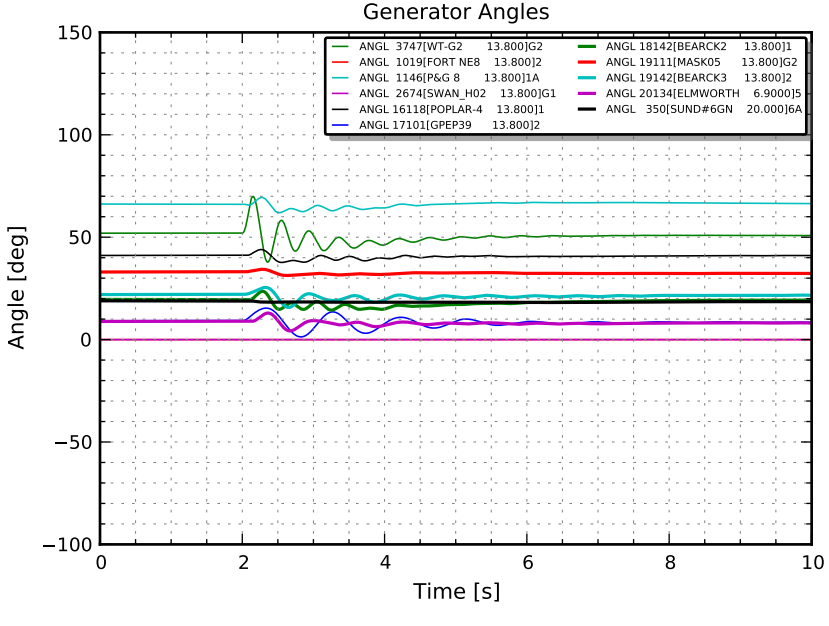
CASE 02 2014 WP Mgen
SCEN 03 144 Tap
CONT 009 7L27 WESLEYCREEK to WESTPEACE_B.

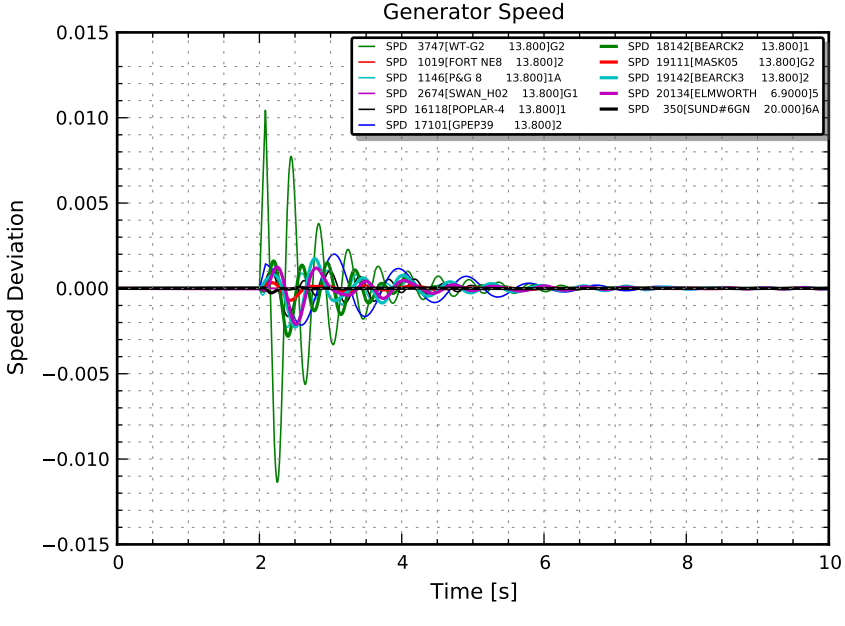
Study Area Generators

Appendix E3B
Figure: 009 (B. 2)





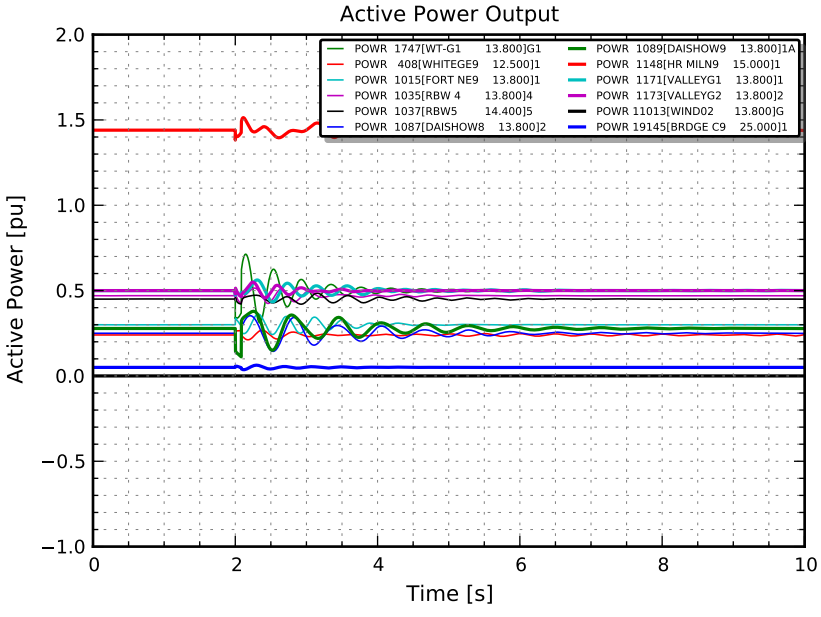


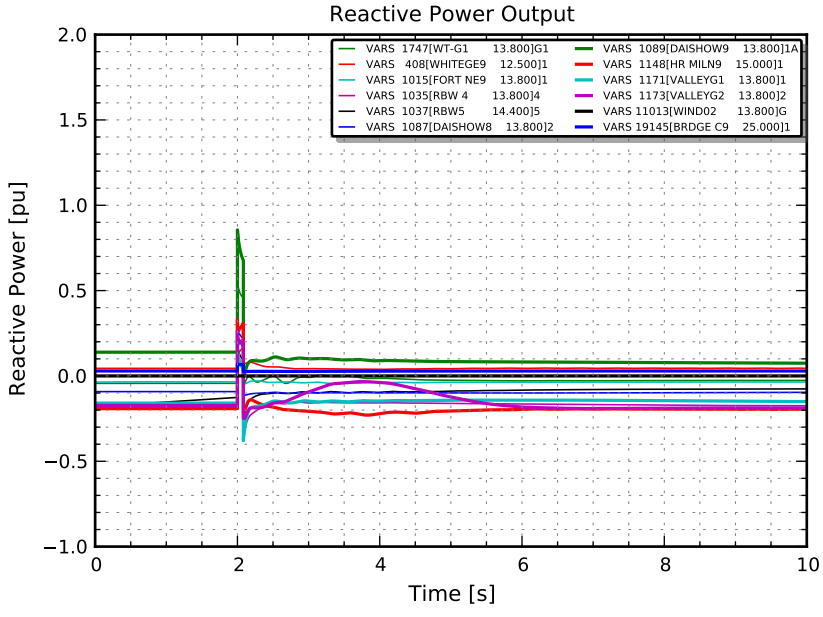


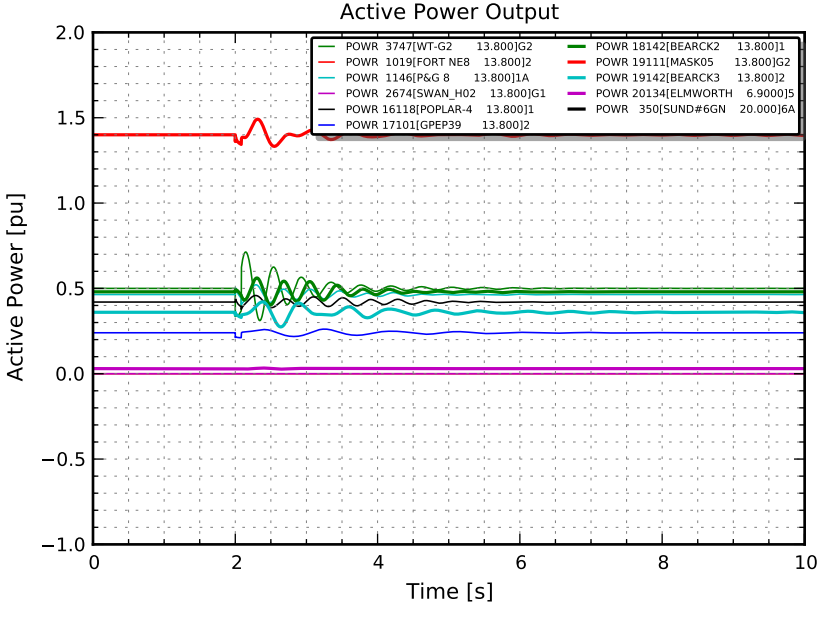
CASE 02 2014 WP Mgen
SCEN 03 144 Tap
CONT 009 7L27 WESLEYCREEK to WESTPEACE_B.

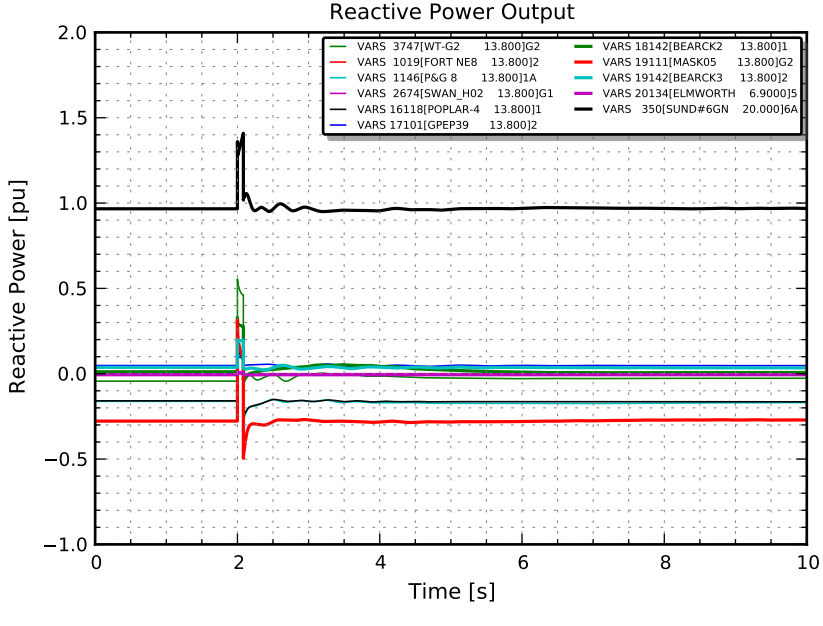
Study Area Generators

Appendix E3B
Figure: 009 (B. 3)





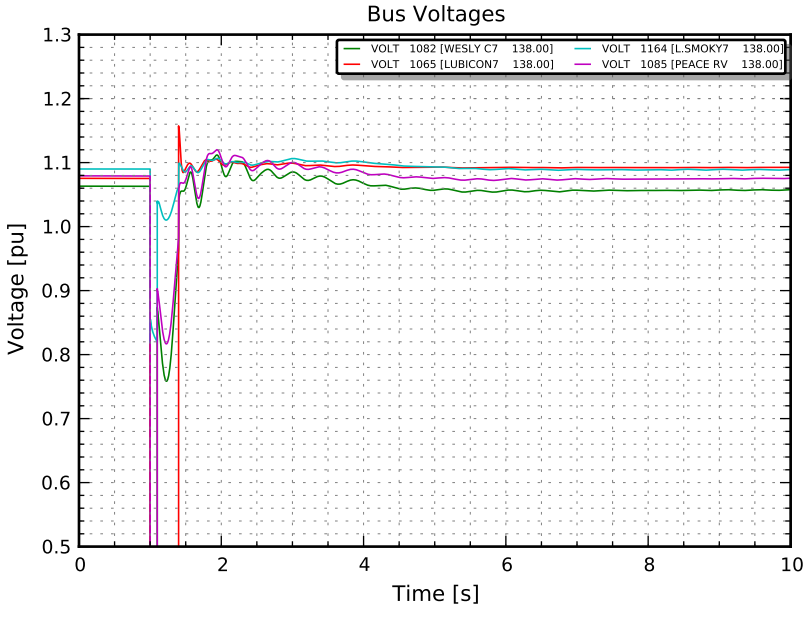


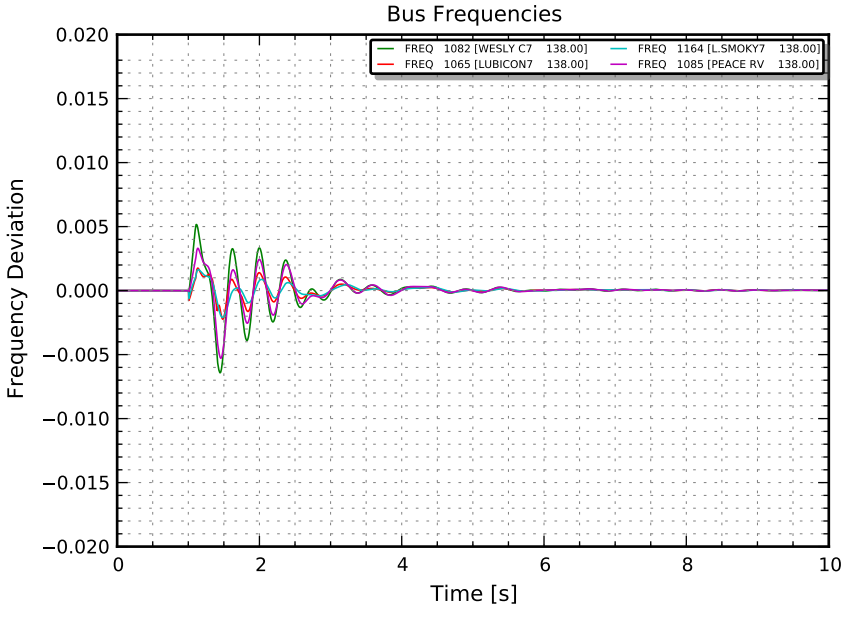


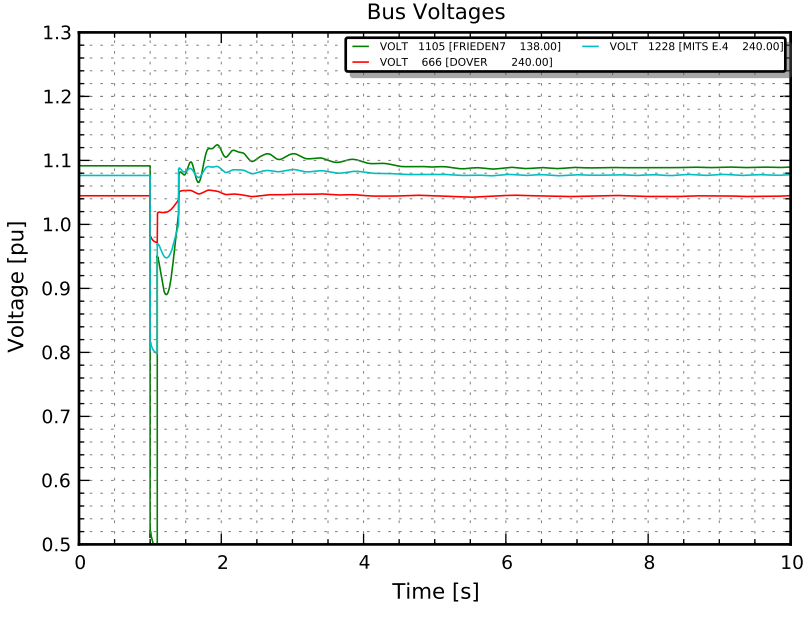
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 010 7L12 WESLEYCREEK to LUBICON_A.

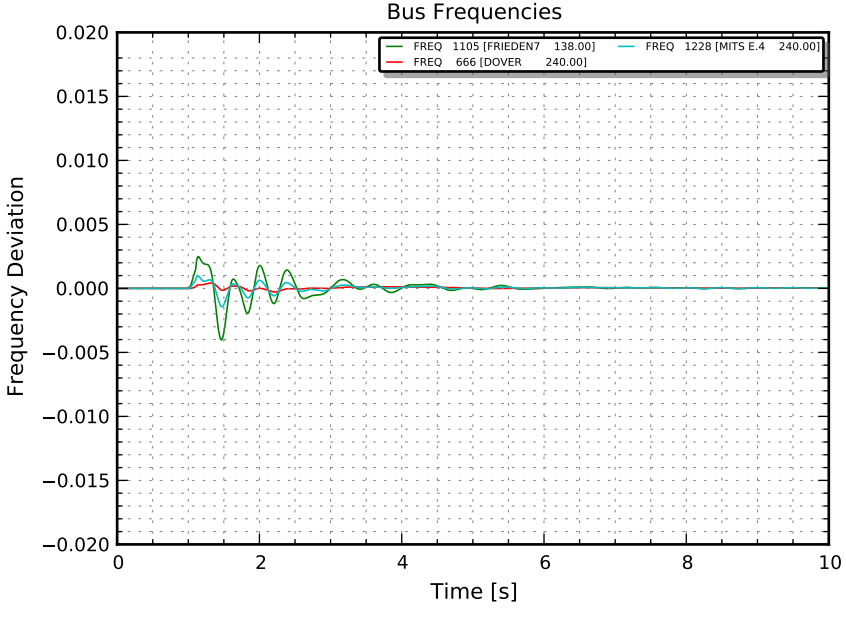
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 010 (A. 1)





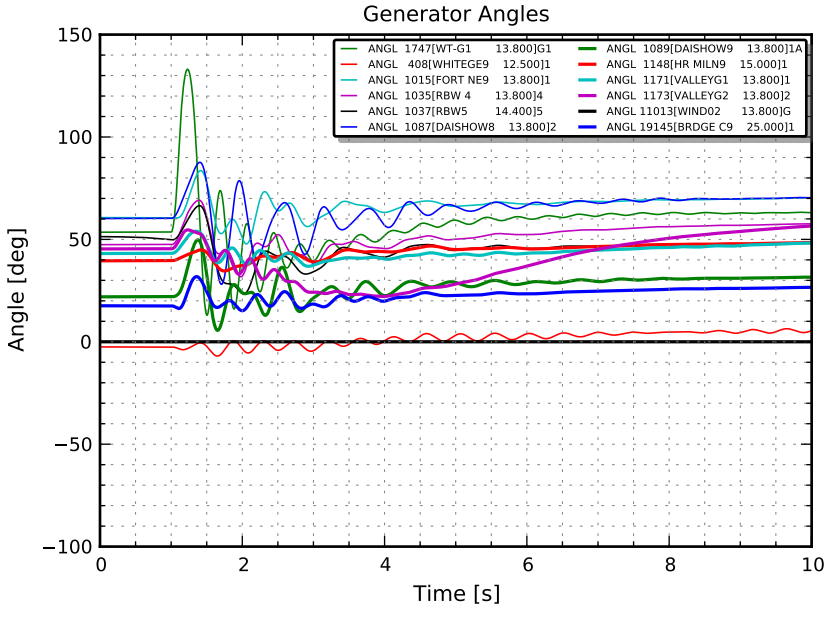


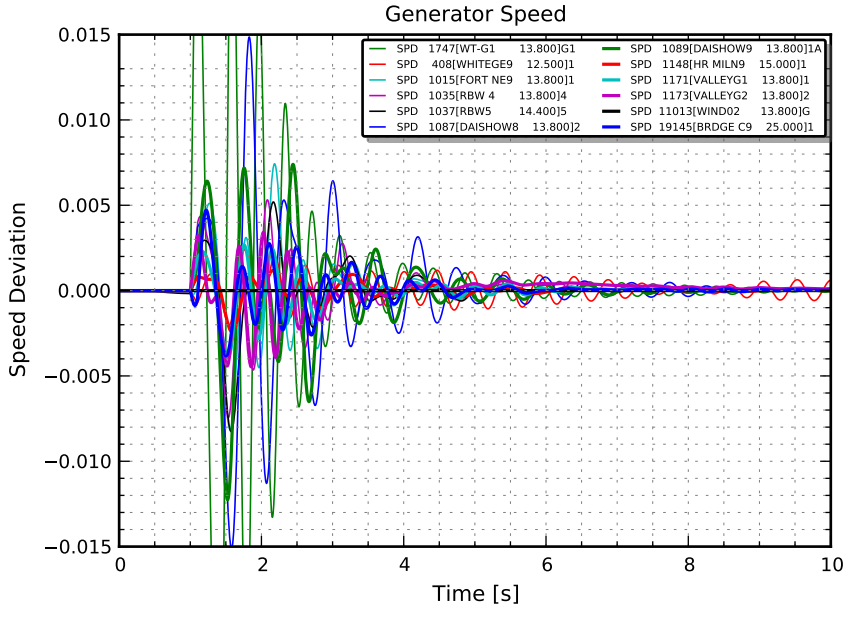


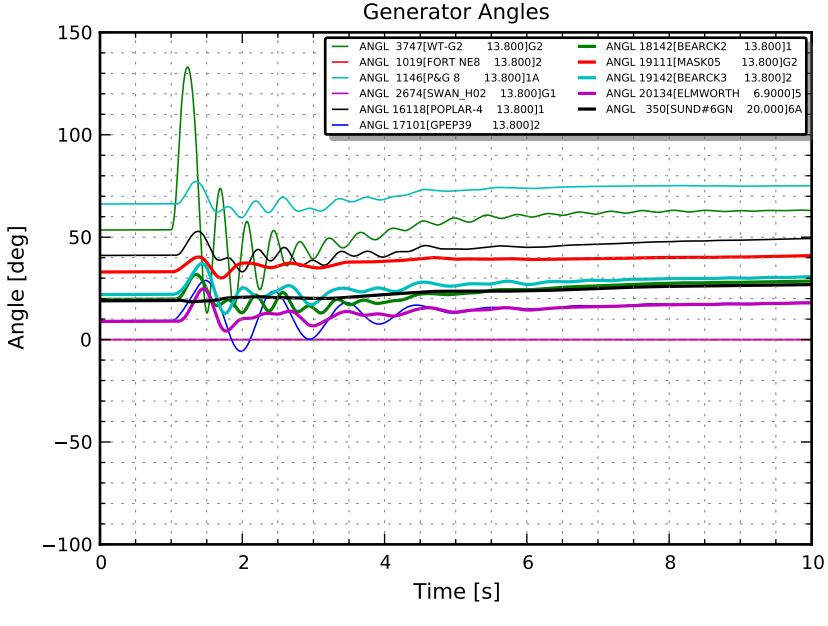
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 010 7L12 WESLEYCREEK to LUBICON_A.

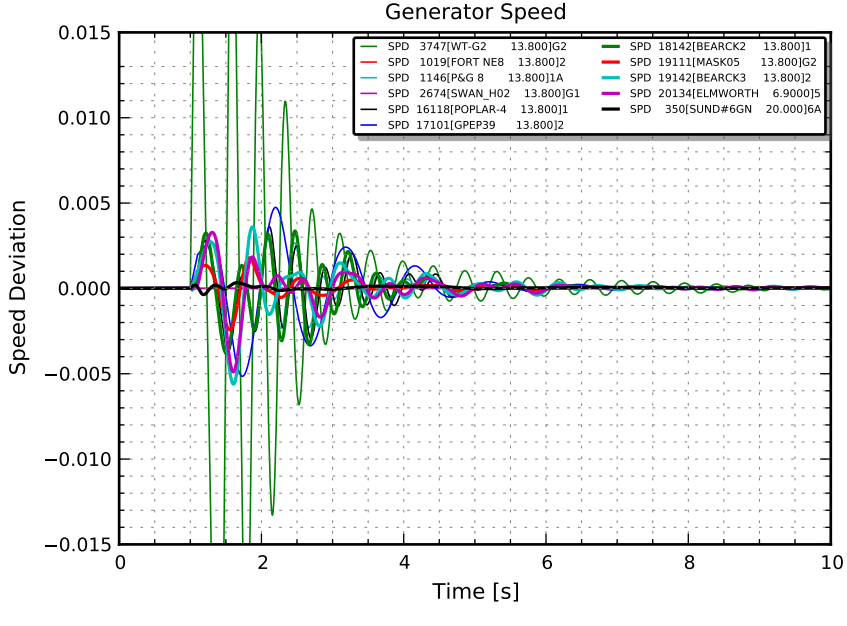
Study Area Generators

Appendix E2A
Figure: 010 (A. 2)





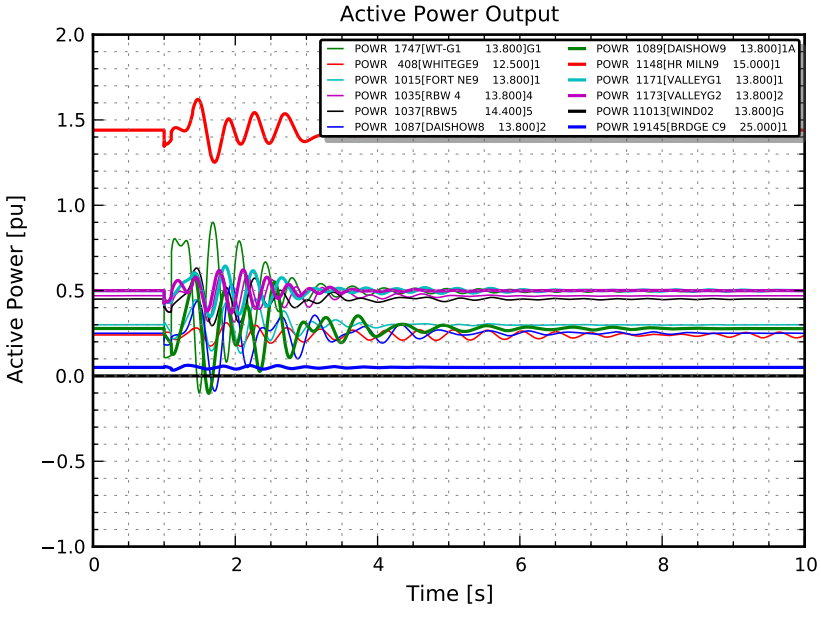


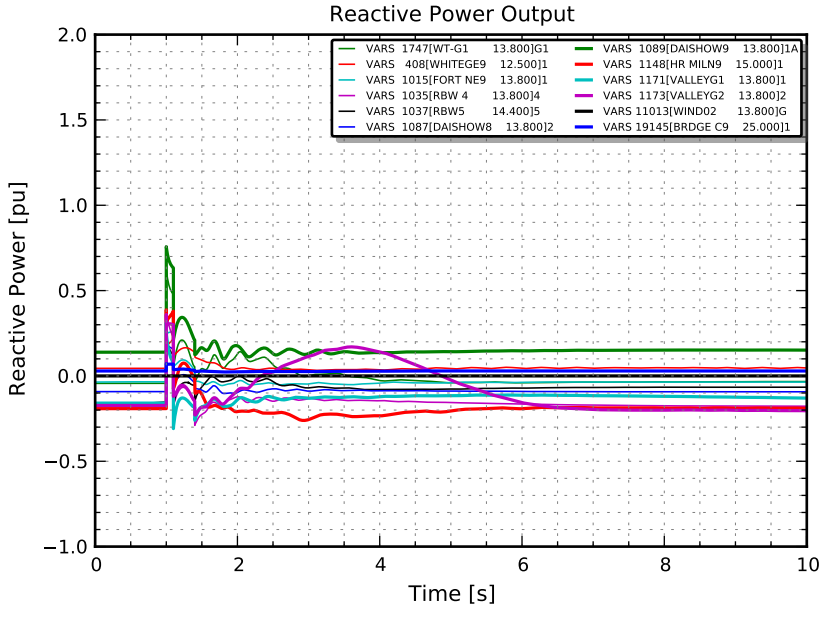


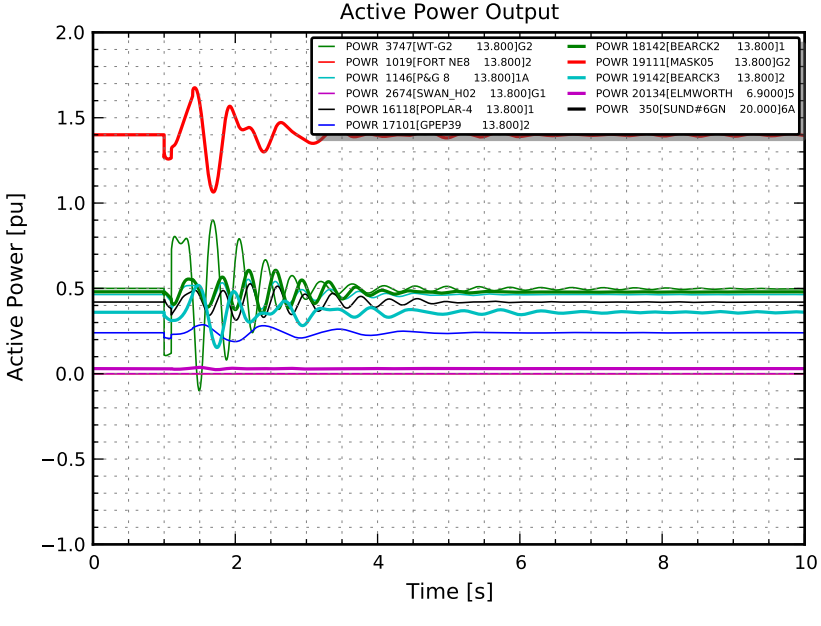
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 010 7L12 WESLEYCREEK to LUBICON_A.

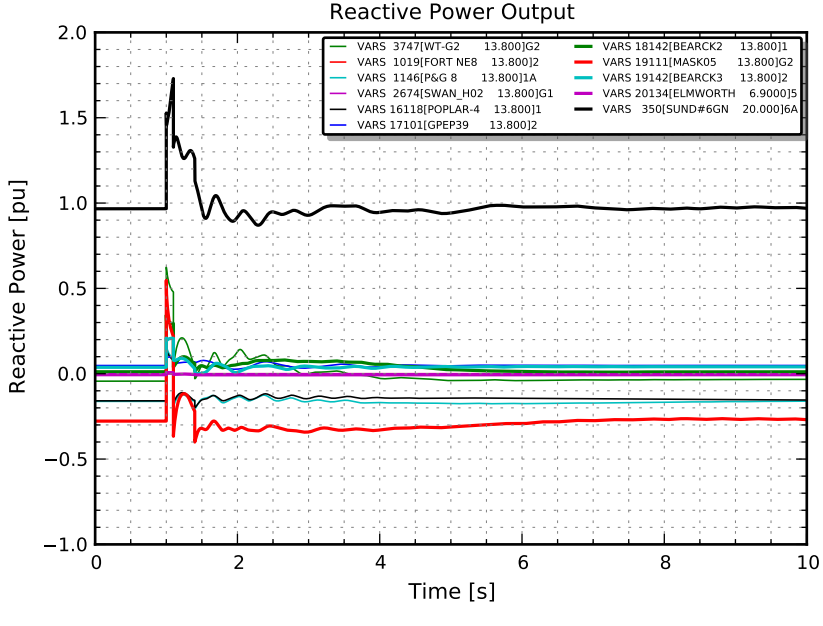
Study Area Generators

Appendix E2A
Figure: 010 (A. 3)





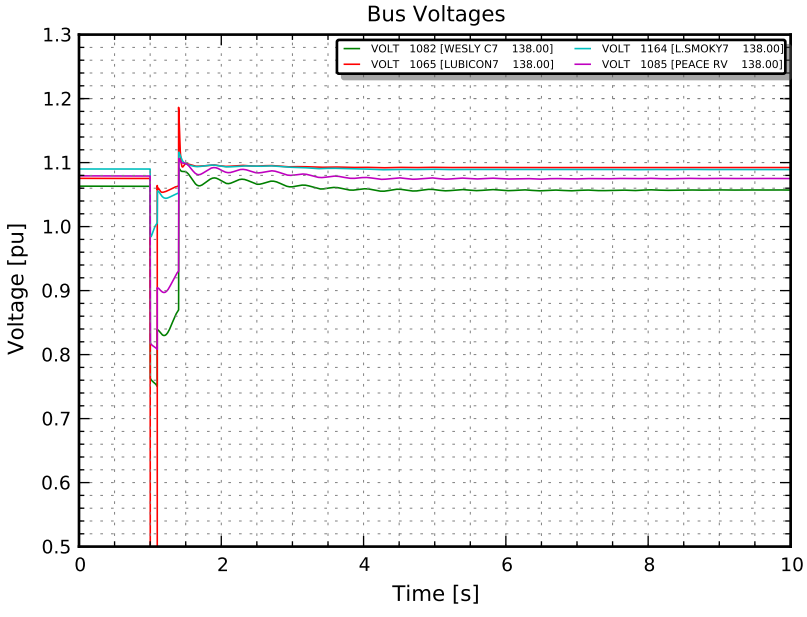


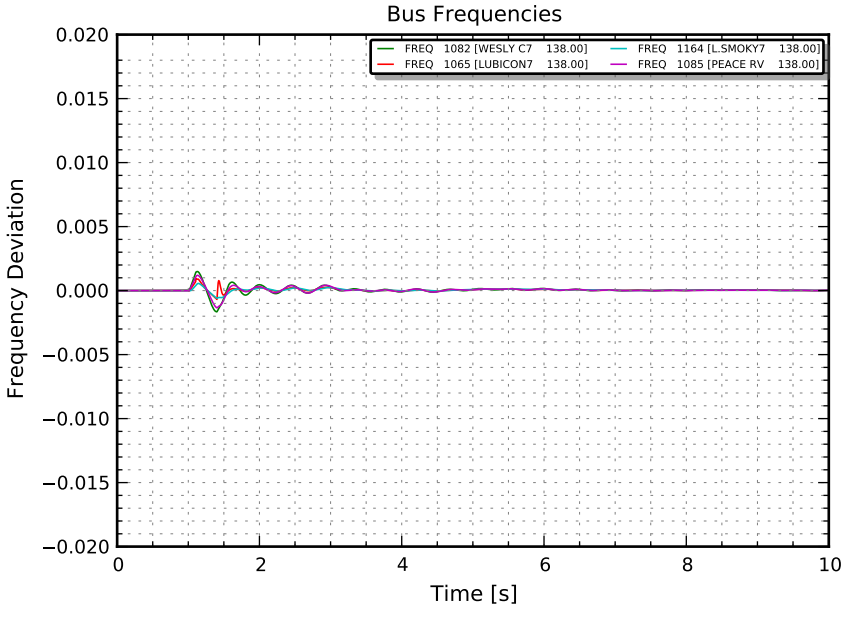


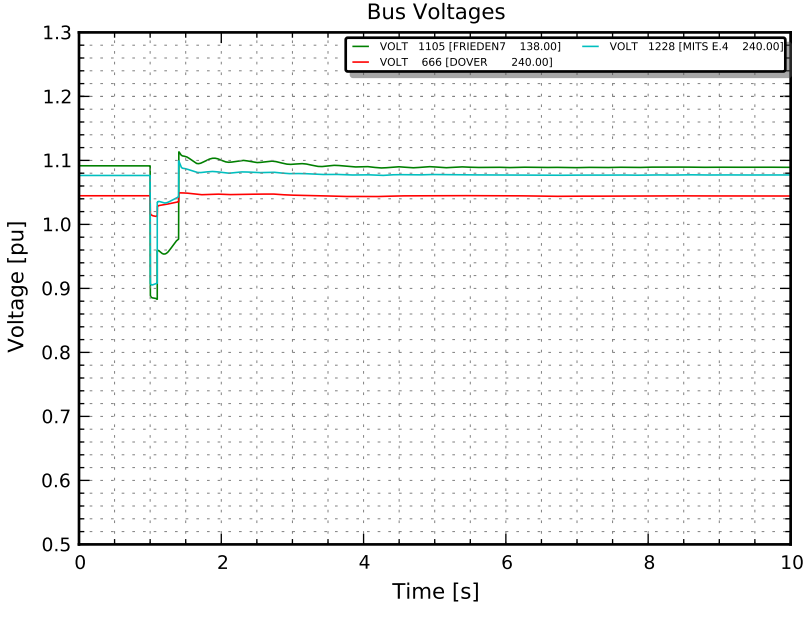
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 010 7L12 WESLEYCREEK to LUBICON_B.

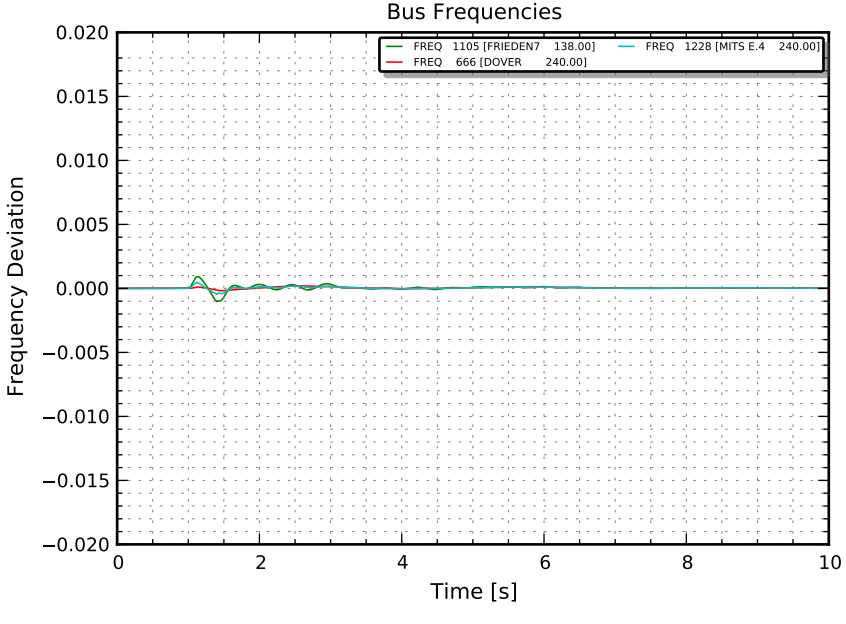
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 010 (B. 1)





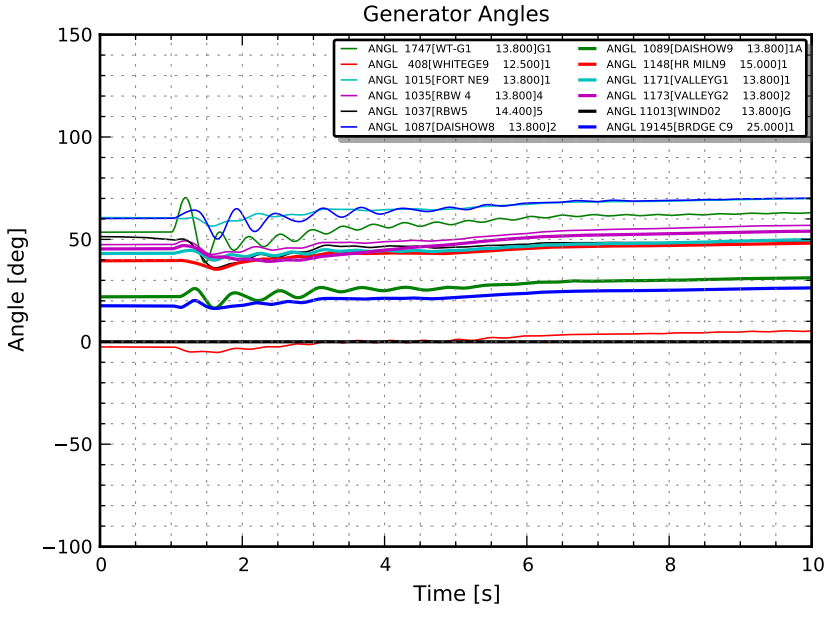


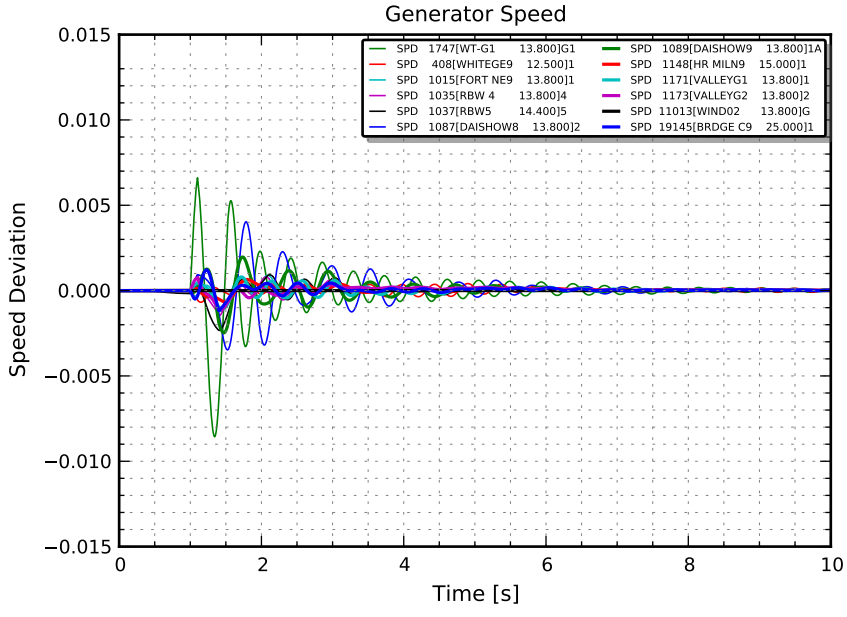


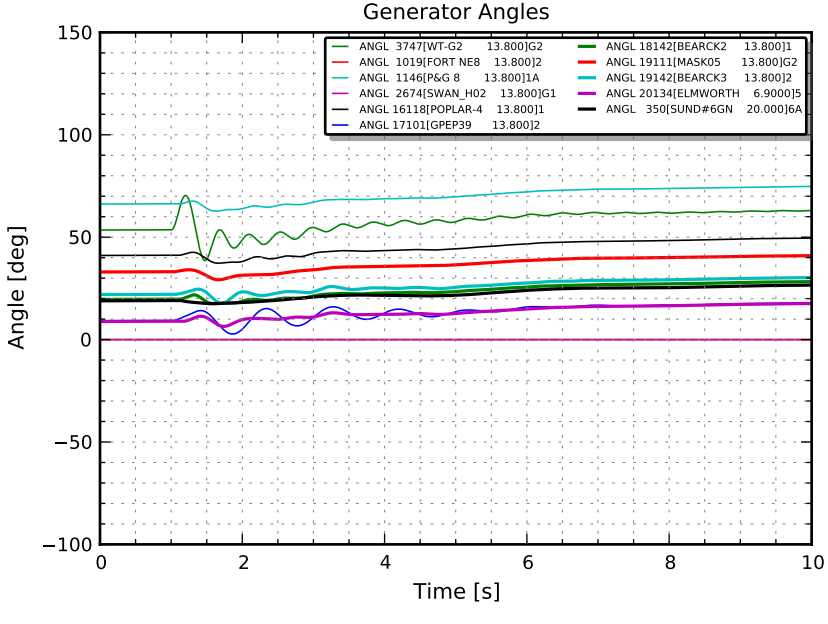
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 010 7L12 WESLEYCREEK to LUBICON_B.

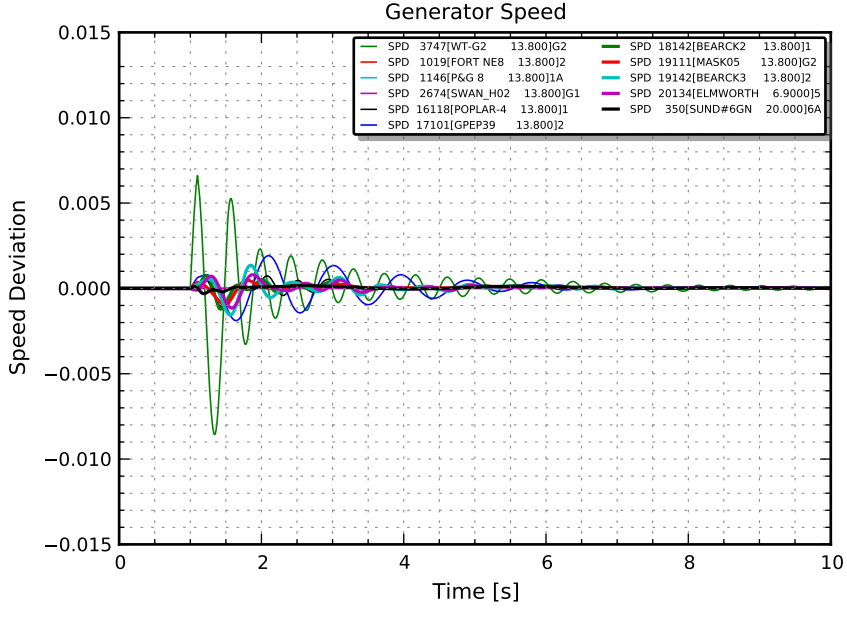
Study Area Generators

Appendix E2A
Figure: 010 (B. 2)





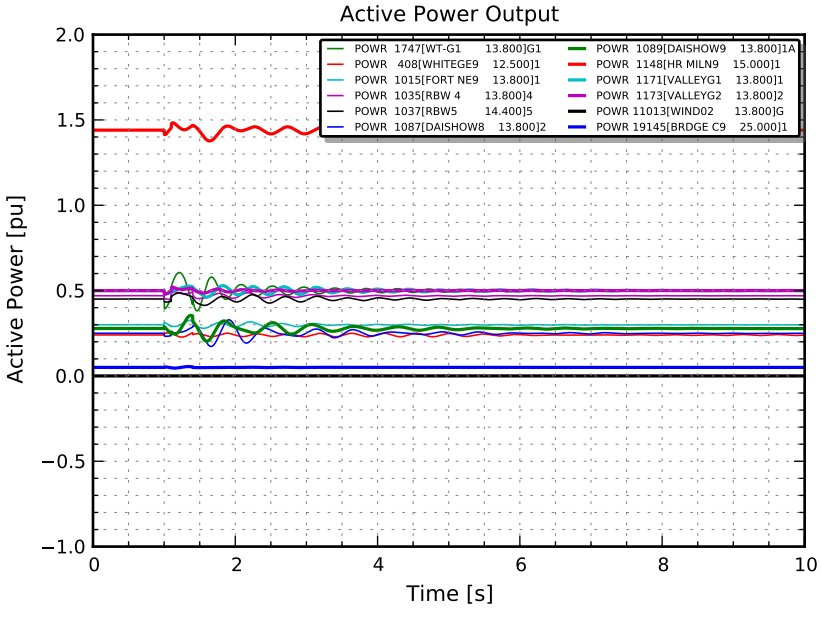


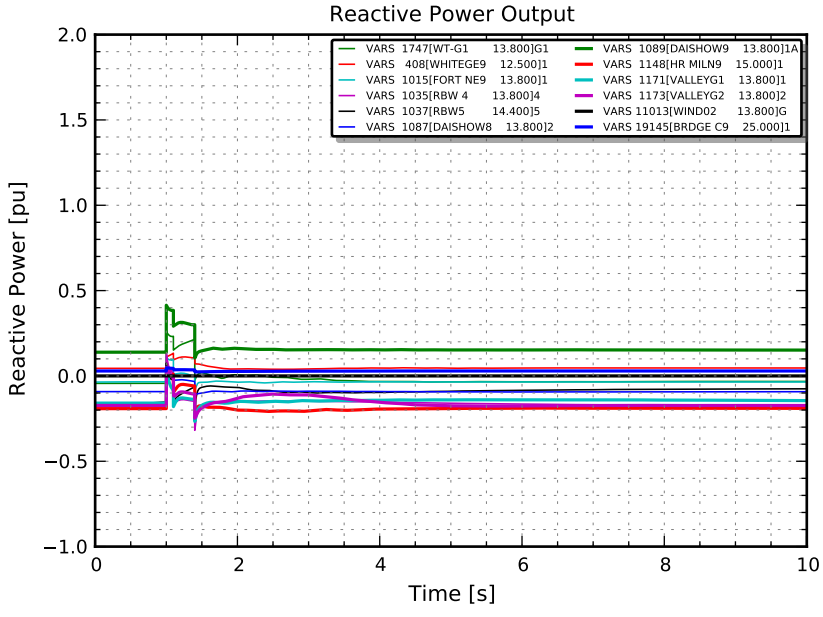


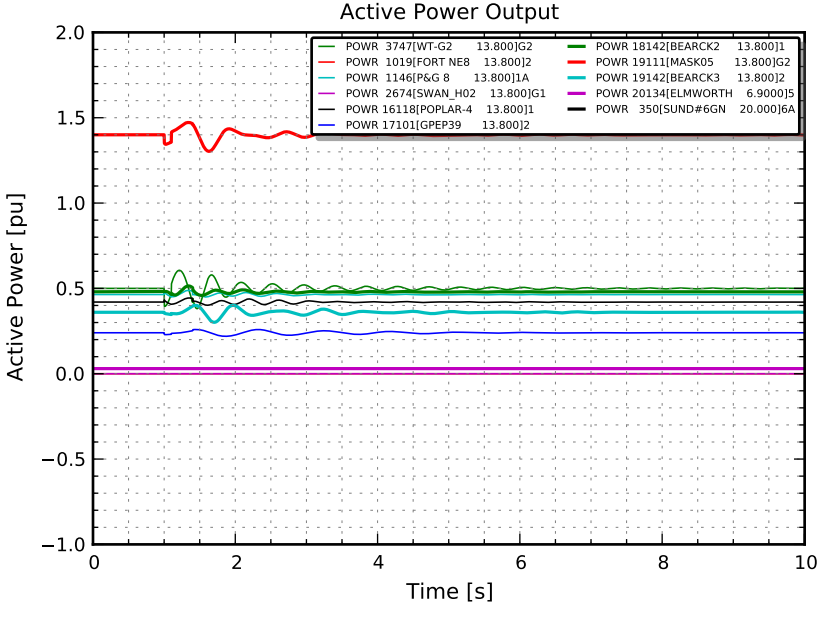
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 010 7L12 WESLEYCREEK to LUBICON_B.

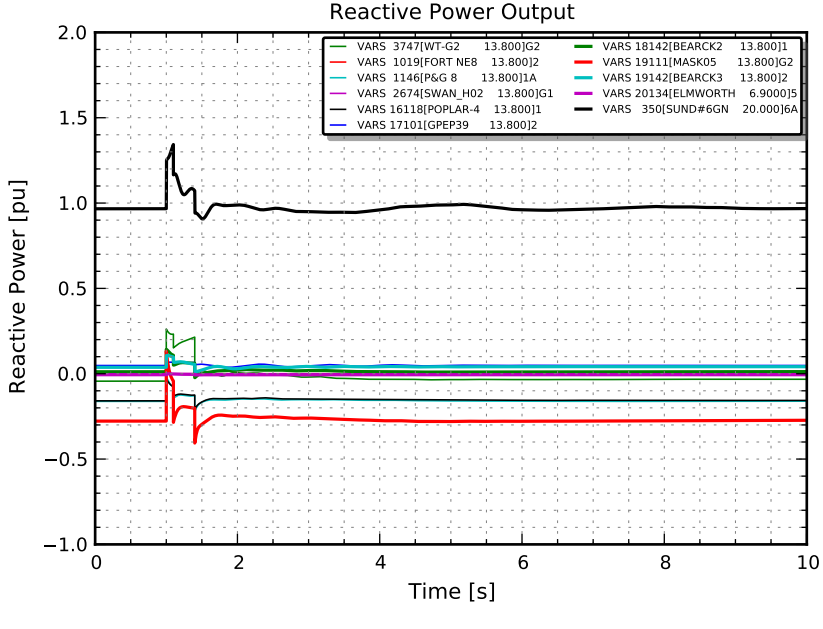
Study Area Generators

Appendix E2A
Figure: 010 (B. 3)





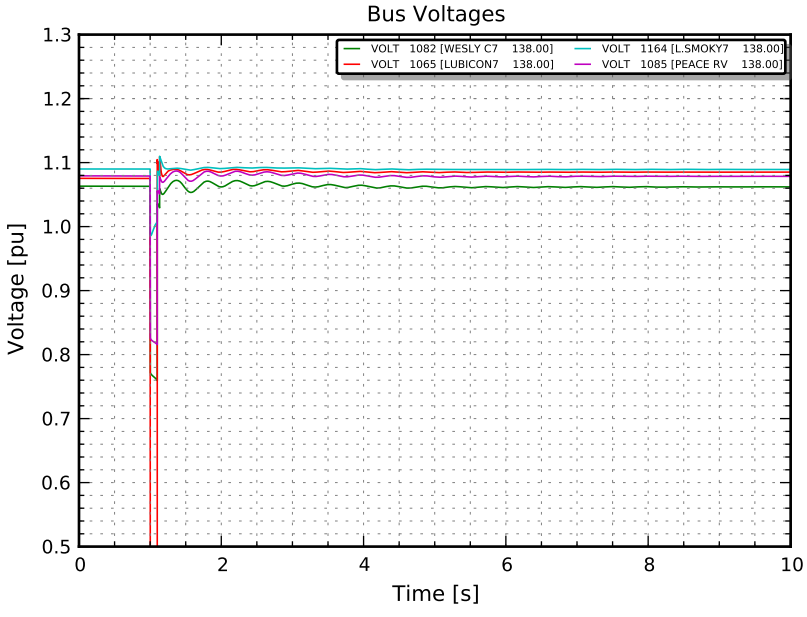


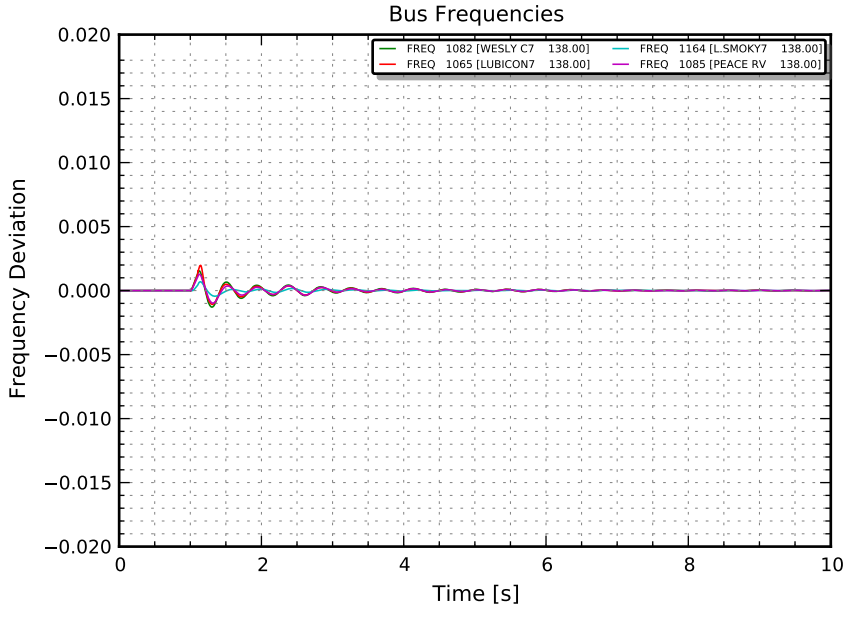


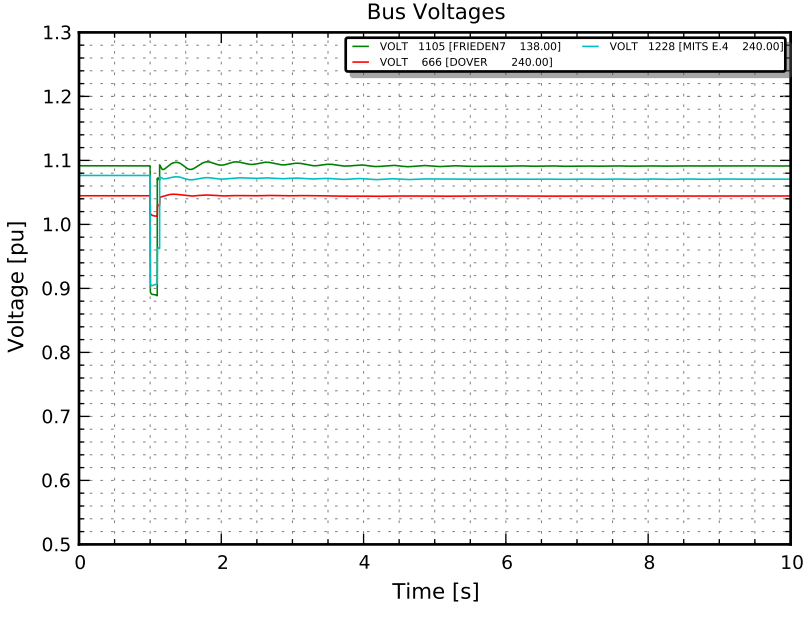
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 011 7L61 LUBICON to NIPISI_A.

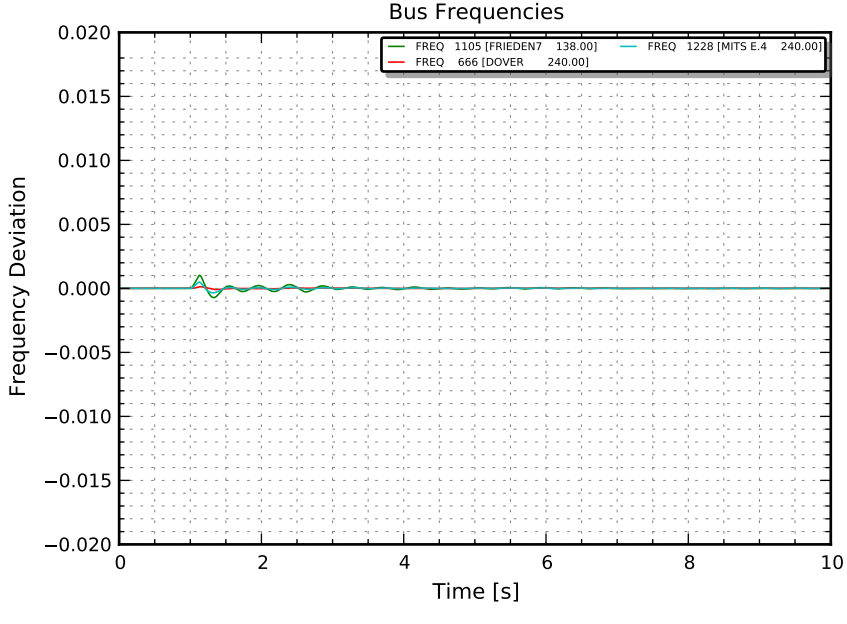
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 011 (A. 1)





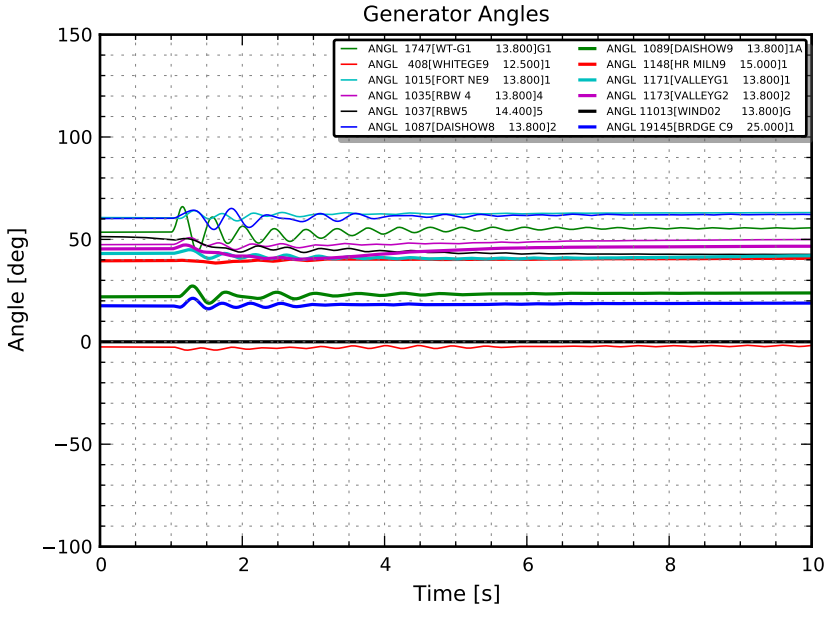


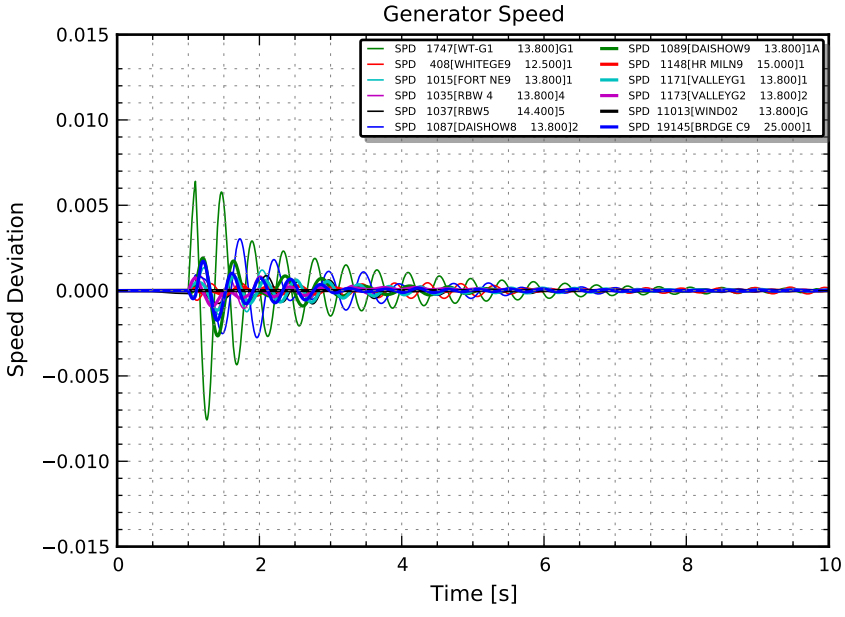


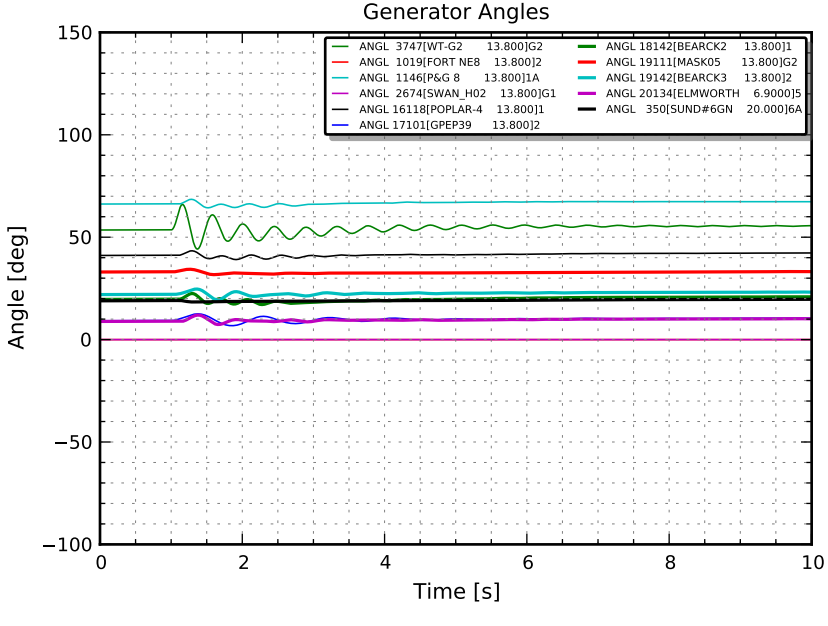
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 011 7L61 LUBICON to NIPISI_A.

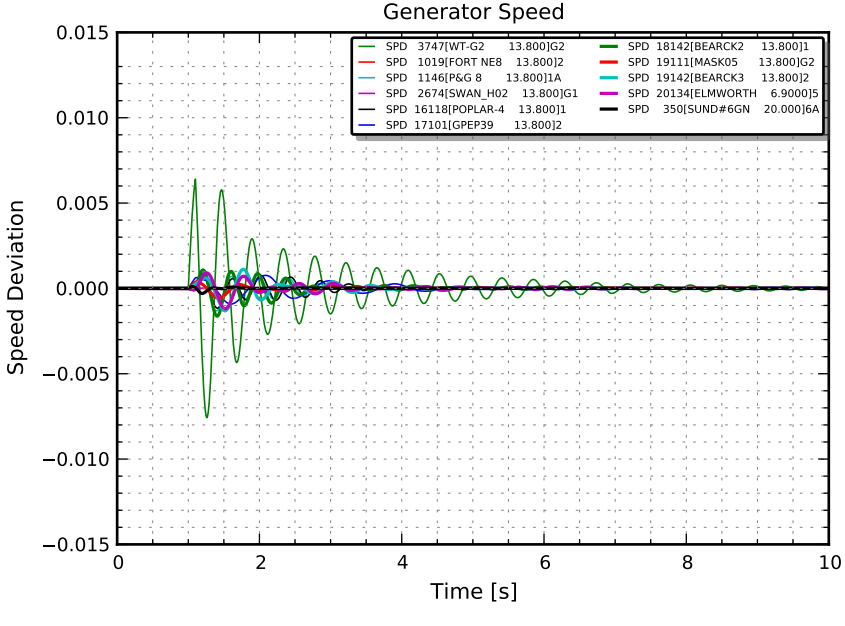
Study Area Generators

Appendix E2A
Figure: 011 (A. 2)





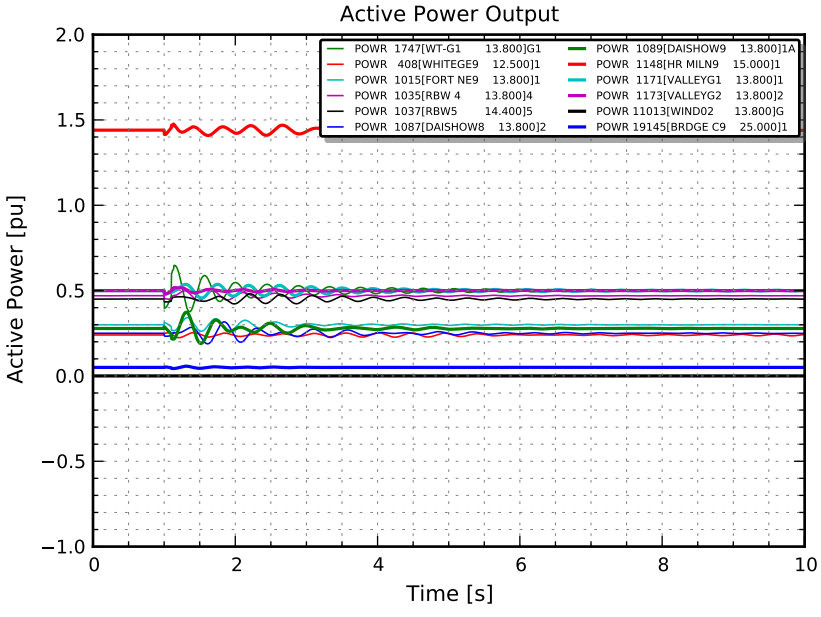


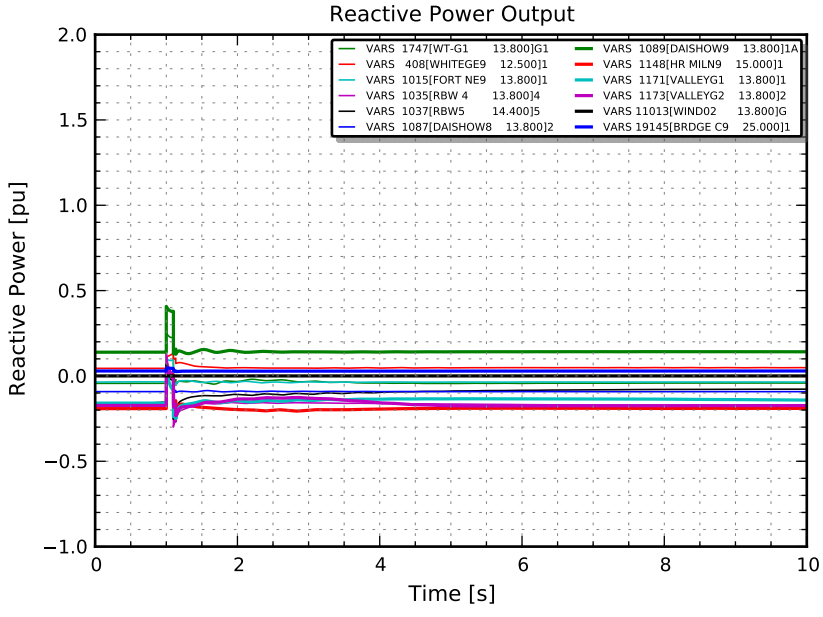


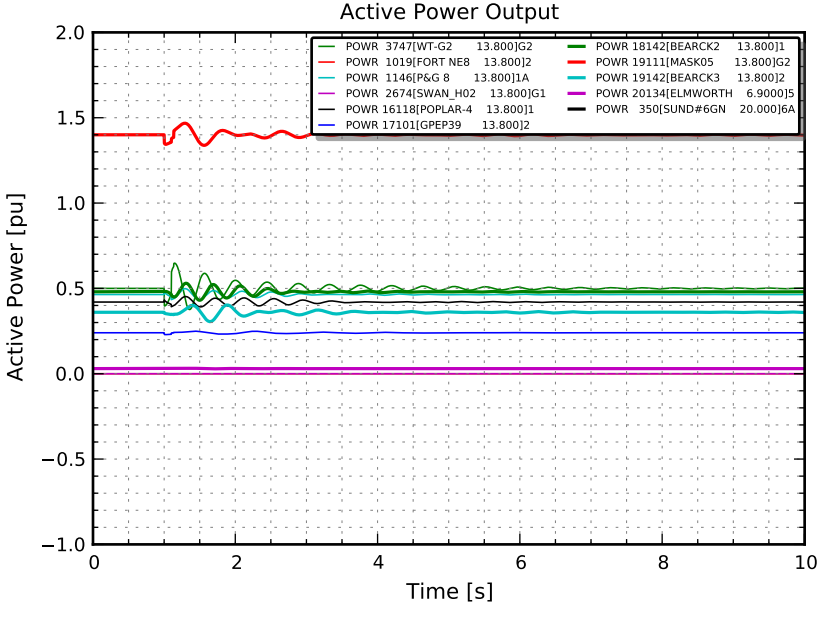
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 011 7L61 LUBICON to NIPISI_A.

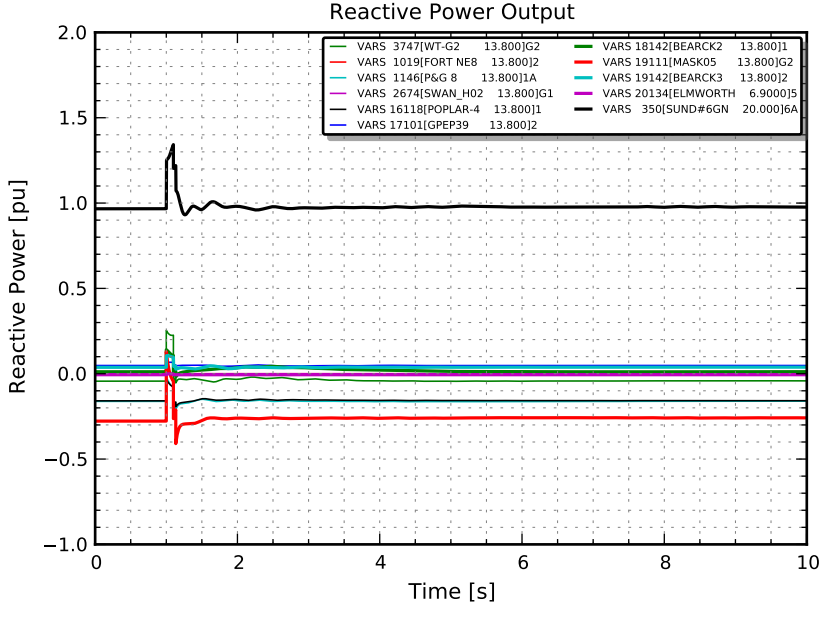
Study Area Generators

Appendix E2A
Figure: 011 (A. 3)





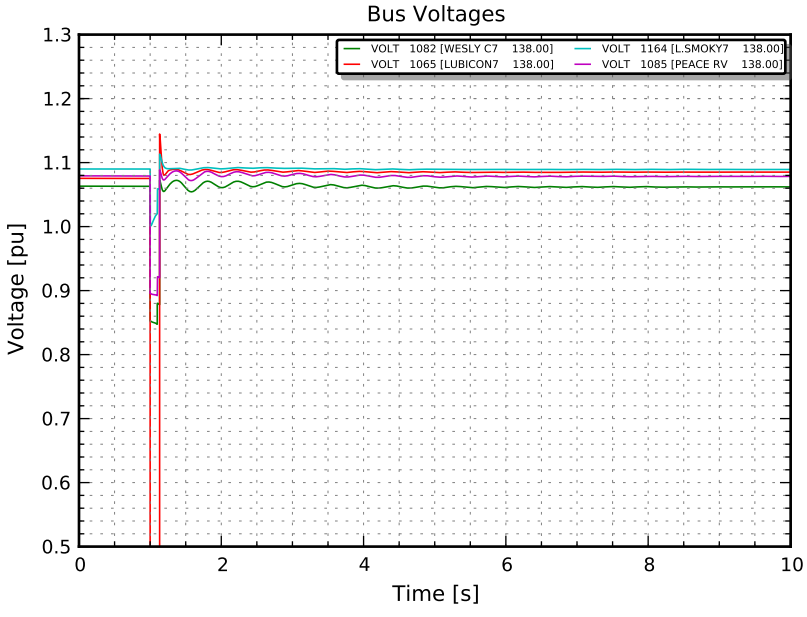


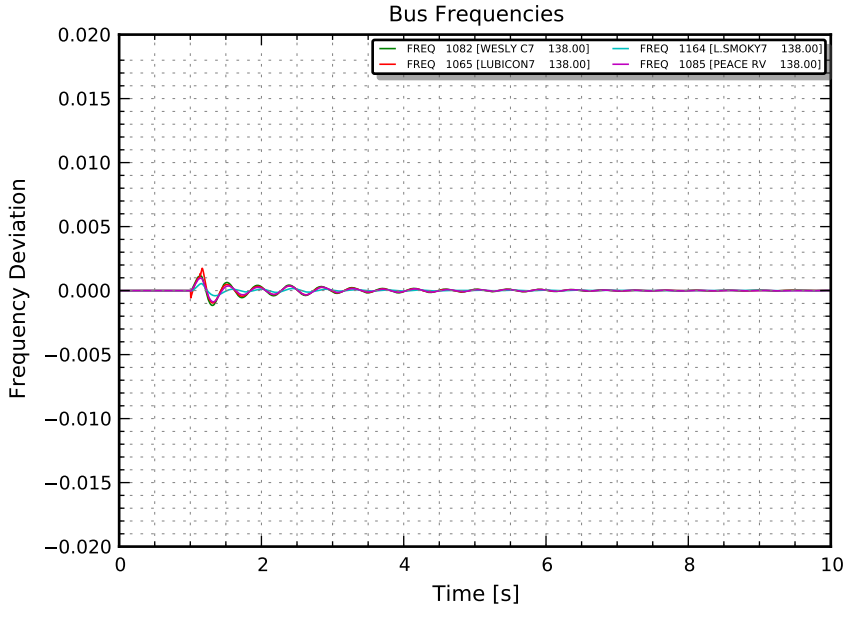


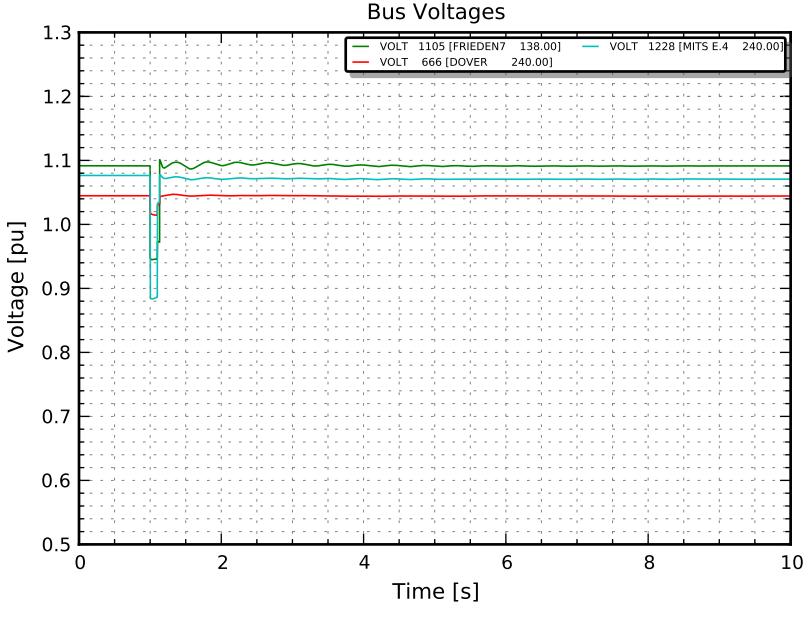
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 011 7L61 LUBICON to NIPISI_B.

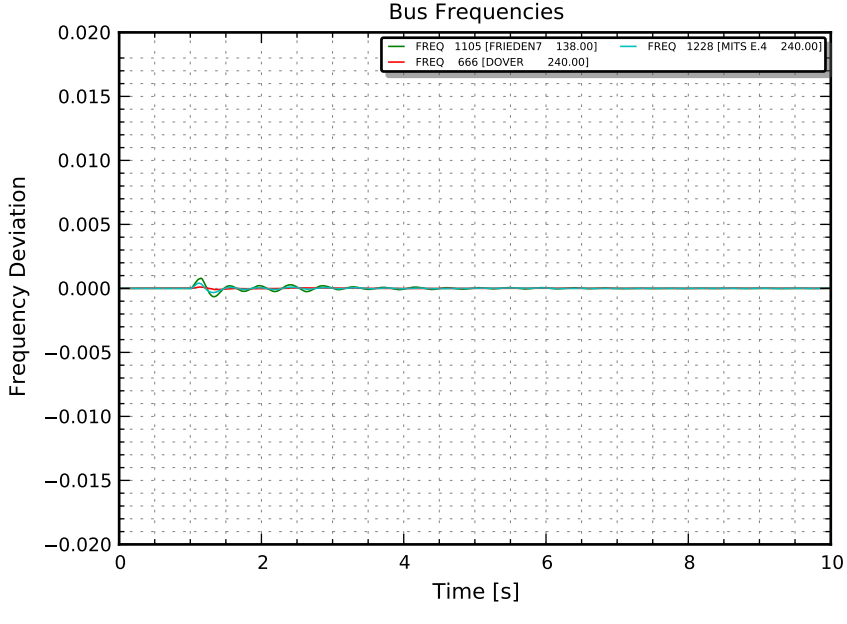
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 011 (B. 1)





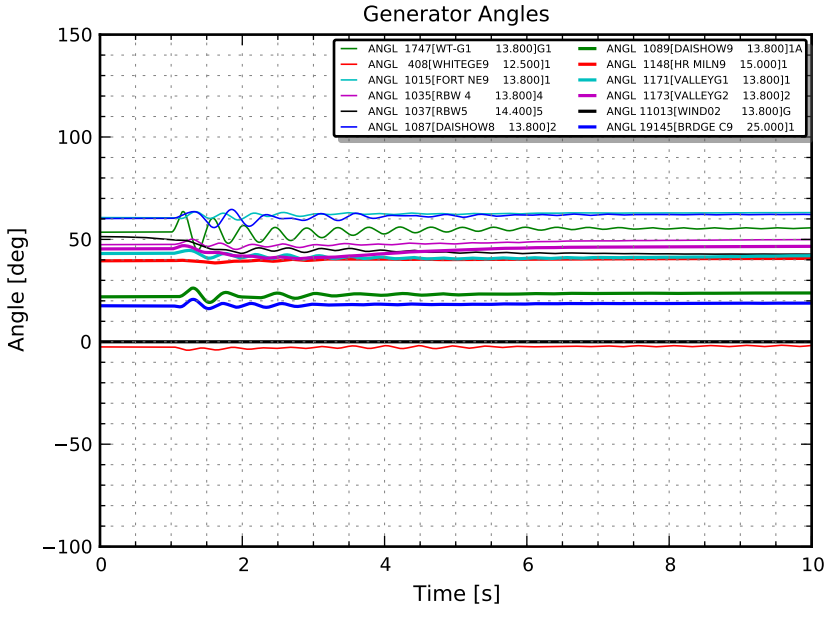


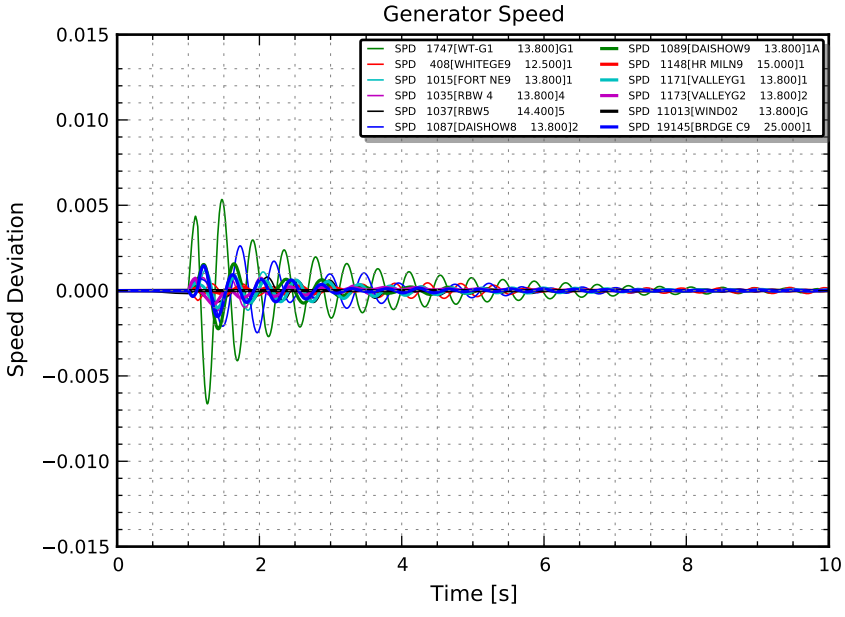


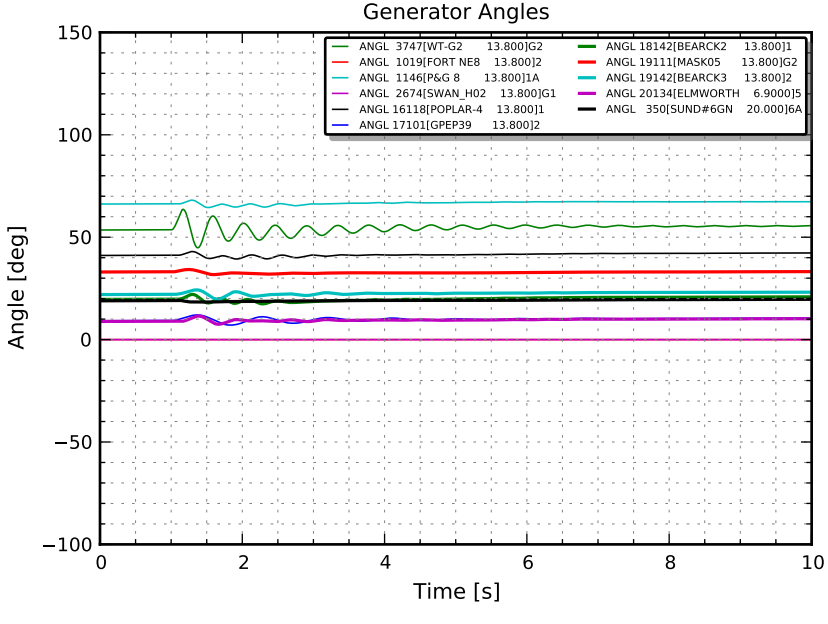
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 011 7L61 LUBICON to NIPISI_B.

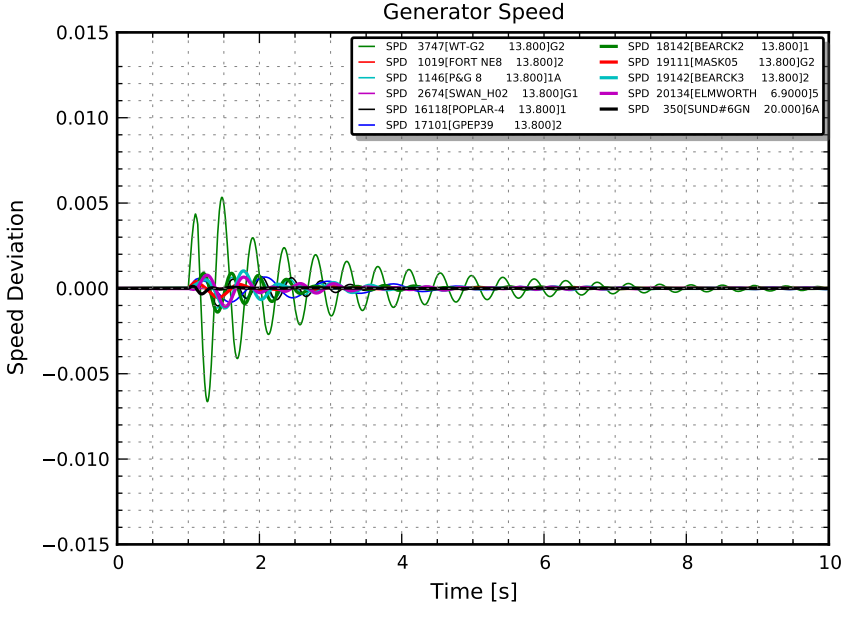
Study Area Generators

Appendix E2A
Figure: 011 (B. 2)





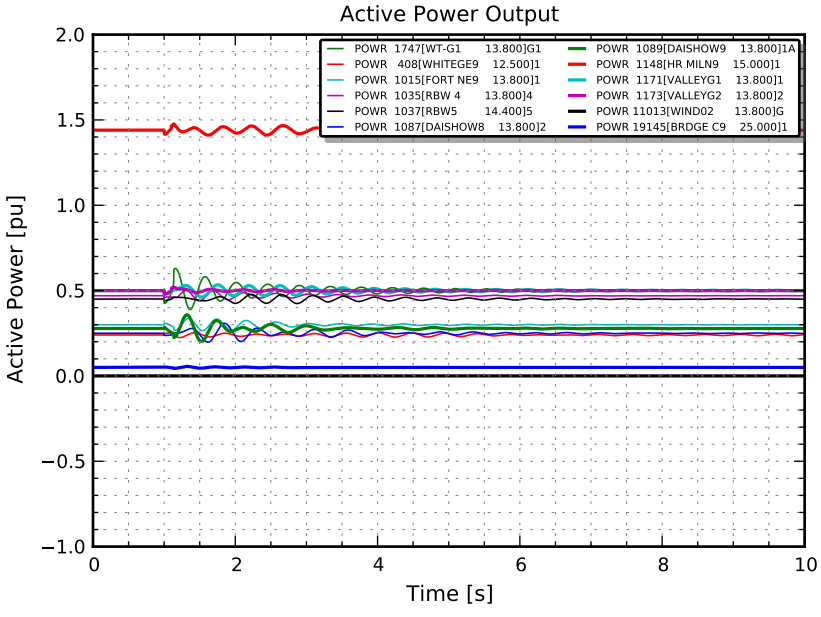


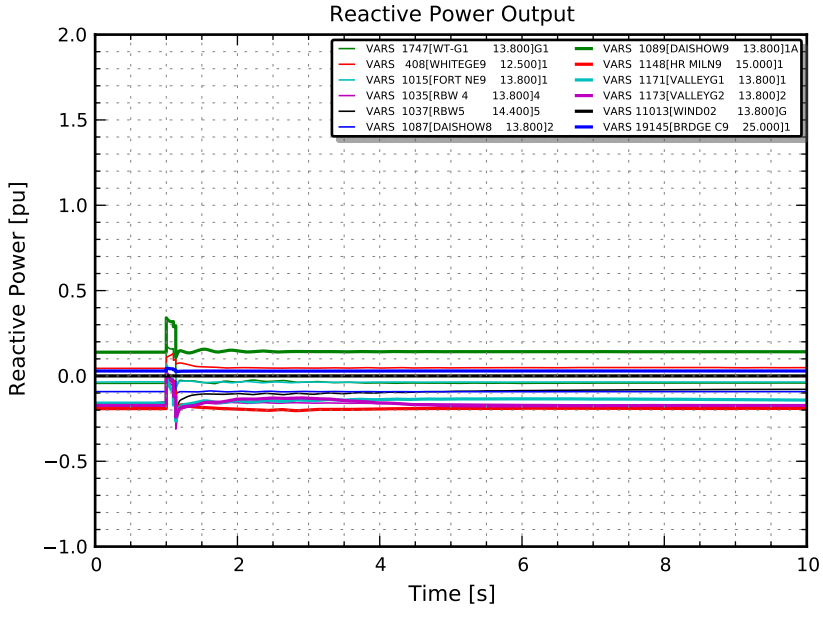


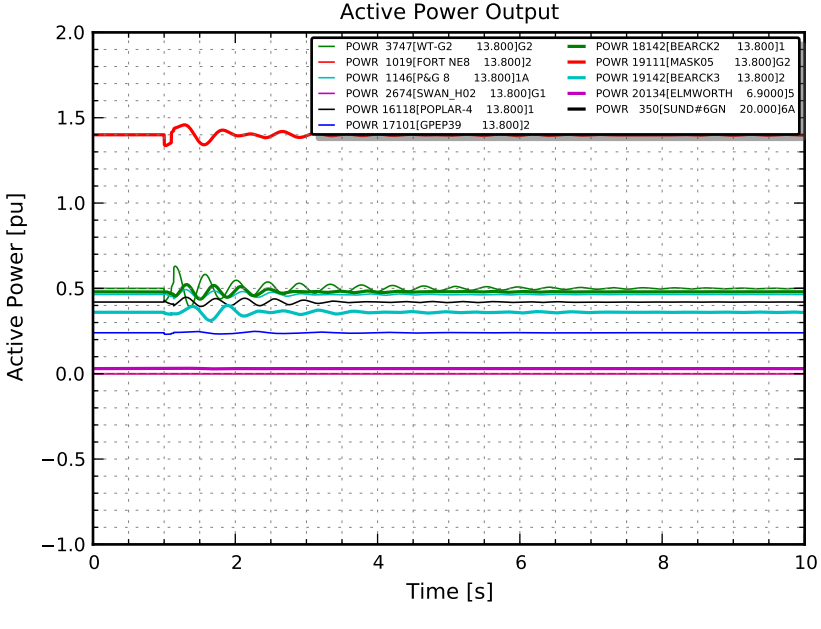
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 011 7L61 LUBICON to NIPISI_B.

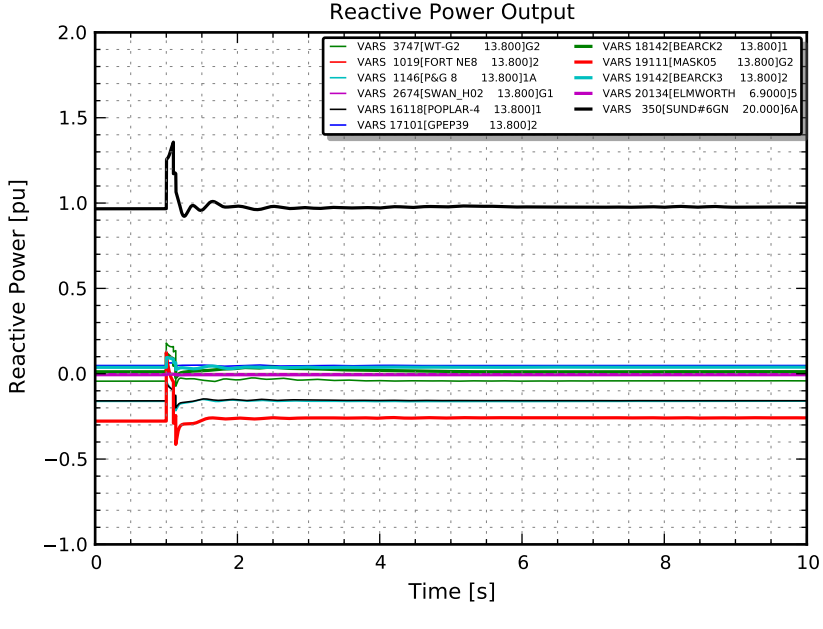
Study Area Generators

Appendix E2A
Figure: 011 (B. 3)





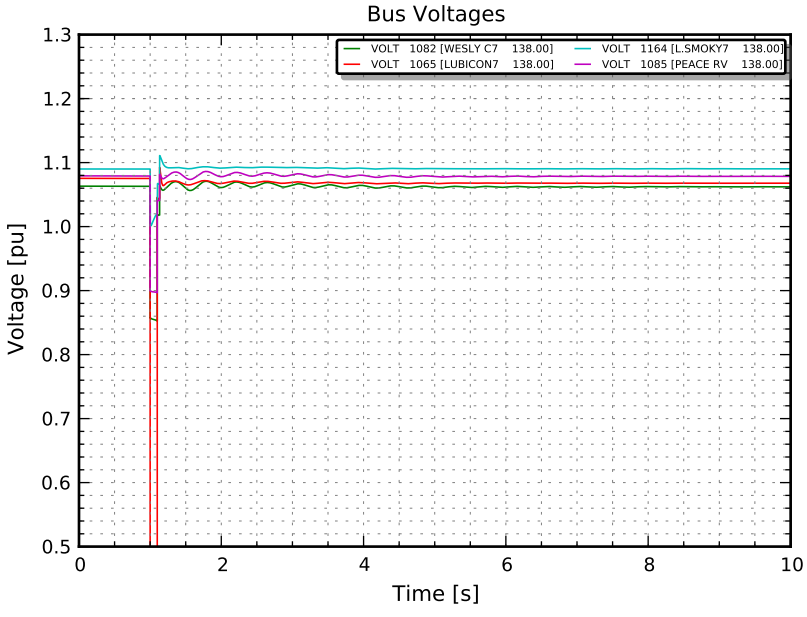


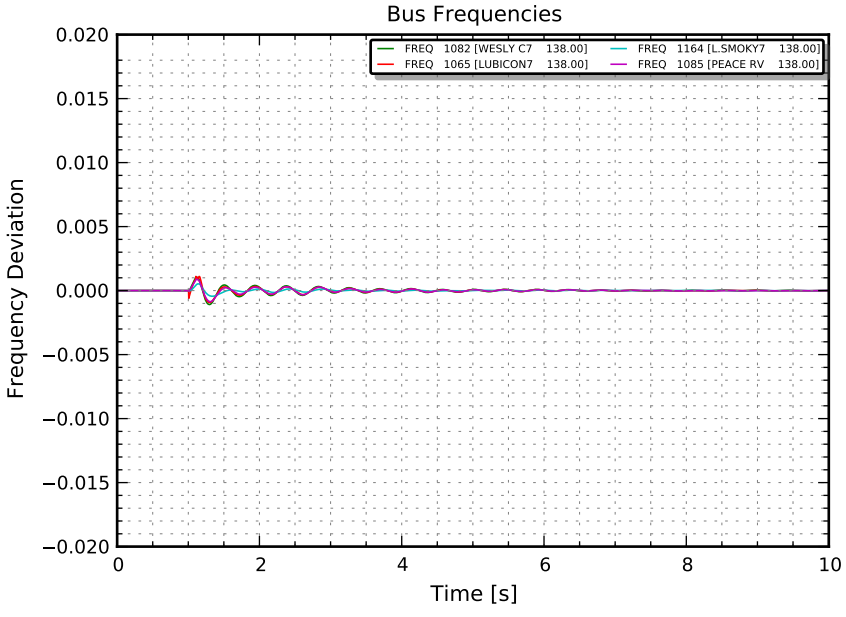


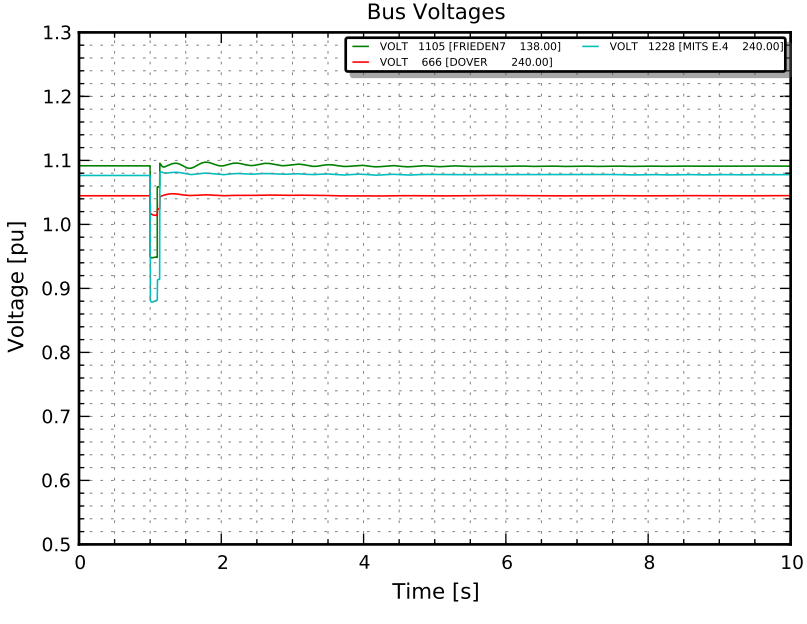
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 012 7L23 NIPISI to MITSUE_A.

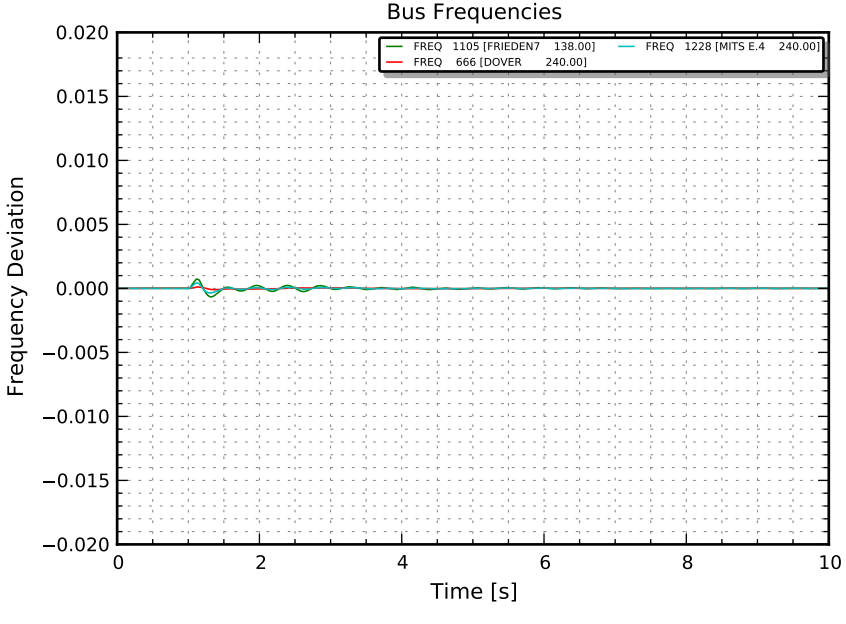
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 012 (A. 1)





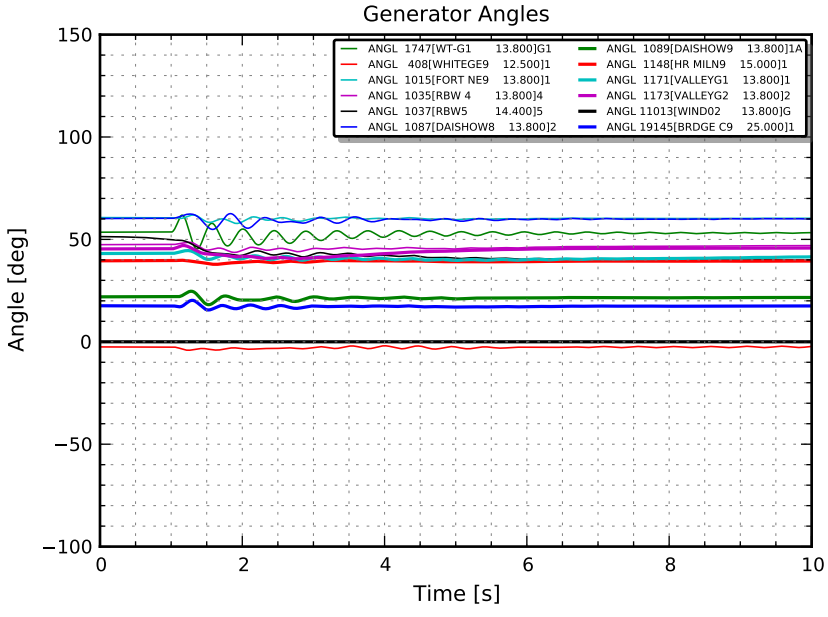


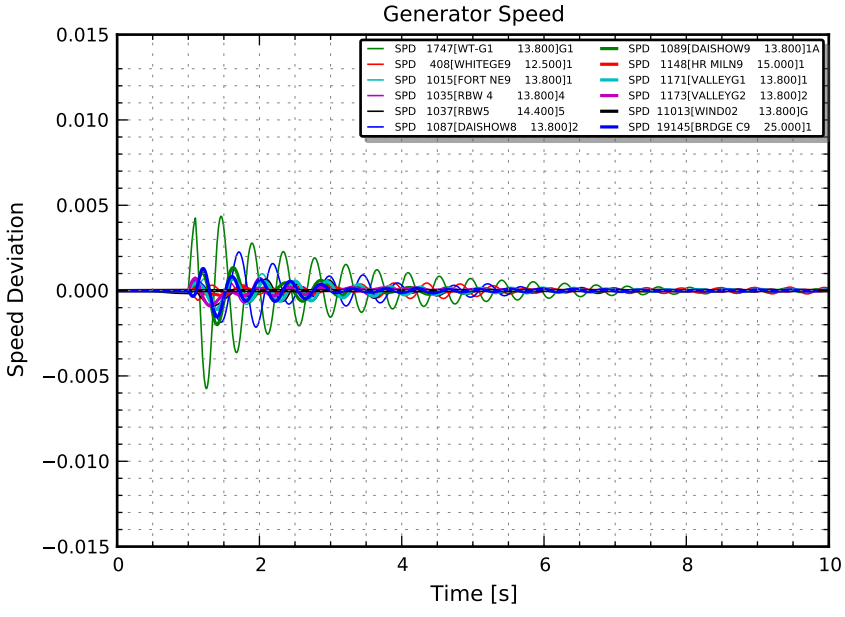


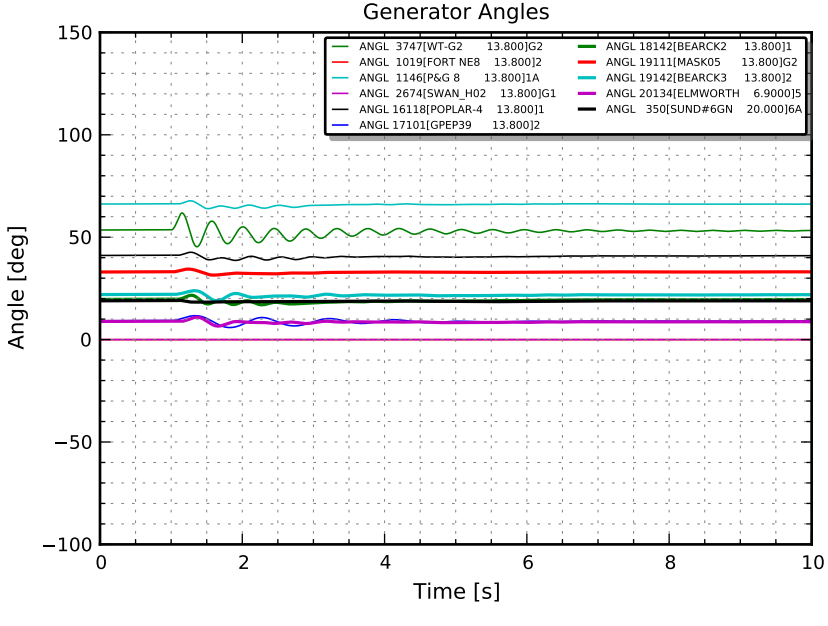
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 012 7L23 NIPISI to MITSUE_A.

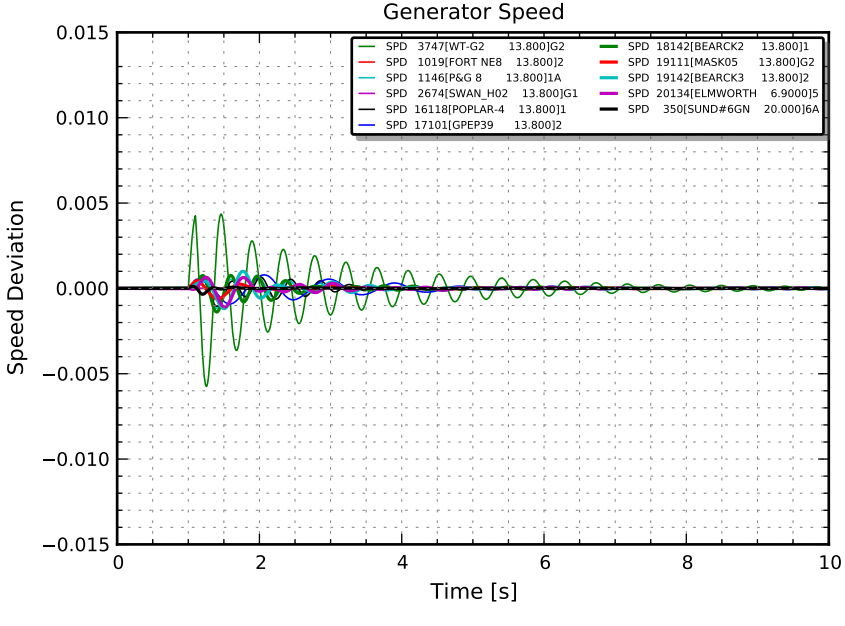
Study Area Generators

Appendix E2A
Figure: 012 (A. 2)





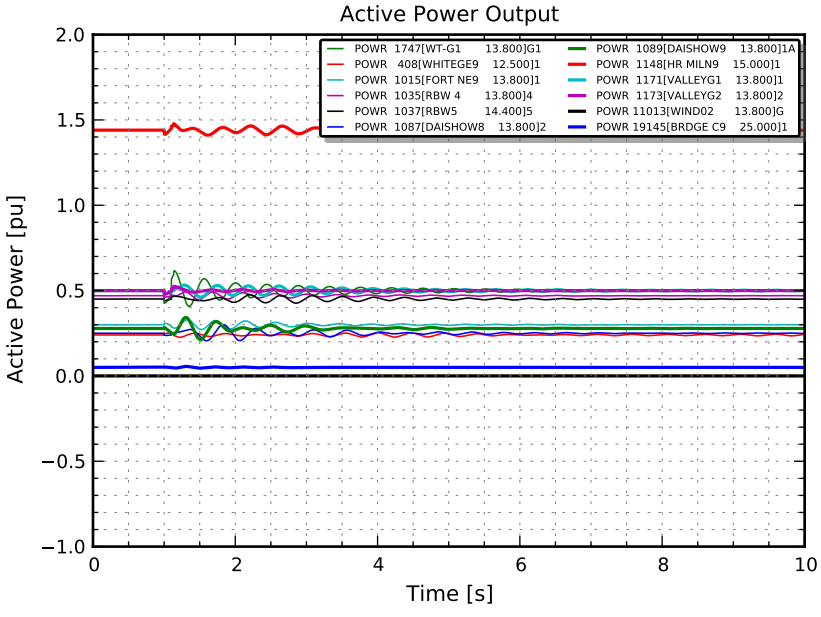


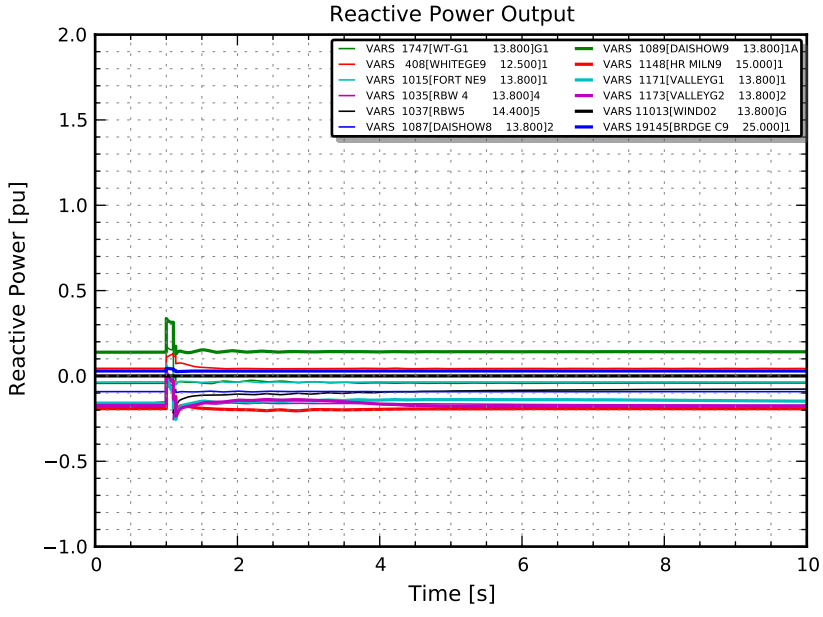


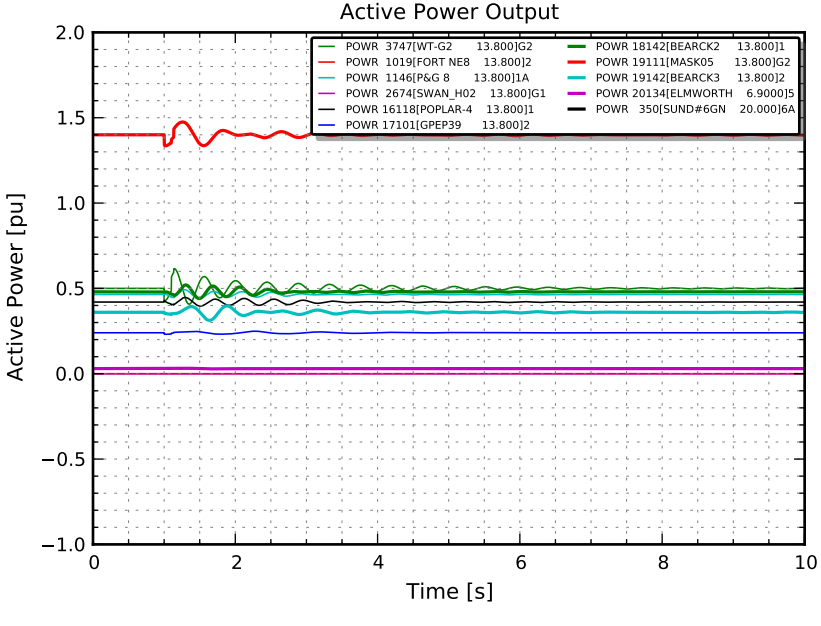
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 012 7L23 NIPISI to MITSUE_A.

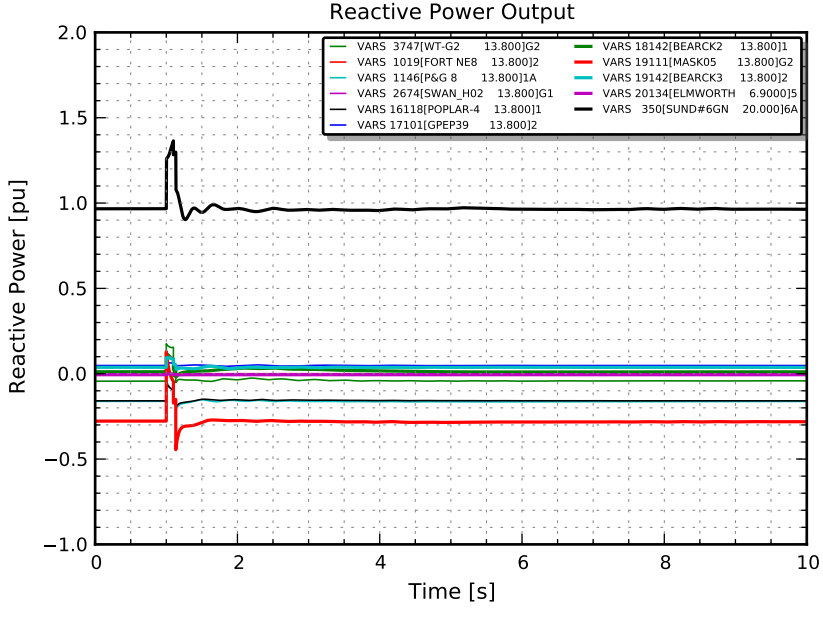
Study Area Generators

Appendix E2A
Figure: 012 (A. 3)





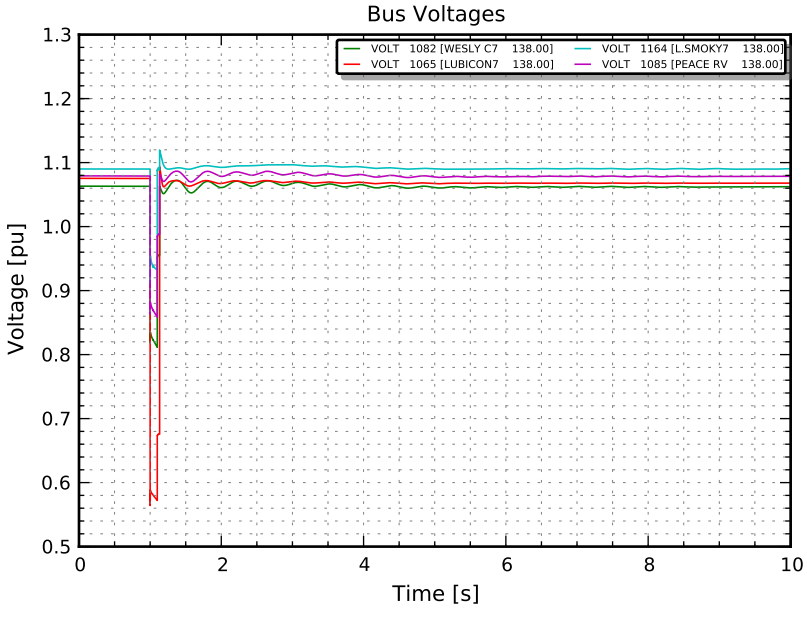


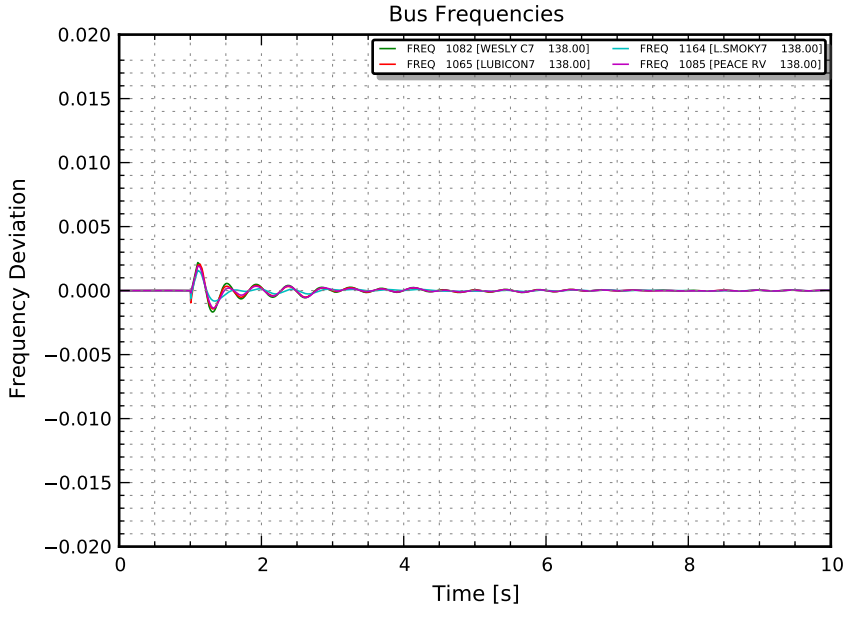


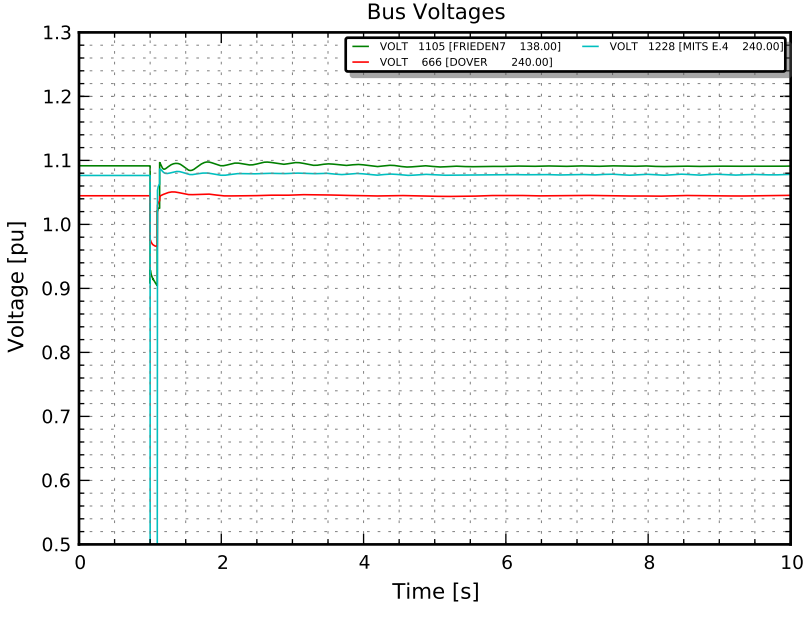
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 012 7L23 NIPISI to MITSUE_B.

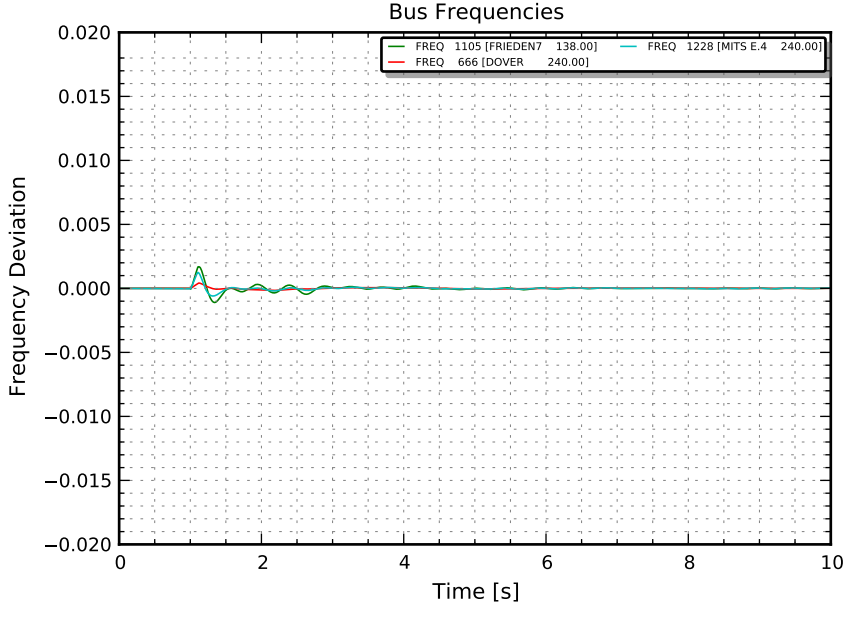
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 012 (B. 1)





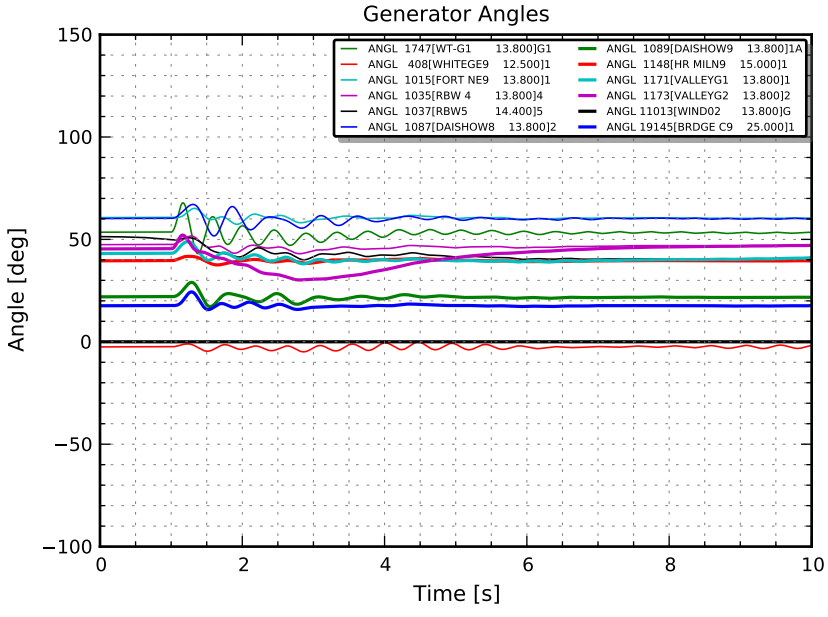


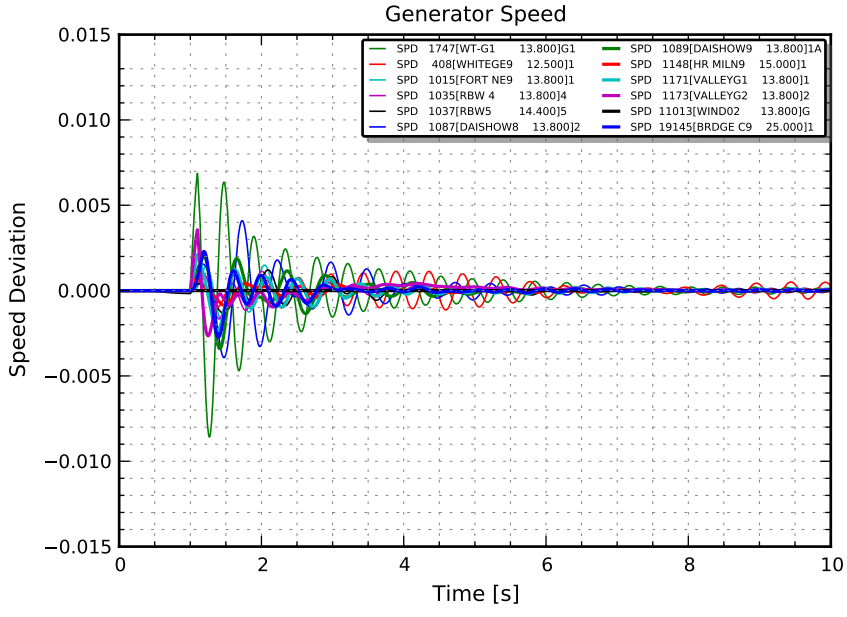


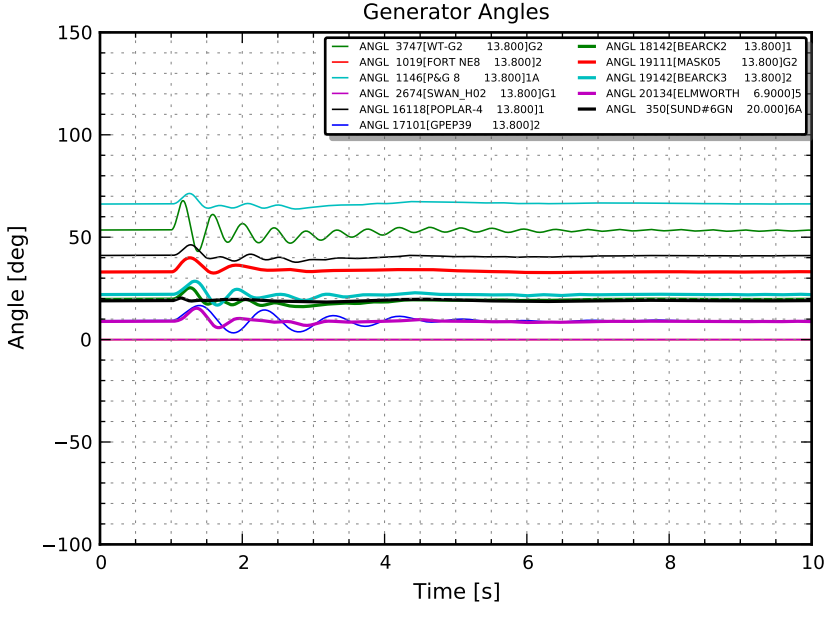
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 012 7L23 NIPISI to MITSUE_B.

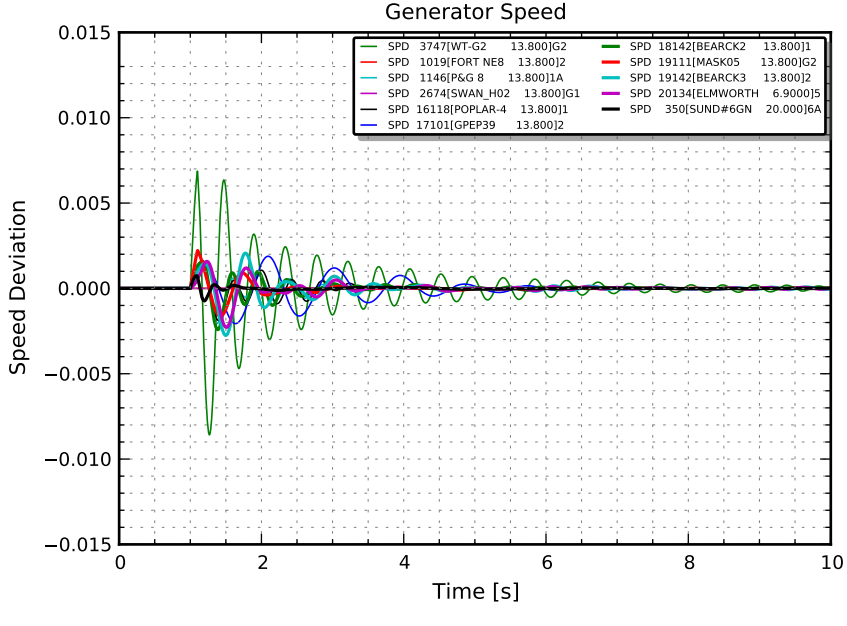
Study Area Generators

Appendix E2A
Figure: 012 (B. 2)





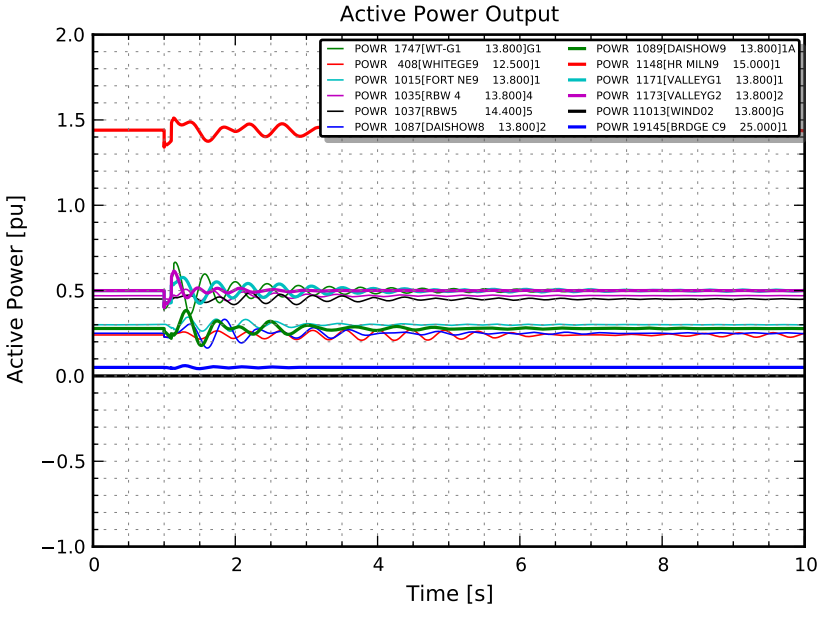


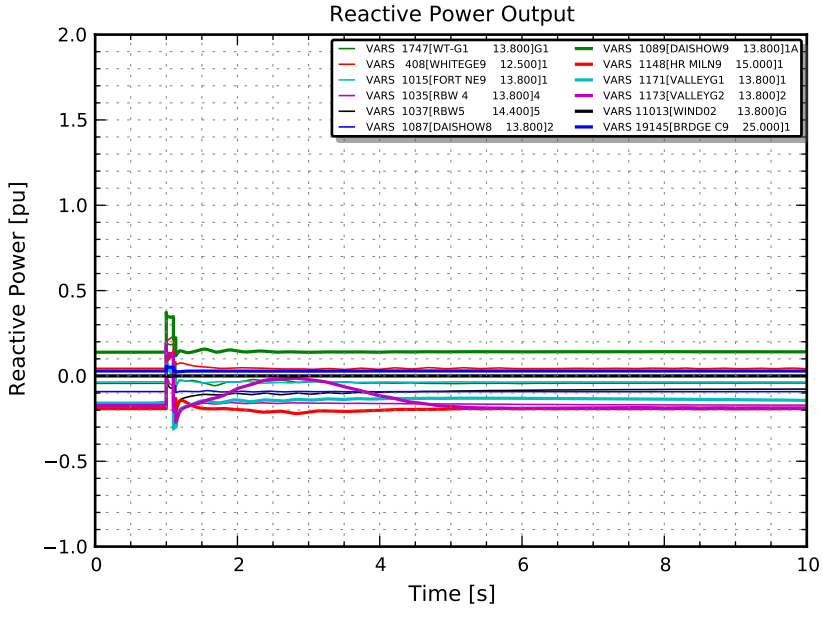


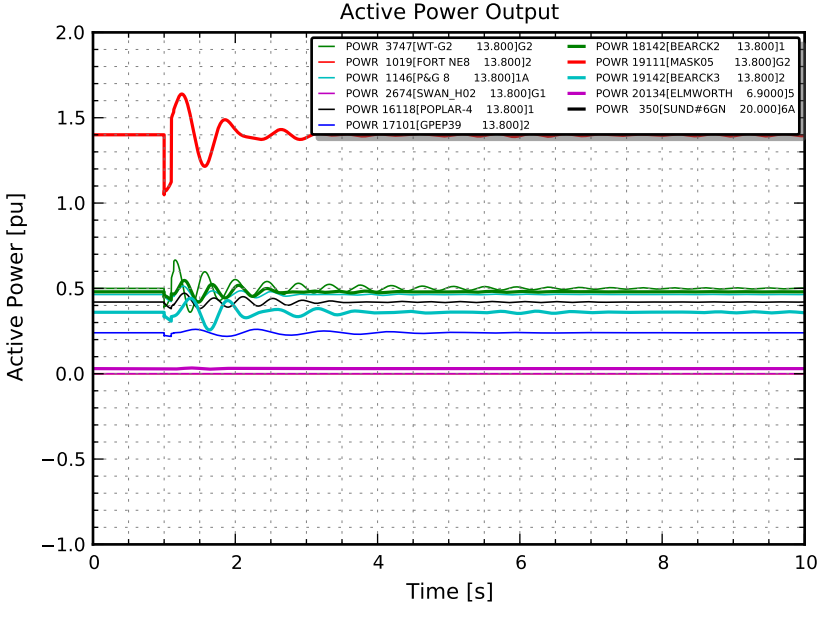
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 012 7L23 NIPISI to MITSUE_B.

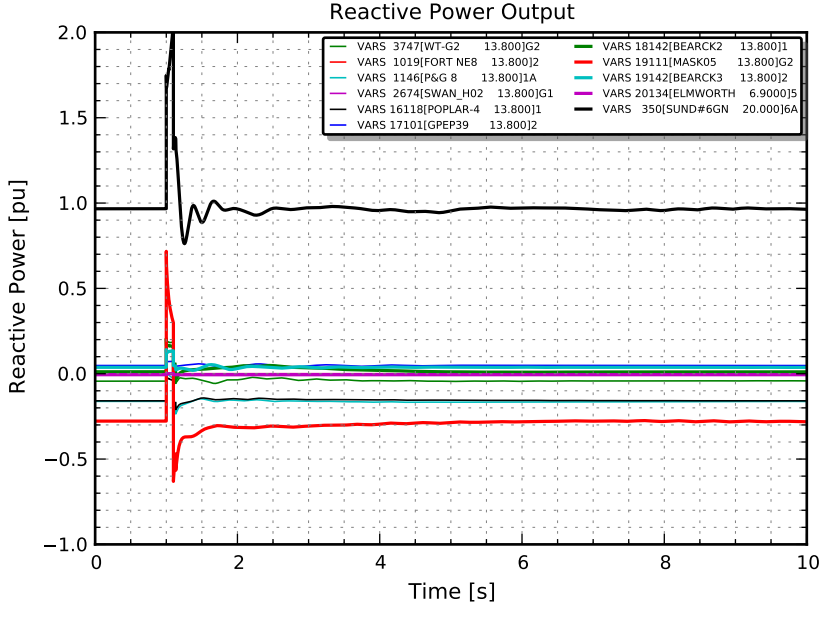
Study Area Generators

Appendix E2A
Figure: 012 (B. 3)





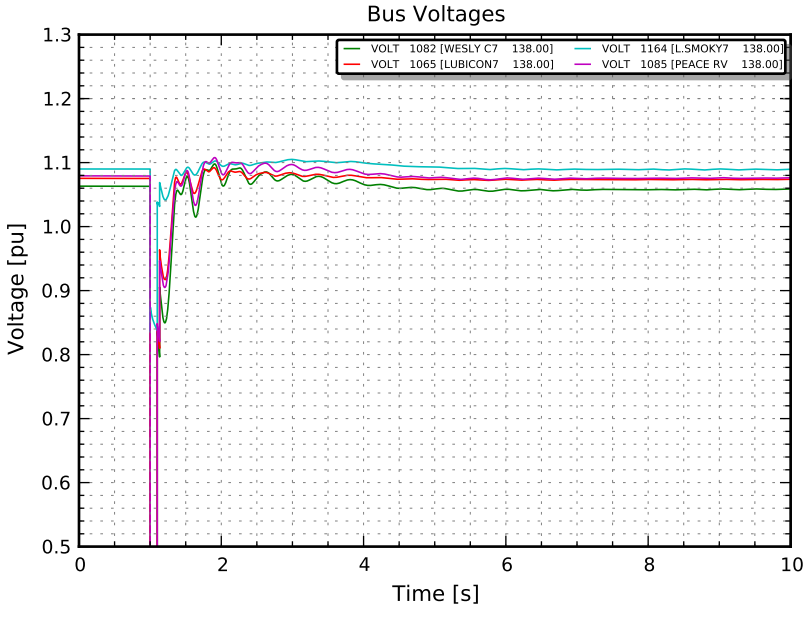


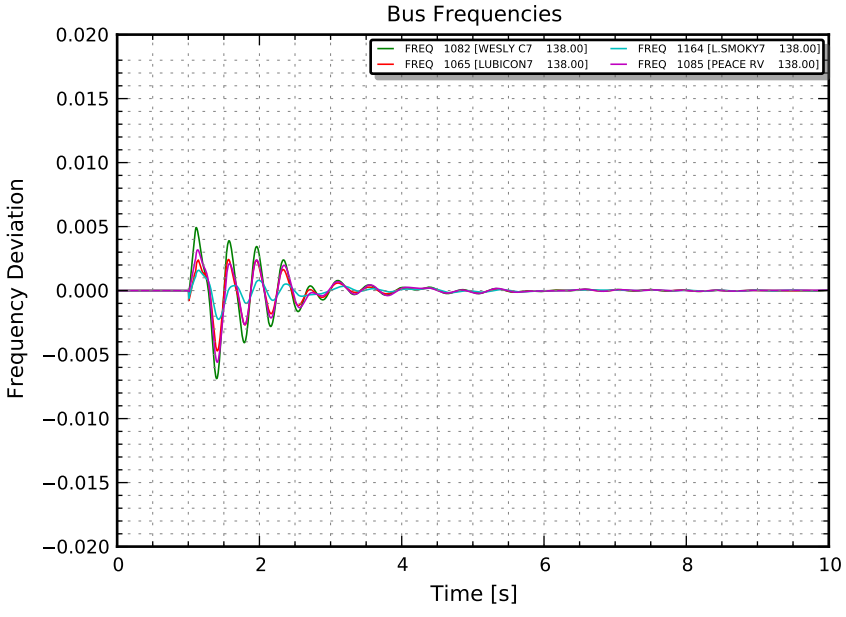


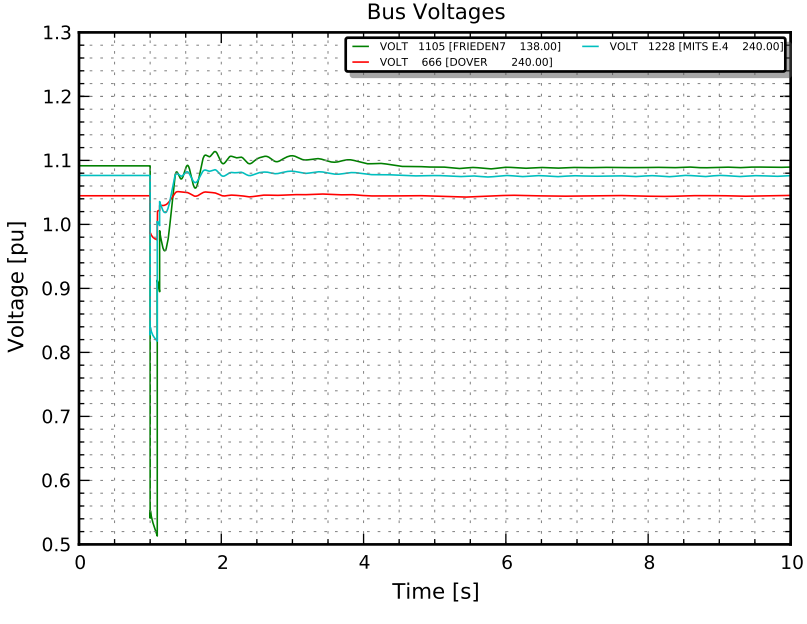
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 013 7L131 WESLEYCREEK to Meikle_A.

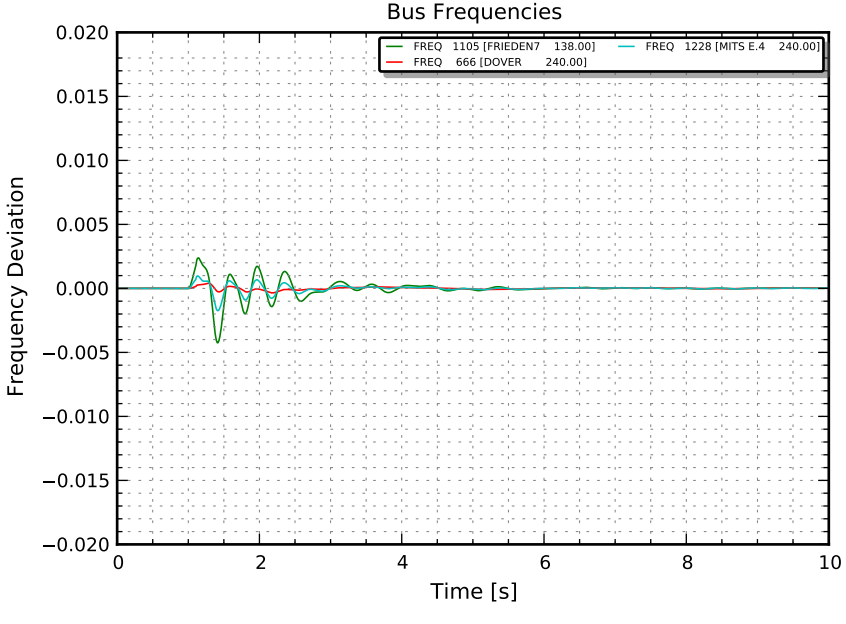
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 013 (A. 1)





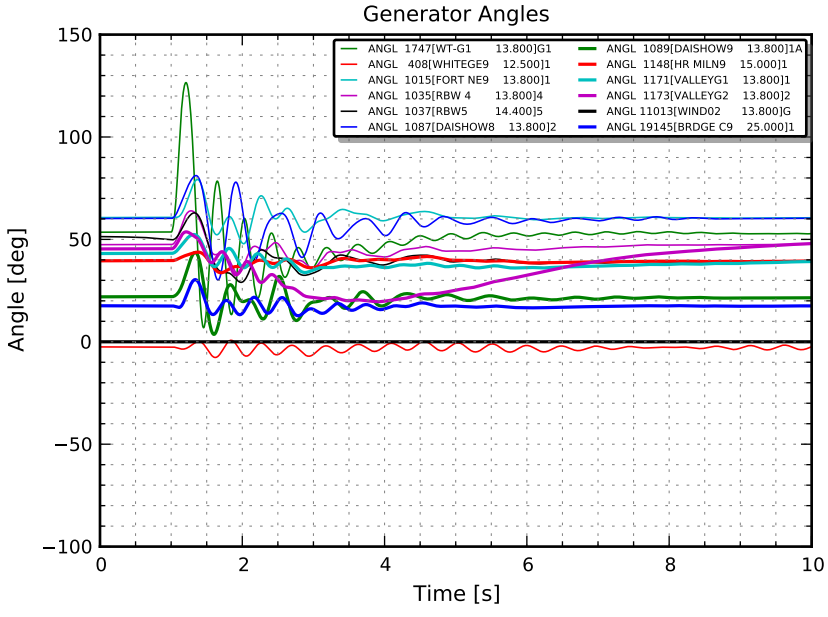


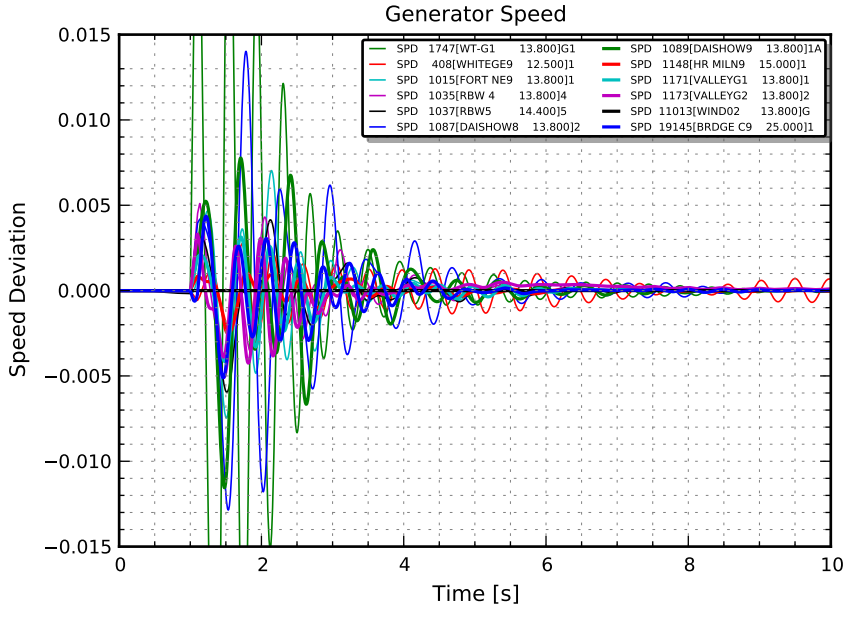


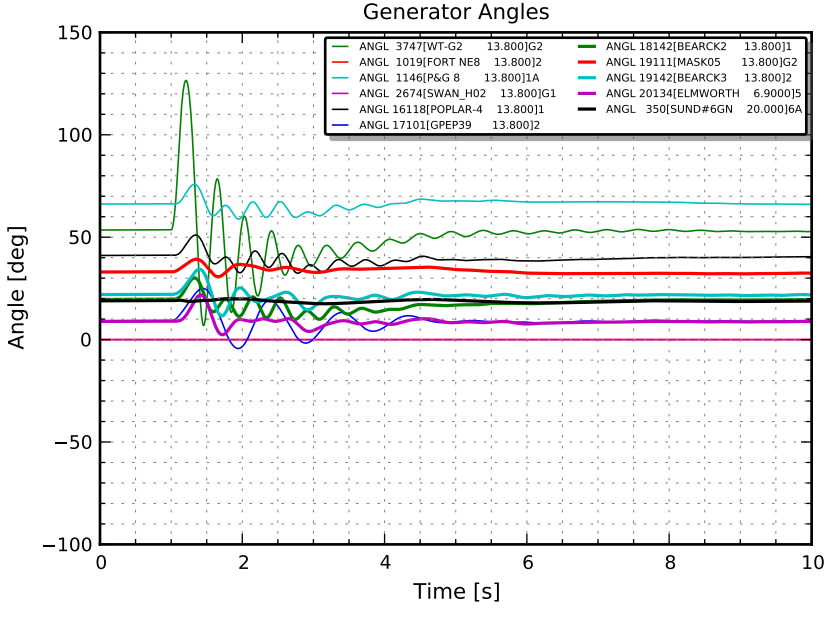
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 013 7L131 WESLEYCREEK to Meikle_A.

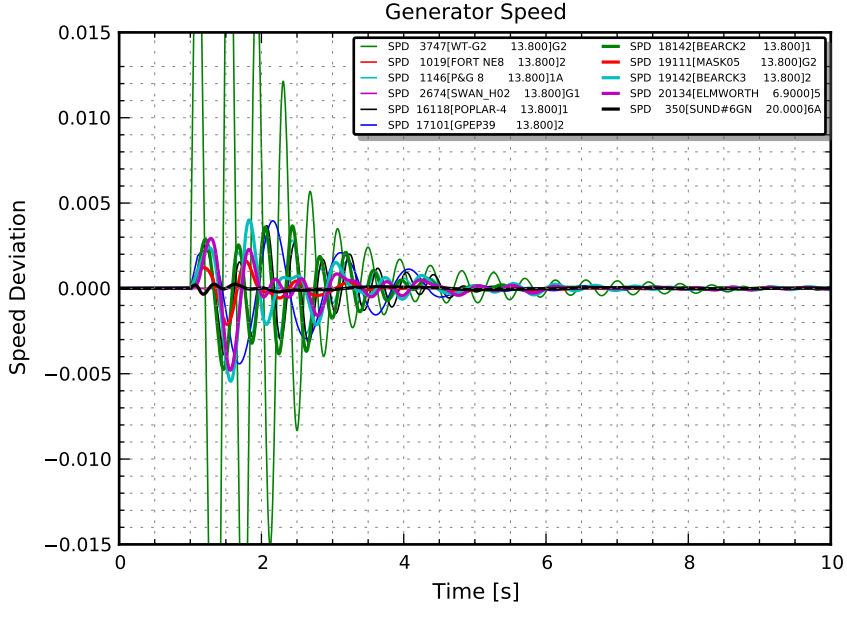
Study Area Generators

Appendix E2A
Figure: 013 (A. 2)





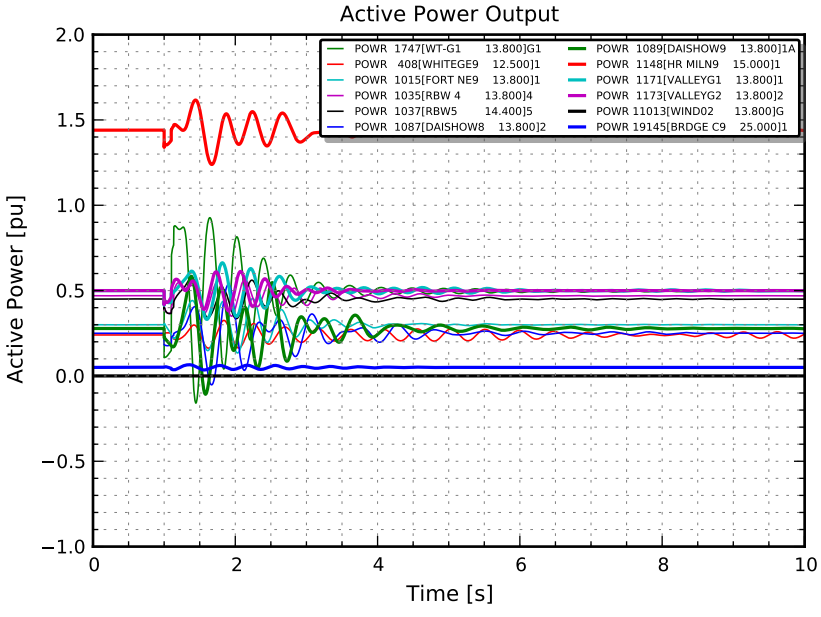


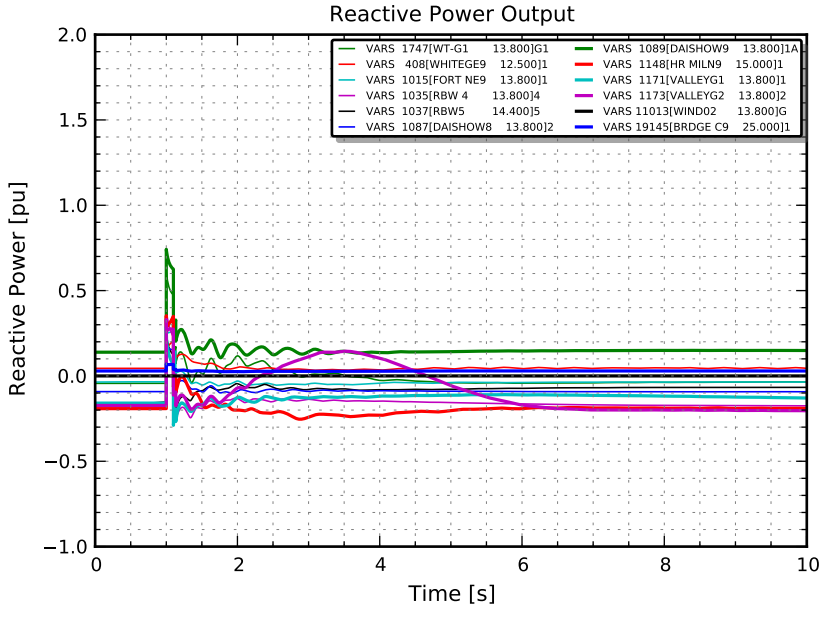


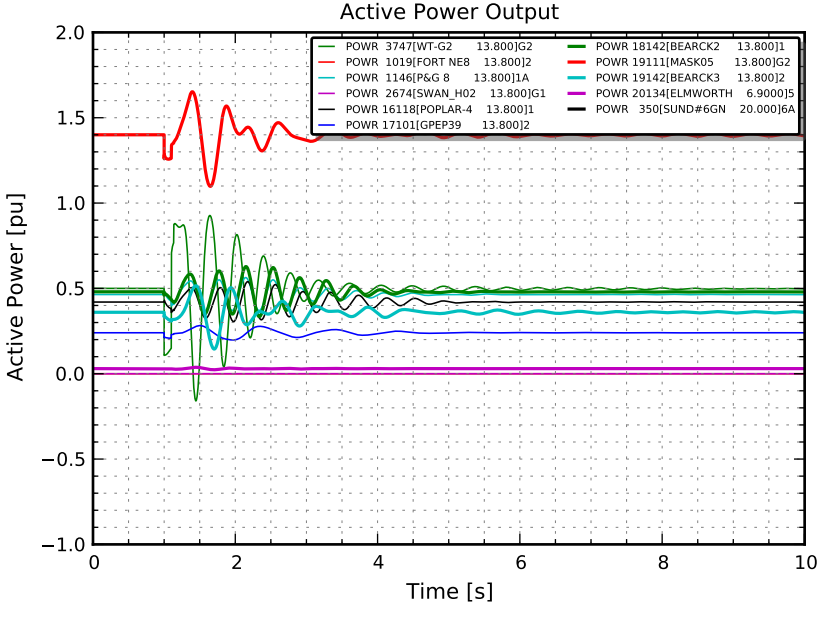
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 013 7L131 WESLEYCREEK to Meikle_A.

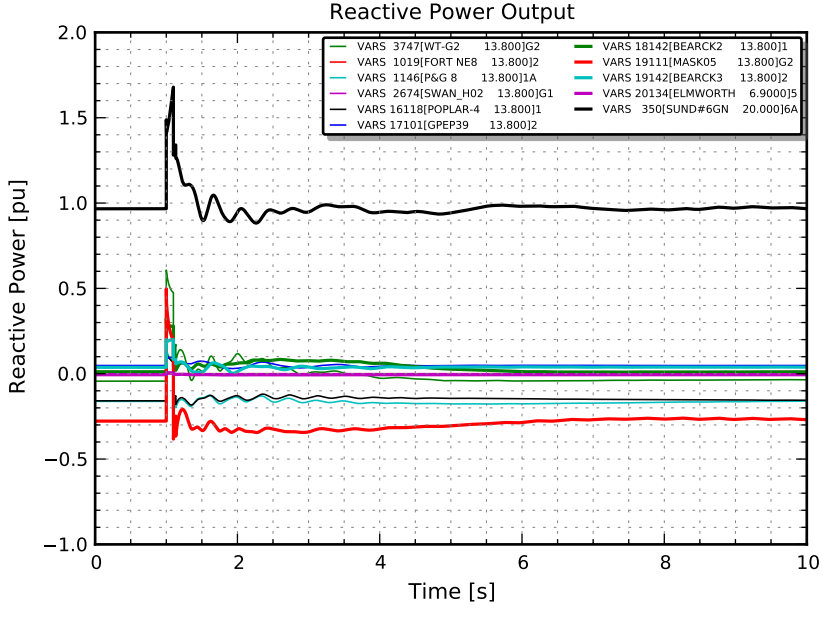
Study Area Generators

Appendix E2A
Figure: 013 (A. 3)





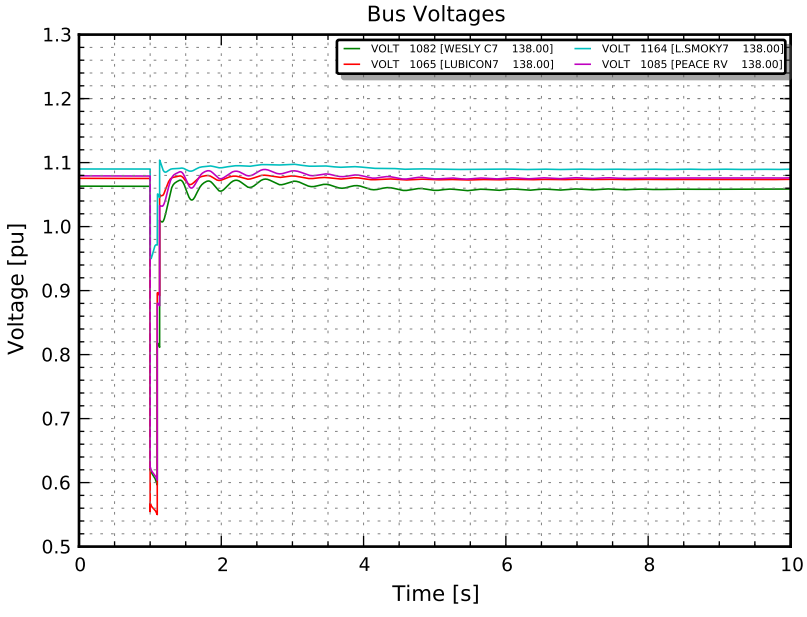


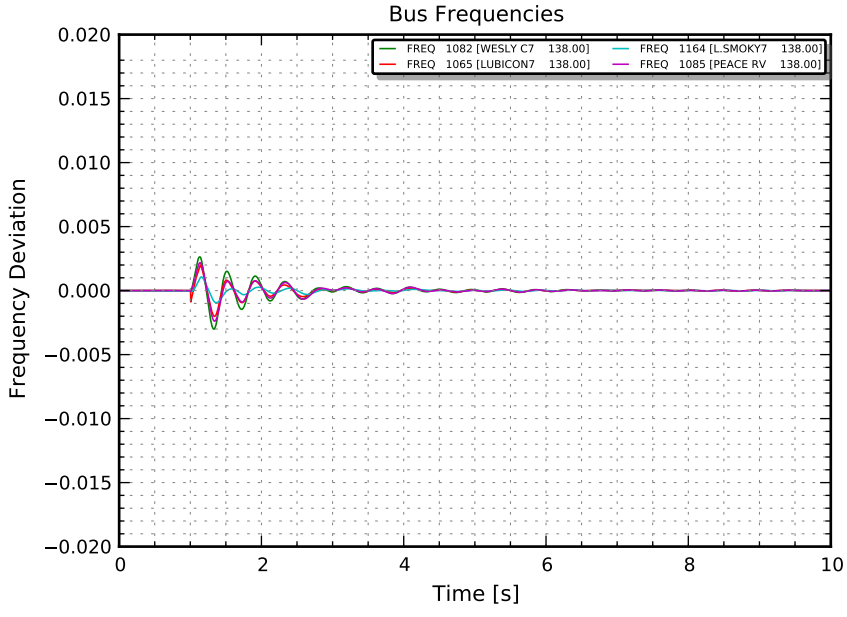


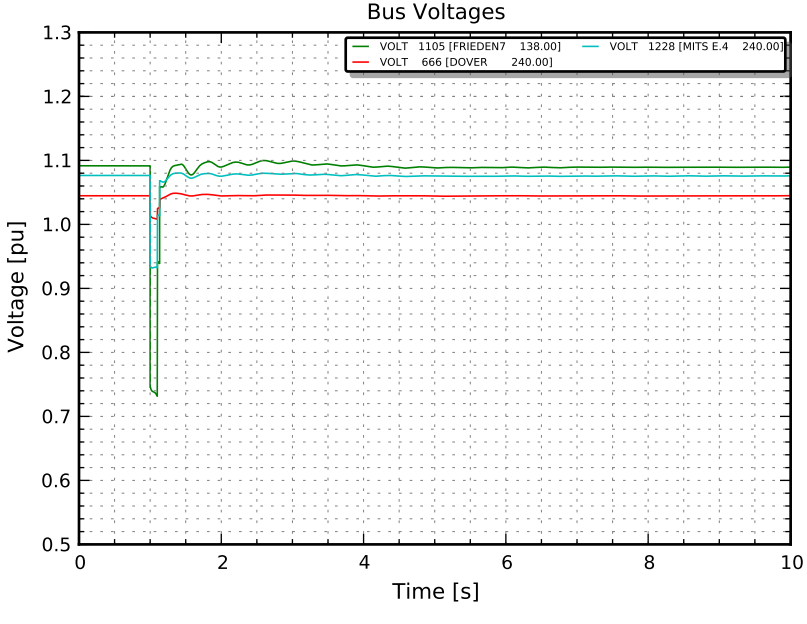
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 013 7L131 WESLEYCREEK to Meikle_B.

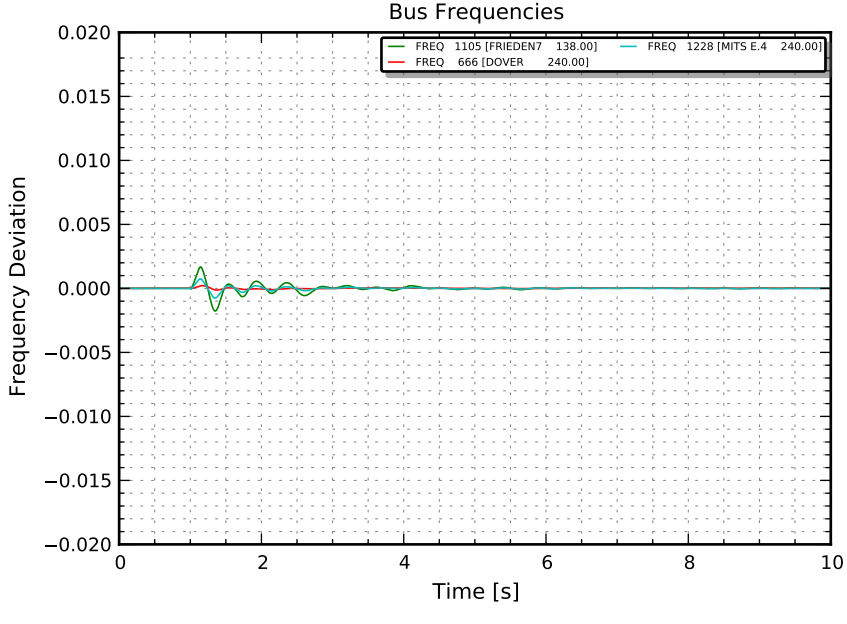
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 013 (B. 1)





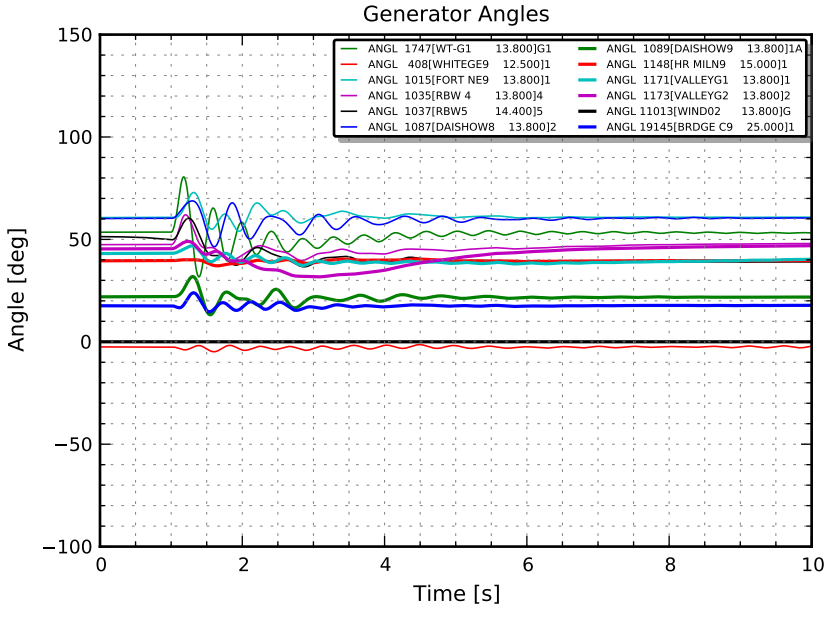


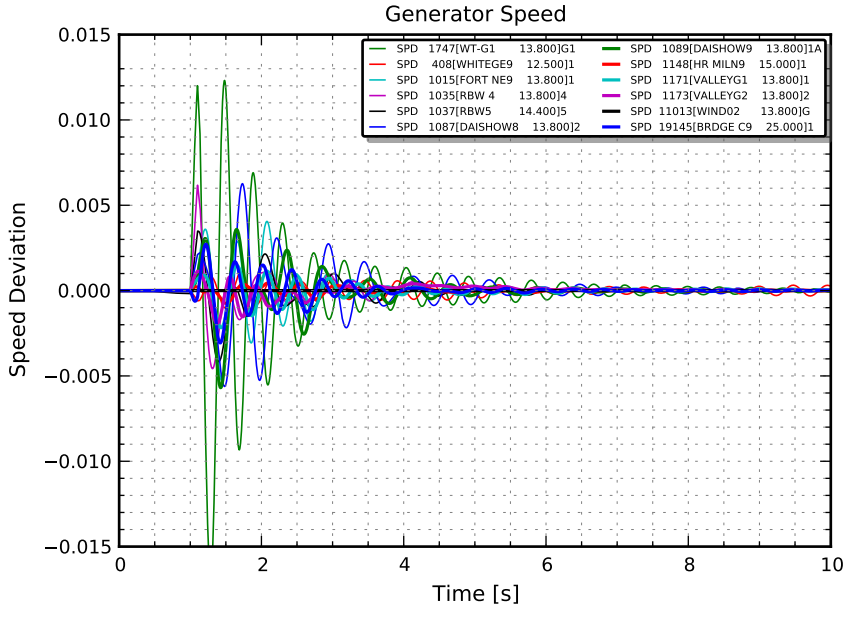


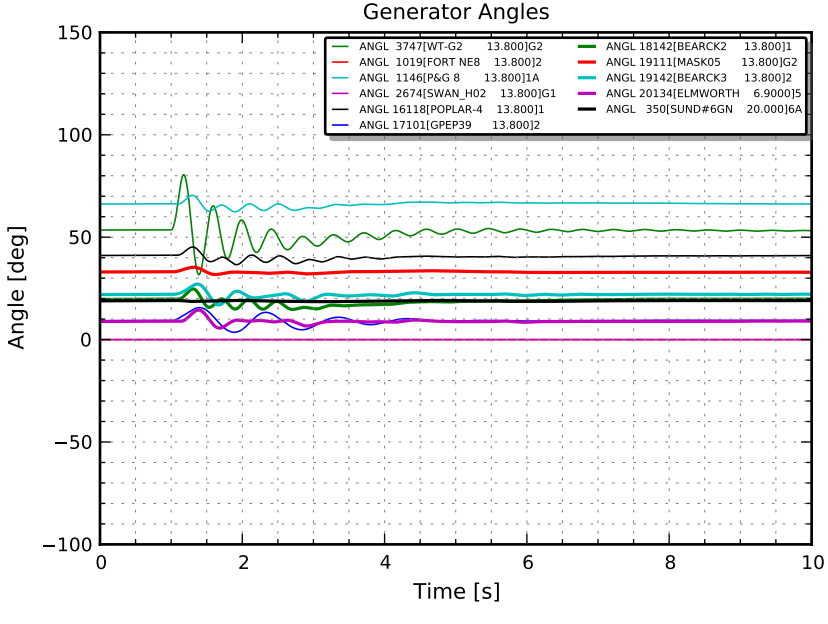
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 013 7L131 WESLEYCREEK to Meikle_B.

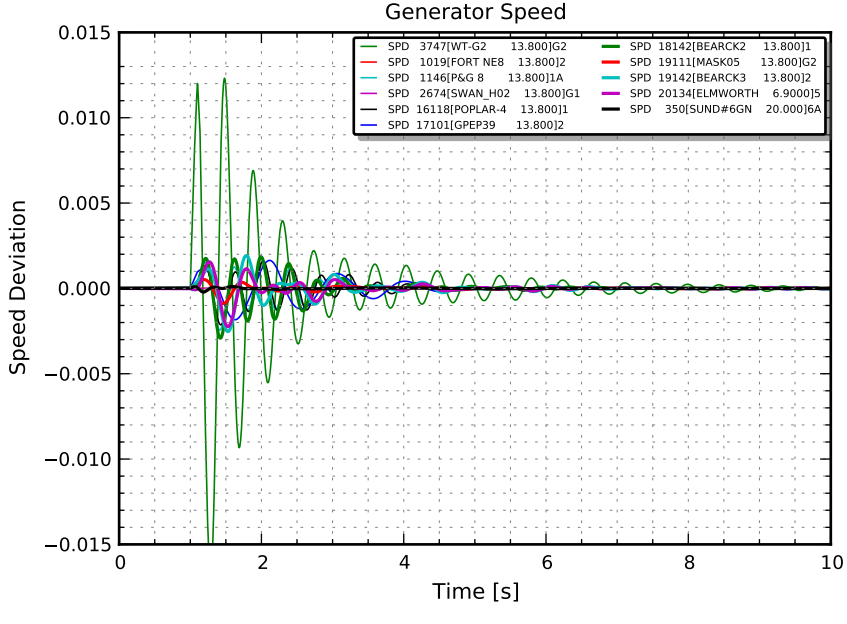
Study Area Generators

Appendix E2A
Figure: 013 (B. 2)





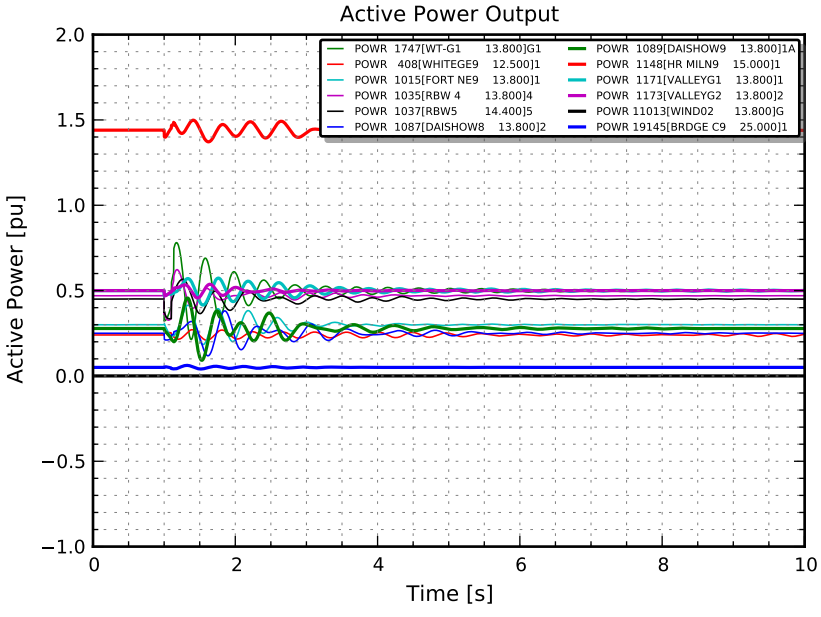


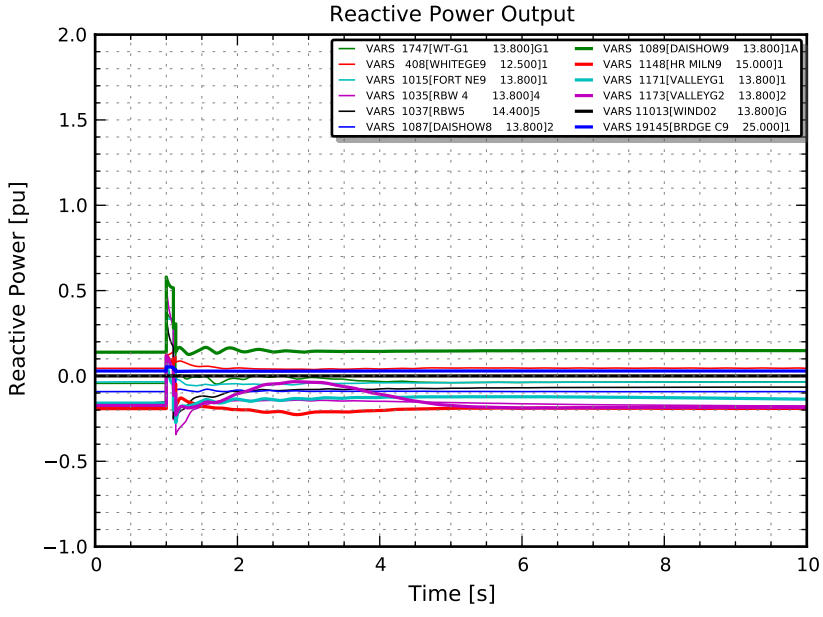


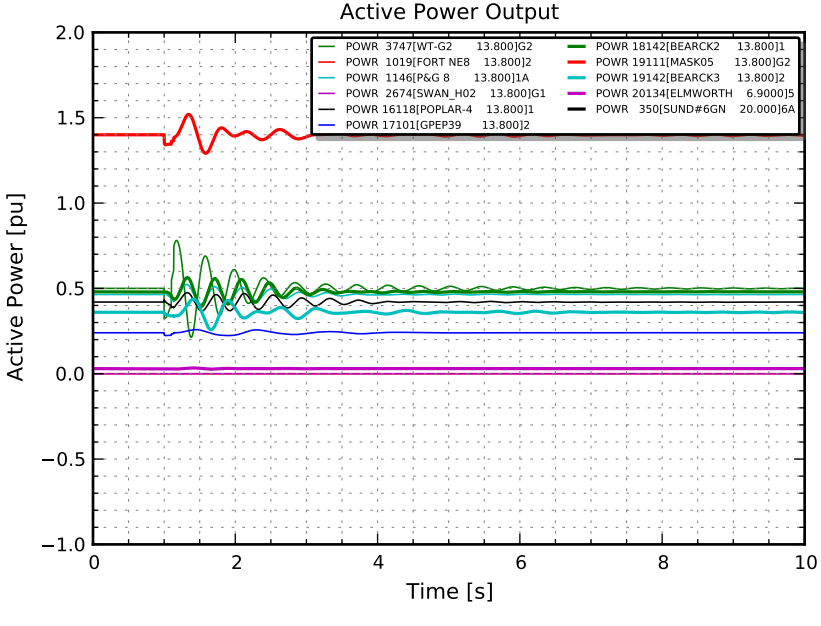
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 013 7L131 WESLEYCREEK to Meikle_B.

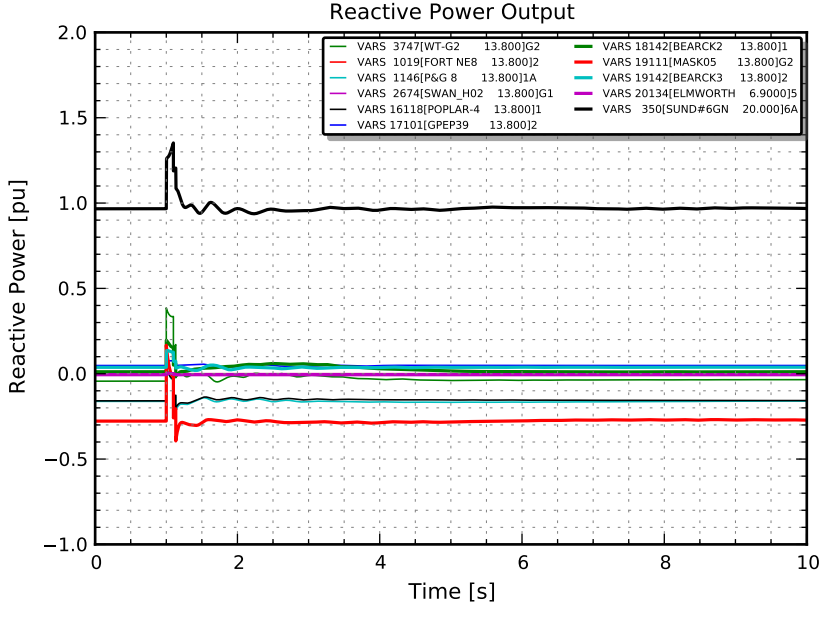
Study Area Generators

Appendix E2A
Figure: 013 (B. 3)





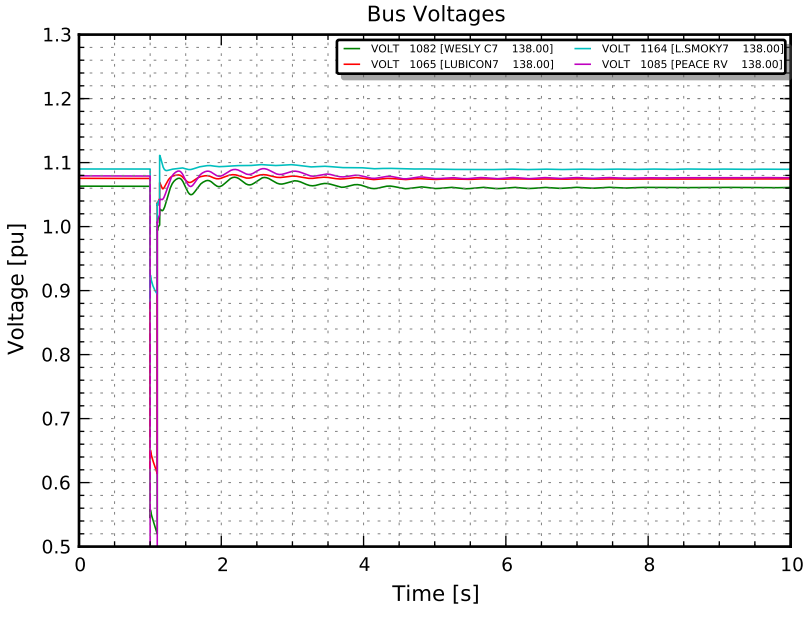


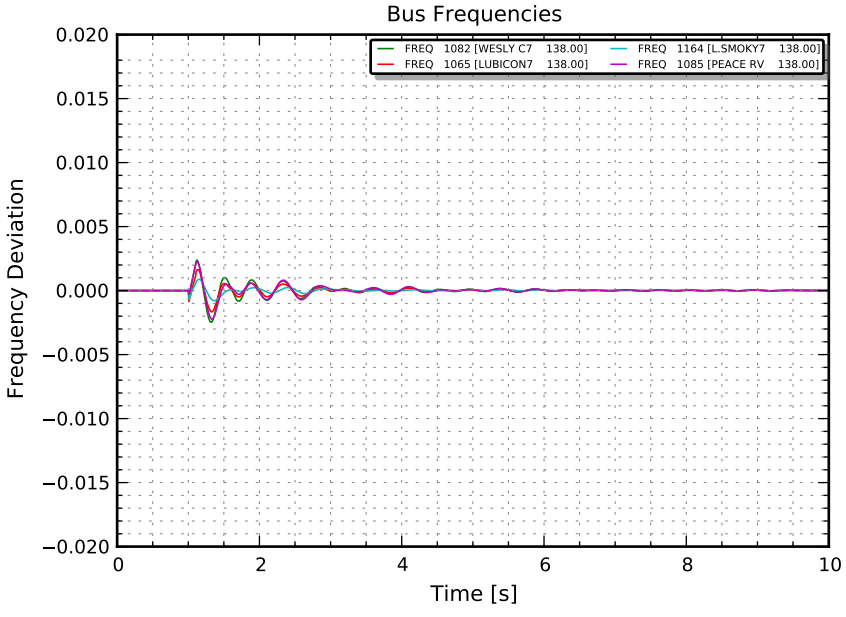


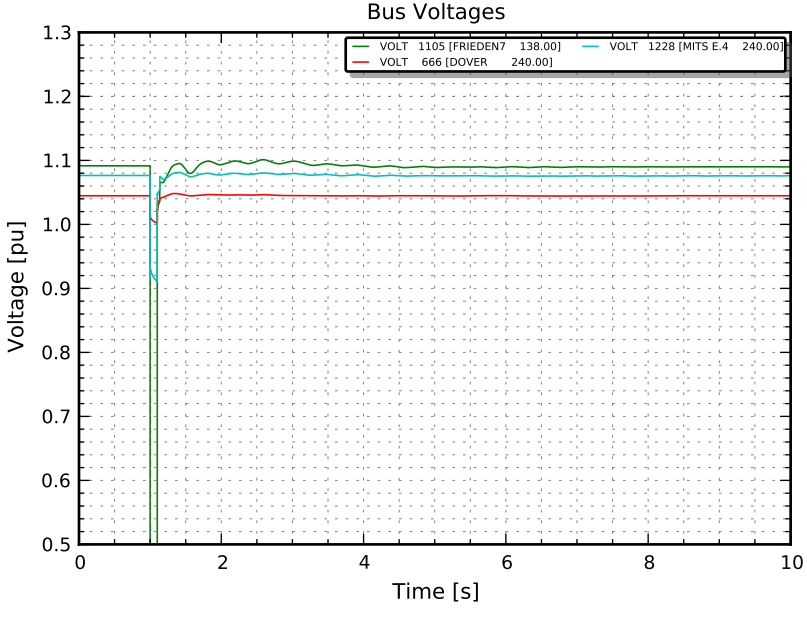
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_A.

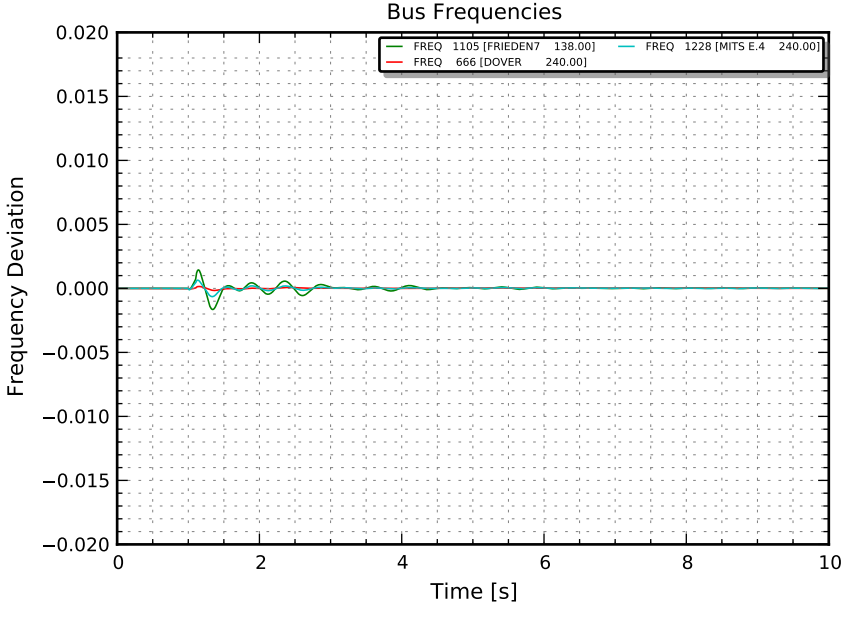
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 014 (A. 1)





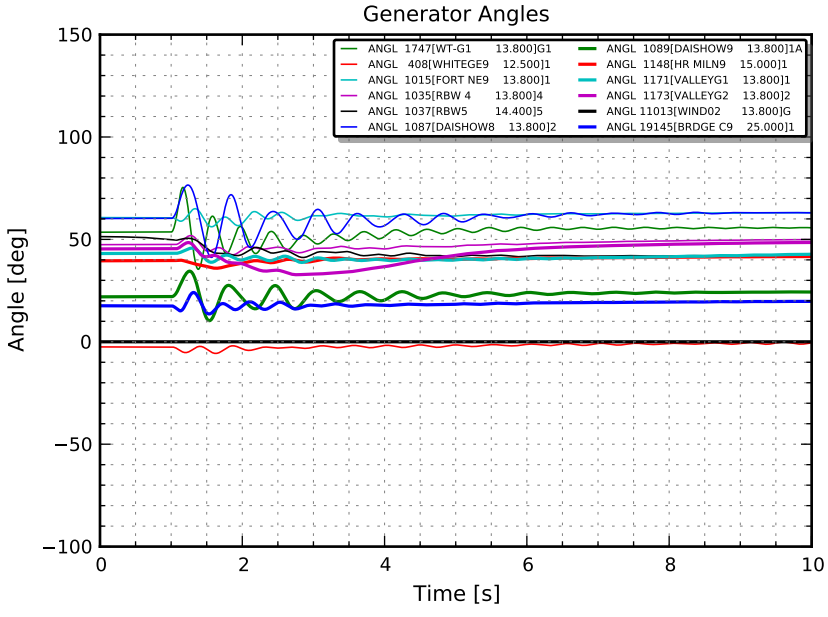


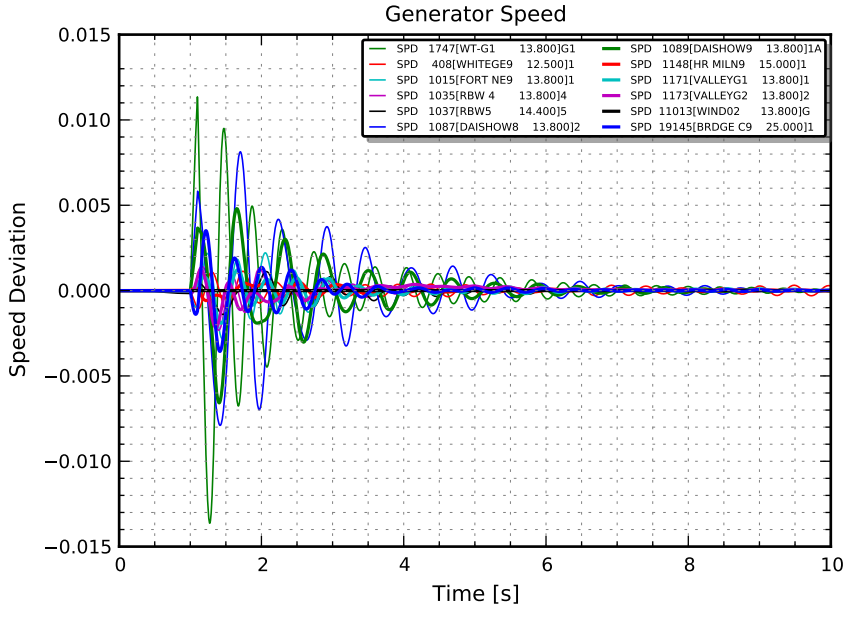


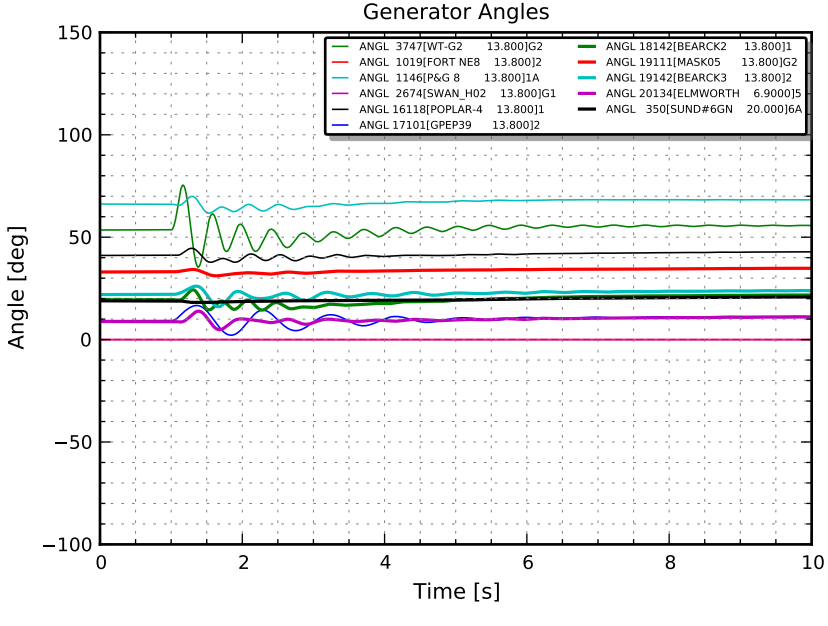
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_A.

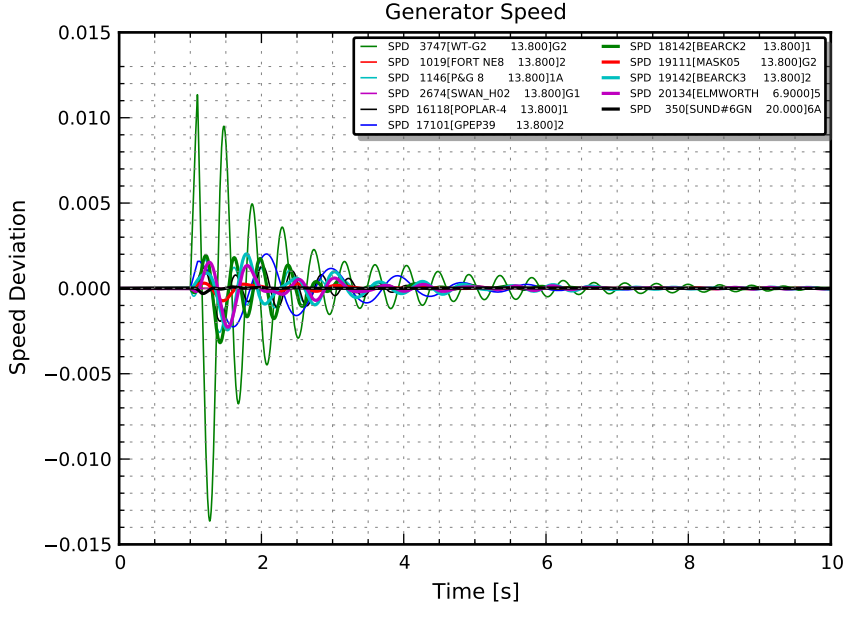
Study Area Generators

Appendix E2A
Figure: 014 (A. 2)





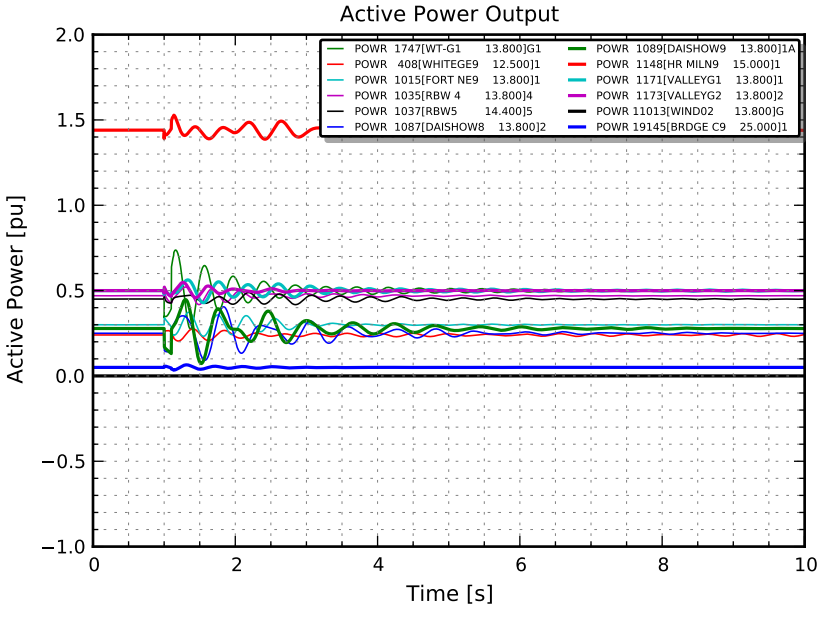


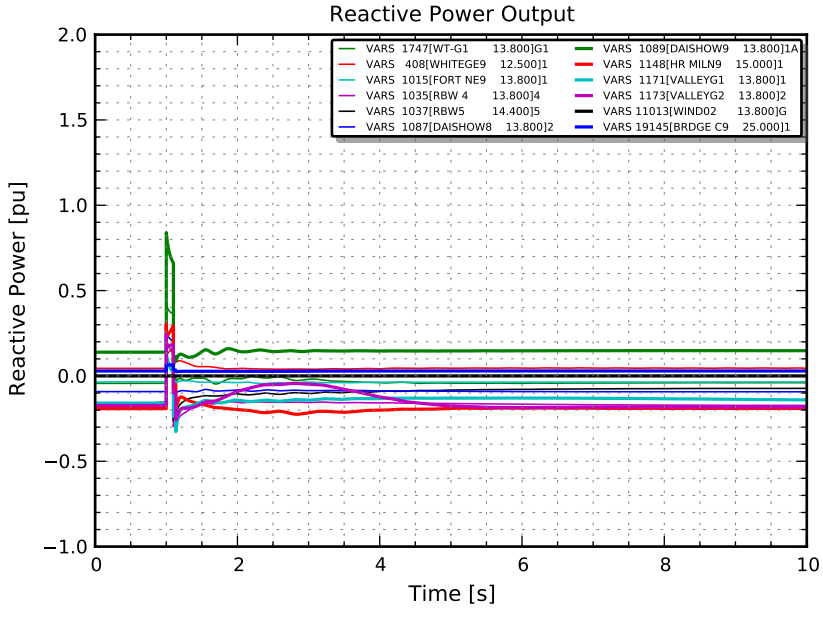


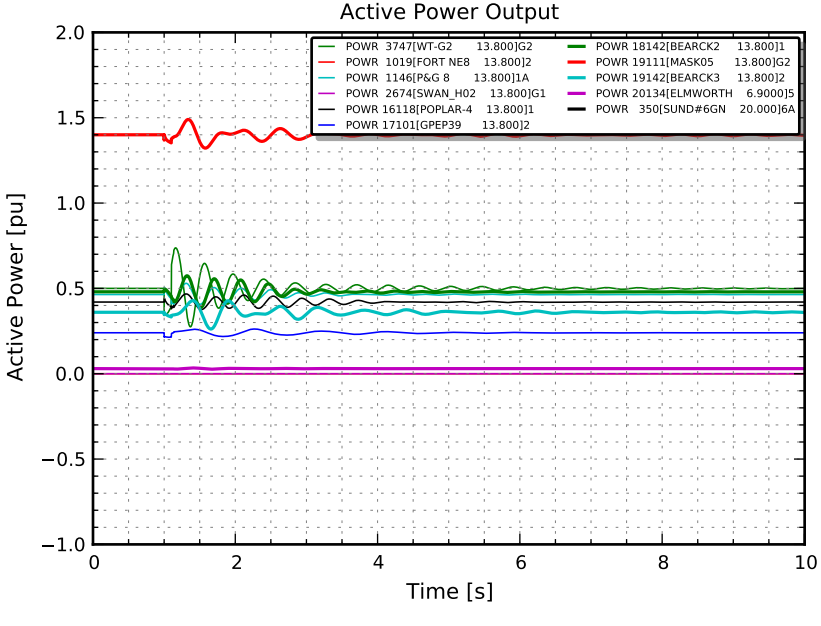
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_A.

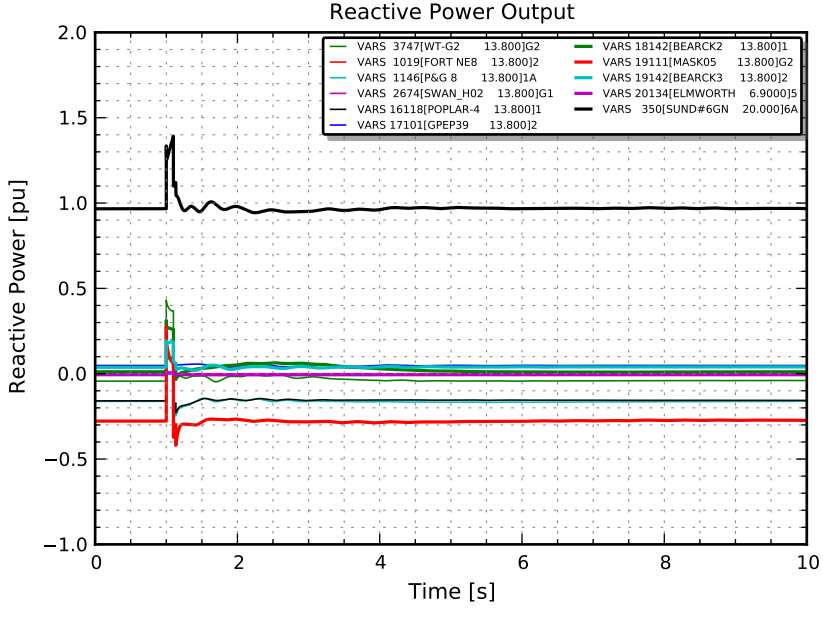
Study Area Generators

Appendix E2A
Figure: 014 (A. 3)





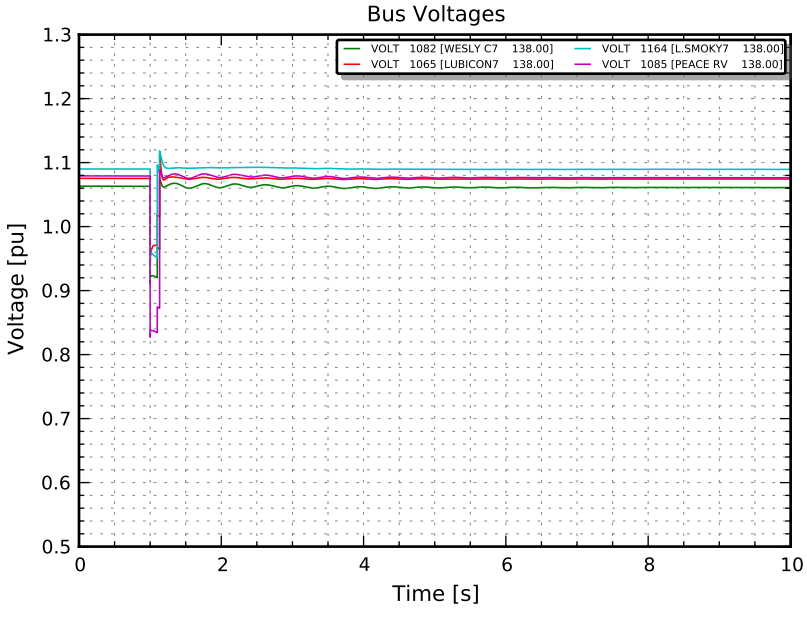


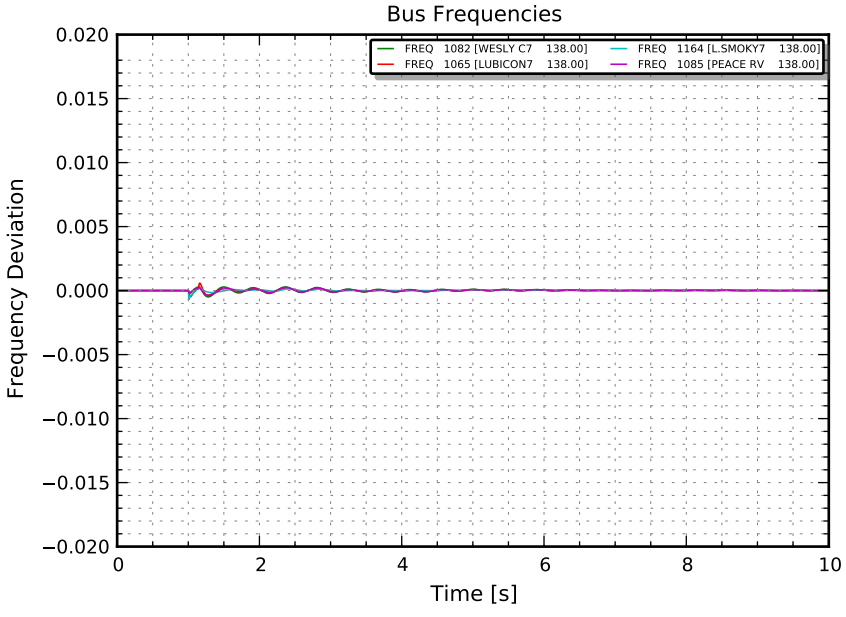


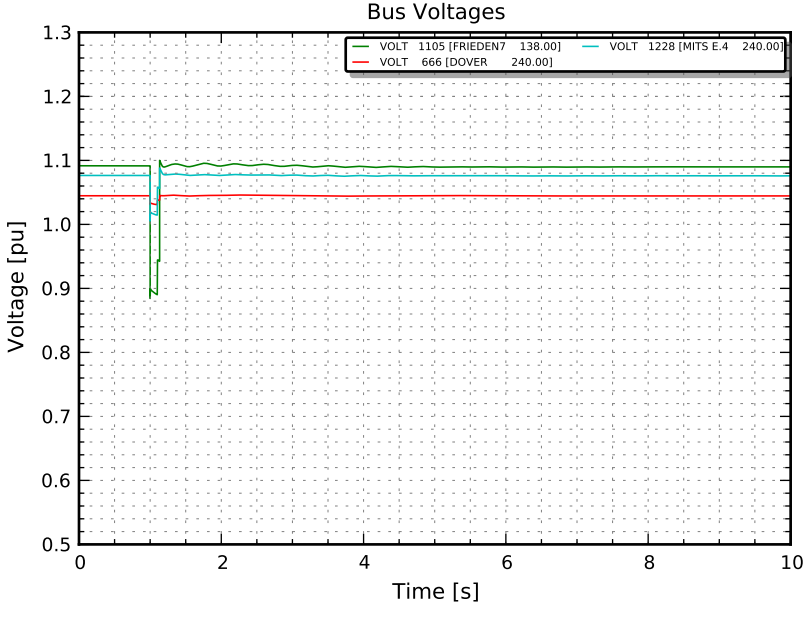
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_B.

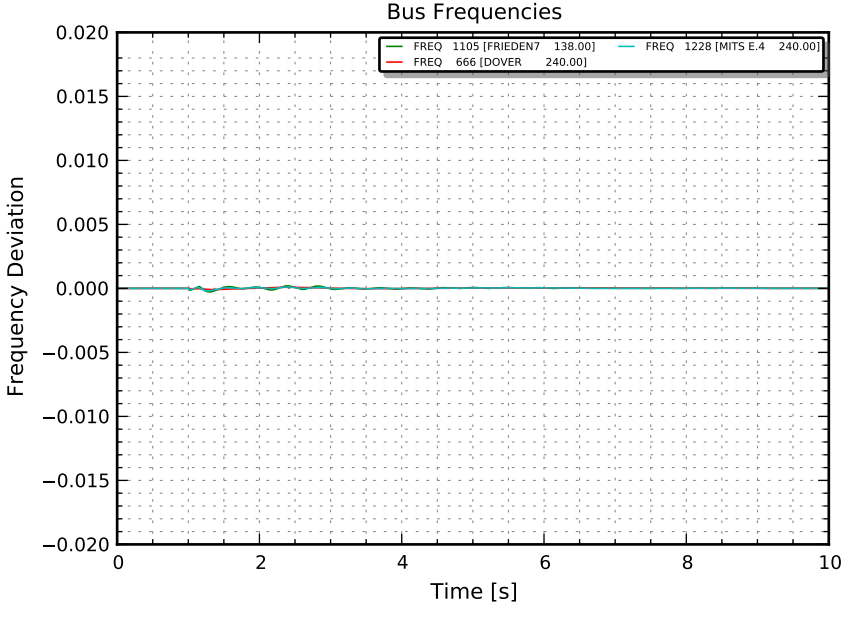
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 014 (B. 1)





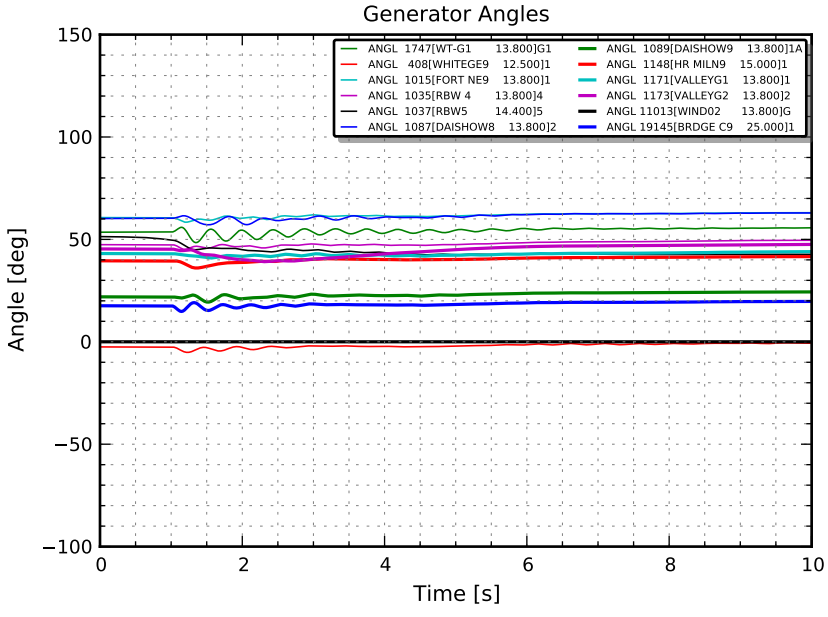


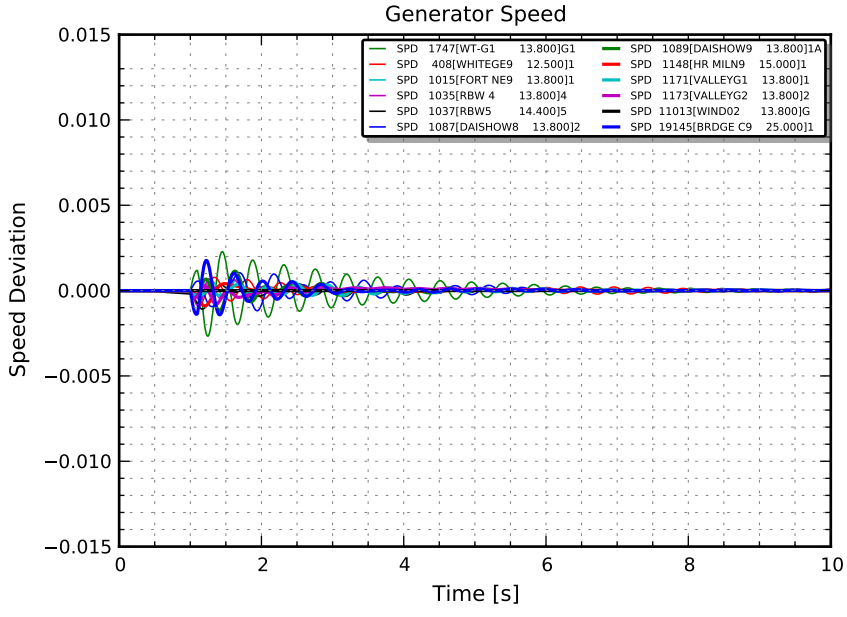


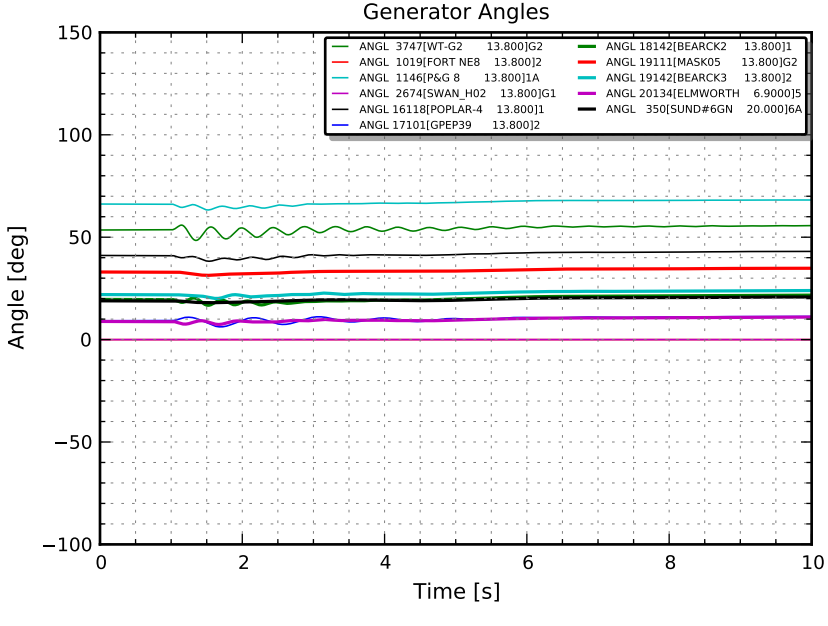
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_B.

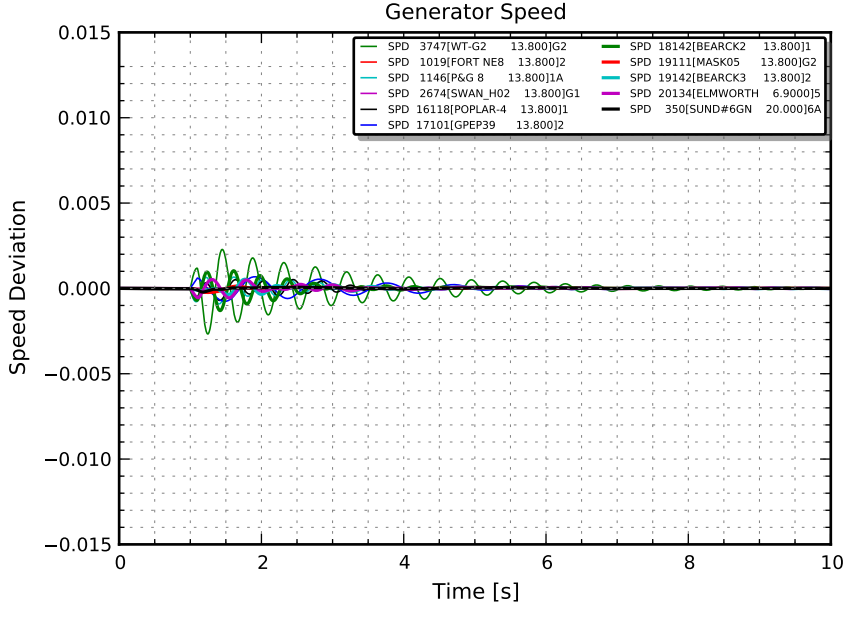
Study Area Generators

Appendix E2A
Figure: 014 (B. 2)





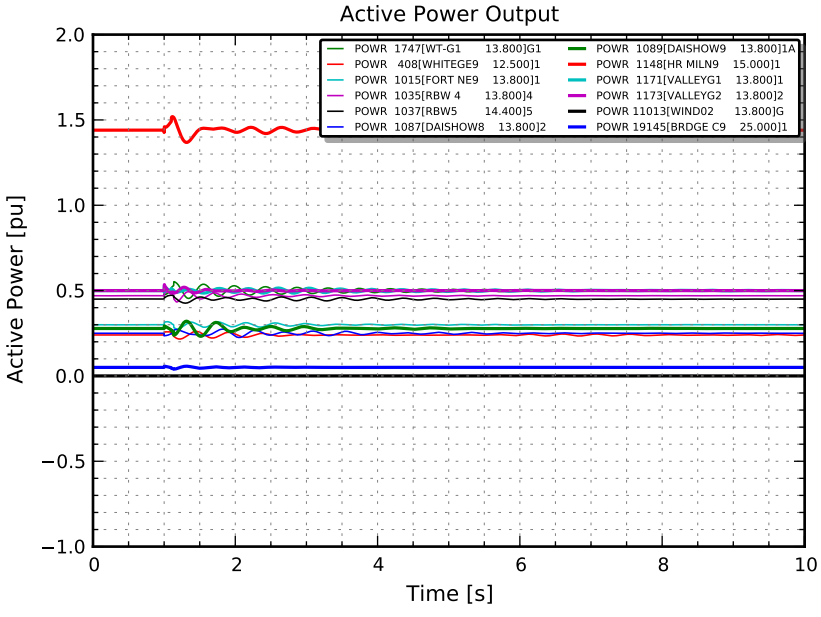


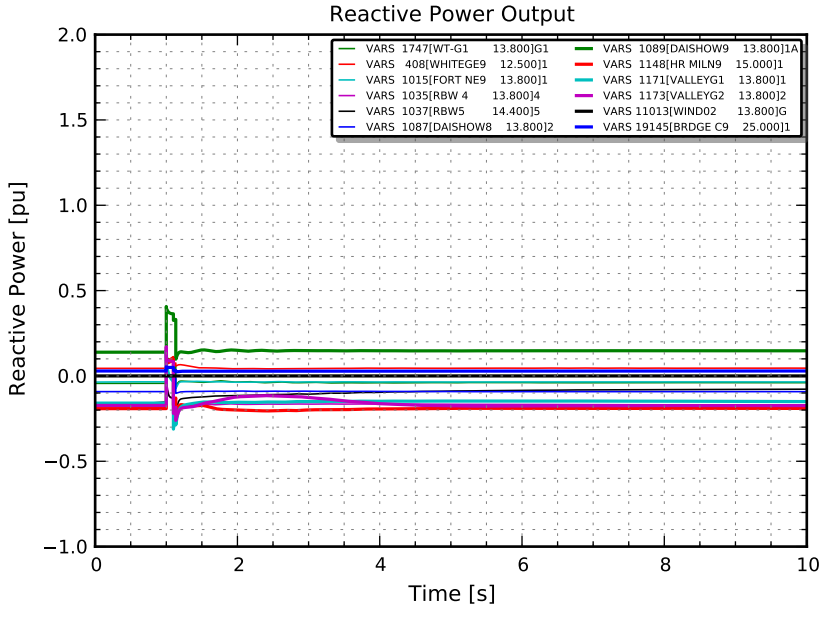


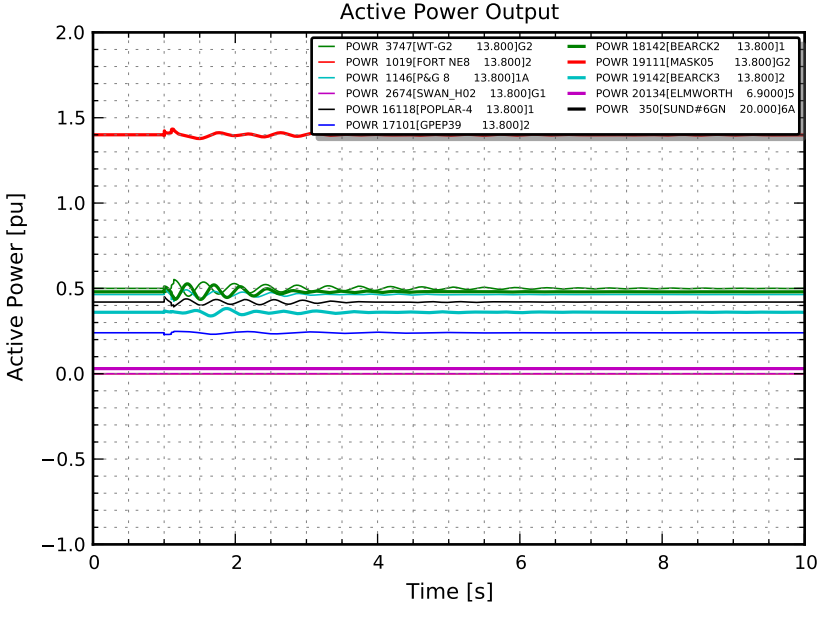
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_B.

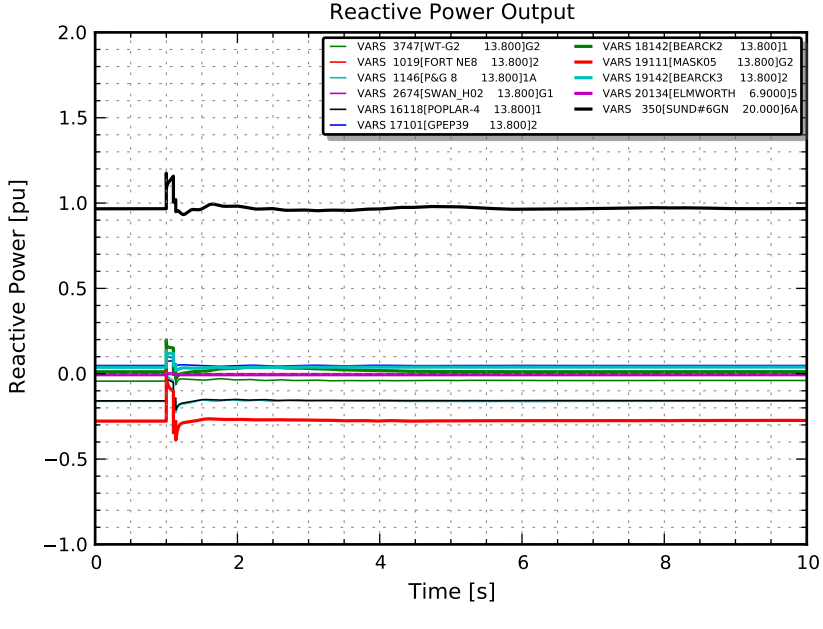
Study Area Generators

Appendix E2A
Figure: 014 (B. 3)





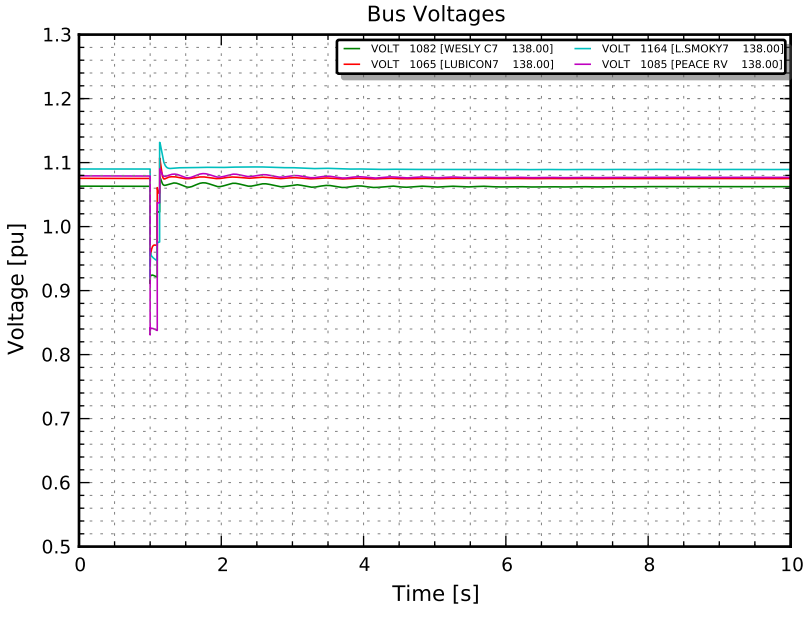


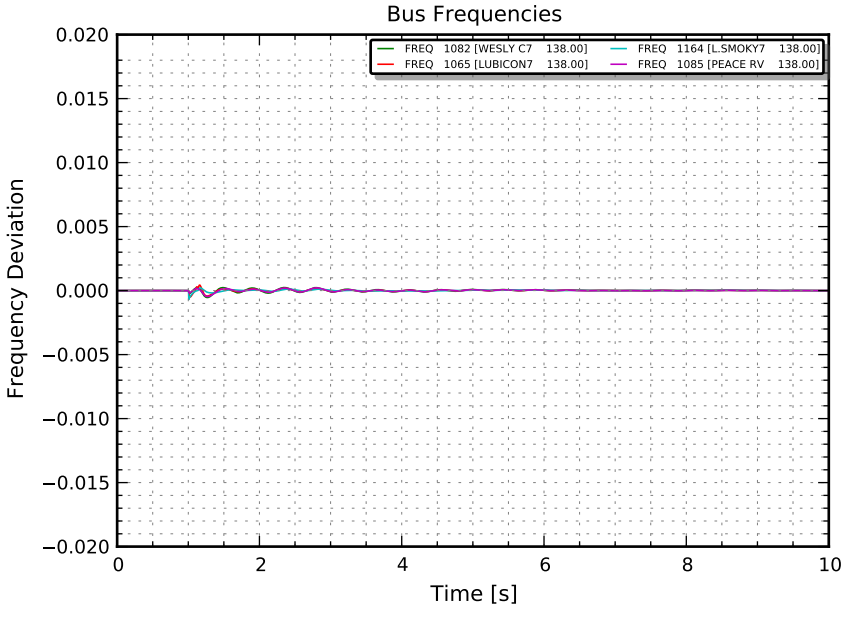


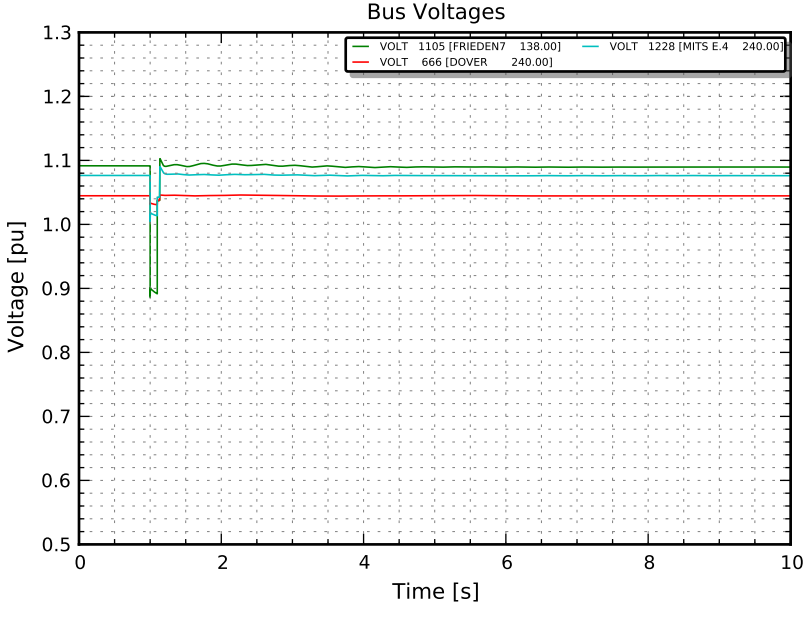
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_A.

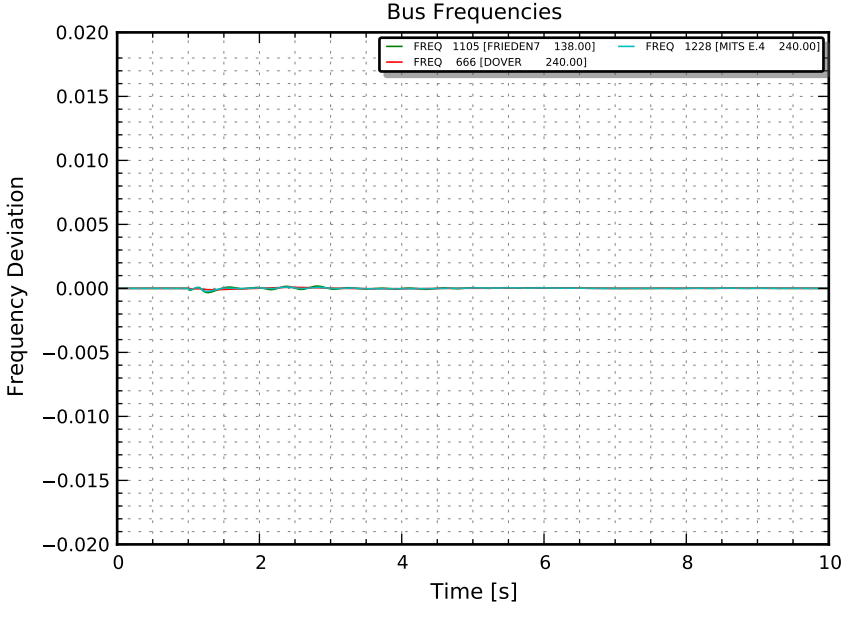
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 015 (A. 1)





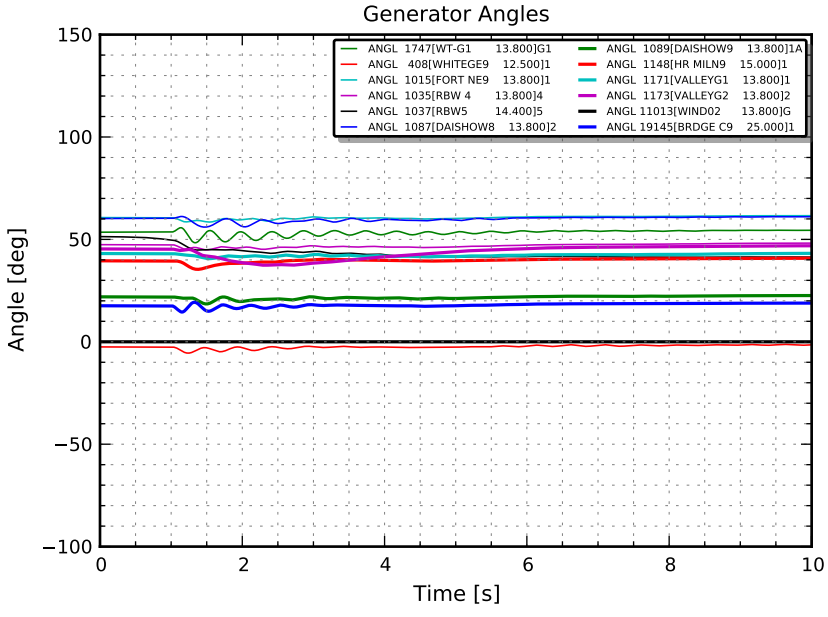


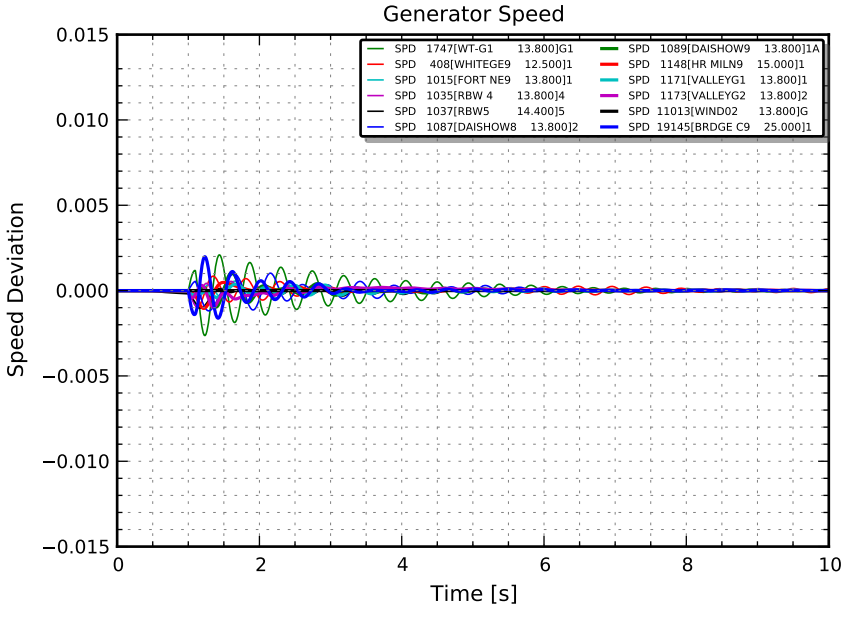


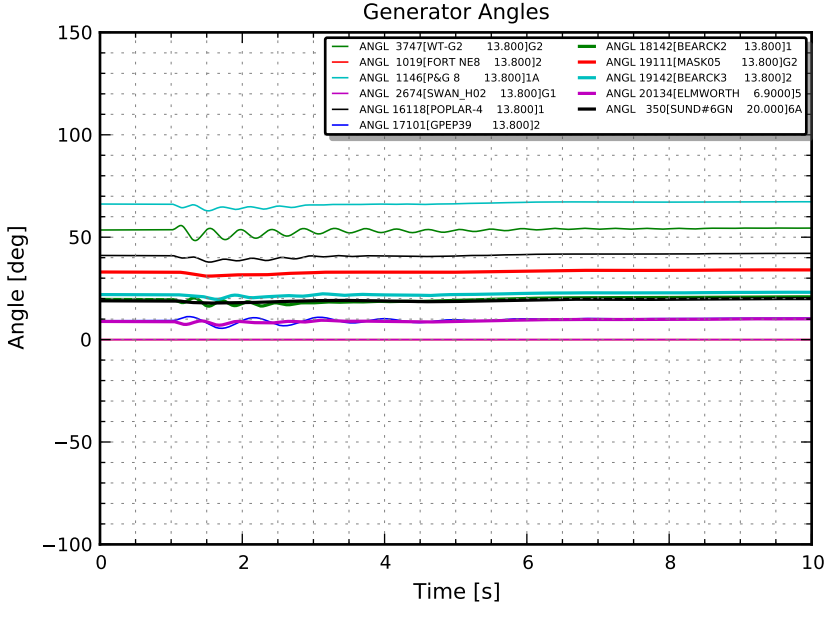
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_A.

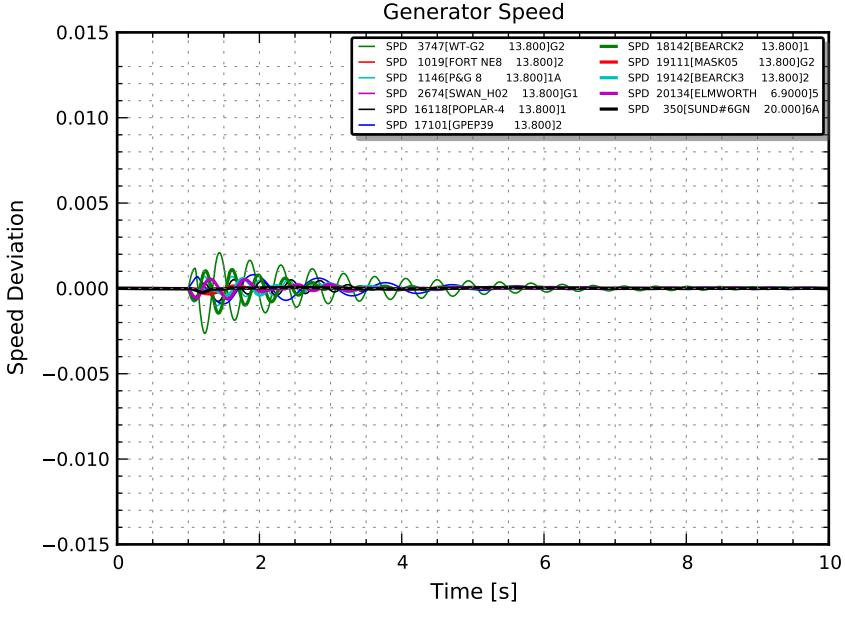
Study Area Generators

Appendix E2A
Figure: 015 (A. 2)





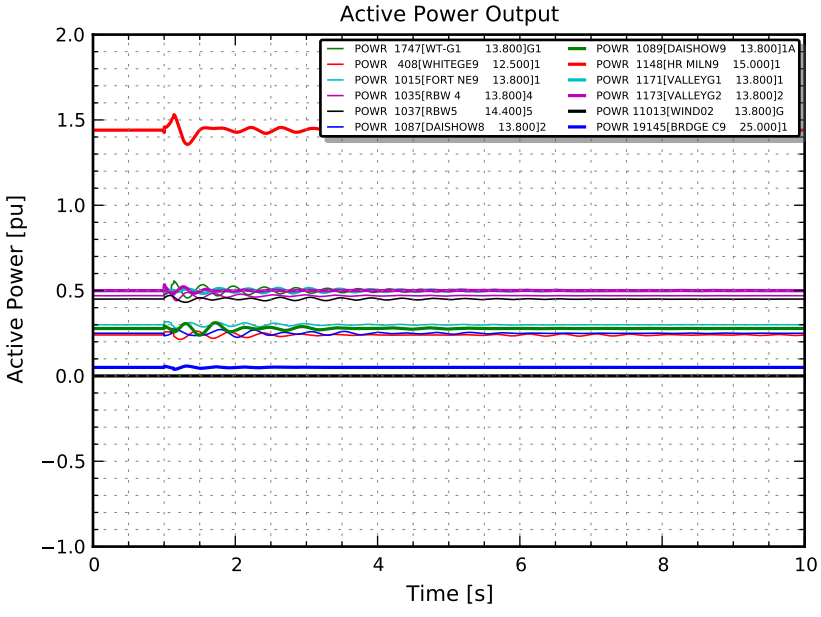


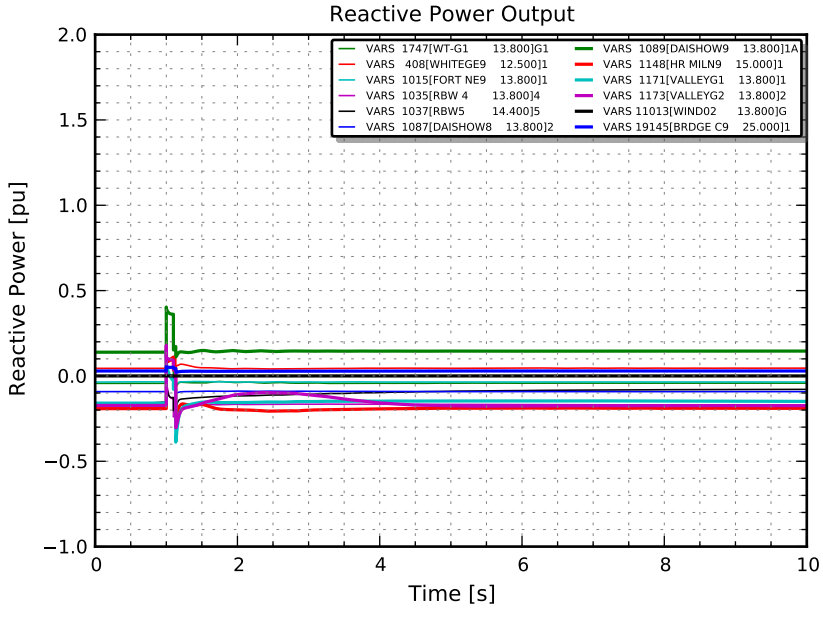


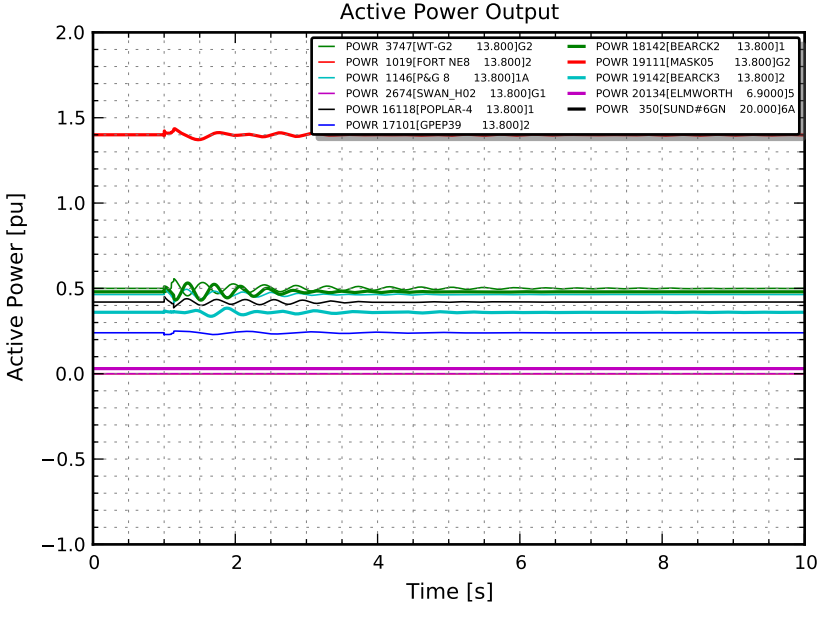
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_A.

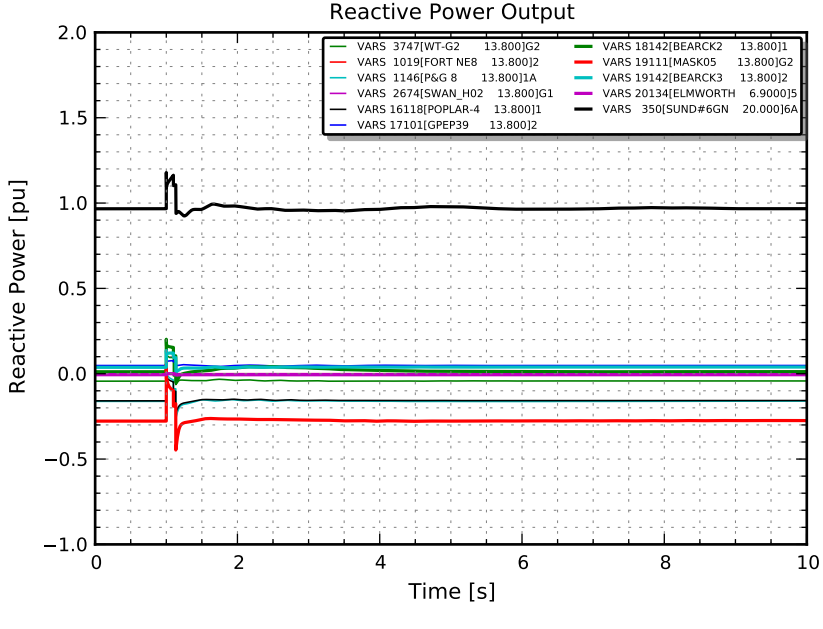
Study Area Generators

Appendix E2A
Figure: 015 (A. 3)





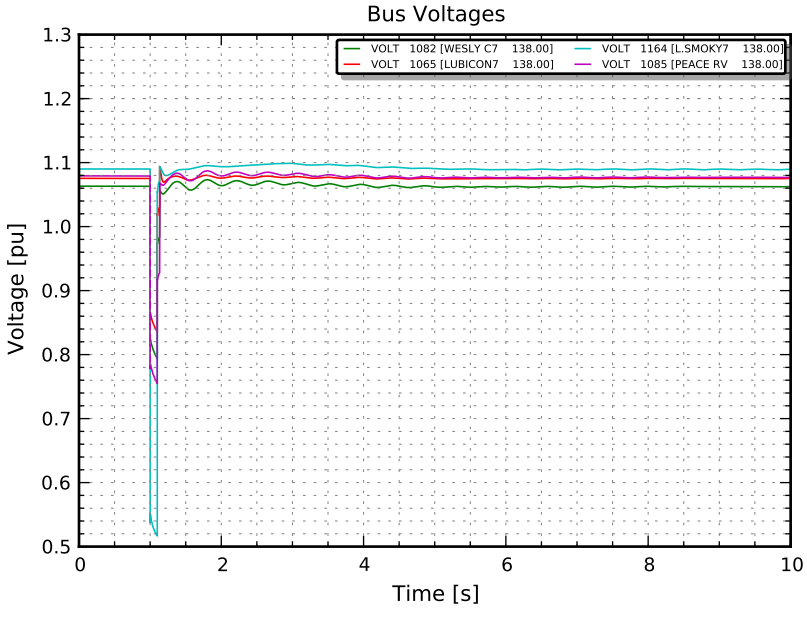


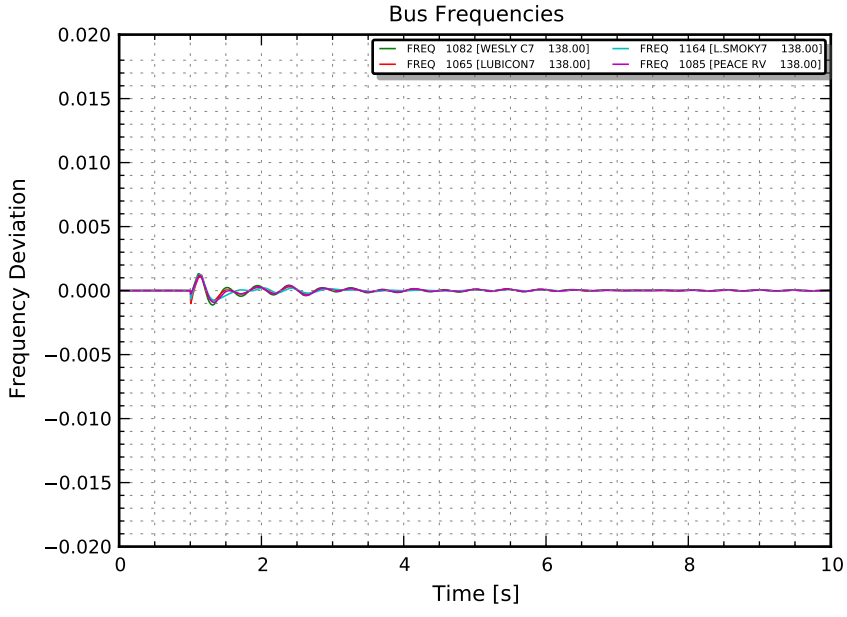


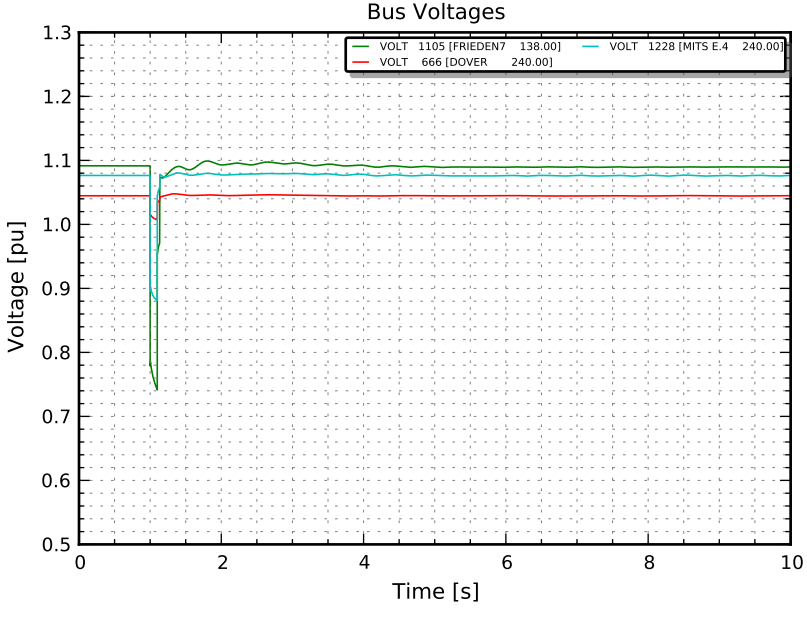
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_B.

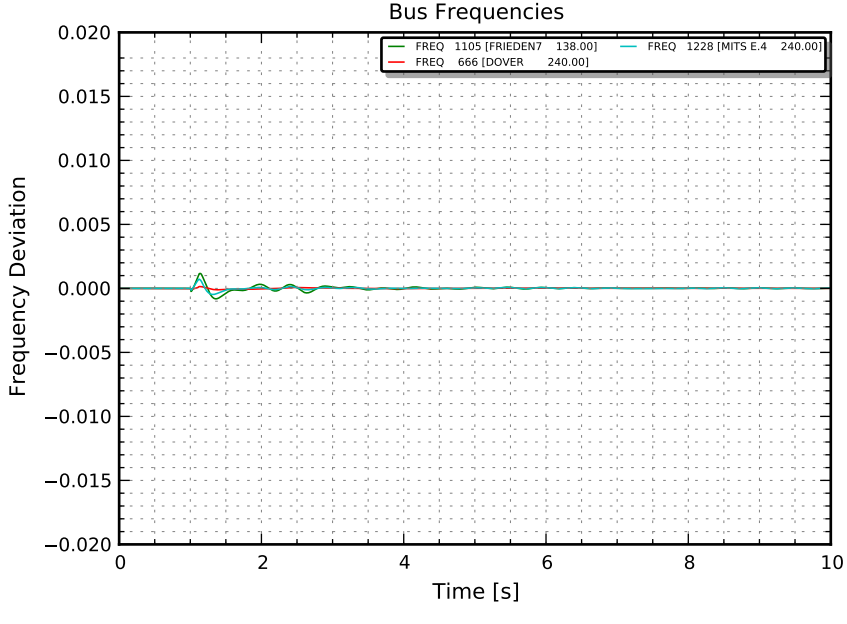
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 015 (B. 1)





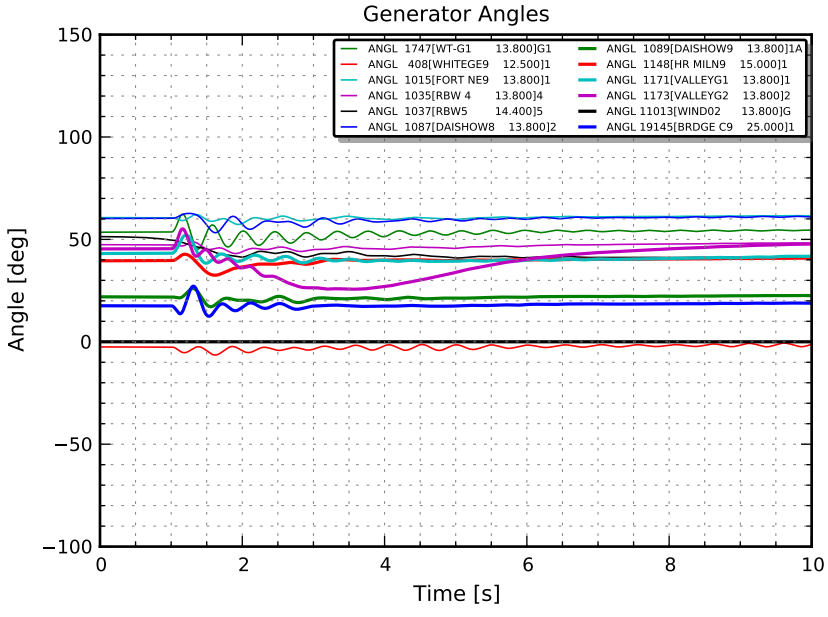


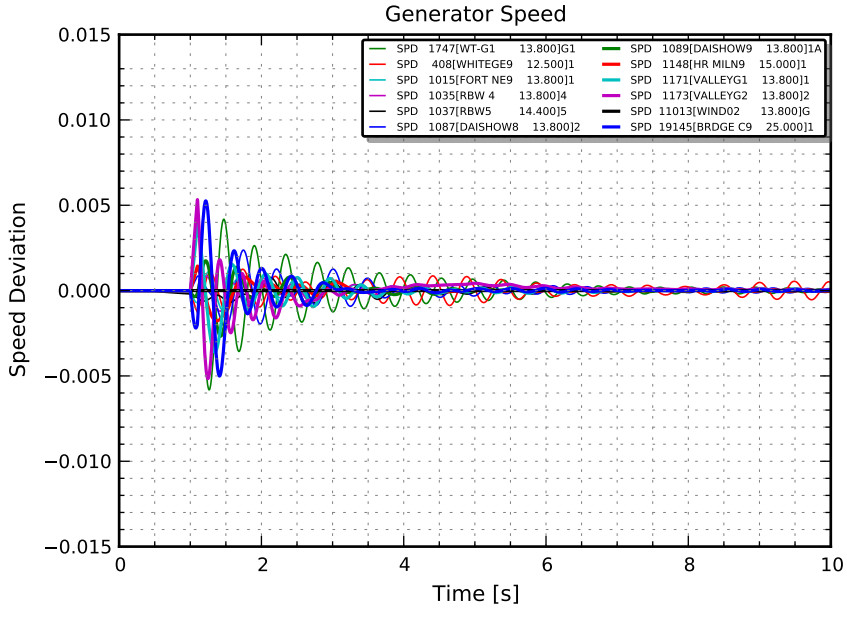


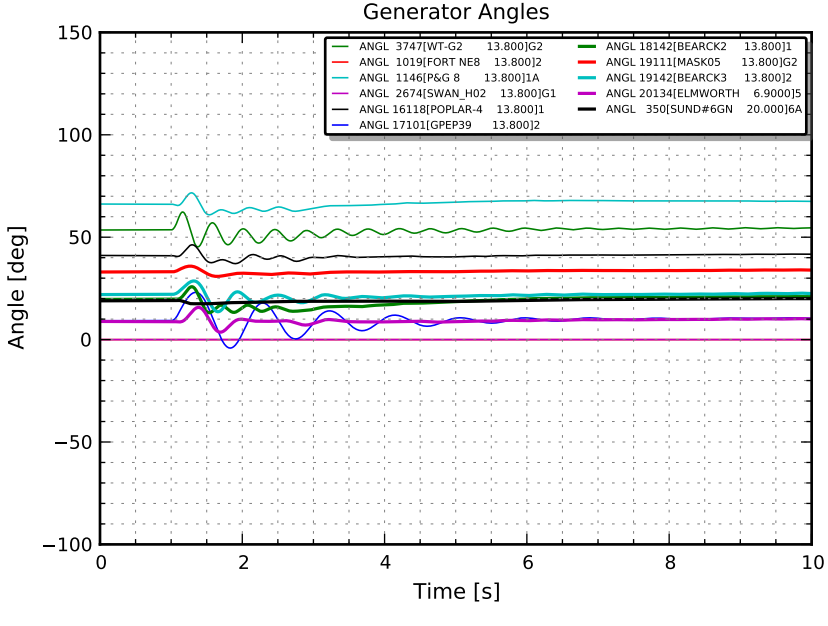
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_B.

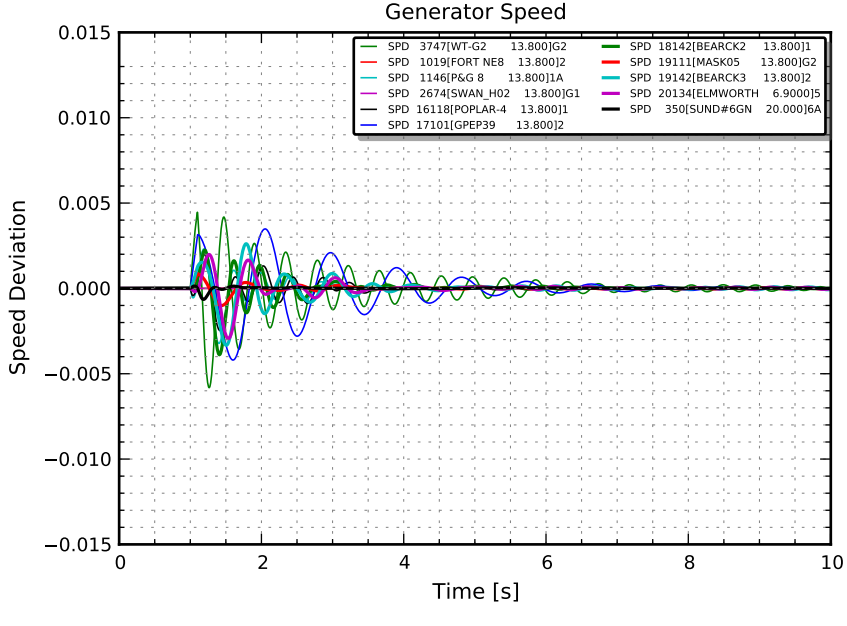
Study Area Generators

Appendix E2A
Figure: 015 (B. 2)





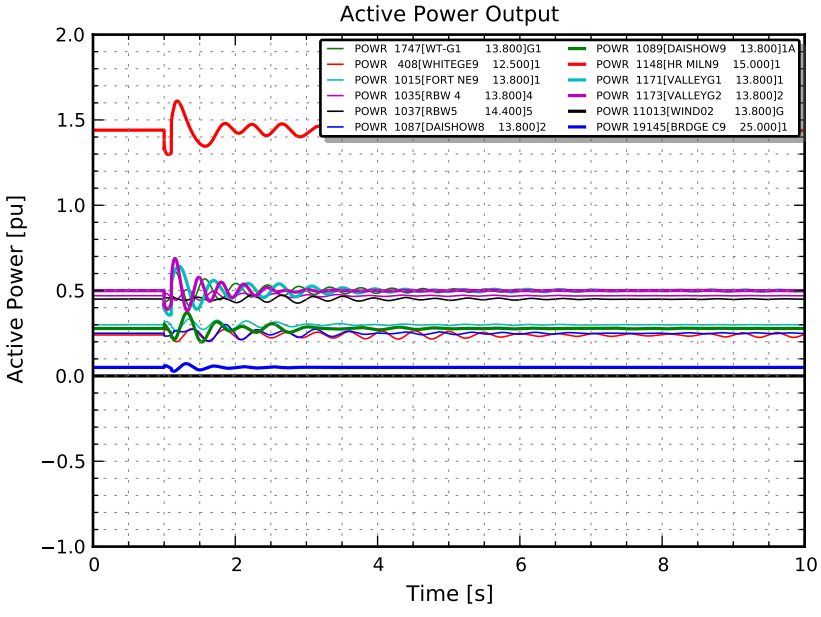


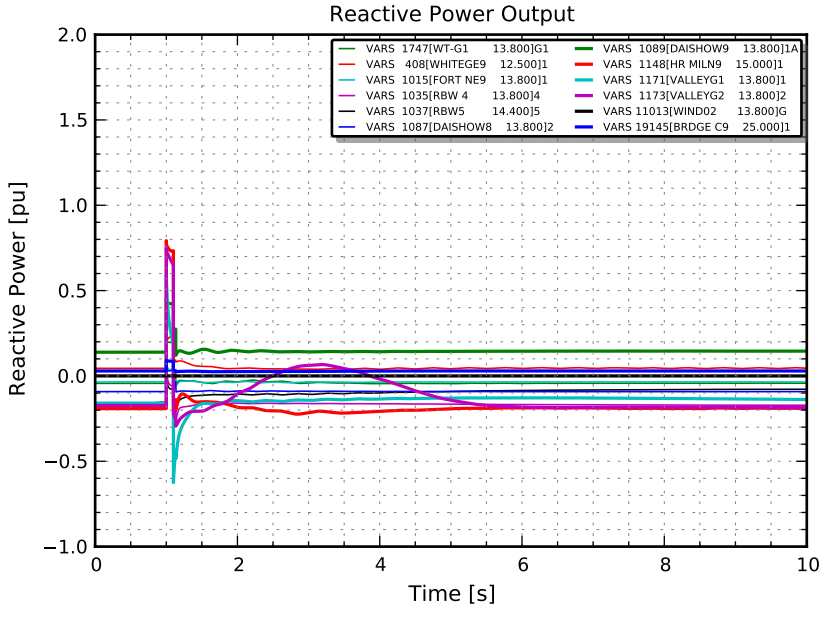


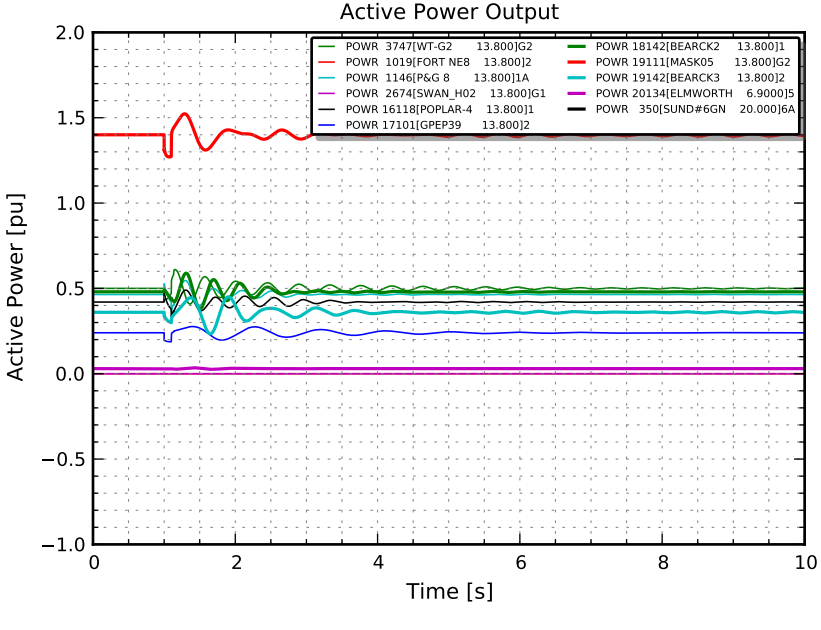
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_B.

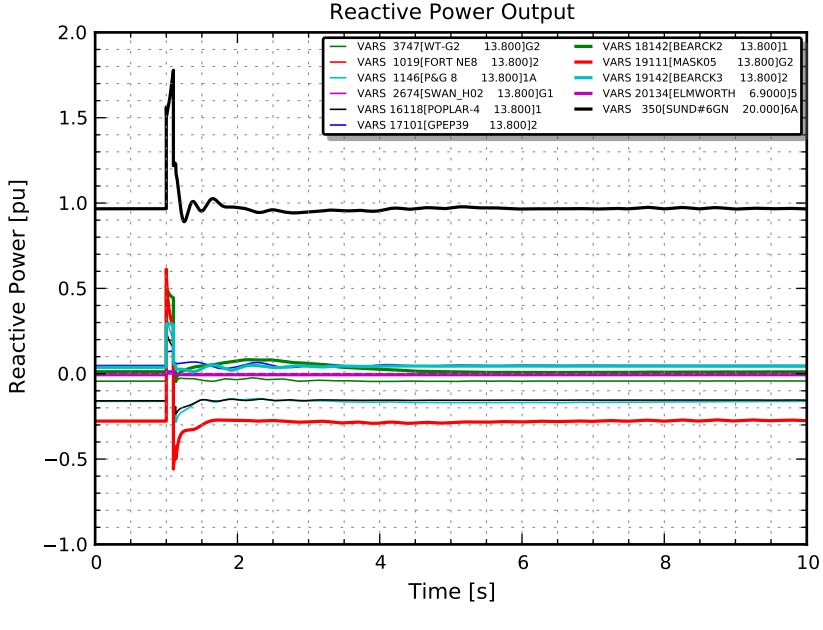
Study Area Generators

Appendix E2A
Figure: 015 (B. 3)





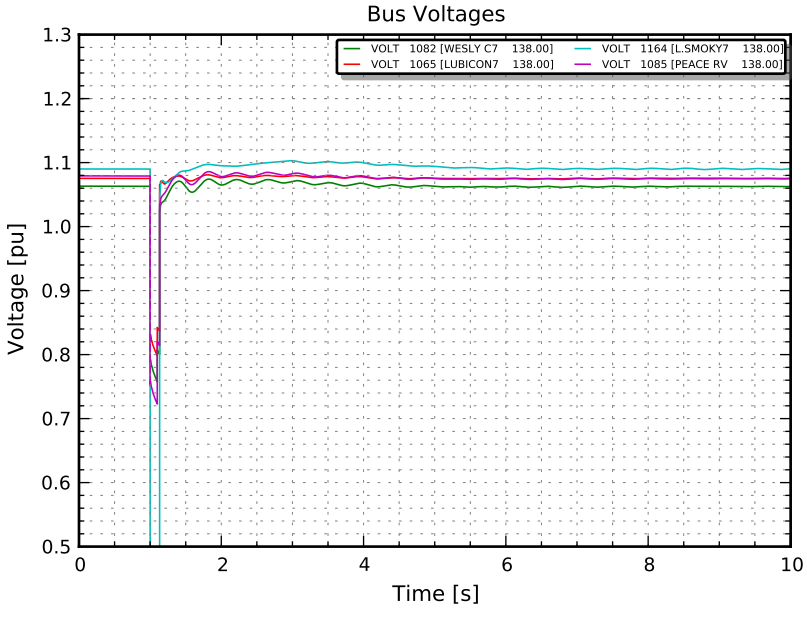


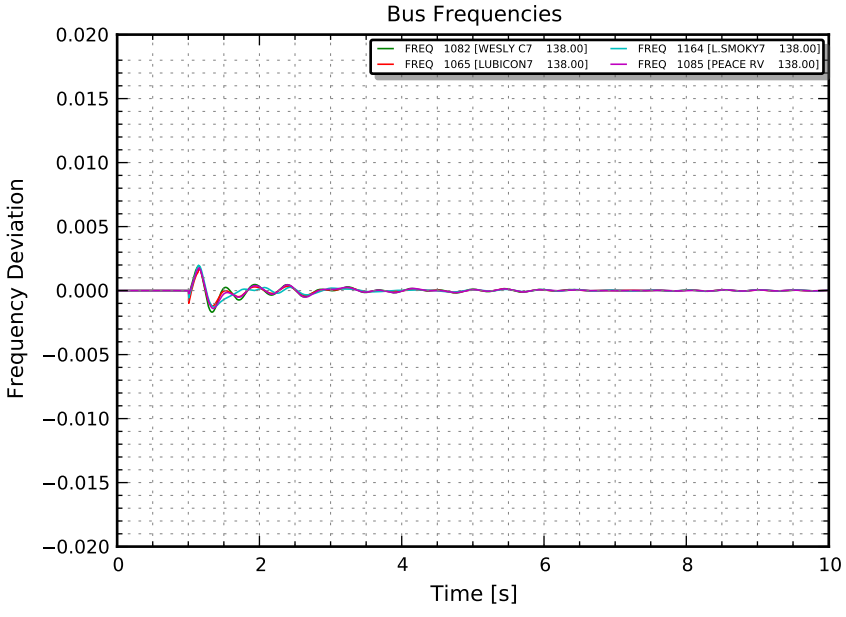


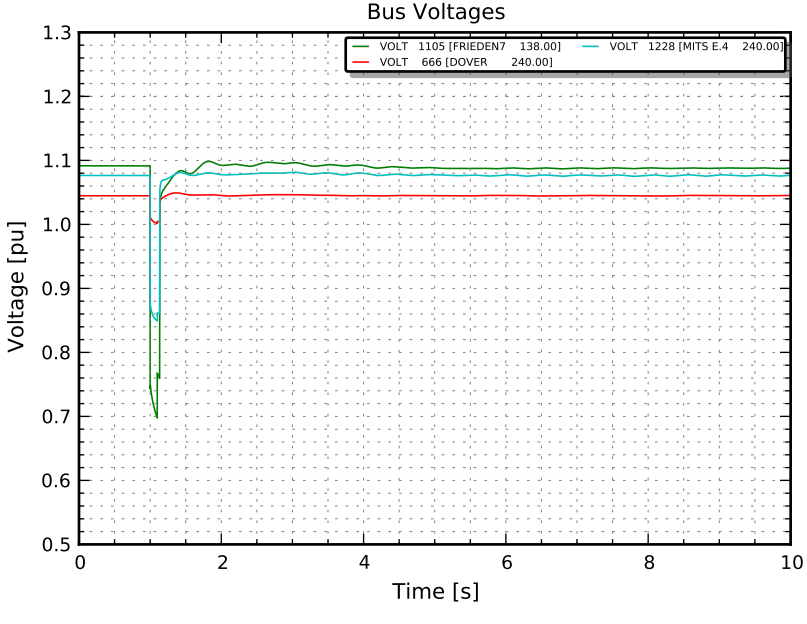
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_A.

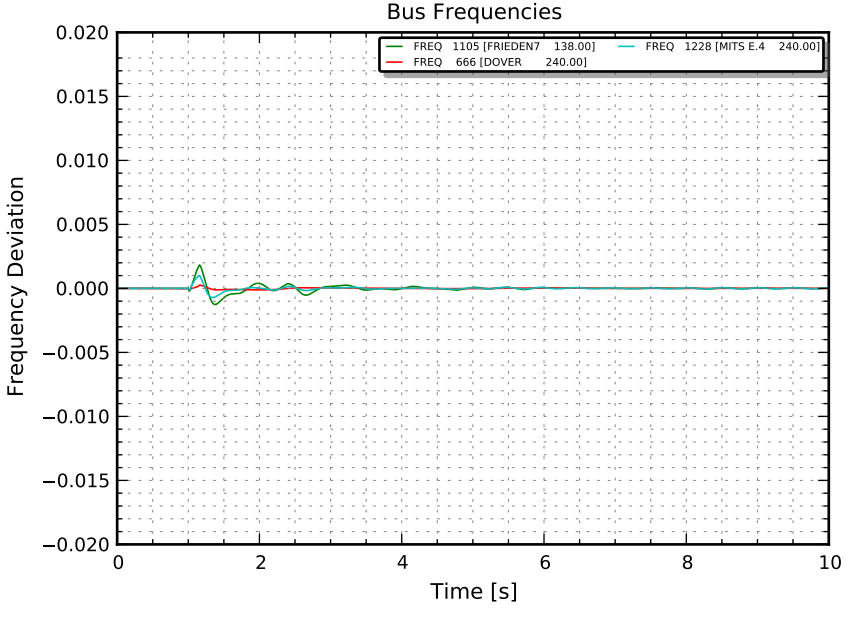
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 016 (A. 1)





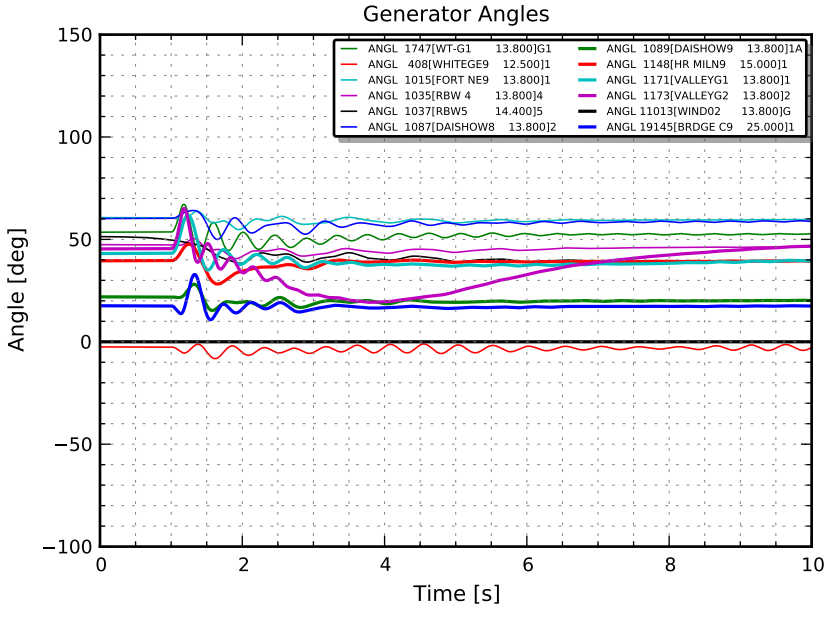


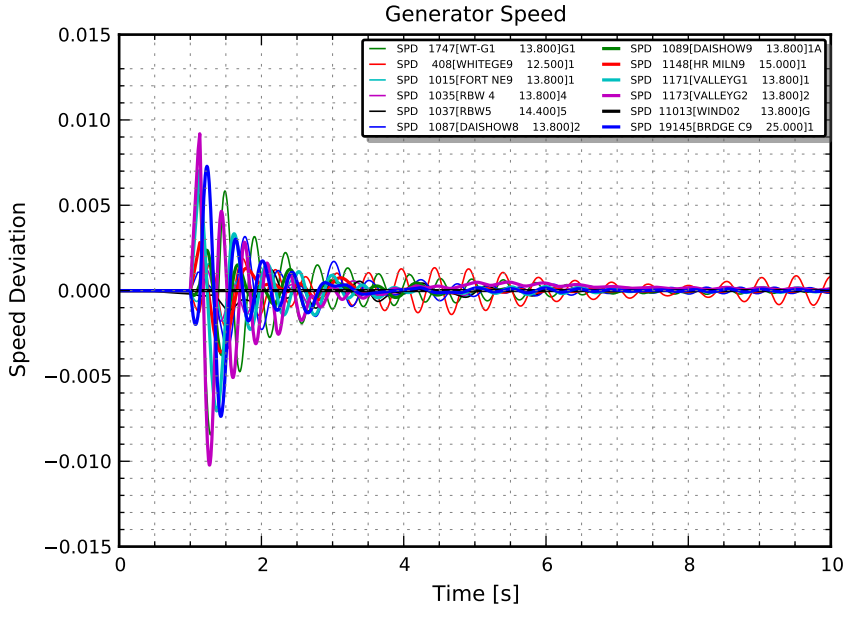


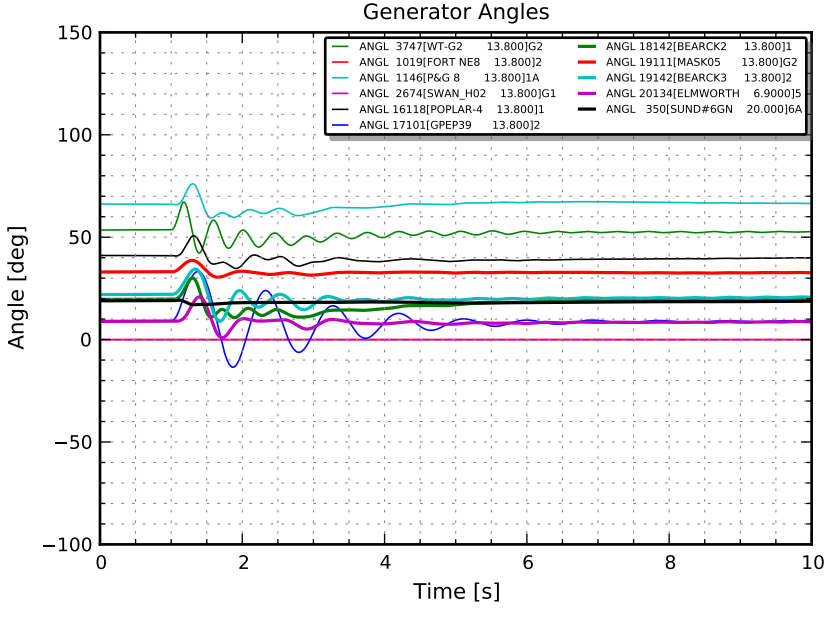
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_A.

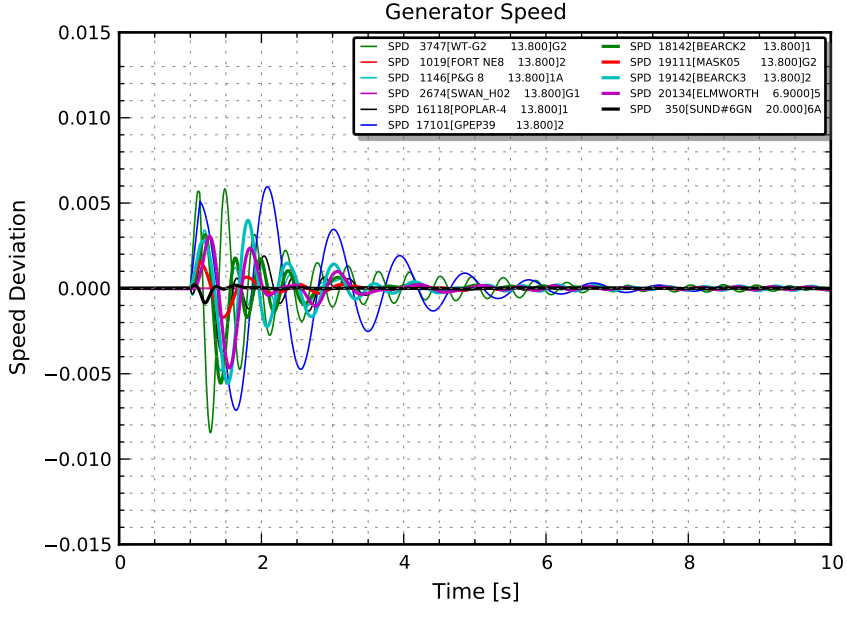
Study Area Generators

Appendix E2A
Figure: 016 (A. 2)





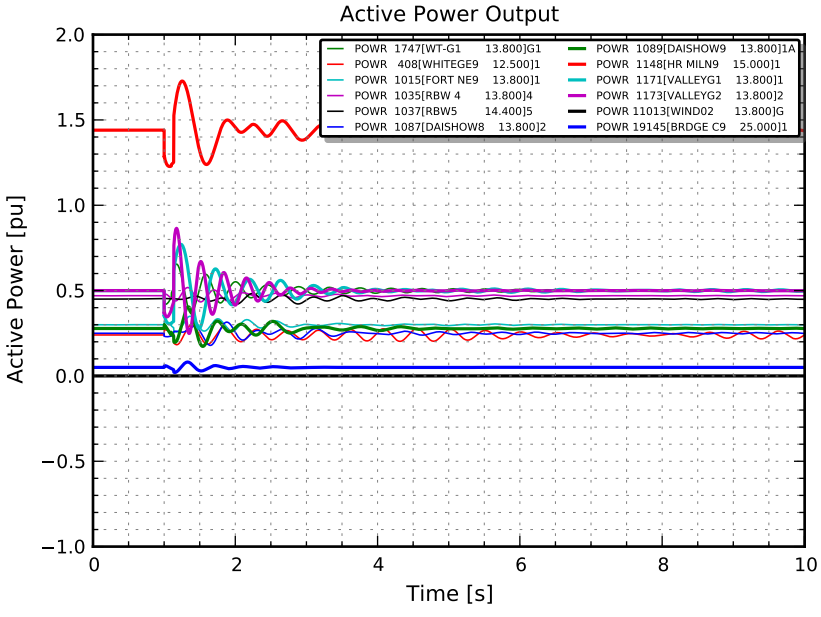


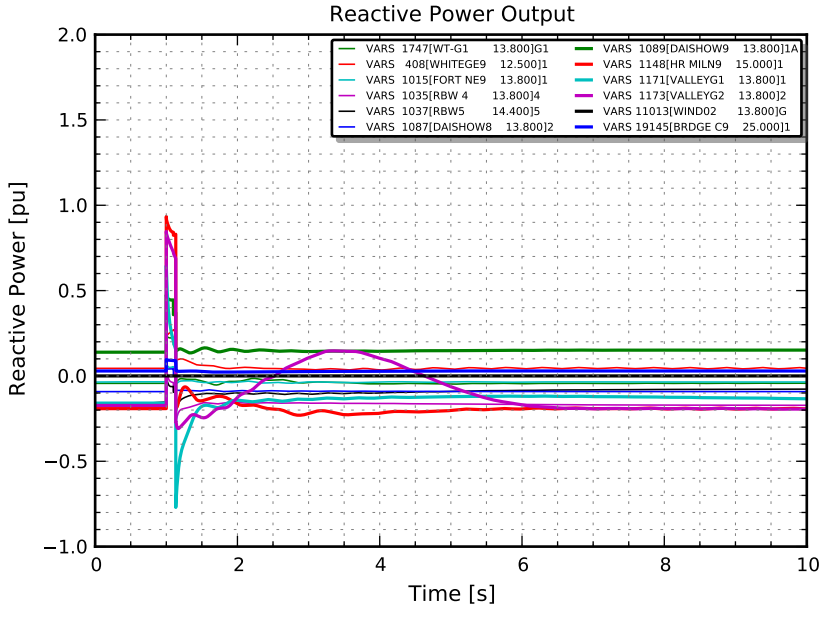


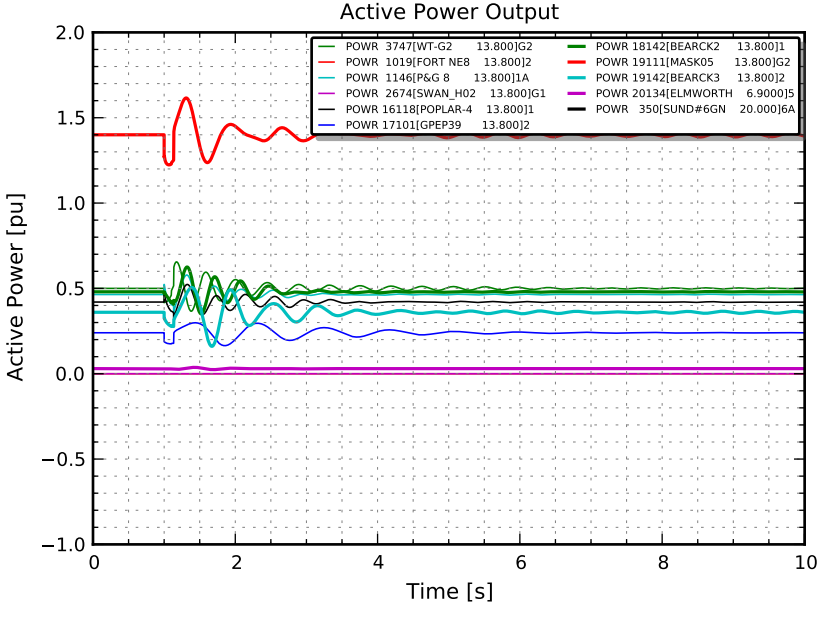
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_A.

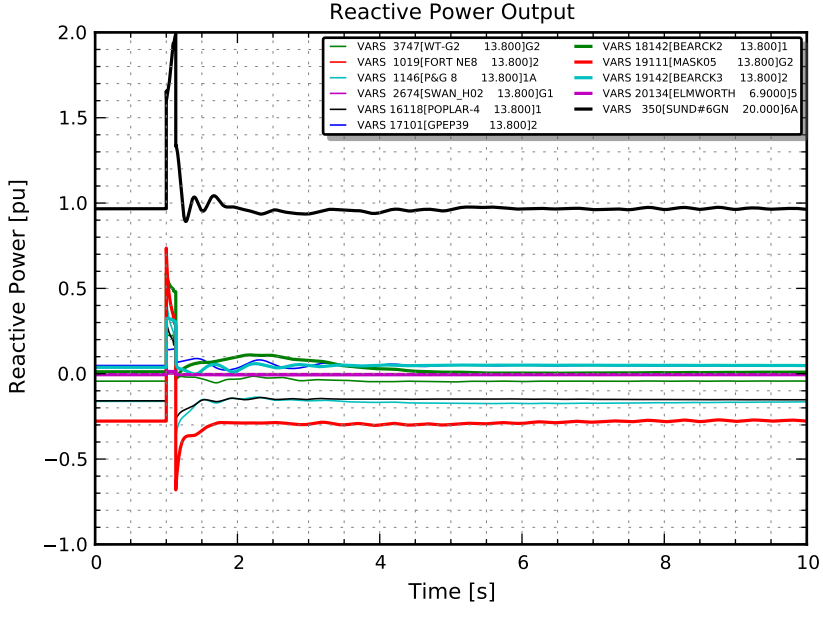
Study Area Generators

Appendix E2A
Figure: 016 (A. 3)





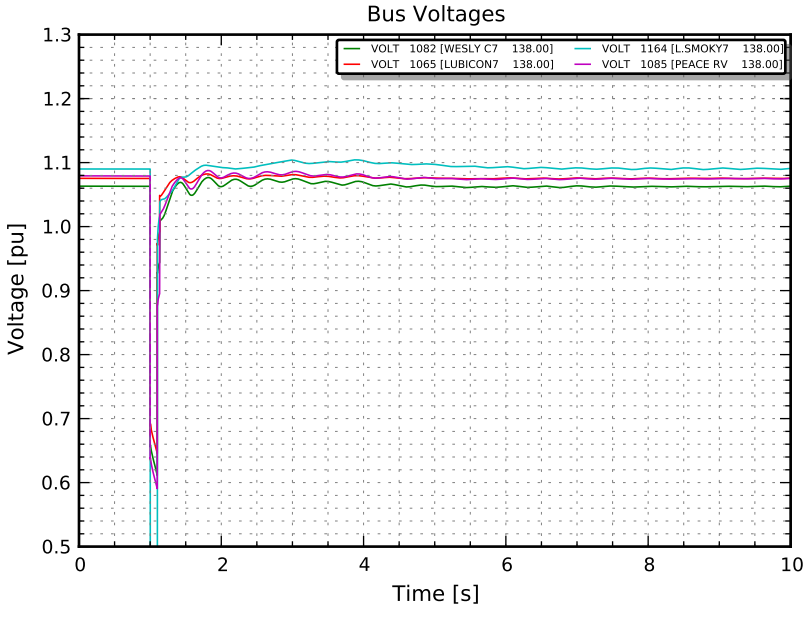


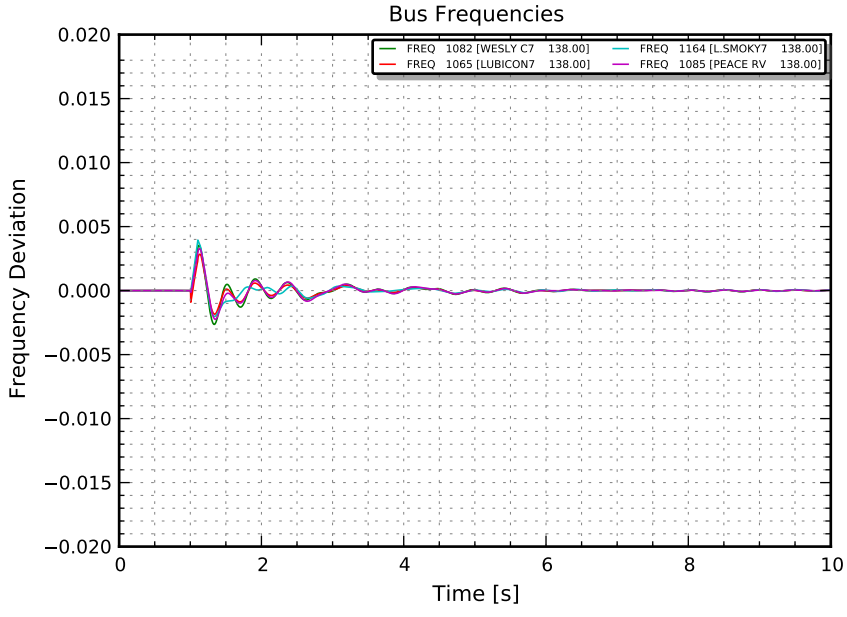


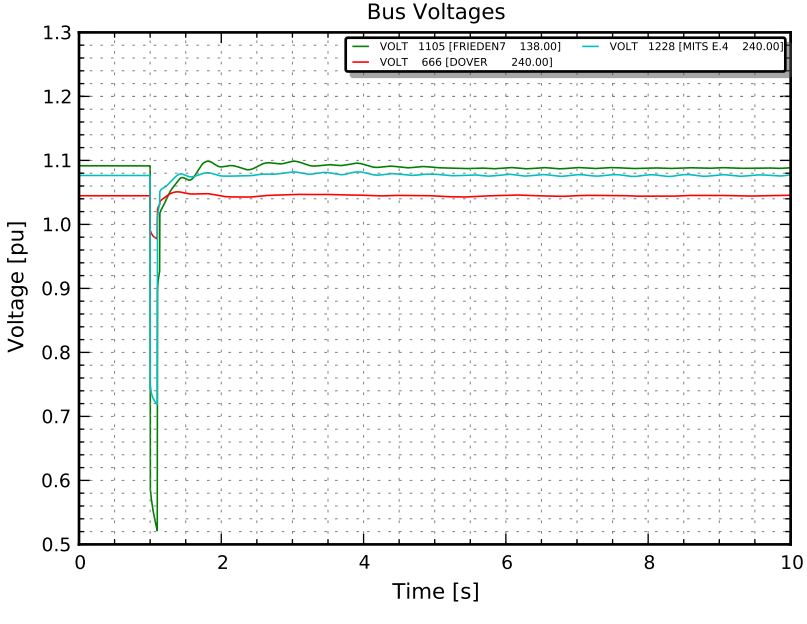
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_B.

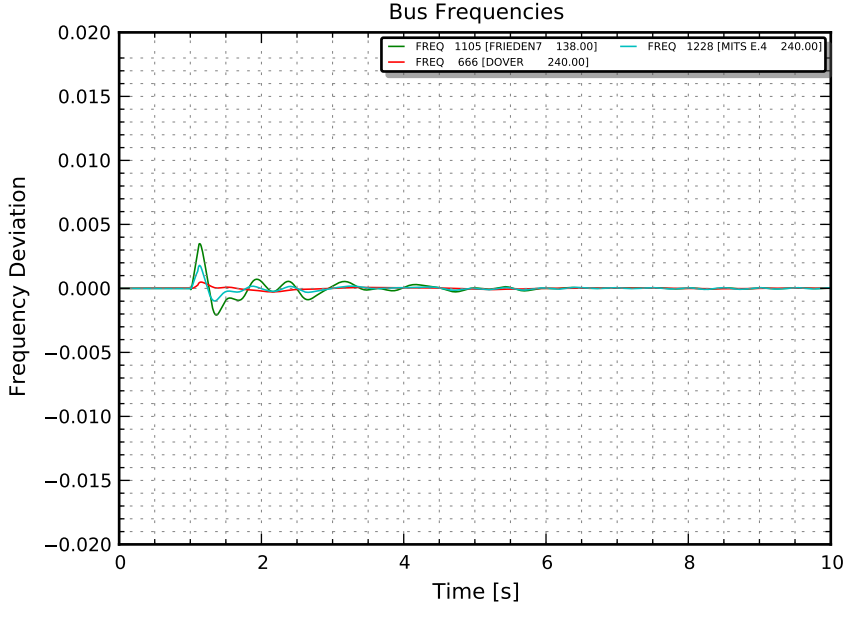
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 016 (B. 1)





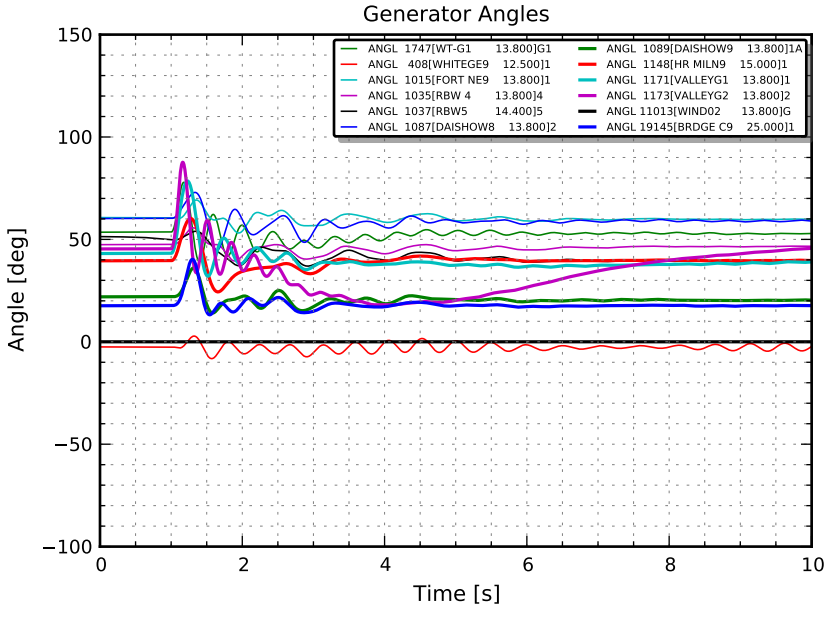


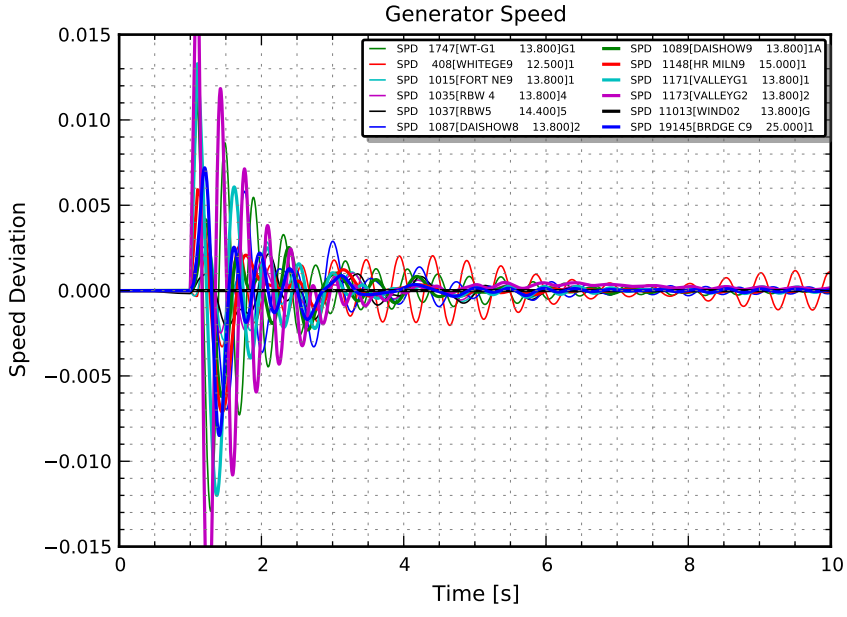


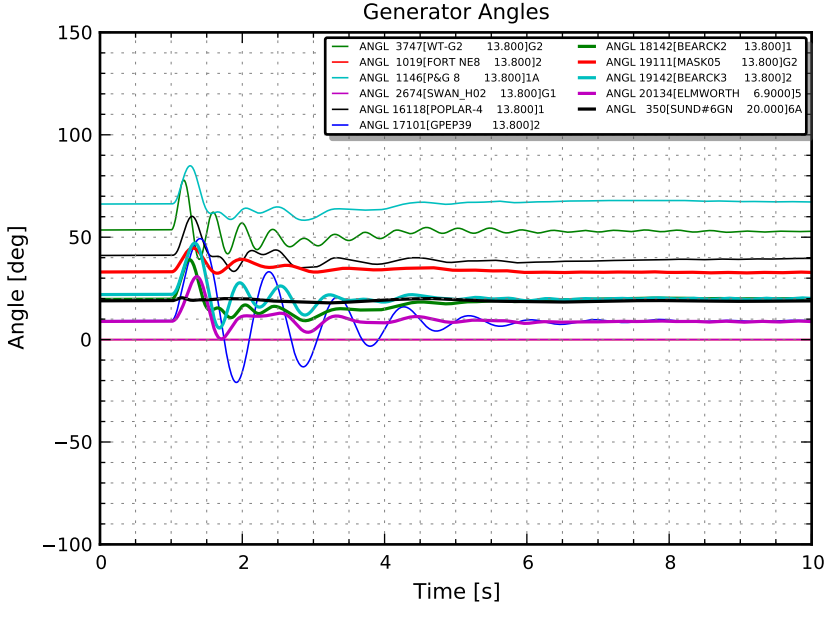
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_B.

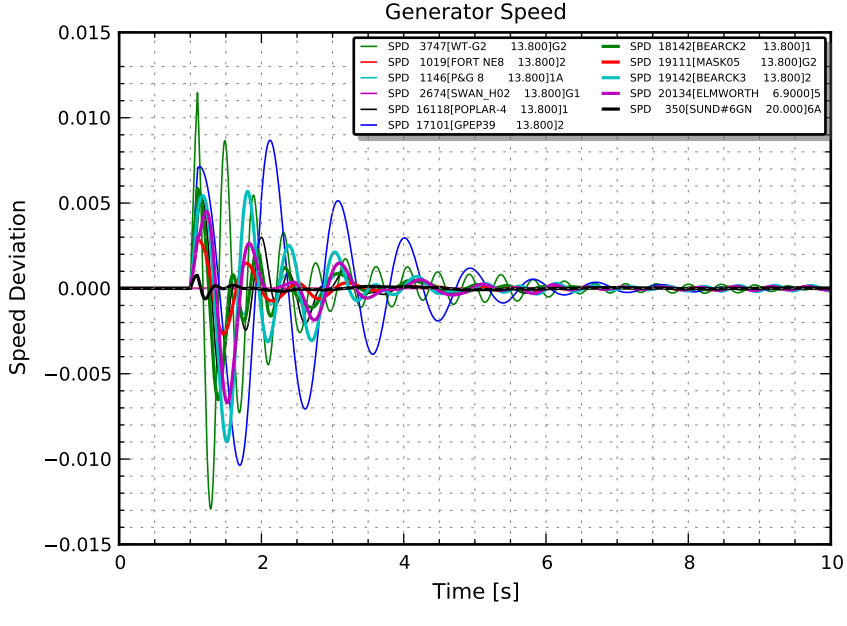
Study Area Generators

Appendix E2A
Figure: 016 (B. 2)





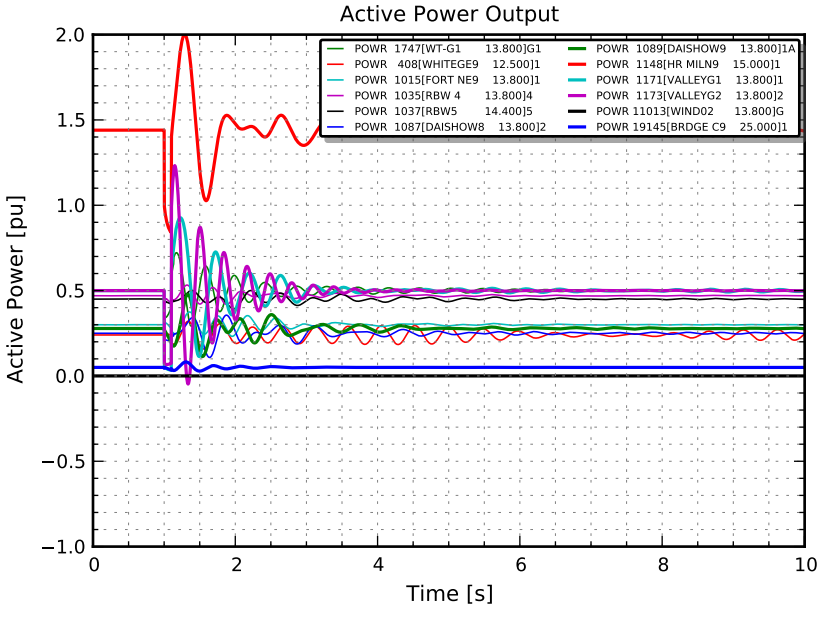


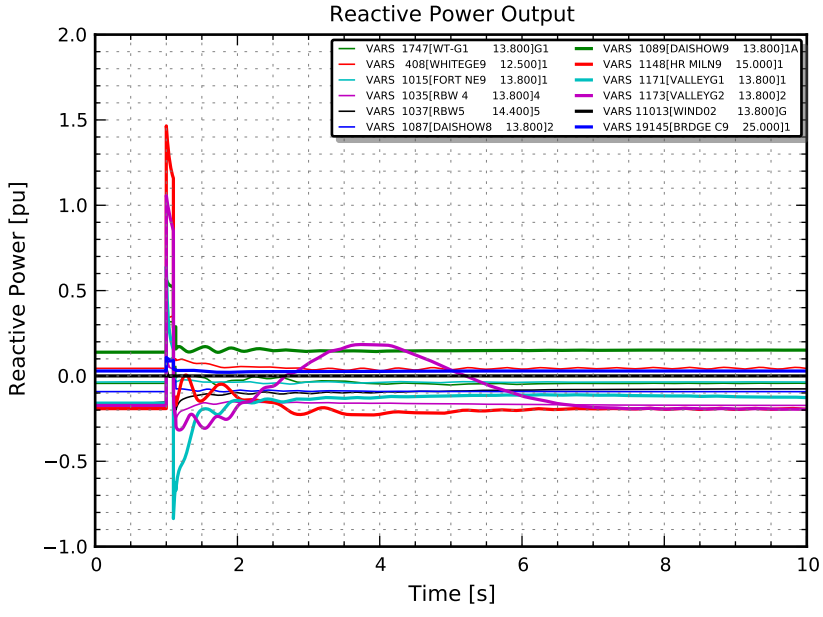


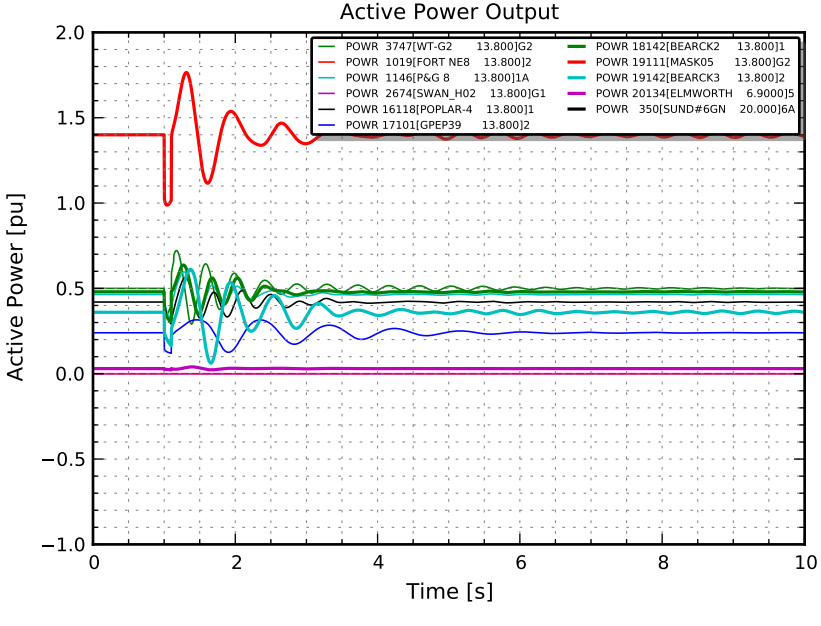
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_B.

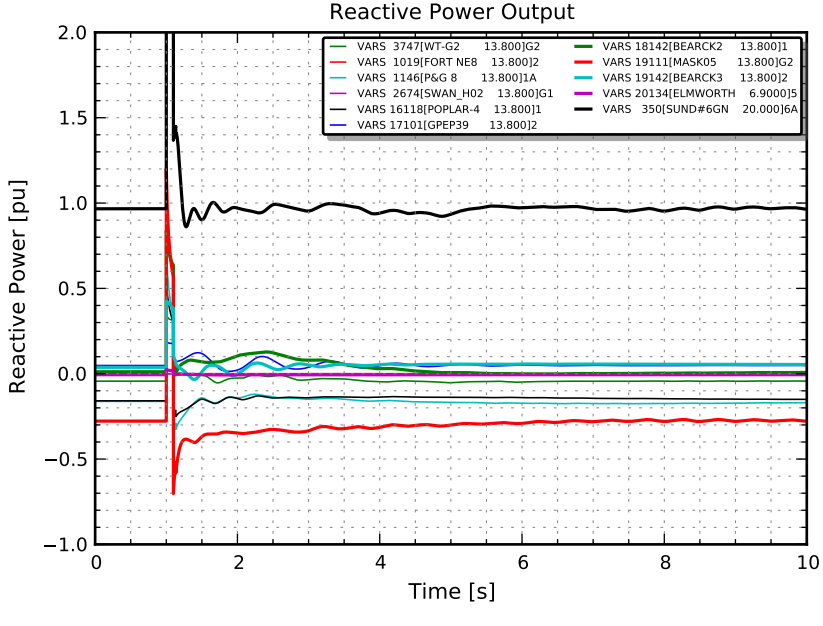
Study Area Generators

Appendix E2A
Figure: 016 (B. 3)





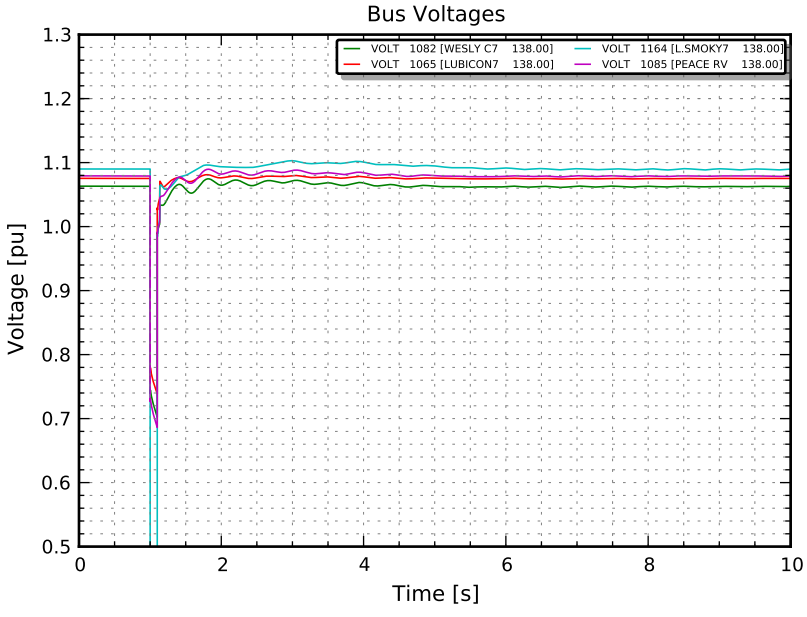


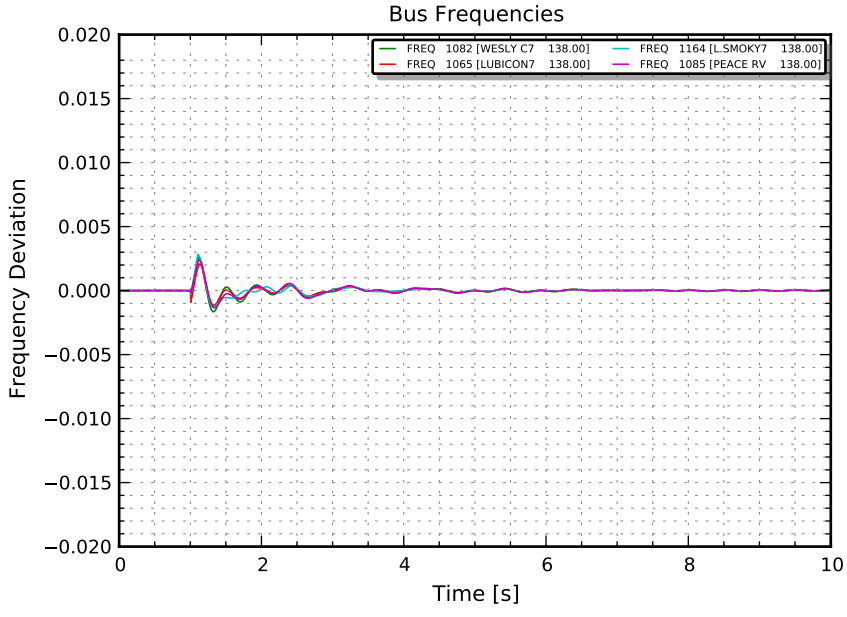


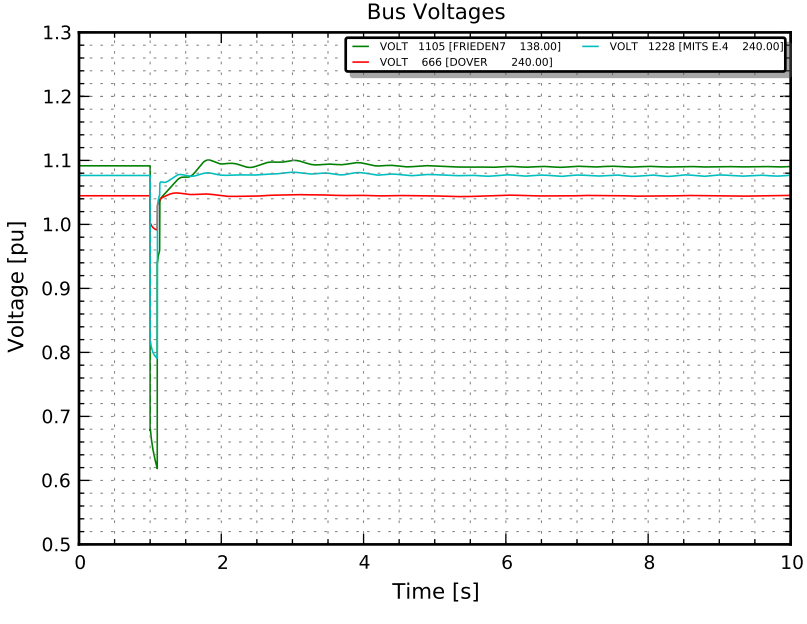
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_A.

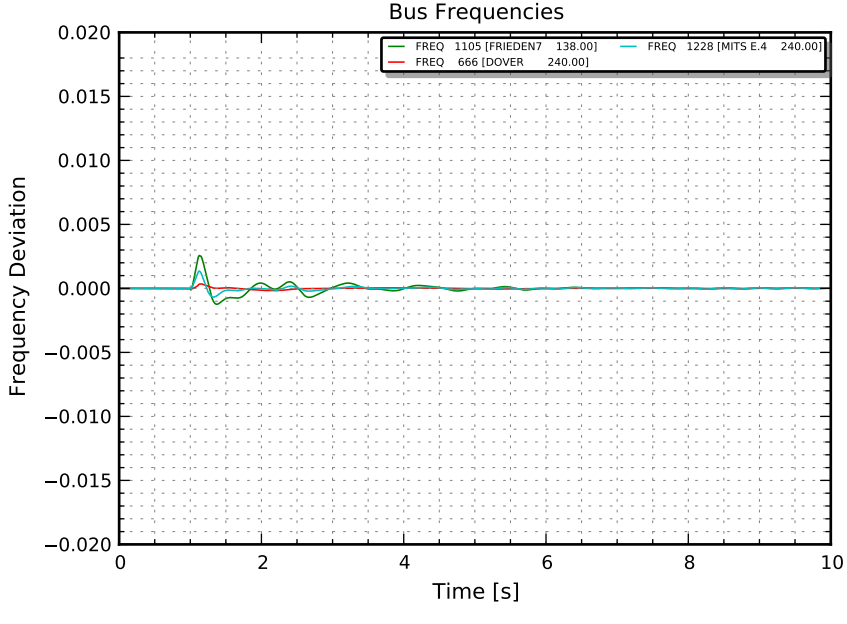
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 017 (A. 1)





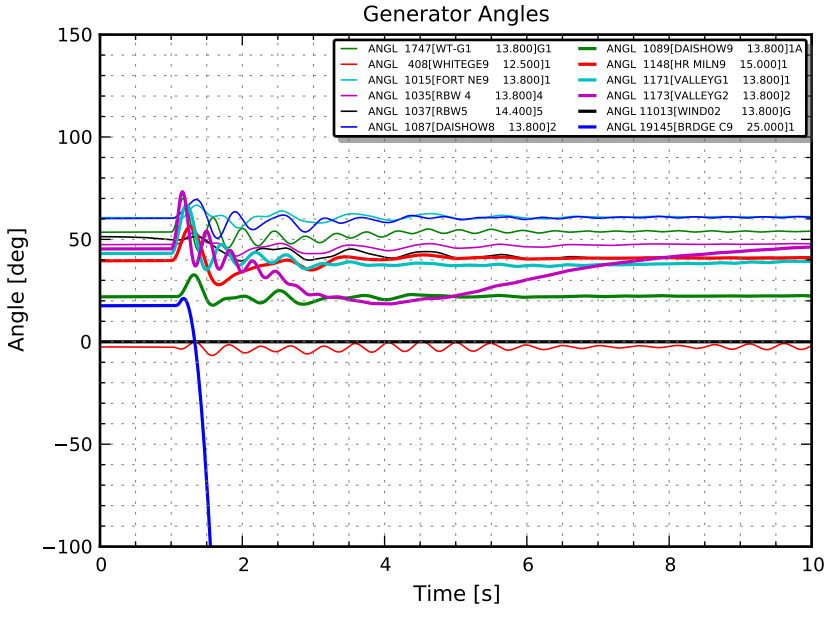


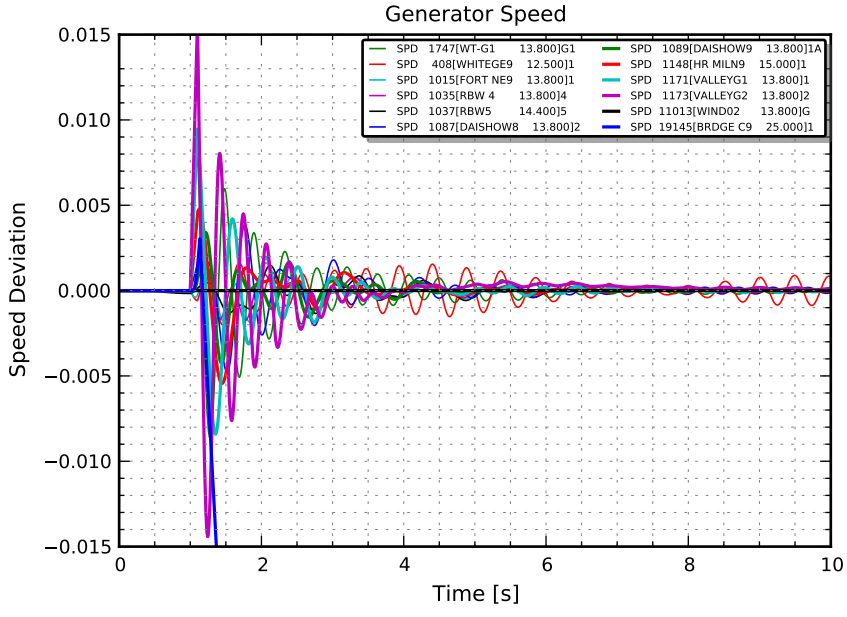


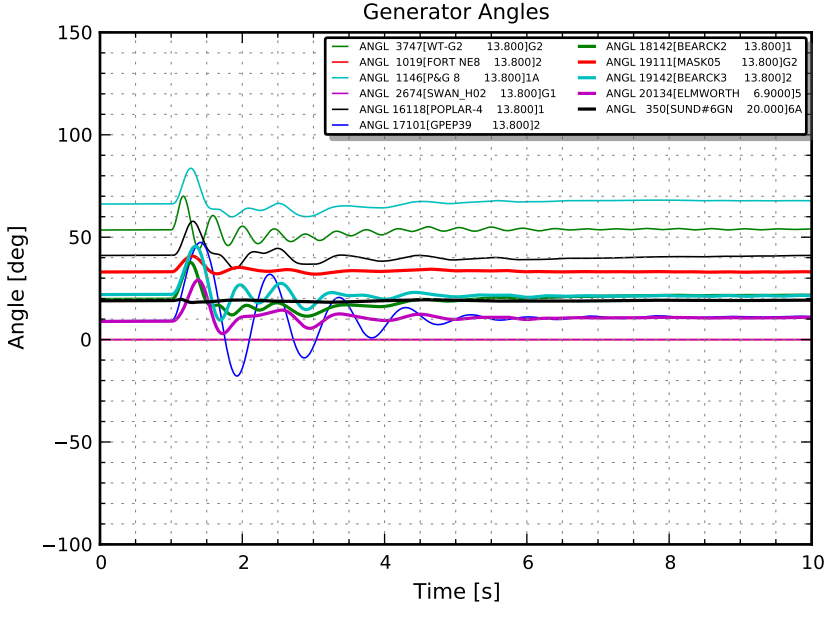
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_A.

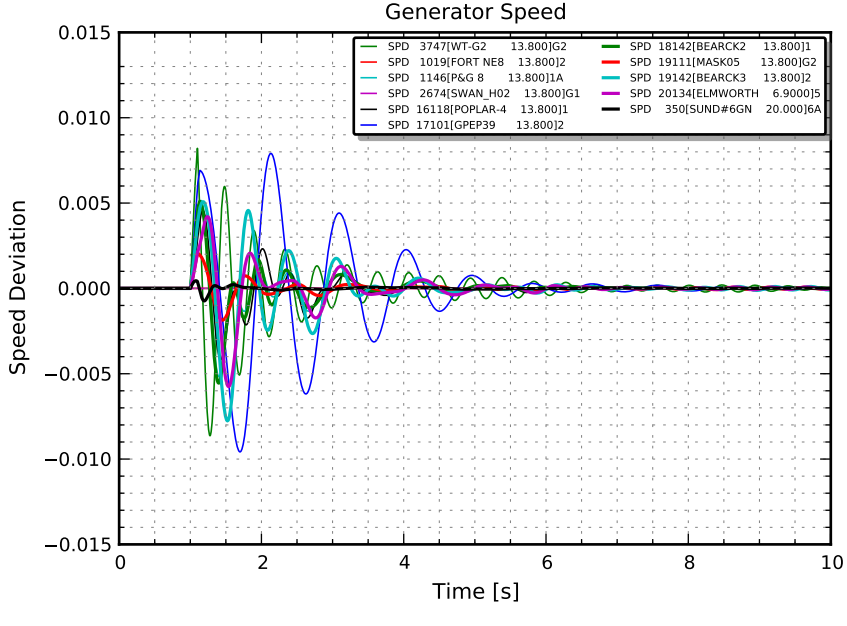
Study Area Generators

Appendix E2A
Figure: 017 (A. 2)





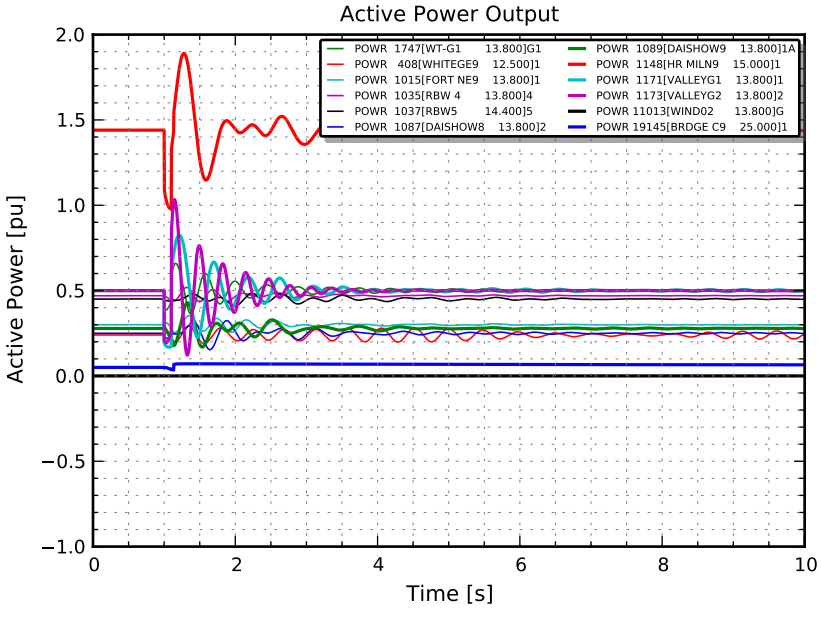


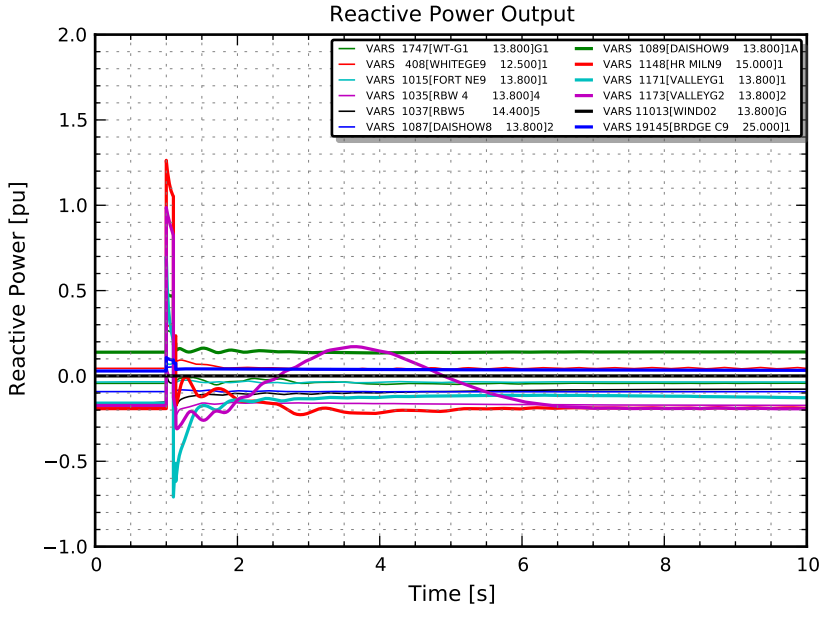


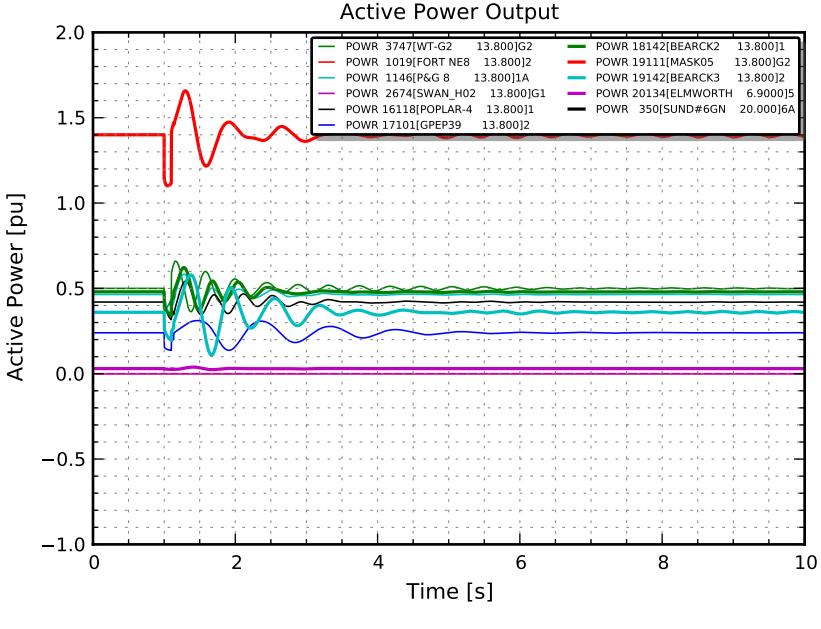
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_A.

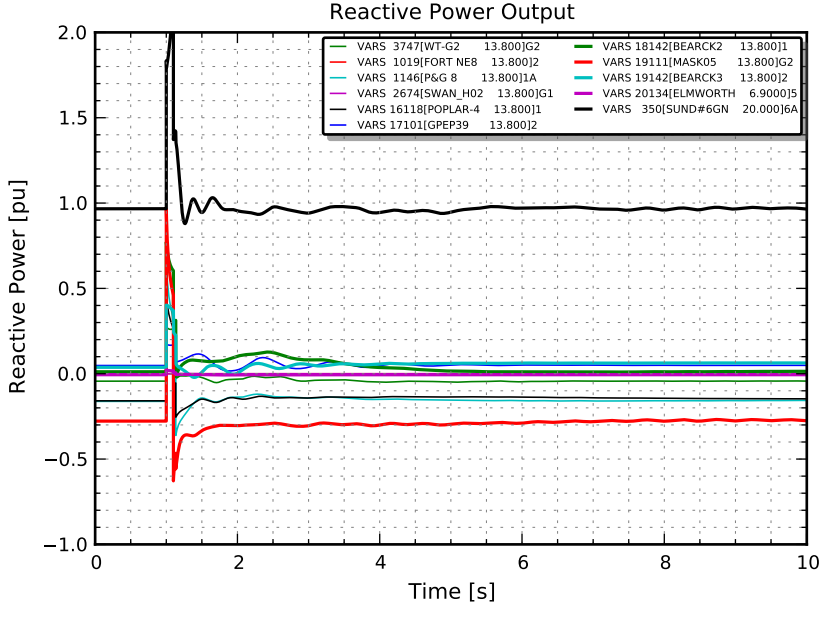
Study Area Generators

Appendix E2A
Figure: 017 (A. 3)





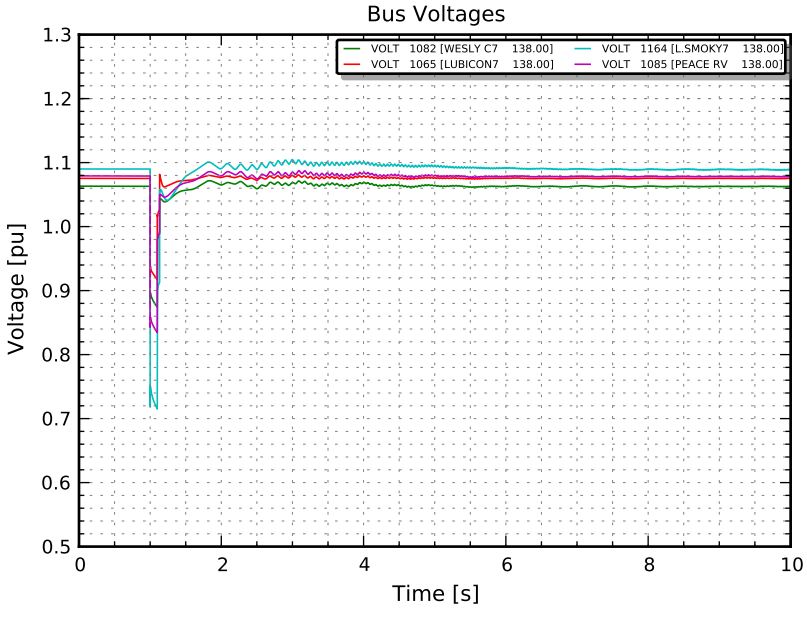


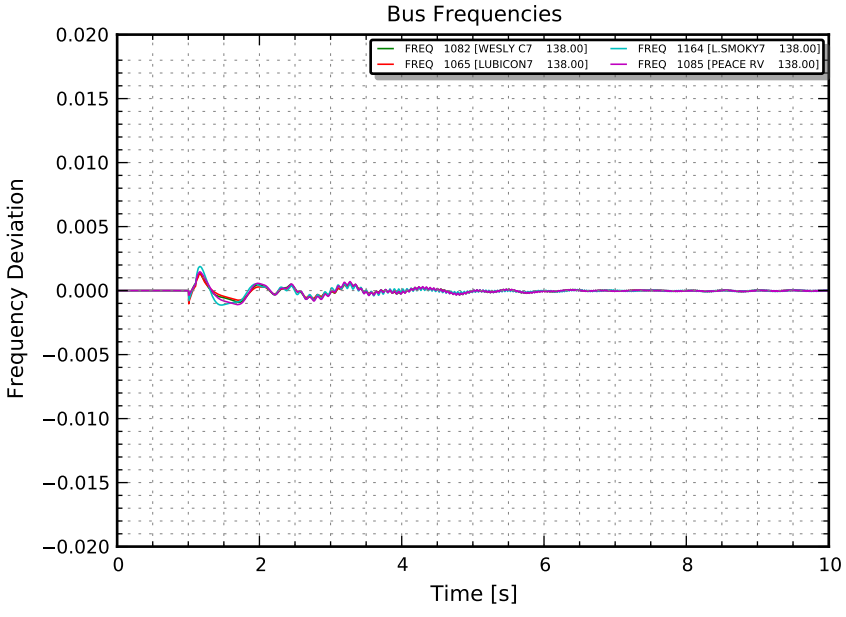


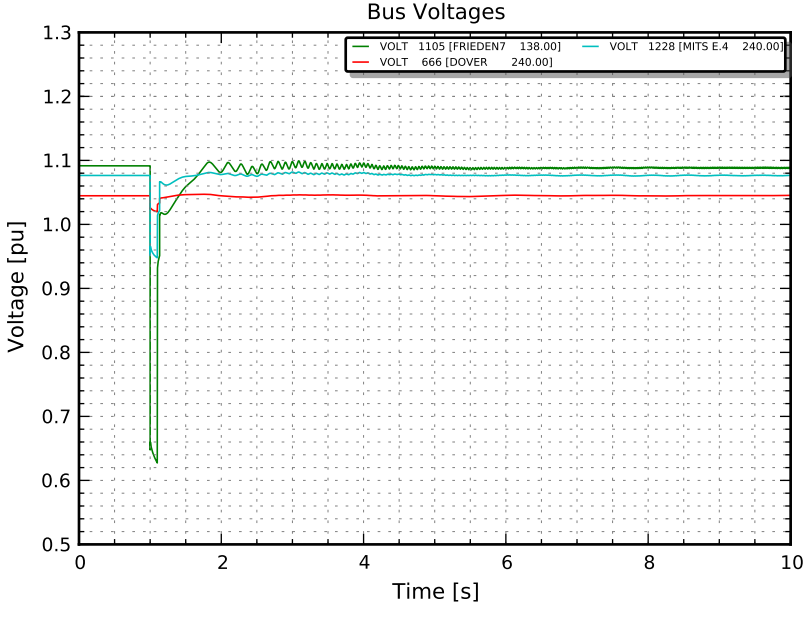
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_B.

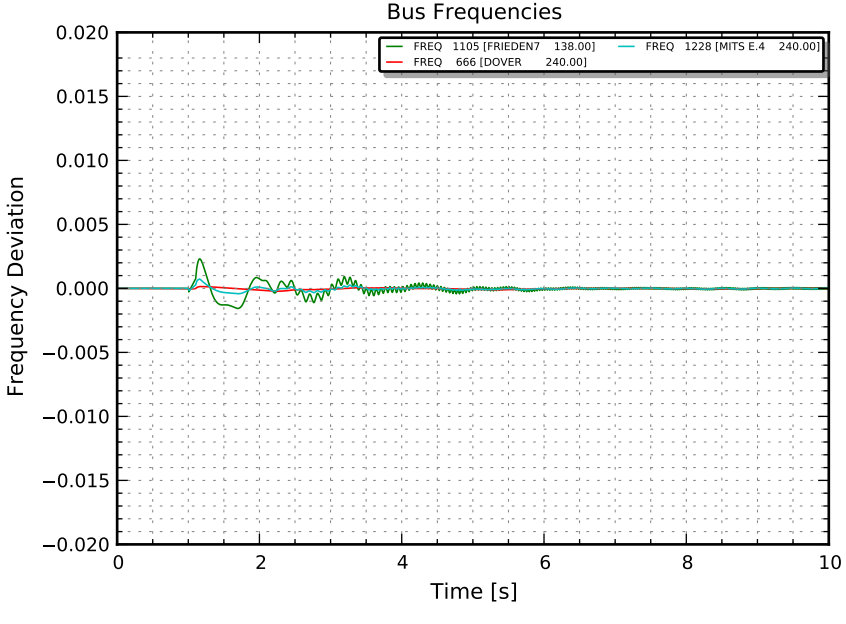
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 017 (B. 1)





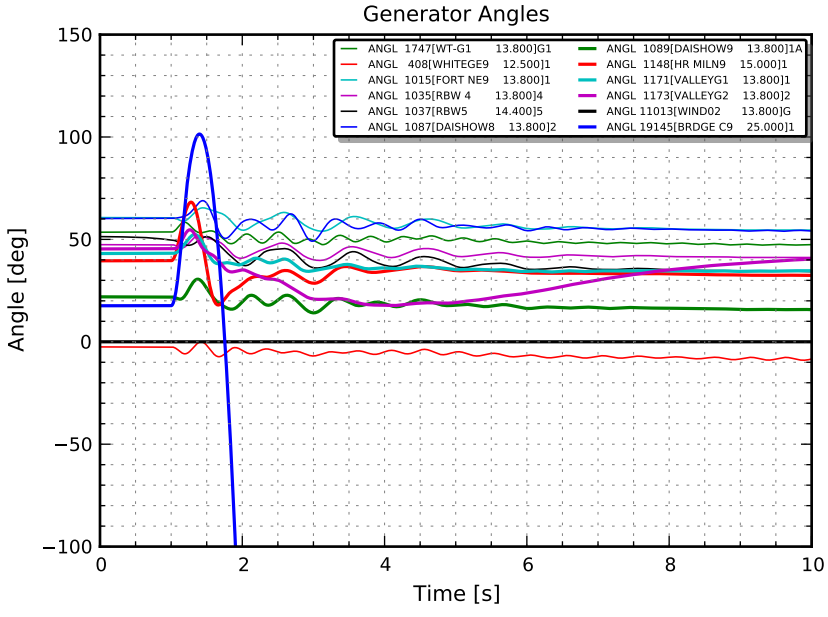


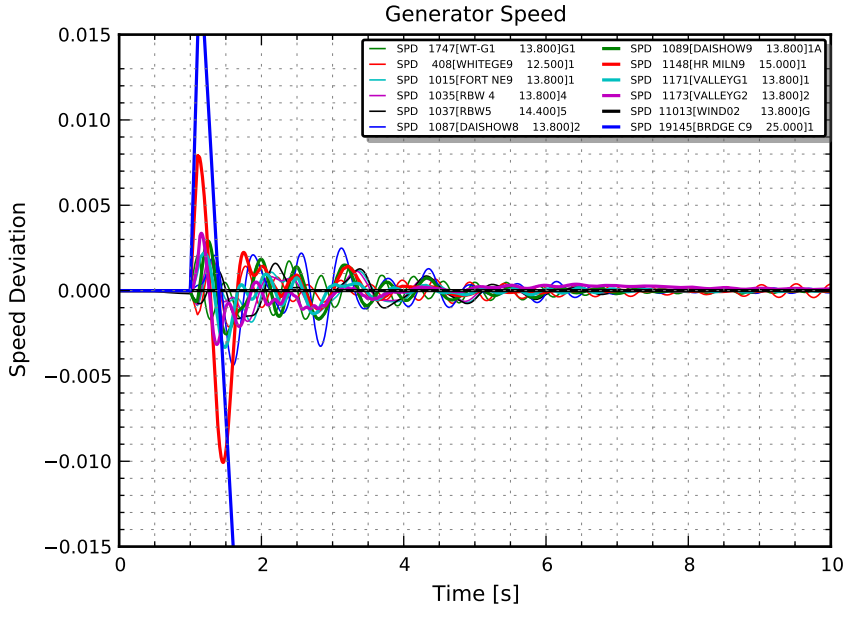


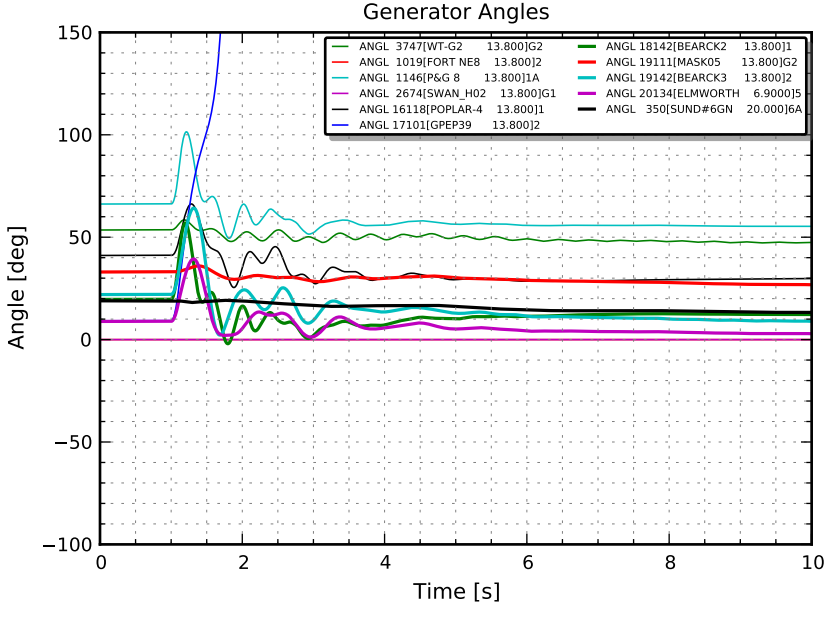
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_B.

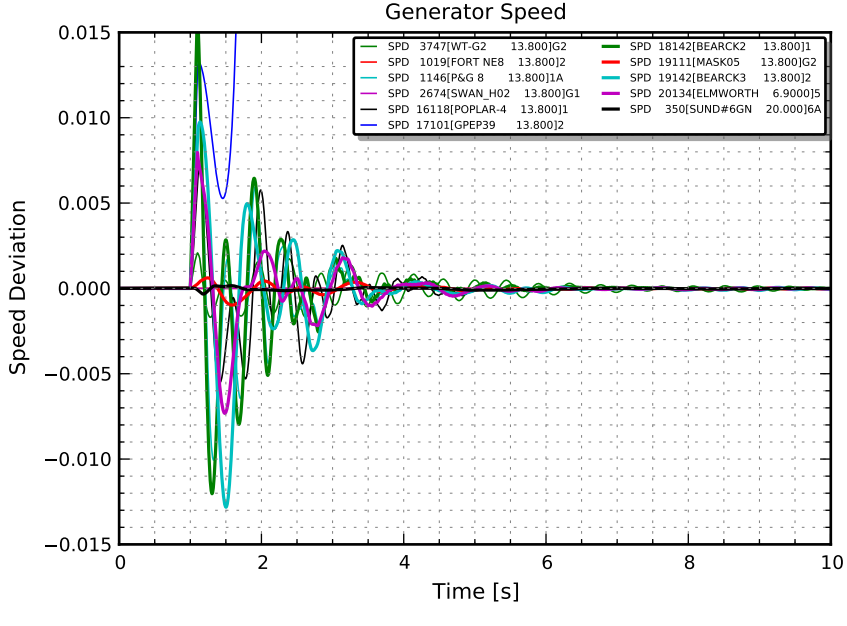
Study Area Generators

Appendix E2A
Figure: 017 (B. 2)





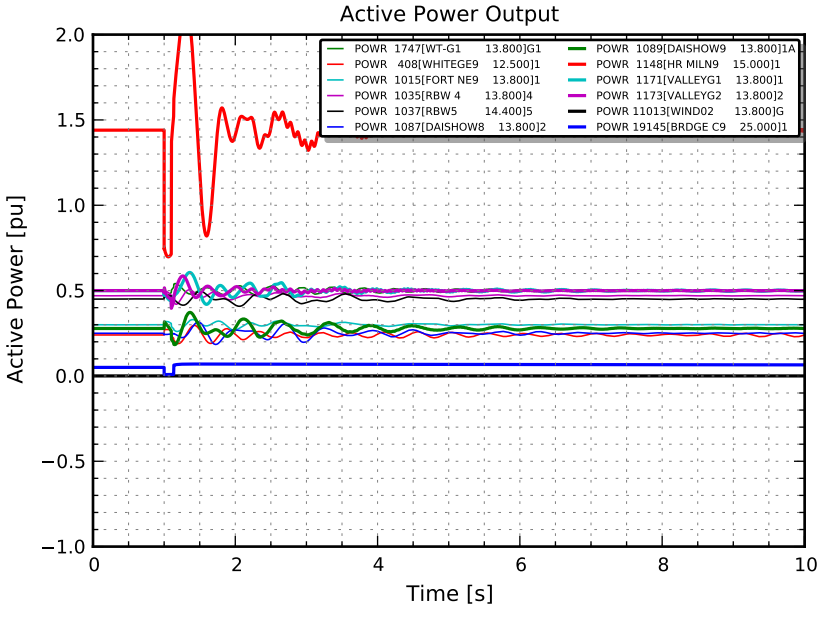


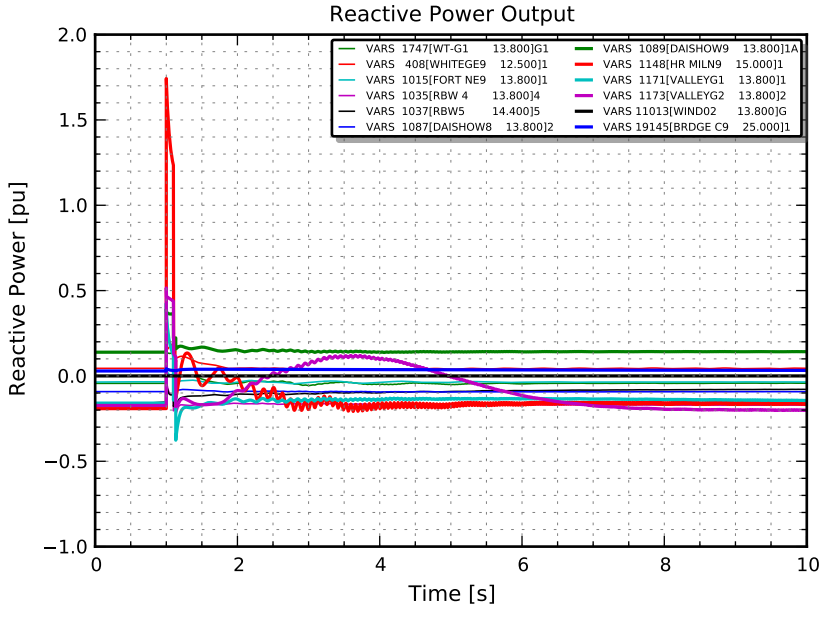


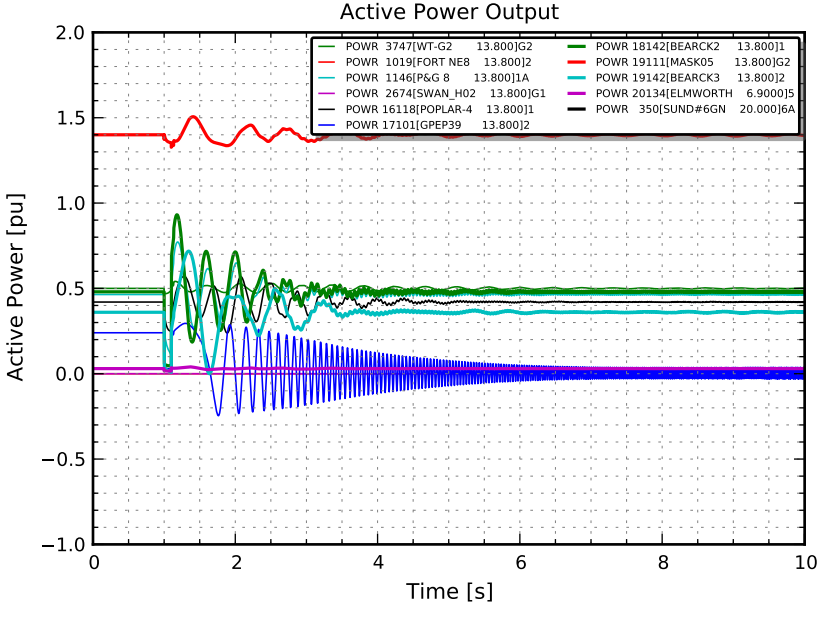
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_B.

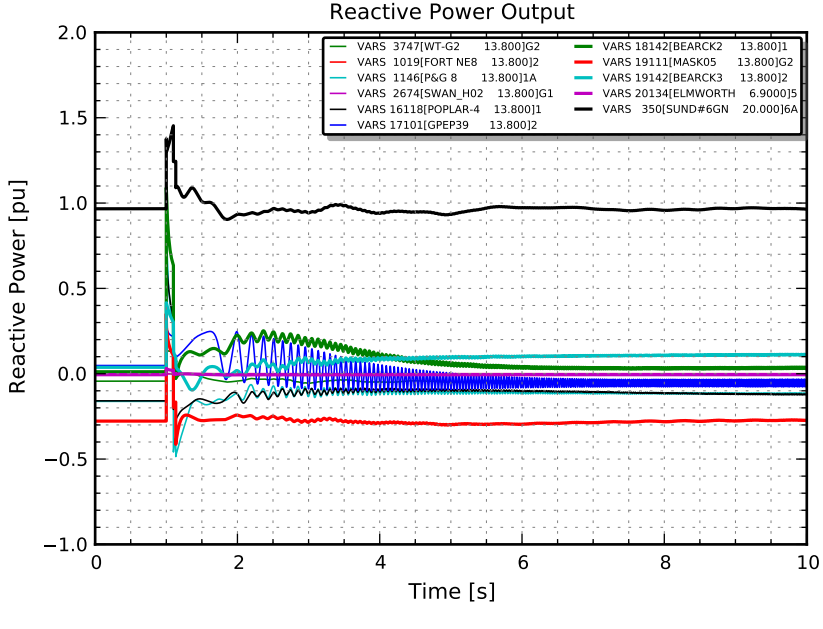
Study Area Generators

Appendix E2A
Figure: 017 (B. 3)





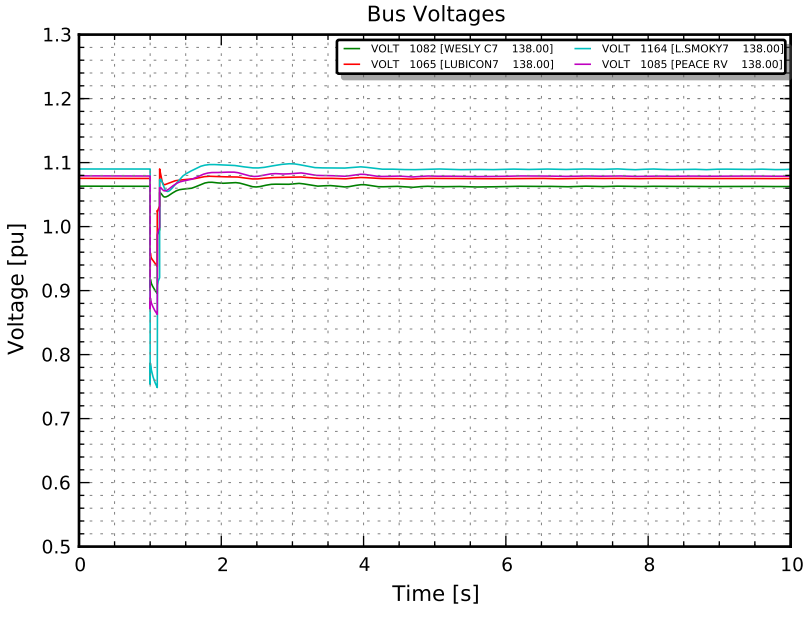


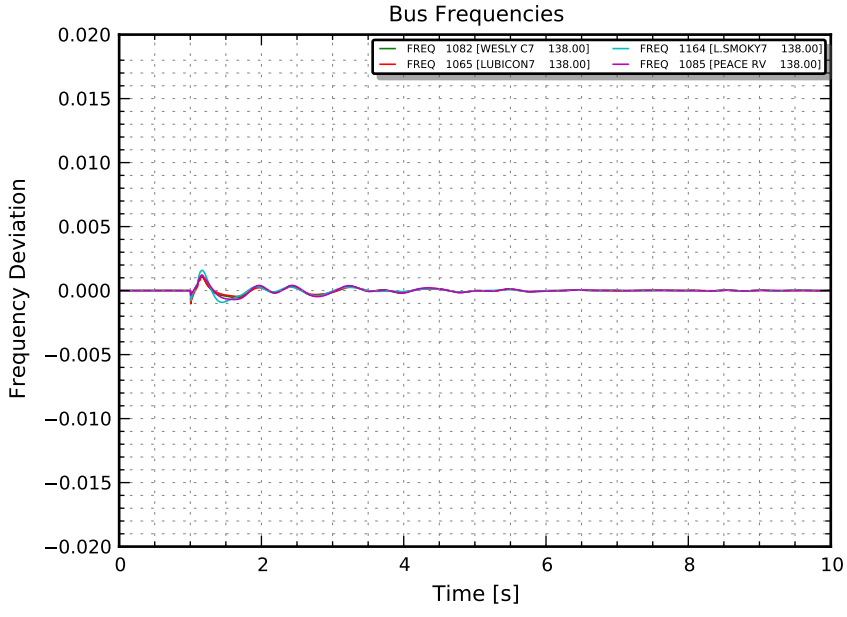


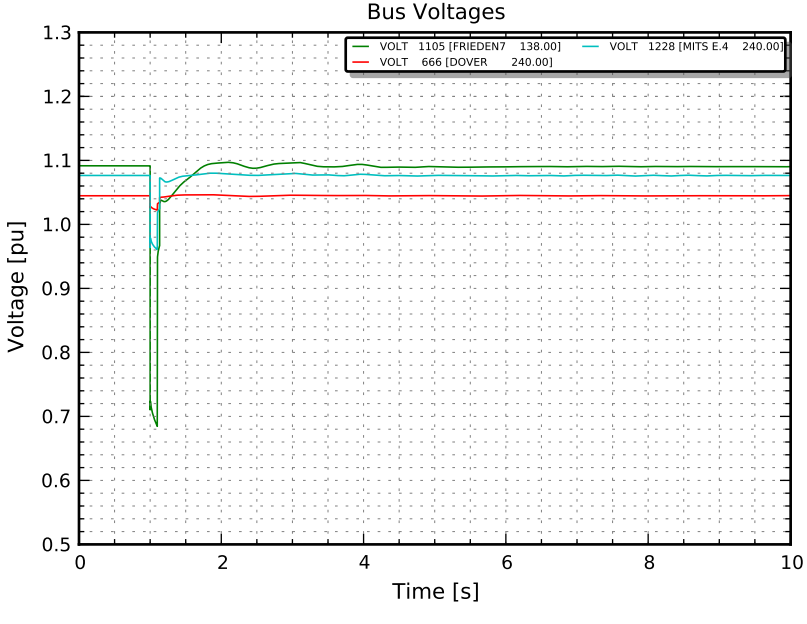
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_A.

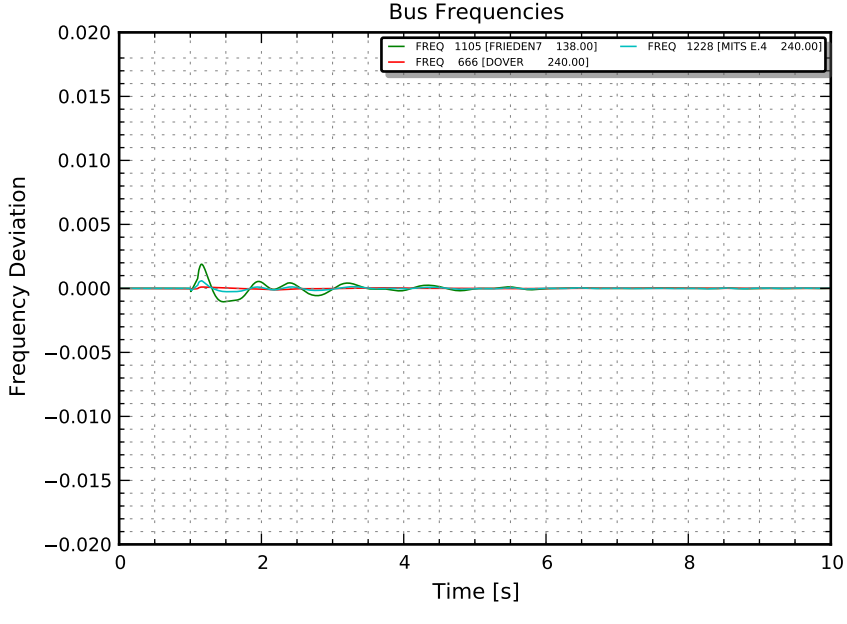
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 018 (A. 1)





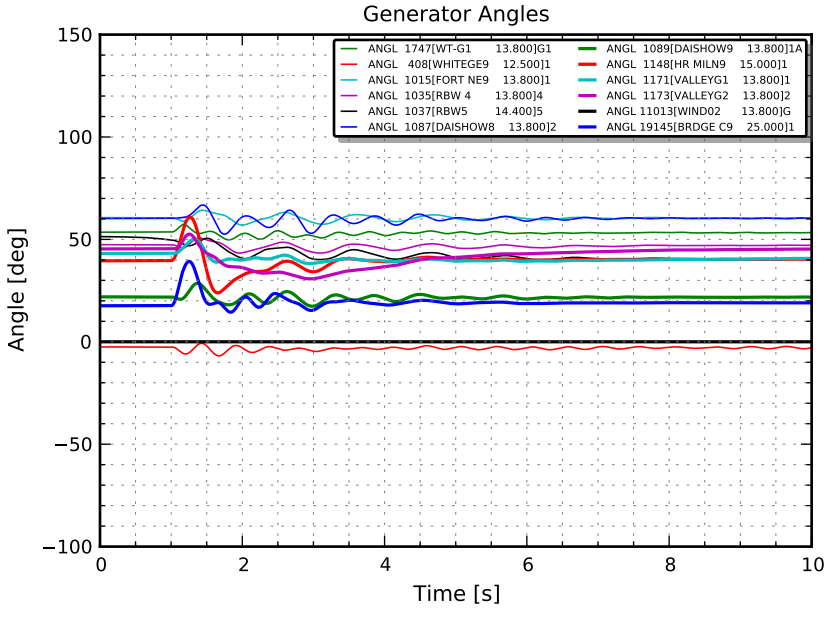


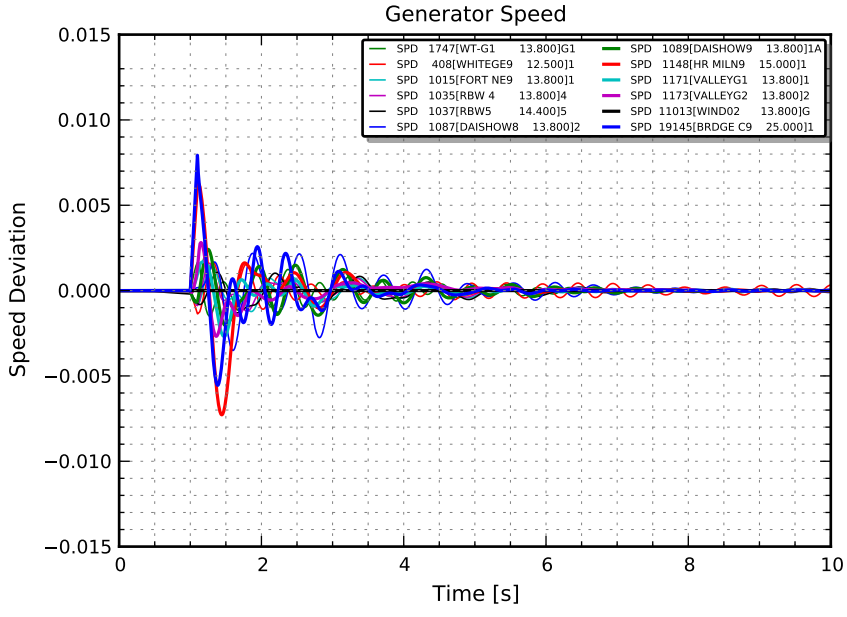


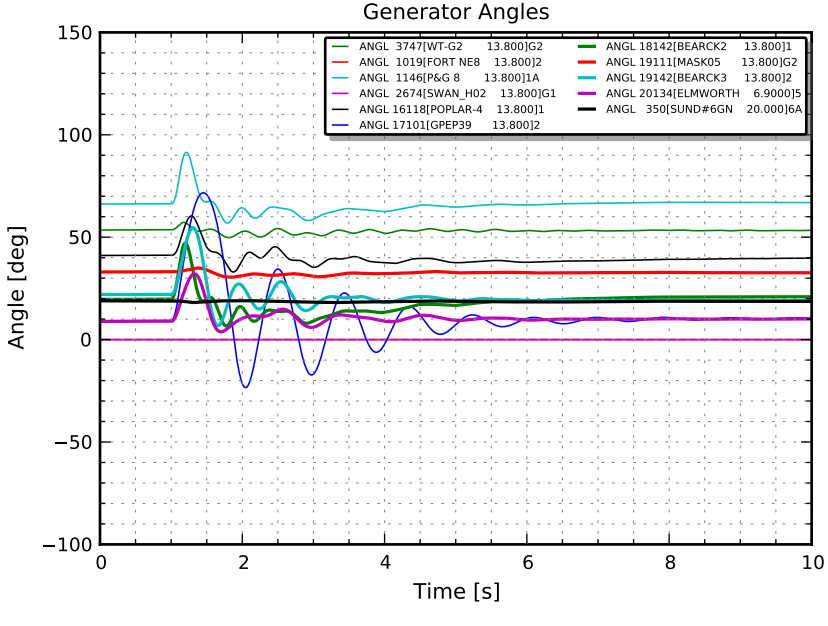
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_A.

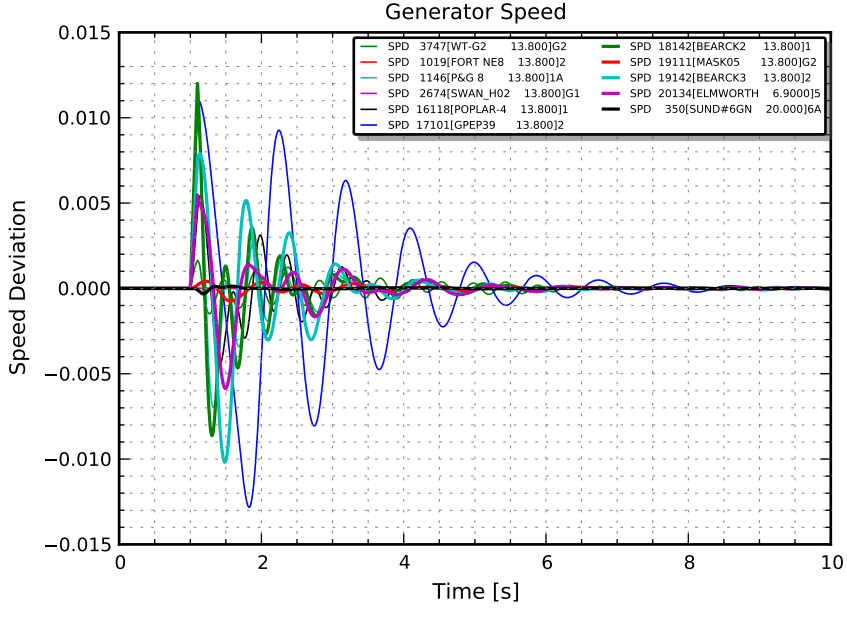
Study Area Generators

Appendix E2A
Figure: 018 (A. 2)





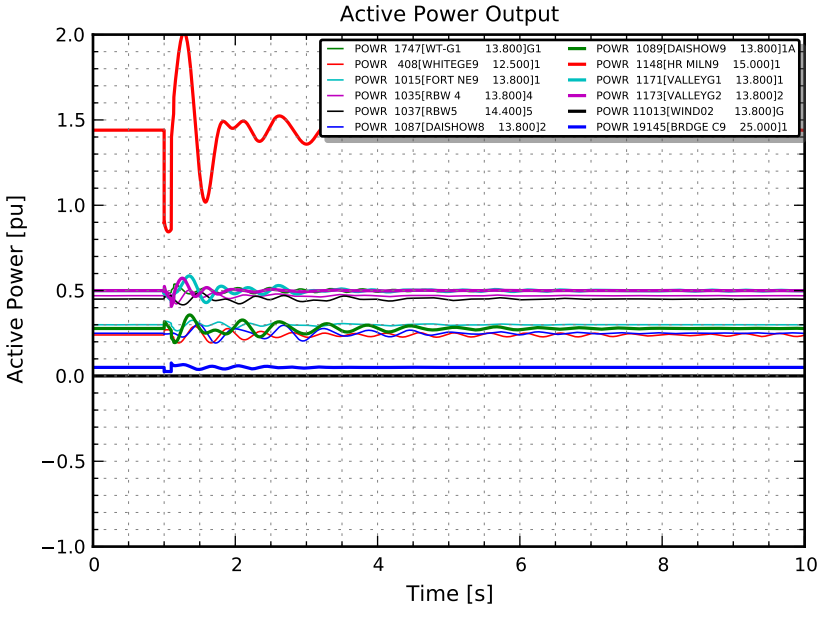


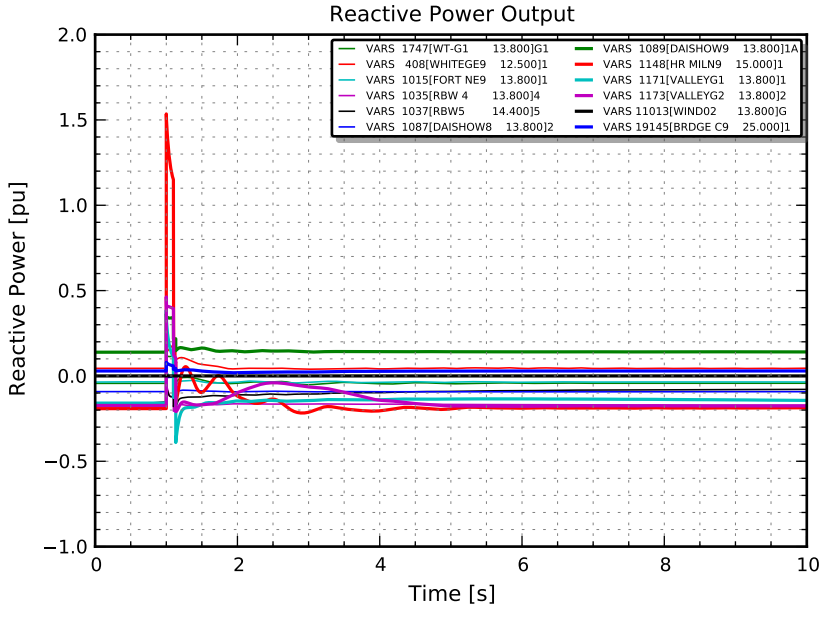


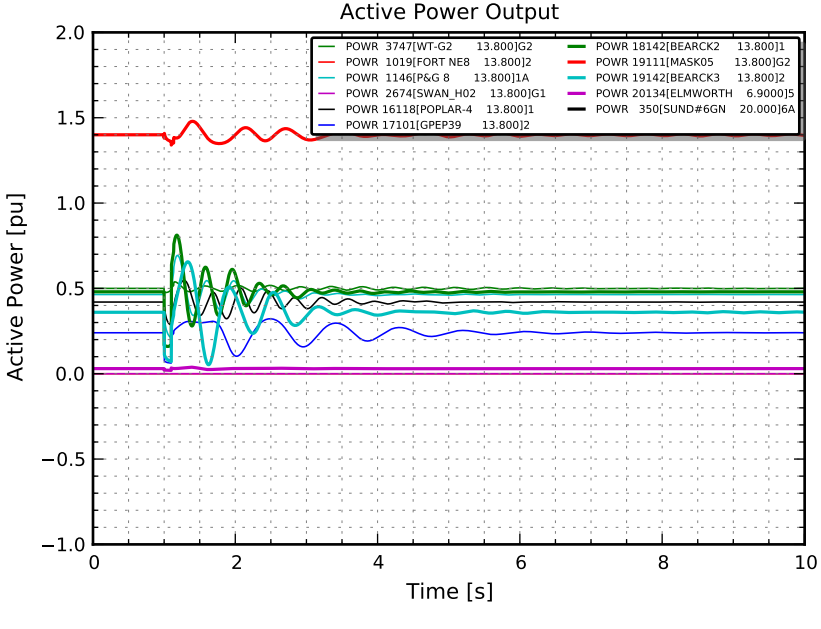
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_A.

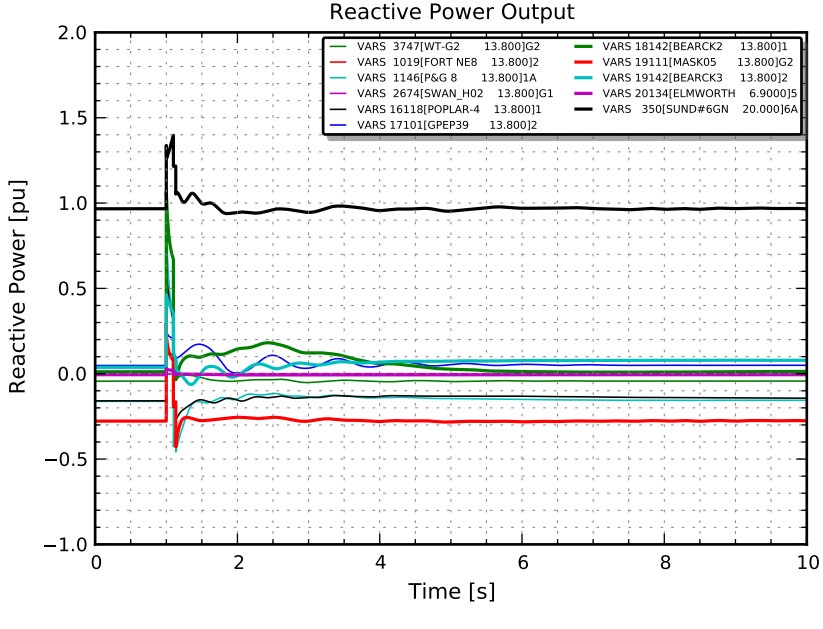
Study Area Generators

Appendix E2A
Figure: 018 (A. 3)





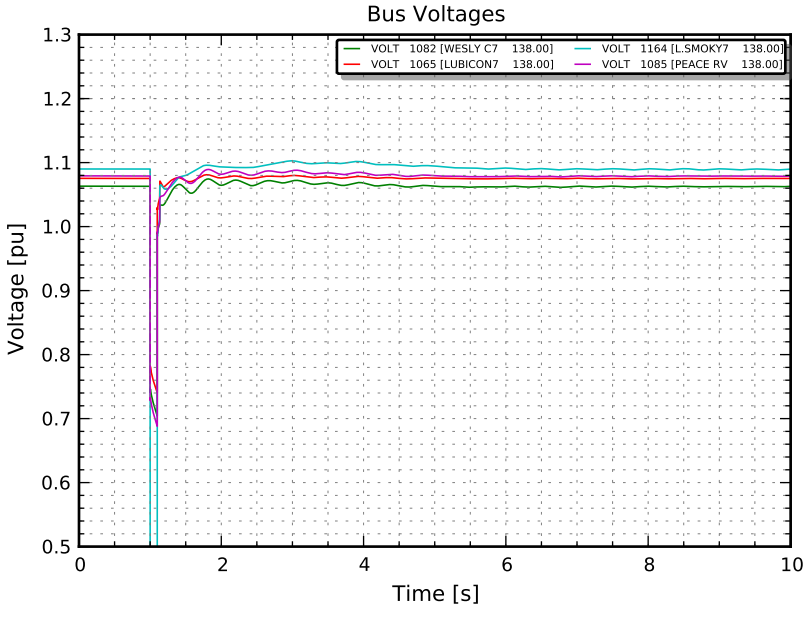


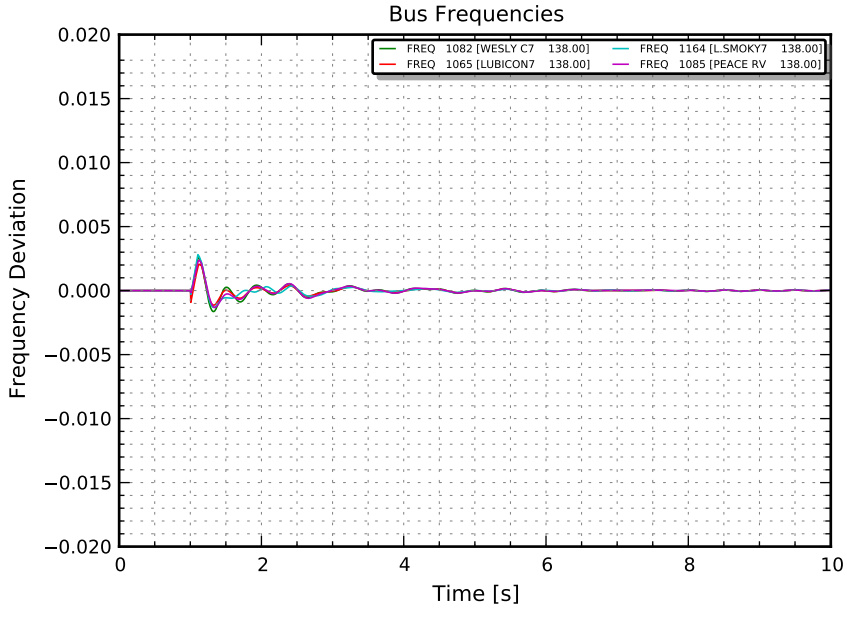


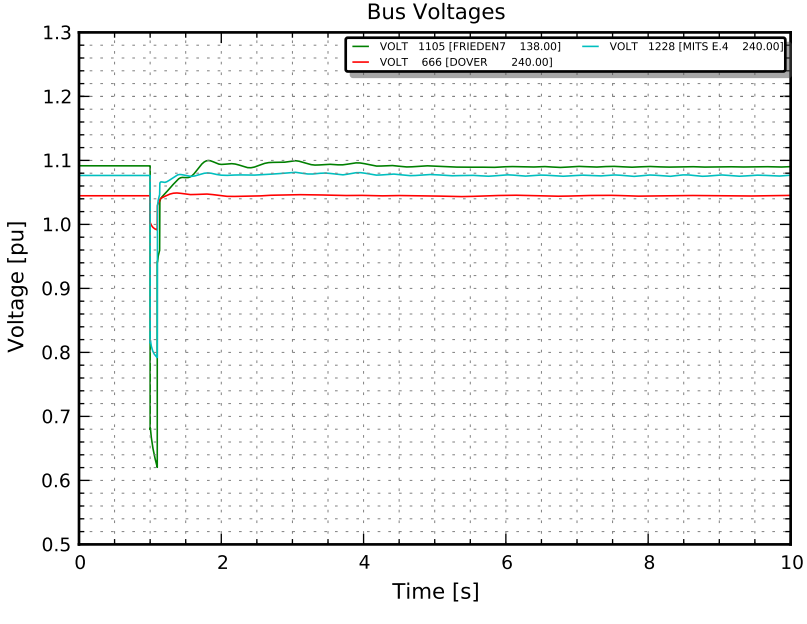
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_B.

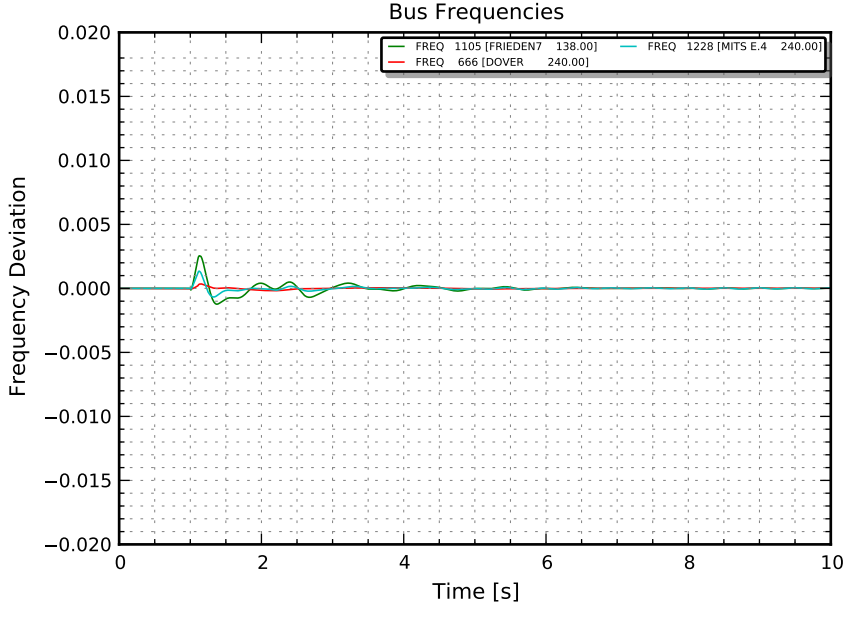
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 018 (B. 1)





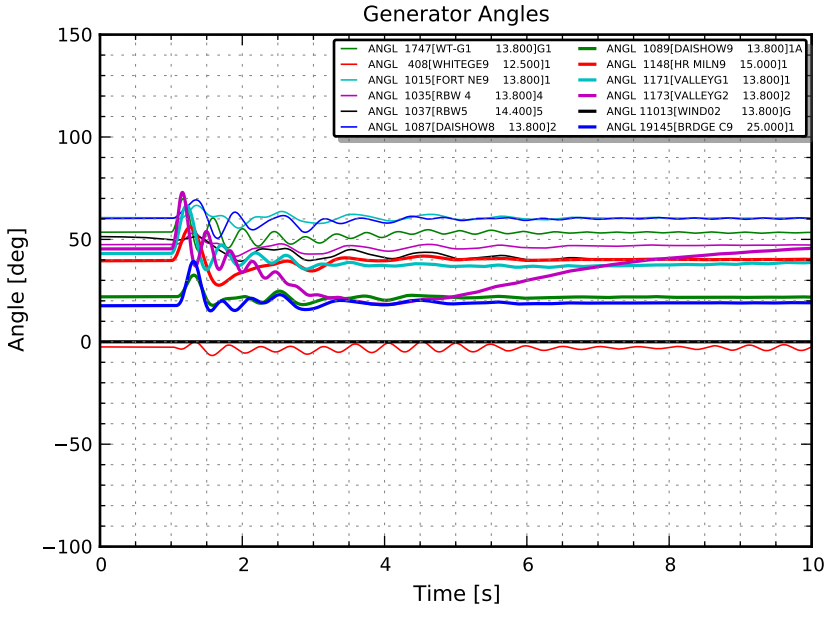


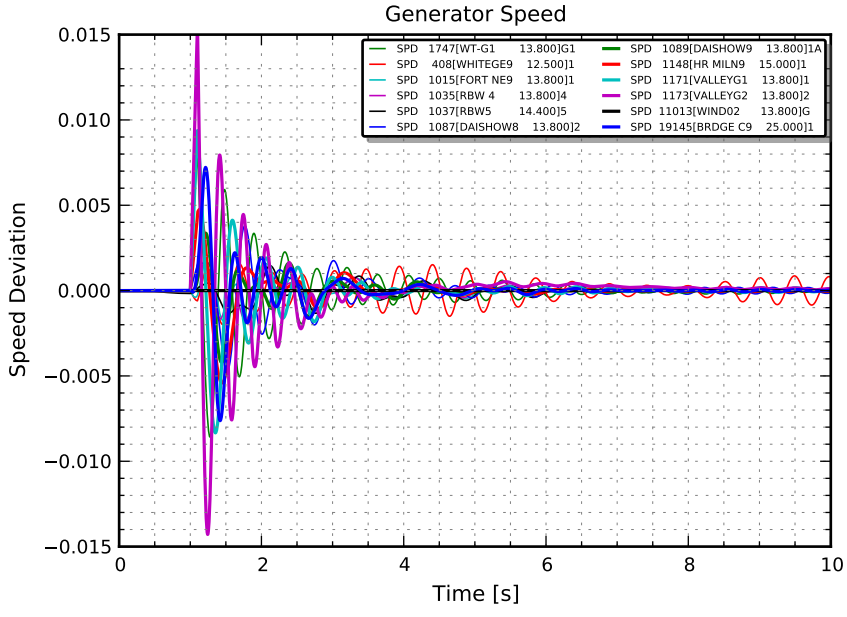


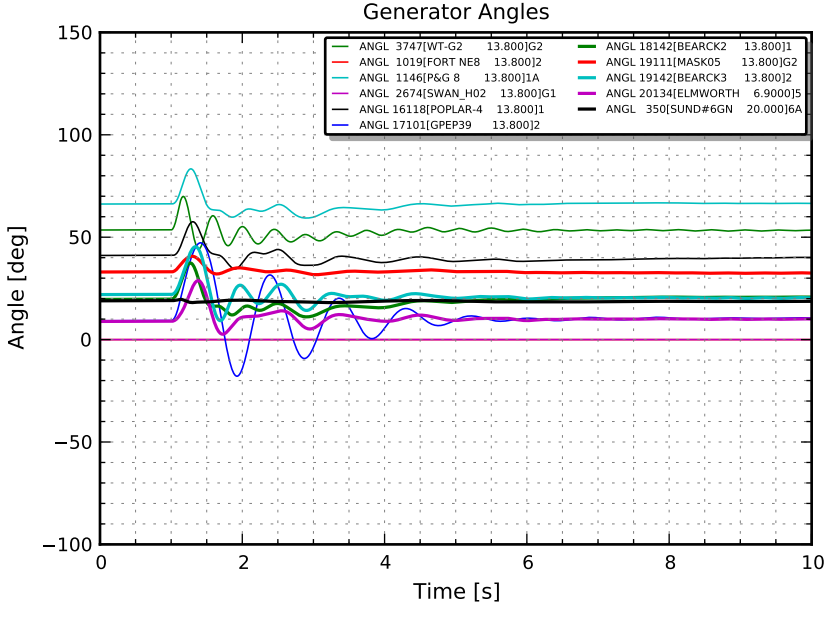
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_B.

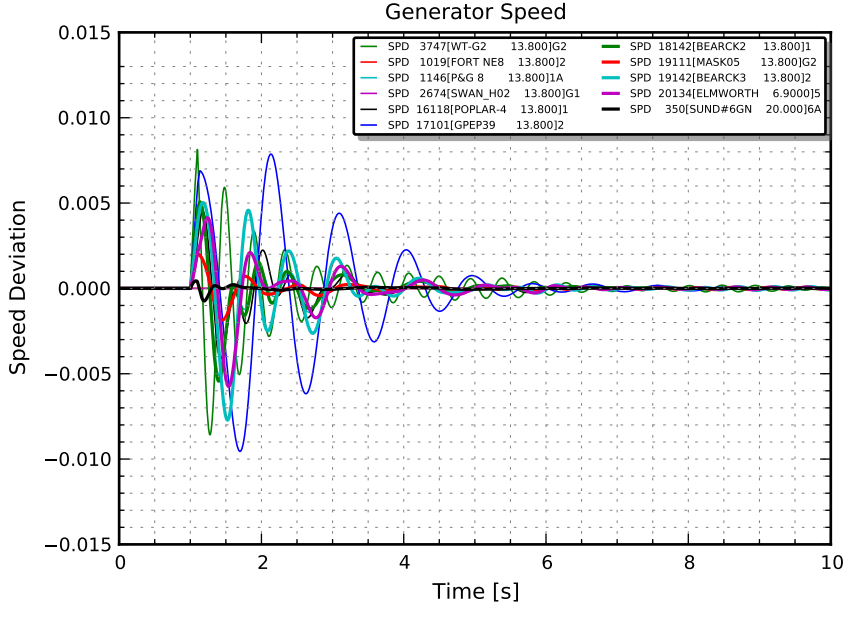
Study Area Generators

Appendix E2A
Figure: 018 (B. 2)





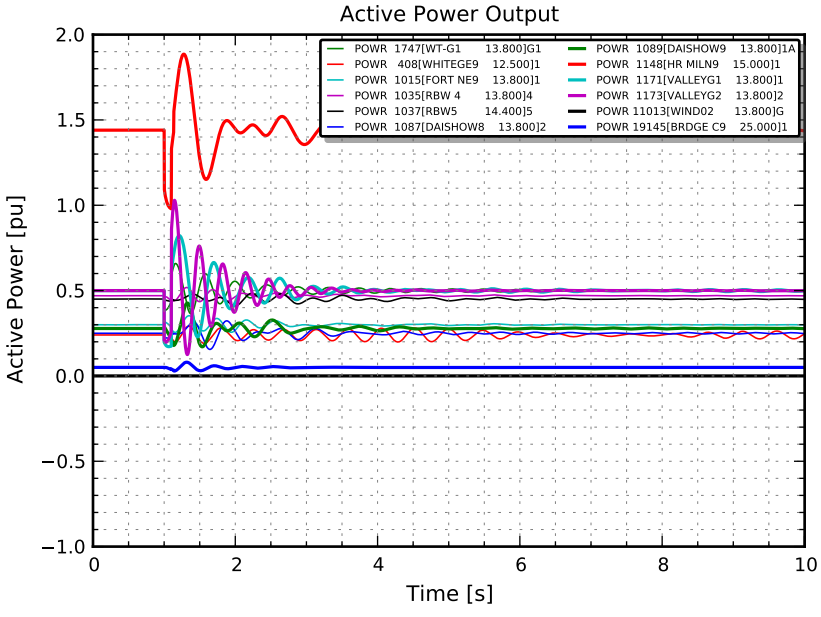


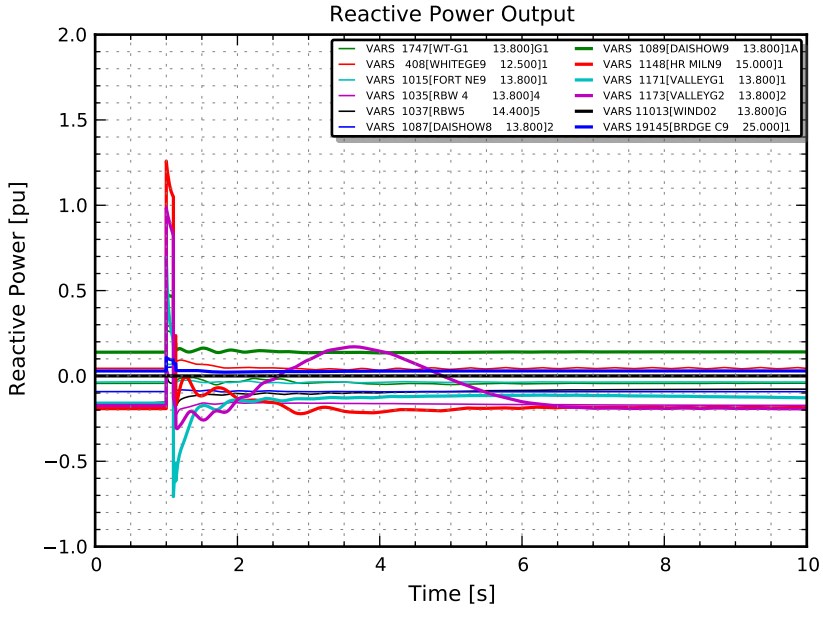


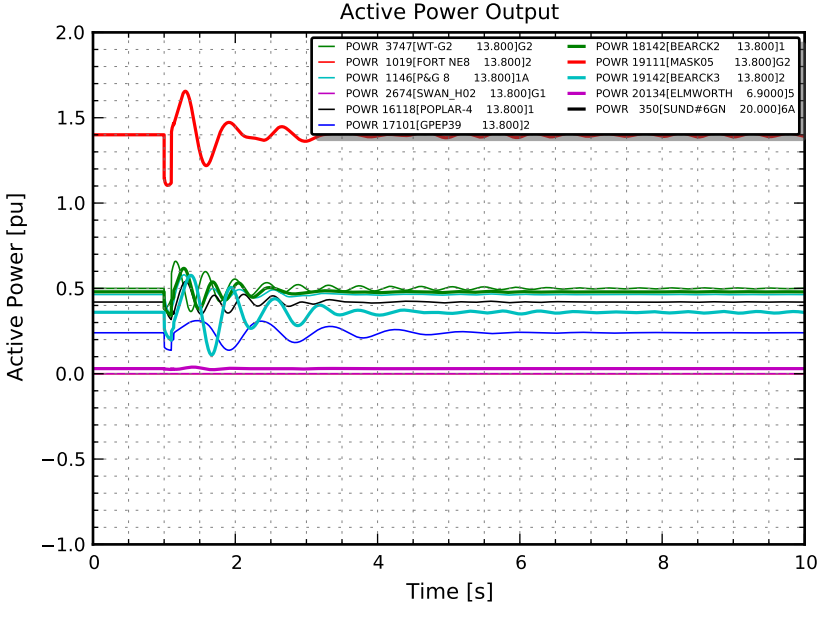
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_B.

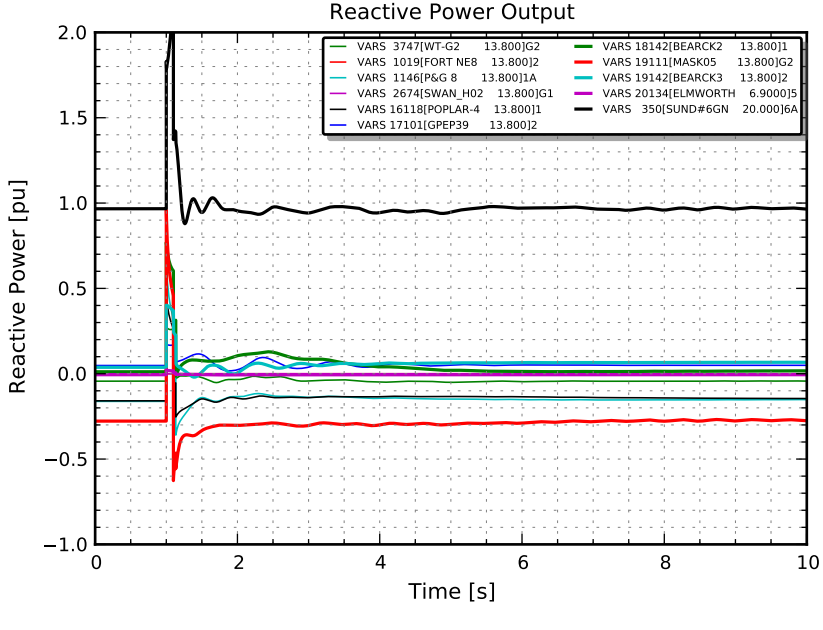
Study Area Generators

Appendix E2A
Figure: 018 (B. 3)





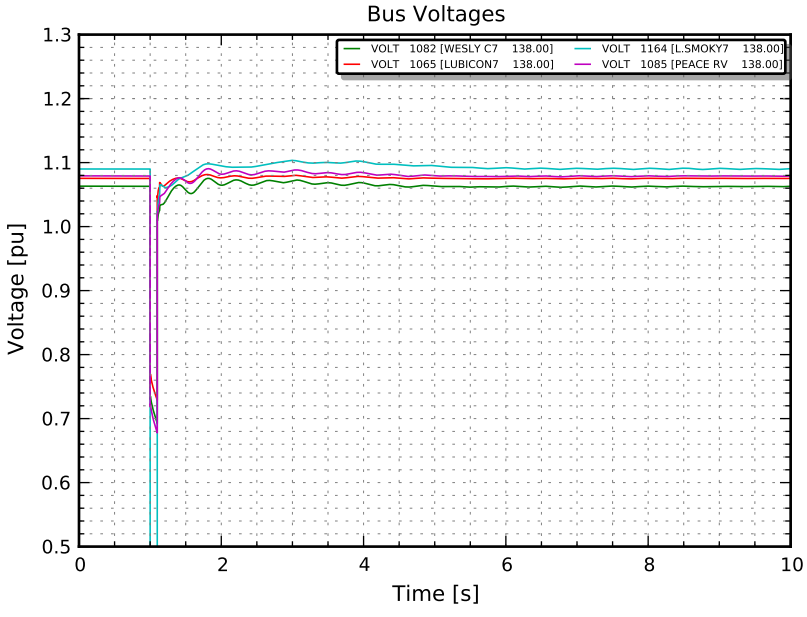


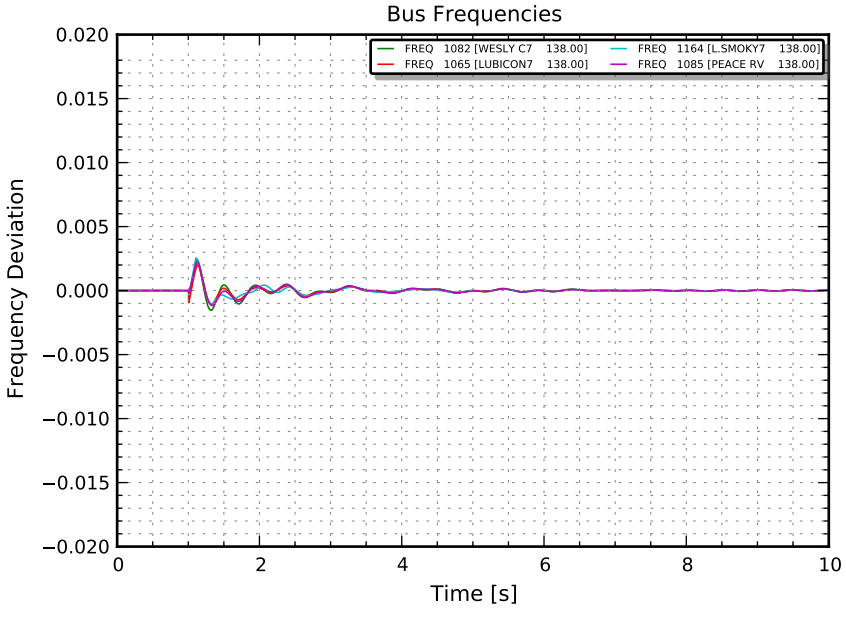


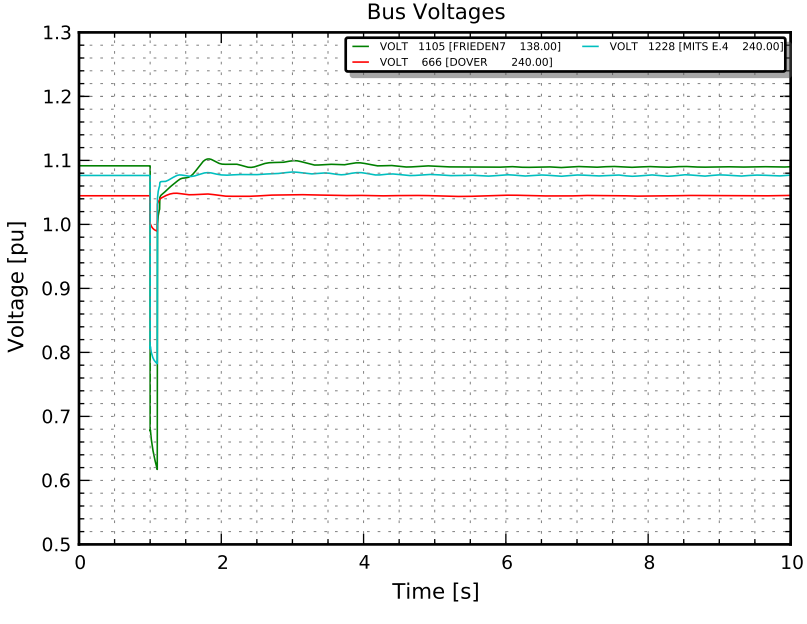
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 019 7L40 LITTLESMOKY to SIMONETTE_A.

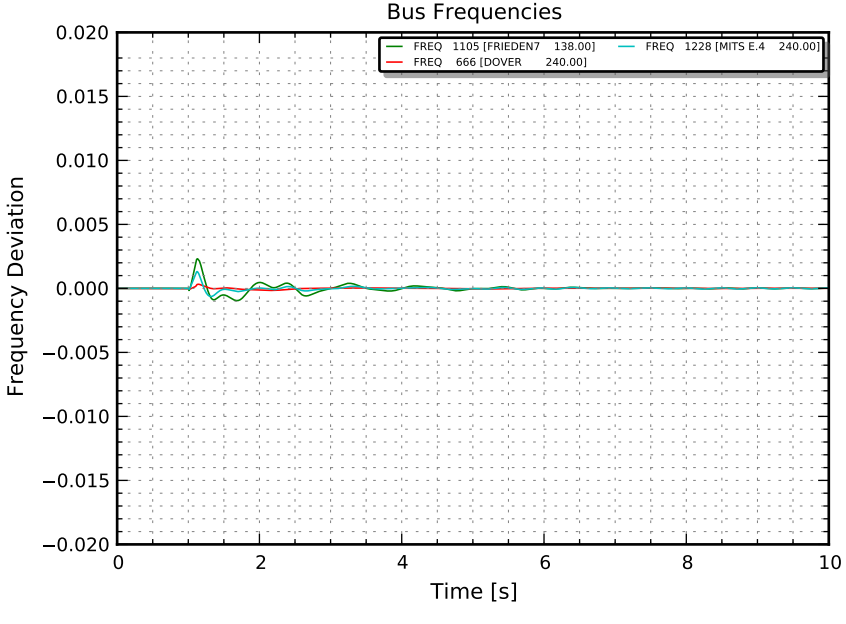
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 019 (A. 1)





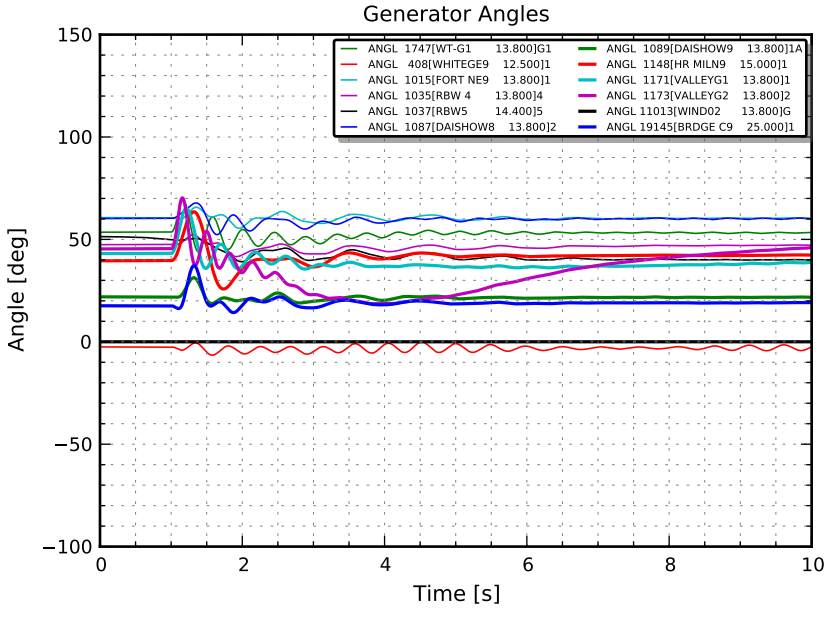


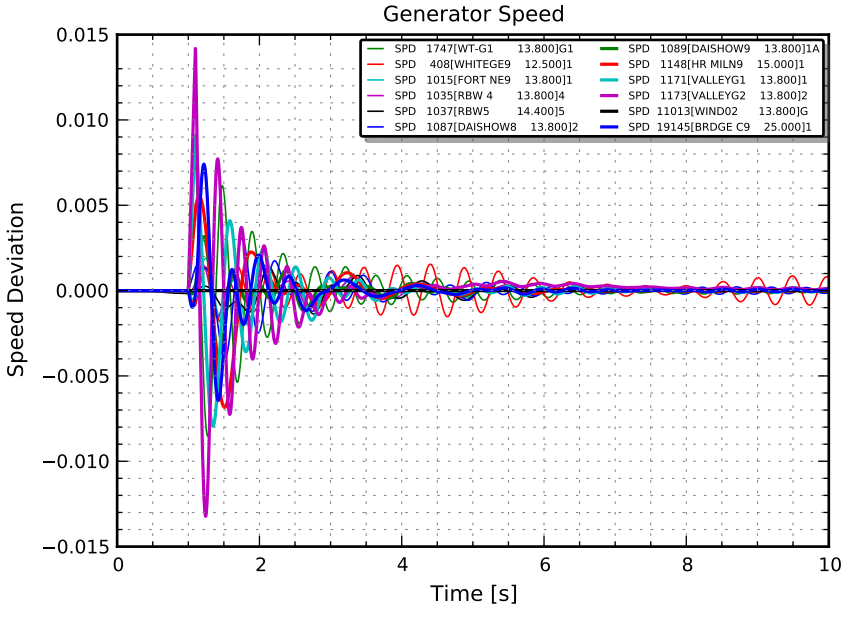


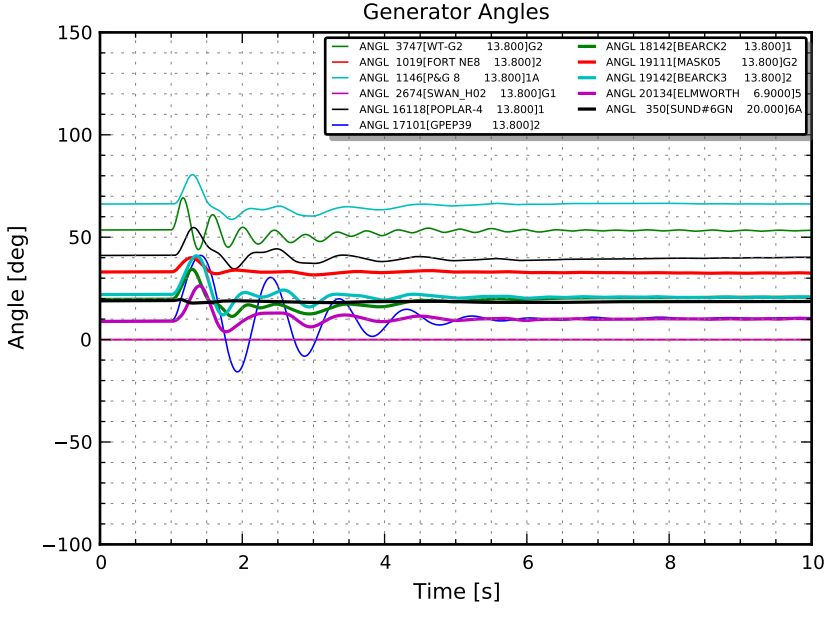
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 019 7L40 LITTLESMOKY to SIMONETTE_A.

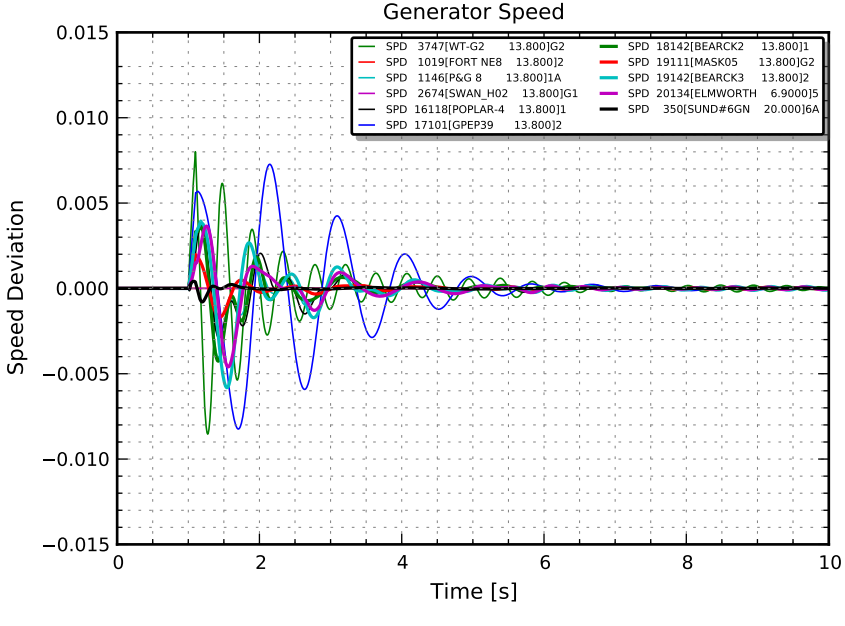
Study Area Generators

Appendix E2A
Figure: 019 (A. 2)





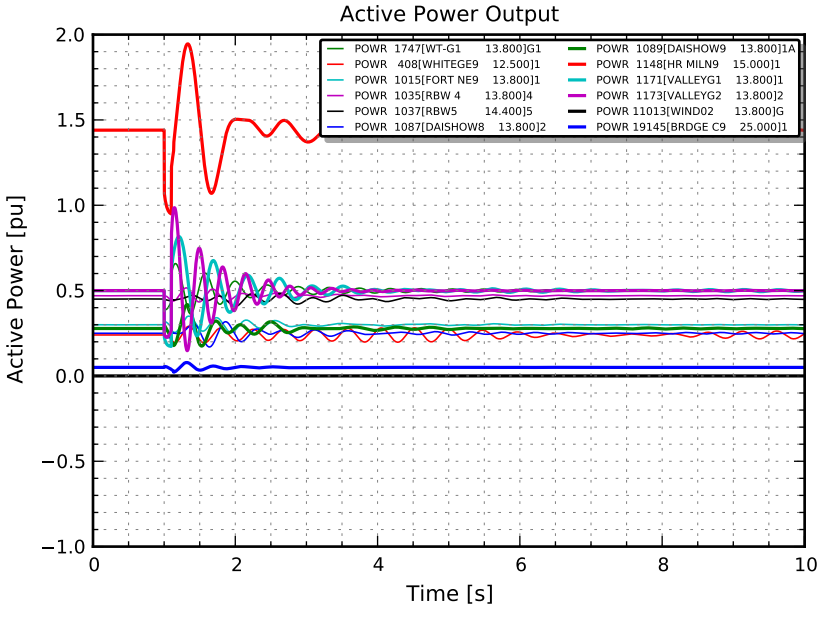


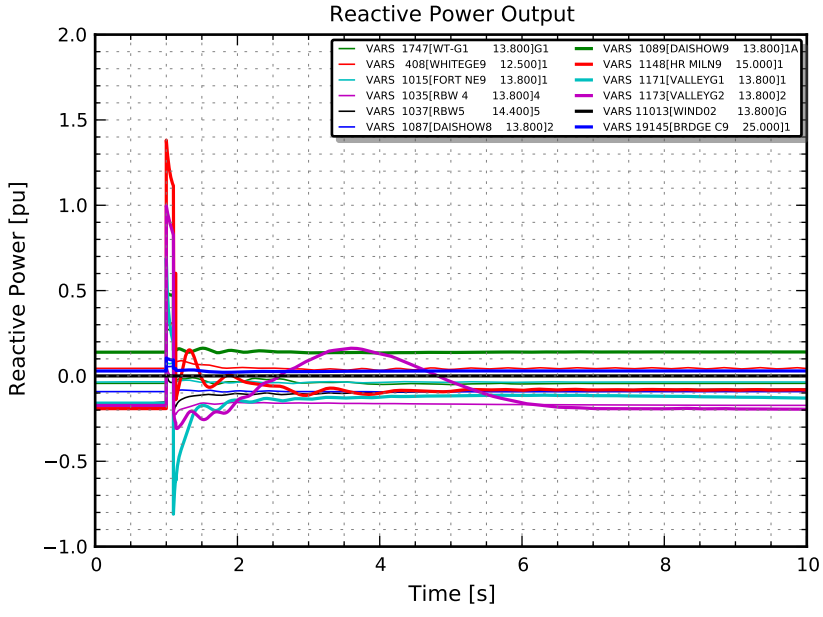


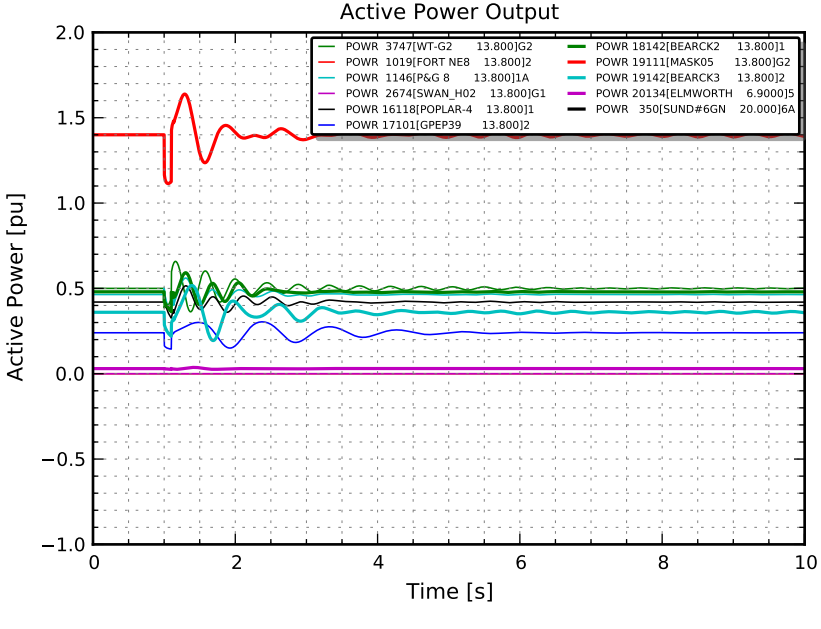
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 019 7L40 LITTLESMOKY to SIMONETTE_A.

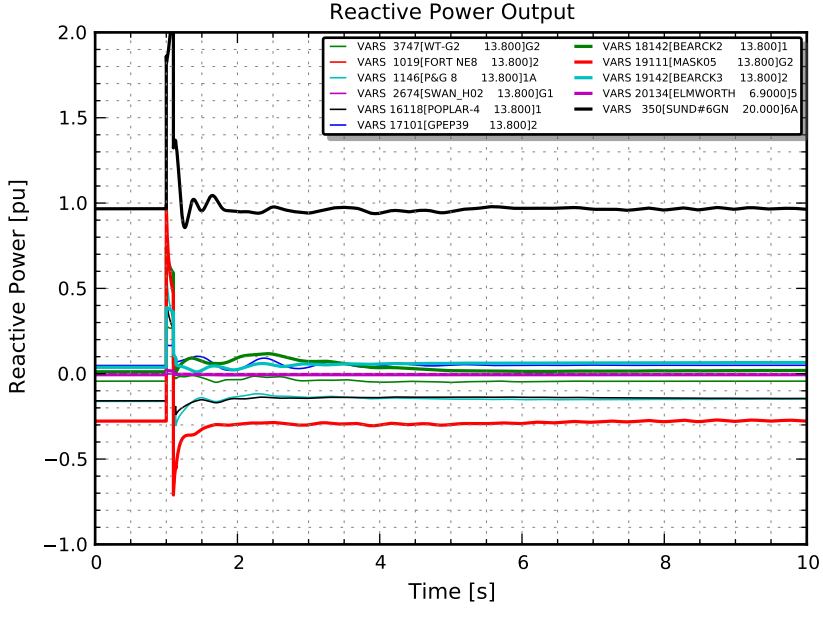
Study Area Generators

Appendix E2A
Figure: 019 (A. 3)





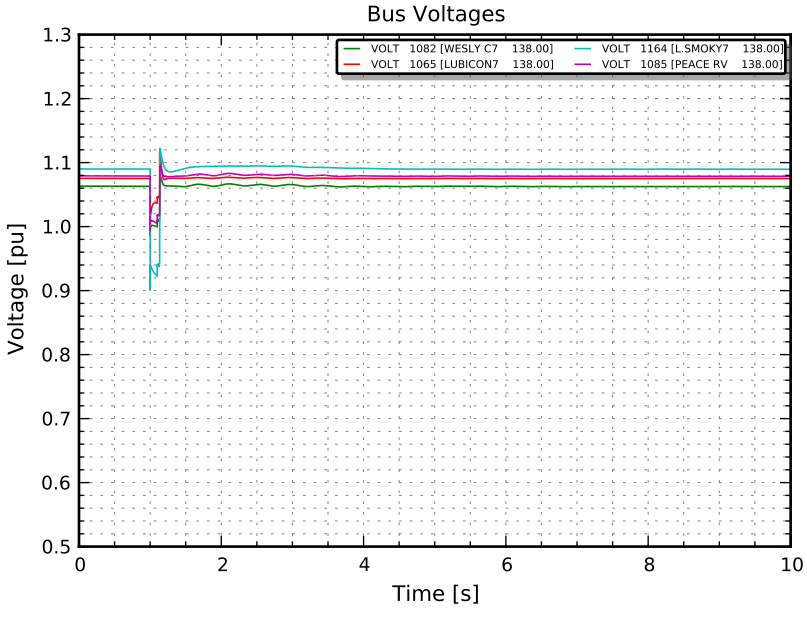


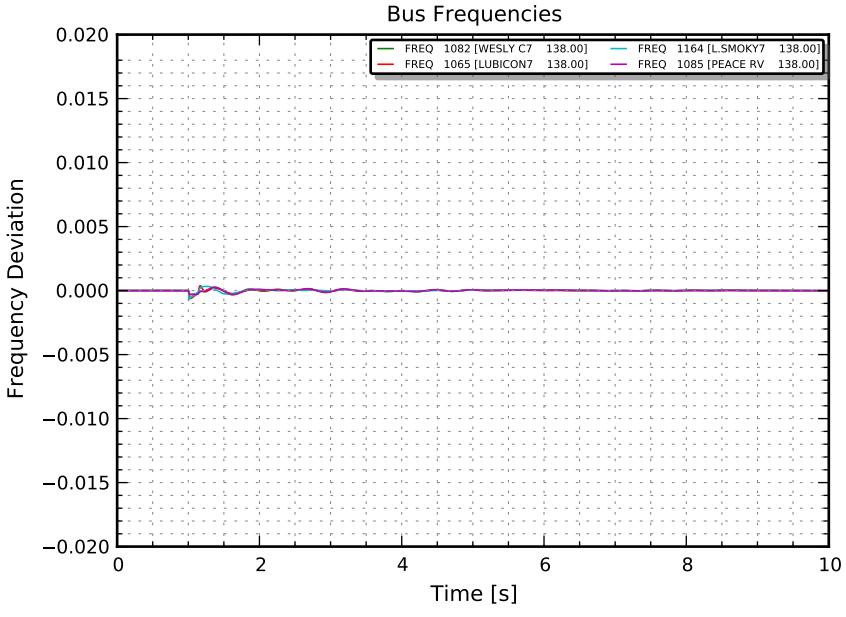


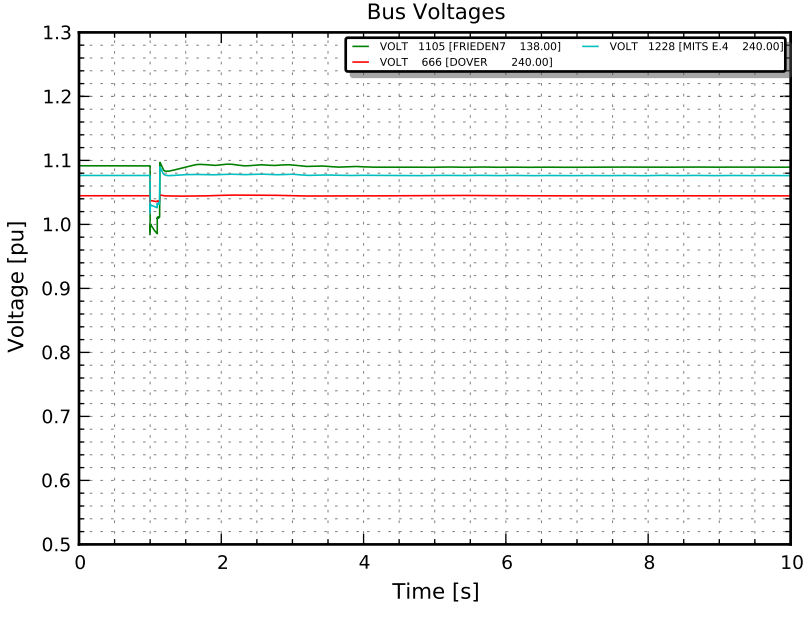
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 019 7L40 LITTLESMOKY to SIMONETTE_B.

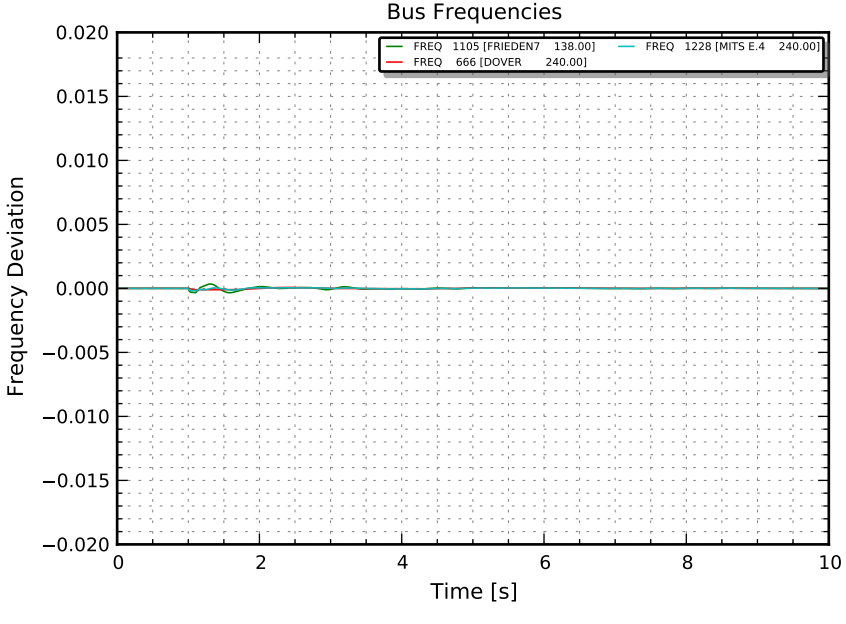
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 019 (B. 1)





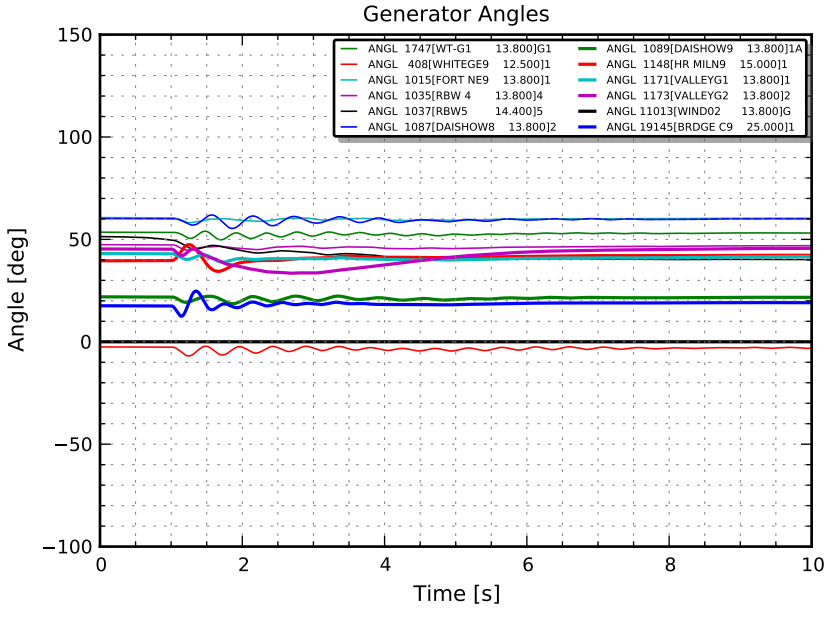


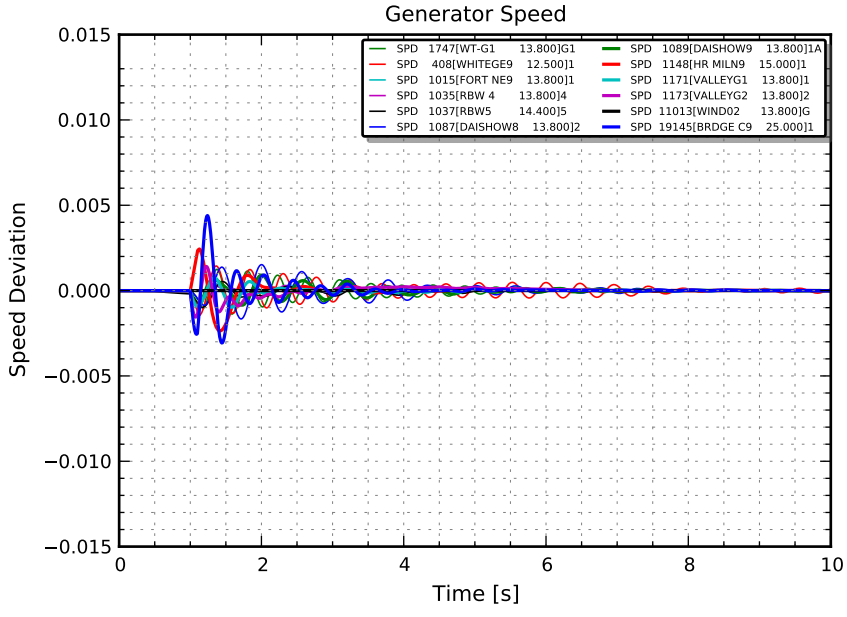


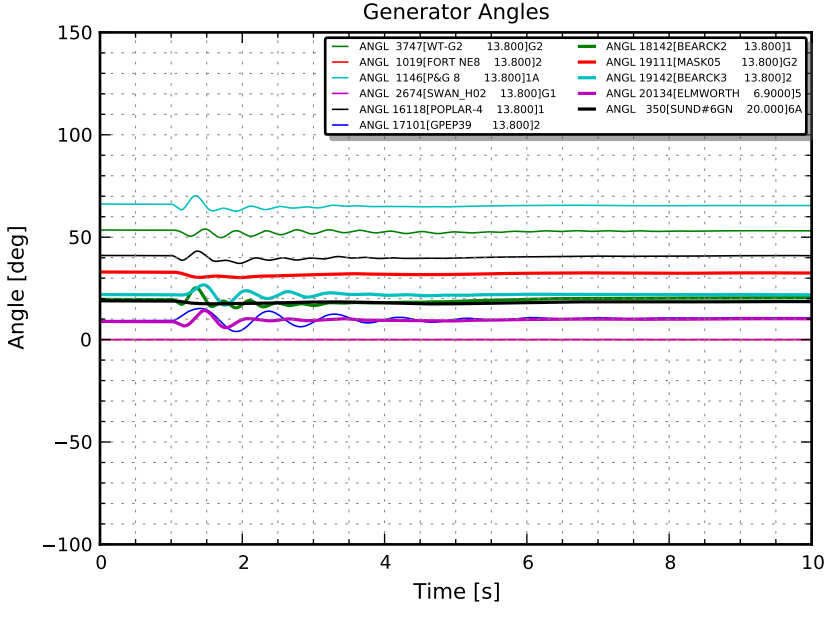
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 019 7L40 LITTLESMOKY to SIMONETTE_B.

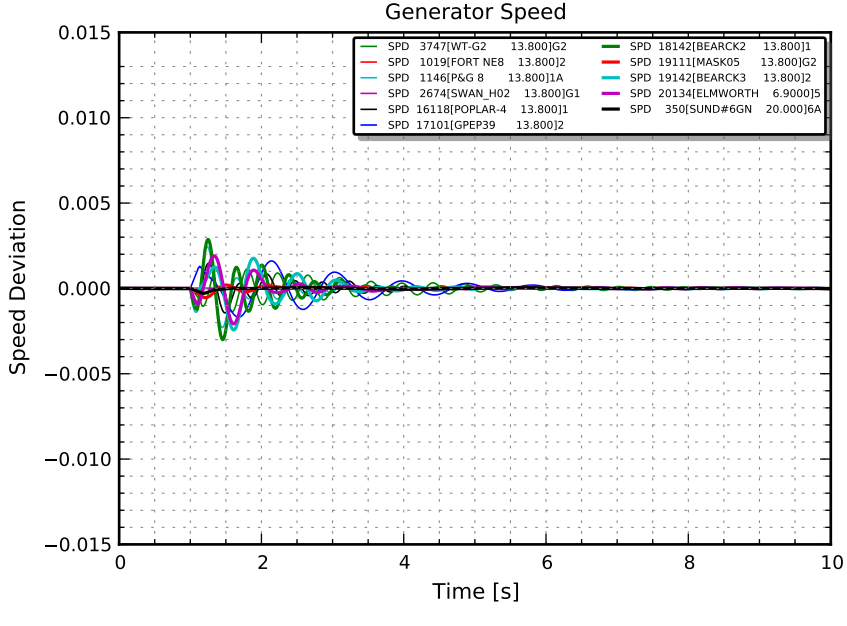
Study Area Generators

Appendix E2A
Figure: 019 (B. 2)





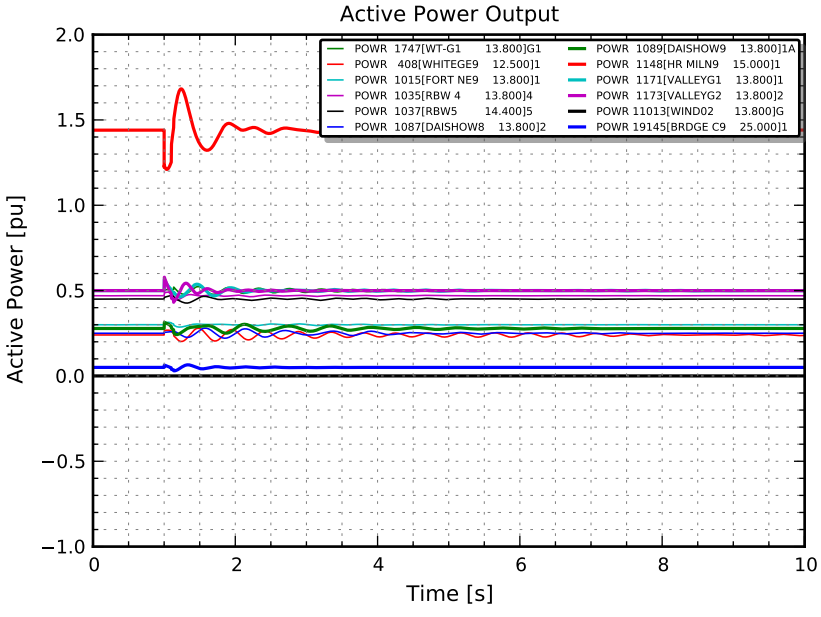


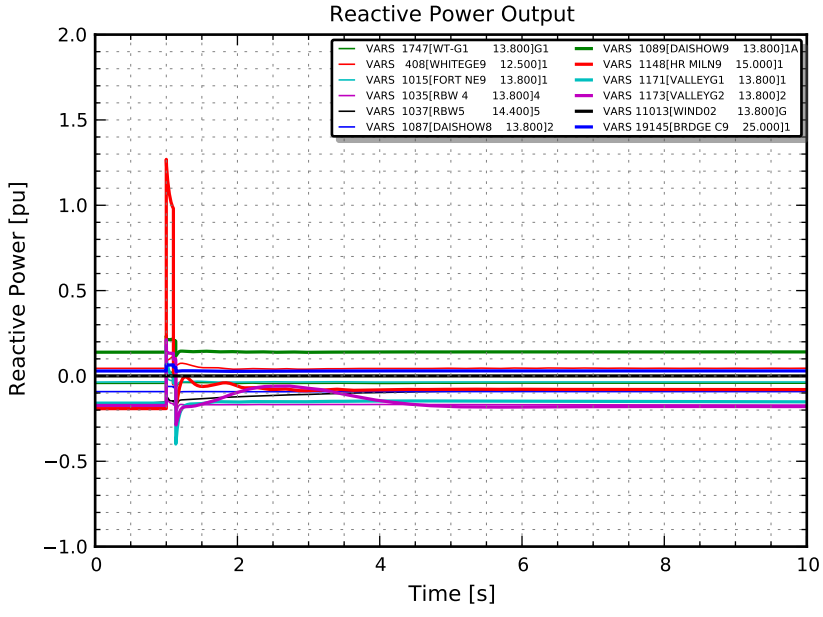


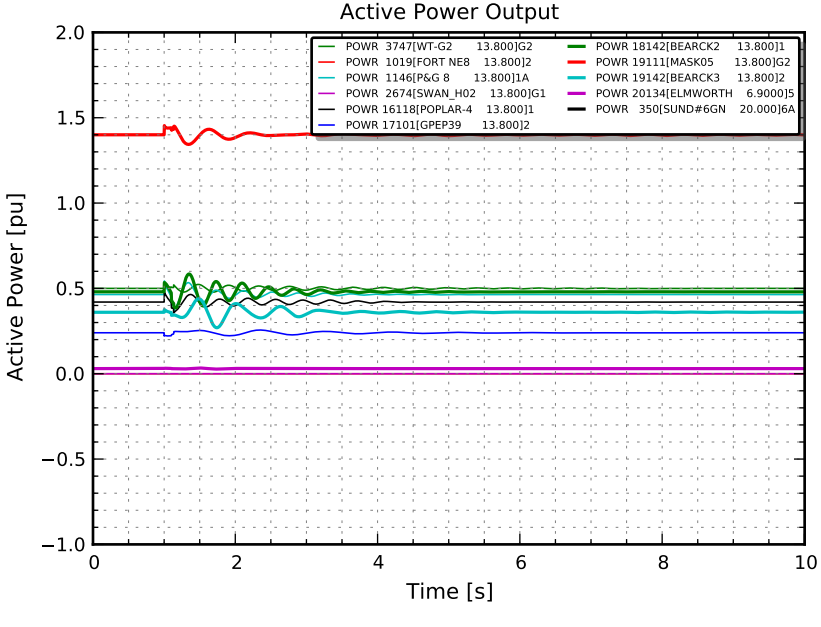
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 019 7L40 LITTLESMOKY to SIMONETTE_B.

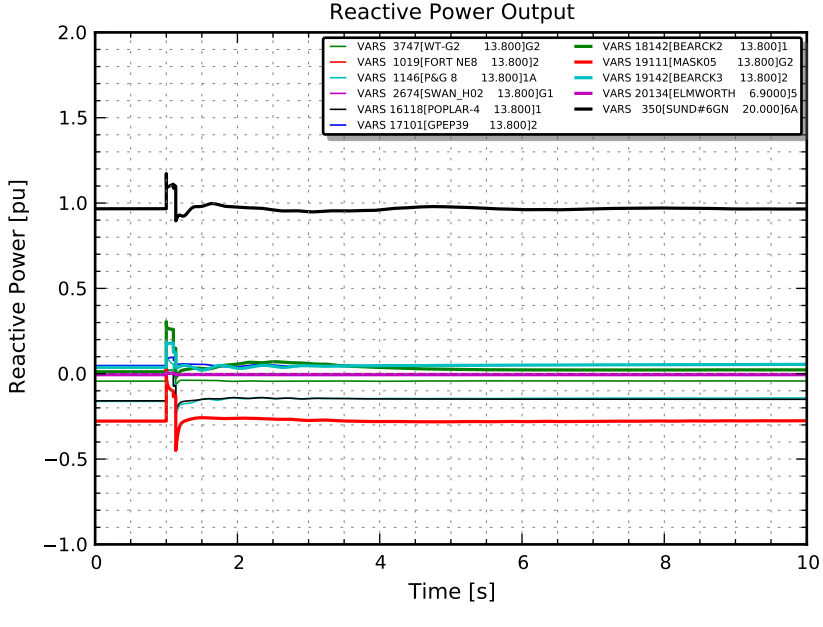
Study Area Generators

Appendix E2A
Figure: 019 (B. 3)





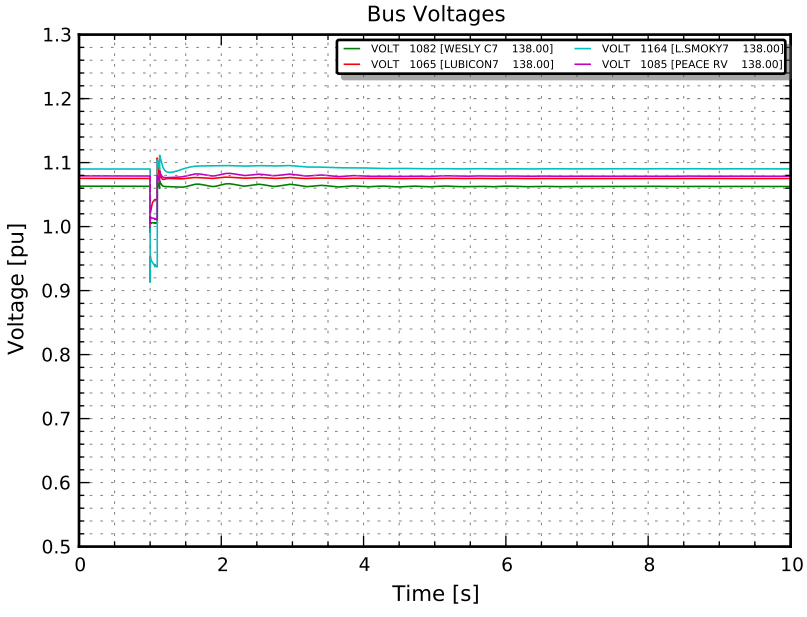


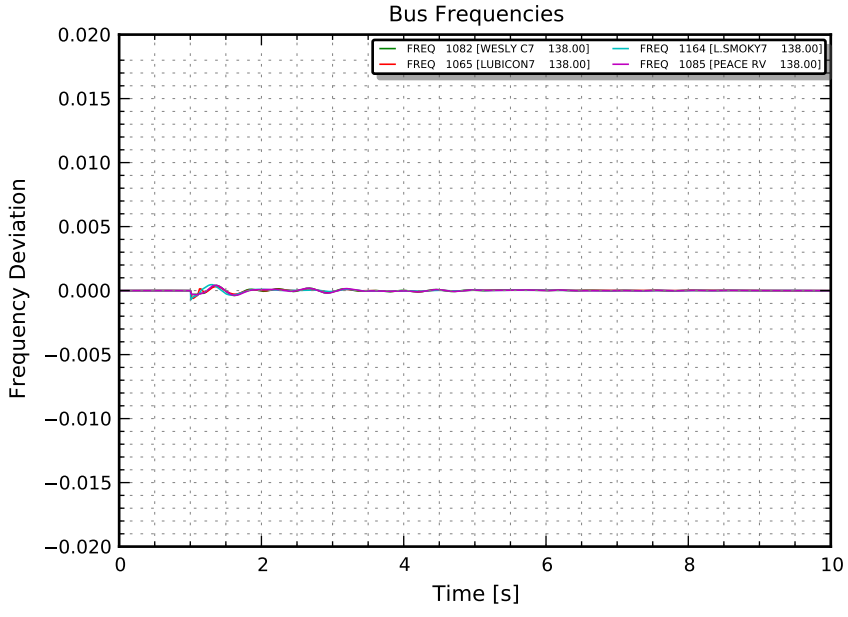


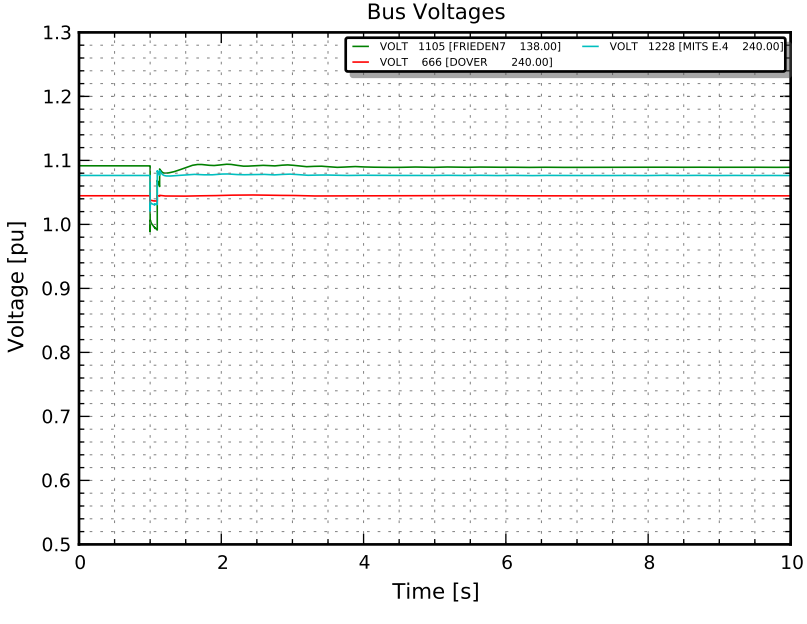
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 020 7L80 SIMONETTE to HR MILNER_A.

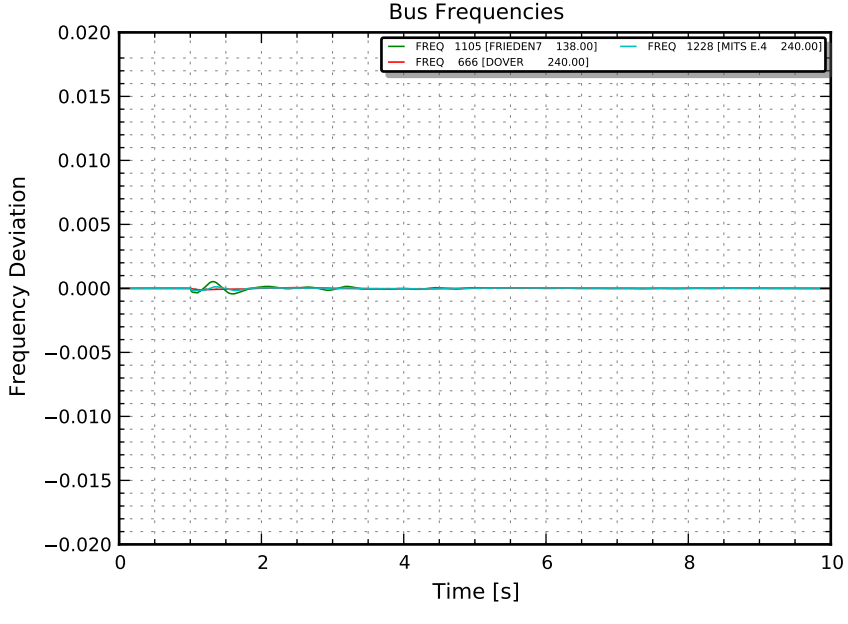
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 020 (A. 1)





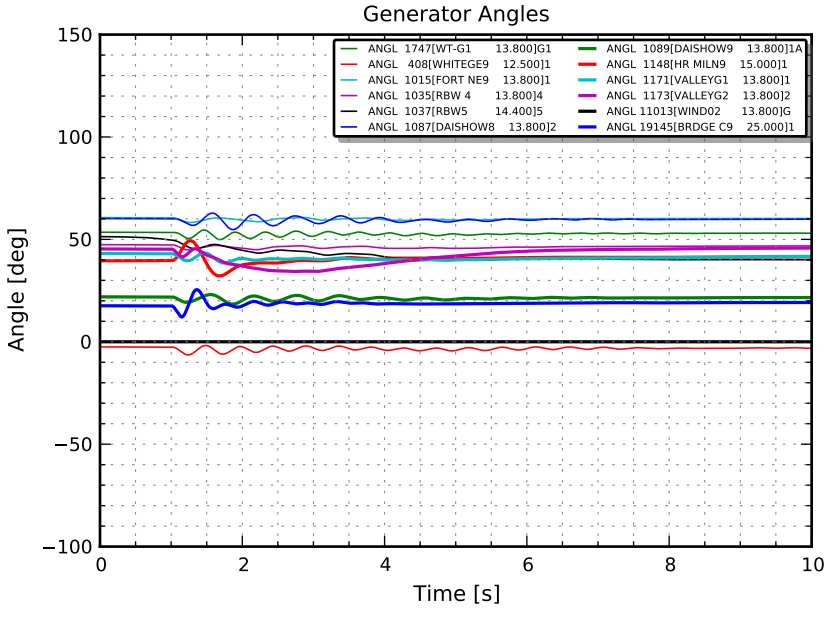


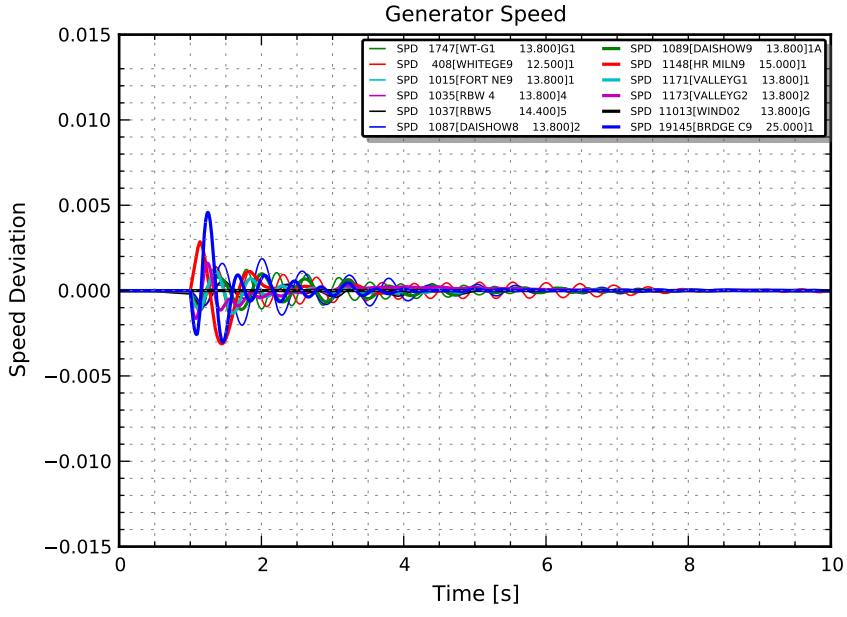


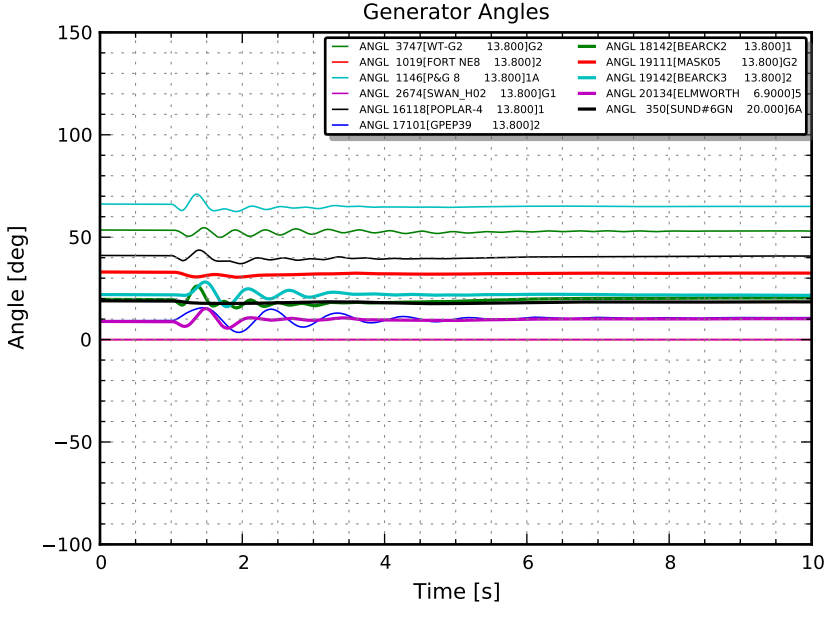
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 020 7L80 SIMONETTE to HR MILNER_A.

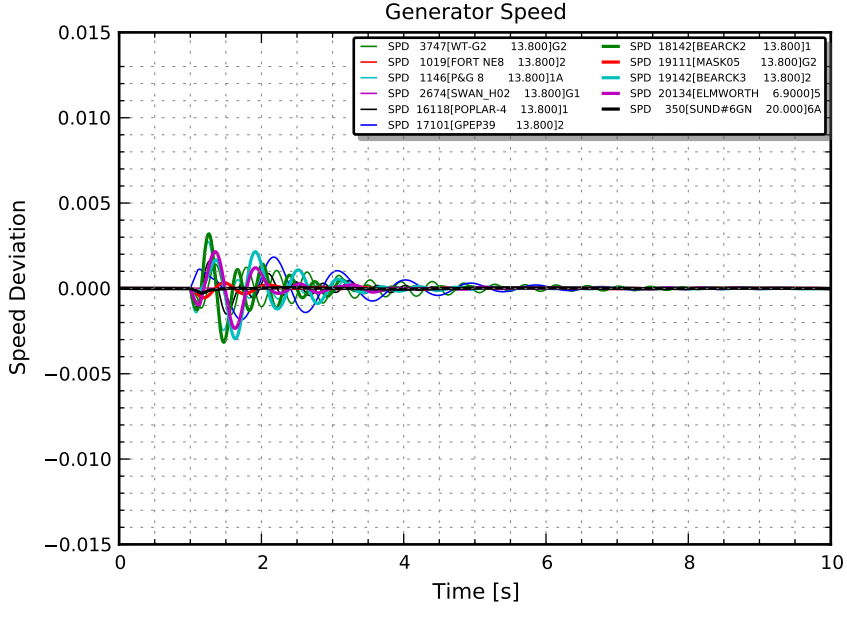
Study Area Generators

Appendix E2A
Figure: 020 (A. 2)





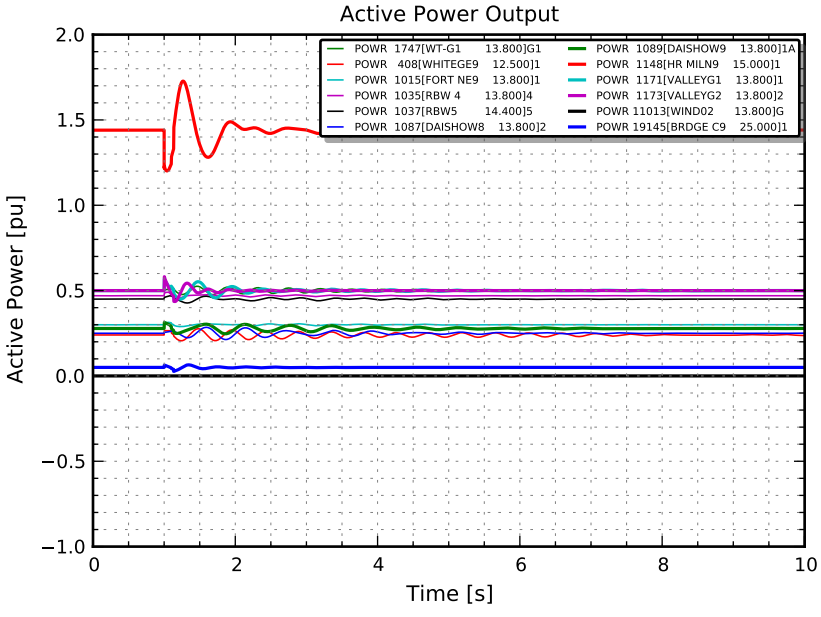


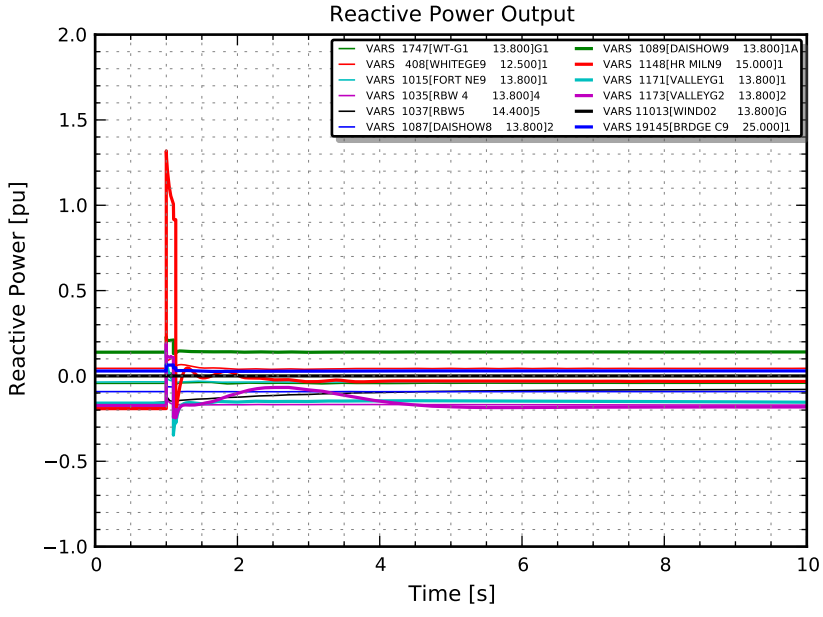


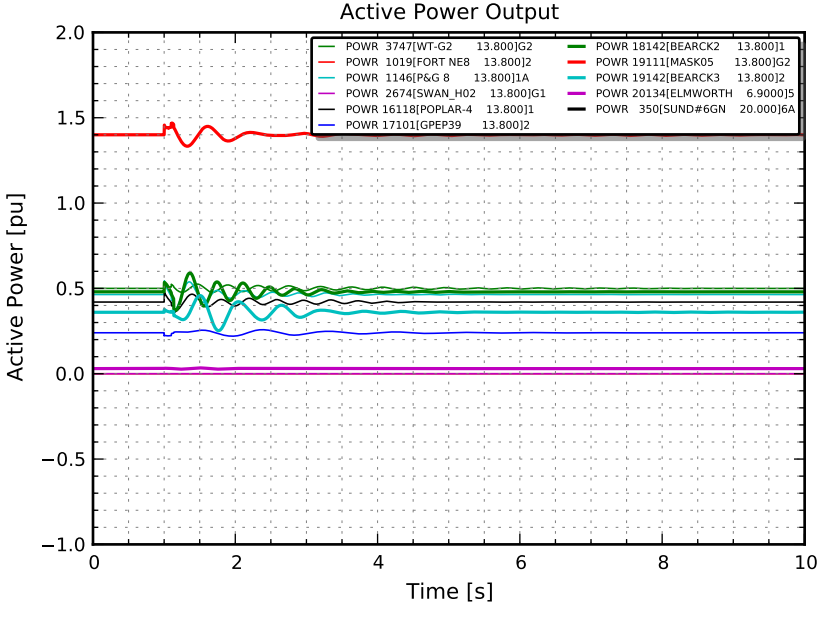
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 020 7L80 SIMONETTE to HR MILNER_A.

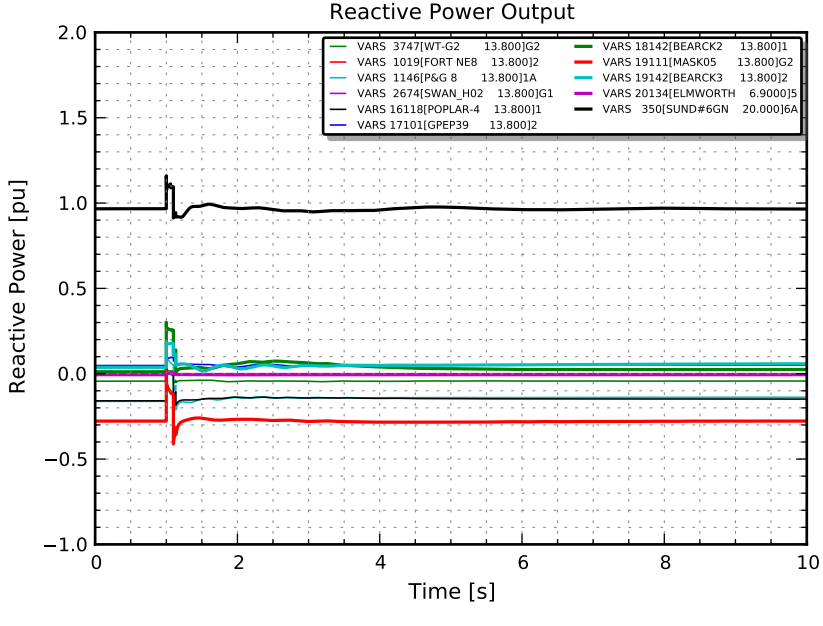
Study Area Generators

Appendix E2A
Figure: 020 (A. 3)





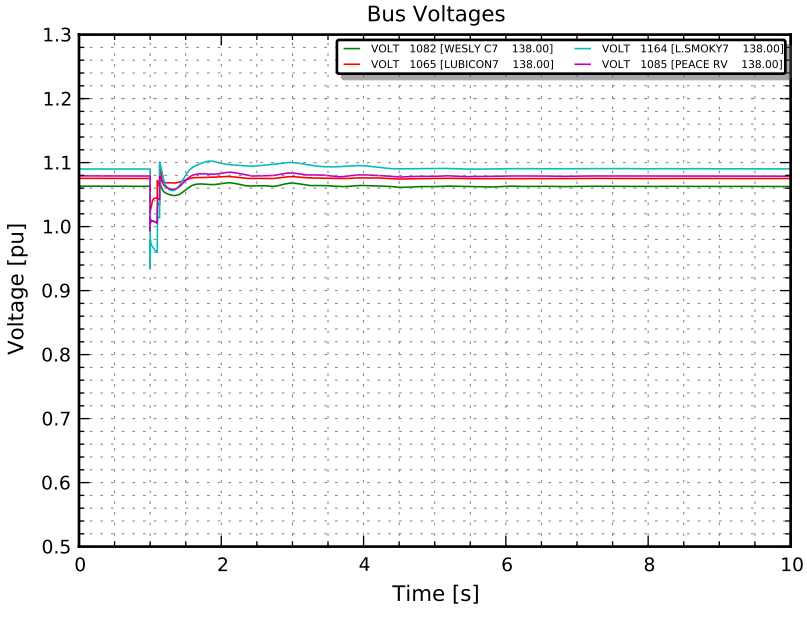


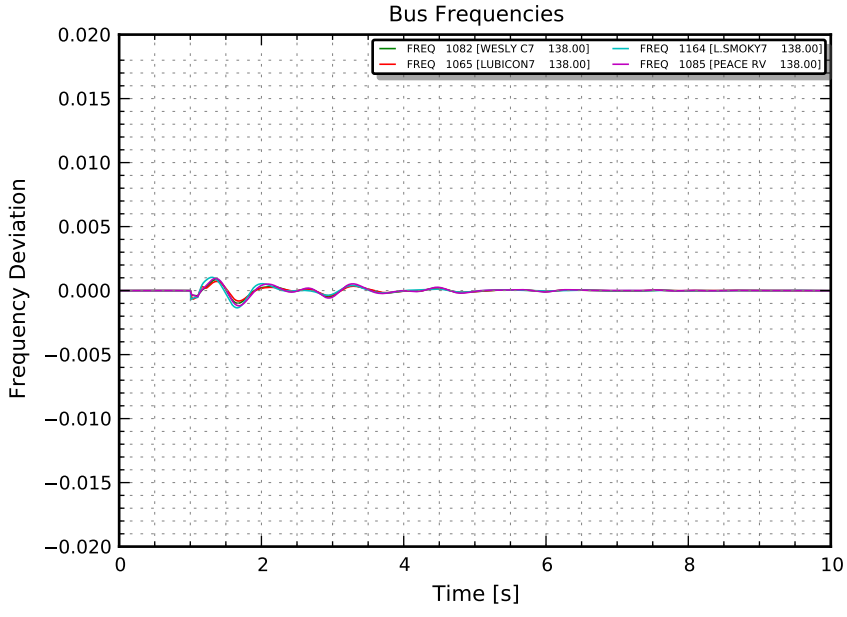


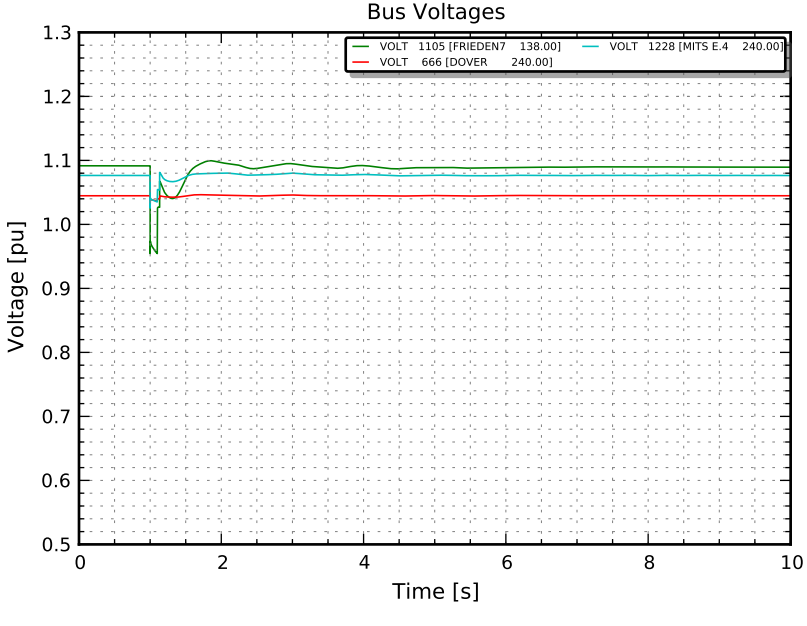
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 020 7L80 SIMONETTE to HR MILNER_B.

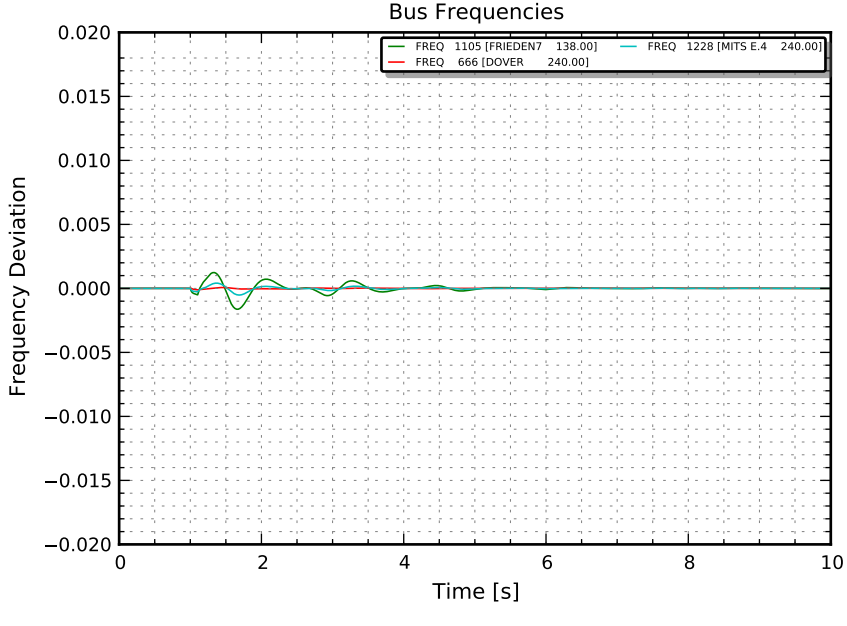
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 020 (B. 1)





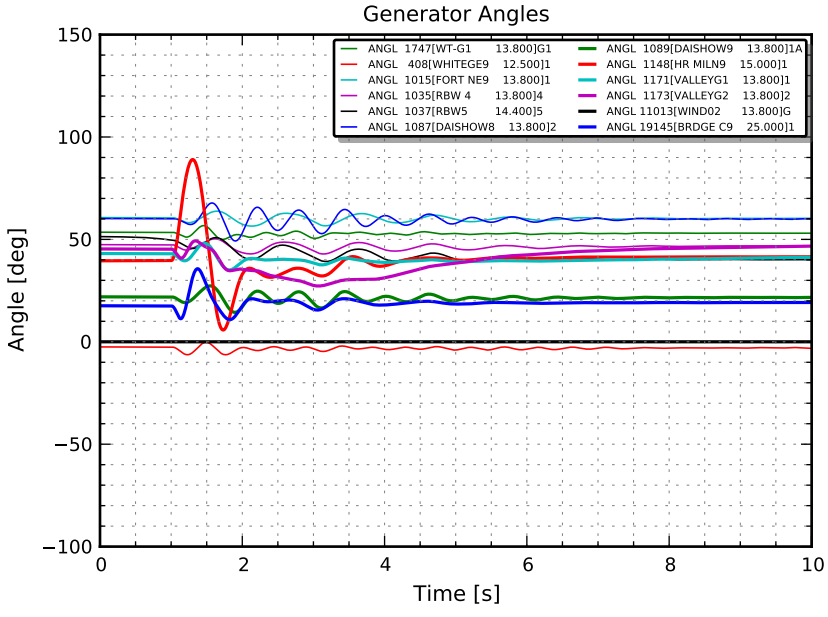


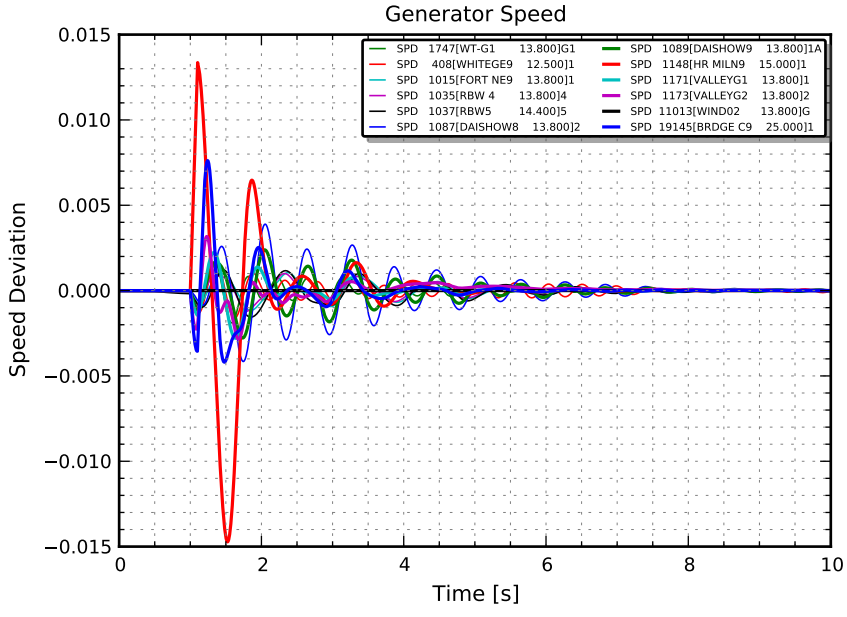


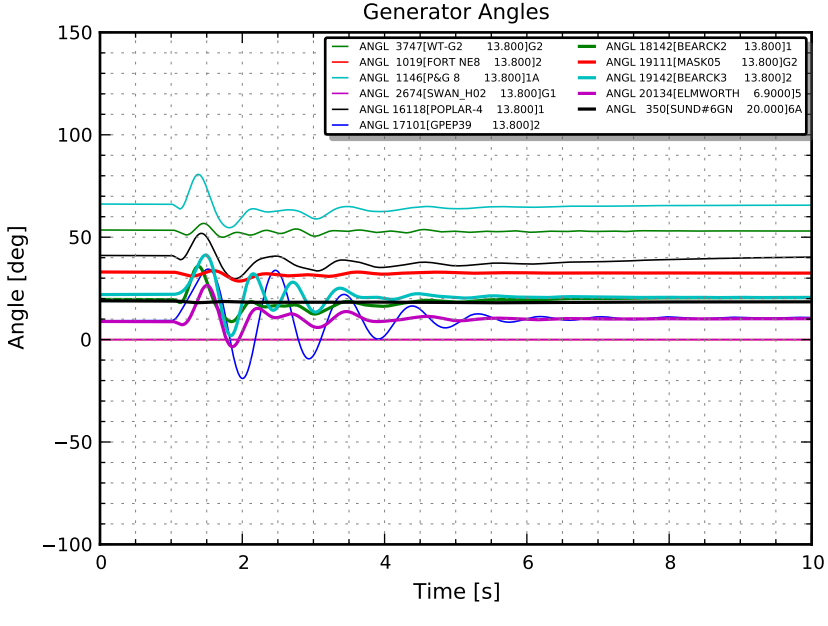
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 020 7L80 SIMONETTE to HR MILNER_B.

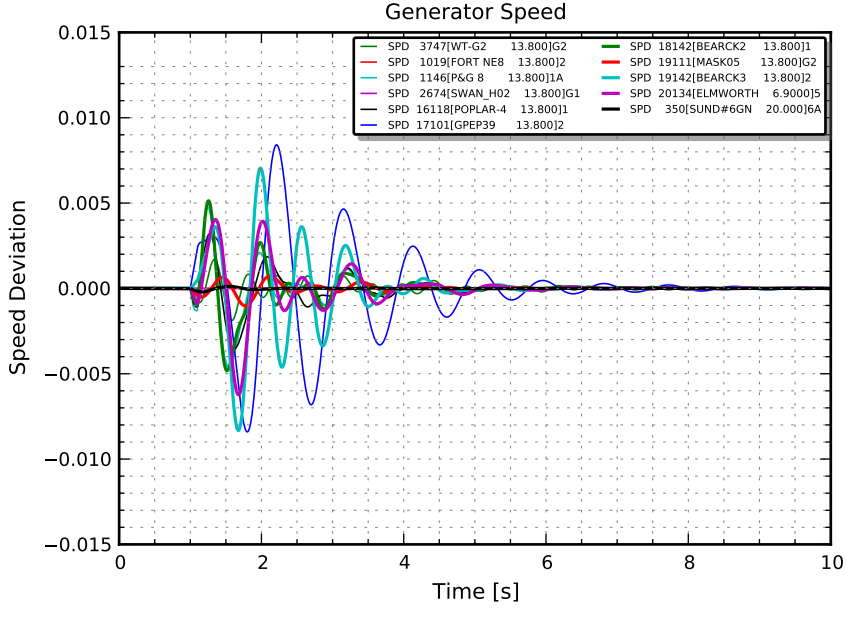
Study Area Generators

Appendix E2A
Figure: 020 (B. 2)





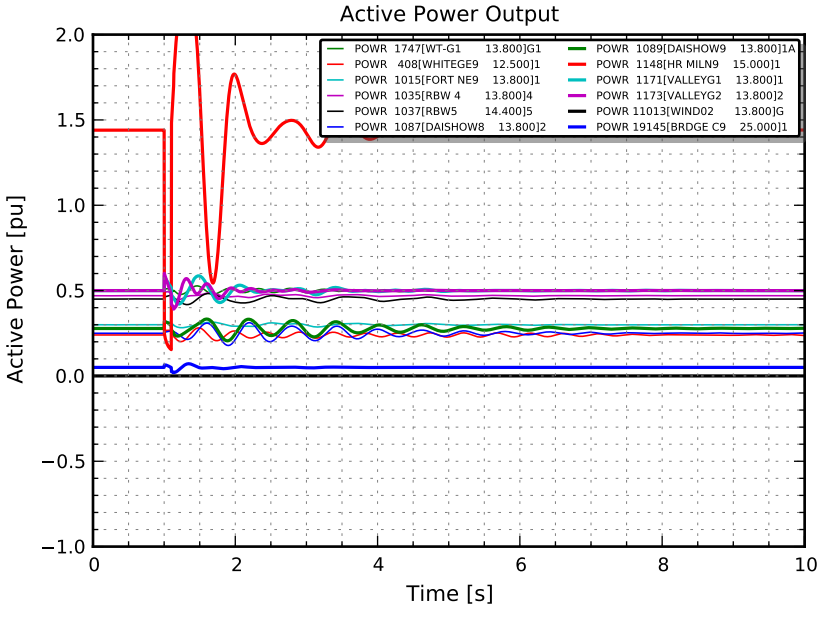


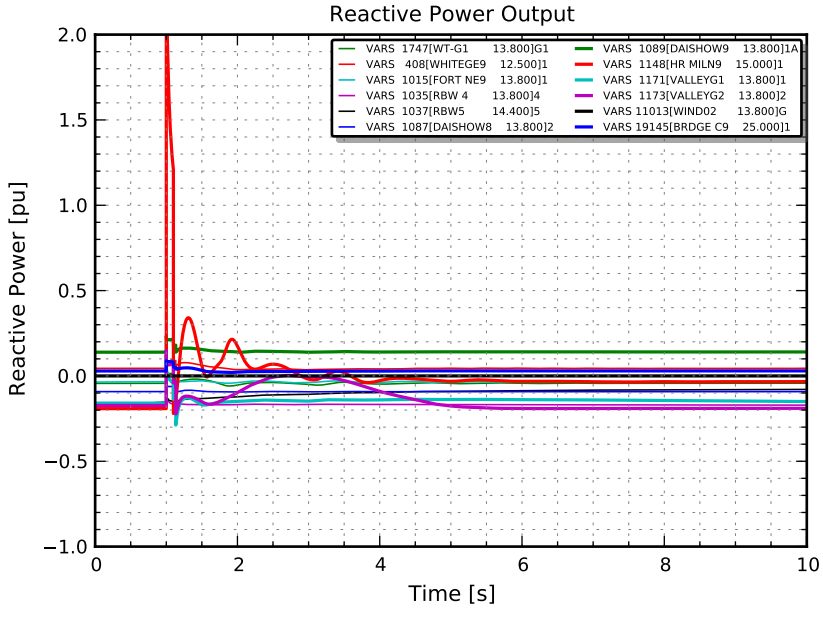


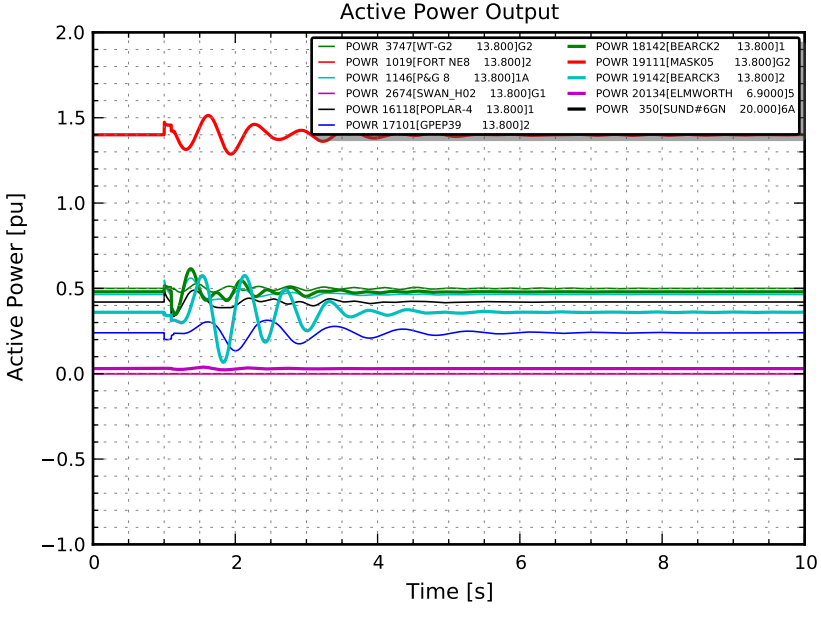
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 020 7L80 SIMONETTE to HR MILNER_B.

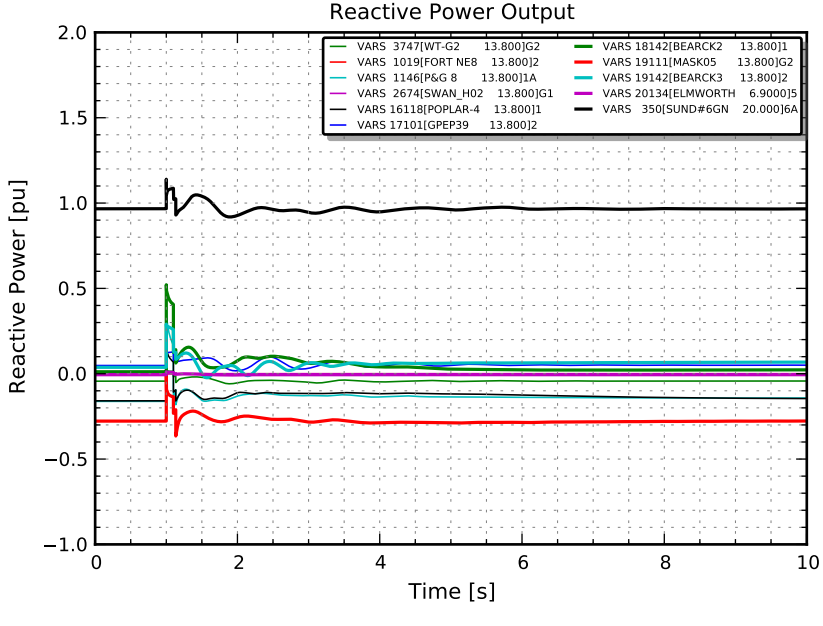
Study Area Generators

Appendix E2A
Figure: 020 (B. 3)





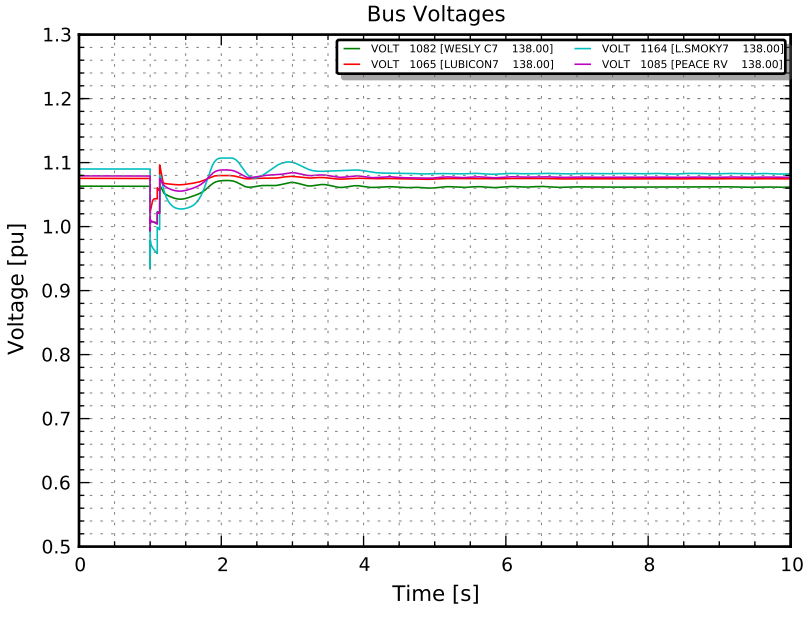


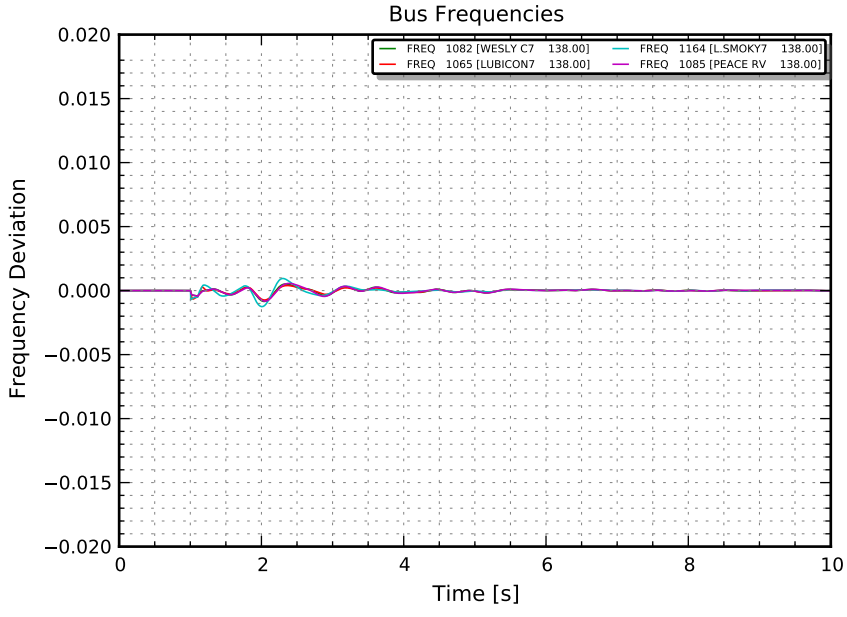


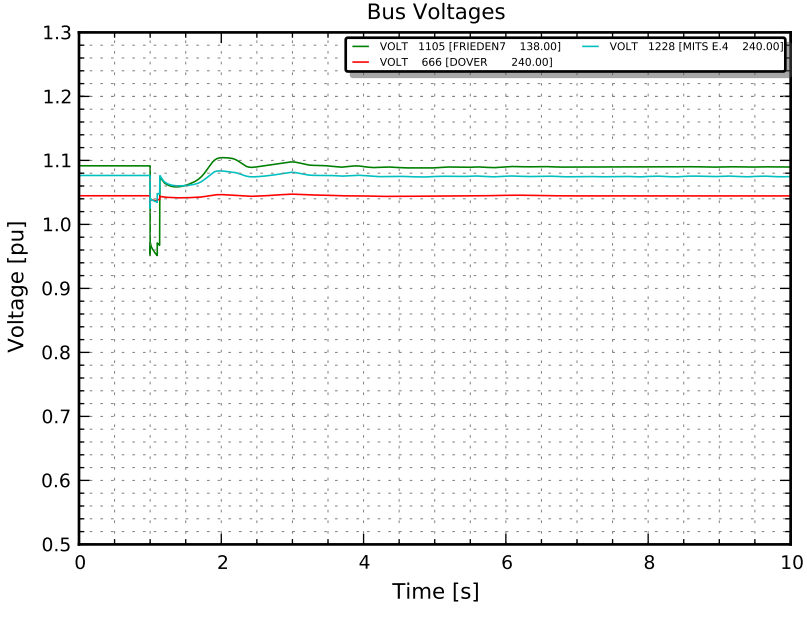
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_A.

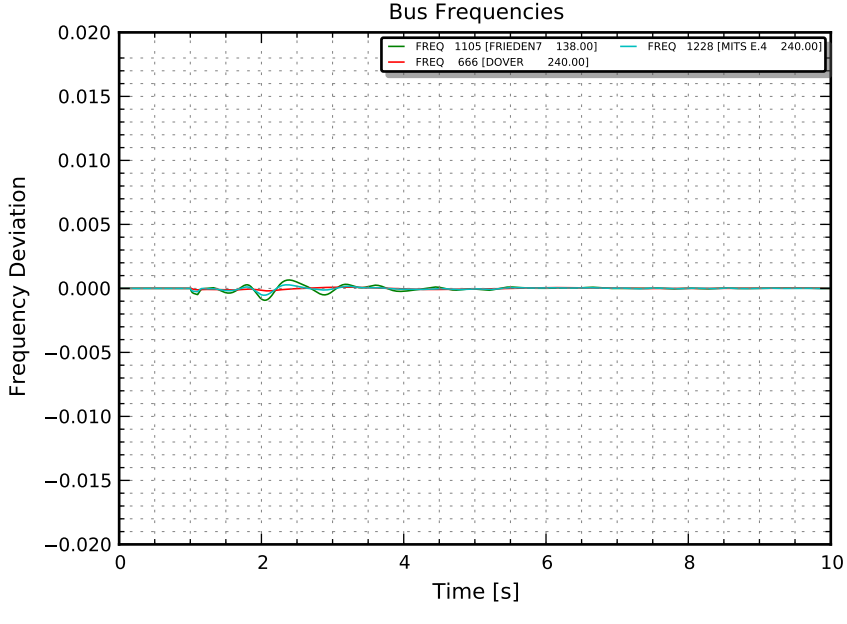
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 021 (A. 1)





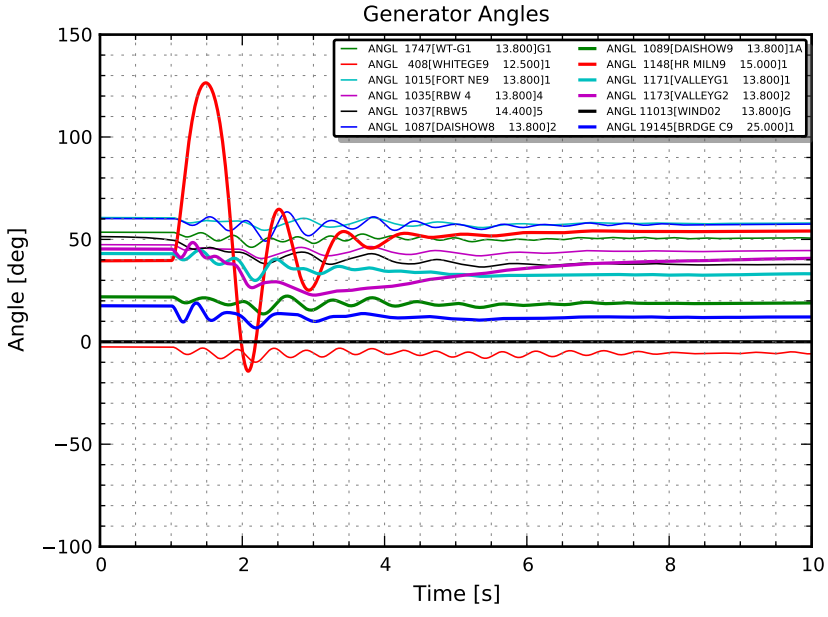


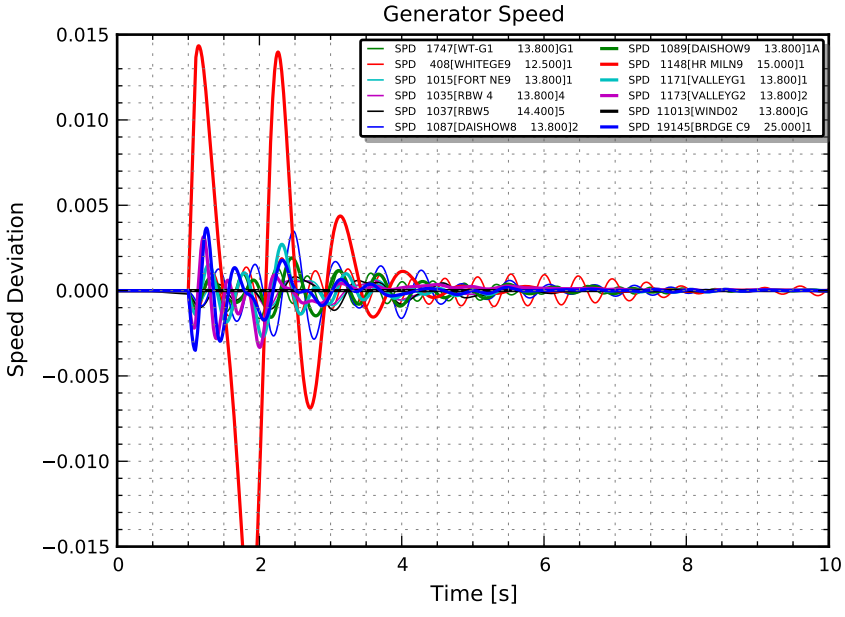


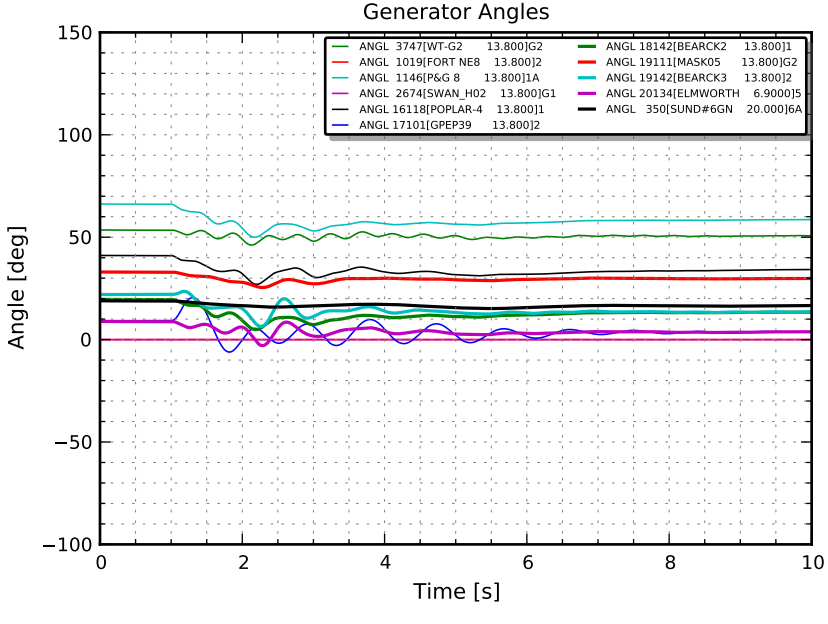
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_A.

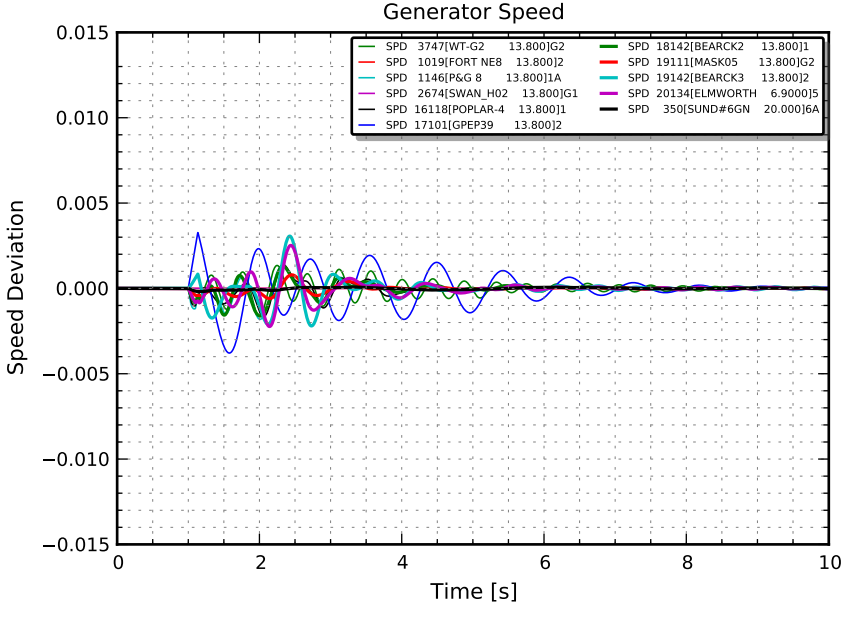
Study Area Generators

Appendix E2A
Figure: 021 (A. 2)





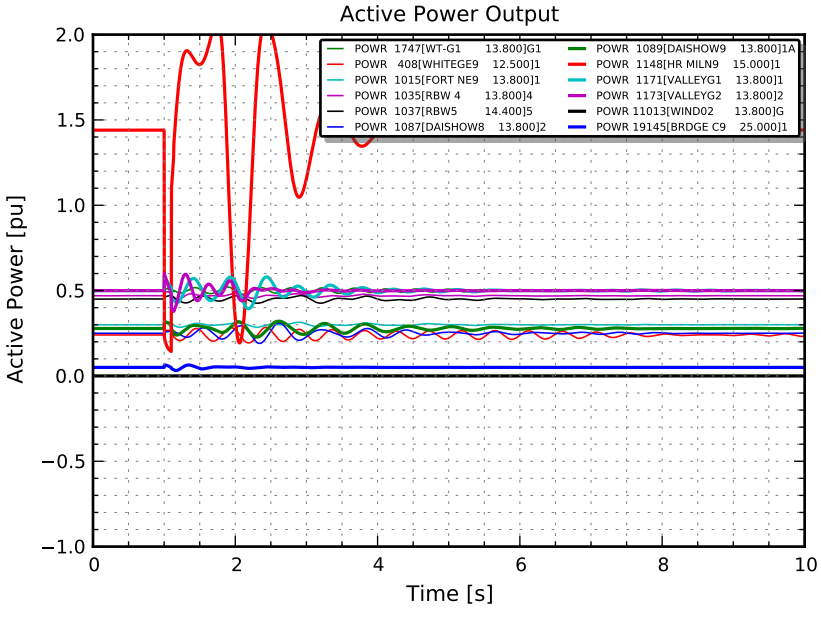


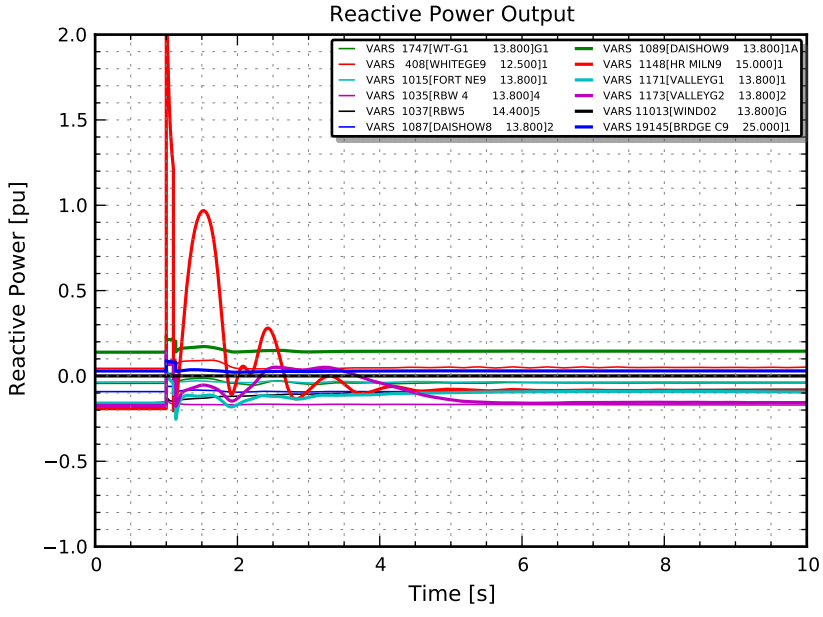


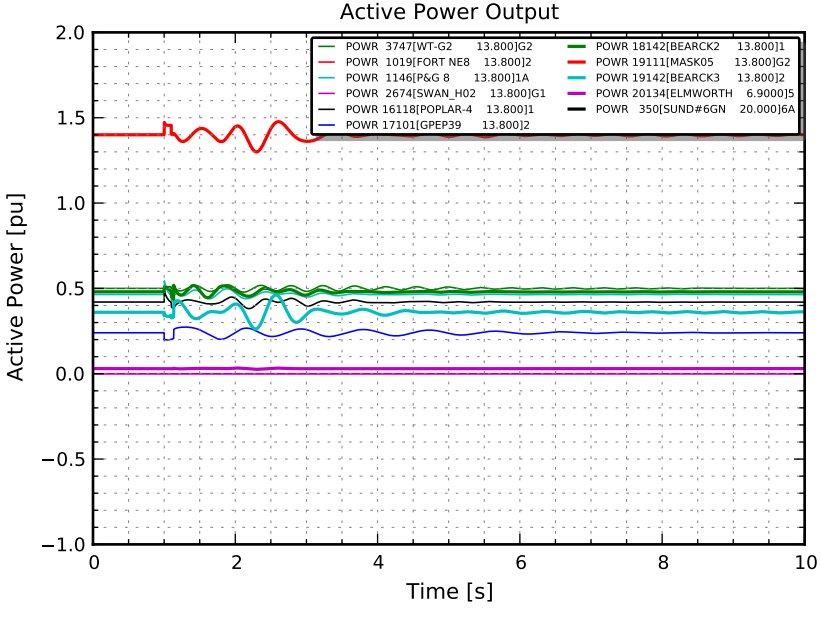
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_A.

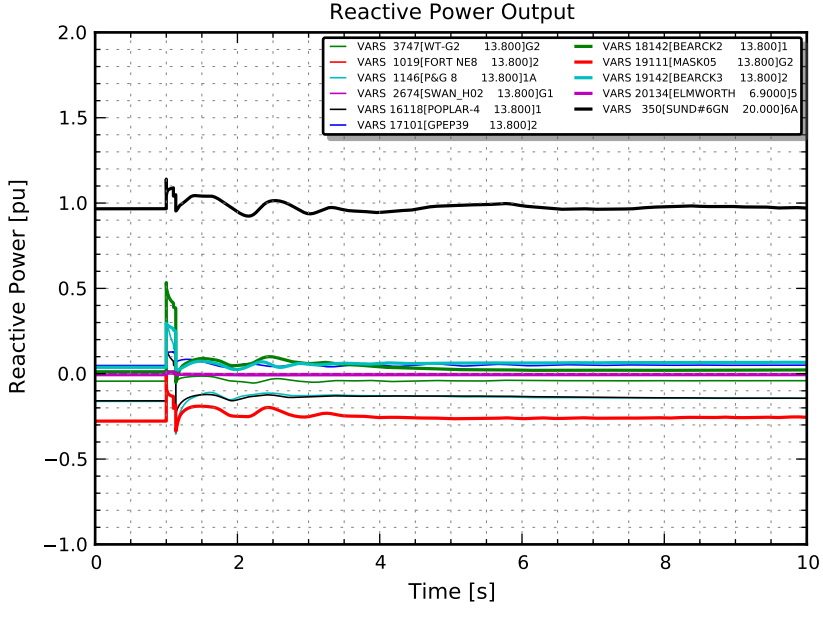
Study Area Generators

Appendix E2A
Figure: 021 (A. 3)





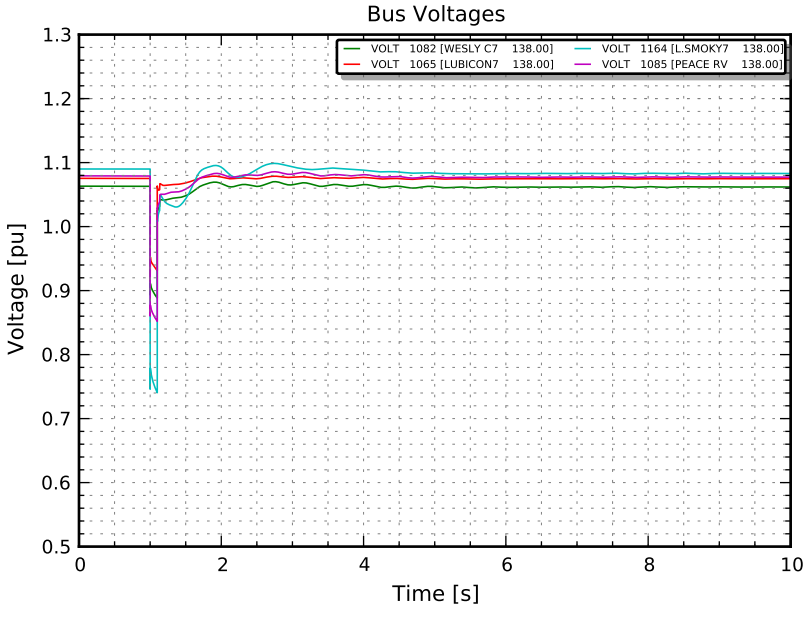


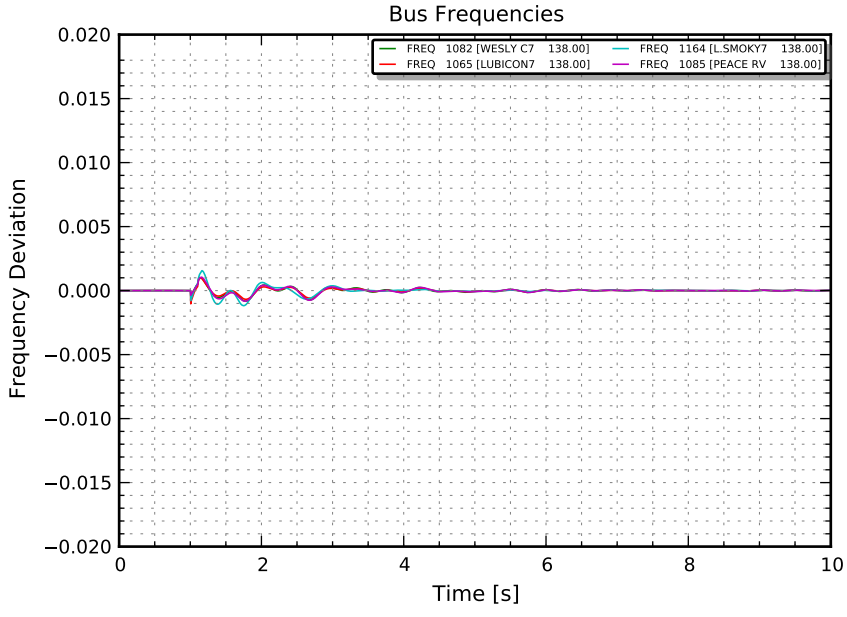


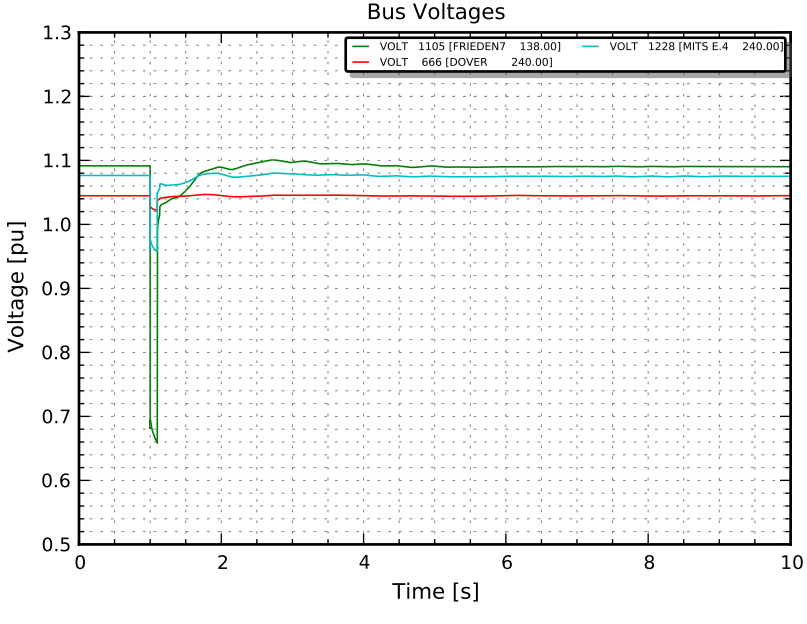
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_B.

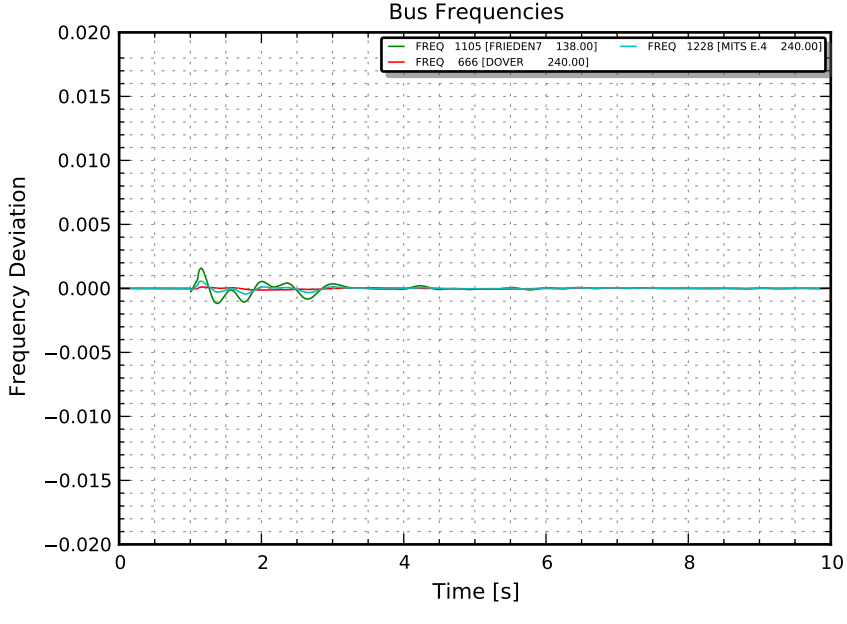
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 021 (B. 1)





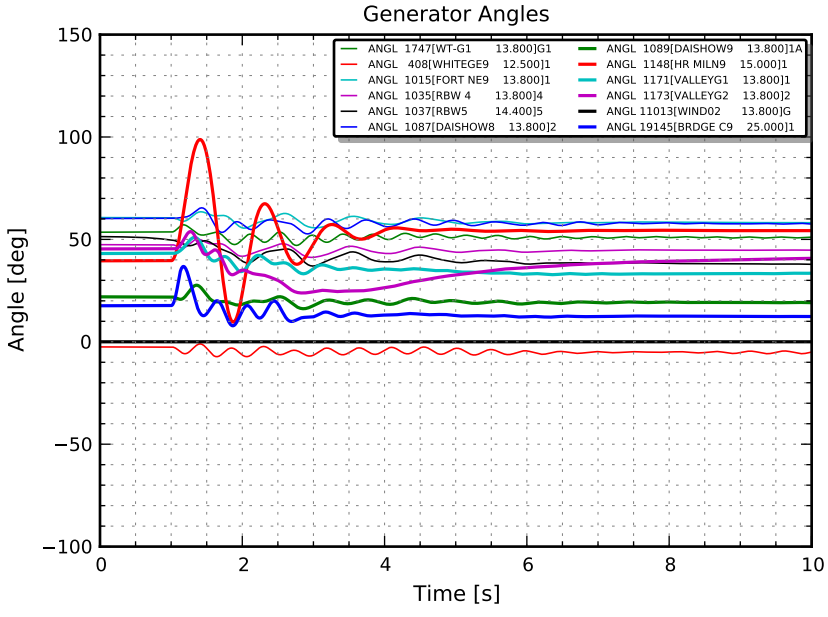


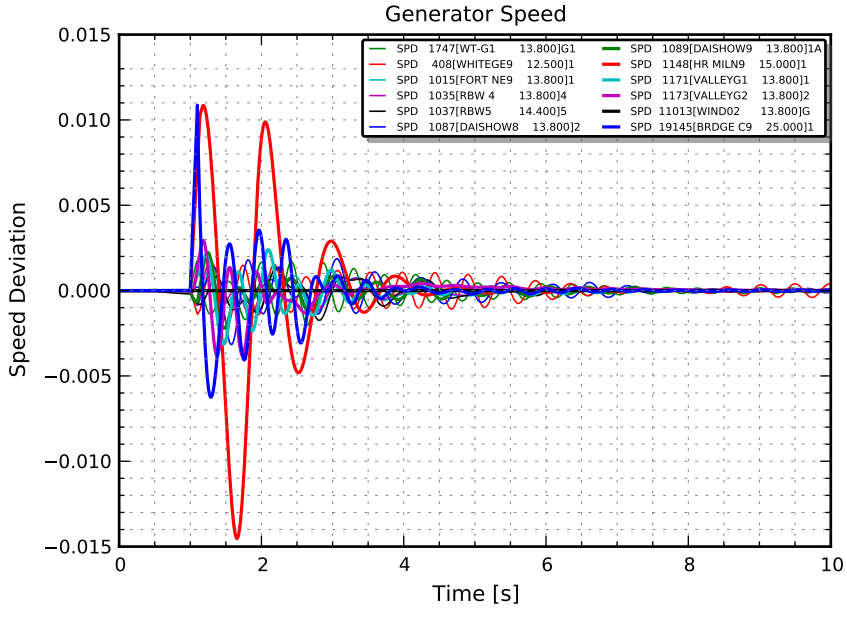


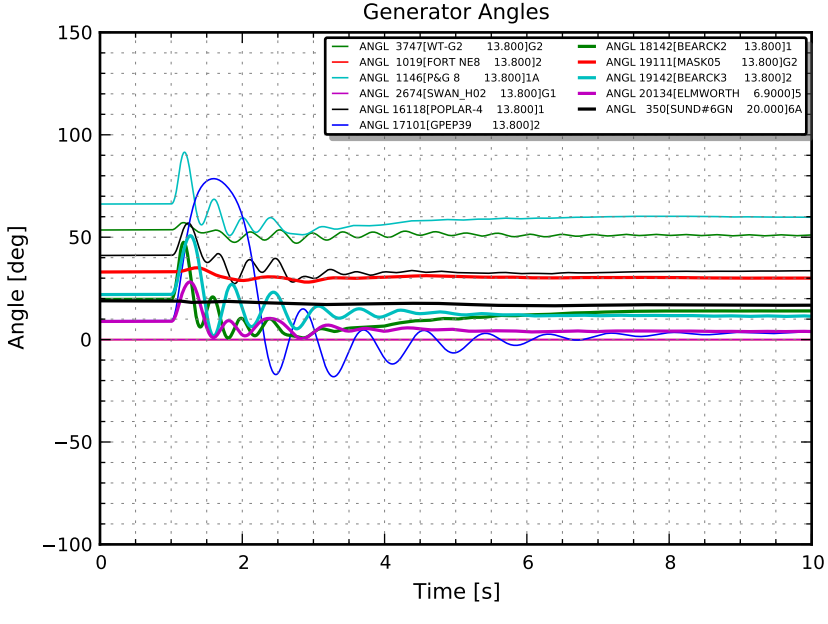
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_B.

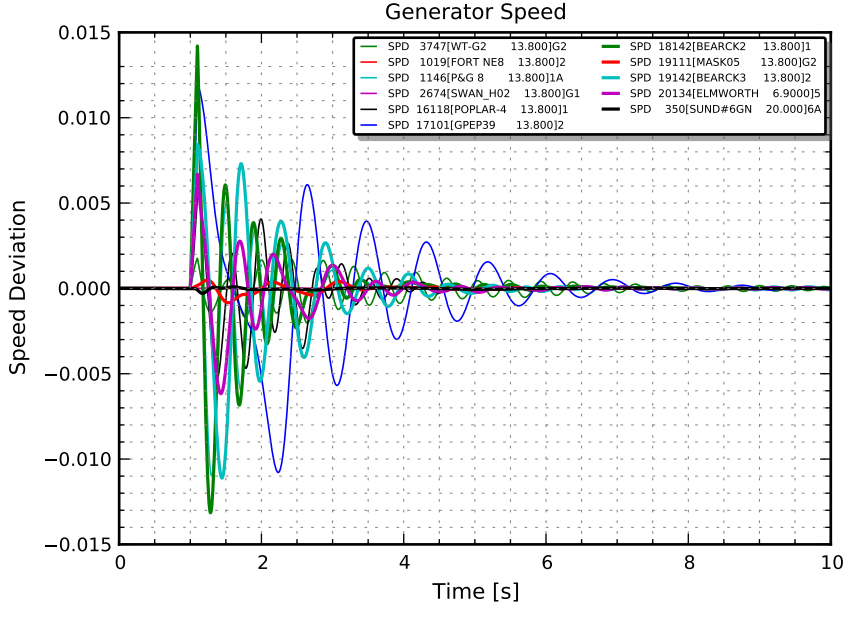
Study Area Generators

Appendix E2A
Figure: 021 (B. 2)





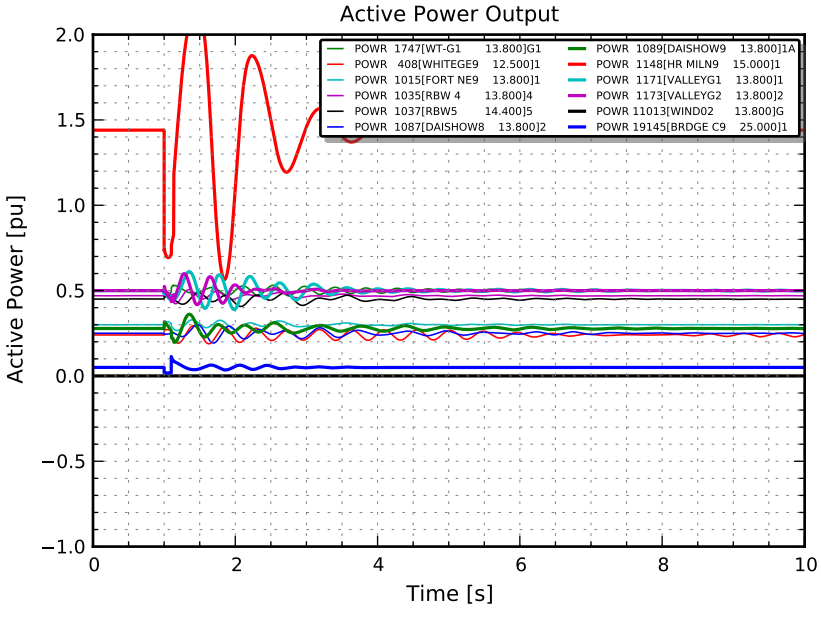


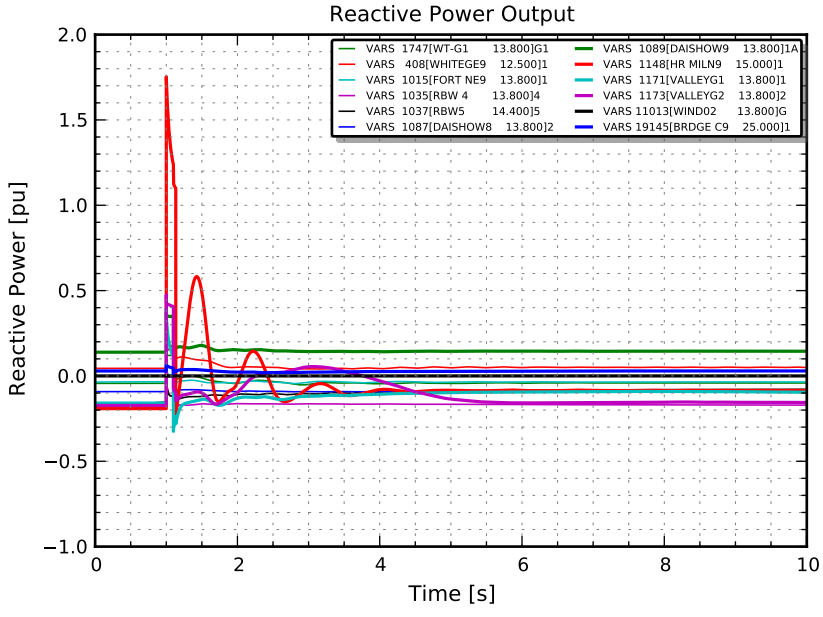


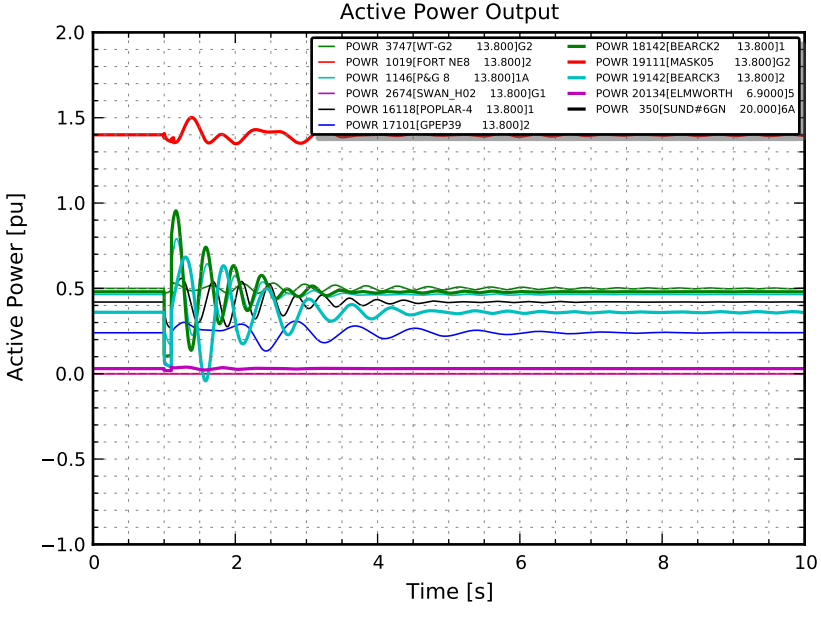
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_B.

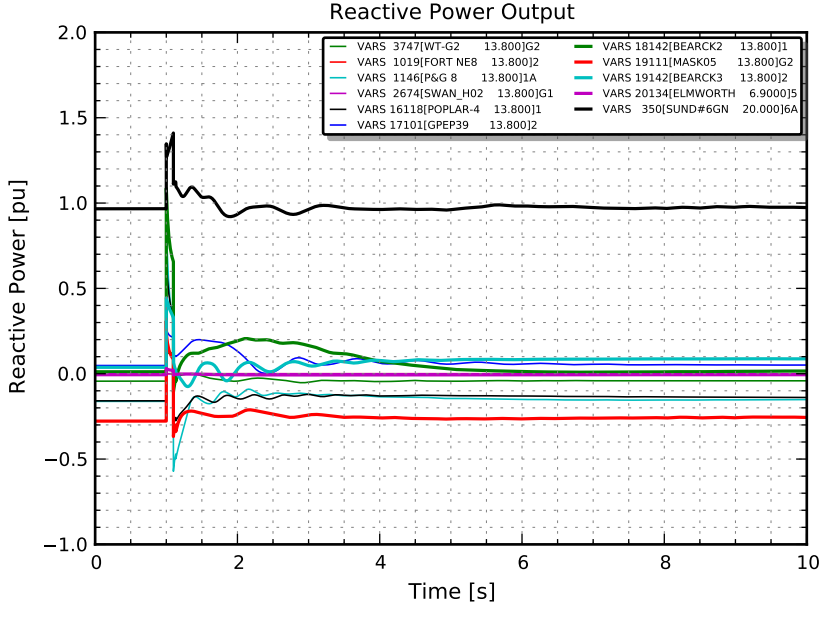
Study Area Generators

Appendix E2A
Figure: 021 (B. 3)





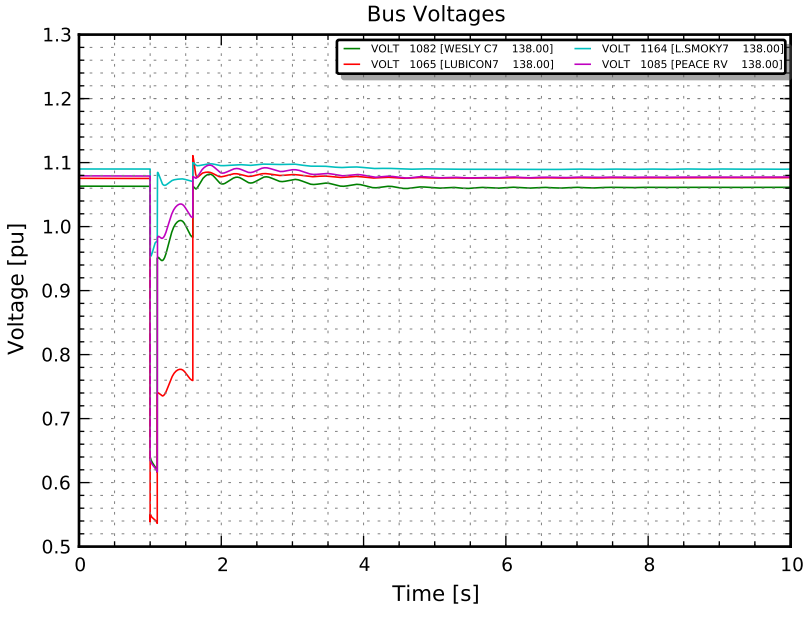


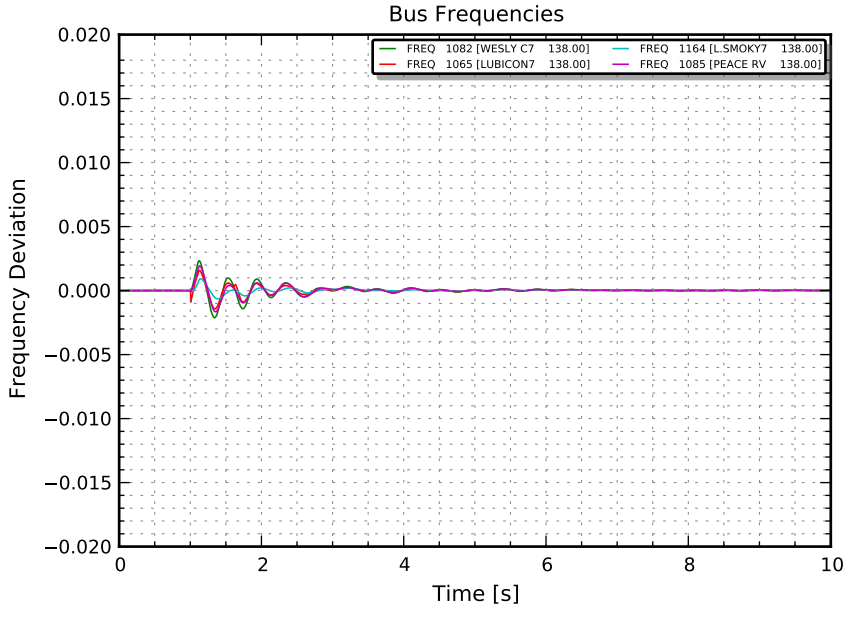


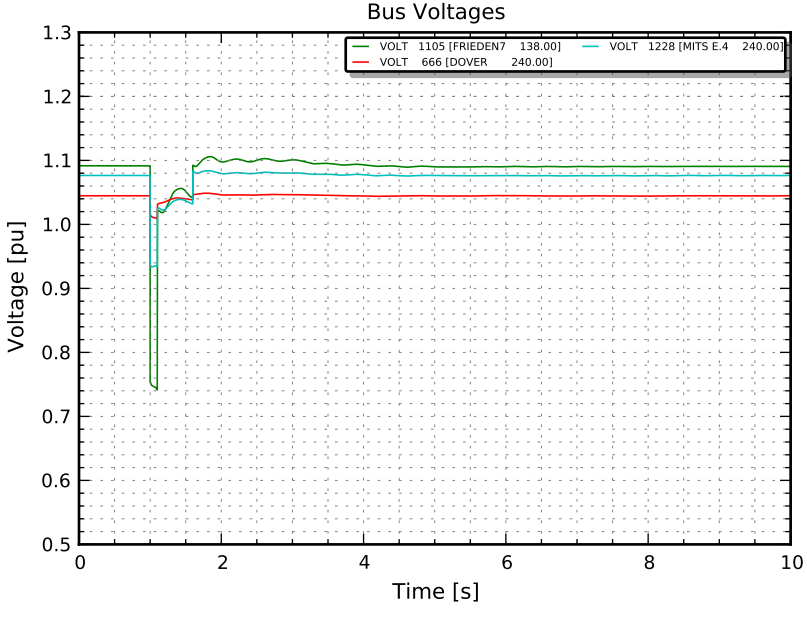
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 022 7L63 HOTCHKISS to LUBICON_A.

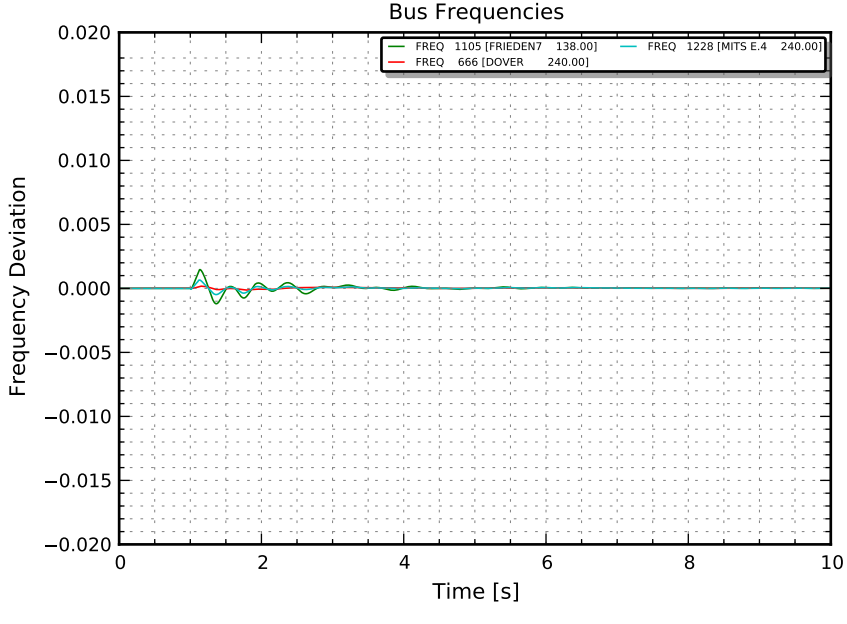
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 022 (A. 1)





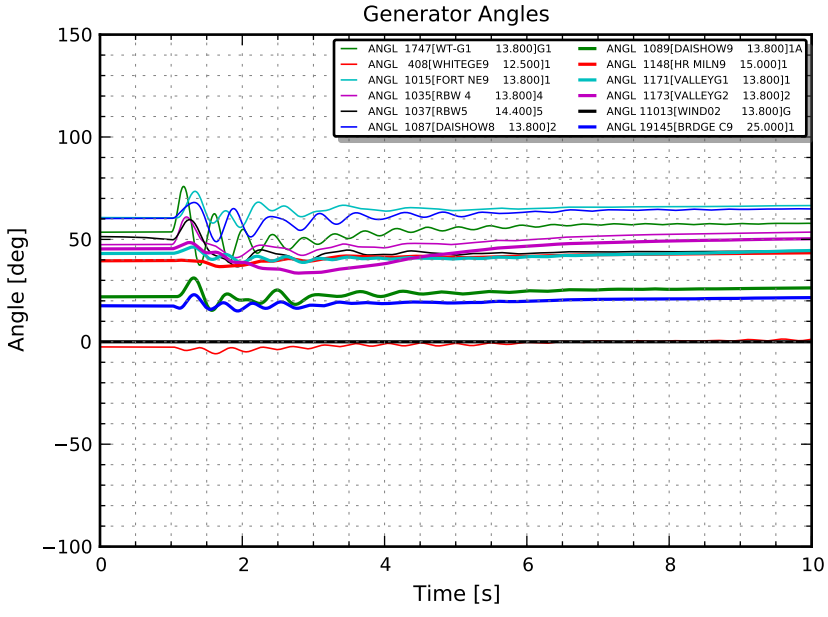


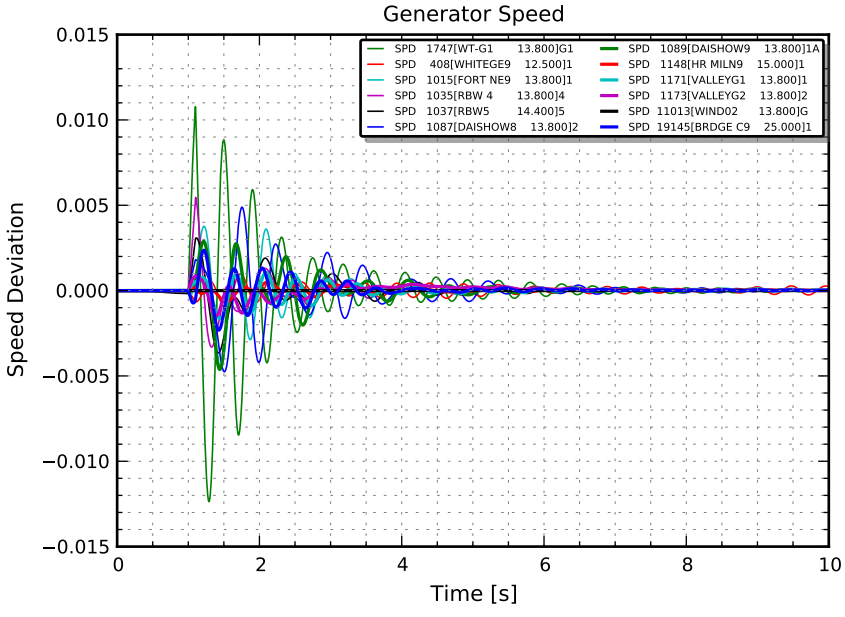


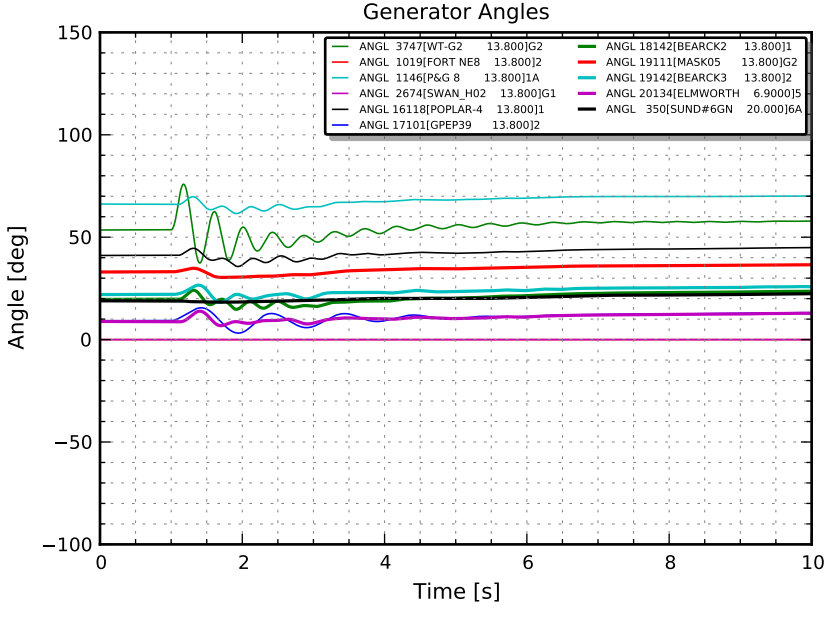
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 022 7L63 HOTCHKISS to LUBICON_A.

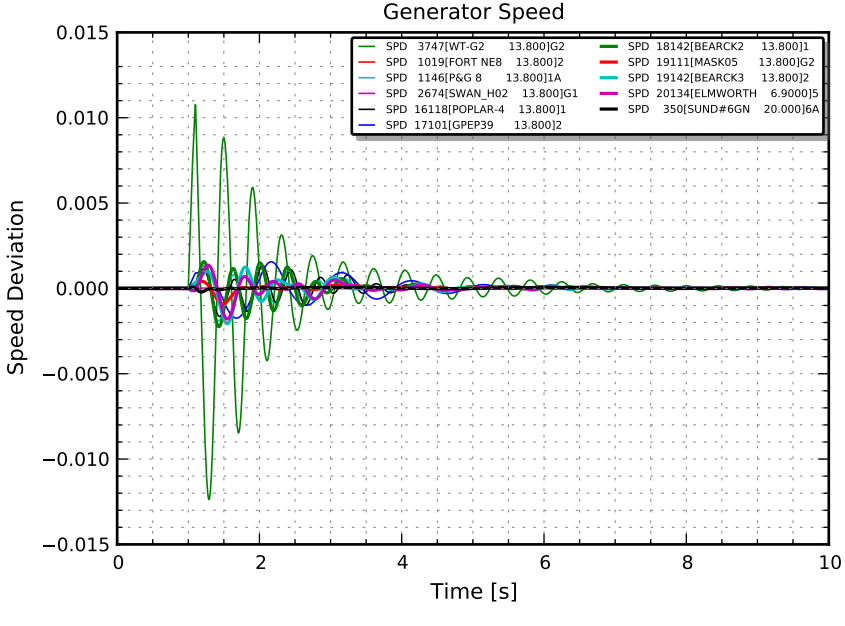
Study Area Generators

Appendix E2A
Figure: 022 (A. 2)





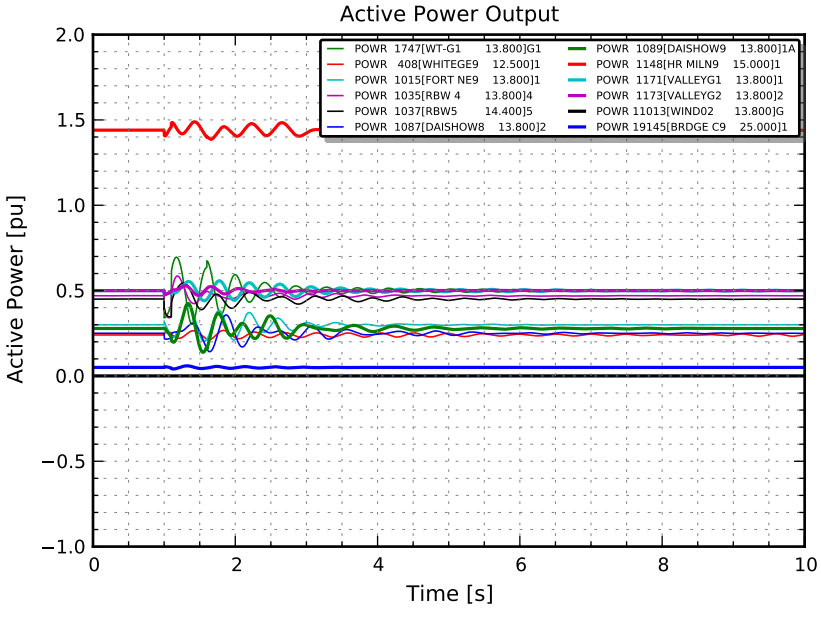


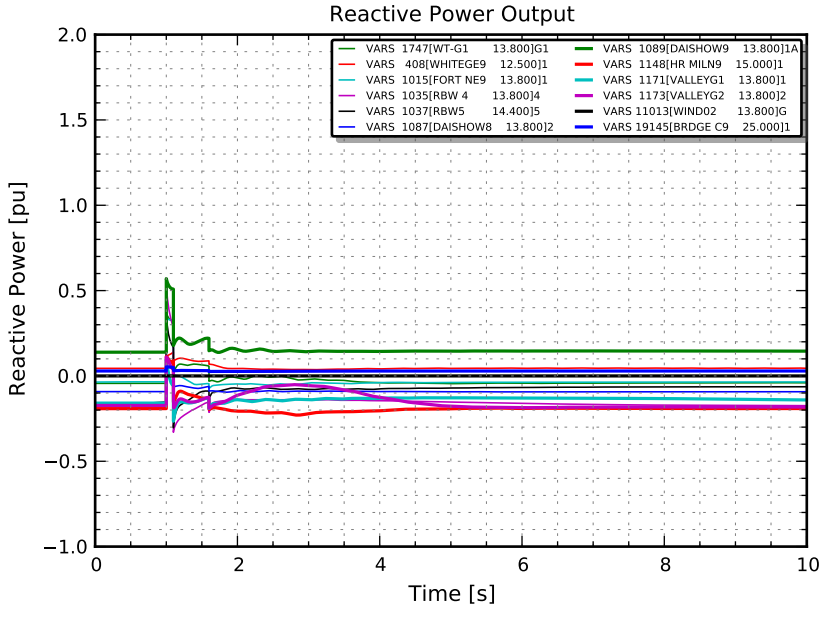


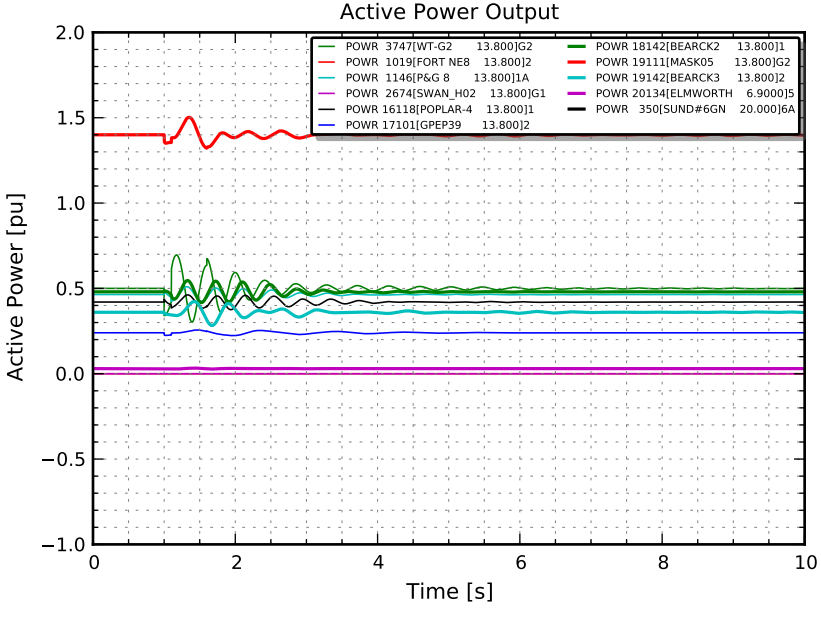
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 022 7L63 HOTCHKISS to LUBICON_A.

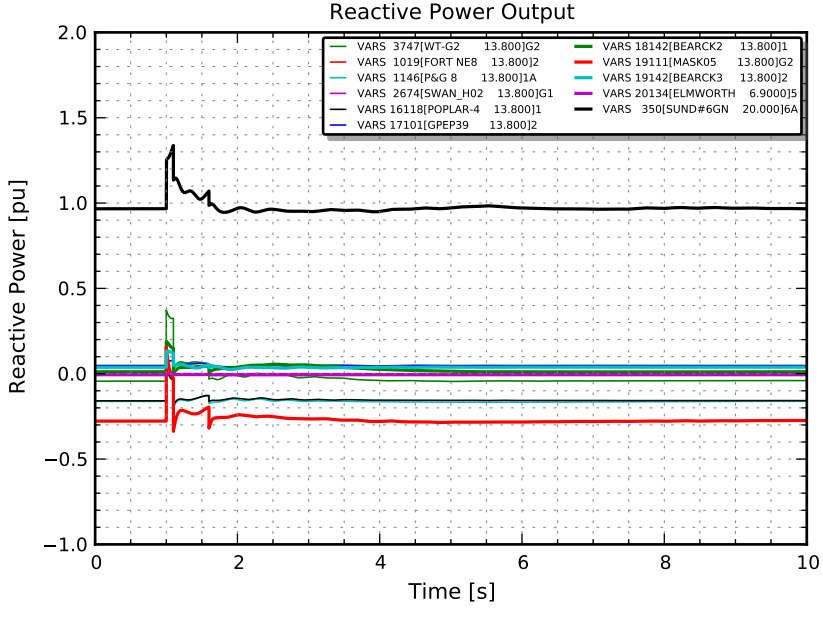
Study Area Generators

Appendix E2A
Figure: 022 (A. 3)





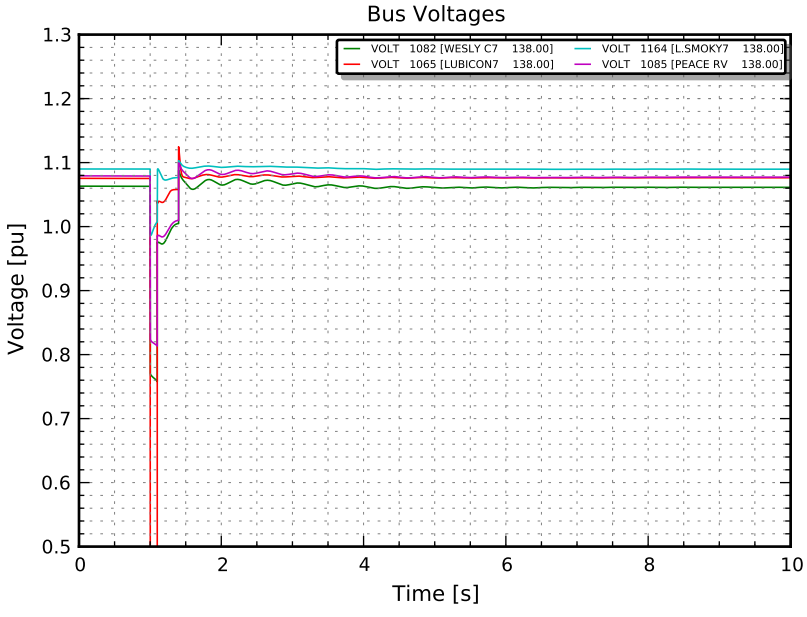


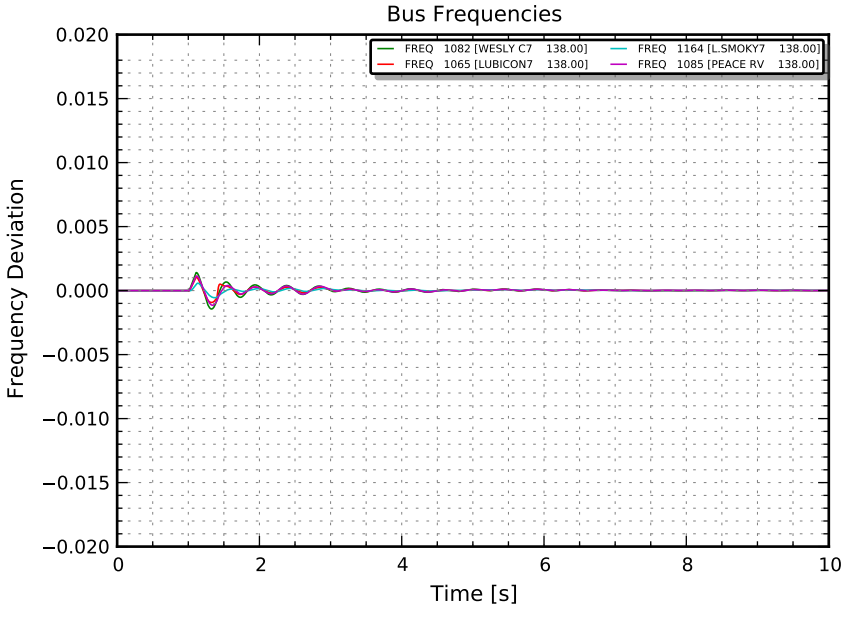


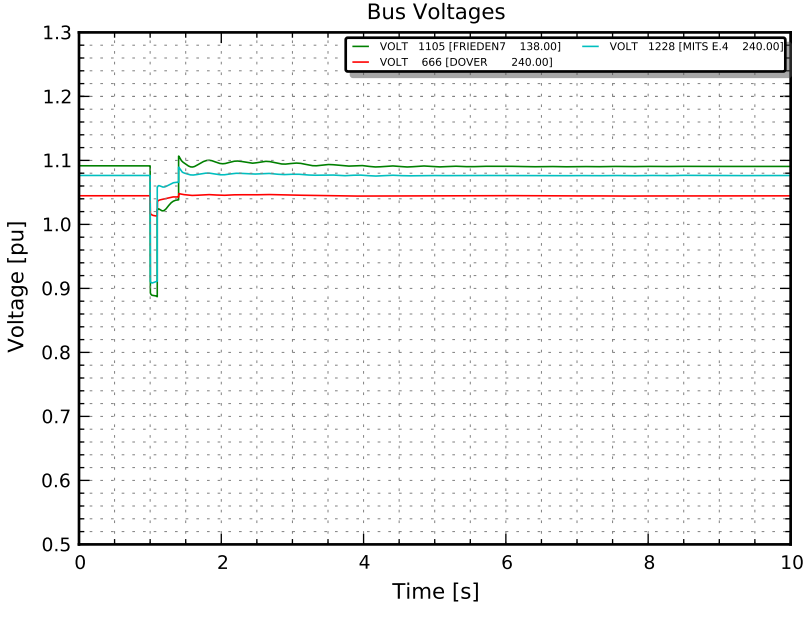
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 022 7L63 HOTCHKISS to LUBICON_B.

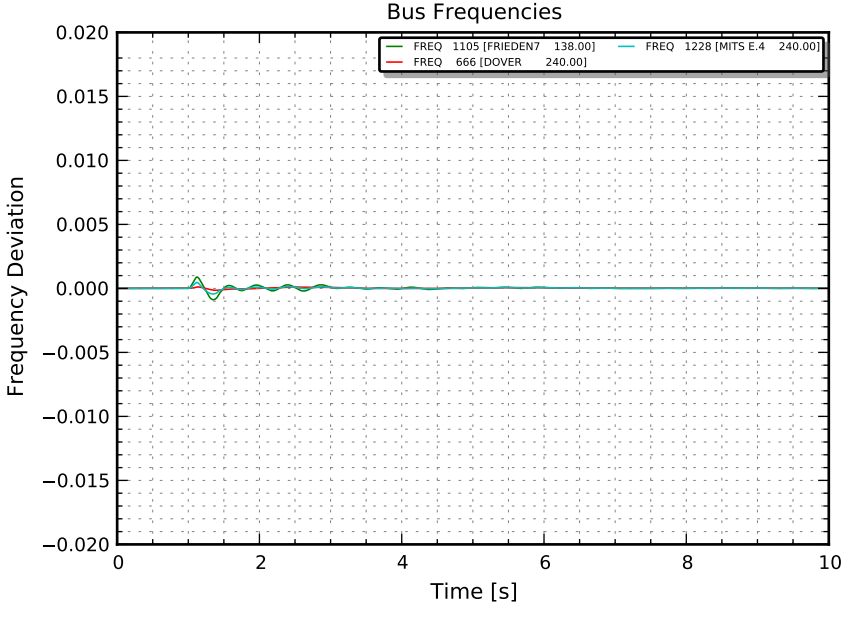
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 022 (B. 1)





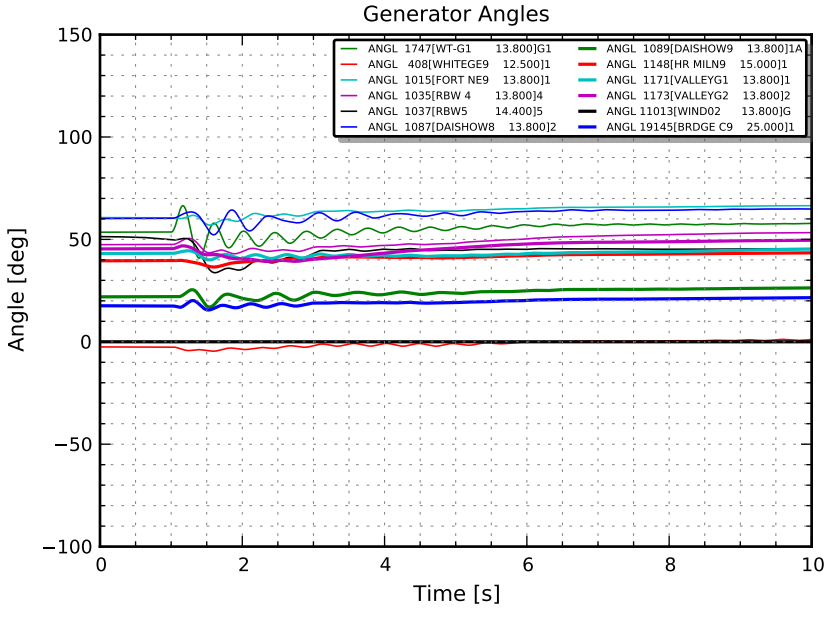


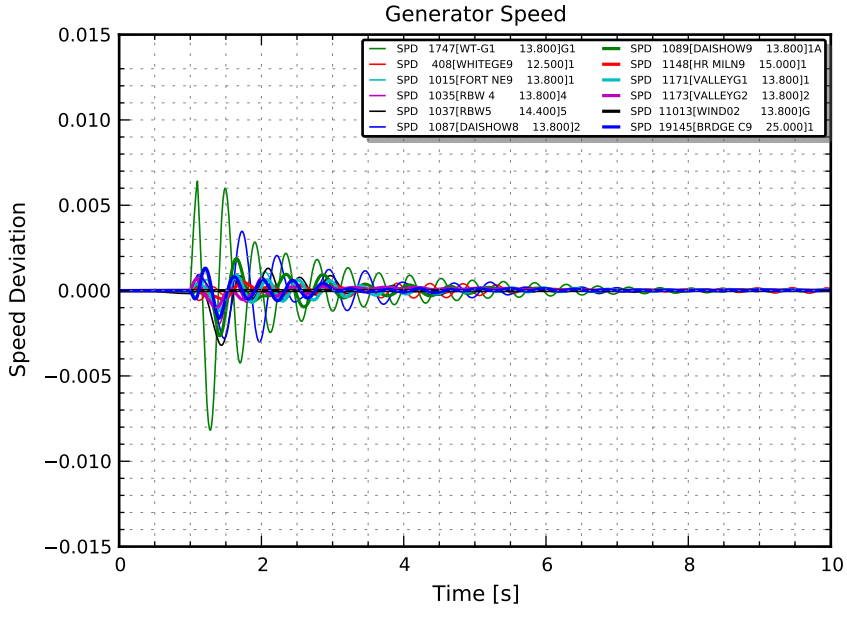


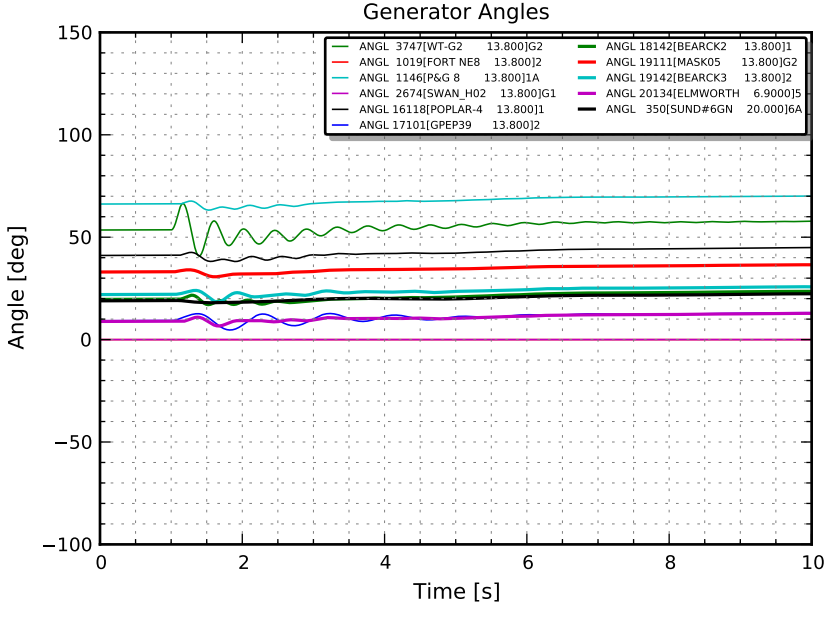
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 022 7L63 HOTCHKISS to LUBICON_B.

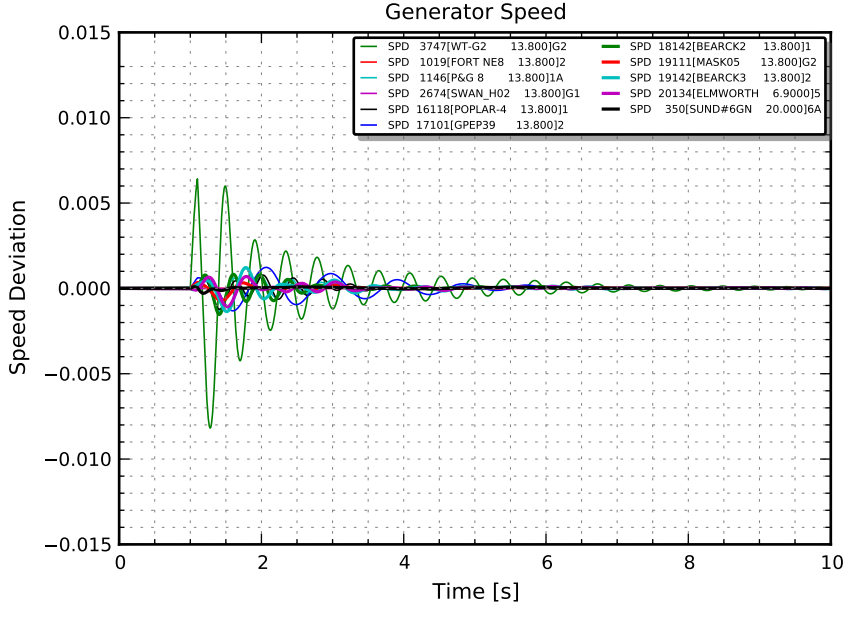
Study Area Generators

Appendix E2A
Figure: 022 (B. 2)





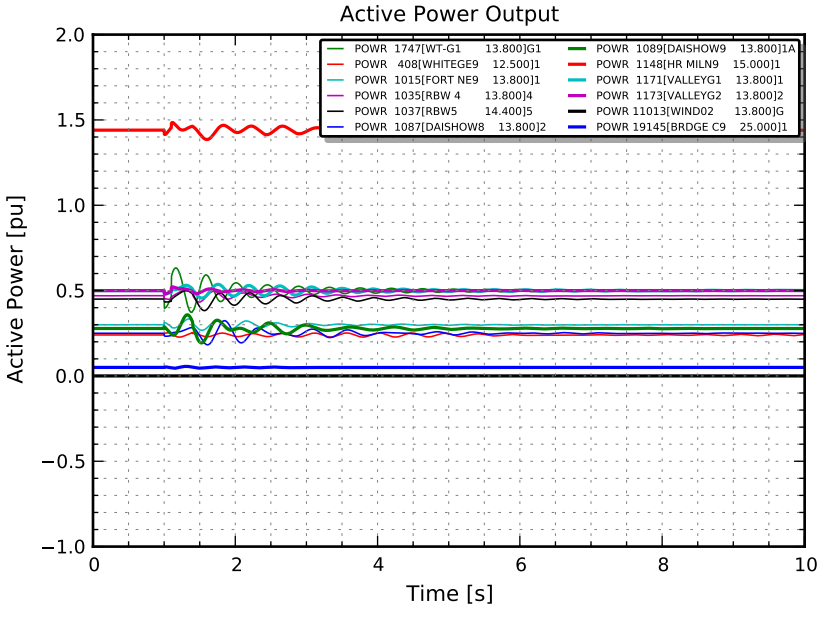


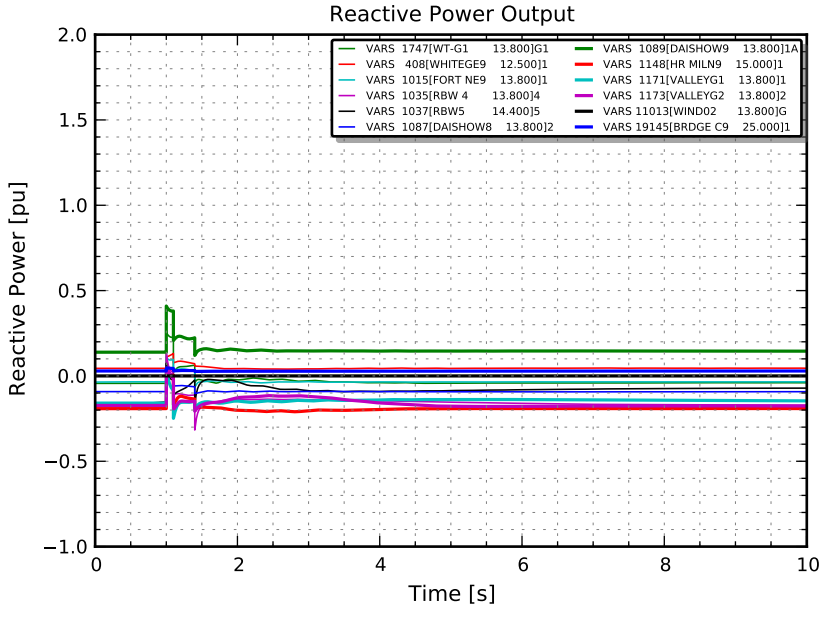


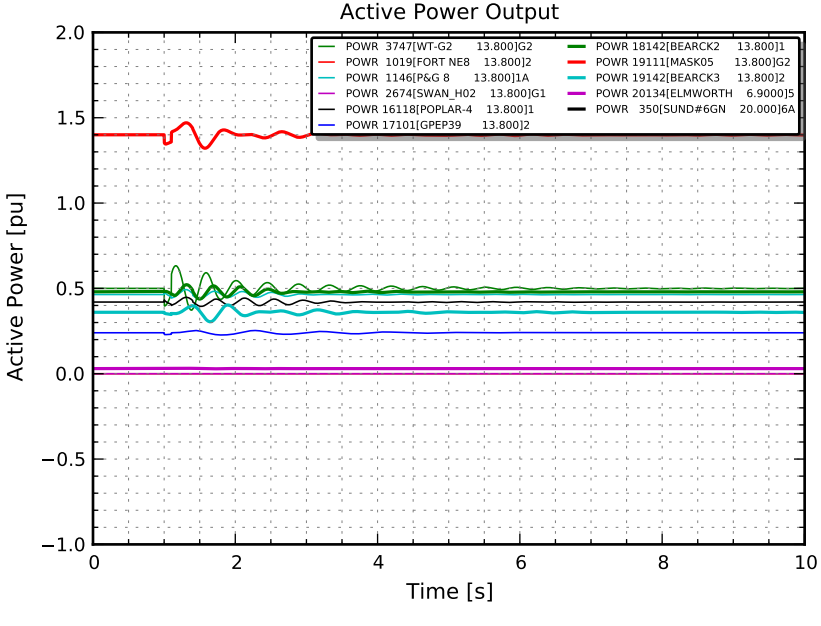
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 022 7L63 HOTCHKISS to LUBICON_B.

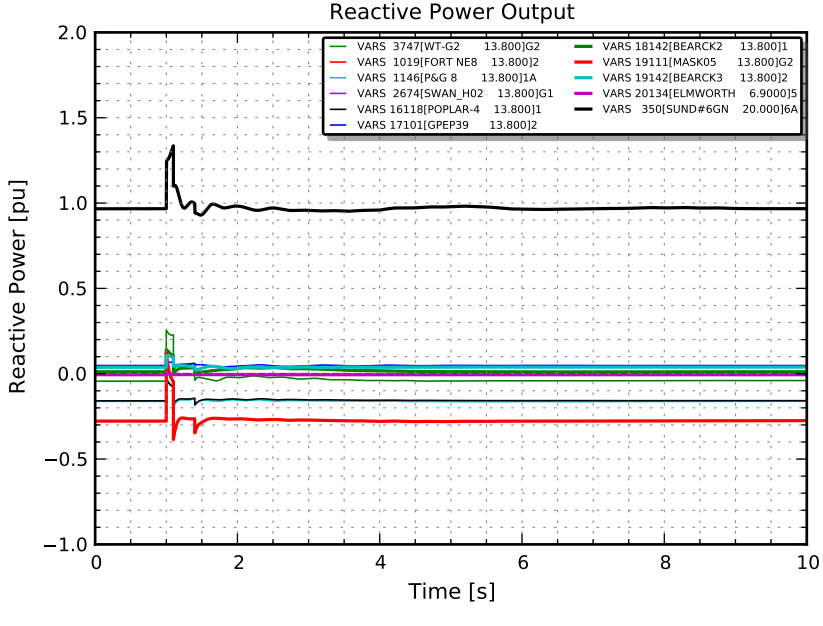
Study Area Generators

Appendix E2A
Figure: 022 (B. 3)





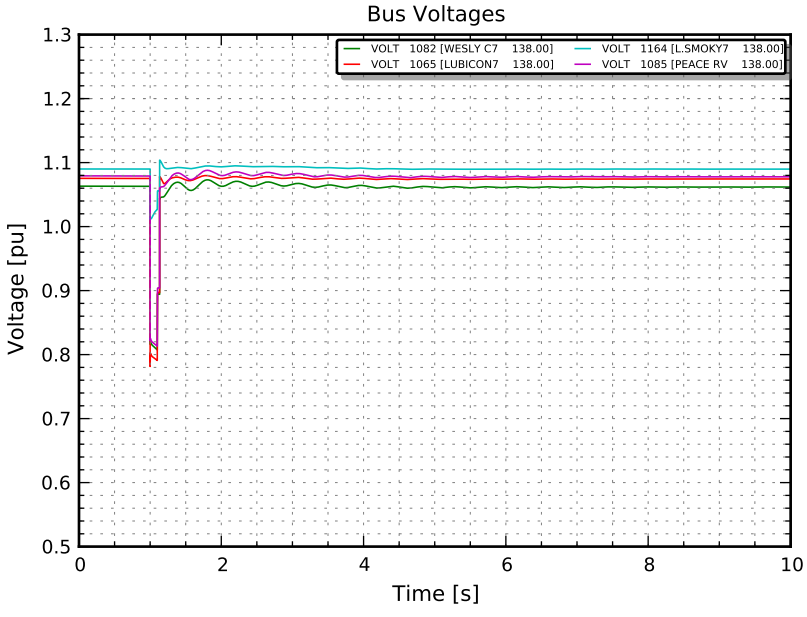


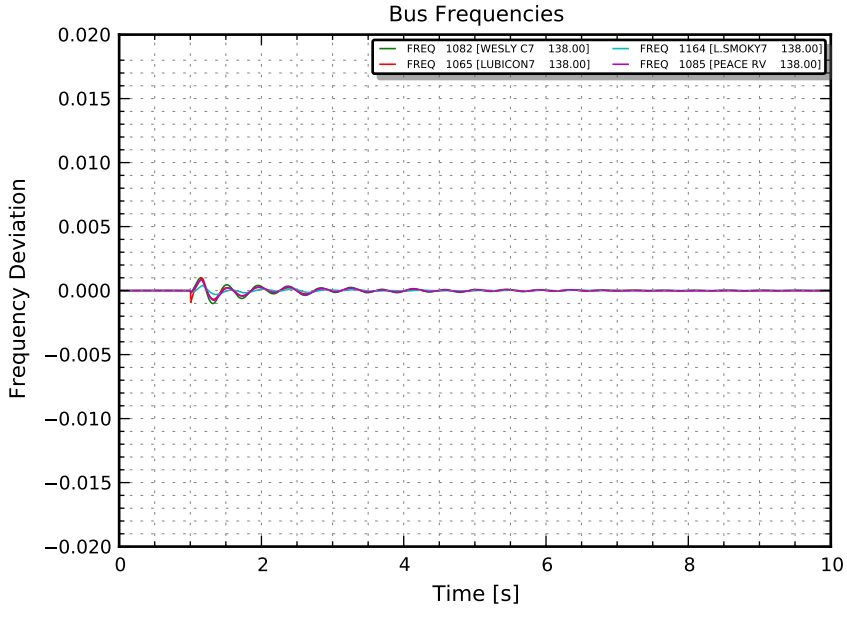


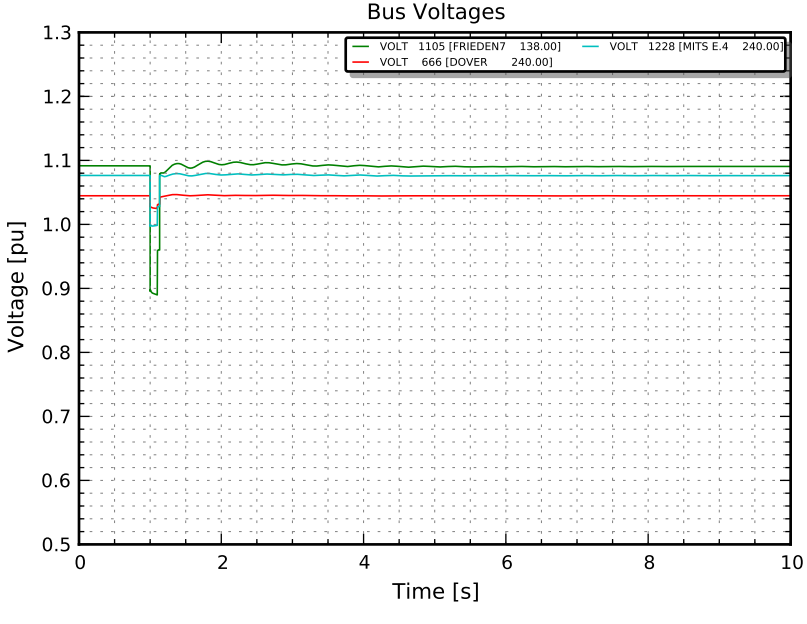
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 023 7L58 KEGRIVER to Meikle_A.

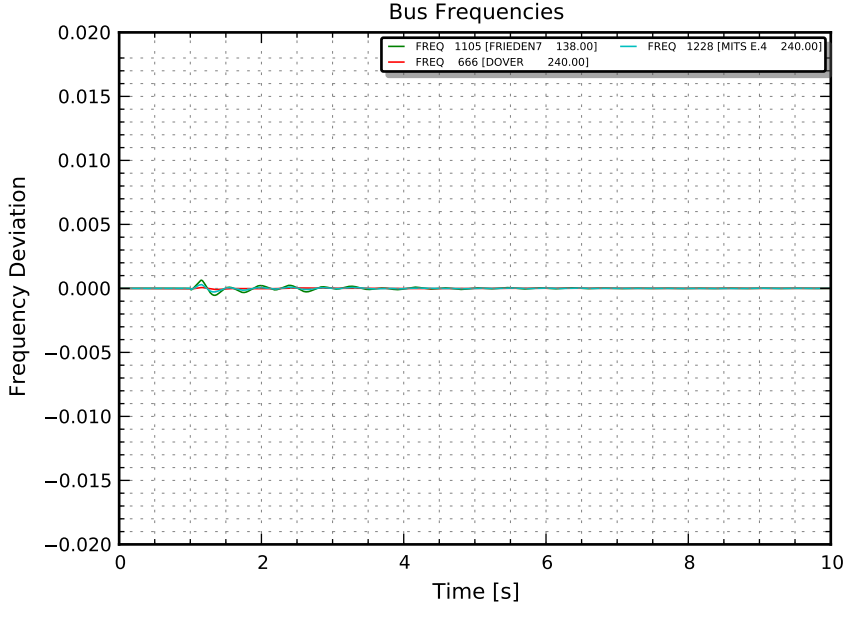
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 023 (A. 1)





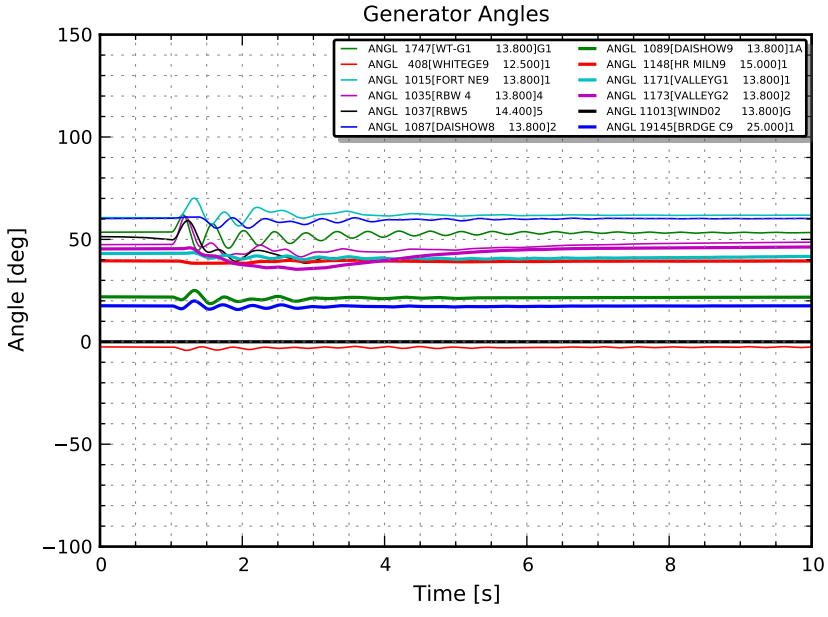


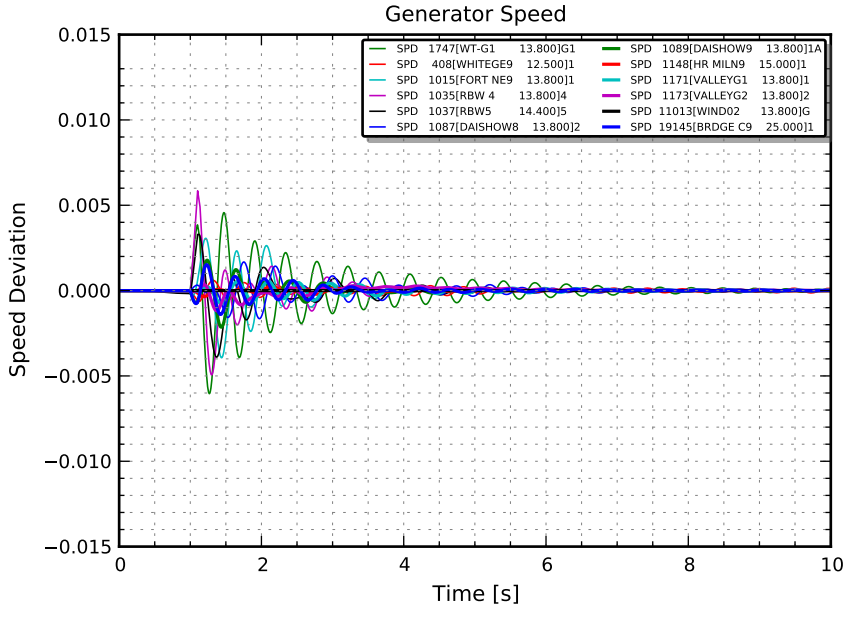


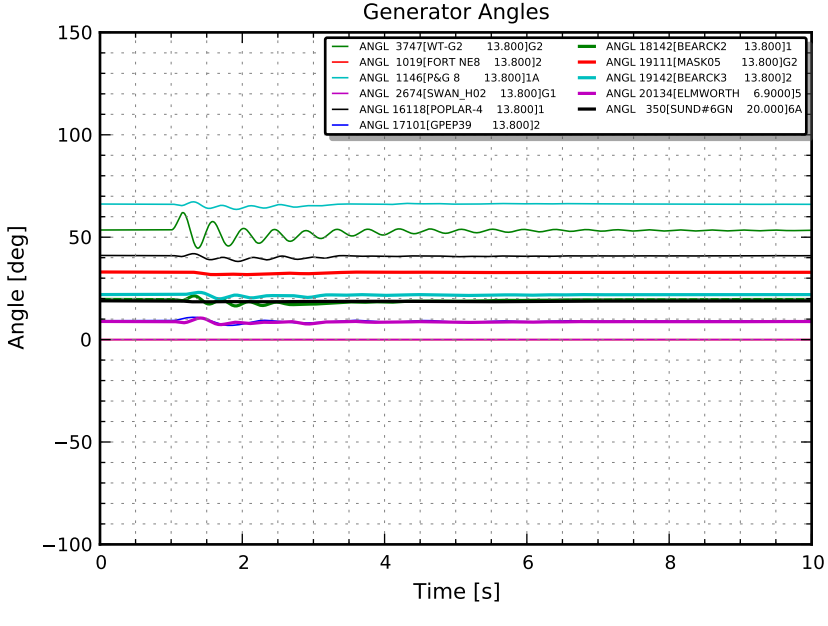
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 023 7L58 KEGRIVER to Meikle_A.

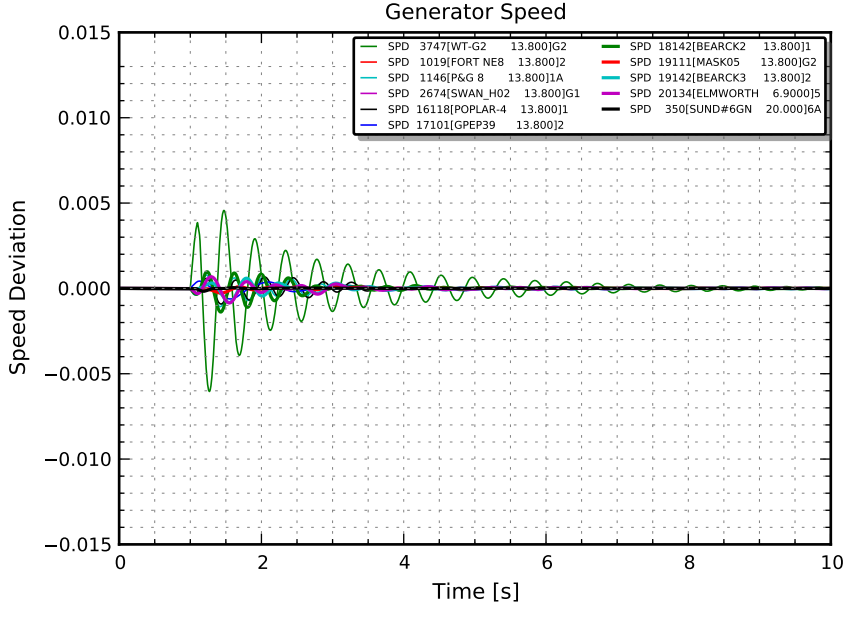
Study Area Generators

Appendix E2A
Figure: 023 (A. 2)





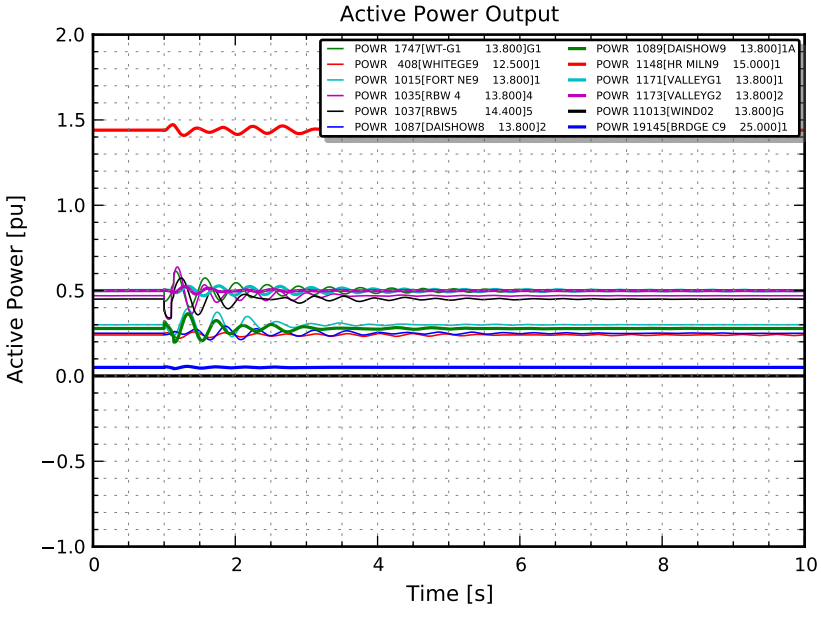


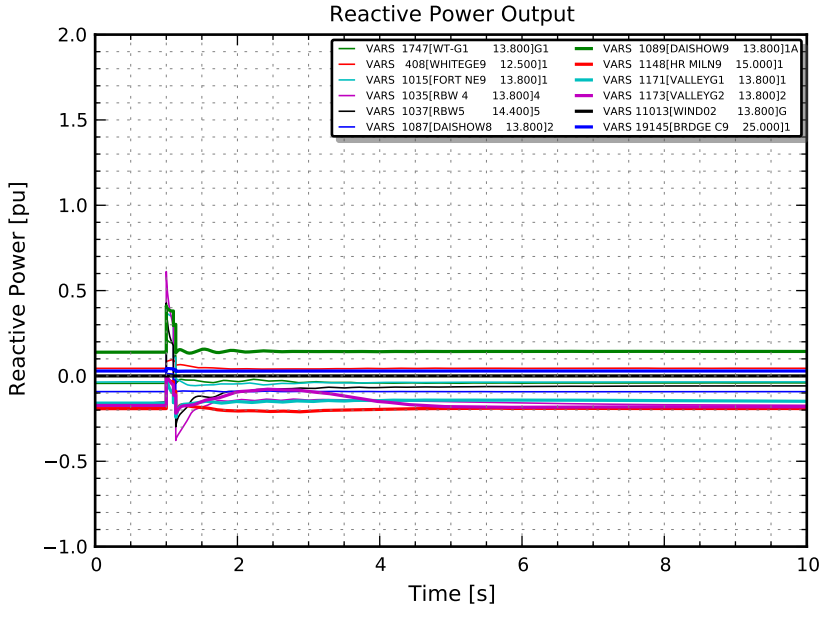


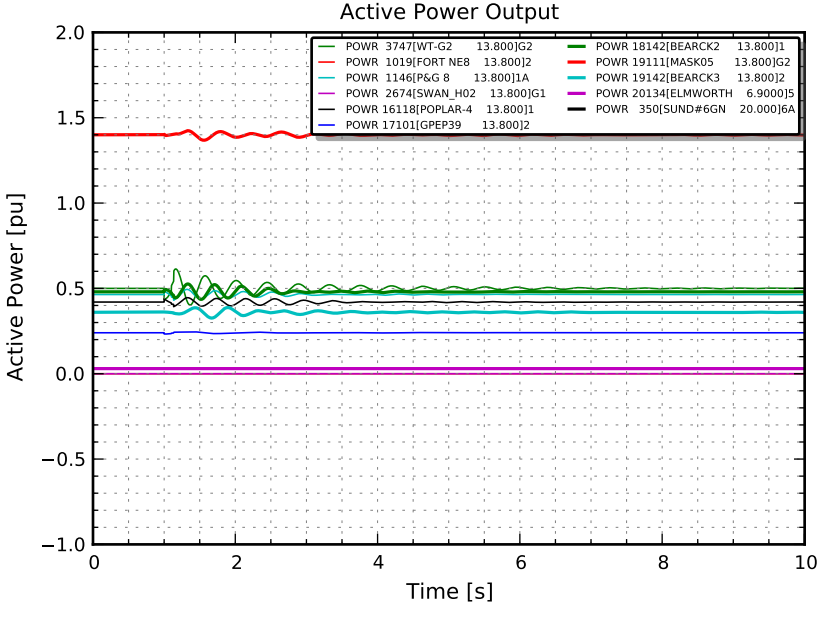
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 023 7L58 KEGRIVER to Meikle_A.

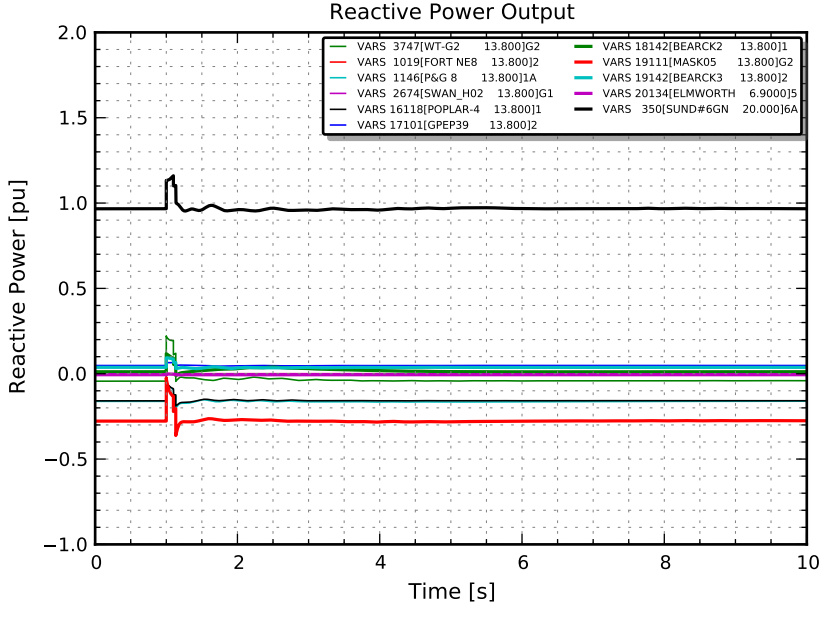
Study Area Generators

Appendix E2A
Figure: 023 (A. 3)





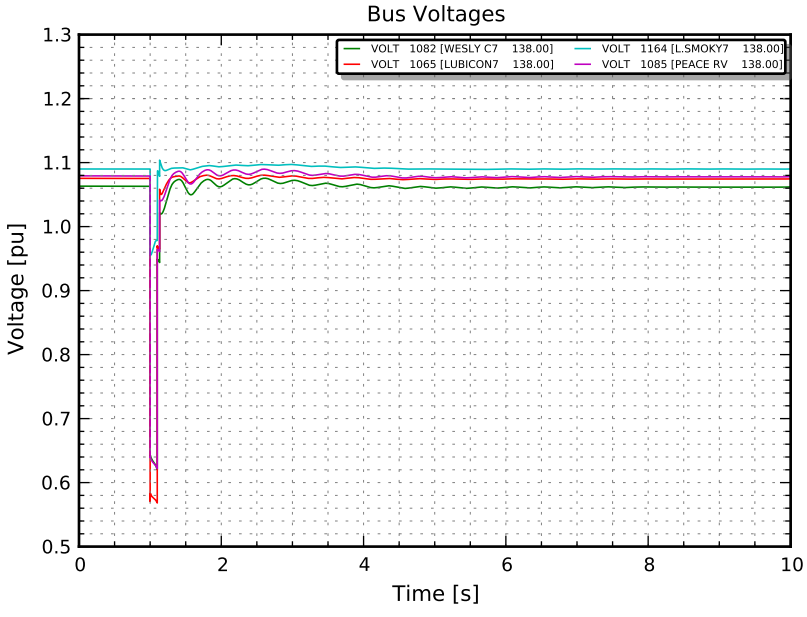


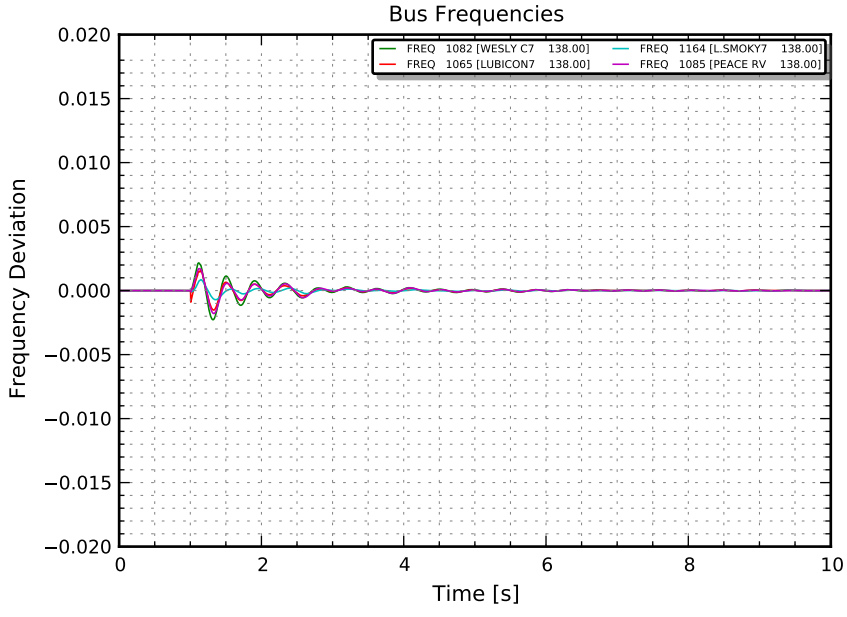


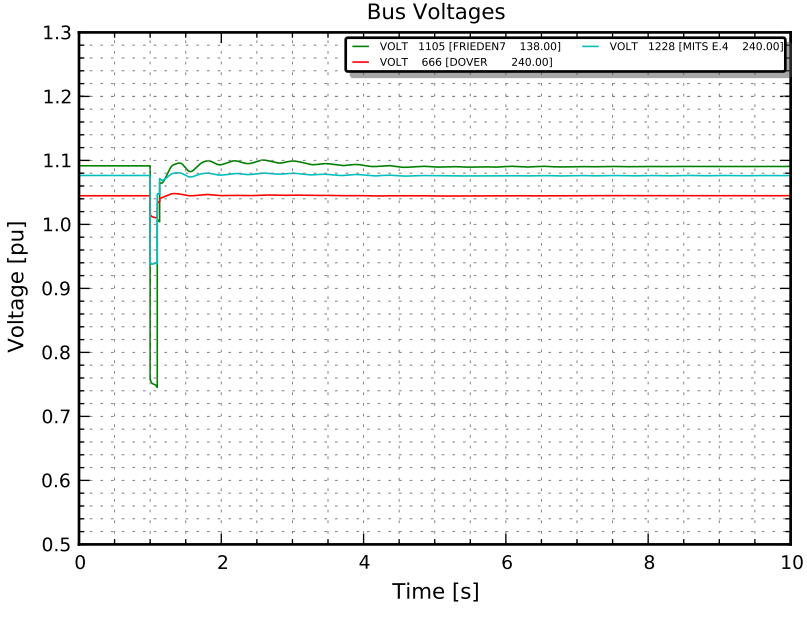
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 023 7L58 KEGRIVER to Meikle_B.

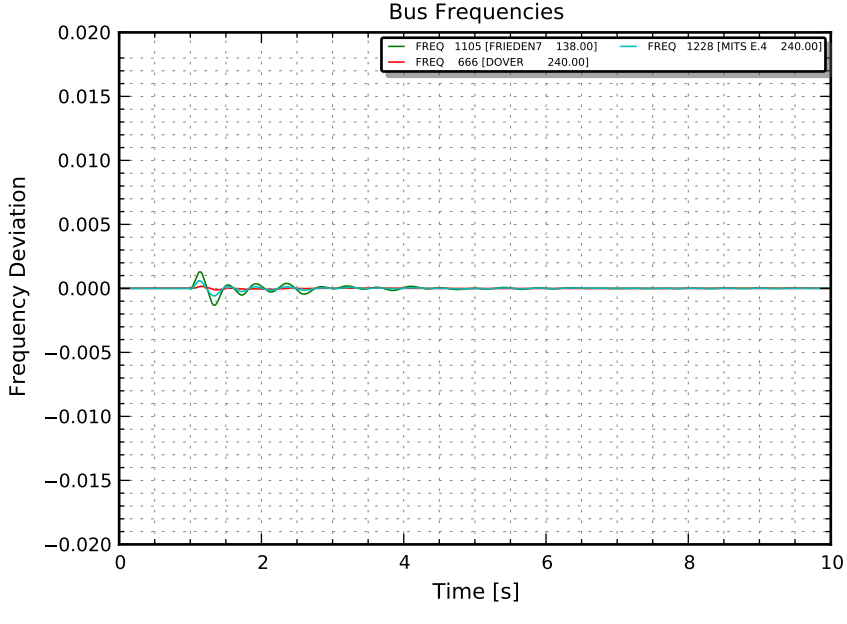
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 023 (B. 1)





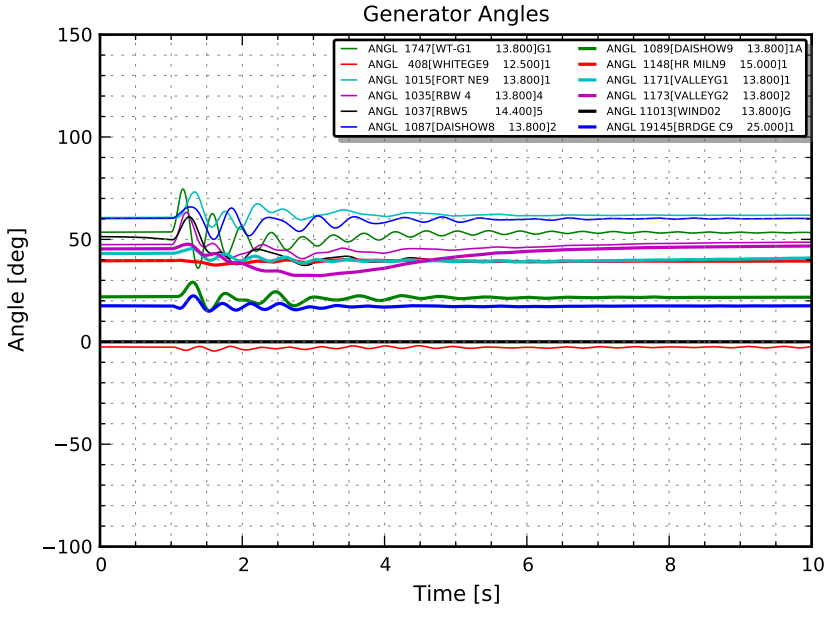


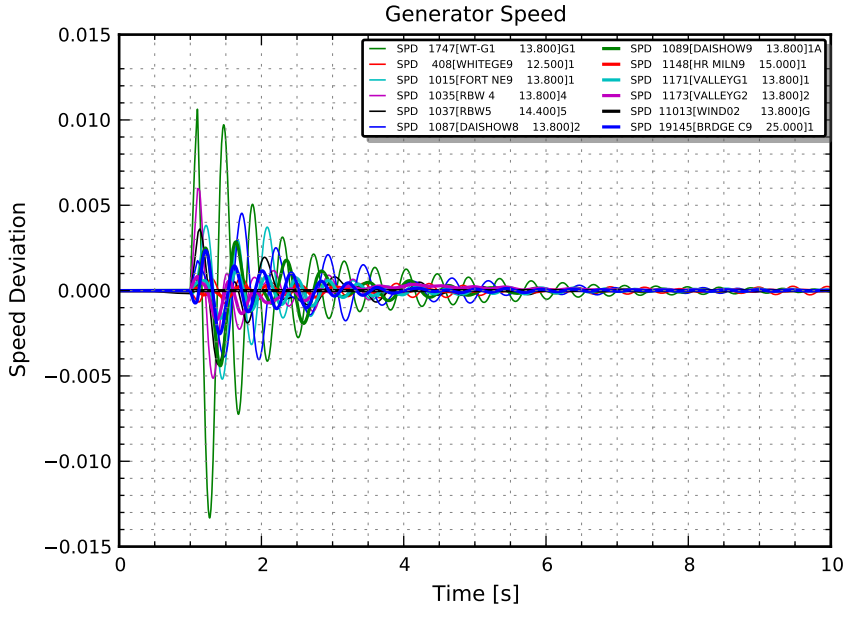


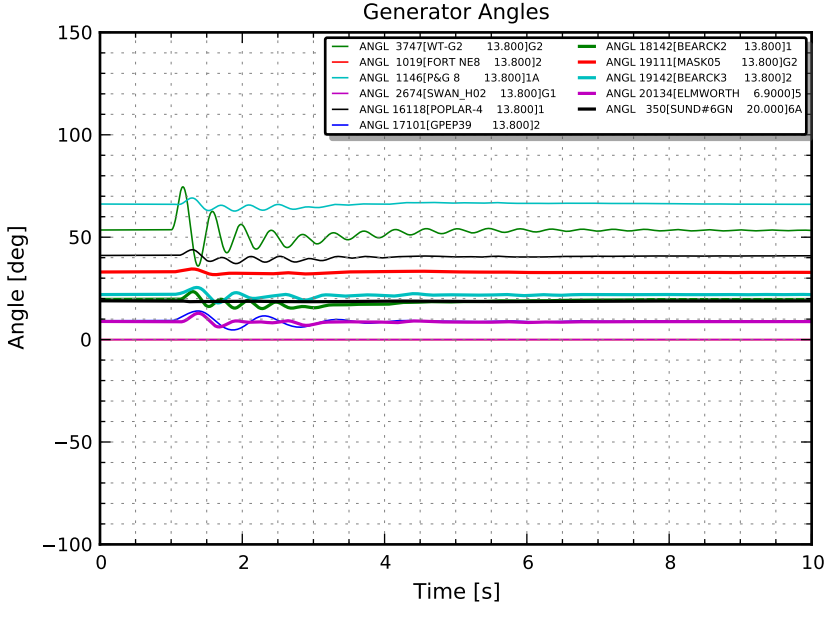
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 023 7L58 KEGRIVER to Meikle_B.

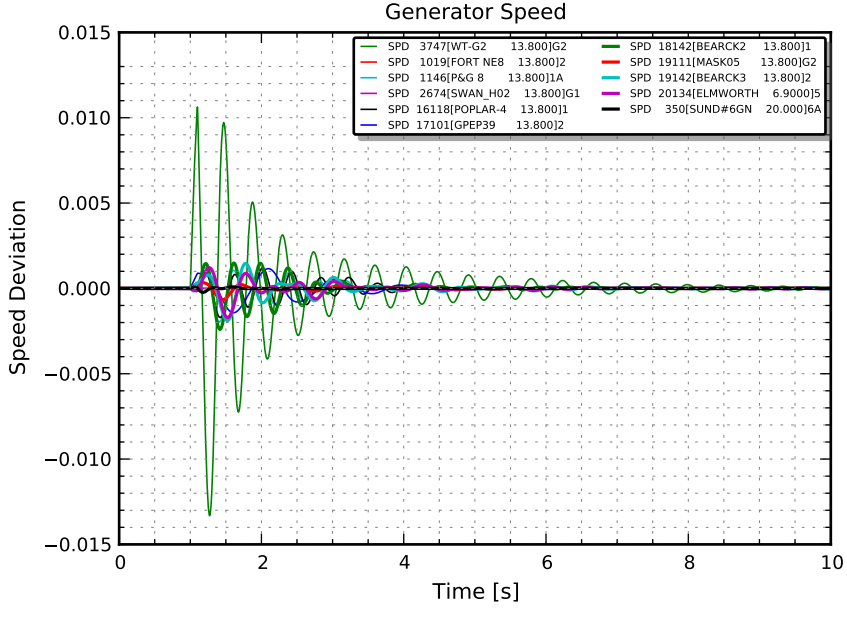
Study Area Generators

Appendix E2A
Figure: 023 (B. 2)





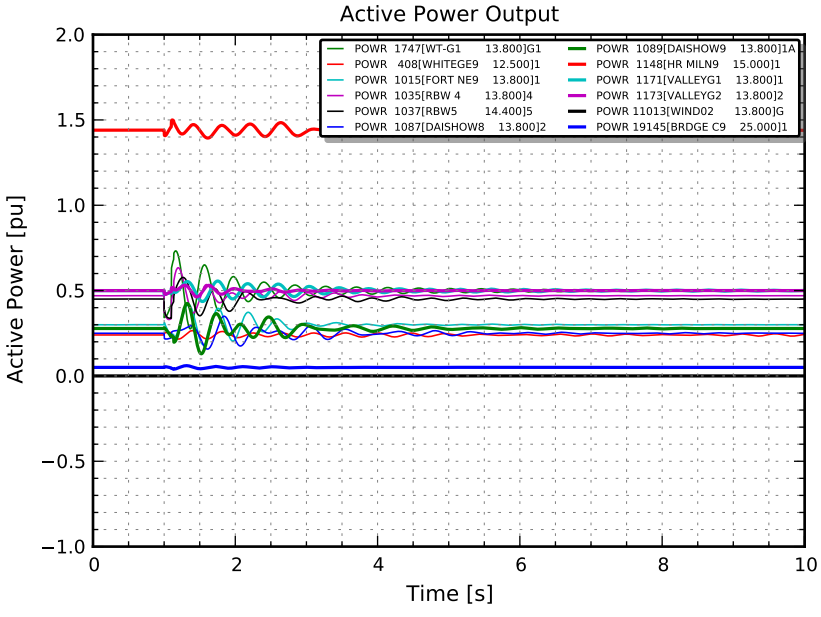


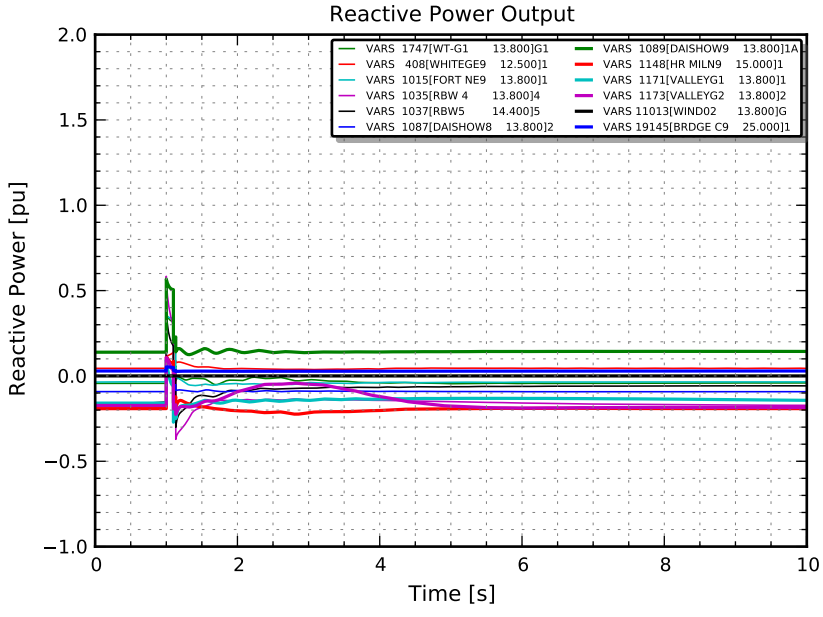


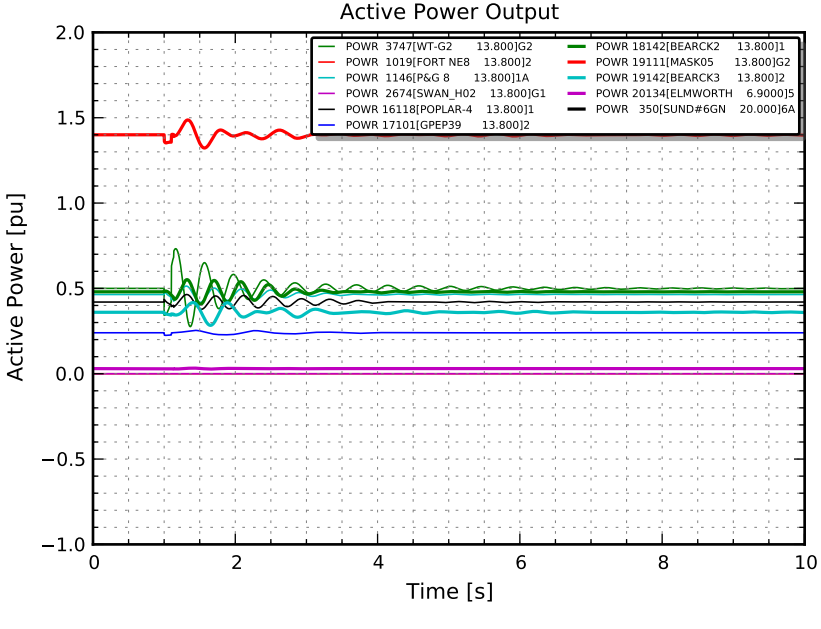
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 023 7L58 KEGRIVER to Meikle_B.

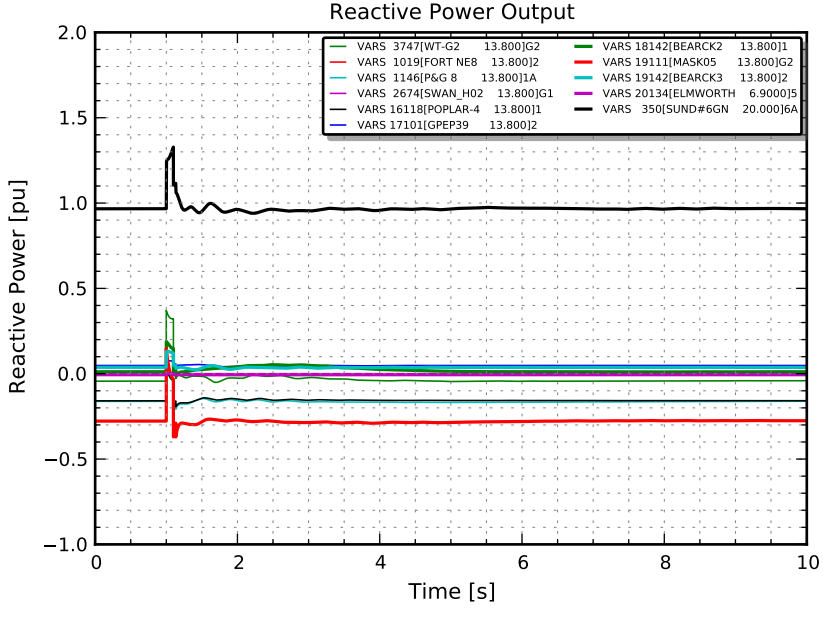
Study Area Generators

Appendix E2A
Figure: 023 (B. 3)





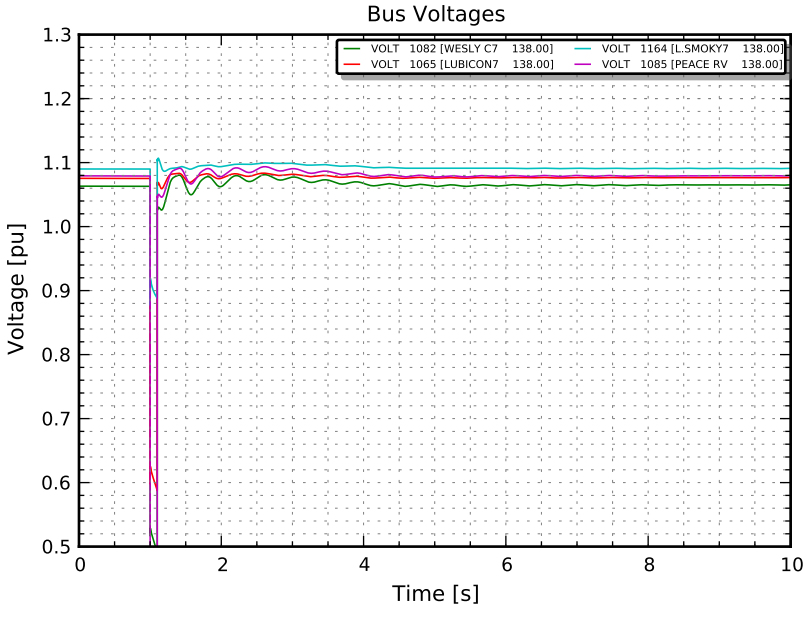


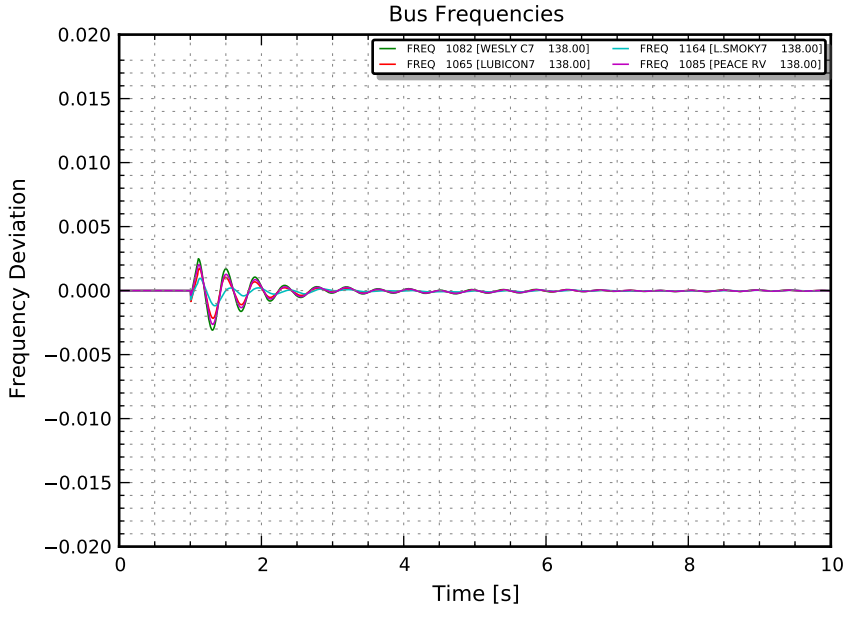


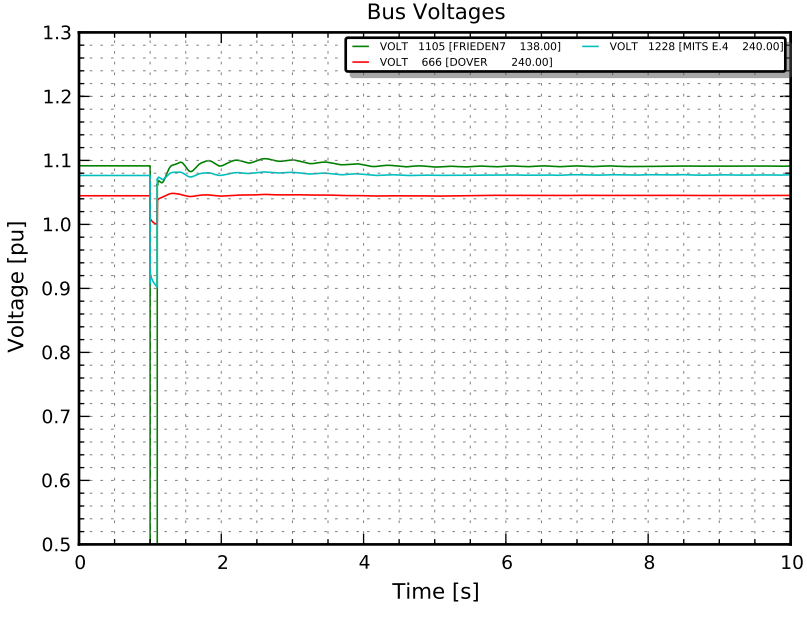
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 024 7L04 WESTPEACE to DAISHOWA_A.

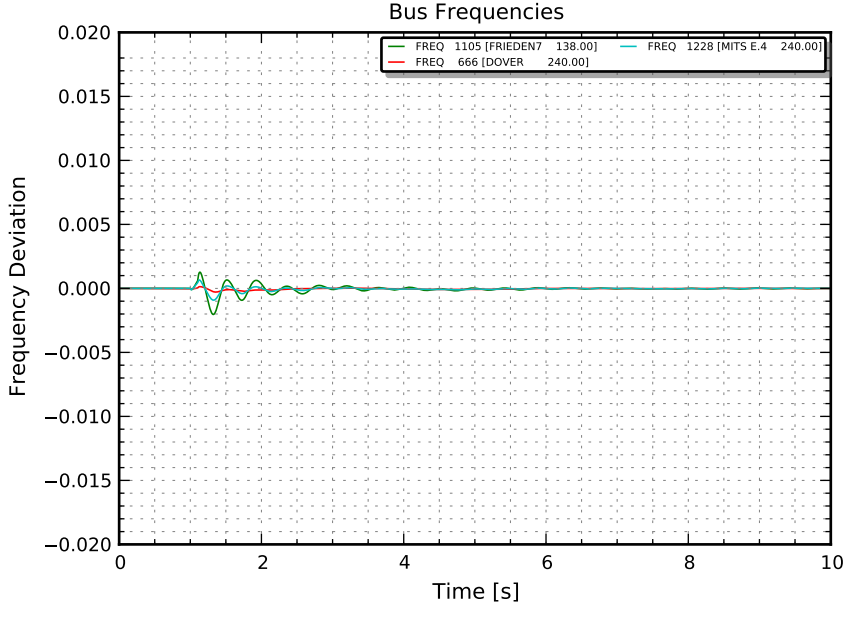
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 024 (A. 1)





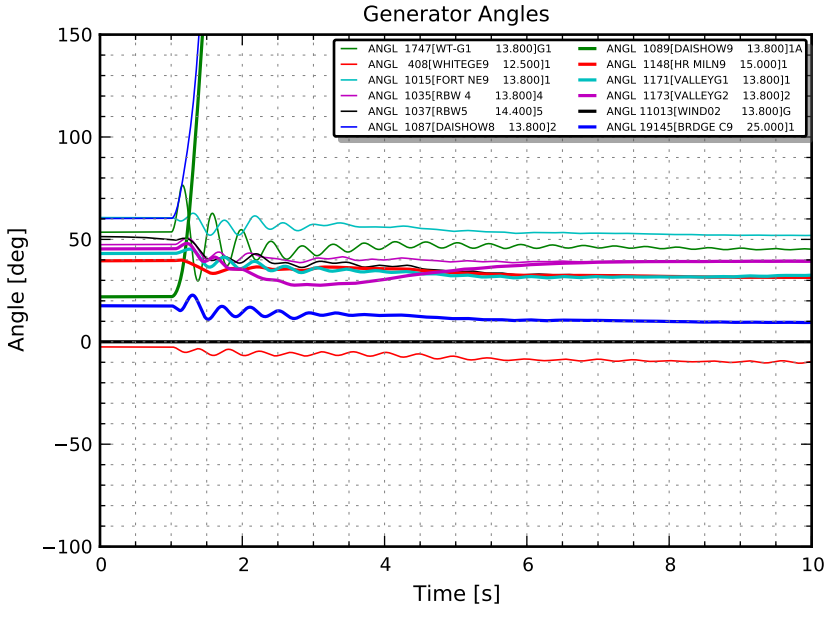


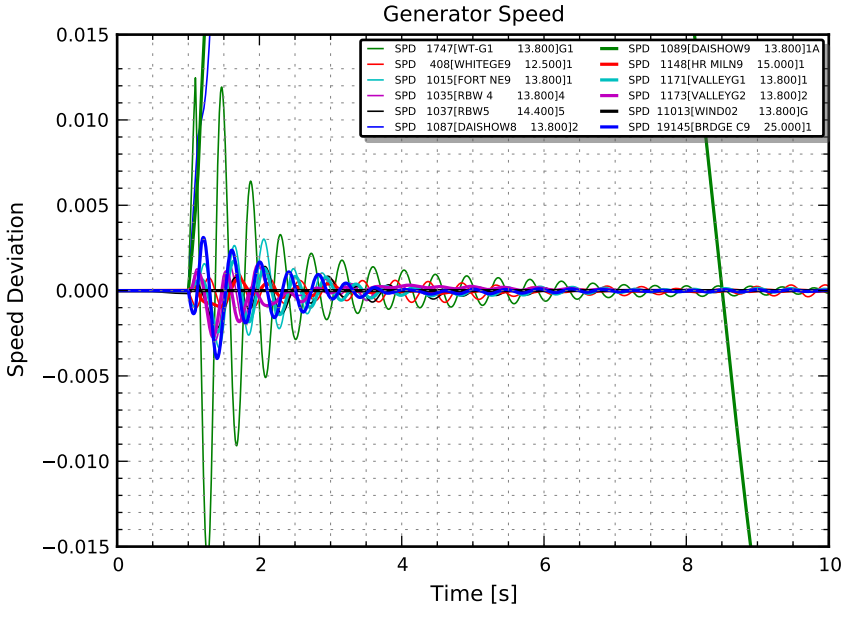


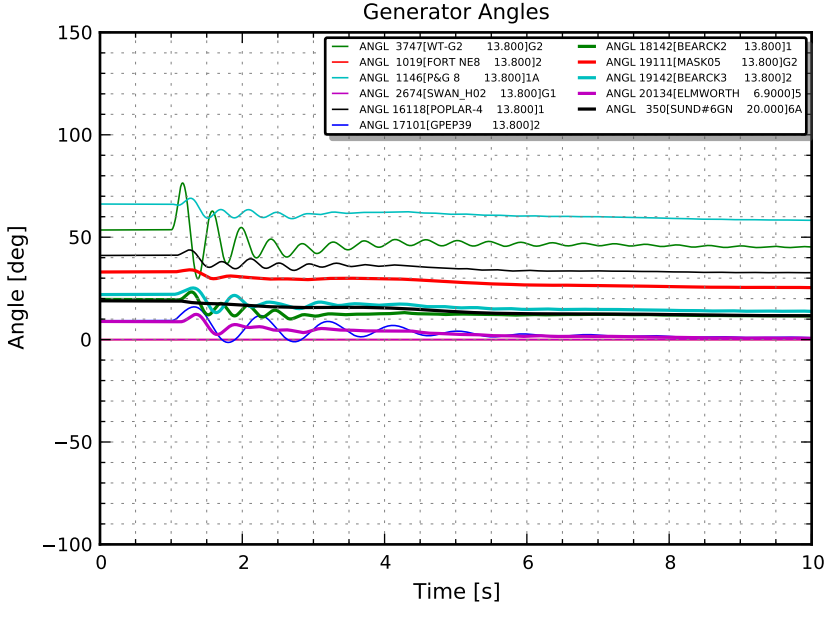
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 024 7L04 WESTPEACE to DAISHOWA_A.

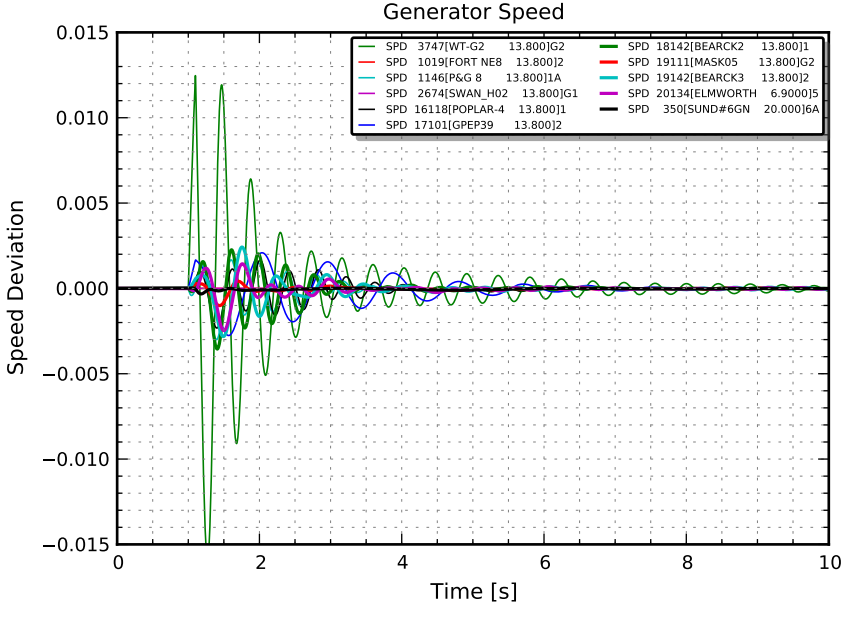
Study Area Generators

Appendix E2A
Figure: 024 (A. 2)





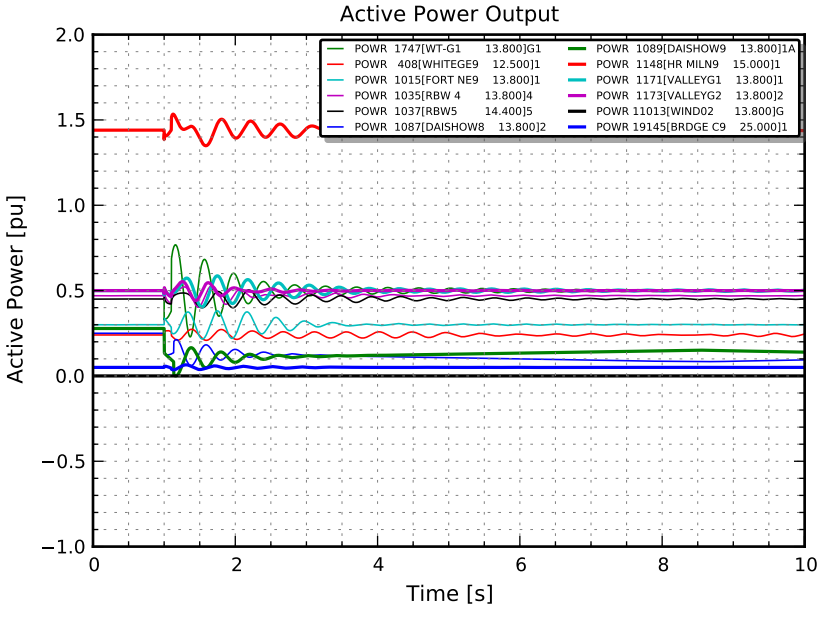


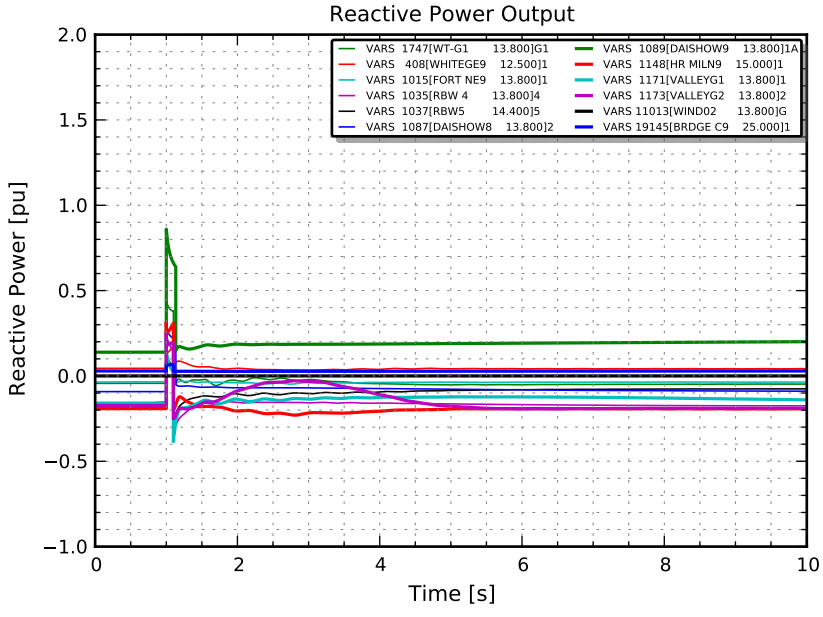


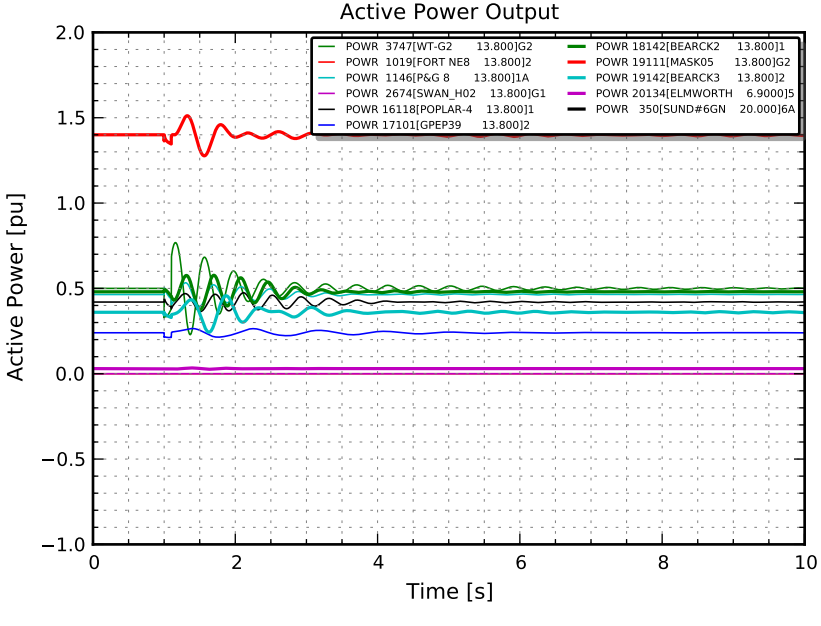
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 024 7L04 WESTPEACE to DAISHOWA_A.

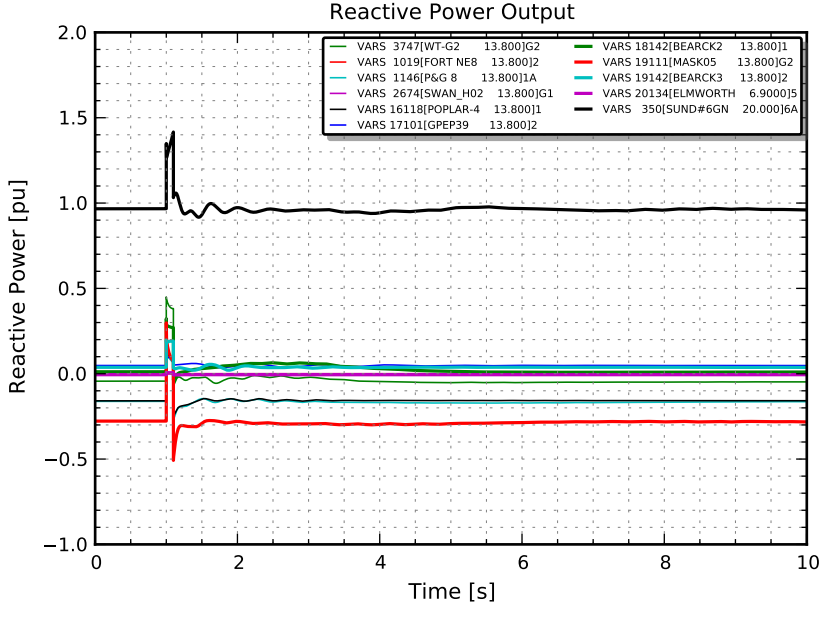
Study Area Generators

Appendix E2A
Figure: 024 (A. 3)





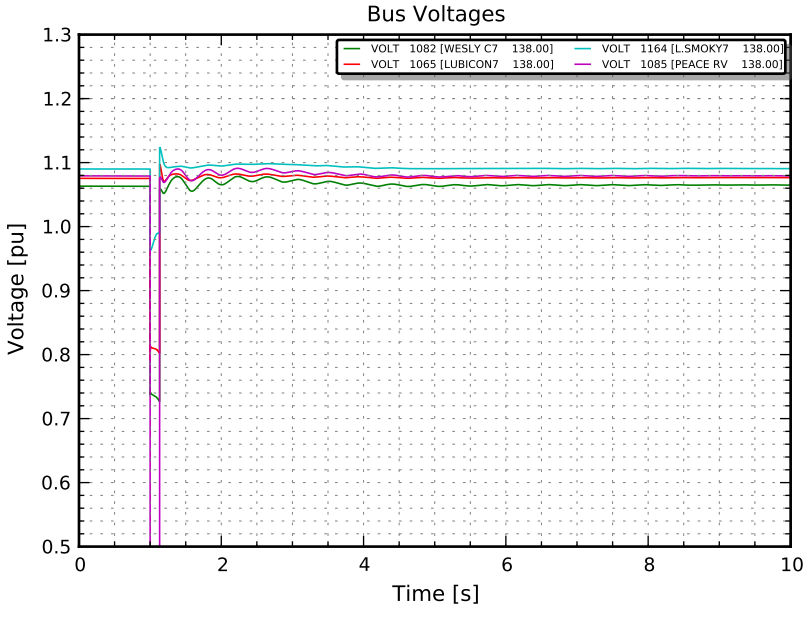


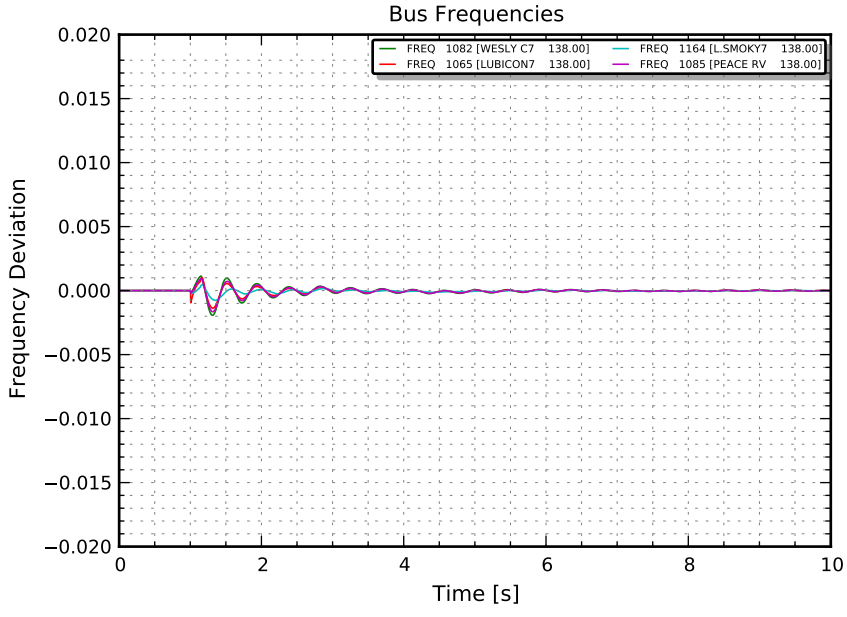


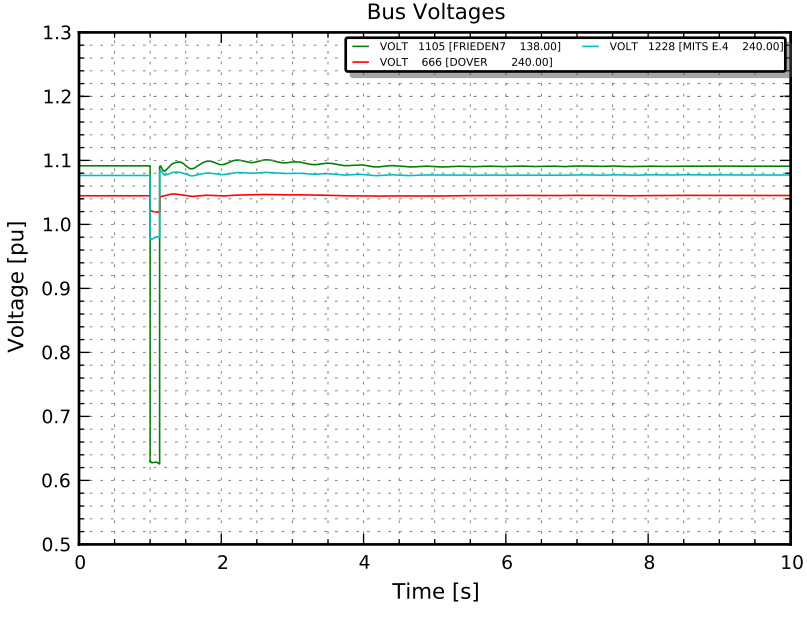
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 024 7L04 WESTPEACE to DAISHOWA_B.

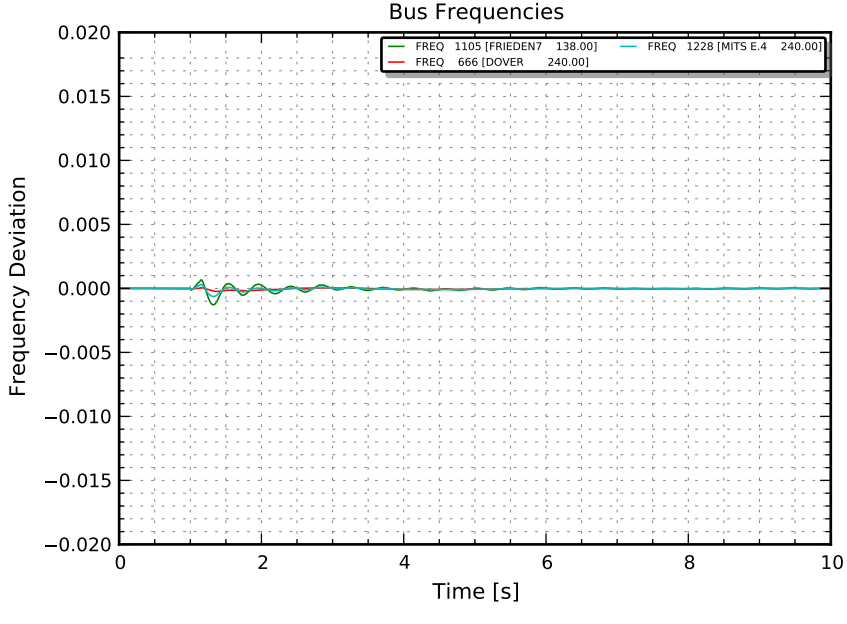
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 024 (B. 1)





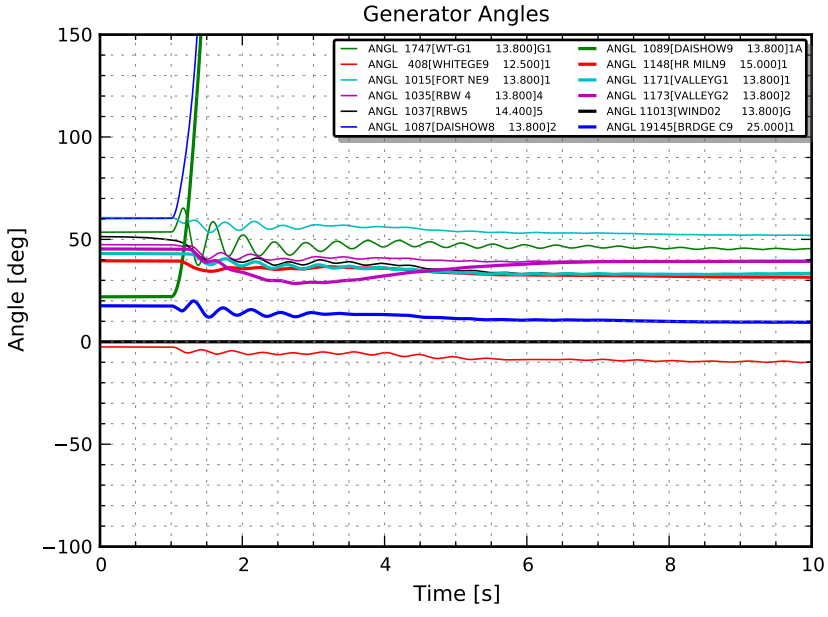


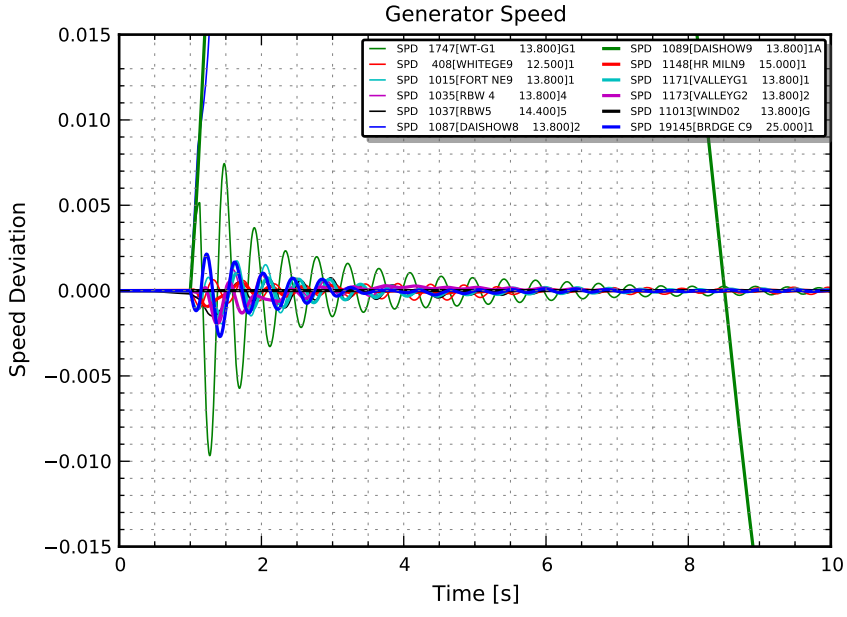


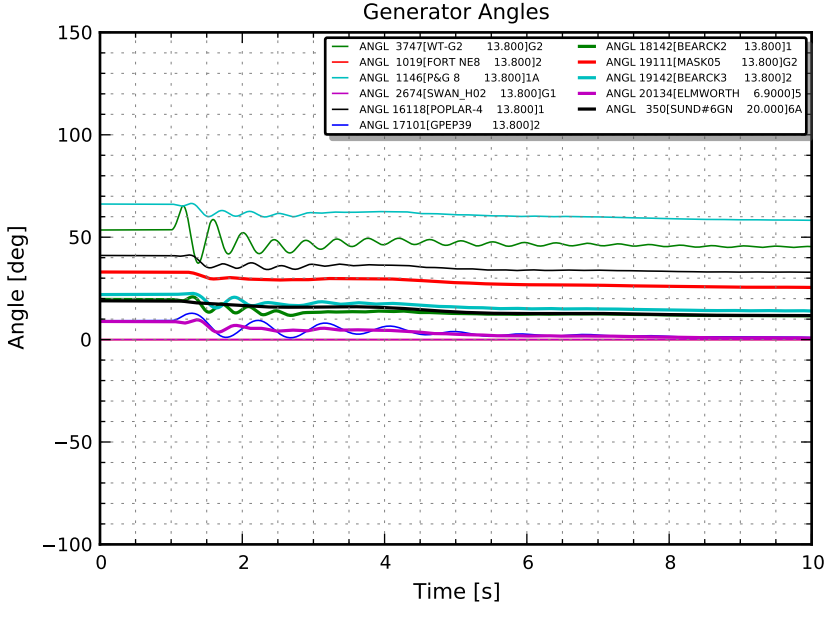
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 024 7L04 WESTPEACE to DAISHOWA_B.

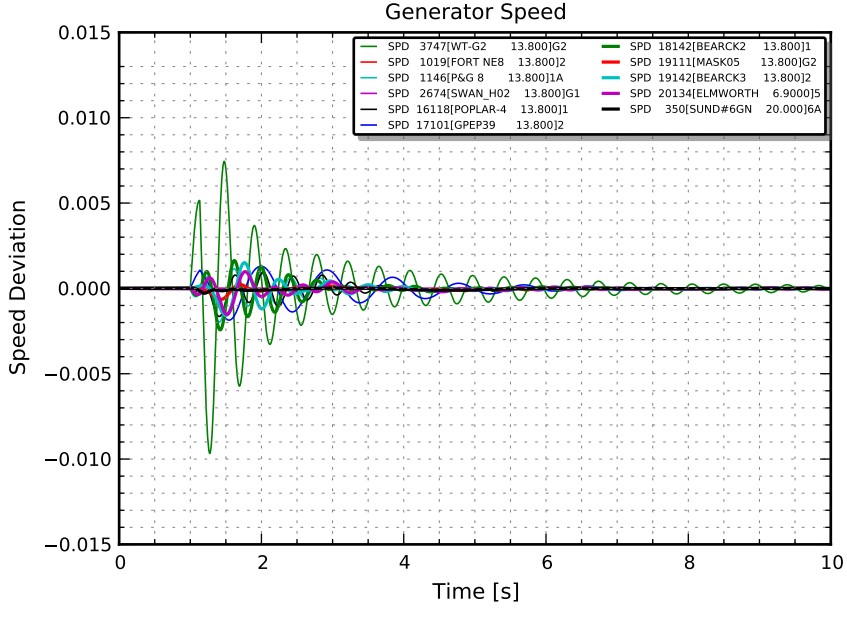
Study Area Generators

Appendix E2A
Figure: 024 (B. 2)





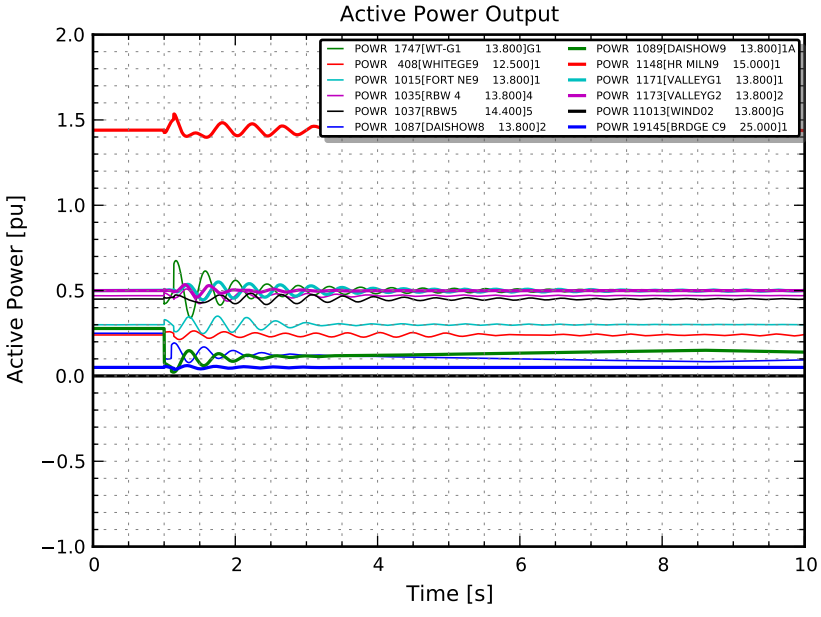


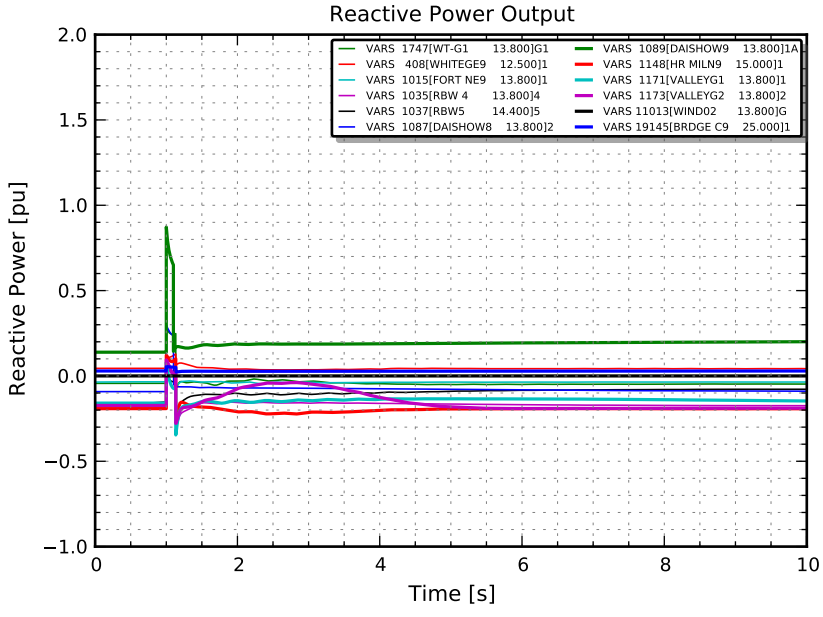


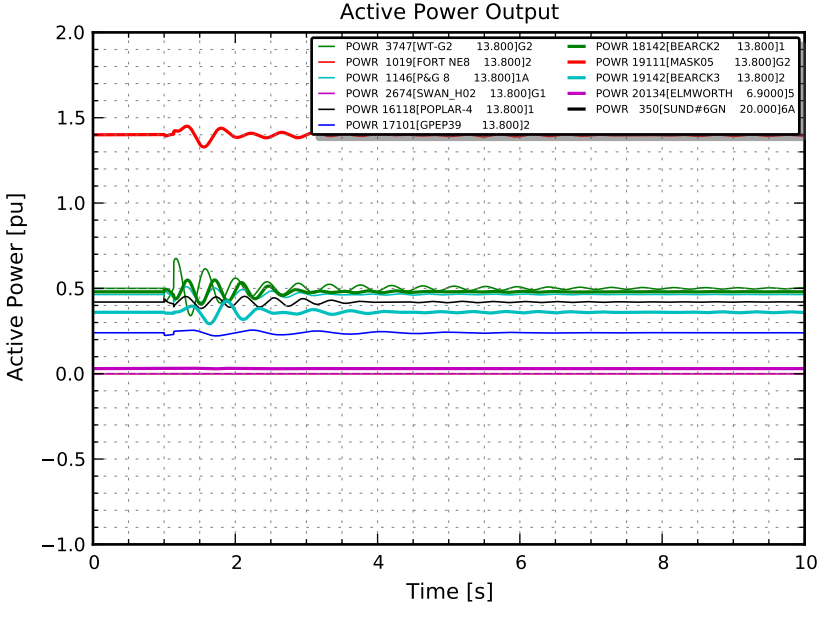
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 024 7L04 WESTPEACE to DAISHOWA_B.

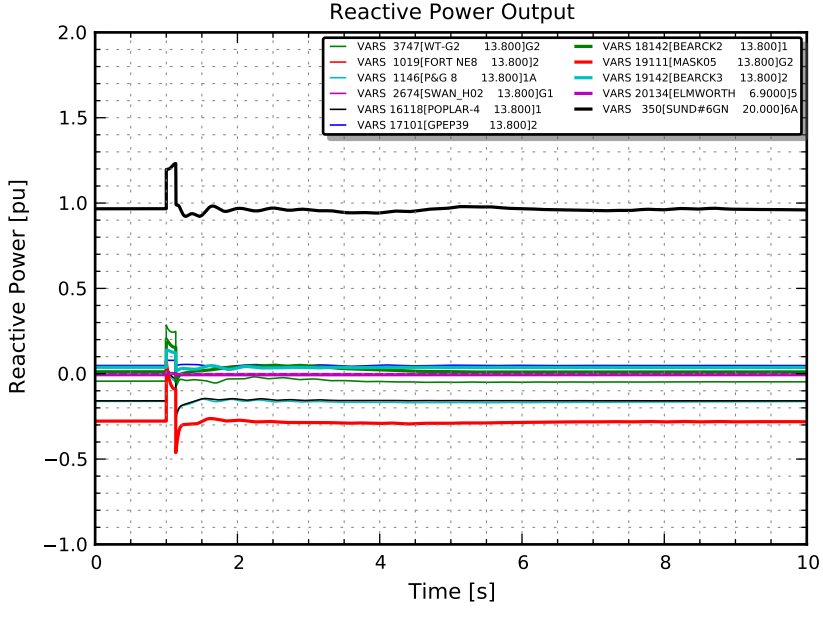
Study Area Generators

Appendix E2A
Figure: 024 (B. 3)





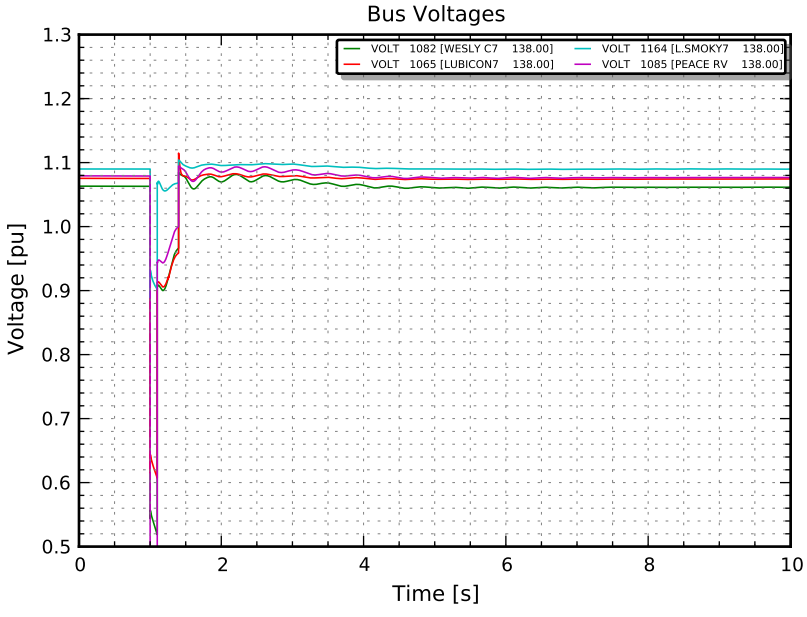


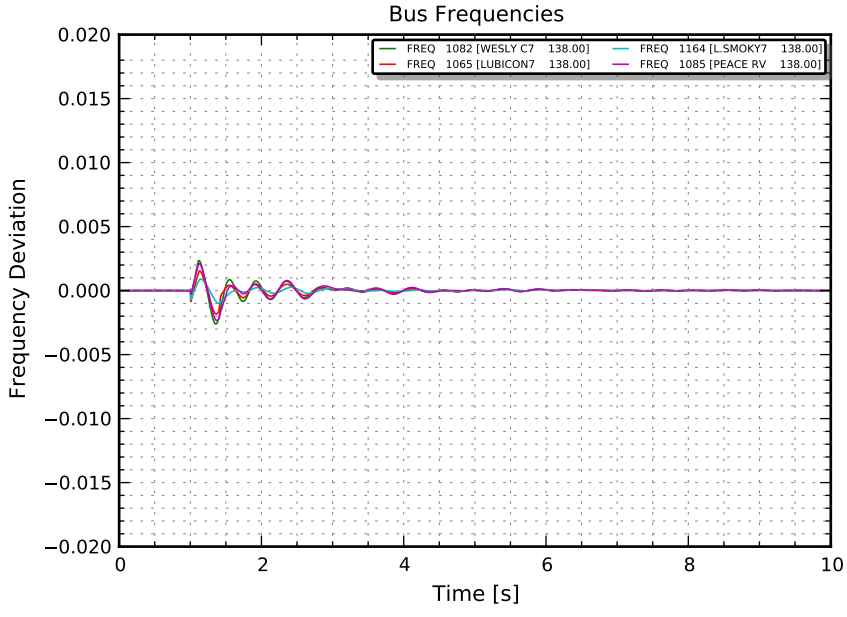


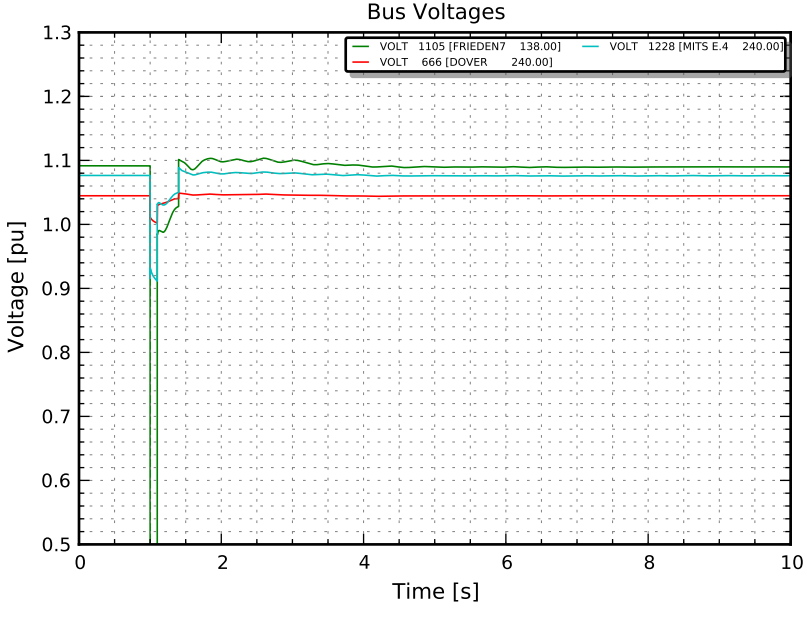
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 025 7L51 WESTPEACE to HOTCHKISS_A.

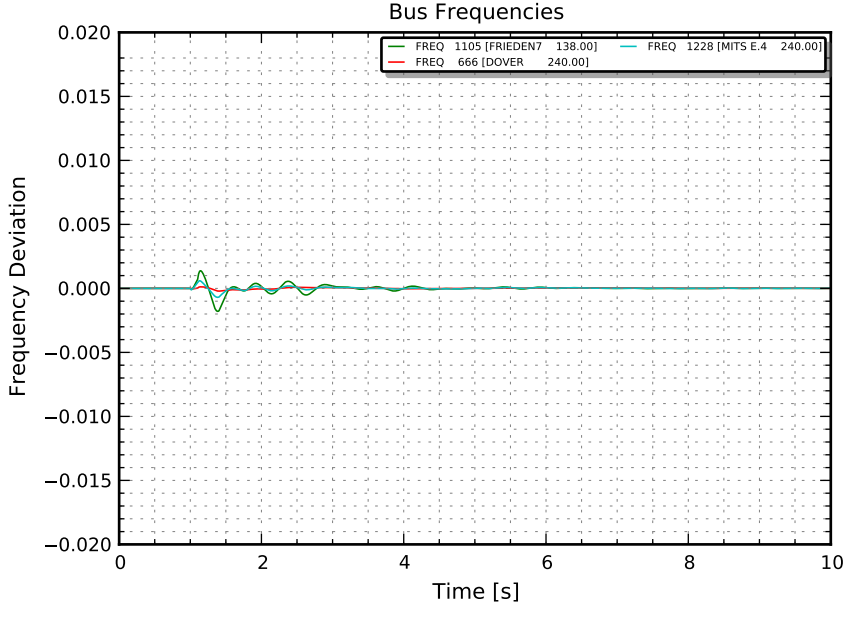
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 025 (A. 1)





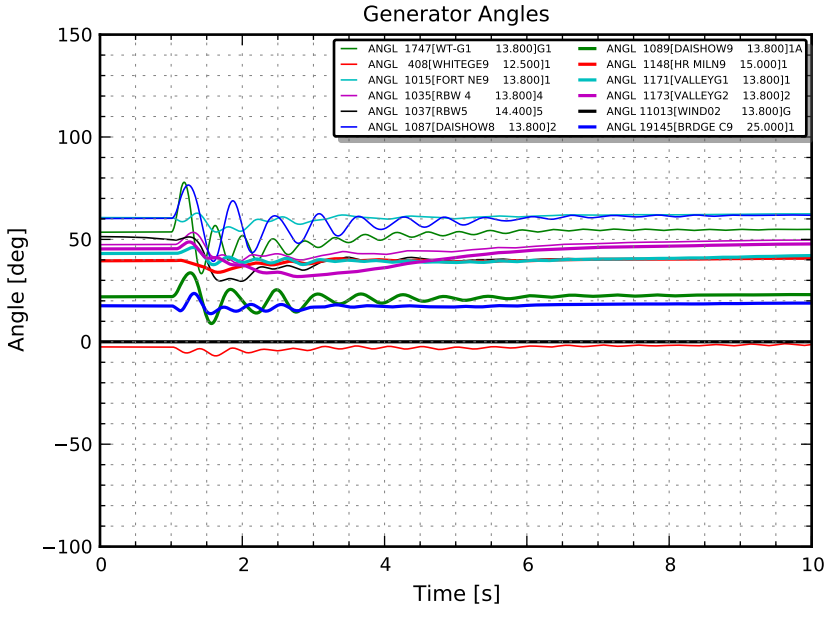


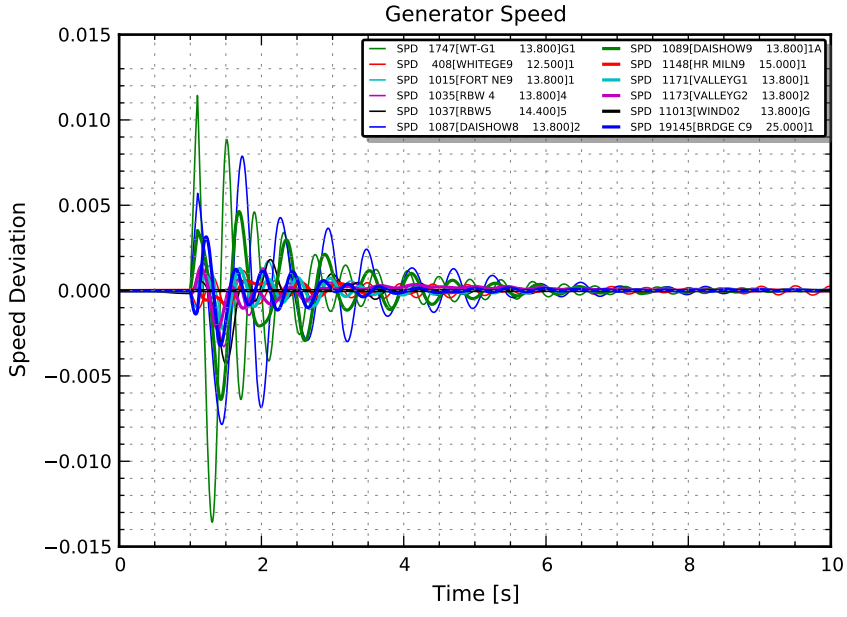


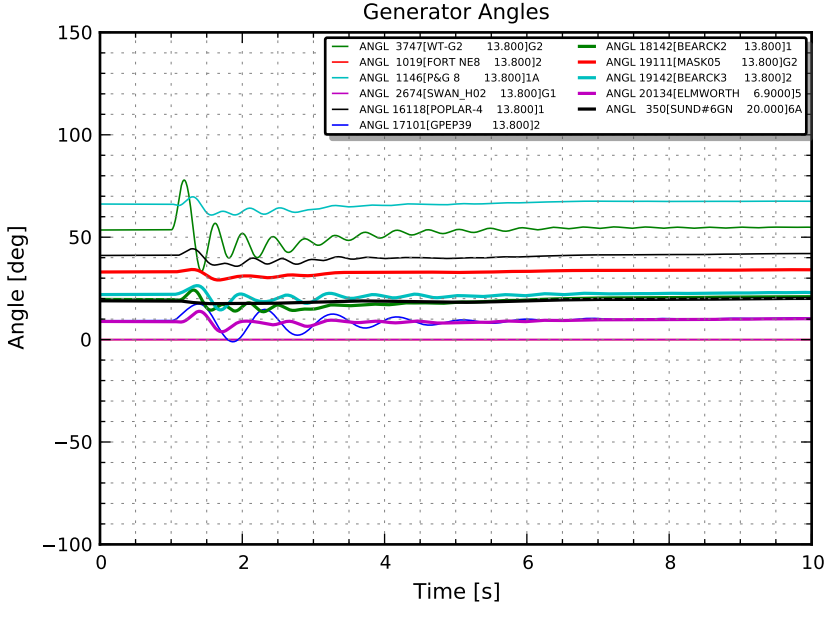
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 025 7L51 WESTPEACE to HOTCHKISS_A.

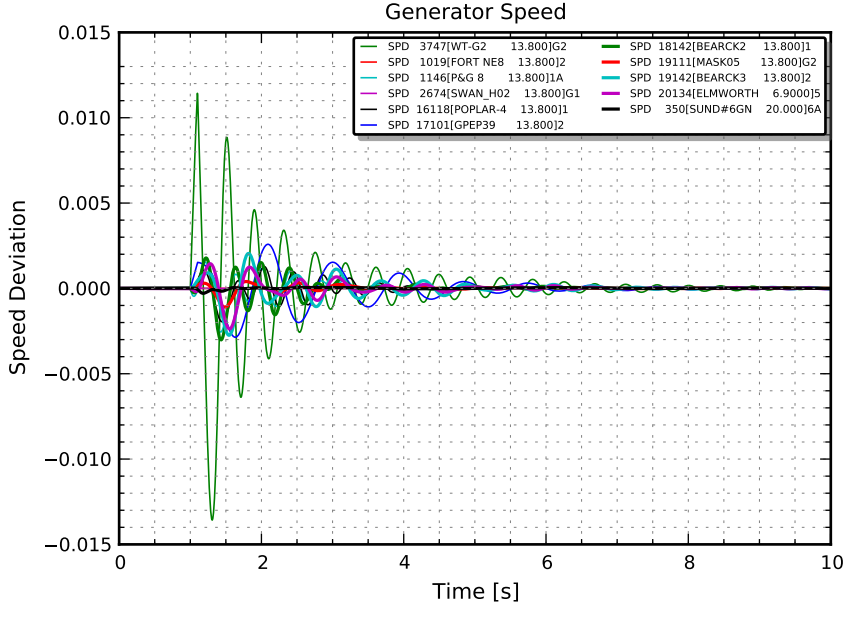
Study Area Generators

Appendix E2A
Figure: 025 (A. 2)





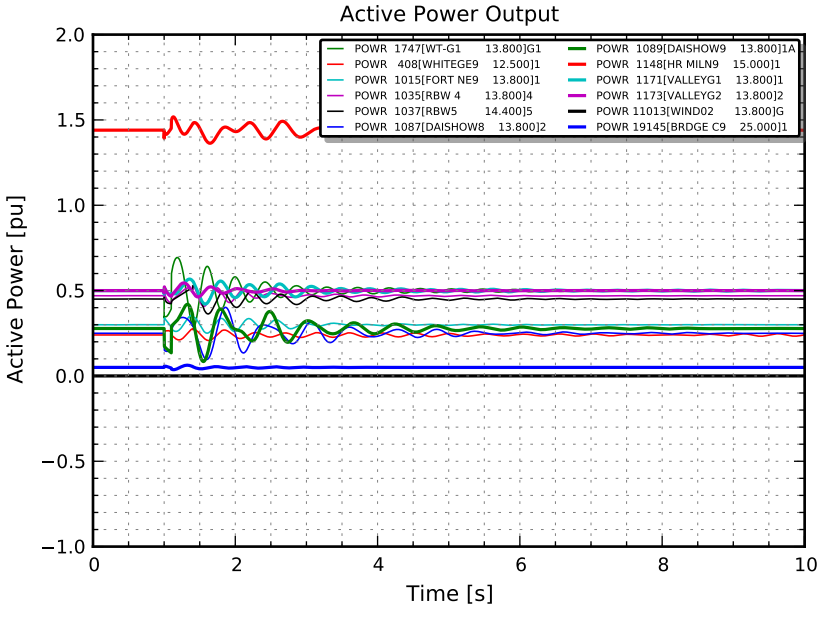


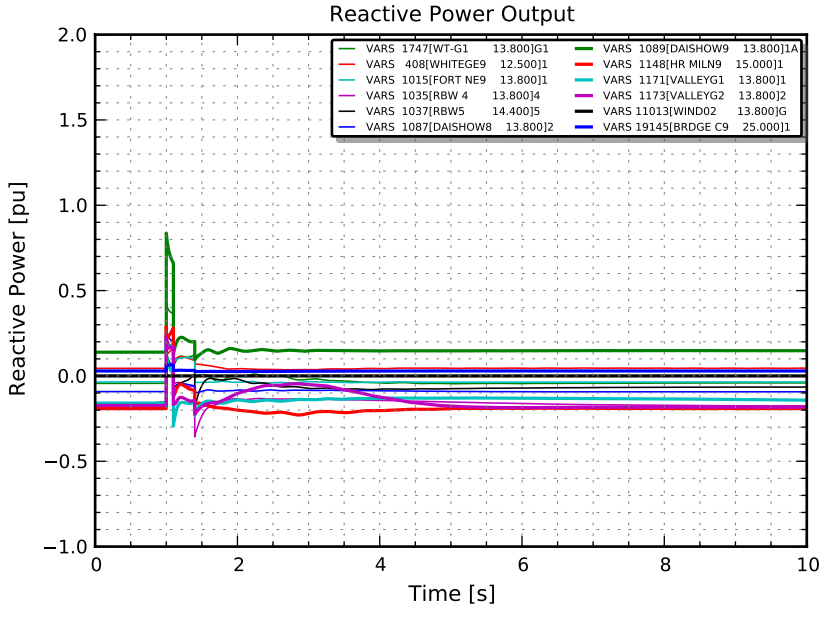


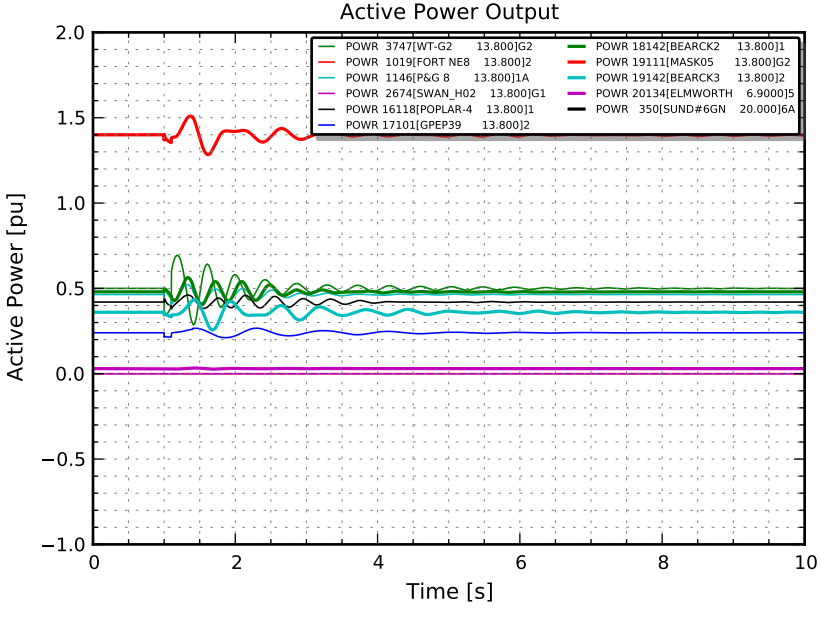
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 025 7L51 WESTPEACE to HOTCHKISS_A.

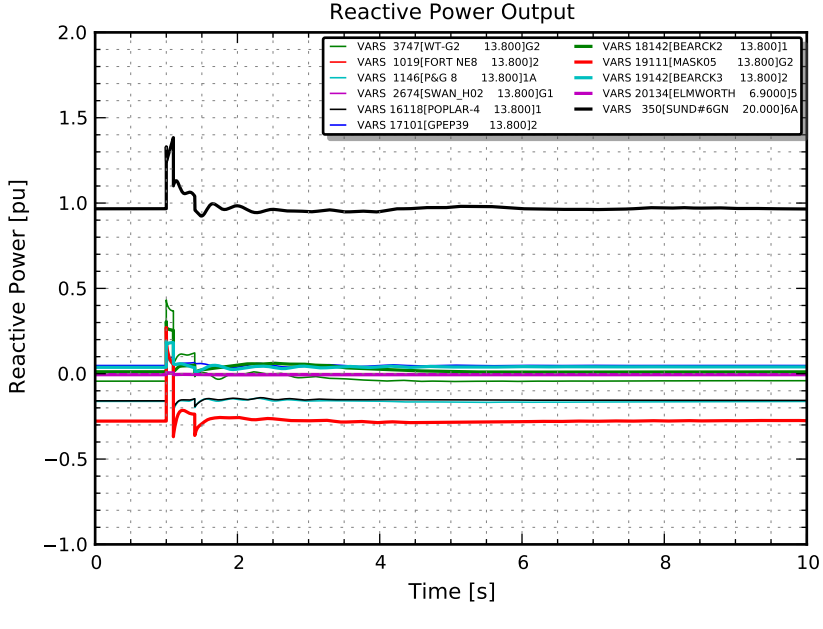
Study Area Generators

Appendix E2A
Figure: 025 (A. 3)





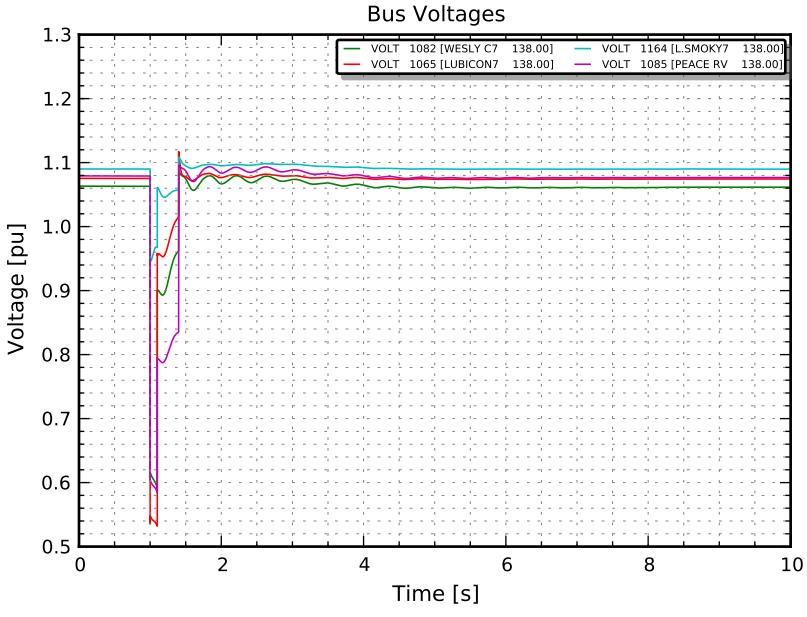


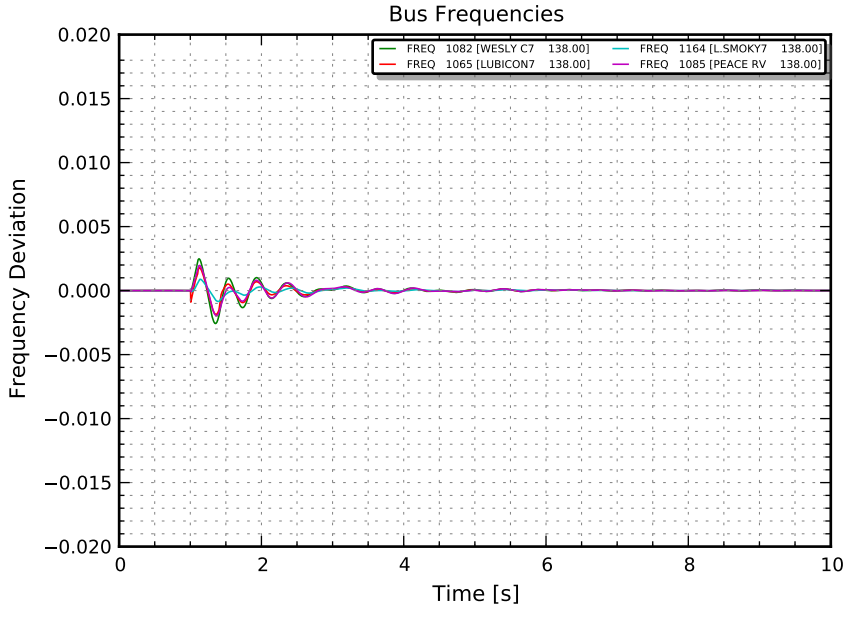


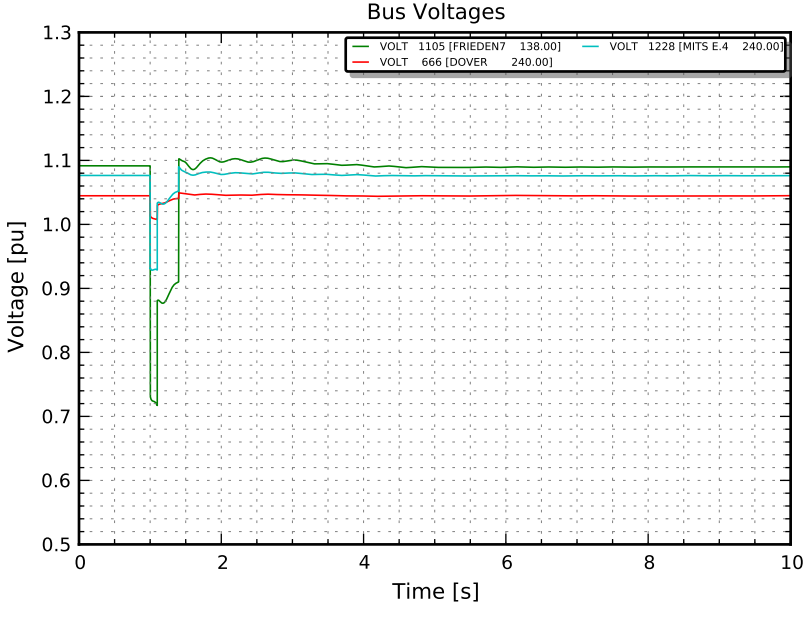
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 025 7L51 WESTPEACE to HOTCHKISS_B.

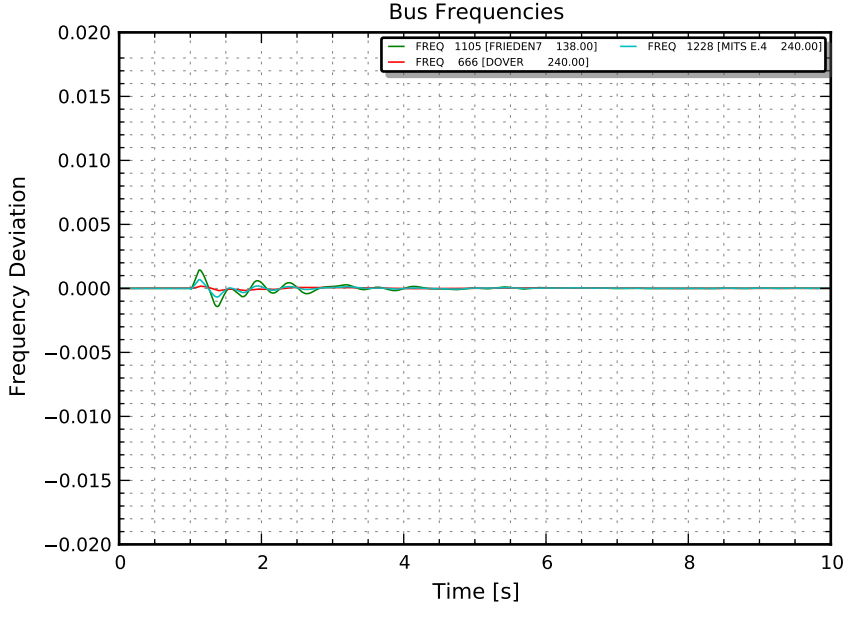
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 025 (B. 1)





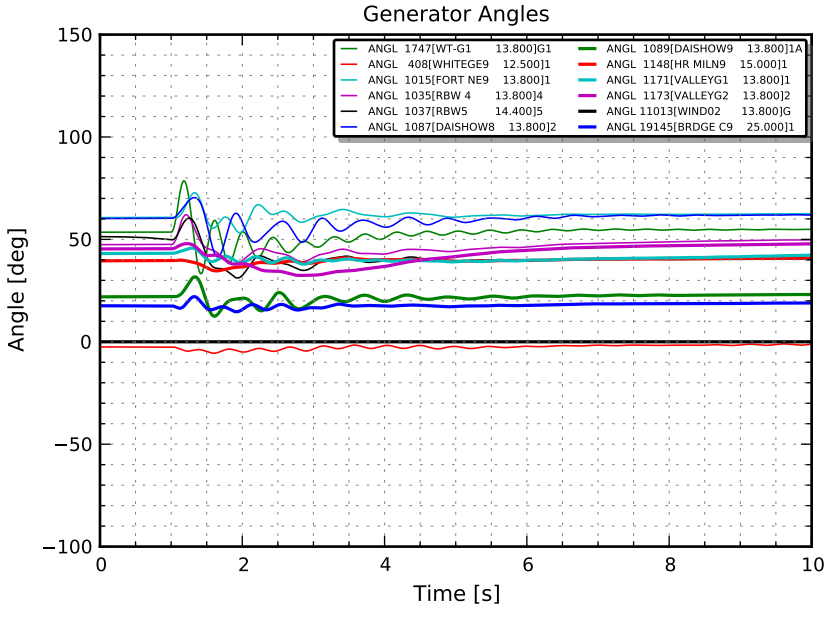


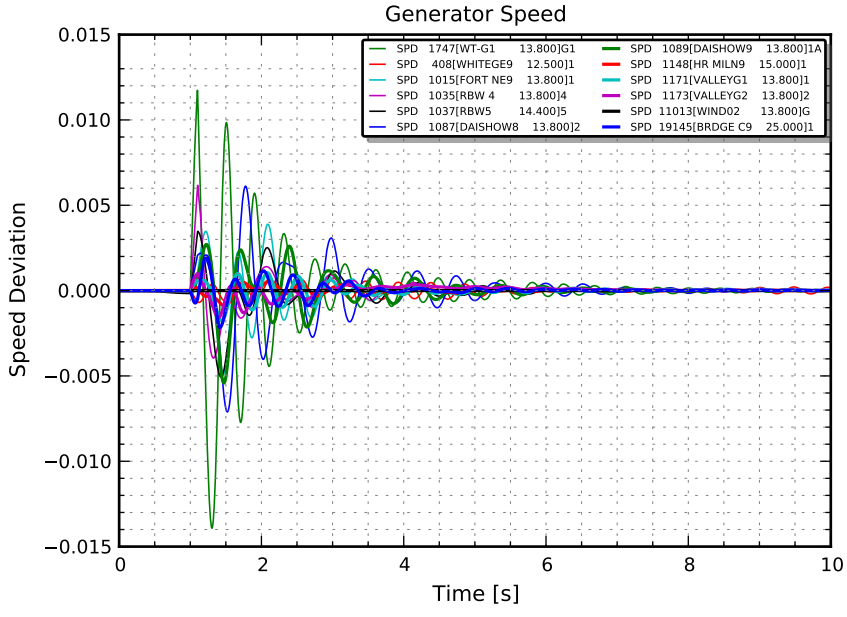


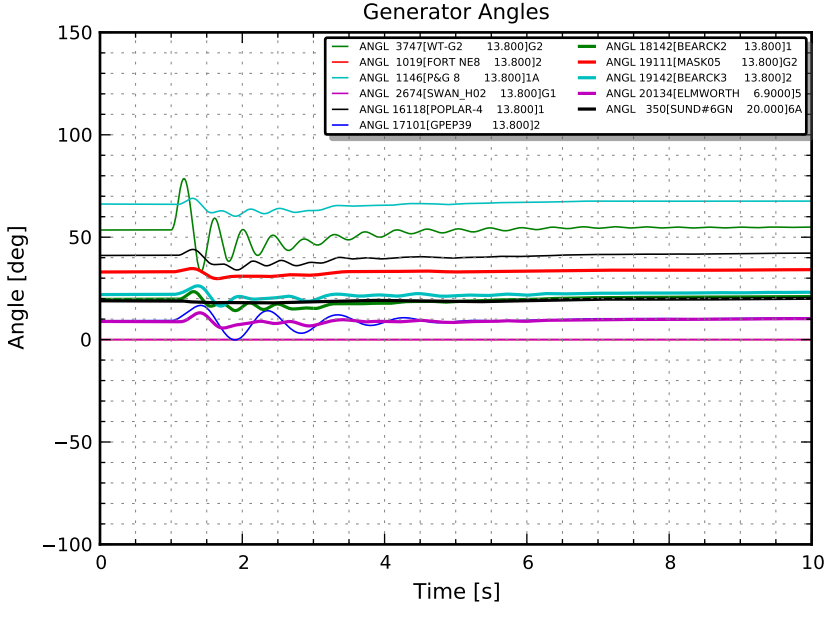
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 025 7L51 WESTPEACE to HOTCHKISS_B.

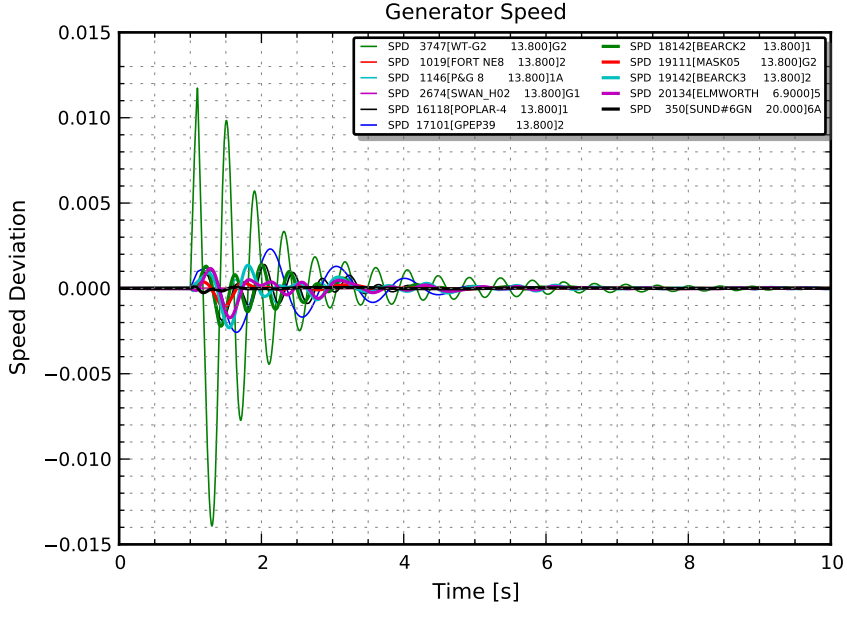
Study Area Generators

Appendix E2A
Figure: 025 (B. 2)





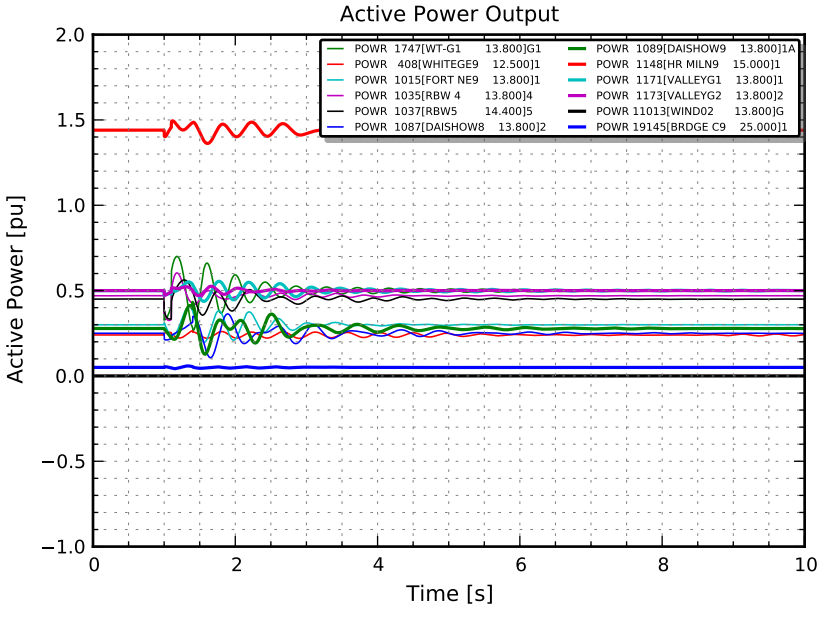


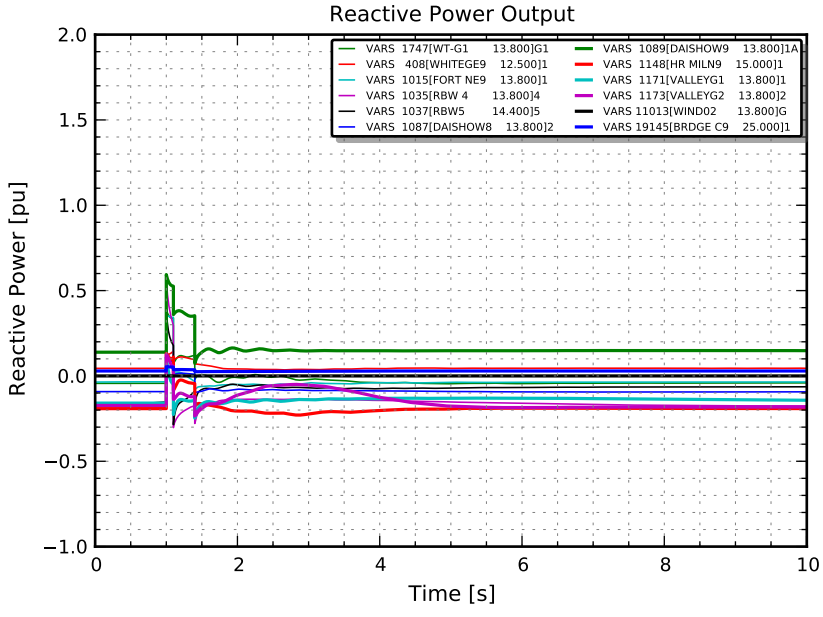


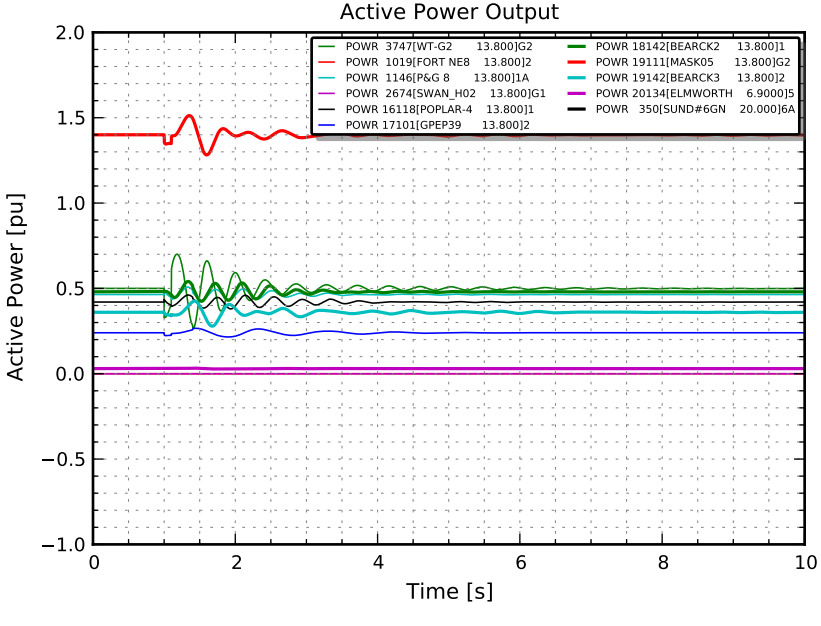
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 025 7L51 WESTPEACE to HOTCHKISS_B.

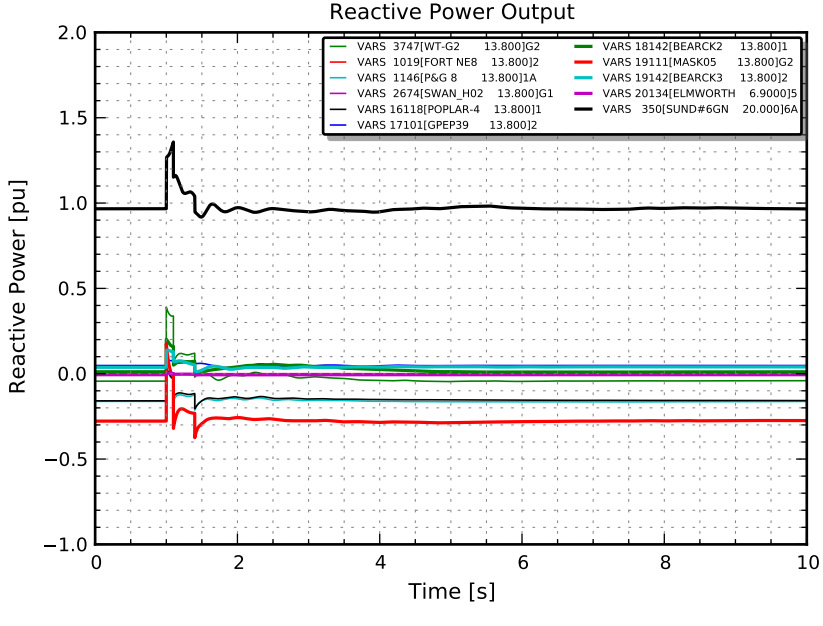
Study Area Generators

Appendix E2A
Figure: 025 (B. 3)





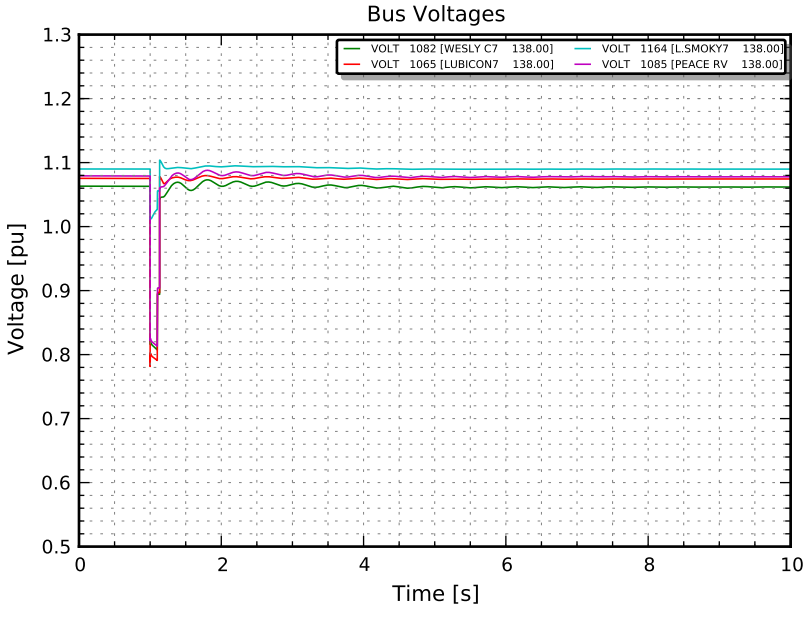


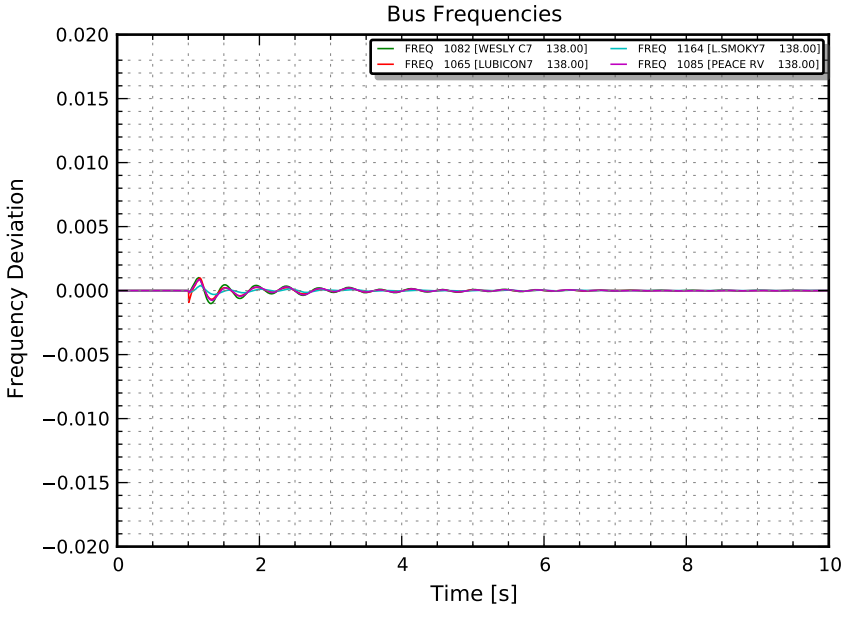


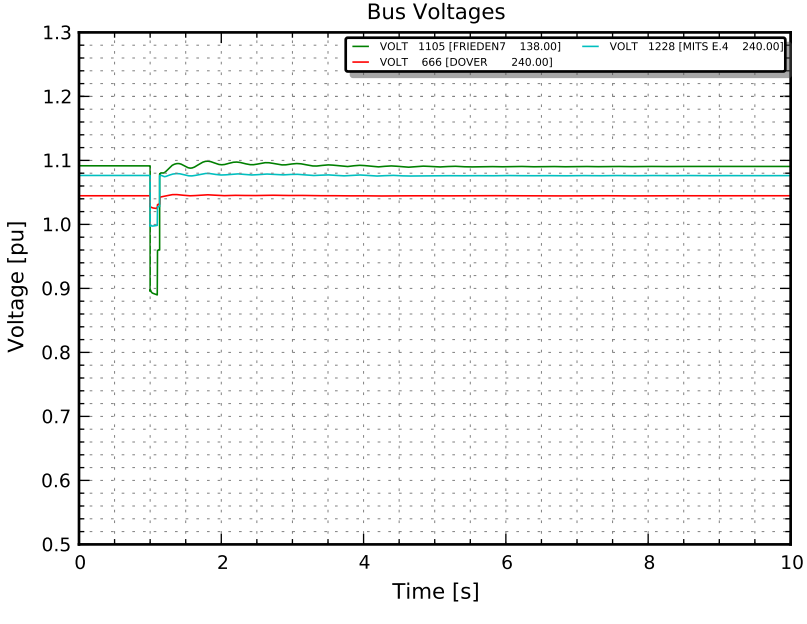
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 026 7L58 KEGRIVER to Meikle_A.

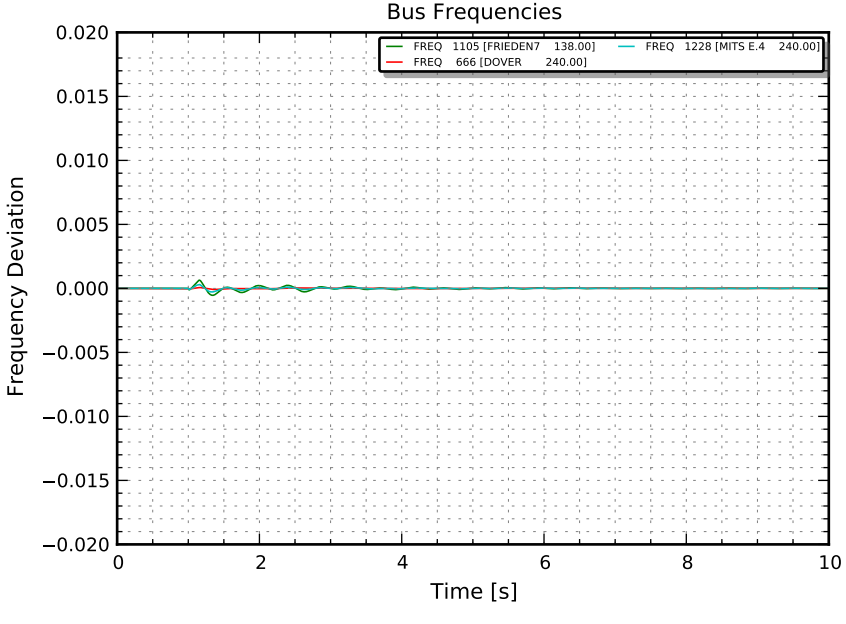
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 026 (A. 1)





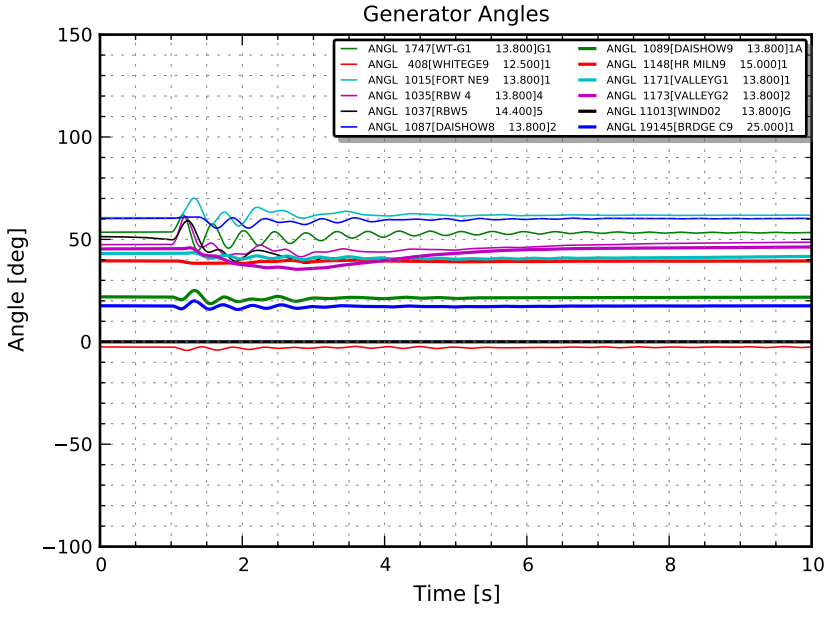


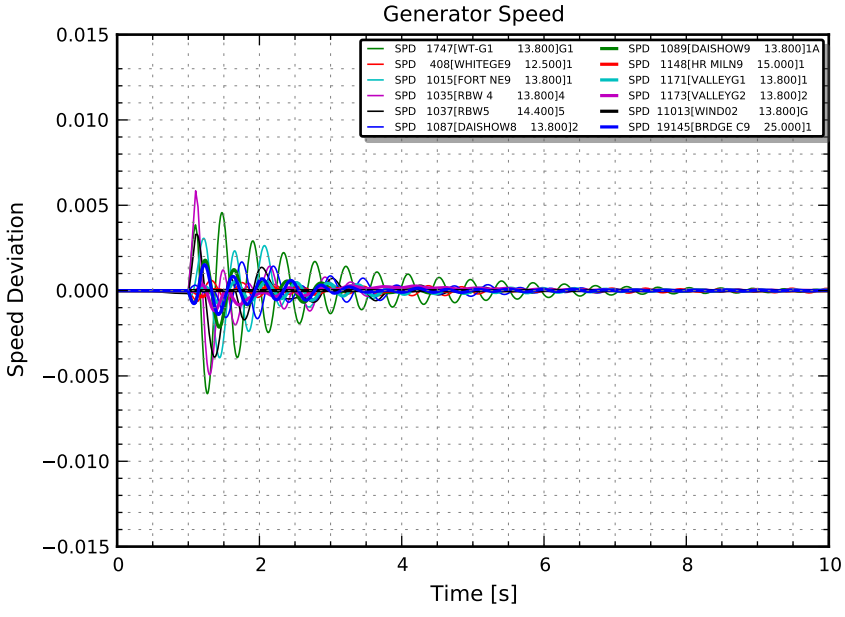


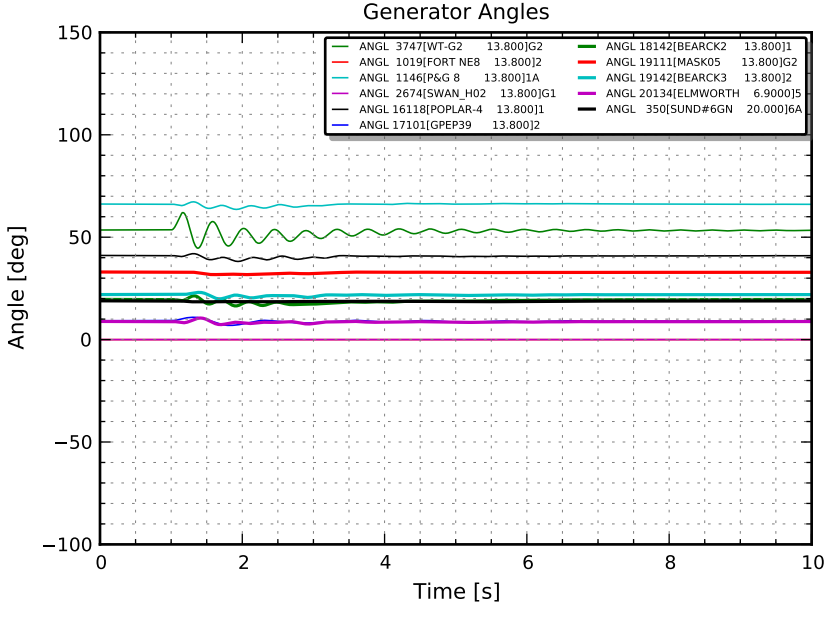
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 026 7L58 KEGRIVER to Meikle_A.

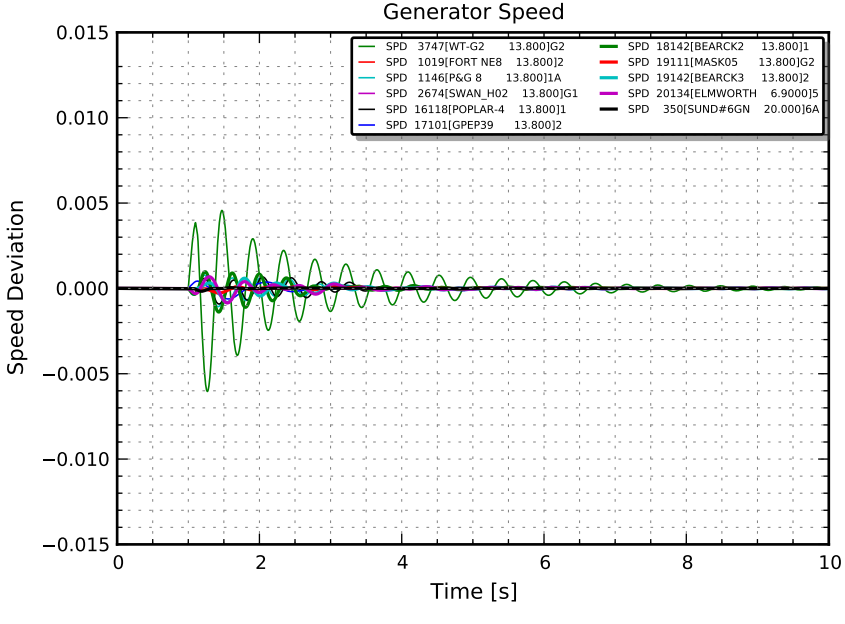
Study Area Generators

Appendix E2A
Figure: 026 (A. 2)





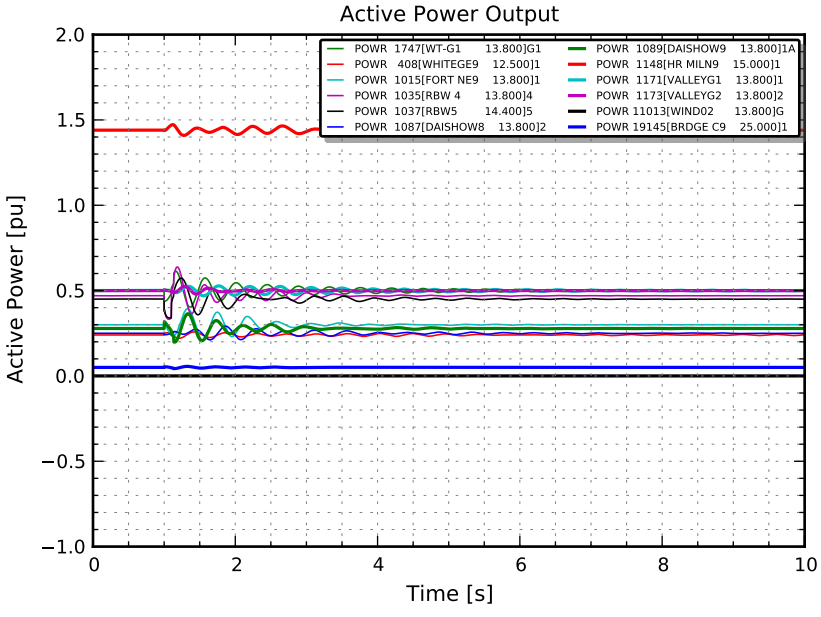


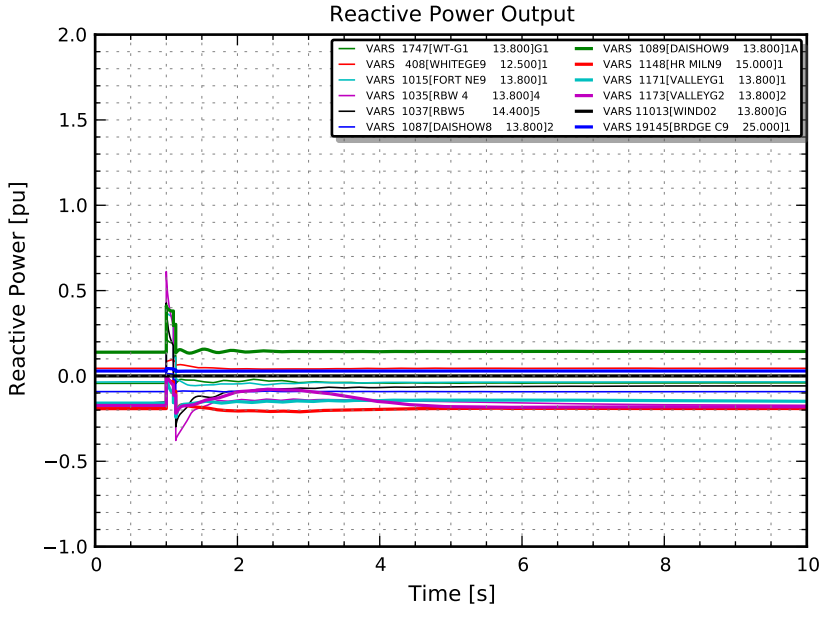


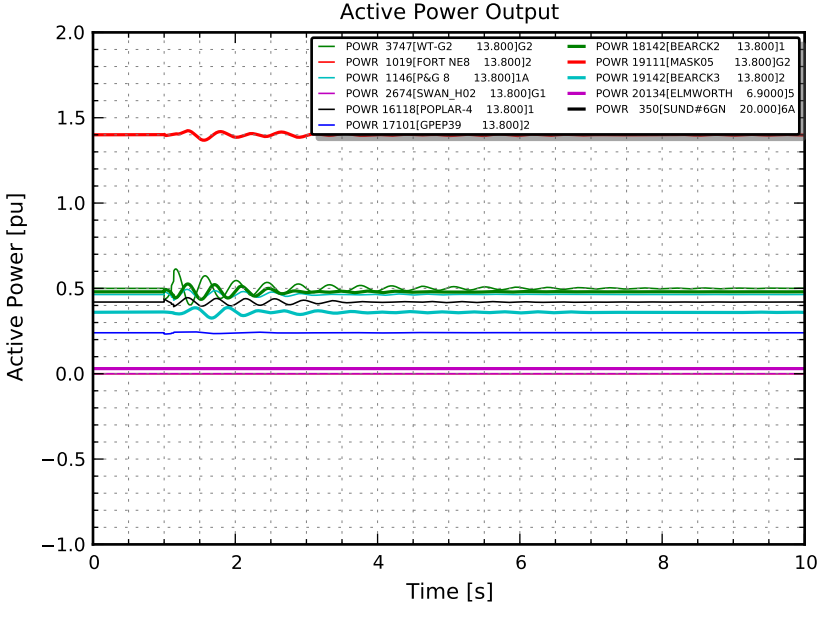
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 026 7L58 KEGRIVER to Meikle_A.

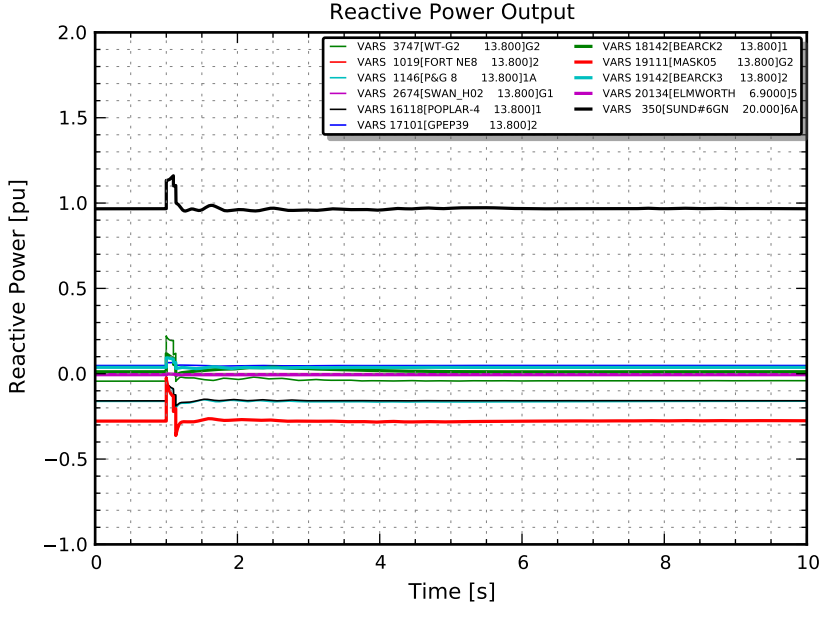
Study Area Generators

Appendix E2A
Figure: 026 (A. 3)





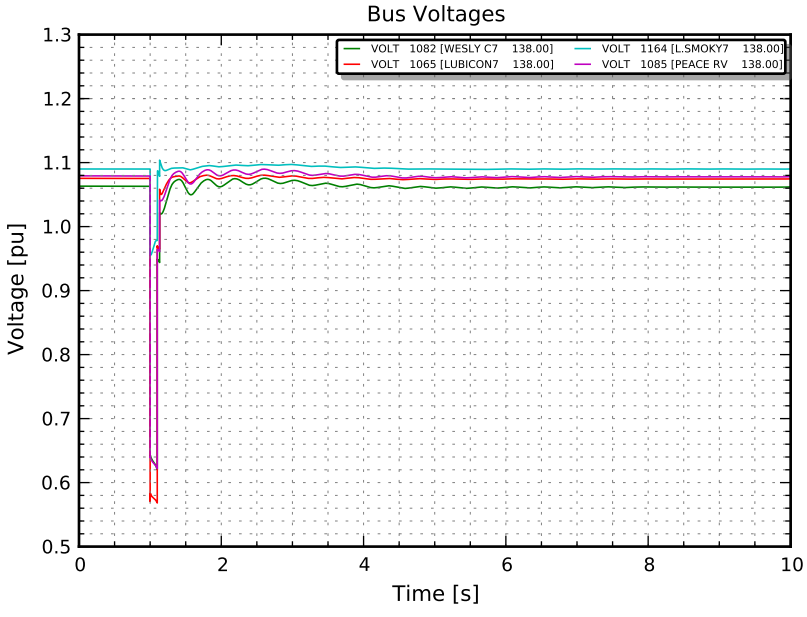


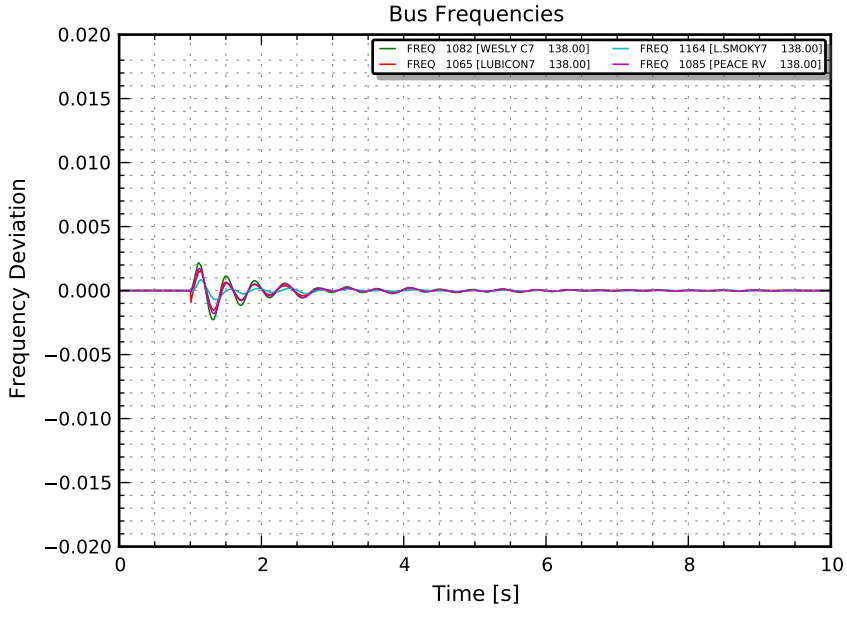


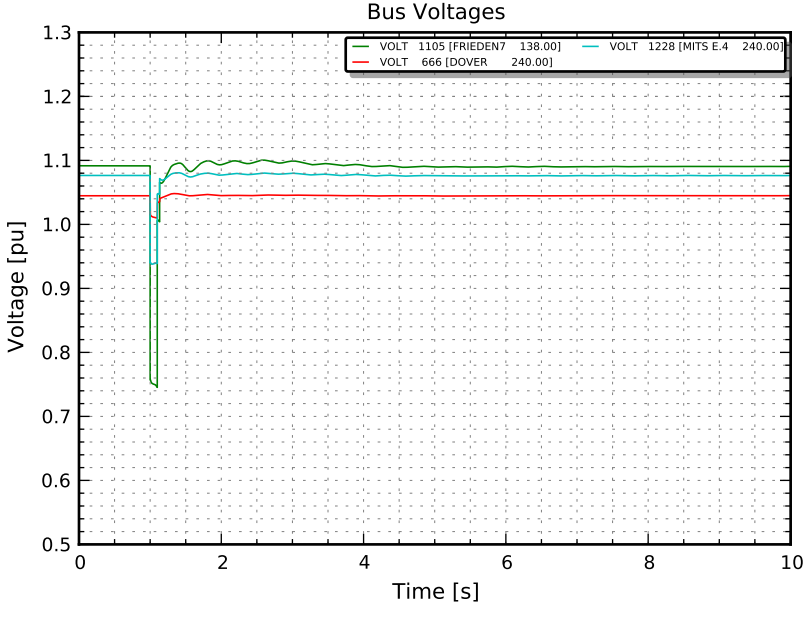
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 026 7L58 KEGRIVER to Meikle_B.

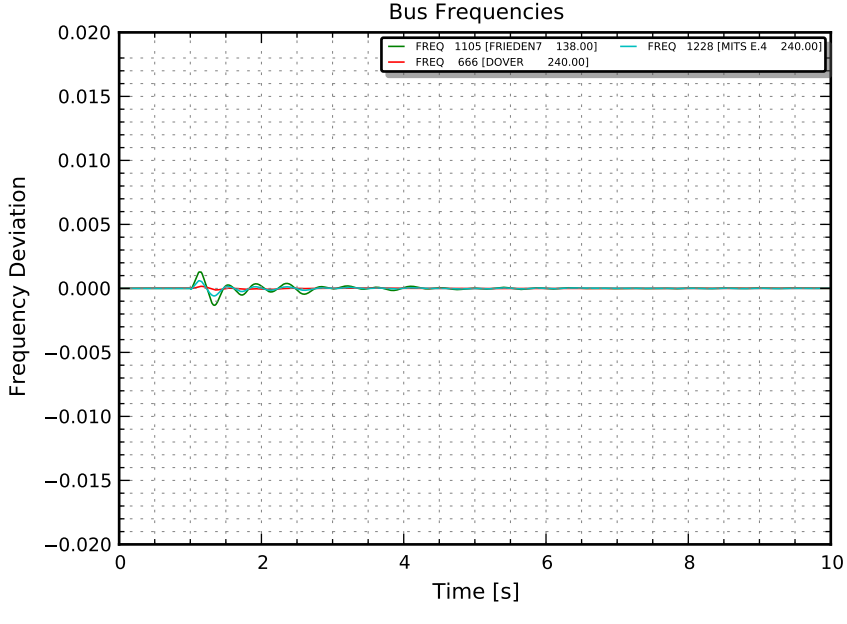
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 026 (B. 1)





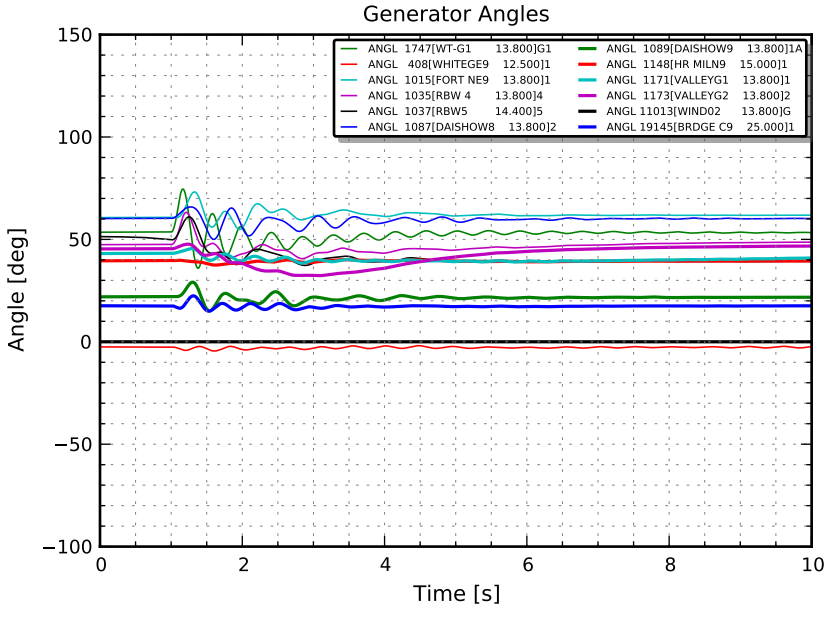


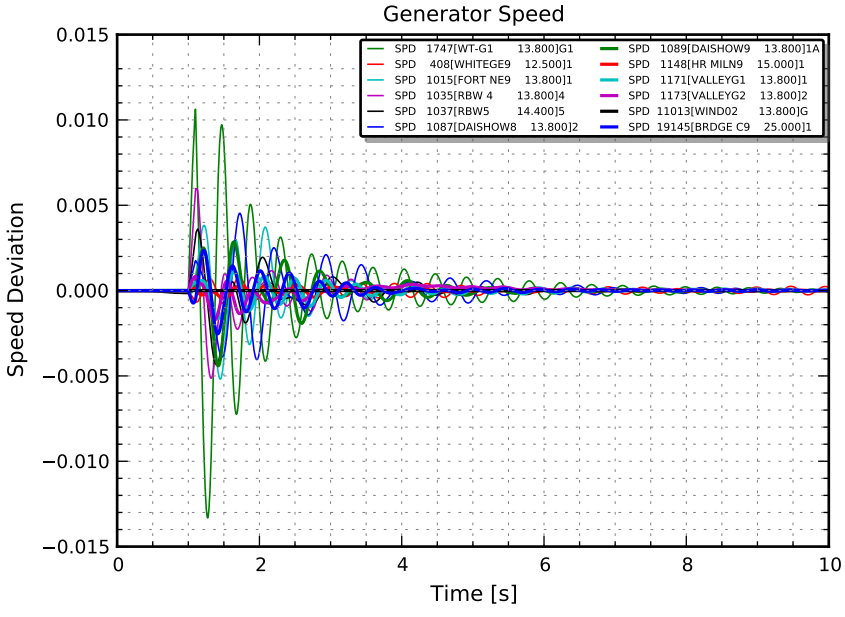


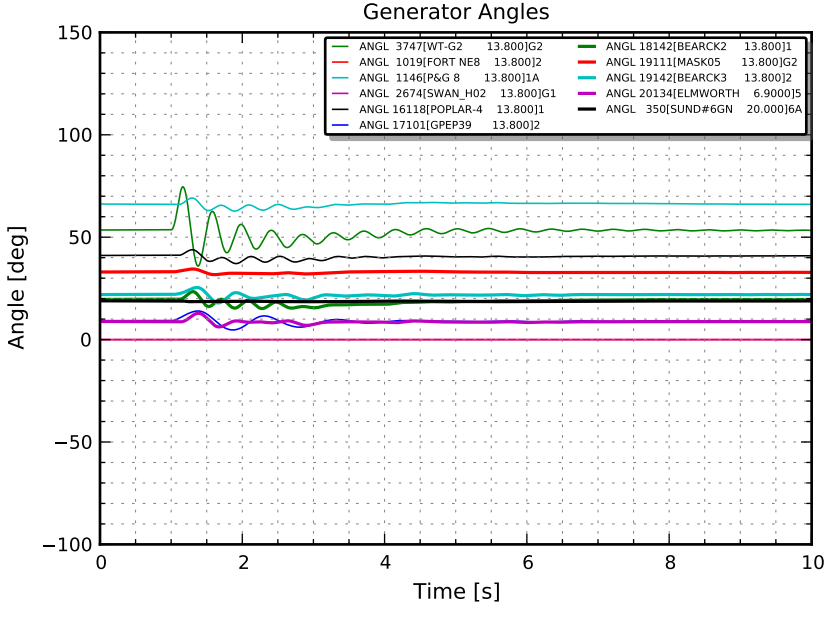
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 026 7L58 KEGRIVER to Meikle_B.

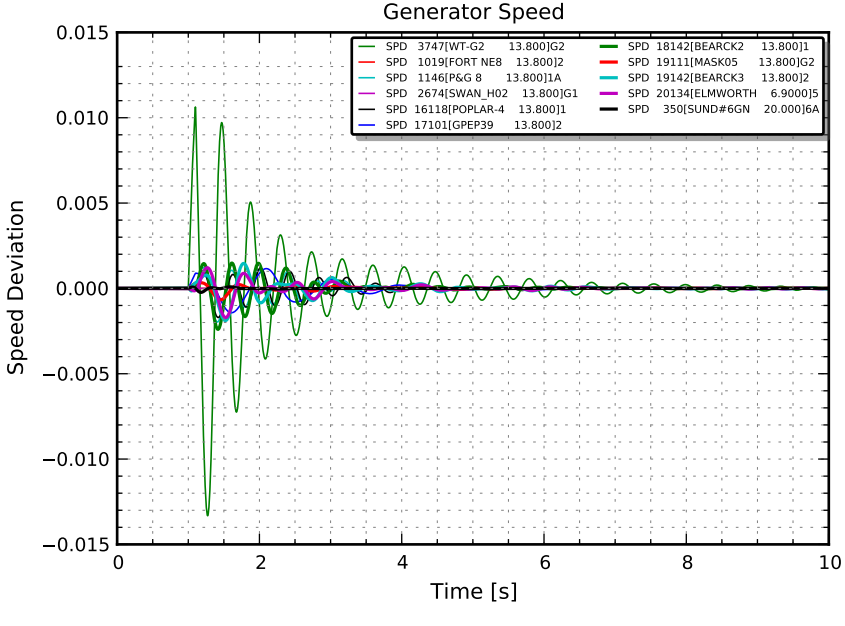
Study Area Generators

Appendix E2A
Figure: 026 (B. 2)





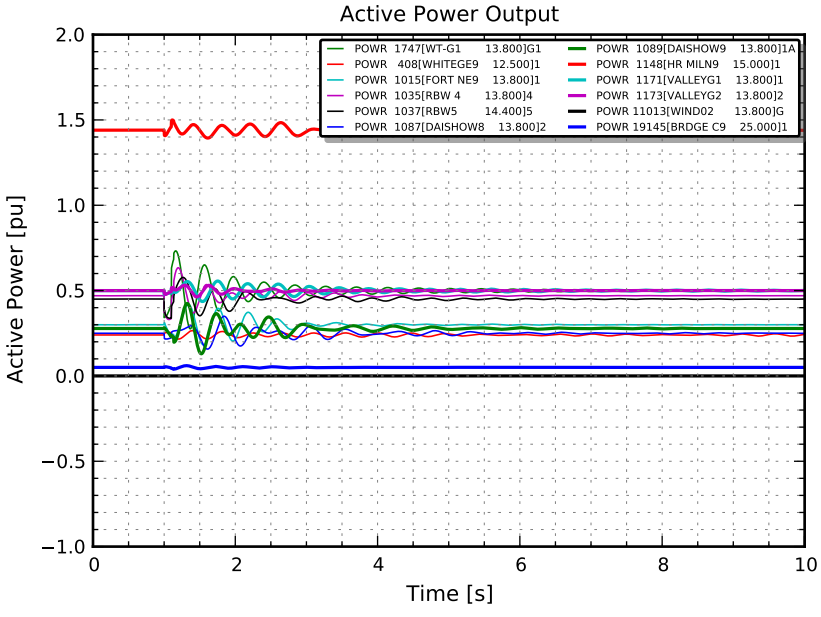


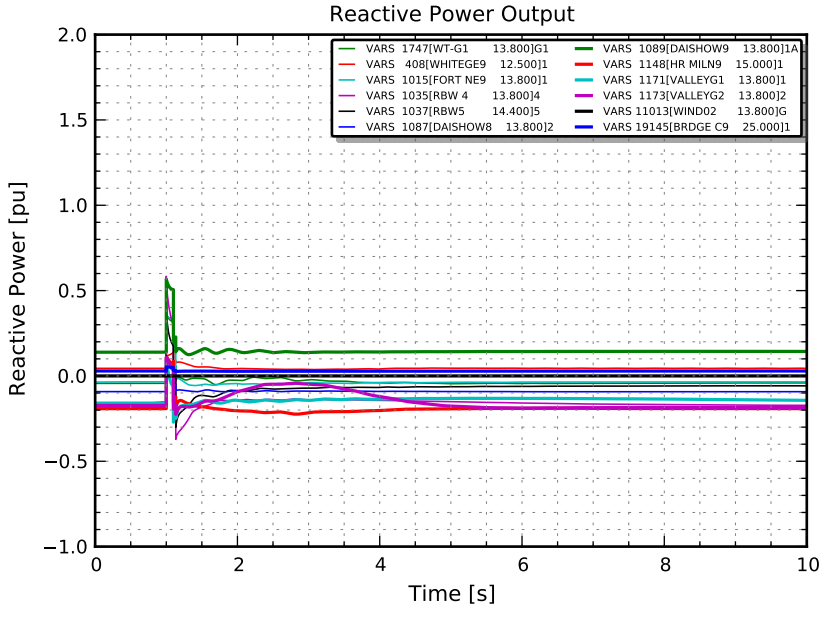


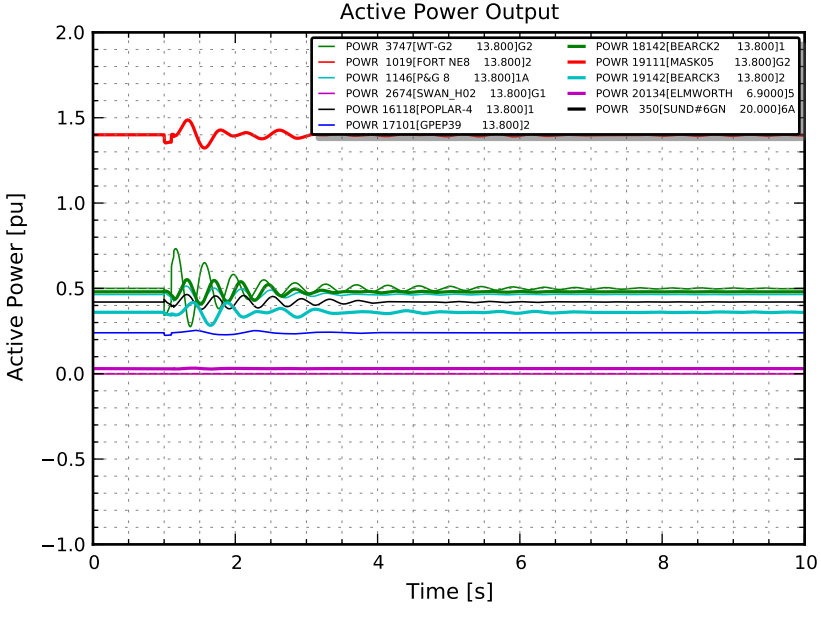
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 026 7L58 KEGRIVER to Meikle_B.

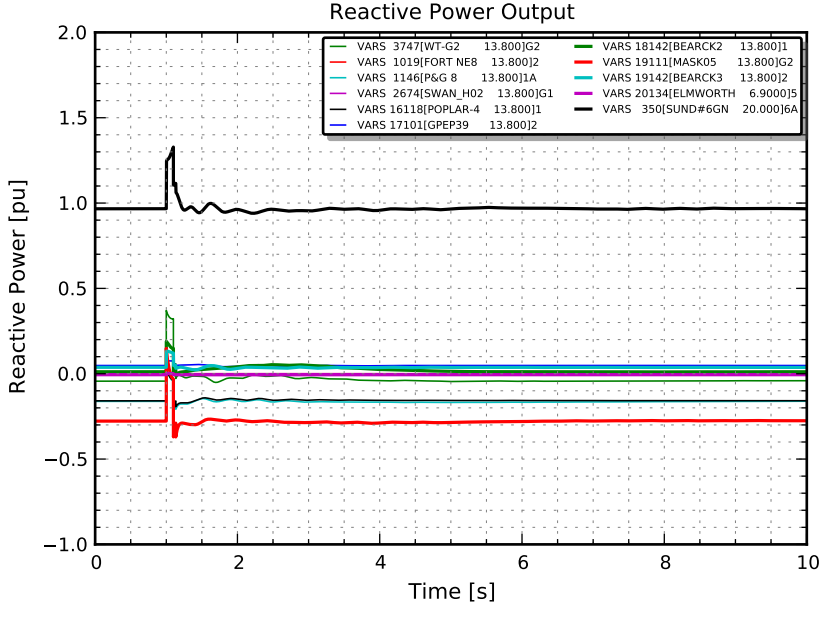
Study Area Generators

Appendix E2A
Figure: 026 (B. 3)





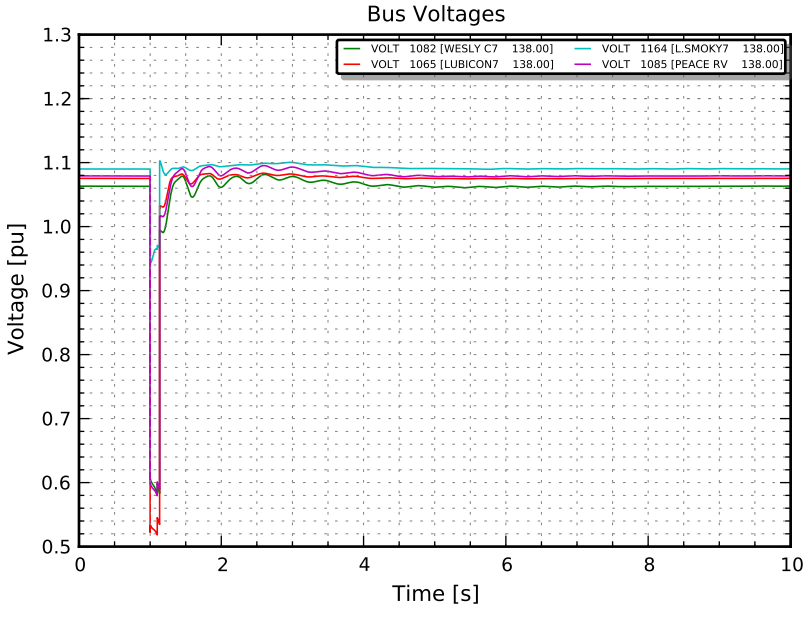


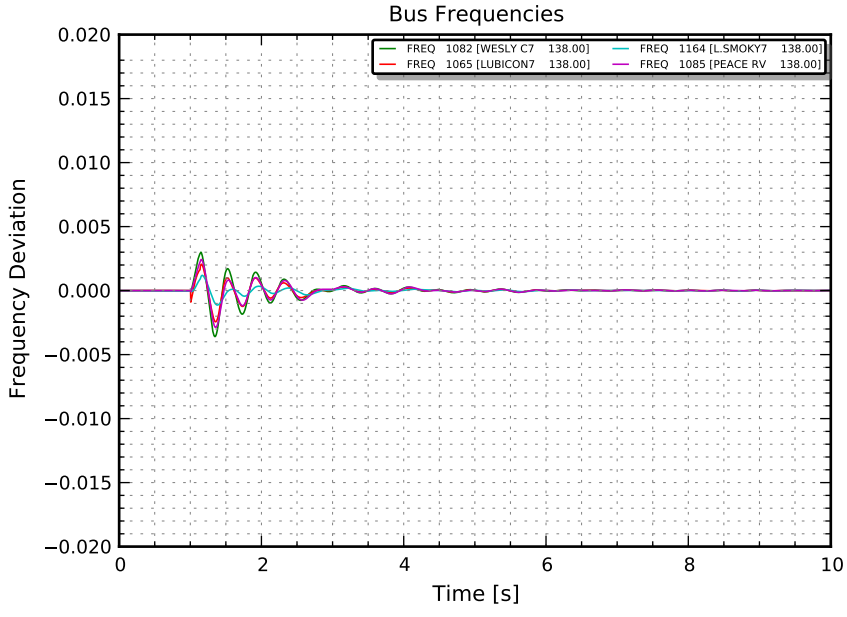


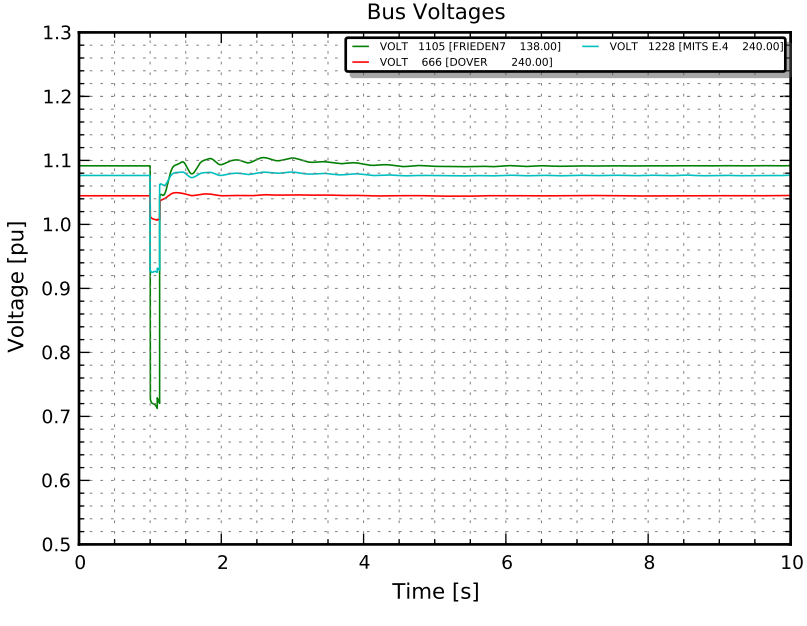
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 027 7L120 HOTCHKISS to Meikle_A.

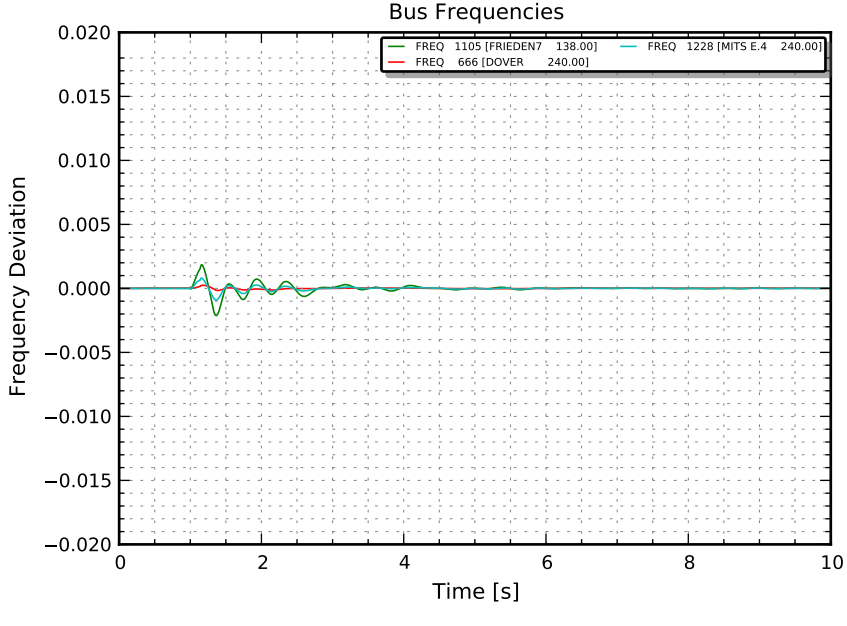
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 027 (A. 1)





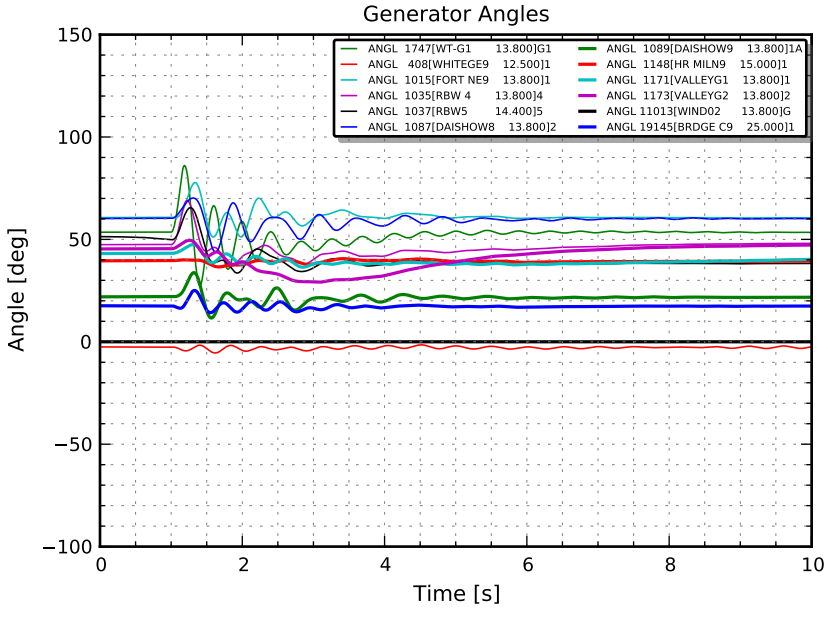


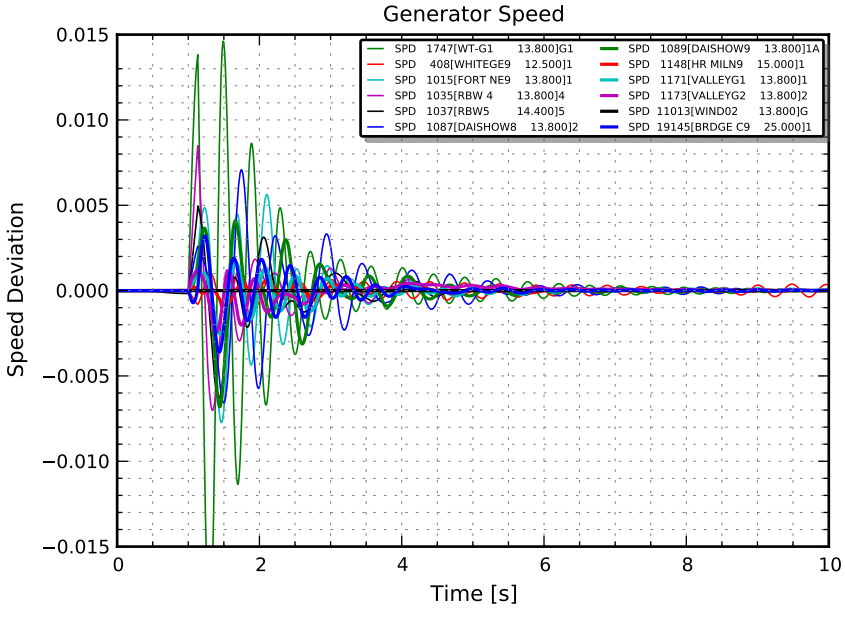


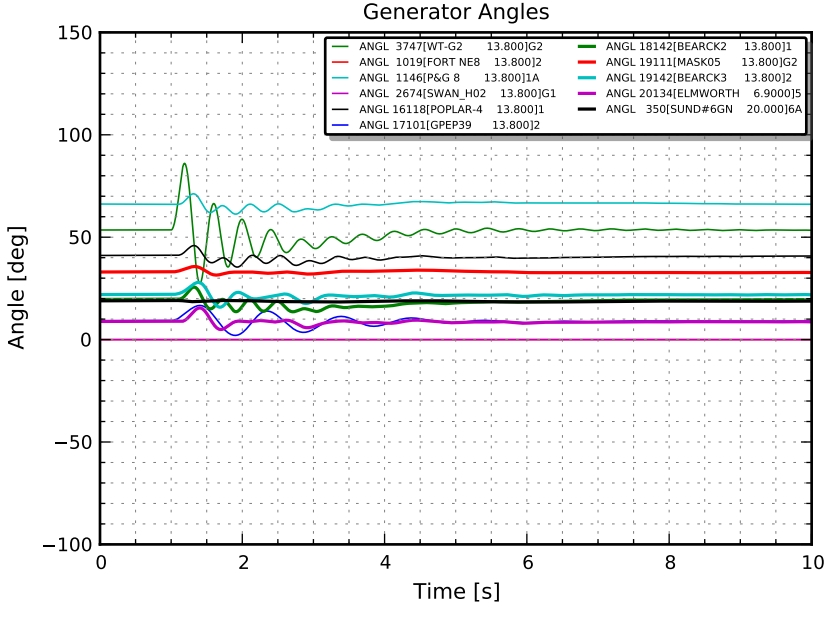
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 027 7L120 HOTCHKISS to Meikle_A.

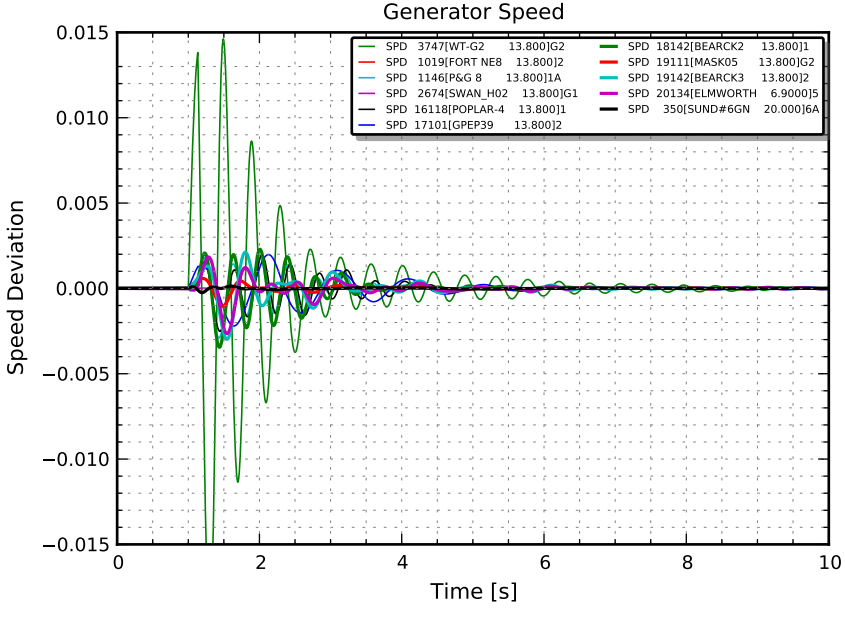
Study Area Generators

Appendix E2A
Figure: 027 (A. 2)





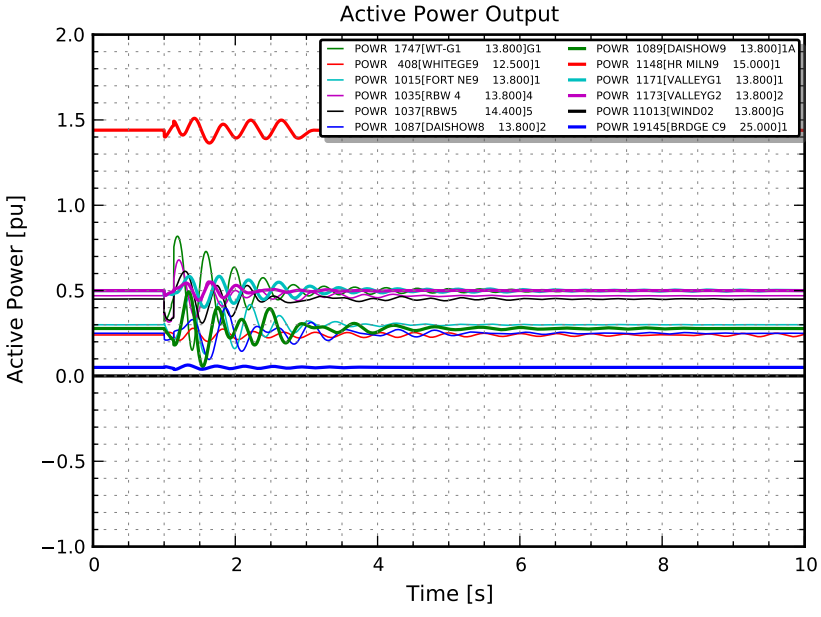


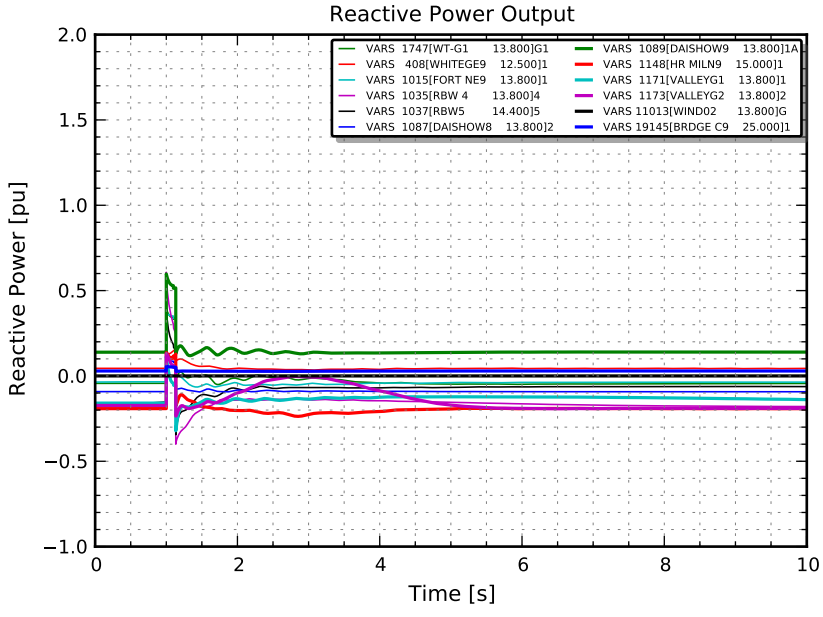


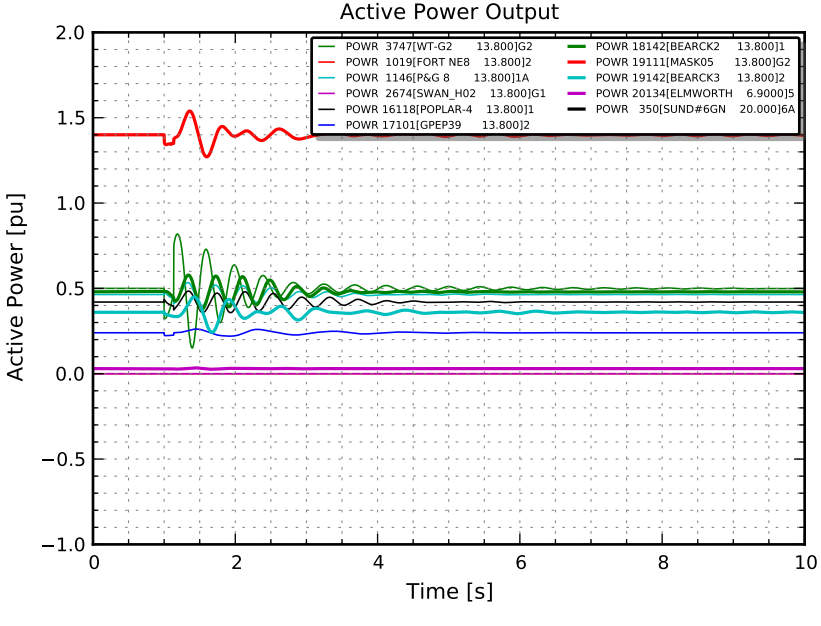
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 027 7L120 HOTCHKISS to Meikle_A.

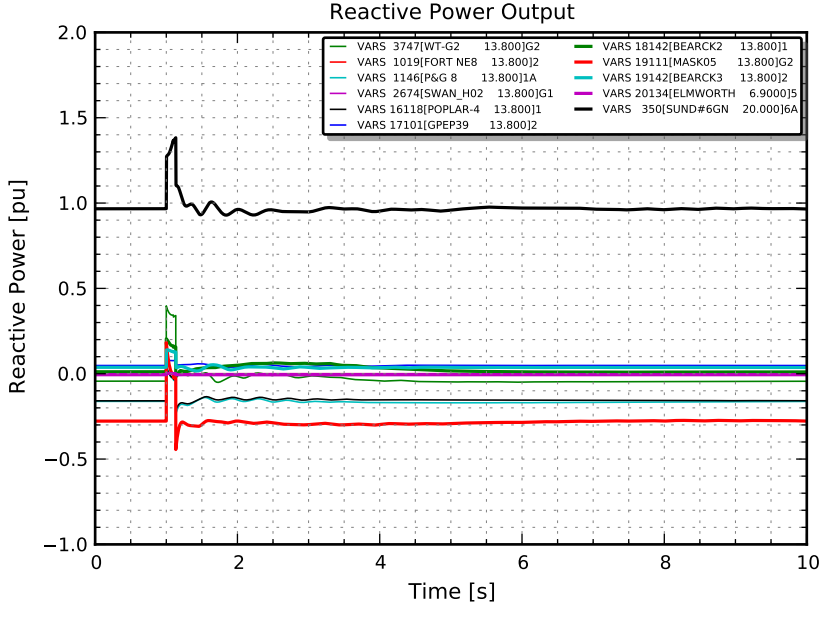
Study Area Generators

Appendix E2A
Figure: 027 (A. 3)





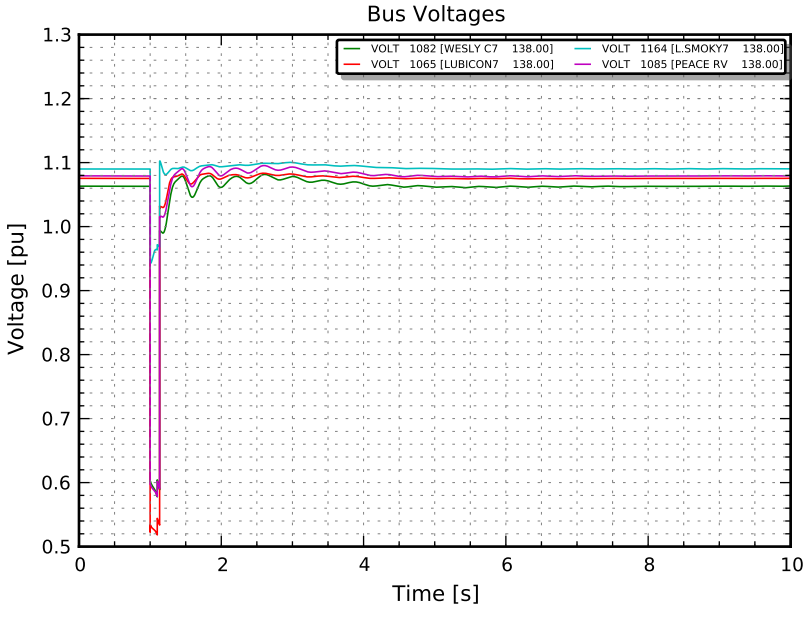


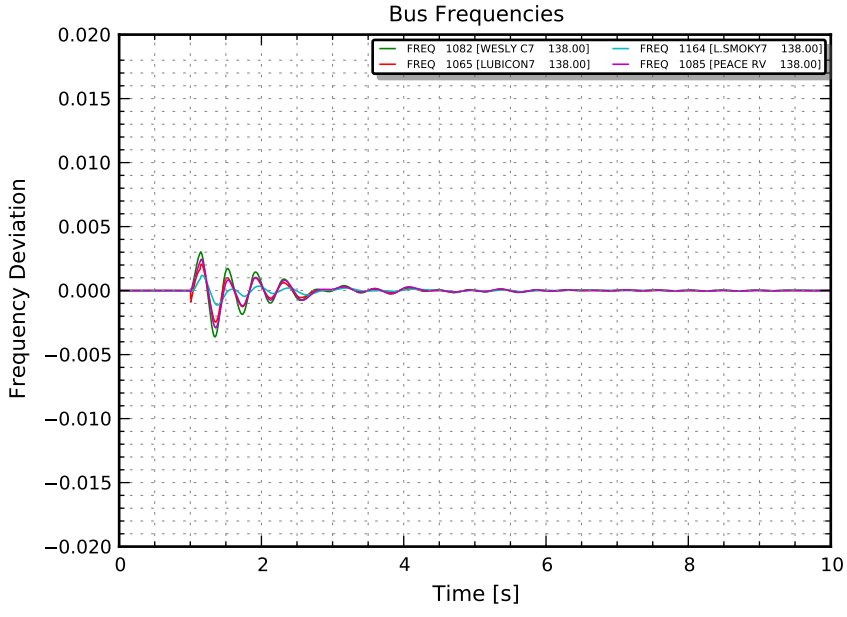


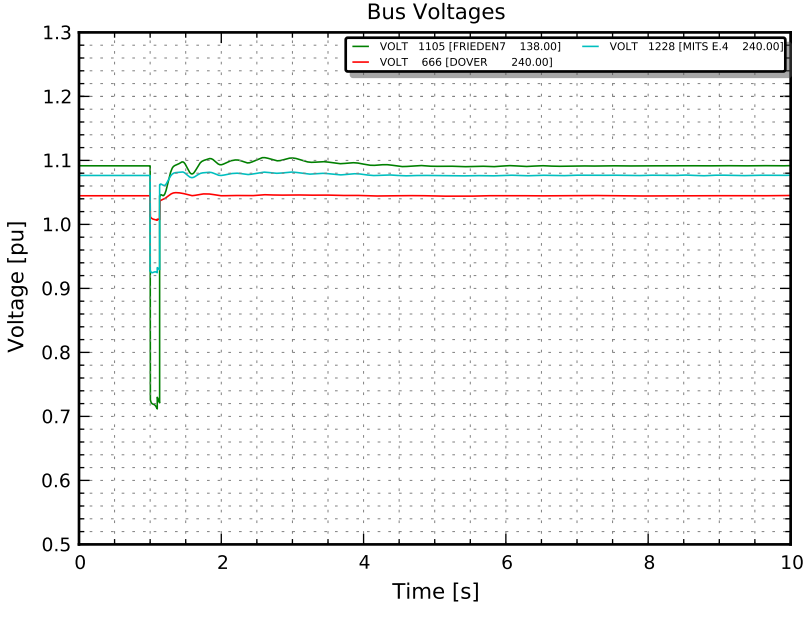
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 027 7L120 HOTCHKISS to Meikle_B.

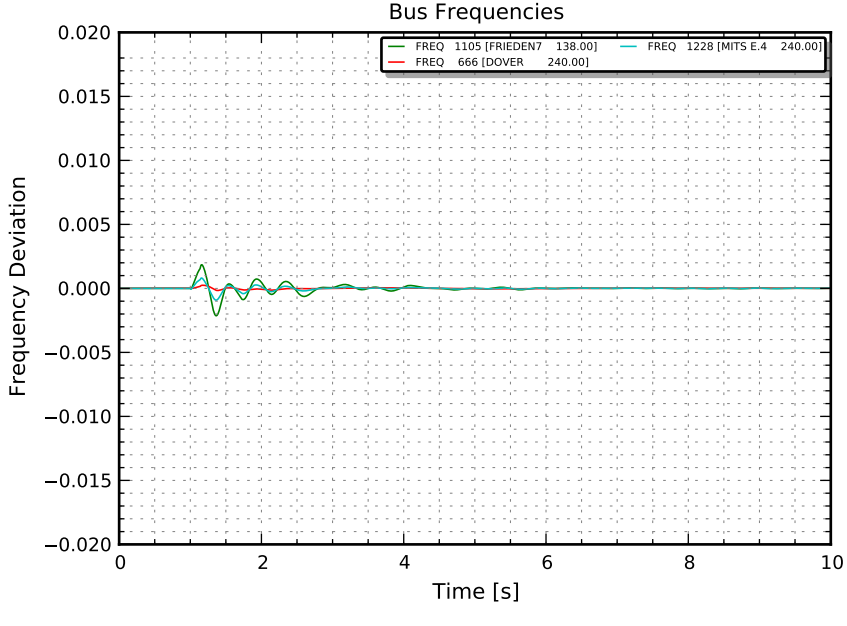
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 027 (B. 1)





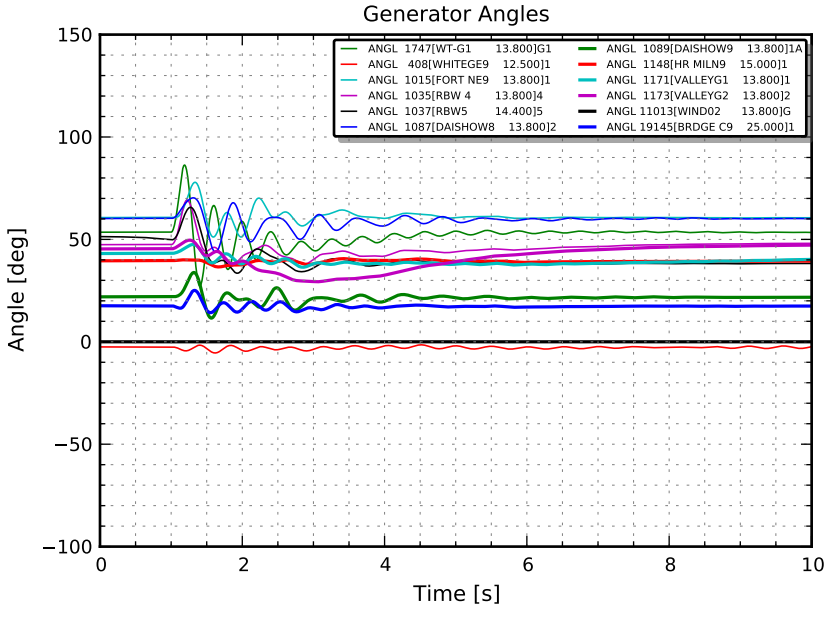


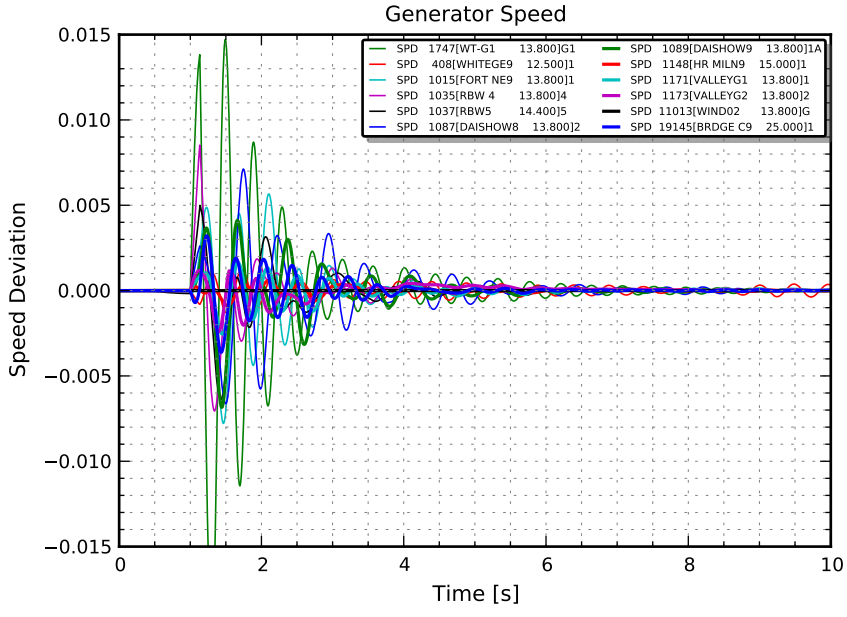


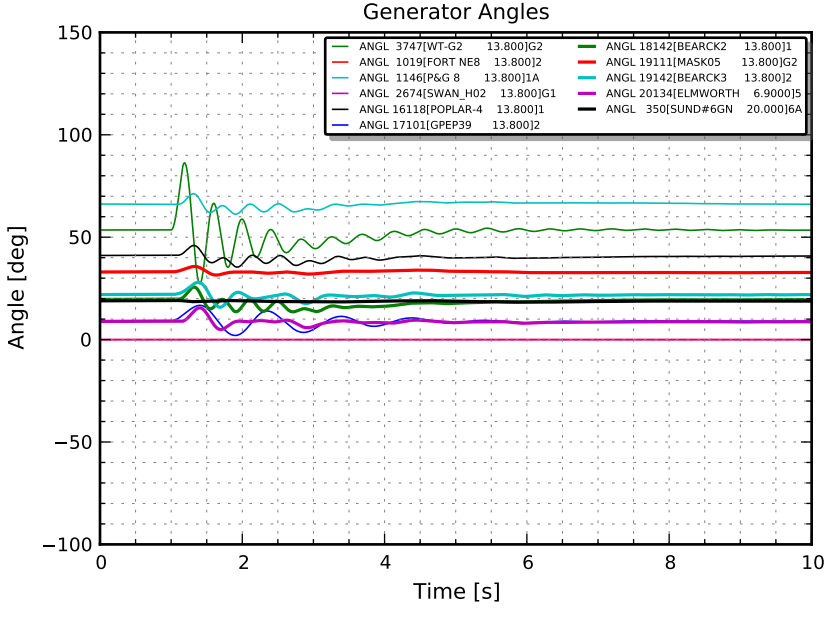
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 027 7L120 HOTCHKISS to Meikle_B.

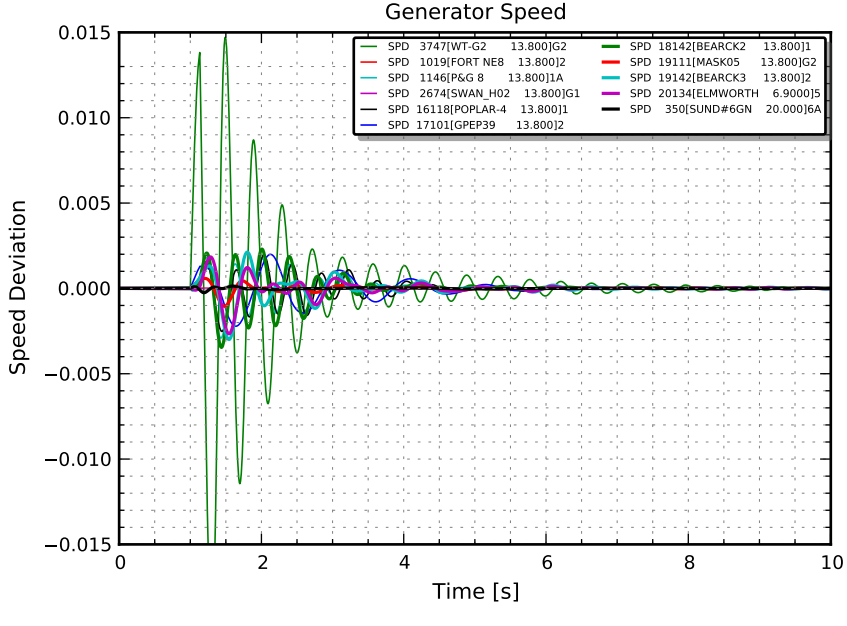
Study Area Generators

Appendix E2A
Figure: 027 (B. 2)





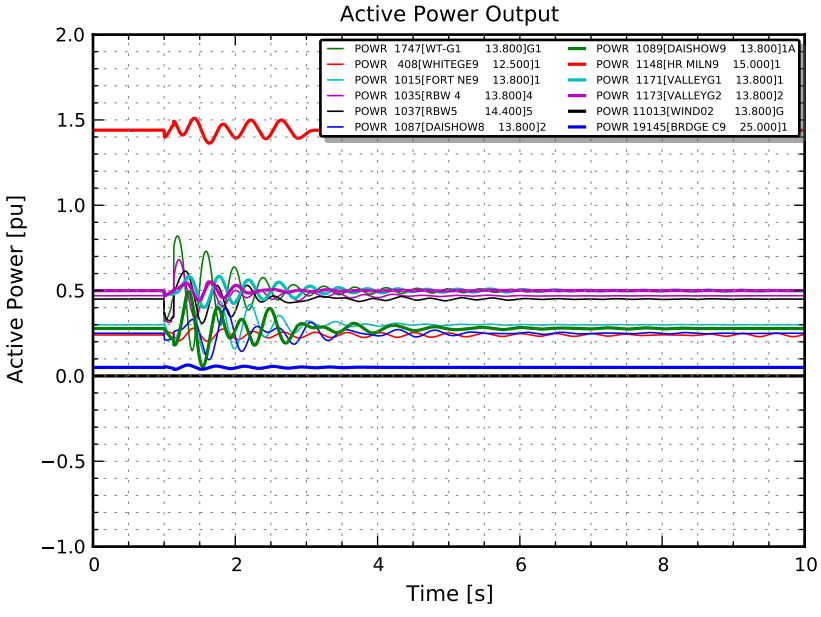


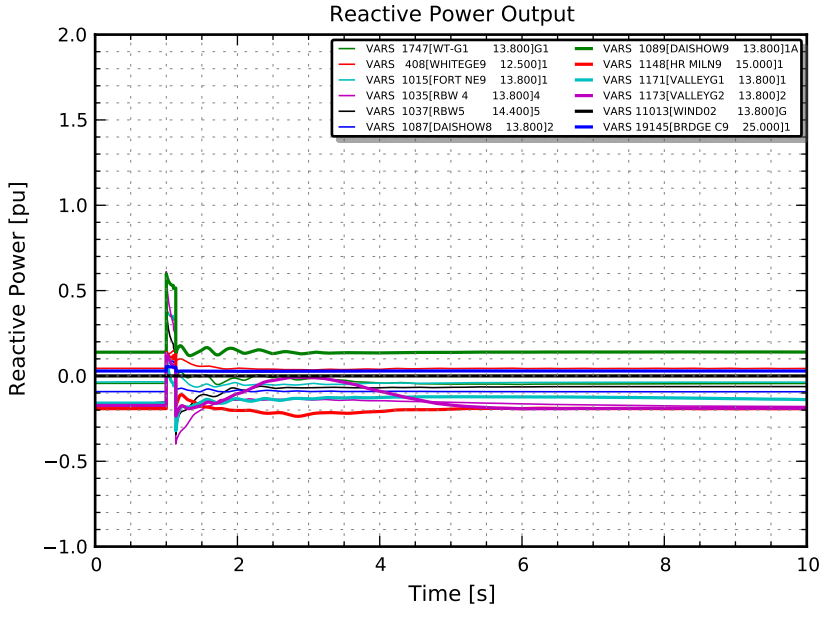


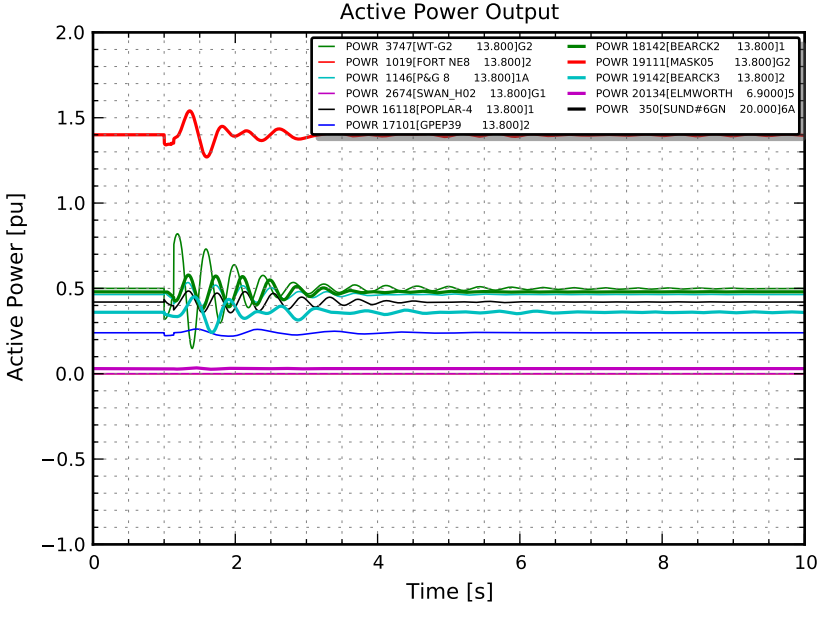
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 027 7L120 HOTCHKISS to Meikle_B.

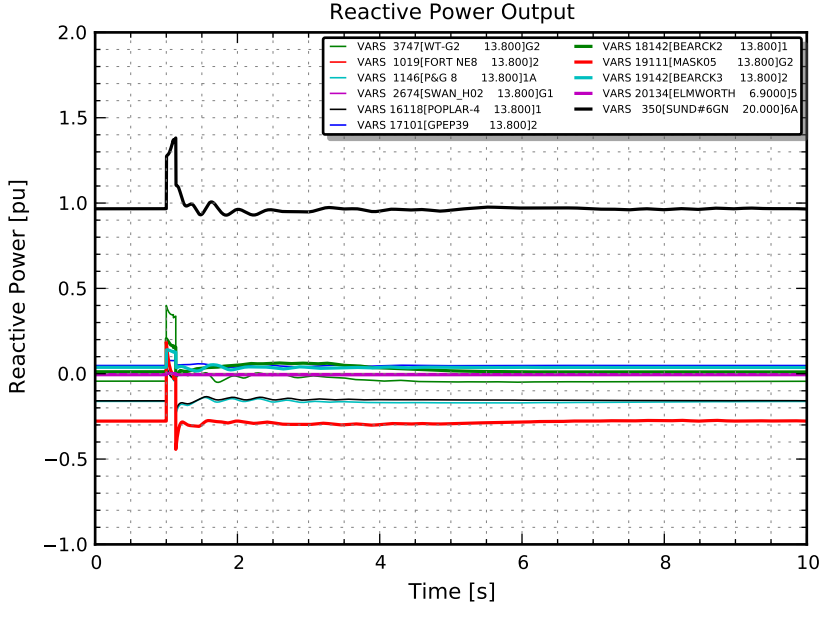
Study Area Generators

Appendix E2A
Figure: 027 (B. 3)





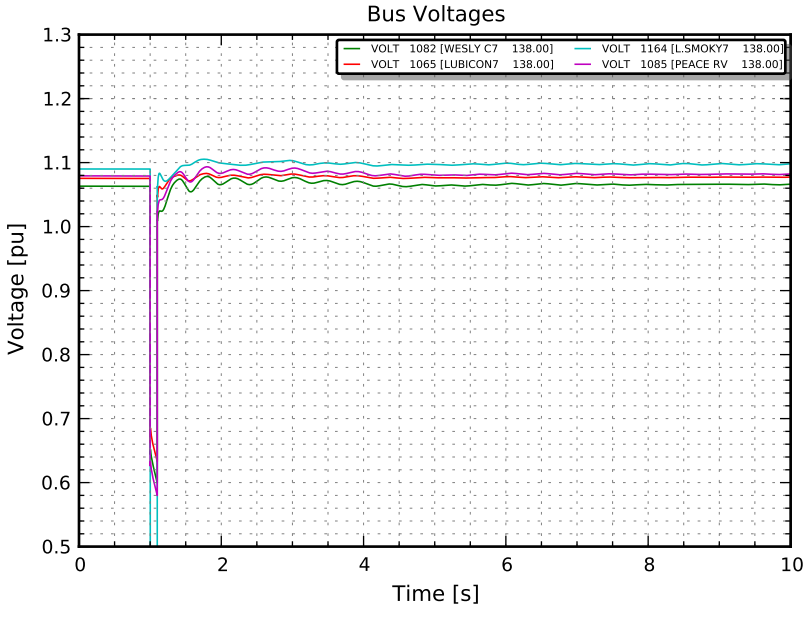


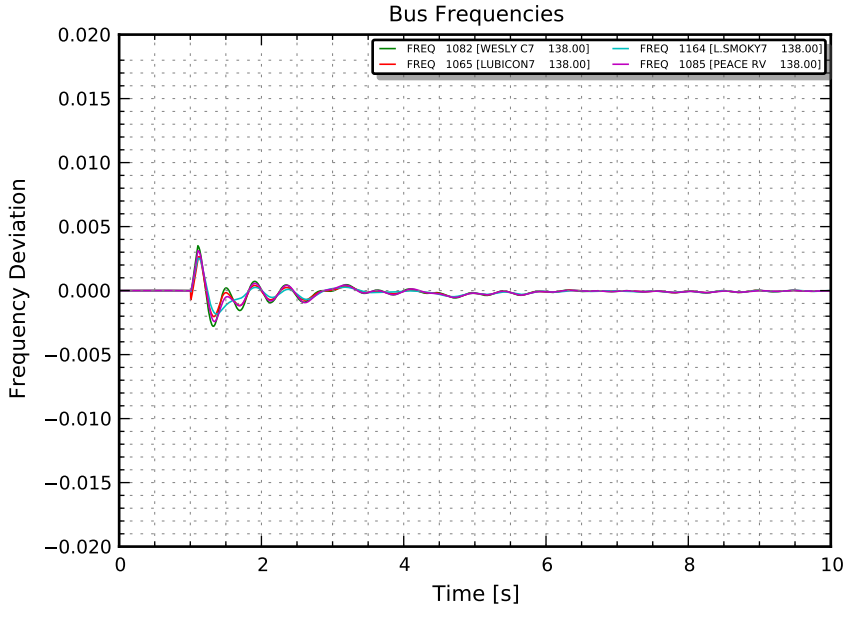


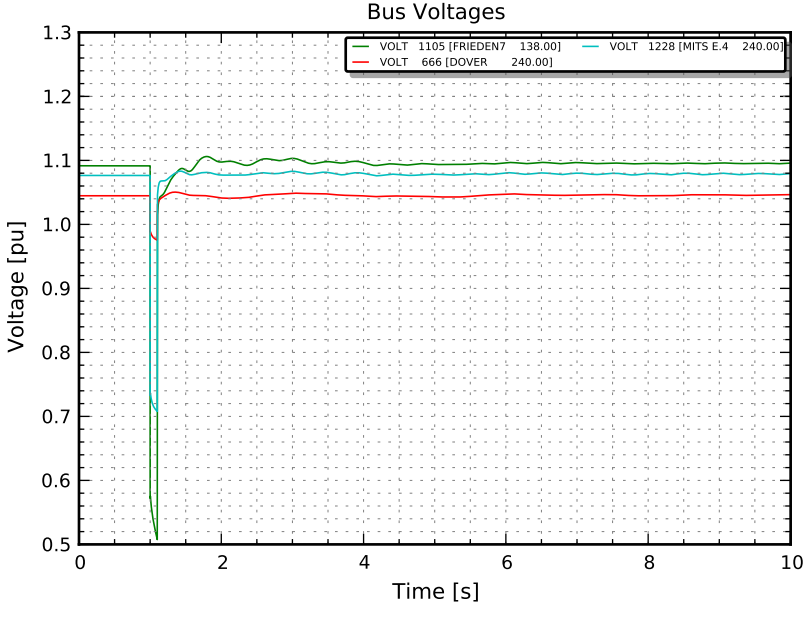
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 028 7L01 LITTLESMOKY to Sturgeon_A.

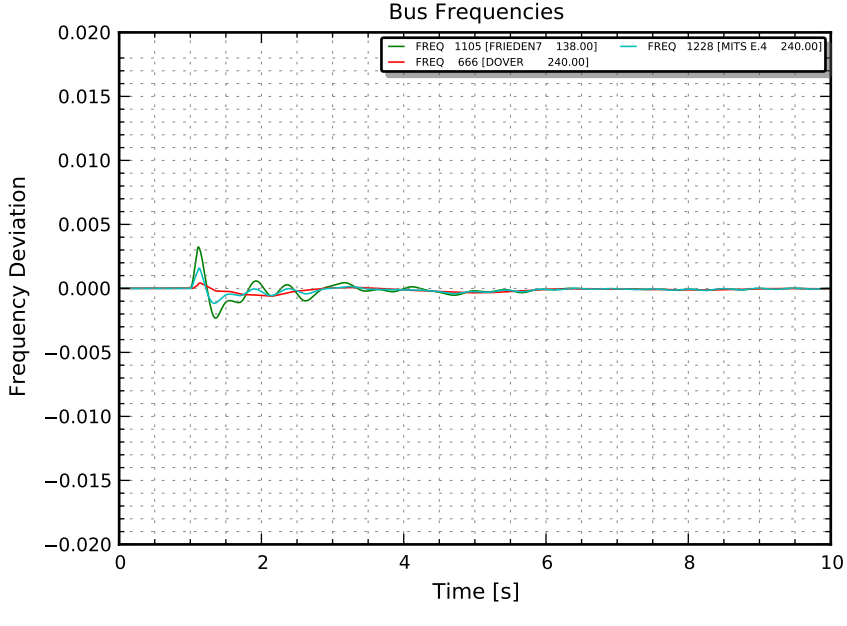
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 028 (A. 1)





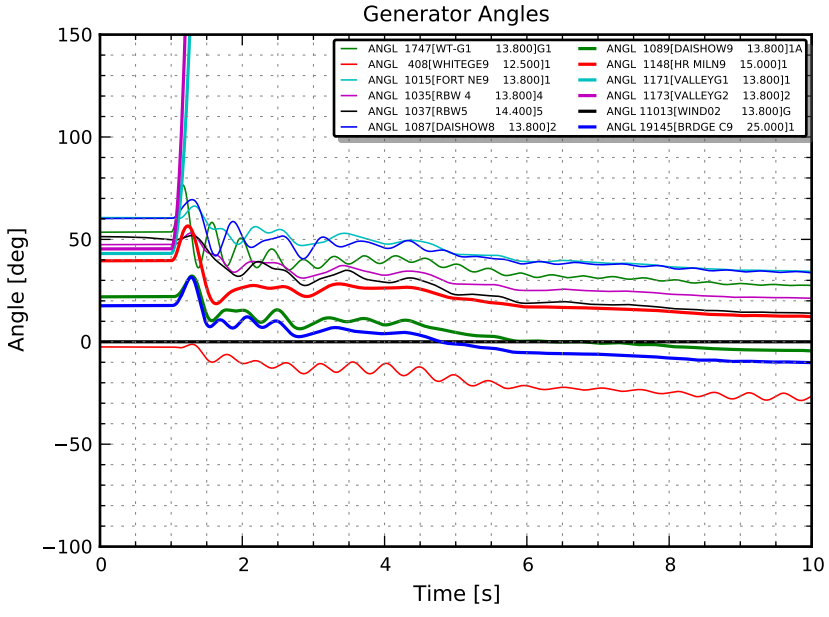


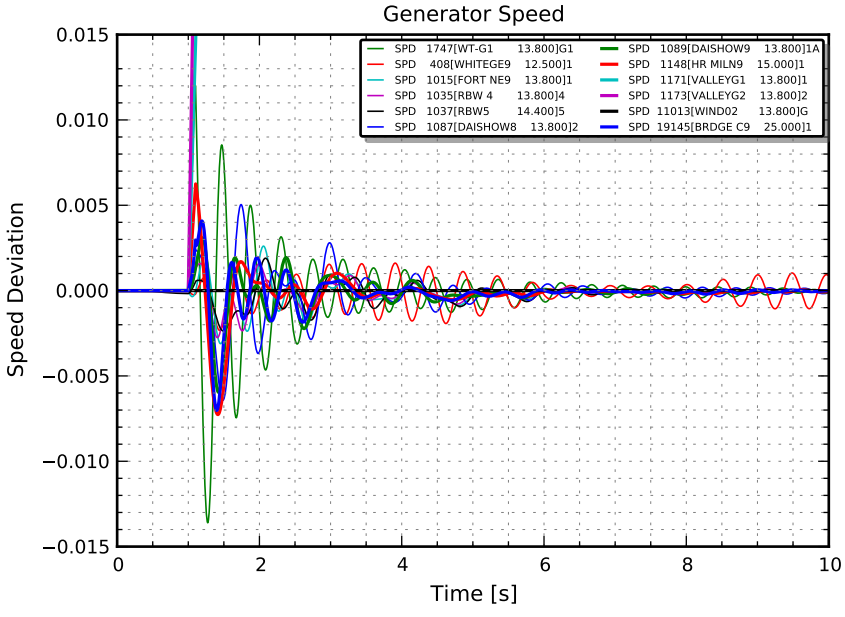


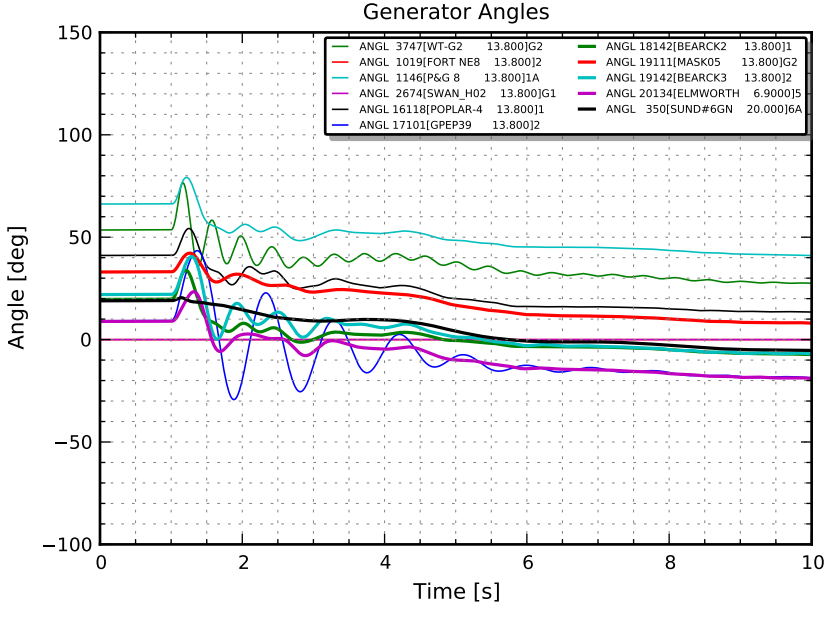
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 028 7L01 LITTLESMOKY to Sturgeon_A.

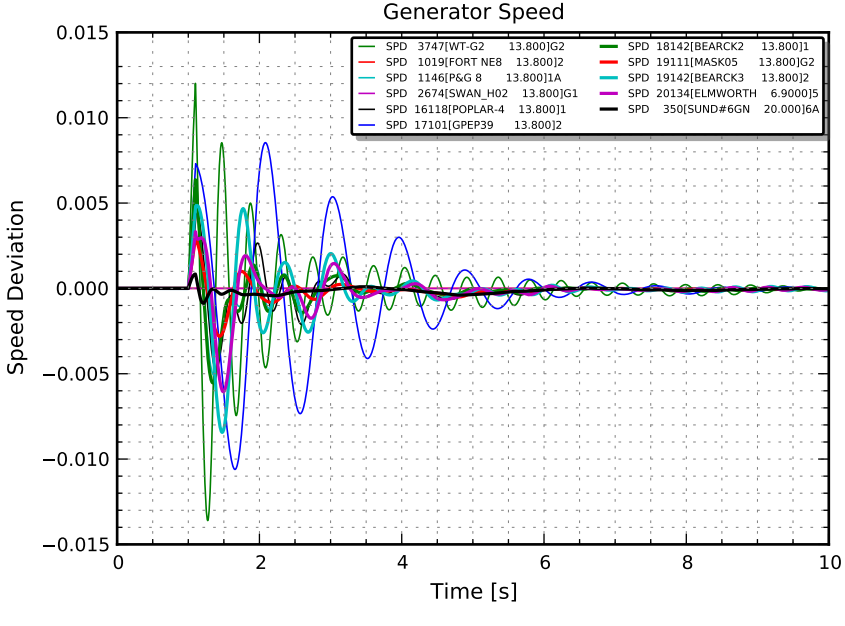
Study Area Generators

Appendix E2A
Figure: 028 (A. 2)





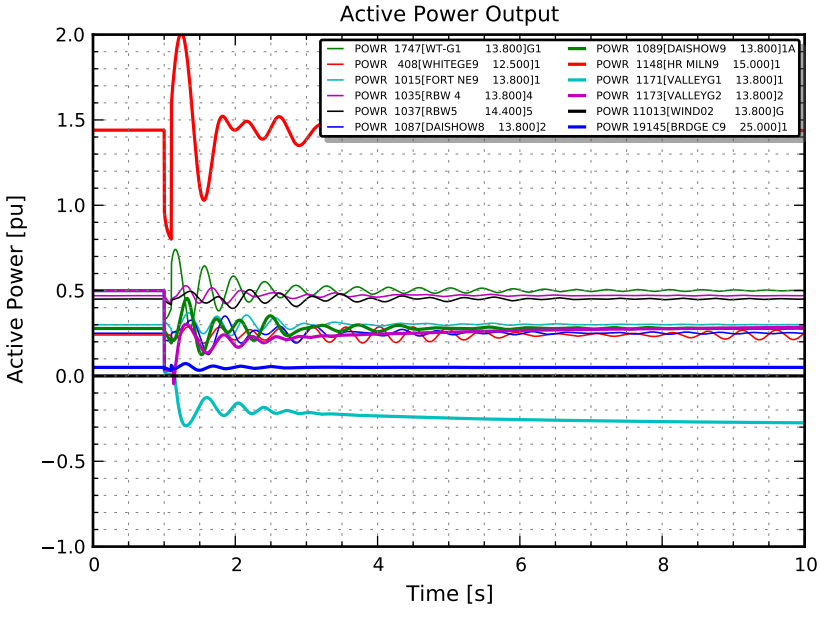


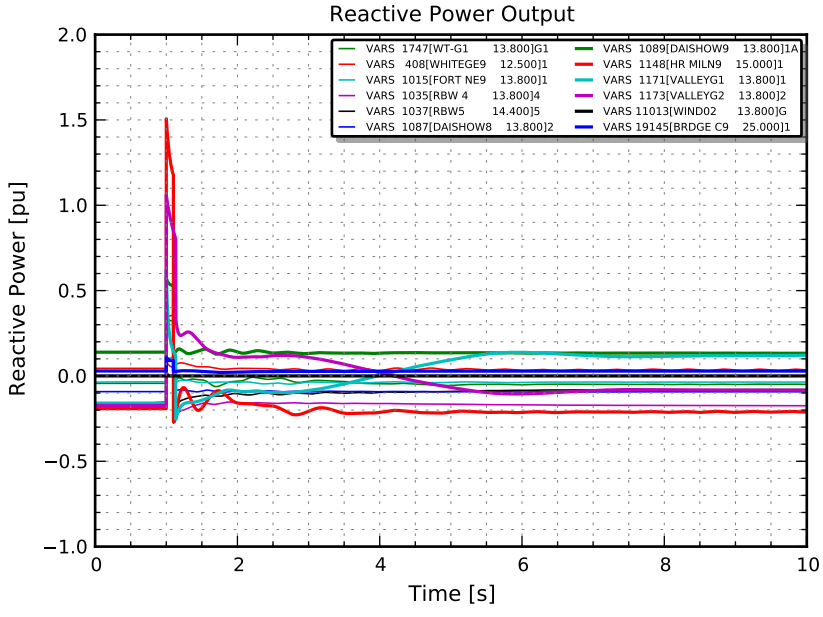


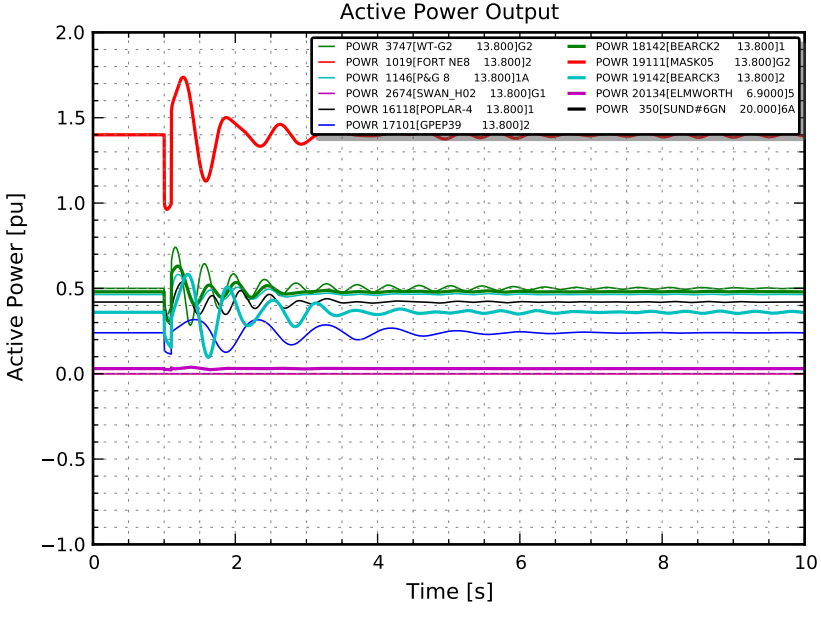
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 028 7L01 LITTLESMOKY to Sturgeon_A.

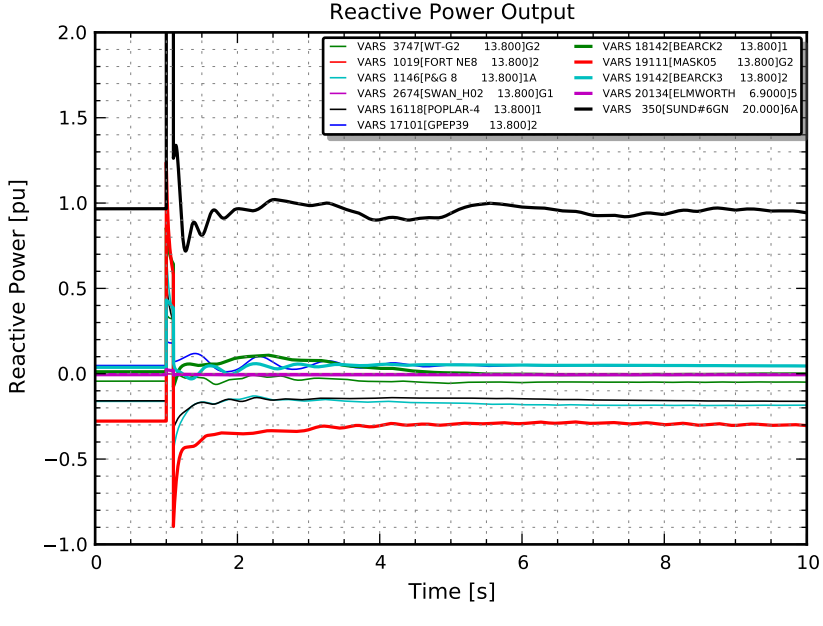
Study Area Generators

Appendix E2A
Figure: 028 (A. 3)





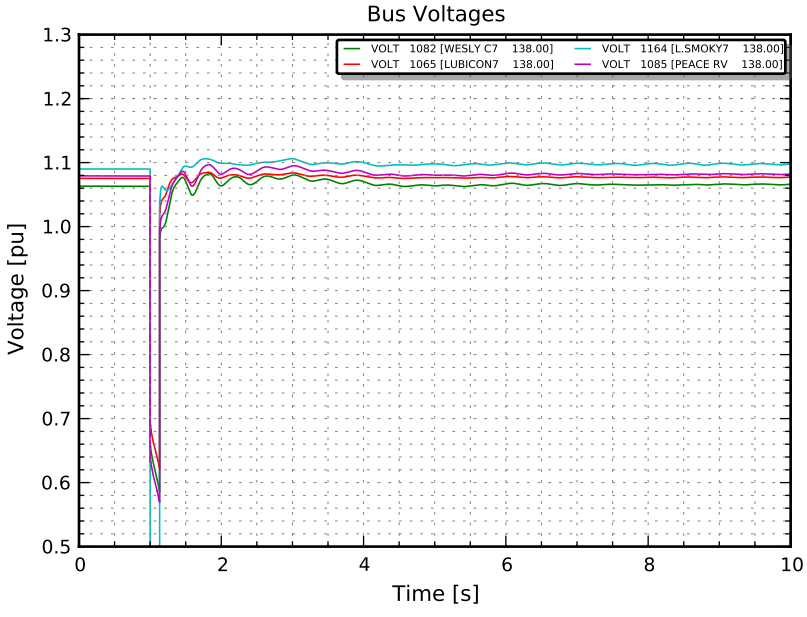


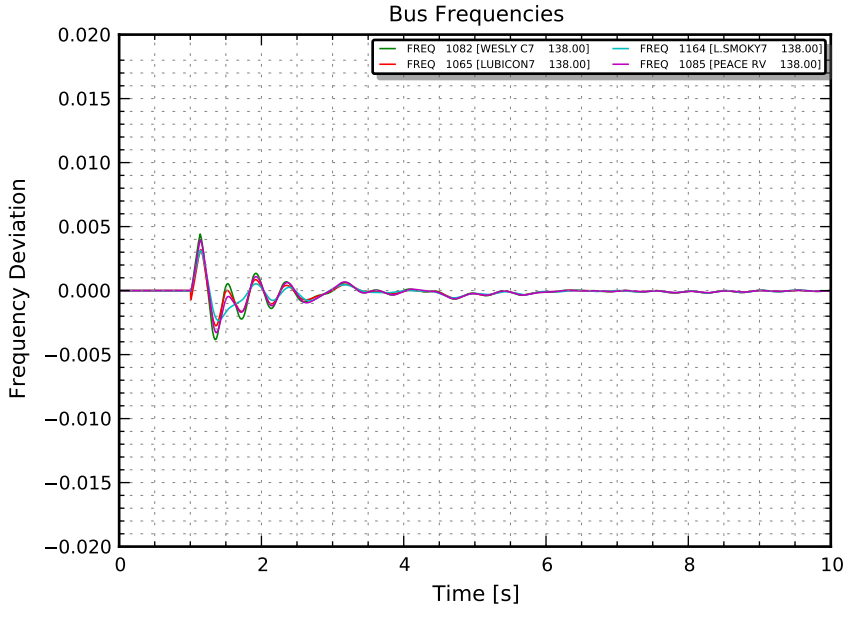


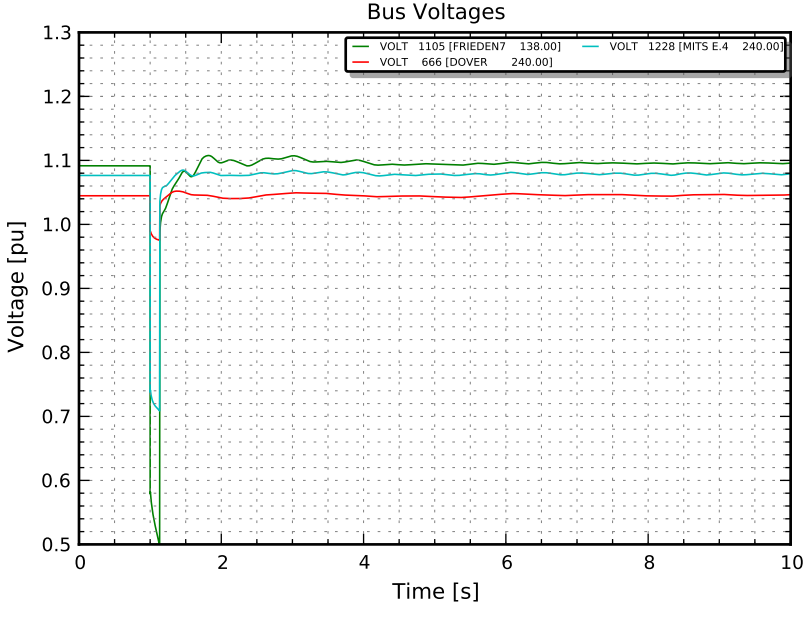
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 028 7L01 LITTLESMOKY to Sturgeon_B.

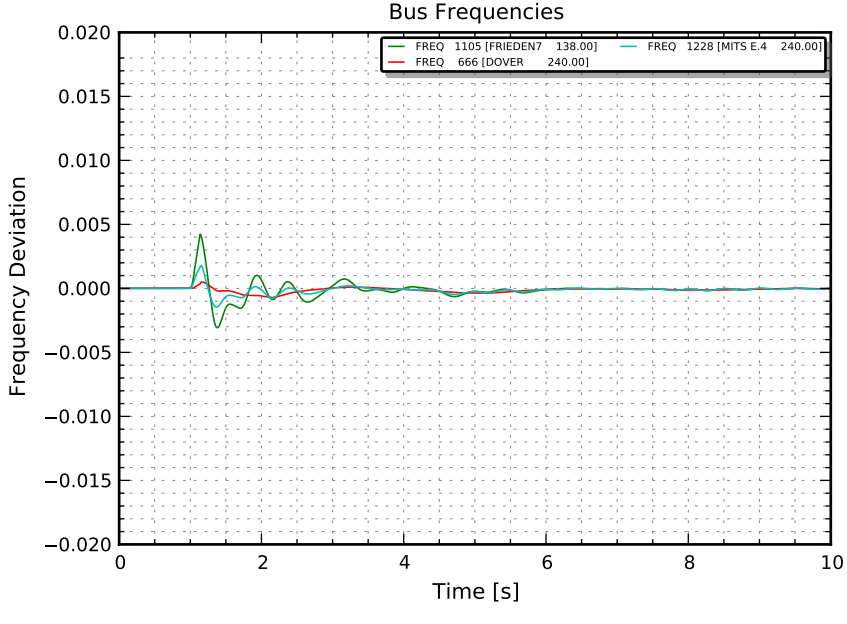
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 028 (B. 1)





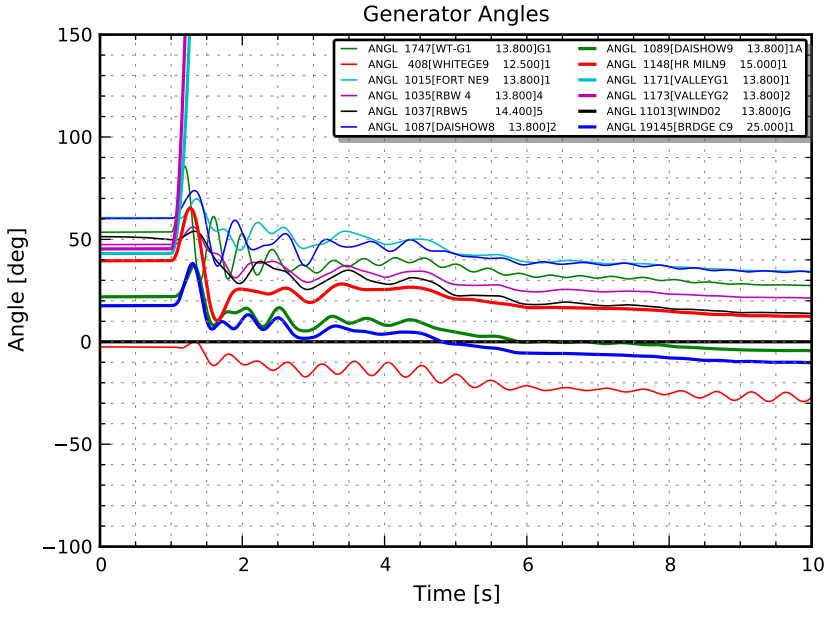


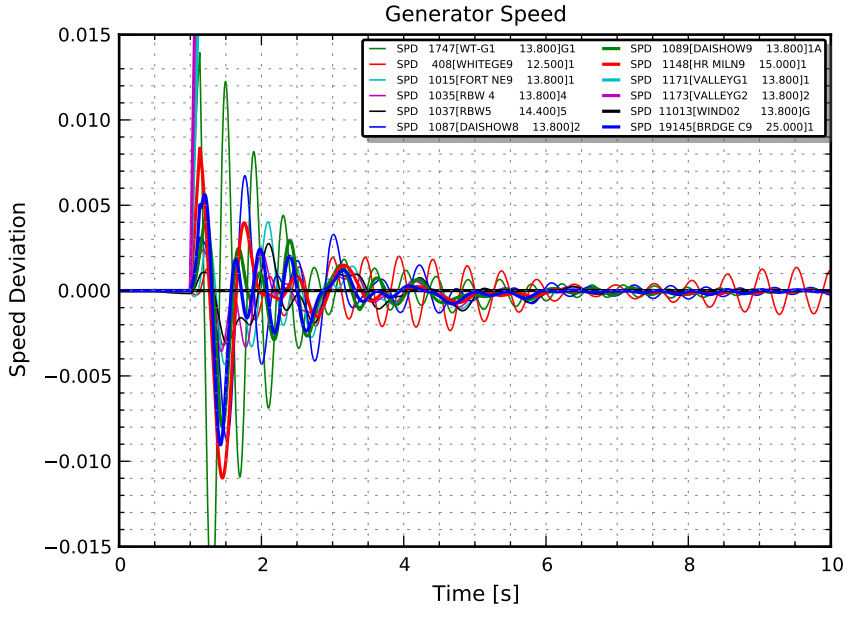


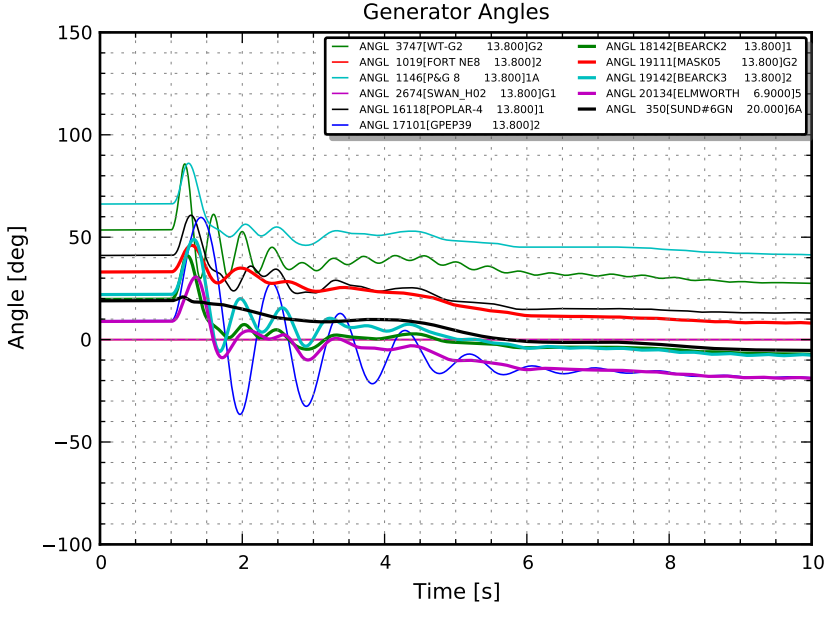
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 028 7L01 LITTLESMOKY to Sturgeon_B.

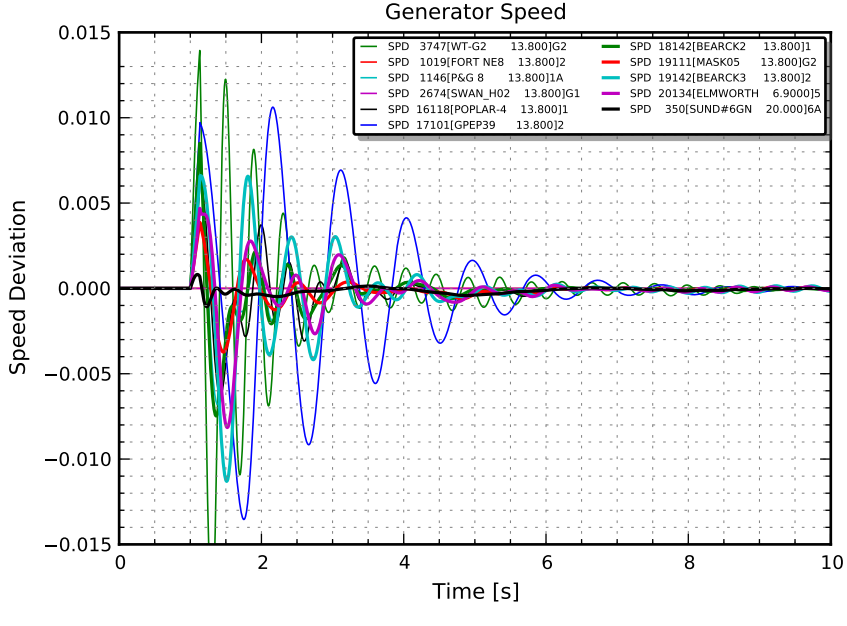
Study Area Generators

Appendix E2A
Figure: 028 (B. 2)





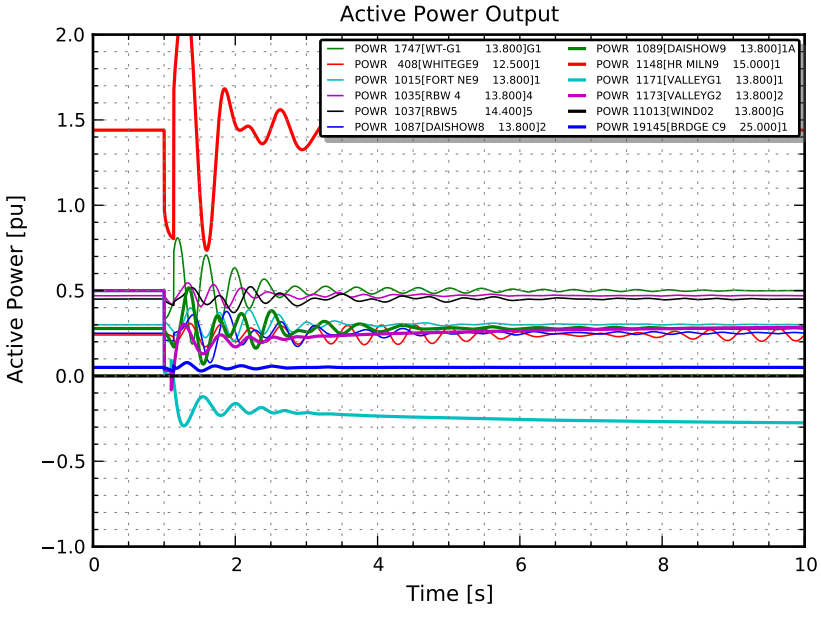


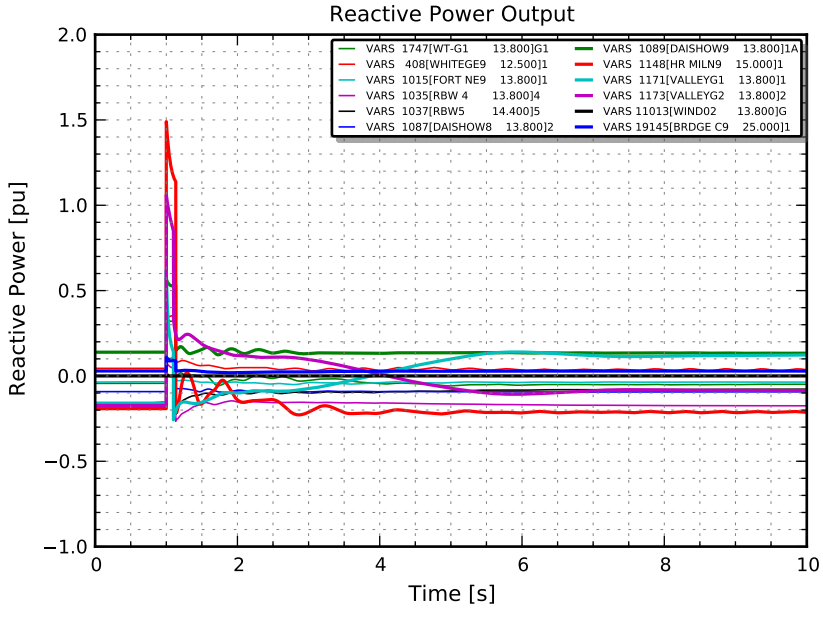


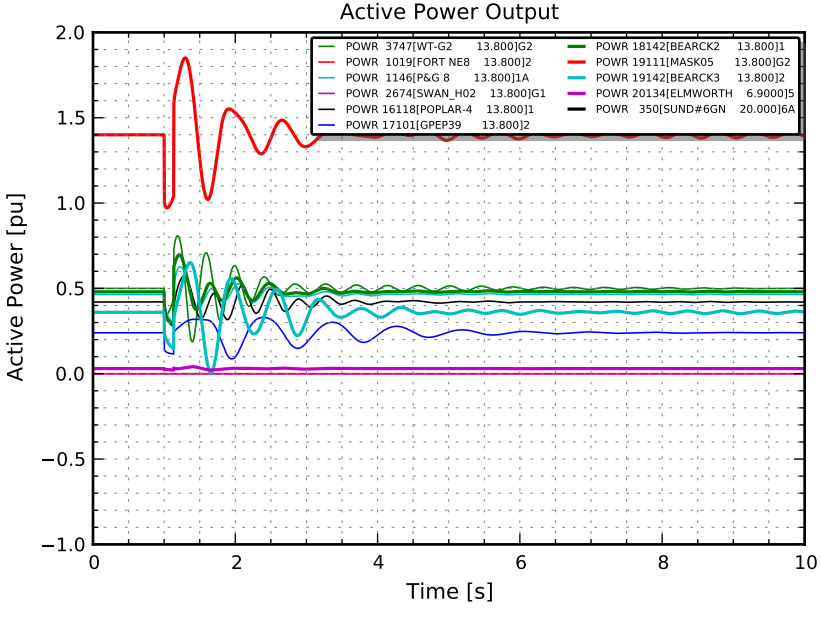
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 028 7L01 LITTLESMOKY to Sturgeon_B.

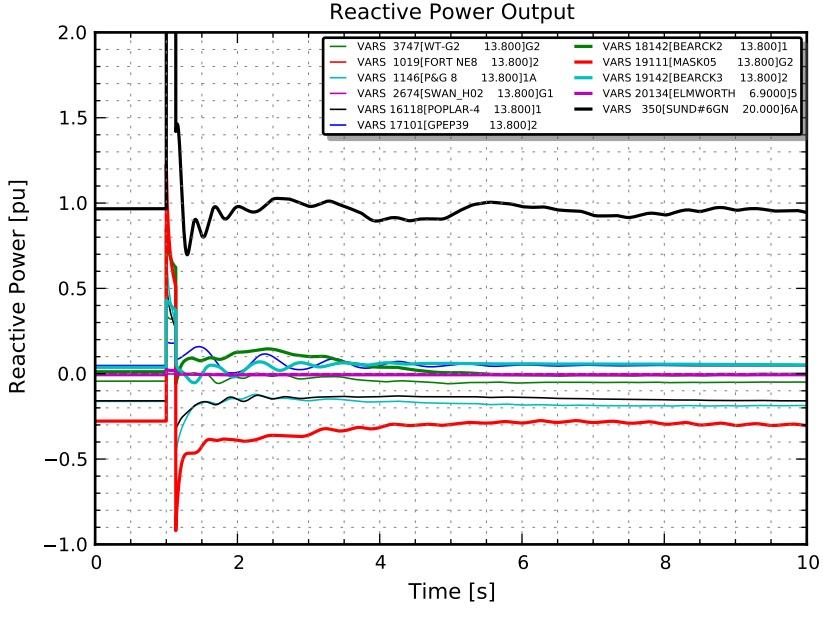
Study Area Generators

Appendix E2A
Figure: 028 (B. 3)





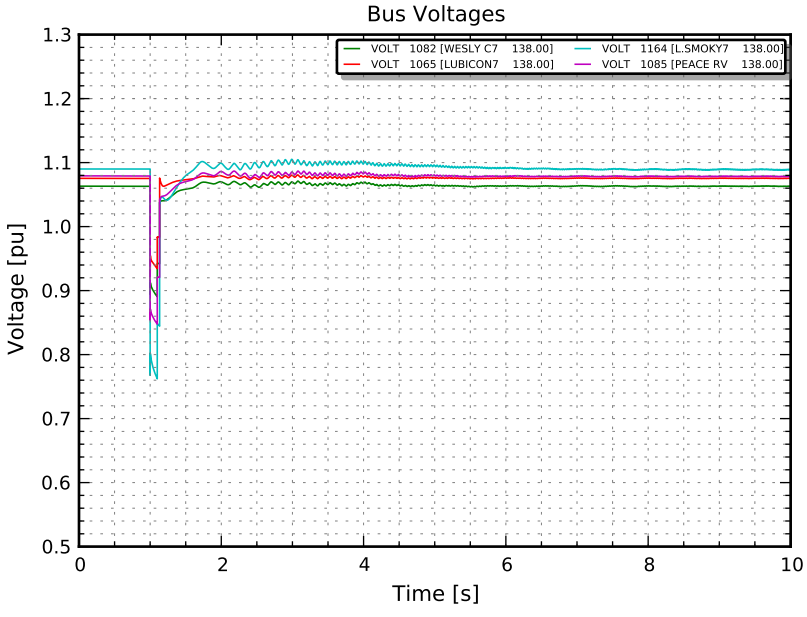


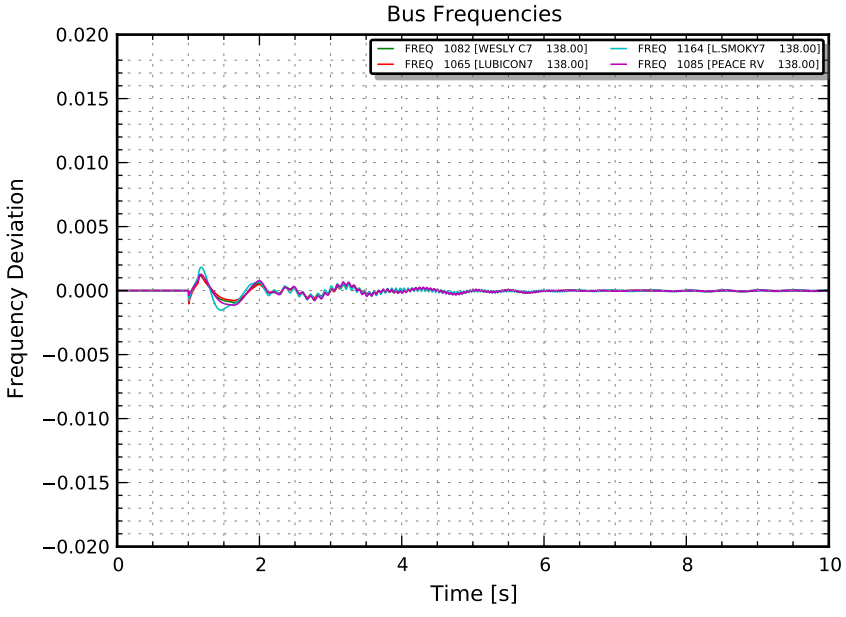


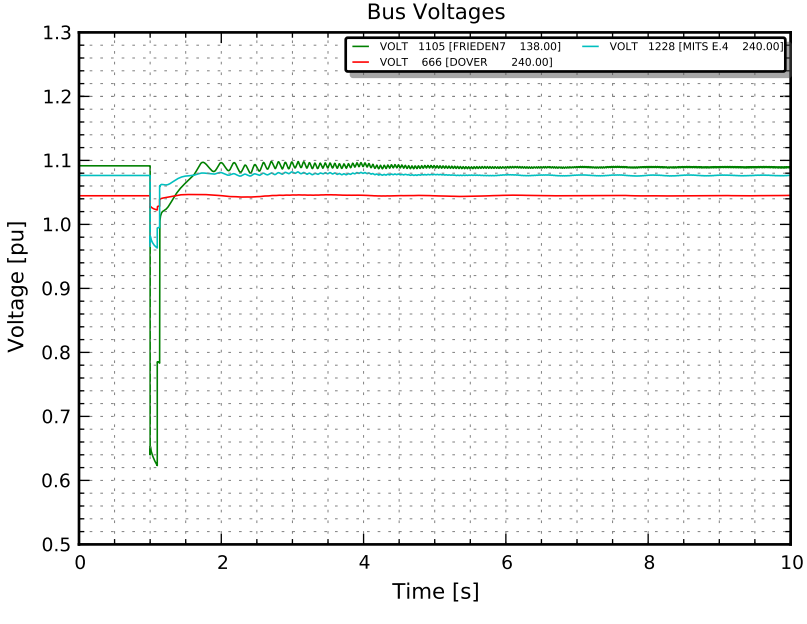
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_A.

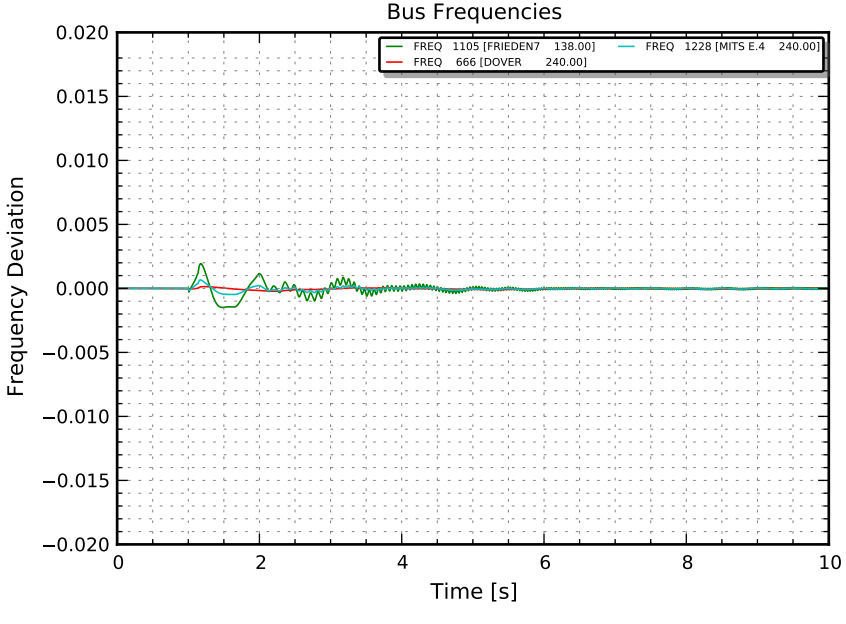
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 029 (A. 1)





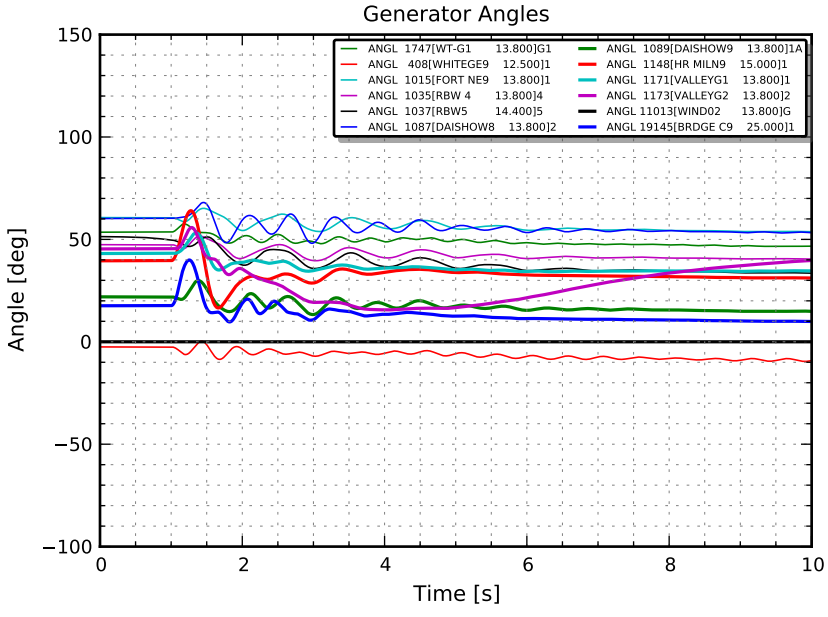


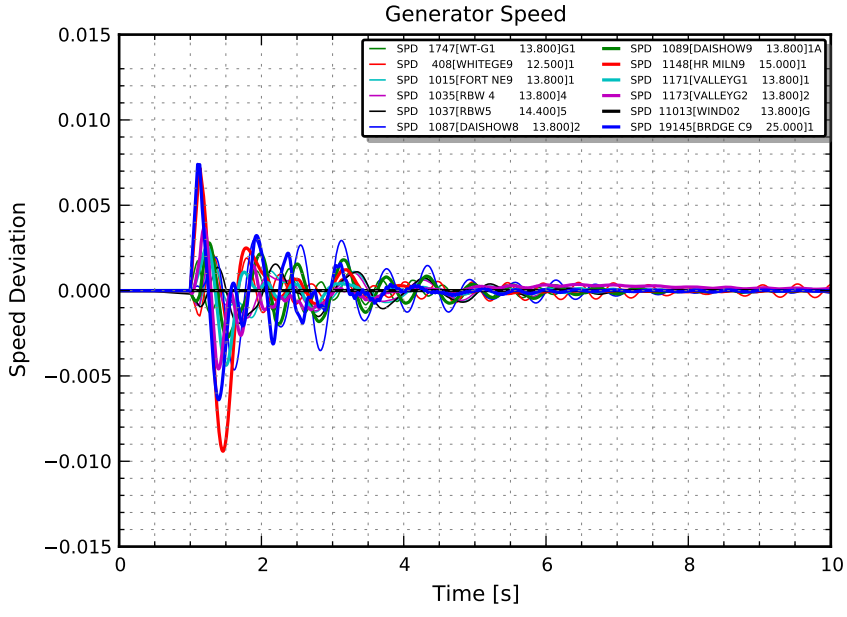


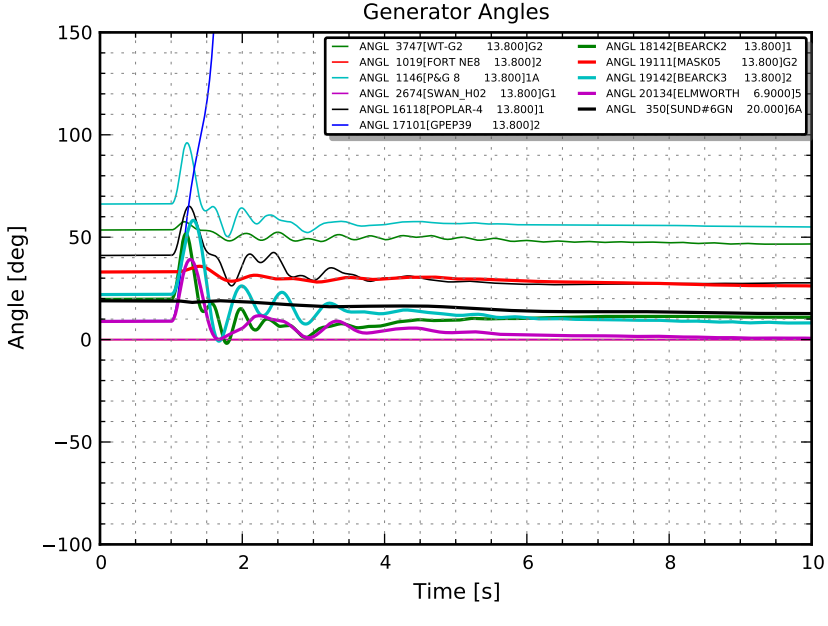
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_A.

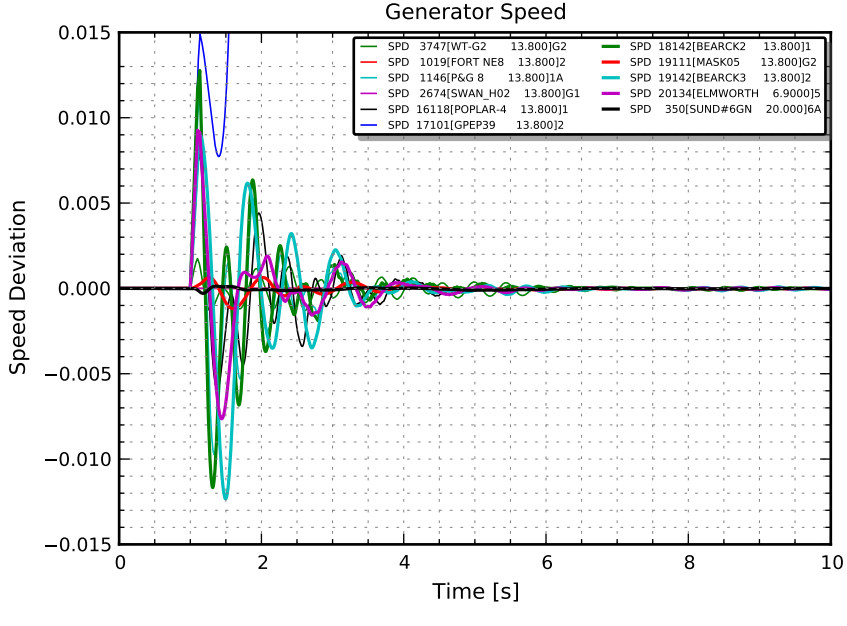
Study Area Generators

Appendix E2A
Figure: 029 (A. 2)





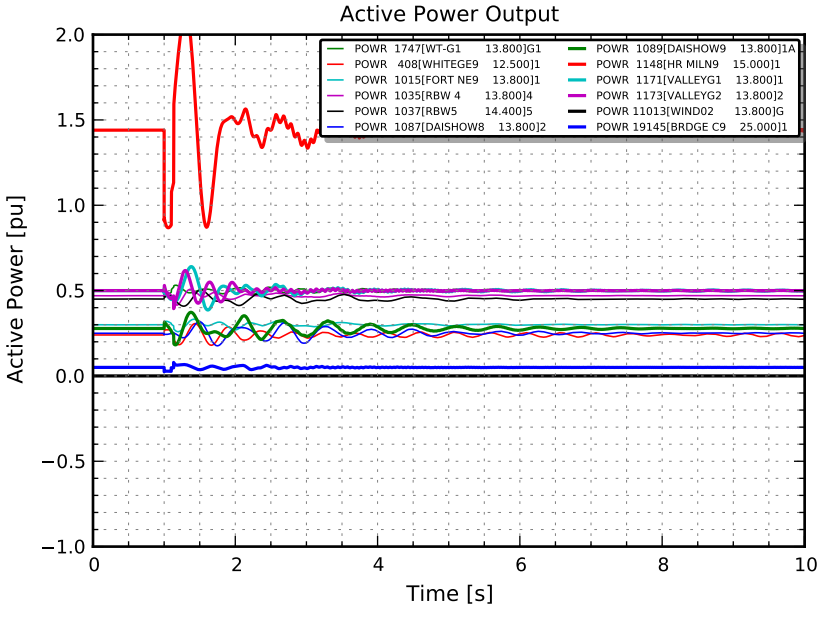


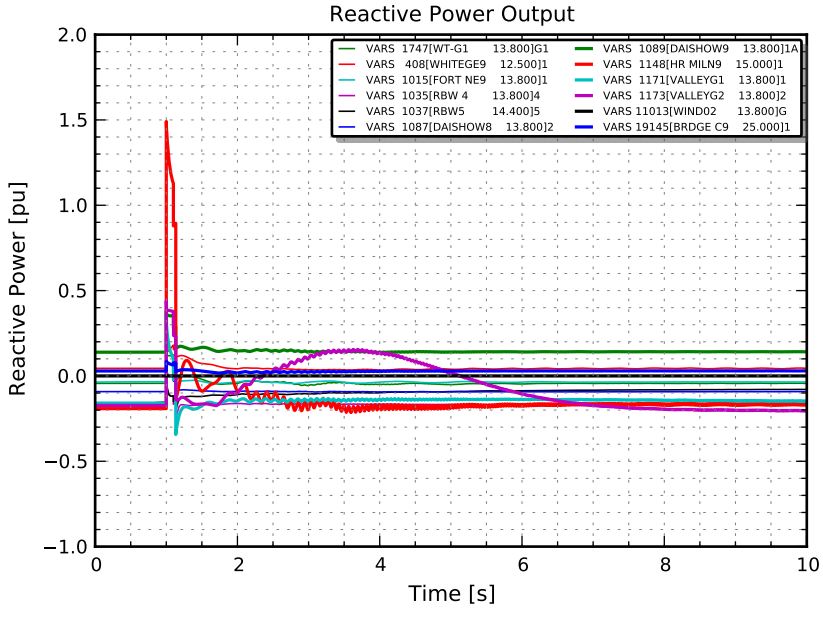


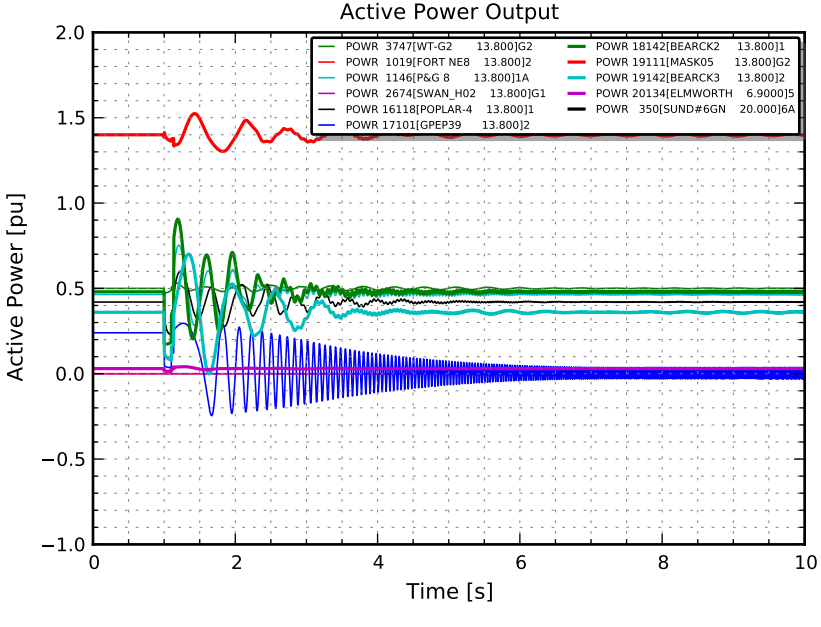
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_A.

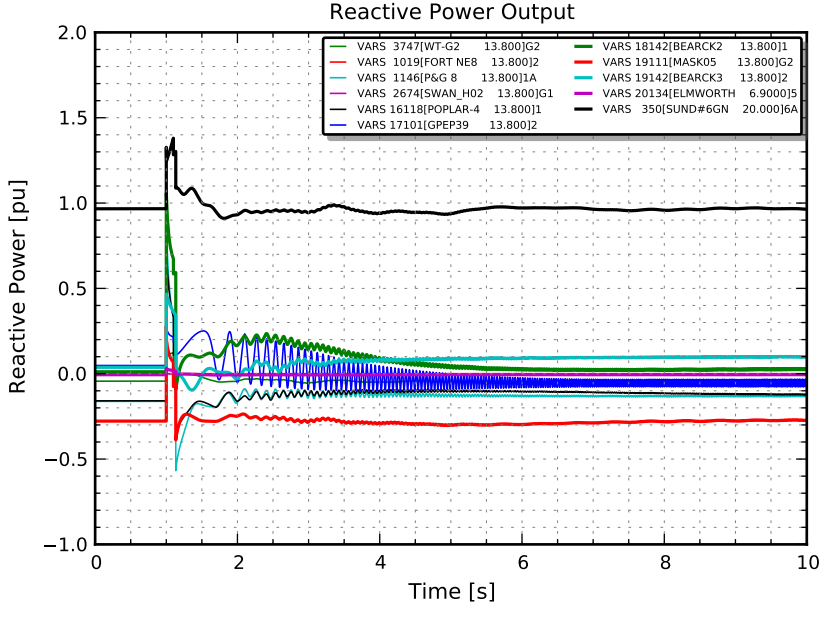
Study Area Generators

Appendix E2A
Figure: 029 (A. 3)





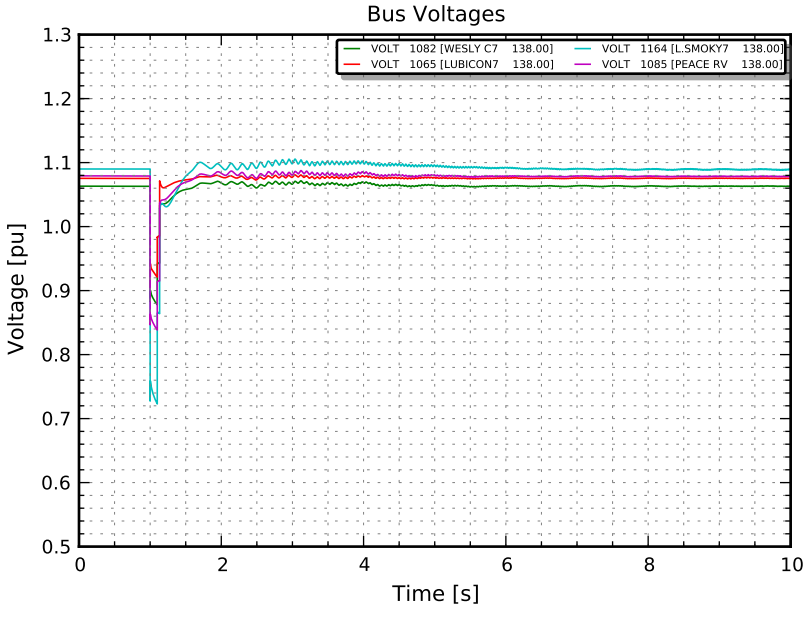


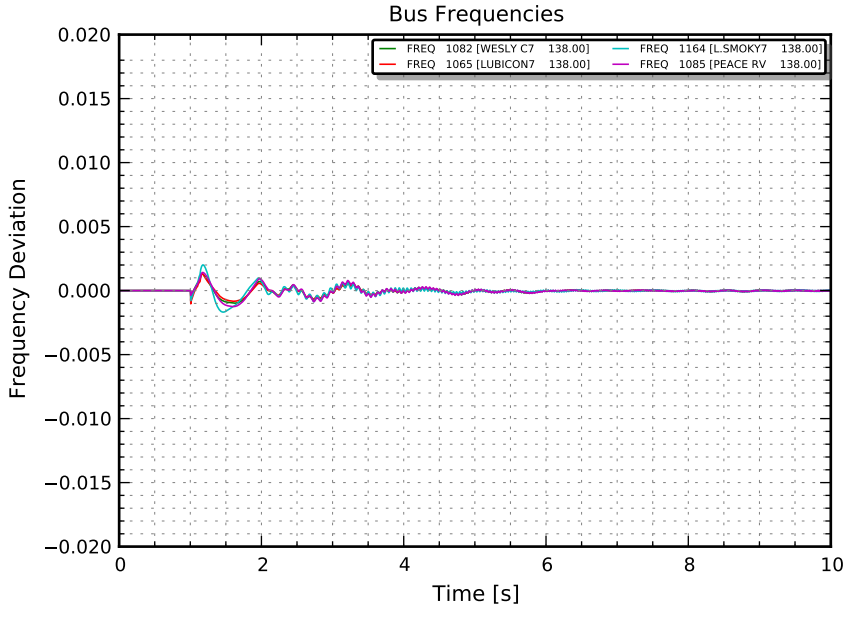


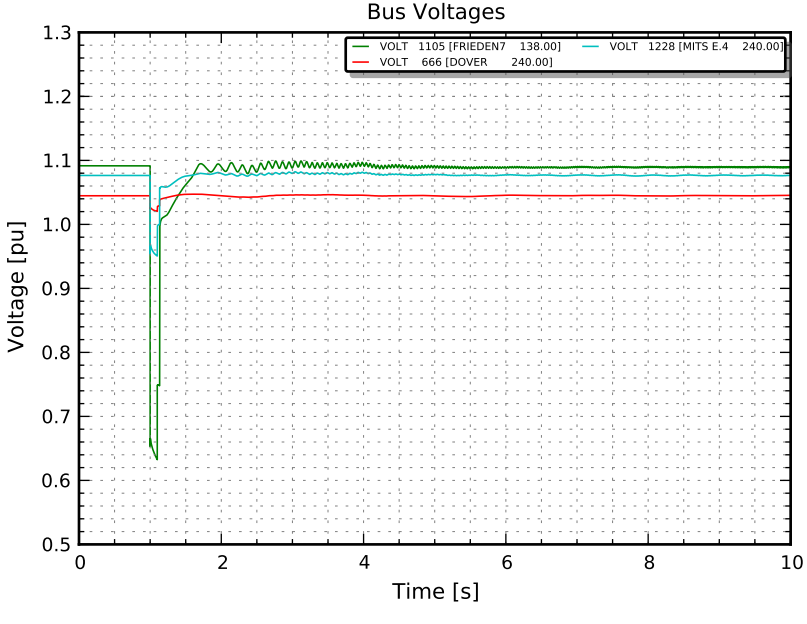
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_B.

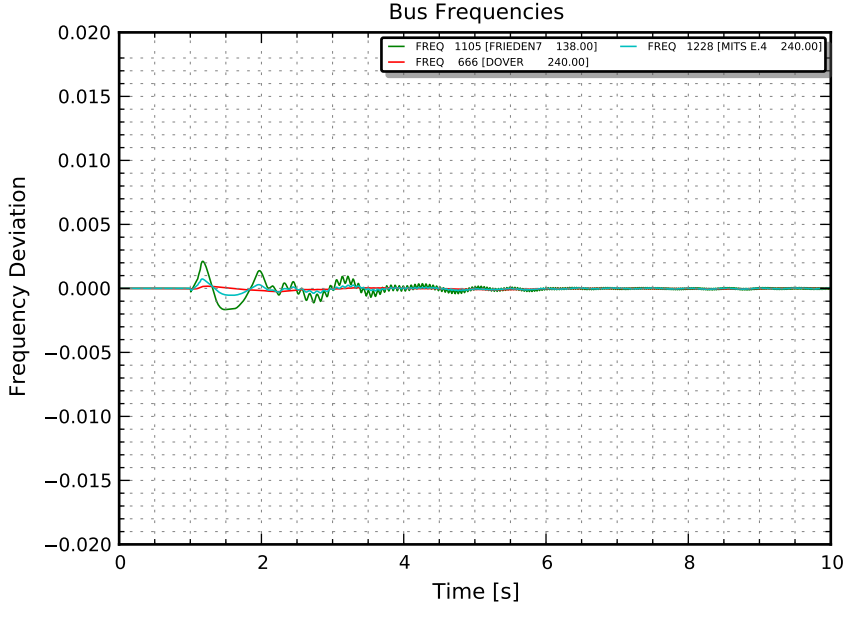
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 029 (B. 1)





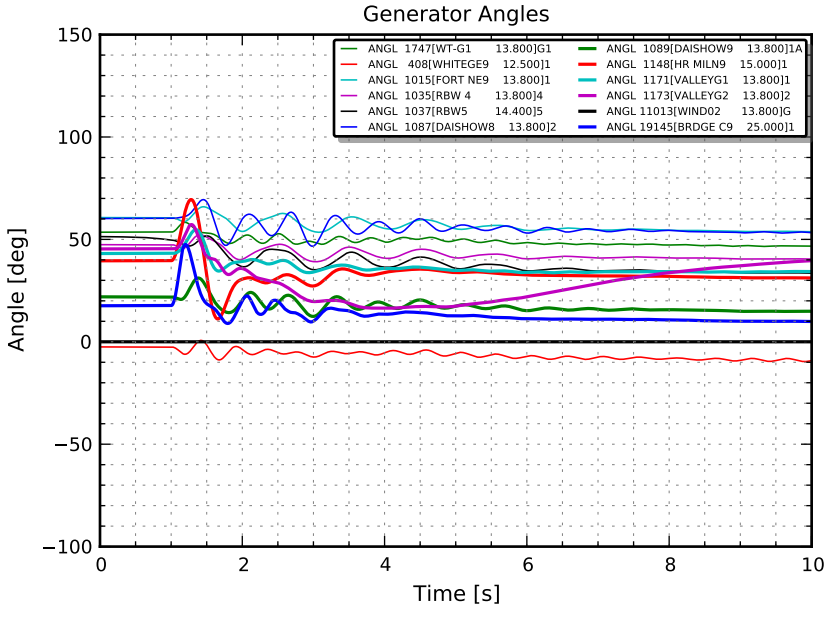


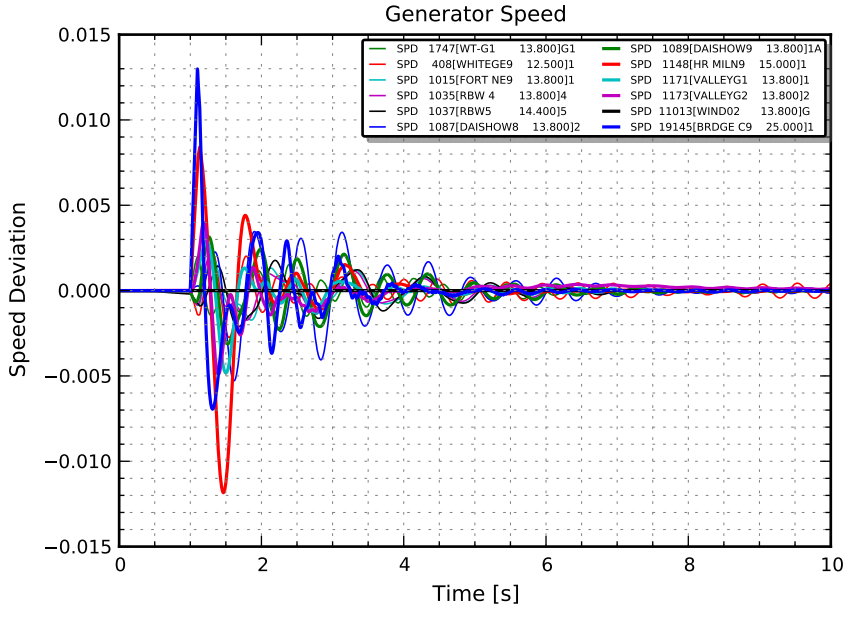


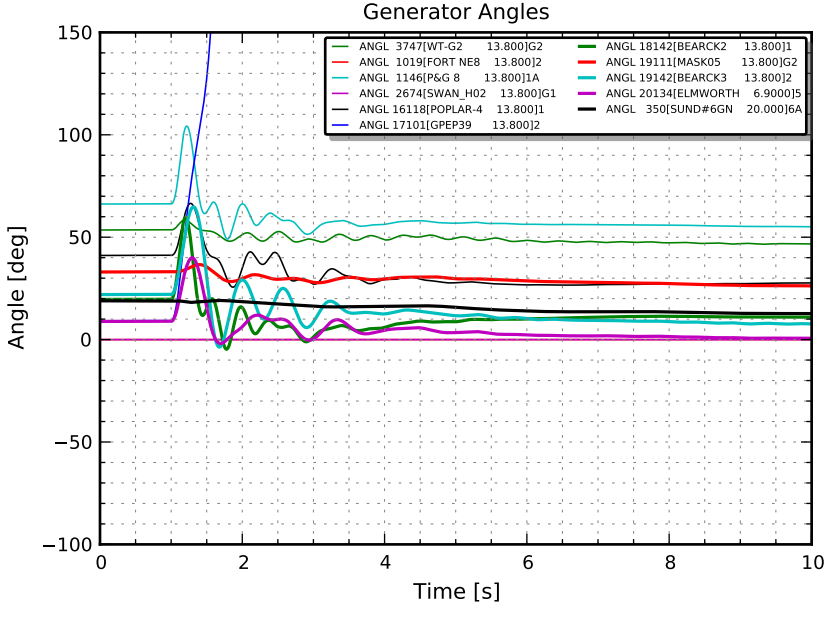
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_B.

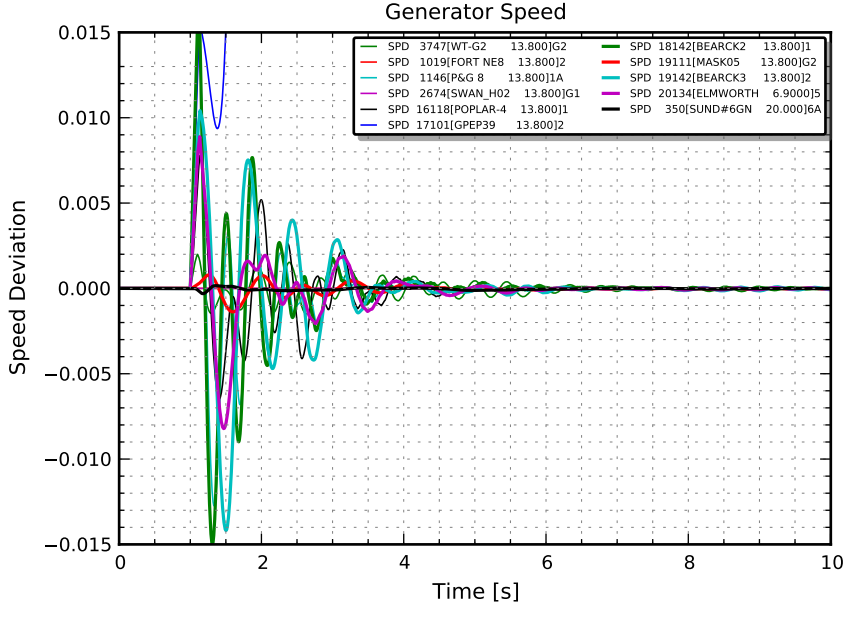
Study Area Generators

Appendix E2A
Figure: 029 (B. 2)





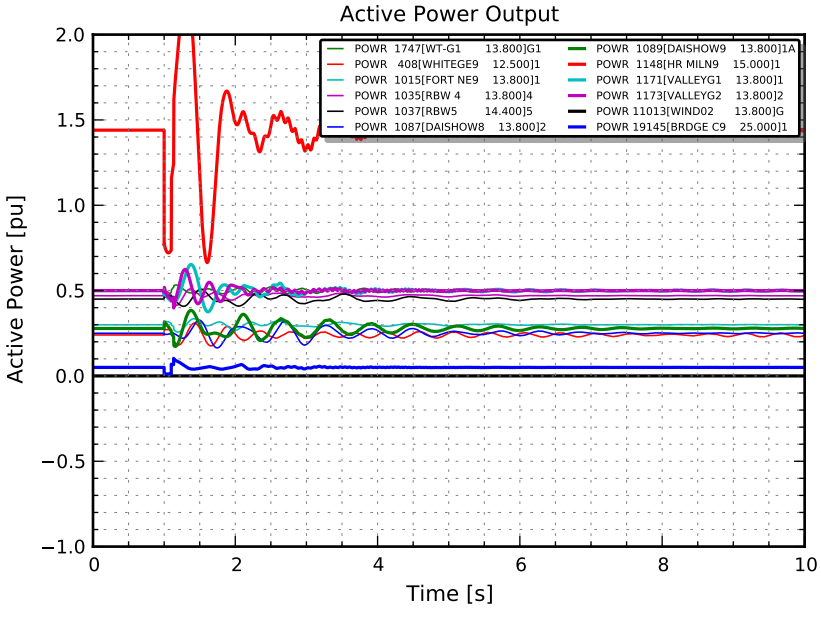


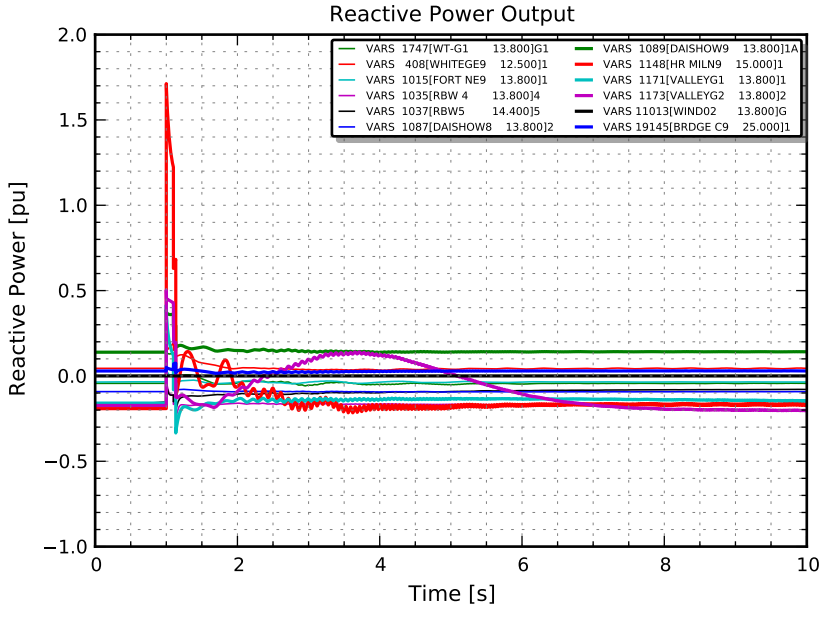


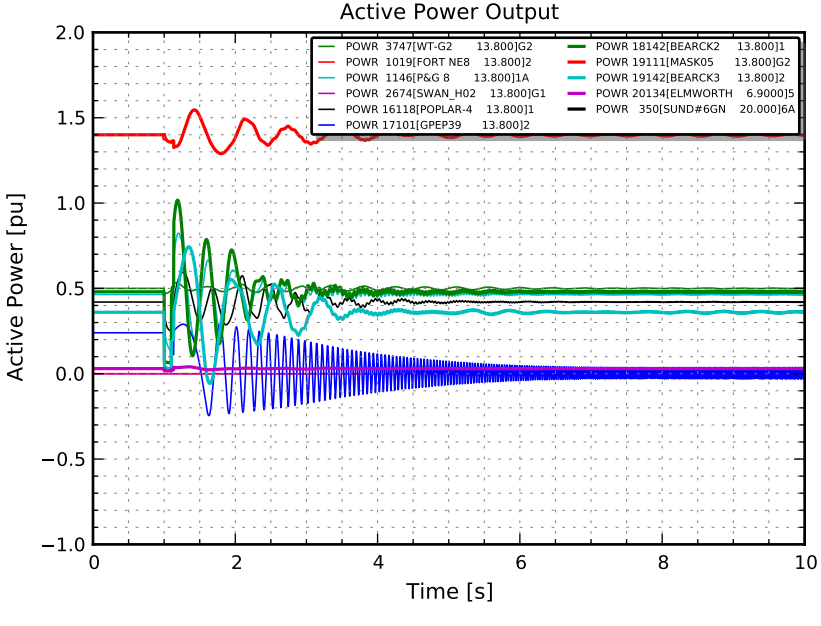
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_B.

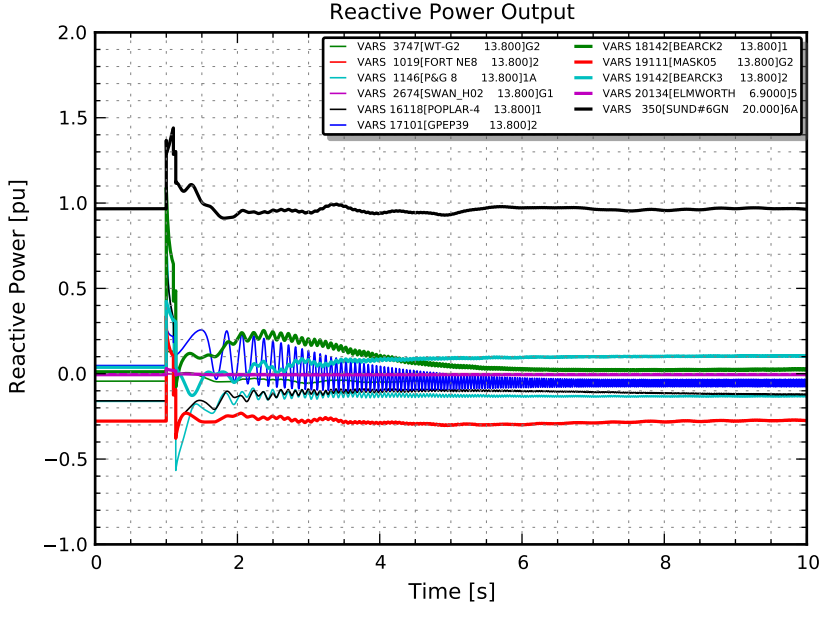
Study Area Generators

Appendix E2A
Figure: 029 (B. 3)





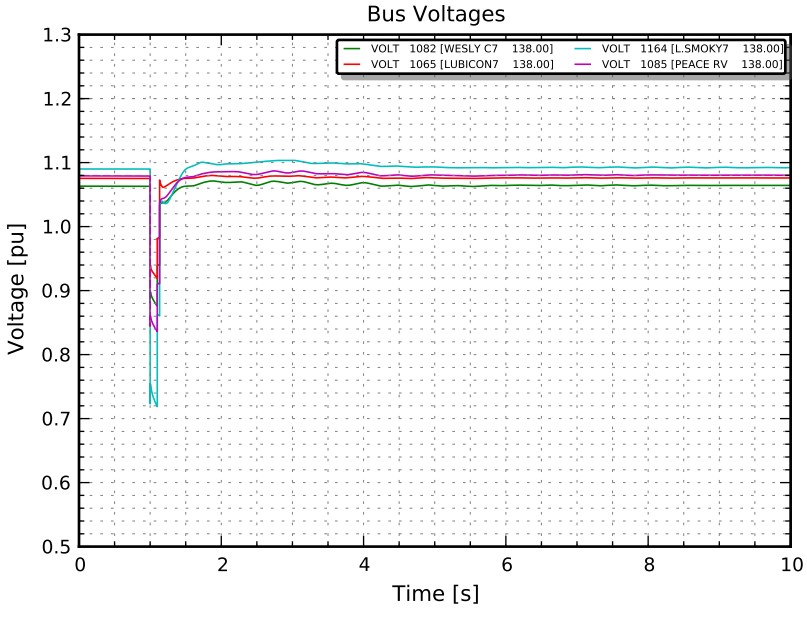


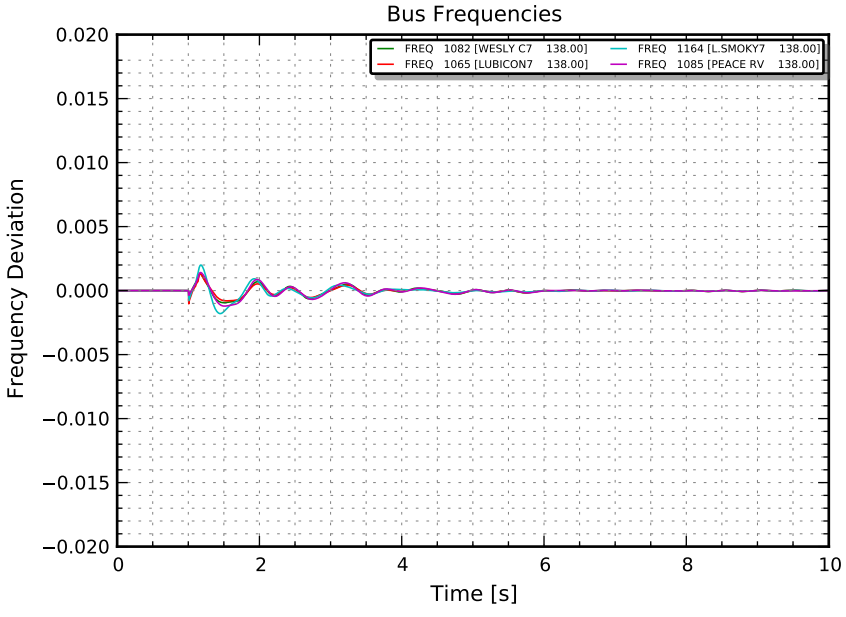


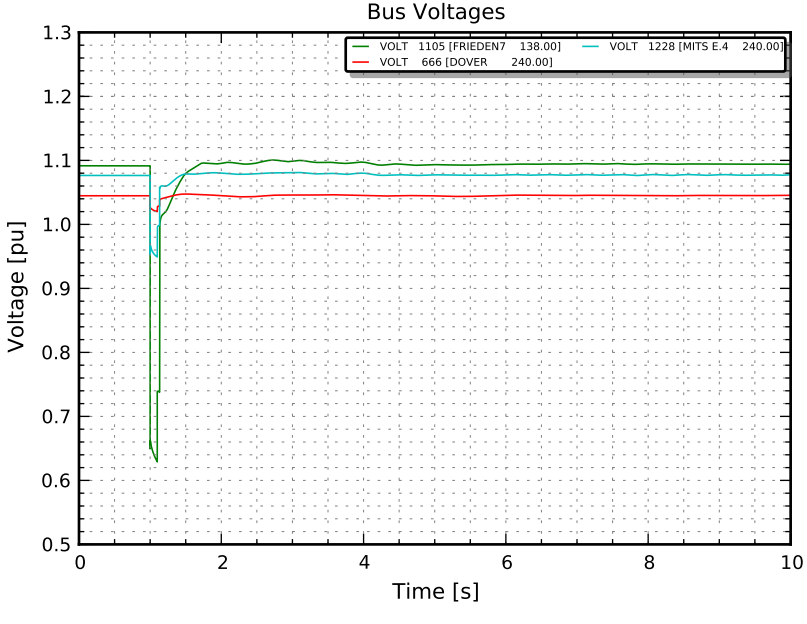
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_A.

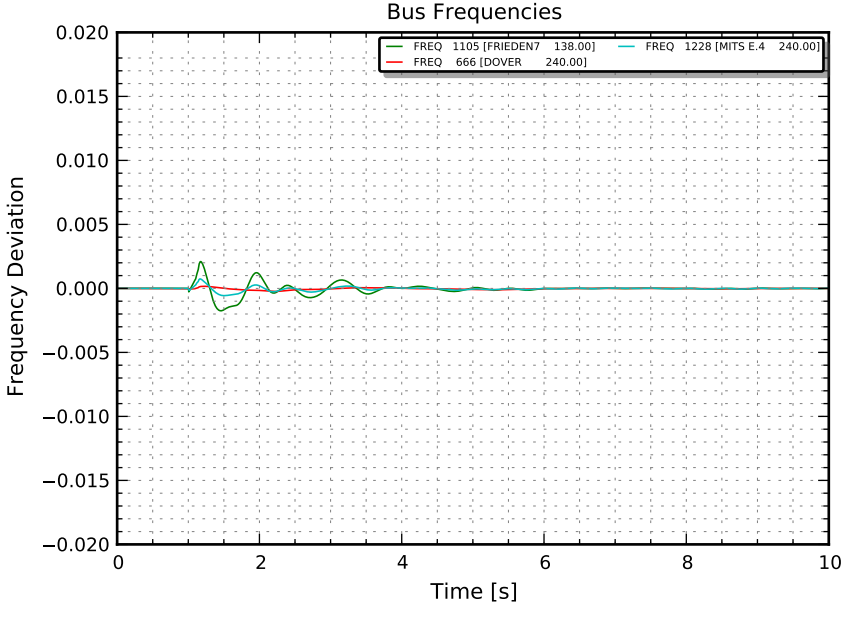
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 030 (A. 1)





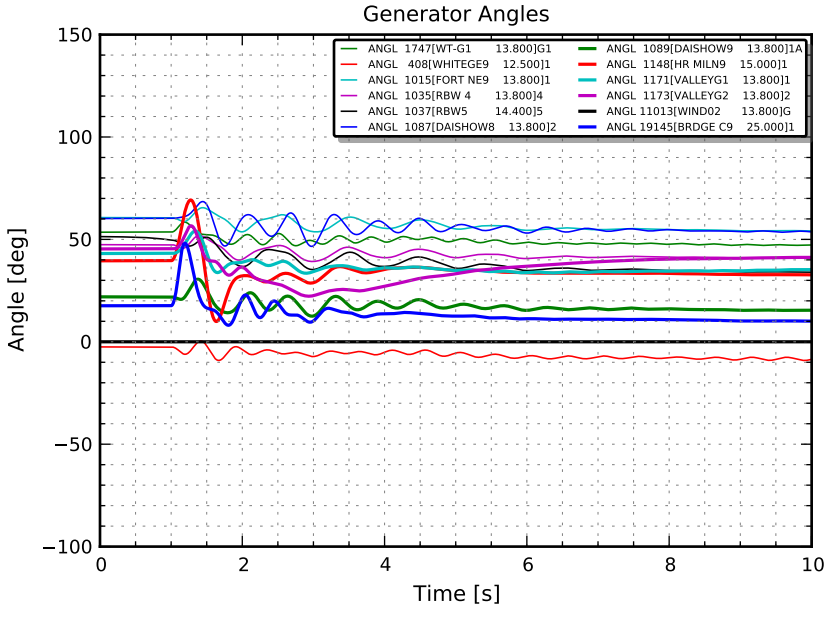


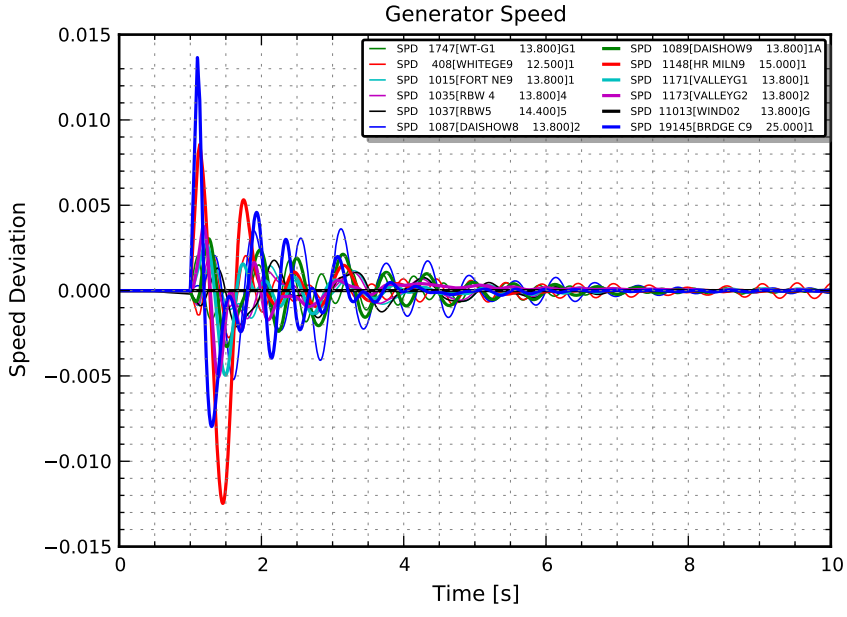


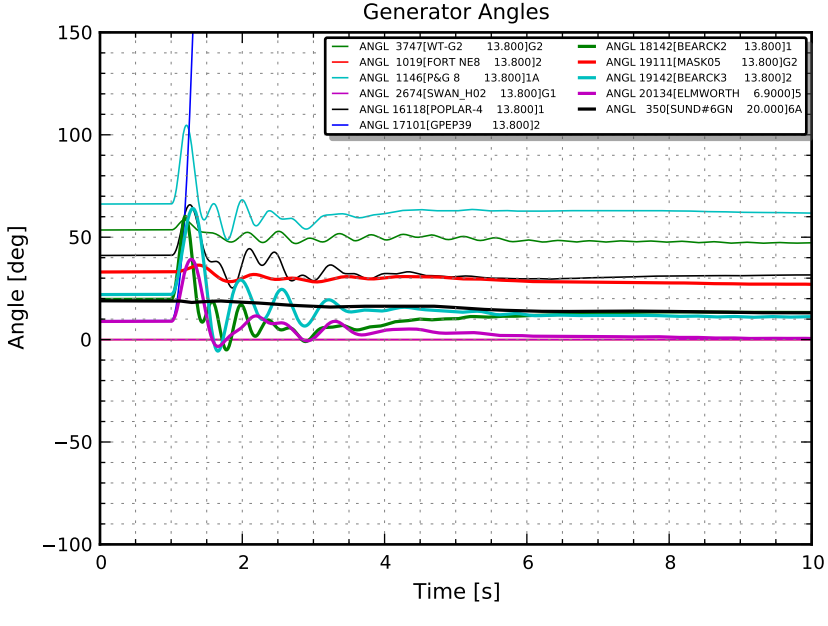
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_A.

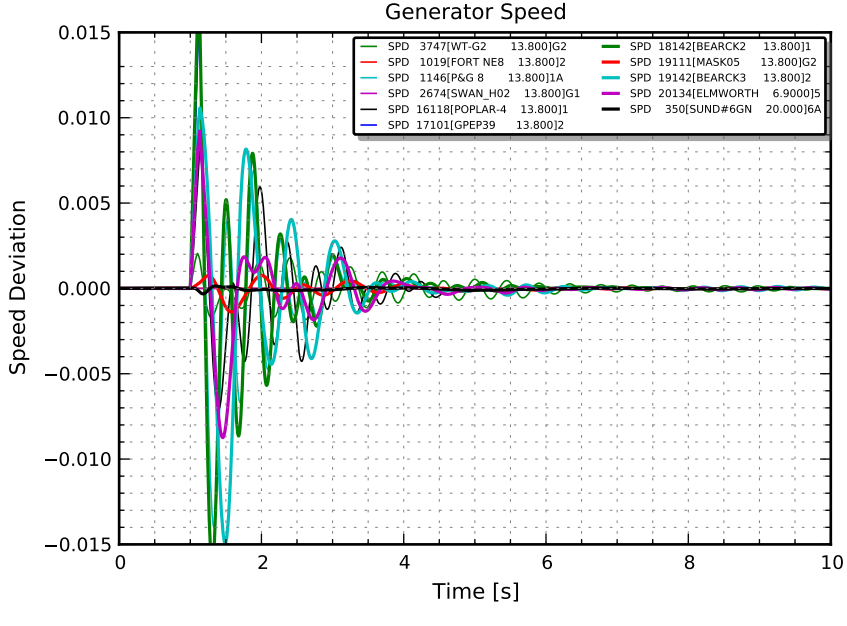
Study Area Generators

Appendix E2A
Figure: 030 (A. 2)





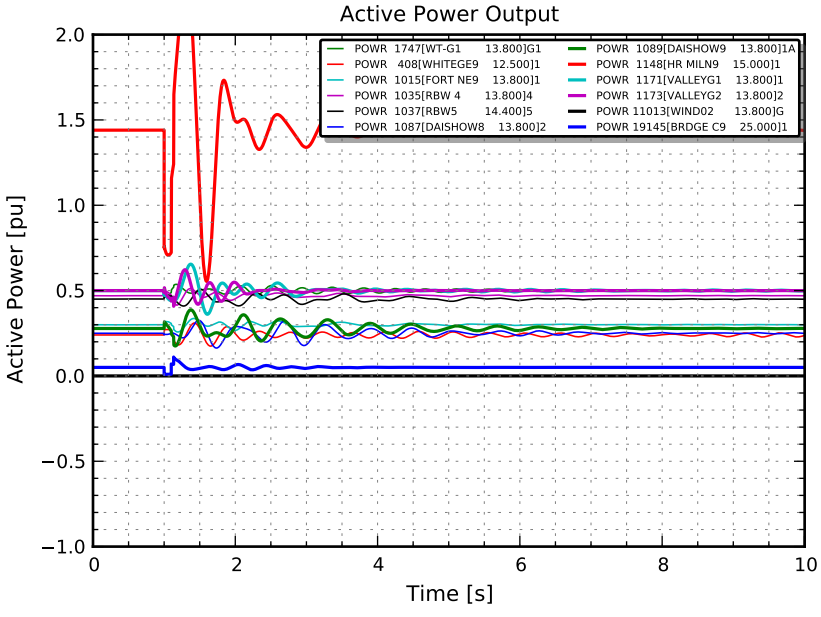


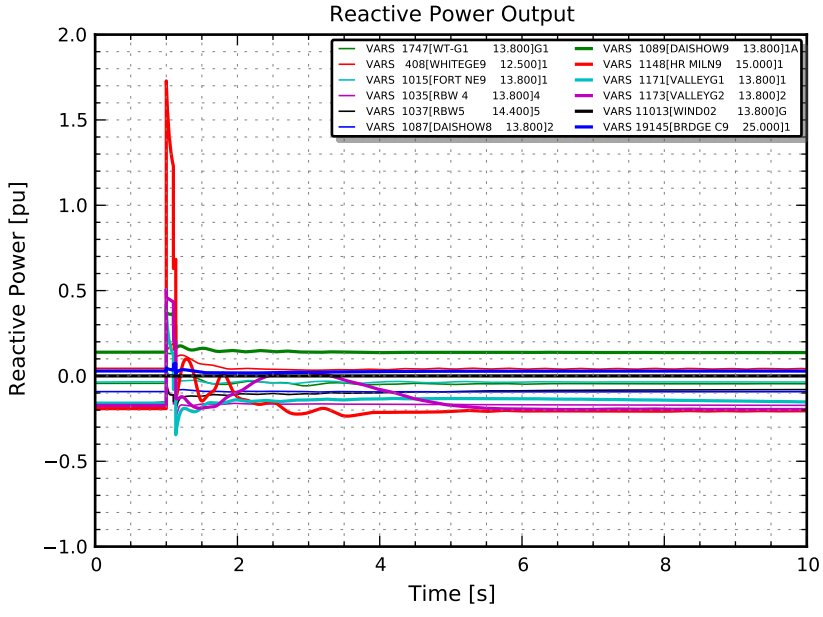


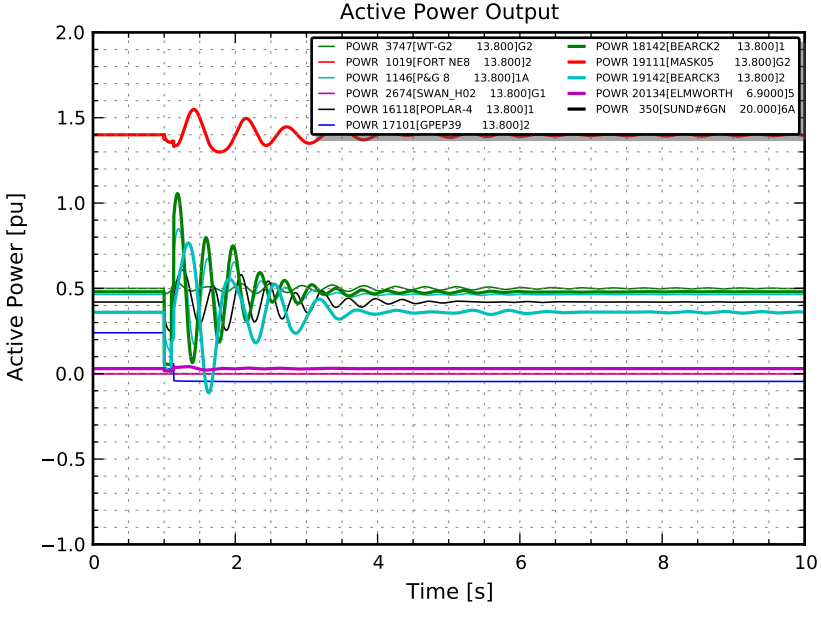
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_A.

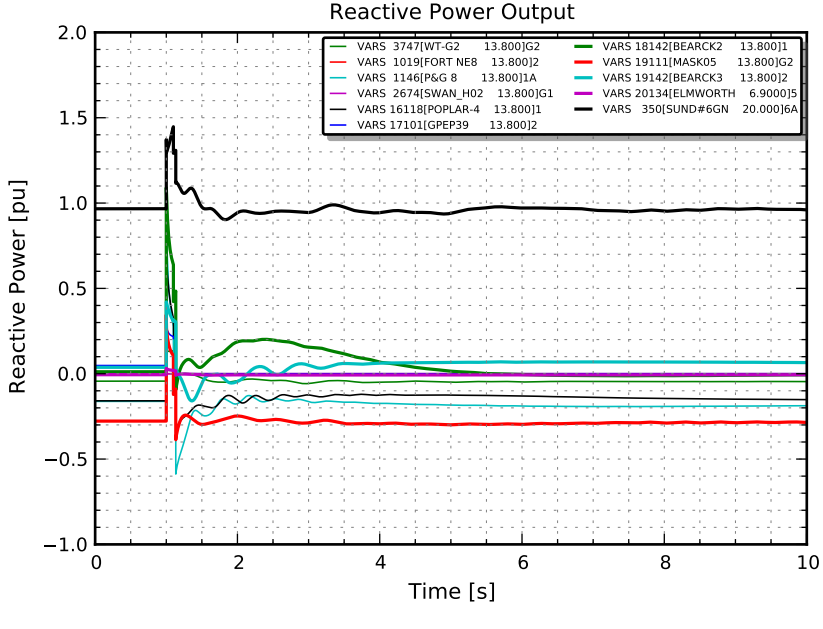
Study Area Generators

Appendix E2A
Figure: 030 (A. 3)





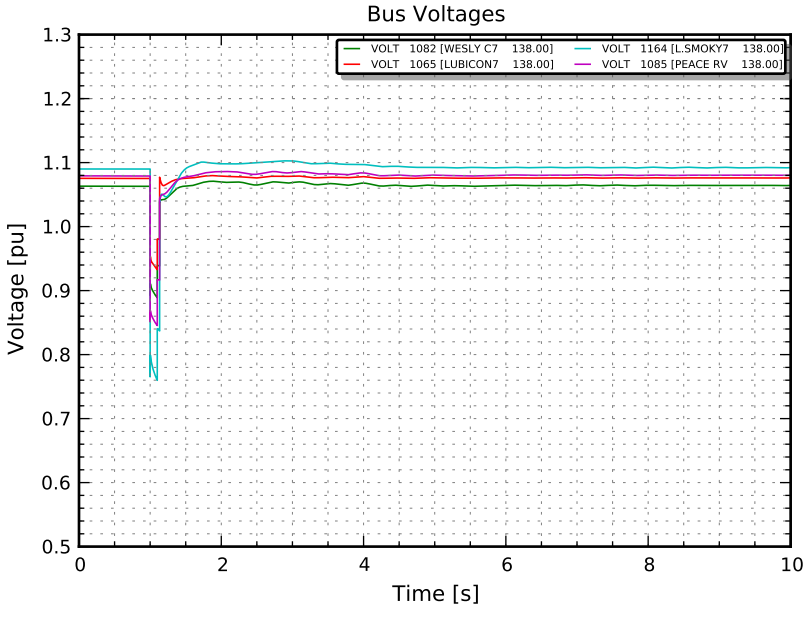


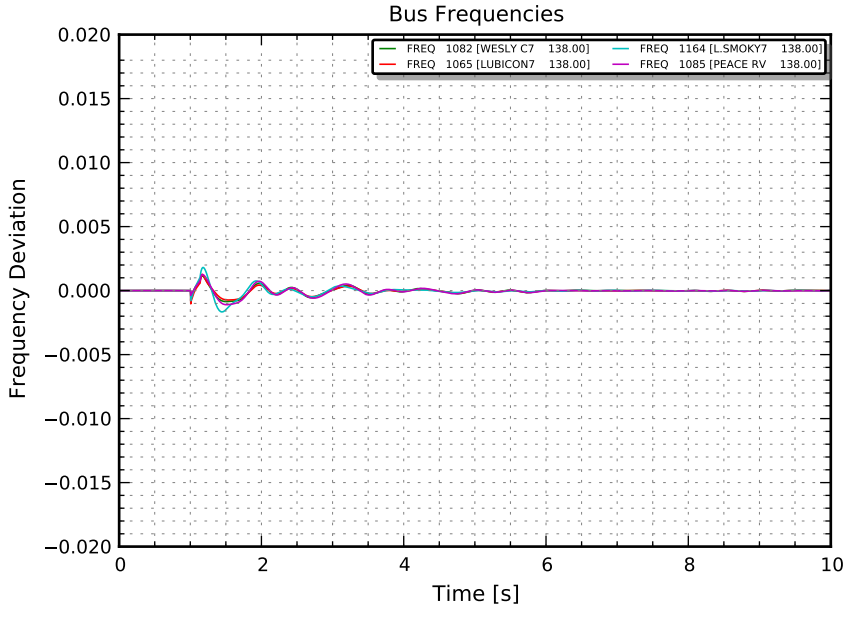


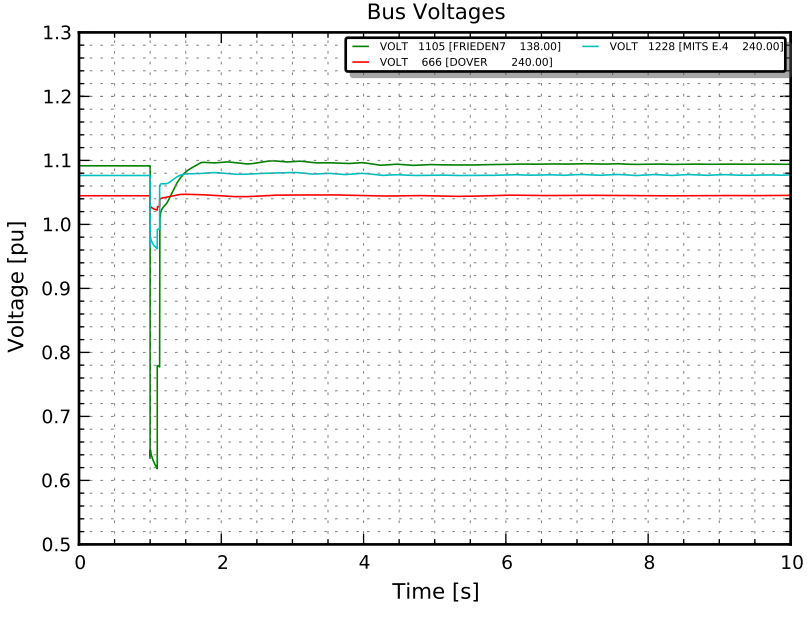
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_B.

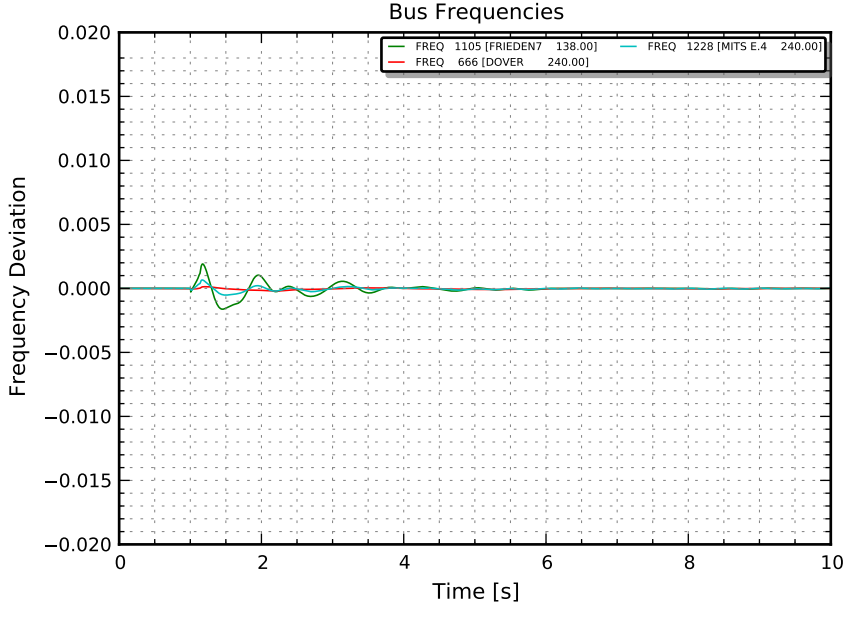
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 030 (B. 1)





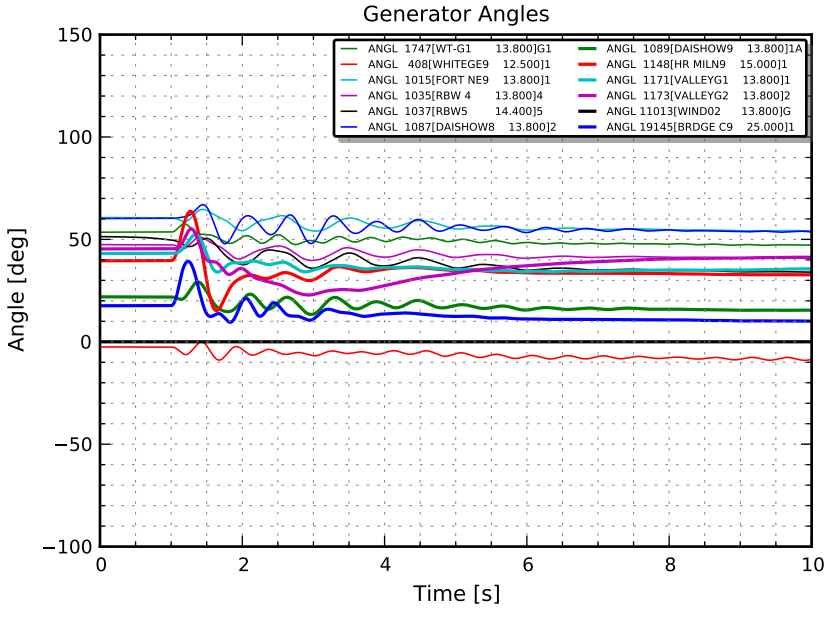


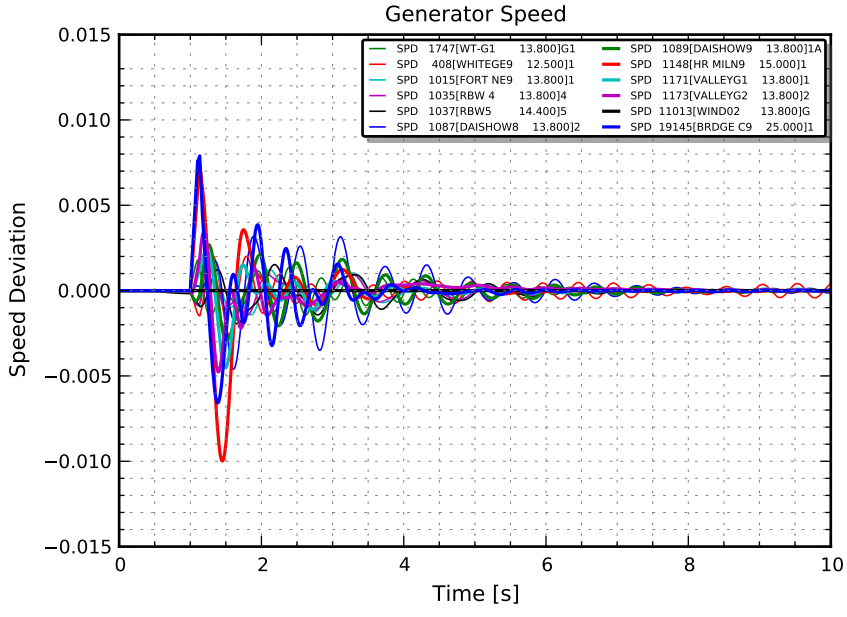


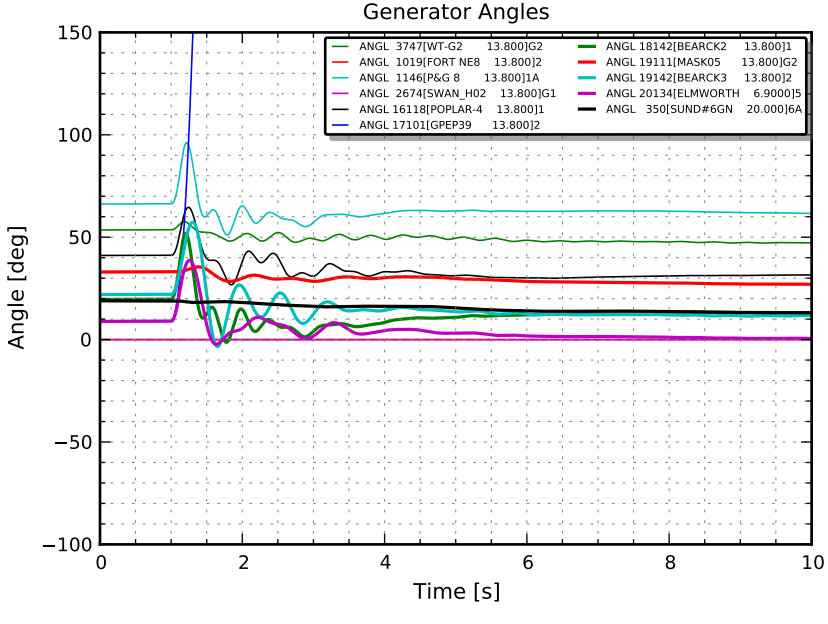
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_B.

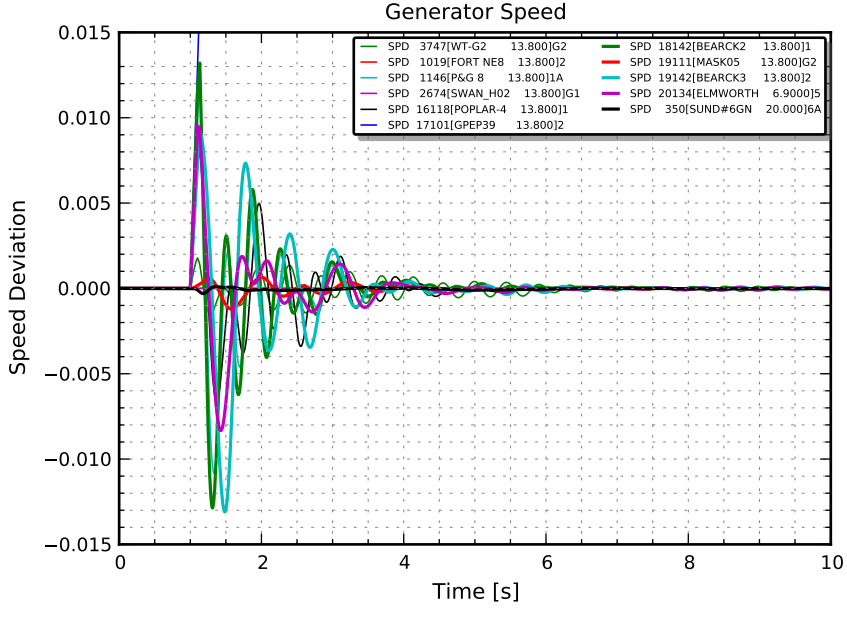
Study Area Generators

Appendix E2A
Figure: 030 (B. 2)





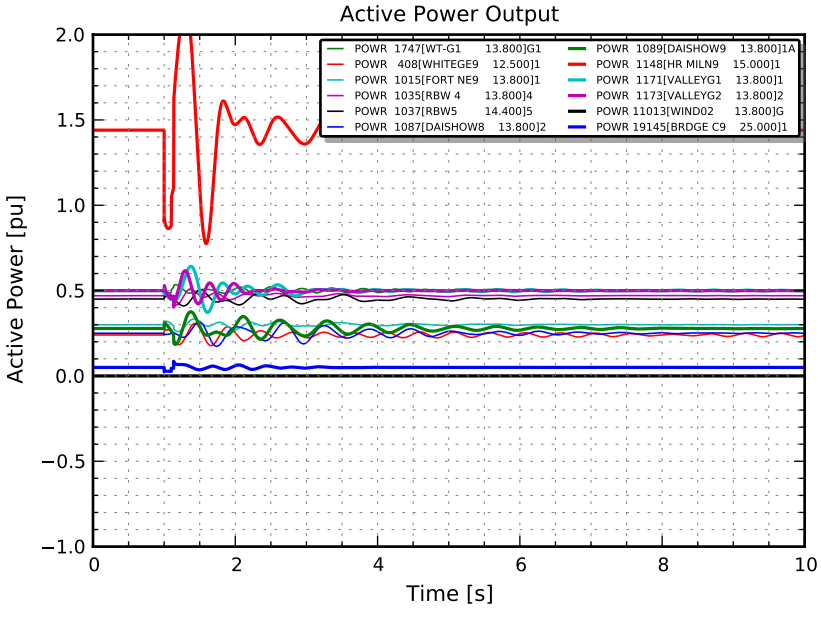


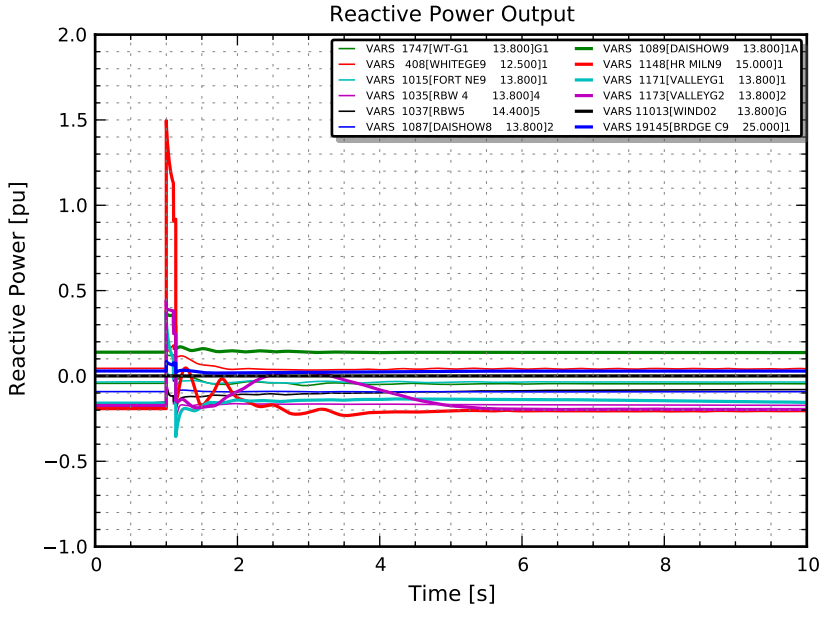


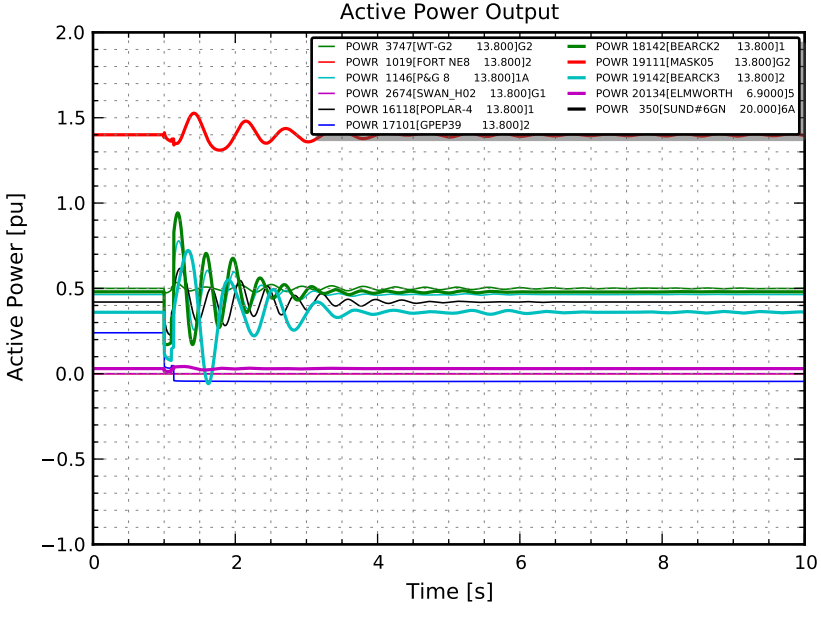
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_B.

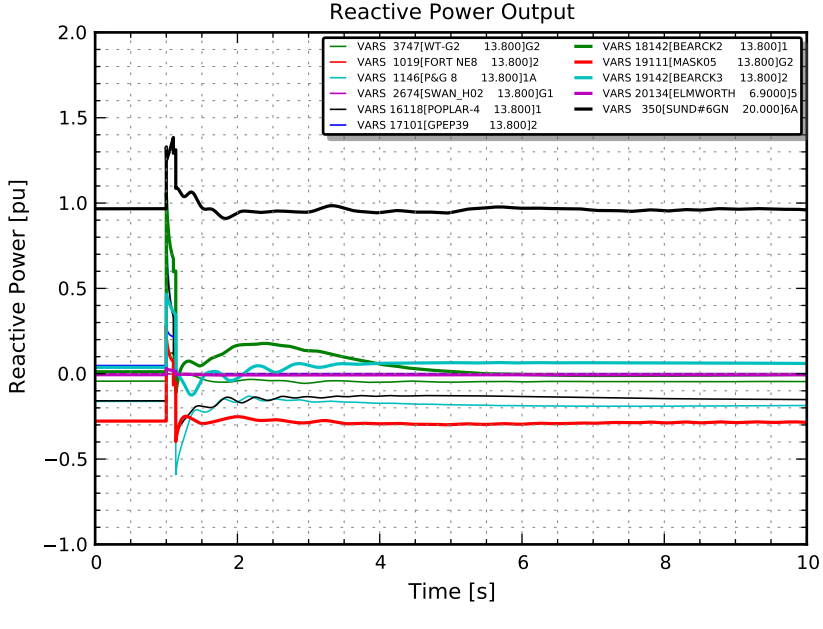
Study Area Generators

Appendix E2A
Figure: 030 (B. 3)





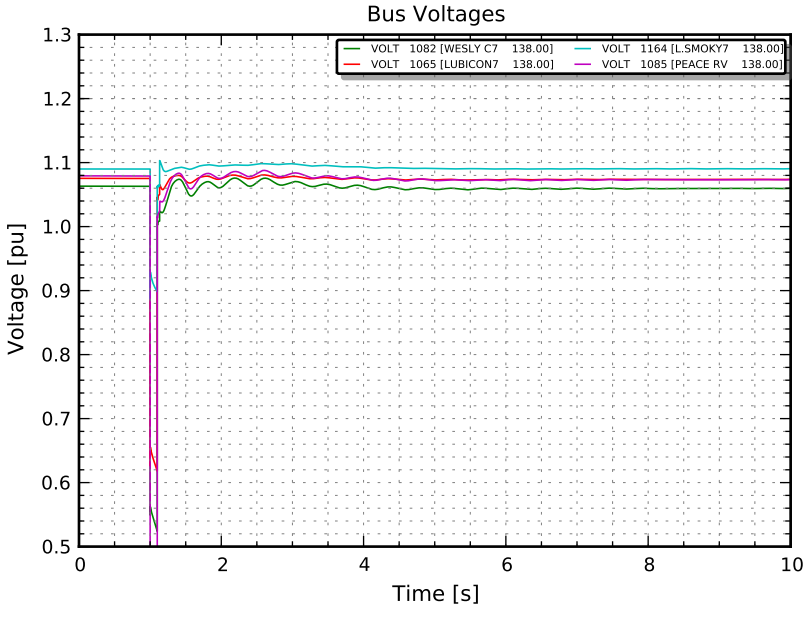


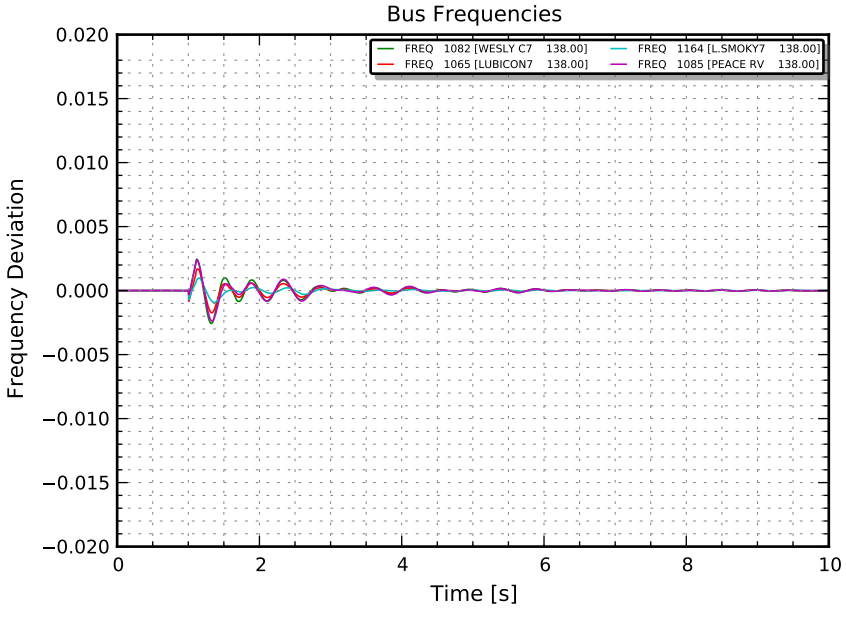


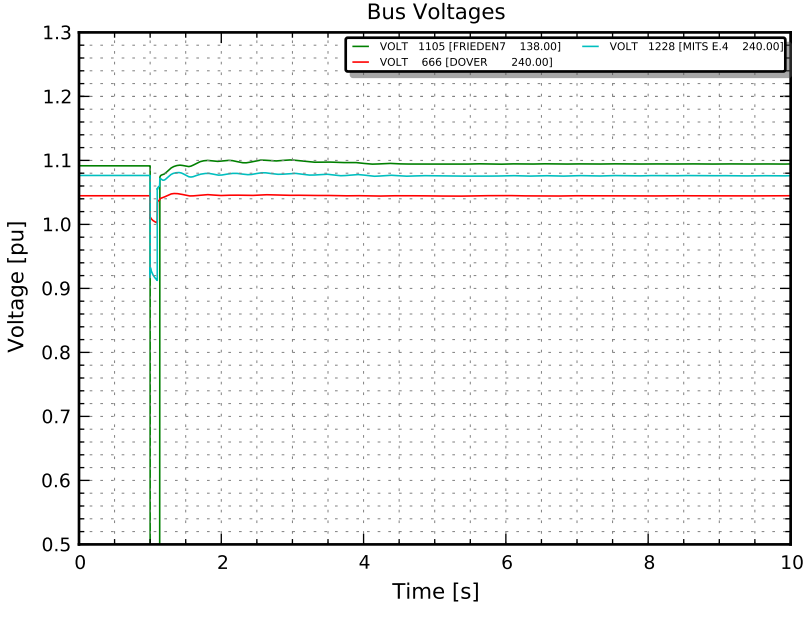
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_A.

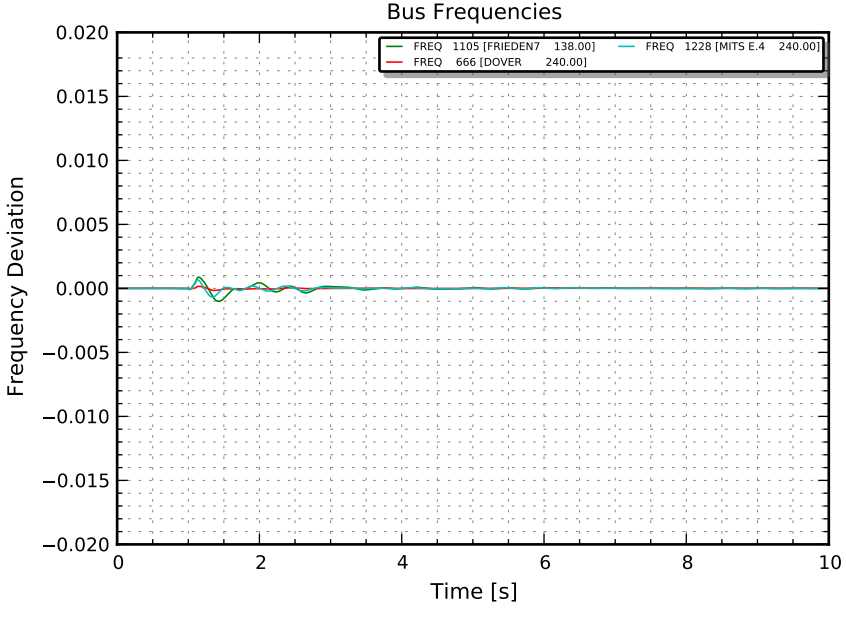
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 031 (A. 1)





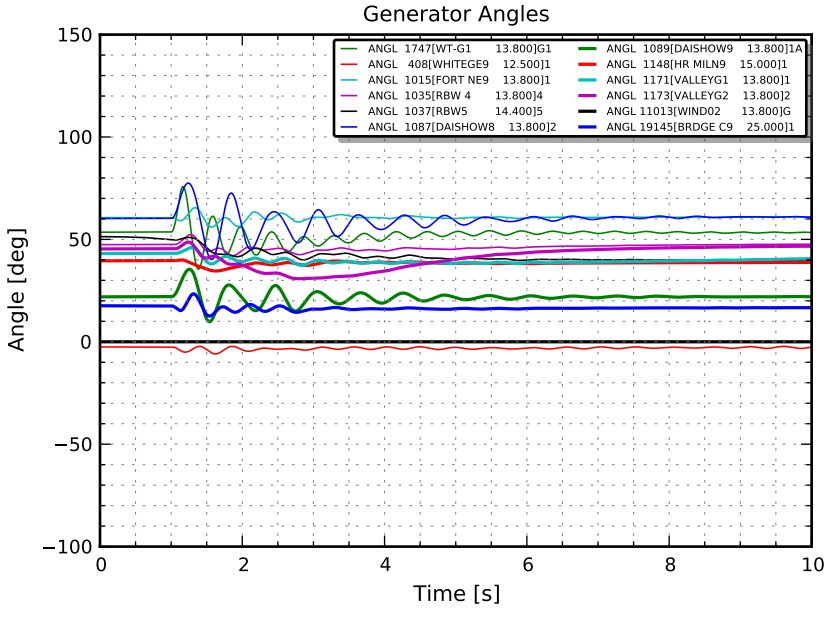


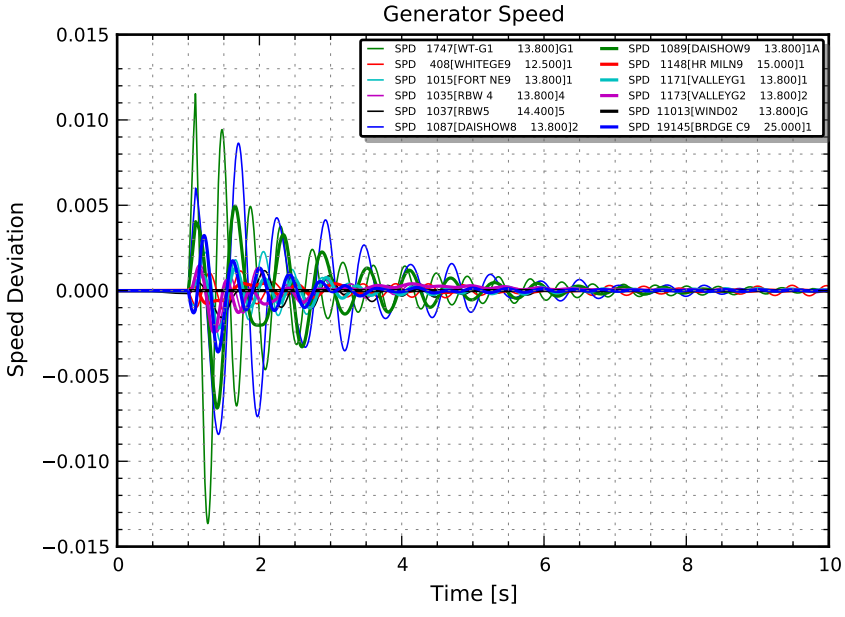


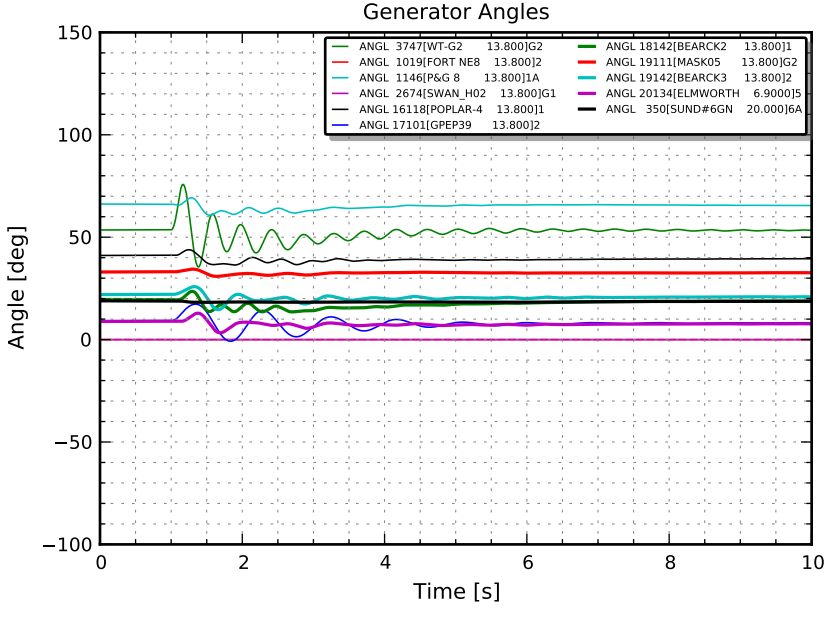
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_A.

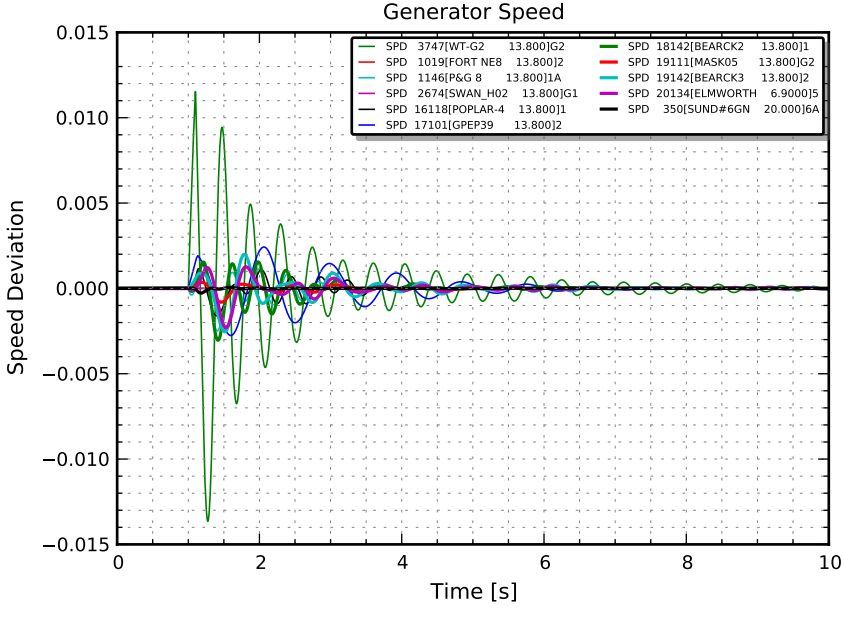
Study Area Generators

Appendix E2A
Figure: 031 (A. 2)





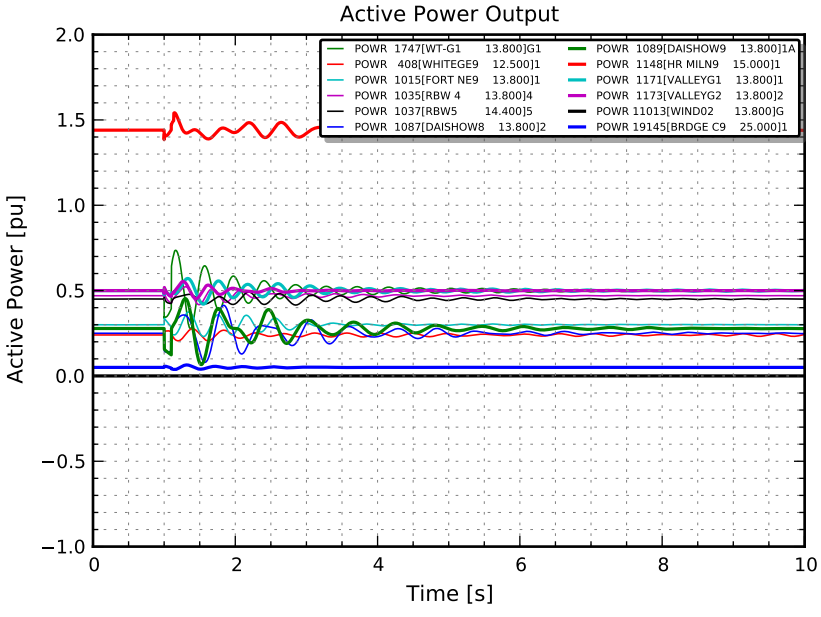


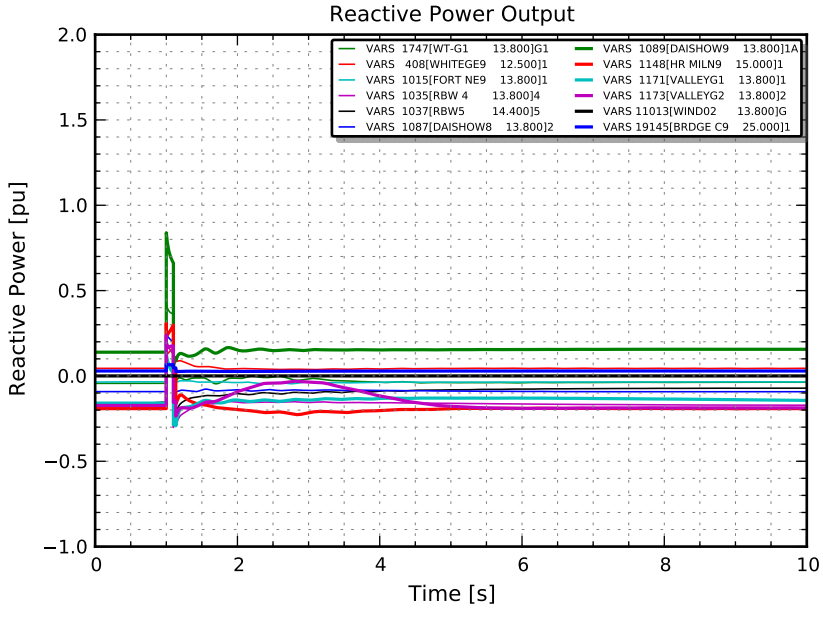


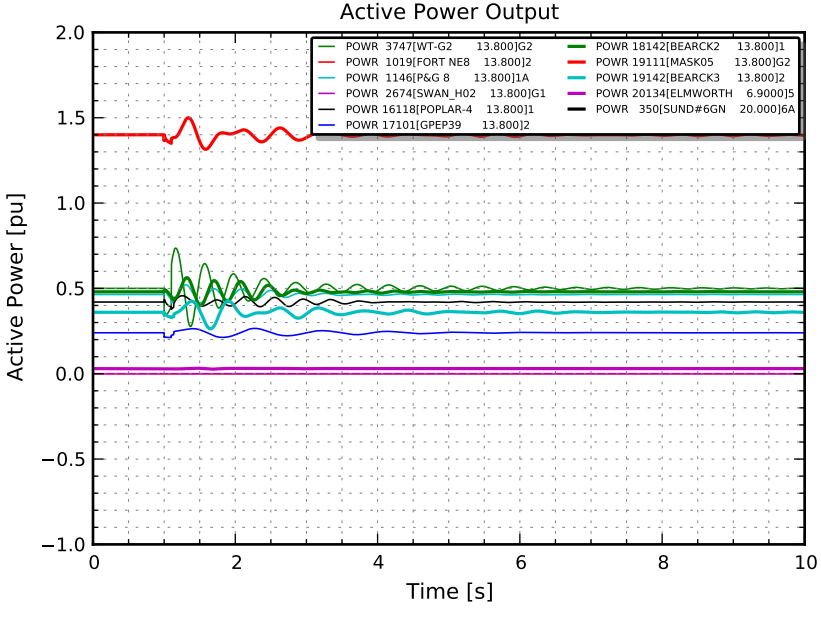
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_A.

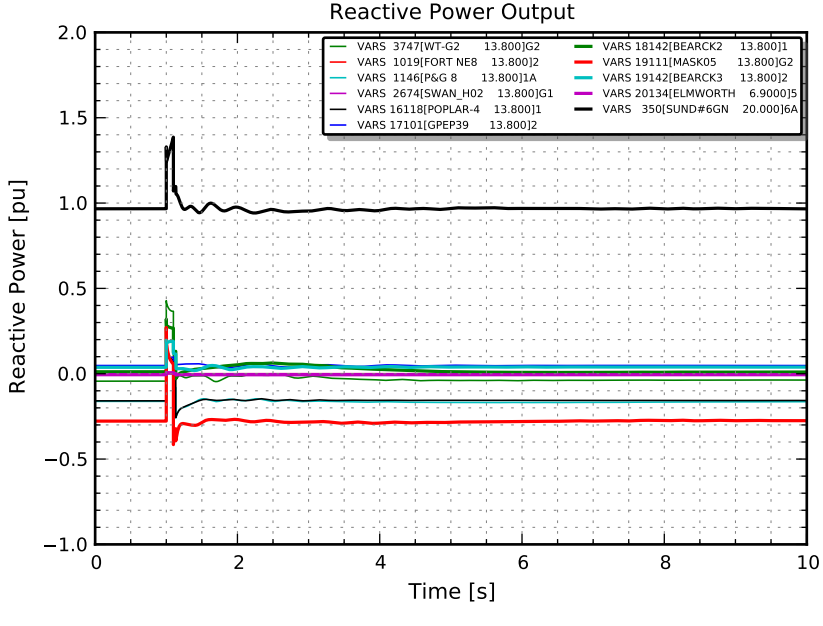
Study Area Generators

Appendix E2A
Figure: 031 (A. 3)





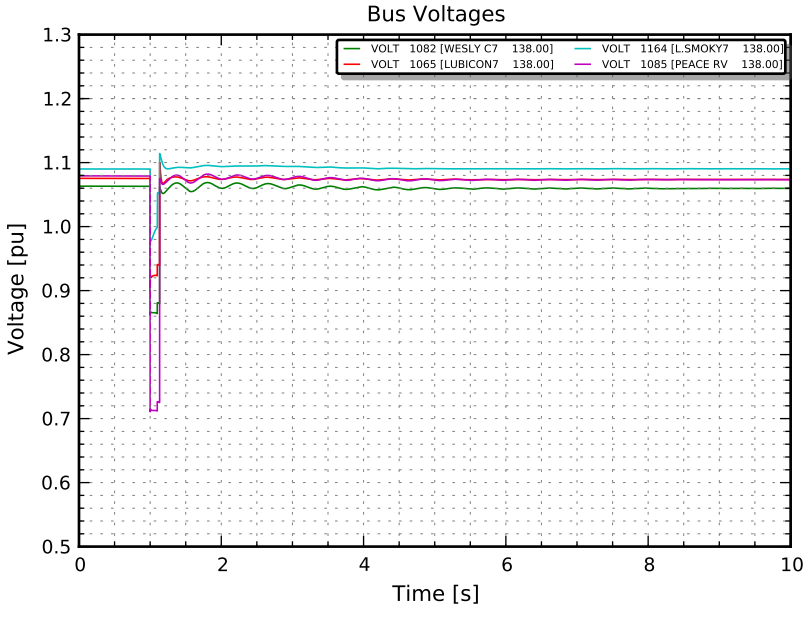


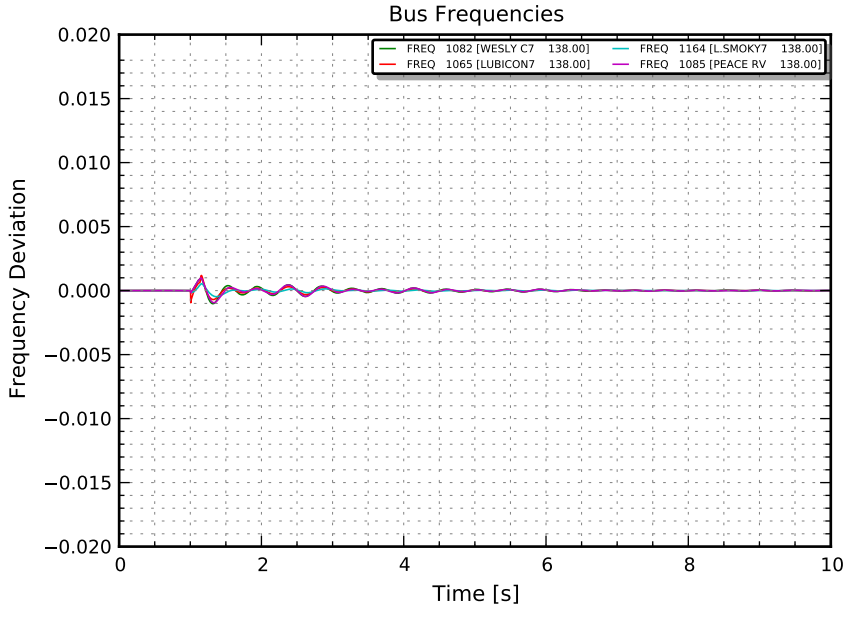


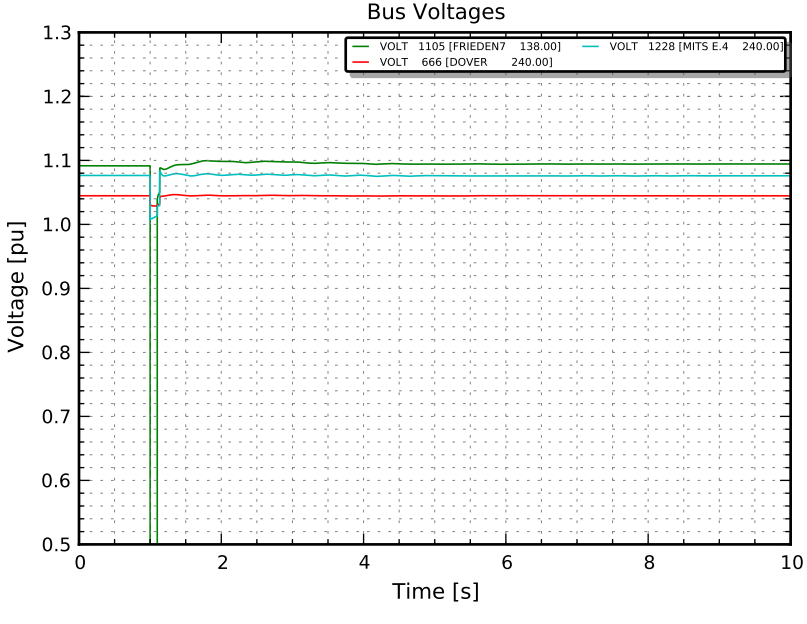
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_B.

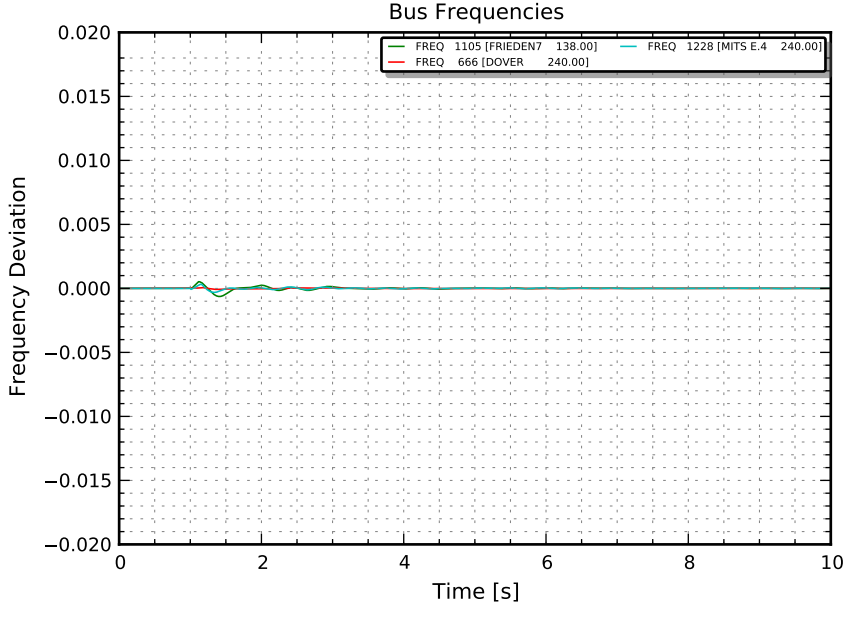
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 031 (B. 1)





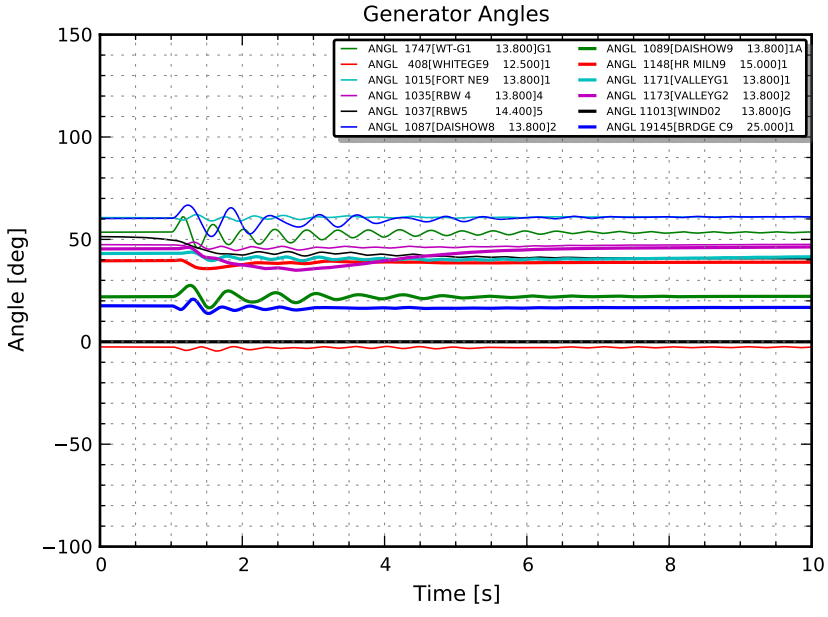


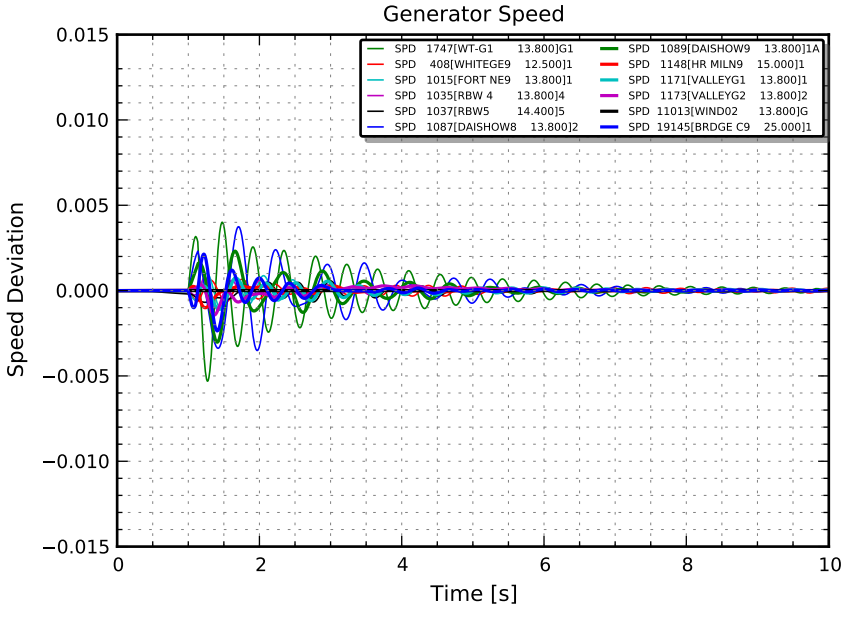


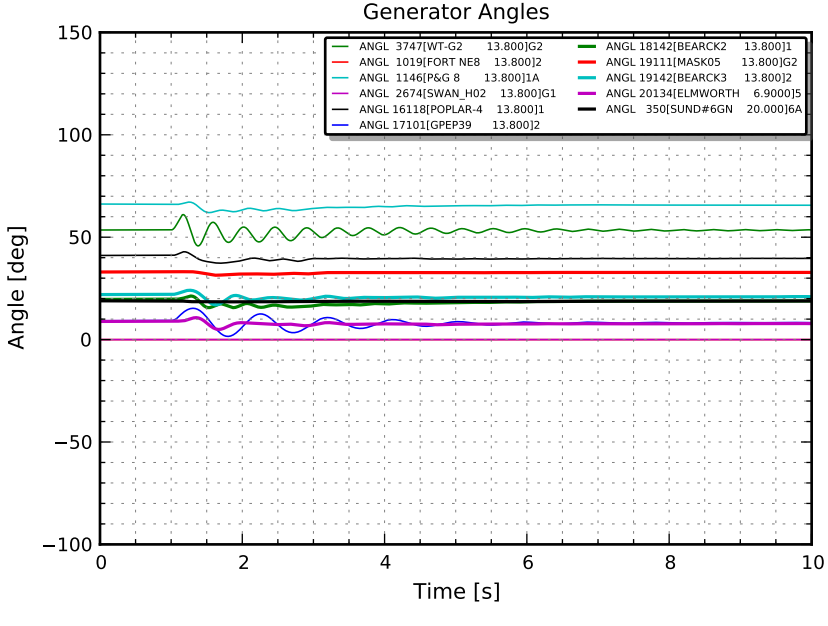
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_B.

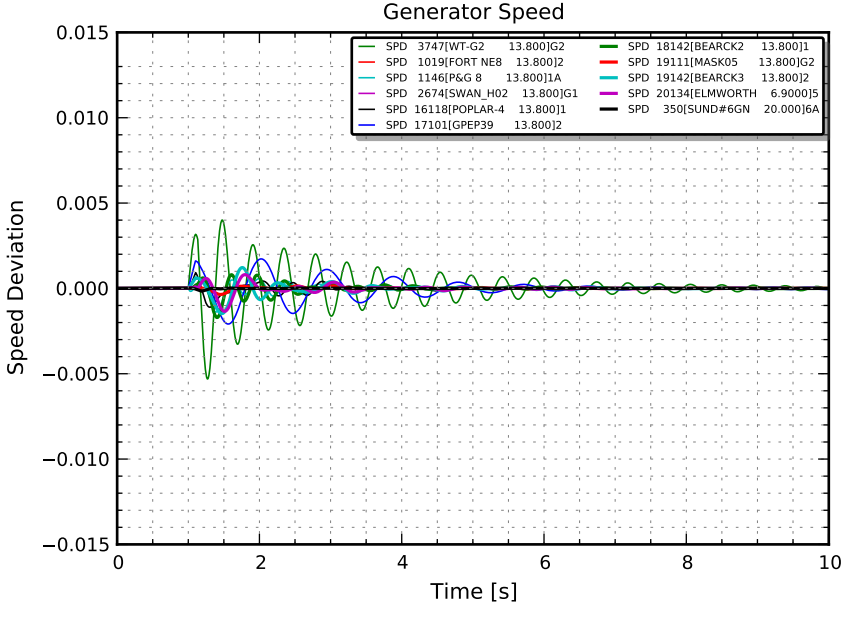
Study Area Generators

Appendix E2A
Figure: 031 (B. 2)





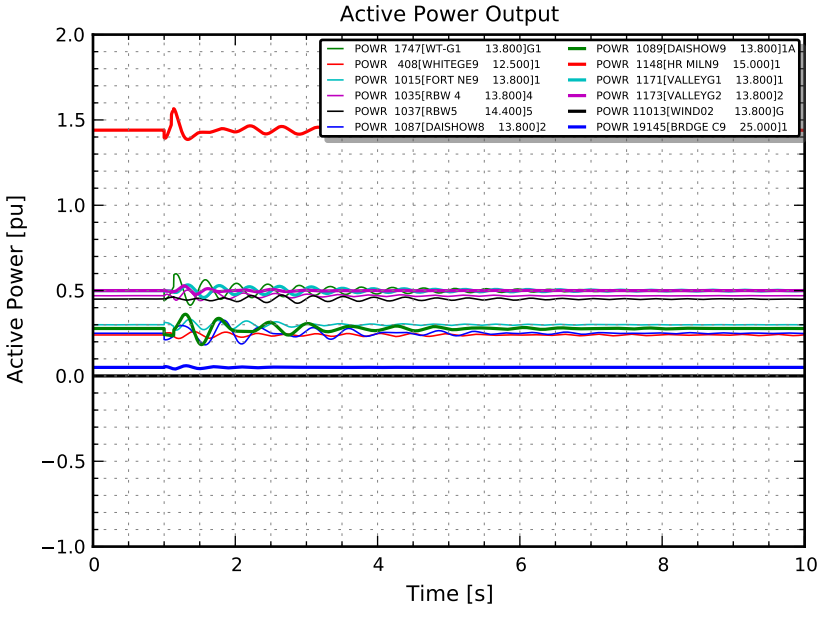


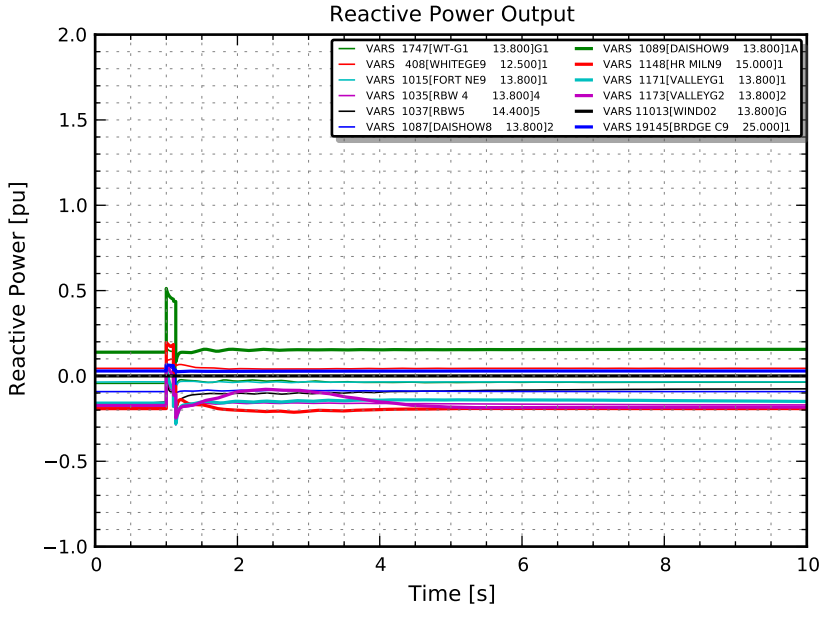


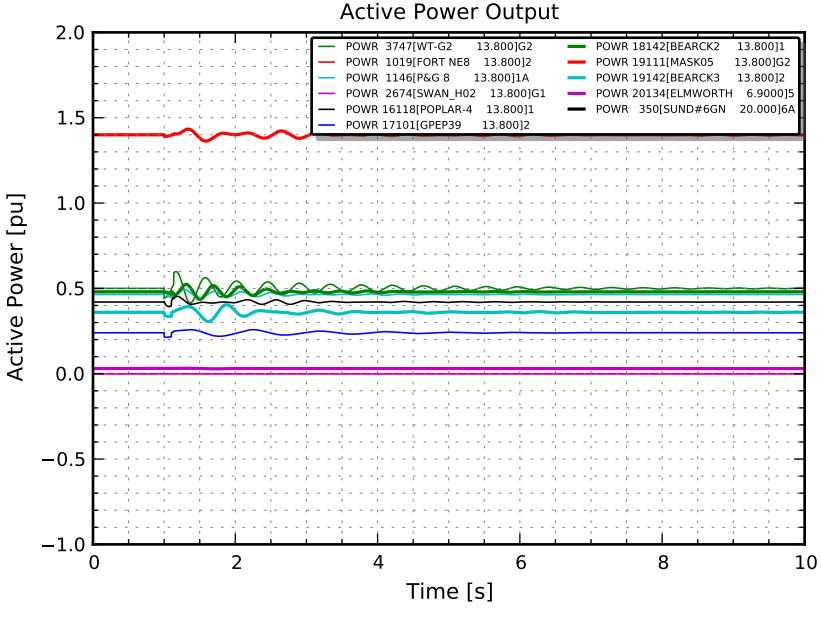
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_B.

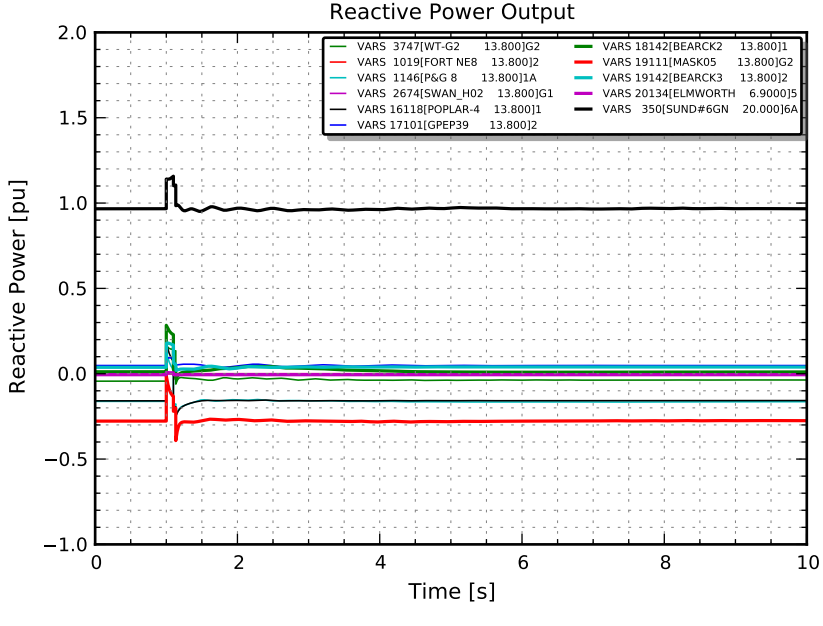
Study Area Generators

Appendix E2A
Figure: 031 (B. 3)





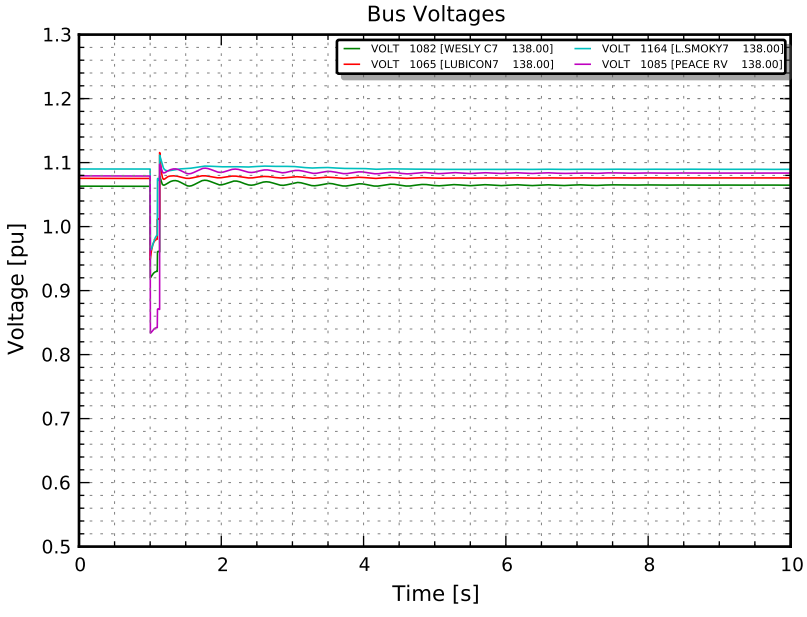


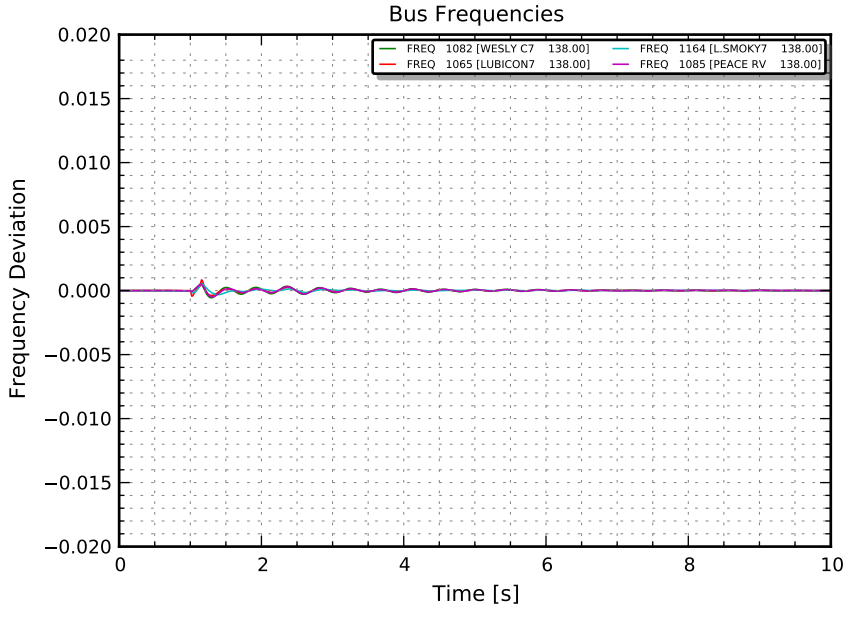


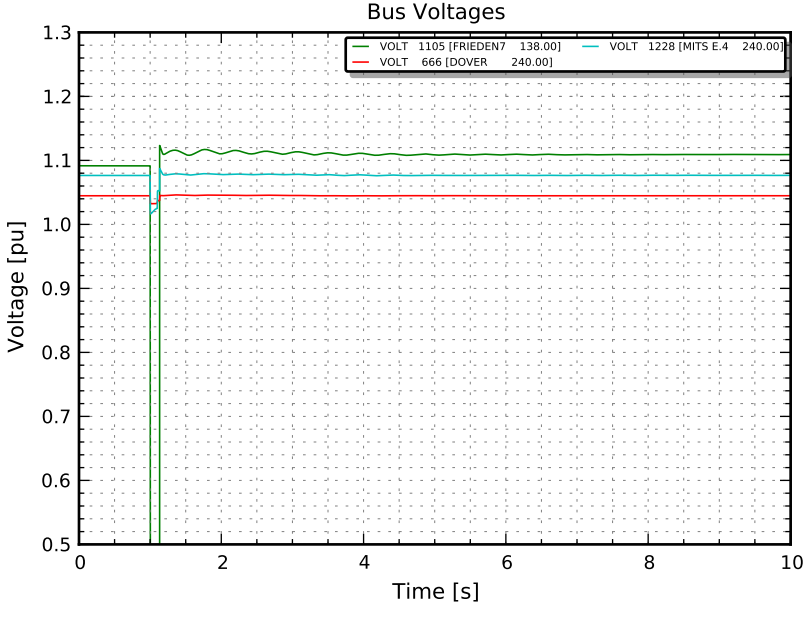
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 032 7L73 RYCROFT to FRIEDENSTAL_A.

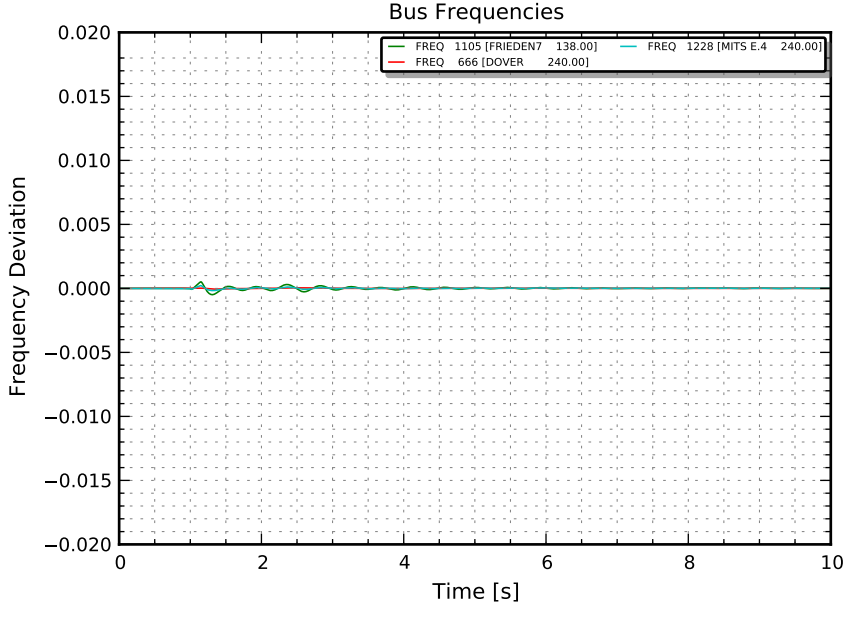
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 032 (A. 1)





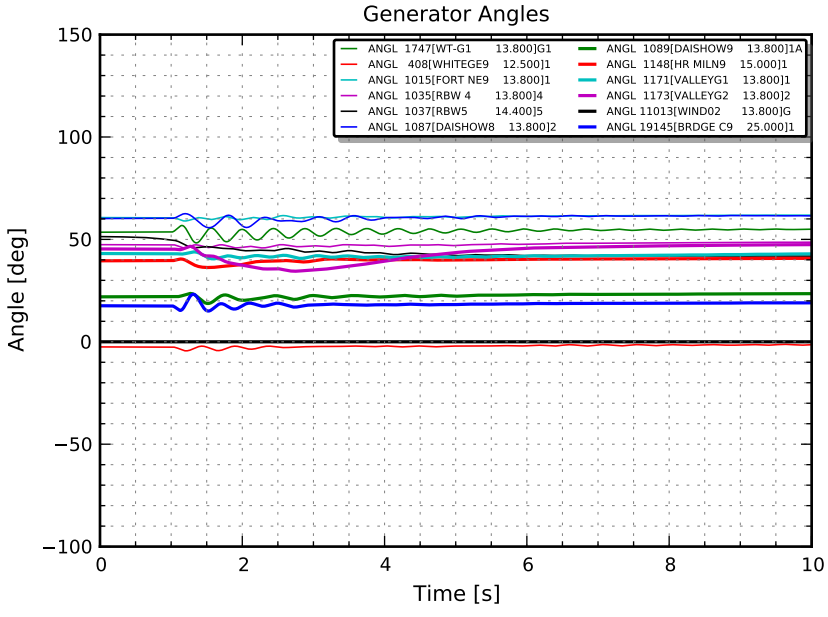


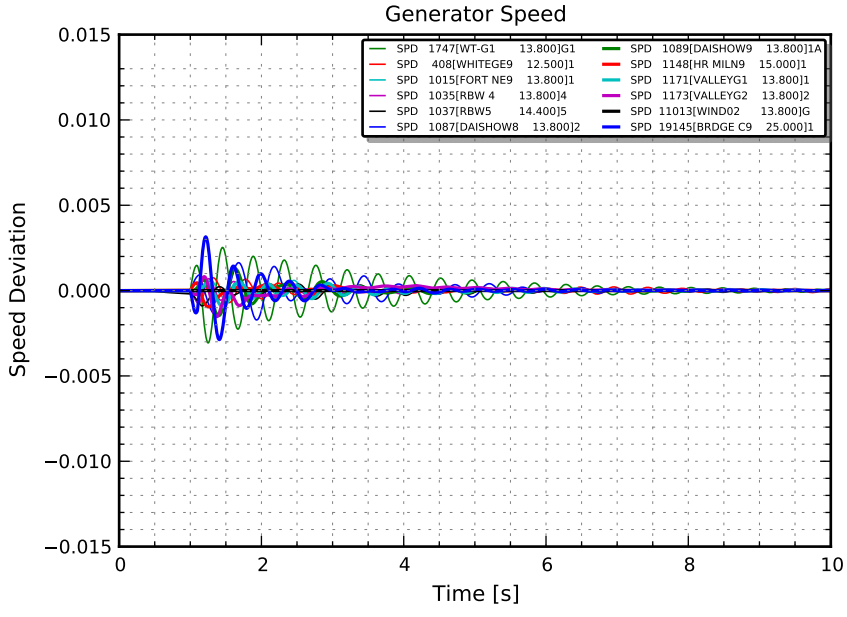


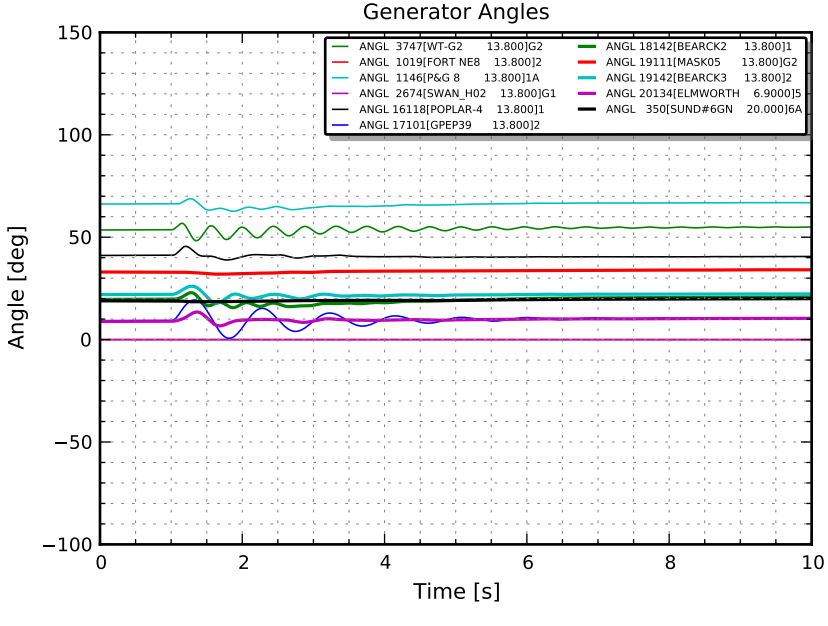
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 032 7L73 RYCROFT to FRIEDENSTAL_A.

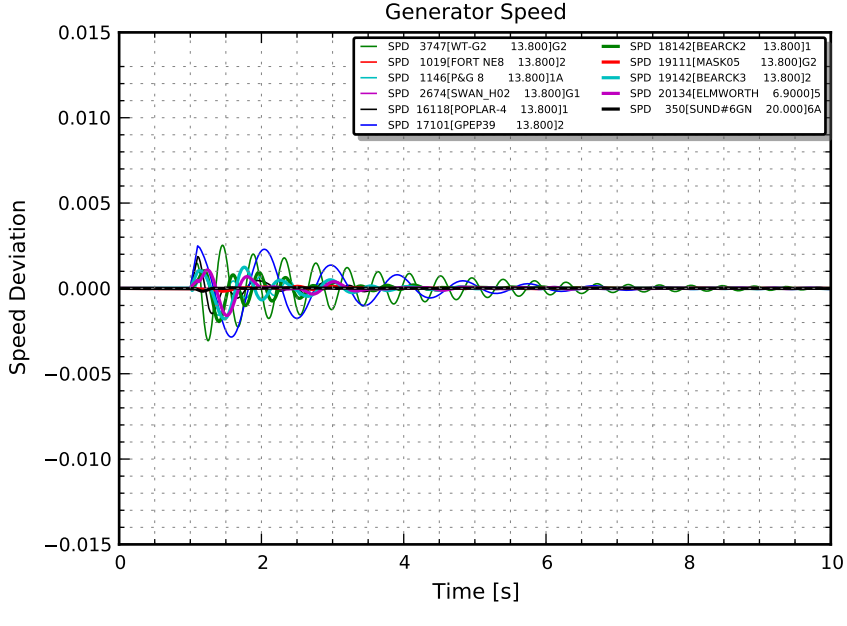
Study Area Generators

Appendix E2A
Figure: 032 (A. 2)





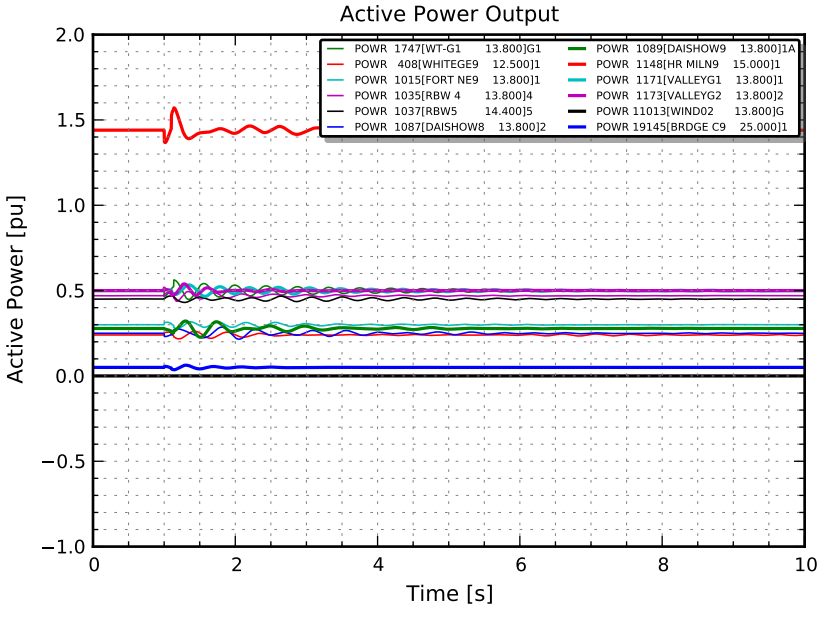


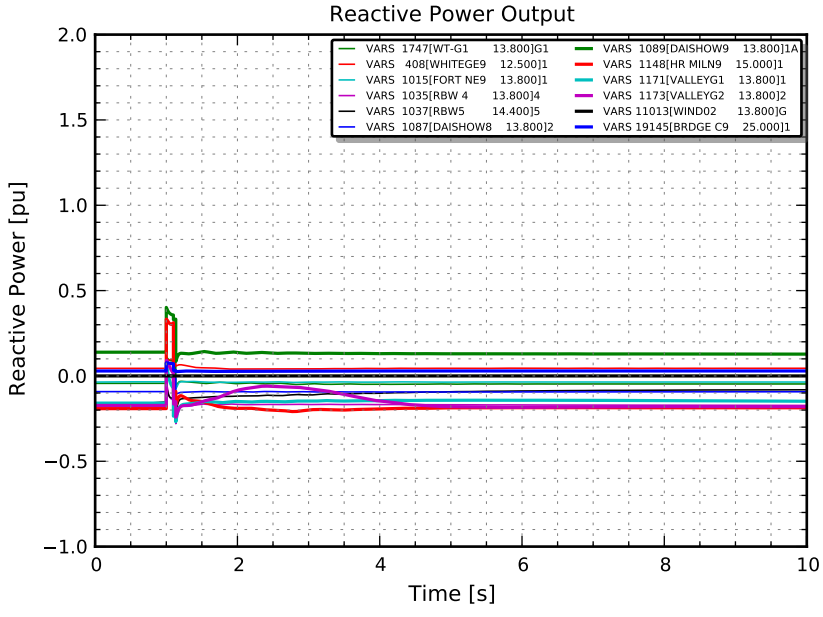


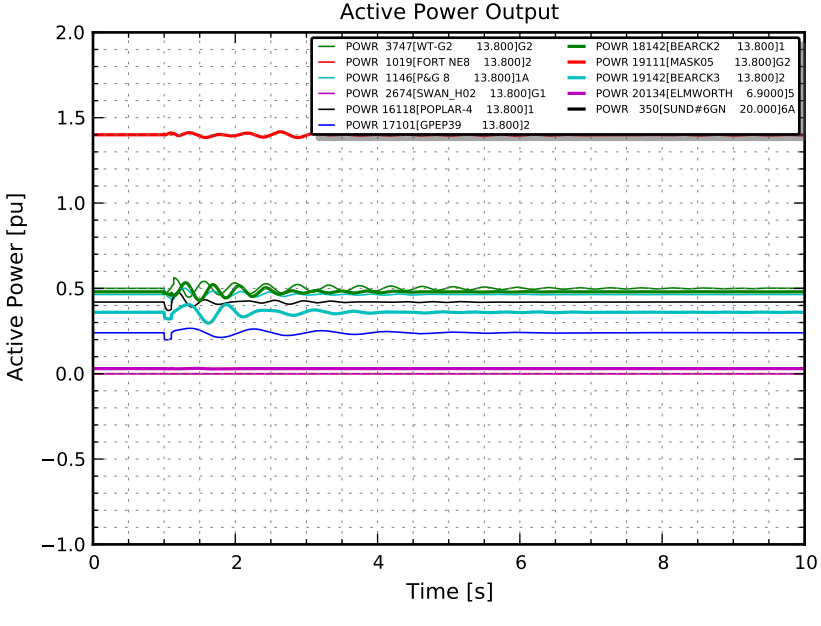
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 032 7L73 RYCROFT to FRIEDENSTAL_A.

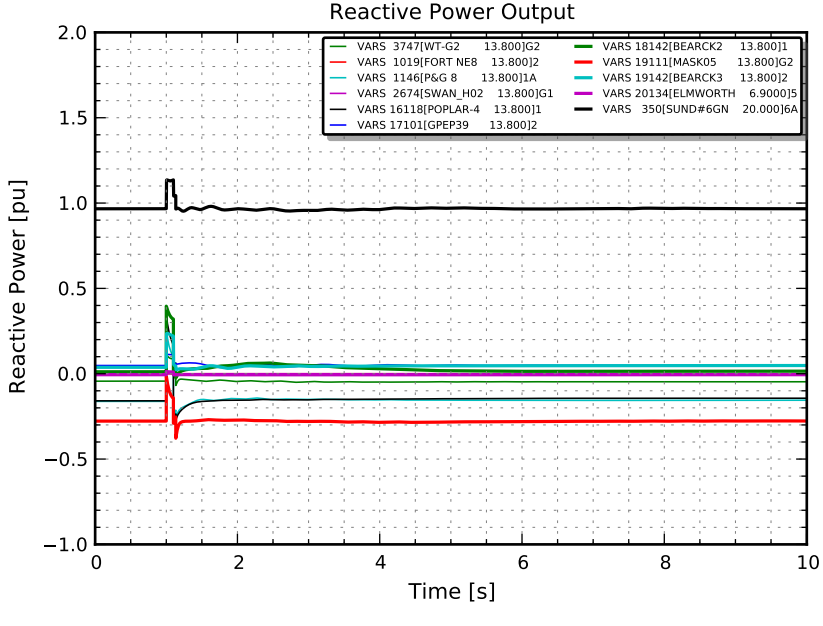
Study Area Generators

Appendix E2A
Figure: 032 (A. 3)





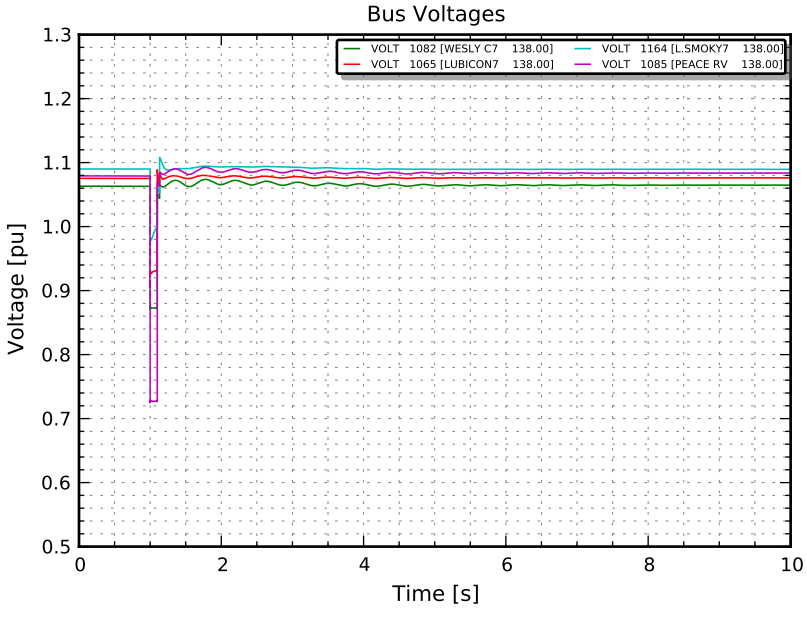


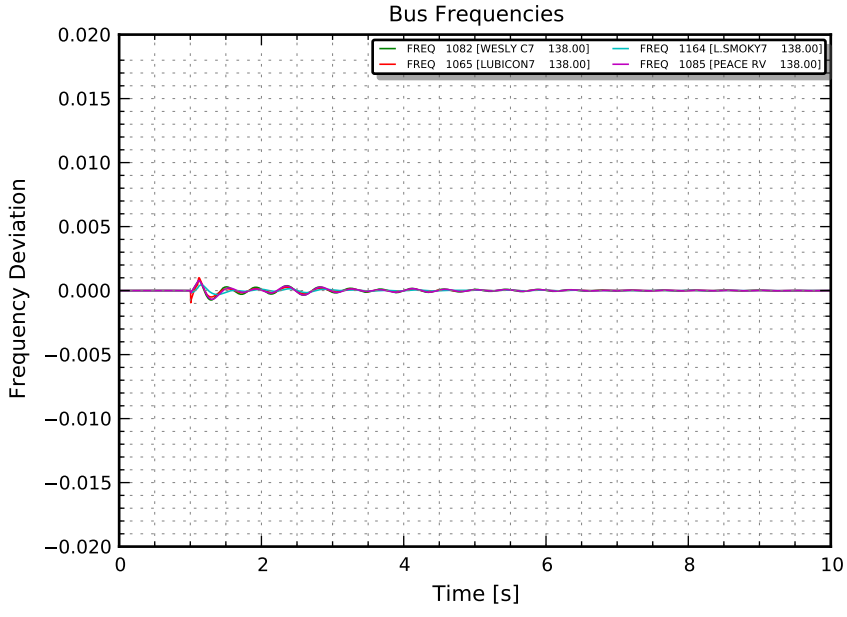


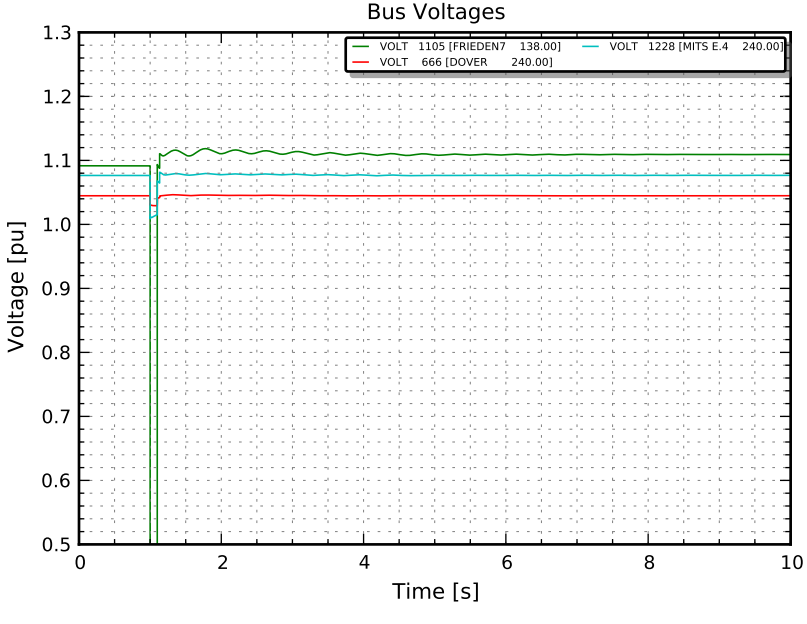
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 032 7L73 RYCROFT to FRIEDENSTAL_B.

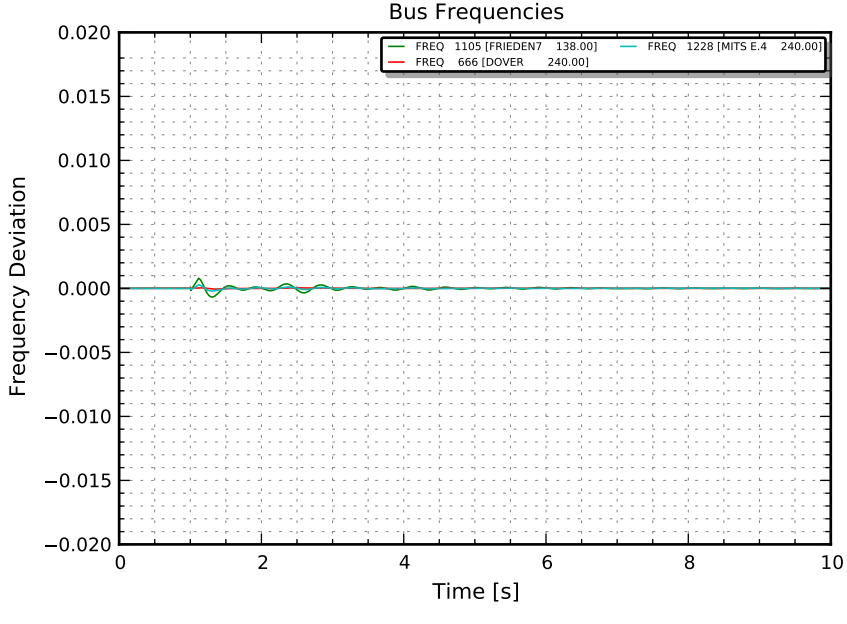
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 032 (B. 1)





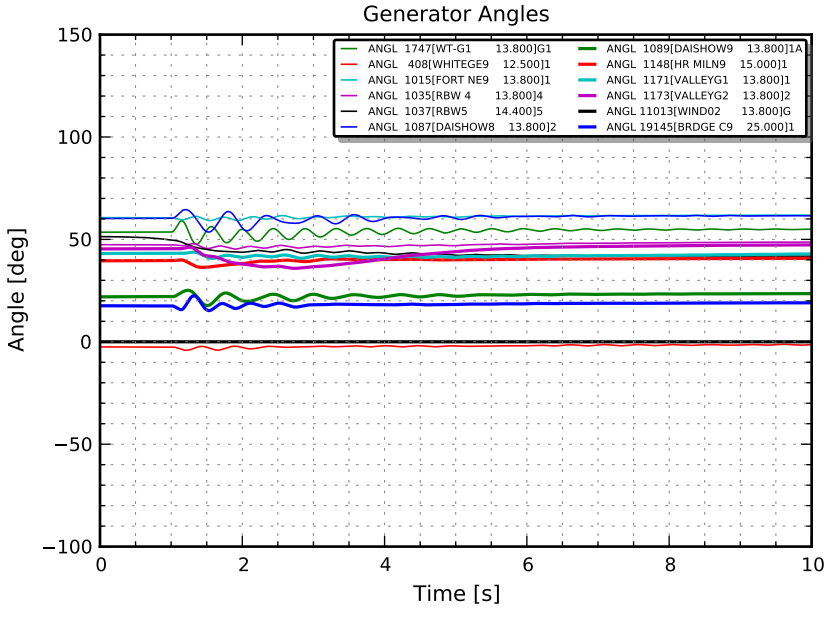


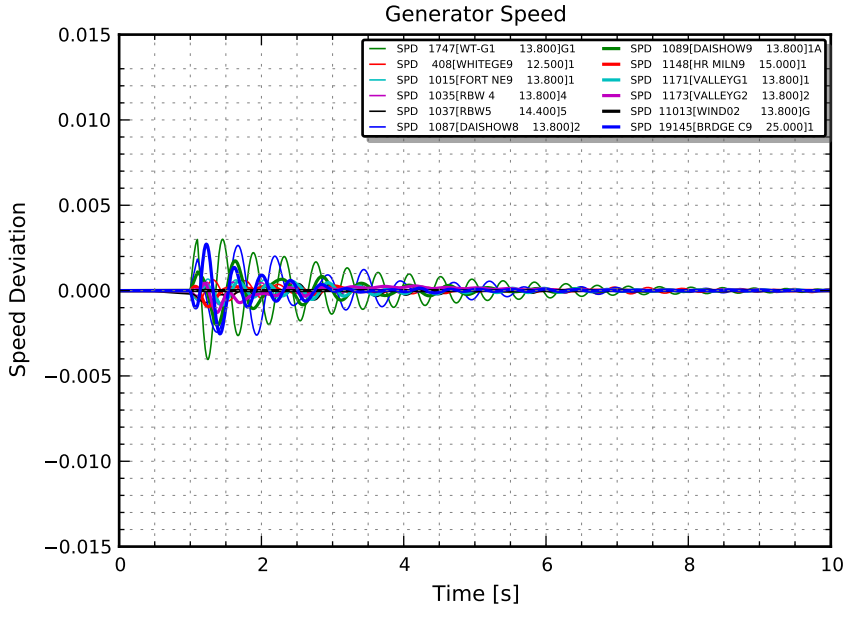


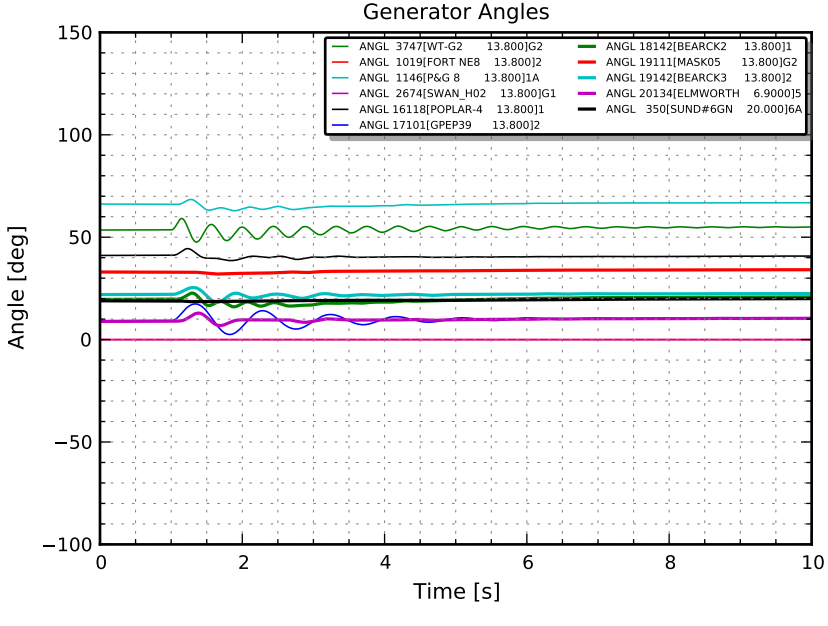
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 032 7L73 RYCROFT to FRIEDENSTAL_B.

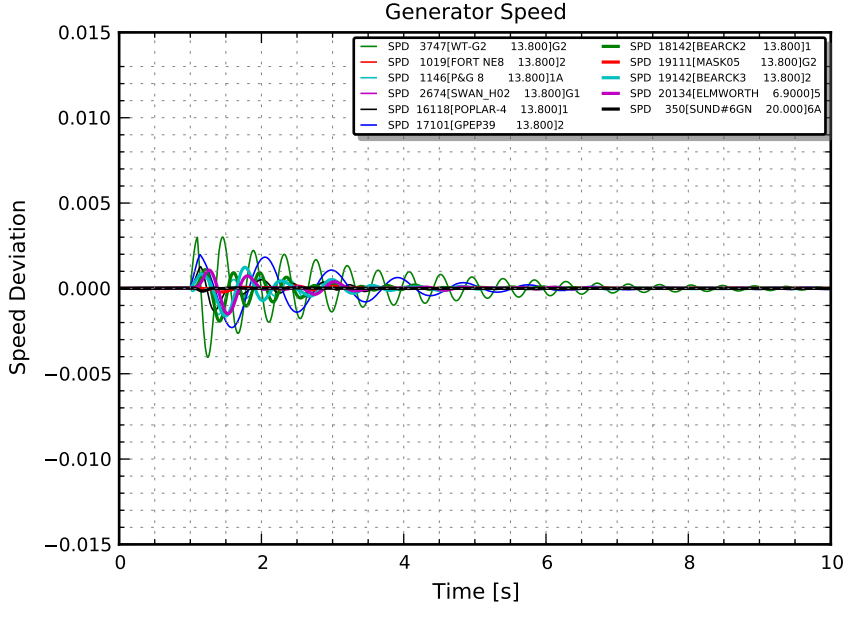
Study Area Generators

Appendix E2A
Figure: 032 (B. 2)





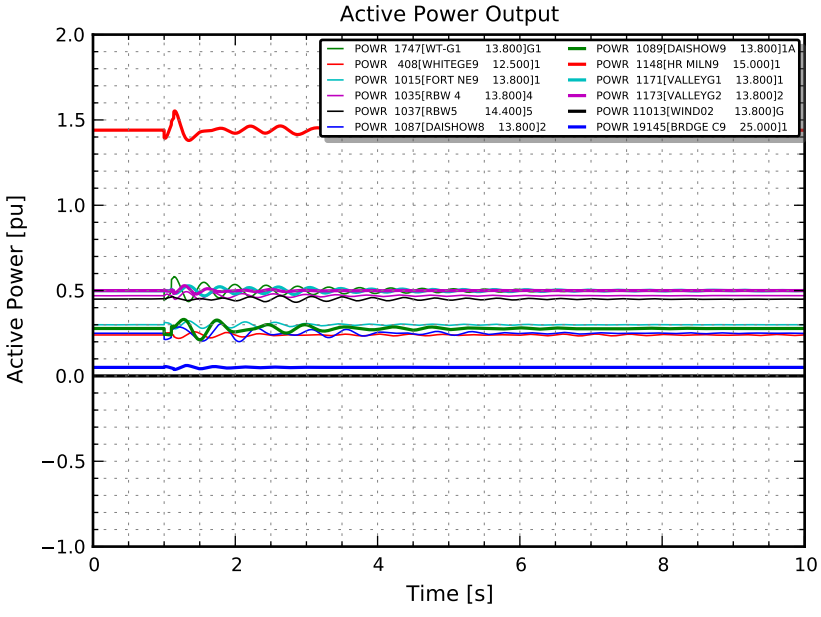


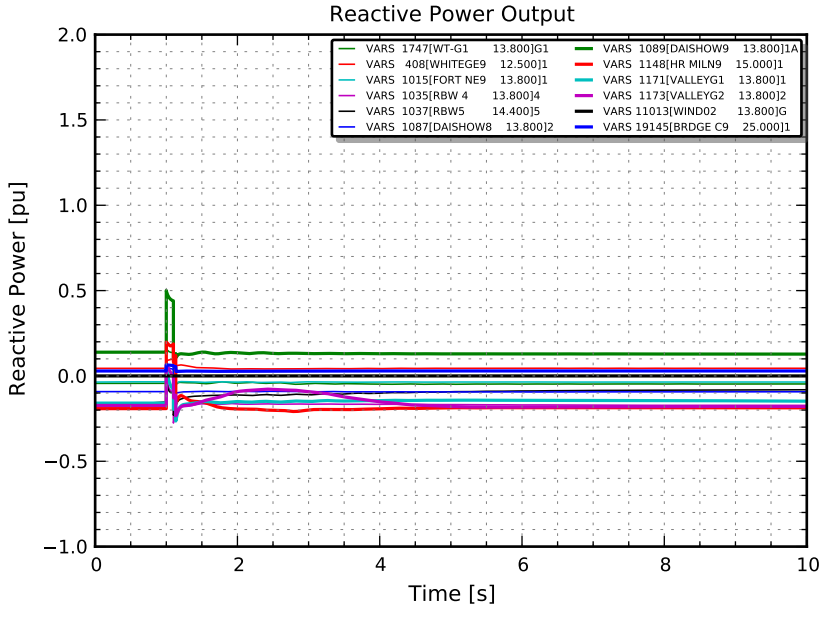


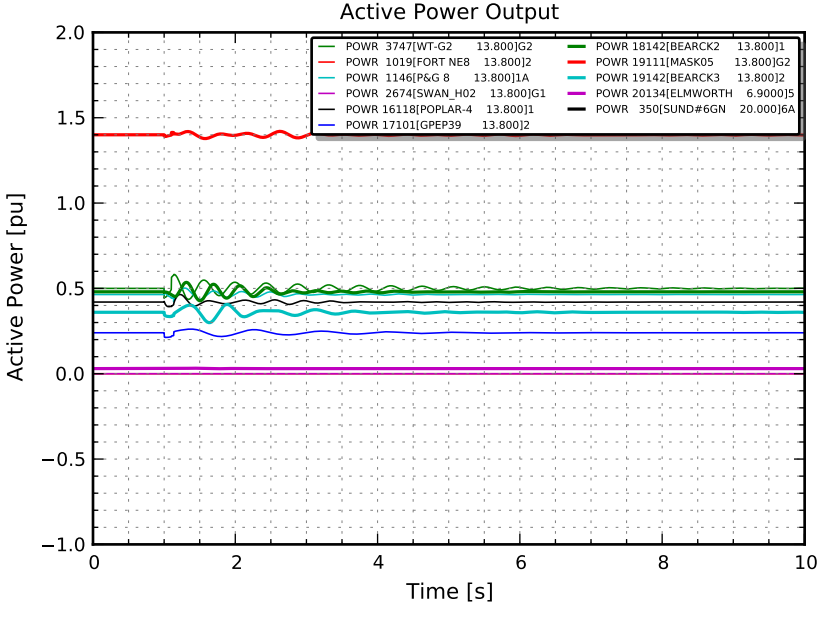
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 032 7L73 RYCROFT to FRIEDENSTAL_B.

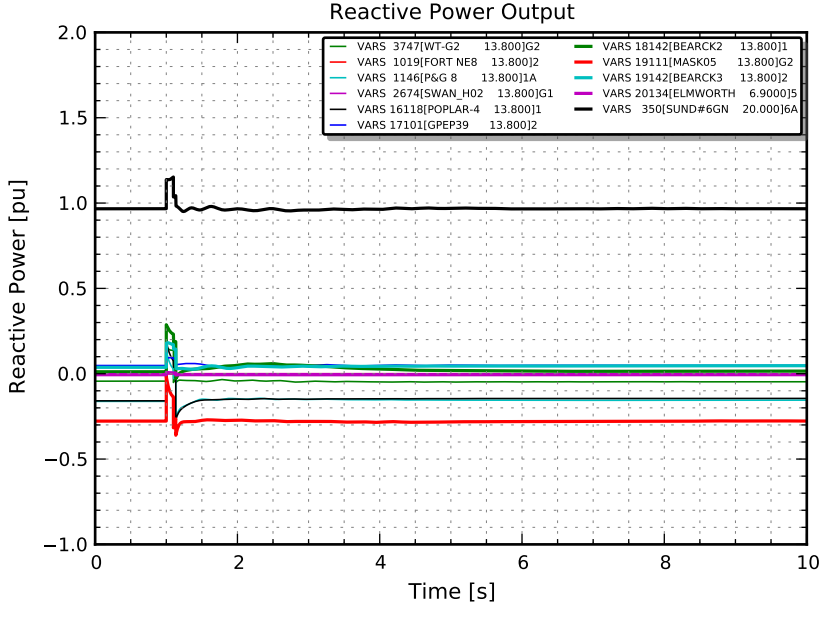
Study Area Generators

Appendix E2A
Figure: 032 (B. 3)





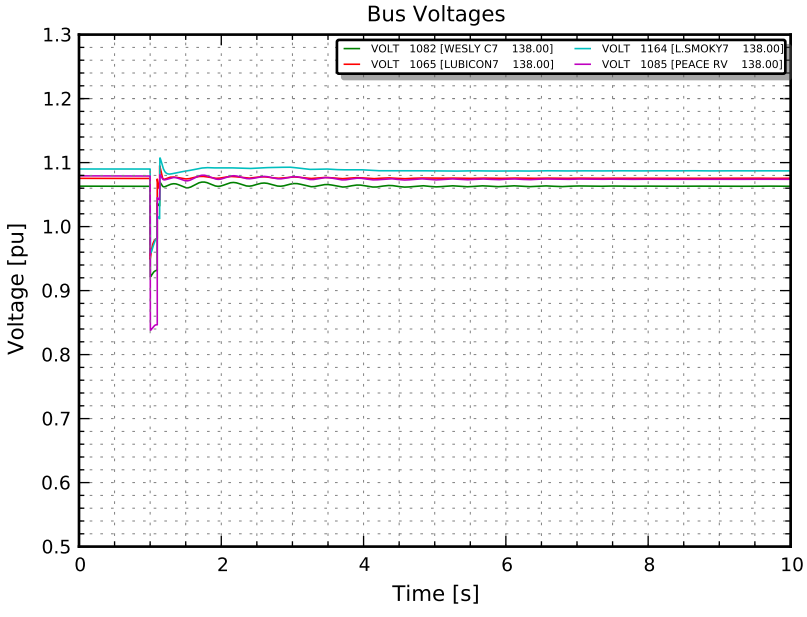


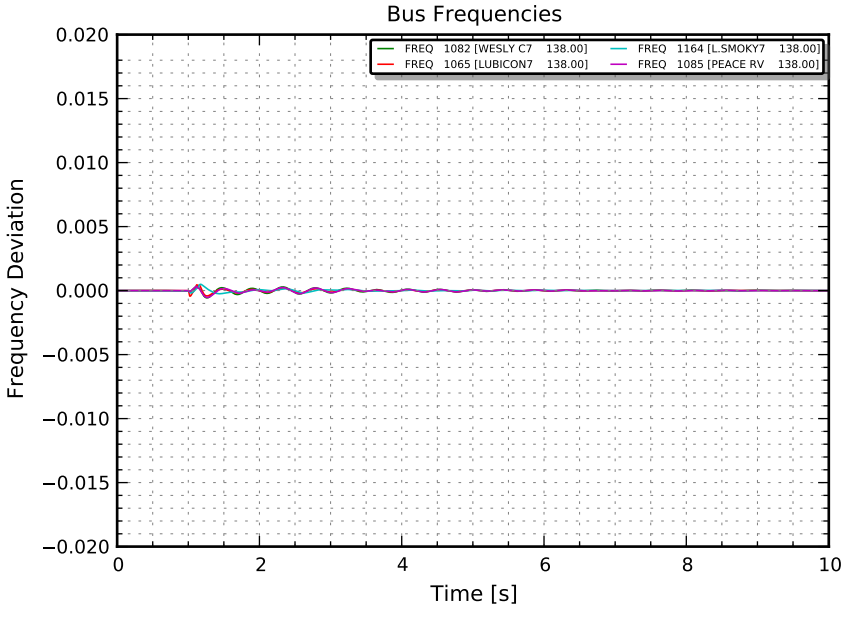


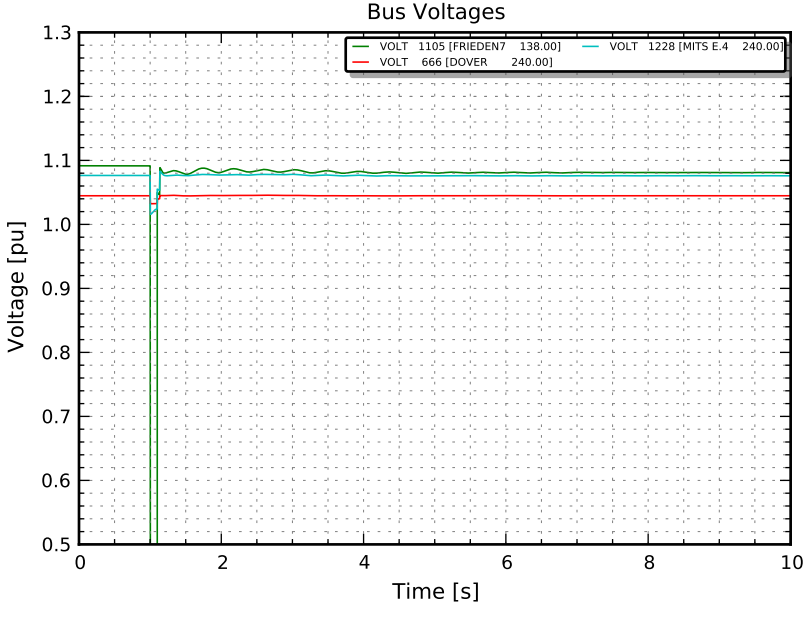
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_A.

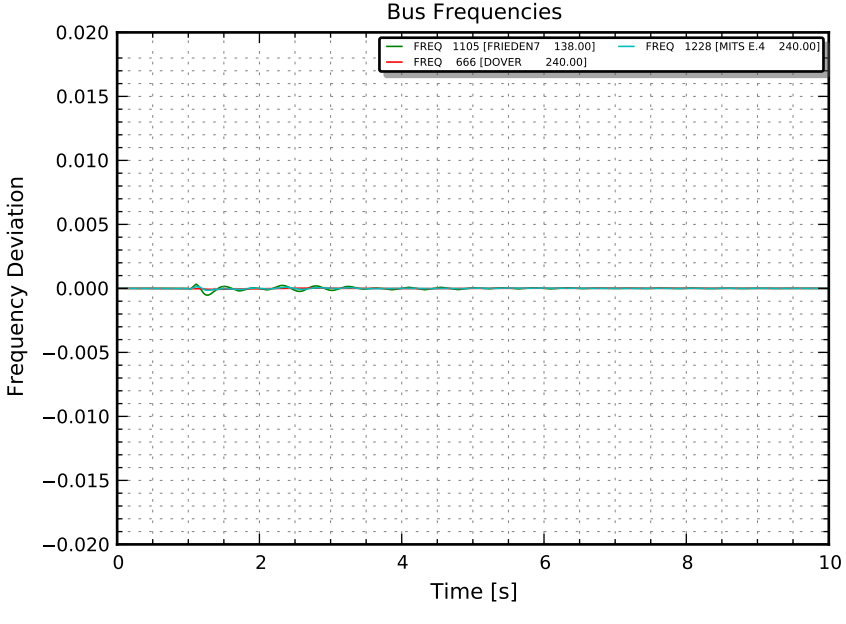
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 033 (A. 1)





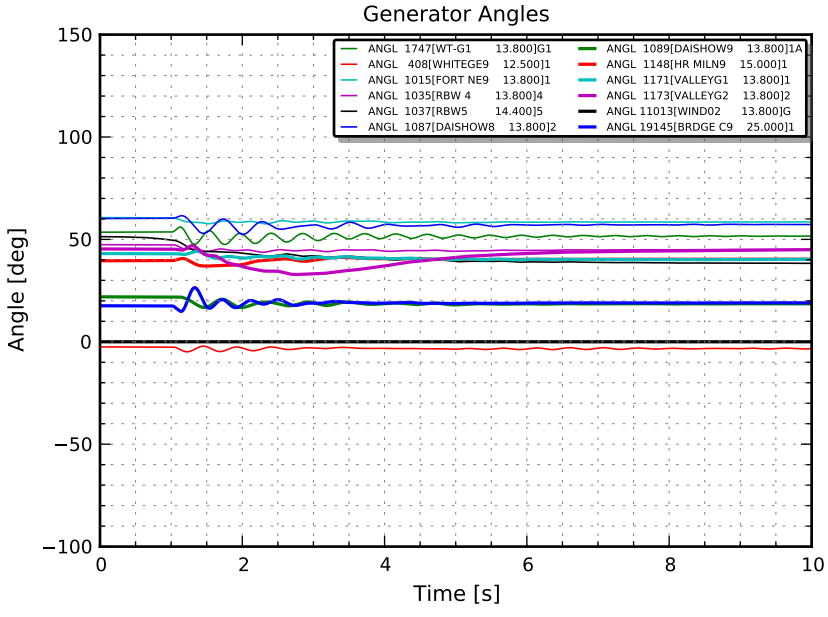


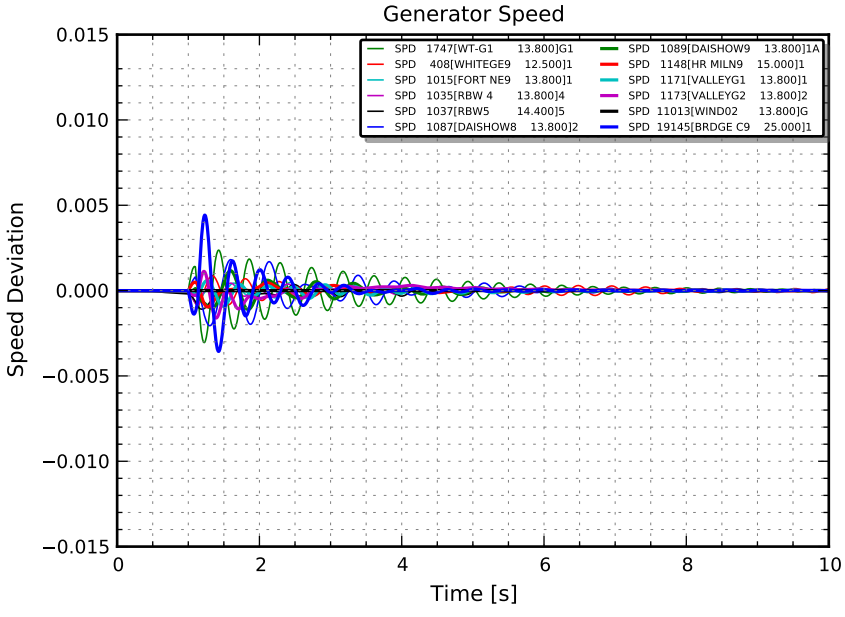


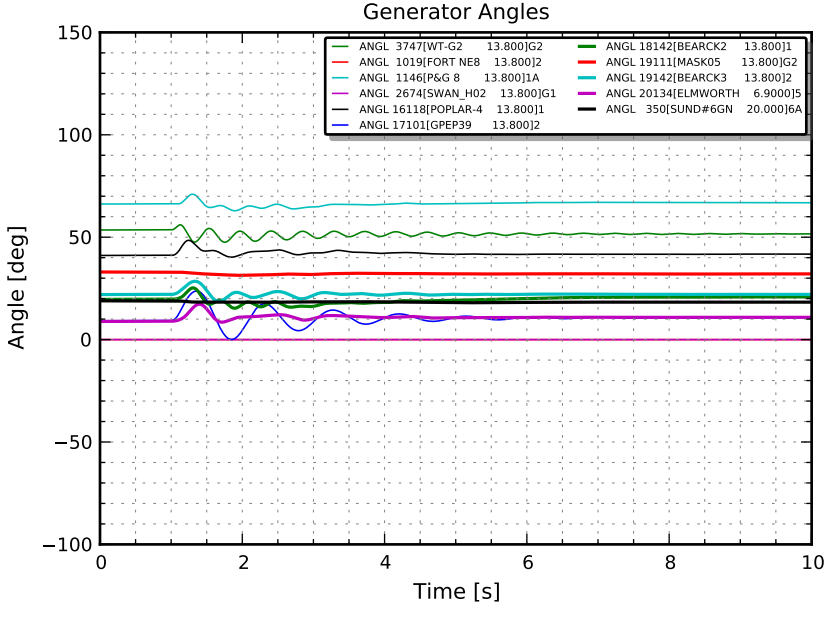
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_A.

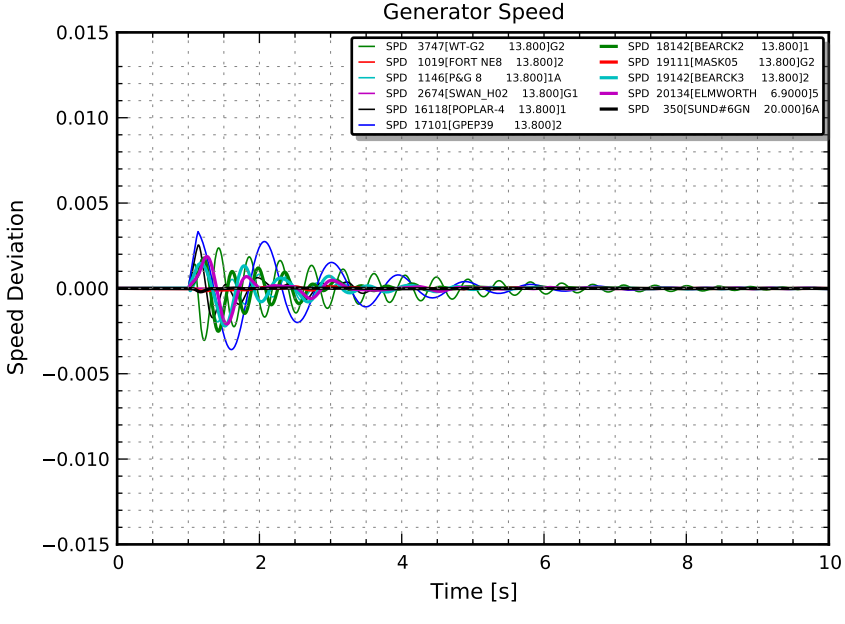
Study Area Generators

Appendix E2A
Figure: 033 (A. 2)





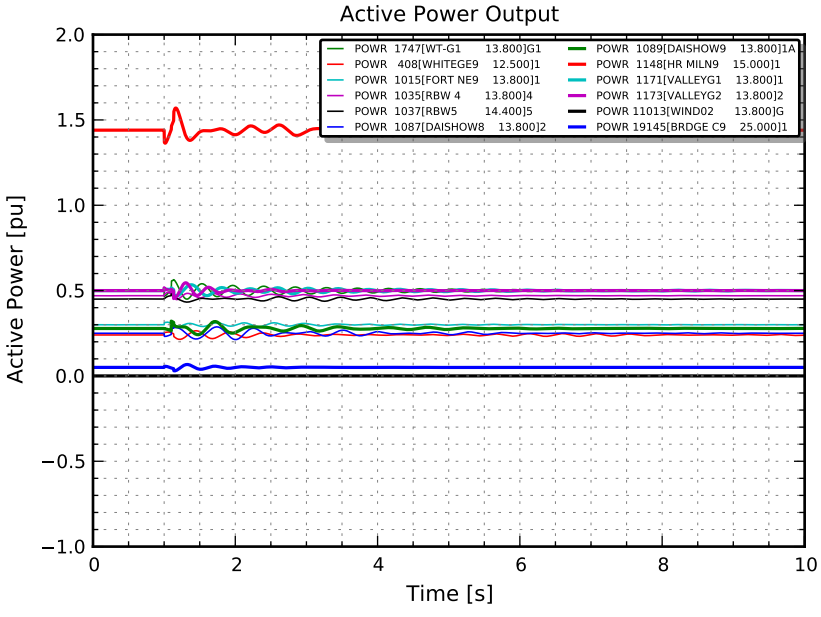


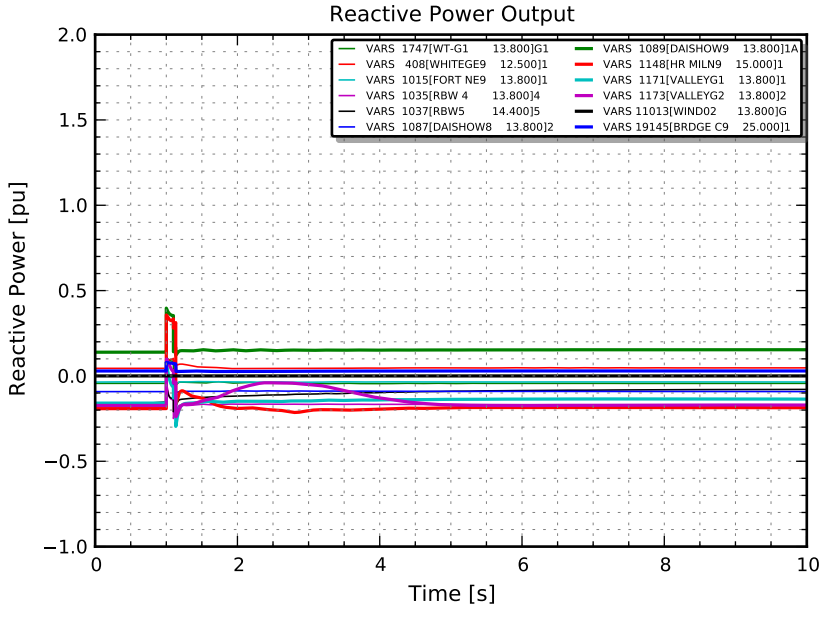


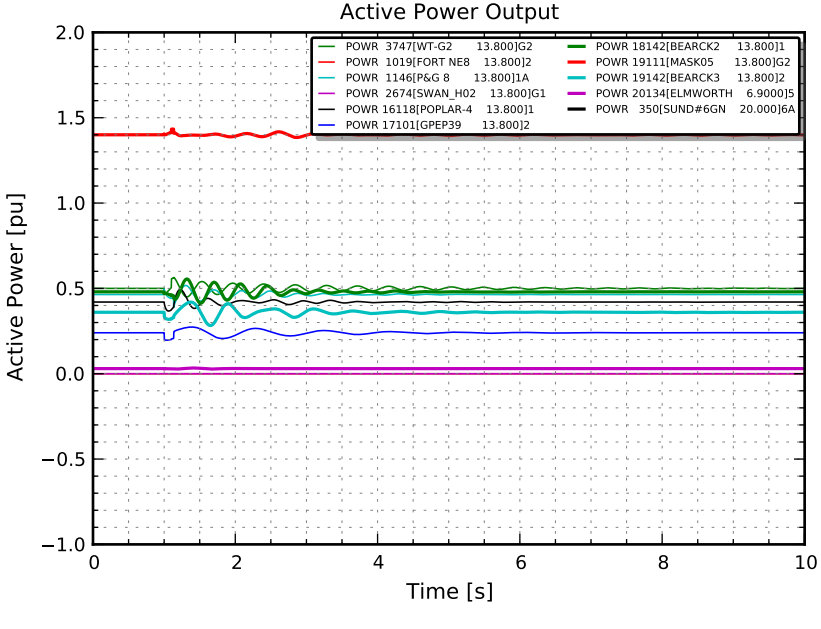
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_A.

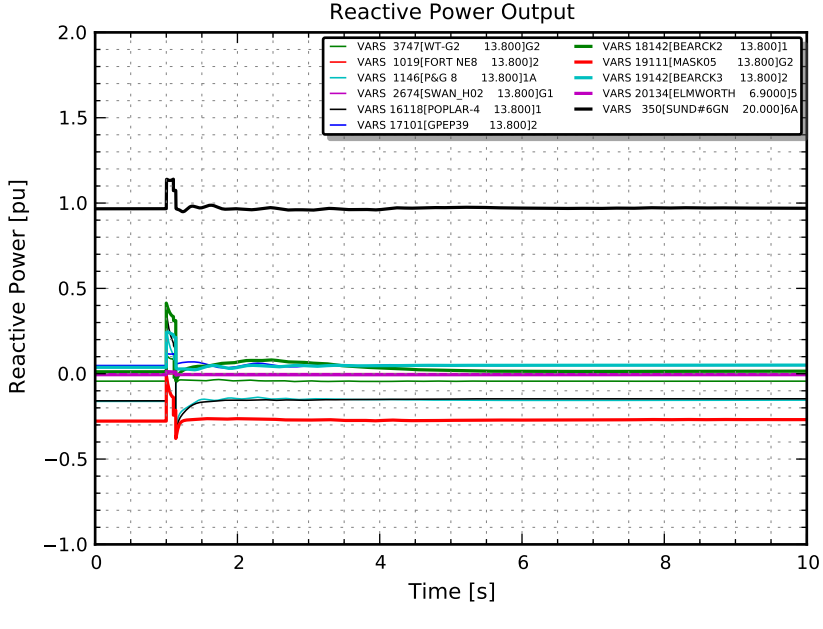
Study Area Generators

Appendix E2A
Figure: 033 (A. 3)





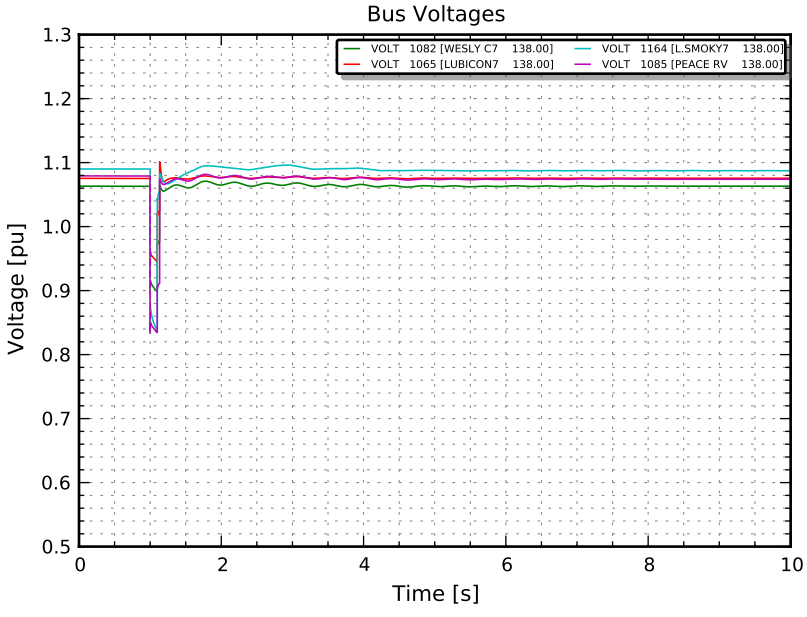


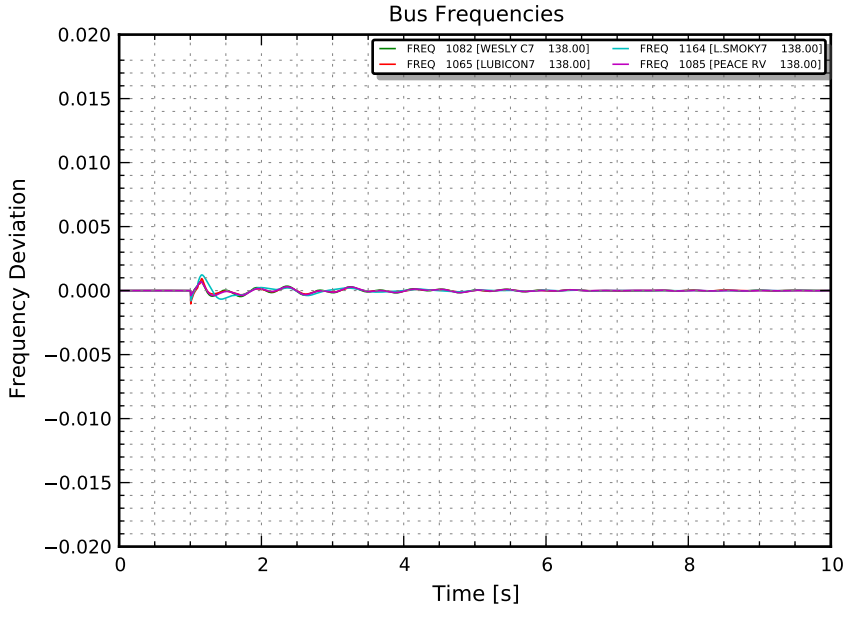


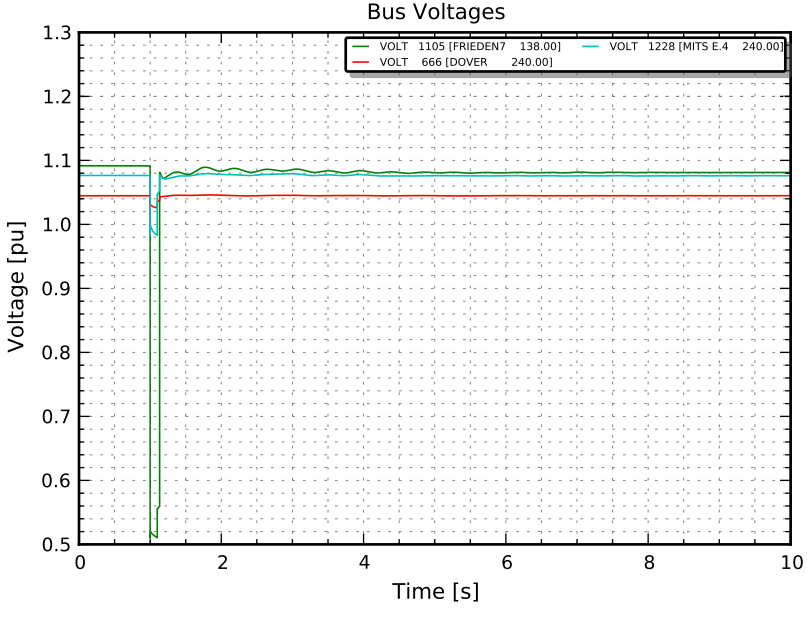
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_B.

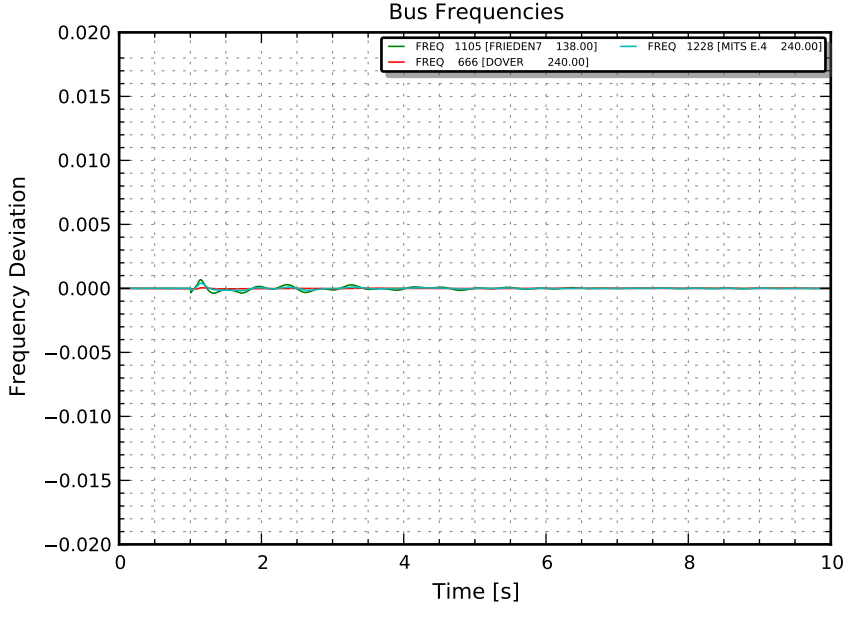
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 033 (B. 1)





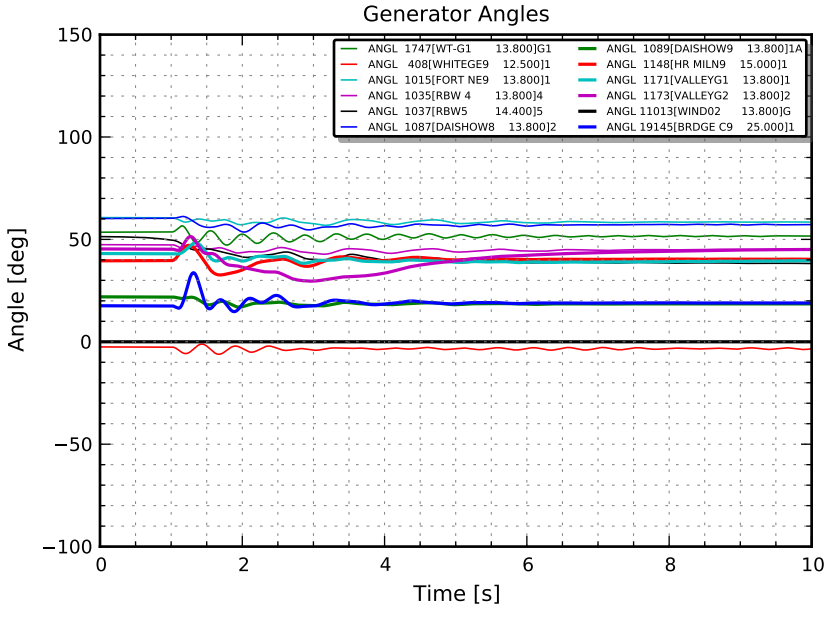


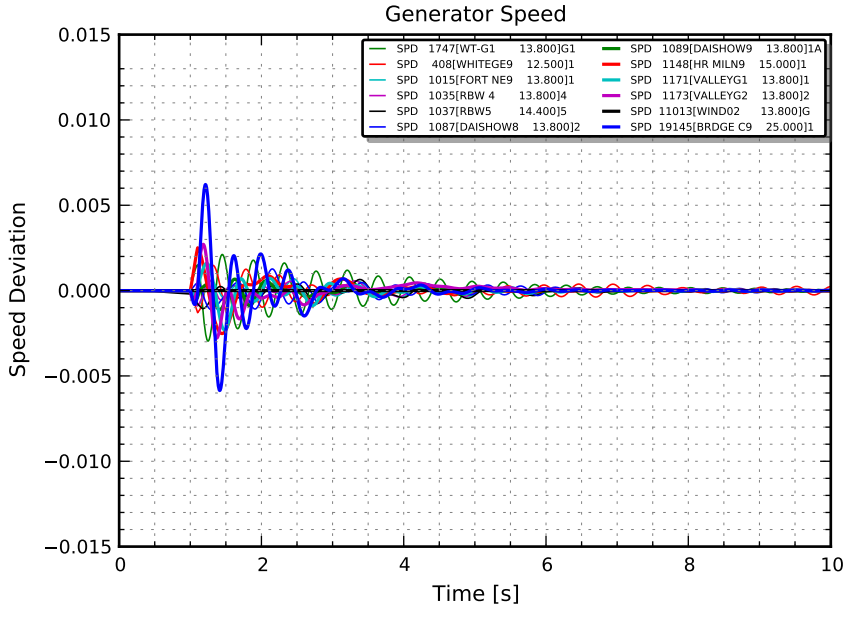


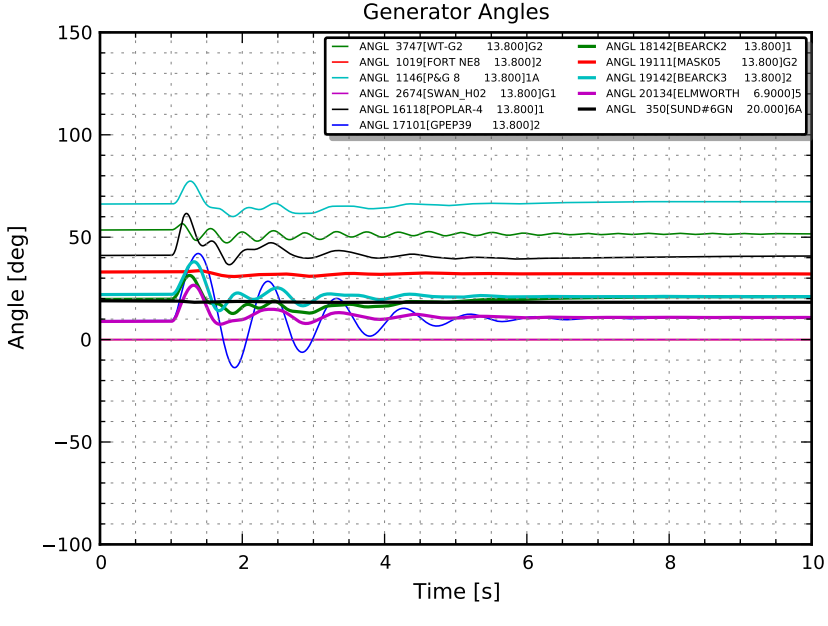
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_B.

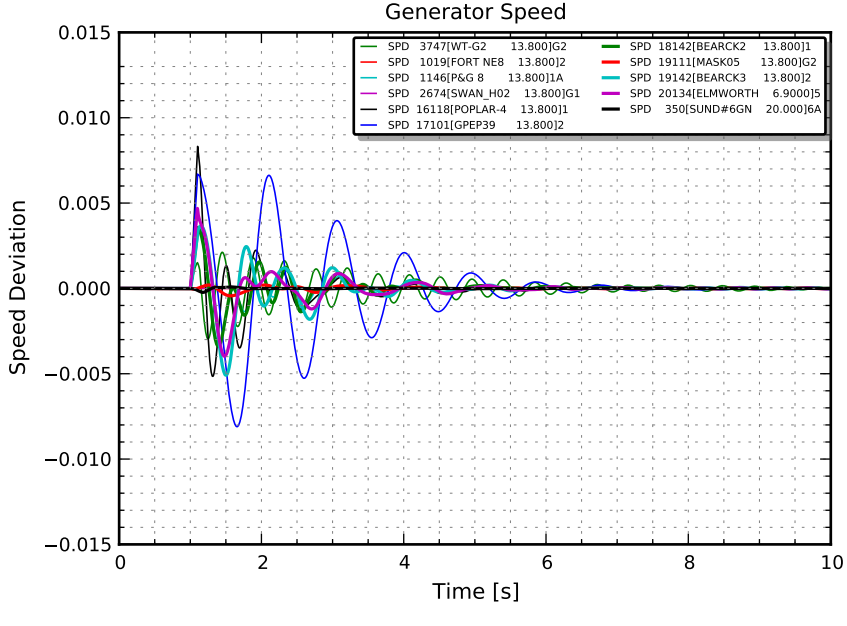
Study Area Generators

Appendix E2A
Figure: 033 (B. 2)





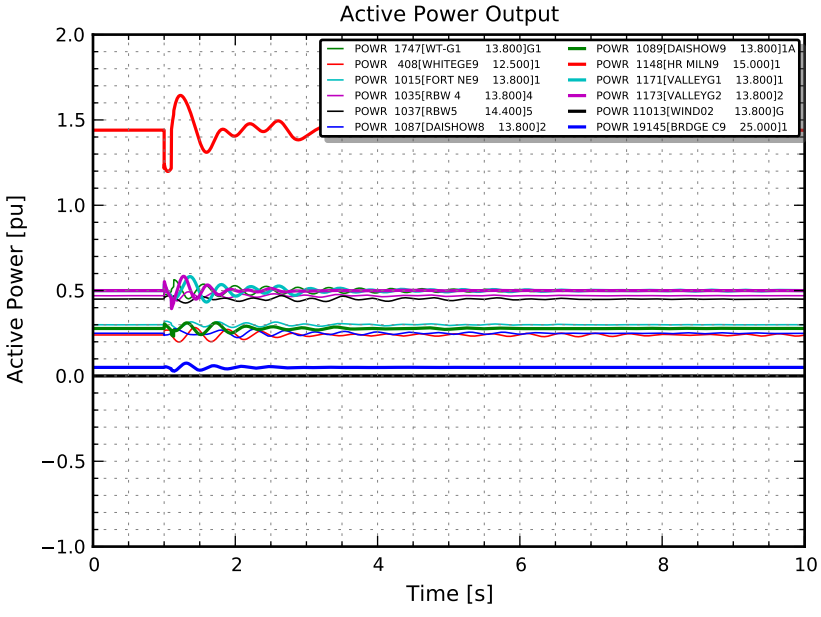


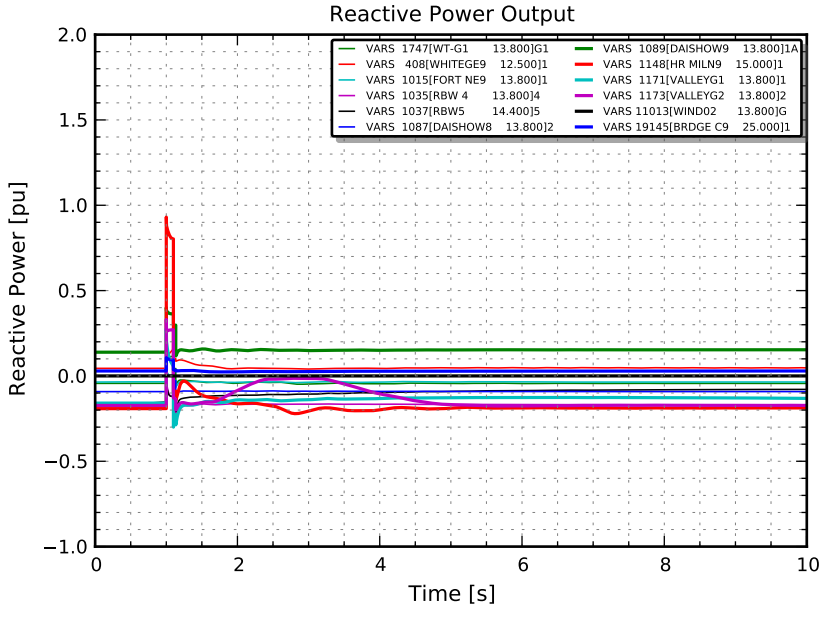


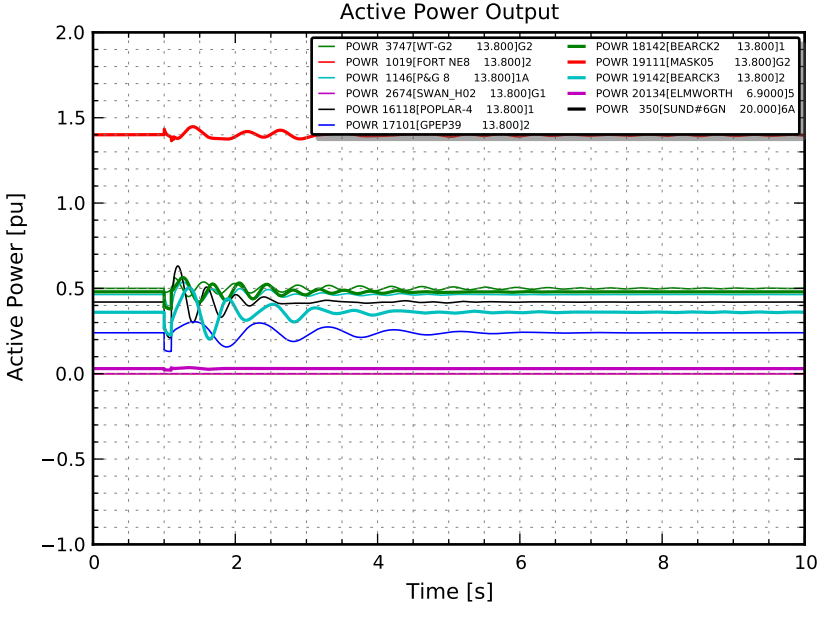
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_B.

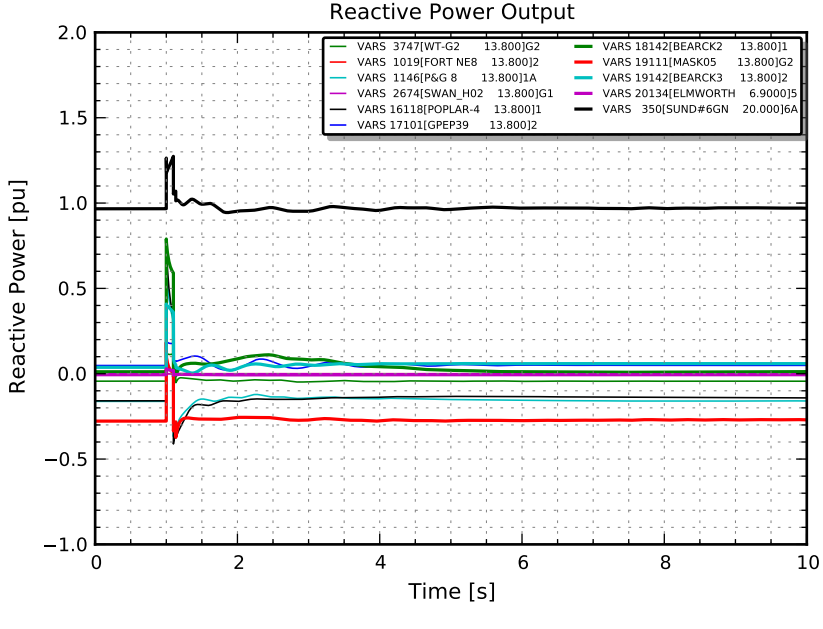
Study Area Generators

Appendix E2A
Figure: 033 (B. 3)





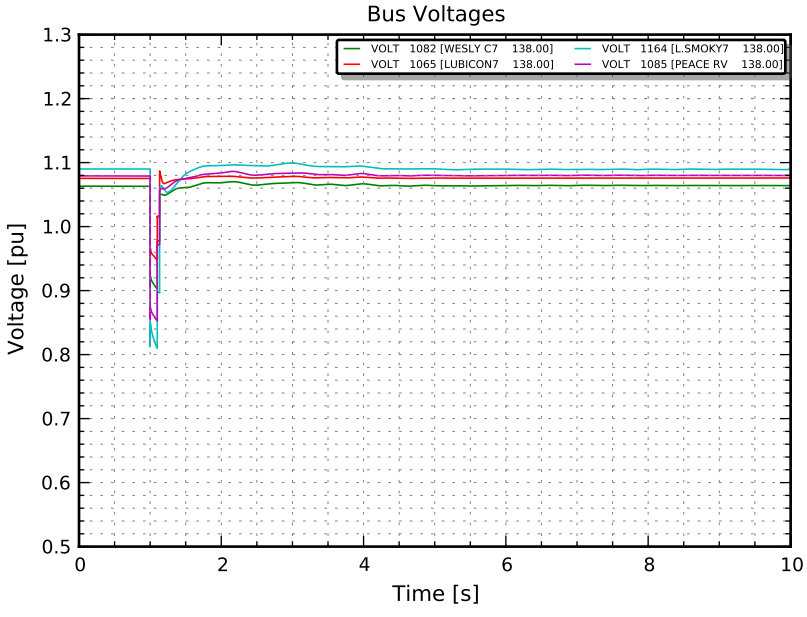


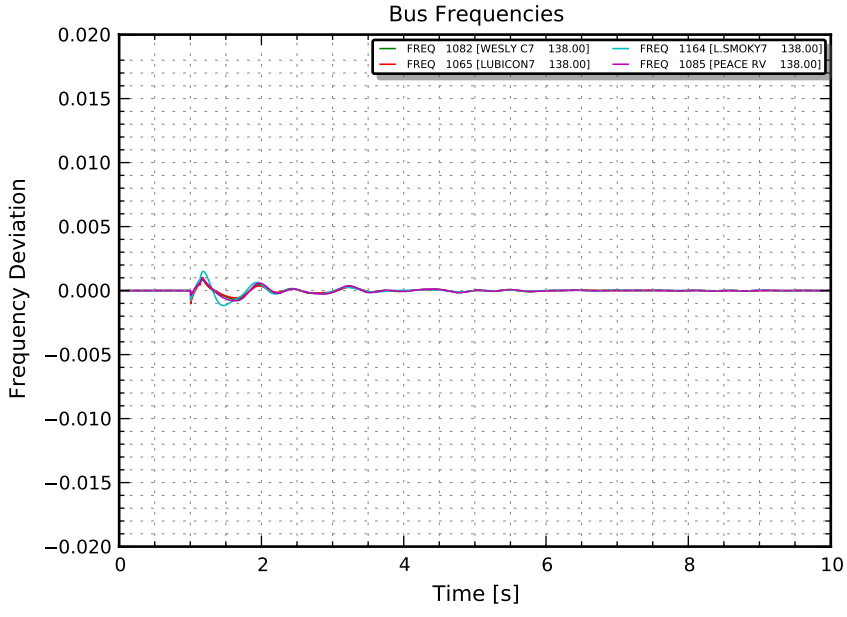


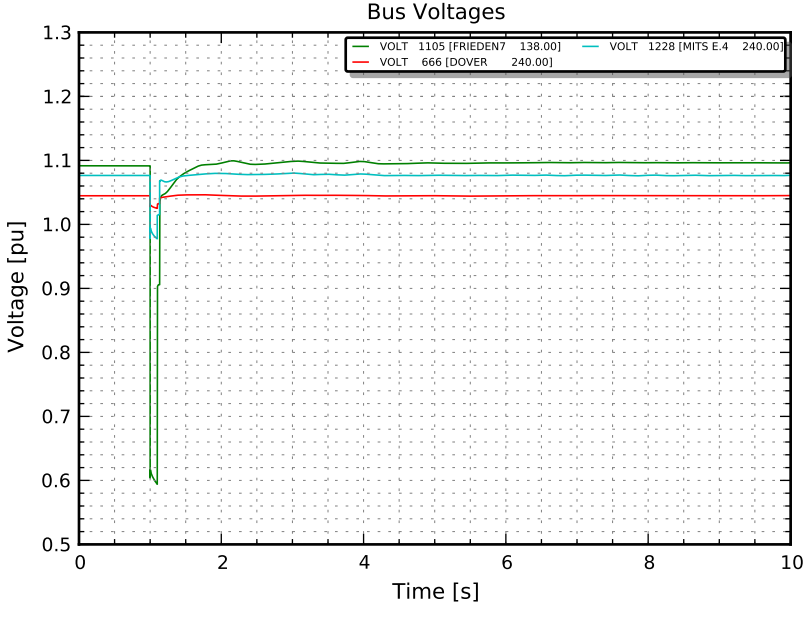
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_A.

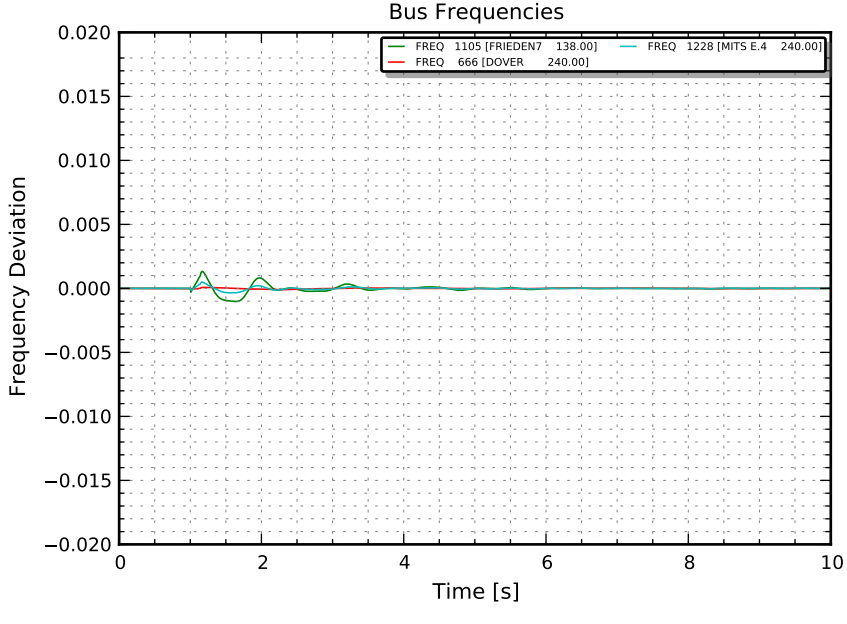
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 034 (A. 1)





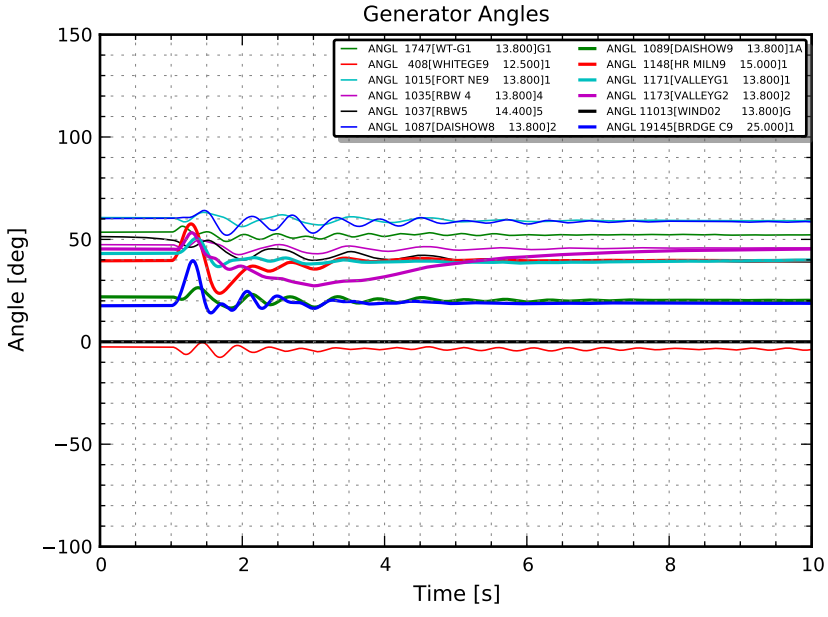


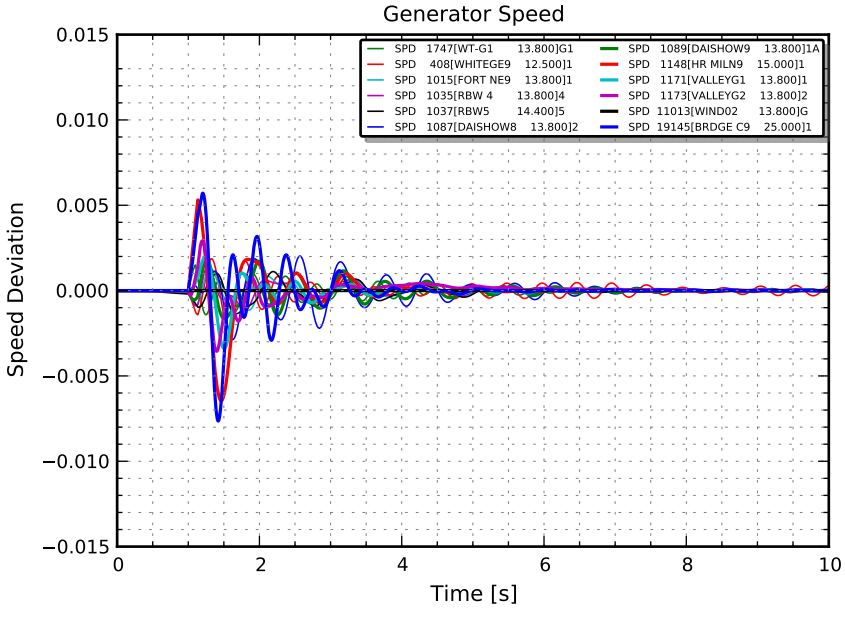


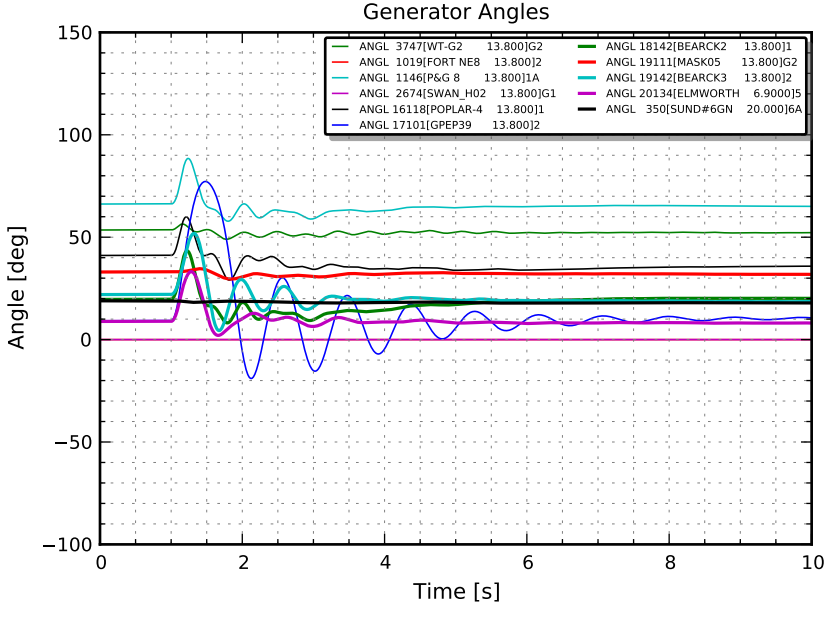
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_A.

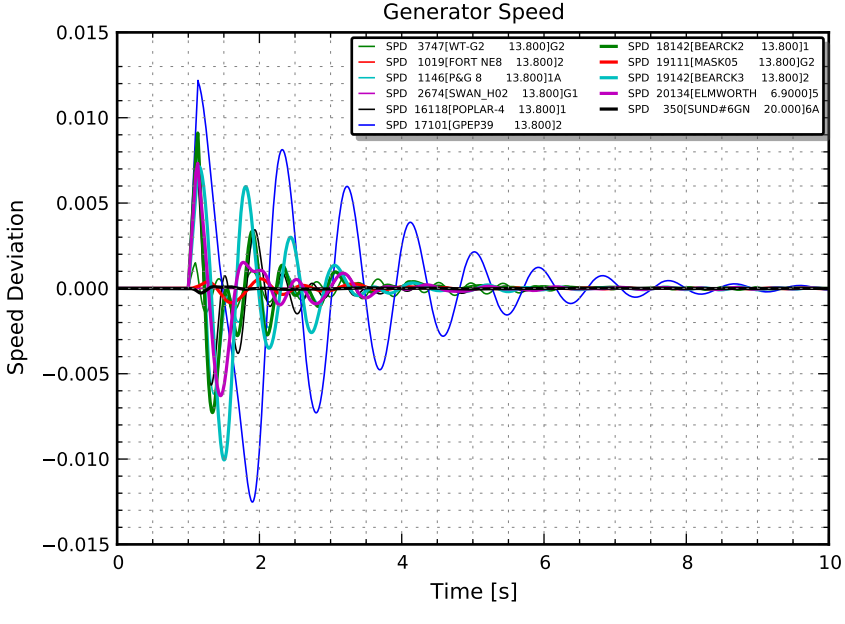
Study Area Generators

Appendix E2A
Figure: 034 (A. 2)





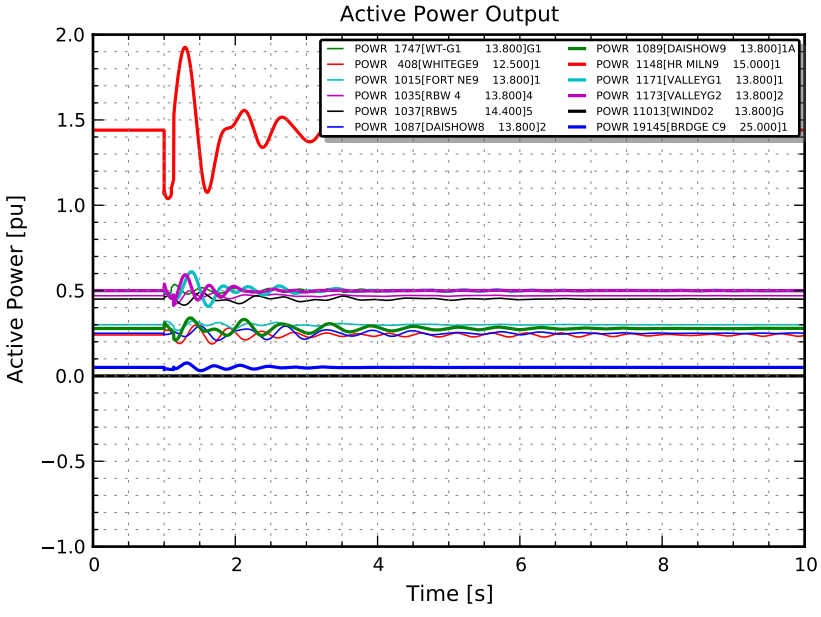


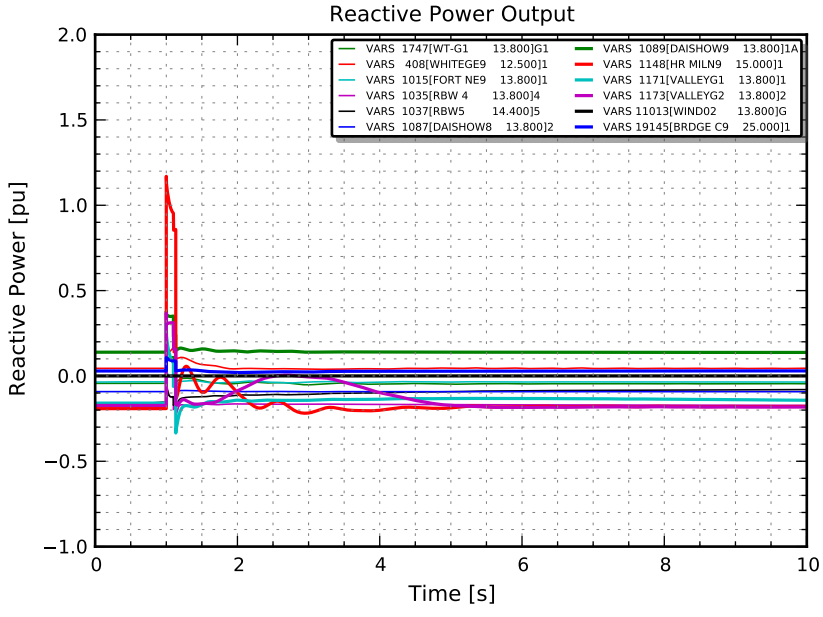


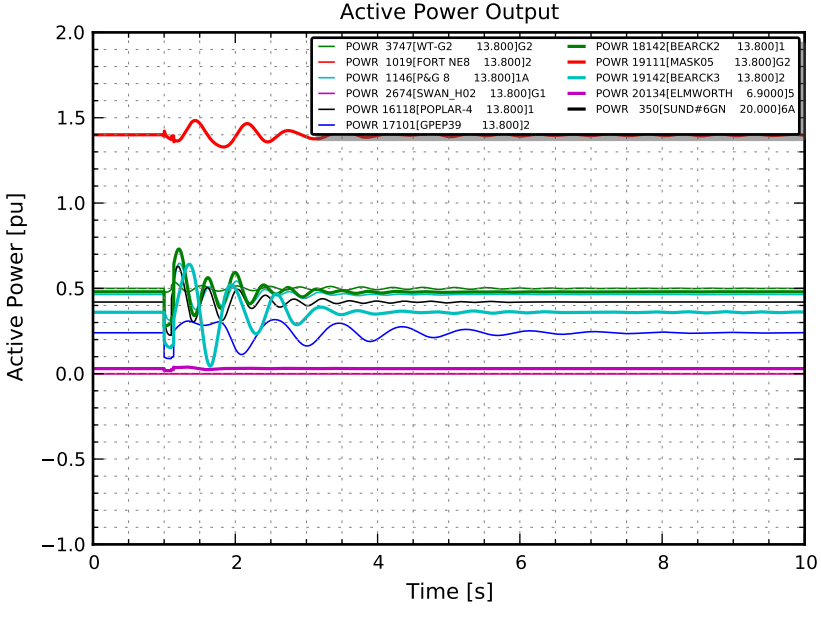
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_A.

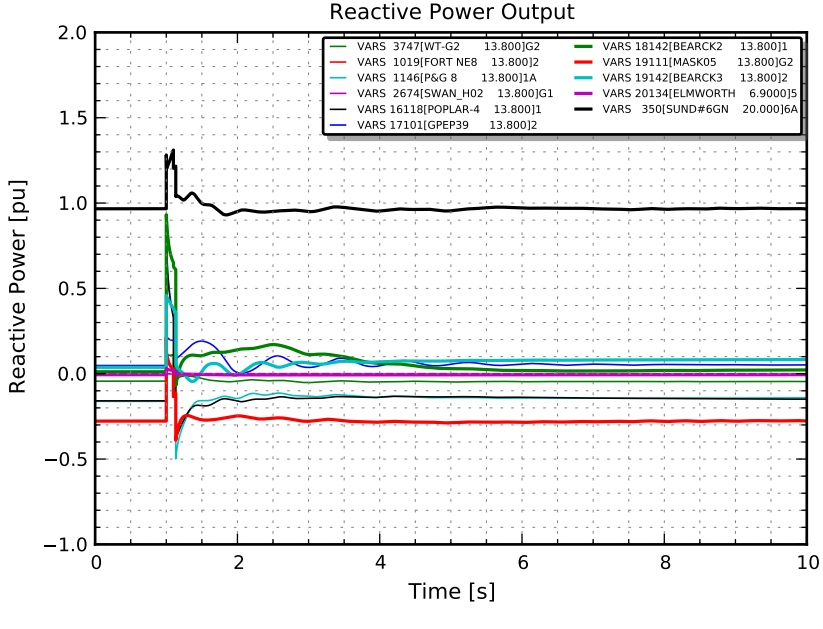
Study Area Generators

Appendix E2A
Figure: 034 (A. 3)





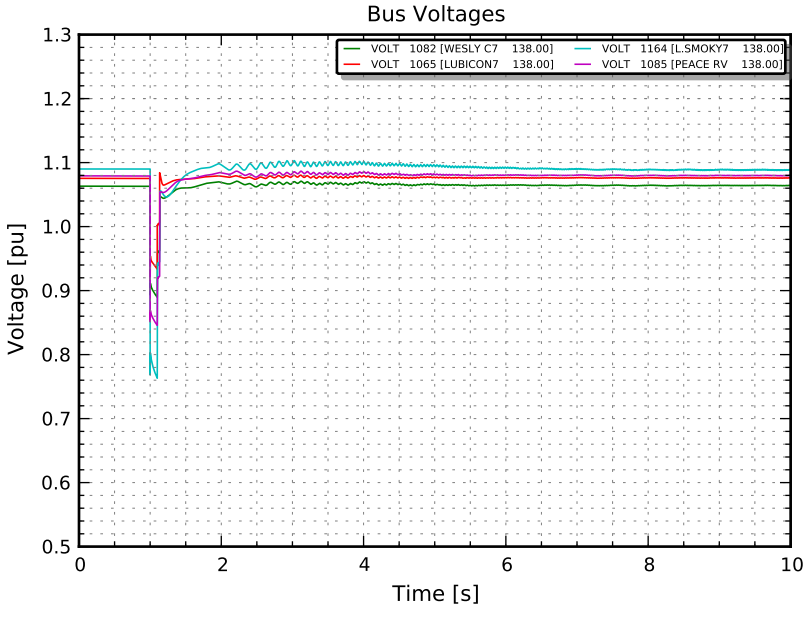


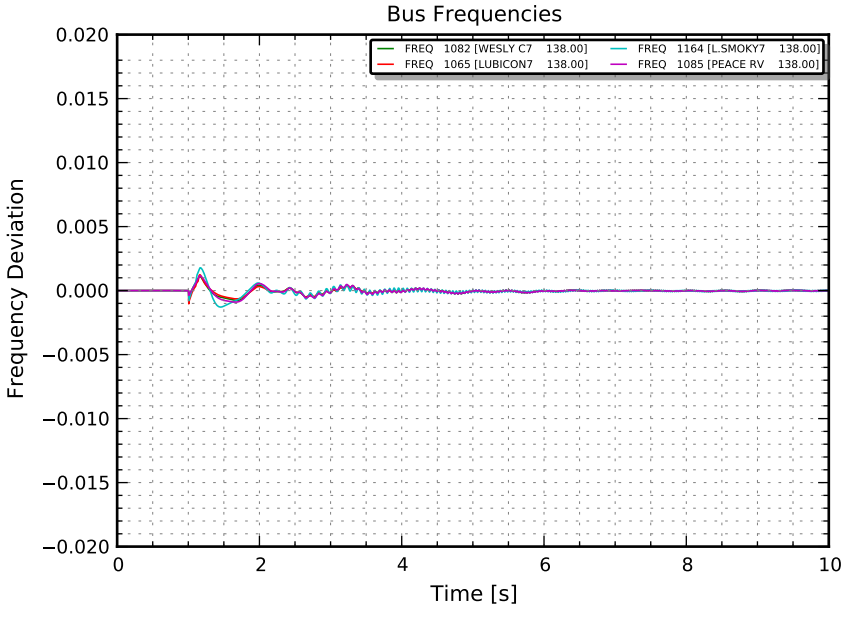


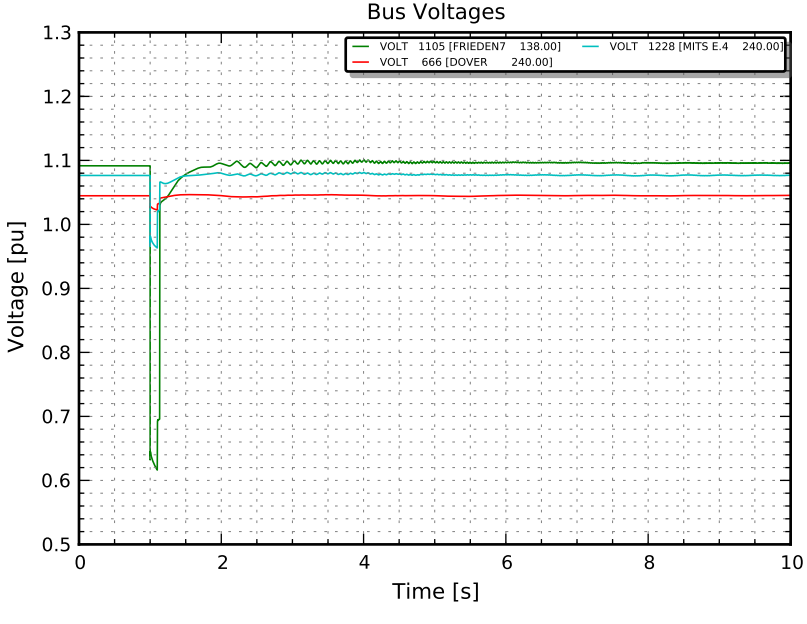
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_B.

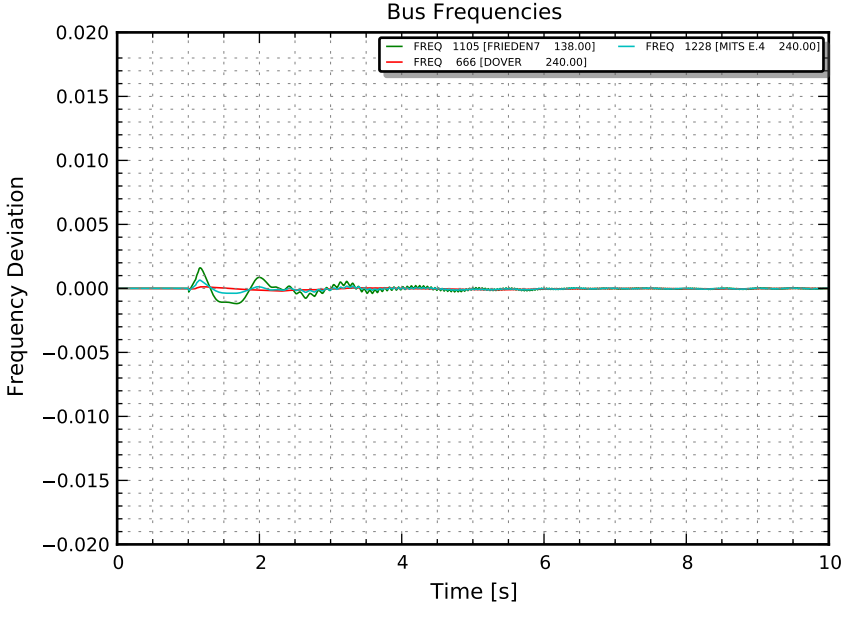
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 034 (B. 1)





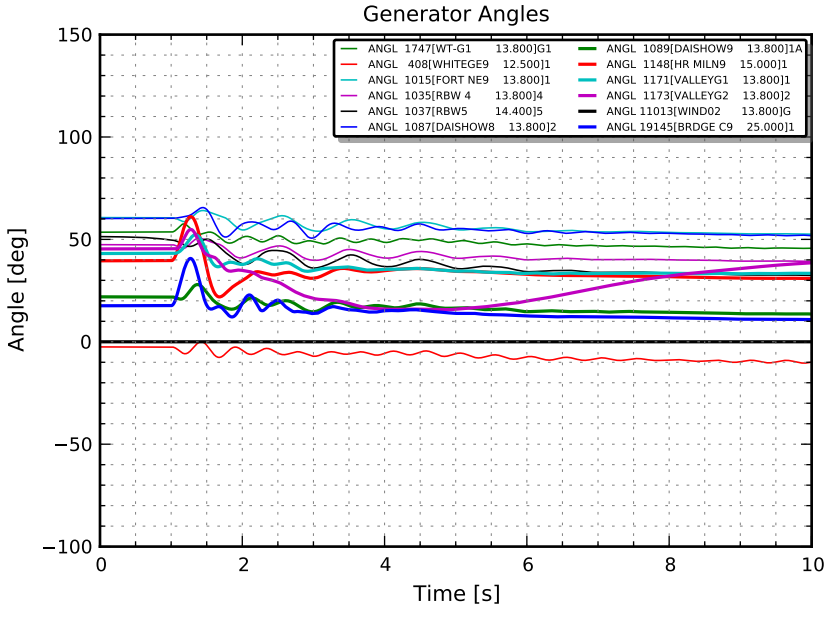


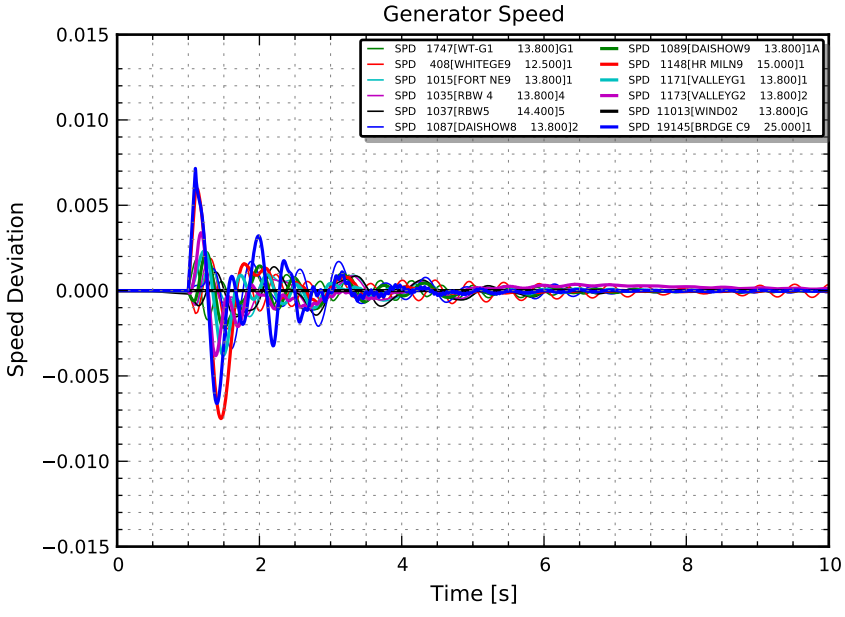


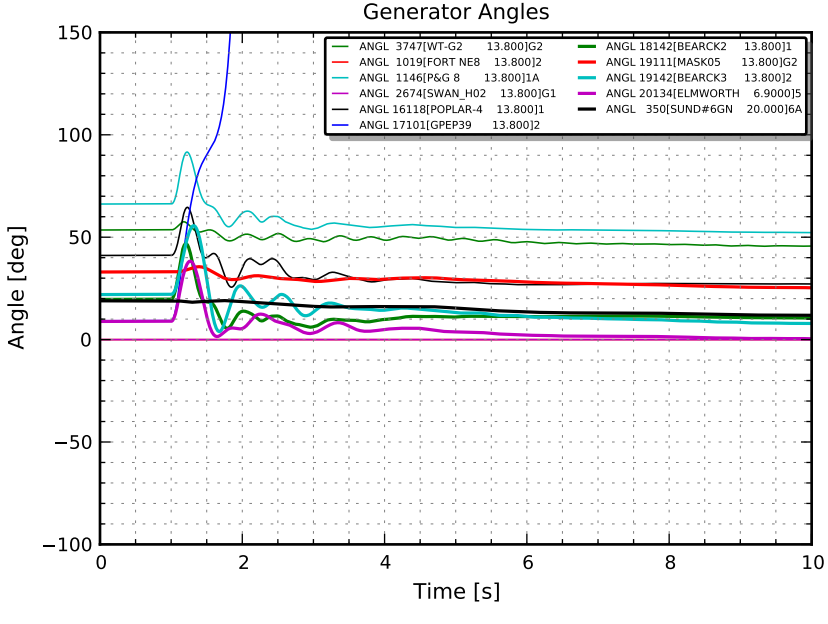
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_B.

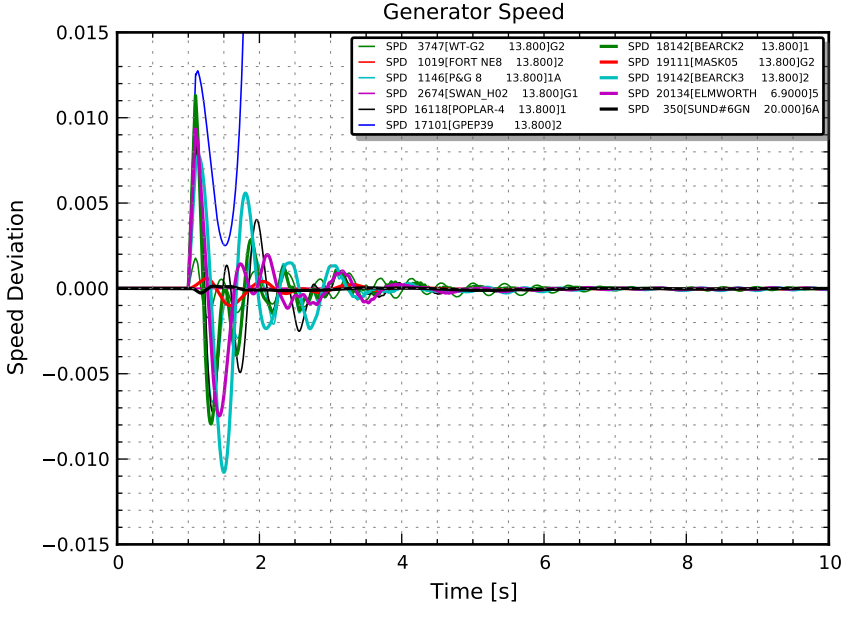
Study Area Generators

Appendix E2A
Figure: 034 (B. 2)





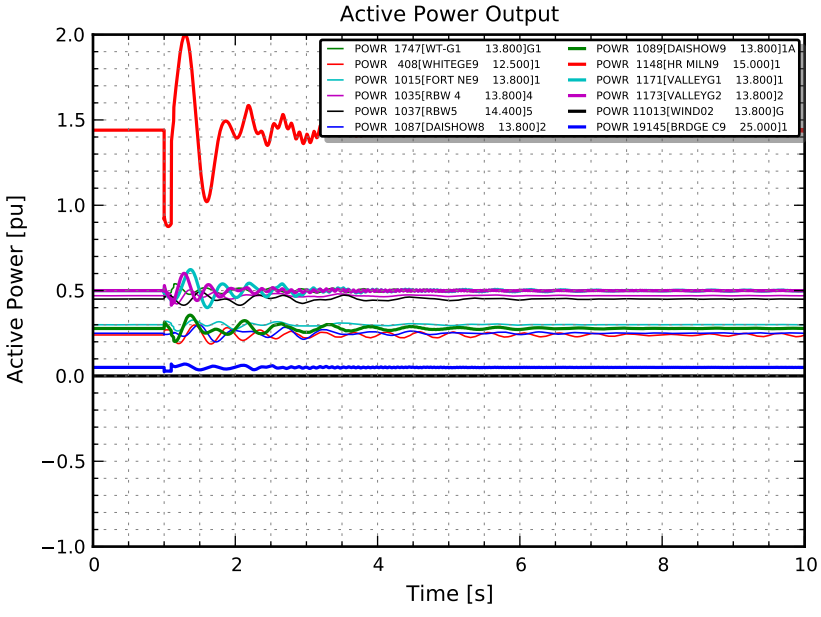


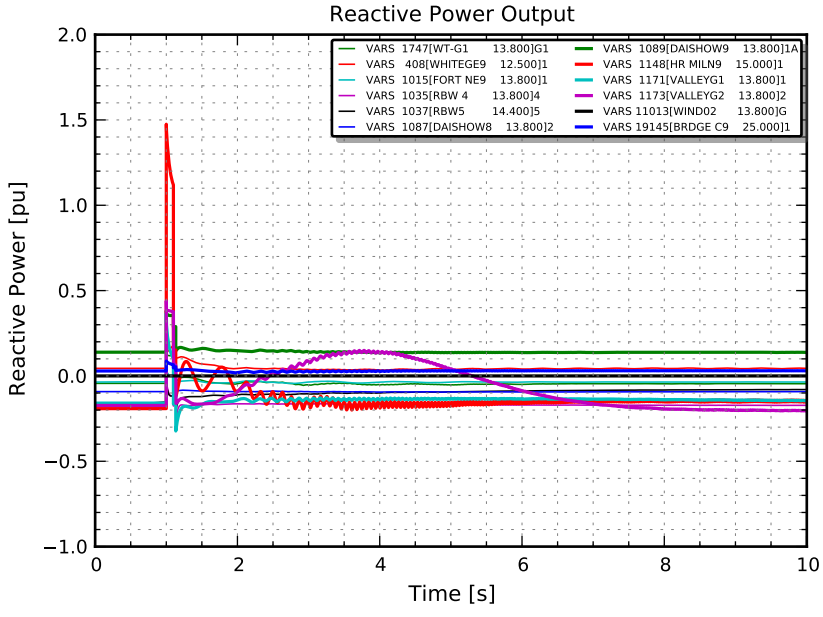


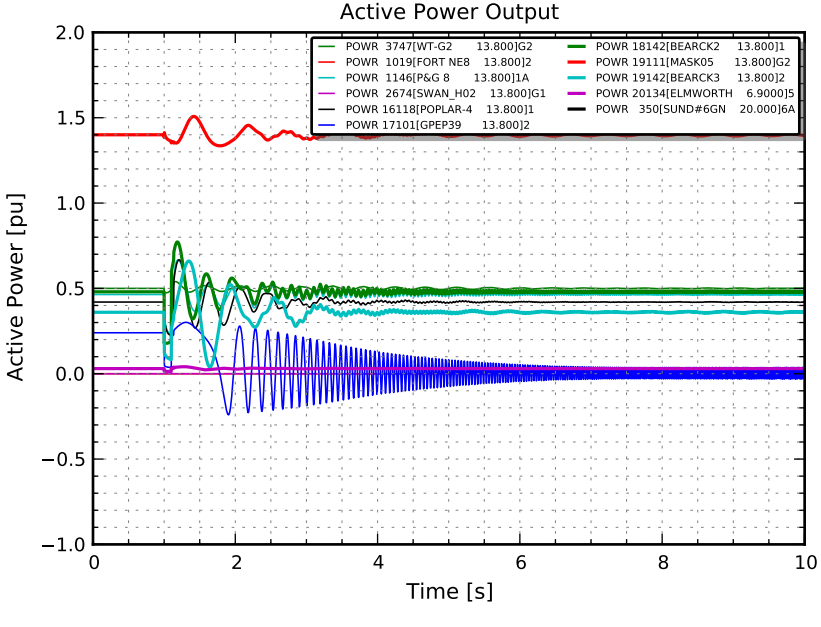
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_B.

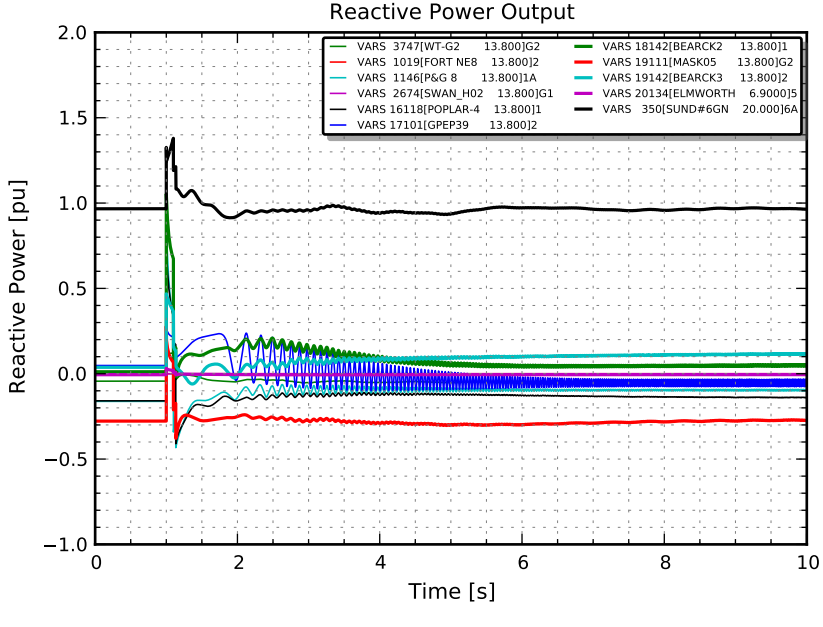
Study Area Generators

Appendix E2A
Figure: 034 (B. 3)





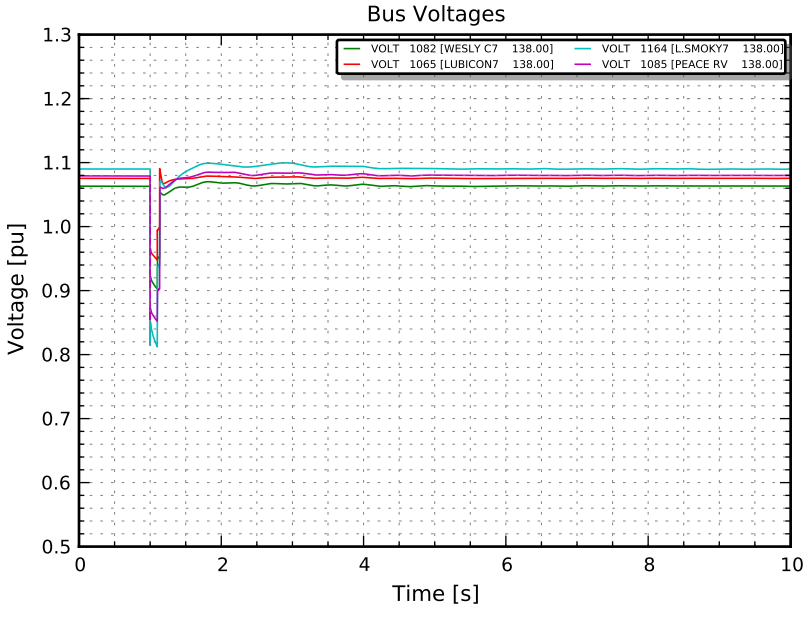


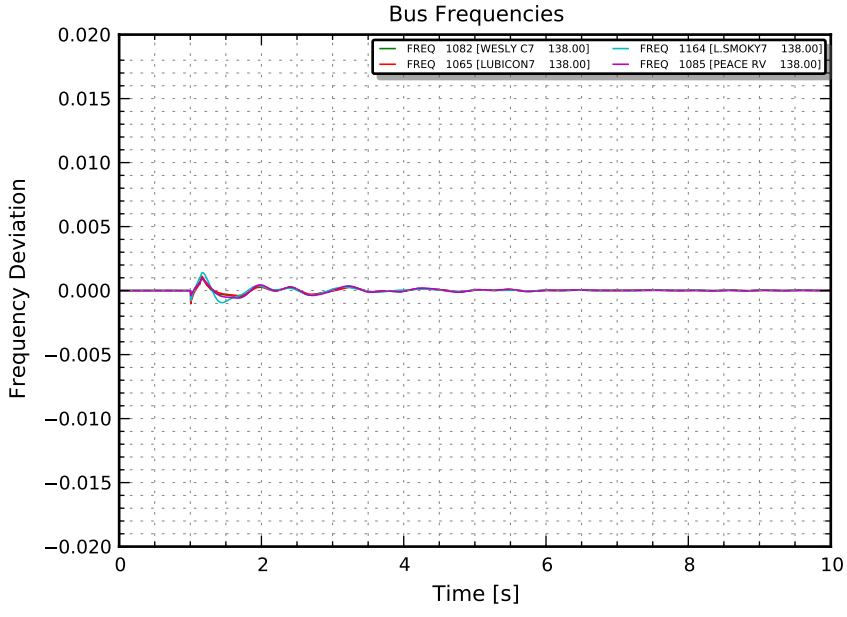


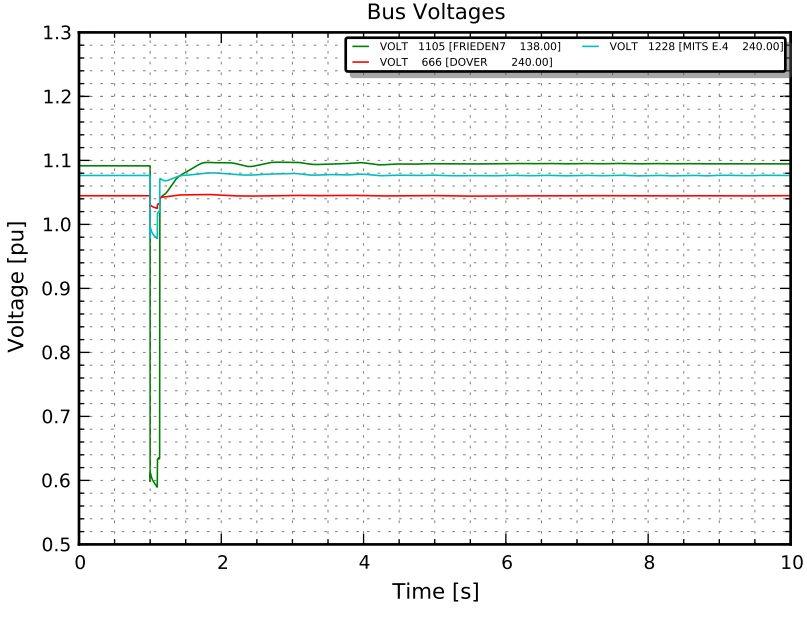
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_A.

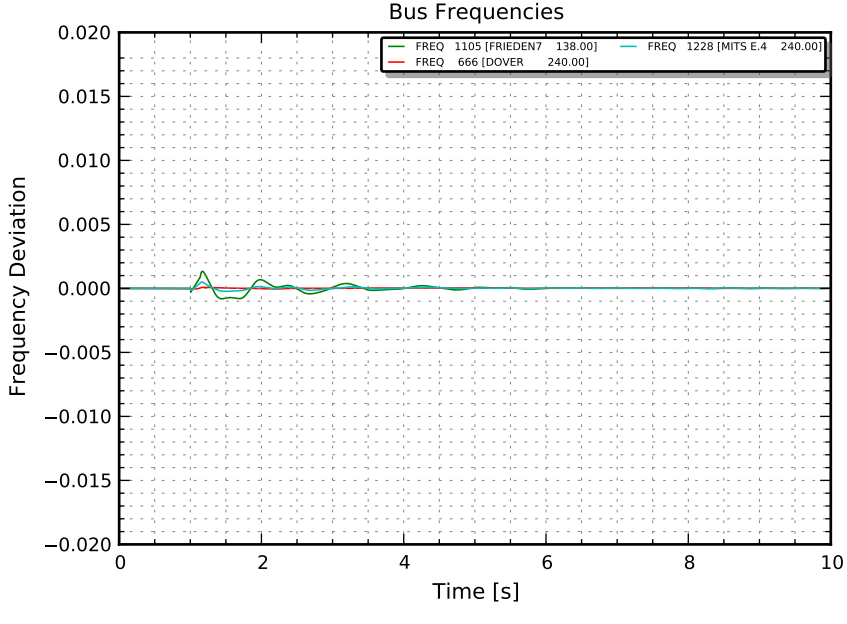
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 035 (A. 1)





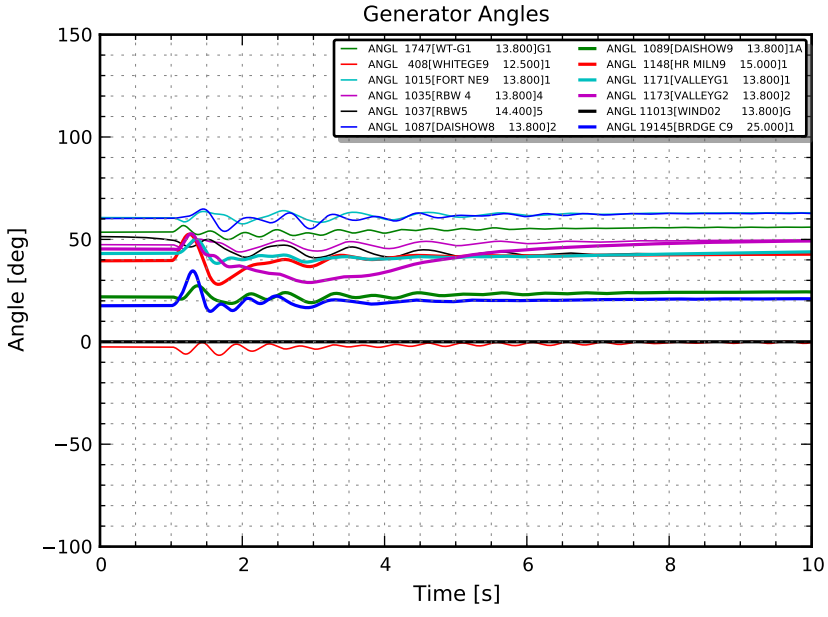


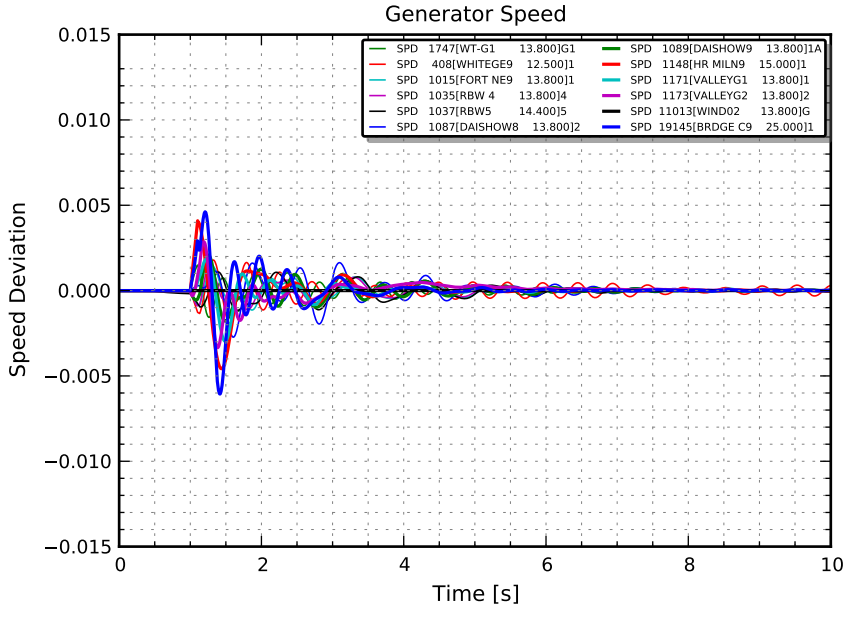


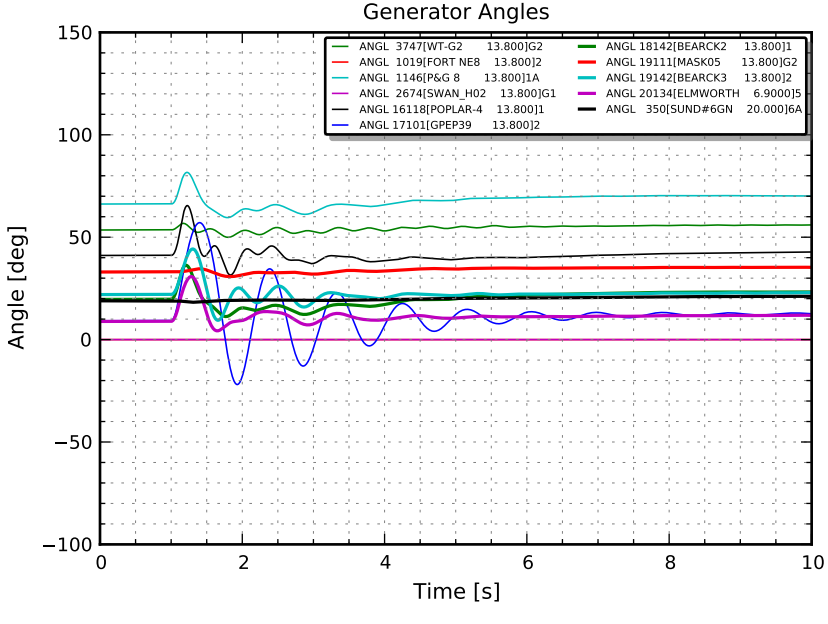
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_A.

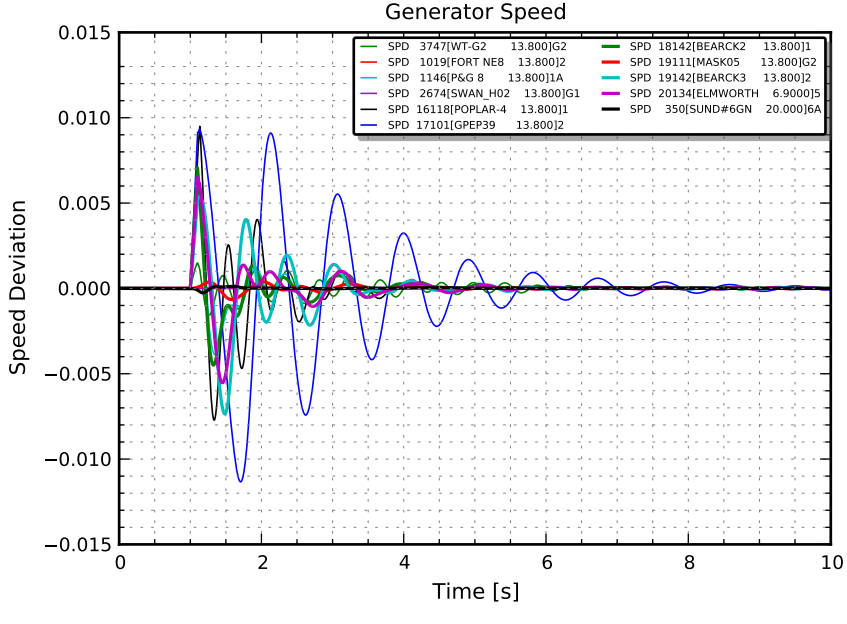
Study Area Generators

Appendix E2A
Figure: 035 (A. 2)





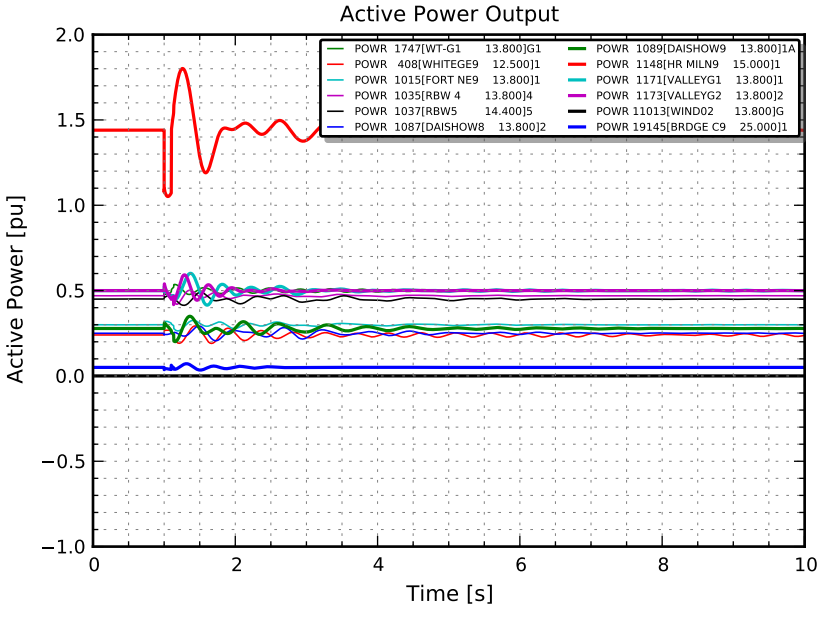


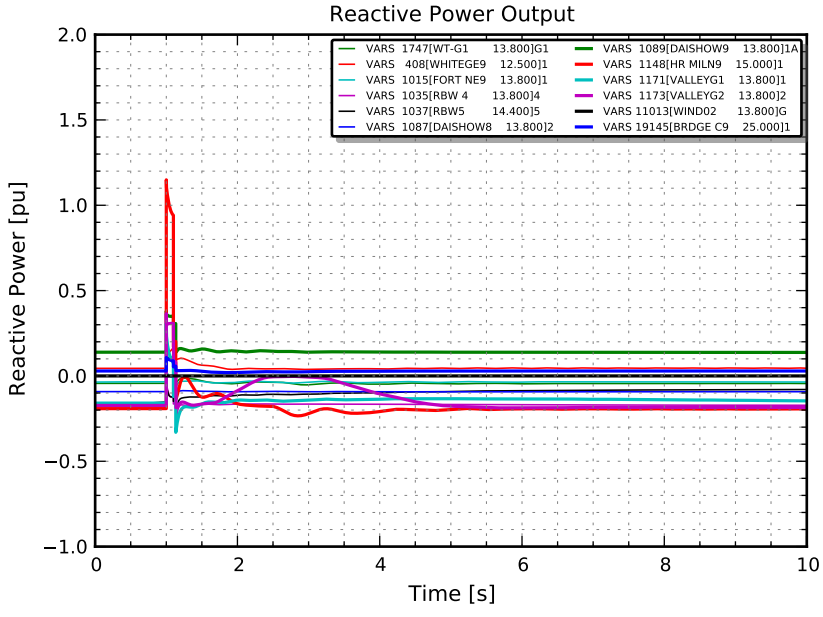


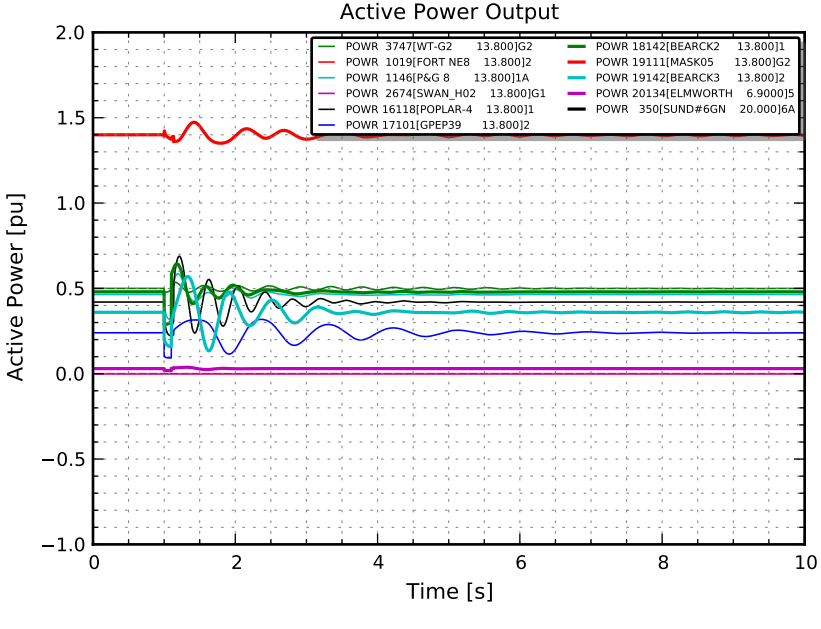
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_A.

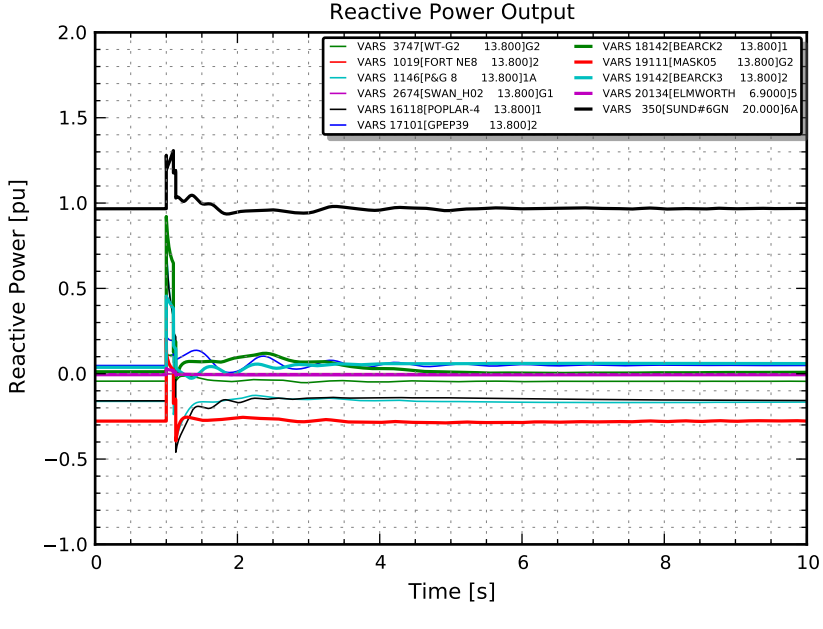
Study Area Generators

Appendix E2A
Figure: 035 (A. 3)





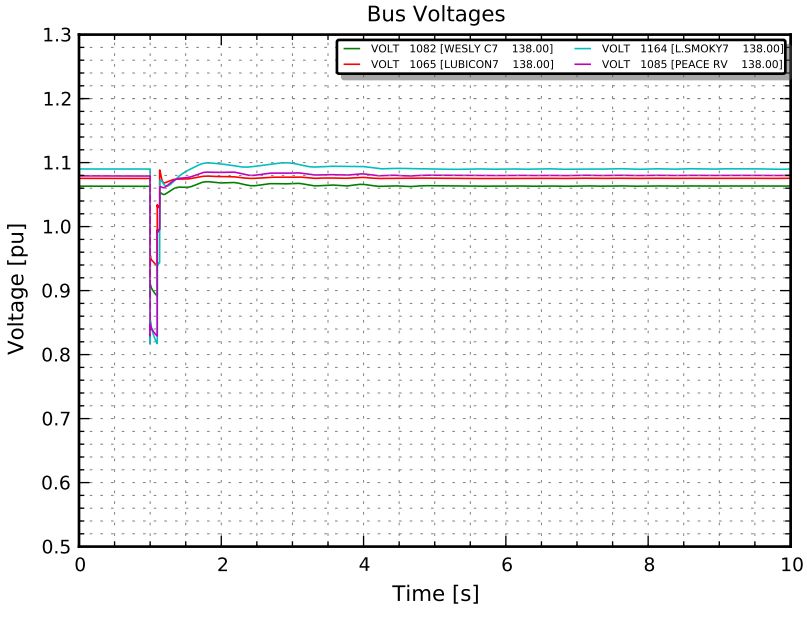


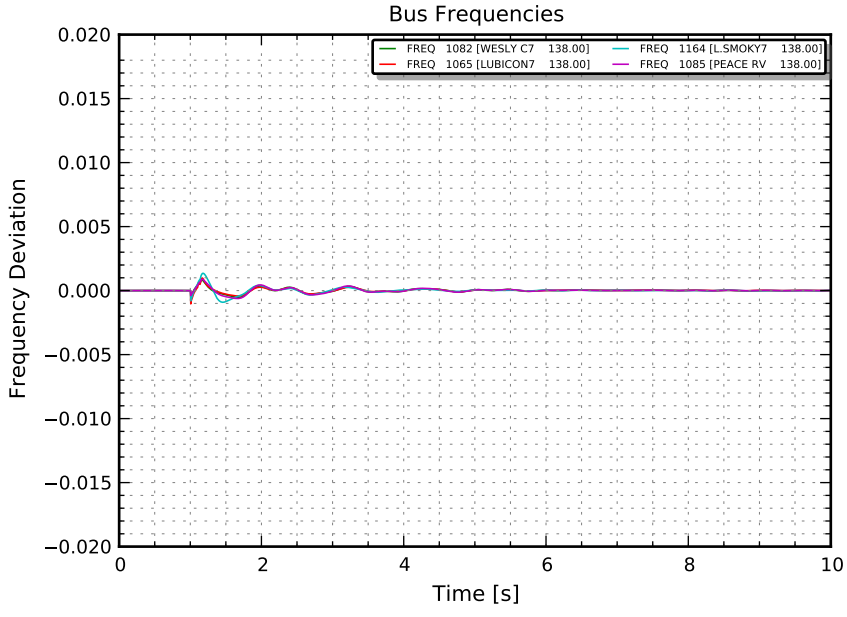


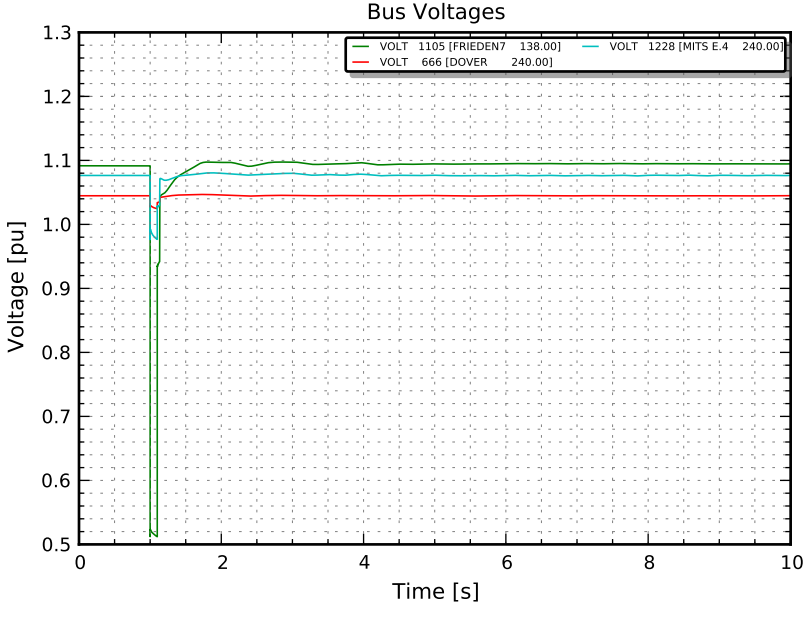
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_B.

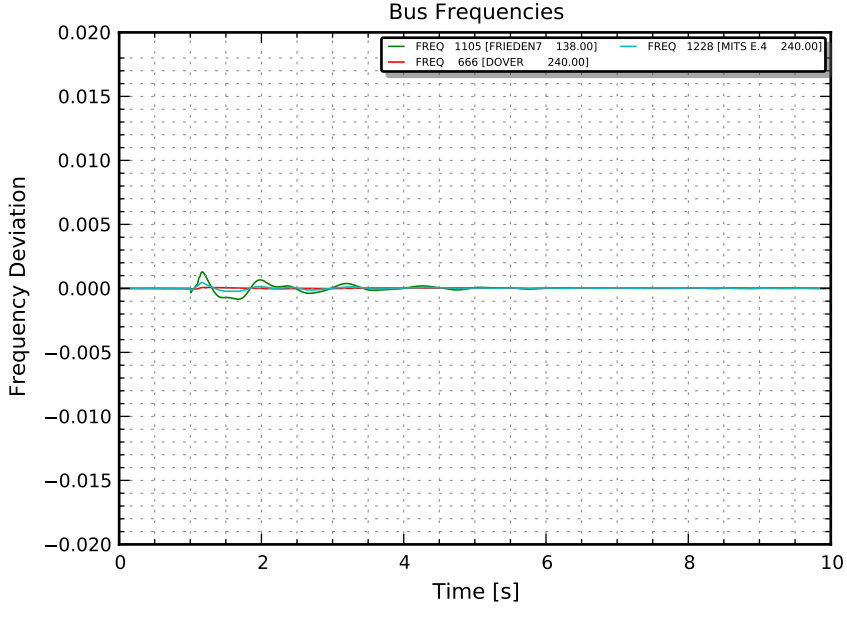
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 035 (B. 1)





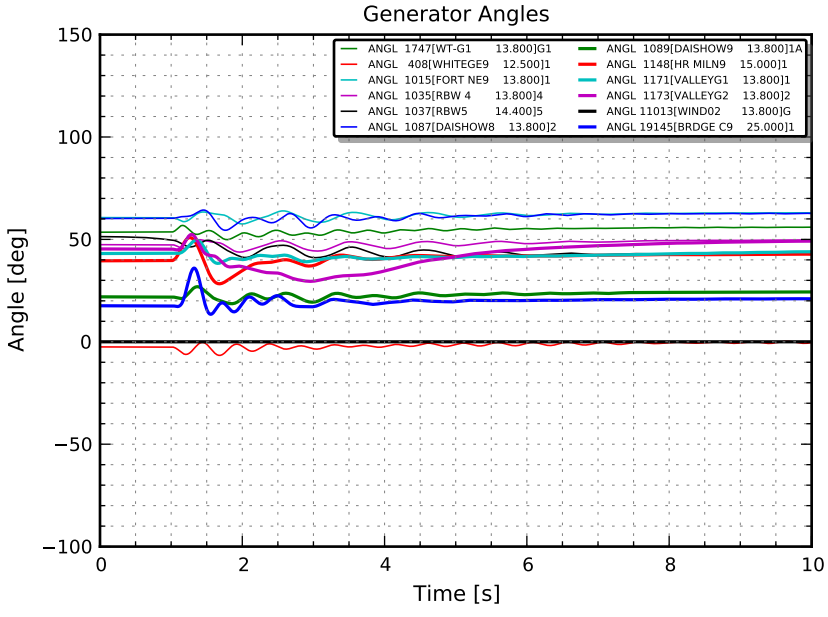


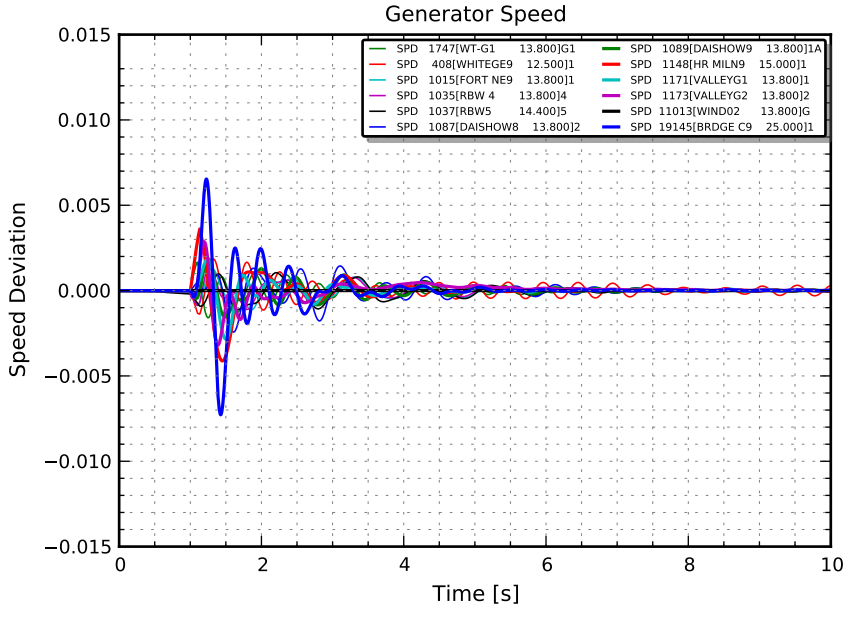


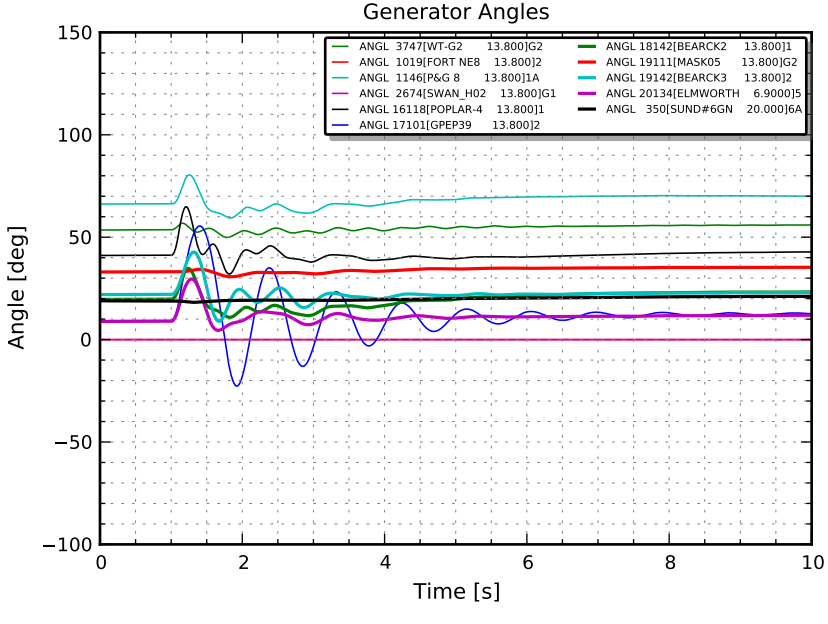
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_B.

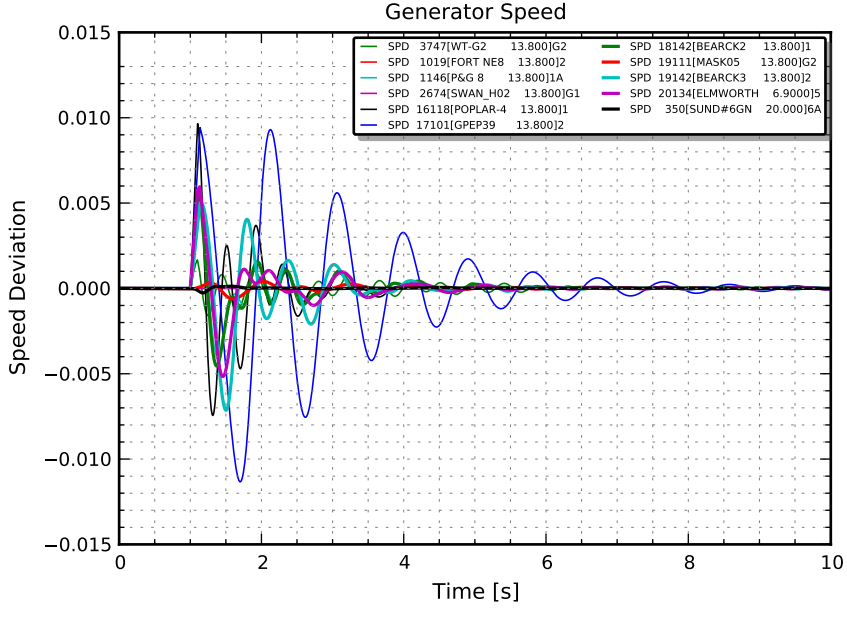
Study Area Generators

Appendix E2A
Figure: 035 (B. 2)





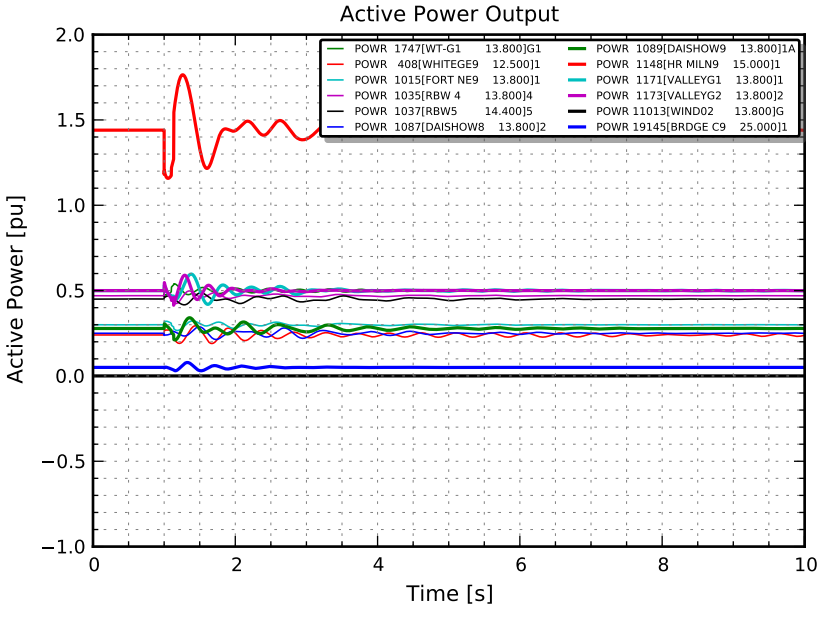


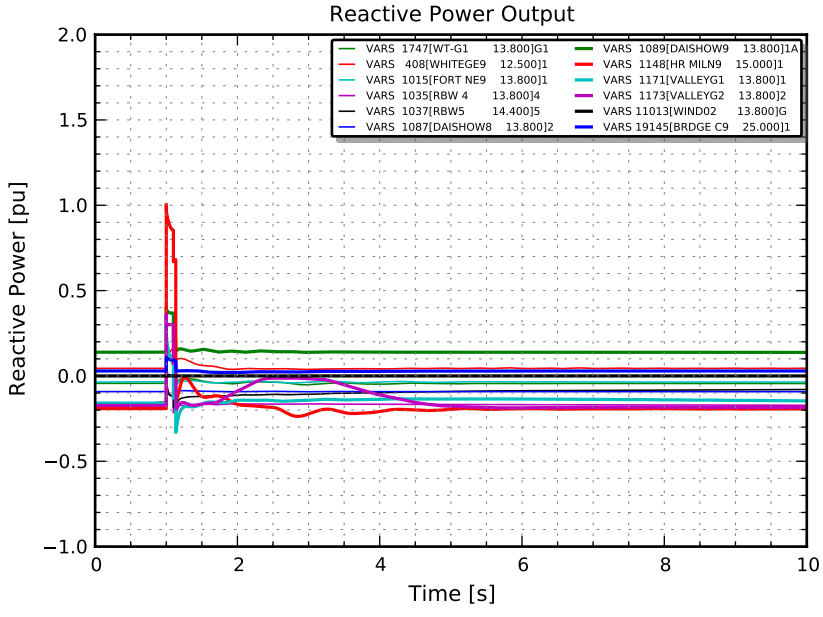


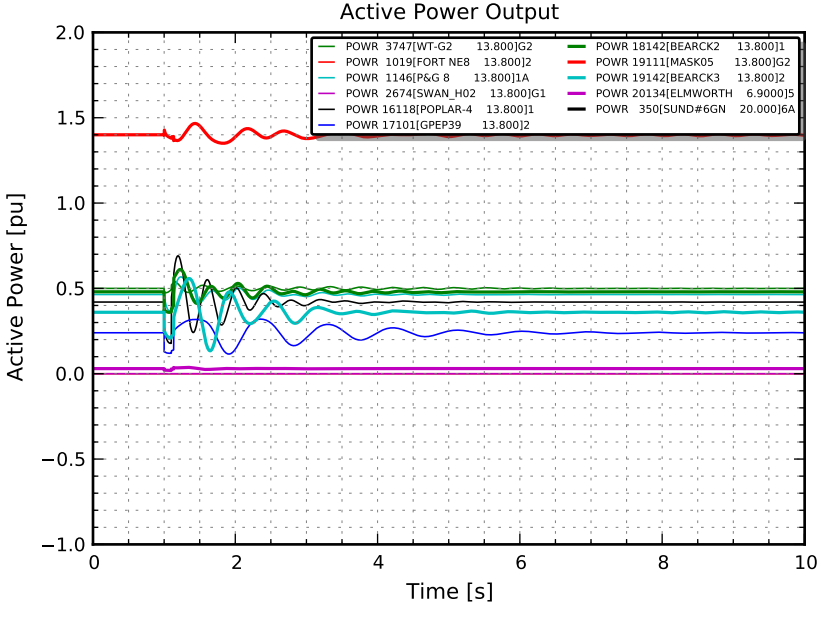
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_B.

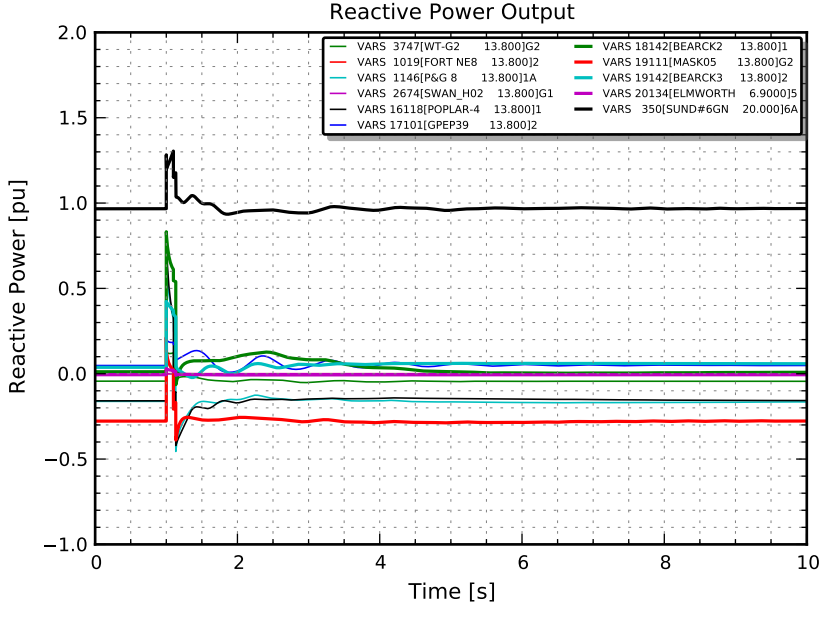
Study Area Generators

Appendix E2A
Figure: 035 (B. 3)





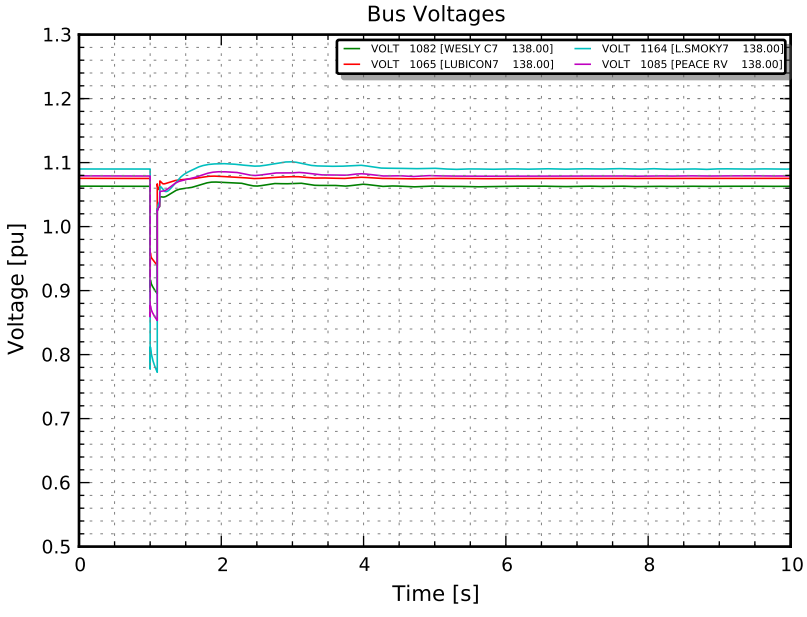


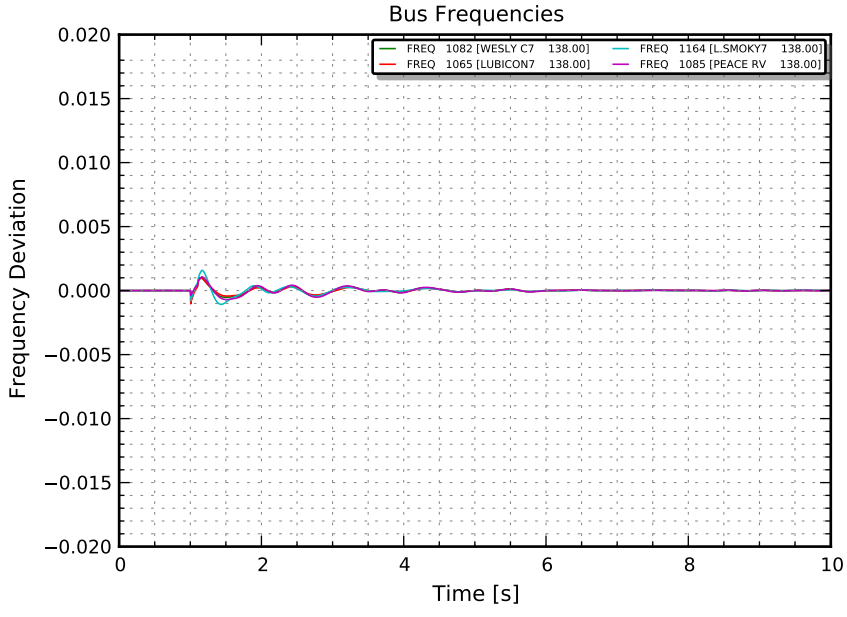


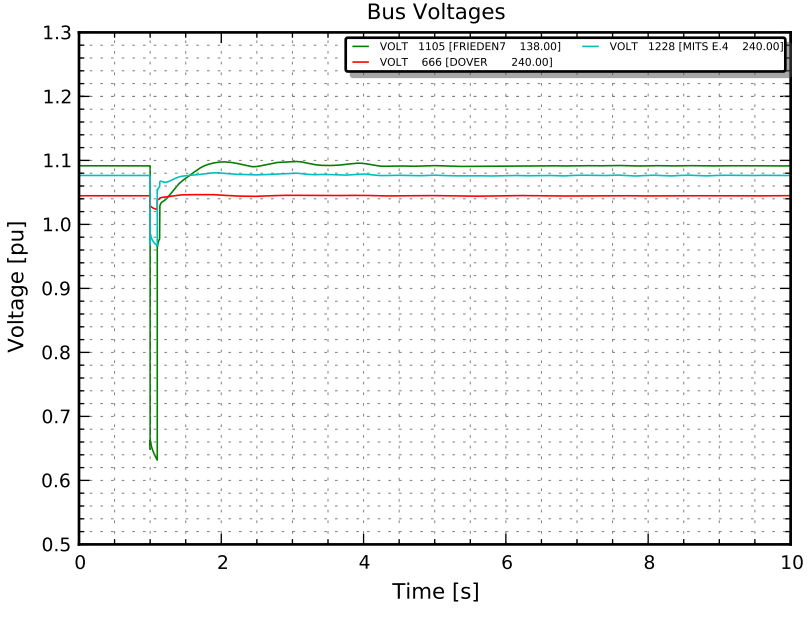
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_A.

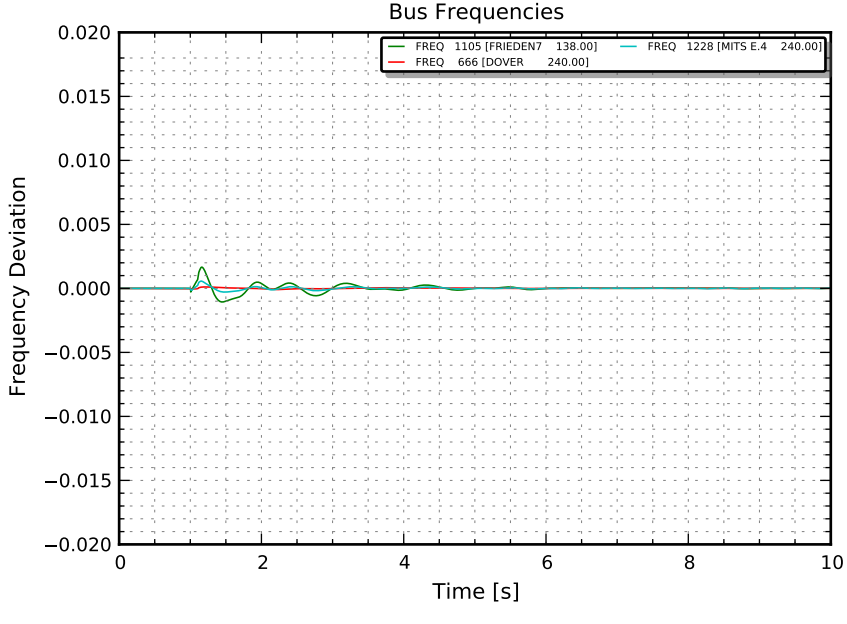
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 036 (A. 1)





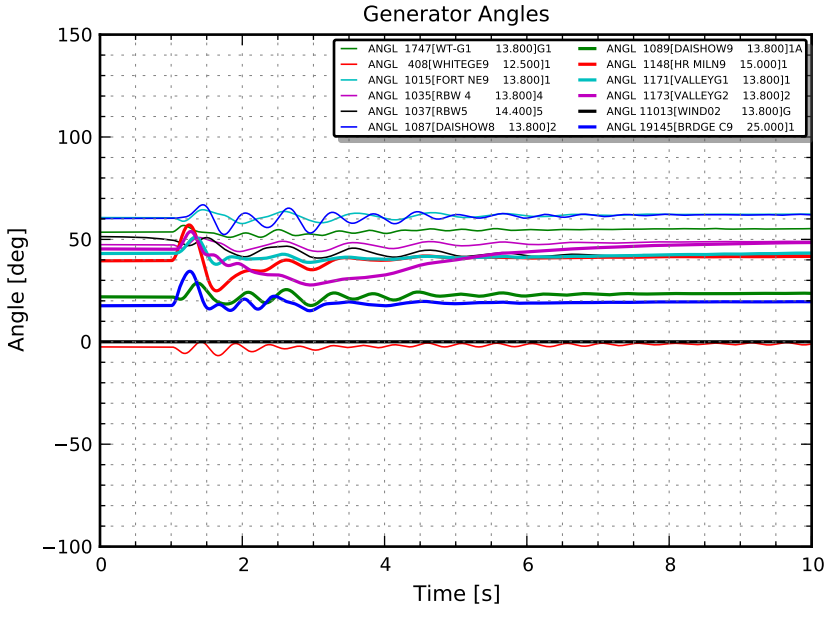


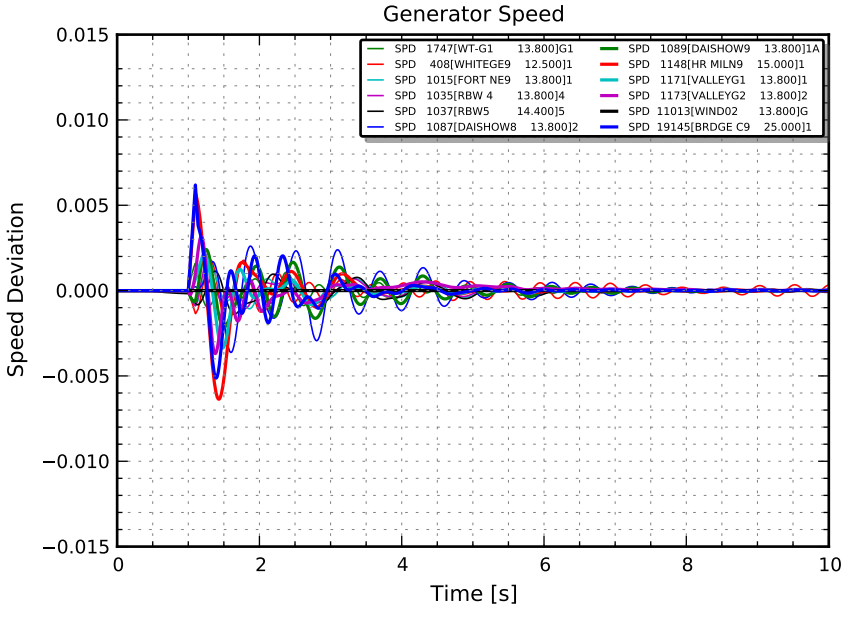


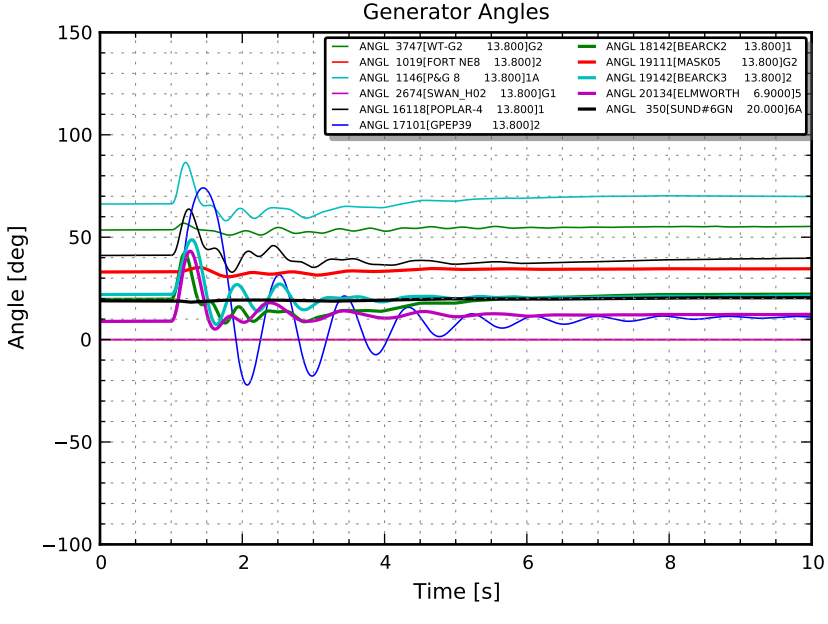
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_A.

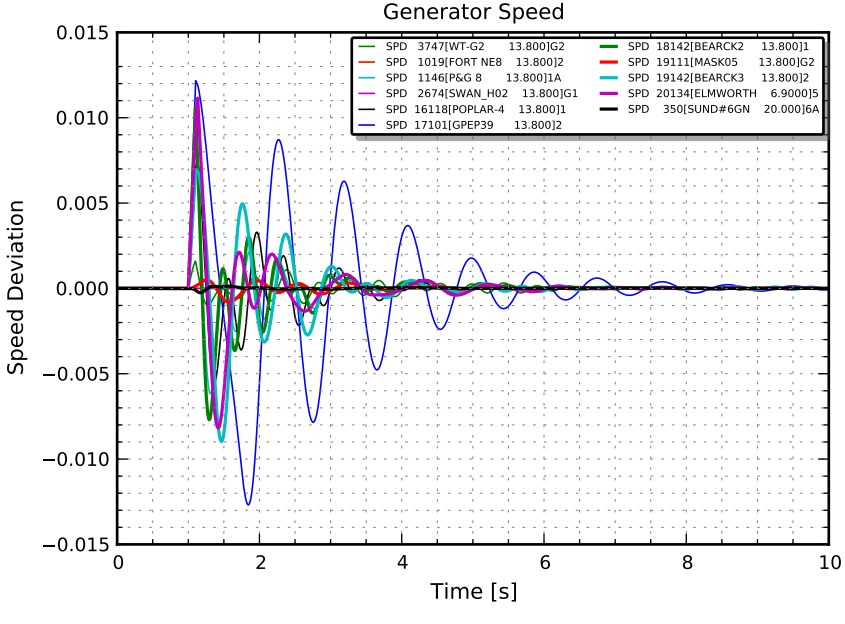
Study Area Generators

Appendix E2A
Figure: 036 (A. 2)





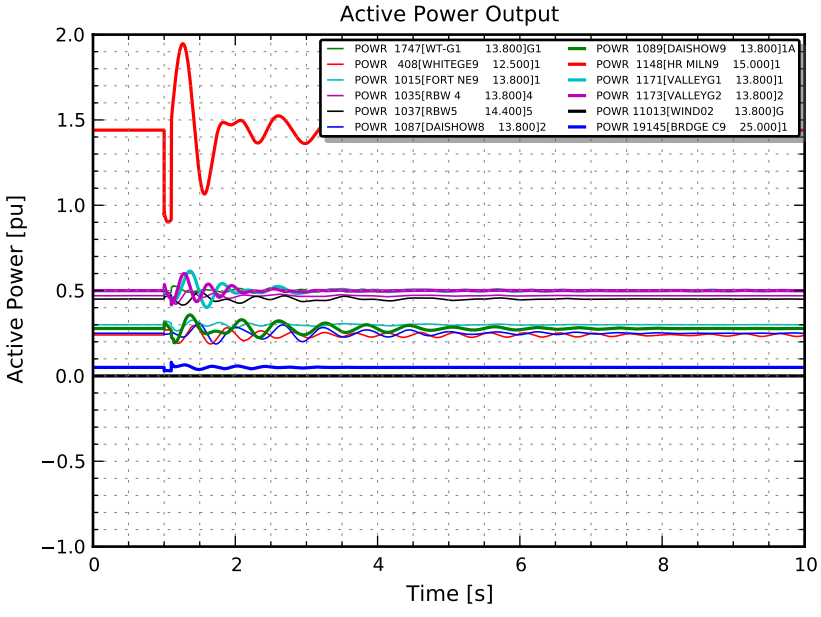


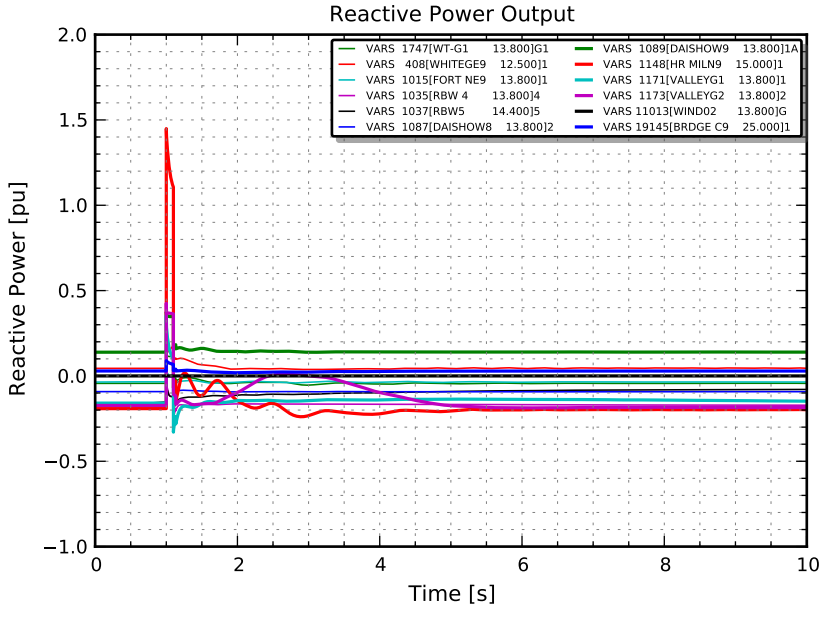


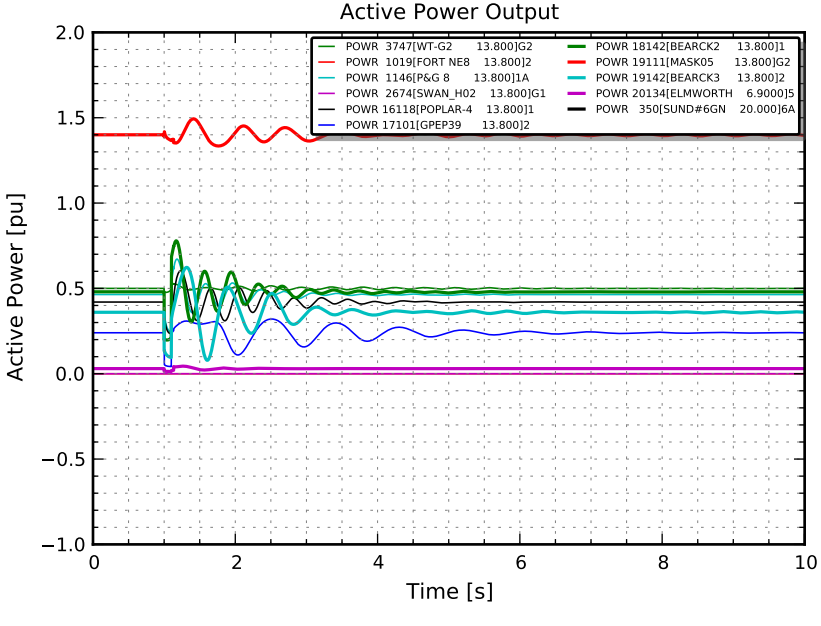
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_A.

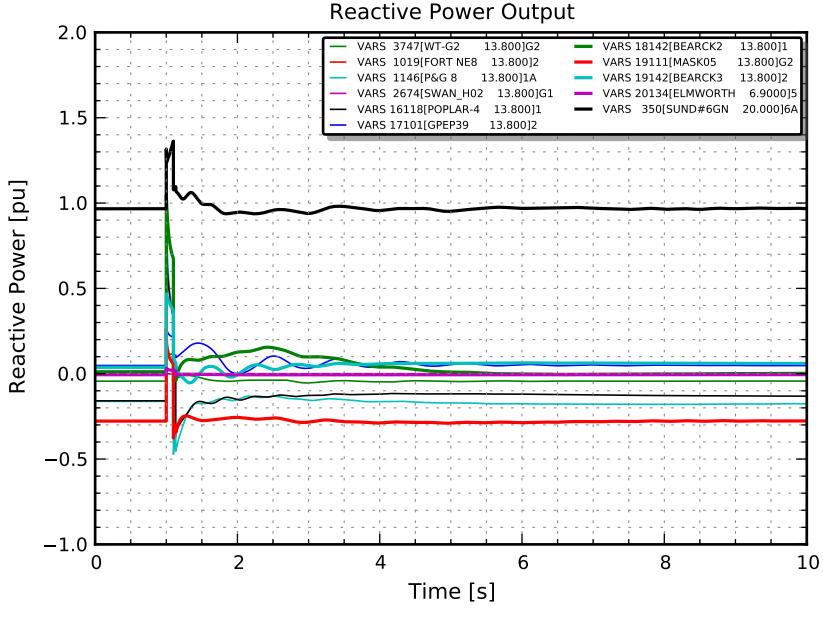
Study Area Generators

Appendix E2A
Figure: 036 (A. 3)





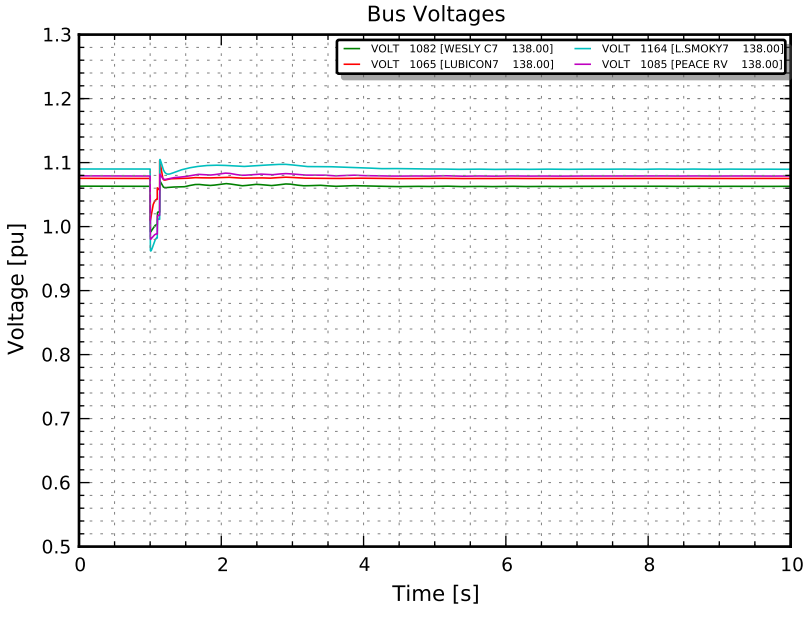


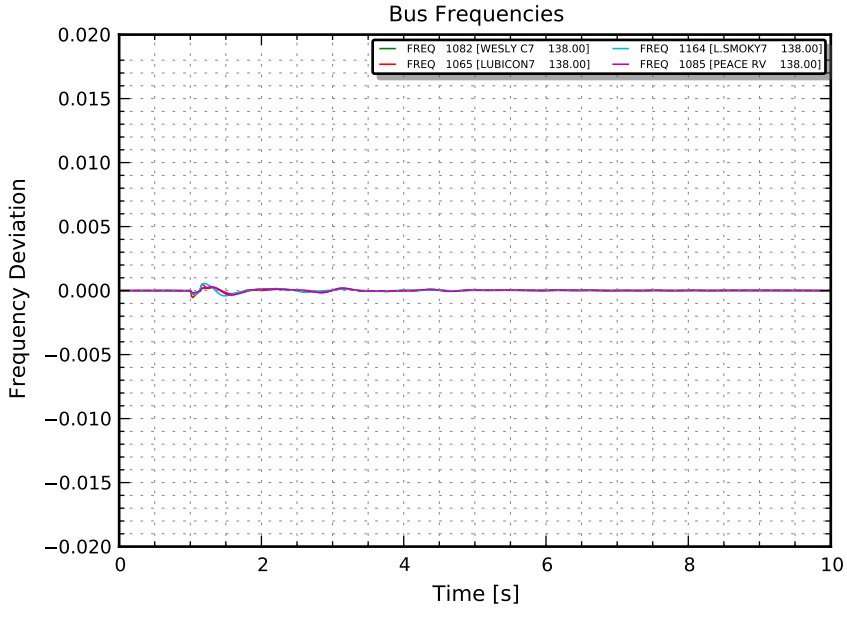


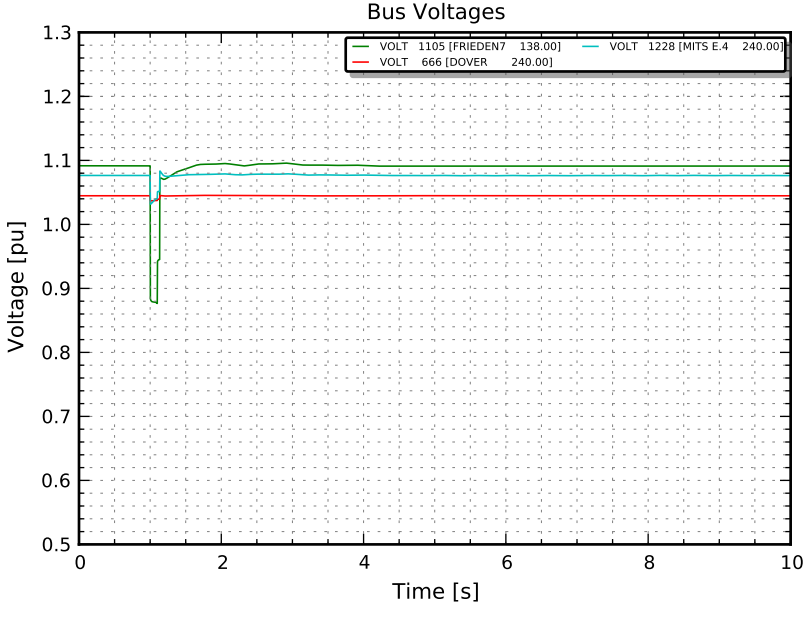
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_B.

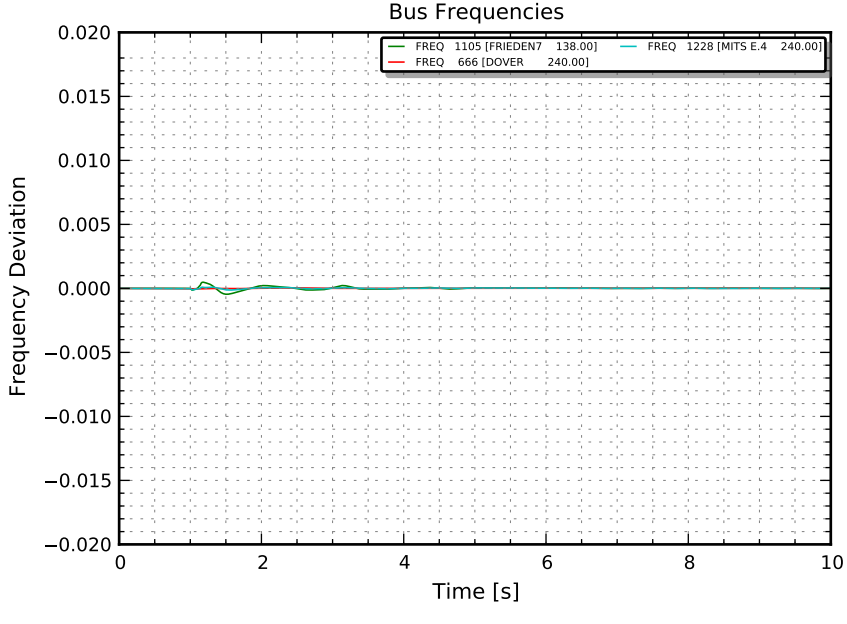
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 036 (B. 1)





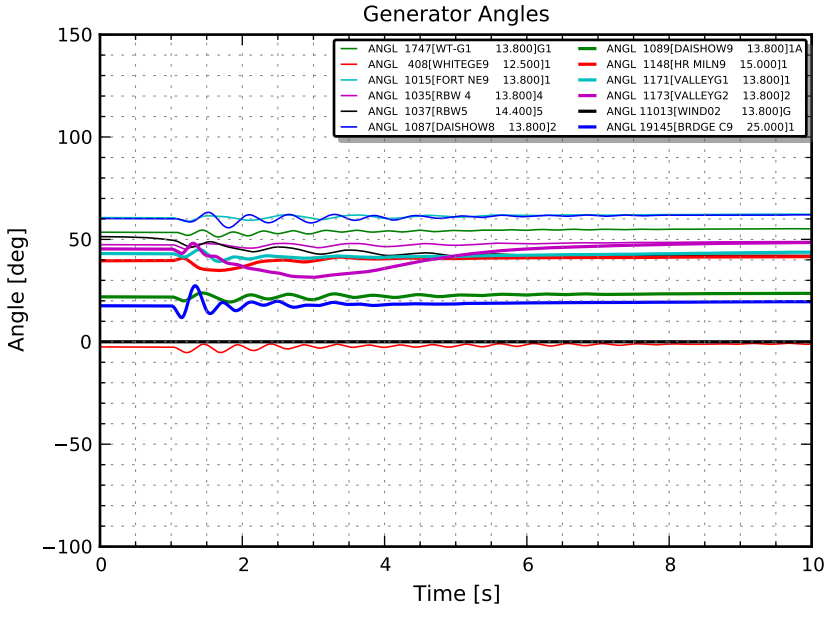


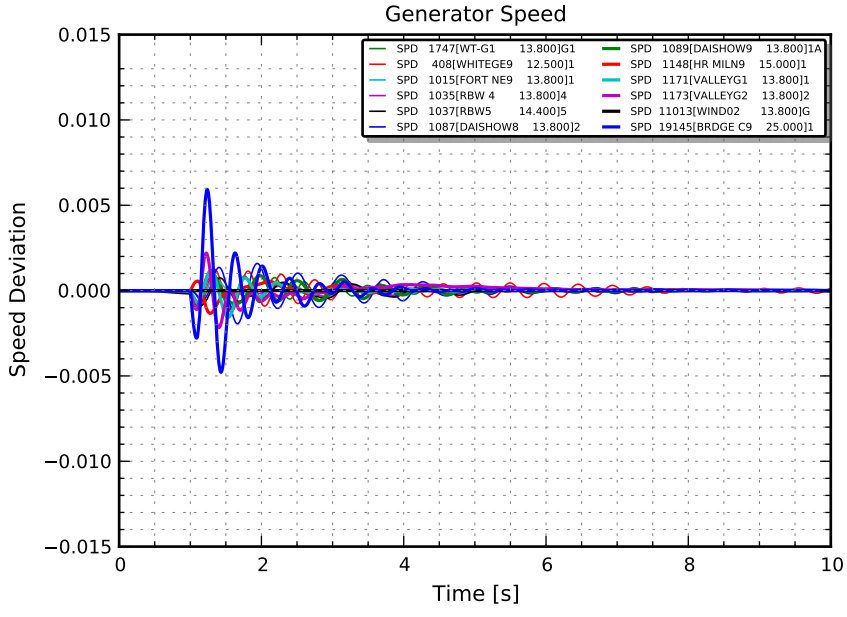


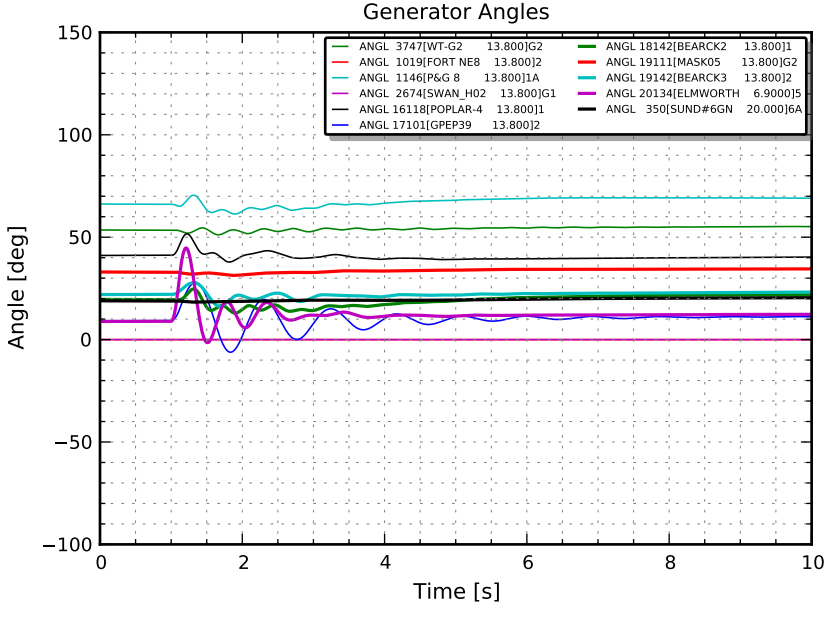
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_B.

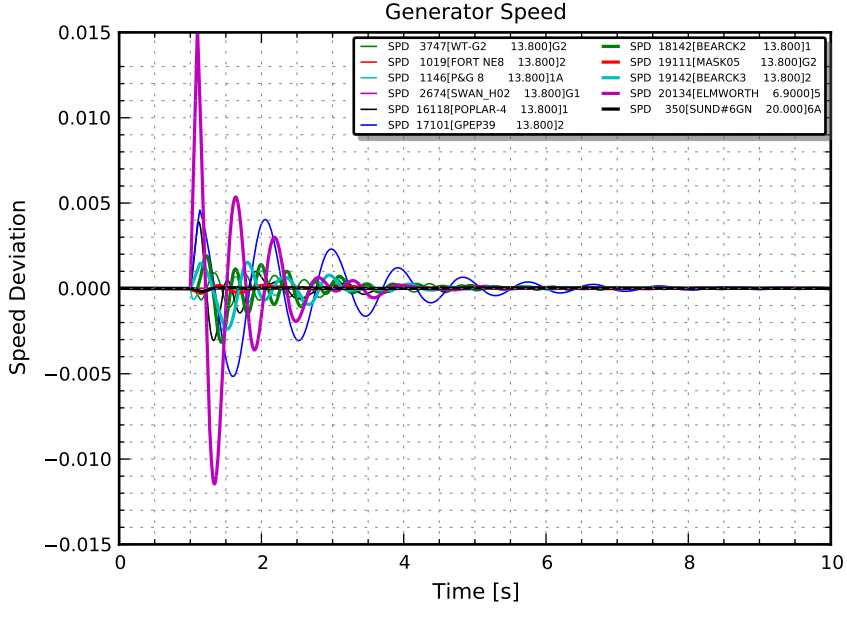
Study Area Generators

Appendix E2A
Figure: 036 (B. 2)





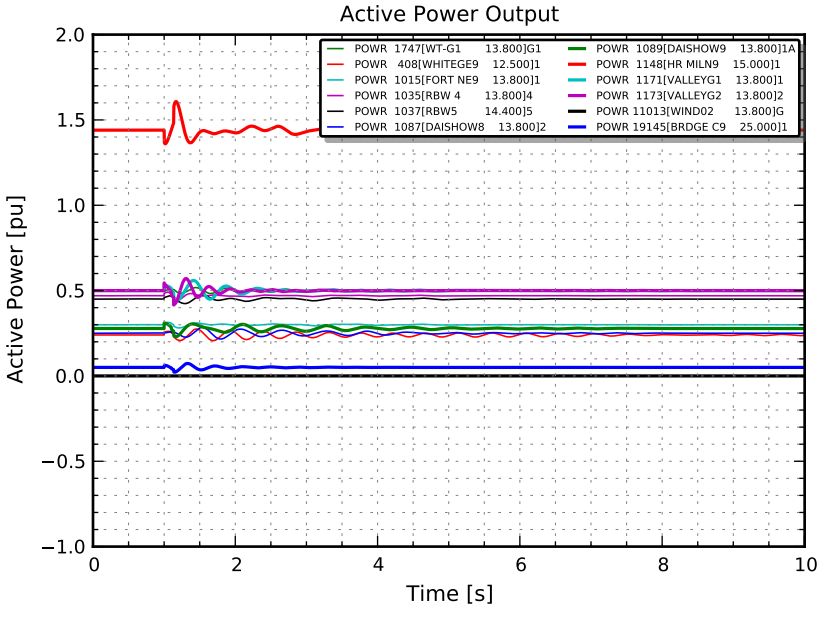


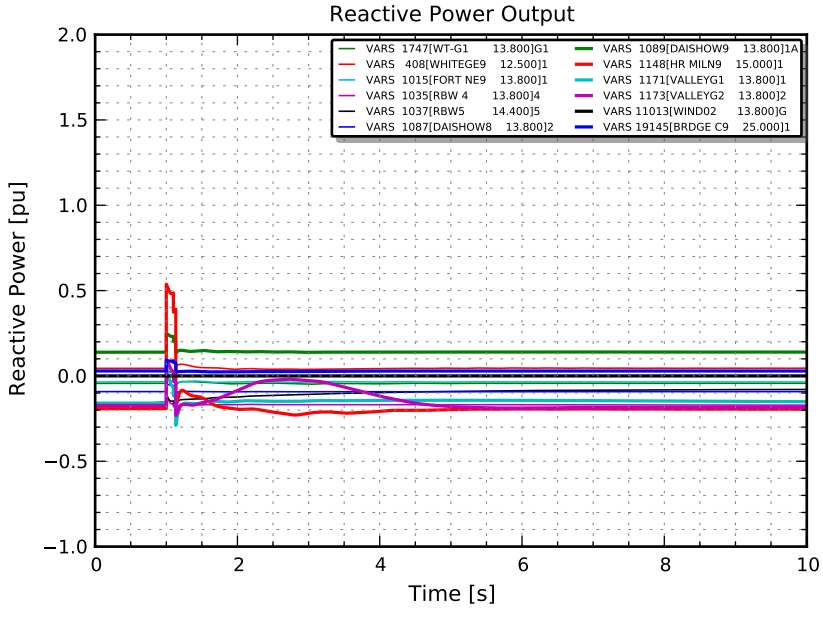


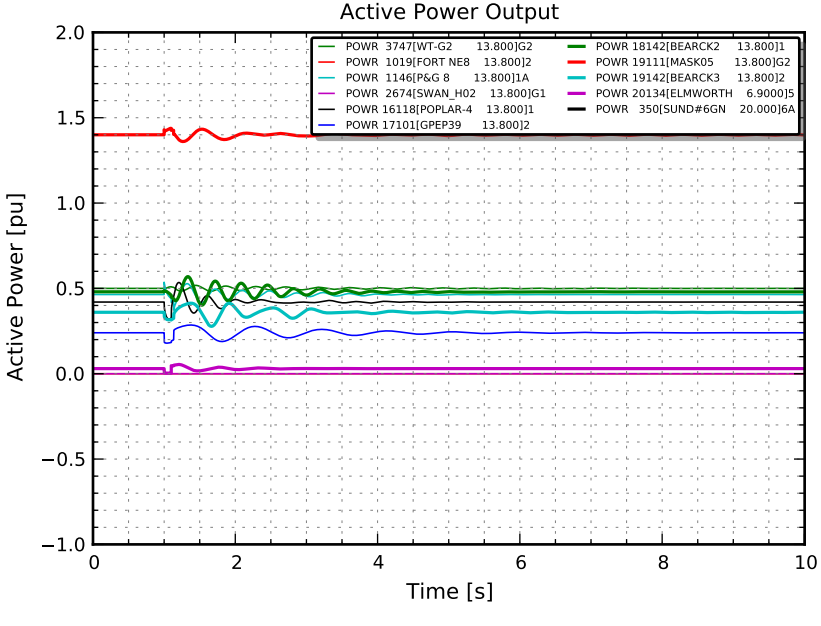
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_B.

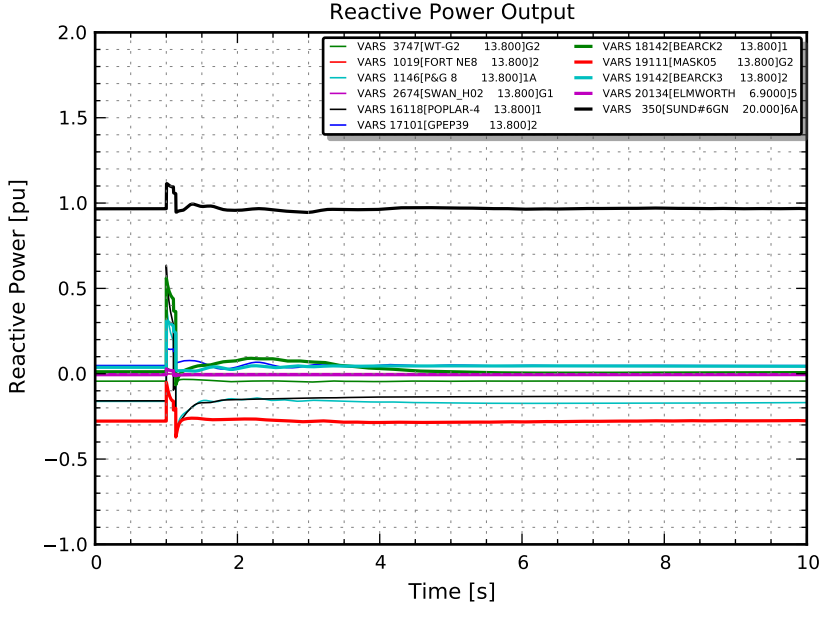
Study Area Generators

Appendix E2A
Figure: 036 (B. 3)





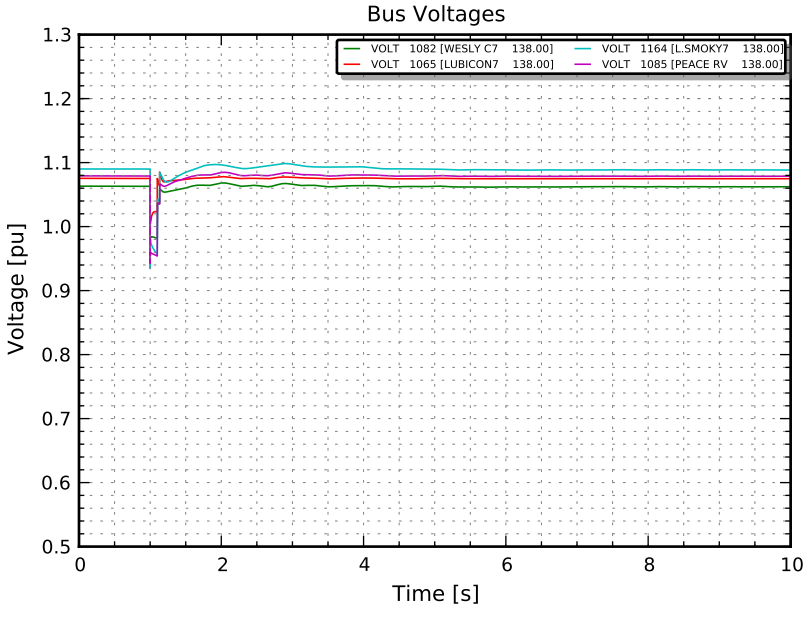


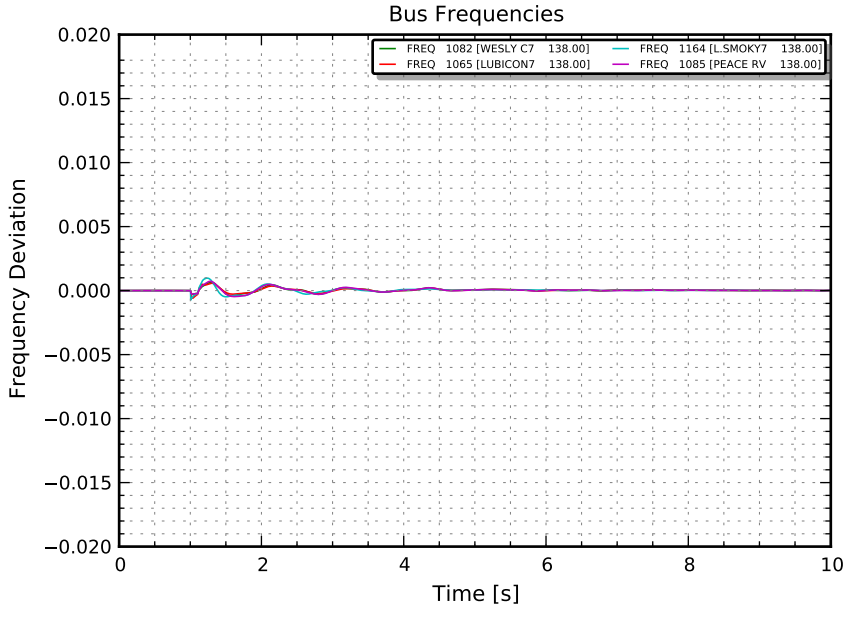


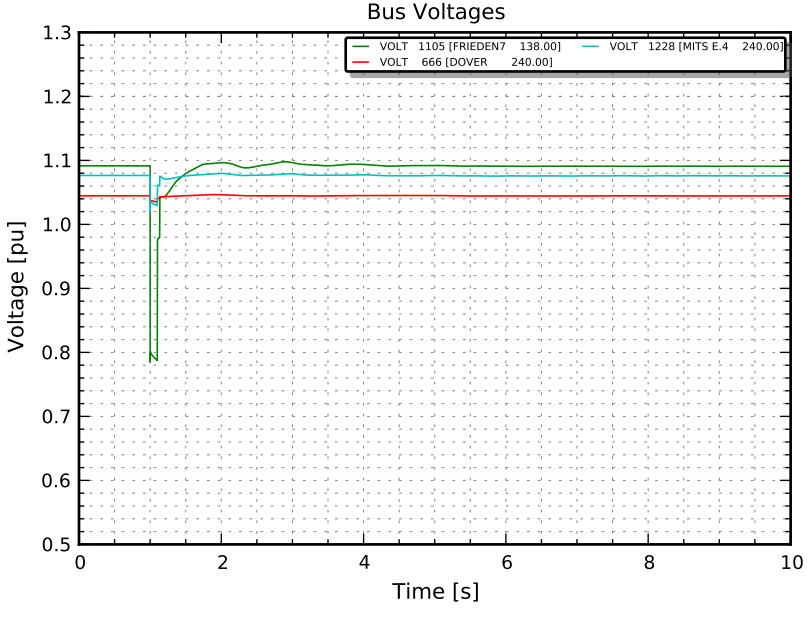
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 037 7L07 POPLARHILL to ELMWORTH_A.

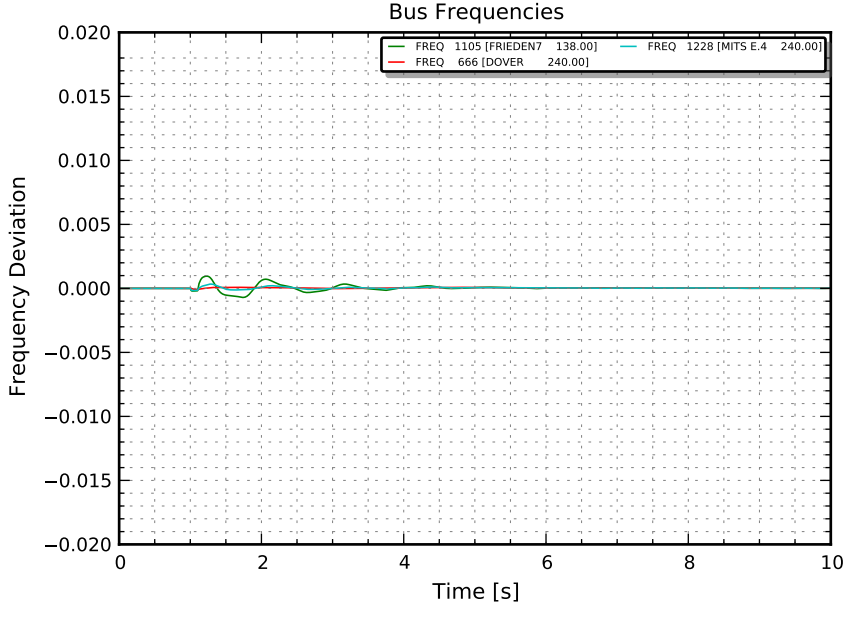
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 037 (A. 1)





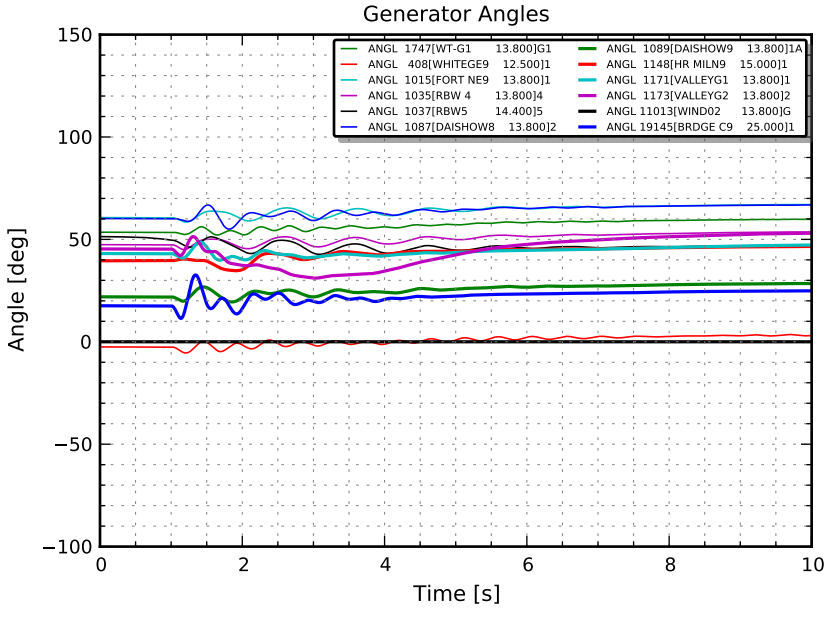


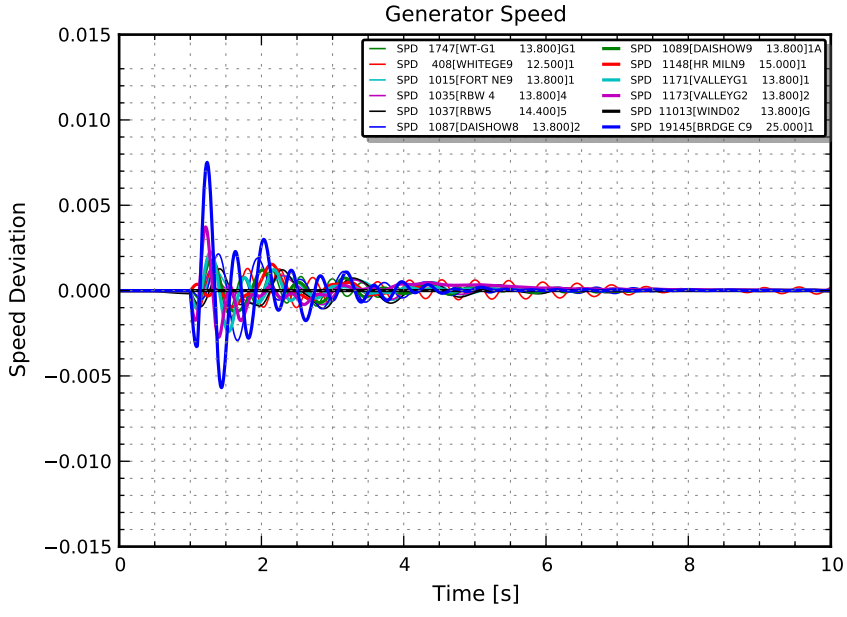


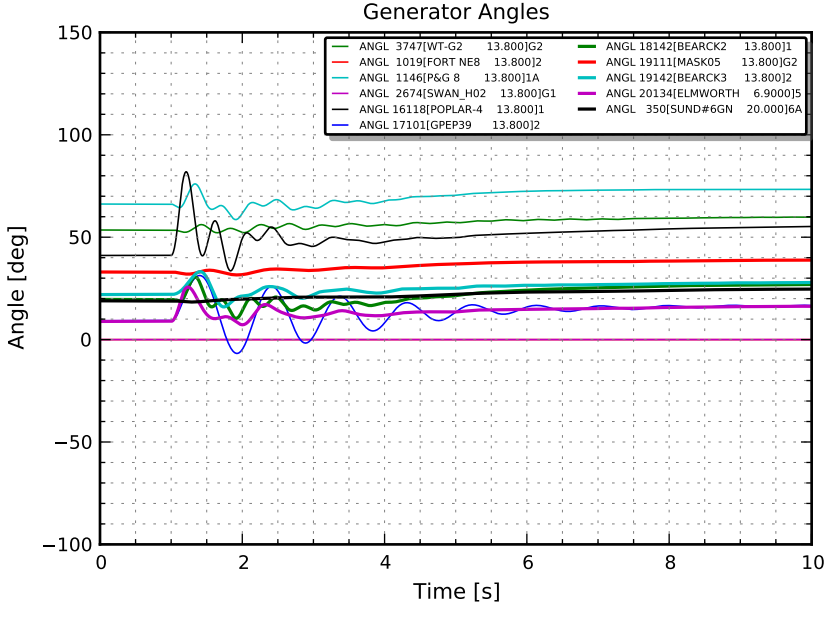
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 037 7L07 POPLARHILL to ELMWORTH_A.

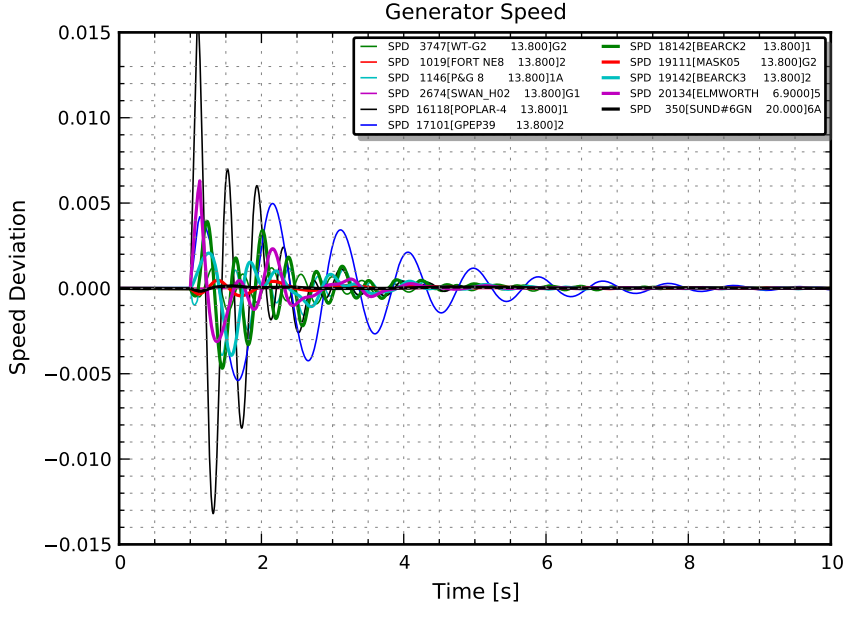
Study Area Generators

Appendix E2A
Figure: 037 (A. 2)





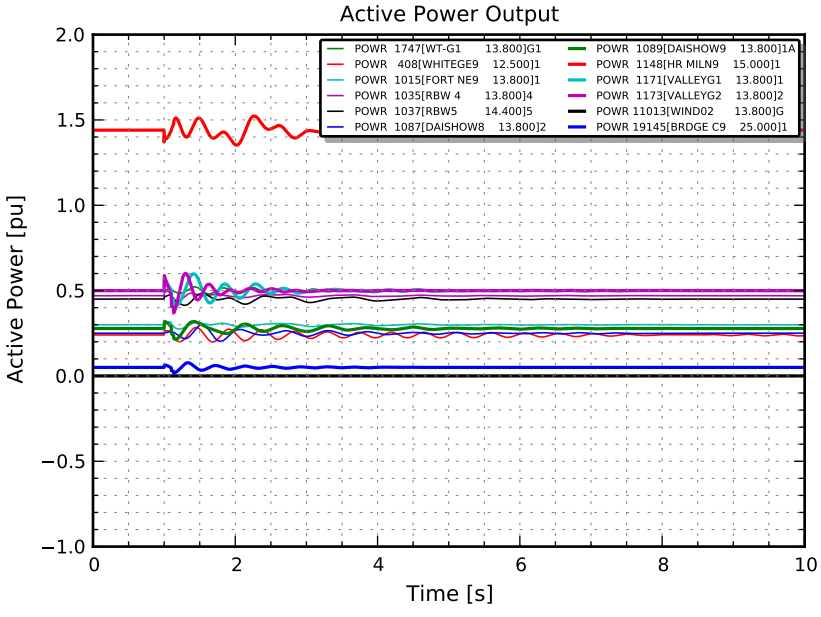


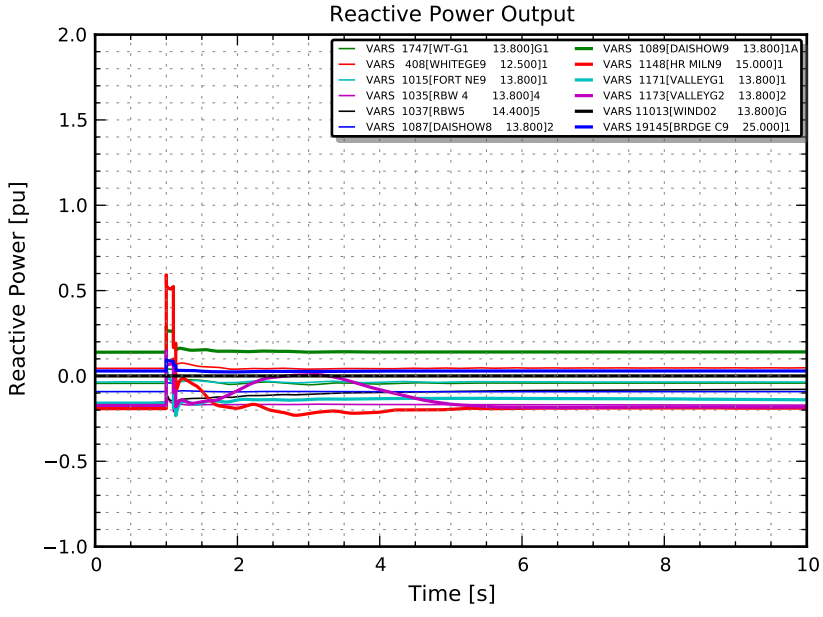


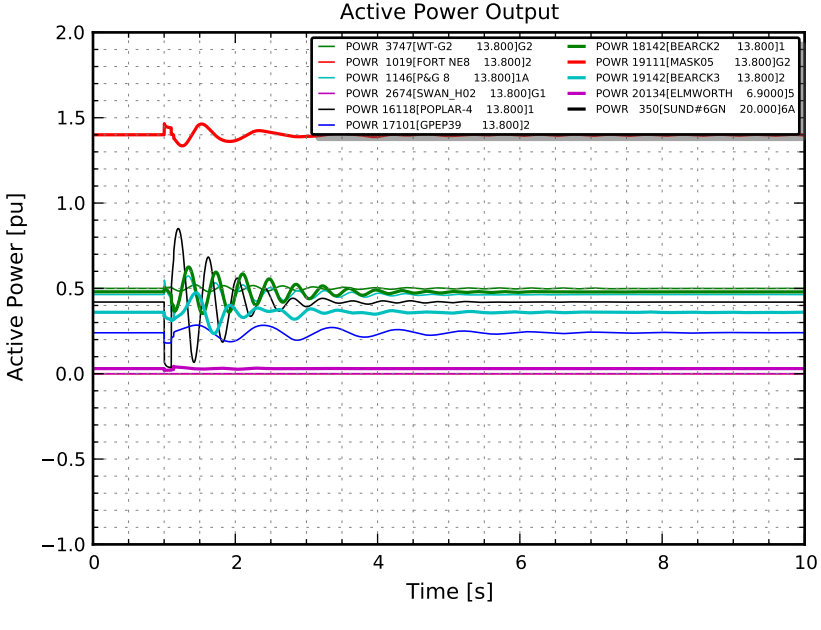
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 037 7L07 POPLARHILL to ELMWORTH_A.

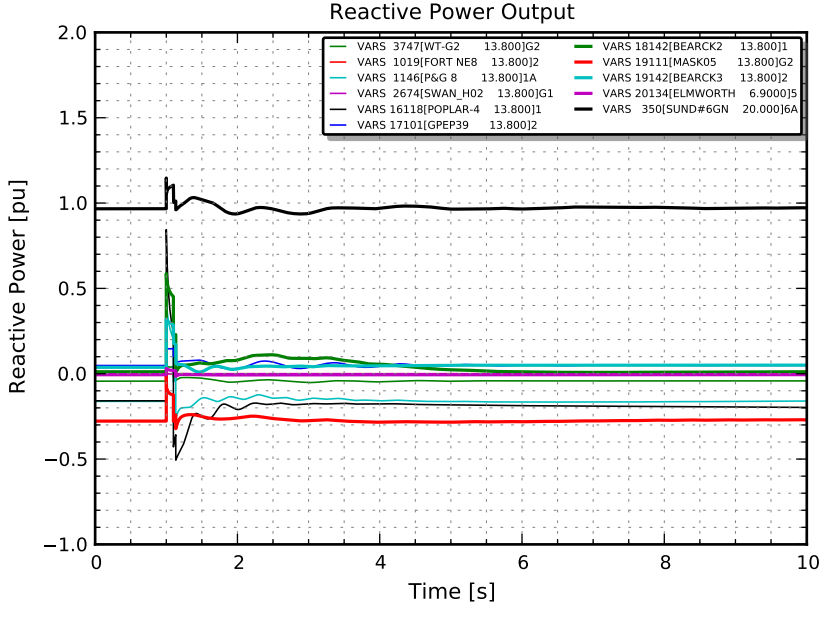
Study Area Generators

Appendix E2A
Figure: 037 (A. 3)





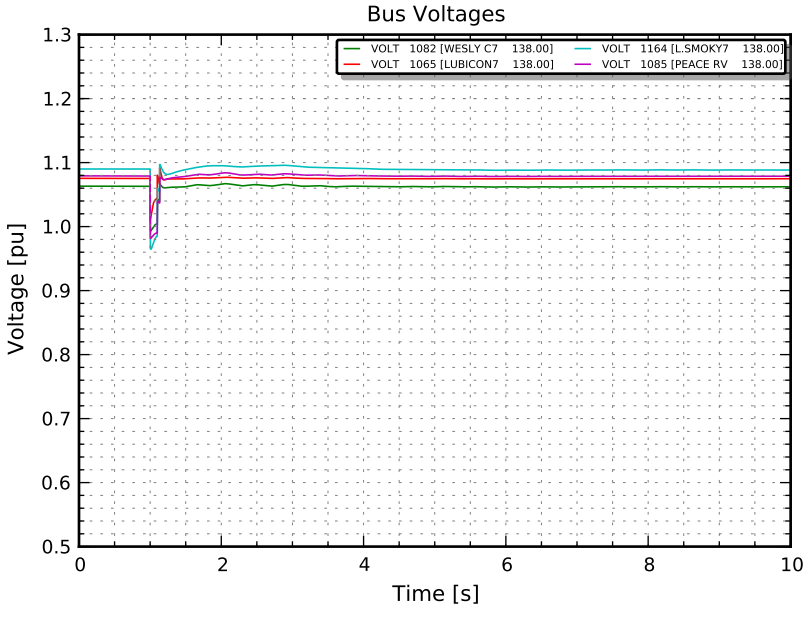


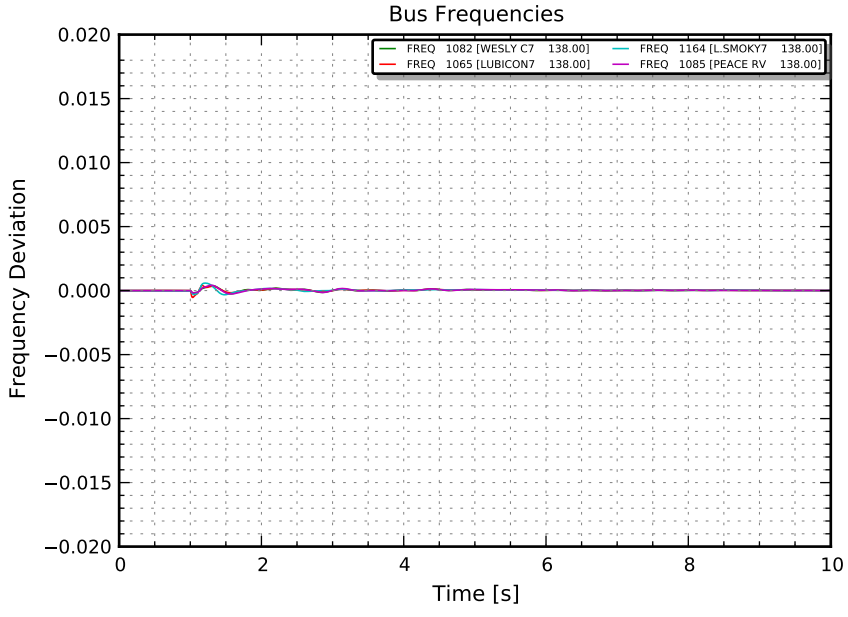


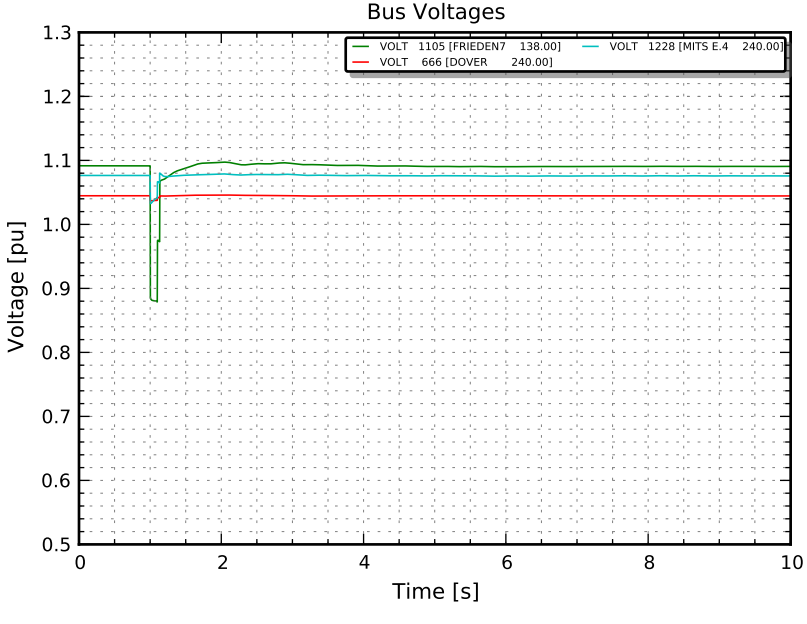
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 037 7L07 POPLARHILL to ELMWORTH_B.

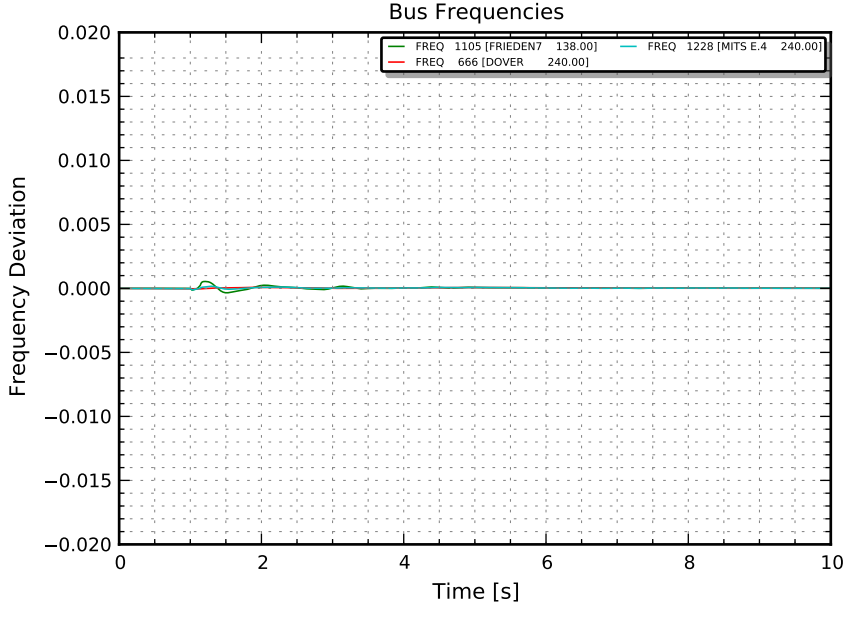
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 037 (B. 1)





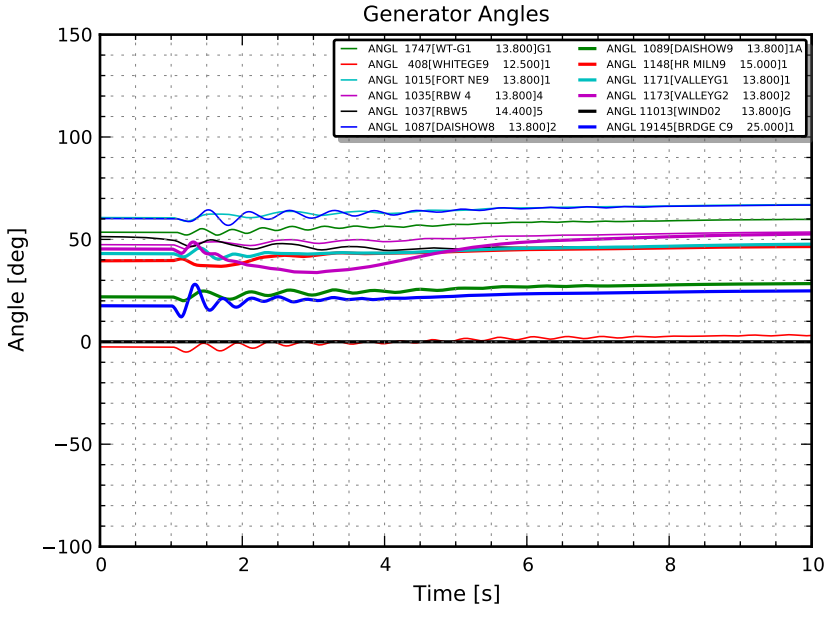


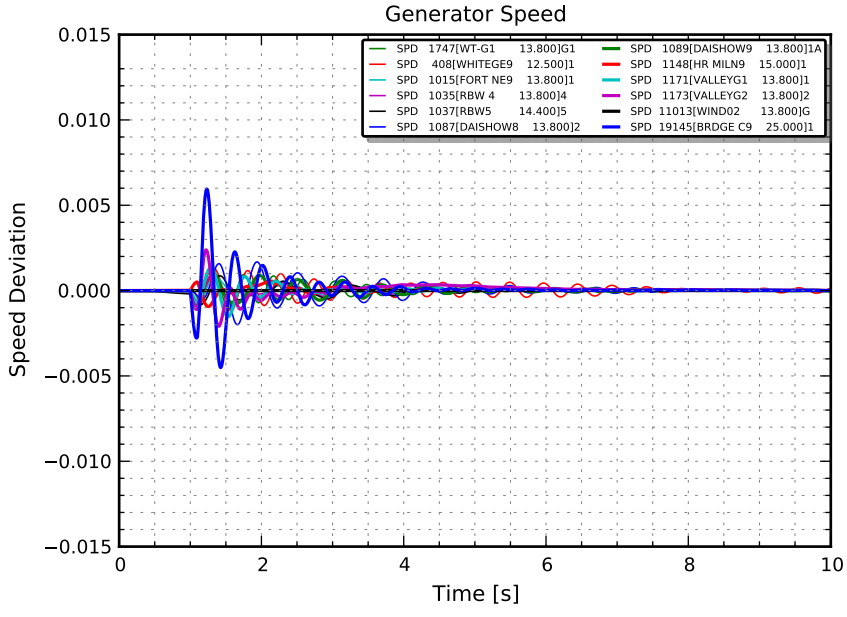


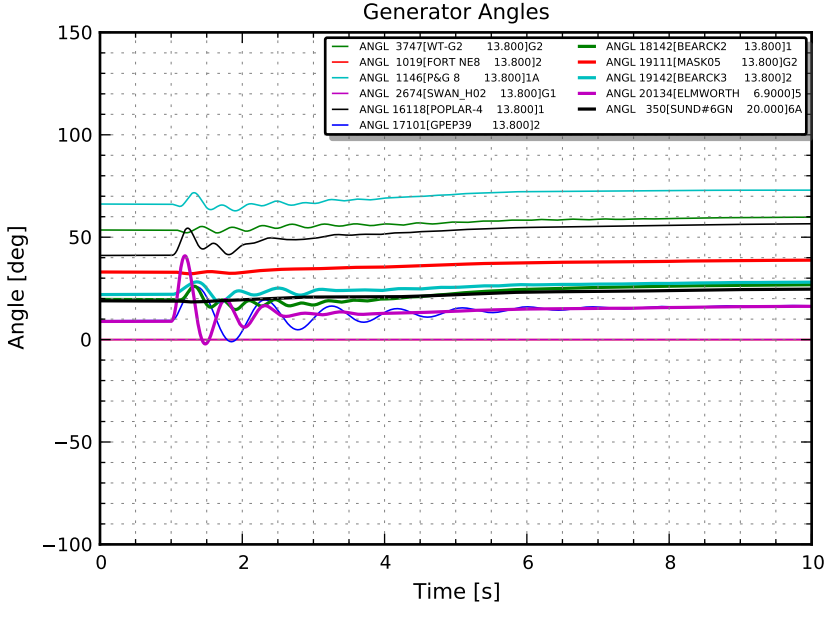
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 037 7L07 POPLARHILL to ELMWORTH_B.

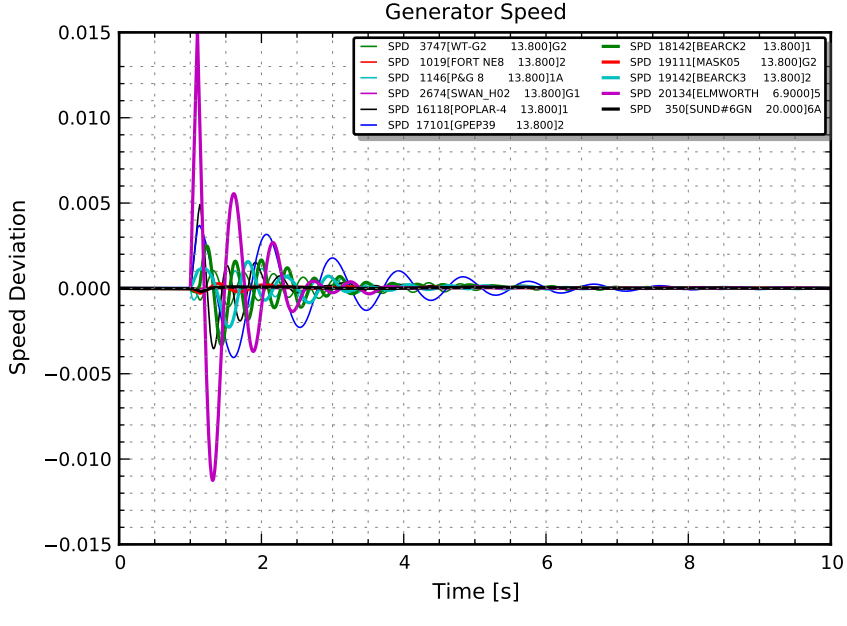
Study Area Generators

Appendix E2A
Figure: 037 (B. 2)





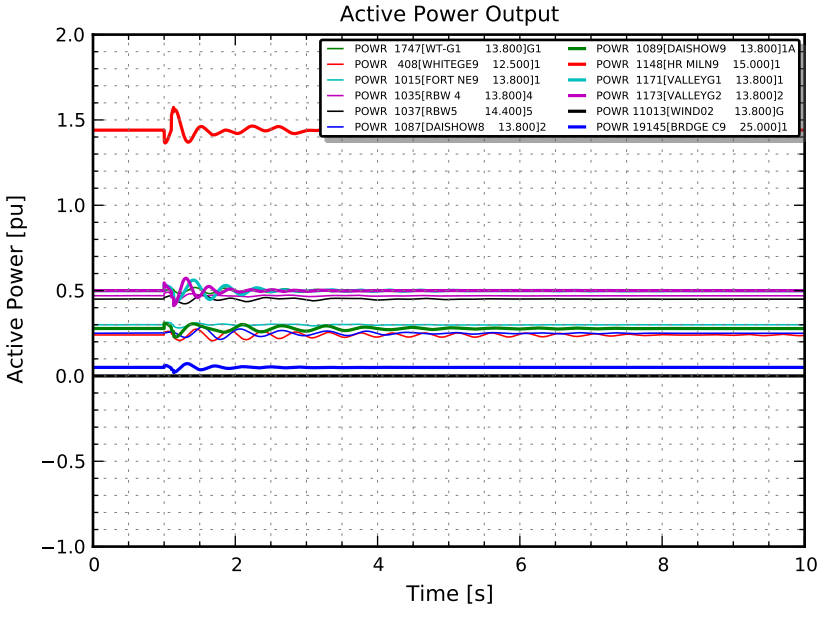


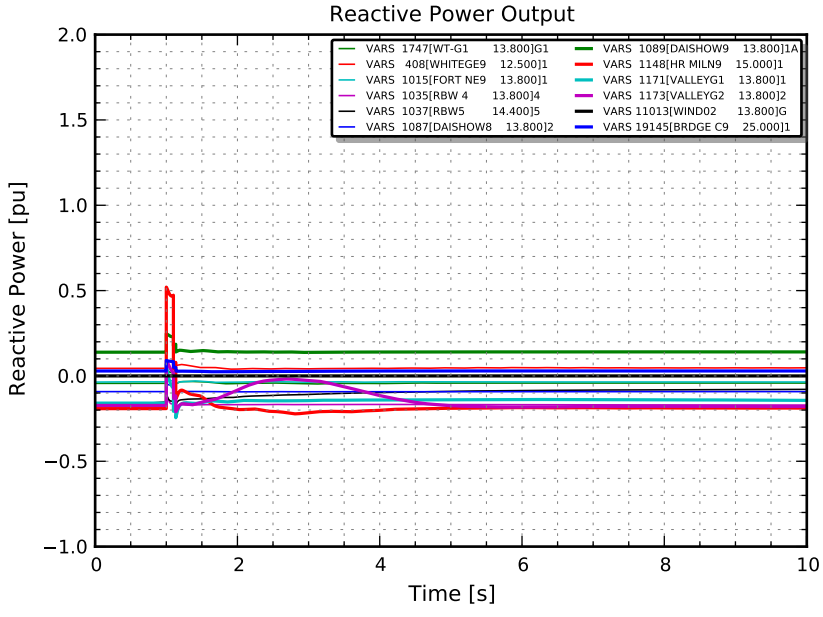


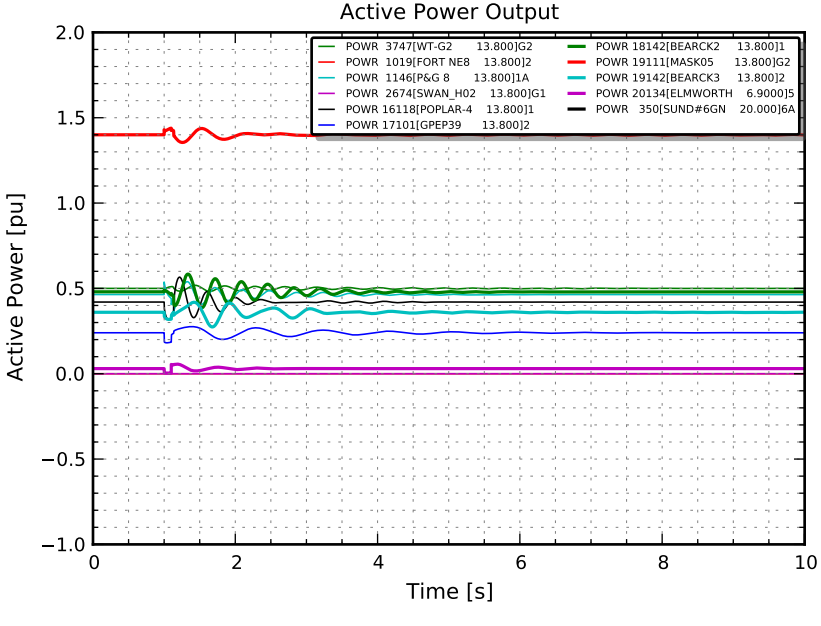
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 037 7L07 POPLARHILL to ELMWORTH_B.

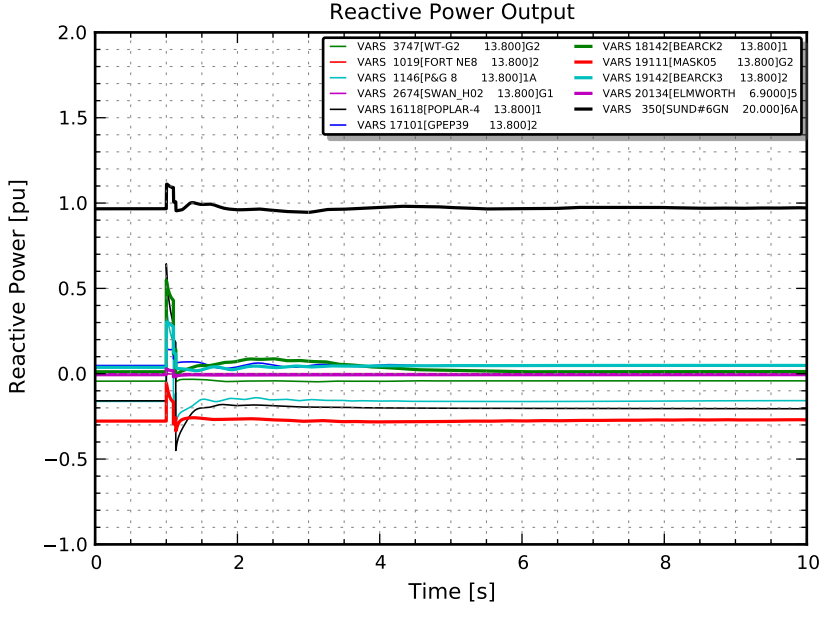
Study Area Generators

Appendix E2A
Figure: 037 (B. 3)





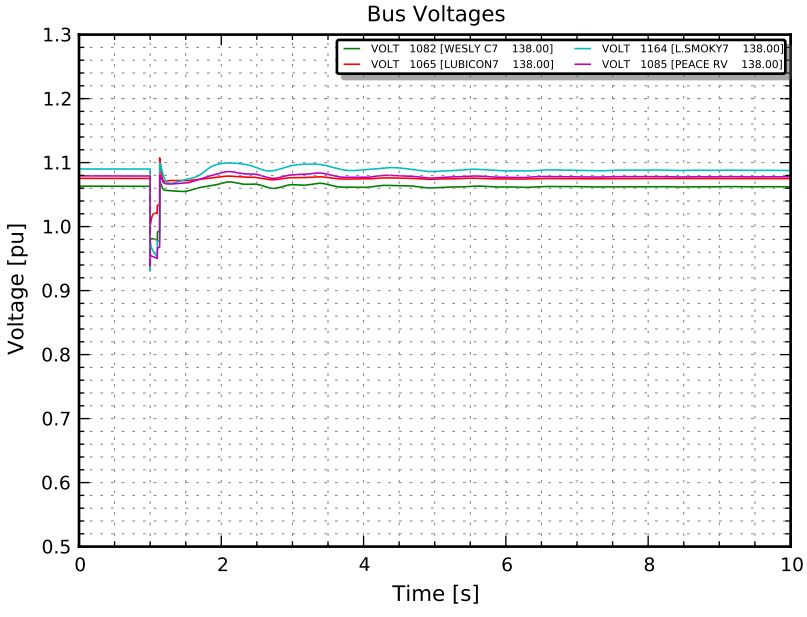


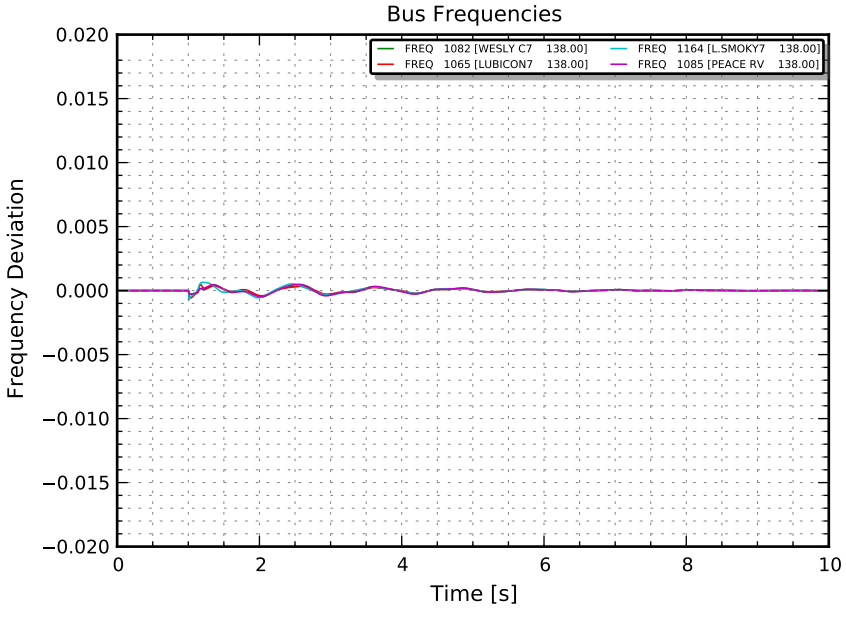


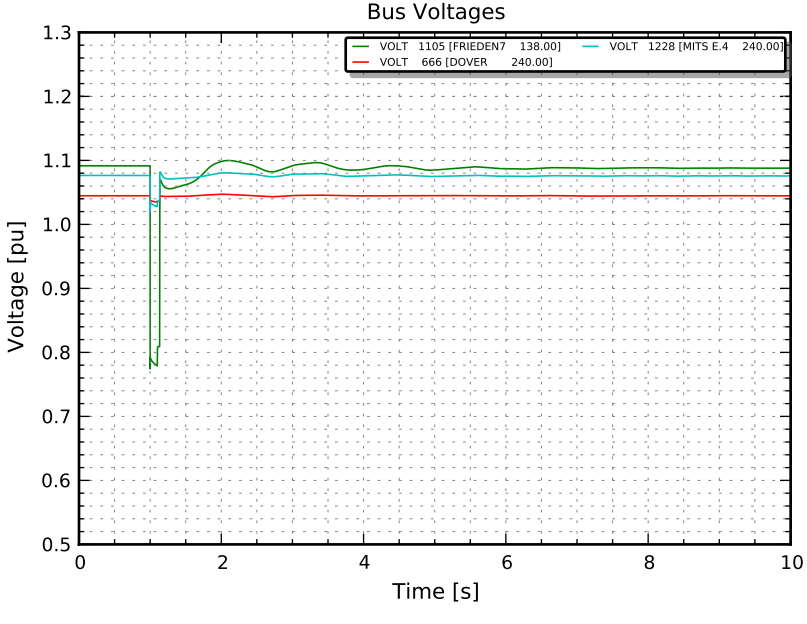
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_A.

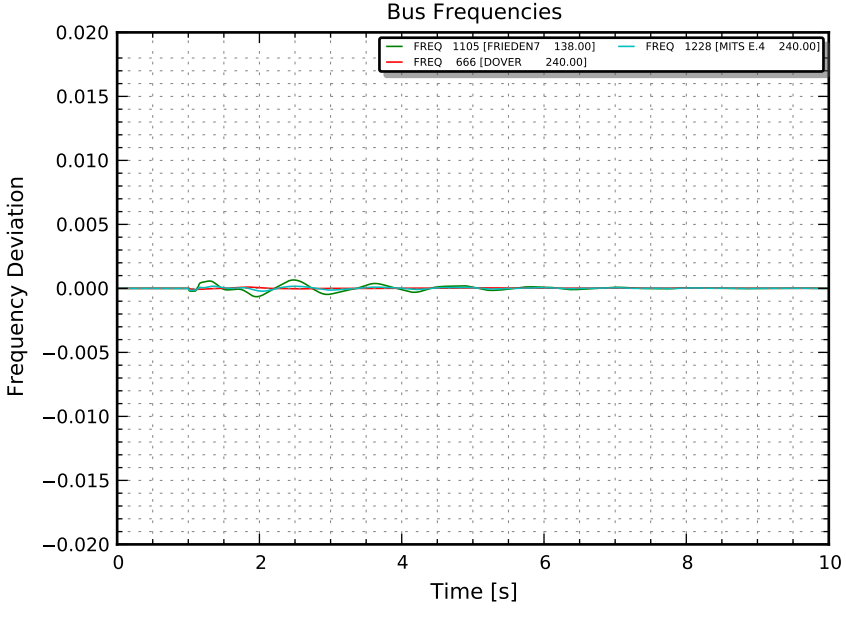
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 038 (A. 1)





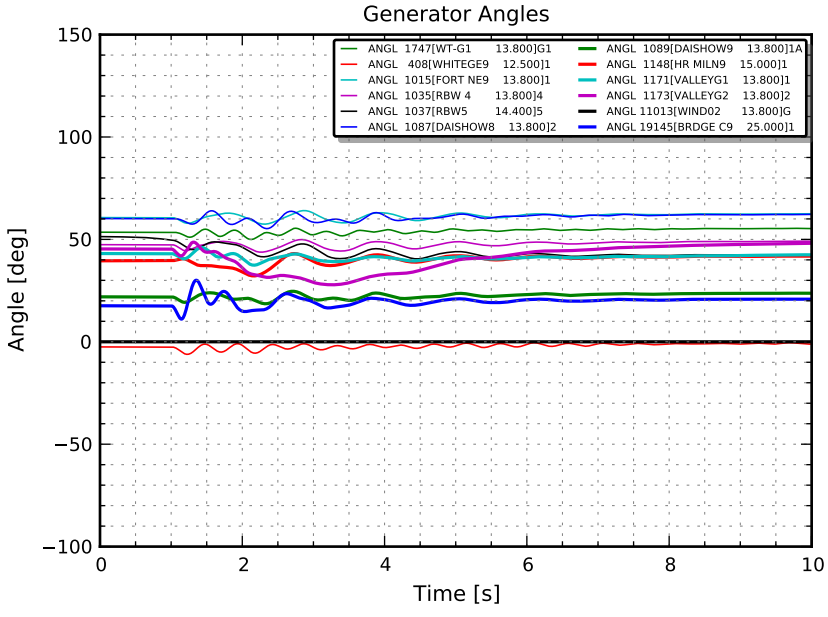


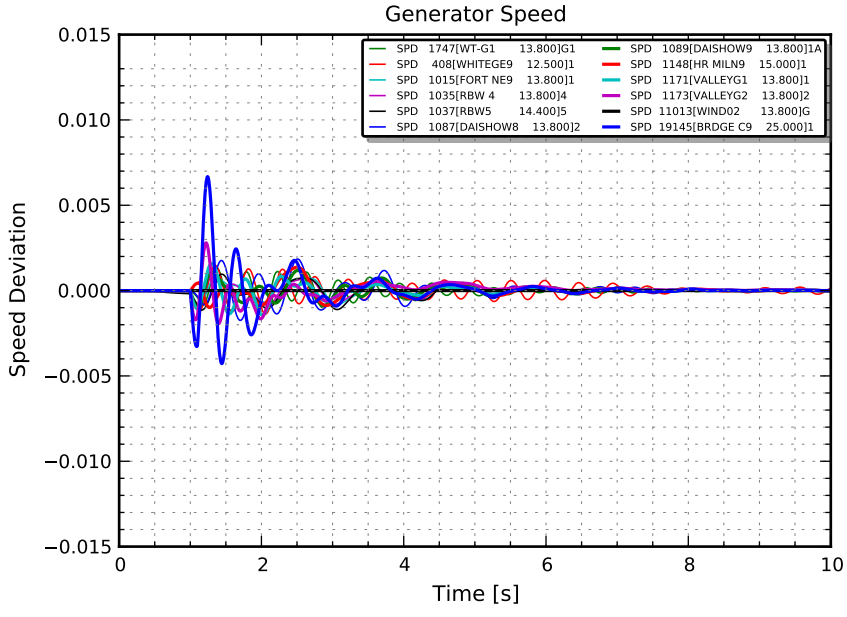


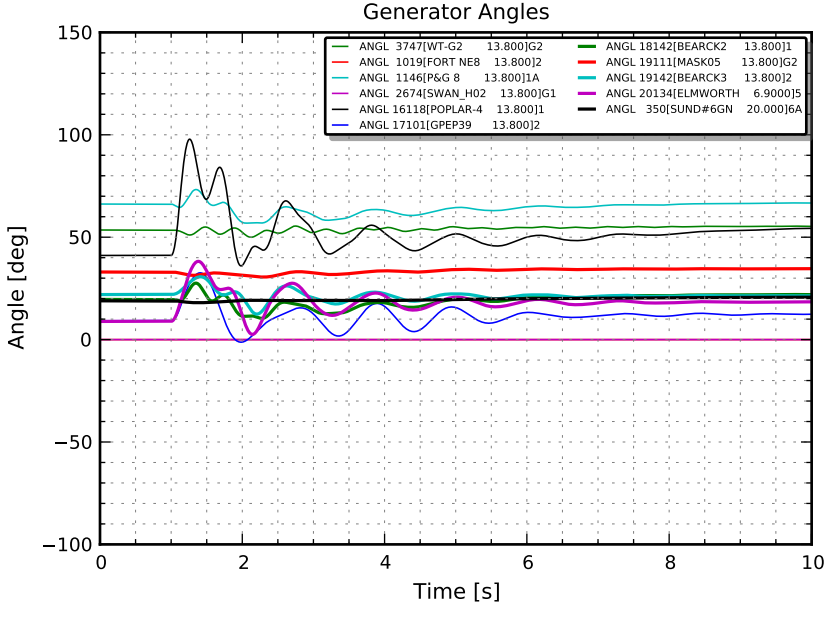
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_A.

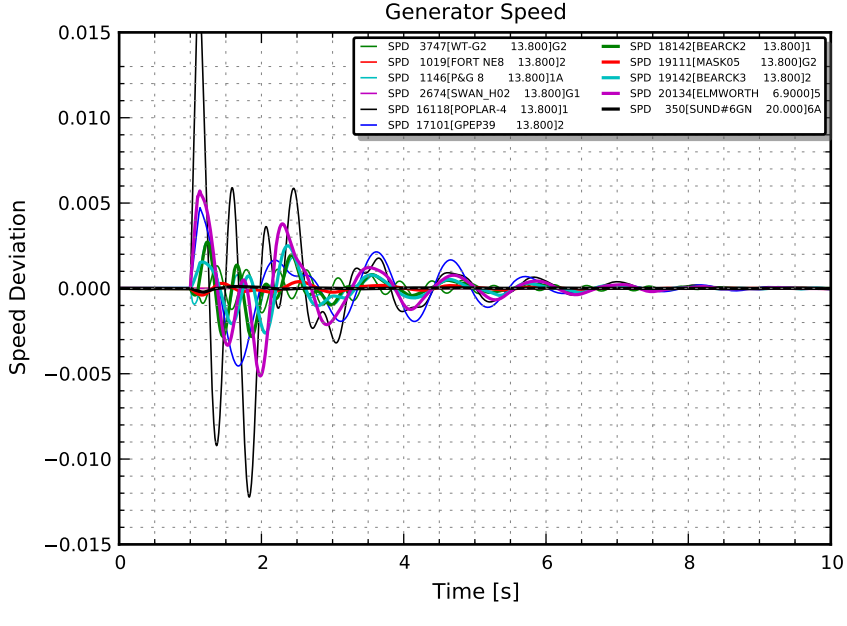
Study Area Generators

Appendix E2A
Figure: 038 (A. 2)





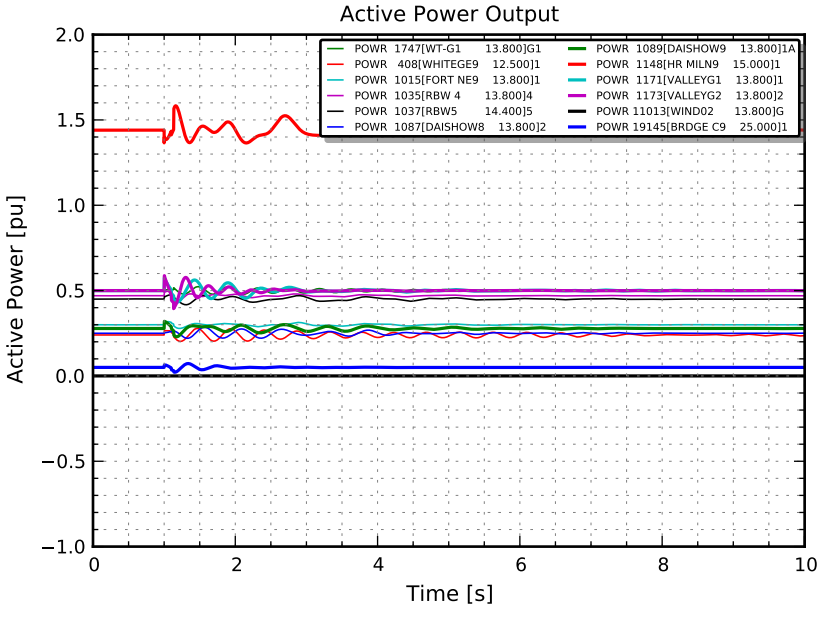


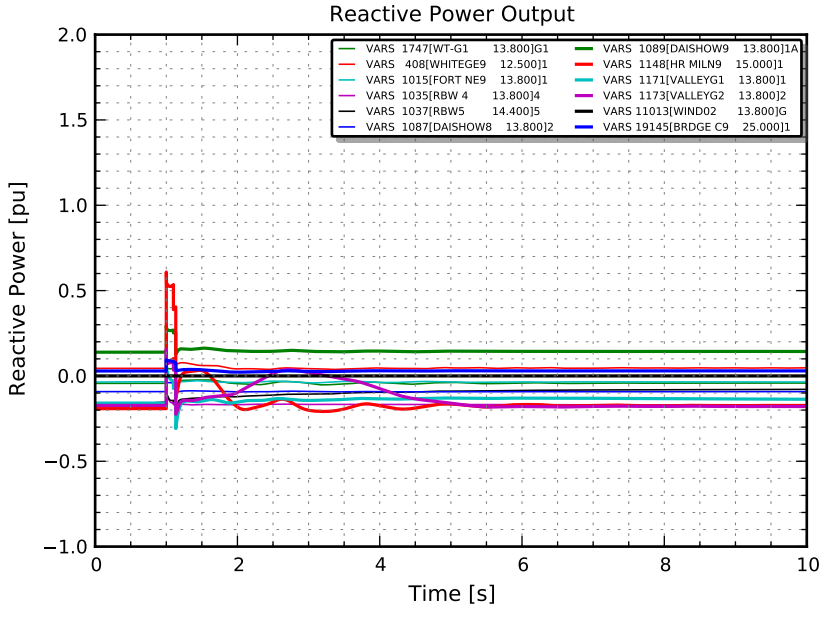


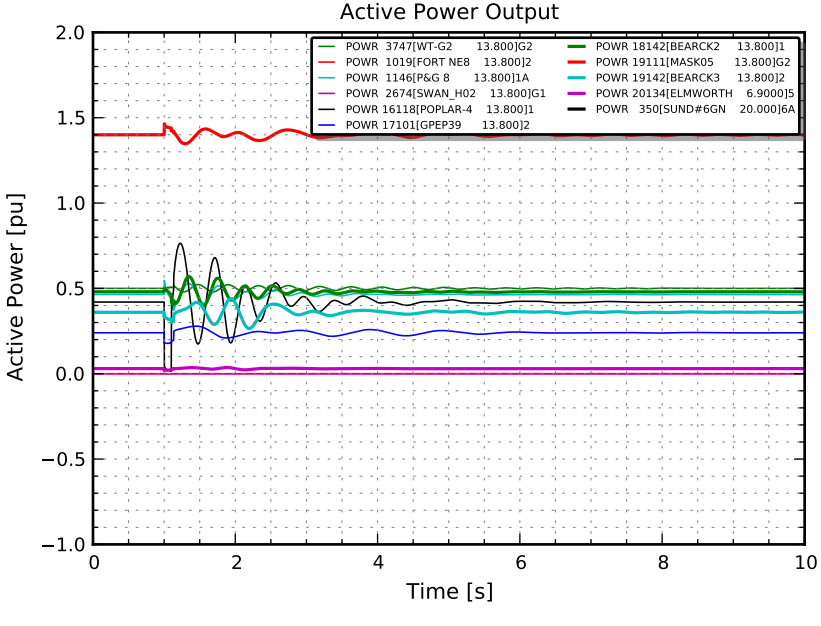
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_A.

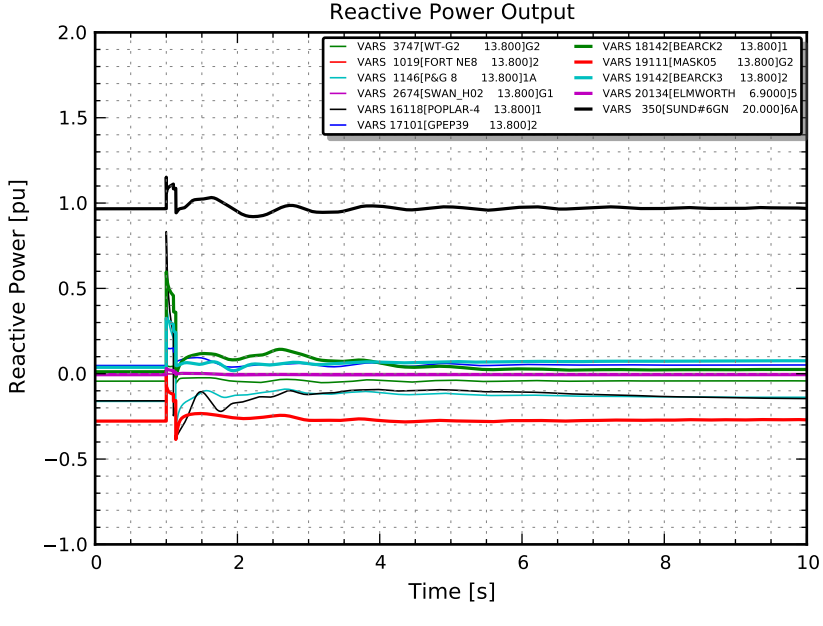
Study Area Generators

Appendix E2A
Figure: 038 (A. 3)





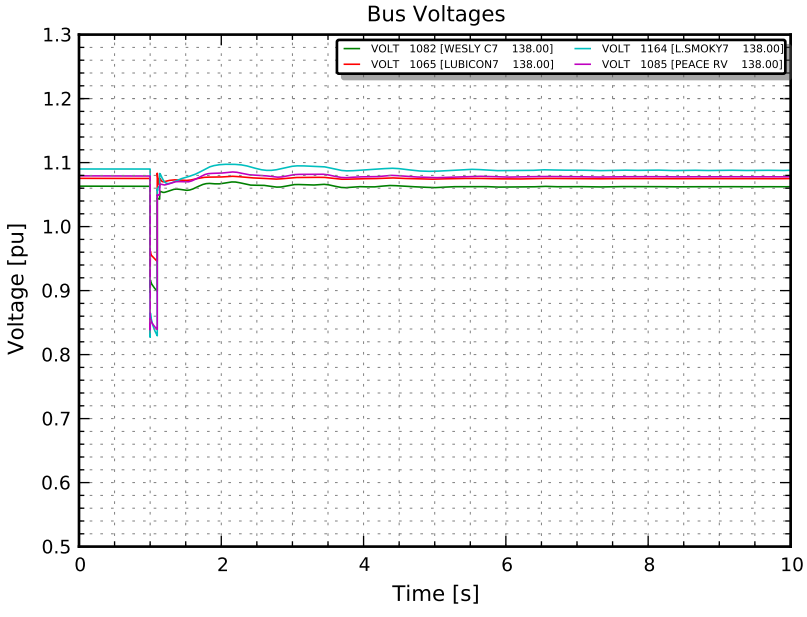


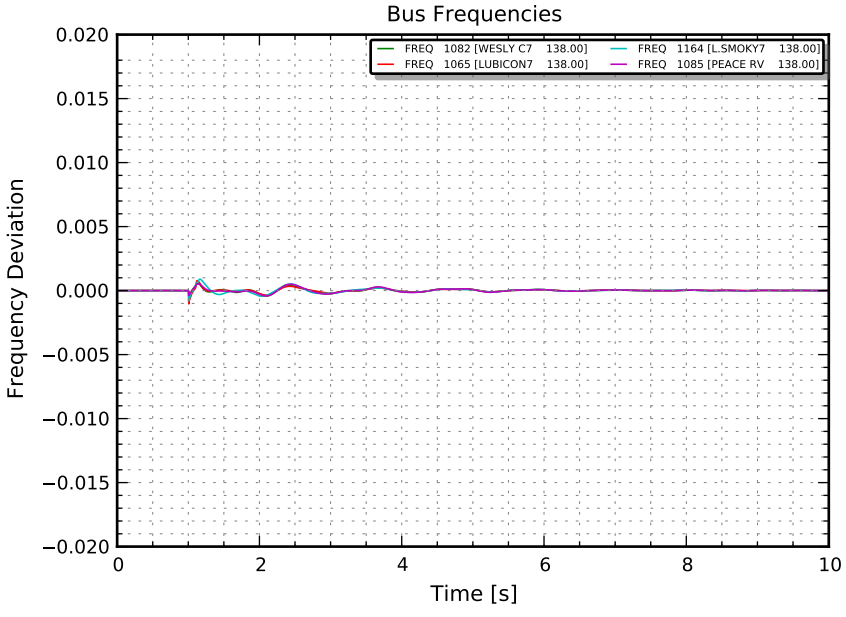


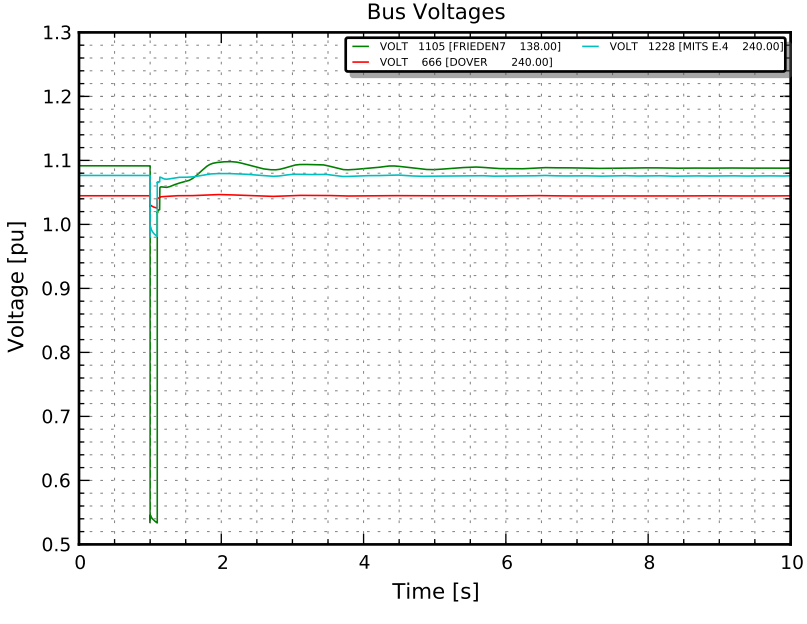
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_B.

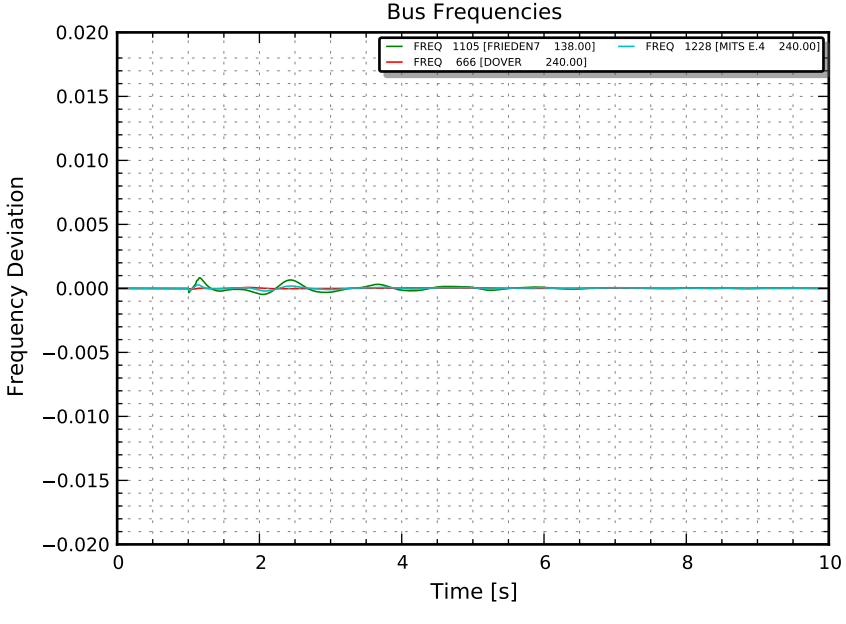
Study Area Bus Voltages and Frequencies

Appendix E2A
Figure: 038 (B. 1)





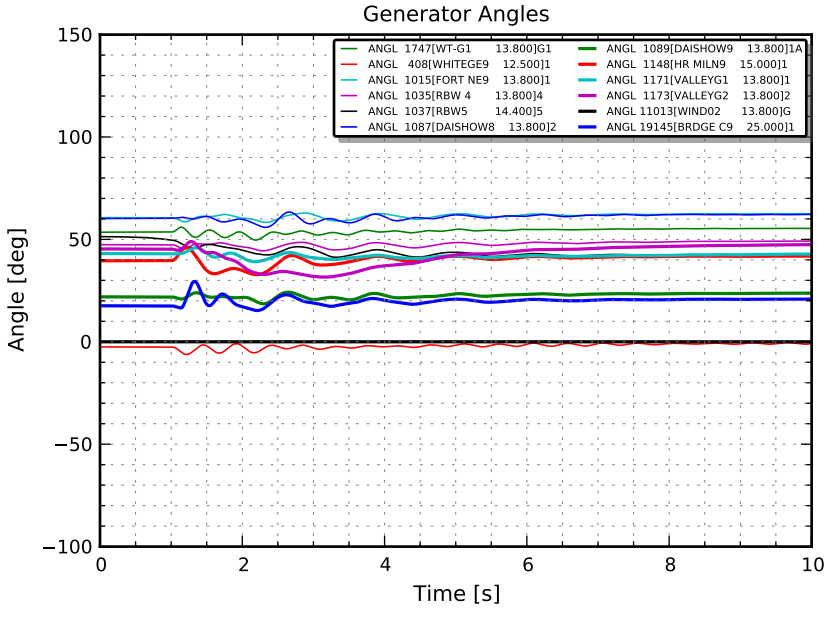


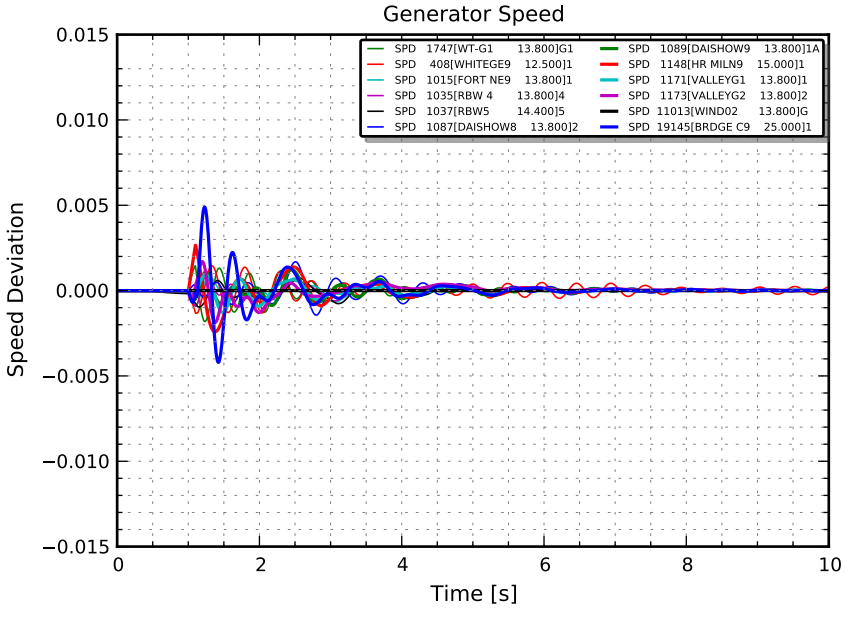


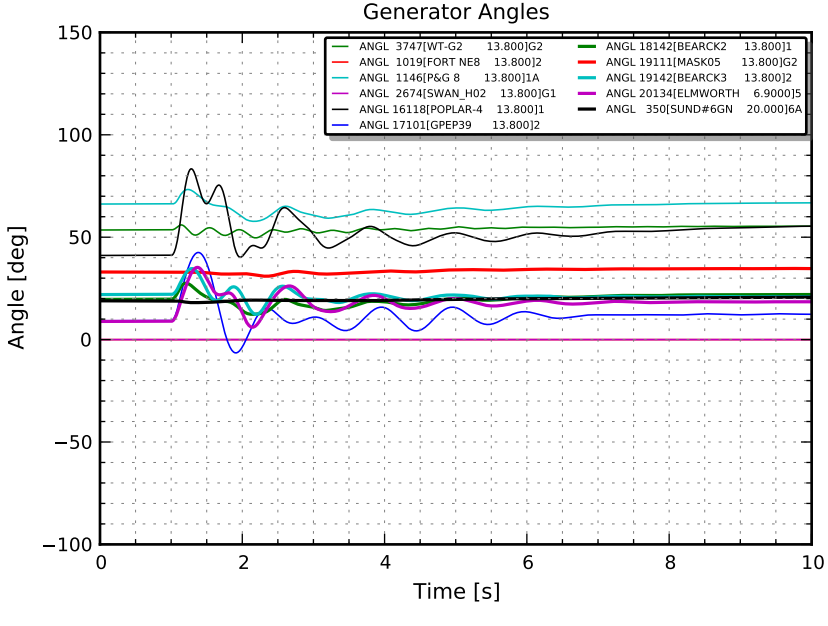
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_B.

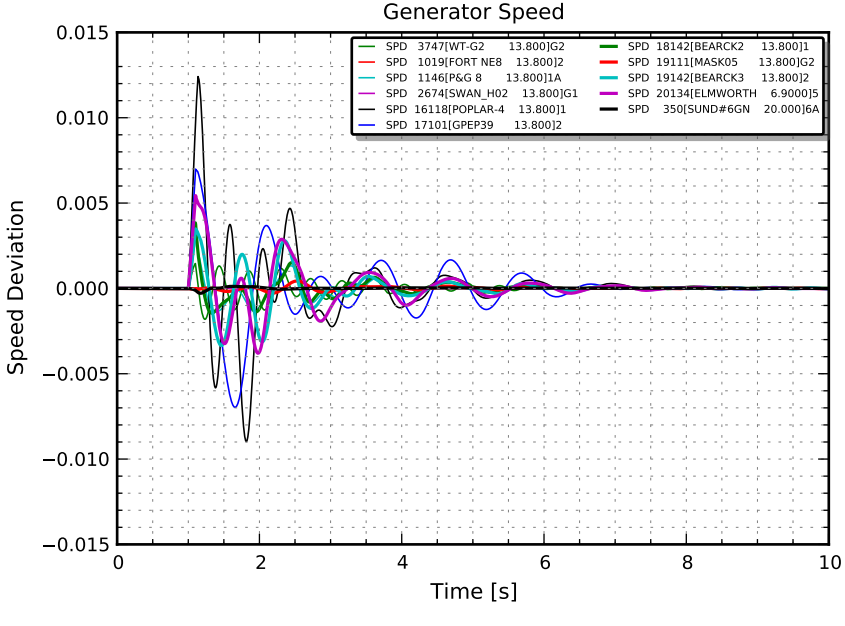
Study Area Generators

Appendix E2A
Figure: 038 (B. 2)





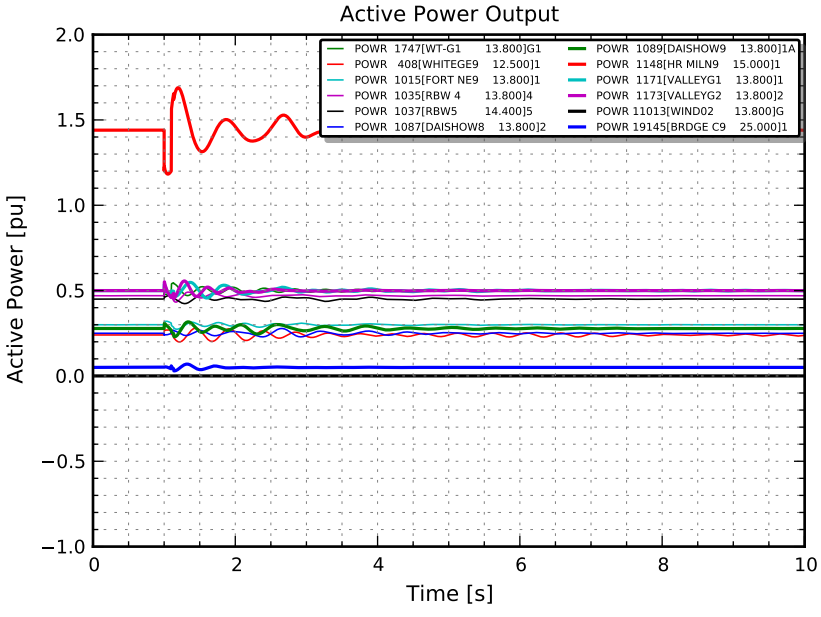


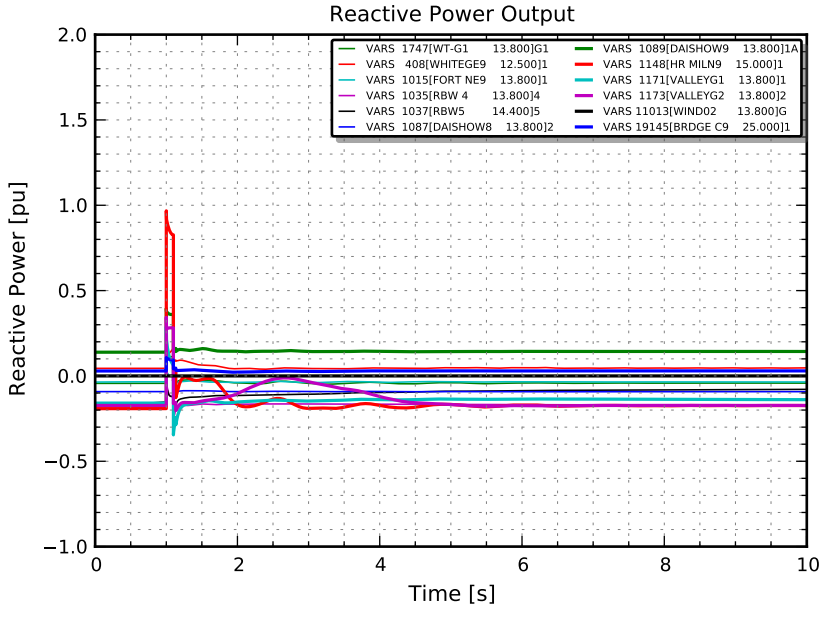


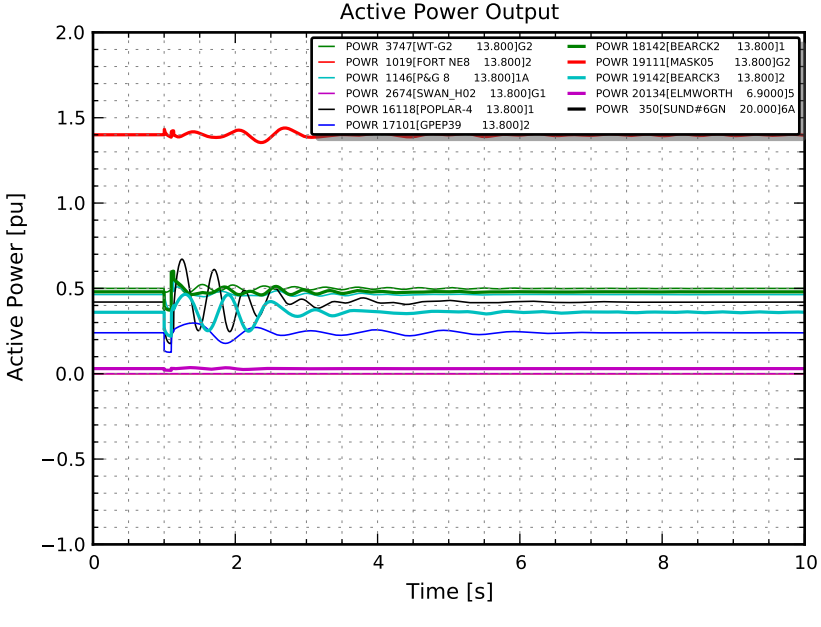
CASE 01 2014 WP Mgen
SCEN 02 144 Tap
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_B.

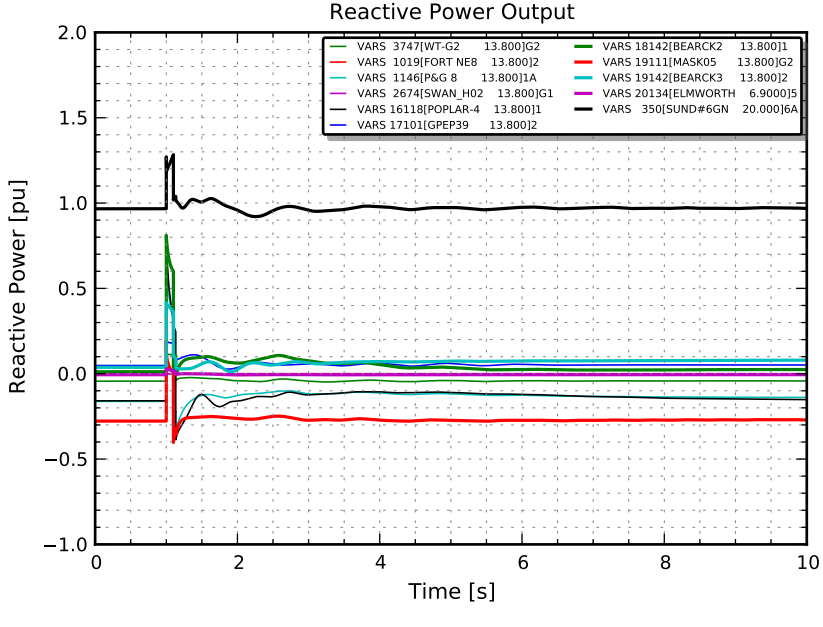
Study Area Generators

Appendix E2A
Figure: 038 (B. 3)





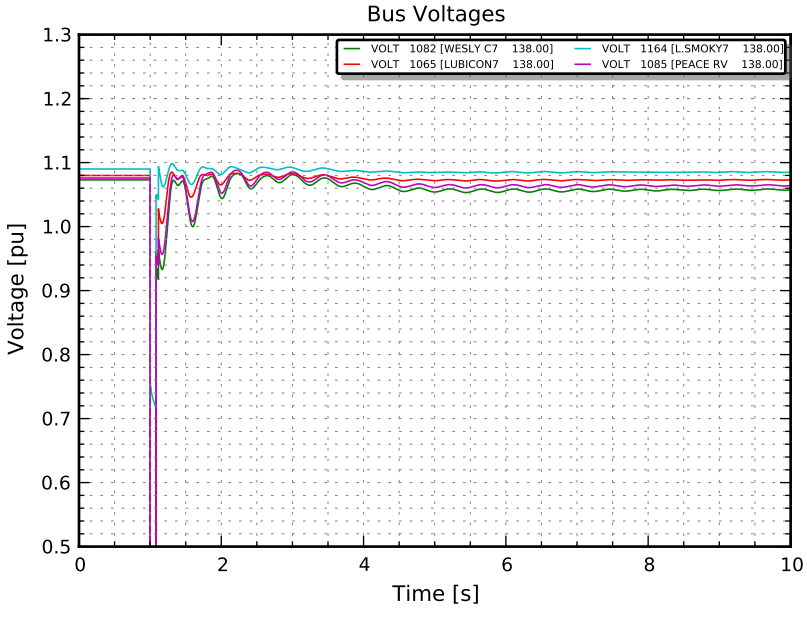


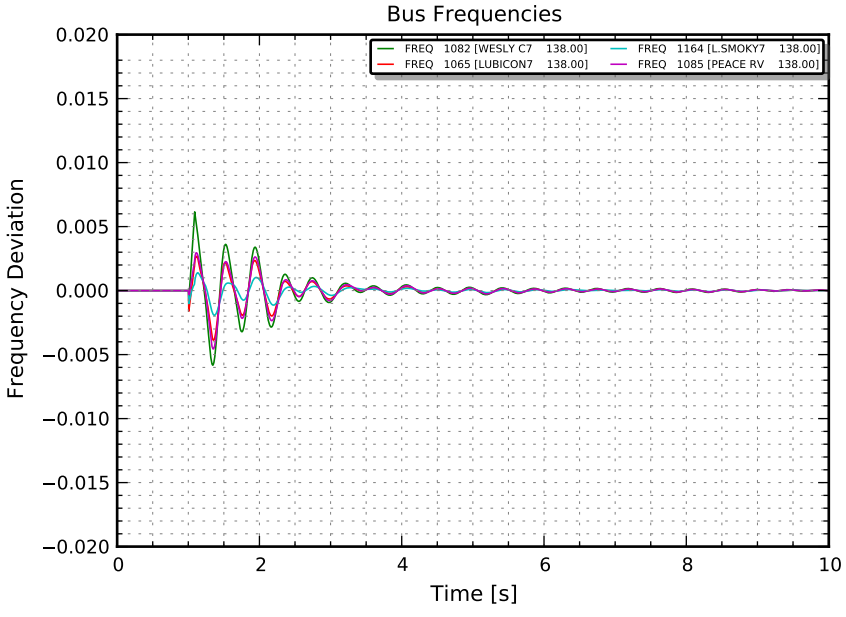


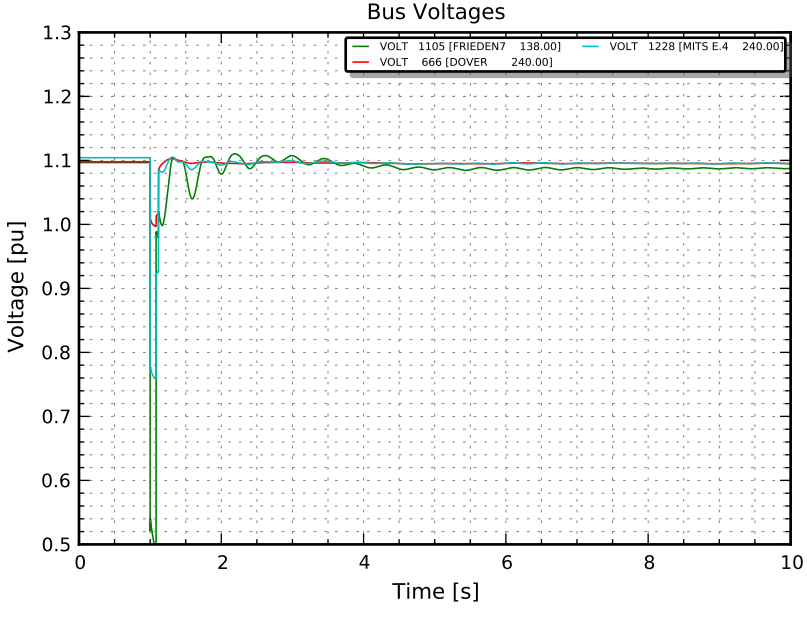
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 001 9L15 WESLEYCREEK to Brintnell_A.

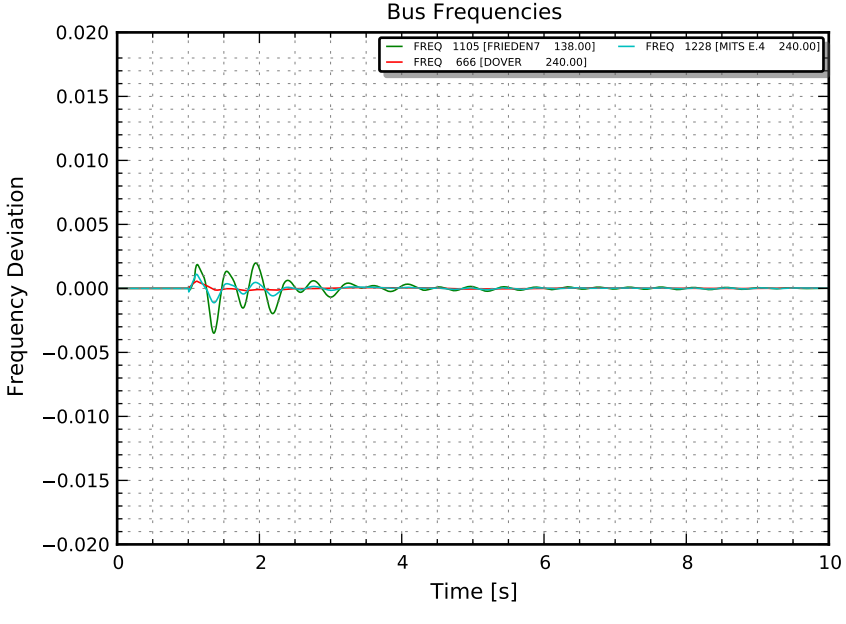
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 001 (A. 1)





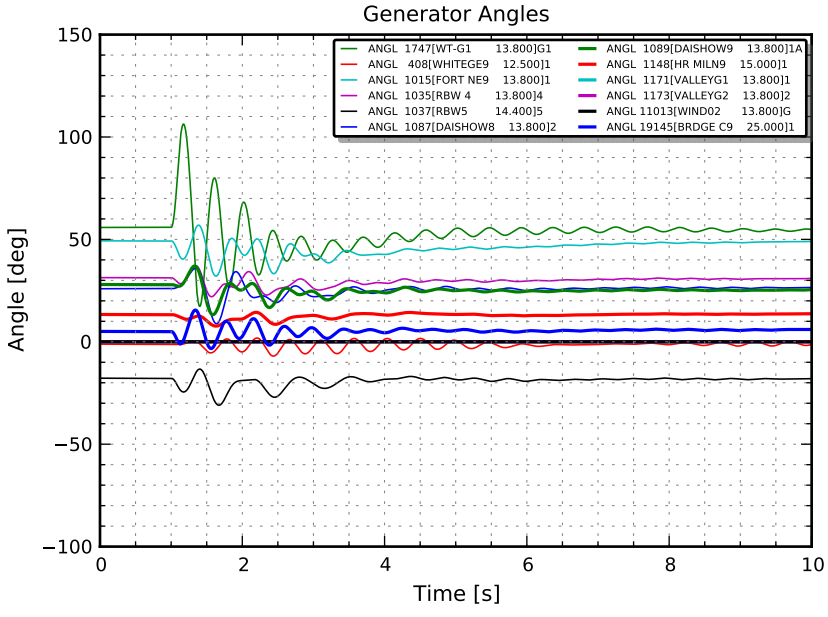


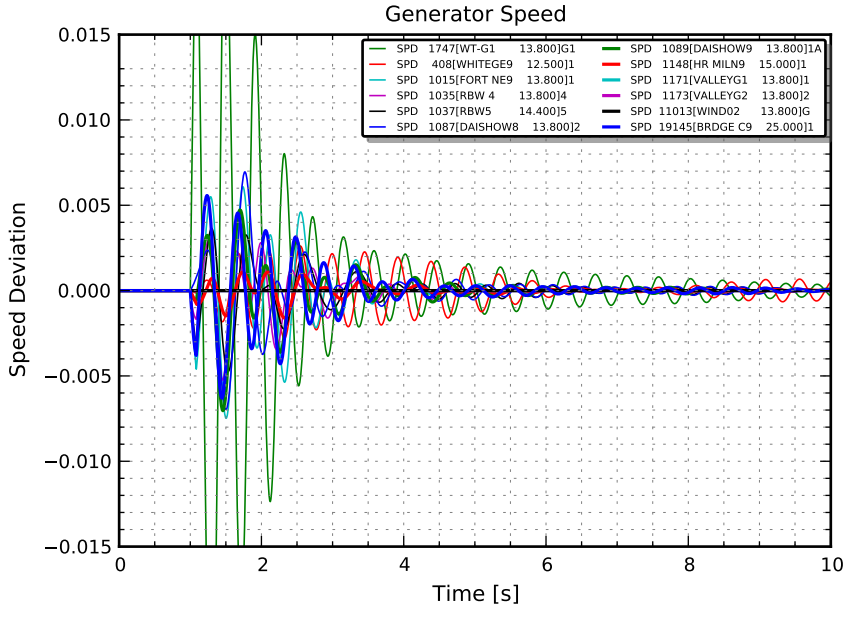


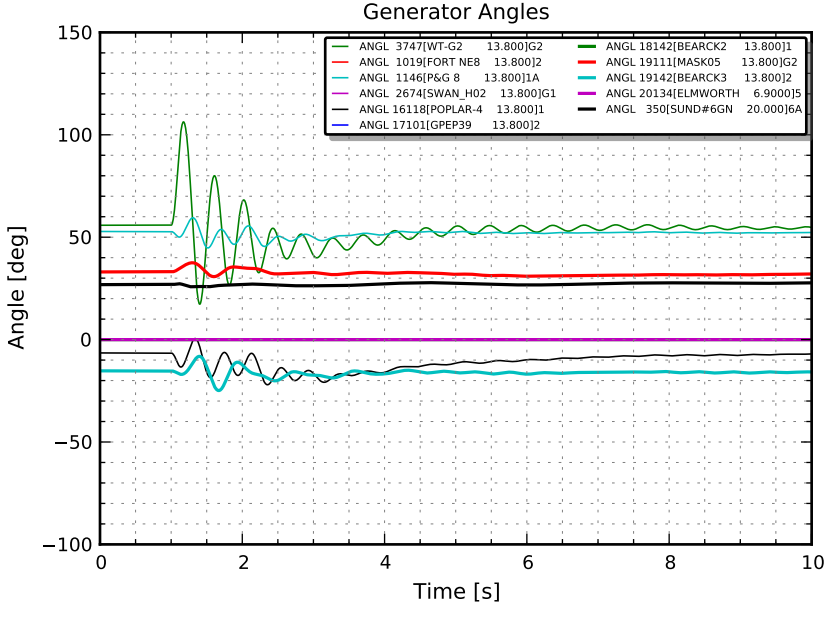
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 001 9L15 WESLEYCREEK to Brintnell_A.

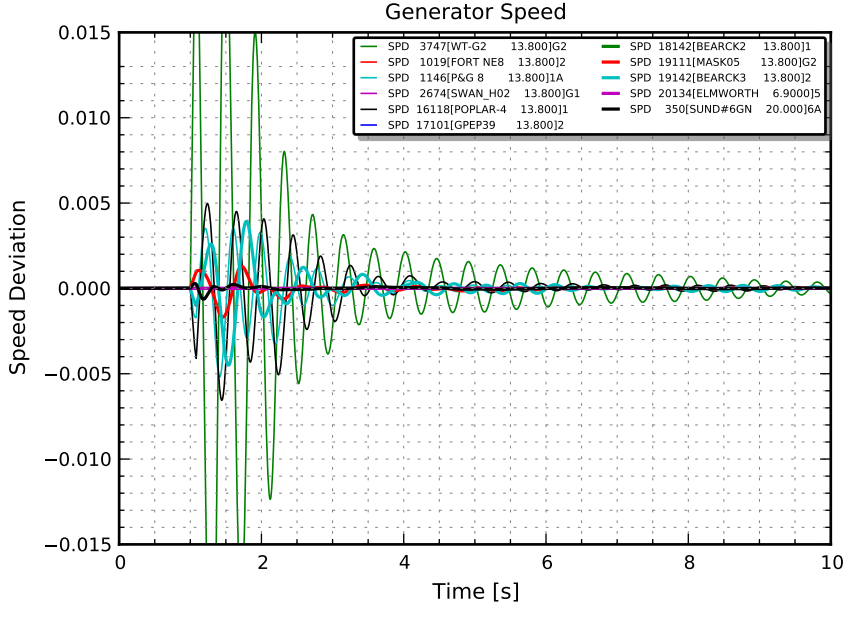
Study Area Generators

Appendix E2B
Figure: 001 (A. 2)





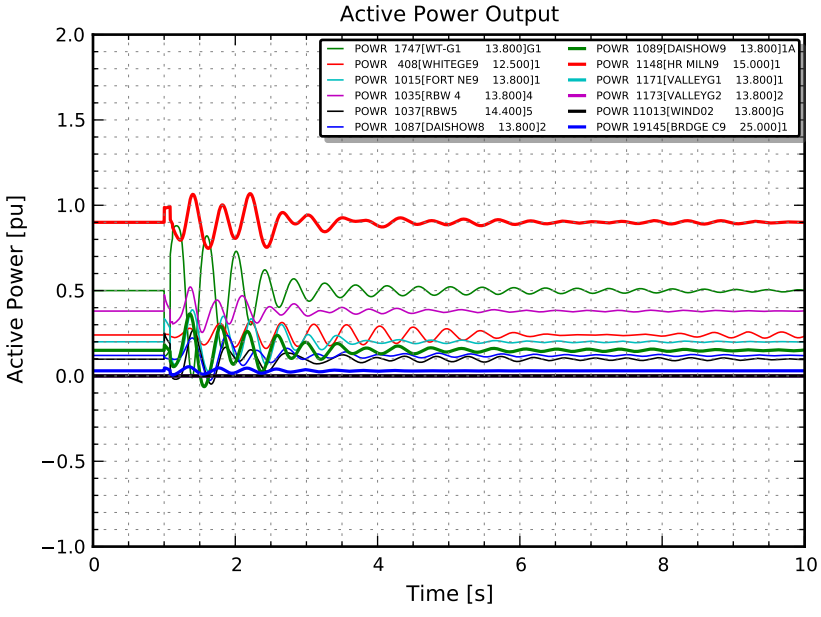


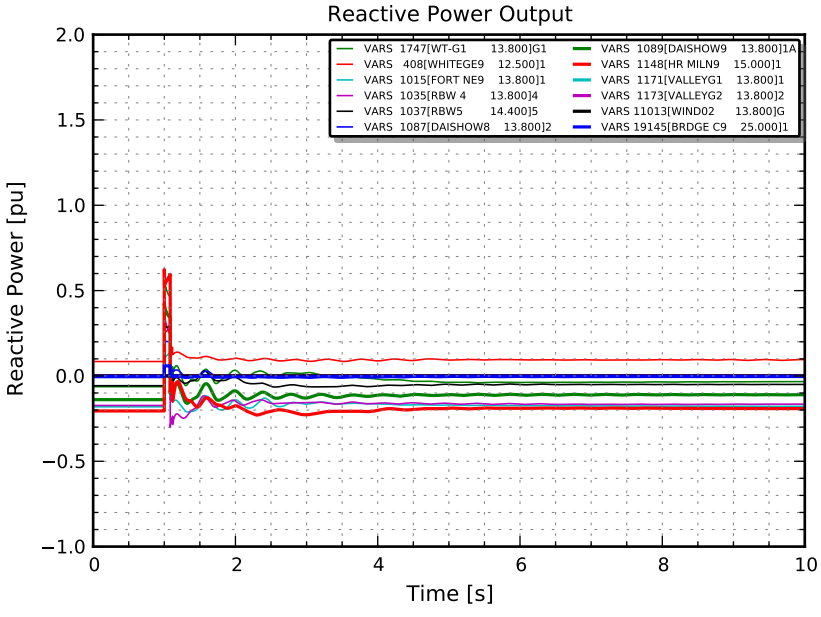


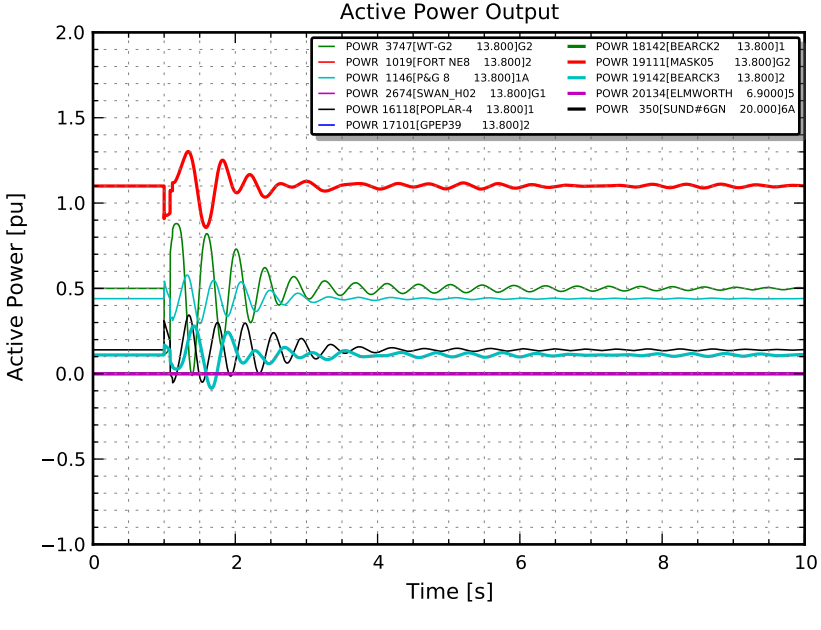
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 001 9L15 WESLEYCREEK to Brintnell_A.

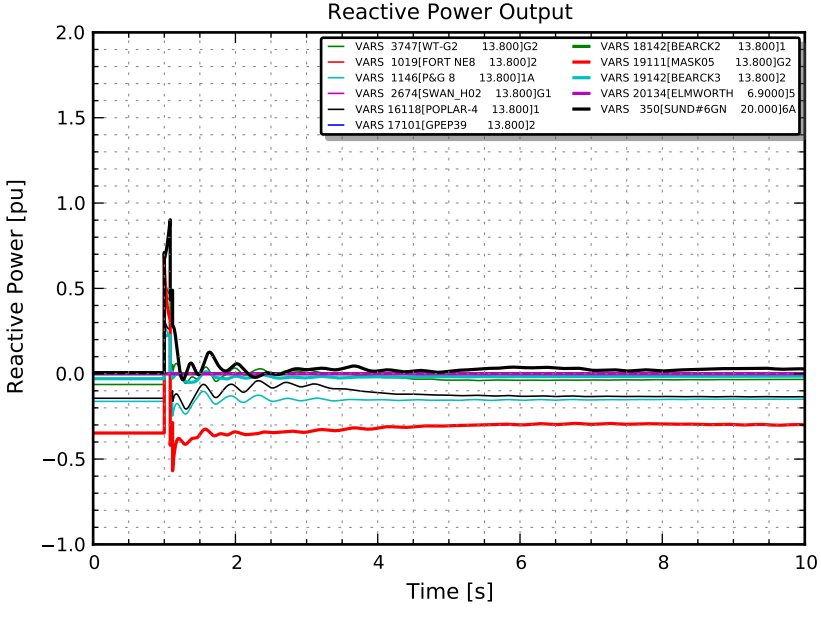
Study Area Generators

Appendix E2B
Figure: 001 (A. 3)





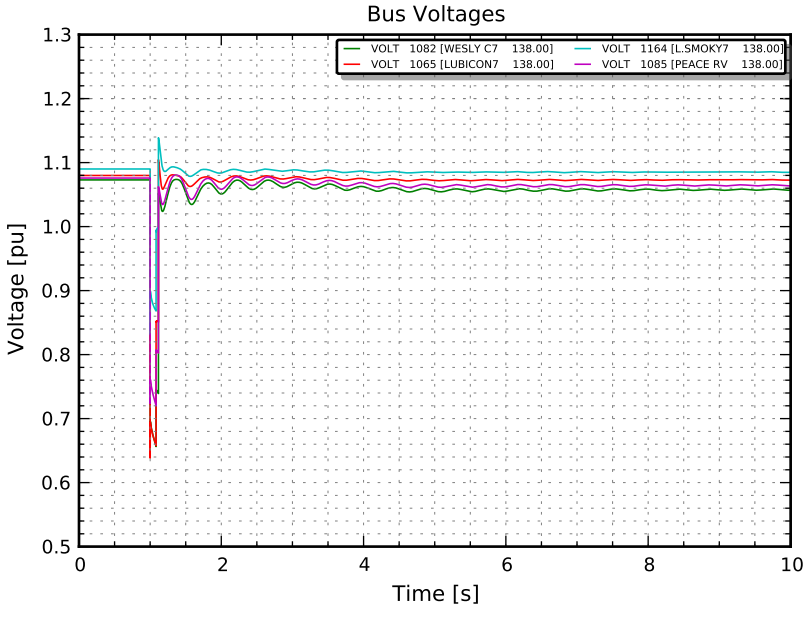


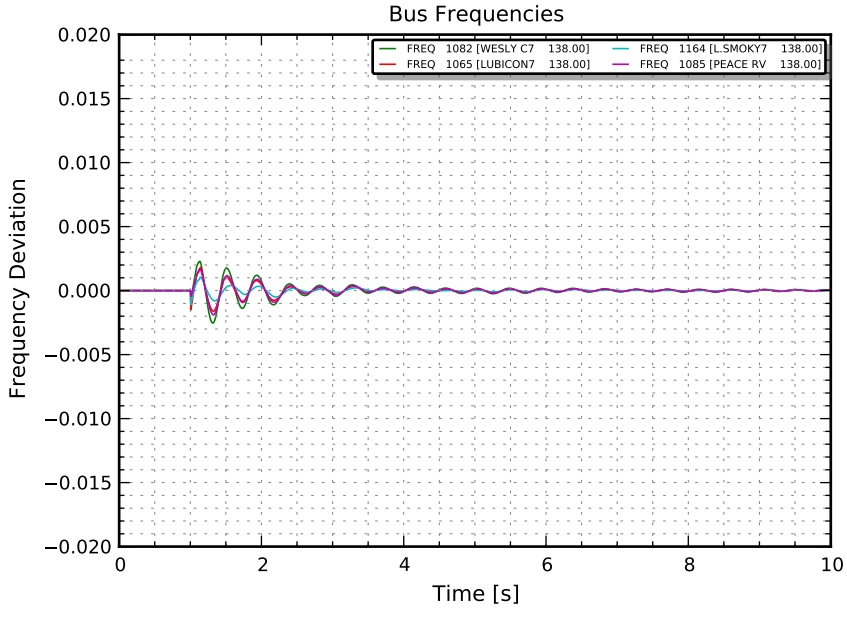


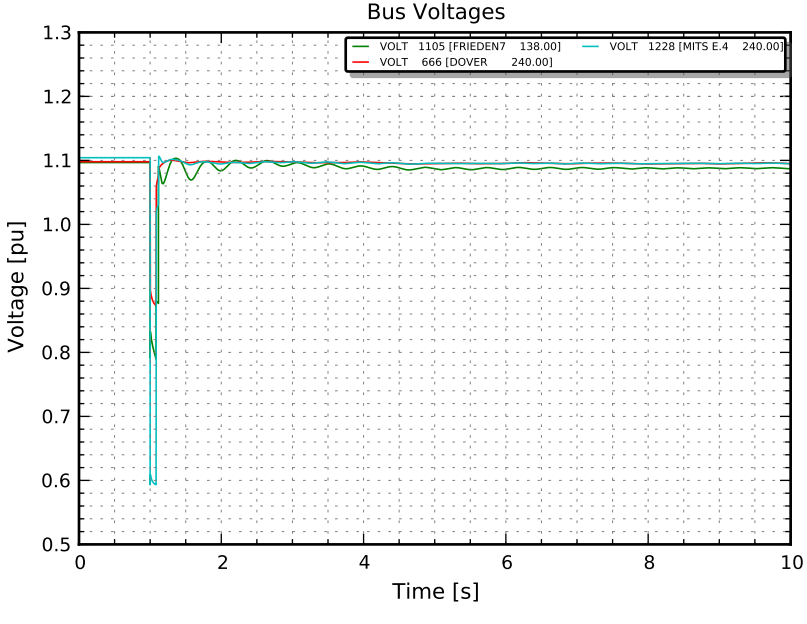
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 001 9L15 WESLEYCREEK to Brintnell_B.

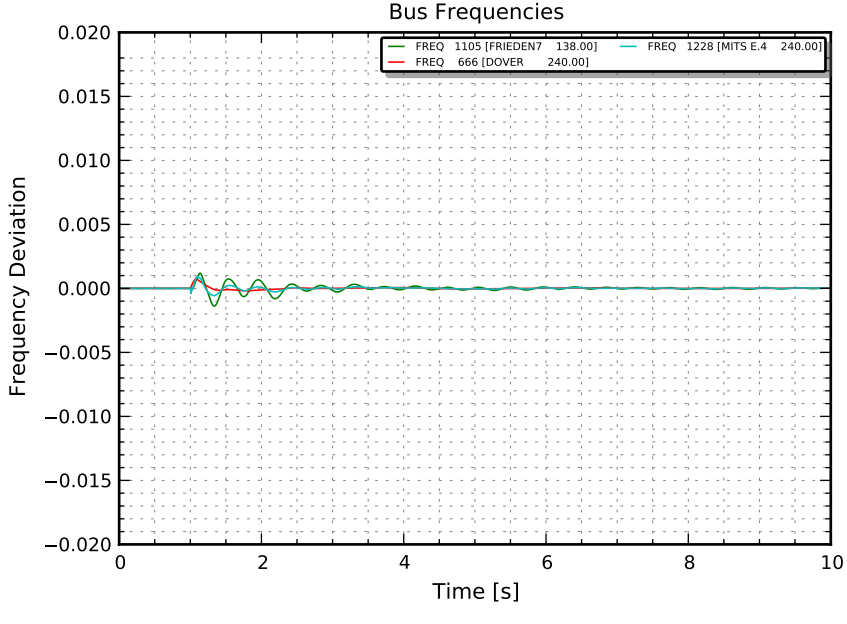
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 001 (B. 1)





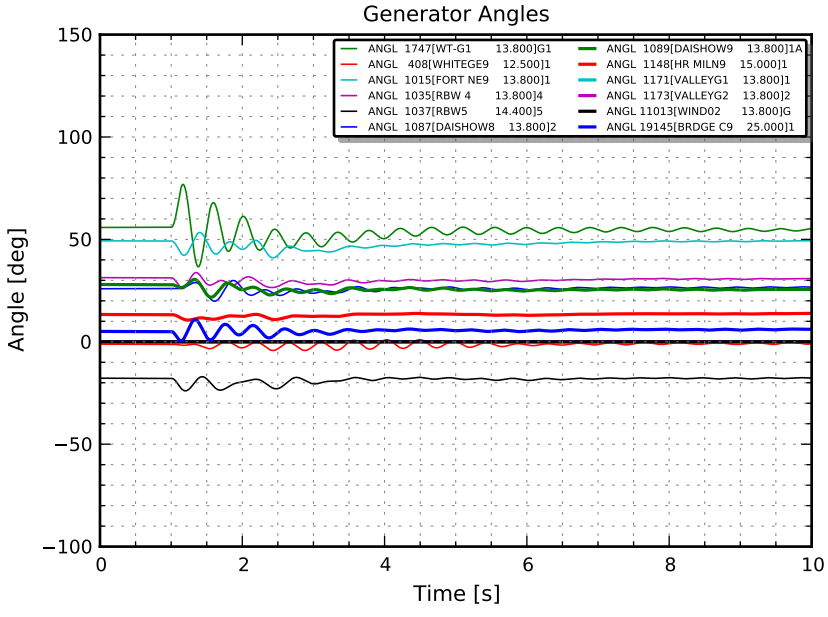


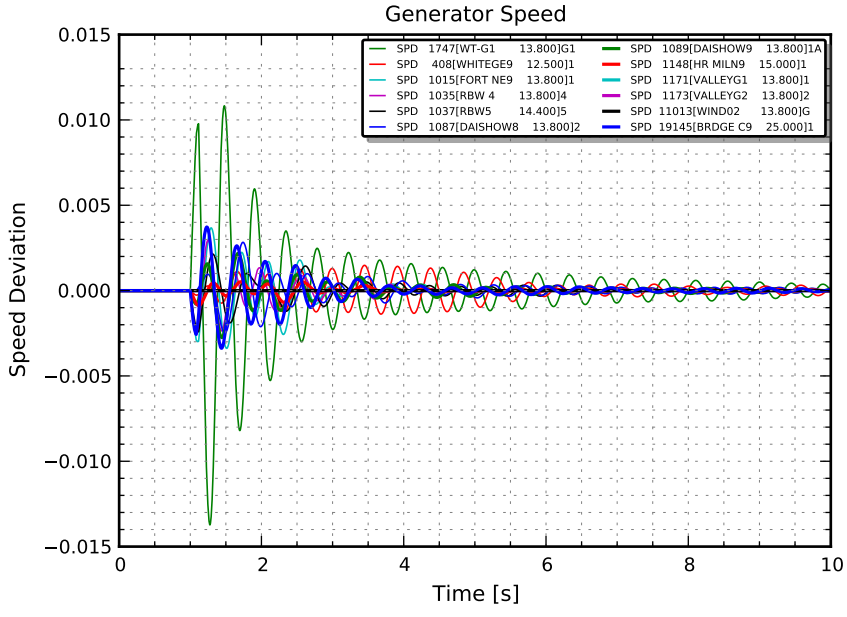


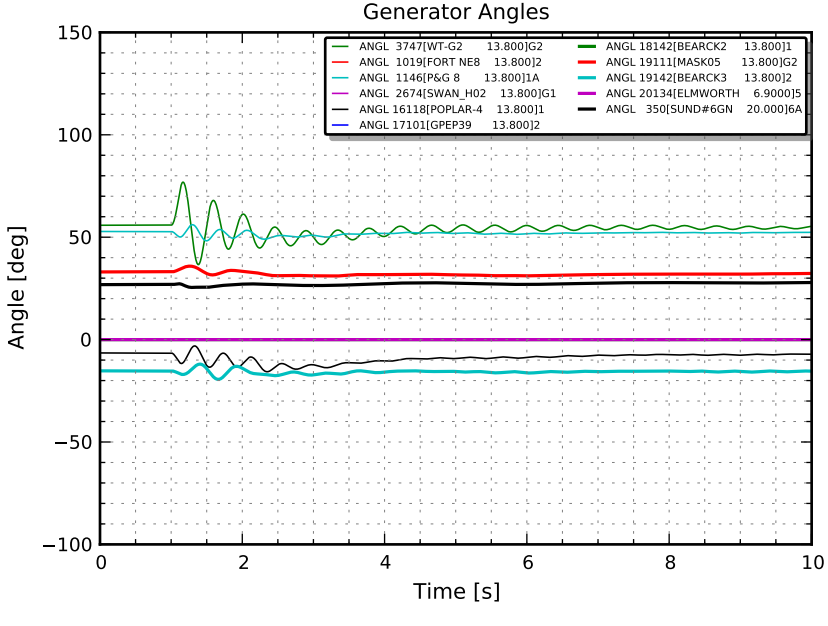
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 001 9L15 WESLEYCREEK to Brintnell_B.

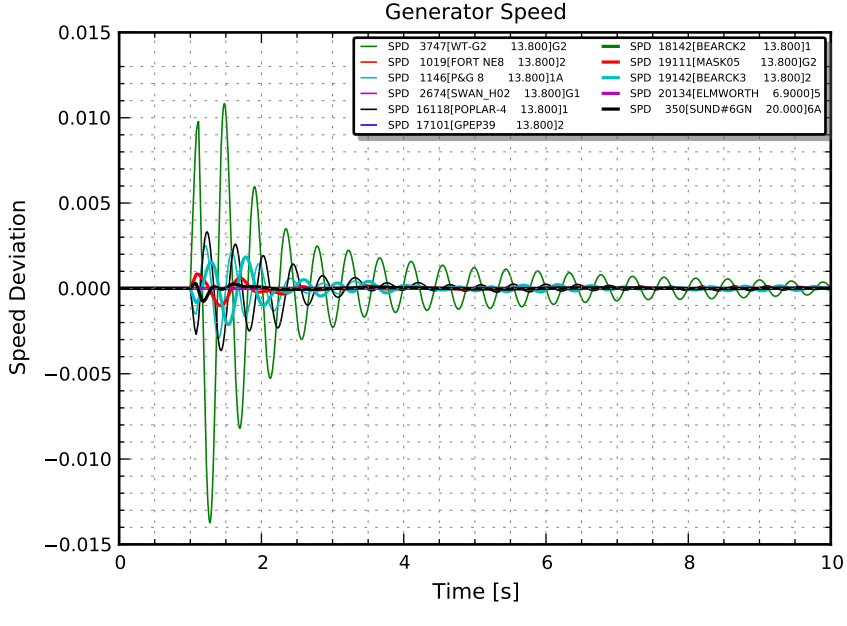
Study Area Generators

Appendix E2B
Figure: 001 (B. 2)





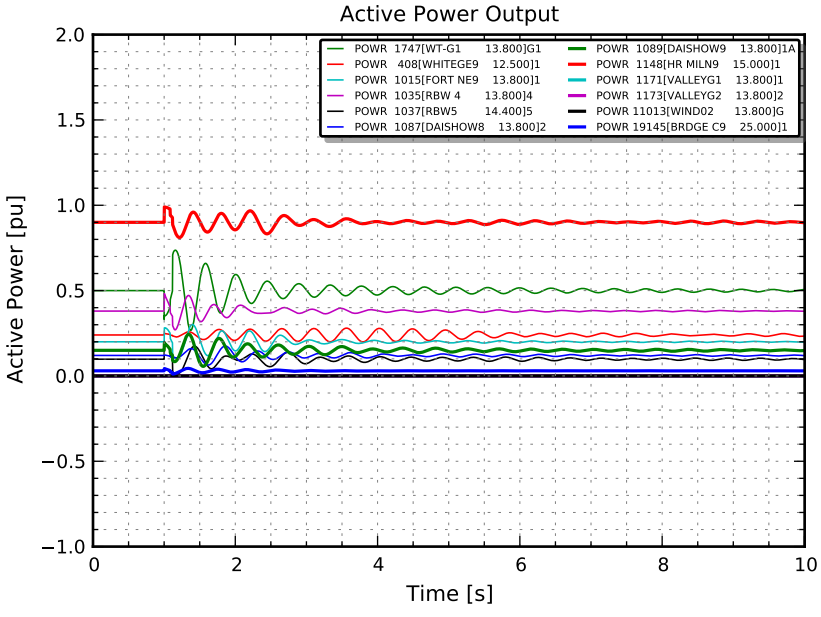


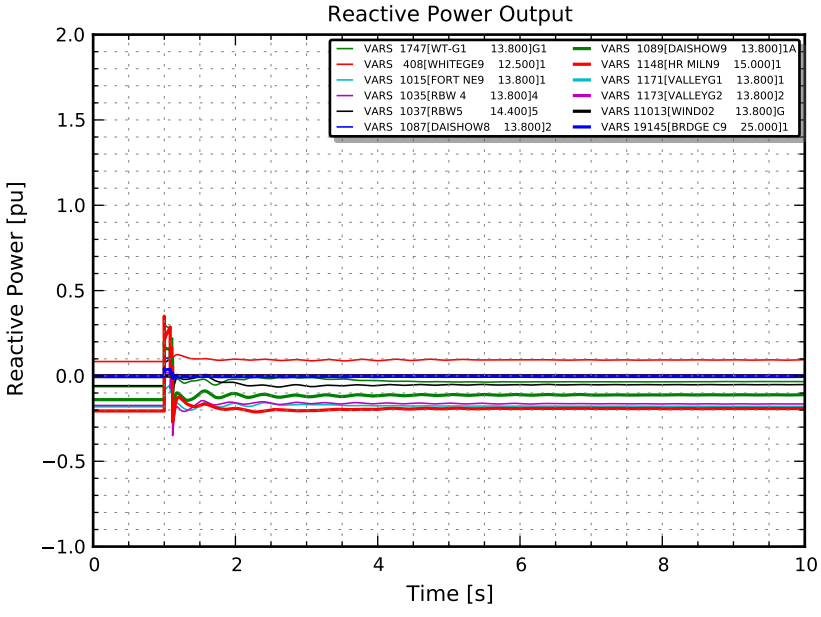


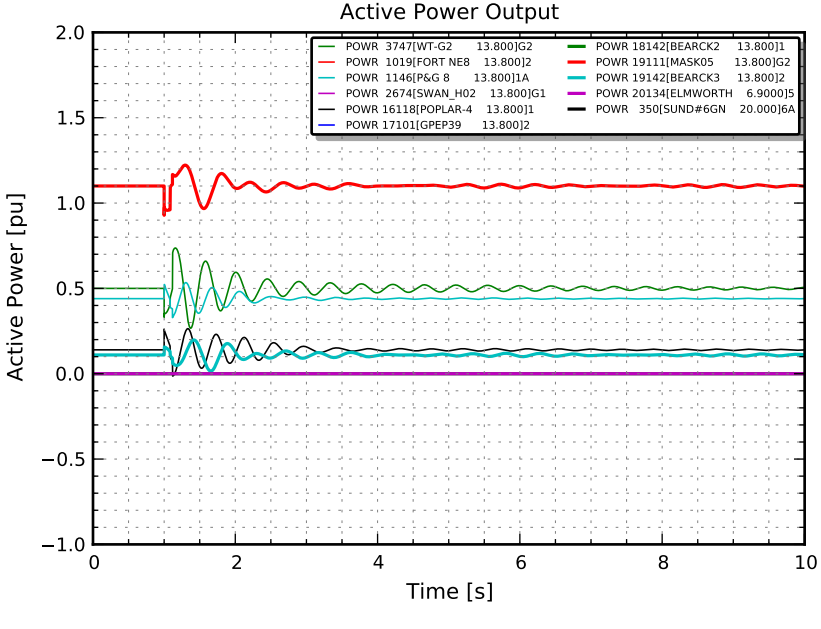
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 001 9L15 WESLEYCREEK to Brintnell_B.

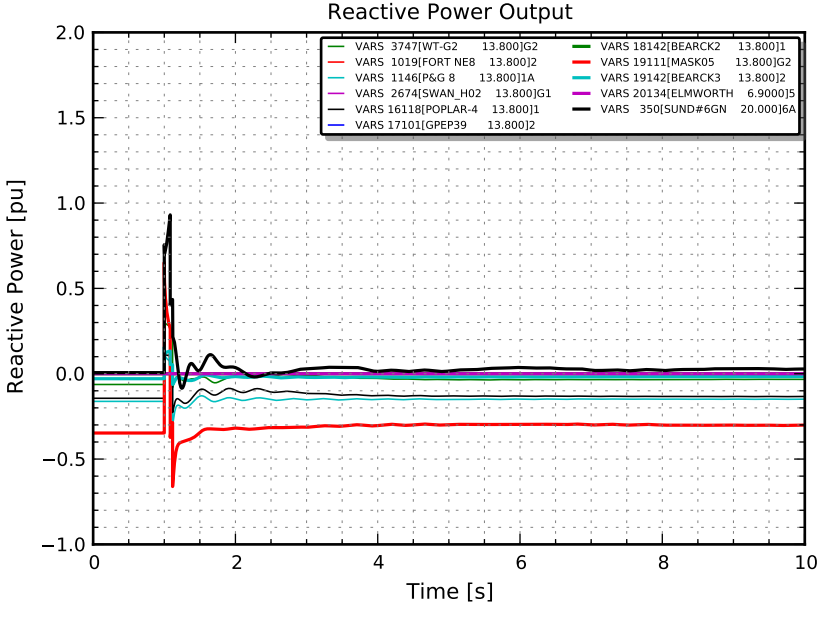
Study Area Generators

Appendix E2B
Figure: 001 (B. 3)





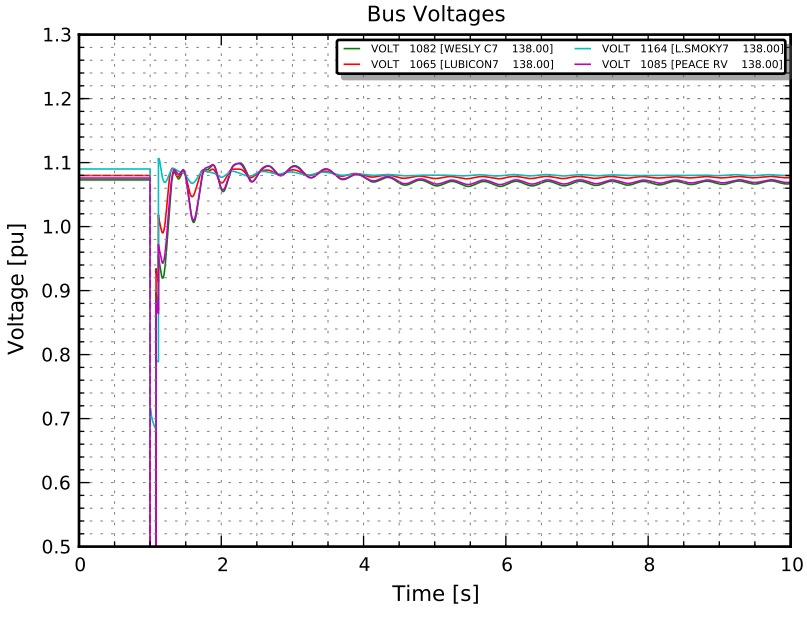


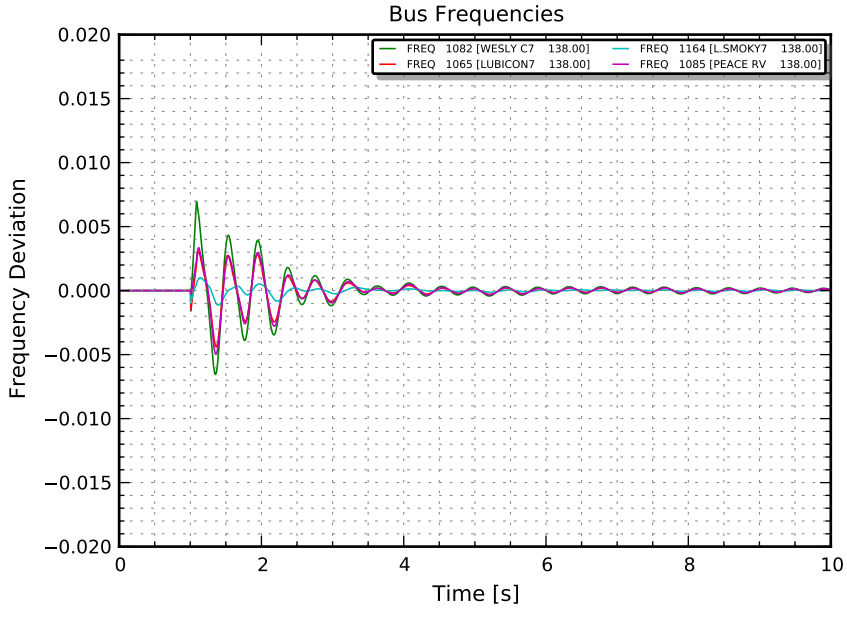


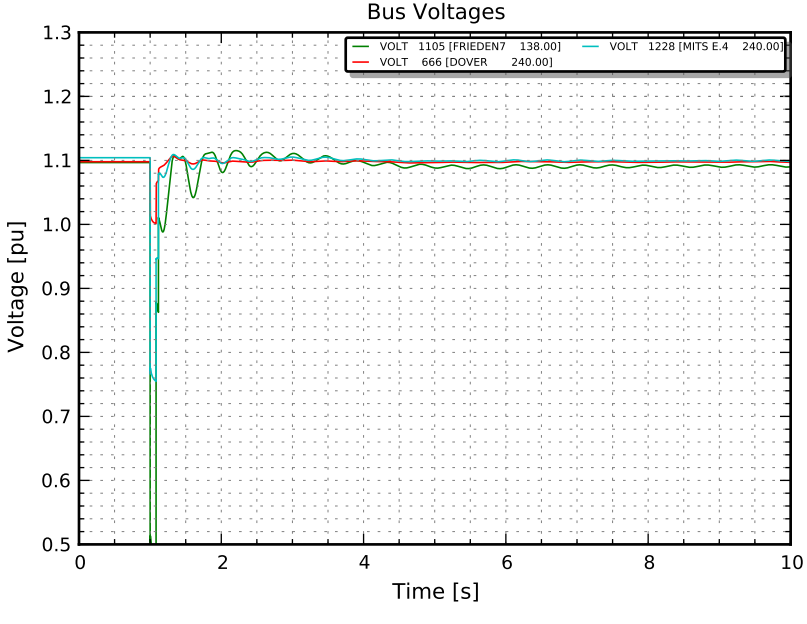
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_A.

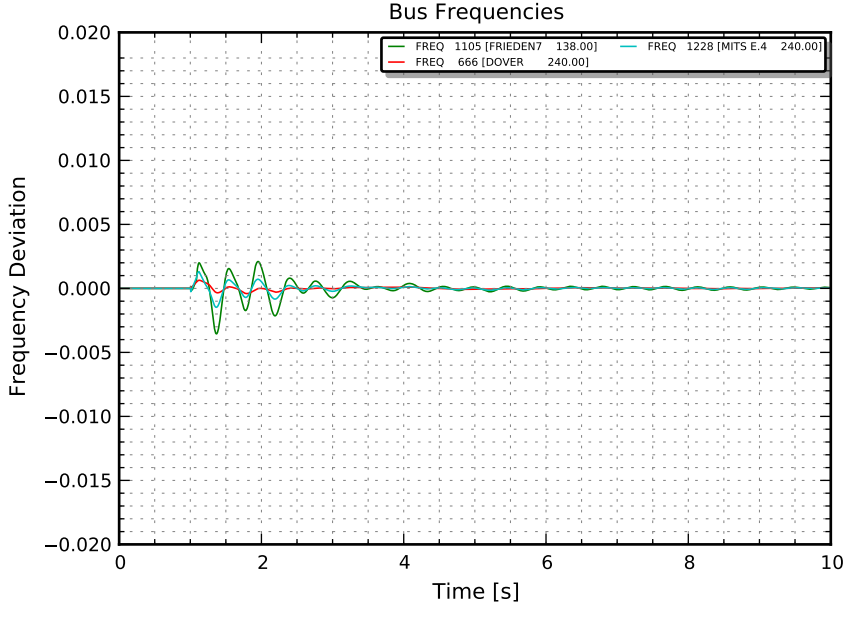
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 002 (A. 1)





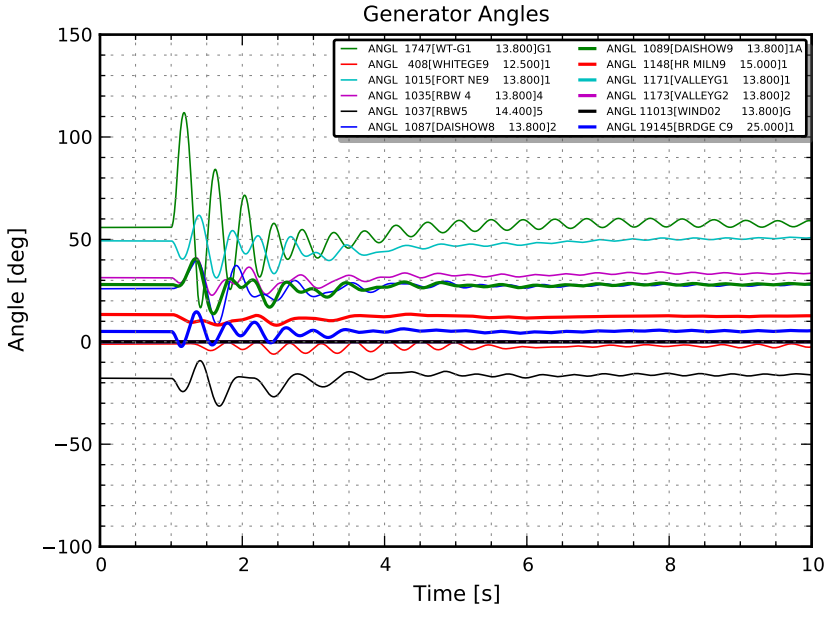


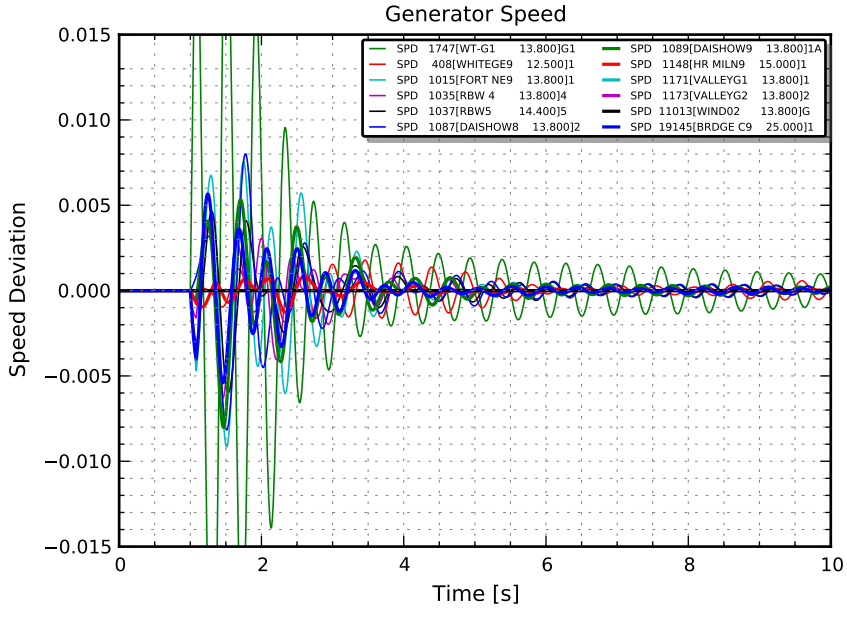


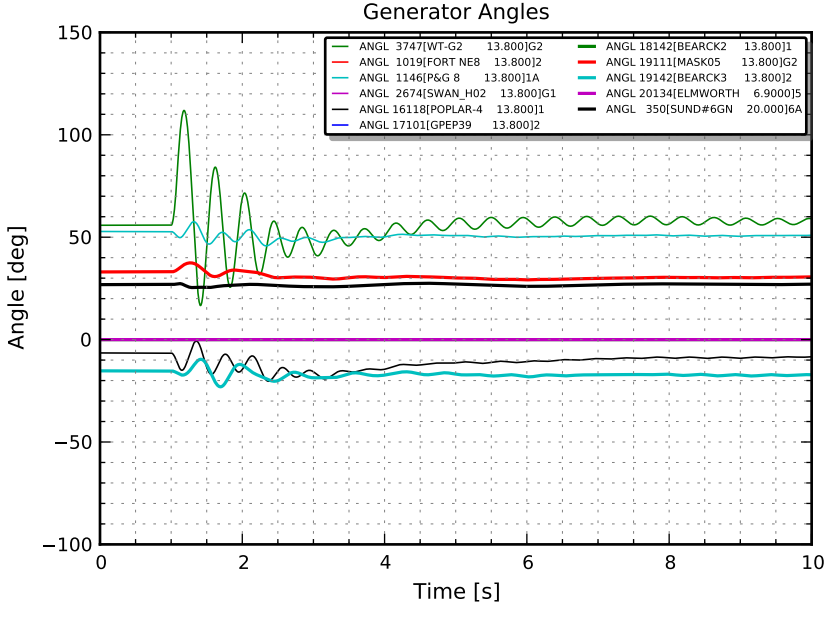
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_A.

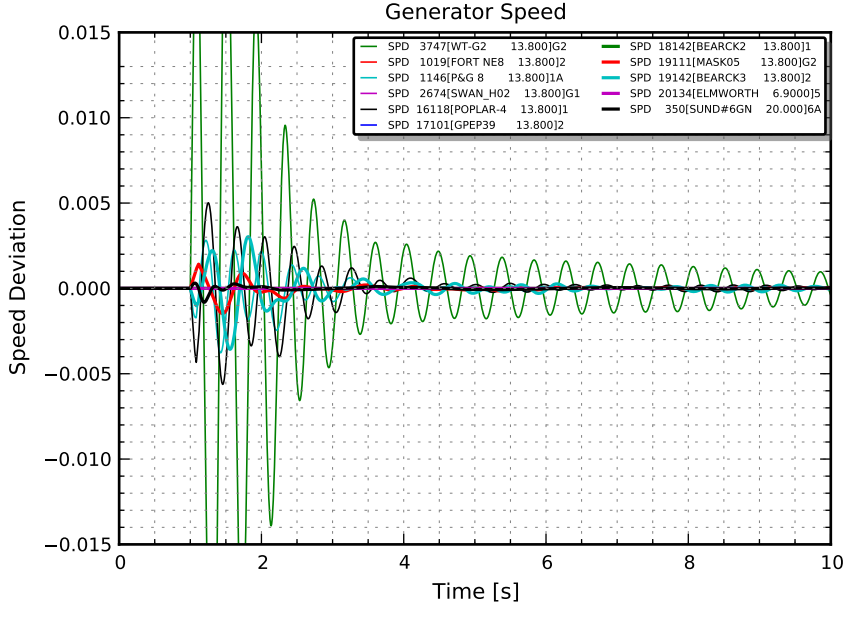
Study Area Generators

Appendix E2B
Figure: 002 (A. 2)





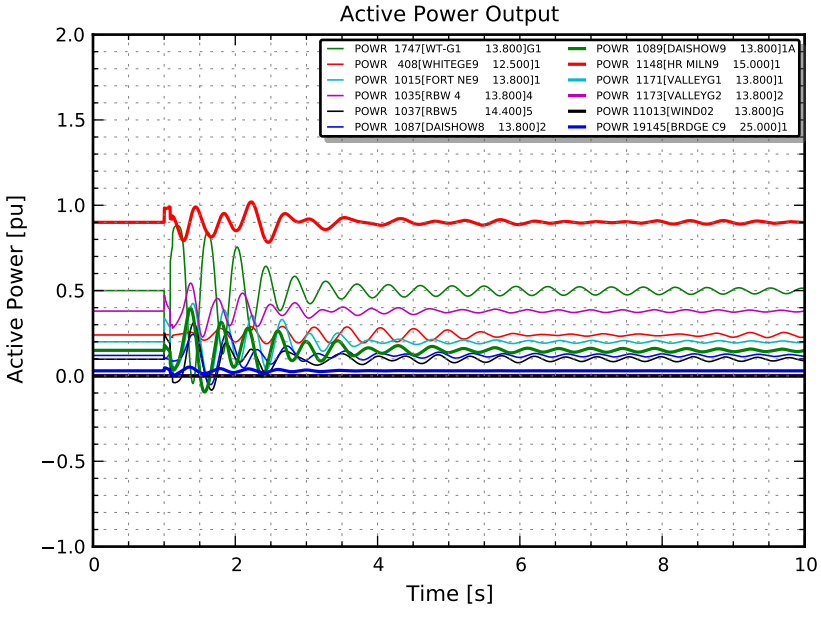


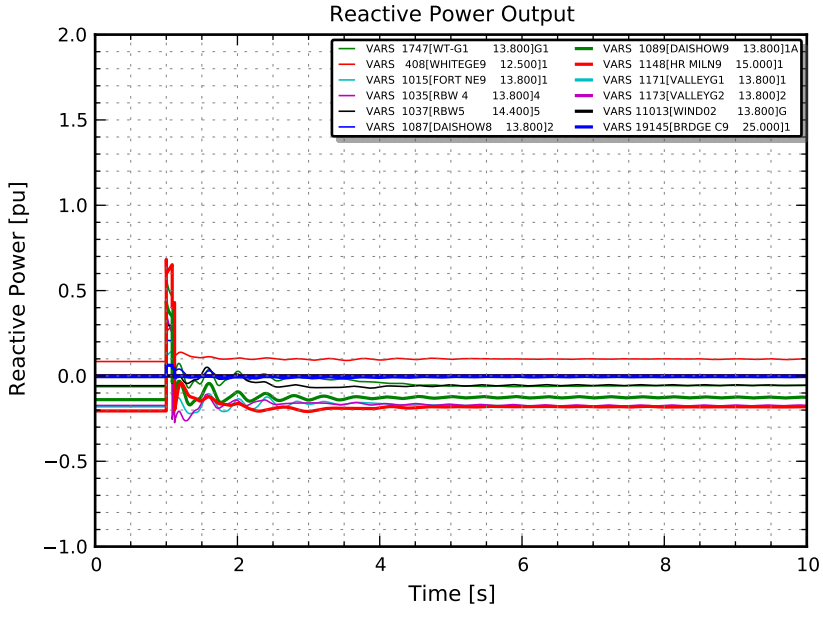


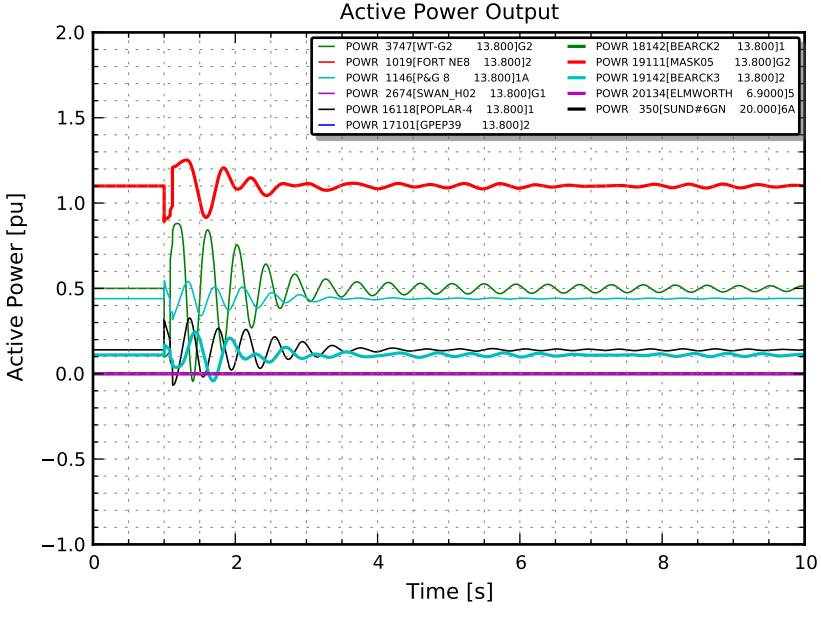
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_A.

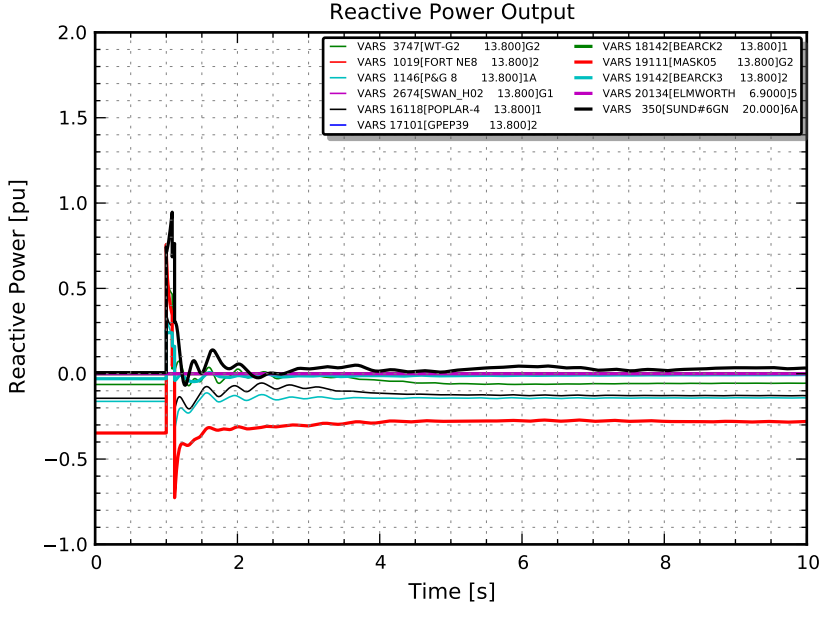
Study Area Generators

Appendix E2B
Figure: 002 (A. 3)





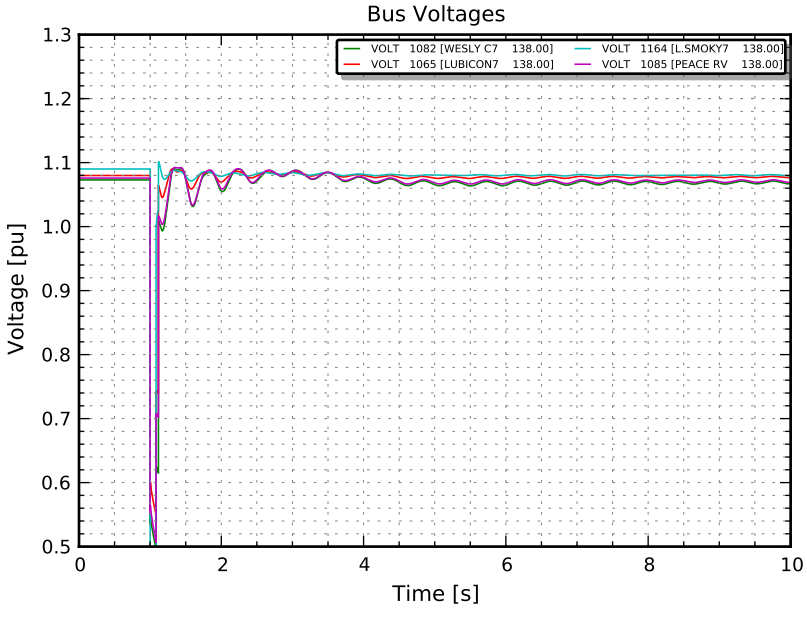


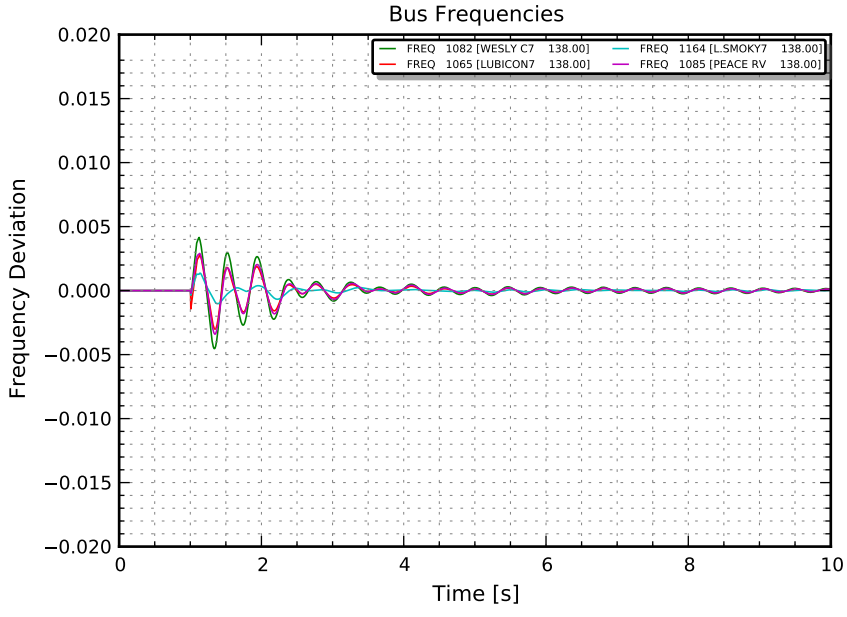


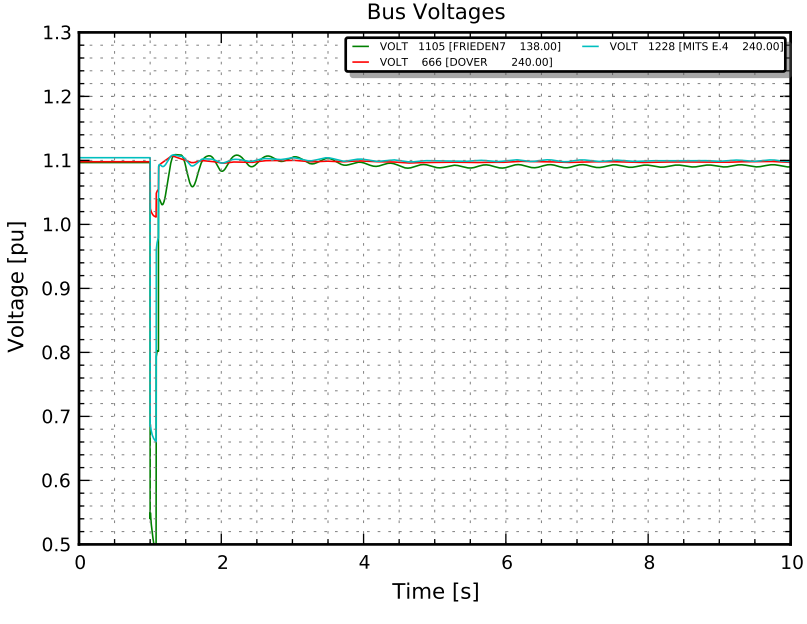
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_B.

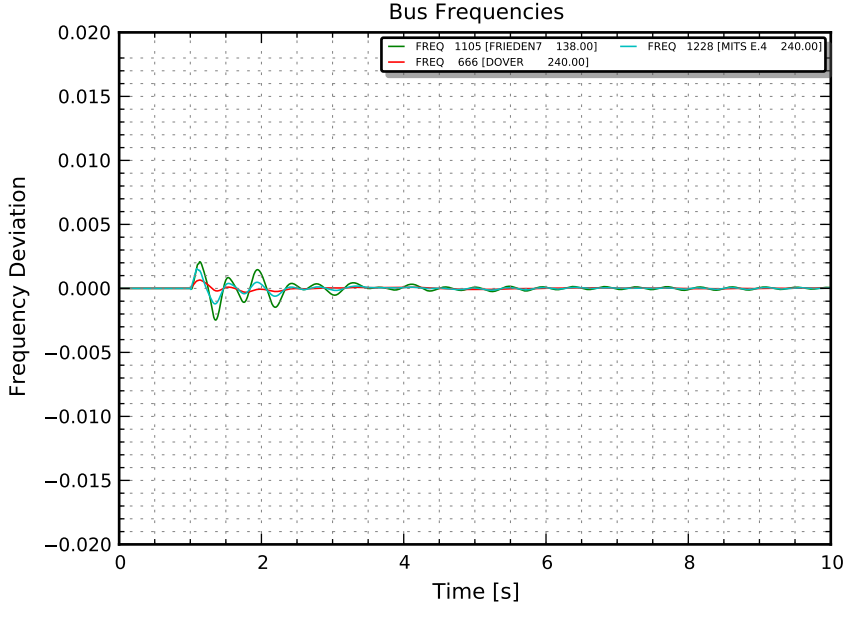
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 002 (B. 1)





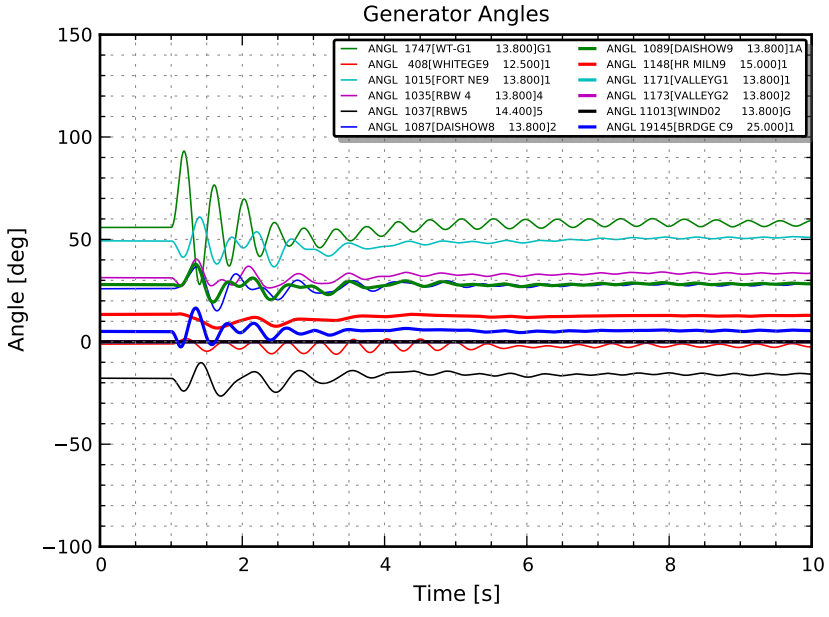


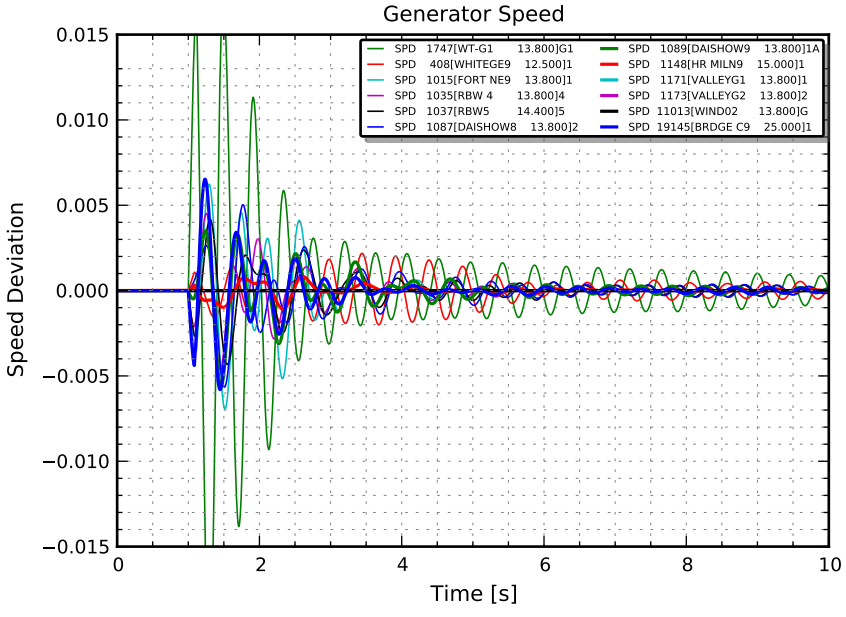


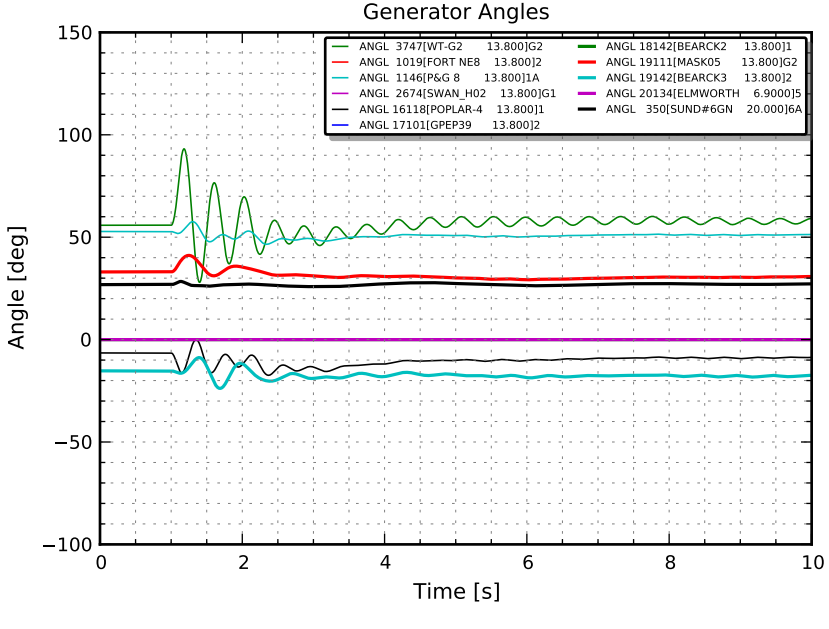
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_B.

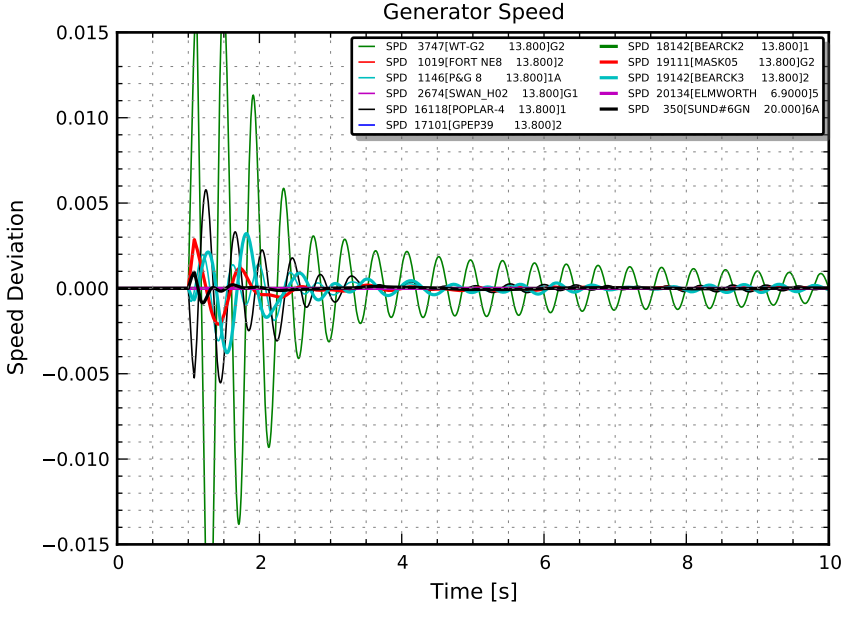
Study Area Generators

Appendix E2B
Figure: 002 (B. 2)





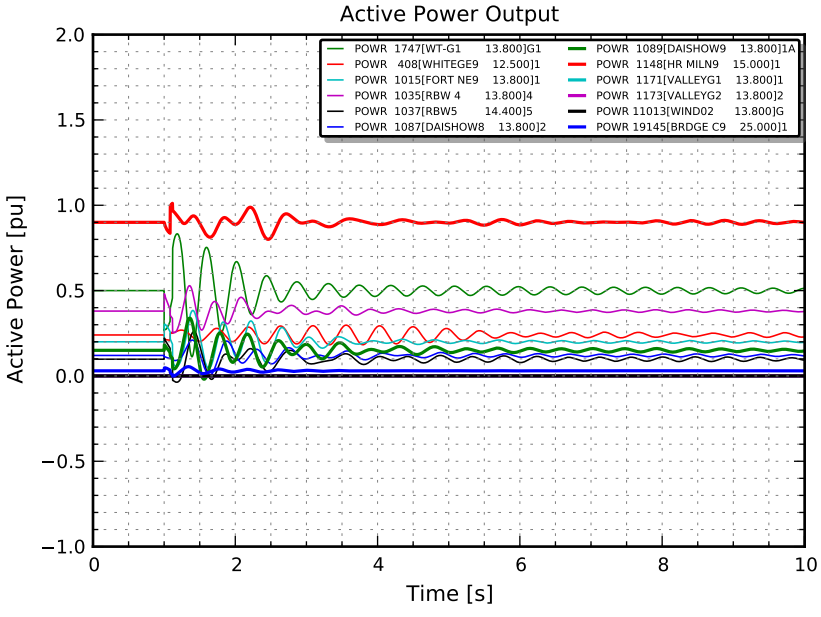


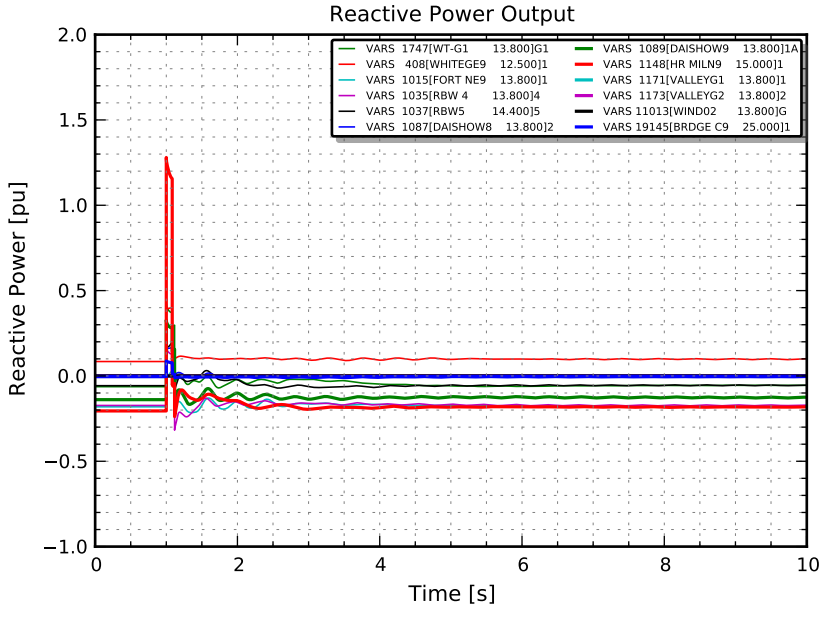


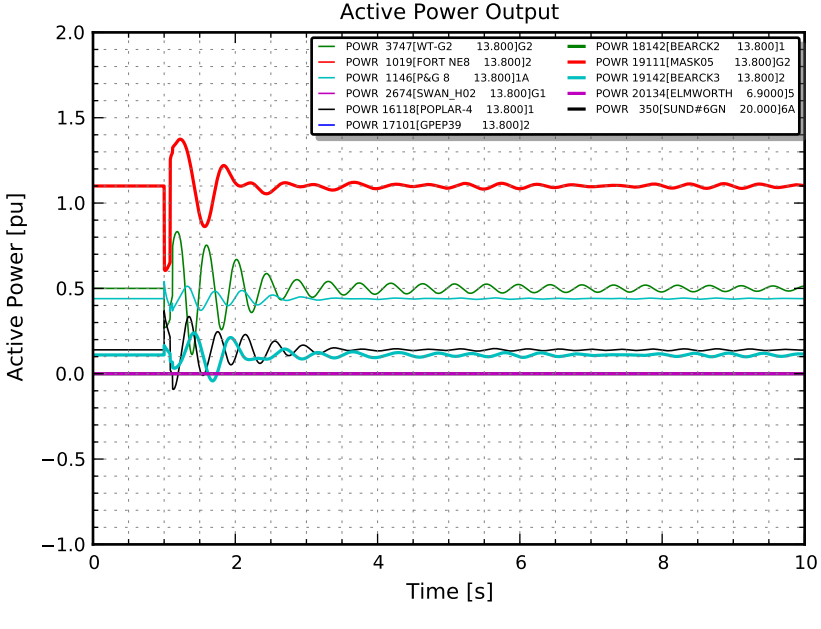
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 002 9L11 WESLEYCREEK to LITTLESMOKY_B.

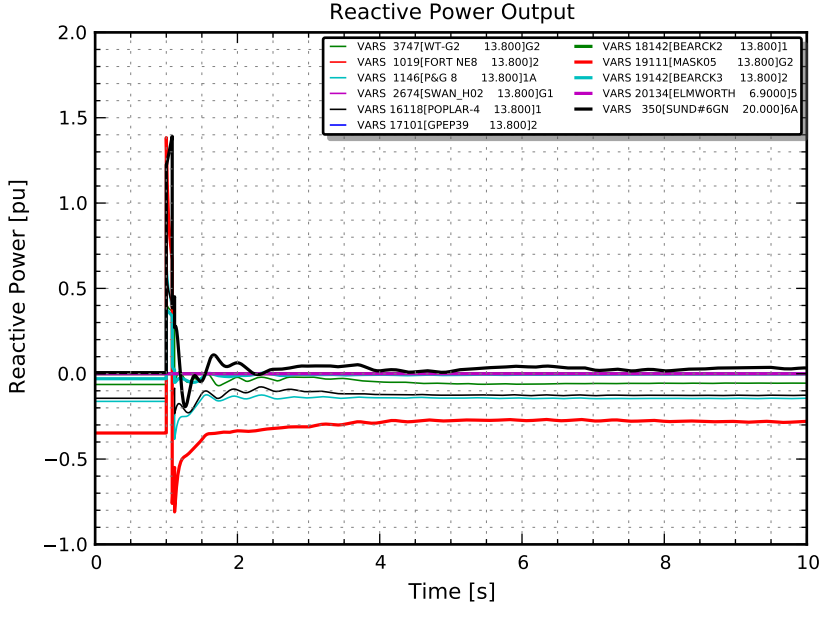
Study Area Generators

Appendix E2B
Figure: 002 (B. 3)





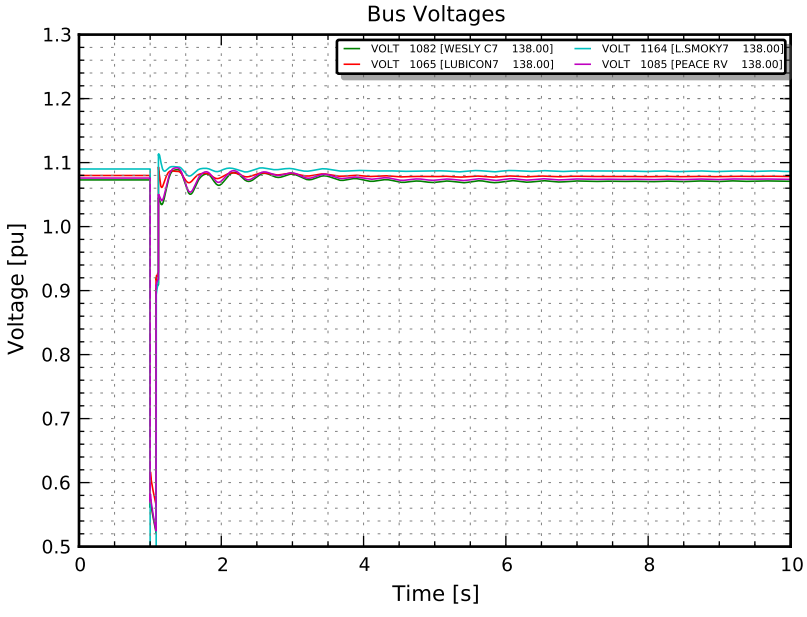


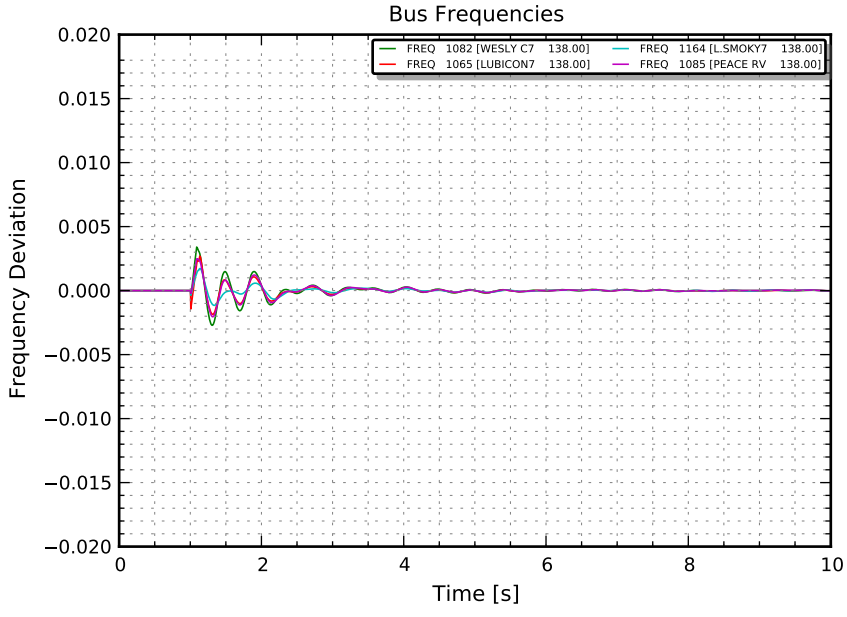


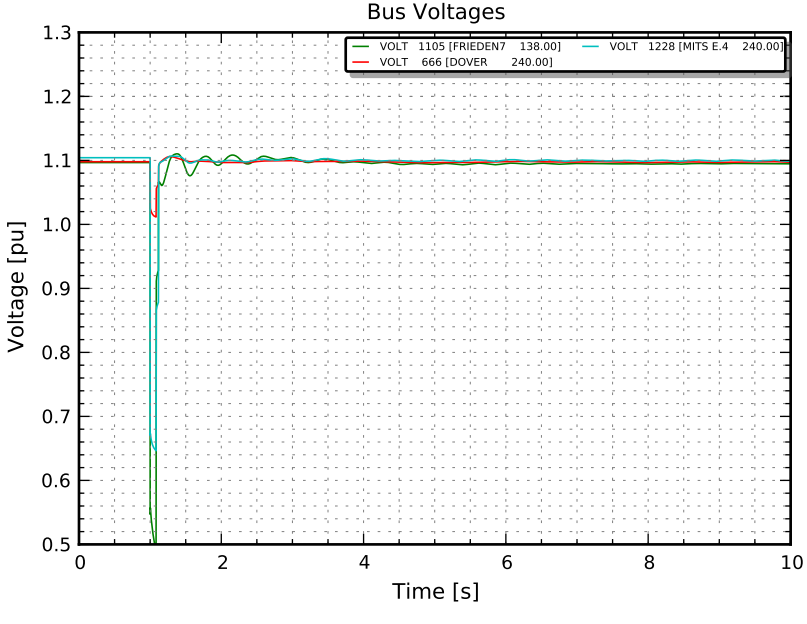
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_A.

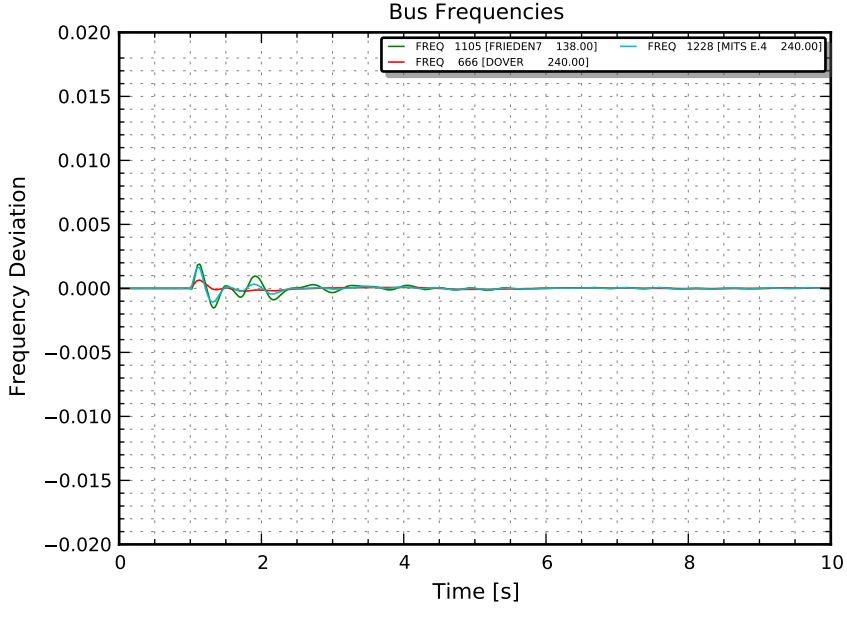
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 003 (A. 1)





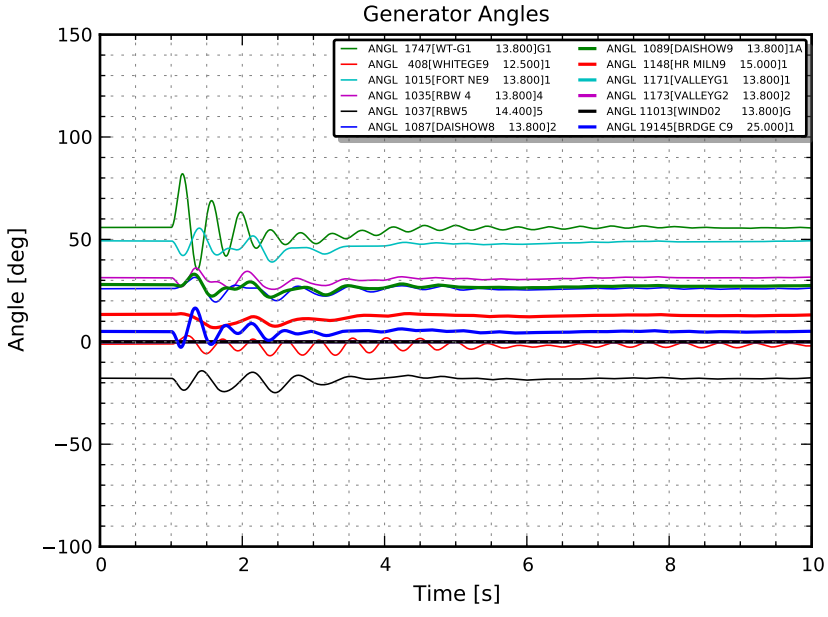


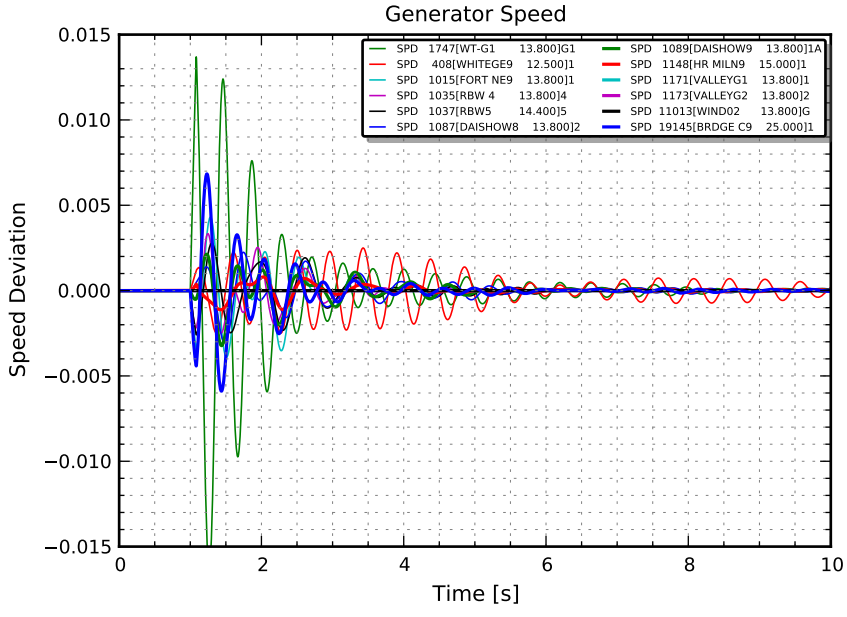


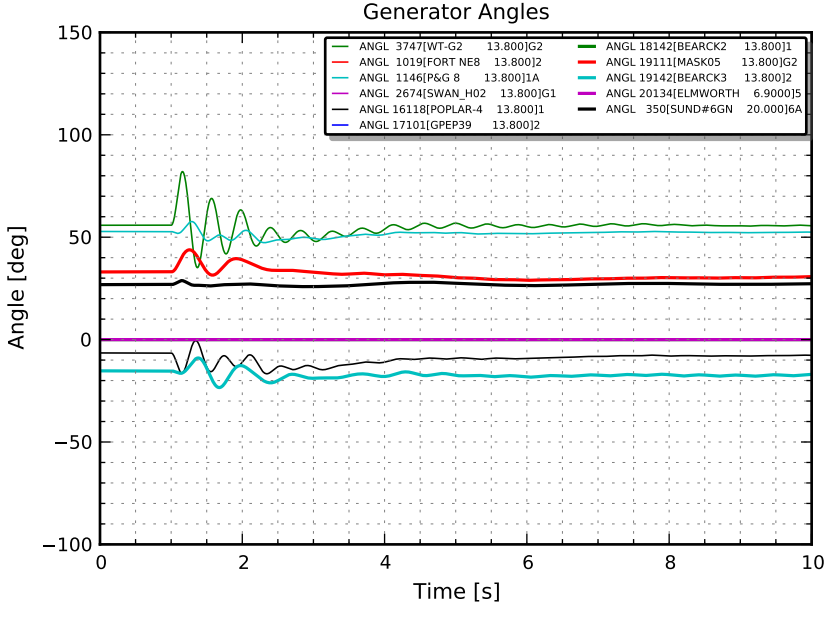
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_A.

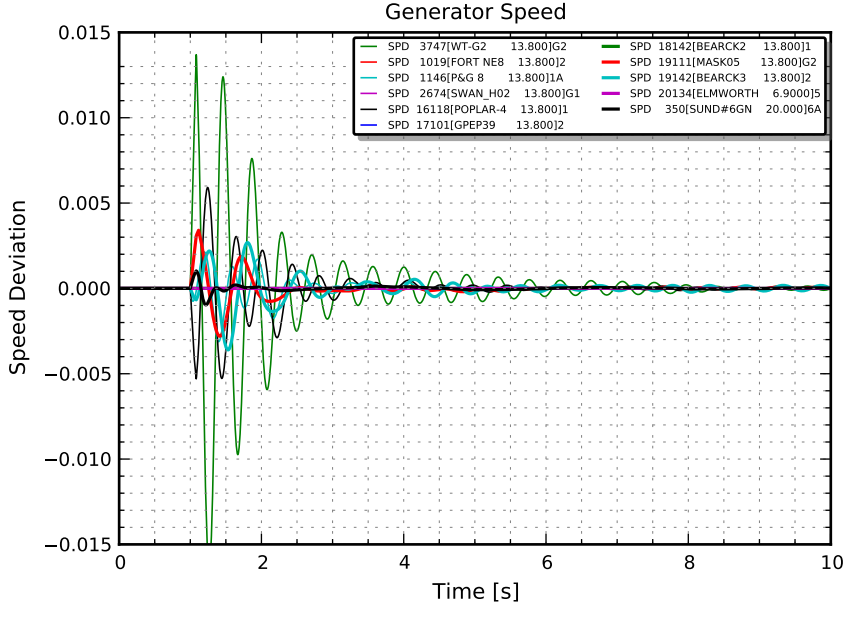
Study Area Generators

Appendix E2B
Figure: 003 (A. 2)





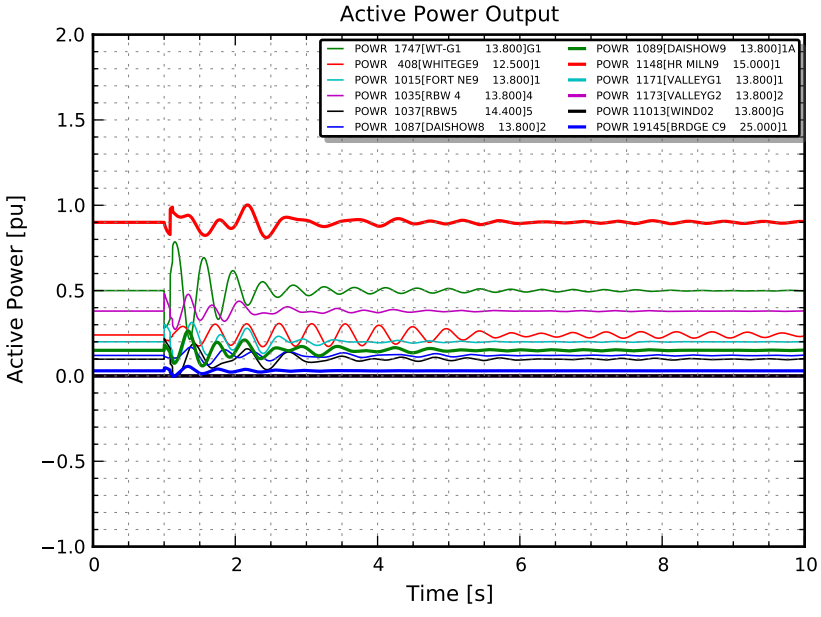


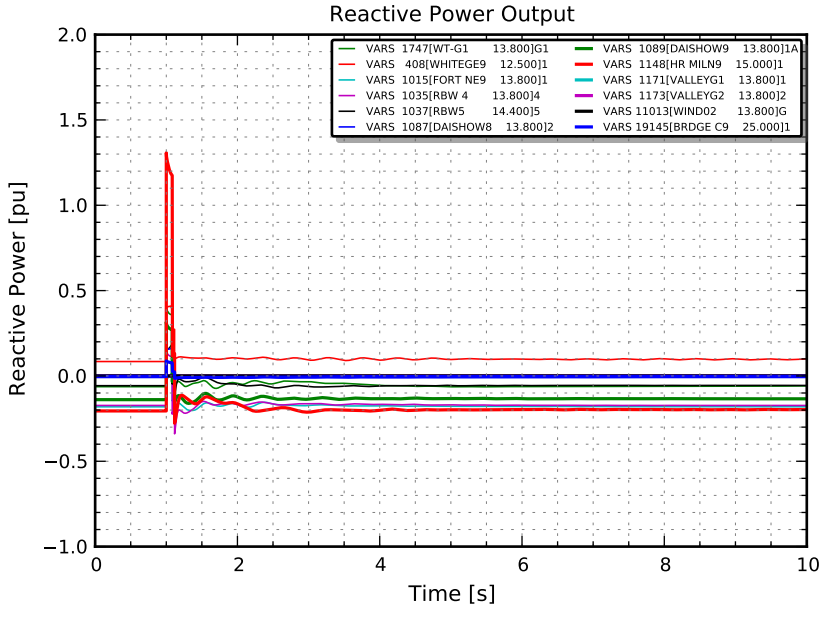


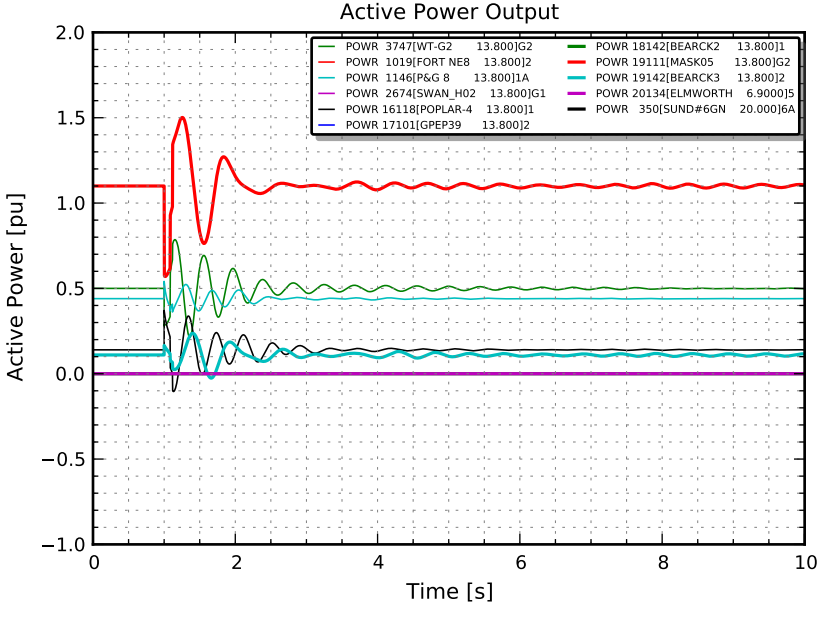
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_A.

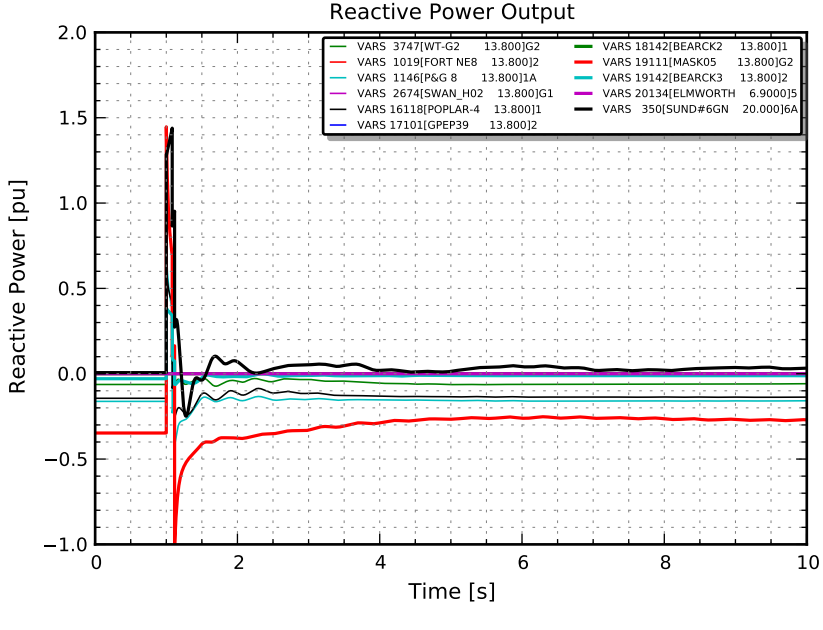
Study Area Generators

Appendix E2B
Figure: 003 (A. 3)





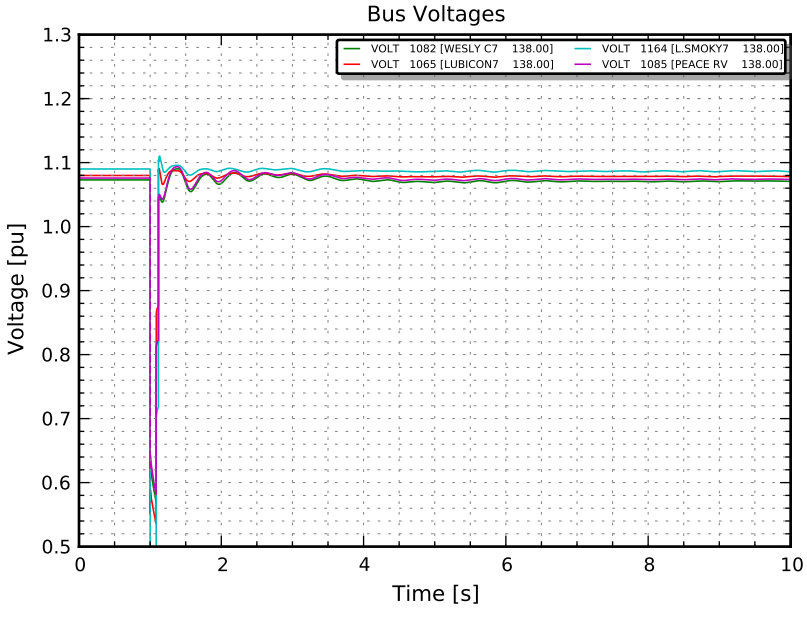


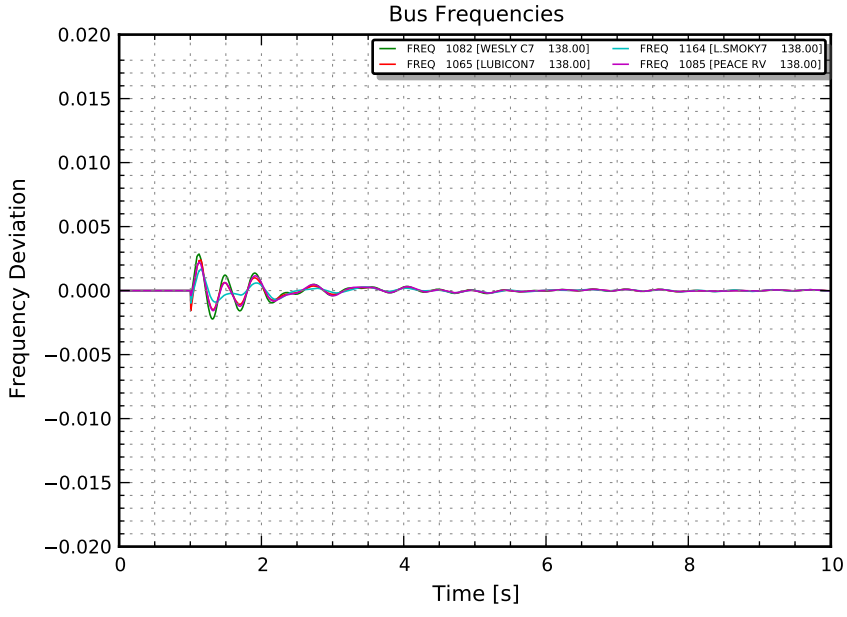


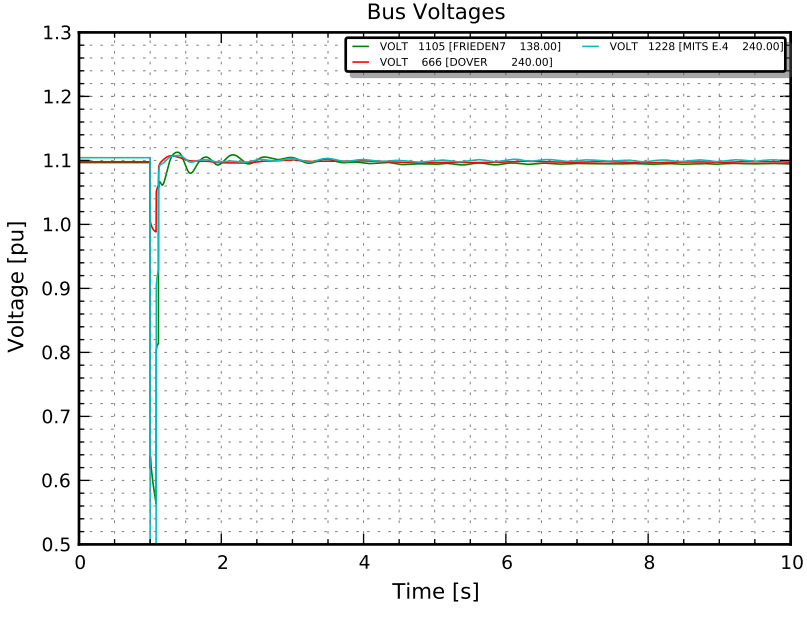
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_B.

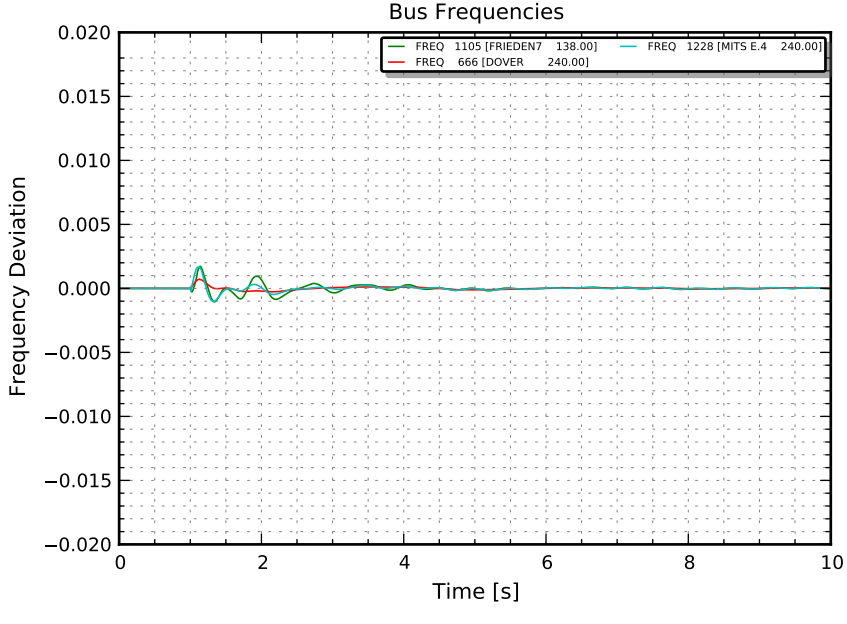
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 003 (B. 1)





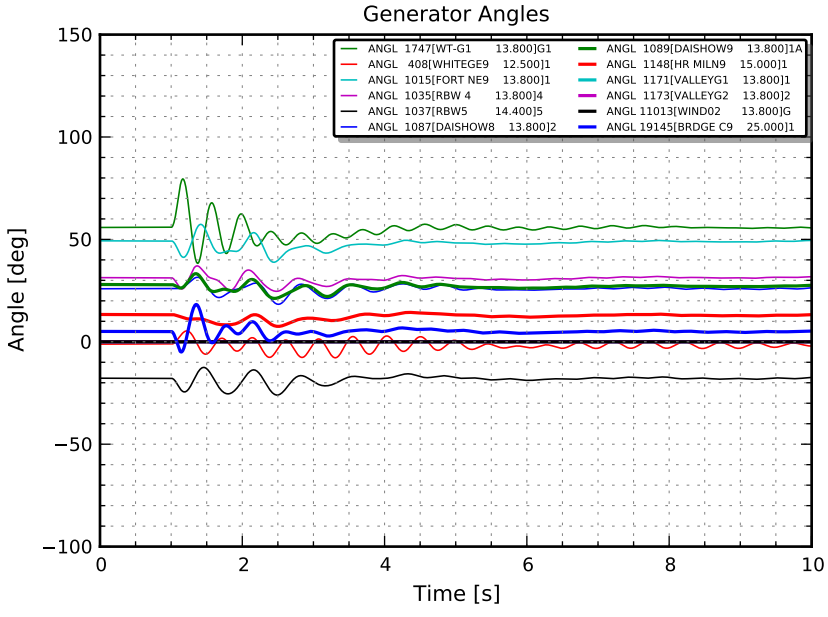


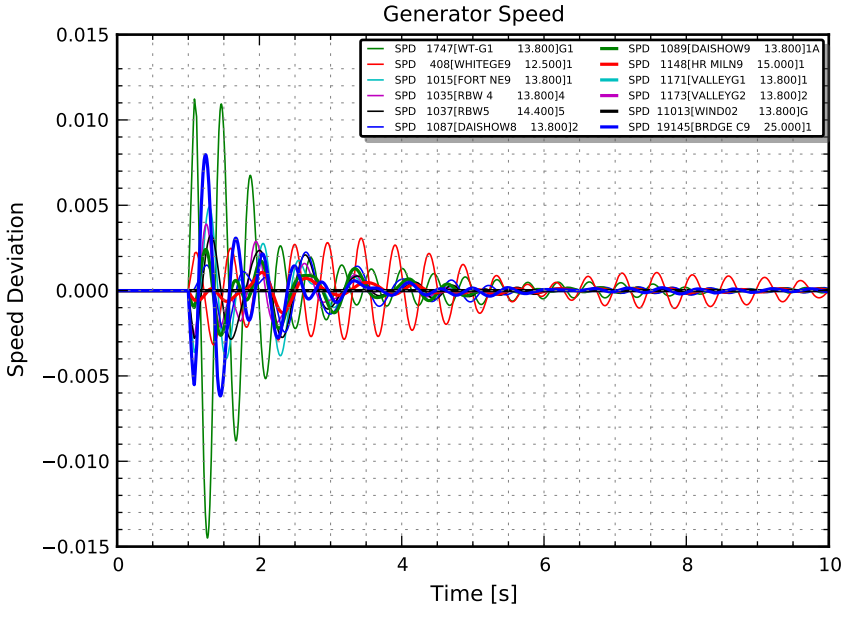


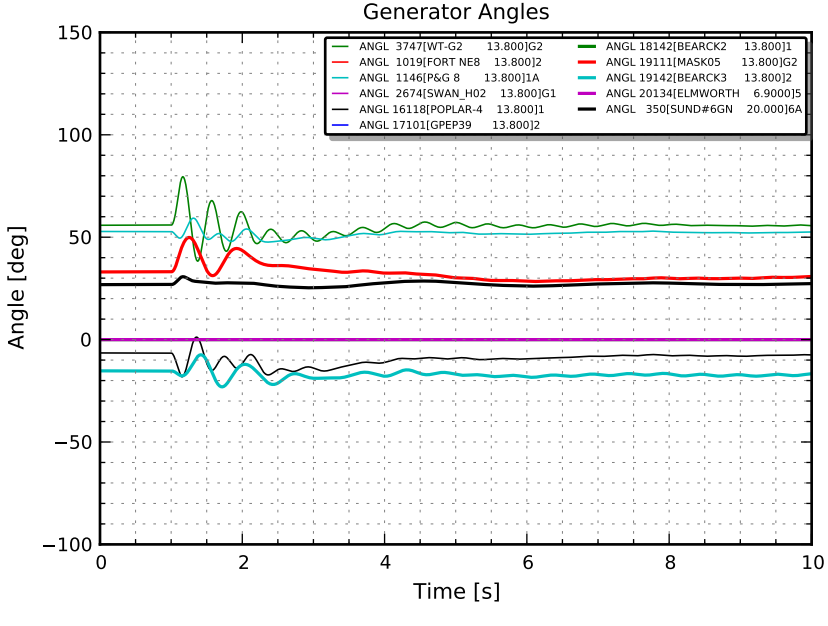
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_B.

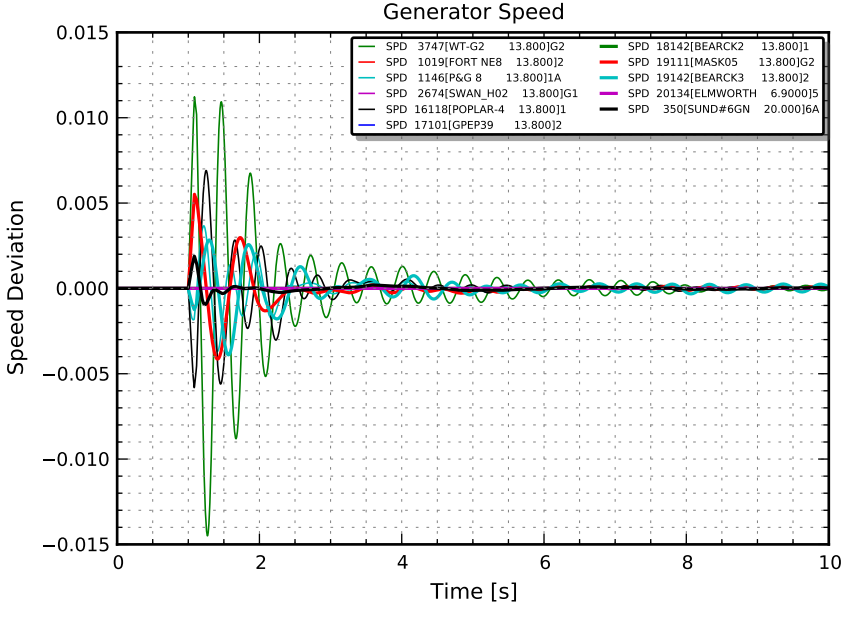
Study Area Generators

Appendix E2B
Figure: 003 (B. 2)





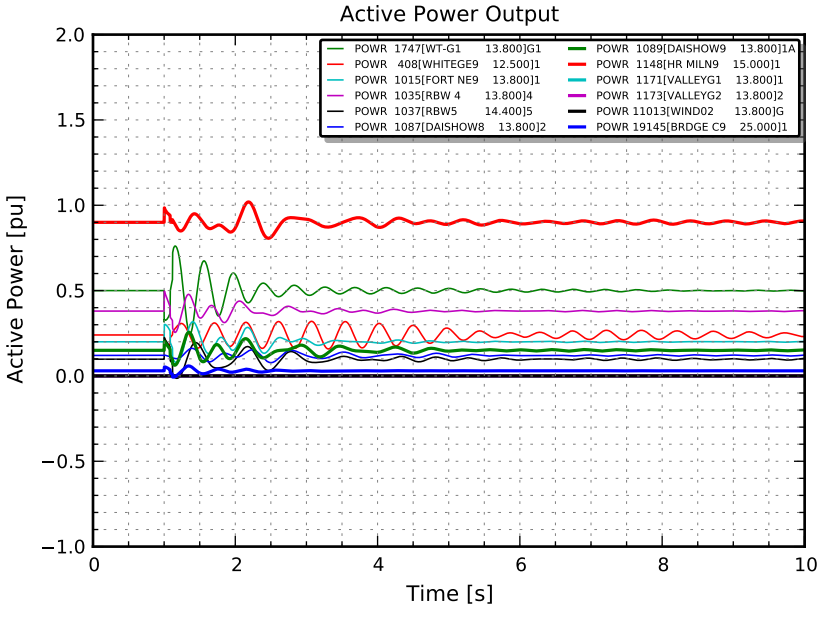


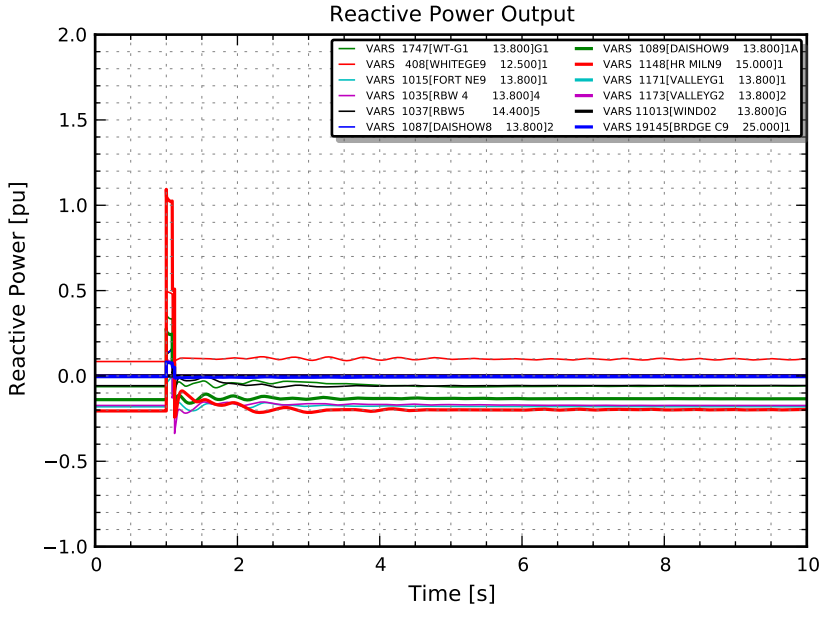


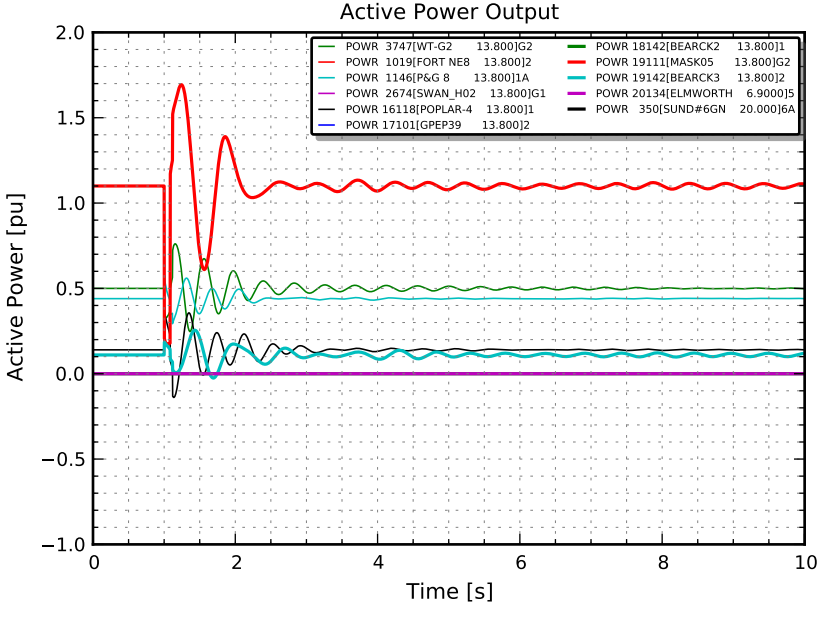
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 003 9L05 LITTLESMOKY to LOUISECREEK_B.

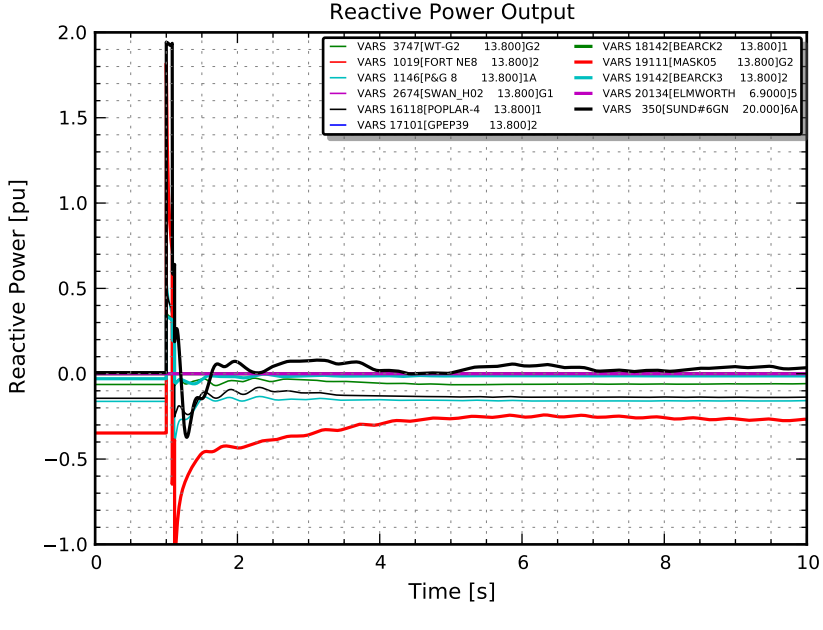
Study Area Generators

Appendix E2B
Figure: 003 (B. 3)





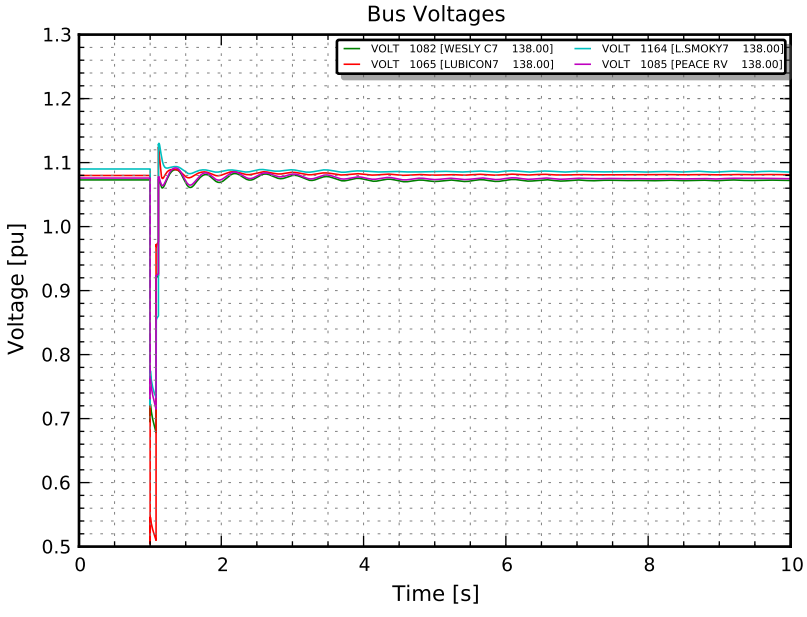


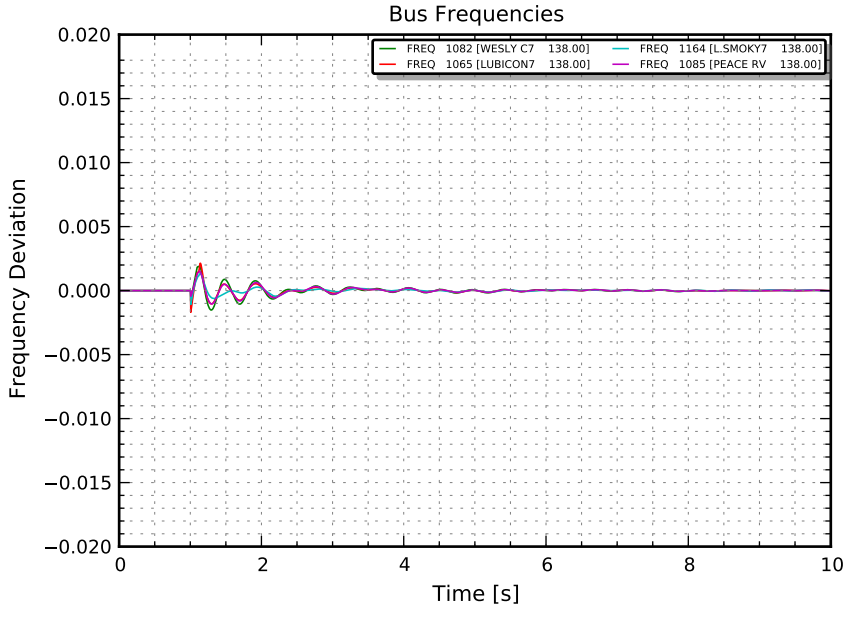


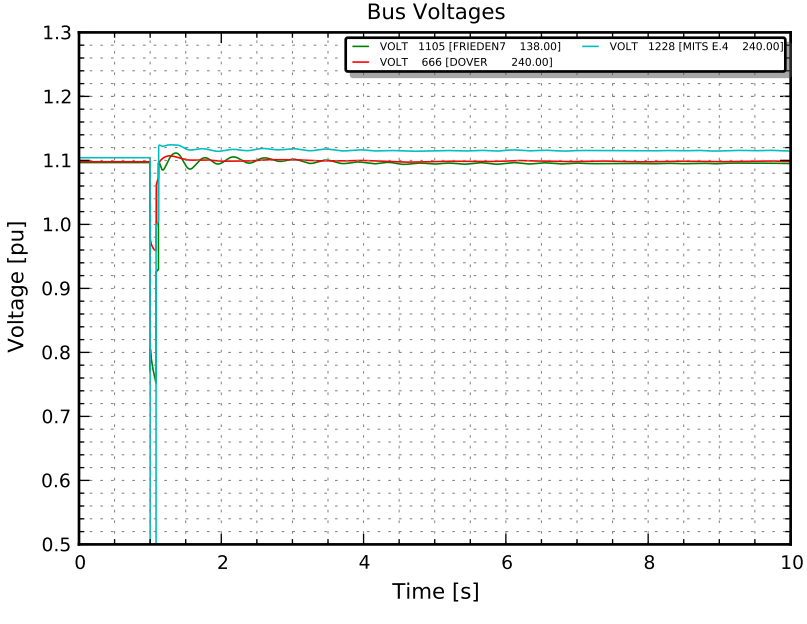
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 004 9L40 MITSUE to LOUISECREEK_A.

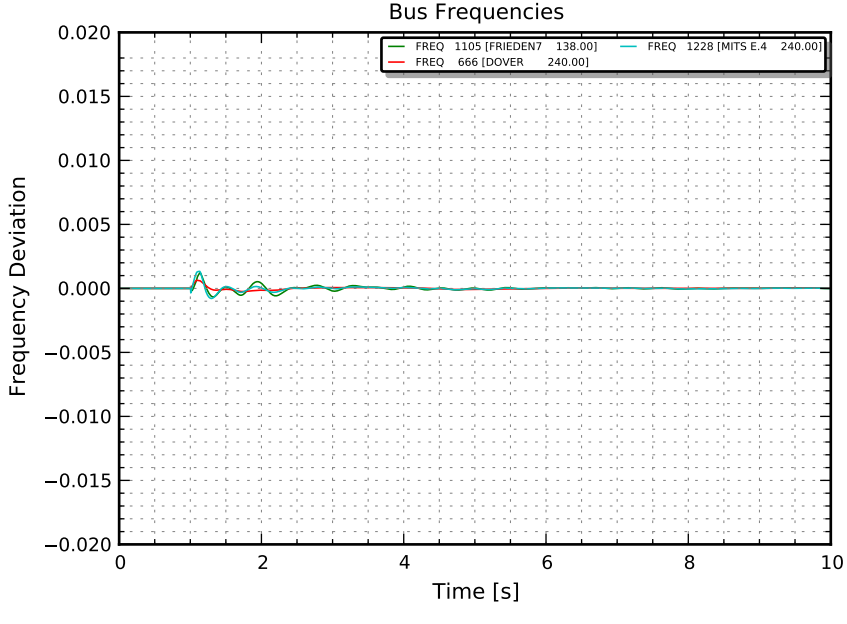
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 004 (A. 1)





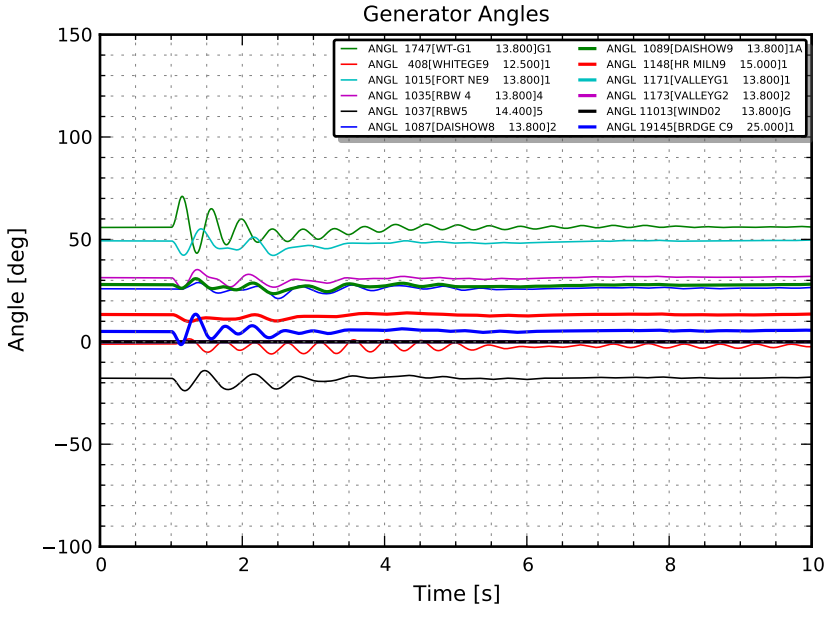


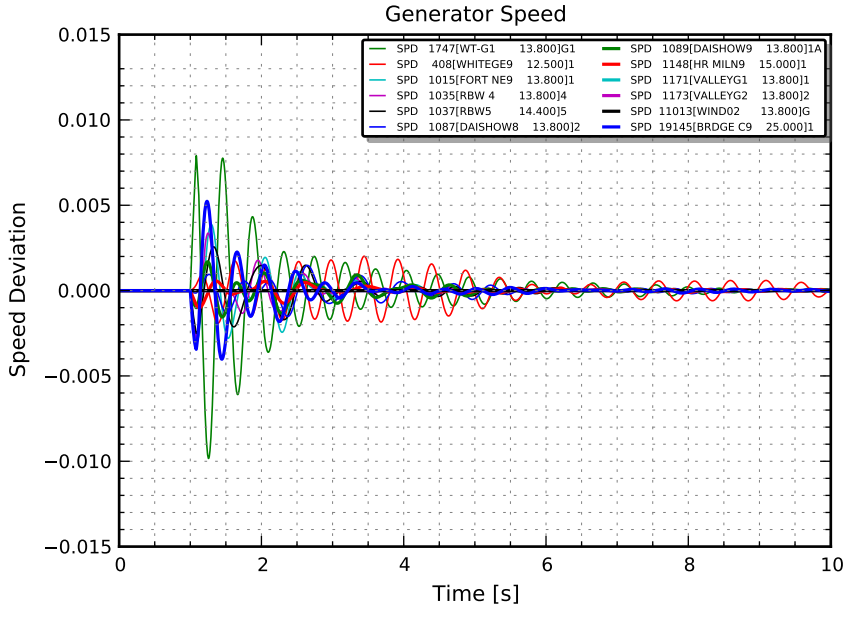


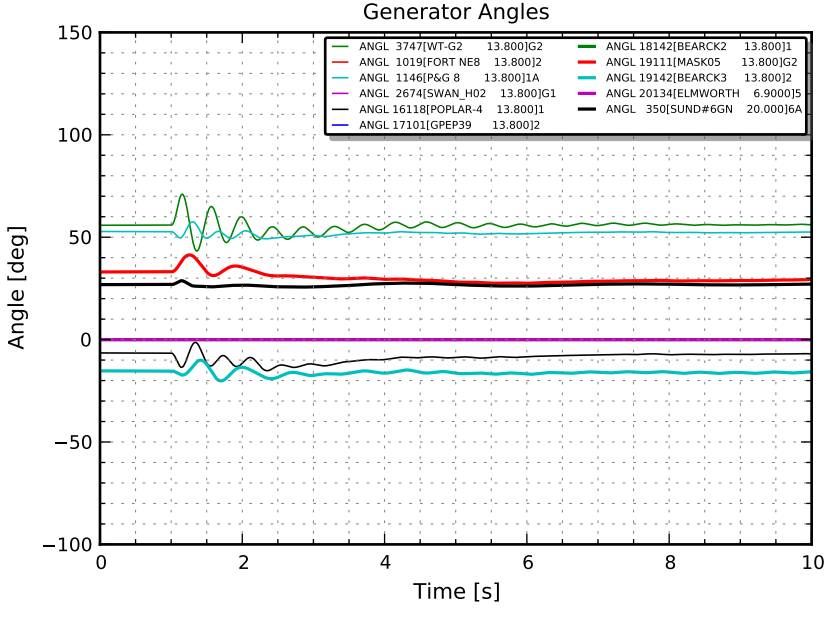
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 004 9L40 MITSUE to LOUISECREEK_A.

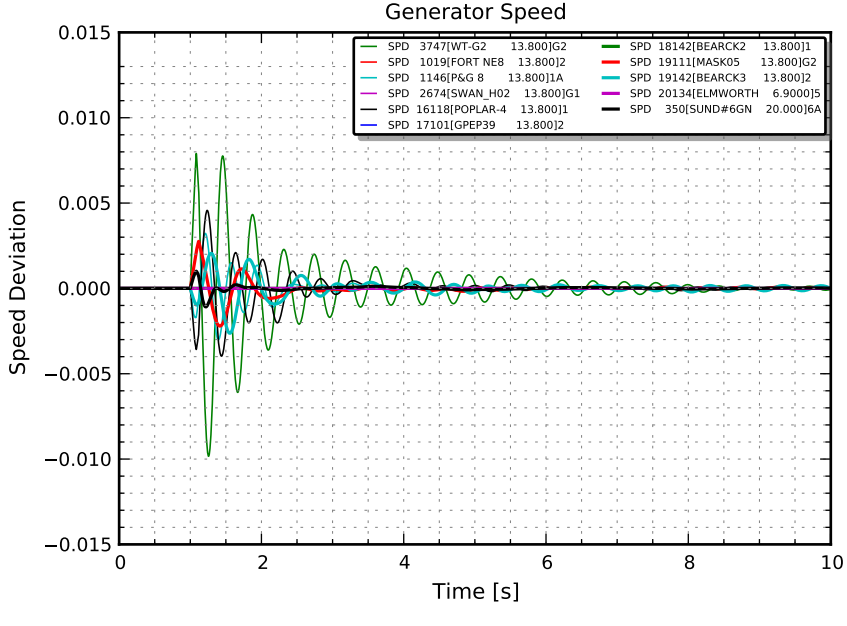
Study Area Generators

Appendix E2B
Figure: 004 (A. 2)





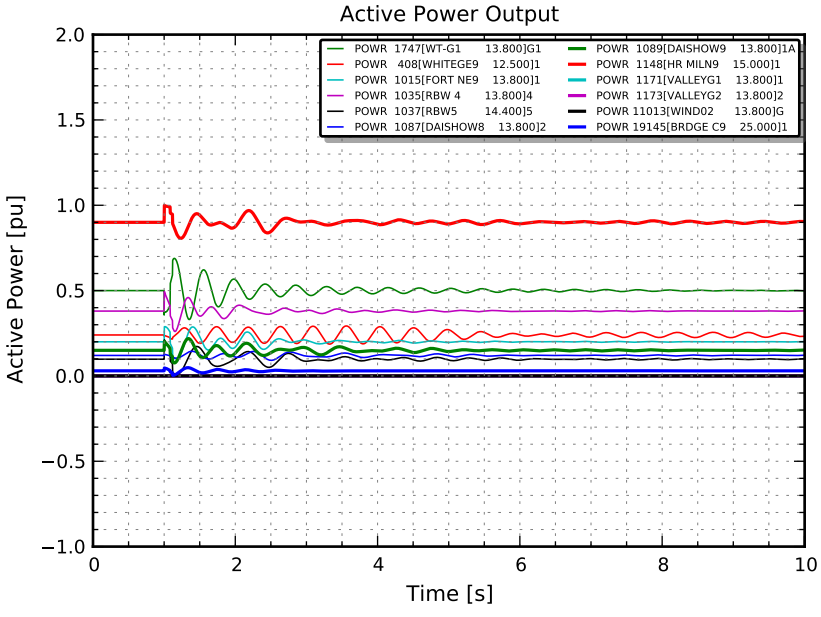


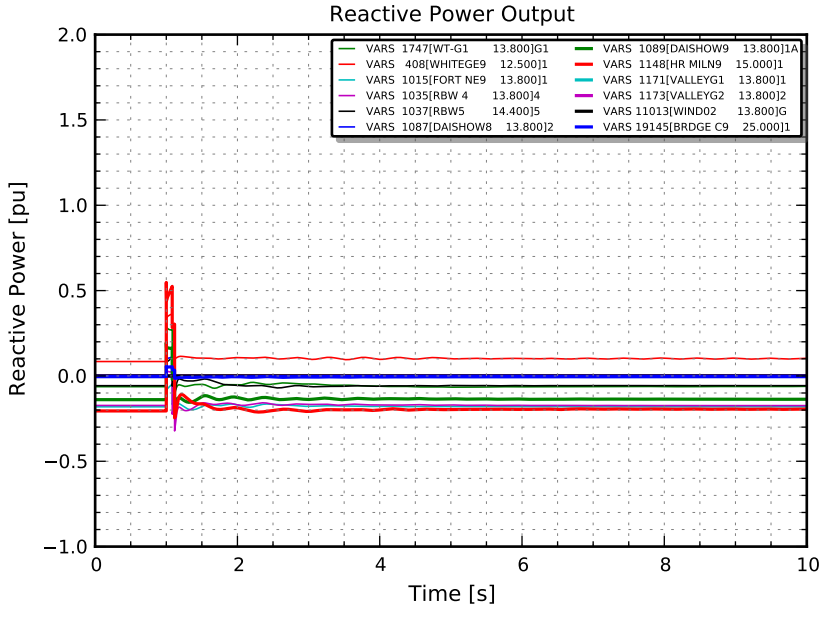


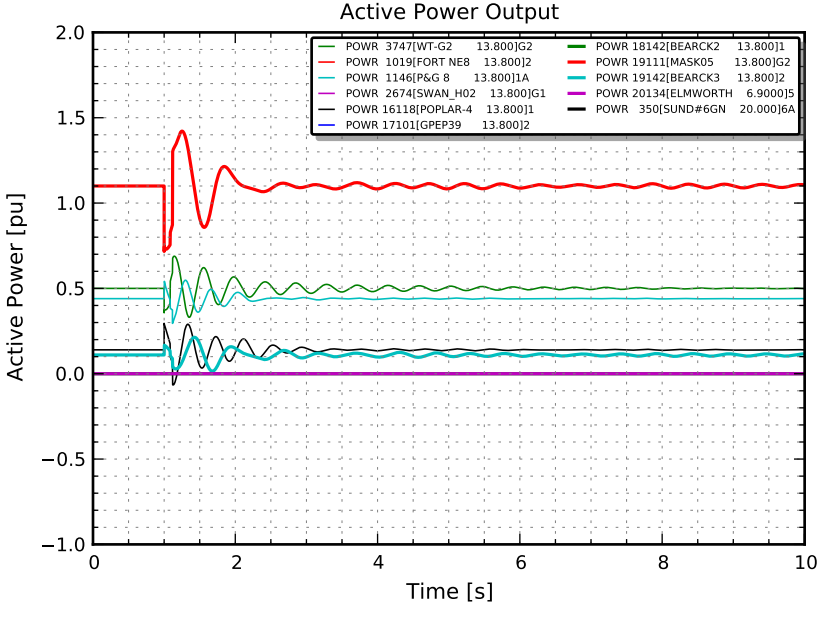
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 004 9L40 MITSUE to LOUISECREEK_A.

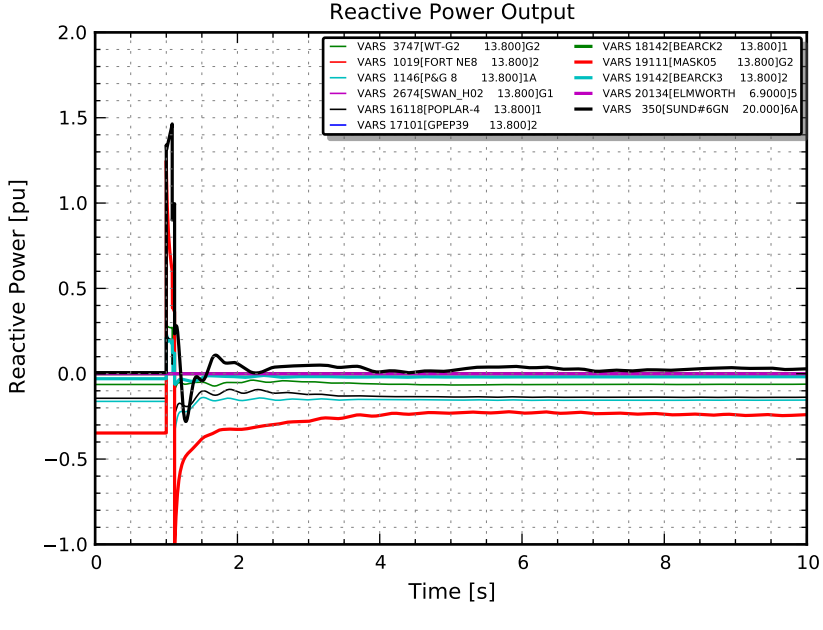
Study Area Generators

Appendix E2B
Figure: 004 (A. 3)





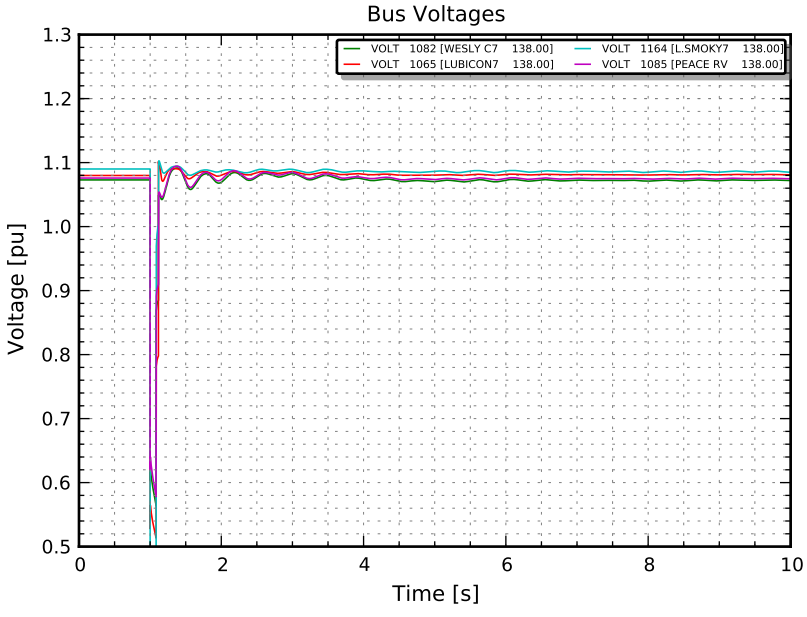


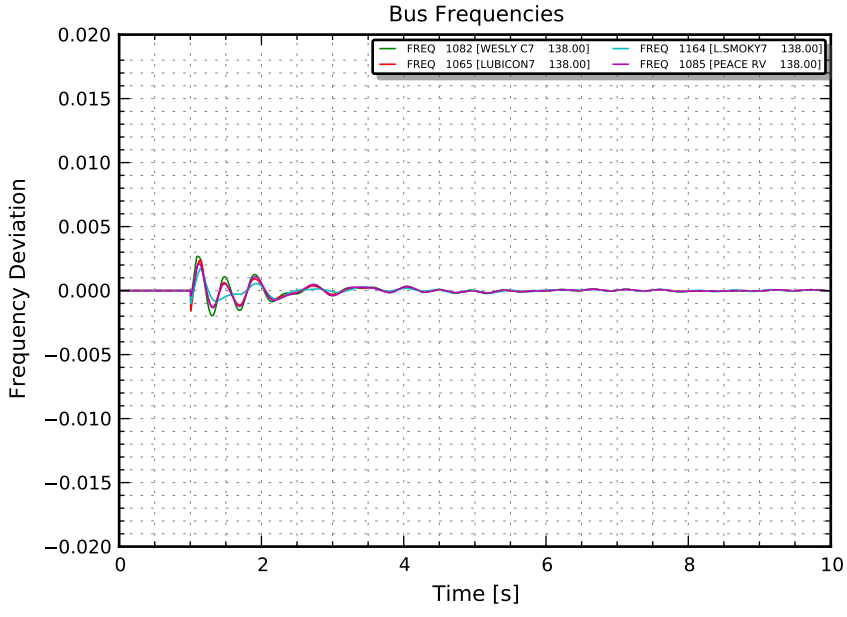


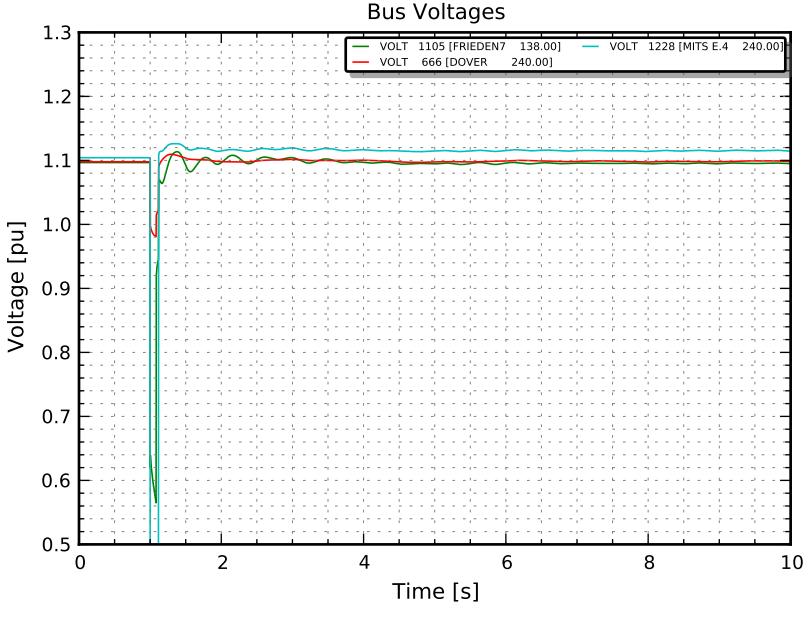
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 004 9L40 MITSUE to LOUISECREEK_B.

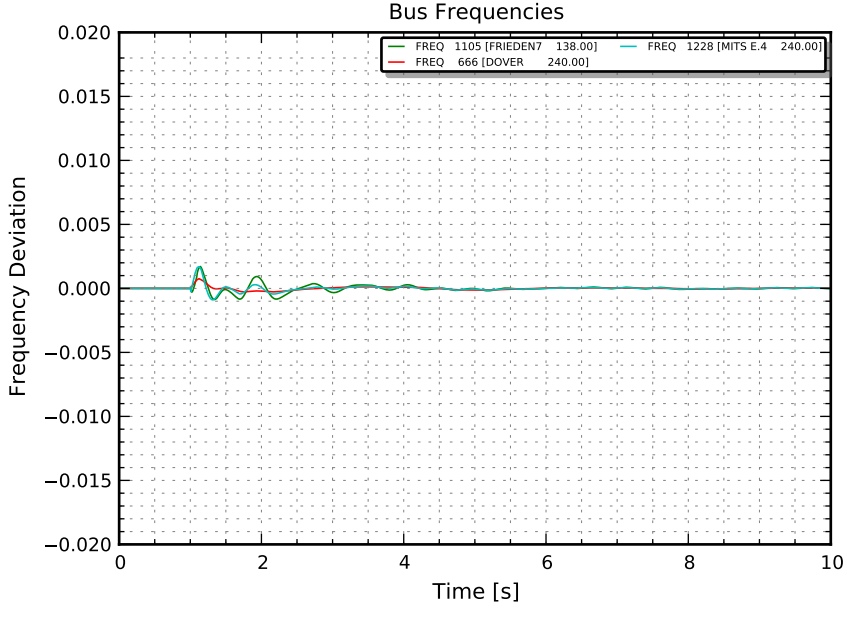
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 004 (B. 1)





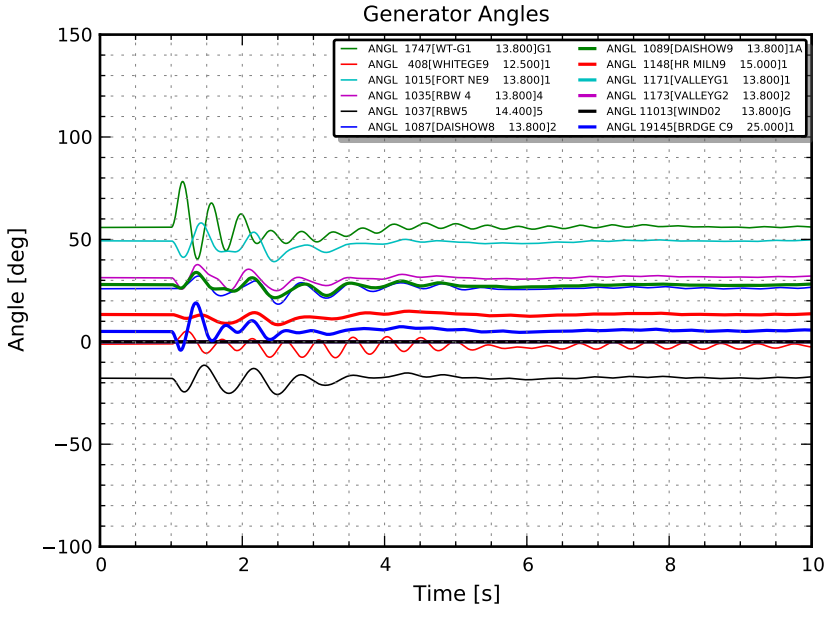


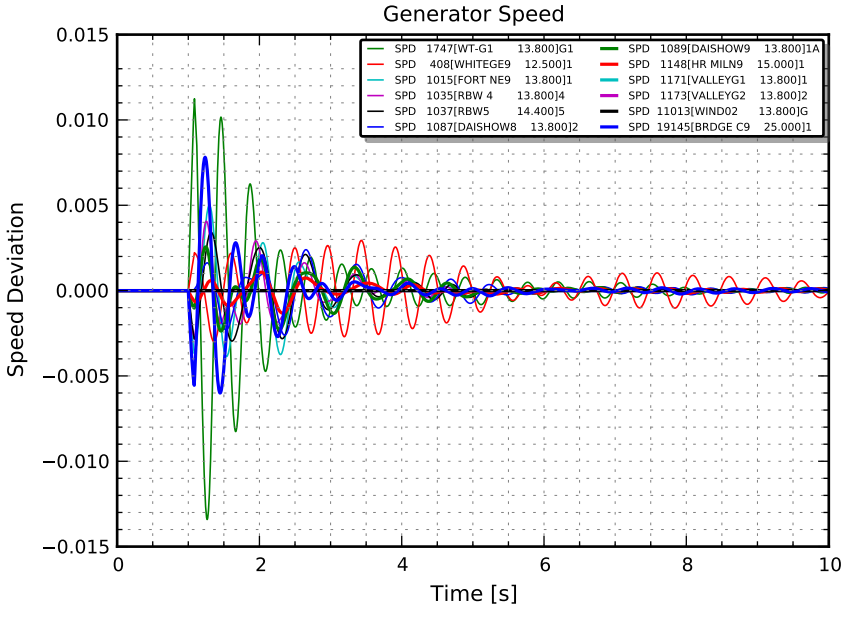


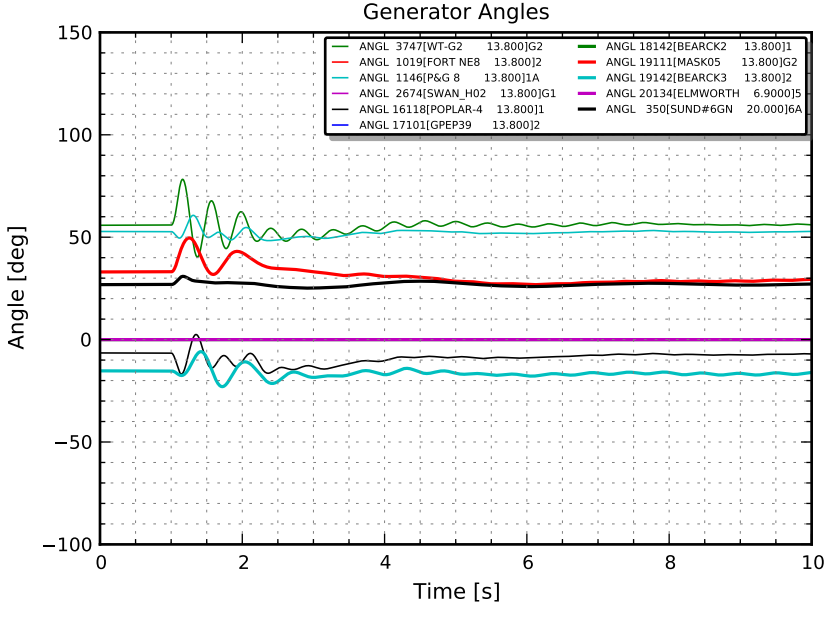
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 004 9L40 MITSUE to LOUISECREEK_B.

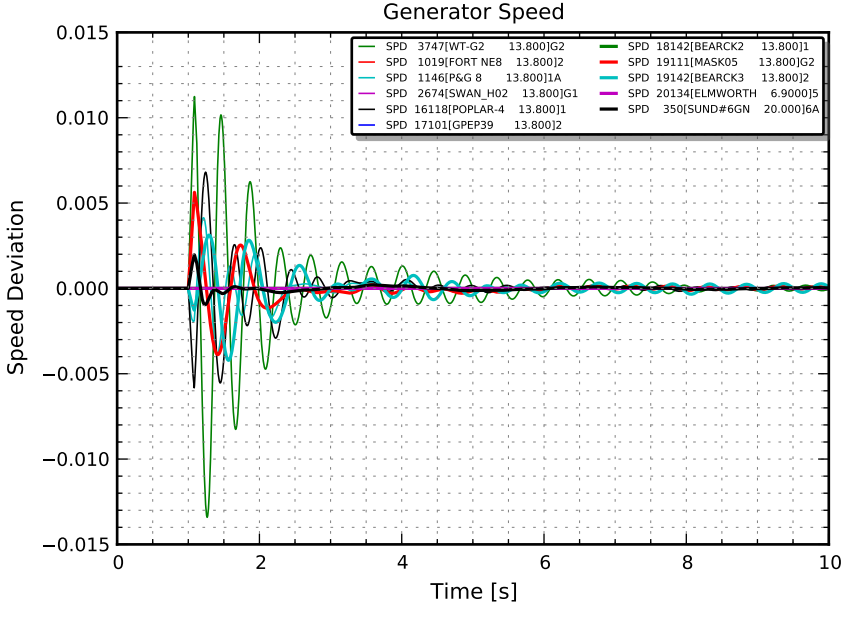
Study Area Generators

Appendix E2B
Figure: 004 (B. 2)





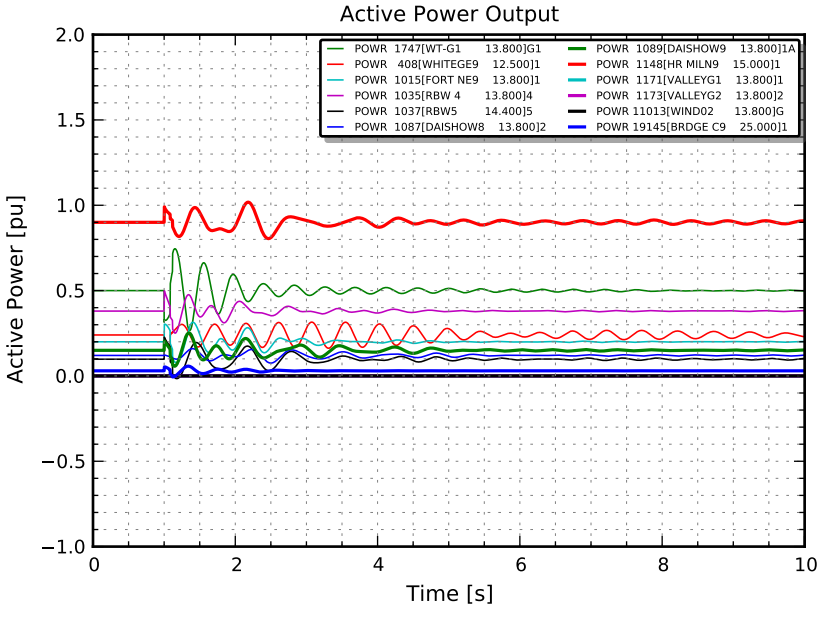


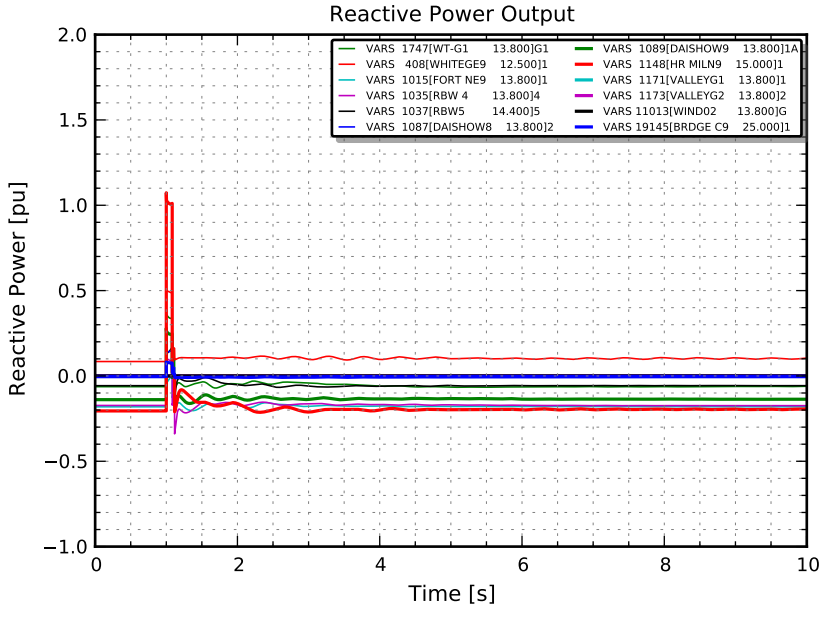


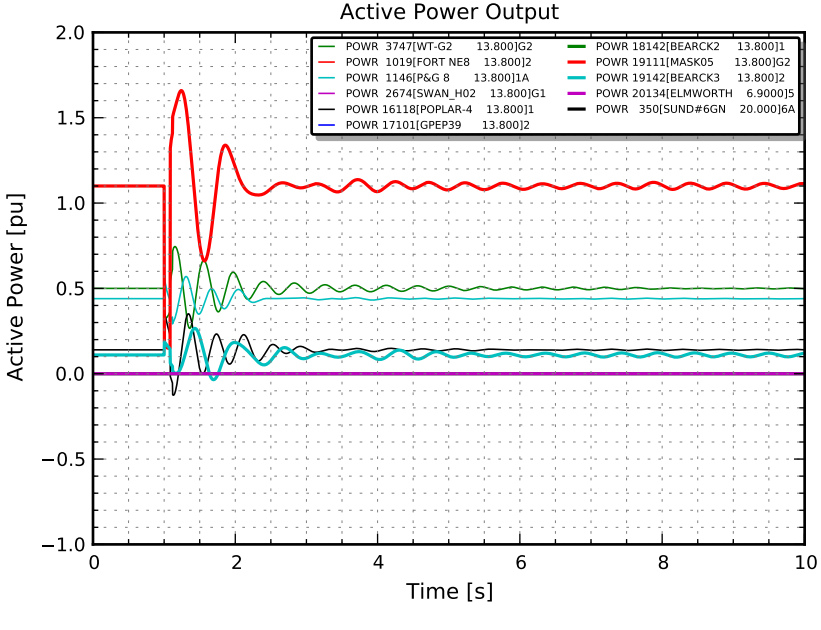
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 004 9L40 MITSUE to LOUISECREEK_B.

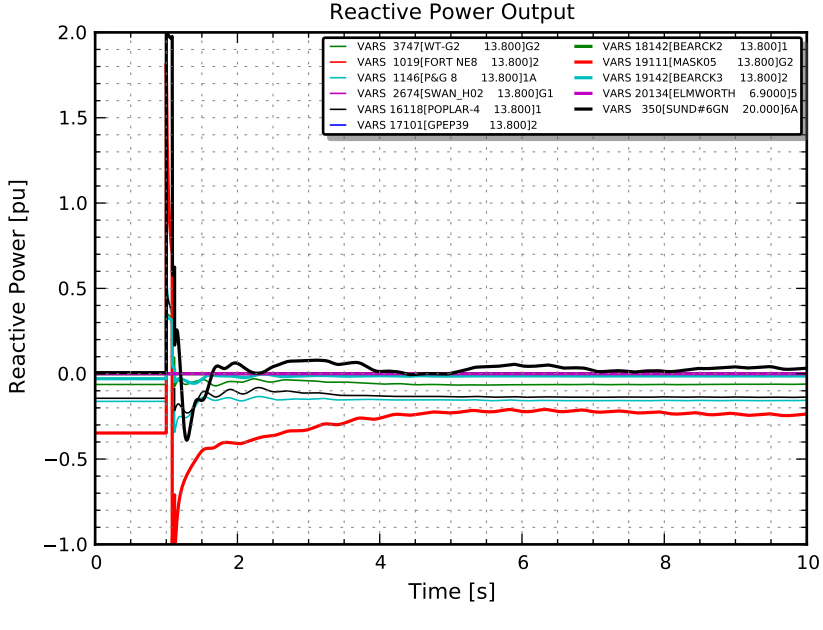
Study Area Generators

Appendix E2B
Figure: 004 (B. 3)





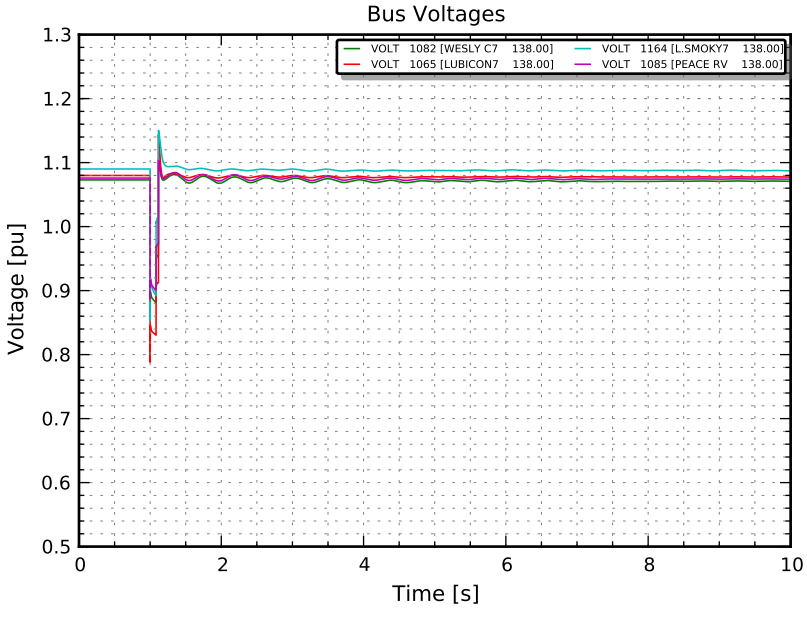


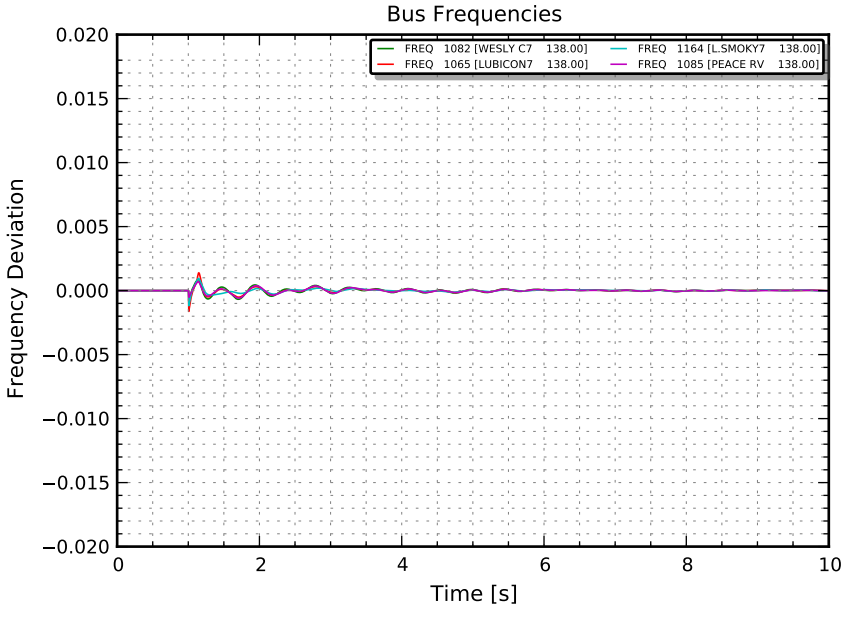


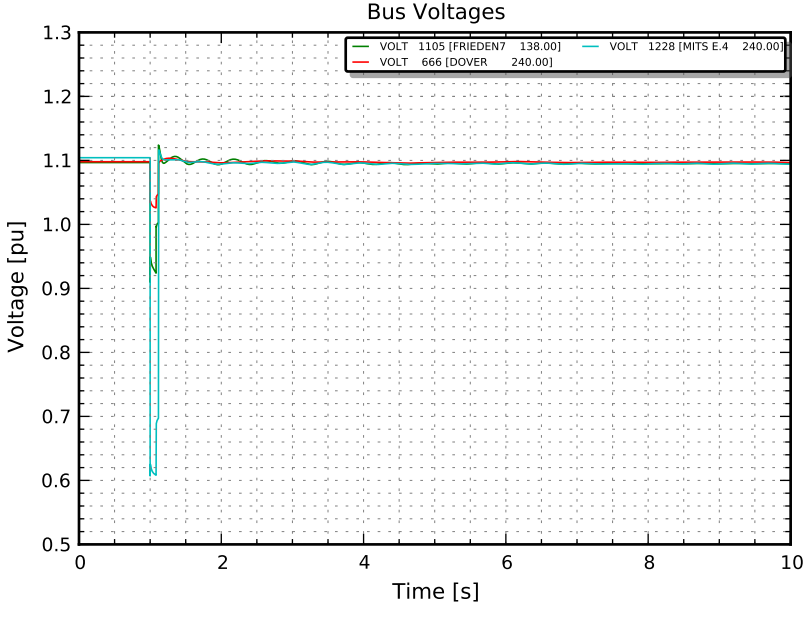
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 005 913L NORTHBARRHEAD to MITSUE_A.

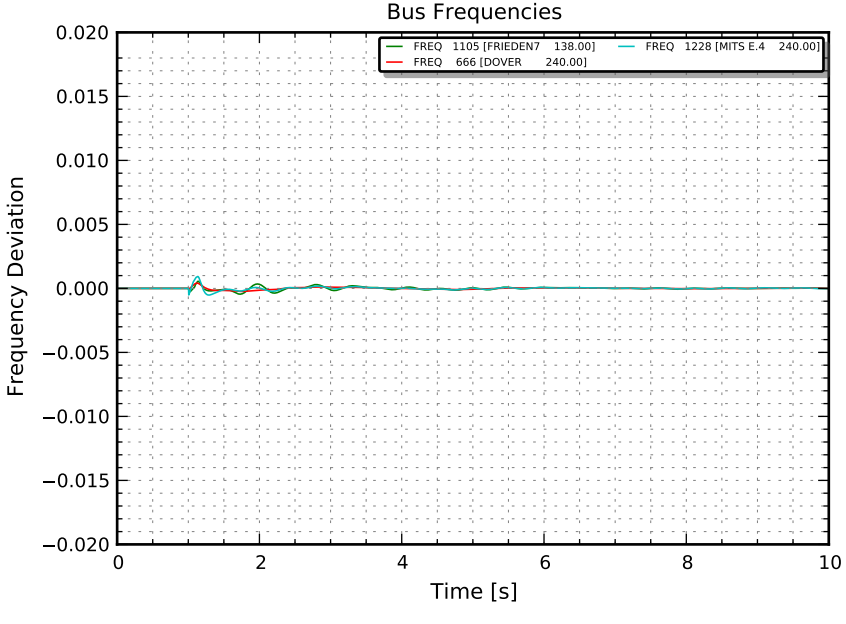
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 005 (A. 1)





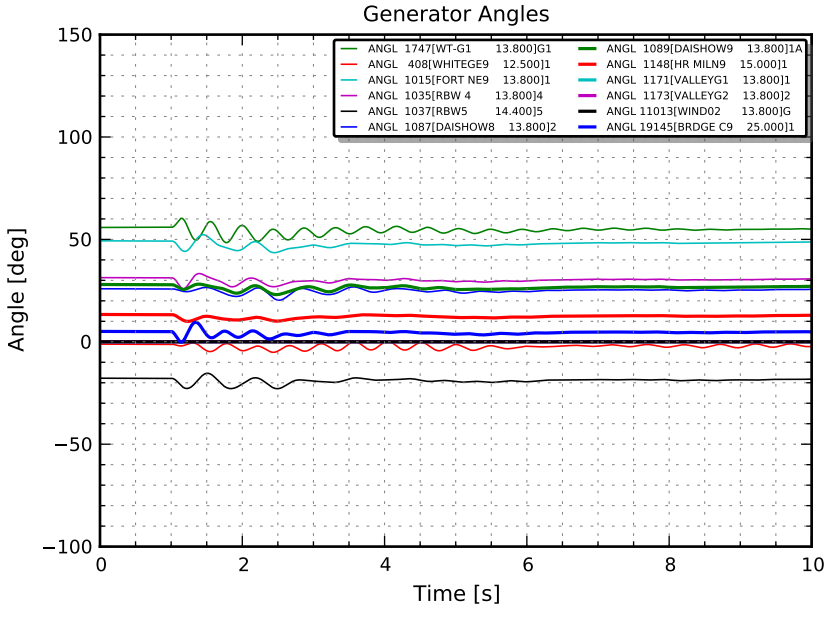


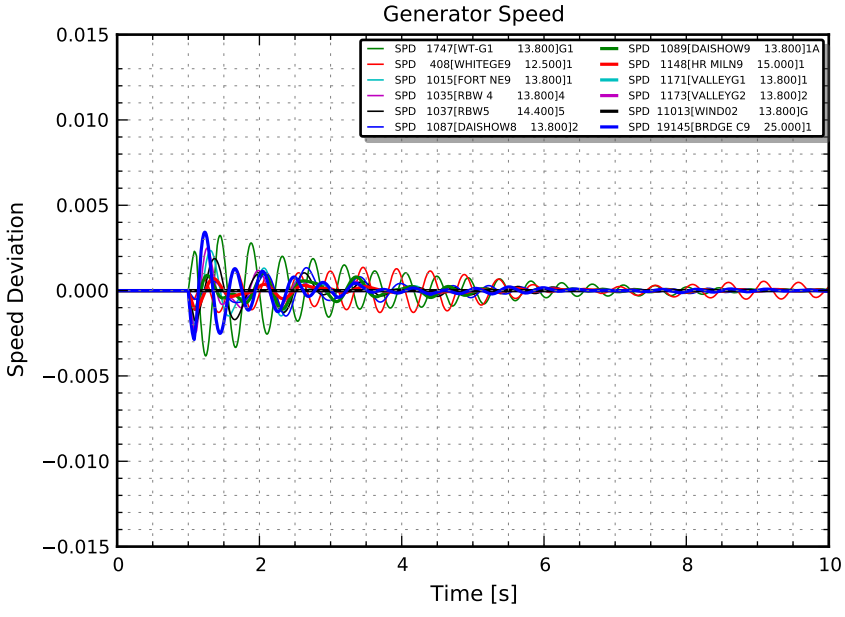


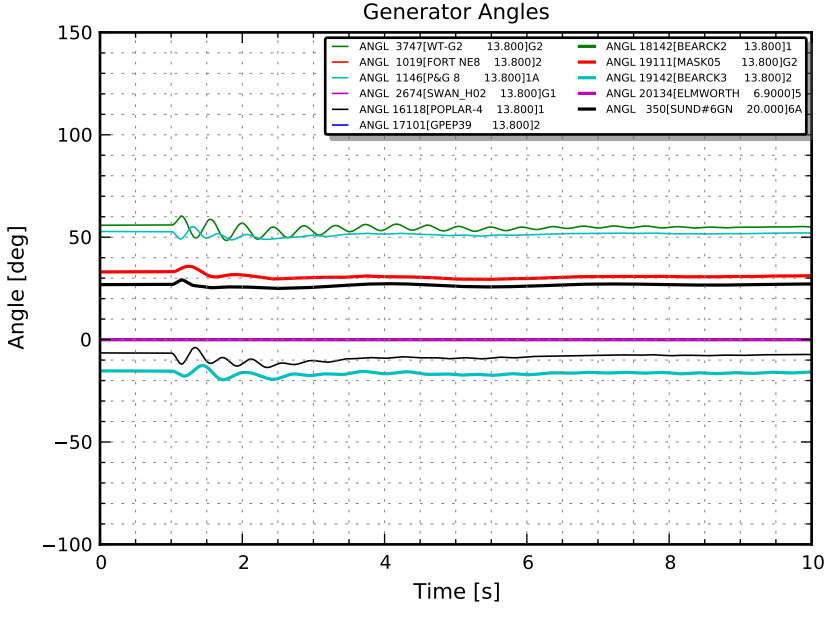
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 005 913L NORTHBARRHEAD to MITSUE_A.

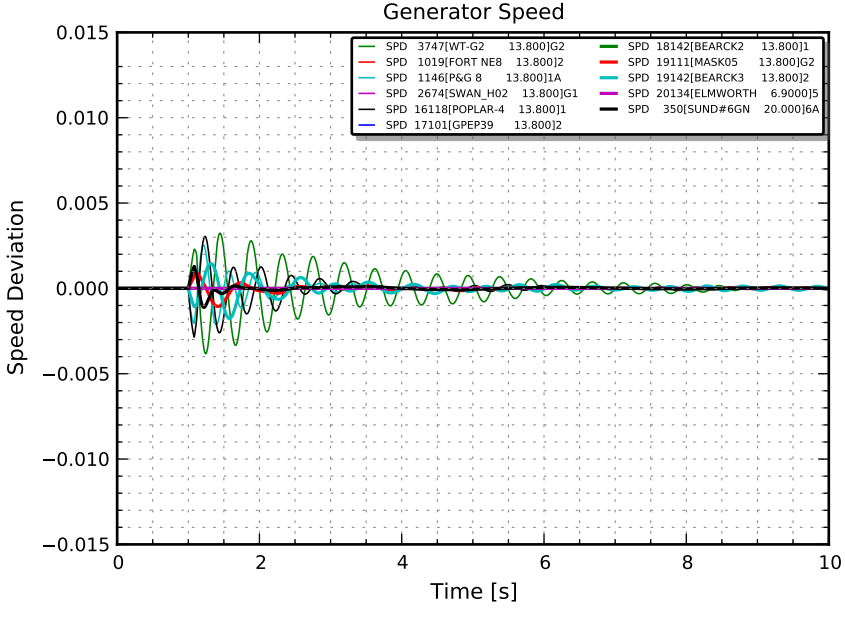
Study Area Generators

Appendix E2B
Figure: 005 (A. 2)





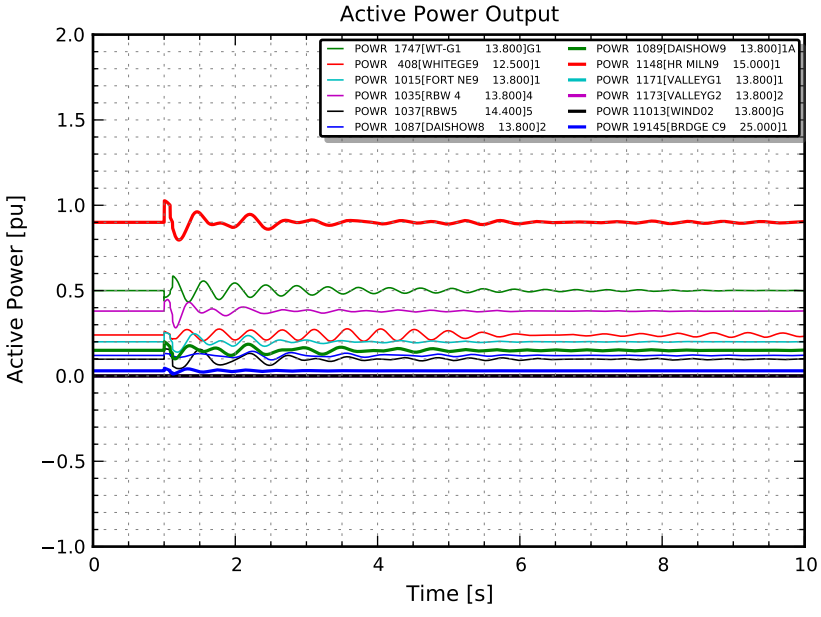


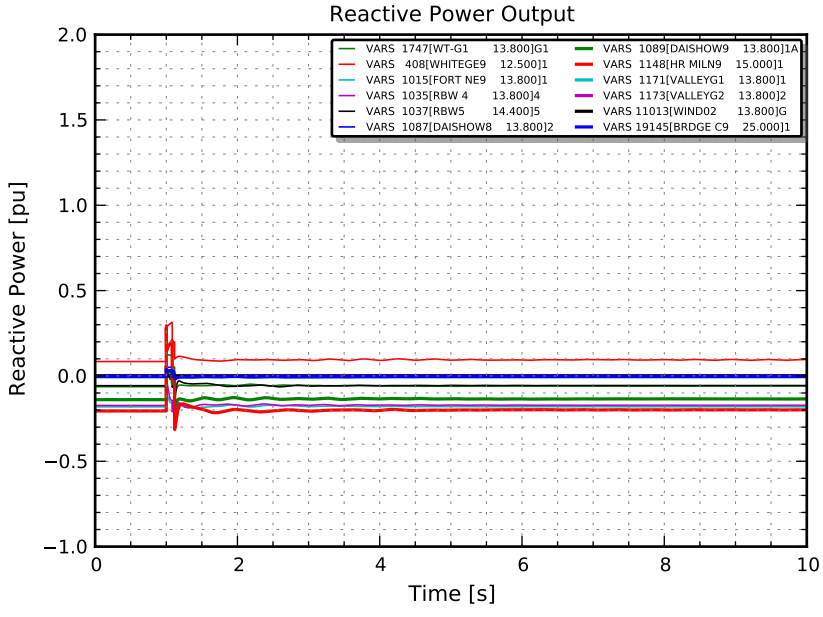


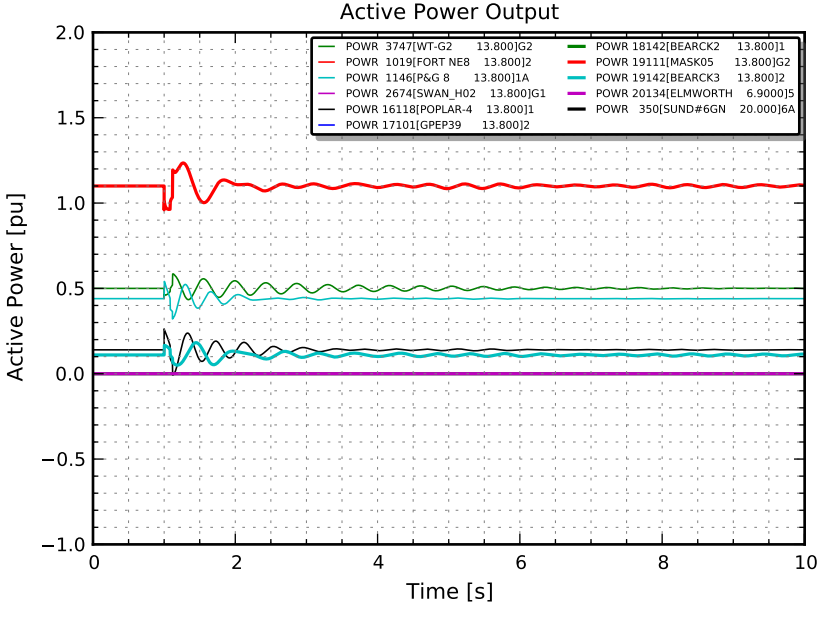
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 005 913L NORTHBARRHEAD to MITSUE_A.

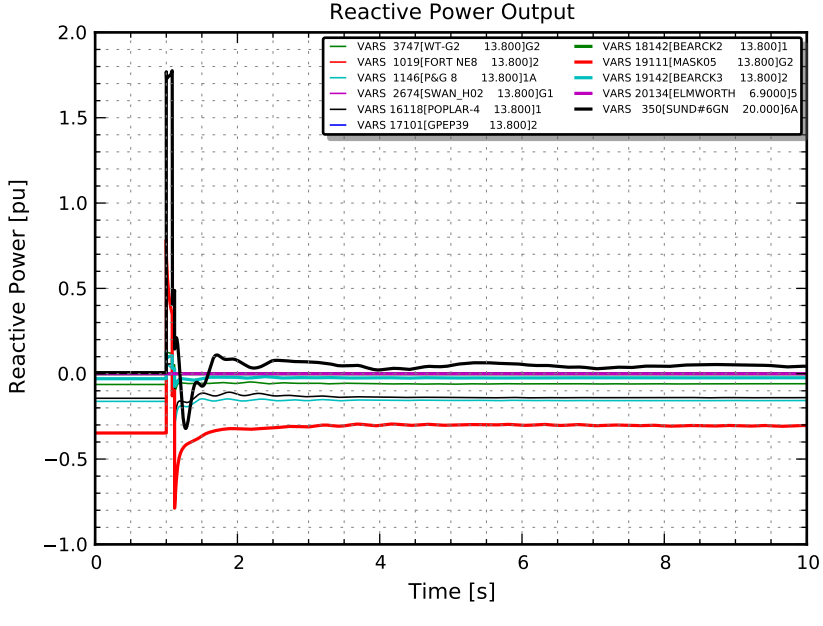
Study Area Generators

Appendix E2B
Figure: 005 (A. 3)





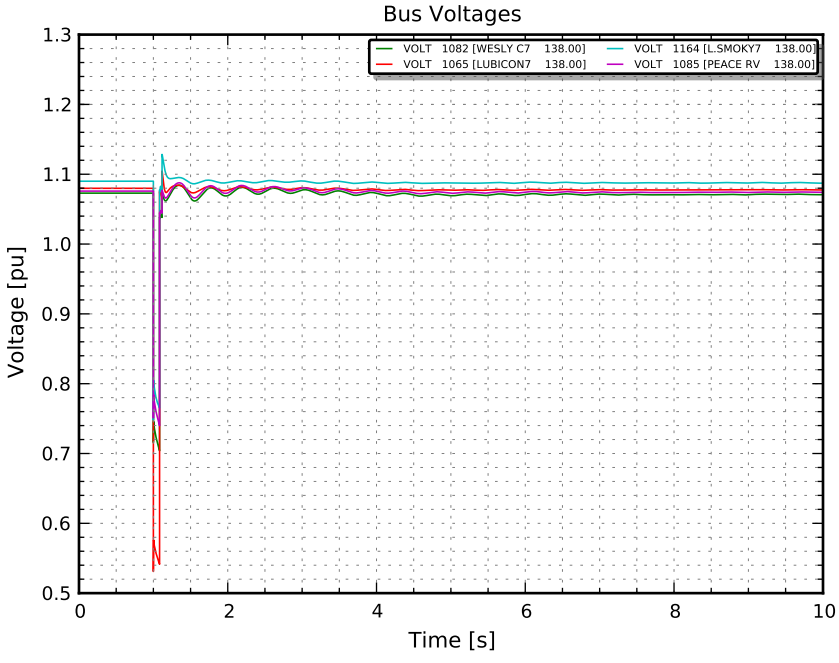


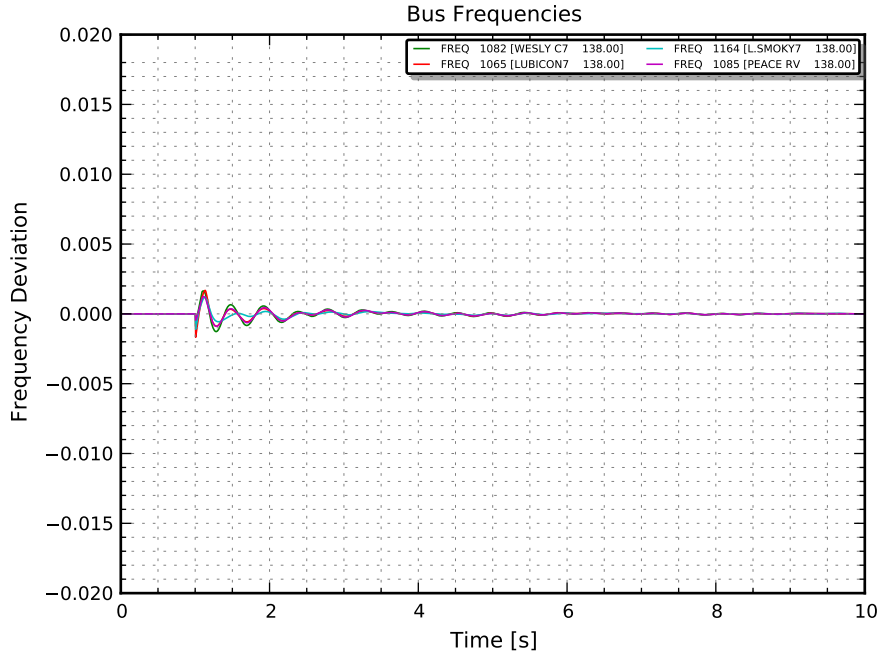


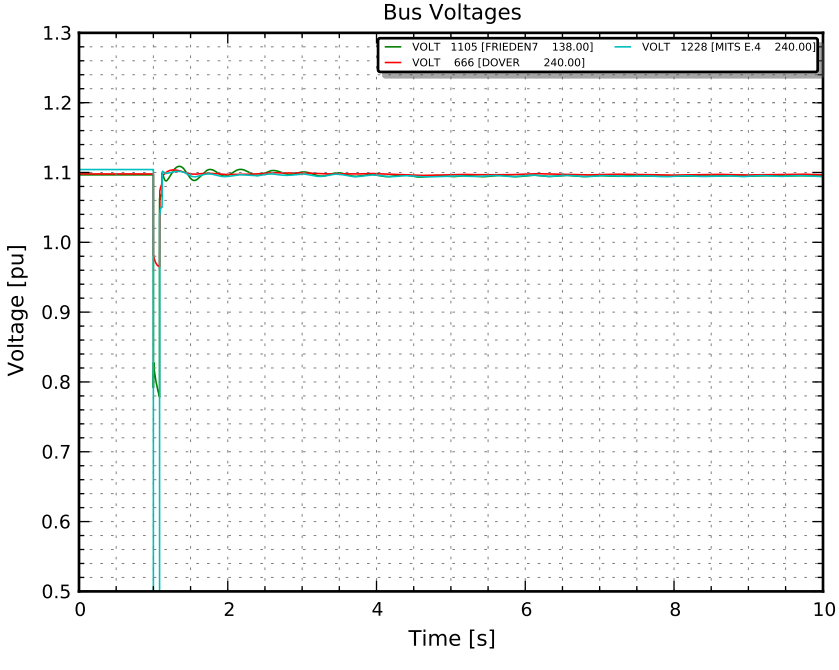
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 005 913L NORTHBARRHEAD to MITSUE_B.

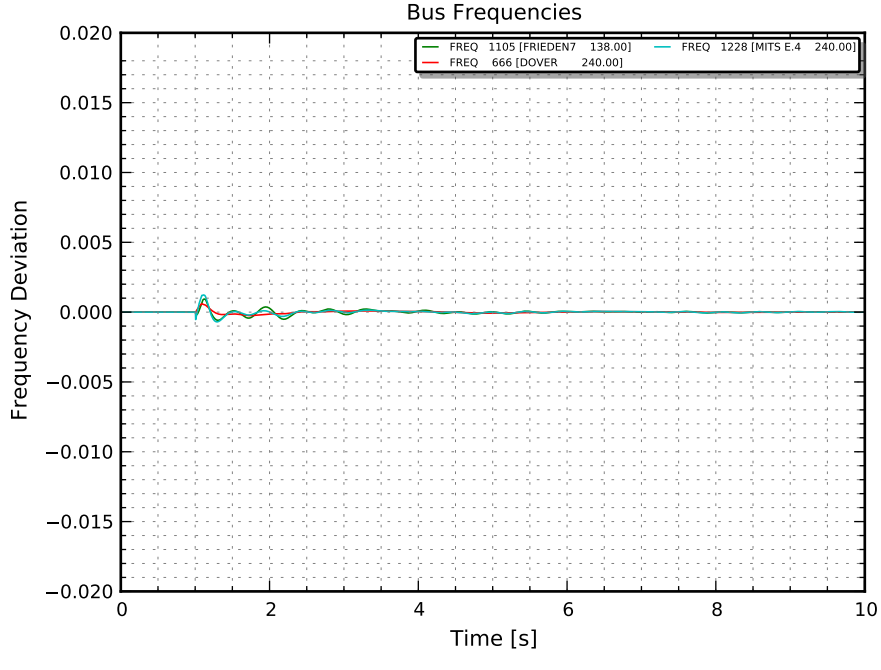
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 005 (B. 1)





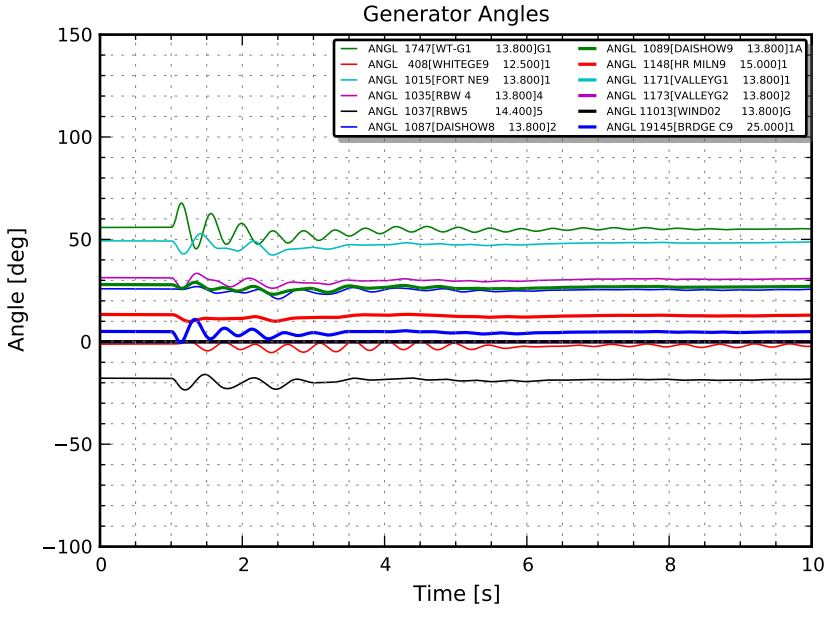


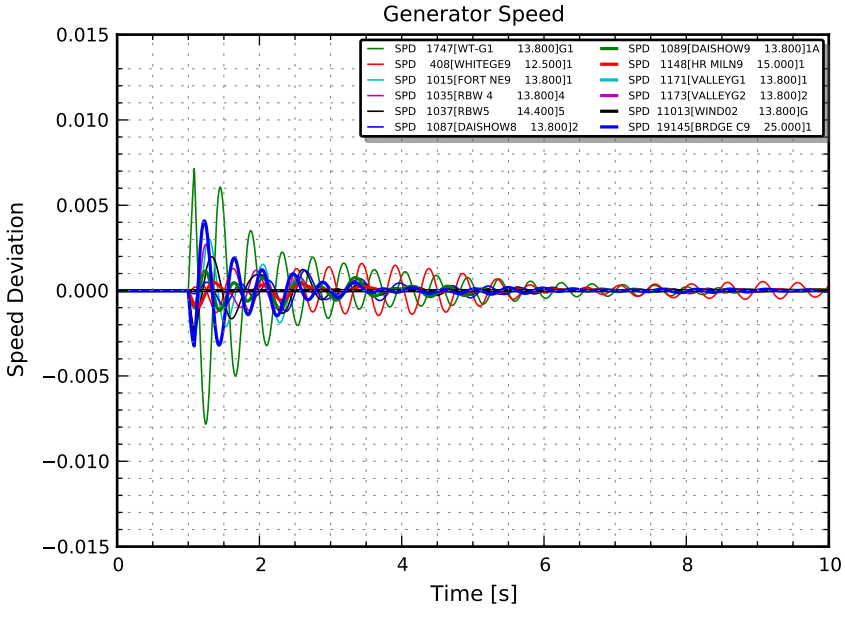


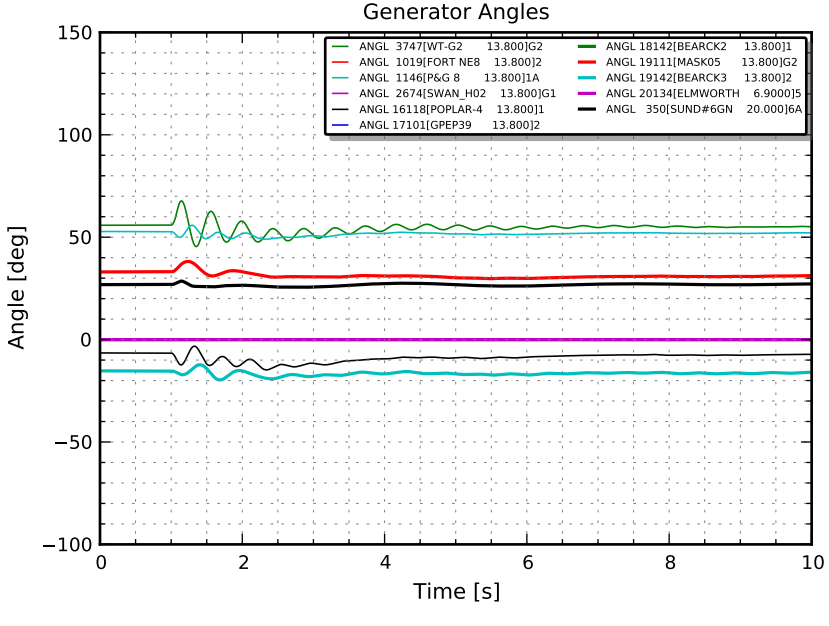
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 005 913L NORTHBARRHEAD to MITSUE_B.

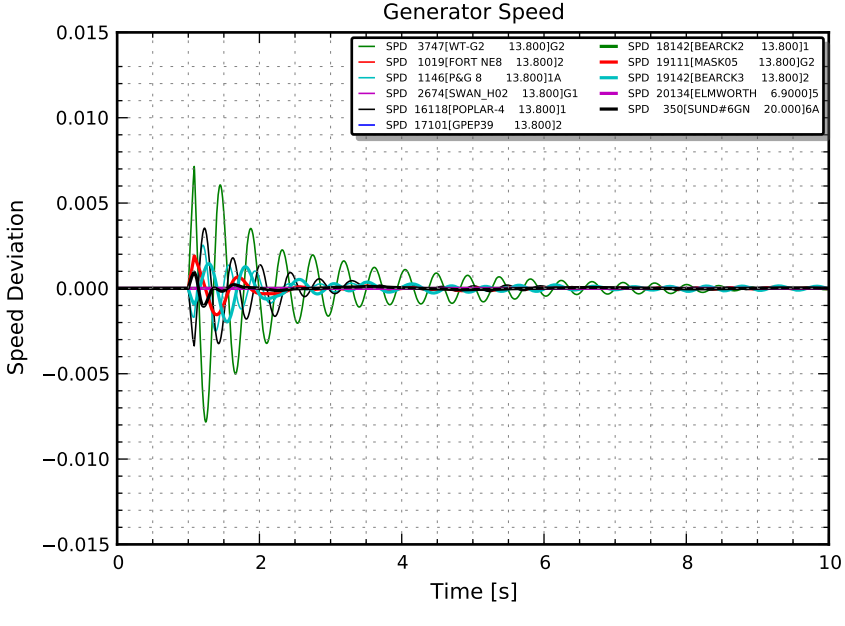
Study Area Generators

Appendix E2B
Figure: 005 (B. 2)





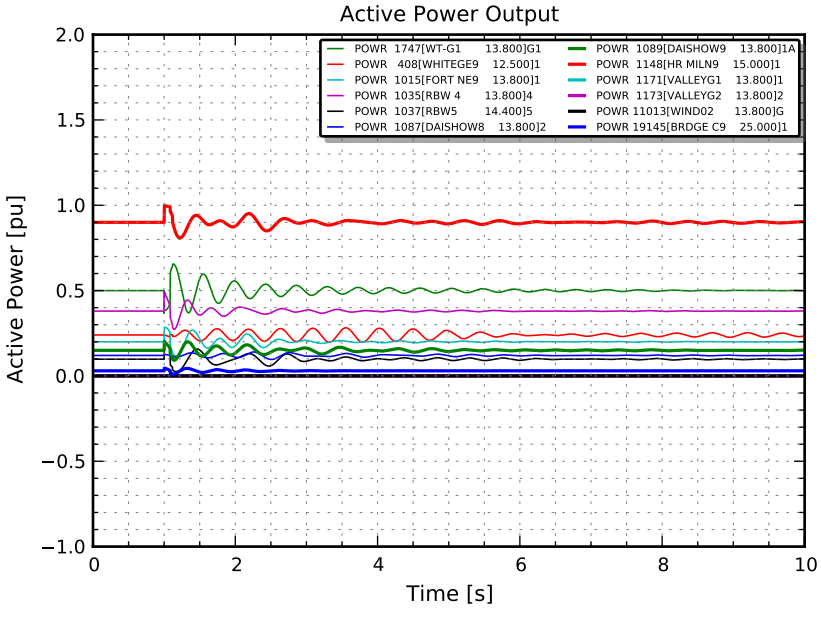


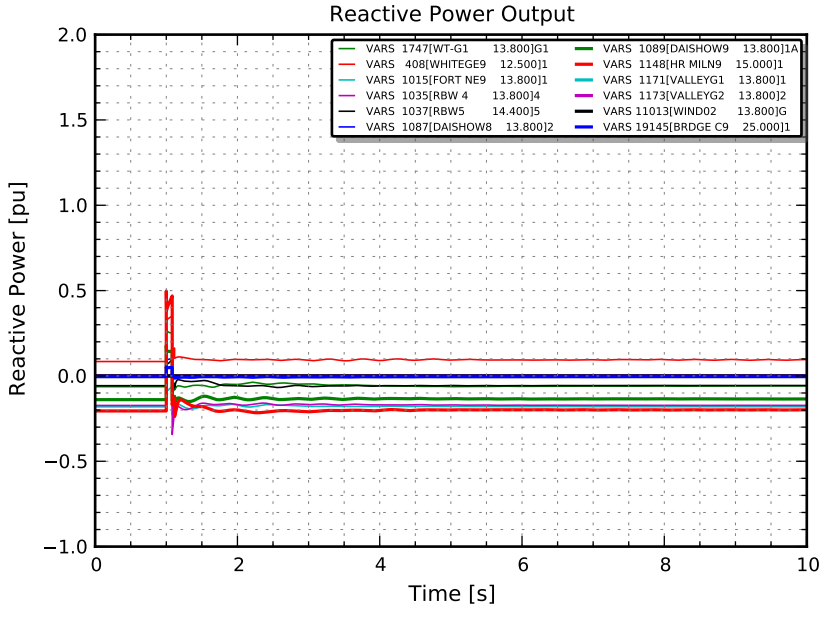


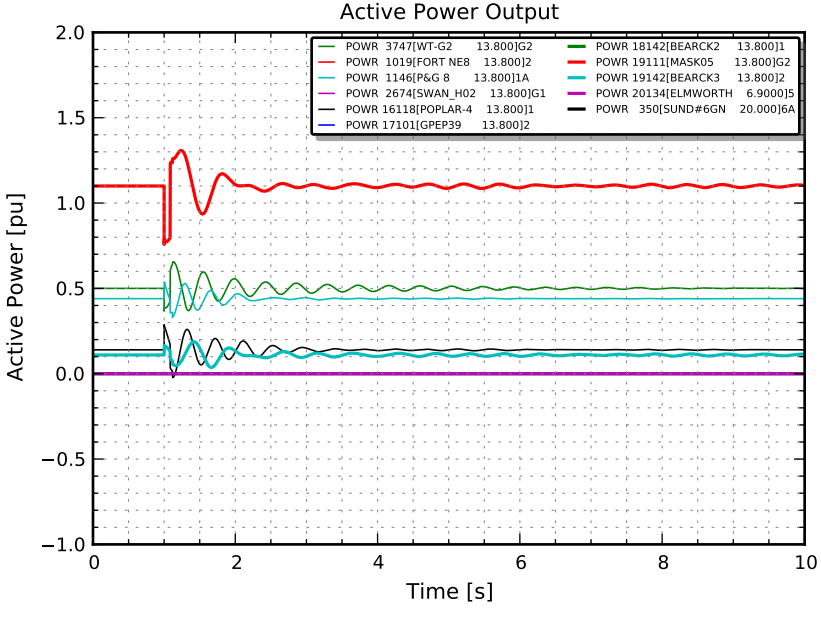
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 005 913L NORTHBARRHEAD to MITSUE_B.

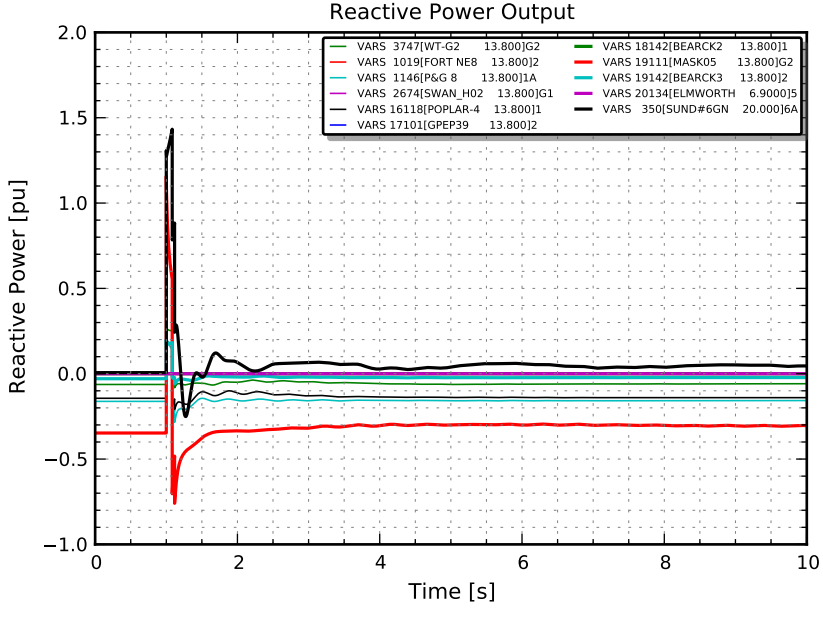
Study Area Generators

Appendix E2B
Figure: 005 (B. 3)





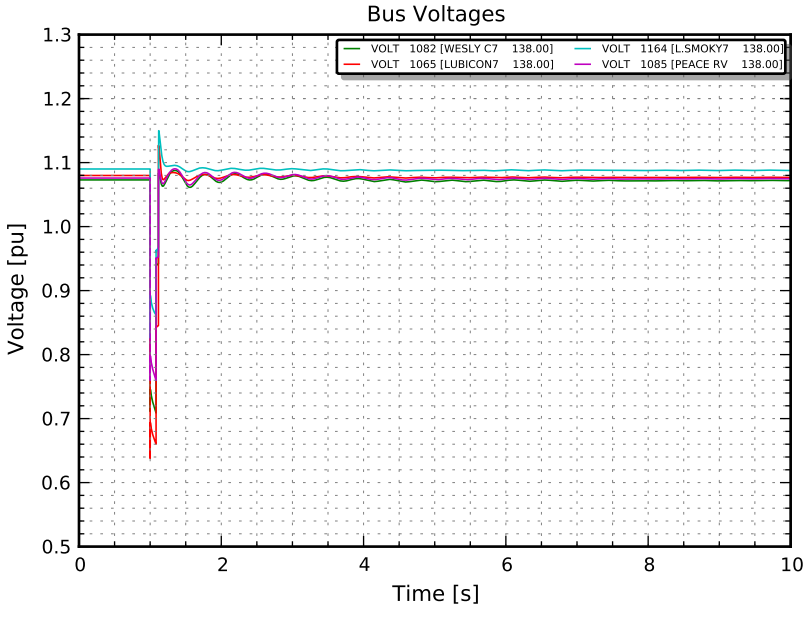


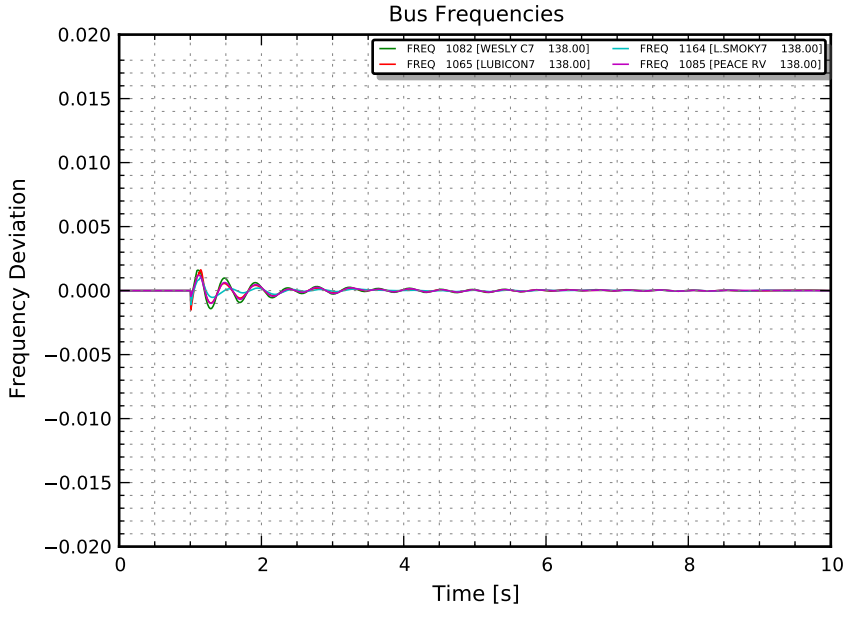


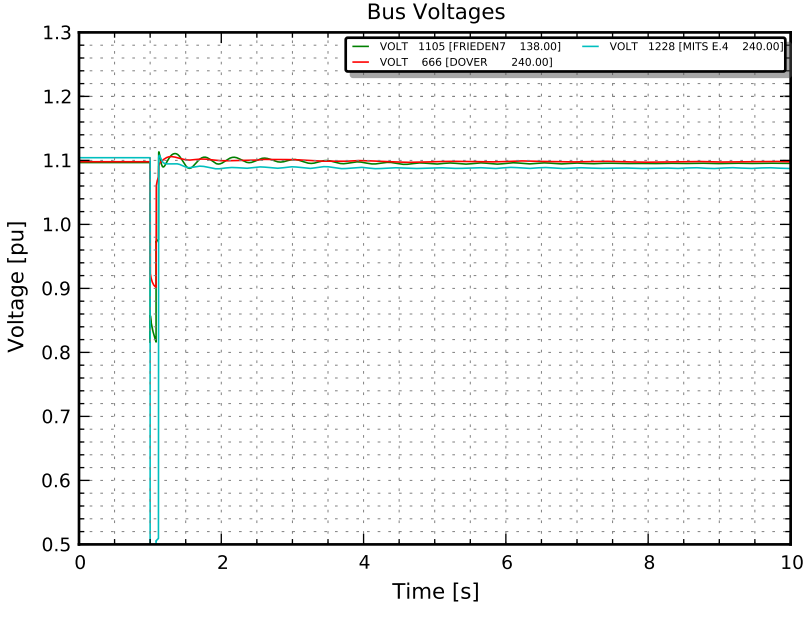
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 006 9L56 WABASCA to MITSUE_A.

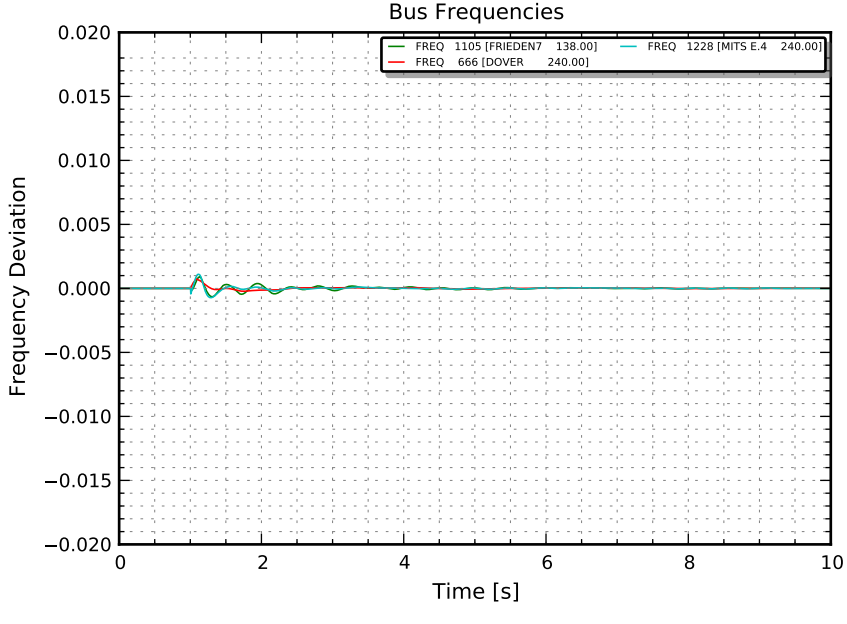
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 006 (A. 1)





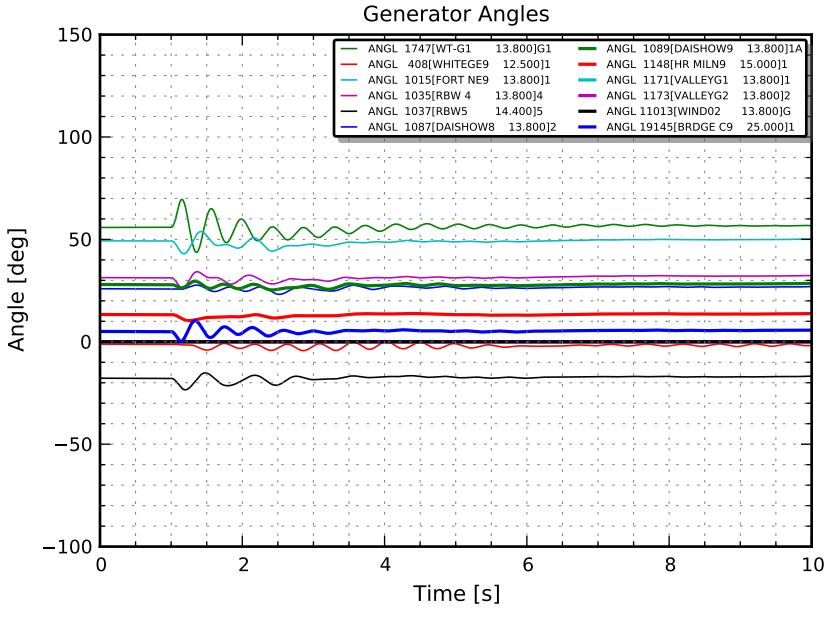


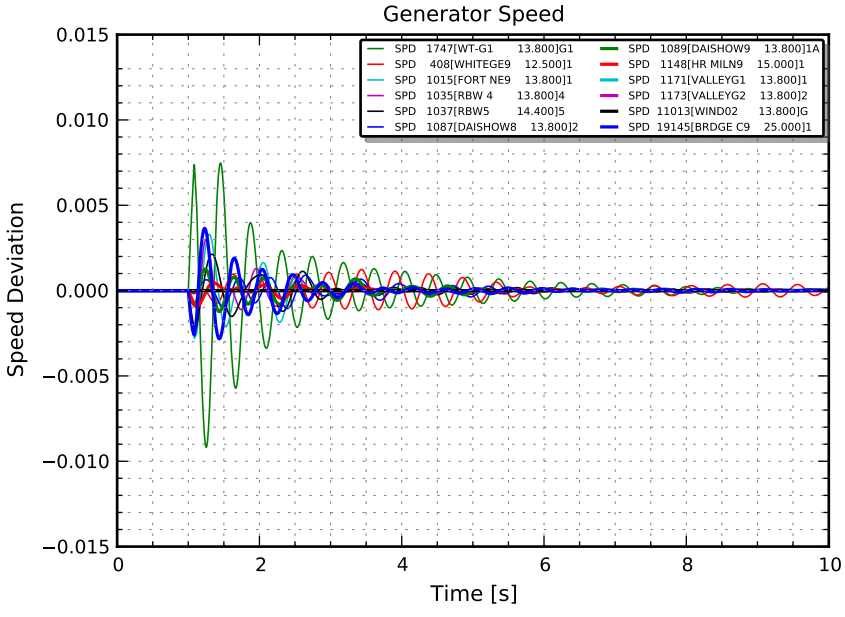


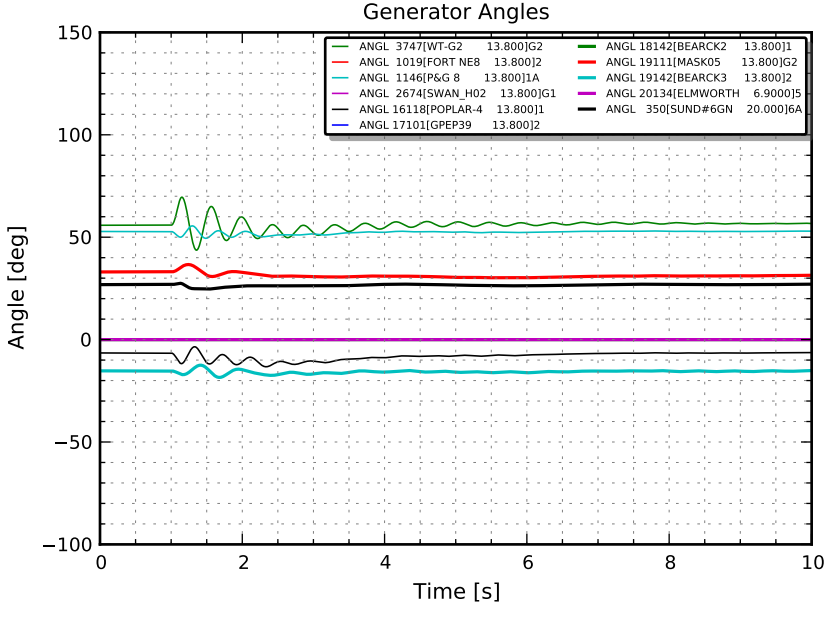
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 006 9L56 WABASCA to MITSUE_A.

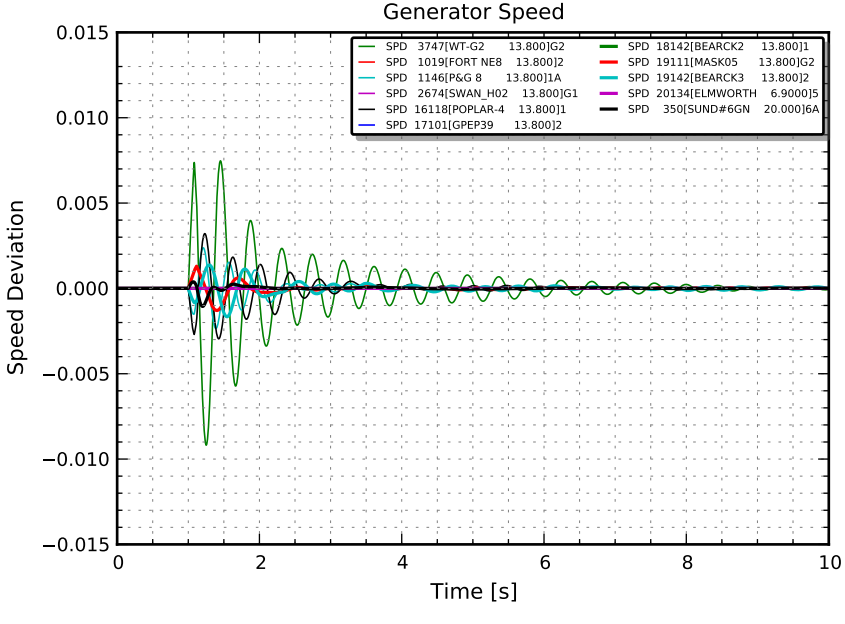
Study Area Generators

Appendix E2B
Figure: 006 (A. 2)





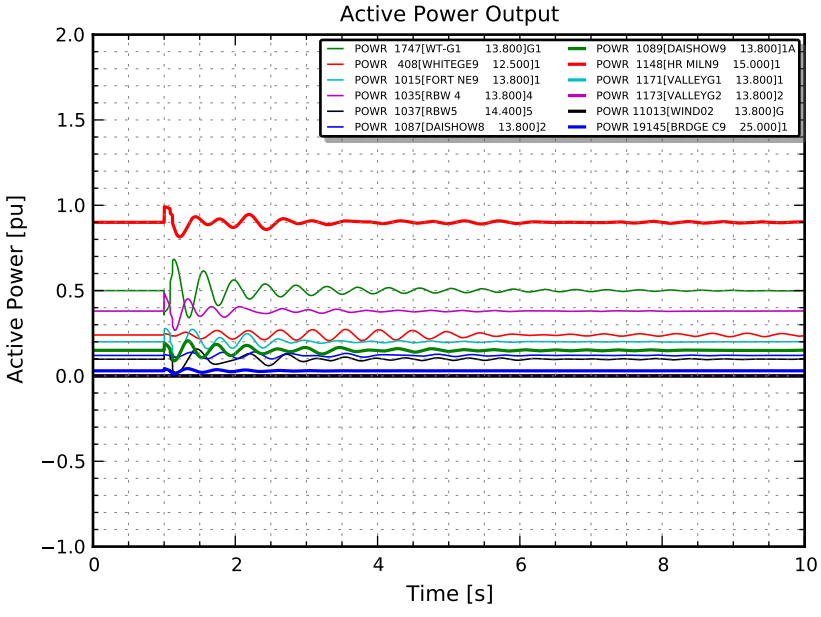


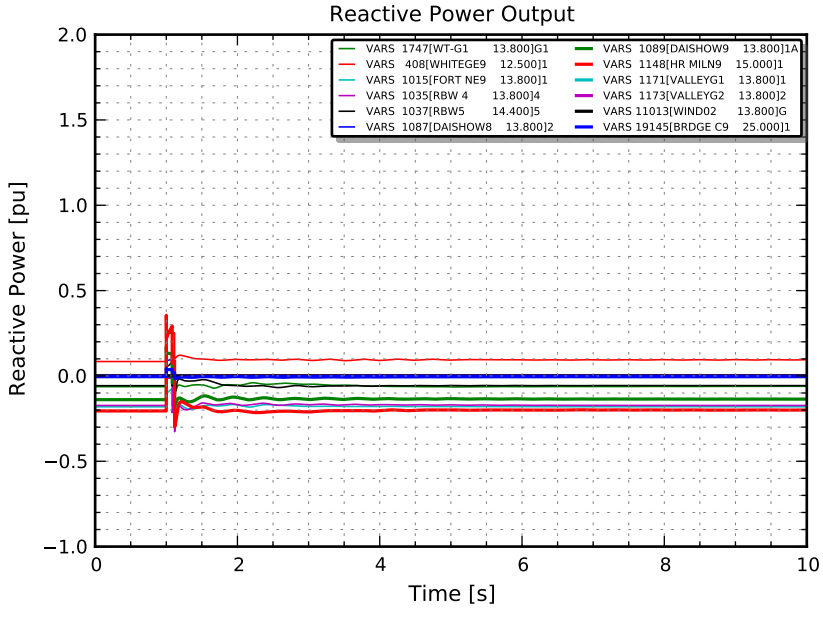


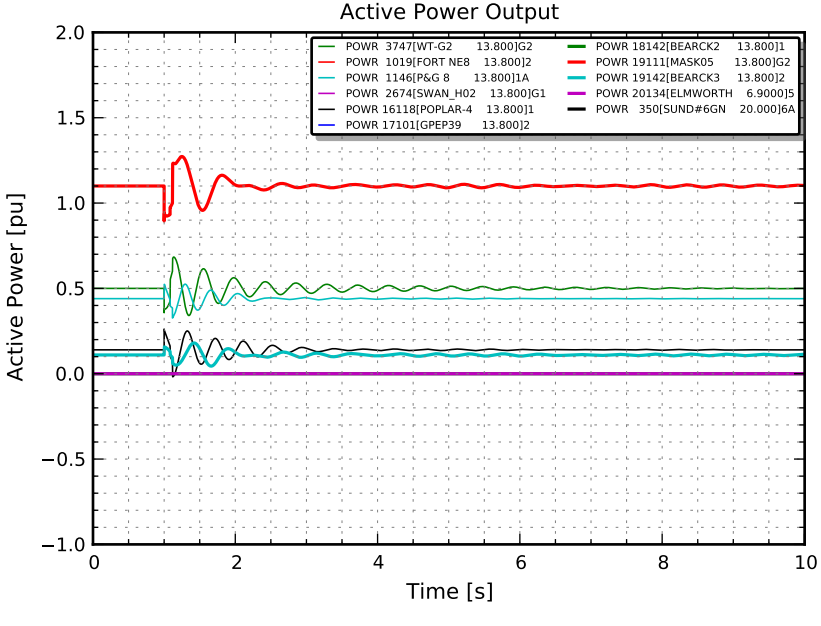
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 006 9L56 WABASCA to MITSUE_A.

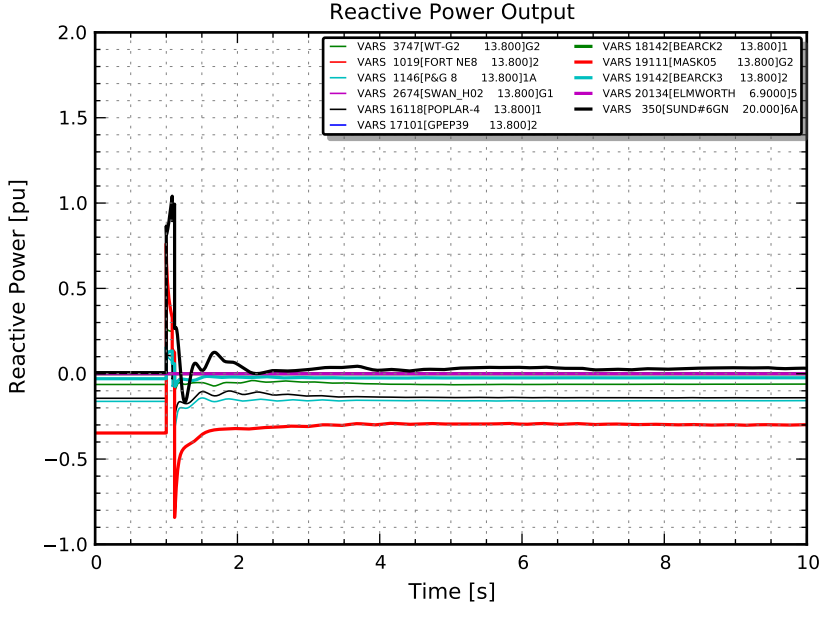
Study Area Generators

Appendix E2B
Figure: 006 (A. 3)





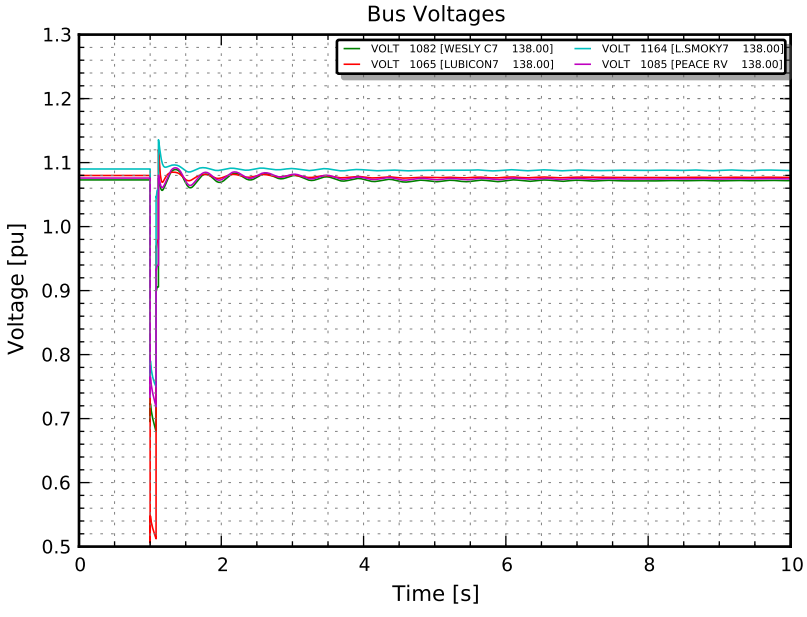


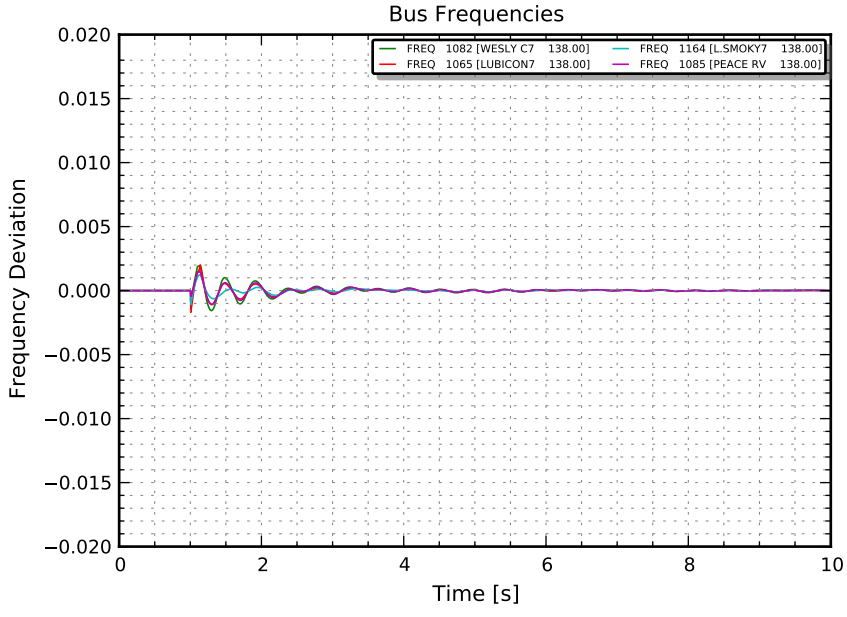


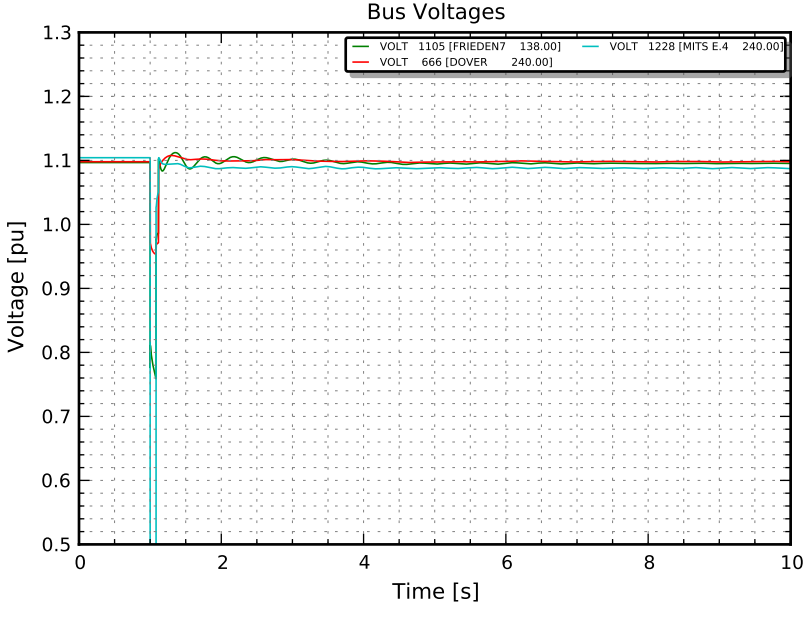
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 006 9L56 WABASCA to MITSUE_B.

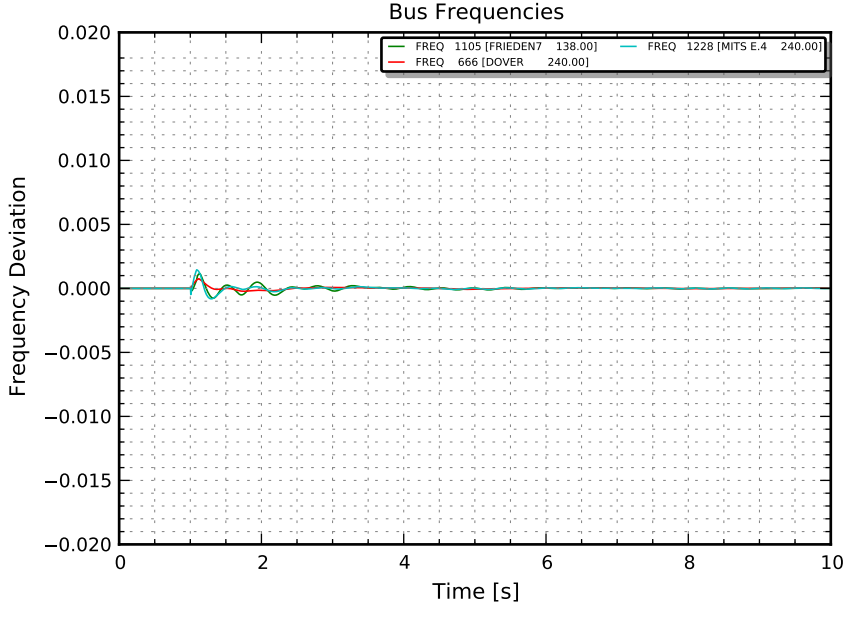
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 006 (B. 1)





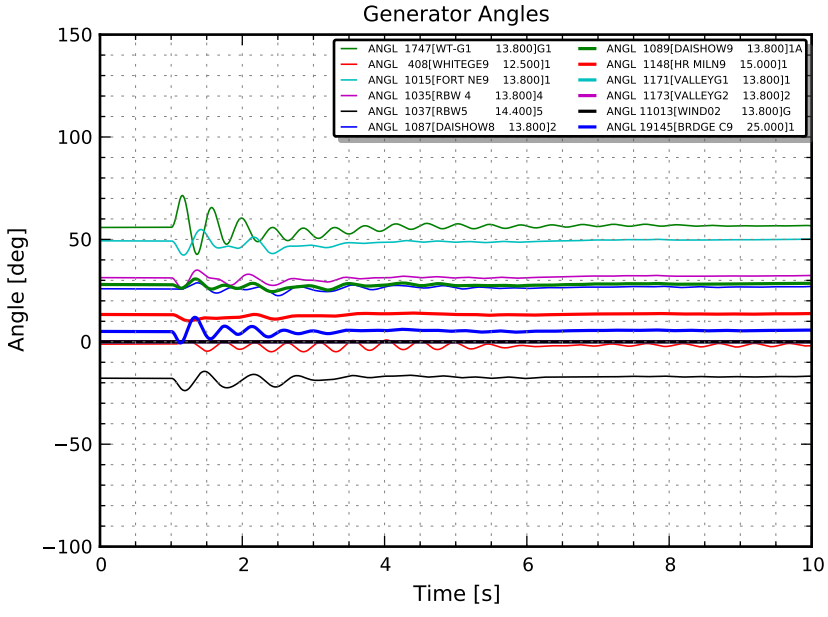


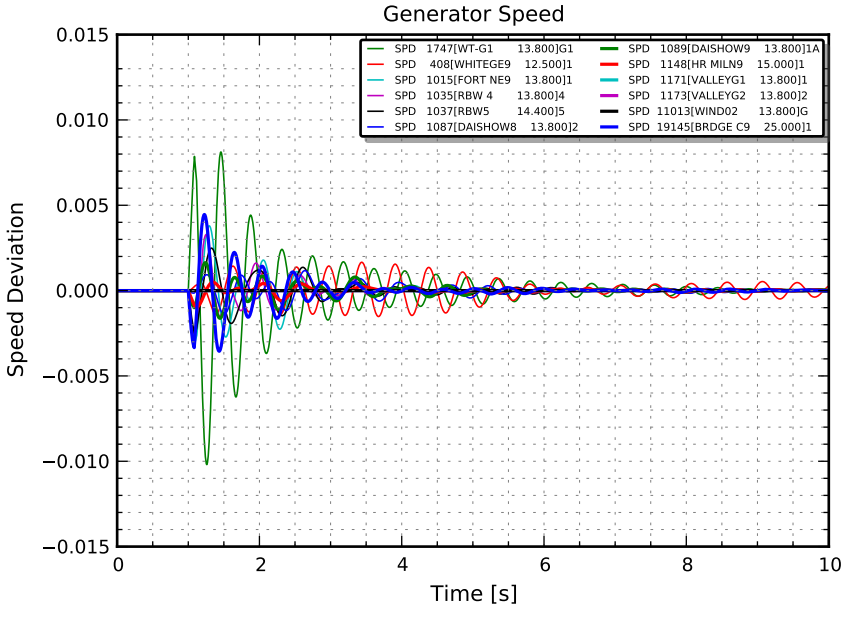


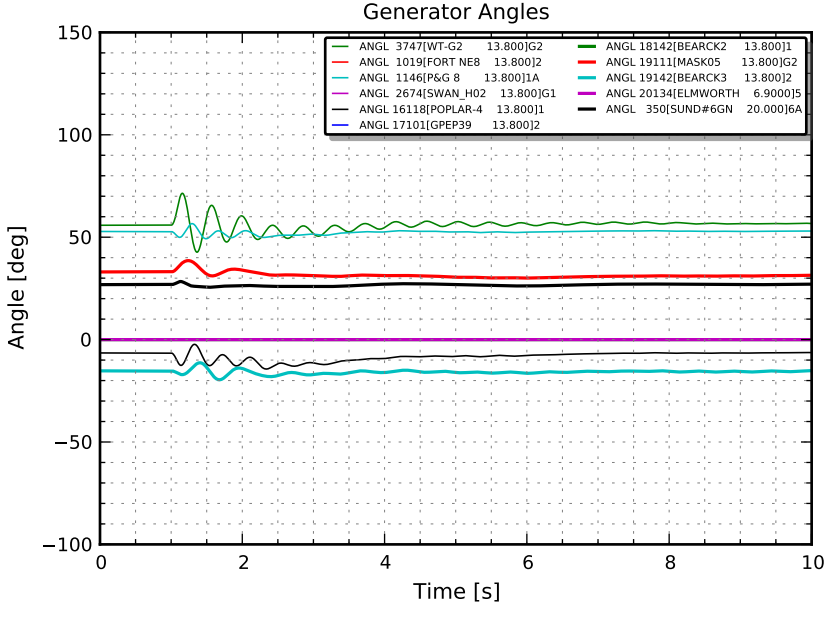
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 006 9L56 WABASCA to MITSUE_B.

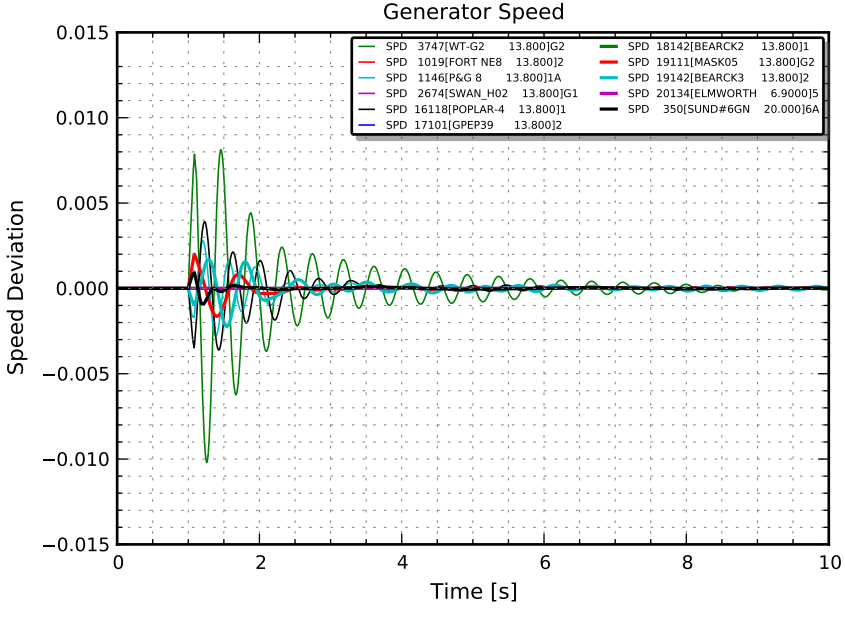
Study Area Generators

Appendix E2B
Figure: 006 (B. 2)





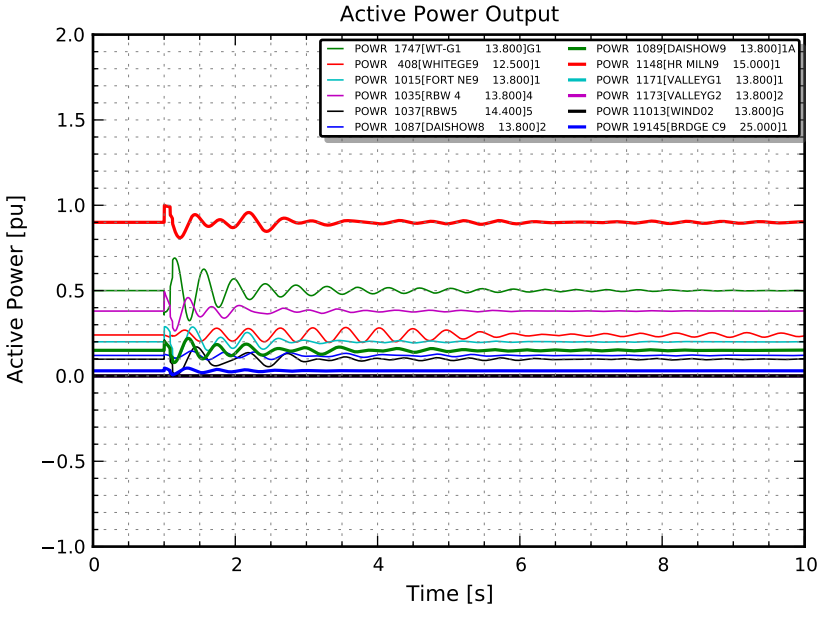


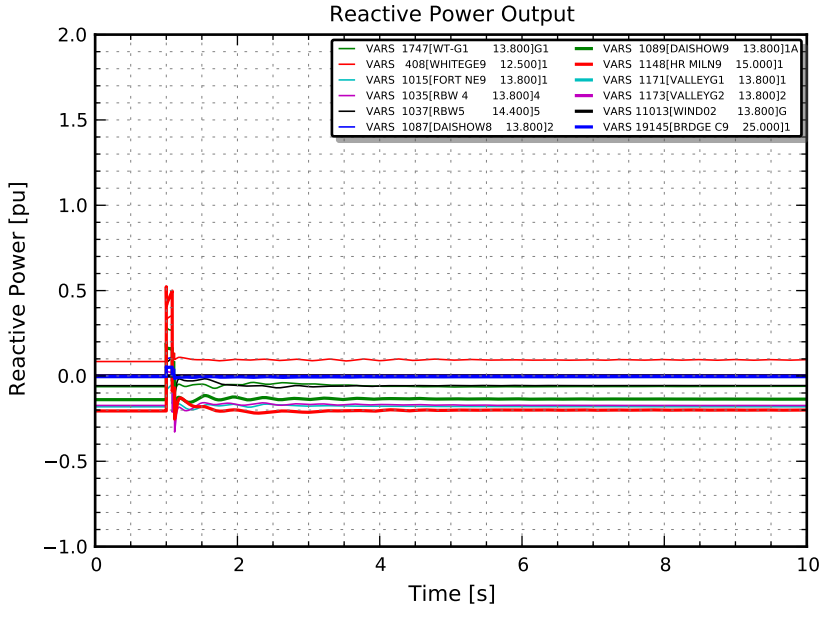


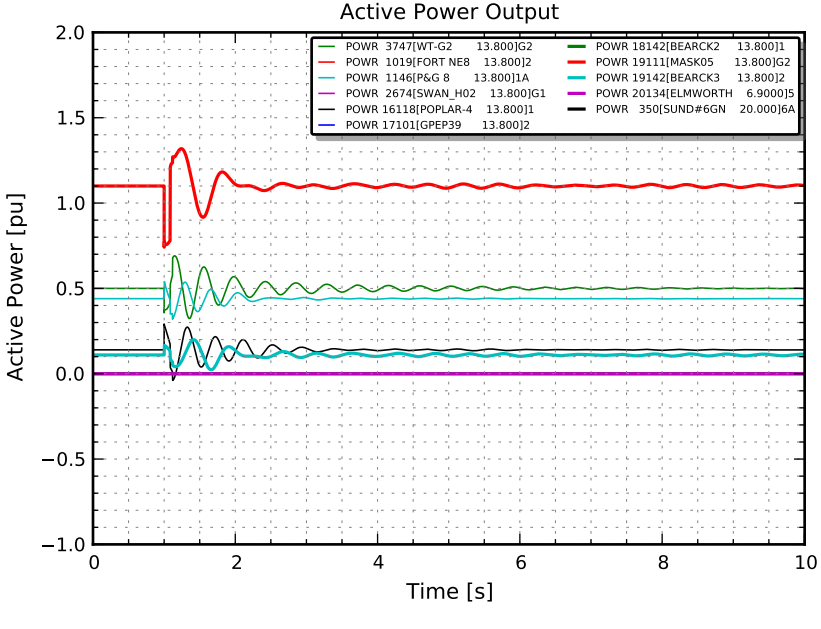
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 006 9L56 WABASCA to MITSUE_B.

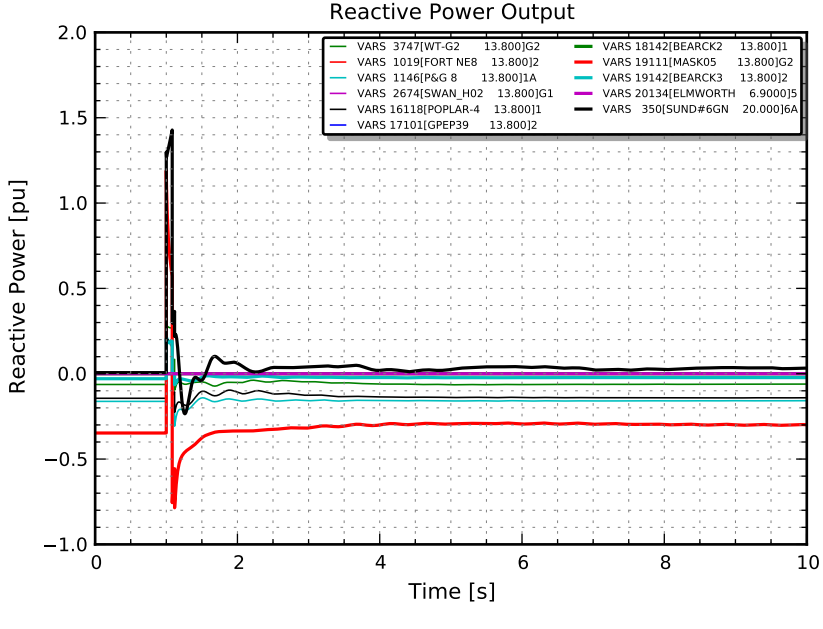
Study Area Generators

Appendix E2B
Figure: 006 (B. 3)





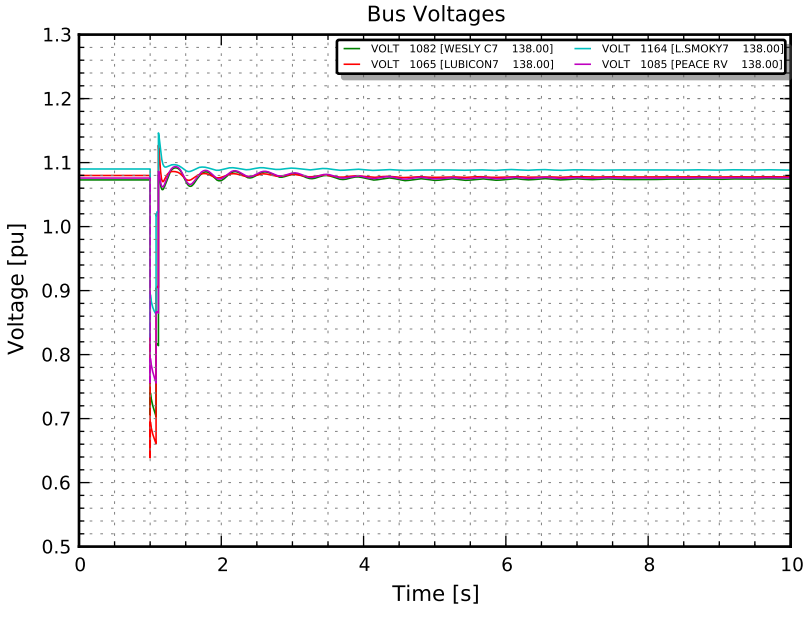


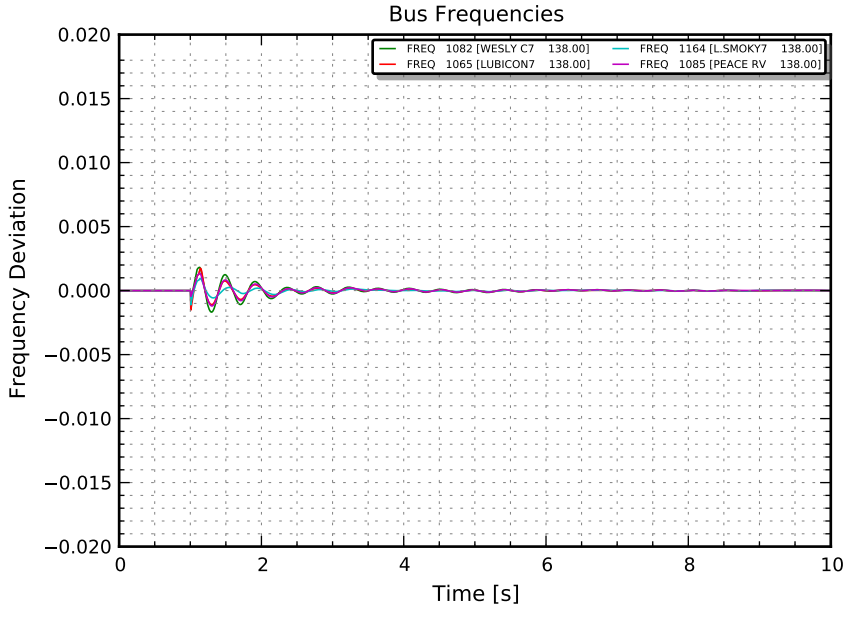


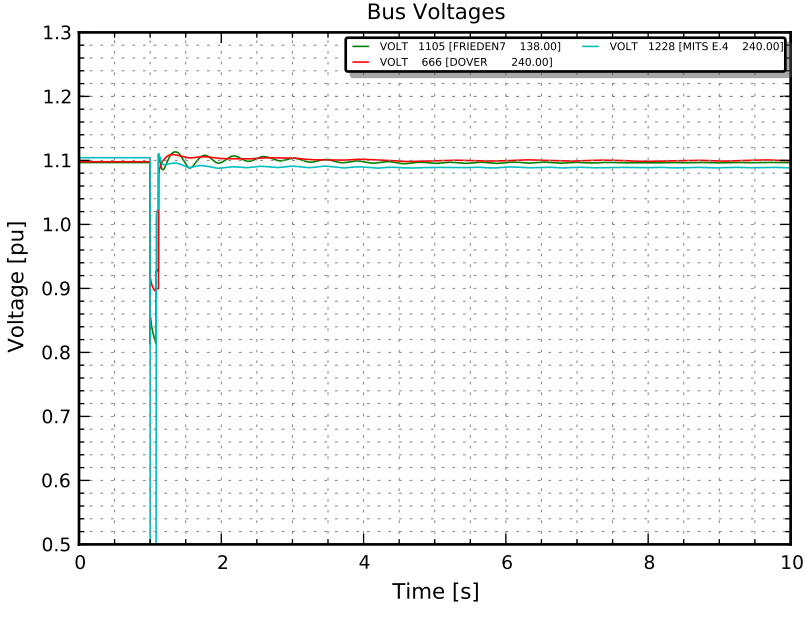
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 007 9L10 WABASCA to Brintnell_A.

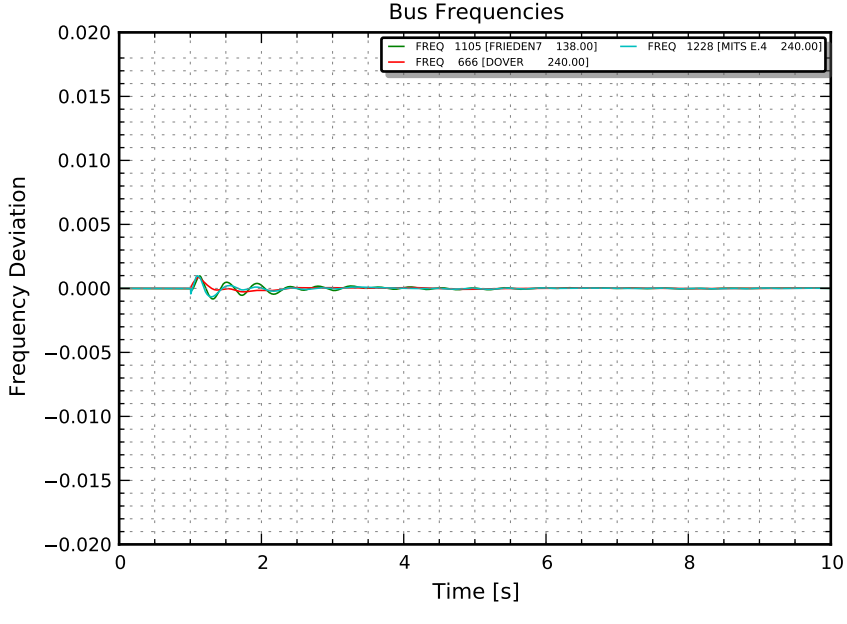
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 007 (A. 1)





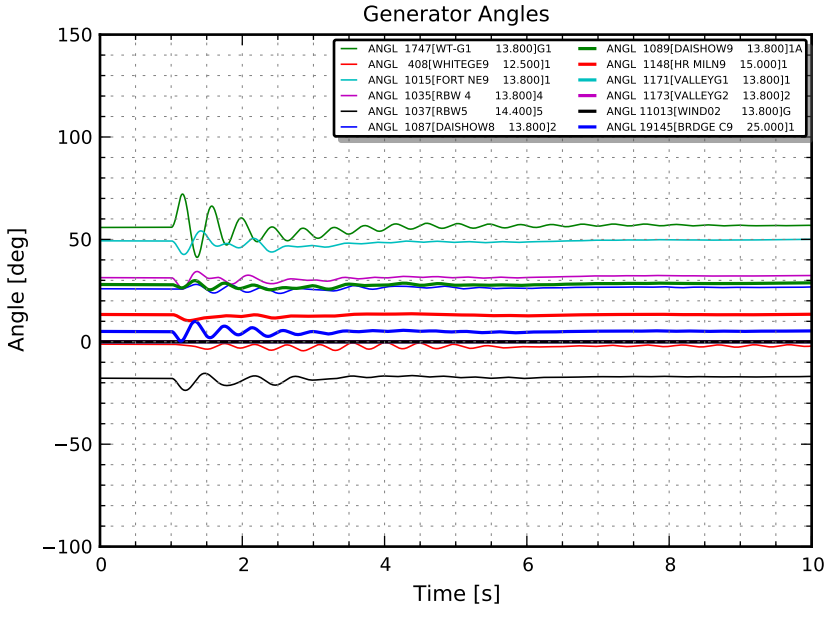


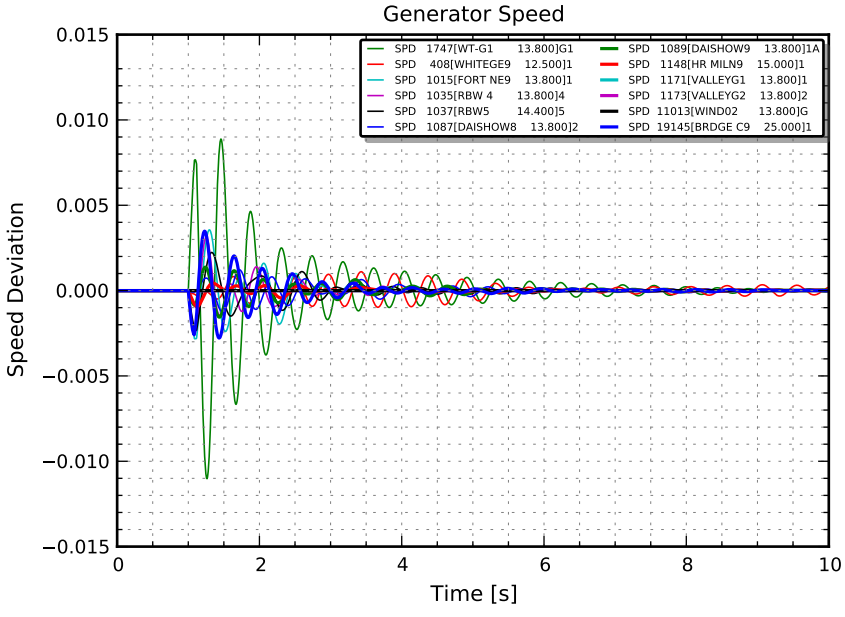


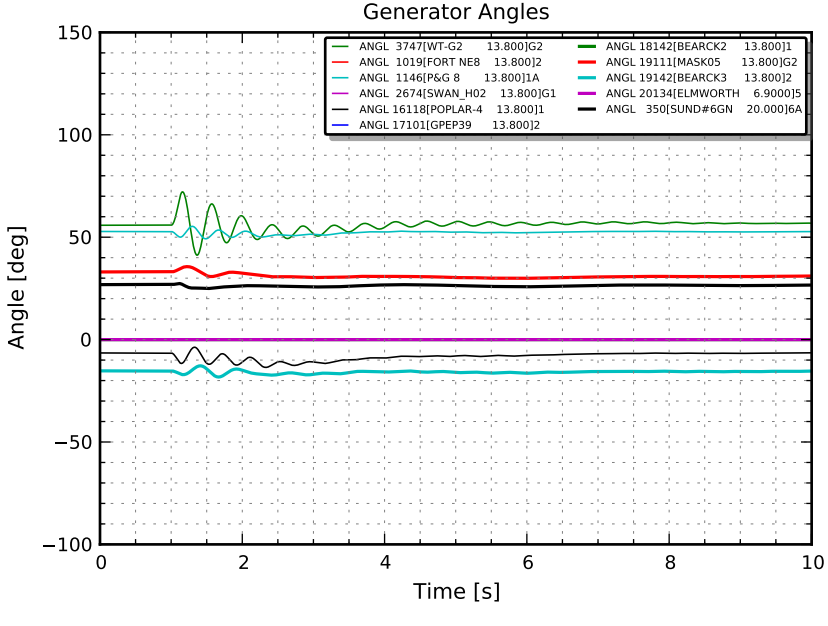
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 007 9L10 WABASCA to Brintnell_A.

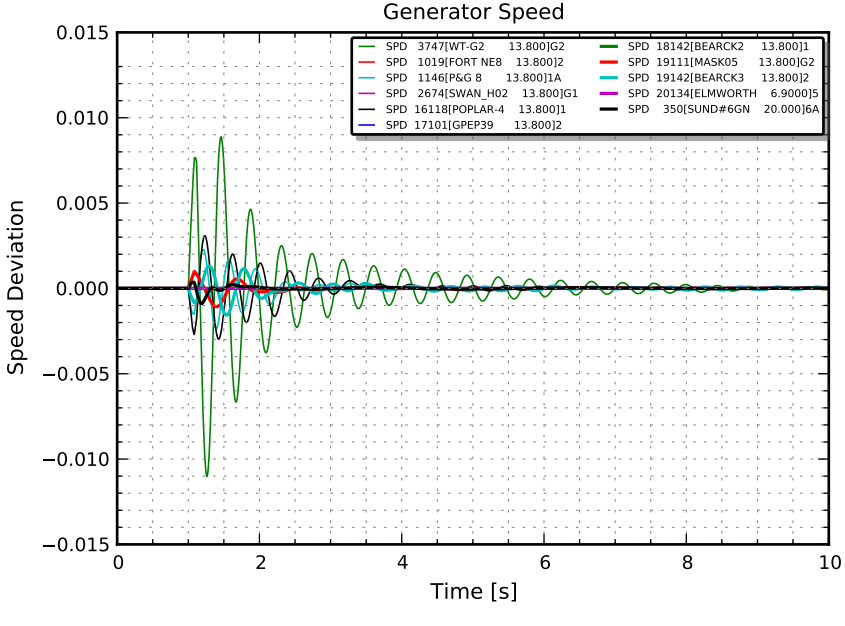
Study Area Generators

Appendix E2B
Figure: 007 (A. 2)





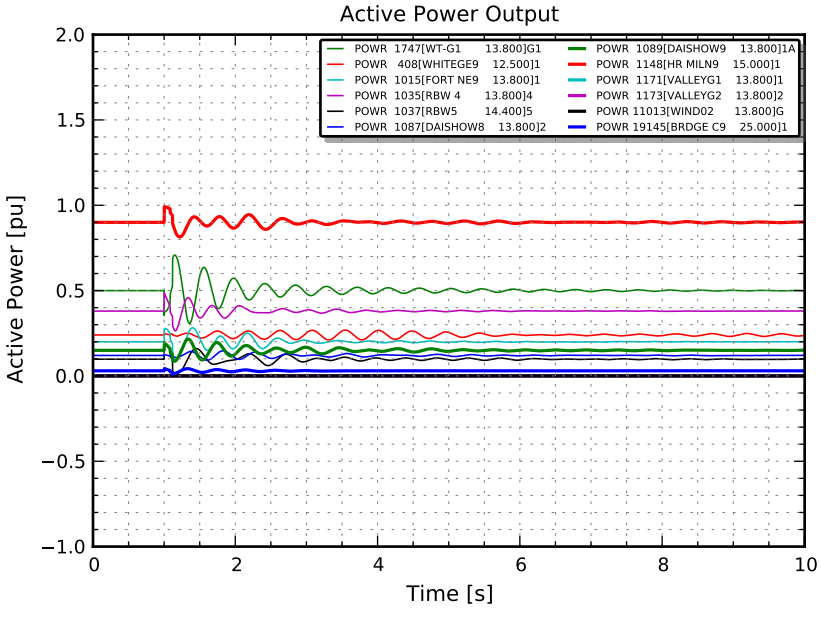


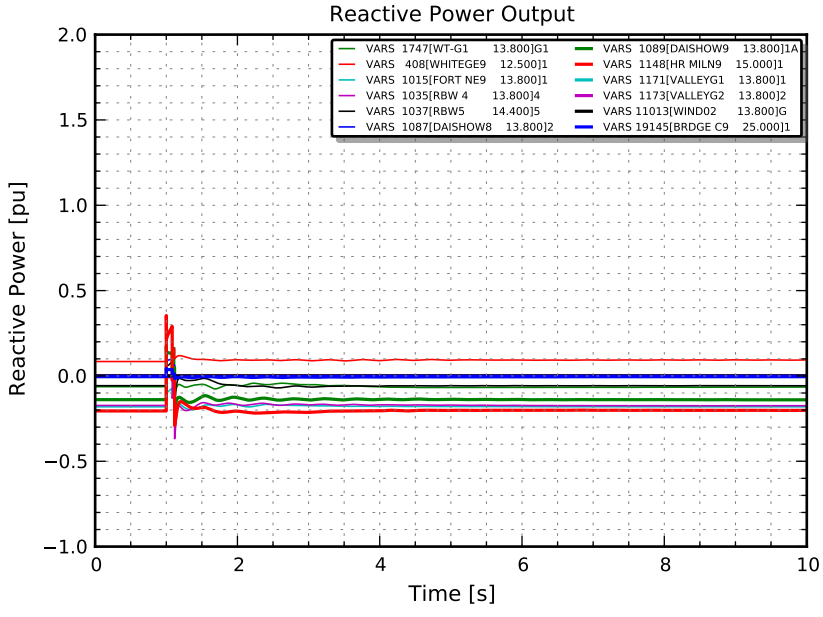


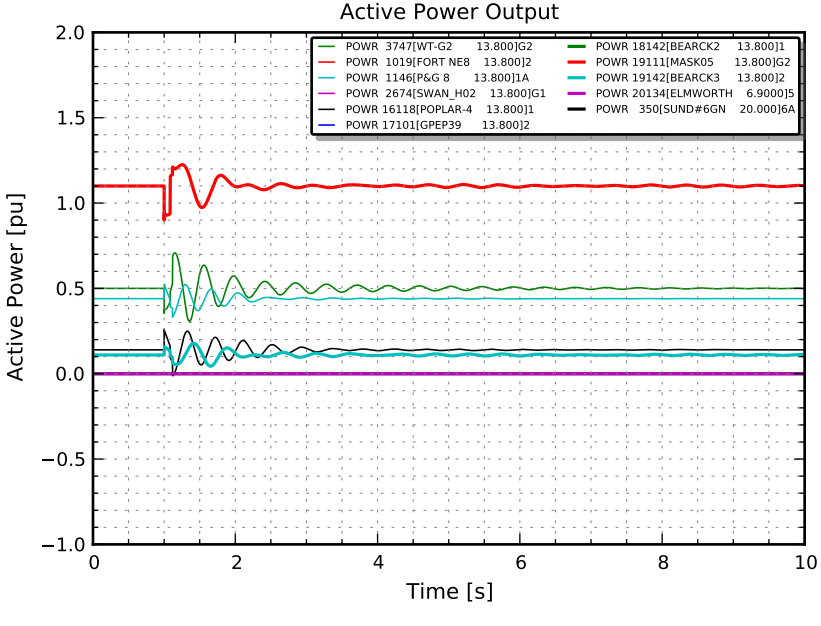
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 007 9L10 WABASCA to Brintnell_A.

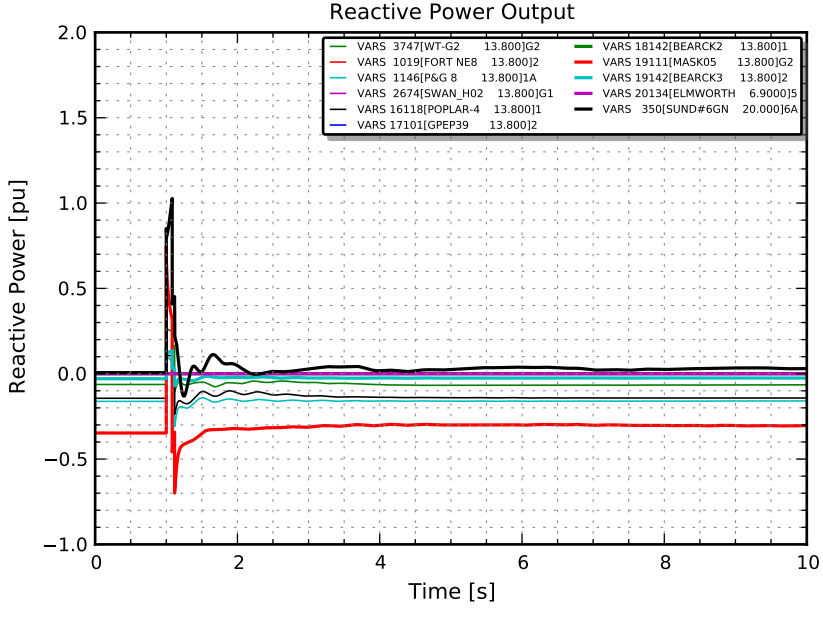
Study Area Generators

Appendix E2B
Figure: 007 (A. 3)





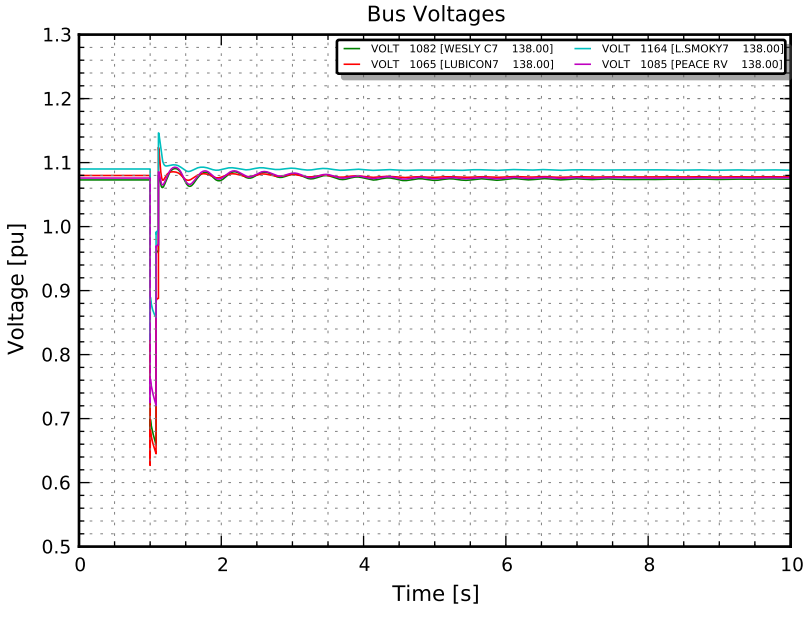


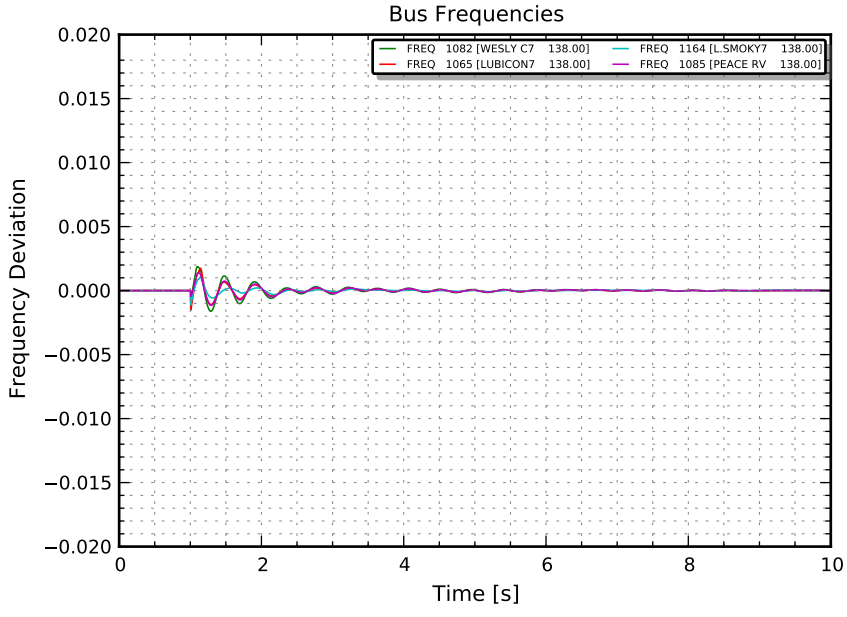


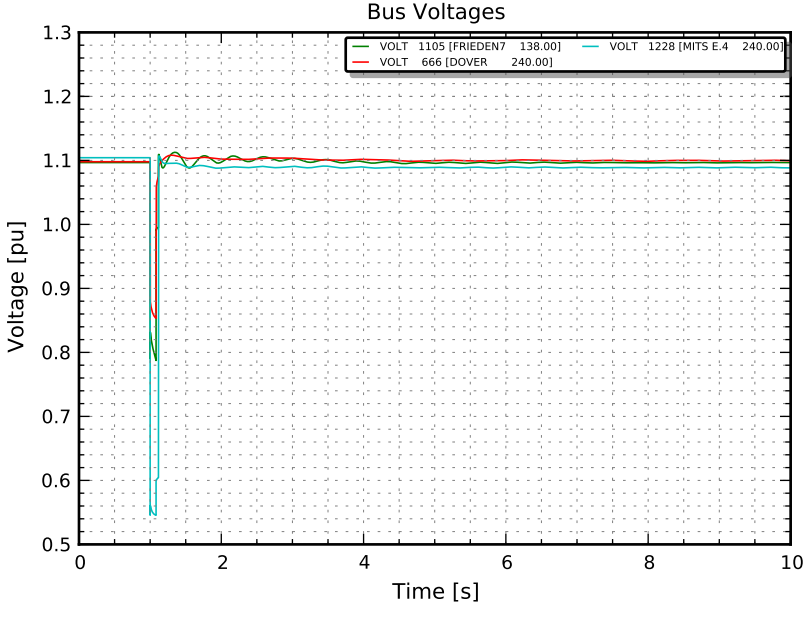
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 007 9L10 WABASCA to Brintnell_B.

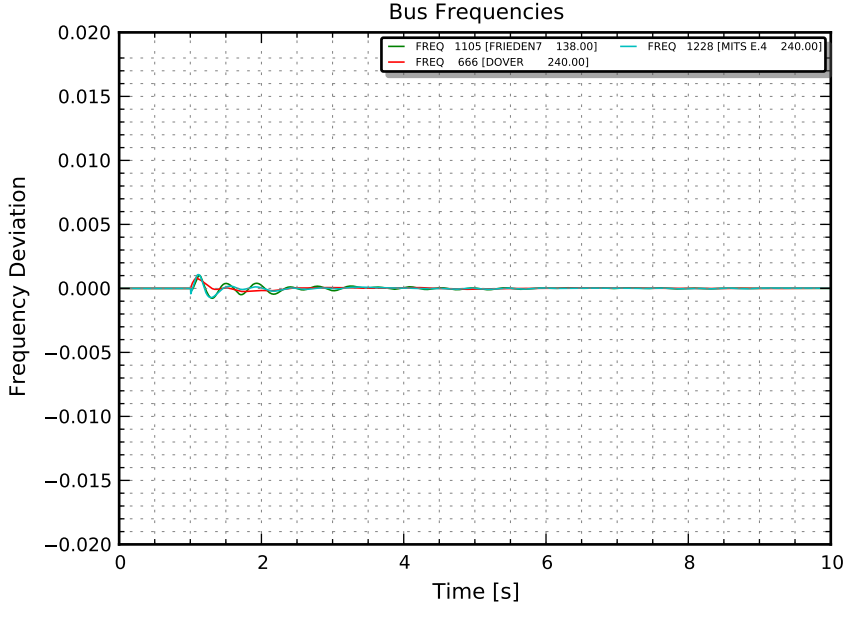
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 007 (B. 1)





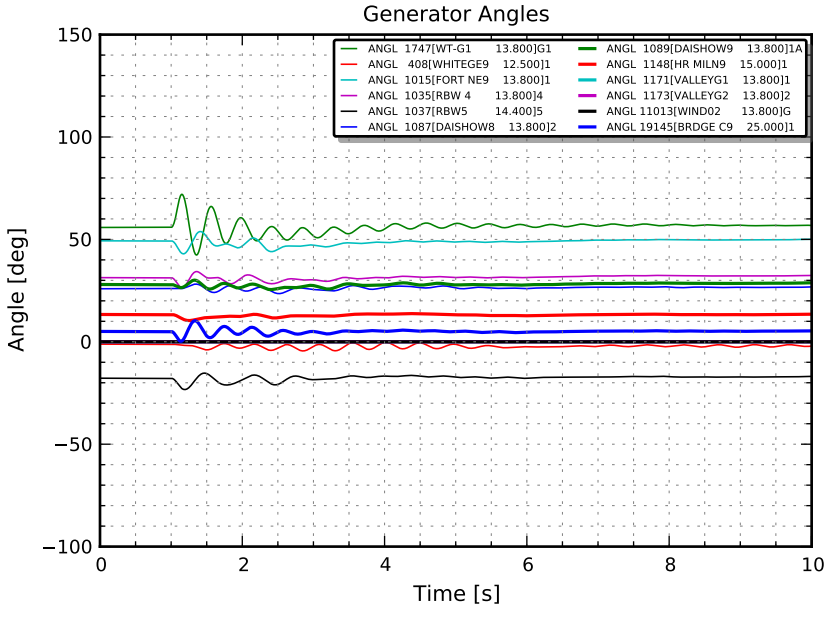


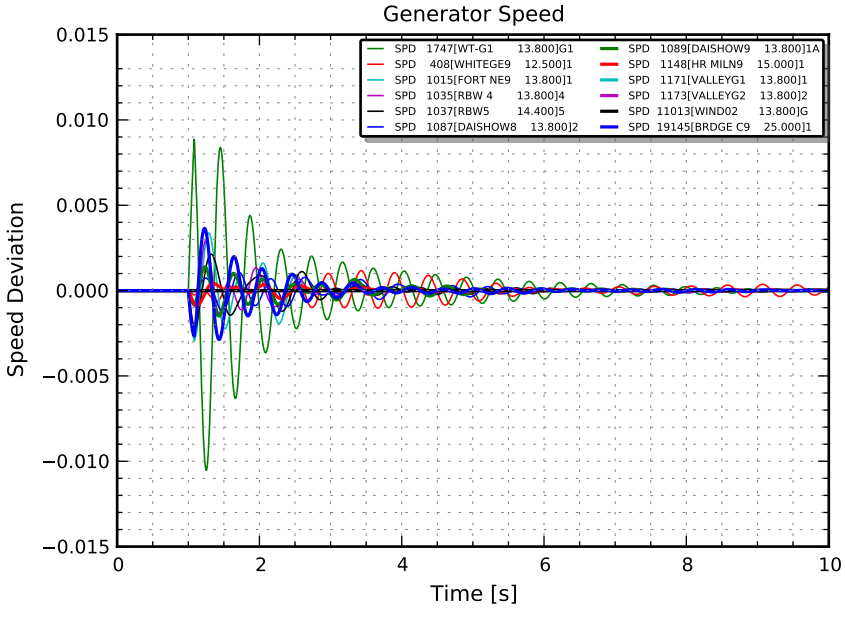


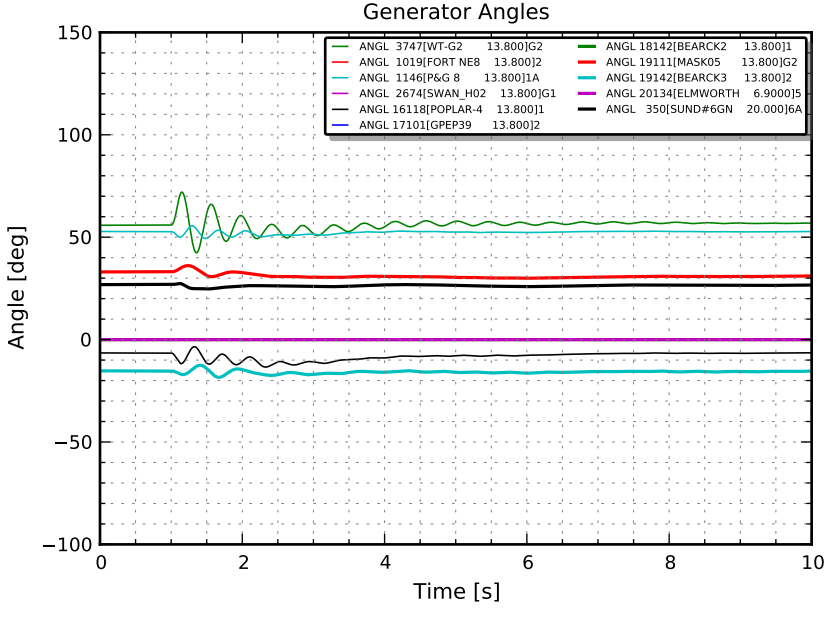
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 007 9L10 WABASCA to Brintnell_B.

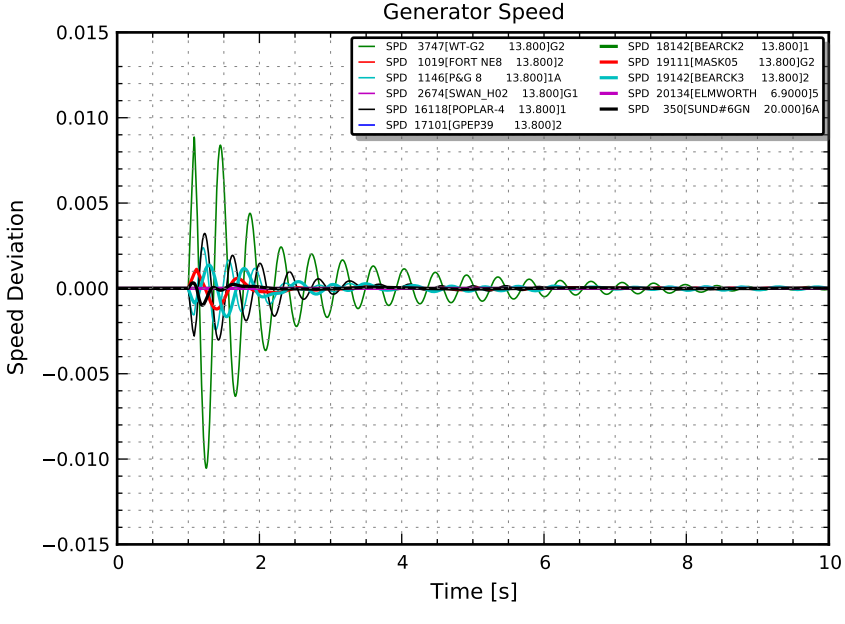
Study Area Generators

Appendix E2B
Figure: 007 (B. 2)





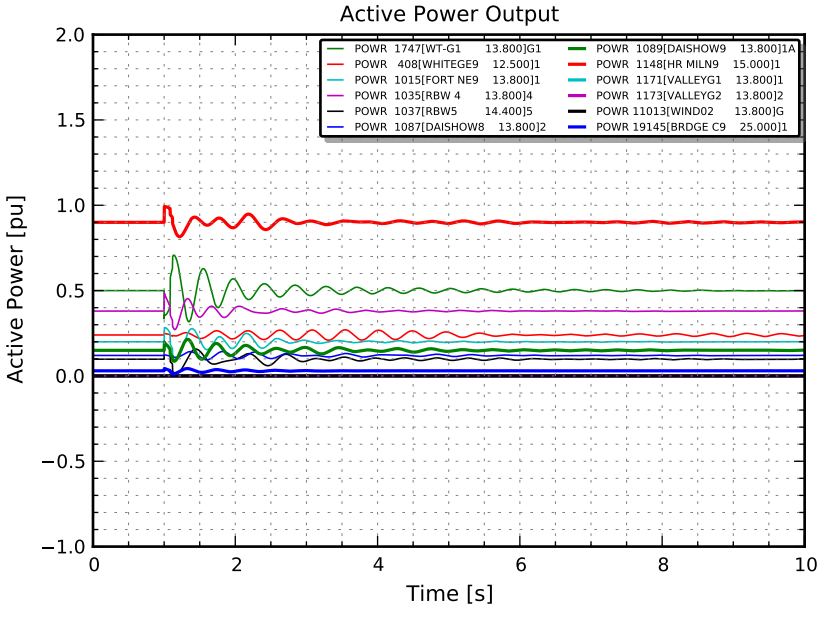


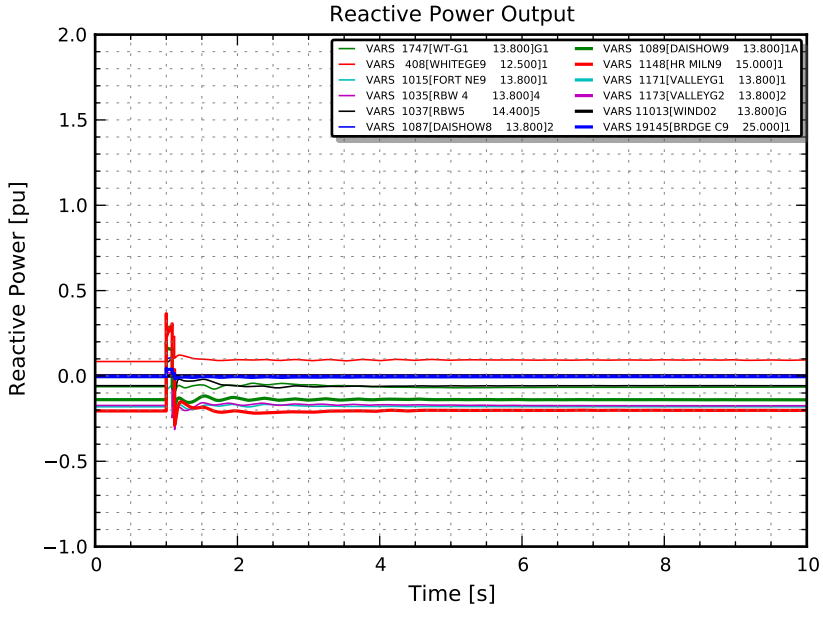


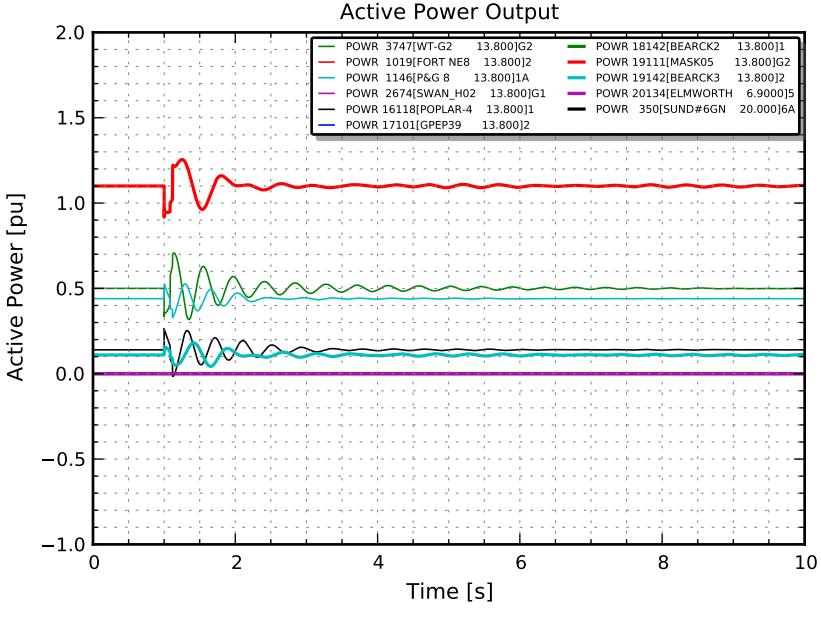
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 007 9L10 WABASCA to Brintnell_B.

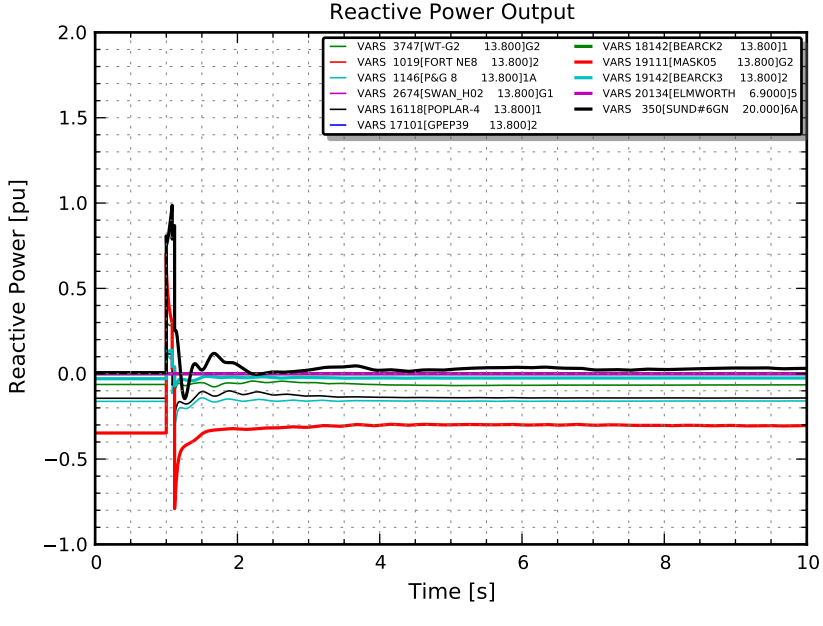
Study Area Generators

Appendix E2B
Figure: 007 (B. 3)





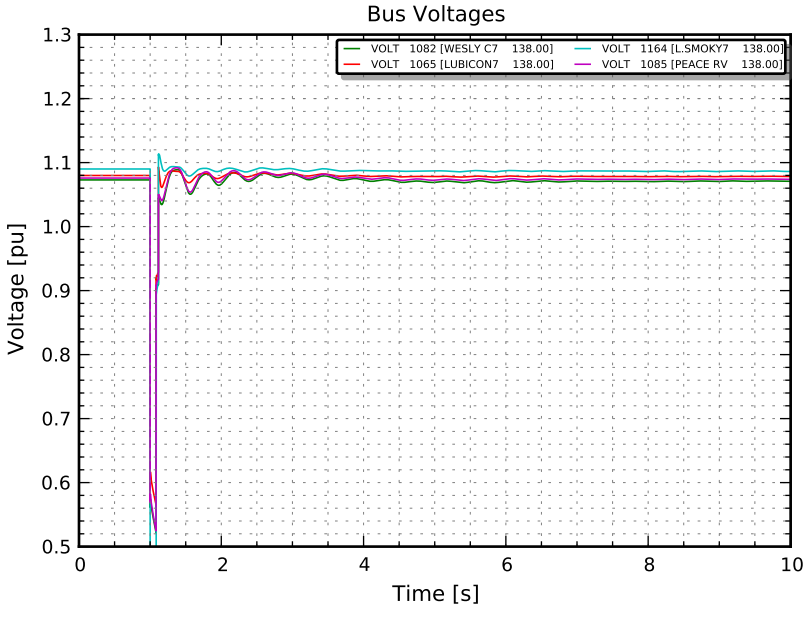


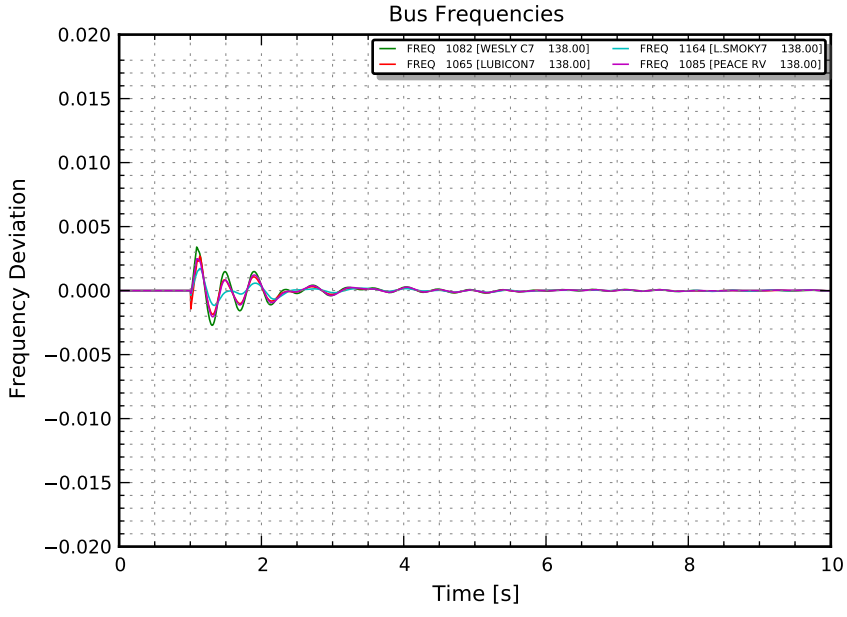


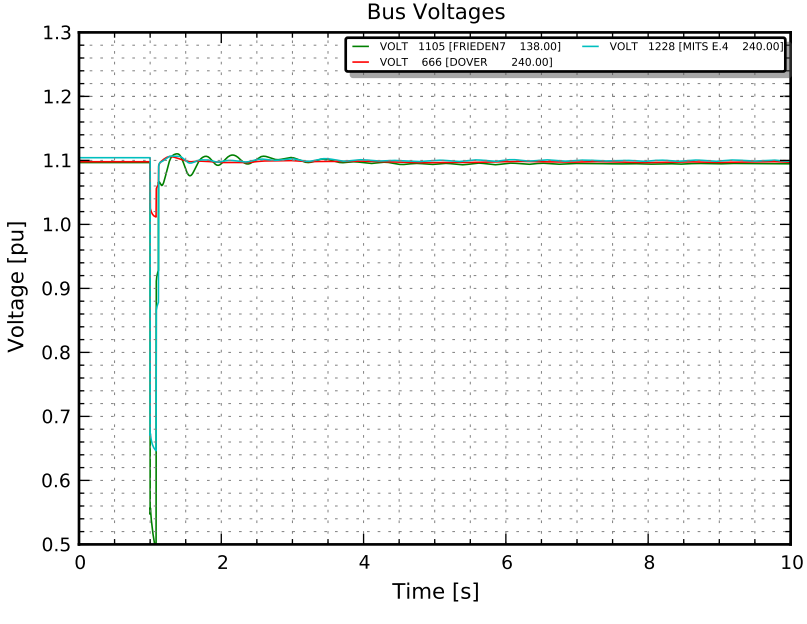
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_A.

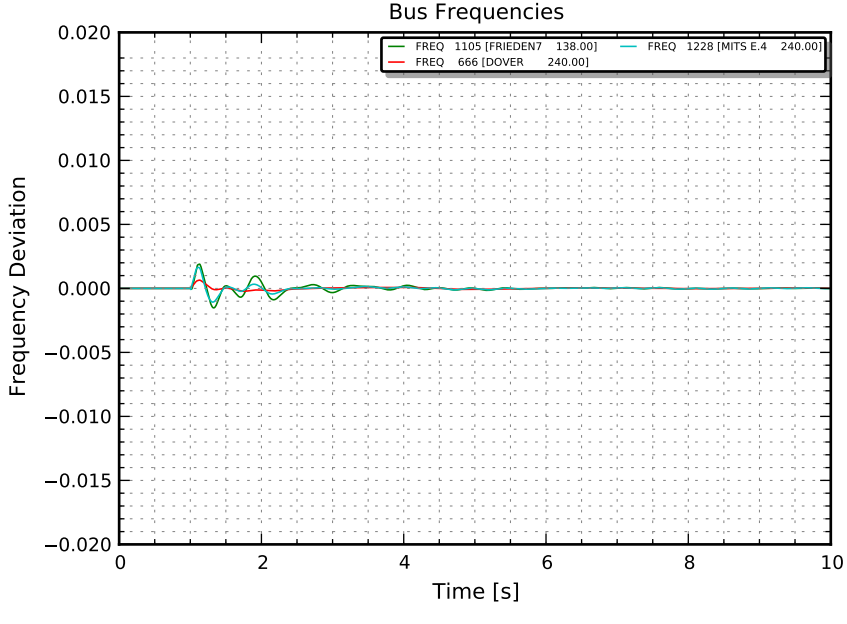
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 008 (A. 1)





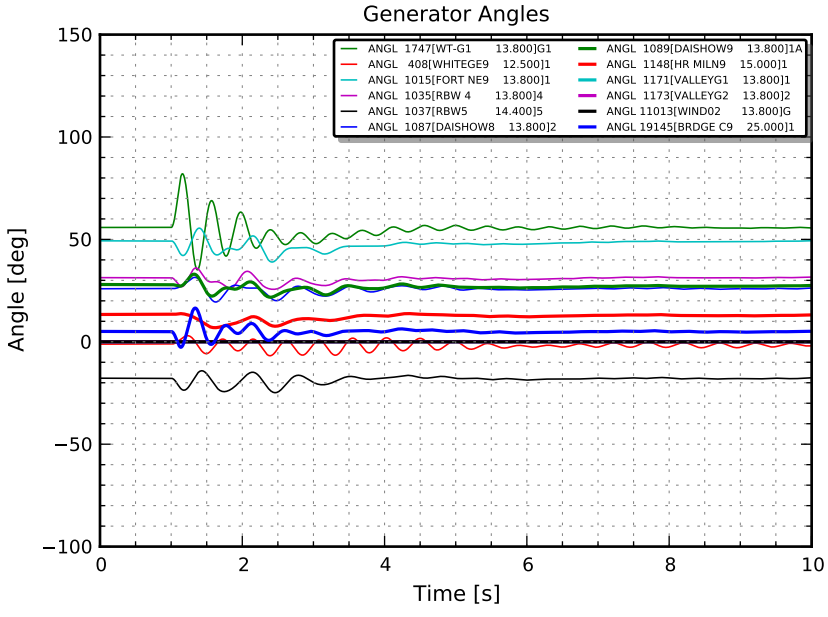


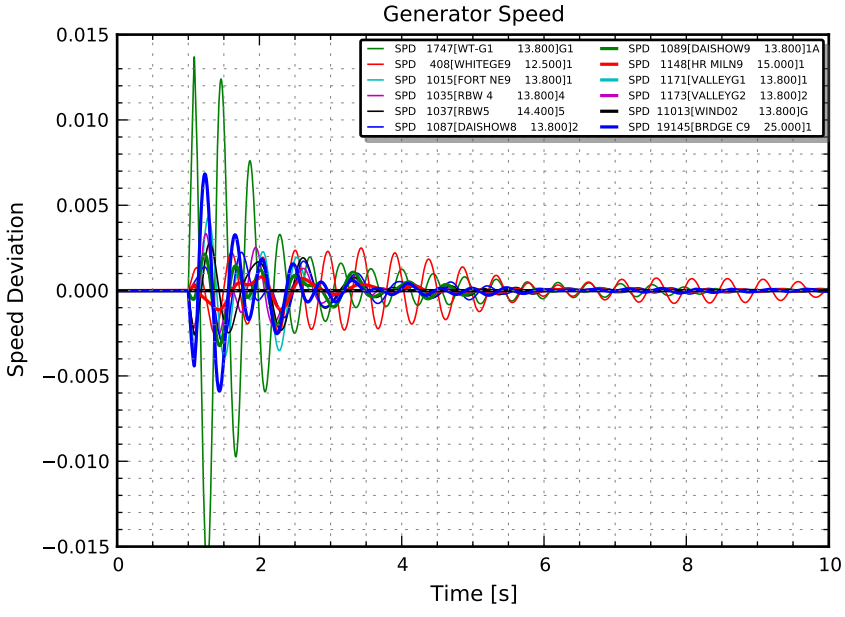


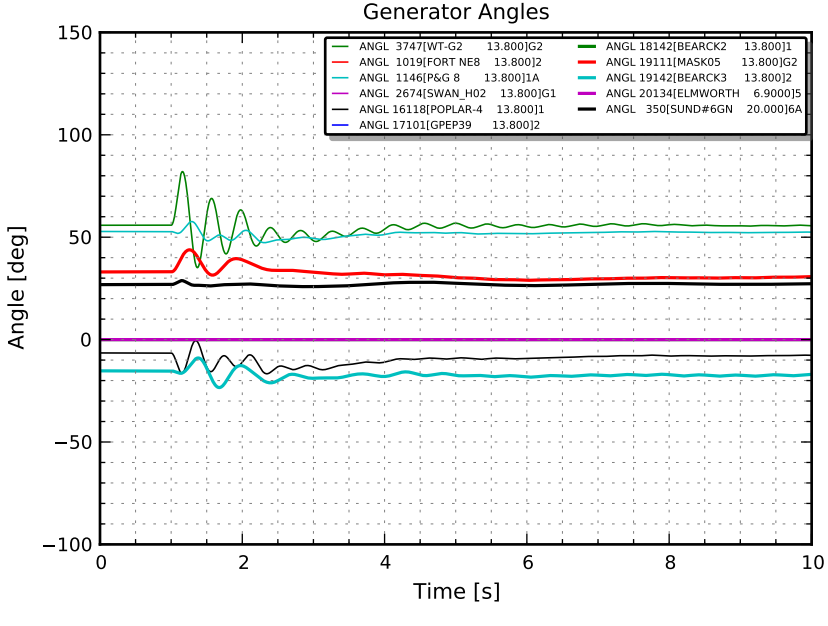
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_A.

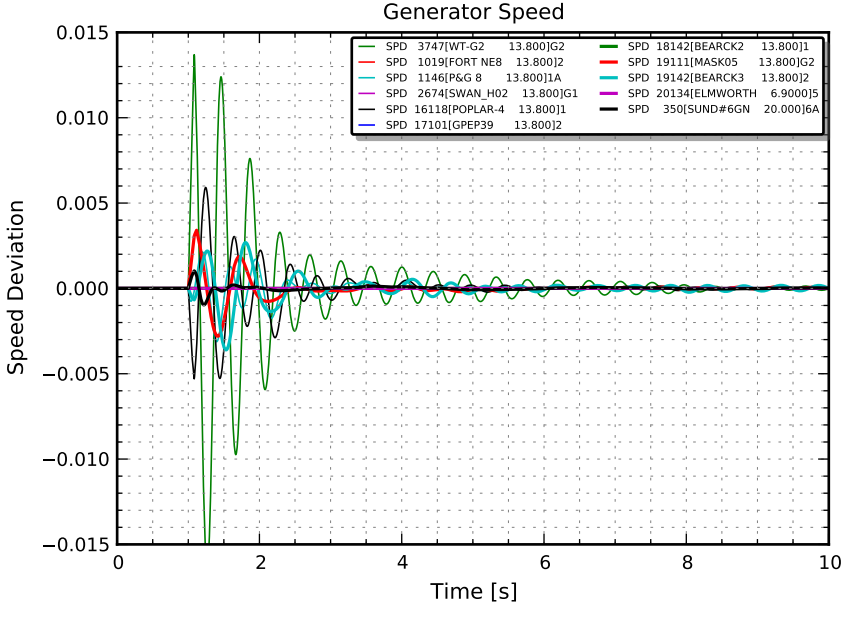
Study Area Generators

Appendix E2B
Figure: 008 (A. 2)





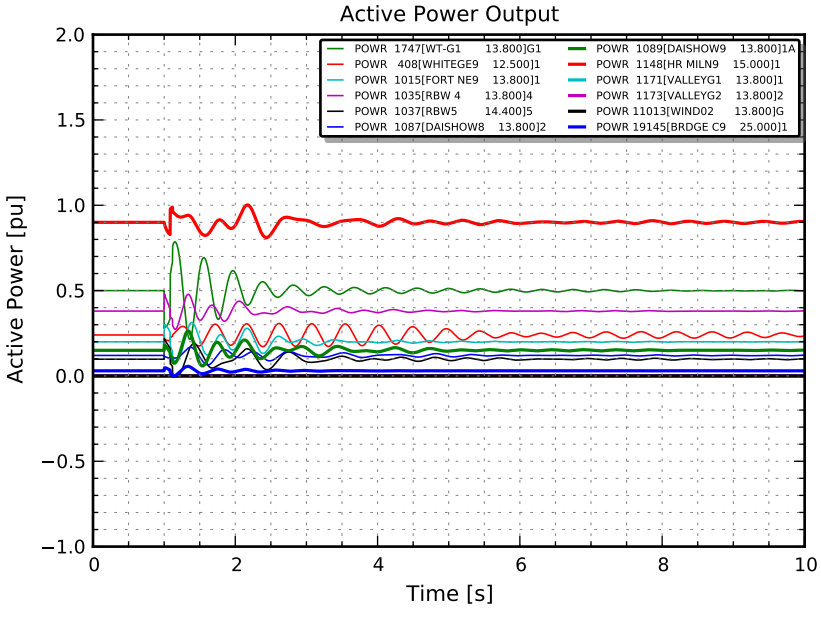


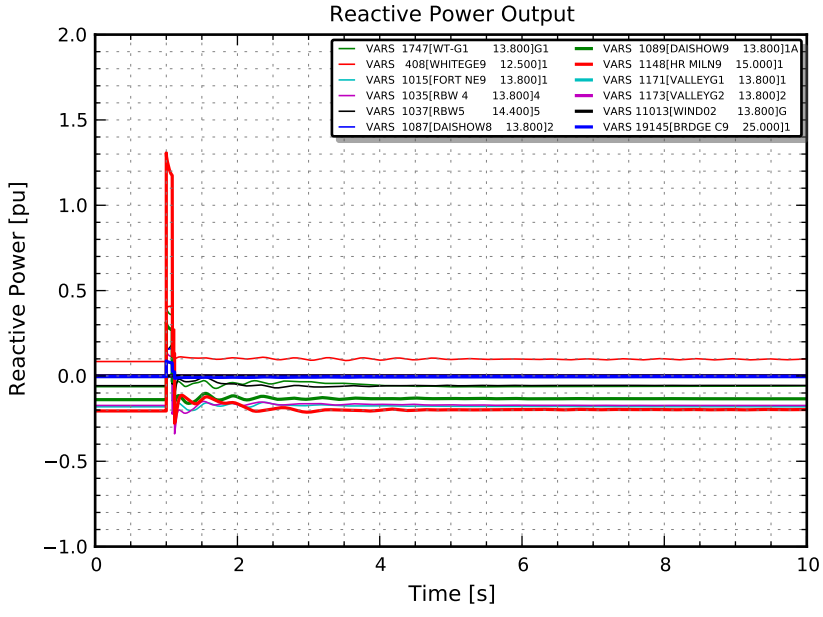


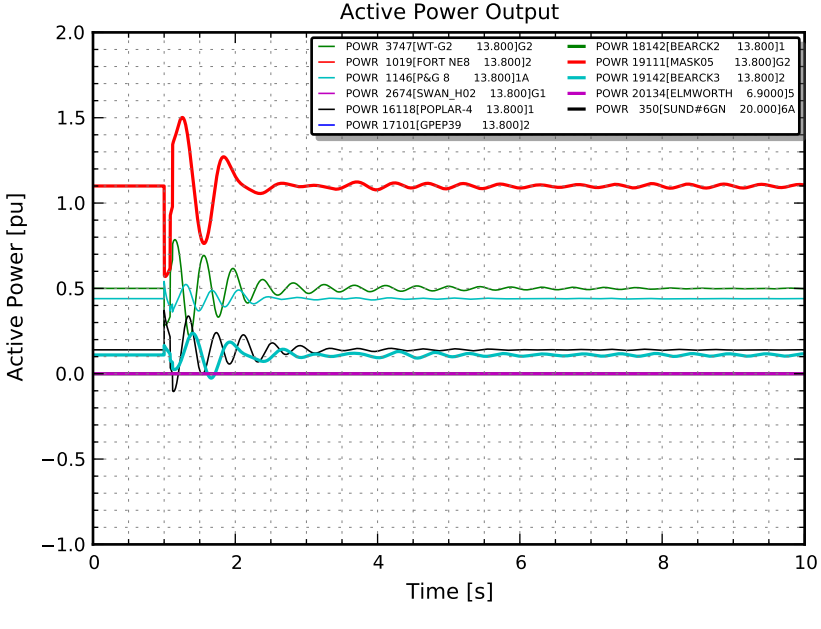
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_A.

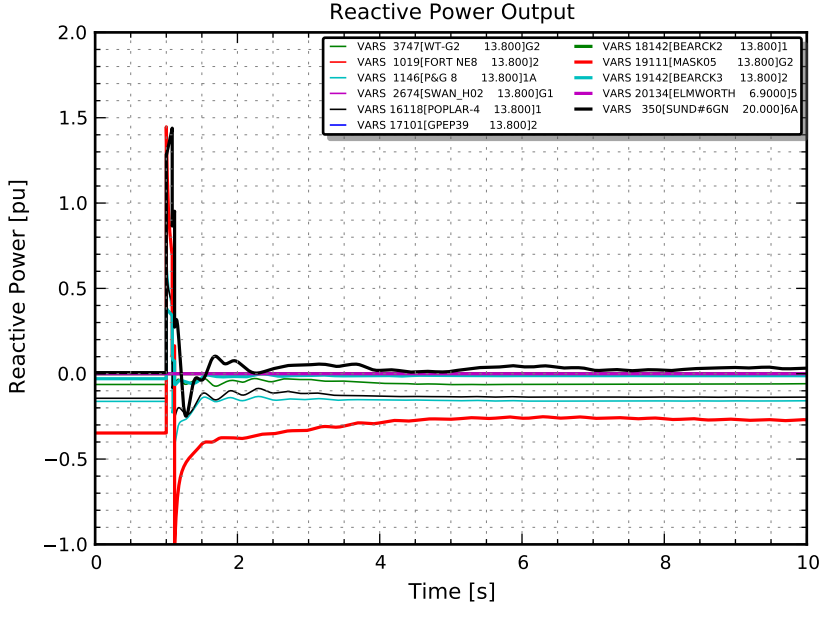
Study Area Generators

Appendix E2B
Figure: 008 (A. 3)





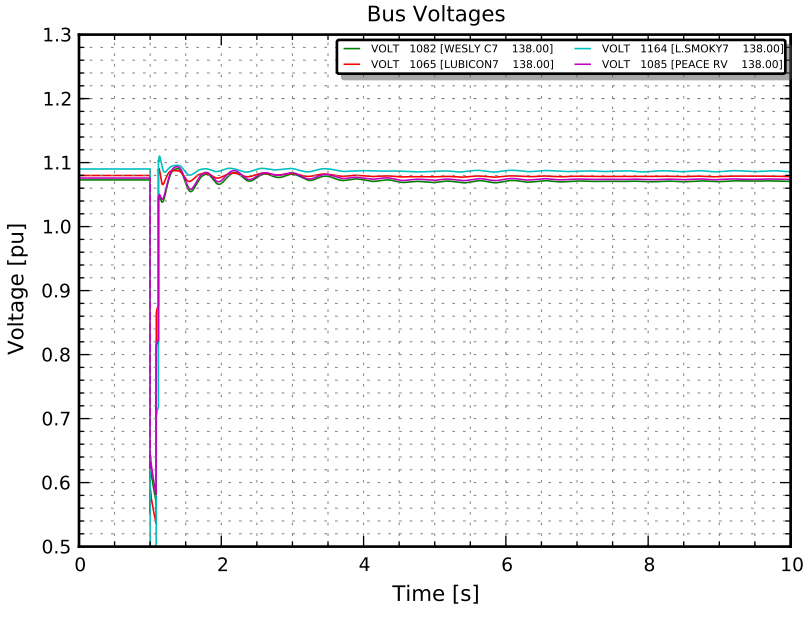


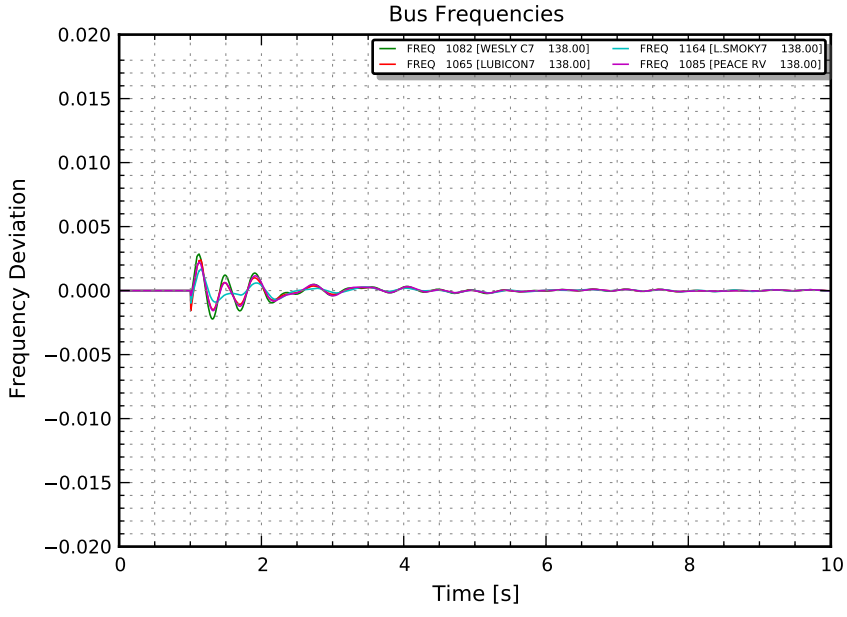


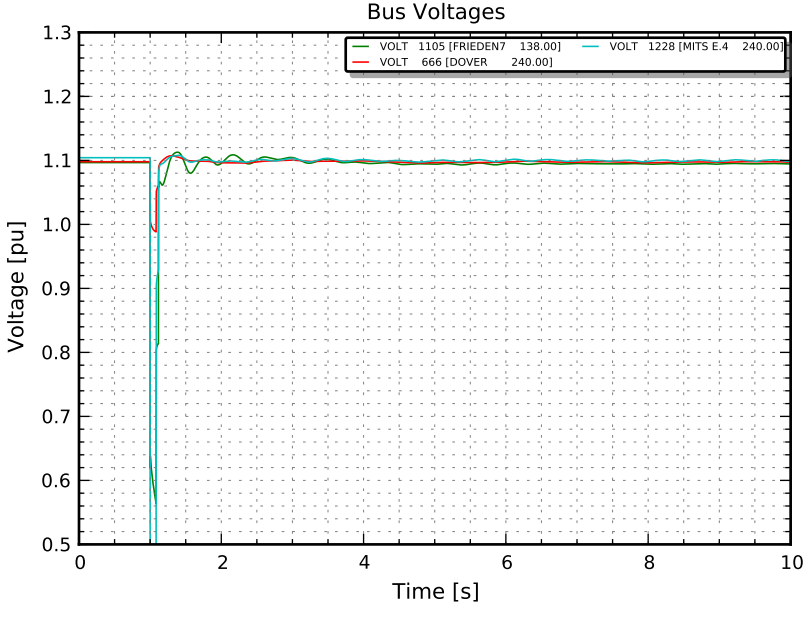
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_B.

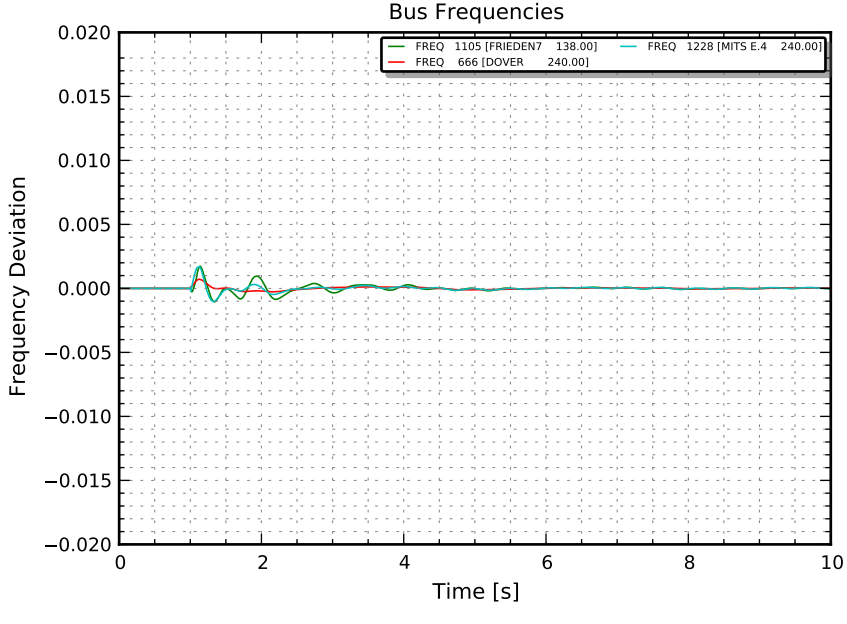
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 008 (B. 1)





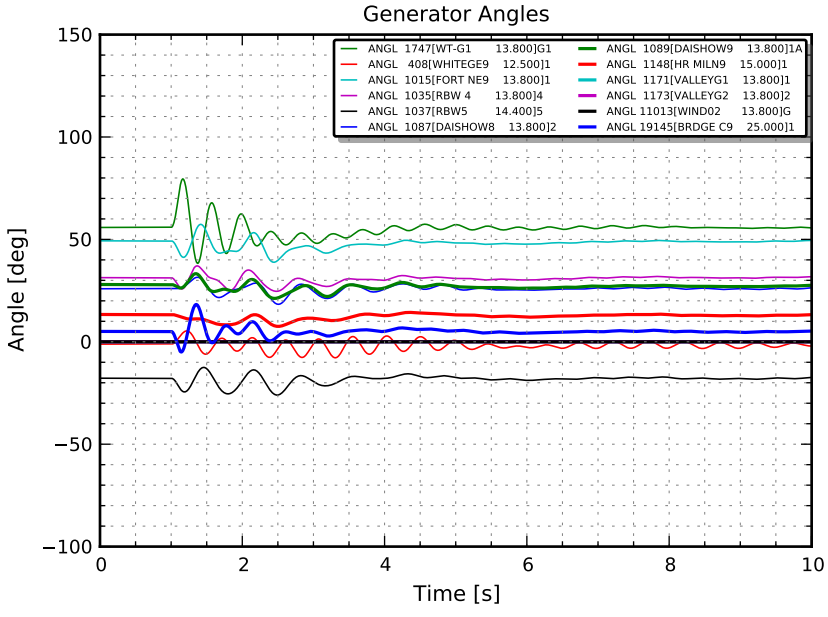


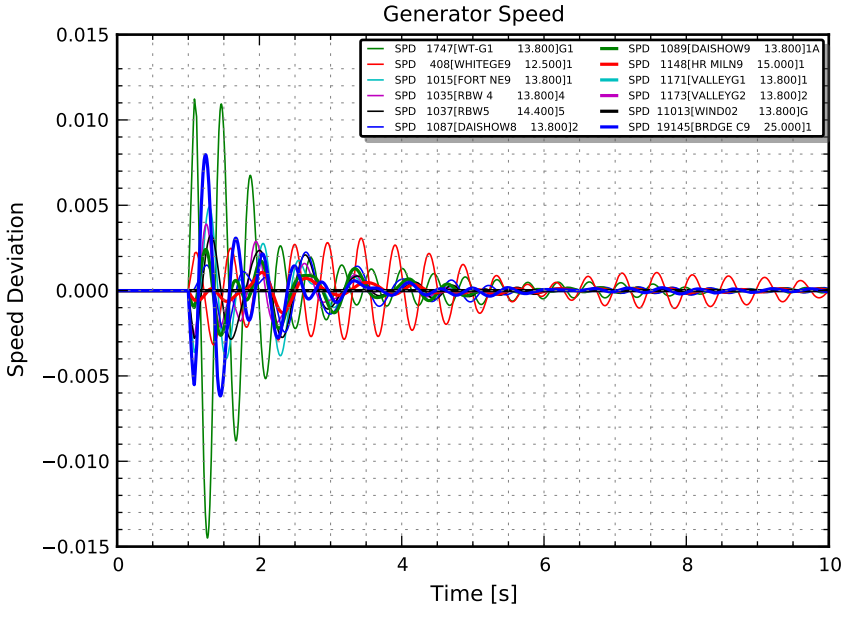


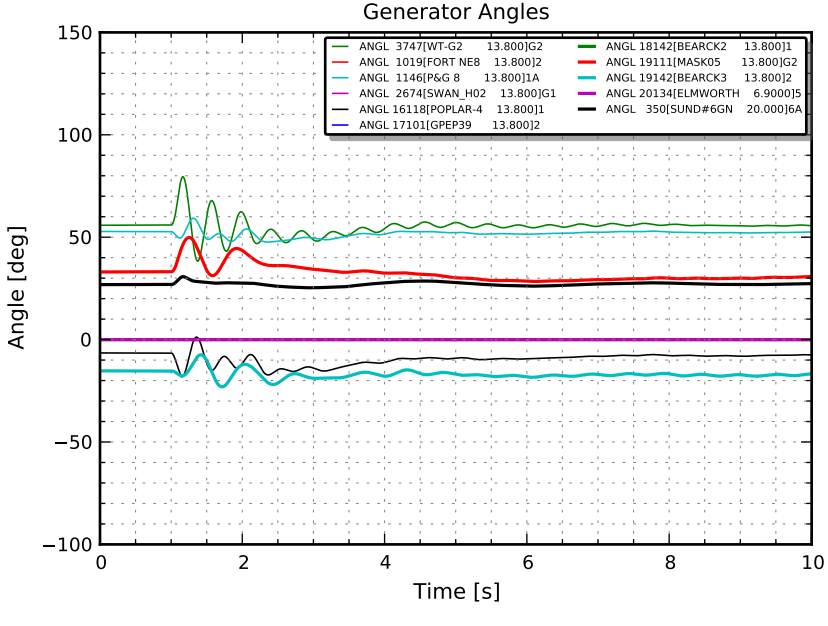
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_B.

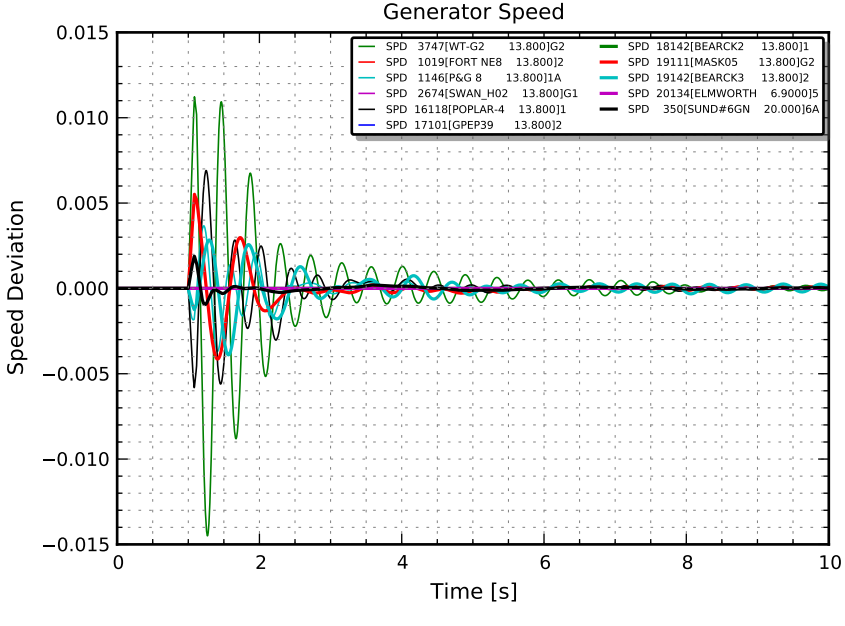
Study Area Generators

Appendix E2B
Figure: 008 (B. 2)





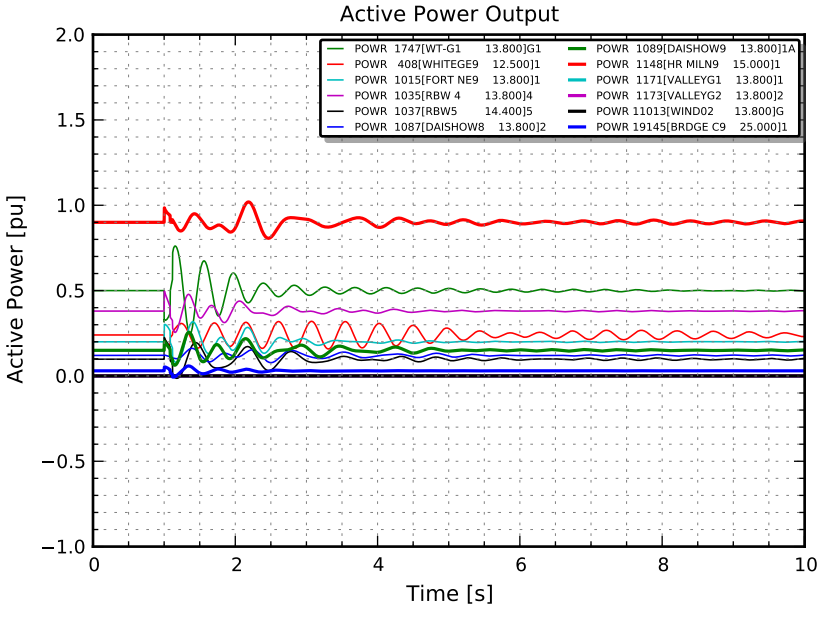


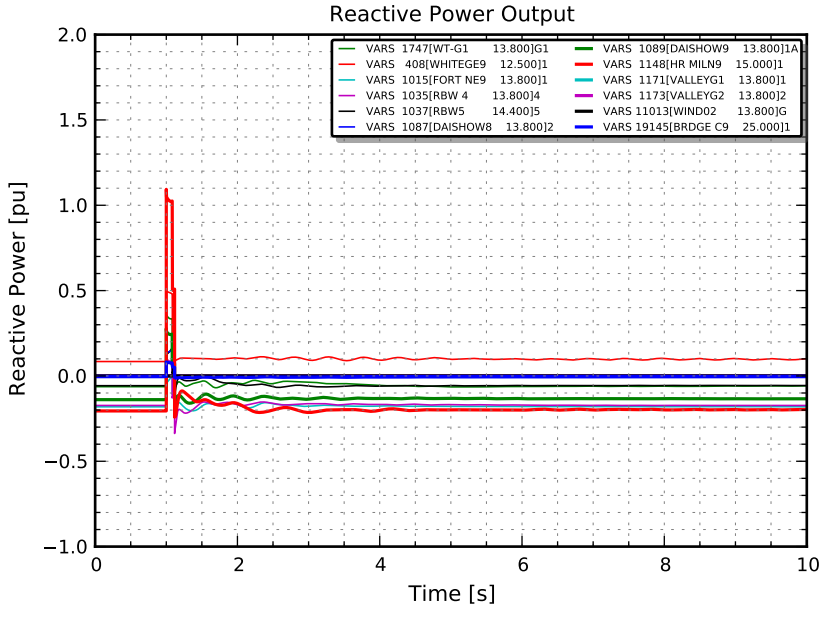


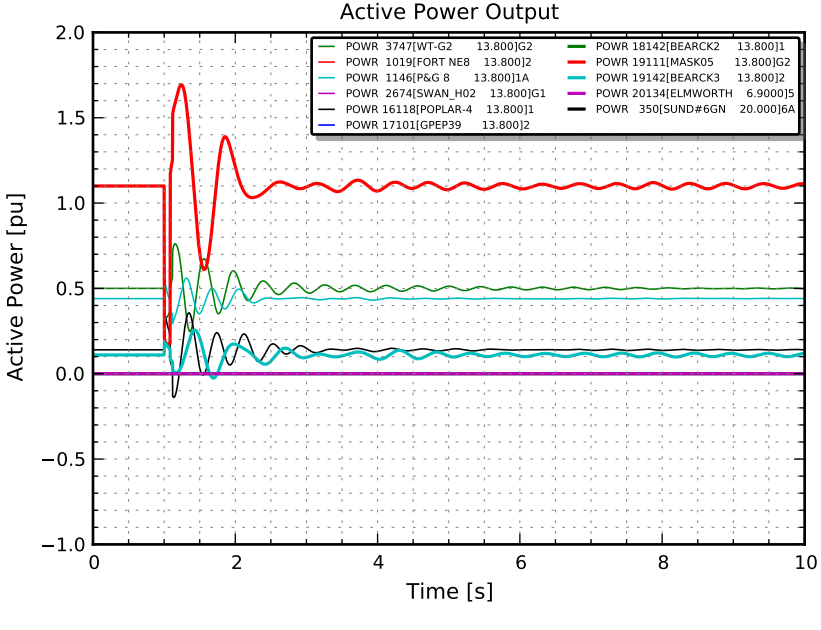
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 008 9L02 LITTLESMOKY to LOUISECREEK_B.

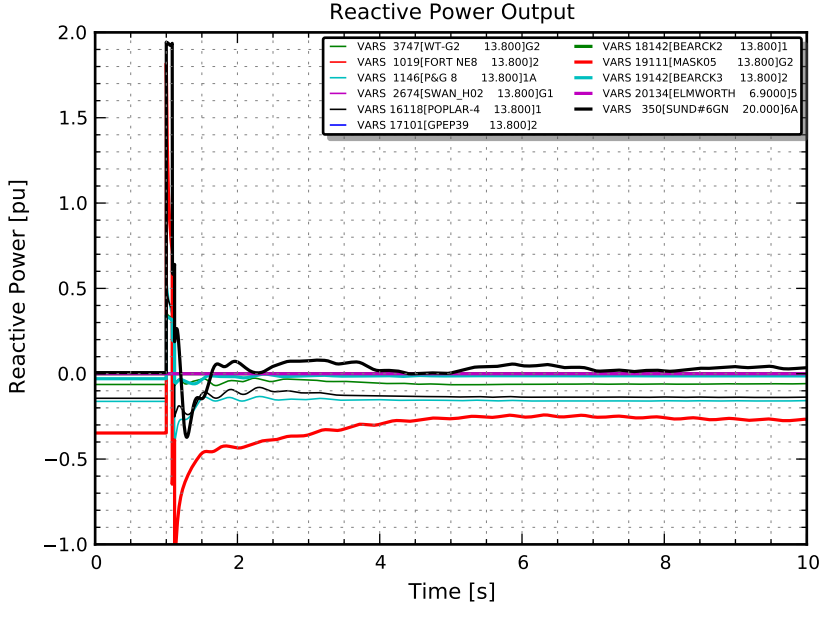
Study Area Generators

Appendix E2B
Figure: 008 (B. 3)





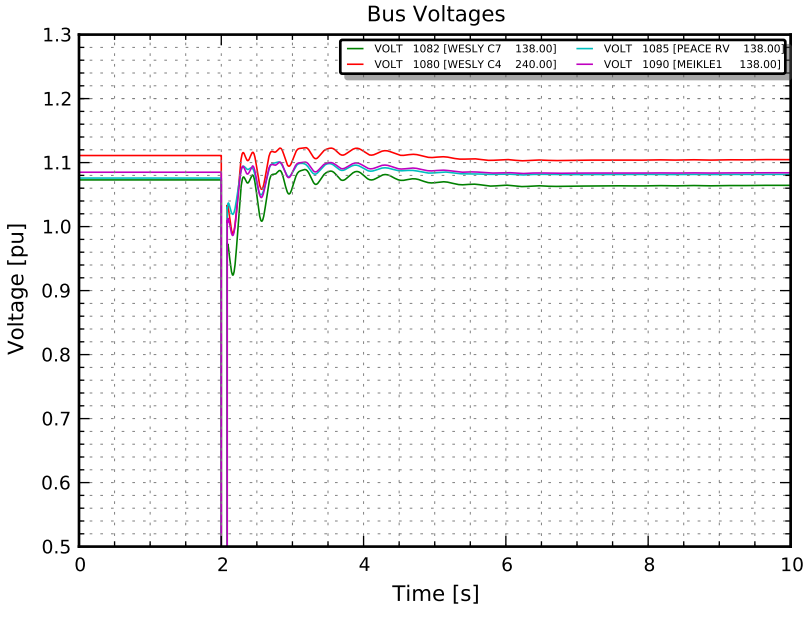


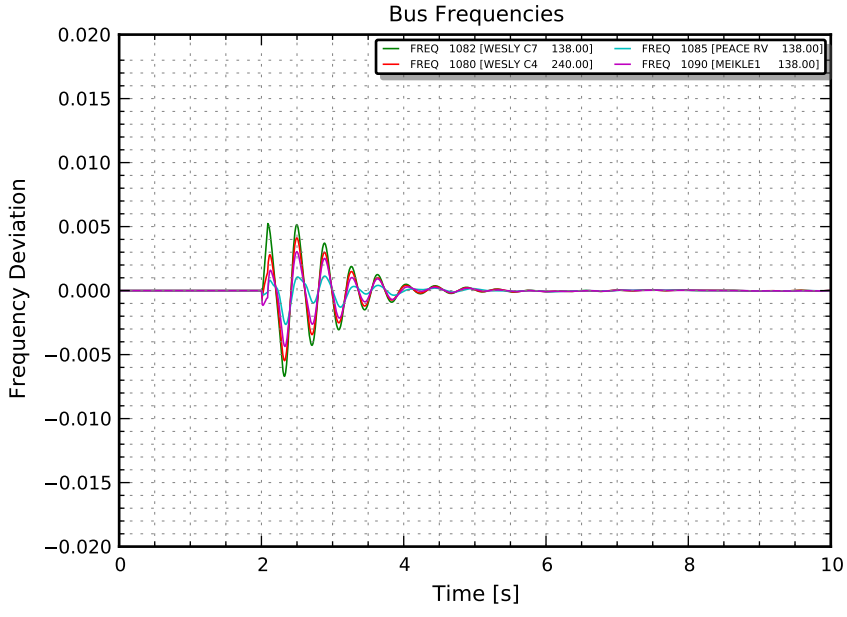


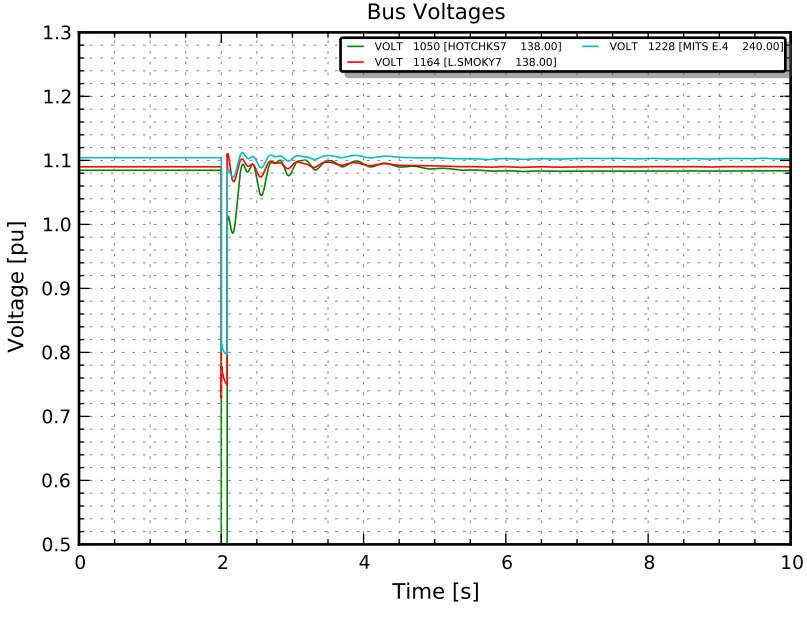
CASE 02 2014 SL Mgen
SCEN 03 144 Tap
CONT 009 7L27 WESLEYCREEK to WESTPEACE_A.

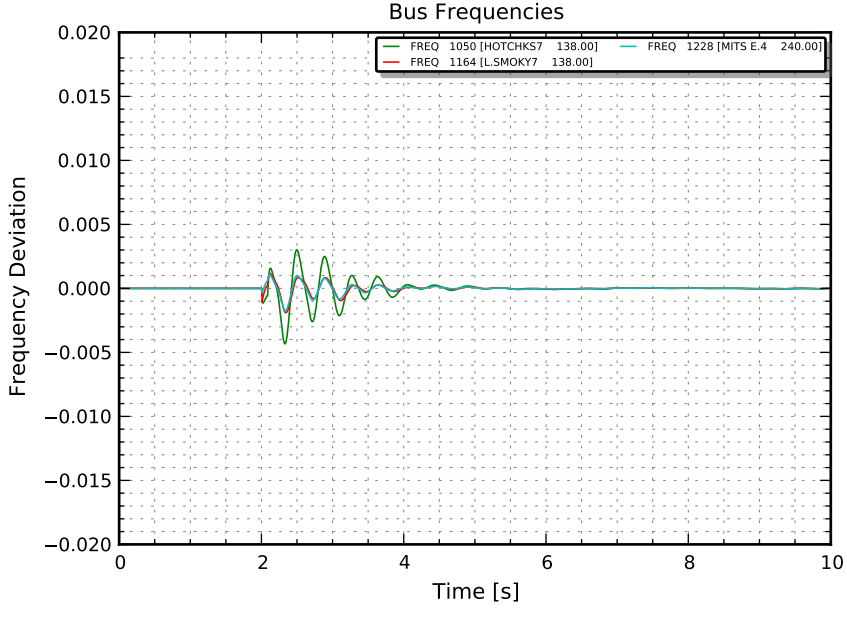
Study Area Bus Voltages and Frequencies

Appendix E3B
Figure: 009 (A. 1)





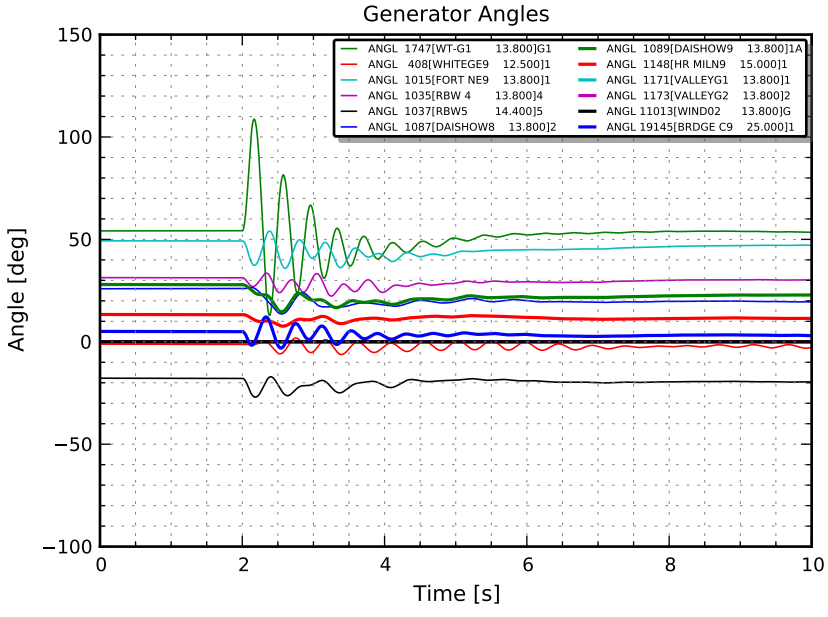


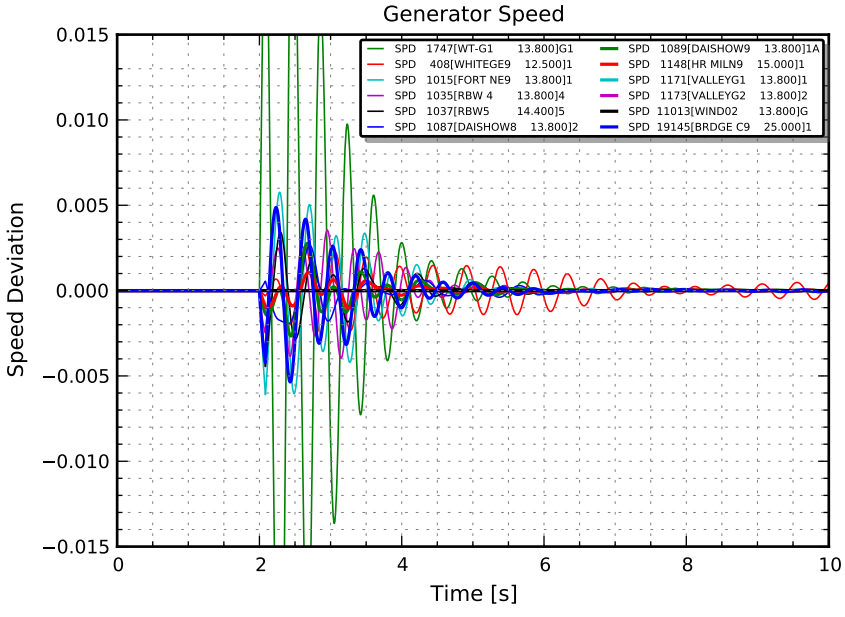


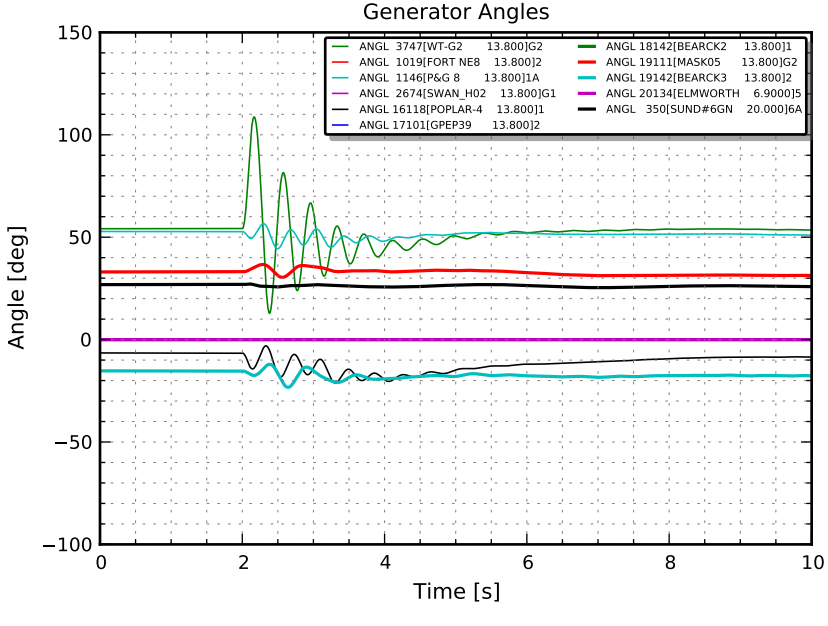
CASE 02 2014 SL Mgen
SCEN 03 144 Tap
CONT 009 7L27 WESLEYCREEK to WESTPEACE_A.

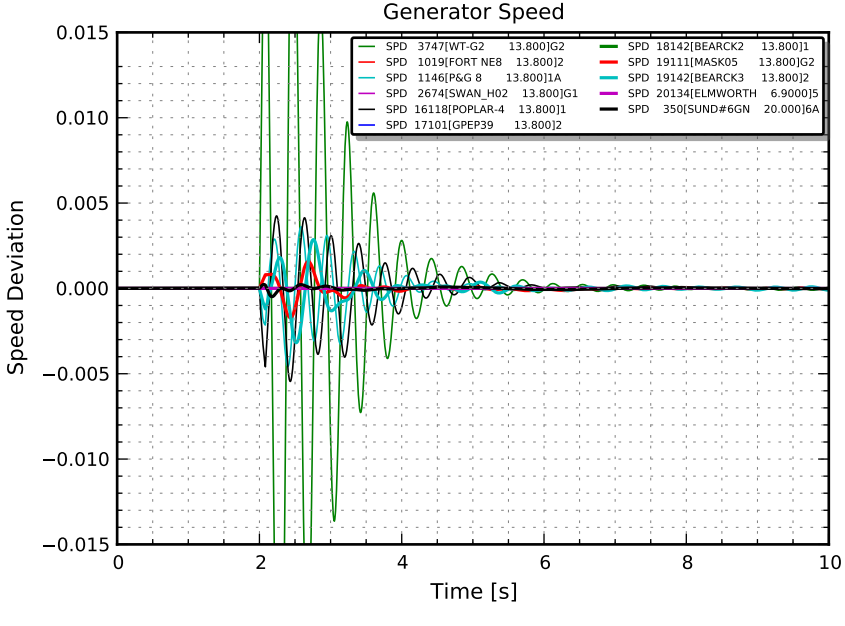
Study Area Generators

Appendix E3B
Figure: 009 (A. 2)





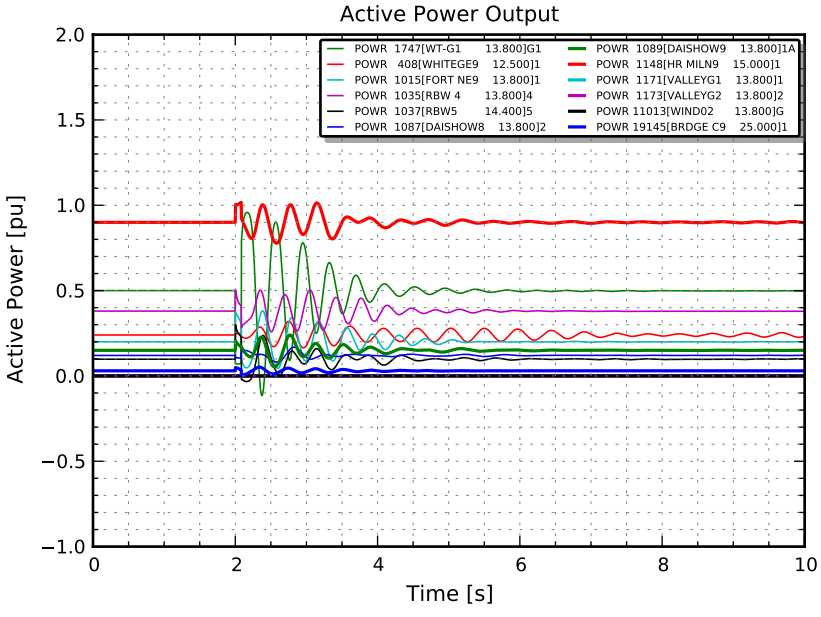


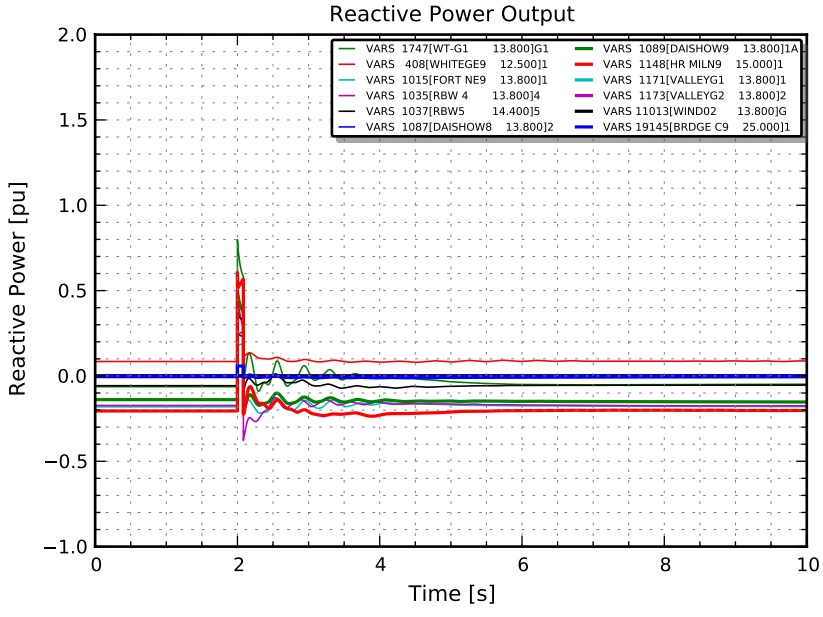


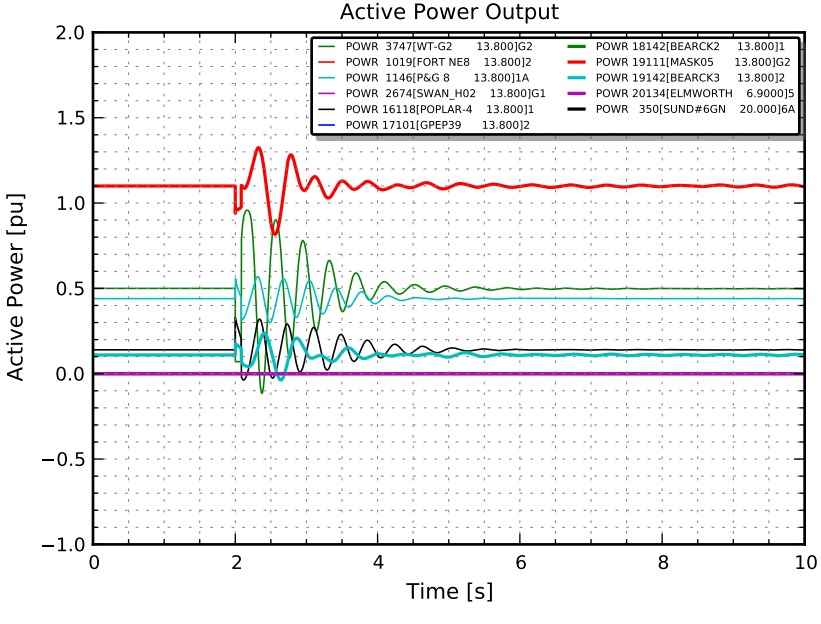
CASE 02 2014 SL Mgen
SCEN 03 144 Tap
CONT 009 7L27 WESLEYCREEK to WESTPEACE_A.

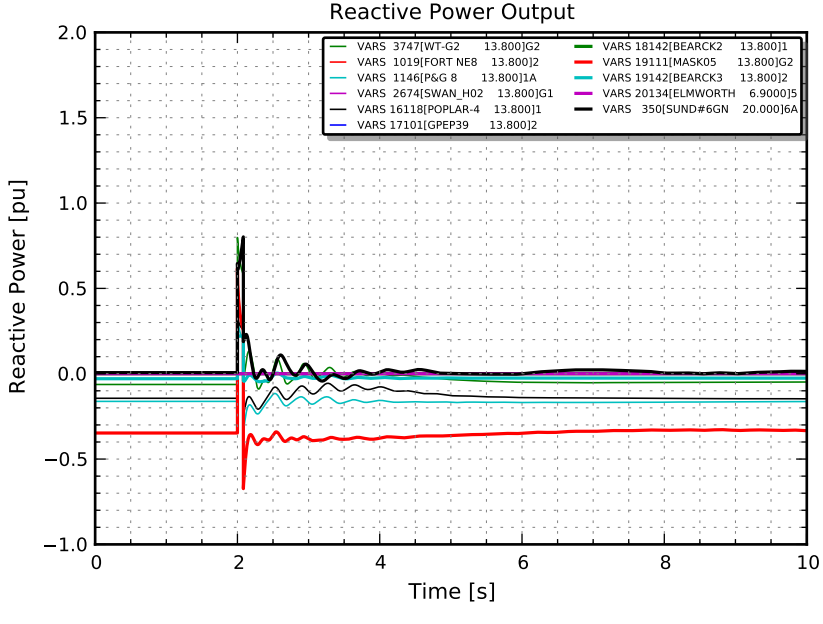
Study Area Generators

Appendix E3B
Figure: 009 (A. 3)





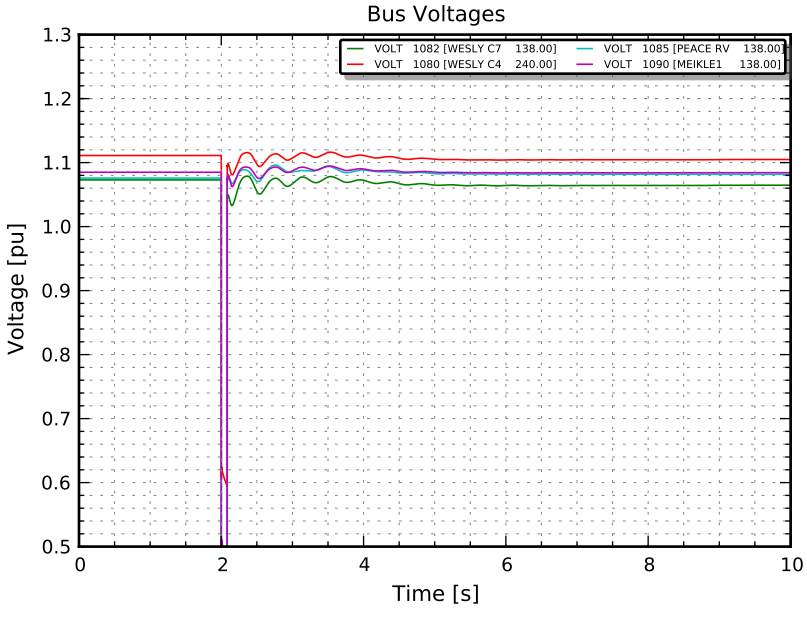


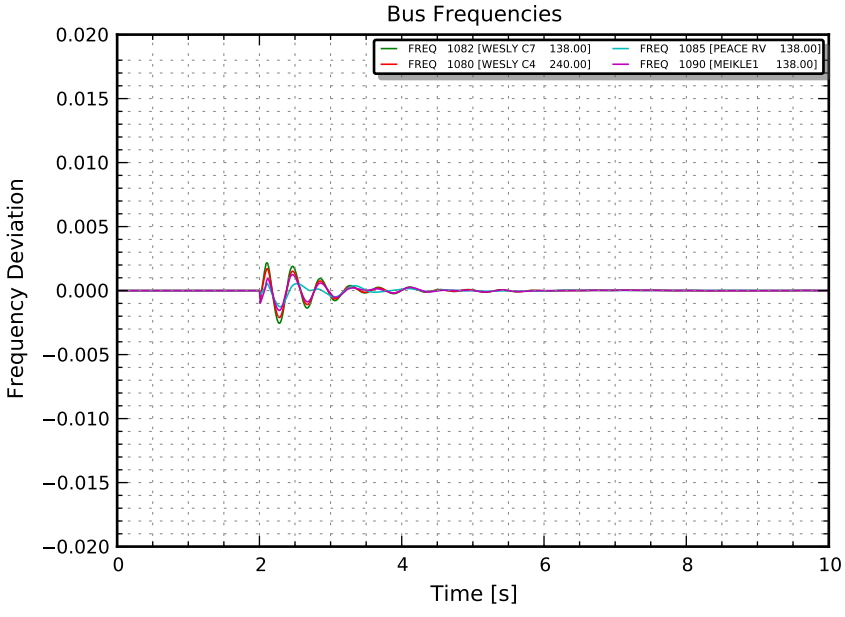


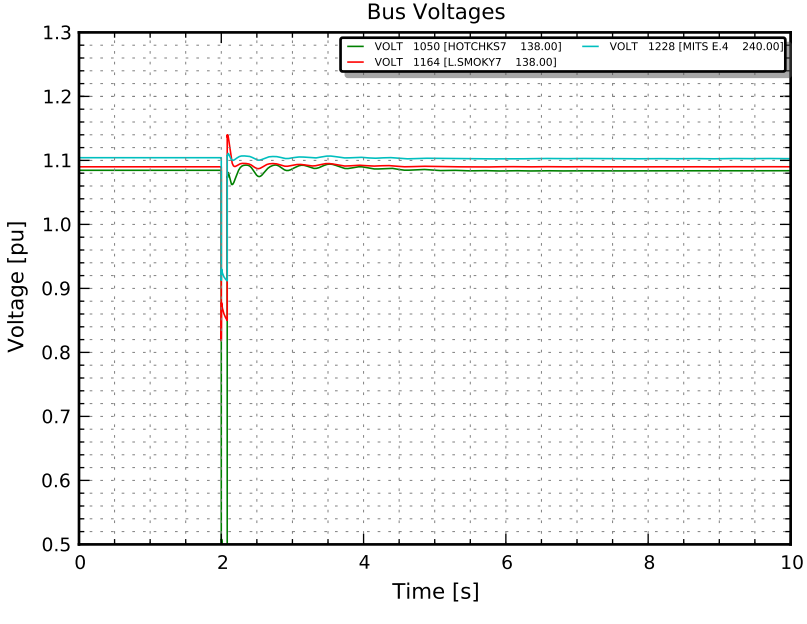
CASE 02 2014 SL Mgen
SCEN 03 144 Tap
CONT 009 7L27 WESLEYCREEK to WESTPEACE_B.

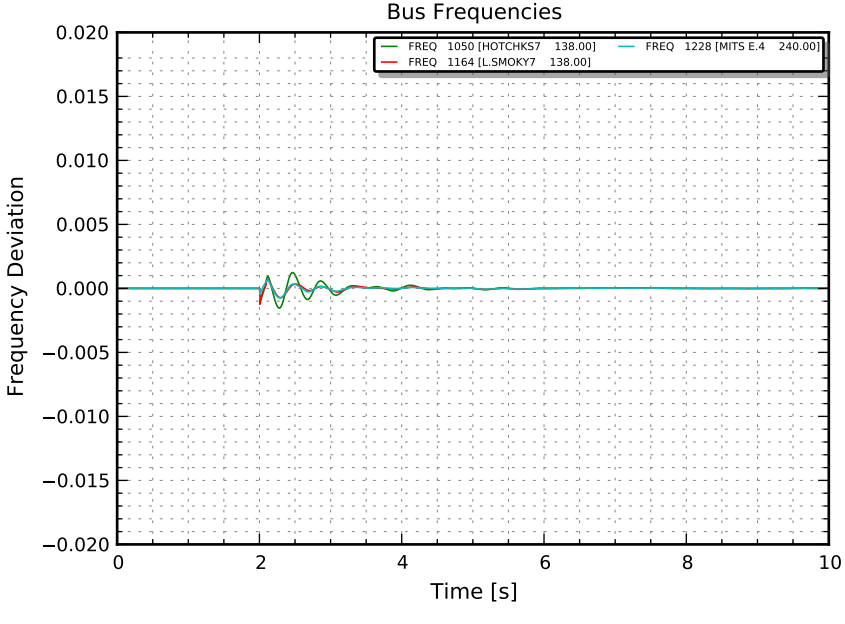
Study Area Bus Voltages and Frequencies

Appendix E3B
Figure: 009 (B. 1)





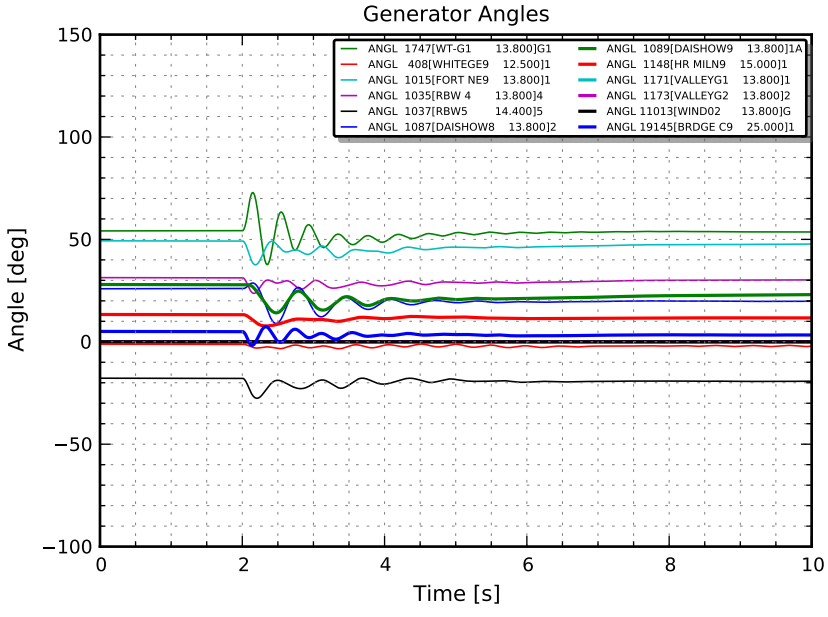


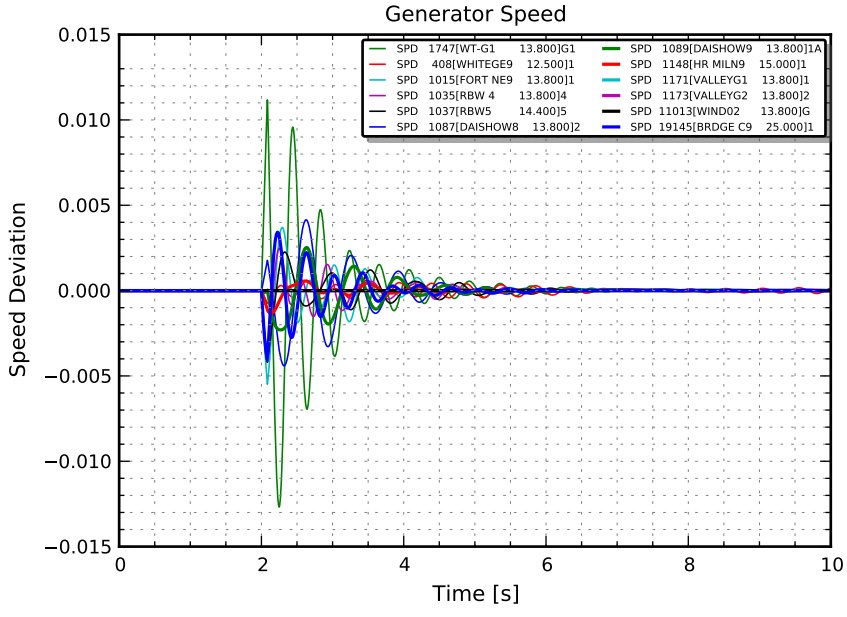


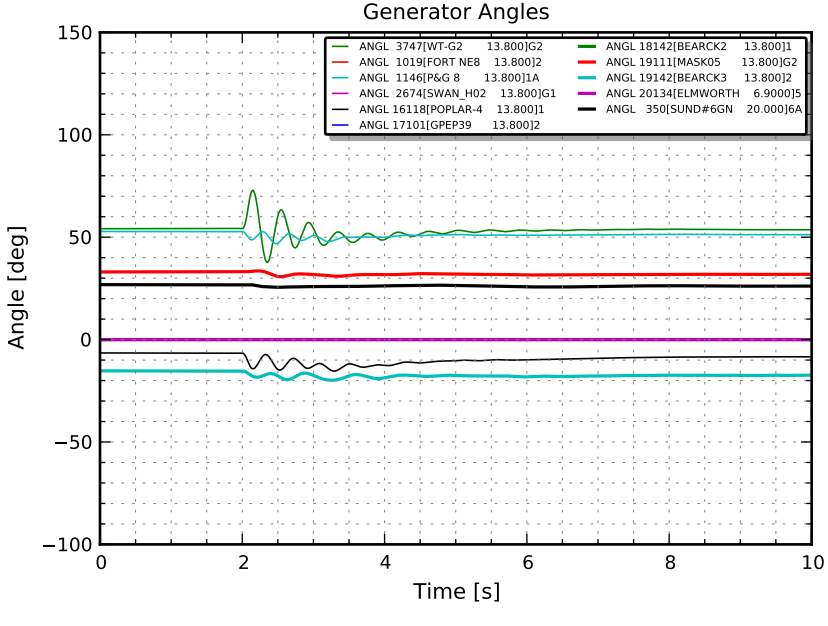
CASE 02 2014 SL Mgen
SCEN 03 144 Tap
CONT 009 7L27 WESLEYCREEK to WESTPEACE_B.

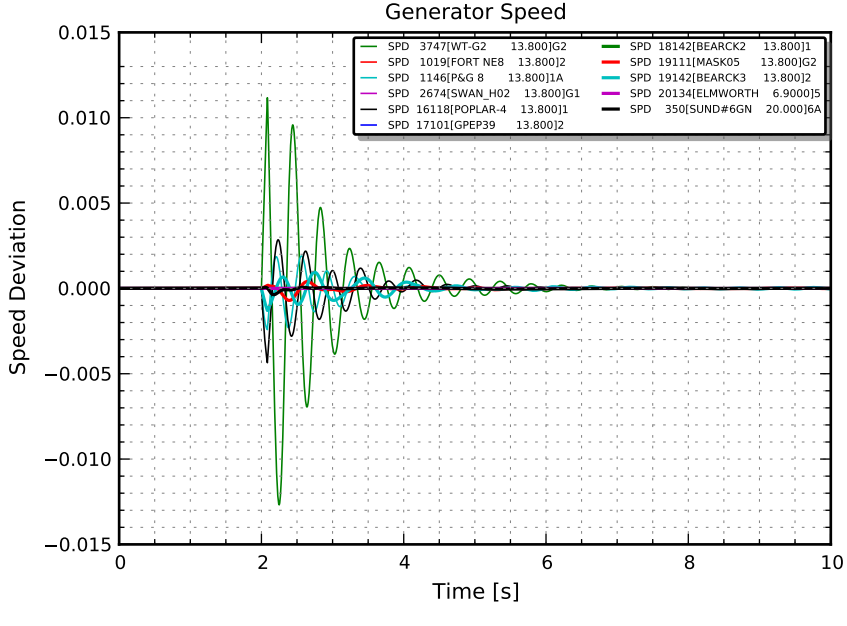
Study Area Generators

Appendix E3B
Figure: 009 (B. 2)





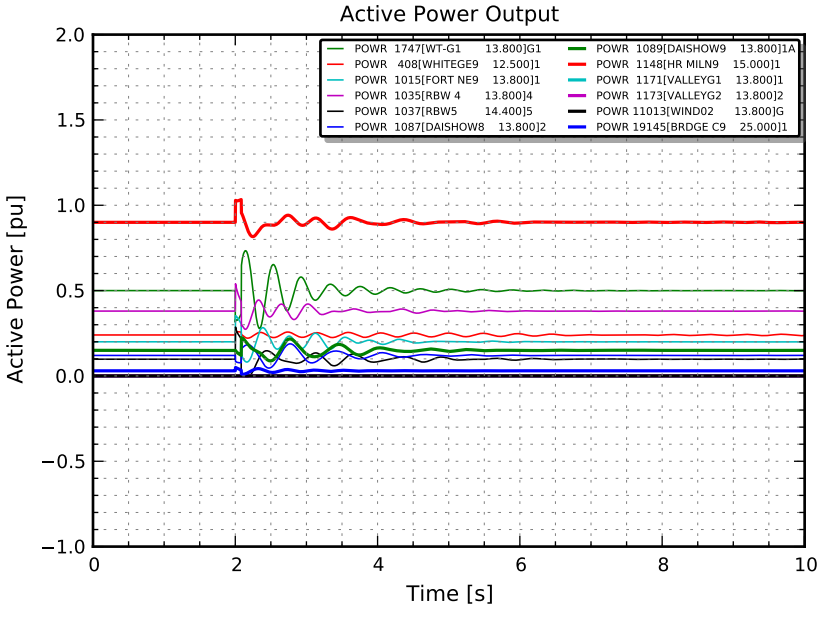


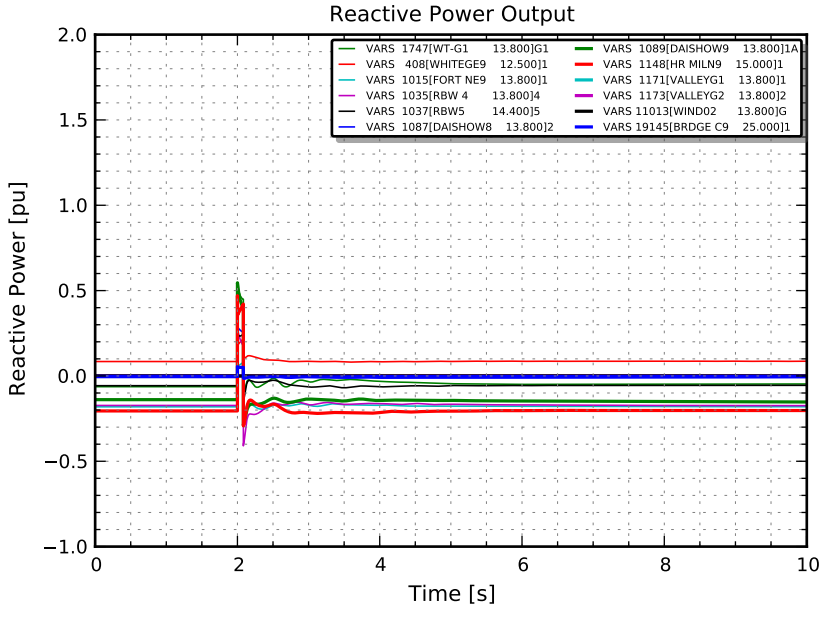


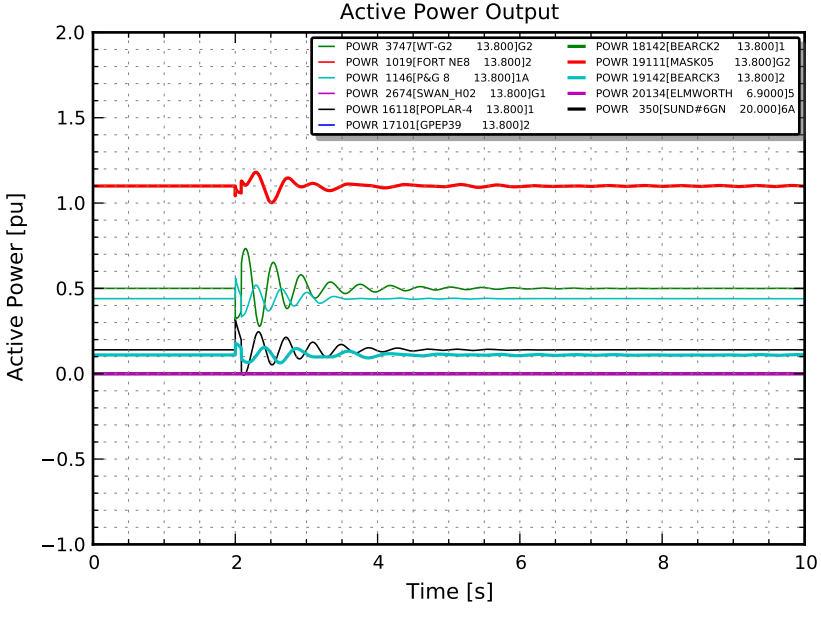
CASE 02 2014 SL Mgen
SCEN 03 144 Tap
CONT 009 7L27 WESLEYCREEK to WESTPEACE_B.

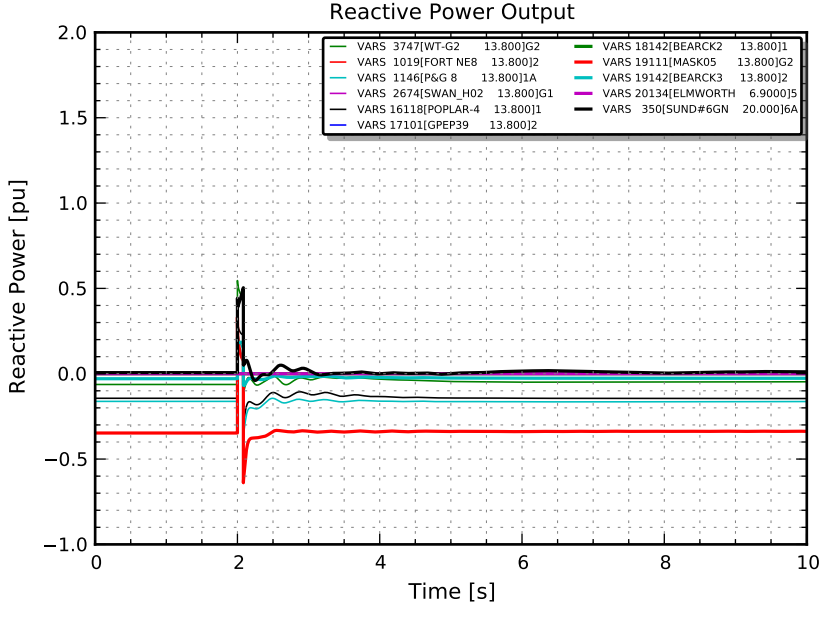
Study Area Generators

Appendix E3B
Figure: 009 (B. 3)





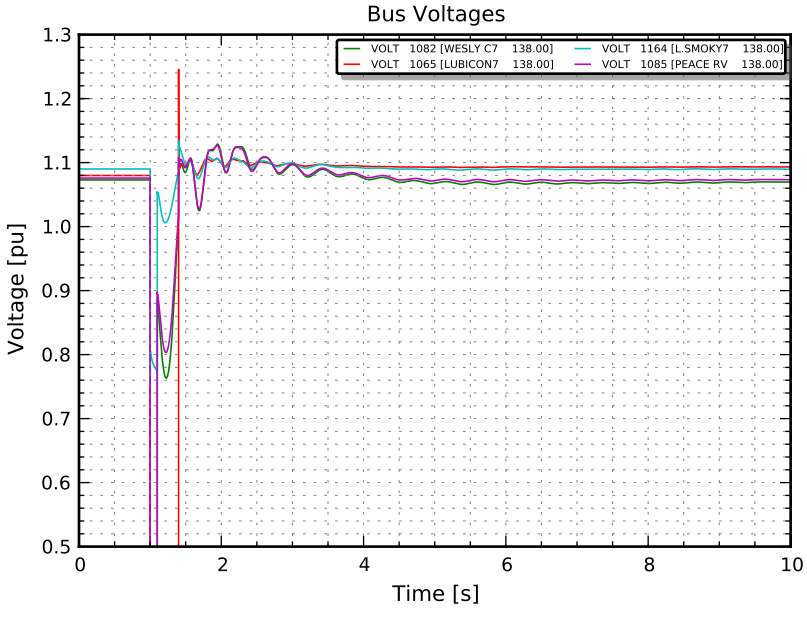


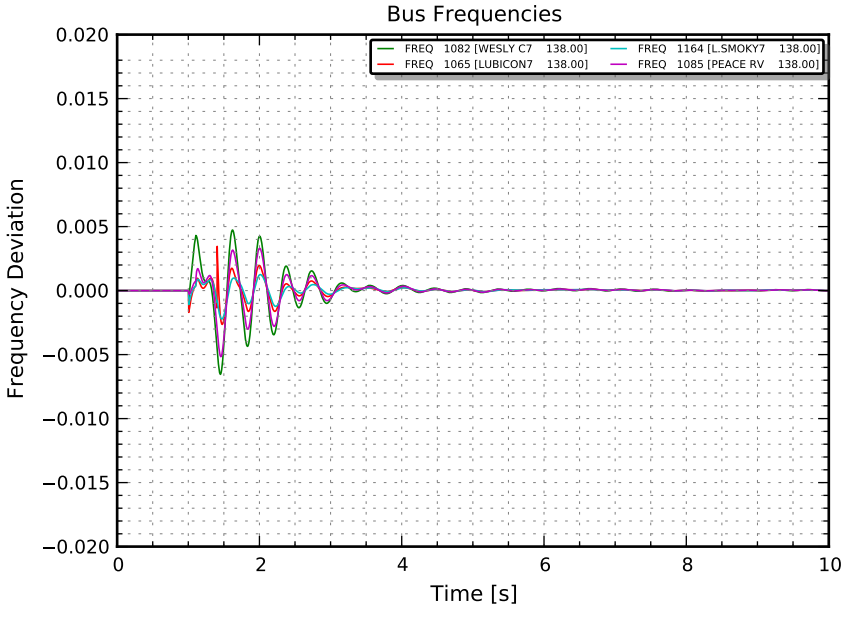


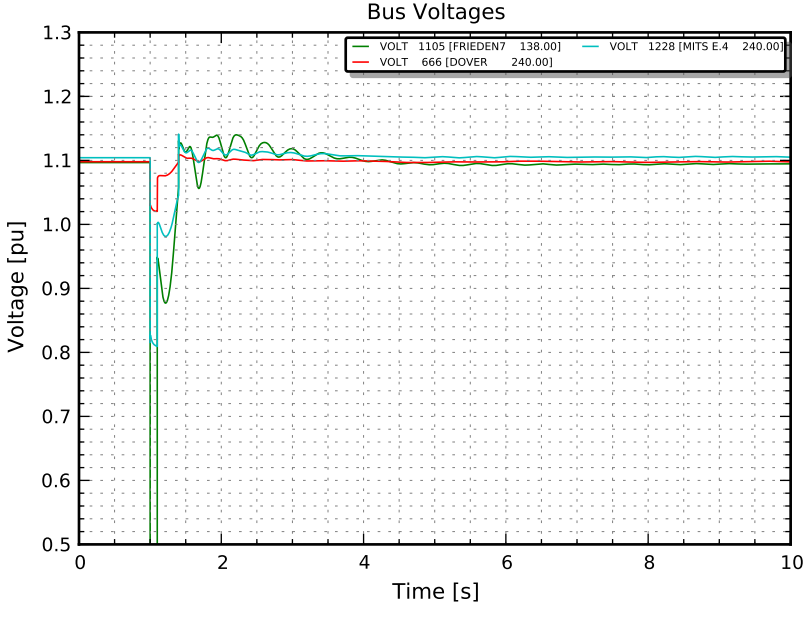
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 010 7L12 WESLEYCREEK to LUBICON_A.

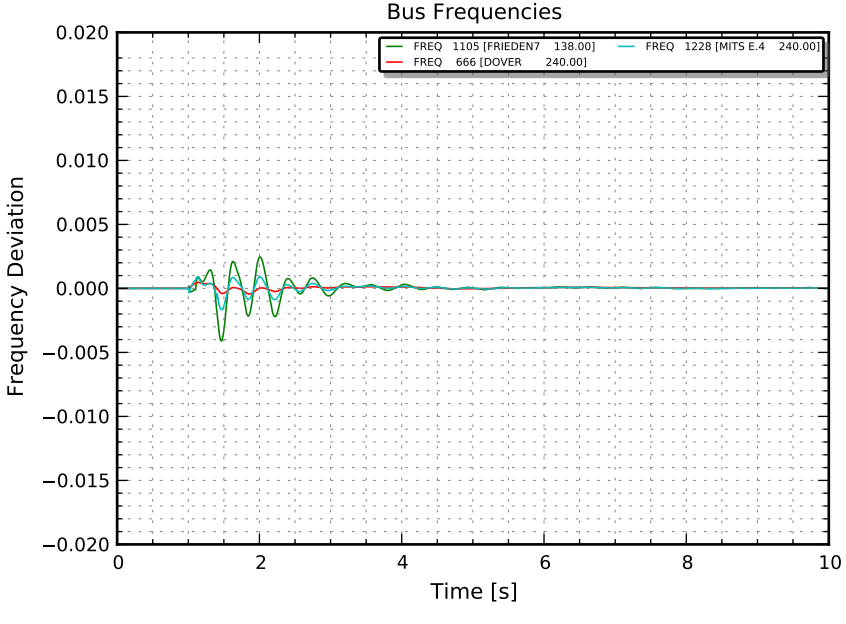
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 010 (A. 1)





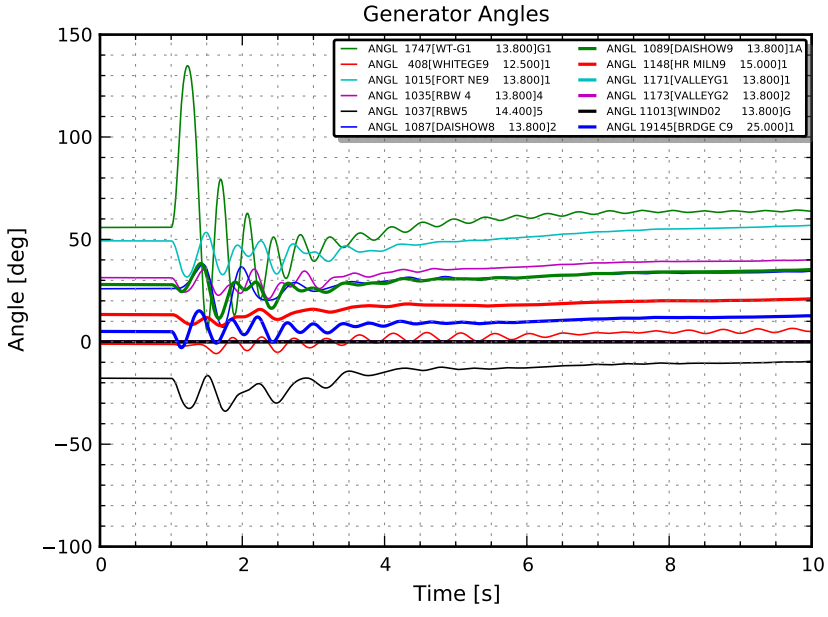


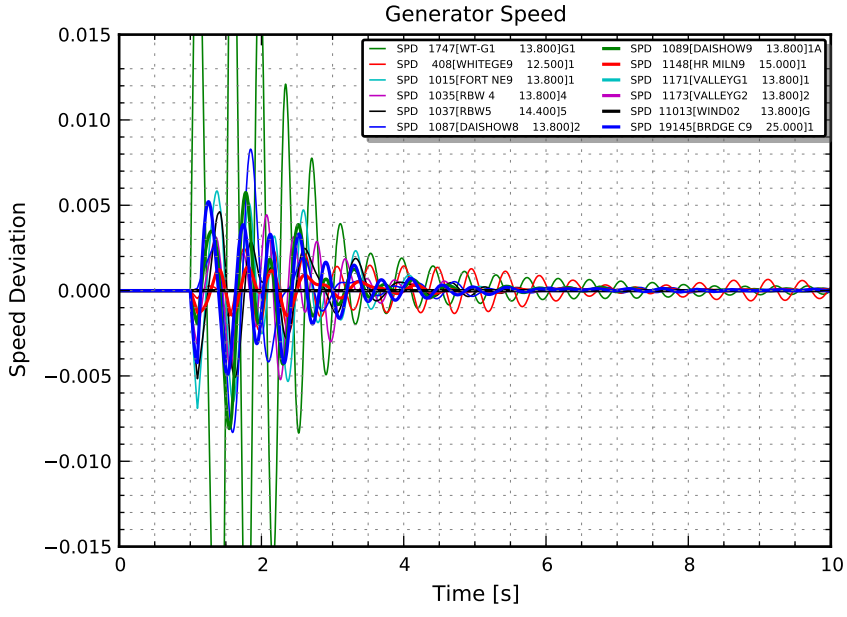


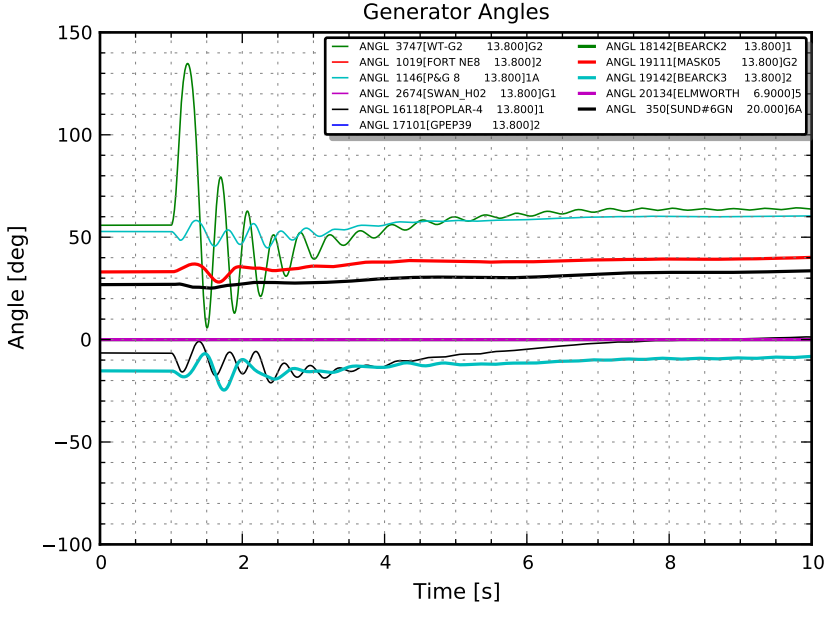
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 010 7L12 WESLEYCREEK to LUBICON_A.

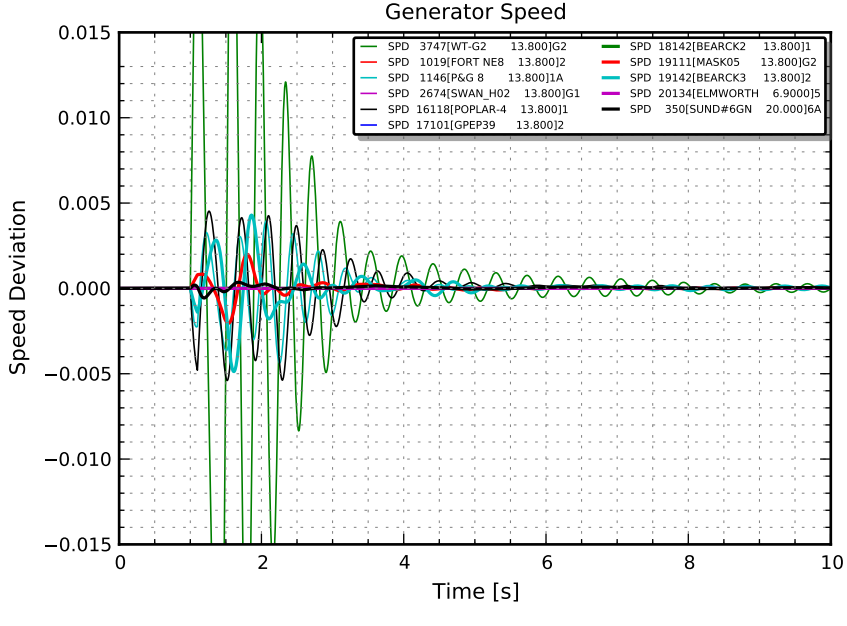
Study Area Generators

Appendix E2B
Figure: 010 (A. 2)





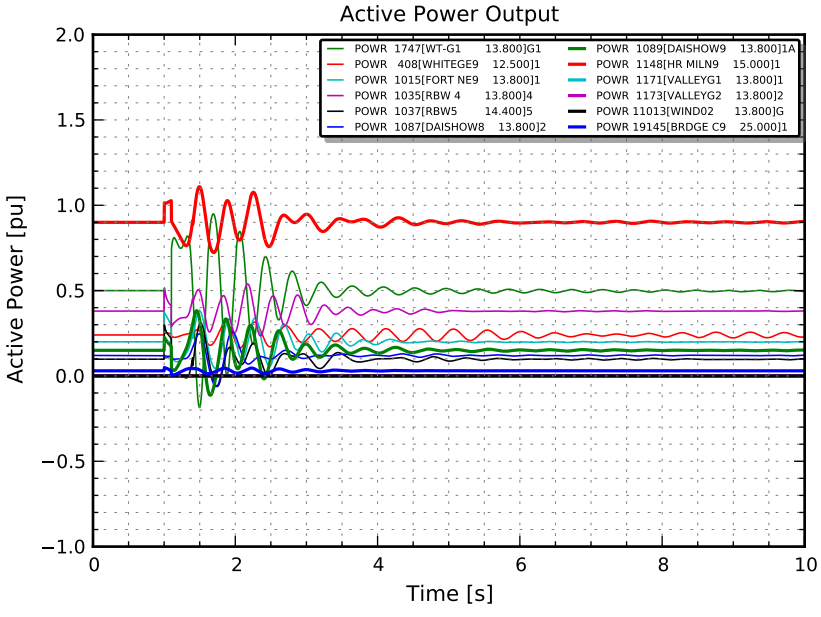


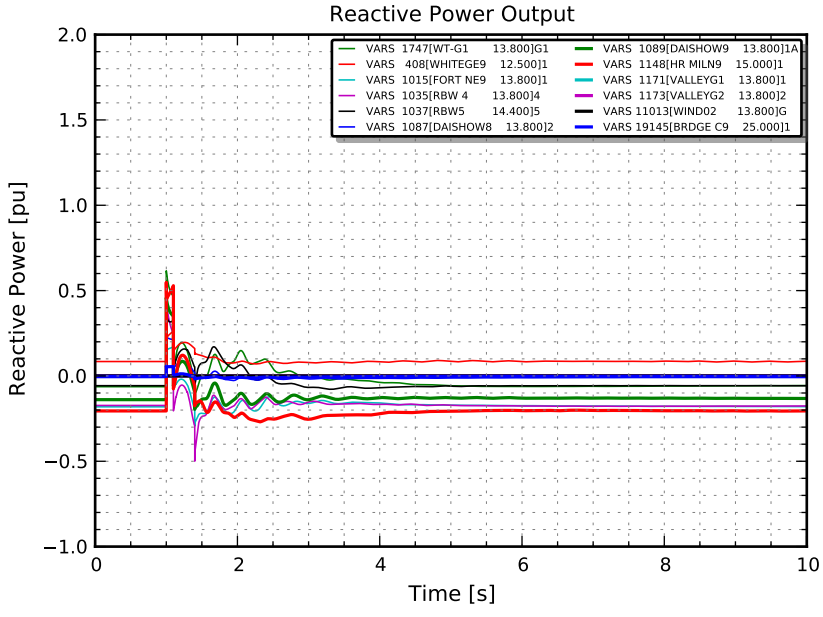


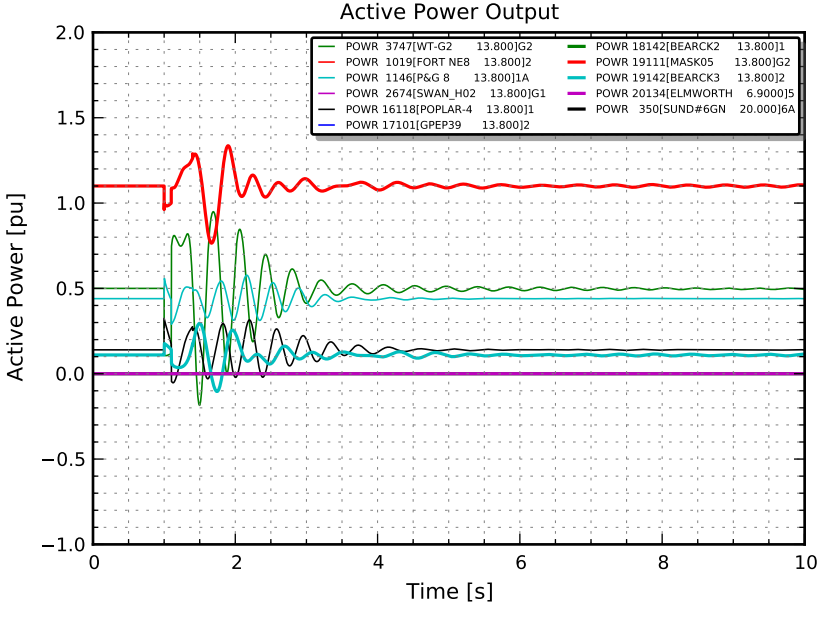
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 010 7L12 WESLEYCREEK to LUBICON_A.

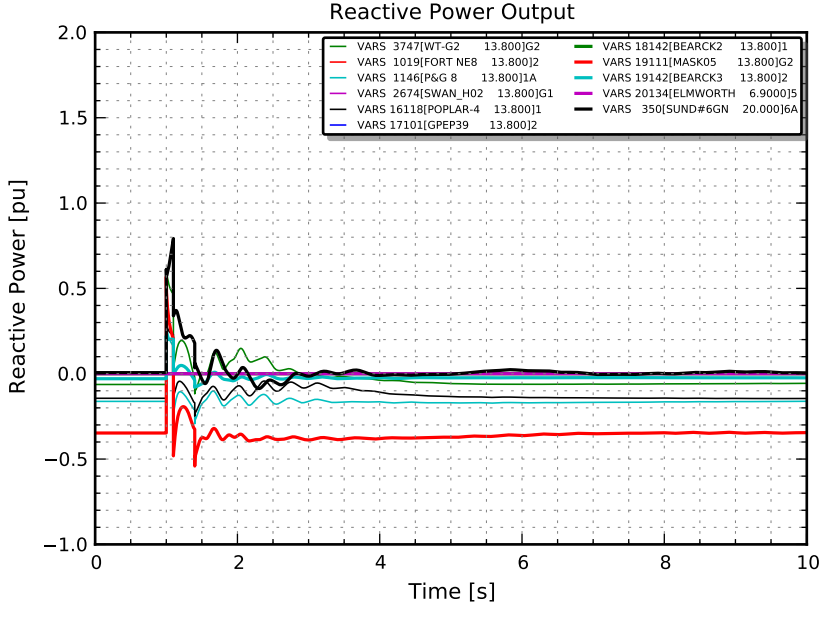
Study Area Generators

Appendix E2B
Figure: 010 (A. 3)





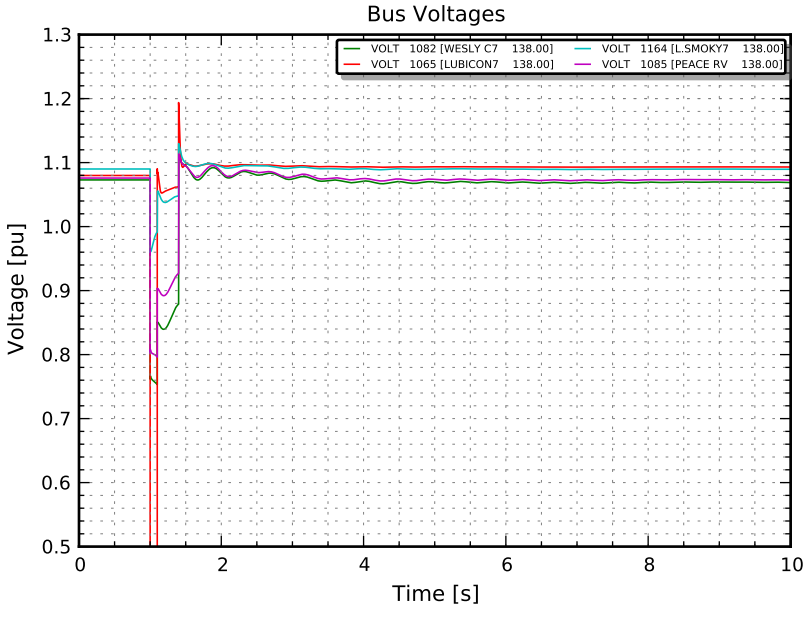


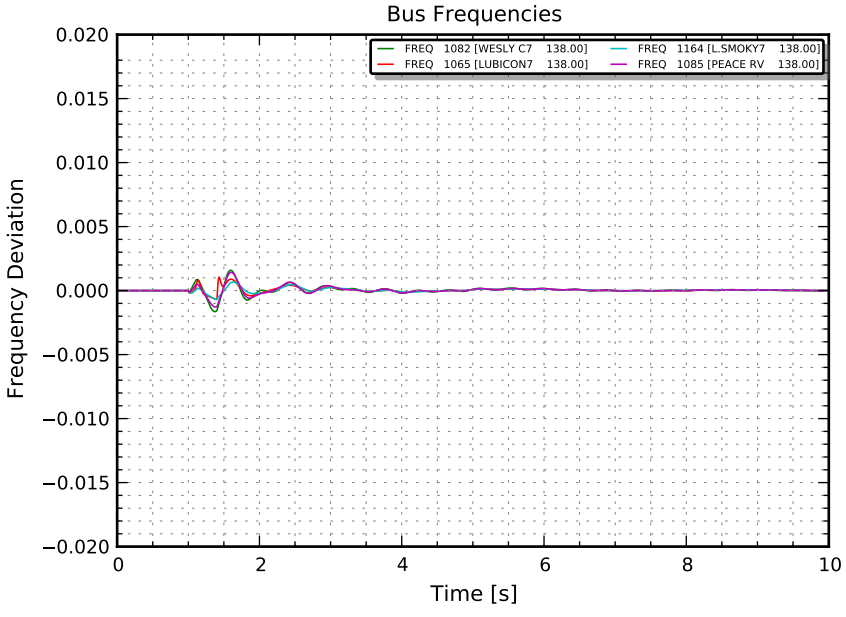


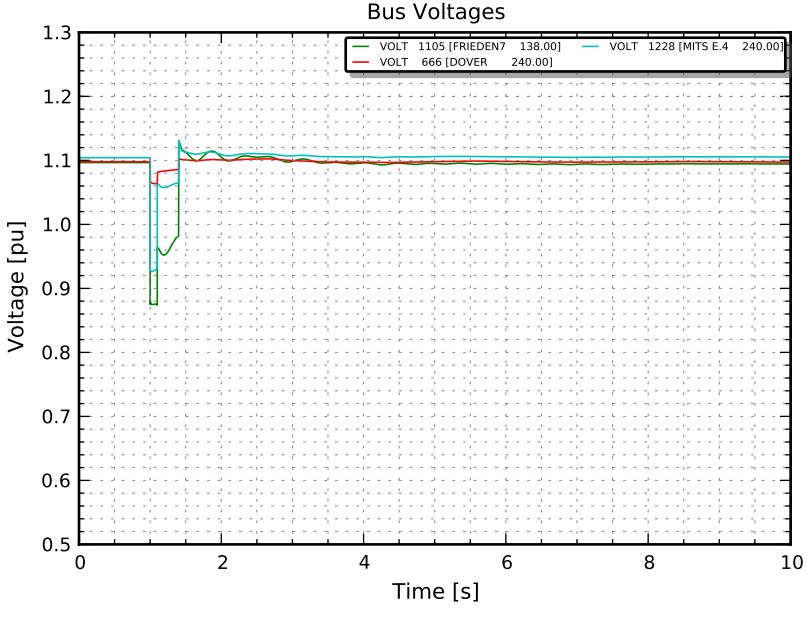
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 010 7L12 WESLEYCREEK to LUBICON_B.

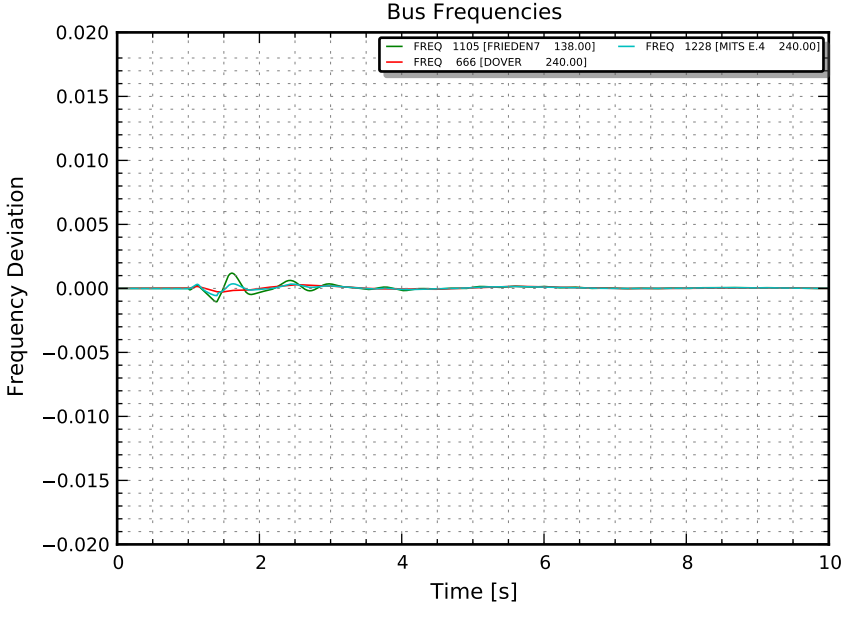
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 010 (B. 1)





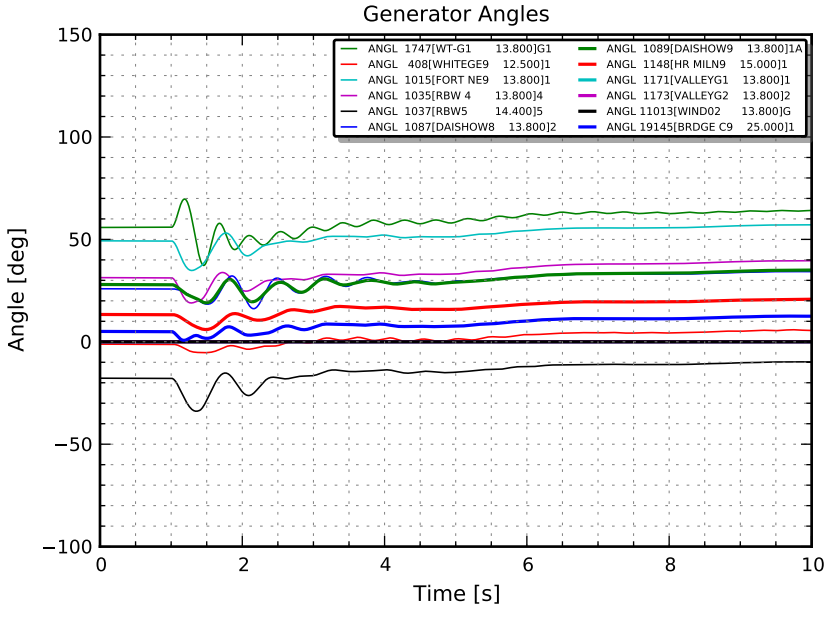


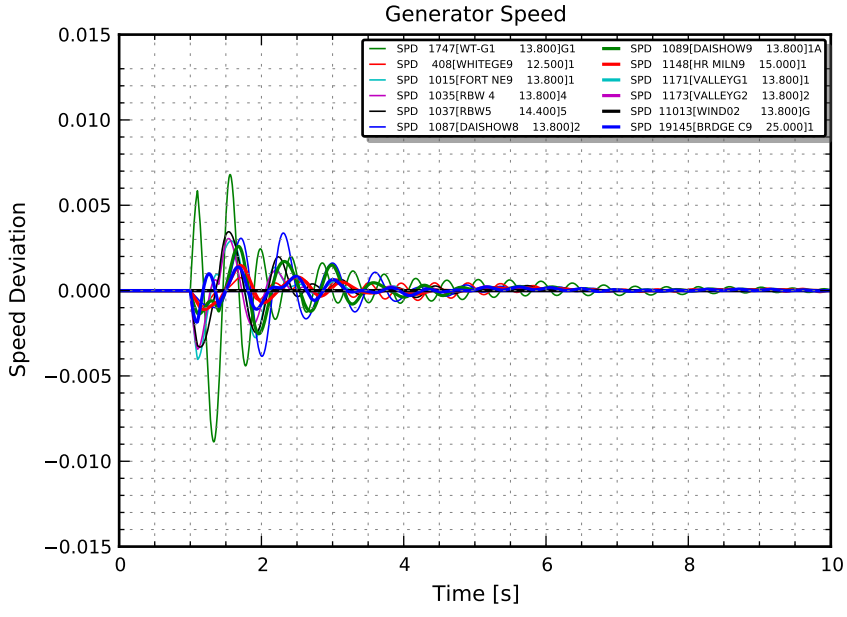


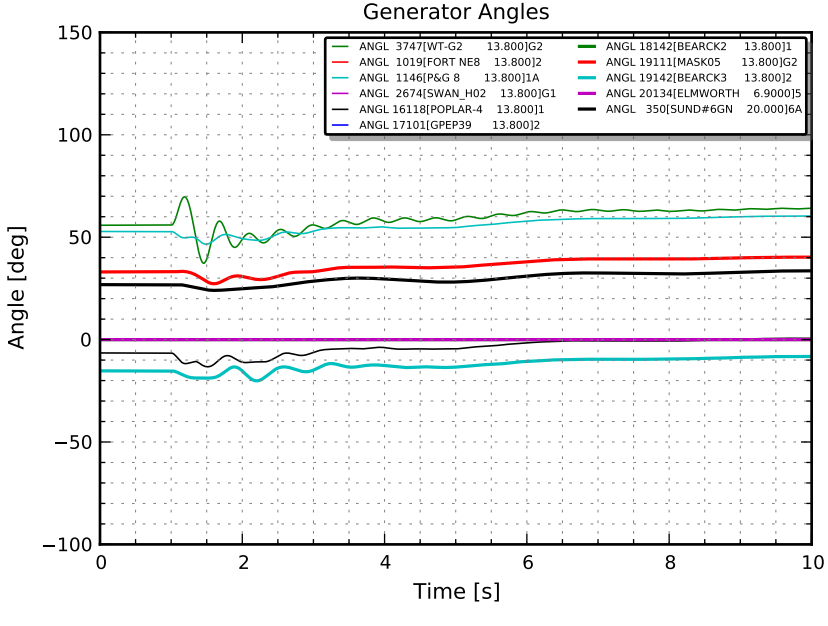
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 010 7L12 WESLEYCREEK to LUBICON_B.

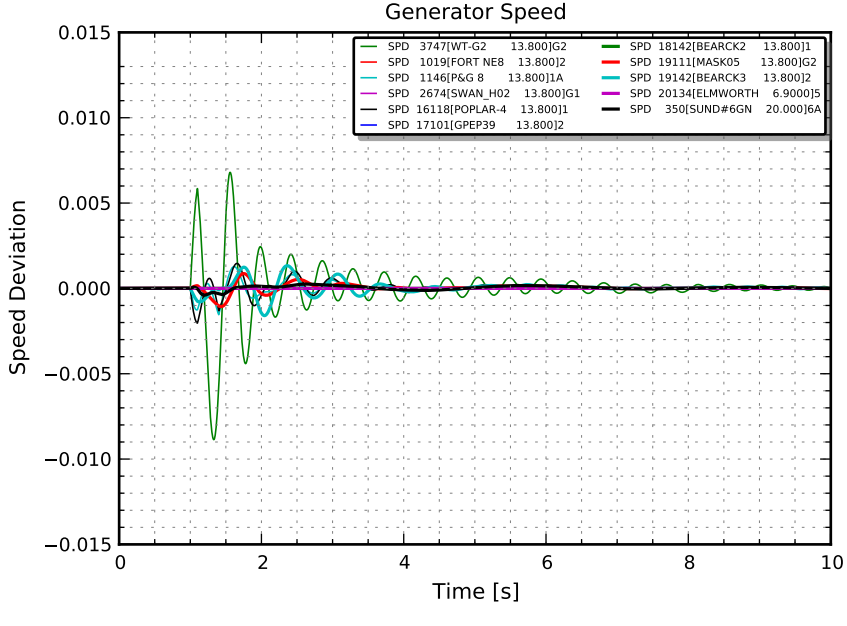
Study Area Generators

Appendix E2B
Figure: 010 (B. 2)





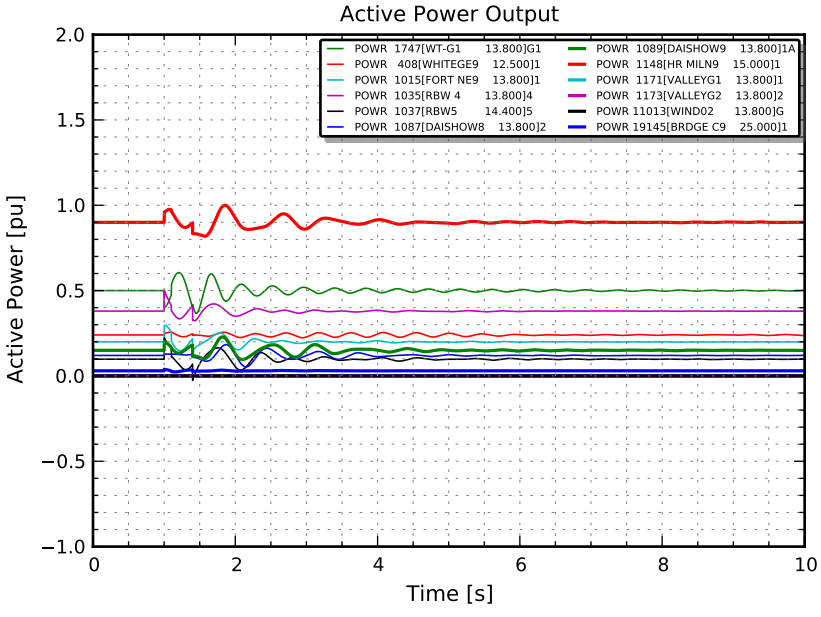


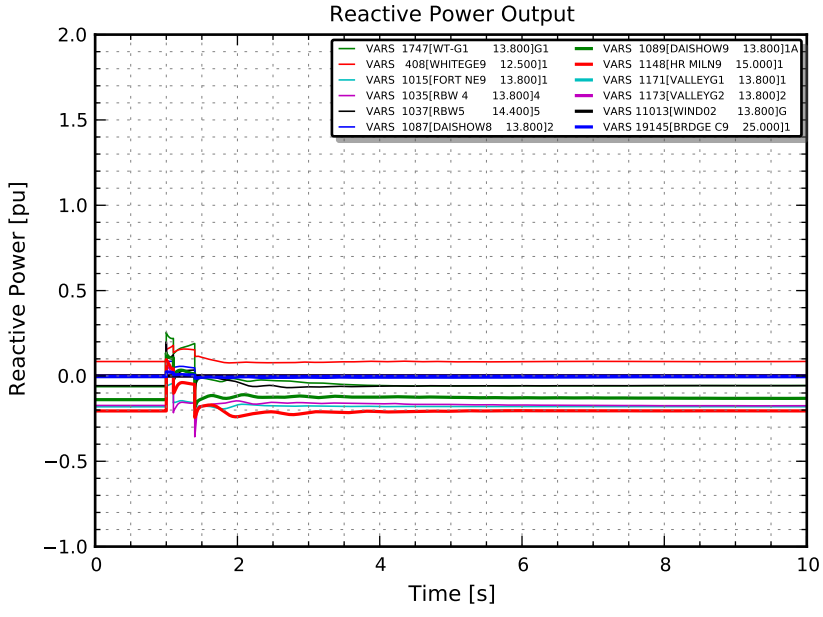


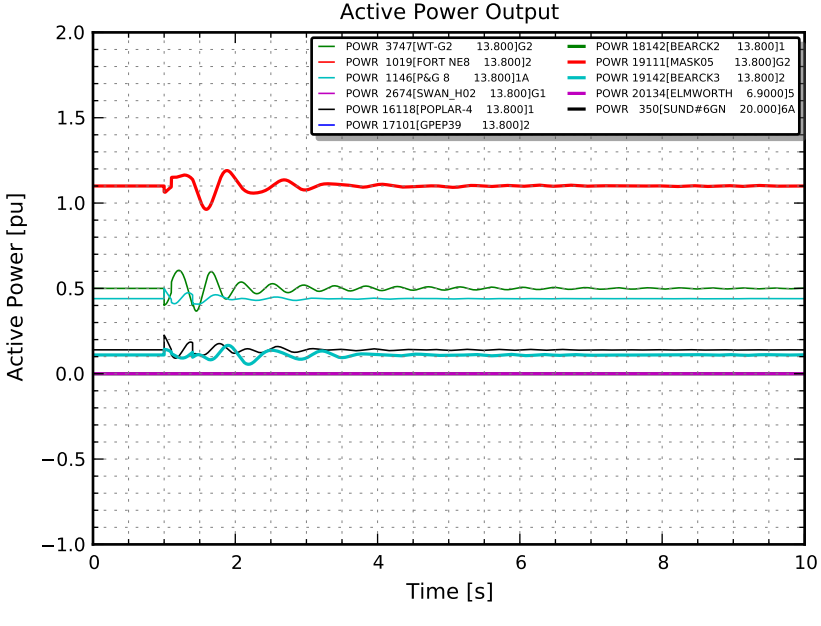
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 010 7L12 WESLEYCREEK to LUBICON_B.

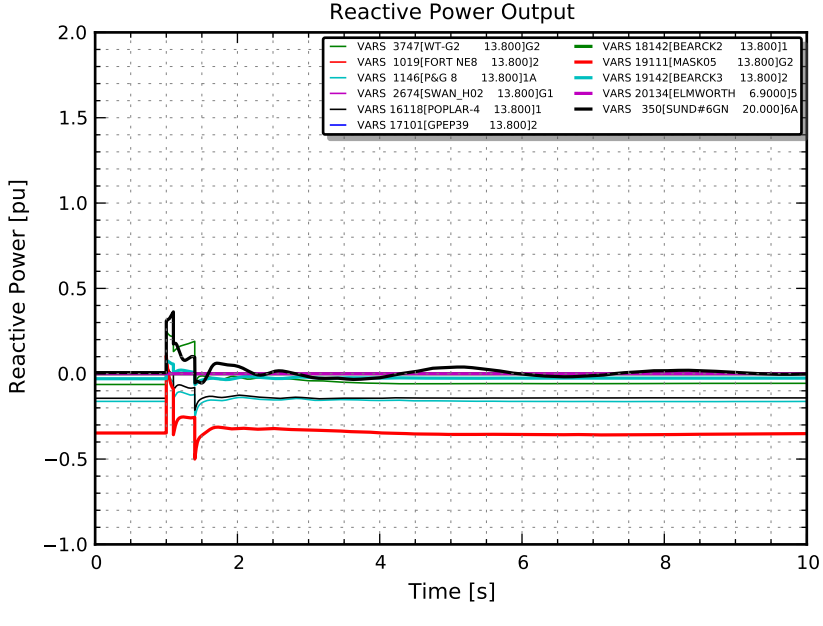
Study Area Generators

Appendix E2B
Figure: 010 (B. 3)





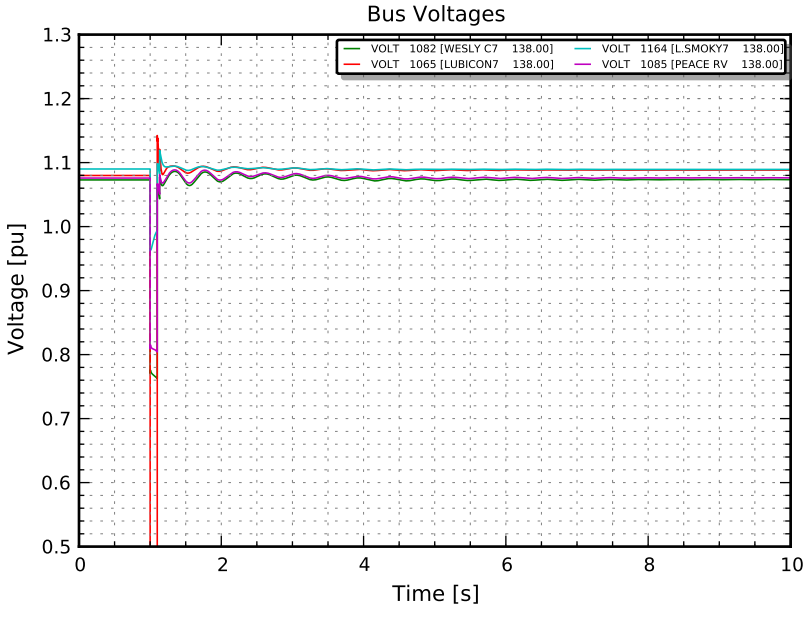


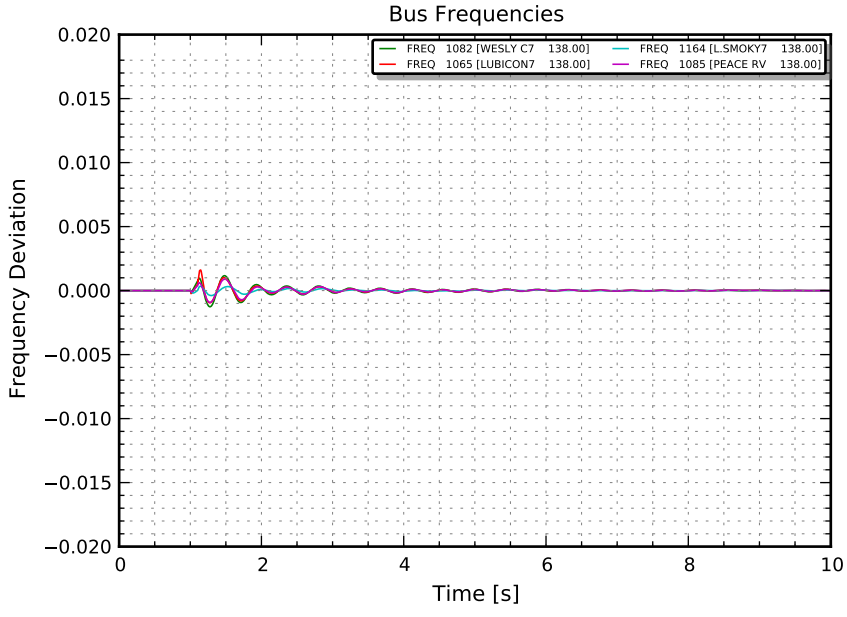


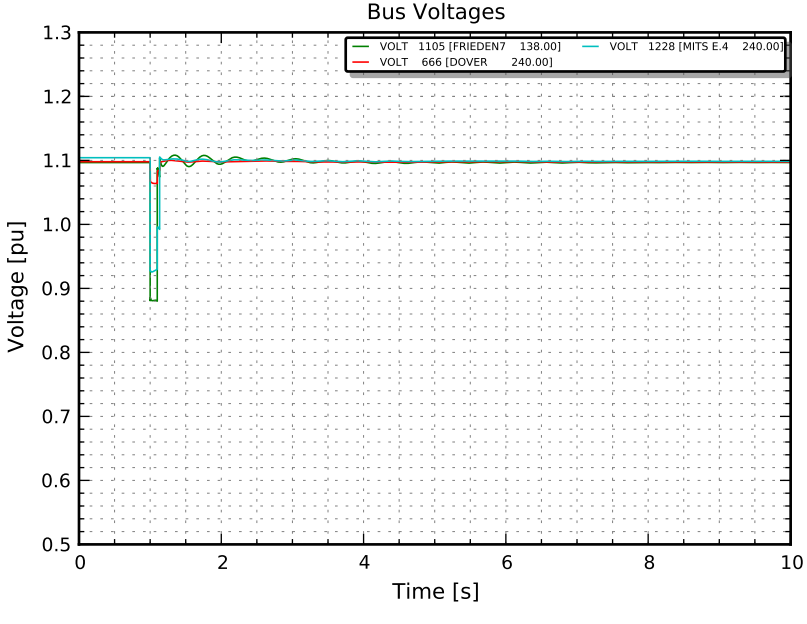
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 011 7L61 LUBICON to NIPISI_A.

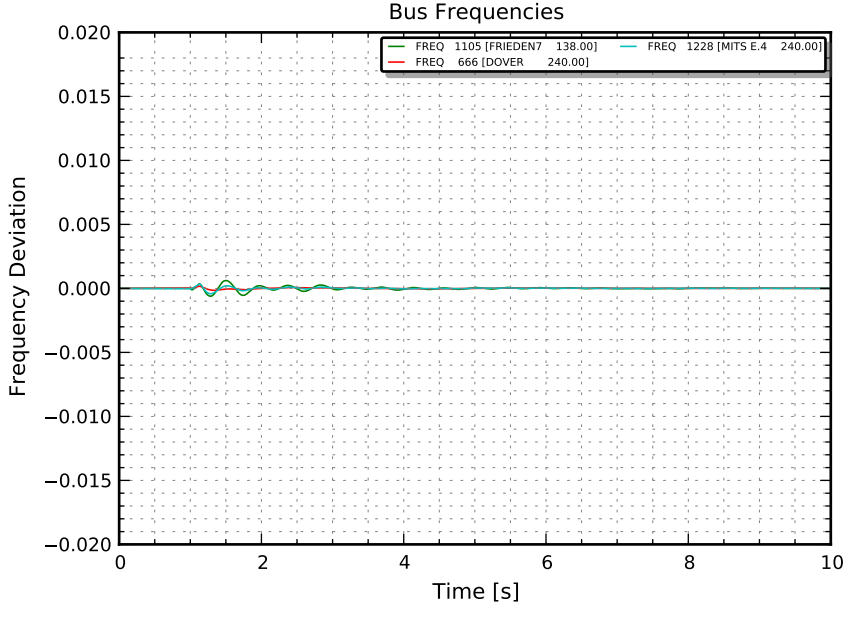
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 011 (A. 1)





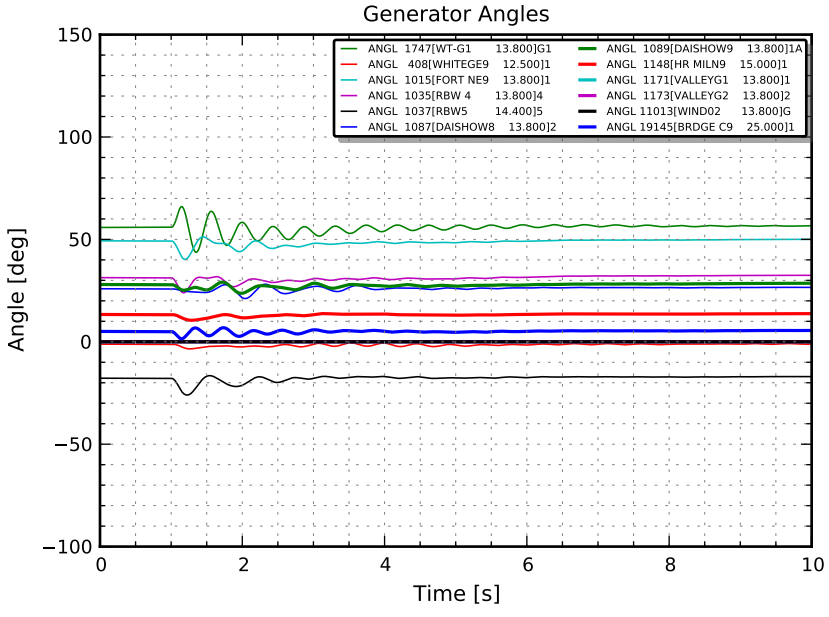


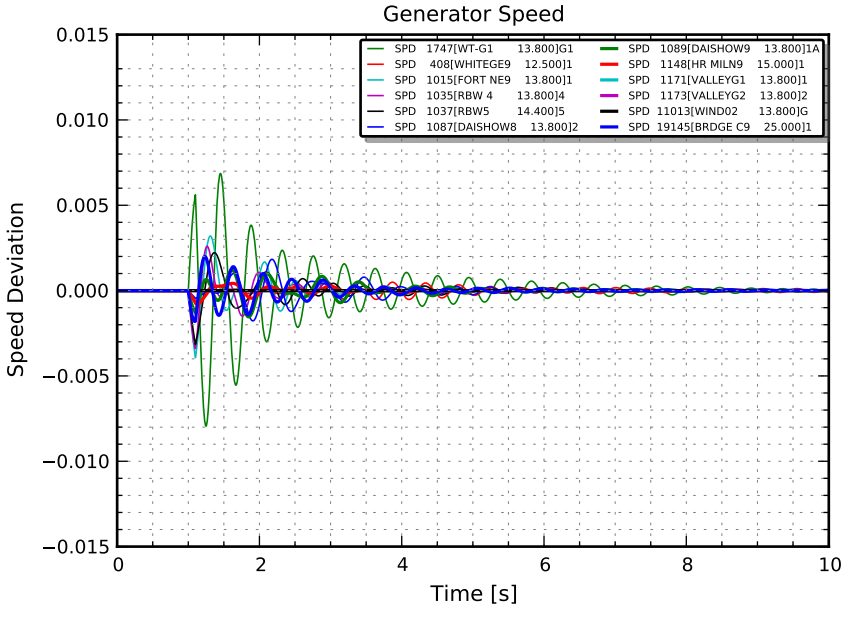


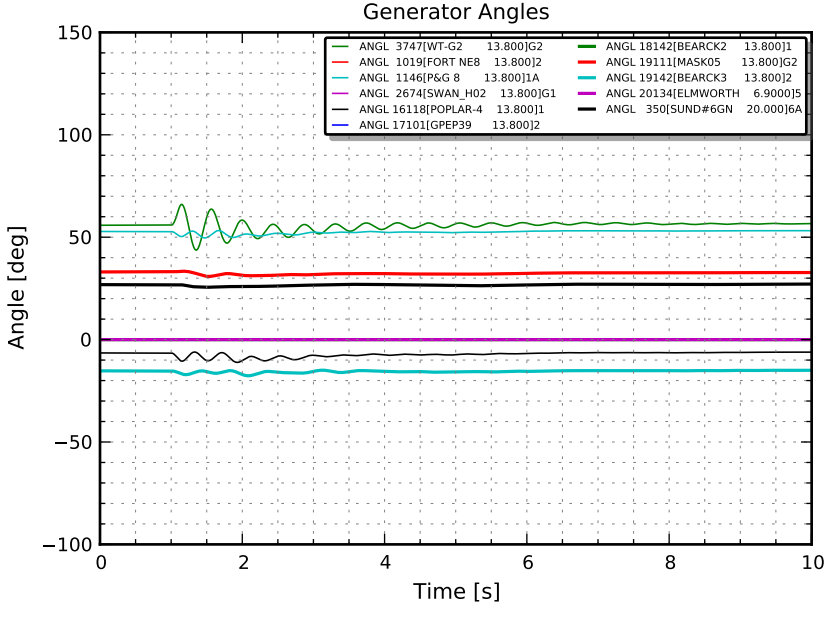
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 011 7L61 LUBICON to NIPISI_A.

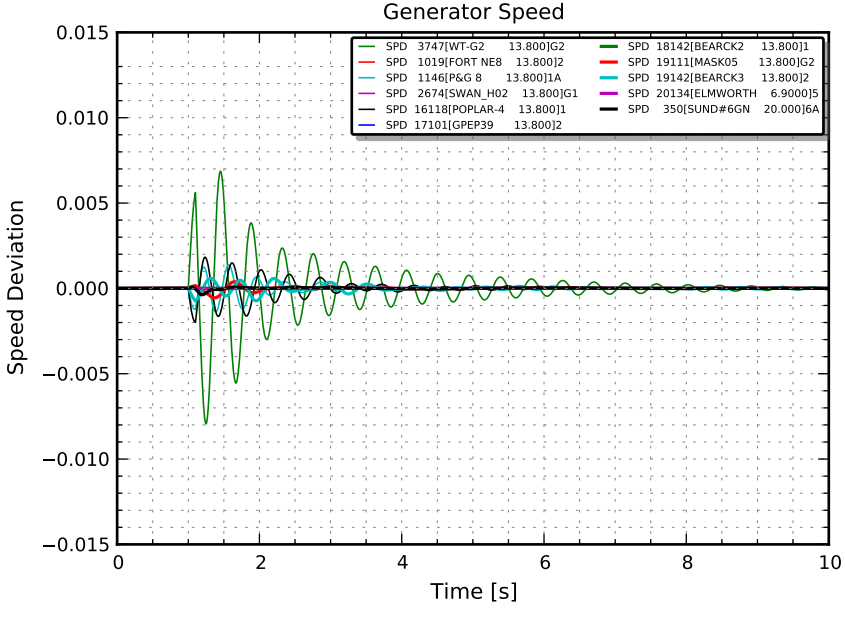
Study Area Generators

Appendix E2B
Figure: 011 (A. 2)





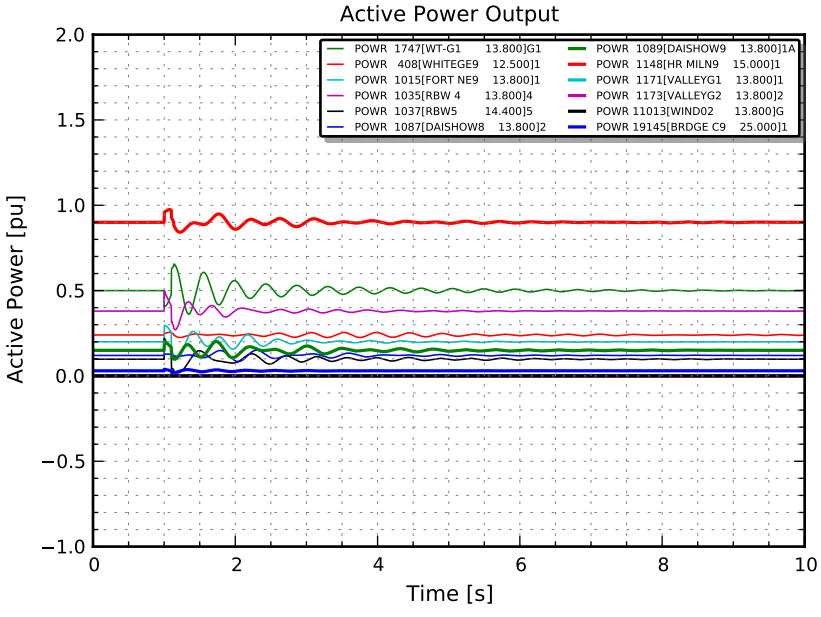


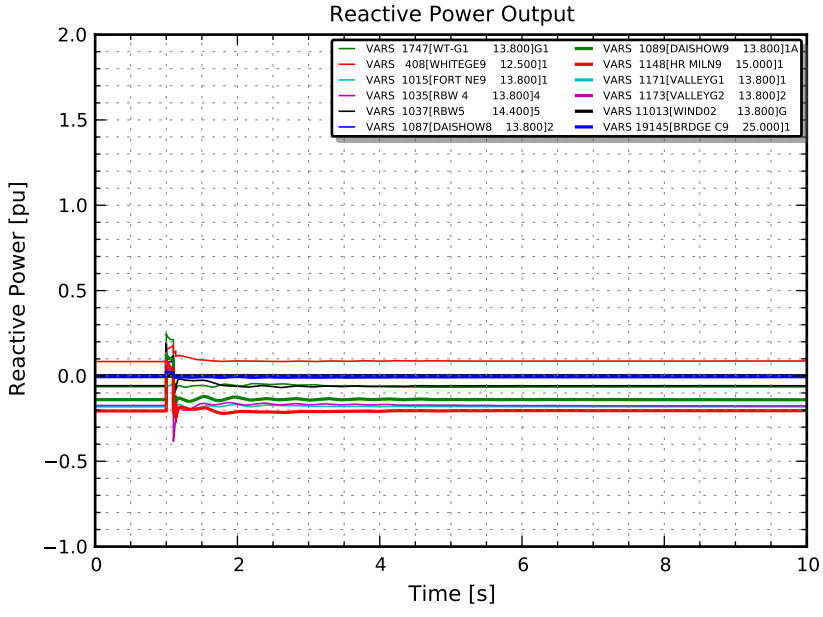


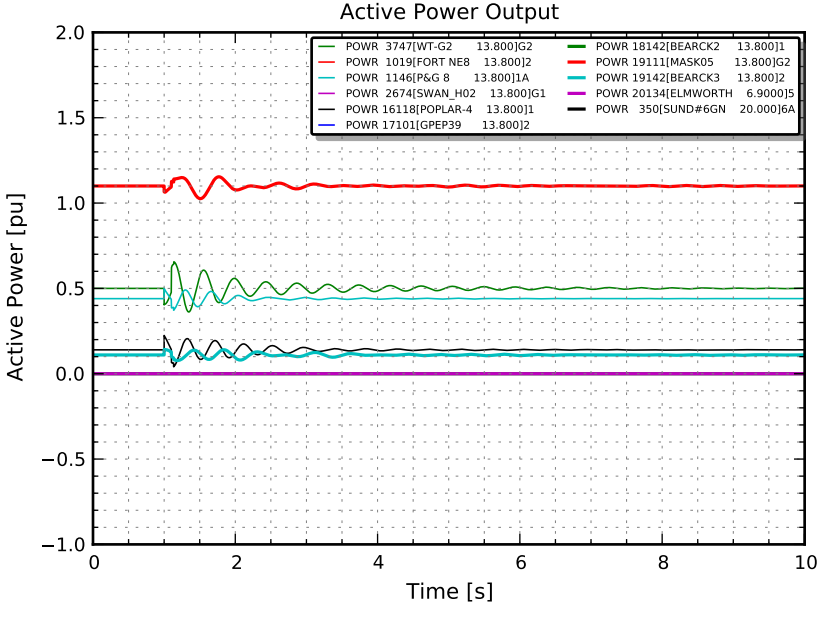
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 011 7L61 LUBICON to NIPISI_A.

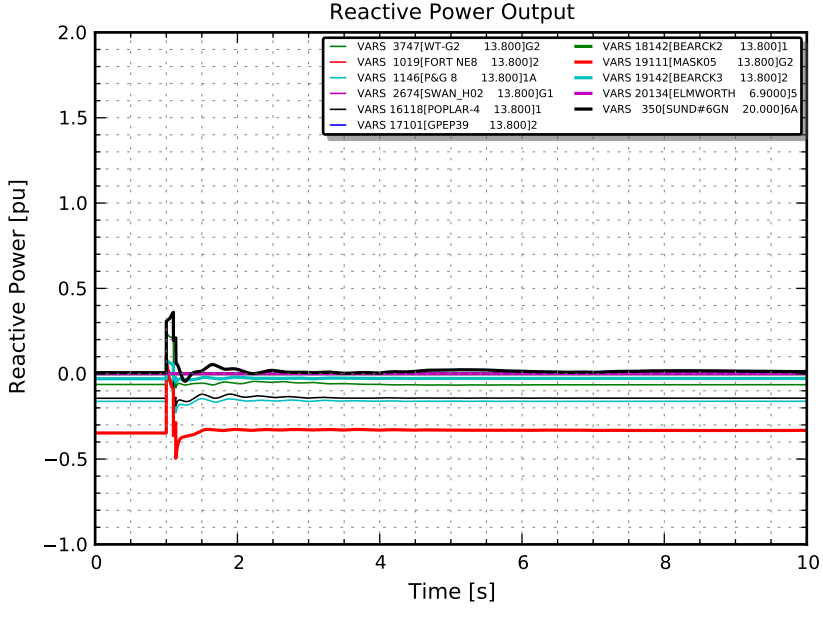
Study Area Generators

Appendix E2B
Figure: 011 (A. 3)





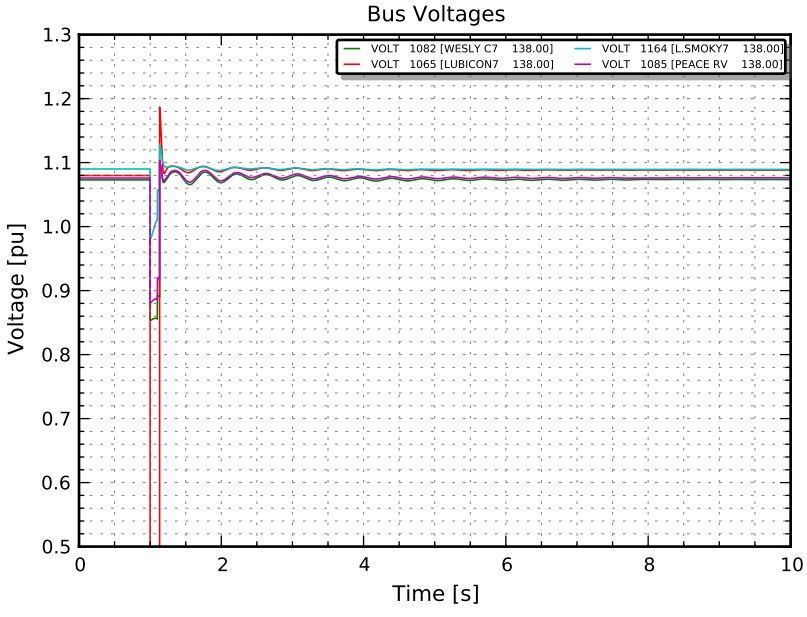


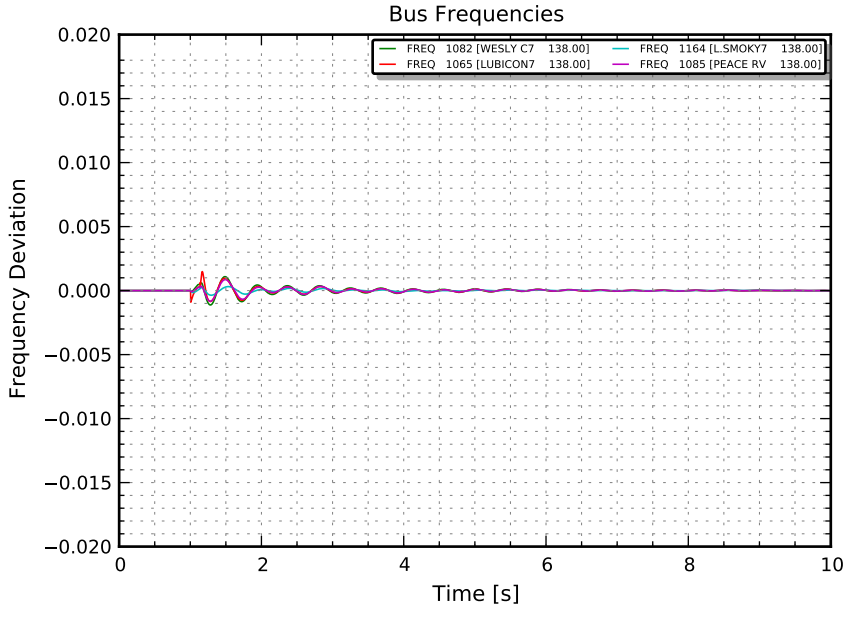


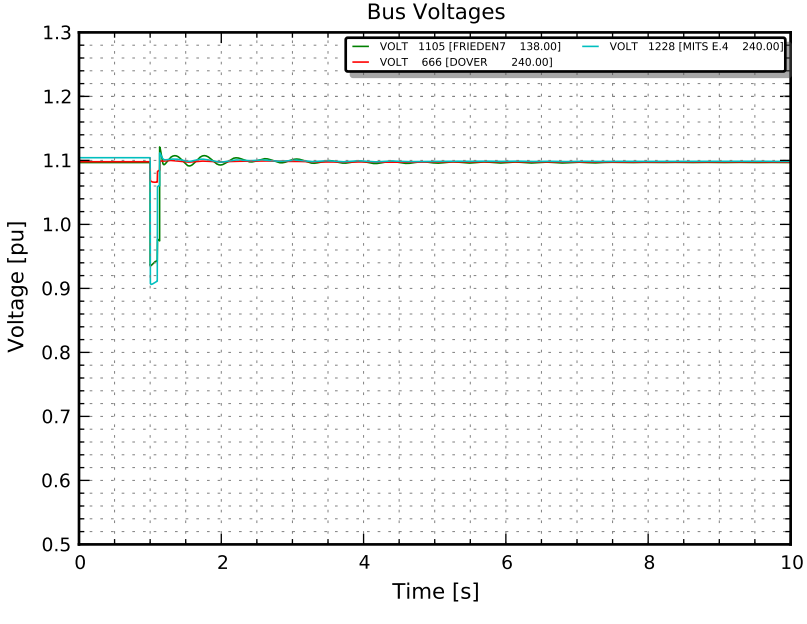
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 011 7L61 LUBICON to NIPISI_B.

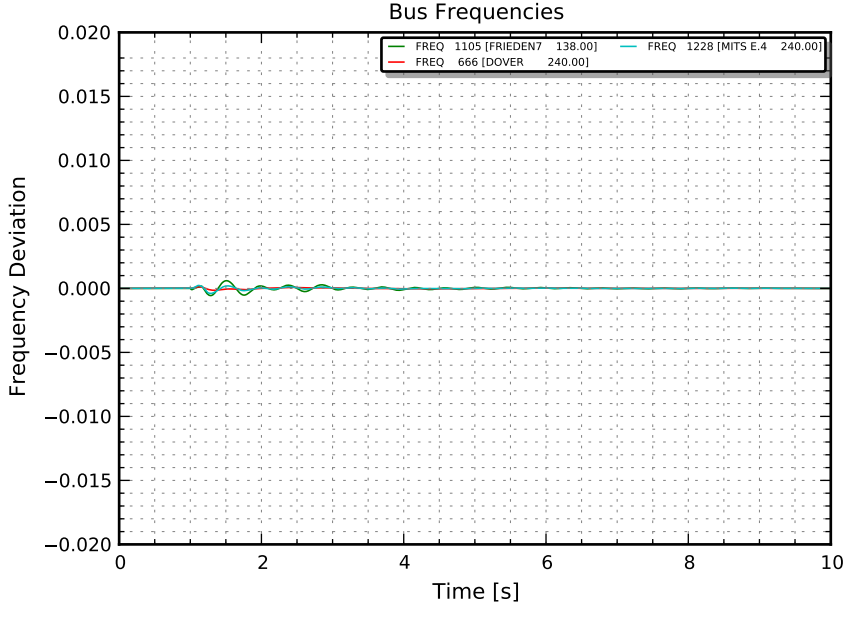
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 011 (B. 1)





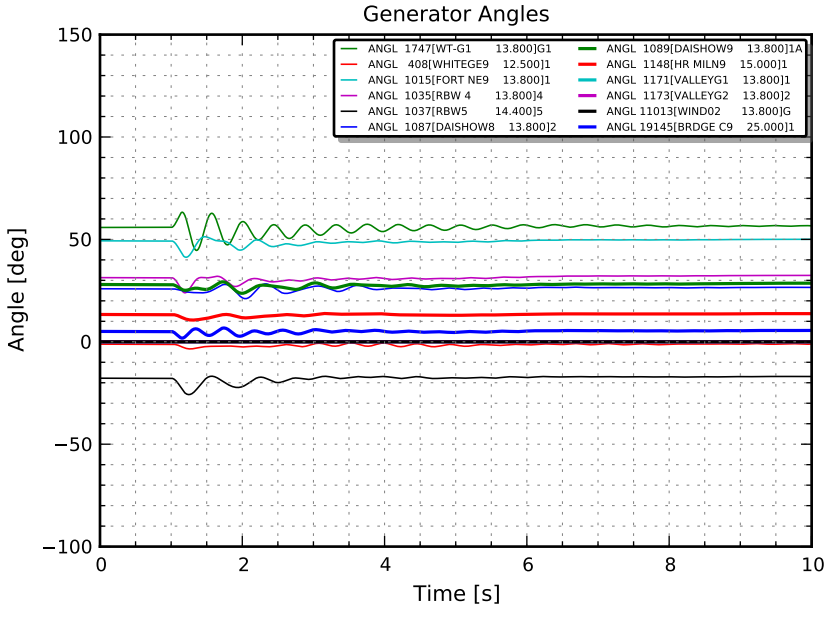


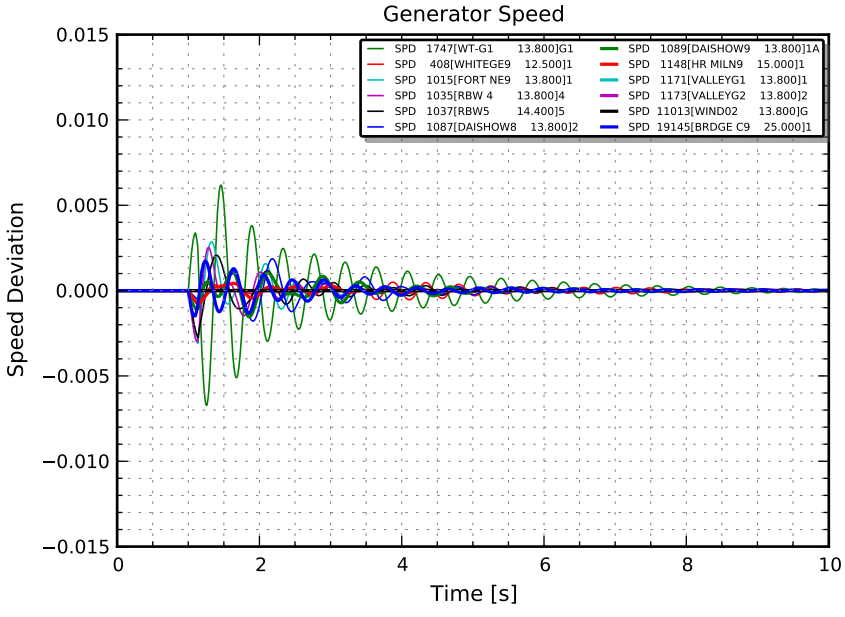


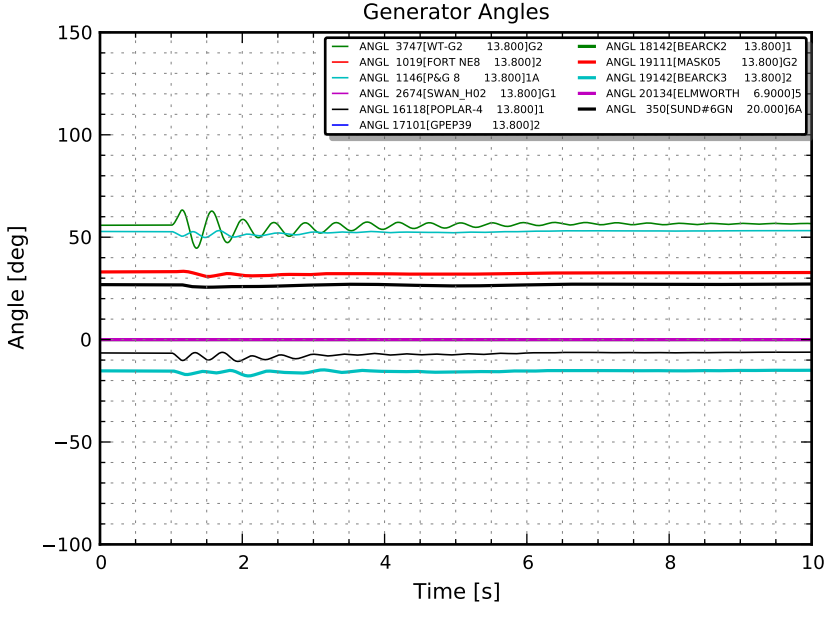
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 011 7L61 LUBICON to NIPISI_B.

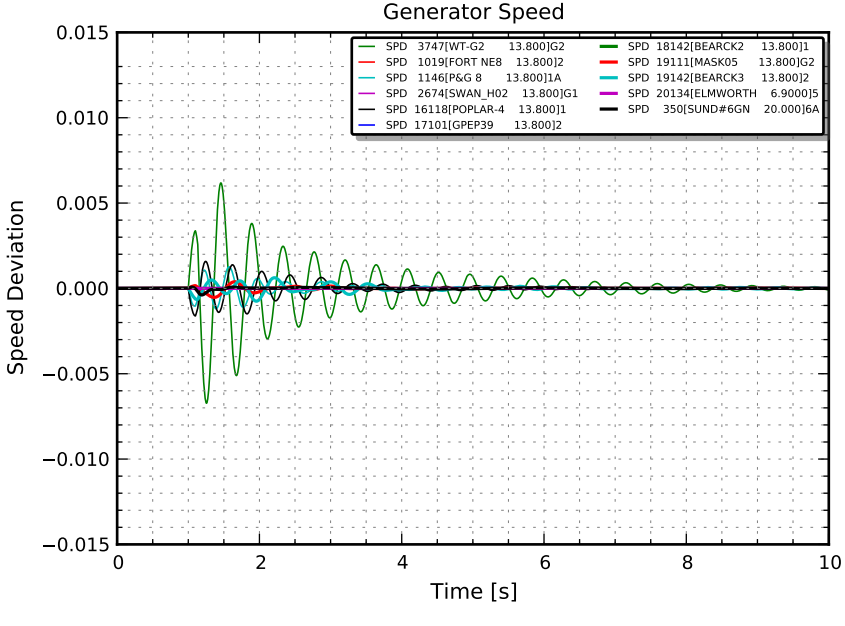
Study Area Generators

Appendix E2B
Figure: 011 (B. 2)





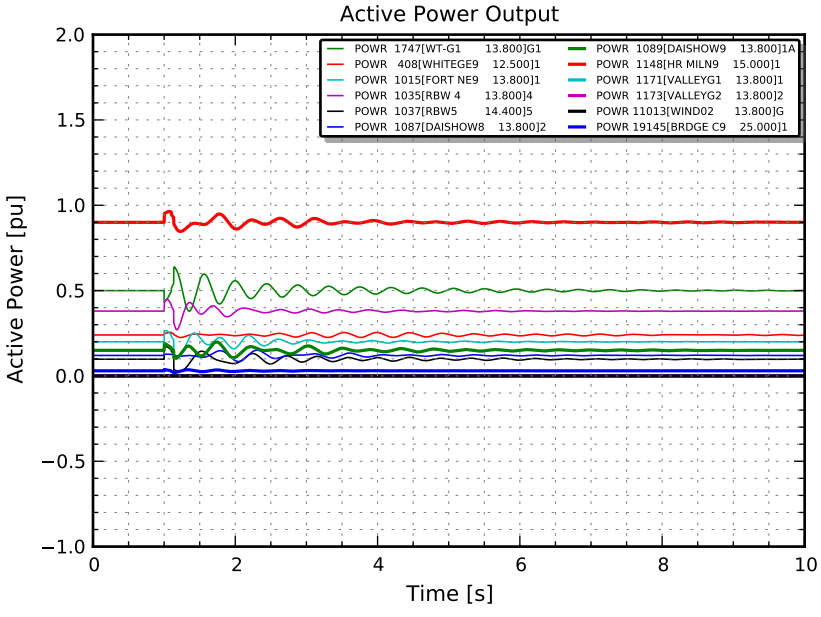


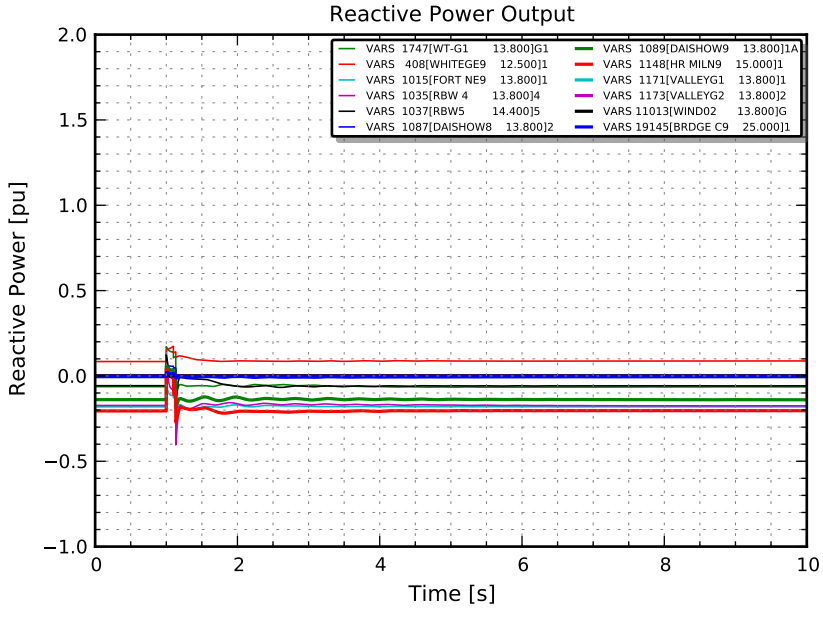


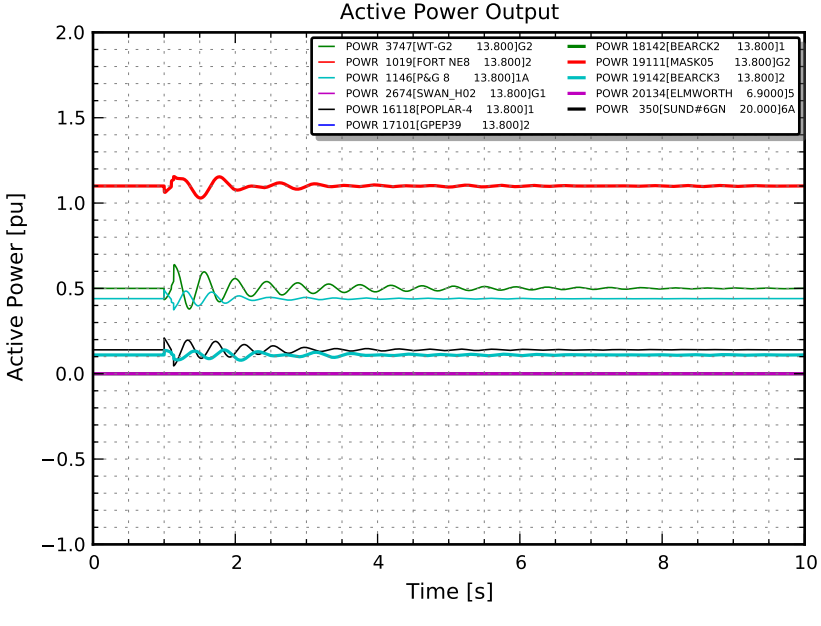
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 011 7L61 LUBICON to NIPISI_B.

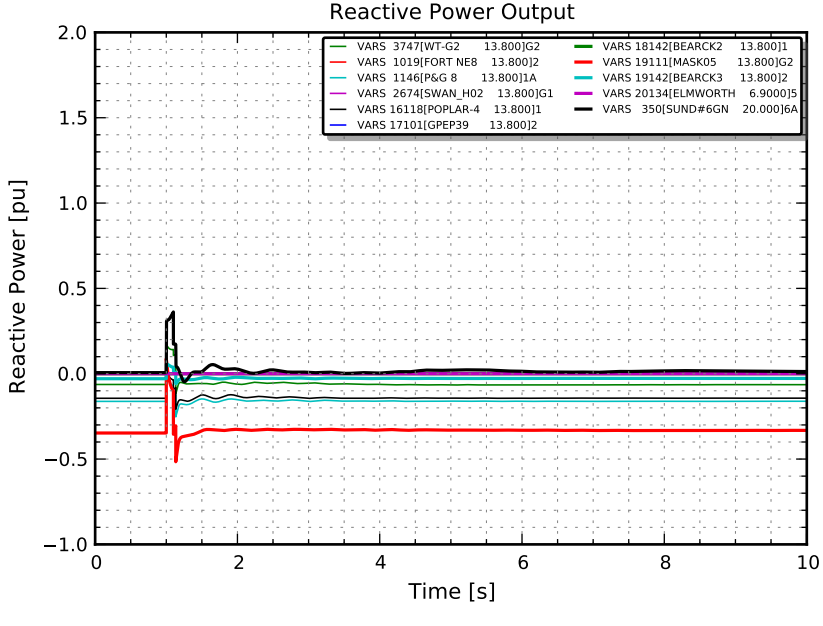
Study Area Generators

Appendix E2B
Figure: 011 (B. 3)





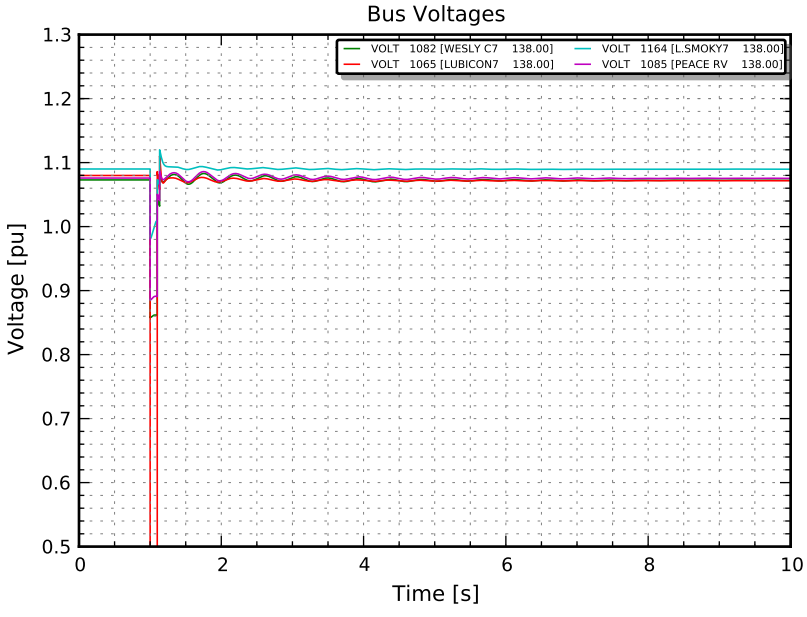


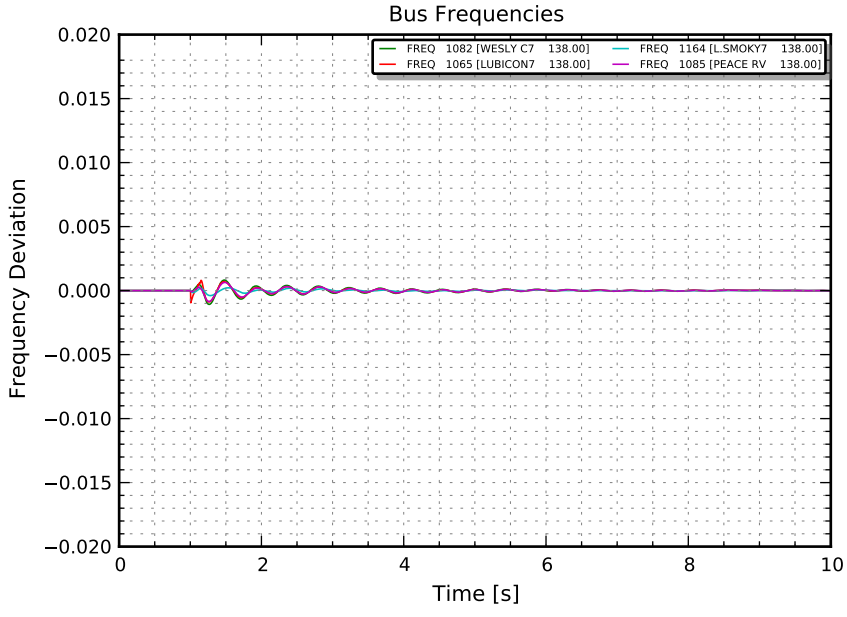


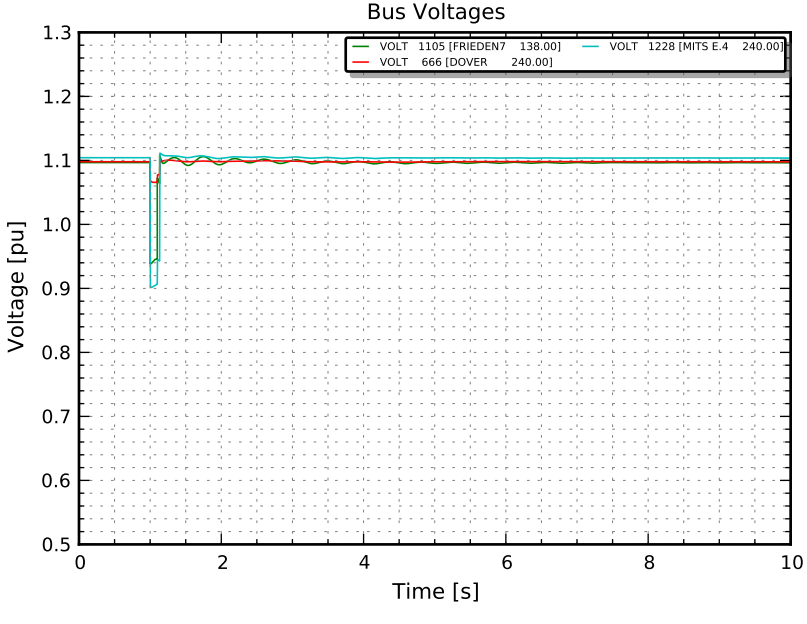
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 012 7L23 NIPISI to MITSUE_A.

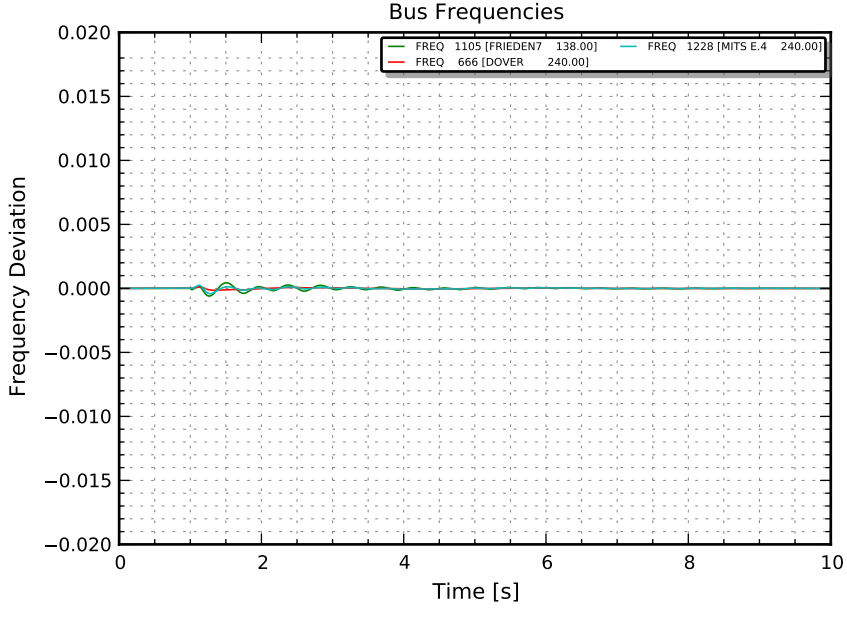
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 012 (A. 1)





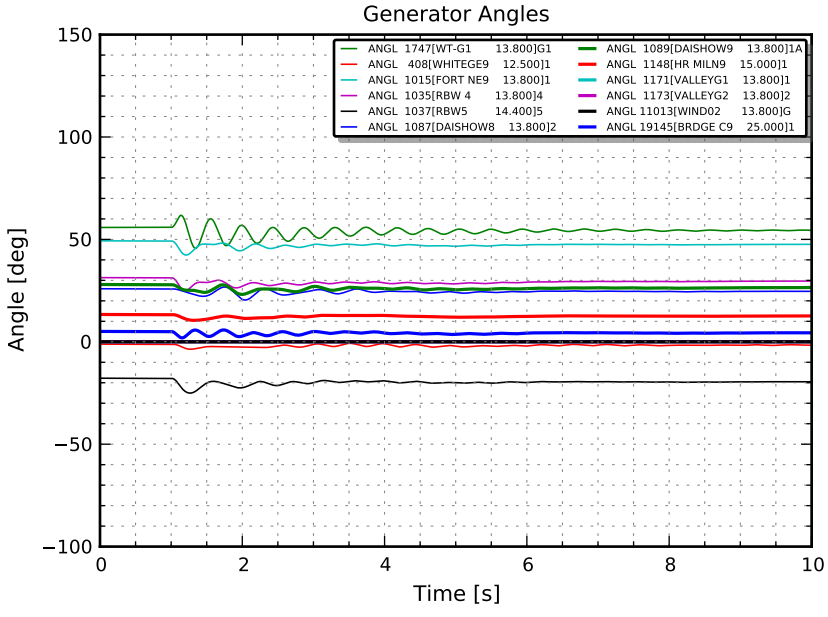


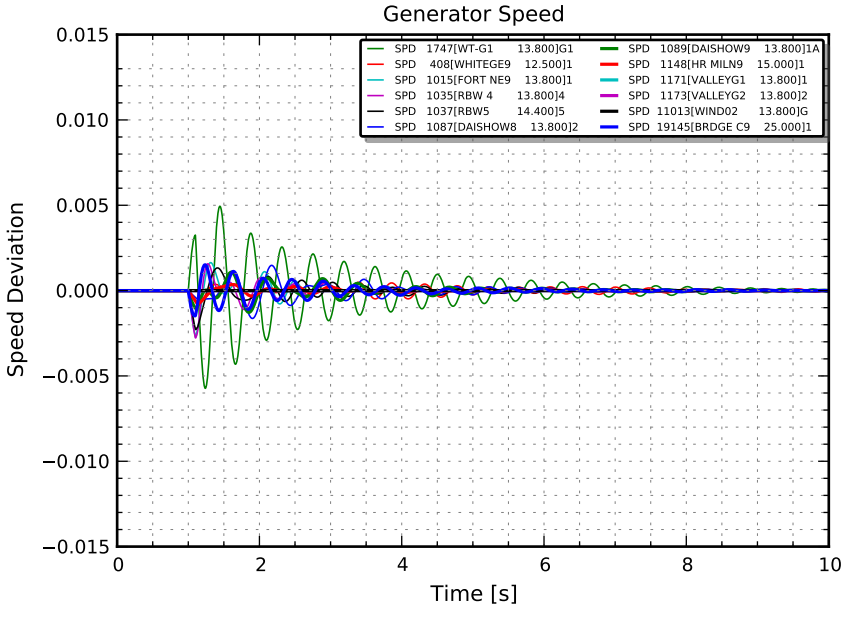


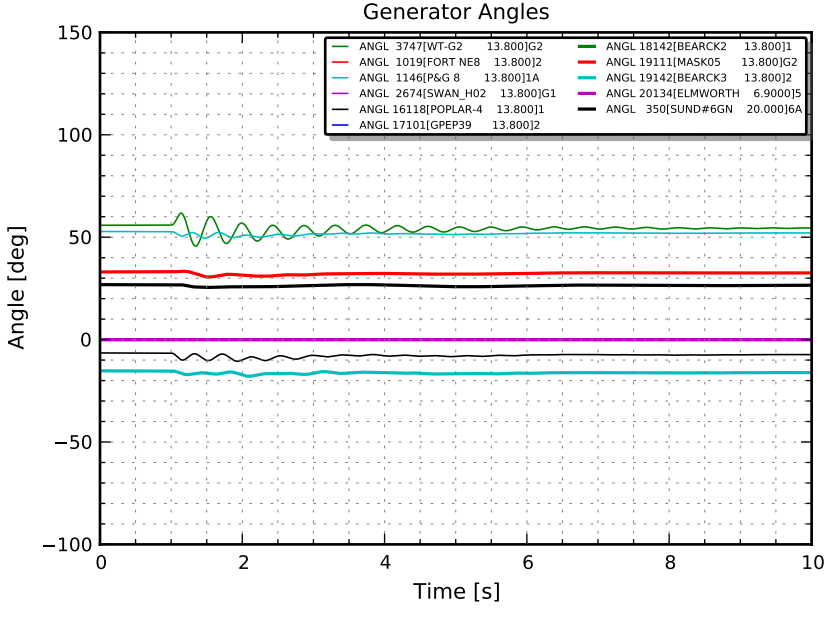
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 012 7L23 NIPISI to MITSUE_A.

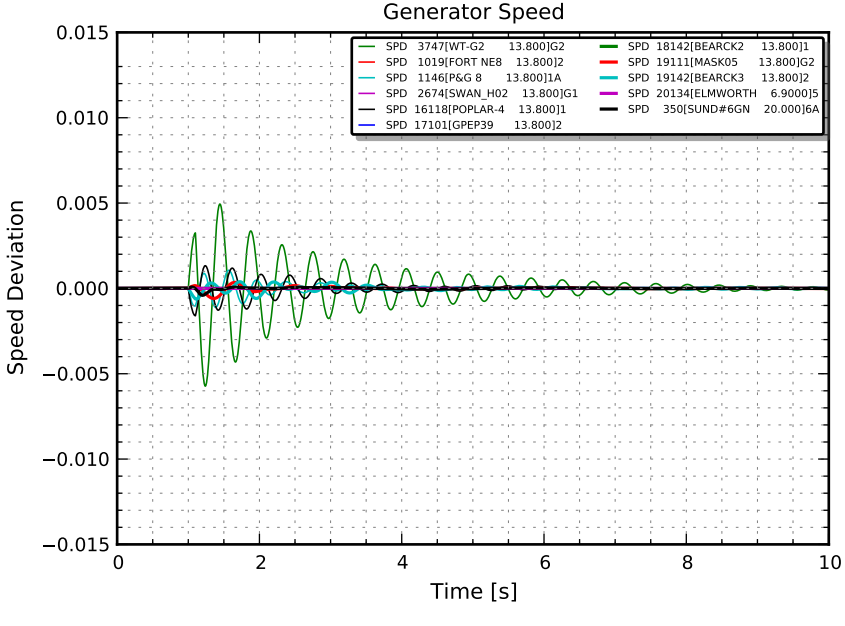
Study Area Generators

Appendix E2B
Figure: 012 (A. 2)





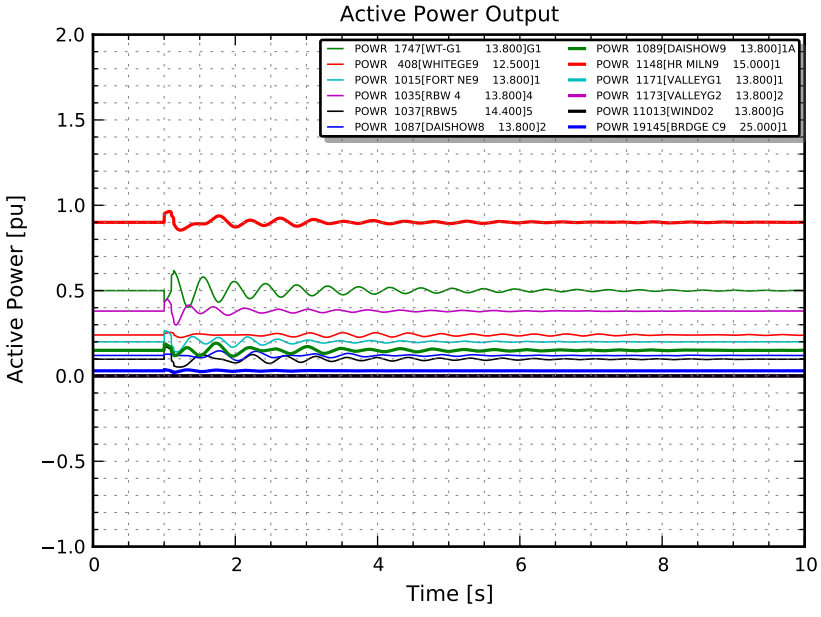


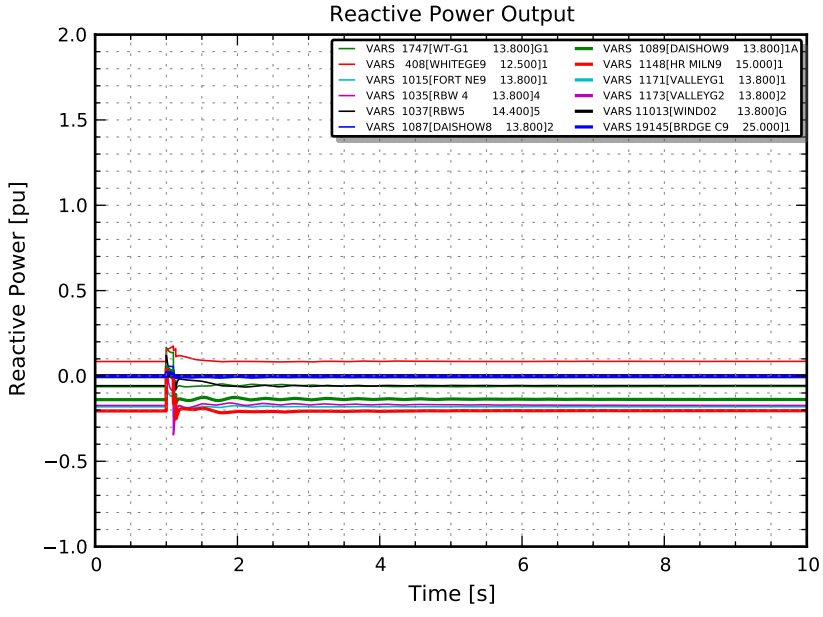


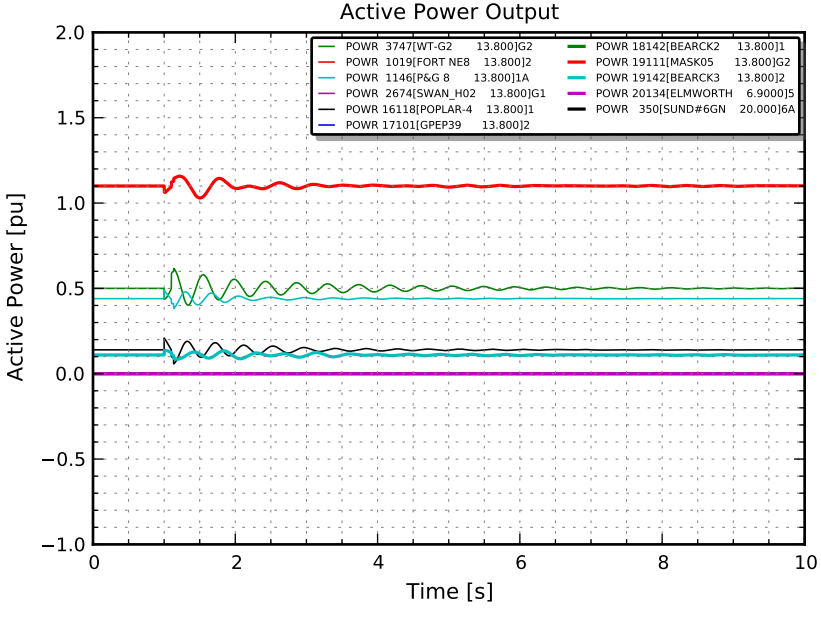
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 012 7L23 NIPISI to MITSUE_A.

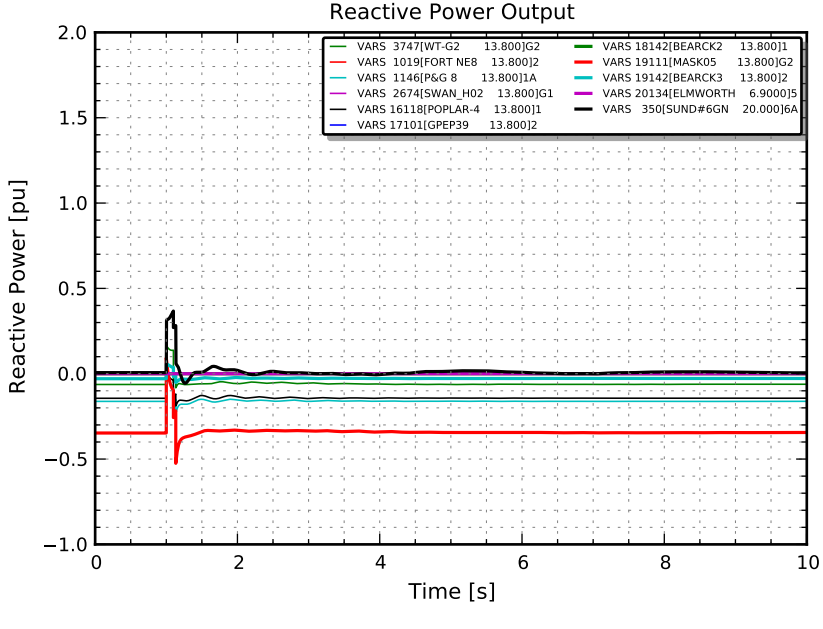
Study Area Generators

Appendix E2B
Figure: 012 (A. 3)





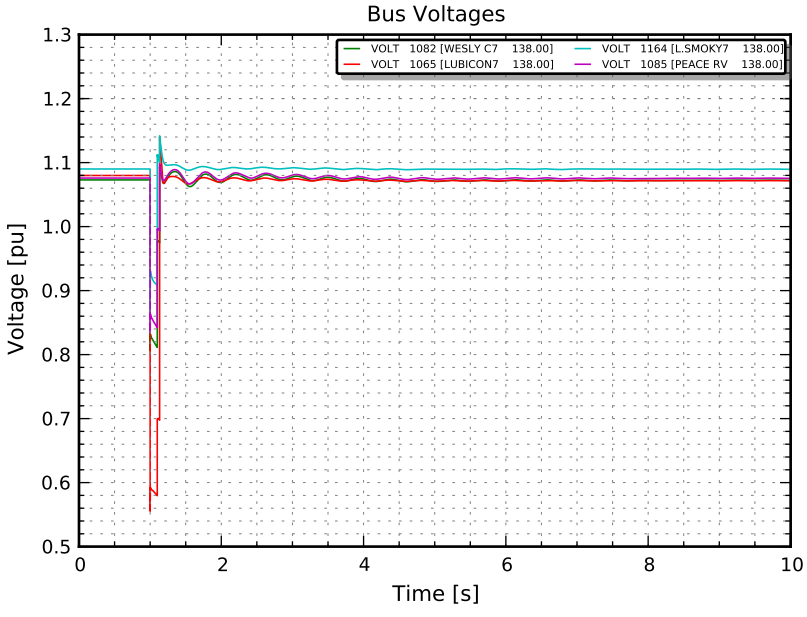


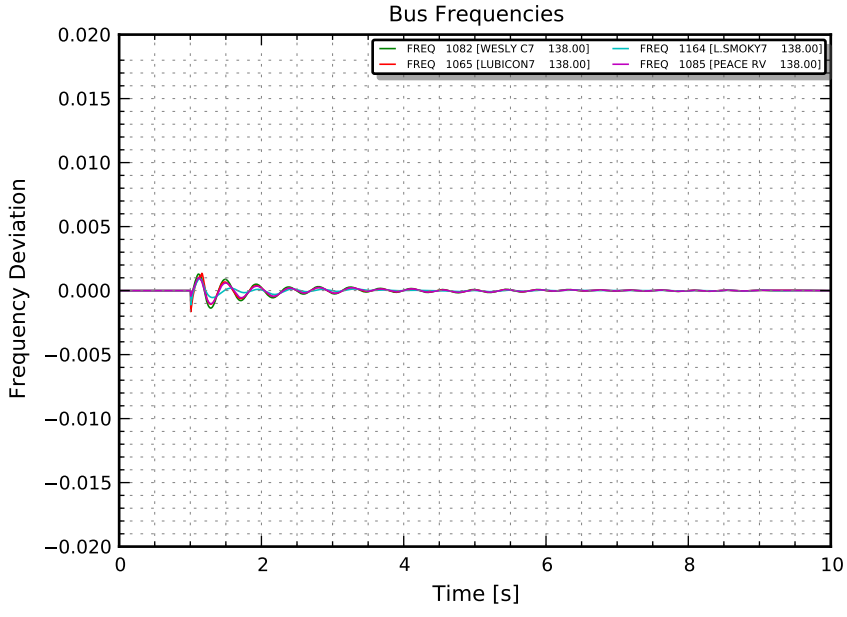


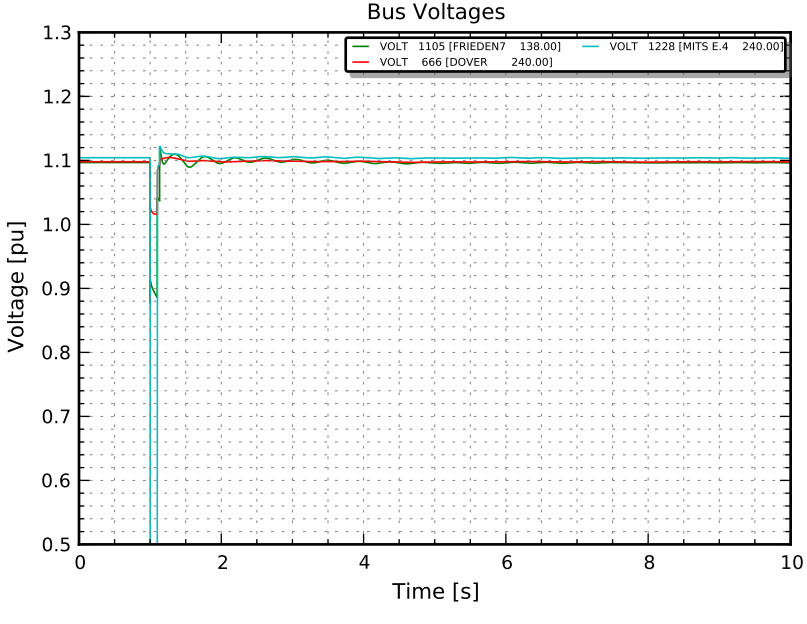
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 012 7L23 NIPISI to MITSUE_B.

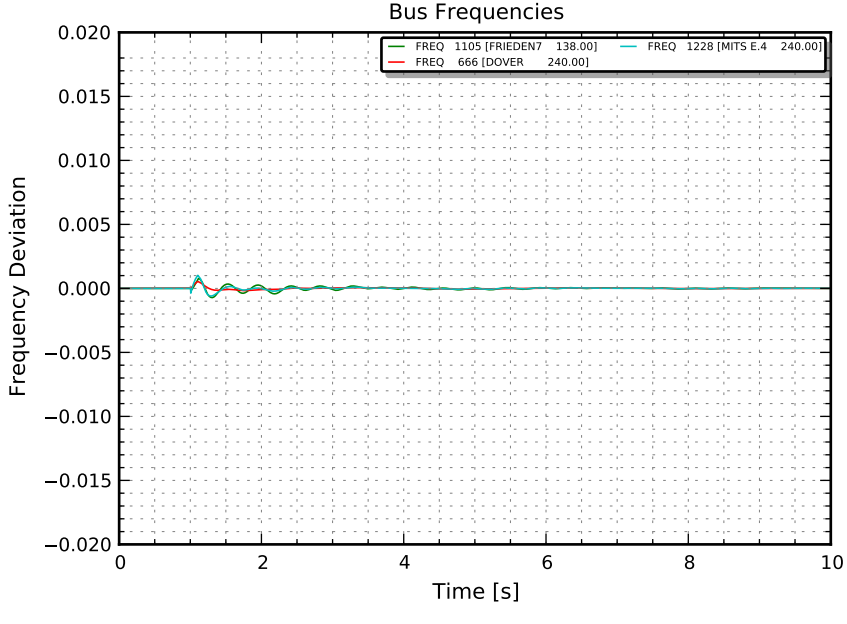
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 012 (B. 1)





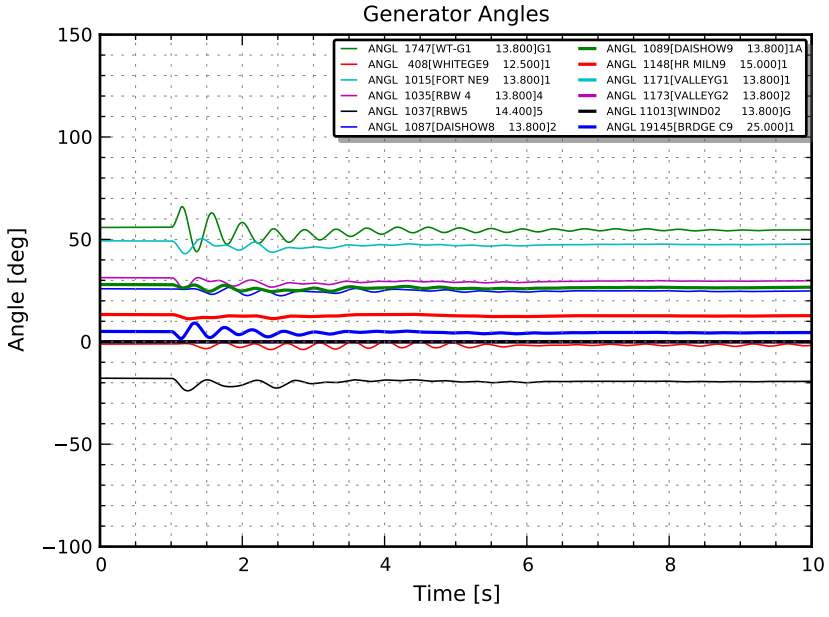


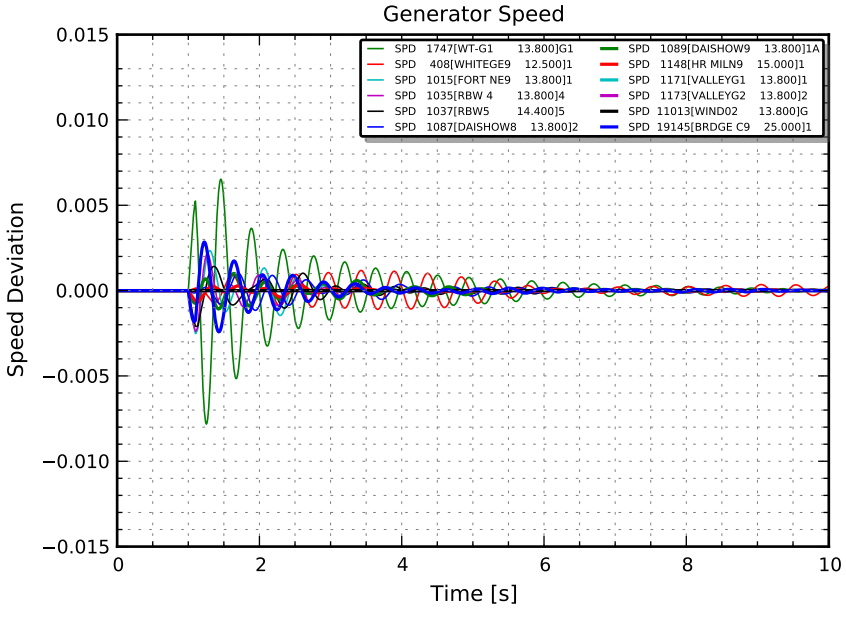


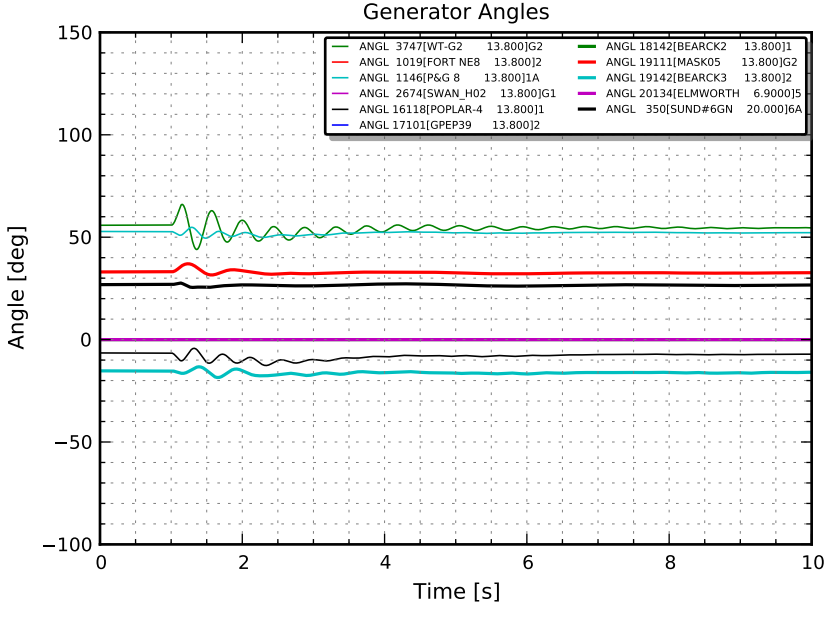
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 012 7L23 NIPISI to MITSUE_B.

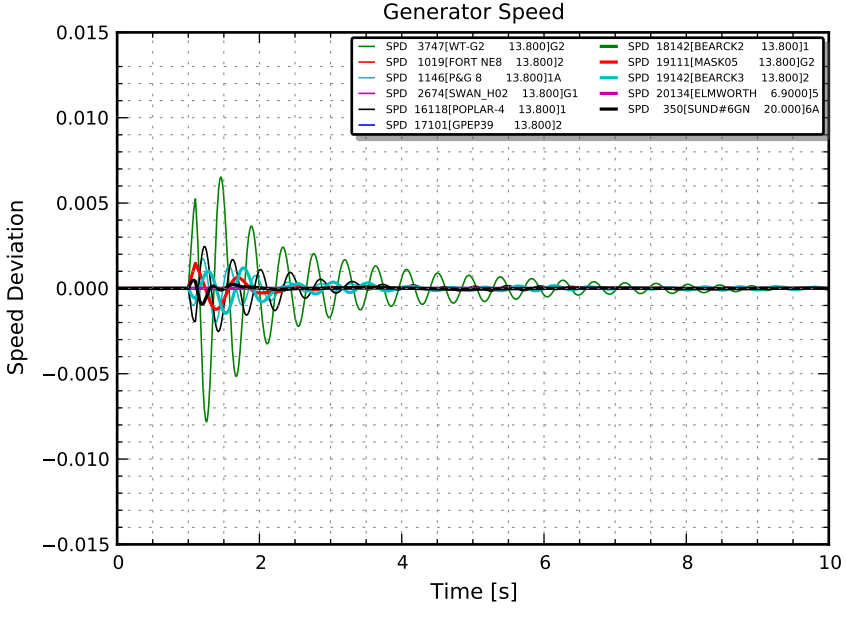
Study Area Generators

Appendix E2B
Figure: 012 (B. 2)





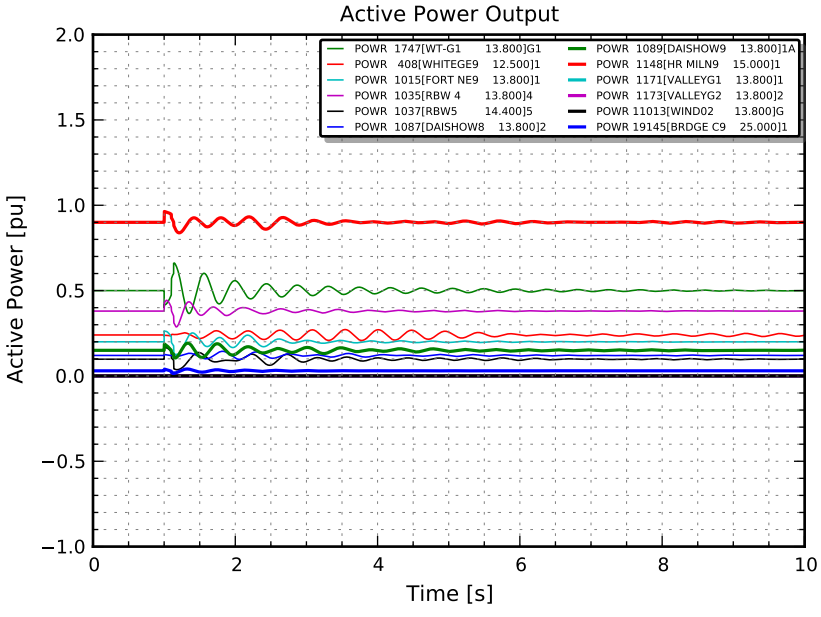


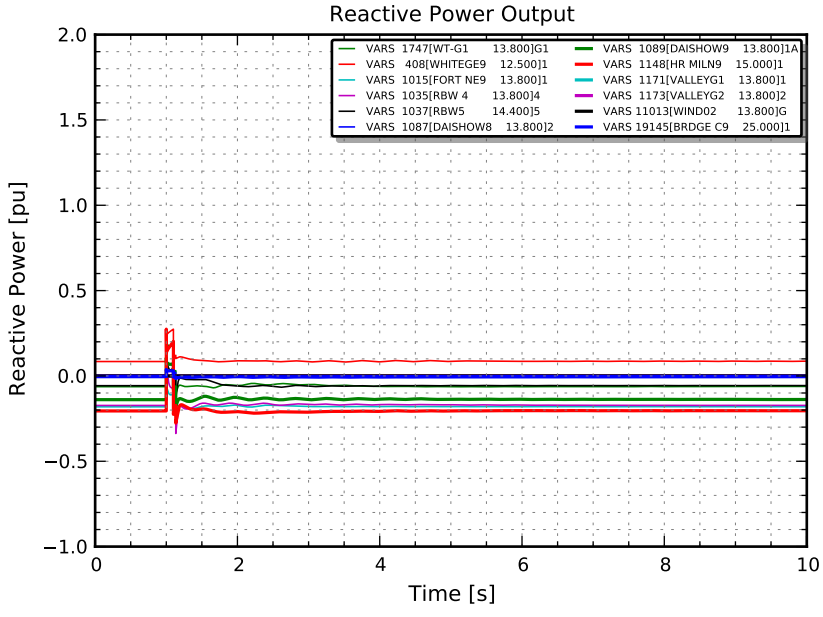


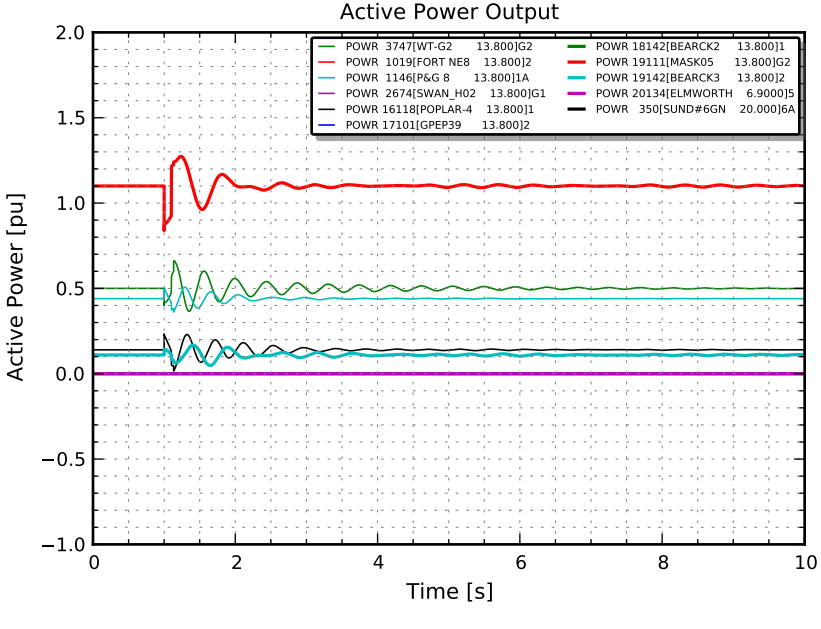
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 012 7L23 NIPISI to MITSUE_B.

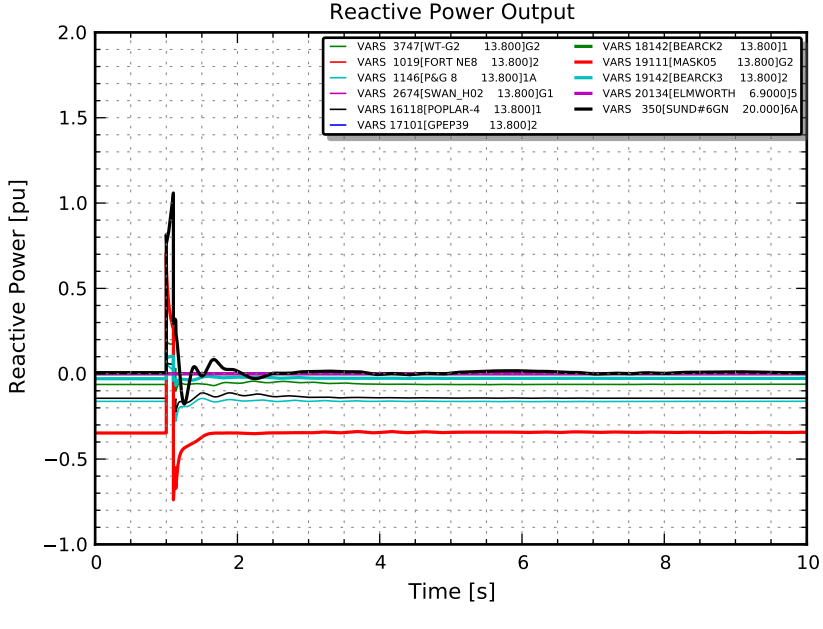
Study Area Generators

Appendix E2B
Figure: 012 (B. 3)





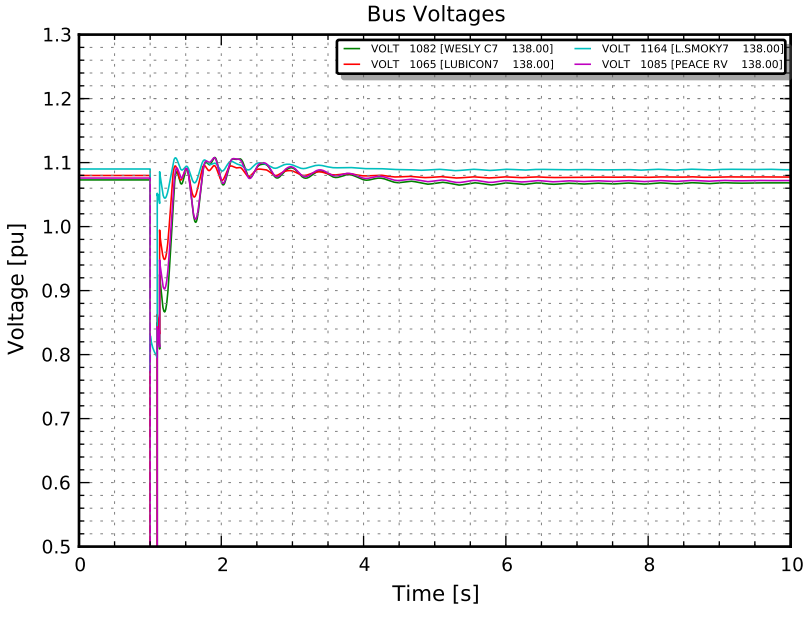


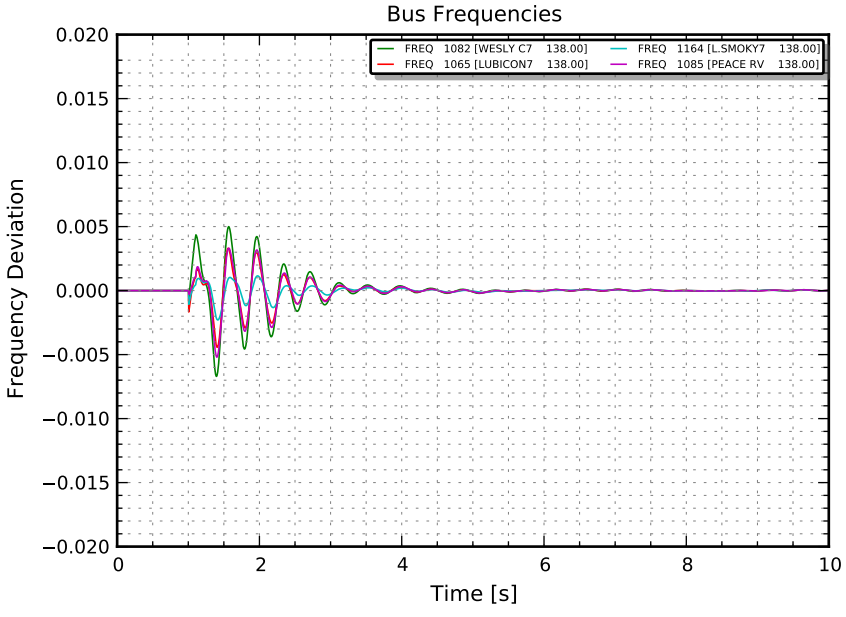


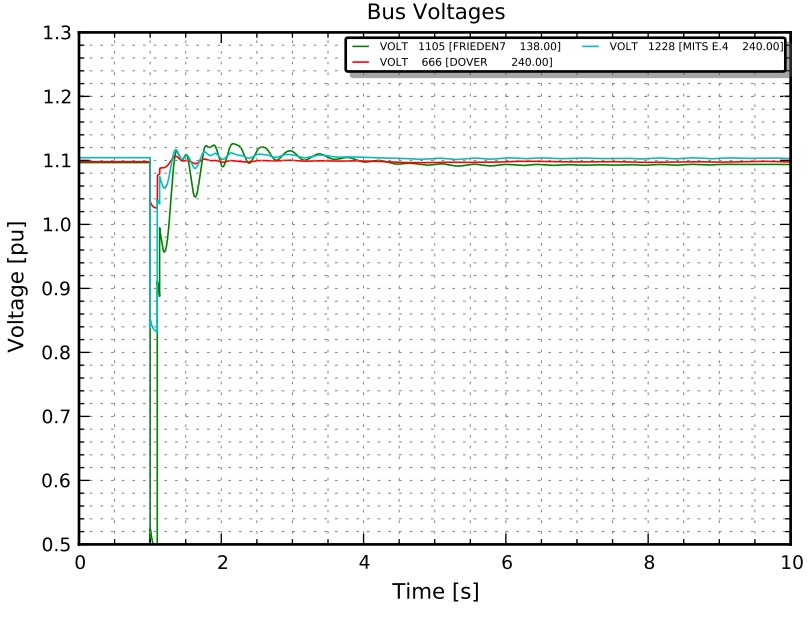
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 013 7L131 WESLEYCREEK to Meikle_A.

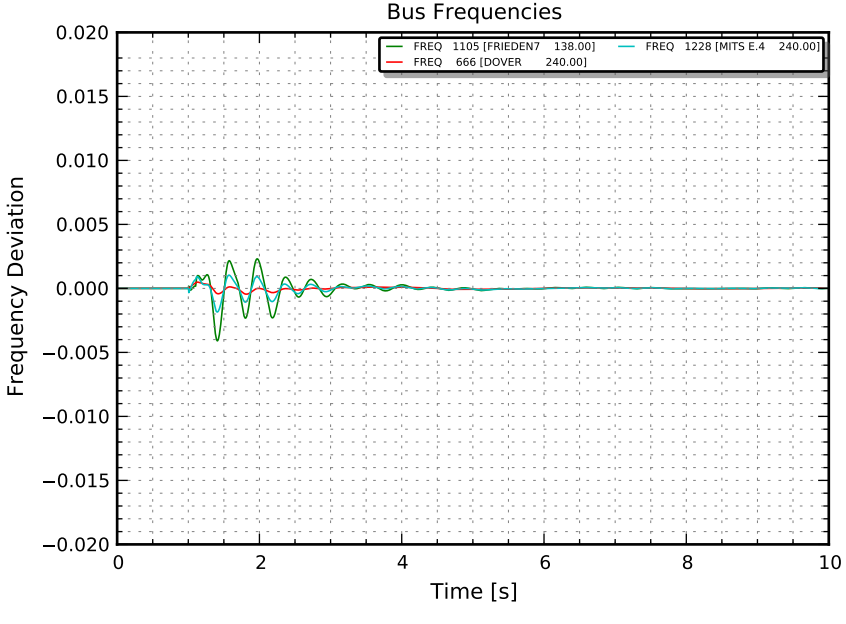
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 013 (A. 1)





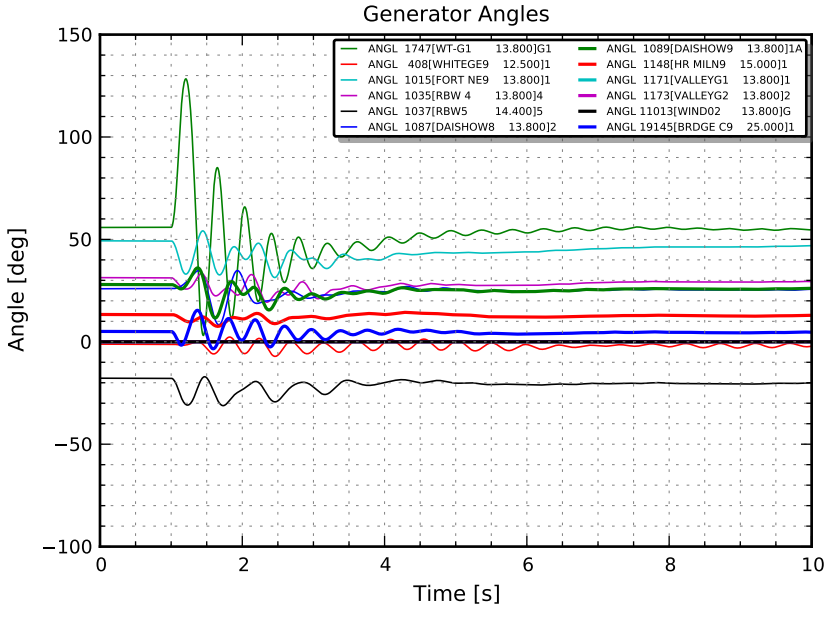


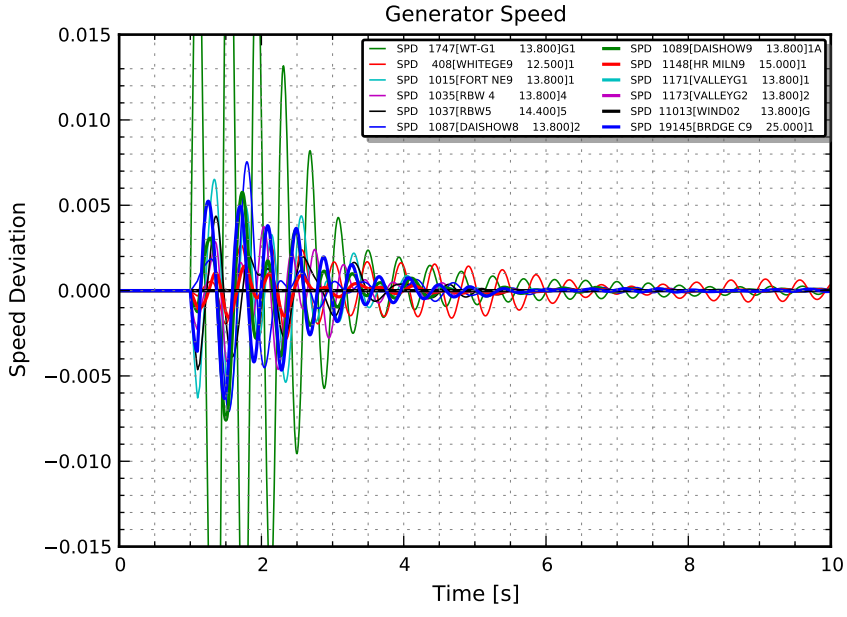


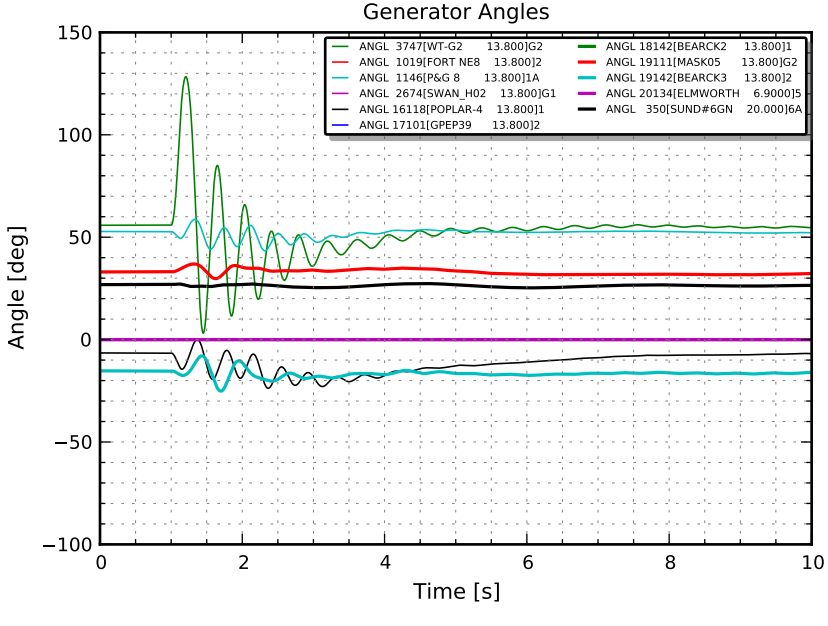
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 013 7L131 WESLEYCREEK to Meikle_A.

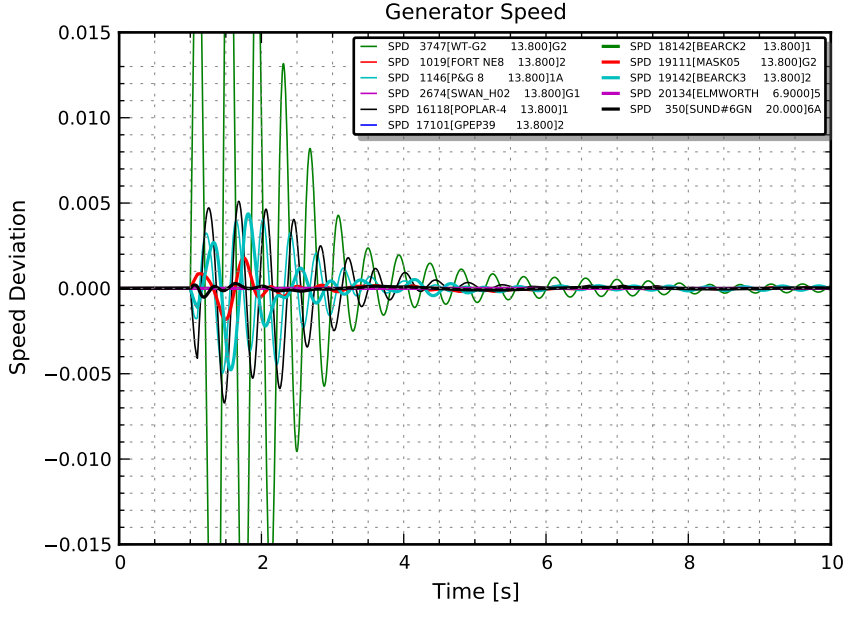
Study Area Generators

Appendix E2B
Figure: 013 (A. 2)





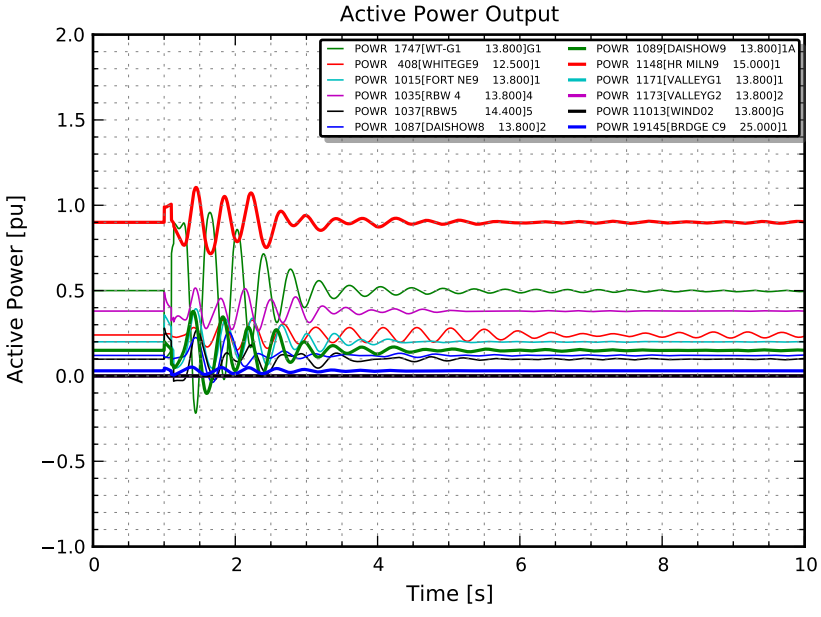


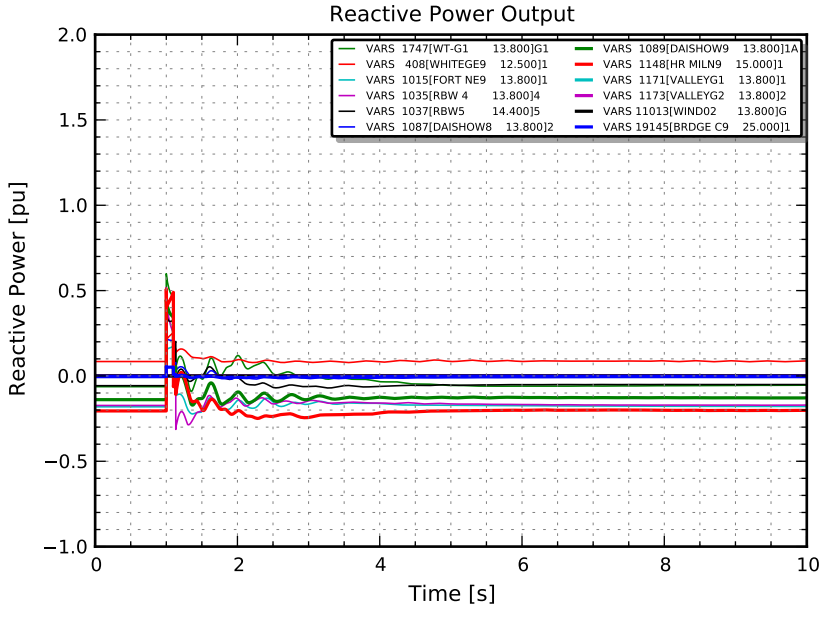


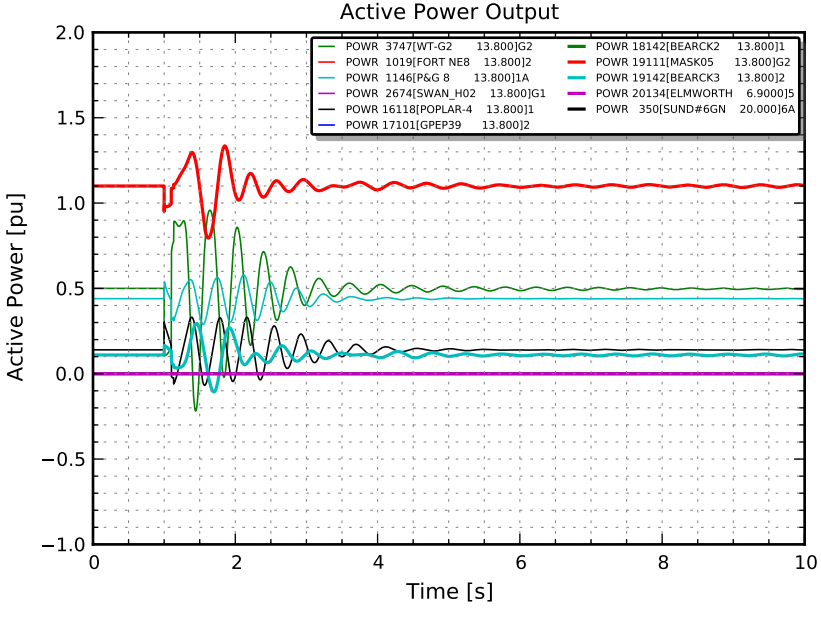
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 013 7L131 WESLEYCREEK to Meikle_A.

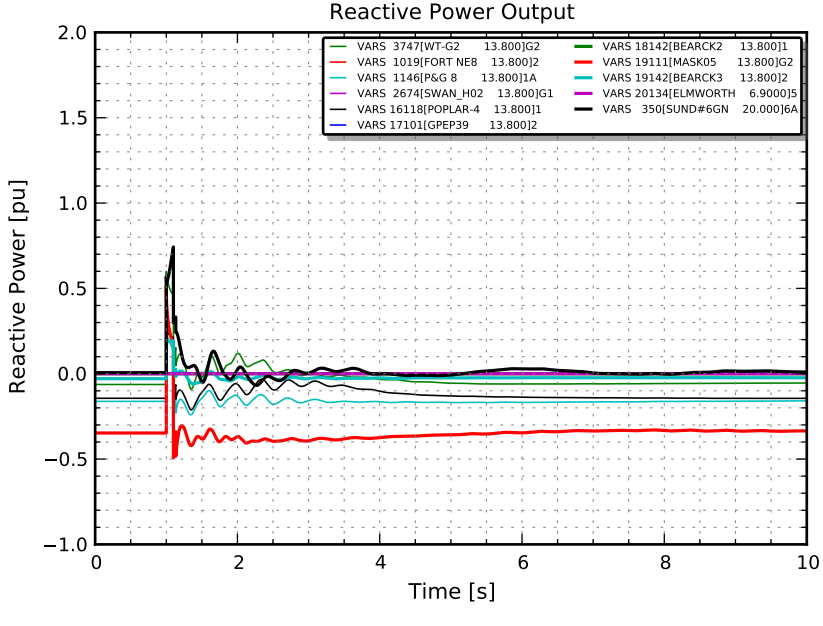
Study Area Generators

Appendix E2B
Figure: 013 (A. 3)





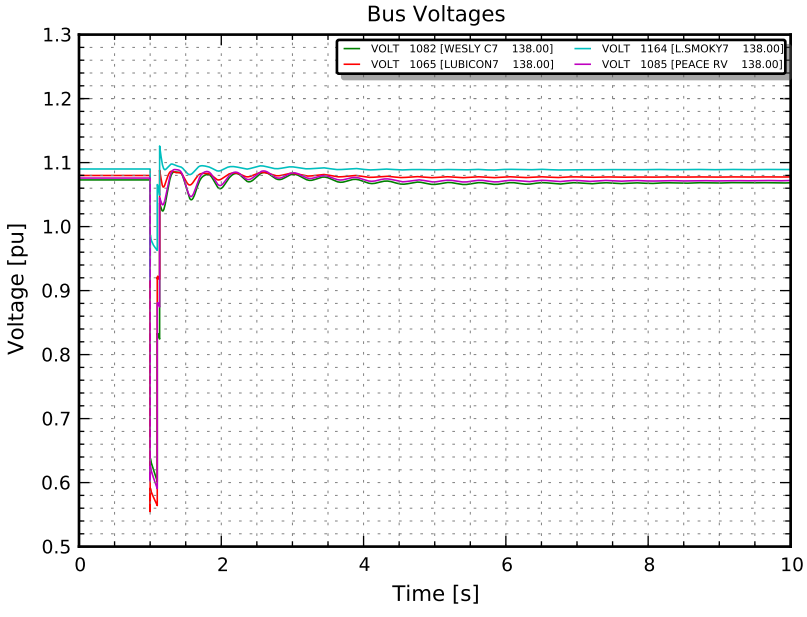


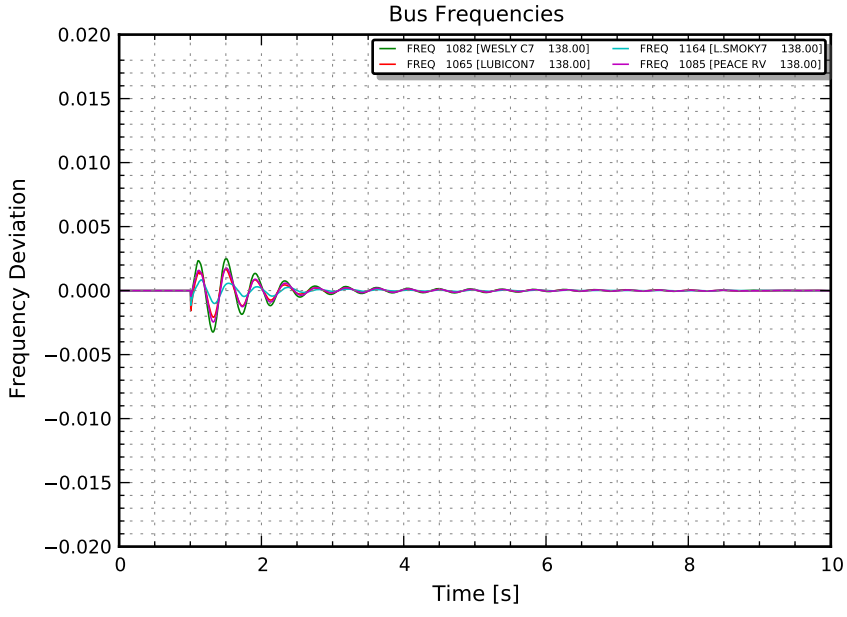


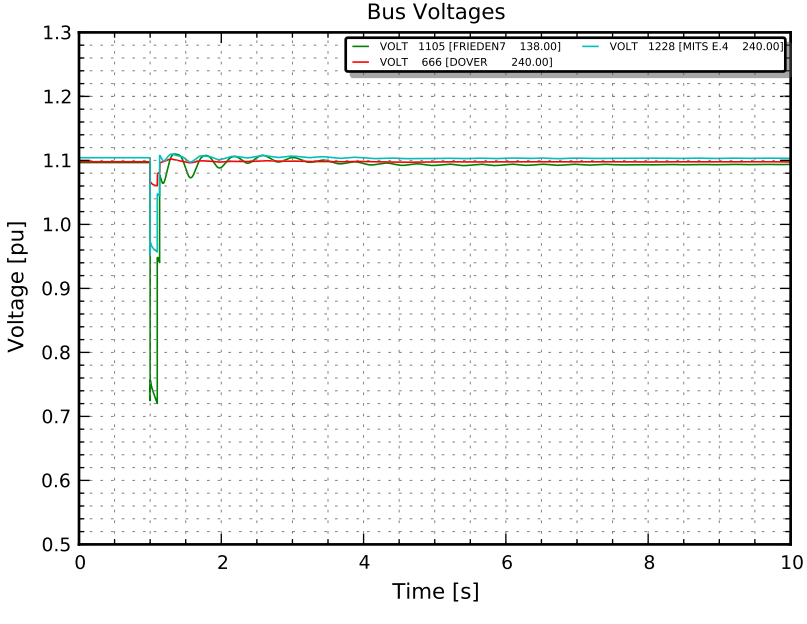
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 013 7L131 WESLEYCREEK to Meikle_B.

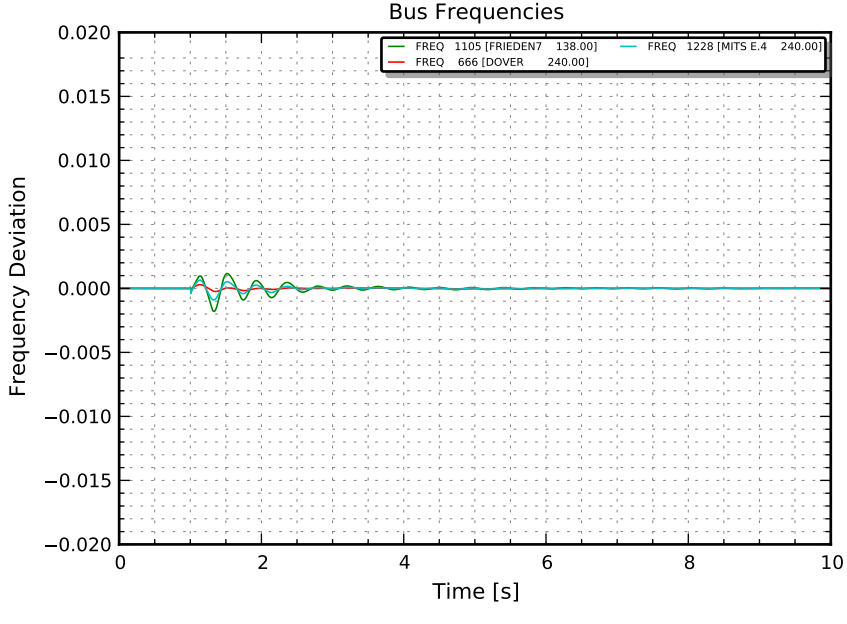
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 013 (B. 1)





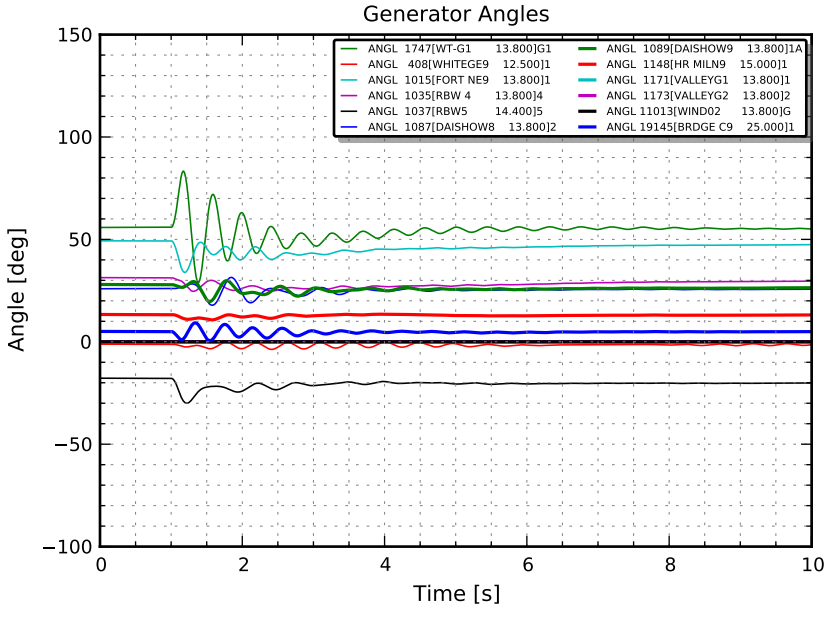


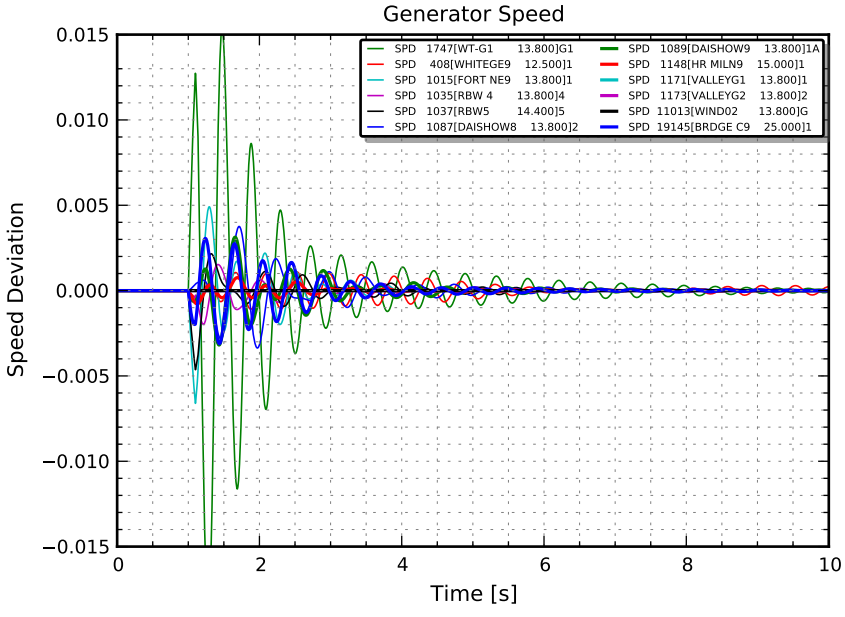


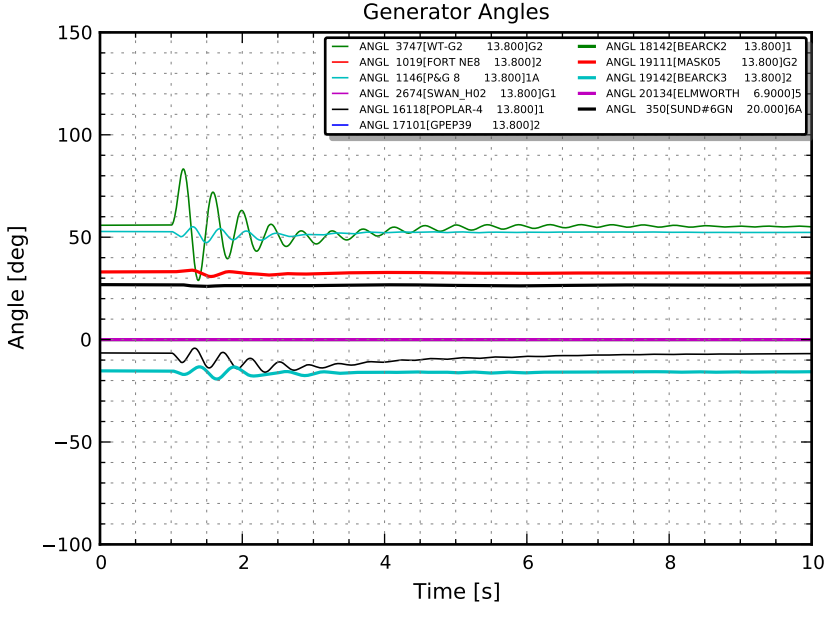
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 013 7L131 WESLEYCREEK to Meikle_B.

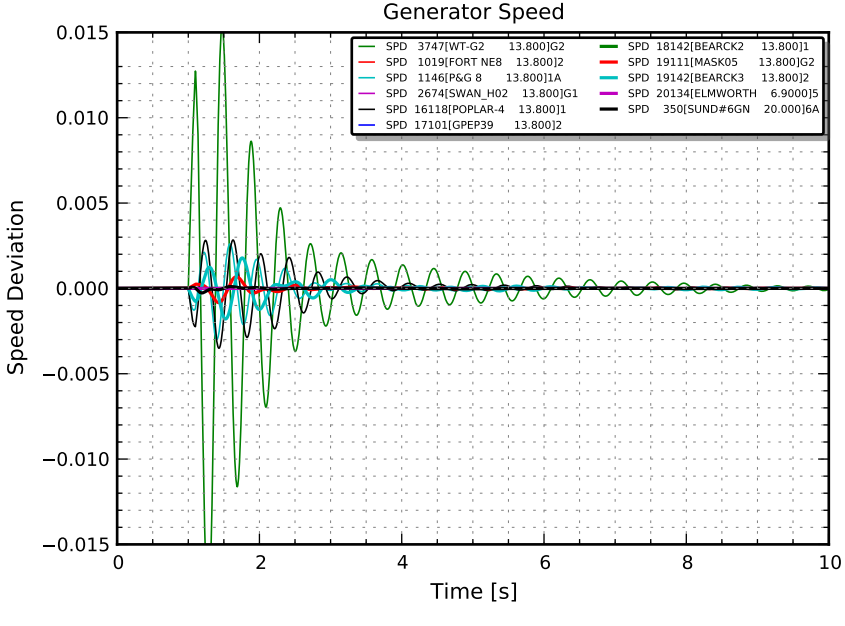
Study Area Generators

Appendix E2B
Figure: 013 (B. 2)





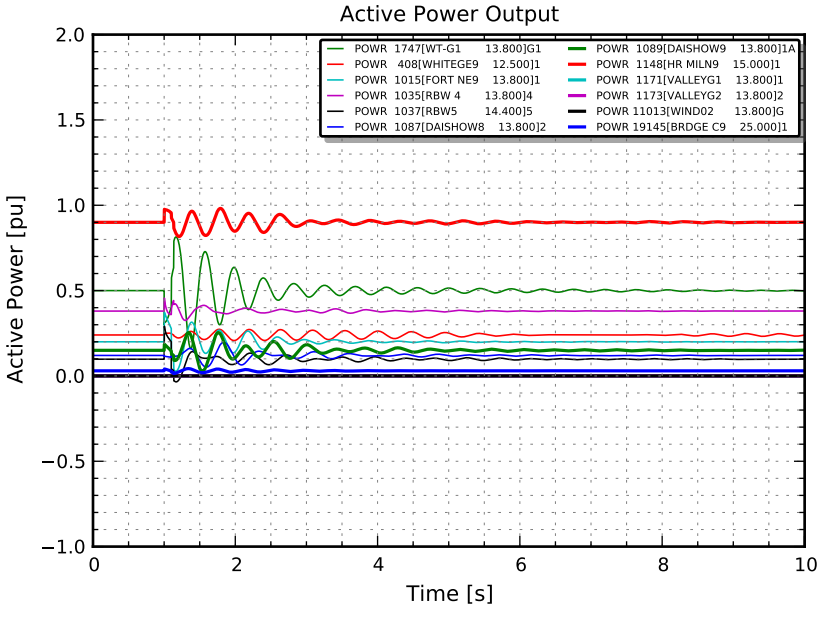


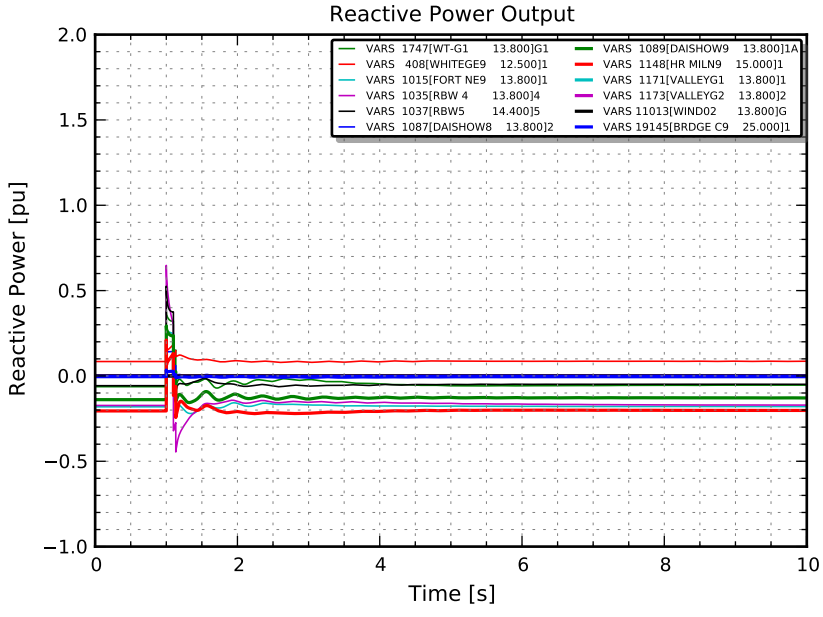


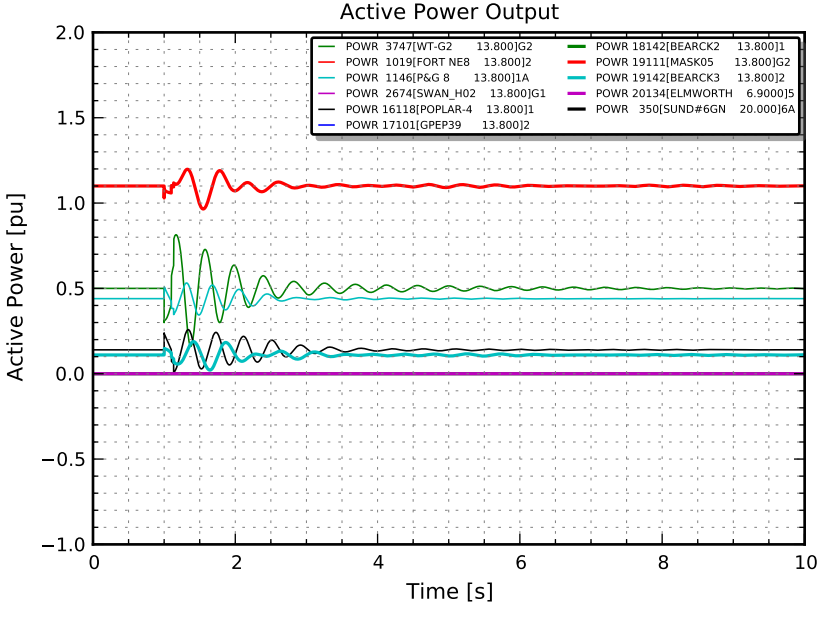
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 013 7L131 WESLEYCREEK to Meikle_B.

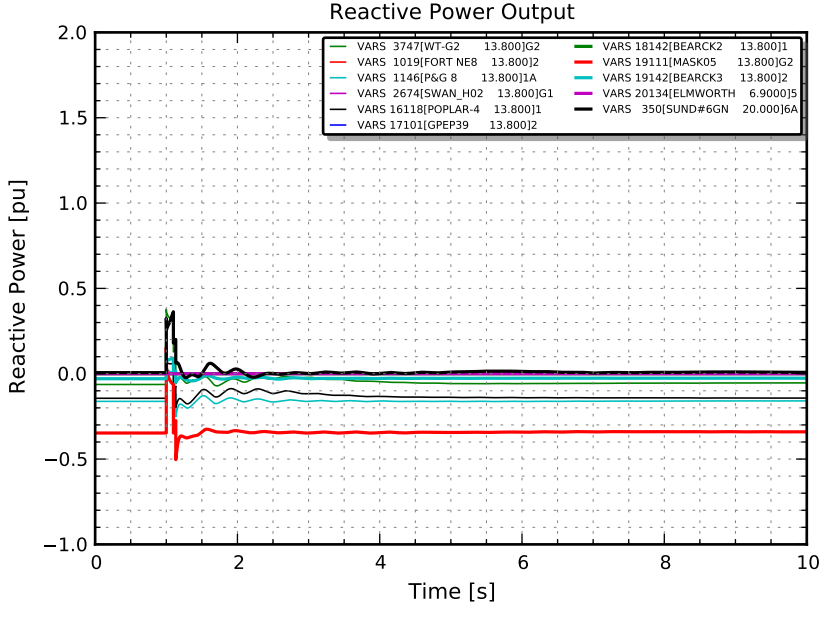
Study Area Generators

Appendix E2B
Figure: 013 (B. 3)





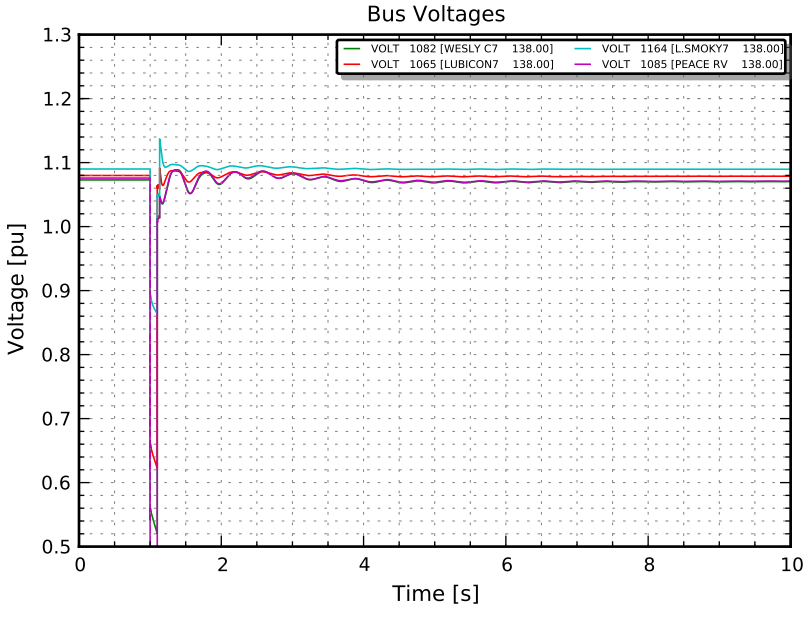


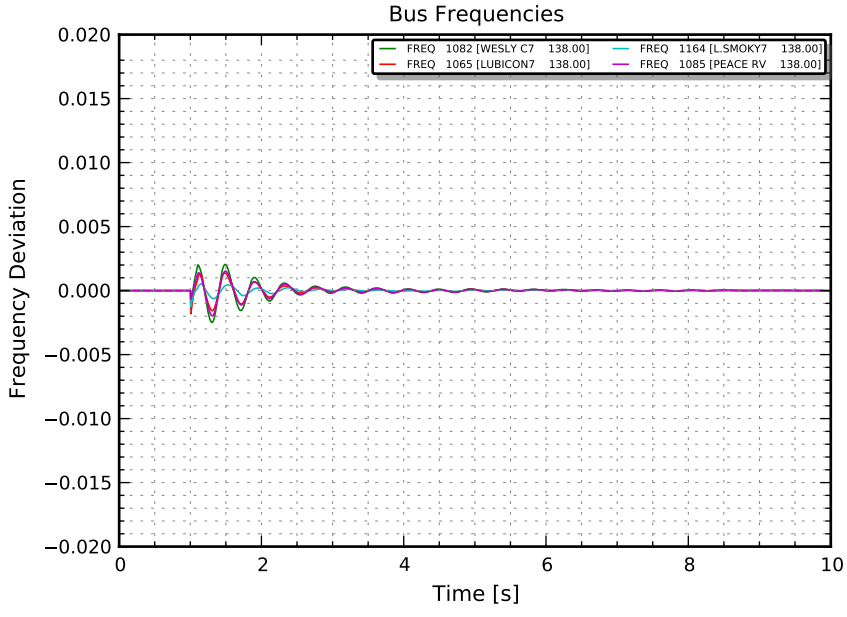


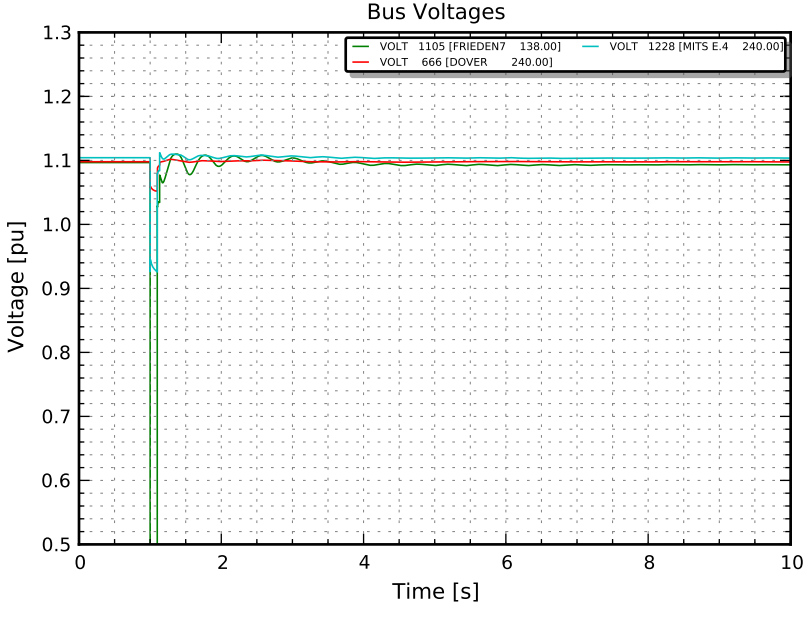
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_A.

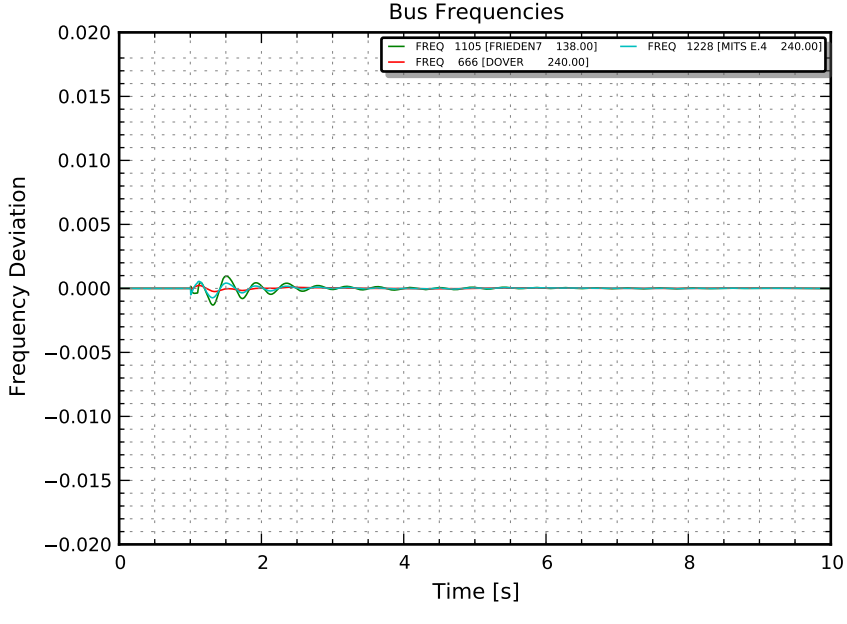
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 014 (A. 1)





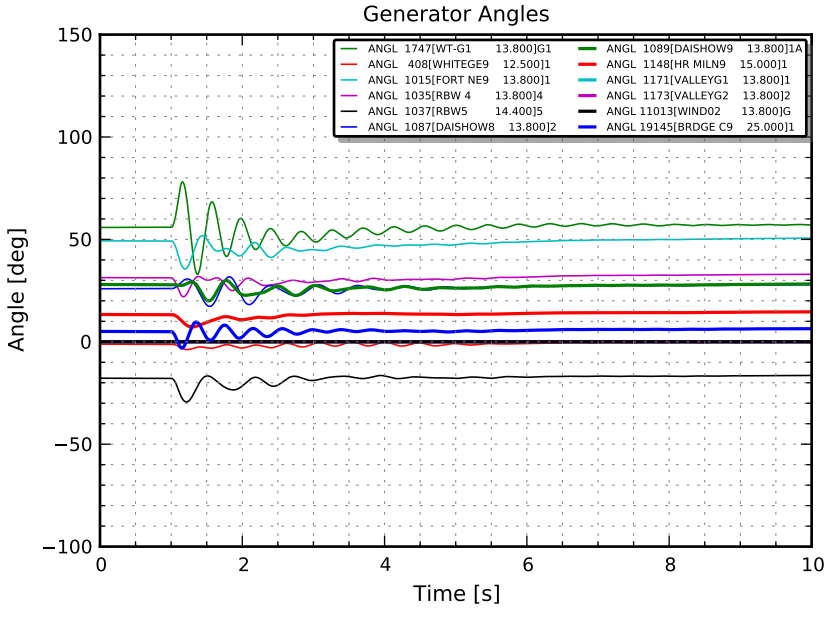


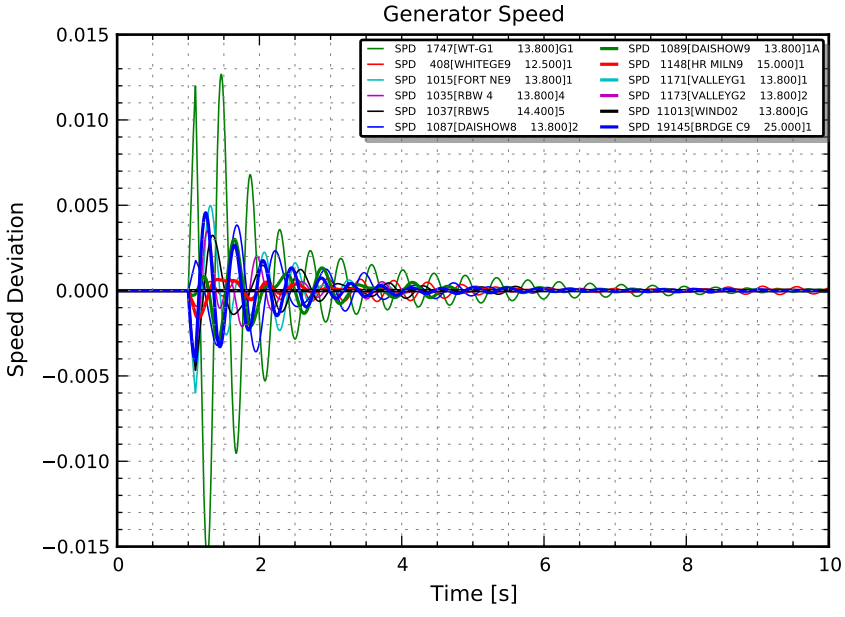


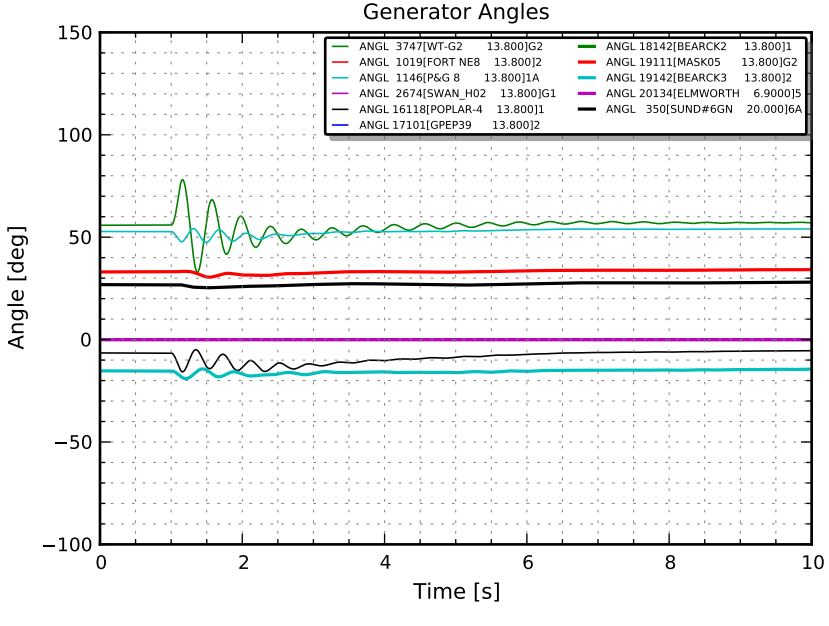
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_A.

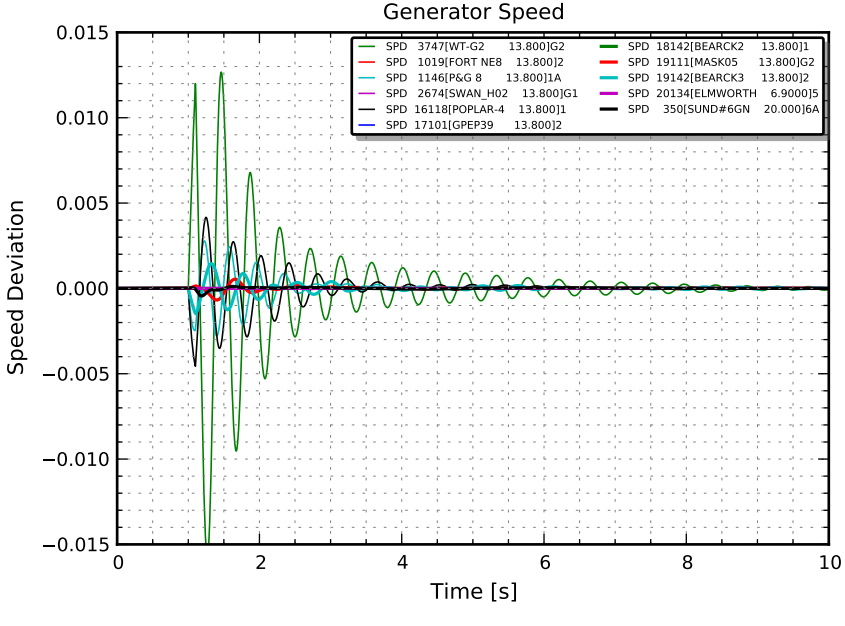
Study Area Generators

Appendix E2B
Figure: 014 (A. 2)





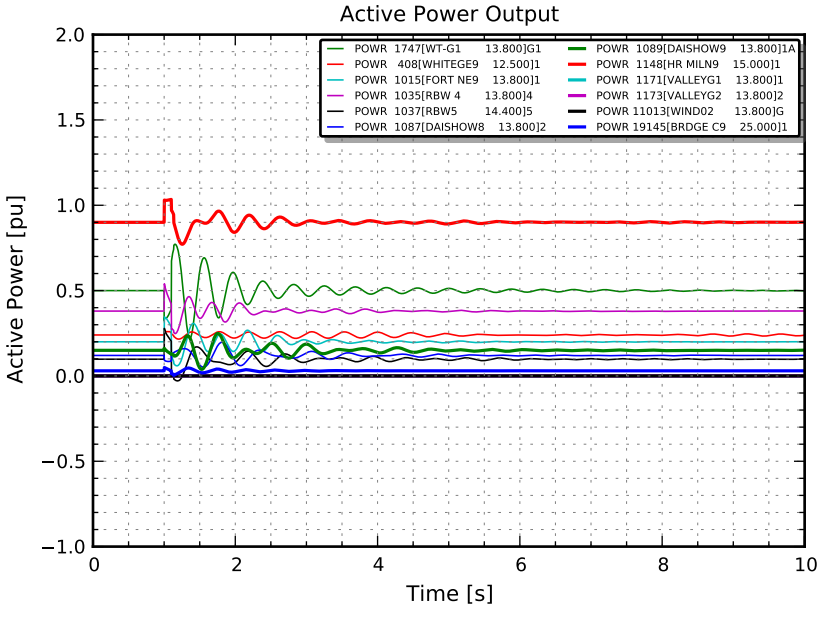


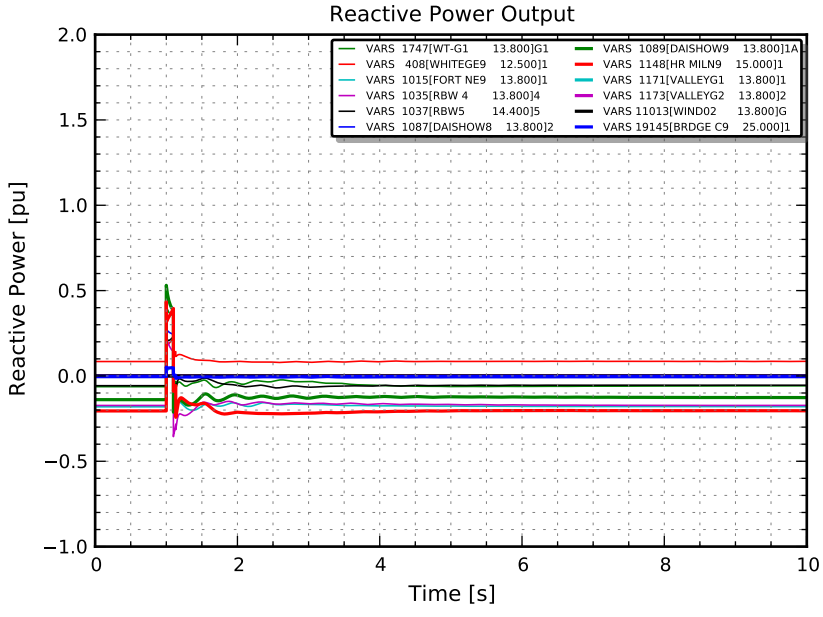


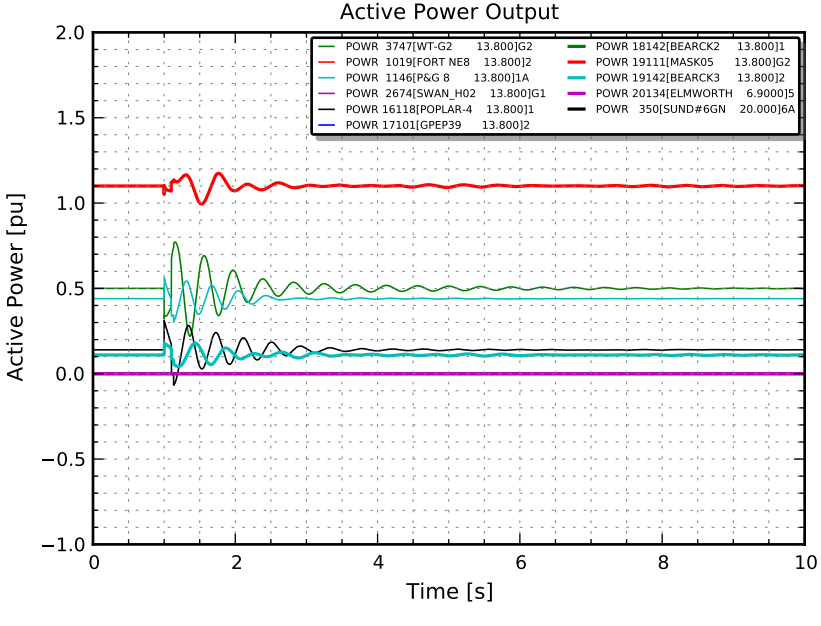
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_A.

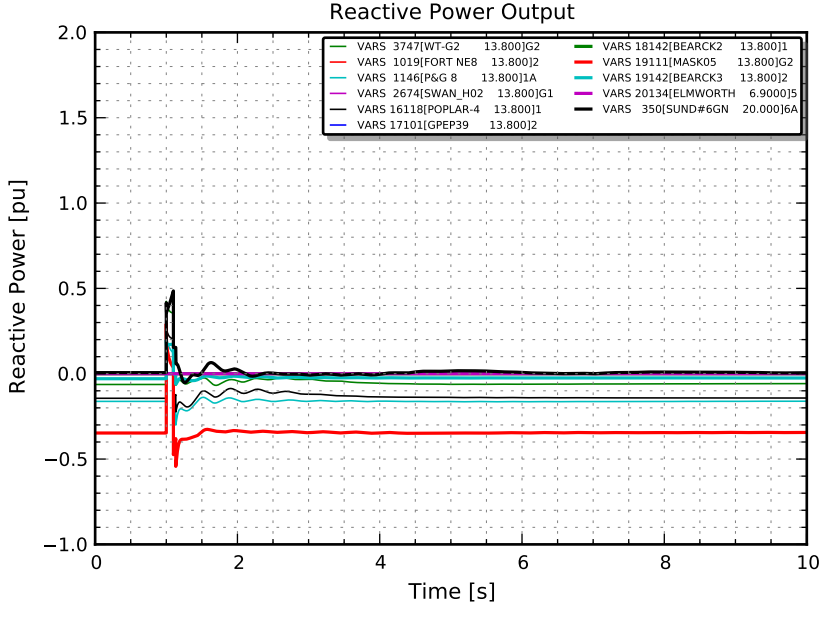
Study Area Generators

Appendix E2B
Figure: 014 (A. 3)





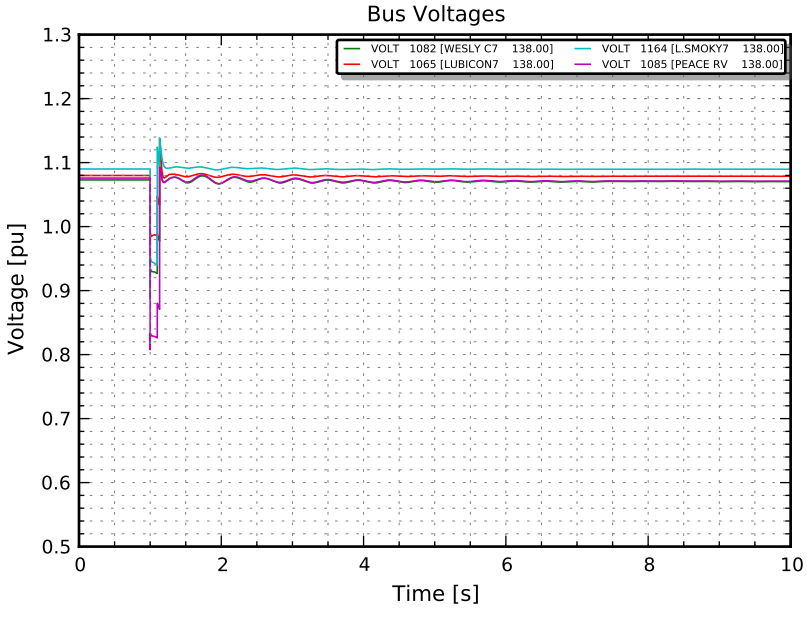


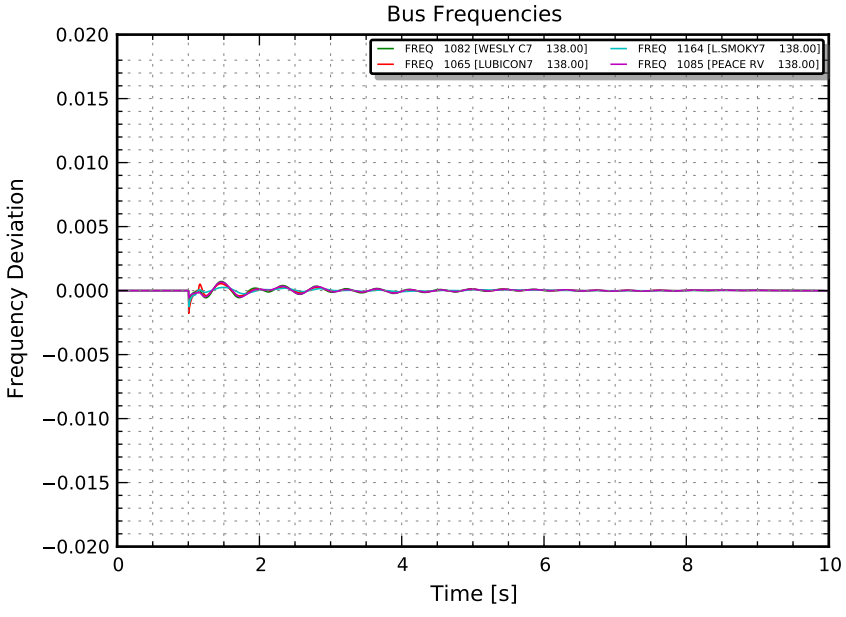


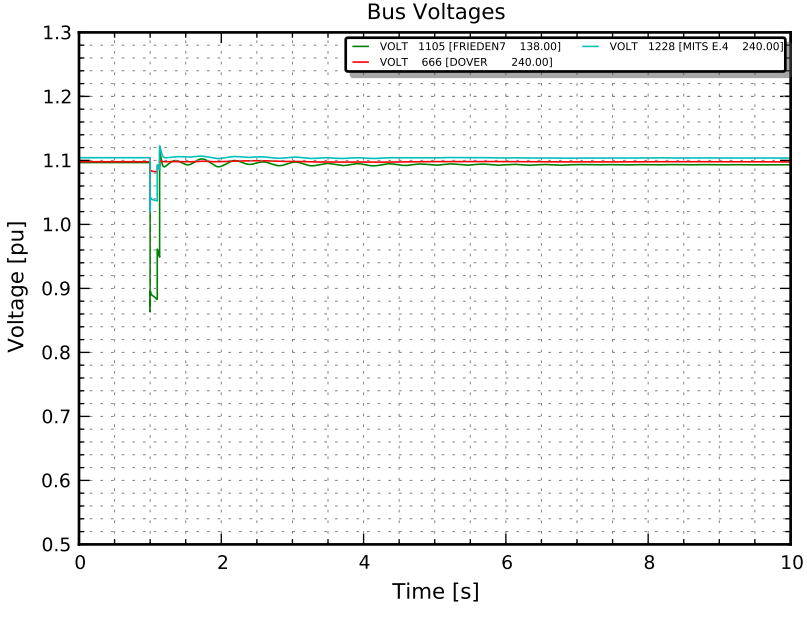
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_B.

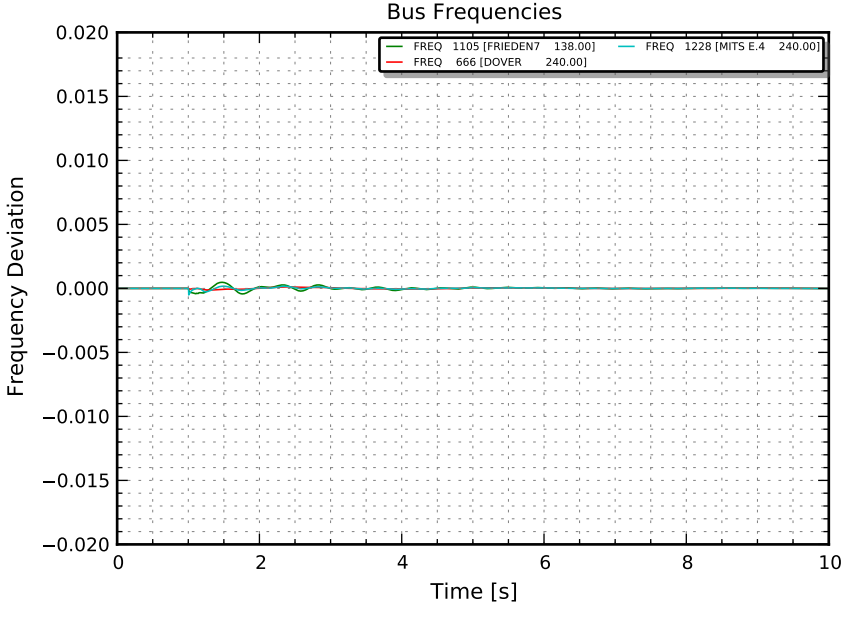
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 014 (B. 1)





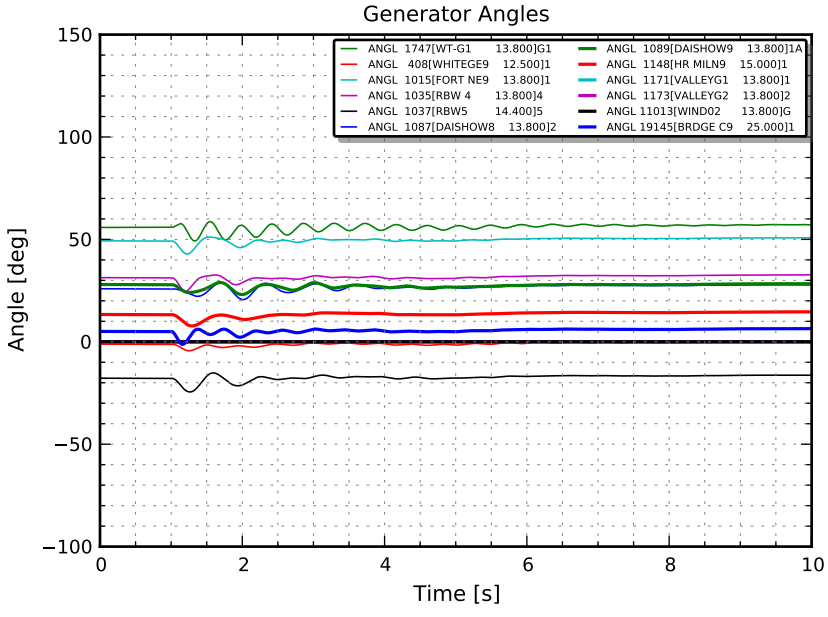


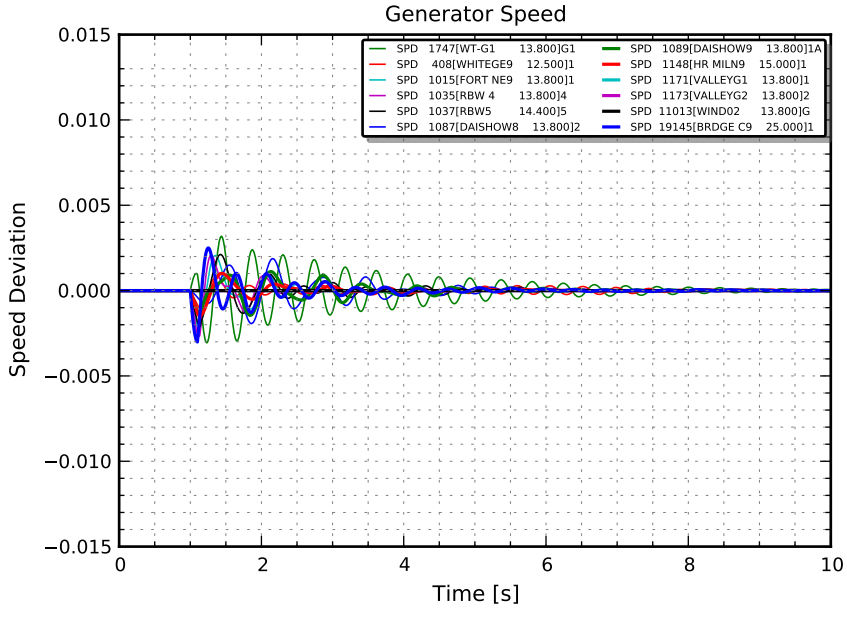


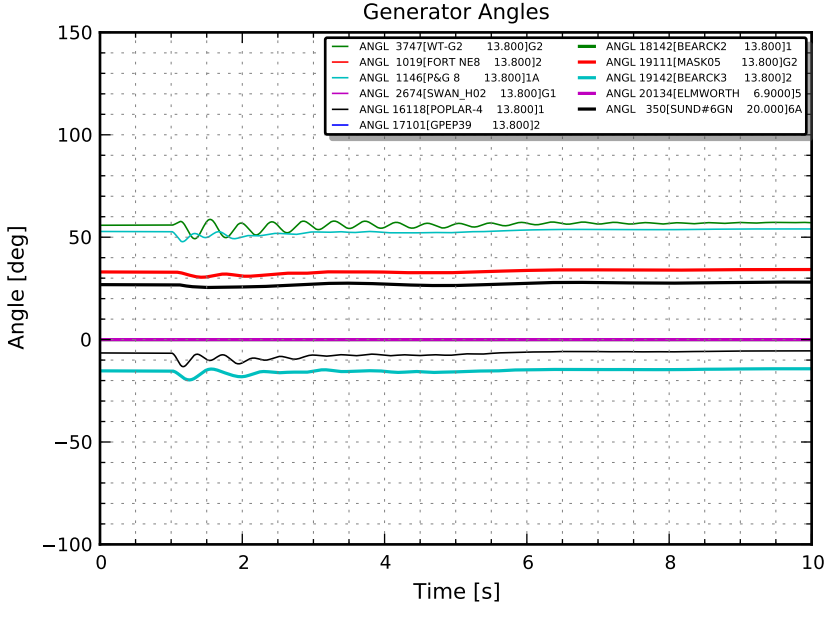
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_B.

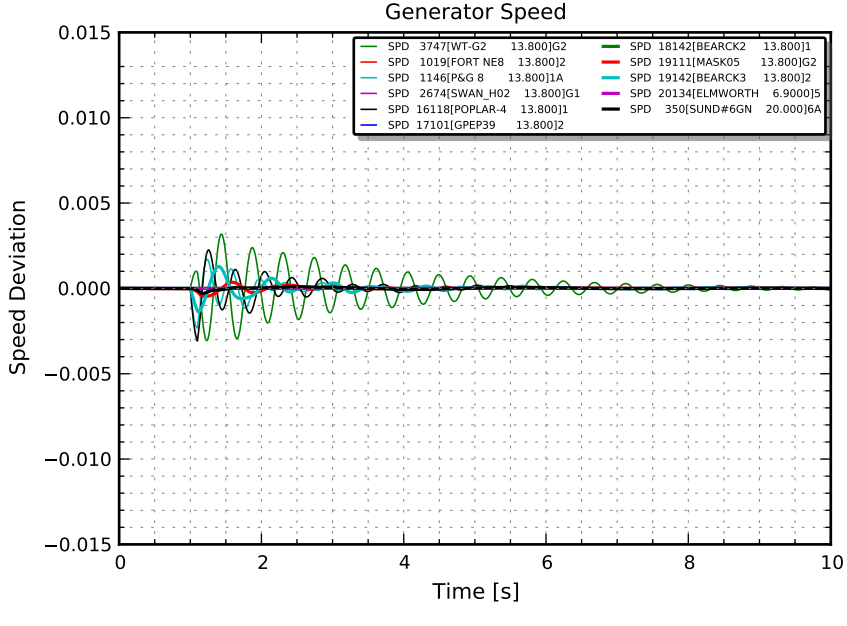
Study Area Generators

Appendix E2B
Figure: 014 (B. 2)





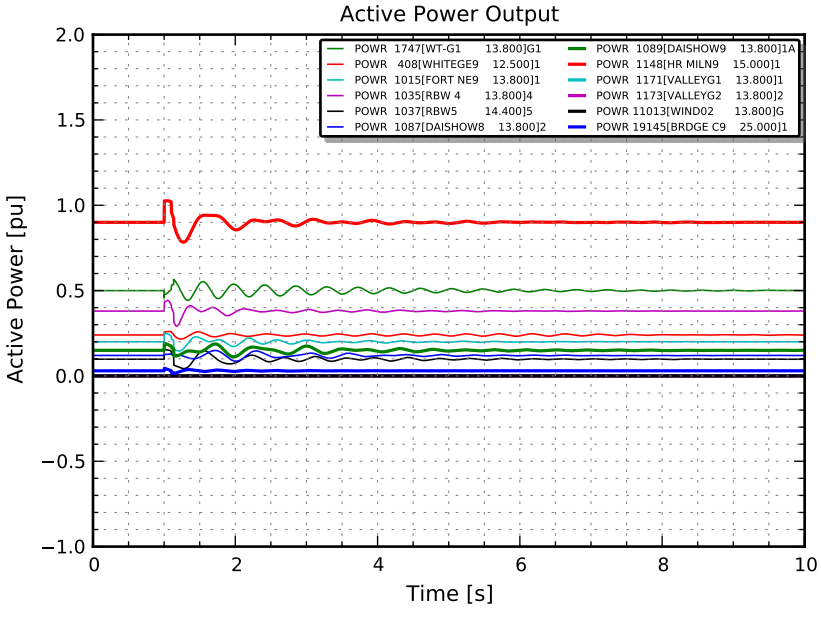


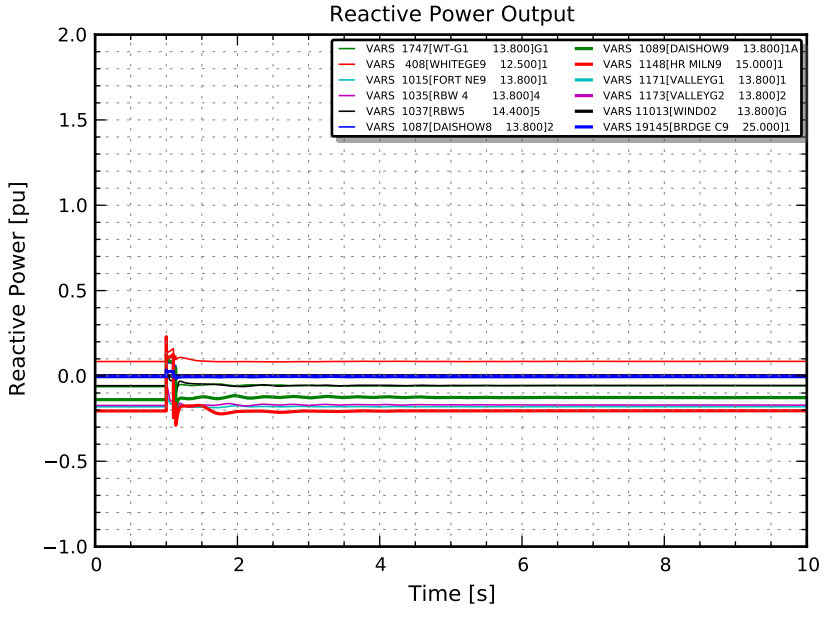


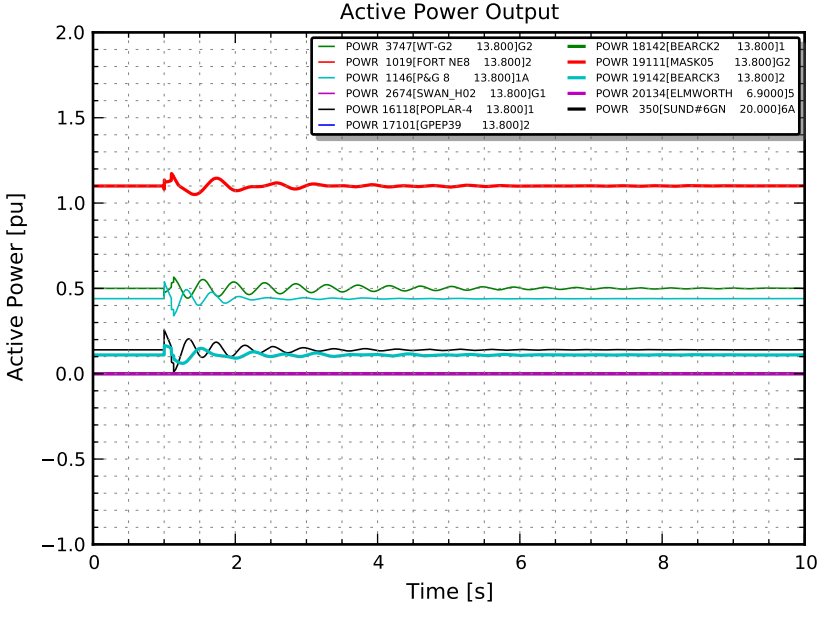
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 014 7L06 WESTPEACE to HIGHPRAIRIE_B.

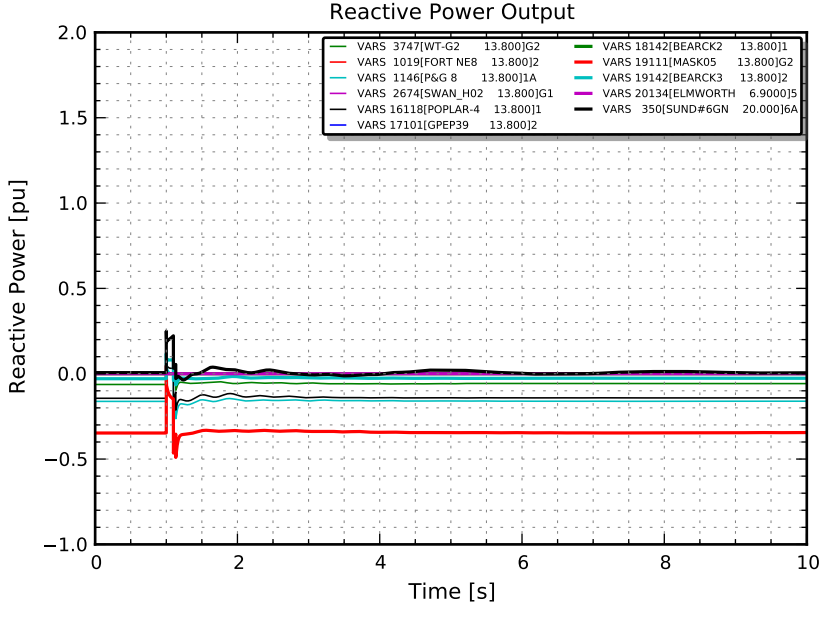
Study Area Generators

Appendix E2B
Figure: 014 (B. 3)





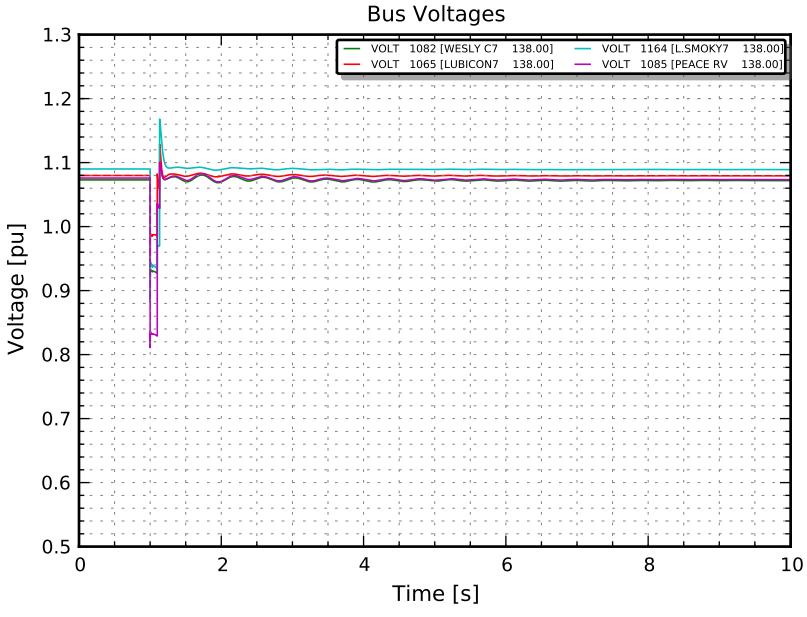


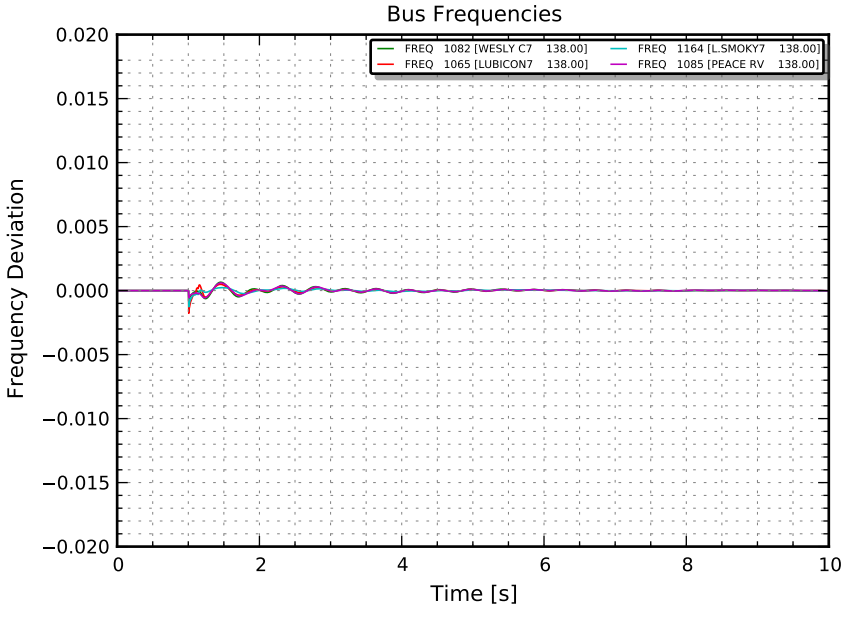


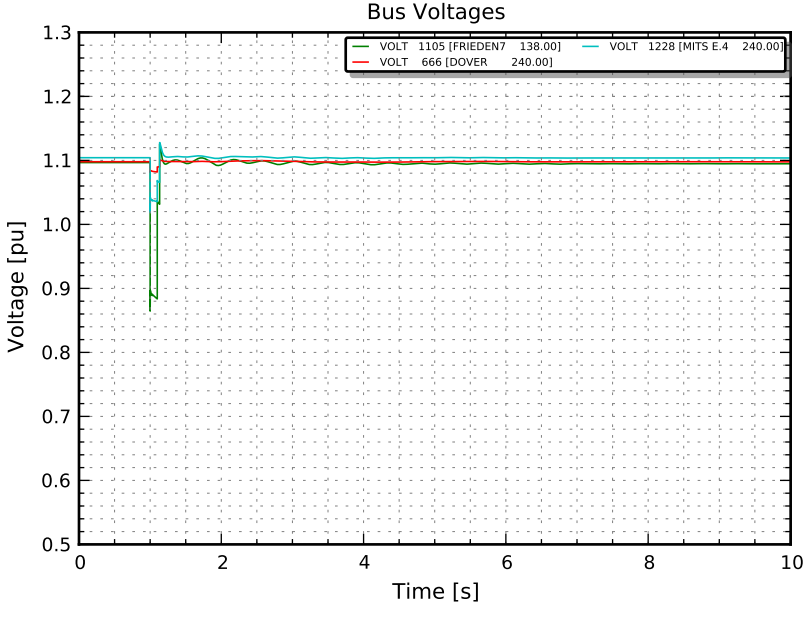
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_A.

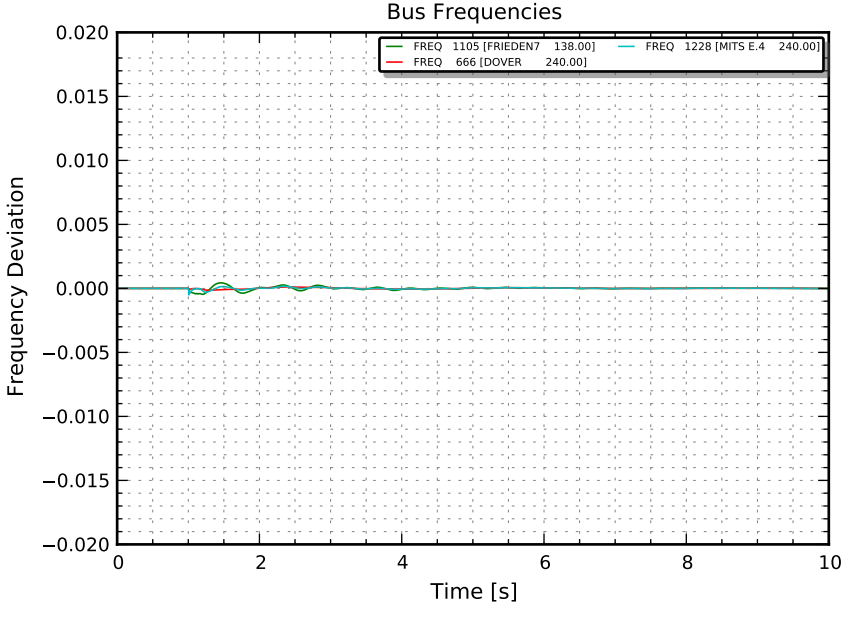
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 015 (A. 1)





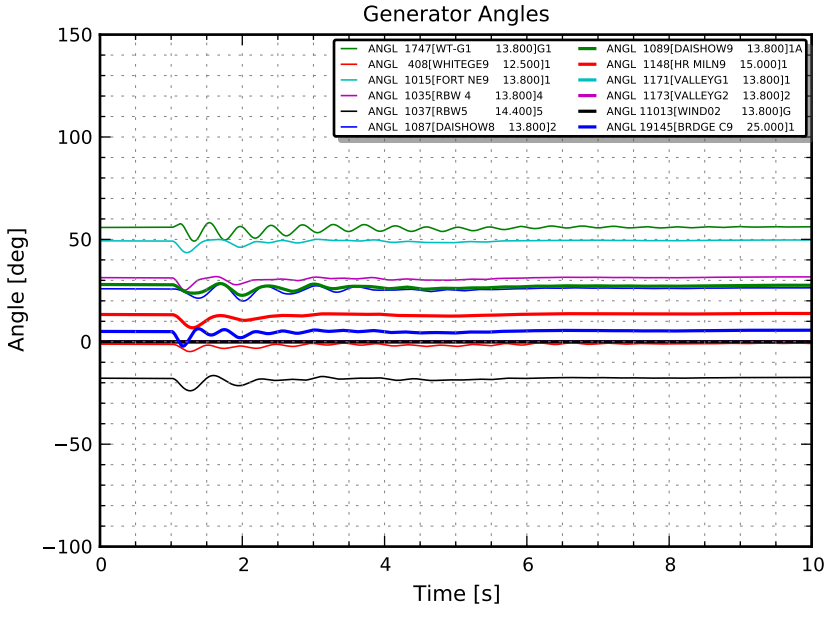


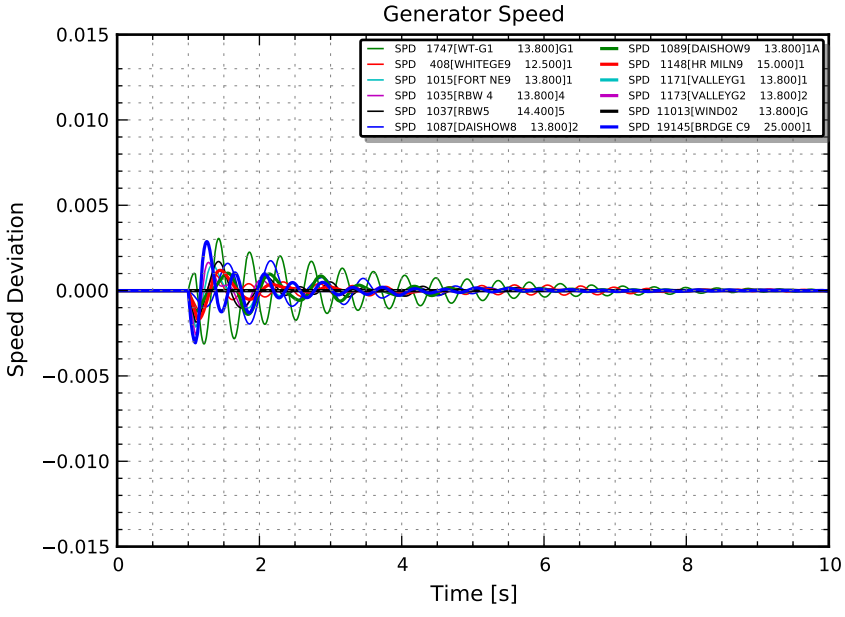


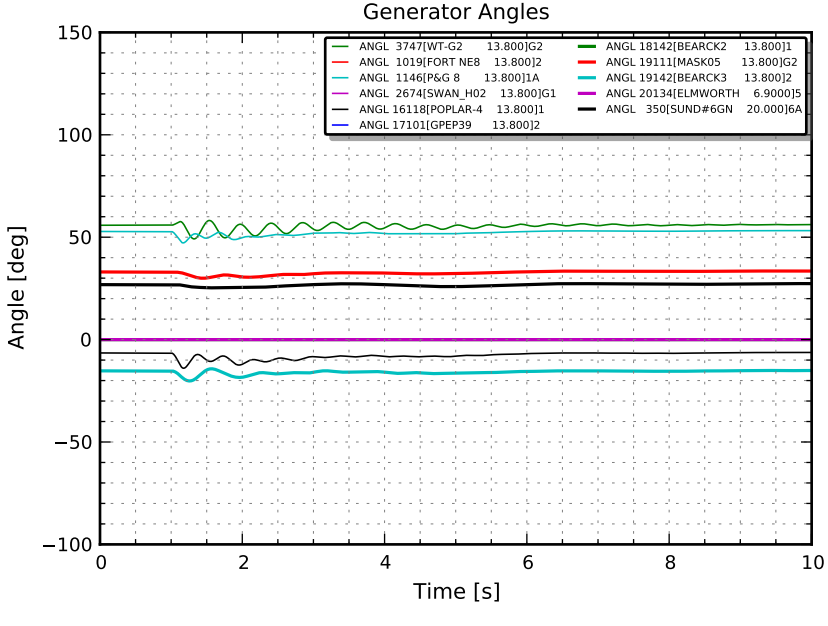
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_A.

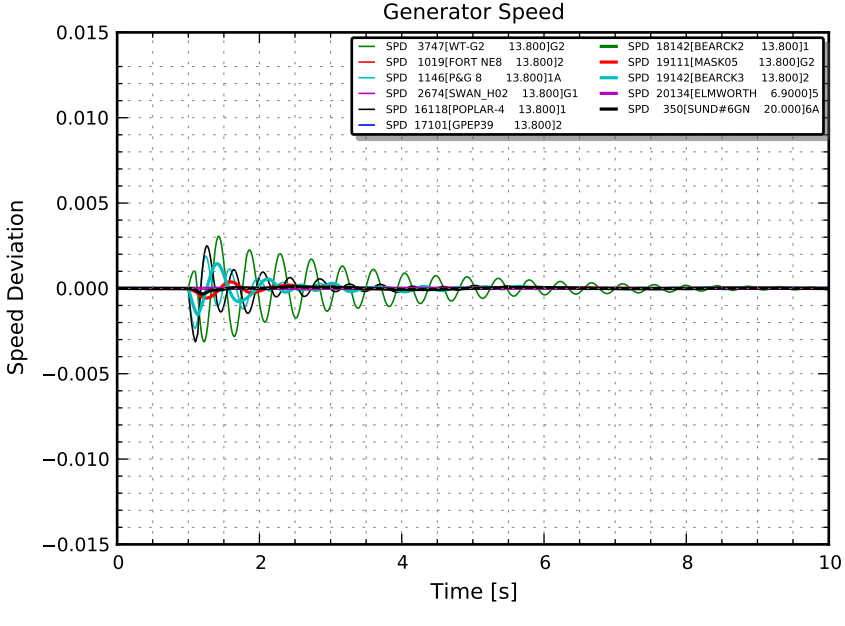
Study Area Generators

Appendix E2B
Figure: 015 (A. 2)





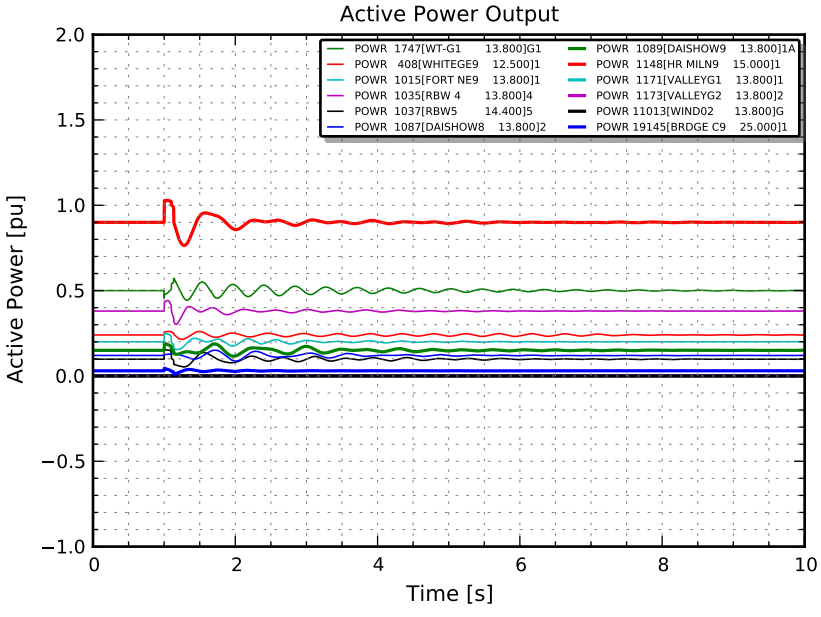


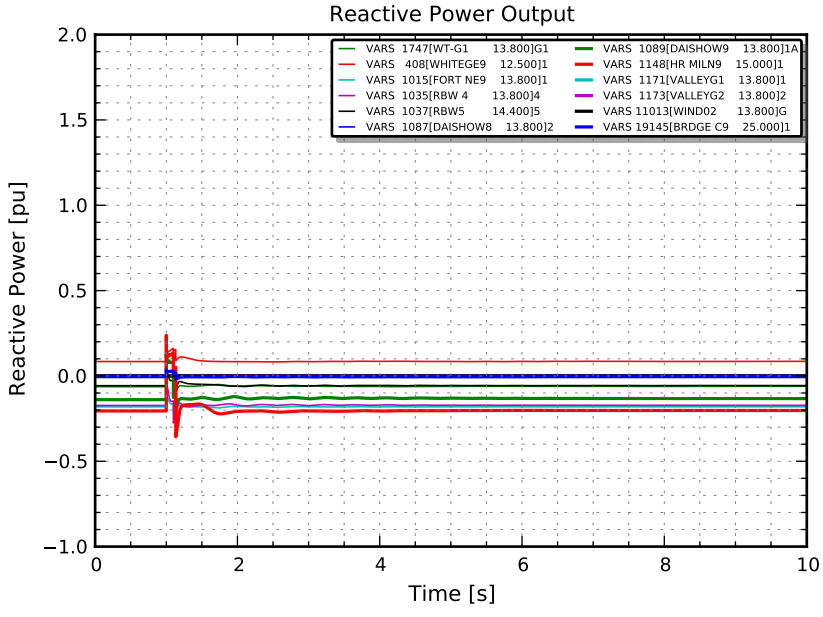


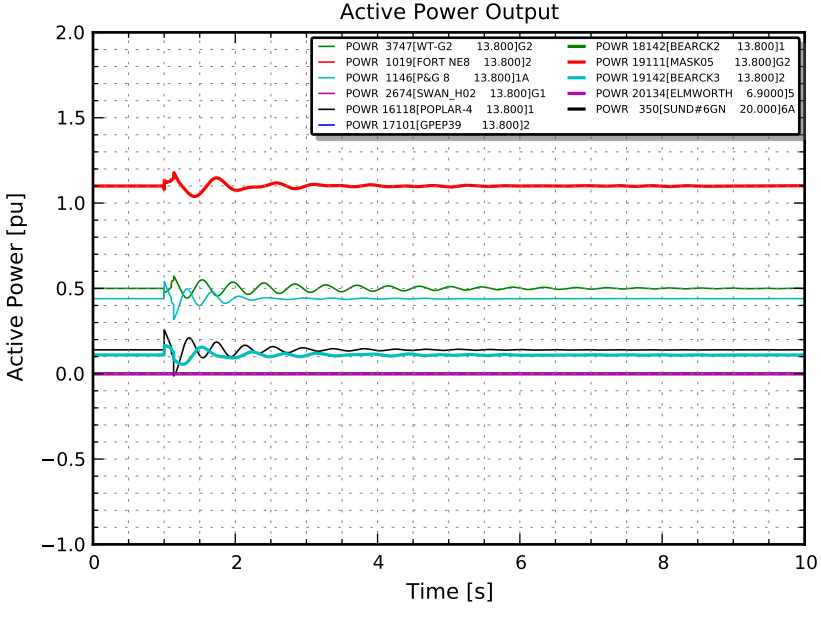
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_A.

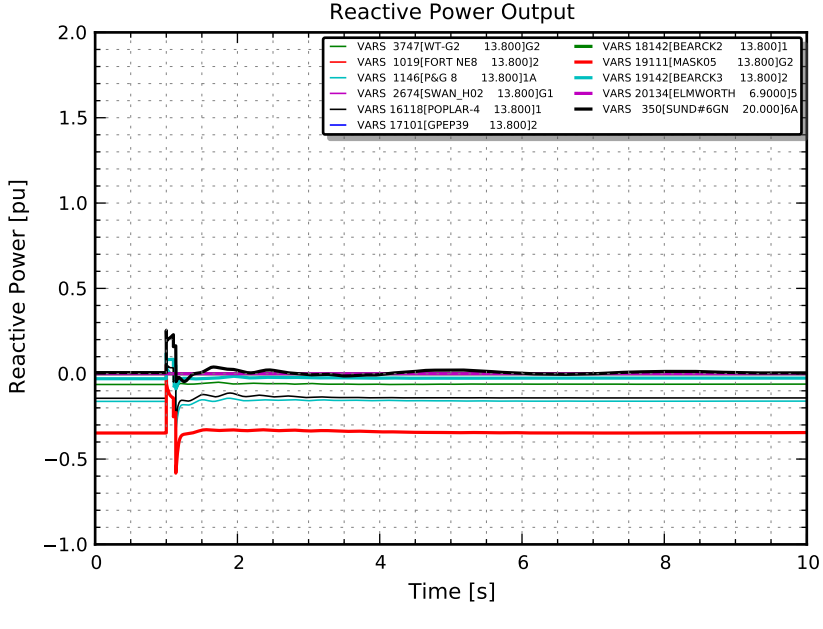
Study Area Generators

Appendix E2B
Figure: 015 (A. 3)





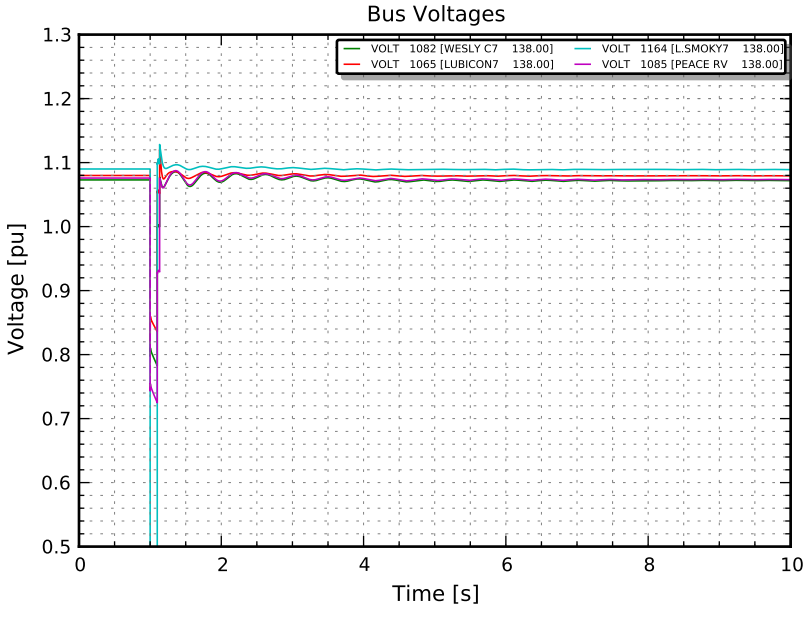


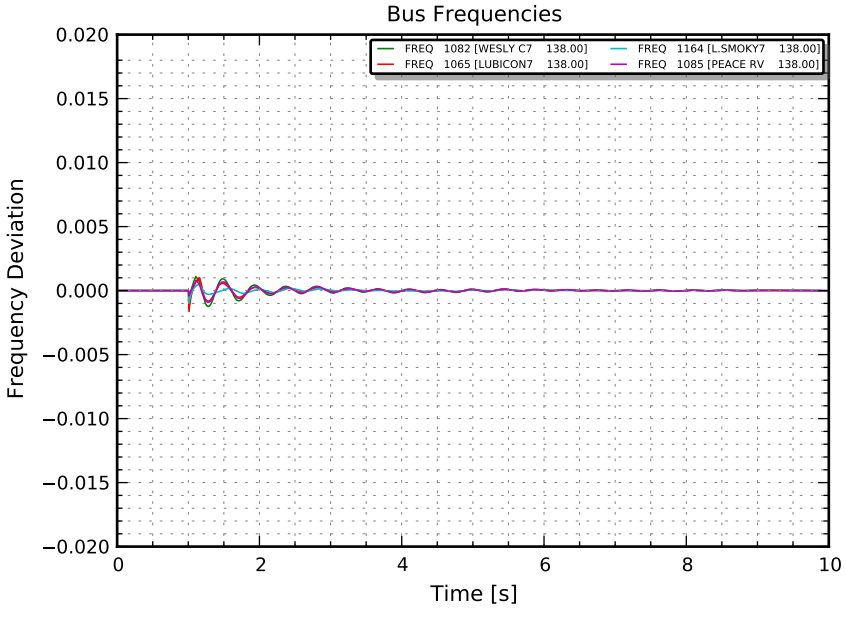


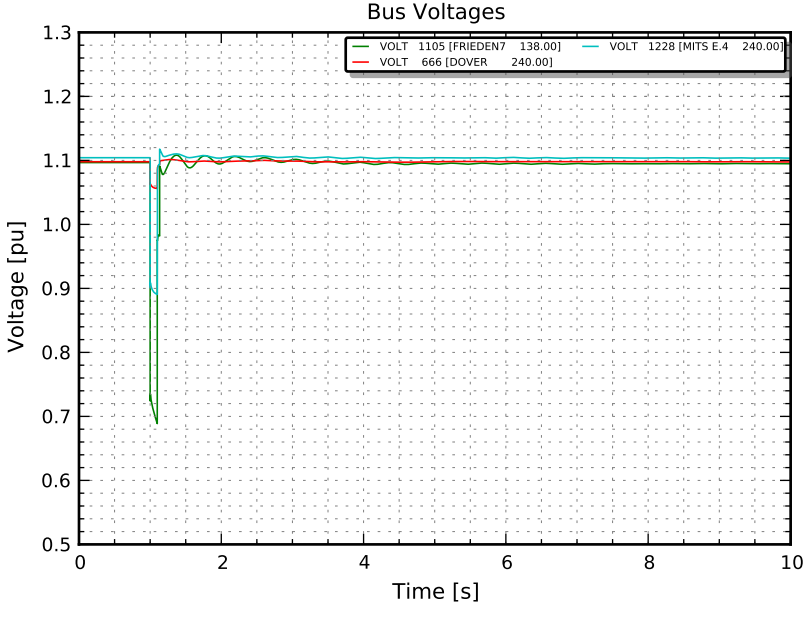
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_B.

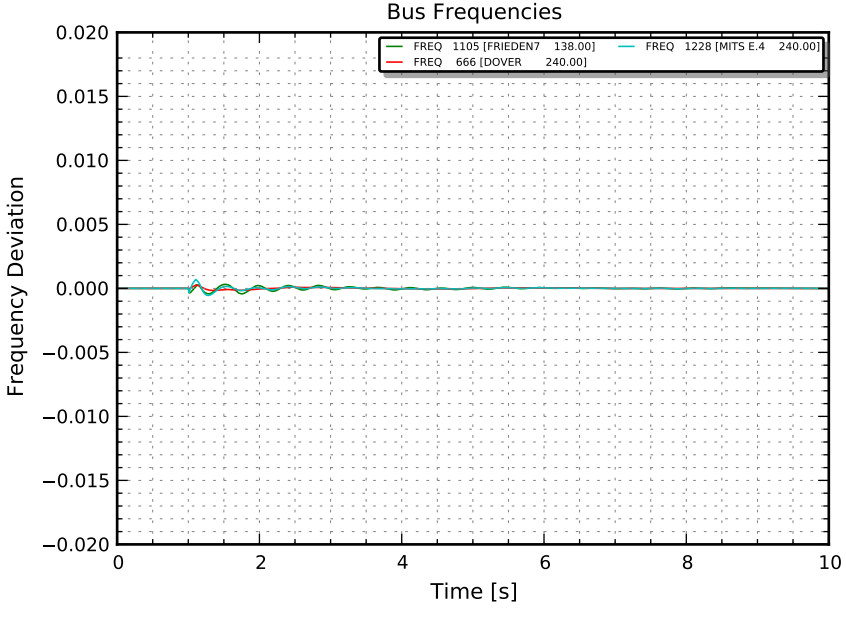
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 015 (B. 1)





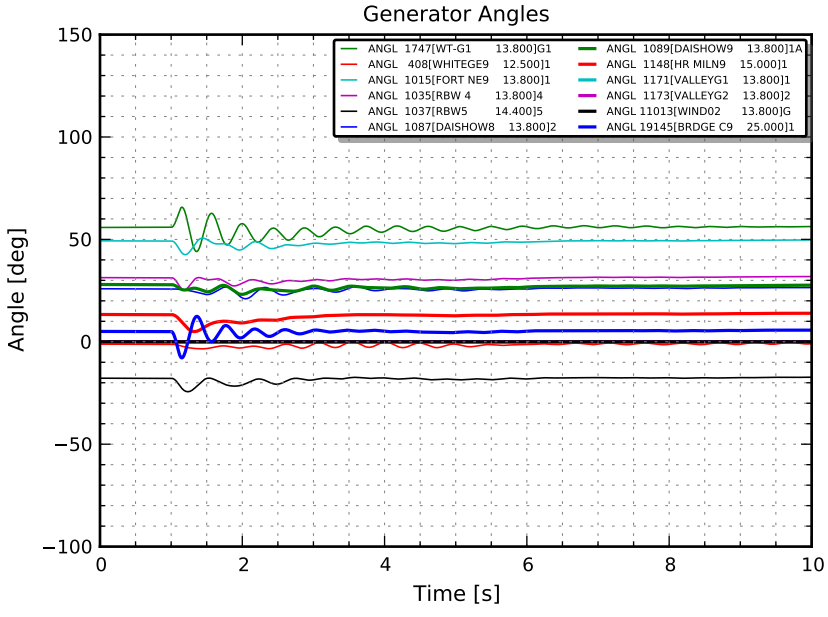


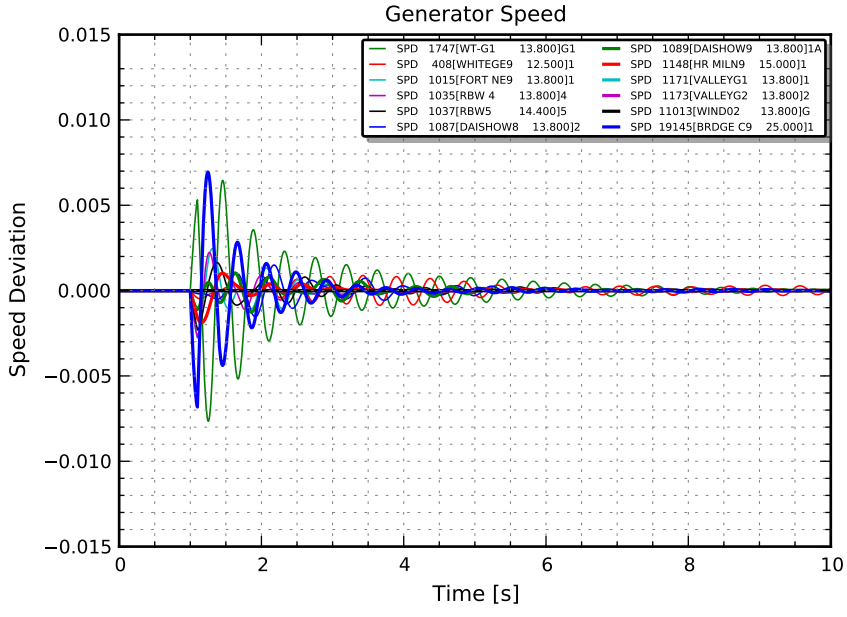


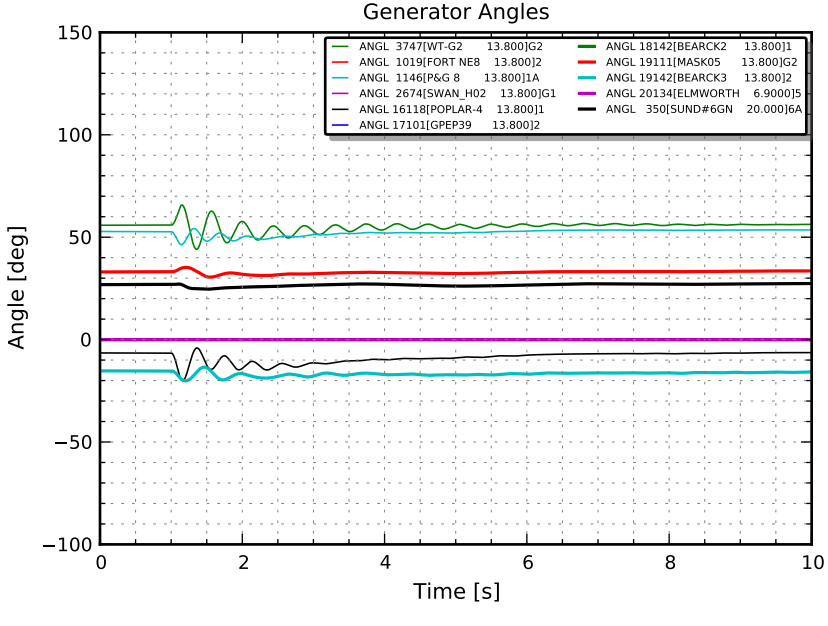
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_B.

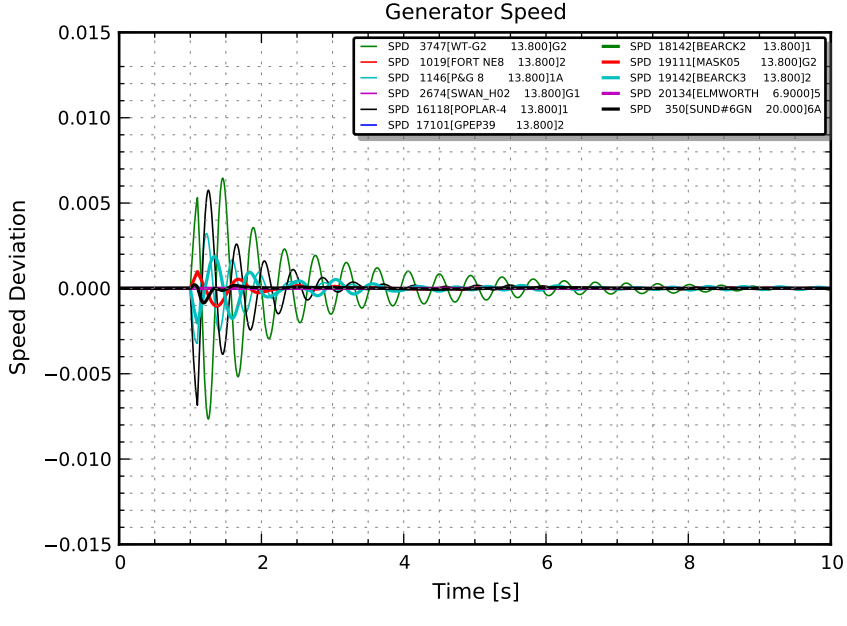
Study Area Generators

Appendix E2B
Figure: 015 (B. 2)





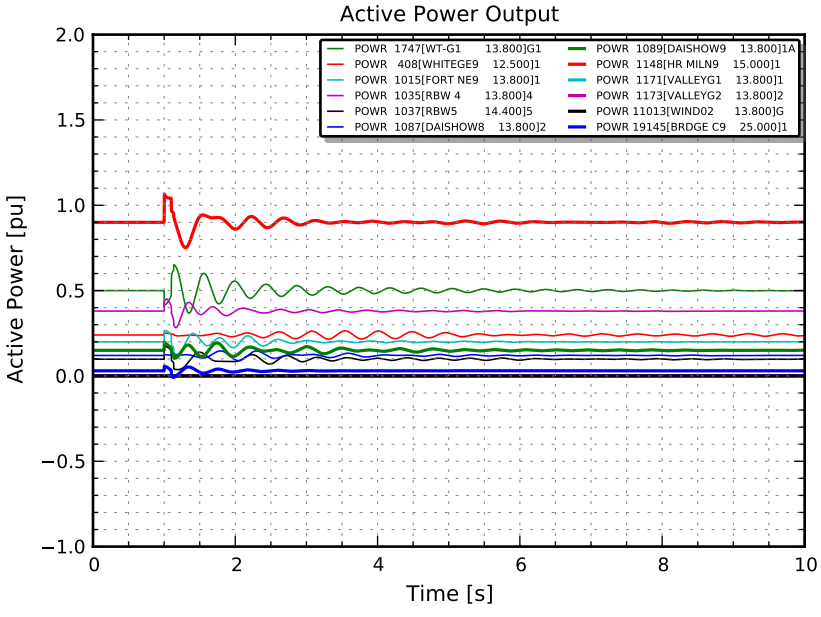


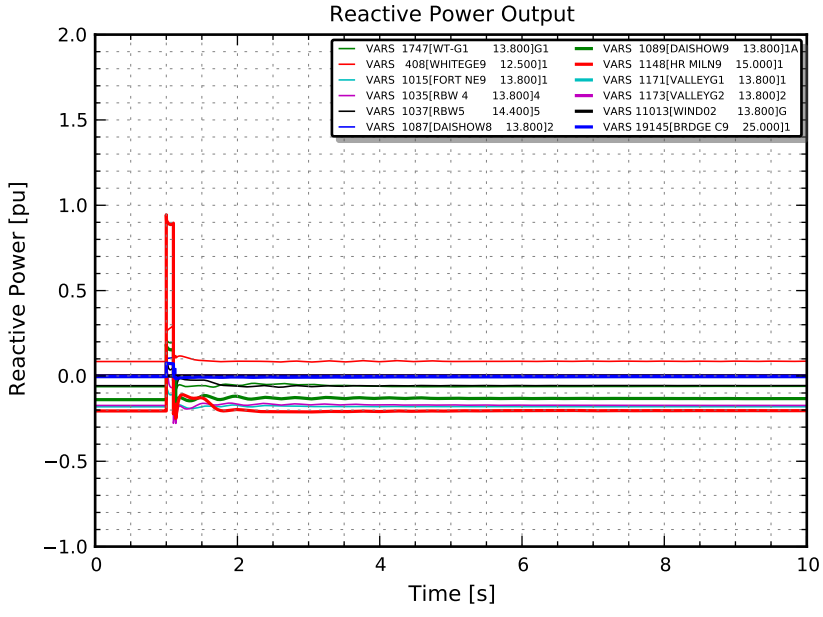


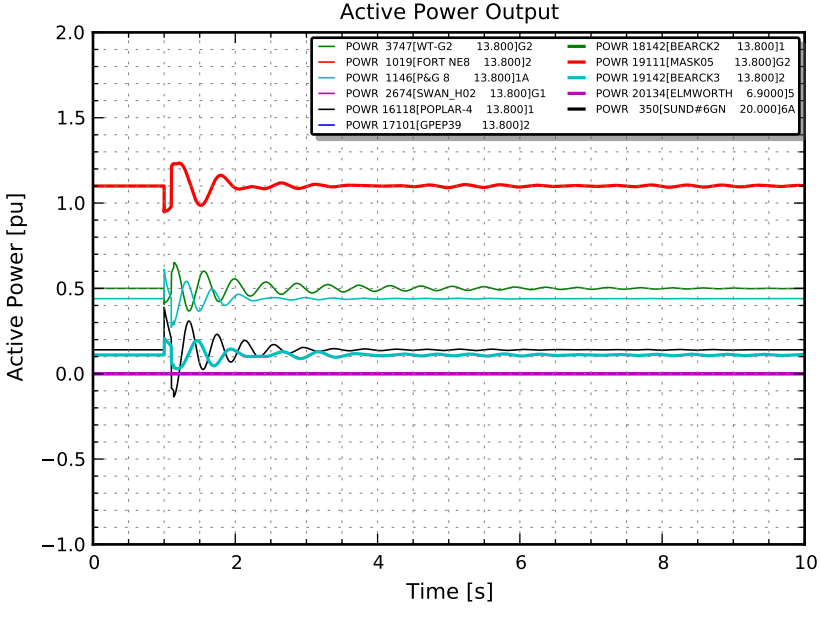
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 015 7L48 HIGHPRAIRIE to VALLEYVIEW_B.

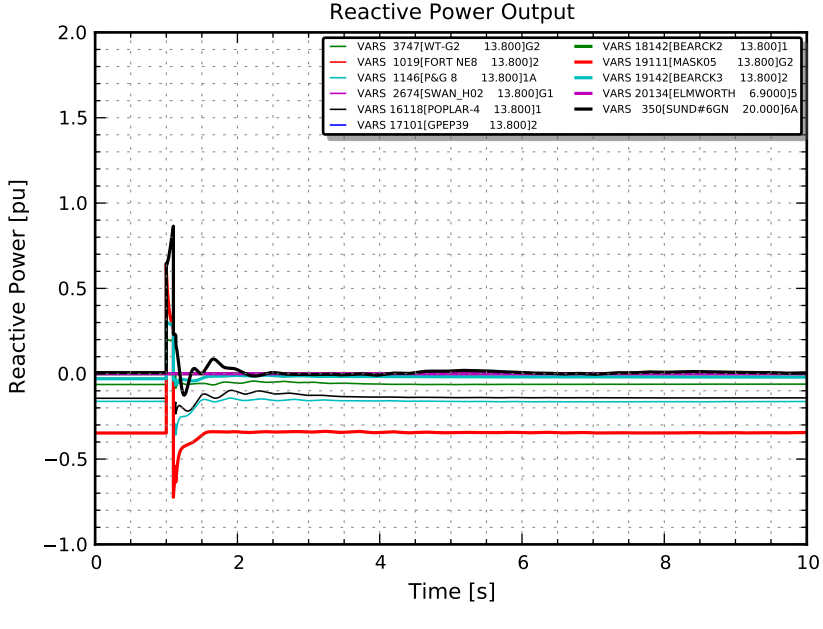
Study Area Generators

Appendix E2B
Figure: 015 (B. 3)





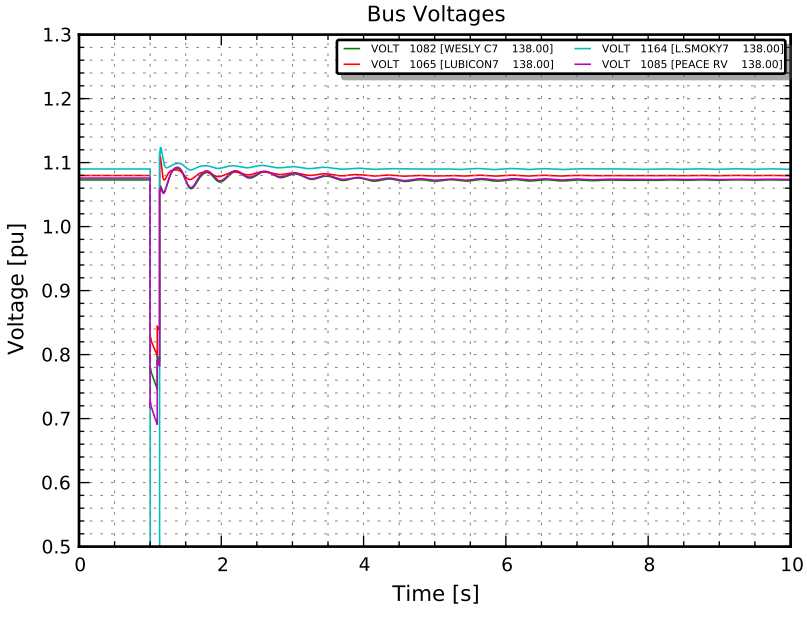


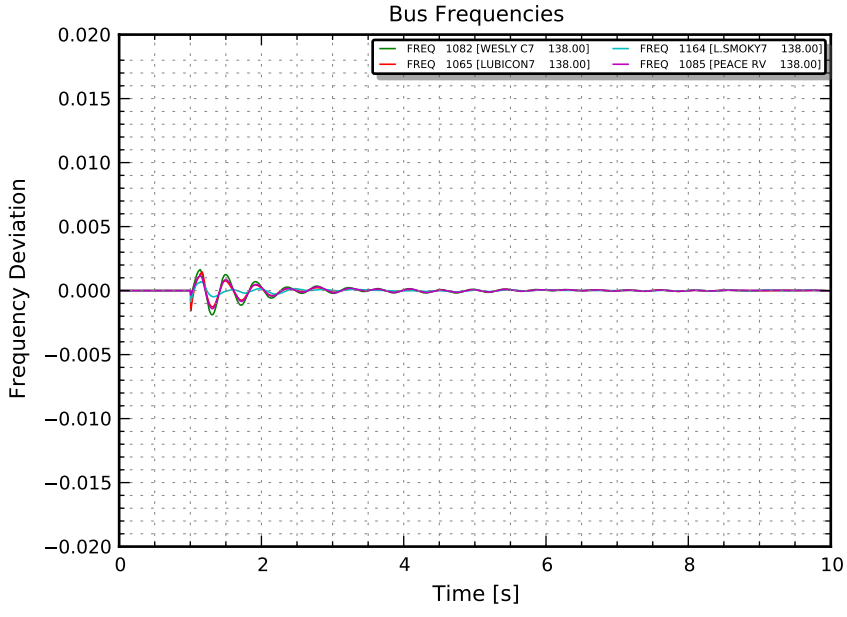


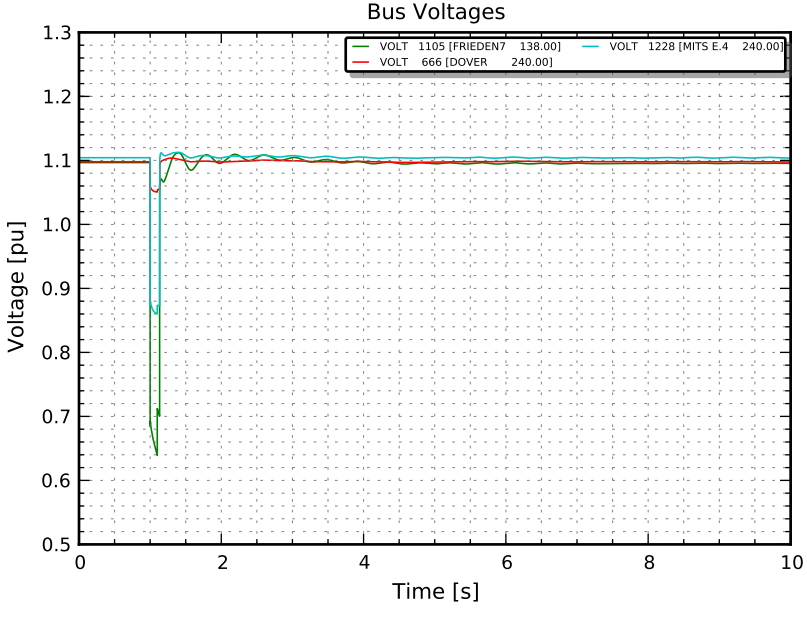
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_A.

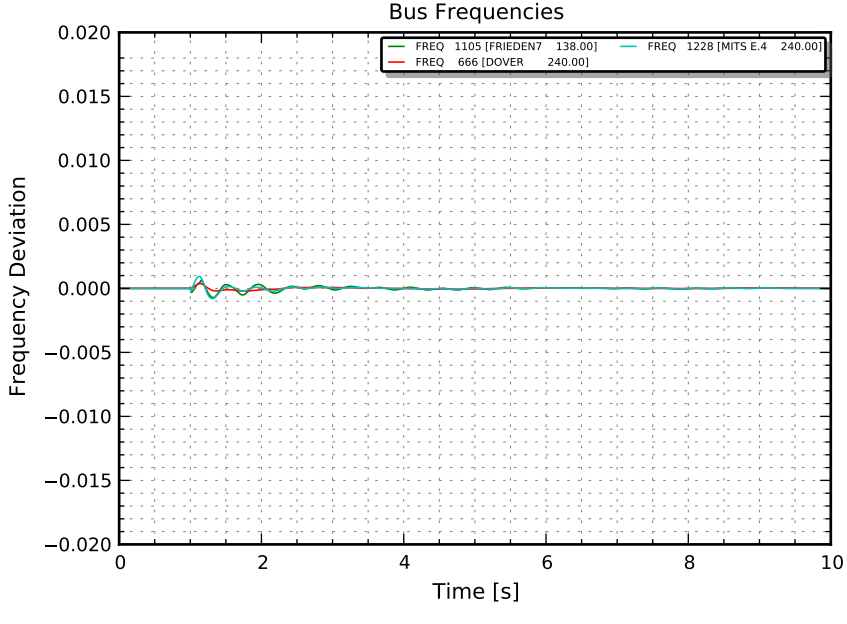
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 016 (A. 1)





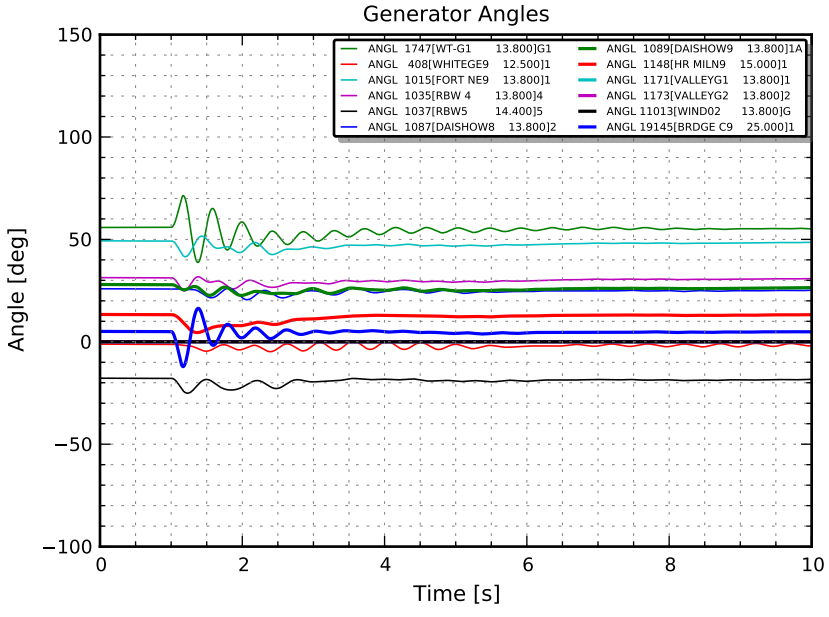


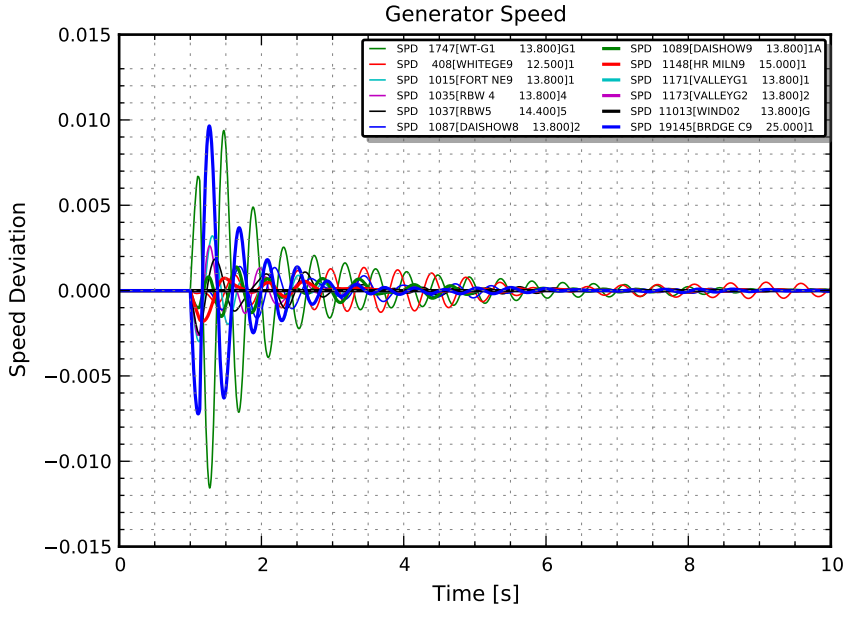


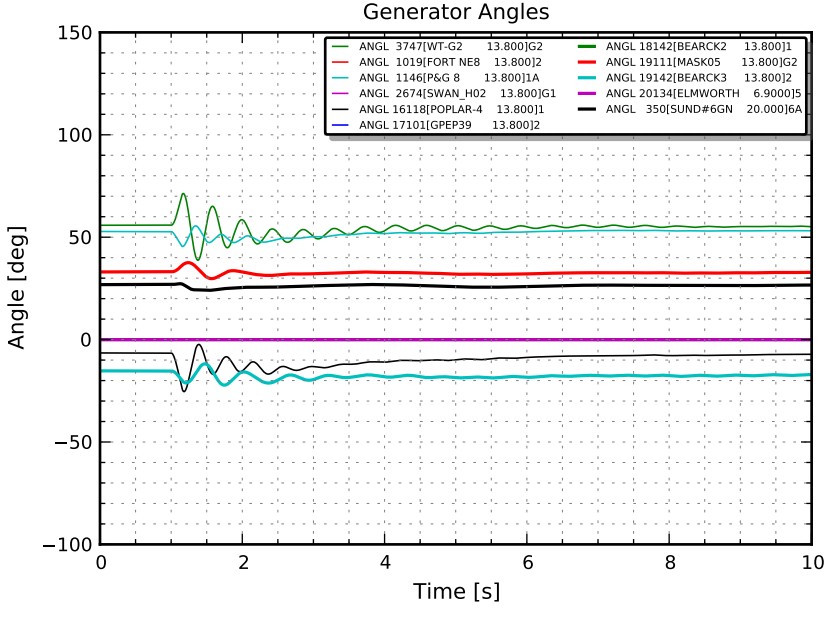
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_A.

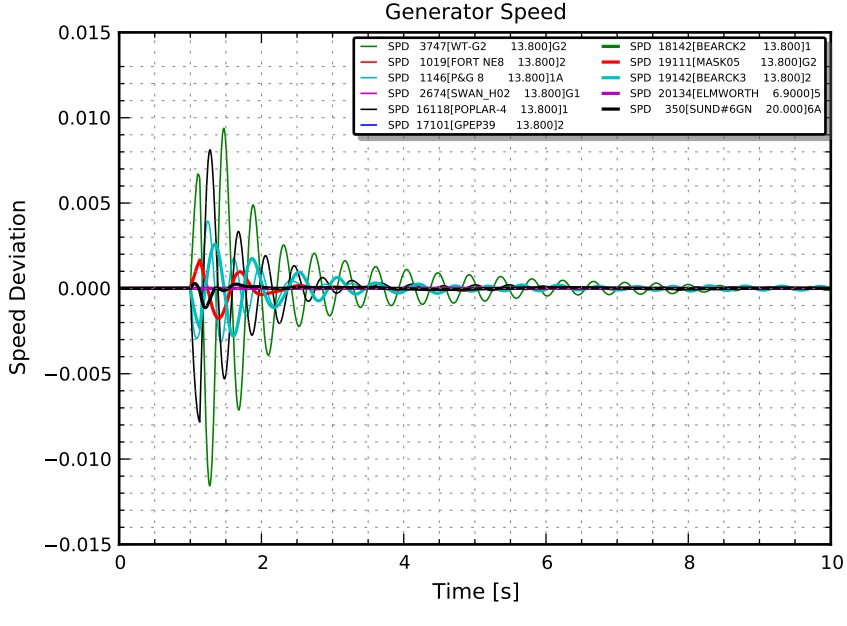
Study Area Generators

Appendix E2B
Figure: 016 (A. 2)





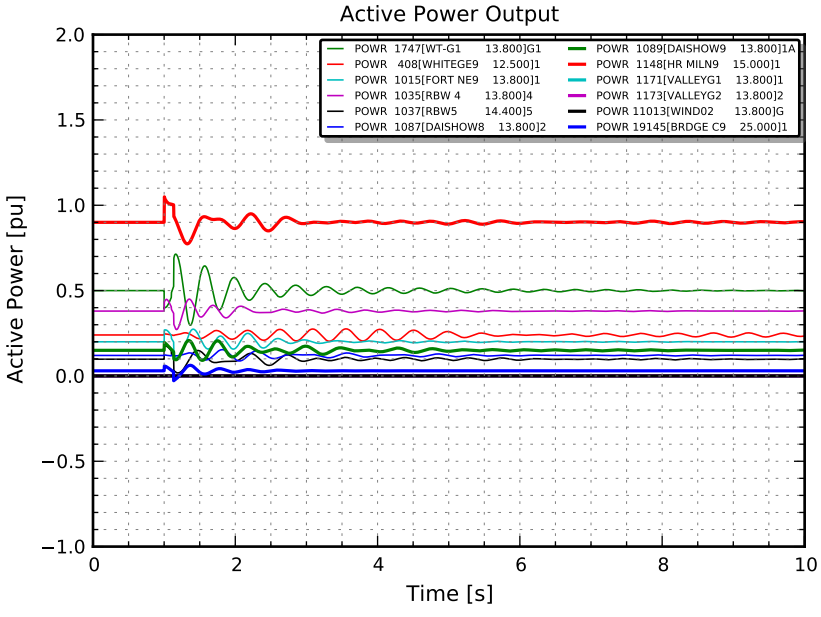


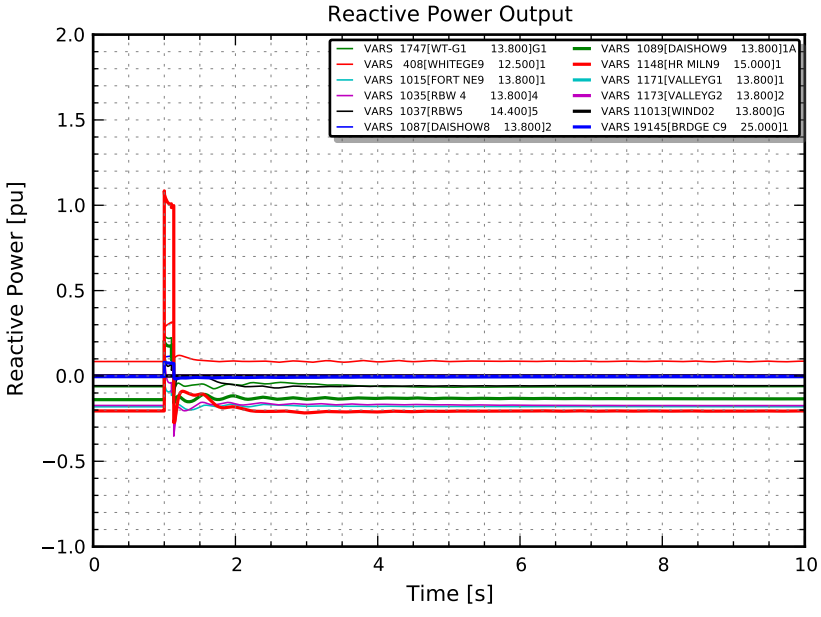


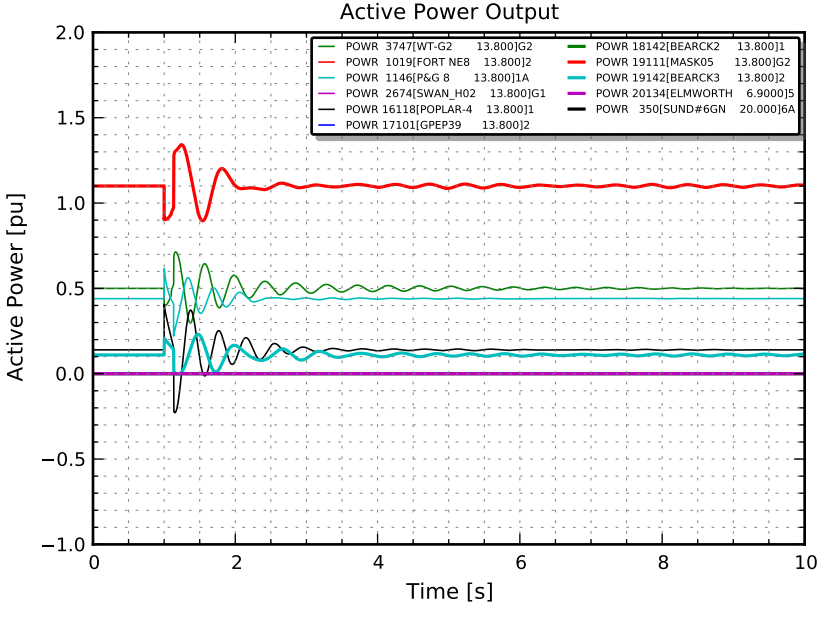
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_A.

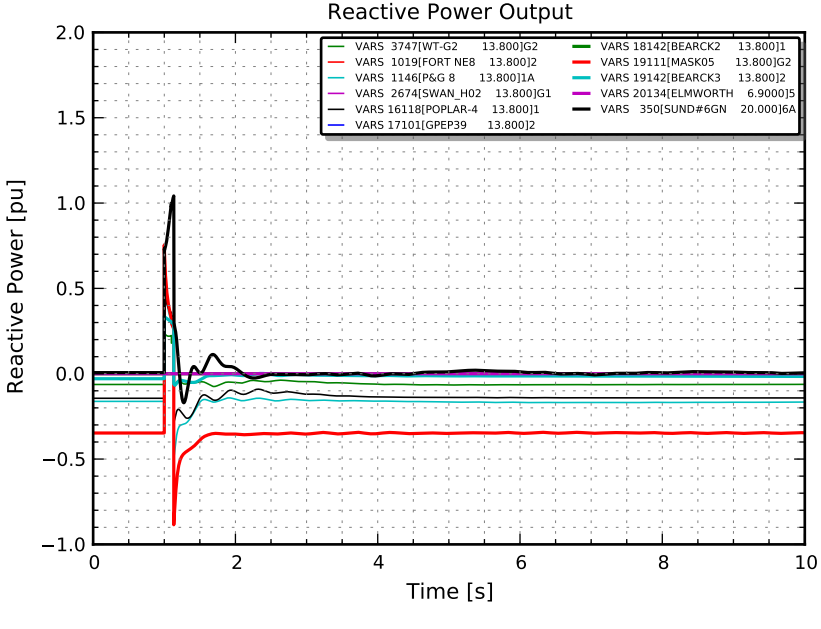
Study Area Generators

Appendix E2B
Figure: 016 (A. 3)





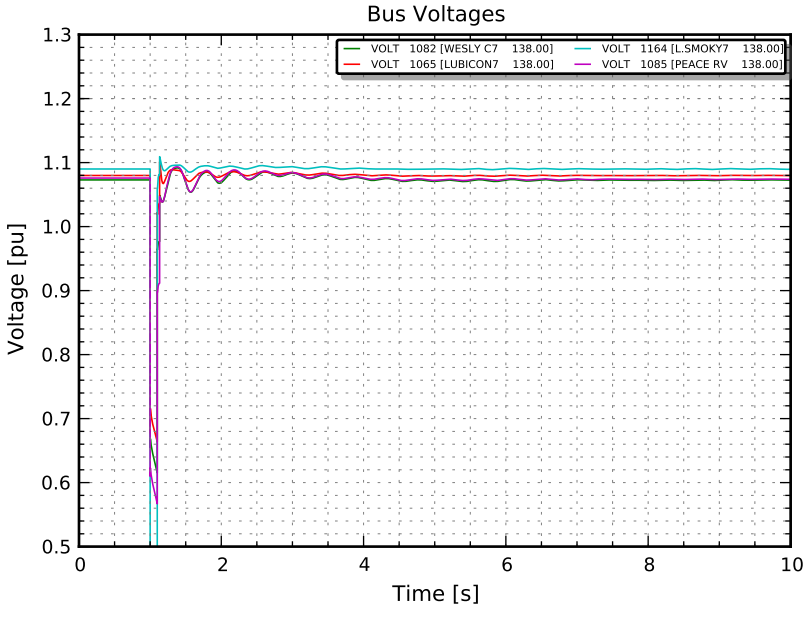


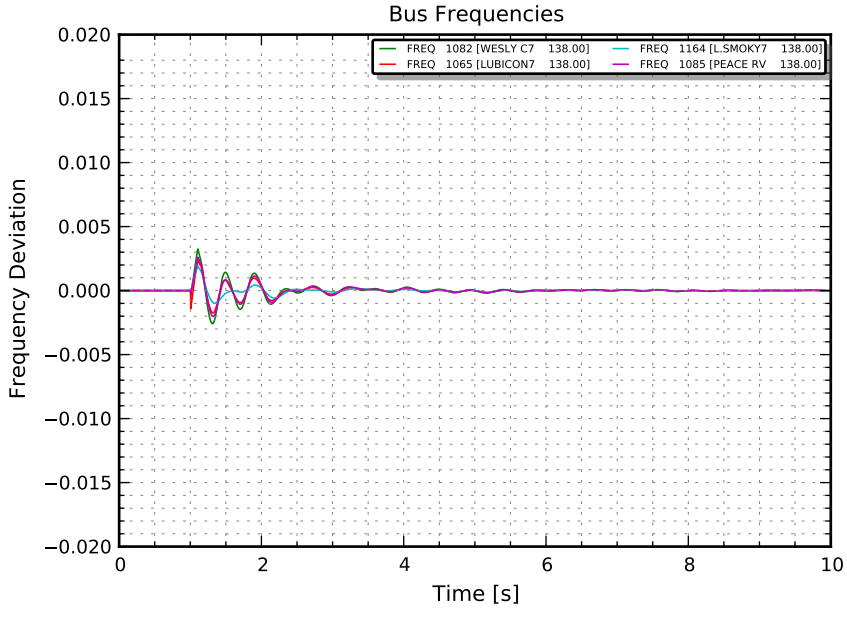


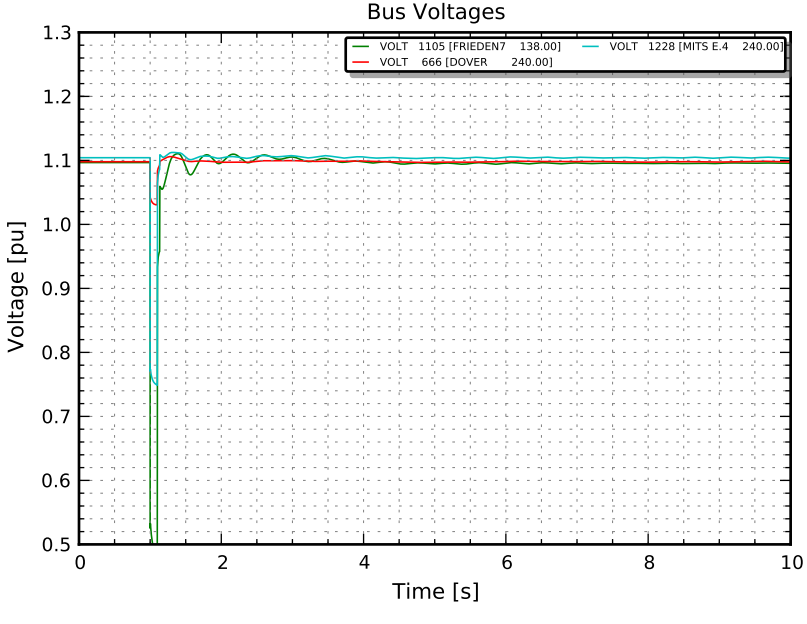
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_B.

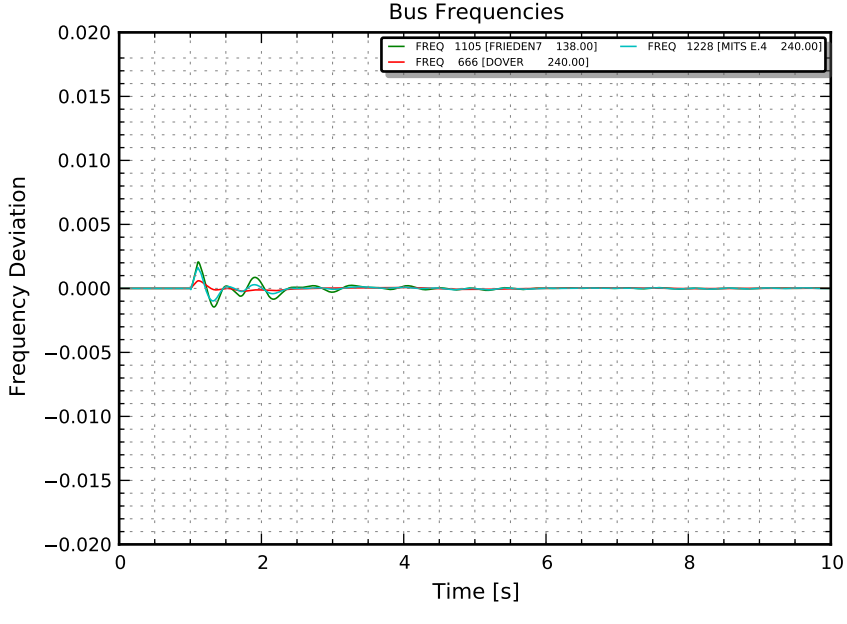
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 016 (B. 1)





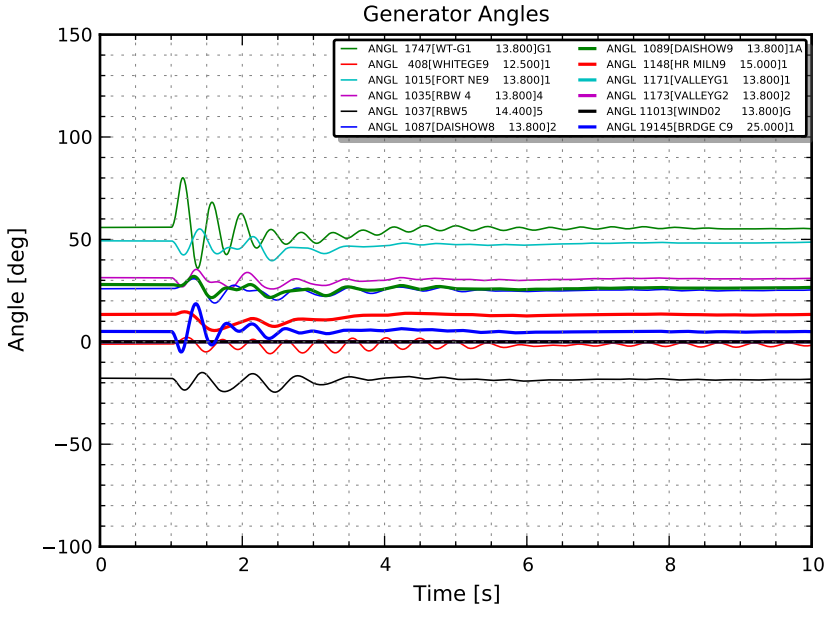


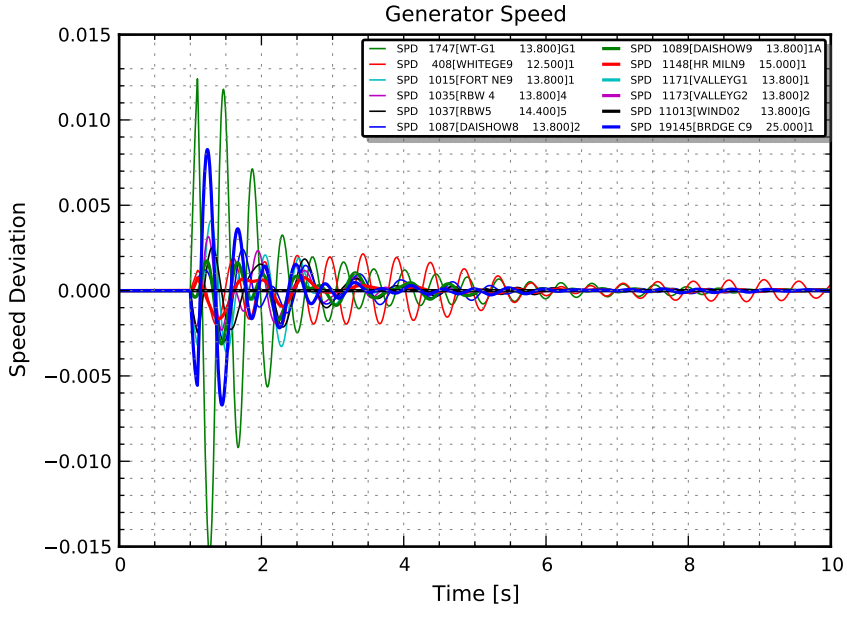


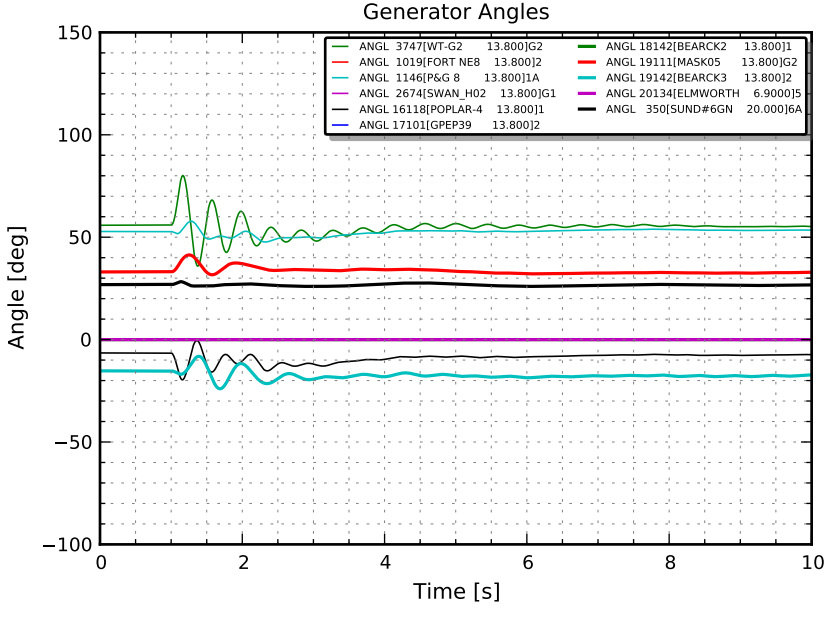
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_B.

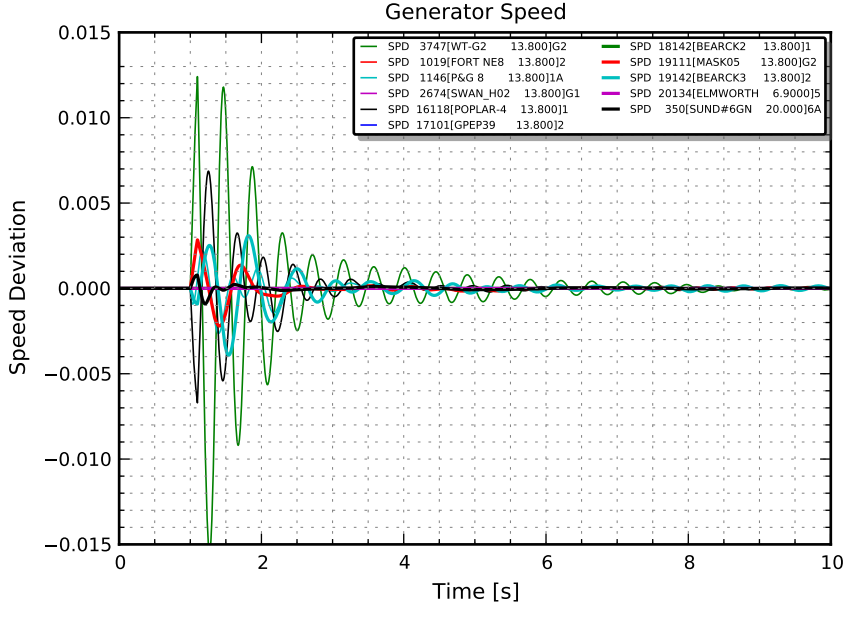
Study Area Generators

Appendix E2B
Figure: 016 (B. 2)





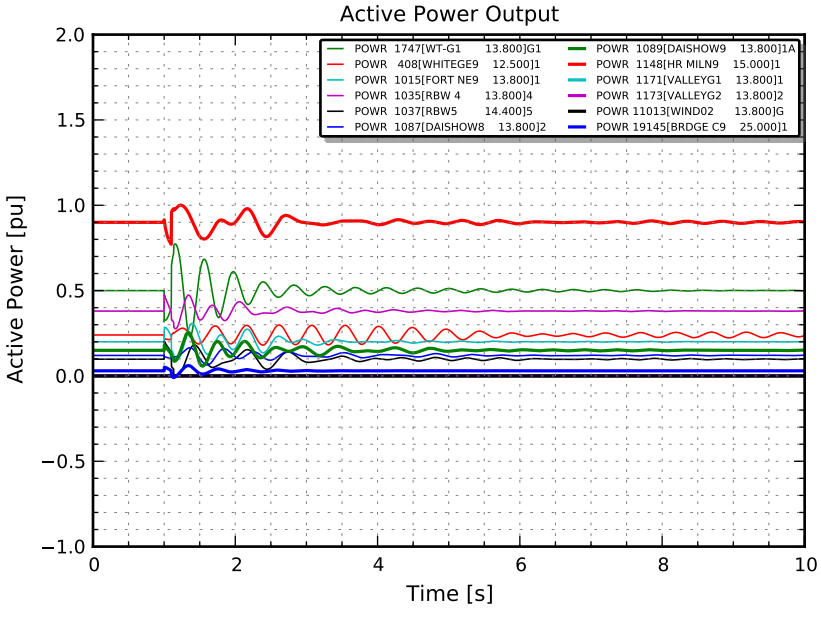


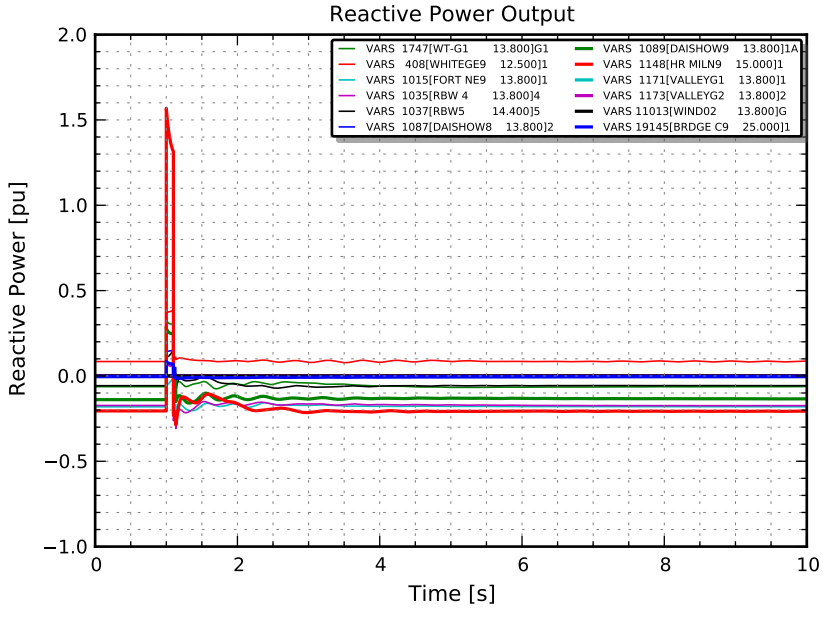


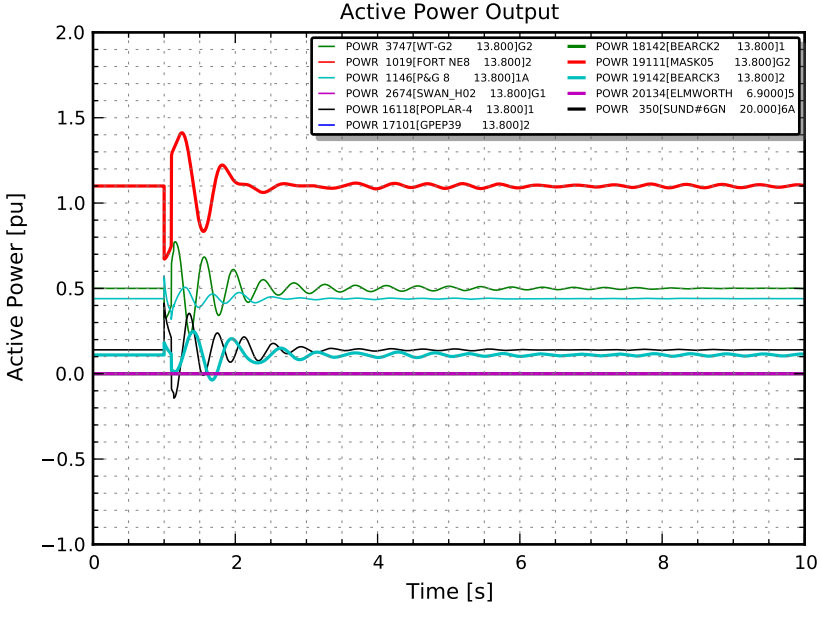
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 016 7L54 VALLEYVIEW to LITTLESMOKY_B.

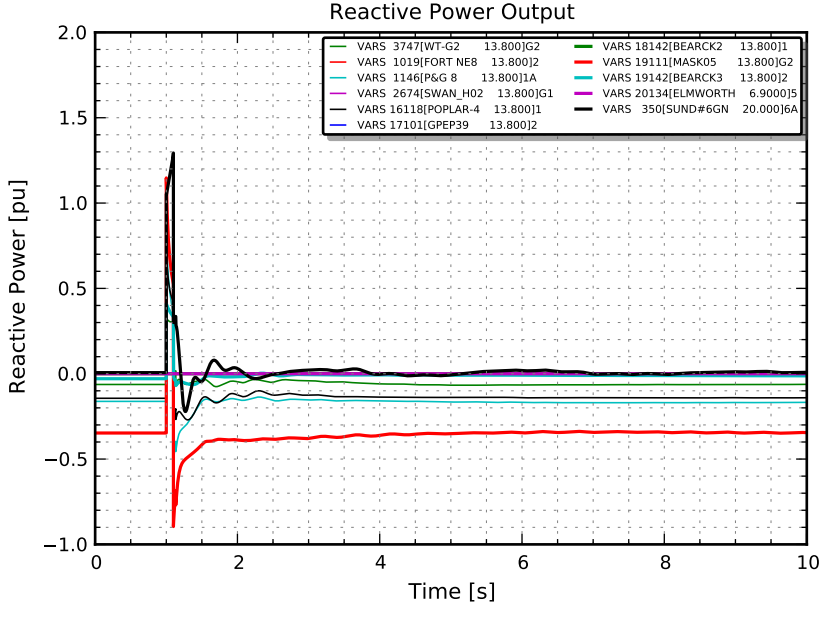
Study Area Generators

Appendix E2B
Figure: 016 (B. 3)





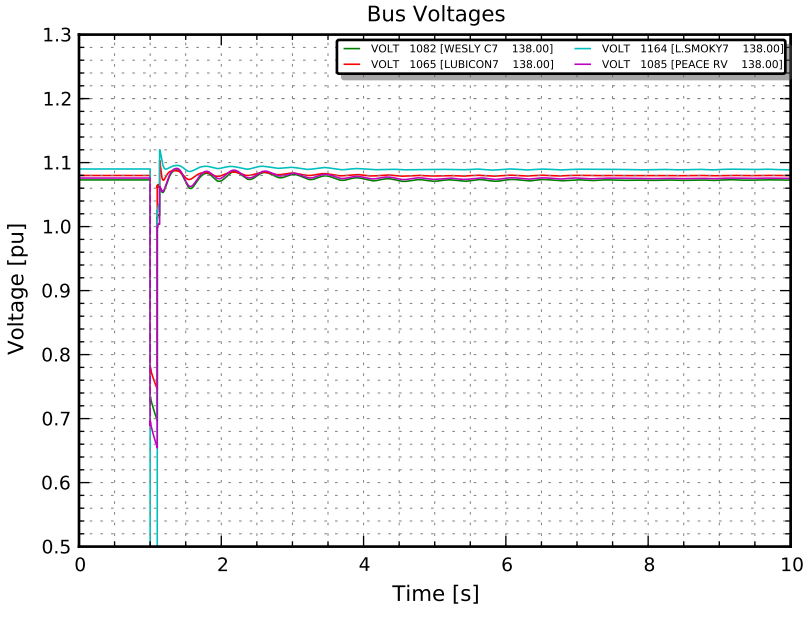


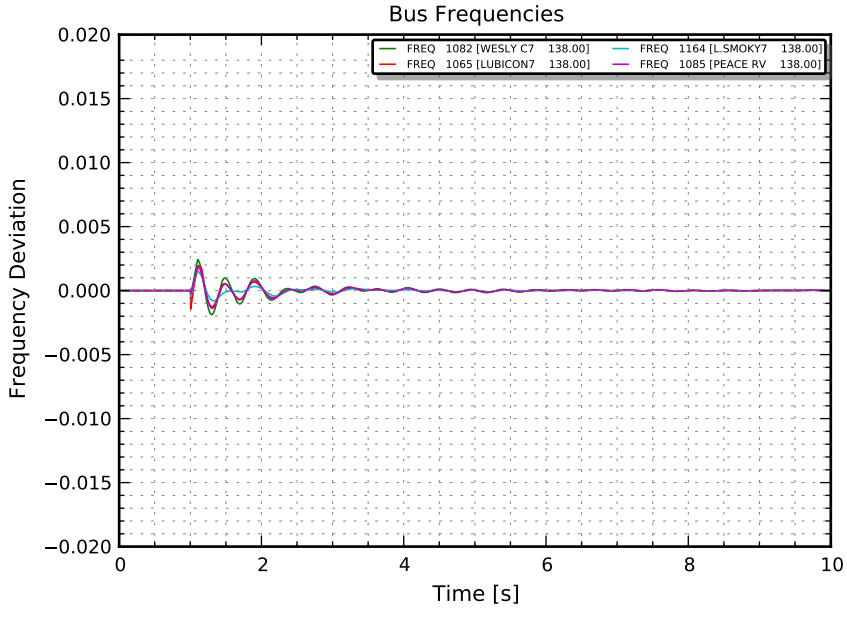


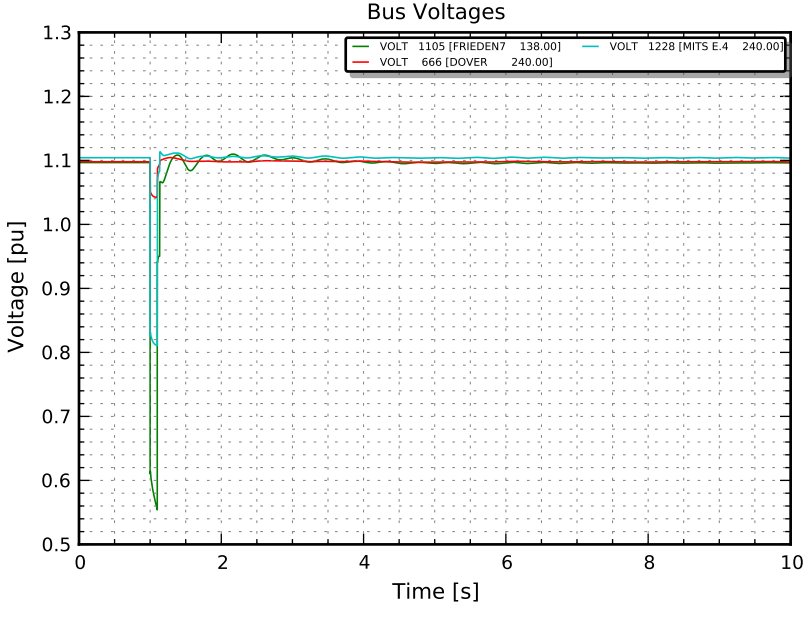
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_A.

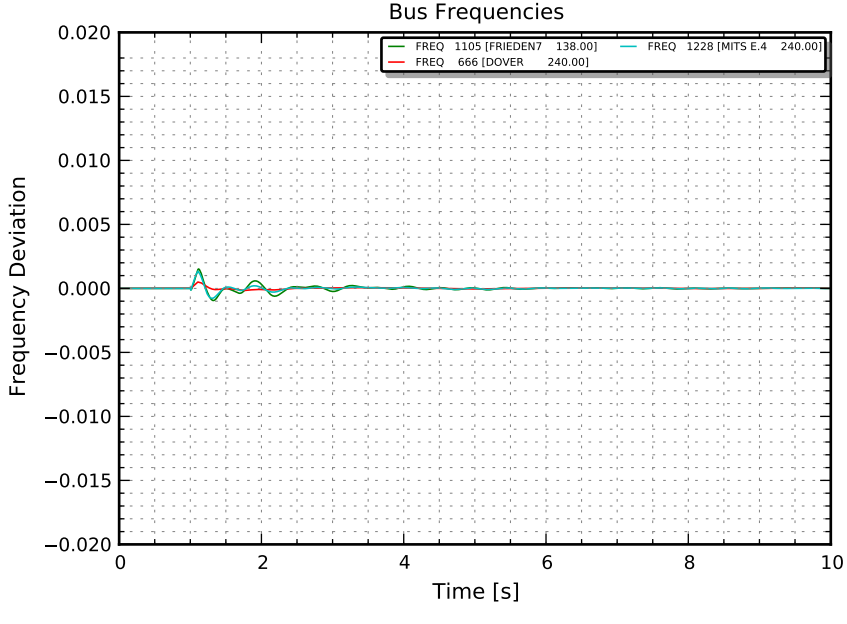
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 017 (A. 1)





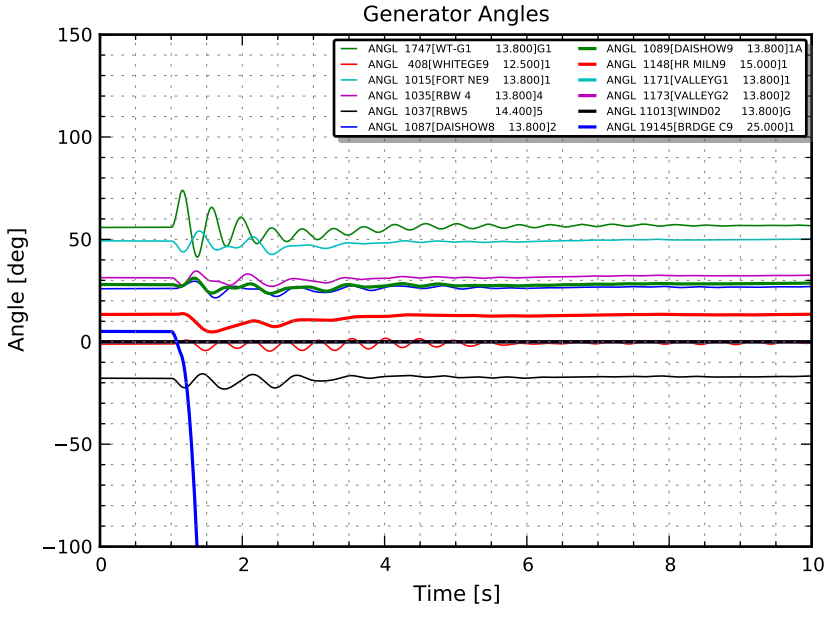


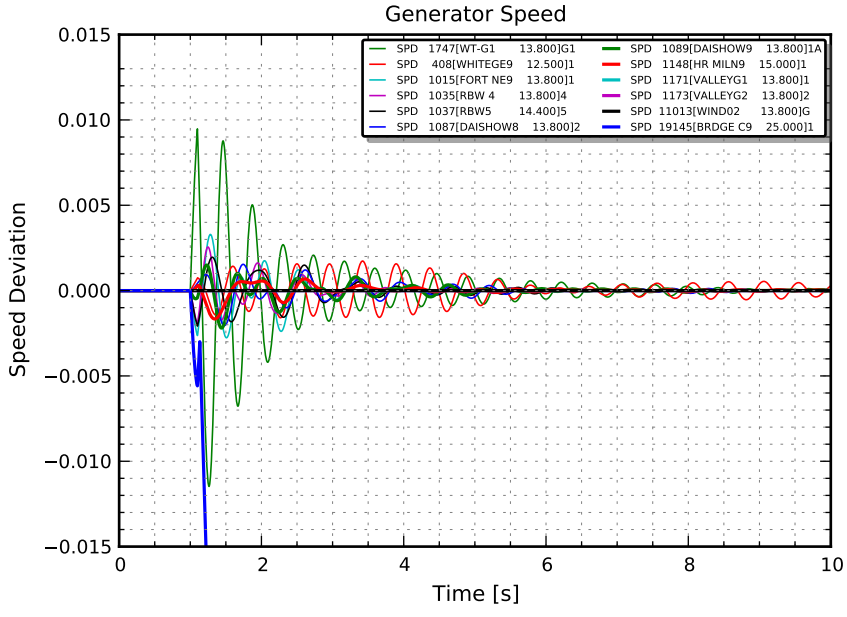


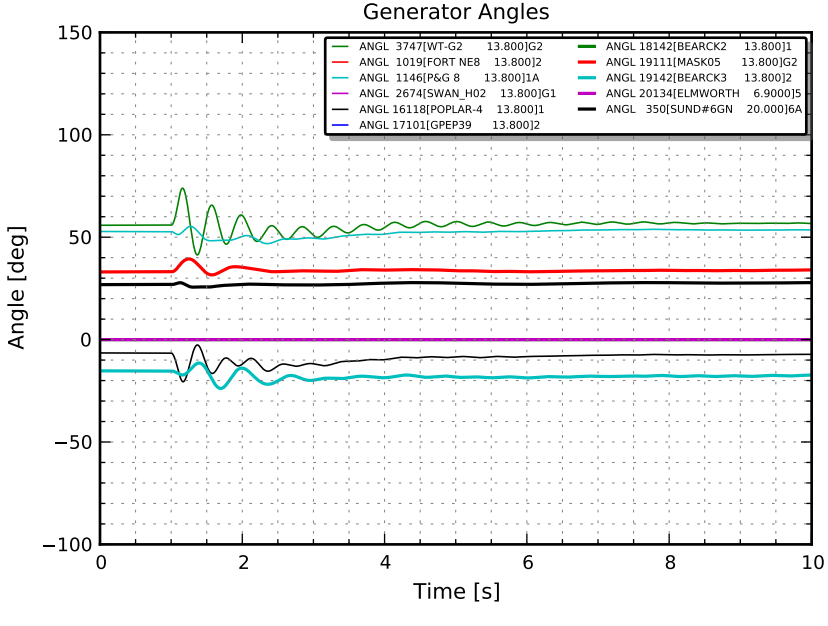
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_A.

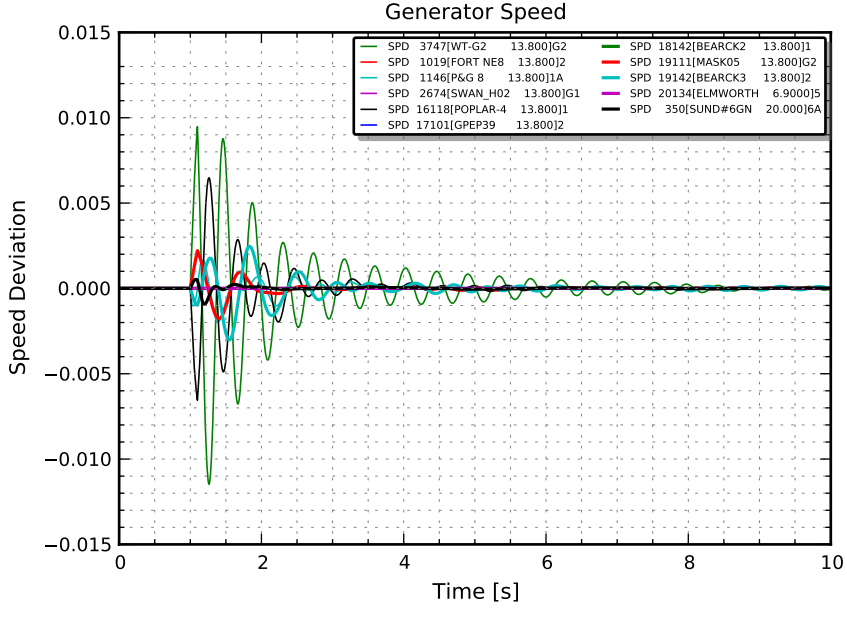
Study Area Generators

Appendix E2B
Figure: 017 (A. 2)





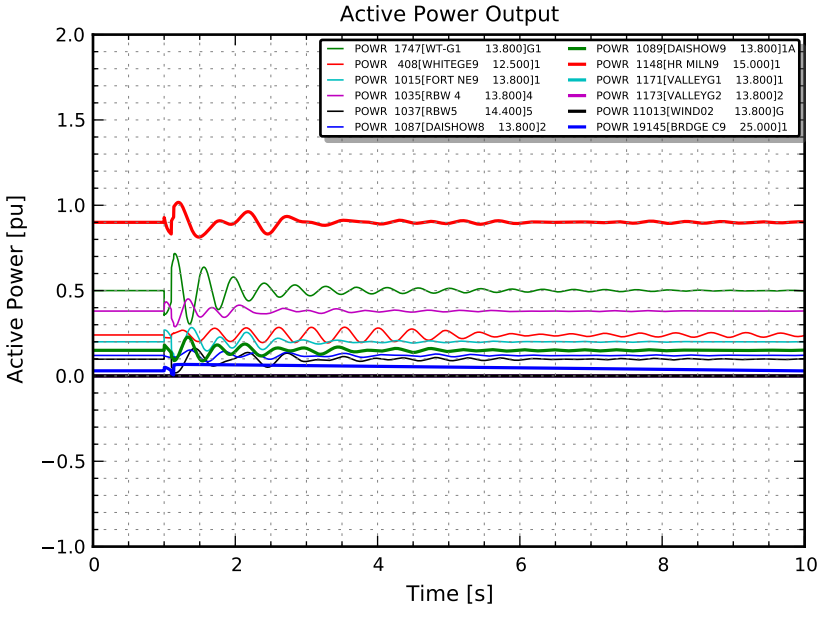


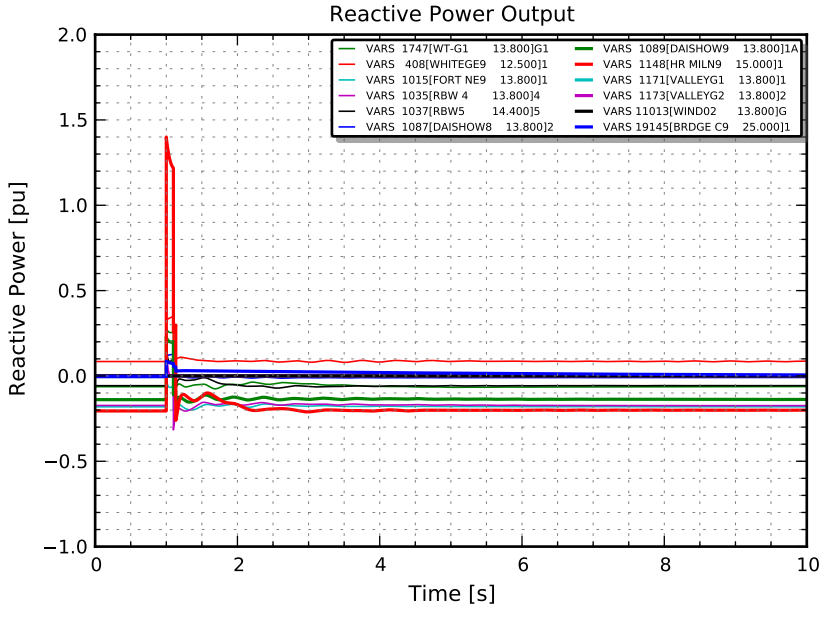


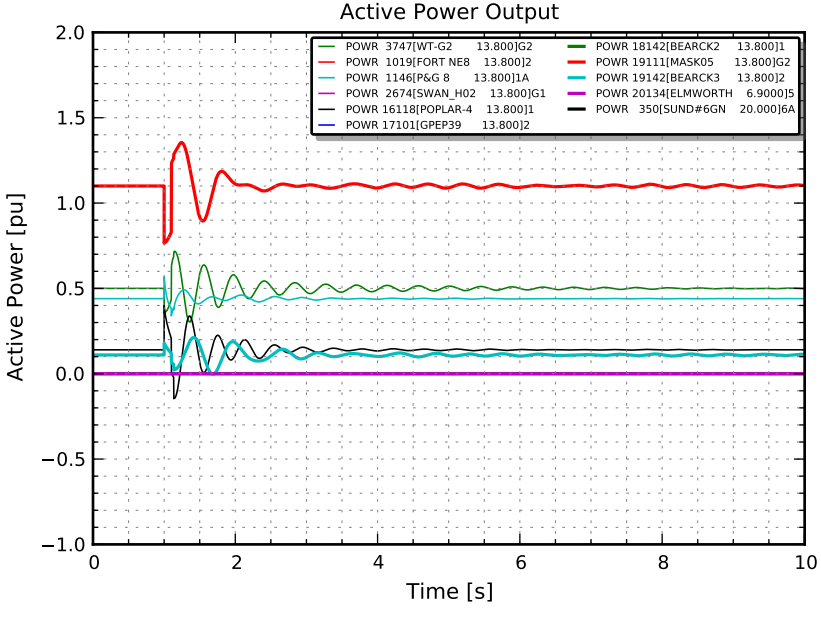
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_A.

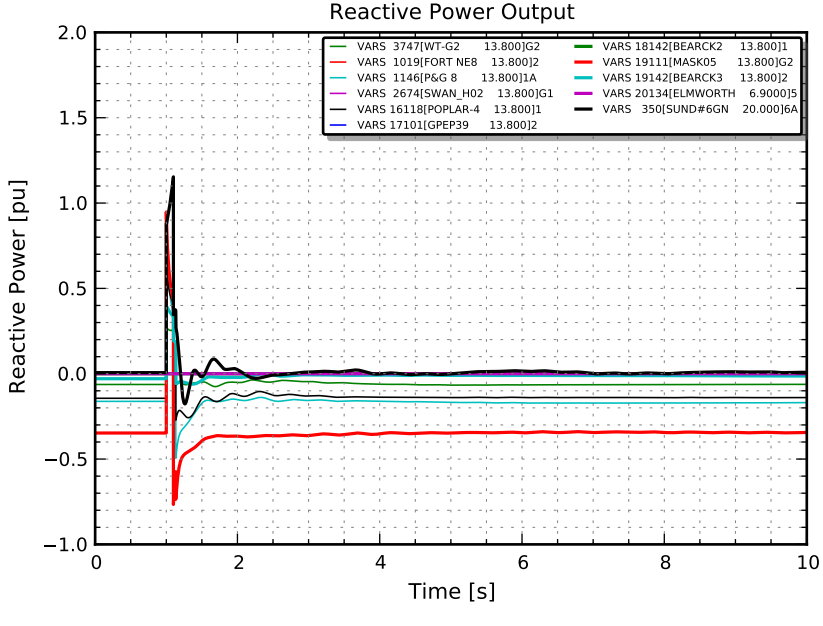
Study Area Generators

Appendix E2B
Figure: 017 (A. 3)





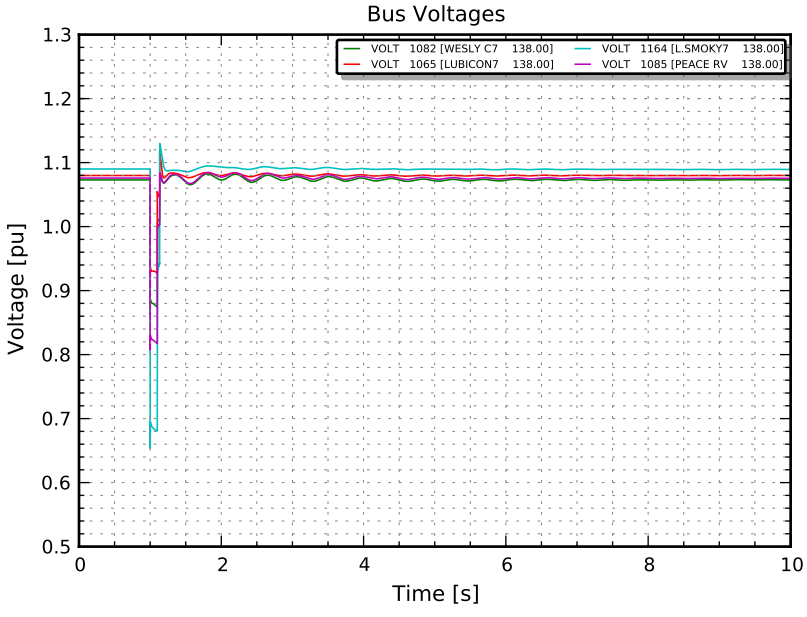


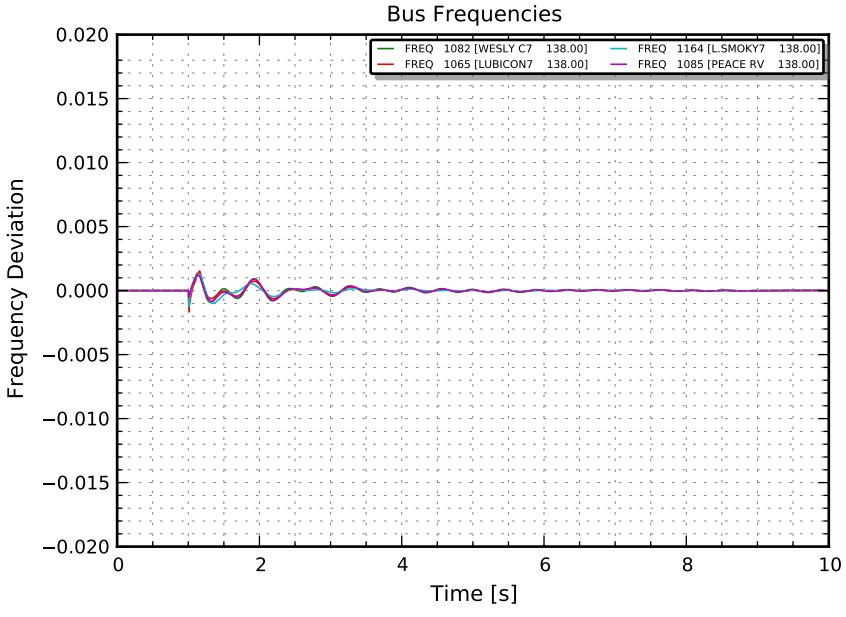


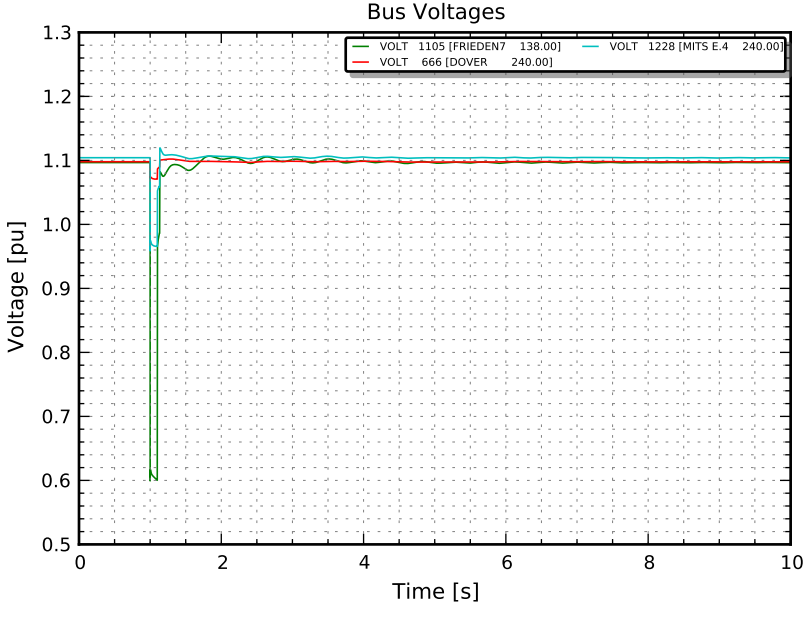
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_B.

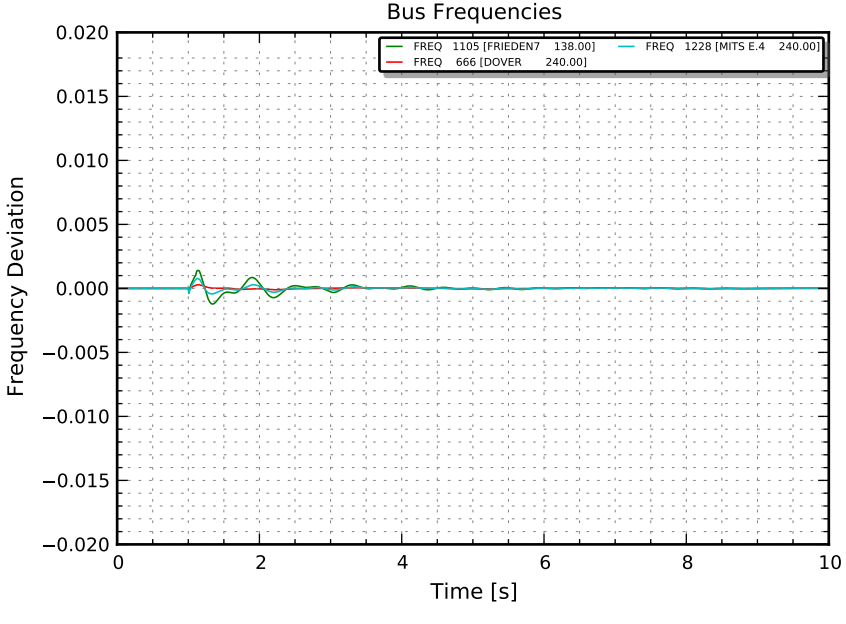
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 017 (B. 1)





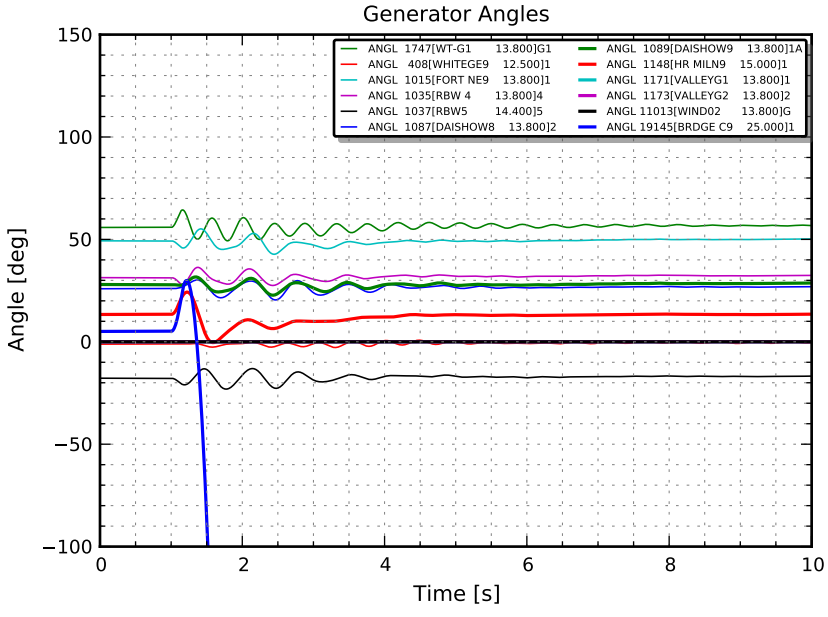


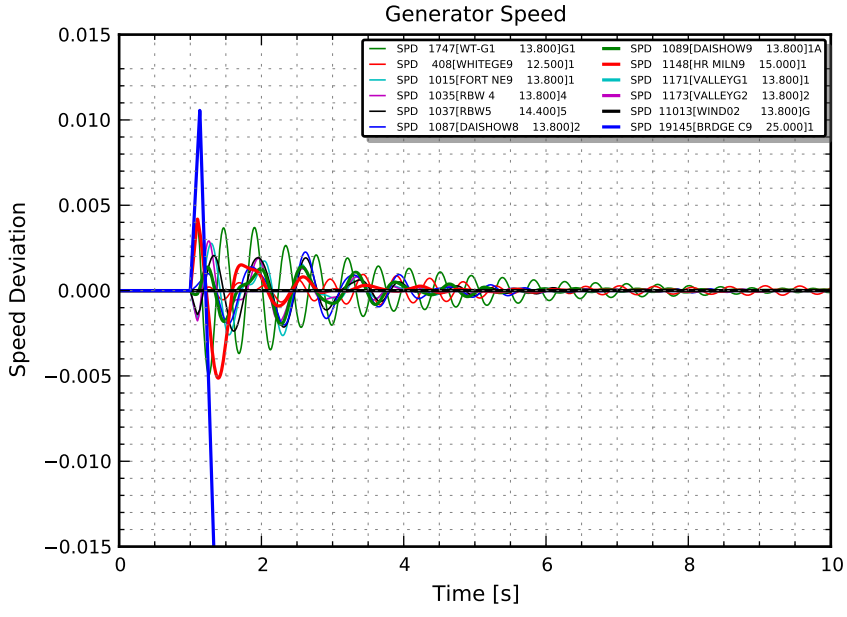


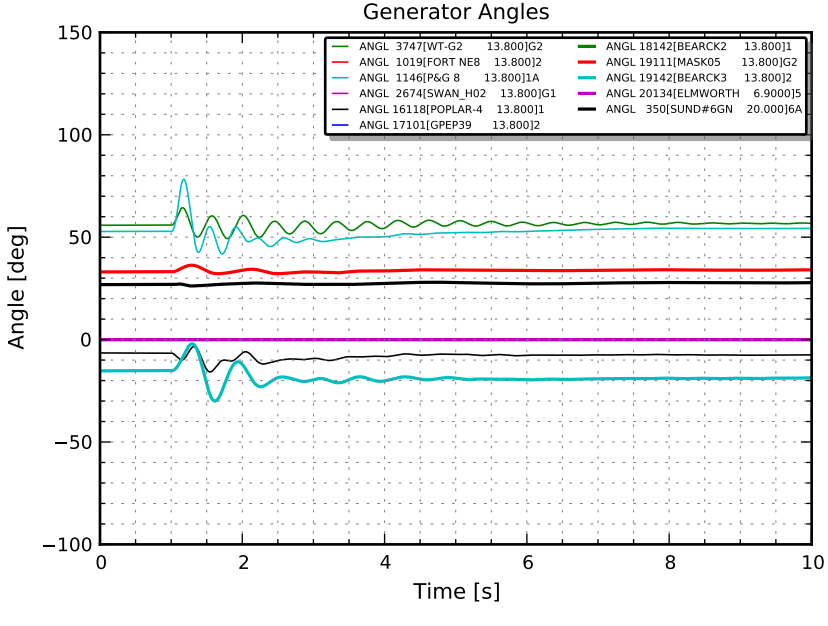
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_B.

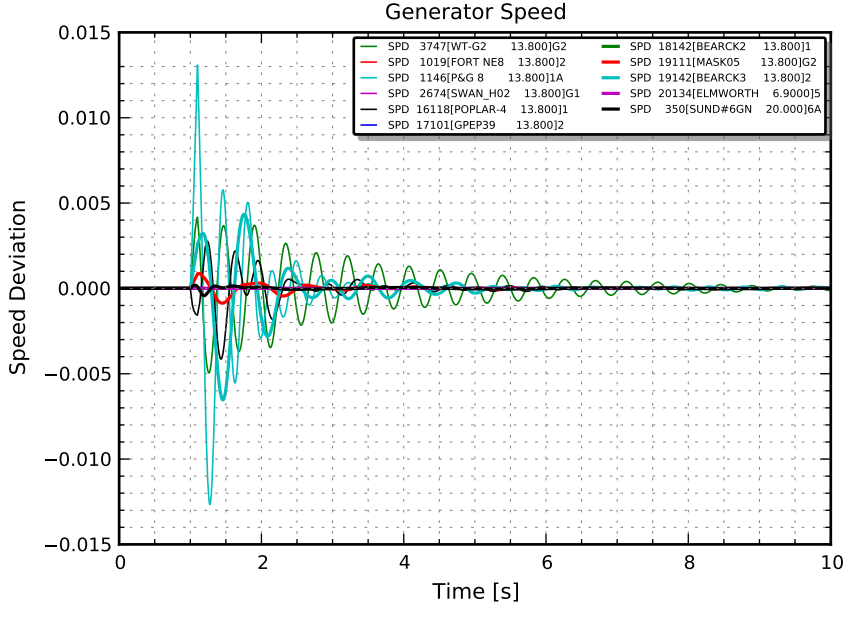
Study Area Generators

Appendix E2B
Figure: 017 (B. 2)





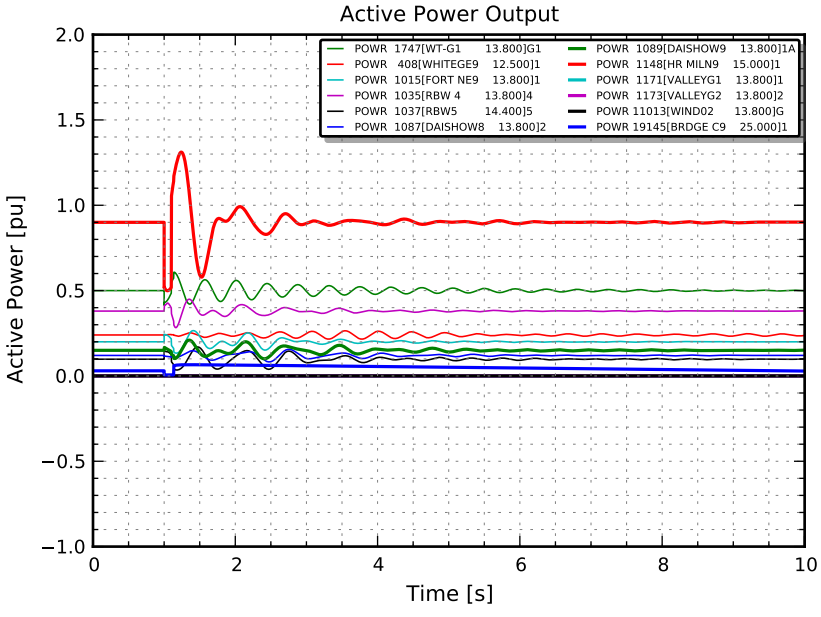


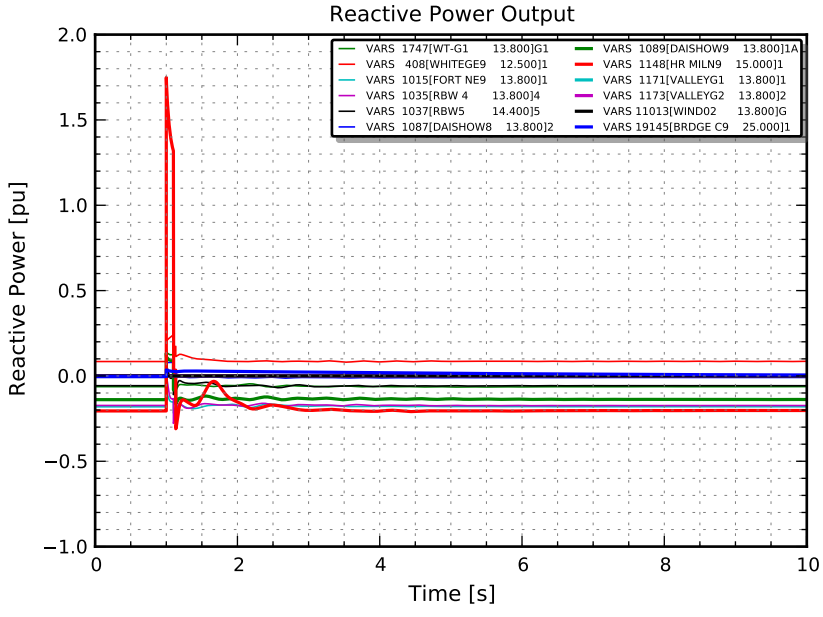


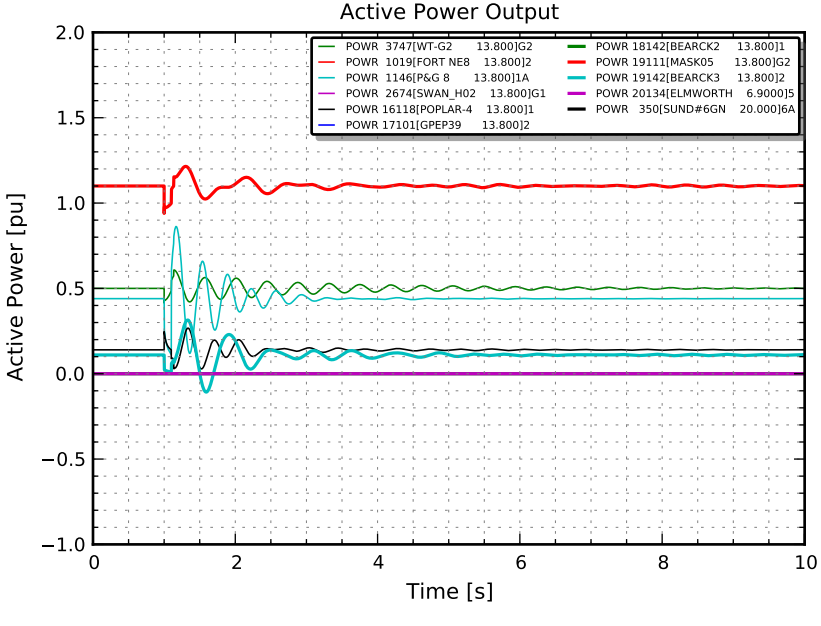
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 017 7L45 LITTLESMOKY to BIGMOUNTAIN_B.

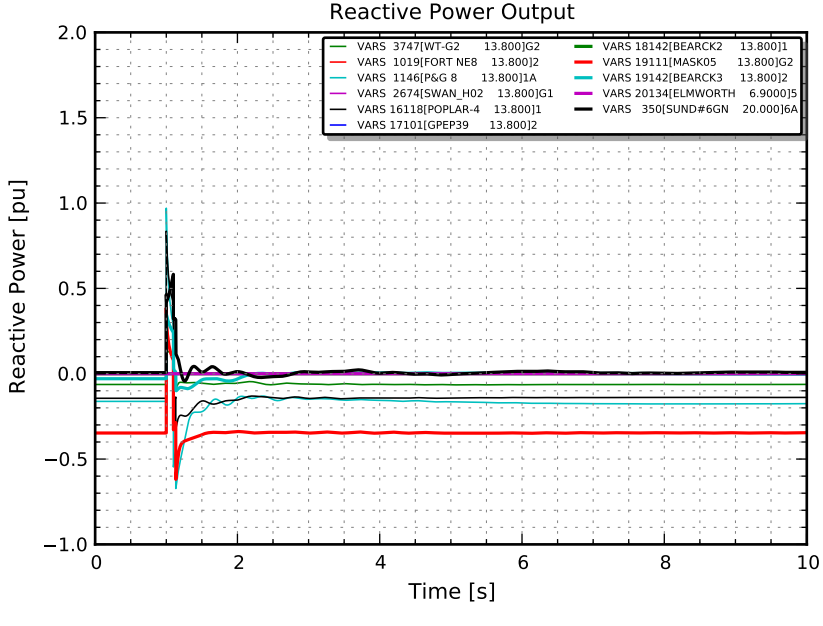
Study Area Generators

Appendix E2B
Figure: 017 (B. 3)





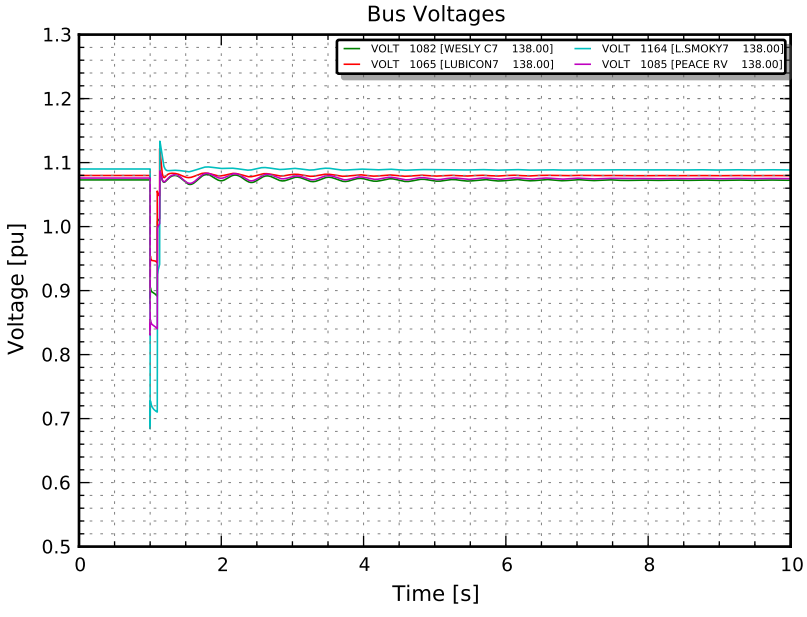


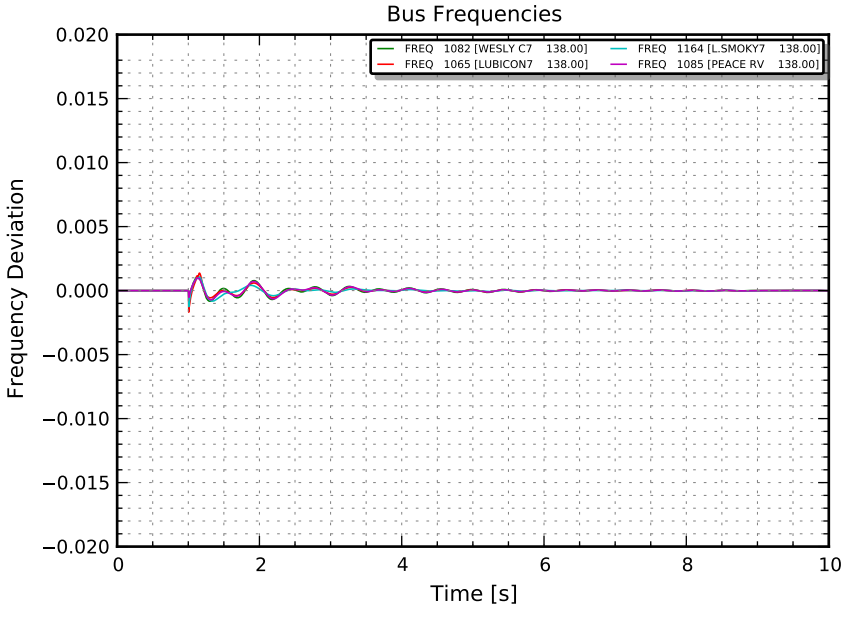


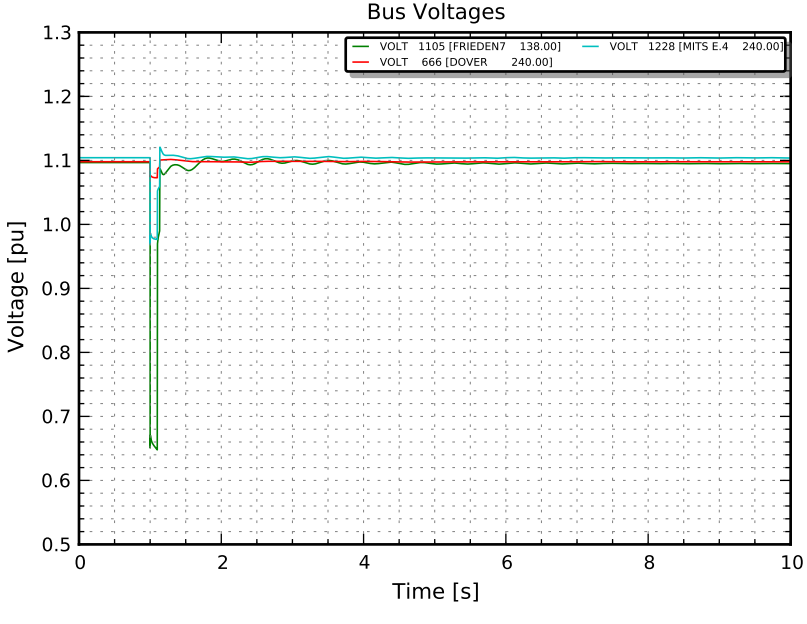
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_A.

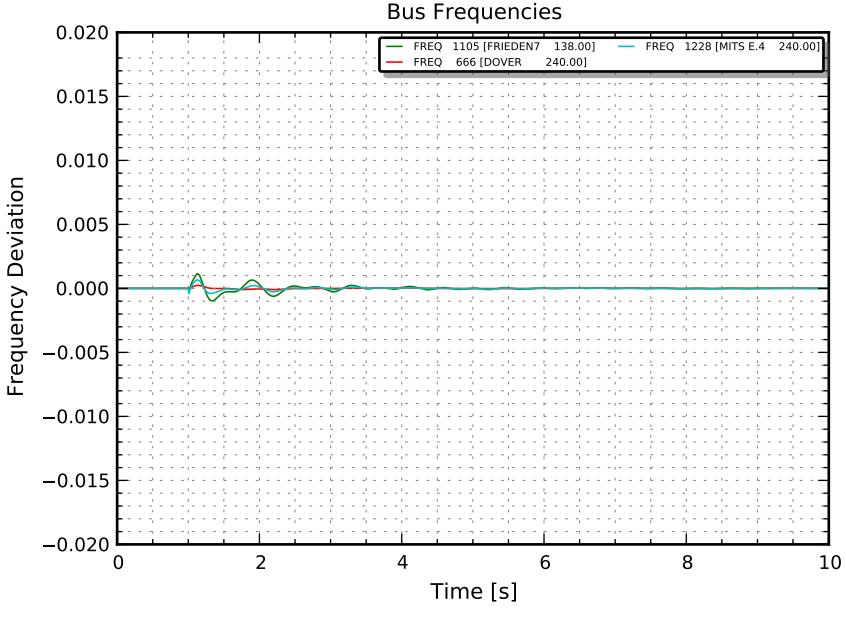
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 018 (A. 1)





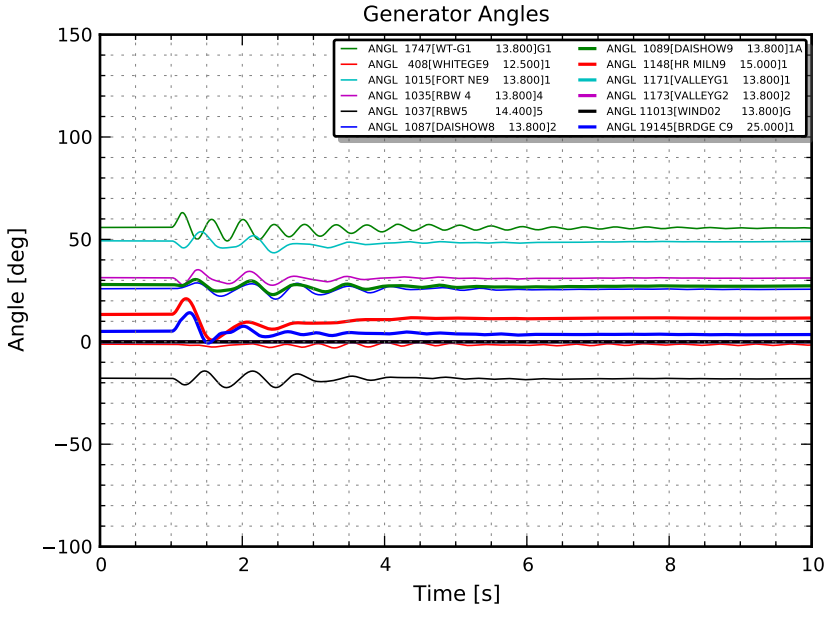


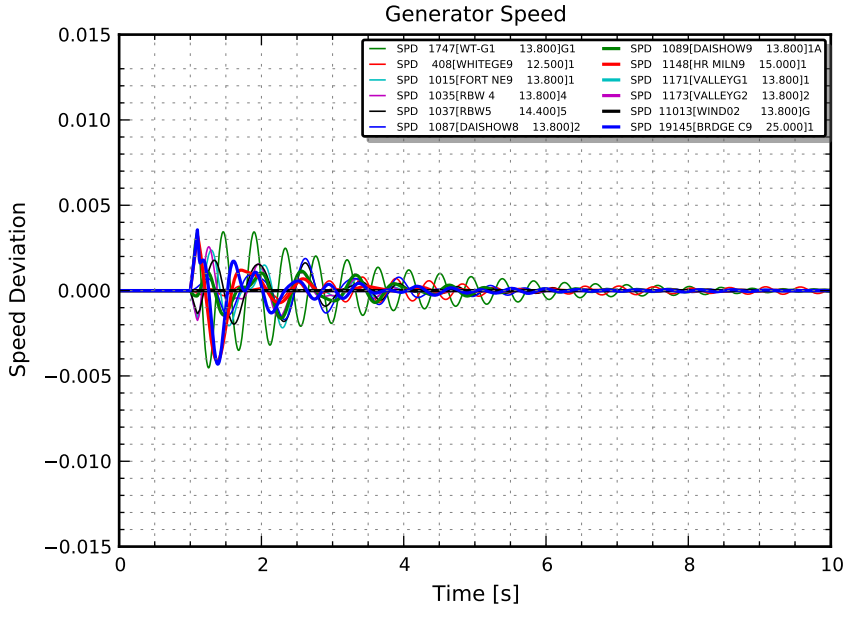


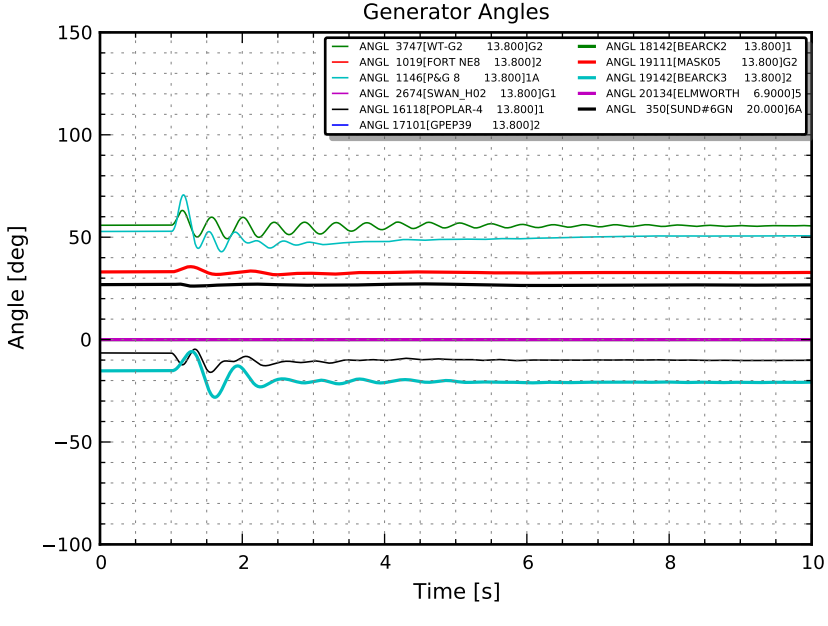
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_A.

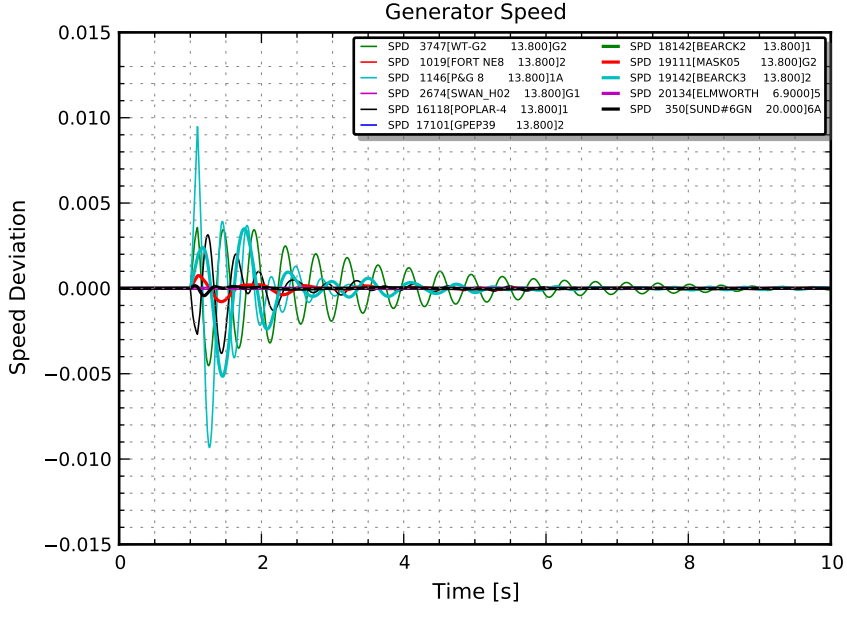
Study Area Generators

Appendix E2B
Figure: 018 (A. 2)





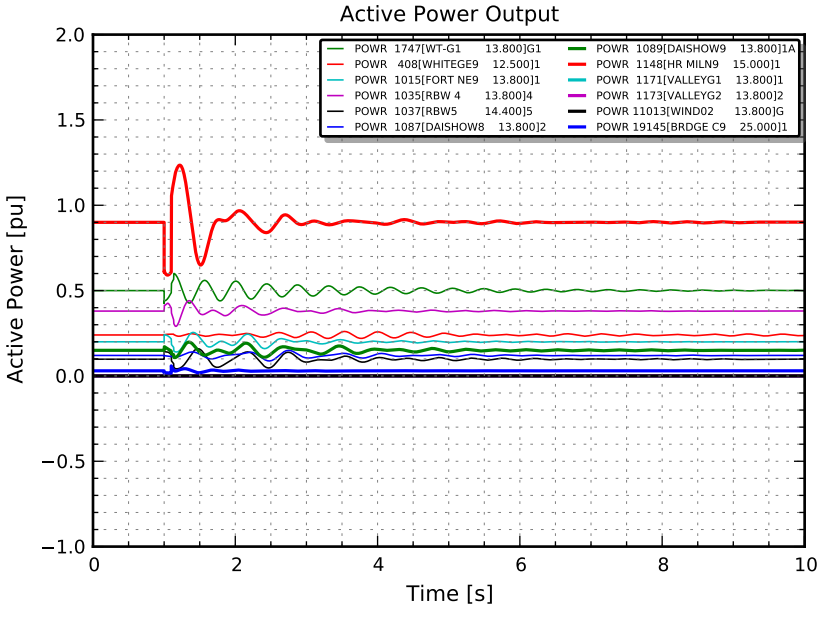


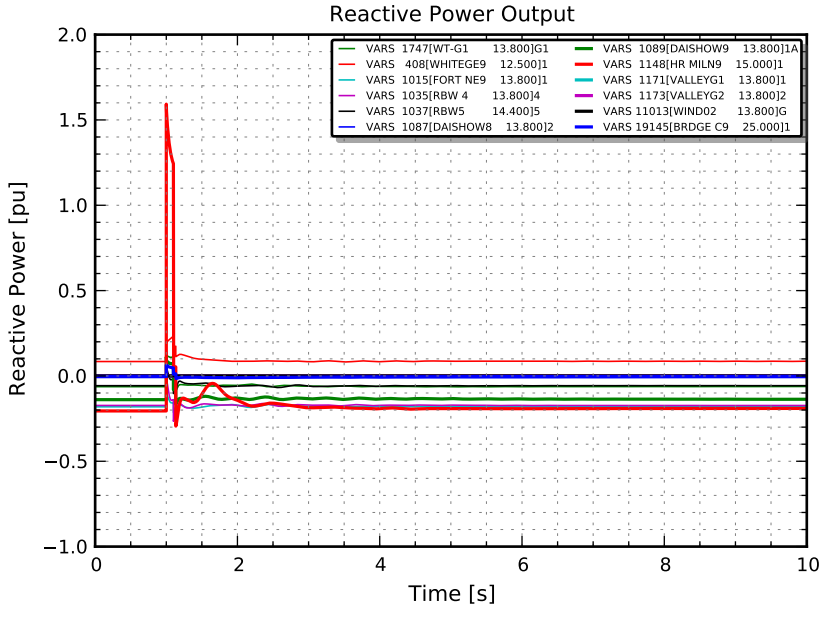


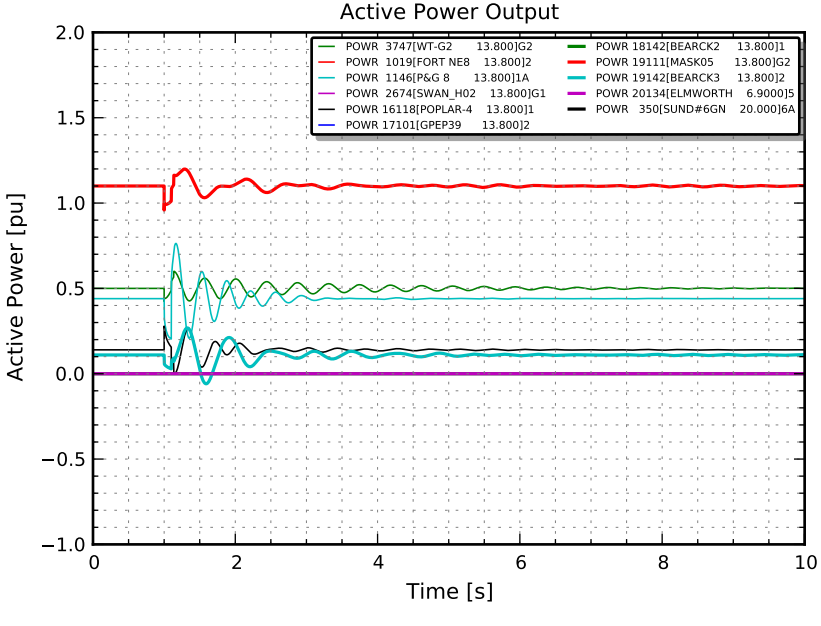
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_A.

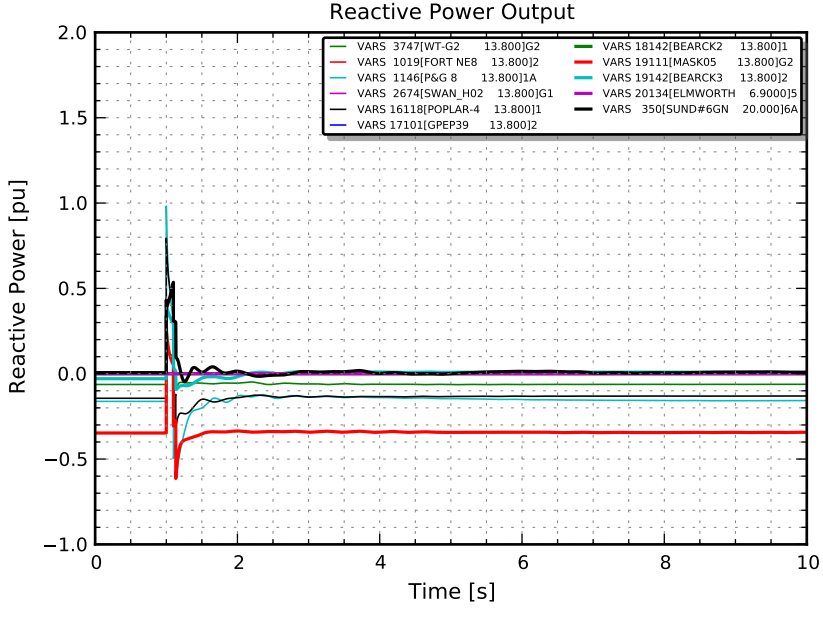
Study Area Generators

Appendix E2B
Figure: 018 (A. 3)





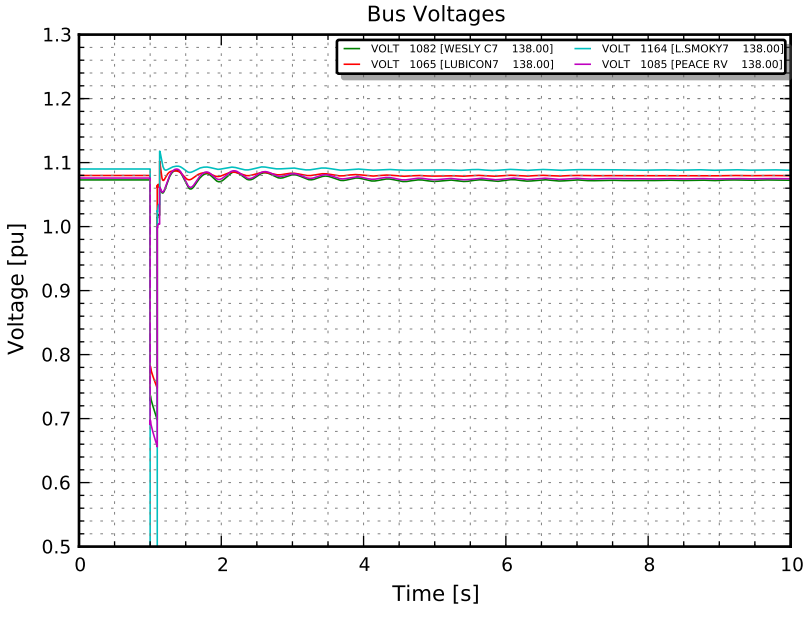


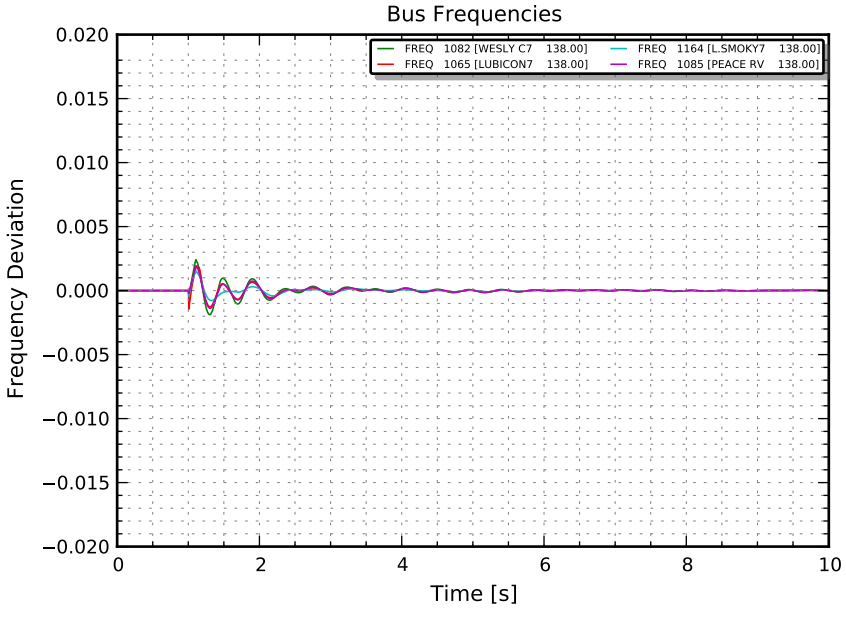


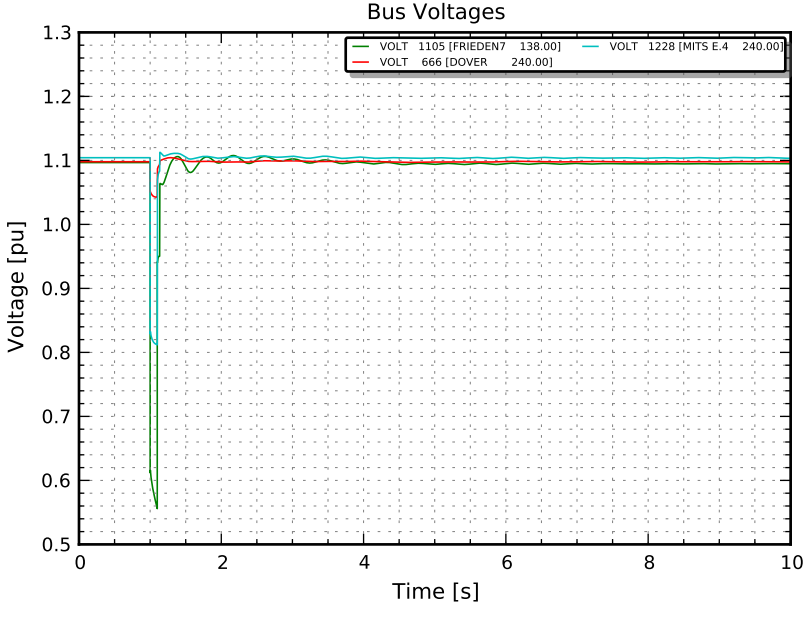
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_B.

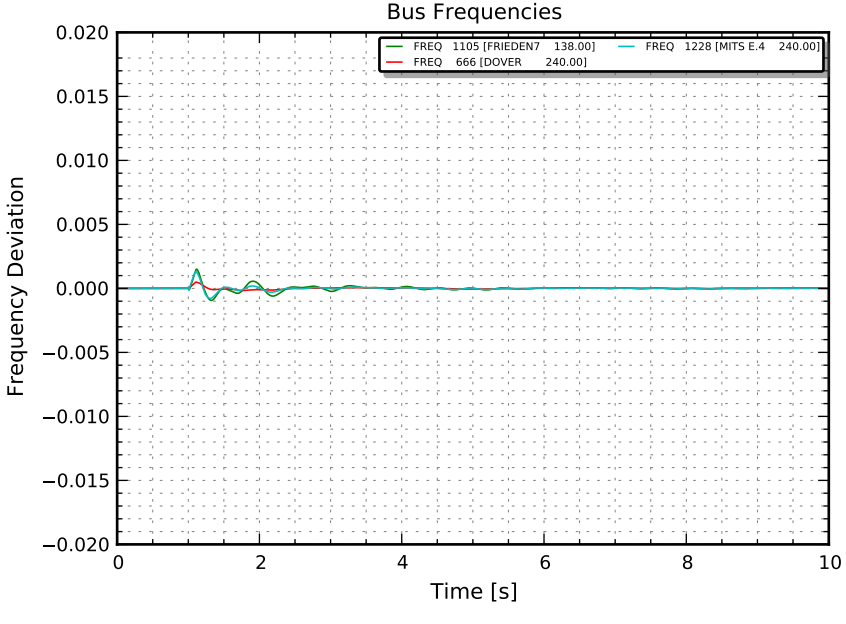
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 018 (B. 1)





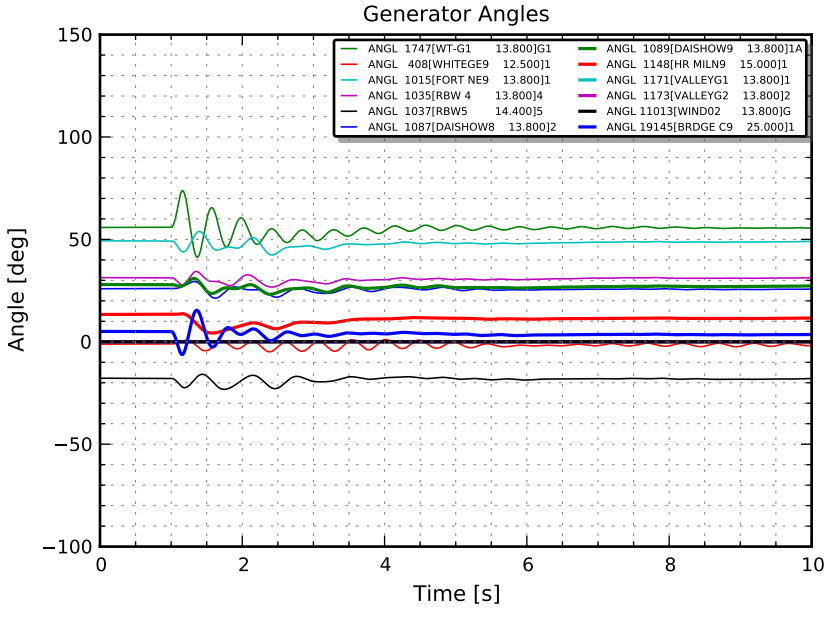


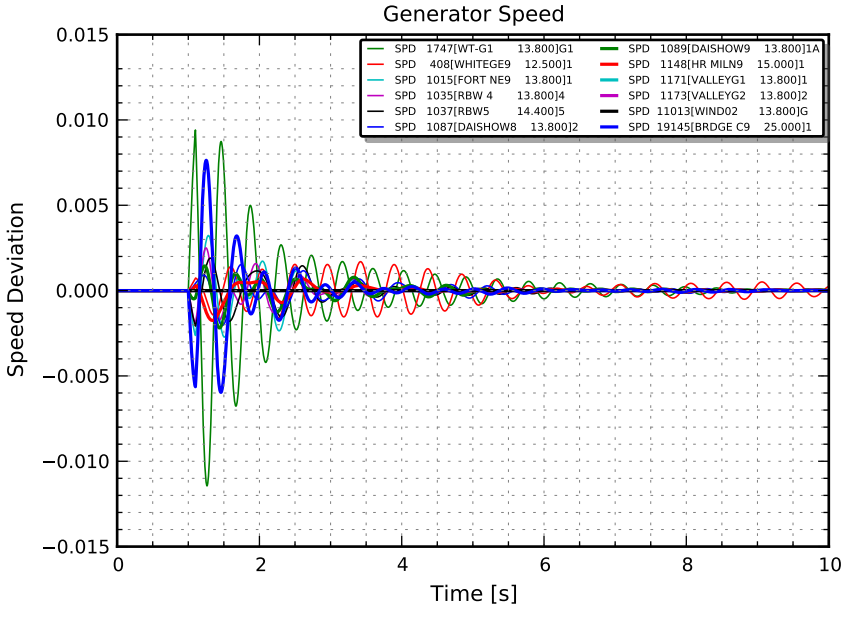


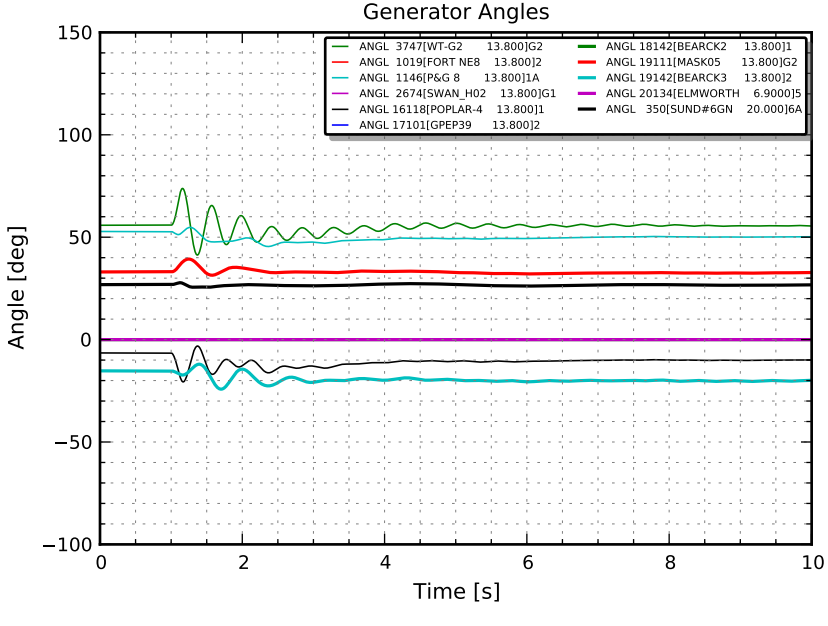
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_B.

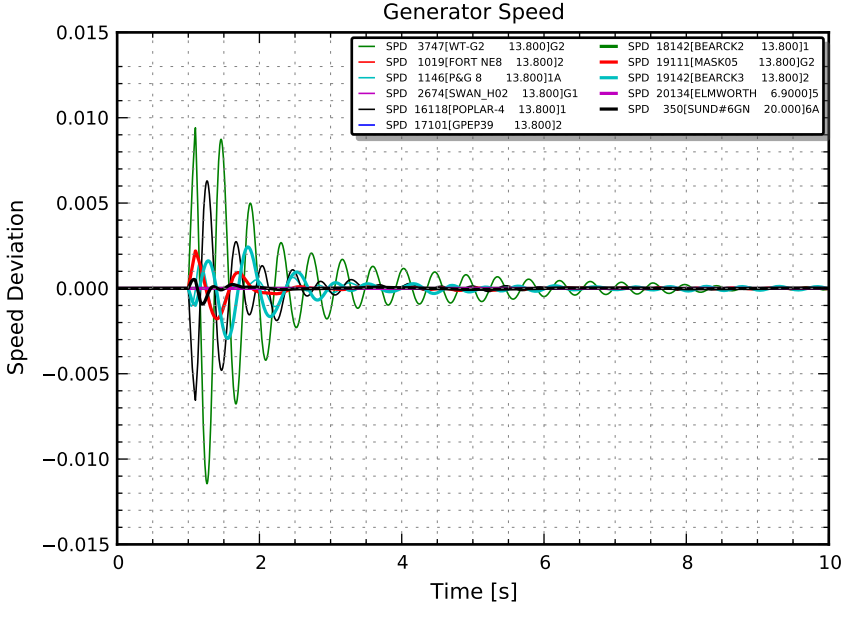
Study Area Generators

Appendix E2B
Figure: 018 (B. 2)





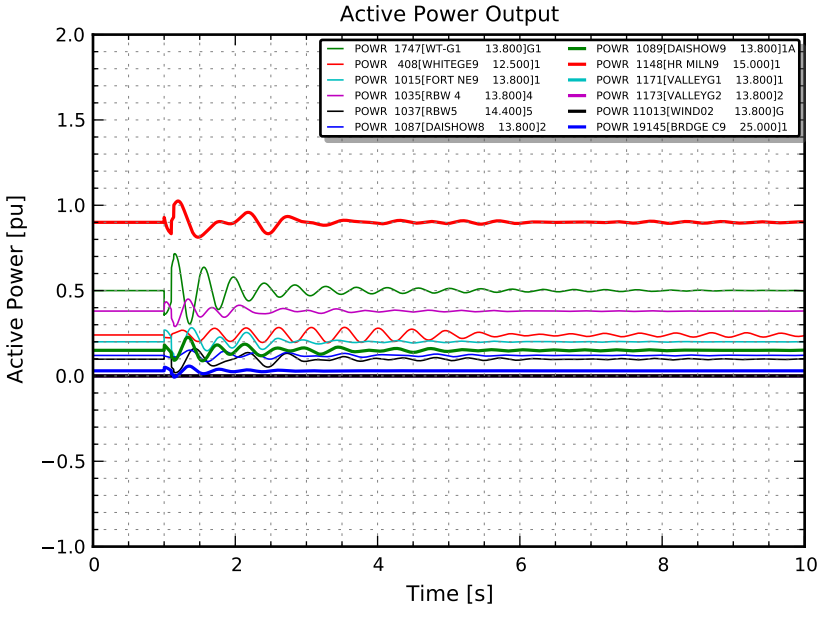


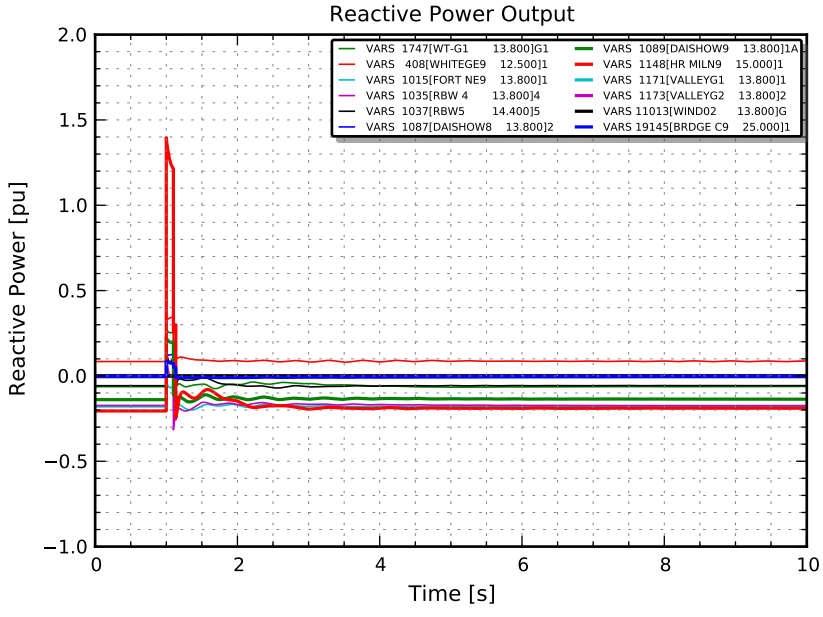


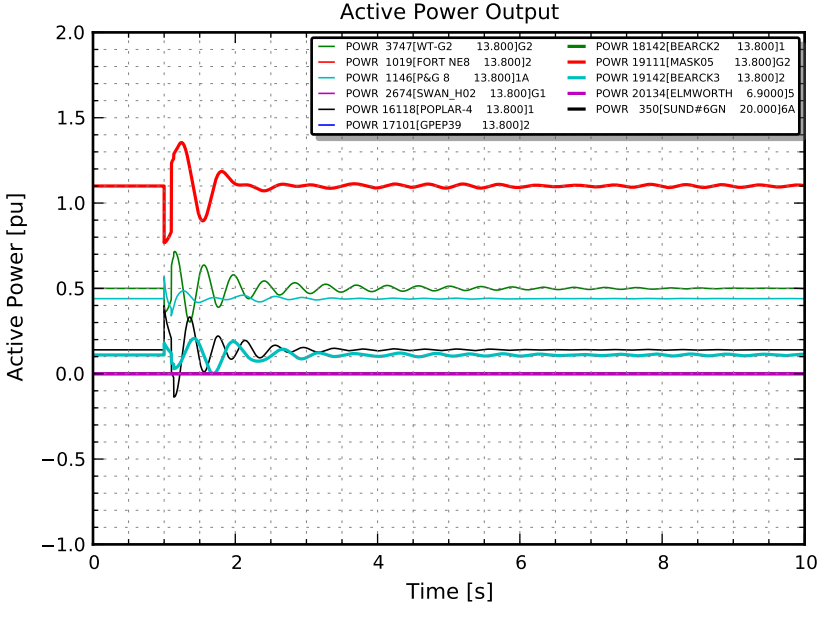
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 018 7L46 BIGMOUNTAIN to LITTLESMOKY_B.

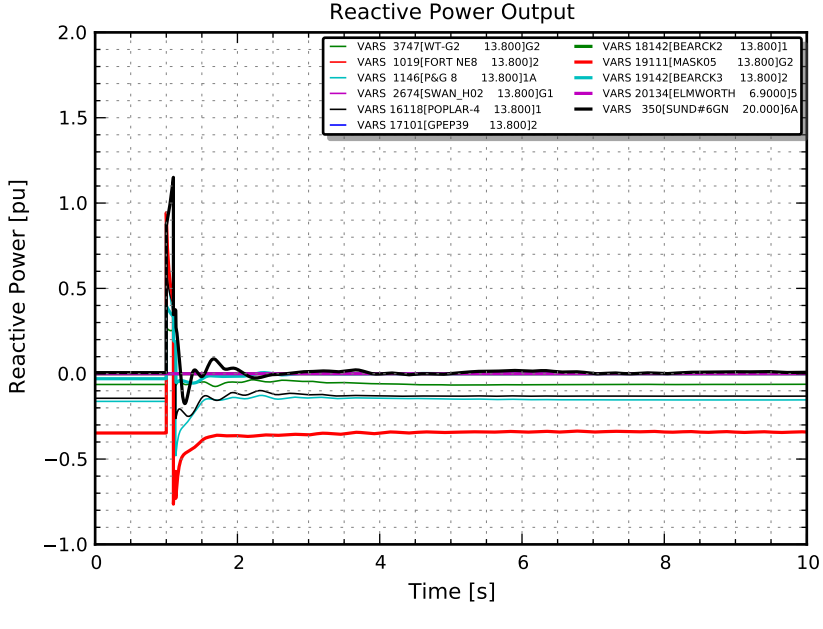
Study Area Generators

Appendix E2B
Figure: 018 (B. 3)





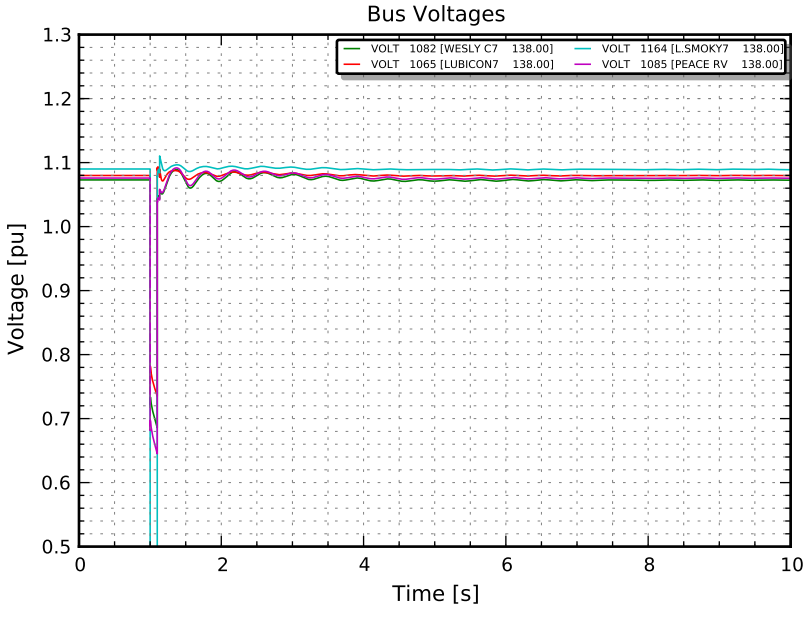


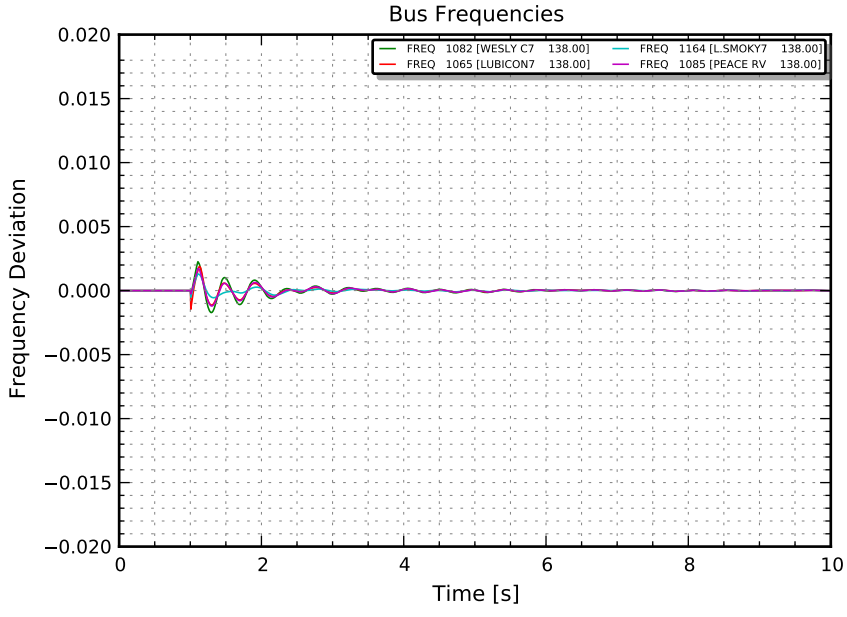


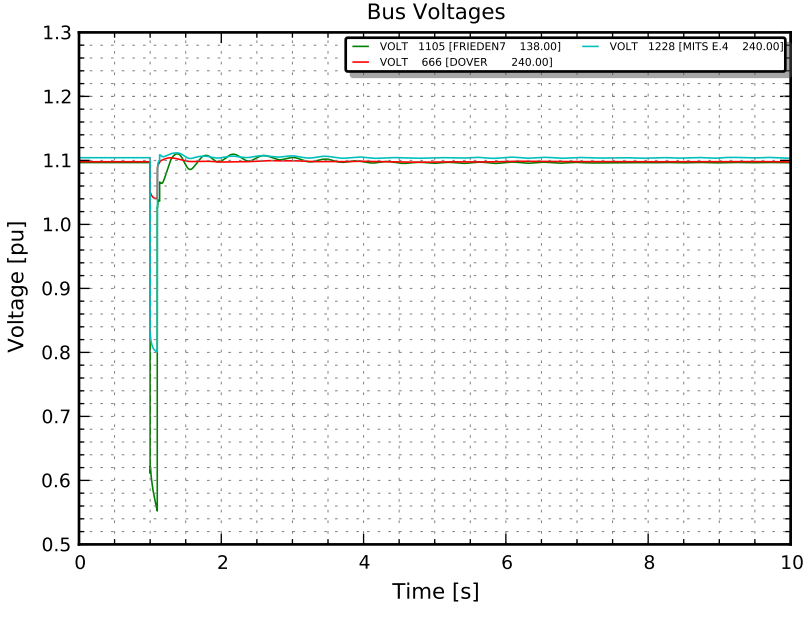
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 019 7L40 LITTLESMOKY to SIMONETTE_A.

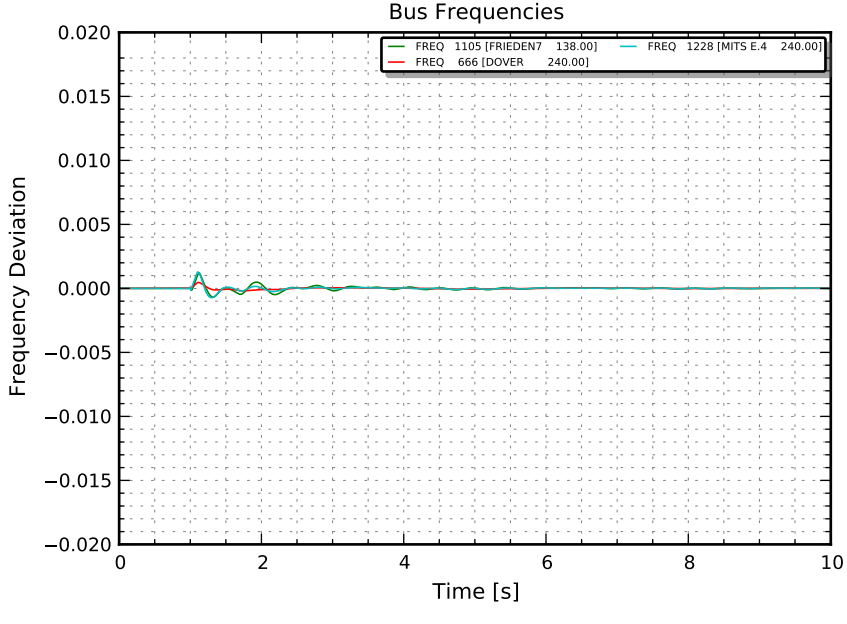
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 019 (A. 1)





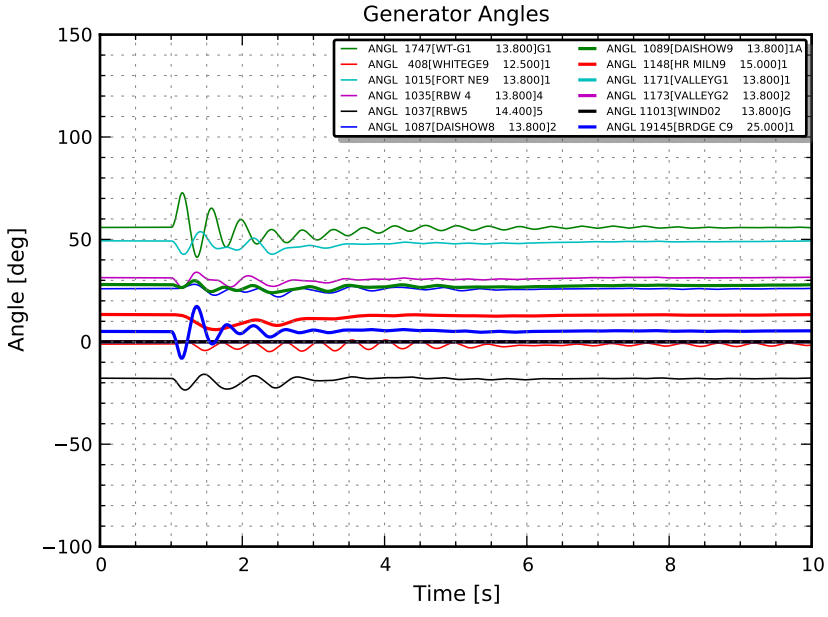


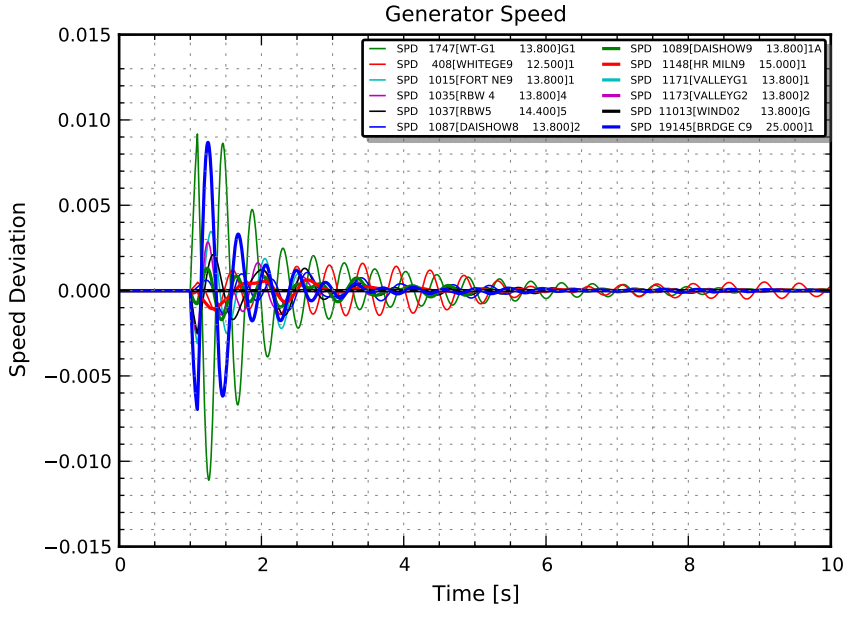


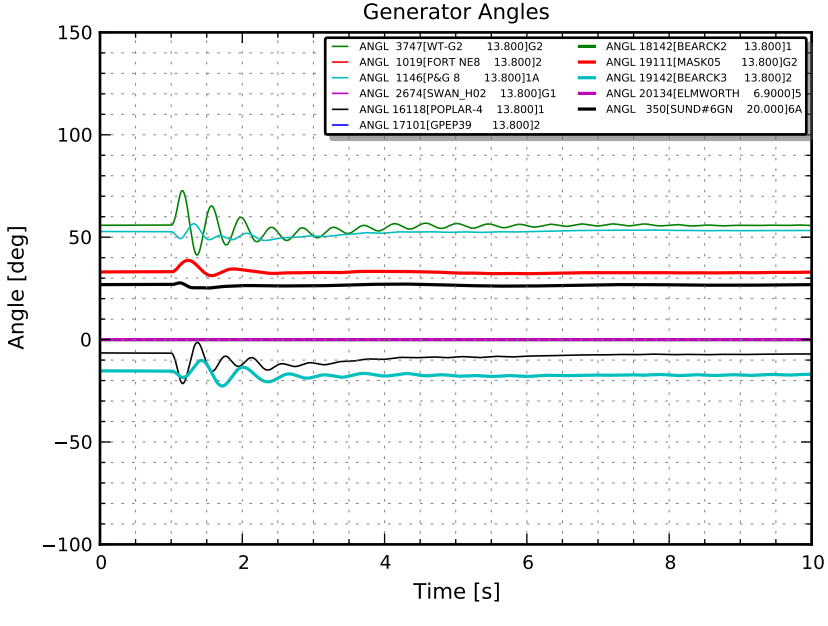
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 019 7L40 LITTLESMOKY to SIMONETTE_A.

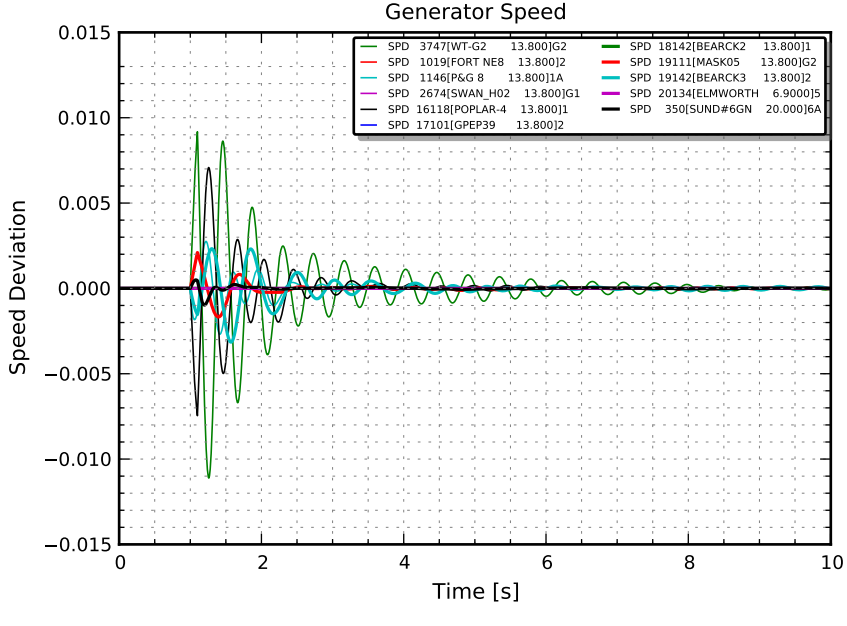
Study Area Generators

Appendix E2B
Figure: 019 (A. 2)





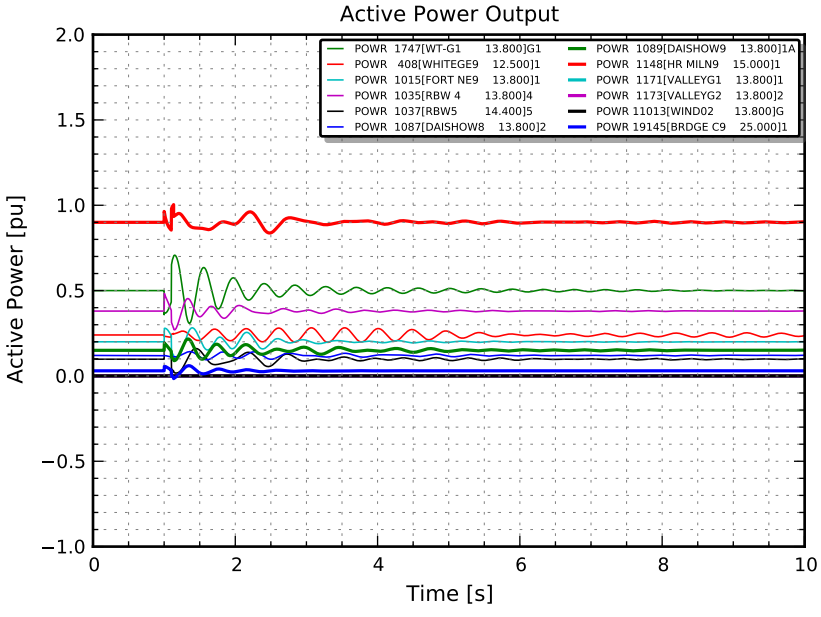


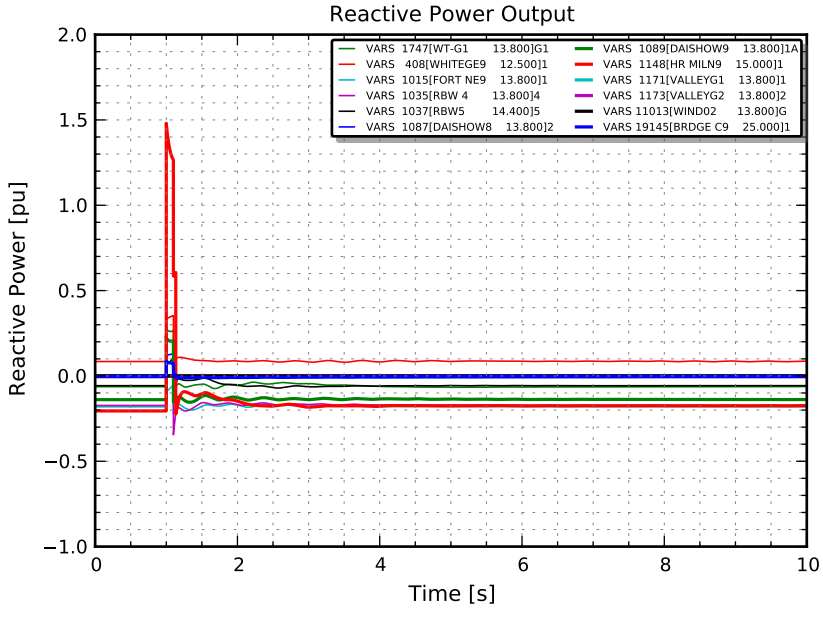


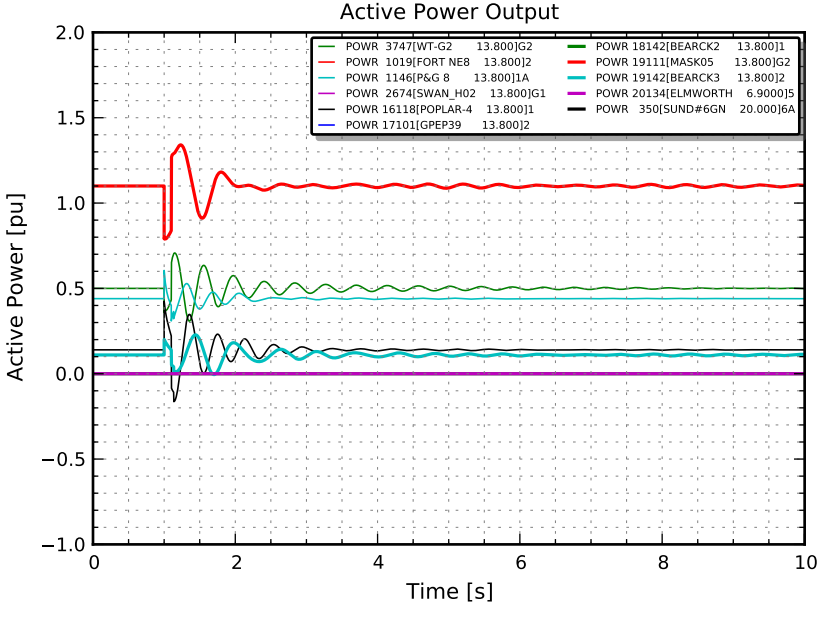
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 019 7L40 LITTLESMOKY to SIMONETTE_A.

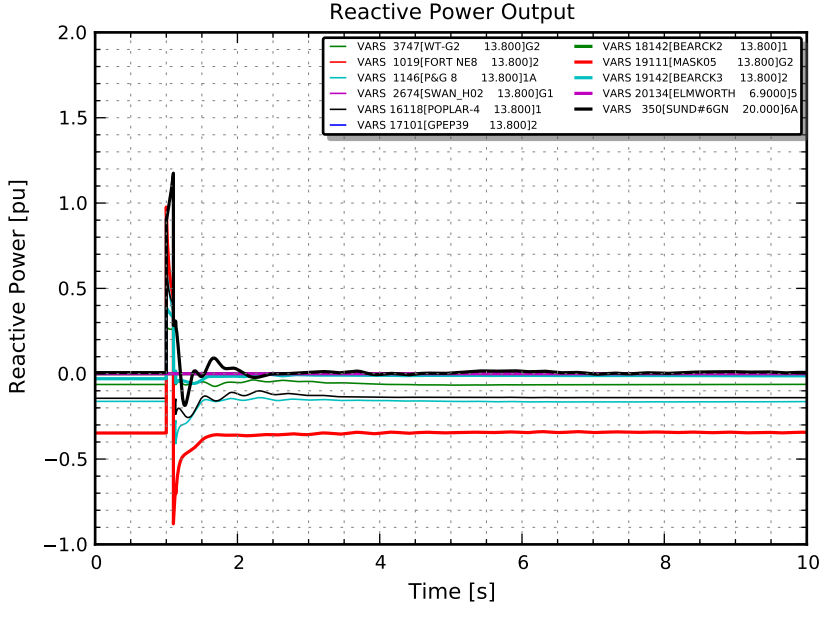
Study Area Generators

Appendix E2B
Figure: 019 (A. 3)





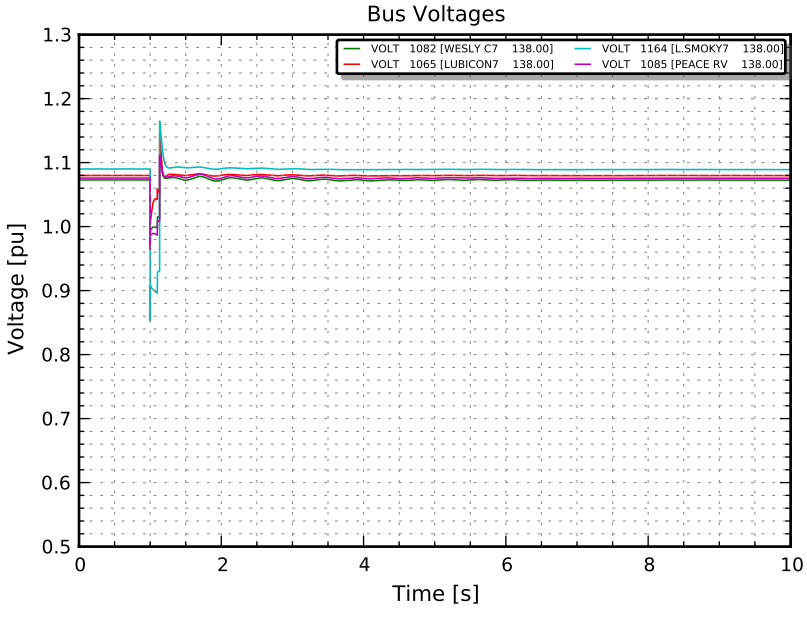


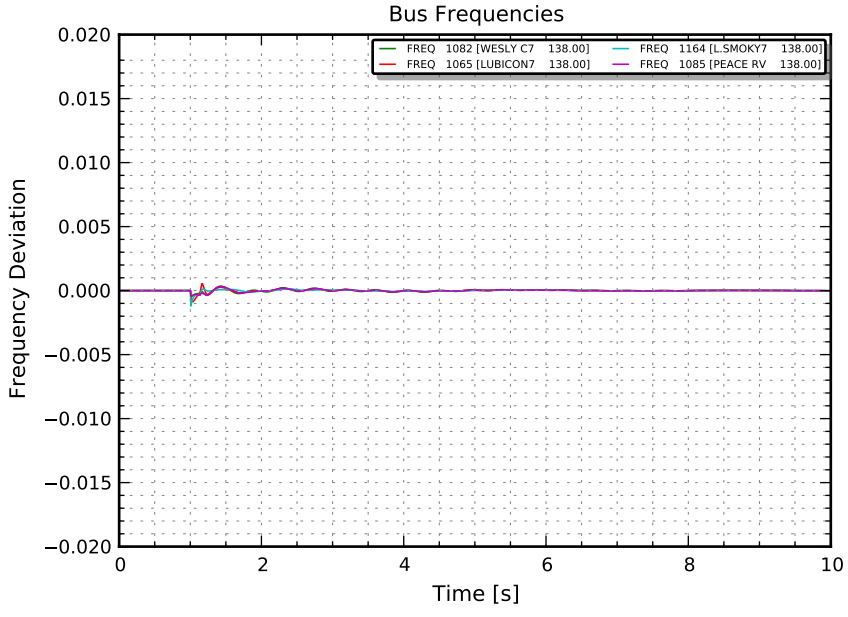


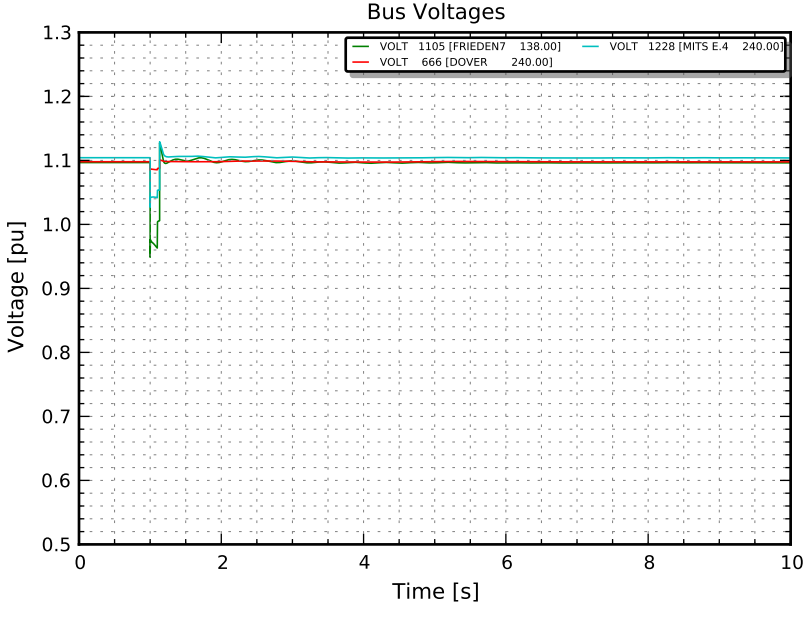
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 019 7L40 LITTLESMOKY to SIMONETTE_B.

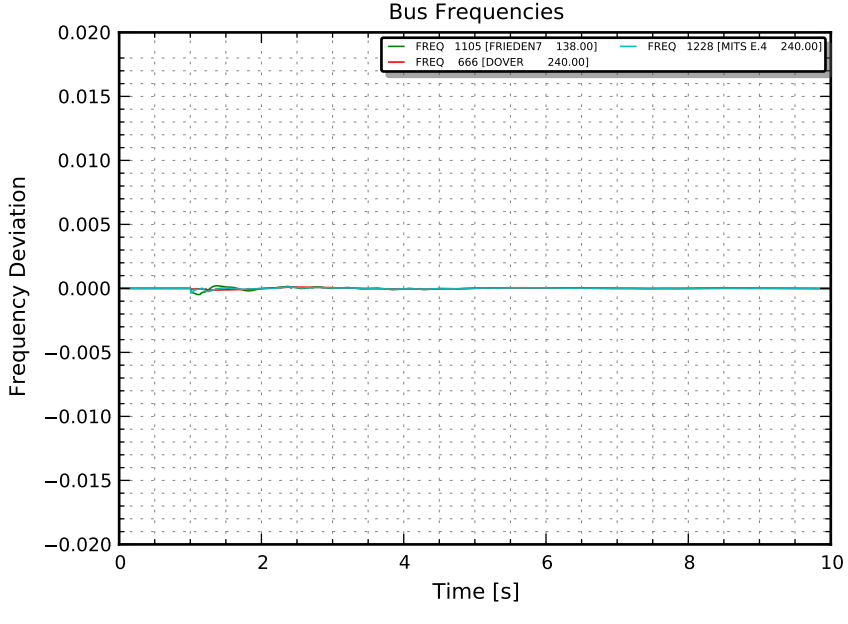
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 019 (B. 1)





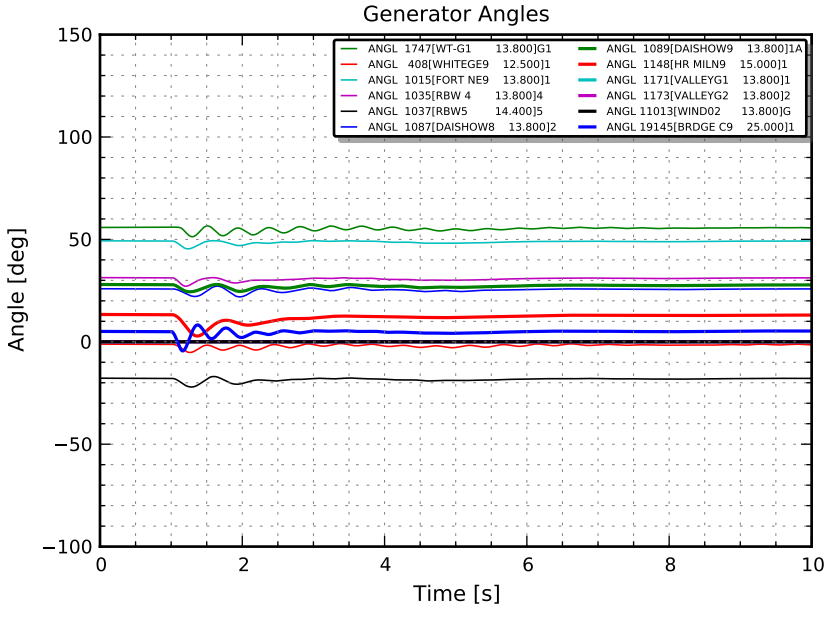


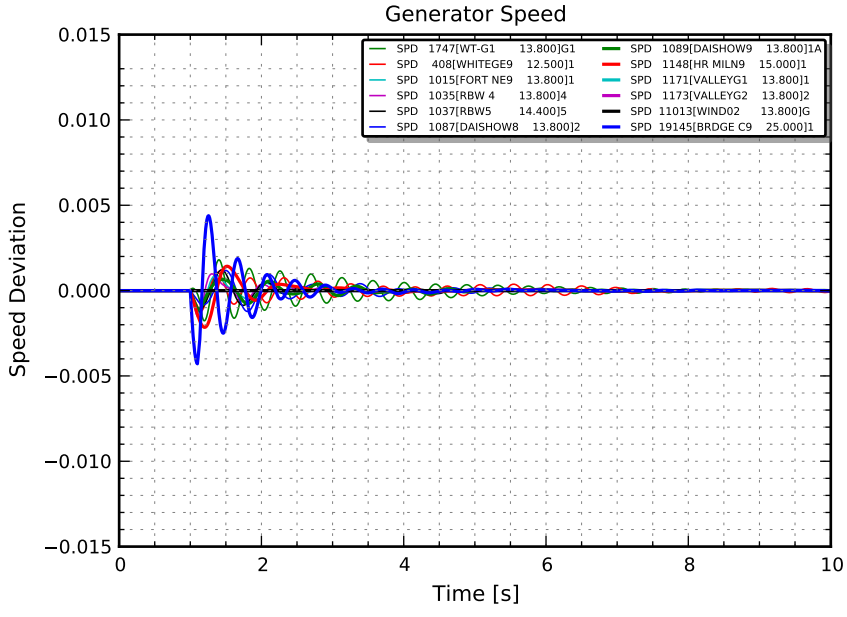


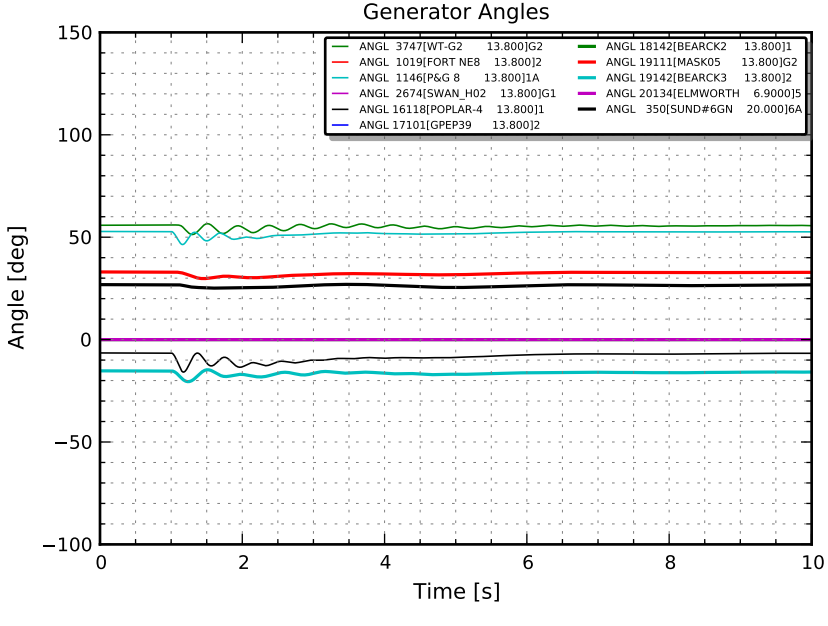
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 019 7L40 LITTLESMOKY to SIMONETTE_B.

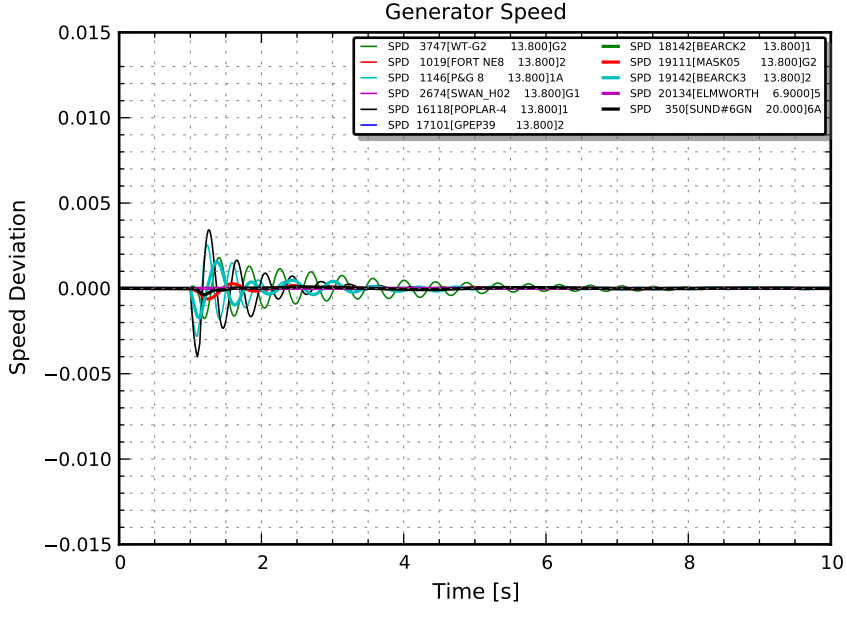
Study Area Generators

Appendix E2B
Figure: 019 (B. 2)





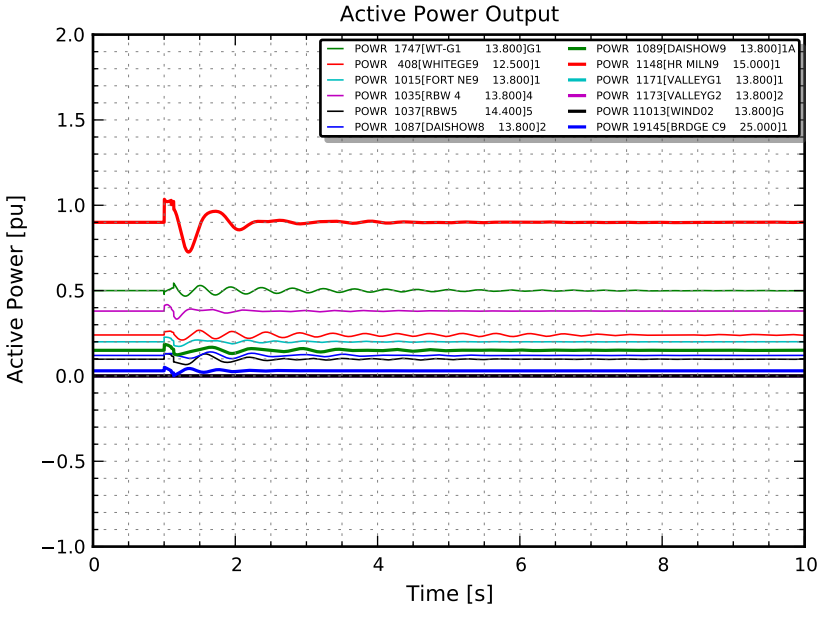


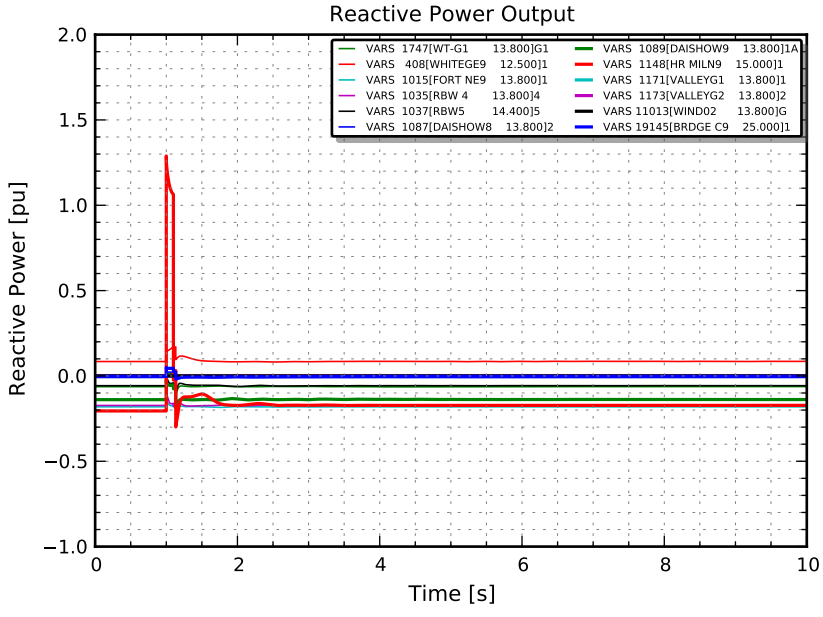


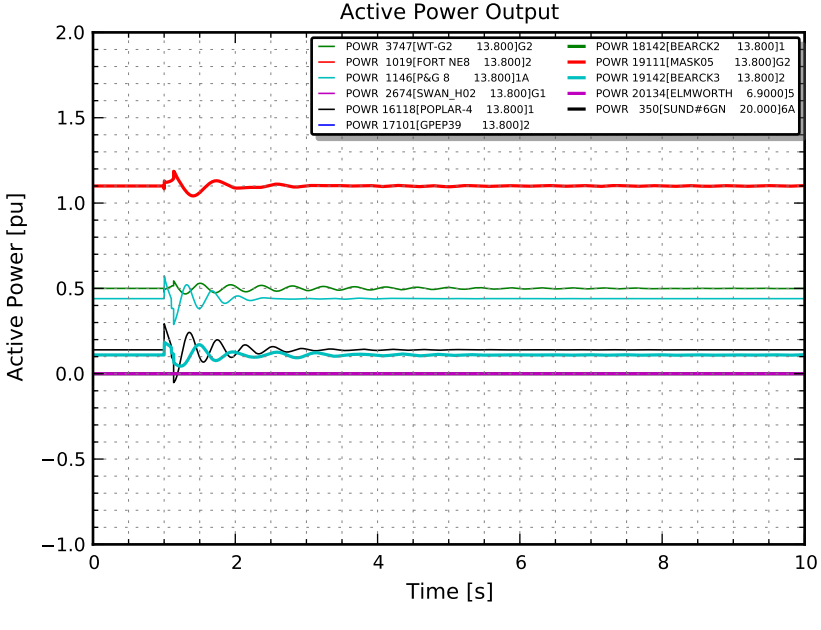
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 019 7L40 LITTLESMOKY to SIMONETTE_B.

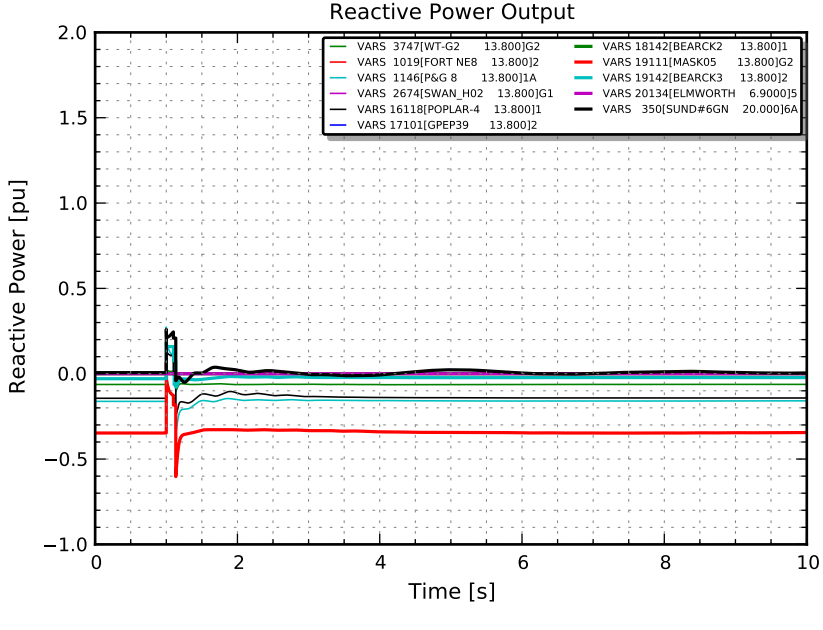
Study Area Generators

Appendix E2B
Figure: 019 (B. 3)





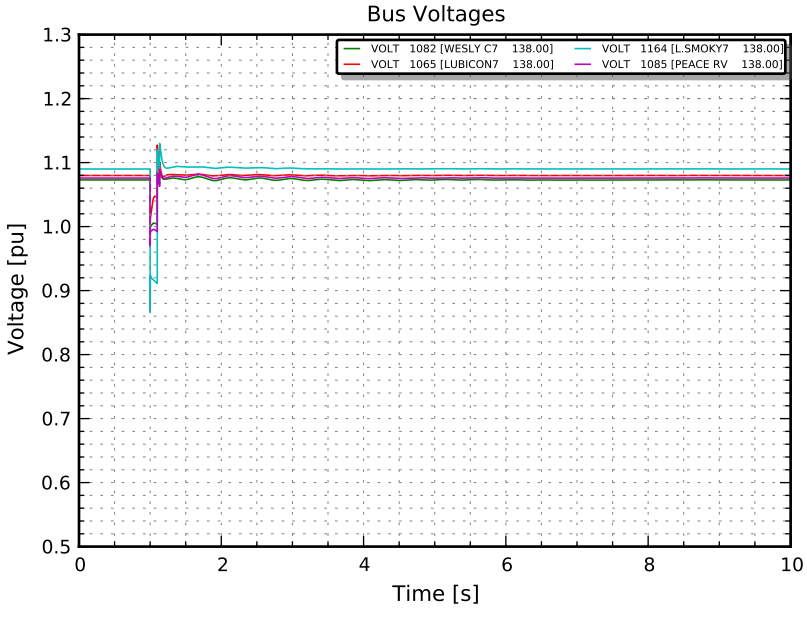


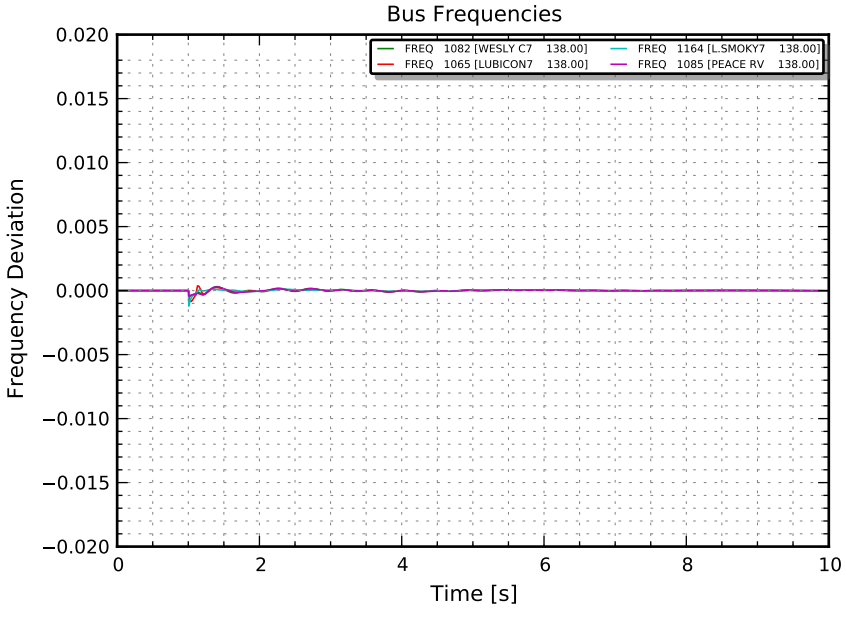


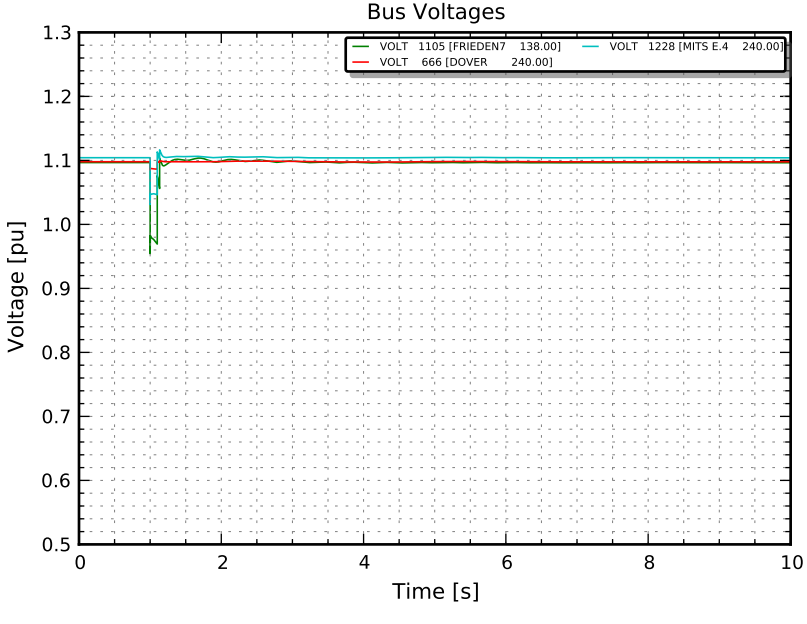
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 020 7L80 SIMONETTE to HR MILNER_A.

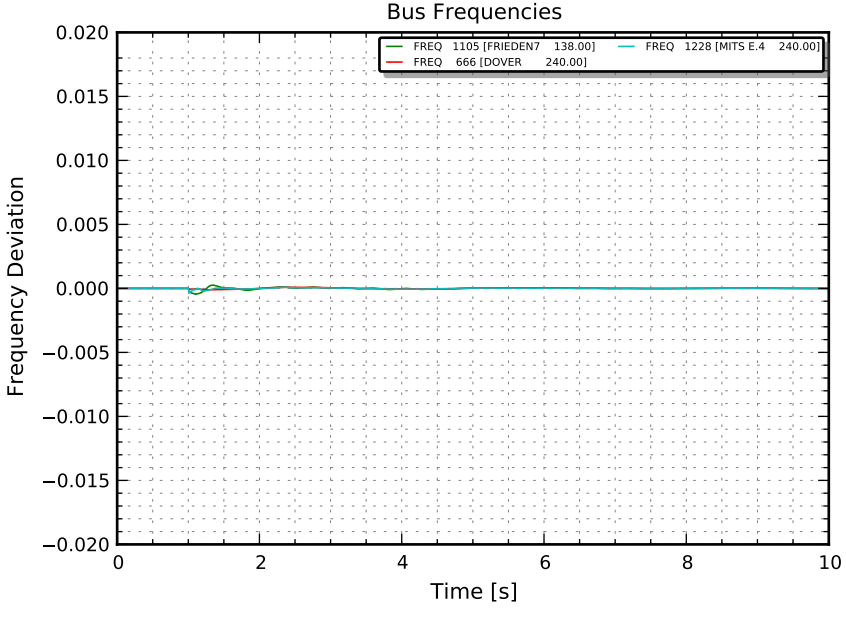
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 020 (A. 1)





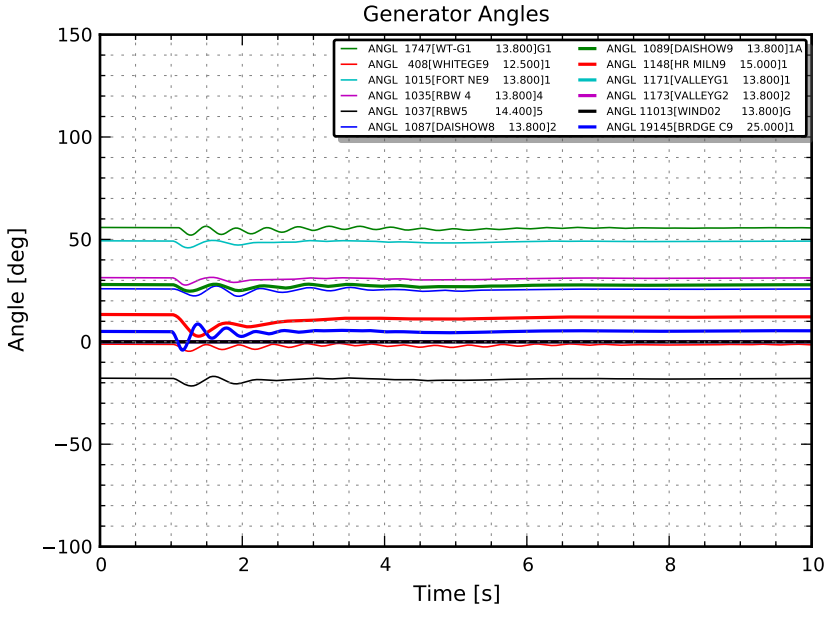


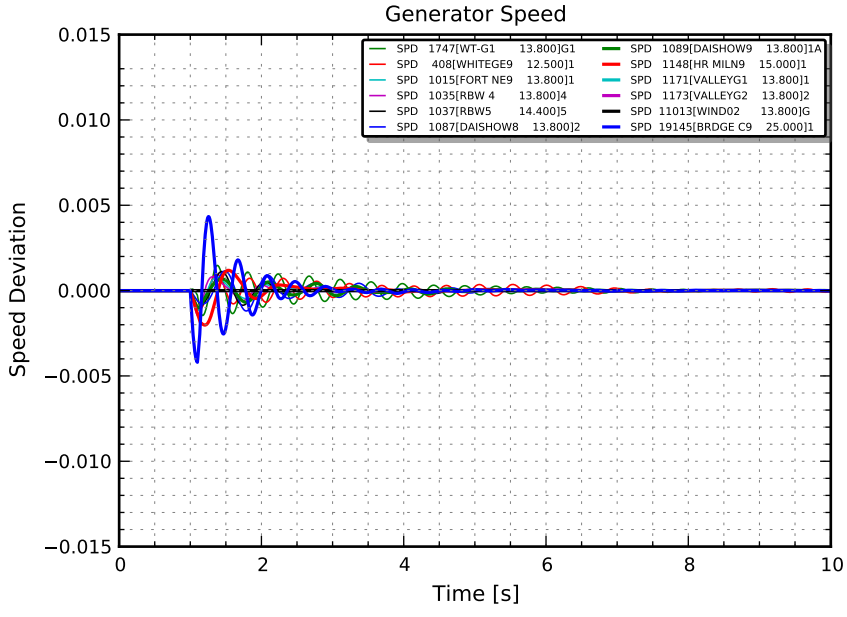


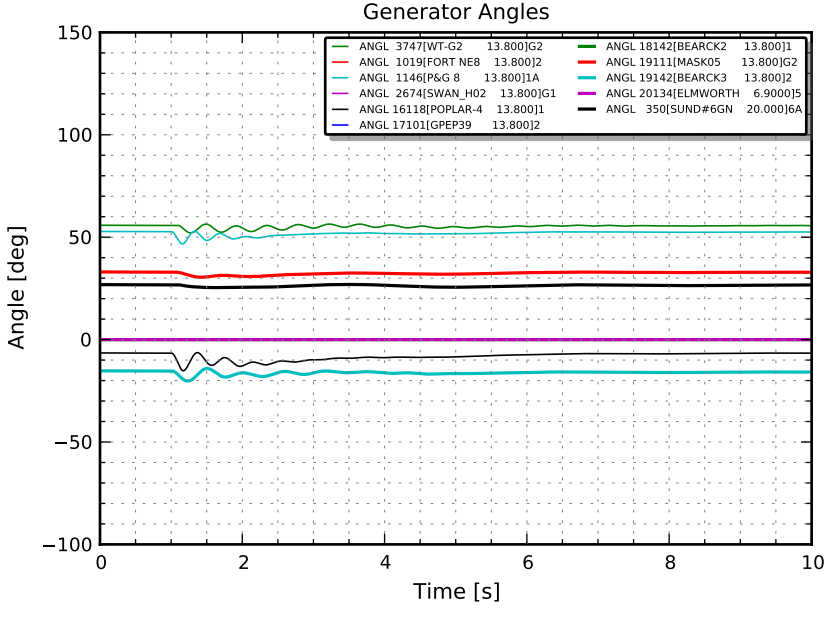
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 020 7L80 SIMONETTE to HR MILNER_A.

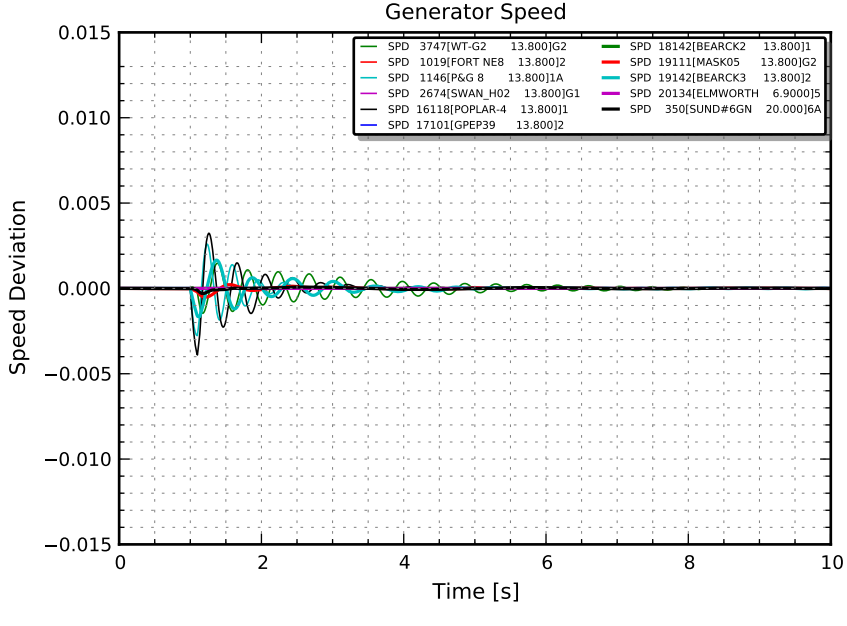
Study Area Generators

Appendix E2B
Figure: 020 (A. 2)





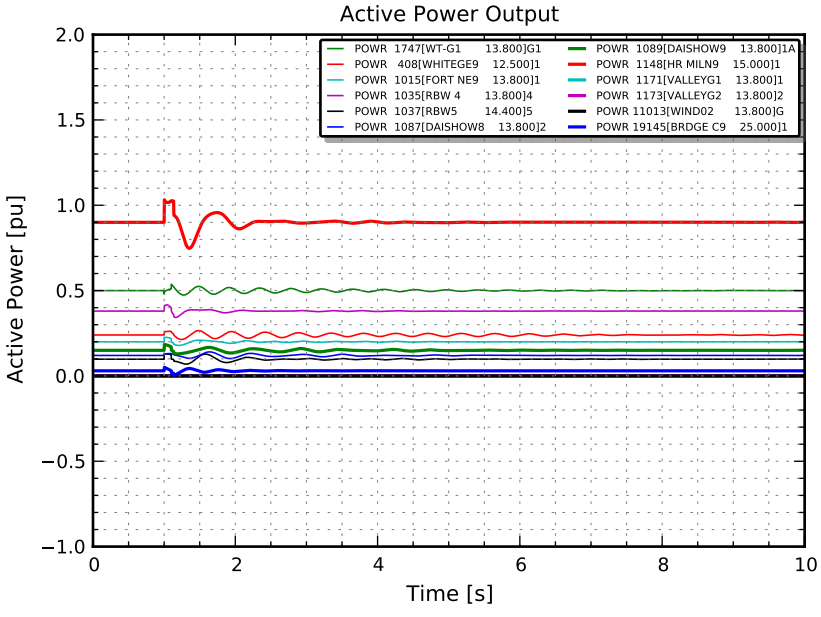


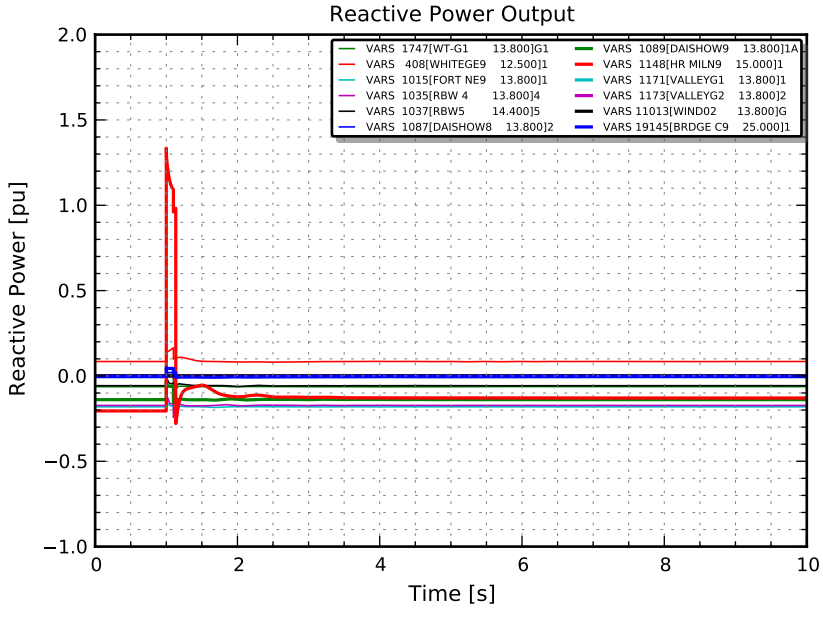


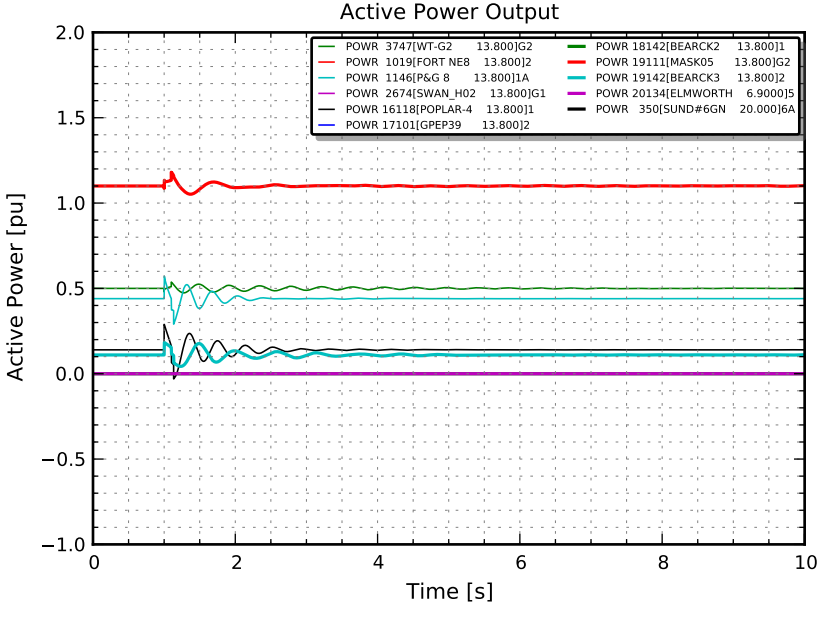
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 020 7L80 SIMONETTE to HR MILNER_A.

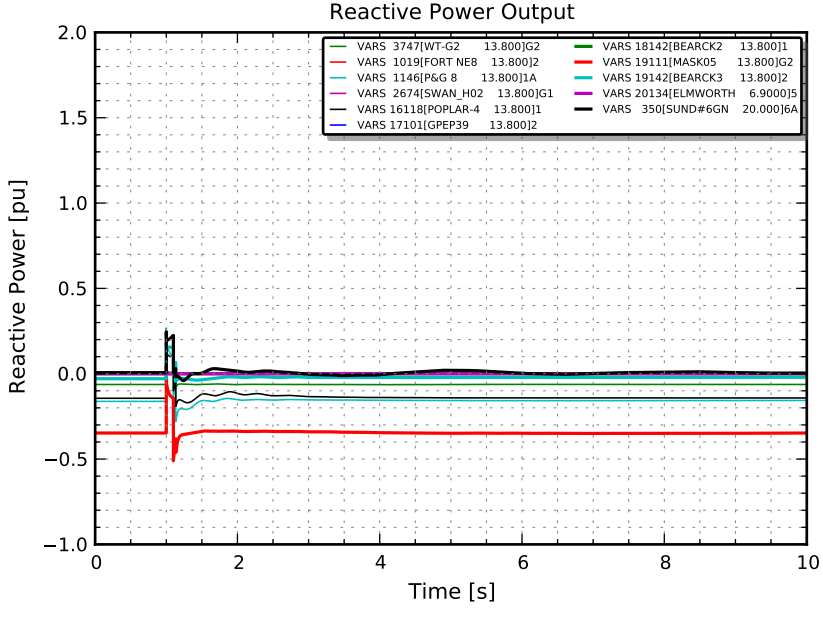
Study Area Generators

Appendix E2B
Figure: 020 (A. 3)





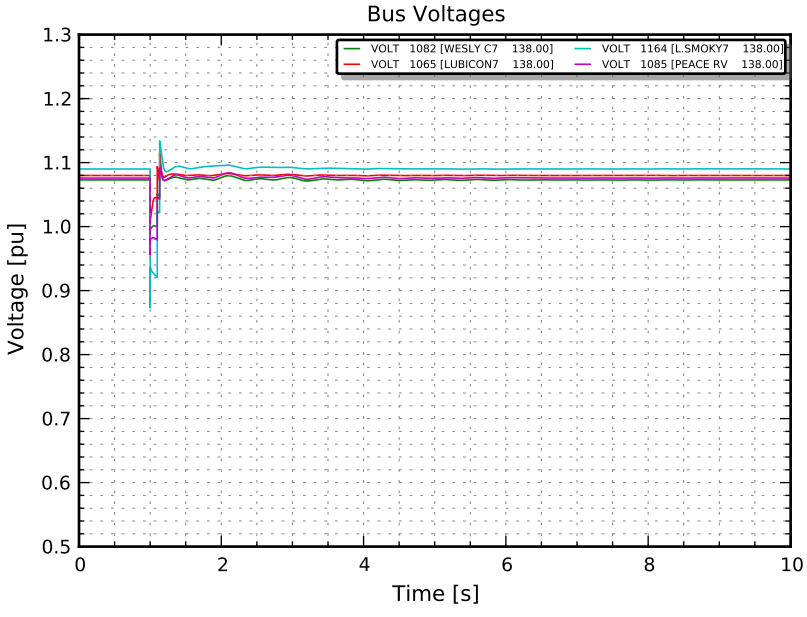


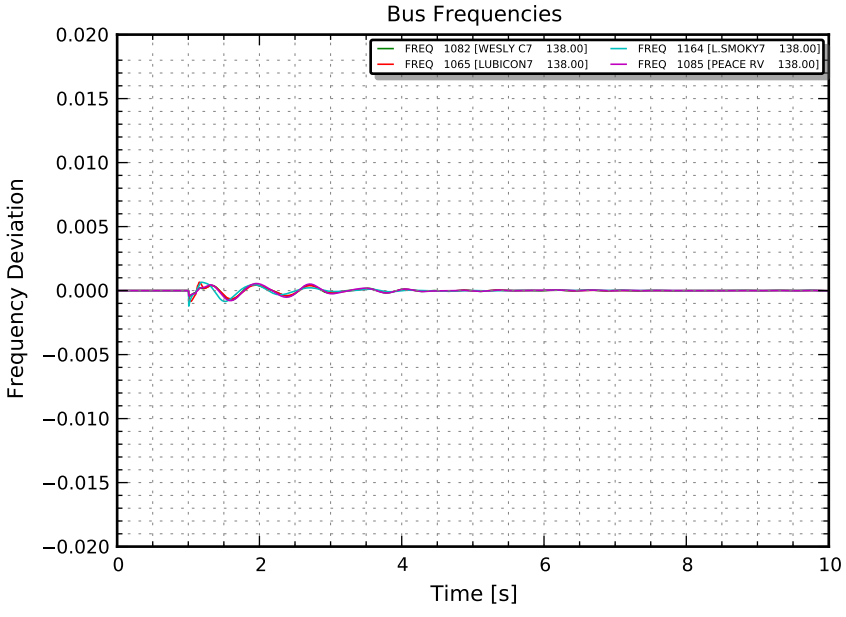


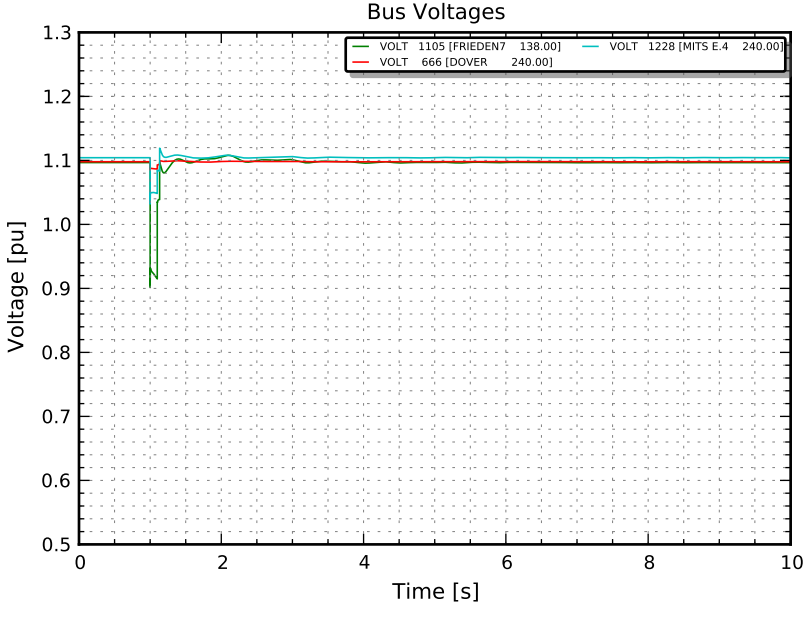
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 020 7L80 SIMONETTE to HR MILNER_B.

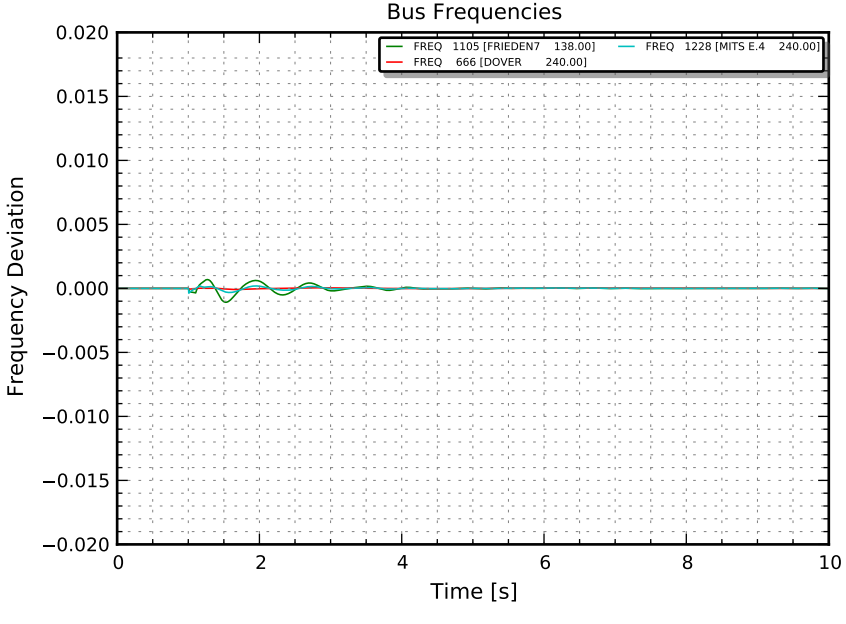
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 020 (B. 1)





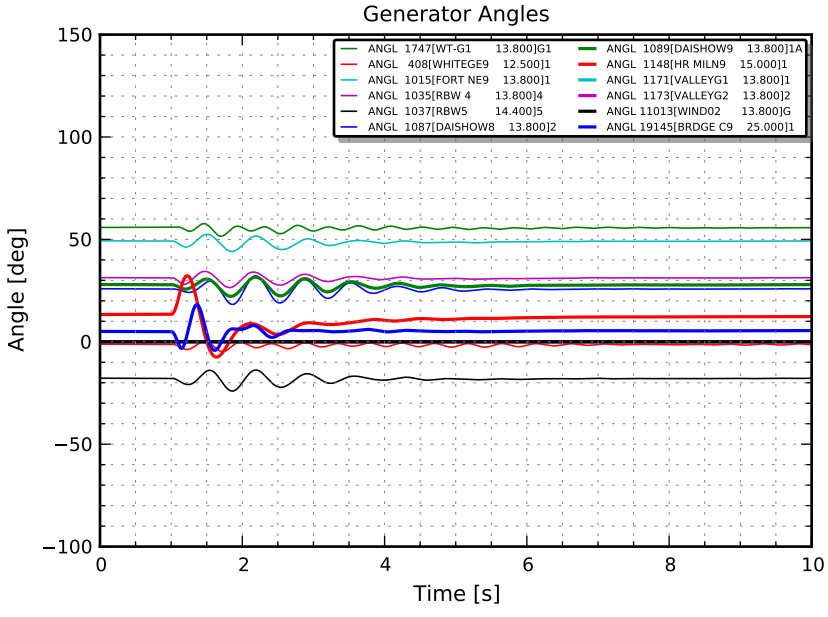


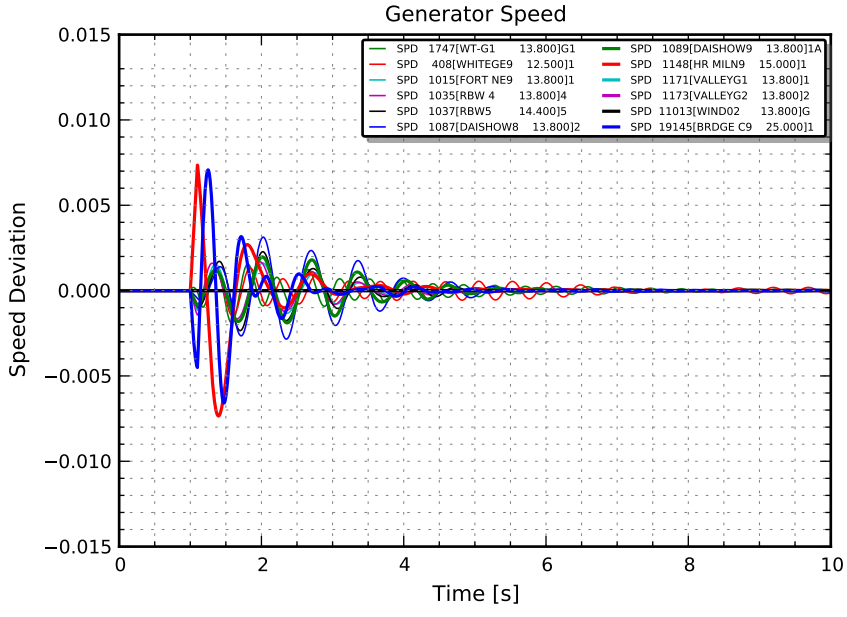


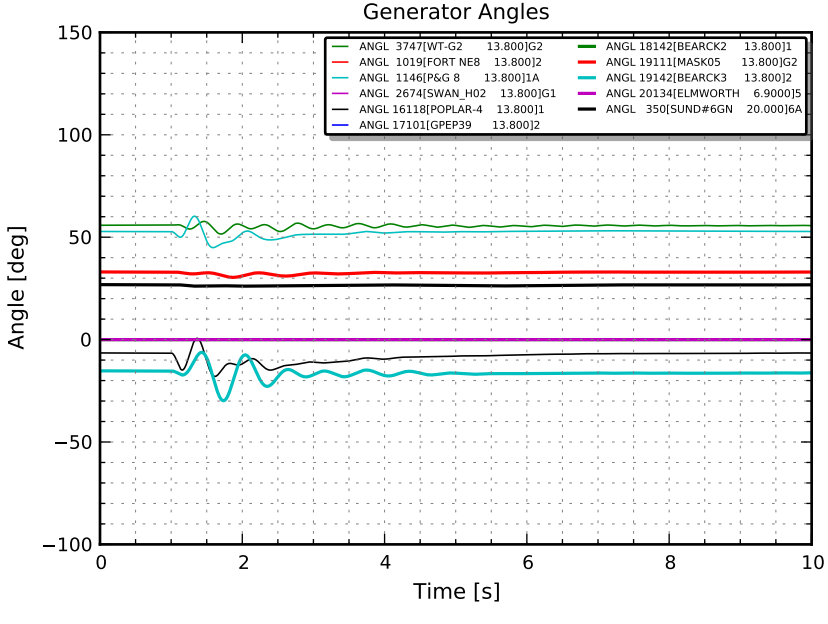
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 020 7L80 SIMONETTE to HR MILNER_B.

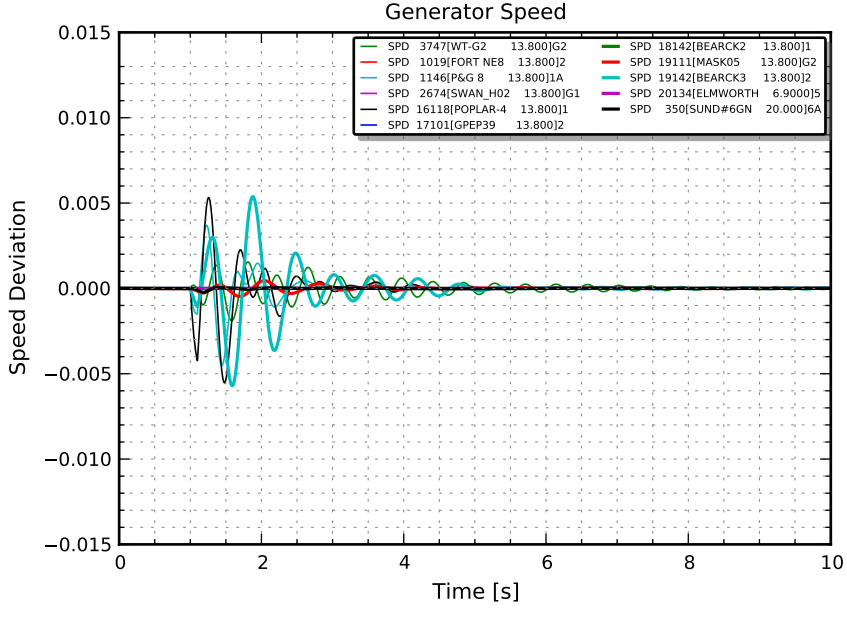
Study Area Generators

Appendix E2B
Figure: 020 (B. 2)





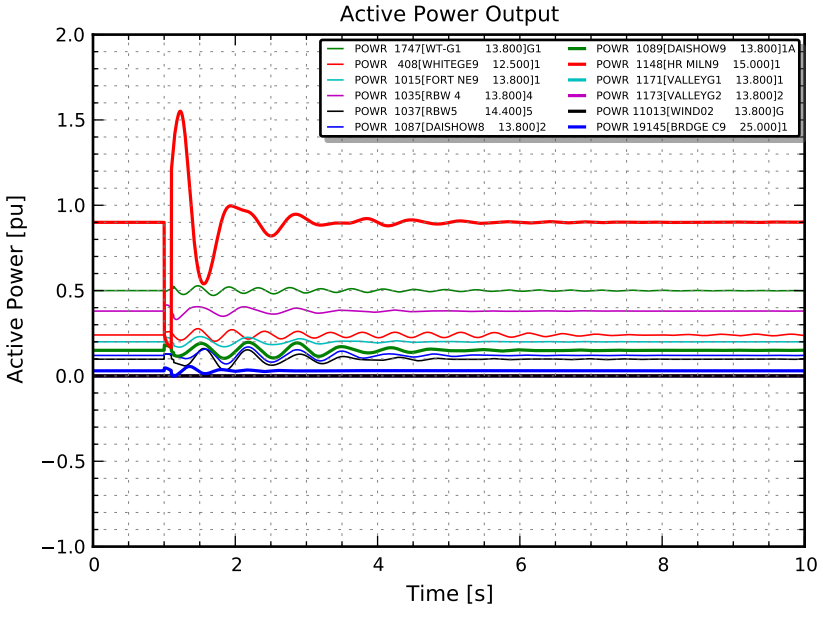


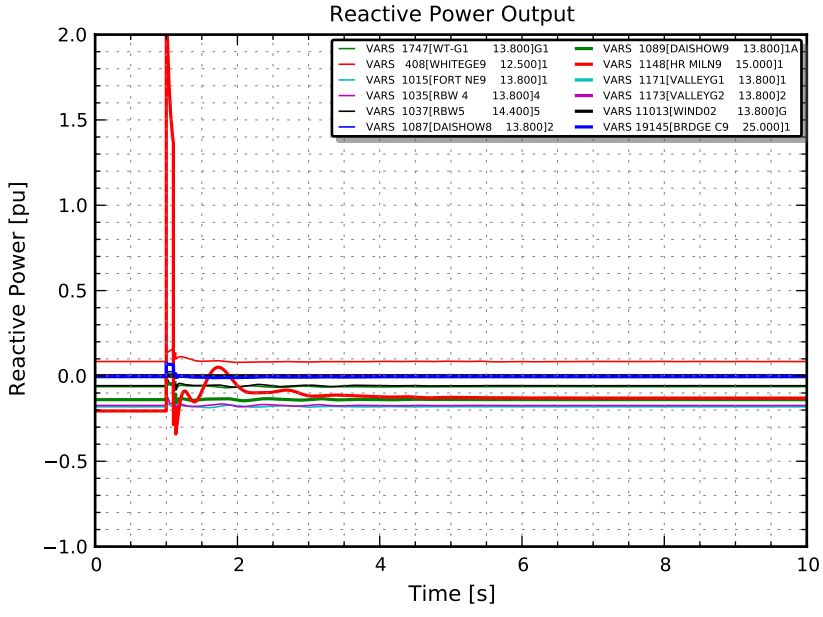


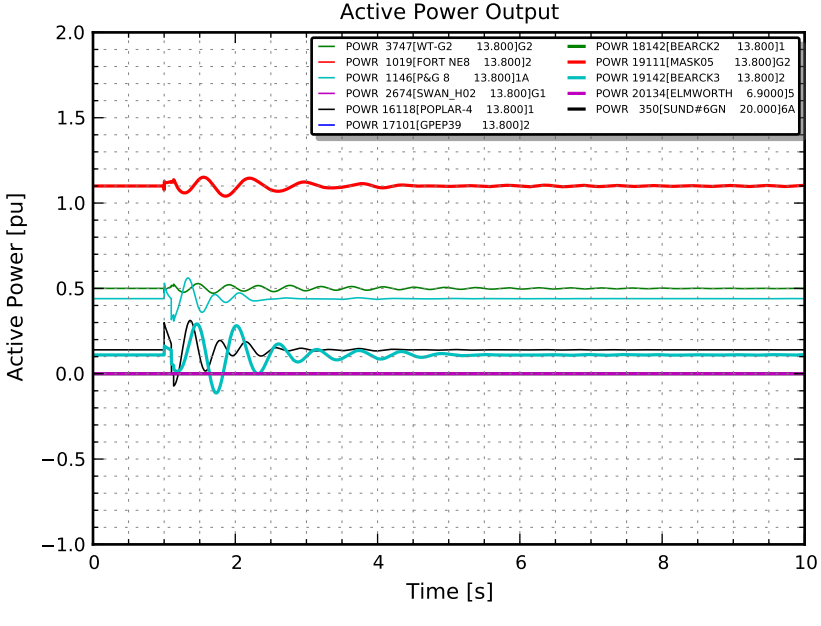
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 020 7L80 SIMONETTE to HR MILNER_B.

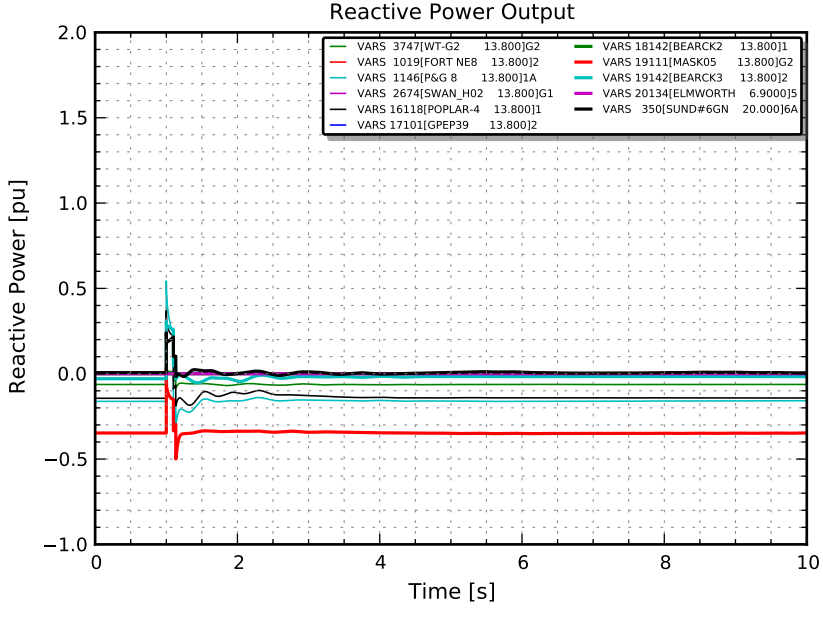
Study Area Generators

Appendix E2B
Figure: 020 (B. 3)





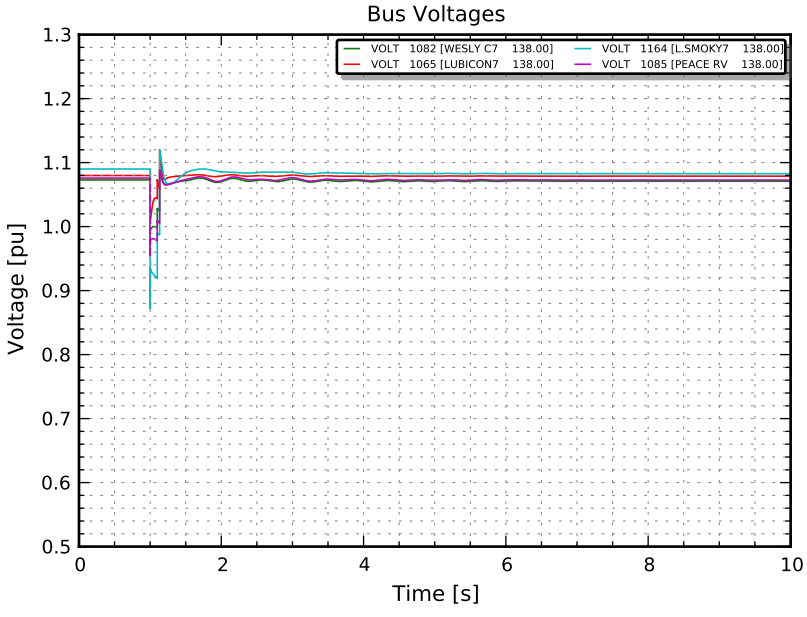


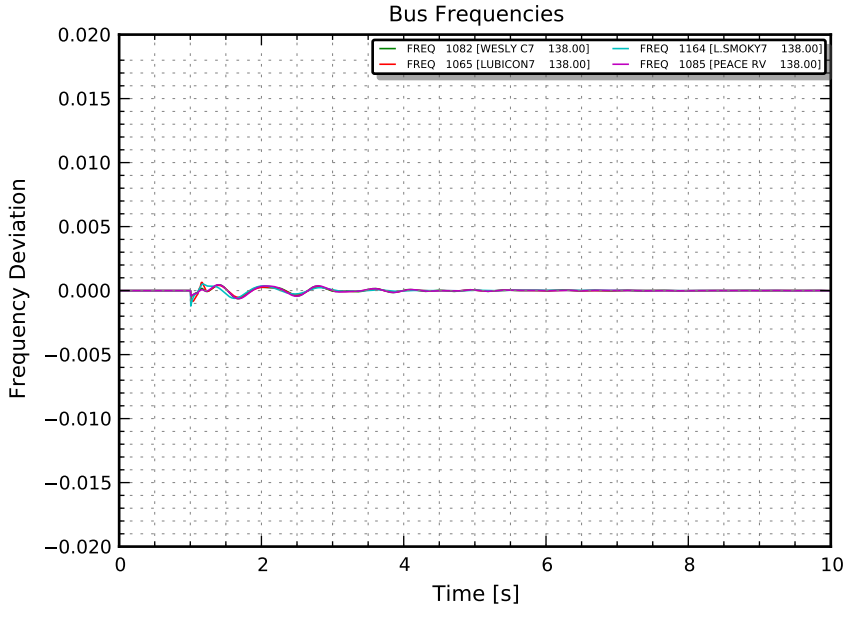


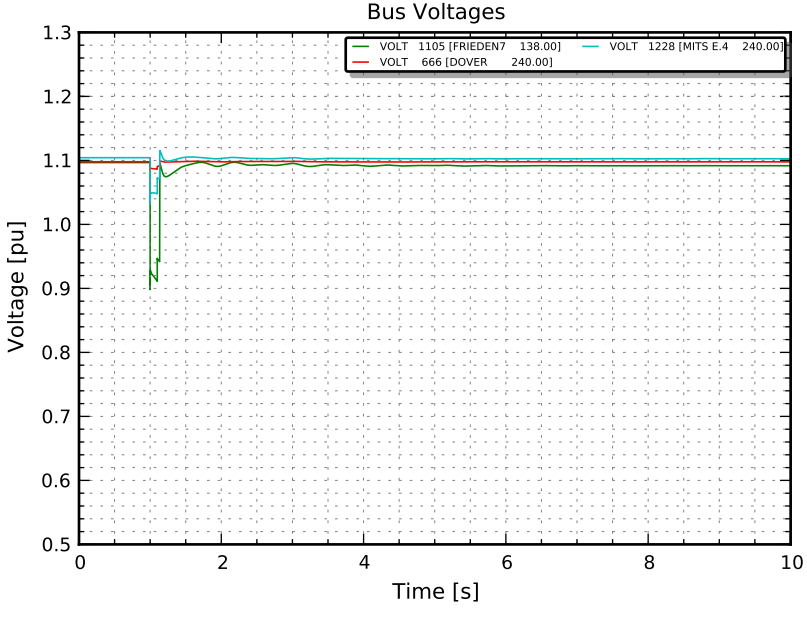
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_A.

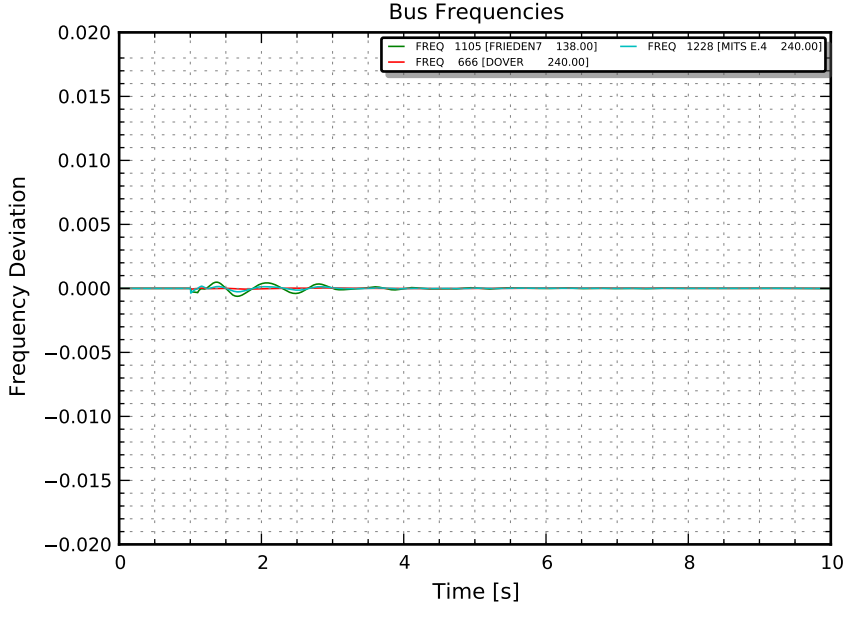
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 021 (A. 1)





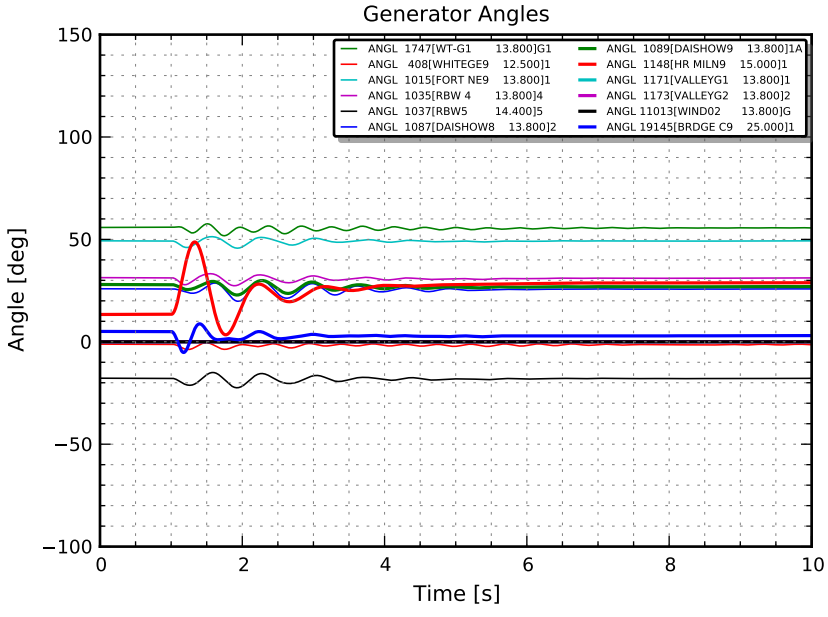


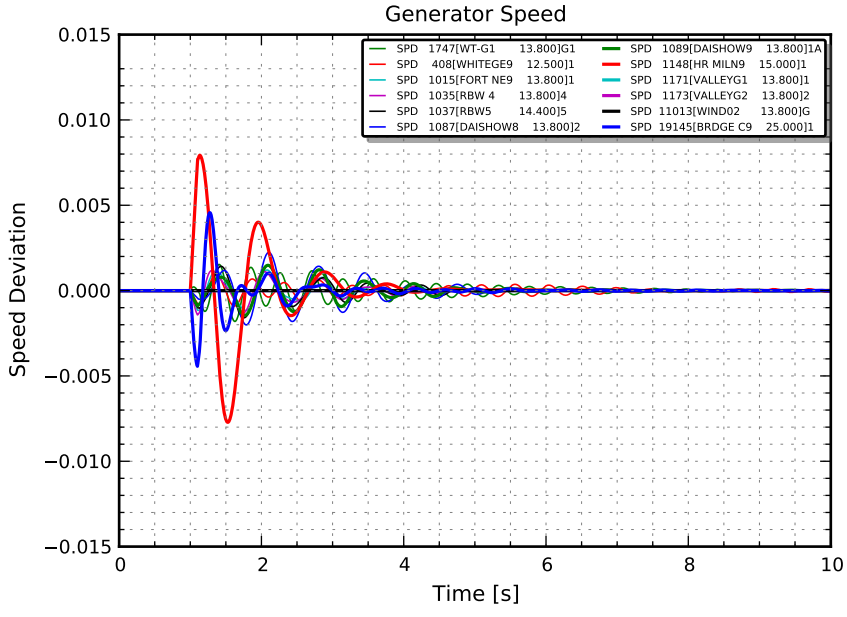


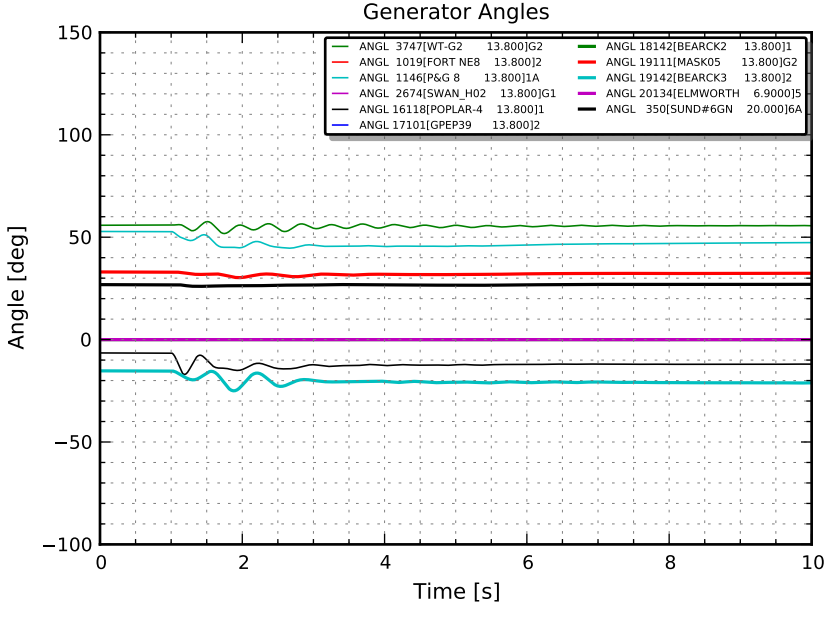
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_A.

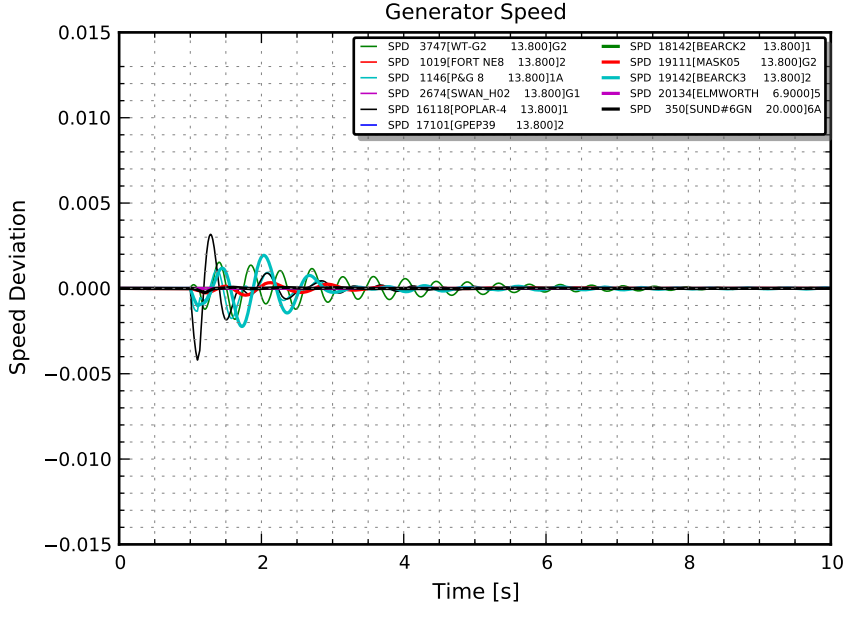
Study Area Generators

Appendix E2B
Figure: 021 (A. 2)





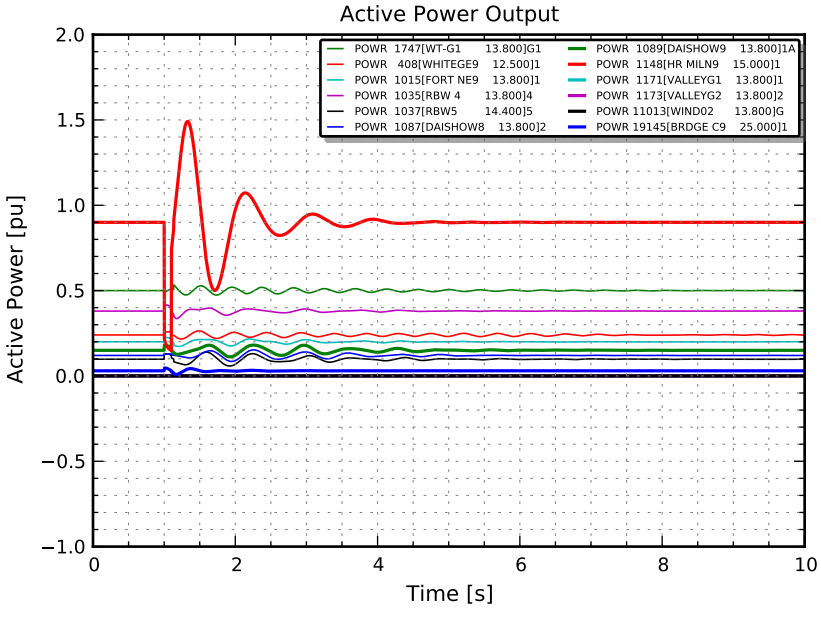


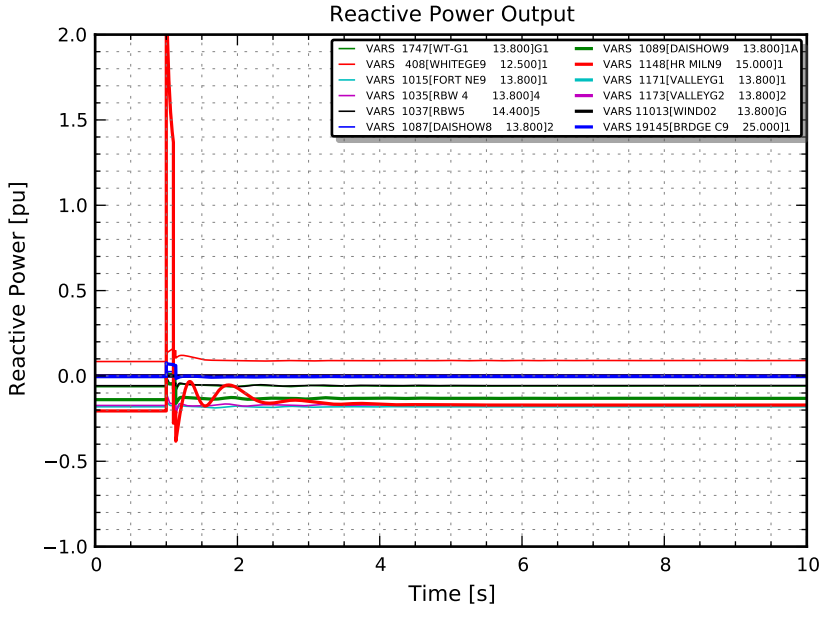


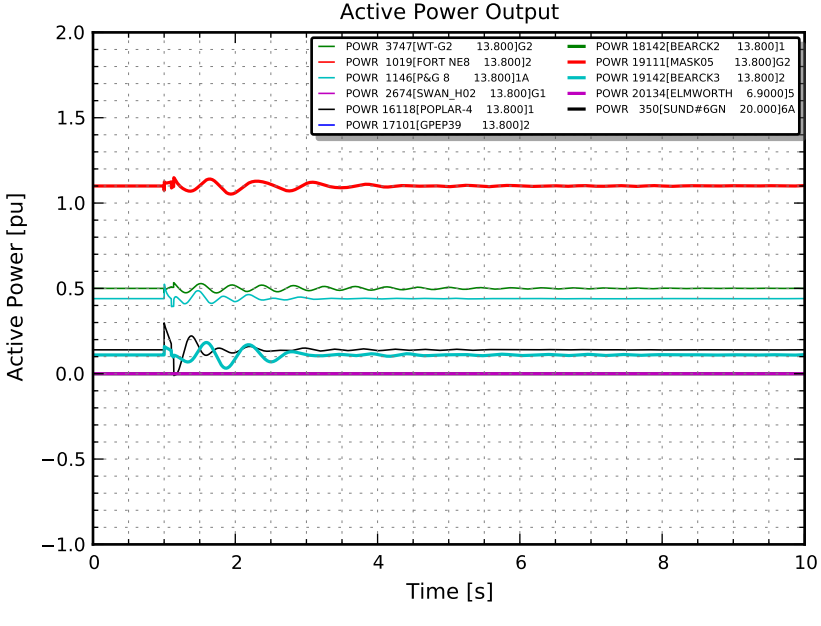
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_A.

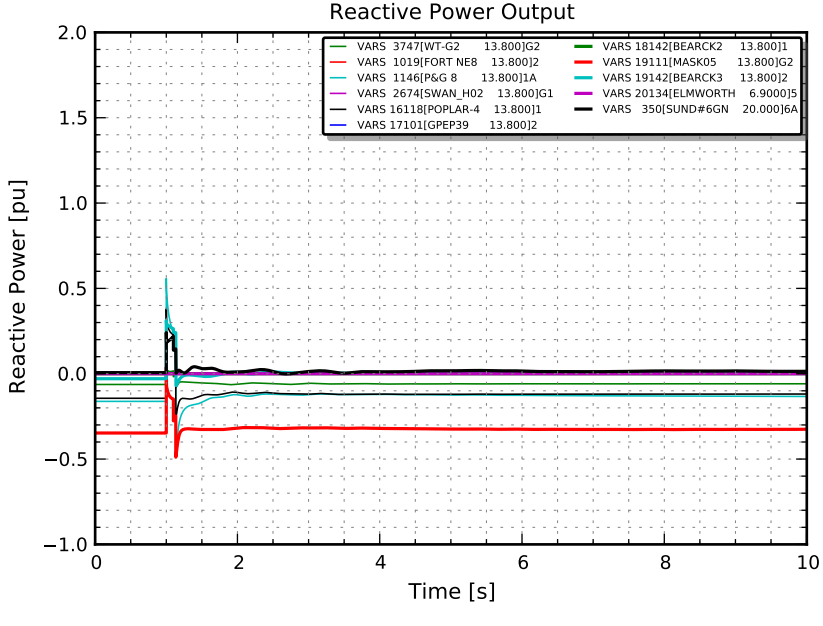
Study Area Generators

Appendix E2B
Figure: 021 (A. 3)





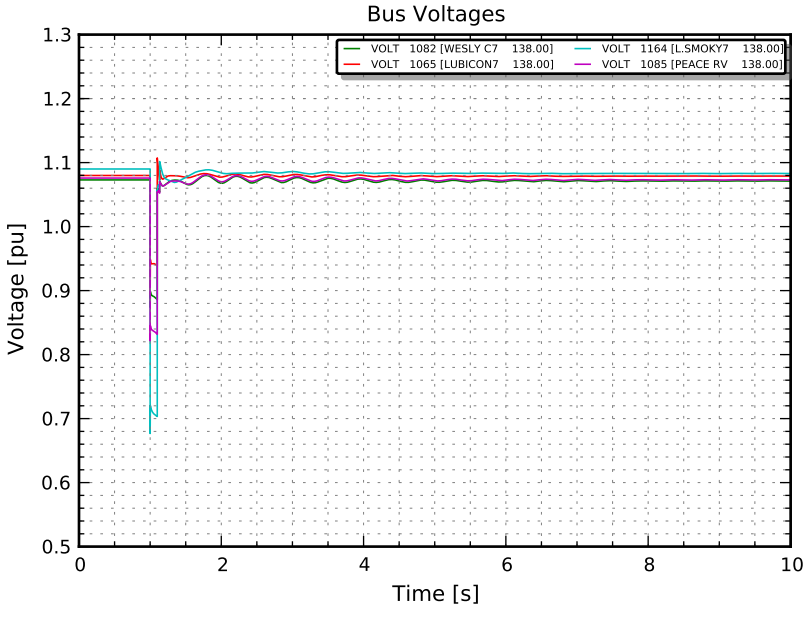


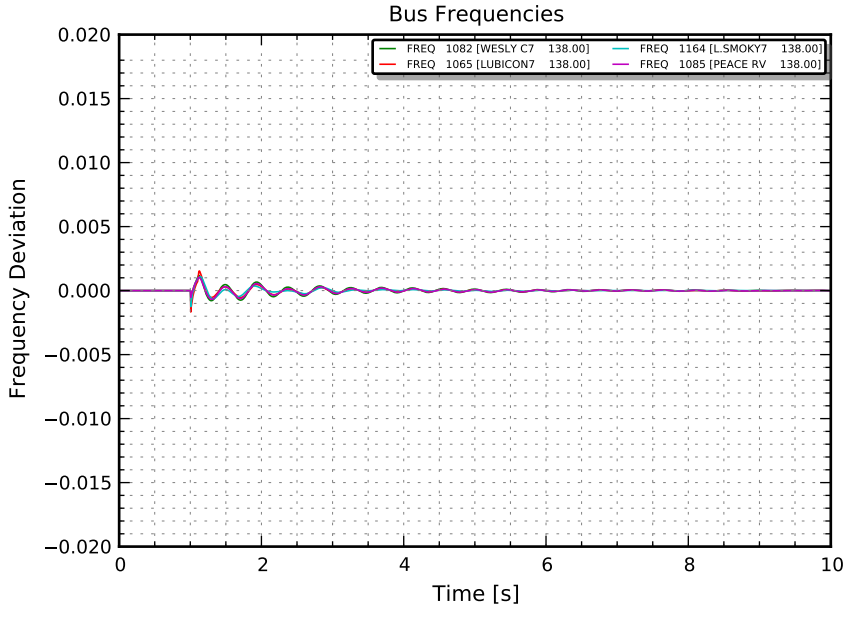


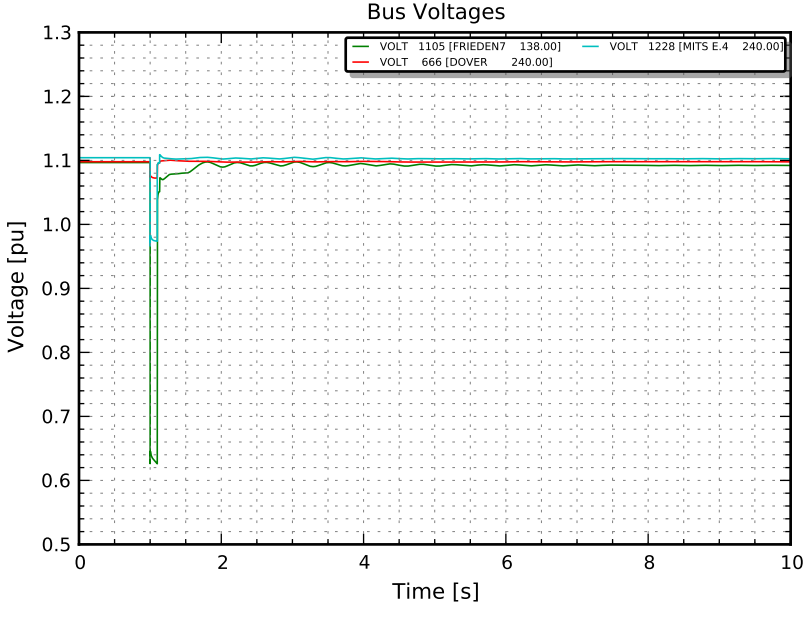
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_B.

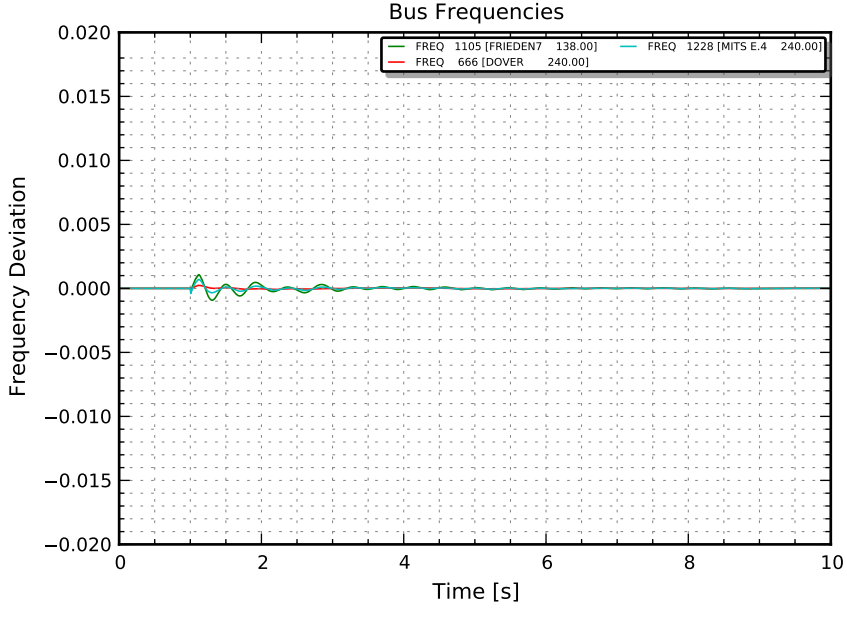
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 021 (B. 1)





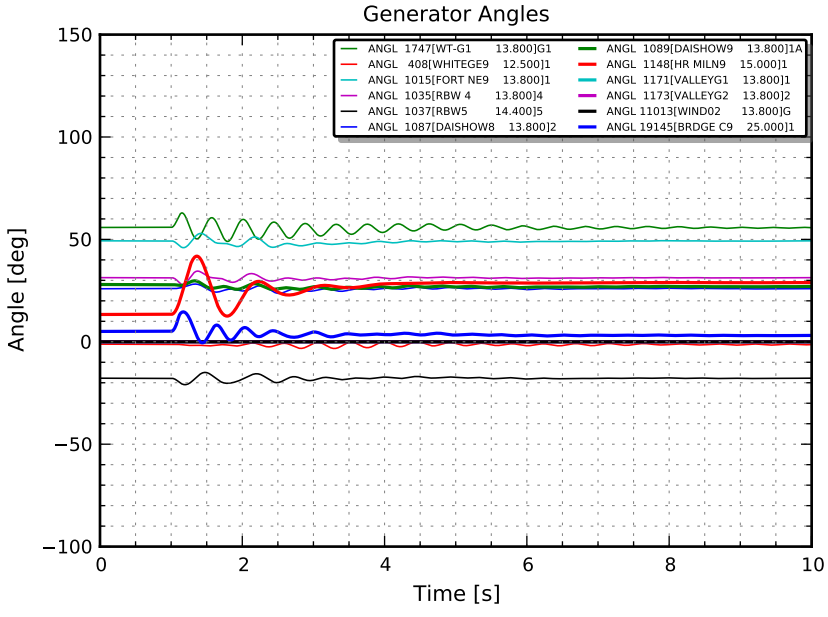


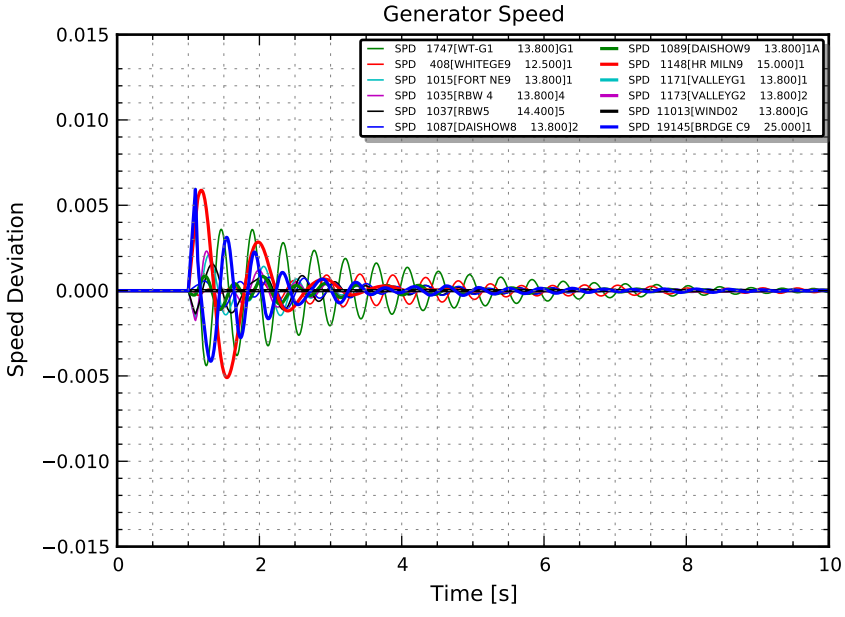


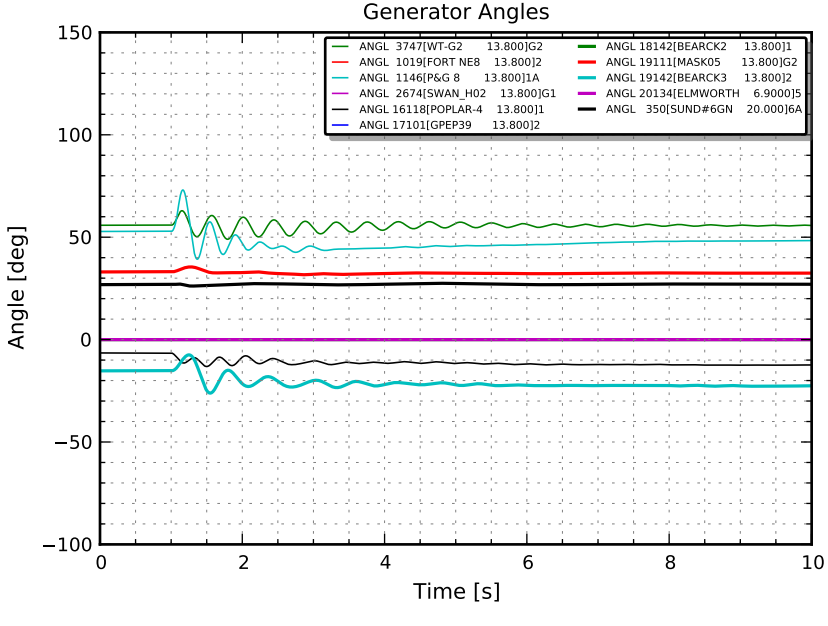
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_B.

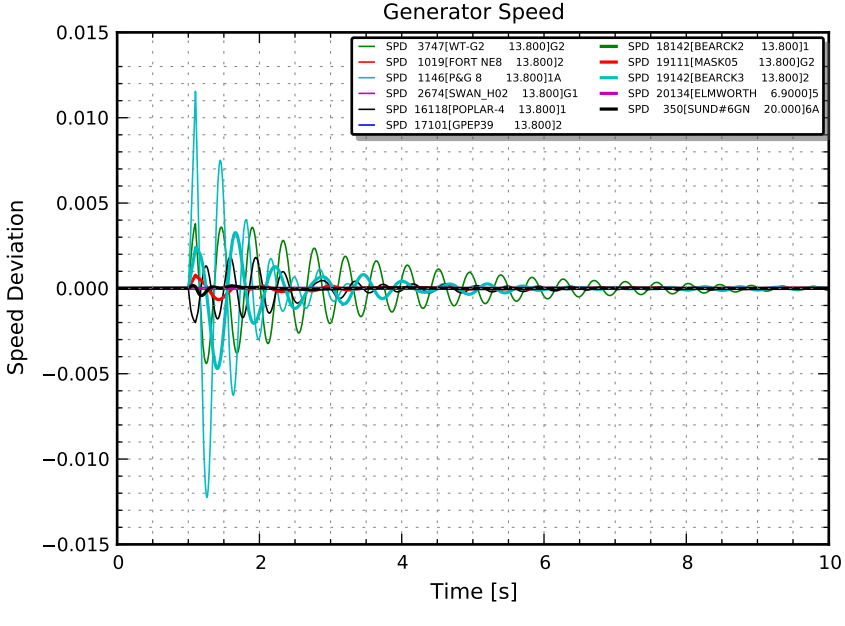
Study Area Generators

Appendix E2B
Figure: 021 (B. 2)





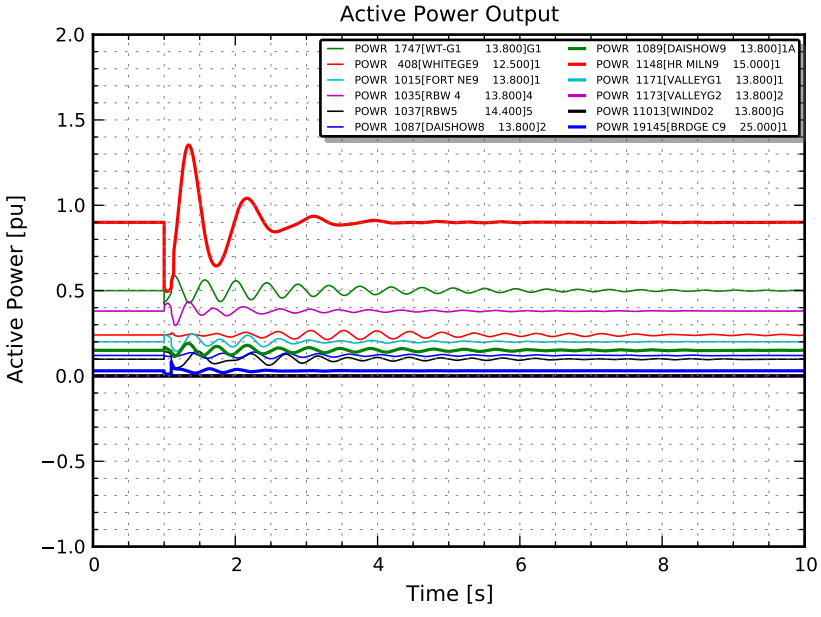


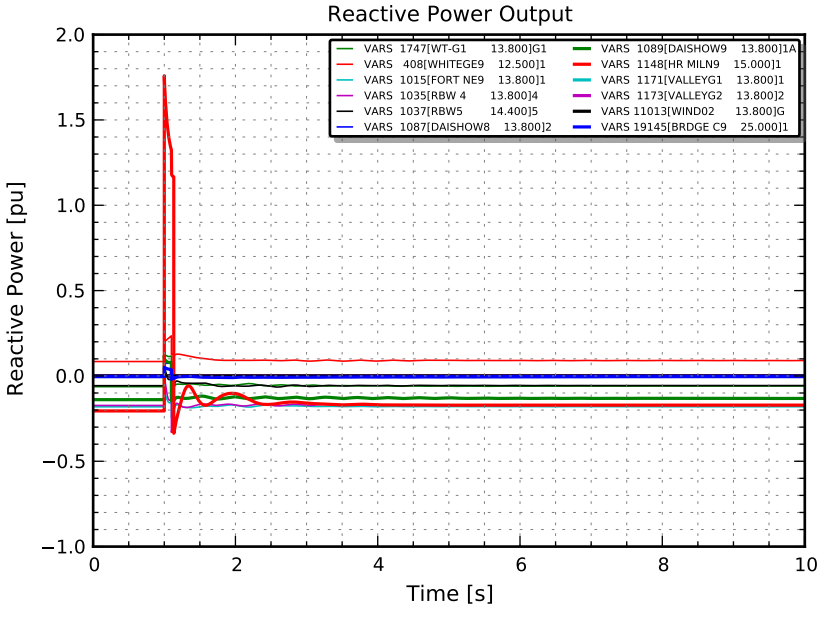


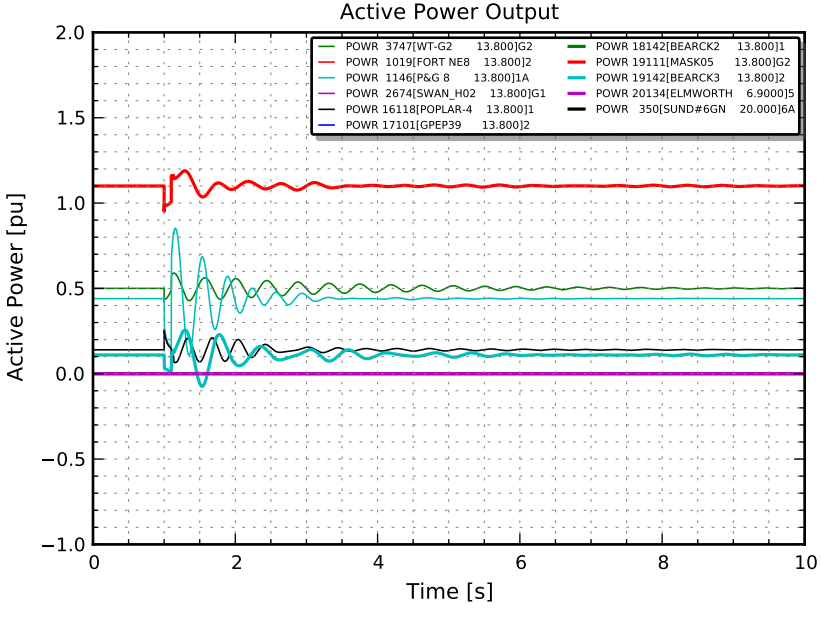
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 021 7L20 HR MILNER to BIGMOUNTAIN_B.

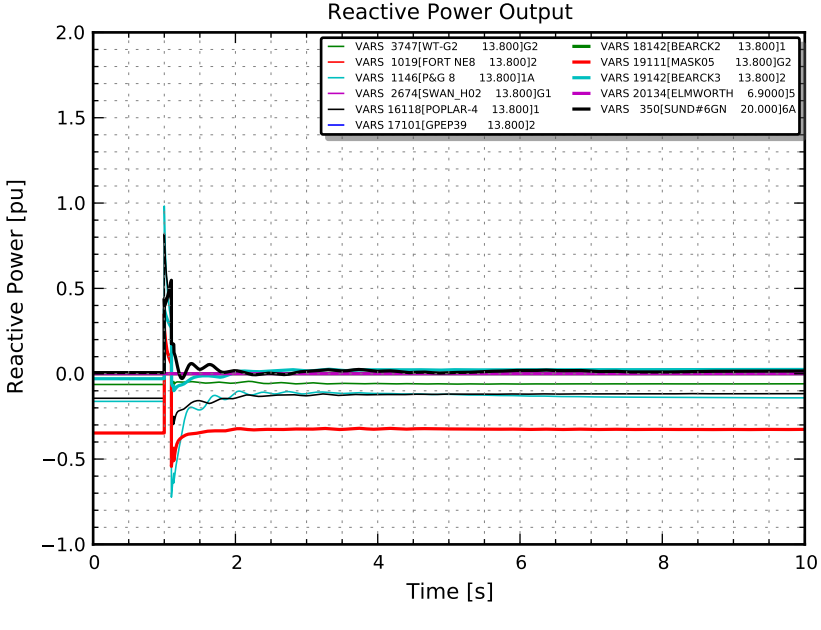
Study Area Generators

Appendix E2B
Figure: 021 (B. 3)





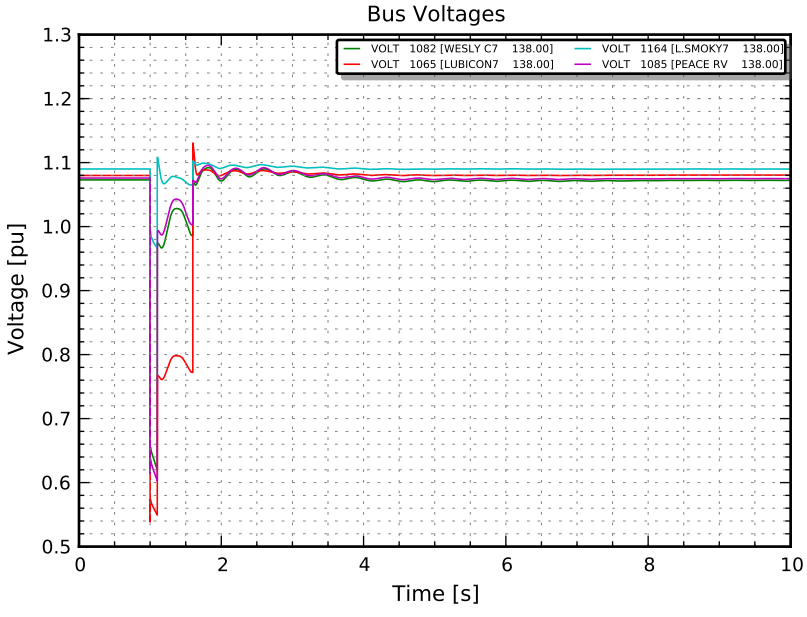


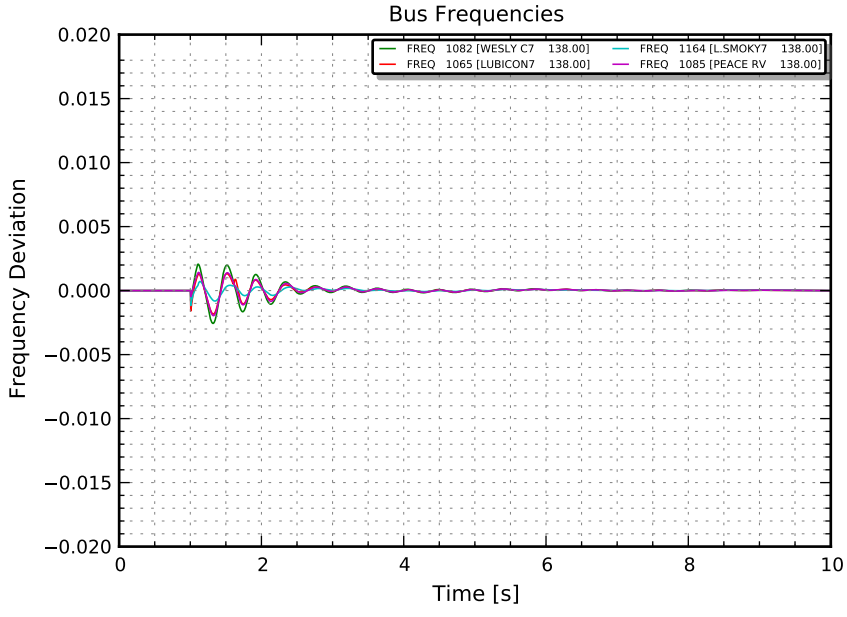


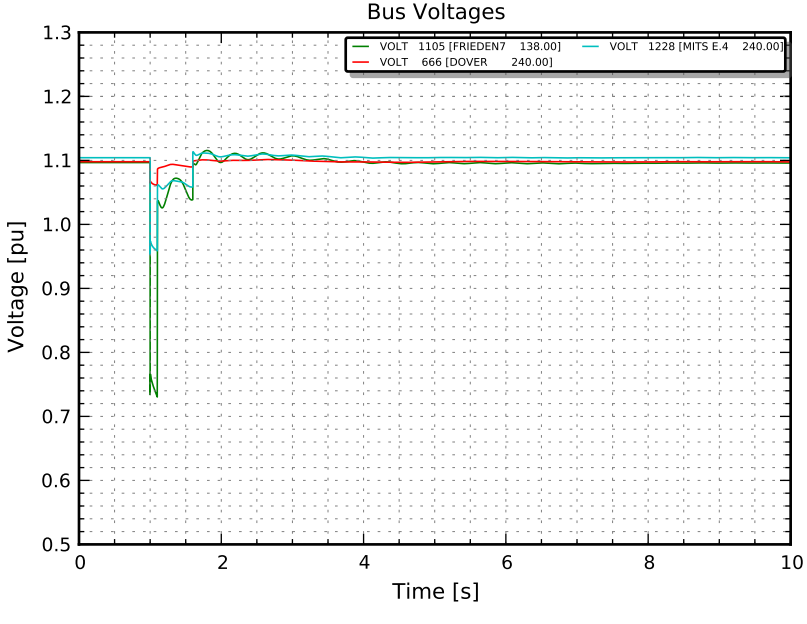
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 022 7L63 HOTCHKISS to LUBICON_A.

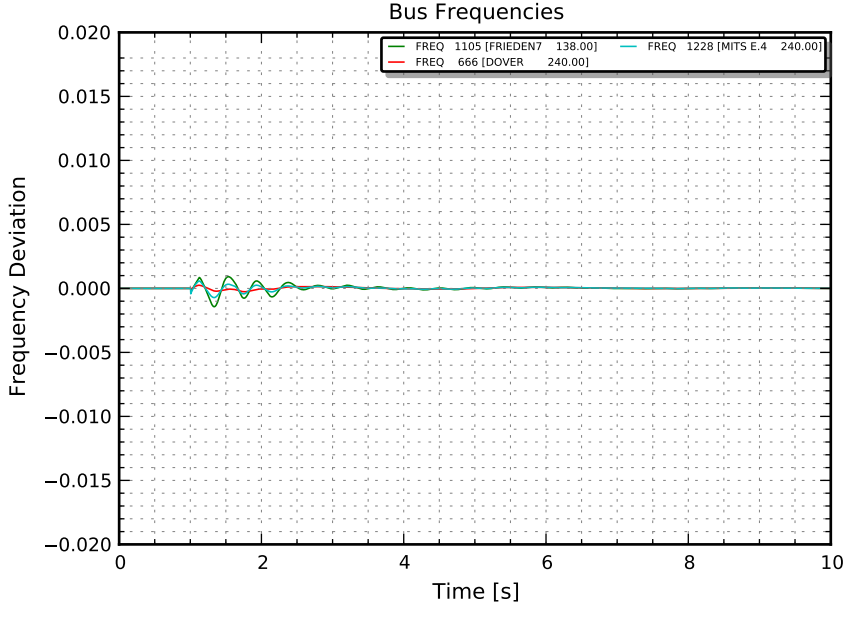
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 022 (A. 1)





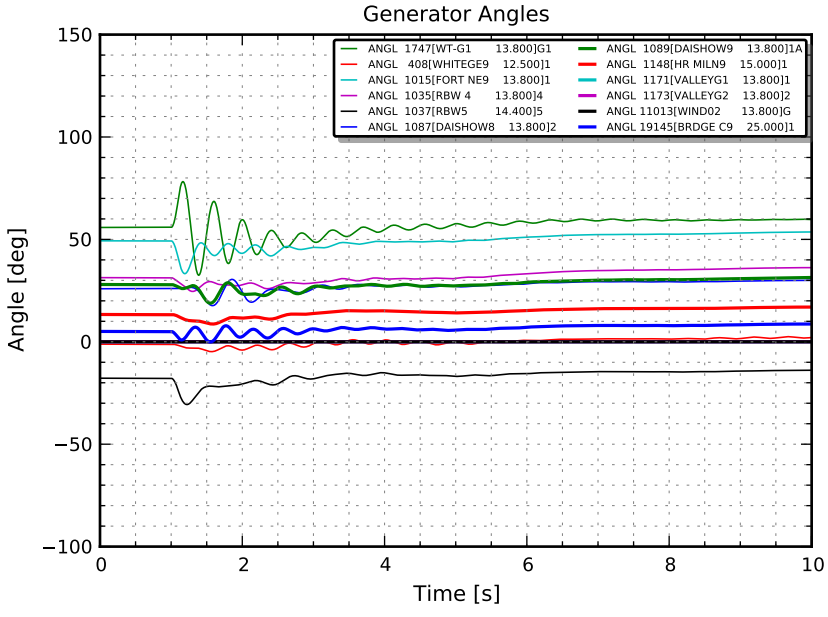


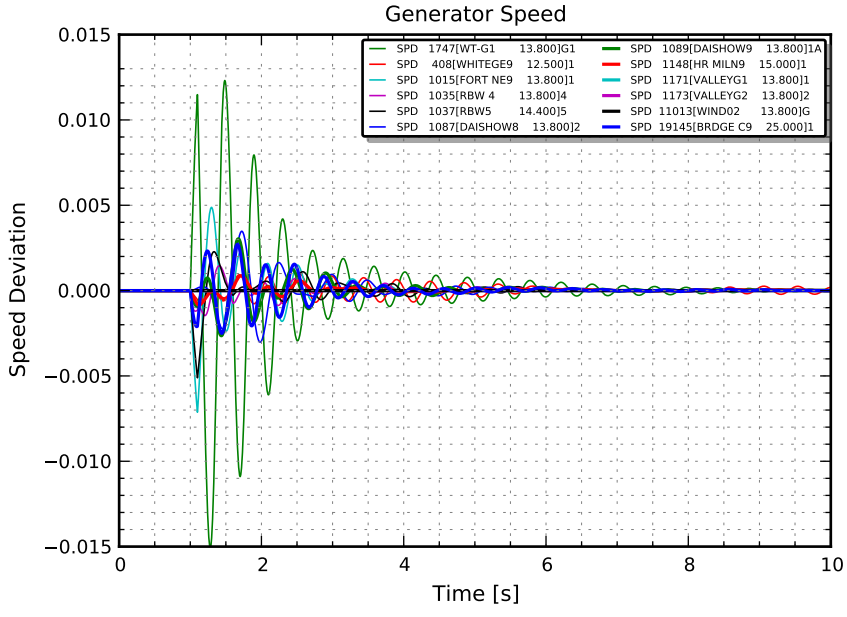


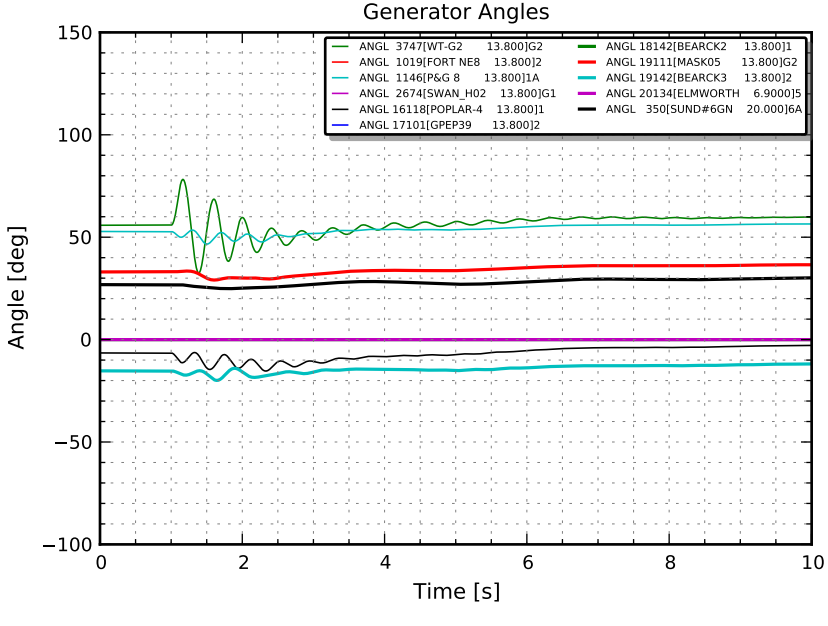
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 022 7L63 HOTCHKISS to LUBICON_A.

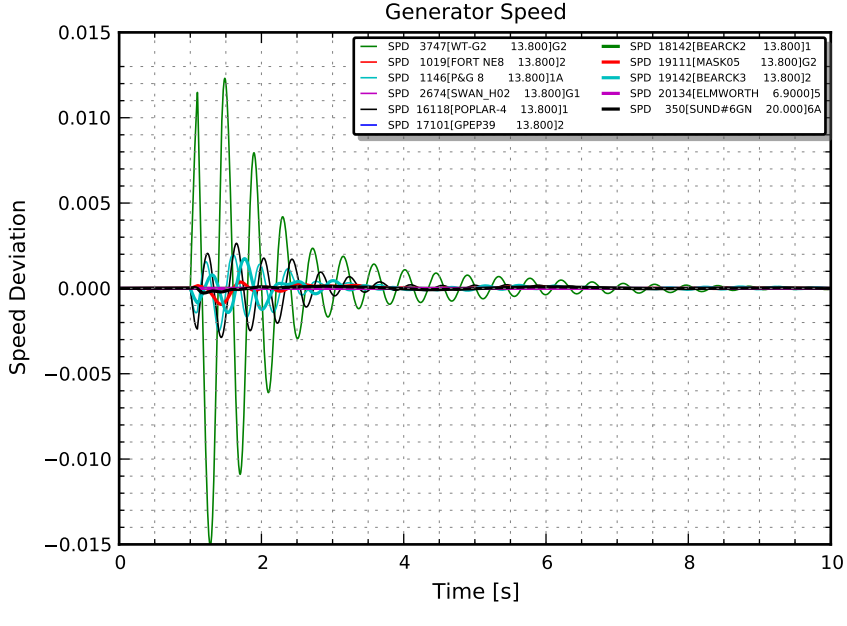
Study Area Generators

Appendix E2B
Figure: 022 (A. 2)





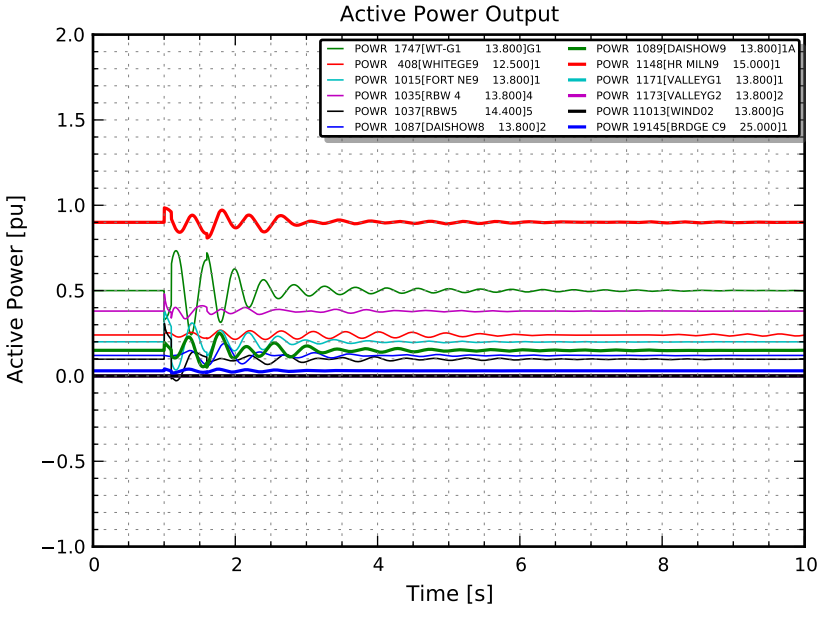


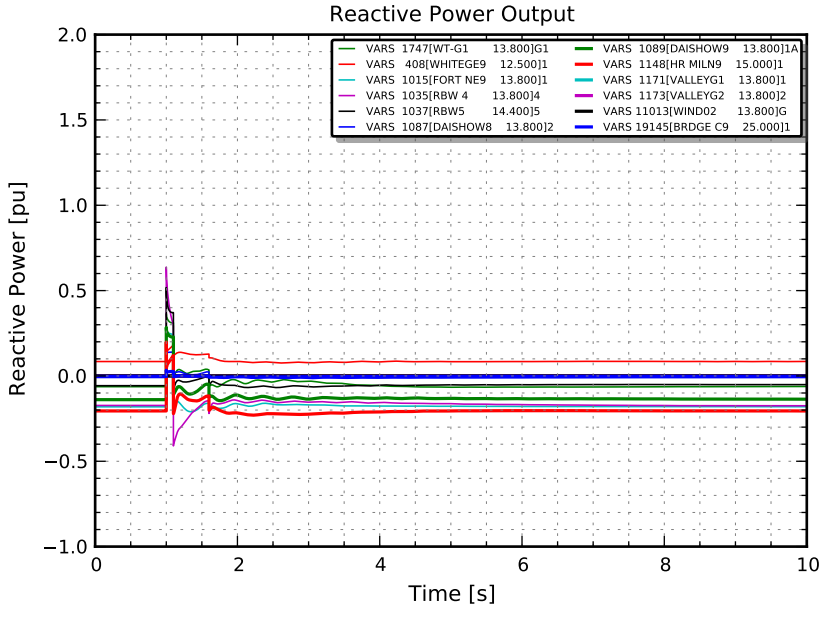


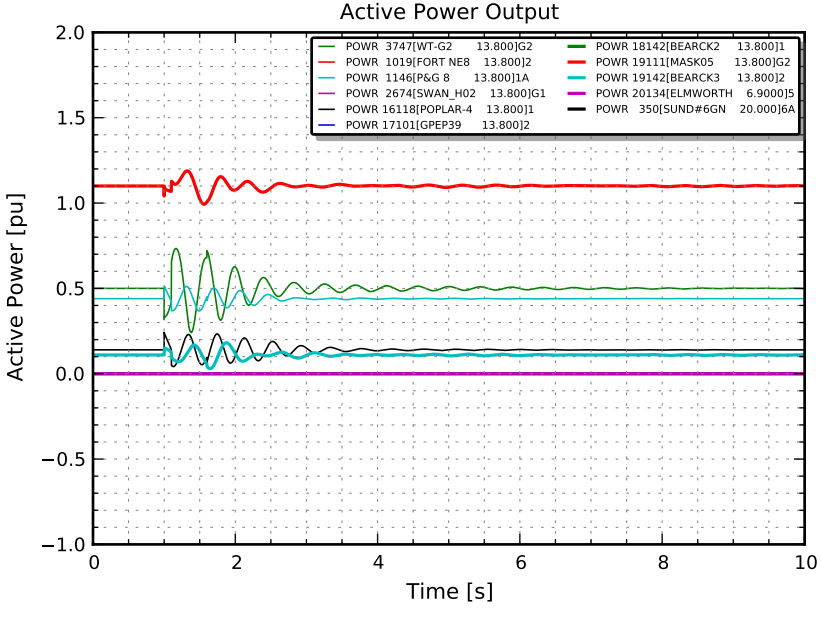
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 022 7L63 HOTCHKISS to LUBICON_A.

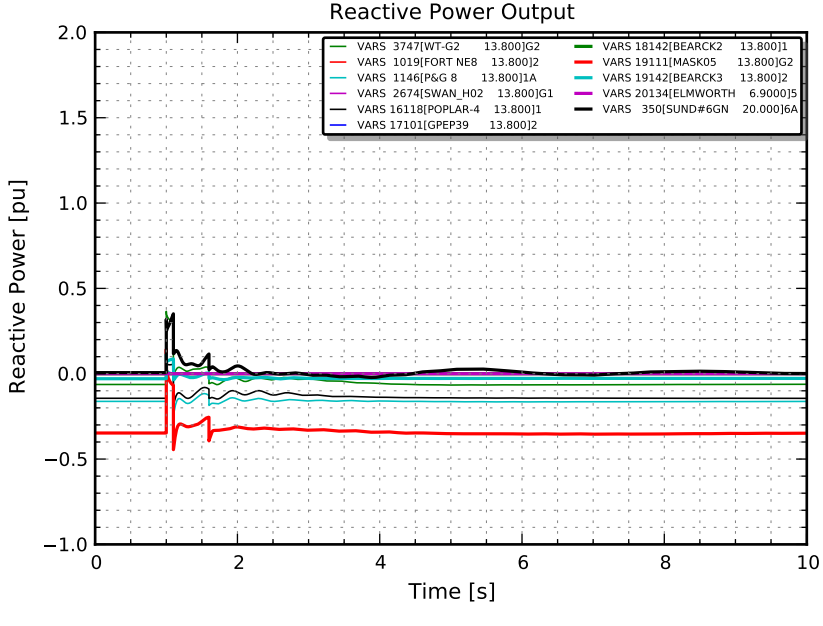
Study Area Generators

Appendix E2B
Figure: 022 (A. 3)





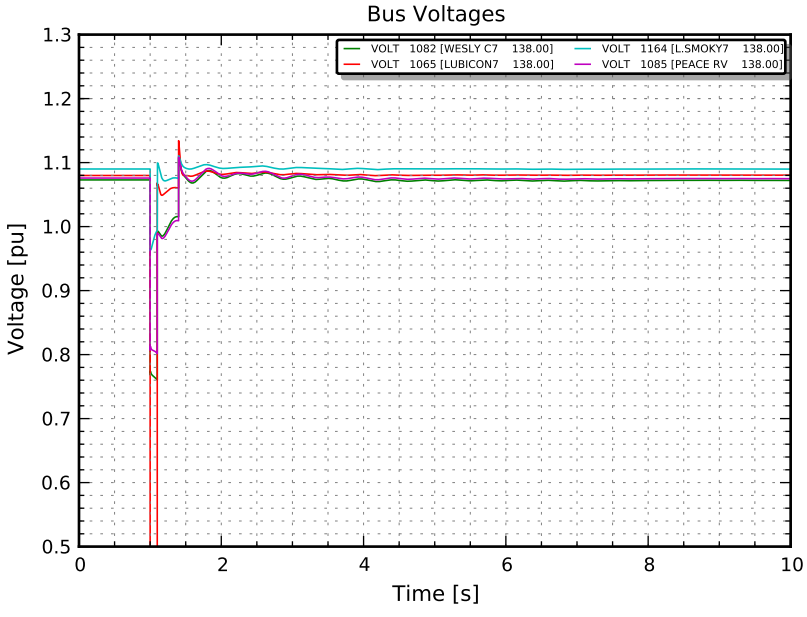


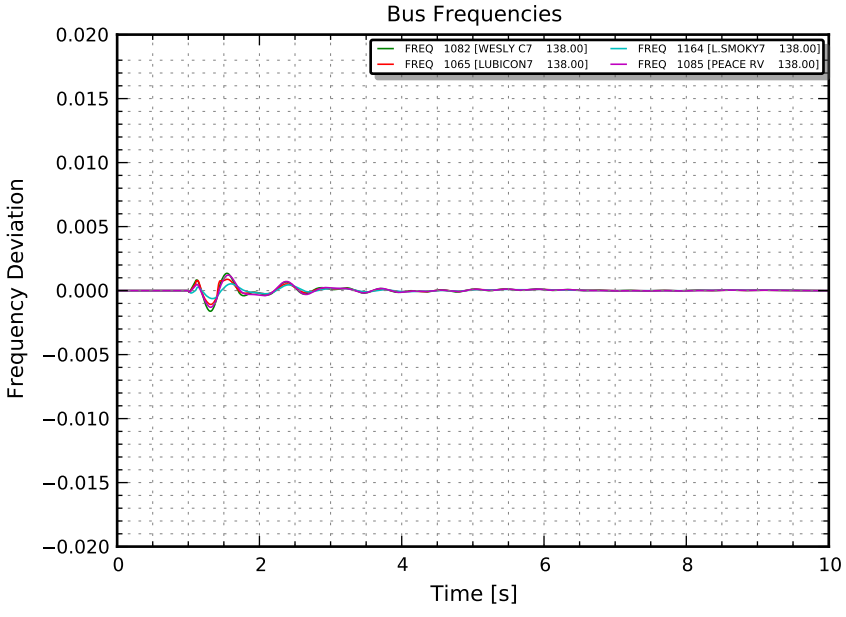


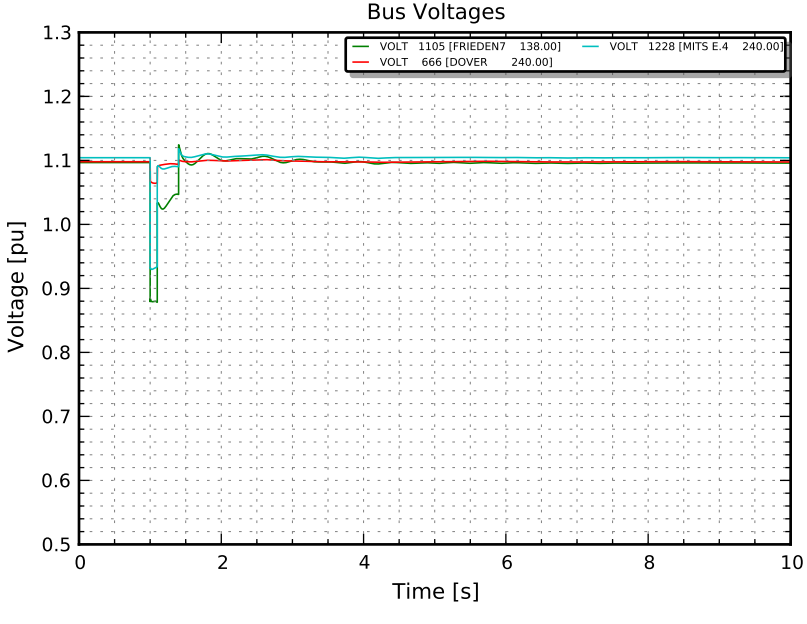
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 022 7L63 HOTCHKISS to LUBICON_B.

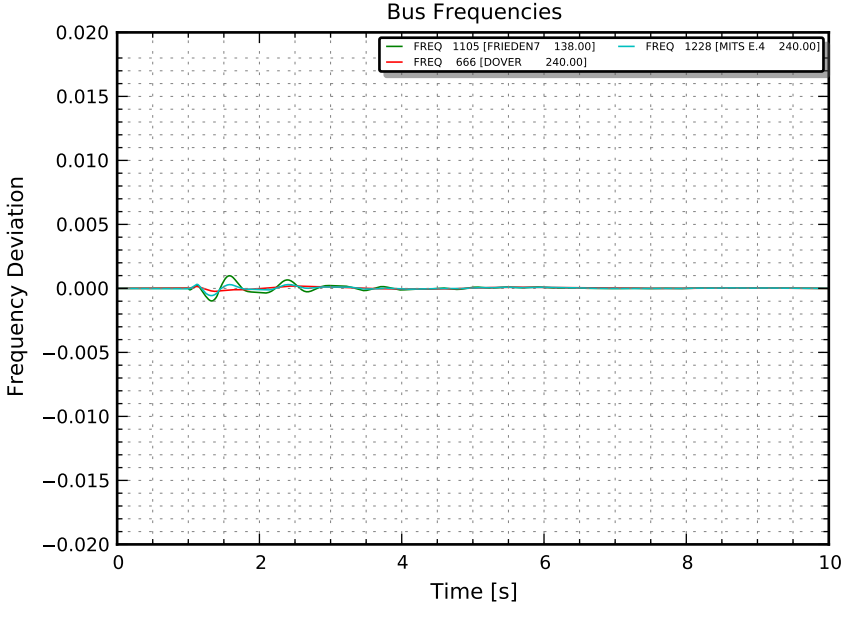
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 022 (B. 1)





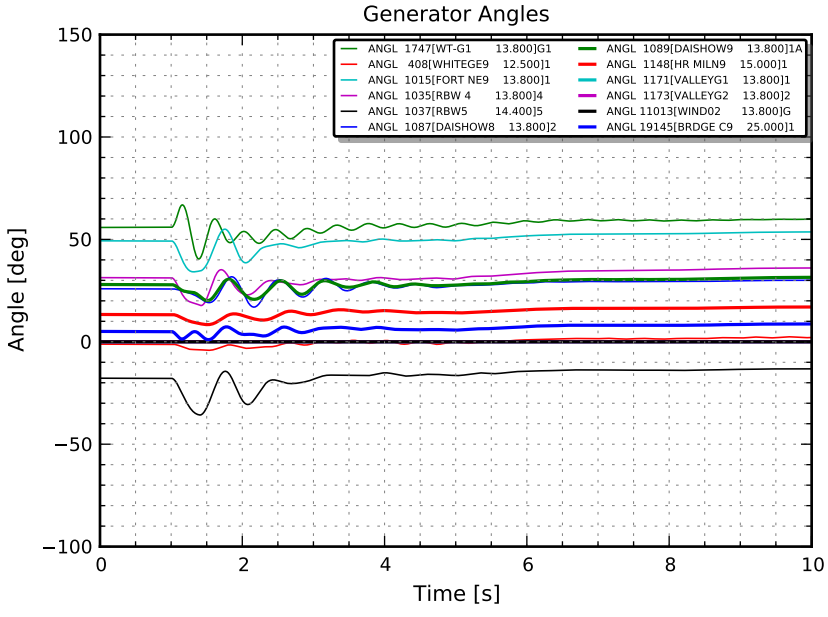


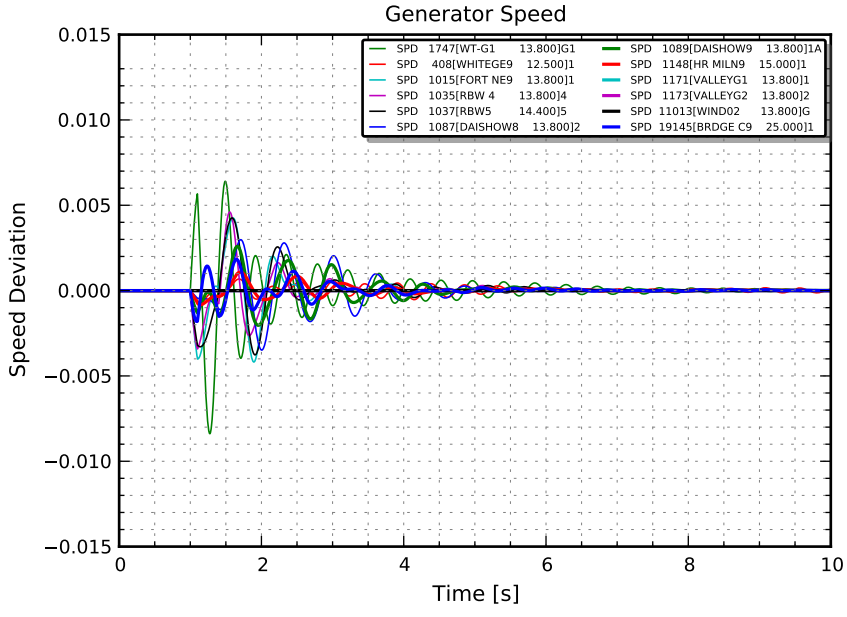


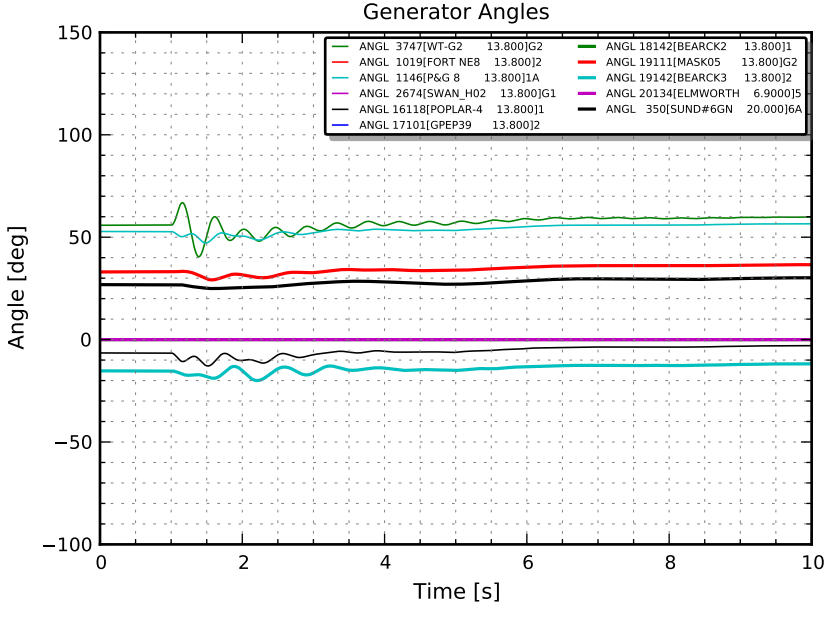
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 022 7L63 HOTCHKISS to LUBICON_B.

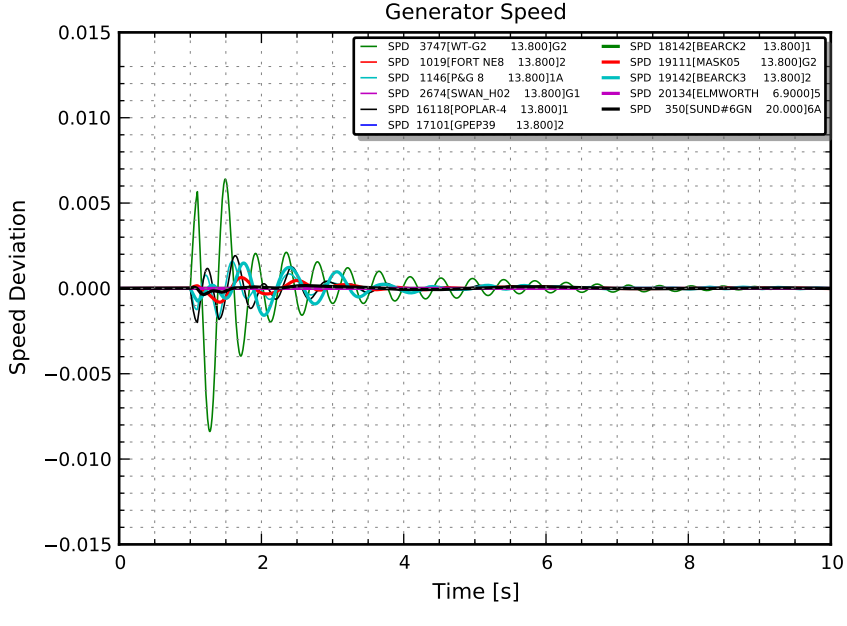
Study Area Generators

Appendix E2B
Figure: 022 (B. 2)





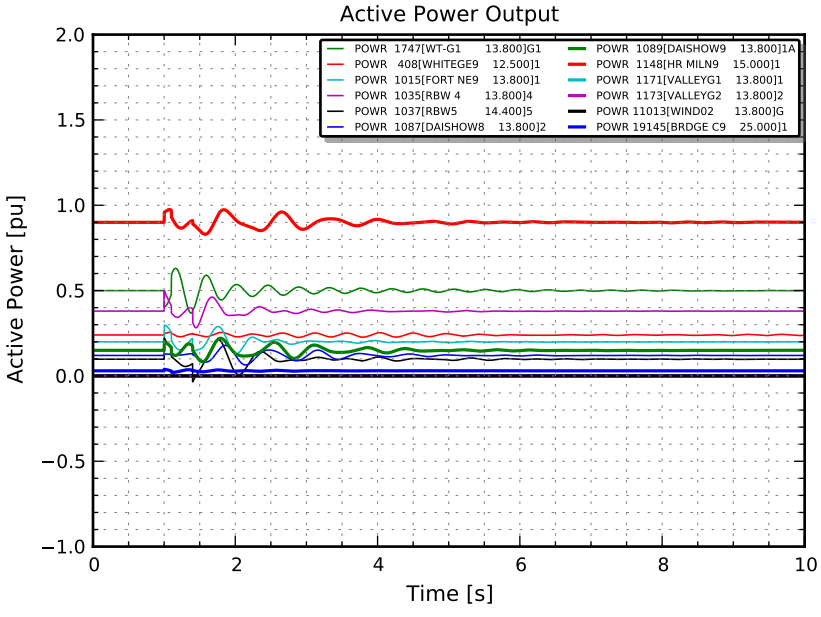


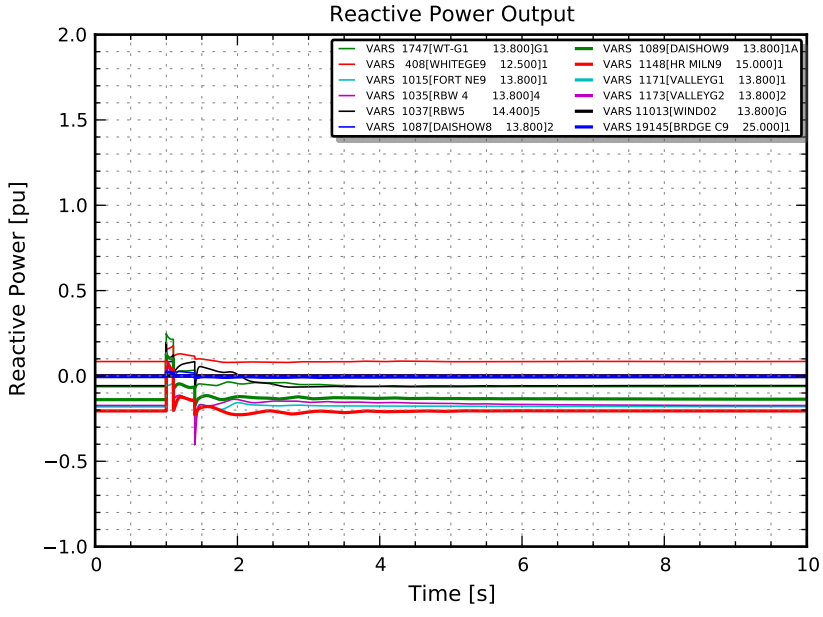


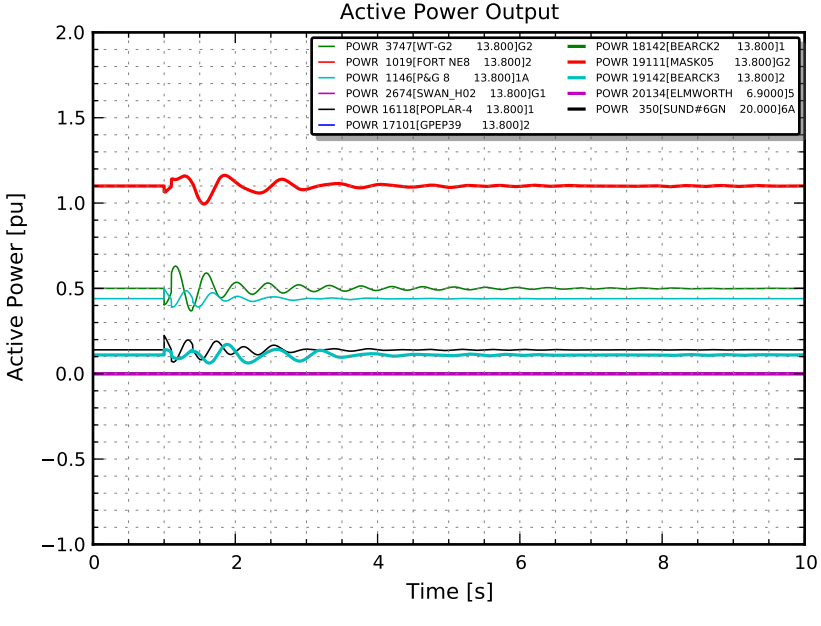
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 022 7L63 HOTCHKISS to LUBICON_B.

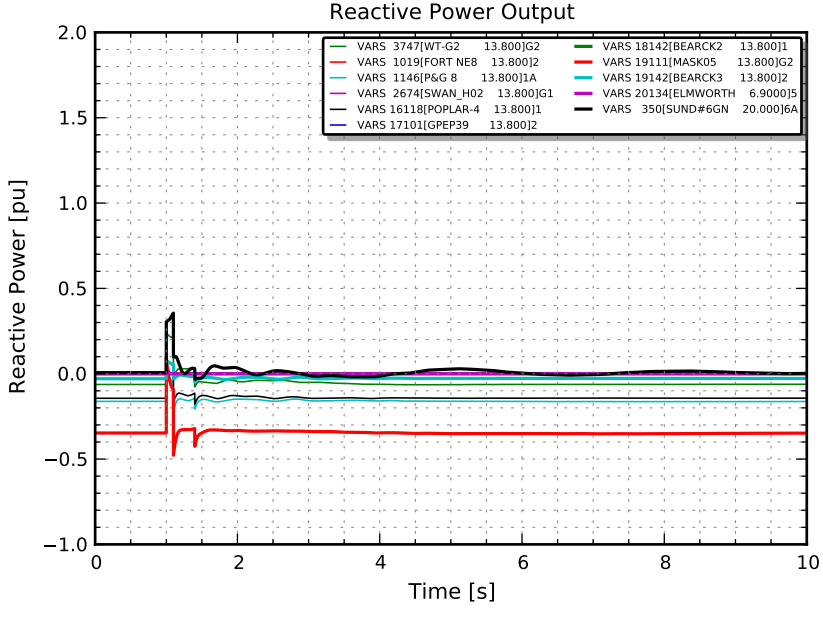
Study Area Generators

Appendix E2B
Figure: 022 (B. 3)





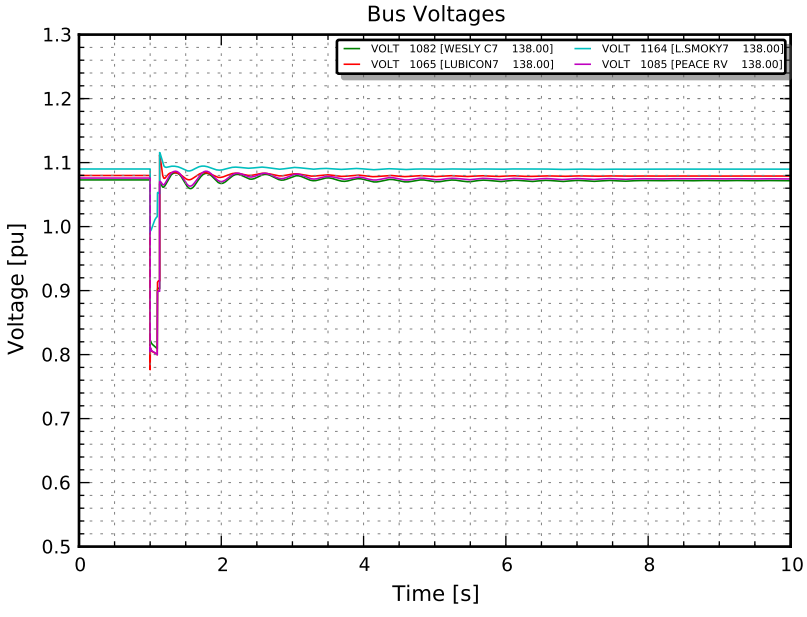


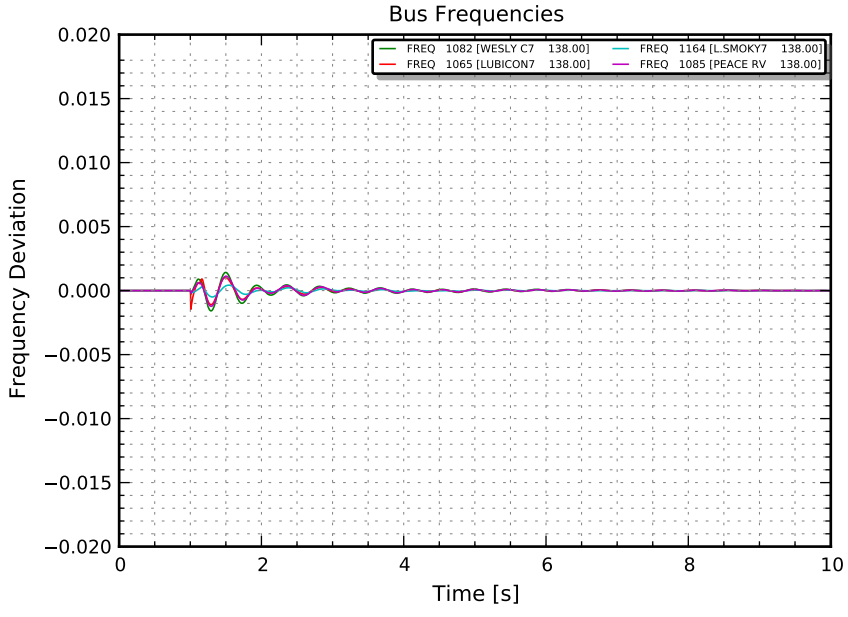


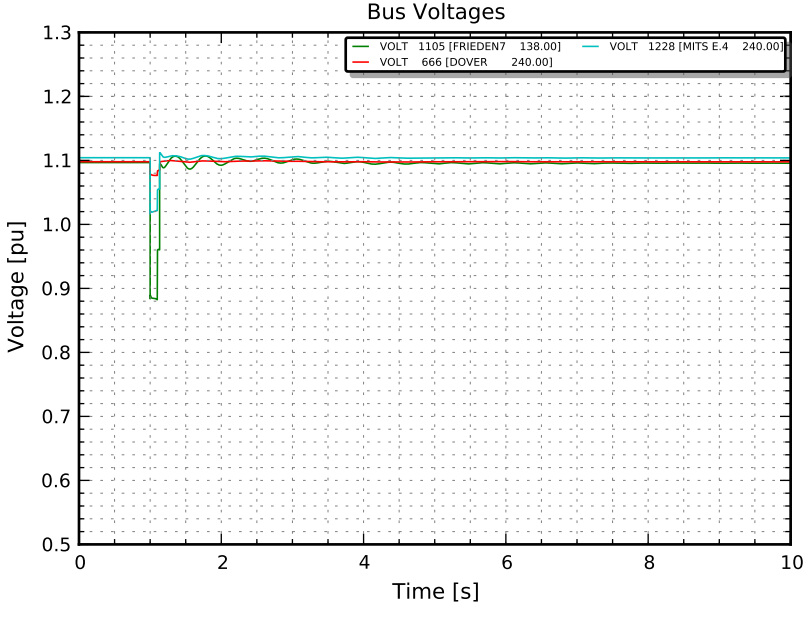
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 023 7L58 KEGRIVER to Meikle_A.

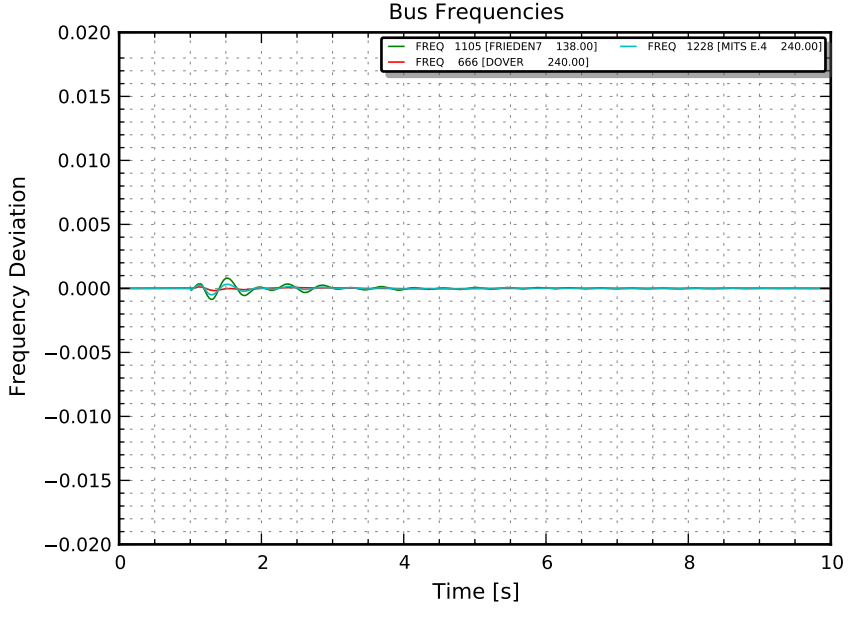
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 023 (A. 1)





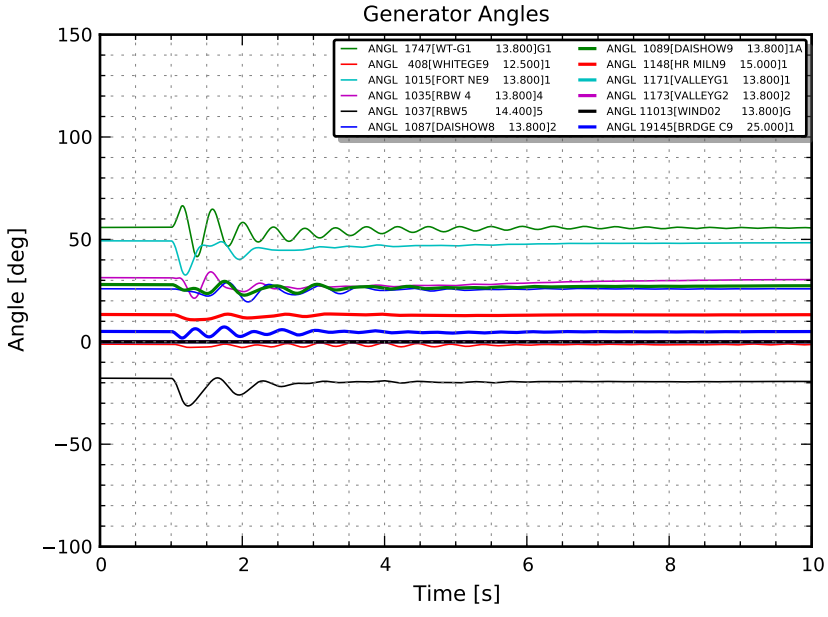


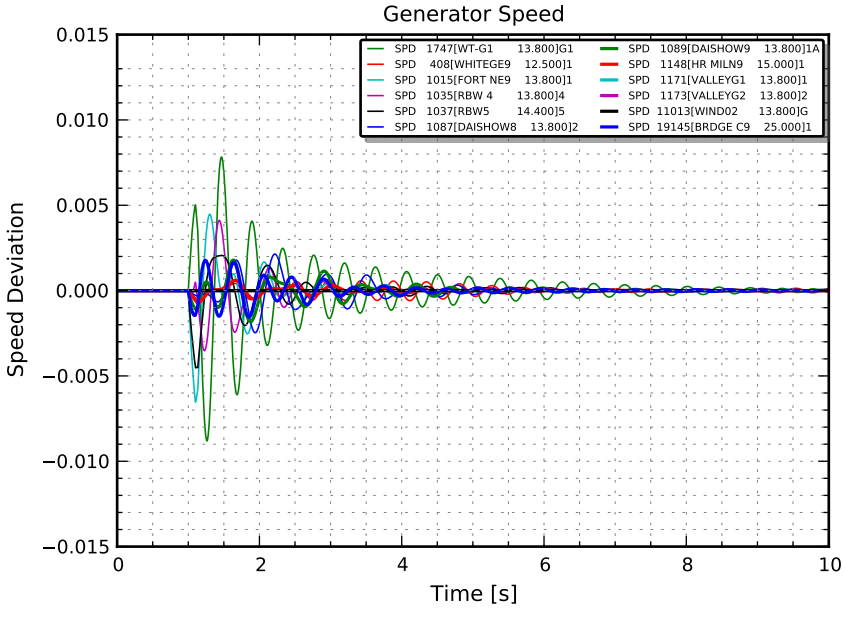


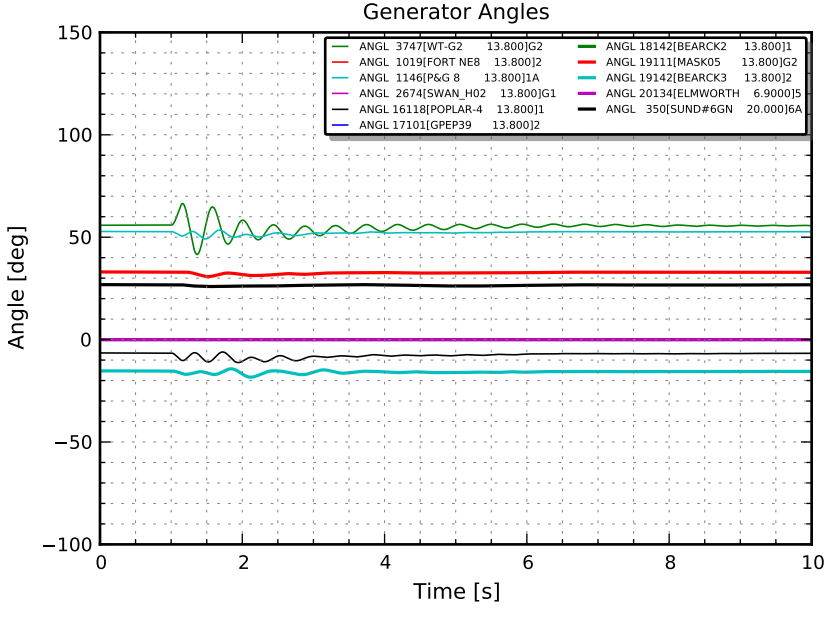
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 023 7L58 KEGRIVER to Meikle_A.

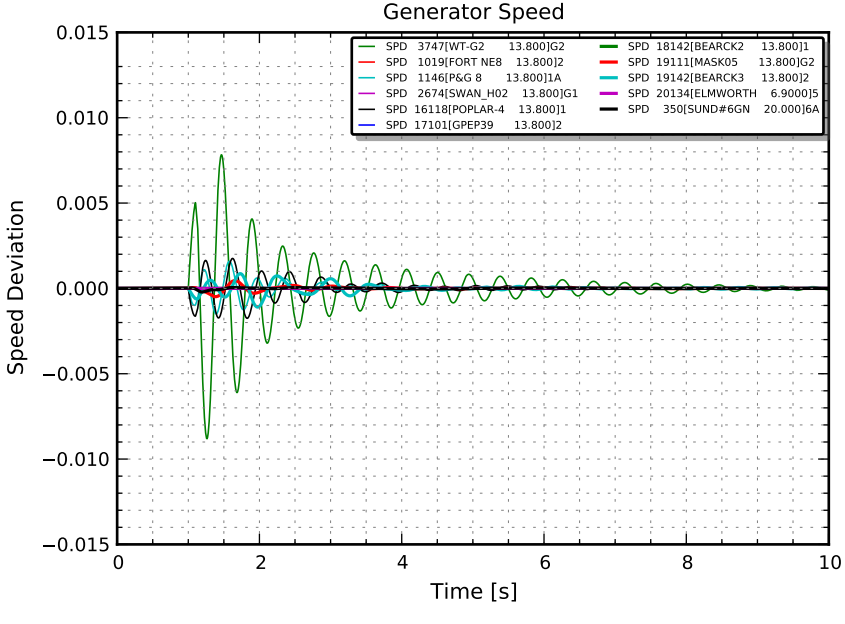
Study Area Generators

Appendix E2B
Figure: 023 (A. 2)





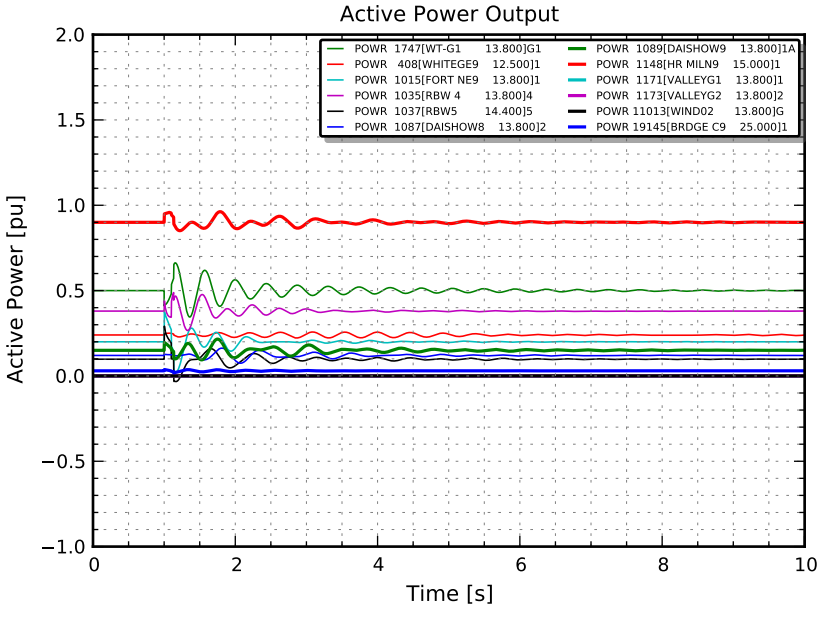


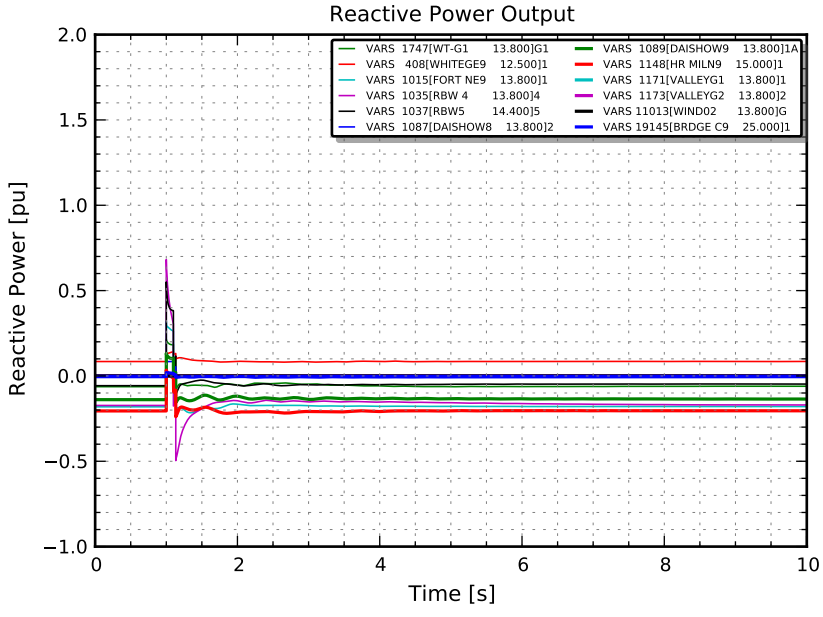


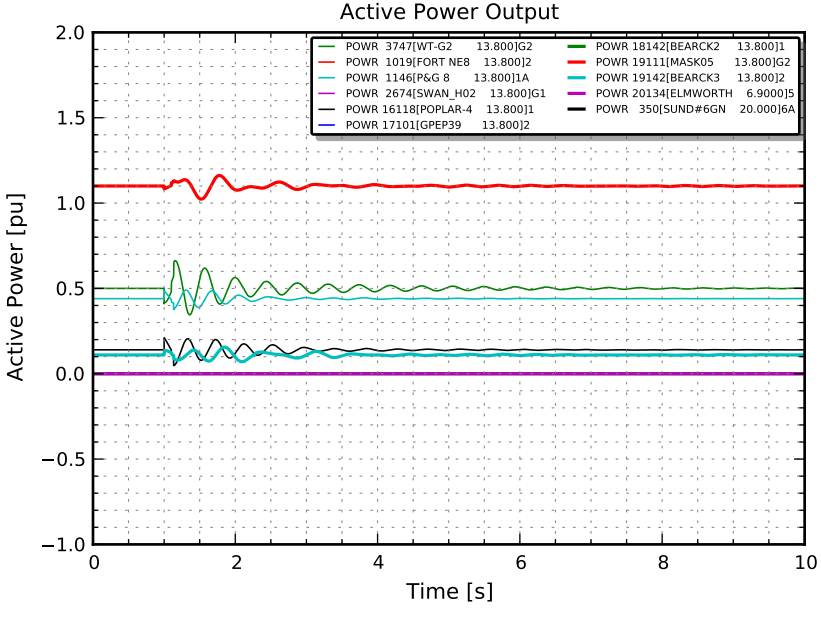
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 023 7L58 KEGRIVER to Meikle_A.

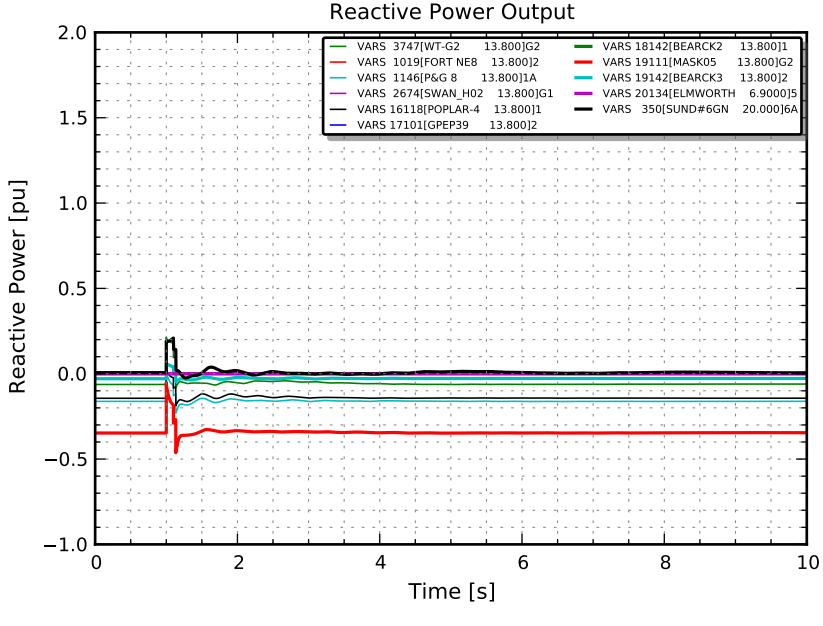
Study Area Generators

Appendix E2B
Figure: 023 (A. 3)





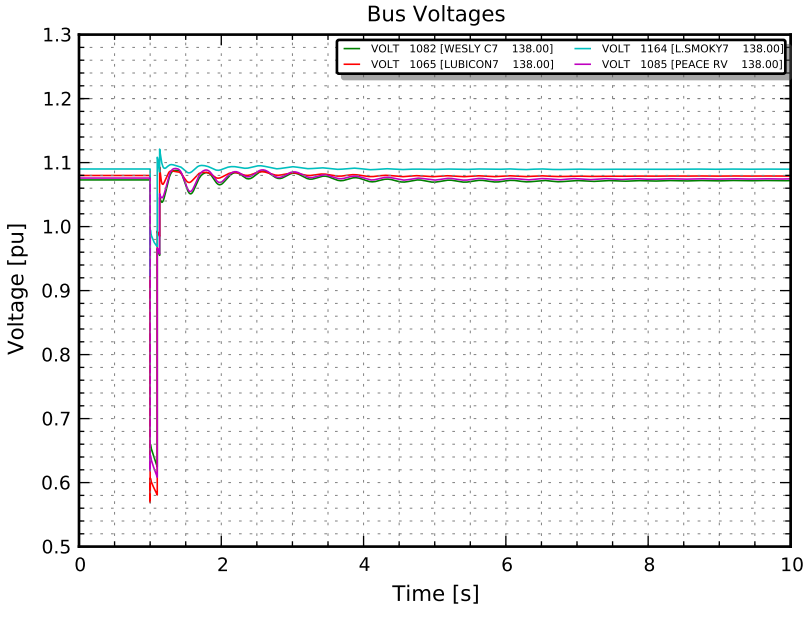


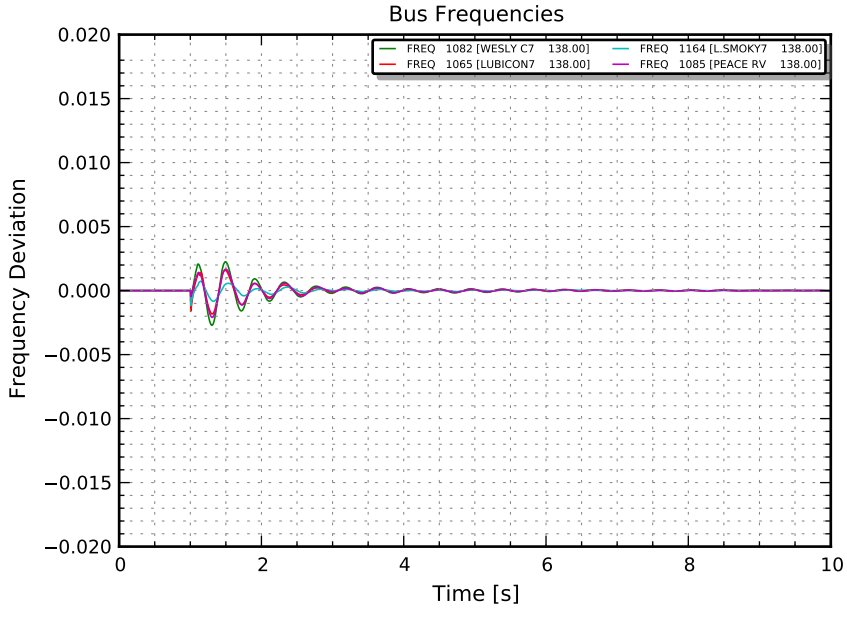


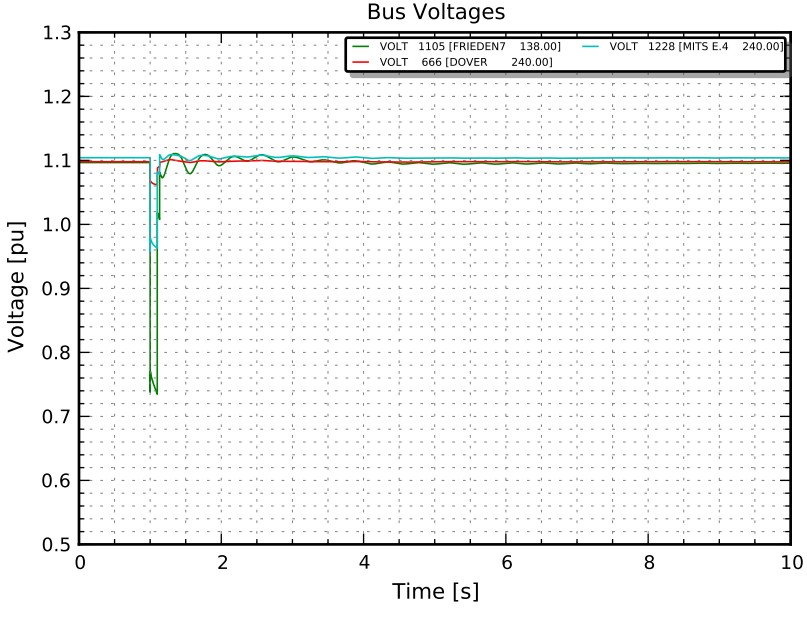
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 023 7L58 KEGRIVER to Meikle_B.

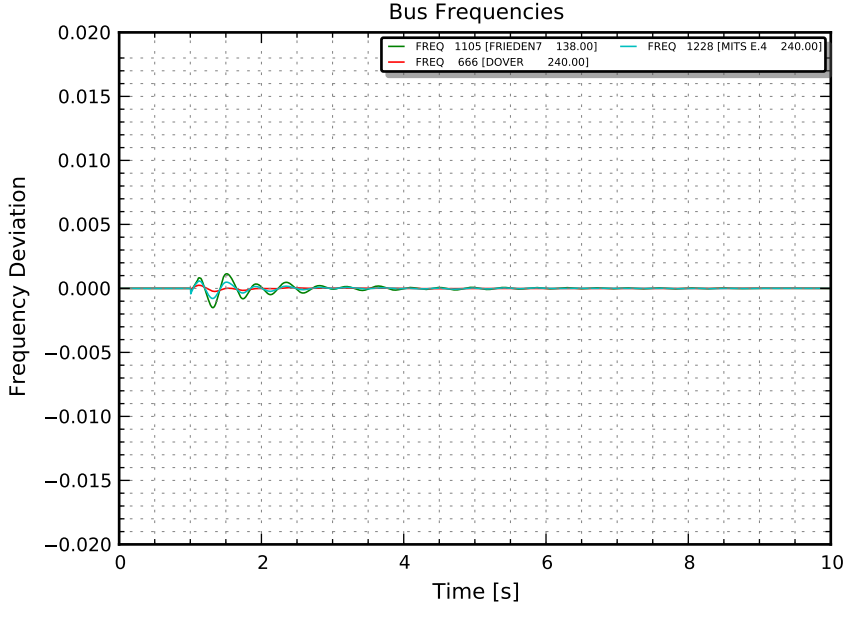
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 023 (B. 1)





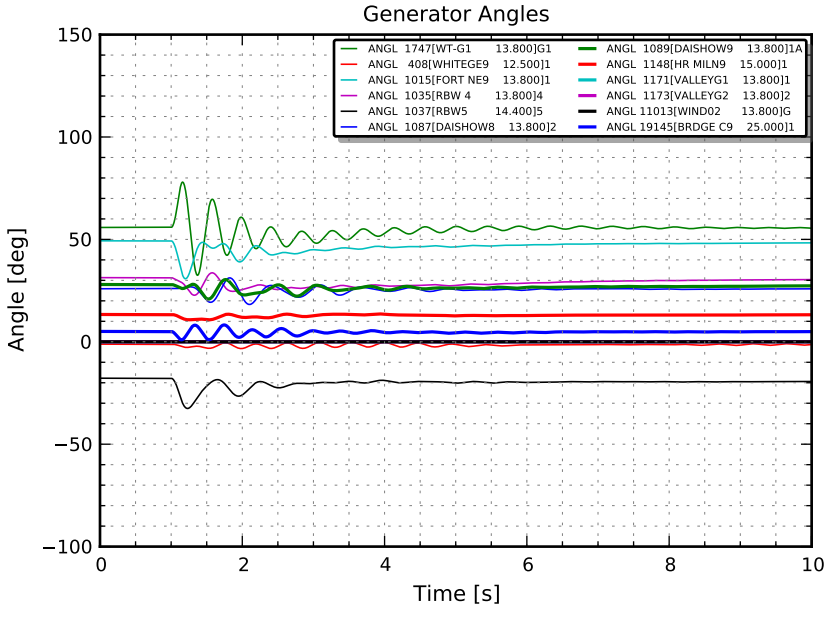


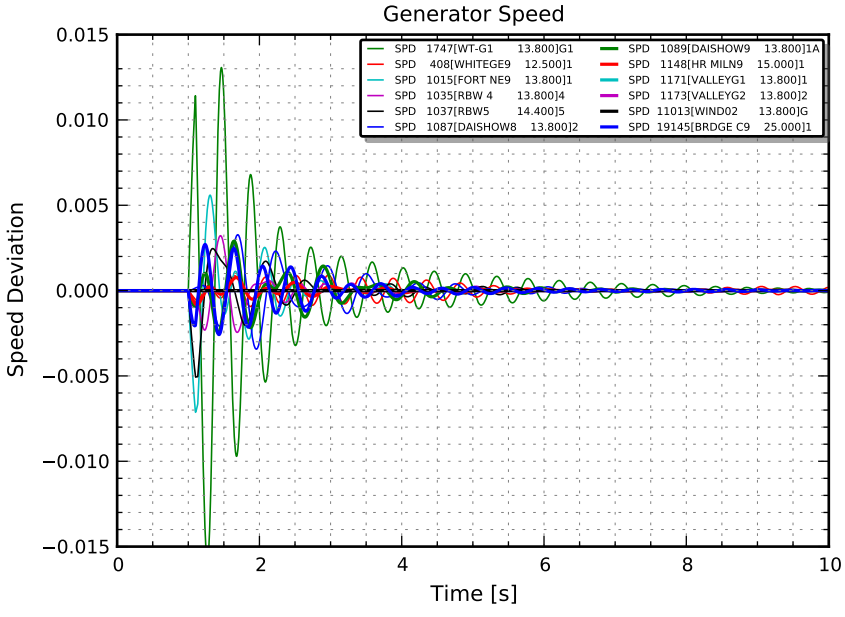


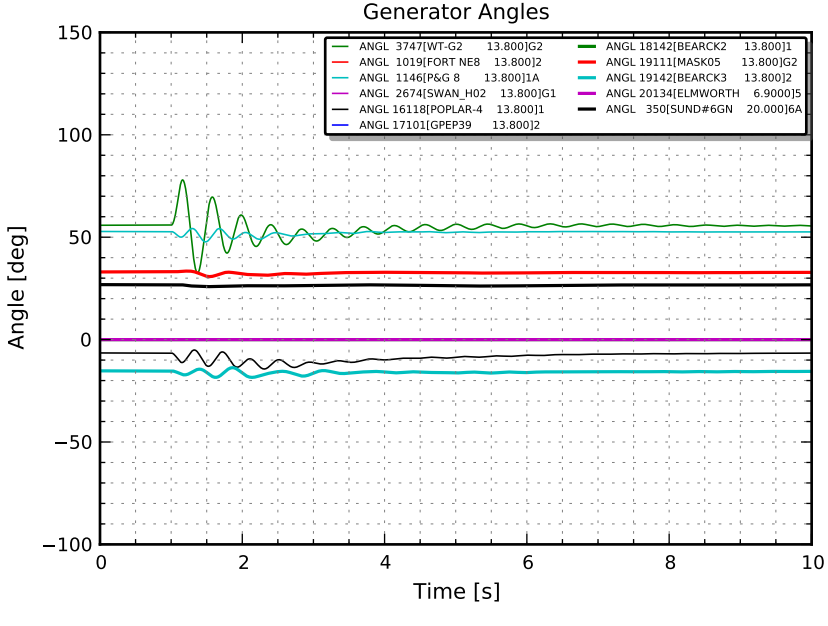
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 023 7L58 KEGRIVER to Meikle_B.

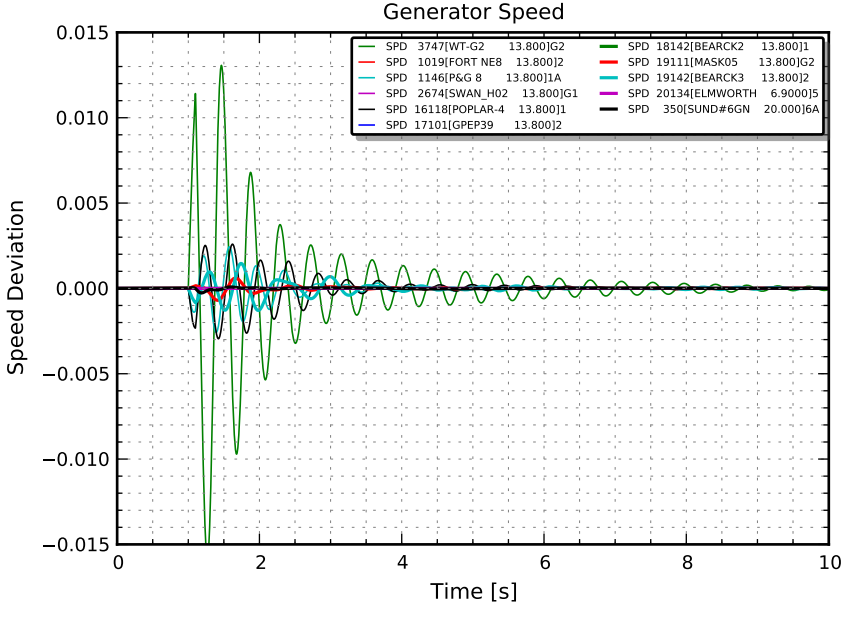
Study Area Generators

Appendix E2B
Figure: 023 (B. 2)





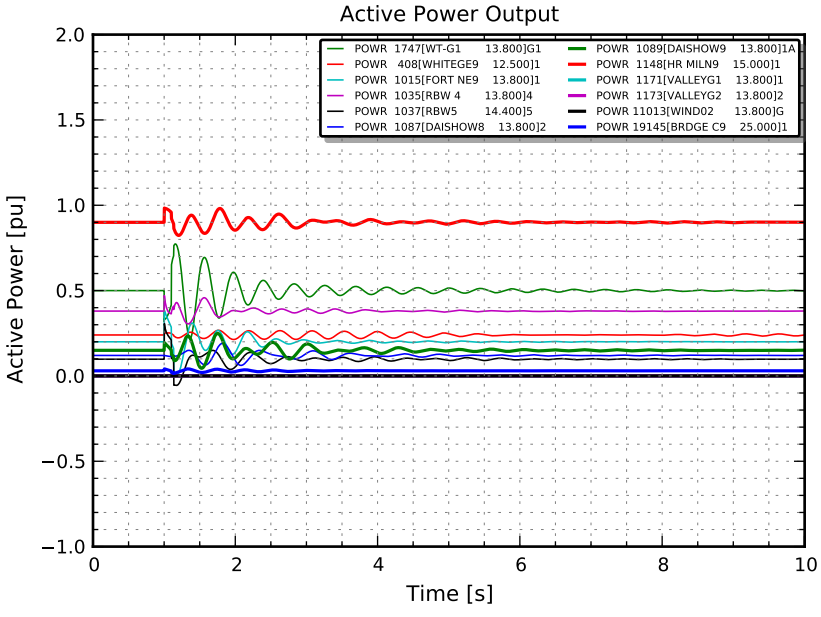


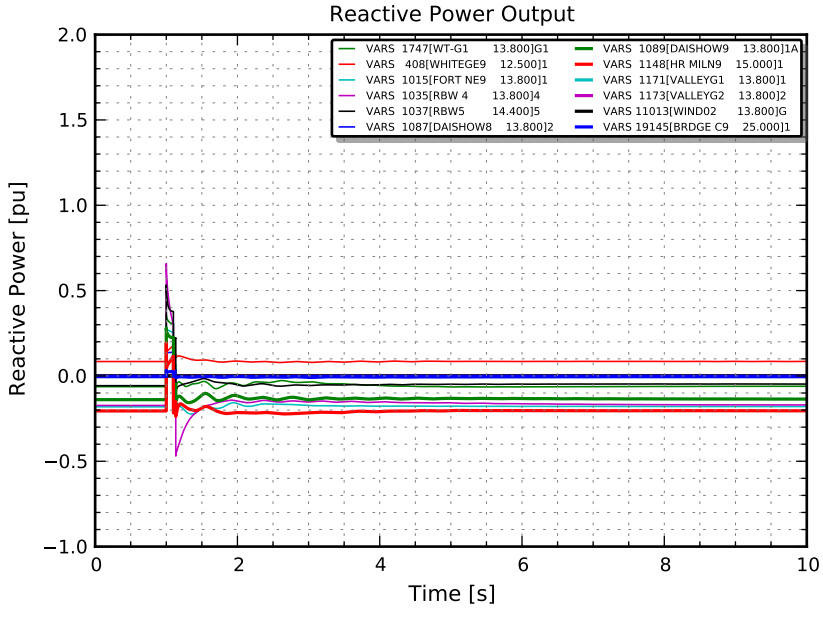


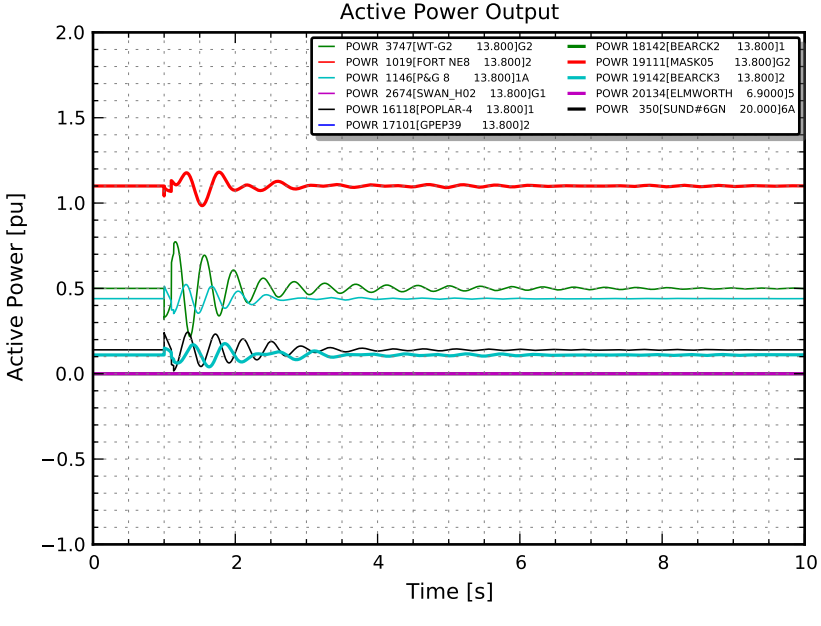
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 023 7L58 KEGRIVER to Meikle_B.

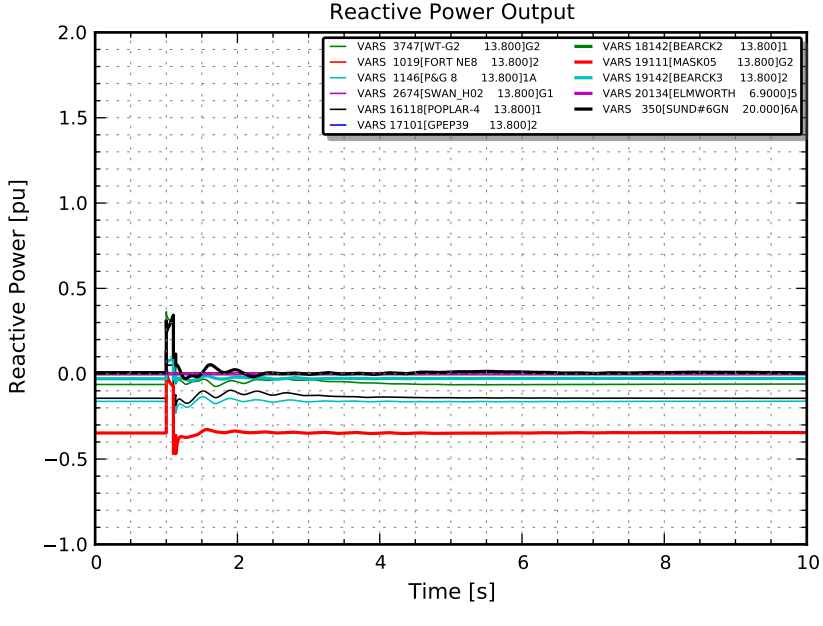
Study Area Generators

Appendix E2B
Figure: 023 (B. 3)





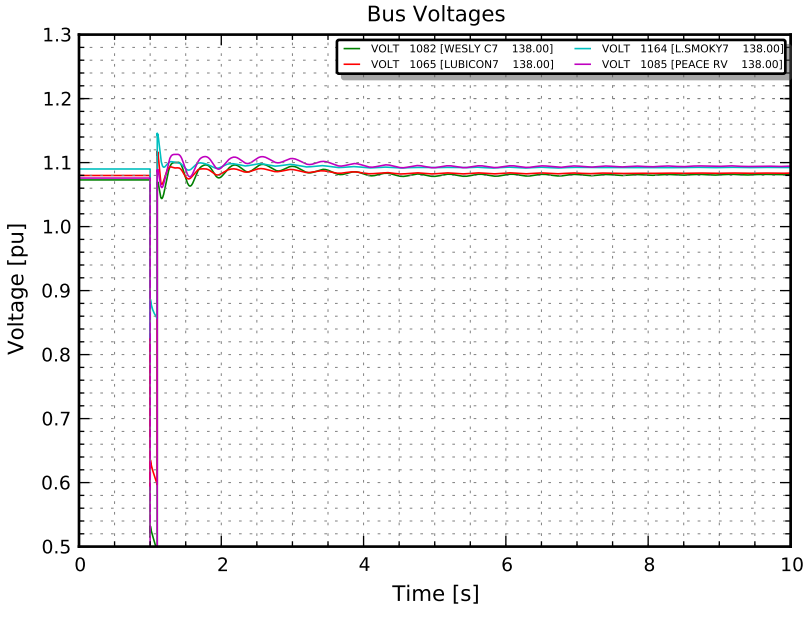


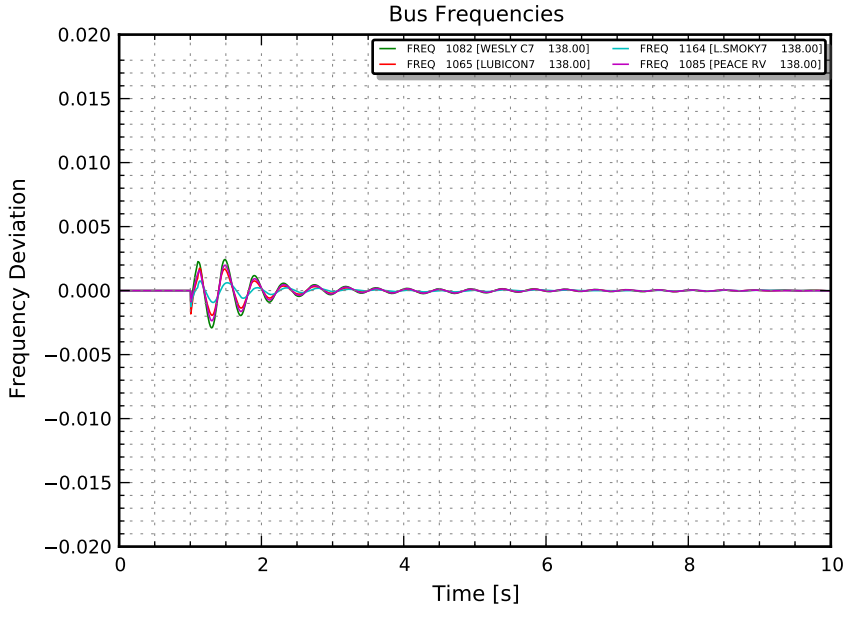


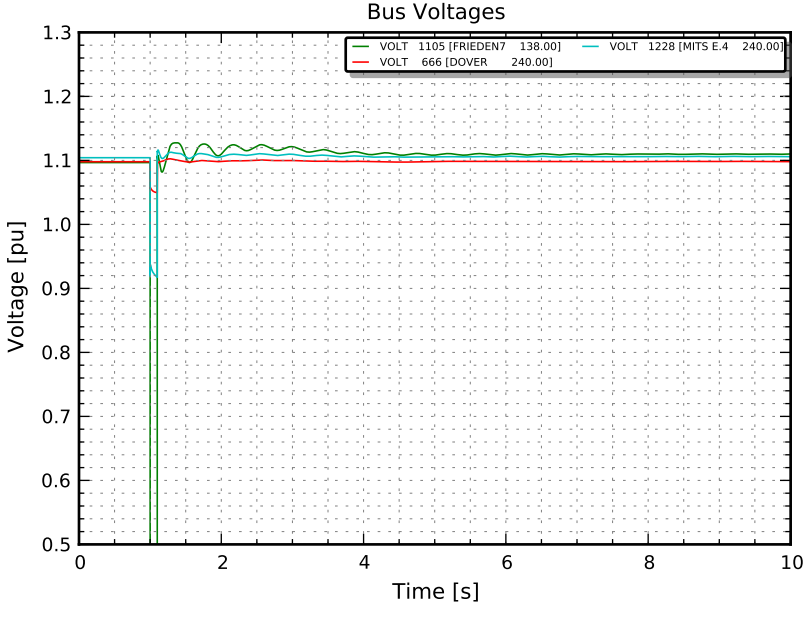
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 024 7L04 WESTPEACE to DAISHOWA_A.

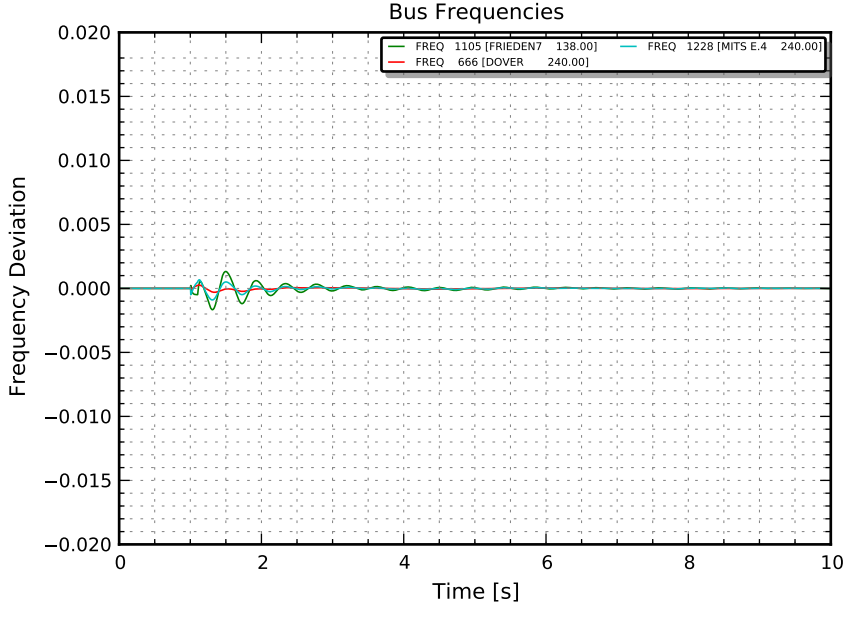
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 024 (A. 1)





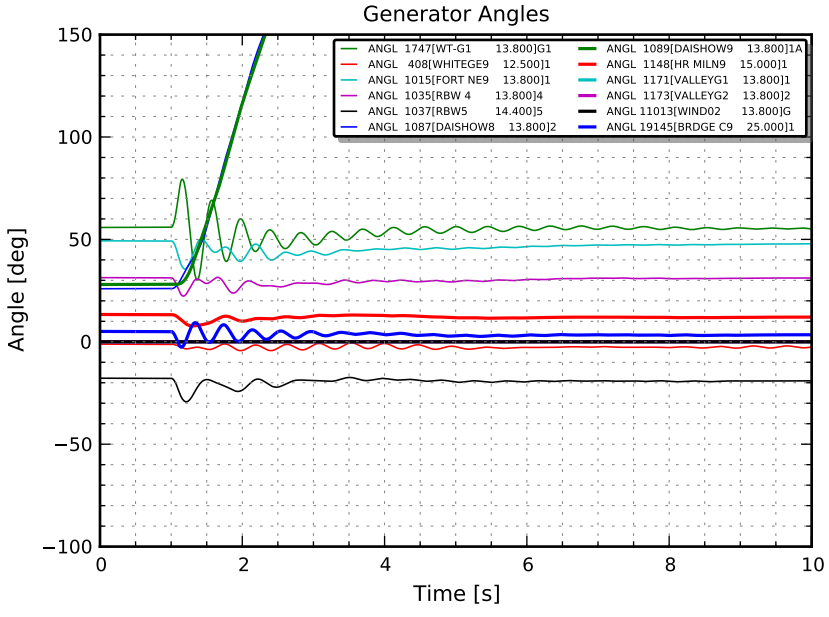


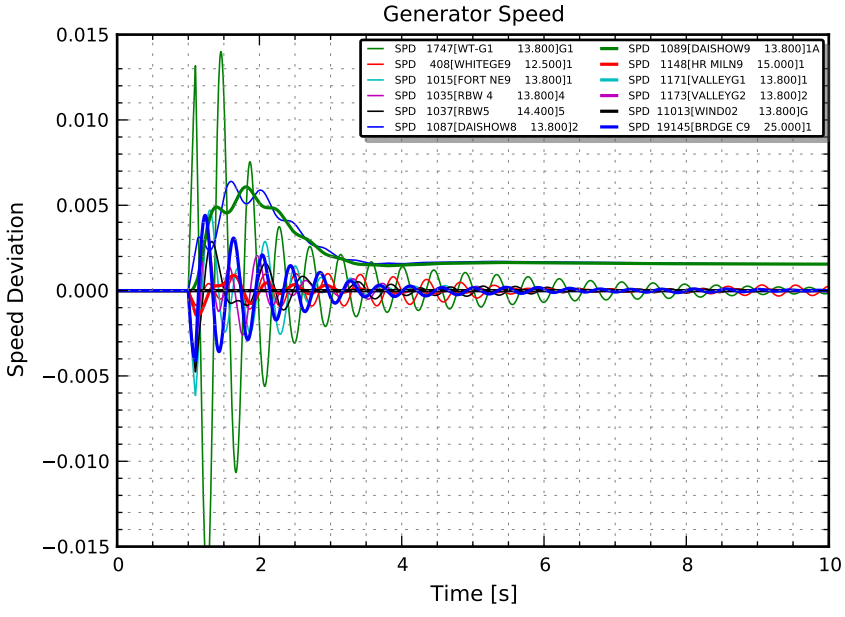


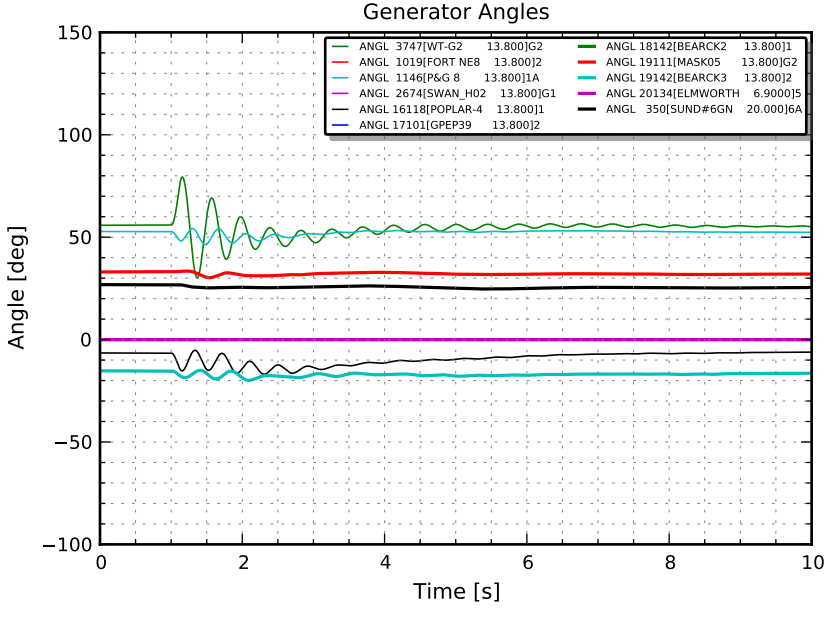
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 024 7L04 WESTPEACE to DAISHOWA_A.

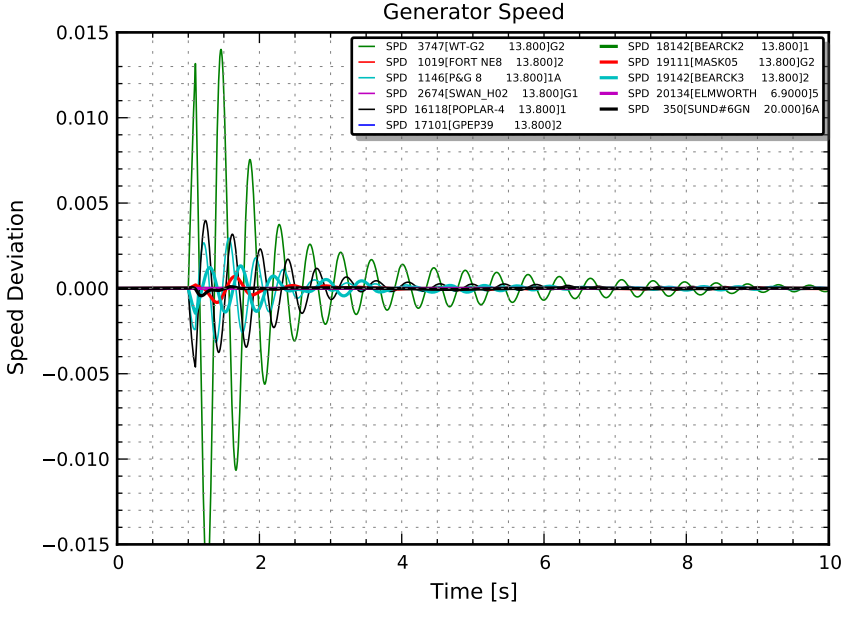
Study Area Generators

Appendix E2B
Figure: 024 (A. 2)





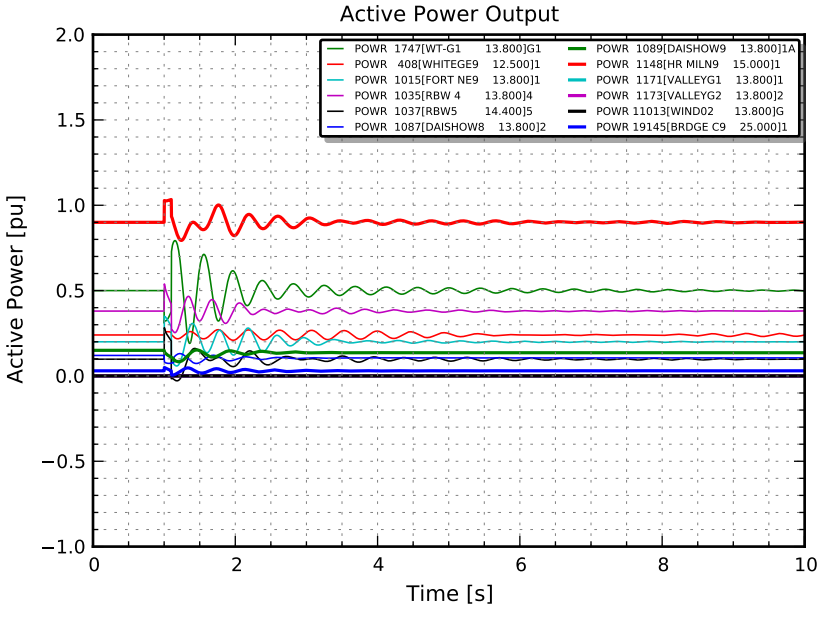


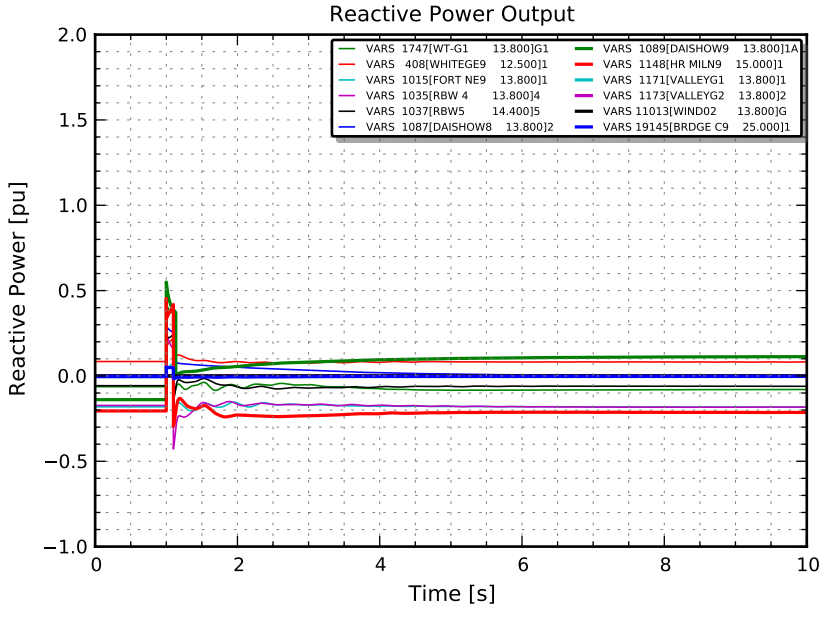


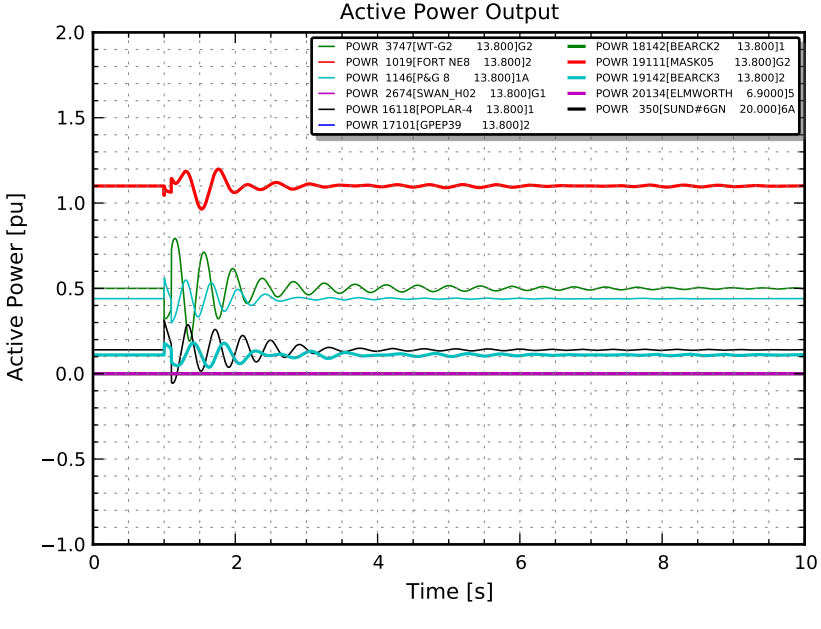
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 024 7L04 WESTPEACE to DAISHOWA_A.

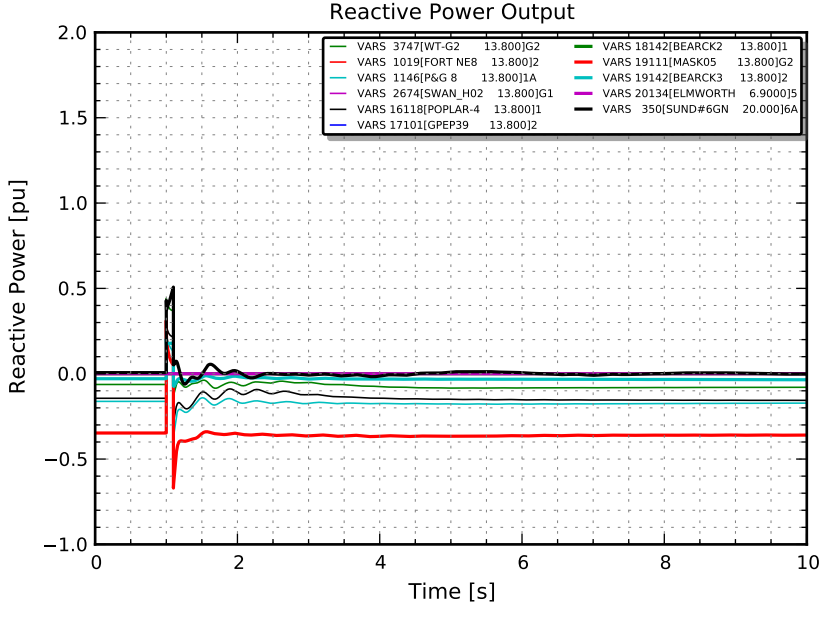
Study Area Generators

Appendix E2B
Figure: 024 (A. 3)





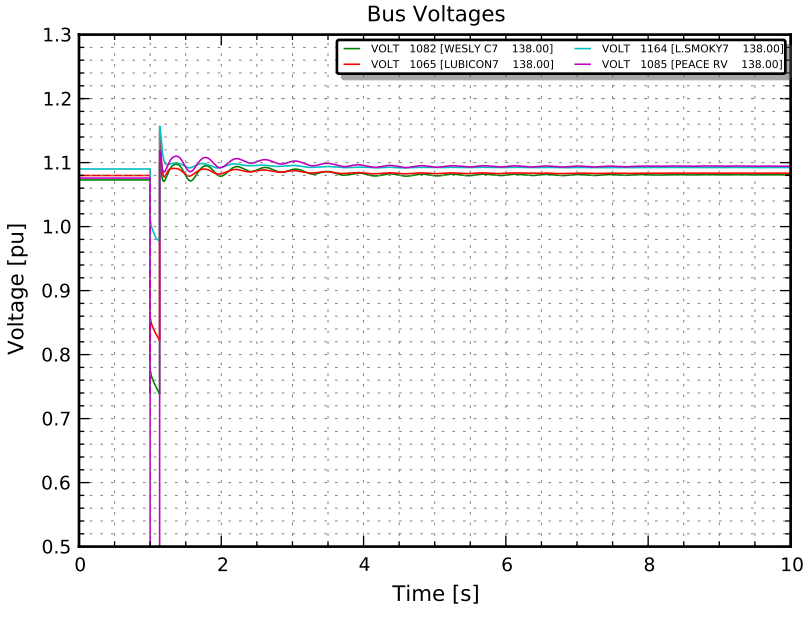


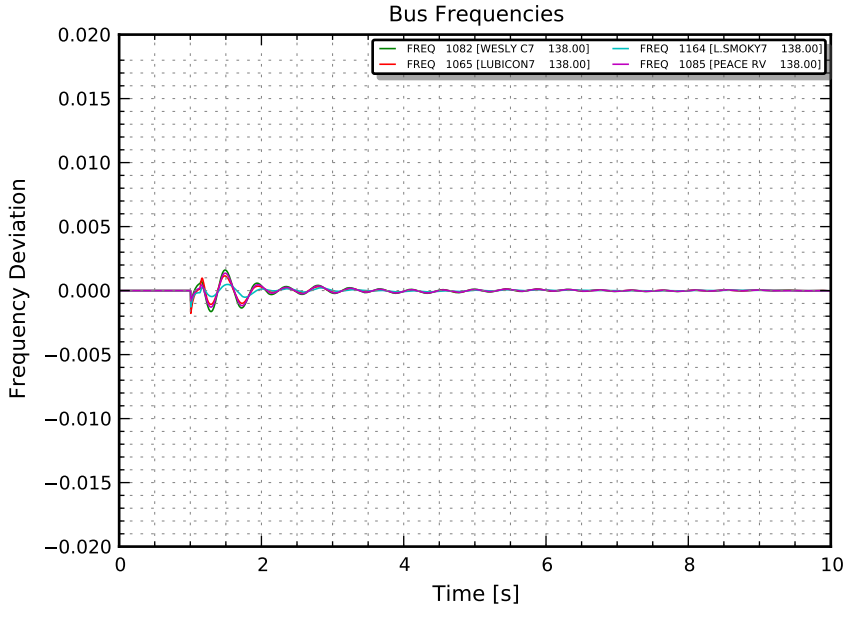


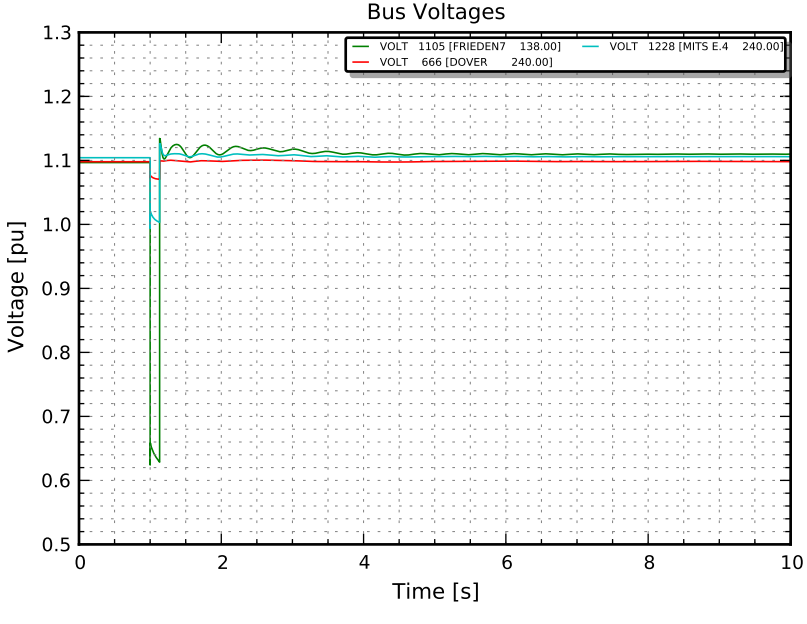
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 024 7L04 WESTPEACE to DAISHOWA_B.

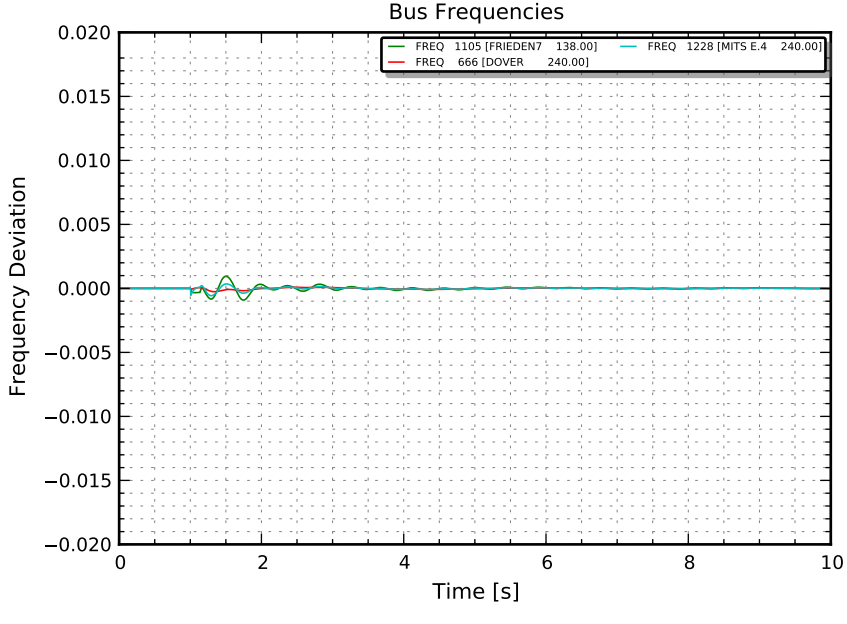
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 024 (B. 1)





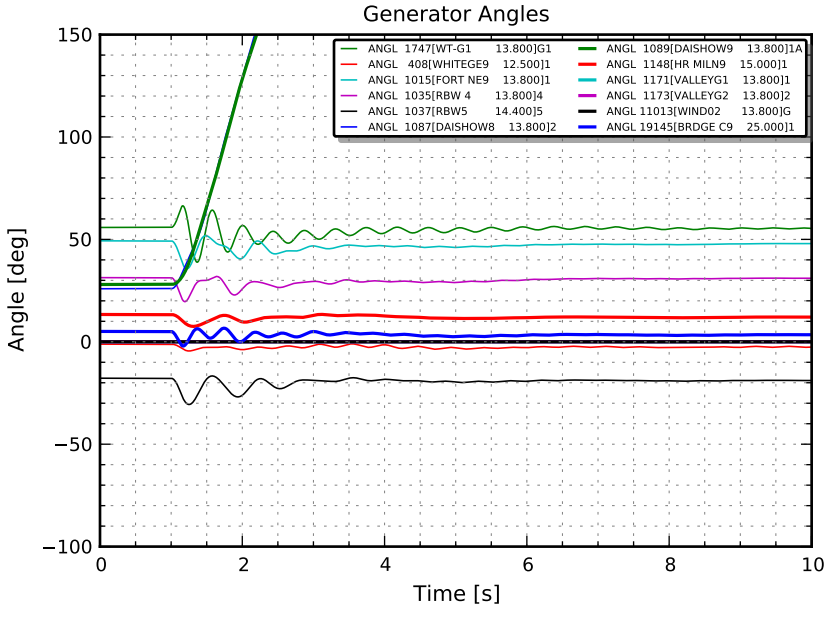


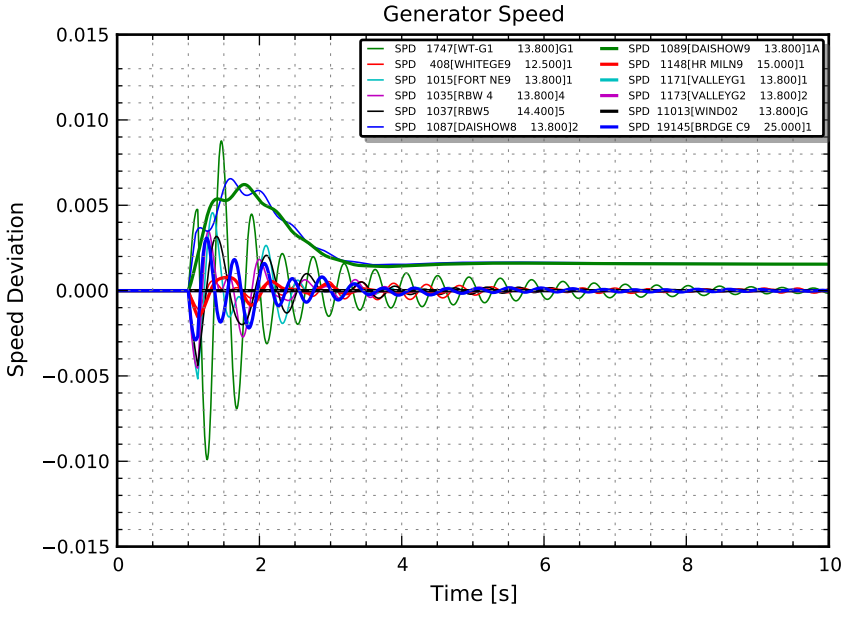


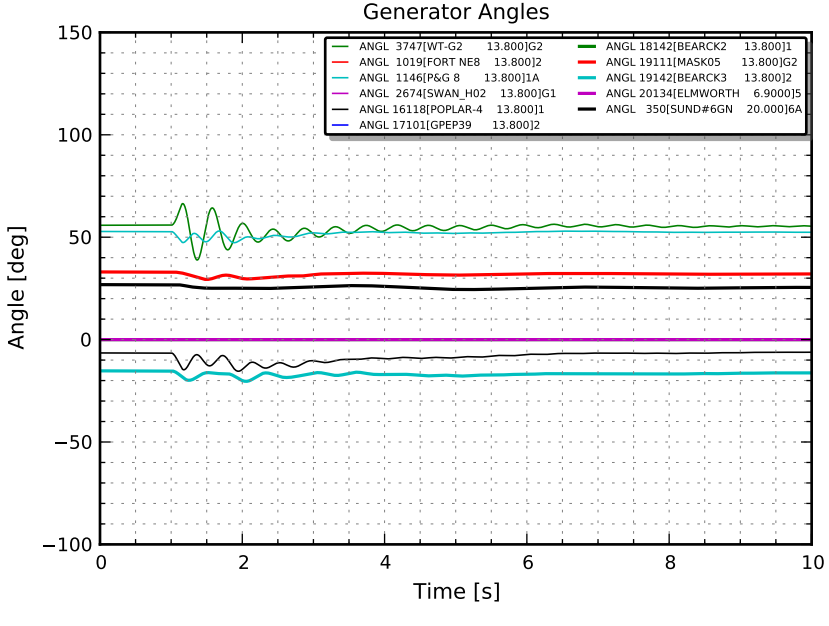
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 024 7L04 WESTPEACE to DAISHOWA_B.

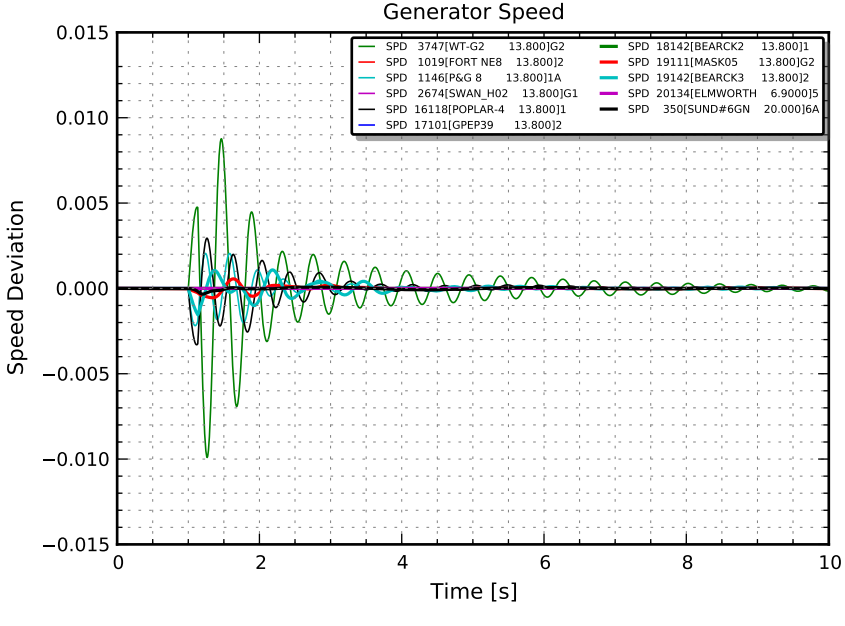
Study Area Generators

Appendix E2B
Figure: 024 (B. 2)





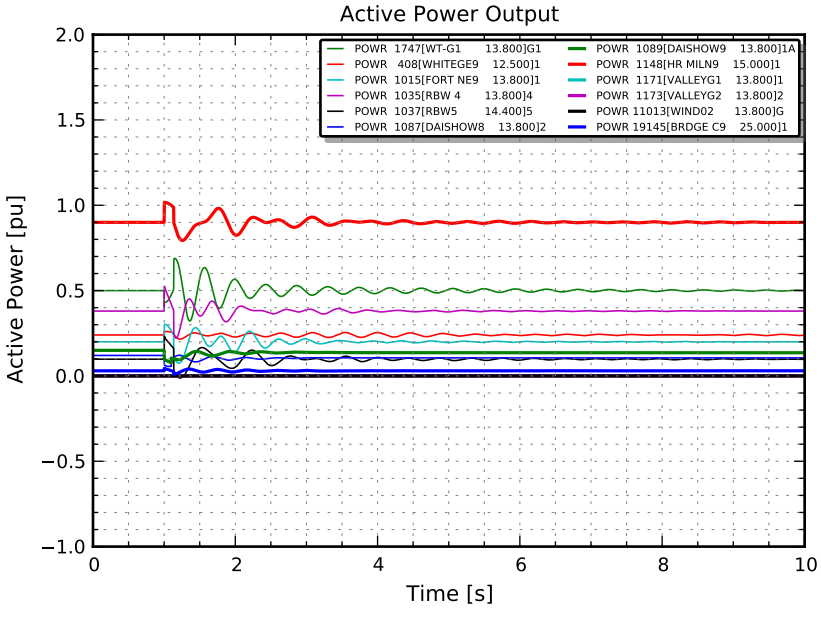


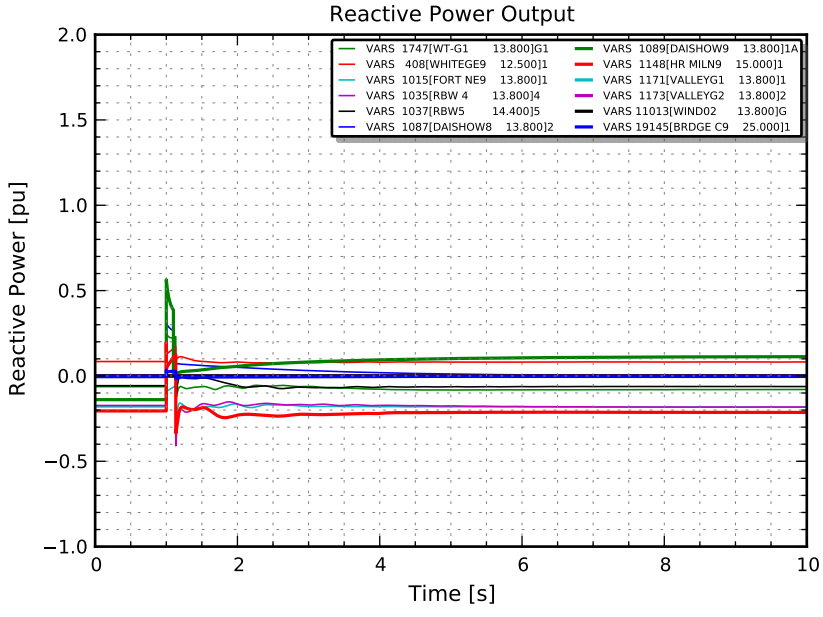


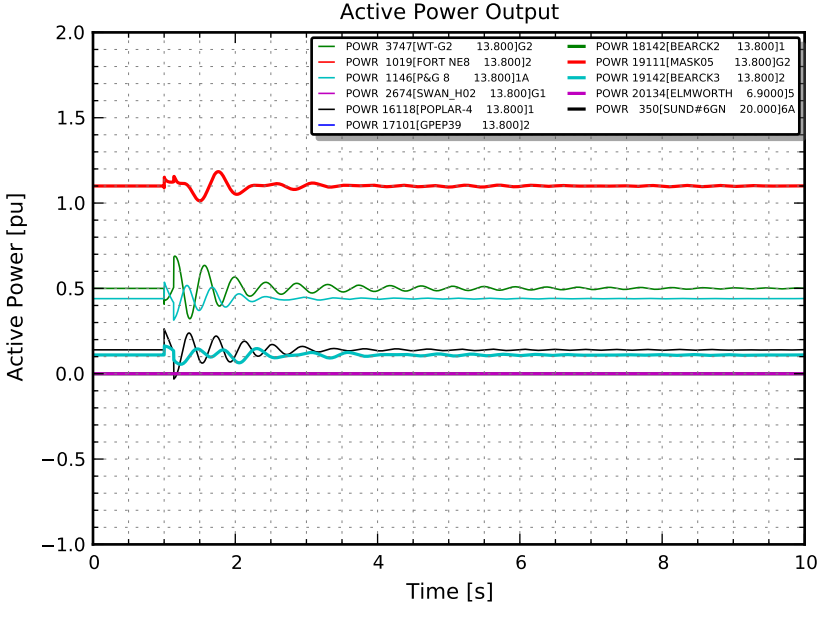
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 024 7L04 WESTPEACE to DAISHOWA_B.

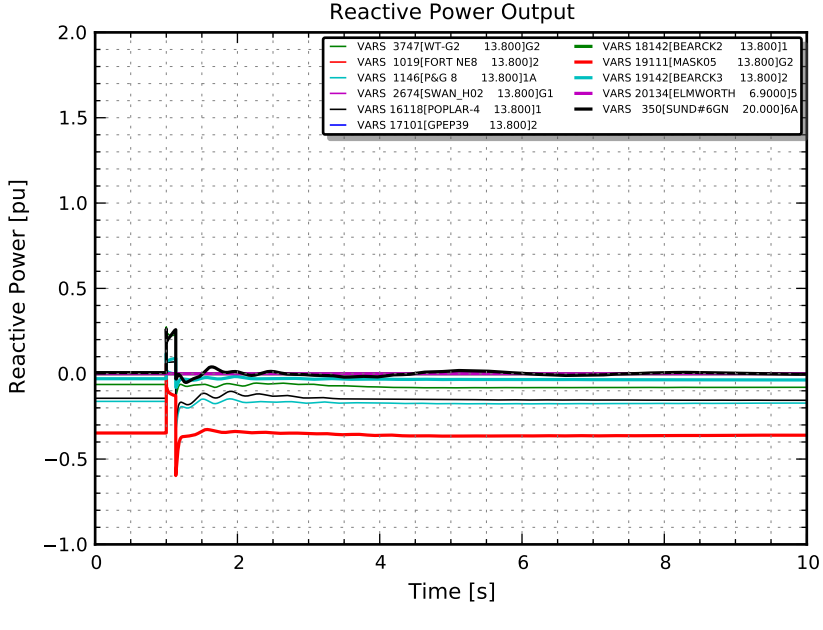
Study Area Generators

Appendix E2B
Figure: 024 (B. 3)





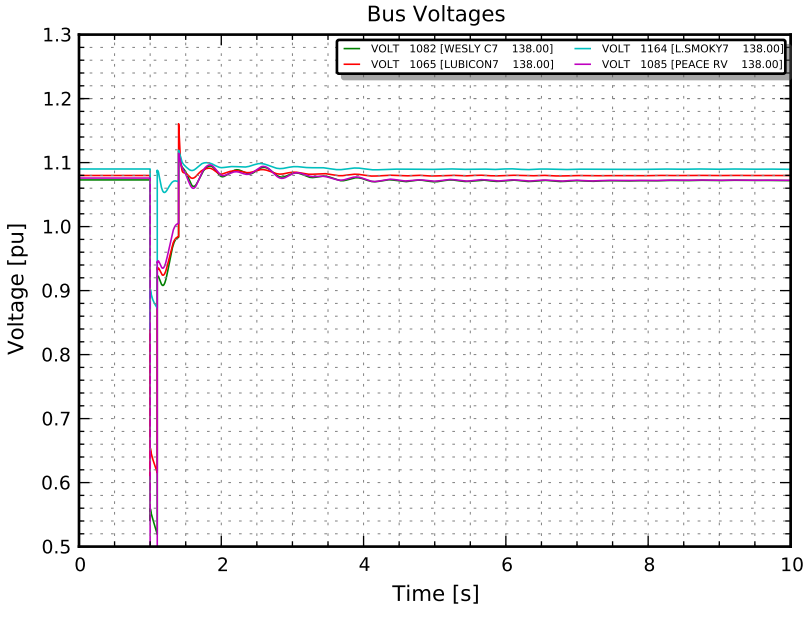


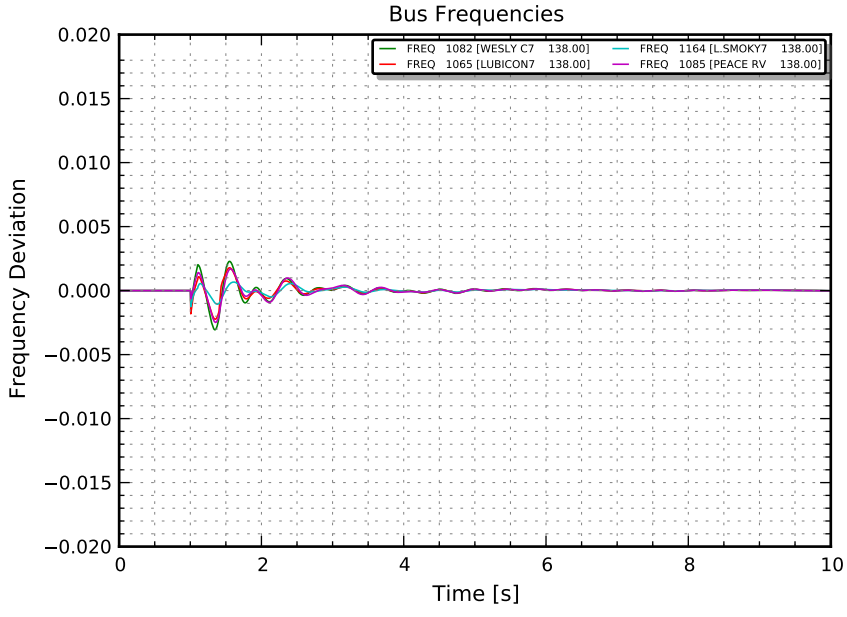


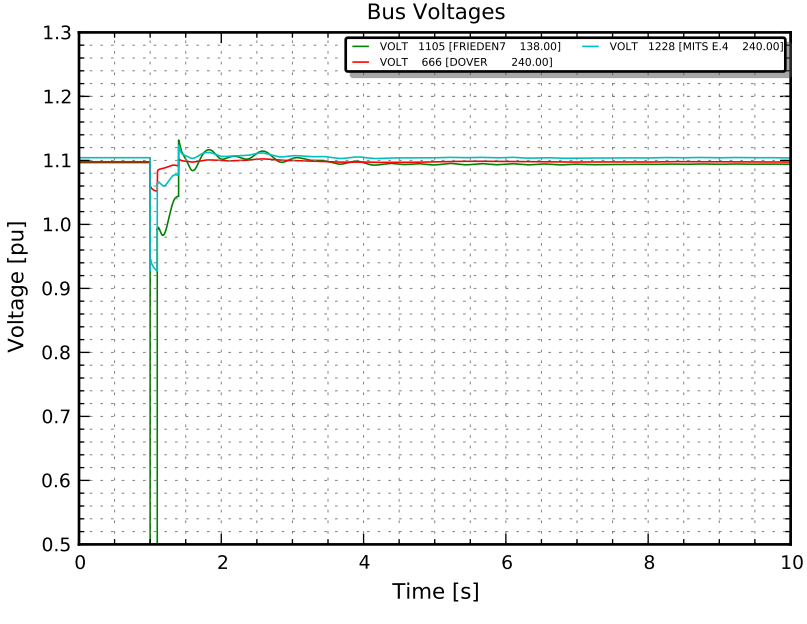
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 025 7L51 WESTPEACE to HOTCHKISS_A.

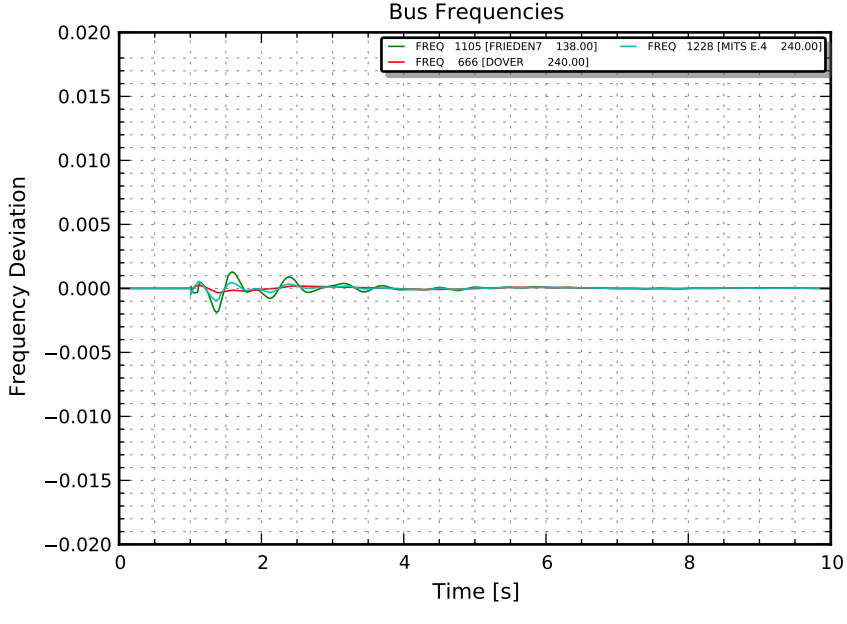
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 025 (A. 1)





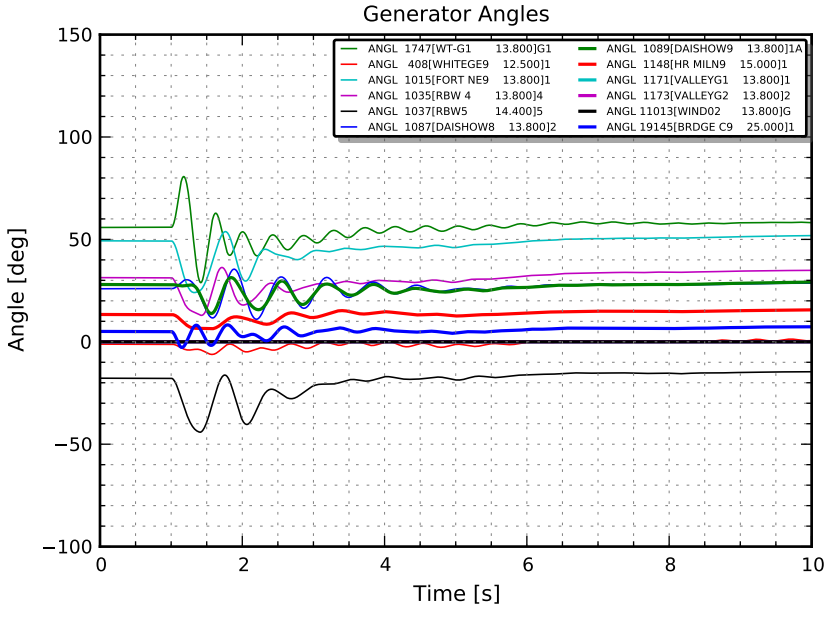


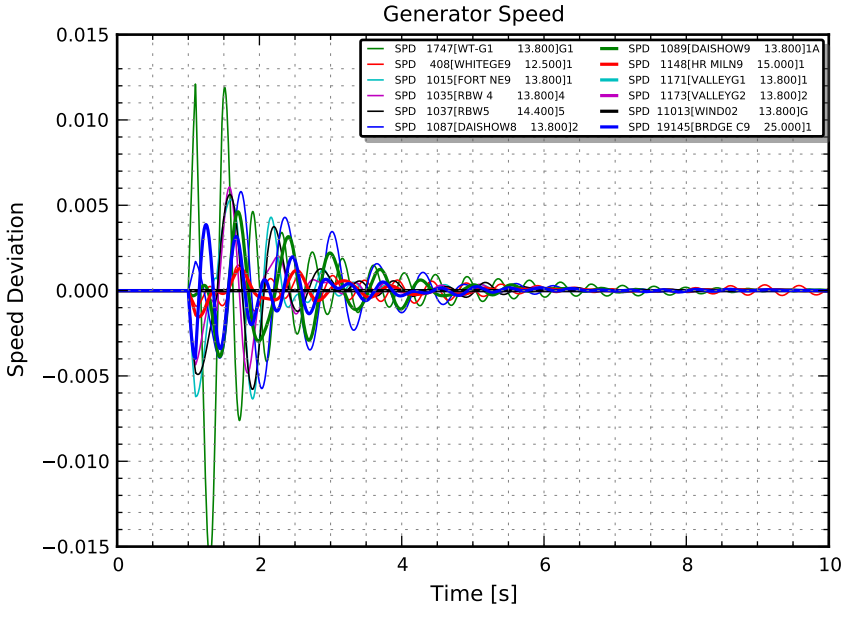


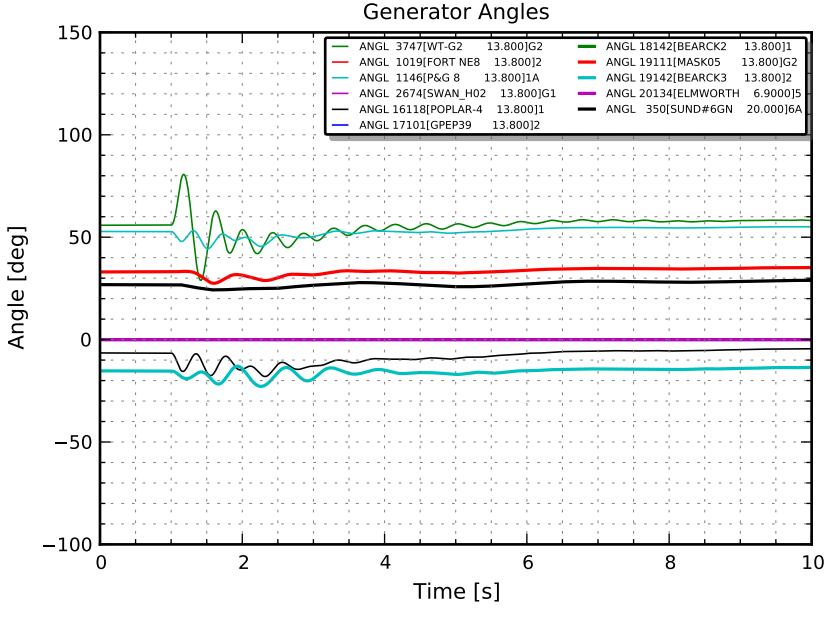
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 025 7L51 WESTPEACE to HOTCHKISS_A.

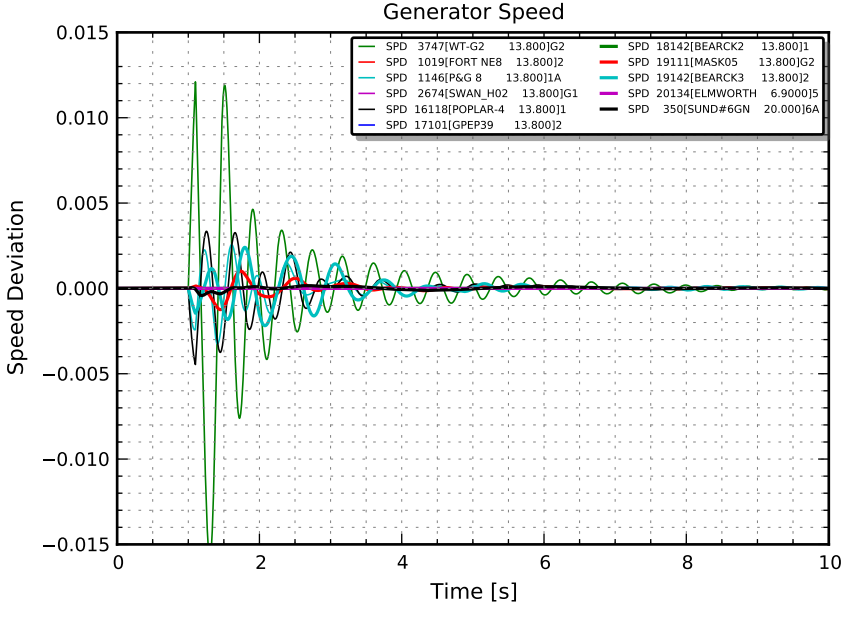
Study Area Generators

Appendix E2B
Figure: 025 (A. 2)





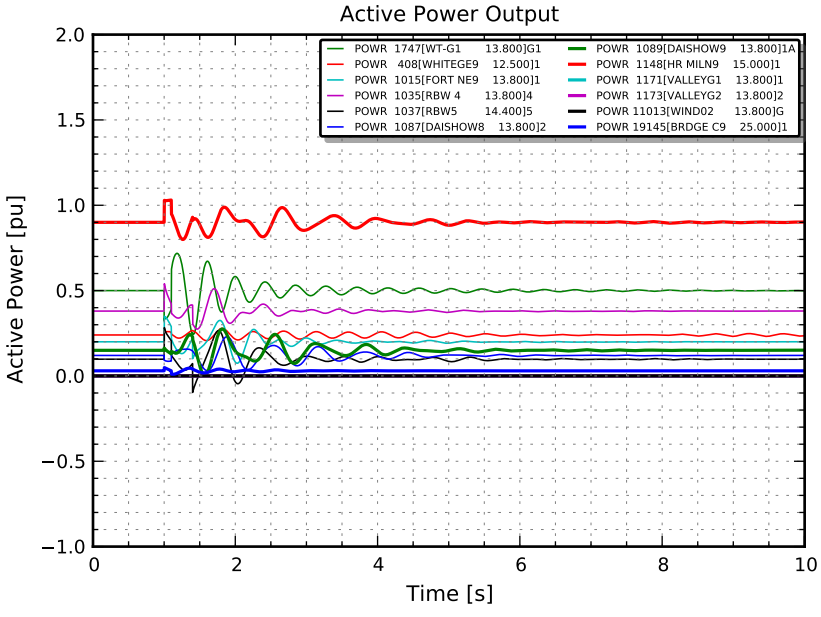


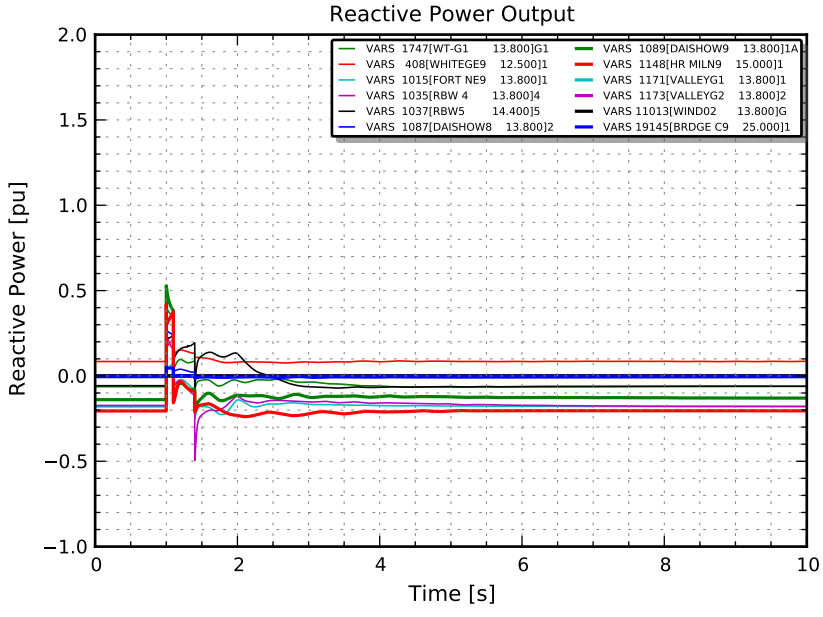


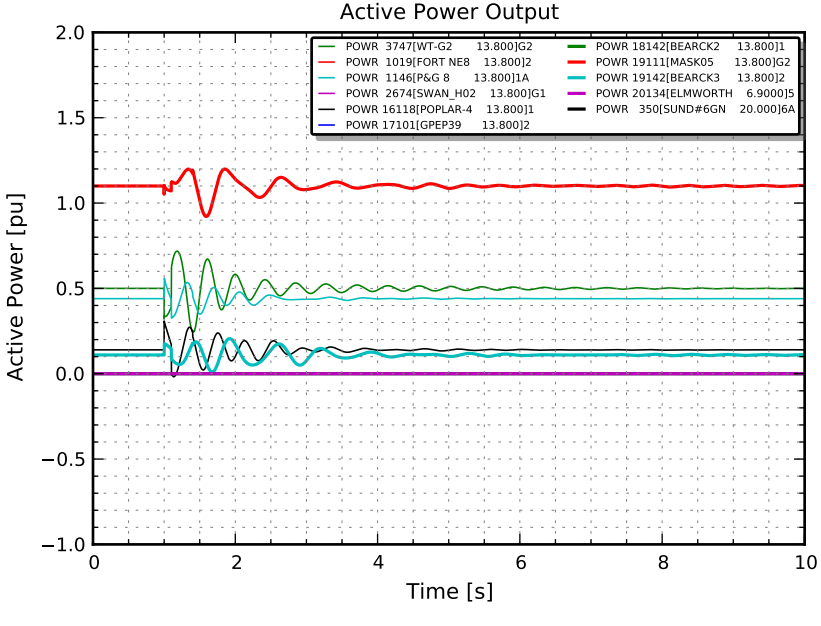
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 025 7L51 WESTPEACE to HOTCHKISS_A.

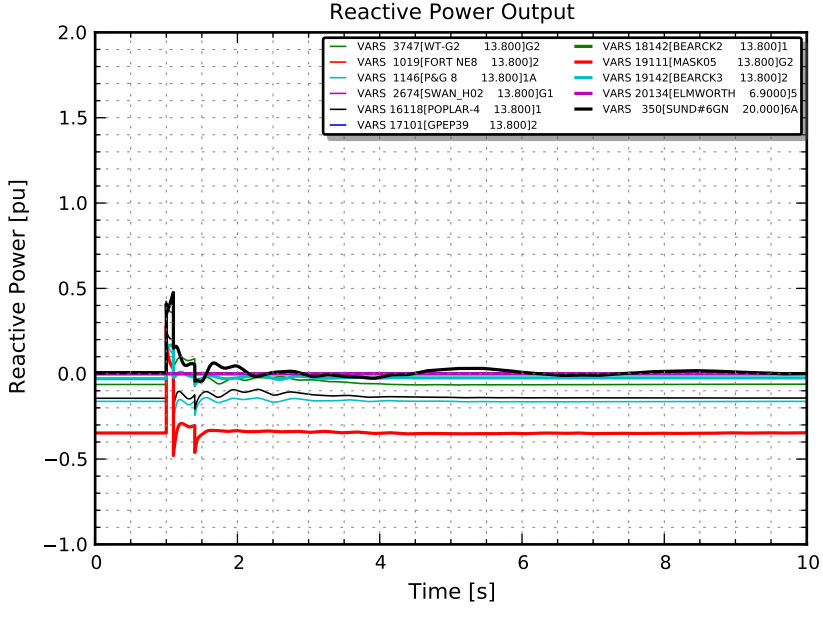
Study Area Generators

Appendix E2B
Figure: 025 (A. 3)





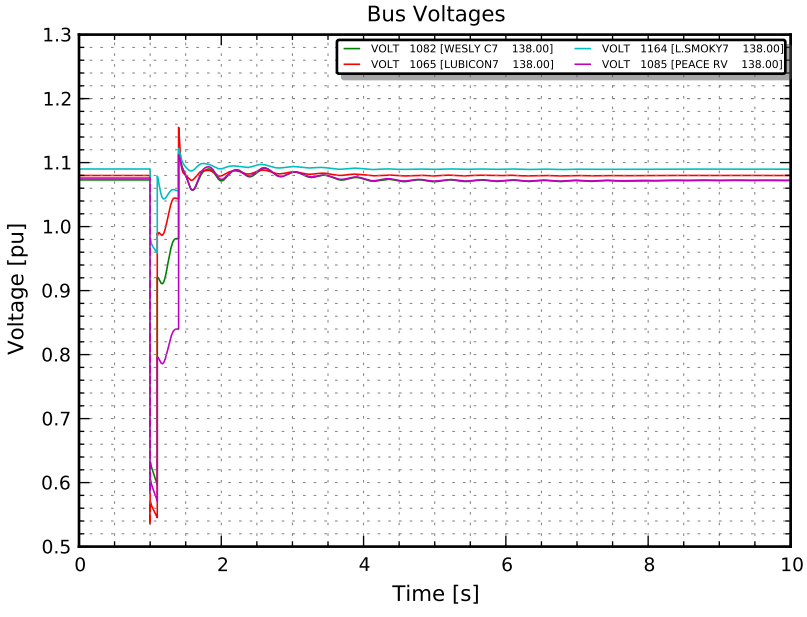


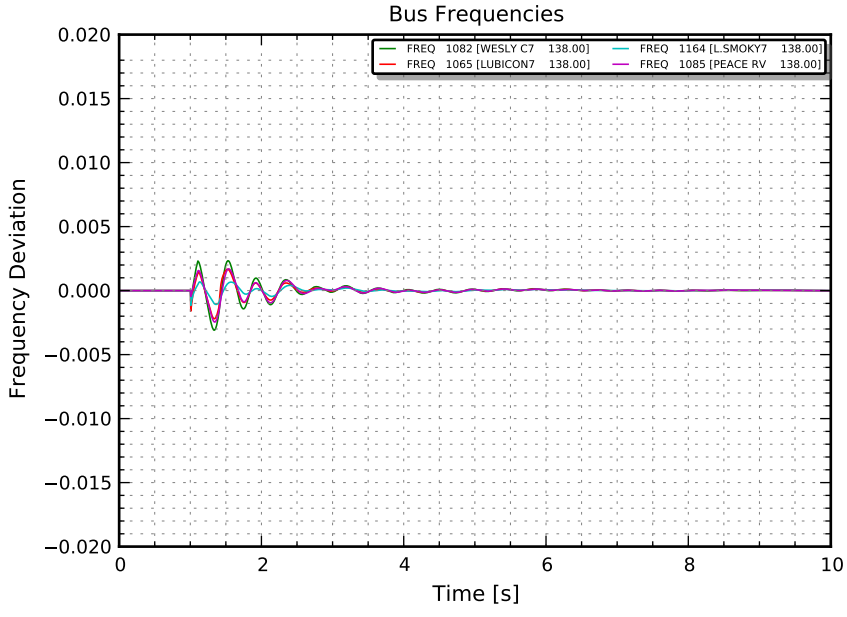


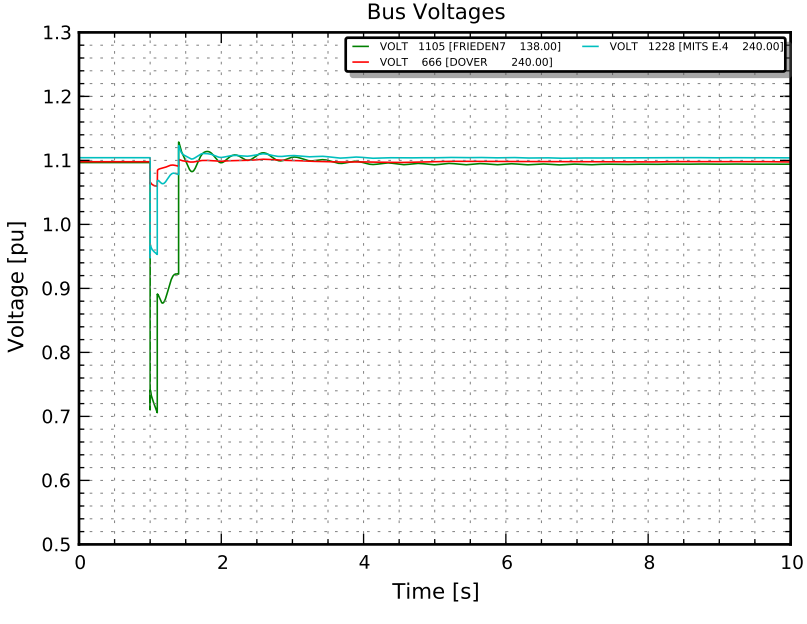
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 025 7L51 WESTPEACE to HOTCHKISS_B.

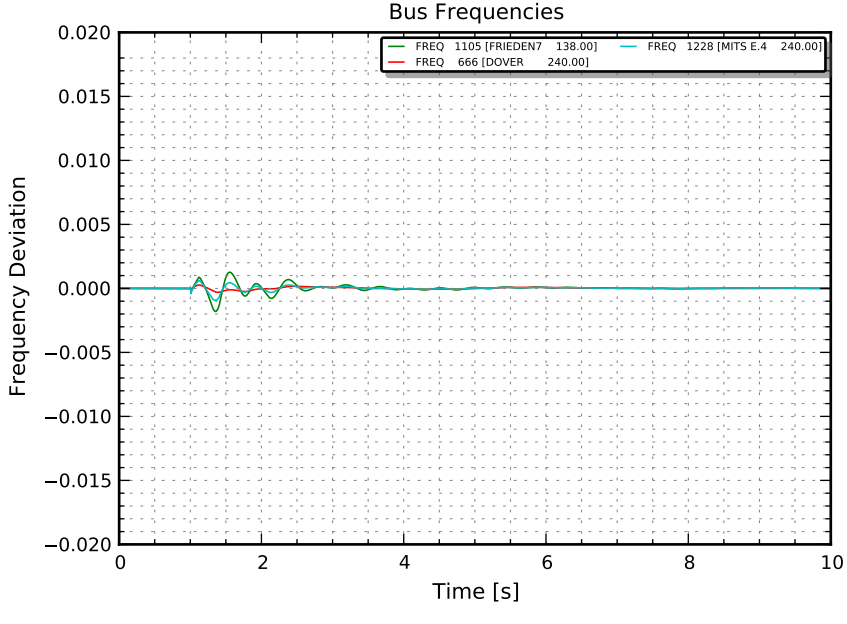
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 025 (B. 1)





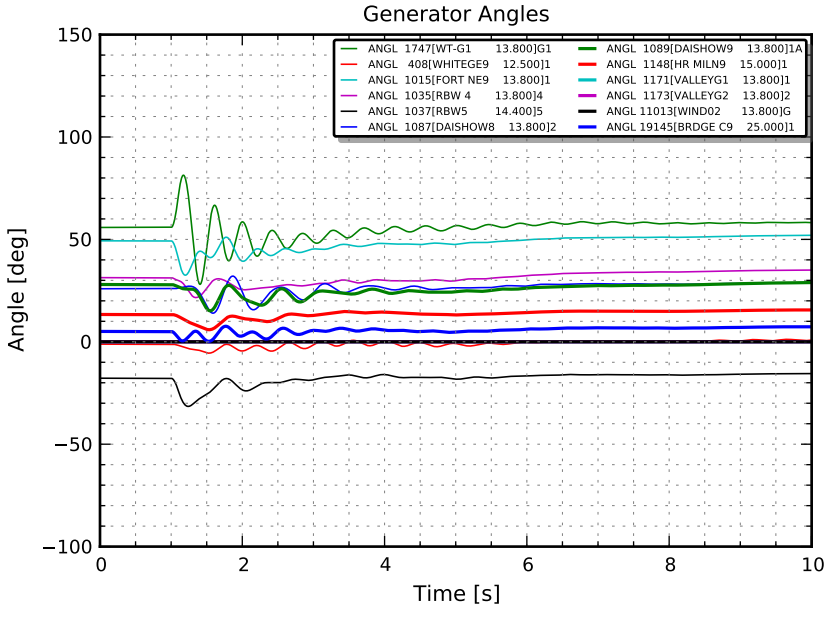


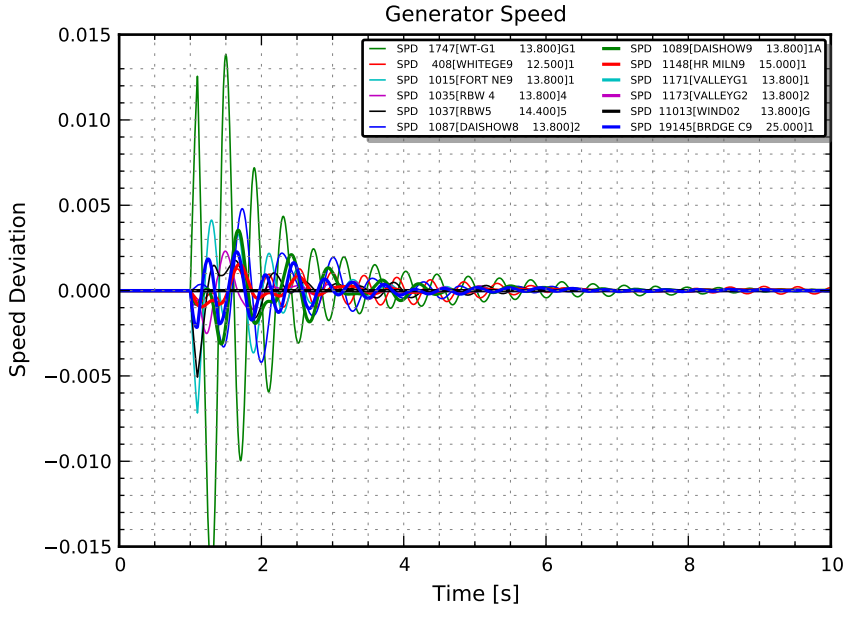


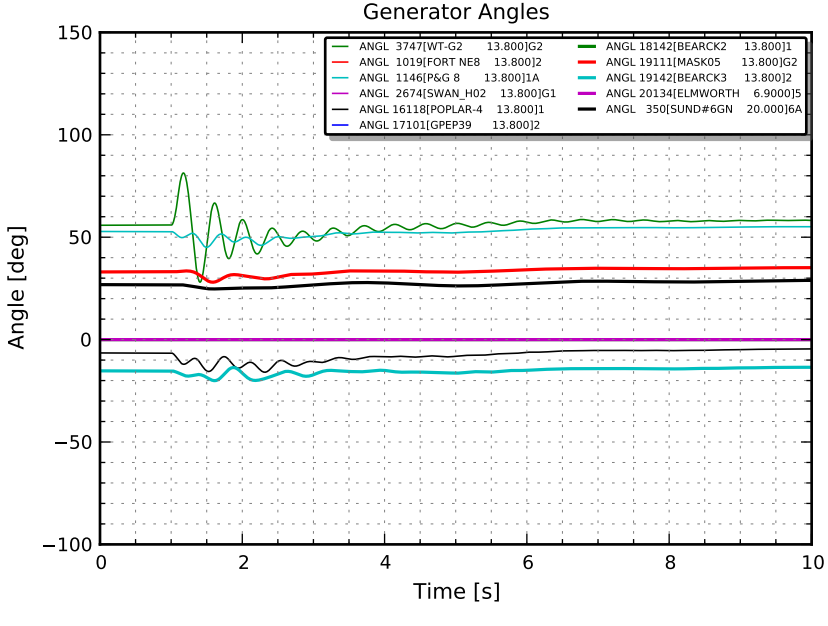
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 025 7L51 WESTPEACE to HOTCHKISS_B.

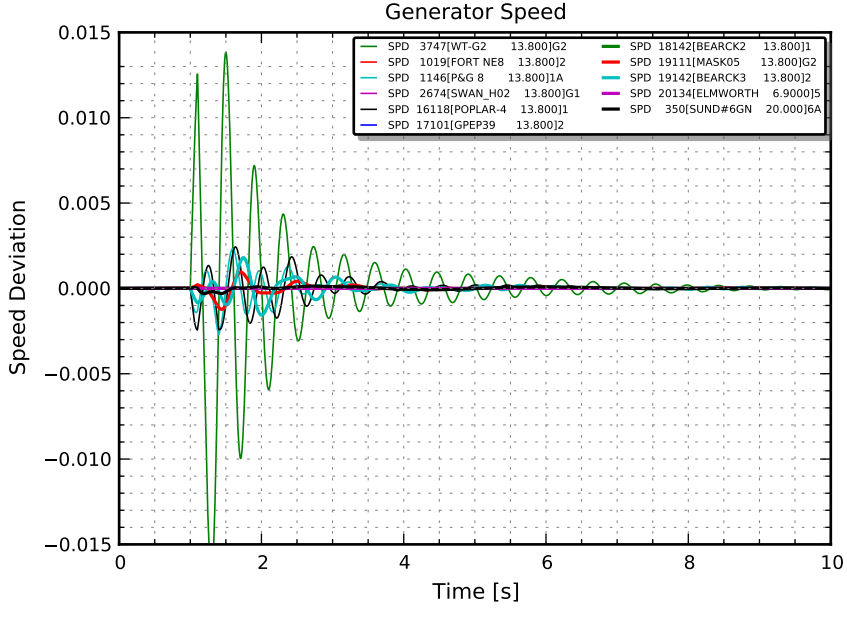
Study Area Generators

Appendix E2B
Figure: 025 (B. 2)





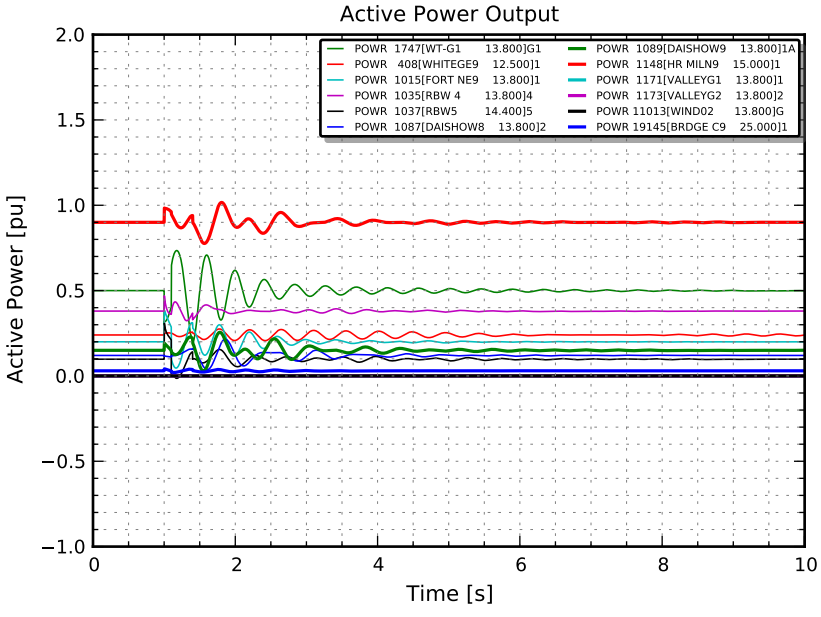


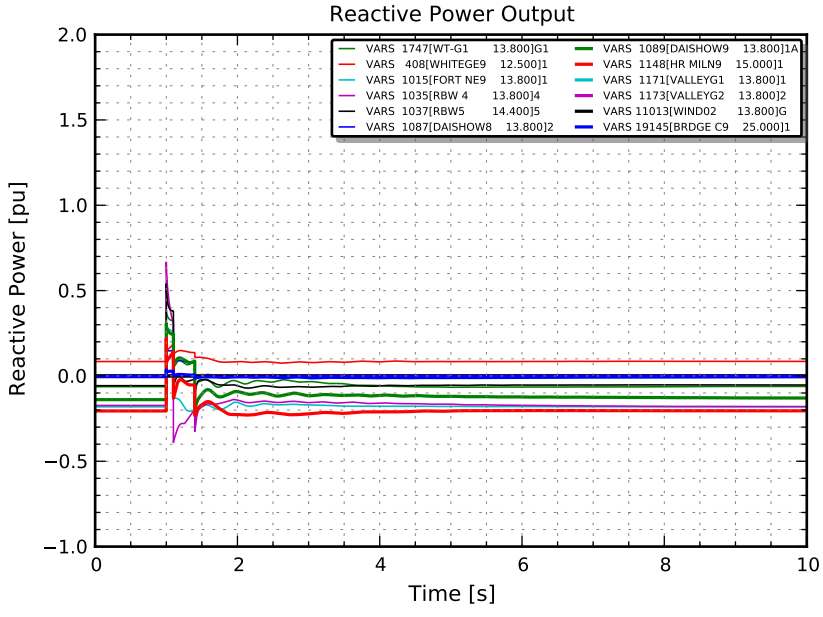


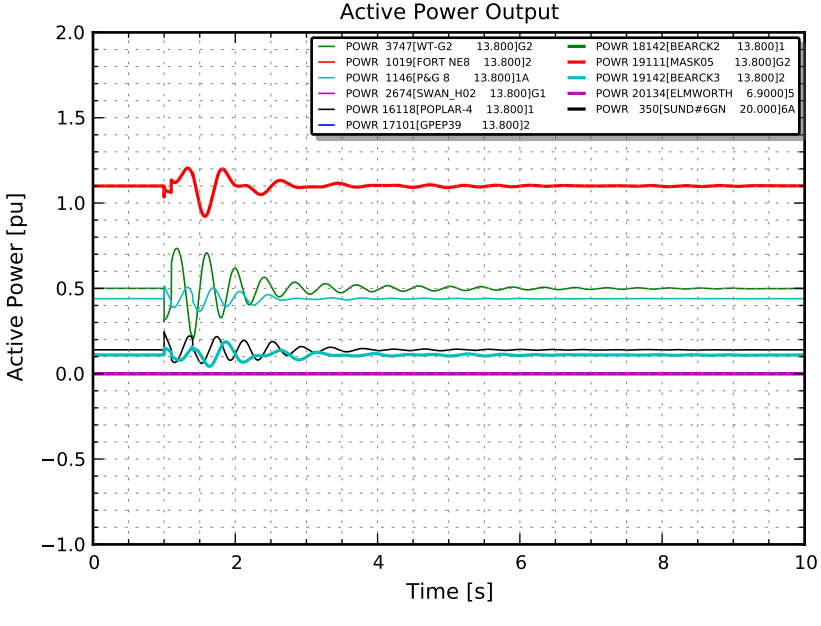
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 025 7L51 WESTPEACE to HOTCHKISS_B.

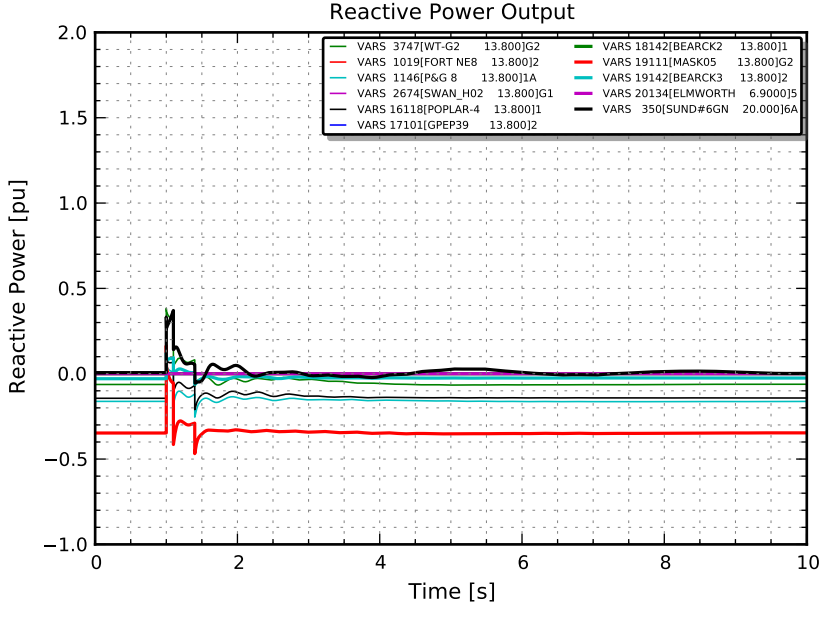
Study Area Generators

Appendix E2B
Figure: 025 (B. 3)





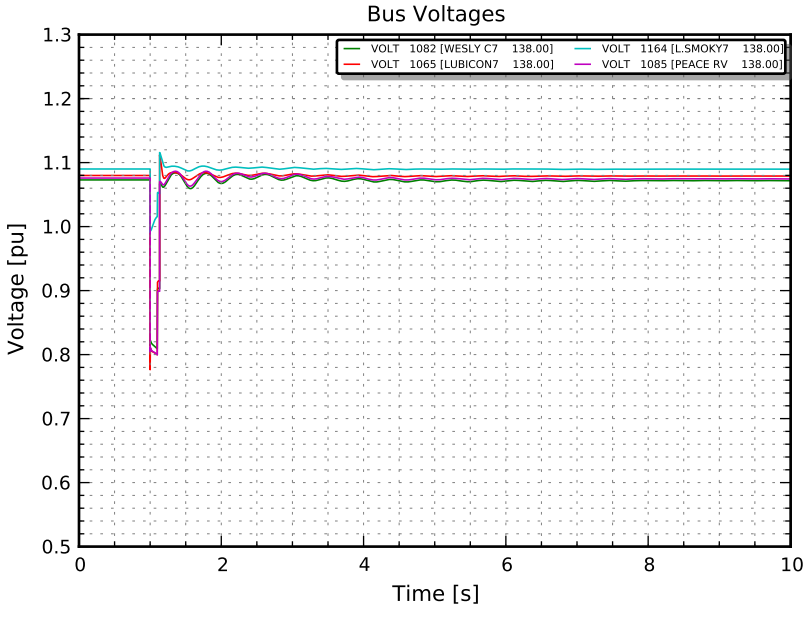


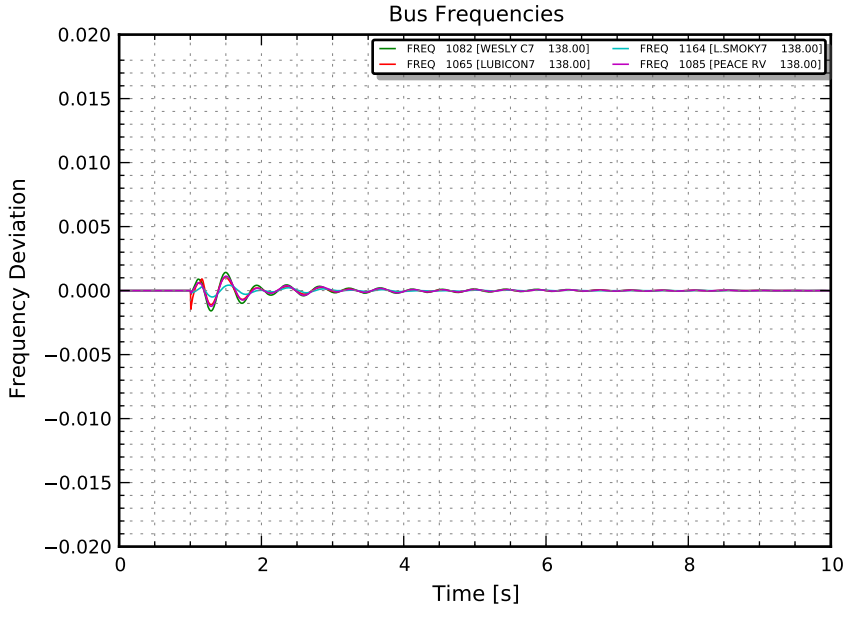


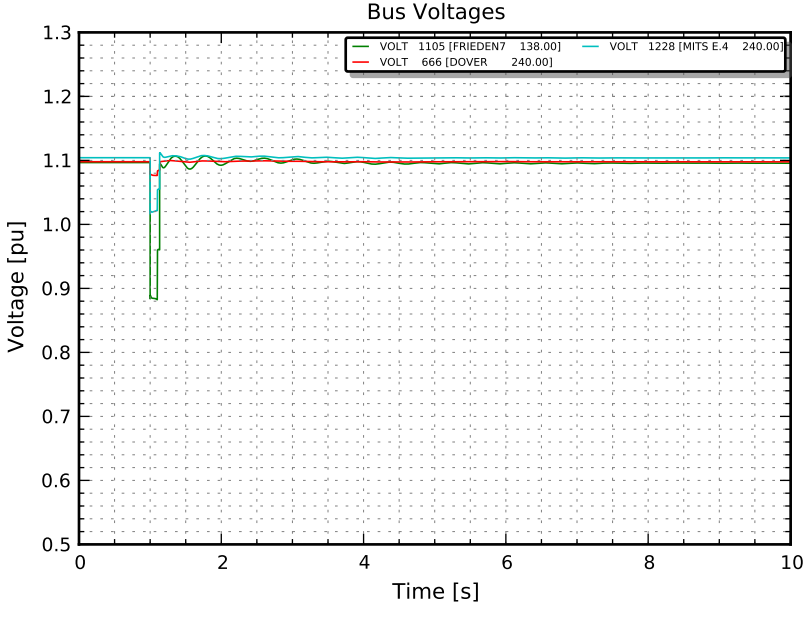
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 026 7L58 KEGRIVER to Meikle_A.

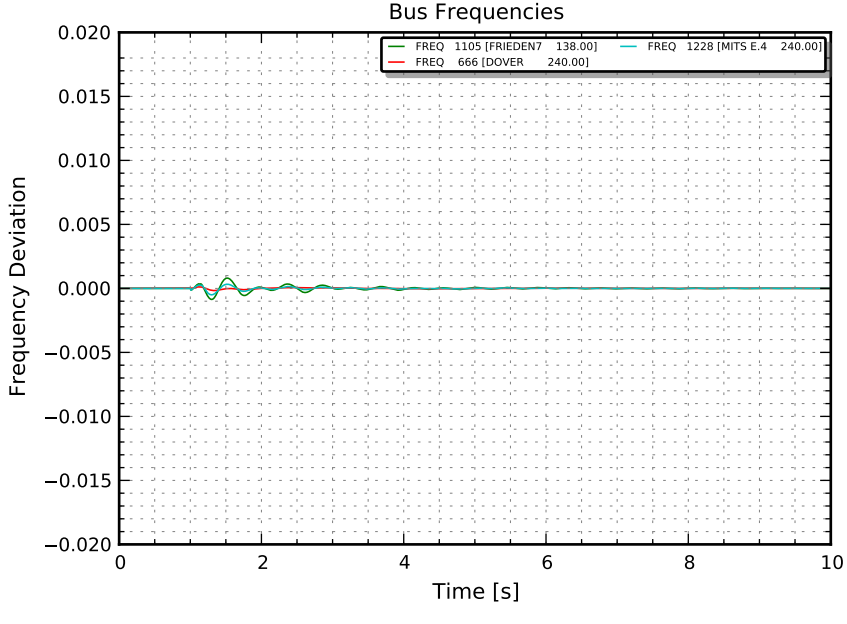
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 026 (A. 1)





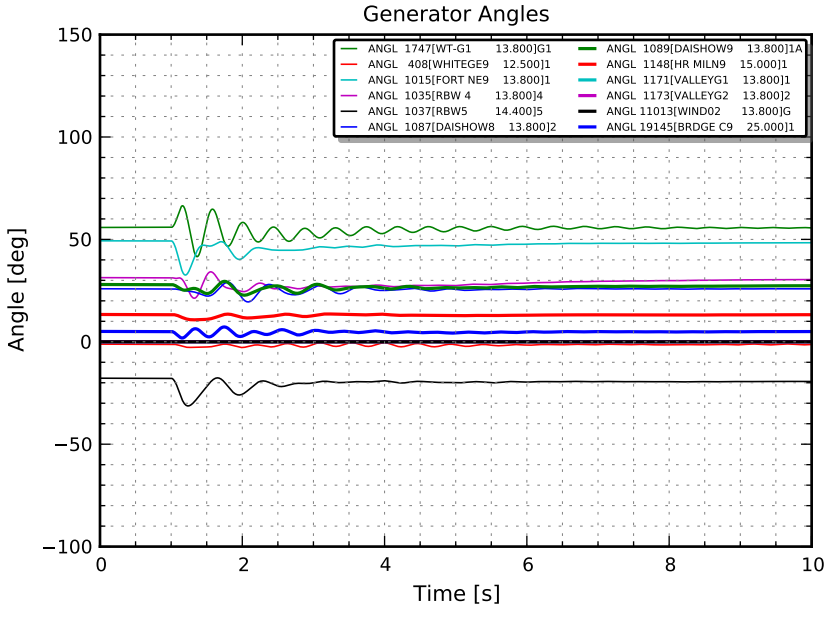


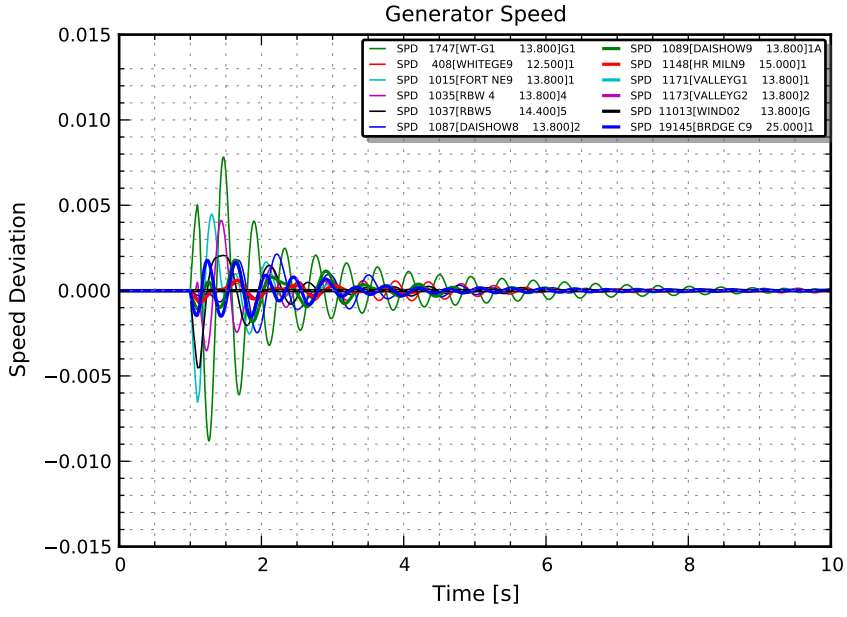


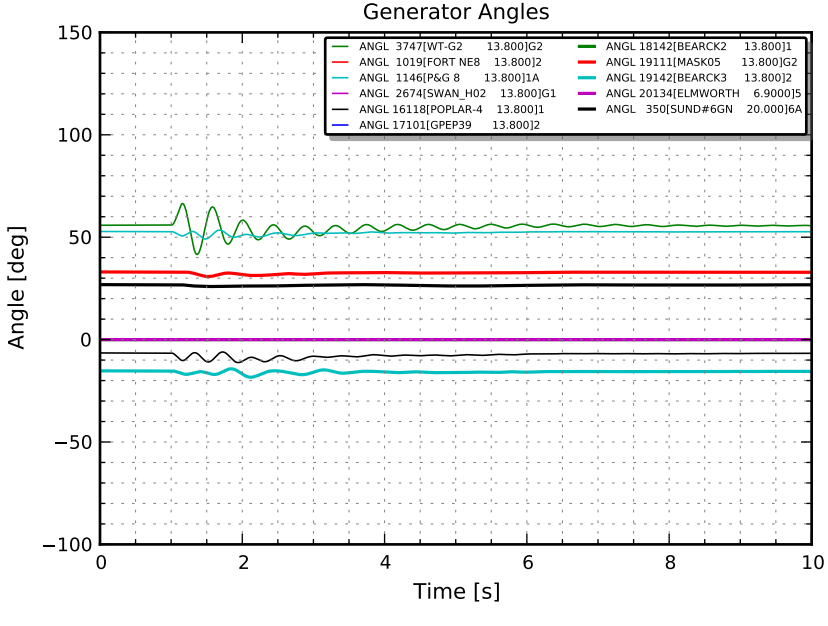
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 026 7L58 KEGRIVER to Meikle_A.

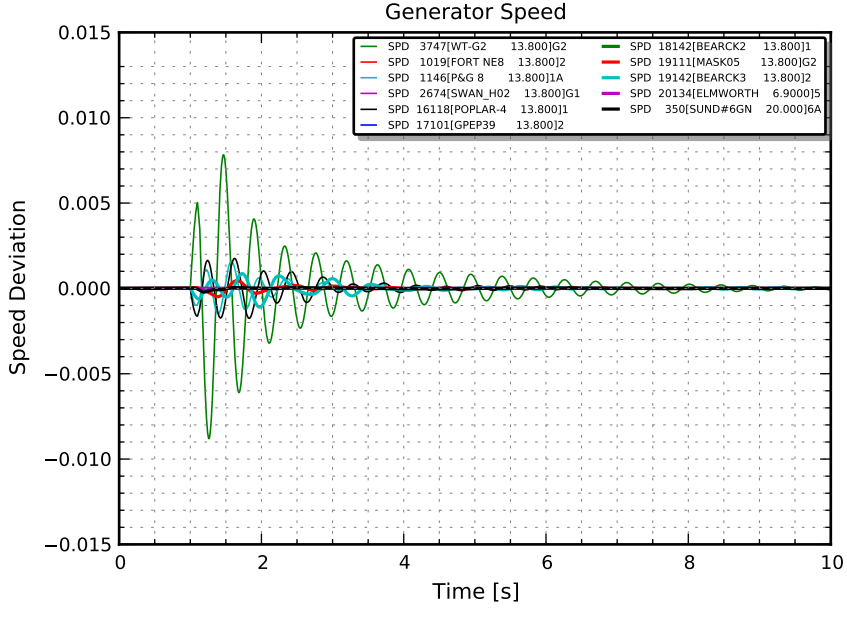
Study Area Generators

Appendix E2B
Figure: 026 (A. 2)





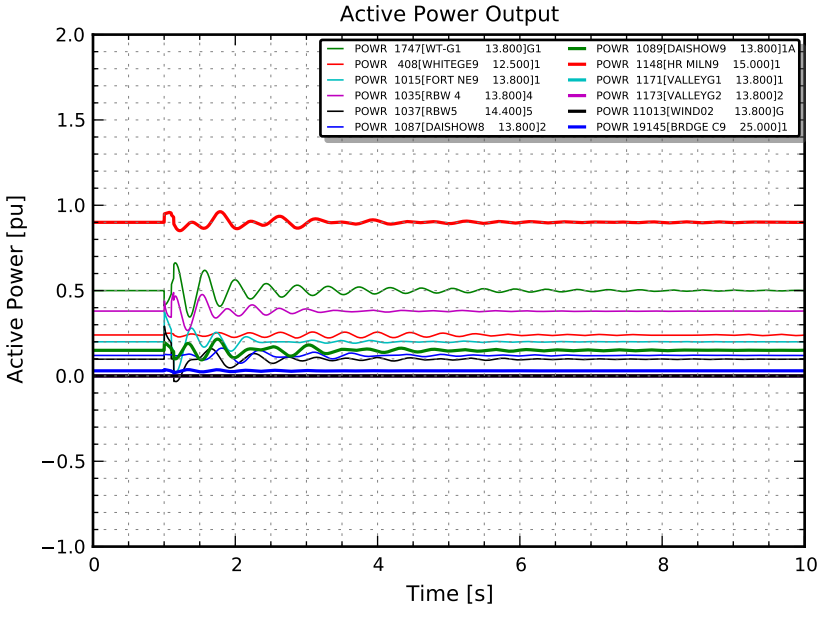


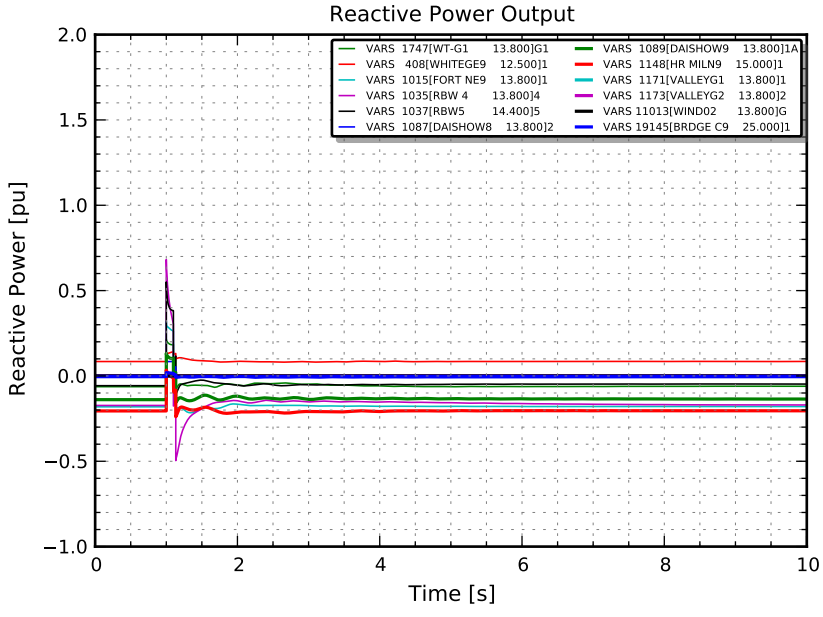


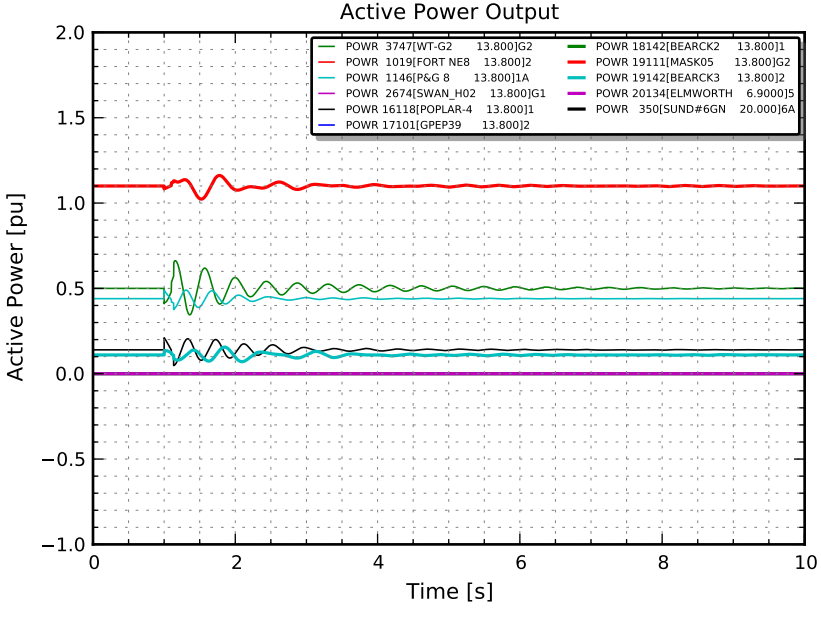
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 026 7L58 KEGRIVER to Meikle_A.

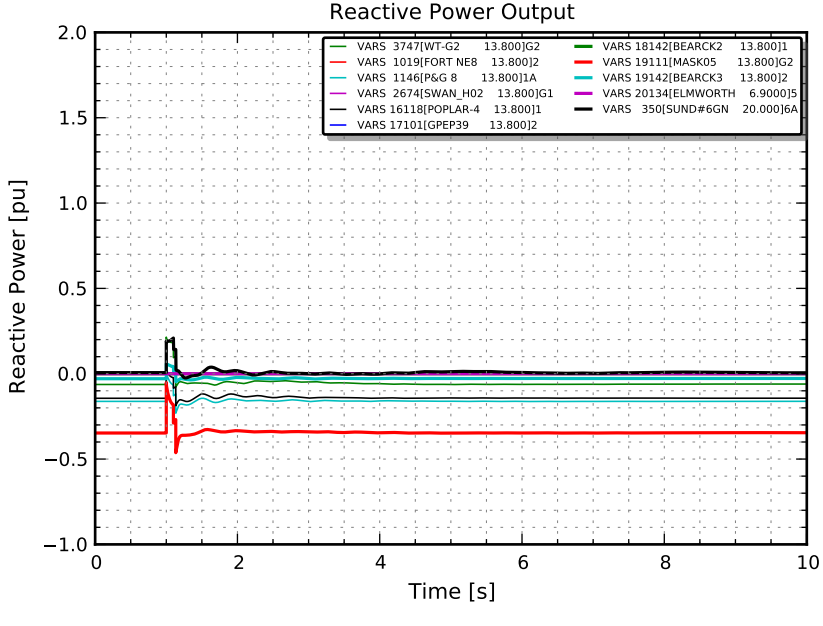
Study Area Generators

Appendix E2B
Figure: 026 (A. 3)





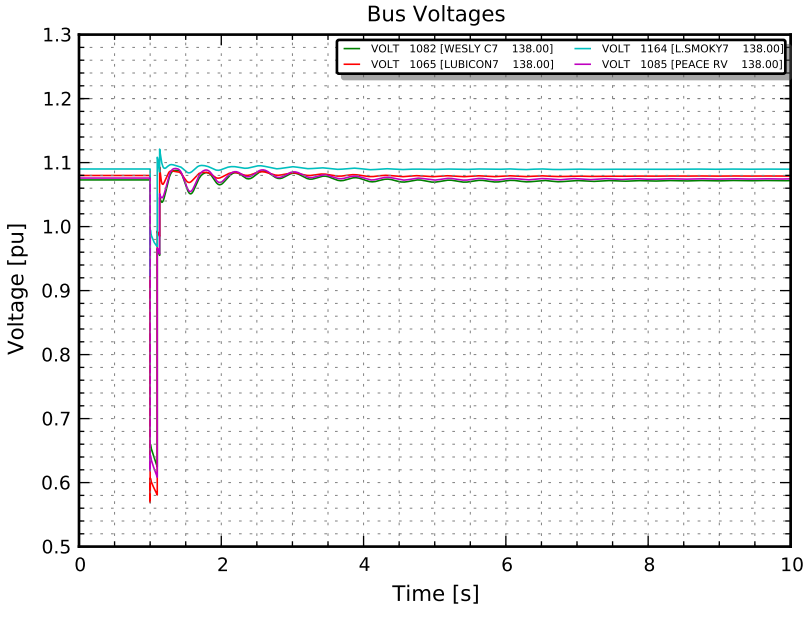


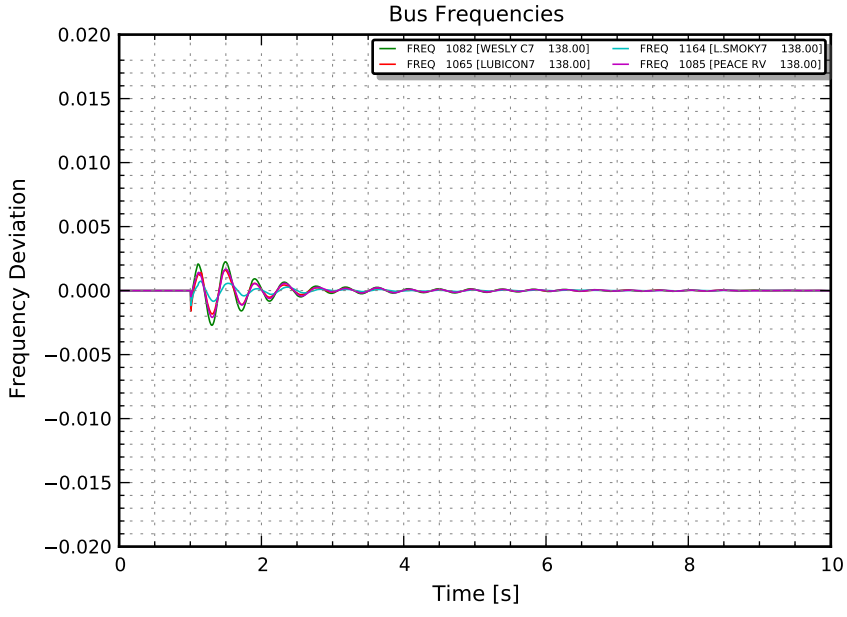


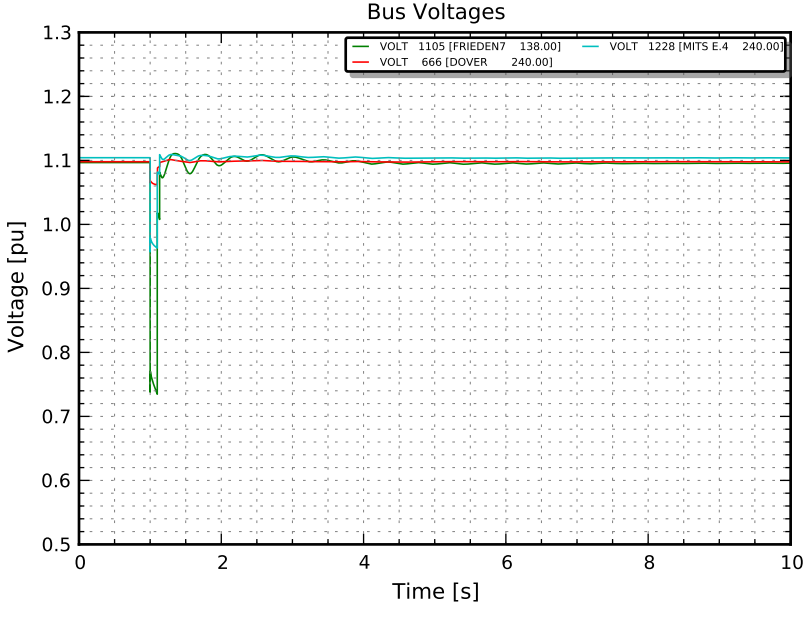
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 026 7L58 KEGRIVER to Meikle_B.

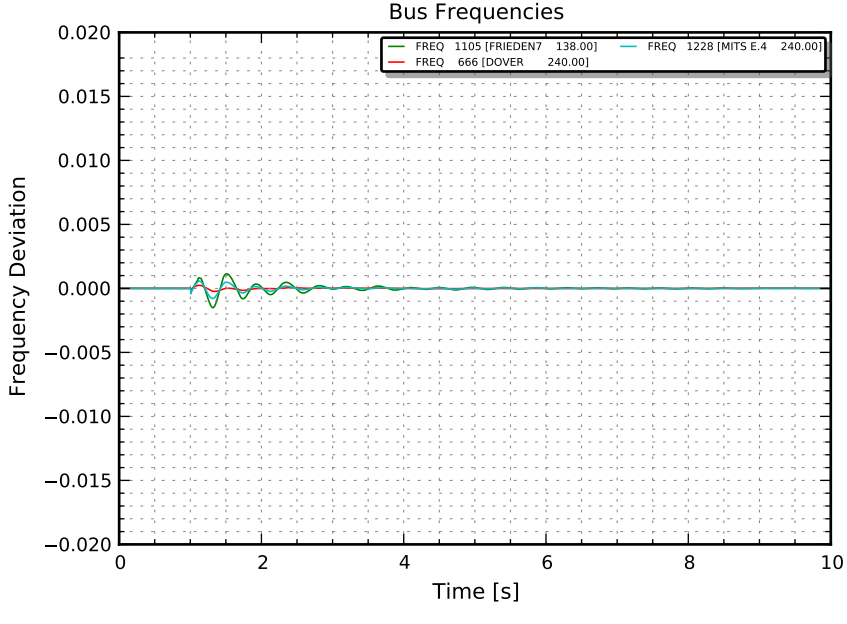
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 026 (B. 1)





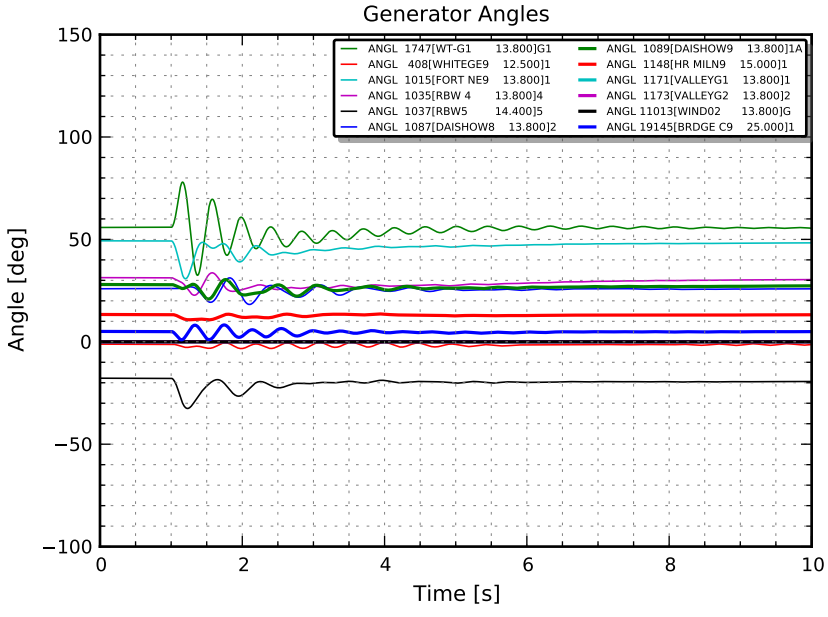


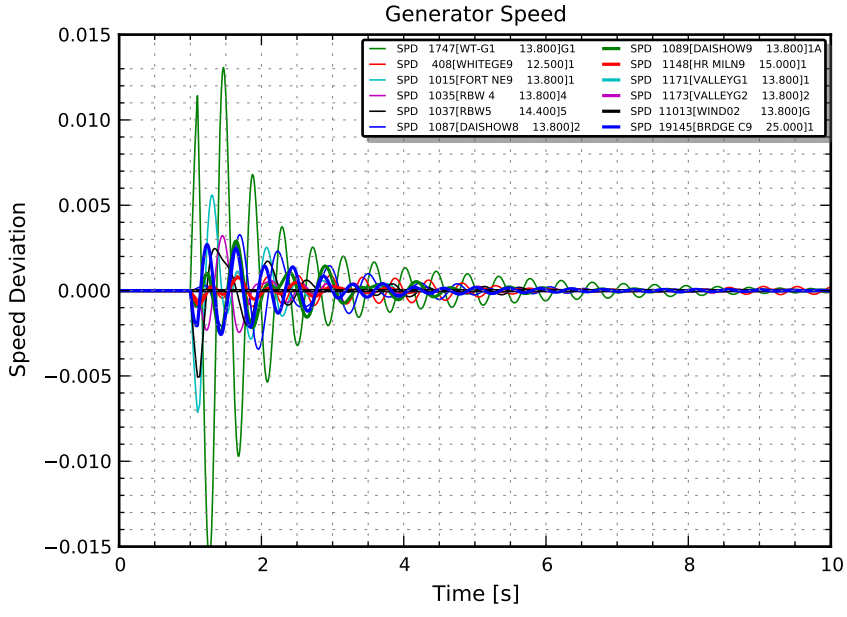


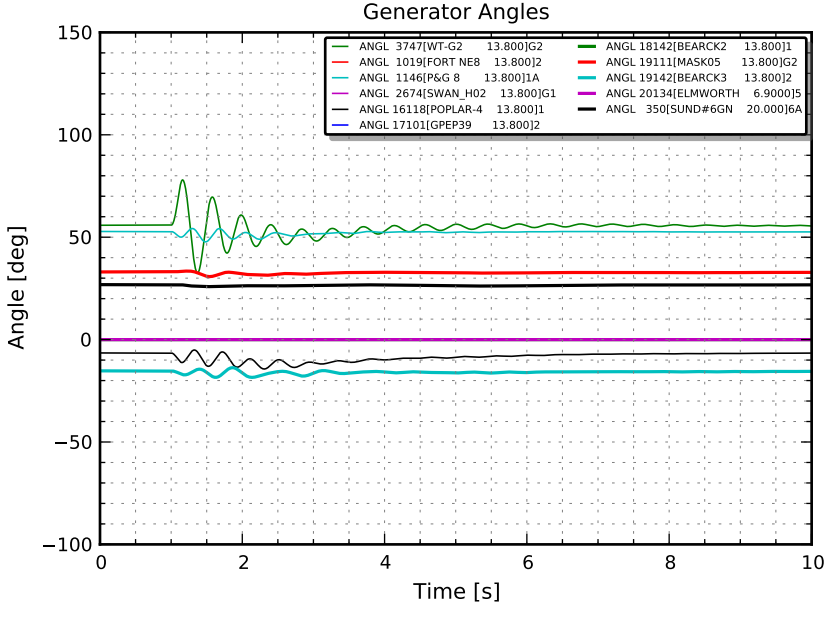
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 026 7L58 KEGRIVER to Meikle_B.

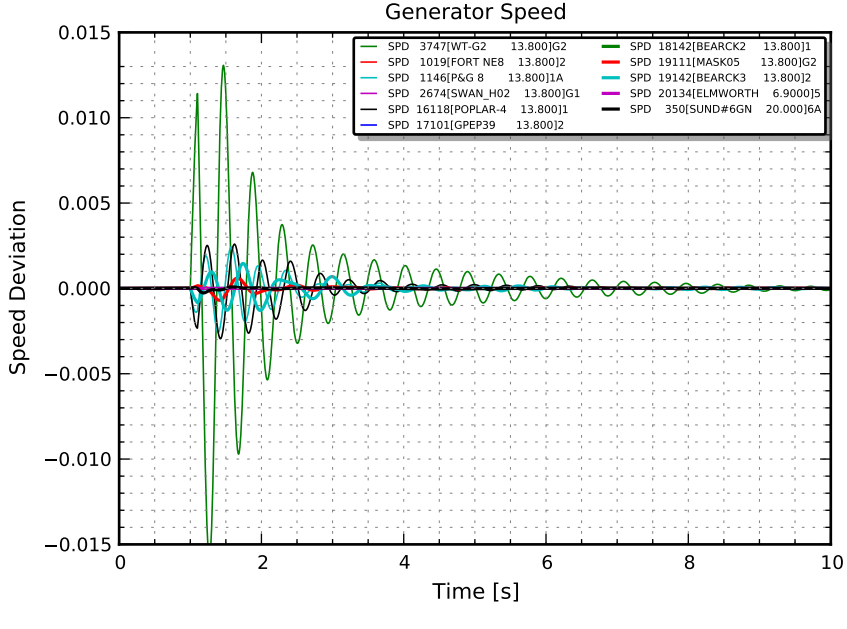
Study Area Generators

Appendix E2B
Figure: 026 (B. 2)





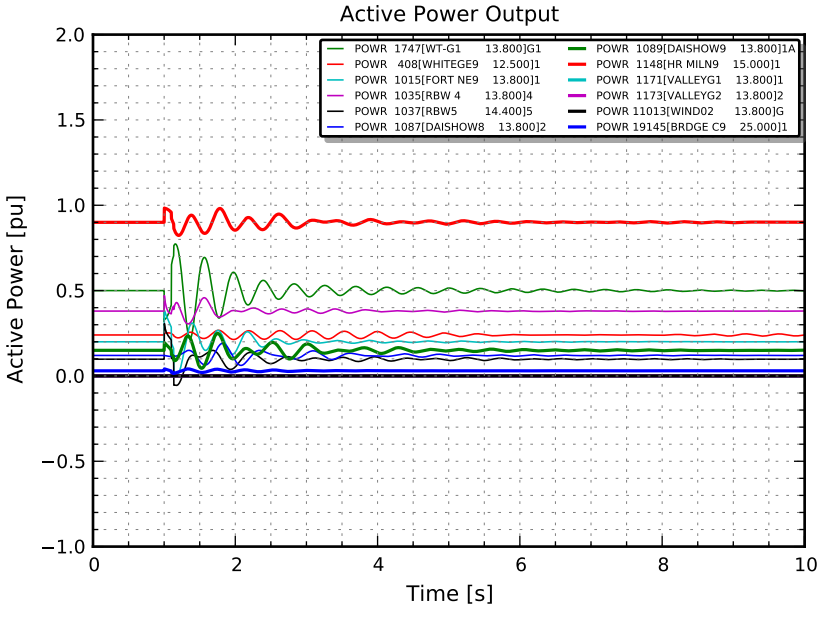


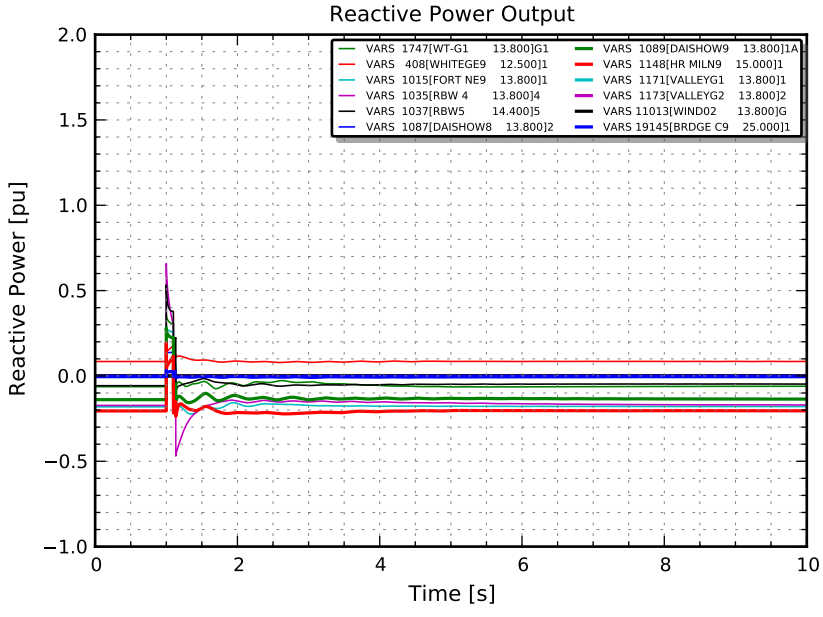


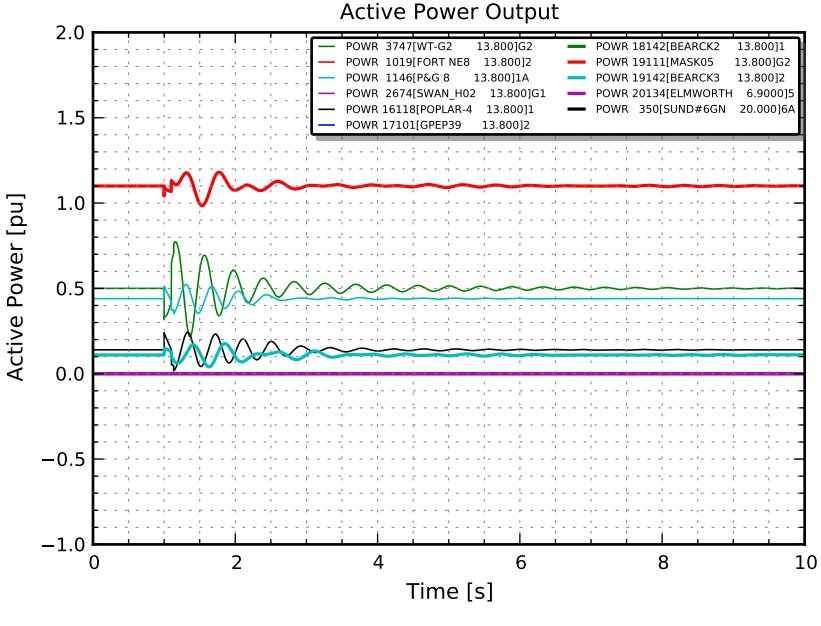
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 026 7L58 KEGRIVER to Meikle_B.

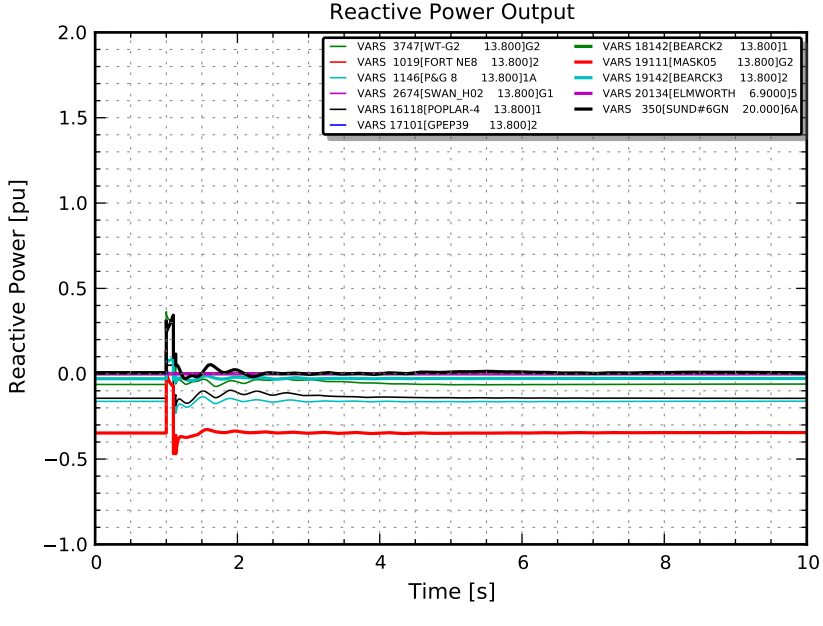
Study Area Generators

Appendix E2B
Figure: 026 (B. 3)





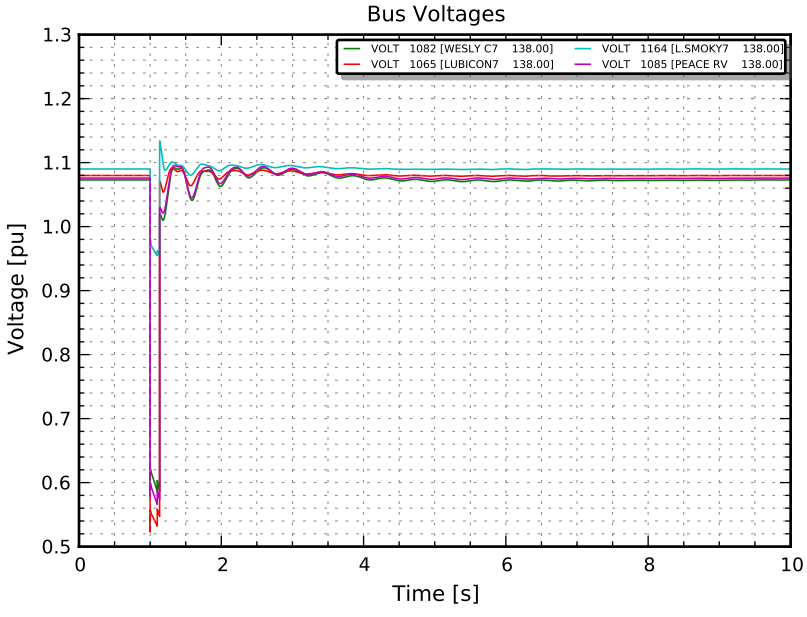


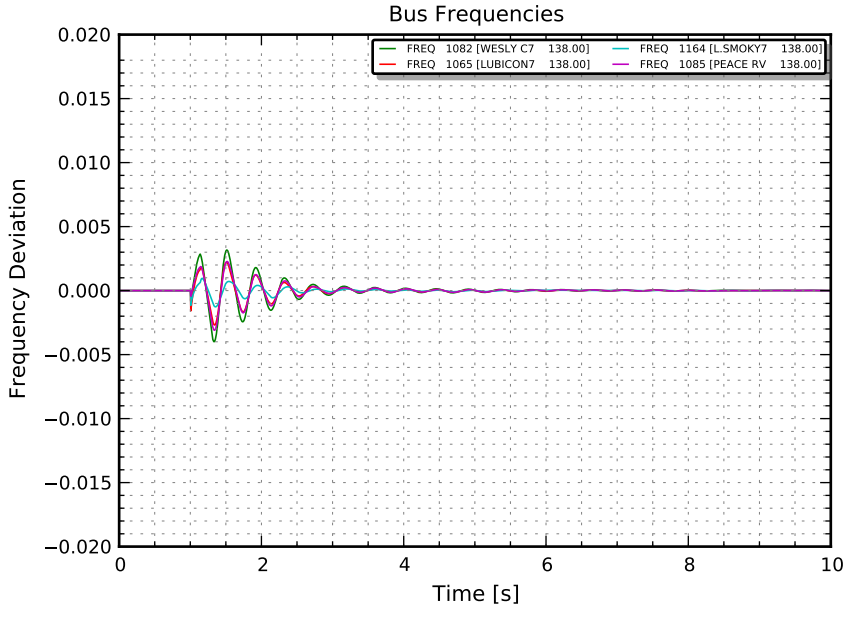


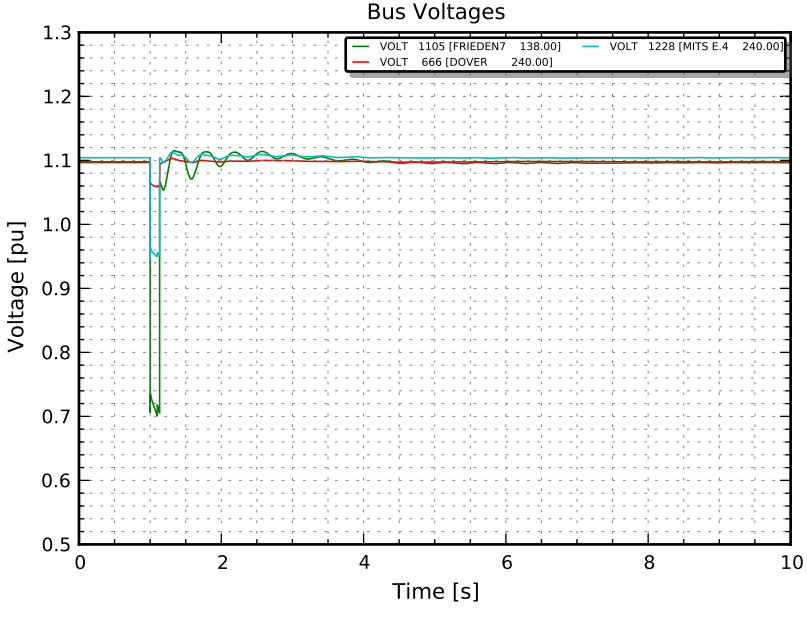
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 027 7L120 HOTCHKISS to Meikle_A.

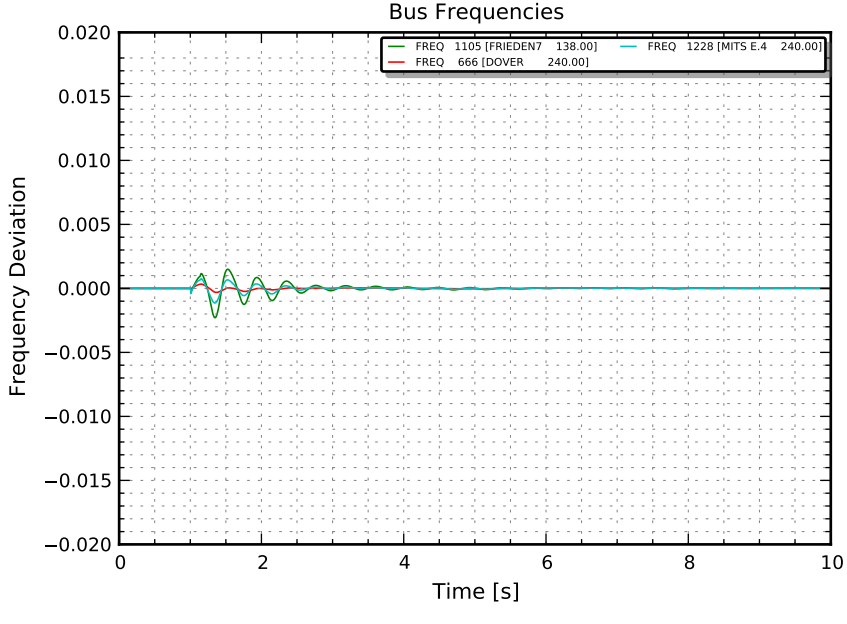
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 027 (A. 1)





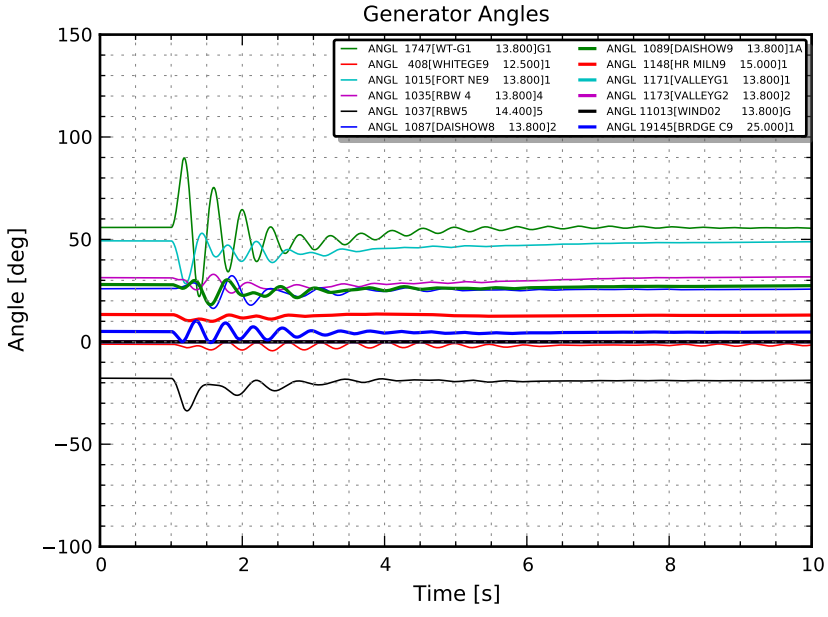


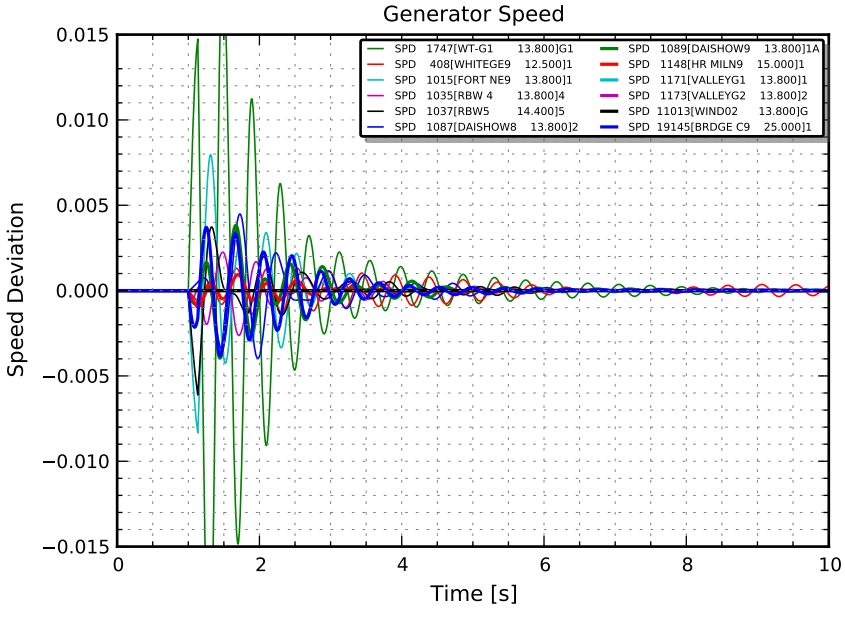


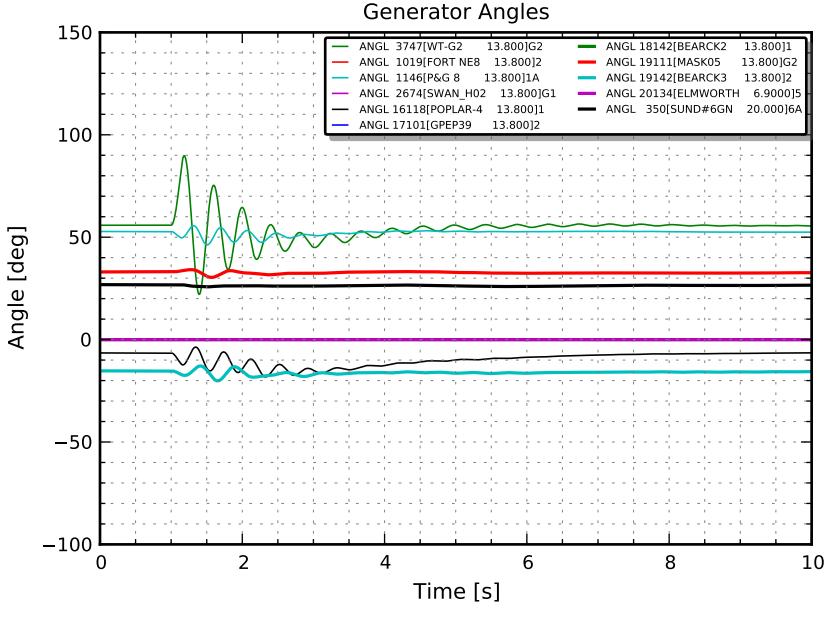
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 027 7L120 HOTCHKISS to Meikle_A.

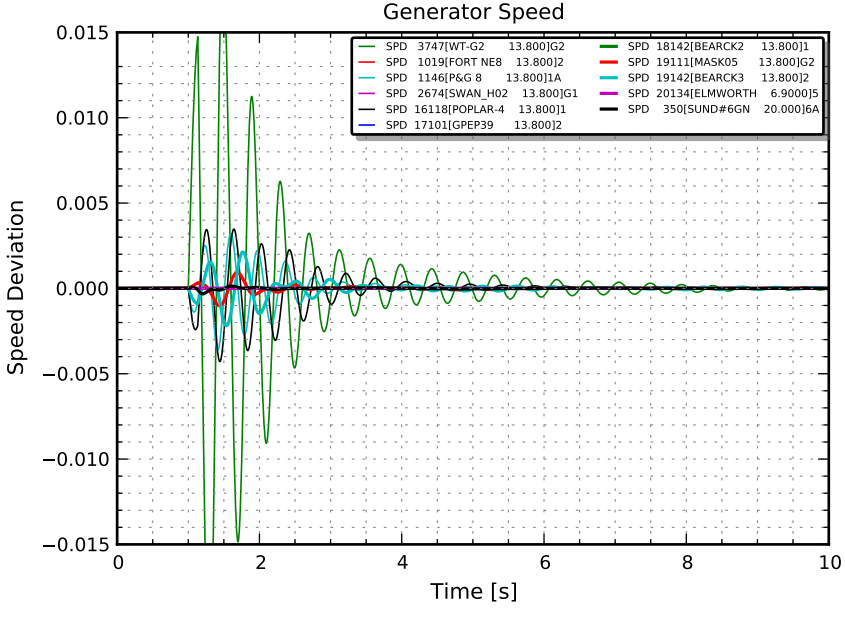
Study Area Generators

Appendix E2B
Figure: 027 (A. 2)





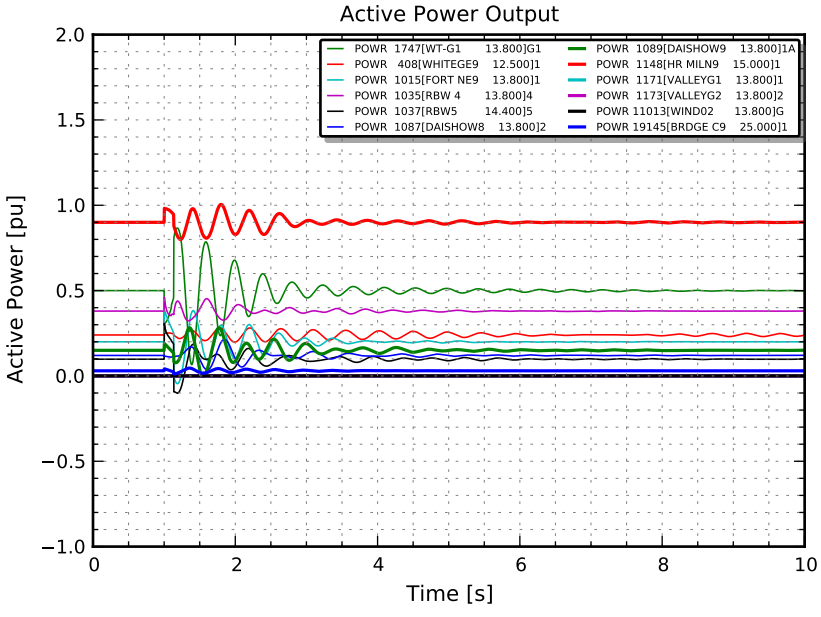


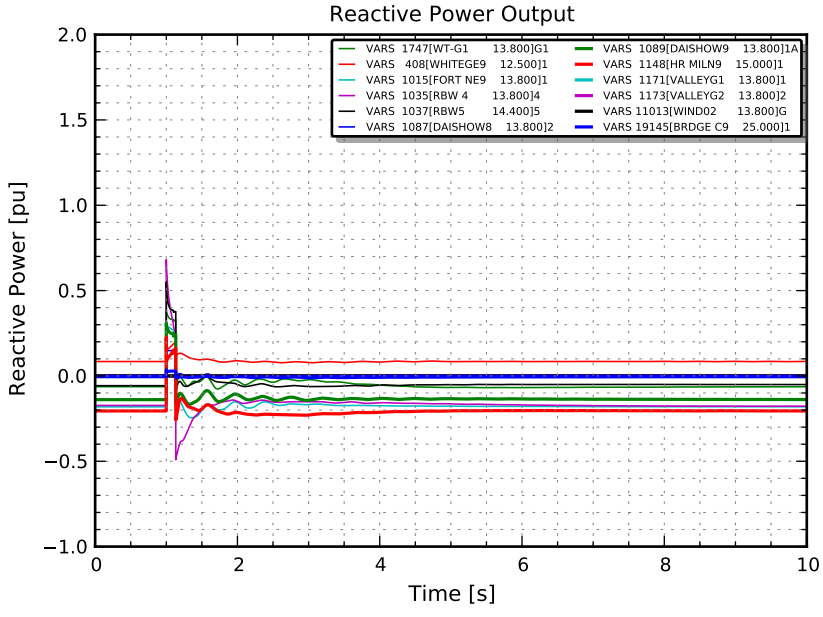


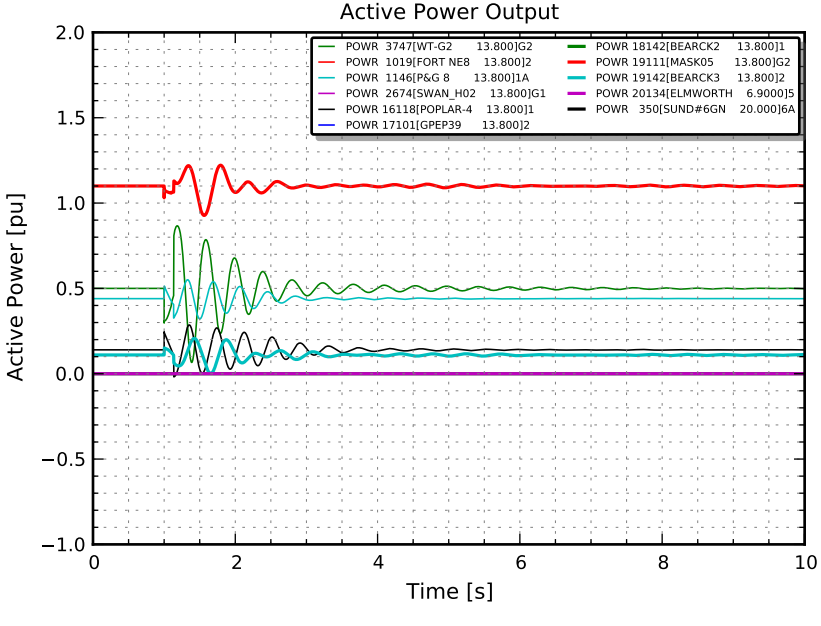
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 027 7L120 HOTCHKISS to Meikle_A.

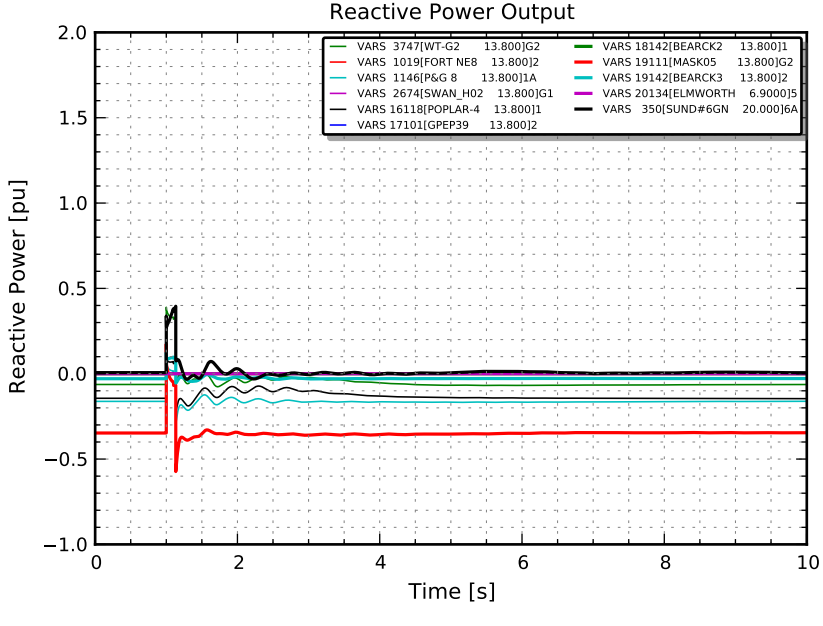
Study Area Generators

Appendix E2B
Figure: 027 (A. 3)





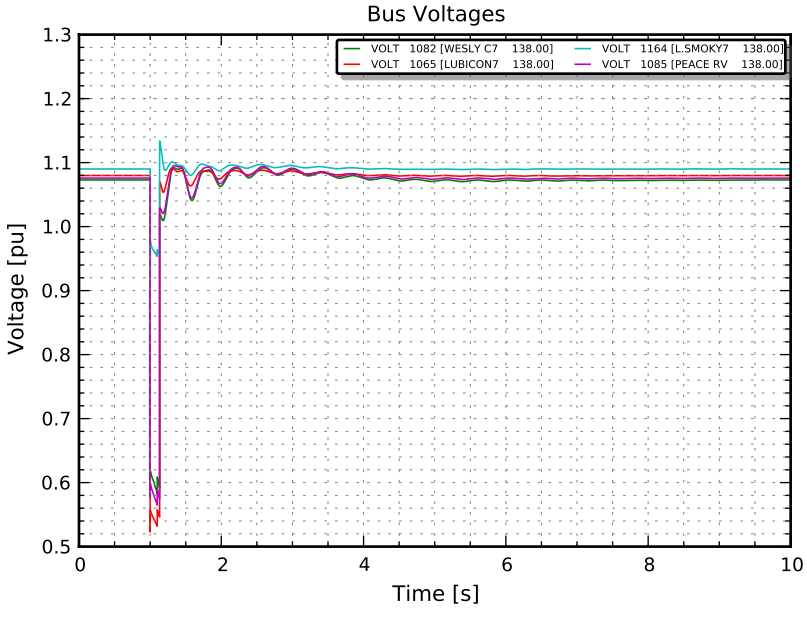


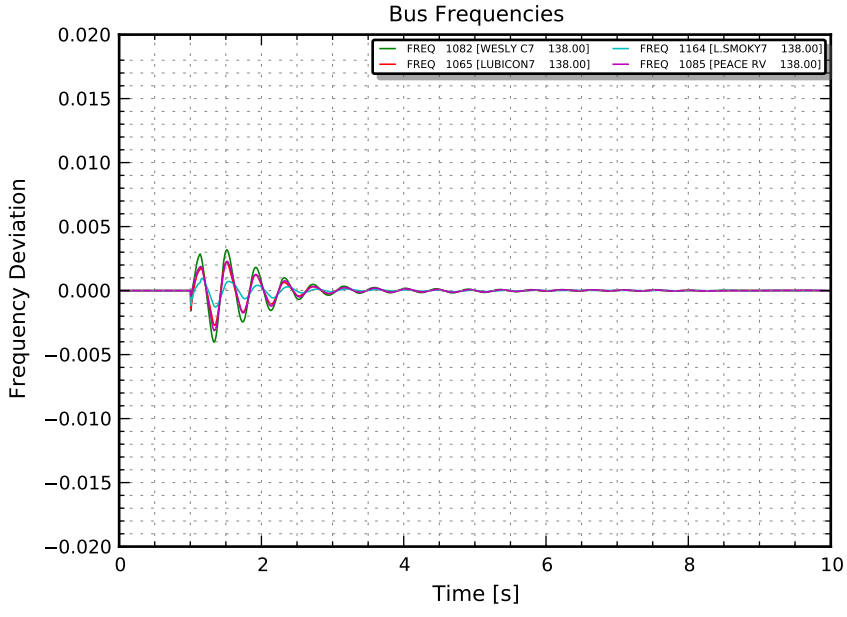


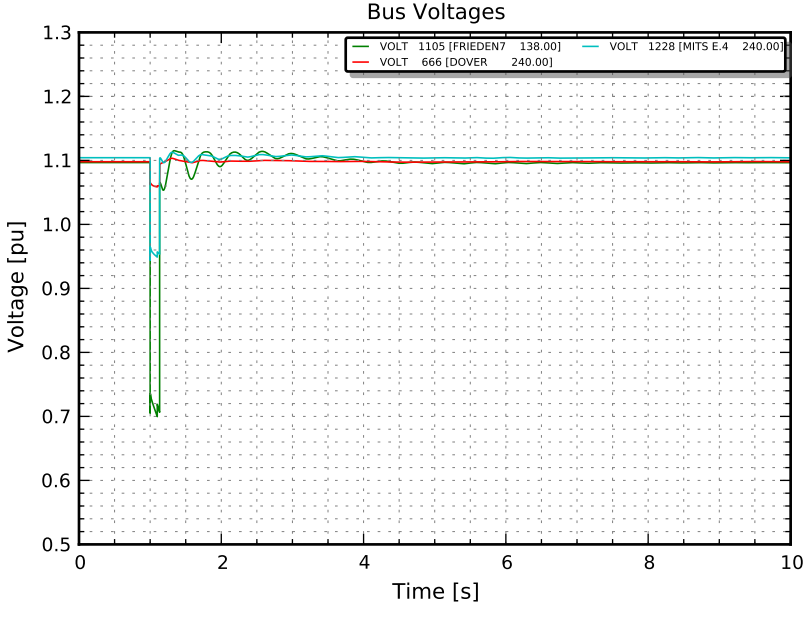
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 027 7L120 HOTCHKISS to Meikle_B.

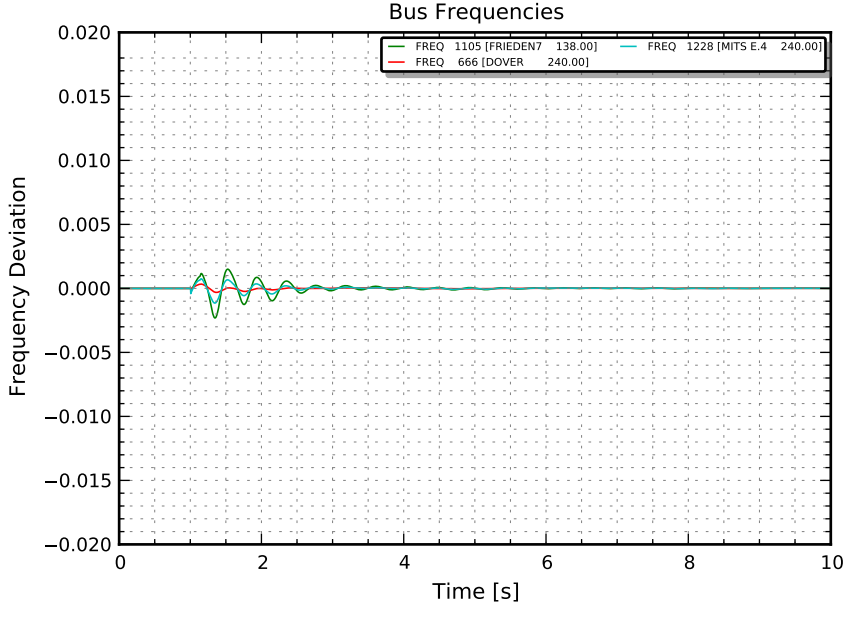
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 027 (B. 1)





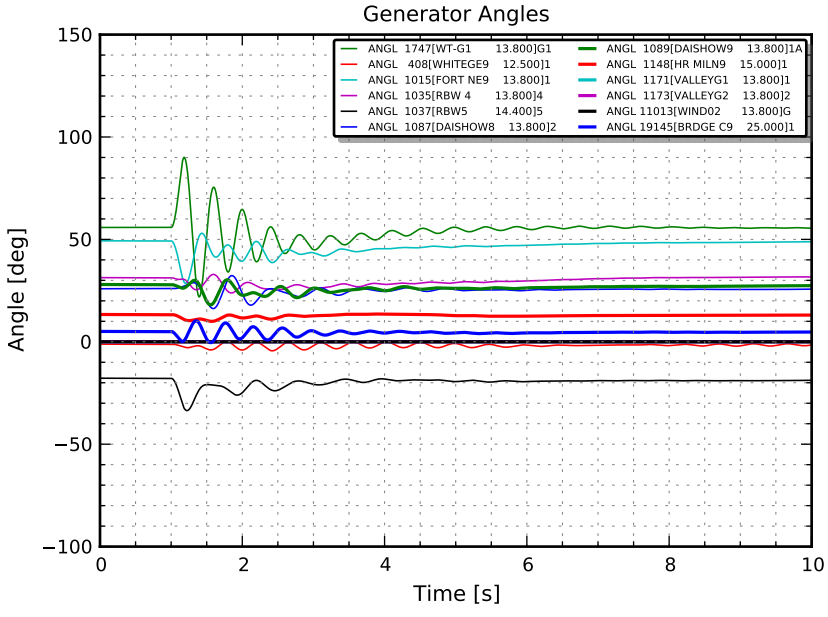


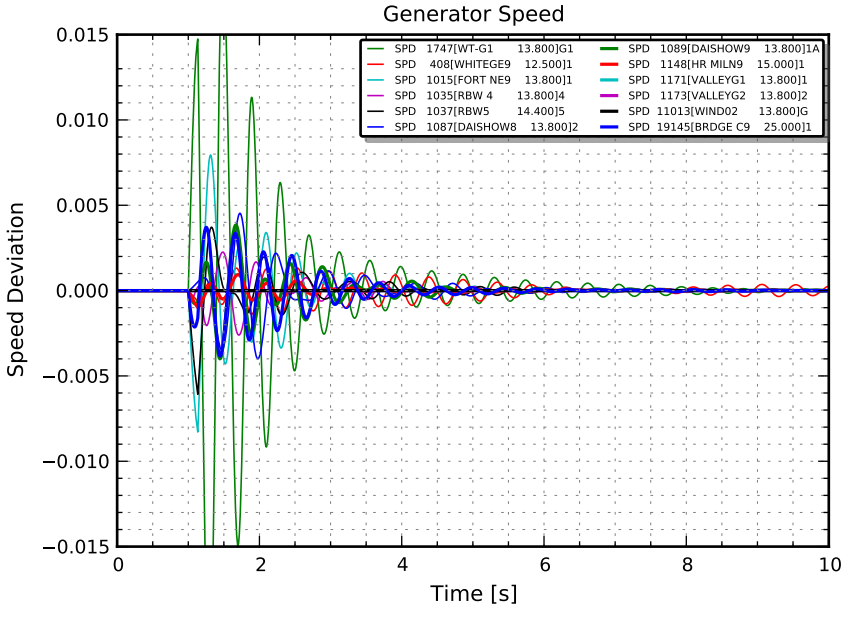


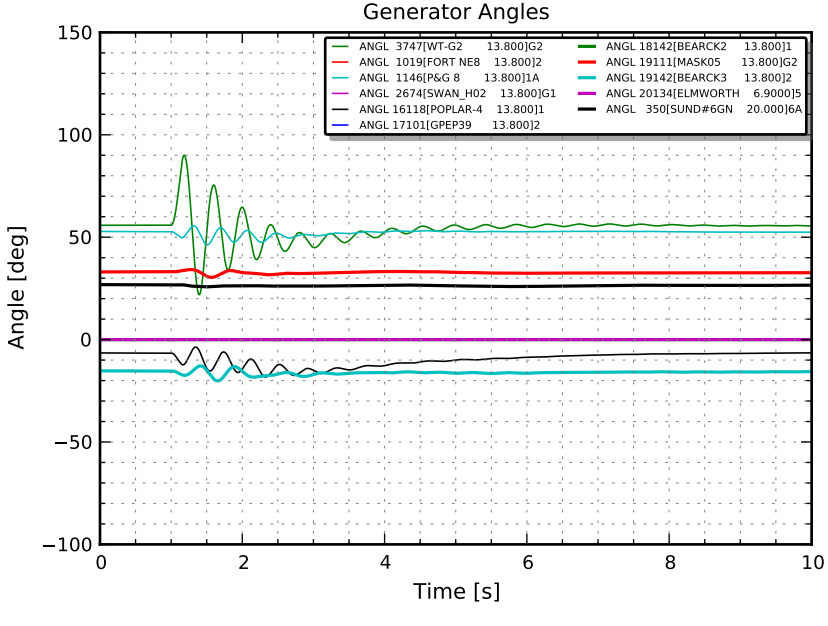
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 027 7L120 HOTCHKISS to Meikle_B.

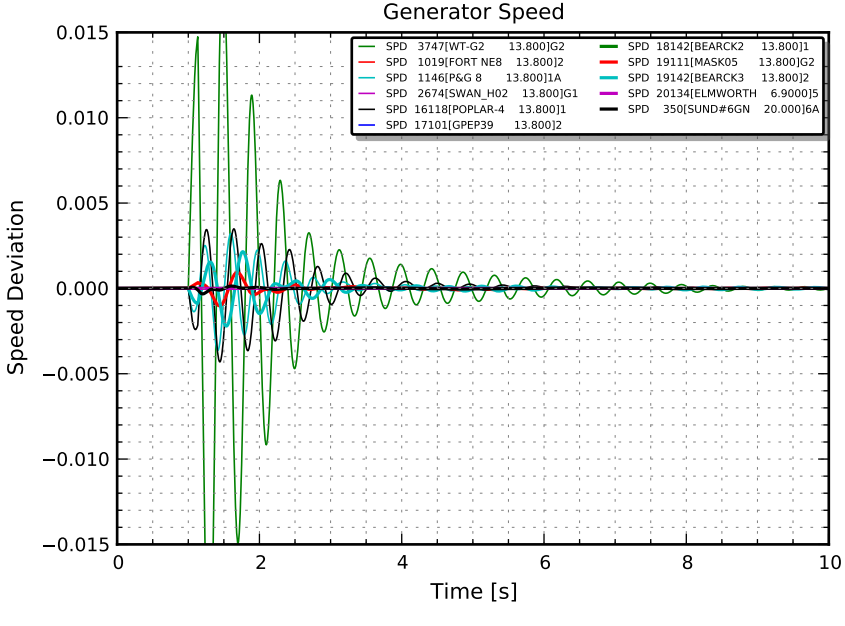
Study Area Generators

Appendix E2B
Figure: 027 (B. 2)





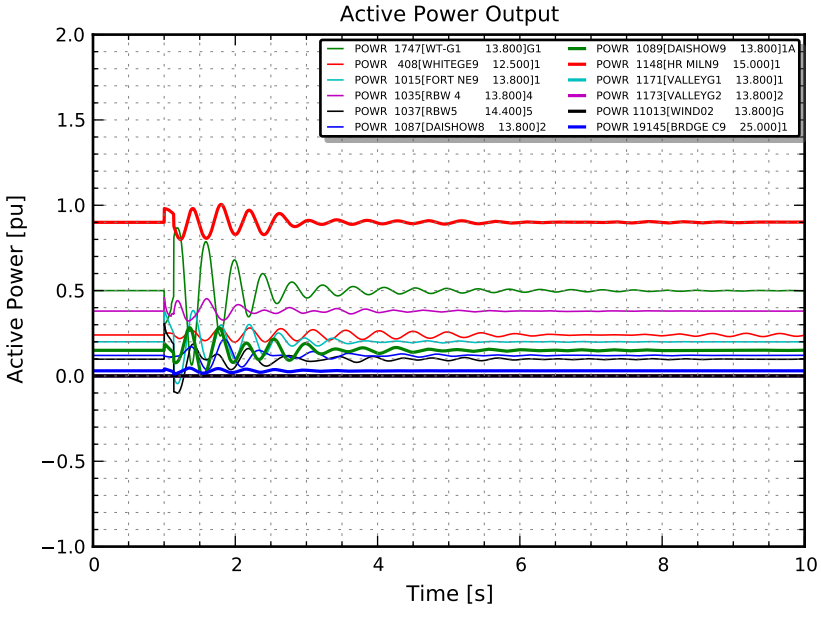


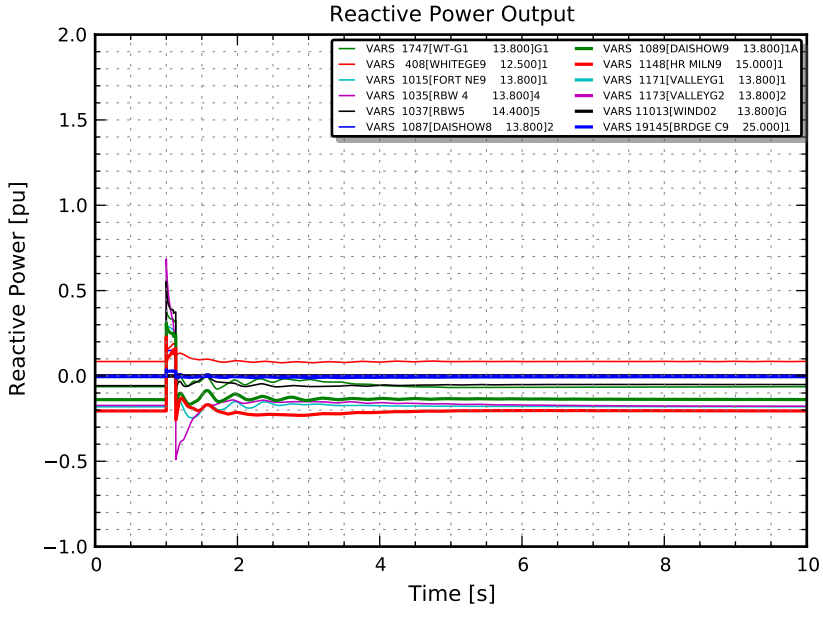


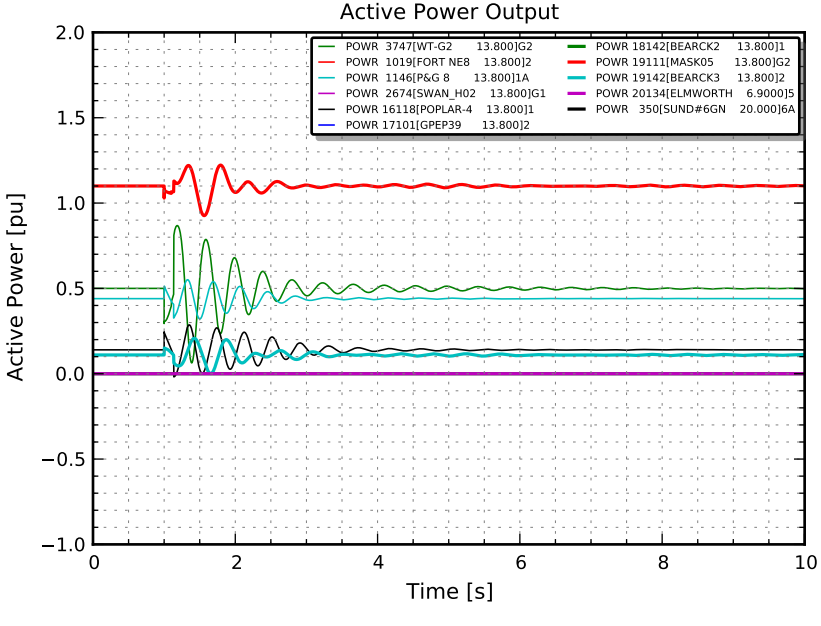
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 027 7L120 HOTCHKISS to Meikle_B.

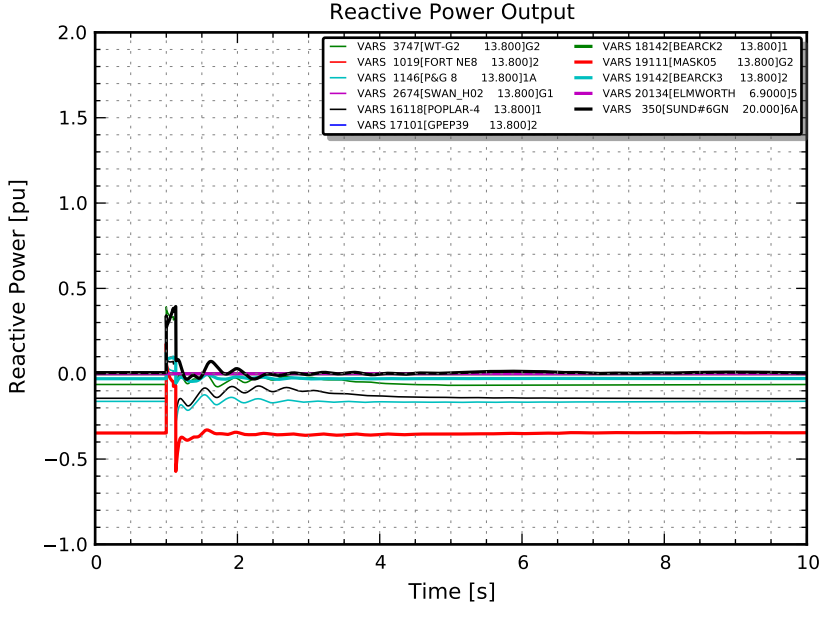
Study Area Generators

Appendix E2B
Figure: 027 (B. 3)





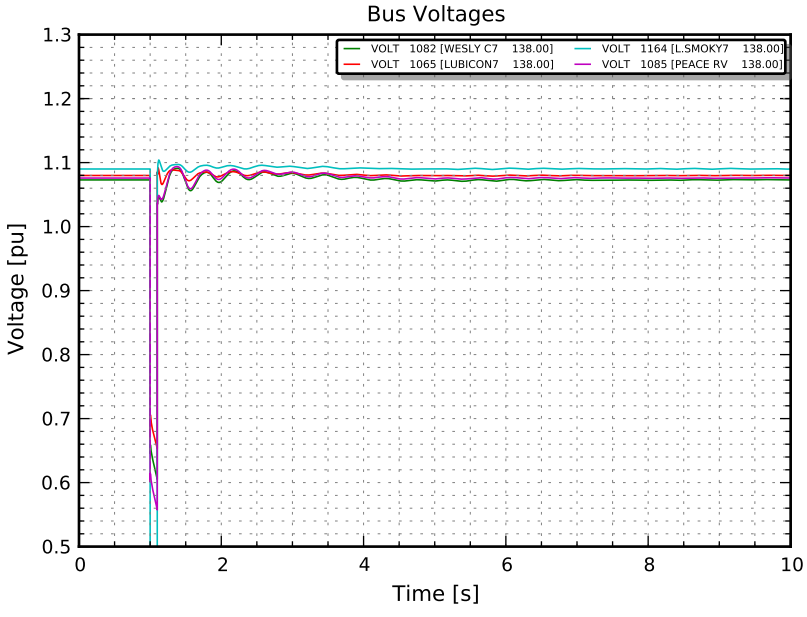


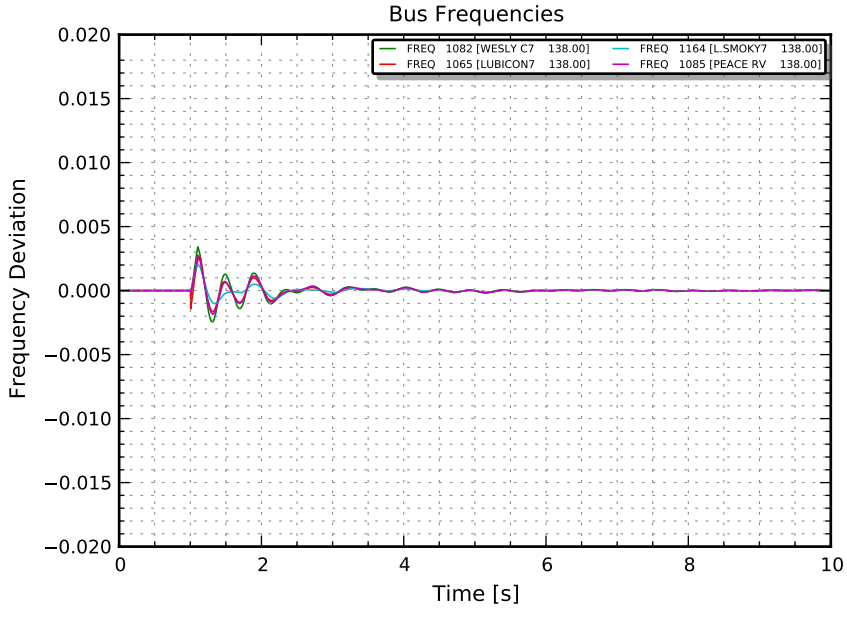


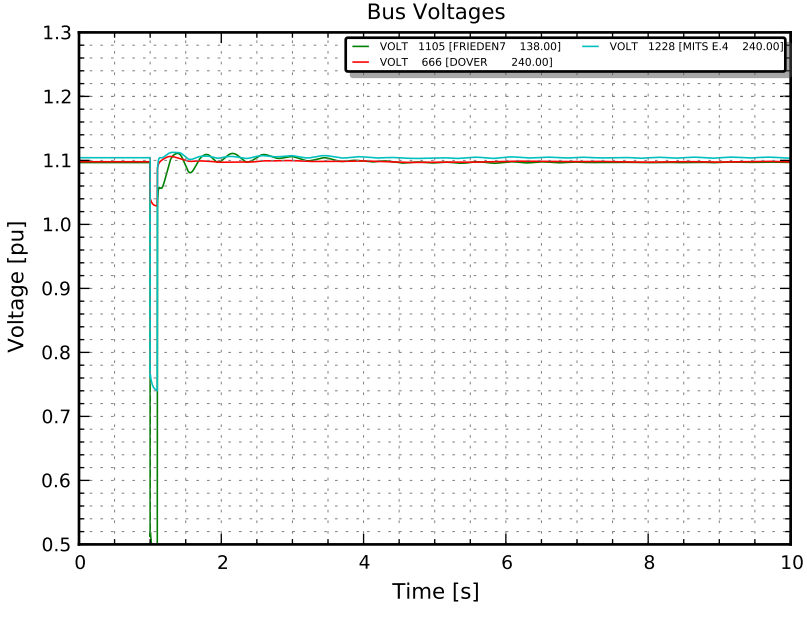
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 028 7L01 LITTLESMOKY to Sturgeon_A.

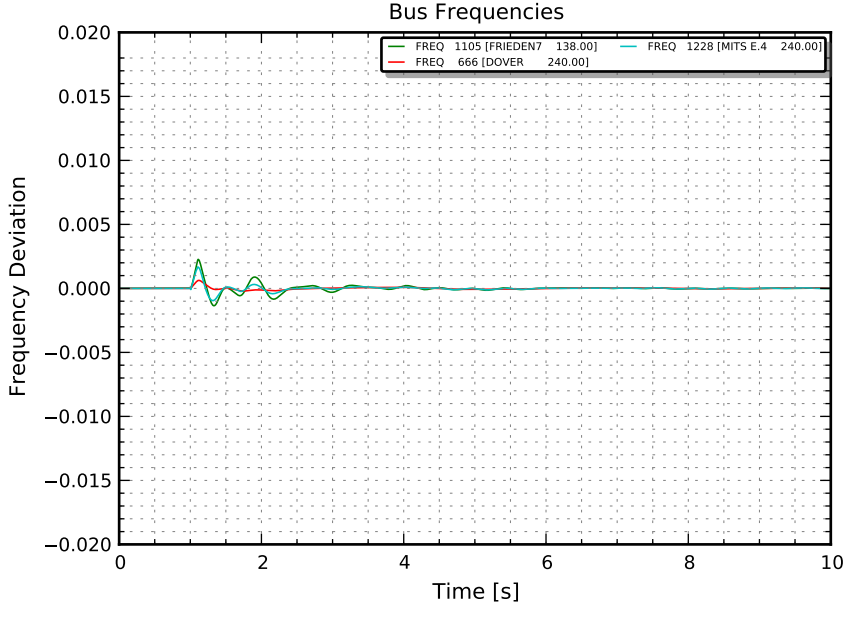
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 028 (A. 1)





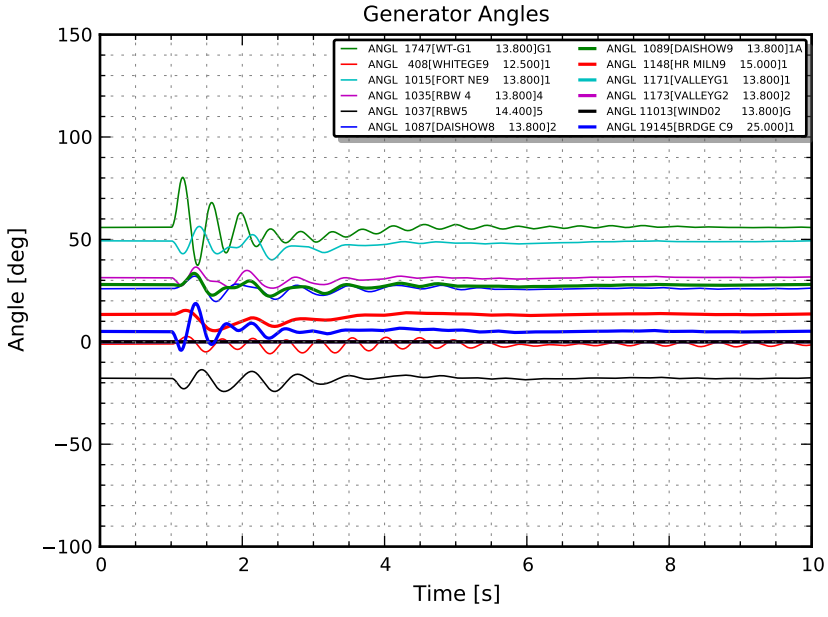


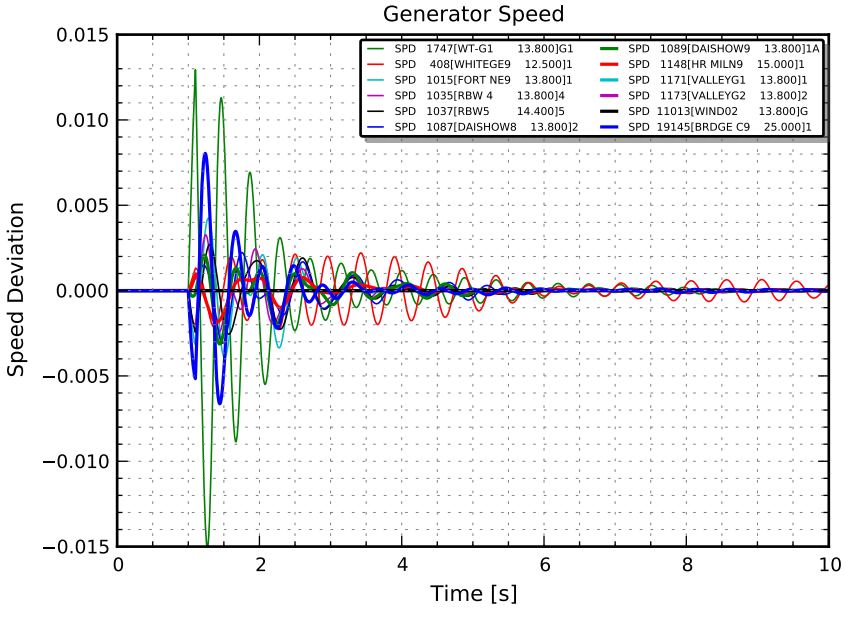


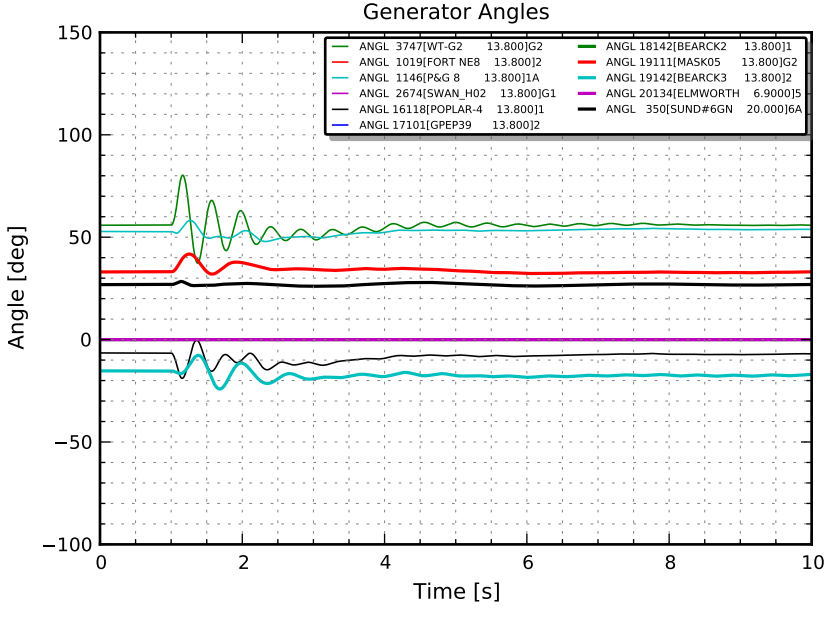
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 028 7L01 LITTLESMOKY to Sturgeon_A.

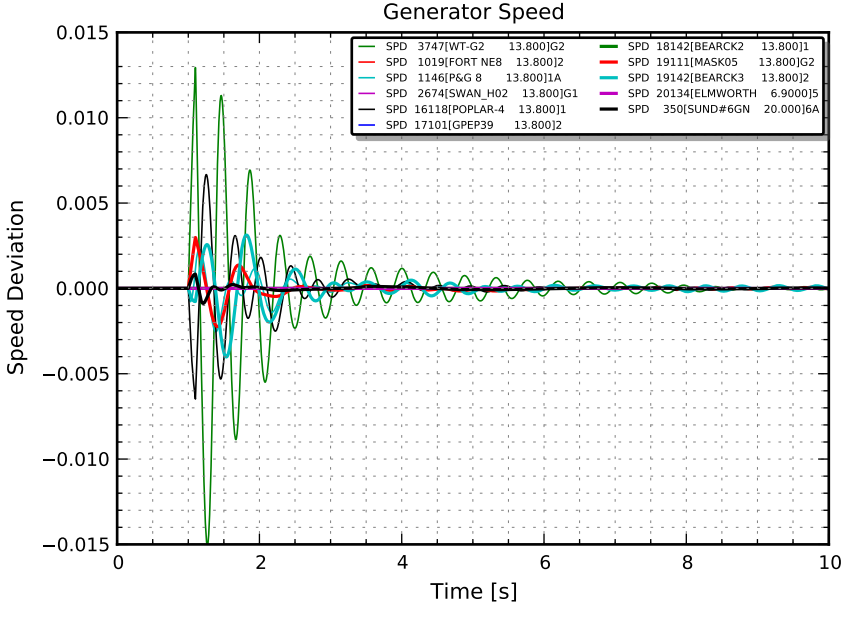
Study Area Generators

Appendix E2B
Figure: 028 (A. 2)





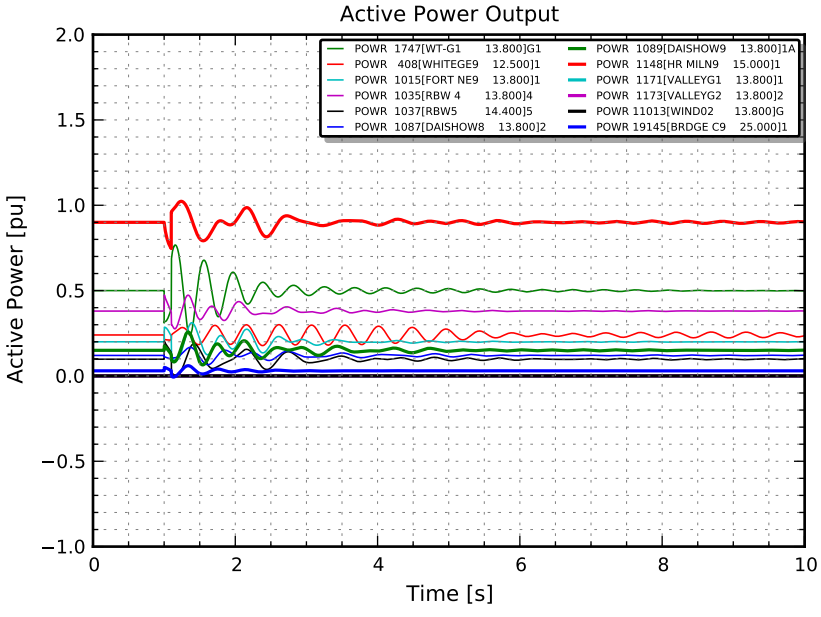


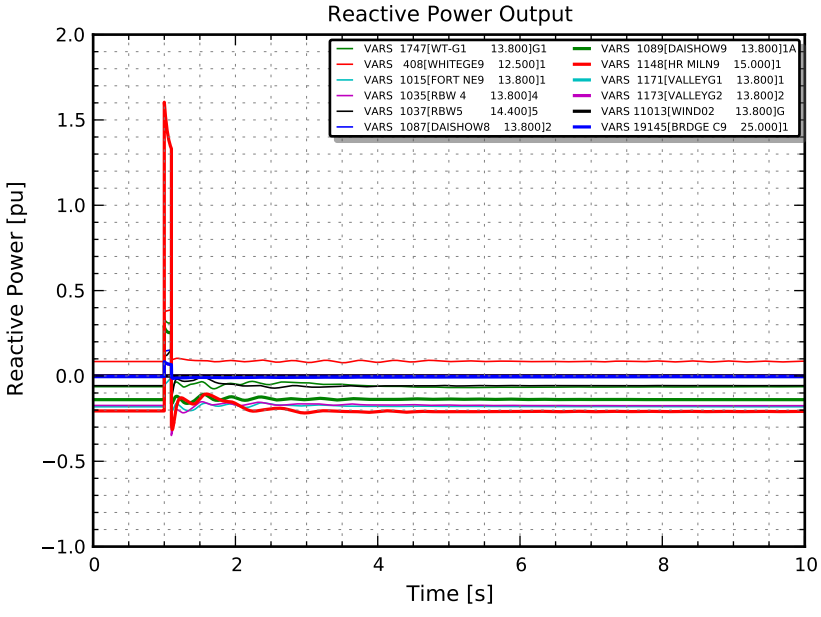


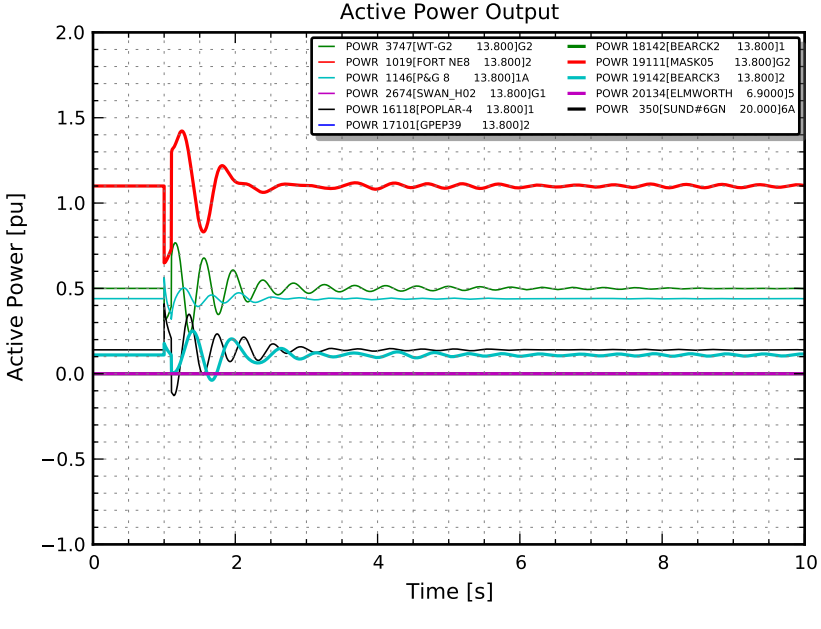
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 028 7L01 LITTLESMOKY to Sturgeon_A.

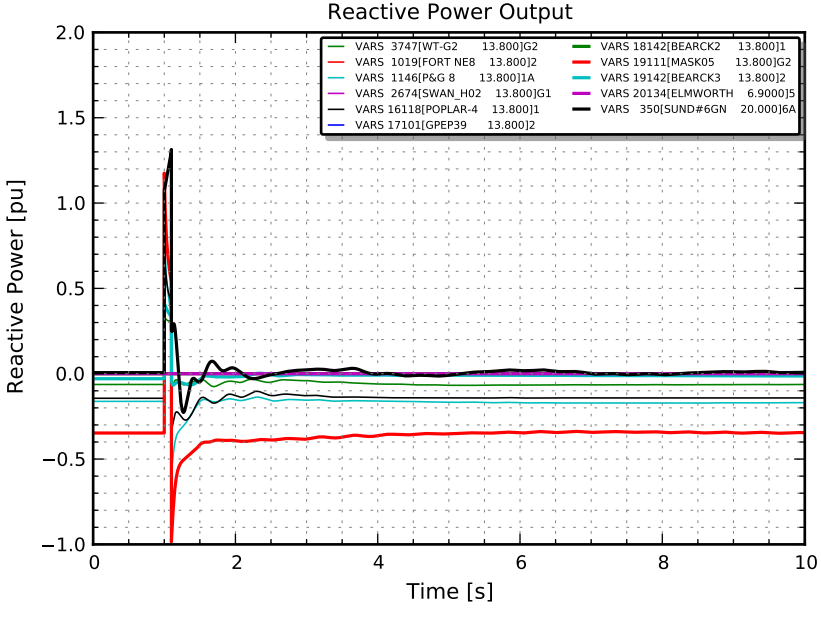
Study Area Generators

Appendix E2B
Figure: 028 (A. 3)





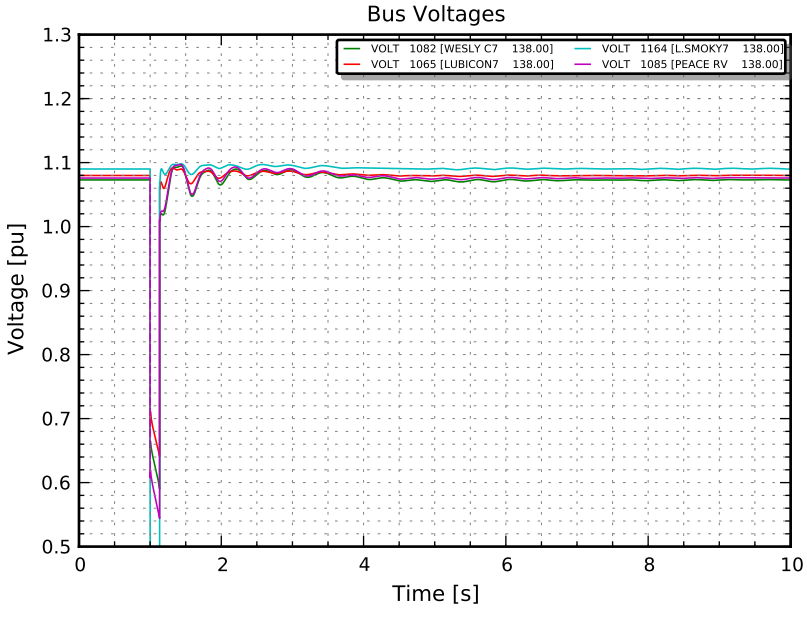


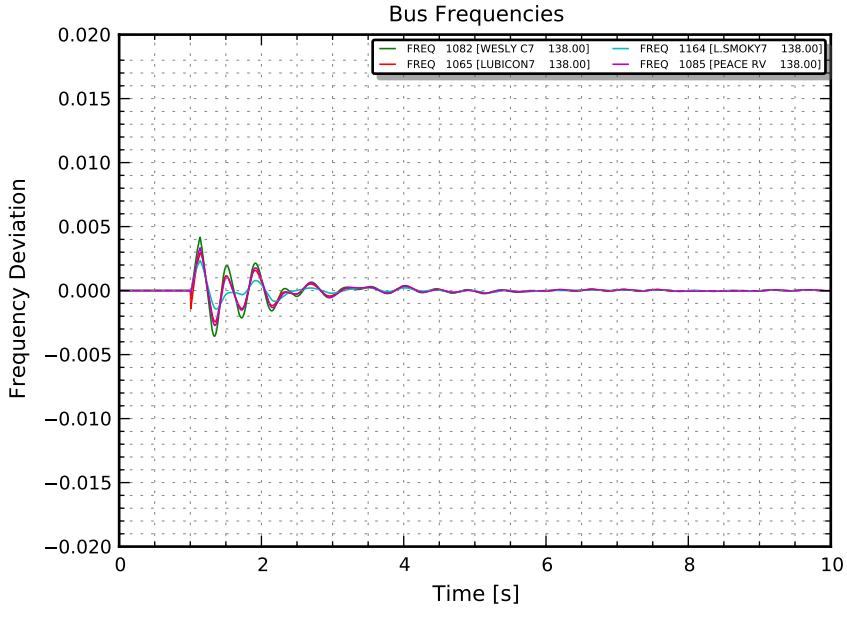


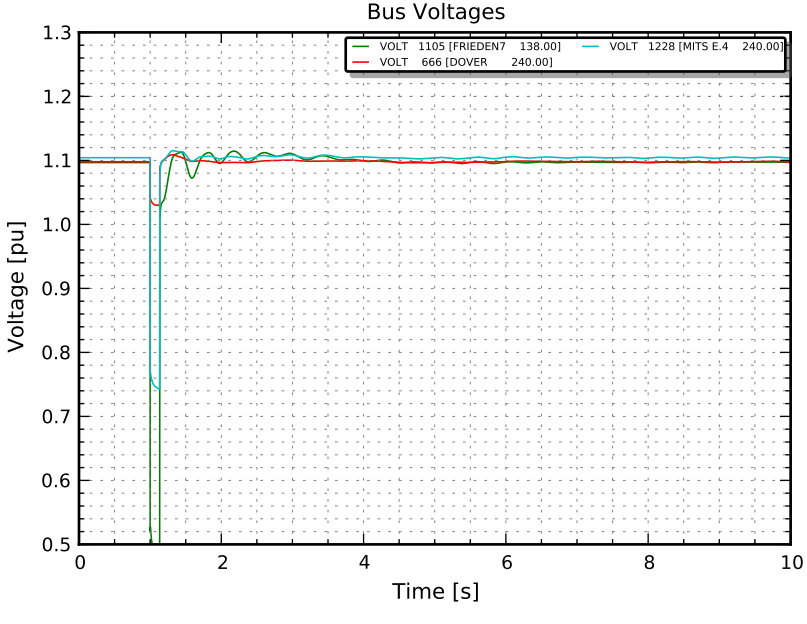
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 028 7L01 LITTLESMOKY to Sturgeon_B.

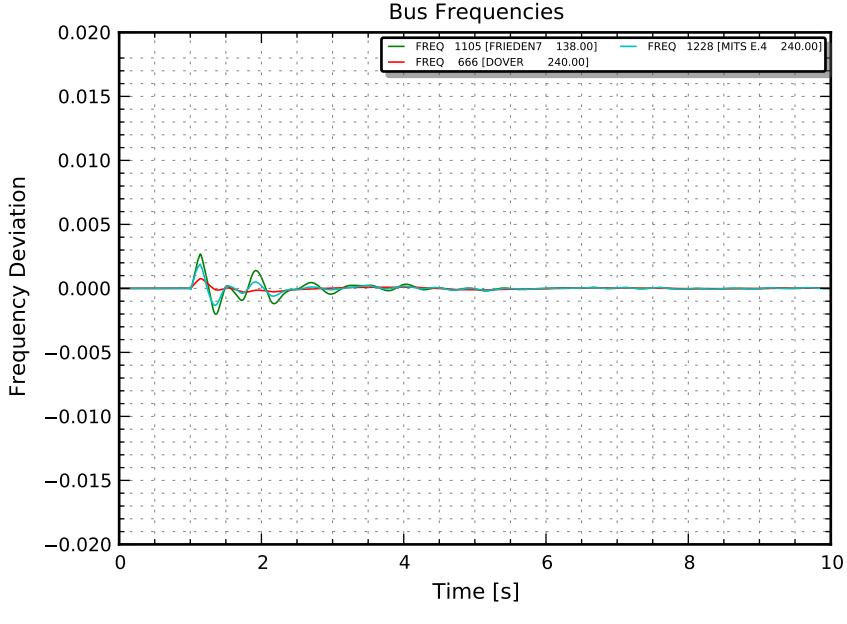
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 028 (B. 1)





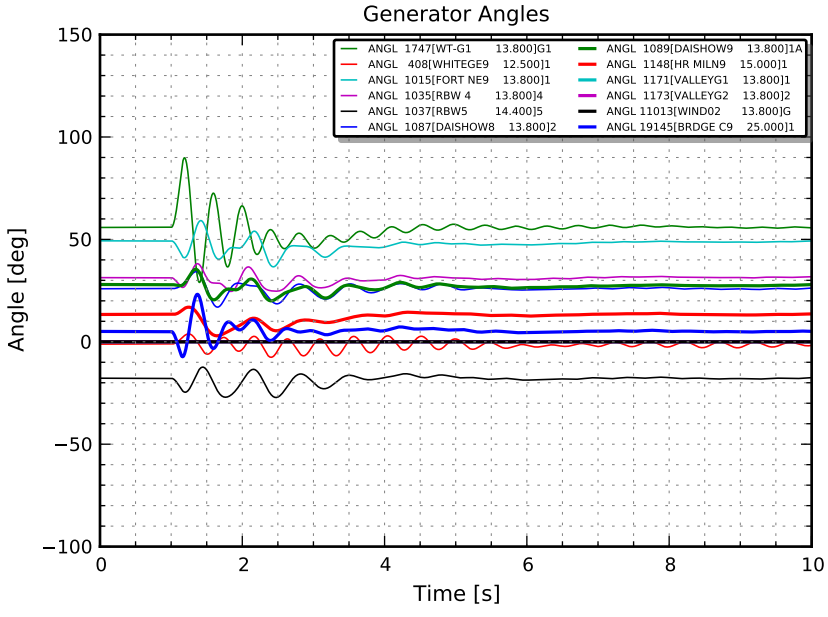


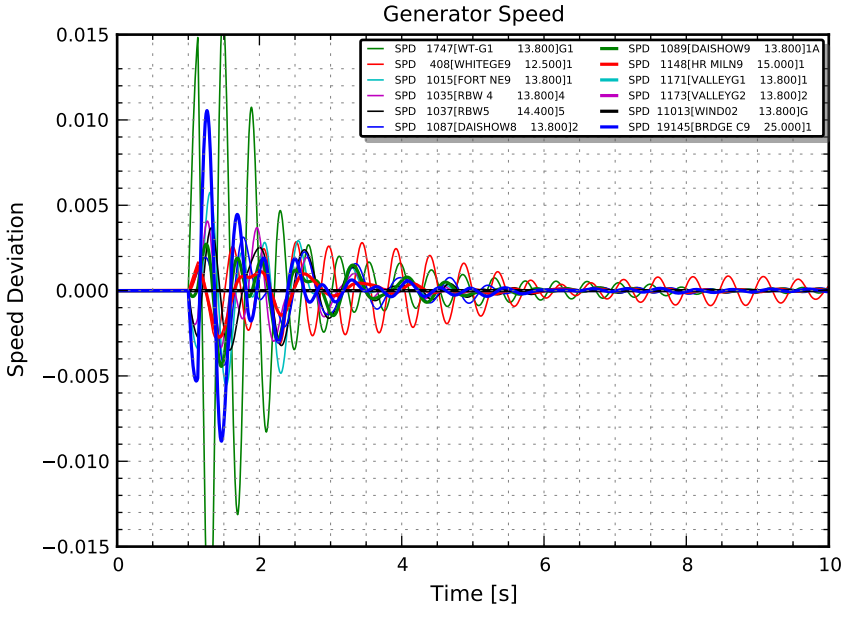


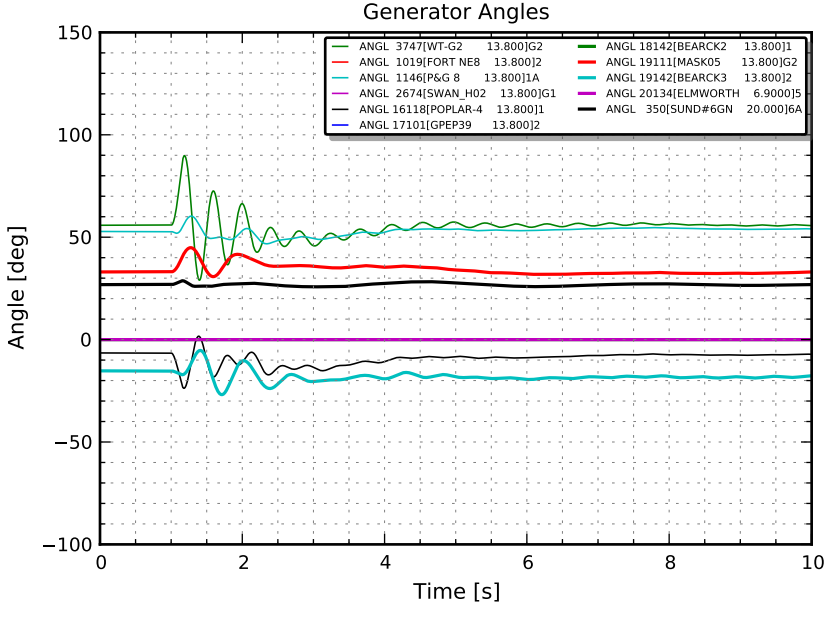
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 028 7L01 LITTLESMOKY to Sturgeon_B.

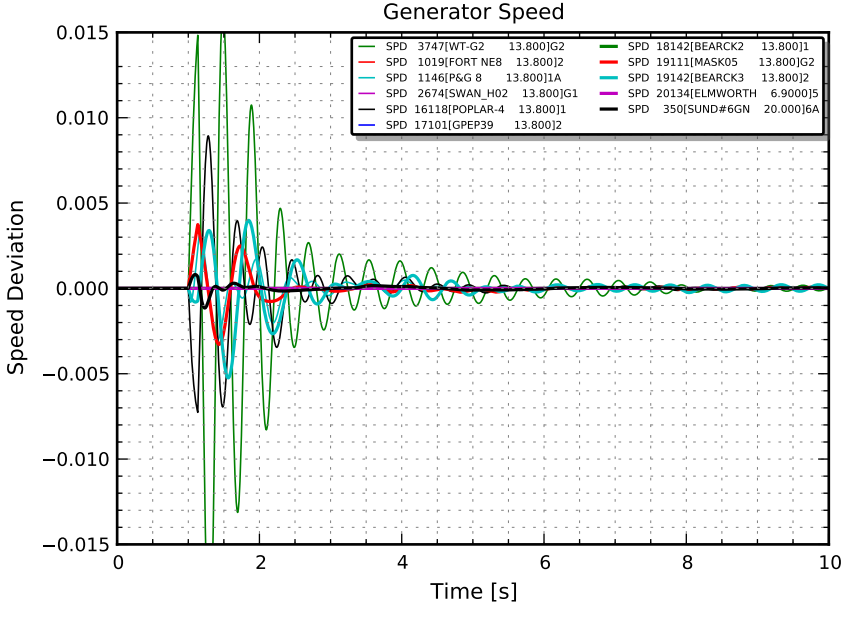
Study Area Generators

Appendix E2B
Figure: 028 (B. 2)





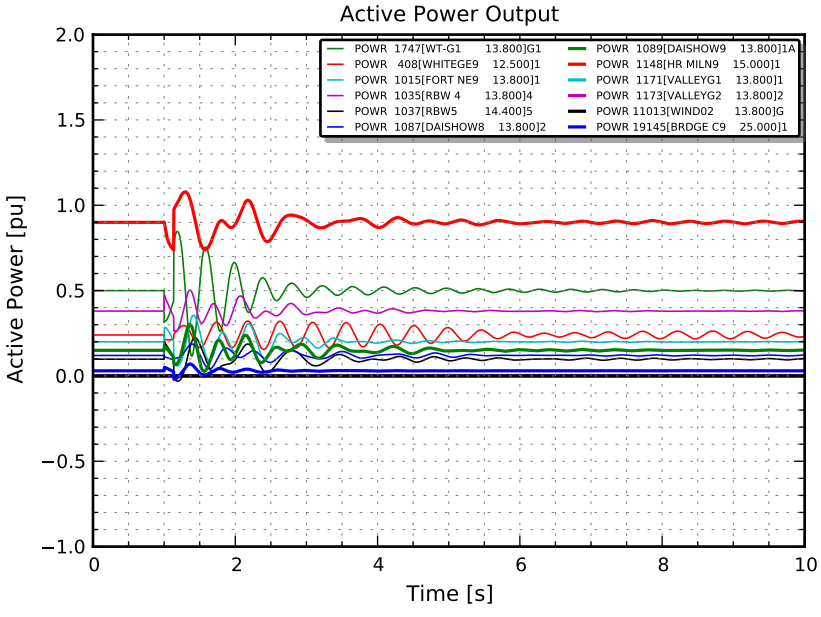


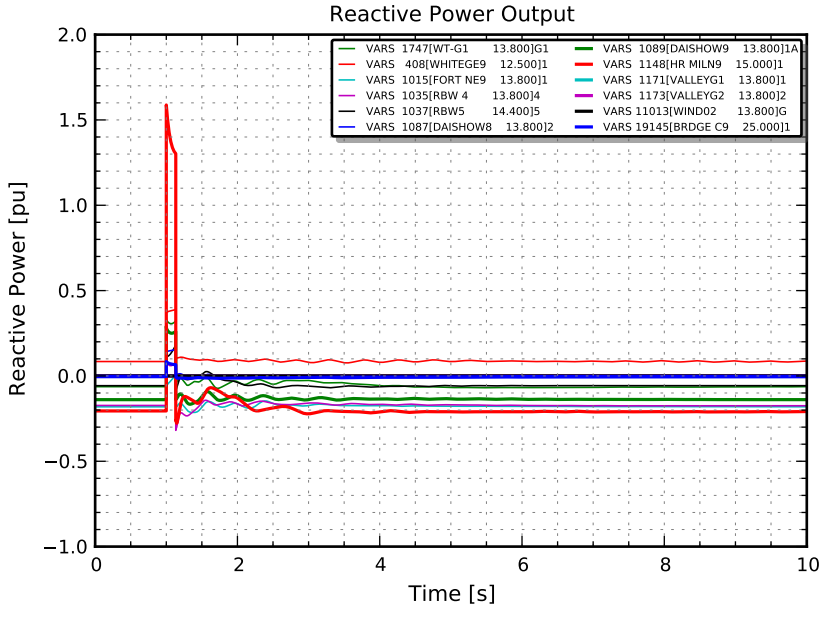


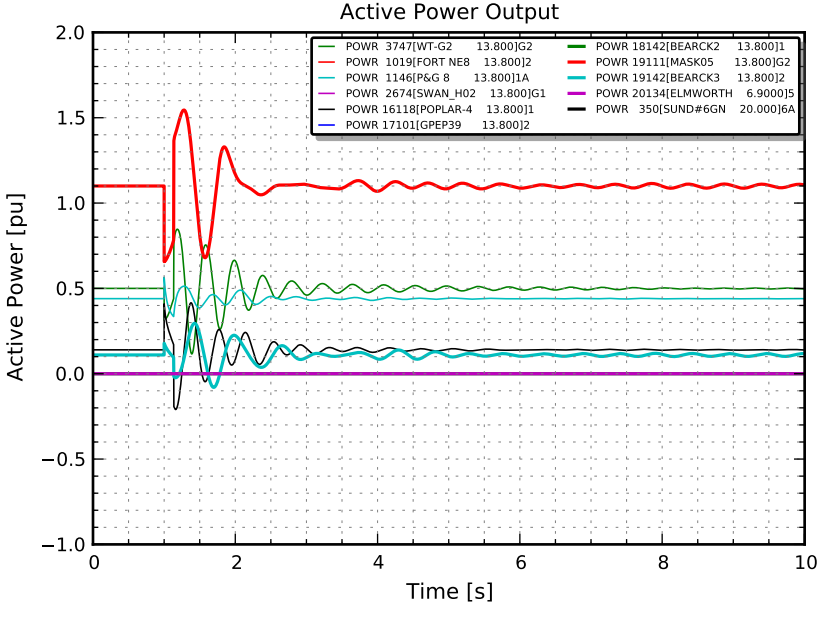
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 028 7L01 LITTLESMOKY to Sturgeon_B.

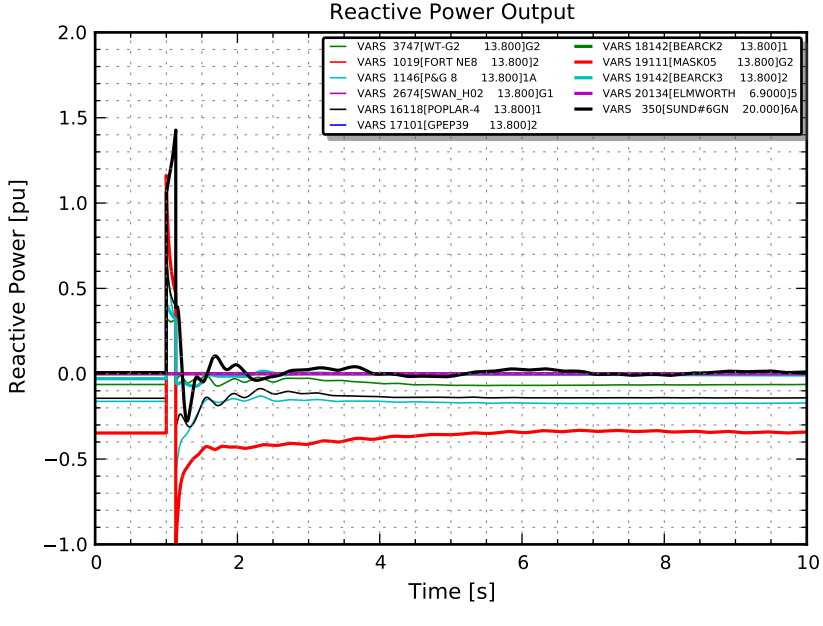
Study Area Generators

Appendix E2B
Figure: 028 (B. 3)





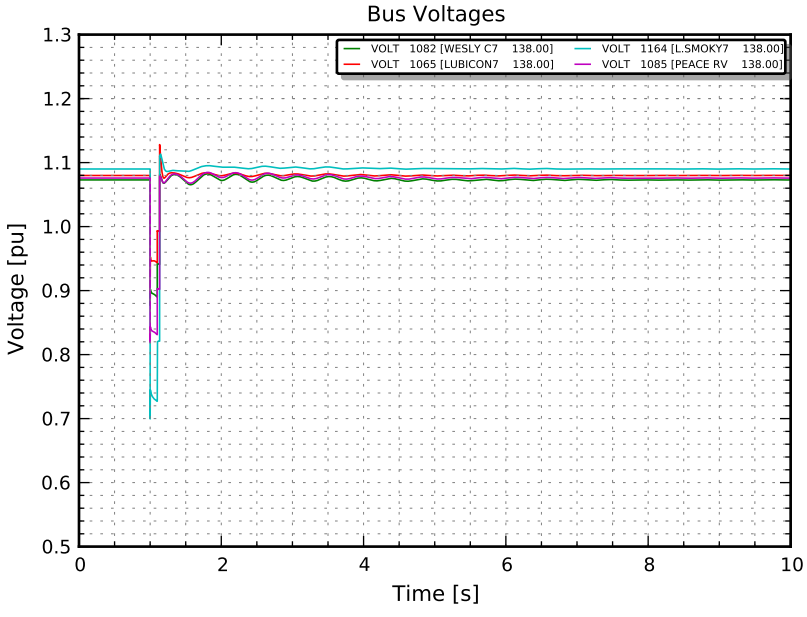


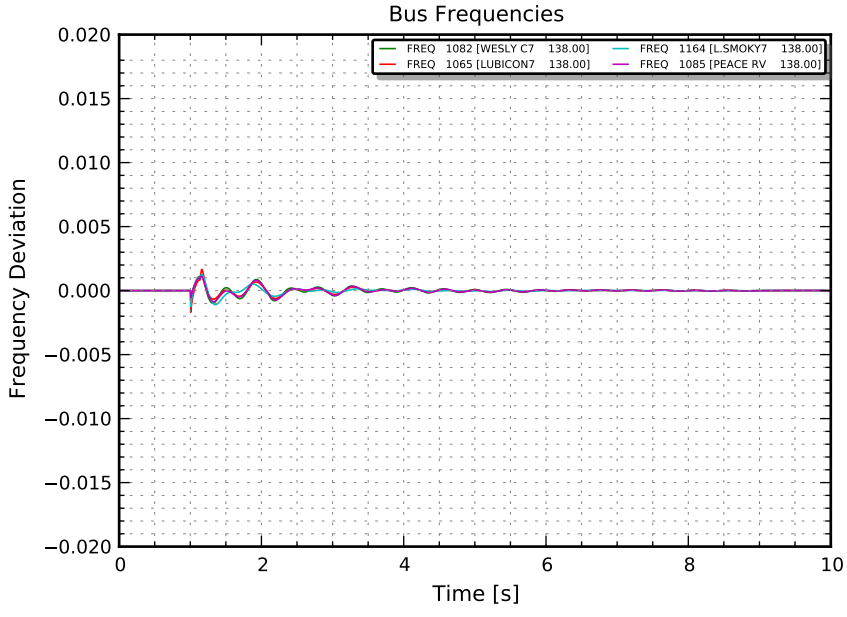


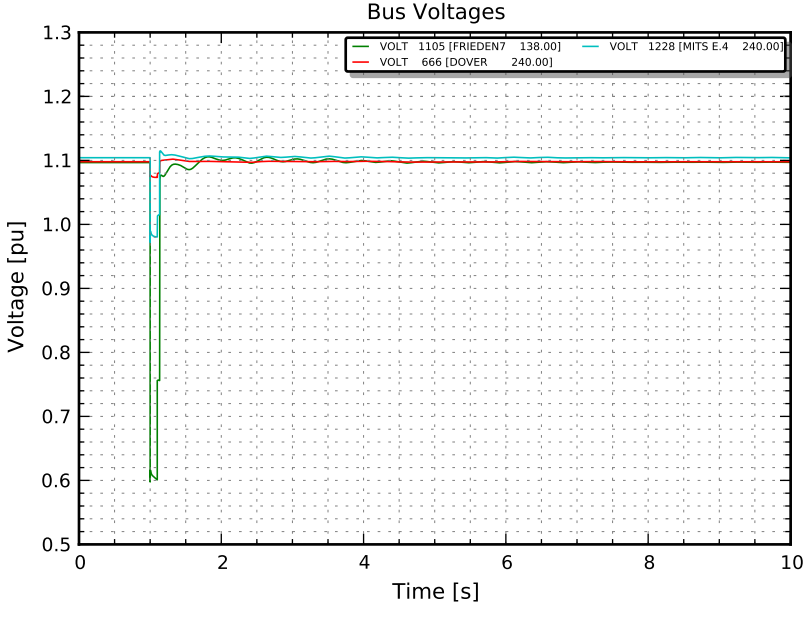
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_A.

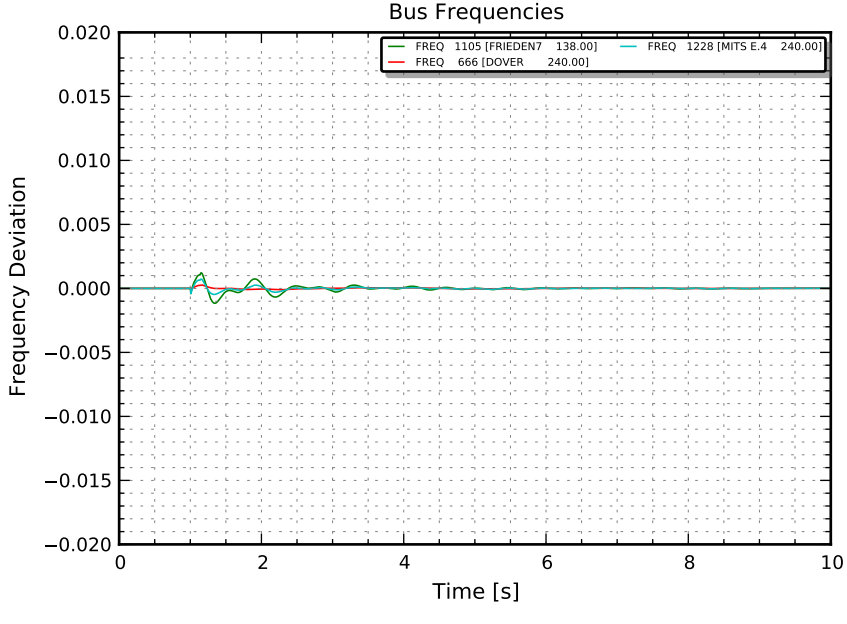
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 029 (A. 1)





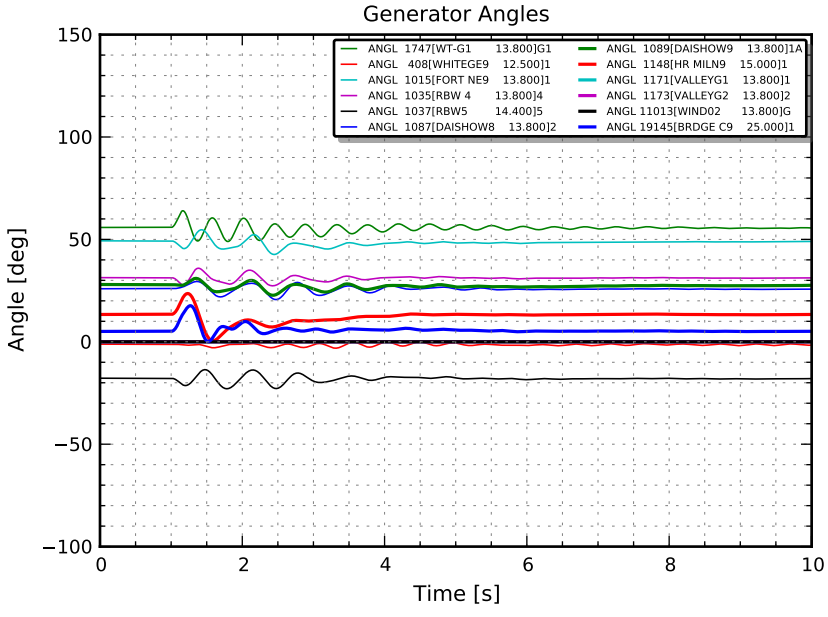


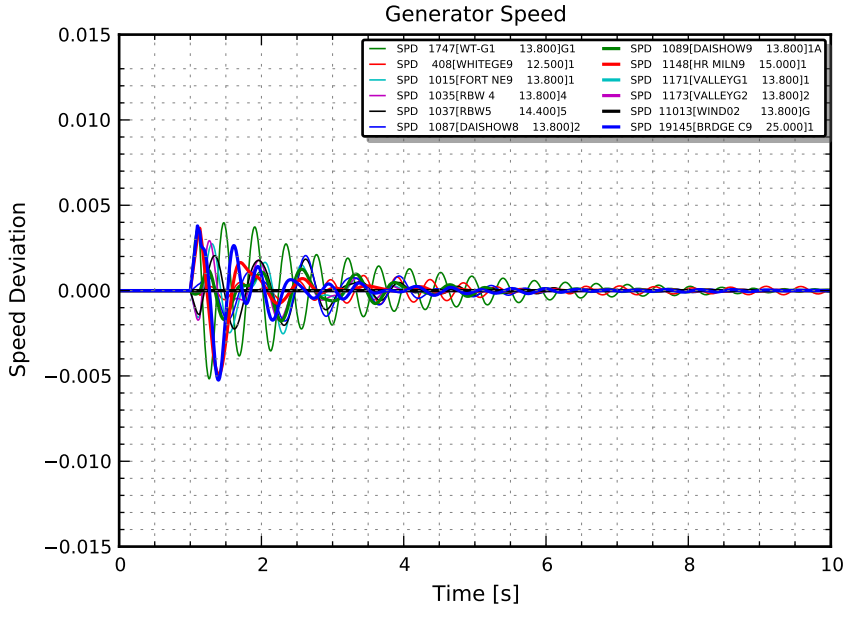


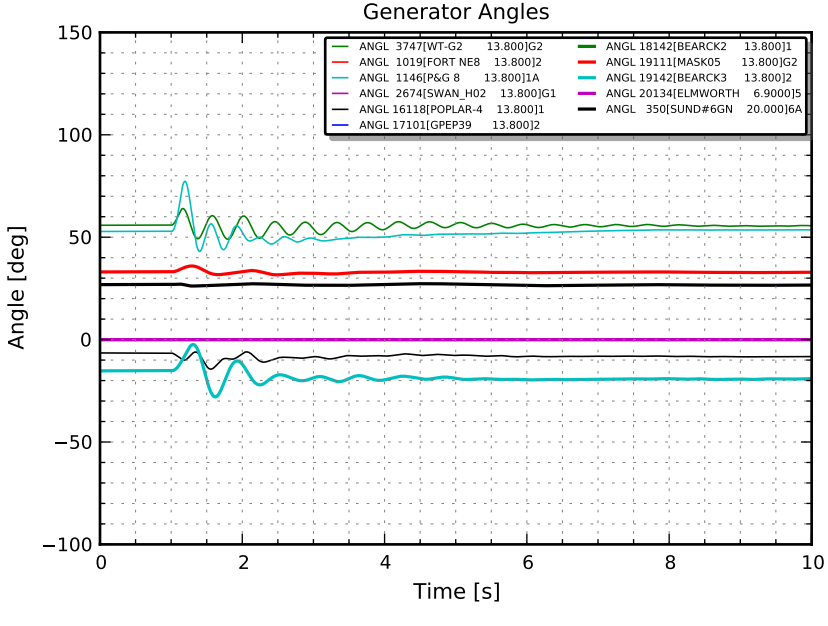
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_A.

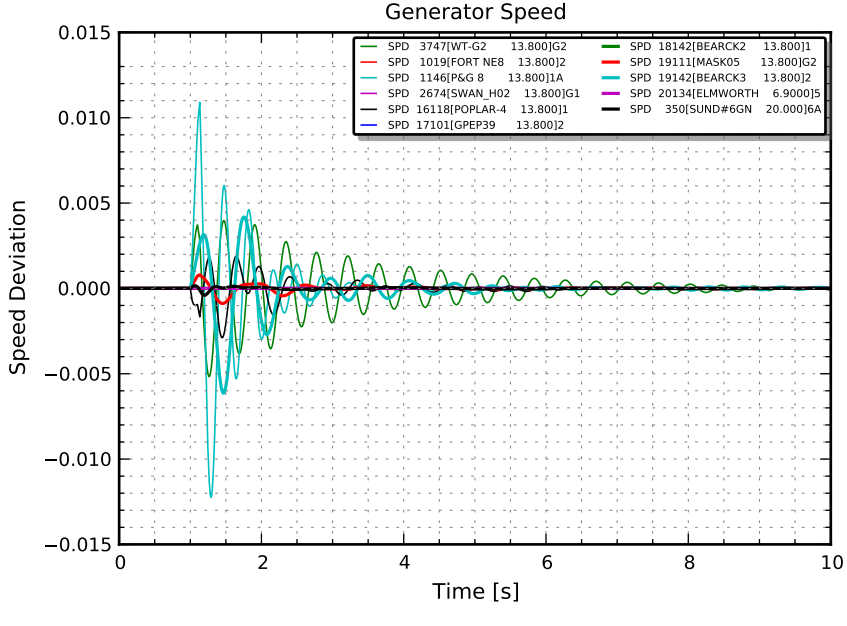
Study Area Generators

Appendix E2B
Figure: 029 (A. 2)





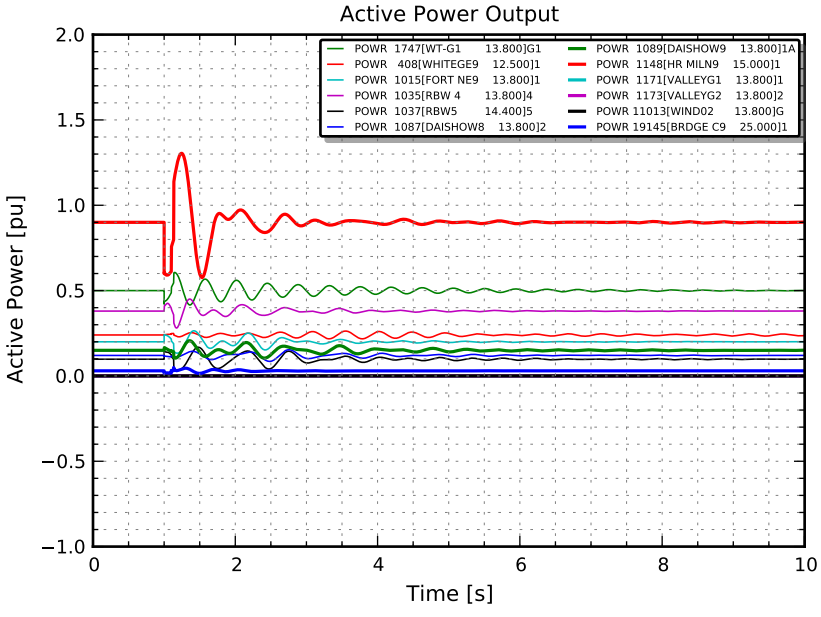


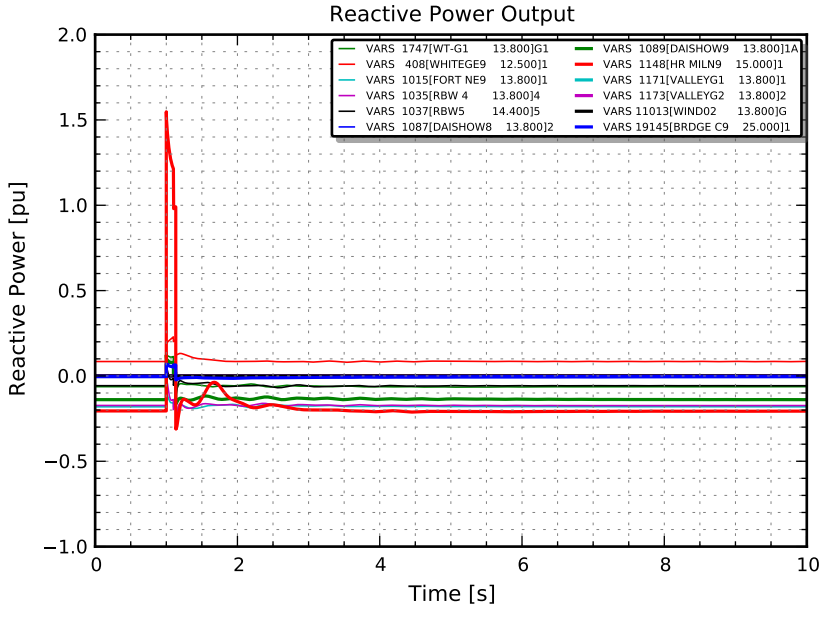


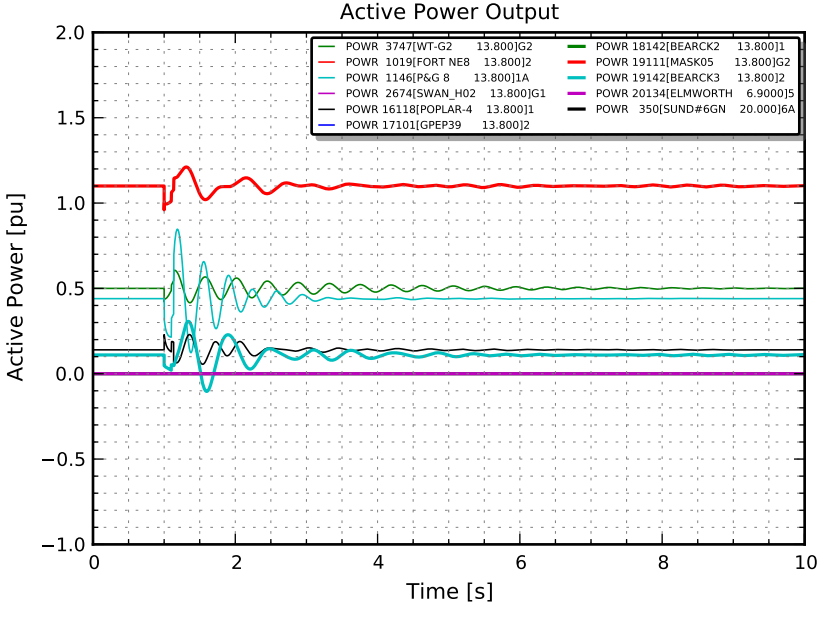
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_A.

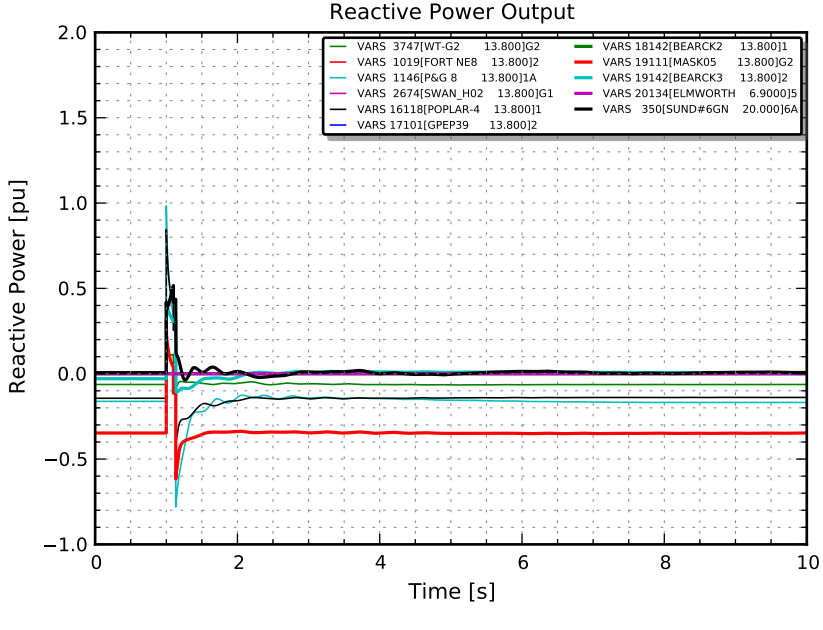
Study Area Generators

Appendix E2B
Figure: 029 (A. 3)





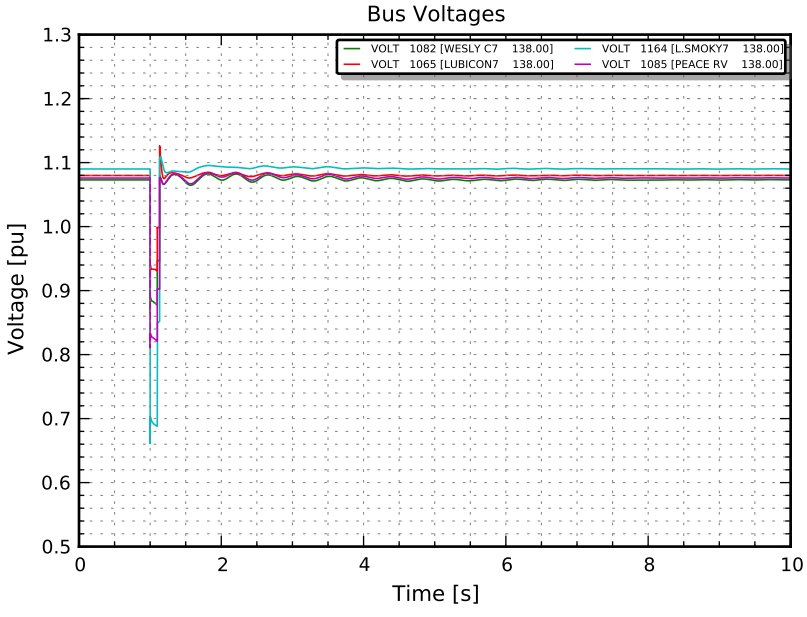


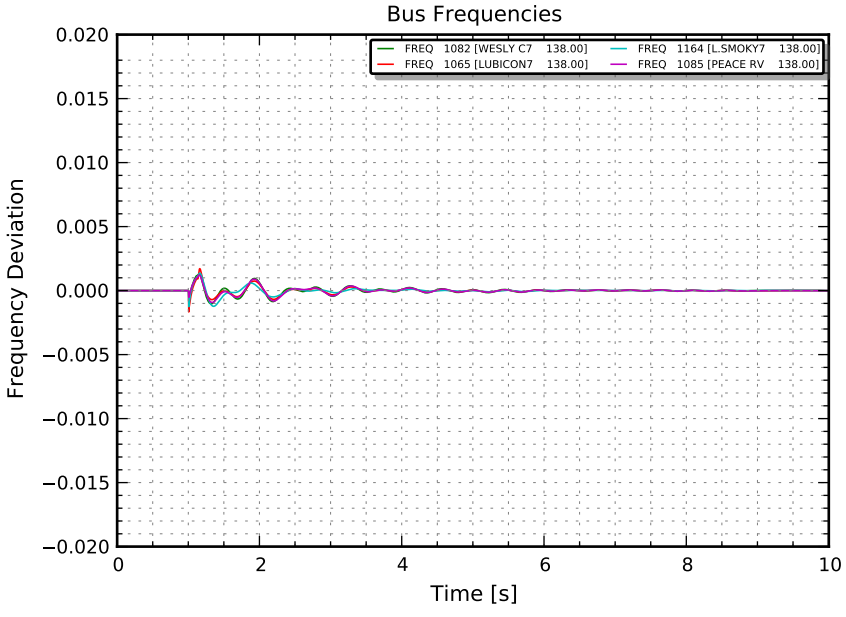


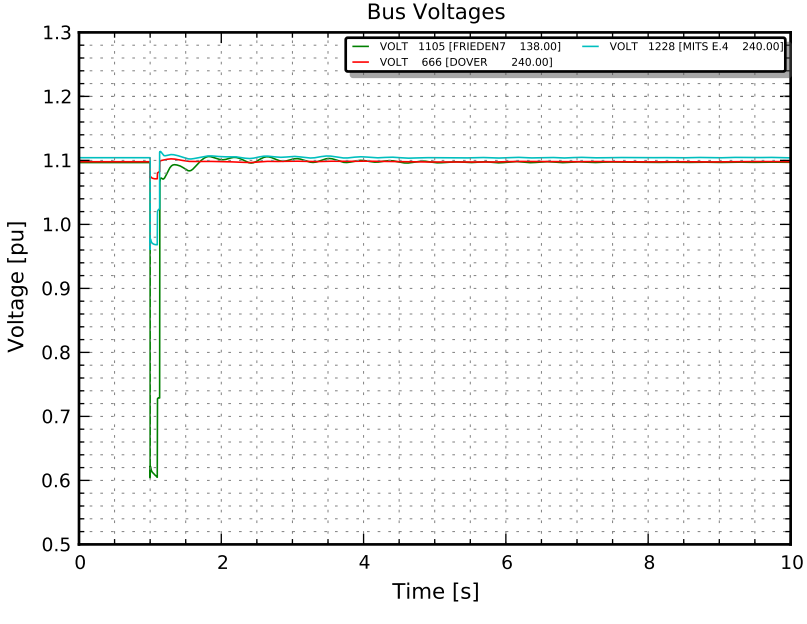
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_B.

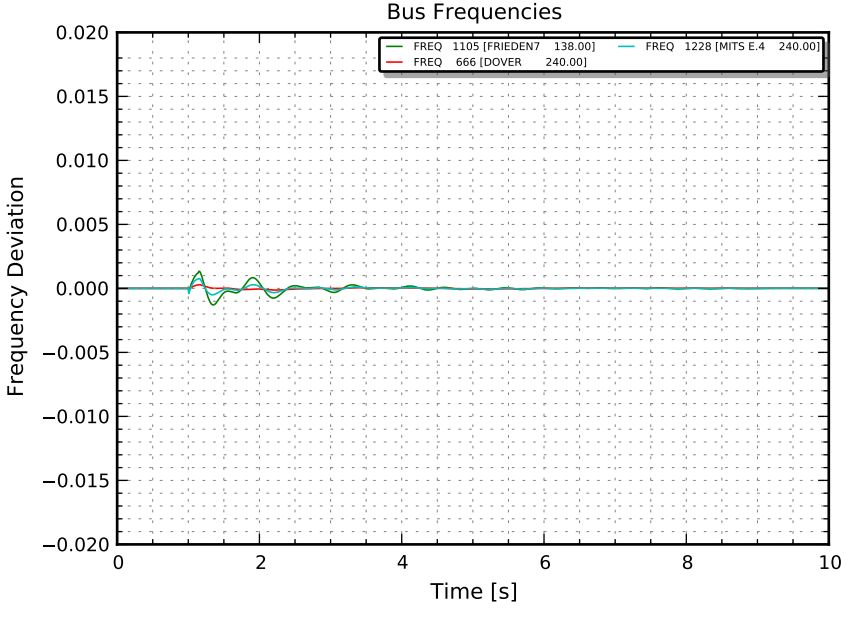
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 029 (B. 1)





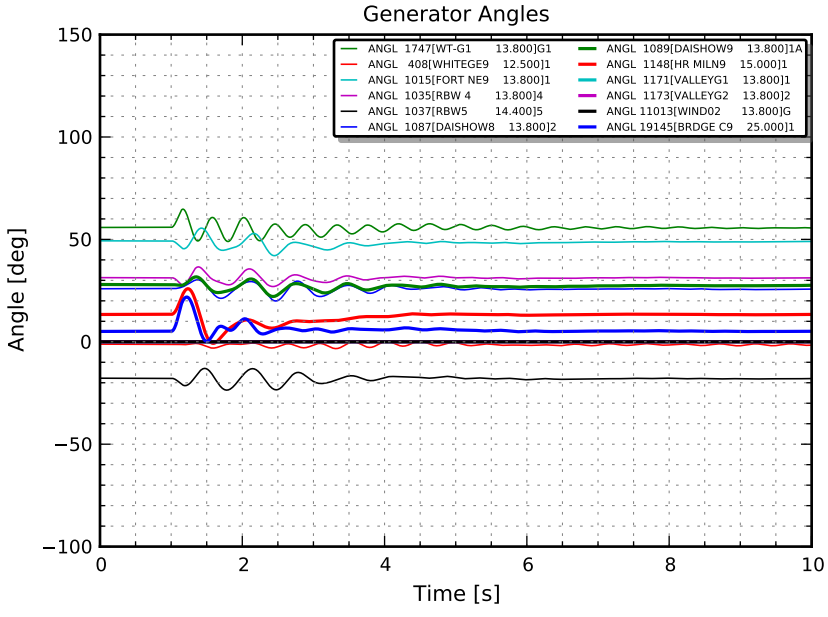


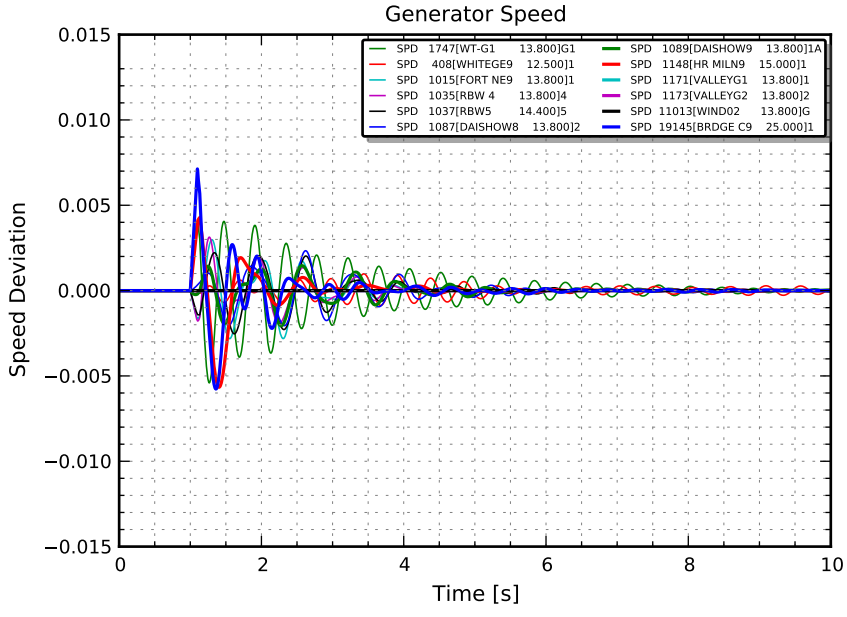


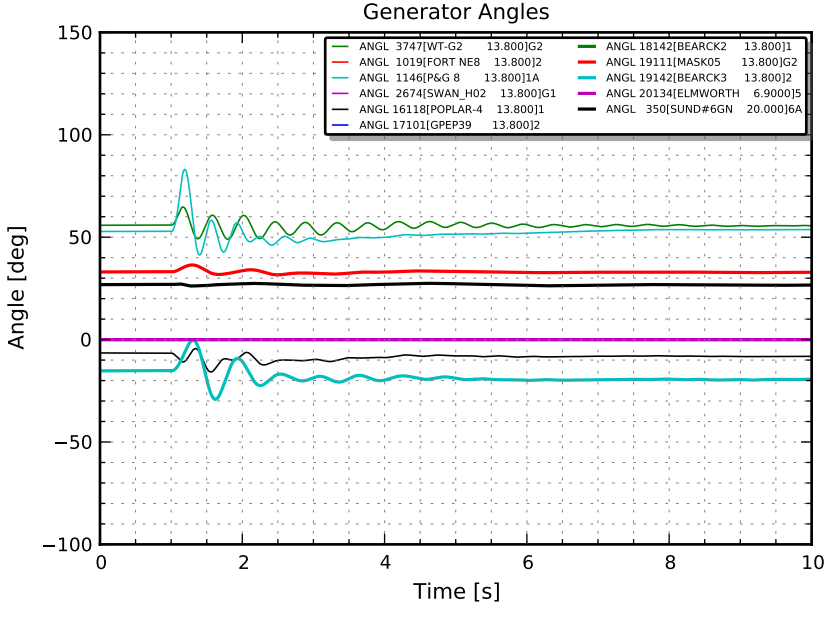
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_B.

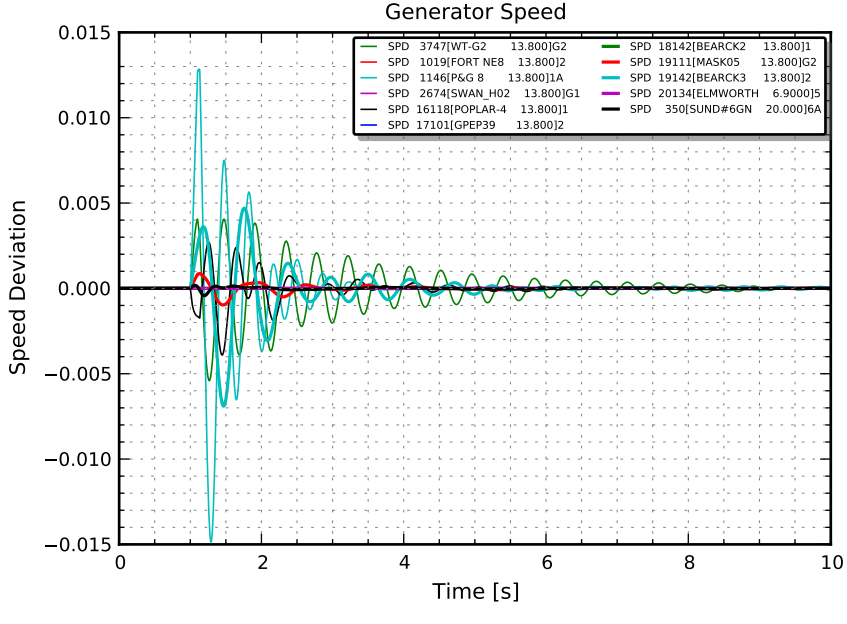
Study Area Generators

Appendix E2B
Figure: 029 (B. 2)





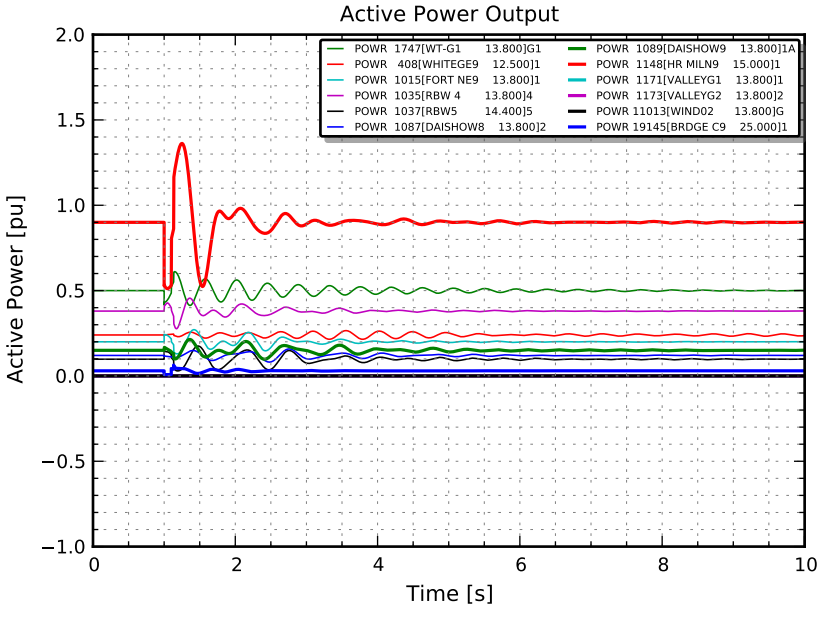


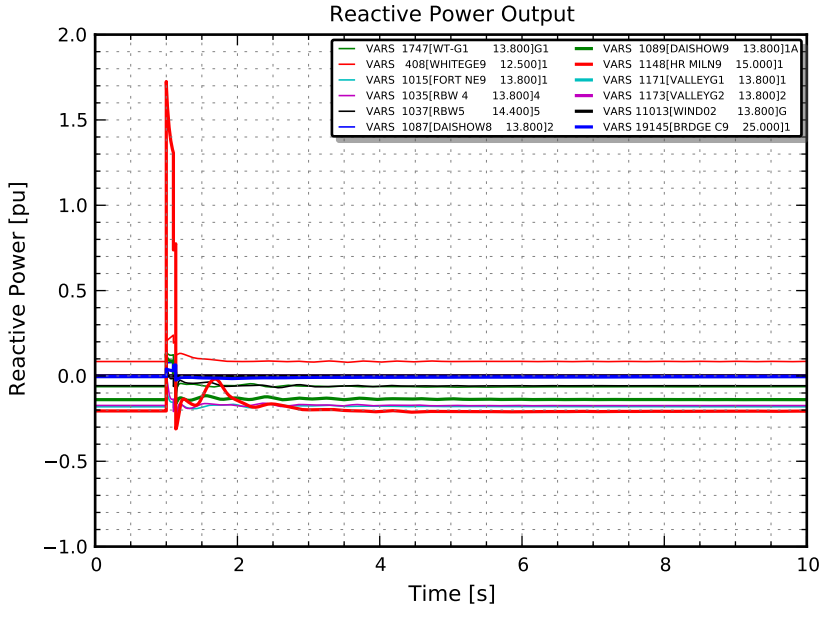


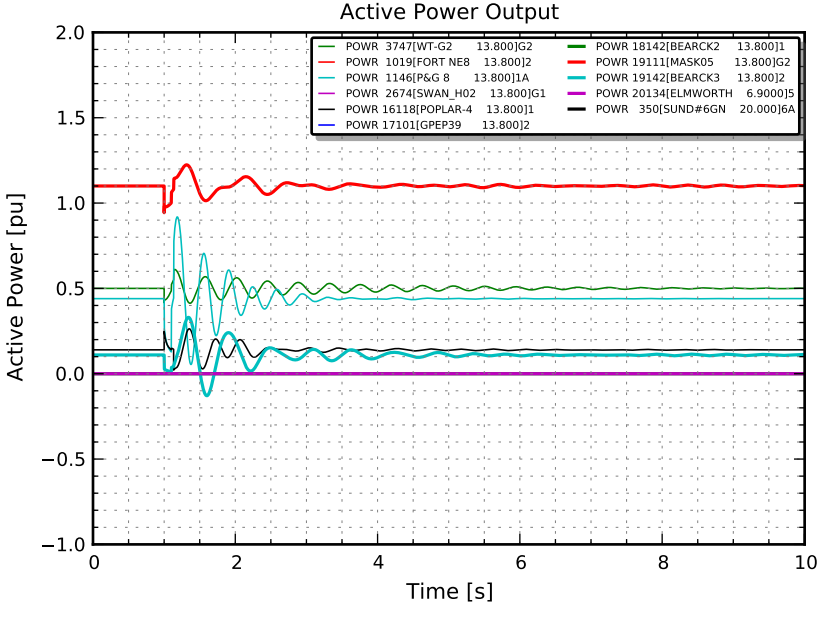
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 029 7L44 FLYINGSHOTLAKE to BIGMOUNTAIN_B.

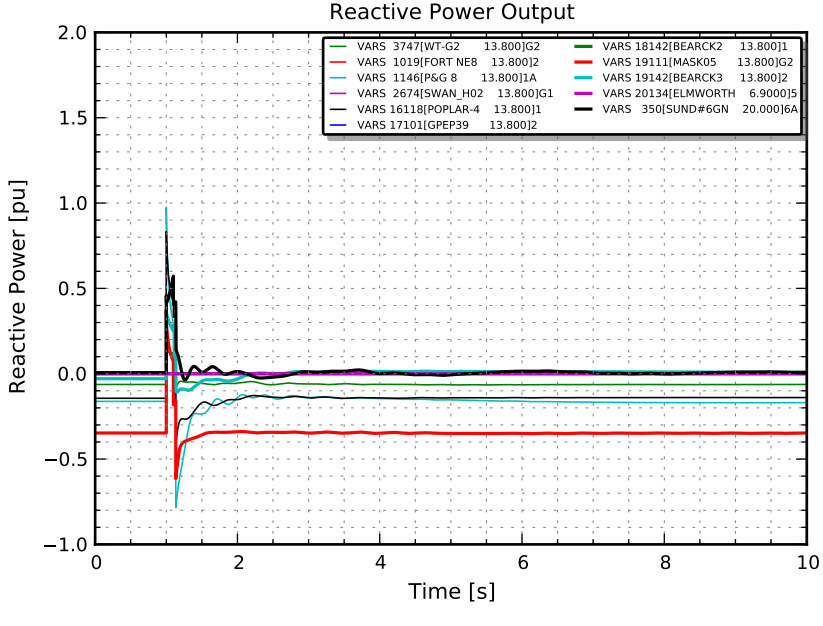
Study Area Generators

Appendix E2B
Figure: 029 (B. 3)





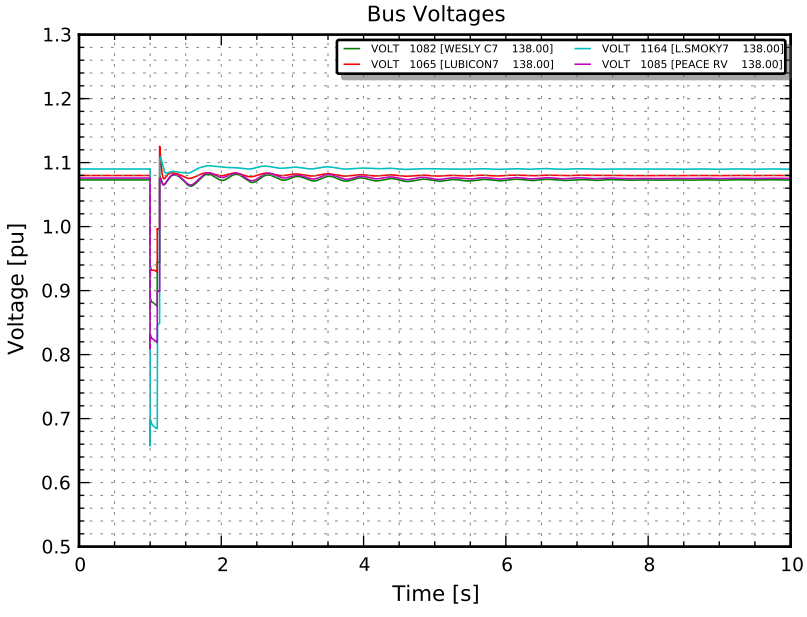


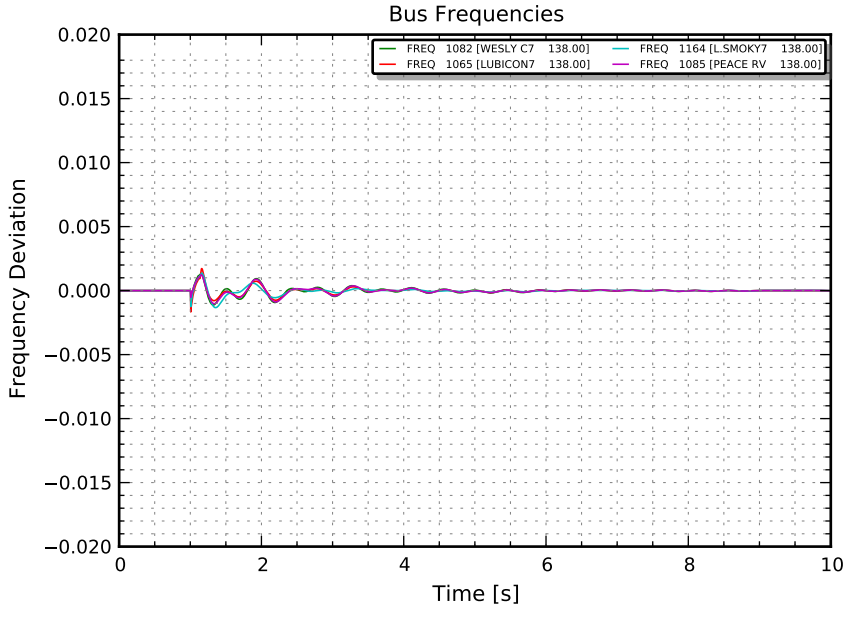


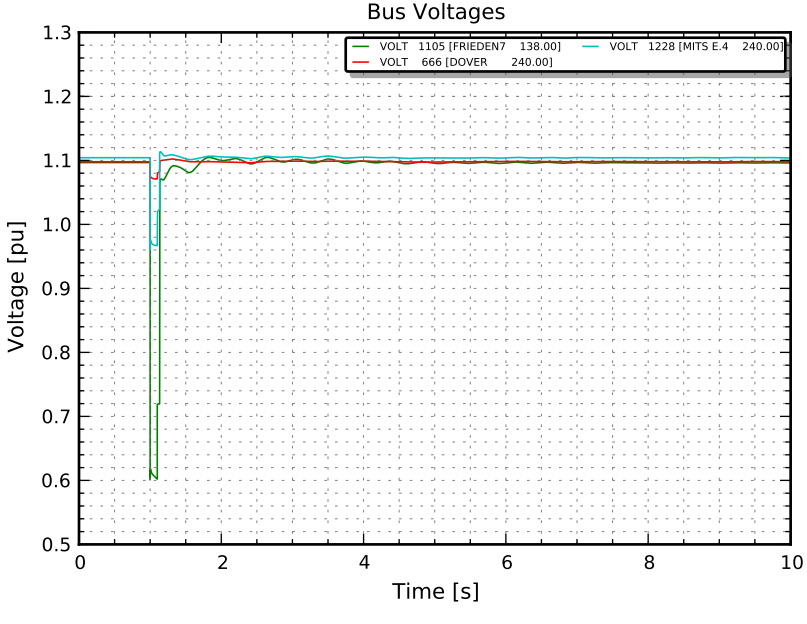
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_A.

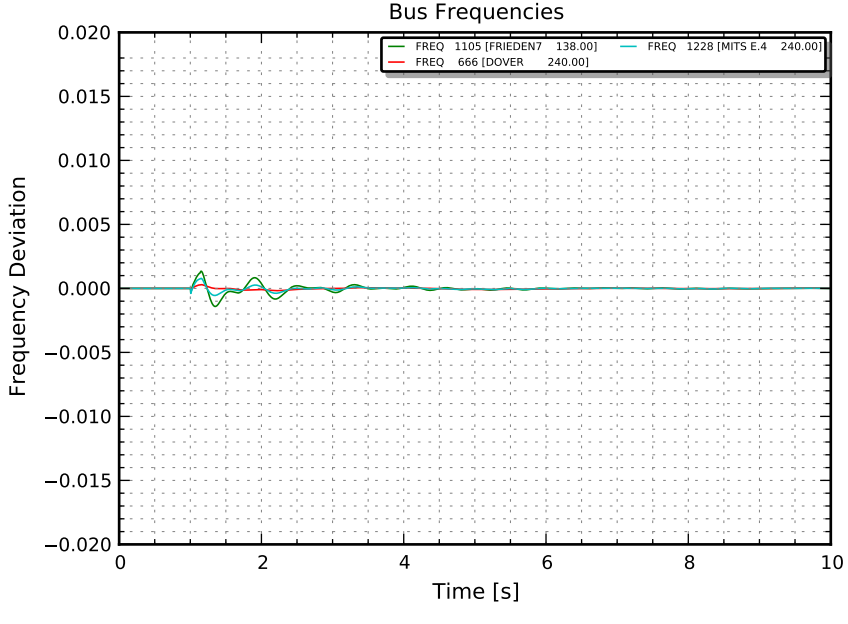
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 030 (A. 1)





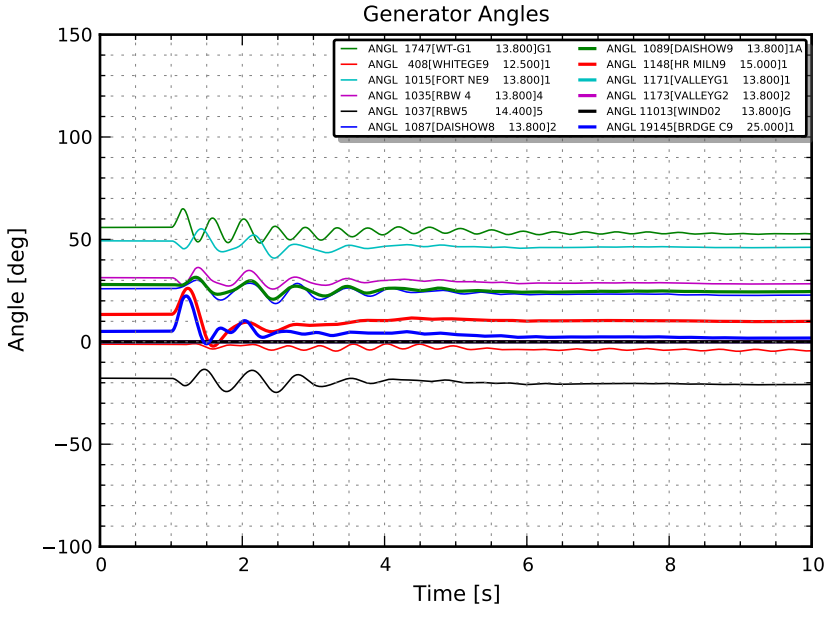


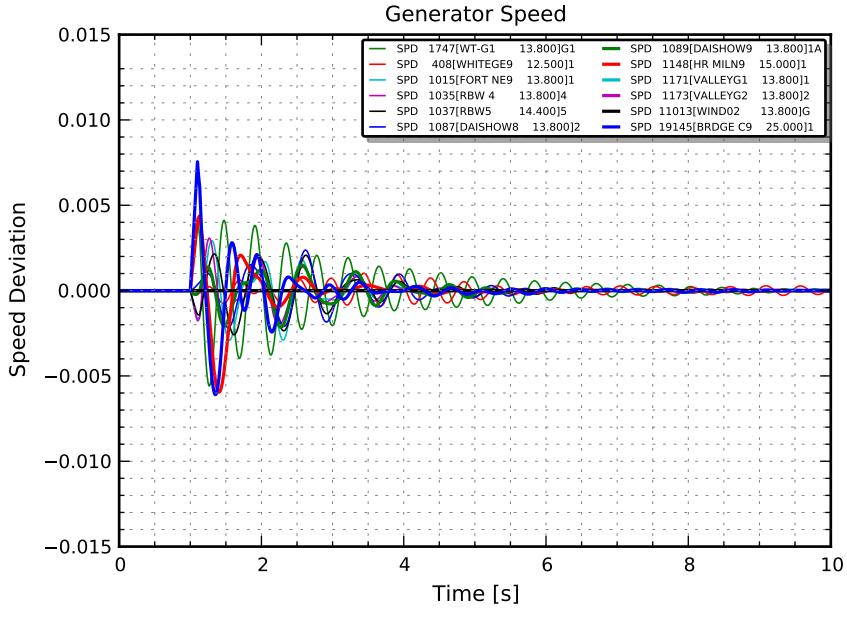


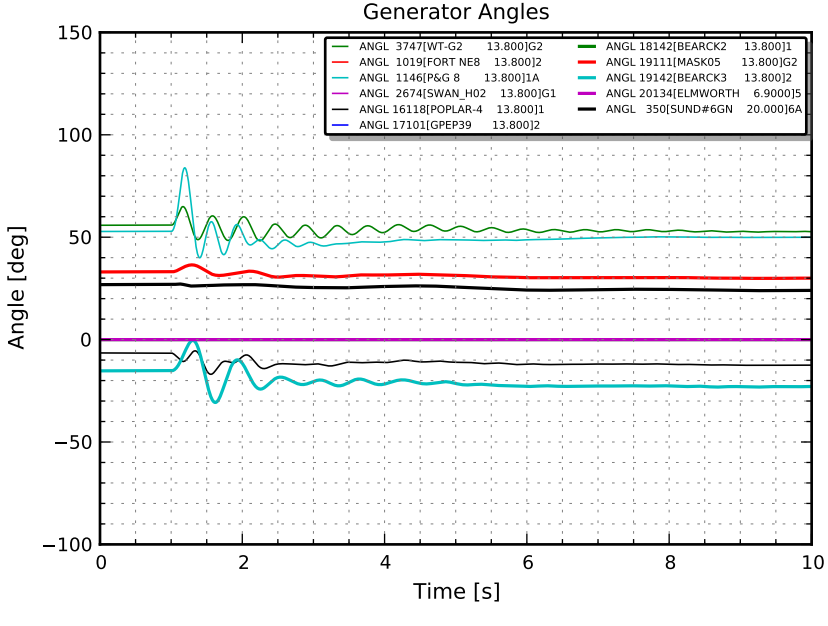
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_A.

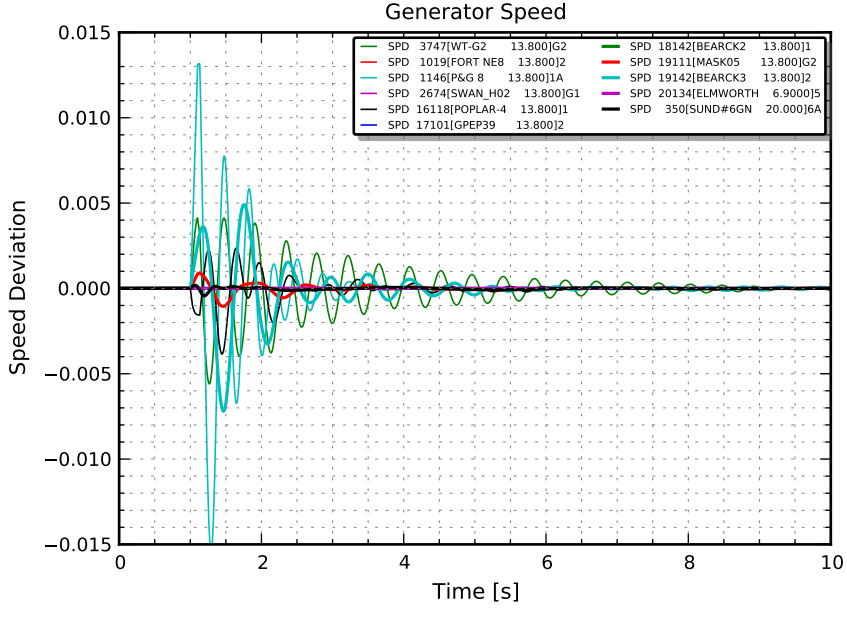
Study Area Generators

Appendix E2B
Figure: 030 (A. 2)





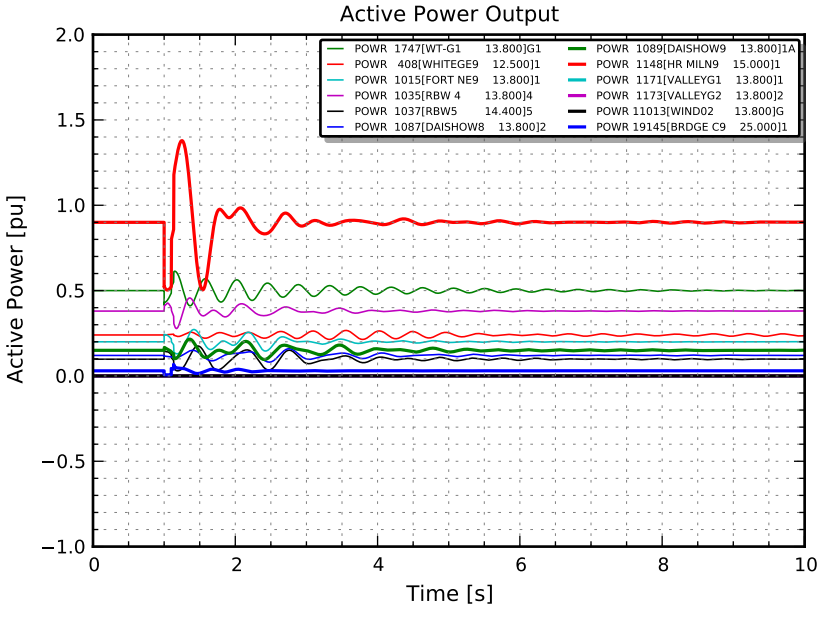


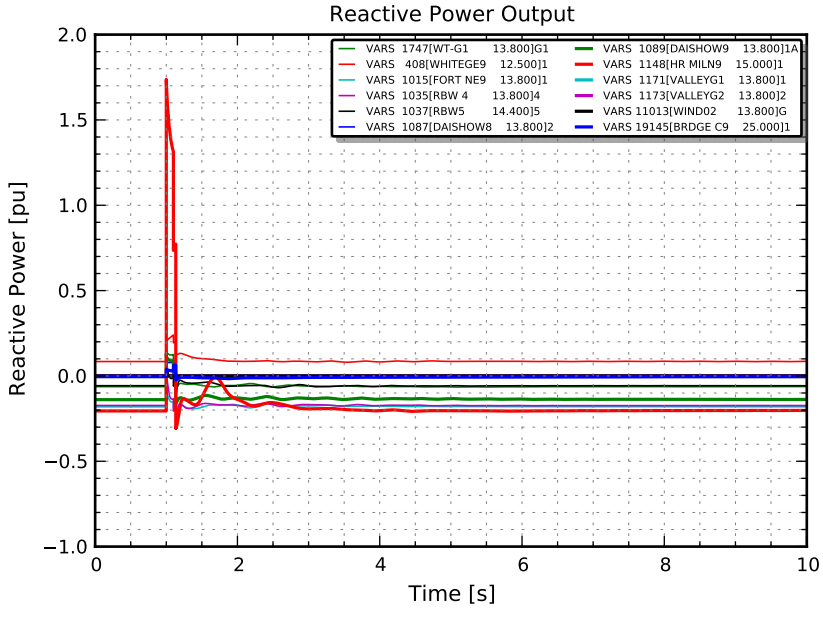


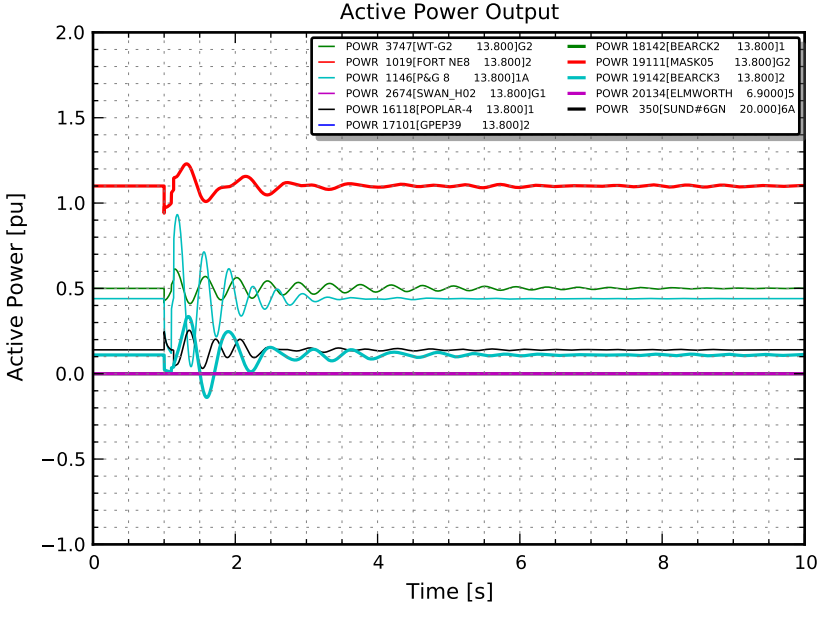
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_A.

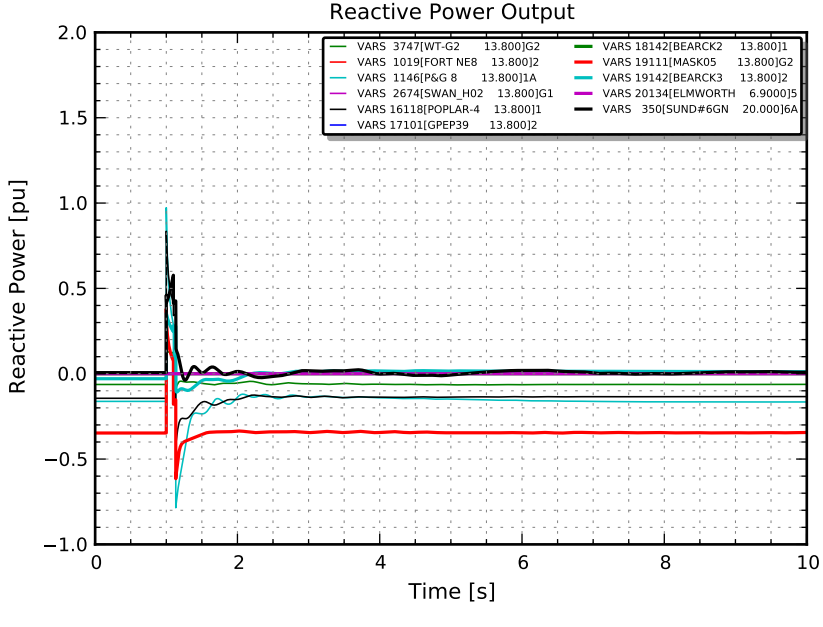
Study Area Generators

Appendix E2B
Figure: 030 (A. 3)





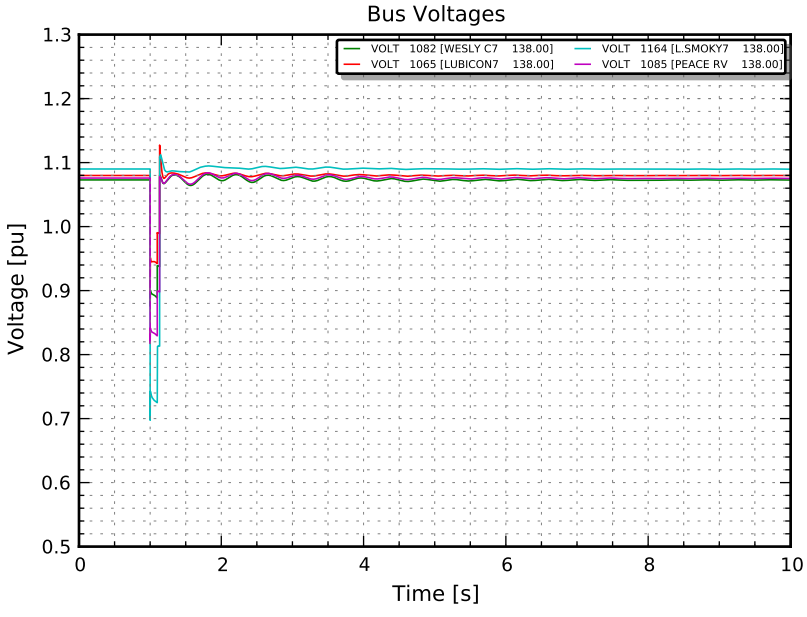


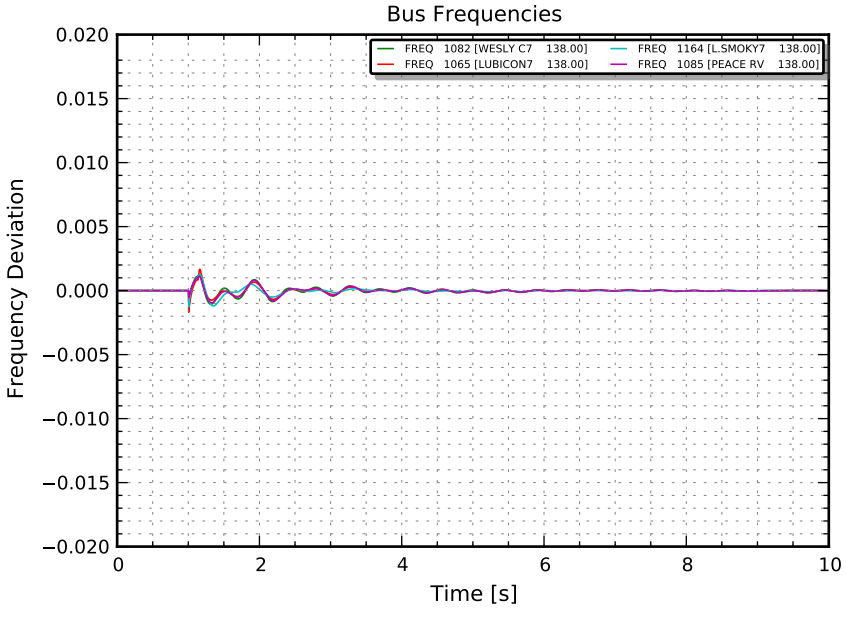


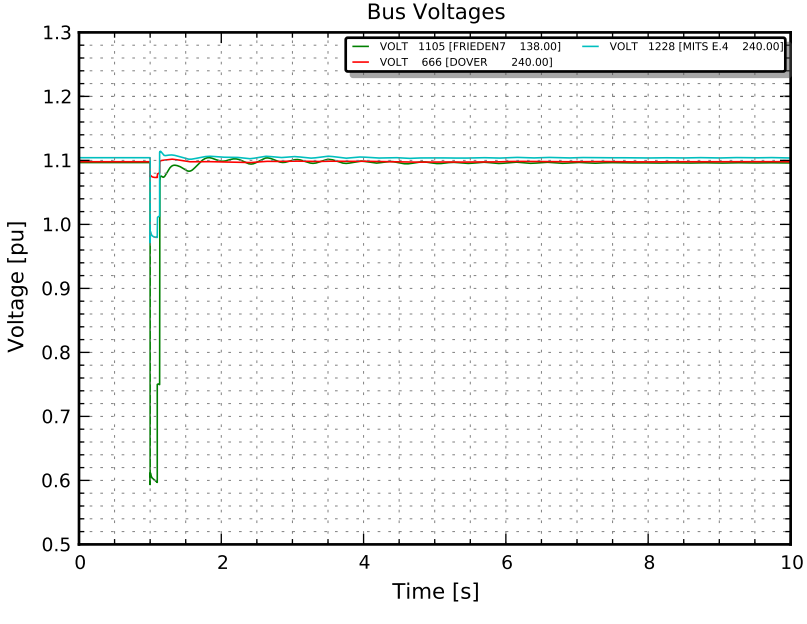
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_B.

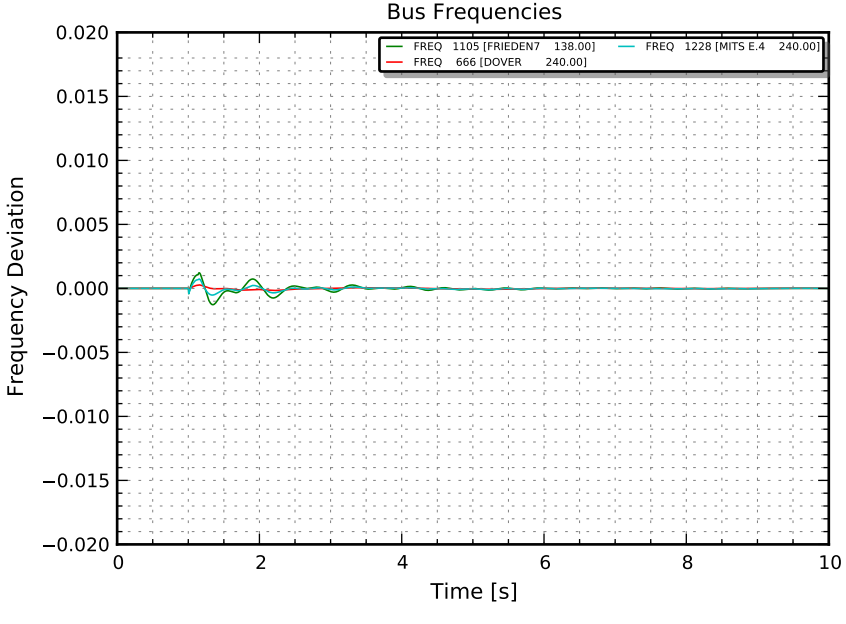
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 030 (B. 1)





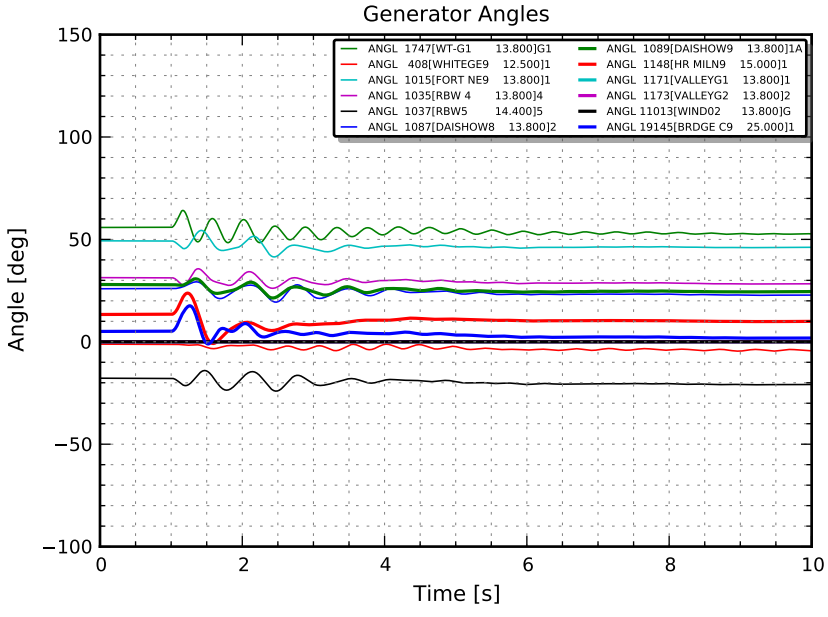


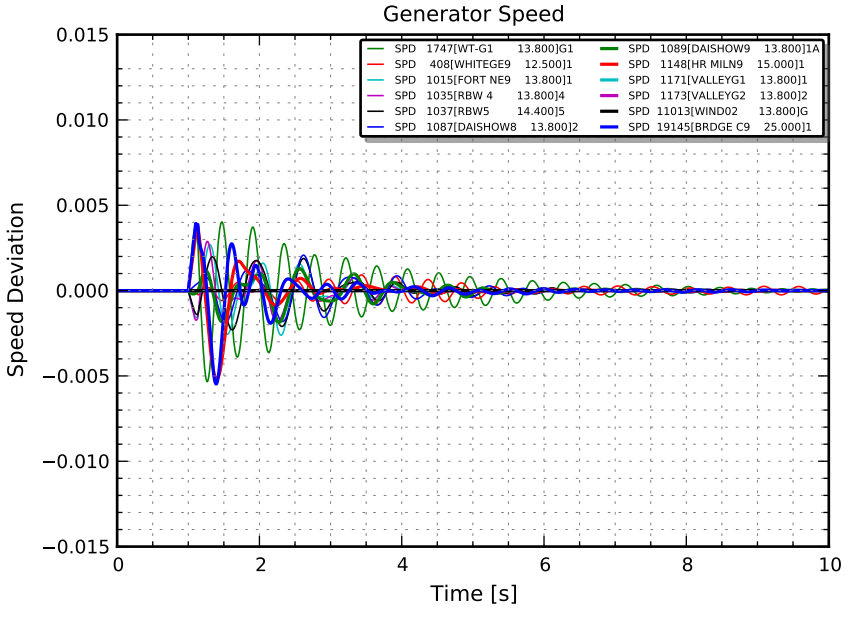


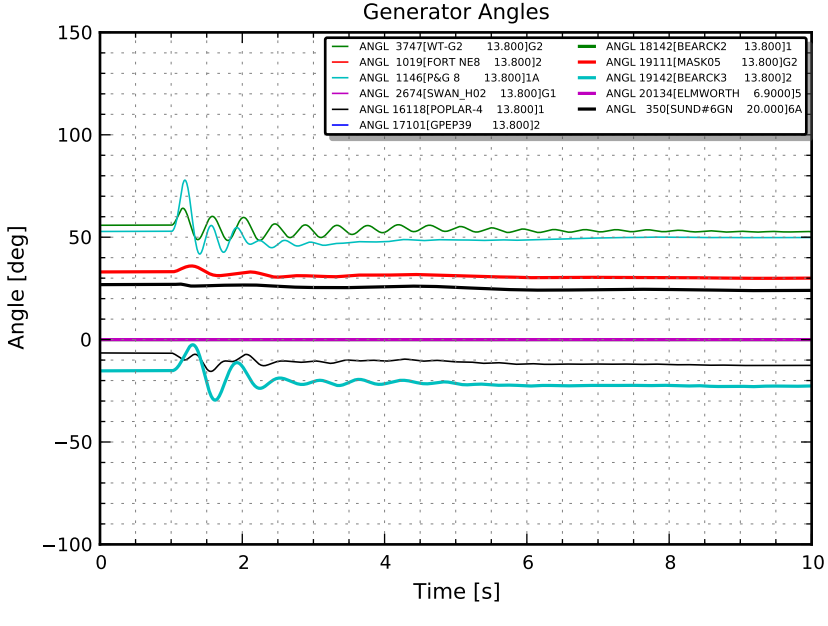
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_B.

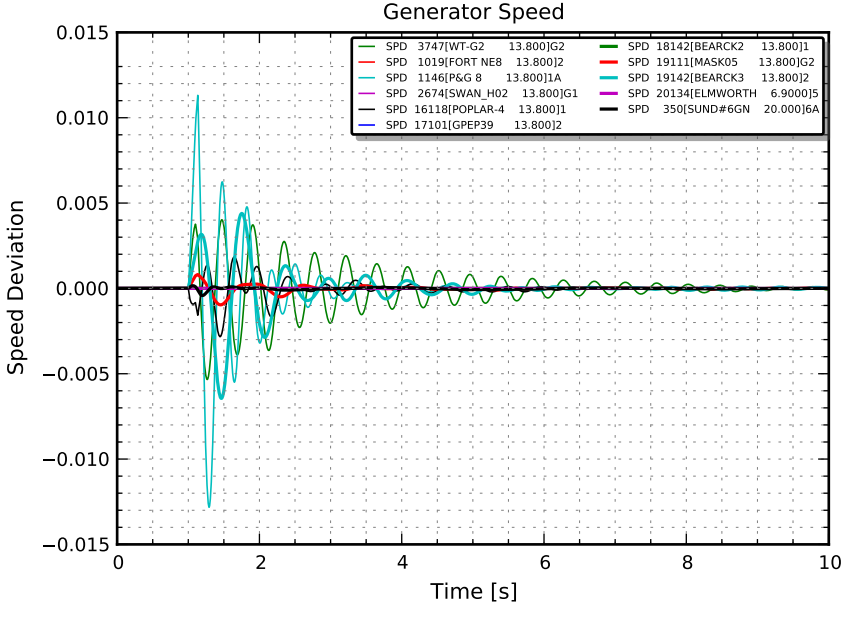
Study Area Generators

Appendix E2B
Figure: 030 (B. 2)





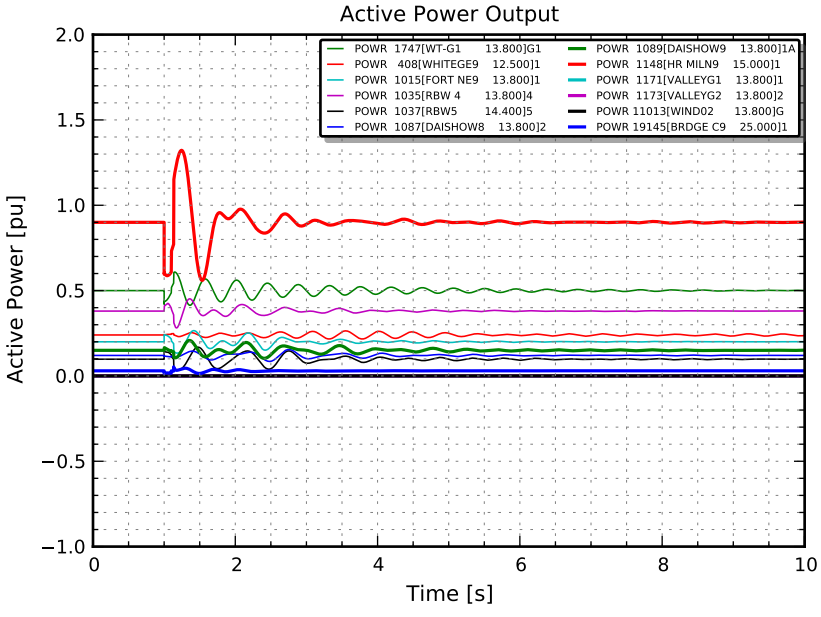


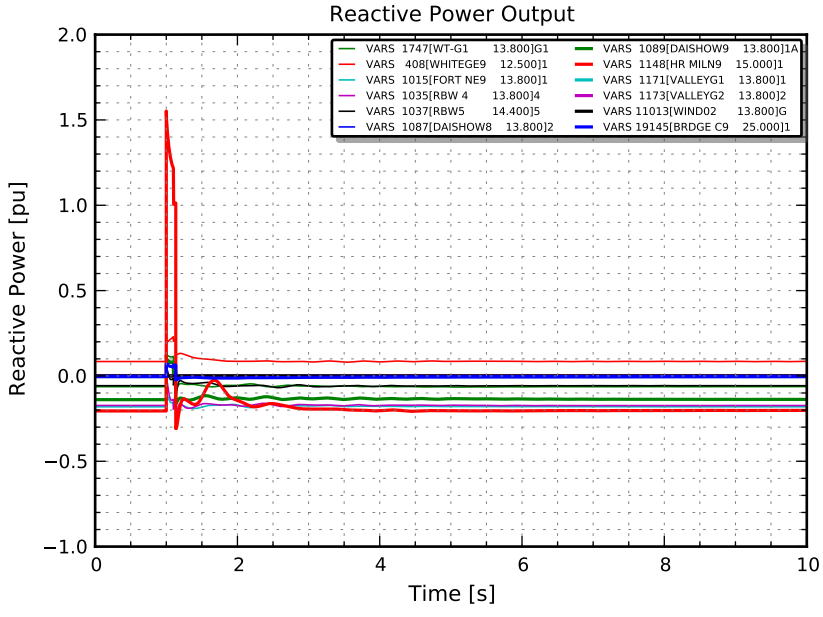


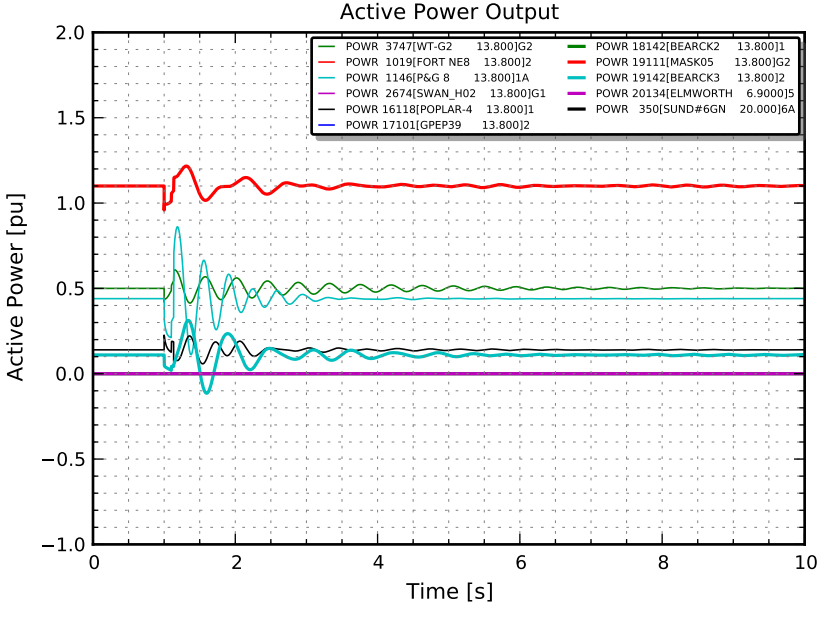
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 030 7L33 BIGMOUNTAIN to FLYINGSHOTLAKE_B.

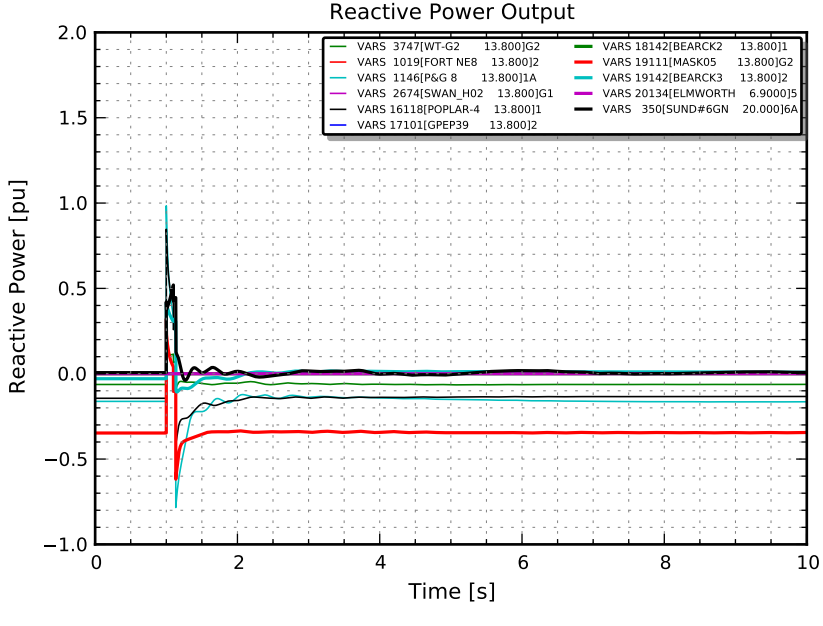
Study Area Generators

Appendix E2B
Figure: 030 (B. 3)





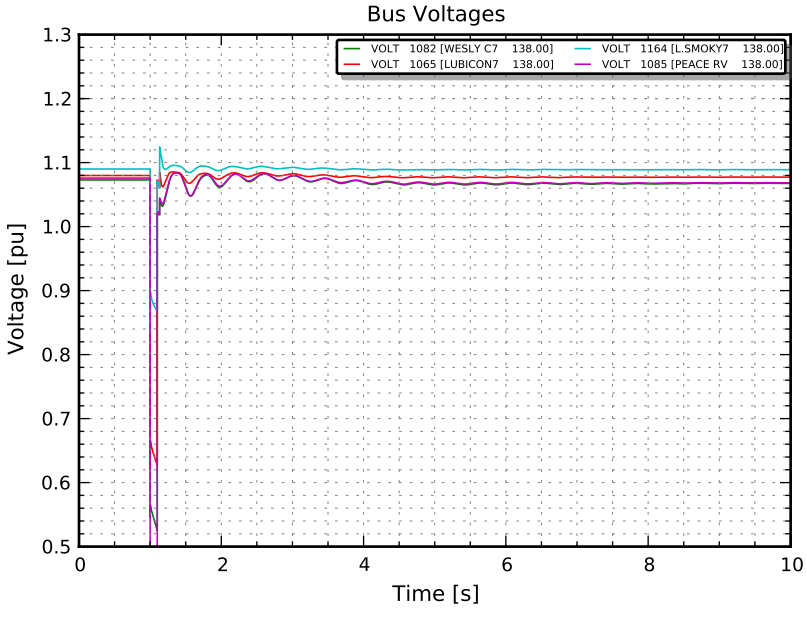


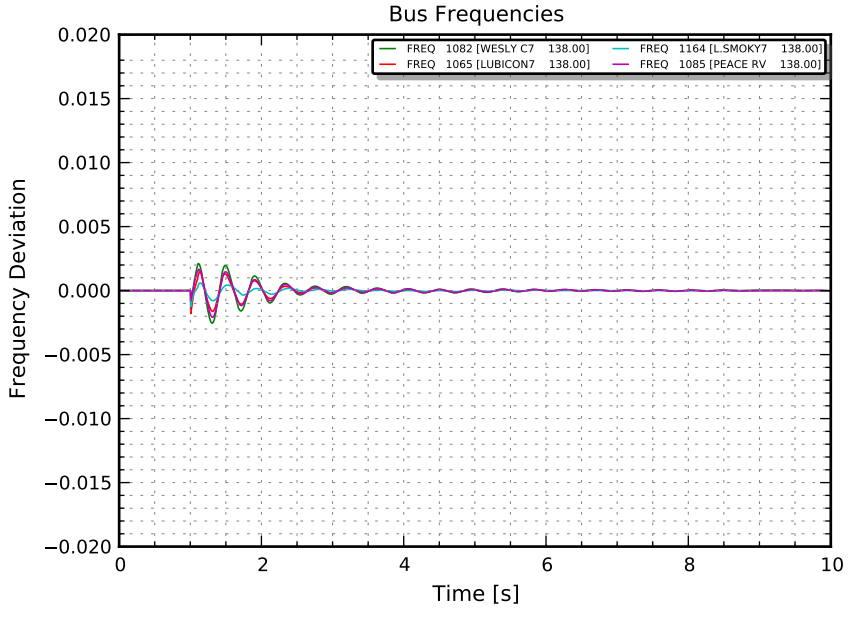


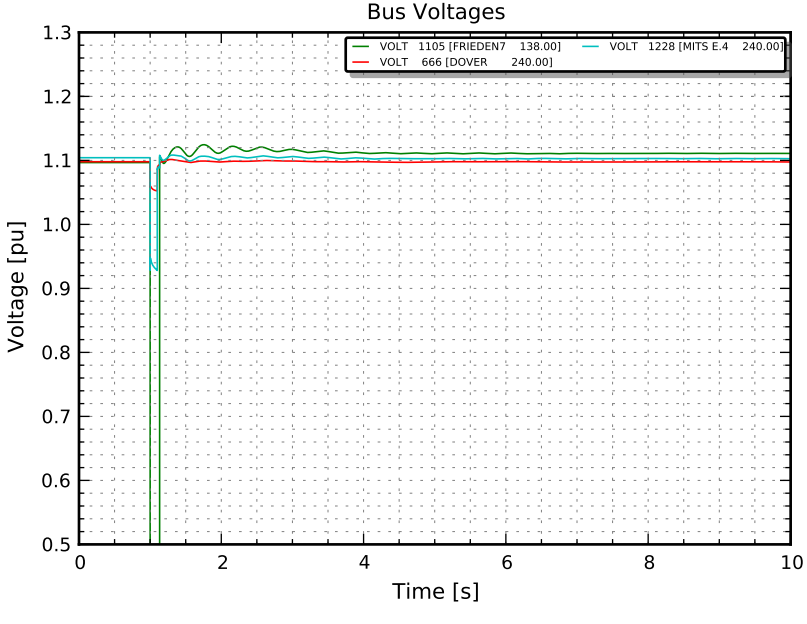
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_A.

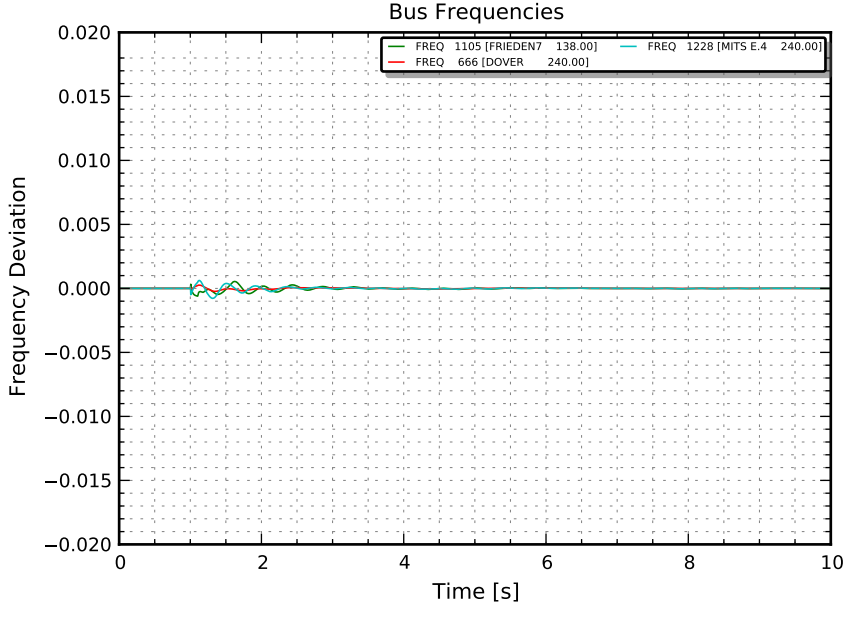
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 031 (A. 1)





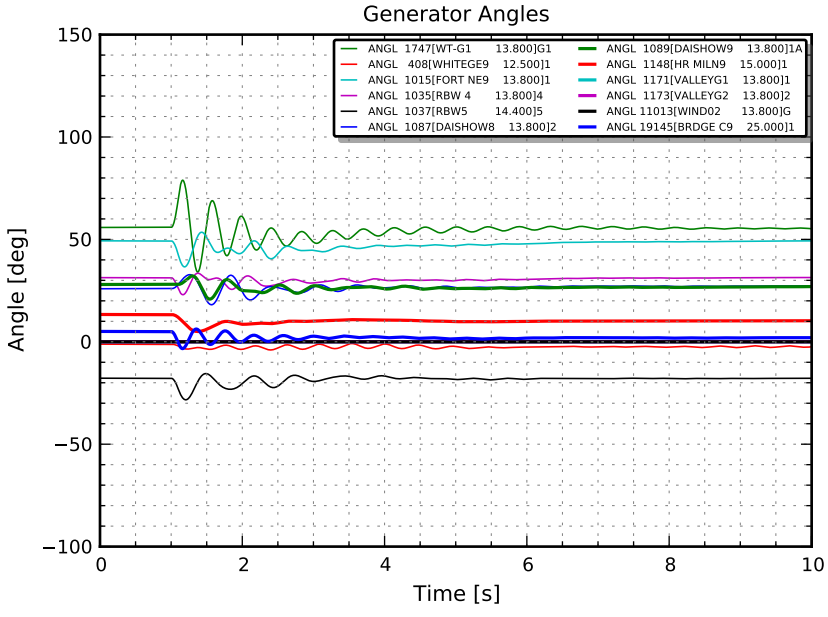


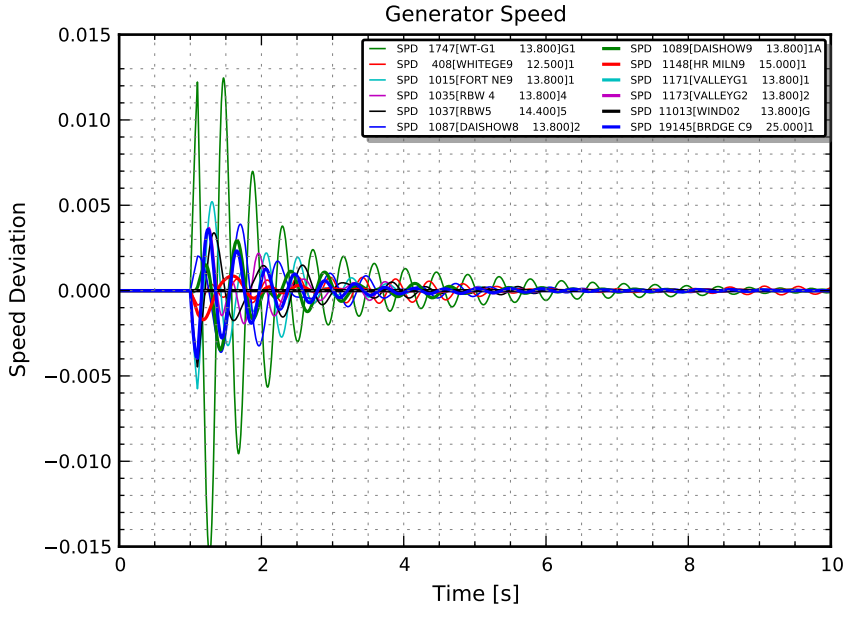


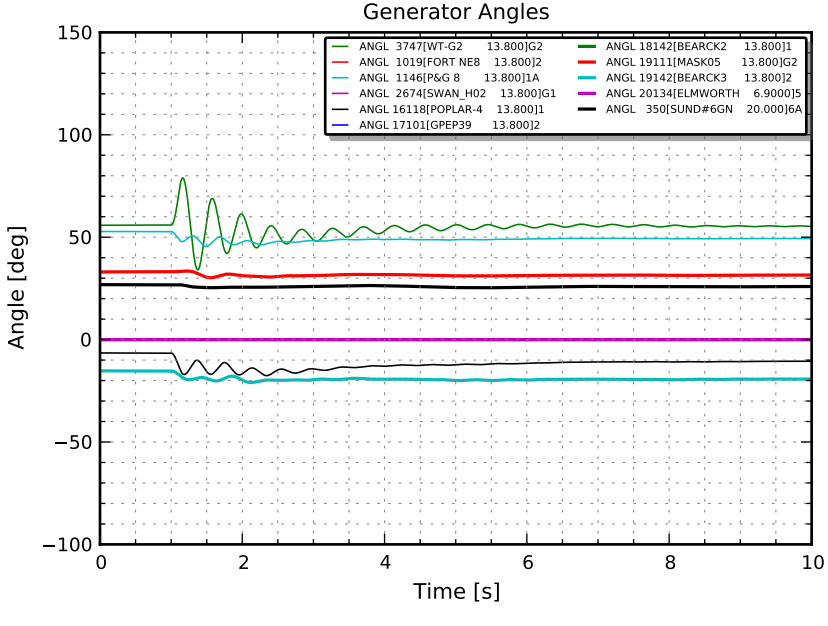
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_A.

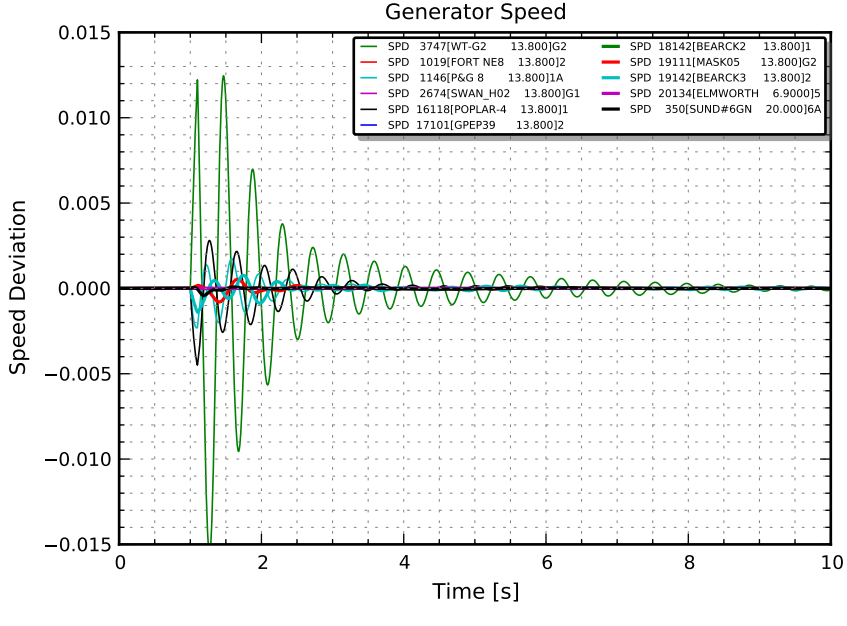
Study Area Generators

Appendix E2B
Figure: 031 (A. 2)





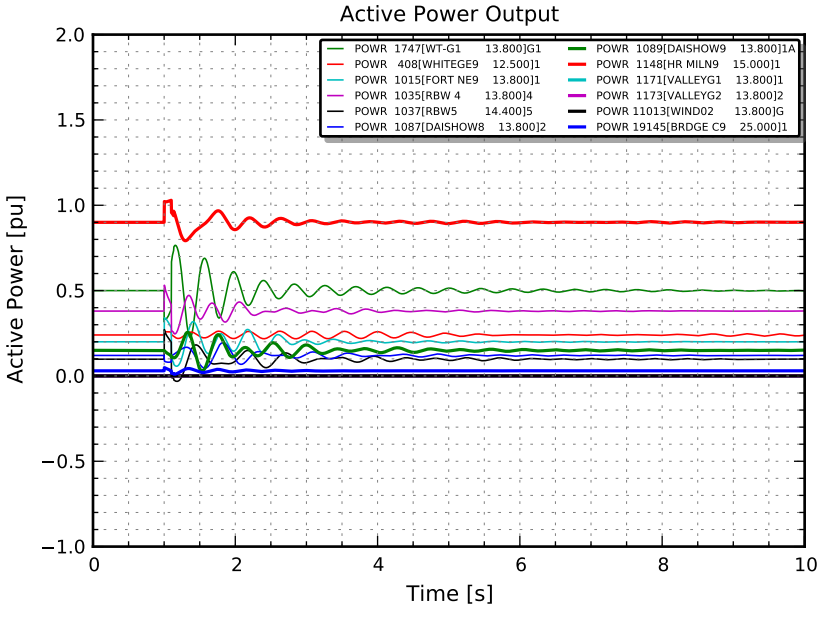


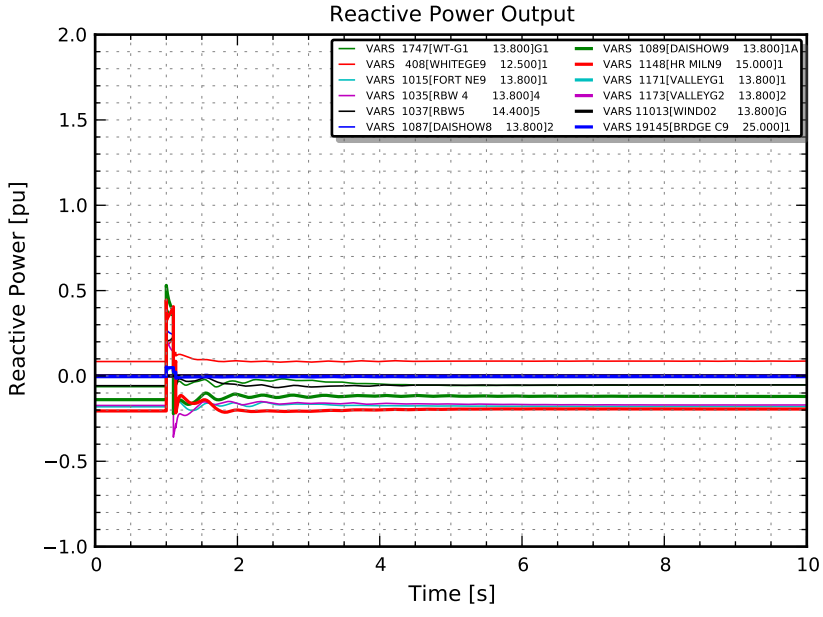


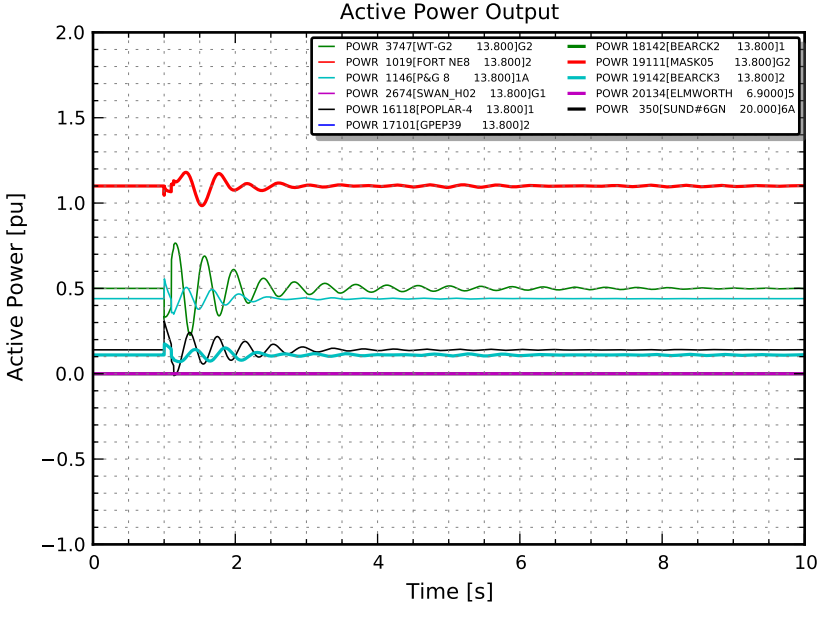
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_A.

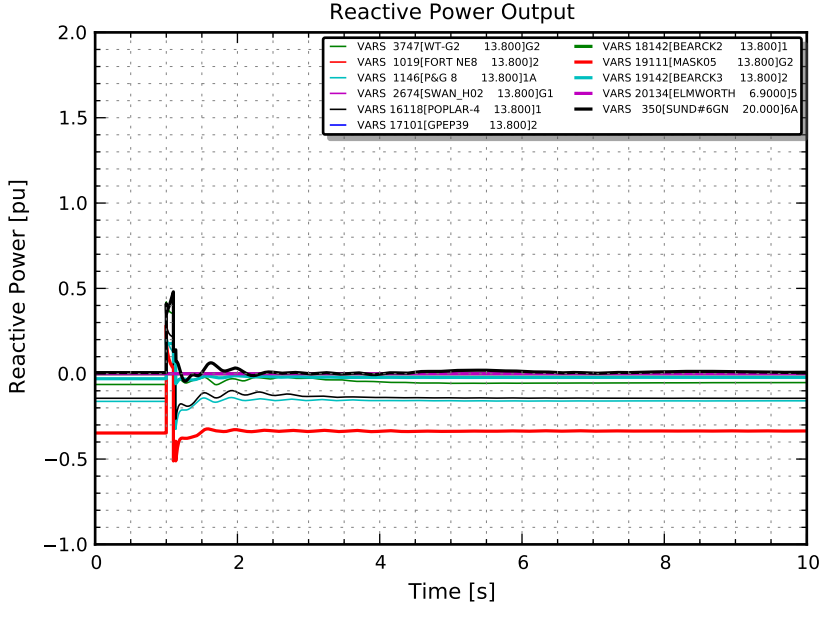
Study Area Generators

Appendix E2B
Figure: 031 (A. 3)





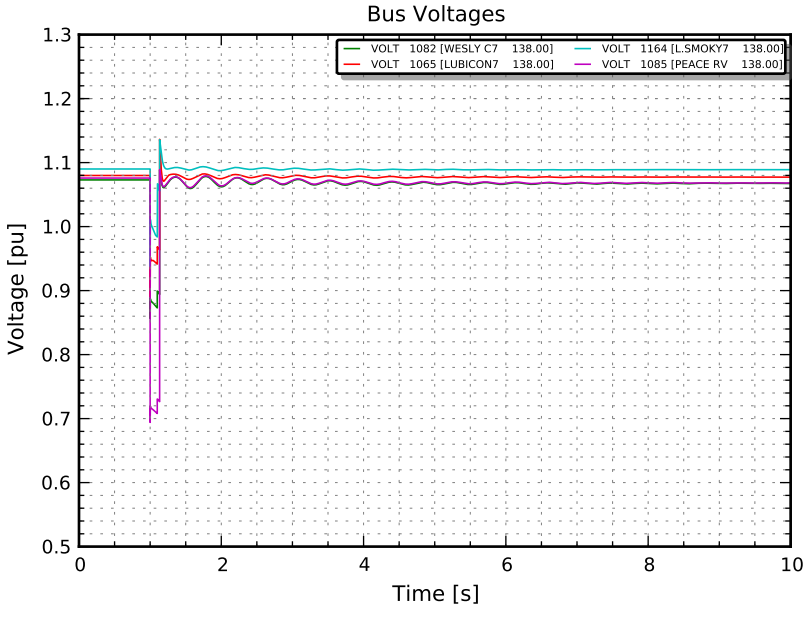


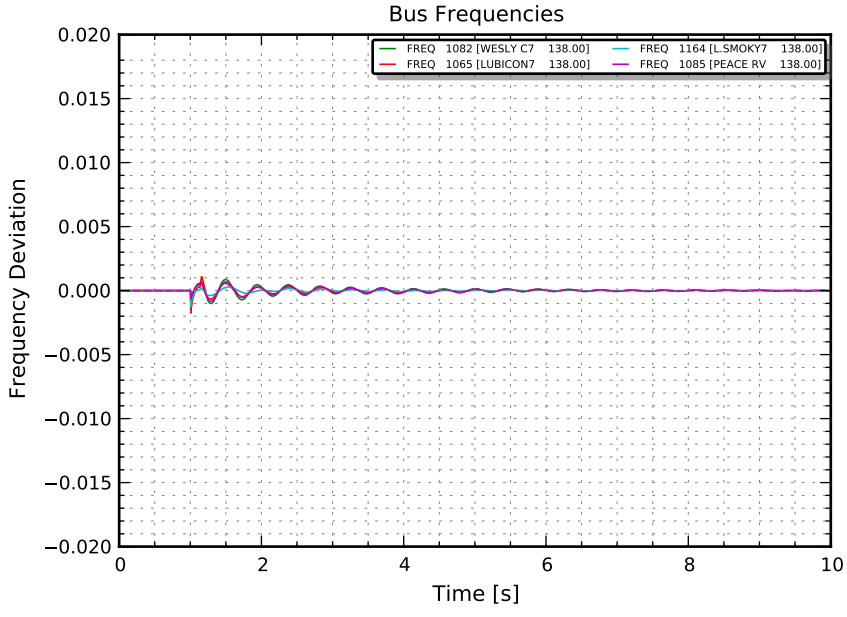


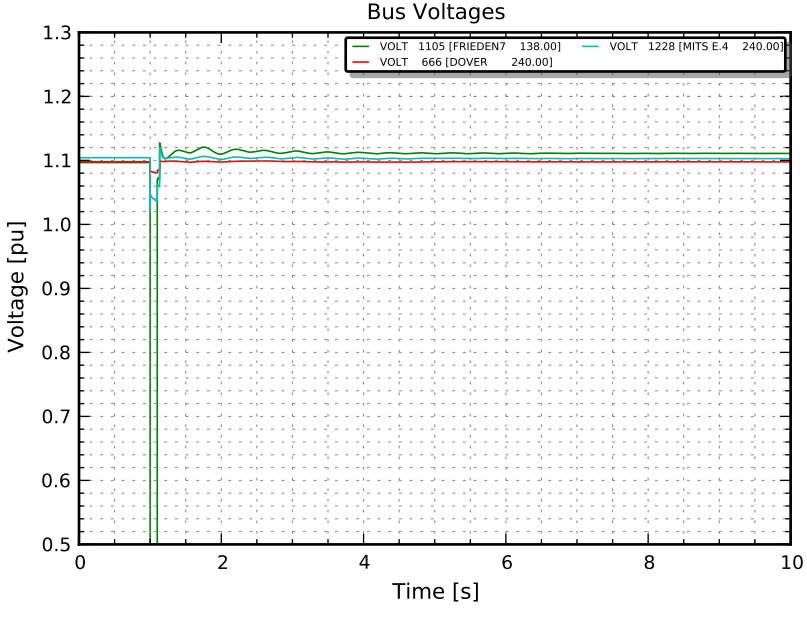
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_B.

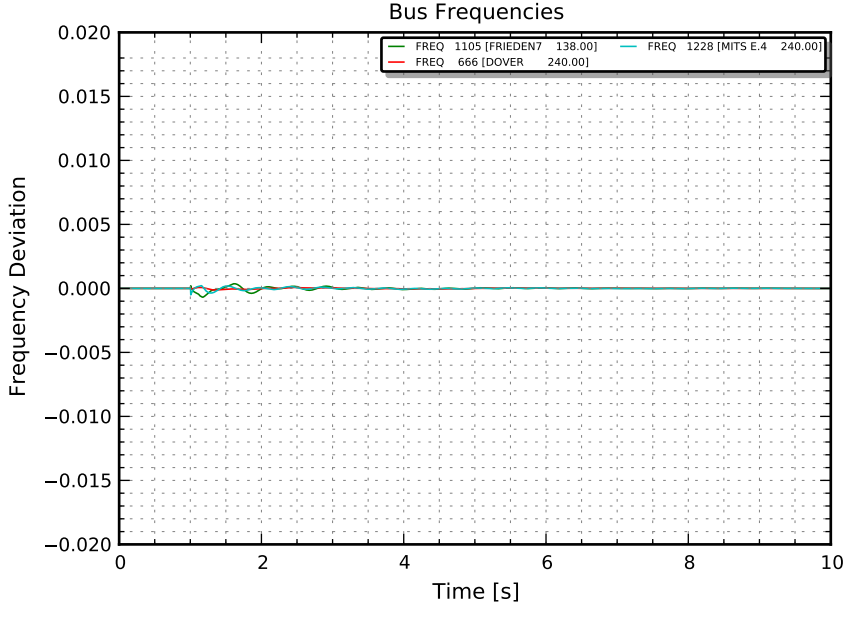
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 031 (B. 1)





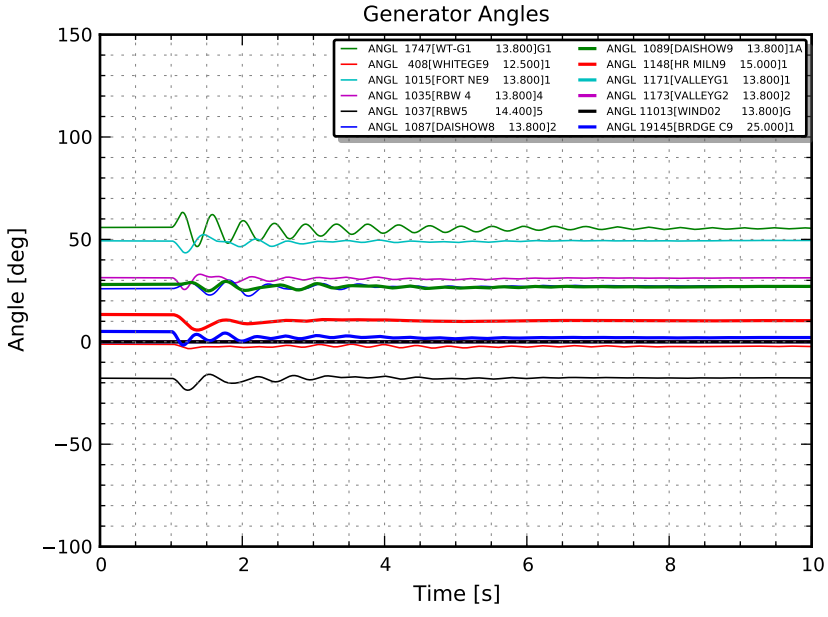


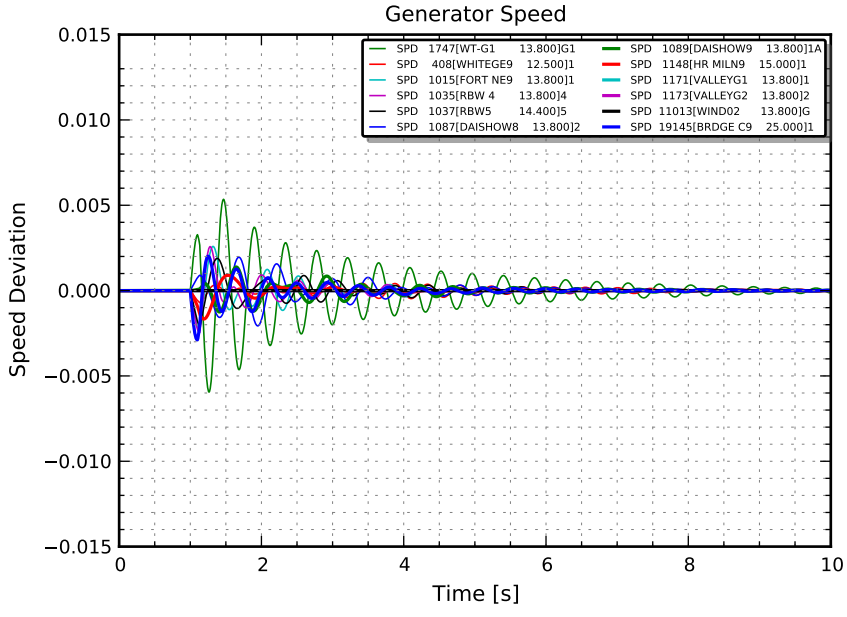


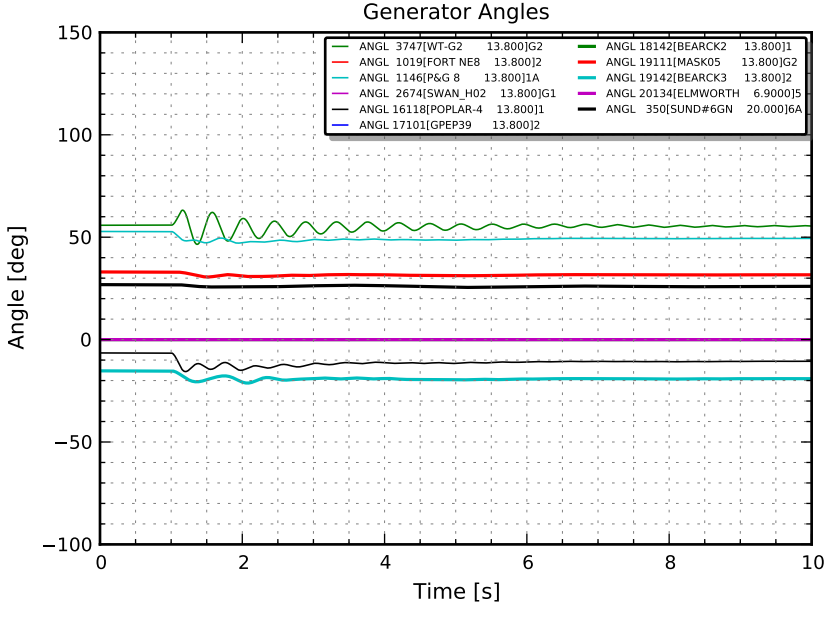
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_B.

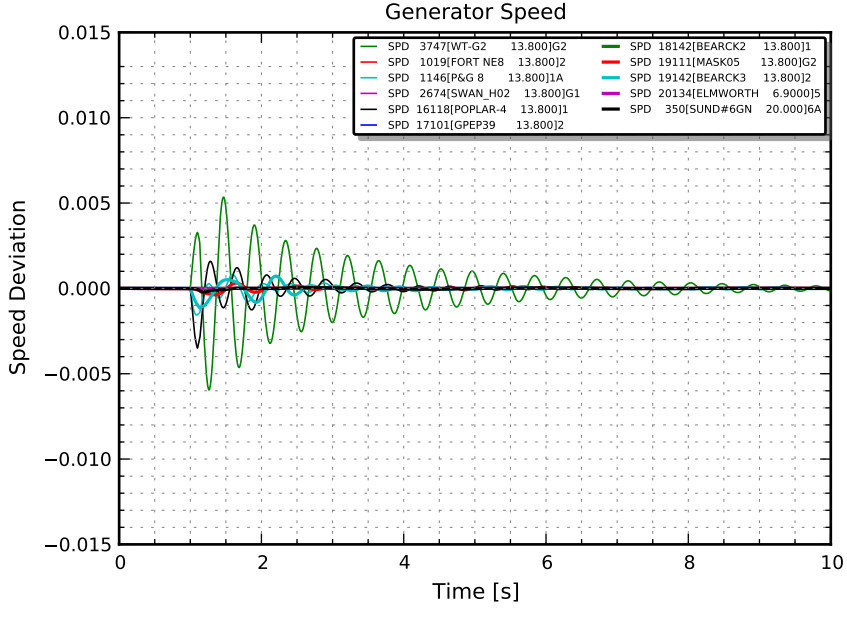
Study Area Generators

Appendix E2B
Figure: 031 (B. 2)





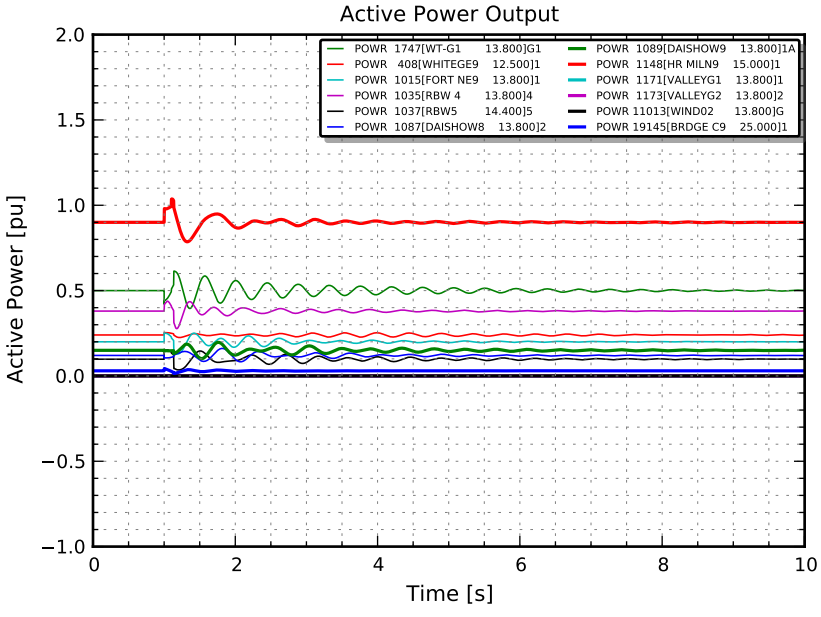


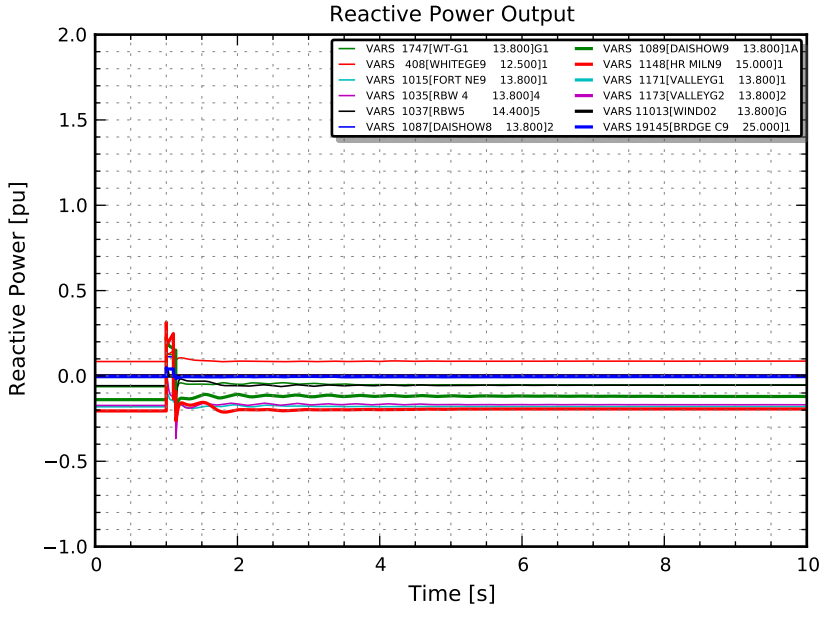


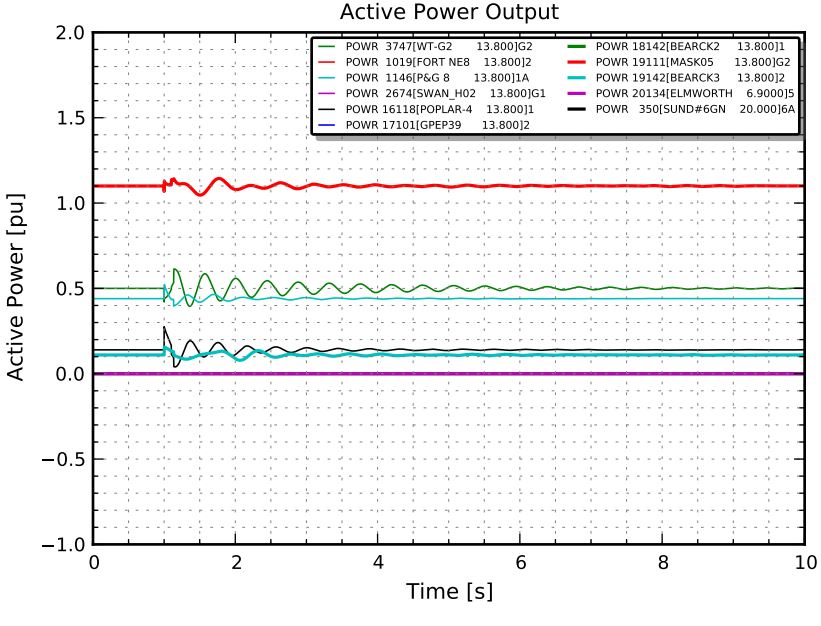
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 031 7L75 WESTPEACE to FRIEDENSTAL_B.

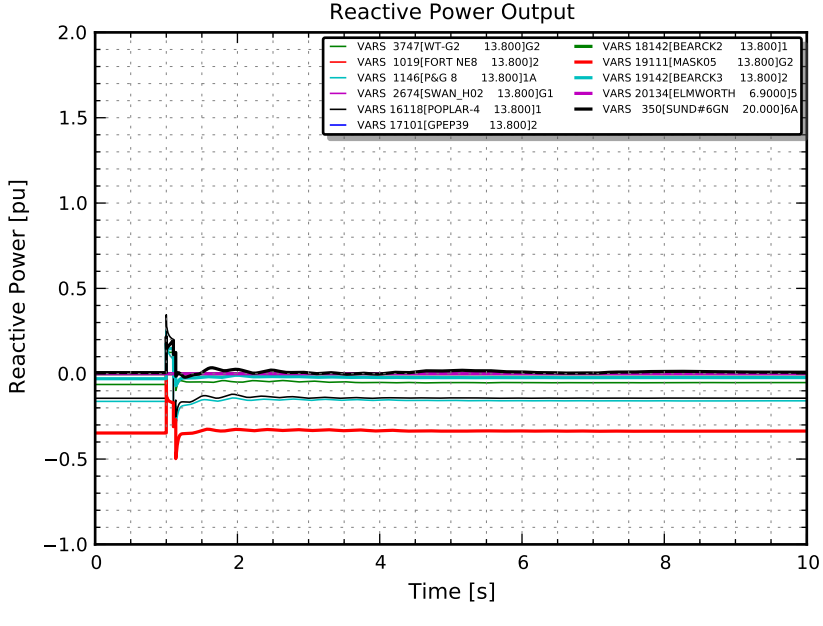
Study Area Generators

Appendix E2B
Figure: 031 (B. 3)





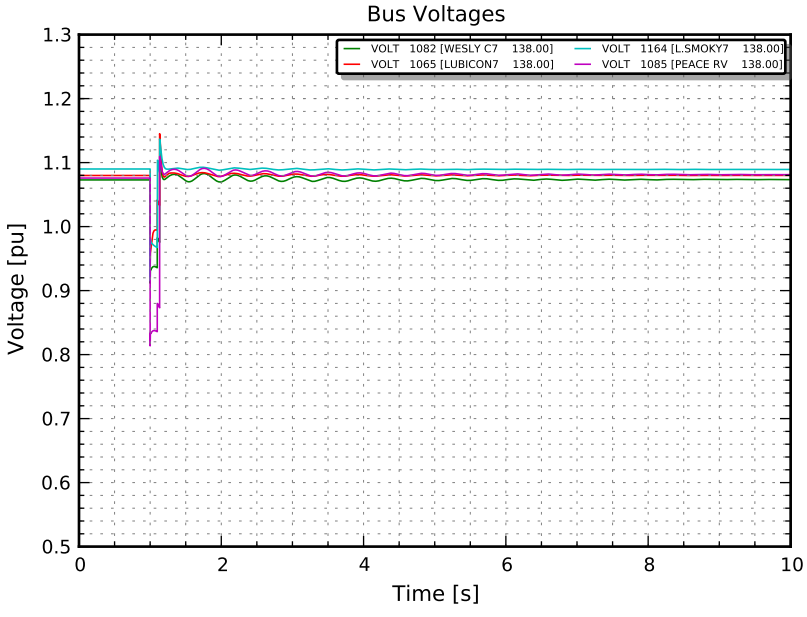


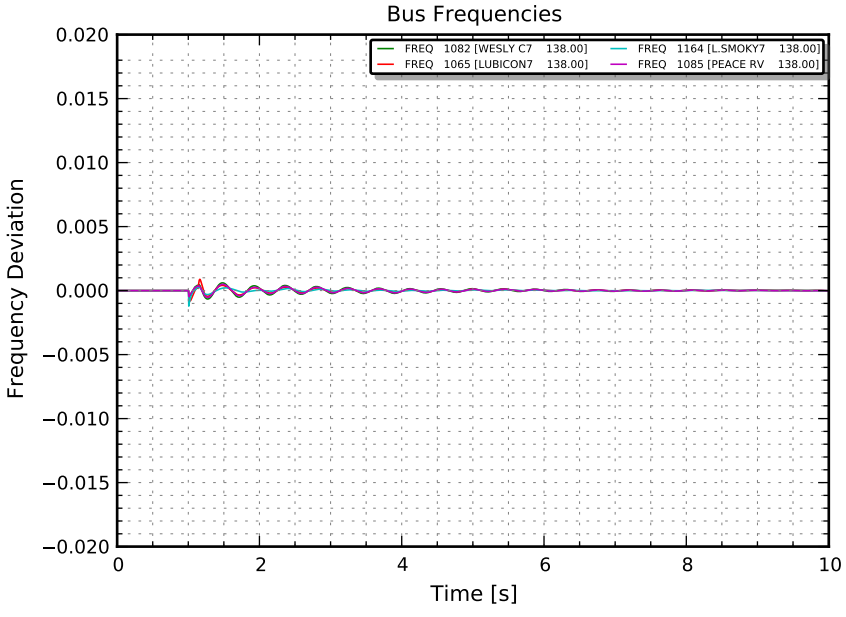


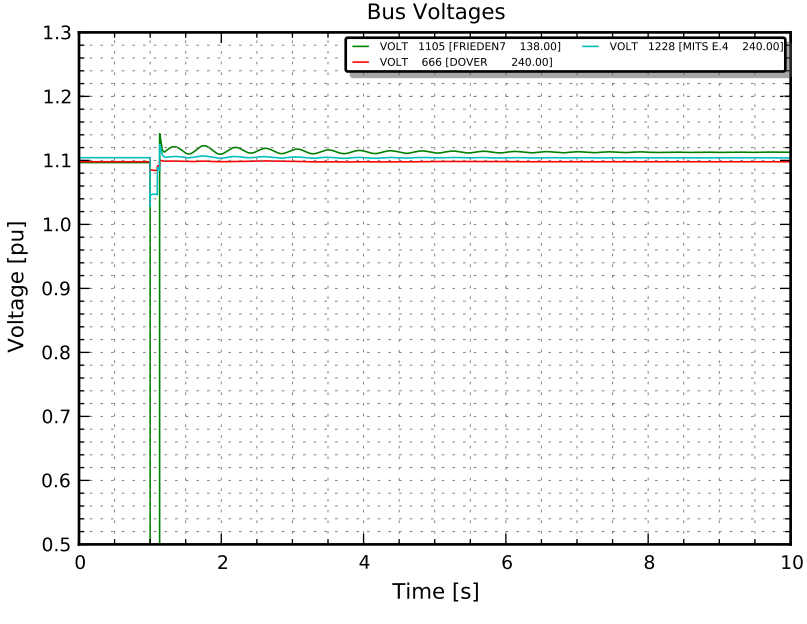
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 032 7L73 RYCROFT to FRIEDENSTAL_A.

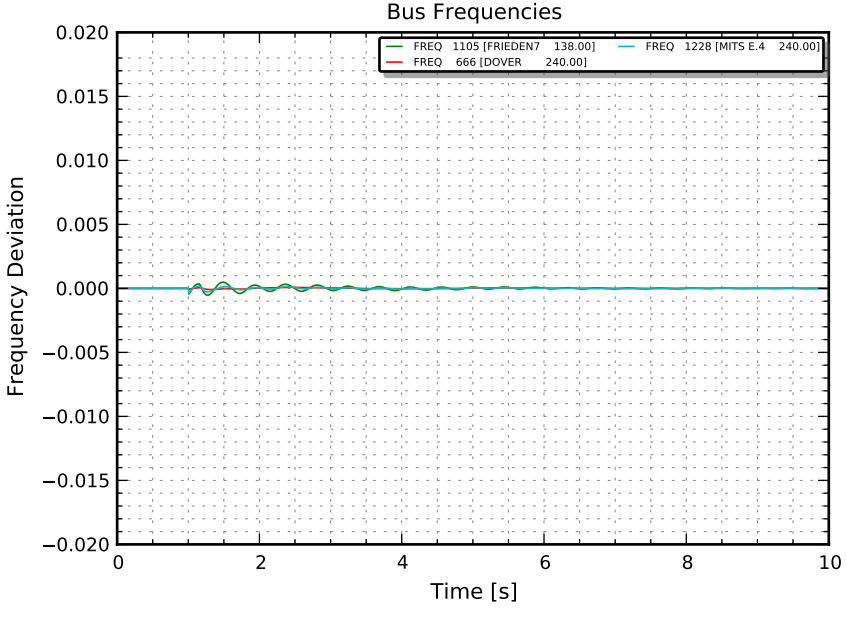
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 032 (A. 1)





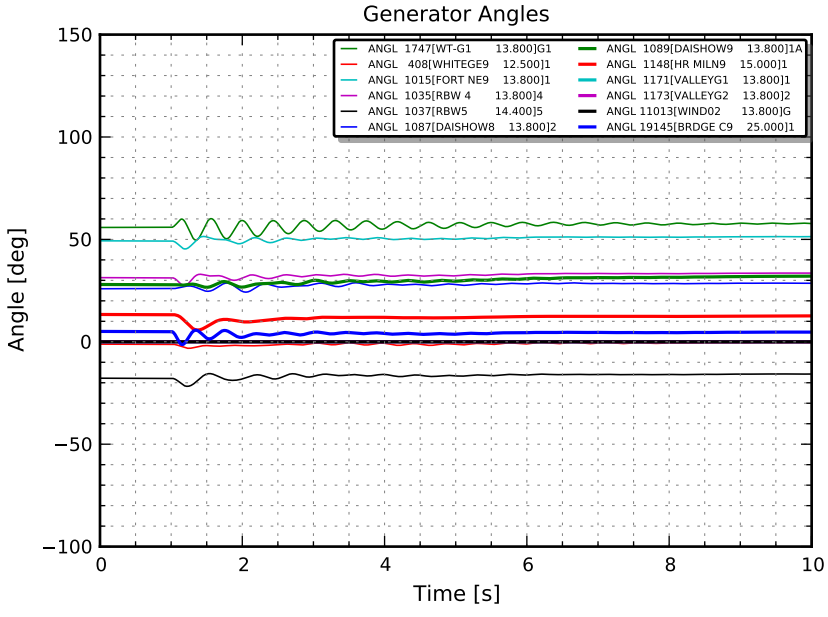


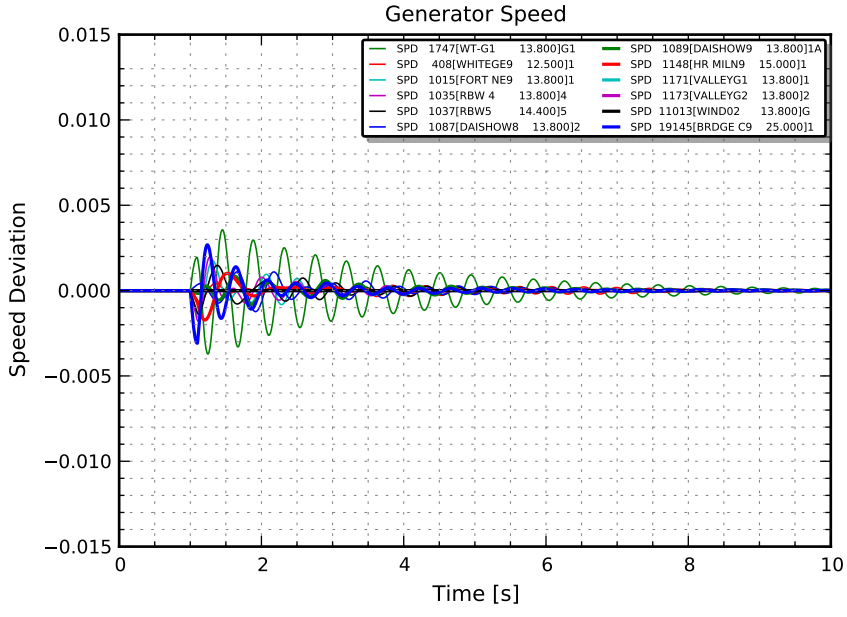


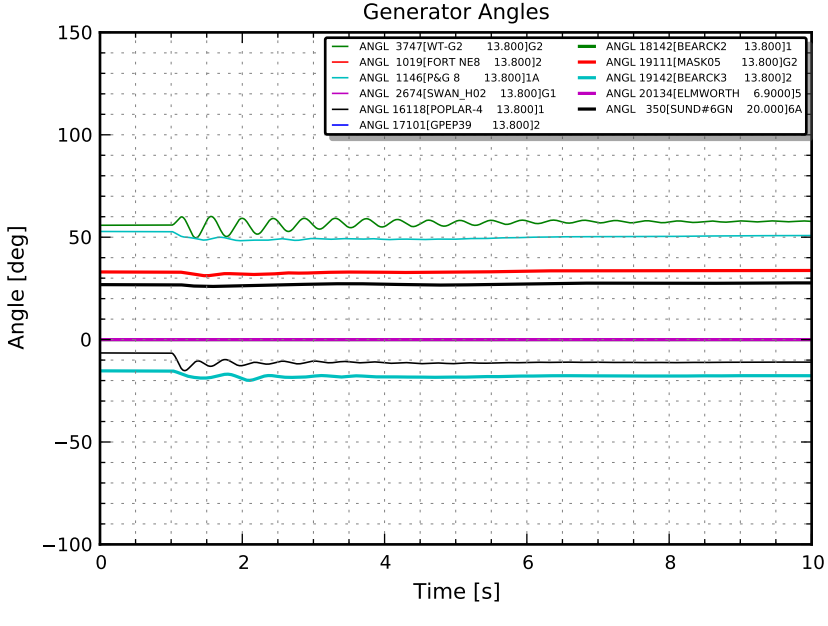
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 032 7L73 RYCROFT to FRIEDENSTAL_A.

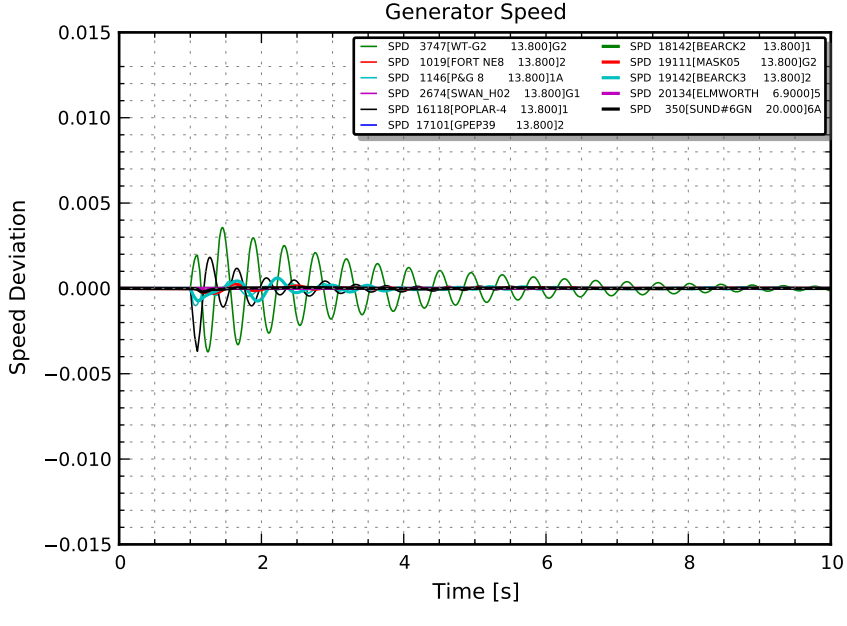
Study Area Generators

Appendix E2B
Figure: 032 (A. 2)





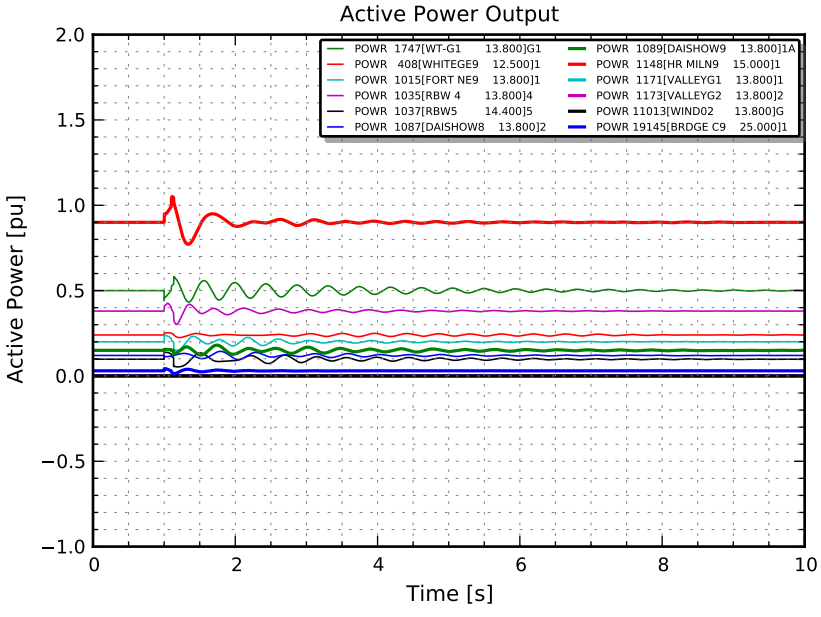


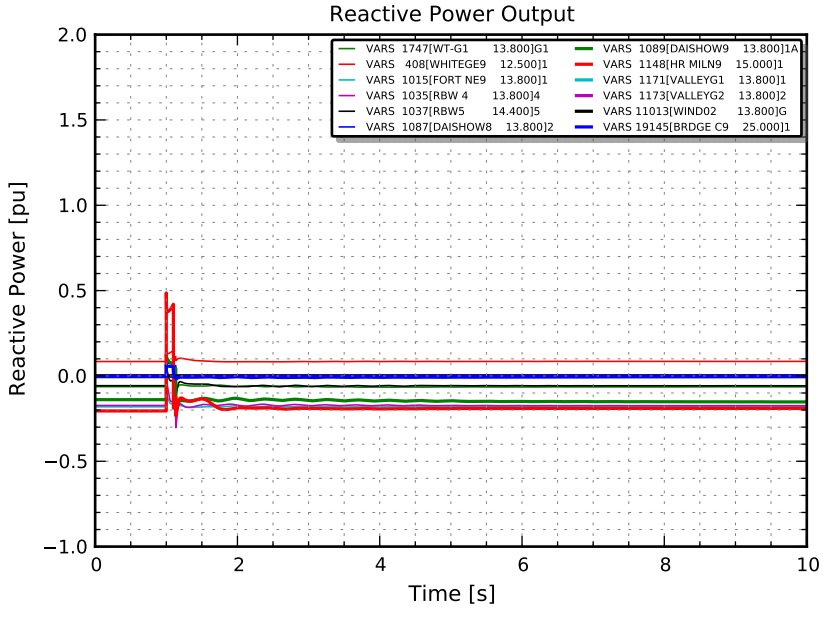


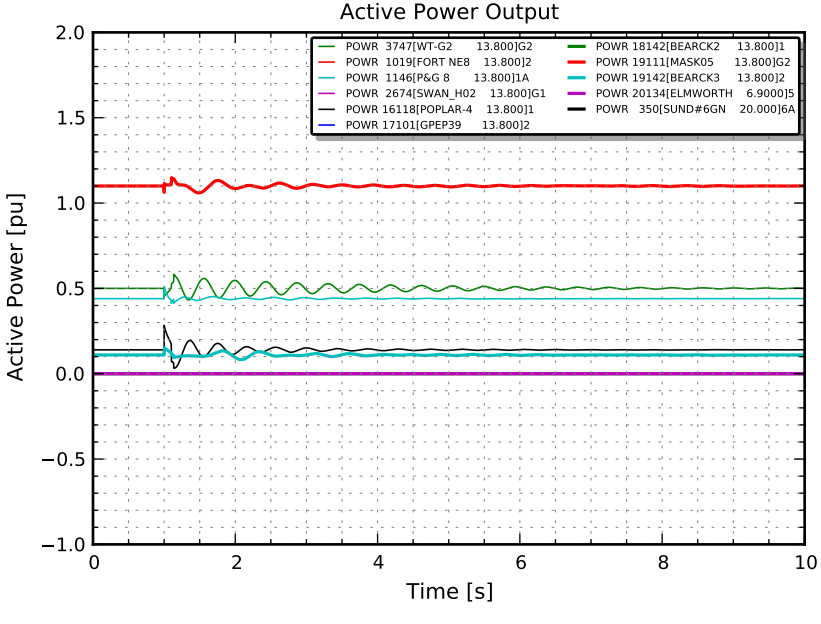
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 032 7L73 RYCROFT to FRIEDENSTAL_A.

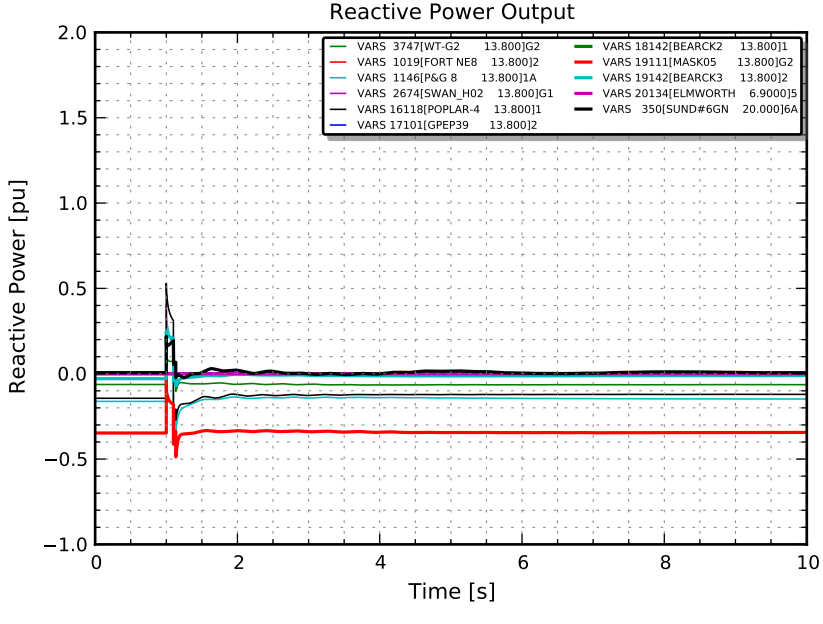
Study Area Generators

Appendix E2B
Figure: 032 (A. 3)





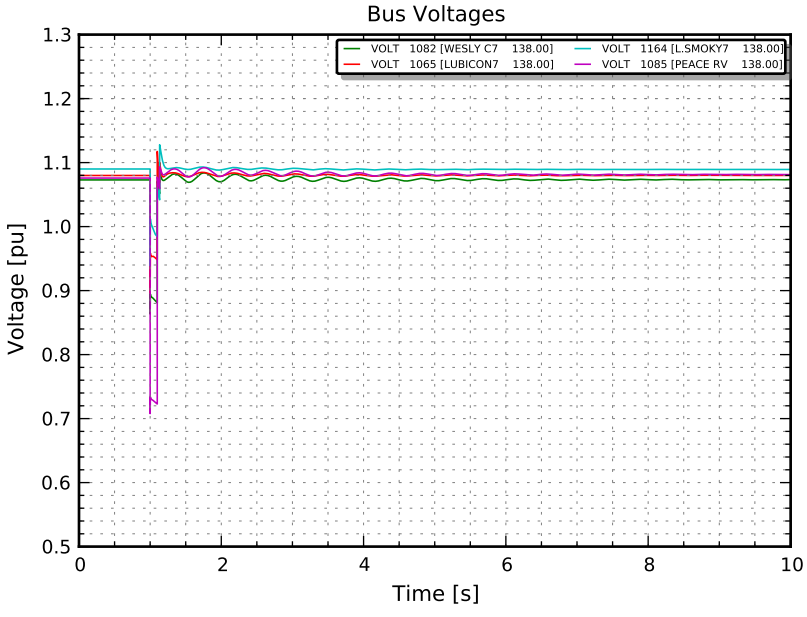


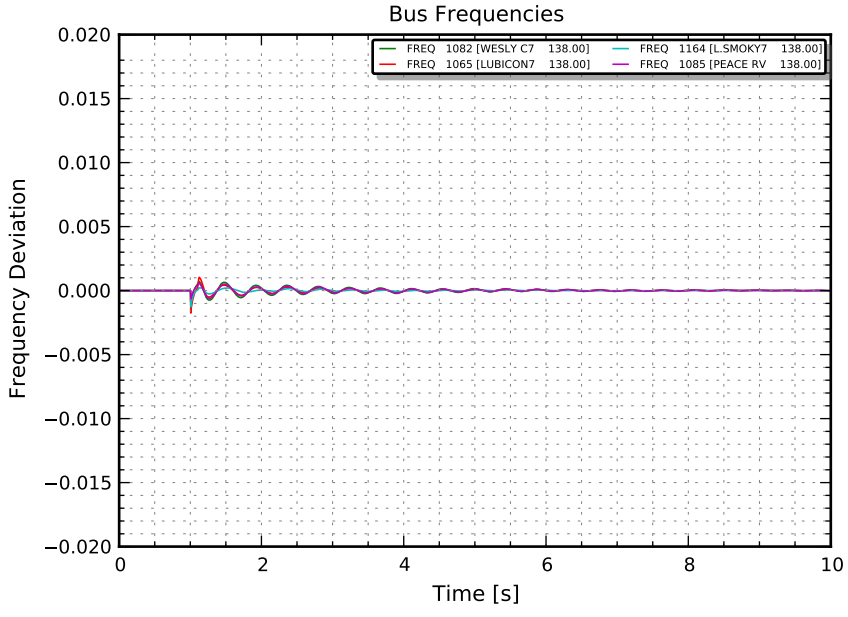


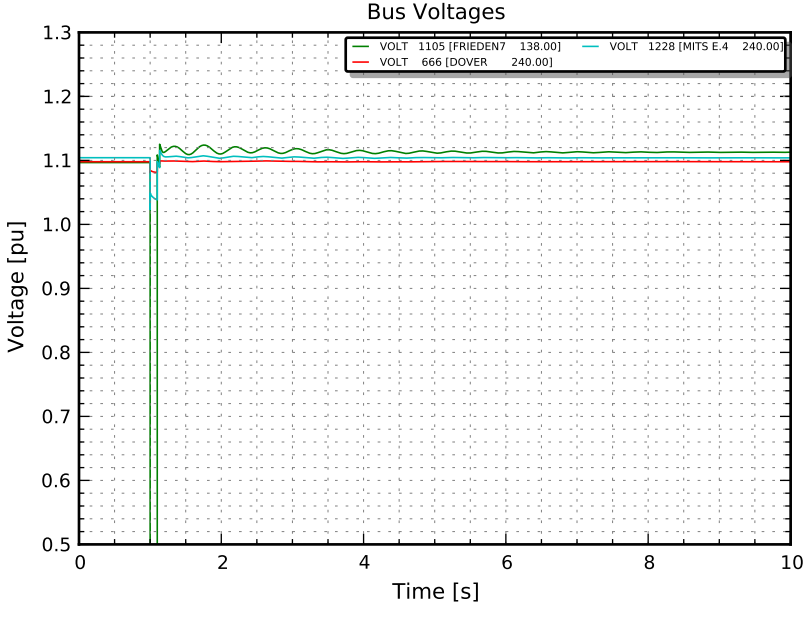
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 032 7L73 RYCROFT to FRIEDENSTAL_B.

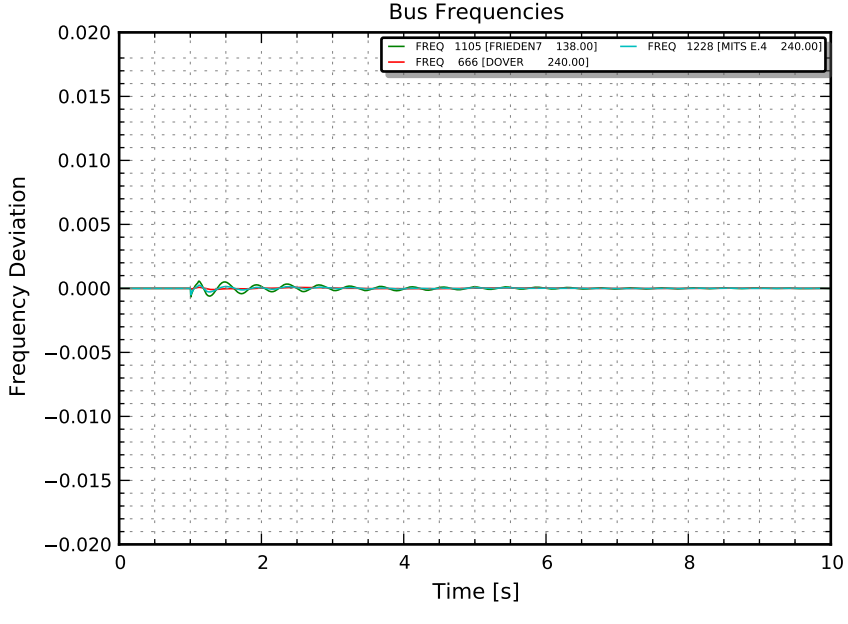
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 032 (B. 1)





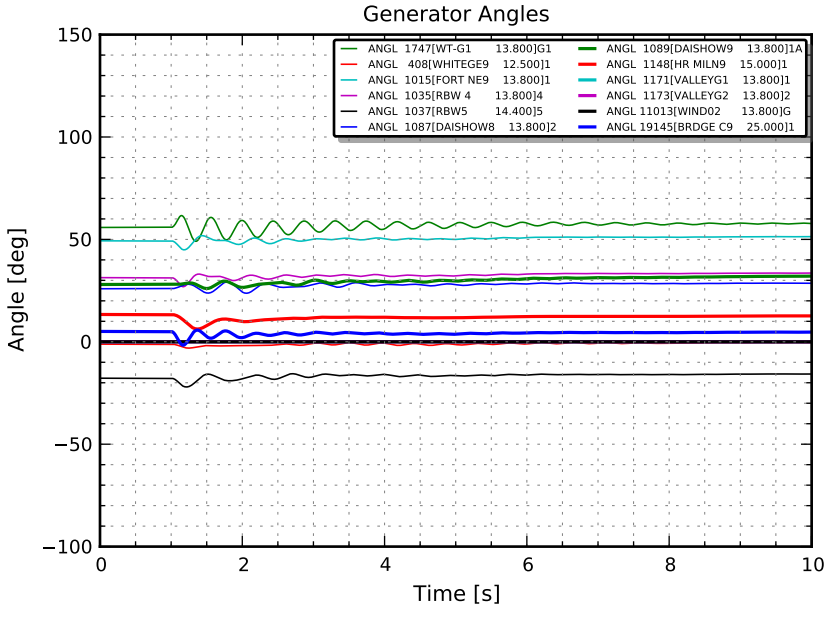


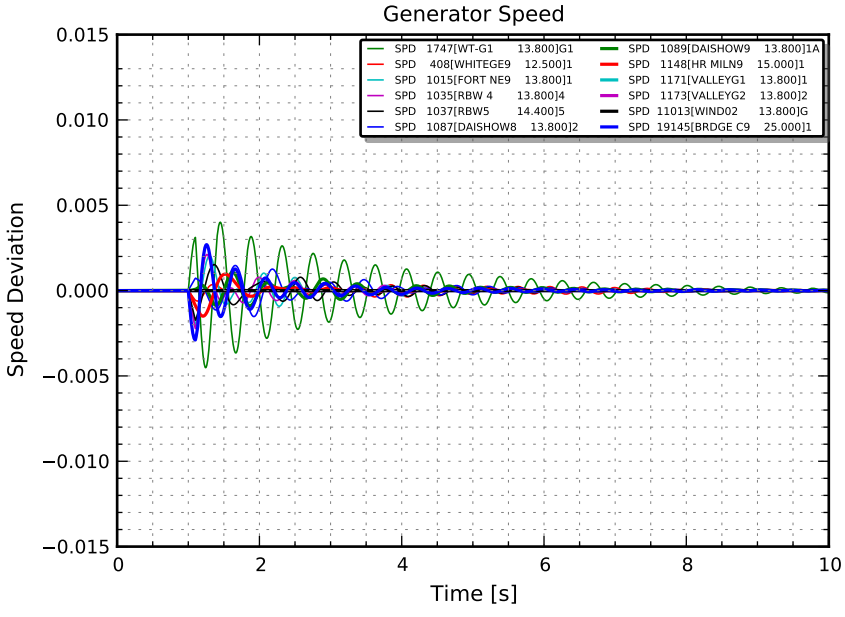


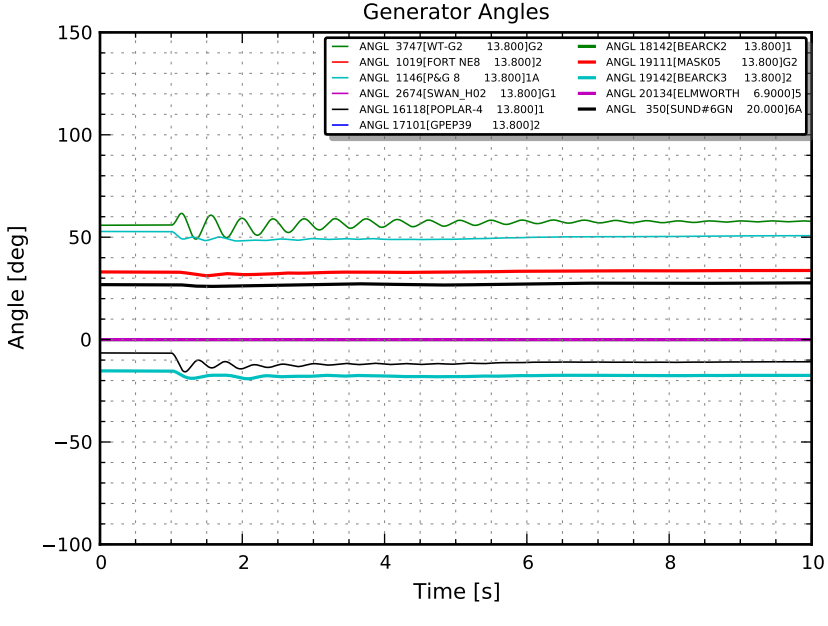
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 032 7L73 RYCROFT to FRIEDENSTAL_B.

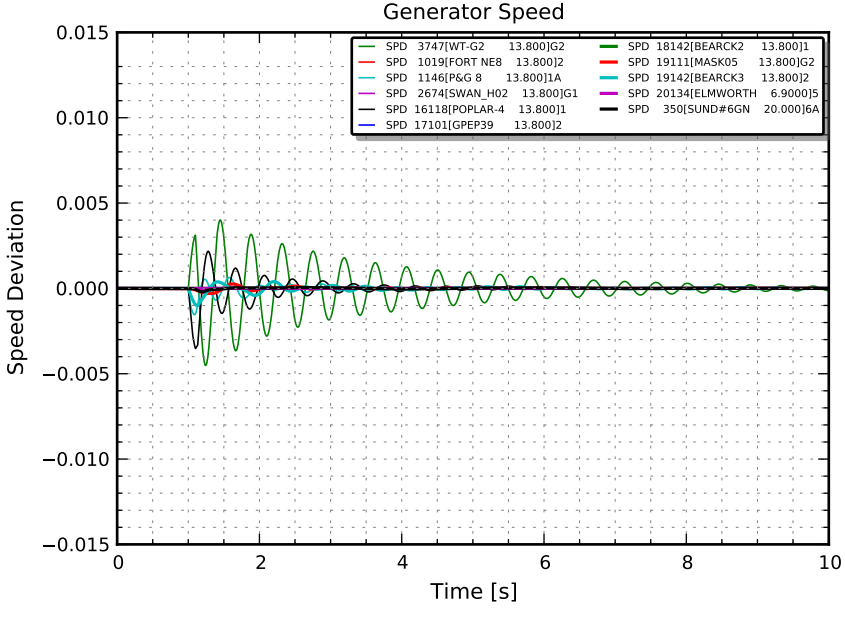
Study Area Generators

Appendix E2B
Figure: 032 (B. 2)





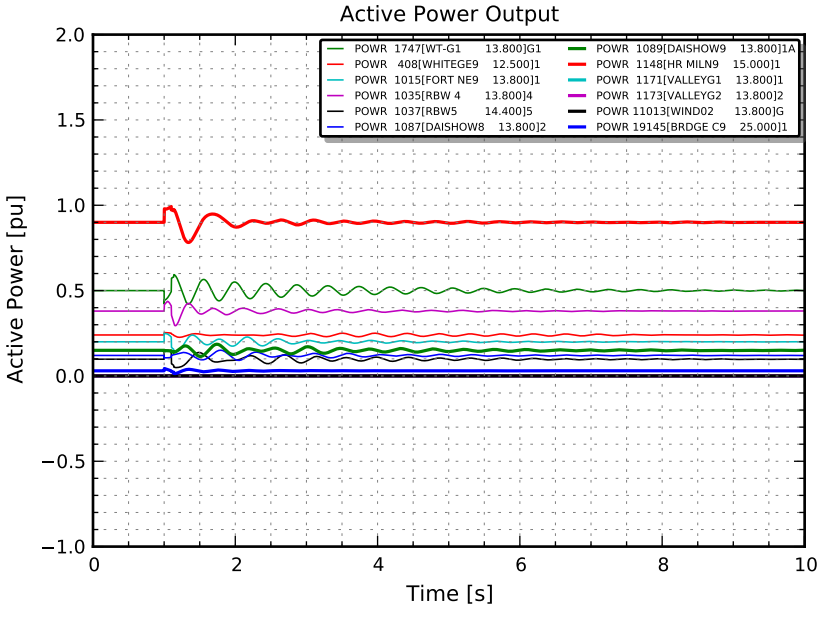


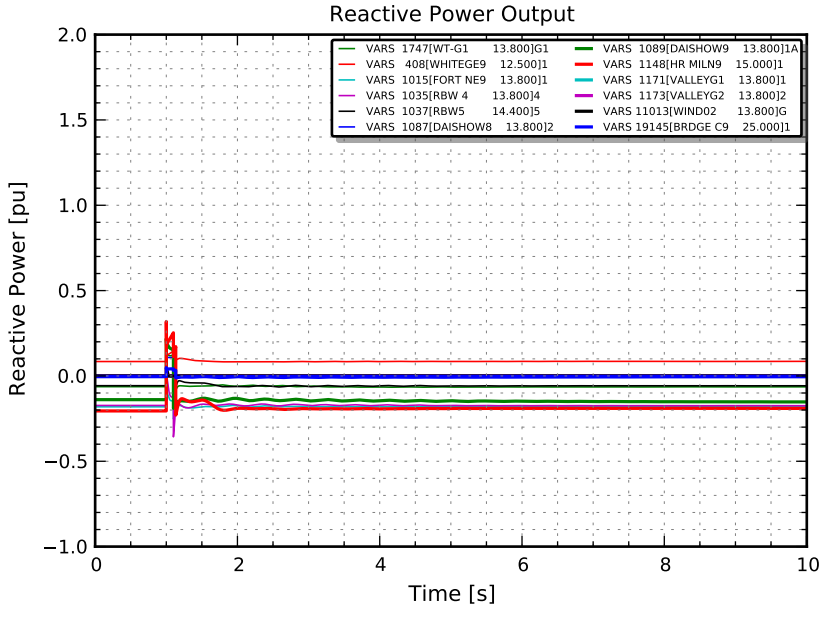


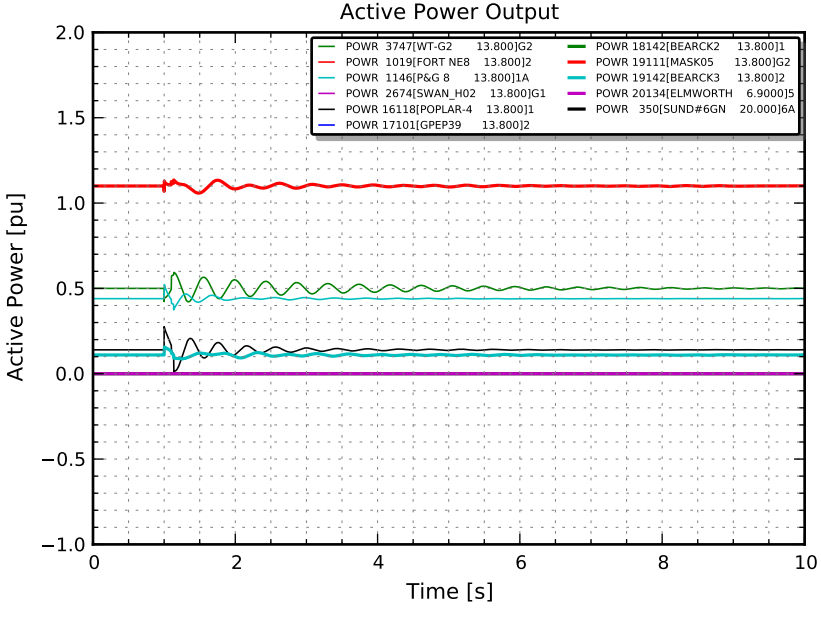
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 032 7L73 RYCROFT to FRIEDENSTAL_B.

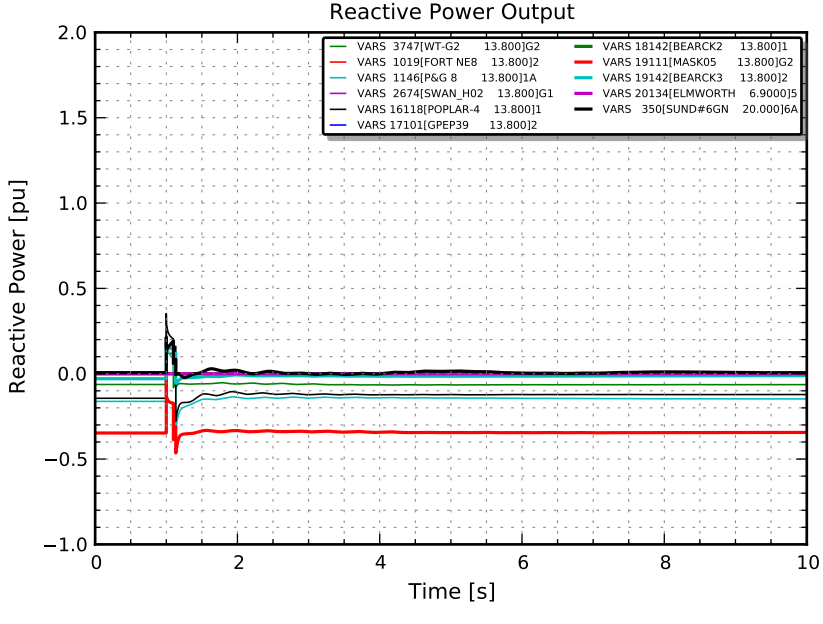
Study Area Generators

Appendix E2B
Figure: 032 (B. 3)





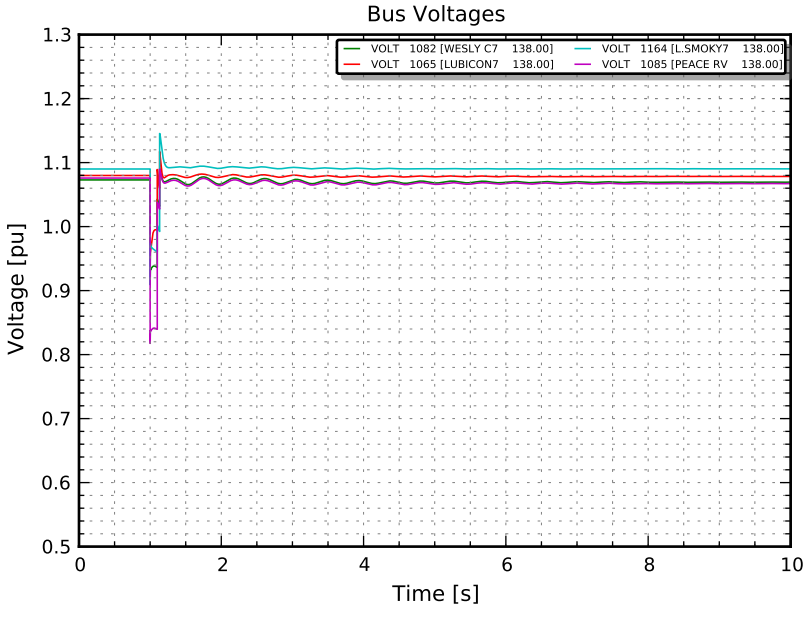


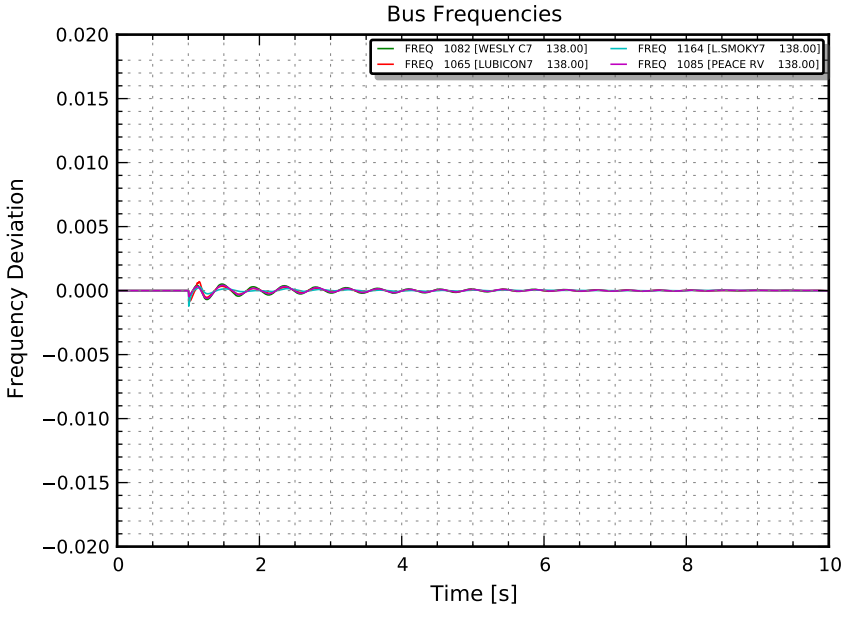


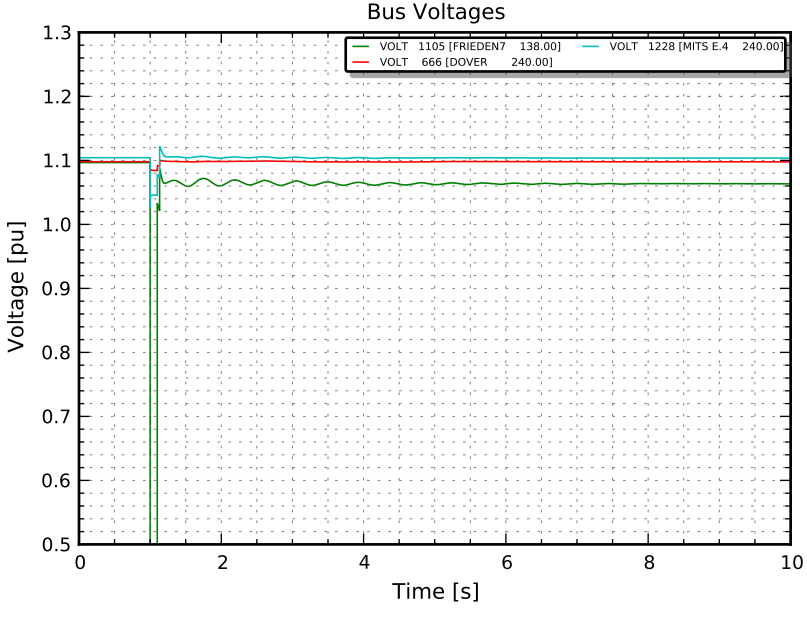
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_A.

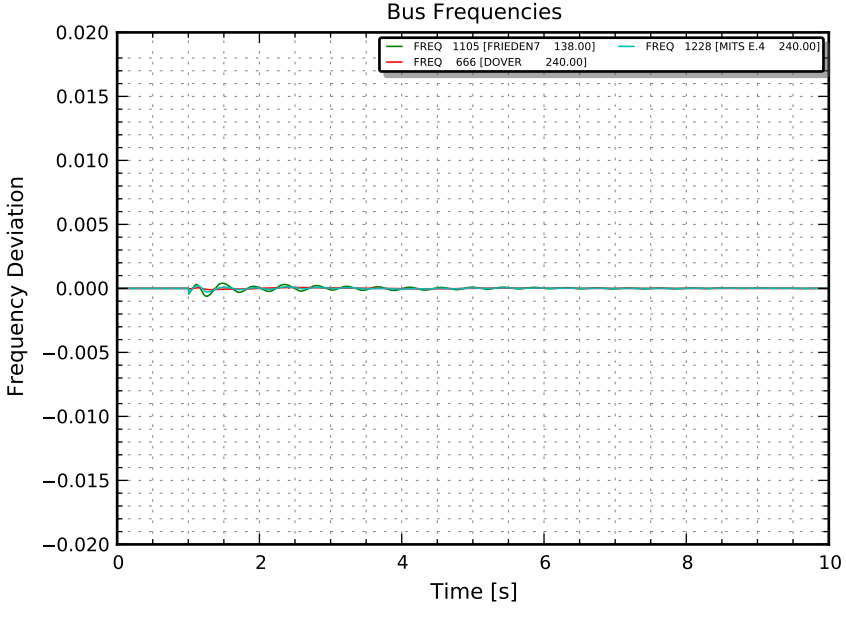
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 033 (A. 1)





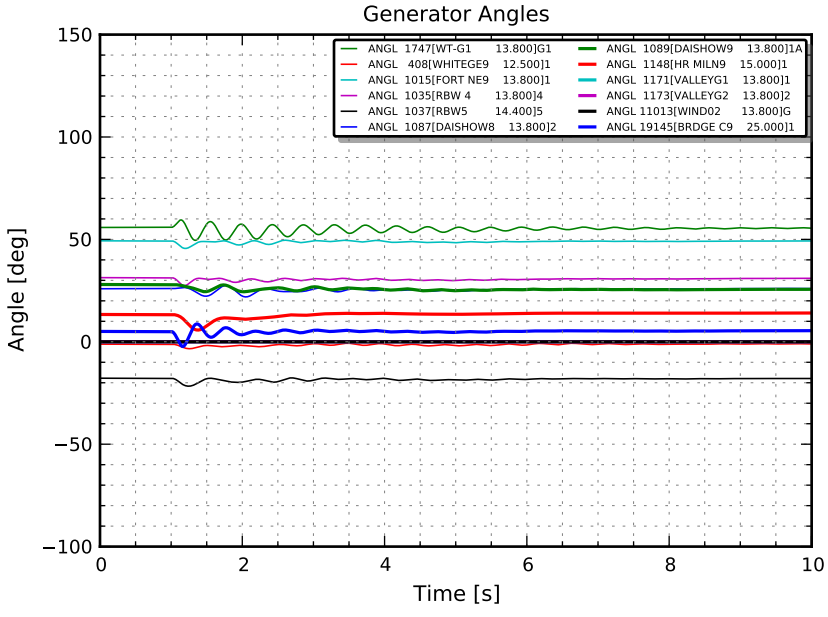


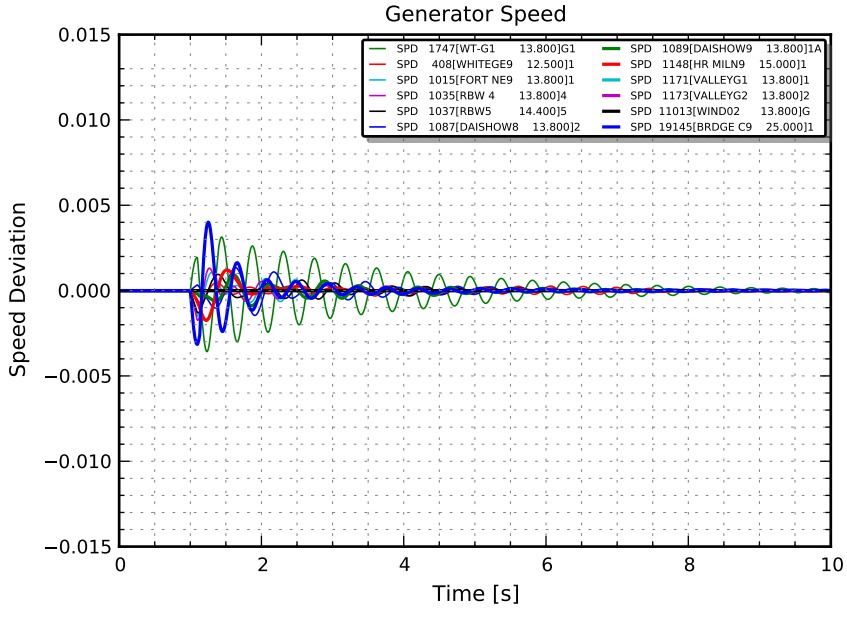


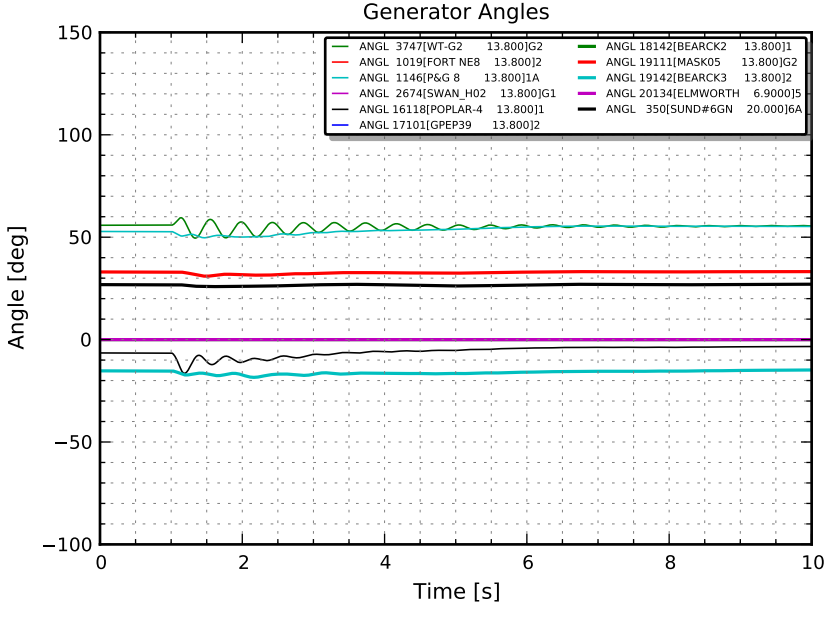
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_A.

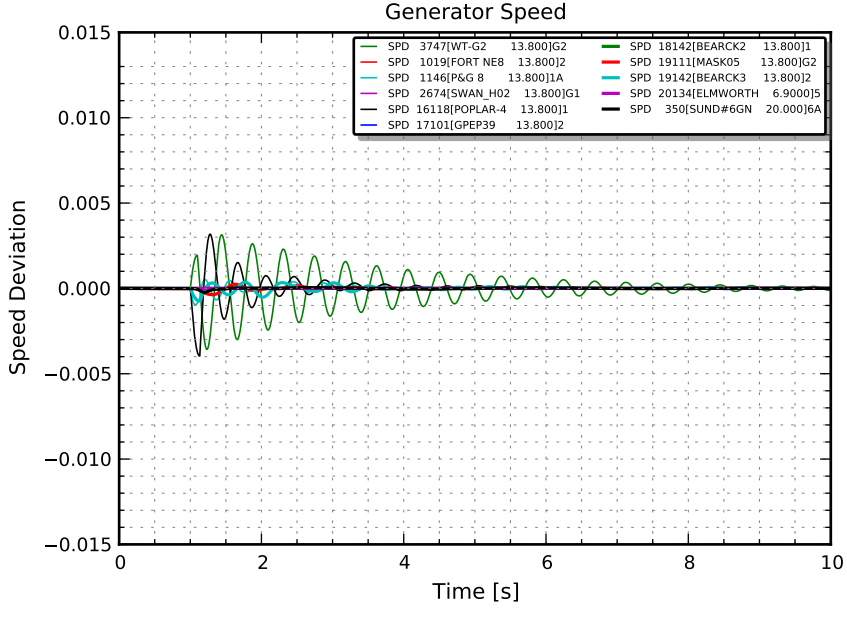
Study Area Generators

Appendix E2B
Figure: 033 (A. 2)





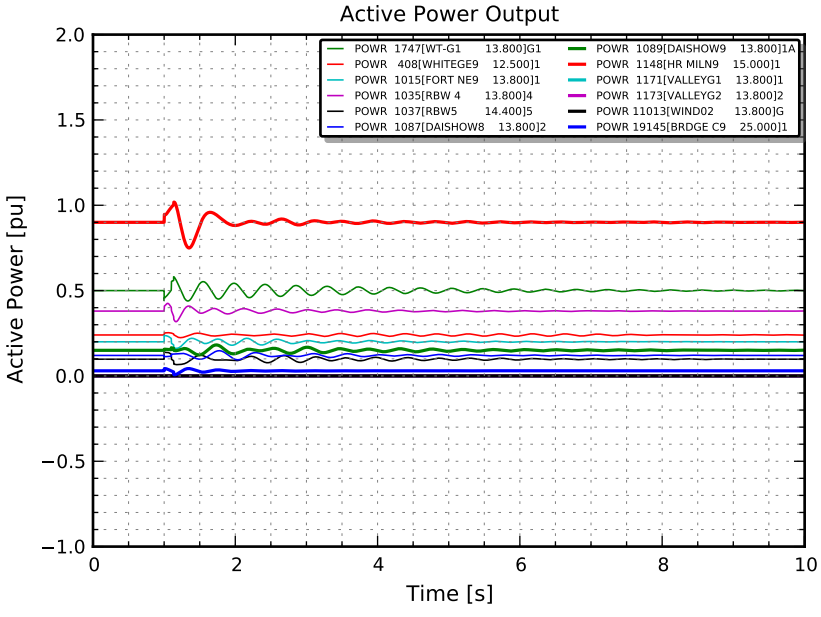


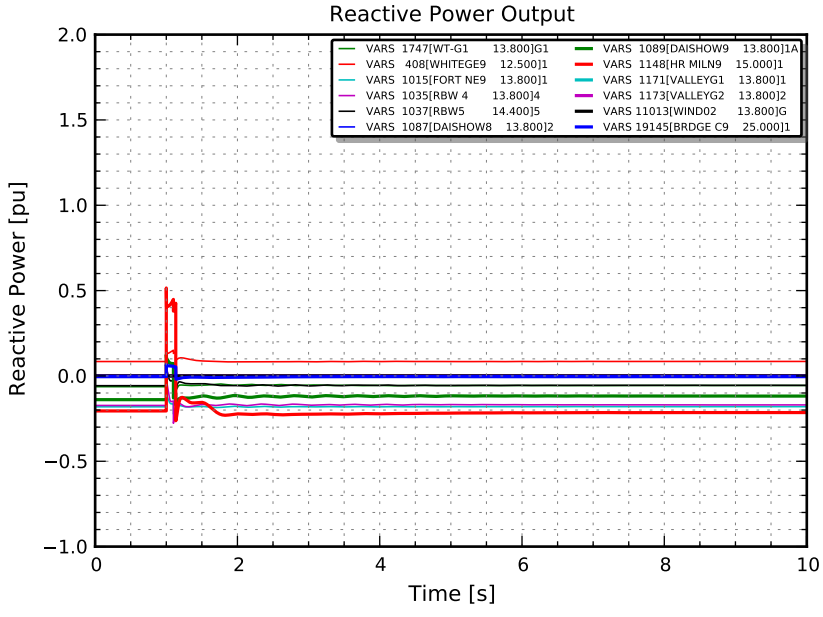


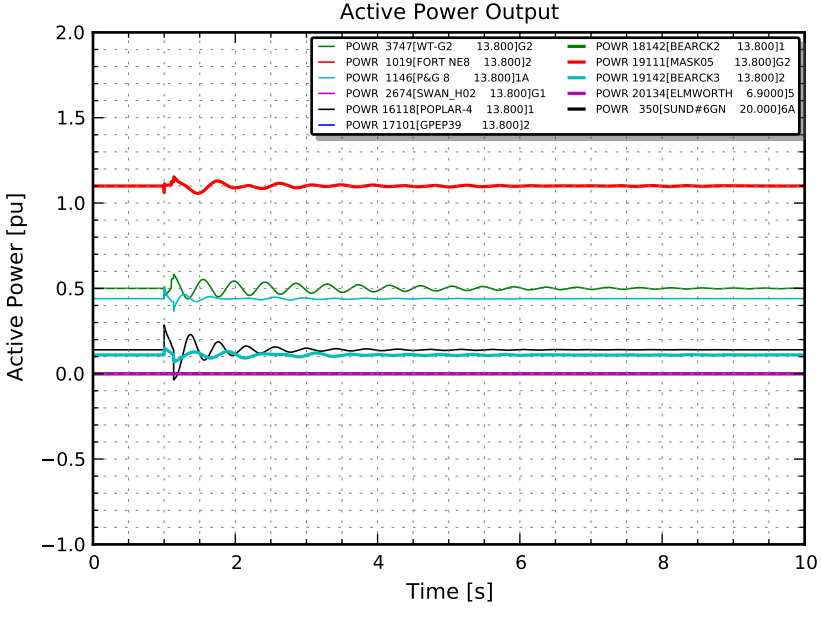
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_A.

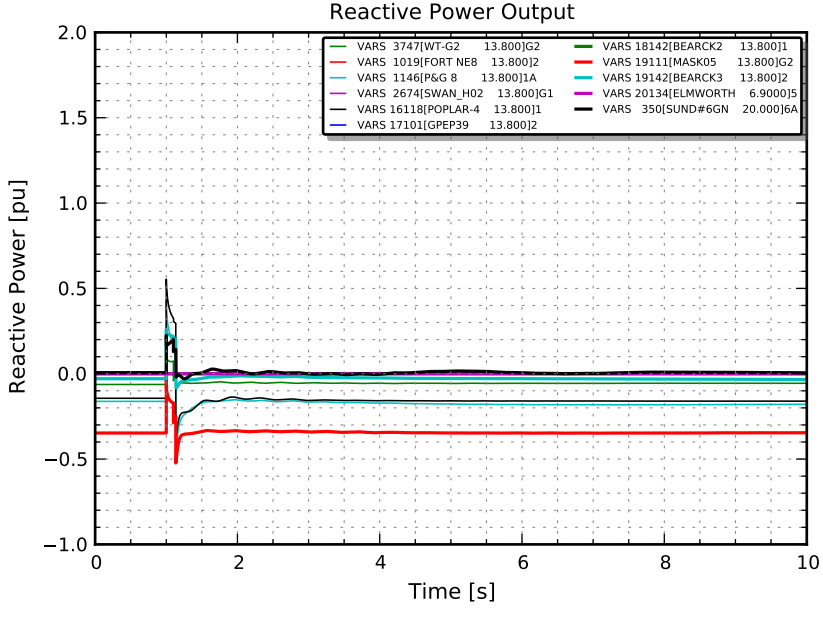
Study Area Generators

Appendix E2B
Figure: 033 (A. 3)





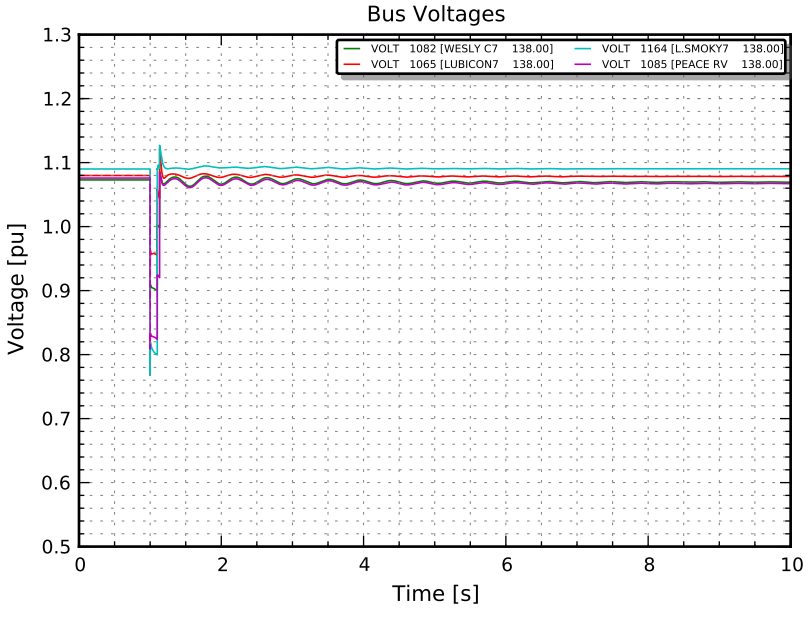


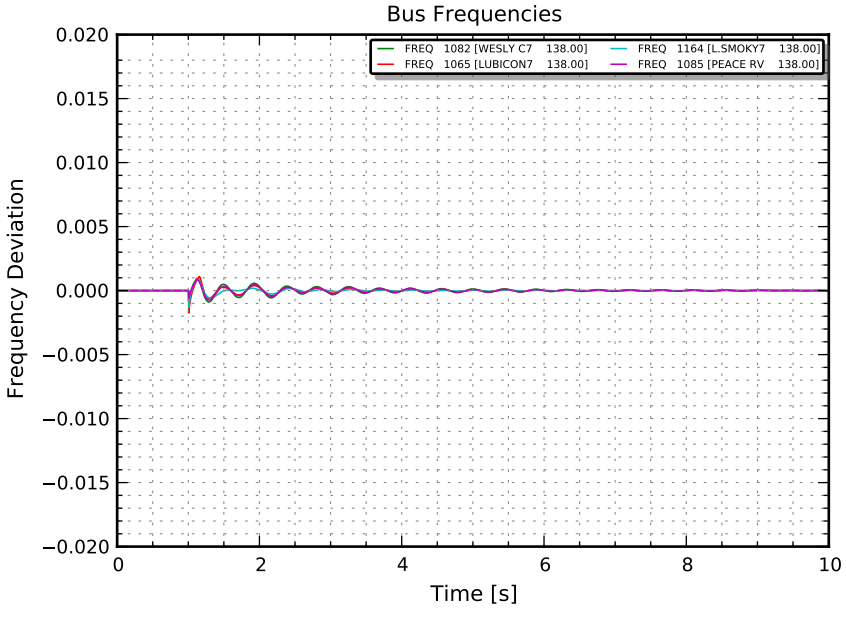


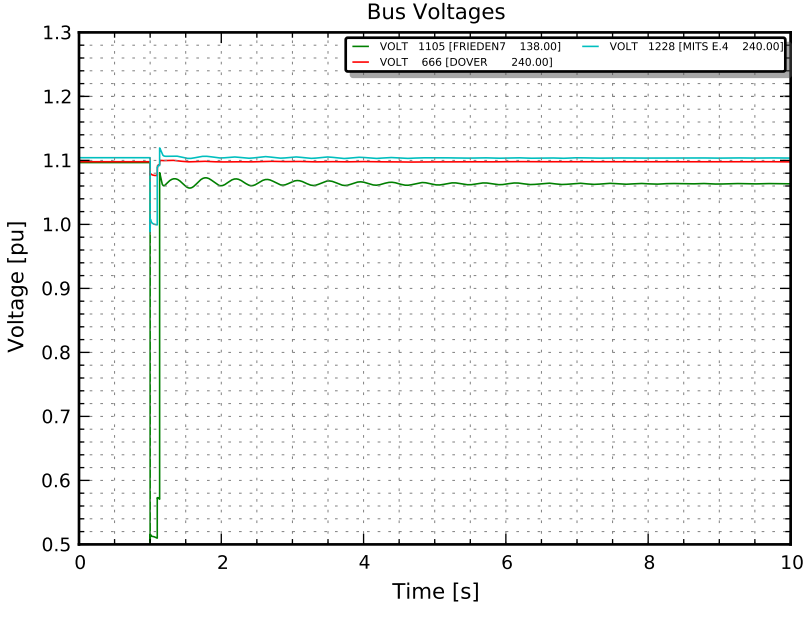
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_B.

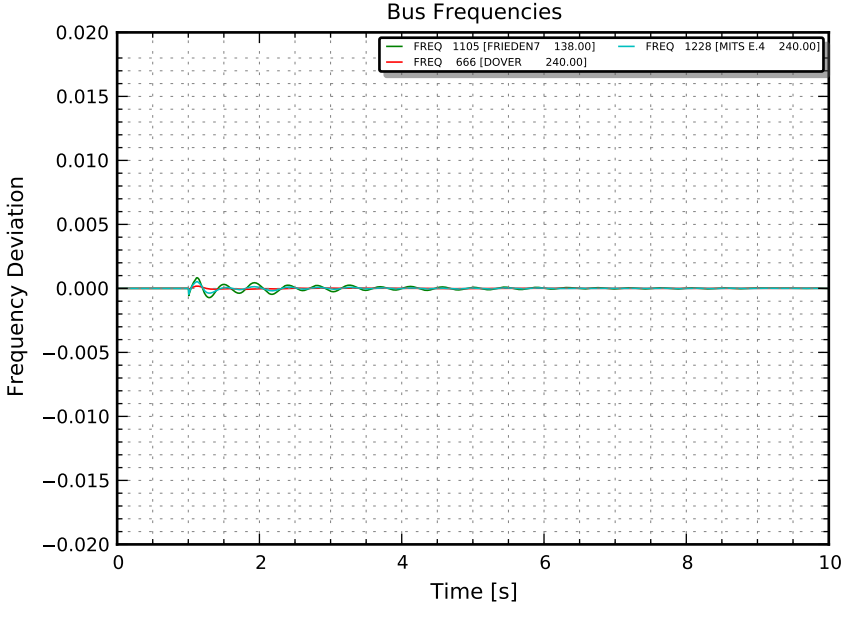
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 033 (B. 1)





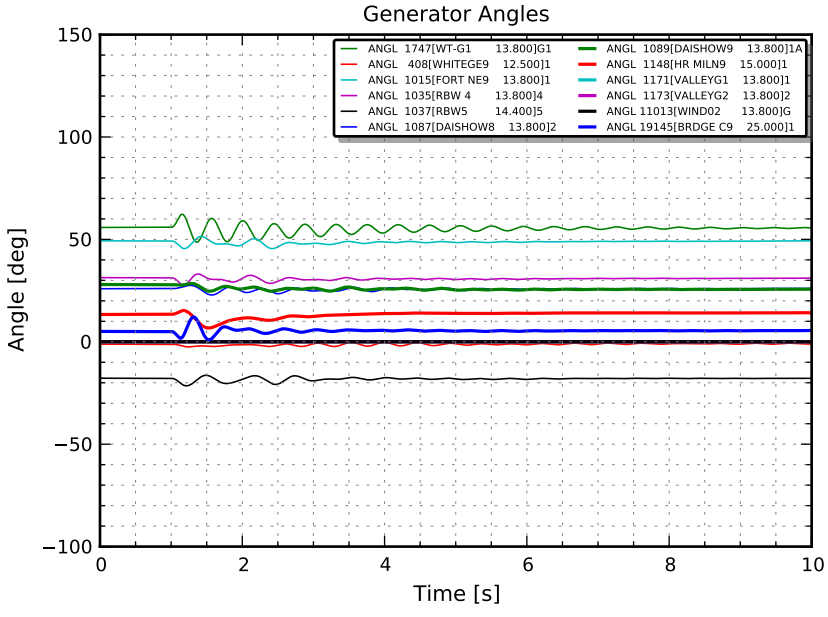


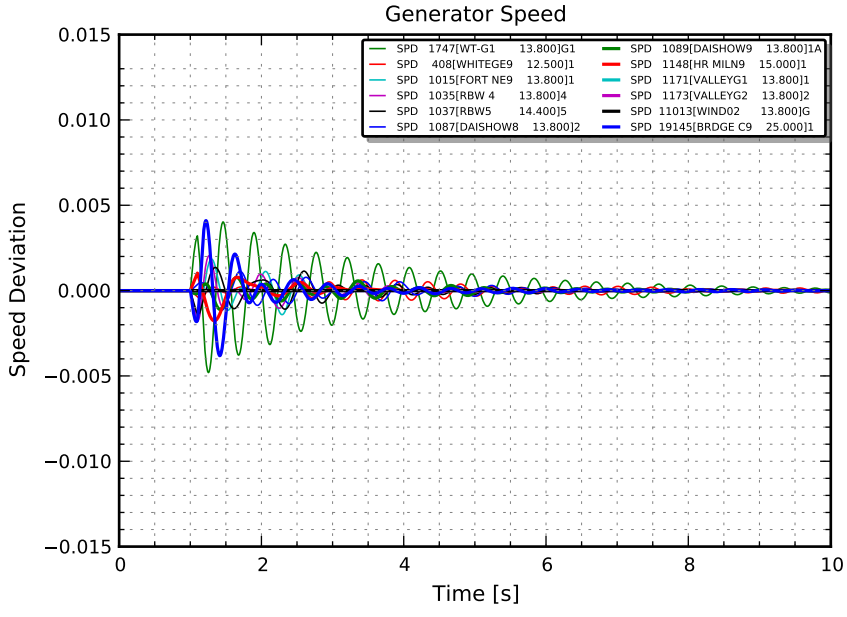


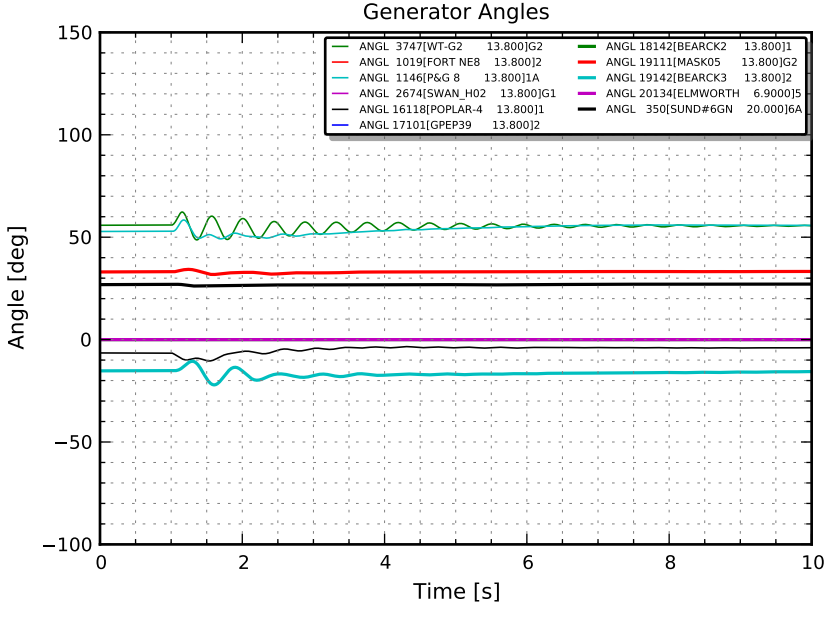
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_B.

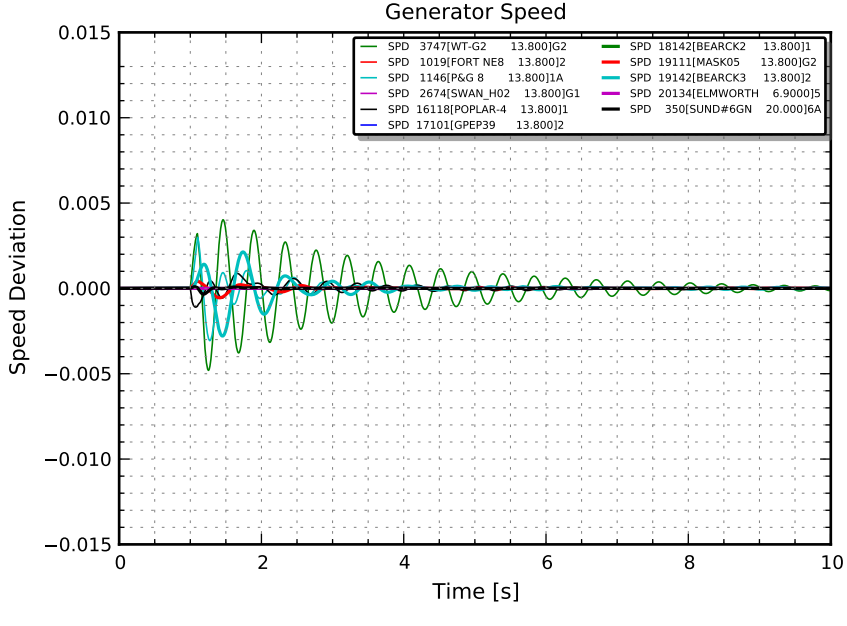
Study Area Generators

Appendix E2B
Figure: 033 (B. 2)





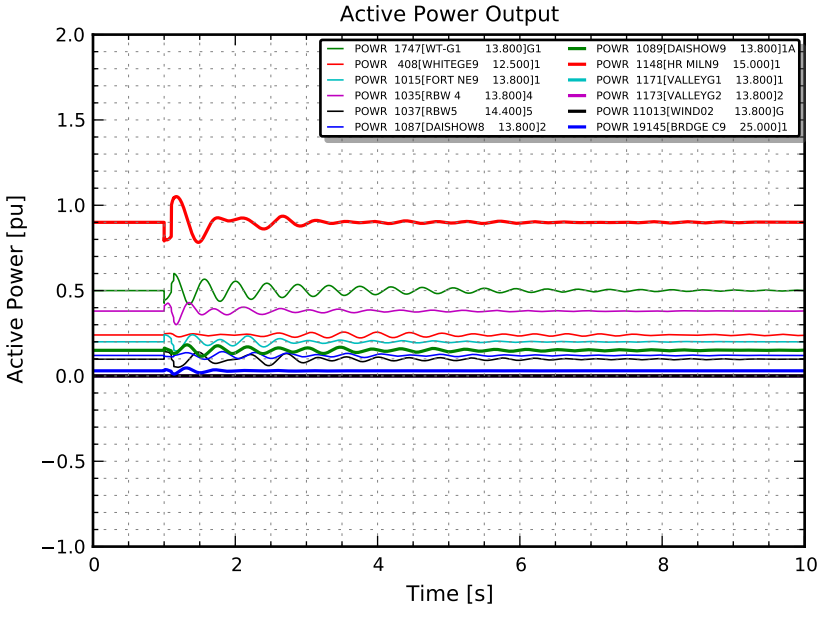


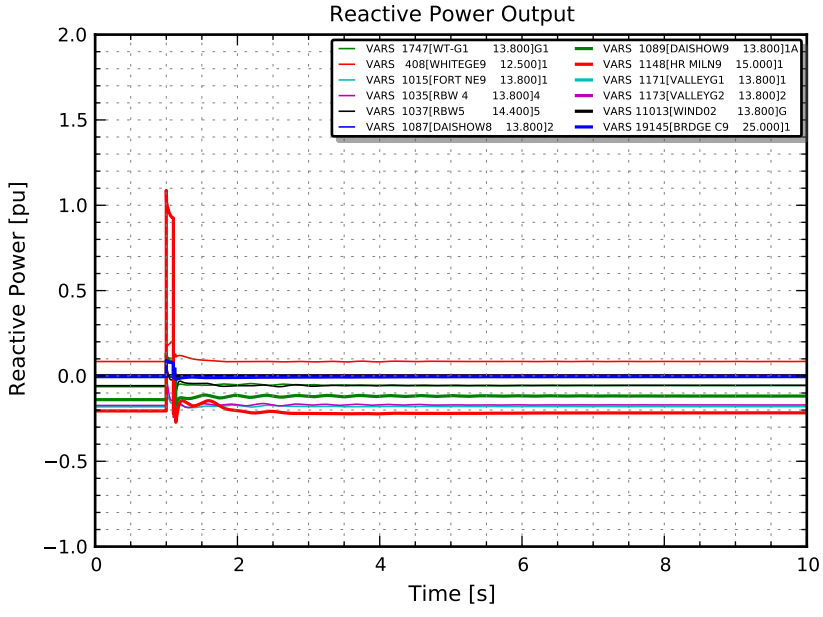


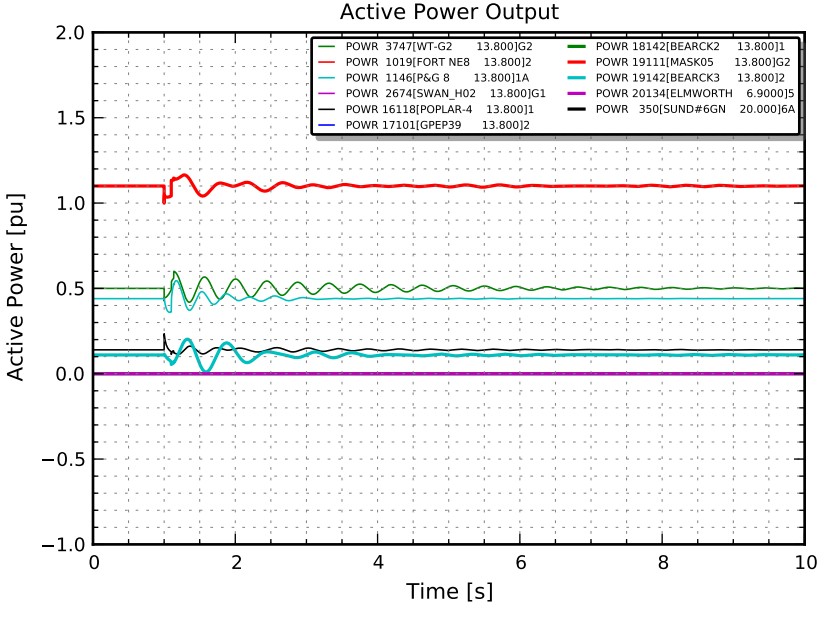
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 033 7L68 RYCROFT to CLAIRMONTLAKE_B.

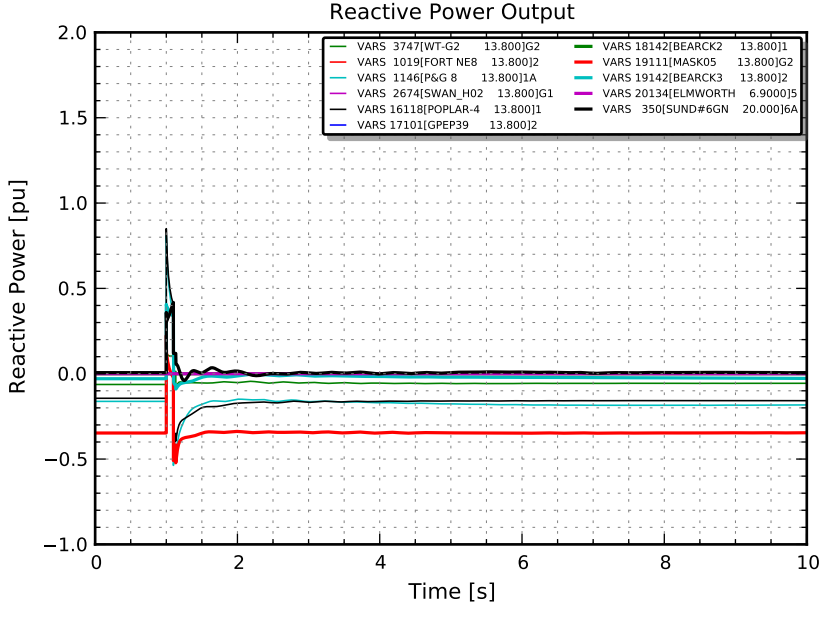
Study Area Generators

Appendix E2B
Figure: 033 (B. 3)





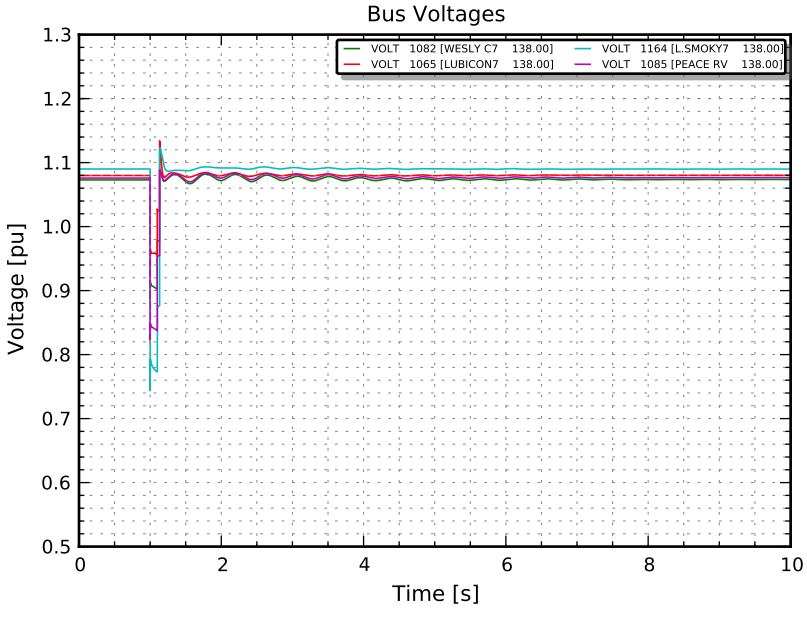


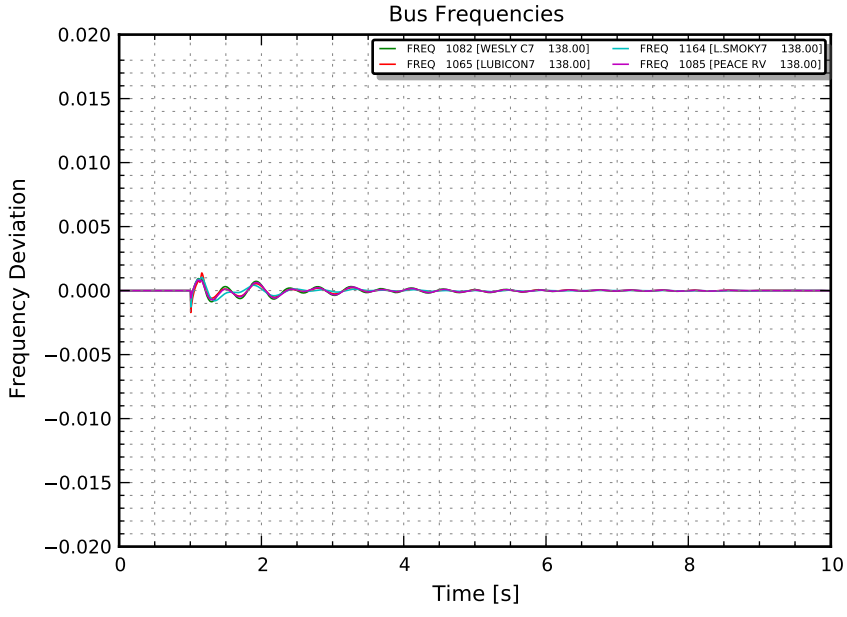


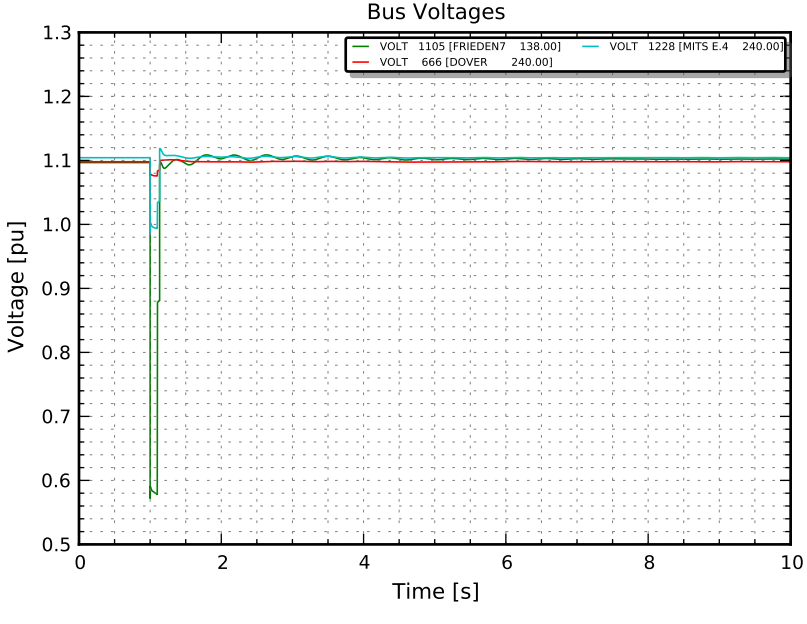
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_A.

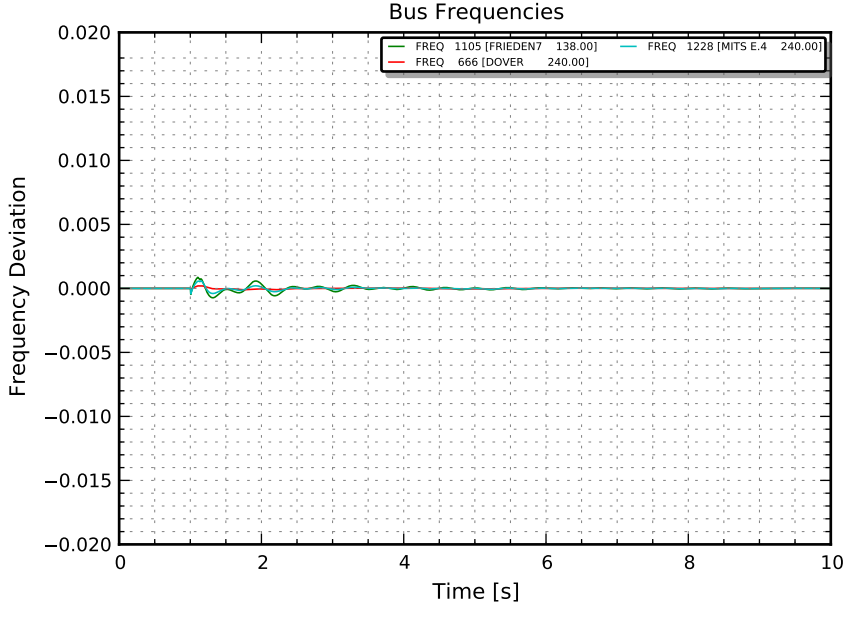
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 034 (A. 1)





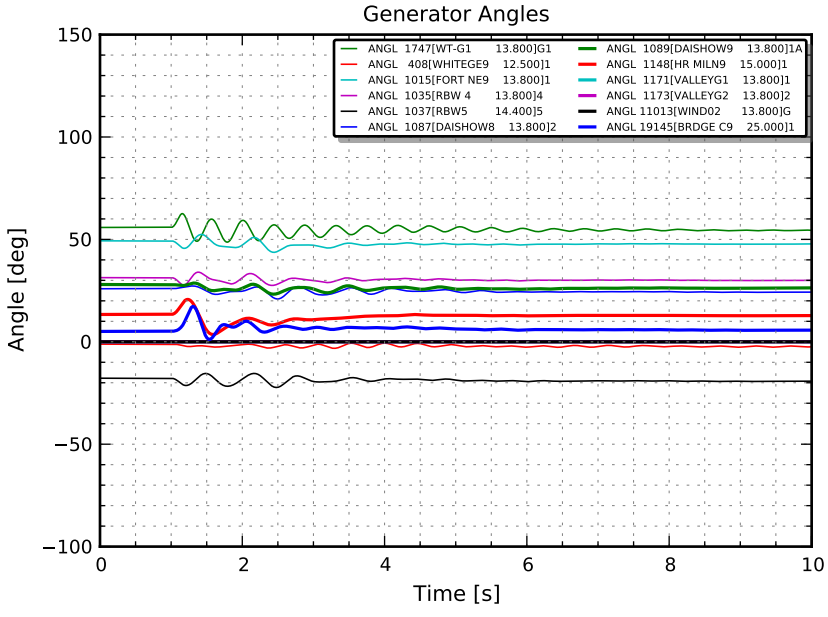


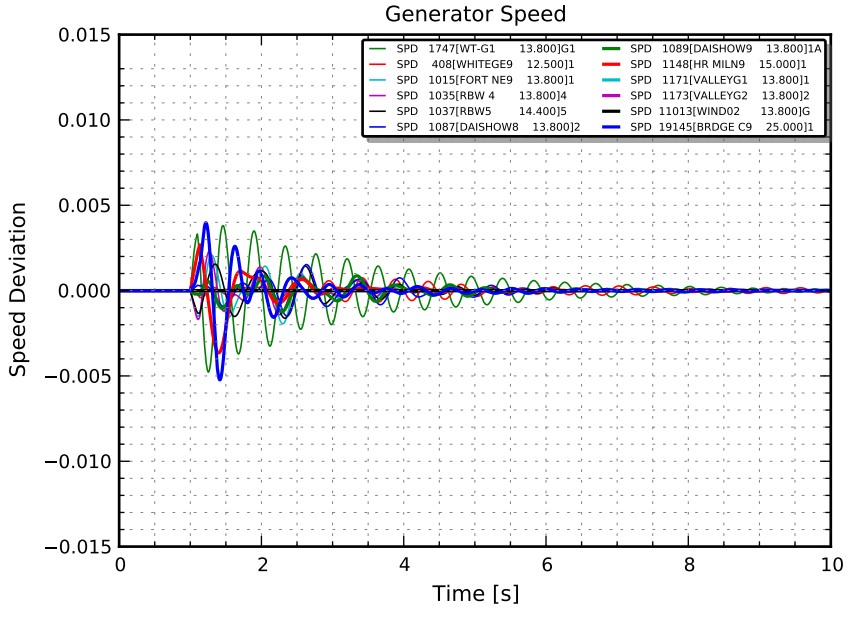


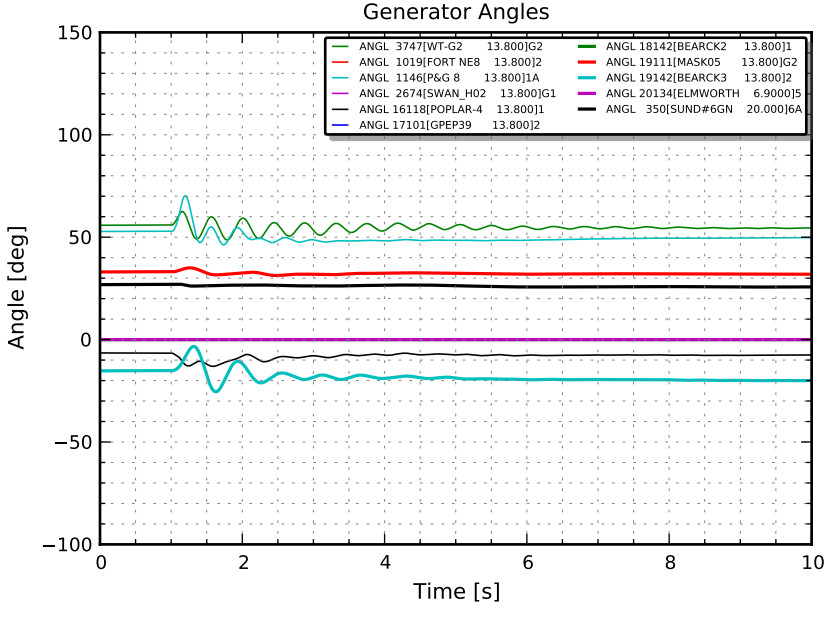
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_A.

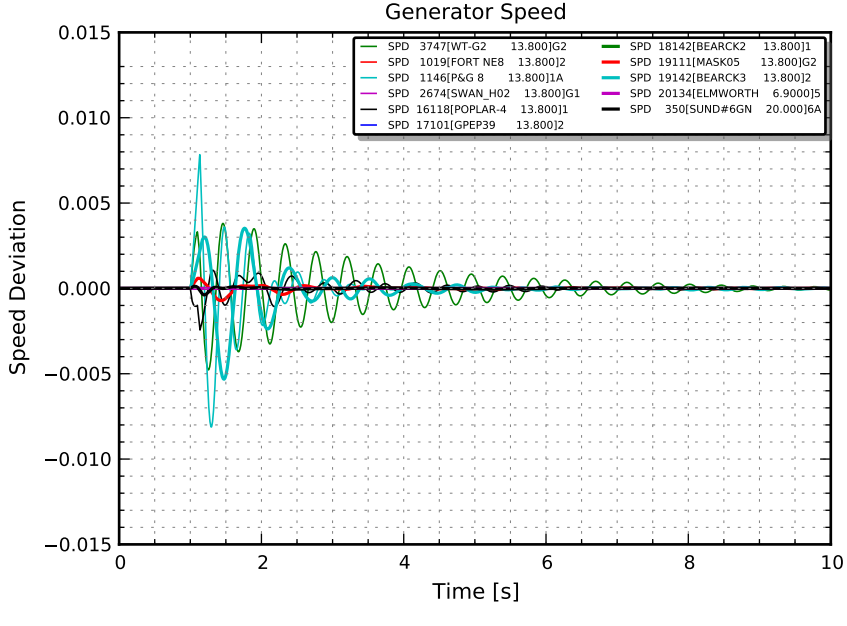
Study Area Generators

Appendix E2B
Figure: 034 (A. 2)





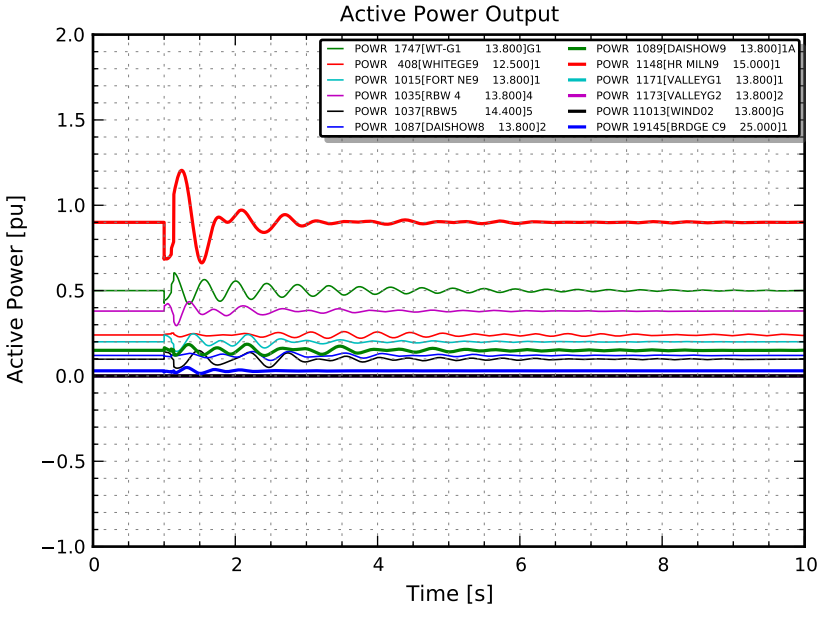


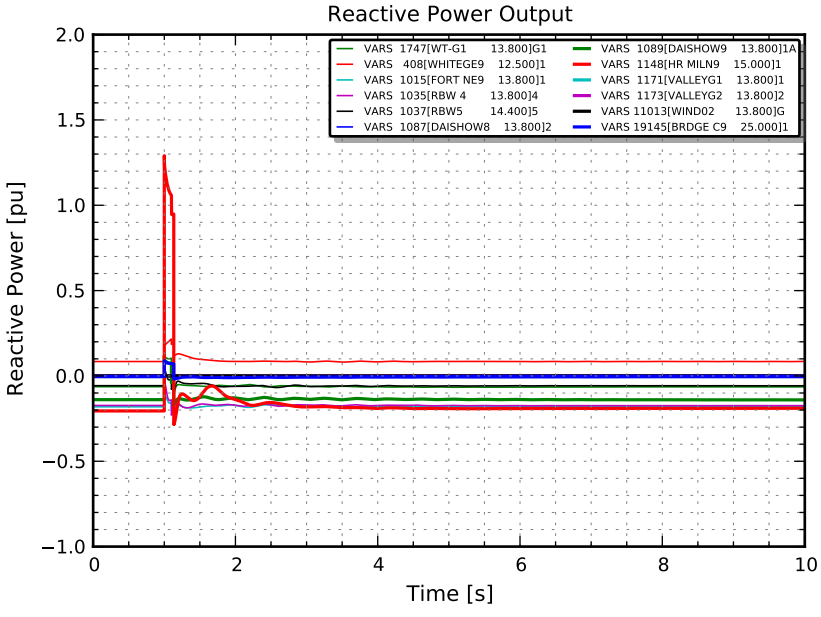


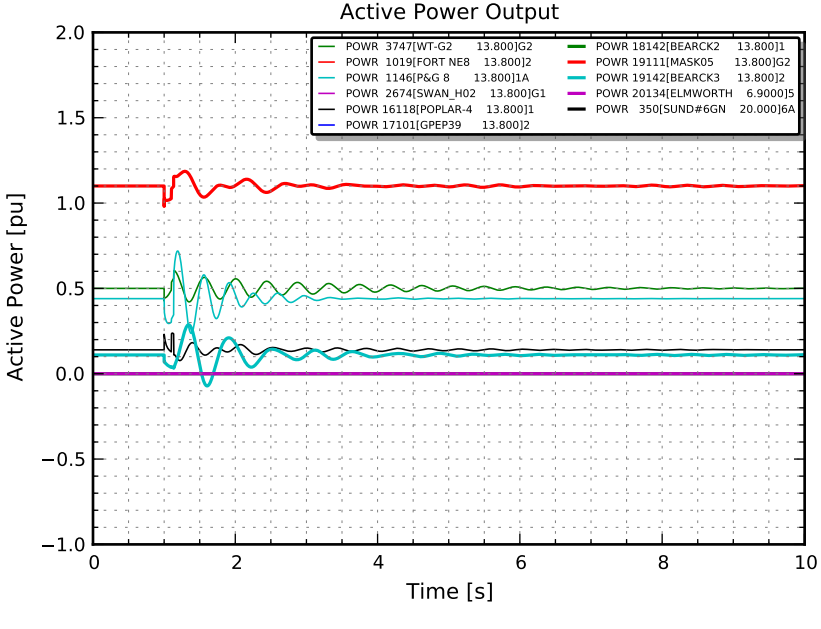
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_A.

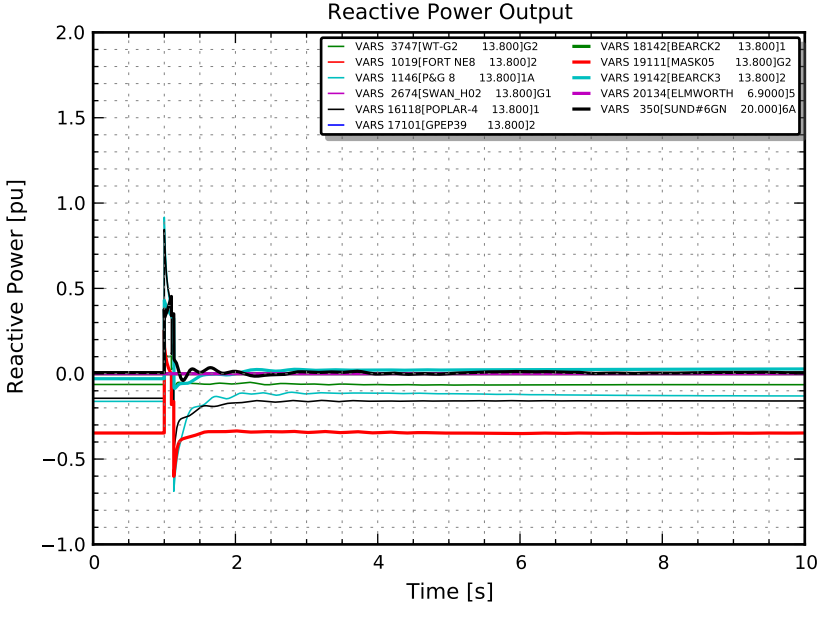
Study Area Generators

Appendix E2B
Figure: 034 (A. 3)





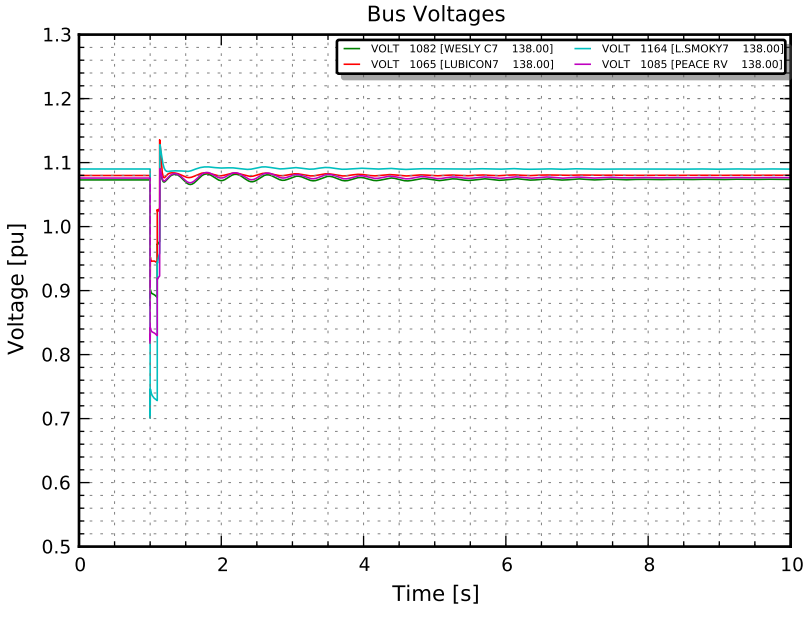


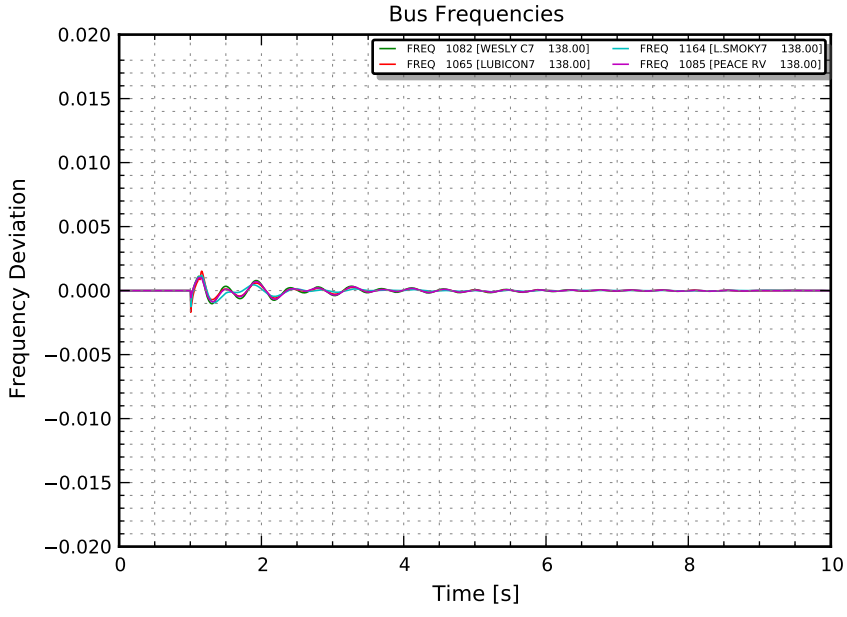


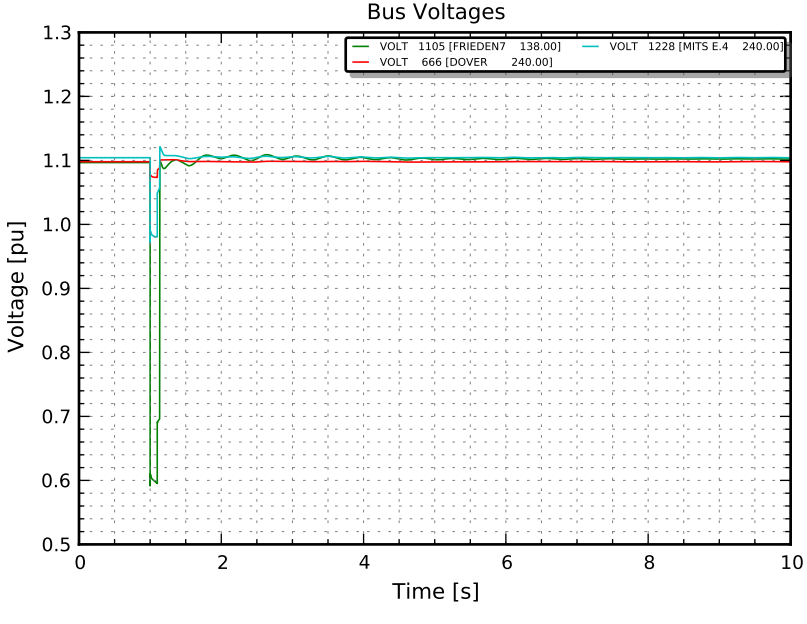
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_B.

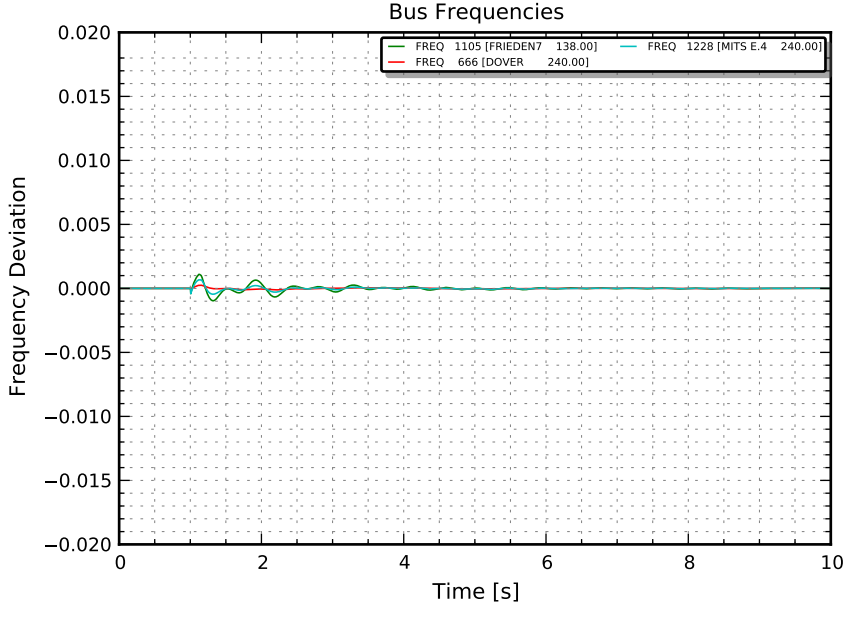
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 034 (B. 1)





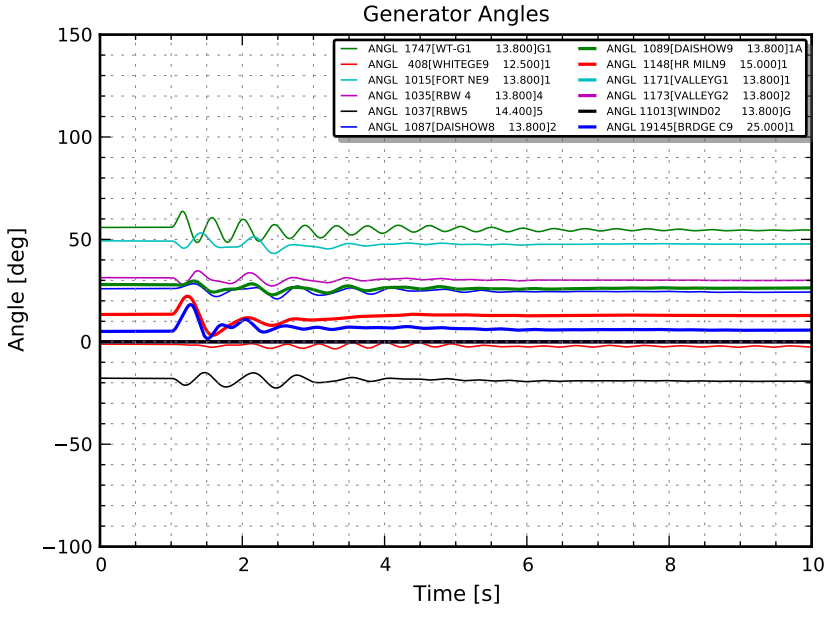


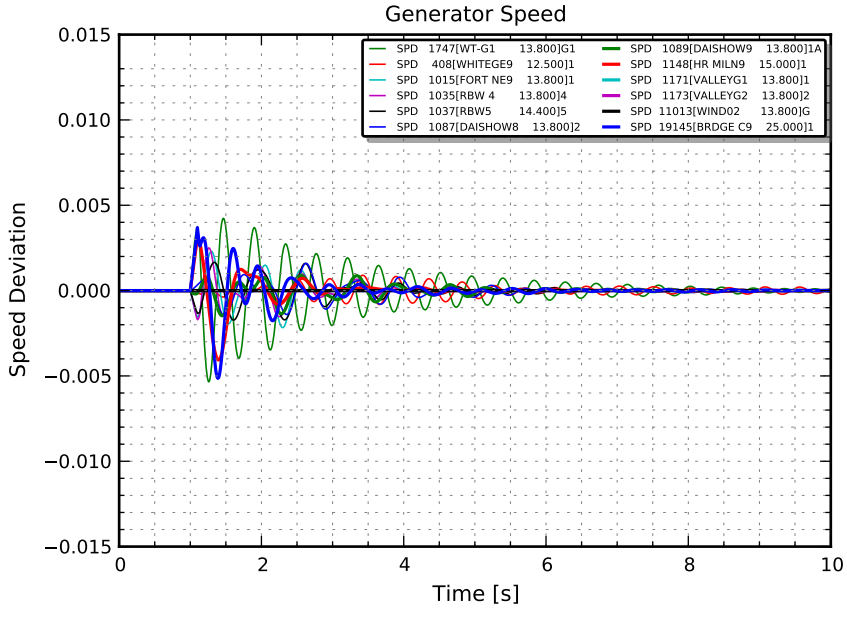


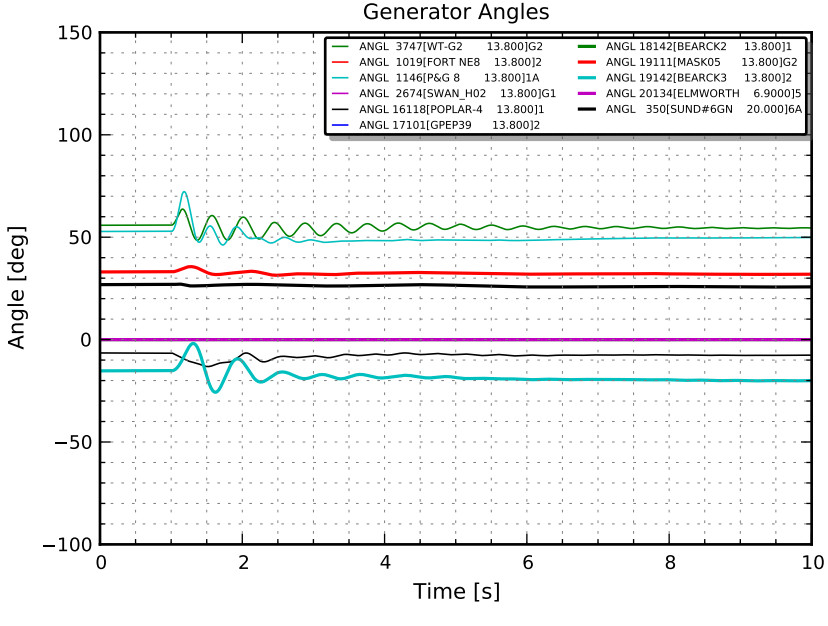
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_B.

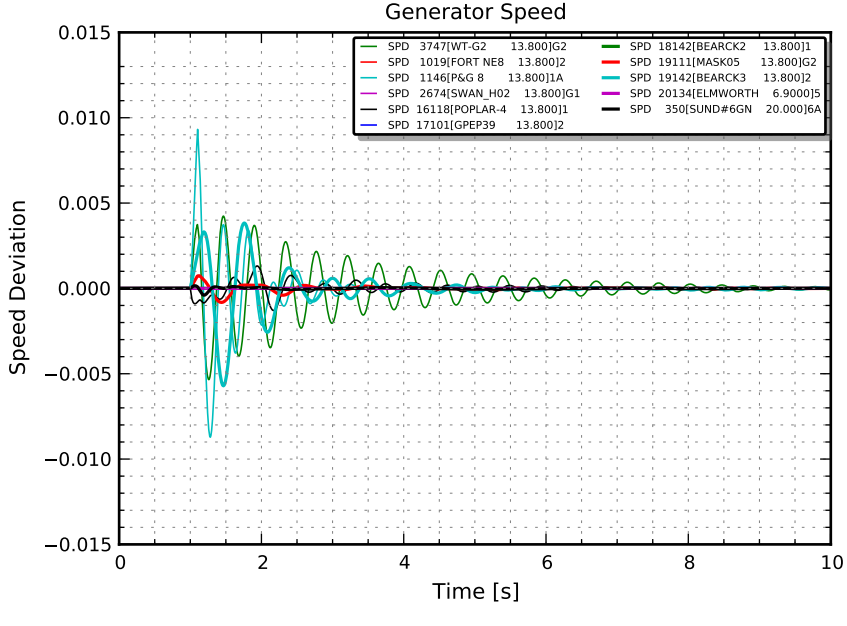
Study Area Generators

Appendix E2B
Figure: 034 (B. 2)





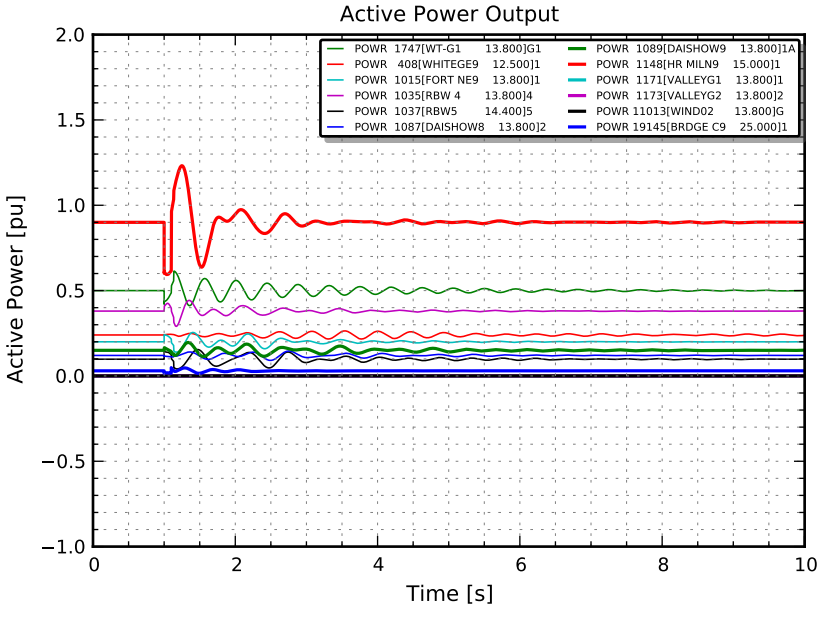


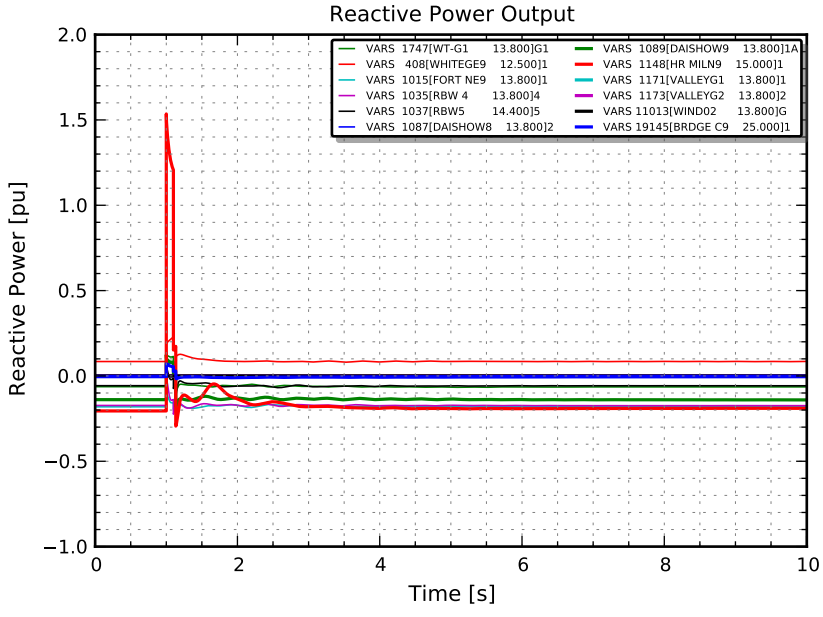


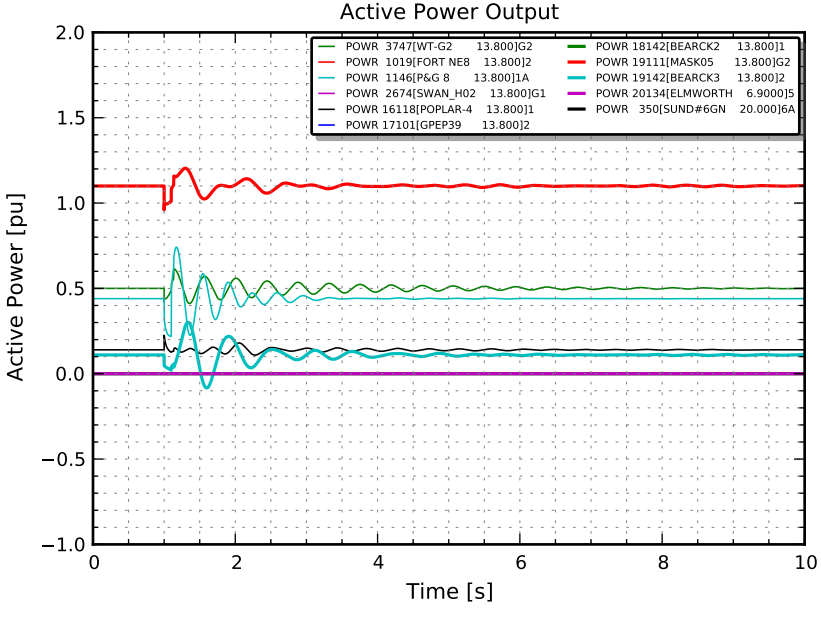
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 034 7L84 CRYSTALLAKE to FLYINGSHOTLAKE_B.

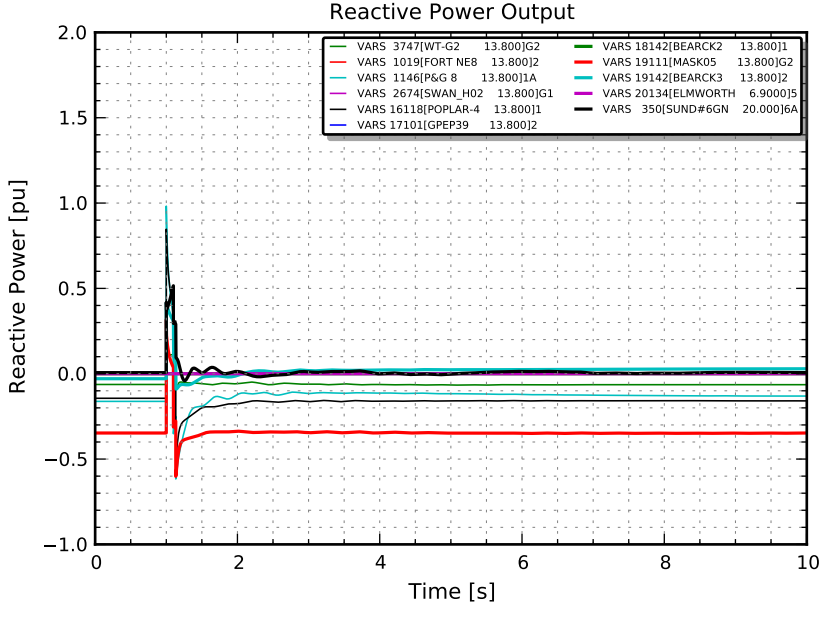
Study Area Generators

Appendix E2B
Figure: 034 (B. 3)





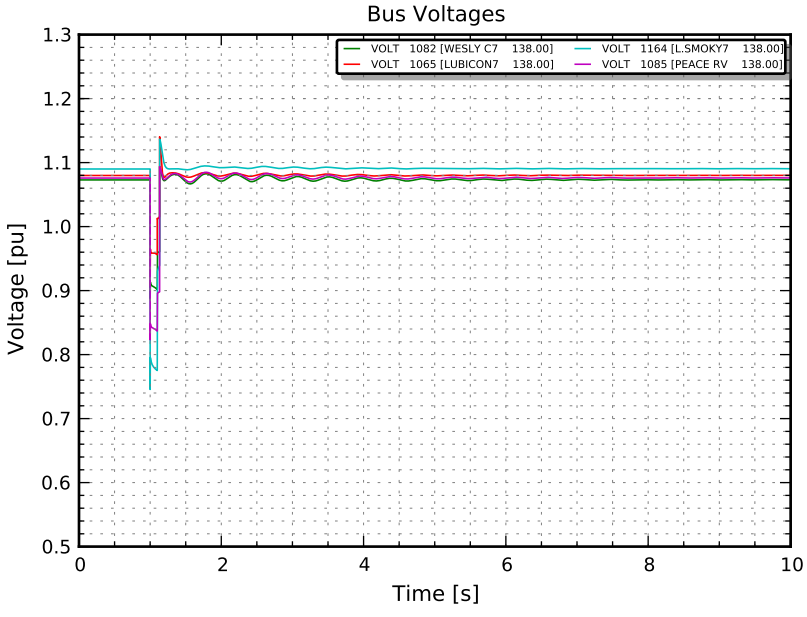


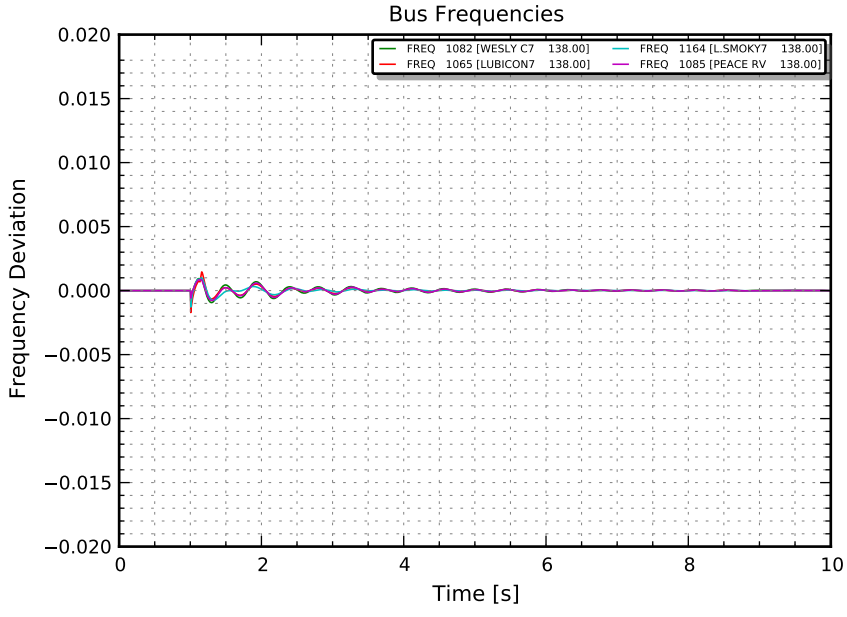


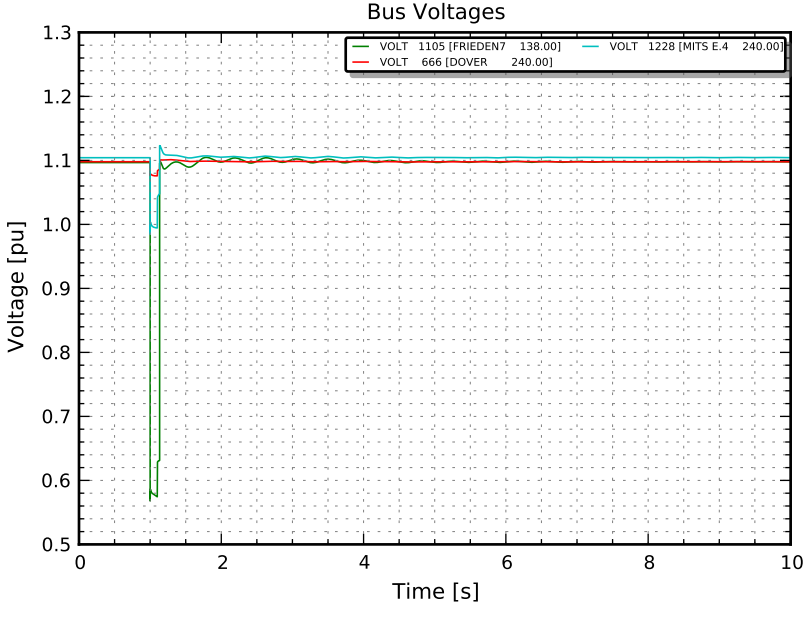
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_A.

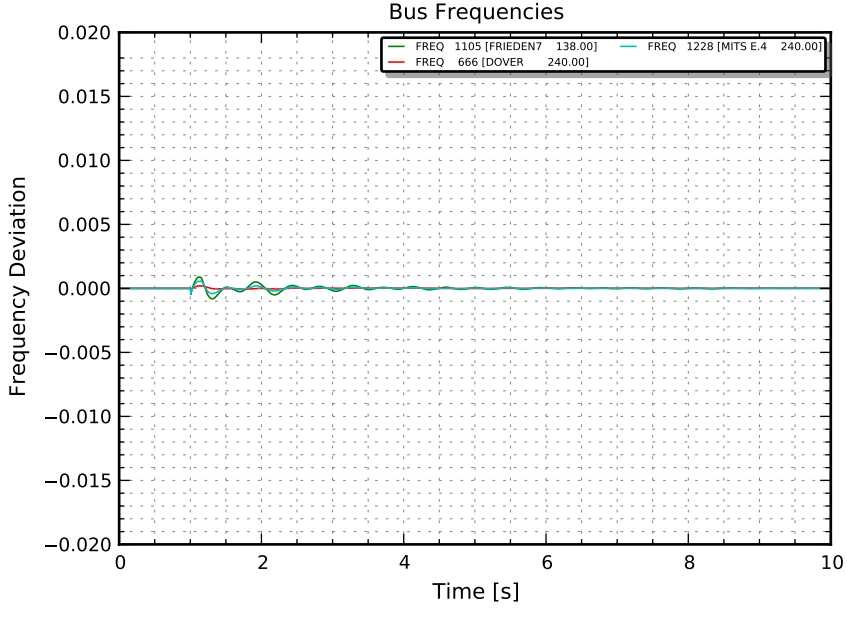
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 035 (A. 1)





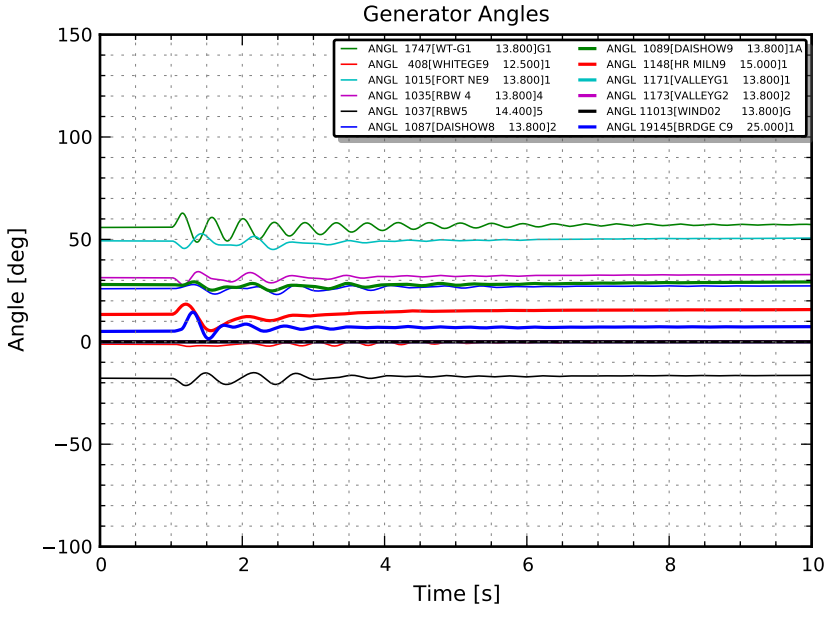


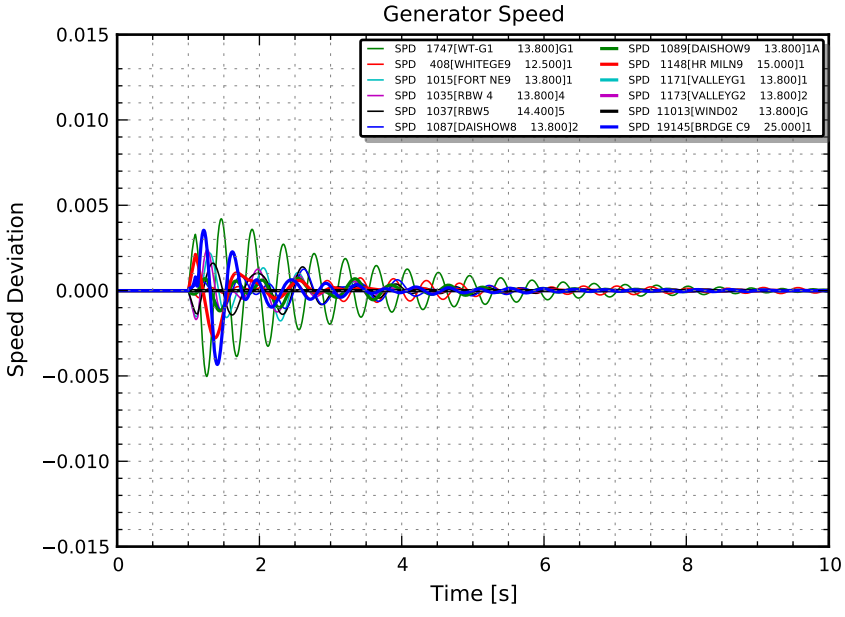


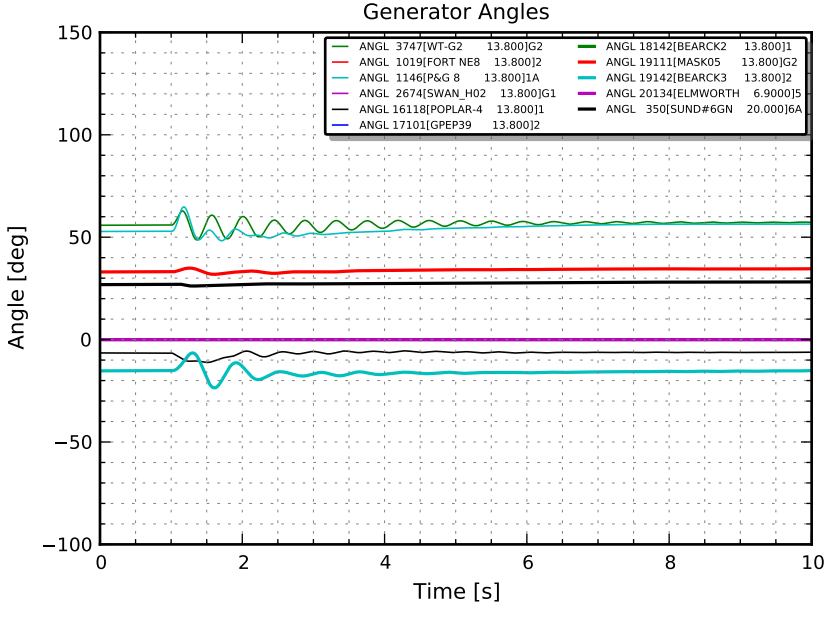
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_A.

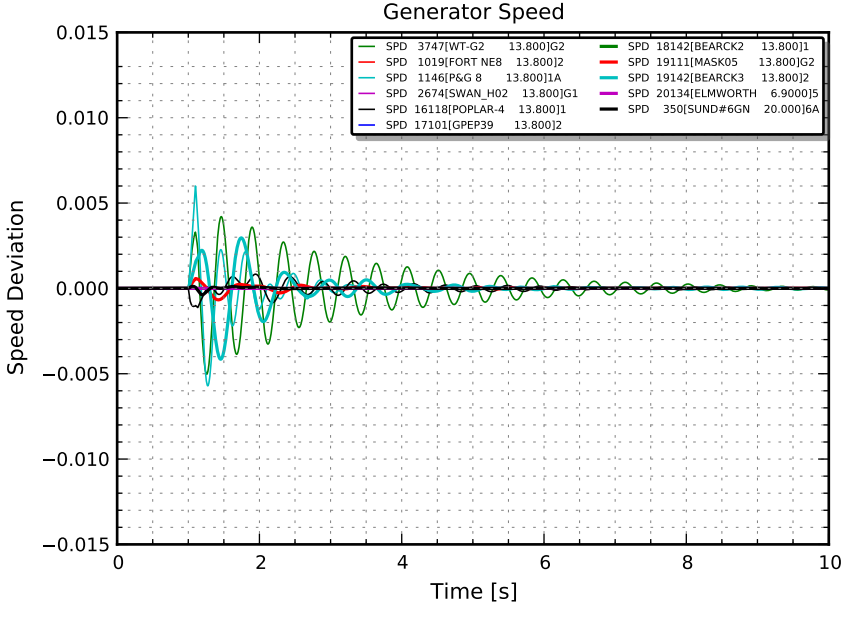
Study Area Generators

Appendix E2B
Figure: 035 (A. 2)





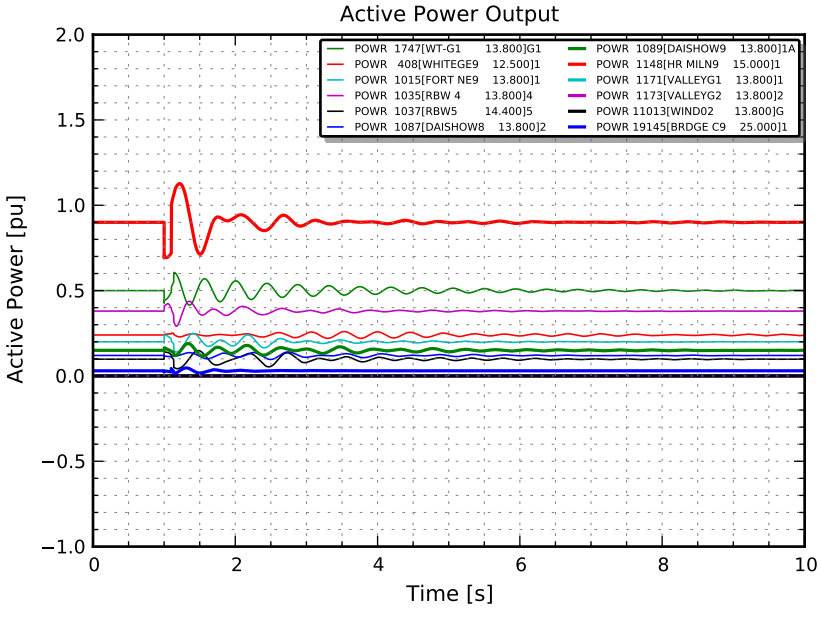


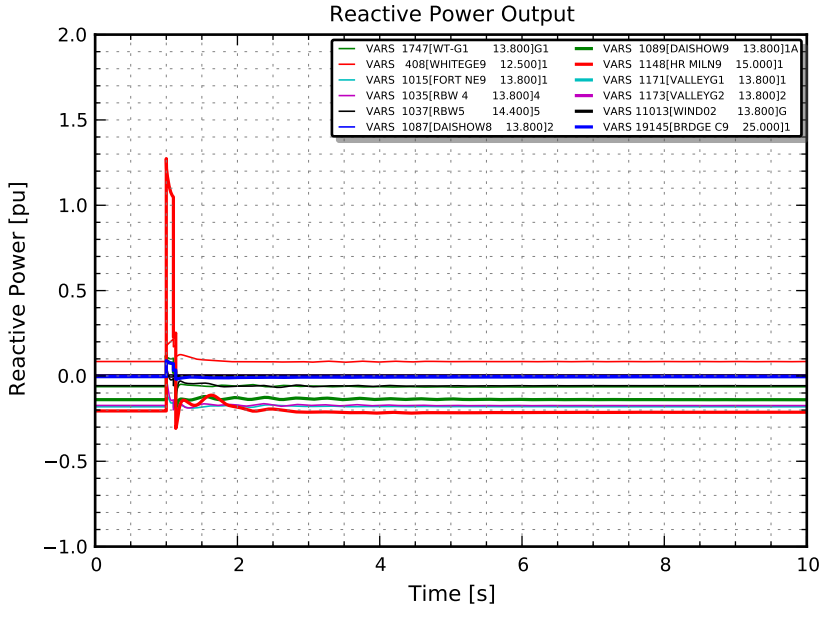


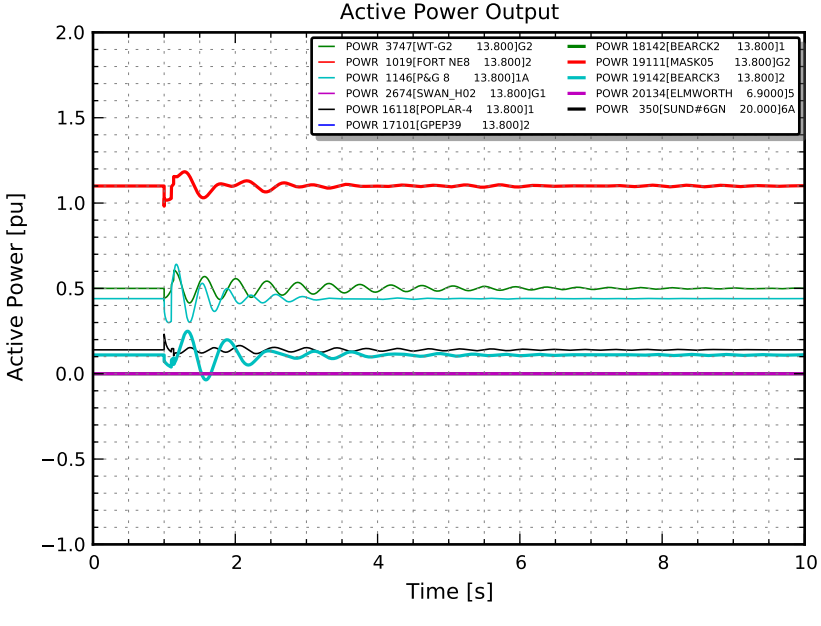
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_A.

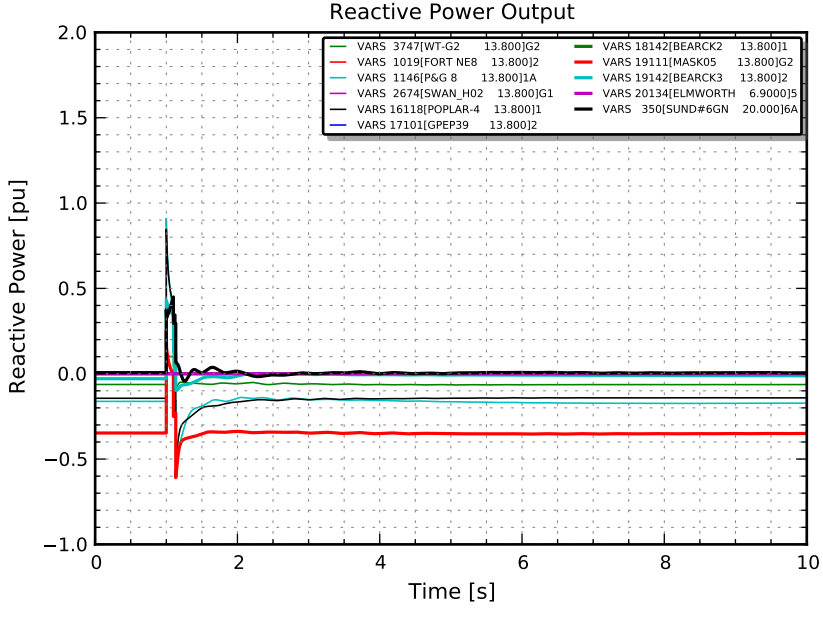
Study Area Generators

Appendix E2B
Figure: 035 (A. 3)





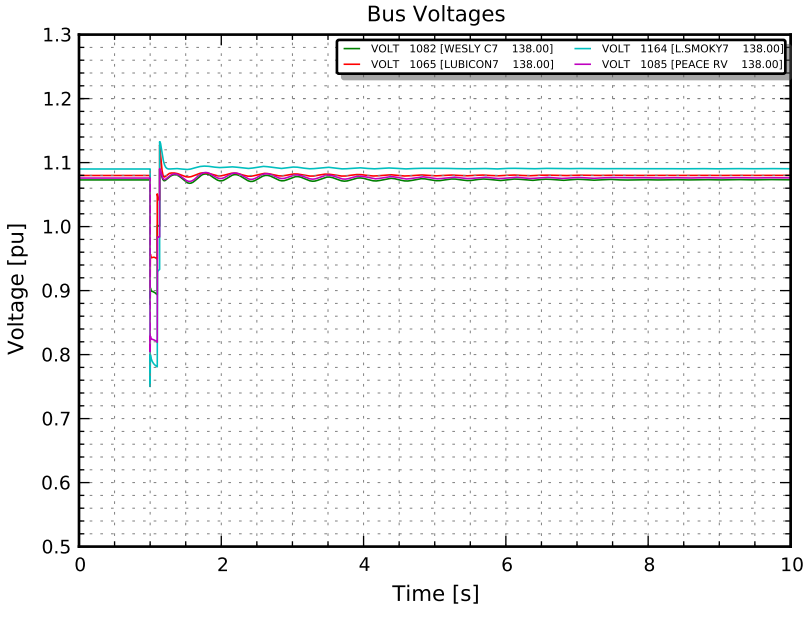


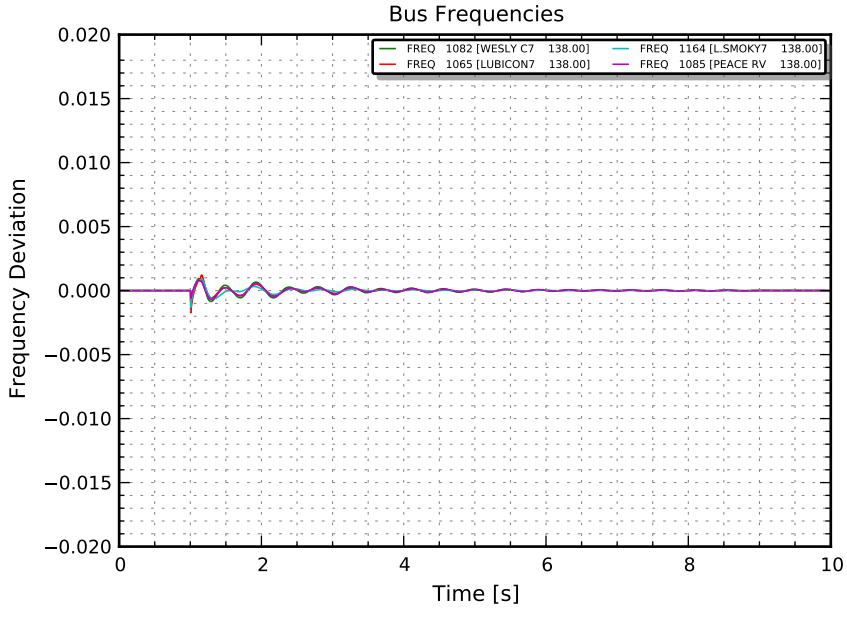


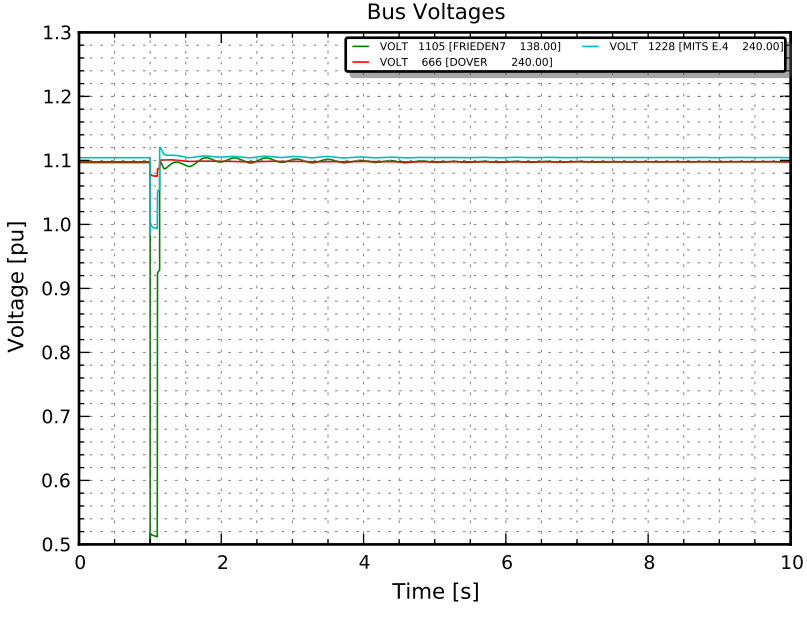
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_B.

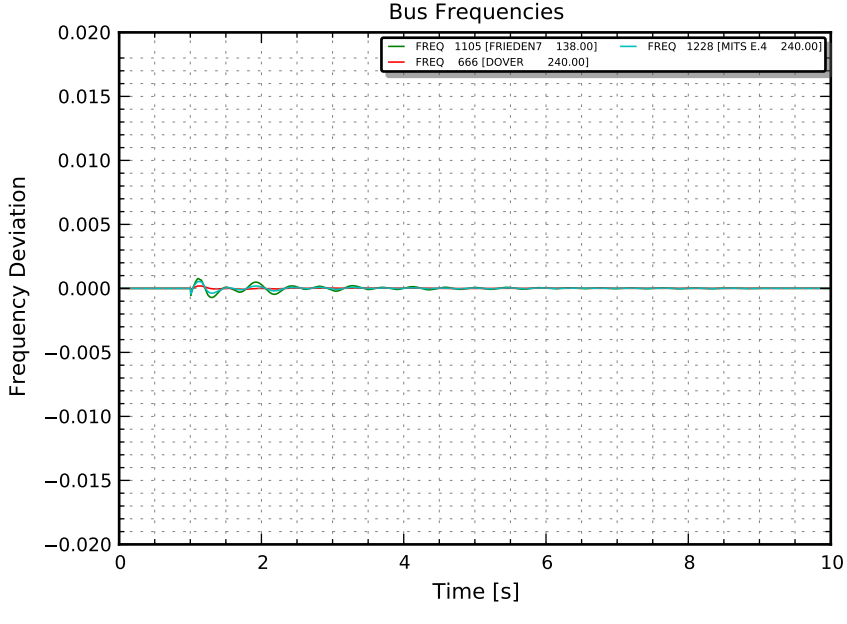
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 035 (B. 1)





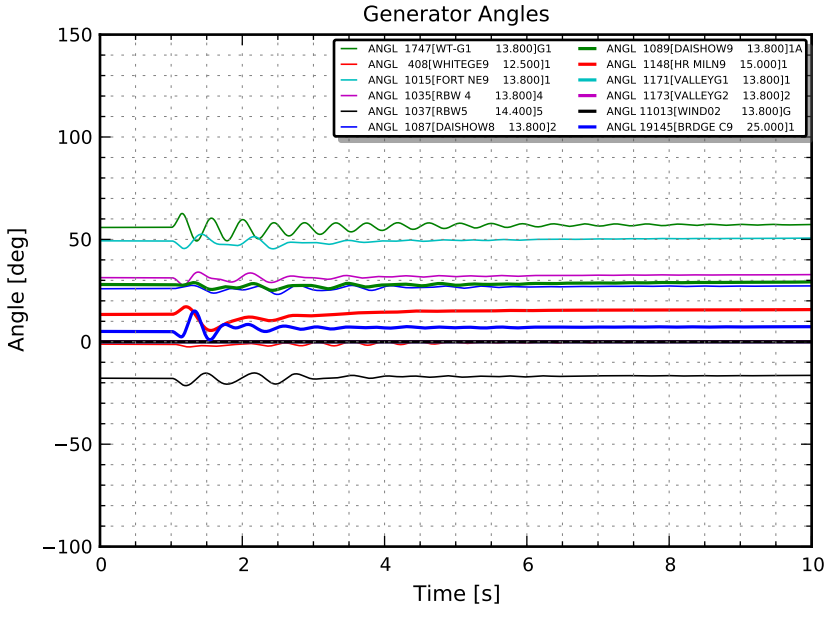


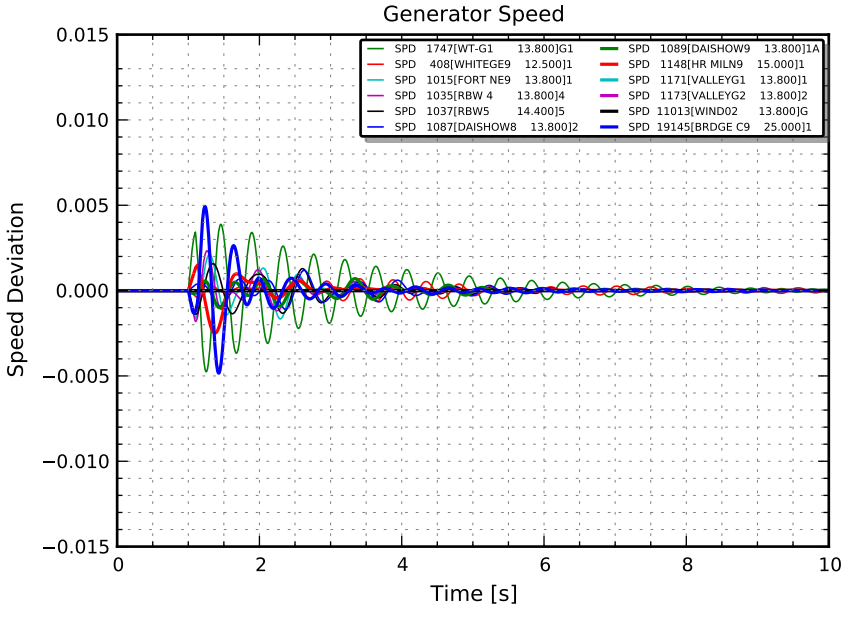


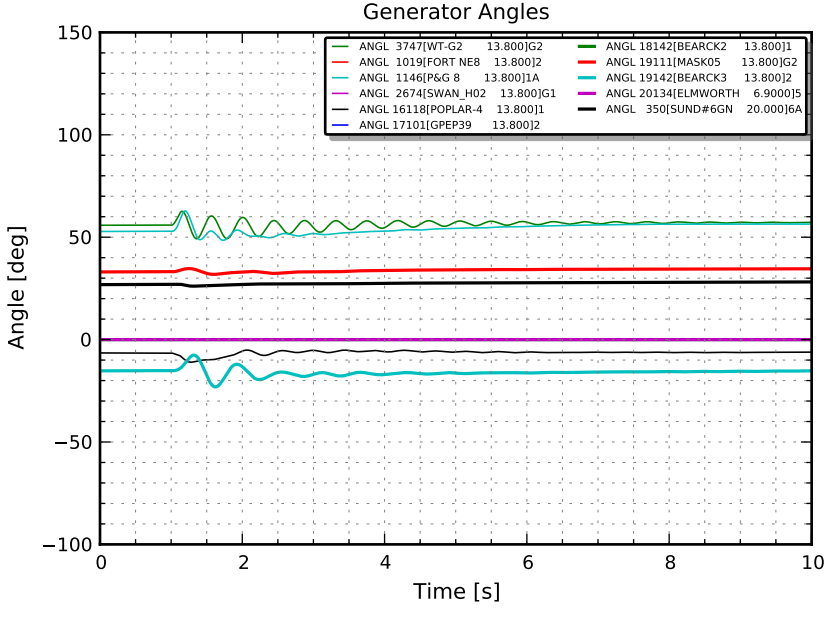
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_B.

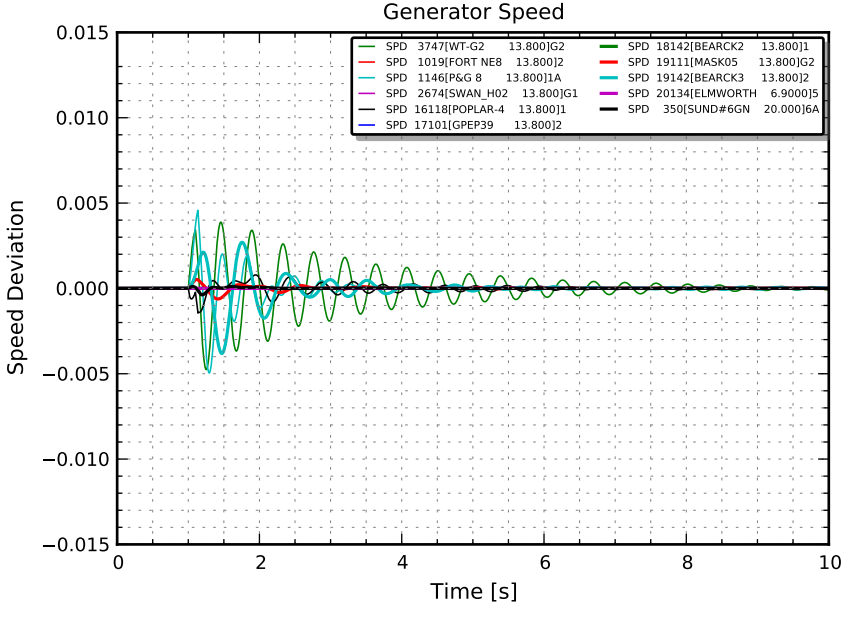
Study Area Generators

Appendix E2B
Figure: 035 (B. 2)





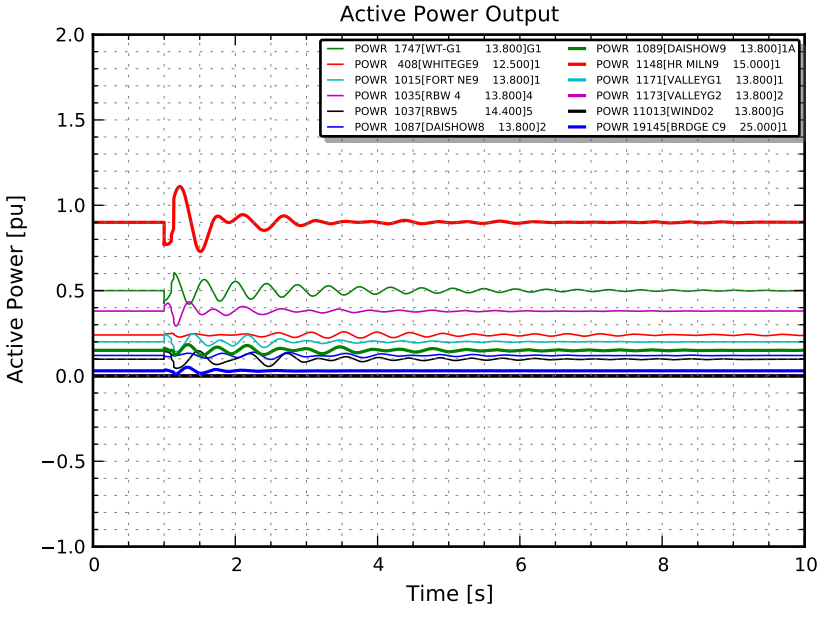


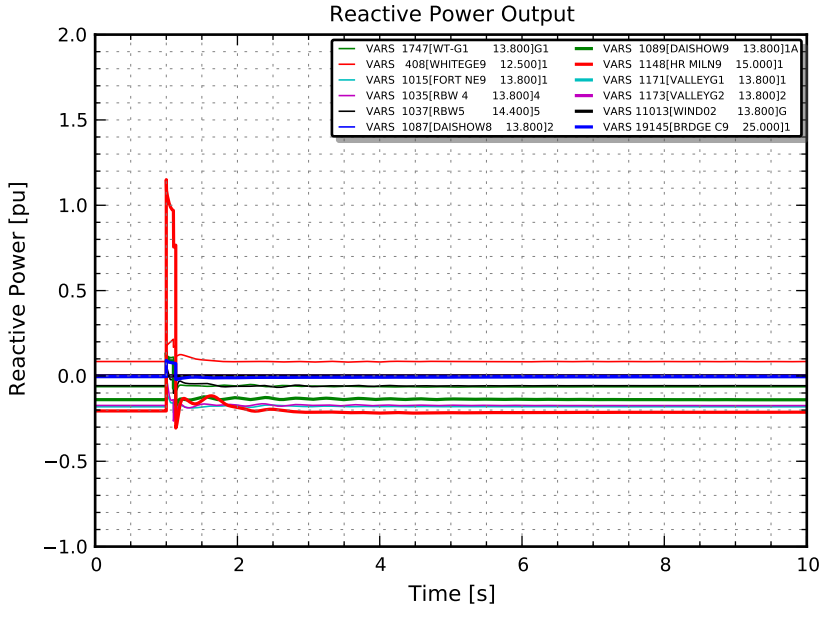


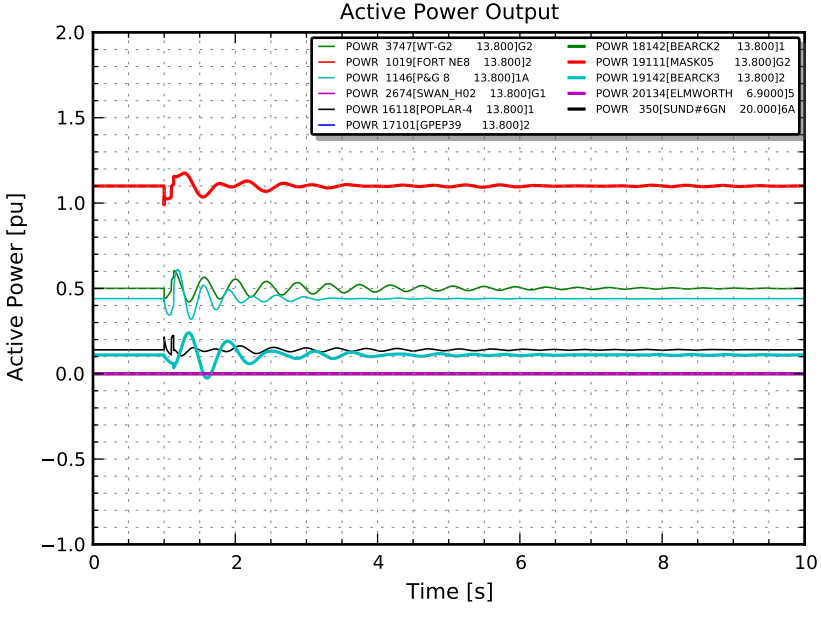
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 035 7L39 CRYSTALLAKE to CLAIRMONTLAKE_B.

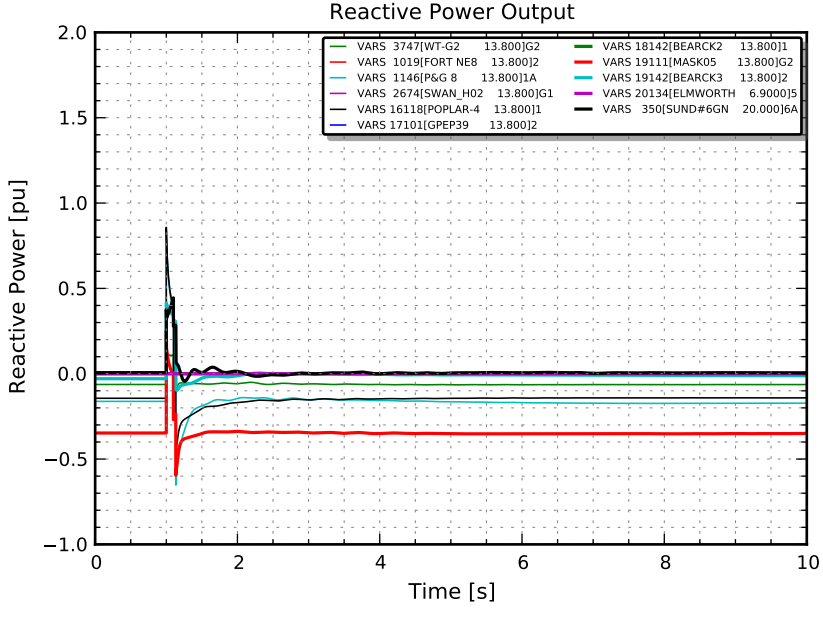
Study Area Generators

Appendix E2B
Figure: 035 (B. 3)





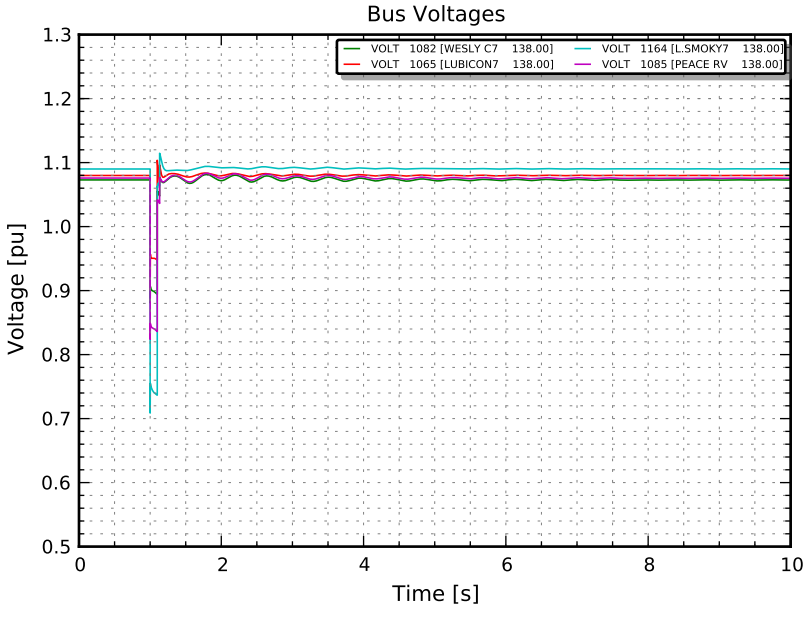


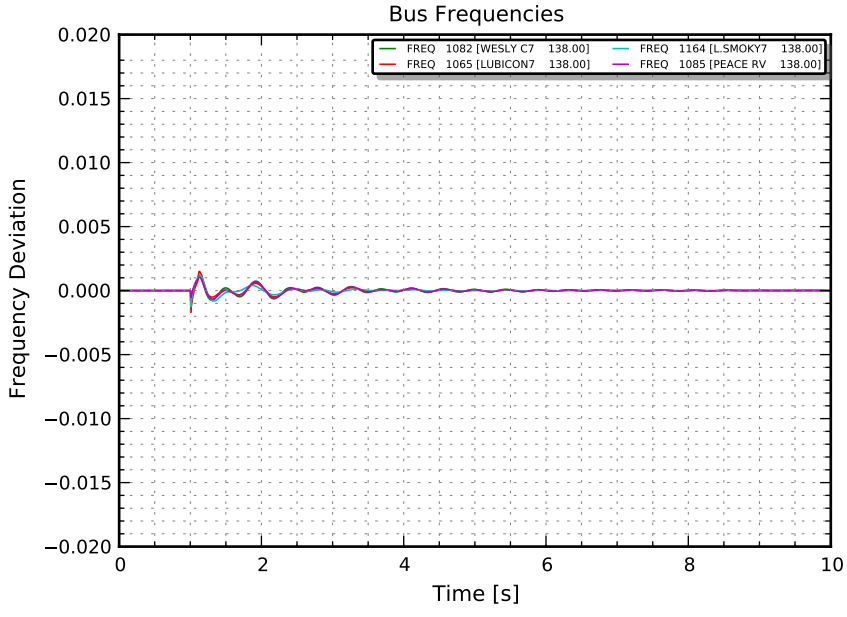


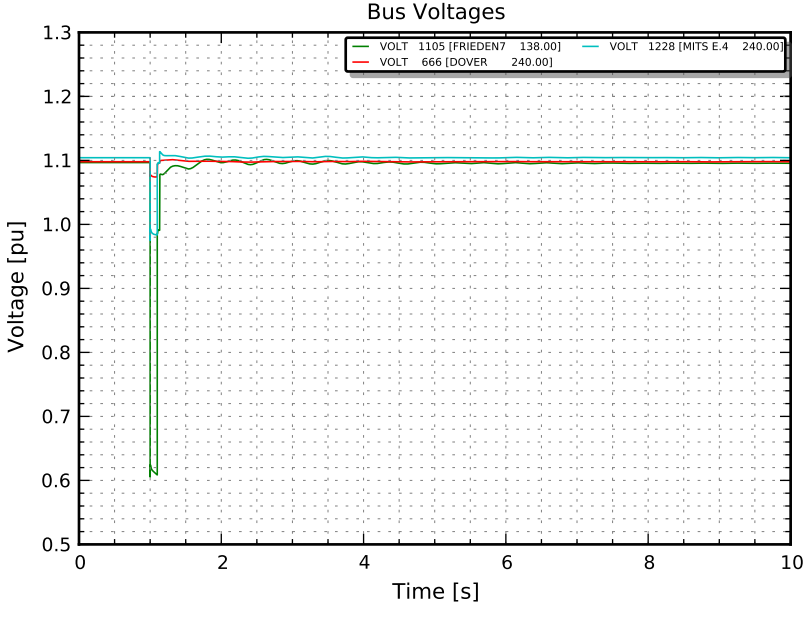
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_A.

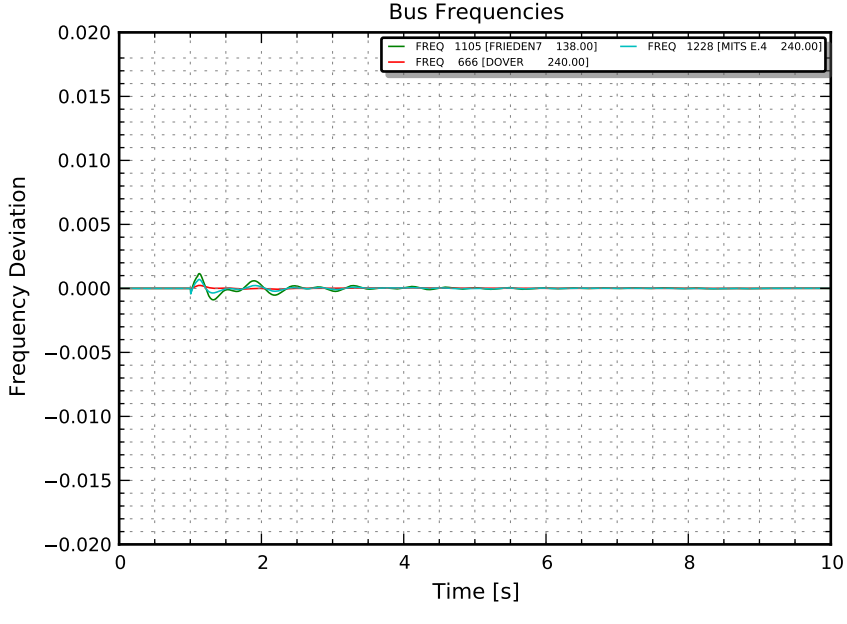
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 036 (A. 1)





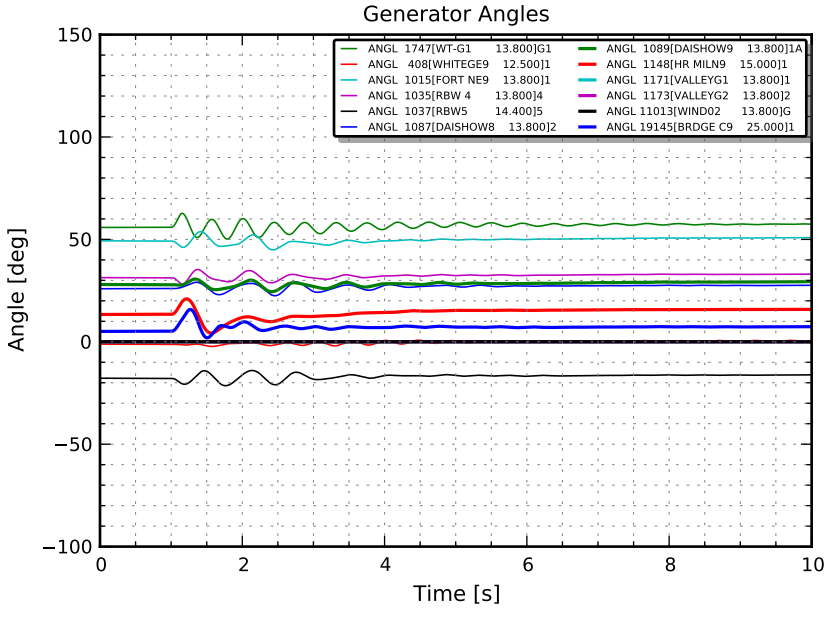


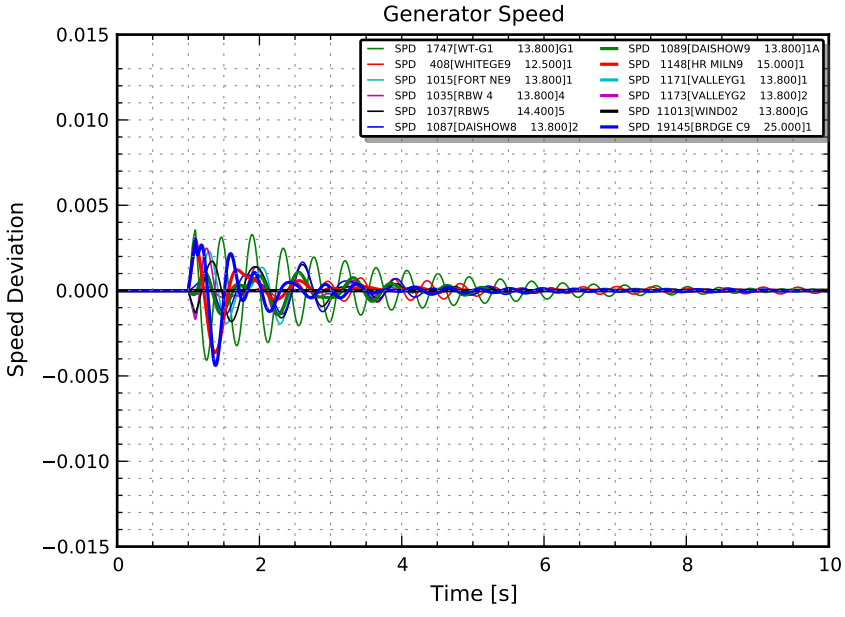


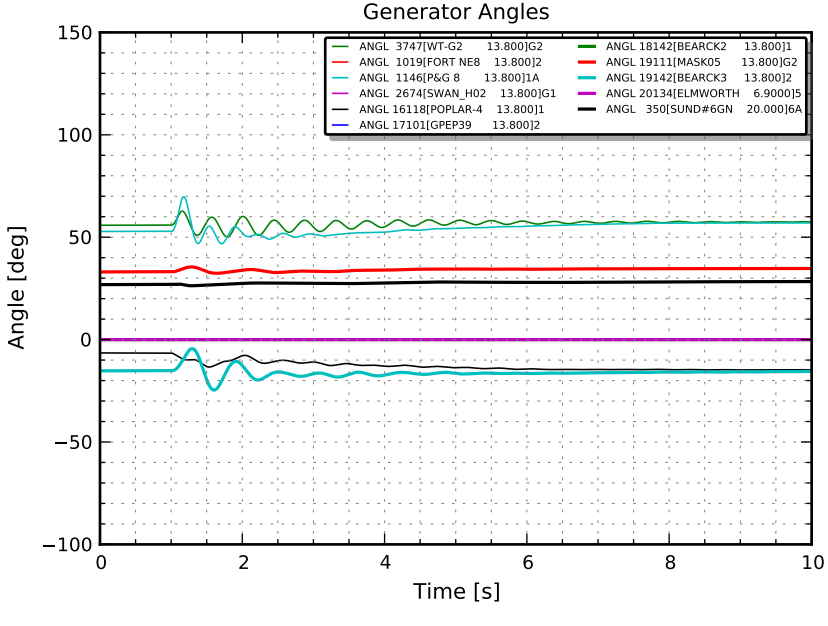
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_A.

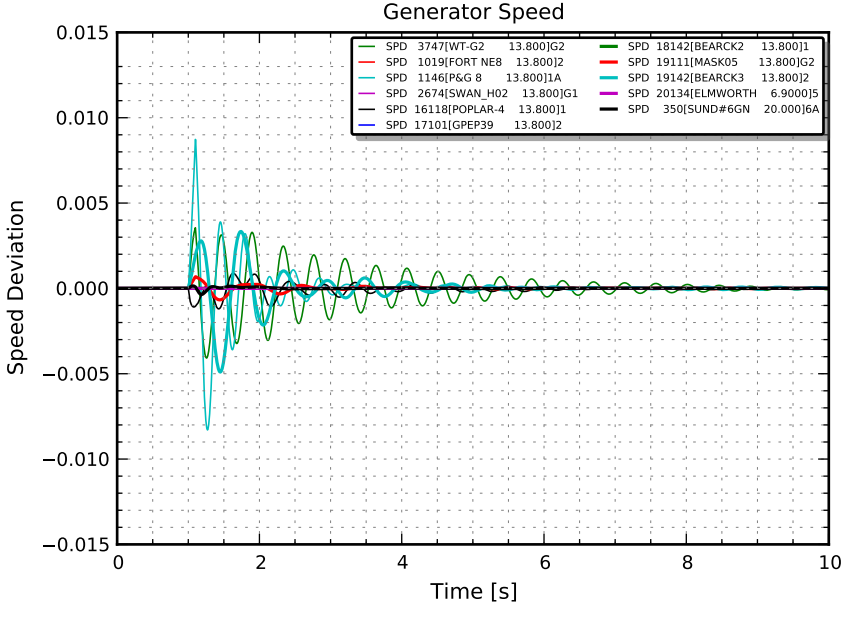
Study Area Generators

Appendix E2B
Figure: 036 (A. 2)





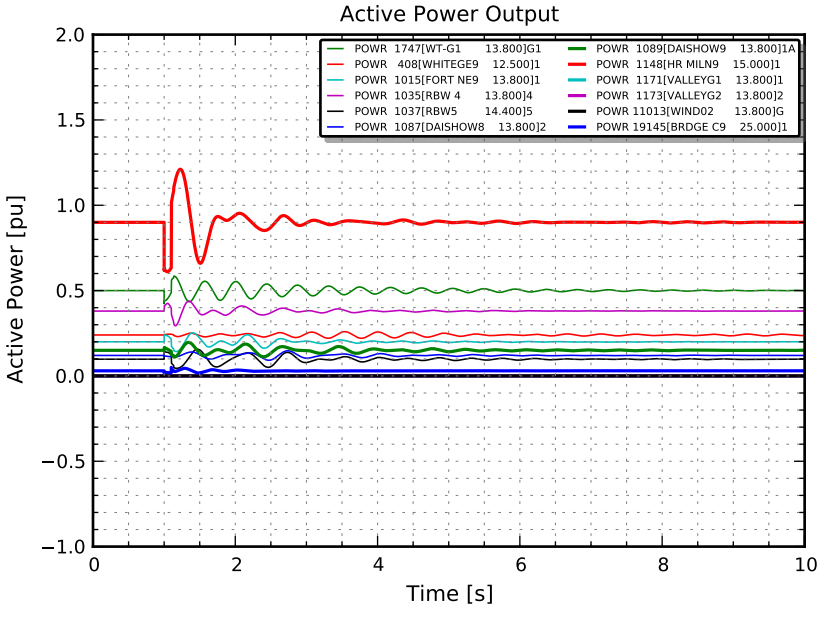


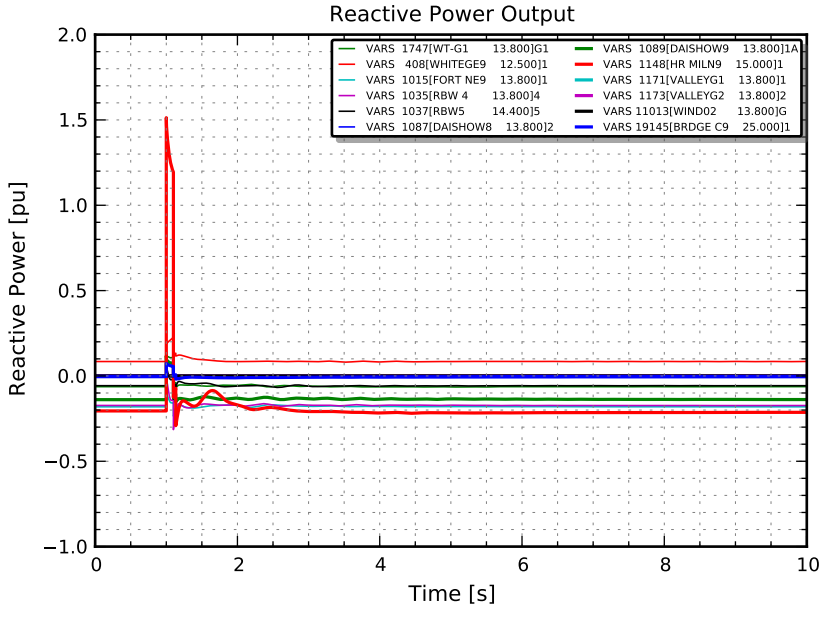


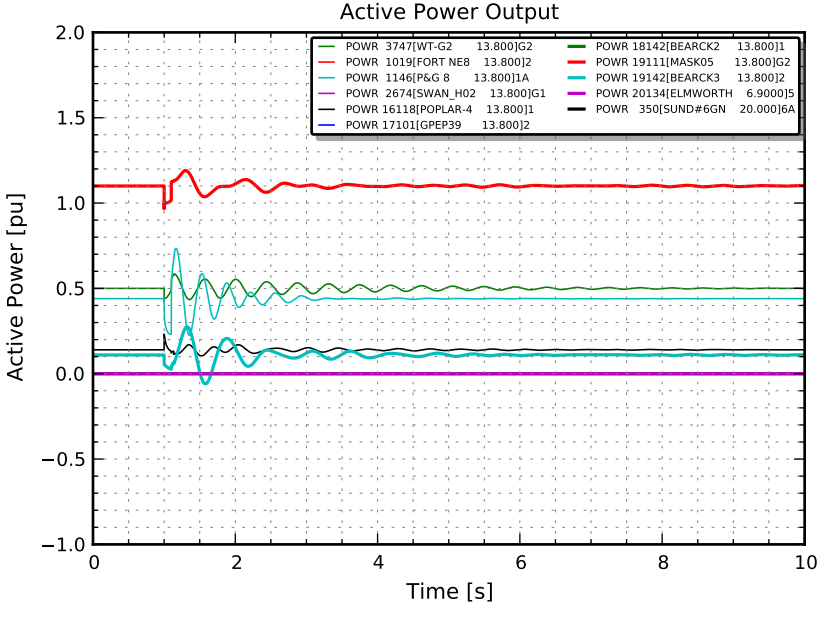
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_A.

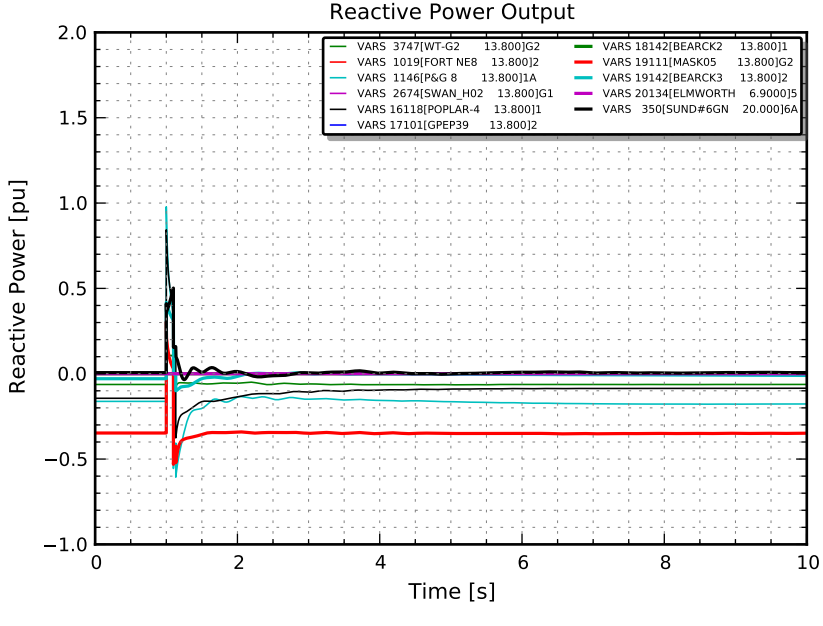
Study Area Generators

Appendix E2B
Figure: 036 (A. 3)





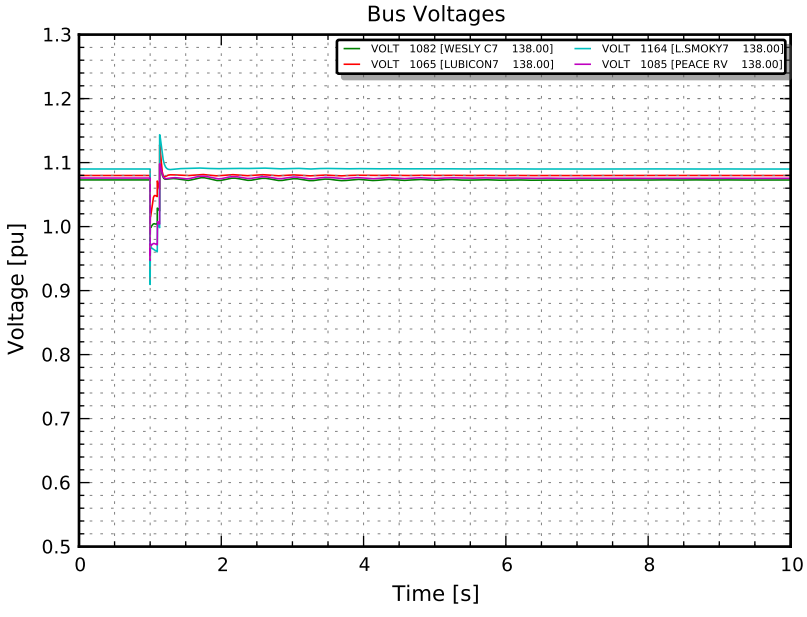


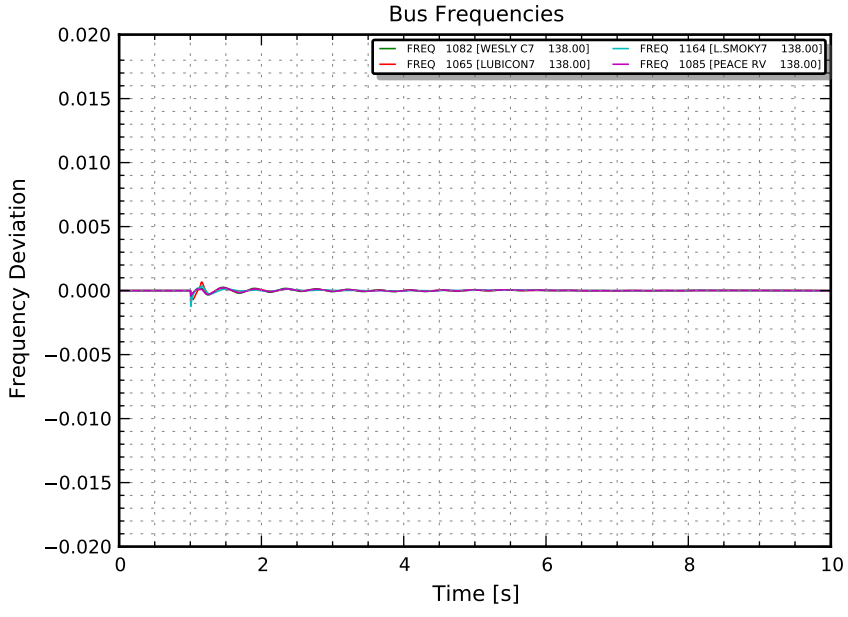


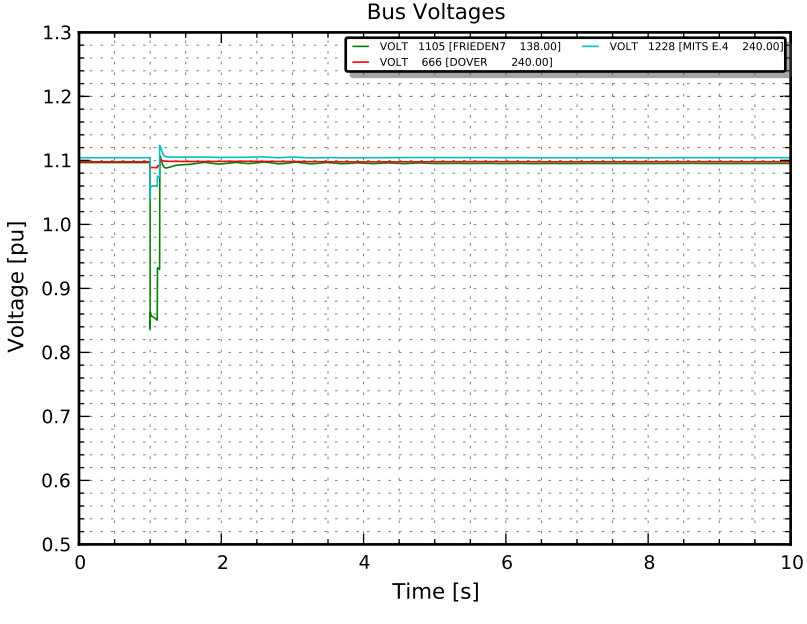
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_B.

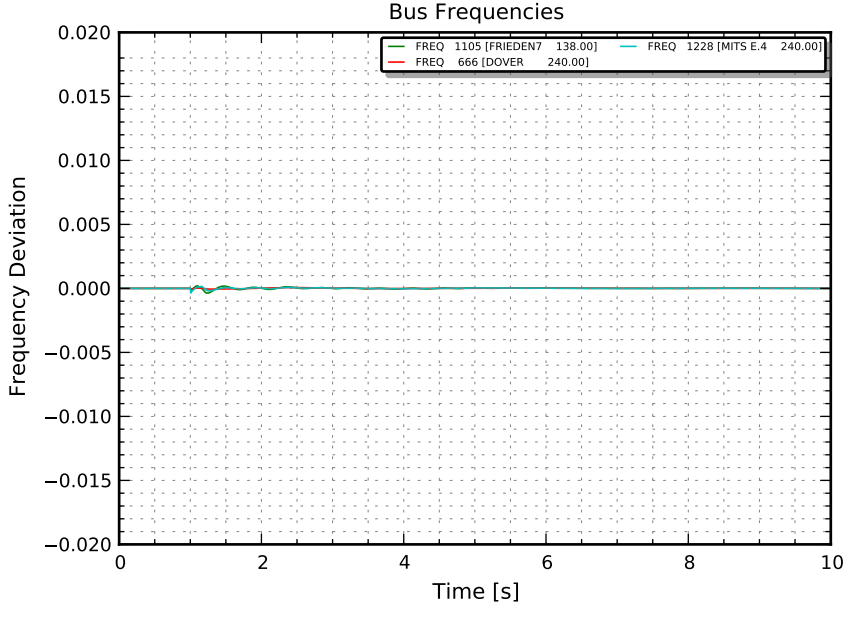
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 036 (B. 1)





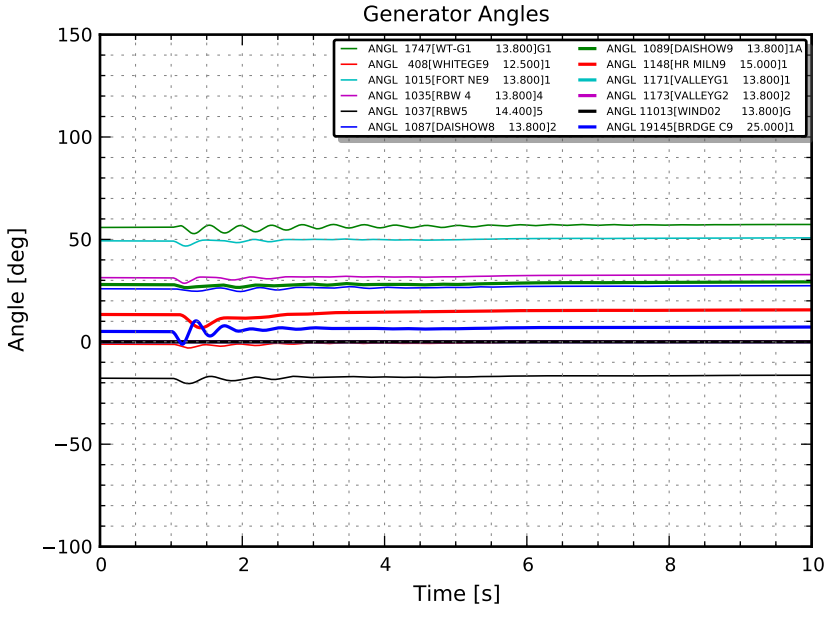


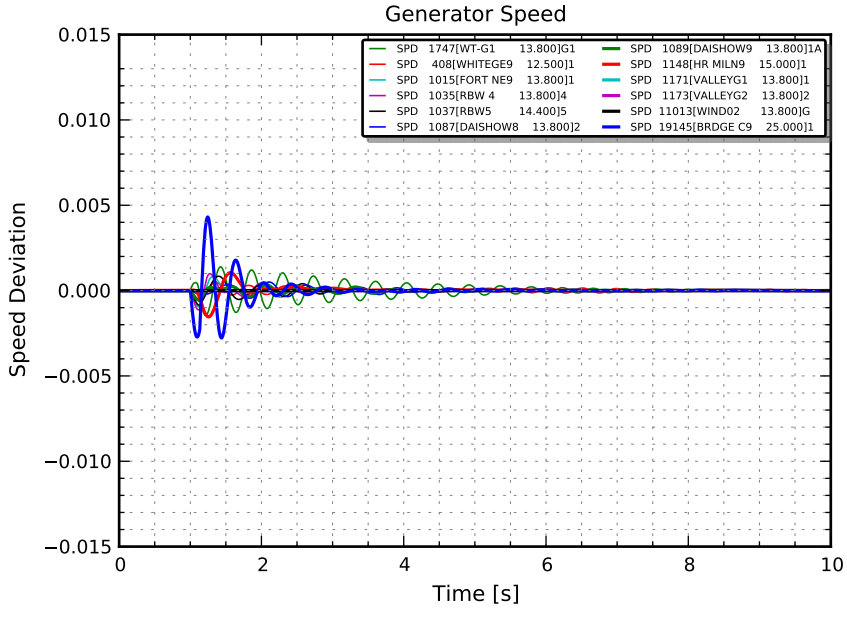


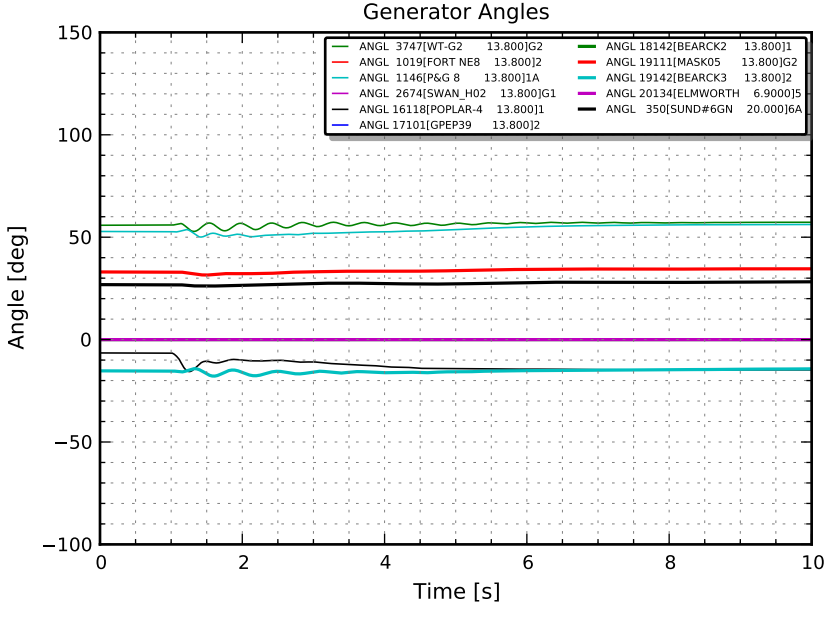
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_B.

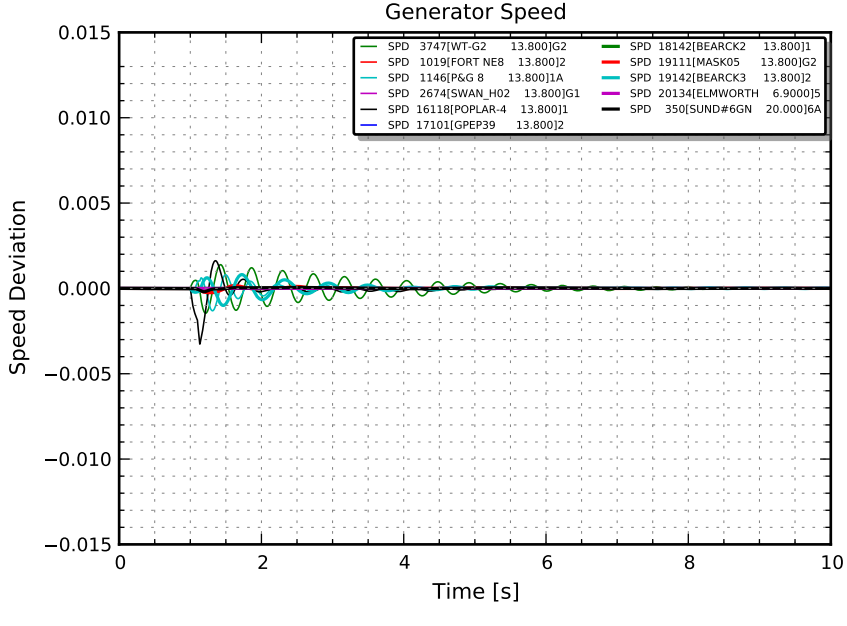
Study Area Generators

Appendix E2B
Figure: 036 (B. 2)





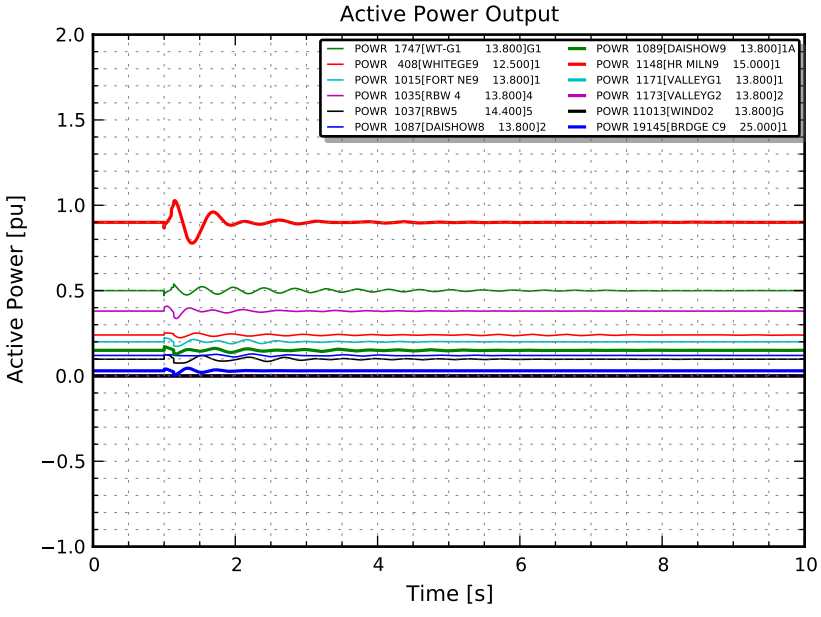


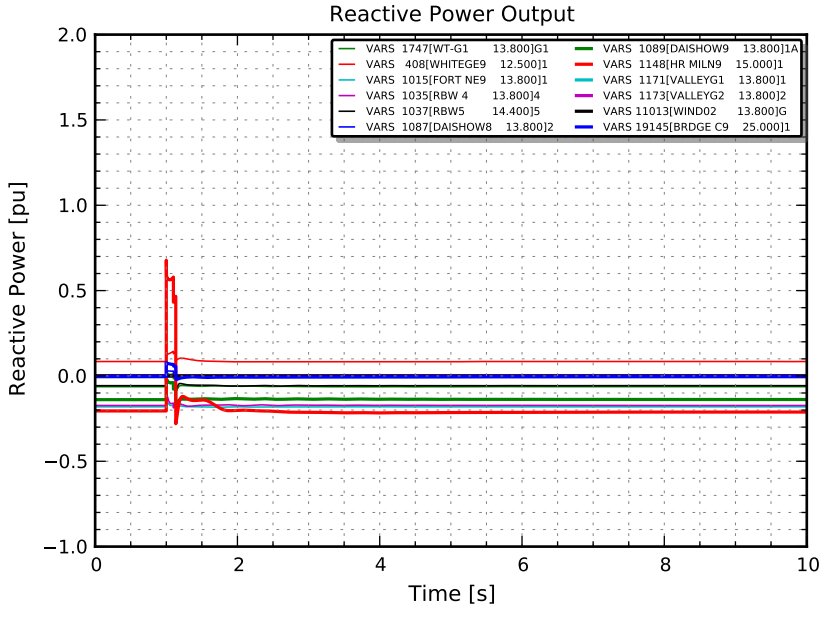


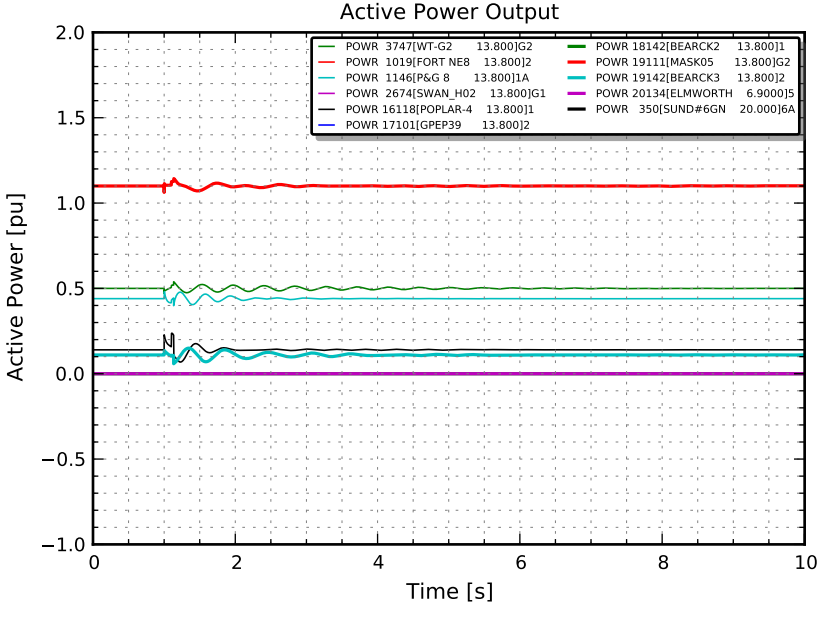
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 036 7L03 FLYINGSHOTLAKE to ELMWORTH_B.

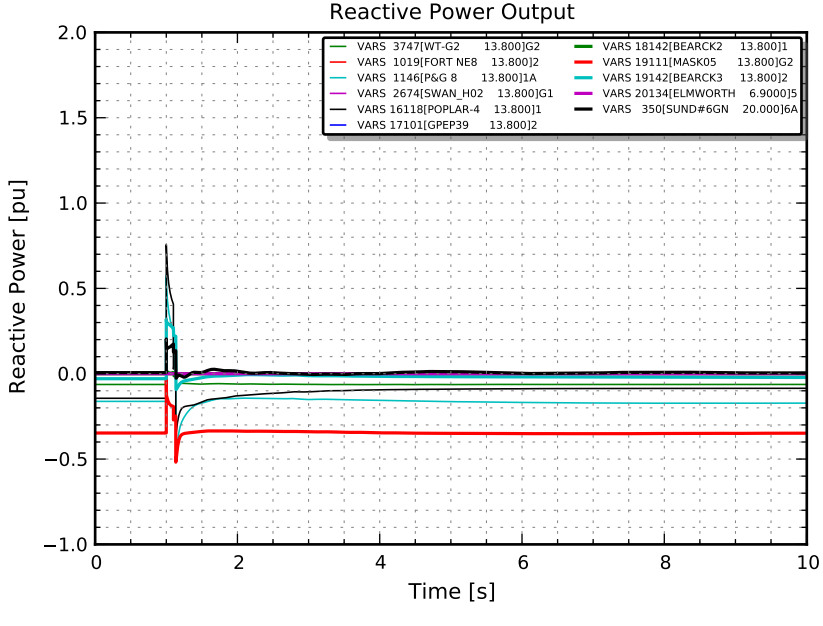
Study Area Generators

Appendix E2B
Figure: 036 (B. 3)





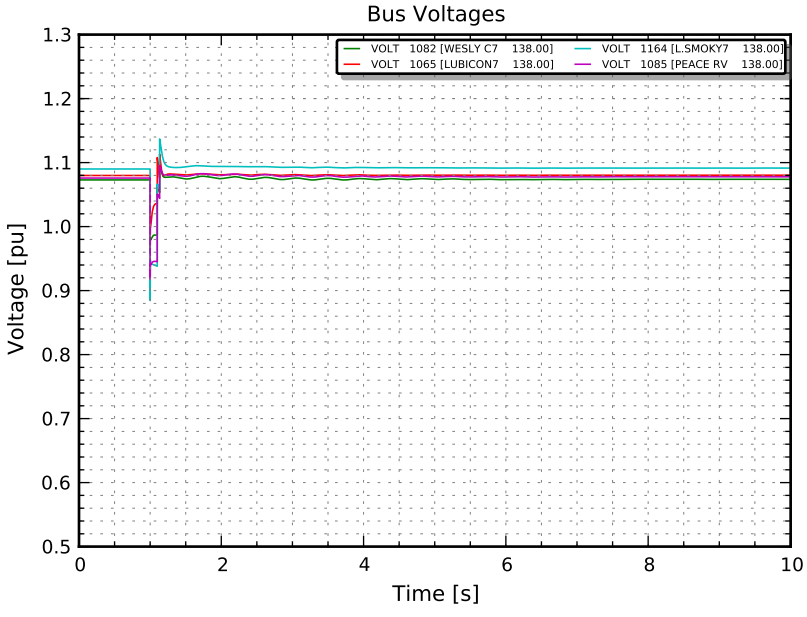


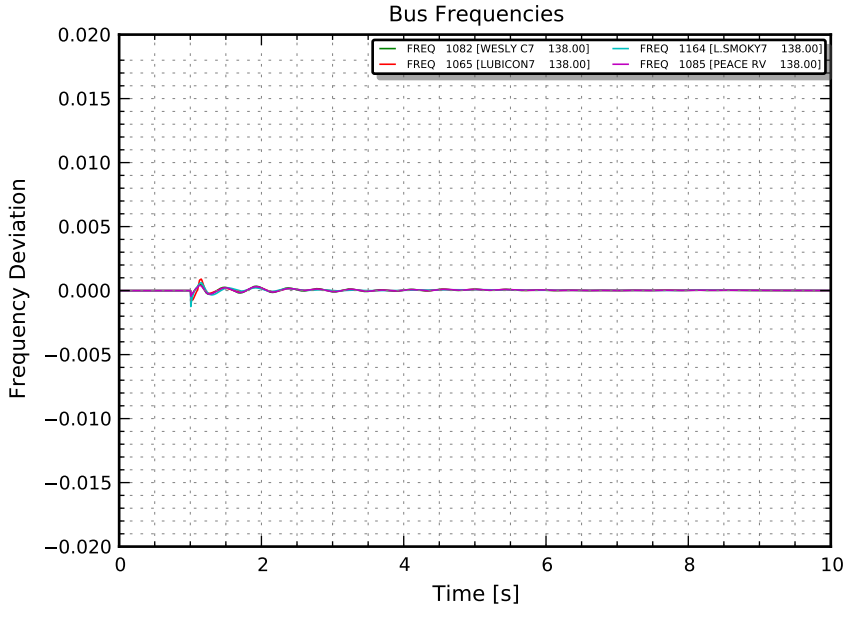


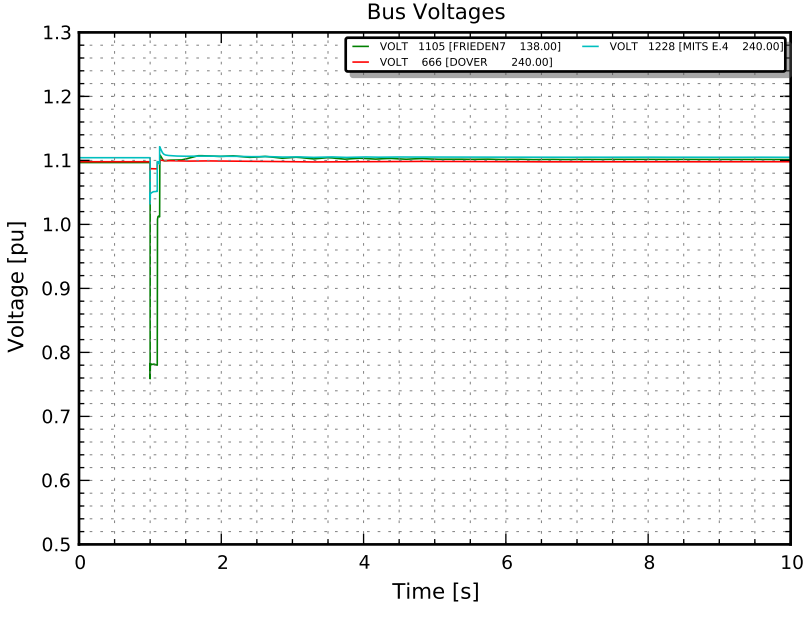
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 037 7L07 POPLARHILL to ELMWORTH_A.

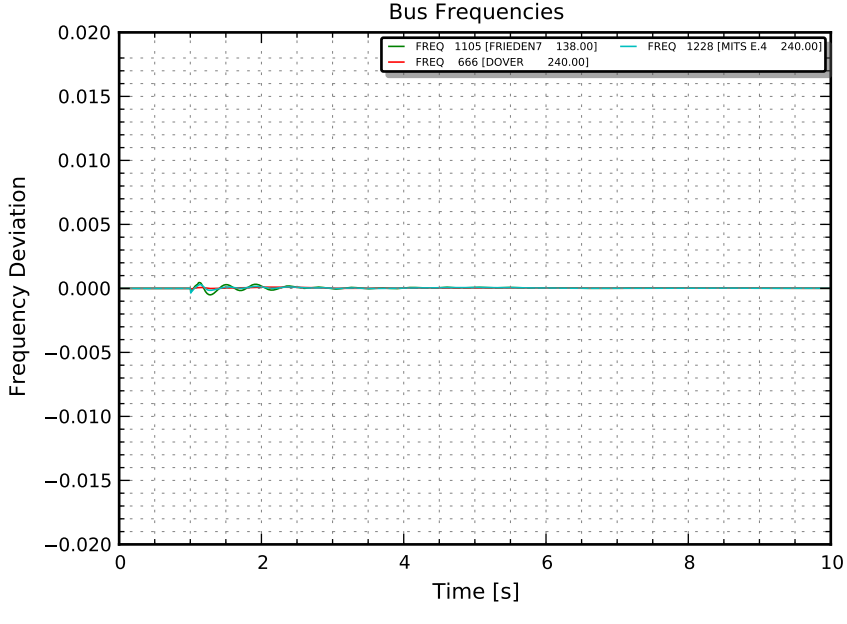
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 037 (A. 1)





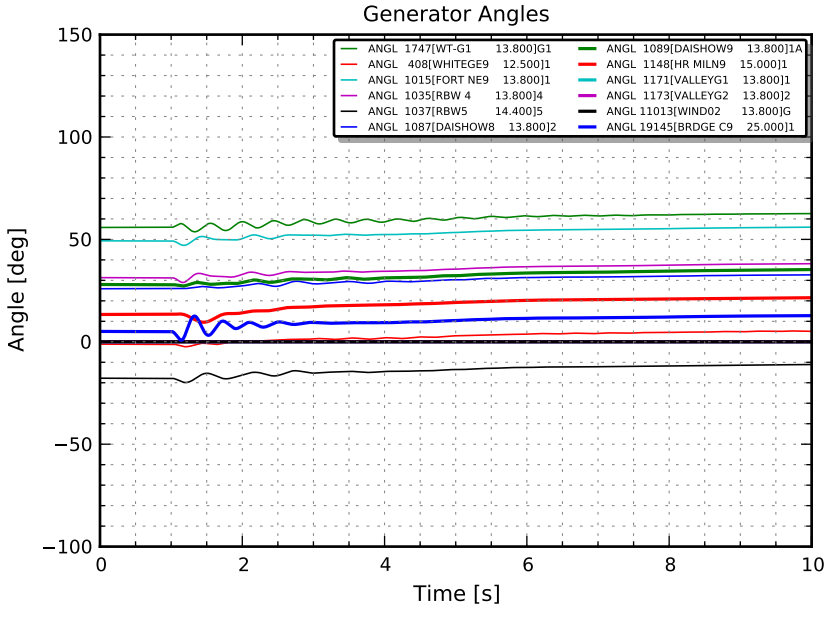


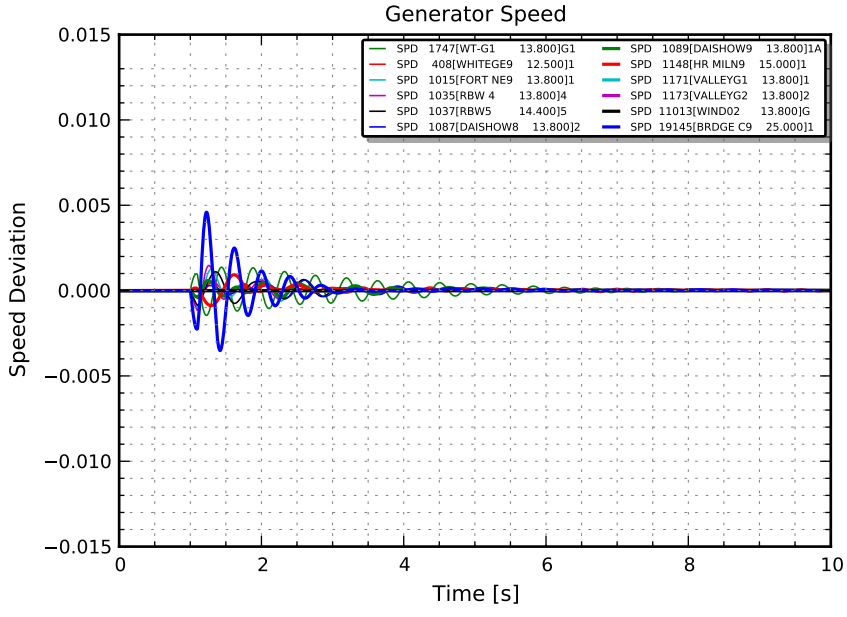


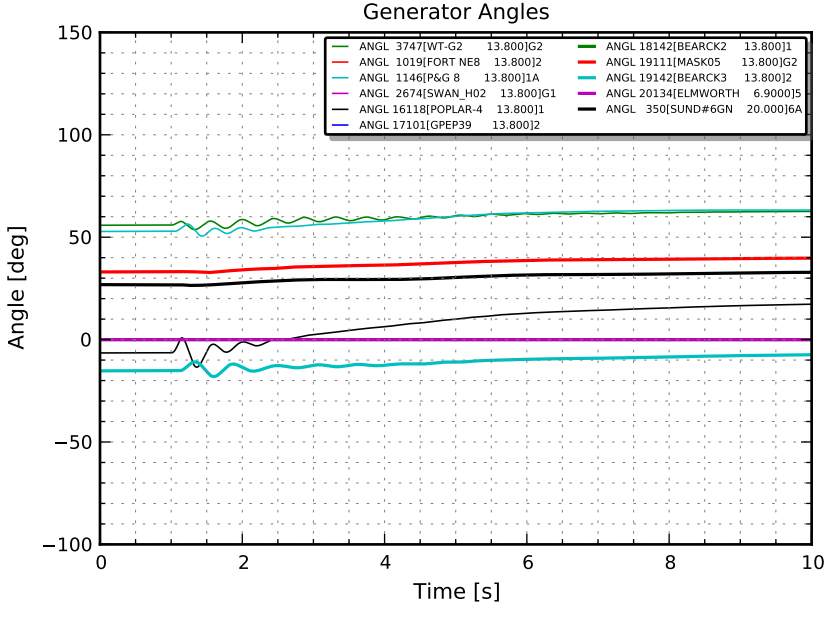
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 037 7L07 POPLARHILL to ELMWORTH_A.

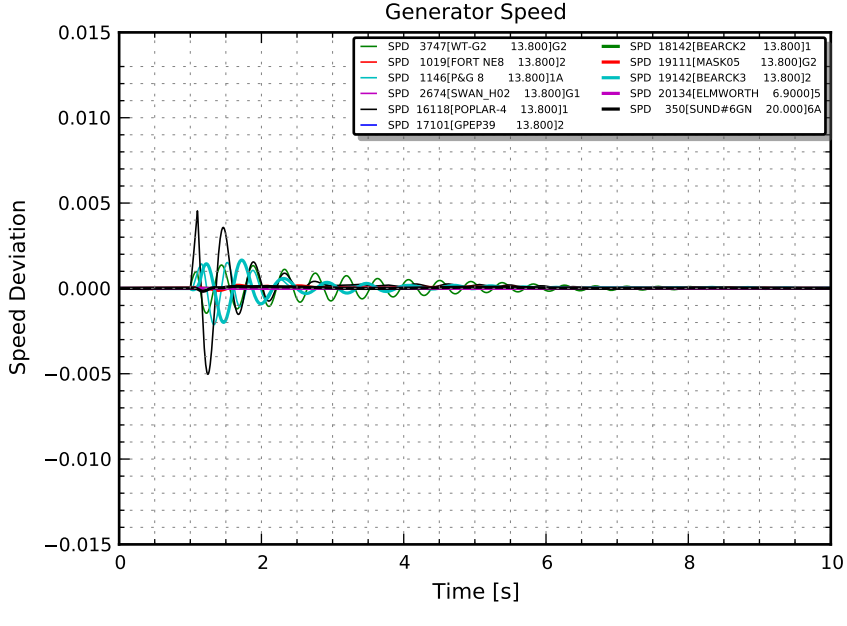
Study Area Generators

Appendix E2B
Figure: 037 (A. 2)





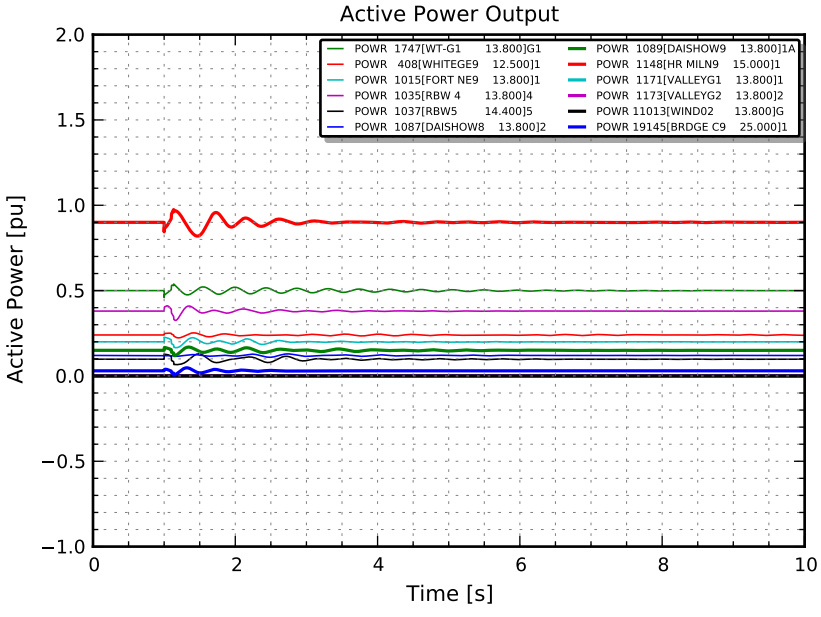


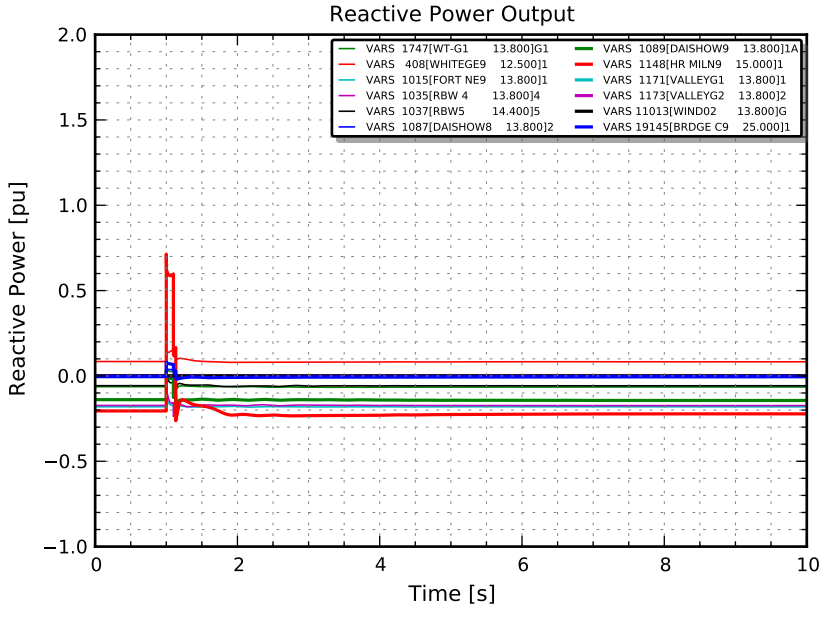


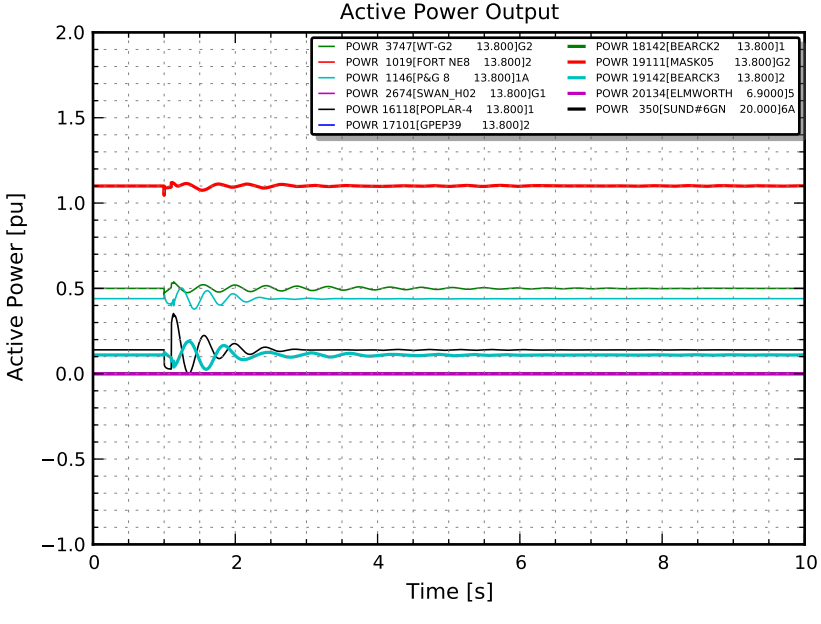
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 037 7L07 POPLARHILL to ELMWORTH_A.

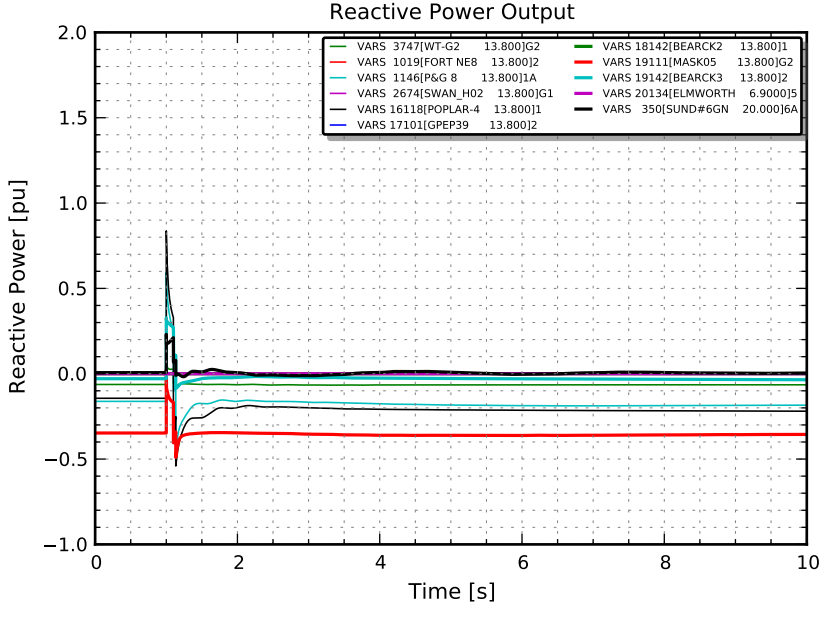
Study Area Generators

Appendix E2B
Figure: 037 (A. 3)





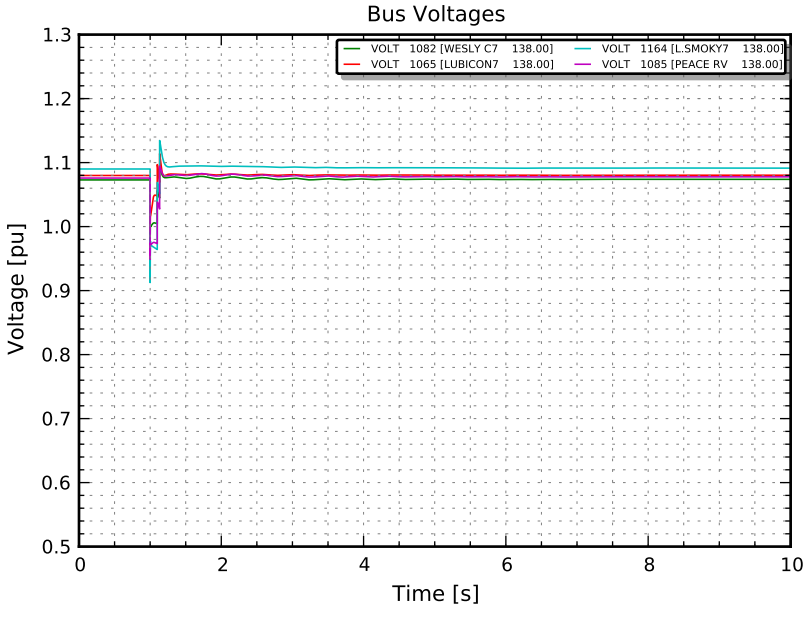


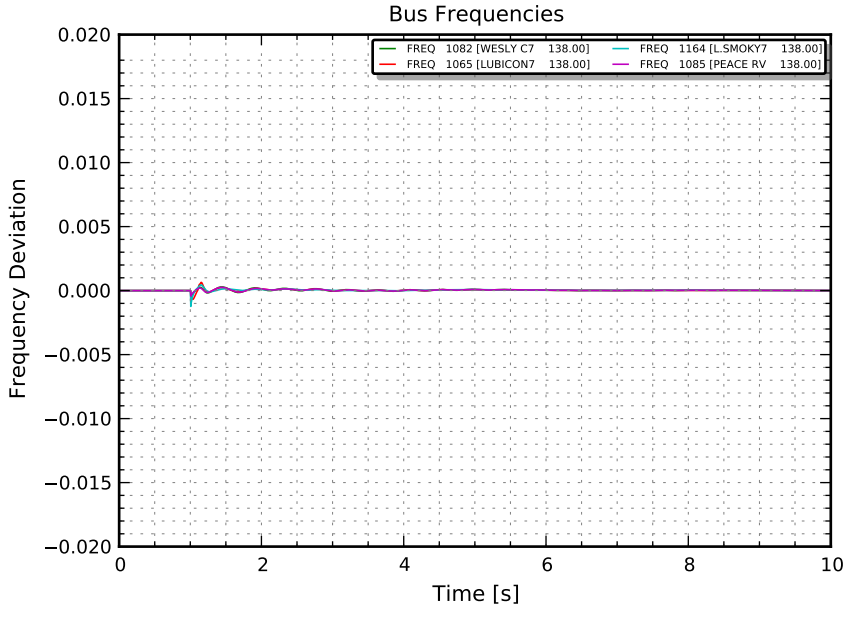


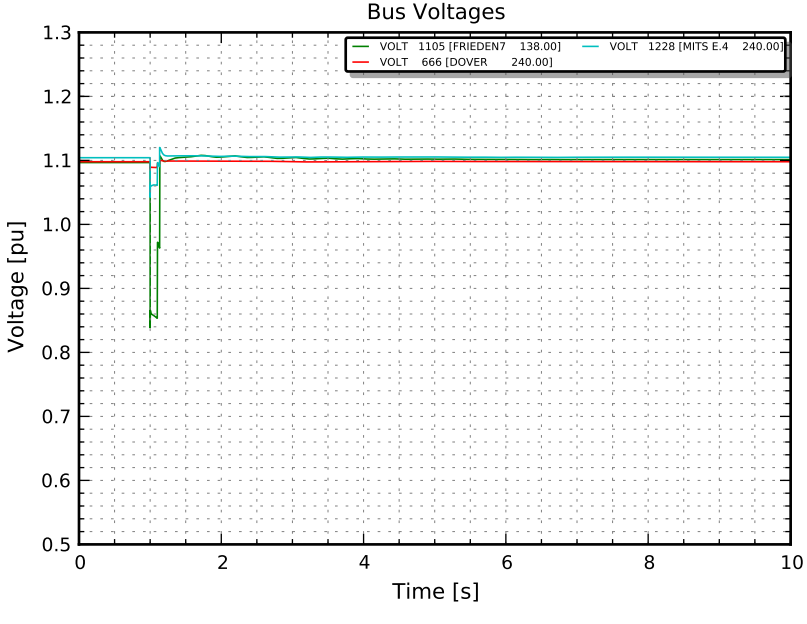
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 037 7L07 POPLARHILL to ELMWORTH_B.

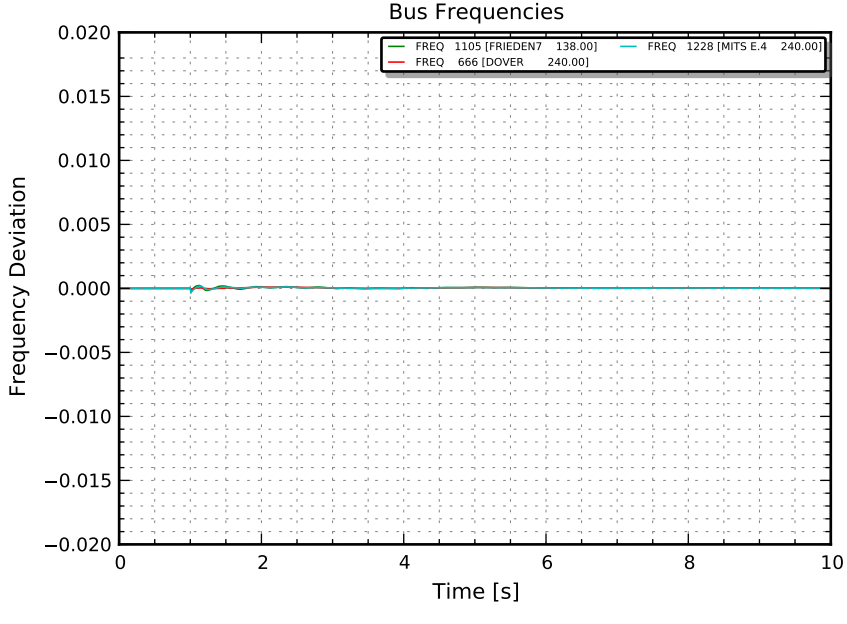
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 037 (B. 1)





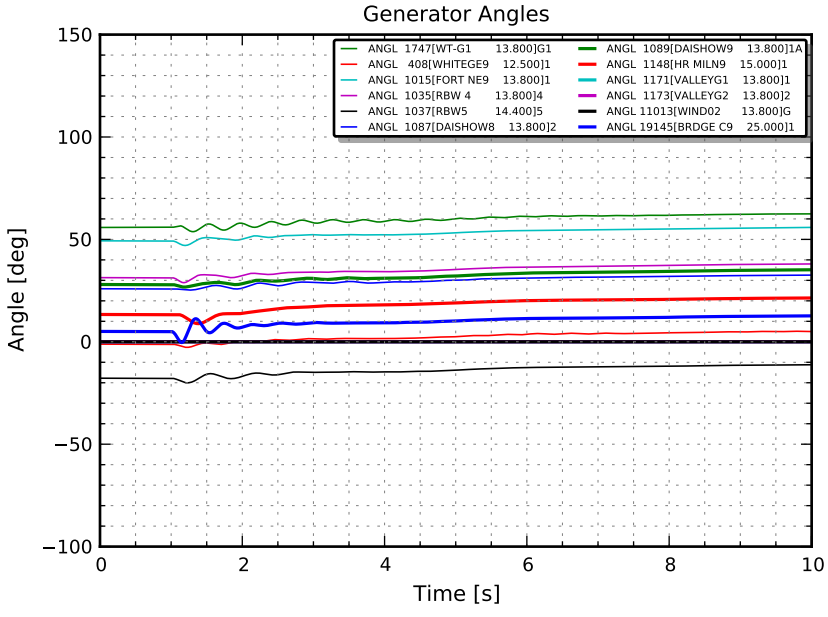


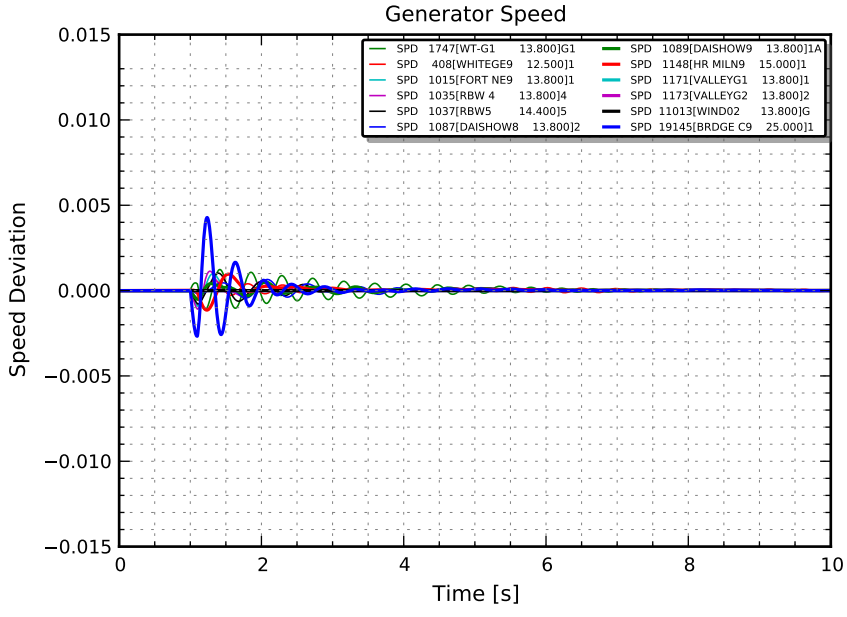


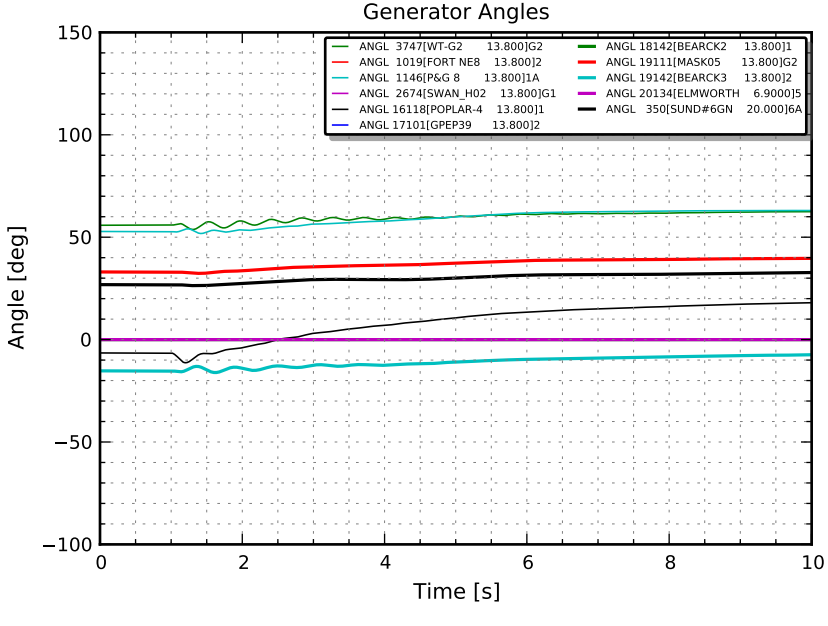
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 037 7L07 POPLARHILL to ELMWORTH_B.

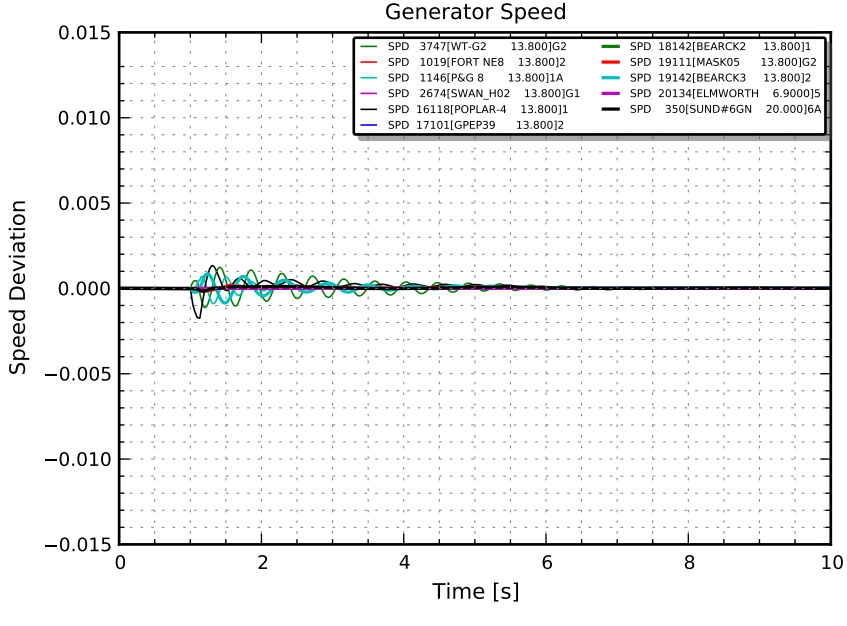
Study Area Generators

Appendix E2B
Figure: 037 (B. 2)





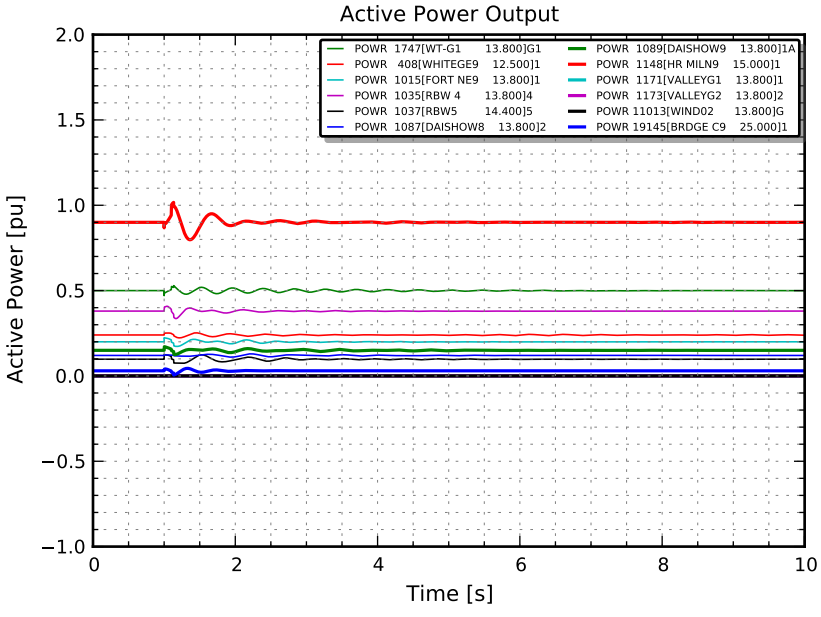


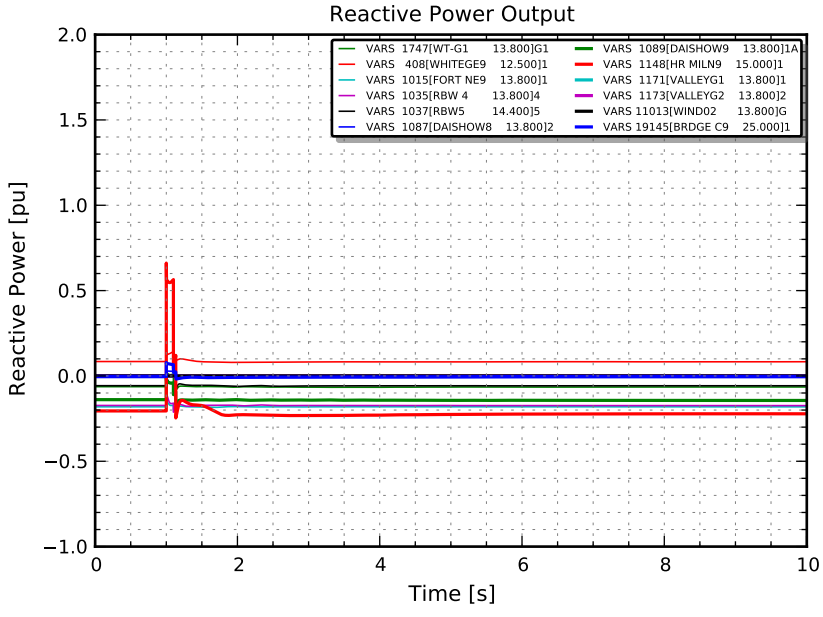


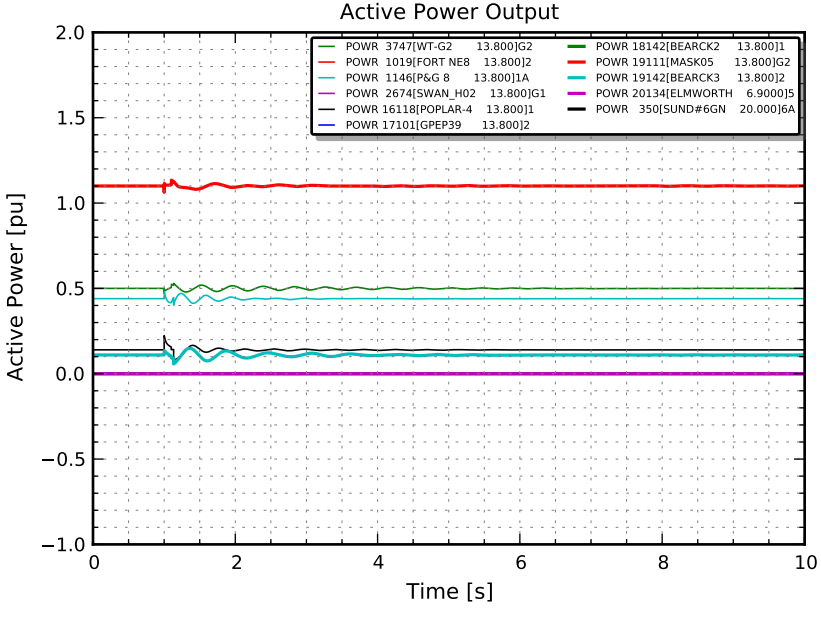
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 037 7L07 POPLARHILL to ELMWORTH_B.

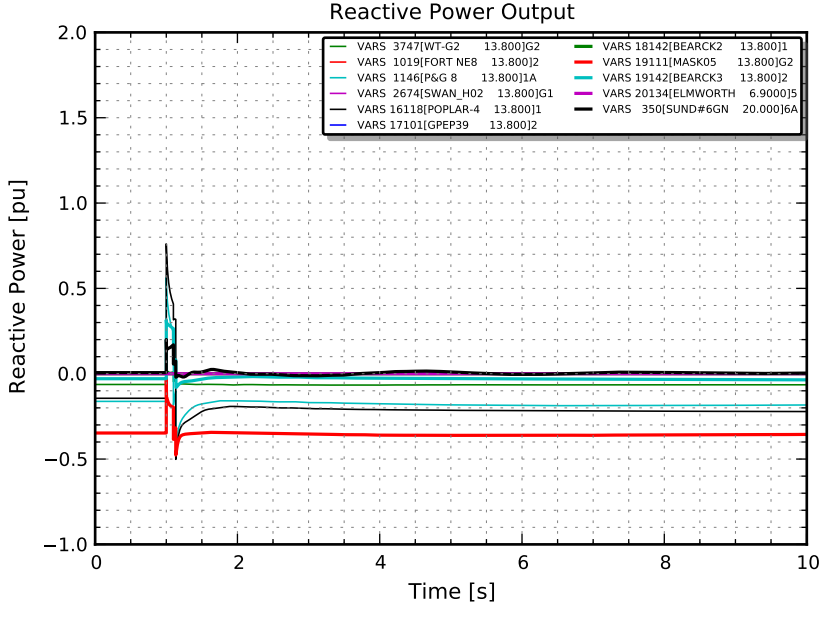
Study Area Generators

Appendix E2B
Figure: 037 (B. 3)





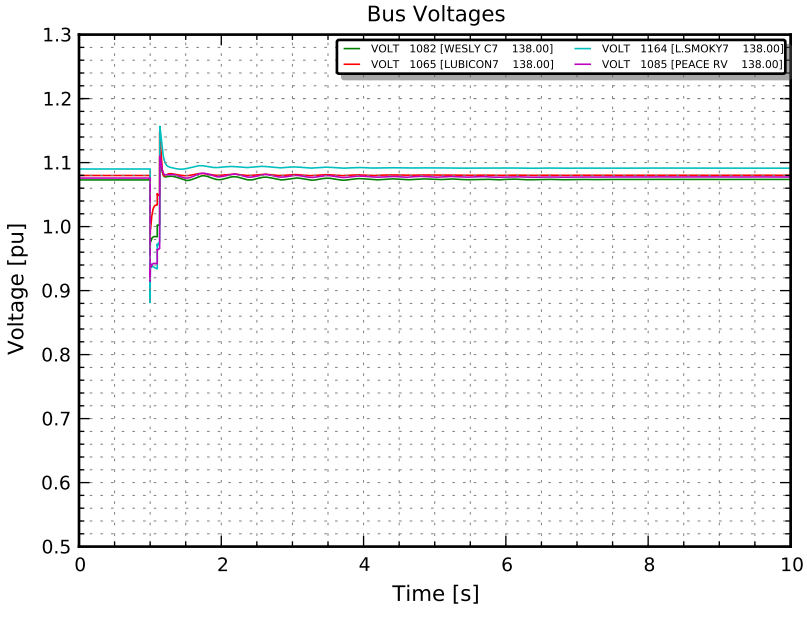


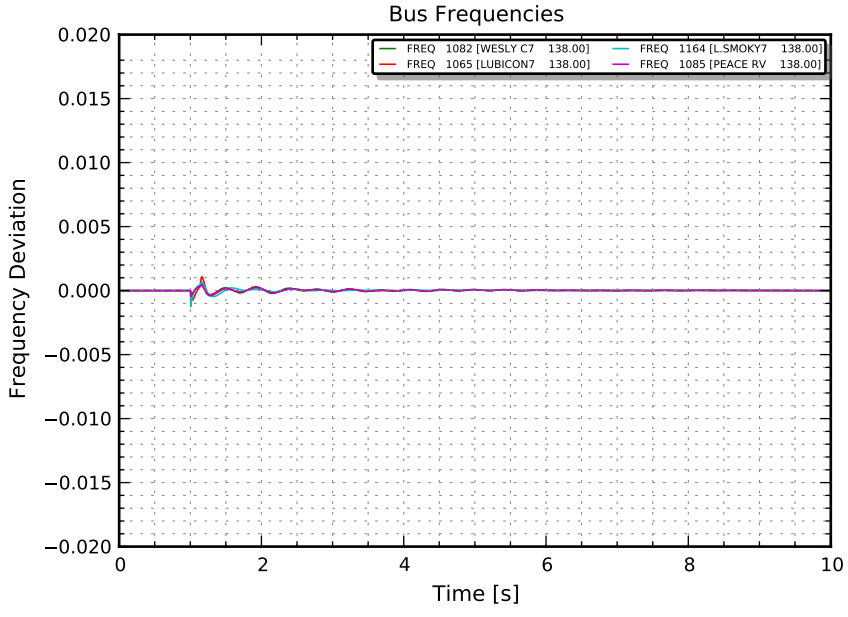


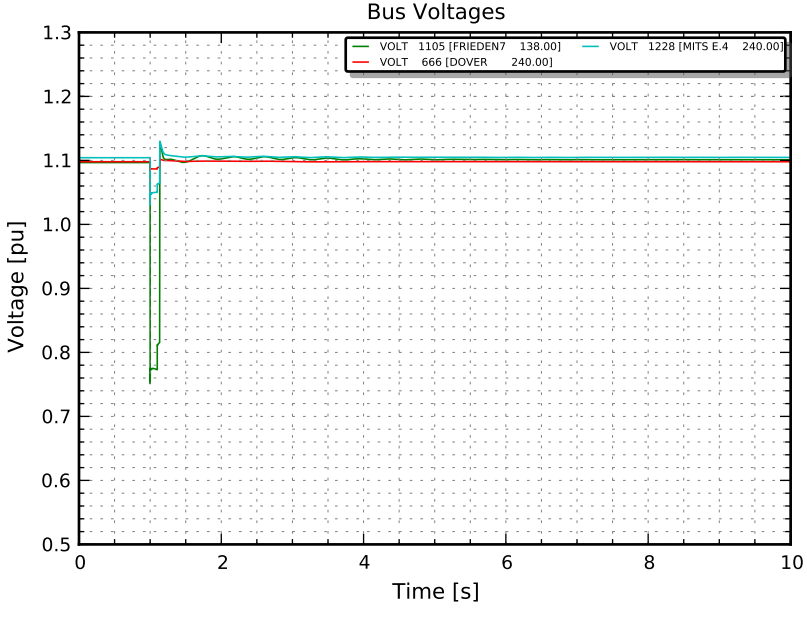
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_A.

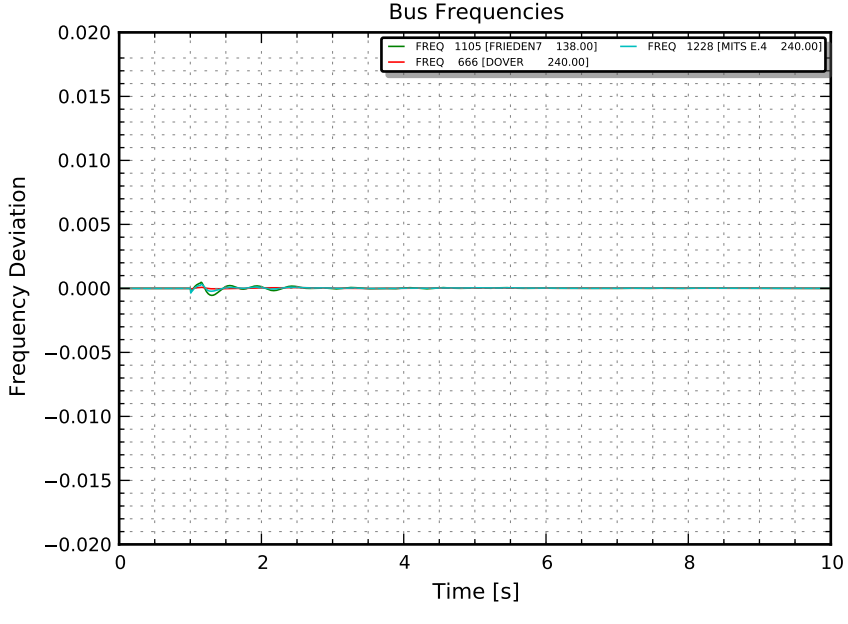
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 038 (A. 1)





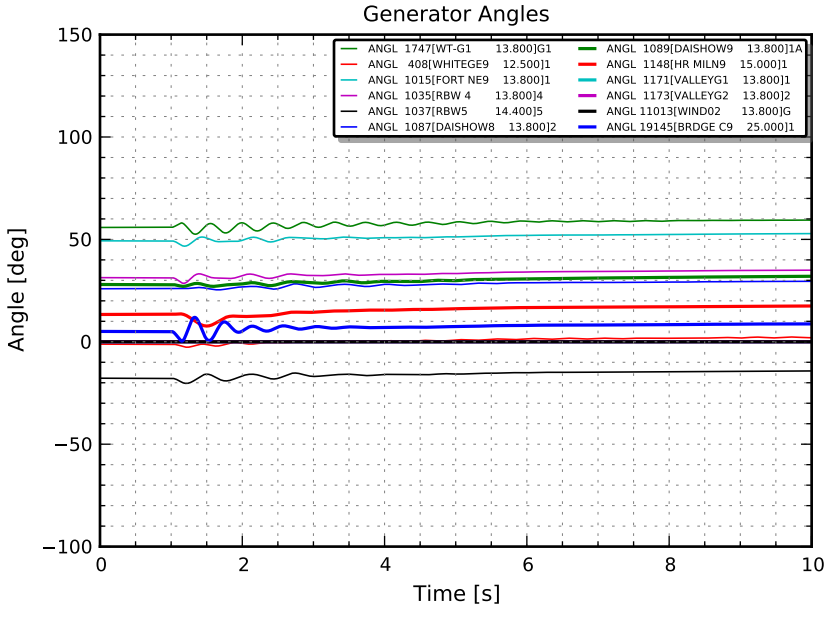


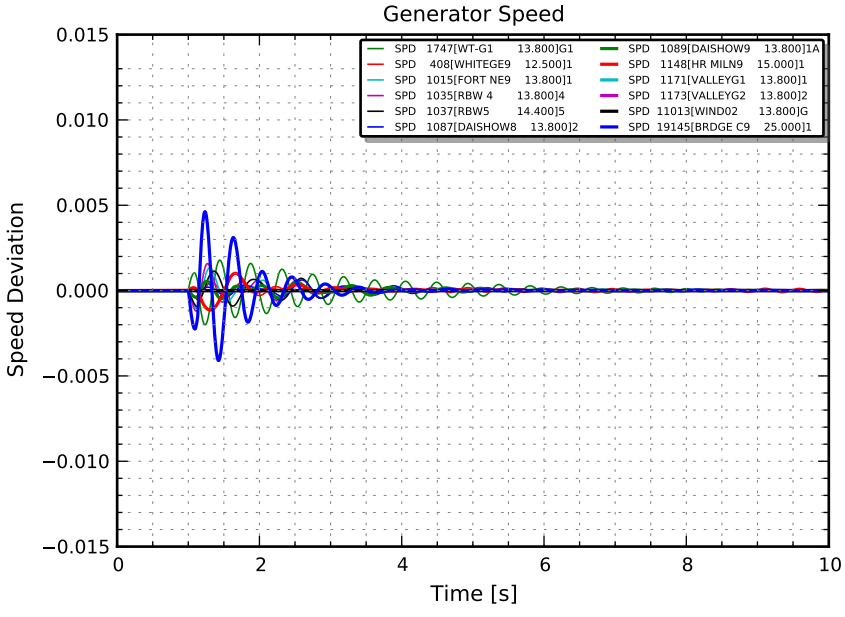


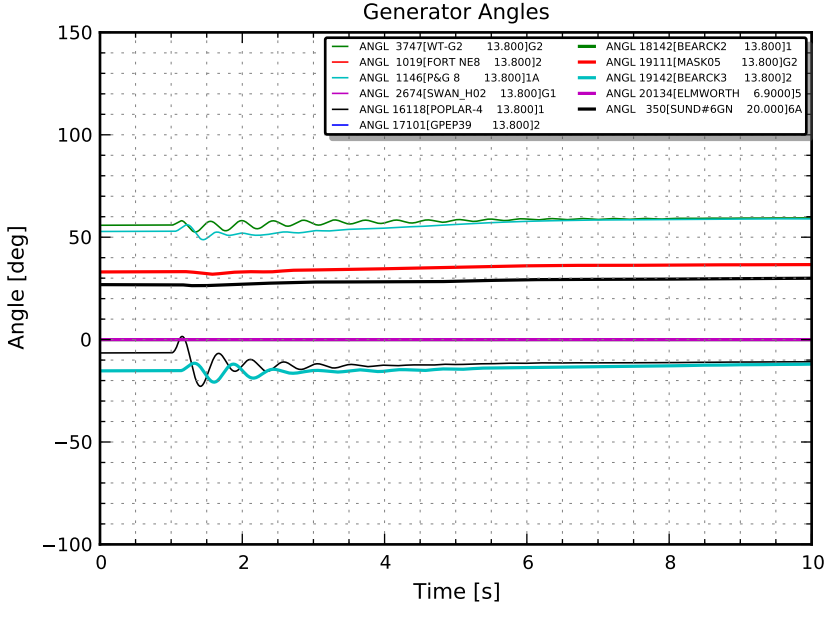
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_A.

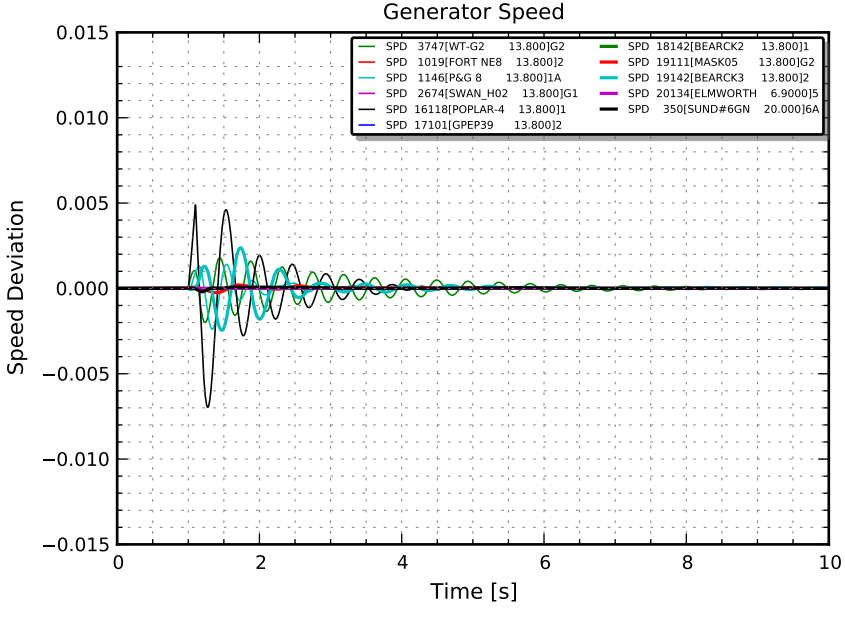
Study Area Generators

Appendix E2B
Figure: 038 (A. 2)





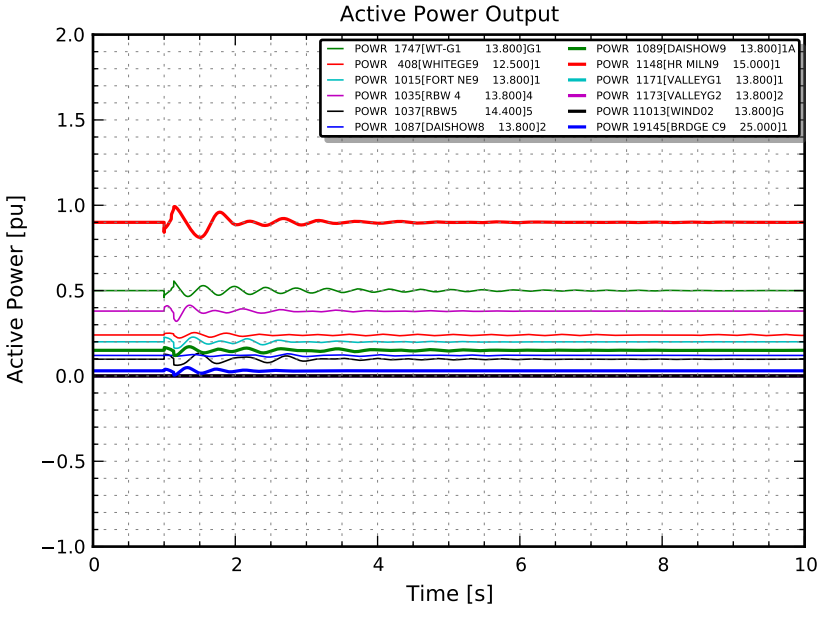


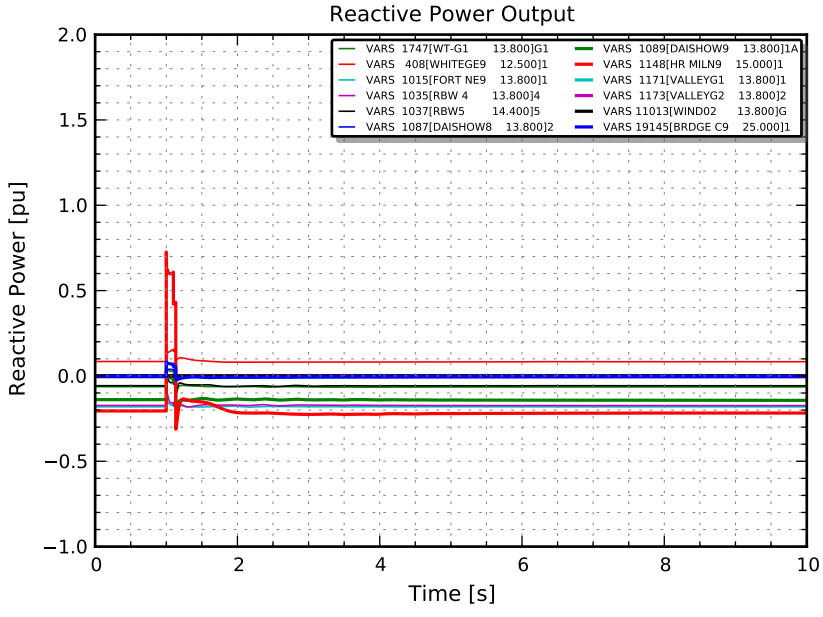


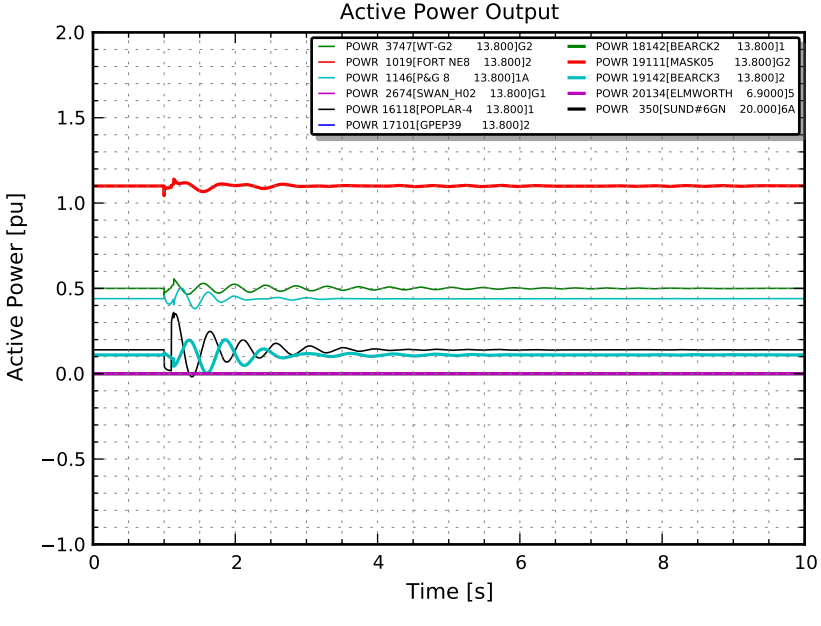
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_A.

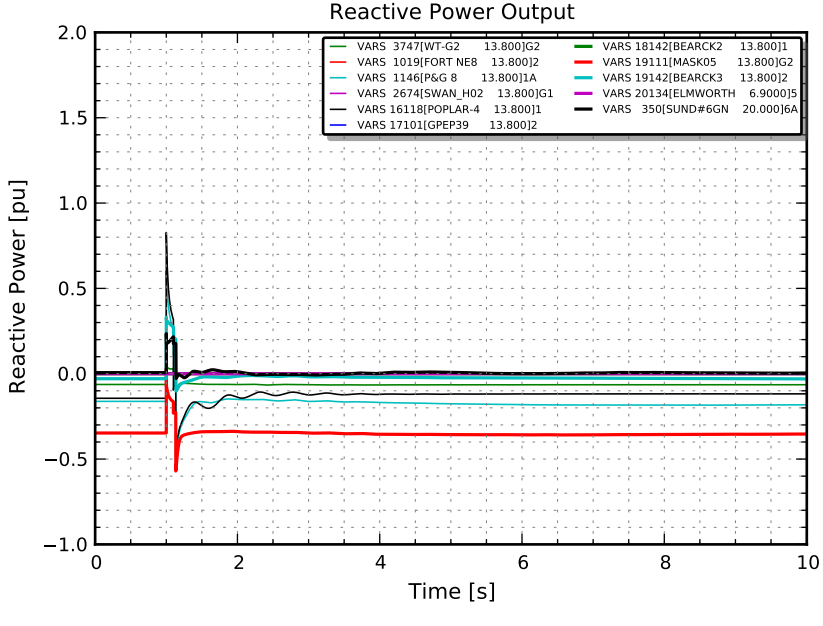
Study Area Generators

Appendix E2B
Figure: 038 (A. 3)





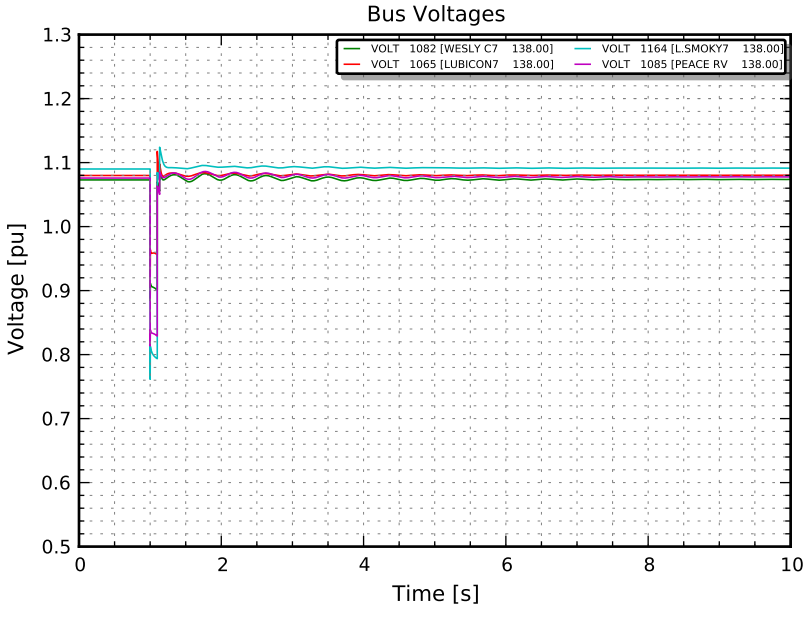


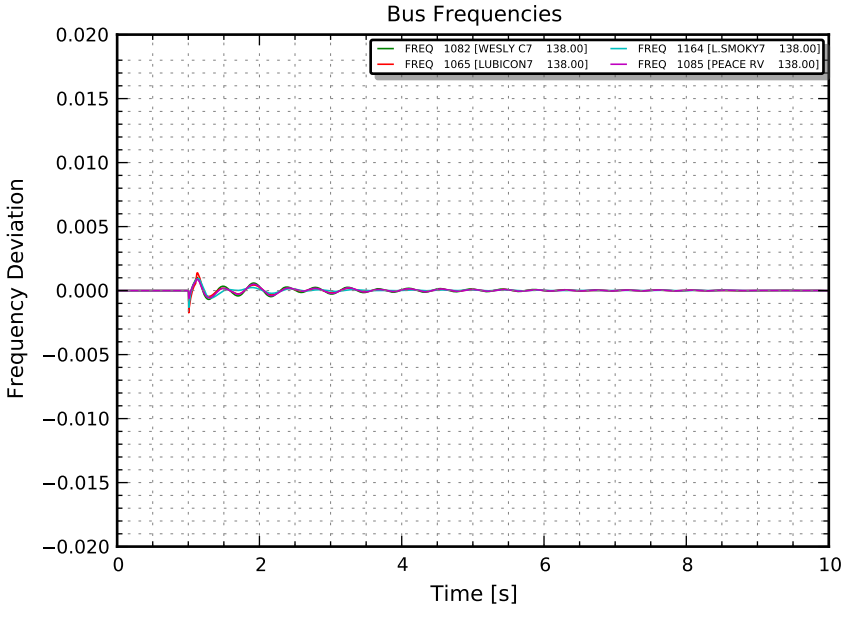


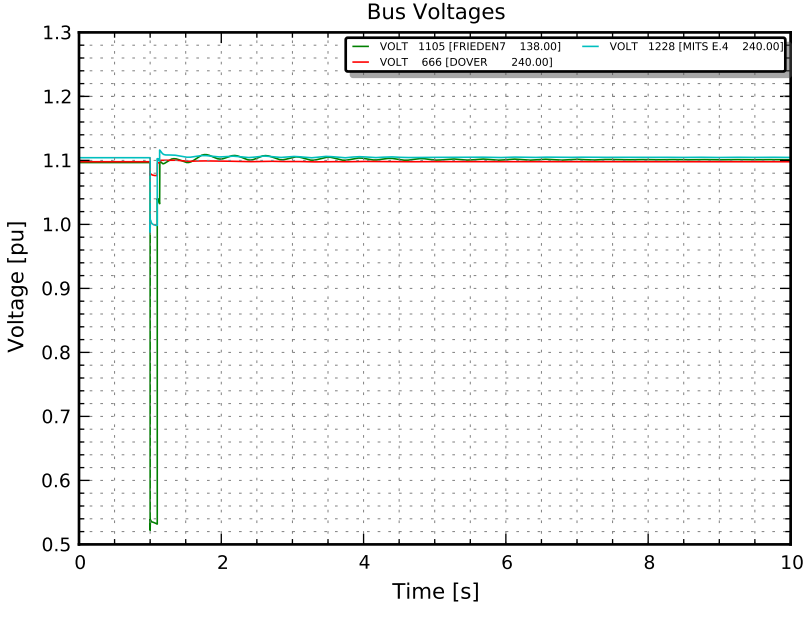
CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_B.

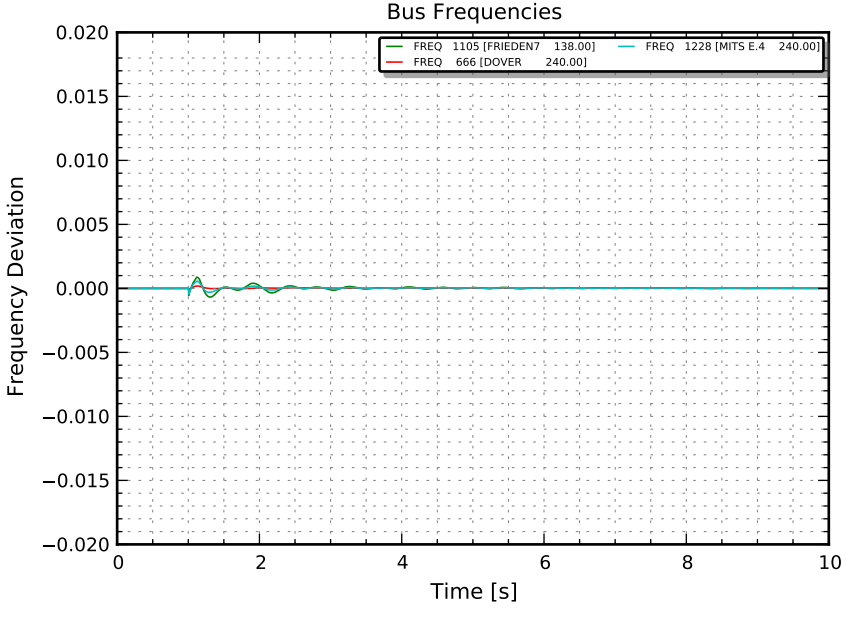
Study Area Bus Voltages and Frequencies

Appendix E2B
Figure: 038 (B. 1)









CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_B.

Study Area Generators

Appendix E2B
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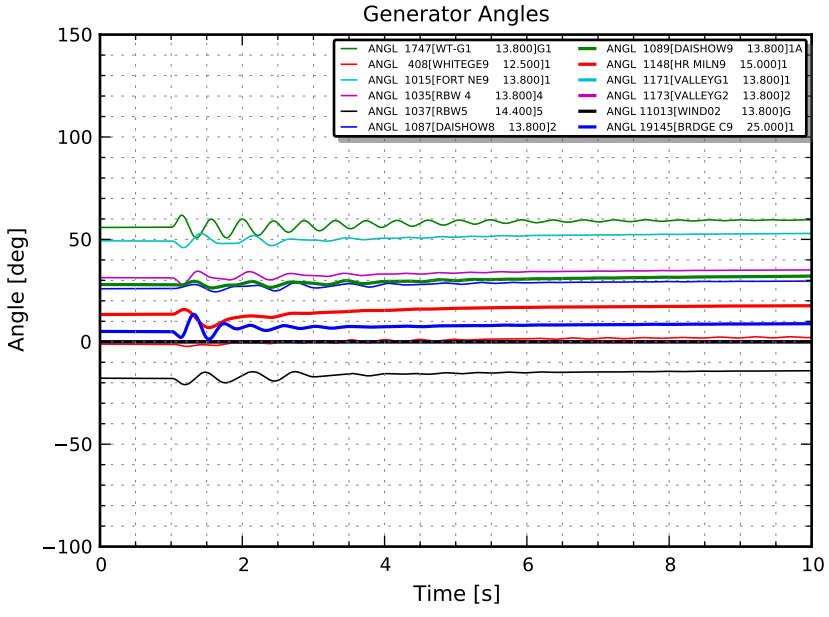

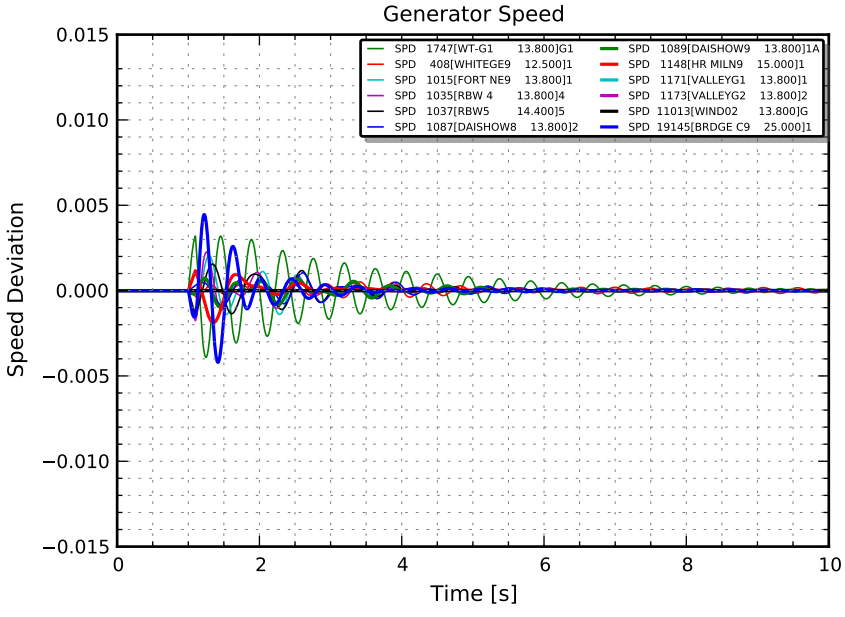

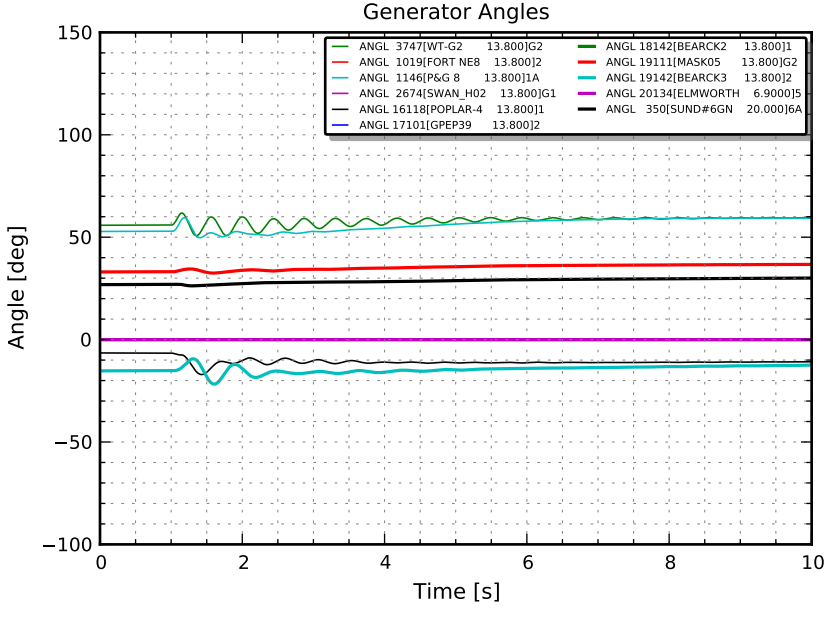

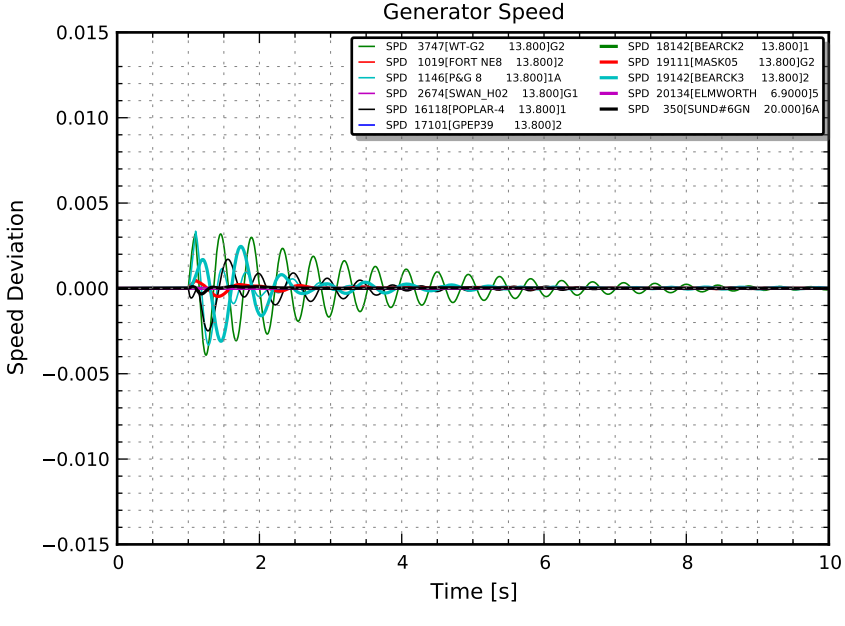

CASE 02 2014 SL Mgen
SCEN 02 144 Tap
CONT 038 7L22 POPLARHILL to CLAIRMONTLAKE_B.

Study Area Generators

Appendix E2B
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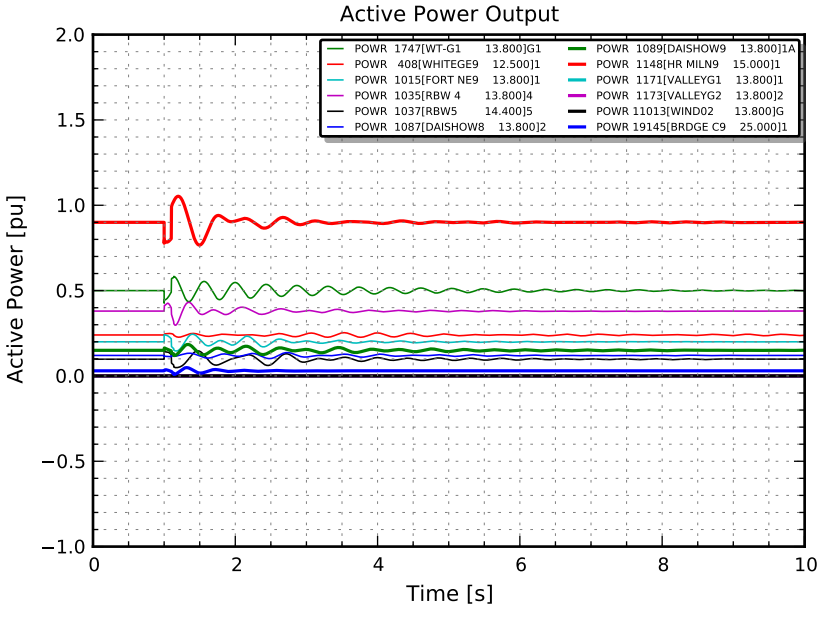
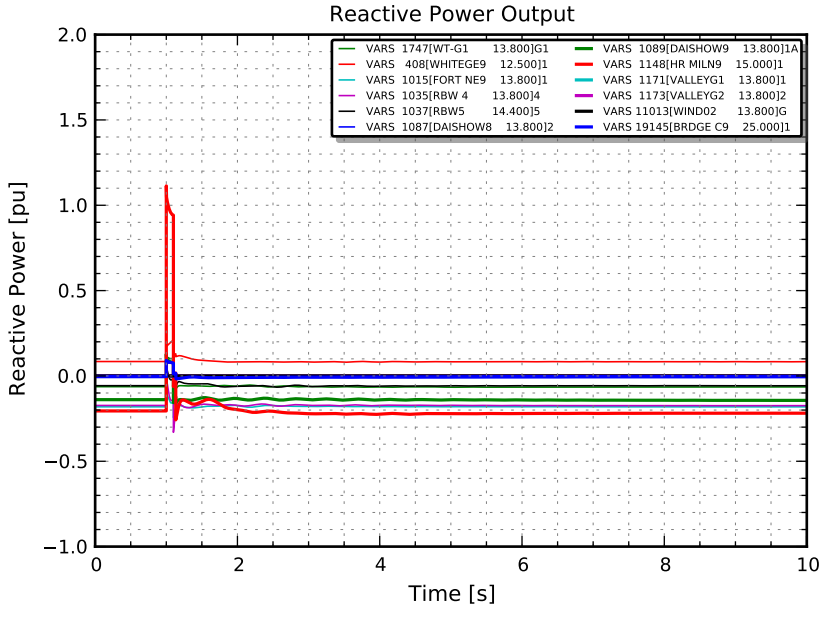
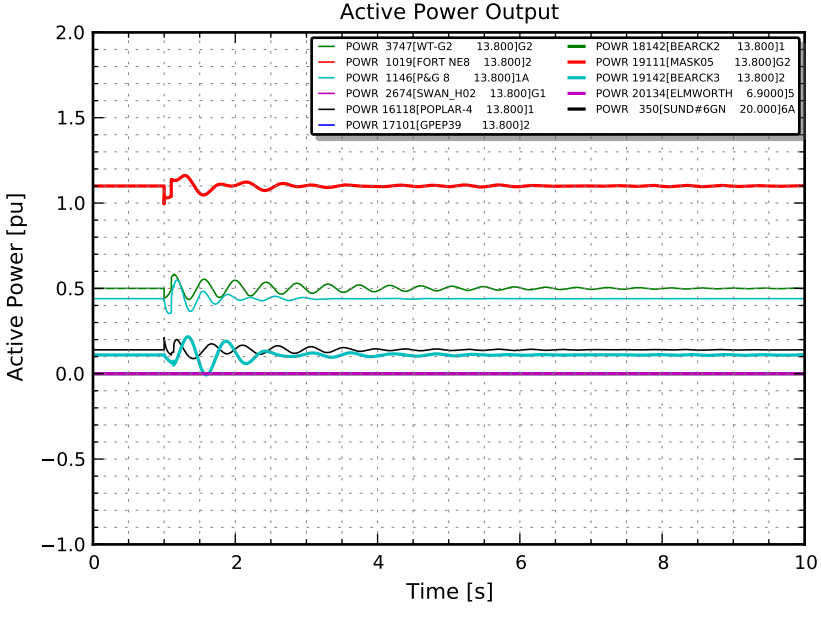
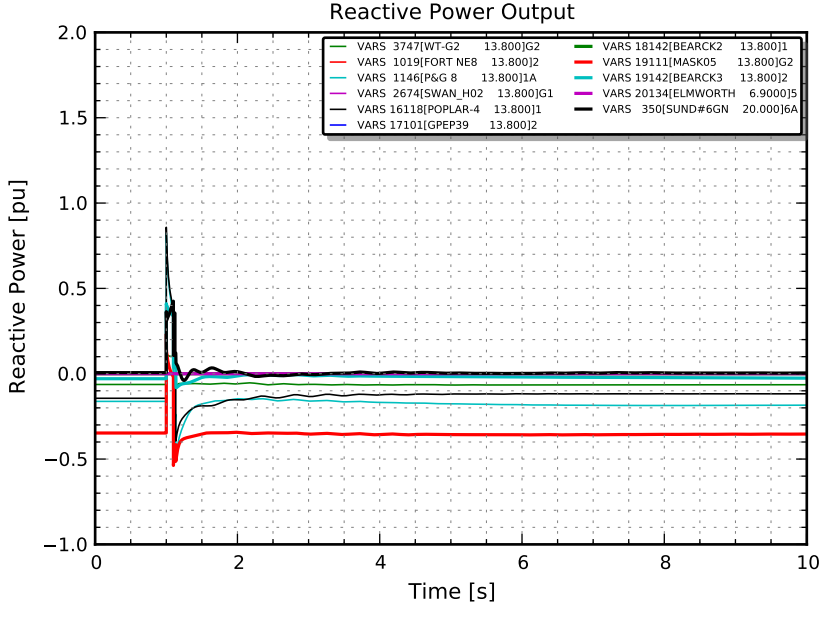




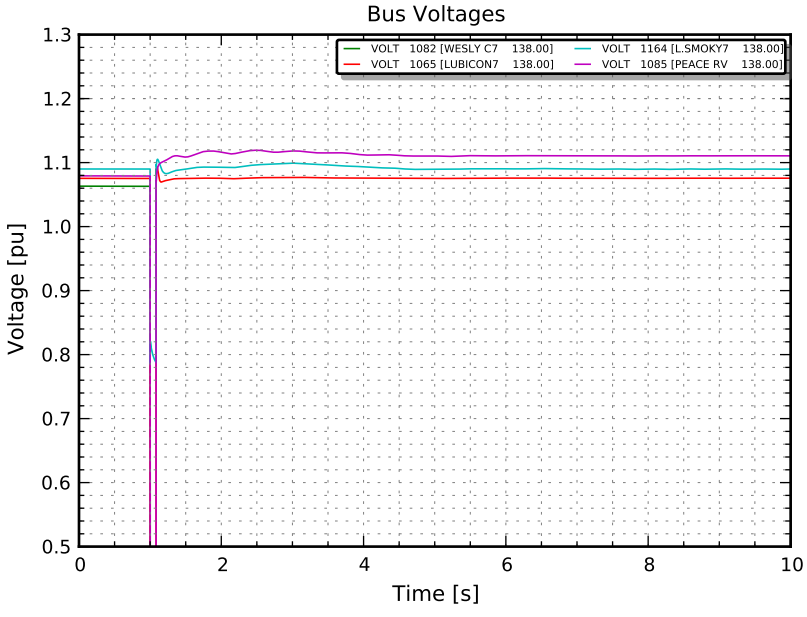


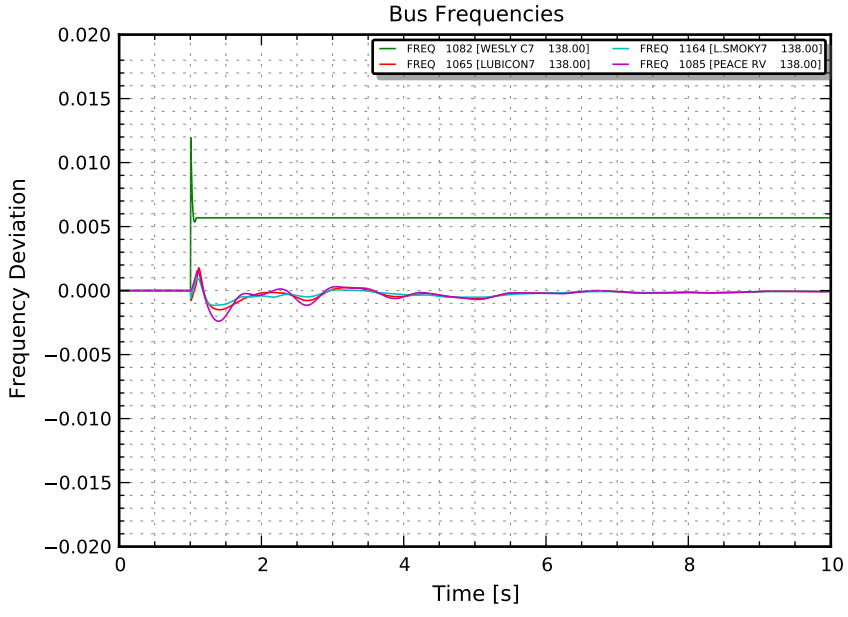


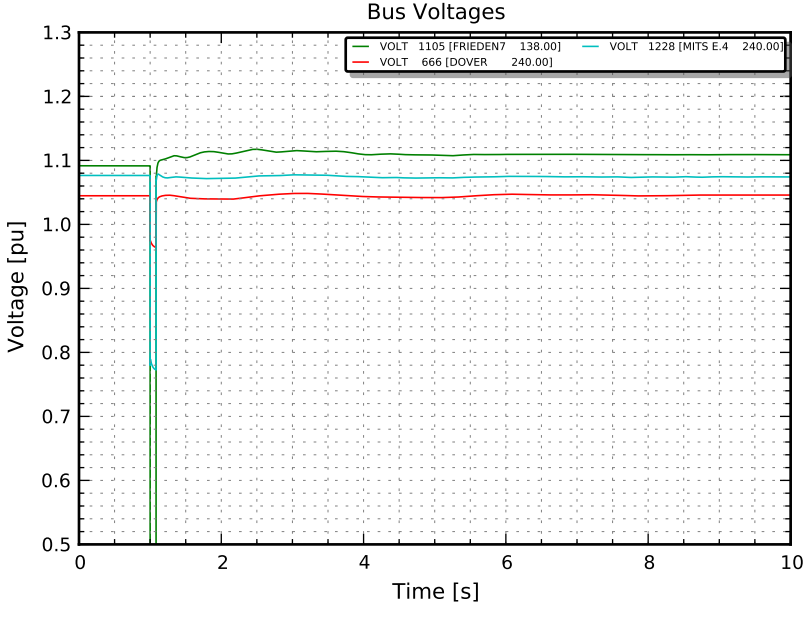
CASE 01 2014 WP Mgen
SCEN 02 144 IN OUT
RAS verification for 7L106 LTO condition

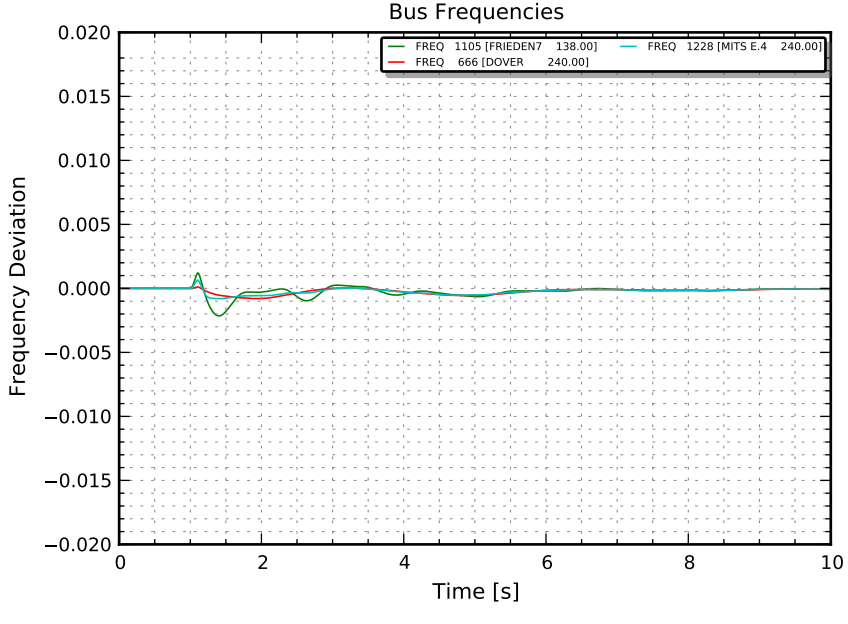
Study Area Bus Voltages and Frequencies

Appendix E-2-C
Figure 01-1





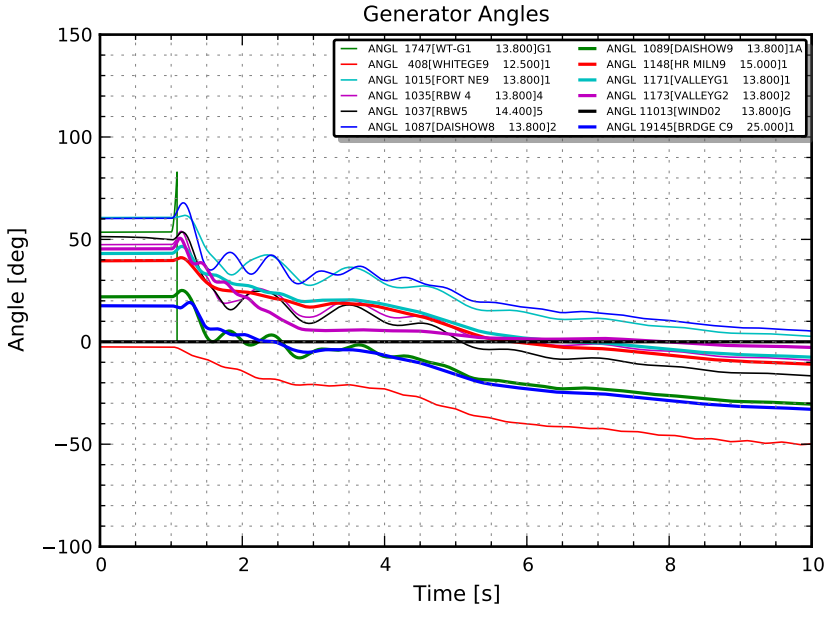


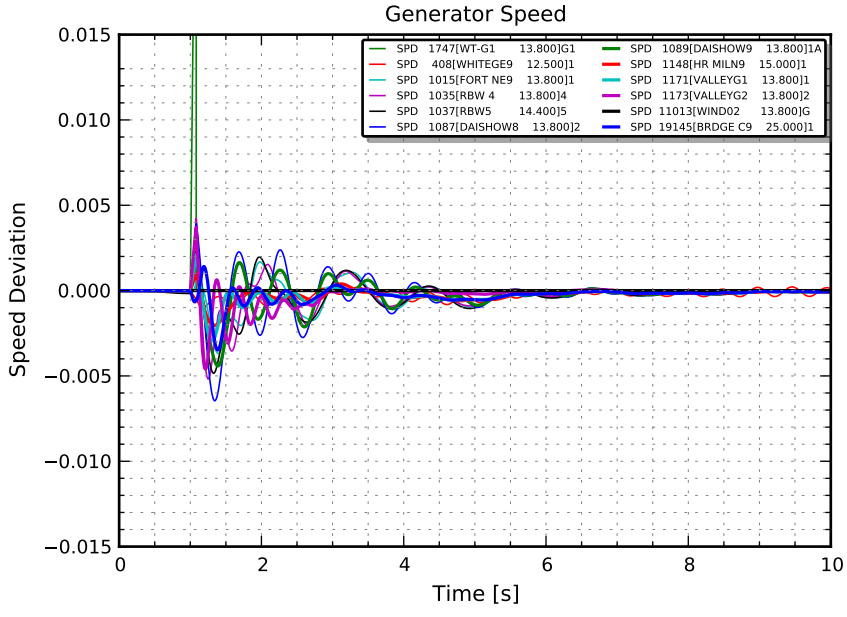


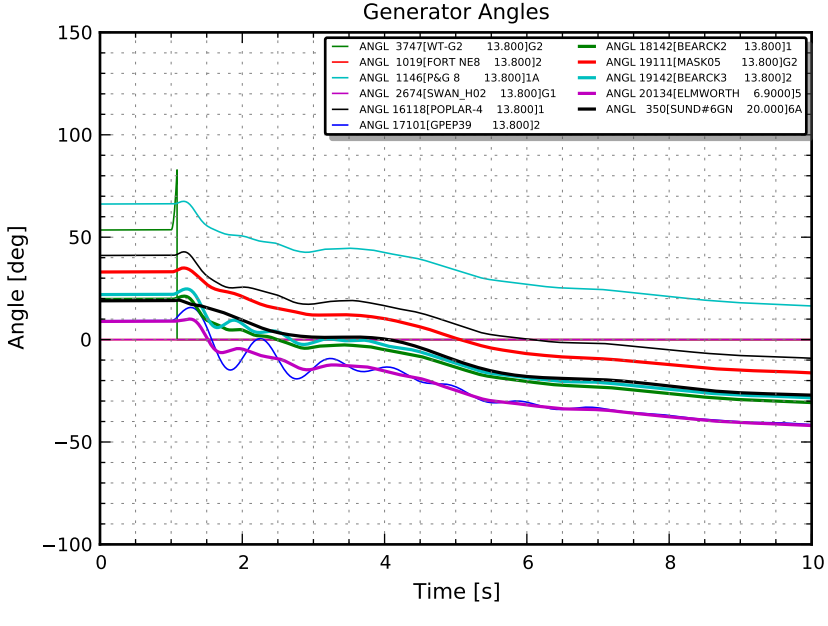
CASE 01 2014 WP Mgen
SCEN 02 144 IN OUT
RAS verification for 7L106 LTO condition

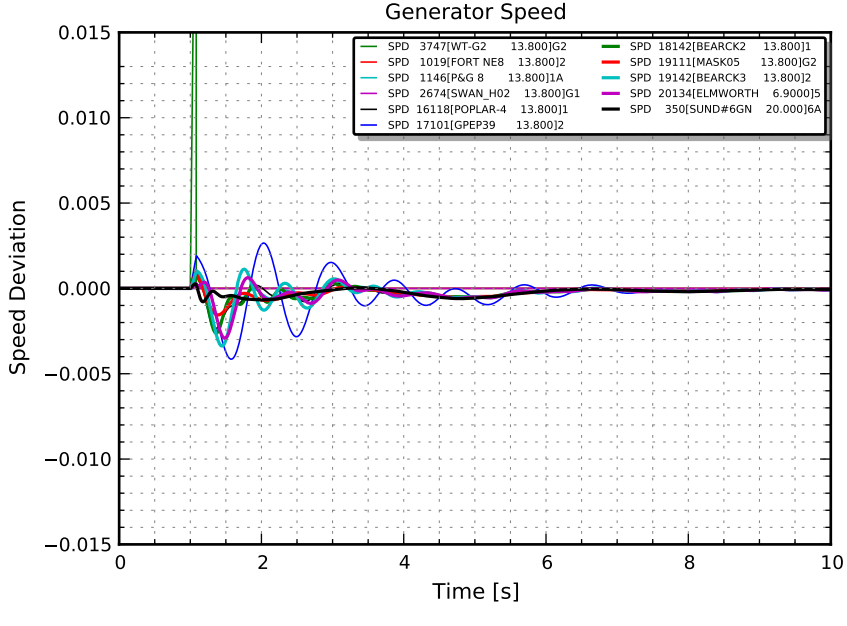
Study Area Generators

Appendix E-2-C
Figure 01-2





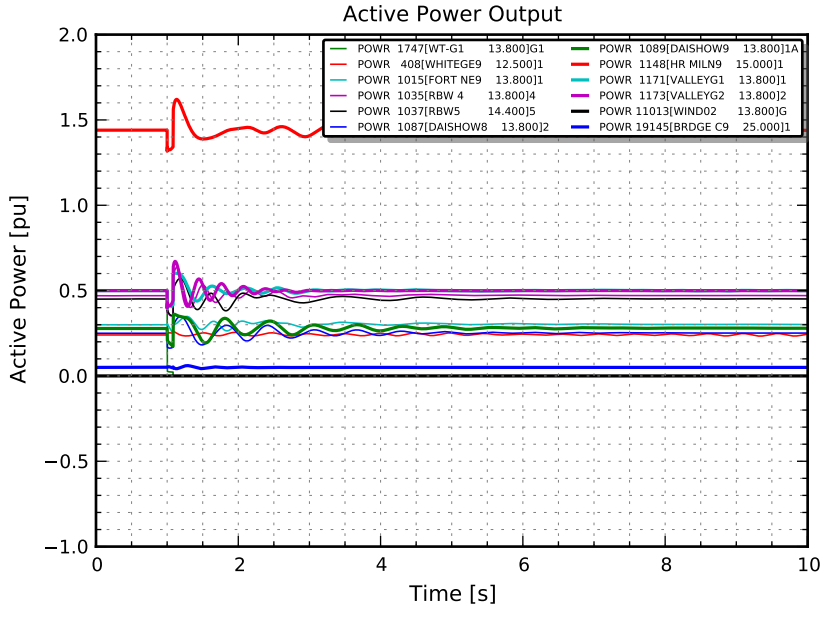


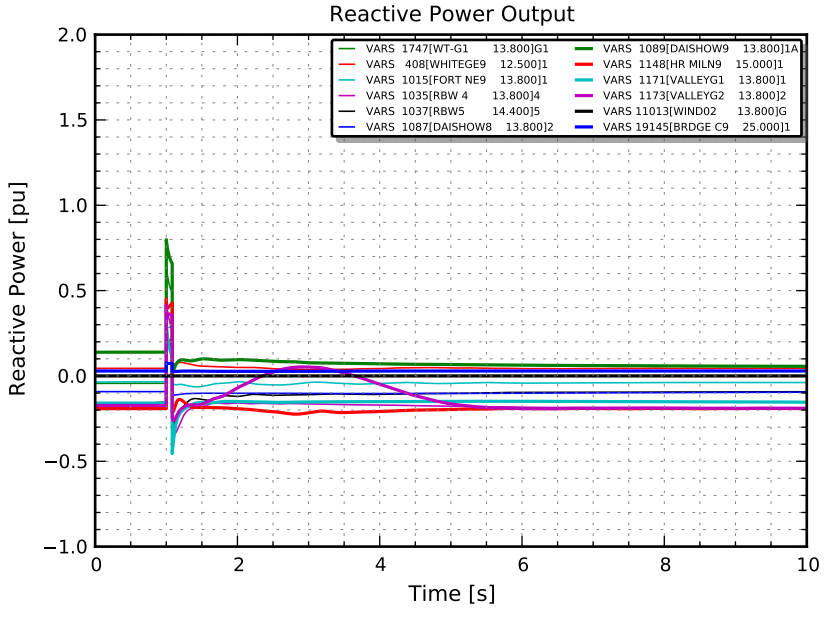


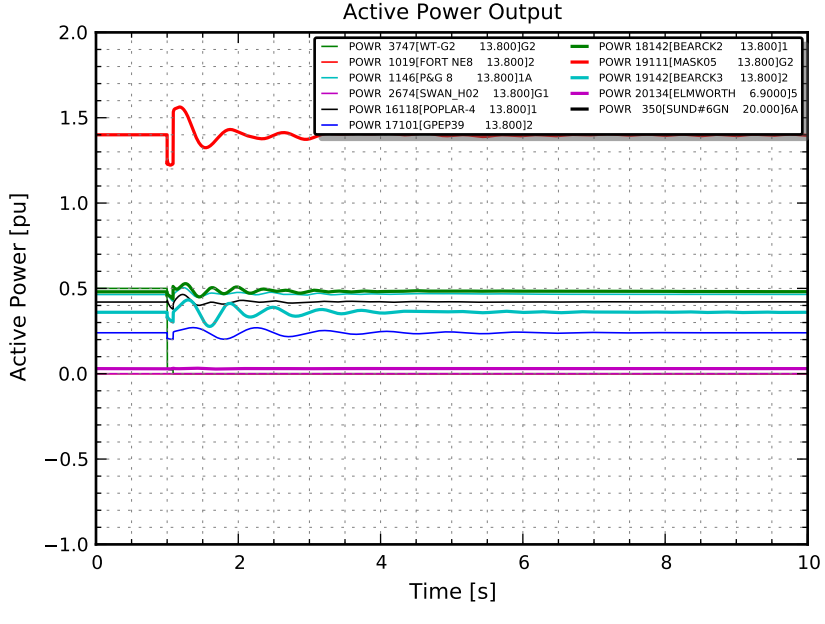
CASE 01 2014 WP Mgen
SCEN 02 144 IN OUT
RAS verification for 7L106 LTO condition

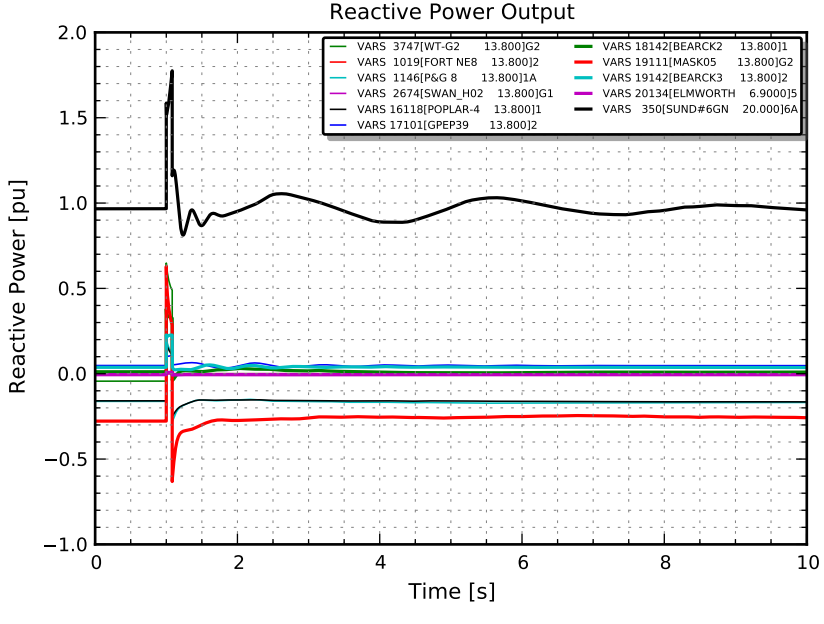
Study Area Generators

Appendix E-2-C
Figure 01-3





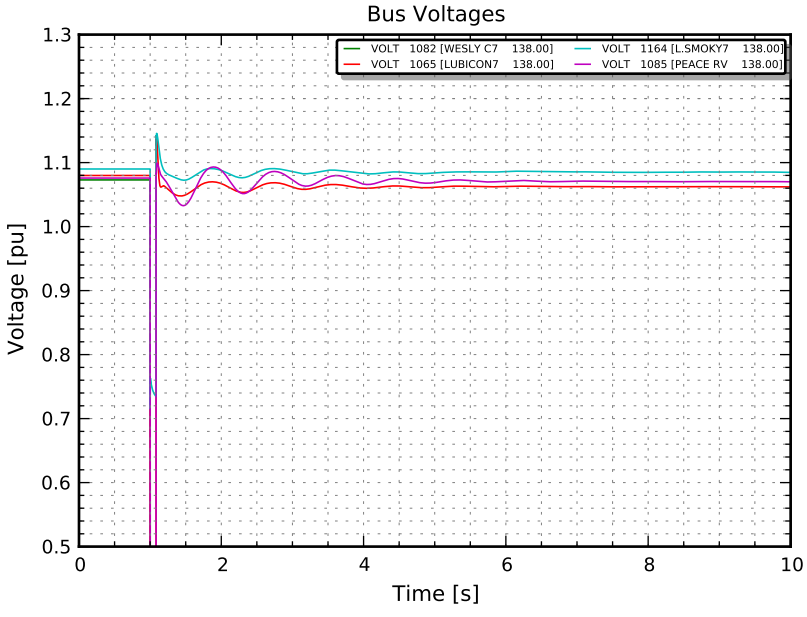


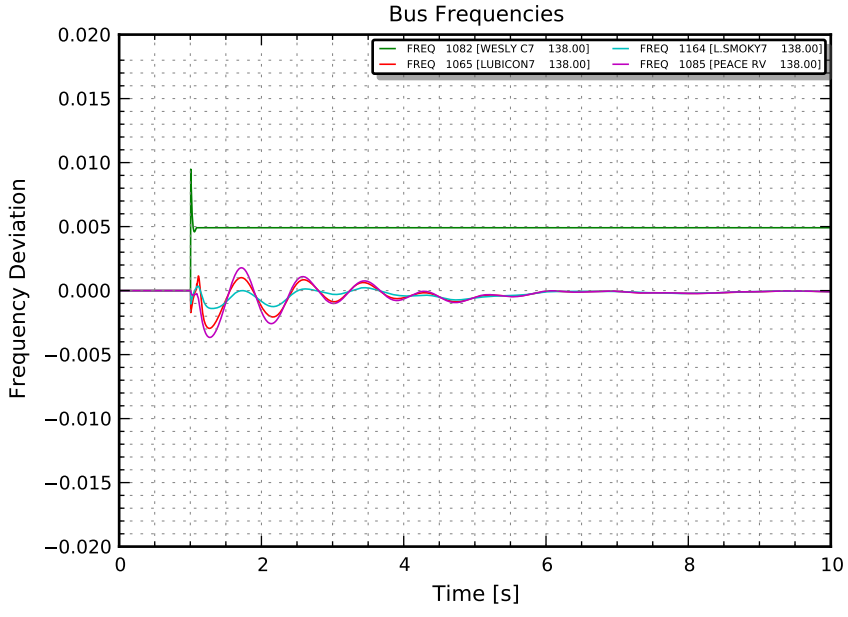


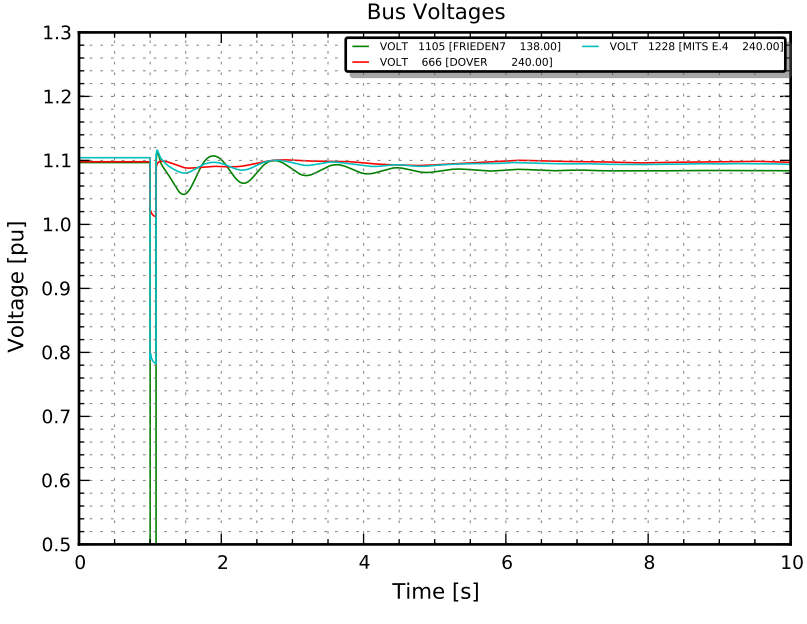
CASE 02 2014 SL Mgen
SCEN 02 144 IN OUT
RAS verification for 7L106 LTO condition

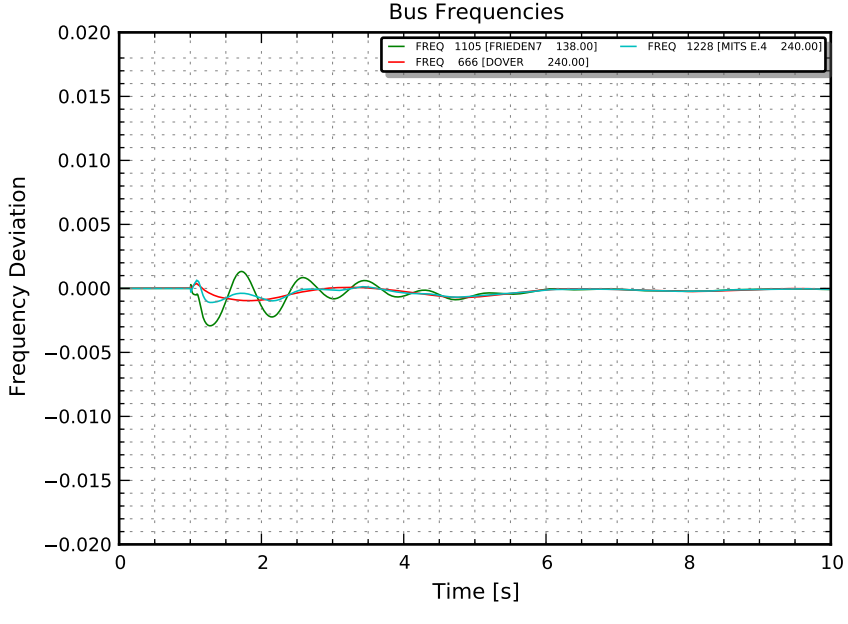
Study Area Bus Voltages and Frequencies

Appendix E-2-C
Figure 02-1









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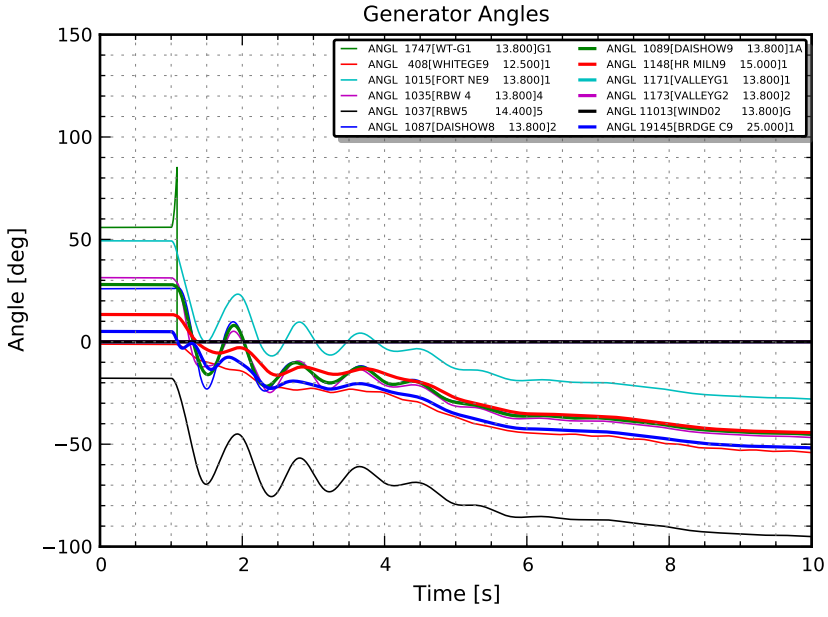
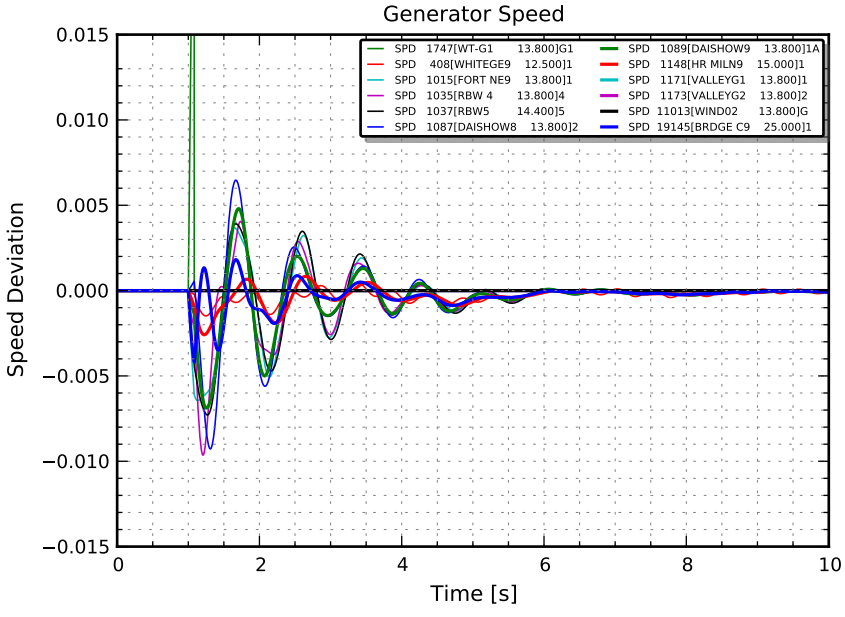
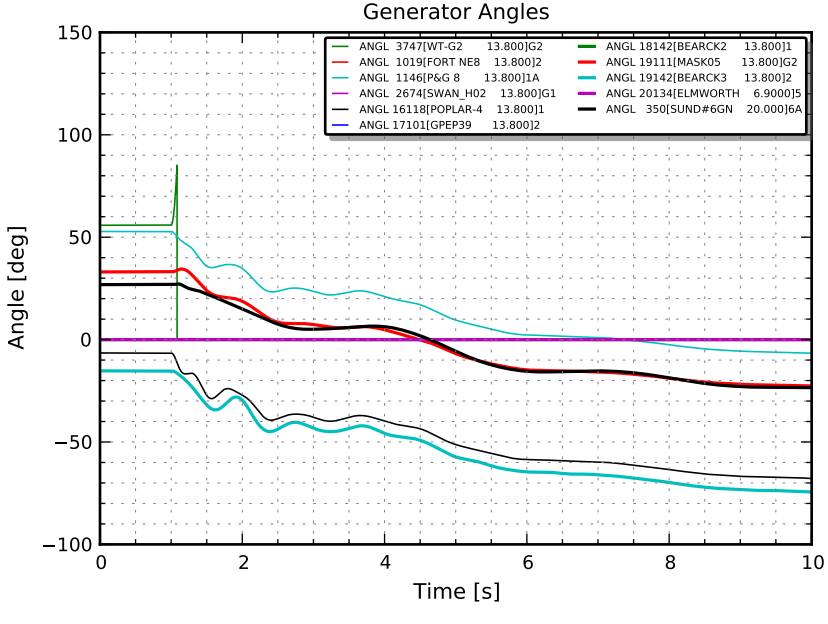
SCEN 02 144 IN OUT
RAS verification for 7L106 LTO condition

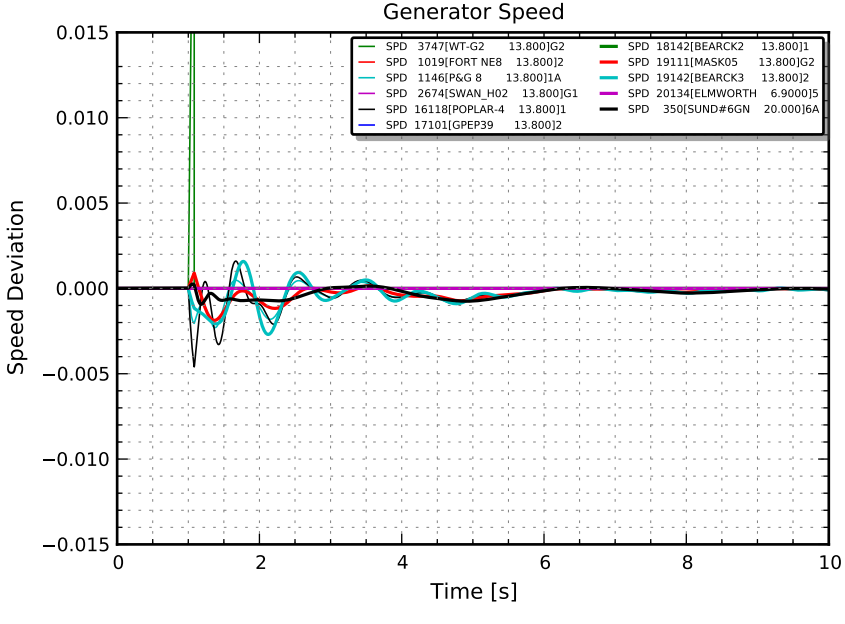
Study Area Generators

Appendix E-2-C
Figure 02-2









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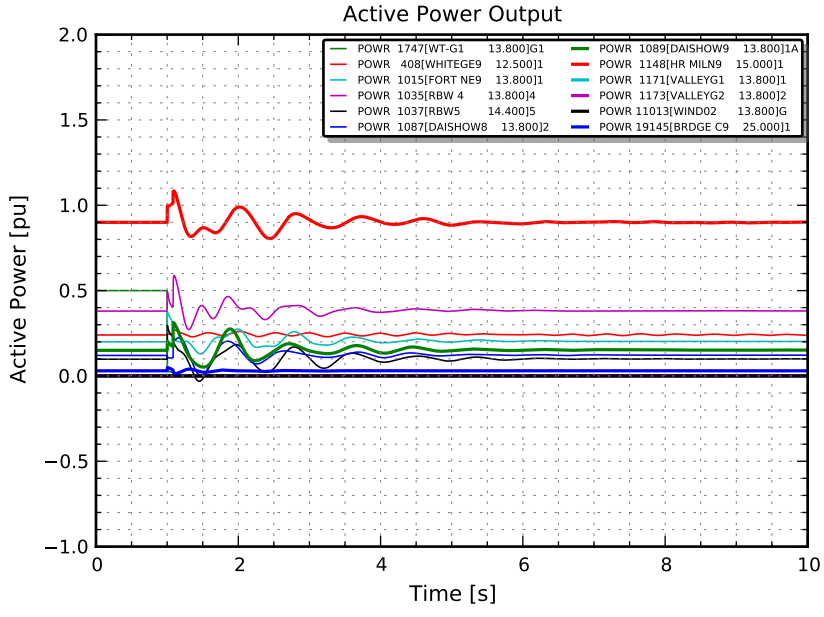
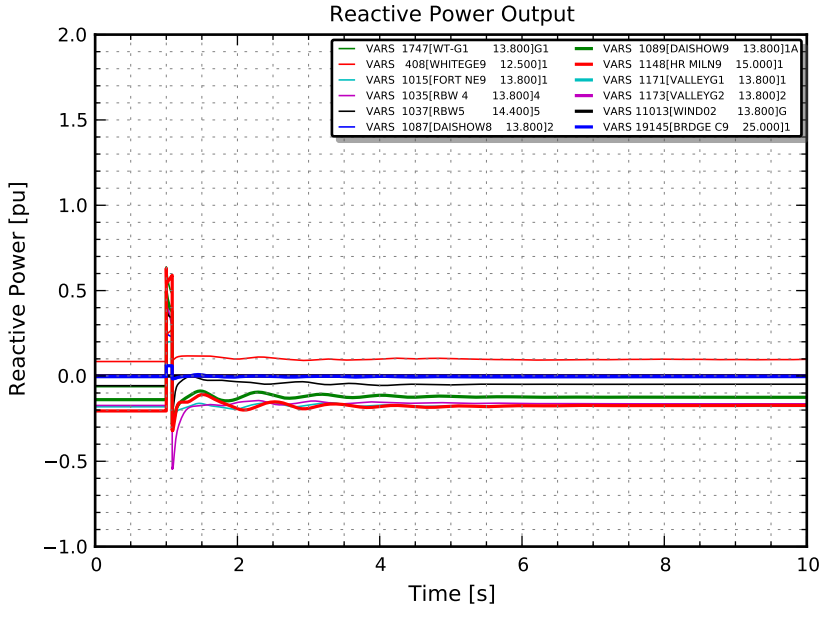
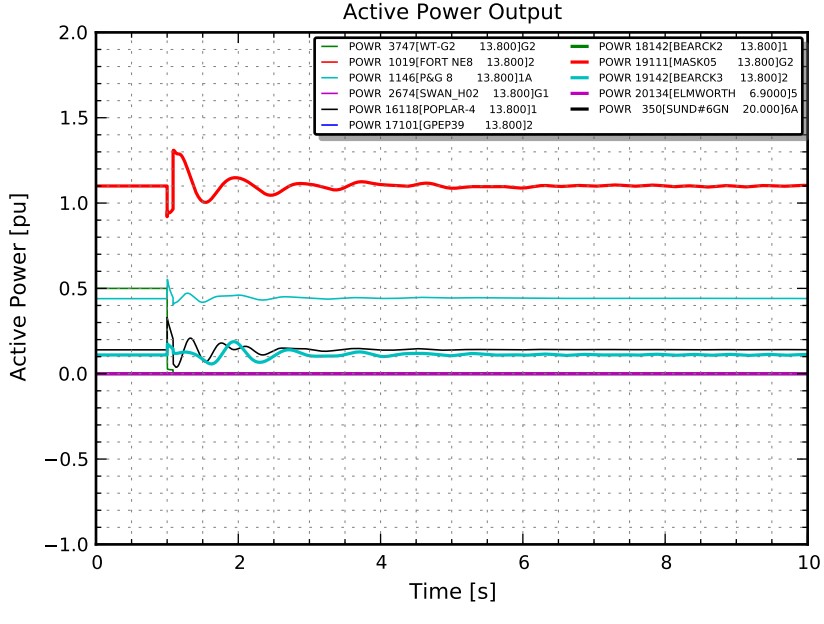
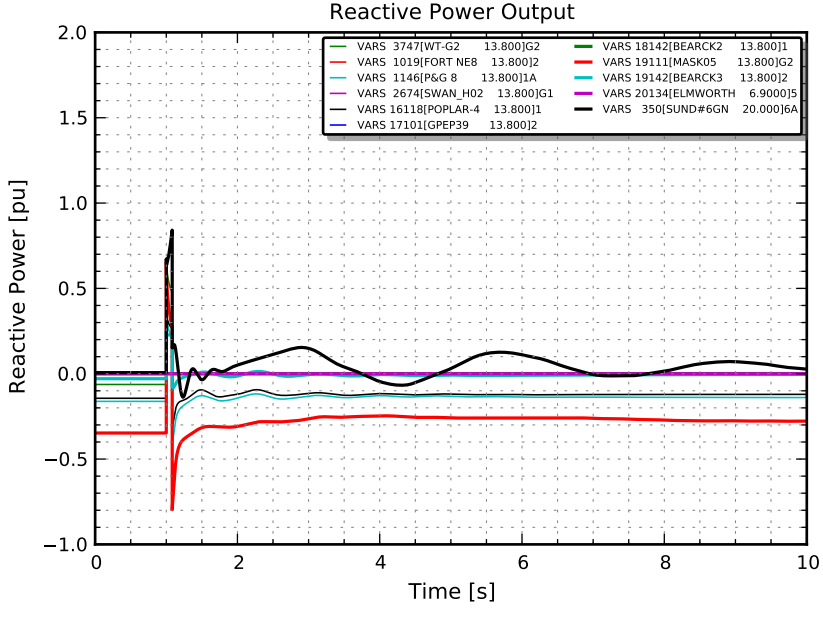
Study Area Generators

Appendix E-2-C
Figure 02-3









Shell Carmon Creek Cogeneration Interconnection

RP-05-1321

The attached engineering study report has been prepared by a third party as part of the AESOs connection process. The AESO has reviewed the report and the conclusions that it contains, and finds it acceptable for the purpose of assessing potential impacts of the proposed connection on the transmission system.

Information regarding the AESO's connection process can be found at: http://www.aeso.ca/8602.html

Date: 12/12/2014

Function	Name	Company	Signature	Date
Senior Engineer	Liuzhong Shi PEng	Alberta Electric System Operator	Liuzhong Shi	Dec 12, 2014
Lead Engineer	Jagtar Tatla, PEng	Alberta Electric System Operator	Jagtar Tatla	Dec 12, 2014
Manager, Projects & System Access Studies	Sami Abdulsalam PhD / PEng	Alberta Electric System Operator		Dec 12 2014

Public

2500, 330-5th Avenue SW, Calgary, Alberta T2P 0L4 Phone: 403-539-2450 Fax: 403-539-2949
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Connection Engineering Study Report for AUC Application

Shell Carmon Creek Cogeneration Interconnection

File No. RP-05-1321
Revision: 1
Revision Date: 10/12/2014

	Name	Date	Signature
Prepared by:	Jeffrey Jiang	Dec 10, 2014	
Reviewed and Approved by:	Tarek Abdelgalil	Dec 11, 2014	

PROFESSIONAL ENGINEER ALBERTA
TAREK ABDELGALIL

Dec 16/2014
Tarek Abdelgalil

Executive Summary

Project Overview

This report presents the results of an Engineering Study for the connection of the Shell Carmon Creek Cogeneration Facility (The Project) to the Alberta Interconnected Electric System (AIES). The Project capacity is 690 MW and consists of three identical gas-fired cogeneration units with a rating of 230 MW each. The Project is to be located in the vicinity of LSD 17-84-19-W5M, approximately 16km northeast of the existing 240kV Wesley Creek 834S substation in the Peace River Planning area (Area 19), in the Northwest (NW) region.

The in-service date (ISD) of the Project is staged. The anticipated ISDs of the three units are July 2015, January 2016 and Q4, 2016, respectively.

Existing System

The NW region is located northwest of the Lake Wabamun and Hinton/Edson areas and includes the following AESO planning areas: Rainbow Lake (17), High Level (18), Peace River (19), Grande Prairie (20), High Prairie (21), Grande Cache (22), Valley View (23), Fox Creek (24) and Swan Hills (26). The NW region transmission system consists of long 144kV and 240kV transmission lines. Currently, the NW region imports power from the rest of the AIES. The three 240kV lines (919L, 989L and 913L) transfer power to the NW region from the Wabamun Lake area; the major source of generation in the province. The 240kV line 9L15 connects the NW Region to the Fort McMurray Area, located to the east of the NW region. There are also three 144kV lines (799L, 7L230 and 854L) that run parallel to these 240kV lines and transfer power to the same region.

Study Objective

The objective of this study is to investigate the potential impacts of the Project on the AIES system. The evaluation is carried out by conducting load flow, short-circuit and dynamic analyses using the AESO planning scenarios for the years 2015/2016 summer and winter peak as well as summer light loading conditions. Short circuit analysis is also performed on the AESO planning scenario for the year 2024. The study is performed according to the relevant criteria, standards and requirements of the AESO for Category A and Category B conditions.

Alternative Selected

Two transmission connection alternatives were identified for the connection of the Project:

- Alternative 1 – In/Out 240kV connection to line 9L15 between Wesley Creek 834S and Brintnell 876S
- Alternative 2 - a new double circuit 240kV line (or two single circuit 240KV lines) in radial connection to the Wesley Creek 834S

Detailed studies were conducted for the preferred Alternative 2 based on the alternative assessment presented in section 5.3.

Study Summary

The load flow, transient stability and short circuit analysis studies were conducted for the preferred Alternative 2 for various load and generation dispatch conditions. Detailed technical analysis of the Project revealed the following:

- Under normal operating conditions (N-0), there are overloads observed on line 7L27 for the following three N-G scenarios:
    - 2016 summer peak with full seasonal capacity at the Shell Carmon Creek Cogen project and HR Milner #1 generator offline as N-G but Daishowa #1A online
    - 2016 summer peak with full seasonal capacity at the Shell Carmon Creek Cogen project and HR Milner #1 generator online but Daishowa #1A offline as N-G;
    - 2016 summer light with full seasonal capacity at the Shell Carmon Creek Cogen project and HR Milner #1 generator online but Daishowa #1A offline as N-G

- The overloads under N-0 condition are manageable through generation dispatch adjustments in the Northwest Region utilizing the generation effectiveness factors according to the ISO Transmission Constraint Management Rule 302.1.

- The most critical contingency is the outage of line 9L11. Under this contingency, lines 7L27, 7L75 and 7L73 experience overloads at various degrees for different study scenarios. This is due to the large amount of additional power from the Project to be transmitted via the existing 144kV network in the region.

- The loss of lines 9L15, 7L12, 7L51, 7L131, 7L04 or 7L106; and the larger generating unit at Daishowa power station can also create overloads on line 7L27 to various extents.

- The most constrained transmission element is line 7L27, which experiences overloads under a number of N-1 contingencies in the surrounding area.

- When the larger unit at Daishowa power station is offline as N-G consideration, the observed overloads on line 7L27 are increased during various contingencies.

- The 144 kV line loadings below the emergency ratings of the lines, as measured in current, will be managed by AESO and TFO real-time operating practice. The line loading of 7L27 and 7L75 exceeding emergency rating, as measured in current, requires remedial action scheme (RAS) mitigation.

- Line 7L80 thermal violation in post 7L20 contingency is an existing system issue which is experienced when HR Milner generation (151MW) is in service. The 7L80 thermal overload is being managed by the AESO and TFO real time operating practice. This project does not exacerbate 7L80 thermal violation.

- Line 7L03 thermal violation in post 7L22 contingency under 2016 summer light loading condition, is an existing system issue that is being managed by the AESO and TFO real time operating practice. This project does not exacerbate 7L03 thermal violation.

- The transient stability analysis is conducted for 2016 summer peak, 2016 winter peak and 2016 summer light study scenarios. The simulation results show that the system is stable under all simulated contingencies.

Recommendations

- Connect the Project to the 240kV Wesley Creek 834S substation via two new 240kV transmission circuits with a minimum summer rating of 800 MVA.

- Develop operational procedures to manage the observed N-0 overloads. The observed N-0 loadings beyond the nominal continuous loading of 7L27 are manageable through generation dispatch adjustments in the Northwest Region utilizing the generator effectiveness factors according to the ISO Transmission Constraint Management Rule 302.1.

- The 144kV line loadings below the emergency ratings of the lines, as measured in current, will be managed by AESO and TFO real-time operating practice.

- Develop temporary RAS for the Carmon Creek generation connection to alleviate thermal violations on the 7L27 144kV line caused by the different contingencies as observed in the connection study. The RAS action to alleviate thermal violation of 7L27 would also remove thermal violation of 7L75 since both circuits are in series in the path to load centre in the Grande Prairie loop.

- The AESO 2013 Long-term Transmission Plan projects, more specifically the 240kV transmission line from Wesley Creek 834S to Little Smokey South planned for near-term needs, will remove N-0 and N-1 thermal violations of the 144kV system and will facilitate the removal of the recommended temporary RAS.

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1. Introduction

This Customer Connection Engineering Study Report presents the results of the study conducted to analyze the impact of the proposed Carmon Creek Cogeneration Project (the Project) on the Alberta Interconnected Electric System (AIES). The Project capacity is 690 MW and consists of three identical gas-fired cogeneration units with a rating of 230 MW each. The Project is to be located in the vicinity of LSD 17-84-19-W5M, approximately 16km northeast of the existing 240kV Wesley Creek 834S substation in the Peace River Planning area (Area 19), in the Northwest (NW) region. The Project's specific details are noted below.

1.1. Project

1.1.1. Project Overview

- Organization proposing the project: Shell Canada Ltd
- The Project: 3x230 MW Cogeneration Facility and associated Brock 232S substation
- Project location: LSD 17-84-19-W5M
- Project purpose: Gas fired power cogeneration
- In-Service date (Unit 1) : July 2015 (1x230 MW)
- In-Service date (Unit 2) : January 2016 (1x230 MW)
- In-Service date (Unit 3) : Q4 2016 (1x230 MW)

1.1.2. Load Component

- The minimum Behind the Fence (BTF) load level for both winter and summer: 90 MW with 90% power factor
- Type of on-site load: Expected to be combinations of heating and motor loads (both large and small induction types)
- The on-site load cannot be sustained without the cogeneration units in service. If all three units trip, Shell will have a load shedding scheme to trip all load except the critical loads required for the station service.
- Shell has requested 10 MW of DTS contract capacity to keep the plant warm, as redundancy to the back-up emergency generators when all three units trip.

1.1.3. Generation Component

- The maximum generation output of the Project is 630 MW for the summer and 690 MW for the winter.
- The requested STS capacity is 600 MW.
- The maximum and minimum continuous reactive power capability of each generator will meet the requirements of section 3.1 of the AESO Generation and Load Interconnection Standard.

1.2. Study Scope

1.2.1. Study Objectives

The objective of this study is to evaluate the proposed connection alternative(s) and identify the impact of the Project on the system performance in terms of any reliability concern.

1.2.2. Study Area

1.2.2.1. Study Area Description

The Project is located approximately 16km northeast of the existing 240kV Wesley Creek 834S substation in the Peace River Planning area (Area 19), in the Northwest Region. The Northwest Region of Alberta is a large geographic area that borders the Fort McMurray Area and Athabasca to the East, Wabamun and Hinton to the South, British Columbia to the West and the Northwest Territories to the north. The Northwest Region represents approximately one-third of Alberta's area.

The Study Area includes the following Alberta Electric System Operator (AESO) planning areas: Peace River (19), Grande Prairie (20), High Prairie (21), Grande Cache (22), Valleyview (23), Fox Creek (24), Fort McMurray (25) and Swan Hills (26). Figure 1 presents a map of the planning areas in the vicinity of the Project.

The transmission network in Northwest Region consists of long 144kV and 240kV transmission lines. Many transmission lines are radial with a low degree of redundancy.

There are five 240kV substations and a number of 240kV transmission lines in the region, including two double circuit transmission lines. These 240kV substations and 240kV transmission lines form a 240kV ring network in Northwest Region via the Brintnell 240kV substation 876S in Northeast Region (Dover). At present, the Northwest Region is primarily a load area and needs to import a substantial amount of power from the other regions, especially from the Wabamun/Edmonton area. Thus there are three 240kV and two 144kV transmission paths from the Wabamun area towards Northern Alberta.

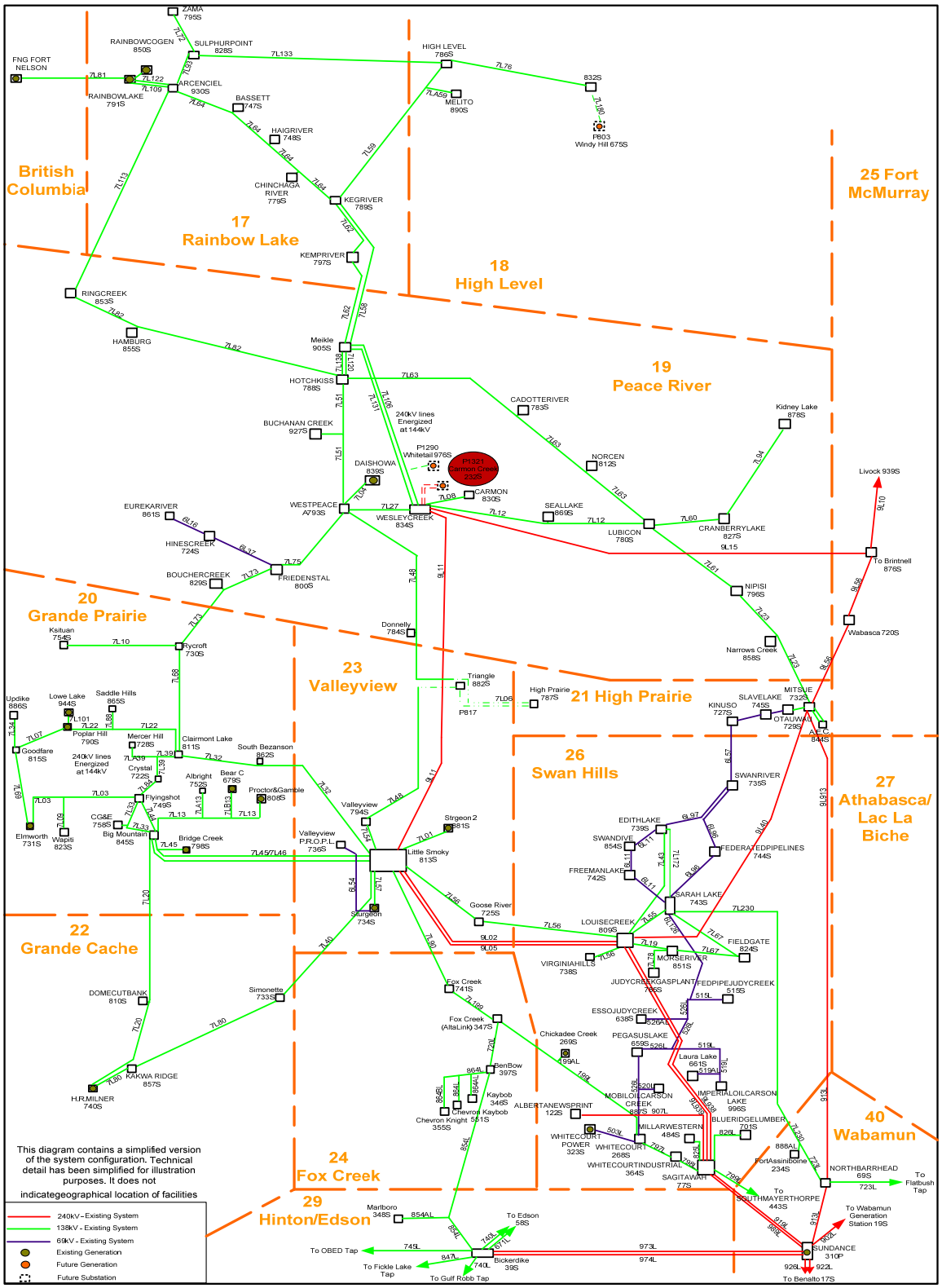
On the west side, a double circuit 240kV transmission line (919L/989L) runs from Sundance 310P in the Wabamun area to Sagitawah 77S and Louise Creek 813S (9L938/9L939), and then to Little Smoky 813S (9L02/9L05). From Little Smoky 813S, a single circuit 240kV line (9L11) extends to Wesley Creek 834S in the Peace River area.

On the east side, a double circuit 240kV line runs from Sundance 310P to Cherhill 338S and then a single 240kV transmission line 9L913 runs to Mitsue 732S. A single 240kV line runs from Mitsue 732S to Brintnell 876S via Wabasca 720S. From Brintnell 876S, a single 240kV transmission line 9L15 is connected to Wesley Creek 834S.

In addition to the 240kV paths, a single 144kV transmission line (854L) runs from Marlboro 348S in Area 29 (Hinton/Edison) to the Benbow 397S in Area 24 (Fox Creek) and another single transmission line 7L230 runs from Fort Assiniboine 234S in Area 40 to Sarah 743S in Area 26 (Swan Hills).

Areas 17, 18, 20, 22 and 24 are serviced exclusively by 144kV transmission lines.

Figure 1: Existing Northwest Transmission System



1.2.2.2. Existing Constraints

The Northwest Region operation is currently managed by the Northwest Area Transmission Constraint Management Rule 302.1 ID #2011-004R. Other related rules include 304.4 General Operating Practice-Voltage Control ID# 2010-007RS.

1.2.3. Studies Performed

The following studies are performed:

- Power flow analysis (Category A and B for pre-connection and post-connection)
- Transient stability analysis (Category A and B for post-connection)
- Short-Circuit fault studies (for pre-connection and post-connection)

The following studies are not performed:

- Power flow and Transient stability analysis for Category C5 because there is no relevant C5 contingency identified for this project.
- Voltage stability analysis because Carmon Creek Cogeneration facility would improve the voltage stability in the area

1.3. Report Overview

The Executive Summary provides a high-level summary of the report and its conclusions. Section 1 provides an Introduction. Section 2 describes the Criteria, System Data, and Study Assumptions. Section 3 presents the Study Methodology. Section 4 discusses the Pre-Connection System Assessment. Section 5 presents the Connection Alternatives. Section 6 provides a Technical Analysis of the Selected Connection Alternatives. Section 7 provides a Short-Circuit Analysis. Section 8 discusses Project Interdependencies. Section 9 presents a Summary and Conclusion.

2. Criteria, System Data, and Study Assumptions

The system studies are conducted using PTI PSS/E version 33. The following subsections describe the criteria and assumptions used in these studies, and the methodology used in the analyses.

2.1. Criteria, Standards, and Requirements

2.1.1. AESO Reliability Criteria

The AESO's *Transmission Planning Criteria – Basis and Assumptions* (Reliability Criteria)[1] were applied to evaluate system performance under Category A system conditions (i.e. all elements in-service, or N-0) and Category B contingencies (i.e. single element outage, or N-1), prior to and following the addition of the requested project development.

Category A represents a normal system with no contingencies and all facilities in service. Under these conditions, the system must be able to supply all firm load[2] and firm transfers to other areas. All equipment must operate within its applicable rating, voltages must be within their applicable range, and the system must be stable with no cascading outages.

Category B events result in the loss of any single specified system element under specified fault conditions with normal clearing. These elements are a generator, a transmission circuit, a transformer, or a single pole of a DC line. All equipment must operate within its applicable rating, voltages must be within their applicable range, and the system must be stable with no cascading outages. Planned or controlled interruption of electric supply to radial customers or some local network customers, connected to or supplied by the faulted *element* or by the affected area, may occur in certain areas without impacting the overall reliability of the interconnected transmission systems.

The AESO Thermal Loading Criteria requires that the continuous thermal rating of any transmission element is not exceeded under normal operating conditions. In this study, thermal limits are assumed to be one hundred per cent of the normal summer and winter ratings.

The normal minimum and maximum voltage limits specified by the Reliability Criteria are used to identify Category A system voltage violations, while the emergency minimum and maximum limits are used to identify Category B system violations. Table 1 shows the acceptable steady state voltages for different transmission voltage classes.

[1] Filed under separate cover

[2] "Firm load" refers to the load that the ISO and system members will use reasonable best efforts to supply without interruption.

Table 1: Acceptable Range of Steady State Voltage (kV)

Nominal	Extreme Minimum	Normal Minimum	Normal Maximum	Extreme Maximum
500	475	500	525	550
240	216	234	252	264
260(Northeast and Northwest)	234	247	266	275
144	130	137	151	155
138	124	135	145	152
72	65	68.5	75.5	79
69	62	65.5	72.5	76

The post contingency voltage deviations following Category B events were checked against the guidelines in Table 2.

Table 2: Post Contingency Voltage Deviation Guidelines

Parameter and reference point	Time Period		
	Post Transient (up to 30 sec)	Post Auto Control (30 sec to 5 min)	Post Manual Control (Steady State)
Voltage deviation from steady state at POD low voltage bus.	±10%	±7%	±5%

Facility loading will be monitored to record any violations based on 100% static seasonal thermal rating of the associated equipment. All transmission elements must be operating within their ratings with no thermal overloads. Cascading outages or unplanned loss of load/generation following any simulated contingencies is not allowed. The Alberta system operating limits must be respected, including the minimum acceptable voltages. Any violation will be recorded in the engineering study report.

2.1.2. AESO Rules

The AESO Voltage Control Practice ID # 2010-007RS will be applied to establish pre-contingency voltage profiles in the study region. The TCM Rule 302.1 will be followed in setting up the study scenarios and assessment of the connection impact. In addition, due regard will be given to the AESO Customer Connection Study Requirements Document and the Generation and Load Interconnection Standard.

The Reliability Criteria is the basis for planning the AIES. The transmission system will normally be designed to meet or exceed the Reliability Criteria under credible worst-case loading and generation conditions.

2.1.3. Other Requirements

Other AESO requirements to be considered, when performing connection studies are outlined below:

- Alberta Reliability Standards (studies per Appendix of the following standards: TPL-001-AB-0; TPL-002-AB-0; TPL-003-AB-0)

2.2. Load and Generation Assumptions

2.2.1. Load Assumptions

Table 3 presents the Northwest Region coincident load forecast to be used to develop the respective summer peak, summer light and winter peak working cases. Guidance on the generation and load dispatch in the form of PSS/E format to use for this study was provided by the AESO.

Table 3: Forecast Area Load (2014 LTO)

Area Name and Number	Season	Year	Load Condition	Forecast Load (MW)	Year	Load Condition	Forecast Load (MW)
Peace River (19)	**Summer**	2015	summer peak	157	2016	summer peak	174
	Summer	2015	summer light	-	2016	summer light	154
	Winter	2015	winter peak	184	2016	winter peak	229
NW Region	**Summer**	2015	summer peak	1,167	2016	summer peak	1185
	Summer	2015	summer light	-	2016	summer light	856
	Winter	2015	winter peak	1,269	2016	winter peak	1346
AIL w/o Losses	**Summer**	2015	summer peak	10,439	2016	summer peak	10,834
	Summer	2015	summer light	-	2016	summer light	7743
	Winter	2015	winter peak	11,456	2016	winter peak	12,154

2.2.2. Generation Assumptions

Generation in the Study Area consists of base load coal-fired and biomass generation, as well as gas-fired peaking units. Generation dispatch is provided by AESO based on generation merit order. The Northwest Region is currently supported by Transmission Must Run (TMR) generation units which will be required until new transmission facilities are built and / or new base load generation comes on line.

Table 4 contains both existing generation and future generation in the Study Area as in the AESO interconnection queue (as of April 2014).

Table 4: Summary of Existing Generators in the Study Area and the Dispatch

Bus Name	Bus Number	ID	Unit Size (MW)	Area	2015SP (MW)	2015WP (MW)	2016SP (MW)	2016SL (MW)	2016WP (MW)
Whitecourt COGEN	408	1	31.8	26	23.9	23.9	23.9	23.9	23.9
Fort Nelson	1015	1	52.2	17	19.4	31.9	19.4	15	31.9
Fort Nelson	1019	2	28	17	10.5	17.2	10.5	7	17.2
Rainbow1	1031	1	28.8	17	0	0	0	0	0
Rainbow2	1032	2	44.1	17	0	0	0	0	0
Rainbow3	1033	3	19.5	17	0	0	0	0	0
Rainbow4	1035	4	52.7	17	33.4	44.6	33.4	38.2	44.6
Rainbow5	1037	5	52.7	17	0	43	0	0	43
Daishowa	1087	2	25.1	19	19	19	19	19	19
Daishowa	1089	1A	40	19	31	31	31	31	31
P&G	1146	1A	49.2	20	41	41	41	41	41
HR Milner	1148	1	151.1	22	Off-line	Off-line	Off-line	Off-line	Off-line
Sturge a	1167	1	11.3	23	0	0	0	0	0
Sturge b	1168	2	8.4	23	0	0	0	0	0
Valleyview1	1171	1	52.7	23	0	0	0	0	0
Valleyview2	1173	2	52.7	23	0	0	0	0	0
Poplar Hill	16118	1	52.7	20	12.6	44.2	12.6	0	44.2
GP-CHP1a	17101	2	28.8	20	18	18	18	18	18
Lowe1	17120	1	79.2	20	57.7	79.2	57.7	0	79.2
BearCreekGT	18142	1	58	20	0	0	0	0	0
BearCreekST	19142	2	38.6	20	12.8	12.8	12.8	12.8	12.8
Gold Creek 1	19145	1	6	20	4	5	4	4.5	5
ElmworthG5	20134	5	3.4	20	0	1	0	0	1
ElmworthG6	20134	6	3.4	20	0	1	0	0	1
ElmworthG7	20134	7	3.4	20	0	1	0	0	1
ElmworthG8	20134	8	3.4	20	0	1	0	0	1
Fortis ANC Gas-Fired	4296	G1-G10	10×6.5	26	59	59	59	0	59
NRGreen Base Load Waste Heat	2674	G1	18.6	26	15	15	15	5	15
P1499 Elmworth G9 Gas-Fired	20134	9	9.2	20	8	8	8	0	8
P803 Mustus	11013	G	44	18	35	35	35	35	35
P1290 Whitetail #1	1747	G1	50	19	50	50	50	0	50

Bus Name	Bus Number	ID	Unit Size (MW)	Area	2015SP (MW)	2015WP (MW)	2016SP (MW)	2016SL (MW)	2016WP (MW)
P1290 Whitetail #2	3747	G2	50	19	50	50	50	0	50
P1290 Whitetail #3	4747	G3	50	19	50	50	50	0	50
P1290 Whitetail #4	5747	G4	50	19	50	50	50	0	50

Note:

1, HR Milner generator (bus 1148) is taken off-line as N-G.

2, P803 and P1290 are both ahead in the AESO connection queue. The ISDs of P803 and P1290 were originally Q2, 2015 and Q3, 2015 that were subsequently changed to Q1, 2016 and Q3, 2016 respectively. These two projects were therefore included in all the Project study scenarios to assess the impact of the addition of the Project on the AIES.

2.3. System Projects

There are no future system projects in the NW Region that are considered to be in service for this project's connection studies.

2.4. Customer Connection Projects

Table 5 includes customer projects that are currently in the AESO Connection Queue and will be included in the study cases.

Table 5: Summary of Connection Projects Included in the Study Cases

Project #	Facility Name	Planned ISD	Type of Project	Load /Generation
1215	Millar Western Pulp BTF	Jul 29, 2015	BTF	Load
1290	Whitetail Peaking Station	Aug 1, 2016	Connection	Generation
803	Mustus Energy Biomass Generator	Mar 31, 2016	Connection	Generation
1416	ATCO Mercer Hill Breaker Addition	Jan 19, 2015	Connection	Load
1382	Fortis Benbow 397S-Feeder breaker	Oct 31, 2014	Connection	Load
1294	Fortis Pegasus Lake 659S - Upgrade	Aug 31, 2015	Connection	Load
1466	ATCO Norcen Substation Capacity	Jul 31, 2015	Connection	Load

2.5. Facility Ratings and Shunt Elements

Key transmission line ratings and transformer ratings in the Study Area are presented in Table 6 to Table 7, respectively.

Table 6: Summary of the Existing Transmission Line Ratings

Line	Description	Voltage (kV)	Nominal Summer Rating (MVA)	Nominal Winter Rating (MVA)	Emergency Summer Rating (MVA)	Emergency Winter Rating (MVA)
1L359	Fort Nelson 852S - BC Border	144	200	237	200	237
7L03	Elmworth 731S - Wapiti 823S - Flyingshot 749S	144	73	73	73	73
7L07	Poplar Hill 790S - Goodfare 815S - Elmworth 731S	144	114	145	129	157
7L106	Meikle 905S - Wesley Creek 834S	144	300	300	376	389
7L109/7L122	Arcenciel 930S - Rainbow Lake 791S	144	165	211	188	227
7L113	Arcenciel 930S - Ring Creek 853S	144	114	145	129	157
7L12	Lubicon 780S - Seal Lake 869S	144	114	145	129	157
7L12	Seal Lake 869S - Wesley Creek 834S	144	114	145	129	157
7L120/7L138	Meikle 905S - Hotchkiss 788S	144	114	145	129	157
7L131	Meikle 905S - Wesley Creek 834S	144	300	300	376	389
7L133	High Level 786S - Sulphur Point 828S	144	114	145	129	157
7L20	HR Milner 740S -Big Mountain 845S	144	150	150	150	150
7L22	Poplar Hill 790S - Saddle Hill 865S	144	114	145	129	157
7L22	Saddle Hill 865S - Clairmont Lake 811S	144	114	145	129	157
7L23	Mitsue 732S - Nipisi 796S	144	114	145	129	157
7L27	Wesley Creek 834S - Peace River 793S	144	114	145	129	157
7L40	Little Smoky 813S - Simmonette 733S	144	114	145	129	157
7L44	Flyingshot 749S - Big Mountain 845S	144	146	149	147	187
7L48	Peace River 793S - Valleyview 794S	144	114	145	129	157
7L51	Hotchkiss 788S - West Peace River 793S	144	99	99	129	129
7L55	Louise Creek 809S - Sarah Lake 743S	144	99	99	129	129
7L58	Keg River 789S - Meikle 905S	144	114	146	129	157
7L59	Keg River 789S - High Level 786S	144	114	145	129	157
7L61	Lubicon 780S - Nipisi 796S	144	99	99	129	129
7L62	Keg River 789S - Meikle 905S	144	114	146	129	157
7L63	Hotchkiss 788S - Lubicon 780S	144	99	99	129	129
7L64	Arcenciel 930S - Keg River 789S	144	75	90	75	90
7L73	Friedenstal 800S - Rycroft 730S	144	99	99	129	129
7L75	Peace River 793S - Friedenstal 800S	144	99	99	129	129
7L80	HR Milner 740S -Simmonette 733S	144	75	75	75	75
7L81	Rainbow Lake 791S - BC Border	144	149	149	183	183
7L82	Hotchkiss 788S - Ring Creek 853S	144	114	145	129	157

Line	Description	Voltage (kV)	Nominal Summer Rating (MVA)	Nominal Winter Rating (MVA)	Emergency Summer Rating (MVA)	Emergency Winter Rating (MVA)
7L84	Crystal Lake 722S - Flyingshot 749S	144	149	149	188	189
7L93	Arcenciel 930S - Sulphur Point 828S	144	114	146	129	157
9L02/9L05	Little Smoky 813S - Louise Creek 809S	240	498	498	592	648
9L11	Wesley Creek 834S - Little Smoky 813S	240	498	498	592	648
9L15	Wesley Creek 834S - Brintnell 876S	240	549	701	627	759
9L40	Mitsue 732S - Louise Creek 809S	240	332	332	432	432
9L56	Wabasca 720S - Mitsue 732S	240	488	624	557	675
919L	Sundance 310P - Sagitawah 77S	240	489	606	587	727
989L	Sundance 310P - Sagitawah 77S	240	499	599	587	727
9L939/9L938	Louise Creek 809S - Sagitawa 77S	240	498	498	592	648

Table 7: Summary of Transformer Ratings

Area	Substation Name and Number	Nominal Ratio	Id	Rate (MVA)
19 Peace River	Wesley Creek 834S	240/144/25	T1	300
		240/144/25	T2	300
21 High Prairie	Mitsue 732S	240/144/25	T1	200
		240/144/25	T2	200
23 Valleyview	Little Smoky 813S	240/144/25	T1	200
		240/144/25	T2	200
26 Swan Hills	Louise Creek 809S	240/144/25	T1	200
		240/144/25	T2	200
	Sagitaw 77S	240/144	T1	200
		240/144	T2	200

Available reactive power resources as shown in Table 8 such as switched capacitor banks, reactors, SVCs and synchronous condensers will be appropriately utilized in the study area to maintain acceptable voltages under normal and contingency conditions.

Table 8: Summary of Reactive Elements in the Study Area

Station Name and Number	Voltage (kV)	Capacitor (MVar)	Reactor (Mvar)	SVC (Mvar)	Synchronous Condenser (MVAR)
Arcenciel 930S	144	1x 30			
	15				
	13.8			+/- 30	+50/ -30
Big Mountain 845S	144	1x 27.54			
Clairmont Lake 811S	144	1x 27			
Crystal Lake 722S	15	1x27.17			
Cranberry Lake 827S	144			+/- 30	
Friedenstal 800S	144	1x 18			
	25	1x 4.8			
Goodfare 815S	138	2x13.77			
High Level 786S	15			+/- 30	
High Level 786S	25	4x2.5			
HR Milner 740S	144	1X5.4			
Hotchkiss 788S	144		1x10		
Keg River 789S	144	1x13.16	1x 9.18		
Ksituan 754S	144	1x 15			
Little Smoky 813S	144	3x 30			
	34.5			+/- 100	
	25		2x 20		
Lubicon 780S	144	2x 30			
Louise Creek 809S	144	1x48.49			
	25		1x20		
			1x10		
Mitsue 732S	25		2x 20		
Peace River 793S	144	2x 15			
Poplar Hill 790S	144	1x 25			
	25	2x 1.2			
		2x 2.4			
		1x 5.4			
Wesley Creek 834S	240		1x 25		
	25		1x 20		

2.6. Dynamic Data and Assumptions

The project dynamic models have been considered as follows:

- Generator model: GENRO

- Exciter model: ST6B
- Governor model: GGOV1
- Power system stabilizer model: PSS2B

The detailed parameters of each model above are given in Attachment A.

2.7. Protection Fault Clearing Times

The simulation uses the clearing times on various existing transmission lines provided by the AESO as shown in Table 9.

Table 9: Summary of Protection Fault Clearing Times

Line ID	Tele – protection Y/N	Faulted End	Tripping End	Total Clearing Time (cycles)
9L124	Y	Wesley Creek (834S)	Wesley Creek (834S)	5
			Brock P1321	7
		Brock P1321	Brock P1321	5
			Wesley Creek (834S)	7
9L15	Y	Wesley Creek (834S)	Wesley Creek (834S)	5
			Brintnell (876S)	7
		Brintnell (876S)	Brintnell (876S)	5
			Wesley Creek (834S)	7
9L11	Y	Wesley Creek (834S)	Wesley Creek (834S)	5
			Little Smoky (813S)	7
		Little Smoky (813S)	Little Smoky (813S)	5
			Wesley Creek (834S)	7
7L12	N	Wesley Creek (834S)	Wesley Creek (834S)	6
			Lubicon (780S)	24
		Lubicon (780S)	Lubicon (780S)	6
			Wesley Creek (834S)	24
7L63	N	Hotchkiss (788S)	Hotchkiss (788S)	6
			Lubicon (780S)	36
		Lubicon (780S)	Lubicon (780S)	6
			Hotchkiss (788S)	24
7L04	Y	Daishowa (839S)	Daishowa (839S)	6

Line ID	Tele – protection Y/N	Faulted End	Tripping End	Total Clearing Time (cycles)
			West Peace River (793S)	8
		West Peace River (793S)	West Peace River (793S)	6
			Daishowa (839S)	8
7L27	N	West Peace River (793S)	Peace River (793S)	6
			Wesley Creek (793S)	24
		Wesley Creek (834S)	Wesley Creek (793S)	6
			Peace River (793S)	24
7L51	N	Hotchkiss (788S)	Hotchkiss (788S)	6
			Peace River (793S)	24
		West Peace River (793S)	Peace River (793S)	6
			Hotchkiss (788S)	24
7L58	Y	Keg River (789S)	Keg River (789S)	6
			Meikle (905S)	8
		Meikle (905S)	Meikle (905S)	6
			Keg River (789S)	8
7L62	Y	Keg River (789S)	Keg River (789S)	6
			Meikle (905S)	8
		Meikle (905S)	Meikle (905S)	6
			Keg River (789S)	8
7L120	Y	Hotchkiss (788S)	Hotchkiss (788S)	6
			Meikle (905S)	8
		Meikle (905S)	Meikle (905S)	6
			Hotchkiss (788S)	8
7L138	Y	Hotchkiss (788S)	Hotchkiss (788S)	6
			Meikle (905S)	8
		Meikle (905S)	Meikle (905S)	6
			Hotchkiss (788S)	8
7L131	Y	Meikle (905S)	Meikle (905S)	6
			Wesley Creek (793S)	8
		Wesley Creek (793S)	Wesley Creek (793S)	6

Line ID	Tele – protection Y/N	Faulted End	Tripping End	Total Clearing Time (cycles)
			Meikle (905S)	8
7L106	Y	Meikle (905S)	Meikle (905S)	6
			Wesley Creek (793S)	8
		Wesley Creek (793S)	Wesley Creek (793S)	6
			Meikle (905S)	8
9L02, 9L05, 9L938, 9L939, 989L and 919L use the generic fault clearing times from the Reliability Criteria for these 240 kV transmission lines; 5 cycles near end and 7 cycles far end.				

2.8. Voltage Profile Assumptions

Table 10 shows the voltage at the key buses (nodes) in the Study Area in comparison with the desired voltages ranges given in the AESO Voltage Control Practice ID # 2010-007RS.

Table 10: Summary of Voltage at Key Nodes in the Study Region

Bus No. and Name	Volt (kV)	Min. Volt (kV)	Desired Range (kV)	Max. Operating Limit (kV)	Voltages in the Study Cases								
					2015SP (1)	2015WP (2)	2015SP (3)	2015WP (4)	2015WP (5)	2016SP (6)	2016SP (7)	2016SL (8)	2016WP (9)
Wesley Creek 834S	240	262	262-268	275	269	265.8	265.4	264.8	264.4	165.5	265.1	265.7	263.7
	144	149	150-152	155	152.1	152.6	151.4	152.4	152.3	151.8	151.7	151.6	151.9
Little Smoky A813S	240	261	262-268	275	265	263.9	264.7	263.7	262.6	264.2	263.8	264.8	261.6
	144	150	150-152	155	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5
West Peace River 793S	144	149	150-152	155	152.4	153	151.8	152.6	152.1	151.8	151.7	152.1	150.9

3. Study Methodology

3.1. Study Objectives

The objective of this study is to evaluate the proposed connection alternative(s) and identify the impact of the Project on the system performance in terms of any reliability concern.

3.2. Study Scenarios

Table 11 lists the study base cases developed for detailed studies. Each base case represents different load and generation dispatch scenarios. AESO provided the 2015 Planning Base Cases for summer peak, summer light and winter peak load conditions and three batch files to be used to develop the 2015 and 2016 base cases. The area loads and generation dispatches in base cases were adjusted according to Table 3 and Table 4.

Table 11: Connection Study Scenarios

Base Case No.	Base Case Name	General NW Region Generation	Carmon Creek COGEN (MW)	Carmon Creek Load (MW)	Studies to be conducted
Pre Connection					
1	2015SP	Economic	0	0	Power Flow
2	2015WP	Economic	0	0	Power Flow, Short Circuit
Post Connection					
3	2015SP	Economic	210	5	Power Flow
4	2015WP	Economic	230	5	Power Flow, Short Circuit
5	2015WP	Economic	460	20	Power Flow, Short Circuit
6	2016SP	Economic	440	40	Power Flow
7	2016SP	Economic	630	90	Power flow, Transient Stability
8	2016SL	Economic	630	90	Power flow, Transient Stability
9	2016WP	Economic	690	90	Power flow, Transient Stability, Short Circuit
10	2024WP	Economic	690	90	Short Circuit

3.3. Connection Studies Carried Out

The following studies were carried out to assess the Project connection.

- Power flow analysis (Category A and B for pre-connection and post-connection)
- Transient stability analysis (Category A and B for post-connection)

- Short-Circuit fault studies (for pre-connection and post-connection)

3.4. Power Flow Analysis

Power flow studies are performed for base cases as presented in Section 3.2. The purpose of the power flow analysis is to quantify incremental thermal overloads and voltage violations following the Project's connection.

3.4.1. Contingencies Studied

Category A (normal system conditions), and Category B (single transmission element outage) in the Study Area are considered for analysis. The outage of each transmission element at 72kV and above in the Study Area is tested for Category B contingency analysis. Tables 12 and 13 show the list of the most relevant or critical contingencies in the Study Area.

Table 12: Contingency List – Transmission Lines

No #	Outage	From Substation	To Substation
Category B Contingencies			
1	9L124	Wesley Creek 834S	Brock (P1321)
2	9L11	Wesley Creek 834S	Little Smoky 813S
3	9L15	Wesley Creek 834S	Brintnell 876S
4	9L40	Louise Creek 809S	Mitsue 732S
5	9L56	Mitsue 732S	Wabasca 720S
6	913L	Sundance 310S	North Barrhead 69S
7	7L106	Wesley Creek 834S	Whitetail Peaking Plant
8	7L27	Wesley Creek 834S	West Peace River 793S
9	7L12	Wesley Creek 834S	Lubicon 780S
10	7L51	Hotchkiss 788S	West Peace River 793S
11	7L63	Hotchkiss 788S	Lubicon 780S
12	7L04	Daishowa 839S	West Peace River 793S
13	7L22	Poplar Hill 790S	Clairmont Lake 811S
14	7L03	Elmworth 710S	749S
15	7L20	Big Mountain 845S	HR Milner 740S
16	7L80	HR Milner 740S	Little Smoky 813S
17	7L44	Flyingshot 749S	Big Mountain 845S

Table 13: Contingency List – Generator/Transformer/SVC/etc.

No.	Outage	Substation
1	240/144 kV 901T transformer (Bus 1080 to Bus 10080)	Wesley Creel 834S
2	240/144 kV 901T transformer (Bus 1163 to Bus 10163)	Little Smoky 813S
3	240/144 kV 901T transformer (Bus 1260 to Bus 11260)	Louis Creek 809S
4	Unit 1A at Daishowa 839S Power Station	

3.5. Short-Circuit Analysis

The short-circuit studies are performed for the following load conditions:

- 2015 winter peak for pre- and post-project connection conditions (Base Case 2, 4 and 5)
- 2016 winter peak for post- project connection conditions (Base Case 9)
- 2024 winter peak for post-connection condition (Base Case 10)

Maximum fault levels are provided for the Brock 232S substation and neighbouring substations with the following assumption:

- Normal system operation with all transmission elements in service and generation dispatched.
- Three-phase faults and single line to ground faults are simulated.
- Polar coordinates and physical values are used for reporting the short-circuit currents.

The maximum fault levels at the following substations are provided: Brock 232S, Wesley Creek 834S, Little Smoky 813S, Louise Creek 809S and West Peace River 793S.

3.6. Transient Stability Analysis

A total of thirty six (36) category B disturbance conditions are simulated for the 2016SP, 2016WP and 2016SL base cases, please refer to Attachment D for the list of contingencies studied. This list covers major 240kV and 144kV transmission lines in the Study Area. As this list is based on existing network configuration, minor adjustments for fault on line 7L106 have been made to match the latest network configuration which has incorporated Whitetail Peaking Plant project P1290. Another two disturbances on one of two single transmission circuits between Brock 232S and Wesley Creek 834S are also added.

4. Pre-Connection System Assessment

4.1. Pre-Connection Power Flow Analysis

This section summarizes the results of load flow analysis before the connection of the Project. The power flow plots are shown in Attachment B.

4.1.1. 2015 Summer Peak – Case 1

Under both N-0 and N-1 conditions, there is no voltage violation or overload identified.

4.1.2. 2015 Winter Peak – Case 2

Under both N-0 and N-1 conditions, there is no voltage violation or overload identified.

5. Connection Alternatives

5.1. Overview

The two preliminary alternatives are identified for consideration to connect the Project.

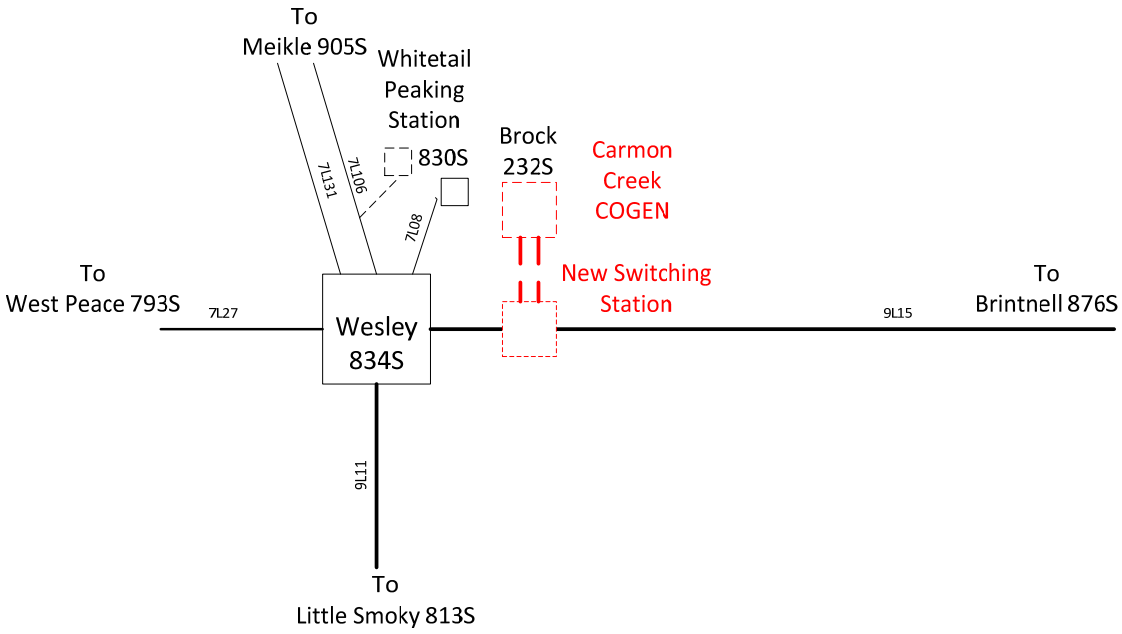
5.2. Connection Alternatives Evaluated

5.2.1. Alternative 1 – In/Out 240 kV connection to 9L15 between Wesley Creek 834S and Brintnell 876S

This connection alternative involves the developments listed below. Figure 2 shows the schematic diagram of Alternative 1.

- Construct a new 240 kV switching substation with breaker and a half arrangement
- Connect the new switching substation to the existing transmission line 9L15 (Wesley Creek 834S-Brintnell 876S) using an in/out connection configuration
- Connect the new switching station to the Project substation (Brock 232S) via two 240 kV transmission circuits, each shall have a minimum summer rating of 800 MVA

Figure 2: Shell Carmon Creek COGEN Connection – Alternative 1

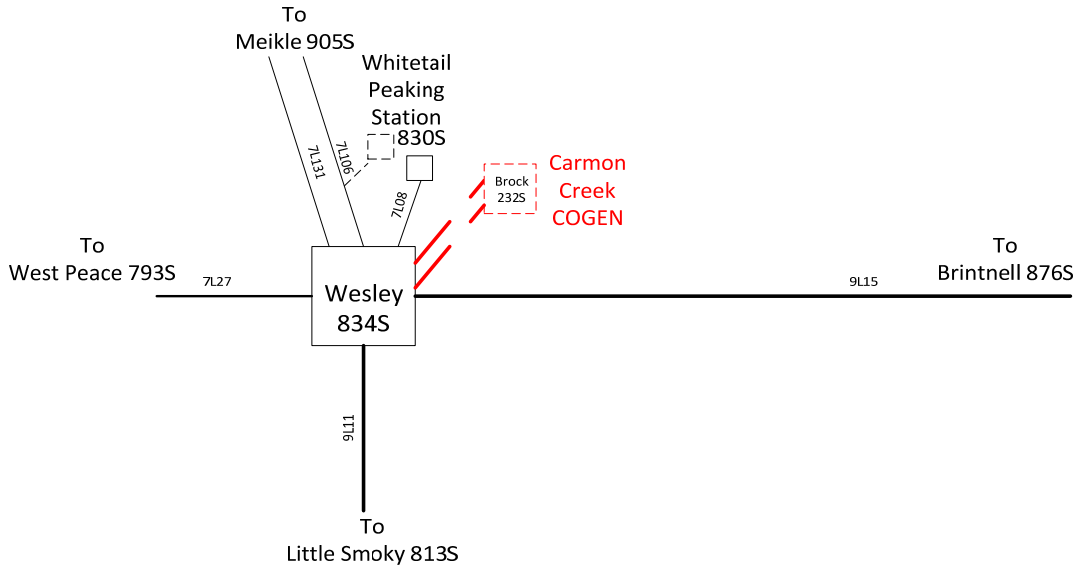


Note: This diagram contains a simplified version of the system configuration. Technical detail has been simplified for illustration purposes. It does not indicate geographical location of facilities.

5.2.2. Alternative 2 - Two new 240 kV circuits in radial connection to the Wesley Creek substation

This connection alternative involves connecting the Project substation (Brock 232S) to the existing Wesley Creek 834S substation via two new 240 kV transmission circuits, each shall have a minimum summer rating of 800 MVA. Figure 3 shows the schematic diagram of this alternative (Alternative #2).

Figure 3: Shell Carmon Creek COGEN Connection – Alternative 2



Note: This diagram contains a simplified version of the system configuration. Technical detail has been simplified for illustration purposes. It does not indicate geographical location of facilities.

5.3. Connection Alternatives Selected for Detailed Studies

Alternative 1 was not considered for further studies due to following reasons:

- The thermal capacity of 9L15 is not sufficient to accommodate the Shell Carmon Creek STS of 600 MW. Therefore, the AESO would need to establish a RAS to mitigate overload on one segment of 9L15 for the contingency of the other 9L15 segment. To remove this temporary RAS, the capacity of line 9L15 would need to be increased or additional transmission capacity towards Wesley Creek and/or the Fort McMurray area would need to be developed.
- Line 9L15 is a bulk system transmission line that transfers power between the Northwest and Northeast regions. Connecting the Carmon Creek Facility to 9L15 would require an in/out configuration via a front-end system switching station, as shown in Figure 2. The configuration would involve two radial 240 kV transmission lines to connect the Project to the switching station. By contrast, Alternative 2 features the existing Wesley Creek switching station, which serves as a connection point between the existing 240 transmission system and the Project via two 240 kV transmission lines. Alternative 2 does not require the addition of a new switching station.

- Additionally, connecting the Project to 9L15 would still require a RAS to mitigate 144 kV thermal violations of 7L27 and 7L75 and N-0 overloads, which is similar to the RAS mitigation required in Alternative 2.
- The 2013 LTP for the NW Region includes a new 240kV circuit between the existing Wesley Creek substation and the proposed Little Smoky substation to mitigate potential constraints following the connection of new generators in the Wesley Creek area. This new 240kV circuit would be required to mitigate constraints for both Alternative 1 and Alternative 2.

Consequently, Alternative 2 was selected as the preferred connection alternative for detailed studies.

6. Technical Analysis of the Selected Connection Alternative

6.1. Power Flow Analysis[3]

This section summarizes the results of load flow analysis following the Project's connection. The power flow plots are shown in Attachment C.

6.1.1. 2015 Summer Peak – Case 3

In this base case, only one Shell Carmon Creek generating unit is connected to AIES system.

There is no voltage violation or overload observed under N-0 conditions.

Under N-1 conditions, the 7L27 line experiences a minor overload to 104% for the loss of line 9L11, as shown in Table 14. This overload is below the emergency rating of 7L27 as measured in current (MVA rating at 144 kV base converted into current) and will be managed by AESO and TFO real-time operating practice.

Table 14: List of Overloads under N-1 (2015SP, Case 3)

SLD REF. in Attachment C	Contingency Element	Overloaded Branch	Pre-Connection		Post-Connection		% Difference between pre and post P1321
			Power Flow (MVA)	% Loading	Power Flow (MVA)	% Loading	
Figure 3-2	240kV 9L11, Wesley Creek 834S to Little Smoky 813S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	76.3	63.5	125	104	40.5

6.1.2. 2015 Winter Peak – Case 4

In this scenario, only one Shell Carmon Creek generating unit of 230 MW is connected to AIES system.

There is no voltage violation or overload observed under both N-0 and N-1 conditions.

6.1.3. 2015 Winter Peak – Case 5

In this base case, two generating units of 2x230 MW are connected to AIES system. There is no voltage violation or overload observed under N-0 conditions.

[3] All line flows of power flow analysis are reported as percentage loading relative to line rating converted to current (amperes)

Under N-1 conditions, lines 7L27, 7L75 and 7L73 are loaded to 113.2%, 121.8% and 106.8%, respectively, under the contingency of 9L11, as presented in Table 15. Among them only the 113.2% loading on 7L27 is higher than the line emergency rating.

Table 15: List of Overloads under N-1 (2015WP, Case 5)

SLD REF. in Attachment C	Contingency Element	Overloaded Branch	Pre-Connection		Post-Connection		% Loading Differ-ence
			Power Flow (MVA)	% Loading	Power Flow (MVA)	% Loading	
Figure 5-2	240kV 9L11, Wesley Creek 834S to Little Smoky 813S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	105.7	68.9	172.8	113.2	+44.3
		144kV 7L75 West Peace River 793S to Friedenstal 800S	88.2	84.7	123.7	121.8	37.1
		144kV 7L73 Friedenstal 800S to Rycroft 730S	71.9	69.1	106.0	106.8	37.3

6.1.4. 2016 Summer Peak – Case 6

In this base case, two Shell Carmon Creek generating units of 460 MW are connected to AIES system.

Under N-0 conditions, there is no voltage violation or overload identified.

Table 16 presents the detailed results under N-1 condition, with the following observations:

- There is no voltage violation identified.
- The overloads on 7L27 occur for the contingencies of 9L11, 9L15, 7L04 and Unit 1A at Daishowa 839S. Most of these overloads are below the emergency rating of 7L27 as measured in current, so these would be managed by real-time AESO and TFO operating practices. The 134.7% loading on 7L27 overload under contingency of 9L11 is higher than the emergency rating of the line as measured in current.
- The contingency of 9L11 also causes overload on 7L75; this overload is below the emergency rating of the line as measured in current, so these would be managed by real-time AESO and TFO operating practices

Table 16: List of Overloads under N-1 (2016SP, Case 6)

SLD REF in Attachment C.	Contingency Element	Overloaded Branch	Pre-Connection		Post-Connection		% Loading Differ-ence
			Power Flow (MVA)	% Loading	Power Flow (MVA)	% Loading	
Figure 6-2	240kV 9L11, Wesley Creek 834S to Little Smoky 813S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	70.2	58.0	161.7	134.7	+75
		144kV 7L75 West Peace River 793S to Friedenstal 800S	65.4	62.4	111.5	107.9	+45.5
Figure 6-3	Outage of Unit 1A at Daishowa 839S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	70.2	58.0	128.8	107.1	+49.1
Figure 6-4	240kV 9L15, Wesley Creek 834S to Brintnell 876S	144kV 7L27, Wesley Creek 834S to West Peace River 793S	70.2	58.0	131.1	109.1	+51.1
Figure 6-6	144kV 7L04, Daishowa 839S to West Peace River 793S	144kV 7L27, Wesley Creek 834S to West Peace River 793S	70.2	58.0	127.2	105.6	+47.6

6.1.5. 2016 Summer Peak – Case 7

In this base case, three Shell Carmon Creek generating units of 690 MW are connected to AIES system.

Under N-0 conditions, there is no voltage violation observed. However, line 7L27 is loaded to 102.6%. In accordance with the ISO TCM Rule 302.1, the generation in Grande Prairie (Area 20) was adjusted until this overload was eliminated. The updated 2016 summer peak – Case 7 with adjusted generation dispatch per the ISO TCM Rule 302.1 is thus used for subsequent N-1 contingency analysis.

Under N-1 conditions, there are a number of overloads on line 7L27. Table 17 summarizes the results. It is observed that:

- The 7L27 overloads occur for the loss of lines 9L11, 9L15, 7L04, 7L12, 7L51, 7L131 and Unit 1A at Daishowa 839S. Most of these overloads are below the emergency rating of the line as measured in current which would be managed by real-time AESO and TFO operating practices. The 161.3% loading on 7L27 overload under contingency of 9L11 and the 125.0% loading on 7L27 overload under contingency of 9L15 are higher than the emergency rating of the line as measured in current.
- The contingency of line 9L11 also causes overloads on lines 7L75 and 7L73 these overloads are below the emergency rating of the lines as measured in current that would be managed by real-time AESO and TFO operating practices

Table 17: List of Overloads (2016SP, Case 7)

SLD REF. in Attachment C	Contingency Element	Overloaded Branch	Power Flow (MVA)	% Loading
Figure 7-1A	N-0 condition	144kV 7L27 Wesley Creek 834S to West Peace River 793S	123.3	102.6
Figure 7-1B	N-0 condition	Overload on 7L27 eliminated	117.7	98.9
Figure 7-2	240kV 9L11, Wesley Creek 834S to Little Smoky 813S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	193.4	161.3
		144kV 7L75 West Peace River 793S to Friedenstal 800S	123.3	120.1
		144kV 7L73 Friedenstal 800S to Rycroft 730S	106.4	105.0
Figure 7-3	144kV 7L12 Wesley Creek 834S to Lubicon 780S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	131.6	109.6
Figure 7-4	144kV 7L51 Hotchkiss 788S - West Peace River 793S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	127.5	106.2
Figure 7-5	Outage of Unit 1A at Daishowa 839S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	124.3	103.8
Figure 7-6	240kV 9L15, Wesley Creek 834S to Brintnell 876S	144kV 7L27, Wesley Creek 834S to West Peace River 793S	149.9	125.0
Figure 7-7	144kV 7L04, Daishowa 839S to West Peace River 793S	144kV 7L27, Wesley Creek 834S to West Peace River 793S	135.9	112.9
Figure 7-8	144kV 7L131 Wesley Creek 834S to Meikle 905S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	122.9	102.4

6.1.6. 2016 Summer Light – Case 8

There is no voltage violation or overload under N-0 conditions.

Table 18 presents the results of N-1 contingency analysis and it is observed that:

- There is no voltage violation identified;

- Overloads on line7L27 occur following the contingencies of lines 9L11, 9L15, 7L04, 7L12, 7L51 and the outage of Unit 1A at Daishowa 839S. Most of these overloads are below the emergency rating of the line, so they would be managed by real-time AESO and TFO operating practices. The 148.8% loading on 7L27 overload under contingency of 9L11 is higher than the line emergency rating.
- Contingency of line 7L22 causes an overload on line 7L03. This is an existing constraint that is being managed by the AESO and TFO real time operating practice.
- Overloads on 7L75 and 7L73 under contingency of 9L11 are below the emergency rating of the lines, so they would be managed by real-time AESO and TFO operating practices.

Table 18: List of Overloads under N-1(2016SL, Case 8)

SLD REF. in Attachment C	Contingency Element	Overloaded Branch	Power Flow (MVA)	% Loading
Figure 8-2	240kV 9L11, Wesley Creek 834S to Little Smoky 813S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	176.9	148.8
		144kV 7L75 West Peace River 793S to Friedenstal 800S	126.4	125.0
		144kV 7L73 Friedenstal 800S to Rycroft 730S	111.6	113.7
Figure 8-3	240kV 9L15, Wesley Creek 834S to Brintnell 876S	144kV 7L27, Wesley Creek 834S to West Peace River 793S	126.4	105.6
Figure 8-4	144kV 7L04, Daishowa 839S to West Peace River 793S	144kV 7L27, Wesley Creek 834S to West Peace River 793S	133.9	111.2
Figure 8-5	144kV 7L22, Poplar Hill 790S - Clairmont Lake 811S	144kV 7L03, Elmworth 731S - Wapiti 823S - Flyingshot 749S	102.5	129.4
Figure 8-6	144kV 7L12 Wesley Creek 834S to Lubicon 780S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	124.4	103.8
Figure 8-7	144kV 7L51 Hotchkiss 788S - West Peace River 793S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	124.3	103.8
Figure 8-8	Outage of Unit 1A at Daishowa 839S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	124.3	103.8

6.1.7. 2016 Winter Peak – Case 9

There is no voltage violation or overload under N-0 conditions.

- Under N-1 conditions, the contingencies of lines 9L11 and 9L15 cause overloads on lines 7L27, 7L75 and 7L73 as detailed in Table 19. The 137.7% loading on 7L27 and the 137.8% loading on 7L75 under contingency of 9L11 are higher than the line emergency rating of the line as measured in current. The 7L73 overload under contingency of 9L11 and the 7L27 and 7L75 overloads under contingency of 9L15 are below the emergency rating of the lines as measured in current and will be managed by AESO and TFO real-time operating practice and in accordance with AESO TCM rule 302.1.

Table 19: List of Overloads under N-1 (2016WP, Case 9)

SLD REF.	Contingency Element	Overloaded Branch	Power Flow (MVA)	% Loading
Figure 9-2	240kV 9L11, Wesley Creek 834S to Little Smoky 813S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	208.7	137.7
		144kV 7L75 West Peace River 793S to Friedenstal 800S	137.2	137.8
		144kV 7L73 Friedenstal 800S to Rycroft 730S	115.3	120.6
Figure 9-3	240kV 9L15, Wesley Creek 834S to Brintnell 876S	144kV 7L27, Wesley Creek 834S to West Peace River 793S	161.9	106.4
		144kV 7L75 West Peace River 793S to Friedenstal 800S	112.4	110.7

6.1.8. Recommendation for Mitigation measures to Thermal Constraints

6.1.8.1. Remedial Action Schemes (RAS)

The power flow analysis identified overloads on lines 7L27/7L75/7L73 following the loss of the 240kV and 144kV lines 9L11, 9L15, 7L04, 7L12, 7L51 and 7L131, as well as the loss of a generating unit at Daishowa 893S. N-1 overloads below the emergency ratings of the lines as measured in current will be managed by real-time operating practice utilizing TCM Rule 302.1 or through system reconfigurations depending on operating conditions at the time. The 7L27/7L75 loading exceeding emergency rating as measured in current will require RAS installation to meet performance requirements for next N-1 contingency.

The observed N-0 loadings exceeding the nominal continuous loading of 7L27 as measured in current are manageable through generation dispatch adjustments in the Northwest Region in

accordance with the ISO Real Time Transmission Constraint Management Rule 302.1 utilizing effective generators in the region.

It is recommended to develop a temporary RAS for Shell Carmon Creek generation connection to alleviate thermal violations on 7L27 144kV line. The RAS action to alleviate thermal violation of 7L27 would also remove thermal violation of 7L75 because both circuits are in series in the path to load centre in the Grande Prairie loop.

It is observed that all thermal violations on 144kV network would be removed by RAS by tripping up to two units at Shell Carmon Creek.

6.2. Transient Stability Analysis

This section presents a summary of the transient stability analysis results on the 2016 summer peak (2016SP), 2016 winter peak (2016WP) and 2016 summer light (2016SL) base cases.

The list of simulated disturbances is defined in Attachment D.

Stability plots for relevant quantities including machine relative angles, active and reactive power outputs for the proposed generating units and bus voltage are provided along with relative machine angles for selected machines.

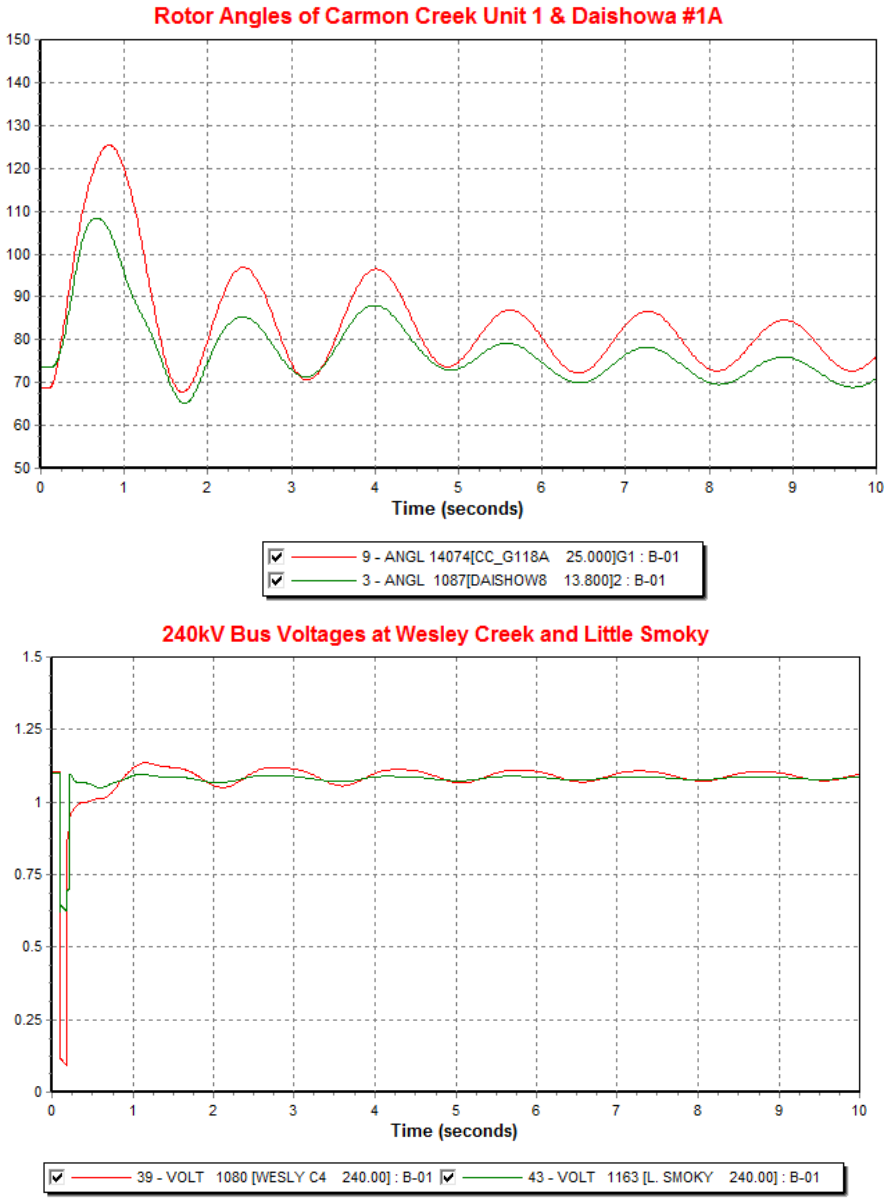
The complete set of plots is given in Attachment E.

6.2.1. 2016 Summer Peak – Case 7

The simulation shows that system is stable under all simulated contingencies.

Figure 4 shows the example plots of the Carmon Creek Unit 1 and Daishowa Unit 1A rotor angles as well as the bus voltages at Wesley Creek 834S and Little Smoky 813S after a three phase fault is applied near Wesley Creek 834S on 9L11.

Figure 4: Three Phase Fault on 9L11 near Wesley Creek 834S



6.2.2. 2016 Summer Light - Case 8

The simulation shows that system is stable under all simulated contingencies.

6.2.3. 2016 Winter Peak - Case 9

The simulation shows that system is stable under all simulated contingencies.

6.3. Sensitivity Studies for Power Flow

This section investigates the impact of a generation outage at the Daishowa power station on all post-connection base cases. The following adjustments were made to the base cases:

- Turn off the largest generating unit (Unit 1A) at Daishowa power station
- Turn on the HR Milner unit with output of 151 MW for all summer peak and winter peak base cases, as well as 71 MW for the summer light base case.

The resulting base cases are listed in Table 20 below.

Table 20: Connection Study Scenarios for Sensitivity Analysis

Case No.	Study Case	General NW Region Generation	Carmon Creek COGEN (MW)	Carmon Creek Load (MW)	Sensitivity Studies
Post Connection					
11	2015SP	Economic	210	5	Daishowa 1A off-line HR Milner: 151 MW back on-line
12	2015WP	Economic	230	5	
13	2015WP	Economic	460	20	
14	2016SP	Economic	440	40	
15	2016SP	Economic	630	90	
16	2016SL	Economic	630	90	Daishowa 1A off-line HR Milner: 71 MW back on-line
17	2016WP	Economic	690	90	Daishowa 1A off-line HR Milner: 151 MW back on-line

The following sections summarize the results of the load flow analysis performed on these base cases. The load flow plots are included in Attachment F.

6.3.1. 2015 Summer Peak – Case 11

There is no voltage violation or overload observed under N-0 conditions.

Table 21 presents the results of the N-1 contingency analysis. It is observed that:

- Line 7L27 experiences loading of 103.3% under the contingency of line 9L11. This is below the emergency rating of the line as measured in current and will be managed by AESO and TFO real-time operating practice.
- Line 7L80 thermal violation in post 7L20 contingency is an existing system issue that is being managed by the AESO and TFO real time operating practice.

Table 21: List of Overloads under N-1 (2015SP, Case 11)

SLD REF. in Attachment F	Contingency Element	Overloaded Branch	Power Flow (MVA)	% Loading
Figure 11-2	240kV 9L11, Wesley Creek 834S to Little Smoky 813S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	123.8	103.3
Figure 11-3	144kV 7L20, HR Milner 740S to Big Mountain 845S	144kV 7L80, HR Milner 740S to Simmonette 733S (section 1170 – 1149)	131.1	173.1

6.3.2. 2015 Winter Peak – Case 12

There is no voltage violation or overload observed under N-0 conditions.

Under N-1 conditions, line 7L80 thermal violation in post 7L20 contingency is an existing system issue that is being managed by the AESO and TFO real time operating practice.

Table 22: List of Overloads under N-1 (2015WP, Case 12)

SLD REF. in Attachment F	Contingency Element	Overloaded Branch	Power Flow (MVA)	% Loading
Figure 12-2	144kV 7L20, HR Milner 740S to Big Mountain 845S	144kV 7L80, HR Milner 740S to Simmonette 733S (section 1170 – 1149)	129.3	170.8

6.3.3. 2015 Winter Peak – Case 13

There is no voltage violation or overload under N-0 conditions.

- Line 7L27 experiences loading of 112.4% under the contingency of line 9L11. This is below the emergency rating of the line as measured in current and will be managed by AESO and TFO real-time operating practice.
- Line 7L80 presents an overload of 170.8% following the loss of line 7L20, which is an existing constraint.
- Line 7L55 is loaded to 104.5% for the contingency of line 7L19. This overload is below the emergency rating of the line as measured in current and will be managed by AESO and TFO real-time operating practice.

Table 23 presents the results.

Table 23: List of Overloads under N-1 (2015WP, Case 13)

SLD REF. in Attachment F	Contingency Element	Overloaded Branch	Power Flow (MVA)	% Loading
Figure 13-2	240kV 9L11, Wesley Creek 834S to Little Smoky 813S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	171.9	112.4
Figure 13-3	144kV 7L20, HR Milner 740S to Big Mountain 845S	144kV 7L80, HR Milner 740S to Simmonette 733S (section 1170 – 1149)	129.3	170.8
Figure 13-4	144kV 7L19, Louise Creek 809S to Morse River 851S	144kV 7L55, Louise Creek to Sarah Lake 743S Milner 740S to Simmonette 733S	109.0	104.5

6.3.4. 2016 Summer Peak – Case 14

Under N-0 conditions, there is no voltage violation or overload identified.

Table 24 presents the results of N-1 contingency analysis. It is observed:

- Overloads on line 7L27 are observed under the contingencies of lines 9L11, 7L12 and 7L51, among them the 7L27 overloads under contingencies of 7L12 and 7L51 are below the emergency rating of the line as measured in current and will be managed by AESO and TFO real-time operating practice. The 133.2% loading on 7L27 under contingency of 9L11 is higher than the line emergency rating as measured in current that would require RAS mitigation.
- Existing constraint on line 7L80 still exist due to the contingency of line 7L20.

Table 24: List of Overloads under N-1 (2016SP, Case 14)

SLD REF. in Attachment F	Contingency Element	Overloaded Branch	Power Flow (MVA)	% Loading
Figure 14-2	240kV 9L11, Wesley Creek 834S to Little Smoky 813S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	160.0	133.2
Figure 14-3	144kV 7L20, HR Milner 740S to Big Mountain 845S	144kV 7L80, HR Milner 740S to Simmonette 733S (section 1170 – 1149)	131.6	173.8

SLD REF. in Attachment F	Contingency Element	Overloaded Branch	Power Flow (MVA)	% Loading
Figure 14-4	144kV 7L12 Wesley Creek 834S to Lubicon 780S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	123.9	103.2
Figure 14-5	144kV 7L51 Hotchkiss 788S - West Peace River 793S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	121.9	101.2

6.3.5. 2016 Summer Peak – Case 15

Under N-0 conditions, there is no voltage violation observed. Line 7L27 is loaded to 106.6% as shown in Figure 15-1A in Attachment F. Thus the outputs of a group of generators which have higher generation effectiveness factors according to Attachment G are adjusted until this overload is removed per the ISO TCM Rule as shown in Figure 15-1B.

There are three overloads observed under N-1 conditions, as shown in Table 25:

- Line 7L27 is overloaded under the contingencies of lines 9L11, 9L15, 7L12, 7L51 and 7L131. Most of these overloads are below the emergency rating of the line as measured in current , so they would be managed by real-time AESO and TFO operating practices. The 157.7% loading on 7L27 overload under contingency of 9L11 and the 128.4% loading on 7L27 overload under contingency of 9L15 are higher than the line emergency rating as measured in current.
- Existing constraint on line 7L80 still exist due to the contingency of line 7L20 that are being managed by the AESO and TFO real time operating practice.
- Line 7L55 is overloaded for the contingency of line 7L19; this overload is below the emergency rating (124 MVA for both summer and winter) of the line and will be managed by AESO and TFO real-time operating practice.

Table 25: List of Overloads (2016SP, Case 15)

SLD REF. in Attachment F	Contingency Element	Overloaded Branch	Power Flow (MVA)	% Loading
Figure 15-1A	N-0 condition	144kV 7L27 Wesley Creek 834S to West Peace River 793S	128.2	106.6
Figure 15-1B	N-0 condition	Overload on 7L27 eliminated	119.3	99.2
Figure 15-2	240kV 9L11, Wesley Creek 834S to Little Smoky 813S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	189.0	157.7

SLD REF. in Attachment F	Contingency Element	Overloaded Branch	Power Flow (MVA)	% Loading
Figure 15-3	144kV 7L20, HR Milner 740S to Big Mountain 845S	144kV 7L80, HR Milner 740S to Simmonette 733S (section 1170 – 1149)	139.5	184.6
Figure 15-4	144kV 7L19, Louise Creek 809S to Morse River 851S	144kV 7L55, Louise Creek to Sarah Lake 743S Milner 740S to Simmonette 733S	104.9	101.8
Figure 15-5	144kV 7L12 Wesley Creek 834S to Lubicon 780S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	133.9	111.5
Figure 15-6	144kV 7L51 Hotchkiss 788S - West Peace River 793S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	128.9	107.3
Figure 15-7	144kV 7L131 Wesley Creek 834S to Meikle 905S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	124.7	103.8
Figure 15-8	240kV 9L15, Wesley Creek 834S to Brintnell 876S	144kV 7L27, Wesley Creek 834S to West Peace River 793S	154.0	128.4

6.3.6. 2016 Summer Light – Case 16

Under N-0 conditions, there is no voltage violation observed. Line 7L27 is loaded to 105.4%, as shown in Figure 16-1A in Attachment F. Again, the outputs of a group of generators with higher generator effectiveness factors are adjusted until this overload is removed, as demonstrated in Figure 16-1B in Attachment F.

Under N-1 conditions, the results of contingency analysis are presented in Table 26 and it is observed that:

- Line 7L27 is overloaded under the contingencies of lines 9L11, 9L15, 7L12, 7L51, 7L106 and 7L131. Most of these overloads are below the emergency rating of the line as measured in current, so they would be managed by real-time AESO and TFO operating practices. The 151.1% loading on 7L27 overload under contingency of 9L11 is higher than the line emergency rating
- Line 7L03 is overloaded following the loss of line 7L22. This is an existing constraint and is currently being managed through ISO Rule 302.1 Real Time Transmission Constraint Management and associated ID #2011-004R

- The loading on line 7L75 for the contingency of line 9L11 is below the emergency rating of the line as measured in current and will be managed by AESO and TFO real-time operating practice.

Table 26: List of Overloads (2016SL, Case 16)

SLD REF. in Attachment F	Contingency Element	Overloaded Branch	Power Flow (MVA)	% Loading
Figure 16-1A	N-0 condition	144kV 7L27 Wesley Creek 834S to West Peace River 793S	126.5	105.4
Figure 16-1B	N-0 condition	Overload on 7L27 eliminated	118.8	99.1
Figure 16-2	240kV 9L11, Wesley Creek 834S to Little Smoky 813S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	180.0	151.1
		144kV 7L75 West Peace River 793S to Friedenstal 800S	107.1	105.4
Figure 16-3	240kV 9L15, Wesley Creek 834S to Brintnell 876S	144kV 7L27, Wesley Creek 834S to West Peace River 793S	131.5	110.0
Figure 16-4	144kV 7L22, Poplar Hill 790S - Clairmont Lake 811S	144kV 7L03, Elmworth 731S – Wapiti 823S – Flyingshot 749S	102.4	129.6
Figure 16-5	144kV 7L12 Wesley Creek 834S to Lubicon 780S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	128.5	107.3
Figure 16-6	144kV 7L51 Hotchkiss 788S – West Peace River 793S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	128.9	107.3
Figure 16-7	144kV 7L131 Wesley Creek 834S to Meikle 905S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	123.3	103.1
Figure 16-8	144kV 7L106 Wesley Creek 834S to Meikle 905S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	123.3	103.1

6.3.7. 2016 Winter Peak – Case 17

There is no voltage or thermal violation under N-0 conditions.

Under N-1 condition, the results of contingency analysis are presented in Table 27 and it is observed that:

- The contingency of line 9L11 causes overloads on lines 7L27, 7L75 and 7L73, among which only the 133.2% loading on 7L27 under contingency of 9L11 is higher than the line emergency rating as measured in current. The contingency of line 9L15 also results in overload on line 7L27, which is below the emergency rating of the line as measured in current and will be managed by AESO and TFO real-time operating practice.
- Existing overloads on line 7L80 still exist due to the contingency of line 7L20.

Table 27: List of Overloads under N-1 (2016WP, Case 17)

SLD REF.	Contingency Element	Overloaded Branch	Power Flow (MVA)	% Loading
Figure 17-2	240kV 9L11, Wesley Creek 834S to Little Smoky 813S	144kV 7L27 Wesley Creek 834S to West Peace River 793S	207.3	136.5
		144kV 7L75 West Peace River 793S to Friedenstal 800S	115.6	115.0
		144kV 7L73 Friedenstal 800S to Rycroft 730S	102.1	103.5
Figure 17-3	240kV 9L15, Wesley Creek 834S to Brintnell 876S	144kV 7L27, Wesley Creek 834S to West Peace River 793S	167.5	110.1
Figure 17-4	144kV 7L20, HR Milner 740S to Big Mountain 845S	144kV 7L80, HR Milner 740S to Simmonette 733S (section 1170 – 1149)	128.0	169.1

6.4. Conclusions and Recommendations

In this Section, study results of the following analysis are presented:

- Load flow analysis under N-0 and N-1 conditions for 2015 and 2016 base and sensitivity study scenarios.
- Transient stability analysis for 2016 summer peak, summer light and winter peak study scenarios.

It is concluded that:

- For all the study cases, there is no voltage violation under N-0 and N-1 conditions.
- Under N-0 conditions, there are three study scenarios (Case 7, 15 and 16) where potential N-0 overloads were observed on line 7L27. These overloads are manageable through generation dispatch adjustments in the Northwest Region in accordance with the ISO Real Time Transmission Constraint Management Rule 302.1 utilizing effective

generators in the region. The generator effectiveness factors are provided in Attachment G.

- Under N-1 condition, the 144kV line 7L27 is the most constrained transmission line and it presents thermal violations under a number of contingencies including those of lines 9L11, 9L15, 7L12, 7L51, 7L04, 7L106 and 7L131; and outage of the largest generator at Daishowa power station.
- The line loadings below the respective line's emergency rating as measured in current will be managed by AESO and TFO real-time operating practice. The line loading of 7L27 and 7L75 exceeding emergency rating as measured in current requires RAS mitigation.
- Sensitivity base cases showed exacerbated overloads on the 144kV network.
- The system remained in synchronism when subjected to transient disturbances under all simulated contingencies after the incorporation of the Project.

It is recommended that:

- AESO develop procedures to manage N-0 overloads.
- Develop appropriate RAS design to mitigate thermal violations of 7L27 and 7L75.

7. Short-Circuit Analysis

7.1. Pre-Connection

The short-circuit current levels[4] at substations near the project location for the 2015 winter peak base case (Pre-connection, Case 2) are presented in Table 28.

Table 28: Summary of Short-Circuit Current Levels – Pre-Connection (2015WP- Case 2)

Substation Name and Number	Base Volt (kV)	Base Volt (kV)	Fault Volt (p.u.)	3-Φ Fault (KA)	Positive Sequence Impedance ($R_1 + j X_1$) (p.u.)	1- Φ Fault (kA)	Zero Sequence Impedance ($R_0 + j X_0$) (p.u.)
Brock 232S	1074	240	1.108	4.71	0.011328+j0.055536	4.56	0.006761+j0.062061
Wesley Creek 834S	1080	240	1.108	5.18	0.010485+j0.050484	5.48	0.002297+j0.043449
Wesley Creek 834S	1082	144	1.106	9.45	0.010498+j0.047904	10.95	0.001255+j0.029218
West Peace River 793S	1085	144	1.109	5.77	0.027328+j0.075709	3.84	0.057004+j0.194419
Little Smoky 813S	1163	240	1.10	6.32	0.010499+j0.040682	6.48	0.003118+j0.039261
Louis Creek 809S	1260	240	1.083	8.74	0.007914+j0.028874	8.96	0.002973+j0.027862

7.2. Post-Connection

7.2.1. 2015 Winter Peak – Case 4 (One Shell Carmon Creek Unit)

The short-circuit current levels at substations near the project location for the 2015 winter peak base case (Post Connection, Case 4) are presented in Table 29. The short circuit current at the 240kV bus of Wesley Creek 834S increases by about 2 kA due to the addition of one generating unit at the Carmon Creek Cogeneration Project.

[4] Short-circuit current studies were based on modeling information provided to the AESO by third parties. The authenticity of the modeling information has not been validated. Fault levels could change as a result of system developments, new customer connections, or additional generation in the area. It is recommended that these changes be monitored and fault levels reviewed to ensure that the fault levels are within equipment operating limits. The information provided in this study should not be used as the sole source of information for electrical equipment specifications or for the design of safety-grounding systems.

Table 29: Summary of Short-Circuit Current Levels – Post Connection (2015WP- Case 4)

Substation Name and Number	Base Volt (kV)	Base Volt (kV)	Fault Volt (p.u.)	3-Φ Fault (KA)	Positive Sequence Impedance ($R_1 + j X_1$) (p.u.)	1- Φ Fault (kA)	Zero Sequence Impedance ($R_0 + j X_0$) (p.u.)
Brock 232S	1074	240	1.108	6.25	0.006652+j0.042079	6.86	0.002629+j0.031158
Wesley Creek 834S	1080	240	1.108	6.66	0.006535+j0.03937	7.38	0.001968+j0.028296
Wesley Creek 834S	1082	144	1.106	11.03	0.007429+j0.041312	12.95	0.001034+j0.023426
West Peace River 793S	1085	144	1.109	6.11	0.025249+j0.071446	3.97	0.056674+j0.190655
Little Smoky 813S	1163	240	1.10	6.60	0.009634+j0.038991	6.68	0.003173+j0.039106
Louis Creek 809S	1260	240	1.083	8.96	0.007531+j0.028245	9.11	0.002974+j0.02786

7.2.2. 2015 Winter Peak – Case 5 (Two Shell Carmon Creek Units)

The short-circuit current levels at substations near the project location for the 2015 winter peak base case (Post Connection, Case 5) are presented in Table 30. The short circuit current at the 240kV bus of Wesley Creek 834S increases by about 3kA due to the addition of two generating units at the Carmon Creek Cogeneration Project.

Table 30: Summary of Short-Circuit Current Levels – Post Connection (2015WP- Case 5)

Substation Name and Number	Base Volt (kV)	Base Volt (kV)	Fault Volt (p.u.)	3-Φ Fault (KA)	Positive Sequence Impedance ($R_1 + j X_1$) (p.u.)	1- Φ Fault (kA)	Zero Sequence Impedance ($R_0 + j X_0$) (p.u.)
Brock 232S	1074	240	1.104	7.82	0.004512+j0.03373	8.98	0.001584+j0.02079
Wesley Creek 834S	1080	240	1.1015	8.09	0.004718+j0.03248	8.96	0.002022+j0.02323
Wesley Creek 834S	1082	144	1.1036	12.28	0.005918+j0.03719	14.34	0.056605+j0.18939
West Peace River 793S	1085	144	1.102	6.33	0.024226+j0.06878	4.03	0.056605+j0.18939
Little Smoky 813S	1163	240	1.0943	6.75	0.009291+j0.03803	6.77	0.003192+j0.03905
Louis Creek 809S	1260	240	1.0797	9.05	0.007370+j0.02786	9.16	0.002975+j0.02785

7.2.3. 2016 Winter Peak – Case 9 (Three Shell Carmon Creek Units)

The short-circuit current levels at substations near the project location for the 2016 winter peak base case (Post-connection, Case 9) are presented in Table 31. The short circuit current at the 240kV bus of Wesley Creek 834S increases by less than 5kA due to the addition of three generating units at the Carmon Creek Cogeneration Project.

Table 31: Summary of Short-Circuit Current Levels – Post Connection (2016WP- Case 9)

Substation Name and Number	Base Volt (kV)	Base Volt (kV)	Fault Volt (p.u.)	3-Φ Fault (KA)	Positive Sequence Impedance ($R_1 + j X_1$) (p.u.)	1- Φ Fault (kA)	Zero Sequence Impedance ($R_0 + j X_0$) (p.u.)
Brock 232S	1074	240	1.104	9.491	0.003701+j0.027779	11.620	0.000845+j0.012629
Wesley Creek 834S	1080	240	1.099	9.518	0.004046+j0.027523	10.594	0.002106+j0.019247
Wesley Creek 834S	1082	144	1.1	13.361	0.005360+j0.034096	15.555	0.001031+j0.019965
West Peace River 793S	1085	144	1.094	6.488	0.024024+j0.066425	4.069	0.056560+j0.188401
Little Smoky 813S	1163	240	1.09	6.851	0.009253+j0.037291	6.831	0.003209+j0.039015
Louis Creek 809S	1260	240	1.074	9.109	0.007342+j0.027548	9.190	0.002976+j0.027858

7.2.4. 2024 Winter Peak - Case 10 (Long-term Short Circuit Assessment)

The short-circuit current levels for 2024 winter peak base case are presented in Table 32.

Table 32: Summary of Short-Circuit Current Levels – Post Connection (2024WP- Case 10)

Substation Name and Number	Base Volt (kV)	Base Volt (kV)	Fault Volt (p.u.)	3-Φ Fault (KA)	Positive Sequence Impedance ($R_1 + j X_1$) (p.u.)	1- Φ Fault (kA)	Zero Sequence Impedance ($R_0 + j X_0$) (p.u.)
Brock 232S	1074	240	1.104	9.996	0.003706+j0.026310	12.160	0.000771+j0.012396
Wesley Creek 834S	1080	240	1.094	10.145	0.003979+j0.025639	11.422	0.001805+j0.017170
Wesley Creek 834S	1082	144	1.125	13.429	0.005057+j0.034689	16.113	0.001099+j0.017554
West Peace River 793S	1085	144	1.093	6.618	0.023120+j0.065141	5.005	0.030264+j0.133037
Little Smoky 813S	1163	240	1.086	8.956	0.006677+j0.028403	9.798	0.002094+j0.021743
Louis Creek 809S	1260	240	1.045	10.214	0.006113+j0.023841	9.490	0.003888+j0.030178

8. Project Interdependencies

Alternative 2 performance in conjunction with the recommended temporary RAS and operating procedures comply with the Alberta Reliability Criteria and Standards. RAS and Operating Procedures will be developed by the AESO to mitigate the identified thermal overloads on lines 7L27/7L75 following the outage of the 240kV line 9L11 with 3x230 MW generators at Shell Carmon Creek. The recommended temporary RAS will trip up to two Carmon Creek generators to remove thermal violation of 7L27 and 7L75.

The observed potential N-0 overloads beyond the nominal continuous thermal loading of line 7L27 will be managed in real time through the AESO Transmission Constraint Management Rule 302.1 for the Northwest Region.

The AESO 2013 Long-term Transmission Plan (LTP) was released in January 2014. The 2013 LTP includes Shell Canada Carmon Creek at full 690 MW capacity (three units) as the expected generation development. The 2013 LTP system upgrades, specifically the 240 kV transmission line from 834S Wesley Creek to Little Smokey South planned for near-term needs, will remove thermal violations on the 144 kV system observed in this Connection Study.

9. Summary and Conclusion

Shell Canada Ltd proposes to develop the Shell Carmon Creek Cogeneration project (The Project). The Project ultimate capacity is 690 MW and consists of three identical gas-fired cogeneration units with a rating of 230 MW each. Shell Carmon Creek is to be located in the vicinity of LSD 17-84-19-W5M in the Peace River area (Planning Area 19). The In Service Date (ISD) of the Project is in July 2015 for the first unit, January 2016 for the second unit and Q4, 2016 for unit #3.

Two transmission connection alternatives were identified for the connection of the Project:

- Alternative 1 – In/Out 240kV connection to line 9L15 between Wesley Creek 834S and Brintnell 876S
- Alternative 2 - a new double circuit 240kV line (or two single circuit 240KV lines) in radial connection to the Wesley Creek 834S

Detailed studies were conducted for the preferred Alternative 2.

This Engineering Study Report (ESR) summarizes the engineering studies and analysis conducted to assess the performance of the AIES with the addition of the Project under 2015 study scenarios using winter peak and summer peak conditions, and 2016 study scenarios using winter peak, summer peak and summer light load conditions. The system is analyzed under Category A (N-0) and Category B (N-1) contingencies. The major observations are outlined below:

- Under normal operating conditions (N-0), there are potential overloads observed on the existing 144 kV line 7L27 for the following three N-G scenarios:
    - 2016 summer peak with full seasonal capacity at the Shell Carmon Creek Cogen project and HR Milner #1 generator offline as N-G but Daishowa #1A online
    - 2016 summer peak with full seasonal capacity at the Shell Carmon Creek Cogen project and HR Milner #1 generator online but Daishowa #1A offline as N-G;
    - 2016 summer light with full seasonal capacity at the Shell Carmon Creek Cogen project and HR Milner #1 generator online but Daishowa #1A offline as N-G

- The overloads under N-0 condition are manageable through generation dispatch adjustments in the Northwest Region utilizing the generation effectiveness factors according to the ISO Transmission Constraint Management Rule 302.1.

- The most critical contingency is the outage of line 9L11. Under this contingency, lines 7L27, 7L75 and 7L73 experience overloads at various degrees for different study scenarios. This is due to the large amount of additional power from the Project to be transmitted via the existing 144kV network in the region.

- The loss of lines 9L15, 7L12, 7L51, 7L131, 7L04 or 7L106; and the larger generating unit at Daishowa power station can also create overloads on line 7L27 to various extents.

- The most constrained transmission element is line 7L27, which experiences overloads under a number of N-1 contingencies in the surrounding area.

- When the larger unit at Daishowa power station is offline as N-G consideration, the observed overloads on line 7L27 are increased during various contingencies.

- The 144 kV line loadings below the emergency ratings of the lines, as measured in current, will be managed by AESO and TFO real-time operating practice. The line loading of 7L27 and 7L75 exceeding emergency rating as measured in current requires RAS mitigation.

- Line 7L80 thermal violation in post 7L20 contingency is an existing system issue which is experienced when HR Milner generation (151MW) is in service. The 7L80 thermal overload is being managed by the AESO and TFO real time operating practice. This project does not exacerbate 7L80 thermal violation.

- Line 7L03 thermal violation in post 7L22 contingency under 2016 summer light loading condition, is an existing system issue that is being managed by the AESO and TFO real time operating practice. This project does not exacerbate 7L03 thermal violation.

- The transient stability analysis is conducted for 2016 summer peak, 2016 winter peak and 2016 summer light study scenarios. The simulation results show that the system is stable under all simulated contingencies.

The study recommendations are as follows:

- Connect the Project to the 240kV Wesley Creek 834S substation via two new 240kV transmission circuits with a minimum summer rating of 800 MVA.

- Develop operational procedures to manage the observed N-0 overloads. The observed N-0 loadings beyond the nominal continuous loading of 7L27 are manageable through generation dispatch adjustments in the Northwest Region utilizing the generator effectiveness factors according to the ISO Transmission Constraint Management Rule 302.1.

- The 144 kV line loadings below the emergency ratings of the lines will be managed by AESO and TFO real-time operating practice.

- Develop temporary remedial action scheme (RAS) for the Carmon Creek generation connection to alleviate thermal violations on the 7L27 144kV line caused by the different contingencies as observed in the connection study. The RAS action to alleviate thermal violation of 7L27 would also remove thermal violation of 7L75 since both circuits are in series in the path to load centre in the Grande Prairie loop.

- The AESO 2013 LTP projects, more specifically the 240kV transmission line from Wesley Creek 834S to Little Smokey South planned for near-term needs, will remove N-0 and N-1 thermal violations of the 144kV system and will facilitate the removal of the recommended temporary RAS.

Attachment A

Dynamic Data of all Equipment Proposed for Connection

Table A-9-1: Generator Model GENROU

GENROU												
T'D0	T'Q0	T''Q0	H	DAMP	XD	XQ	X'D	X'Q	X''D	XL	*S(1,0)*	*S(1.2)*
4.77	0.42	0.069	6.5	0.00	2.286	2.181	0.344	0.519	0.244	0.202	0.036	0.220

Table A-9-2: Generator Exciter Model ST6B

ST6B												
TR	KPA	KIA	KDA	TDA	VAMAX	VAMIN	KFF	KM	KCI	KLR	*ILR*	*VRMAX*
0.012	23.5	4.7	0.00	0.00	6.3	-5.00	1.00	1.00	1.00	30.00	3.74	6.3
VRMIN	KG	TG										
-5.3	1.00	0.02										

Table A-9-3: Governor Model GGOV1

GGOV1									
R	TPELEC	MAXER	R MINERR	KPGOV	KIGOV	KDGOV	TDGOV	VMAX	VMIN
0.04	0.1	0.05	-0.05	27.6	7.7	0	1	1	0.1
TACT	KTURB	WFNL	TB	TC	TENG	TFLOAD	KPLOAD	KILOAD	LDREF
0.3	1.24	0.196	0.59	0	0	3	1	0.2	99
DM	ROPEN	RCLOSE	KIMW	ASET	KA	TA	TRATE	DB	
0	0.1	-0.1	0	0.01	0	0.1	250	0	
TSA	TSB	RUP	RDOWN						
3	5	99	-99						

Table A-9-4: Power System Stabilizer PSS2B Module

PSS2B											
TW1	TW2	T6	TW3	TW4	T7	KS2	KS3	T8	T9	KS1	T1
10.00	10.0	0.000	10.0	0.00	10.00	0.70	1.00	0.60	0.12	20.0	0.14
T2	T3	T4	T10	T11	VS1MAX	VS1MIN	VS2MAX	VS2MIN	VSTAX	VSMIN	
0.014	0.14	0.014	0.00	0.000	0.5	-0.5	2.00	-2.00	0.100	-0.100	

Attachment B

Pre-Connection Power Flow Analysis Results (Case 1 to 2)

Pre-Project Power Flow Plot
2015 Summer Peak (Case 1)

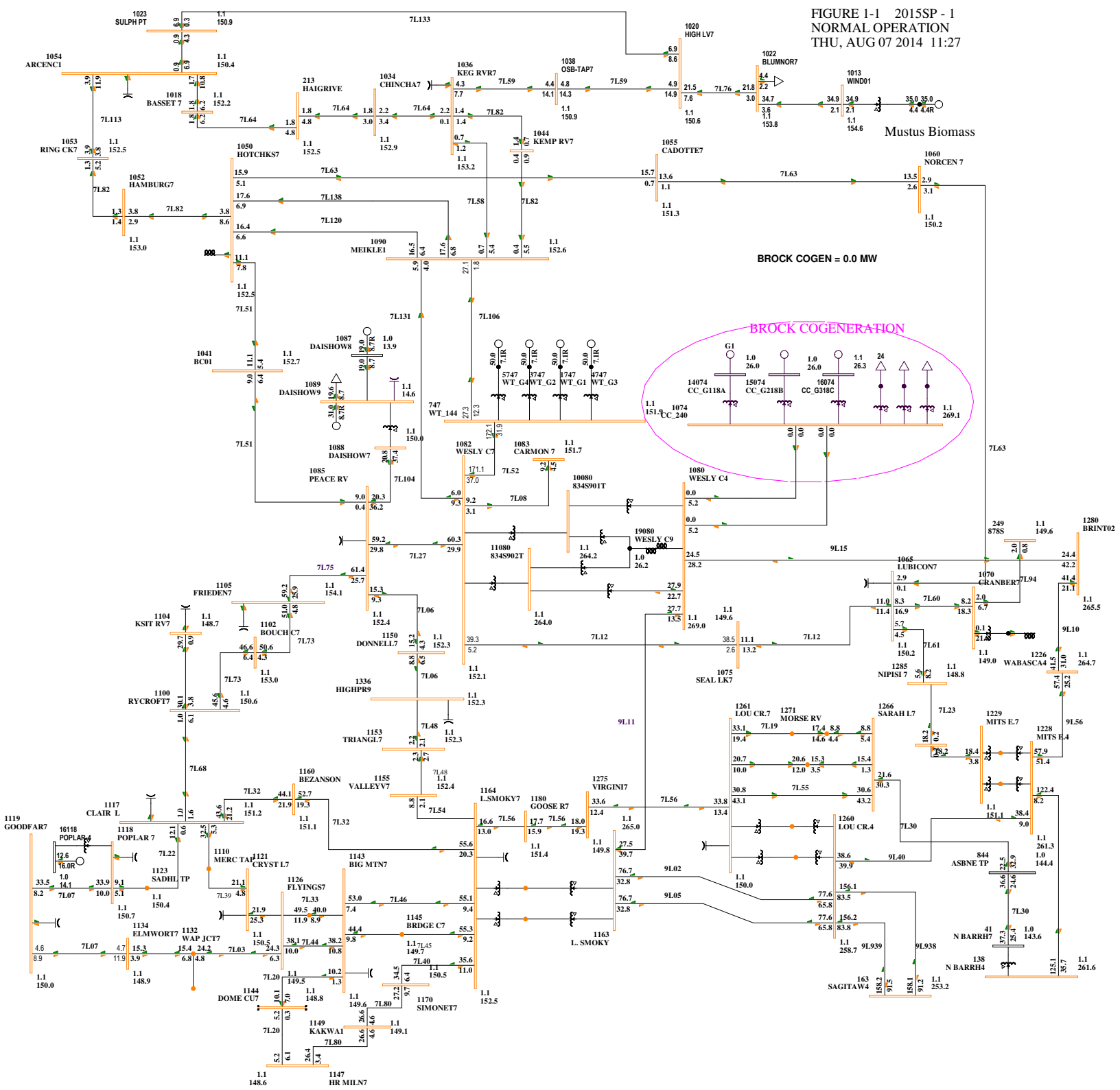


FIGURE 1-1 2015SP - 1
NORMAL OPERATION
THU, AUG 07 2014 11:27
Mustus Biomass
BROCK COGEN = 0.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1044 KEMP RV7
1055 CADOTTE7
1060 NORCEN 7
1050 HOTCHKS7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
1082 WESLY C7
1083 CARMON 7
1080 WESLY C4
10080 834S901T
19080 WESLY C9
11080 834S902T
1065 LUBICON7
1070 CRANBER7
1280 BRINT02
249 878S
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1150 DONNELL7
1336 HIGHPR9
1100 RYCROFT7
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1118 POPLAR 7
1119 GOODFAR7
16118 POPLAR 4
1117 CLAIR L
1110 MERC TAP
1121 CRYST L7
1123 SADHL TP
1126 FLYINGS7
1143 BIG MTN7
1145 BRDGE C7
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1163 L. SMOKY
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1075 SEAL LK7
1285 NIPISI 7
1226 WABASCA4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1170 SIMONET7
163 SAGITAW4
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
7L63
7L82
7L64
7L59
7L76
7L58
7L106
7L131
7L51
7L27
7L75
7L104
7L52
7L08
7L12
9L15
7L94
7L60
7L61
9L10
7L06
7L73
7L68
7L32
7L48
7L54
7L56
9L11
7L23
9L56
7L30
9L40
9L02
9L05
9L939
9L938
7L07
7L03
7L20
7L80
7L44
7L46
7L33
7L39
7L22
7L55

Pre-Project Power Flow Plot
2015 Winter Peak (Case 2)

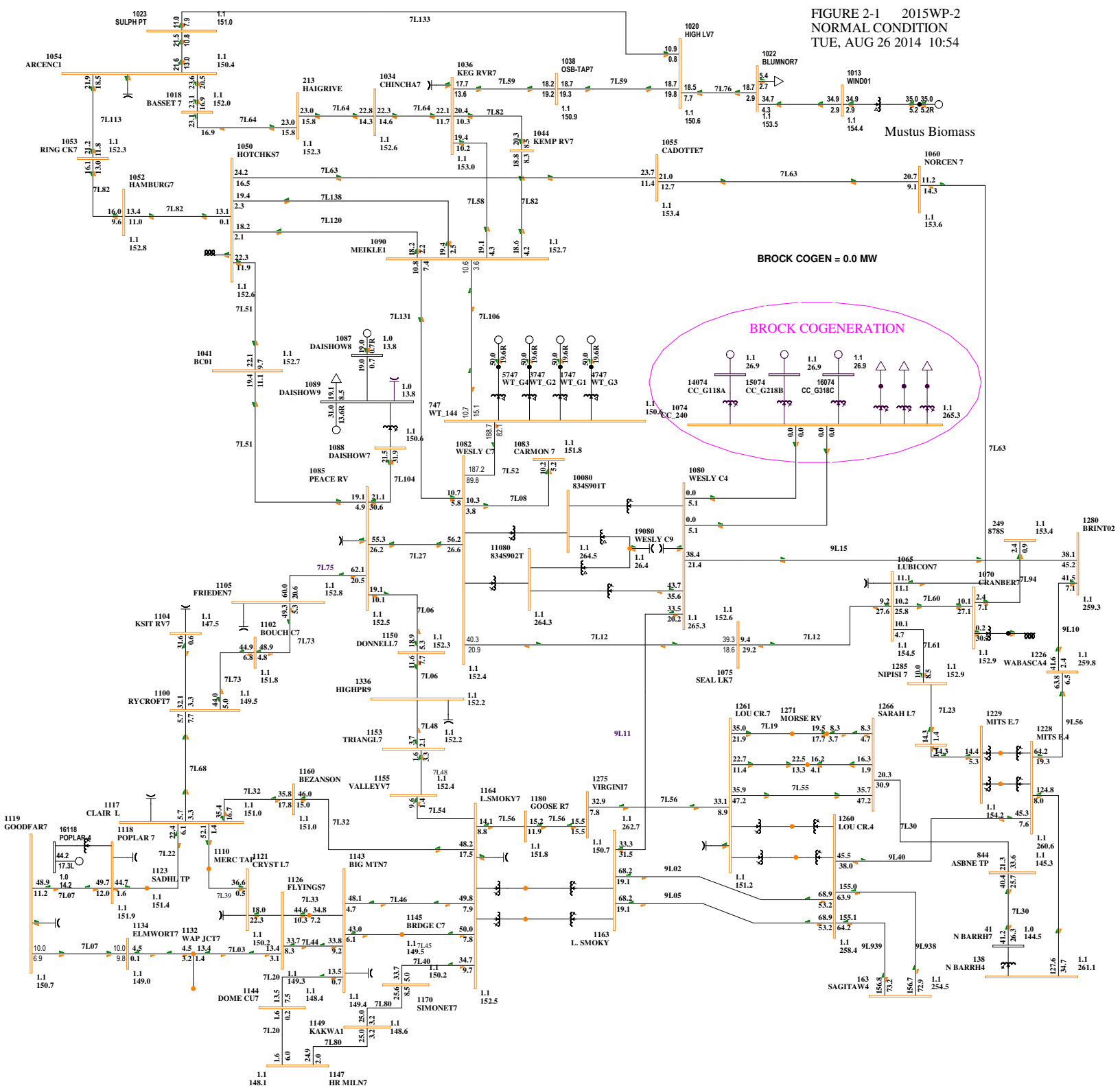


FIGURE 2-1 2015WP-2
NORMAL CONDITION
TUE, AUG 26 2014 10:54
Mustus Biomass
BROCK COGEN = 0.0 MW
BROCK COGENERATION
1023 SULPH PT
7L133
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1054 ARCENC1
1018 BASSET 7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
7L113
7L64
7L59
7L76
7L82
1053 RING CK7
1044 KEMP RV7
1055 CADOTTE7
1060 NORCEN 7
1050 HOTCHKS7
1052 HAMBURG7
7L63
7L138
7L58
7L120
7L82
1090 MEIKLE1
7L131
7L106
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
7L104
1041 BC01
7L51
7L27
7L75
1105 FRIEDEN7
1102 BOUCH C7
7L73
1104 KSIT RV7
1100 RYCROFT7
7L68
1117 CLAIR L
1118 POPLAR 7
1119 GOODFAR7
16118 POPLAR 4
1123 SADHL TP
7L22
7L07
1134 ELMWORT7
1132 WAP JCT7
7L03
1144 DOME CU7
1149 KAKWA1
7L80
1147 HR MILN7
1110 MERC TAP
1121 CRYST L7
7L39
1126 FLYINGS7
7L33
7L44
7L20
1160 BEZANSON
7L32
1155 VALLEYV7
1153 TRIANGL7
7L48
1336 HIGHPR9
7L06
1150 DONNELL7
7L73
7L52
1082 WESLY C7
1083 CARMON 7
7L08
10080 834S901T
11080 834S902T
19080 WESLY C9
1080 WESLY C4
7L12
1075 SEAL LK7
1164 L.SMOKY7
1180 GOOSE R7
7L56
7L54
1143 BIG MTN7
1145 BRDGE C7
7L46
7L45
1170 SIMONET7
1163 L. SMOKY
1275 VIRGINI7
9L02
9L05
9L11
1261 LOU CR.7
1271 MORSE RV
7L19
1260 LOU CR.4
7L55
9L40
1266 SARAH L7
7L23
7L30
1229 MITS E.7
1228 MITS E.4
9L56
844 ASBNE TP
41 N BARRH7
138 N BARRH4
9L939
9L938
163 SAGITAW4
1065 LUBICON7
1070 CRANBER7
7L94
7L60
7L61
1226 WABASCA4
1285 NIPISI 7
9L10
9L15
249 878S
1280 BRINT02
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3

Attachment C

Post-Project Power Flow Analysis Results (Cases 3 to 9)

Post-Project Power Flow Plot
2015 Summer Peak (Case 3)

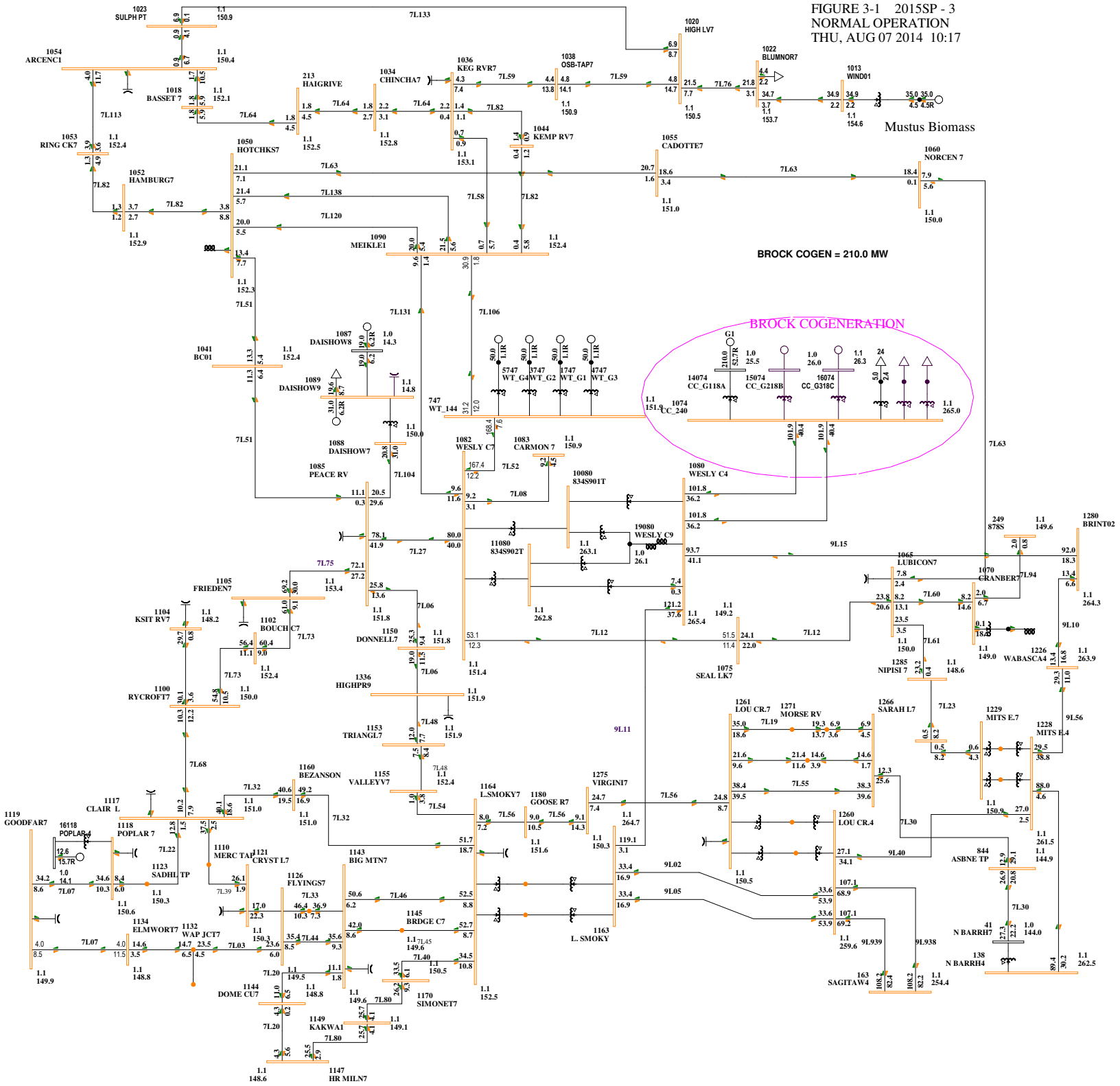
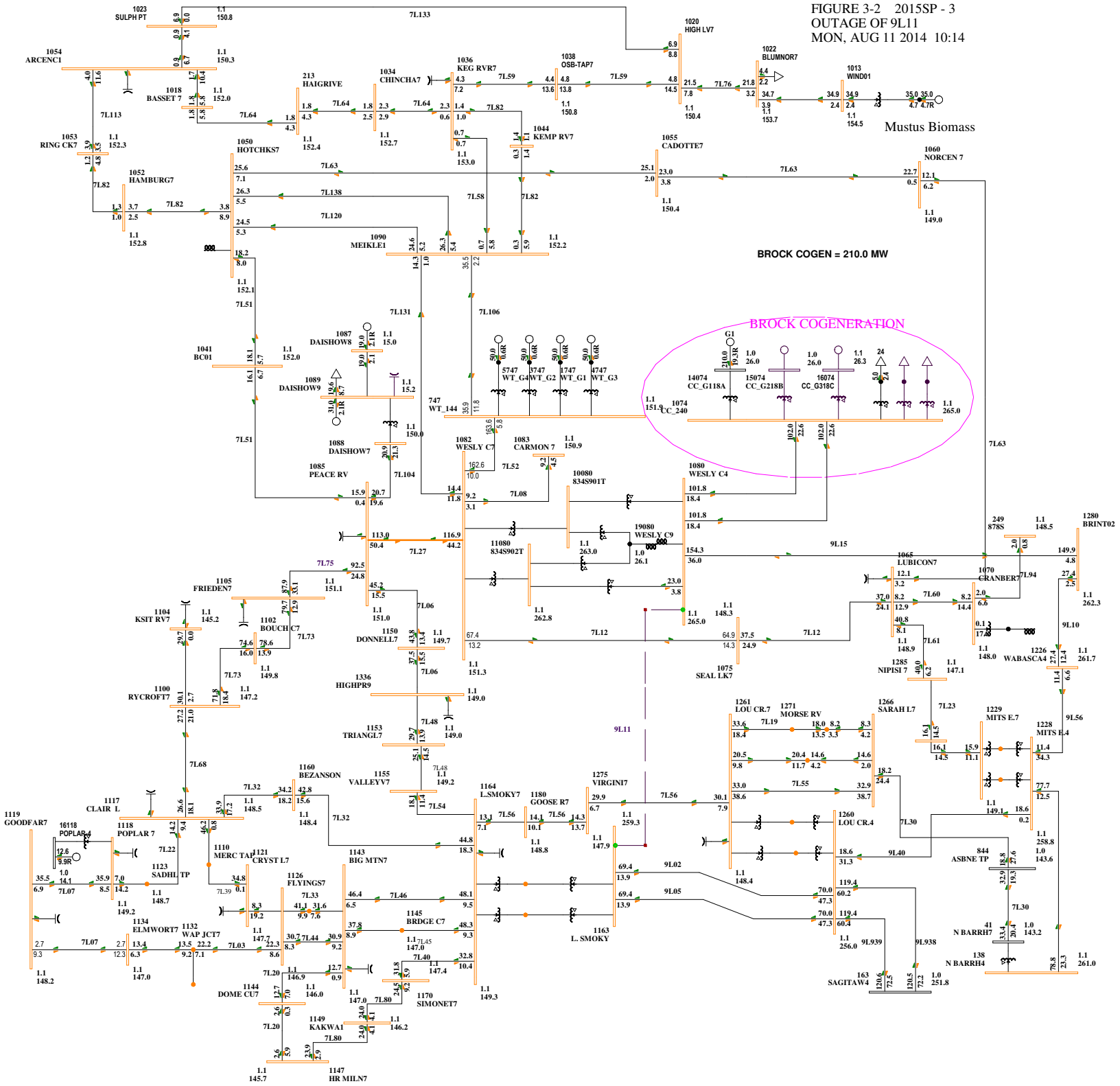


FIGURE 3-1 2015SP - 3
NORMAL OPERATION
THU, AUG 07 2014 10:17
Mustus Biomass
BROCK COGEN = 210.0 MW
BROCK COGENERATION
1023 SULPH PT
7L133
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1054 ARCENC1
1018 BASSET 7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1053 RING CK7
1050 HOTCHKS7
1052 HAMBURG7
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1041 BC01
1085 PEACE RV
1082 WESLY C7
1083 CARMON 7
1080 WESLY C4
10080 834S901T
19080 WESLY C9
11080 834S902T
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
G1
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1100 RYCROFT7
1117 CLAIR L
1118 POPLAR 7
16118 POPLAR 4
1119 GOODFAR7
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1143 BIG MTN7
1145 BRDGE C7
1170 SIMONET7
1164 L.SMOKY7
1180 GOOSE R7
1163 L. SMOKY
1275 VIRGINI7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
1065 LUBICON7
1070 CRANBER7
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
249 878S
1280 BRINT02
7L63
9L15
9L11
9L10
9L56
9L02
9L05
9L40
9L939
9L938
7L30
7L94
7L60
7L61
7L23
7L12
7L56
7L54
7L48
7L32
7L68
7L75
7L73
7L06
7L27
7L08
7L52
7L104
7L51
7L131
7L106
7L58
7L82
7L63
7L64
7L59
7L76
7L113
7L138
7L120
7L80
7L46
7L33
7L44
7L45
7L40
7L20
7L07
7L03
7L22
7L39

FIGURE 3-2 2015SP - 3
OUTAGE OF 9L11
MON, AUG 11 2014 10:14


Mustus Biomass
BROCK COGEN = 210.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
1082 WESLY C7
1083 CARMON 7
10080 834S901T
11080 834S902T
19080 WESLY C9
1080 WESLY C4
1074 CC_240
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
747 WT_144
G1
1065 LUBICON7
1070 CRANBER7
249 878S
1280 BRINT02
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1229 MITS E.7
1228 MITS E.4
1260 LOU CR.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
1105 FRIEDEN7
1104 KSIT RV7
1102 BOUCH C7
1100 RYCROFT7
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1117 CLAIR L
1118 POPLAR 7
16118 POPLAR 4
1119 GOODFAR7
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1143 BIG MTN7
1145 BRDGE C7
1163 L. SMOKY
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1170 SIMONET7
1141 CHETWYND
1140 CHETWYND 7
1139 CHETWYND 4
1142 CHETWYND 2
1143 CHETWYND 3
1144 CHETWYND 1
1145 CHETWYND 5
1146 CHETWYND 6
1147 CHETWYND 8
1148 CHETWYND 9
1149 CHETWYND 10
1150 CHETWYND 11
1151 CHETWYND 12
1152 CHETWYND 13
1153 CHETWYND 14
1154 CHETWYND 15
1155 CHETWYND 16
1156 CHETWYND 17
1157 CHETWYND 18
1158 CHETWYND 19
1159 CHETWYND 20

Post-Project Power Flow Plot
2015 Winter Peak (Case 4)

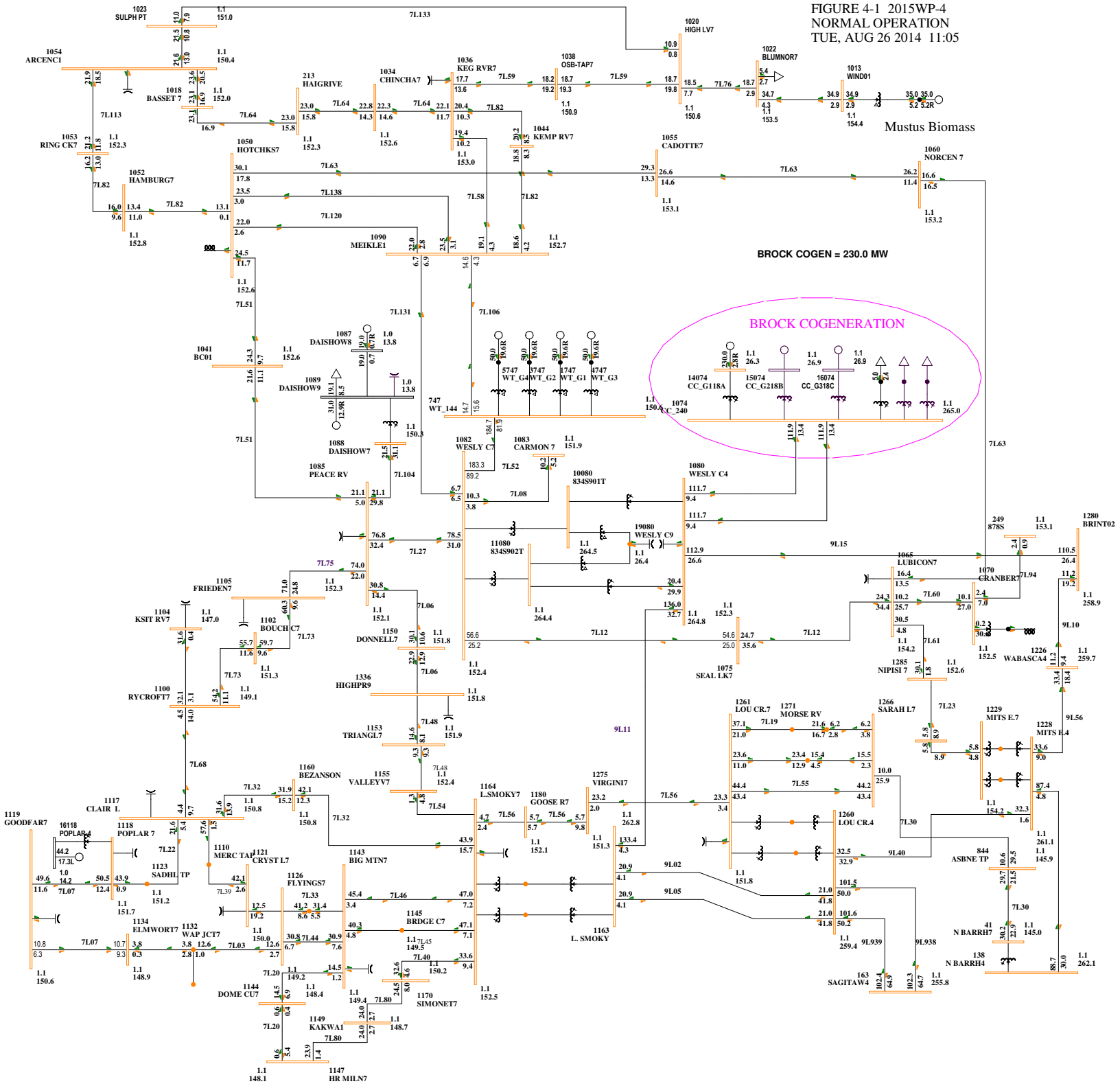


FIGURE 4-1 2015WP-4
NORMAL OPERATION
TUE, AUG 26 2014 11:05
Mustus Biomass
BROCK COGEN = 230.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
1082 WESLY C7
1083 CARMON 7
10080 834S901T
1080 WESLY C4
19080 WESLY C9
11080 834S902T
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
1065 LUBICON7
1070 CRANBER7
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
1280 BRINT02
249 878S
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1100 RYCROFT7
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1229 MITS E.7
1228 MITS E.4
1260 LOU CR.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
1119 GOODFAR7
16118 POPLAR.4
1118 POPLAR 7
1117 CLAIR L
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1143 BIG MTN7
1145 BRDGE C7
1163 L. SMOKY
1132 WAP JCT7
1134 ELMWORT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1170 SIMONET7
163 SAGITAW4
7L133
7L113
7L64
7L82
7L63
7L138
7L120
7L58
7L131
7L106
7L51
7L104
7L52
7L08
7L27
7L75
7L06
7L73
7L12
7L94
7L60
7L61
7L23
7L56
7L54
7L68
7L48
7L32
7L22
7L07
7L03
7L39
7L33
7L46
7L44
7L45
7L40
7L20
7L80
9L15
9L11
9L10
9L56
9L02
9L05
9L40
9L30
9L939
9L938

Post-Project Power Flow Plot
2015 Winter Peak (Case 5)

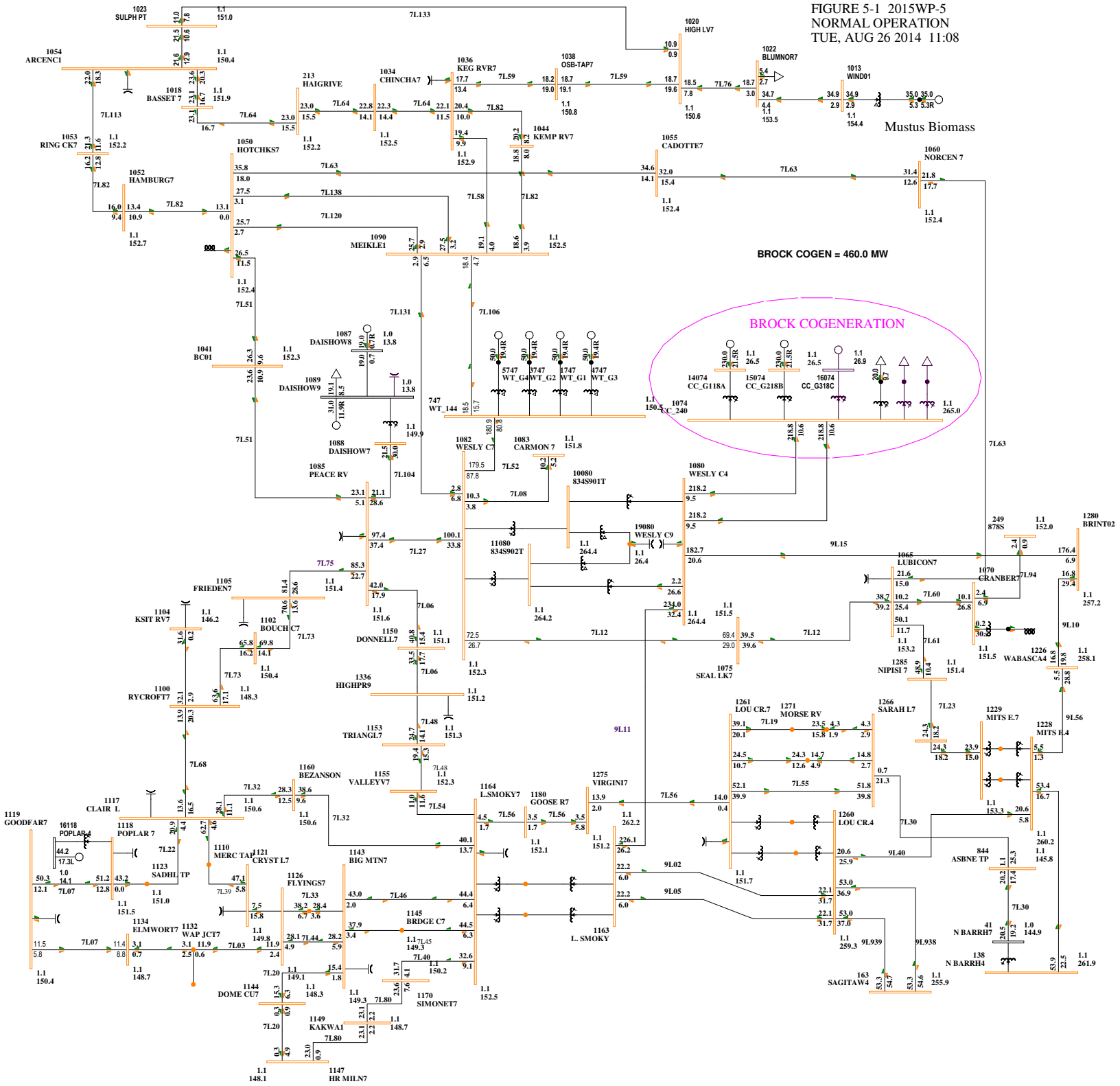


FIGURE 5-1 2015WP-5
NORMAL OPERATION
TUE, AUG 26 2014 11:08
Mustus Biomass
BROCK COGEN = 460.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
1082 WESLY C7
1083 CARMON 7
10080 834S901T
1080 WESLY C4
19080 WESLY C9
11080 834S902T
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
1105 FRIEDEN7
1104 KSIT RV7
1102 BOUCH C7
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
1100 RYCROFT7
1160 BEZANSON
1155 VALLEYV7
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1163 L. SMOKY
1143 BIG MTN7
1145 BRDGE C7
1126 FLYINGS7
1121 CRYST L7
1110 MERC TAP
1117 CLAIR L
1118 POPLAR 7
16118 POPLAR 4
1119 GOODFAR7
1123 SADHL TP
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1170 SIMONET7
1065 LUBICON7
1070 CRANBER7
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
249 878S
1280 BRINT02
7L133
7L113
7L64
7L82
7L63
7L138
7L120
7L58
7L131
7L106
7L51
7L27
7L75
7L104
7L08
7L52
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7L94
7L60
7L61
9L10
7L73
7L06
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7L07
7L03
7L39
7L46
7L33
7L44
7L20
7L80
7L45
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7L54
7L56
7L55
7L19
7L23
9L56
7L30
9L40
9L02
9L05
9L939
9L938

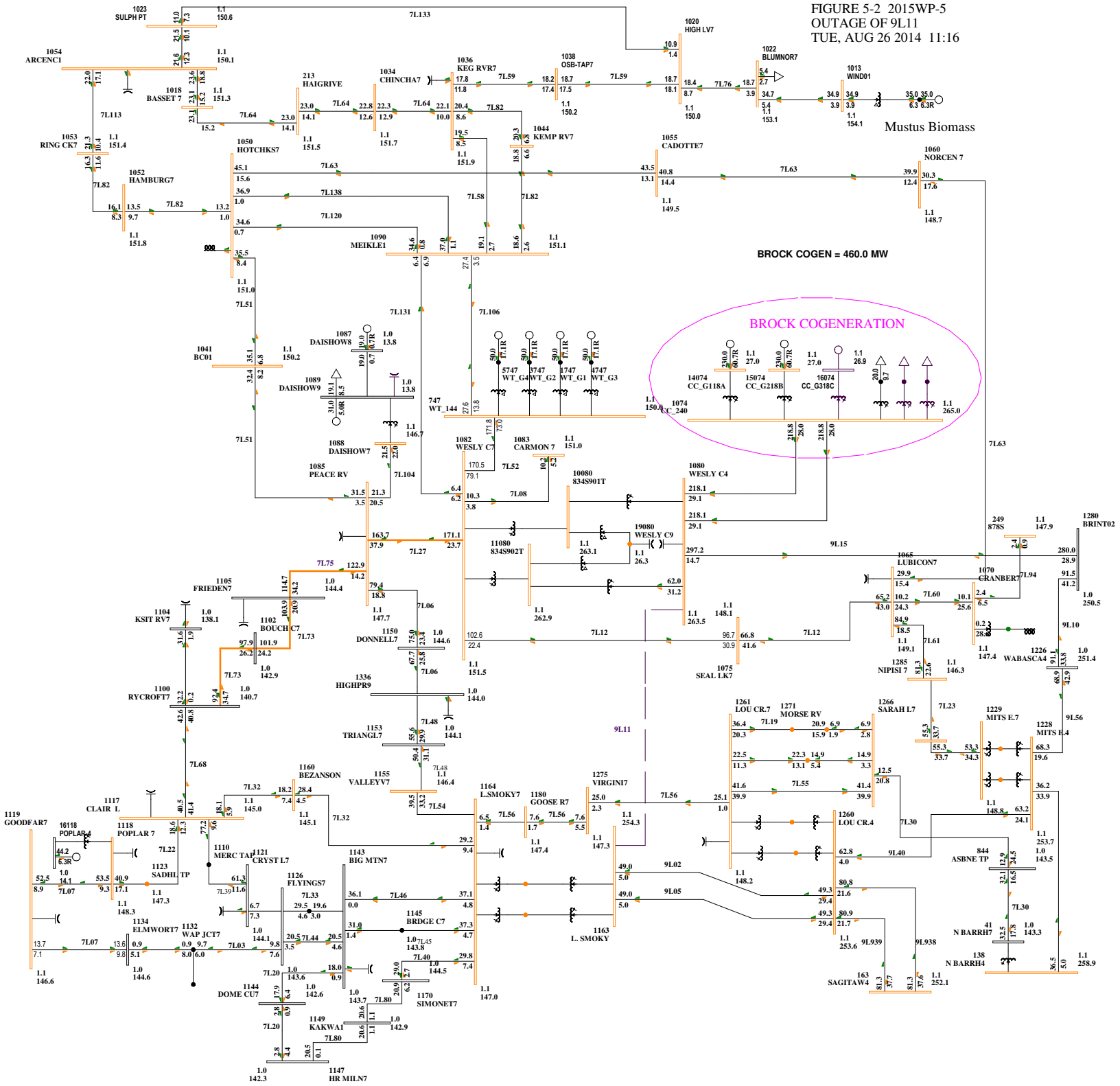
FIGURE 5-2 2015WP-5
OUTAGE OF 9L11
TUE, AUG 26 2014 11:16
Mustus Biomass
BROCK COGEN = 460.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
1082 WESLY C7
1083 CARMON 7
10080 834S901T
1080 WESLY C4
19080 WESLY C9
11080 834S902T
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1100 RYCROFT7
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1117 CLAIR L
1119 GOODFAR7
16118 POPLAR4
1118 POPLAR 7
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1143 BIG MTN7
1145 BRDGE C7
1170 SIMONET7
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1163 L. SMOKY
1261 LOU CR.7
1271 MORSE RV
1260 LOU CR.4
1266 SARAH L7
1075 SEAL LK7
1065 LUBICON7
1070 CRANBER7
1285 NIPISI 7
1226 WABASCA4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
249 878S
1280 BRINT02
7L133
7L113
7L64
7L63
7L82
7L138
7L120
7L58
7L59
7L76
7L51
7L131
7L106
7L104
7L27
7L75
7L73
7L06
7L08
7L52
7L12
9L15
9L11
7L94
7L60
7L61
9L10
7L23
9L56
7L68
7L22
7L32
7L54
7L48
7L56
7L55
9L02
9L05
9L40
7L30
9L939
9L938
7L07
7L03
7L20
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7L44
7L45
7L46
7L33
7L39
7L40

Post-Project Power Flow Plot
2016 Summer Peak (Case 6)

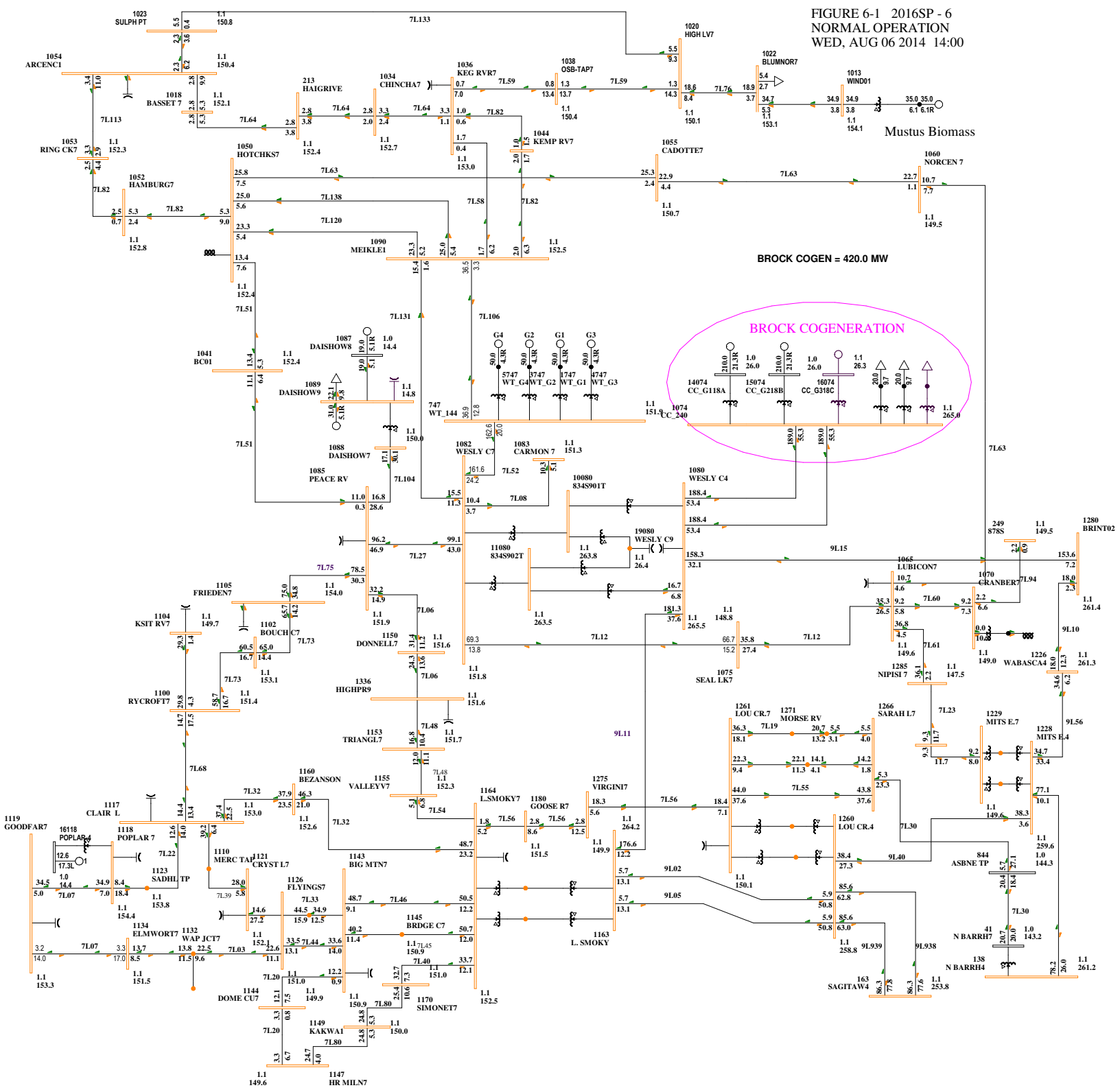
FIGURE 6-1 2016SP - 6
NORMAL OPERATION
WED, AUG 06 2014 14:00
Mustus Biomass
BROCK COGEN = 420.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
1082 WESLY C7
1083 CARMON 7
10080 834S901T
1080 WESLY C4
19080 WESLY C9
11080 834S902T
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1100 RYCROFT7
1336 HIGHPR9
1150 DONNELL7
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1117 CLAIR L
1118 POPLAR 7
16118 POPLAR 4
1119 GOODFAR7
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1143 BIG MTN7
1145 BRDGE C7
1170 SIMONET7
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1163 L. SMOKY
1065 LUBICON7
1070 CRANBER7
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
249 878S
1280 BRINT02
7L133
7L113
7L64
7L82
7L63
7L138
7L120
7L58
7L131
7L106
7L51
7L104
7L27
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7L06
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7L68
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7L22
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7L80
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7L56
7L46
7L44
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7L40
7L39
7L12
7L60
7L61
7L94
7L23
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9L15
9L10
9L56
9L02
9L05
9L40
9L939
9L938
7L30

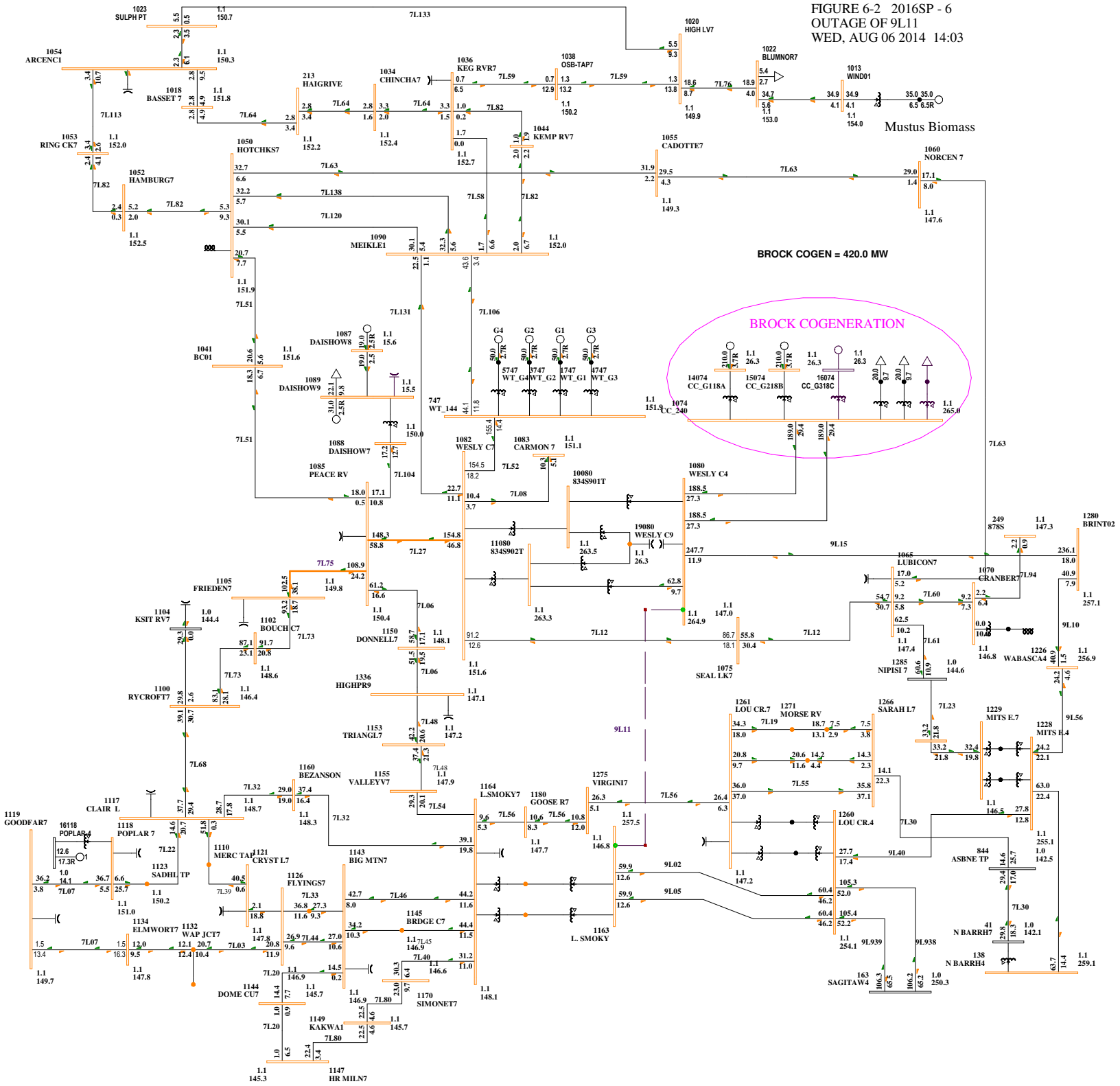
FIGURE 6-2 2016SP - 6
OUTAGE OF 9L11
WED, AUG 06 2014 14:03
Mustus Biomass
BROCK COGEN = 420.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
1082 WESLY C7
1083 CARMON 7
10080 834S901T
1080 WESLY C4
19080 WESLY C9
11080 834S902T
1105 FRIEDEN7
1104 KSIT RV7
1102 BOUCH C7
1150 DONNELL7
1336 HIGHPR9
1100 RYCROFT7
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1117 CLAIR L
1119 GOODFAR7
16118 POPLAR 4
1118 POPLAR 7
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1143 BIG MTN7
1145 BRDGE C7
1170 SIMONET7
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1163 L. SMOKY
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1075 SEAL LK7
1065 LUBICON7
1070 CRANBER7
1285 NIPISI 7
1226 WABASCA4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
249 878S
1280 BRINT02
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
1074 CC_240
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
7L133
7L63
7L64
7L82
7L113
7L138
7L120
7L58
7L131
7L106
7L51
7L104
7L27
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9L15
7L94
7L60
7L61
9L10
7L75
7L06
7L73
7L68
7L32
7L48
7L54
9L11
7L56
7L55
9L02
9L05
9L40
9L939
9L938
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9L56
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7L59
7L76
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7L63
7L138
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7L51
7L104
7L27
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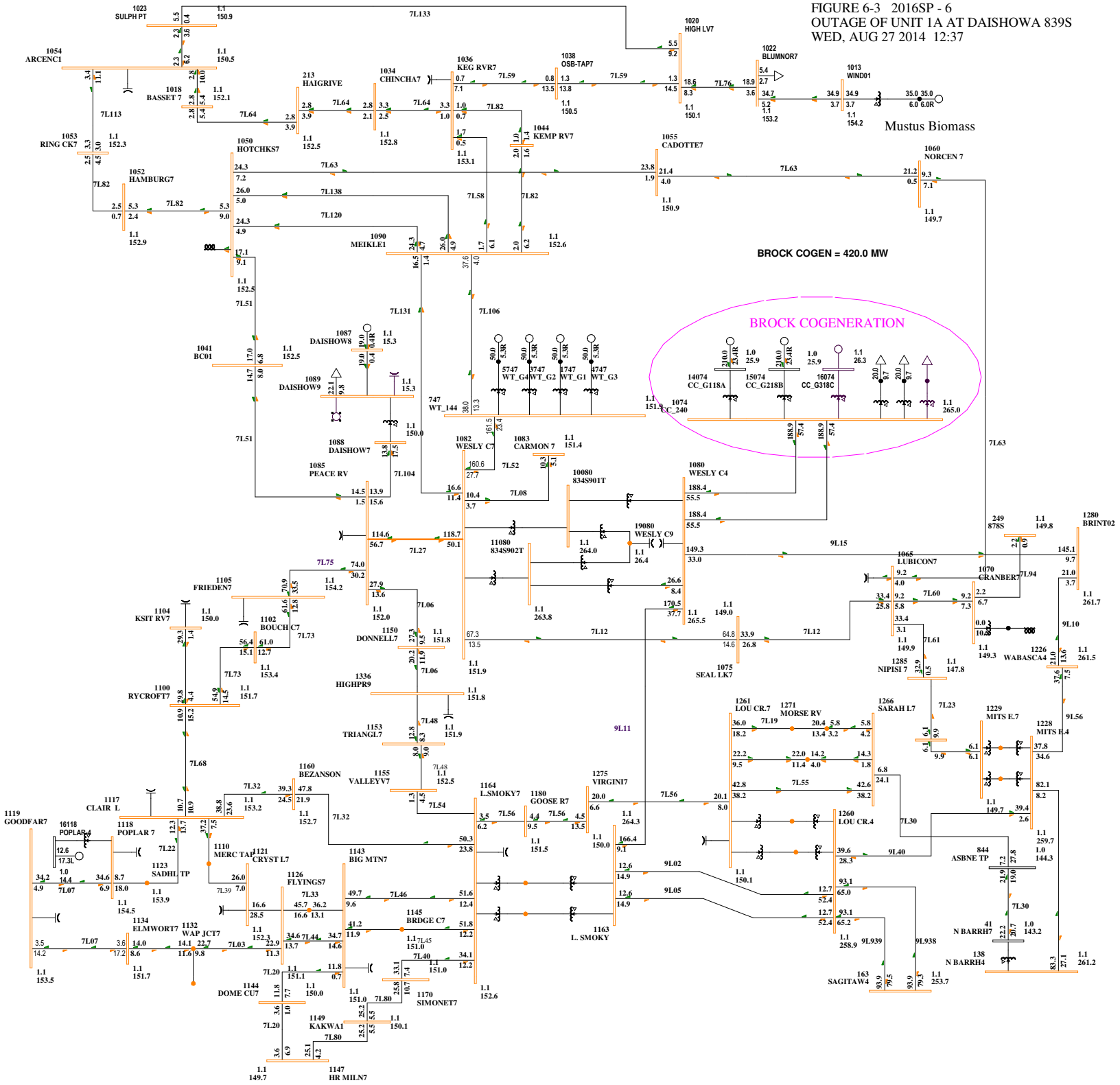
7L59
7L76
7L82
7L58
7L63

FIGURE 6-3 2016SP - 6
OUTAGE OF UNIT 1A AT DAISHOWA 839S
WED, AUG 27 2014 12:37



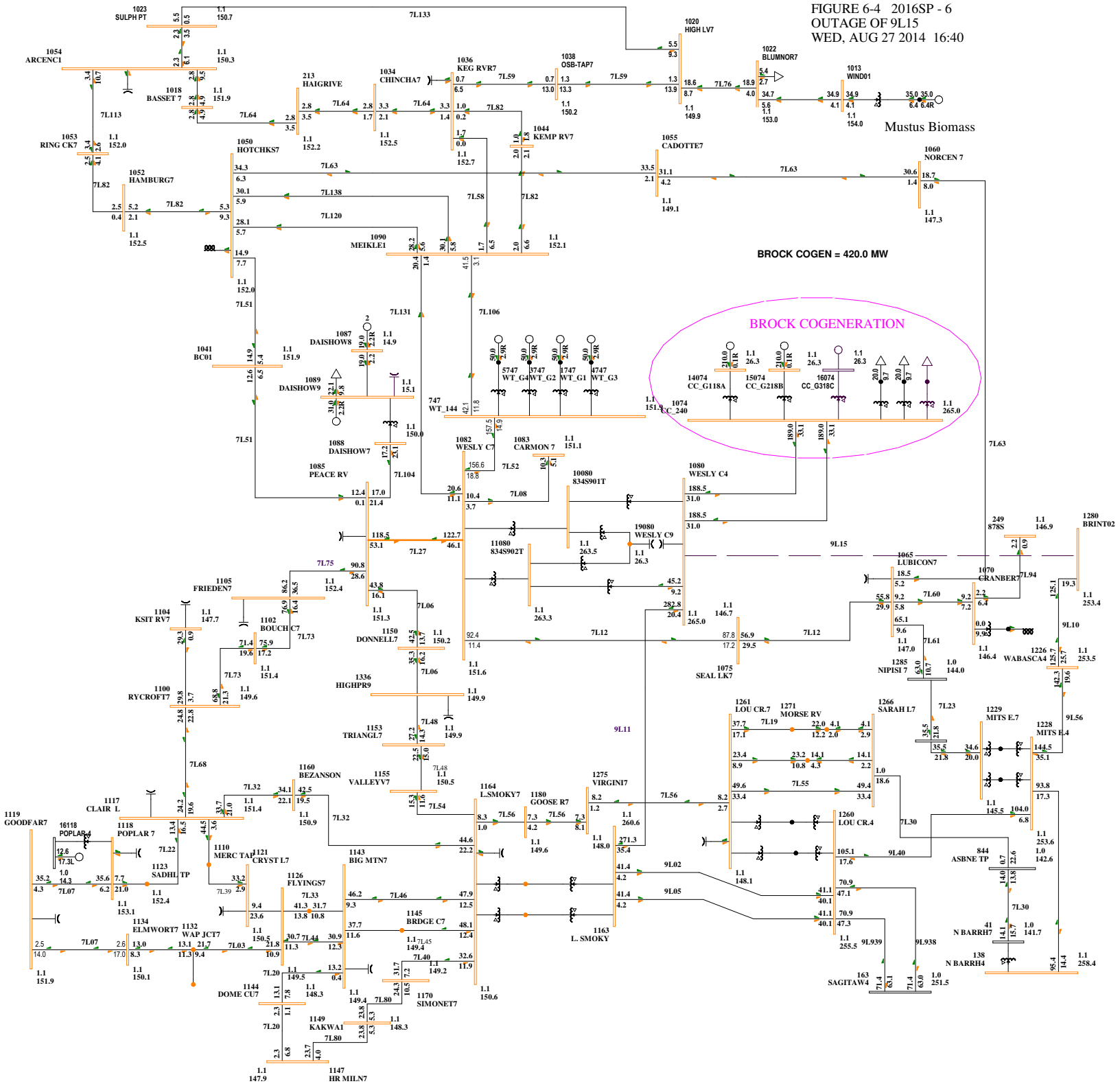


FIGURE 6-4 2016SP - 6
OUTAGE OF 9L15
WED, AUG 27 2014 16:40
Mustus Biomass
BROCK COGEN = 420.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
1082 WESLY C7
1083 CARMON 7
10080 834S901T
1080 WESLY C4
19080 WESLY C9
11080 834S902T
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
1075 SEAL LK7
1065 LUBICON7
1070 CRANBER7
1226 WABASCA4
1285 NIPISI 7
249 878S
1280 BRINT02
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1150 DONNELL7
1336 HIGHPR9
1100 RYCROFT7
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1117 CLAIR L
1118 POPLAR 7
16118 POPLAR 4
1119 GOODFAR7
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1143 BIG MTN7
1145 BRDGE C7
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1170 SIMONET7
1163 L. SMOKY
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
7L133
7L63
7L82
7L64
7L59
7L76
7L113
7L138
7L120
7L58
7L51
7L131
7L106
7L27
7L104
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7L08
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7L06
7L73
7L68
7L32
7L22
7L39
7L03
7L07
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7L40
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7L94
7L60
7L61
7L23
7L55
7L30
9L15
9L11
9L02
9L05
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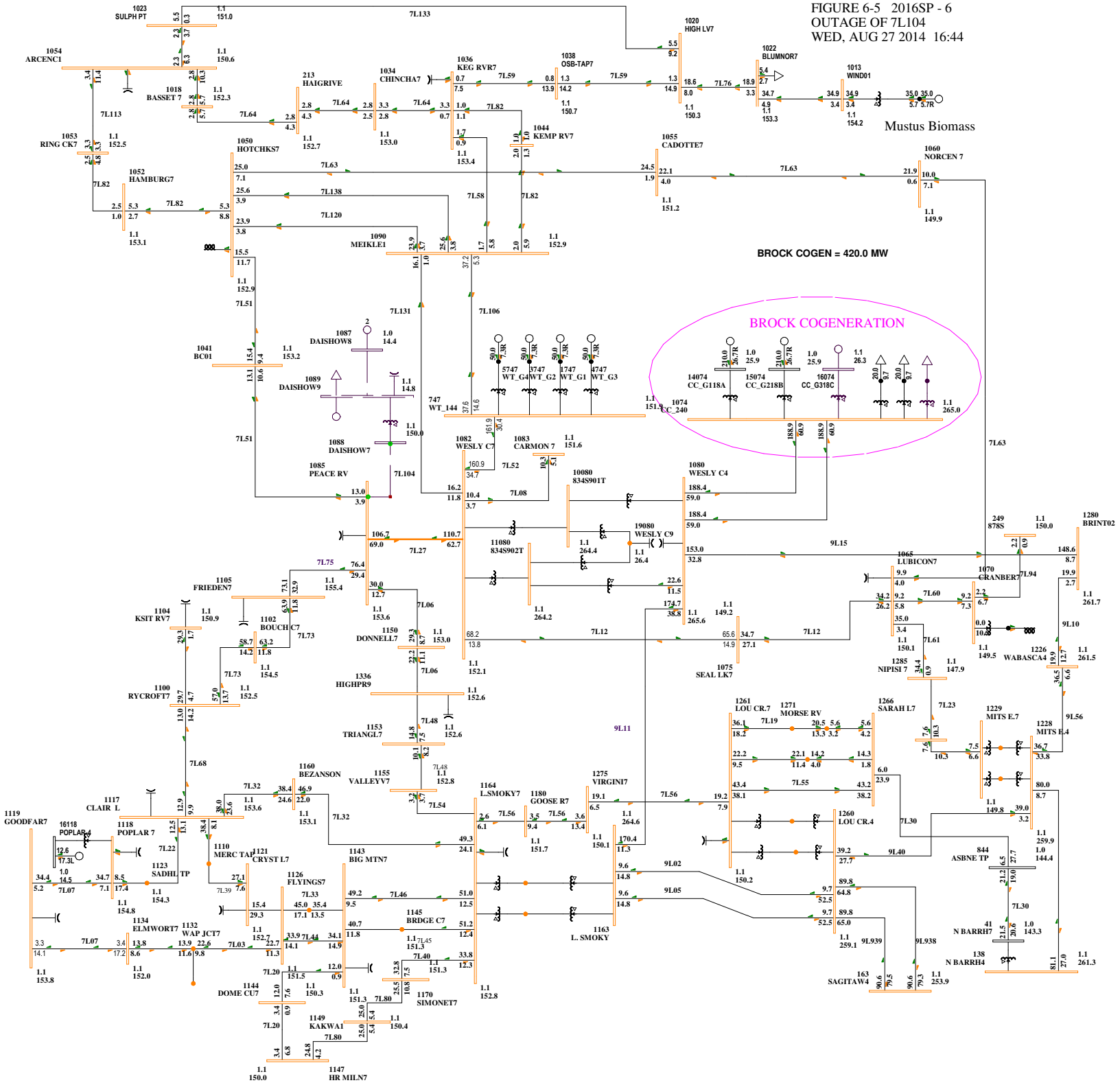
9L939
9L938
9L10
9L56

FIGURE 6-5 2016SP - 6
OUTAGE OF 7L104
WED, AUG 27 2014 16:44



Post-Project Power Flow Plot
2016 Summer Peak (Case 7)

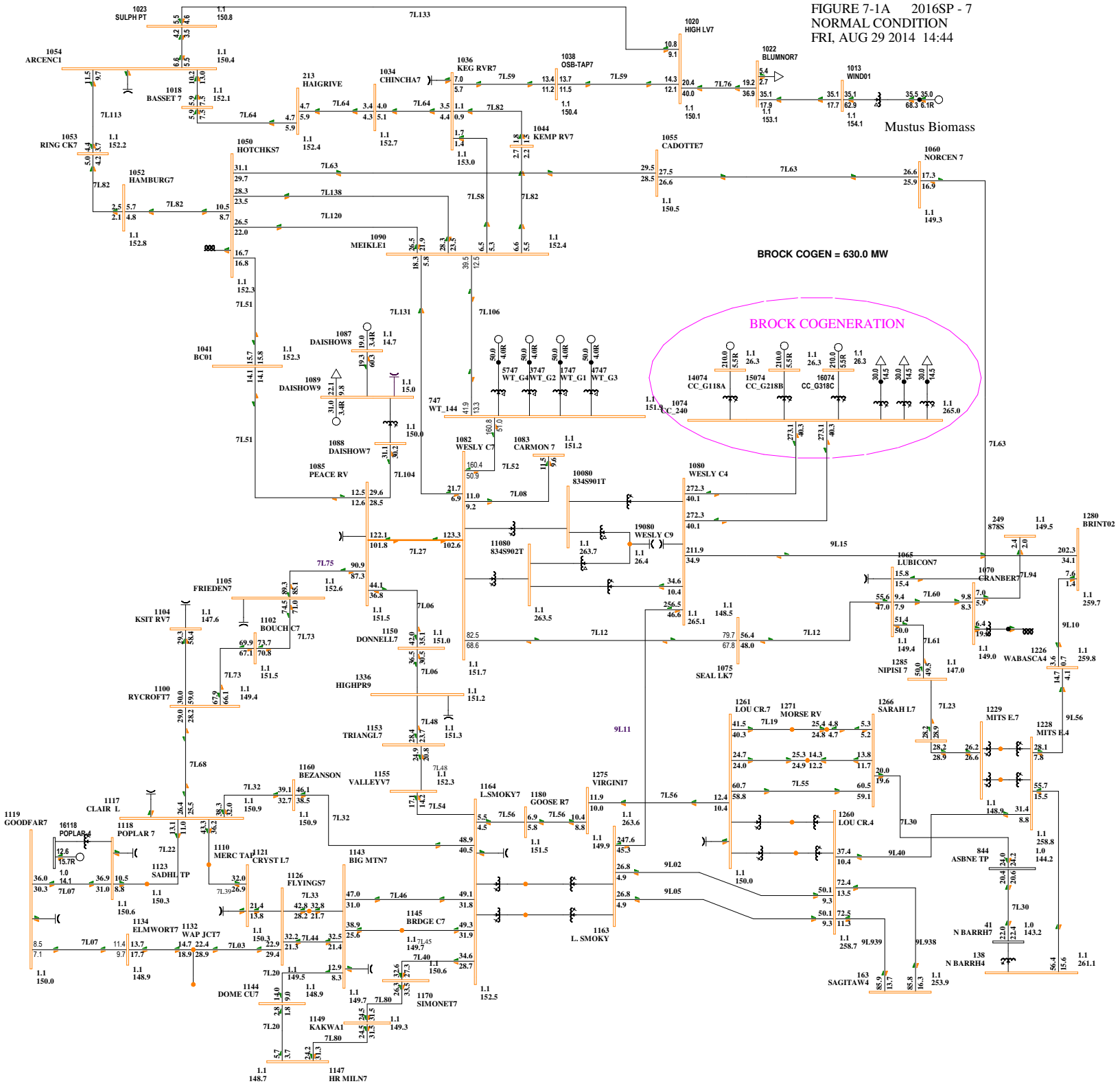


FIGURE 7-1A 2016SP - 7
NORMAL CONDITION
FRI, AUG 29 2014 14:44
Mustus Biomass
BROCK COGEN = 630.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1050 HOTCHKS7
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
1082 WESLY C7
1083 CARMON 7
10080 834S901T
1080 WESLY C4
19080 WESLY C9
11080 834S902T
1105 FRIEDEN7
1104 KSIT RV7
1102 BOUCH C7
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1100 RYCROFT7
1117 CLAIR L
1119 GOODFAR7
16118 POPLAR4
1118 POPLAR 7
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1143 BIG MTN7
1145 BRDGE C7
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1170 SIMONET7
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1163 L. SMOKY
1065 LUBICON7
1070 CRANBER7
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1229 MITS E.7
1228 MITS E.4
1260 LOU CR.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
249 878S
1280 BRINT02
7L133
7L64
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9L56

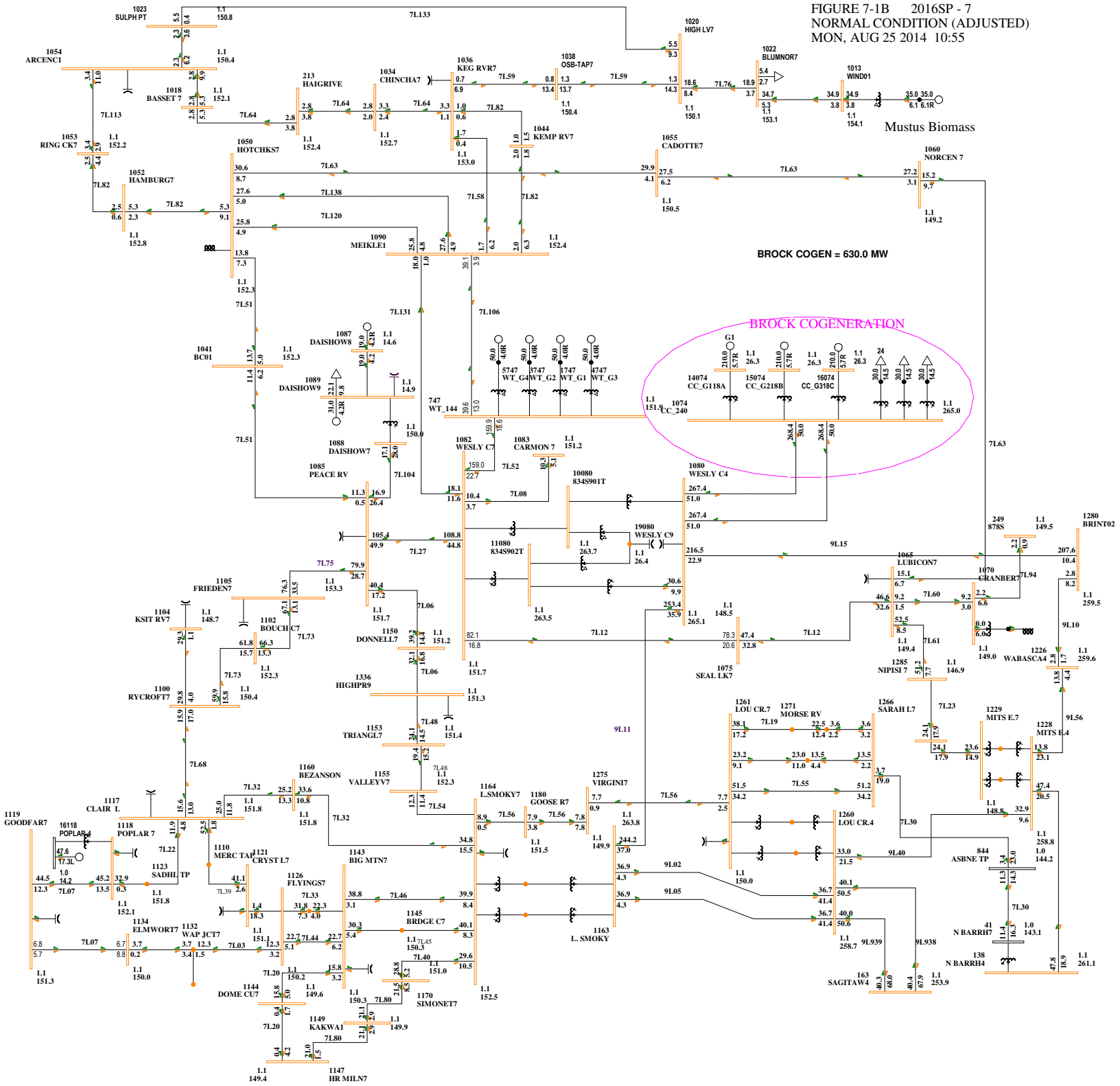
FIGURE 7-1B 2016SP - 7
NORMAL CONDITION (ADJUSTED)
MON, AUG 25 2014 10:55
Mustus Biomass
BROCK COGEN = 630.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1044 KEMP RV7
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
1082 WESLY C7
1083 CARMON 7
10080 834S901T
1080 WESLY C4
19080 WESLY C9
11080 834S902T
1065 LUBICON7
1070 CRANBER7
249 878S
1280 BRINT02
1105 FRIEDEN7
1104 KSIT RV7
1102 BOUCH C7
1150 DONNELL7
1336 HIGHPR9
1100 RYCROFT7
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1117 CLAIR L
1119 GOODFAR7
16118 POPLAR 4
1118 POPLAR 7
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1143 BIG MTN7
1145 BRDGE C7
1170 SIMONET7
1163 L. SMOKY
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
1074 CC_240
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
747 WT_144
7L133
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7L23
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9L11
9L15
9L10
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9L939
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FIGURE 7-2 2016SP - 7
OUTAGE OF 9L11
WED, AUG 06 2014 14:07

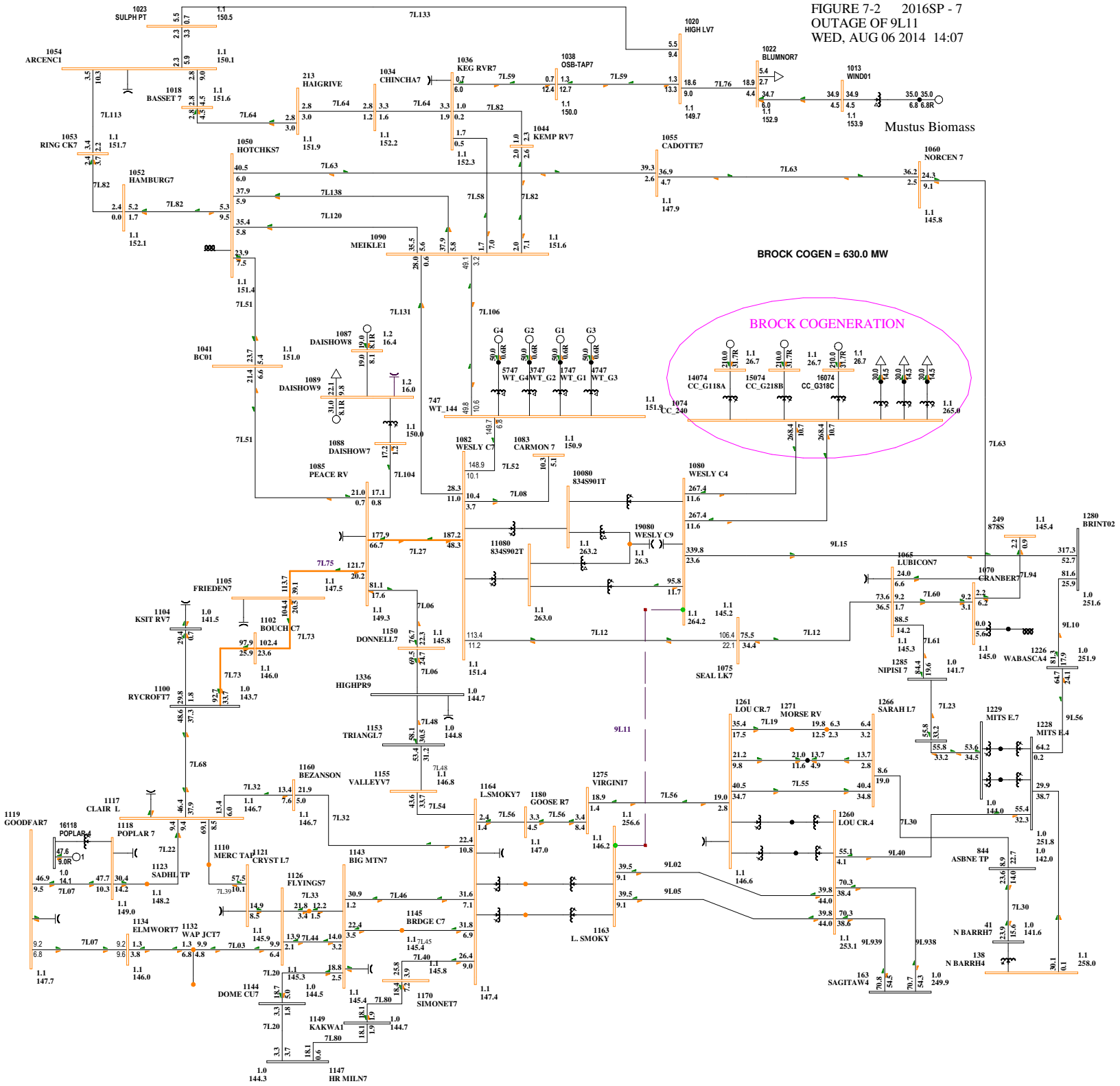


FIGURE 7-2A 2016SP - 7
OUTAGE OF 9L11 AND RAS APPLIED (TWO UNITS TRIPPED)
FRI, SEP 05 2014 14:36

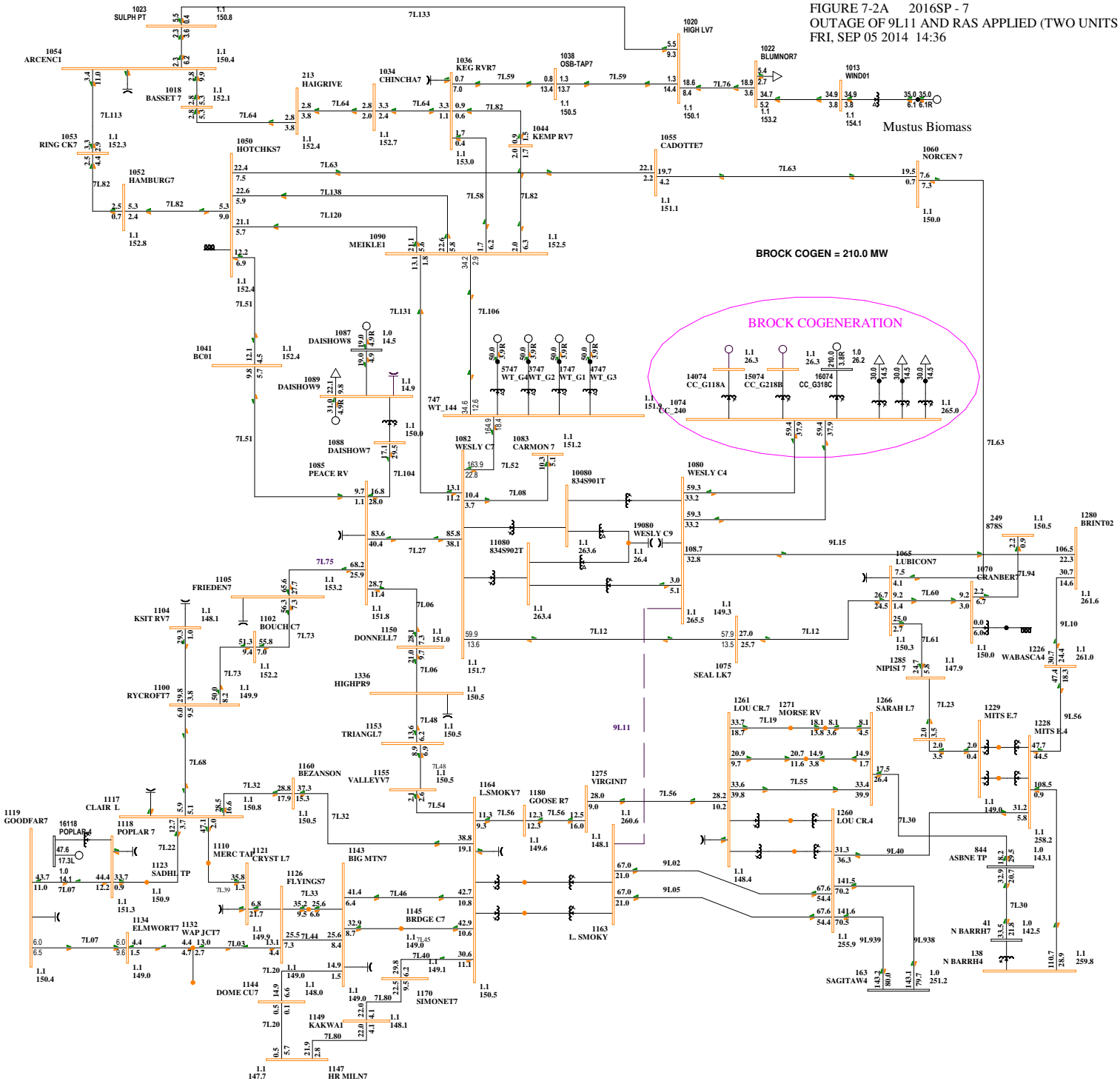
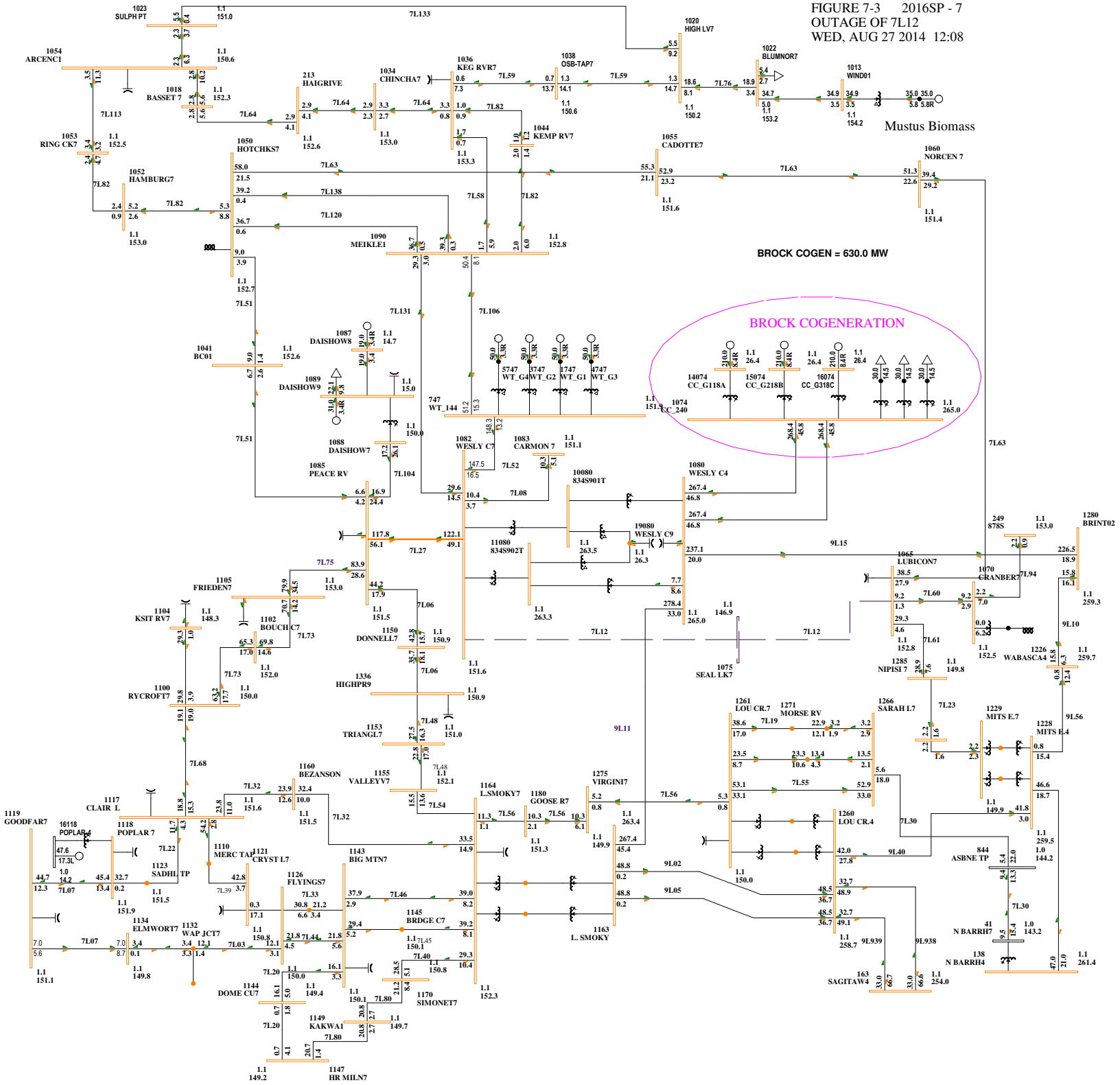


FIGURE 7-3 2016SP - 7
OUTAGE OF 7L12
WED, AUG 27 2014 12:08



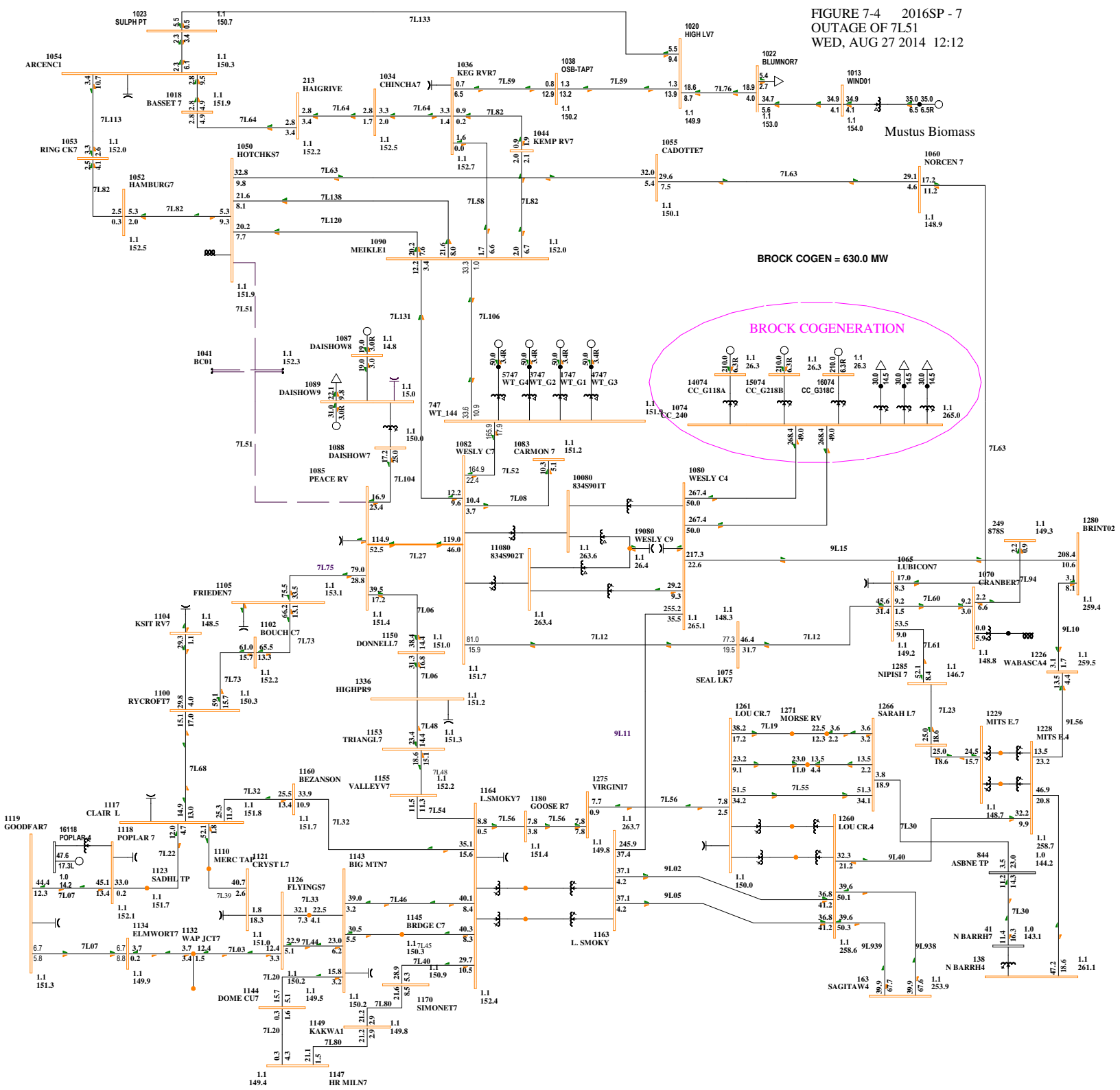
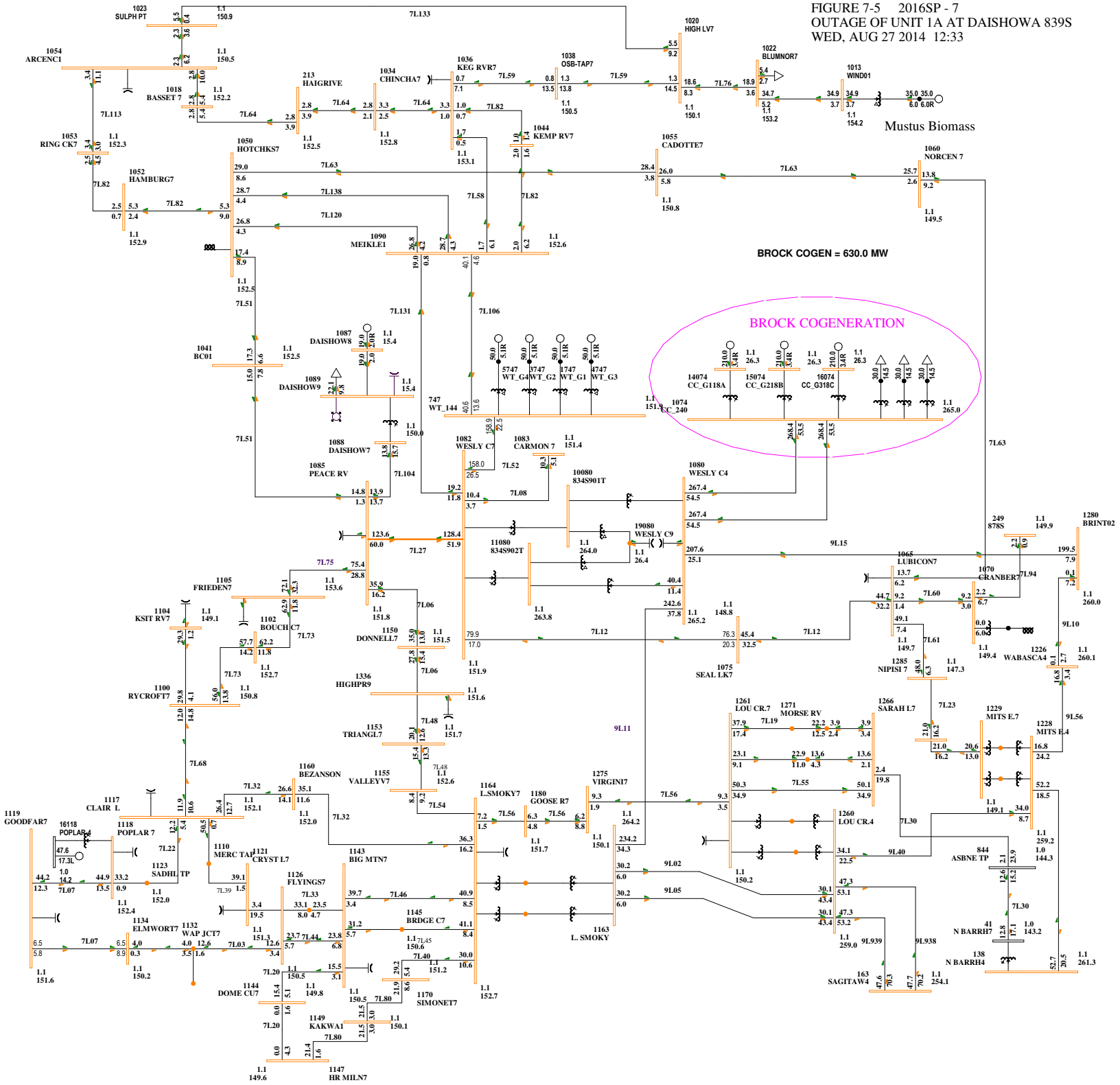


FIGURE 7-4 2016SP - 7
OUTAGE OF 7L51
WED, AUG 27 2014 12:12
Mustus Biomass
BROCK COGEN = 630.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1044 KEMP RV7
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
1082 WESLY C7
1083 CARMON 7
10080 834S901T
1080 WESLY C4
19080 WESLY C9
11080 834S902T
1074 CC_240
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
747 WT_144
249 878S
1280 BRINT02
1065 LUBICON7
1070 CRANBER7
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1100 RYCROFT7
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1117 CLAIR L
1118 POPLAR 7
16118 POPLAR 4
1119 GOODFAR7
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1143 BIG MTN7
1145 BRDGE C7
1163 L. SMOKY
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1170 SIMONET7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1229 MITS E.7
1228 MITS E.4
1260 LOU CR.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
7L133
7L63
7L64
7L82
7L113
7L51
7L131
7L106
7L138
7L120
7L58
7L59
7L64
7L76
7L82
7L27
7L104
7L52
7L08
7L06
7L12
7L73
7L75
7L68
7L32
7L48
7L54
7L56
7L46
7L33
7L44
7L03
7L07
7L20
7L80
9L15
9L11
9L10
9L56
9L02
9L05
9L40
9L939
9L938
7L94
7L60
7L61
7L23
7L30
7L55
7L19

FIGURE 7-5 2016SP - 7
OUTAGE OF UNIT 1A AT DAISHOWA 839S
WED, AUG 27 2014 12:33



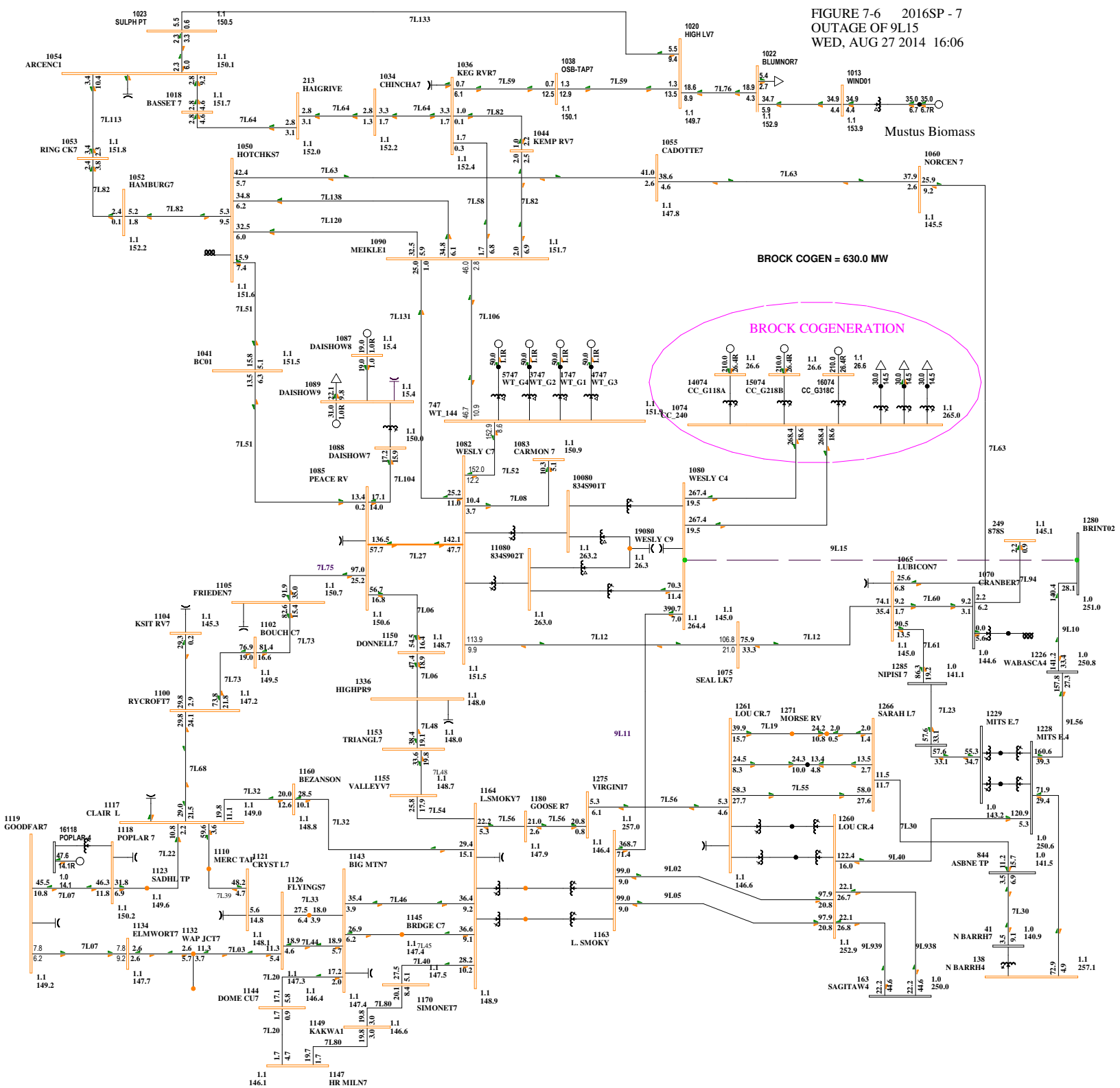


FIGURE 7-6 2016SP - 7
OUTAGE OF 9L15
WED, AUG 27 2014 16:06
Mustus Biomass
BROCK COGEN = 630.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
1082 WESLY C7
1083 CARMON 7
10080 834S901T
1080 WESLY C4
19080 WESLY C9
11080 834S902T
1074 CC_240
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
747 WT_144
1105 FRIEDEN7
1104 KSIT RV7
1102 BOUCH C7
1100 RYCROFT7
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1163 L. SMOKY
1143 BIG MTN7
1145 BRDGE C7
1126 FLYINGS7
1121 CRYST L7
1110 MERC TAP
1123 SADHL TP
1118 POPLAR 7
1117 CLAIR L
1119 GOODFAR7
16118 POPLAR 4
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1170 SIMONET7
1065 LUBICON7
1070 CRANBER7
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
249 878S
1280 BRINT02
7L133
7L64
7L82
7L63
7L138
7L120
7L58
7L131
7L106
7L51
7L27
7L75
7L104
7L52
7L08
7L06
7L73
7L68
7L32
7L48
7L54
7L56
7L12
7L23
7L94
7L60
7L61
7L30
7L80
7L20
7L07
7L03
7L46
7L40
7L45
9L15
9L11
9L10
9L56
9L40
9L02
9L05
9L939
9L938

FIGURE 7-6A 2016SP - 7
OUTAGE OF 9L15 AND RAS APPLIED (ONE UNIT TRIPPED)
FRI, SEP 05 2014 14:33

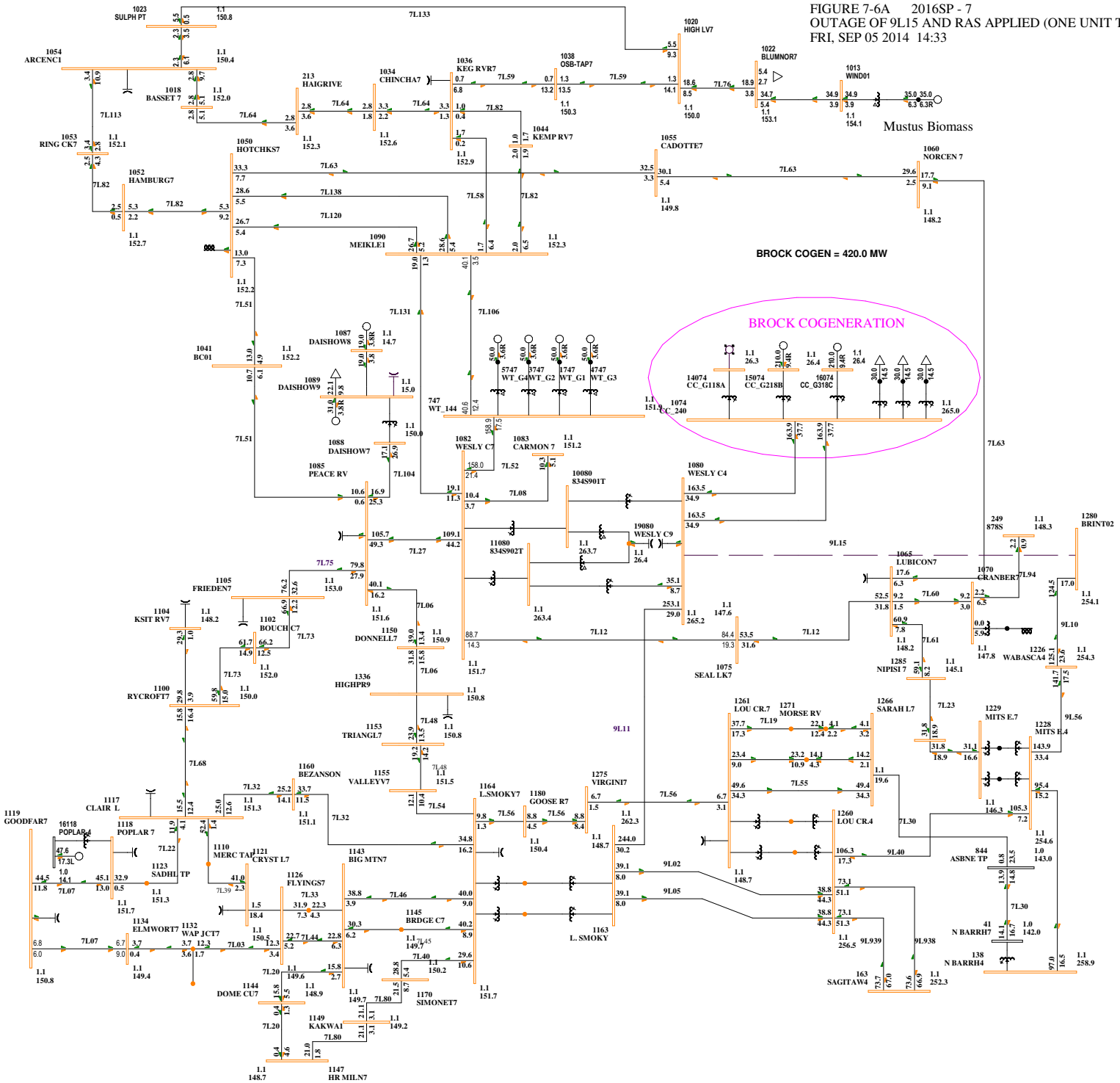


FIGURE 7-7 2016SP - 7
OUTAGE OF 7L104
WED, AUG 27 2014 16:09

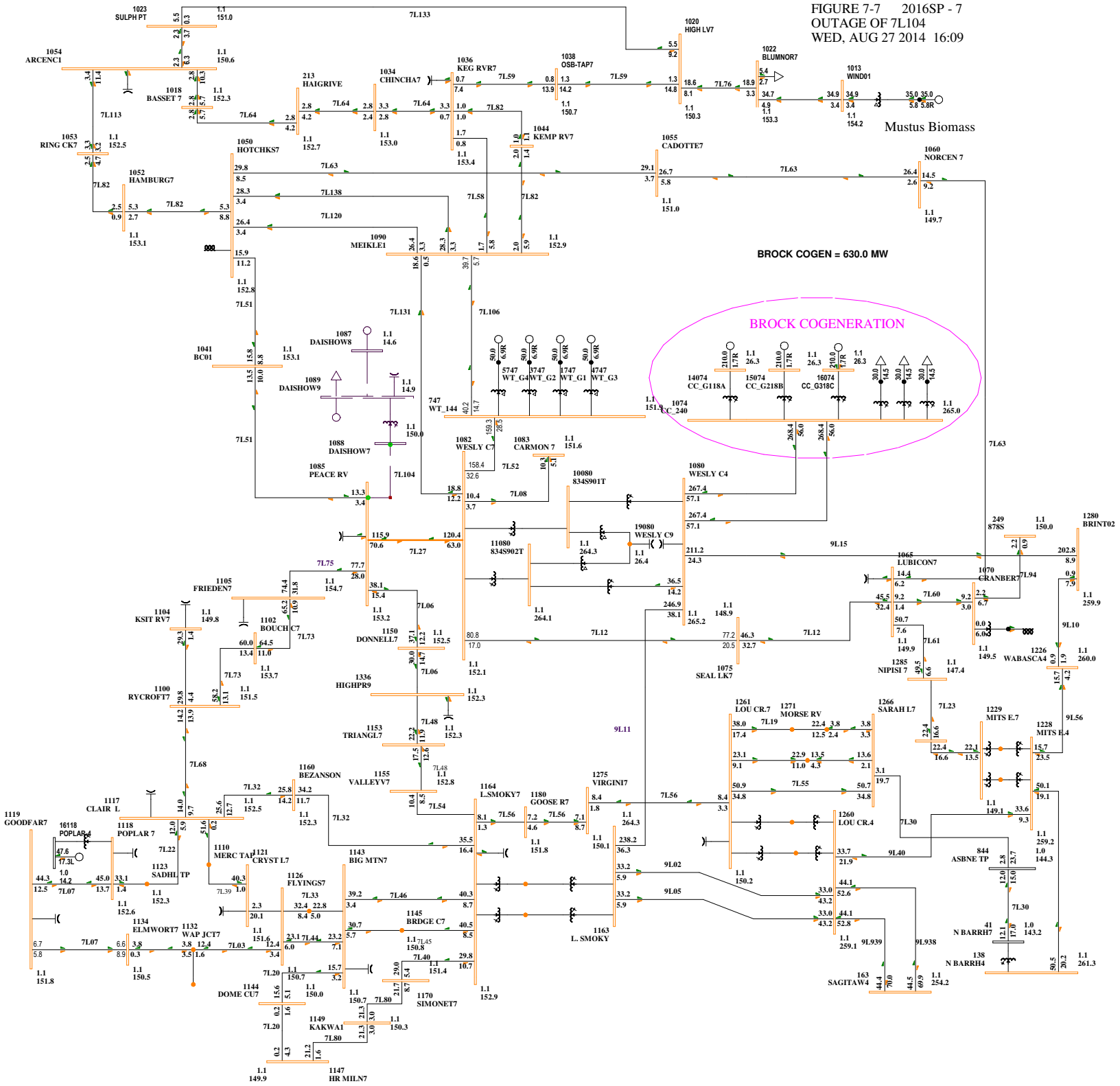
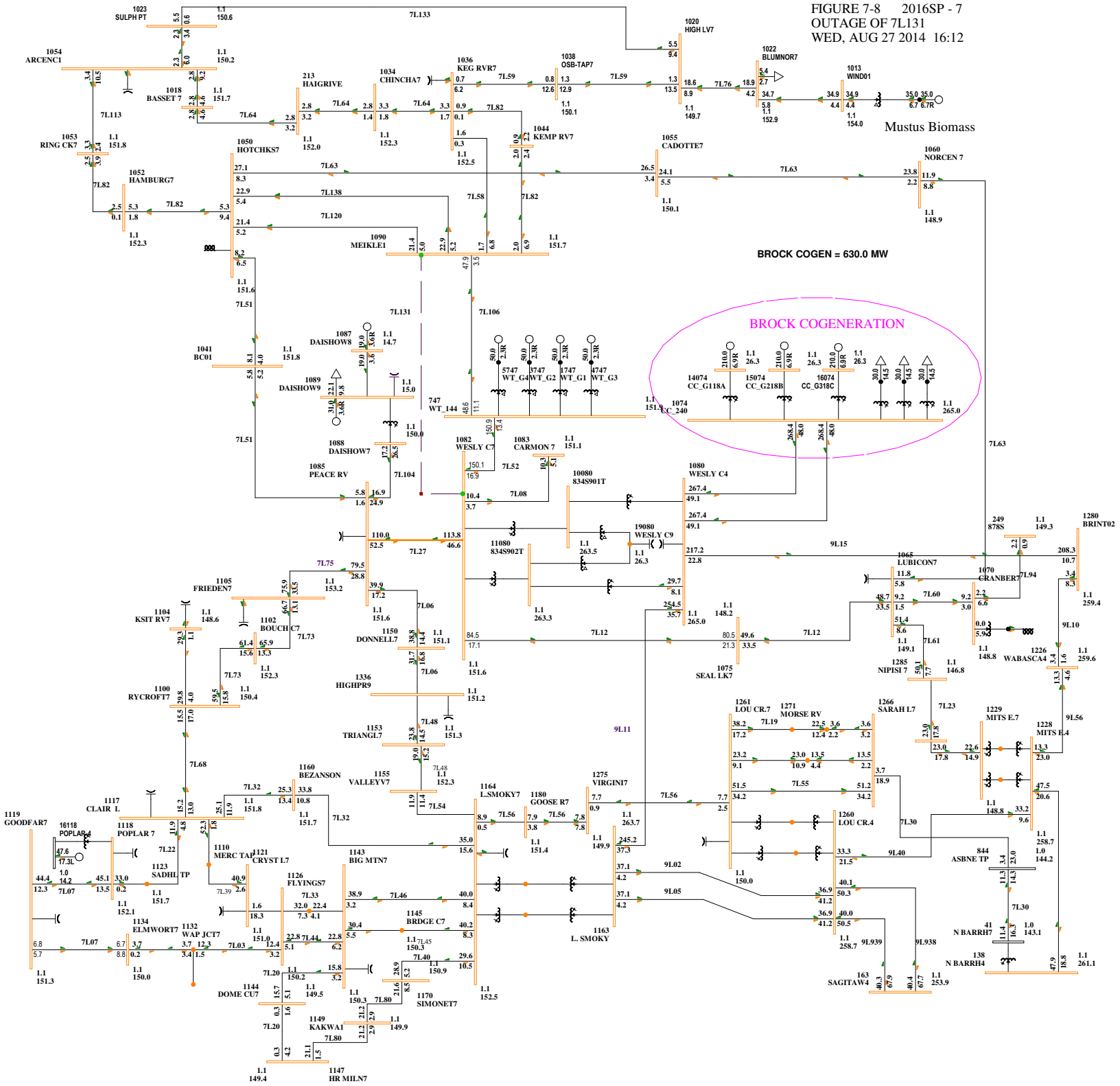


FIGURE 7-8 2016SP - 7
OUTAGE OF 7L131
WED, AUG 27 2014 16:12



Post-Project Power Flow Plot
2016 Summer Light (Case 8)

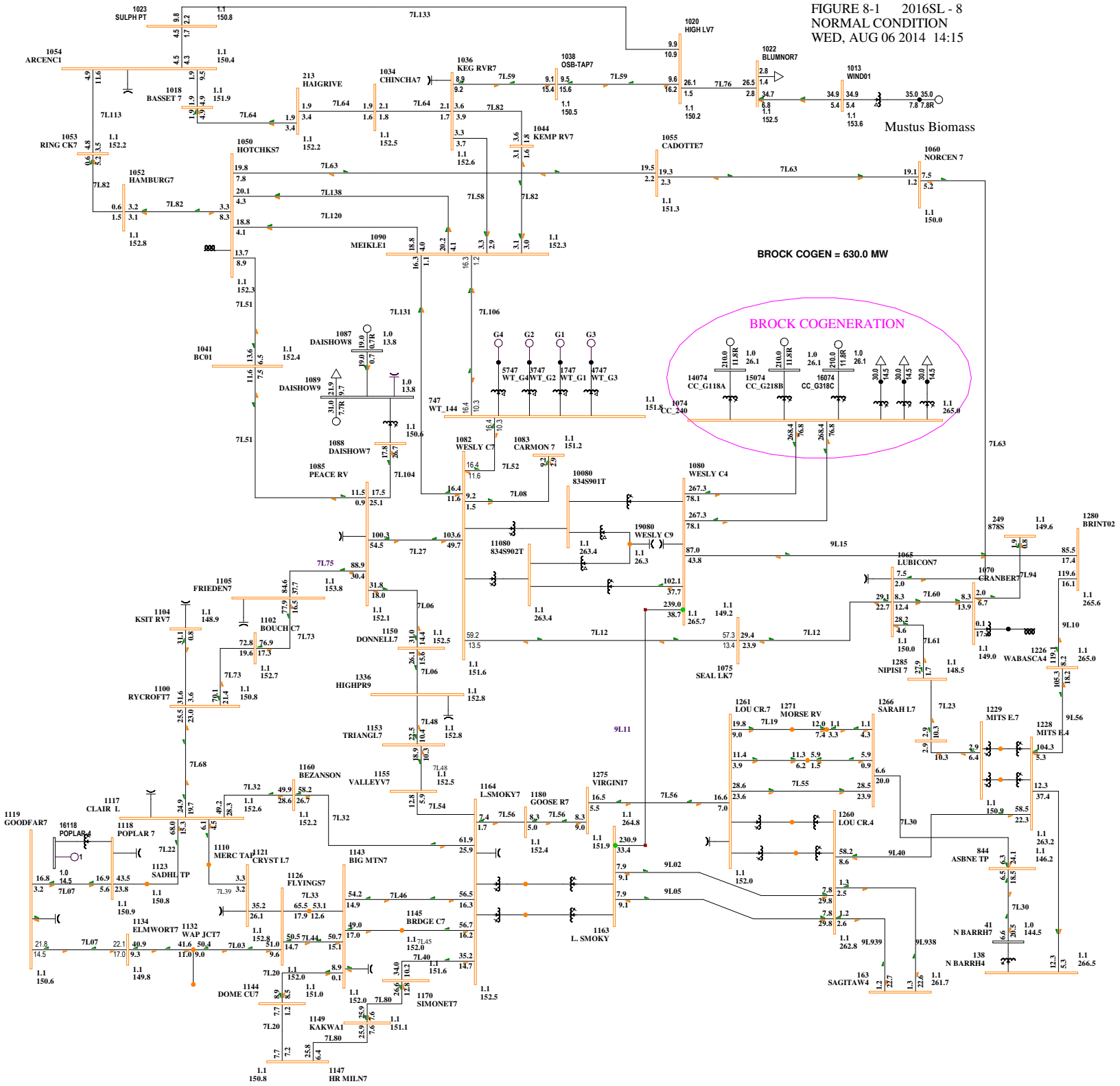


FIGURE 8-1 2016SL - 8
NORMAL CONDITION
WED, AUG 06 2014 14:15
Mustus Biomass
BROCK COGEN = 630.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1041 BC01
1085 PEACE RV
1082 WESLY C7
1083 CARMON 7
1080 WESLY C4
10080 834S901T
19080 WESLY C9
11080 834S902T
1074 CC_240
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
1105 FRIEDEN7
1104 KSIT RV7
1102 BOUCH C7
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
1100 RYCROFT7
1160 BEZANSON
1155 VALLEYV7
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1163 L. SMOKY
1143 BIG MTN7
1145 BRDGE C7
1126 FLYINGS7
1121 CRYST L7
1110 MERC TAP
1123 SADHL TP
1118 POPLAR 7
16118 POPLAR 4
1117 CLAIR L
1119 GOODFAR7
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1170 SIMONET7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1075 SEAL LK7
1065 LUBICON7
1070 CRANBER7
1285 NIPISI 7
1226 WABASCA4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
249 878S
1280 BRINT02
7L133
7L113
7L64
7L82
7L63
7L138
7L120
7L58
7L131
7L106
7L51
7L104
7L27
7L08
7L52
7L12
7L15
7L94
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7L61
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7L06
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7L22
7L07
7L39
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7L33
7L44
7L45
7L40
7L20
7L80
7L48
7L54
7L56
7L55
7L30
7L23
9L11
9L02
9L05
9L40
9L939
9L938
9L10
9L56

FIGURE 8-2 2016SL - 8
OUTAGE OF 9L11
WED, AUG 06 2014 14:17

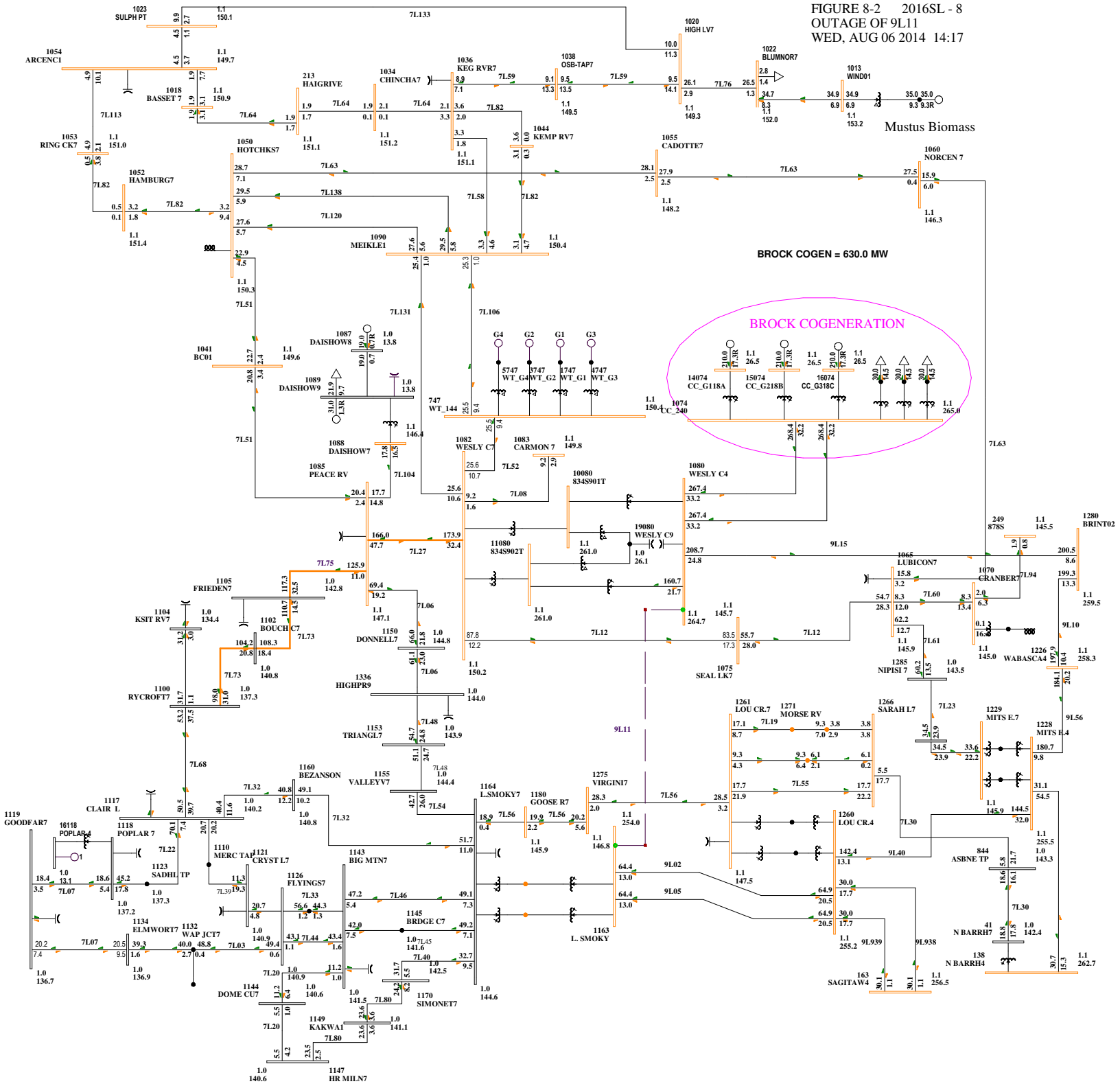


FIGURE 8-2A 2016SL - 8
OUTAGE OF 9L11 AND RAS APPLIED (ONE UNIT TRIPPED)
FRI, SEP 05 2014 14:42

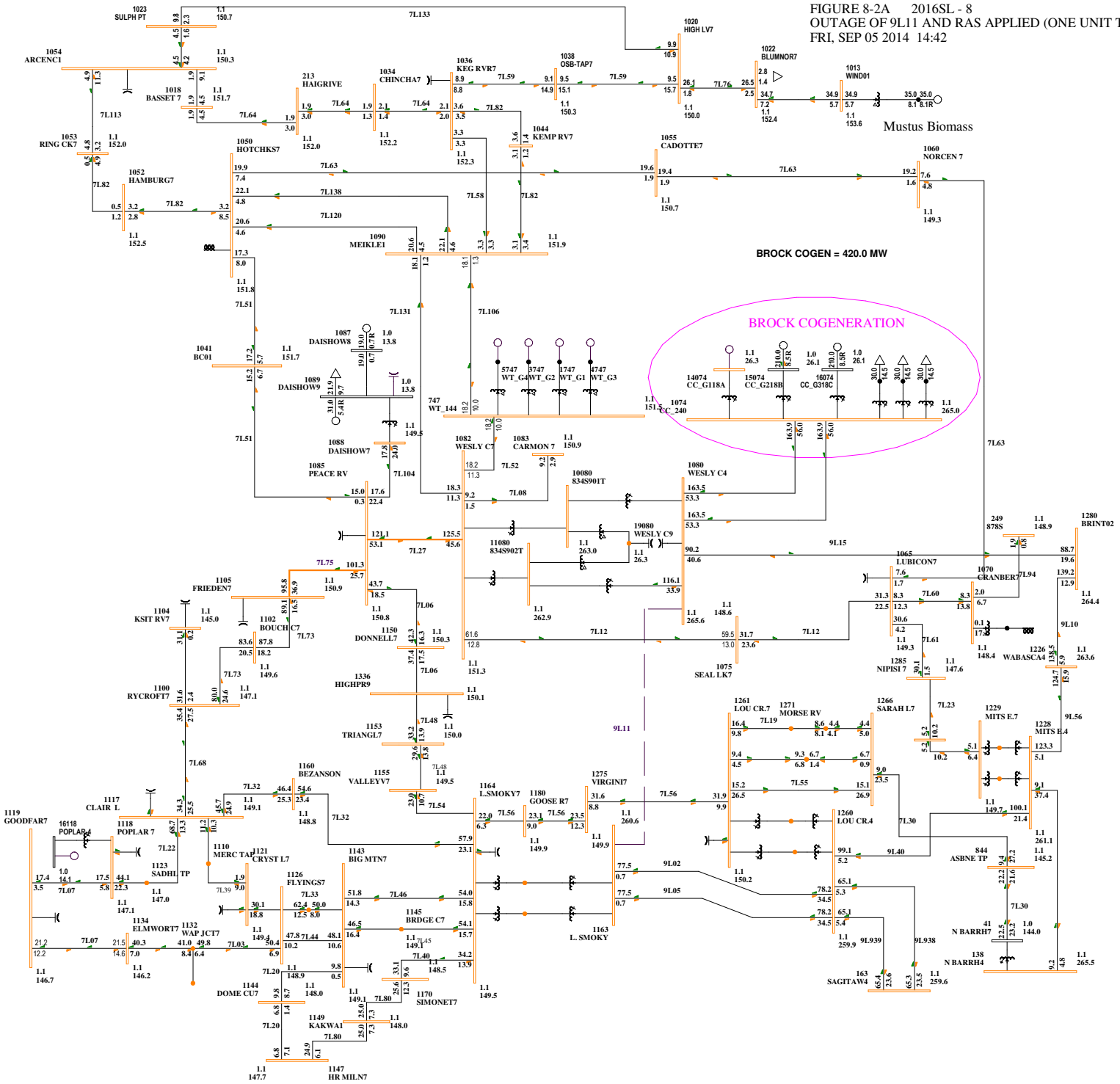


FIGURE 8-3 2016SL - 8
OUTAGE OF 9L15
WED, AUG 06 2014 14:18

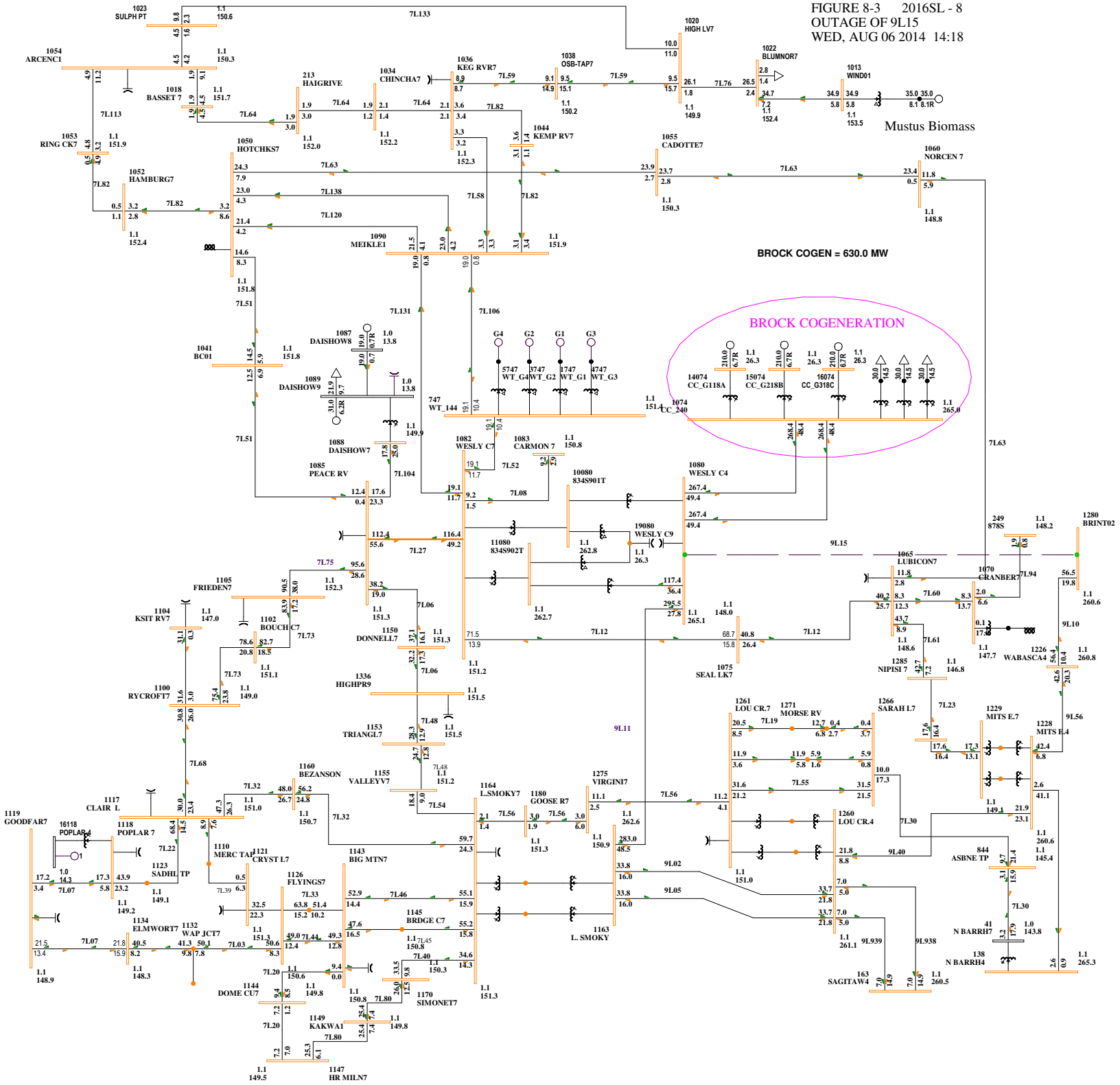


FIGURE 8-4 2016SL - 8
OUTAGE OF 7L104
WED, AUG 06 2014 14:20

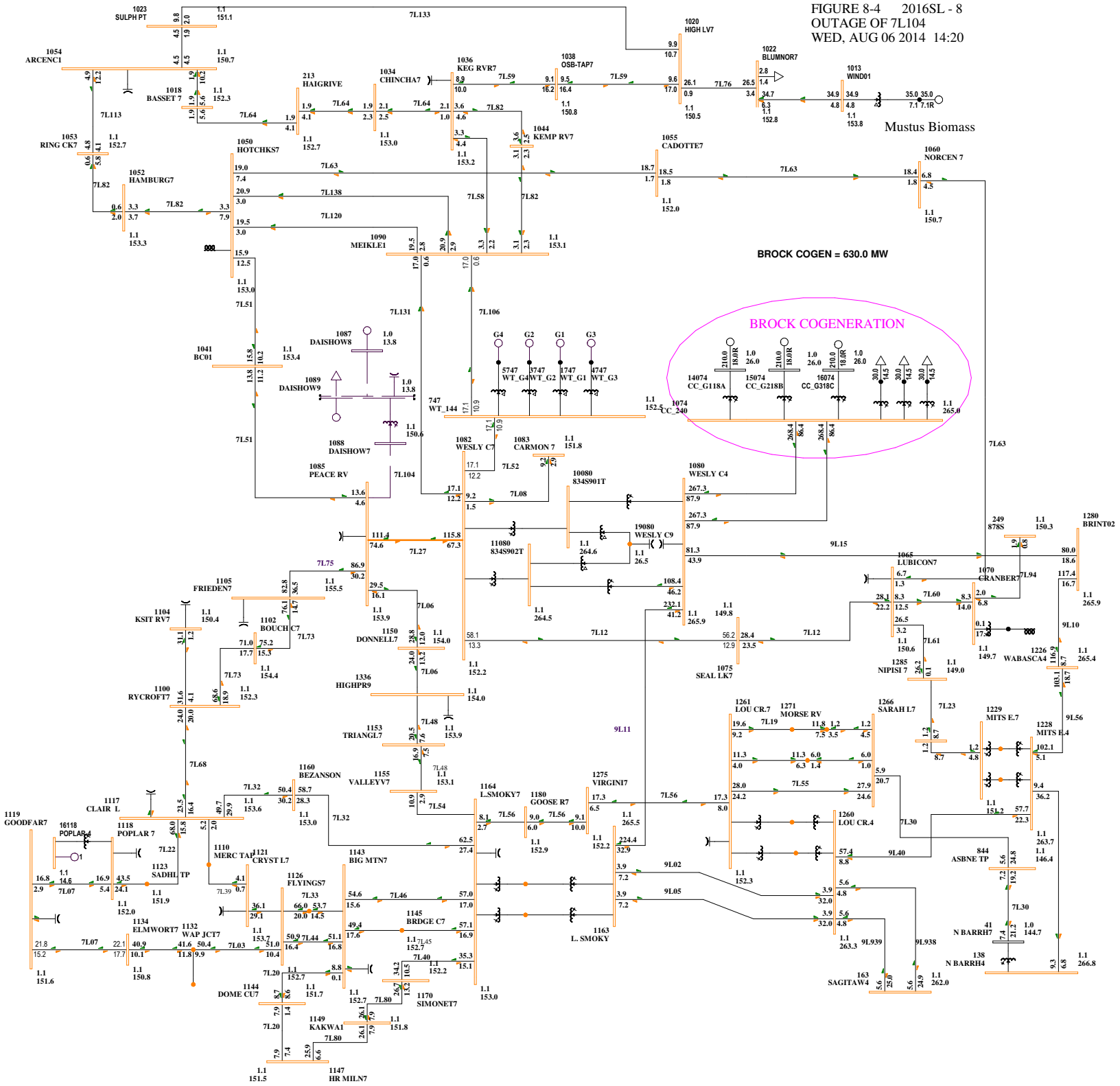


FIGURE 8-5 2016SL - 8
OUTAGE OF 7L22
WED, AUG 06 2014 14:23

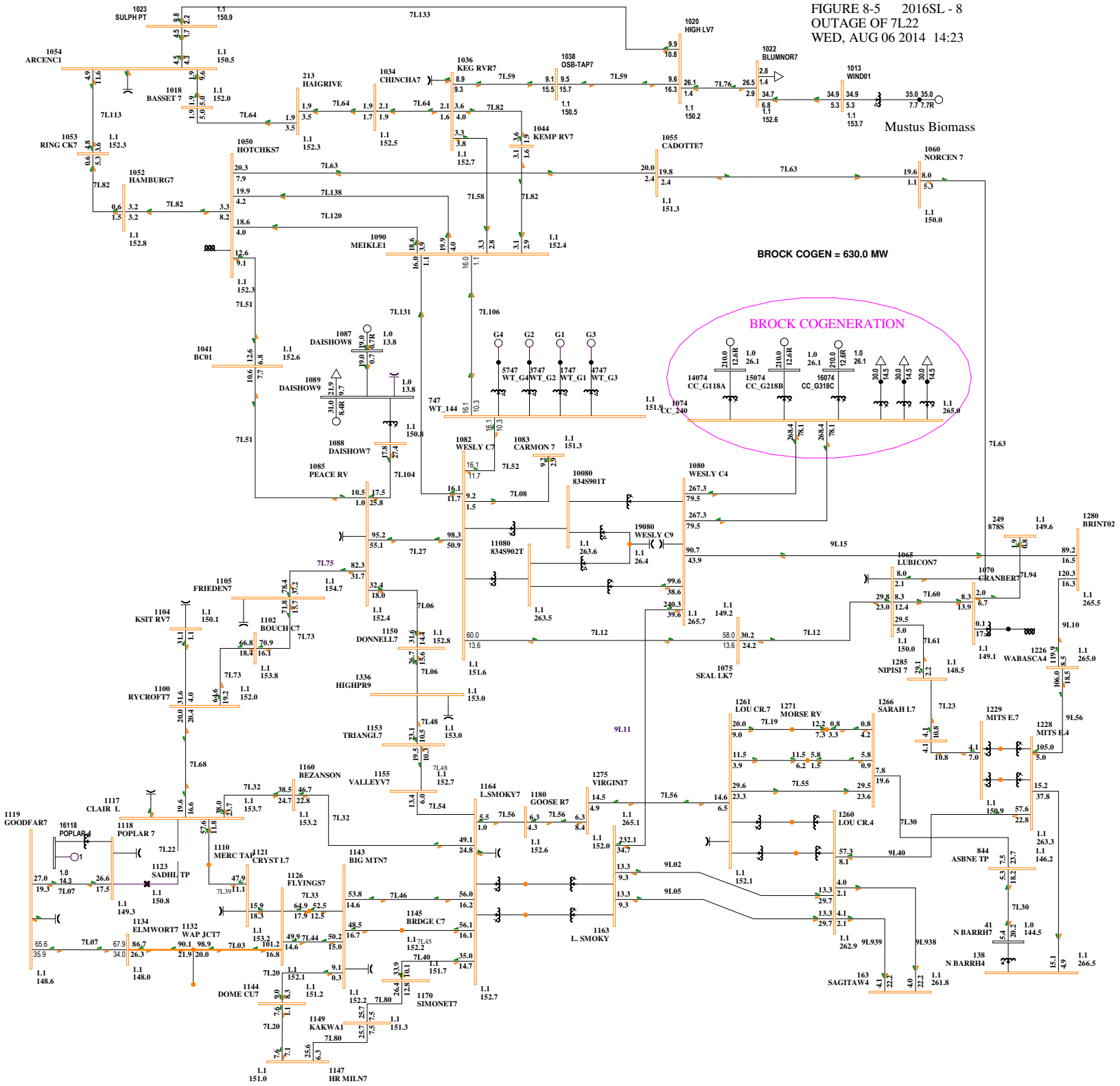


FIGURE 8-6 2016SL - 8
OUTAGE OF 7L12
WED, AUG 27 2014 12:26

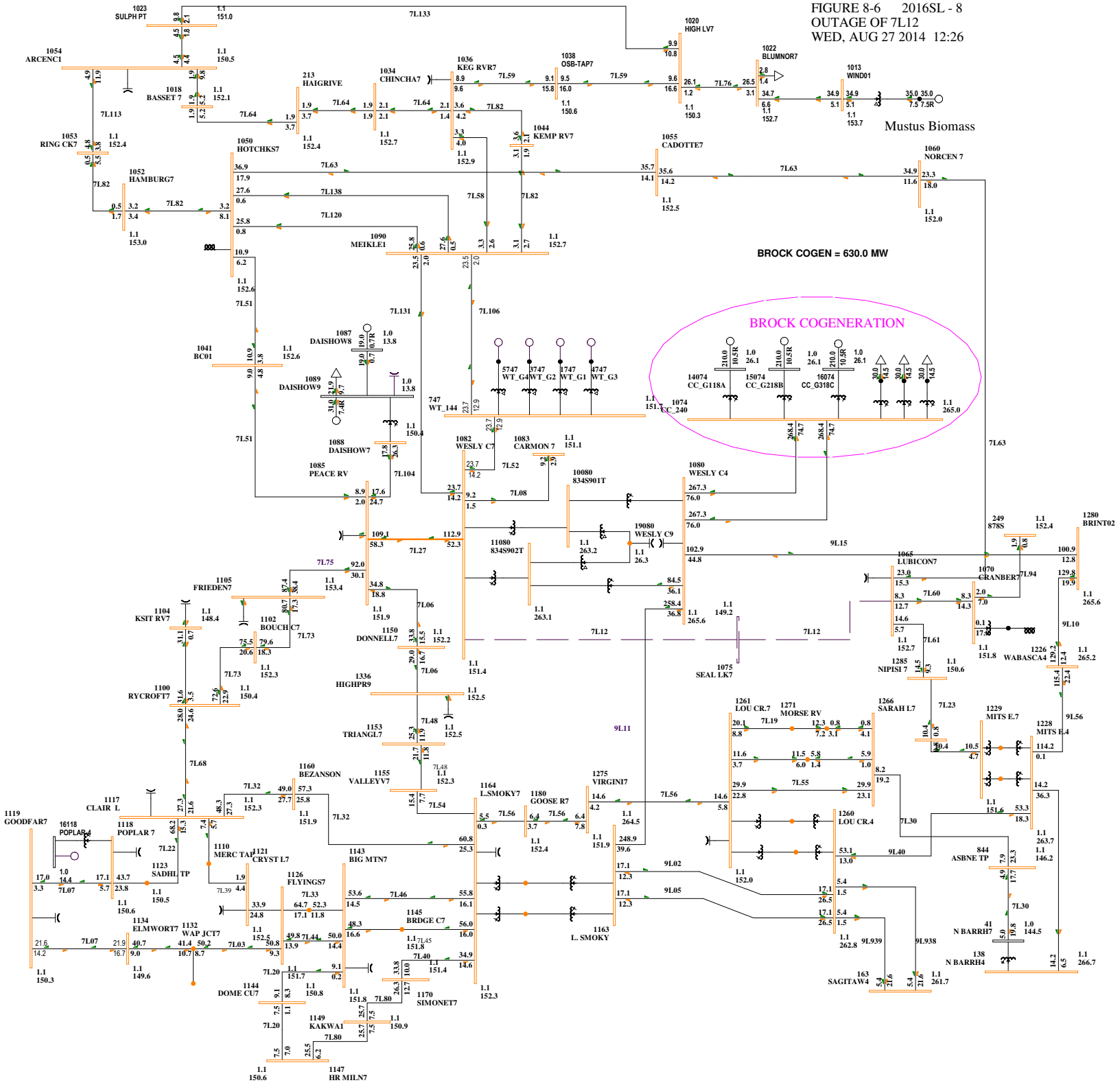


FIGURE 8-7 2016SL - 8
OUTAGE OF 7151
WED, AUG 27 2014 12:28

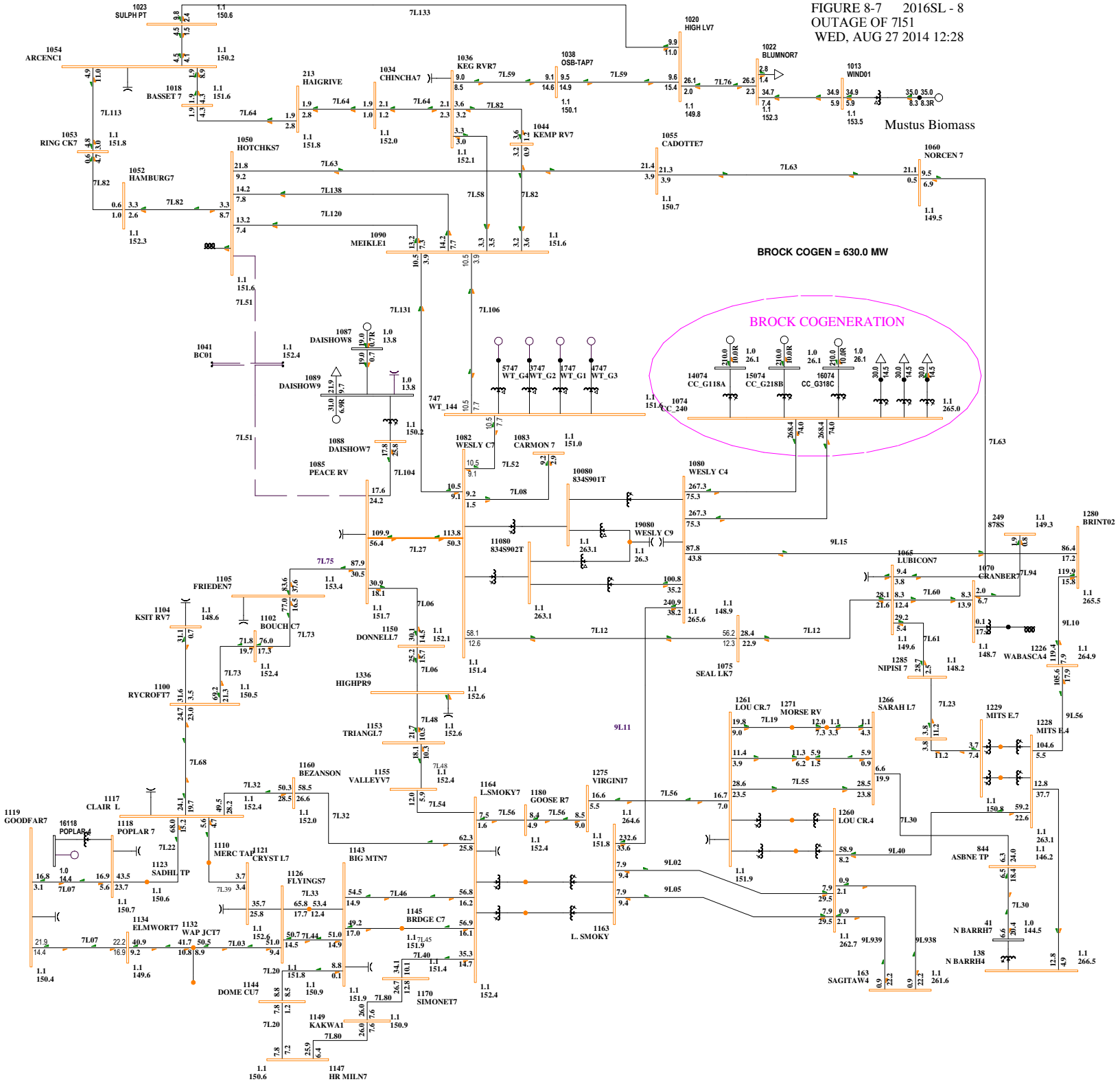
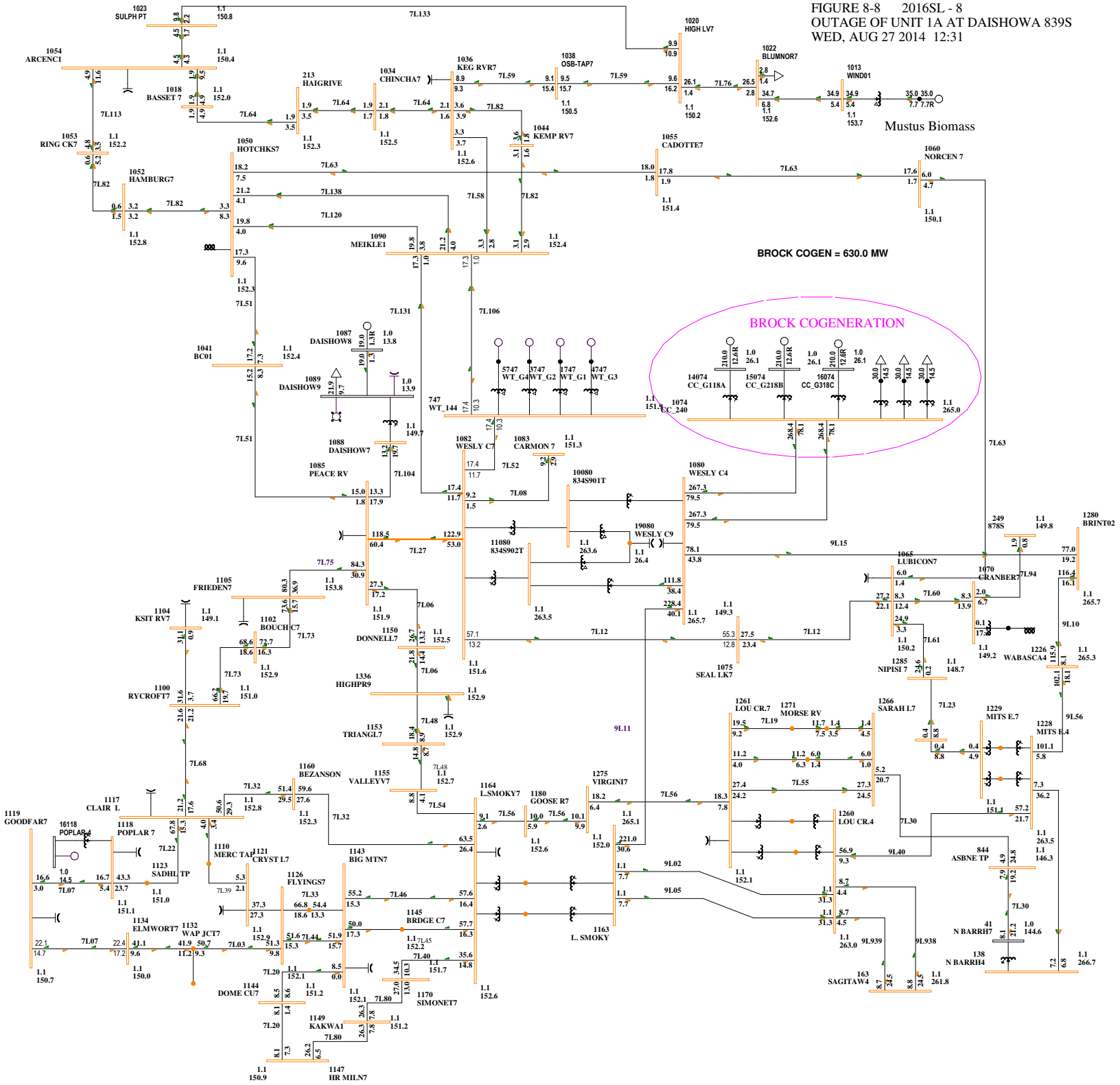
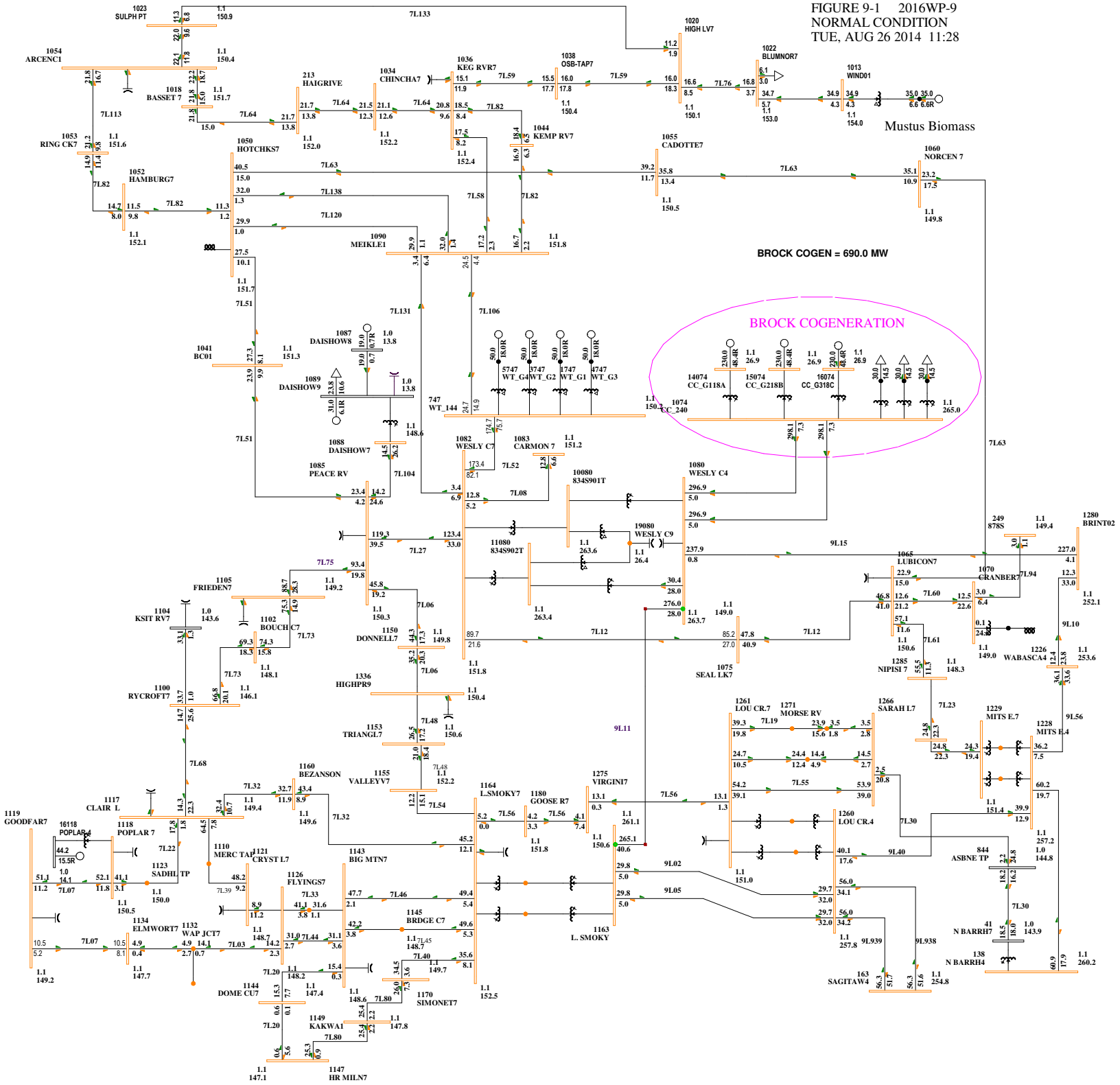


FIGURE 8-8 2016SL - 8
OUTAGE OF UNIT 1A AT DAISHOWA 839S
WED, AUG 27 2014 12:31



Post-Project Power Flow Plot
2016 Winter Peak (Case 9)

FIGURE 9-1 2016WP-9
NORMAL CONDITION
TUE, AUG 26 2014 11:28



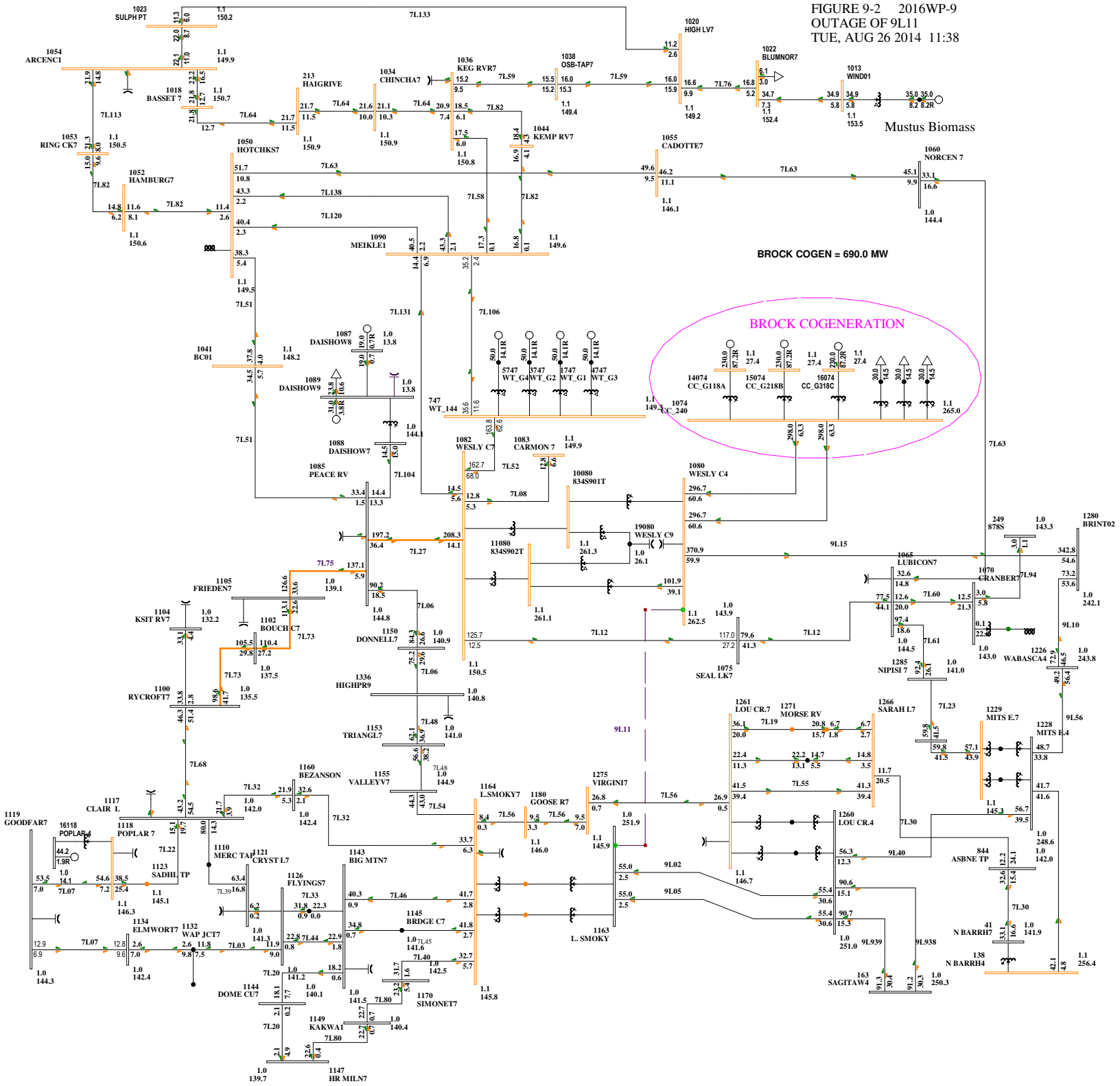


FIGURE 9-2 2016WP-9
OUTAGE OF 9L11
TUE, AUG 26 2014 11:38
Mustus Biomass
BROCK COGEN = 690.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1041 BC01
1085 PEACE RV
1082 WESLY C7
1083 CARMON 7
10080 834S901T
1080 WESLY C4
19080 WESLY C9
11080 834S902T
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
1065 LUBICON7
1070 CRANBER7
249 878S
1280 BRINT02
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1100 RYCROFT7
1336 HIGHPR9
1150 DONNELL7
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1117 CLAIR L
1118 POPLAR 7
16118 POPLAR 4
1119 GOODFAR7
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1143 BIG MTN7
1145 BRDGE C7
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1170 SIMONET7
1163 L. SMOKY
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
7L133
7L113
7L64
7L63
7L82
7L138
7L120
7L58
7L131
7L106
7L51
7L104
7L27
7L08
7L52
7L75
7L73
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7L39
7L20
7L80
7L48
7L54
7L56
7L59
7L76
7L94
7L60
7L61
7L12
7L23
7L55
7L30
9L11
9L15
9L10
9L56
9L40
9L02
9L05
9L939
9L938

FIGURE 9-2A 2016WP-9
OUTAGE OF 9L11 AND RAS APPLIED (ONE UNIT TRIPPED)
FRI, SEP 05 2014 14:45

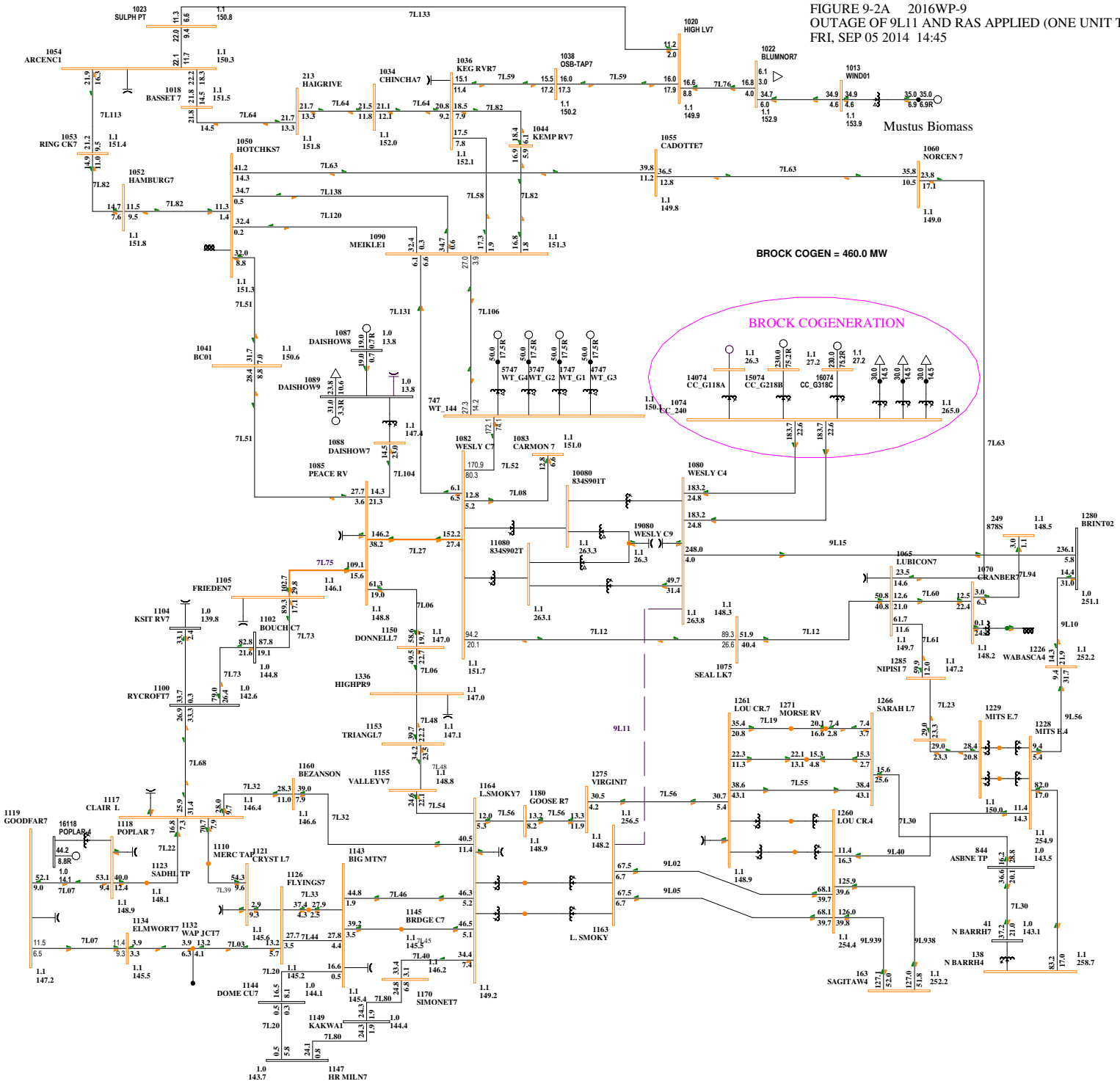
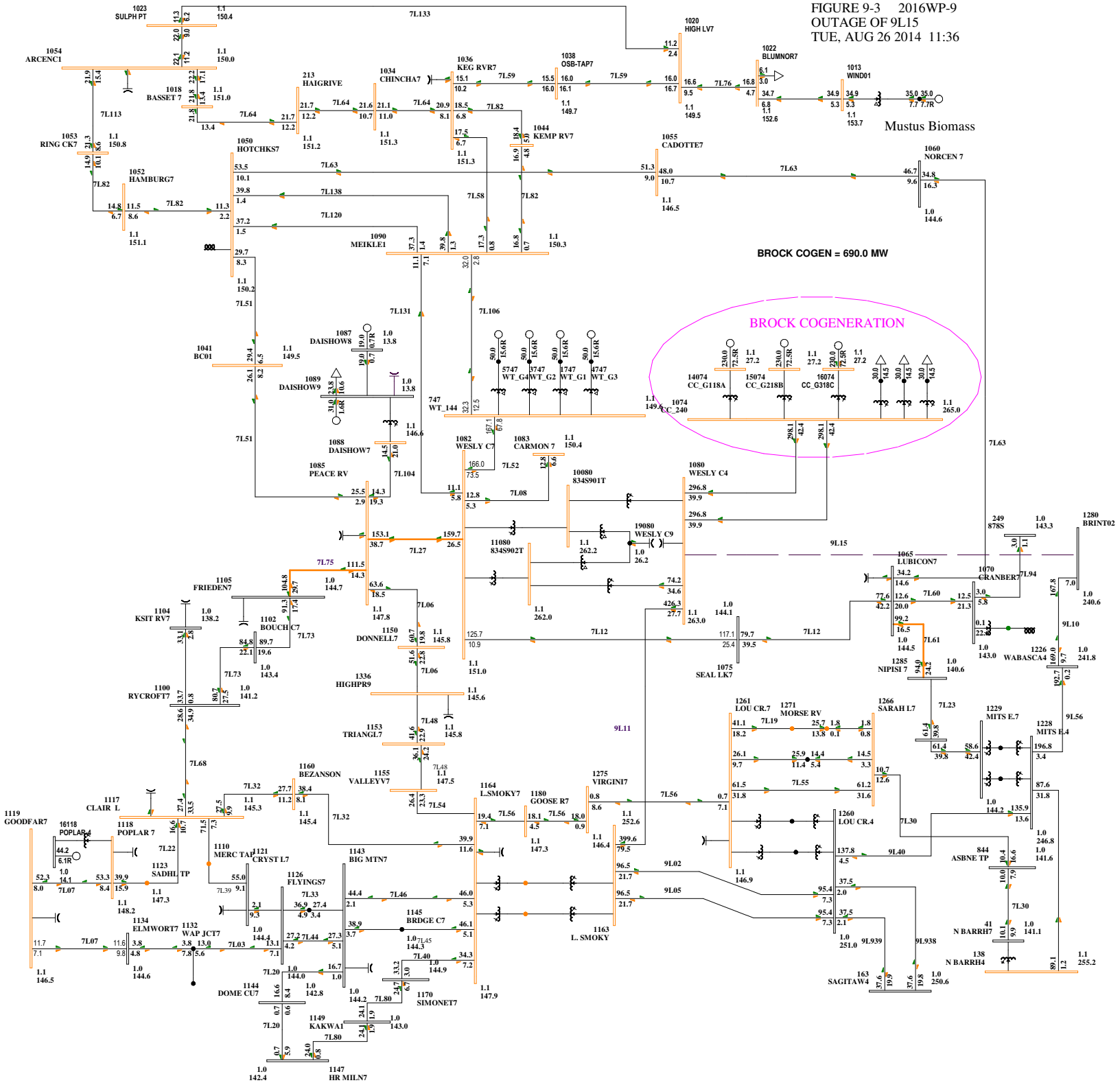


FIGURE 9-3 2016WP-9
OUTAGE OF 9L15
TUE, AUG 26 2014 11:36



Attachment D

List of Contingencies for Transient Stability Analysis

List of Contingencies for Transient Stability Analysis

Plot No.	Contingency	Fault Description and Clearing Times
B-01	*3ph fault on Line 9L11* *(Wesley Creek 834S to Little Smoky 813S)*	*3ph fault at Wesley Creel 834S on 9L11* *5 cycles: trip Wesley Creek 834S CB on 9L11* *7 cycles: trip Little Smoky 813S CB on 9L11*
B-02	*3ph fault on Line 9L11* *(Wesley Creek 834S to Little Smoky 813S)*	*3ph fault at Little Smoky 813S to Wesley Creel 834S on 9L11* *5 cycles: trip Little Smoky 813S CB on 9L11* *7 cycles: trip Wesley Creek 834S CB on 9L11*
B-03	*3ph fault on Line 9L15* *(Wesley Creek 834S to Brintnell 876S)*	*3ph fault at Wesley Creek 834S on 9L15* *5 cycles: trip Wesley Creek 834S CB on 9L15* *7 cycles: trip Brintnell 876S CB on 9L15*
B-04	*3ph fault on Line 9L15* *(Wesley Creek 834S to Brintnell 876S)*	*3ph fault at Brintnell 876S on 9L15* *5 cycles: trip Brintnell 876S CB on 9L15* *7 cycles: trip Wesley Creek 834S CB on 9L15*
B-05	*3ph fault on Line 9L124* *(Shell Carmon Creek Cogen to Wesley Creek 834S)*	*3ph fault at Block P1231 on 9L124* *5 cycles: trip Block 1231 CB on 9L124* *7 cycles: trip Wesley Creek 834S CB on 9L124*
B-06	*3ph fault on Line 9L124* *(Shell Carmon Creek Cogen to Wesley Creek 834S)*	*3ph fault at Wesley Creek 834S on 9L124* *5 cycles: Wesley Creek 834S CB on 9L124* *7 cycles: trip Block P1231 CB on 9L124*
B-07	*3ph fault on Line 7L12* *(Wesley Creek 834S to Lubicon 780S)*	*3ph fault at Wesley Creek 834S on 7L12* *6 cycles: trip Wesley Creek 834S CB on 7L12* *24 cycles: trip Lubicon 780S CB on 7L12*
B-08	*3ph fault on Line 7L12* *(Wesley Creek 834S to Lubicon 780S)*	*3ph fault at Lubicon 780S on 7L12* *6 cycles: trip Lubicon 780S CB on 7L12* *24 cycles: trip Wesley Creek 834S CB on 7L12*
B-09	*3ph fault on Line 7L63* *(Hotchkiss 788S to Lubicon 780S)*	*3ph fault at Lubicon 780S on 7L63* *6 cycles: trip Lubicon 780S CB on 7L63* *24 cycles: trip Hotchkiss 788S CB on 7L63*
B-10	*3ph fault on Line 7L63* *(Hotchkiss 788S to Lubicon 780S)*	*3ph fault at Hotchkiss 788S on 7L63* *6 cycles: trip Hotchkiss 788S CB on 7L63* *36 cycles: trip Lubicon 780S CB on 7L63*
B-11	*3ph fault on Line 7L04* *(Daishowa 839S to West Peace 793S)*	*3ph fault at Daishowa 839S on 7L04* *6 cycles: trip Daishowa 839S CB on 7L04* *8 cycles: trip West Peace 793S CB on 7L04*
B-12	*3ph fault on Line 7L04* *(Daishowa 839S to West Peace 793S)*	*3ph fault at trip West Peace 793S on 7L04* *6 cycles: trip West Peace 793S CB on 7L04* *8 cycles: Daishowa 839S CB on 7L04*
B-13	*3ph fault on Line 7L27* *(West Peace 793S to Wesley Creek 834S)*	*3ph fault at Wesley Creek 834S on 7L27* *6 cycles: trip Wesley Creek 834S CB on 7L27* *24 cycles: trip West Peace 793S CB on 7L27*
B-14	*3ph fault on Line 7L27* *(West Peace River 793S to Wesley Creek 834S)*	*3ph fault at West Peace River 793S on 7L27* *6 cycles: trip West Peace River 793S CB on 7L27* *24 cycles: trip Wesley Creek 834S CB on 7L27*

Plot No.	Contingency	Fault Description and Clearing Times
B-15	*3ph fault on Line 7L51 (West Peace River 793S to Hotchkiss 788S)*	*3ph fault at West Peace River 793S on 7L51* *6 cycles: trip West Peace River 793S CB on 7L51* *24 cycles: trip Hotchkiss 788S CB on 7L51*
B-16	*3ph fault on Line 7L51 (West Peace River 793S to Hotchkiss 788S)*	*3ph fault at Hotchkiss 788S CB on 7L51* *6 cycles: trip Hotchkiss 788S CB on 7L51* *24 cycles: trip West Peace River 793S CB on 7L51*
B-17	*3ph fault on Line 7L58 (Keg River 789S to Meikle 905S)*	*3ph fault at Meikle 905S on 7L58 to Keg River 789S* *6 cycles: trip Meikle 905S CB on 7L58* *8 cycles: trip Keg River 789S CB on 7L58*
B-18	*3ph fault on Line 7L58 (Keg River 789S to Meikle 905S)*	*3ph fault at Keg River 789S on 7L58 to Meikle 905S* *6 cycles: trip Keg River 789S CB on 7L58* *8 cycles: trip Meikle 905S CB on 7L58*
B-19	*3ph fault on Line 7L62 (Keg River 789S to Meikle 905S)*	*3ph fault at Meikle 905S on 7L62 to Keg River 789S* *6 cycles: trip Meikle 905S CB on 7L62* *8 cycles: trip Keg River 789S CB on 7L62*
B-20	*3ph fault on Line 7L62 (Keg River 789S to Meikle 905S)*	*3ph fault at Keg River 789S on 7L62 to Meikle 905S* *6 cycles: trip Keg River 789S CB on 7L62* *8 cycles: trip Meikle 905S CB on 7L62*
B-21	*3ph fault on Line 7L120 (Hotchkiss 788S to Meikle 905S)*	*3ph fault at Meikle 905S on 7L120 to Hotchkiss 788S* *6 cycles: trip Meikle 905S CB on 7L120* *8 cycles: trip Hotchkiss 788S CB on 7L120*
B-22	*3ph fault on Line 7L120 (Hotchkiss 788S to Meikle 905S)*	*3ph fault at Hotchkiss 788S on 7L120 to Meikle 905S* *6 cycles: trip Hotchkiss 788S CB on 7L120* *8 cycles: trip Meikle 905S CB on 7L120*
B-23	*3ph fault on Line 7L138 (Hotchkiss 788S to Meikle 905S)*	*3ph fault at Meikle 905S on 7L138 to Hotchkiss 788S* *6 cycles: trip Meikle 905S CB on 7L138* *8 cycles: trip Hotchkiss 788S CB on 7L138*
B-24	*3ph fault on Line 7L138 (Hotchkiss 788S to Meikle 905S)*	*3ph fault at Hotchkiss 788S on 7L138 to Meikle 905S* *6 cycles: trip Hotchkiss 788S CB on 7L138* *8 cycles: trip Meikle 905S CB on 7L138*
B-25	*3ph fault on Line 7L131 (Wesley Creek 834S to Meikle 905S)*	*3ph fault at Wesley Creek 834S on 7L131* *6 cycles: trip Wesley Creek 834S CB on 7L131* *8 cycles: trip Meikle 905S CB on 7L131*
B-26	*3ph fault on Line 7L131 (Wesley Creek 834S to Meikle 905S)*	*3ph fault at Meikle 905S on 7L131* *6 cycles: trip Meikle 905S CB on 7L131* *8 cycles: trip Wesley Creek 834S CB on 7L131*

Plot No.	Contingency	Fault Description and Clearing Times
B-27	*3ph fault on Line 7L106 (Meikle 905S to Whitetail)*	*3ph fault at Meikle 905S on 7L106 6 cycles: trip Meikle 905S CB on 7L106 8 cycles: trip Whitetail CB on 7L106*
B-28	*3ph fault on Line 7L106 (Meikle 905S to Whitetail)*	*3ph fault at Whitetail on 7L106 6 cycles: trip Whitetail CB on 7L106 8 cycles: trip Meikle 905S CB on 7L106*
B-31	*3ph fault on Line 9L02 (Little Smoky 813S to Louise Creek 809S)*	*3ph fault at Little Smoky 813S on 9L02 5 cycles: trip Little Smoky 813S CB on 9L02 7 cycles: trip Louise Creek 809S CB on 9L02*
B-32	*3ph fault on Line 9L02 (Little Smoky 813S to Louise Creek 809S)*	*3ph fault at Louise Creek 809S on 9L02 5 cycles: trip Louise Creek 809S CB on 9L02 7 cycles: trip Little Smoky 813S CB on 9L02*
B-33	*3ph fault on Line 9L938 (Louise Creek 809S to Sagitaw 77S)*	*3ph fault at Louise Creek 809S on 9L938 5 cycles: trip Louise Creek 809S CB on 9L938 7 cycles: trip Sagitaw 77S CB on 9L938*
B-34	*3ph fault on Line 9L938 (Louise Creek 809S to Sagitaw 77S)*	*3ph fault at Sagitaw 77S on 9L938 5 cycles: trip Sagitaw 77S CB on 9L938 7 cycles: trip Louise Creek 809S CB on 9L938*
B-35	*3ph fault on Line 989L (Sagitaw 77S to Sundance 310S)*	*3ph fault at Sagitaw 77S on 989S 5 cycles: trip Sagitaw 77S CB on 989S 7 cycles: trip Sundance 310S CB on 989S*
B-36	*3ph fault on Line 989L (Sagitaw 77S to Sundance 310S)*	*3ph fault at Sundance 310S on 989S 5 cycles: trip Sundance 310S CB on 989S 7 cycles: trip Sagitaw 77S CB on 989S*

Attachment E

Transient Stability Analysis Results (Cases 7 to 9)

Transient Stability Plots
2016 Summer Peak (Case 7)

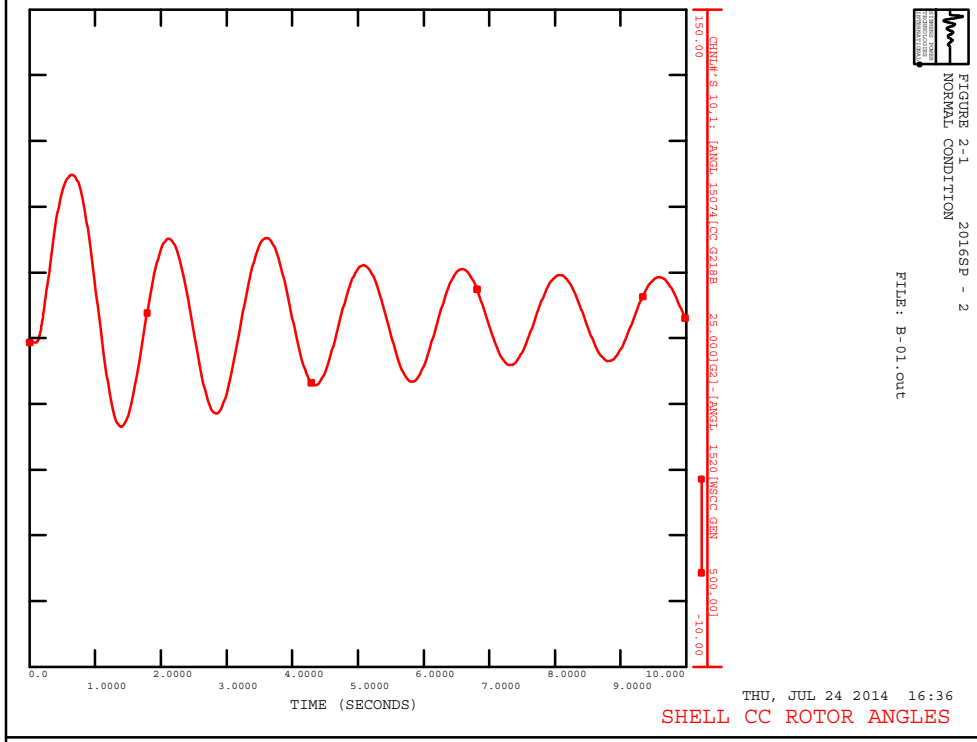


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-01.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

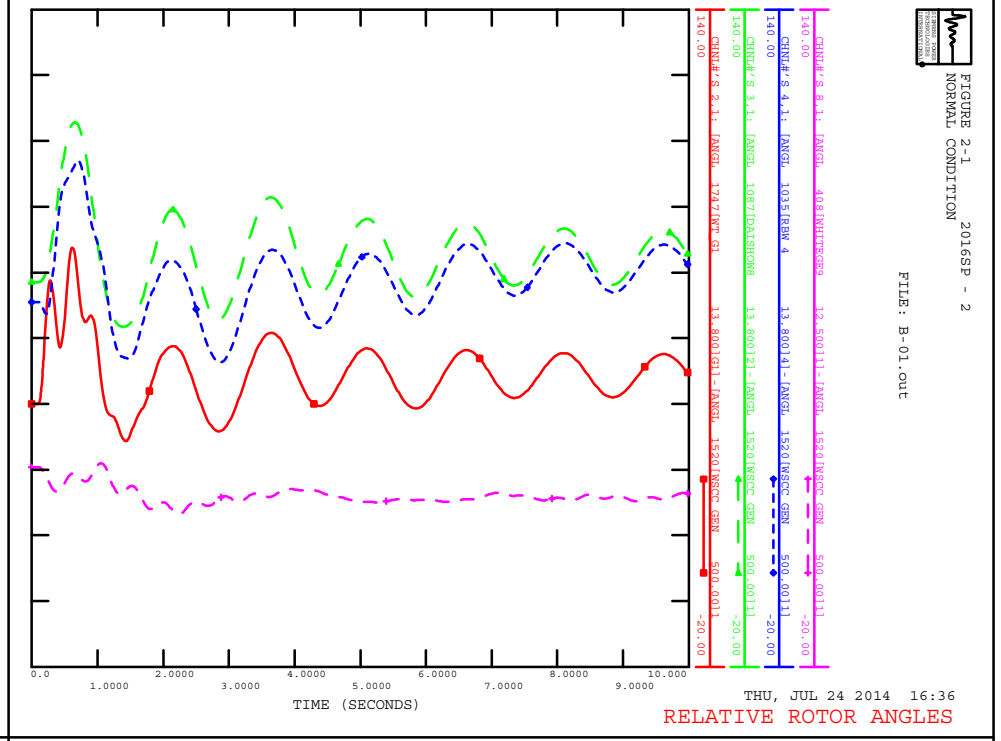


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-01.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

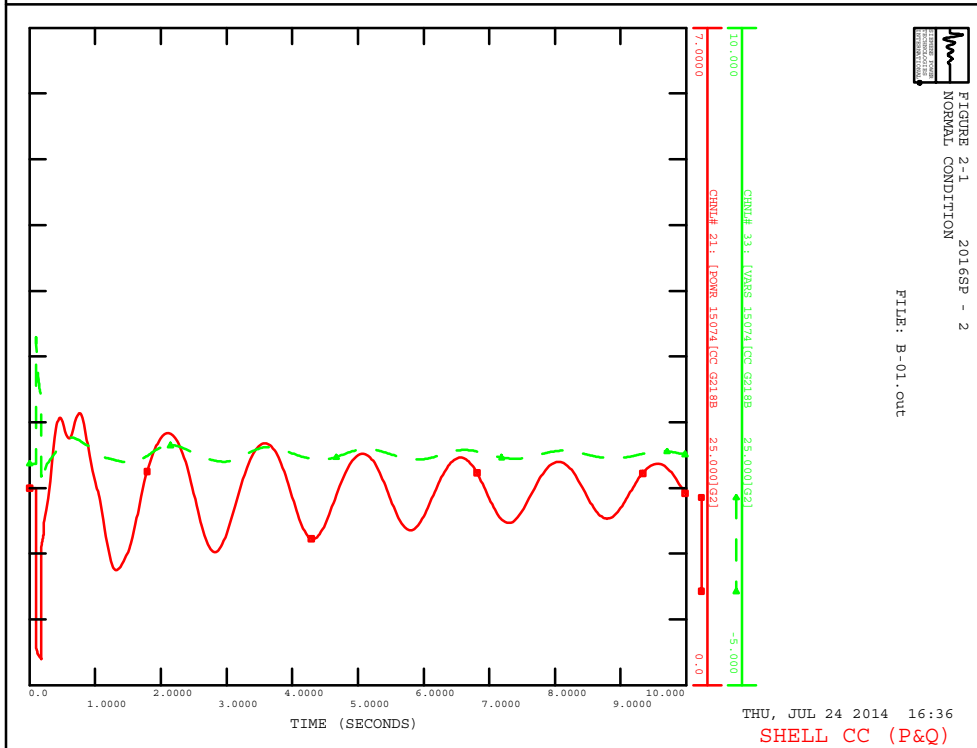


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-01.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

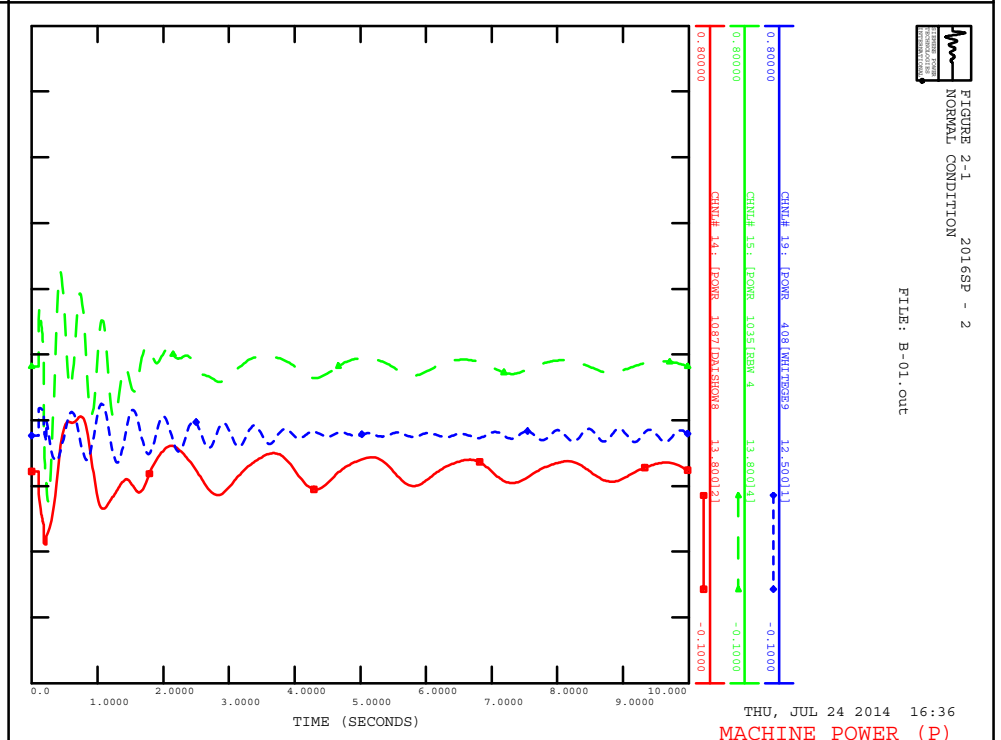


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-01.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

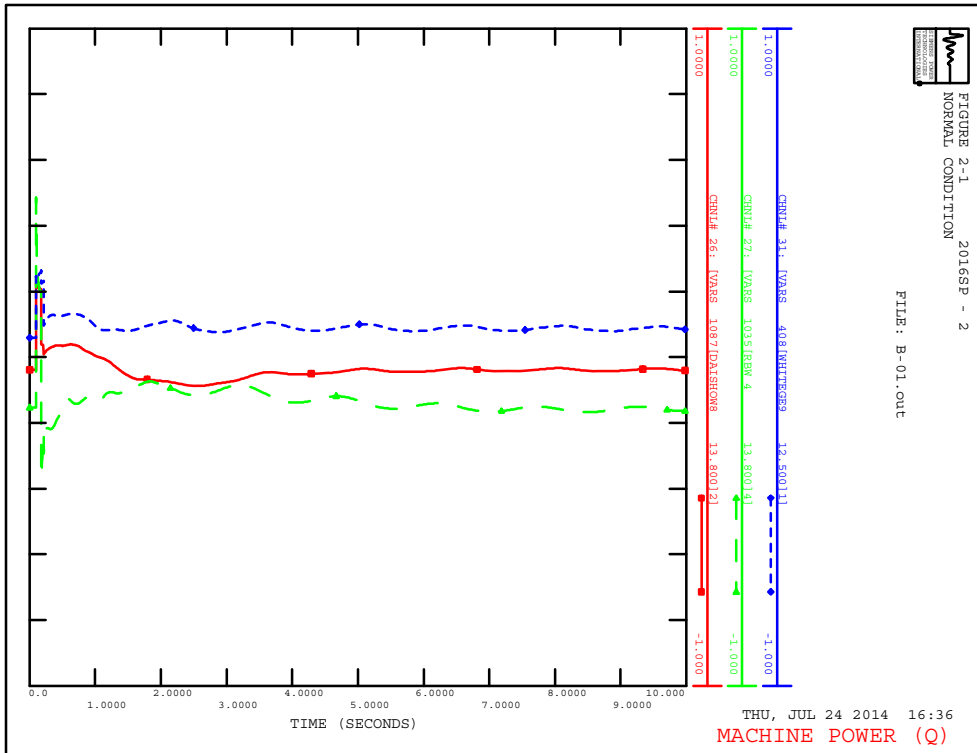


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-01.out
CHNI# 26: [VARS 1087 [DAISHOWA 13.800 [2]
CHNI# 27: [VARS 1035 [RBW 4 13.800 [4]
CHNI# 31: [VARS 408 [WHITEGB9 12.500 [1]
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

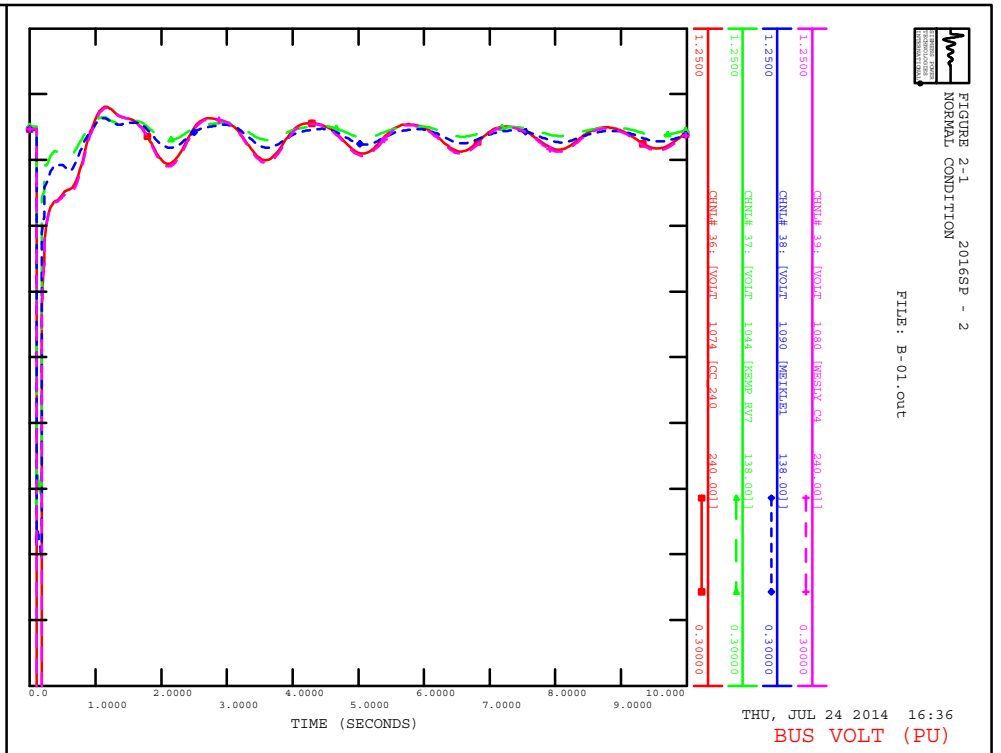


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-01.out
CHNI# 36: [VOLT 1074 [CC 240 240.00] [
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00] [
CHNI# 38: [VOLT 1090 [MEIKLE1 138.00] [
CHNI# 39: [VOLT 1080 [NRSIX C4 240.00] [
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

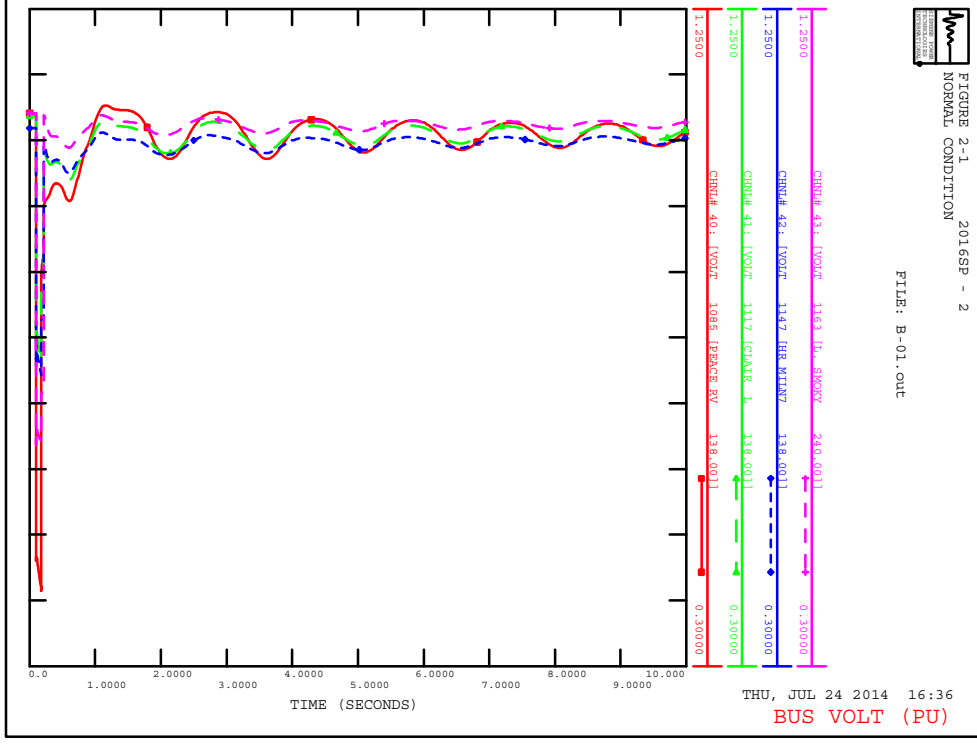


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-01.out
CHNI# 40: [VOLT 1085 [PEACE RV 138.00] [
CHNI# 41: [VOLT 1117 [CLAIR L 138.00] [
CHNI# 42: [VOLT 1142 [HR MIAN7 138.00] [
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00] [
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

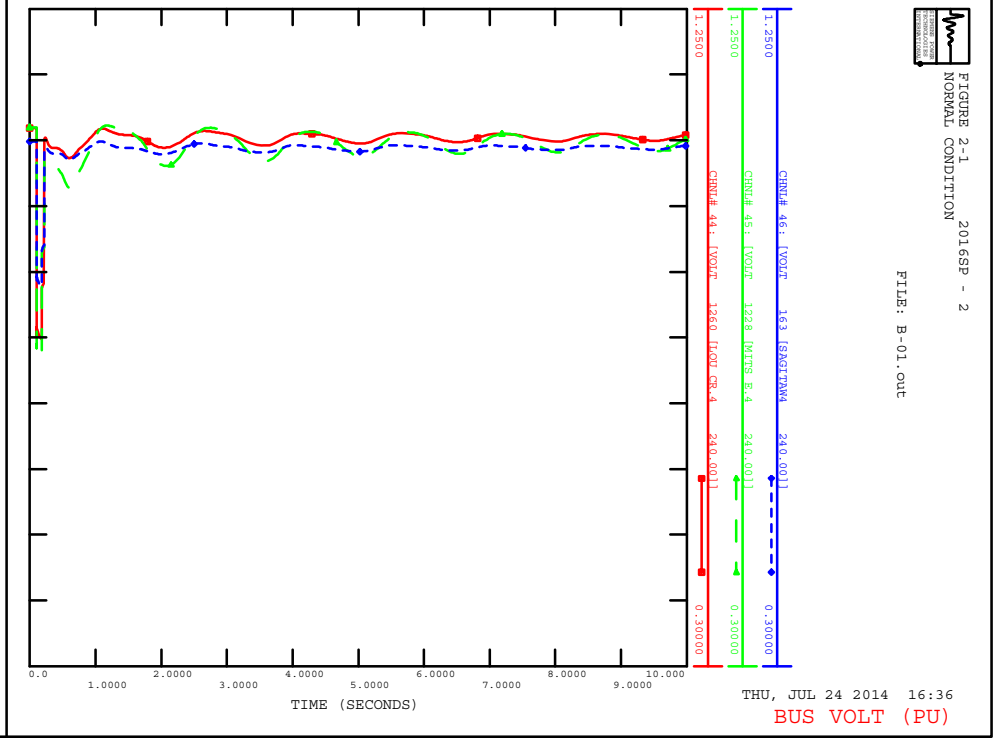


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-01.out
CHNI# 44: [VOLT 1260 [FOX CR 4 240.00] [
CHNI# 45: [VOLT 1228 [MITS E-4 240.00] [
CHNI# 46: [VOLT 163 [SAGITAW4 240.00] [
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

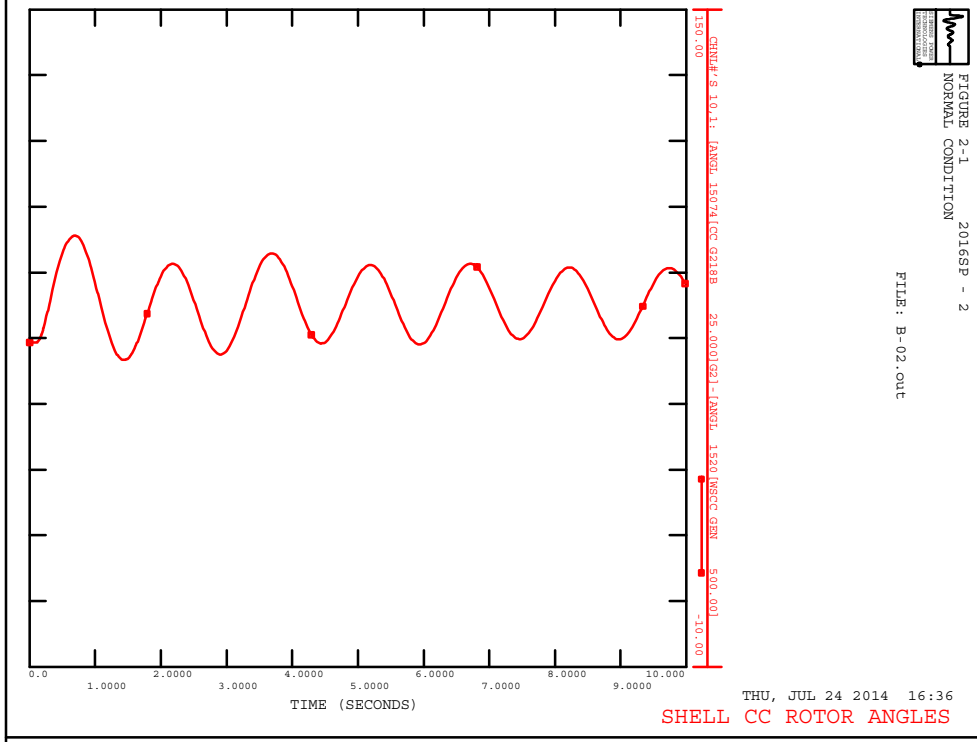


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-02.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

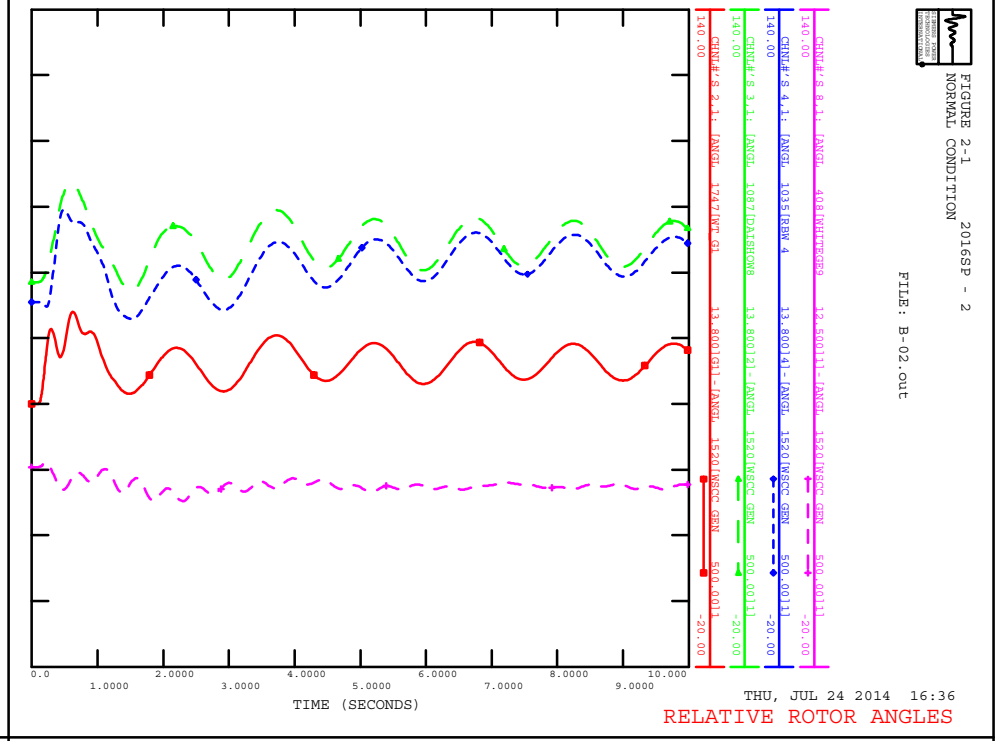


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-02.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

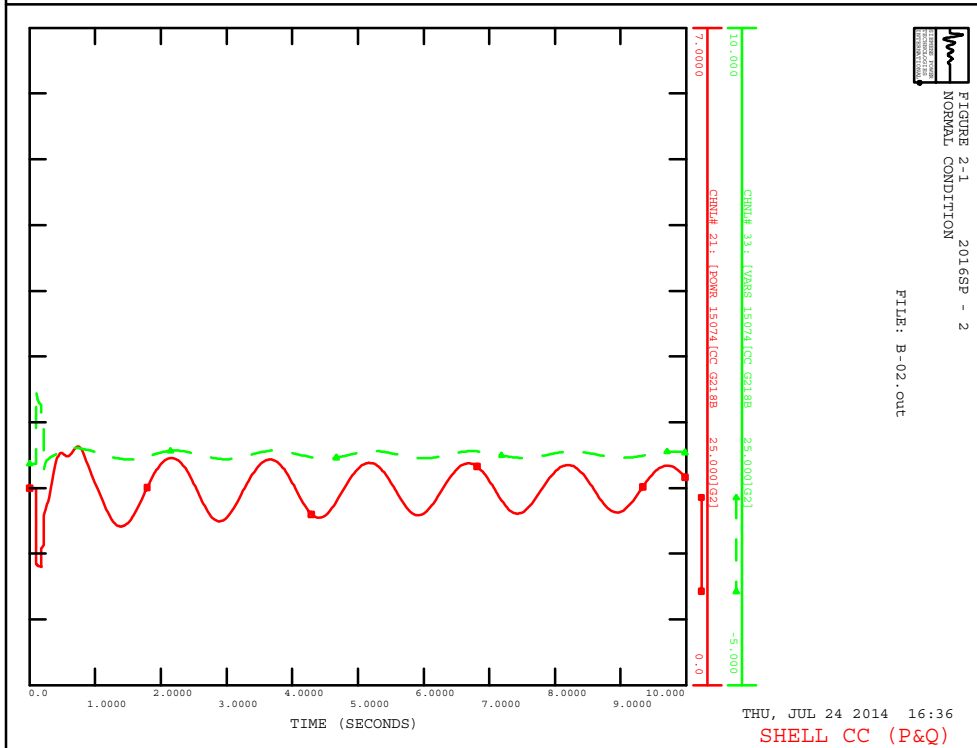


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-02.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

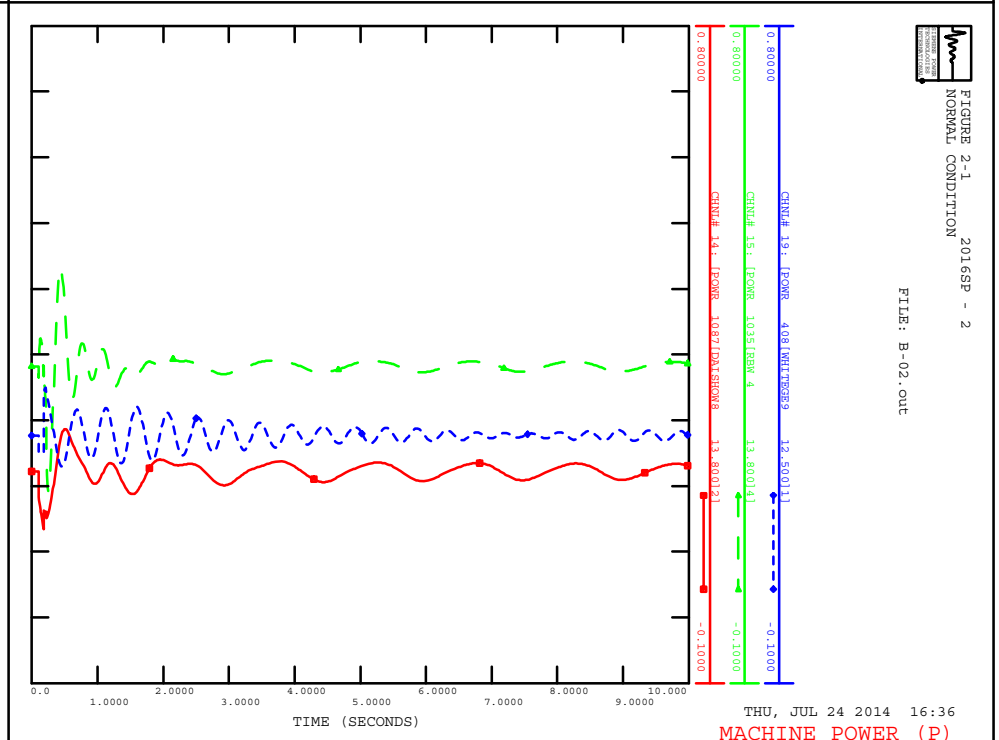


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-02.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

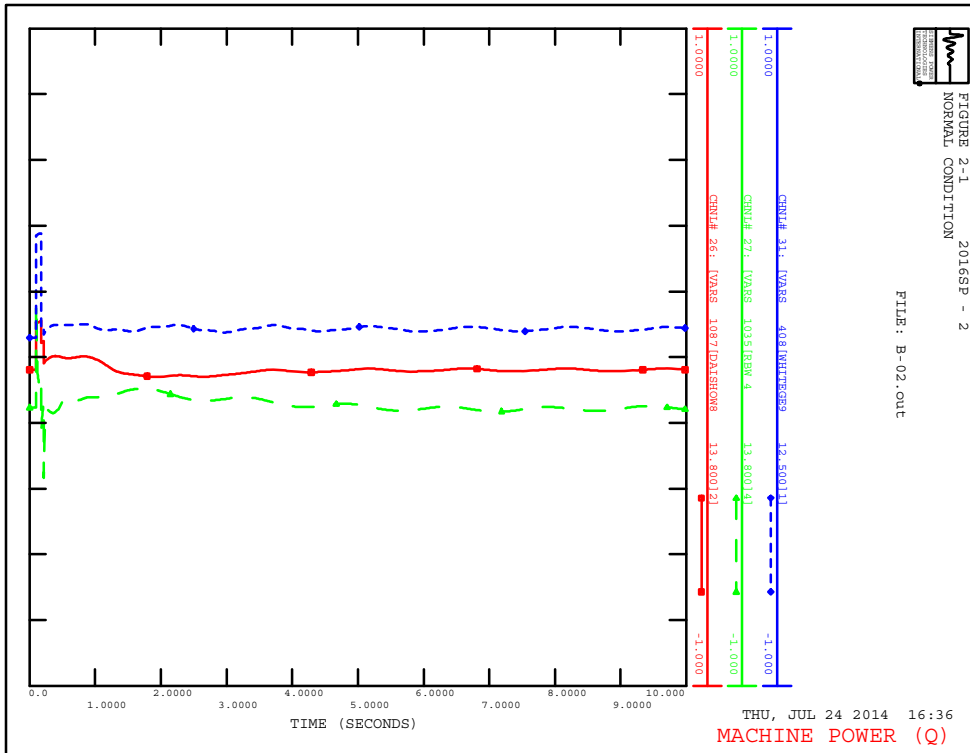


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-02.out
CHNI# 31: [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27: [VARS 1035 [RBW 4 13.800]4]
CHNI# 26: [VARS 1087 [DAISHOW8 13.800]2]
1.0000
-1.000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

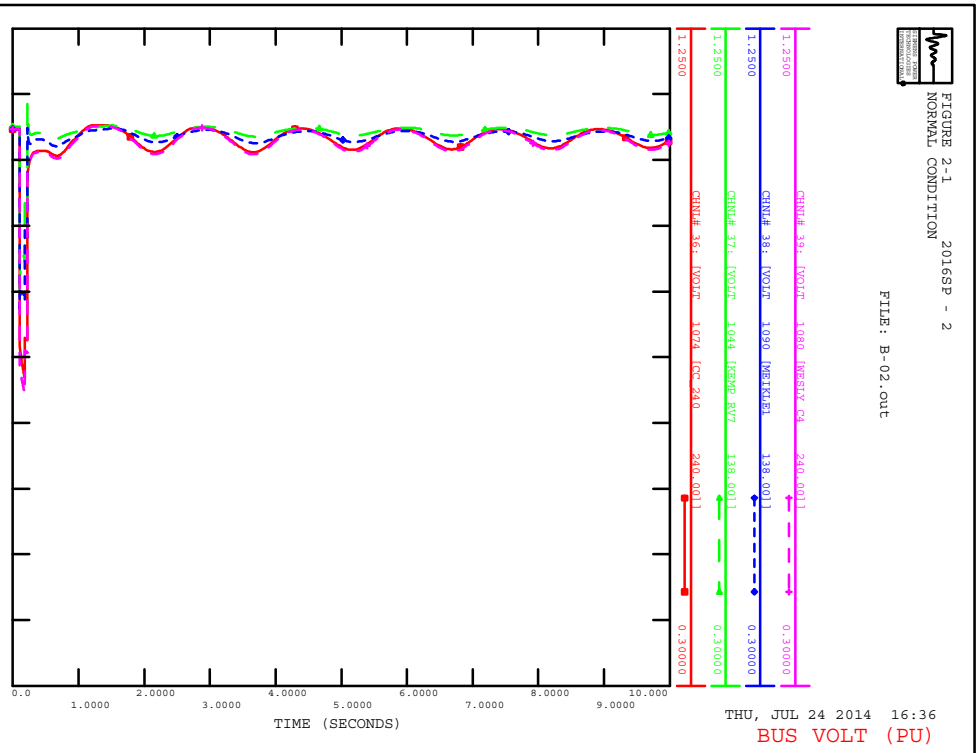


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-02.out
CHNI# 39: [VOLT 1080 [MESIX C4 240.00]
CHNI# 38: [VOLT 1090 [MESIKLE1 138.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 36: [VOLT 1074 [CC 240 240.00]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

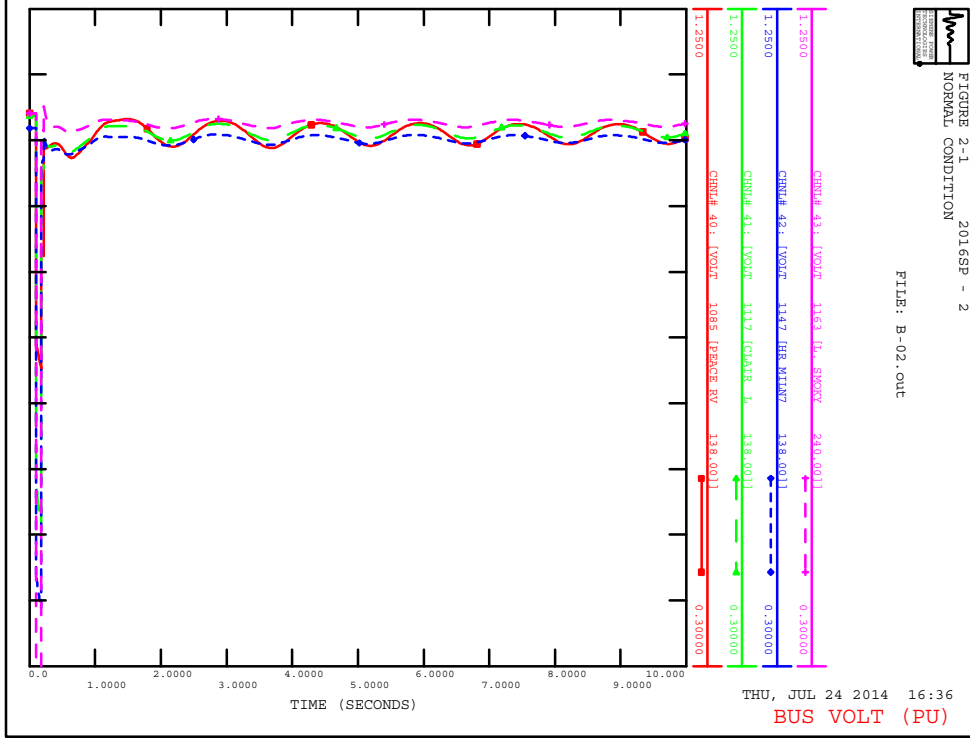


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-02.out
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00]
CHNI# 42: [VOLT 1142 [HR MTN7 138.00]
CHNI# 41: [VOLT 1117 [CHAIR L 138.00]
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

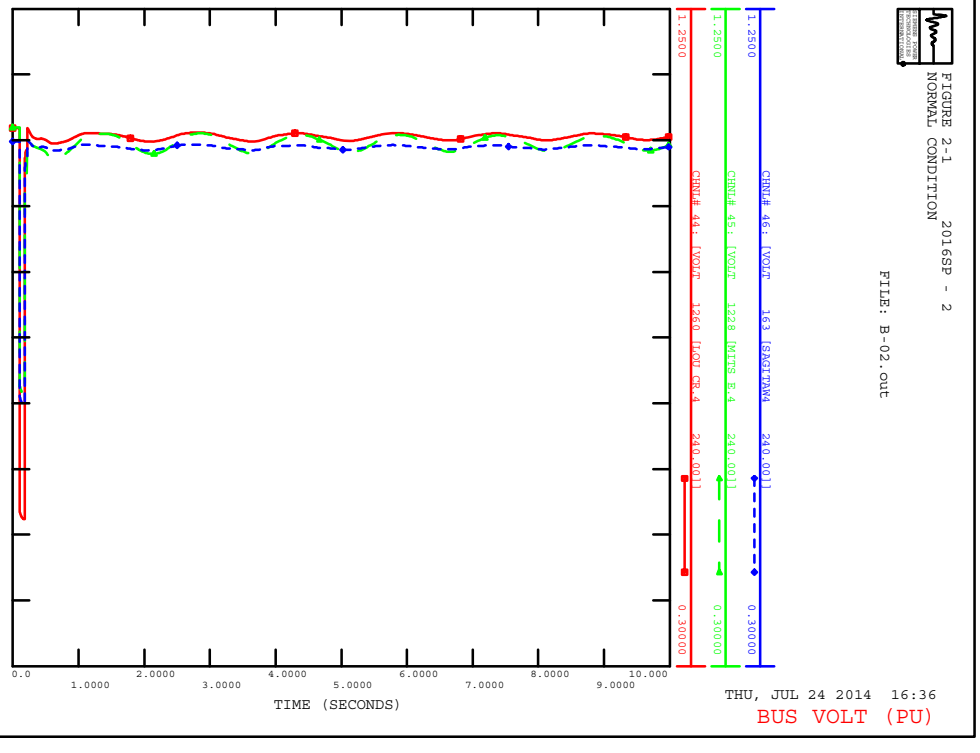


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-02.out
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
CHNI# 45: [VOLT 1228 [MTS B.4 240.00]
CHNI# 44: [VOLT 1260 [FOT CR.4 240.00]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

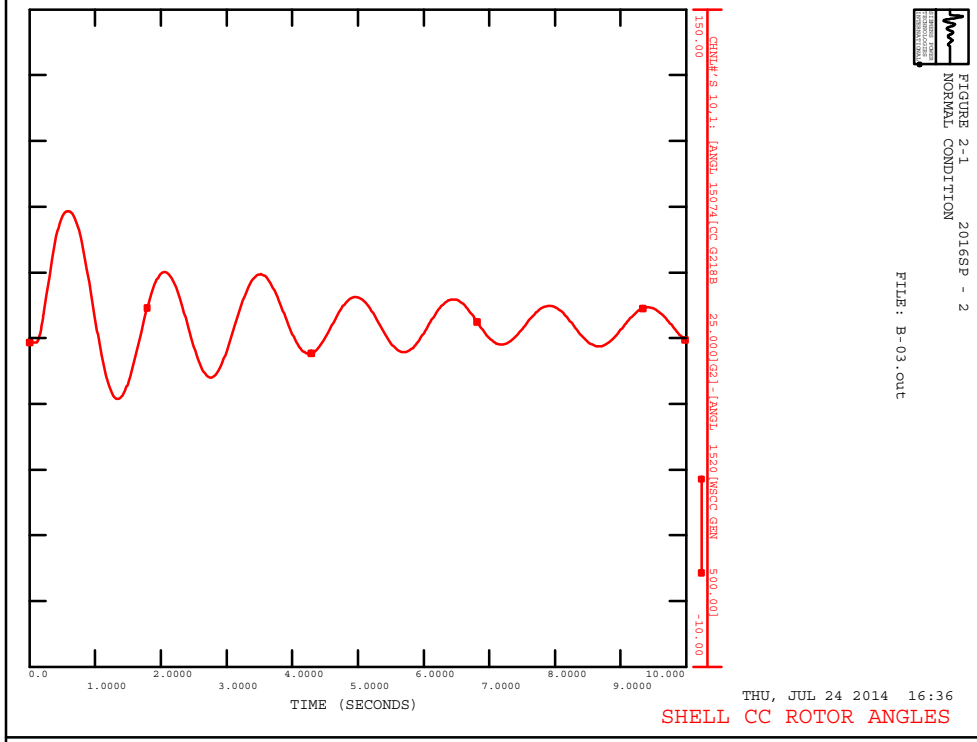


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-03.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

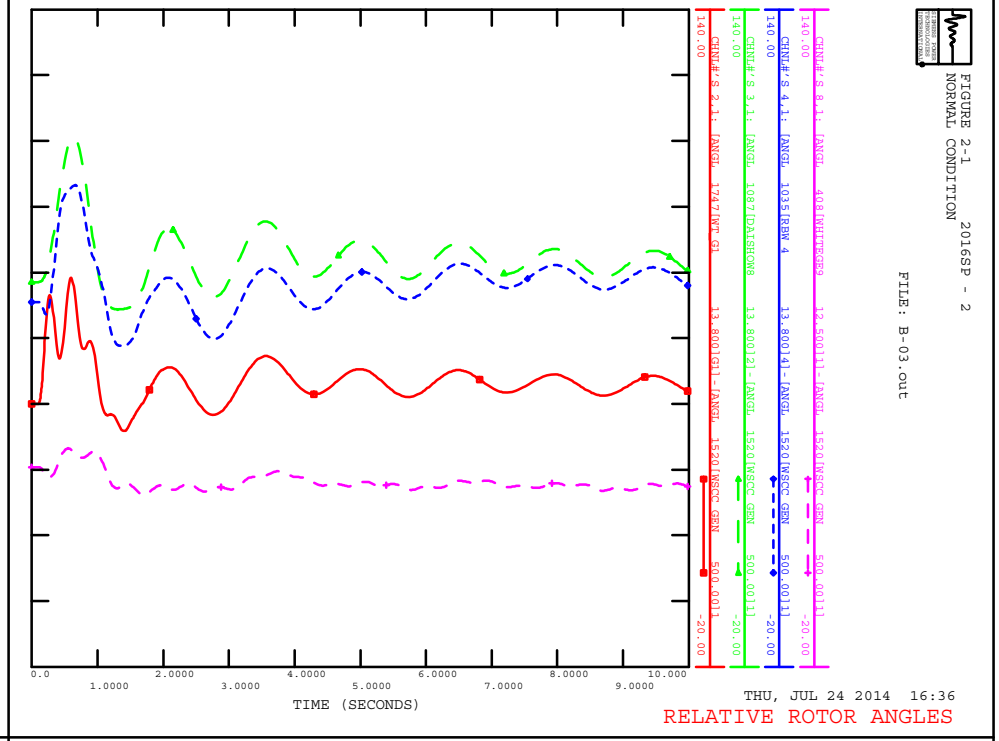


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-03.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

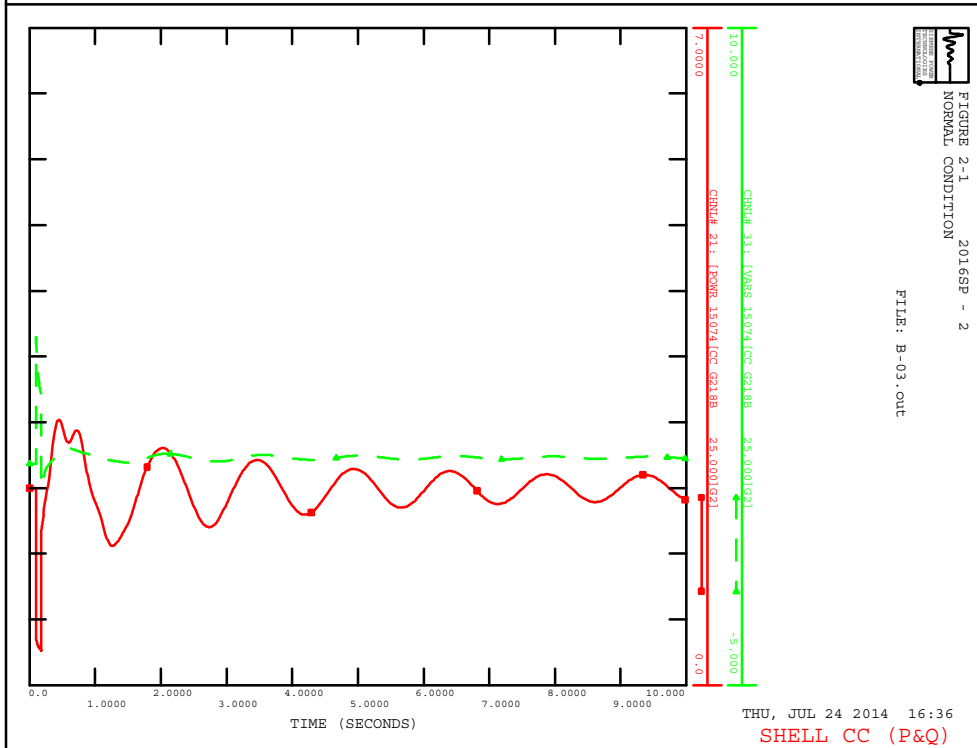


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-03.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

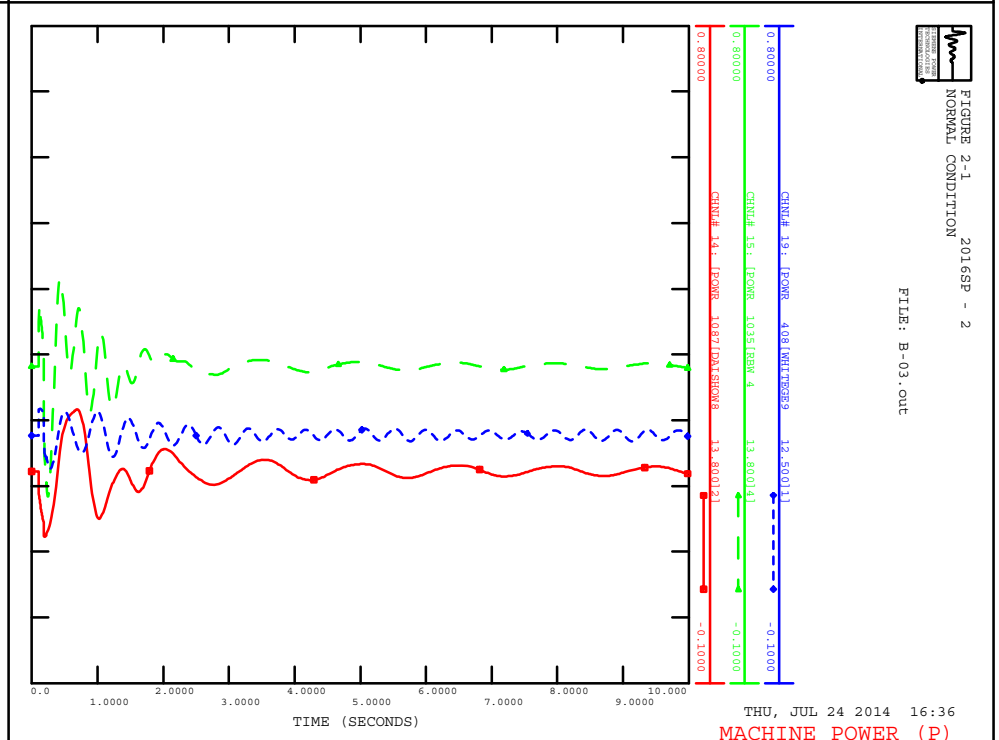


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-03.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

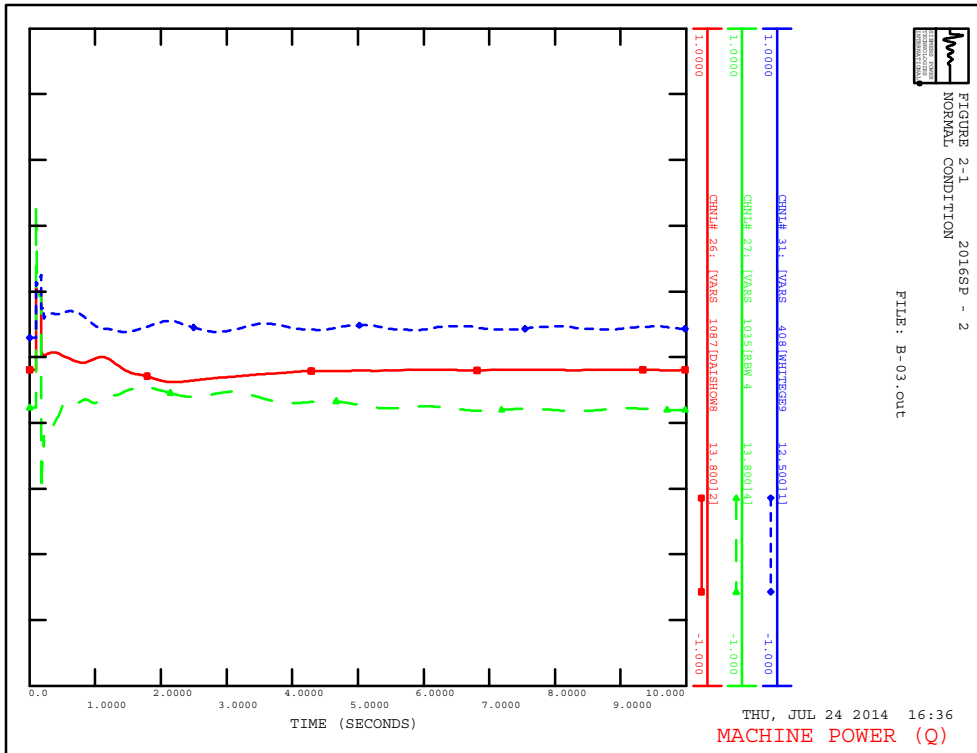


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-03.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

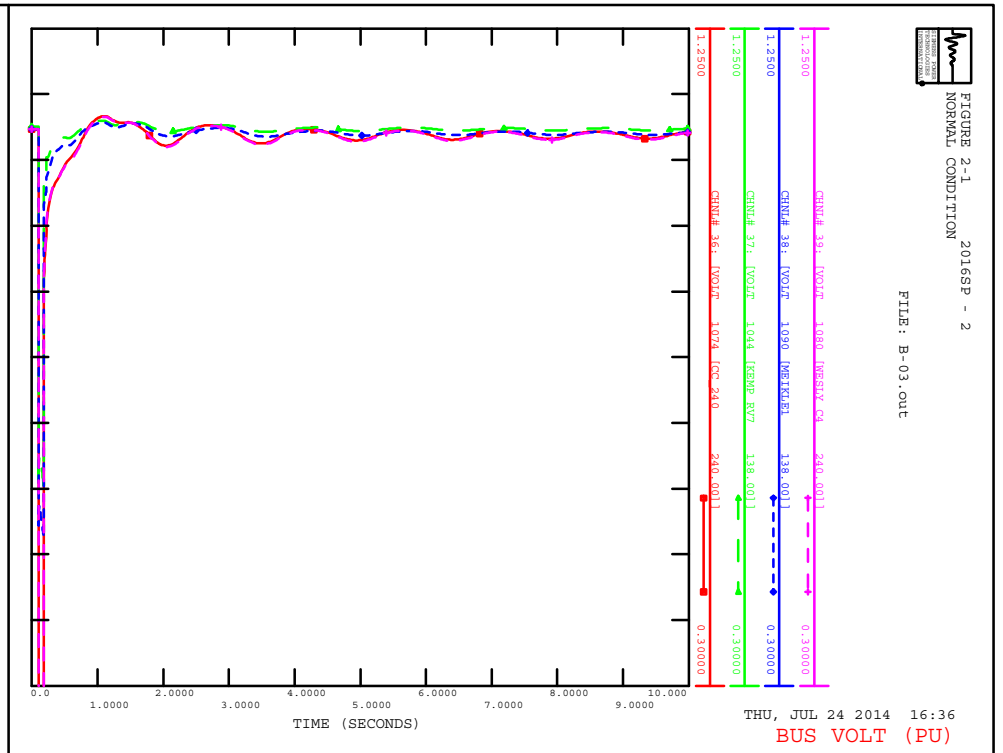


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-03.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

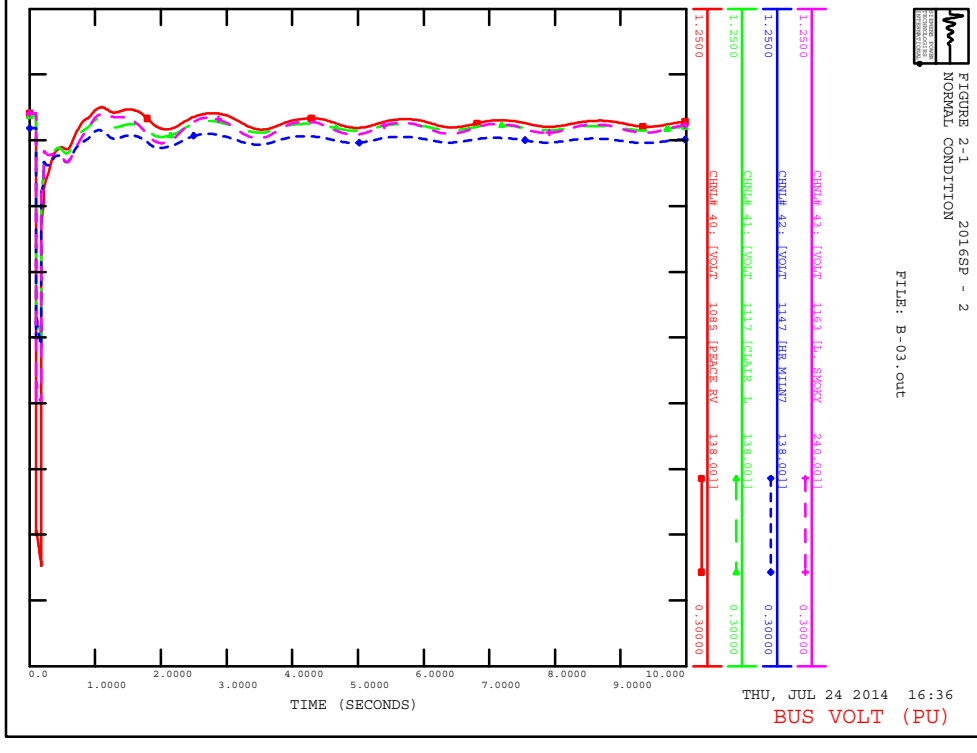


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-03.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

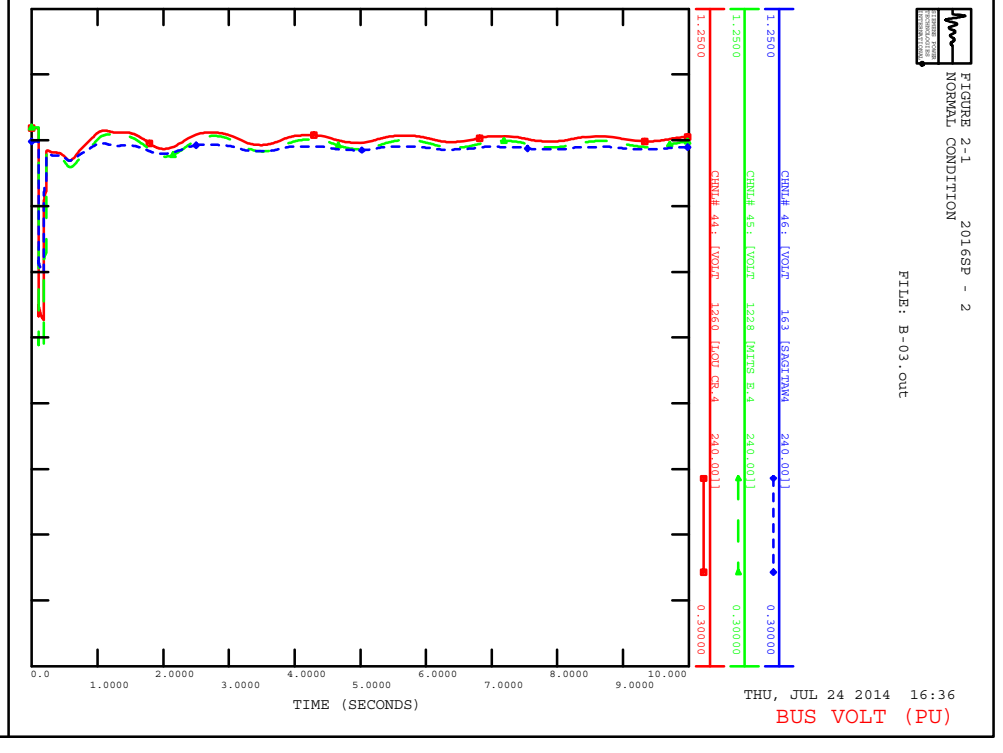


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-03.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

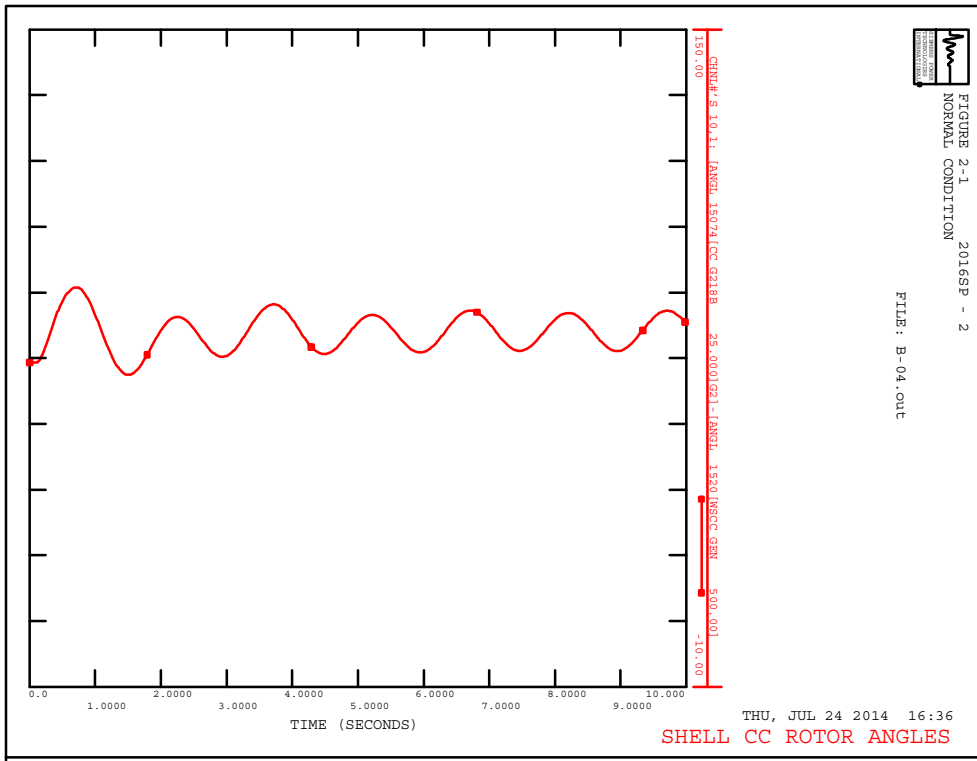


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-04.out
CHNL#'S 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

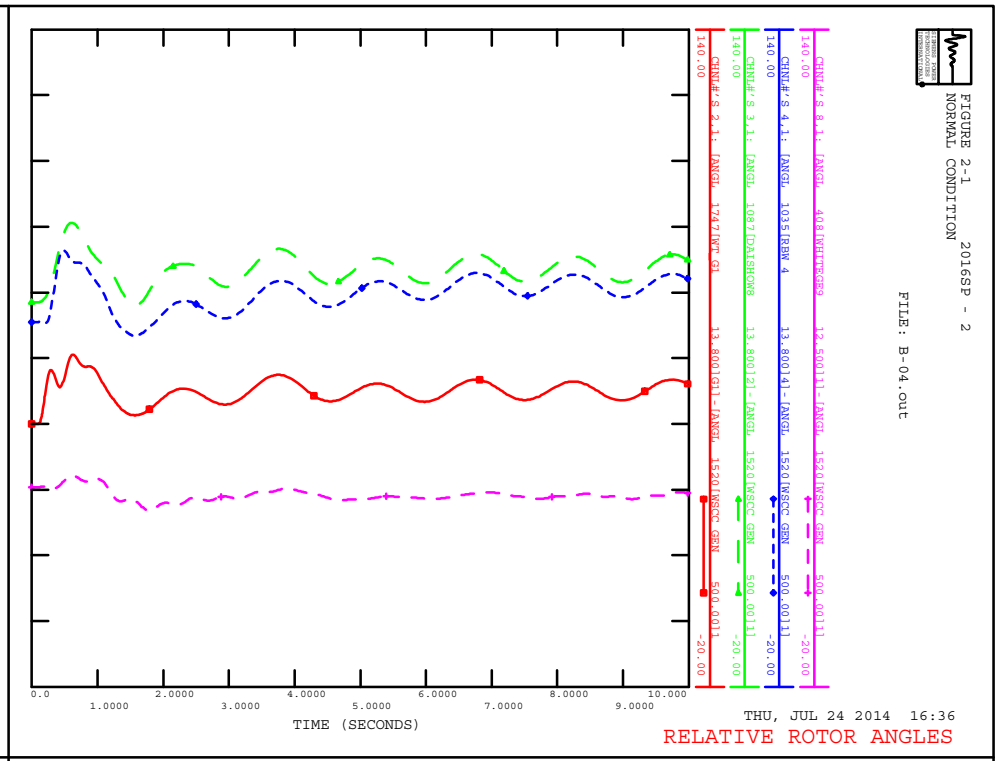


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-04.out
CHNL#'S 8,1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 3,1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 2,1: [ANGL 1747[WT G1 13.800[1]-[ANGL 1520[NSCC GEN 500.00]]
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

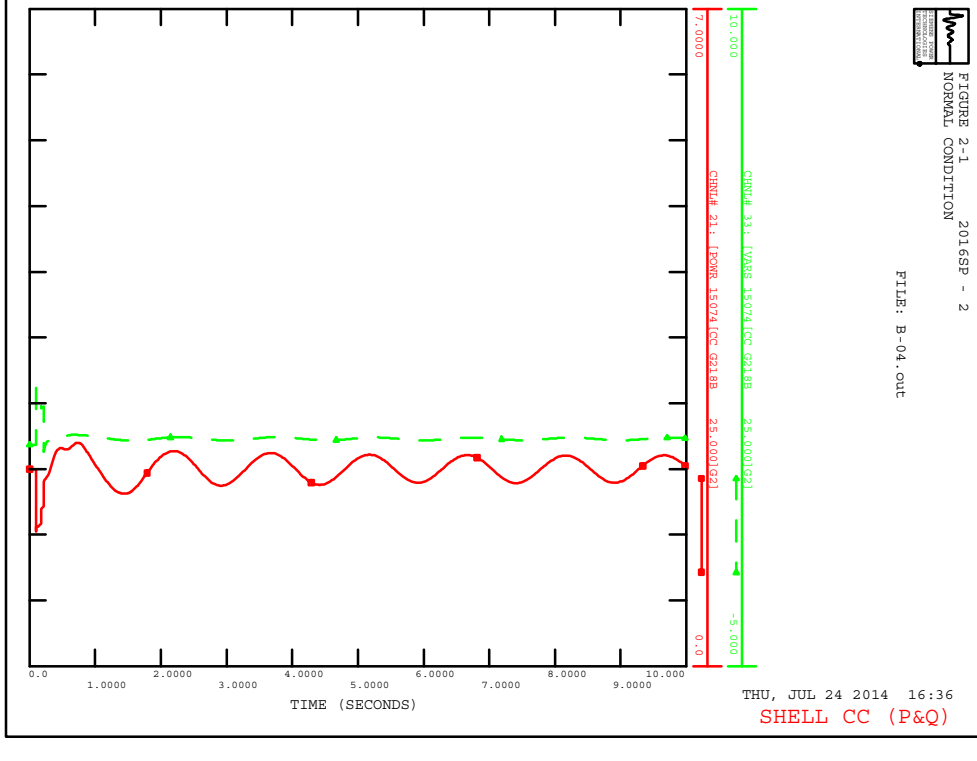


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-04.out
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

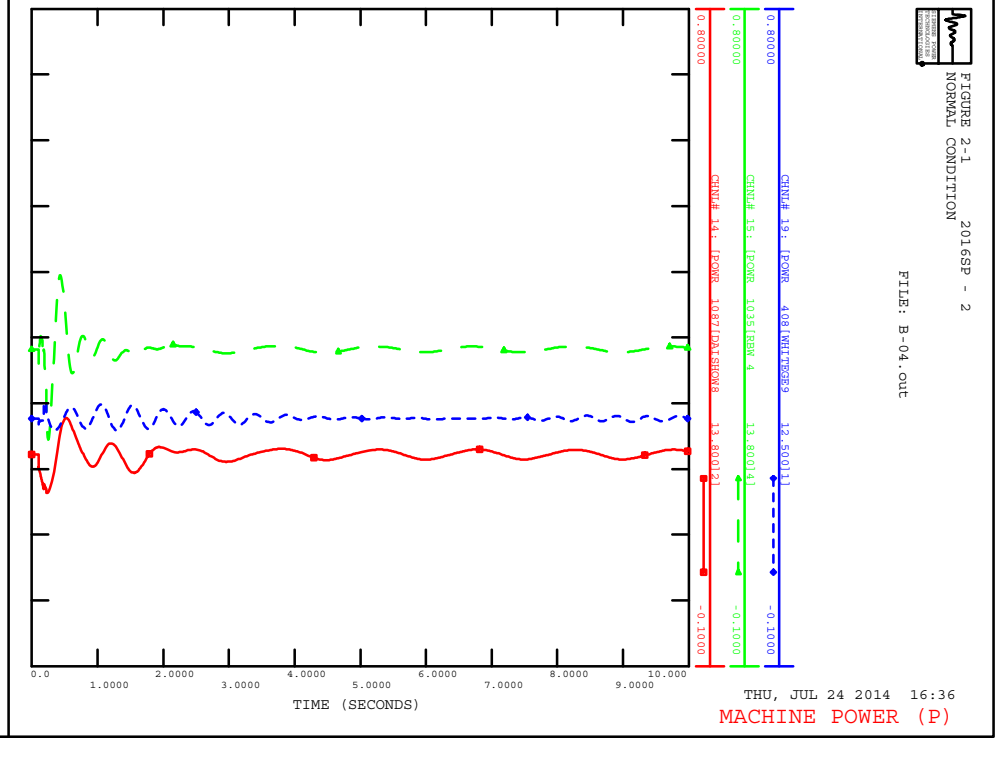


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-04.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

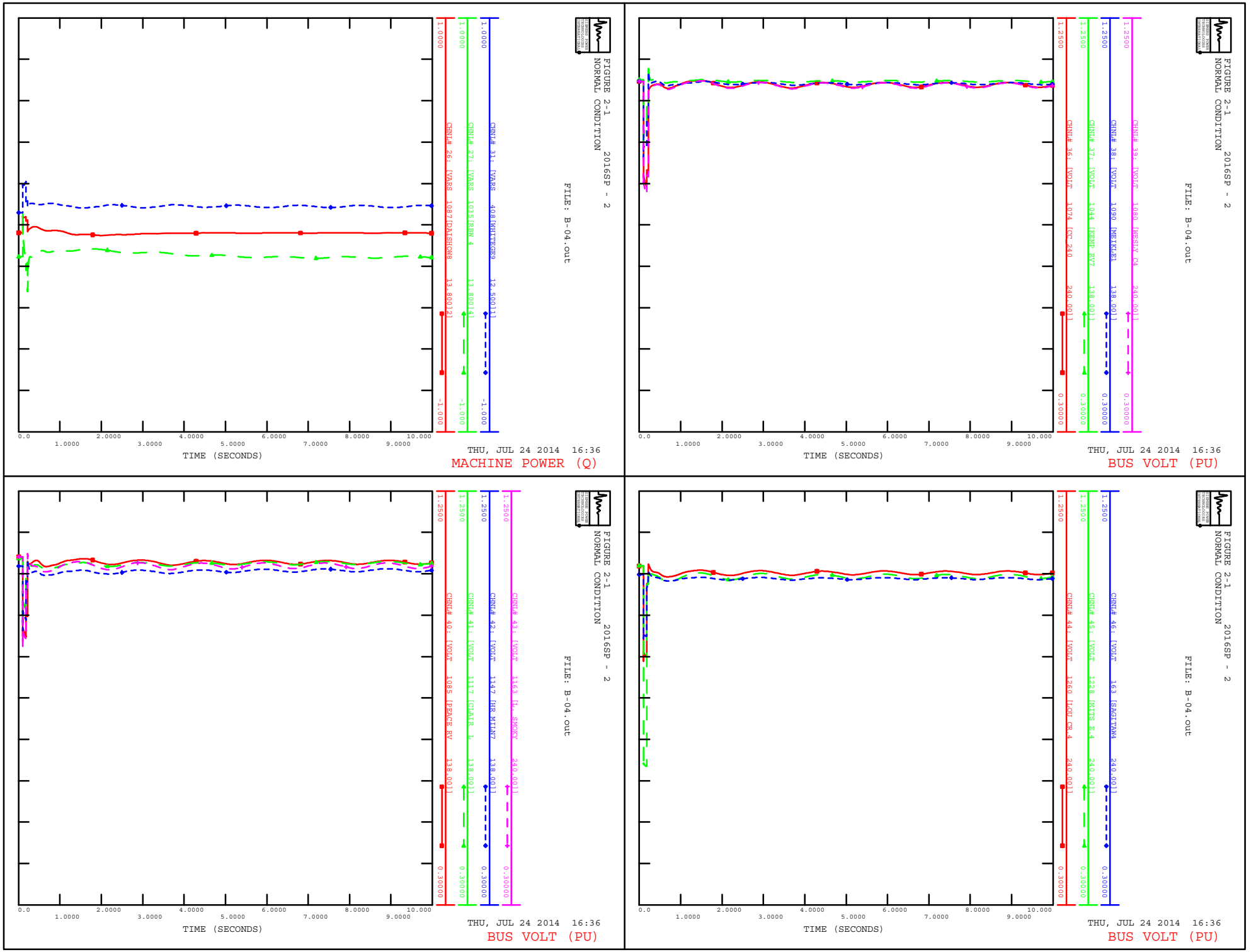


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-04.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)
FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-04.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)
FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-04.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)
FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-04.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

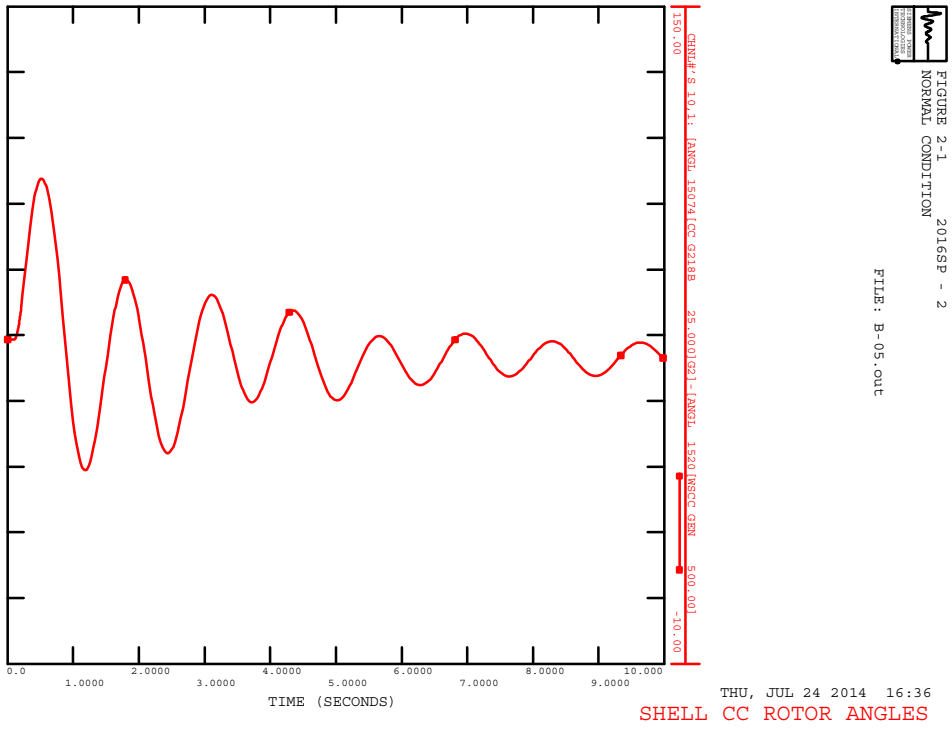


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-05.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

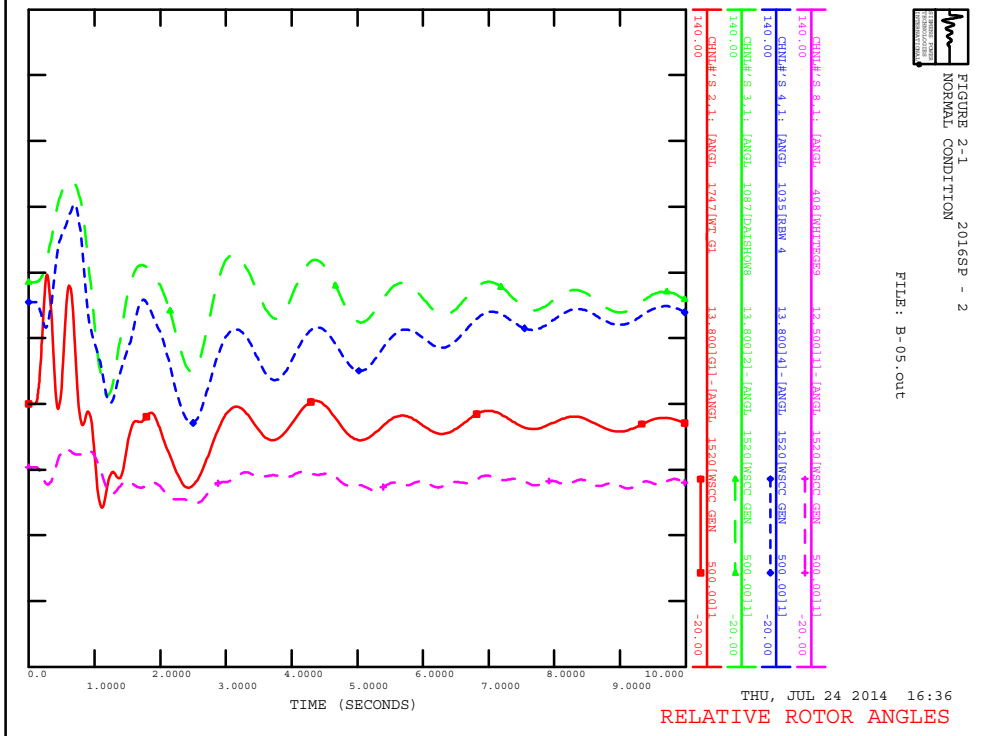


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-05.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

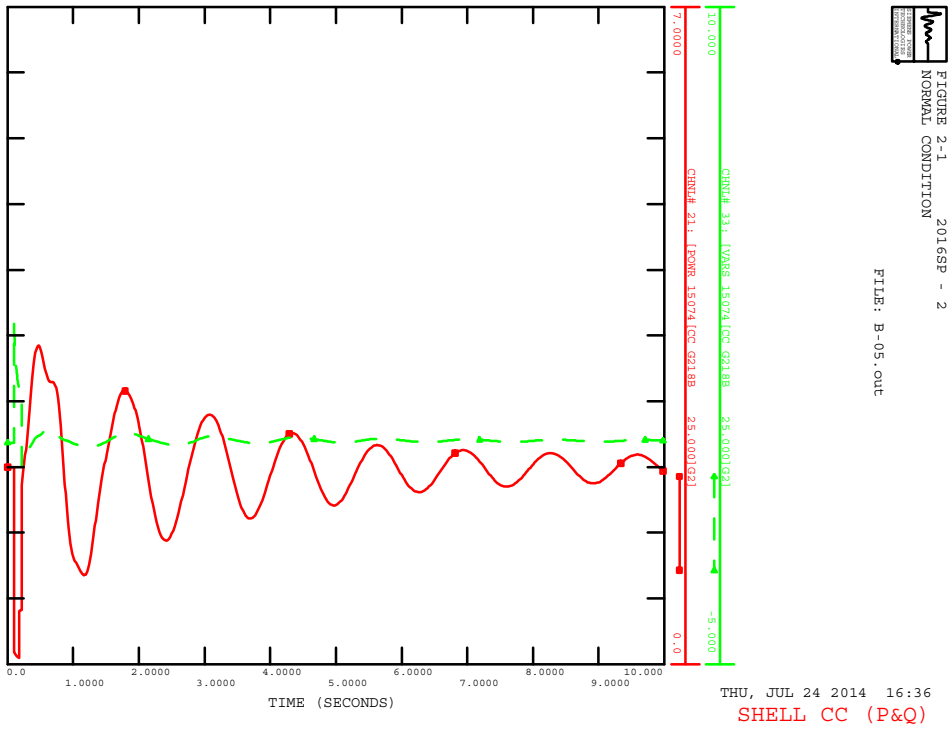


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-05.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

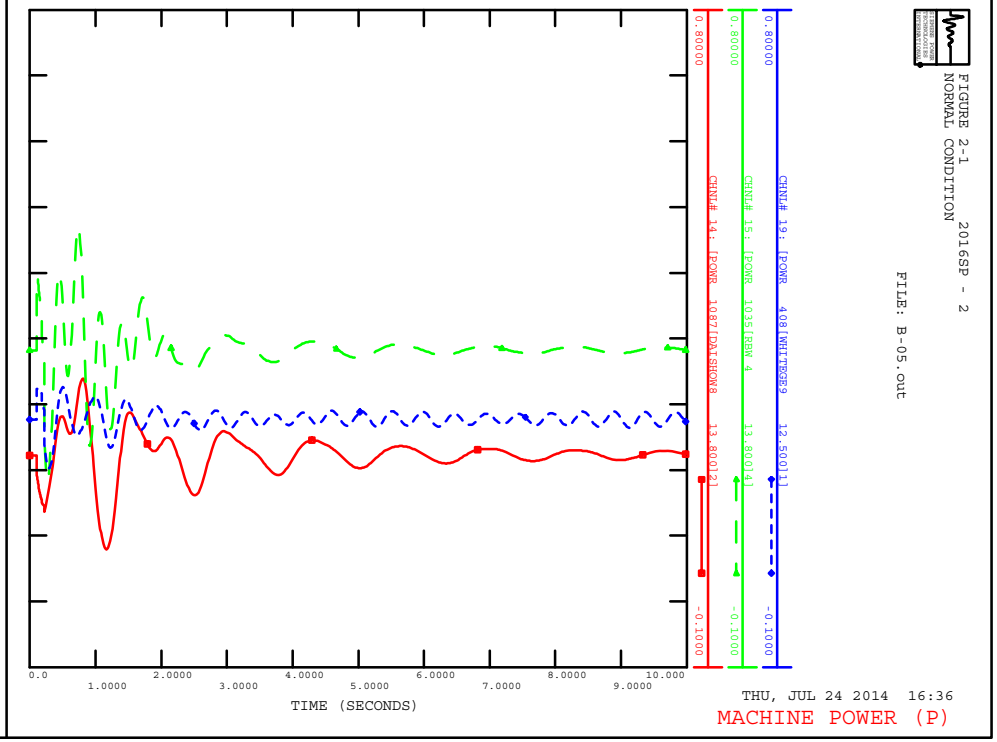


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-05.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

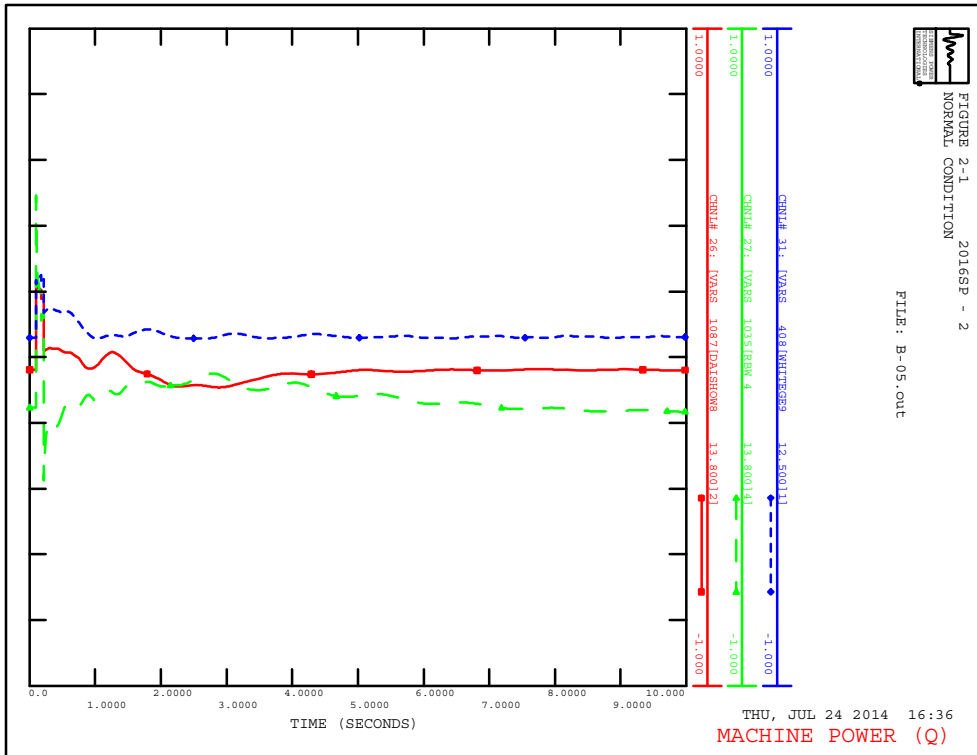


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-05.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

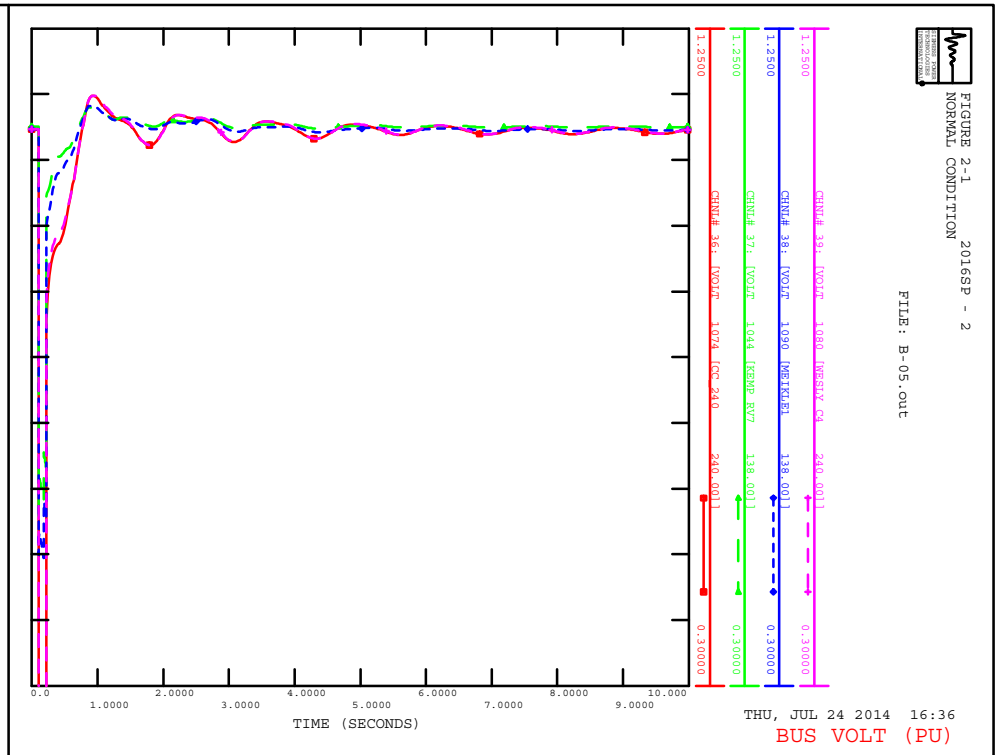


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-05.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

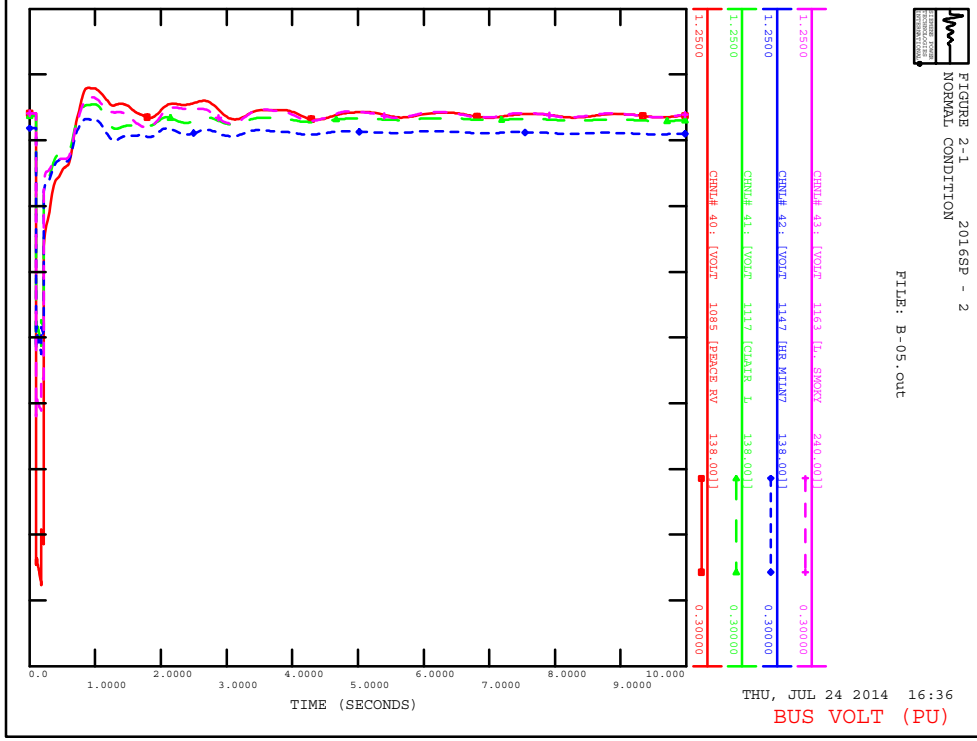


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-05.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

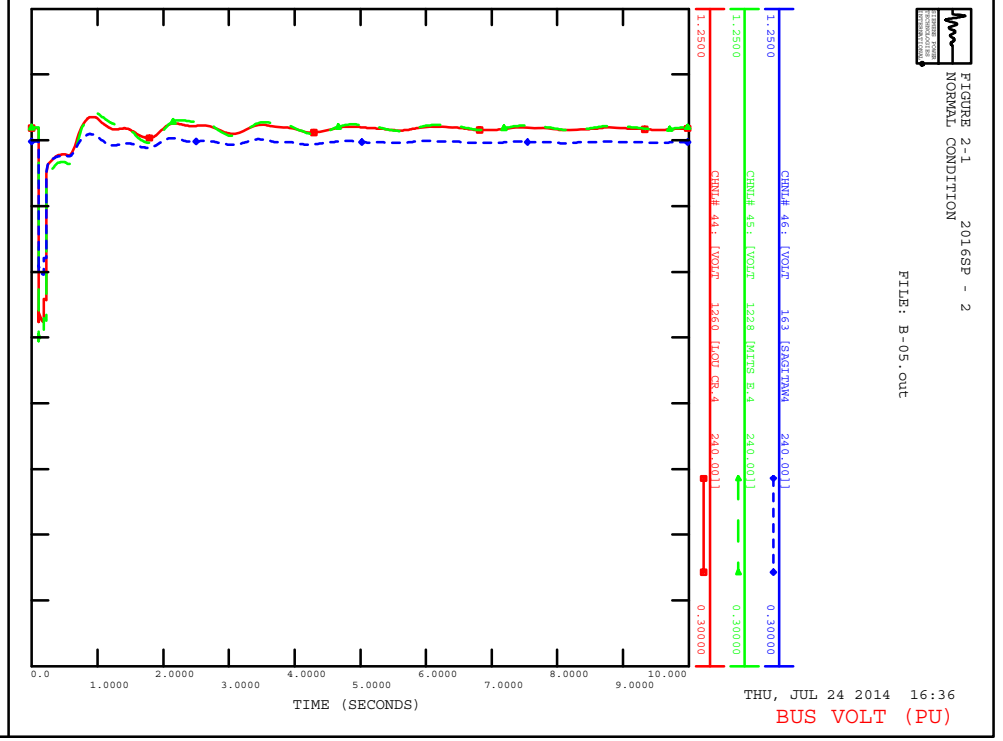


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-05.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

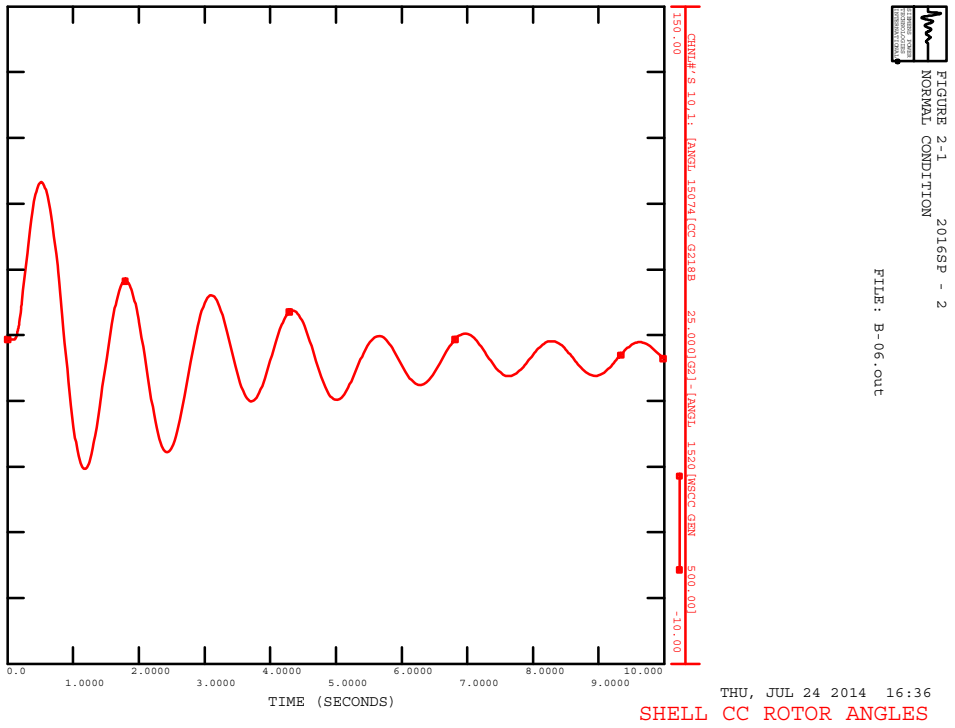


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-06.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

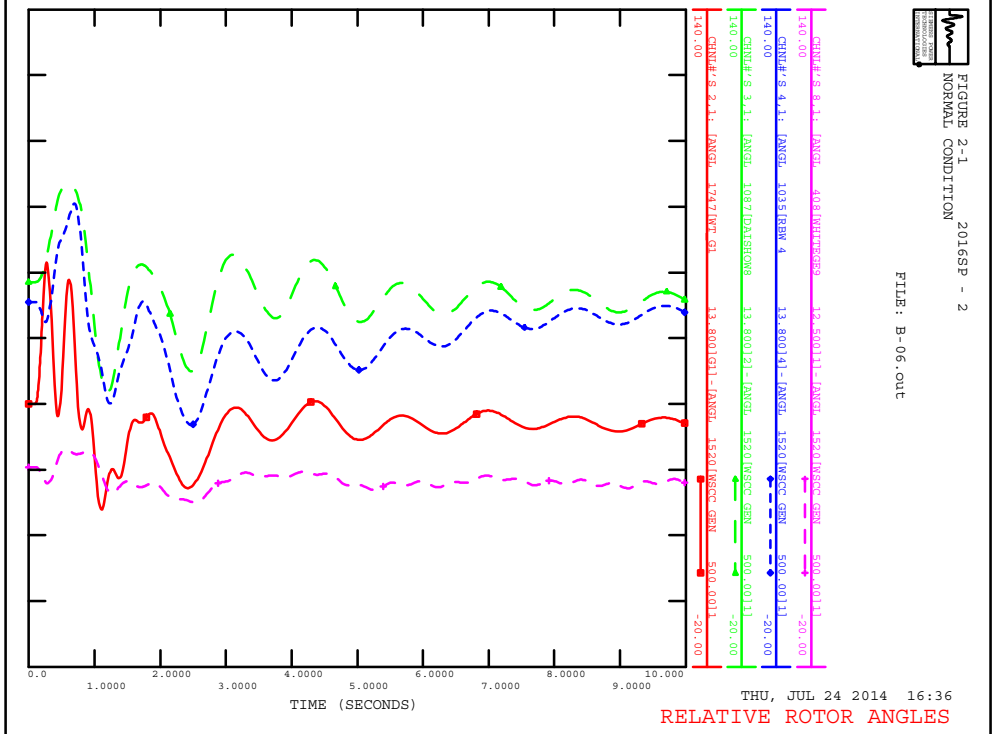


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-06.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

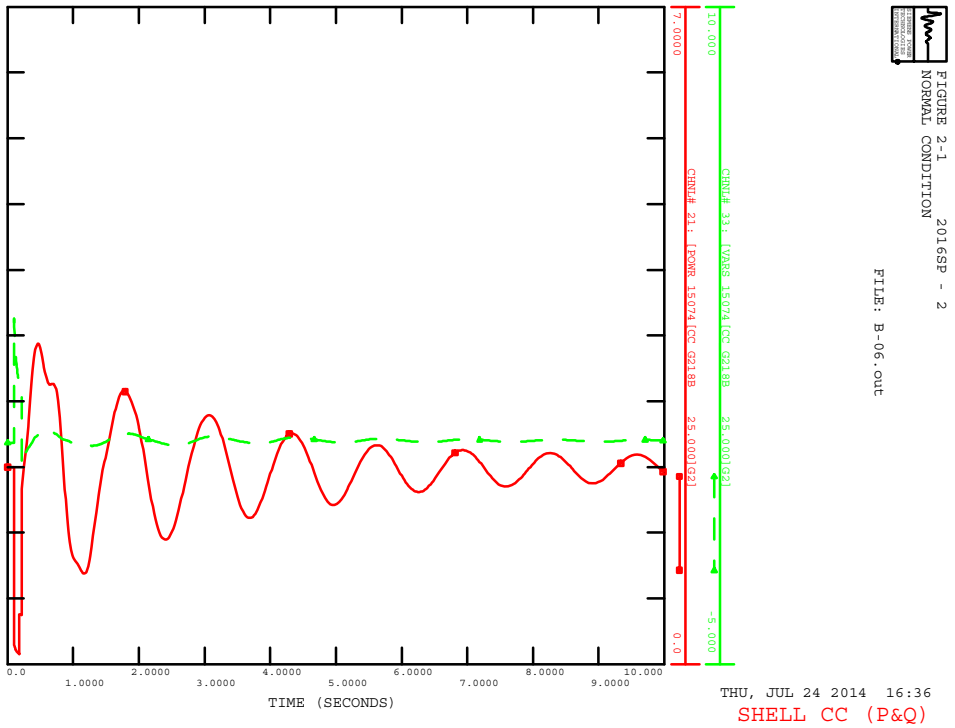


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-06.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

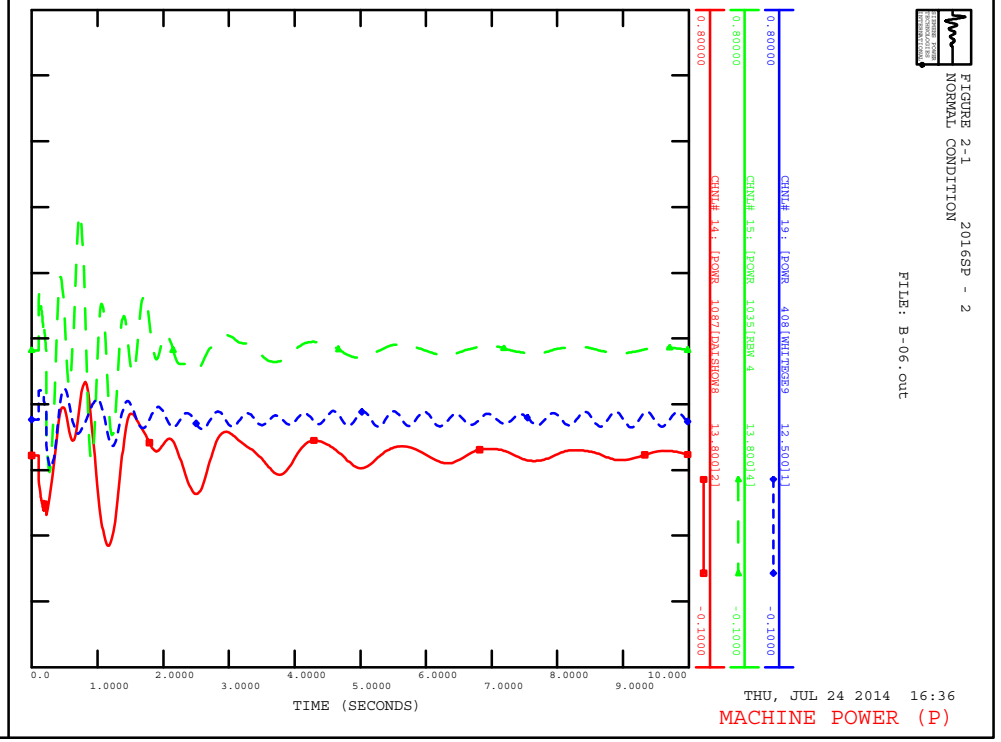


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-06.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

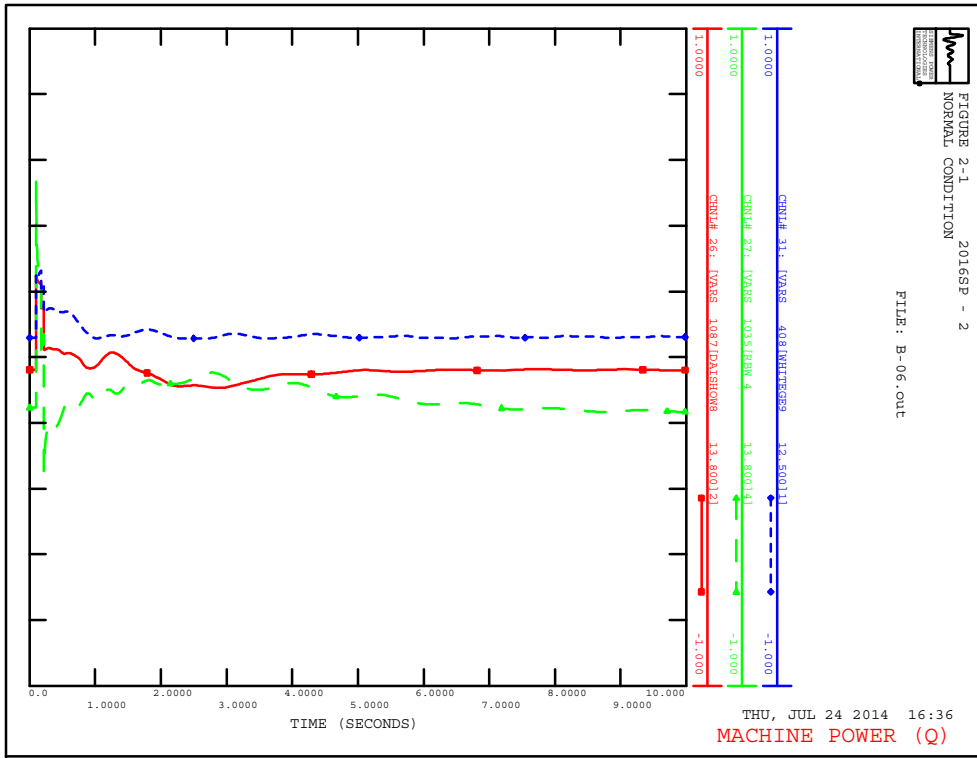


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-06.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

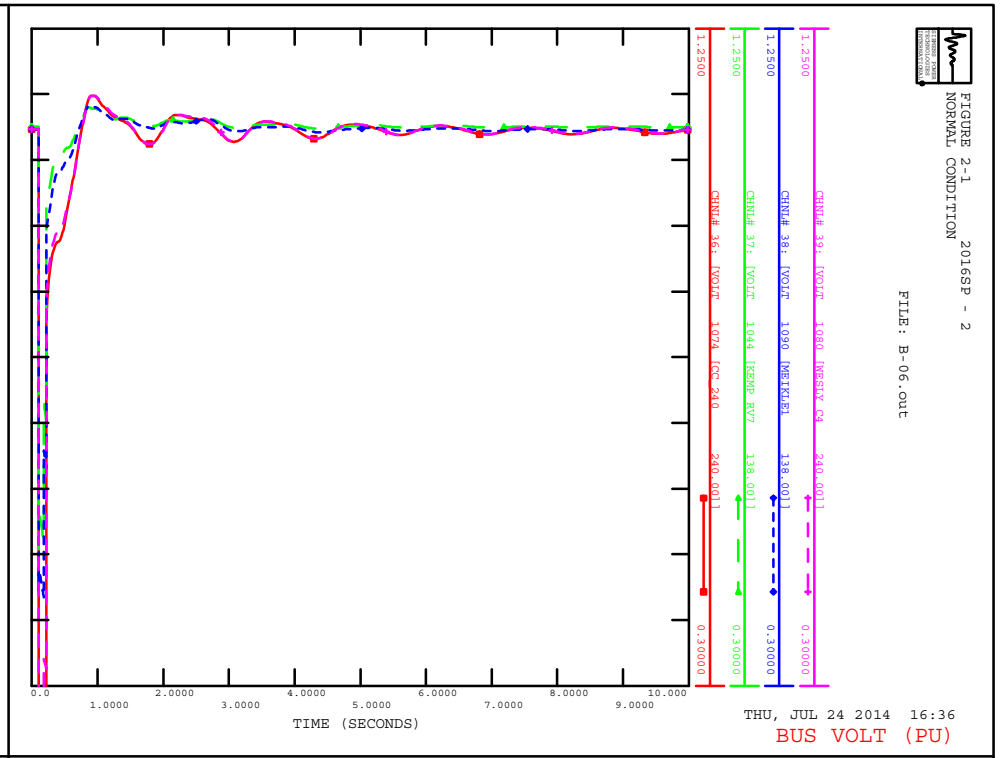


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-06.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

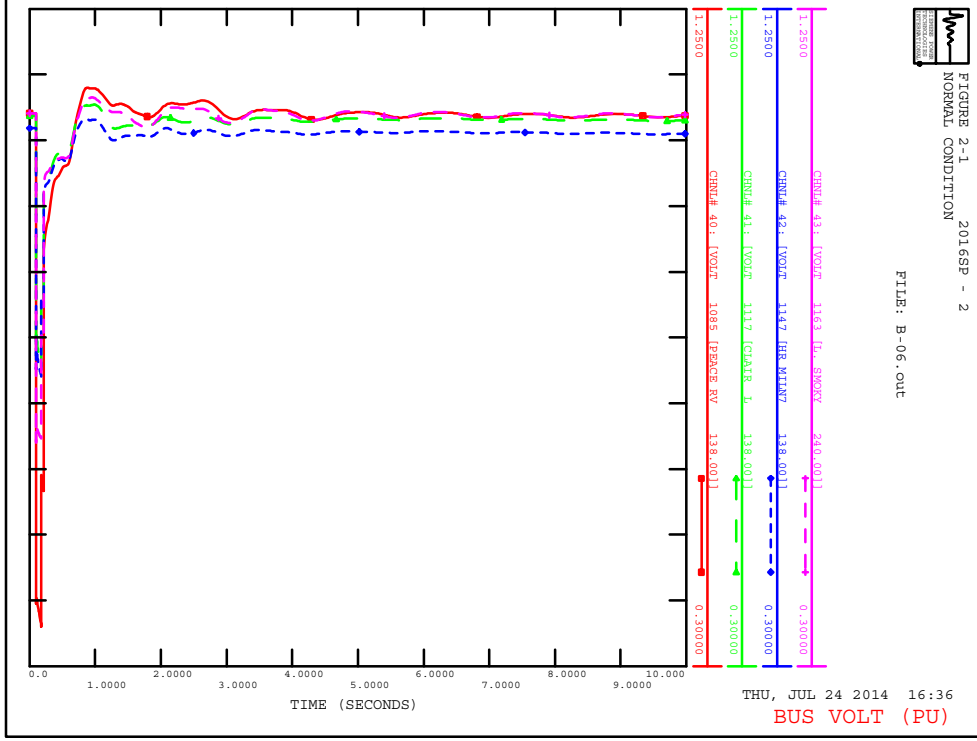


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-06.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

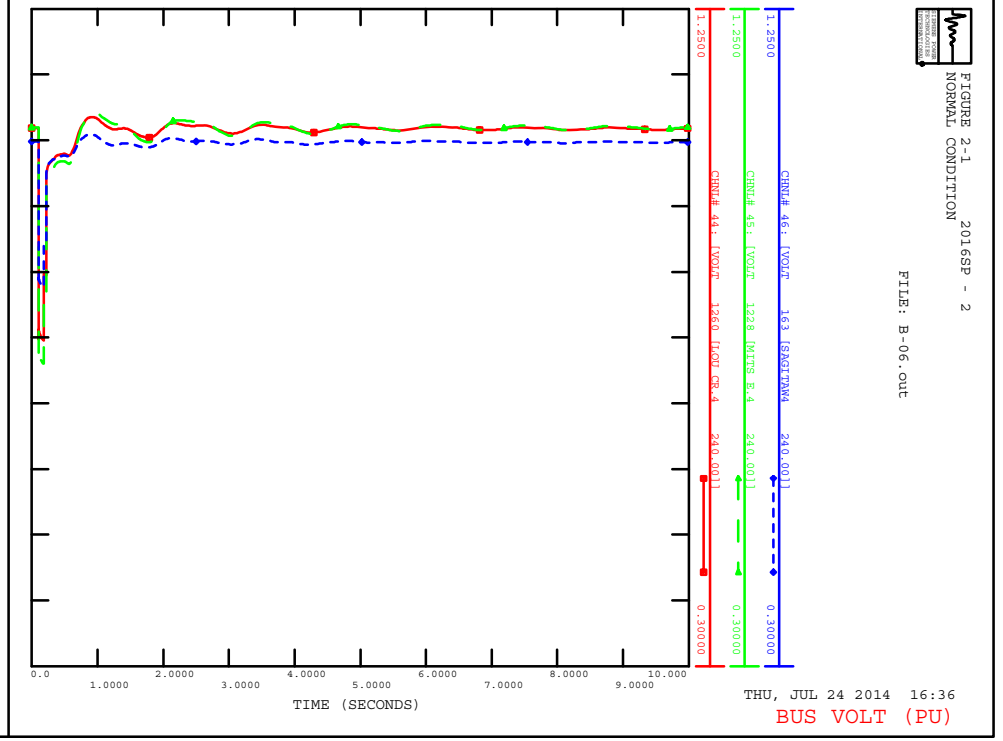


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-06.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

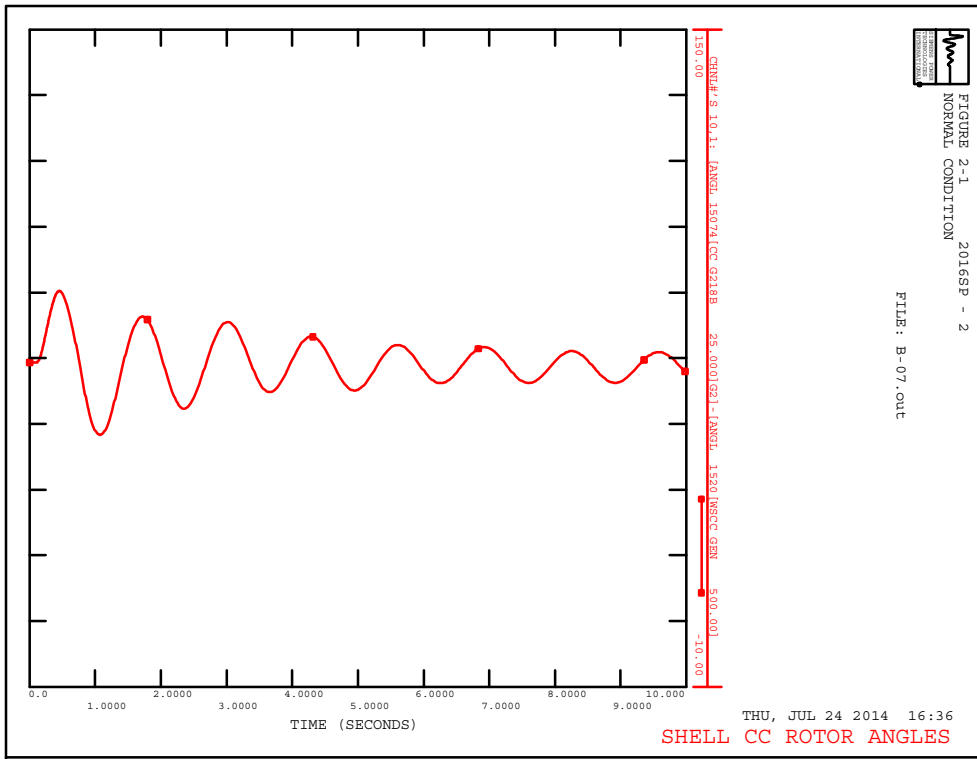


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-07.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

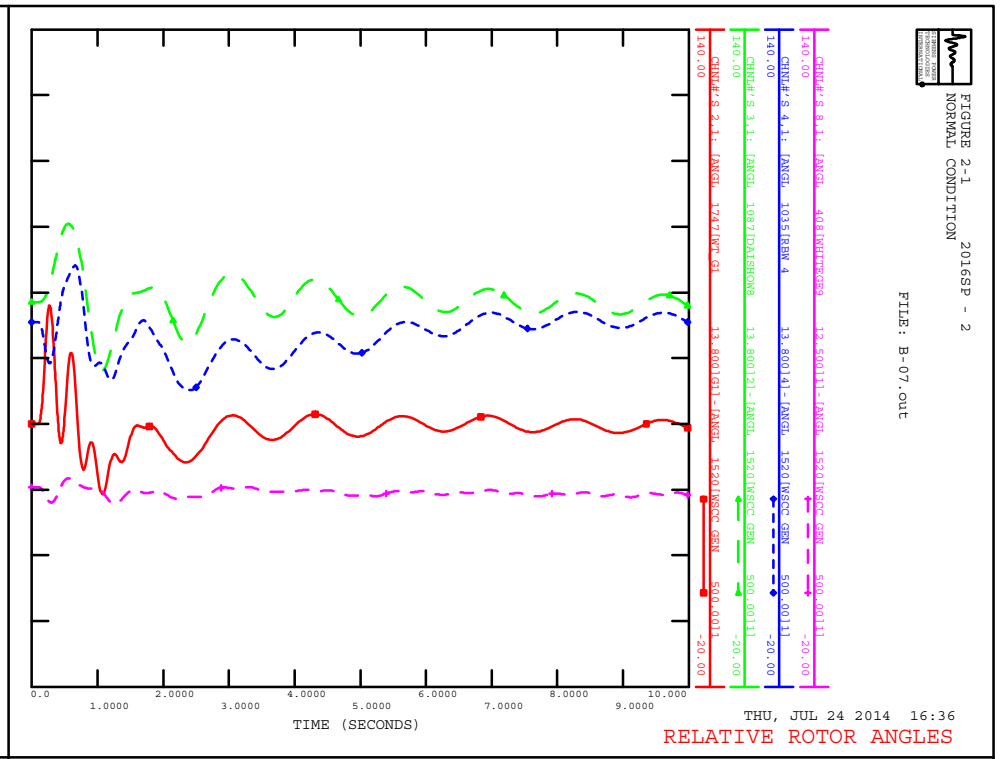


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-07.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

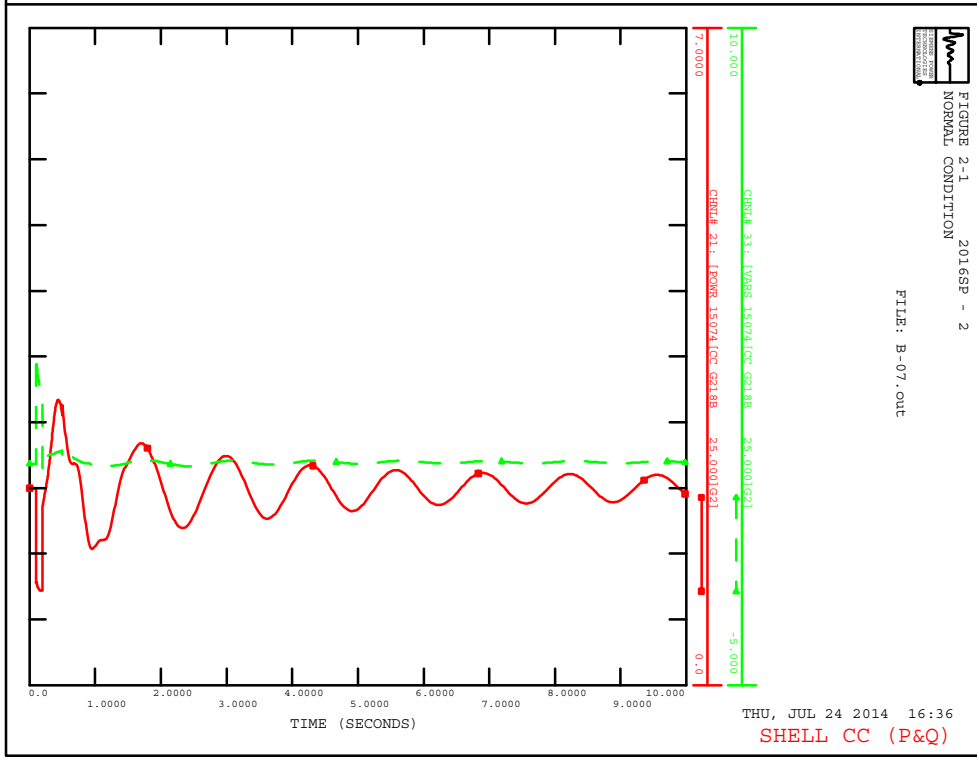


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-07.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

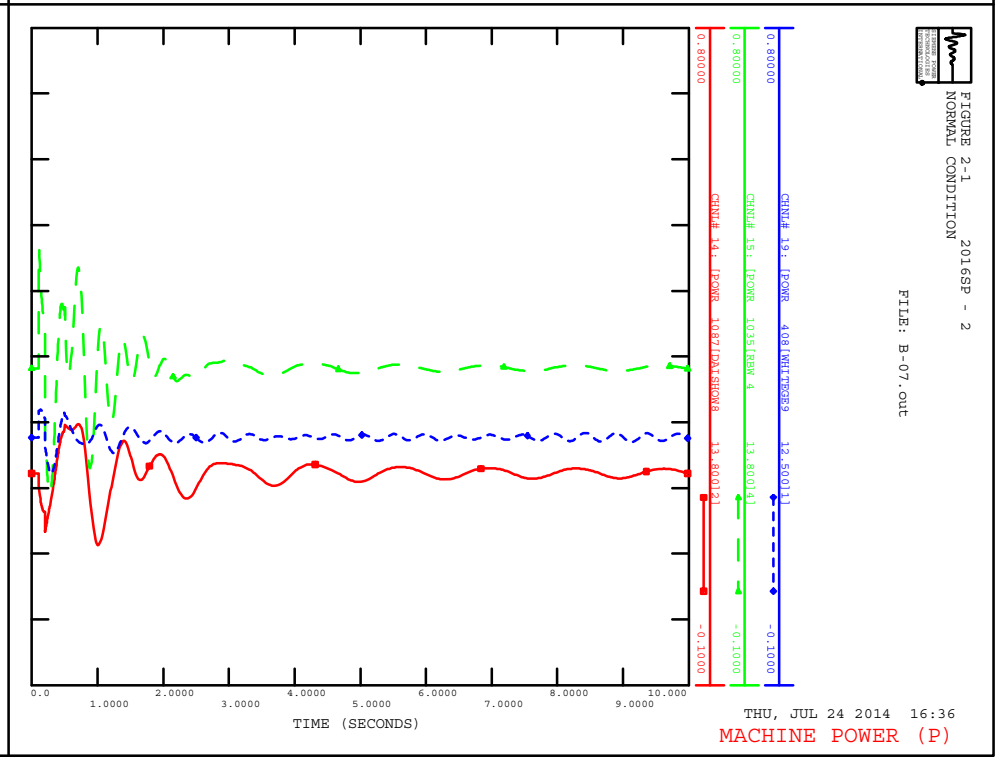


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-07.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

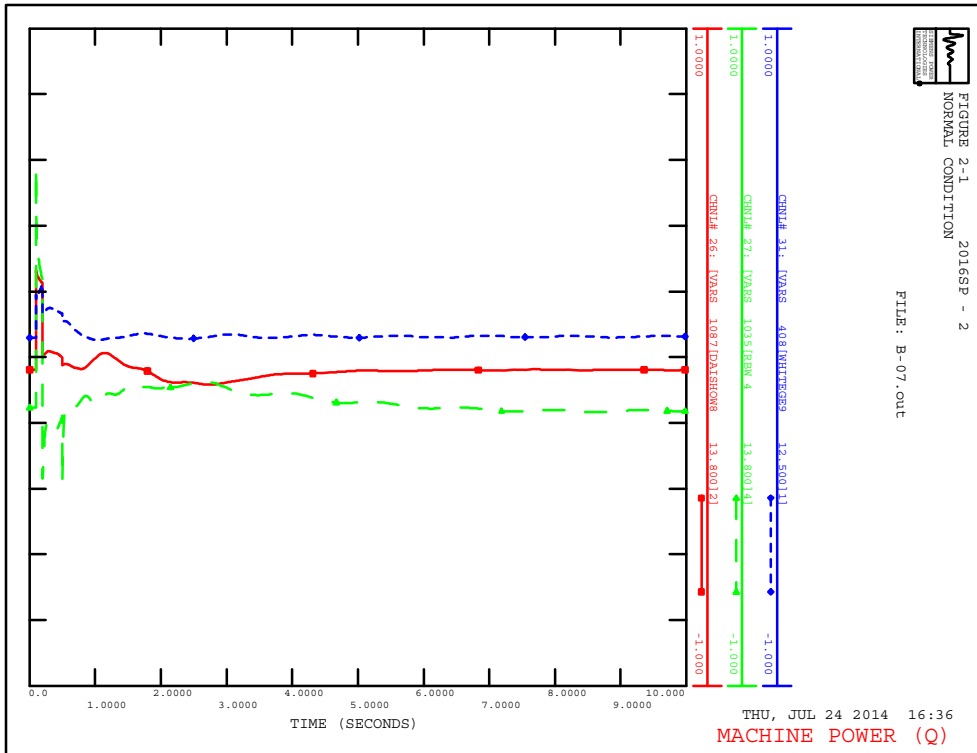


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-07.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

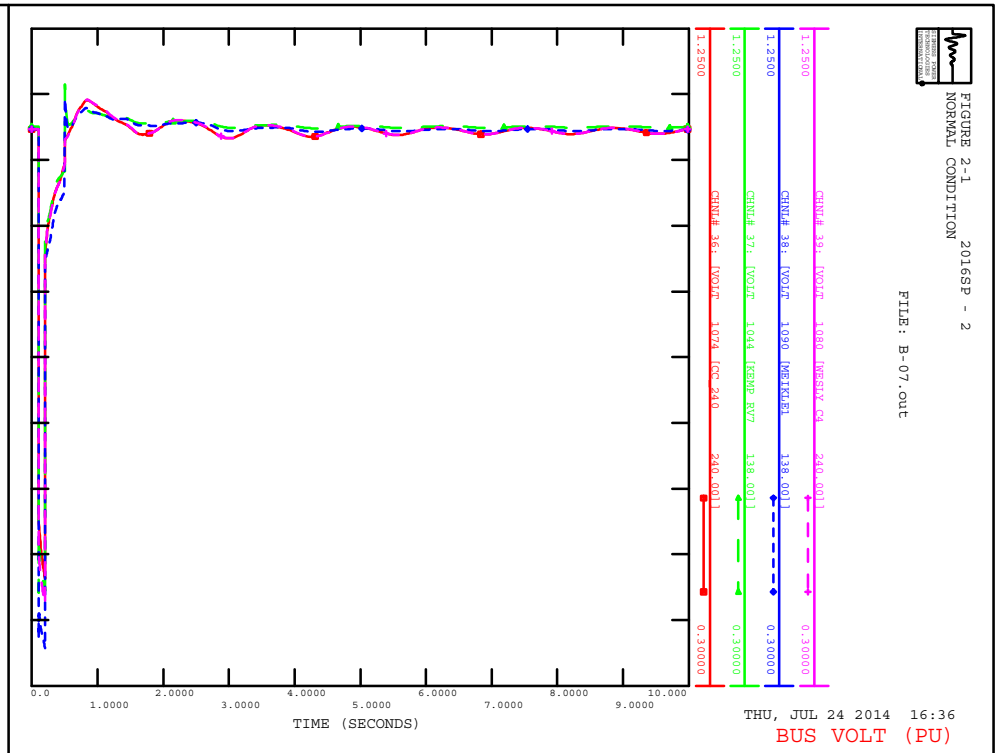


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-07.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

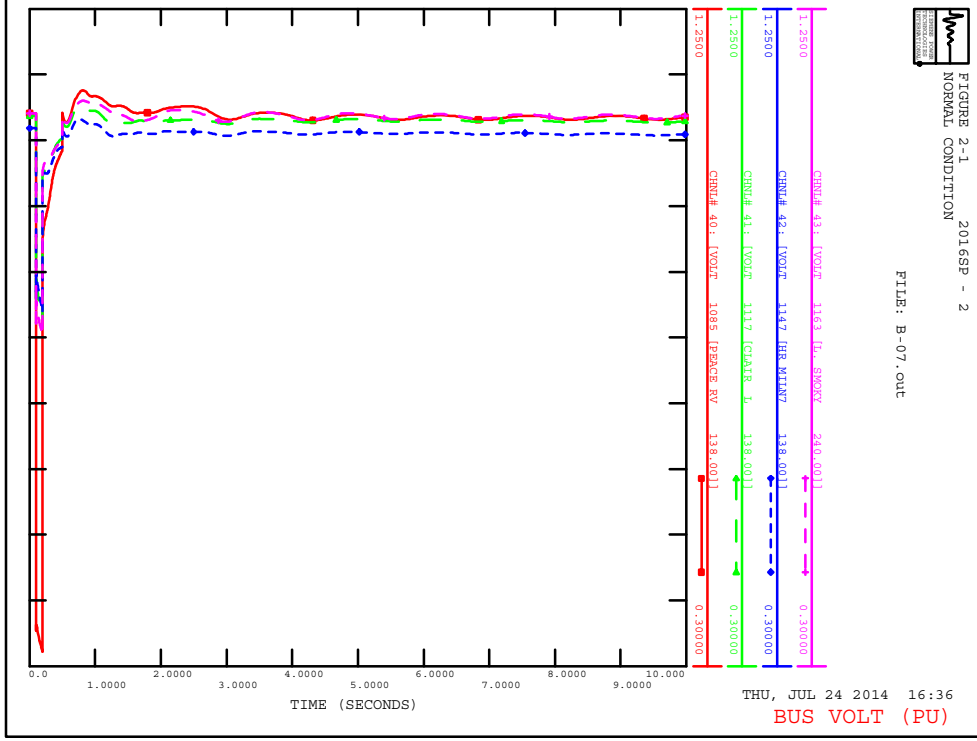


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-07.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

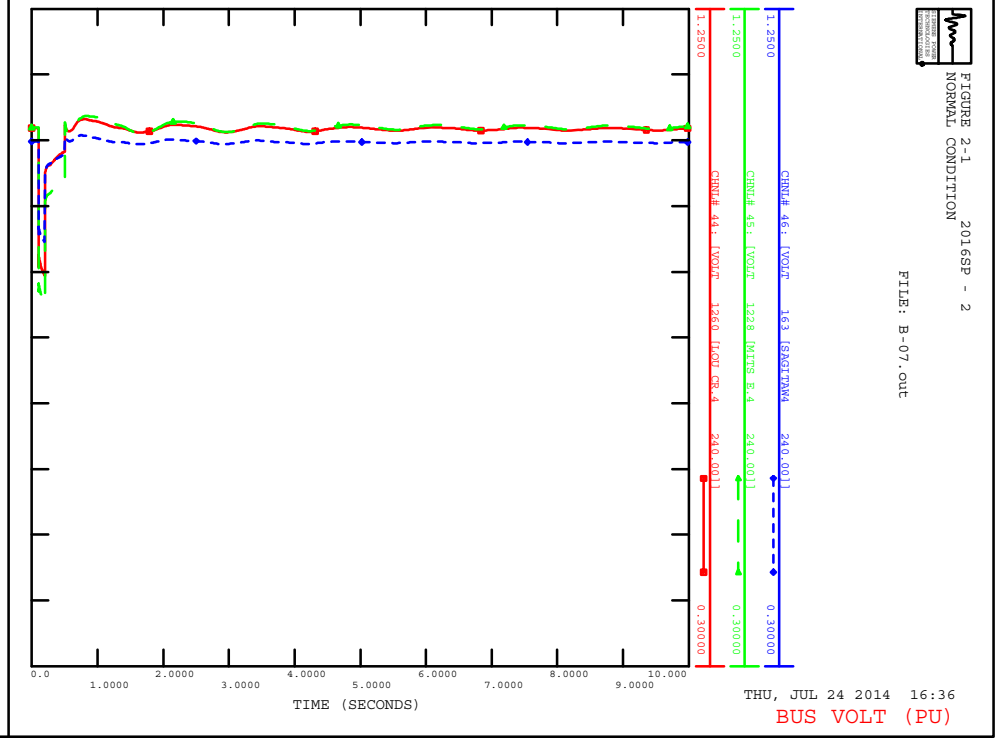


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-07.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

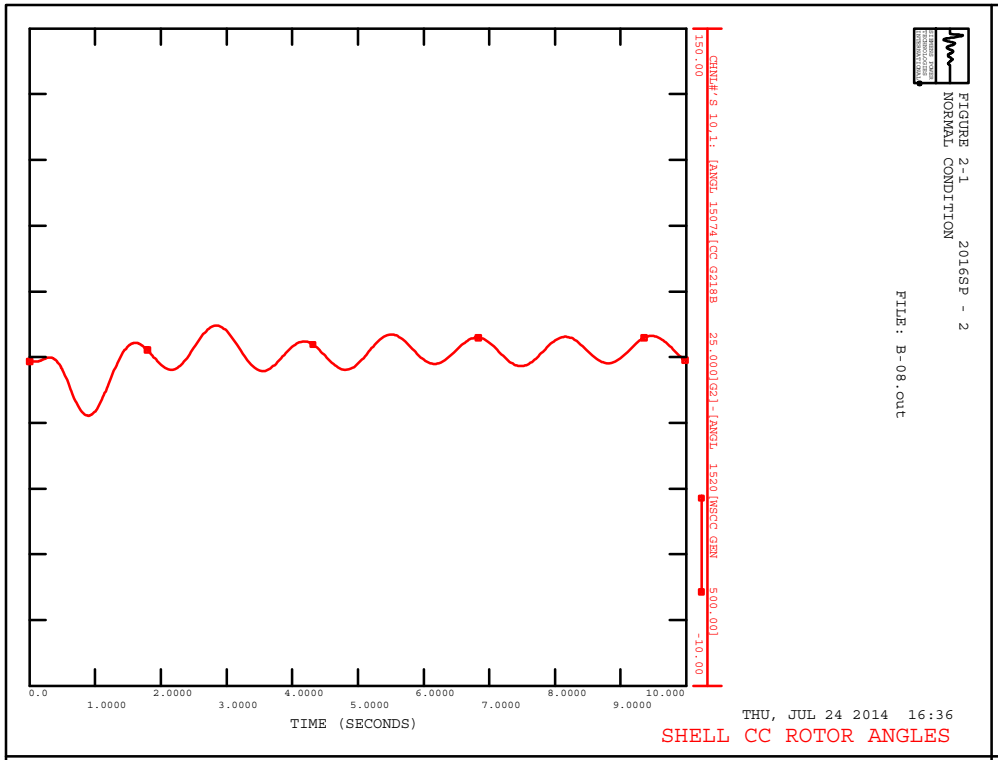


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-08.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

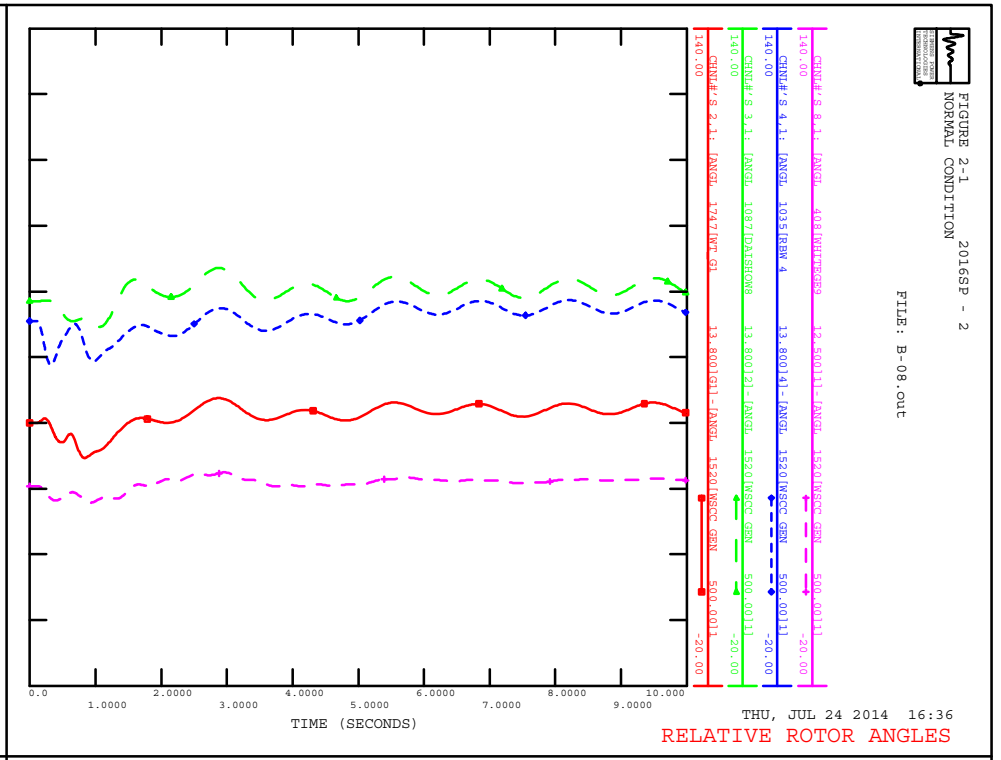


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-08.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

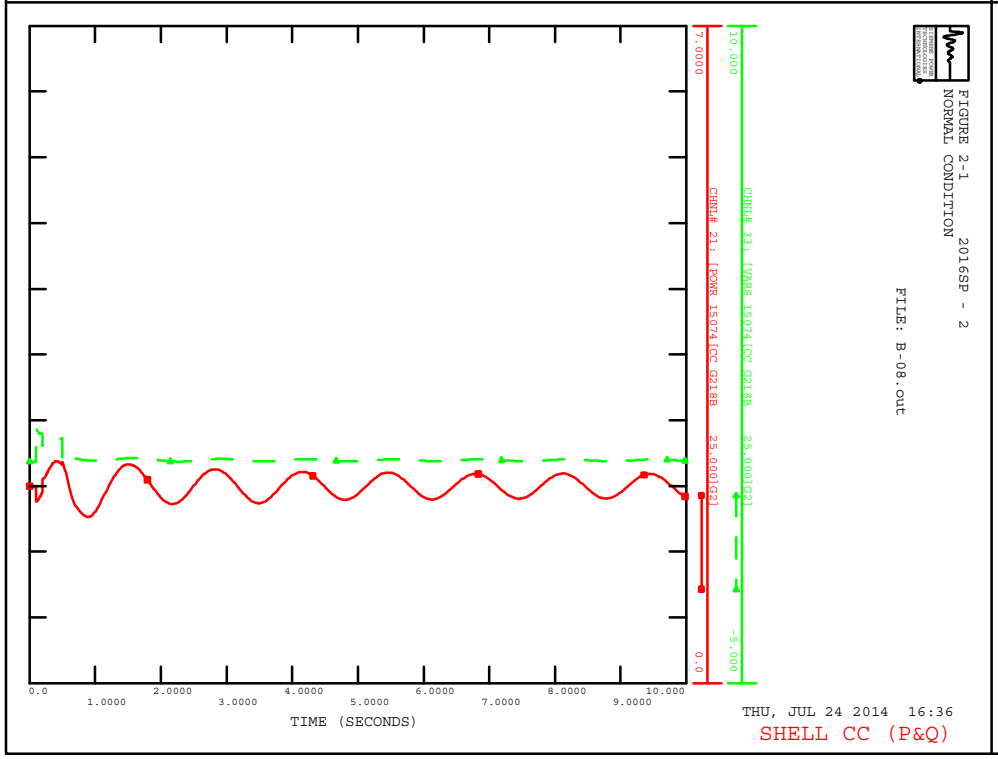


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-08.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

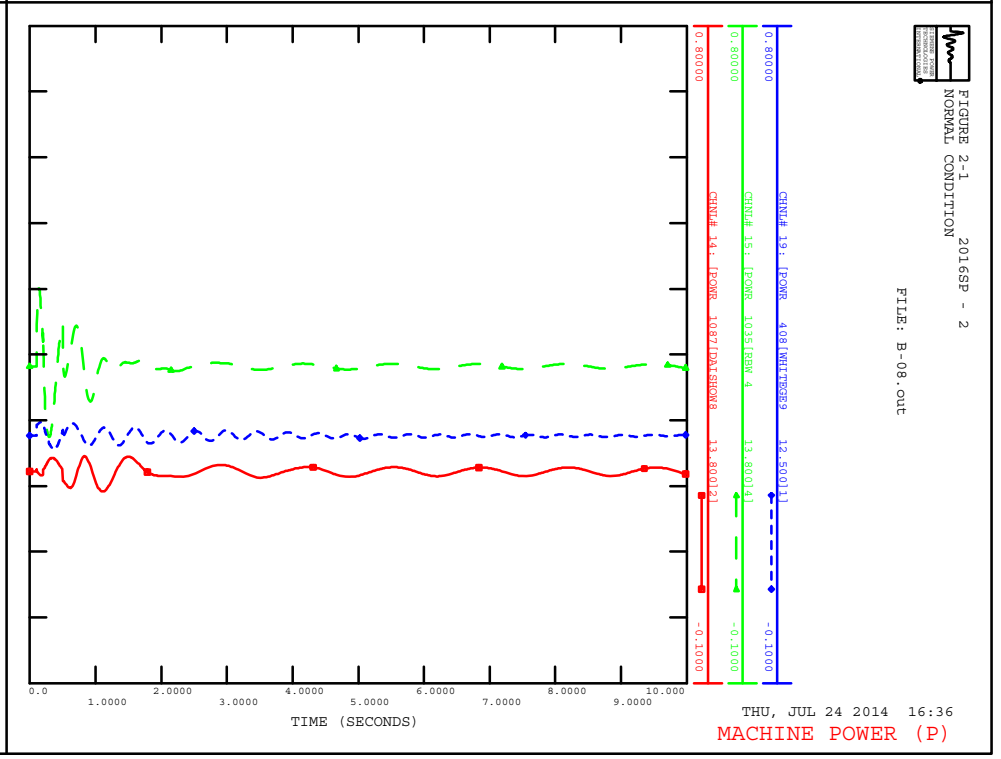


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-08.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

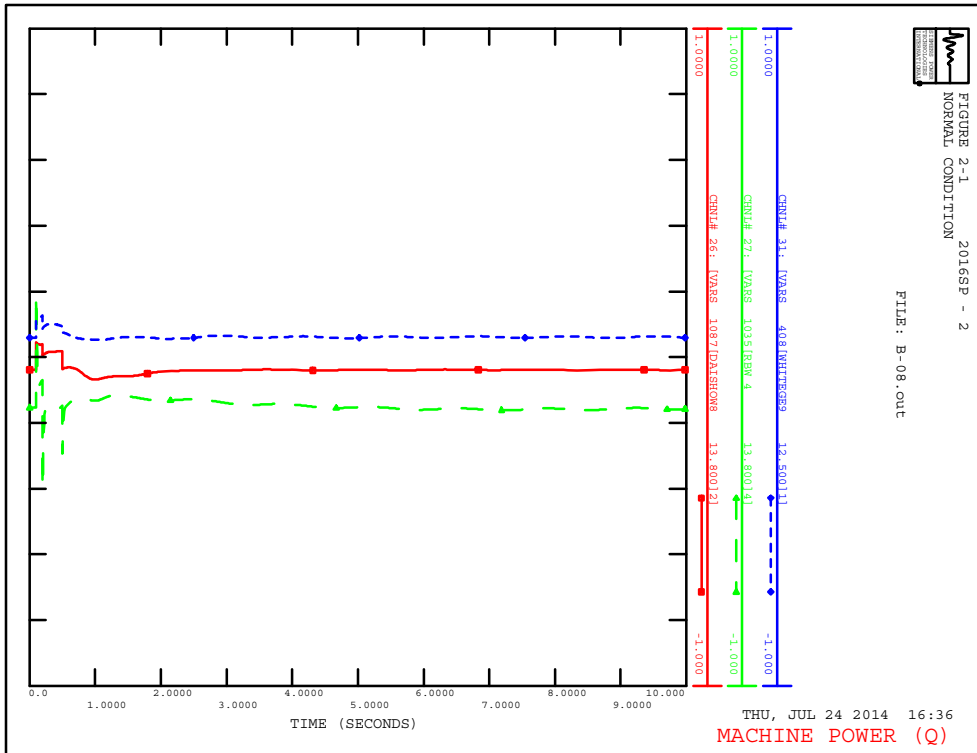


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-08.out
CHNI# 26: [VARS 1087 [DAISHOW8 13.800 [2]
CHNI# 27: [VARS 1035 [RBW 4 13.800 [4]
CHNI# 31: [VARS 408 [WHITEGB9 12.500 [1]
-1.000
1.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

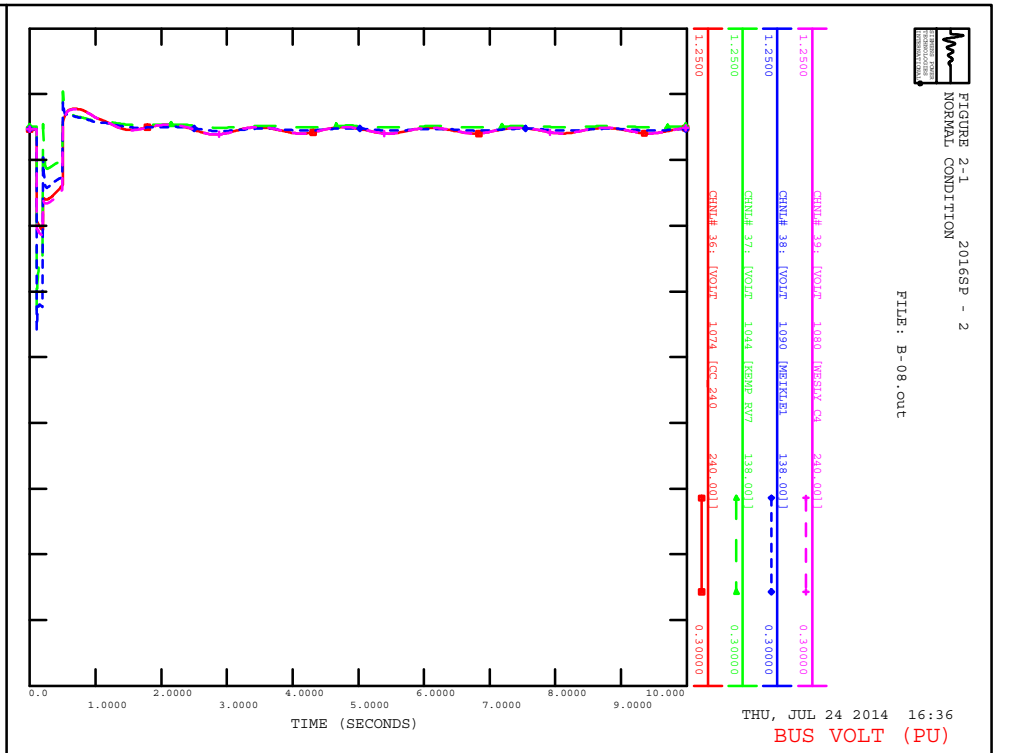


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-08.out
CHNI# 36: [VOLT 1074 [CC 240 240.00] [2]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00] [4]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.00] [1]
CHNI# 39: [VOLT 1080 [MESIK C4 240.00] [3]
0.30000
1.2500
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

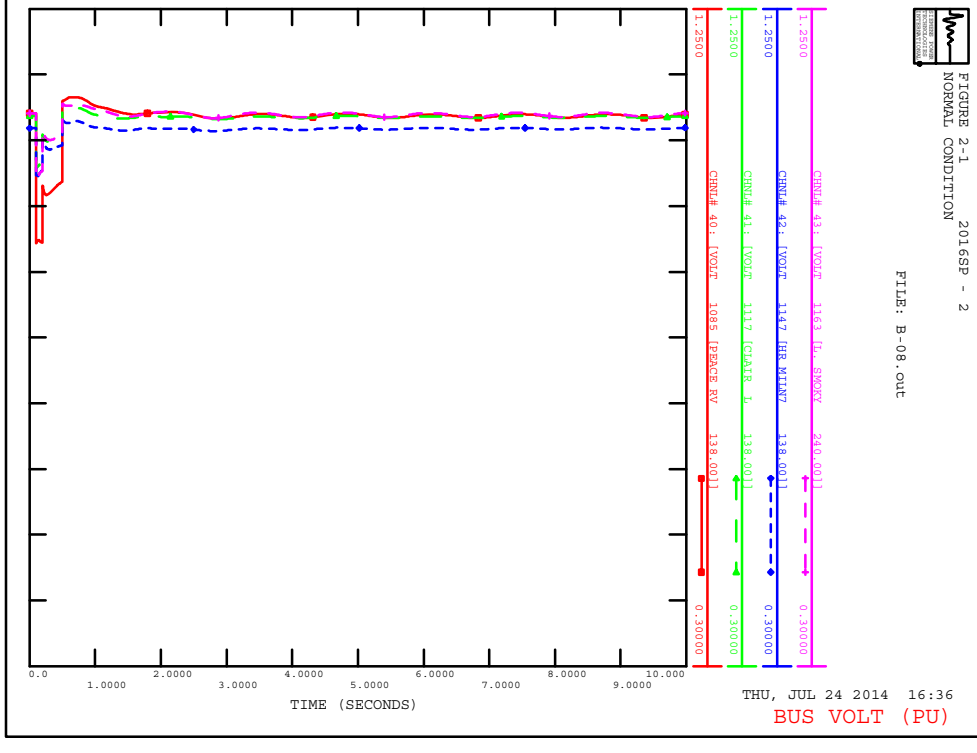


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-08.out
CHNI# 40: [VOLT 1085 [PEACE RV 138.00] [2]
CHNI# 41: [VOLT 1117 [CHAIR L 138.00] [4]
CHNI# 42: [VOLT 1142 [HR MIAN7 138.00] [1]
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00] [3]
0.30000
1.2500
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

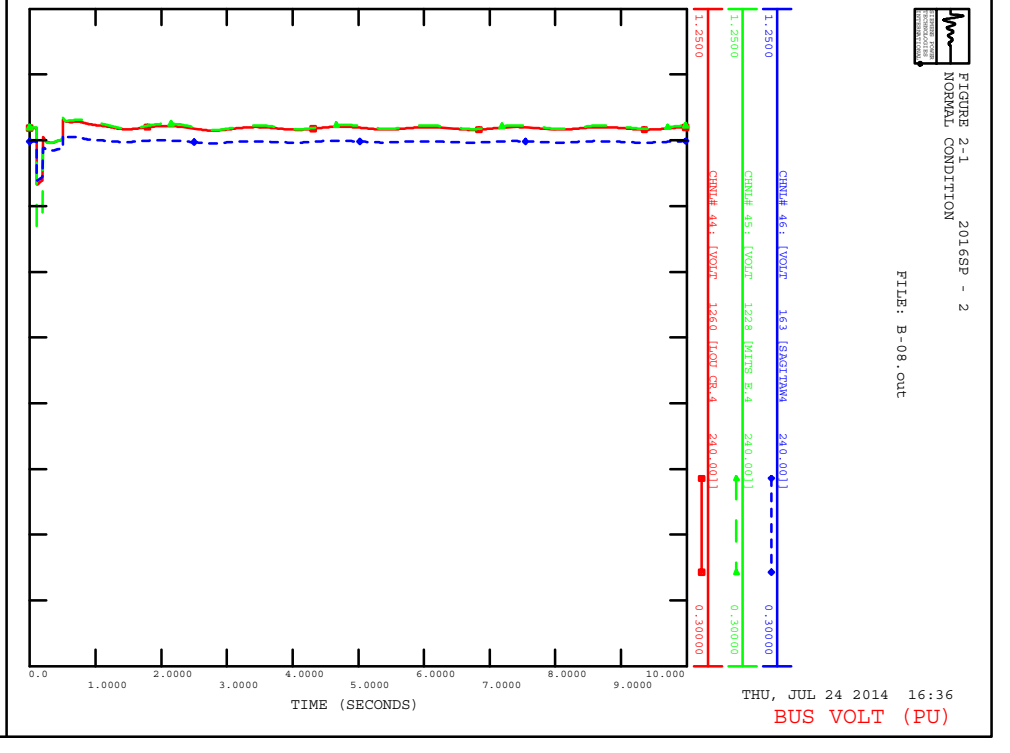


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-08.out
CHNI# 44: [VOLT 1260 [FOX CR 4 240.00] [2]
CHNI# 45: [VOLT 1228 [MITS B-4 240.00] [4]
CHNI# 46: [VOLT 163 [SAGITAW4 240.00] [1]
0.30000
1.2500
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

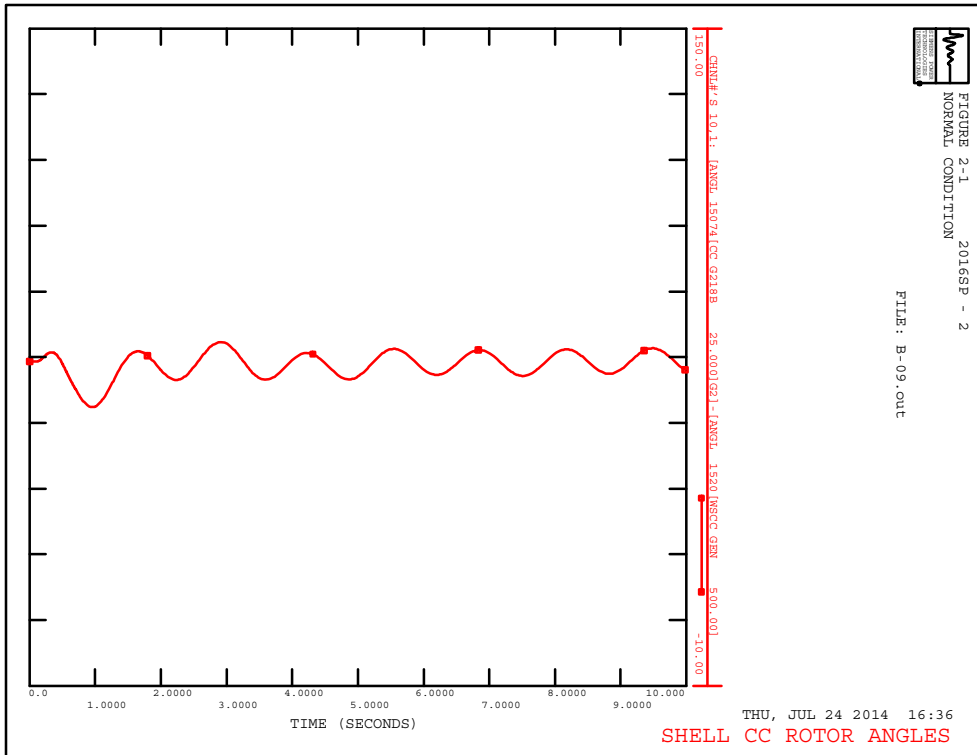


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-09.out
CHNL# 10.1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
150.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

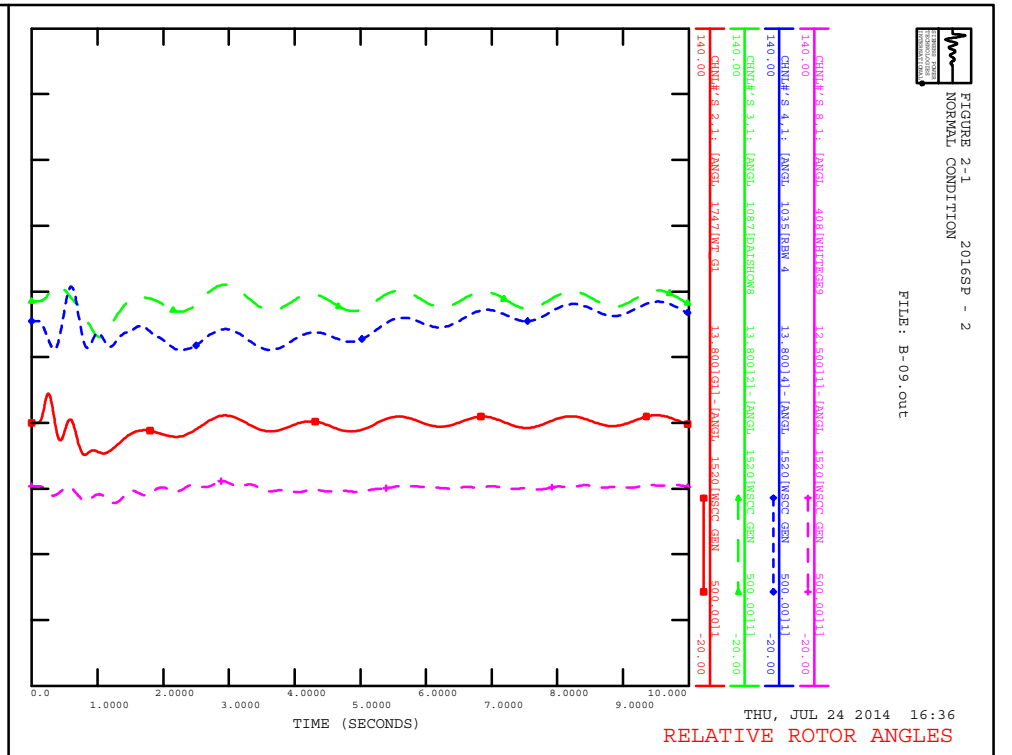


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-09.out
CHNL# 8.1: [ANGL 408[WHITESB9 12.500[1] [ANGL 1520[NSCC GEN 500.00]]
CHNL# 4.1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3.1: [ANGL 1087[DAISHON8 13.800[2] [ANGL 1520[NSCC GEN 500.00]]
CHNL# 2.1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

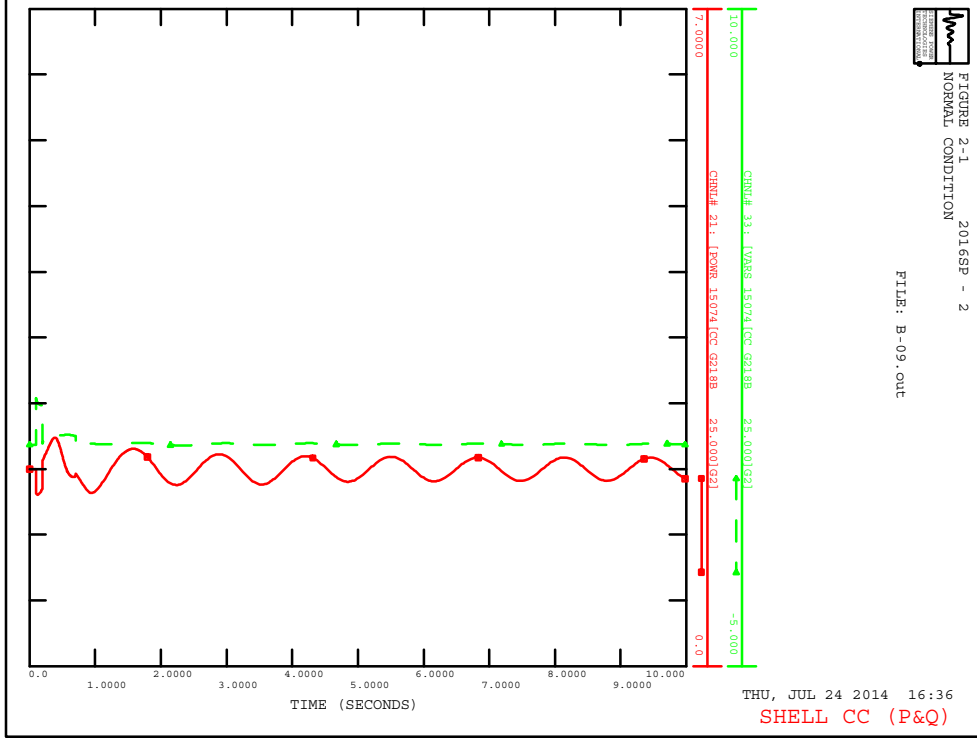


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-09.out
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
7.0000
0.0
10.000
-5.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

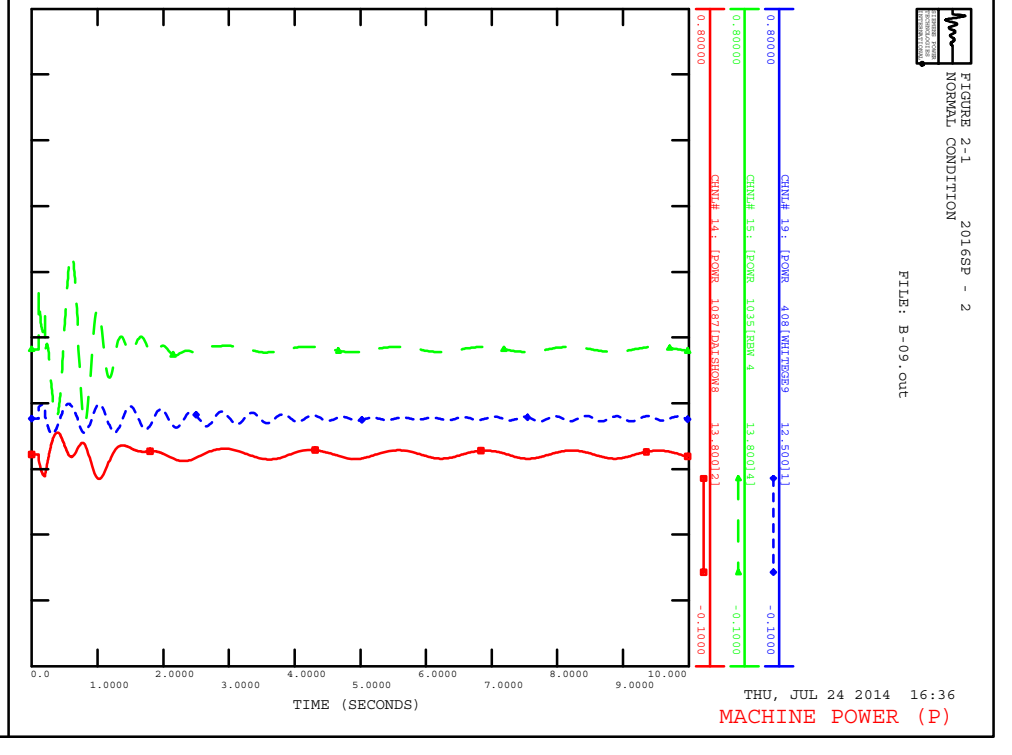


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-09.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

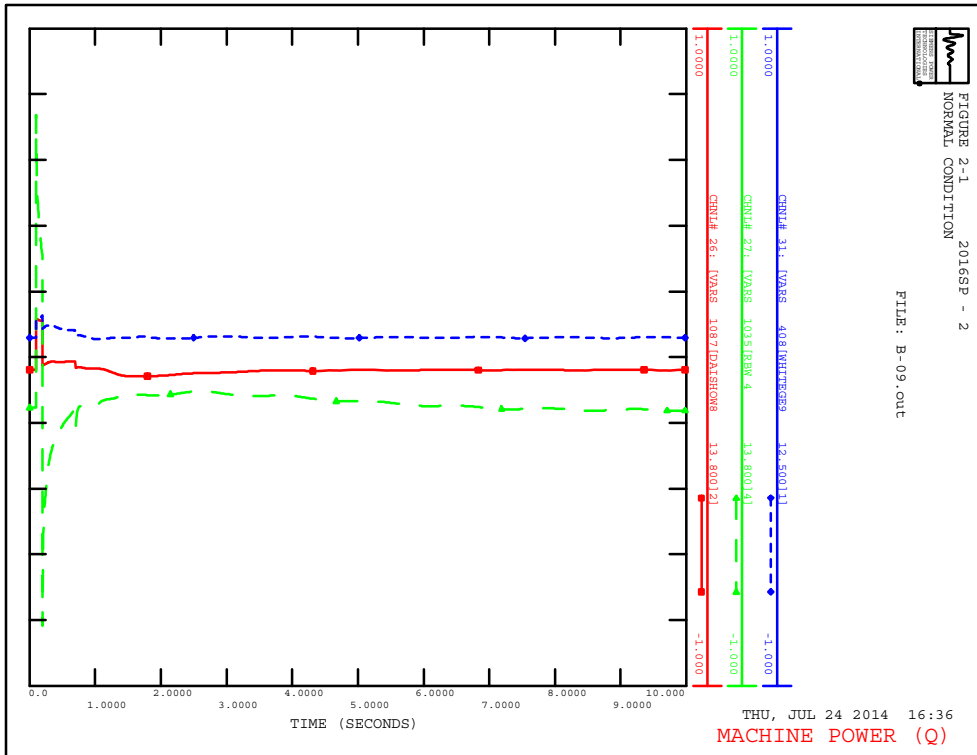


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-09.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

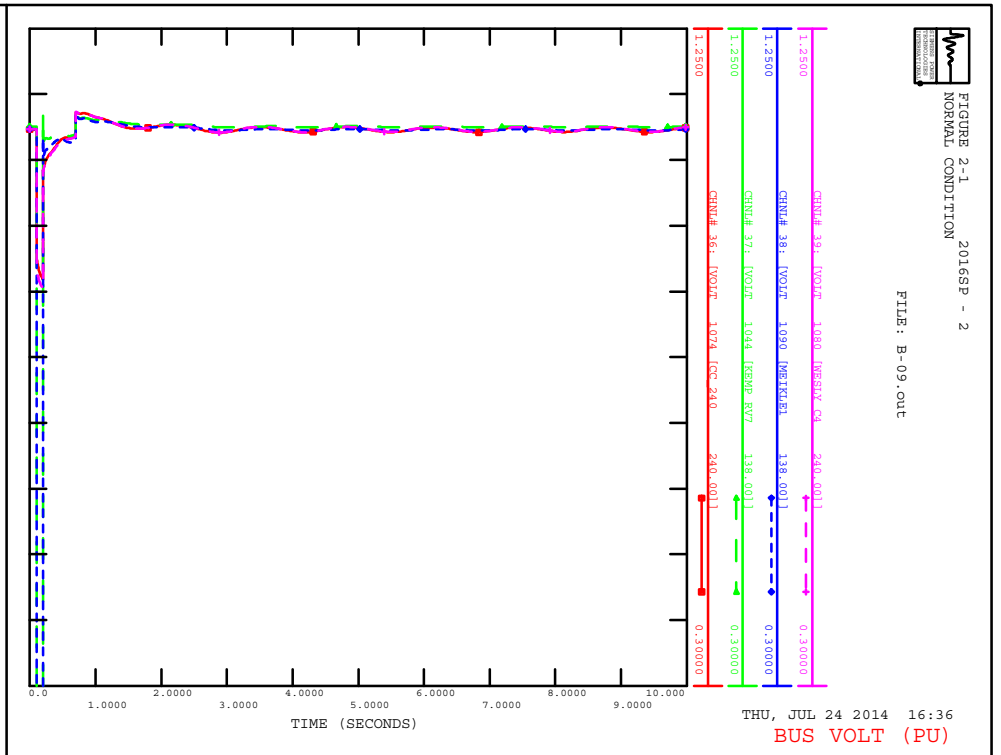


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-09.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

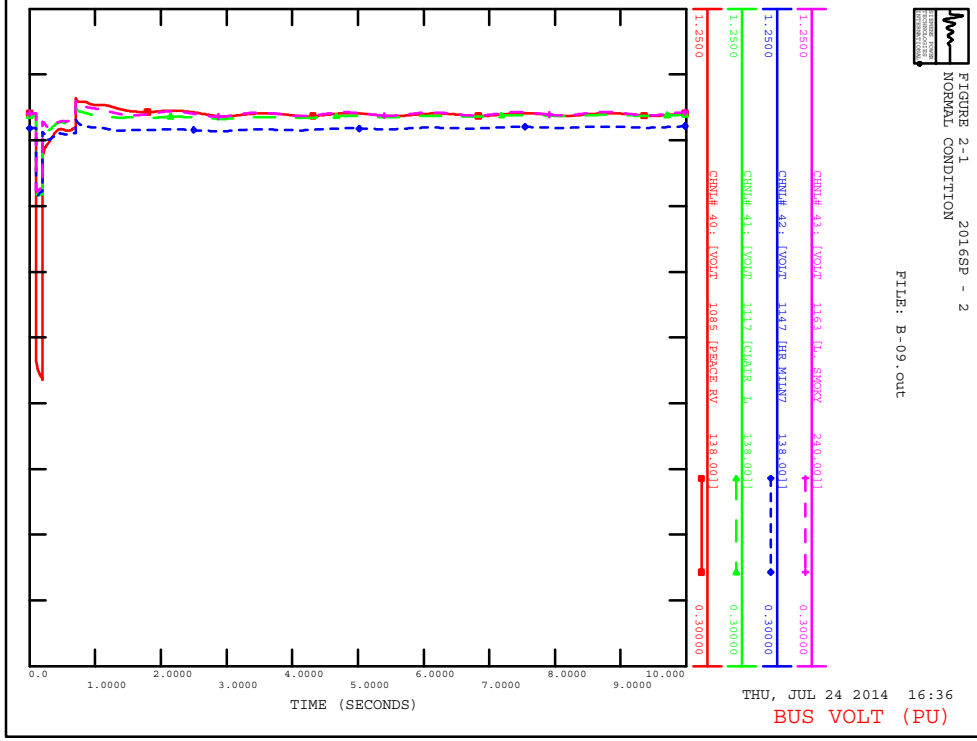


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-09.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

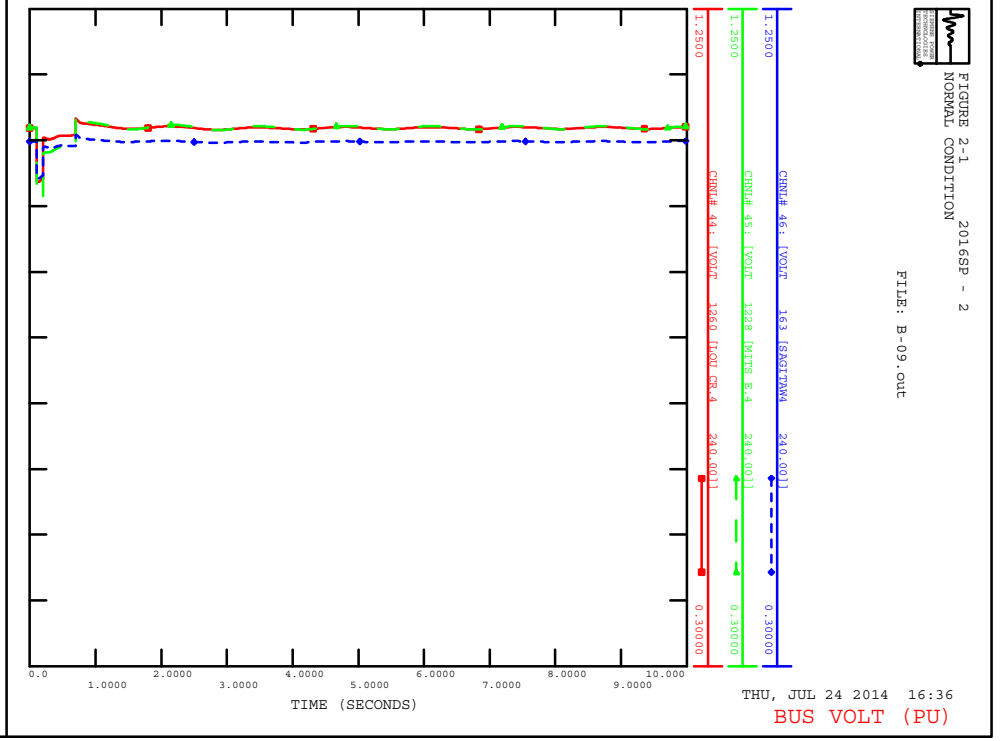


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-09.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

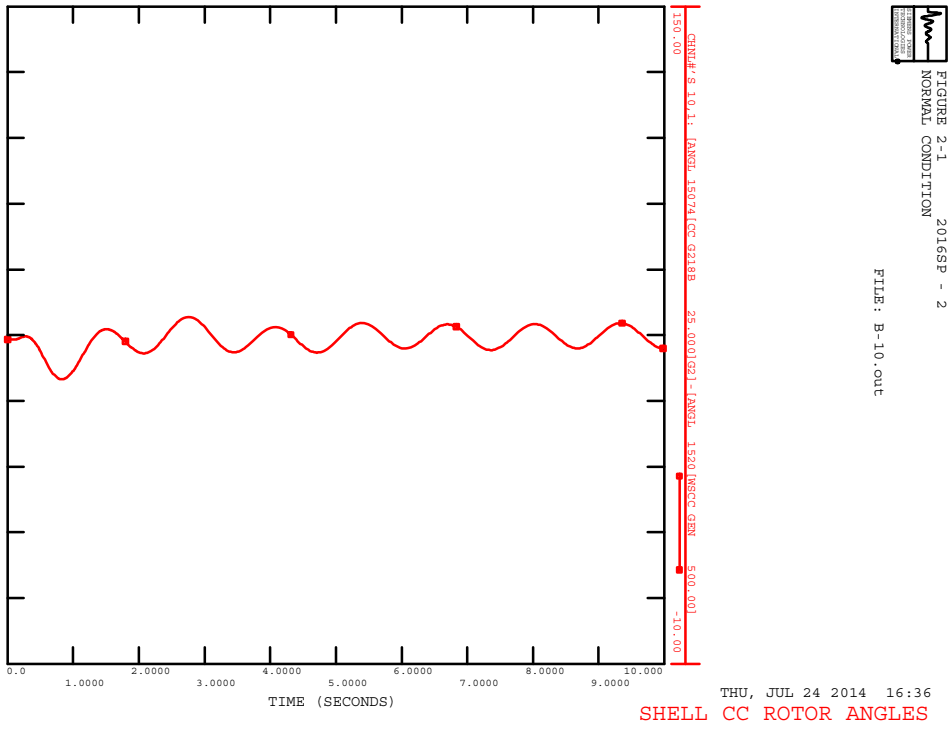


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-10.out
CHNL#'S 10,1: [ANGL 15074[CC G218B
25.000[G2]-[ANGL 1520[NSCC GEN
-500.00]
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

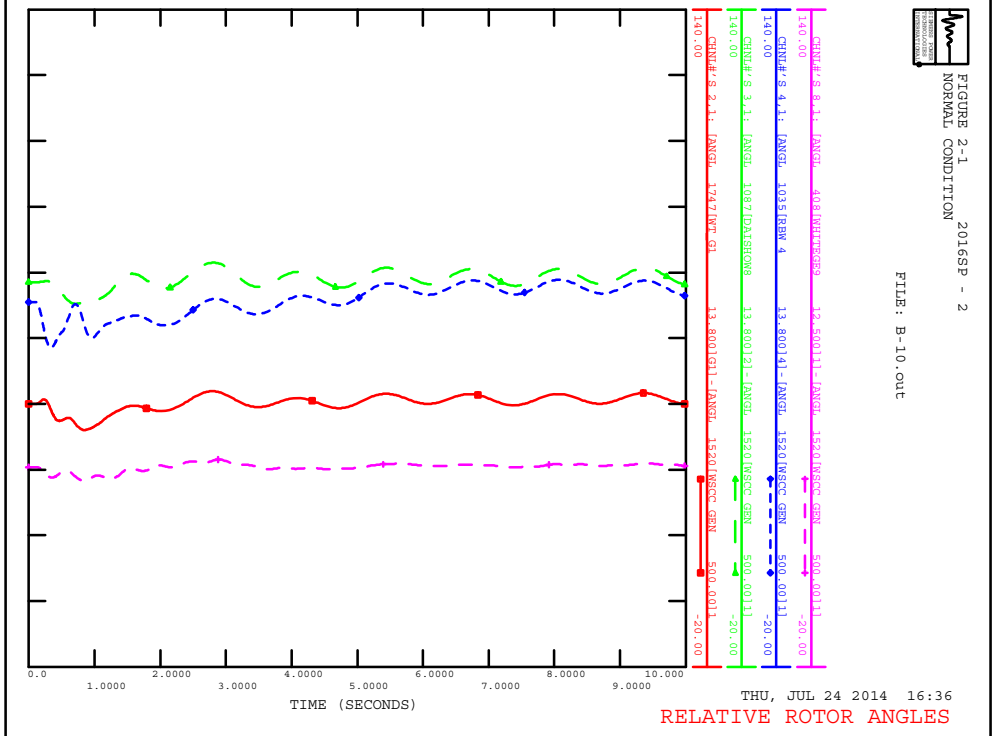


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-10.out
CHNL#'S 8,1: [ANGL 408[WHITESB9
12.500[1]-[ANGL 1520[NSCC GEN
-500.00]
CHNL#'S 4,1: [ANGL 1035[RBM 4
13.800[4]-[ANGL 1520[NSCC GEN
-500.00]
CHNL#'S 3,1: [ANGL 1087[DAISHON8
13.800[2]-[ANGL 1520[NSCC GEN
-500.00]
CHNL#'S 2,1: [ANGL 1747[WT G1
13.800[1]-[ANGL 1520[NSCC GEN
-500.00]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

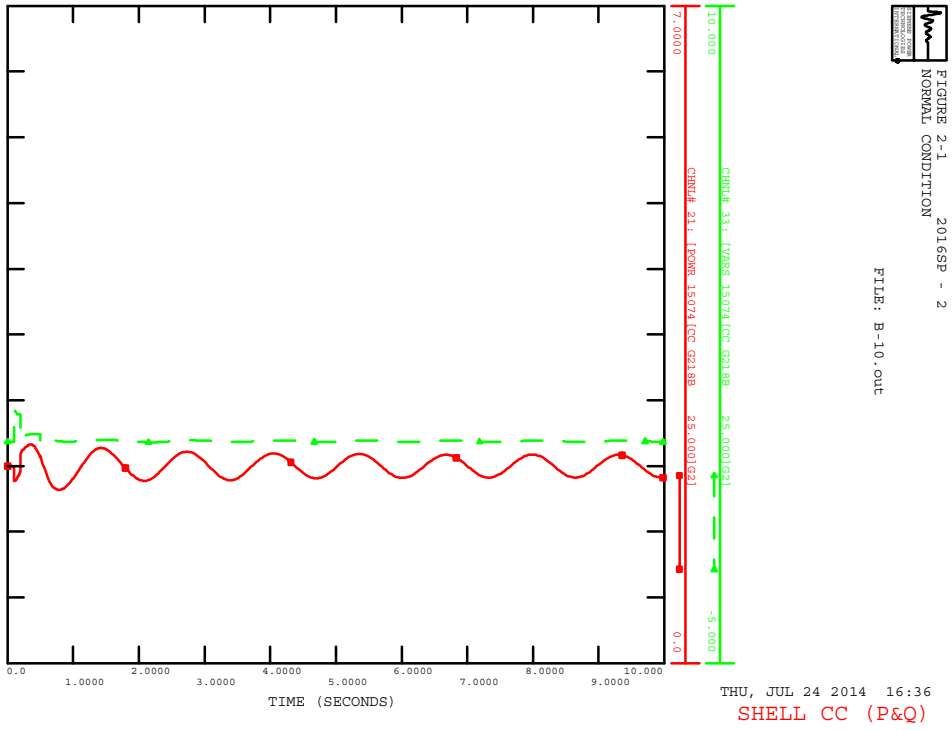


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-10.out
CHNL# 33: [VARS 15074[CC G218B
25.000[G2]
CHNL# 21: [POWR 15074[CC G218B
25.000[G2]
10.000
-5.000
7.0000
0.0
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

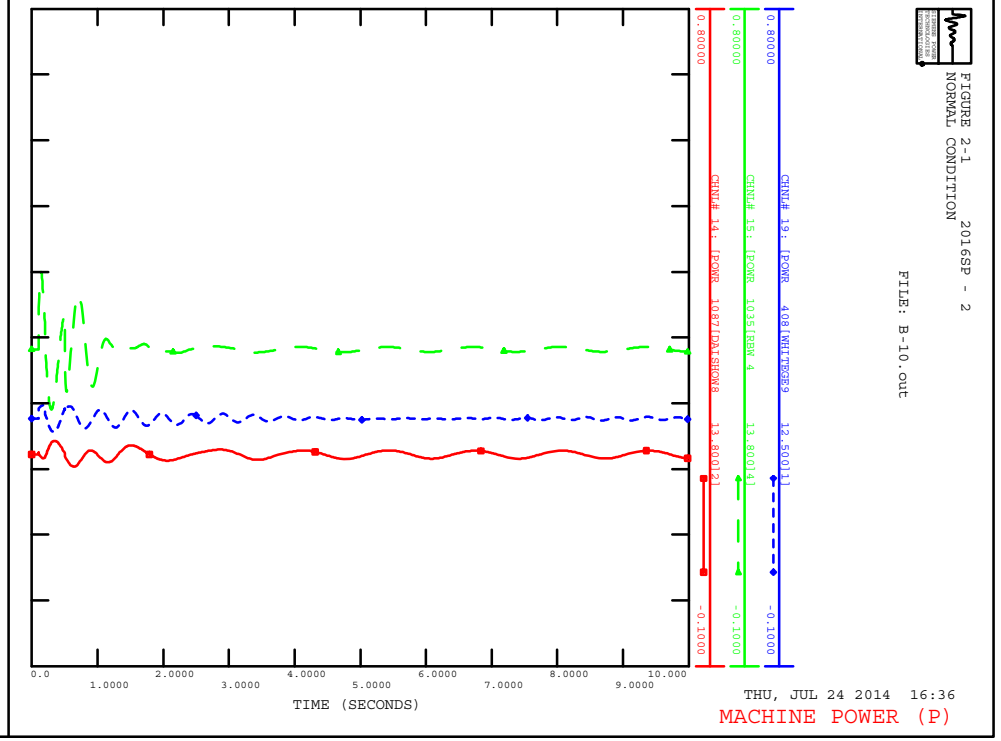


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-10.out
CHNL# 19: [POWR 408[WHITESB9
12.500[1]
CHNL# 15: [POWR 1035[RBM 4
13.800[4]
CHNL# 14: [POWR 1087[DAISHON8
13.800[2]
CHNL# 13: [POWR 1747[WT G1
13.800[1]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-10.out

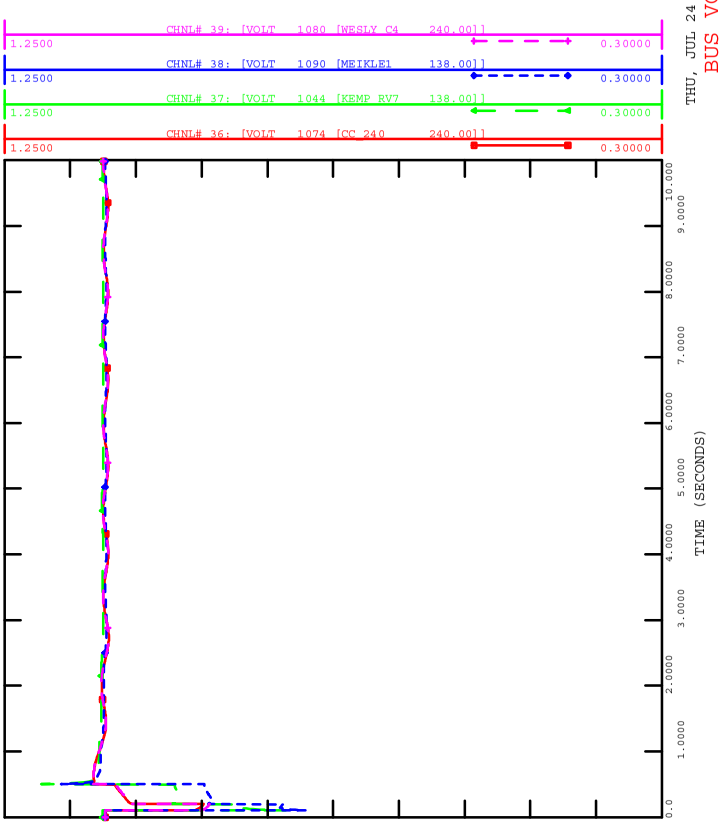


FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-10.out

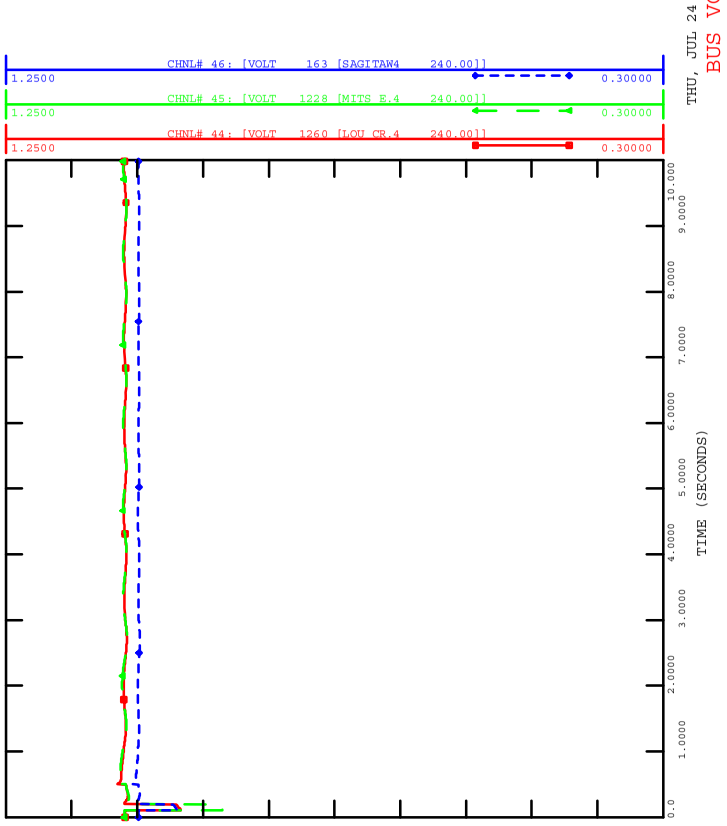


FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-10.out

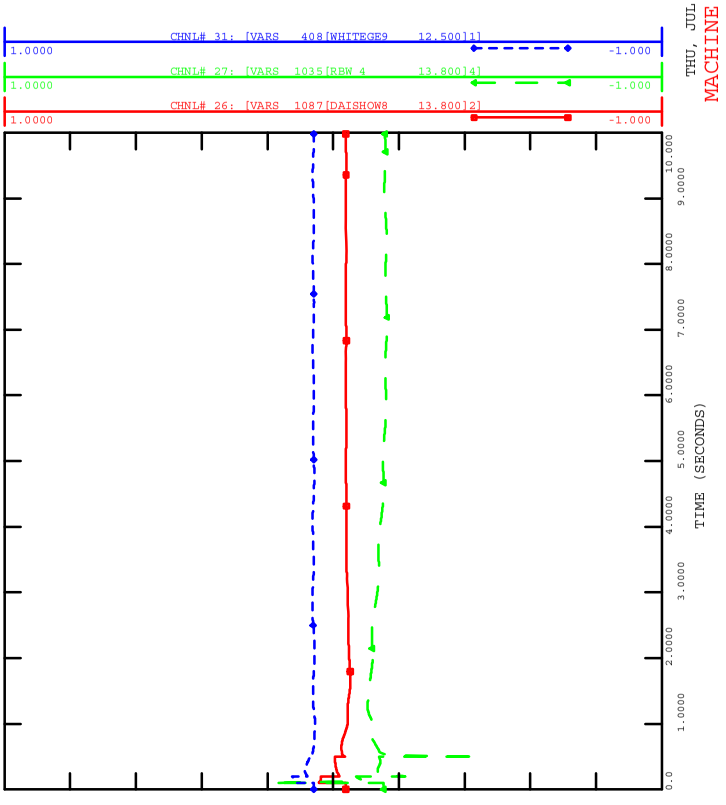
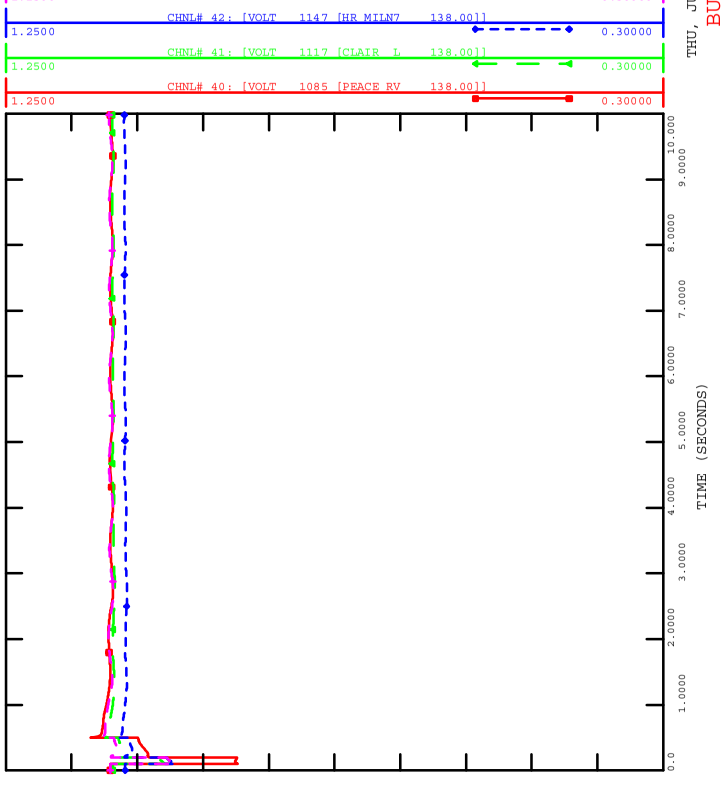


FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-10.out



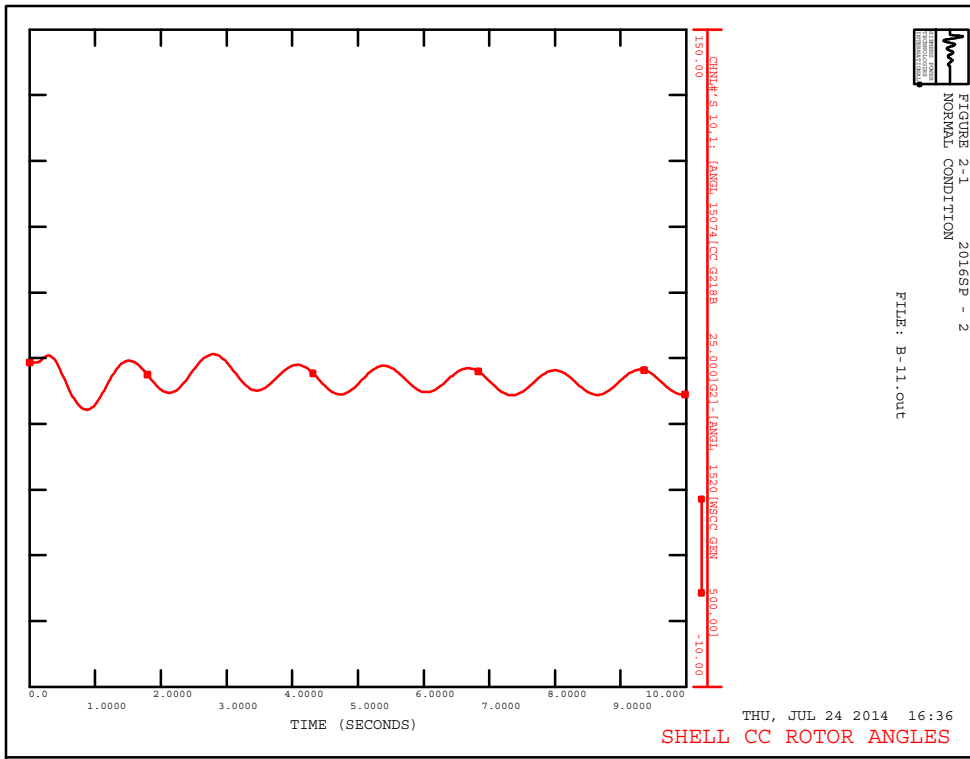


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-11.out
CHNL# 10.1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

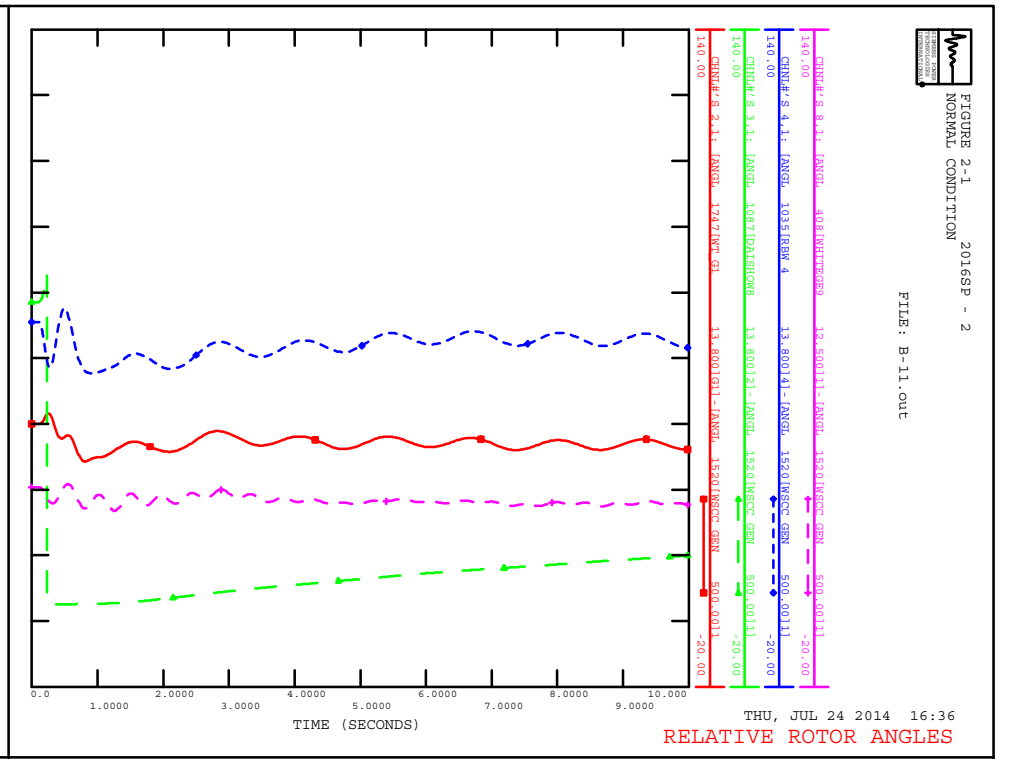


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-11.out
CHNL# 8: 1: [ANGL 408[WHITEGE9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 4: 1: [ANGL 1035[RBM 4 13.800[14]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3: 1: [ANGL 1087[DAISHON8 13.800[12]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 2: 1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

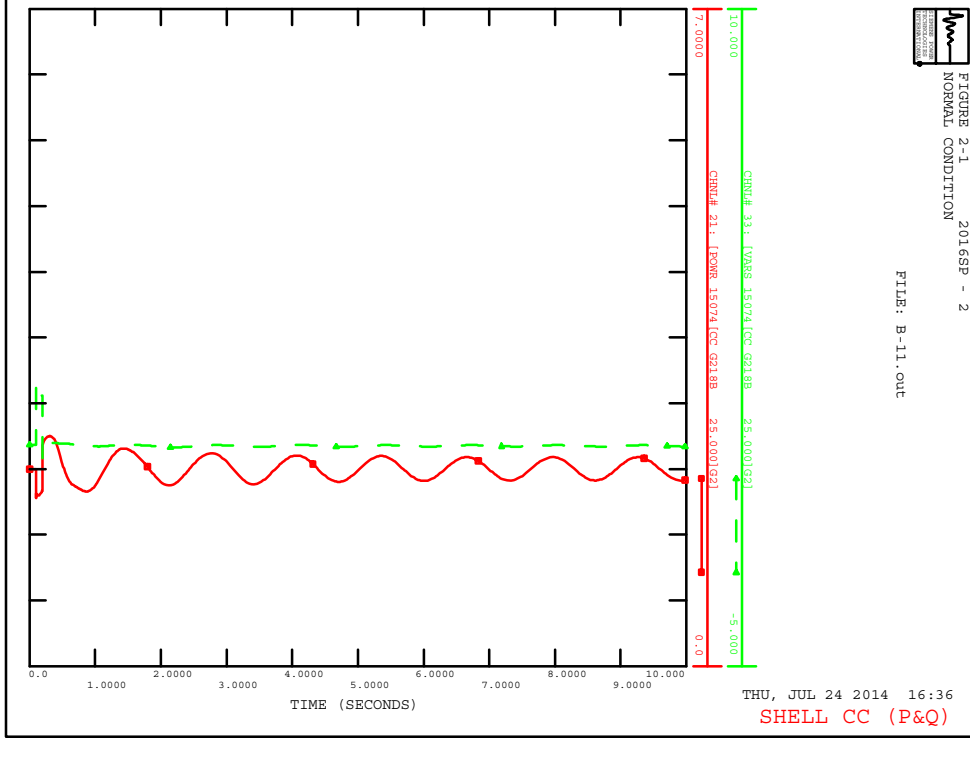


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-11.out
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
7.0000
0.0
10.000
-5.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

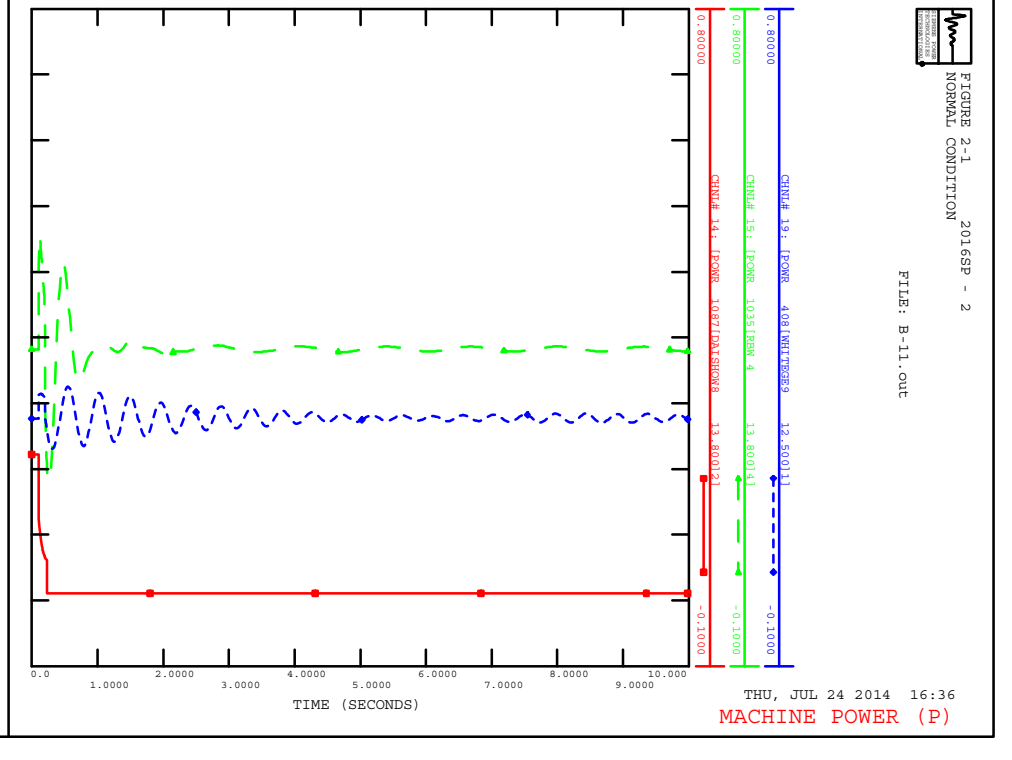


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-11.out
CHNL# 19: [POWR 408[WHITEGE9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[14]
CHNL# 14: [POWR 1087[DAISHON8 13.800[12]
0.80000
-0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

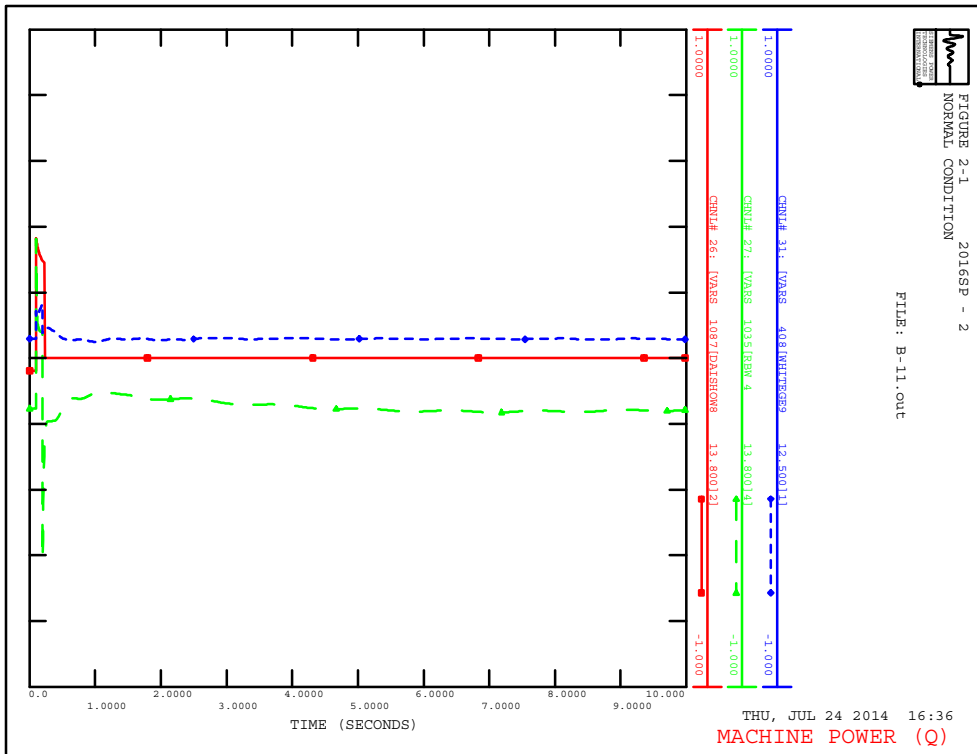


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-11.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

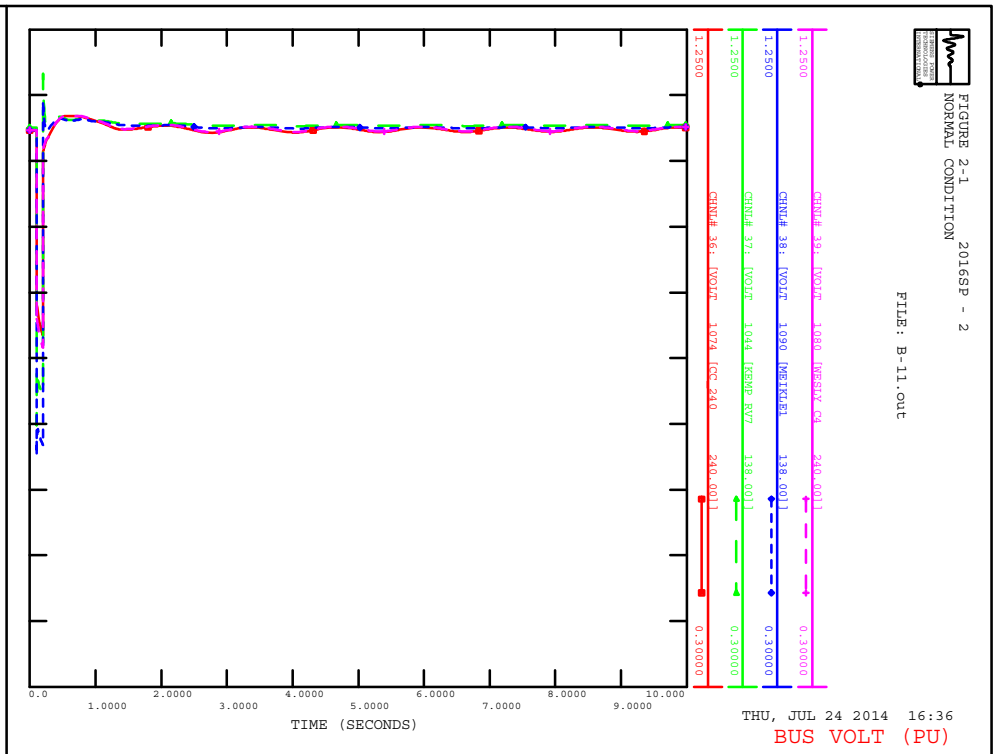


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-11.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

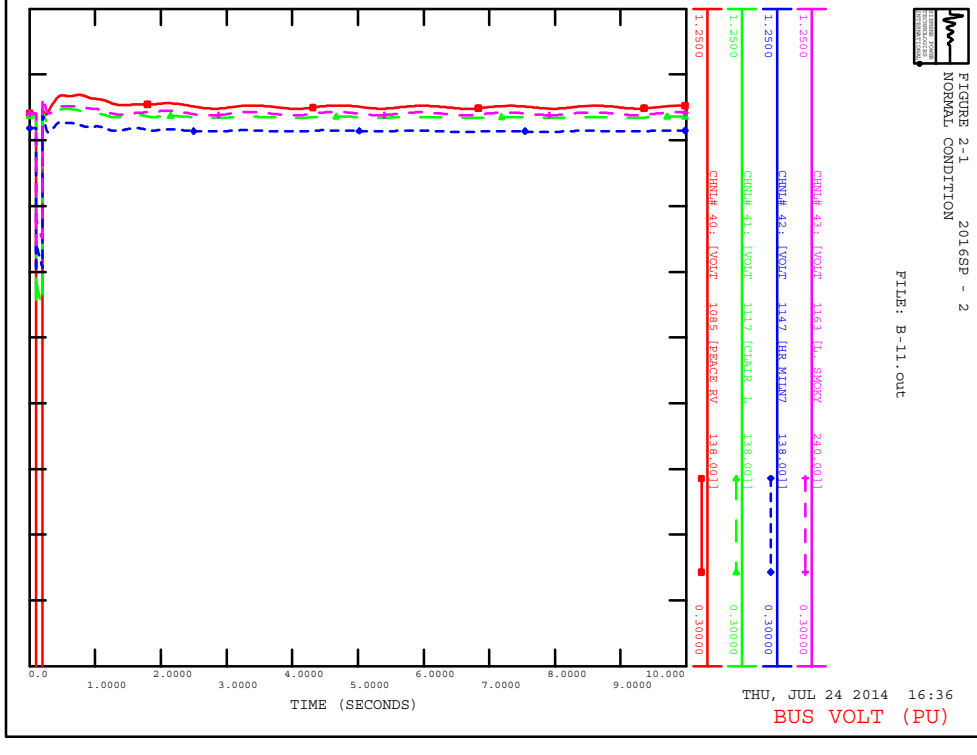


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-11.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

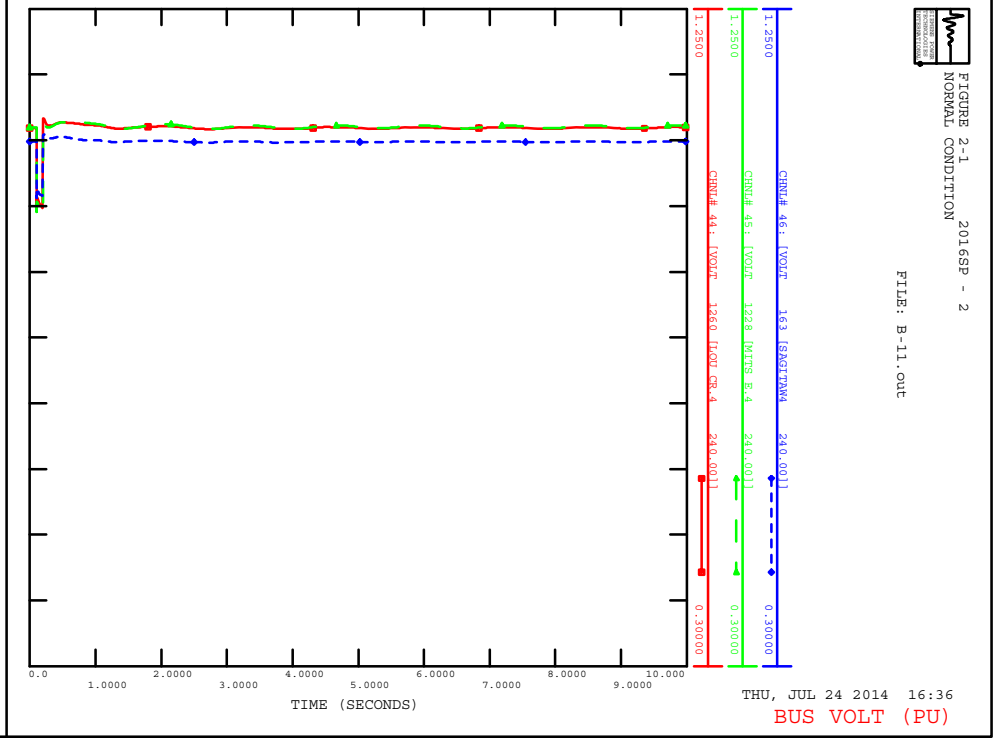


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-11.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

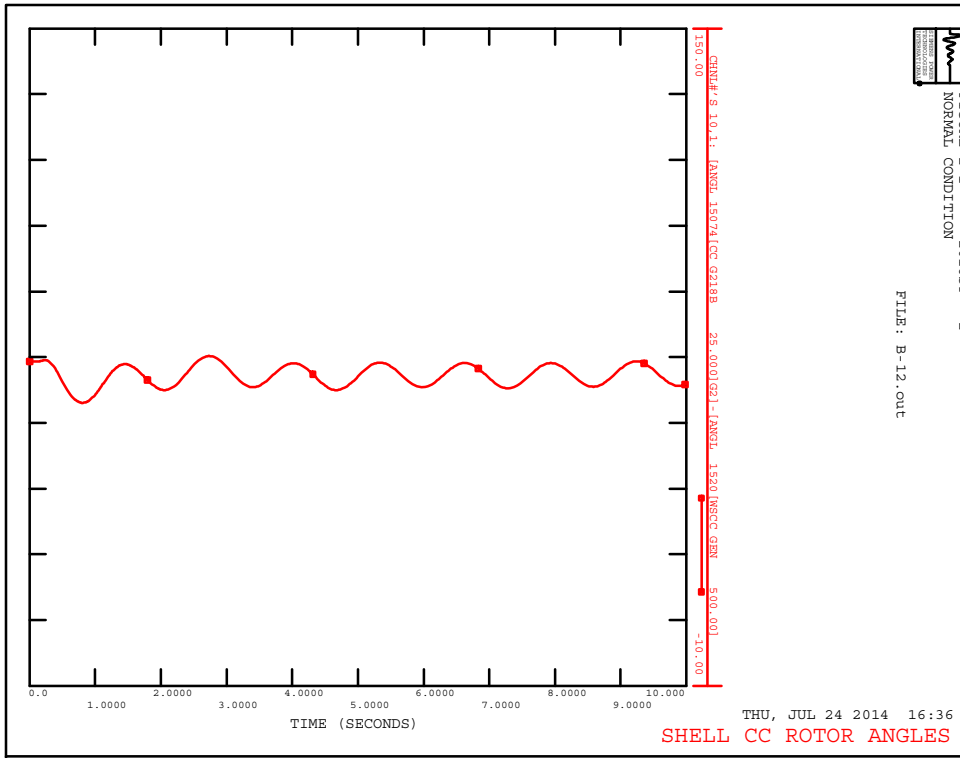


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-12.out
CHNL# 10.1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

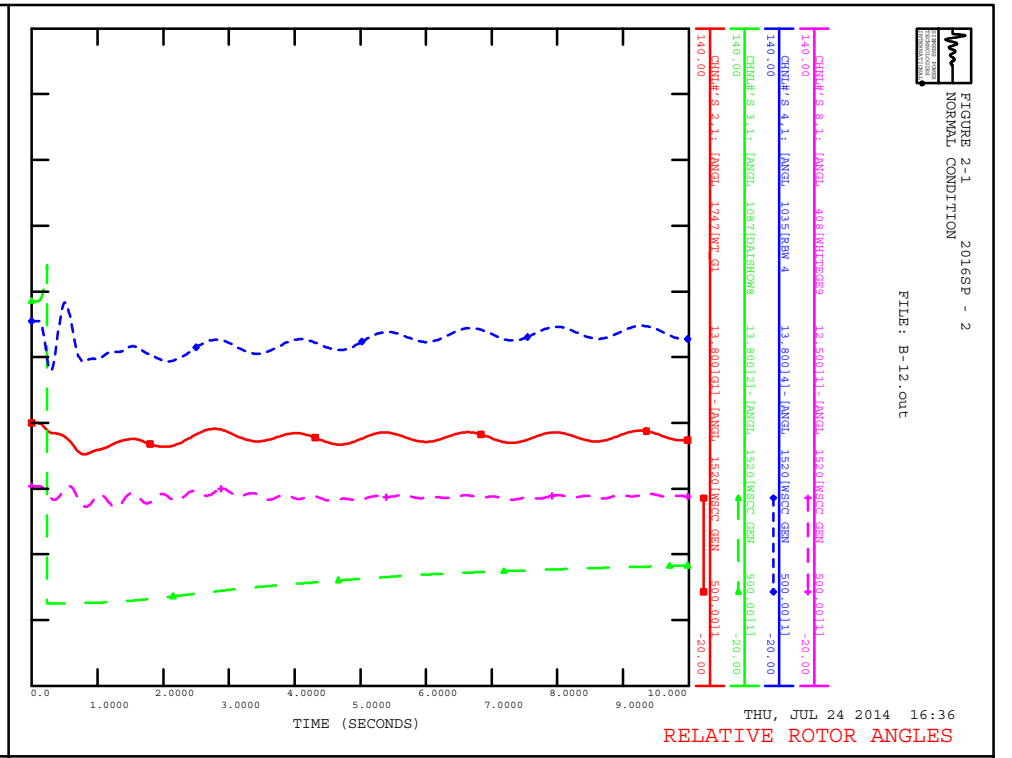


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-12.out
CHNL# 8.1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 4.1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3.1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 2.1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

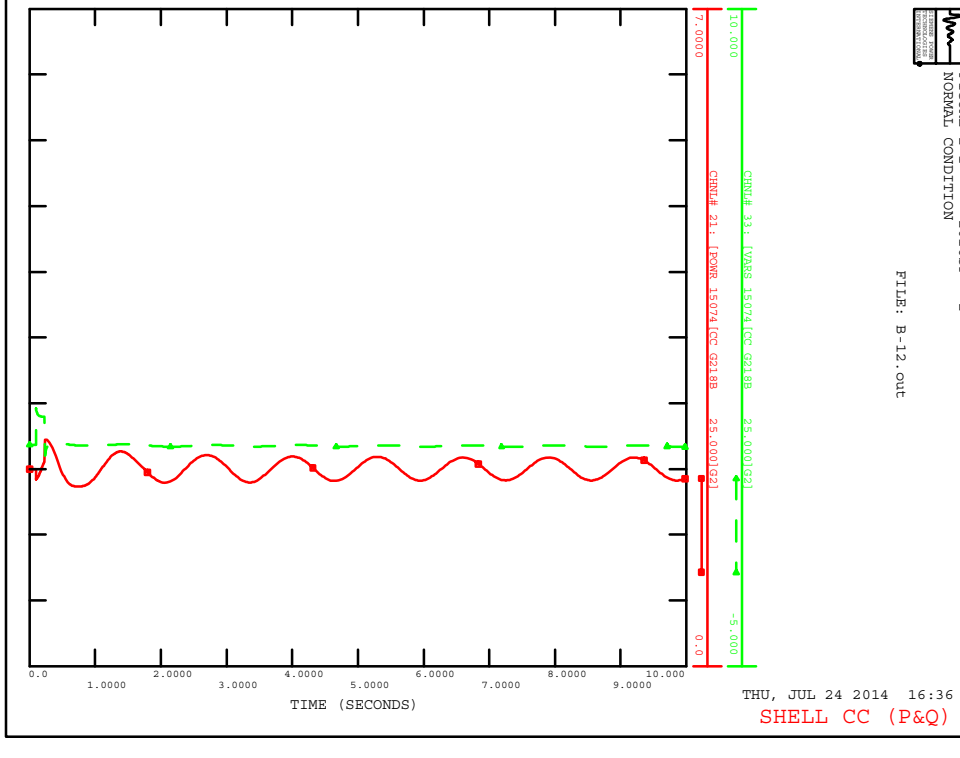


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-12.out
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
7.0000
10.000
0.0
-5.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

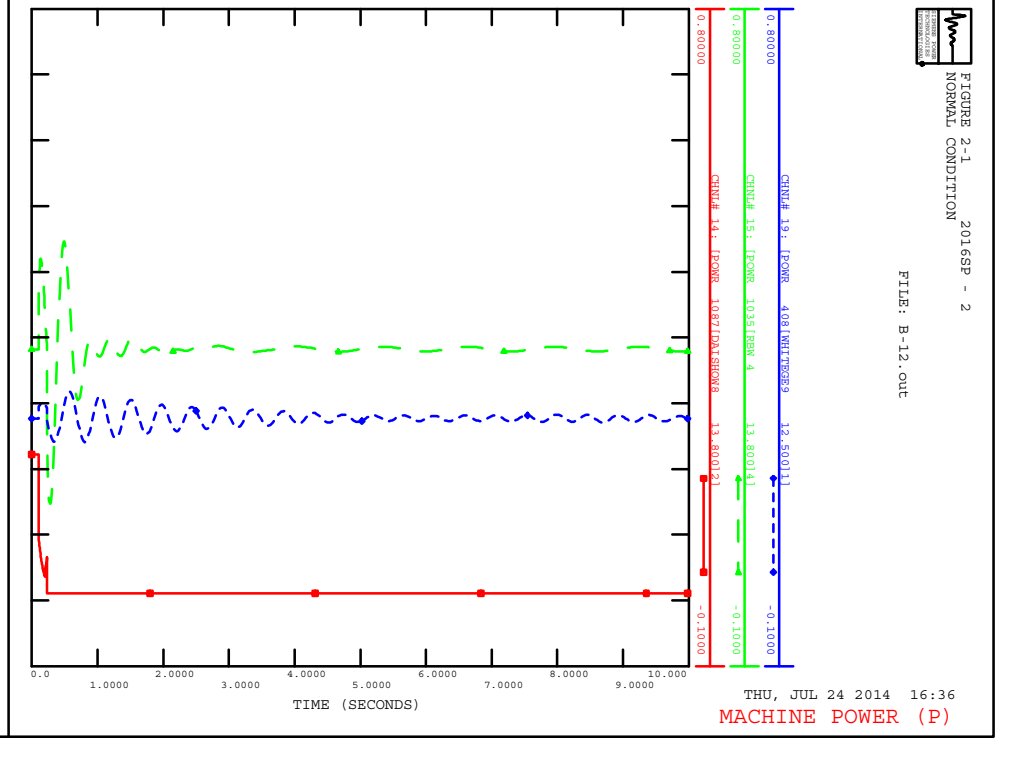


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-12.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
0.80000
-0.1000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

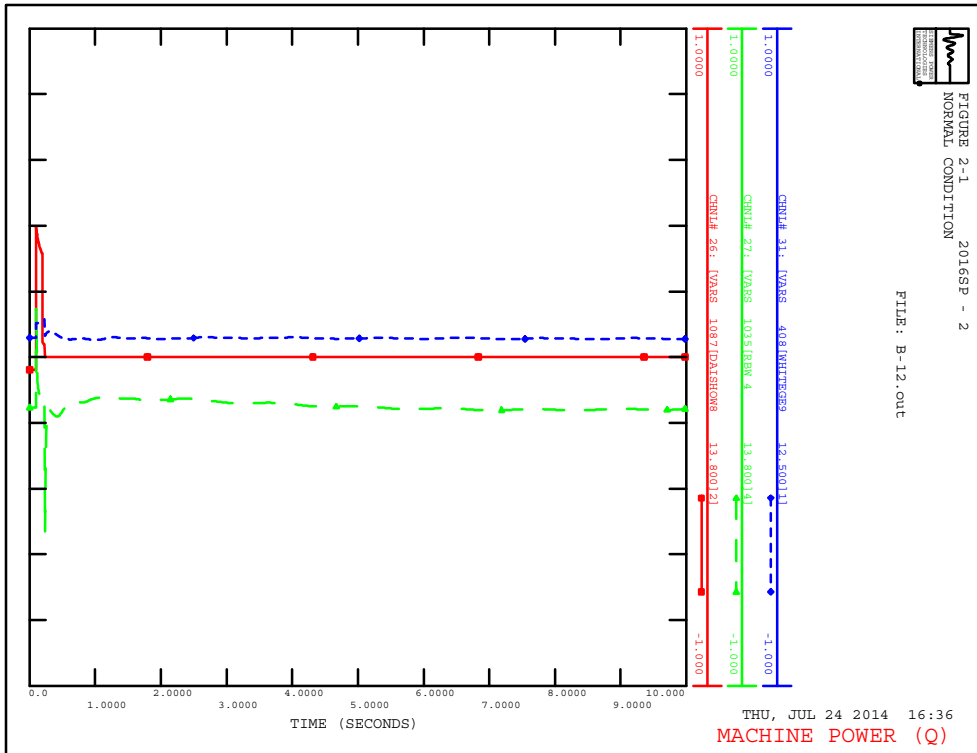


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-12.out
CHNI# 26: [VARS 1087[DAISHOWB 13.80012]
CHNI# 27: [VARS 1035[RBW 4 13.80014]
CHNI# 31: [VARS 408[WHITEGB9 12.50011]
1.0000
-1.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

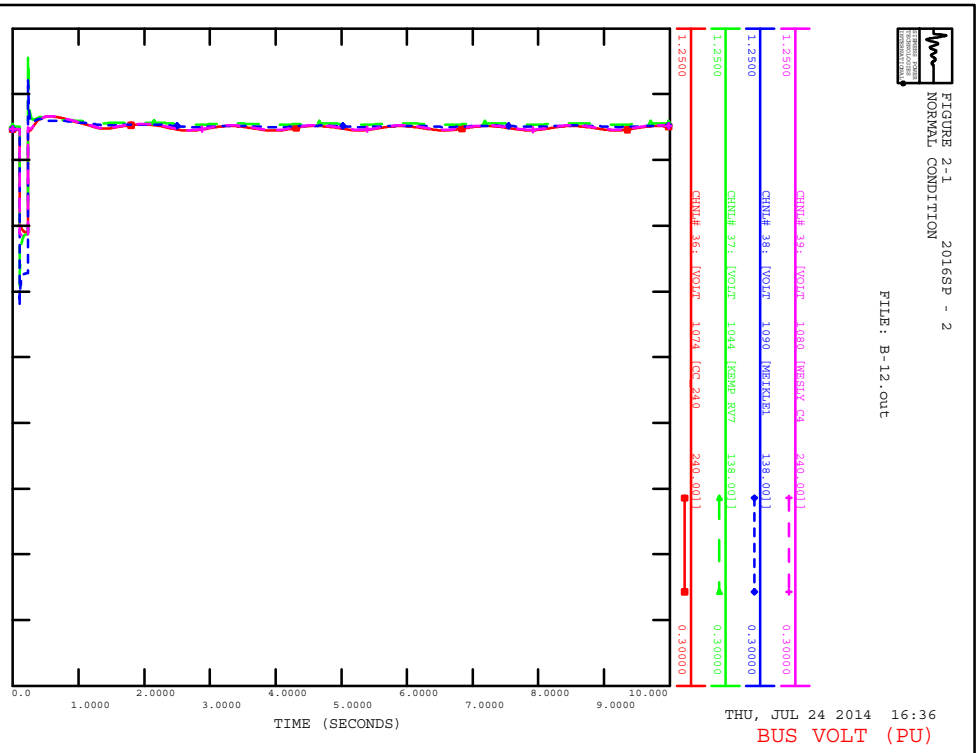


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-12.out
CHNI# 36: [VOLT 1074 [CC 240 240.001]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.001]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.001]
CHNI# 39: [VOLT 1080 [MESIK C4 240.001]
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

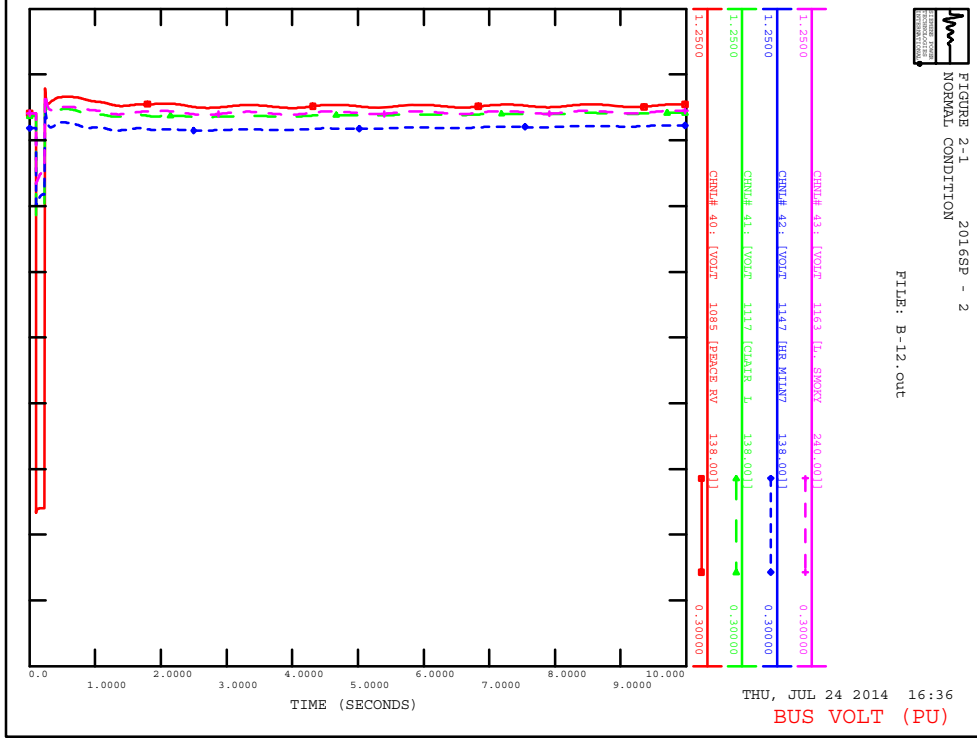


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-12.out
CHNI# 40: [VOLT 1085 [PEACE RV 138.001]
CHNI# 41: [VOLT 1117 [CLAIR L 138.001]
CHNI# 42: [VOLT 1142 [KR MIAN7 138.001]
CHNI# 43: [VOLT 1163 [L. SMOKY 240.001]
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

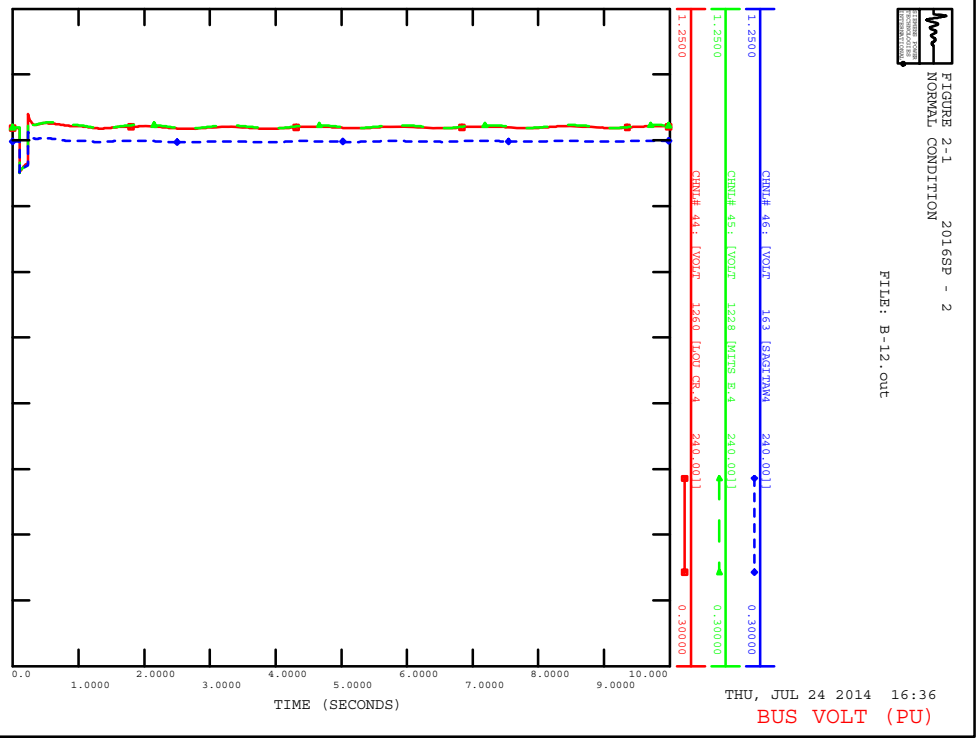


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-12.out
CHNI# 44: [VOLT 1260 [FOX CR 4 240.001]
CHNI# 45: [VOLT 1228 [MITS B-4 240.001]
CHNI# 46: [VOLT 163 [SAGITAW4 240.001]
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

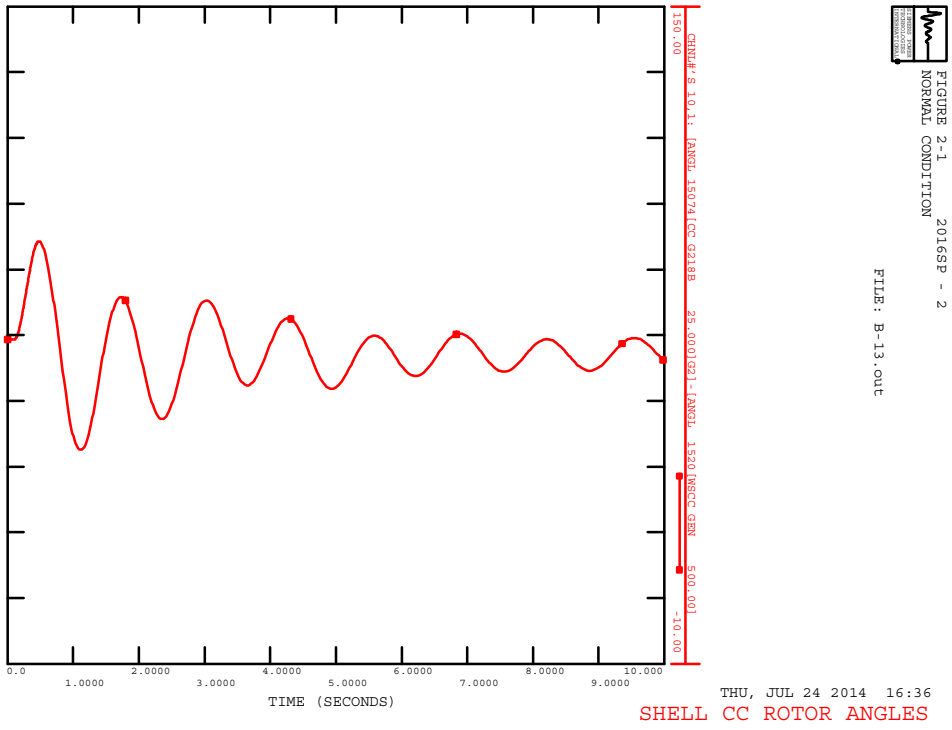


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-13.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

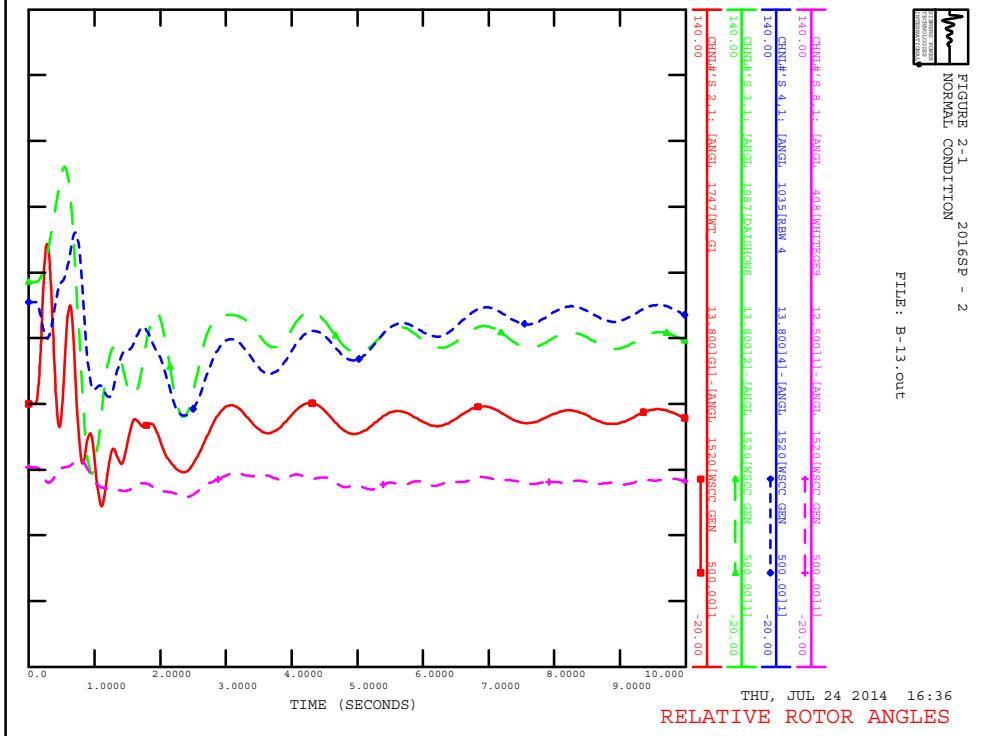


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-13.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

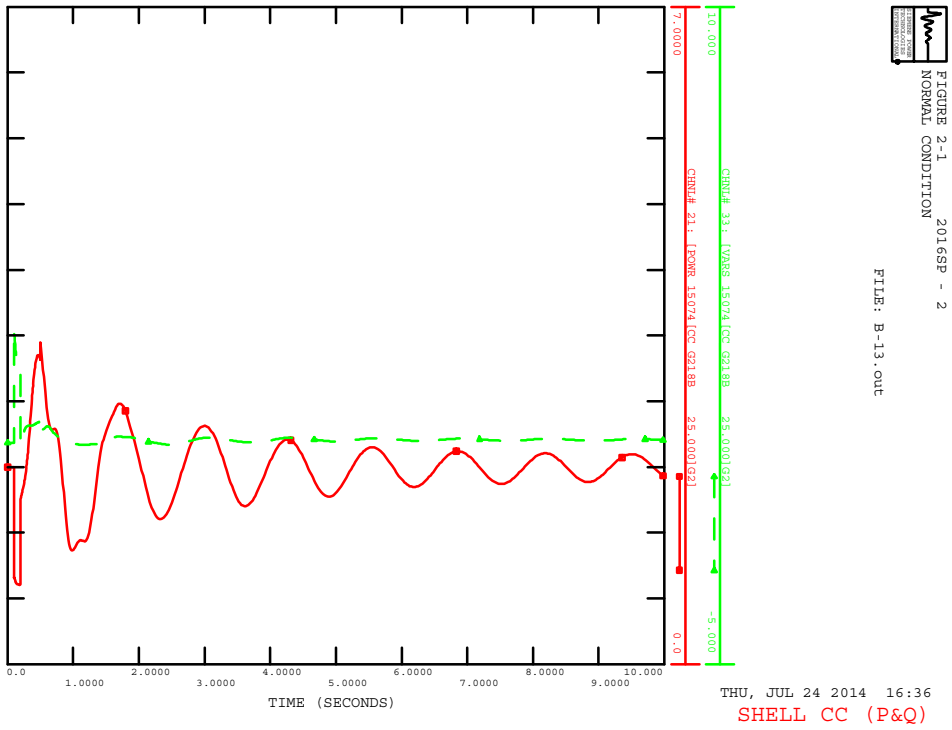


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-13.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

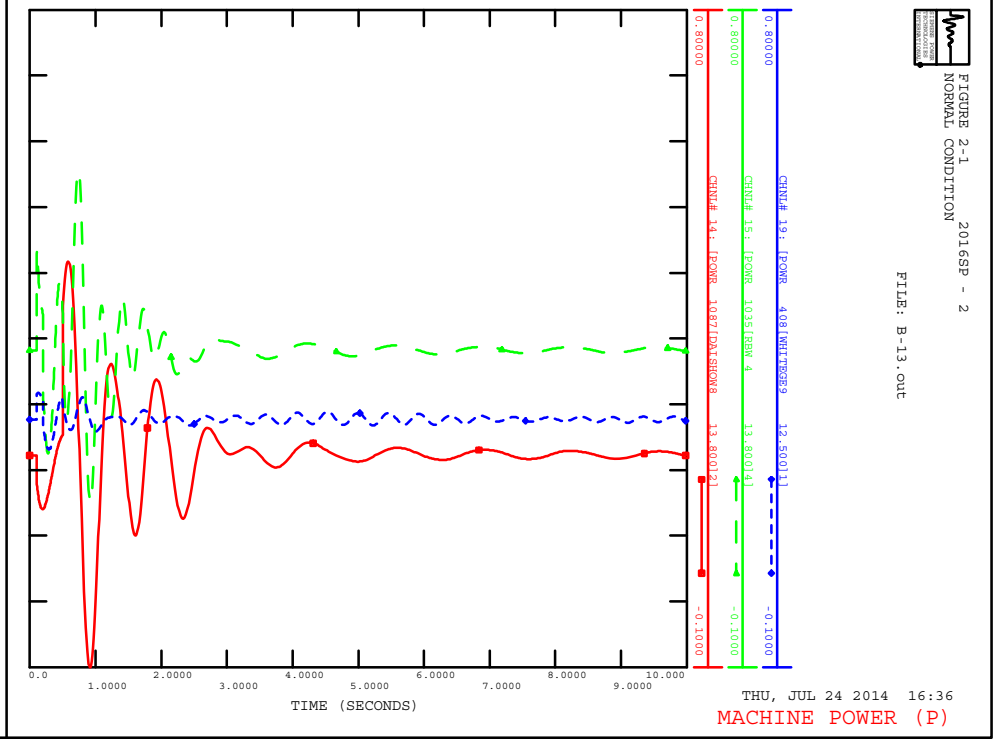


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-13.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

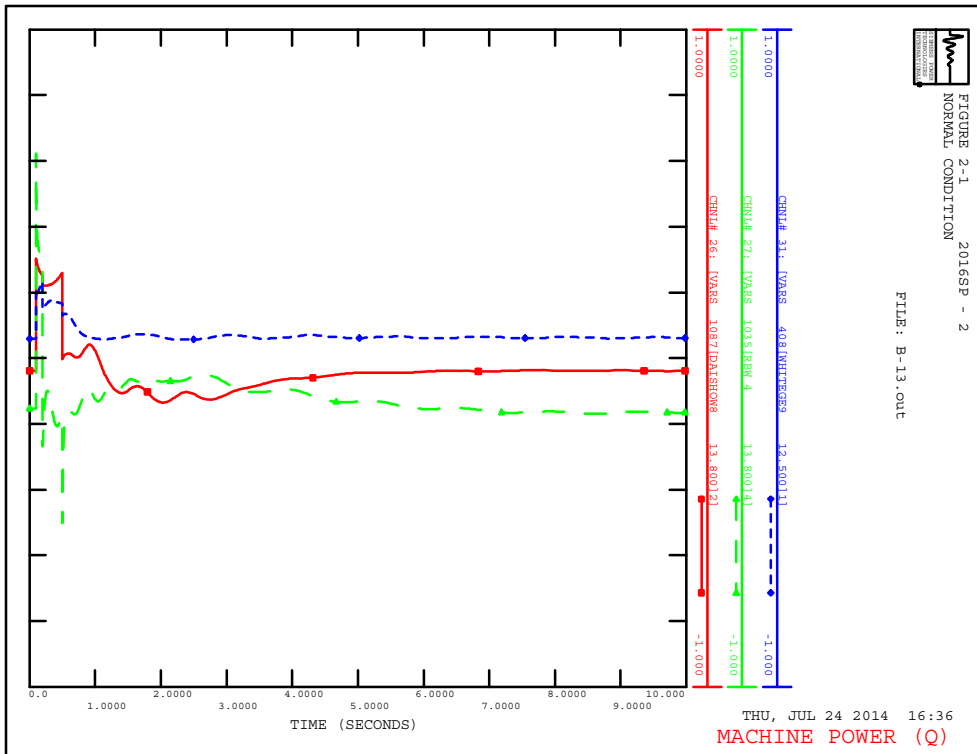


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-13.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

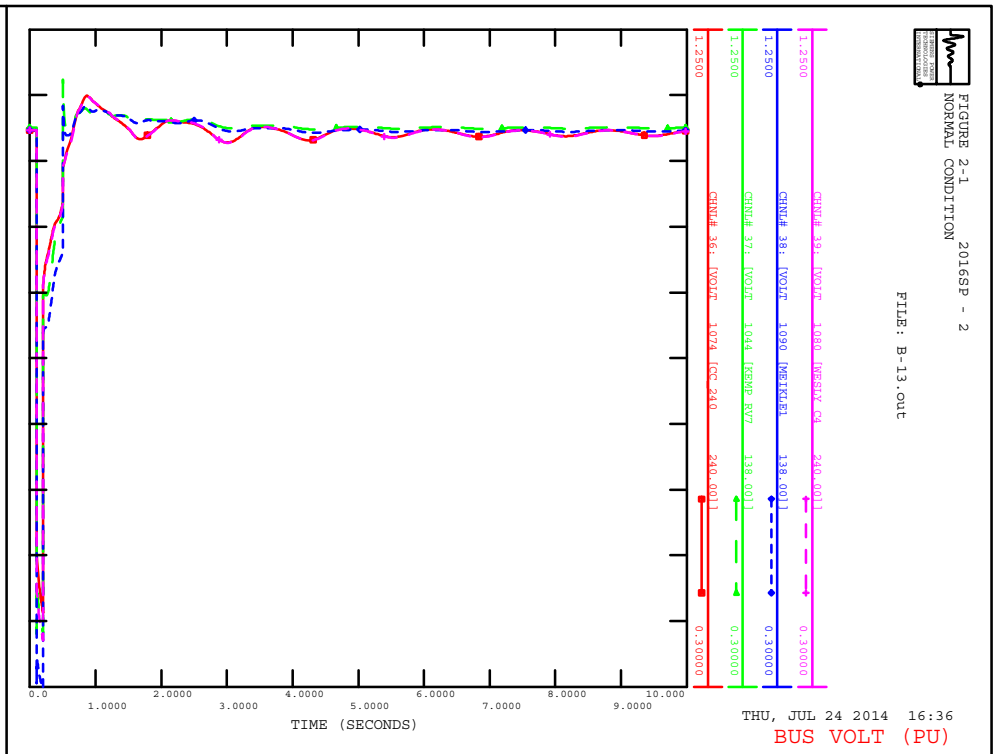


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-13.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

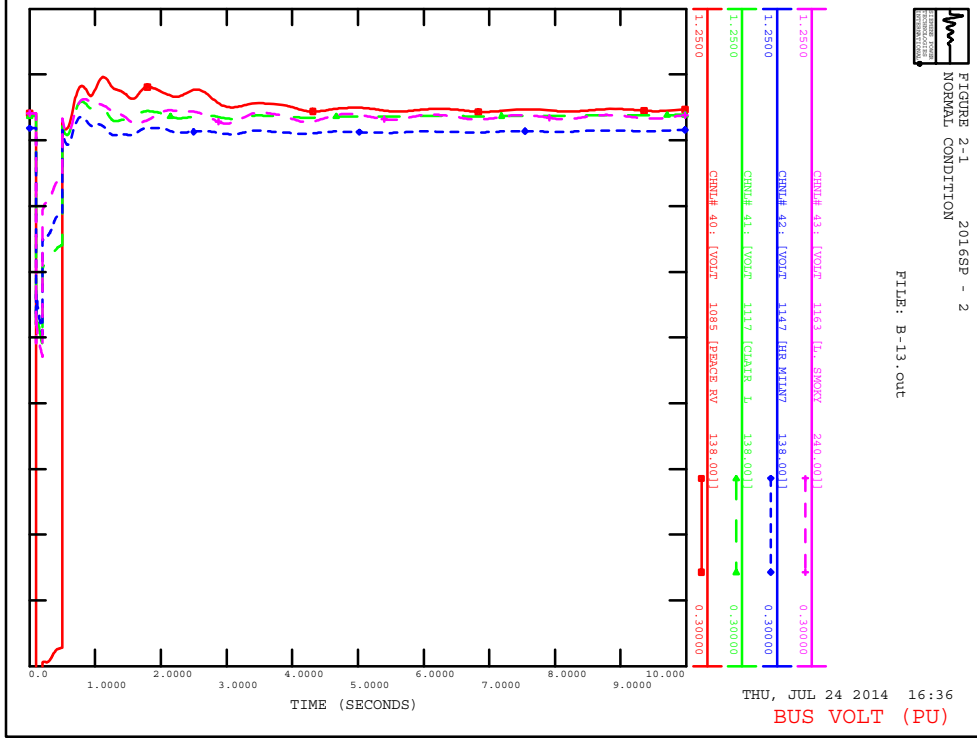


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-13.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

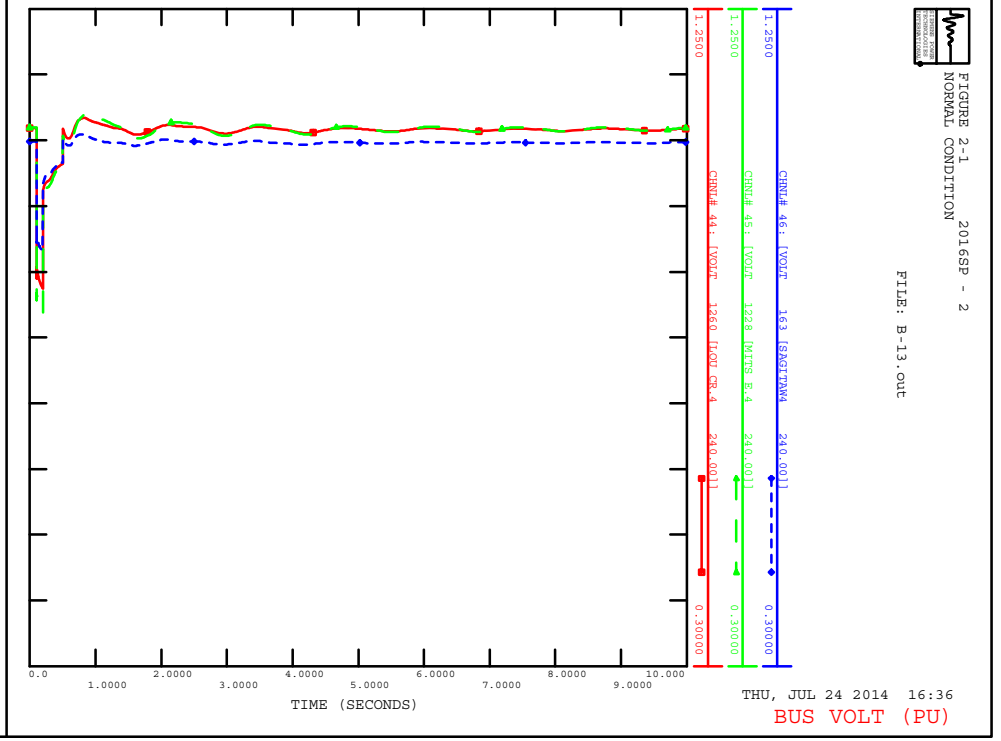


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-13.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

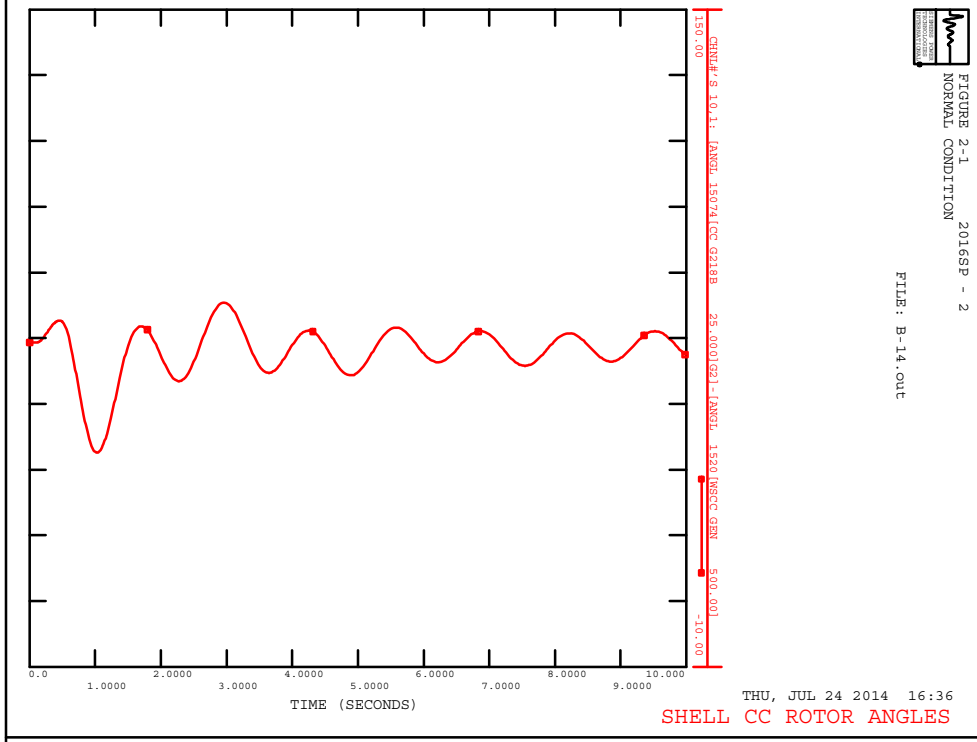


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-14.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

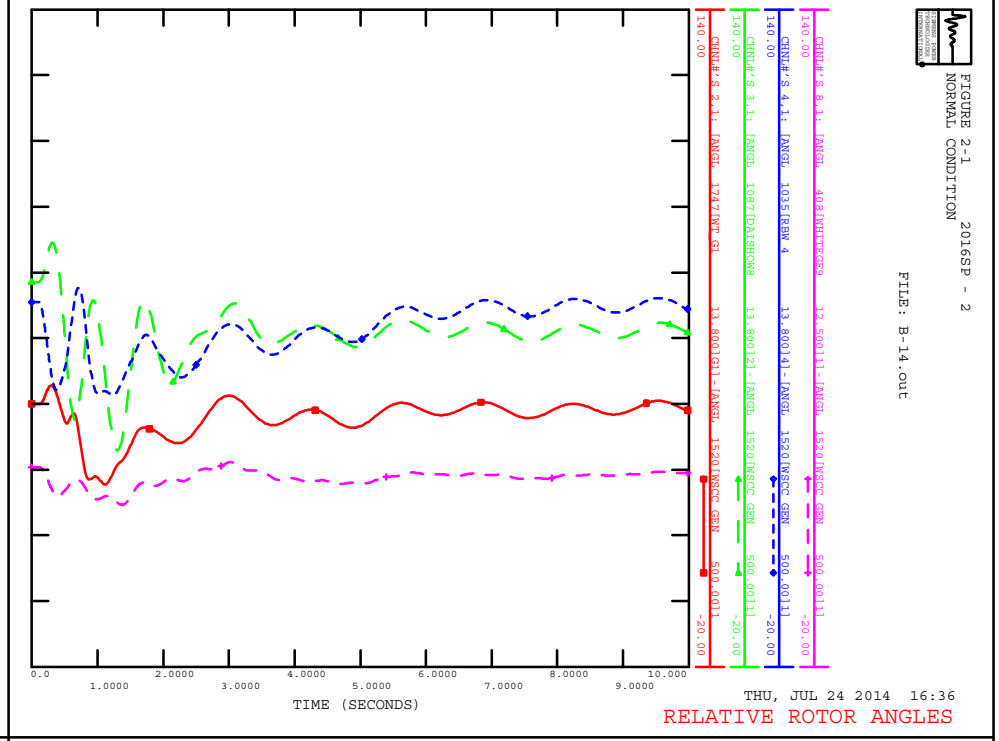


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-14.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

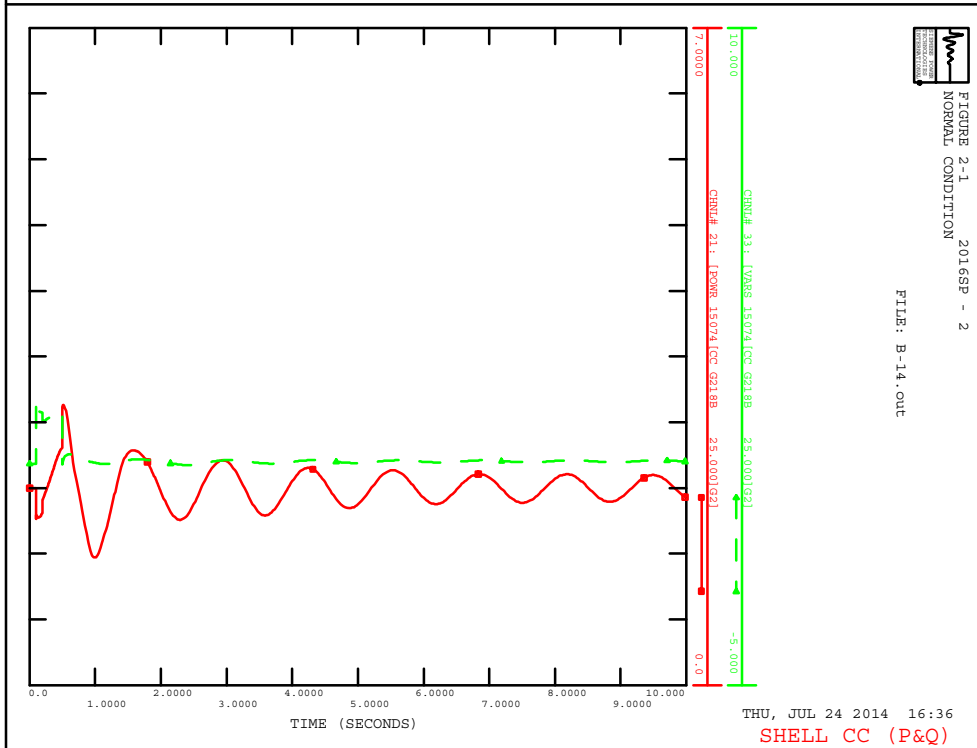


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-14.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

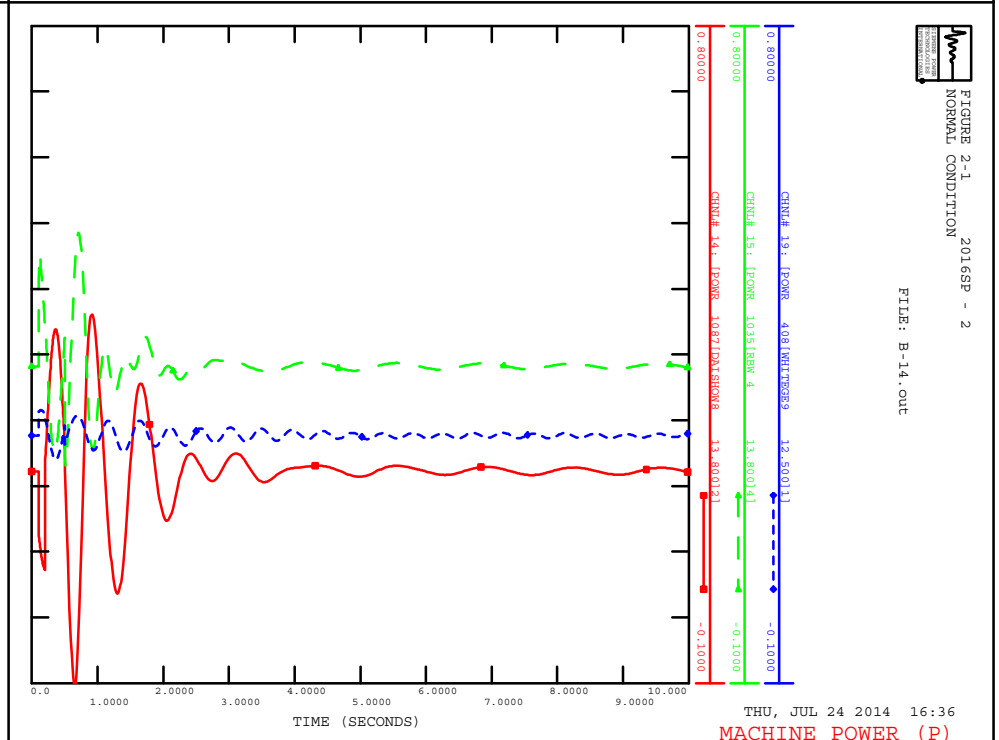


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-14.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

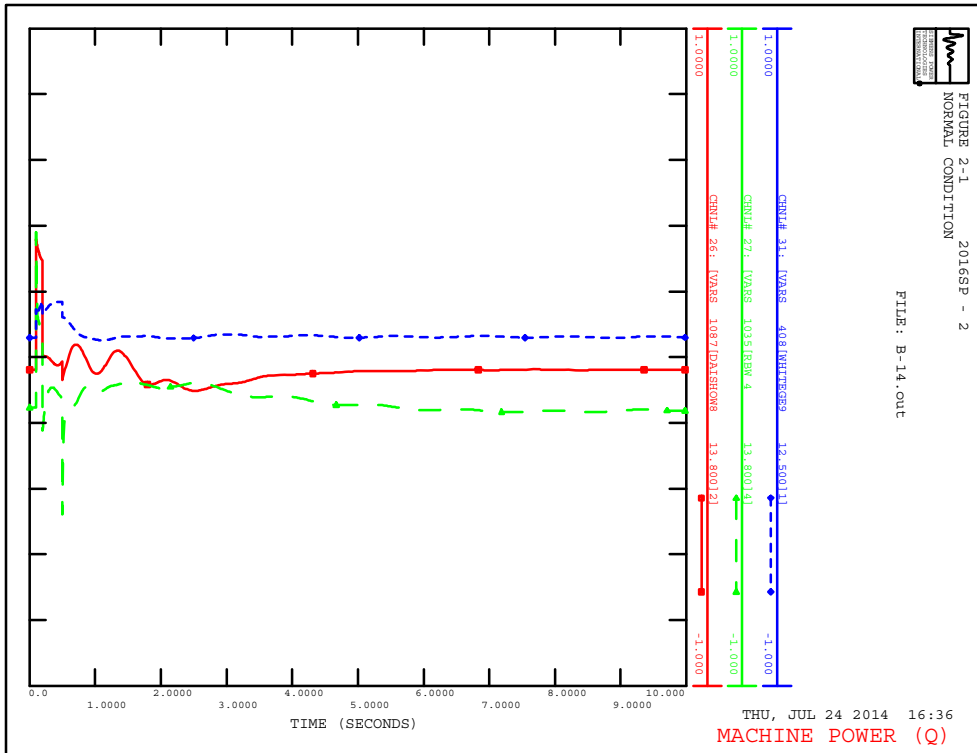


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-14.out
CHNI# 31: [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27: [VARS 1035[RBW 4 13.800]4]
CHNI# 26: [VARS 1087[DAISHOWB 13.800]2]
1.0000
-1.000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

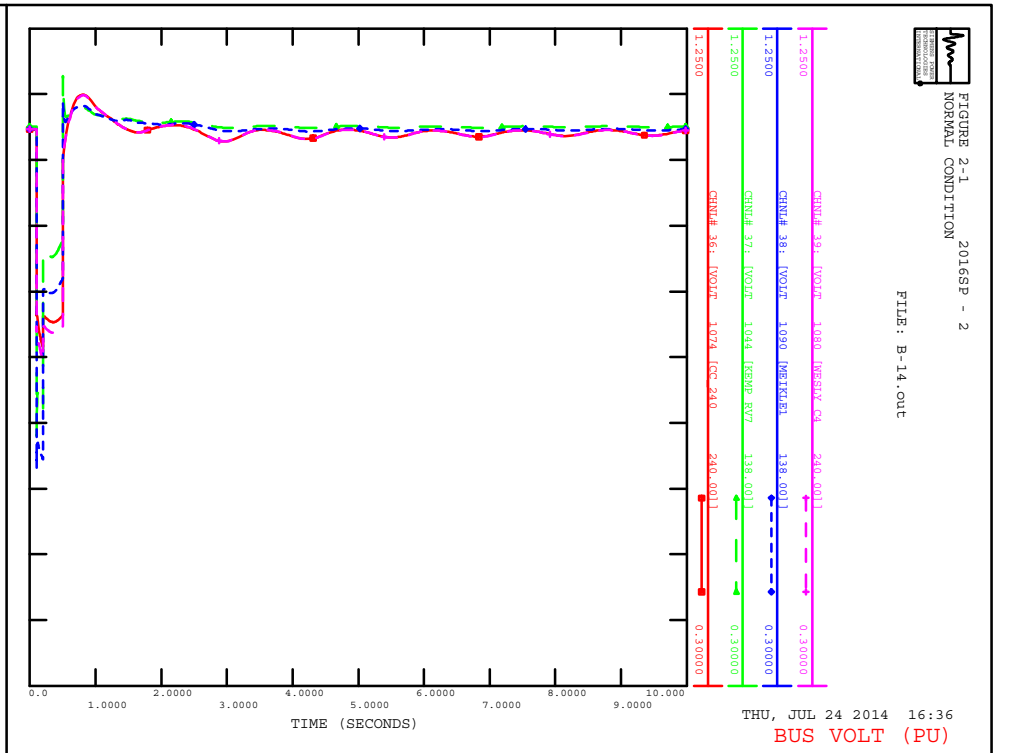


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-14.out
CHNI# 39: [VOLT 1080 [MESIX C4 240.00]]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.00]]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]]
CHNI# 36: [VOLT 1074 [CC 240 240.00]]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

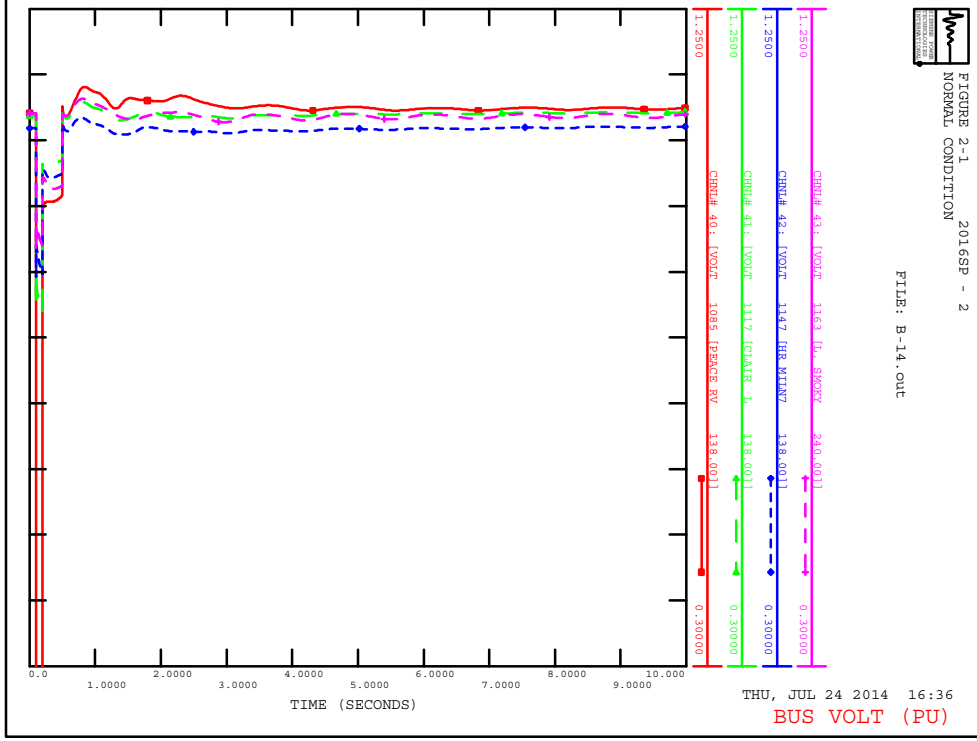


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-14.out
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00]]
CHNI# 42: [VOLT 1142 [KR MIAN7 138.00]]
CHNI# 41: [VOLT 1117 [CHAIR L 138.00]]
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

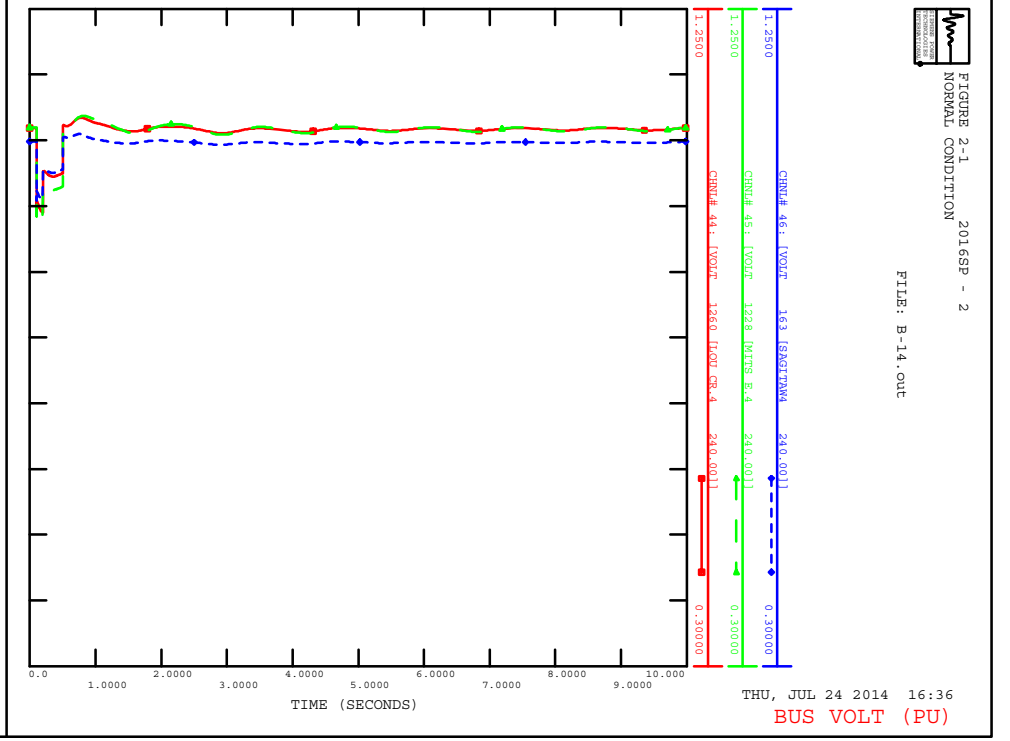


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-14.out
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]]
CHNI# 45: [VOLT 1228 [MTCS B-4 240.00]]
CHNI# 44: [VOLT 1260 [FOX CR-4 240.00]]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

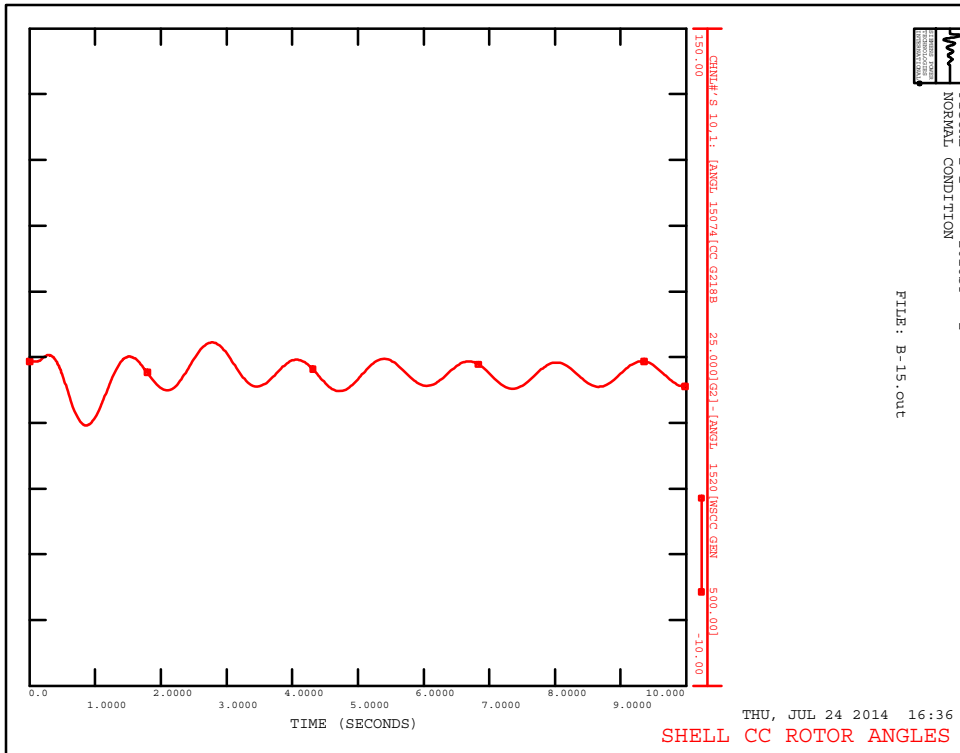


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-15.out
CHNL# 8 8.1: [ANGL 408[WHITESB9 12.5001]1] [ANGL 1520[NSCC GEN 500.001]1]
CHNL# 4 4.1: [ANGL 1035[RBM 4 13.80014]-[ANGL 1520[NSCC GEN 500.001]1]
CHNL# 3 3.1: [ANGL 1087[DAISHON8 13.80012] [ANGL 1520[NSCC GEN 500.001]1]
CHNL# 2 2.1: [ANGL 1747[WT G1 13.80013]-[ANGL 1520[NSCC GEN 500.001]1]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-15.out
CHNL# 10 10.1: [ANGL 15074[CC G218B 25.00012]-[ANGL 1520[NSCC GEN 500.001]1]
-50.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

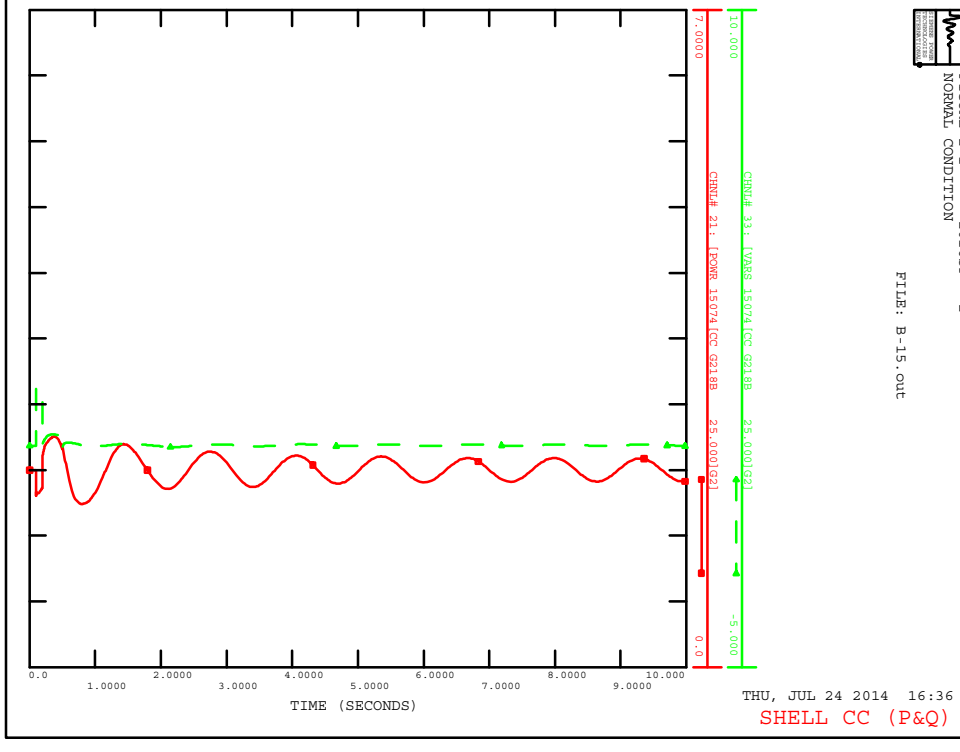


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-15.out
CHNL# 19: [POWR 408[WHITESB9 12.5001]1]
CHNL# 15: [POWR 1035[RBM 4 13.80014]
CHNL# 14: [POWR 1087[DAISHON8 13.80012]
0.80000
-0.10000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-15.out
CHNL# 33: [VARS 15074[CC G218B 25.00012]
CHNL# 21: [POWR 15074[CC G218B 25.00012]
10.000
-5.000
7.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

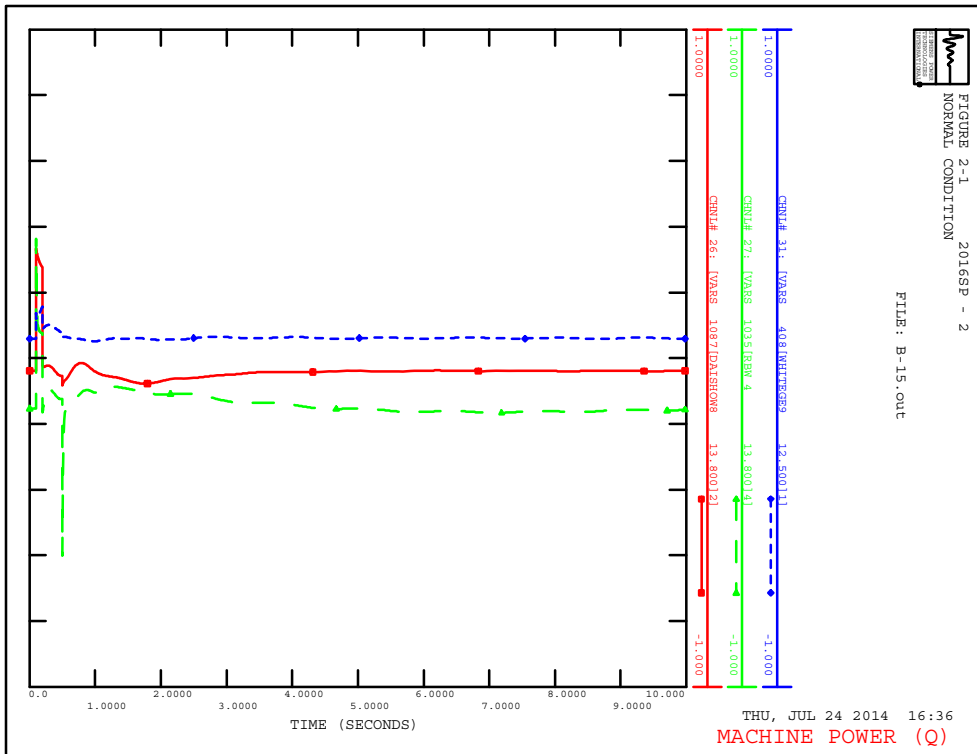


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-15.out
CHNI# 26: [VARS 1087 [DAISHOWA 13.80012]
CHNI# 27: [VARS 1035 [RBW 4 13.80014]
CHNI# 31: [VARS 408 [WHITEGB9 12.50011]
1.0000
-1.000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

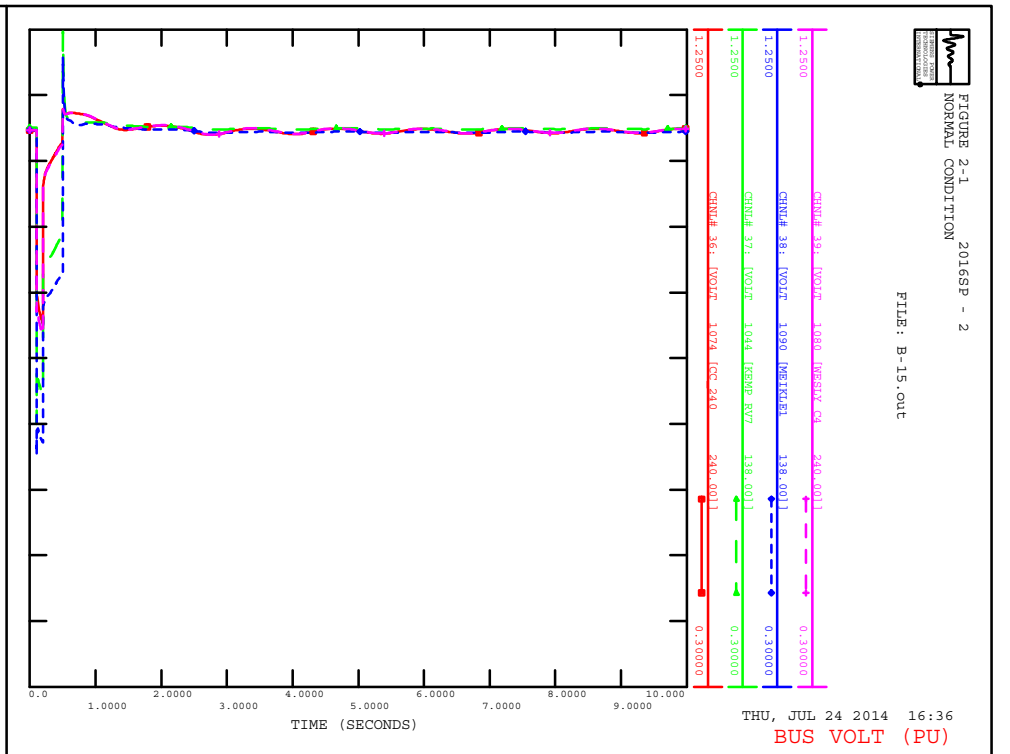


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-15.out
CHNI# 36: [VOLT 1074 [CC 240 240.001]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.001]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.001]
CHNI# 39: [VOLT 1080 [NRSIX C4 240.001]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

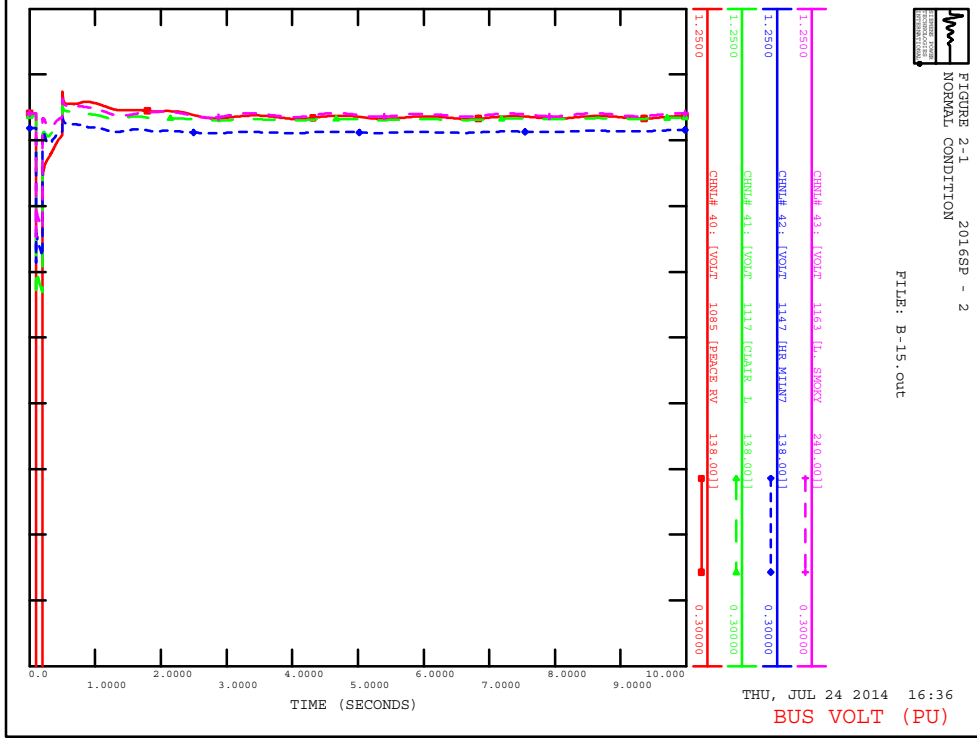


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-15.out
CHNI# 40: [VOLT 1085 [PEACE RV 138.001]
CHNI# 41: [VOLT 1117 [CHAIR L 138.001]
CHNI# 42: [VOLT 1142 [KR MLNT 138.001]
CHNI# 43: [VOLT 1163 [L. SMOKY 240.001]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

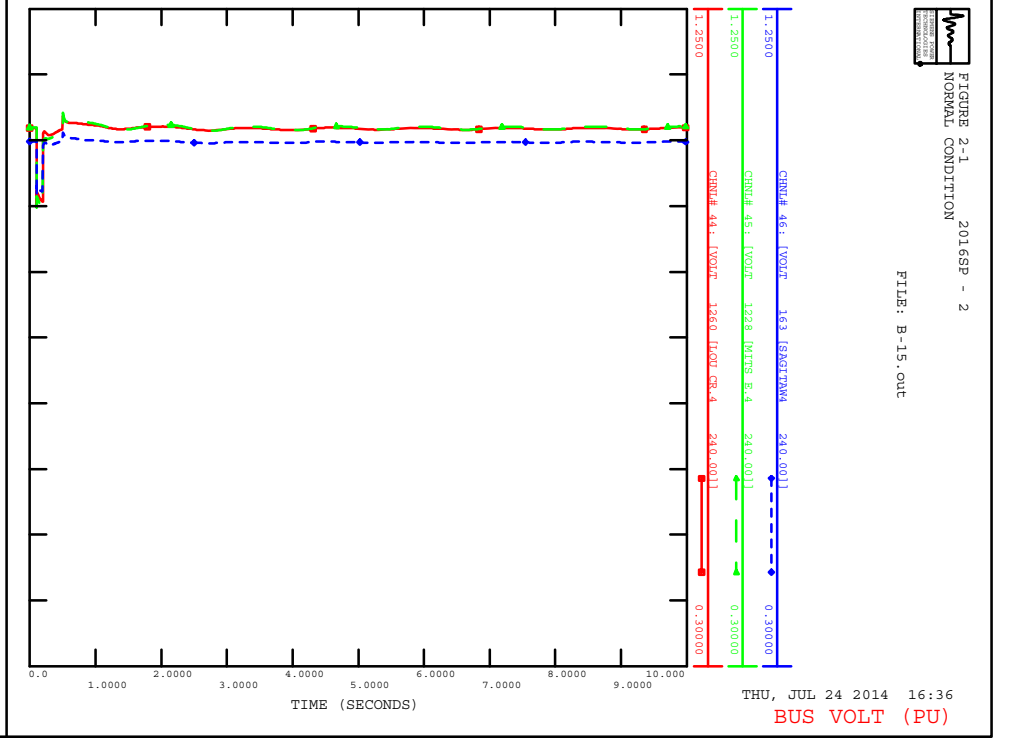


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-15.out
CHNI# 44: [VOLT 1260 [FOX CR 4 240.001]
CHNI# 45: [VOLT 1228 [MITS B 4 240.001]
CHNI# 46: [VOLT 163 [SAGITAW4 240.001]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

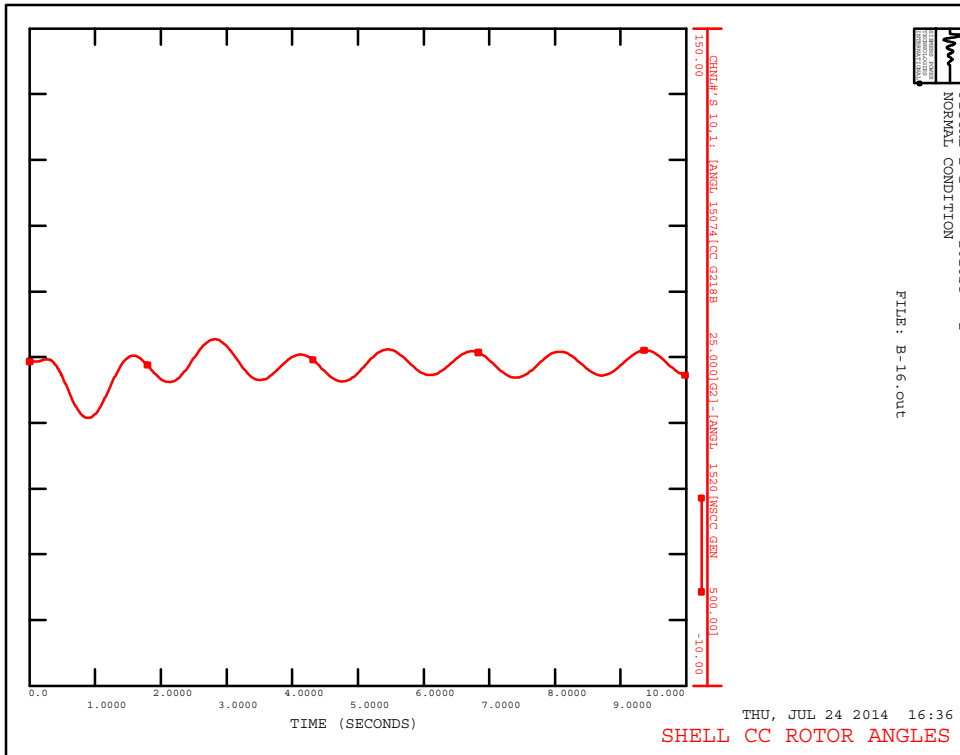


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-16.out
CHNL# 10.1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

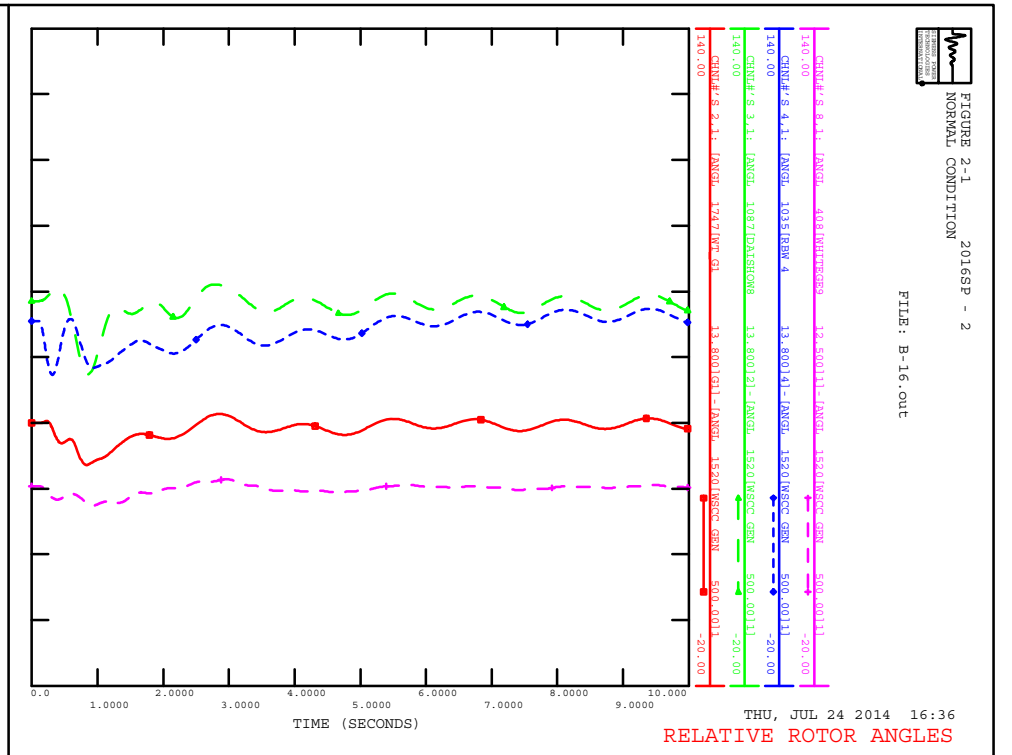


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-16.out
CHNL# 8.1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 4.1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3.1: [ANGL 1087[DAISHOW8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 2.1: [ANGL 1747[WT G1 13.800[1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

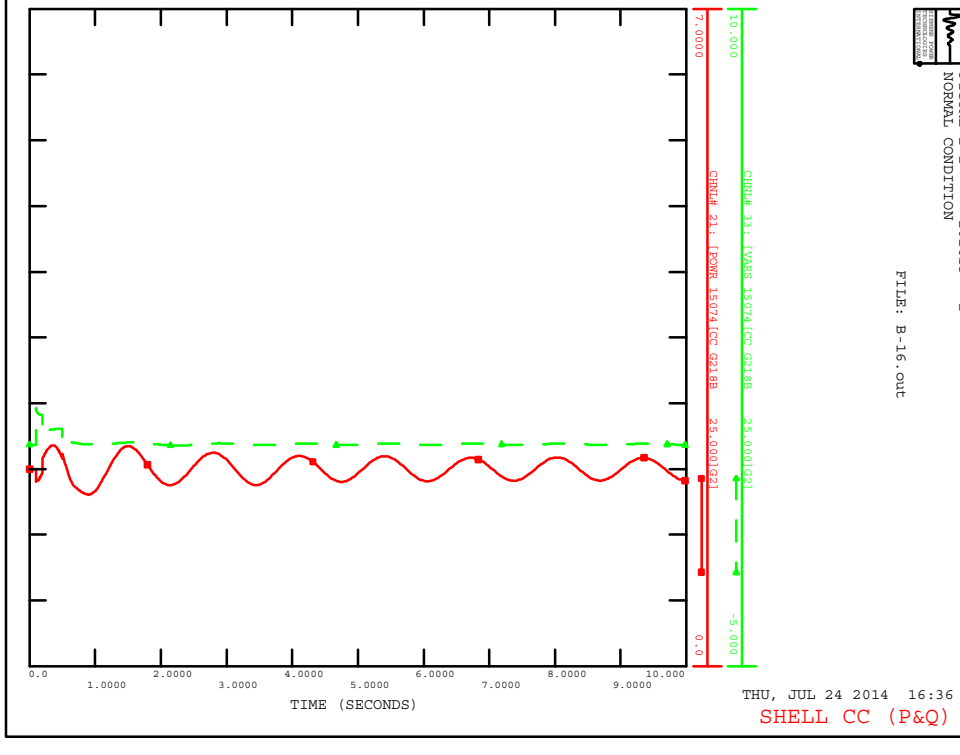


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-16.out
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

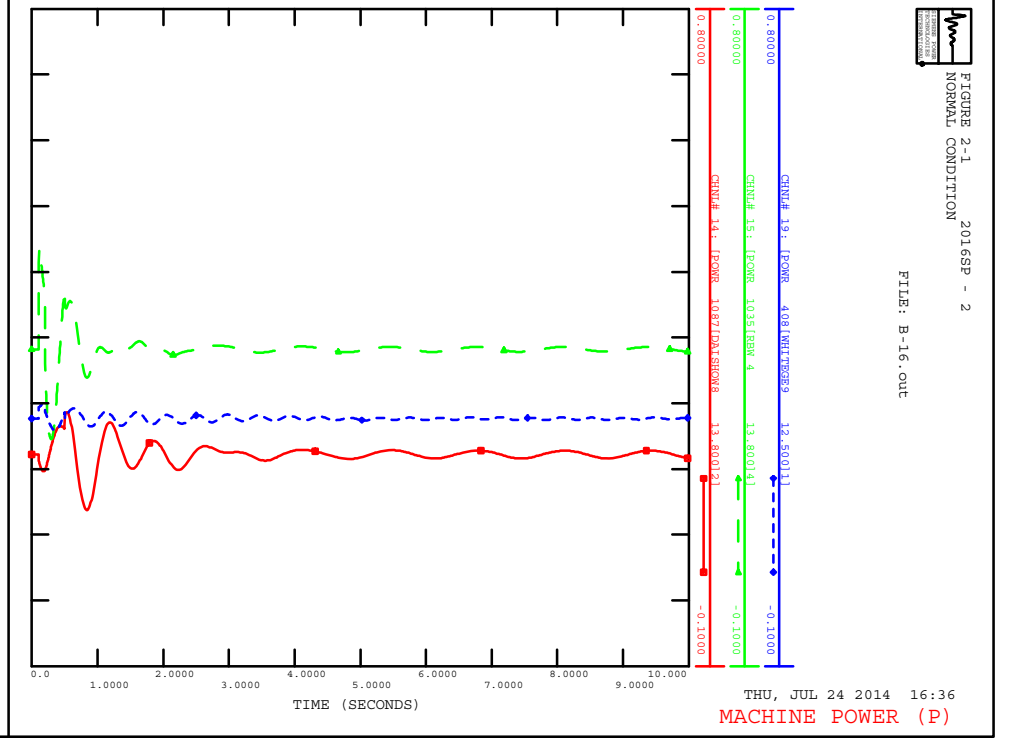


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-16.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHOW8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

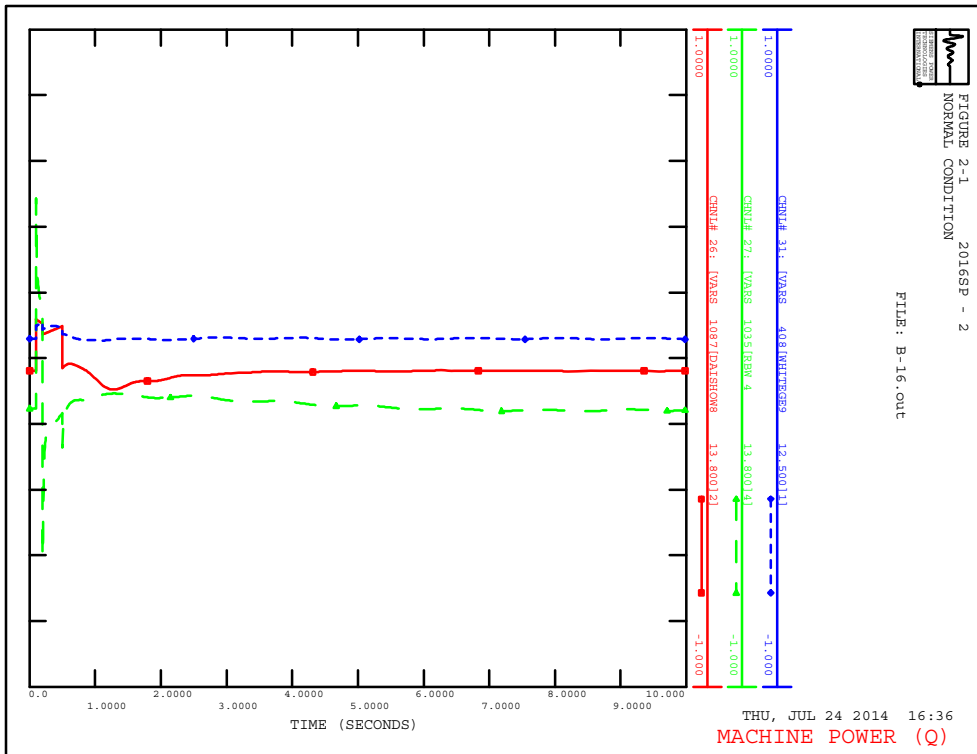


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-16.out
CHNI# 26: [VARS 1087 [DAISHOWB 13.80012]
CHNI# 27: [VARS 1035 [RBW 4 13.80014]
CHNI# 31: [VARS 408 [WHITEGB9 12.50011]
1.0000
-1.000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

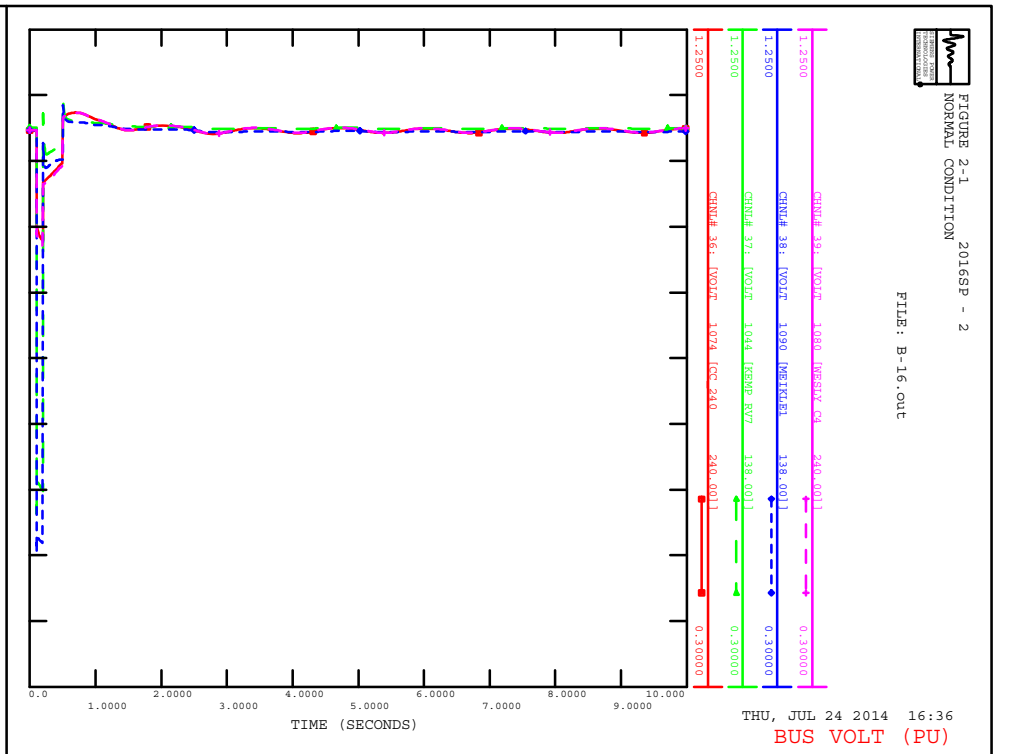


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-16.out
CHNI# 36: [VOLT 1074 [CC 240 240.001]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.001]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.001]
CHNI# 39: [VOLT 1080 [MESIK C4 240.001]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

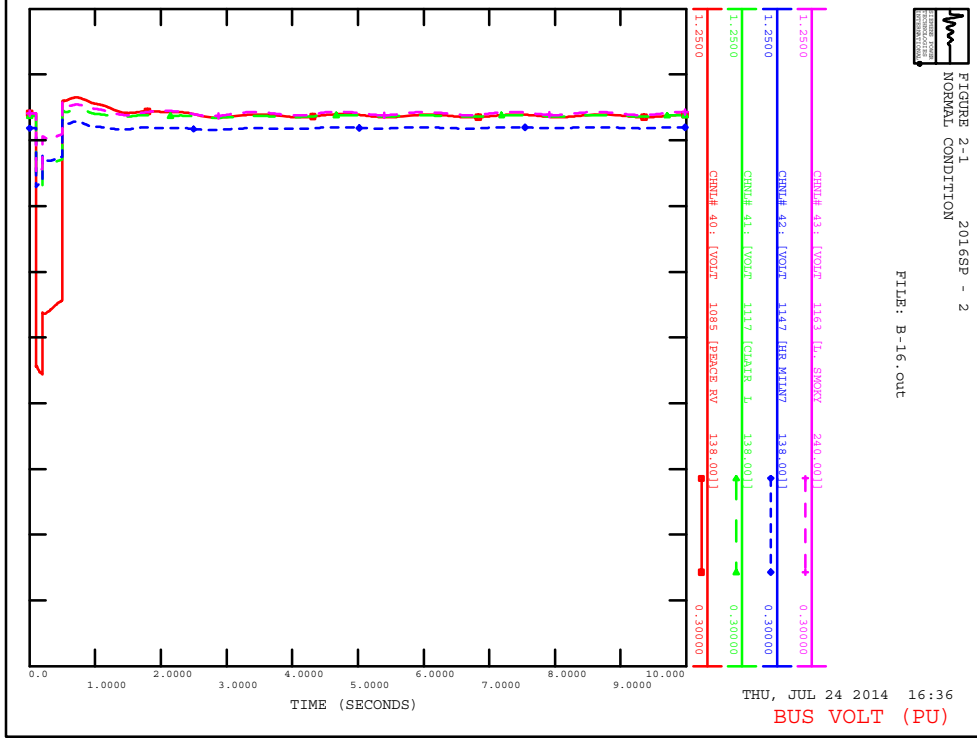


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-16.out
CHNI# 40: [VOLT 1085 [PEACE RV 138.001]
CHNI# 41: [VOLT 1117 [CHAIR L 138.001]
CHNI# 42: [VOLT 1142 [KR MIANT 138.001]
CHNI# 43: [VOLT 1163 [L. SMOKY 240.001]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

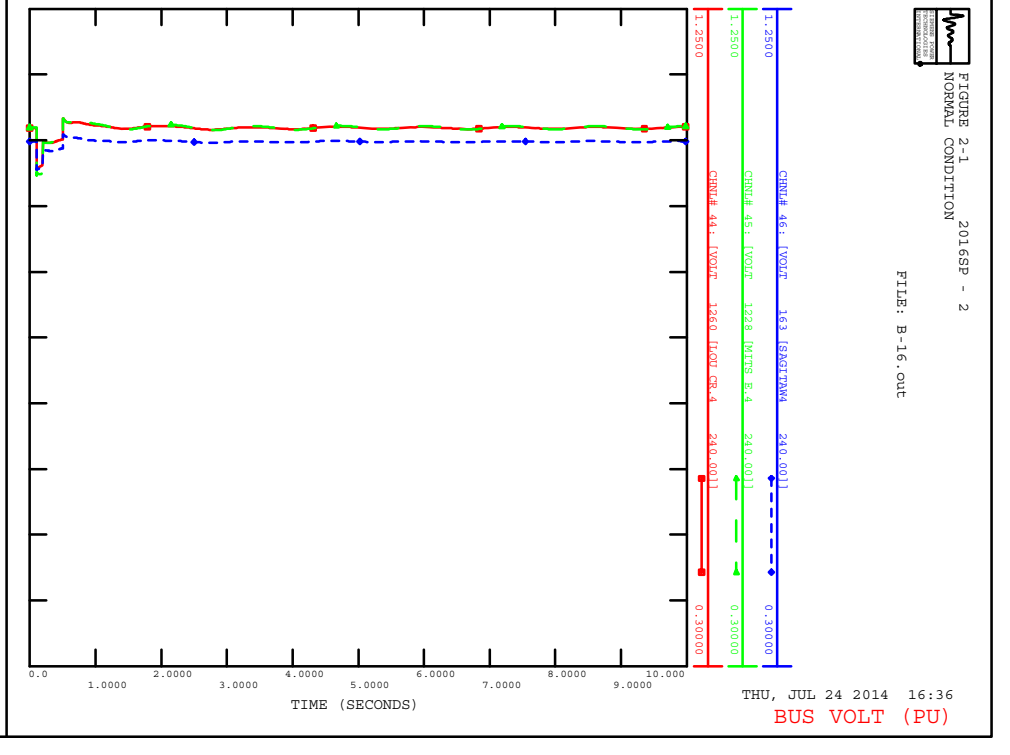


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-16.out
CHNI# 44: [VOLT 1260 [FOX CR 4 240.001]
CHNI# 45: [VOLT 1228 [MITS B 4 240.001]
CHNI# 46: [VOLT 163 [SAGITAW4 240.001]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

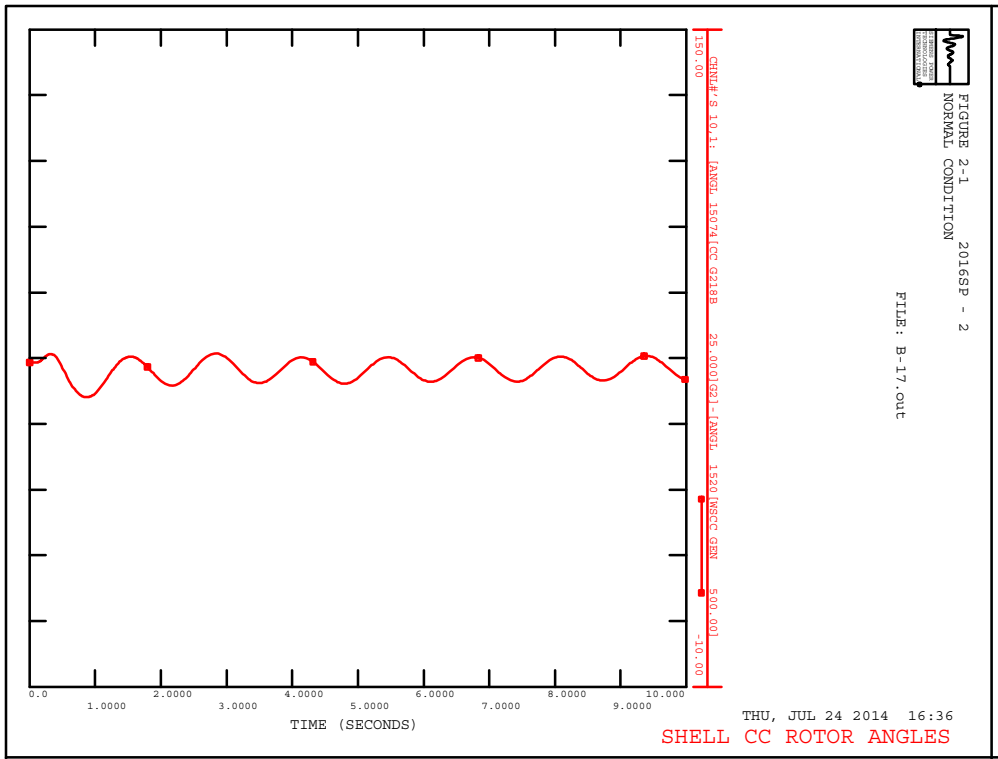


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-17.out
THU, JUL 24 2014 16:36
TIME (SECONDS)
SHELL CC ROTOR ANGLES

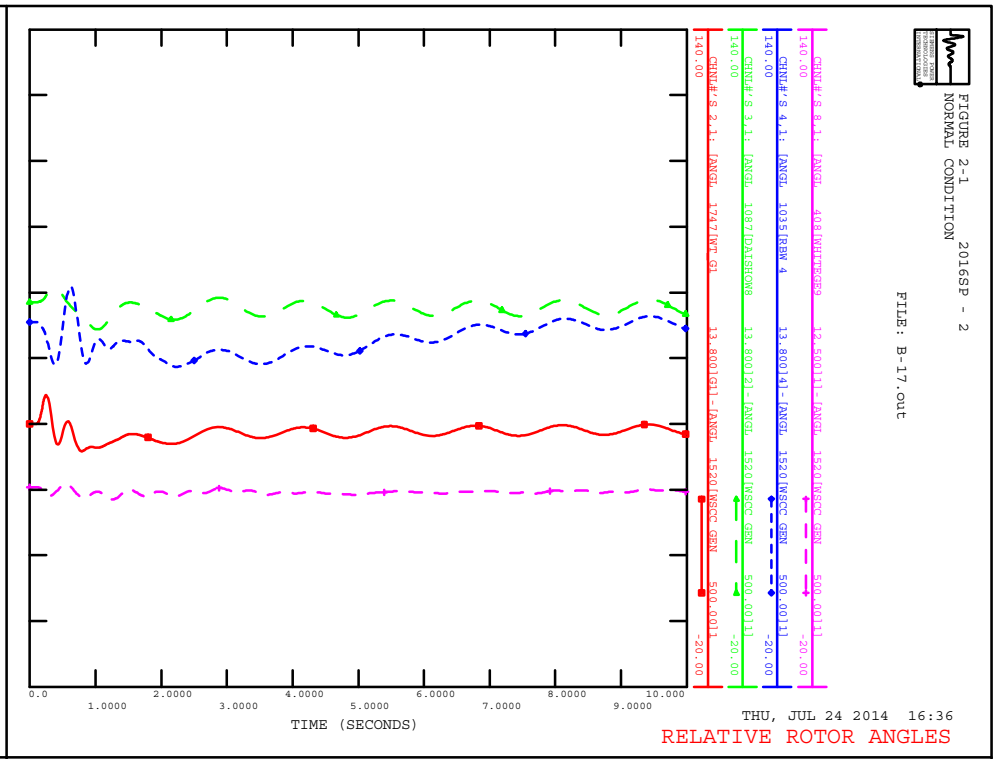


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-17.out
THU, JUL 24 2014 16:36
TIME (SECONDS)
RELATIVE ROTOR ANGLES

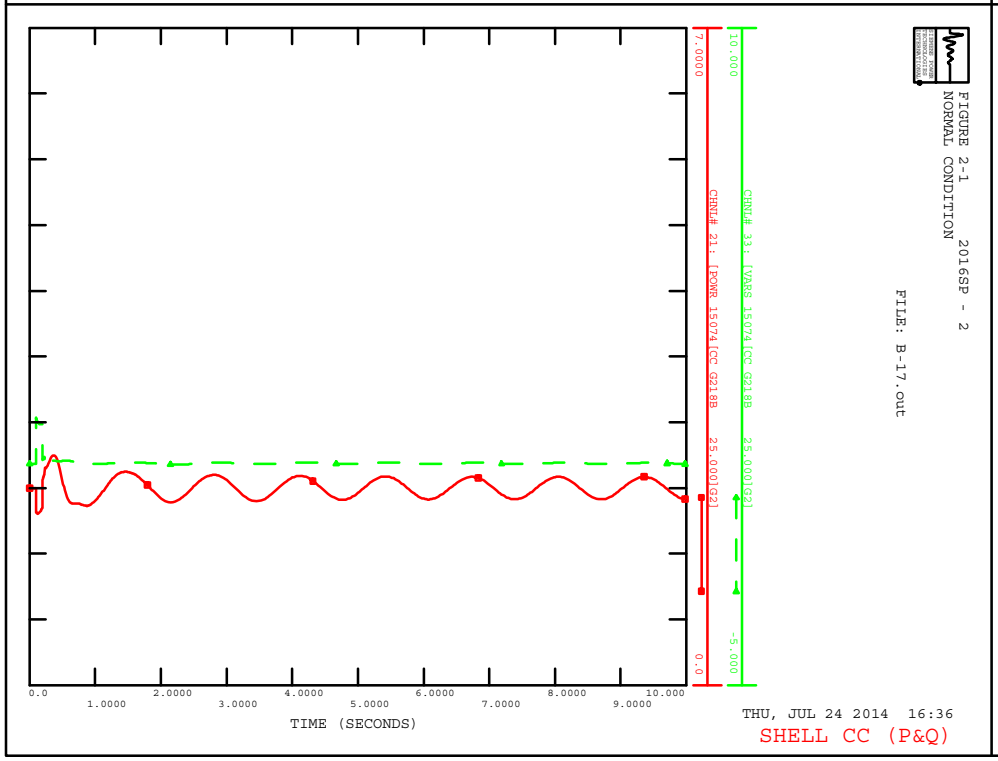


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-17.out
THU, JUL 24 2014 16:36
TIME (SECONDS)
SHELL CC (P&Q)

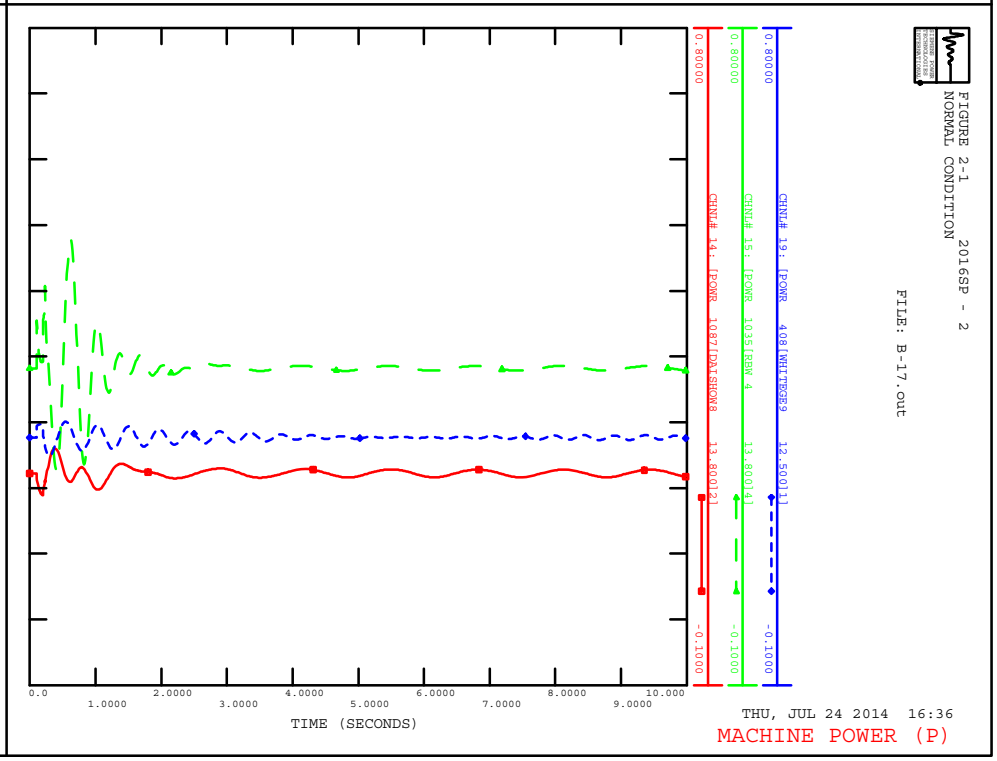


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-17.out
THU, JUL 24 2014 16:36
TIME (SECONDS)
MACHINE POWER (P)

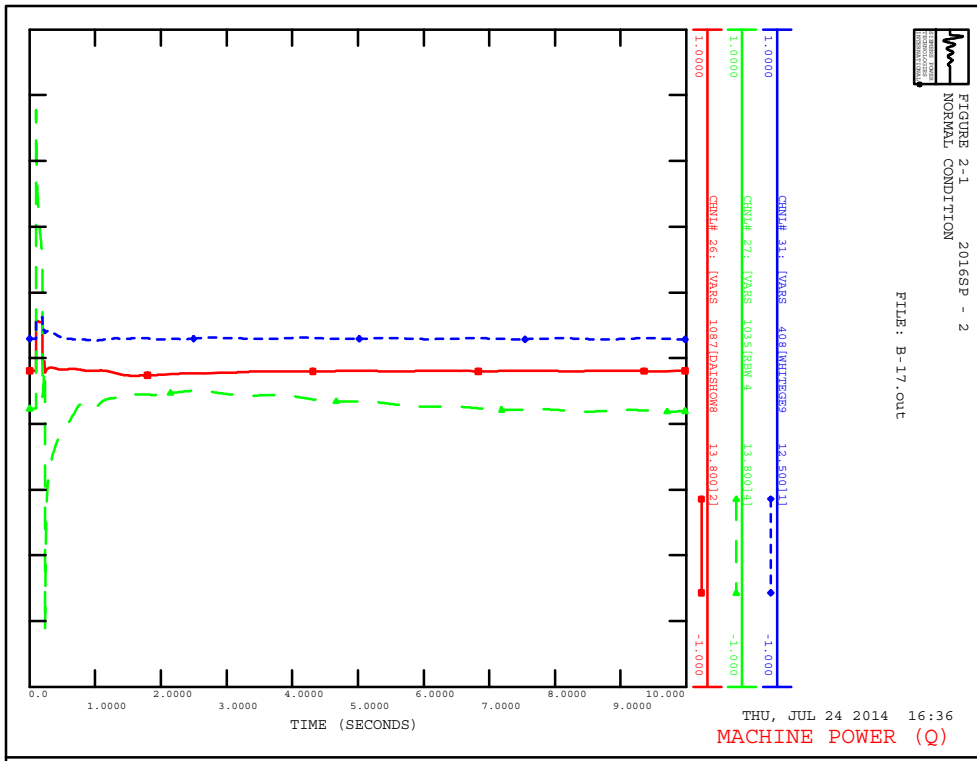


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-17.out
THU, JUL 24 2014 16:36
MACHINE POWER (Q)
TIME (SECONDS)

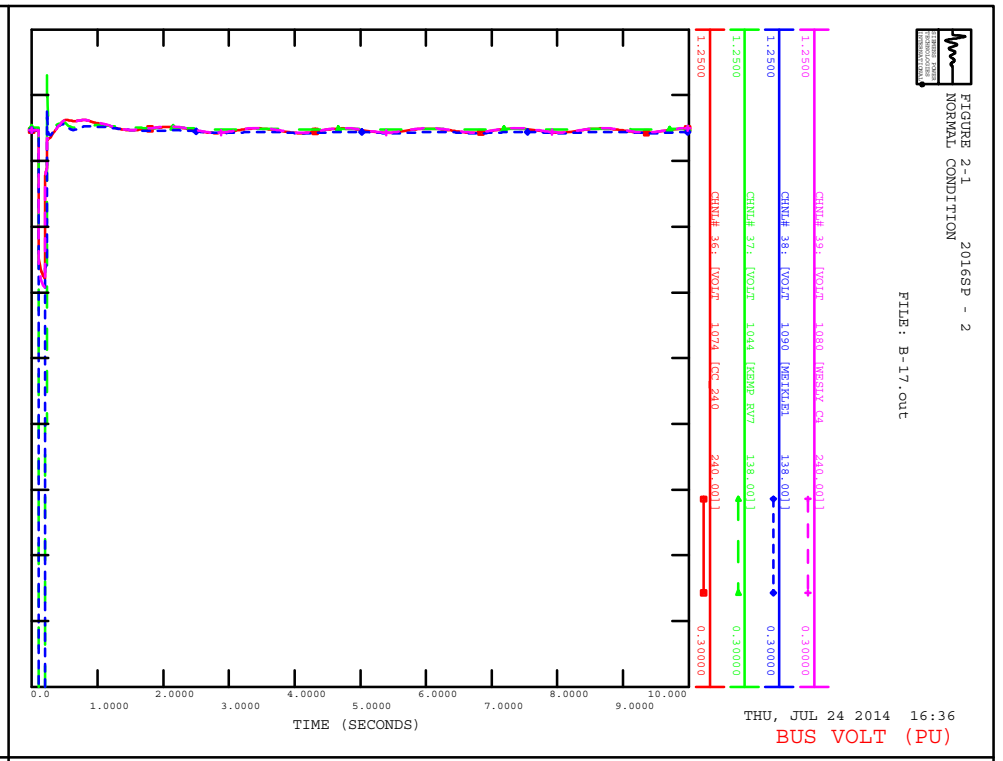


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-17.out
THU, JUL 24 2014 16:36
BUS VOLT (PU)
TIME (SECONDS)

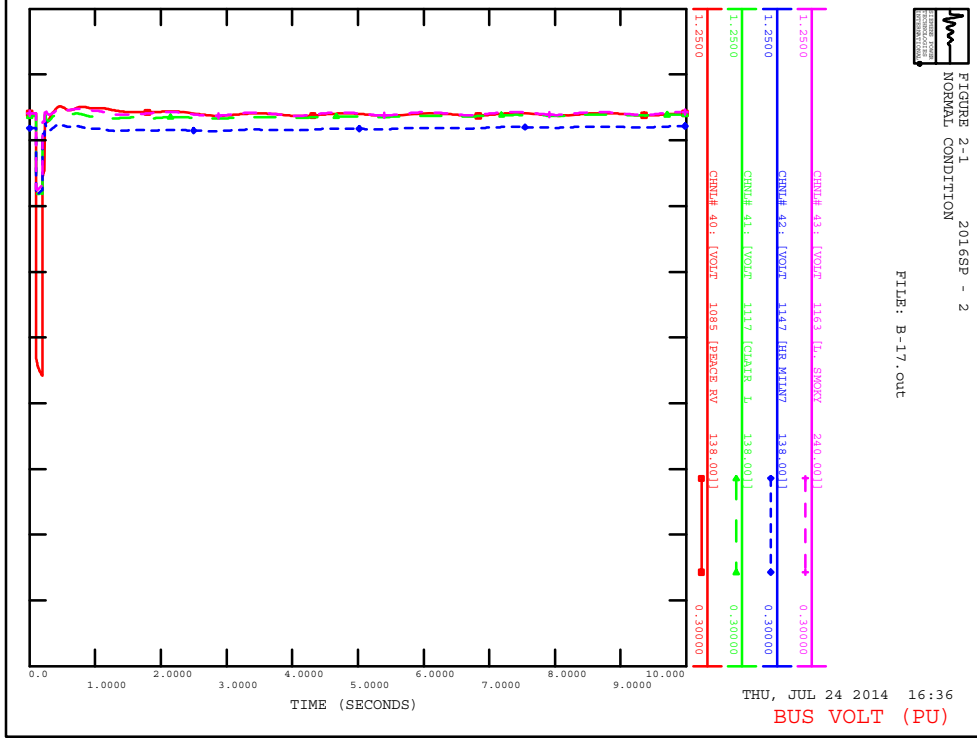


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-17.out
THU, JUL 24 2014 16:36
BUS VOLT (PU)
TIME (SECONDS)

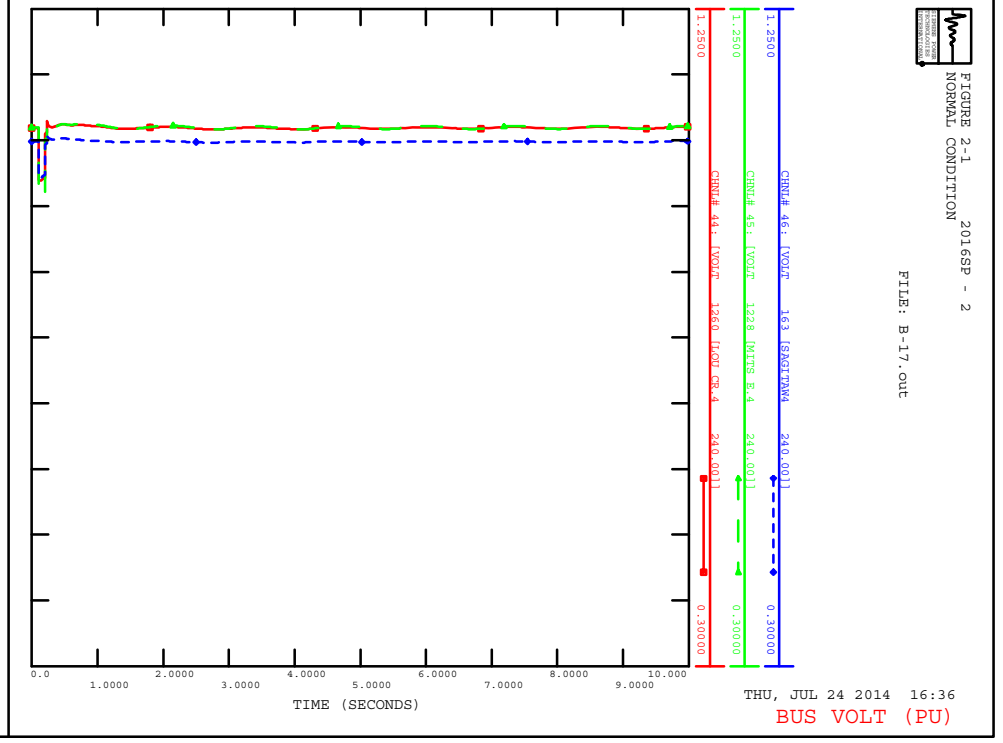


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-17.out
THU, JUL 24 2014 16:36
BUS VOLT (PU)
TIME (SECONDS)

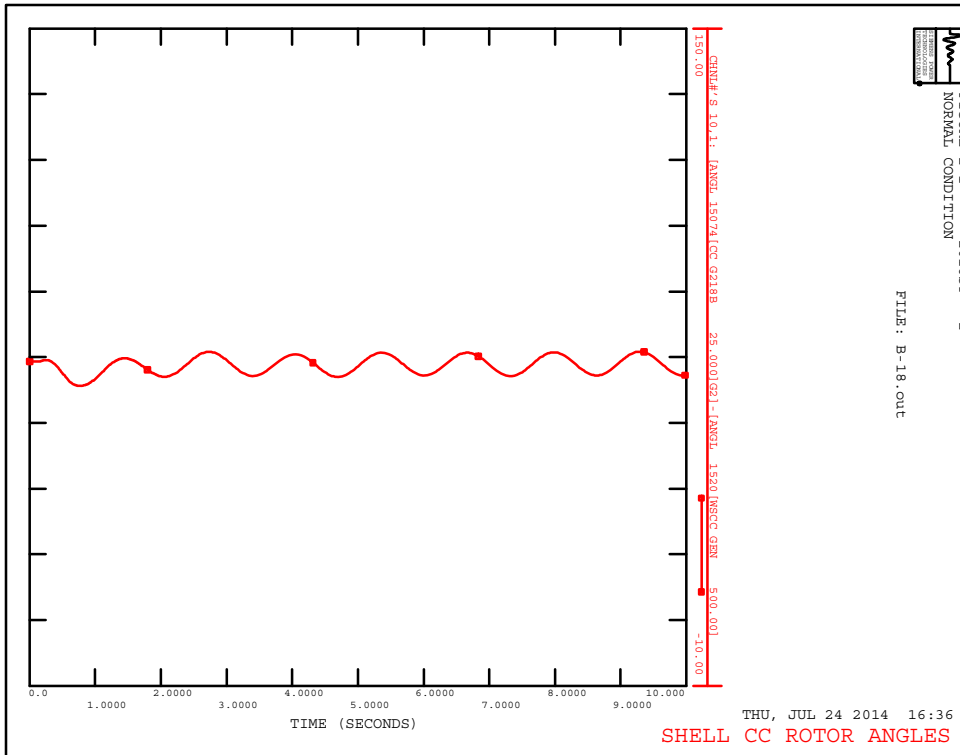


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-18.out
CHNL# 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

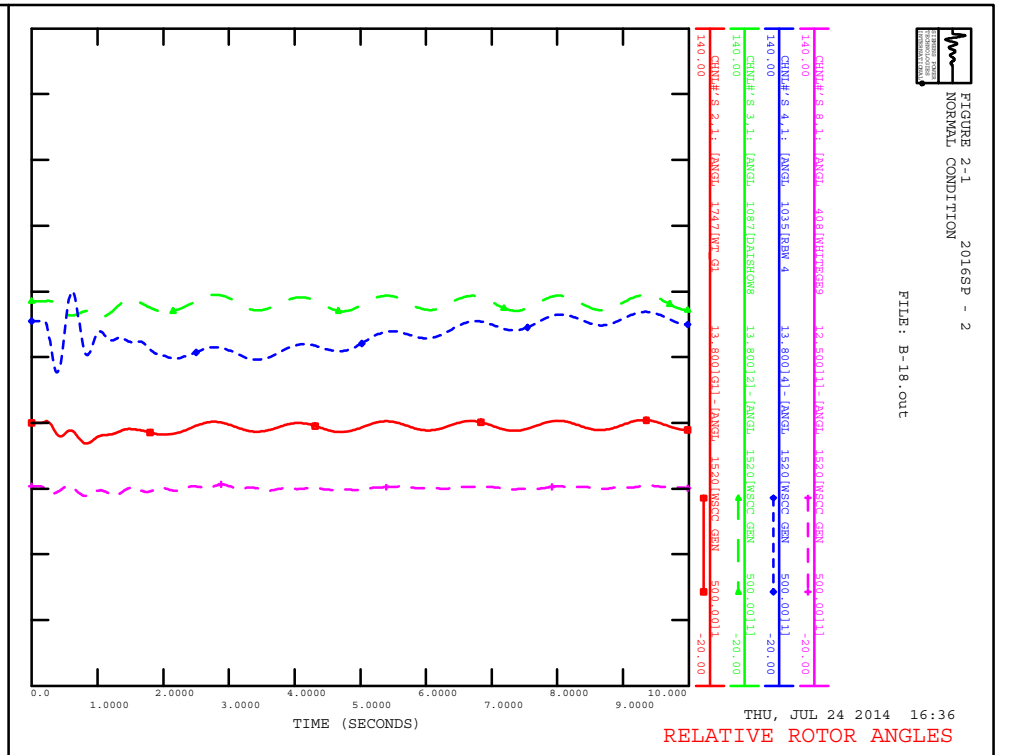


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-18.out
CHNL# 8,1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3,1: [ANGL 1087[DAISHOW8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 2,1: [ANGL 1747[WT G1 13.800[1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

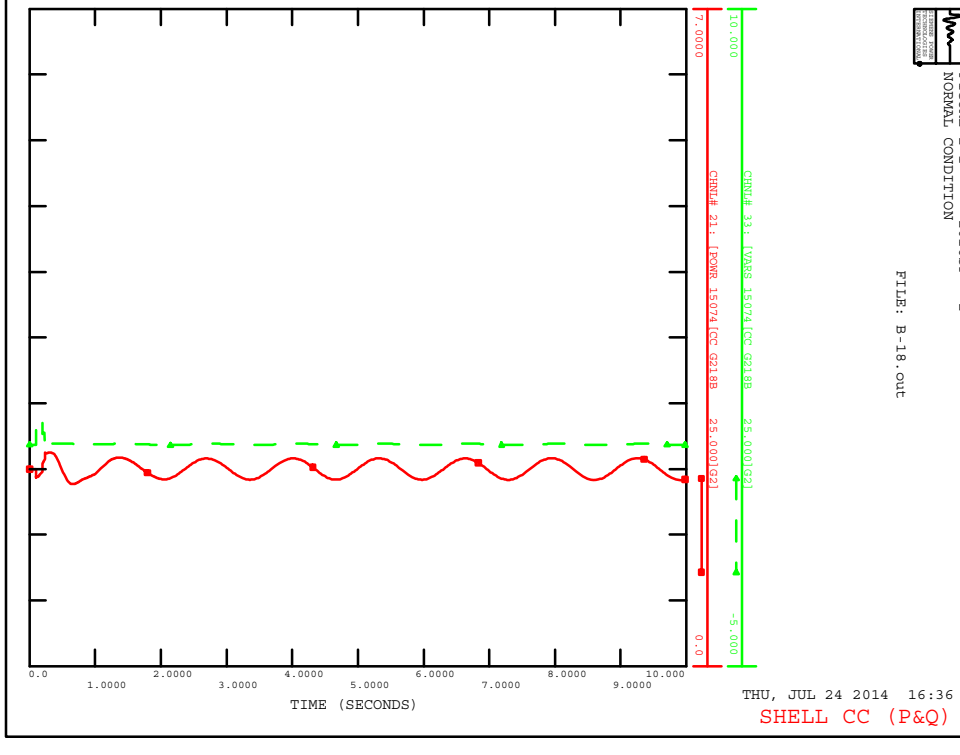


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-18.out
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
7.0000
-5.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

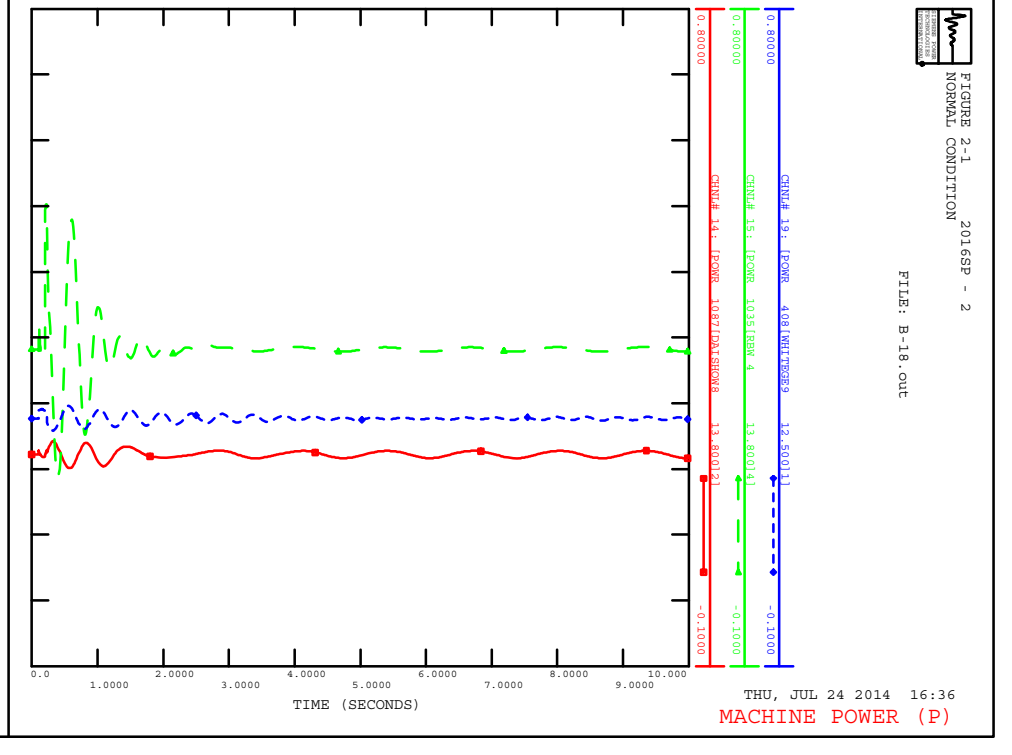


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-18.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHOW8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-18.out

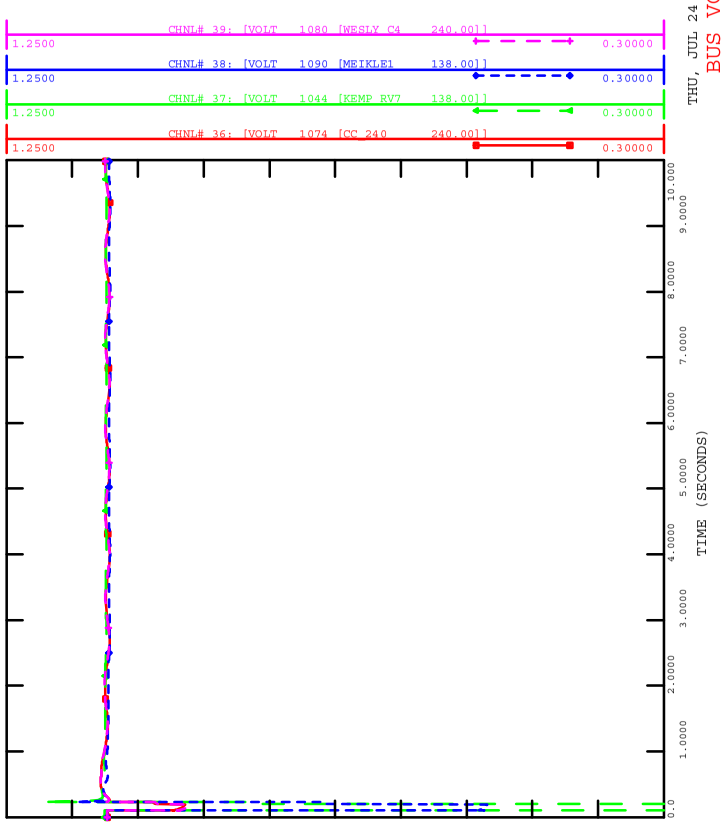


FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-18.out

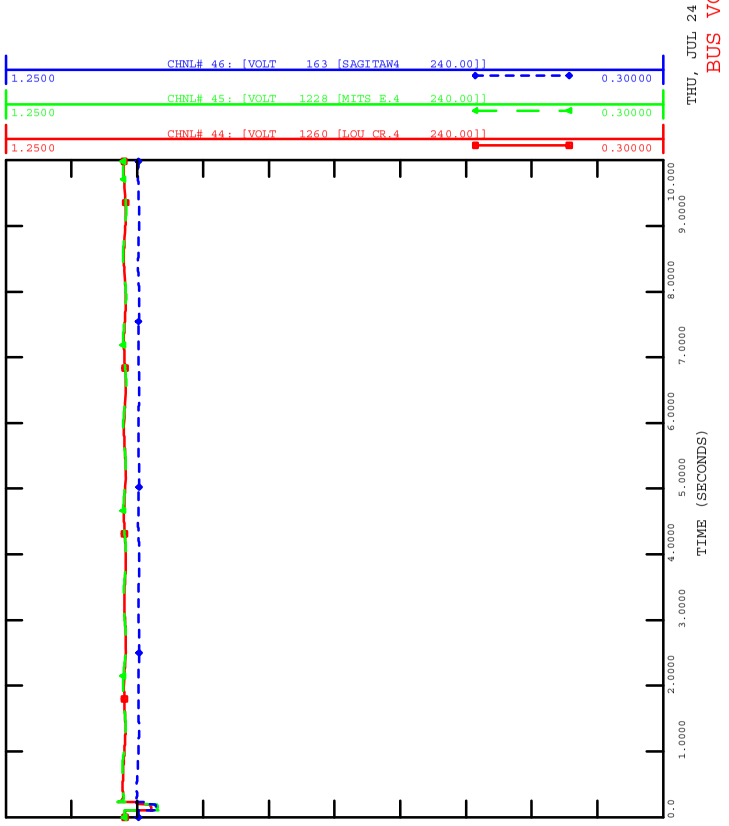


FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-18.out

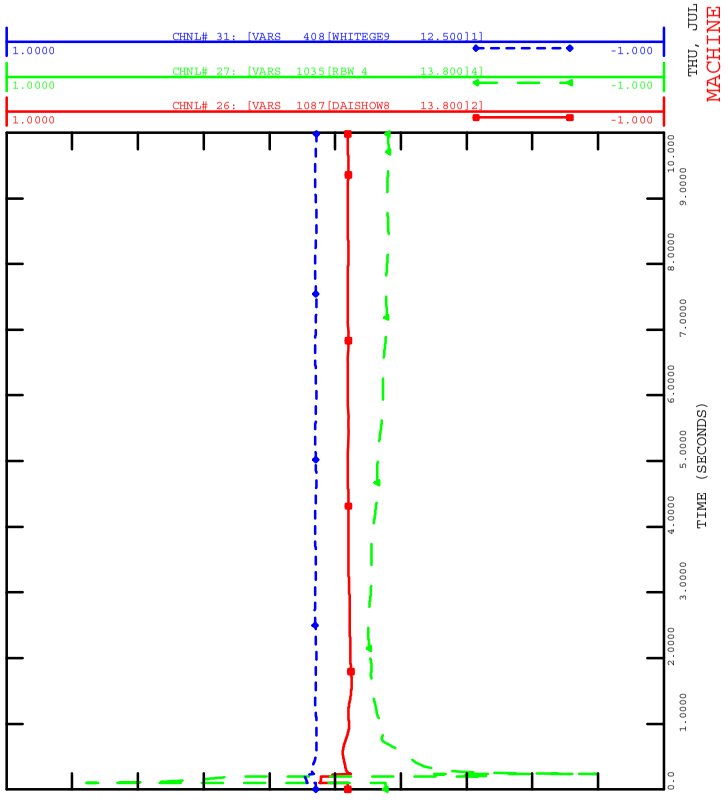
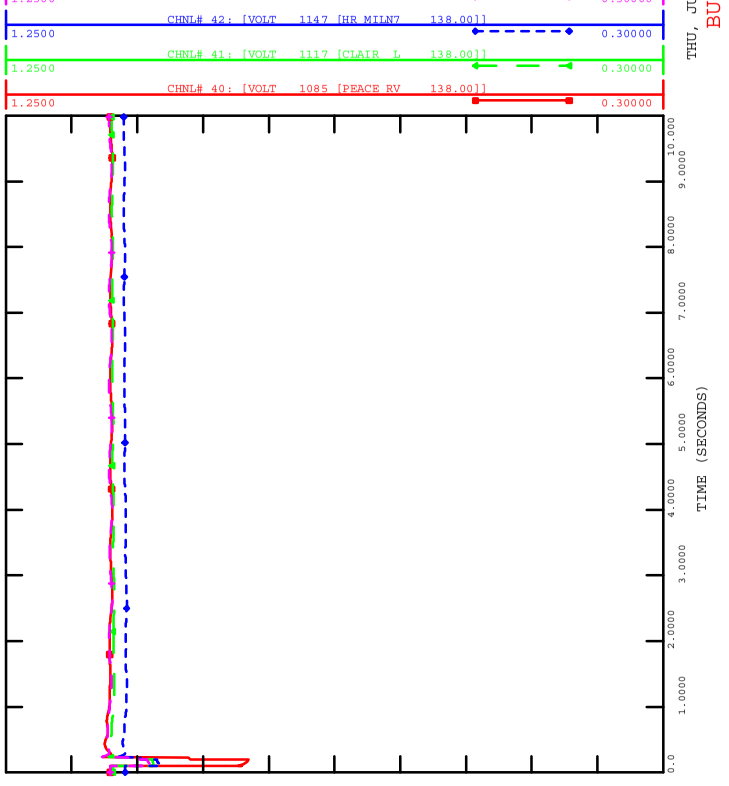


FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-18.out



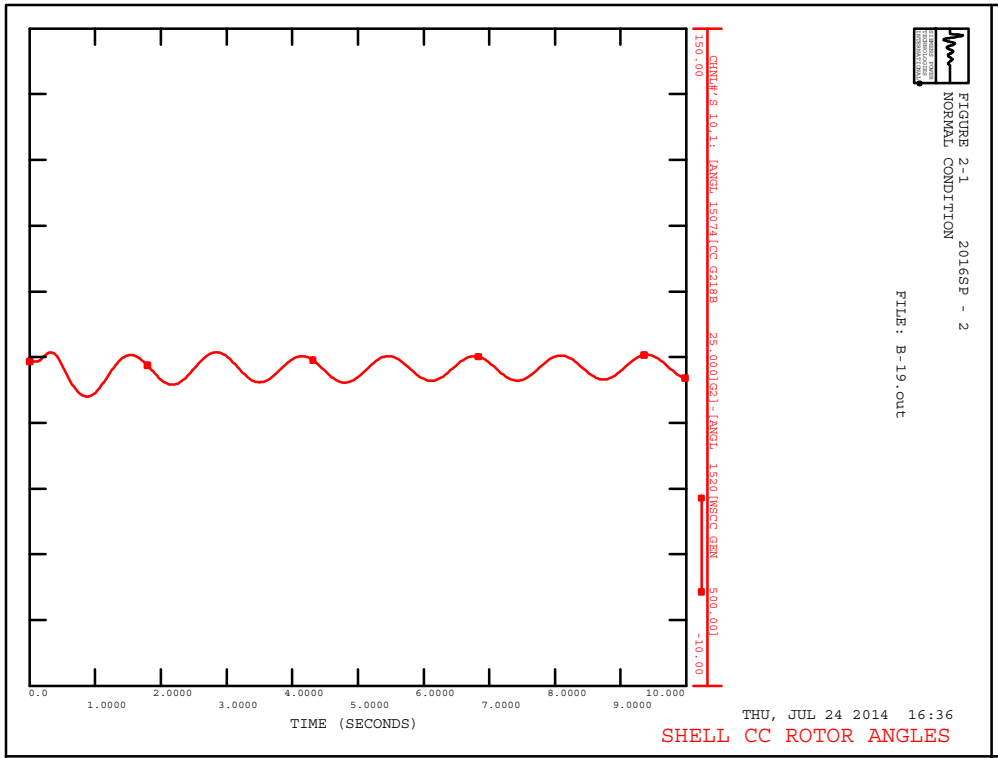


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-19.out
CHNL#'S 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

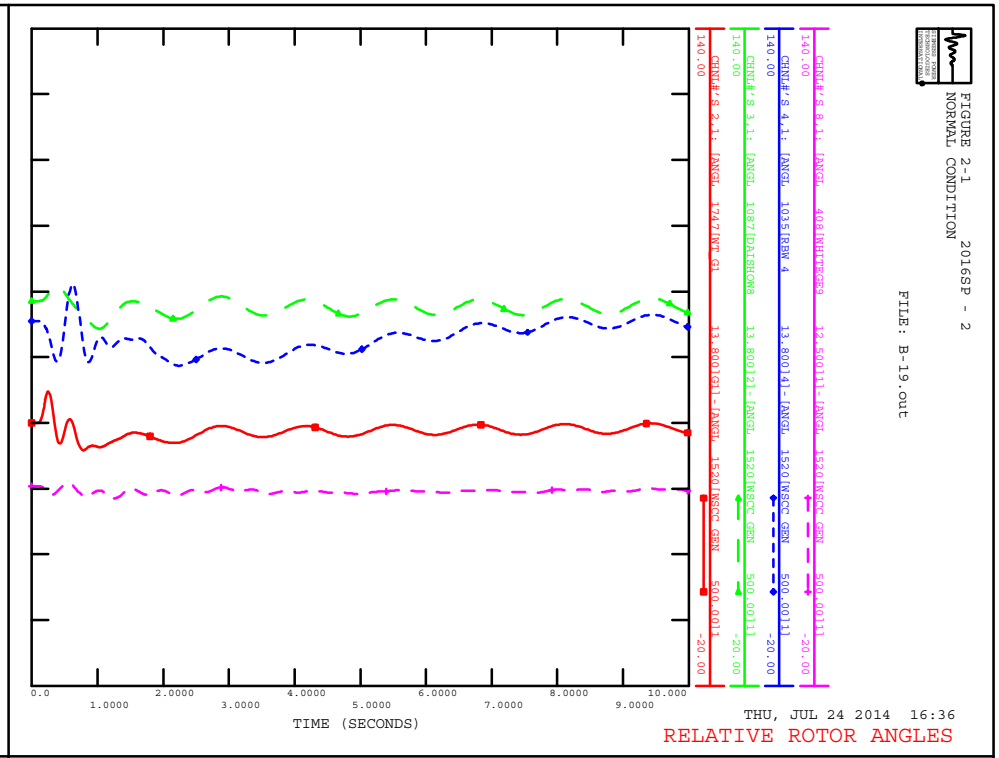


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-19.out
CHNL#'S 8,1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 3,1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 2,1: [ANGL 1747[WT G1 13.800[1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

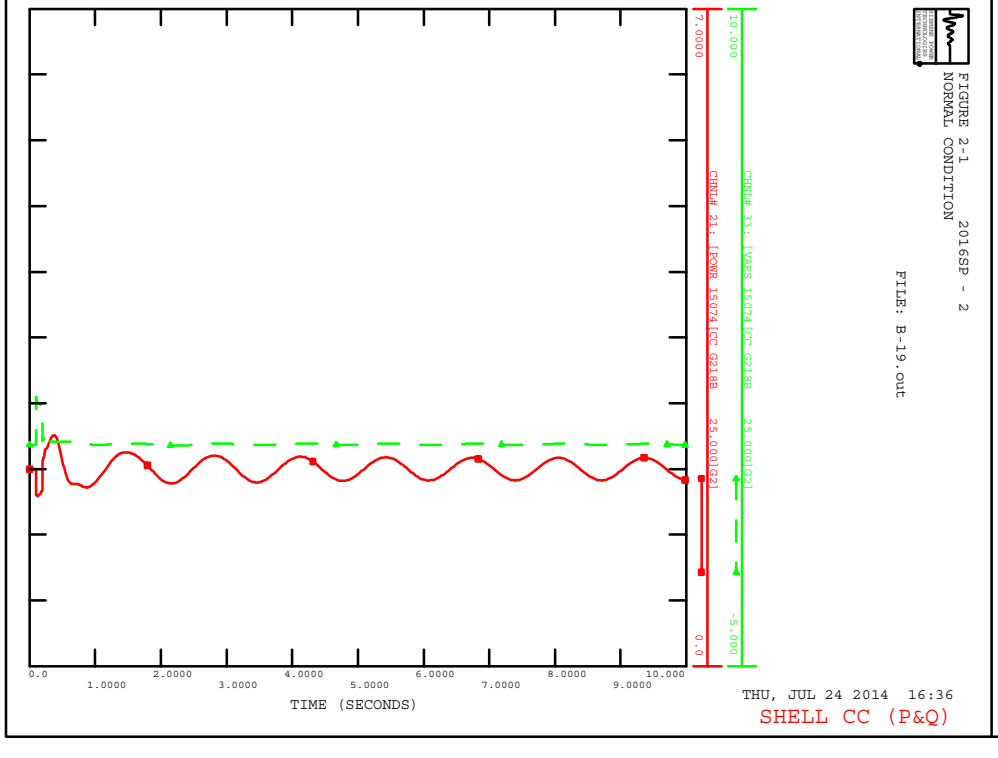


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-19.out
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

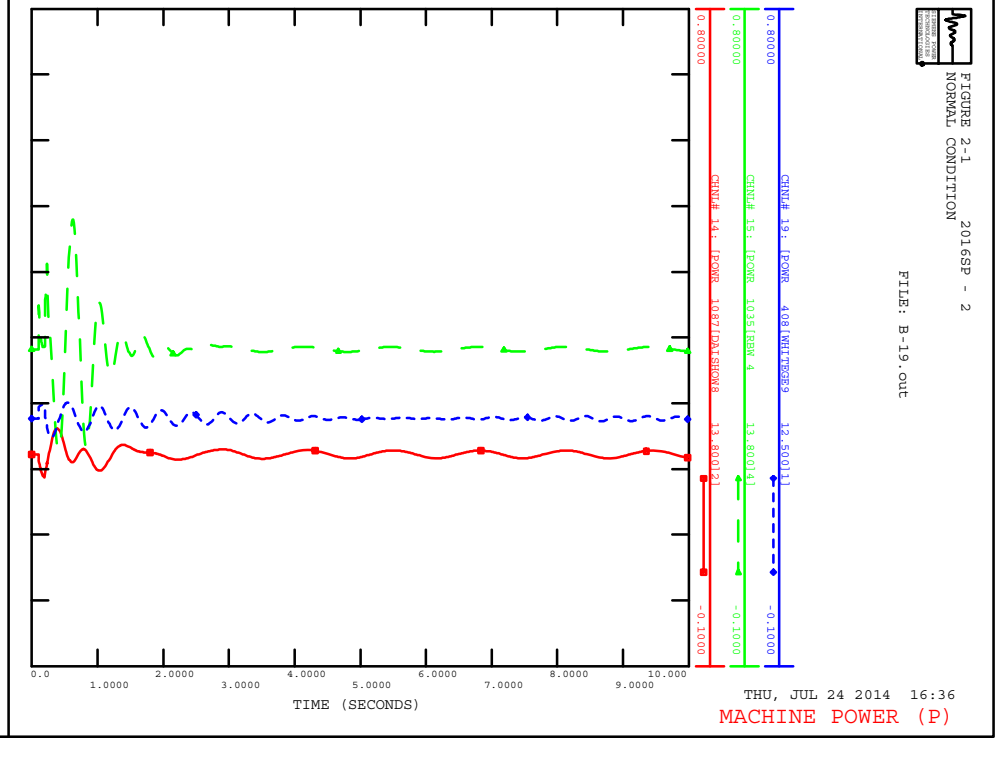


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-19.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

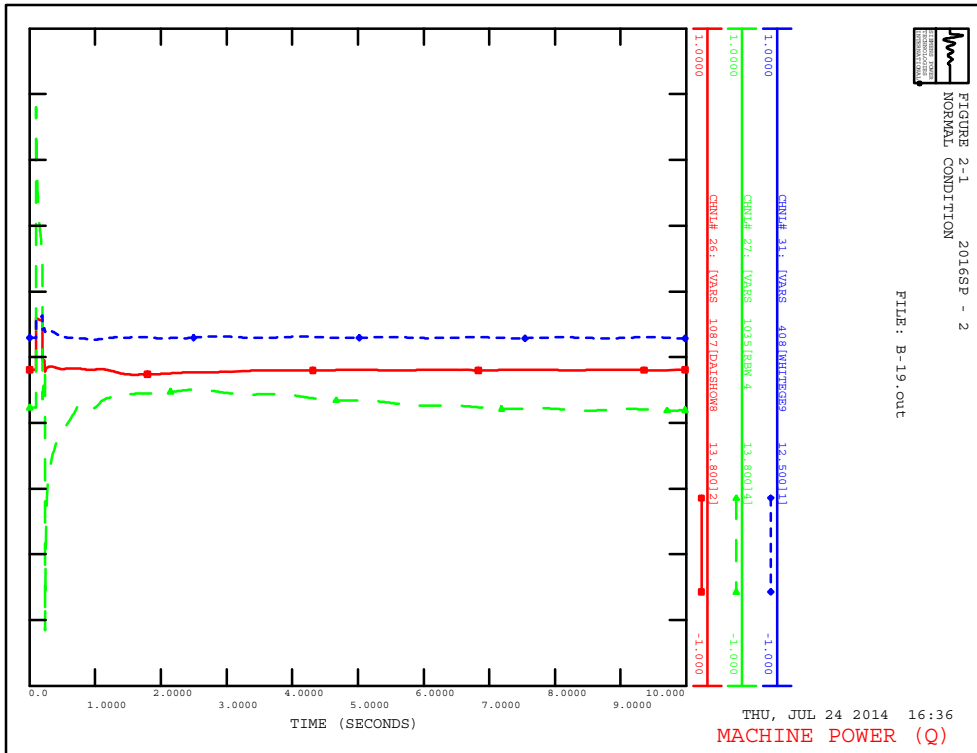


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-19.out
THU, JUL 24 2014 16:36
TIME (SECONDS)
MACHINE POWER (Q)

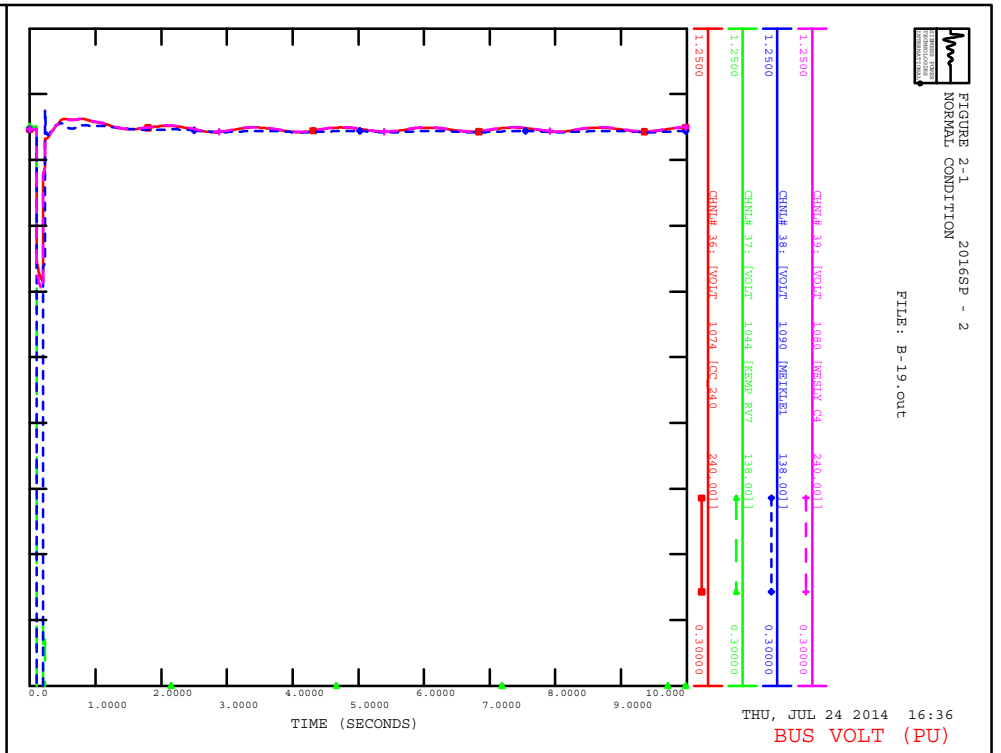


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-19.out
THU, JUL 24 2014 16:36
TIME (SECONDS)
BUS VOLT (PU)

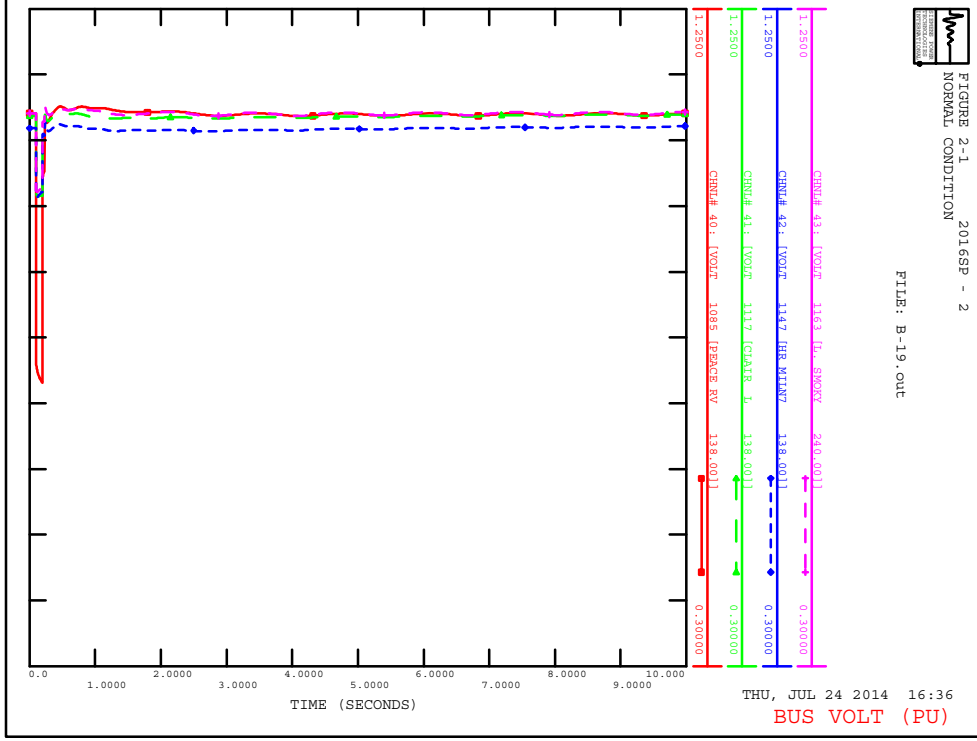


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-19.out
THU, JUL 24 2014 16:36
TIME (SECONDS)
BUS VOLT (PU)

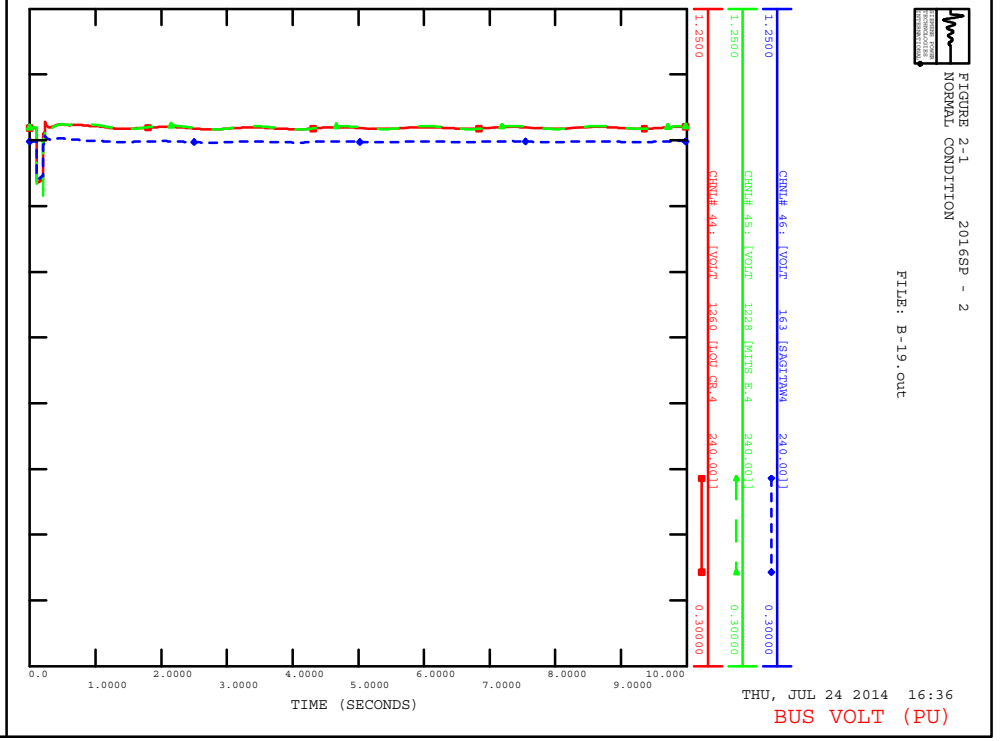


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-19.out
THU, JUL 24 2014 16:36
TIME (SECONDS)
BUS VOLT (PU)

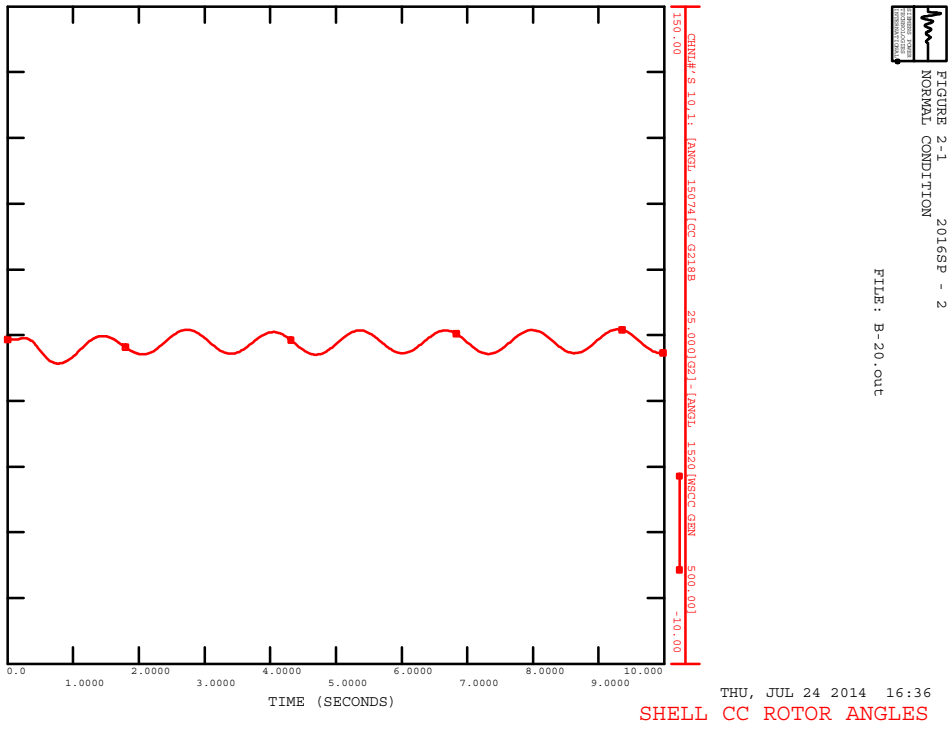


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-20.out
CHNL# 10.1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

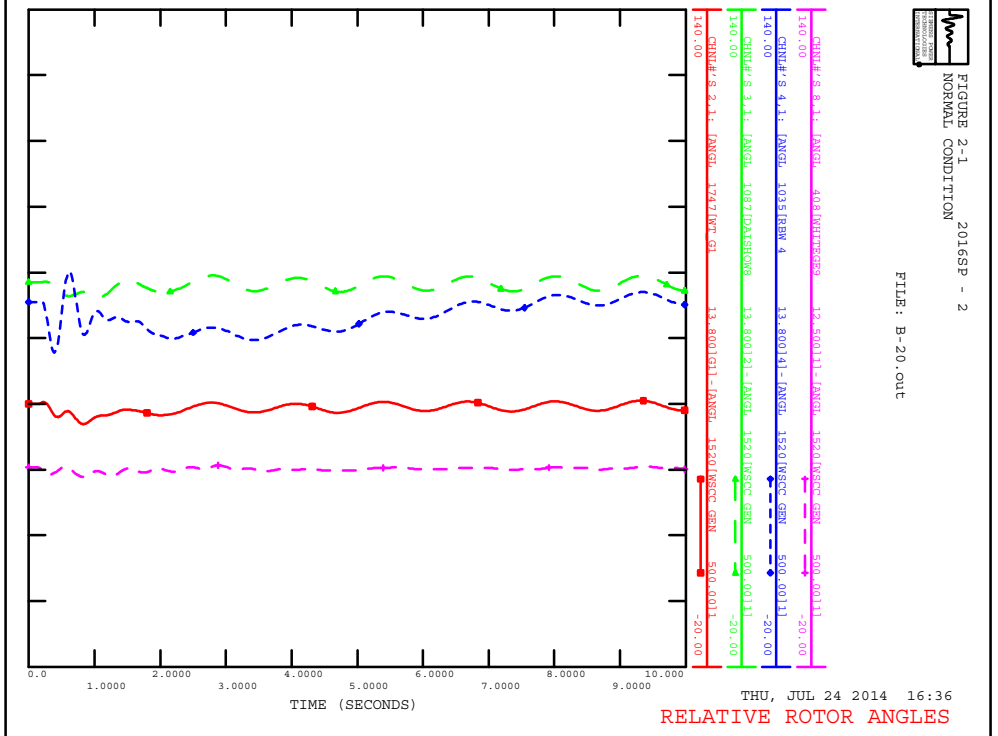


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-20.out
CHNL# 8.1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 4.1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3.1: [ANGL 1087[DAISHOW8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 2.1: [ANGL 1747[WT G1 13.800[1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

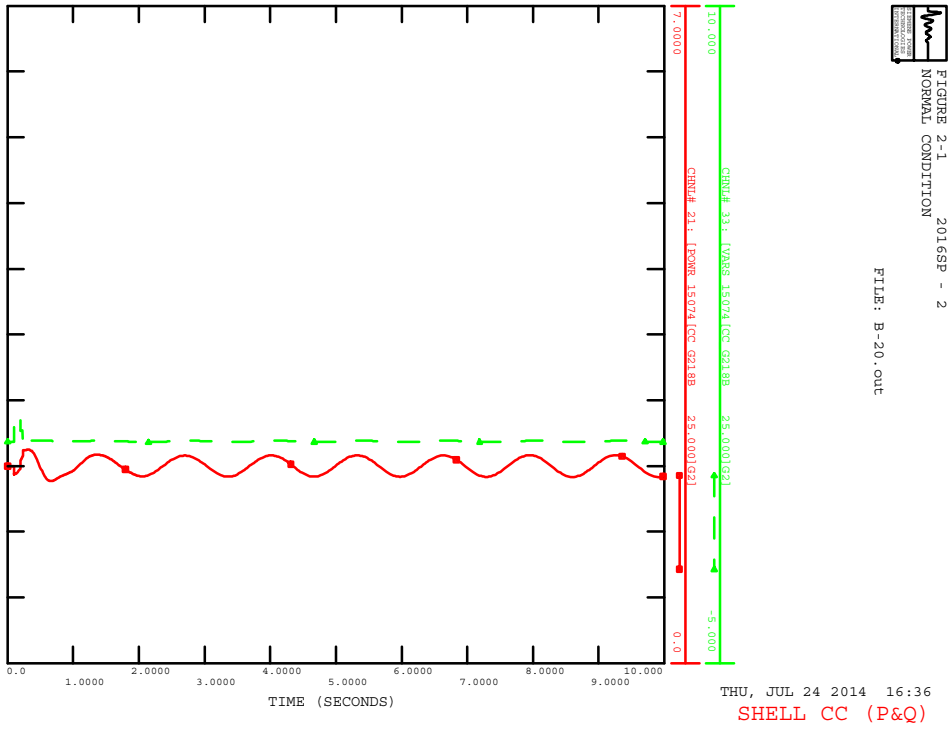


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-20.out
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
10.000
7.0000
-5.000
0.0
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

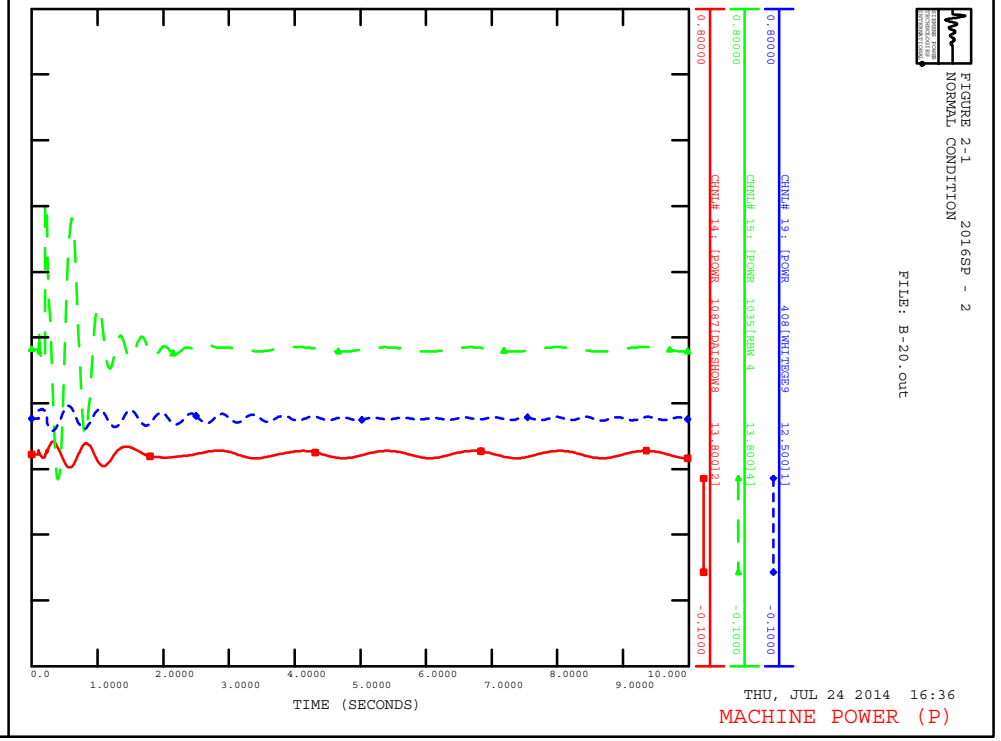


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-20.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHOW8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-20.out

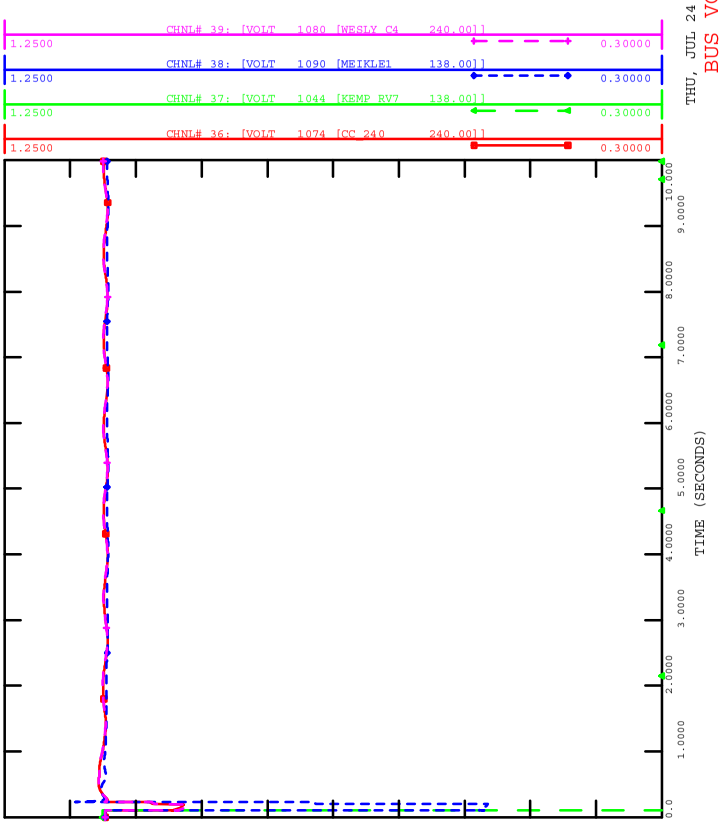


FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-20.out

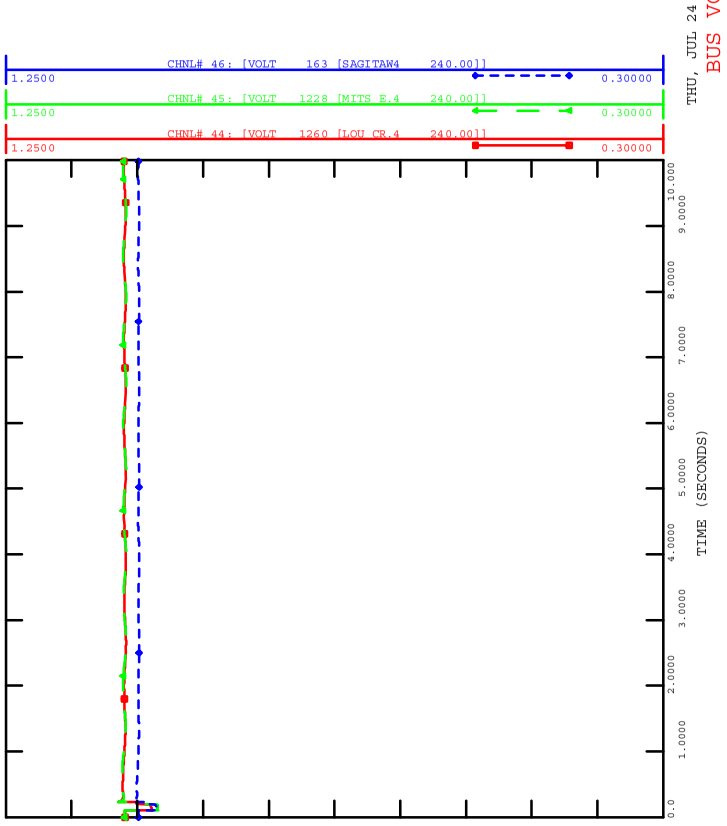


FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-20.out

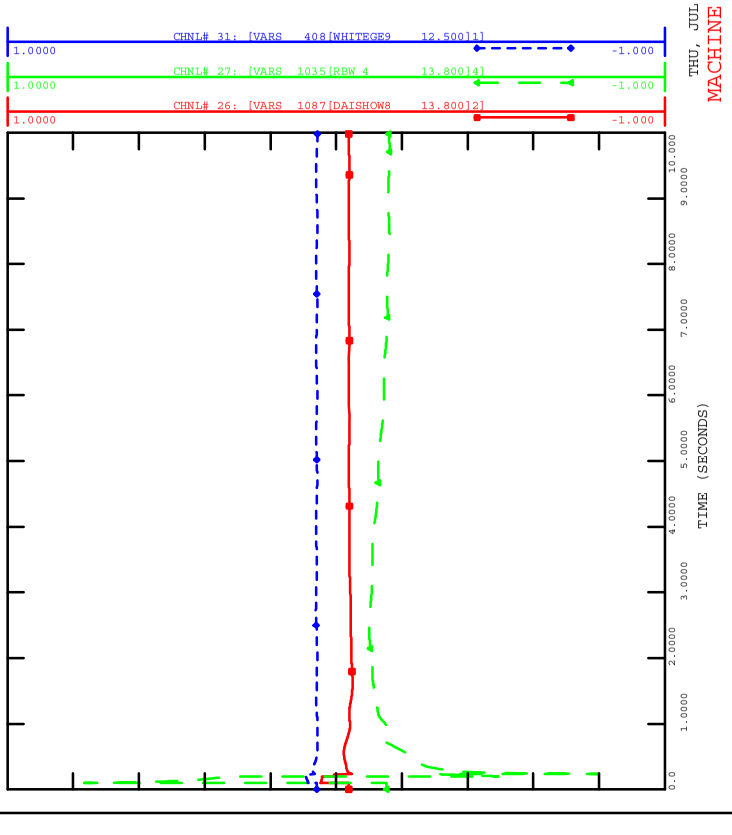
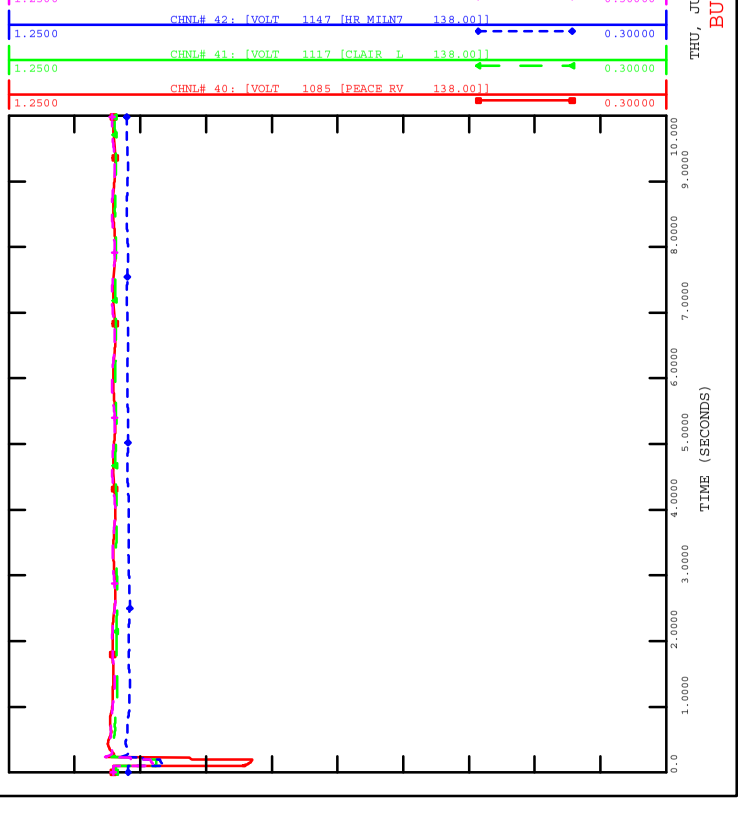


FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-20.out



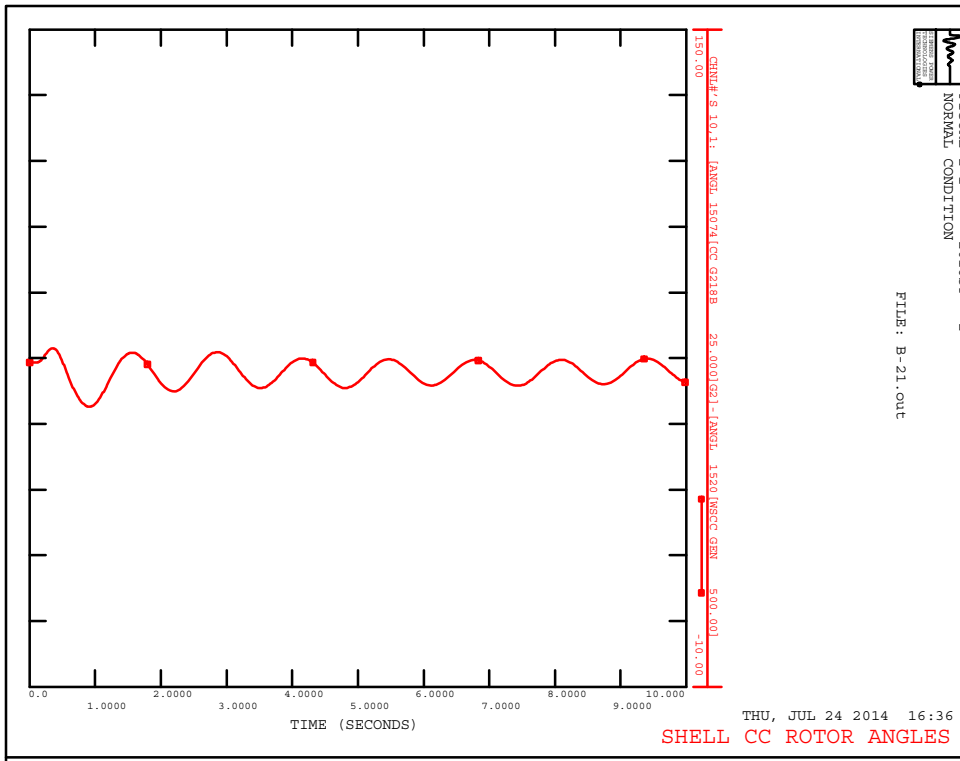


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-21.out
CHNL# 10.1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

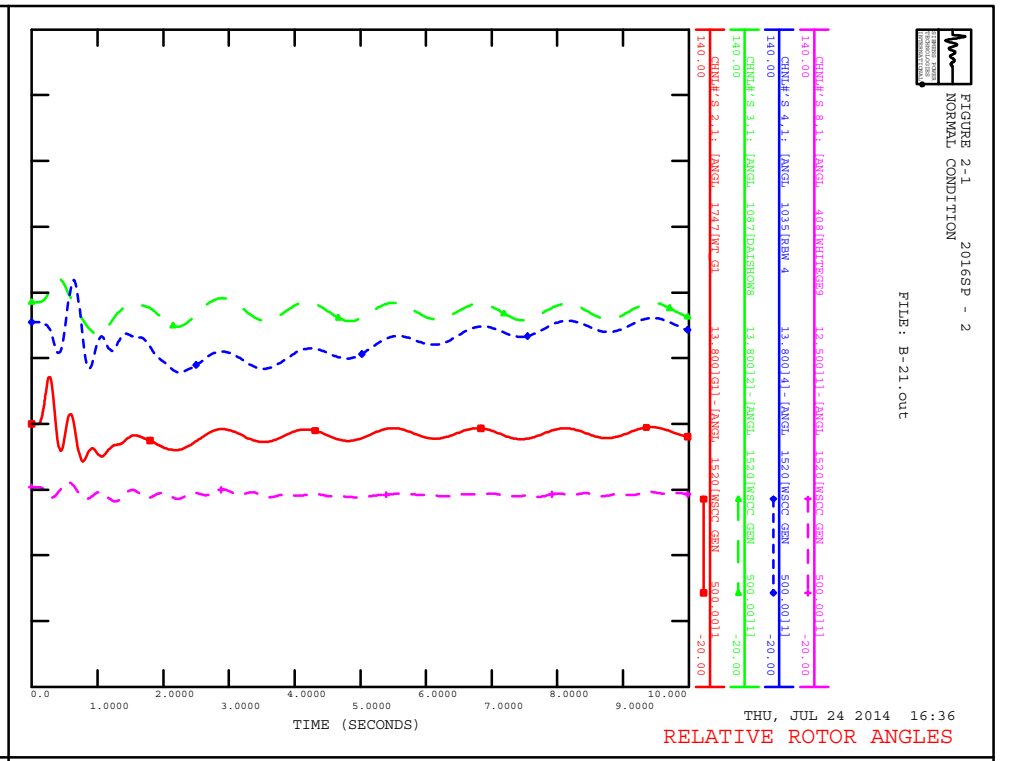


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-21.out
CHNL# 8.1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 4.1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3.1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 2.1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

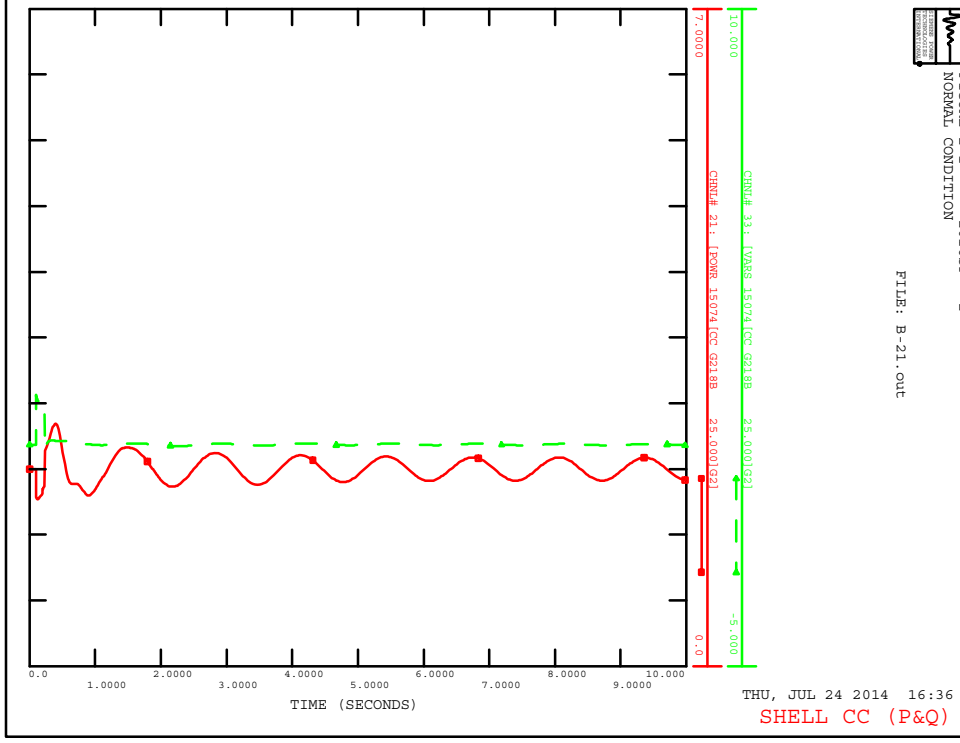


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-21.out
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
7.0000
10.000
0.0
-5.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

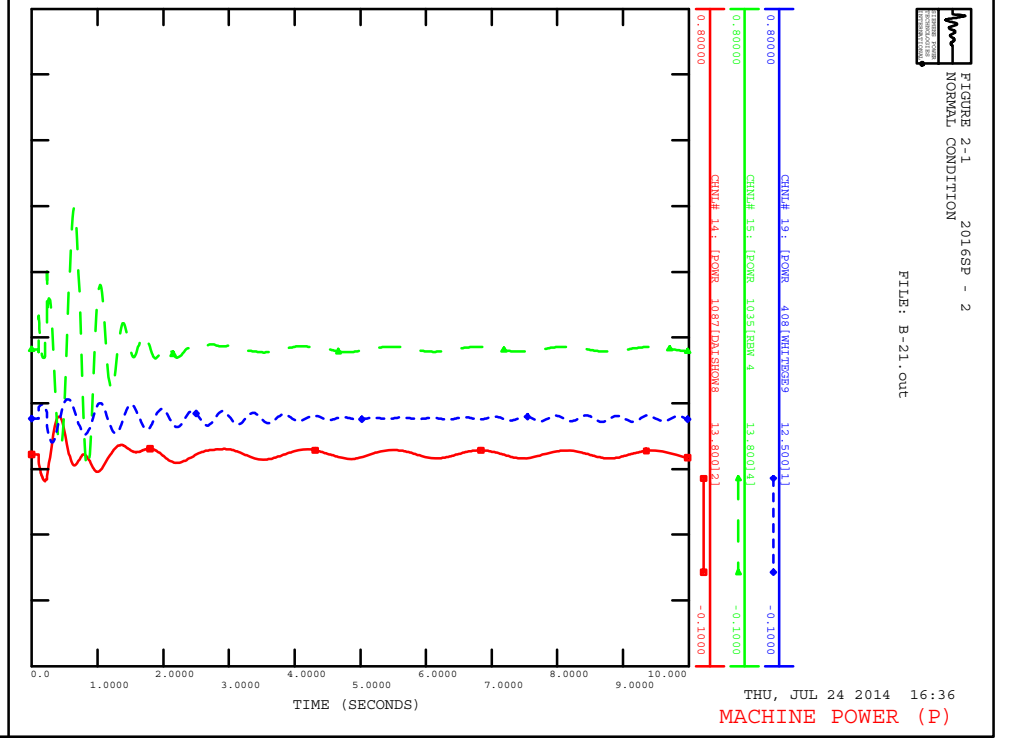


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-21.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

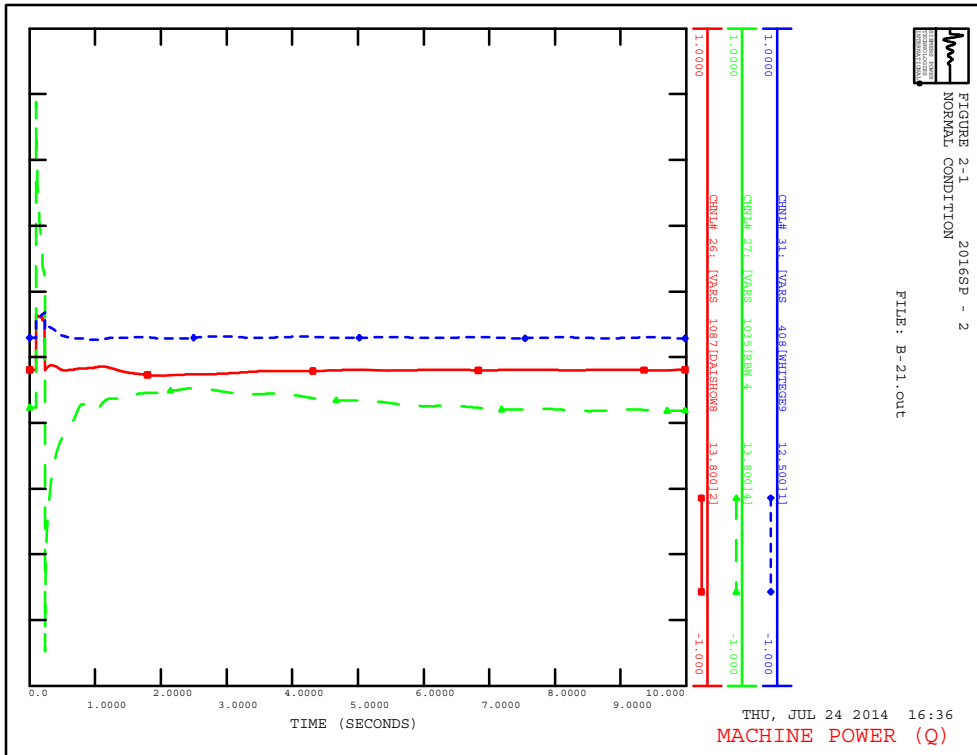


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-21.out
CHNI# 31: [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27: [VARS 1035[RBW 4 13.800]4]
CHNI# 26: [VARS 1087[DAISHOW8 13.800]2]
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

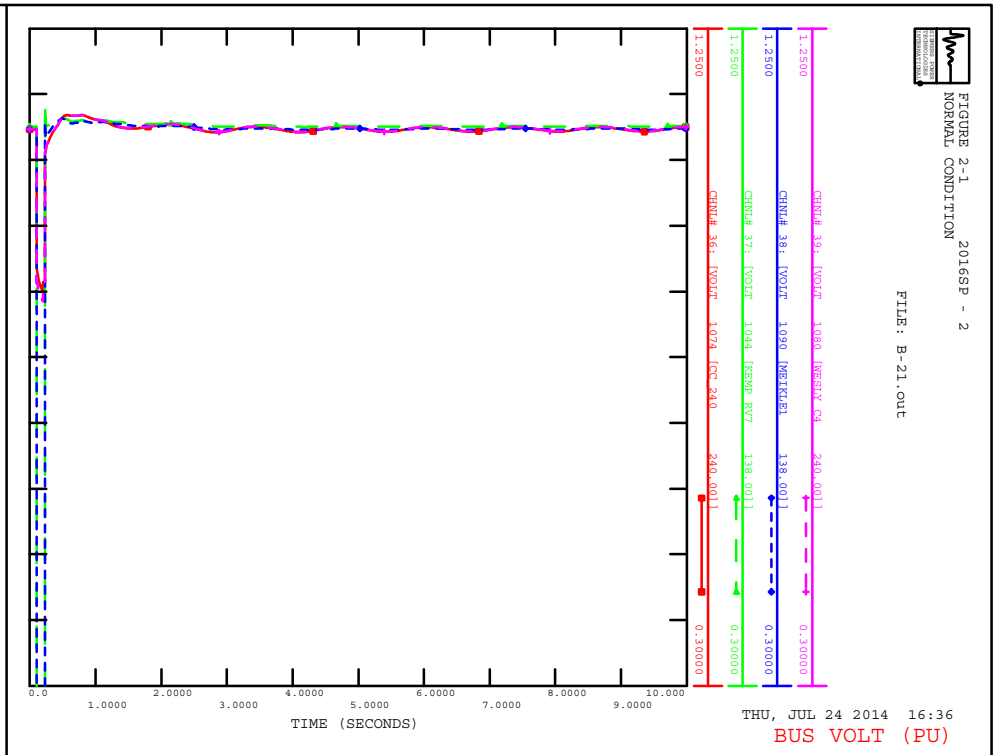


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-21.out
CHNI# 38: [VOLT 1090 [MEIKLE1 138.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 36: [VOLT 1074 [CC 240 240.00]
CHNI# 33: [VOLT 1080 [NRSIX C4 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

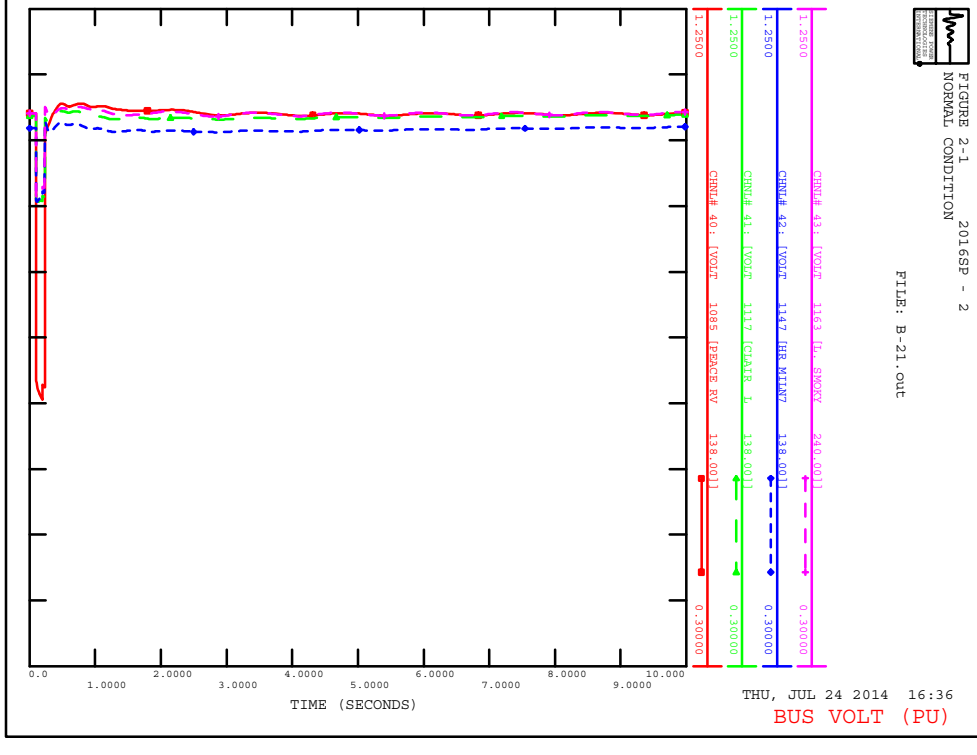


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-21.out
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]
CHNI# 41: [VOLT 1117 [CHAIR L 138.00]
CHNI# 42: [VOLT 1142 [KR MLNT 138.00]
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

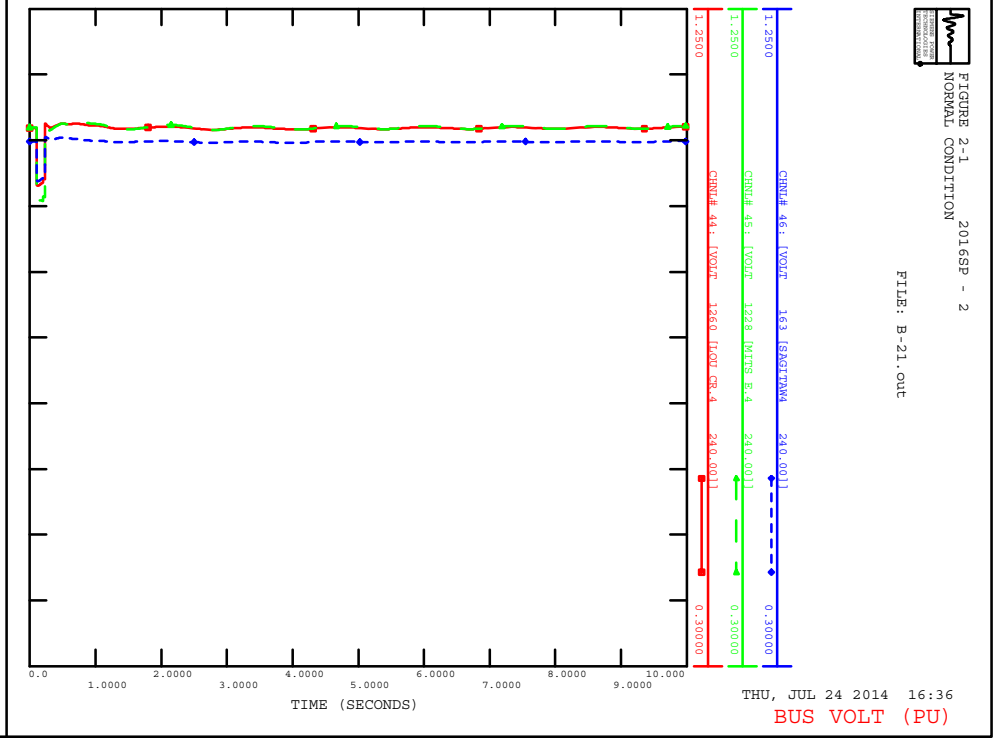


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-21.out
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
CHNI# 45: [VOLT 1228 [MITS B-4 240.00]
CHNI# 44: [VOLT 1260 [FOX CR-4 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

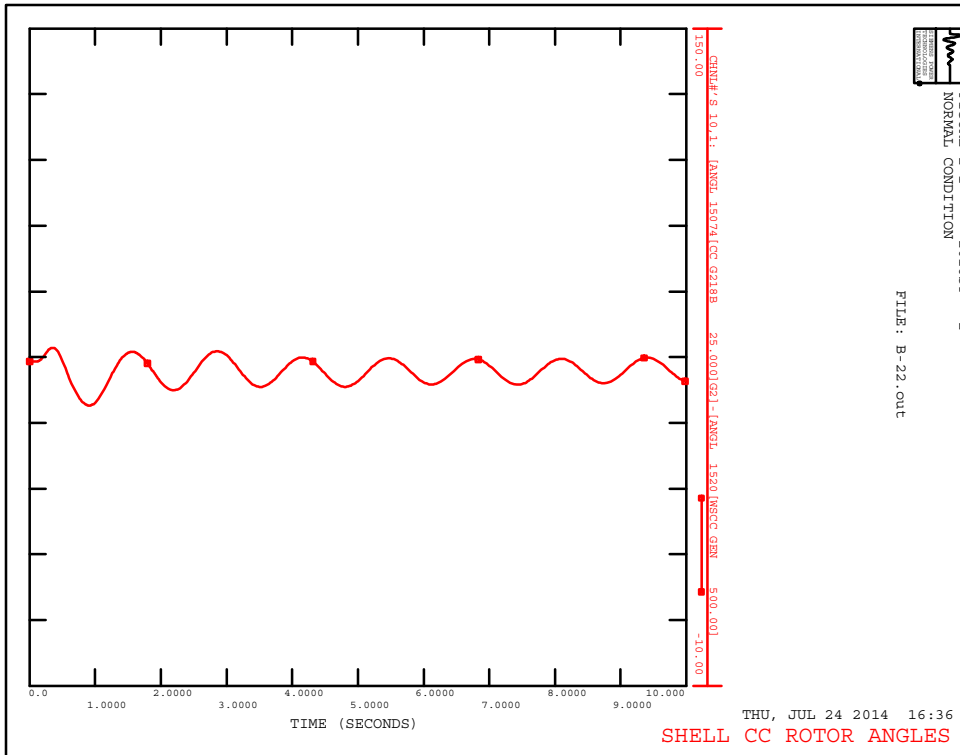


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-22.out
CHNL# 10.1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
-150.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

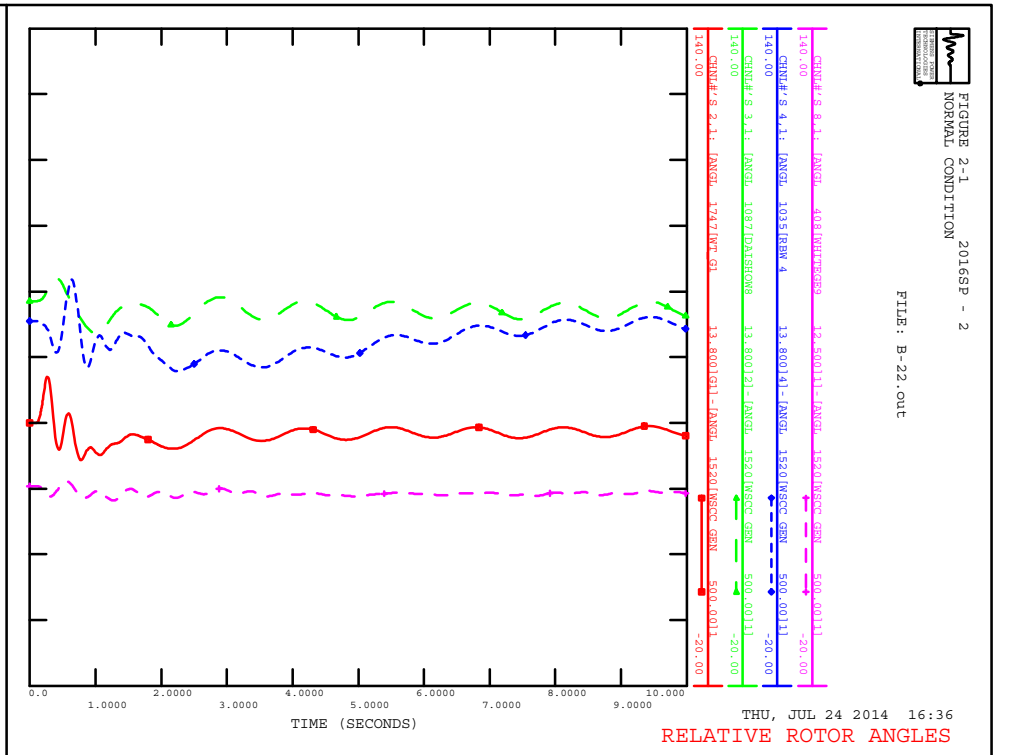


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-22.out
CHNL# 8.1: [ANGL 408[WHITESB9 12.500[1] [ANGL 1520[NSCC GEN 500.00]]
CHNL# 4.1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3.1: [ANGL 1087[DAISHON8 13.800[2] [ANGL 1520[NSCC GEN 500.00]]
CHNL# 2.1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

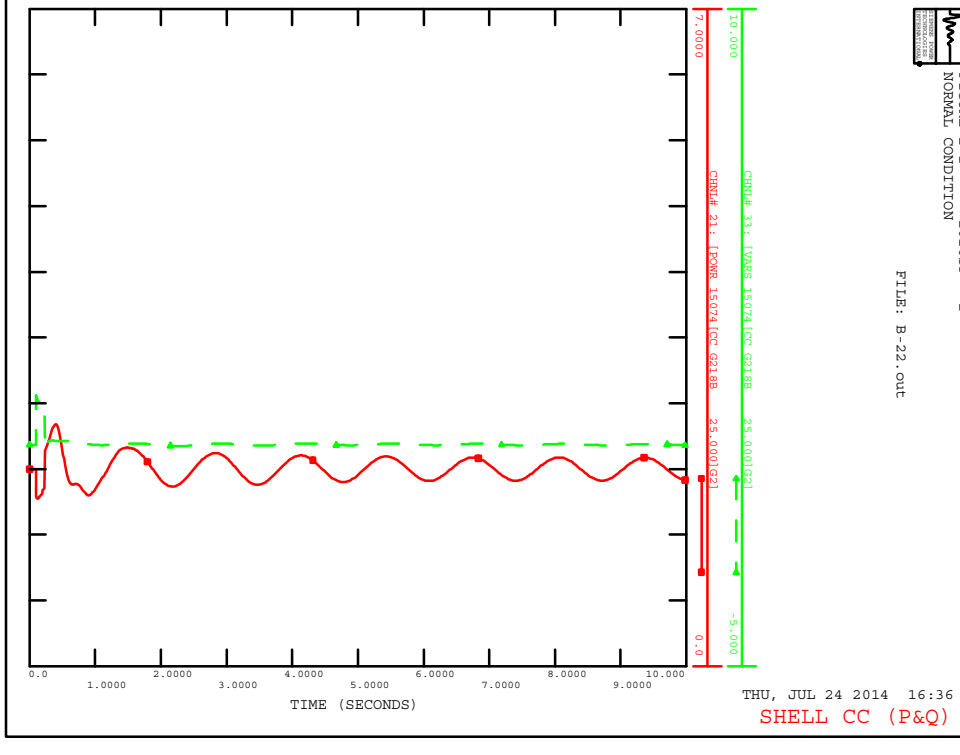


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-22.out
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

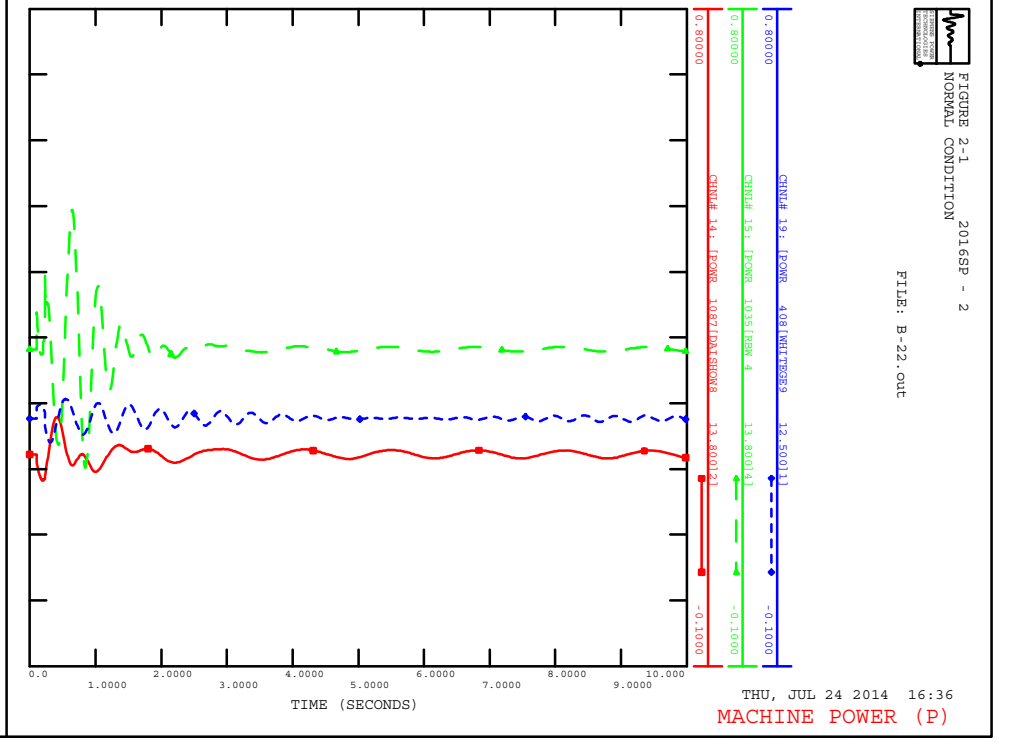


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-22.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

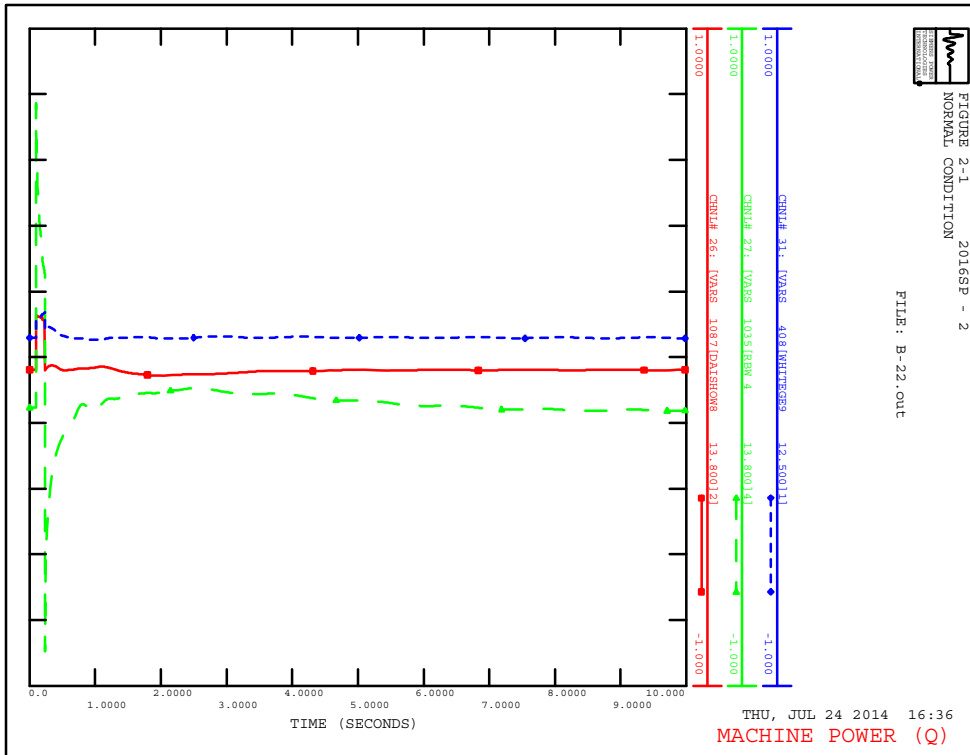


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-22.out
CHNI# 31: [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27: [VARS 1035[RBM 4 13.800]4]
CHNI# 26: [VARS 1087[DAISHOWB 13.800]2]
1.0000
-1.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

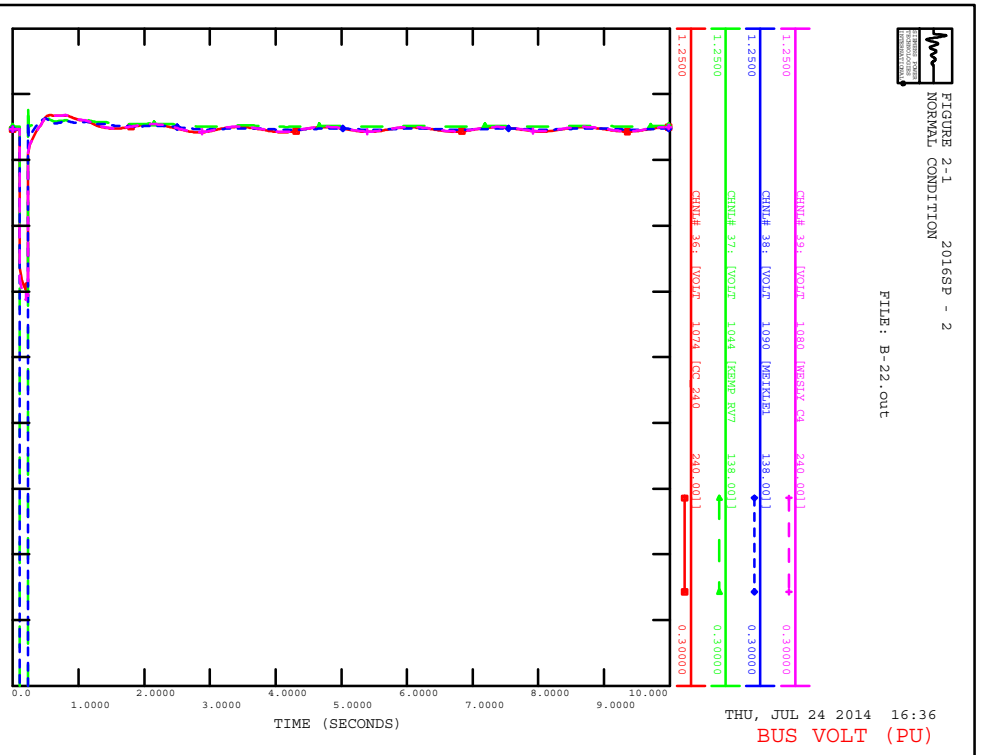


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-22.out
CHNI# 39: [VOLT 1080 [MESIC C4 240.00]
CHNI# 38: [VOLT 1090 [MESIKLE1 138.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 36: [VOLT 1074 [CC 240 240.00]
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

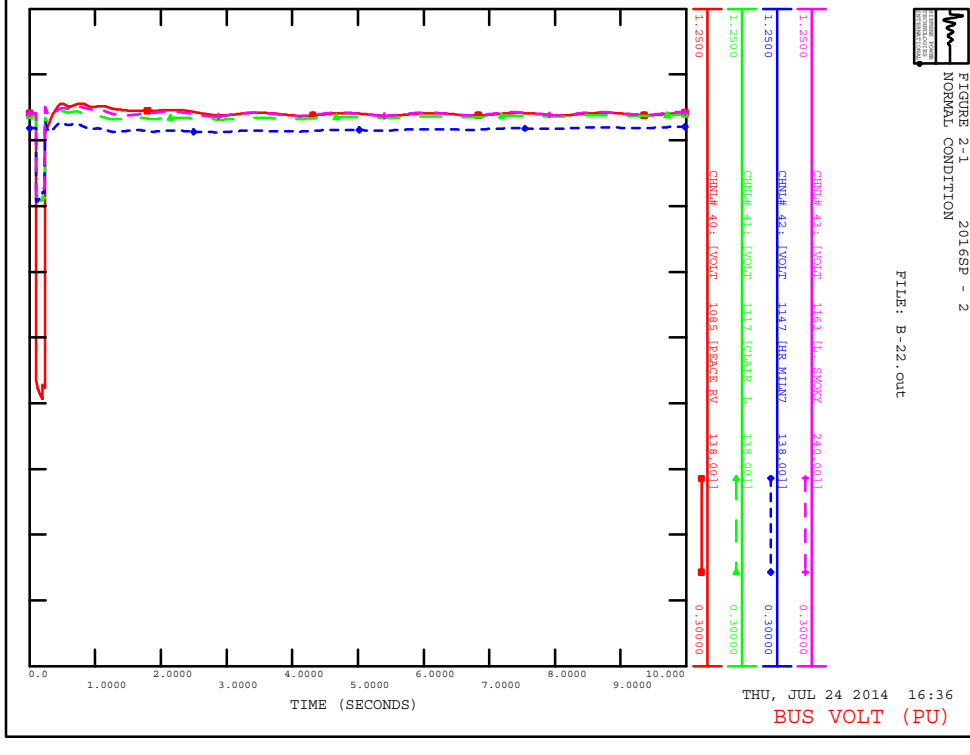


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-22.out
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00]
CHNI# 42: [VOLT 1142 [RR MTANT 138.00]
CHNI# 41: [VOLT 1117 [CHAIR L 138.00]
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

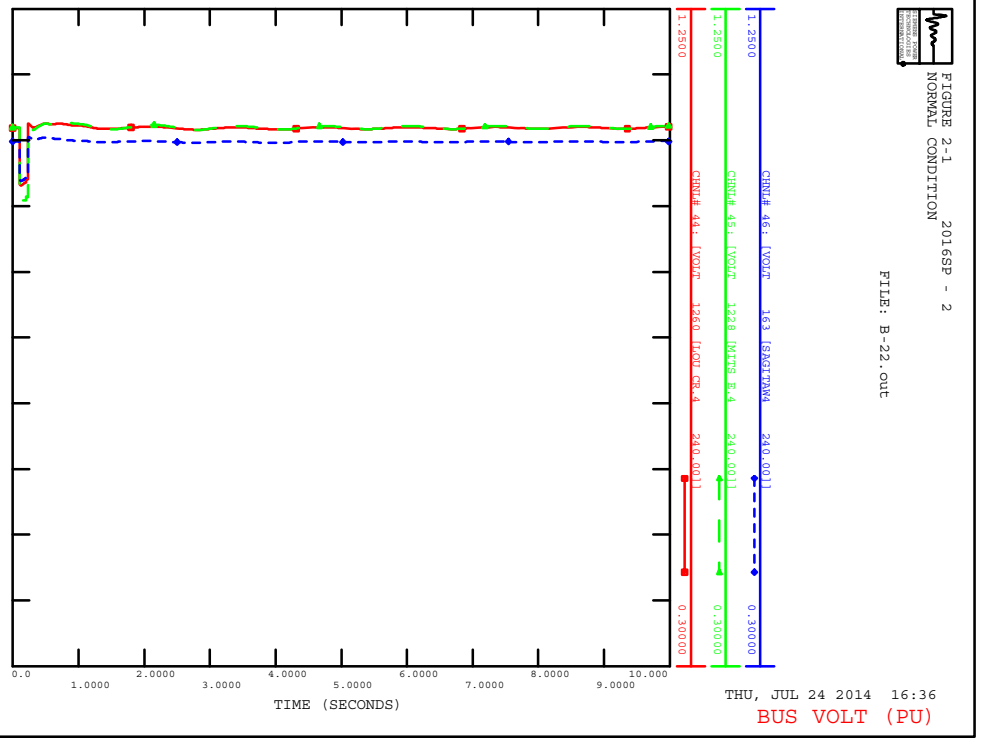


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-22.out
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
CHNI# 45: [VOLT 1228 [MTES B-4 240.00]
CHNI# 44: [VOLT 1260 [FOT CR-4 240.00]
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

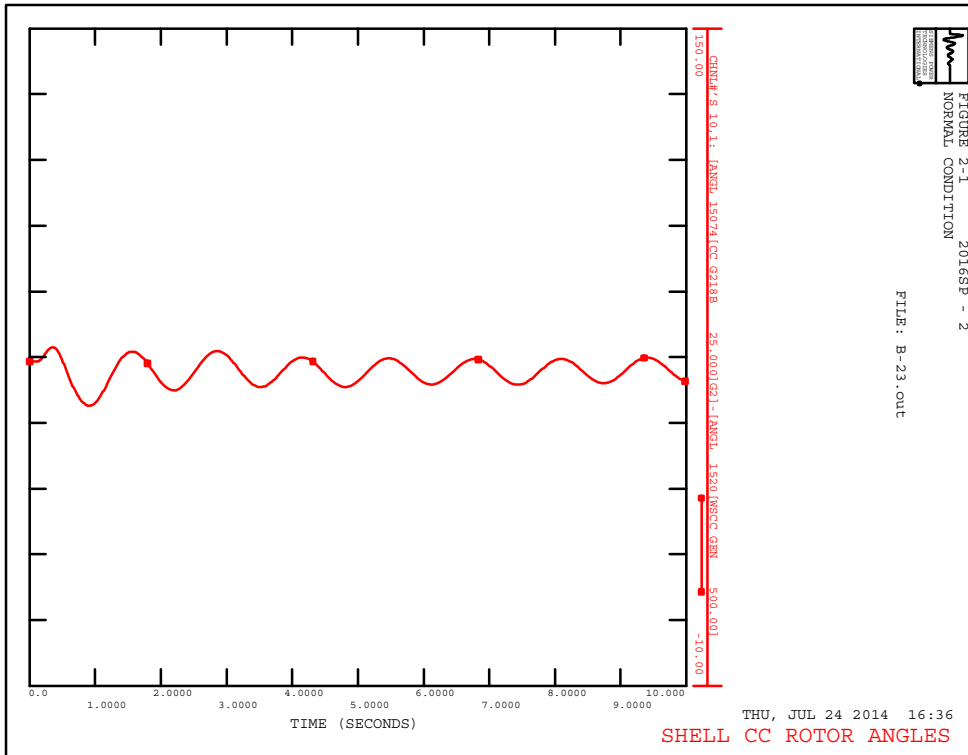


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-23.out
CHNL# 10.1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

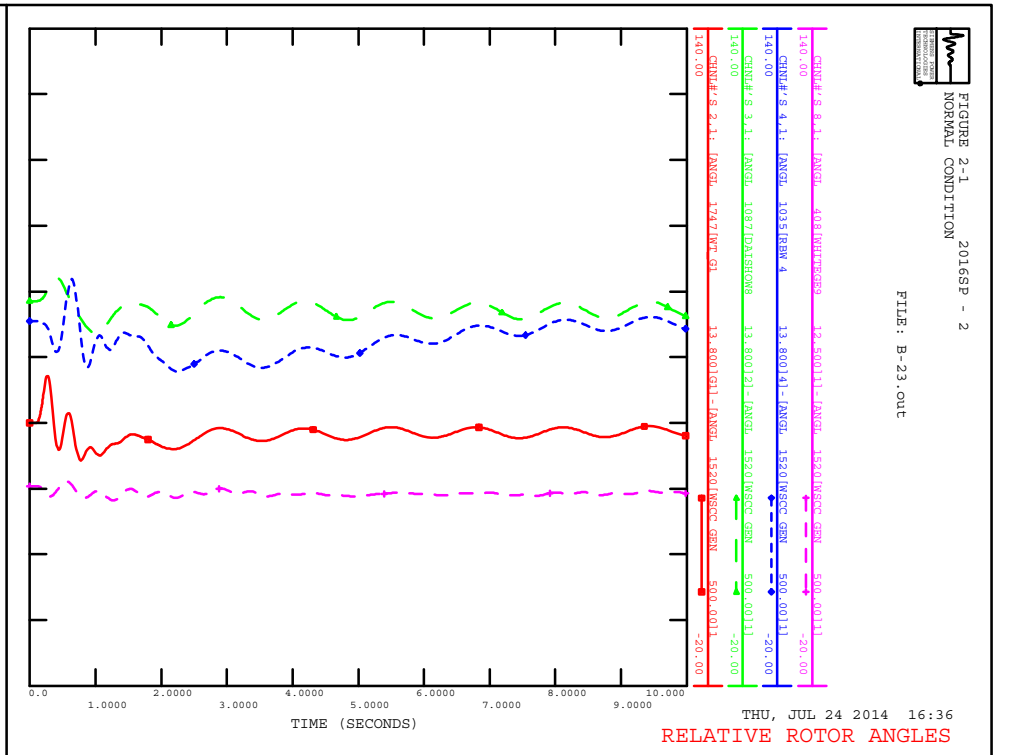


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-23.out
CHNL# 8.1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 4.1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3.1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 2.1: [ANGL 1747[WT G1 13.800[1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

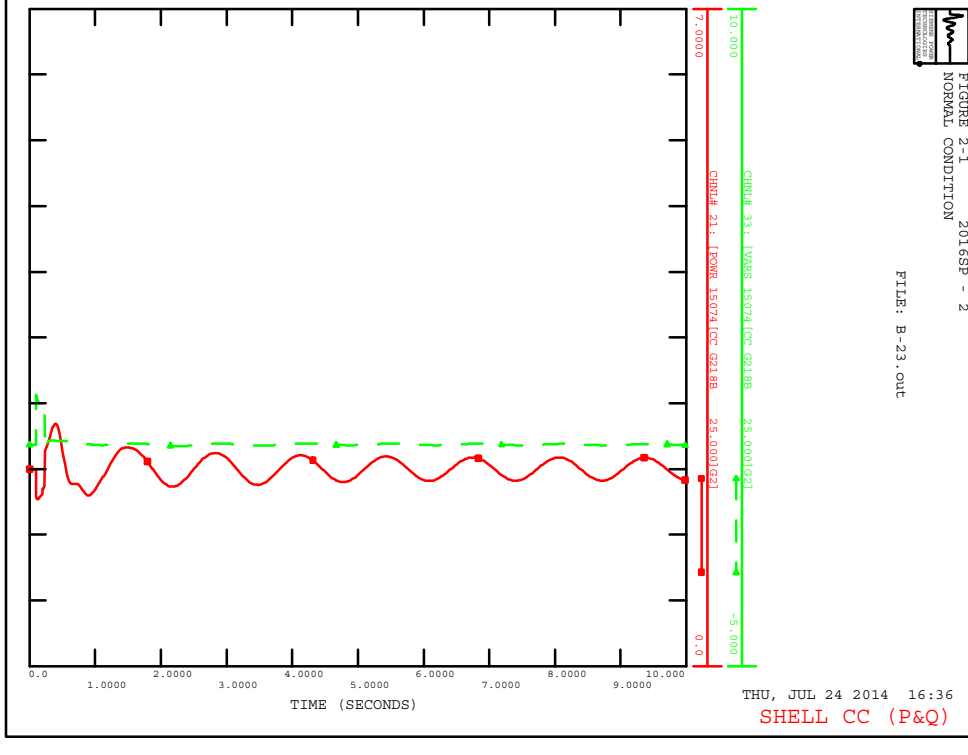


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-23.out
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
7.0000
10.000
0.0
-5.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

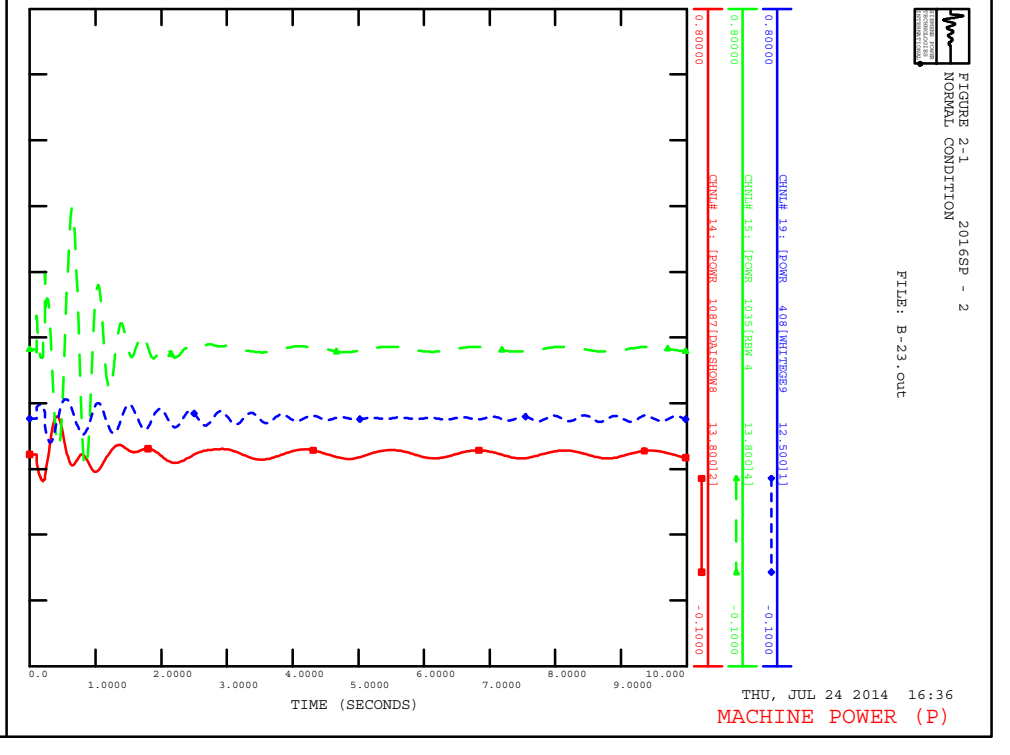


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-23.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

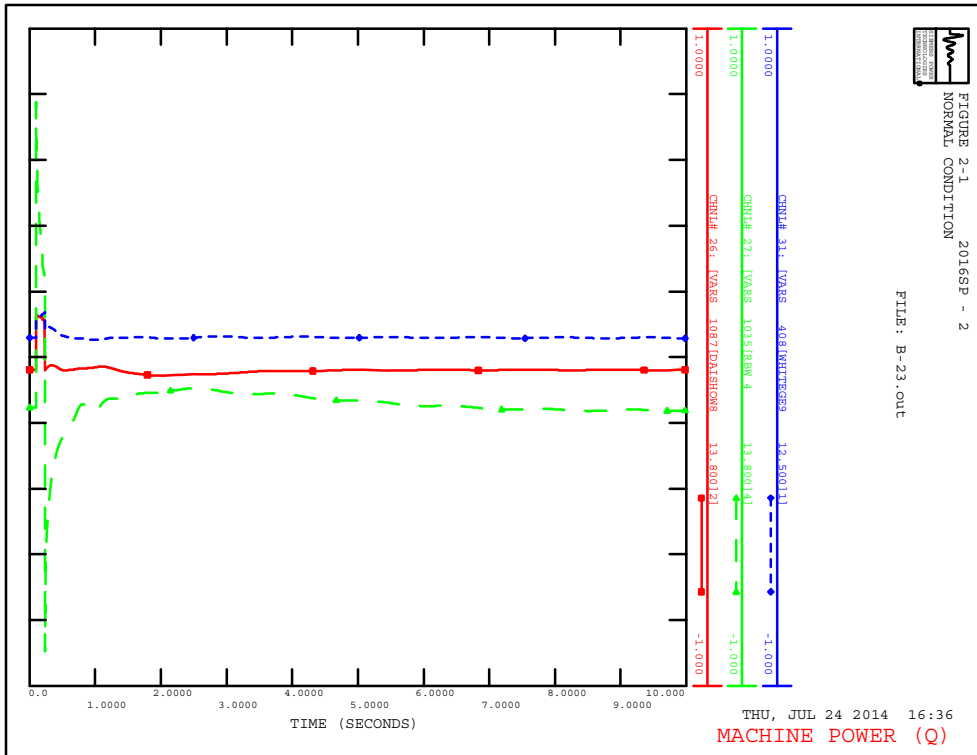


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-23.out
CHNI# 31: [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27: [VARS 1035[RBW 4 13.800]4]
CHNI# 26: [VARS 1087[DAISHOW8 13.800]2]
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

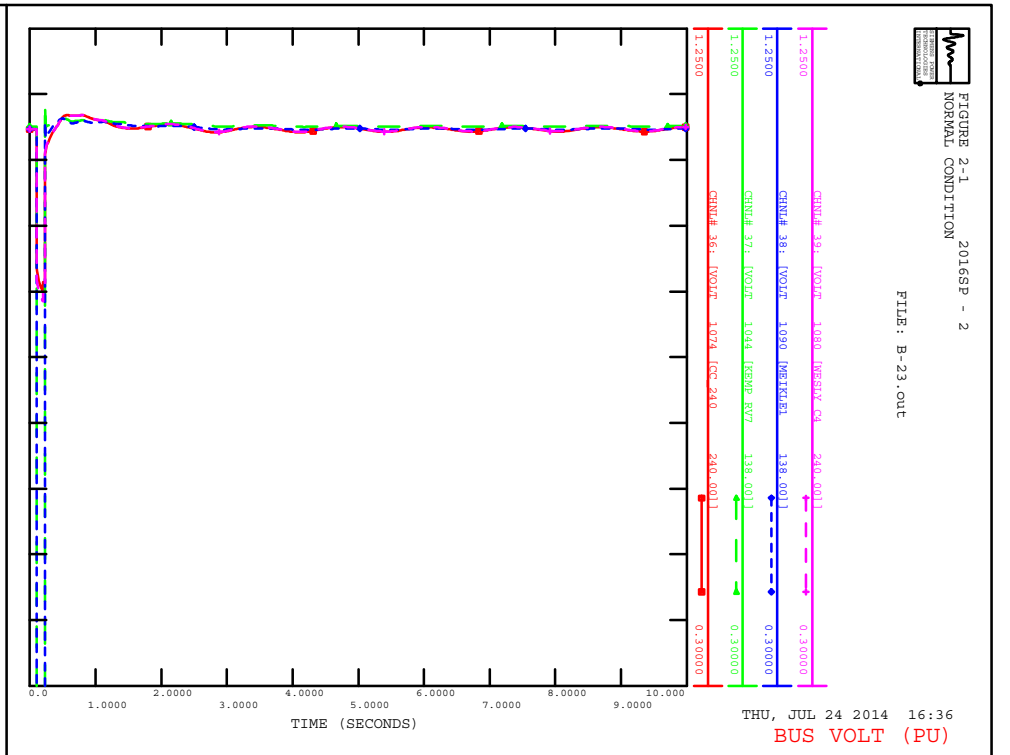


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-23.out
CHNI# 39: [VOLT 1080 [MESIX C4 240.00]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 36: [VOLT 1074 [CC 240 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

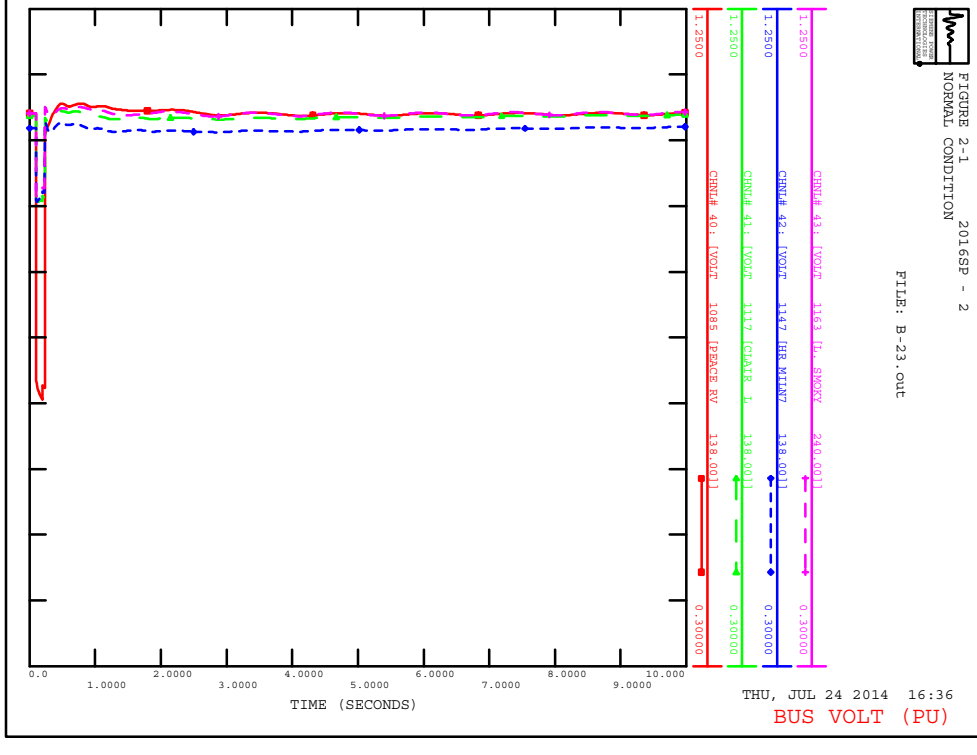


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-23.out
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00]
CHNI# 42: [VOLT 1142 [HR MIAN7 138.00]
CHNI# 41: [VOLT 1117 [CHAIR L 138.00]
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

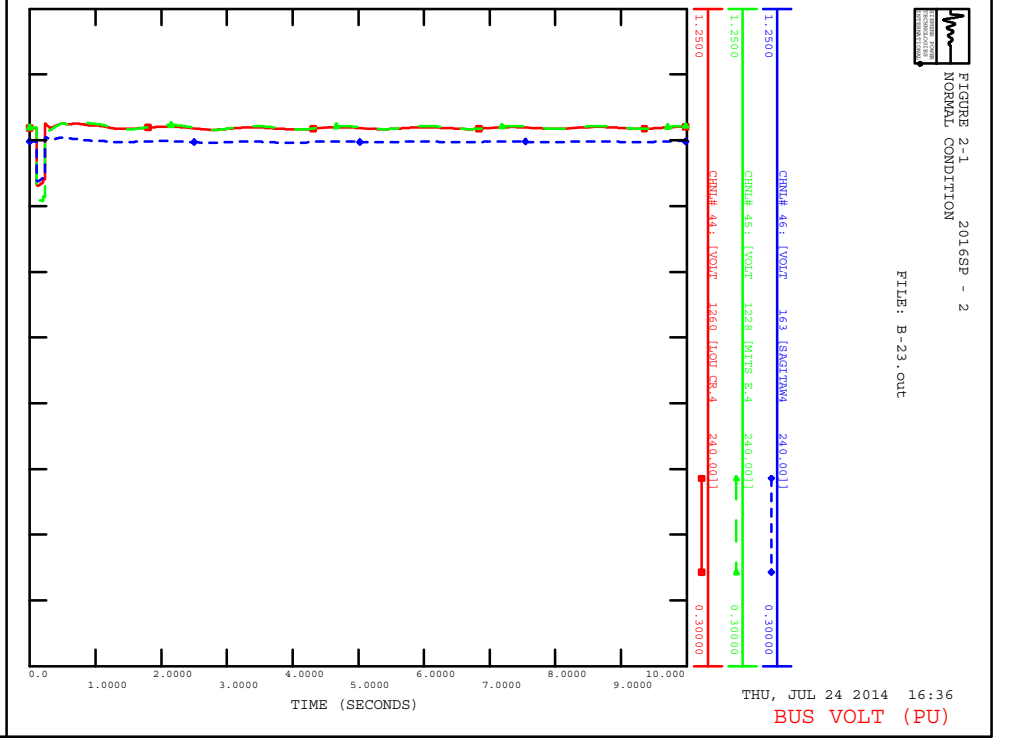


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-23.out
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
CHNI# 45: [VOLT 1228 [MTTS B.4 240.00]
CHNI# 44: [VOLT 1260 [FOT CR.4 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

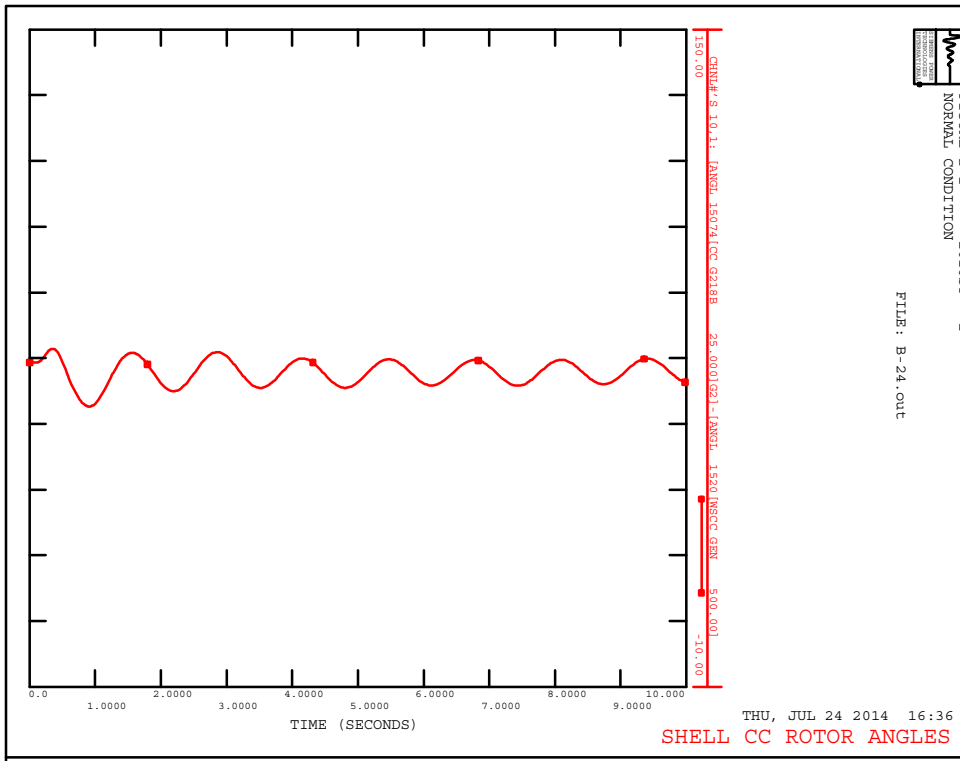


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-24.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

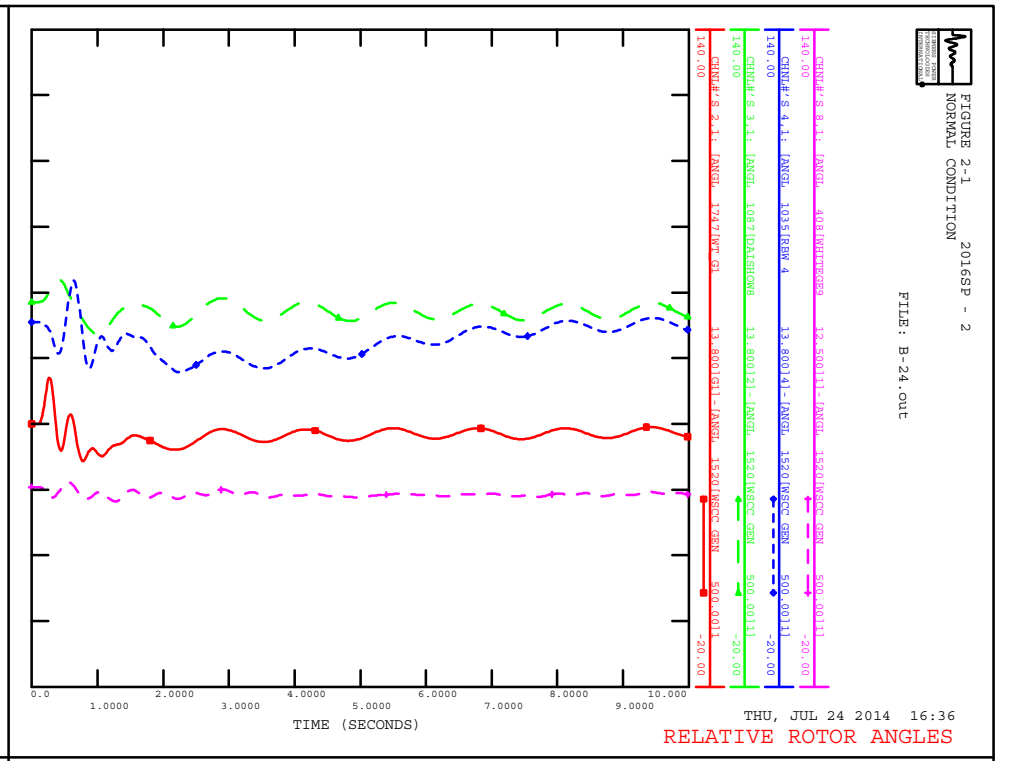


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-24.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

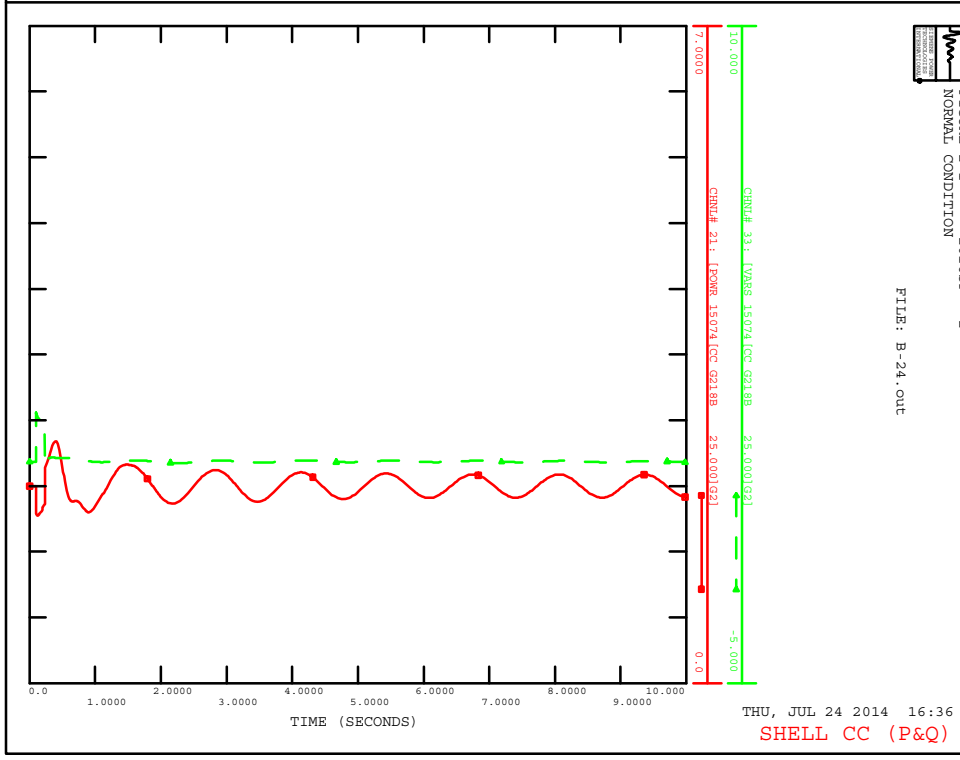


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-24.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

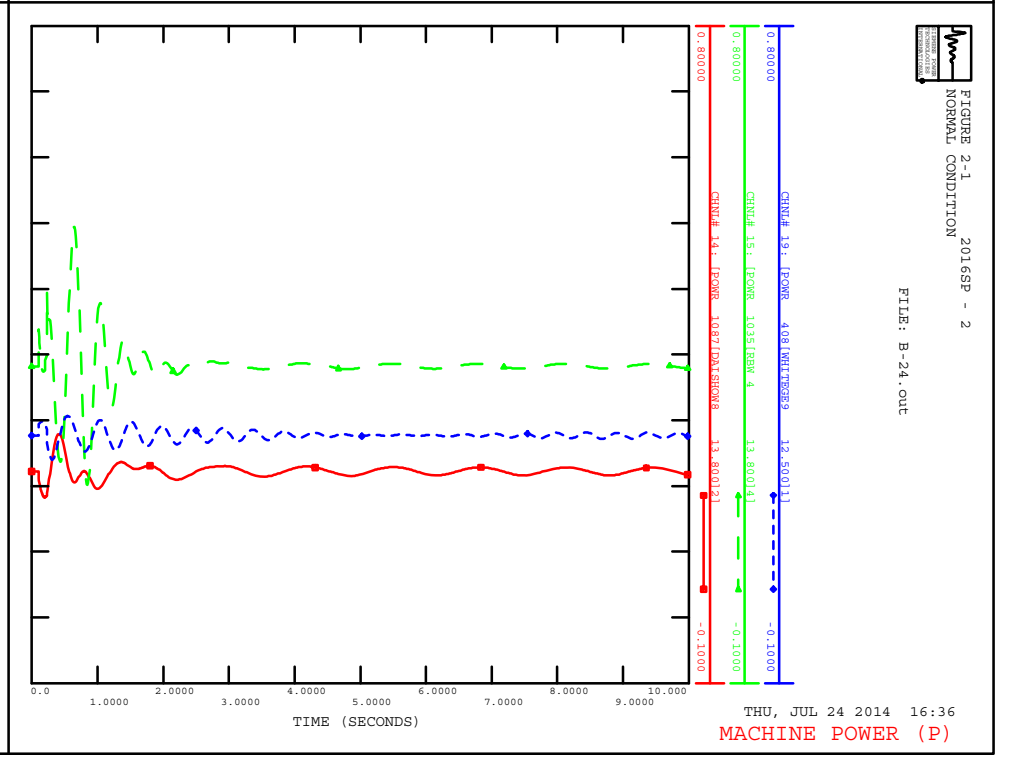


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-24.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

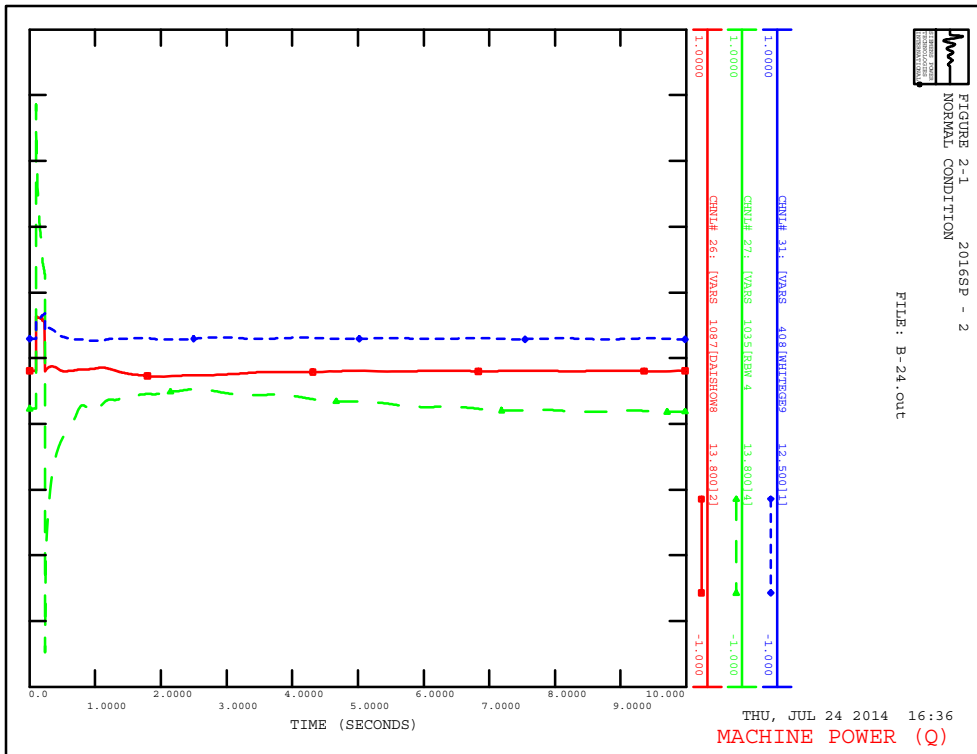


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-24.out
CHNI# 26: [VARS 1087 [DAISHOWB 13.80012]
CHNI# 27: [VARS 1035 [RBW 4 13.80014]
CHNI# 31: [VARS 408 [WHITEGB9 12.50011]
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

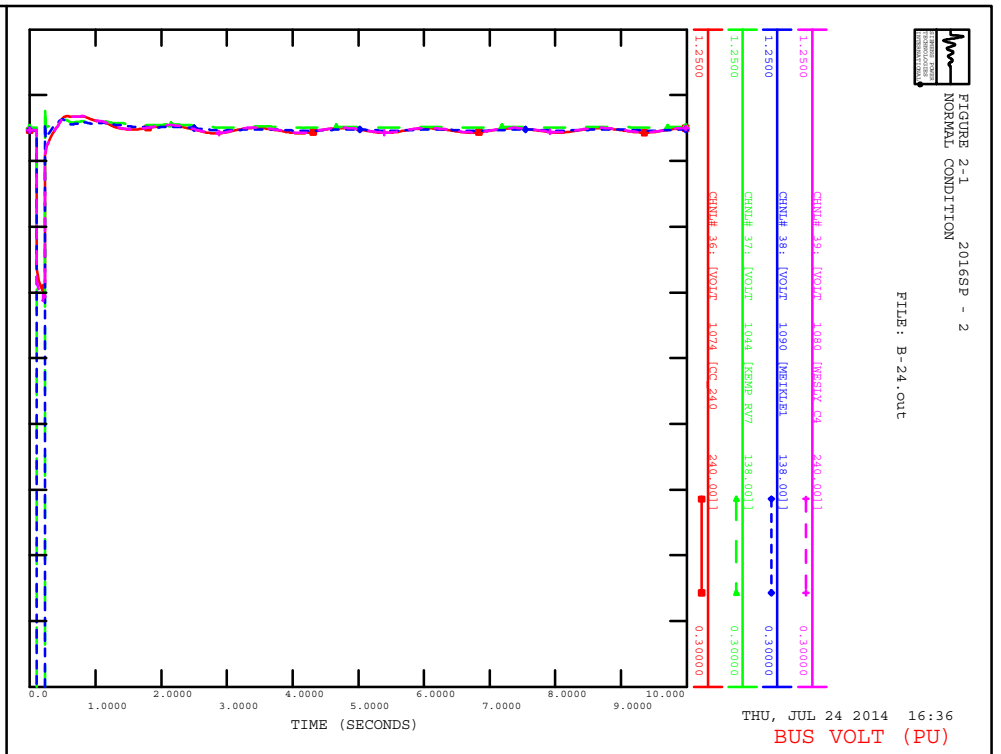


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-24.out
CHNI# 36: [VOLT 1074 [CC 240 240.001]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.001]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.001]
CHNI# 39: [VOLT 1080 [NRSIX C4 240.001]
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

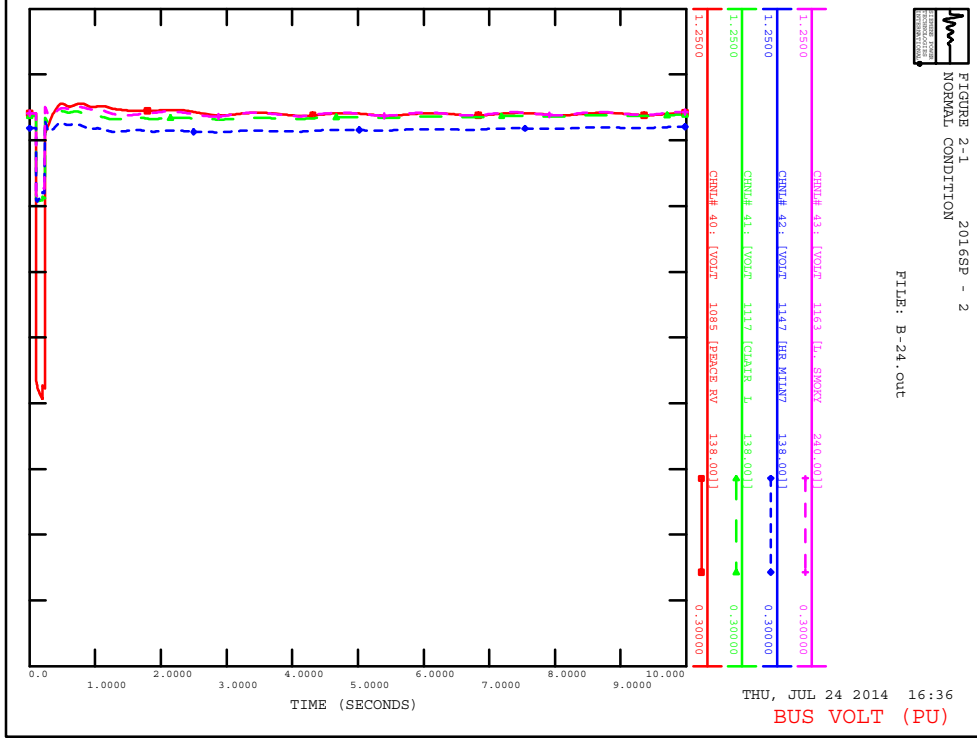


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-24.out
CHNI# 40: [VOLT 1085 [PEACE RV 138.001]
CHNI# 41: [VOLT 1117 [CHAIR L 138.001]
CHNI# 42: [VOLT 1142 [HR MIAN7 138.001]
CHNI# 43: [VOLT 1163 [L. SMOKY 240.001]
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

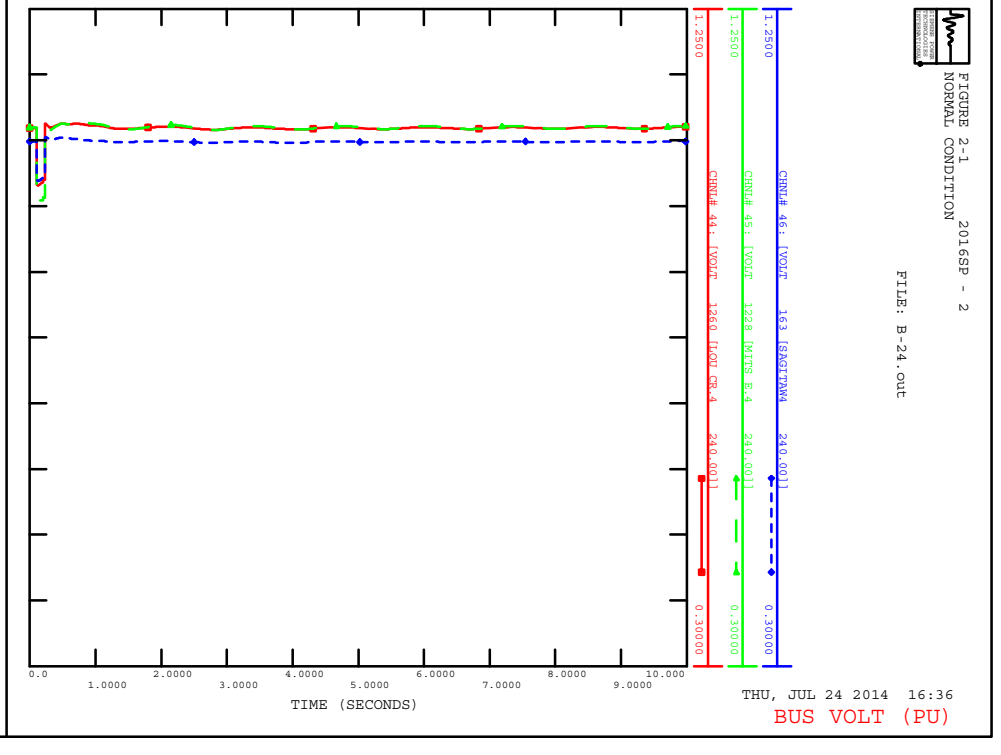


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-24.out
CHNI# 44: [VOLT 1260 [FOX CR 4 240.001]
CHNI# 45: [VOLT 1228 [MITS B-4 240.001]
CHNI# 46: [VOLT 163 [SAGITAW4 240.001]
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

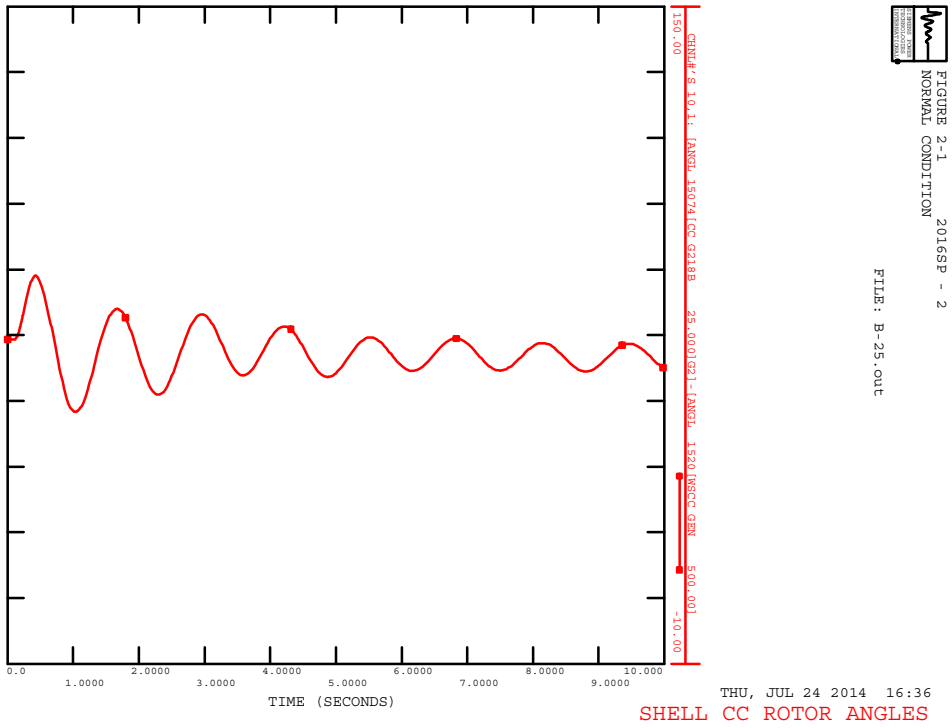


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-25.out
CHNL#'S 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
-50.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

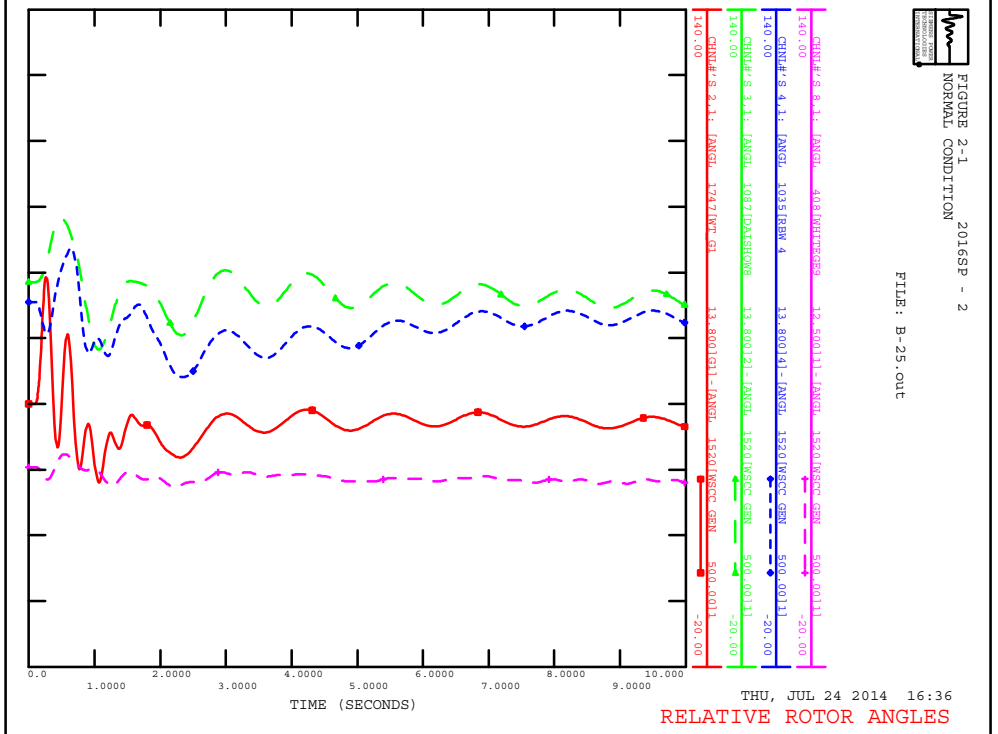


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-25.out
CHNL#'S 8,1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 3,1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

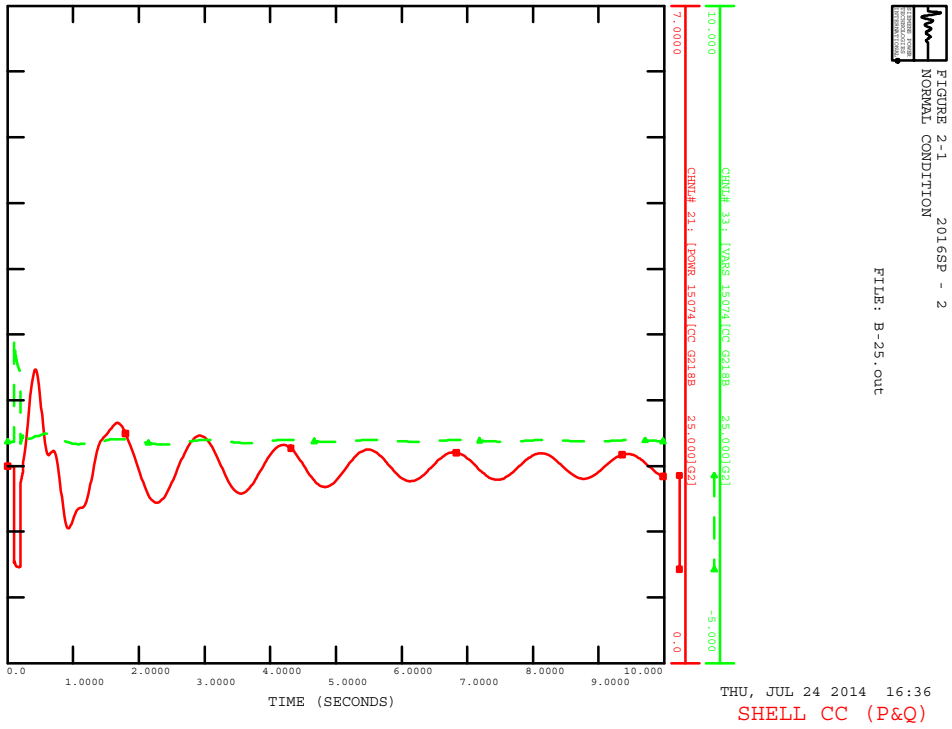


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-25.out
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

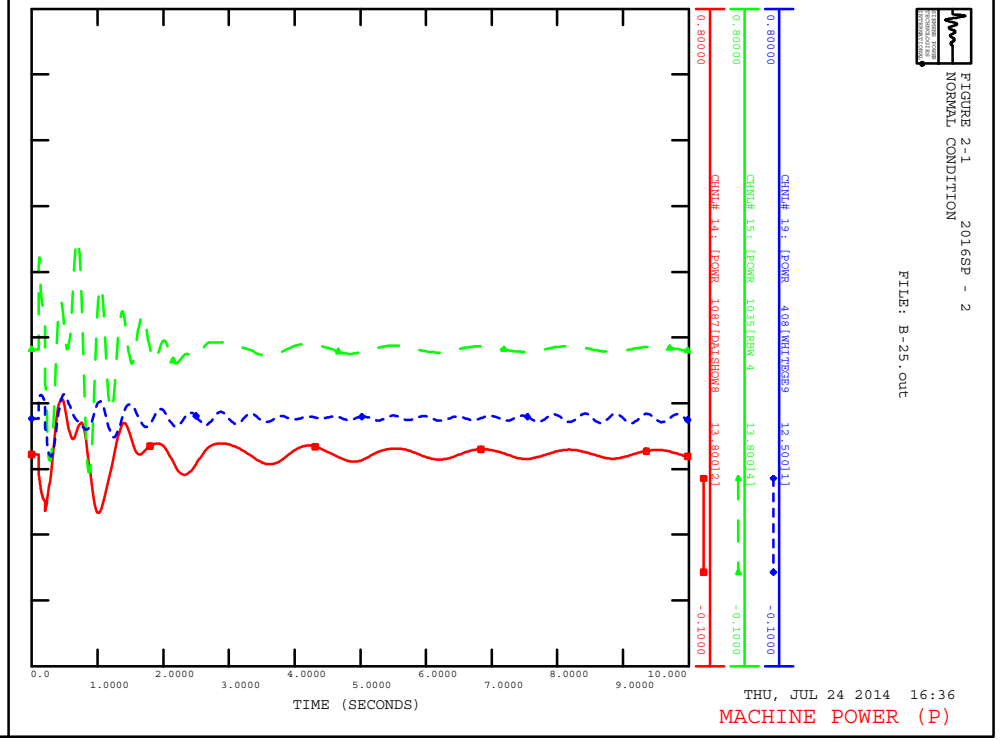


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-25.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

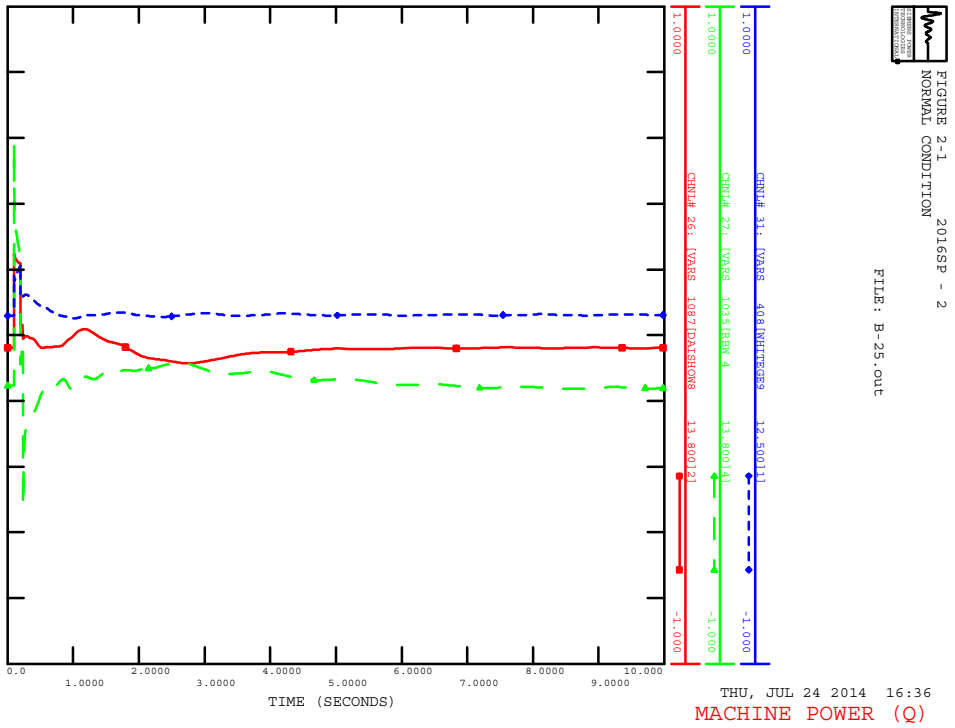


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-25.out
CHNI# 31: [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27: [VARS 1035[RBW 4 13.800]4]
CHNI# 26: [VARS 1087[DAISHOWB 13.800]2]
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

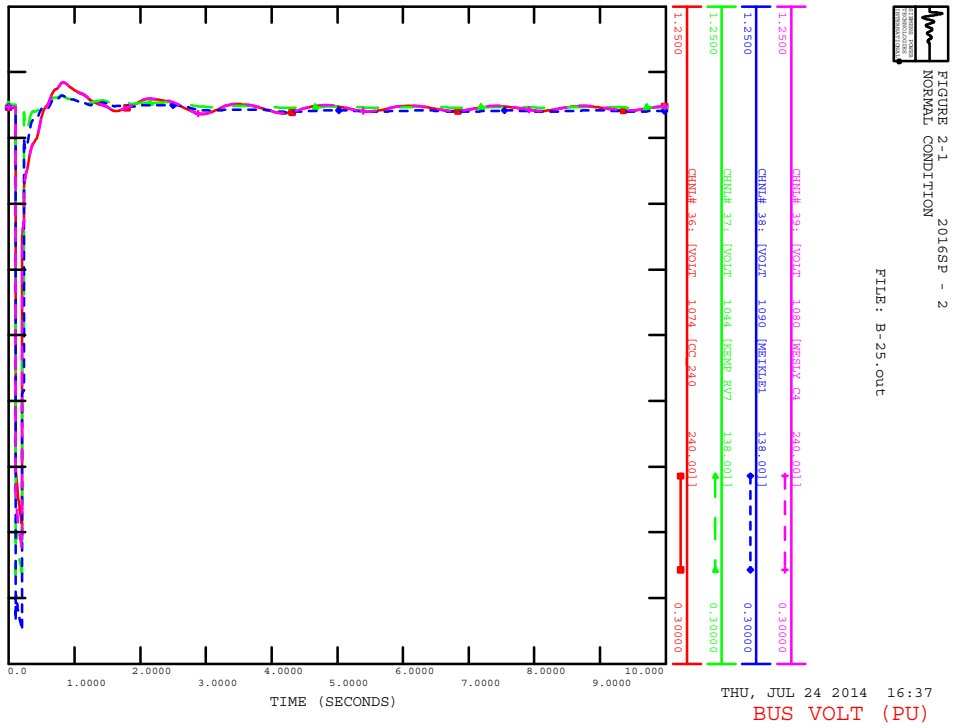


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-25.out
CHNI# 39: [VOLT 1080 [NRSIX C4 240.00]
CHNI# 38: [VOLT 1090 [MSIKLE1 138.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 36: [VOLT 1074 [CC 240 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

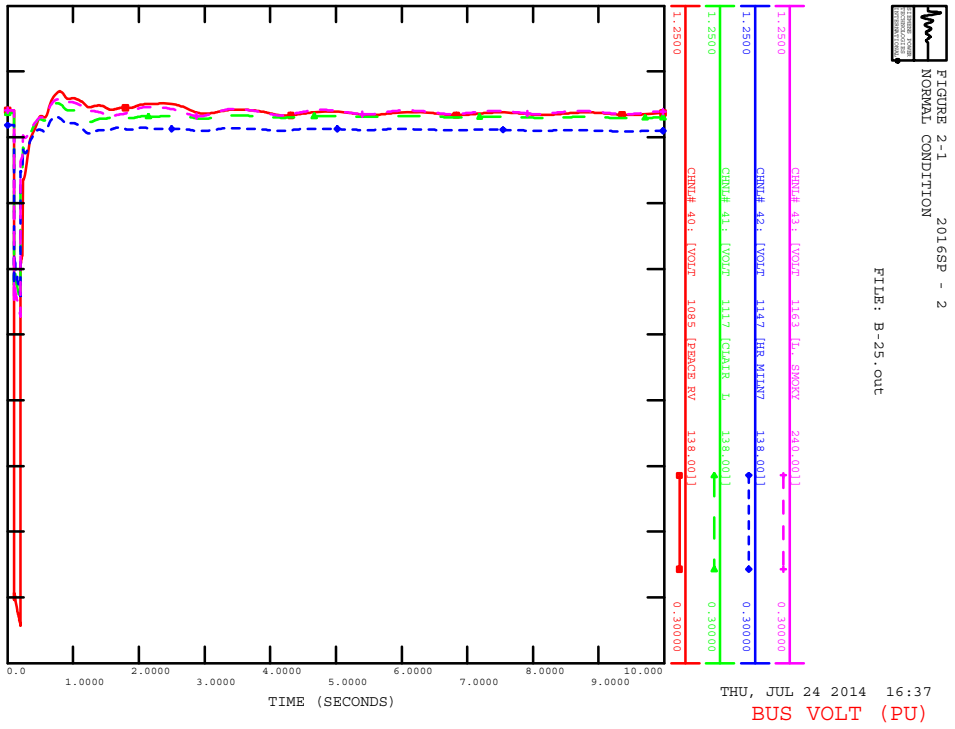


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-25.out
CHNI# 43: [VOLT 1163 [L SMOKY 240.00]
CHNI# 42: [VOLT 1142 [HR MTN7 138.00]
CHNI# 41: [VOLT 1117 [CHAIR L 138.00]
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

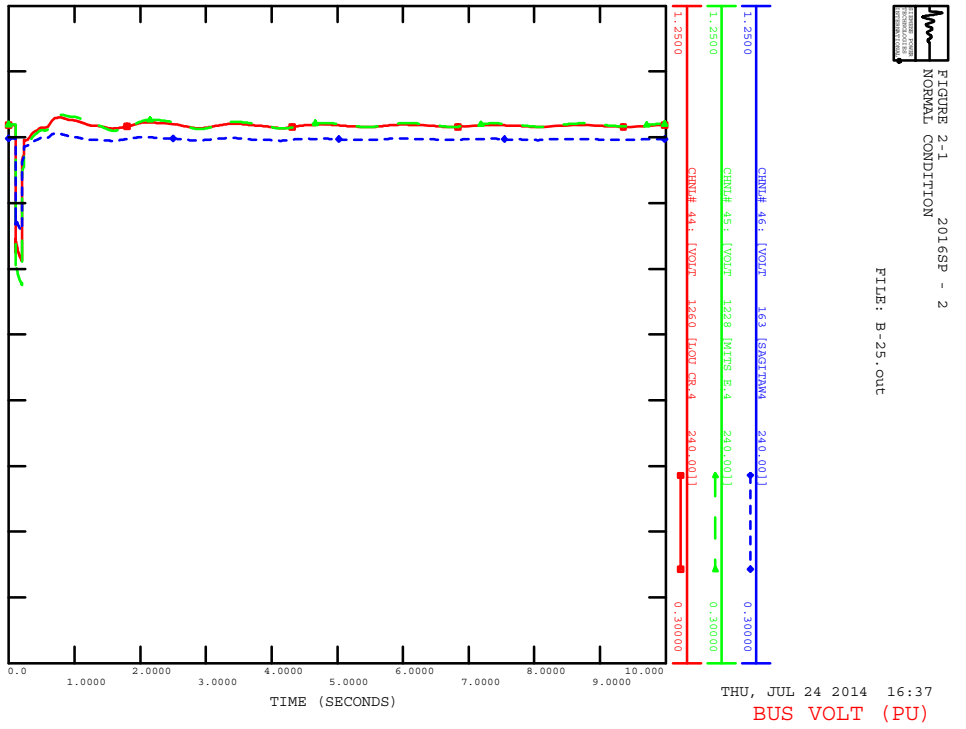


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-25.out
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
CHNI# 45: [VOLT 1228 [MTNS B-4 240.00]
CHNI# 44: [VOLT 1260 [FOU CR-4 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

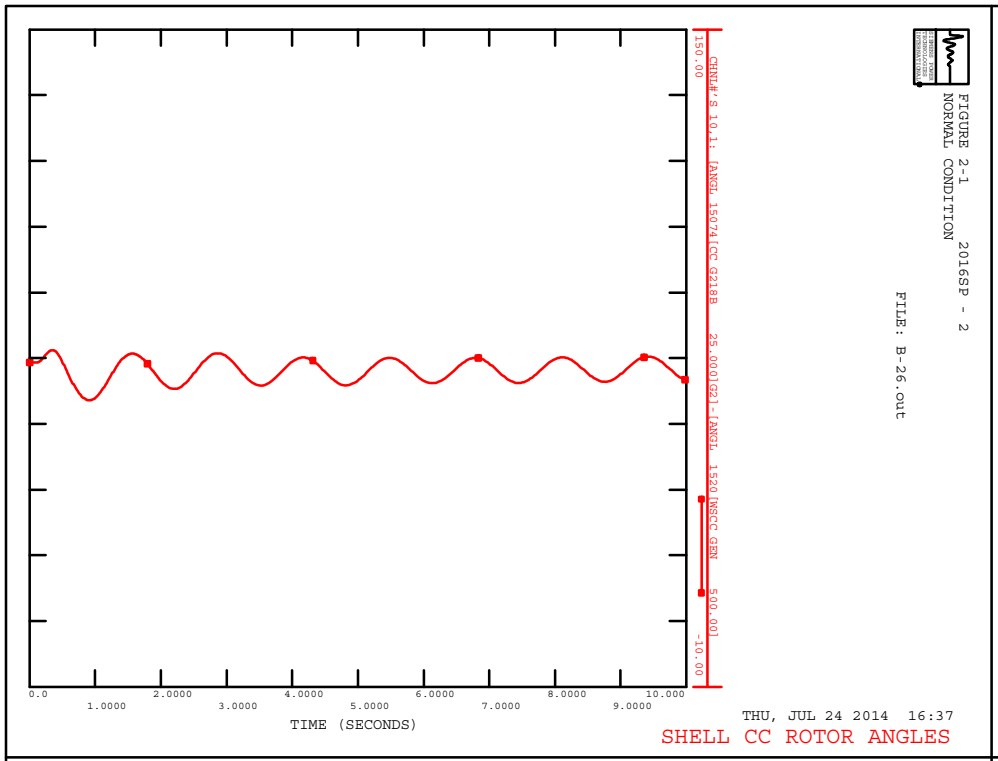


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-26.out
CHNL#'S 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC ROTOR ANGLES

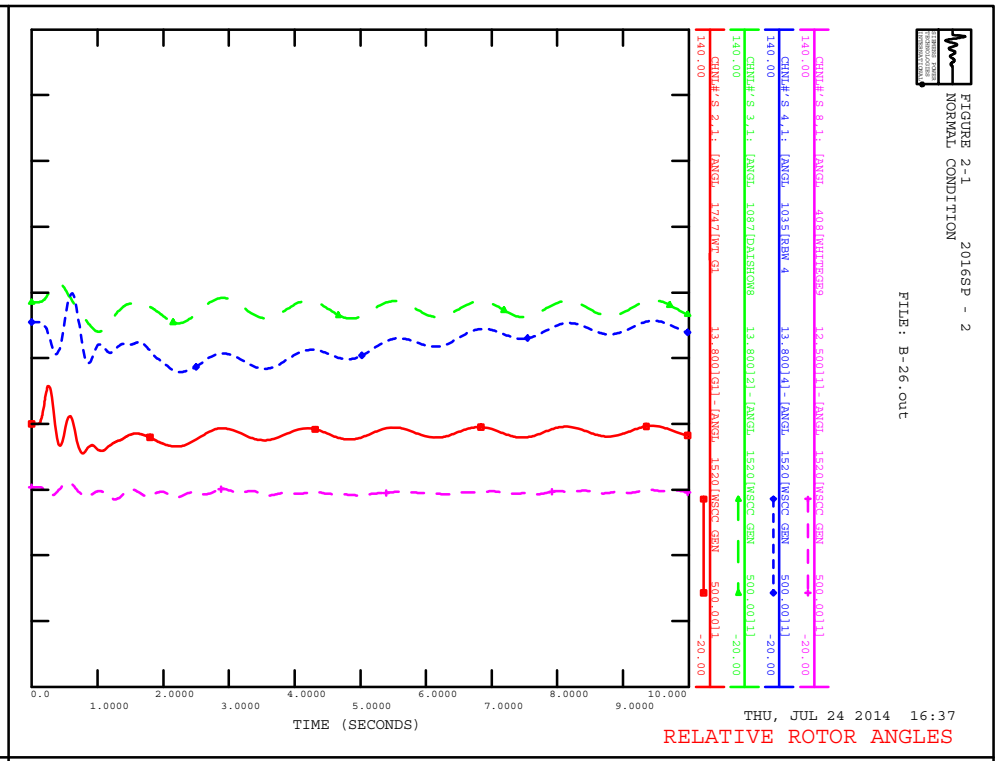


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-26.out
CHNL#'S 8,1: [ANGL 408[WHITESB9 12.500[1] [ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 3,1: [ANGL 1087[DAISHOW8 13.800[2] [ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
RELATIVE ROTOR ANGLES

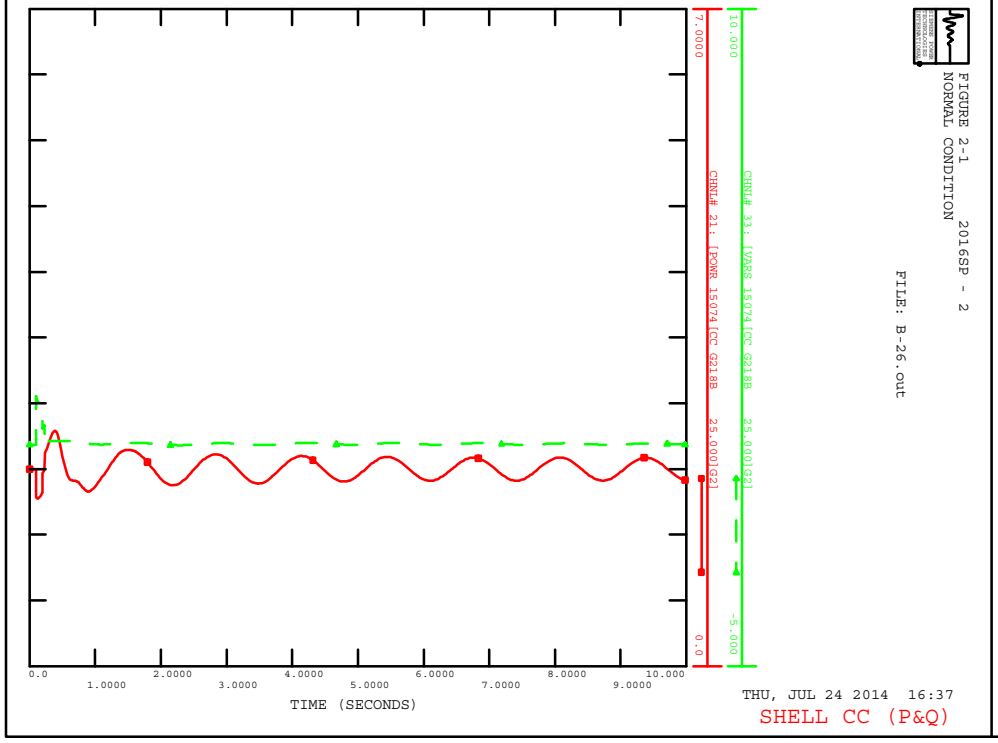


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-26.out
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC (P&Q)

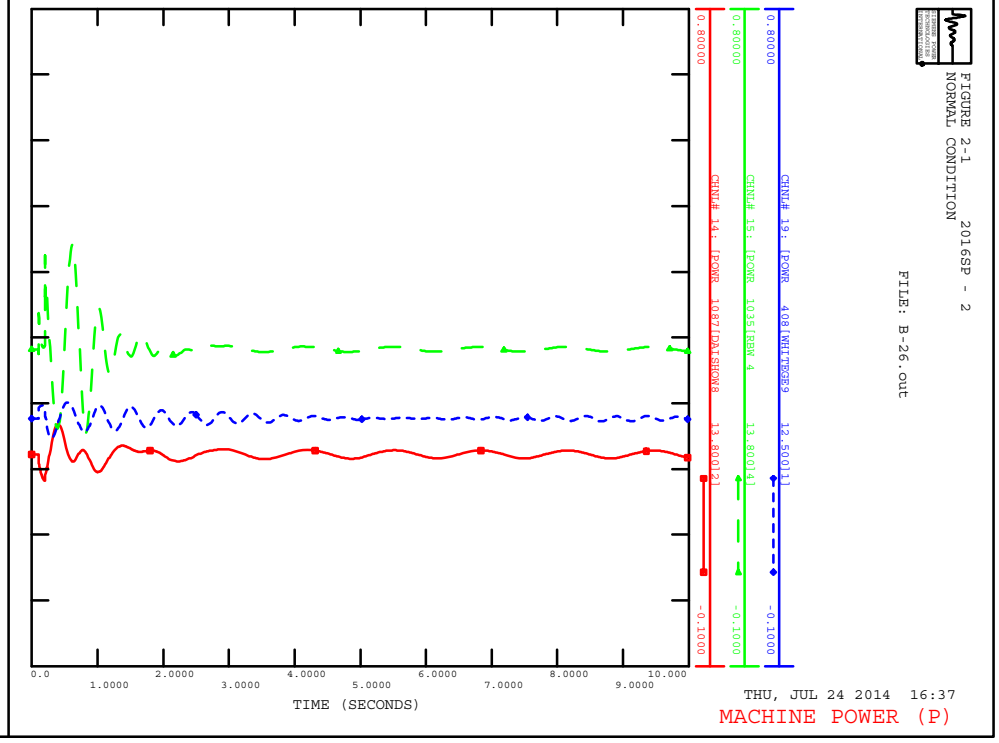


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-26.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHOW8 13.800[2]
0.80000
-0.1000
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (P)

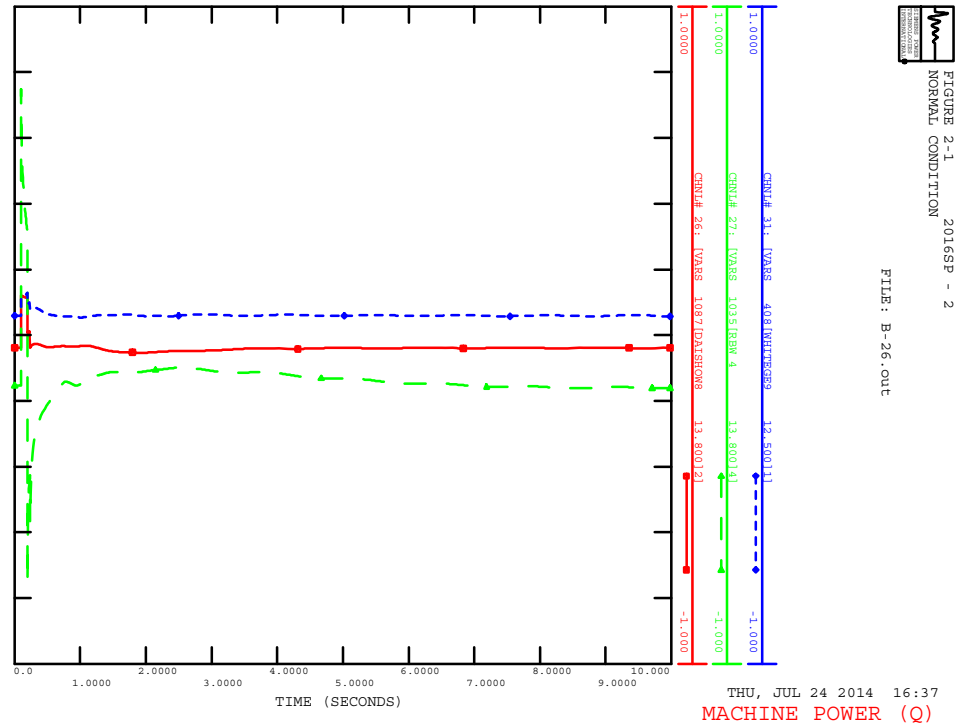


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-26.out
CHNI# 26: [VARS 1087[DAISHOWA 13.800[2]
CHNI# 27: [VARS 1035[RBW 4 13.800[4]
CHNI# 31: [VARS 408[WHITEGB9 12.500[1]
-1.000
1.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (Q)

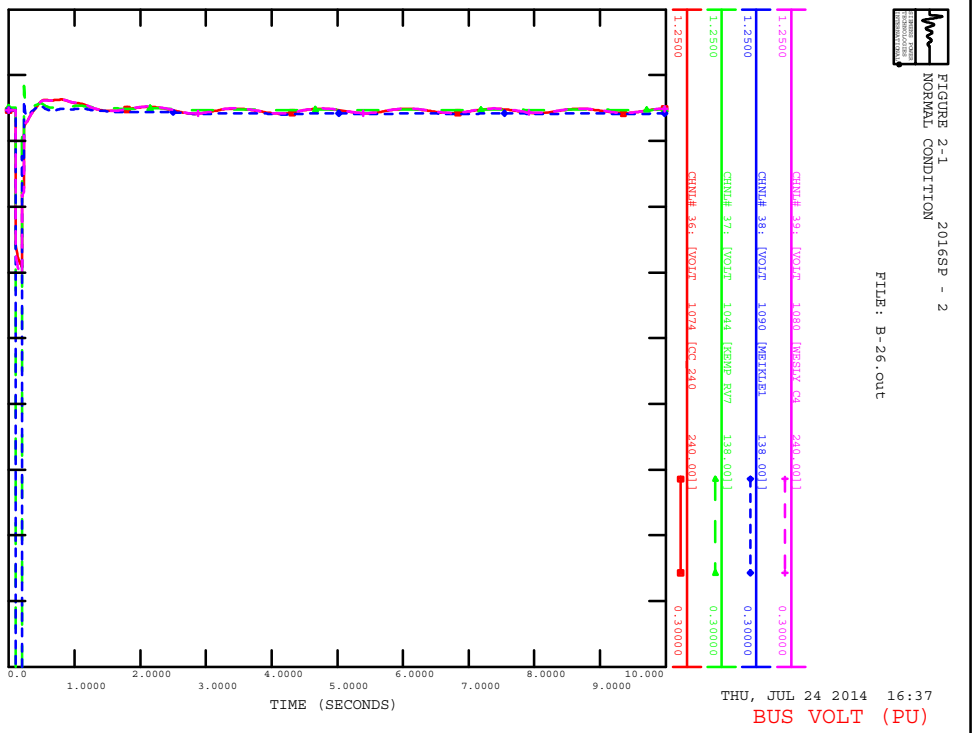


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-26.out
CHNI# 36: [VOLT 1074 [CC 240
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00[1]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.00[1]
CHNI# 39: [VOLT 1080 [NESBIT C4 240.00[1]
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

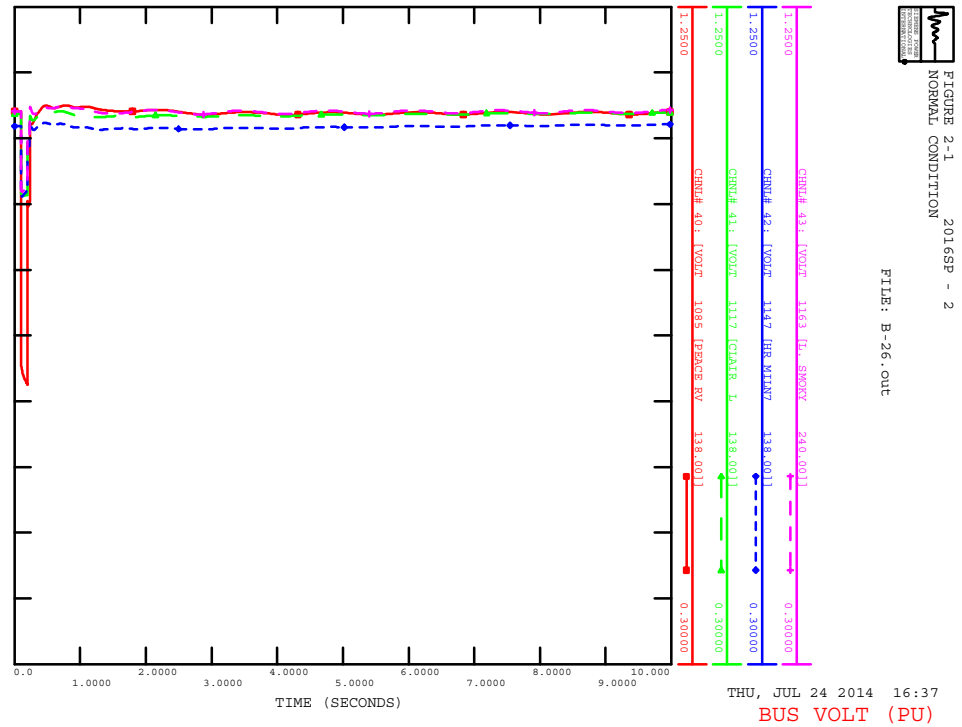


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-26.out
CHNI# 40: [VOLT 1085 [PEACE RV 138.00[1]
CHNI# 41: [VOLT 1117 [CHATR 1 138.00[1]
CHNI# 42: [VOLT 1142 [KR MIANT 138.00[1]
CHNI# 43: [VOLT 1163 [T. SMOKY 240.00[1]
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

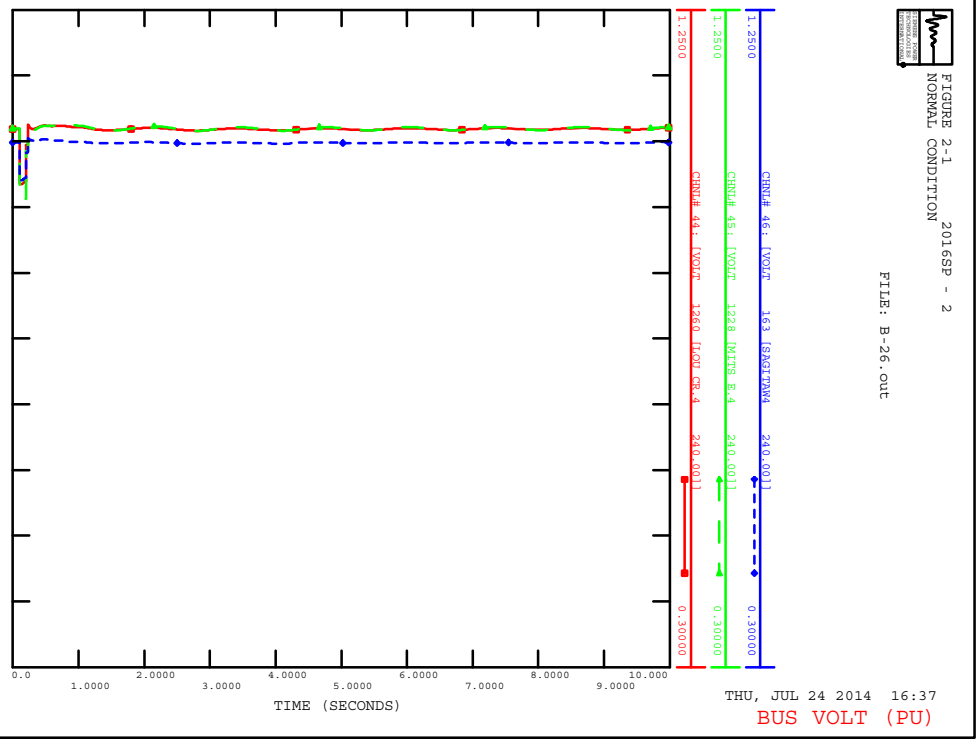


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-26.out
CHNI# 44: [VOLT 1260 [FOX CR 4
CHNI# 45: [VOLT 1228 [MTRS B-4
CHNI# 46: [VOLT 163 [SAGITAW4
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

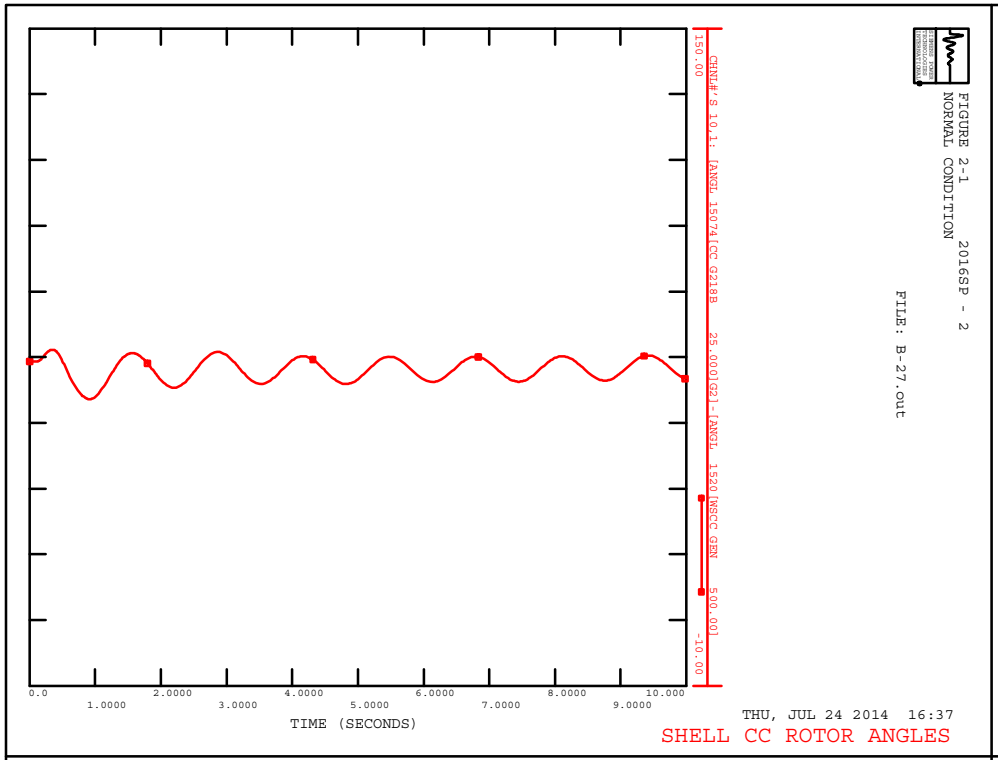


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-27.out
CHNU#'S 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC ROTOR ANGLES

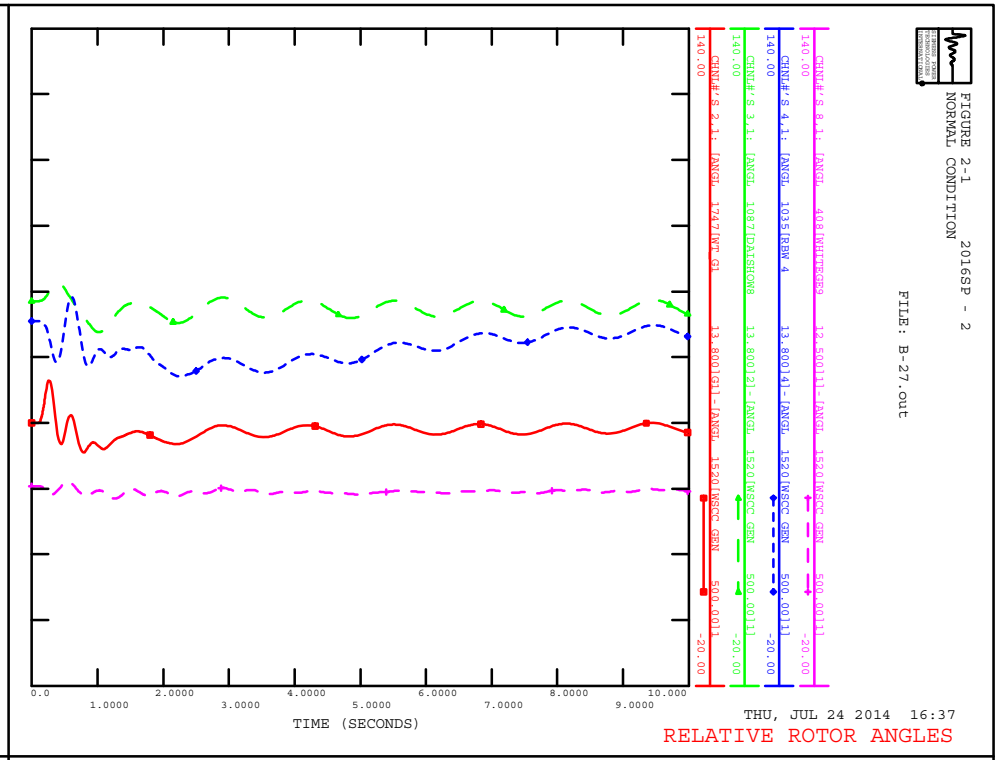


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-27.out
CHNU#'S 8,1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 3,1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 2,1: [ANGL 1747[WT G1 13.800[1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
RELATIVE ROTOR ANGLES

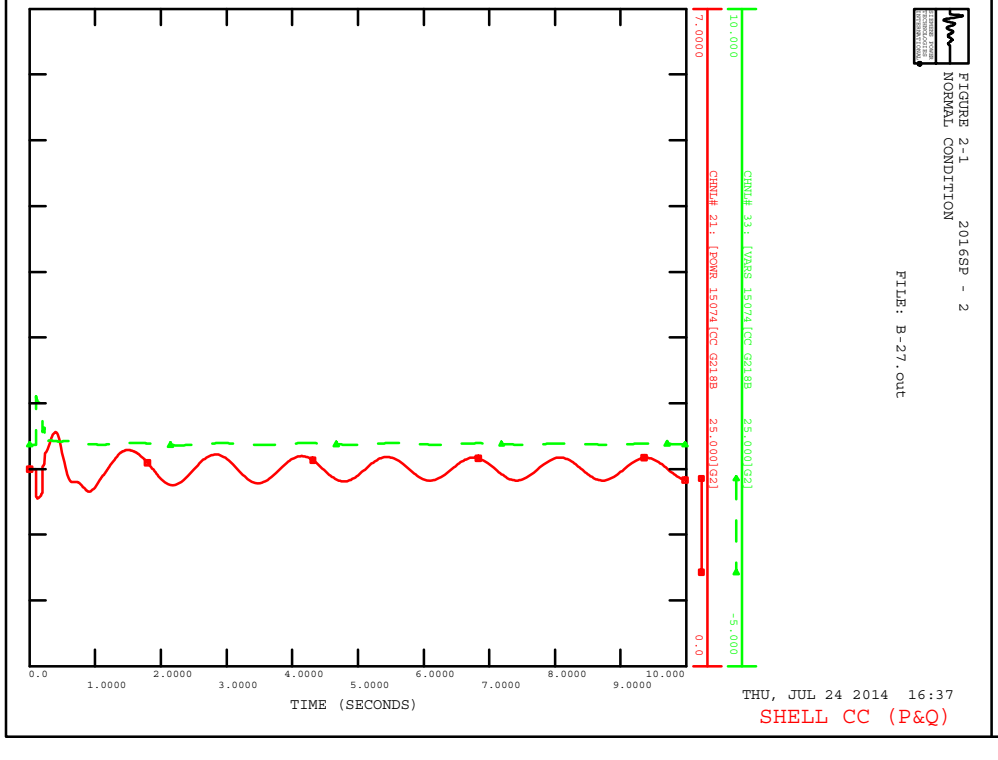


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-27.out
CHNU# 33: [VARS 15074[CC G218B 25.000[G2]
CHNU# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC (P&Q)

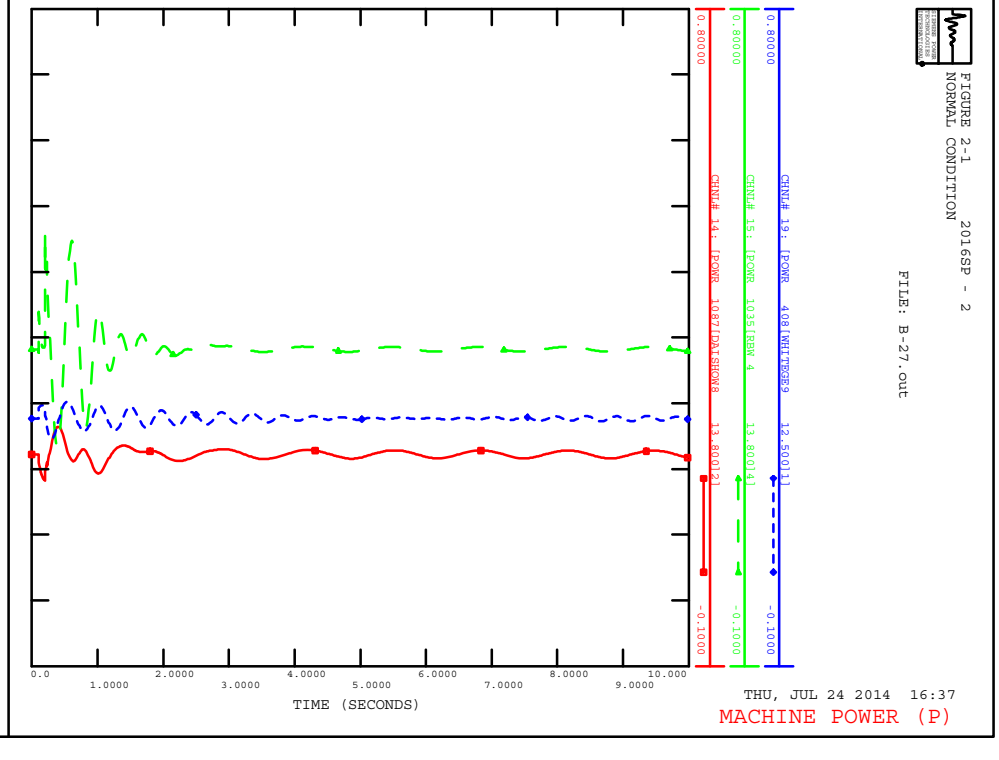


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-27.out
CHNU# 19: [POWR 408[WHITESB9 12.500[1]
CHNU# 15: [POWR 1035[RBM 4 13.800[4]
CHNU# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (P)

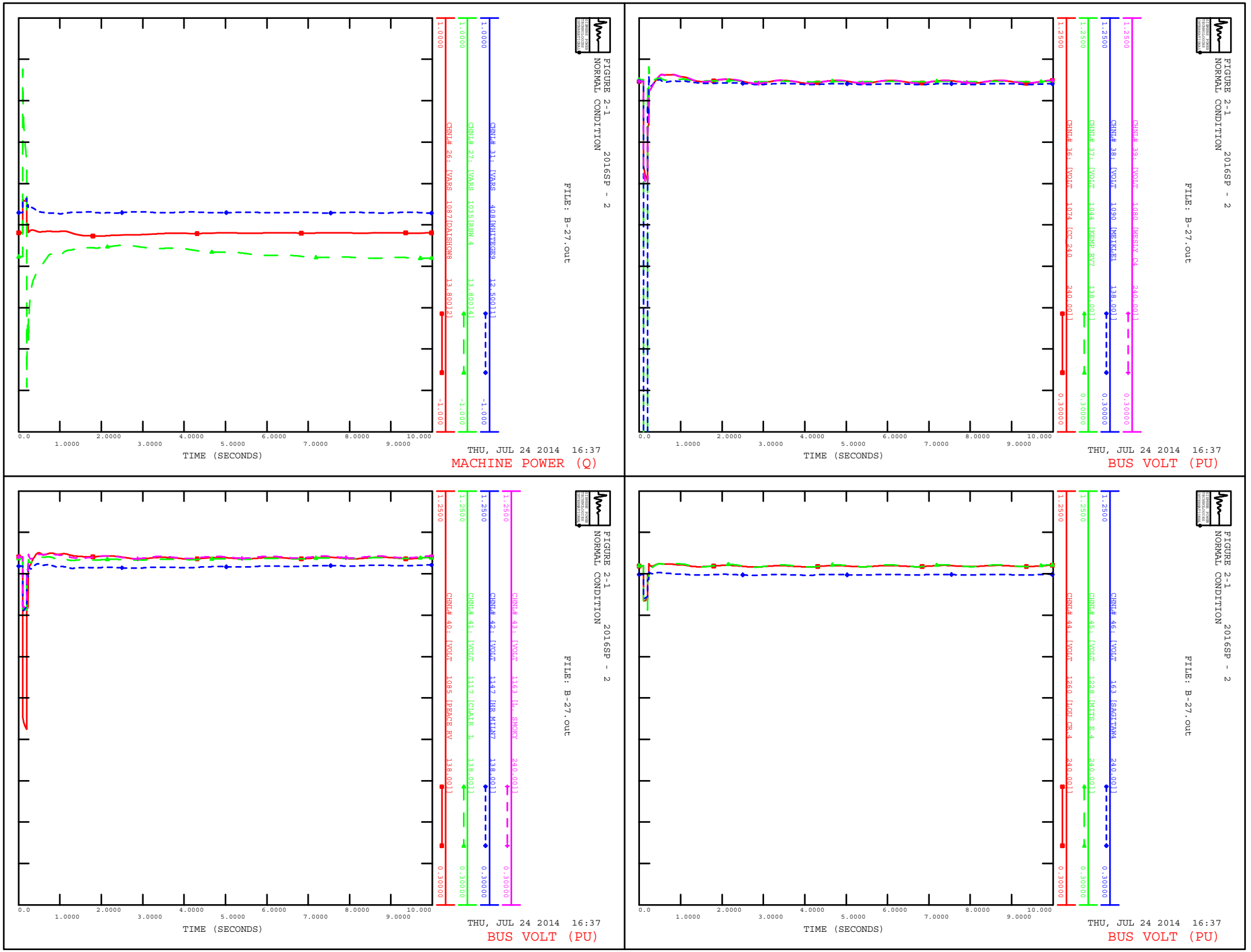


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-27.out
CHNI# 31: [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27: [VARS 1035 [RBW 4 13.800]4]
CHNI# 26: [VARS 1087 [DAISHOWB 13.800]2]
1.0000
-1.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (Q)
FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-27.out
CHNI# 39: [VOLT 1080 [WESK1 C4 240.00]
CHNI# 38: [VOLT 1090 [WESKLE1 138.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 36: [VOLT 1074 [CC 240 240.00]
1.2500
0.30000
THU, JUL 24 2014 16:37
BUS VOLT (PU)
FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-27.out
CHNI# 43: [VOLT 1163 [L SMOKY 240.00]
CHNI# 42: [VOLT 1142 [HR MTN7 138.00]
CHNI# 41: [VOLT 1117 [CHAIR L 138.00]
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]
THU, JUL 24 2014 16:37
BUS VOLT (PU)
FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-27.out
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
CHNI# 45: [VOLT 1228 [MTNS B-4 240.00]
CHNI# 44: [VOLT 1260 [FOU CR-4 240.00]
THU, JUL 24 2014 16:37
BUS VOLT (PU)

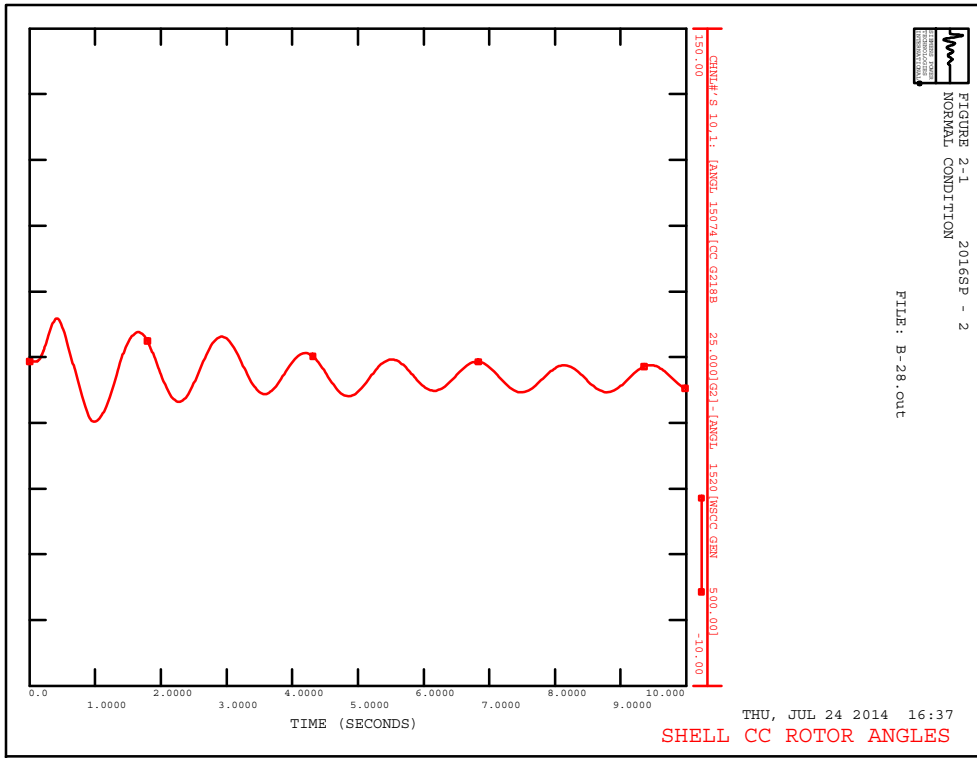


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-28.out
CHNL# 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC ROTOR ANGLES

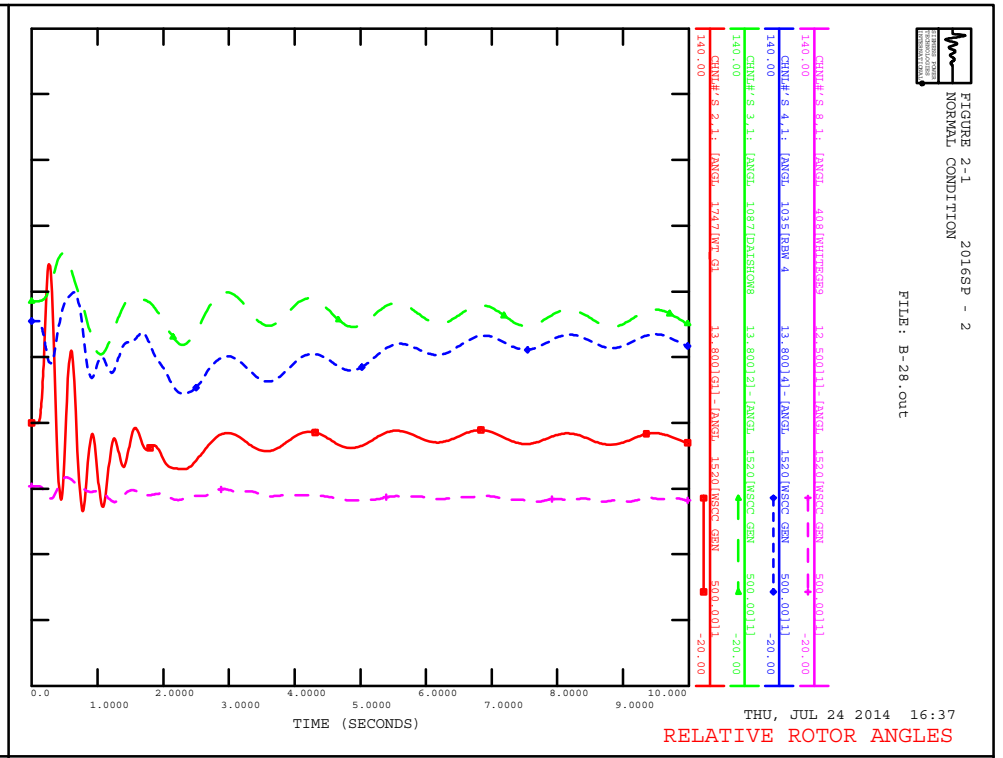


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-28.out
CHNL# 8,1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3,1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
RELATIVE ROTOR ANGLES

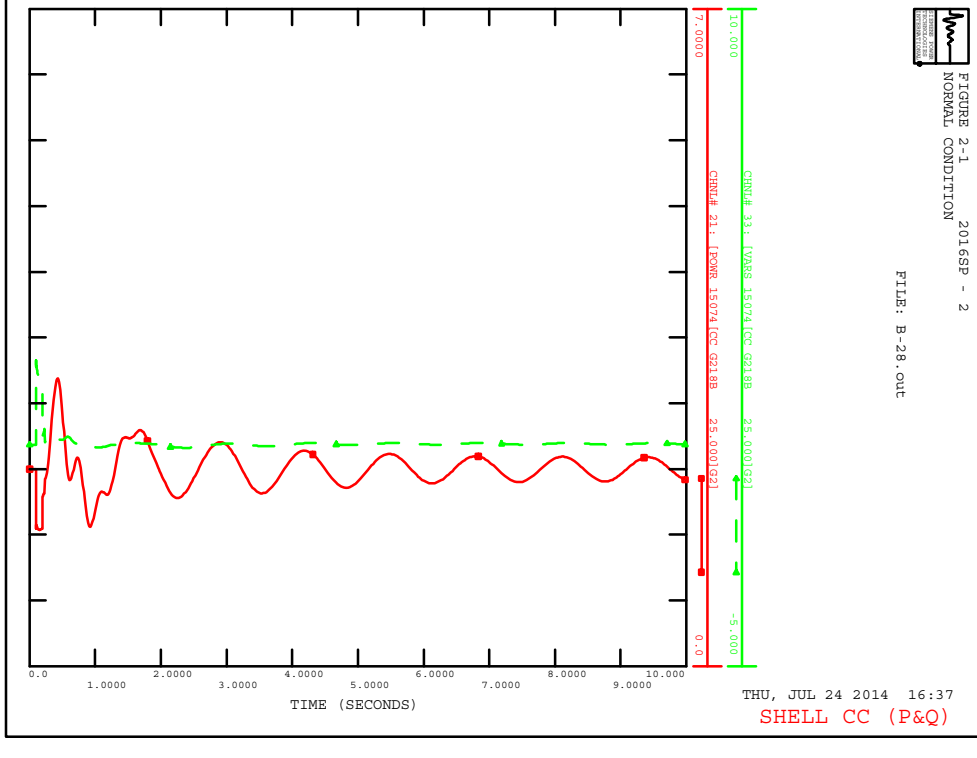


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-28.out
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
7.0000
10.000
0.0
-5.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC (P&Q)

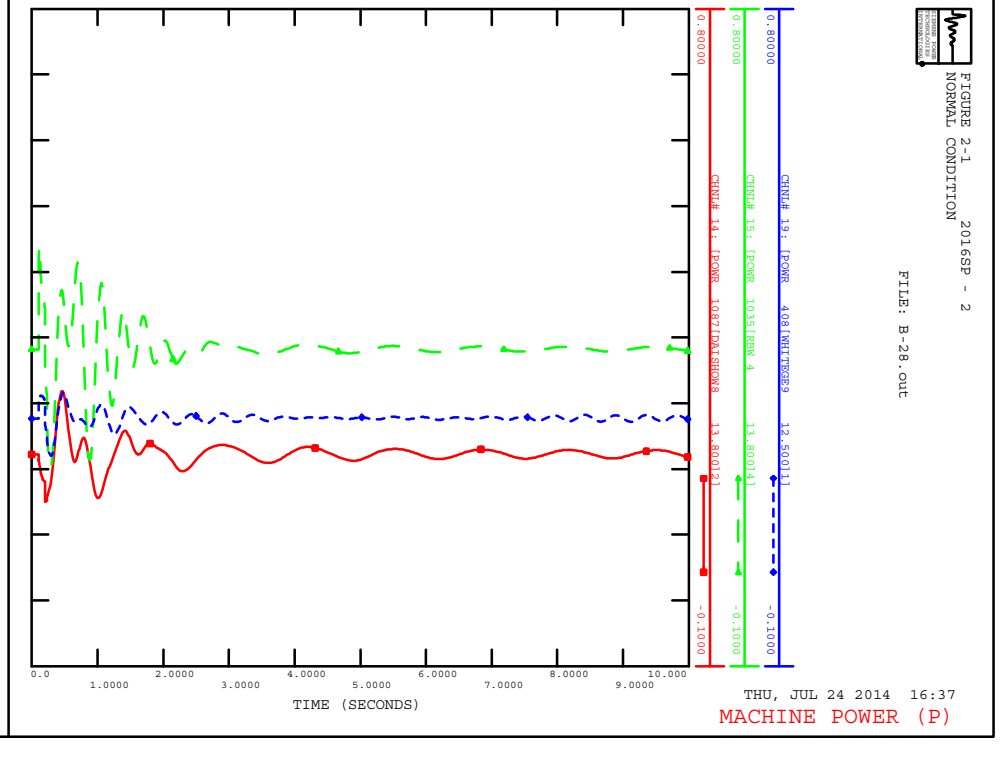


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-28.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
0.80000
-0.1000
-0.1000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (P)

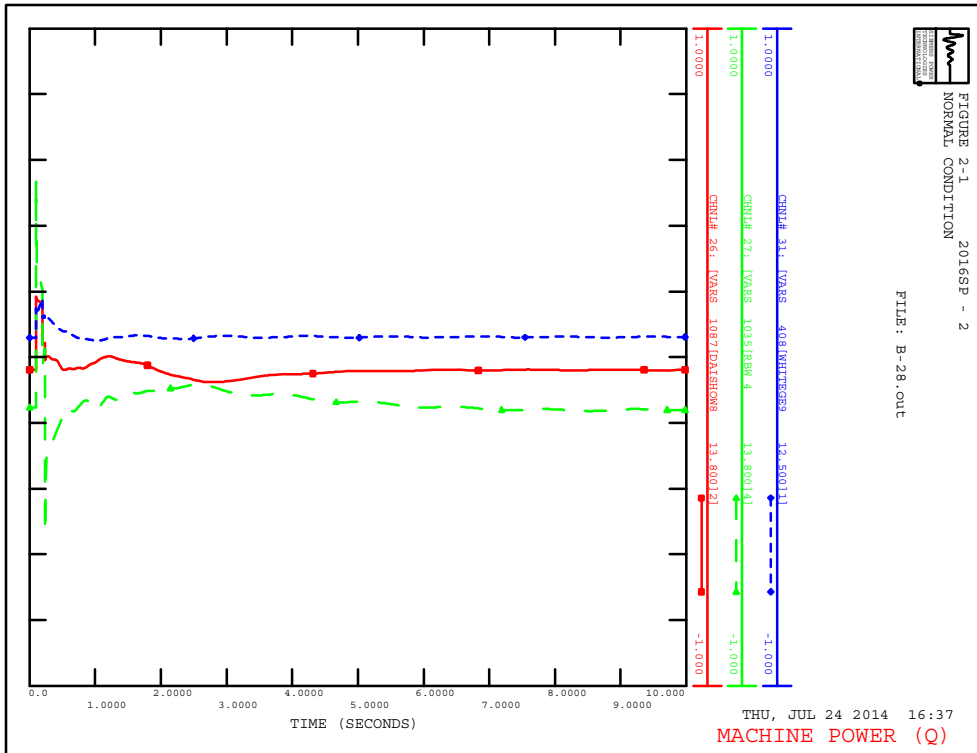


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-28.out
CHNI# 26: [VARS 1087[DAISHOWB 13.80012]
CHNI# 27: [VARS 1035[RBW 4 13.80014]
CHNI# 31: [VARS 408[WHITEGB9 12.50011]
-1.000
1.0000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (Q)

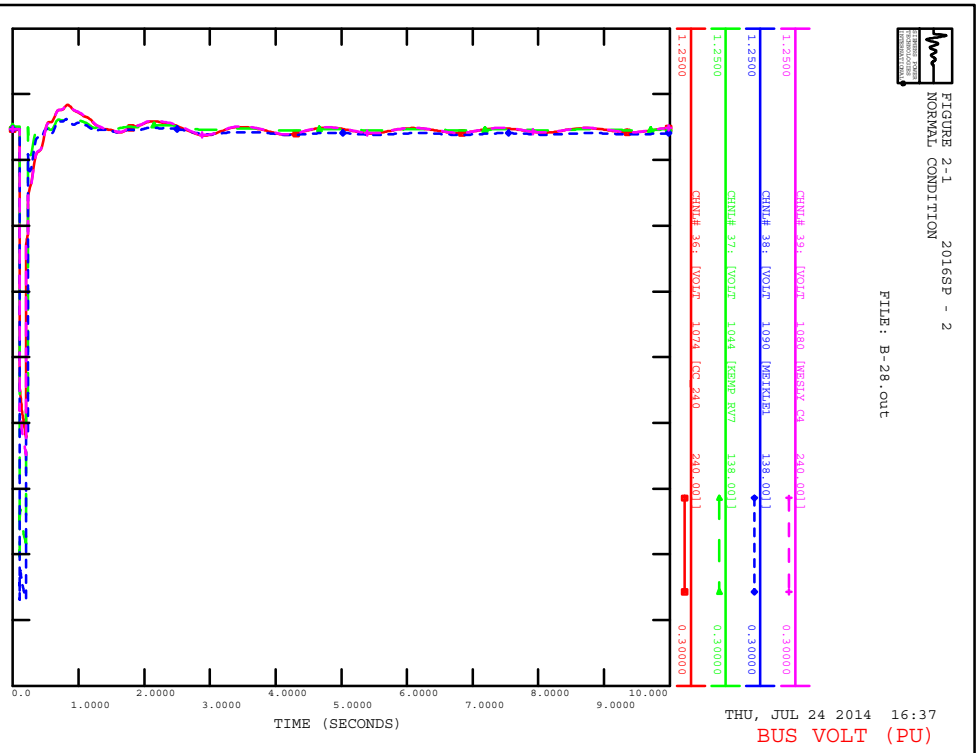


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-28.out
CHNI# 36: [VOLT 1074 [CC 240 240.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.00]
CHNI# 39: [VOLT 1080 [NRSIX C4 240.00]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

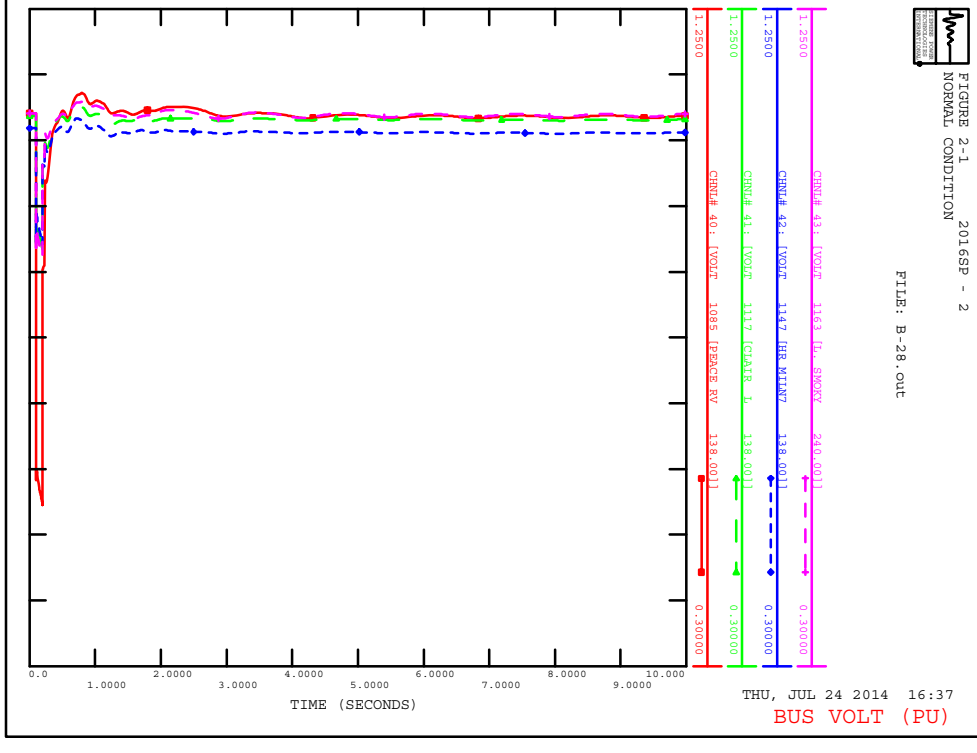


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-28.out
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]
CHNI# 41: [VOLT 1117 [CLAIR L 138.00]
CHNI# 42: [VOLT 1142 [HR MIAN7 138.00]
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

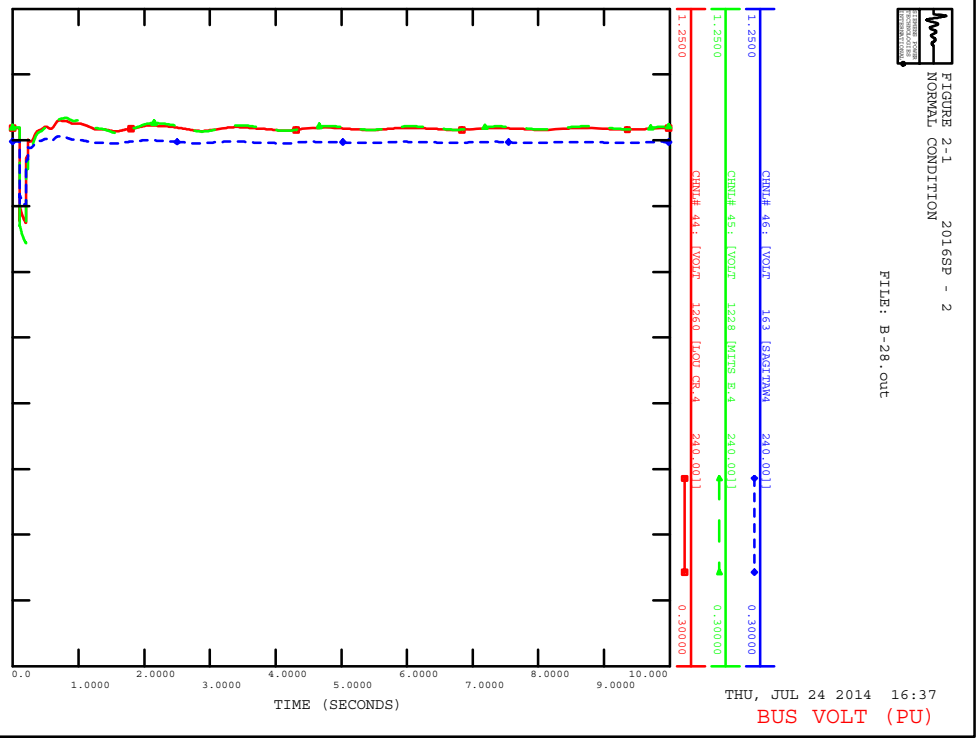


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-28.out
CHNI# 44: [VOLT 1260 [FOX CR 4 240.00]
CHNI# 45: [VOLT 1228 [MITS B 4 240.00]
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

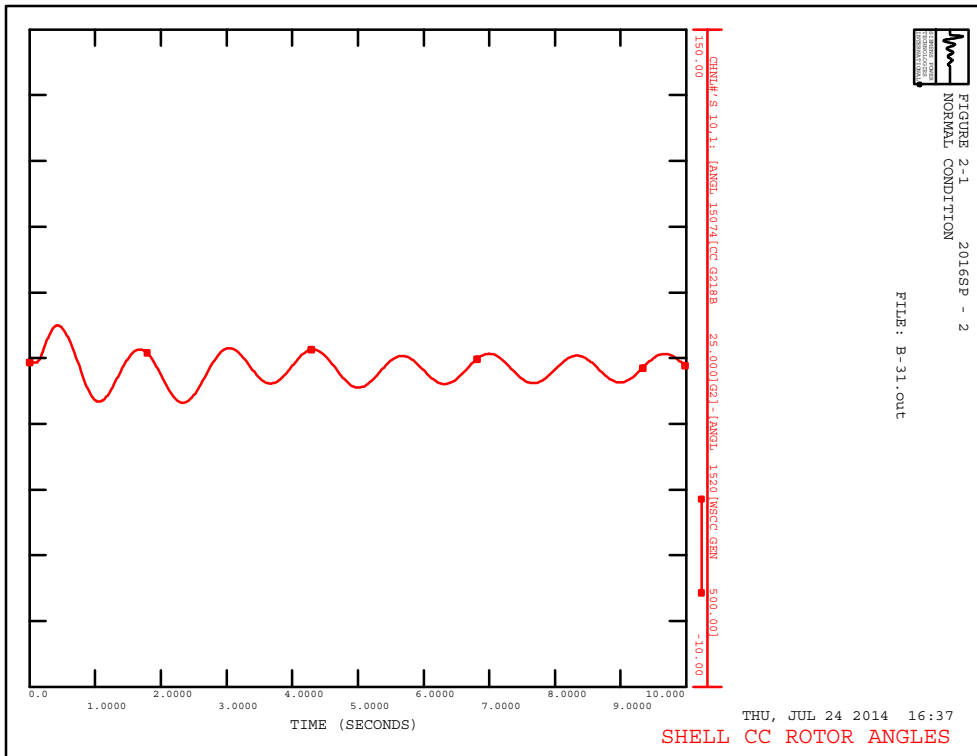


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-31.out
CHNL# 10.1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
-50.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC ROTOR ANGLES

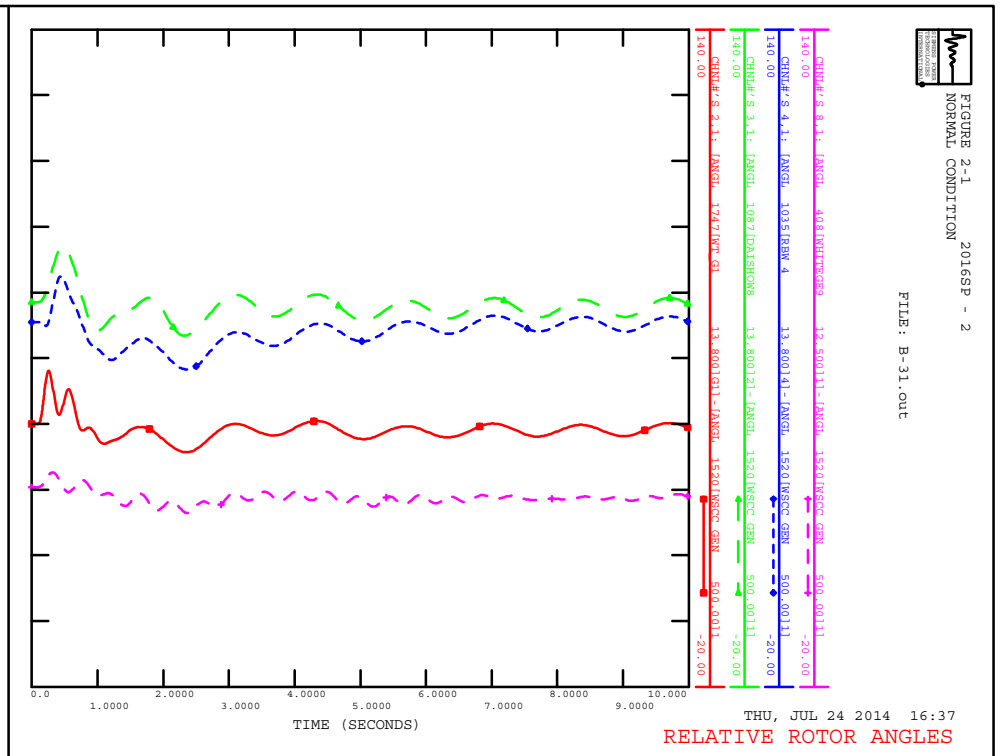


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-31.out
CHNL# 8.1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 4.1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3.1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 2.1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
RELATIVE ROTOR ANGLES

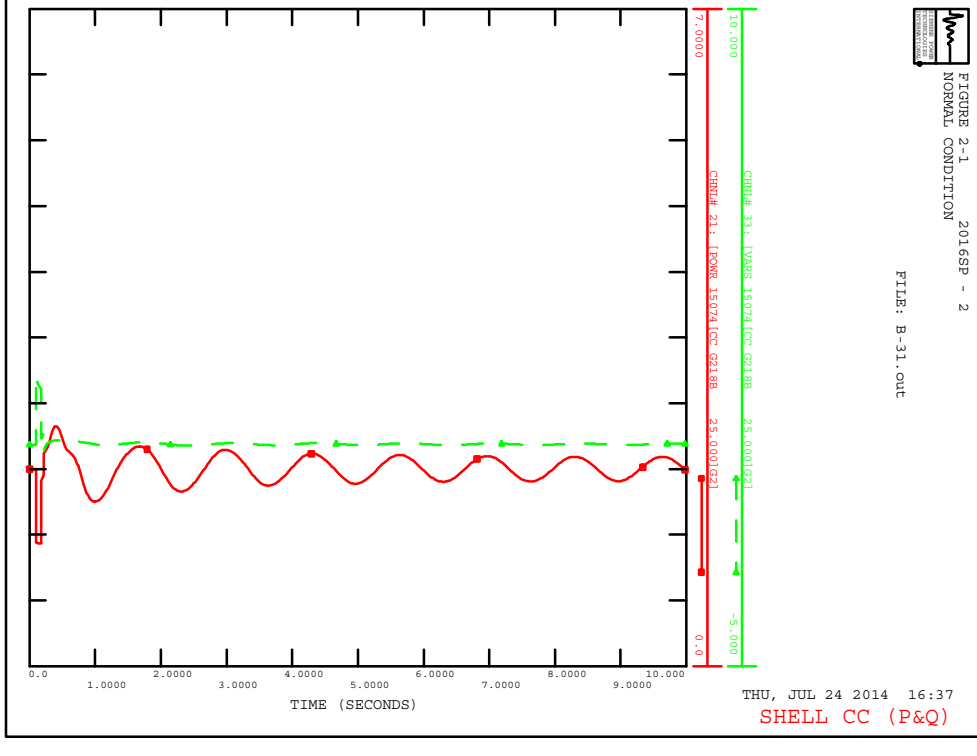


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-31.out
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC (P&Q)

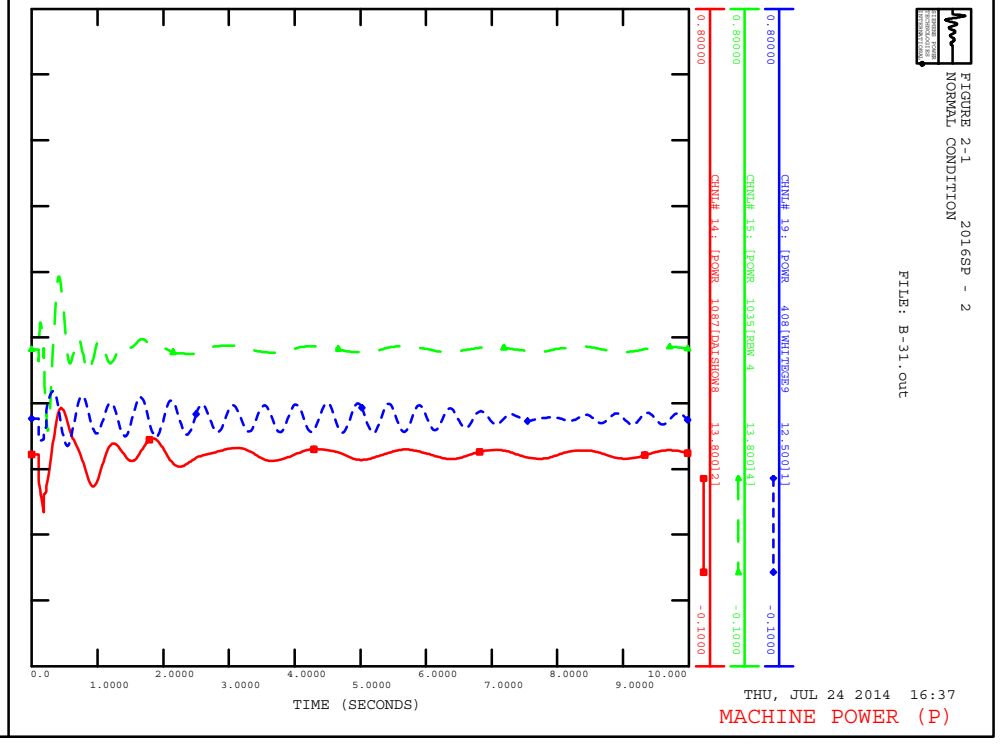


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-31.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (P)

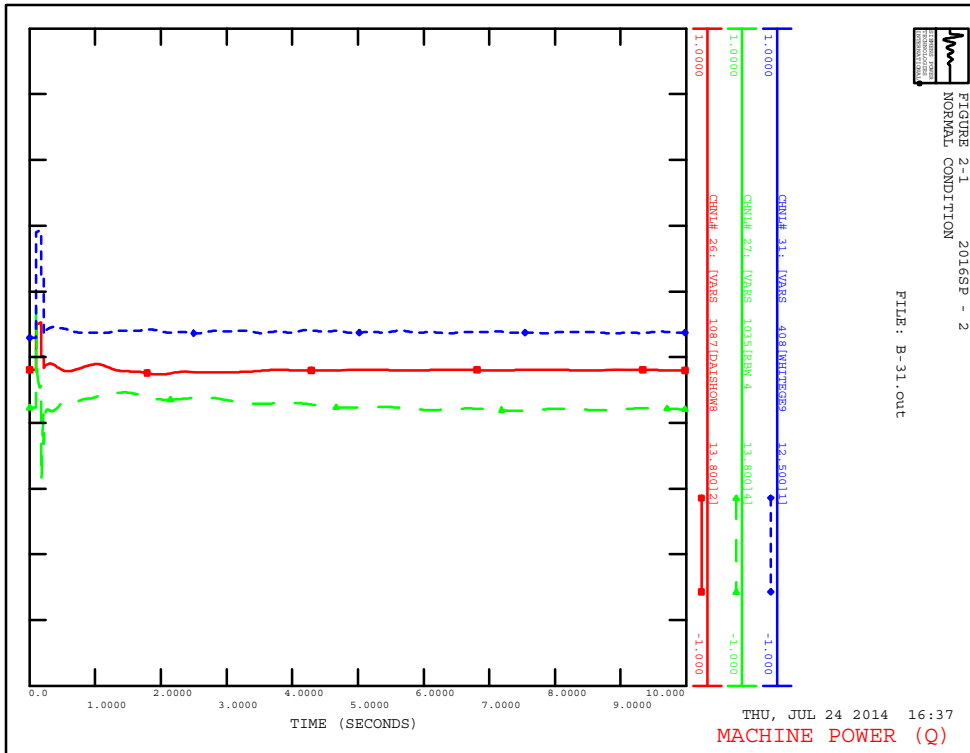


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-31.out
CHNI# 31: [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27: [VARS 1035[RBW 4 13.800]4]
CHNI# 26: [VARS 1087[DAISHOWB 13.800]2]
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (Q)

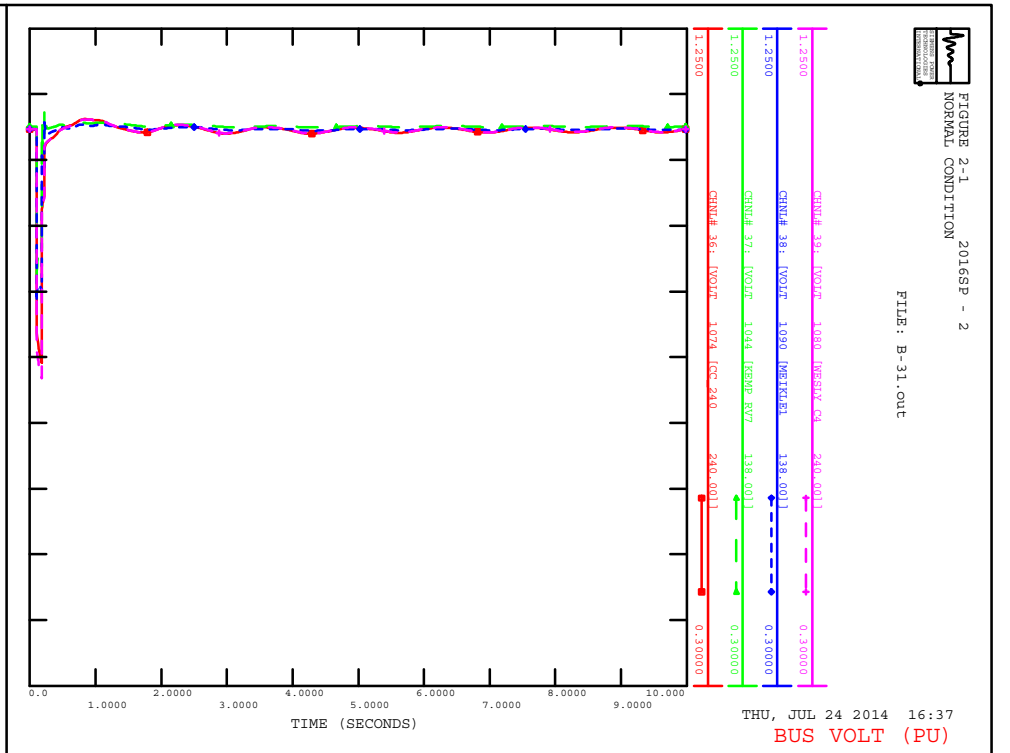


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-31.out
CHNI# 39: [VOLT 1080 [MESIK C4 240.00]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 36: [VOLT 1074 [CC 240 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

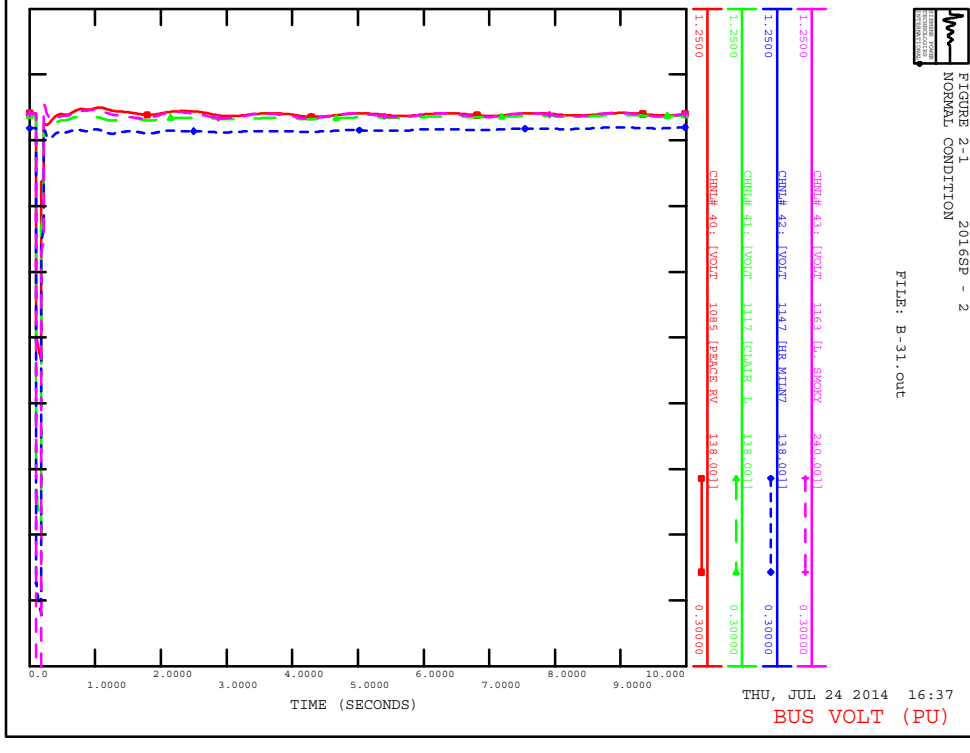


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-31.out
CHNI# 43: [VOLT 1163 [W. SMOKY 240.00]
CHNI# 42: [VOLT 1142 [KR MLIN7 138.00]
CHNI# 41: [VOLT 1117 [CHAIR L 138.00]
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

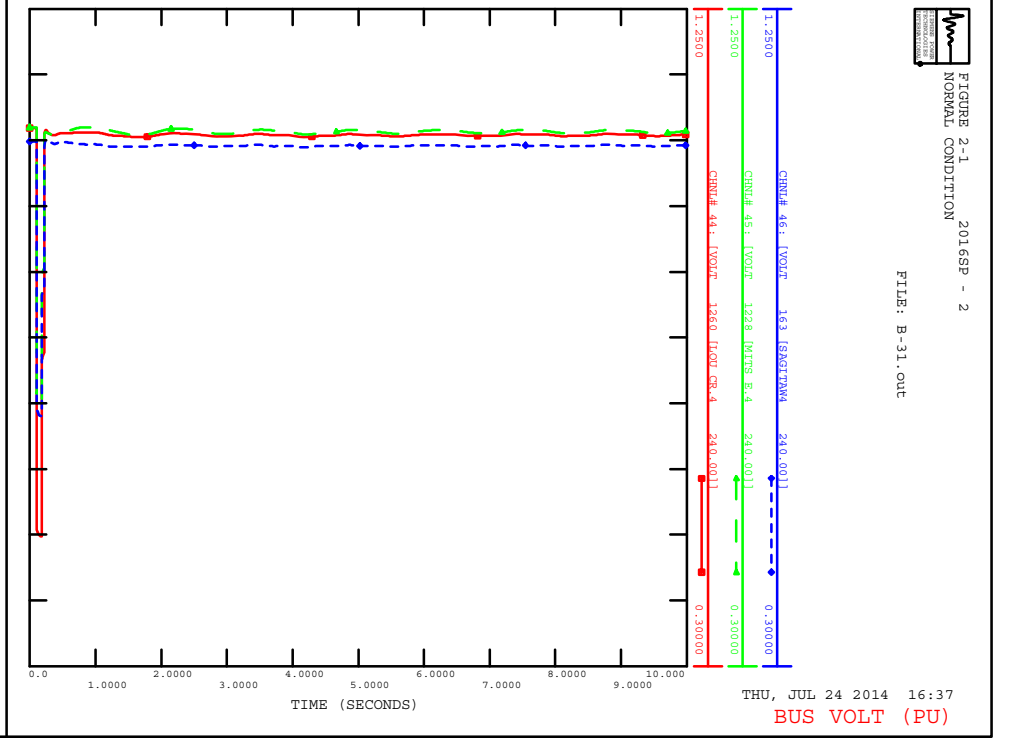


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-31.out
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
CHNI# 45: [VOLT 1228 [MTS B-4 240.00]
CHNI# 44: [VOLT 1260 [FOX CR-4 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

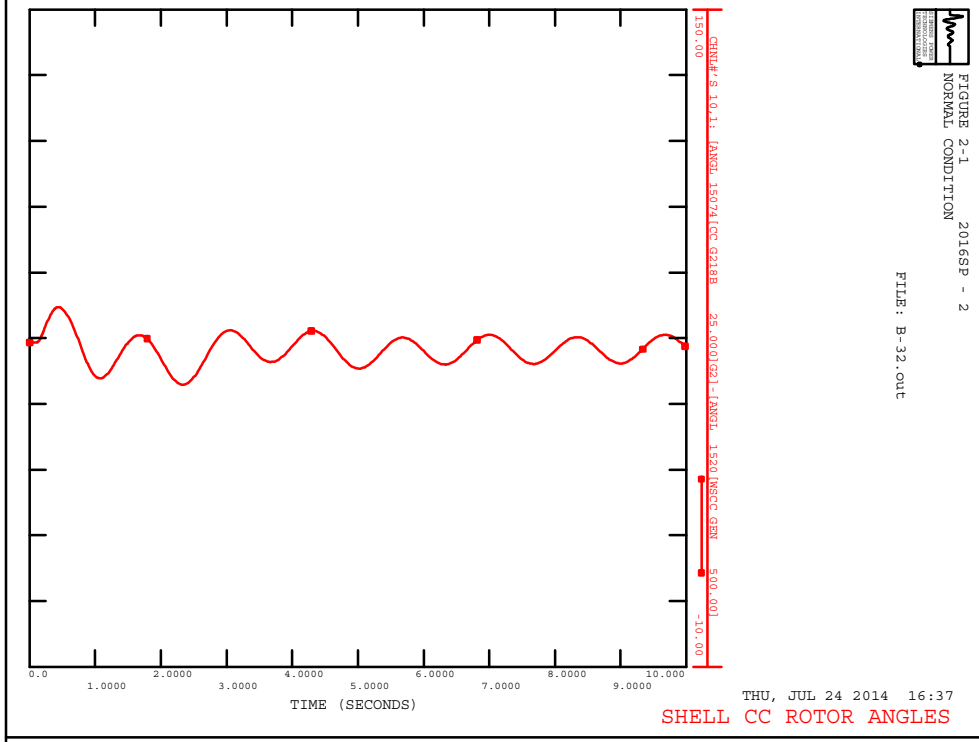


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-32.out
CHNU#'S 10,1: [ANGL 15074[CC G218B
25.000[G2]-[ANGL 1520[NSCC GEN
-500.00]
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC ROTOR ANGLES

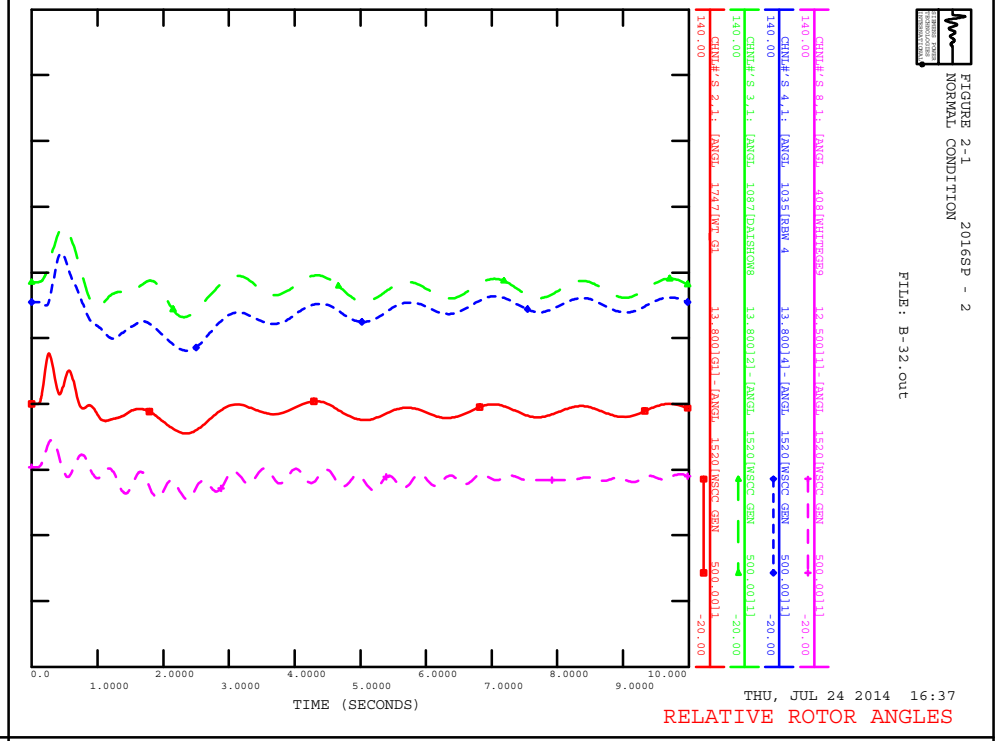


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-32.out
CHNU#'S 8,1: [ANGL 408[WHITESB9
12.500[1]-[ANGL 1520[NSCC GEN
-500.00]
CHNU#'S 4,1: [ANGL 1035[RBM 4
13.800[4]-[ANGL 1520[NSCC GEN
-500.00]
CHNU#'S 3,1: [ANGL 1087[DAISHON8
13.800[2]-[ANGL 1520[NSCC GEN
-500.00]
CHNU#'S 2,1: [ANGL 1747[WT G1
13.800[G1]-[ANGL 1520[NSCC GEN
-500.00]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
RELATIVE ROTOR ANGLES

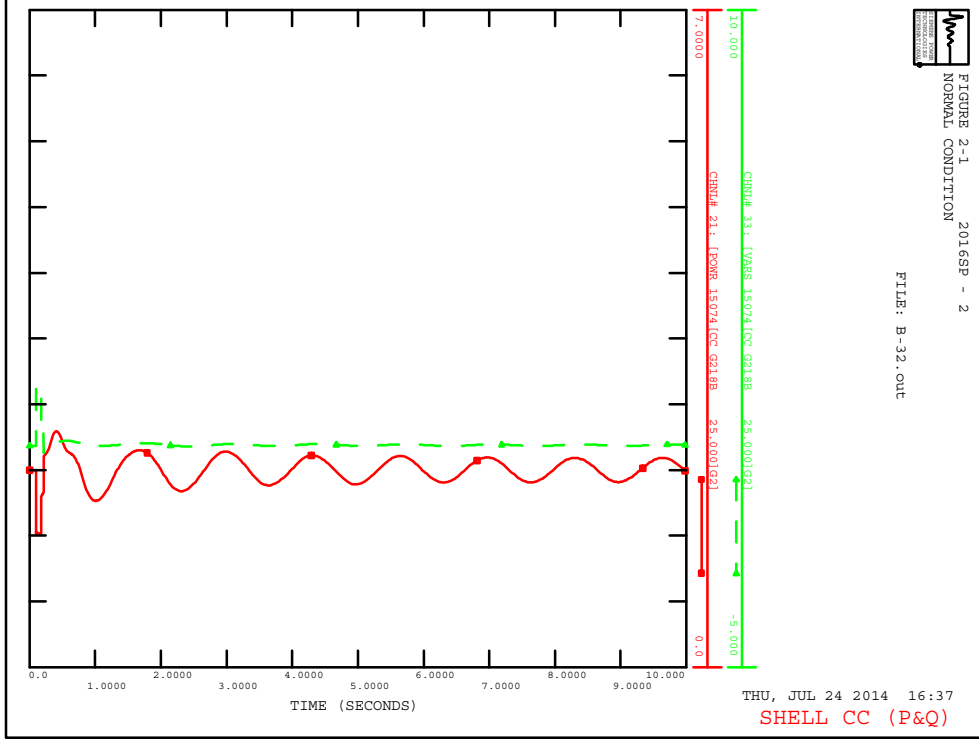


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-32.out
CHNU# 33: [VARS 15074[CC G218B
25.000[G2]
CHNU# 21: [POWR 15074[CC G218B
25.000[G2]
10.000
-5.000
7.0000
0.0
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC (P&Q)

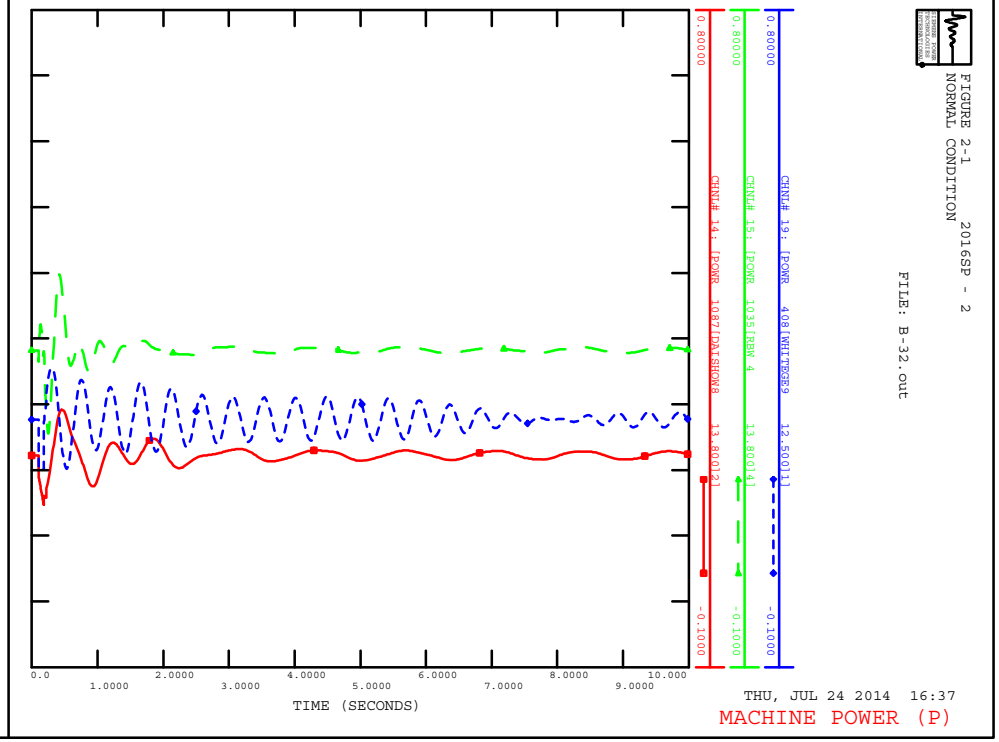


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-32.out
CHNU# 19: [POWR 408[WHITESB9
12.500[1]
CHNU# 15: [POWR 1035[RBM 4
13.800[4]
CHNU# 14: [POWR 1087[DAISHON8
13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (P)

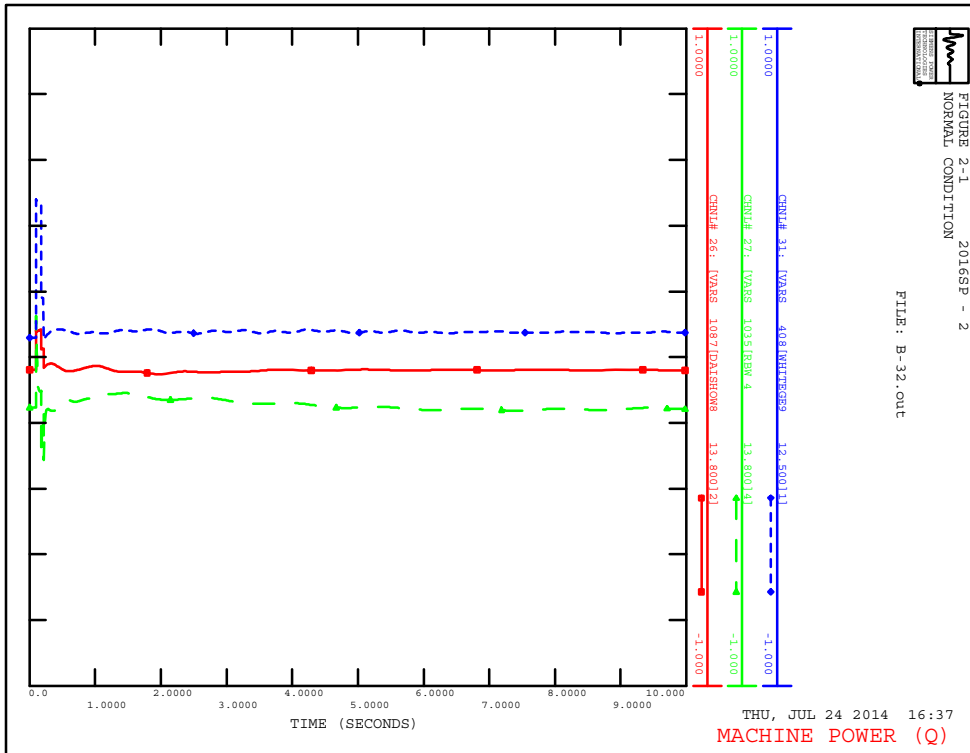


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-32.out
CHNI# 26: [VARS 1087 [DAISHOW8 13.800[2]
CHNI# 27: [VARS 1035 [RBW 4 13.800[4]
CHNI# 31: [VARS 408 [WHITEGB9 12.500[1]
1.0000
-1.000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (Q)

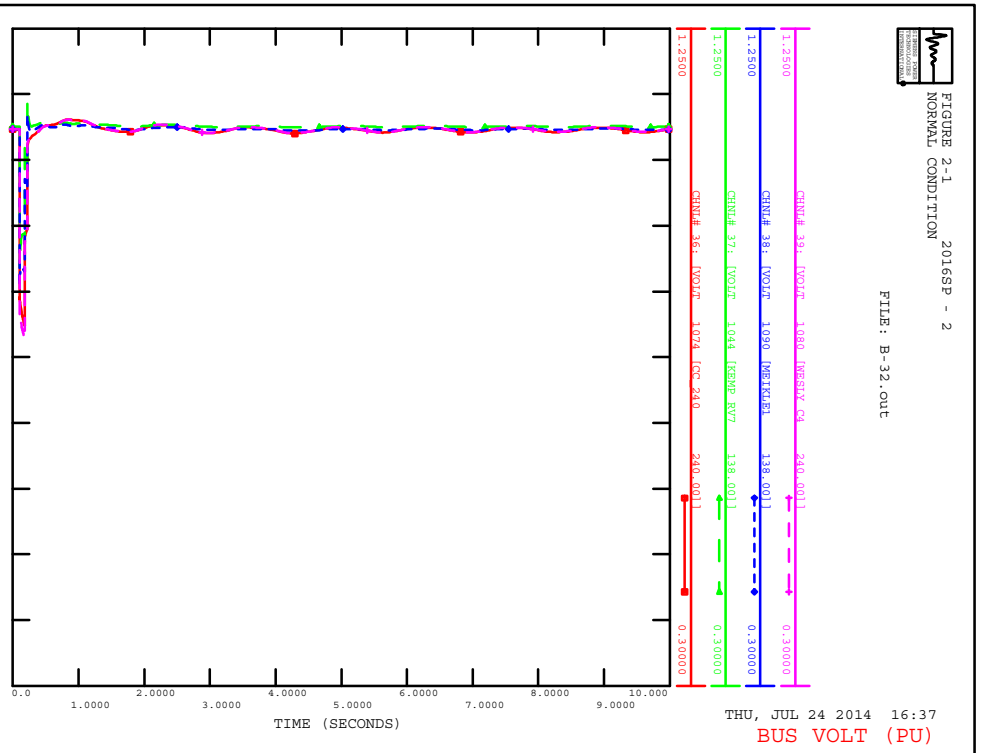


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-32.out
CHNI# 36: [VOLT 1074 [CC 240 240.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.00]
CHNI# 39: [VOLT 1080 [MESIK C4 240.00]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

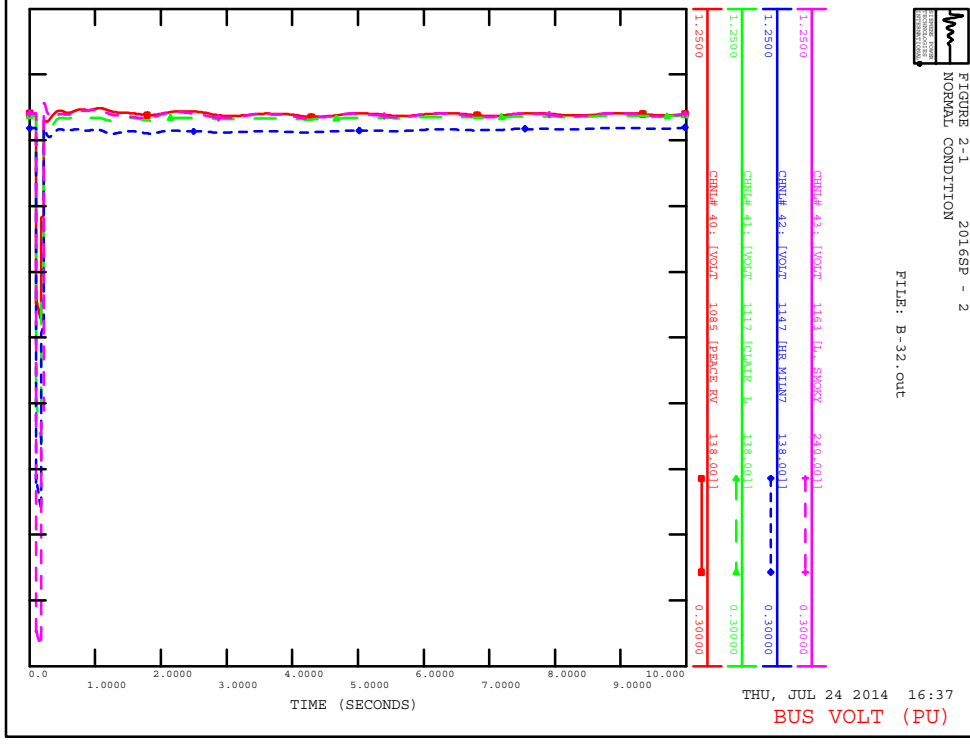


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-32.out
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]
CHNI# 41: [VOLT 1117 [CLAIR 1 138.00]
CHNI# 42: [VOLT 1142 [HR MIAN7 138.00]
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

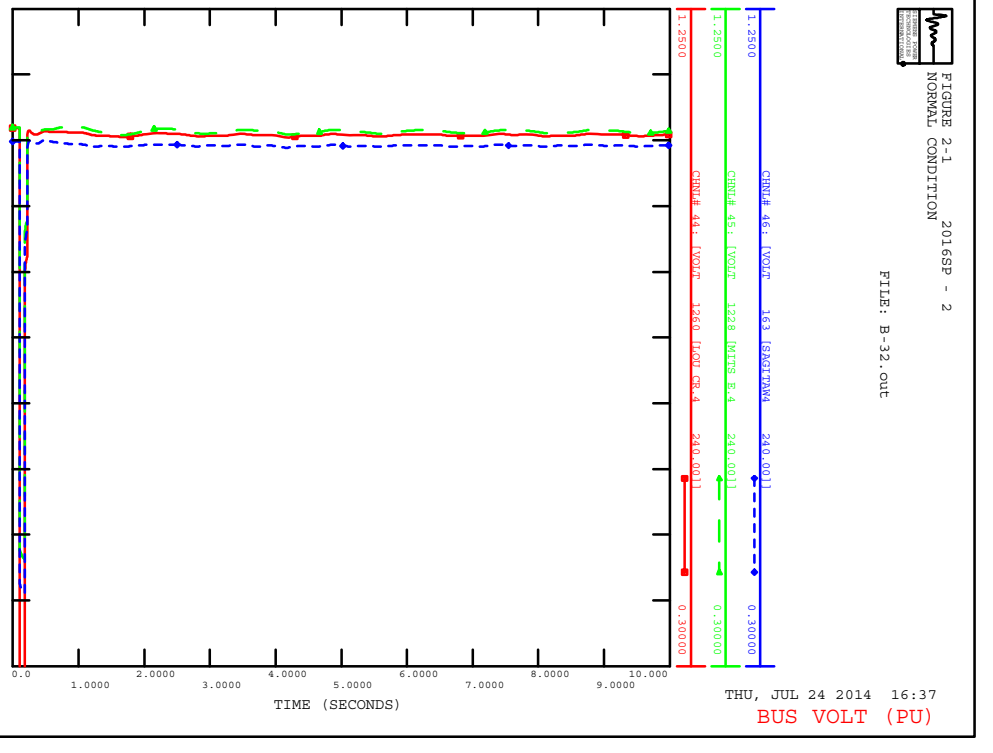


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-32.out
CHNI# 44: [VOLT 1260 [FOX CR 4 240.00]
CHNI# 45: [VOLT 1228 [MITS B-4 240.00]
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

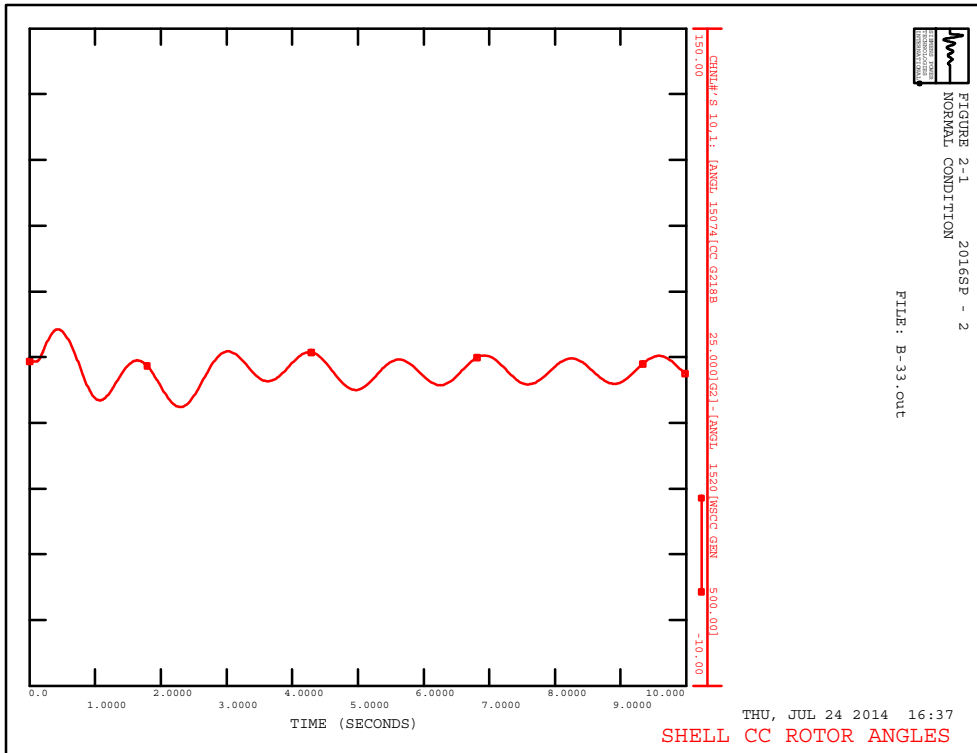


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-33.out
CHNL# 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
-50.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC ROTOR ANGLES

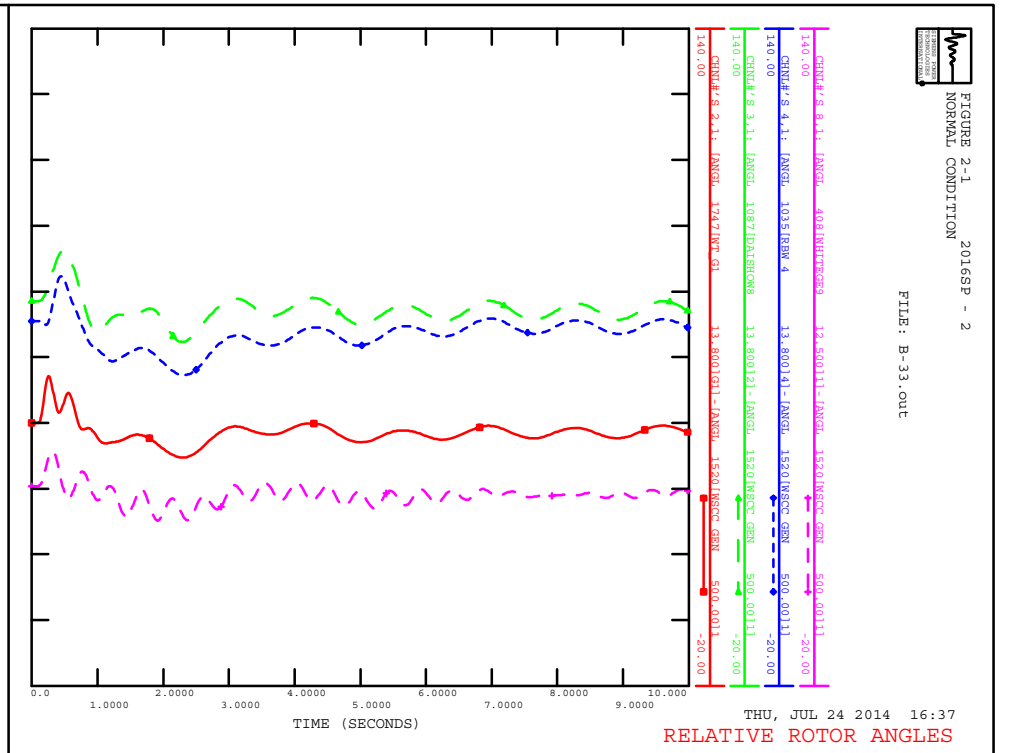


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-33.out
CHNL# 8,1: [ANGL 408[WHITEGE9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3,1: [ANGL 1087[DAISHOW8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
RELATIVE ROTOR ANGLES

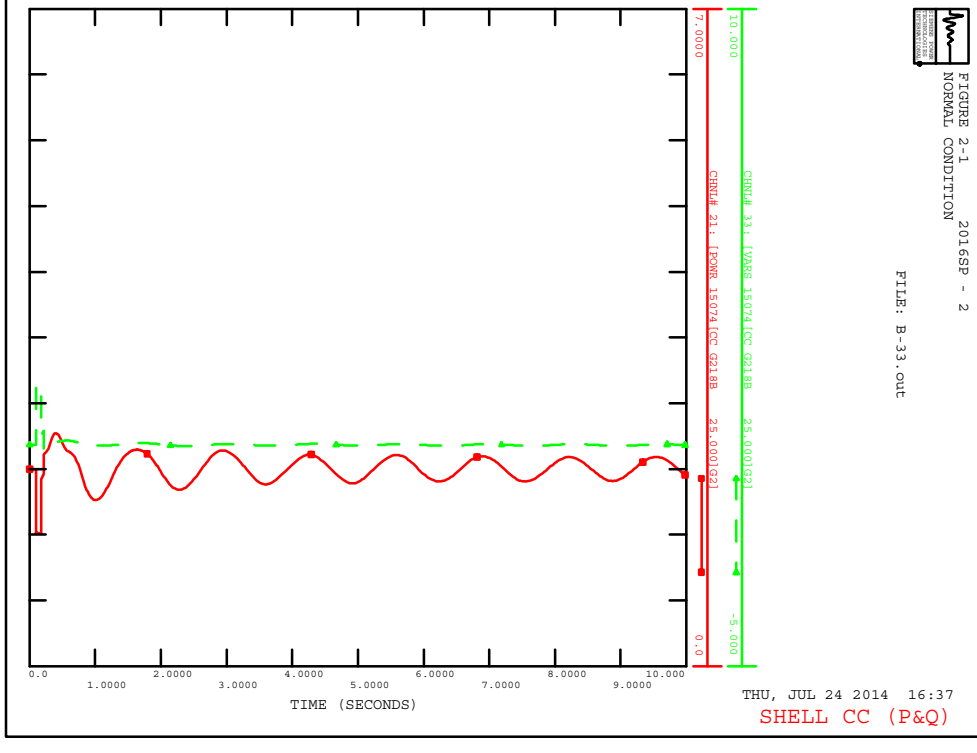


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-33.out
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC (P&Q)

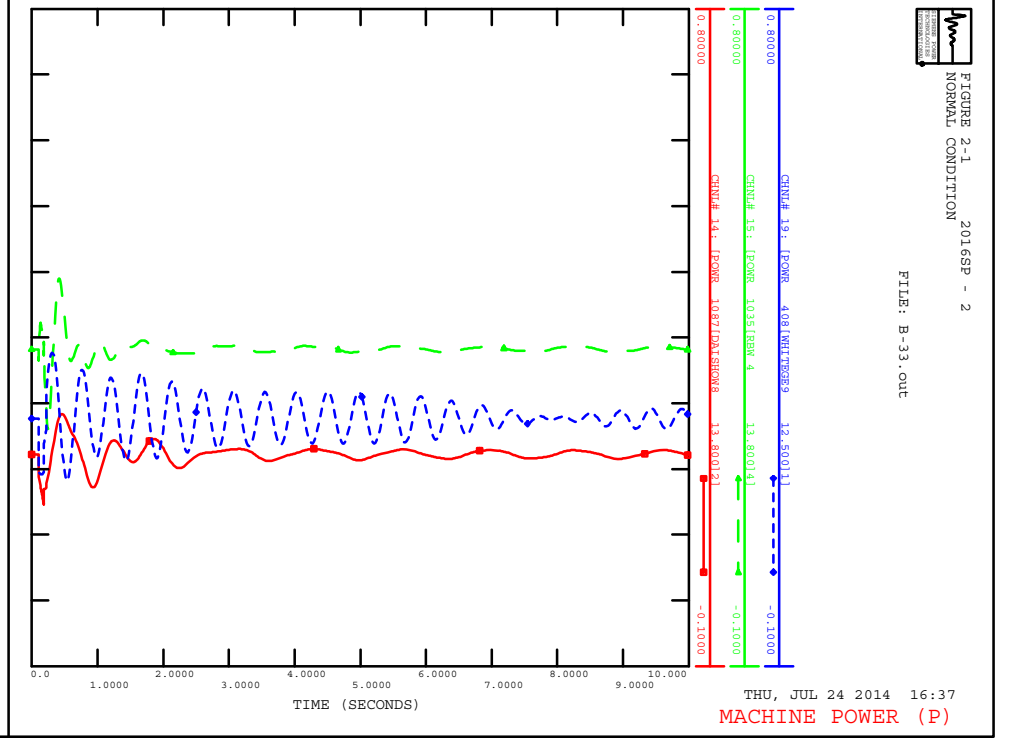


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-33.out
CHNL# 19: [POWR 408[WHITEGE9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHOW8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (P)

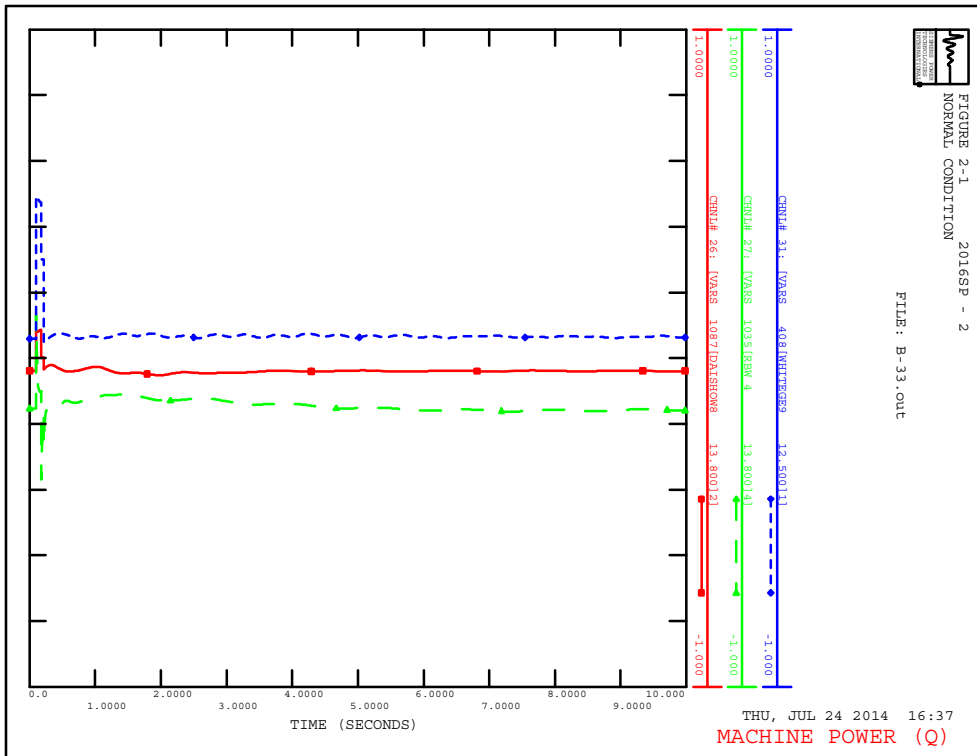


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-33.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (Q)

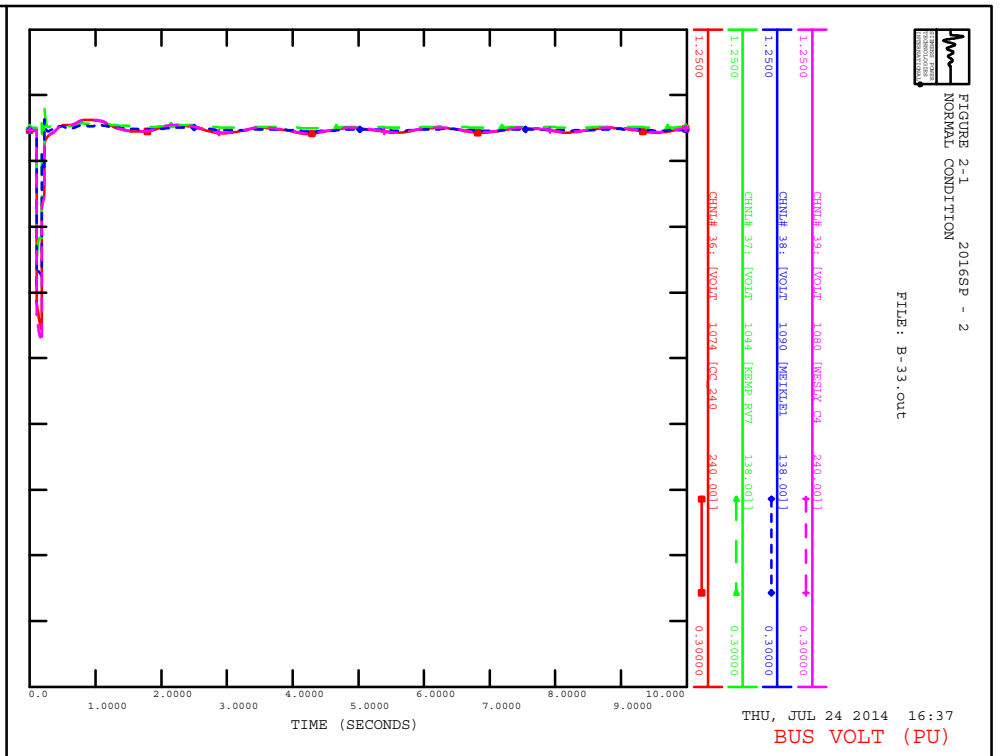


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-33.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

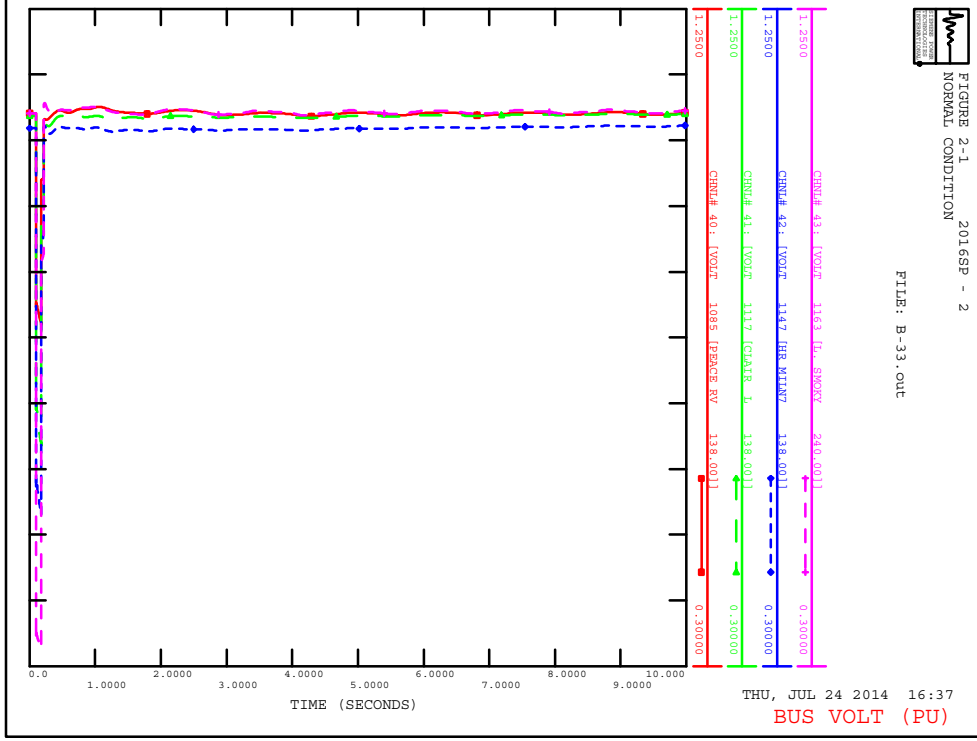


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-33.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

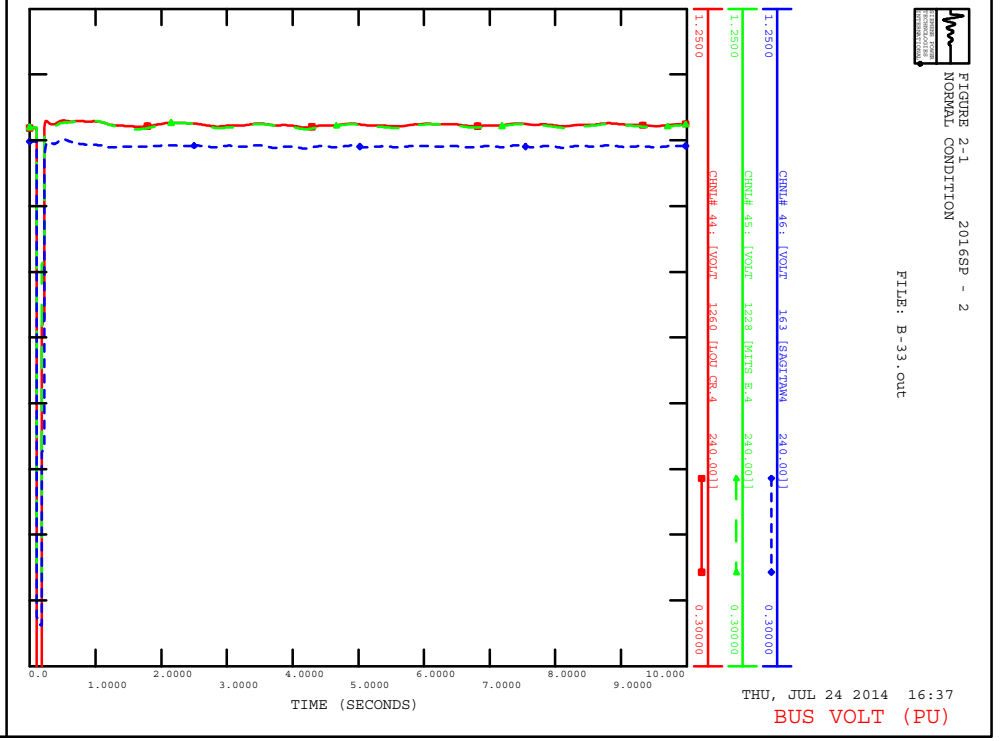


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-33.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

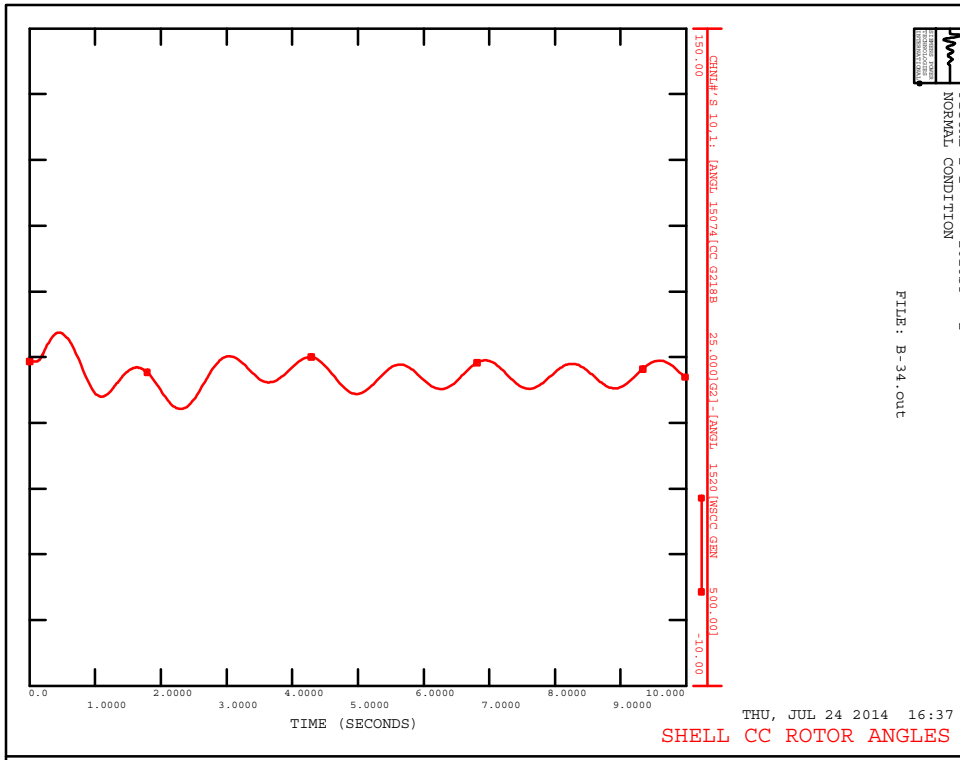


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-34.out
CHNU#'S 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC ROTOR ANGLES

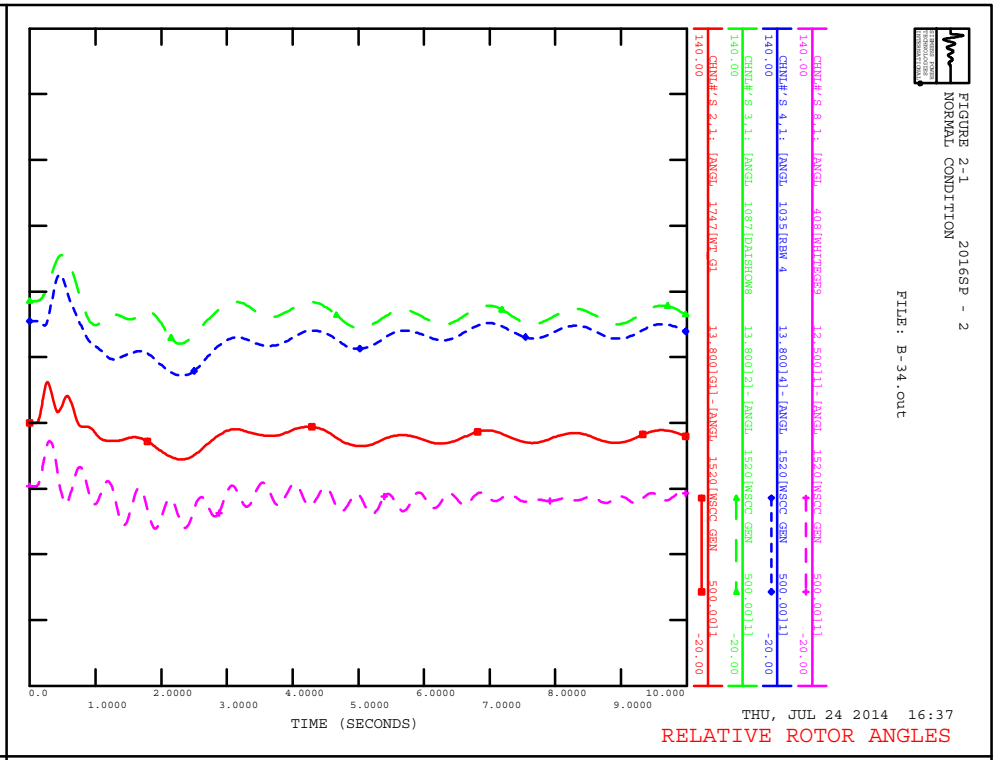


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-34.out
CHNU#'S 8,1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 3,1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
RELATIVE ROTOR ANGLES

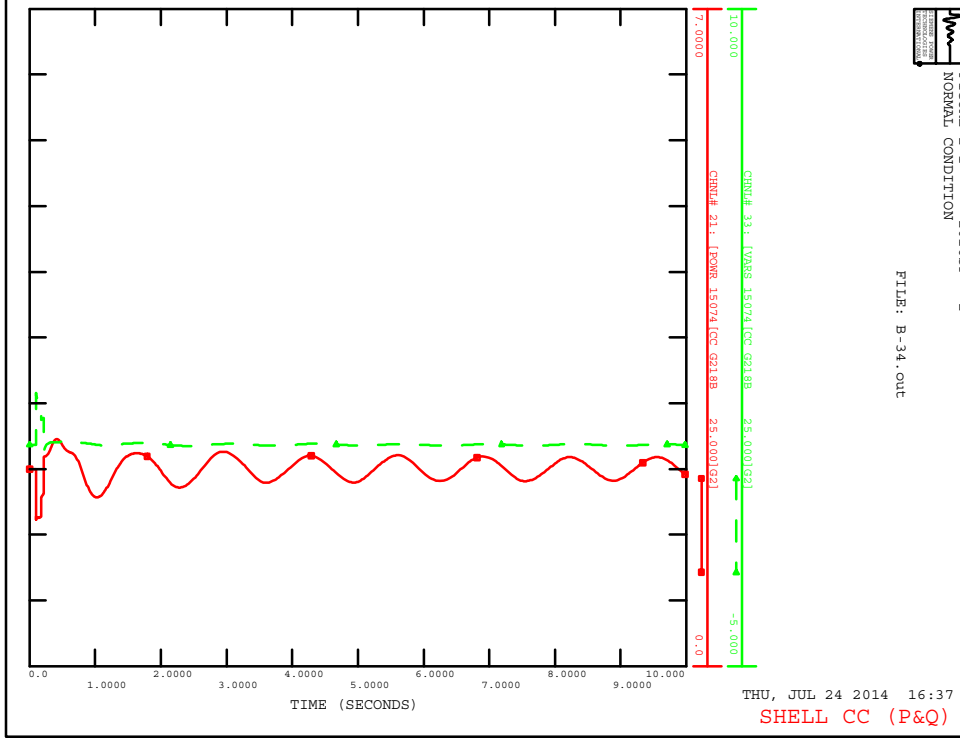


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-34.out
CHNU# 33: [VARS 15074[CC G218B 25.000[G2]
CHNU# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC (P&Q)

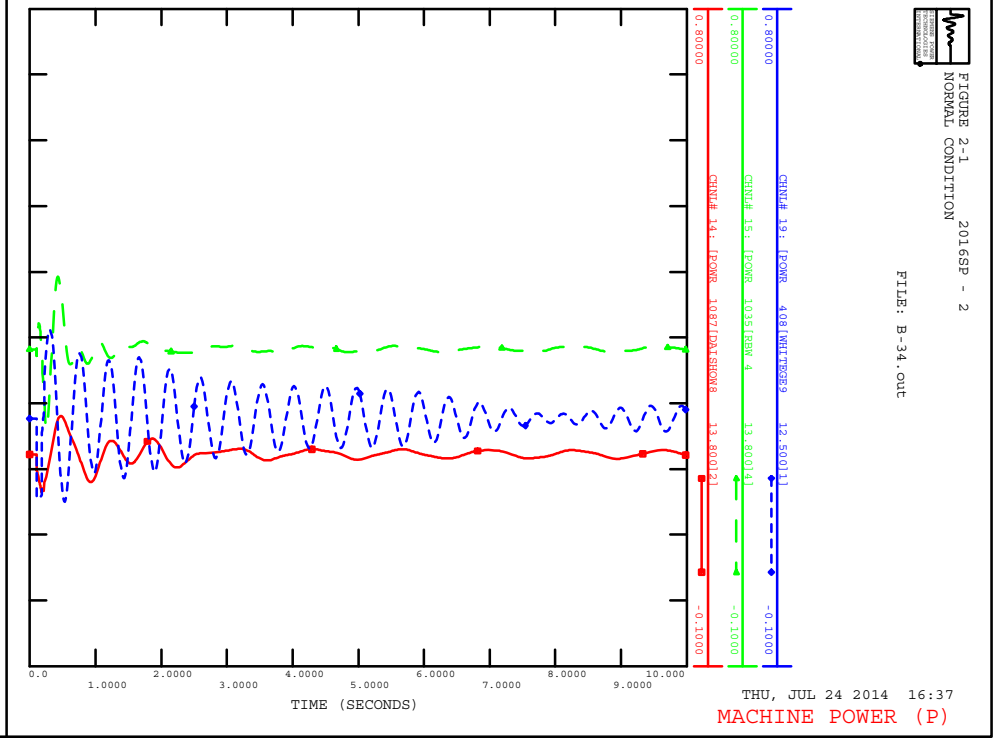


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-34.out
CHNU# 19: [POWR 408[WHITESB9 12.500[1]
CHNU# 15: [POWR 1035[RBM 4 13.800[4]
CHNU# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (P)

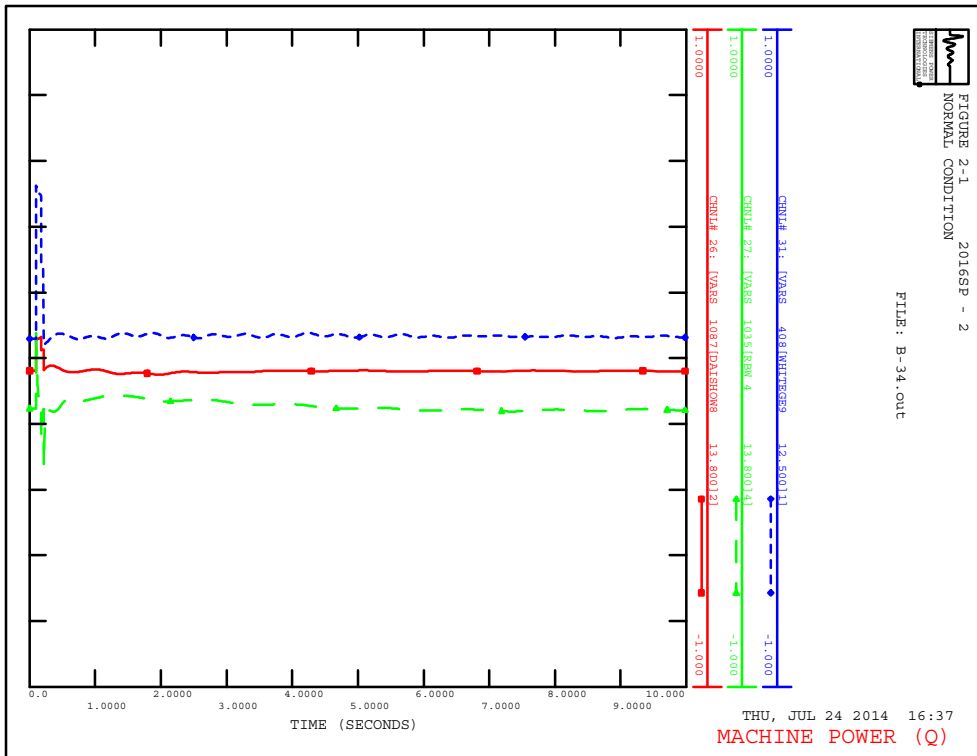


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-34.out
CHNI# 26: [VARS 1087 [DAISHOW8 13.800[2]
CHNI# 27: [VARS 1035 [RBW 4 13.800[4]
CHNI# 31: [VARS 408 [WHITEGB9 12.500[1]
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (Q)

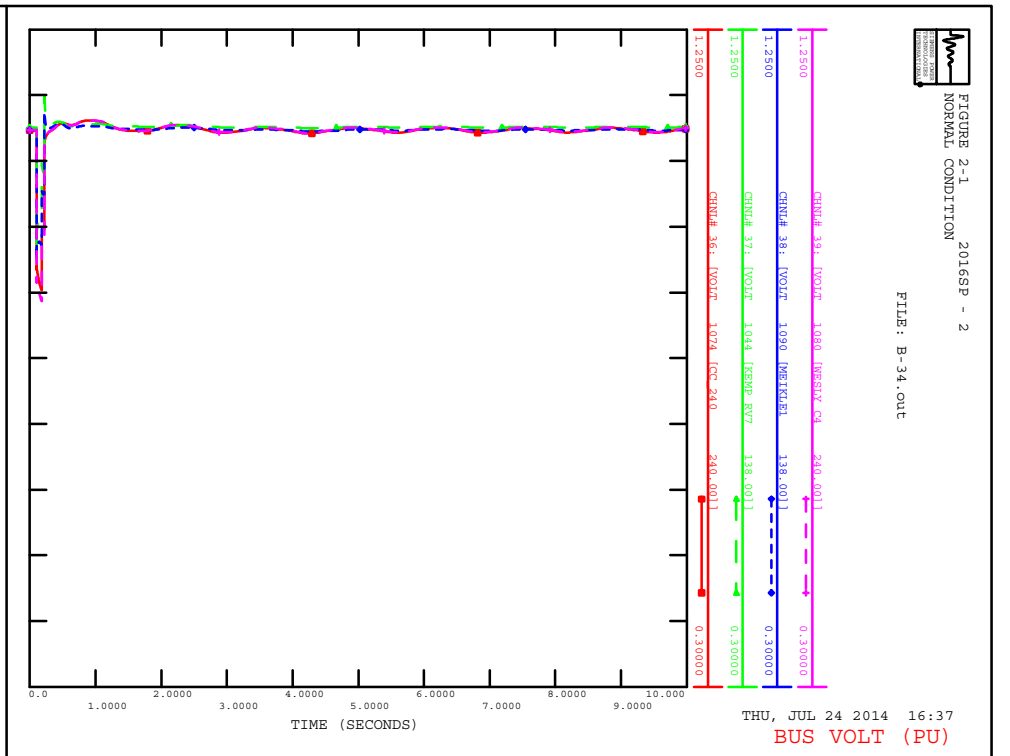


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-34.out
CHNI# 36: [VOLT 1074 [CC 240 240.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.00]
CHNI# 39: [VOLT 1080 [MESIC C4 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

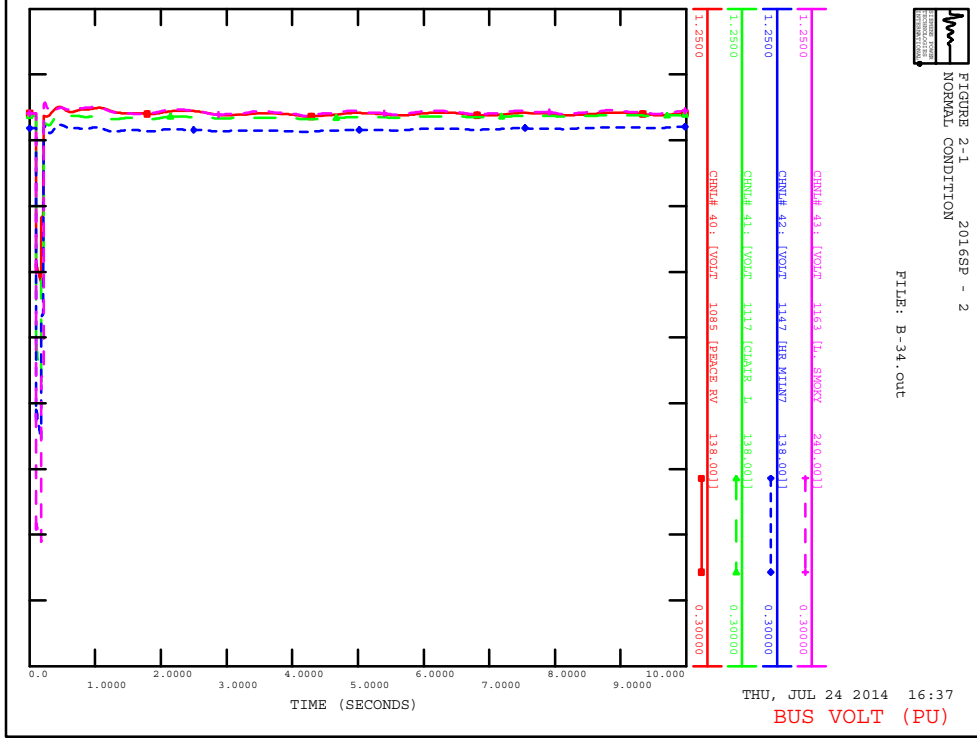


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-34.out
CHNI# 40: [VOLT 1085 [PEARCE RV 138.00]
CHNI# 41: [VOLT 1117 [CLAIR L 138.00]
CHNI# 42: [VOLT 1142 [RB MIAN7 138.00]
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

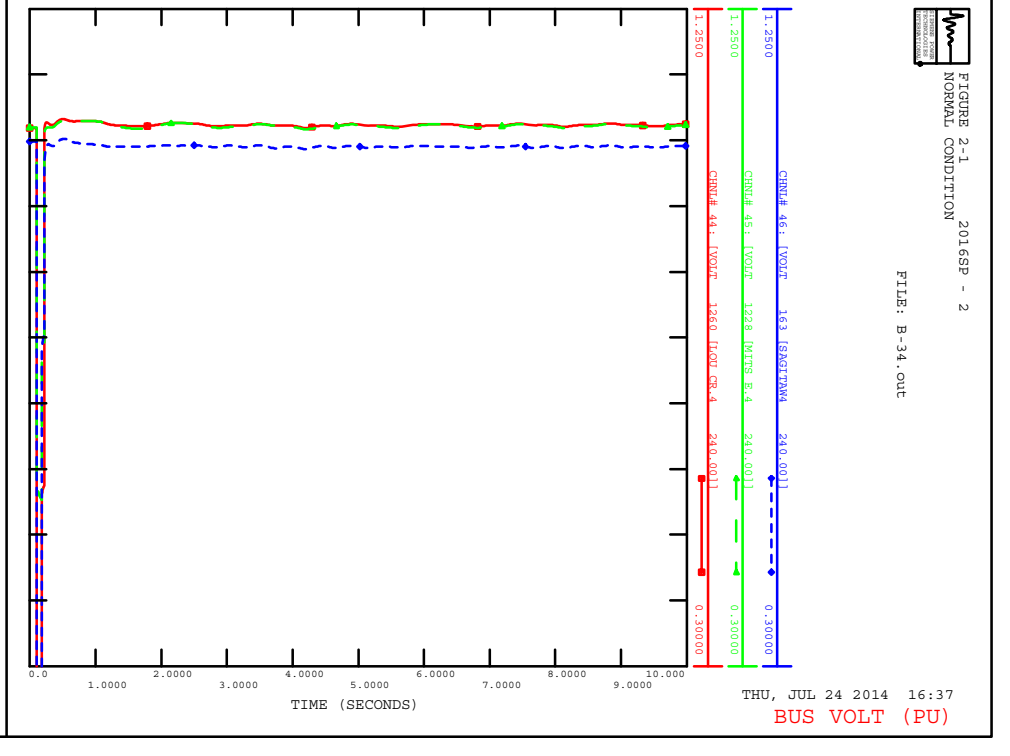


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-34.out
CHNI# 44: [VOLT 1260 [FOY CR 4 240.00]
CHNI# 45: [VOLT 1228 [MTS B-4 240.00]
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

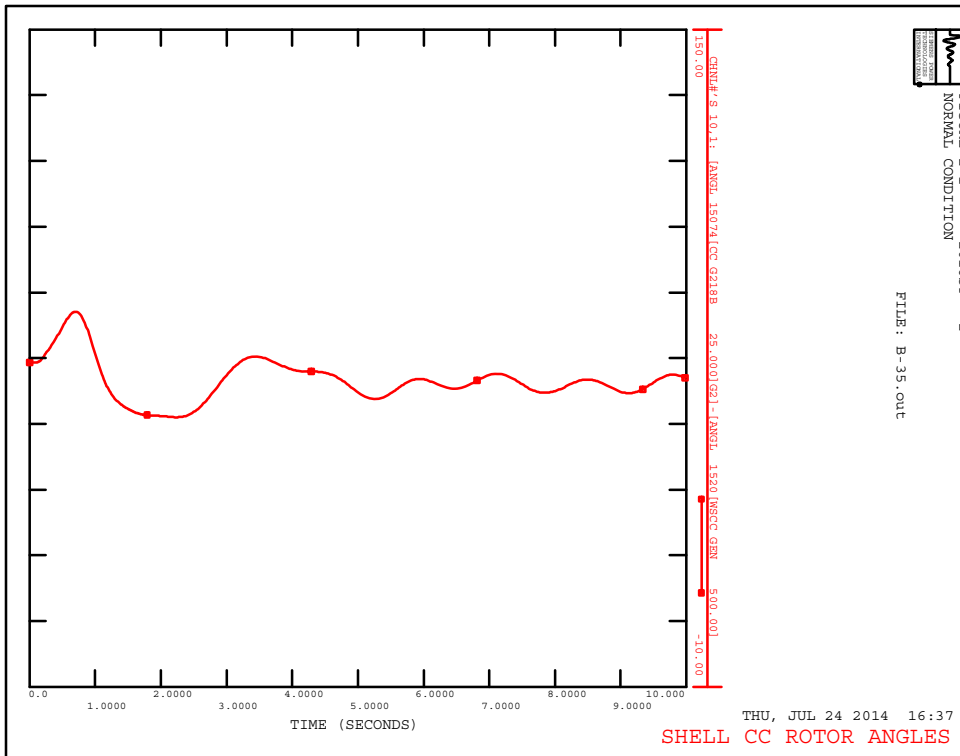


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-35.out
CHNU#'S 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC ROTOR ANGLES

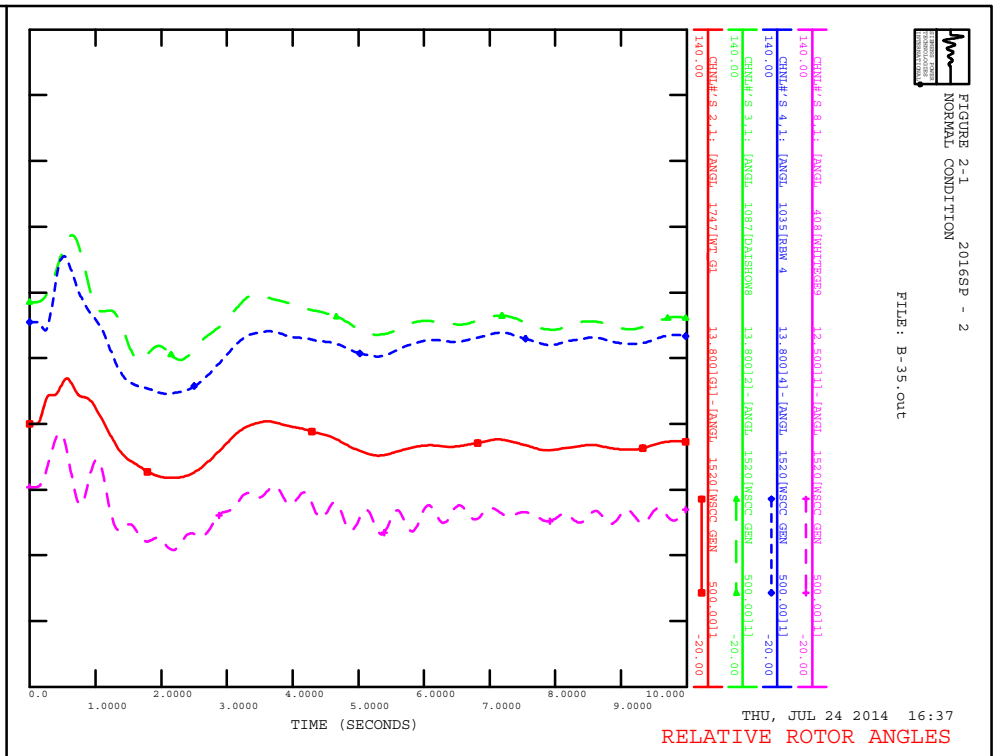


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-35.out
CHNU#'S 8,1: [ANGL 408[WHITEGE9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 3,1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
RELATIVE ROTOR ANGLES

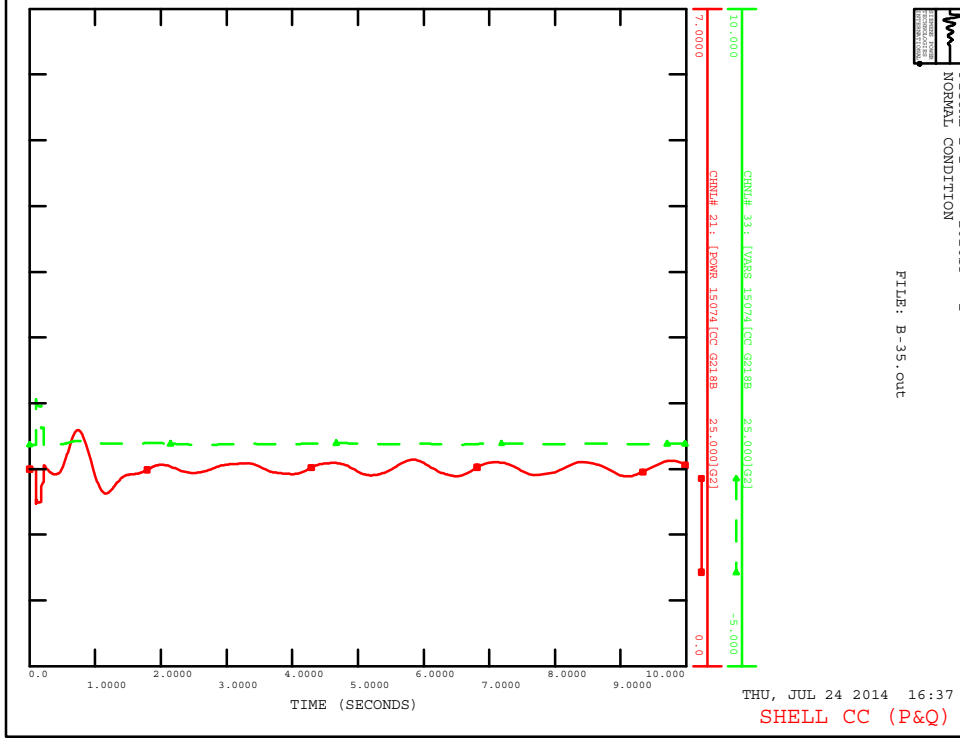


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-35.out
CHNU# 33: [VARS 15074[CC G218B 25.000[G2]
CHNU# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC (P&Q)

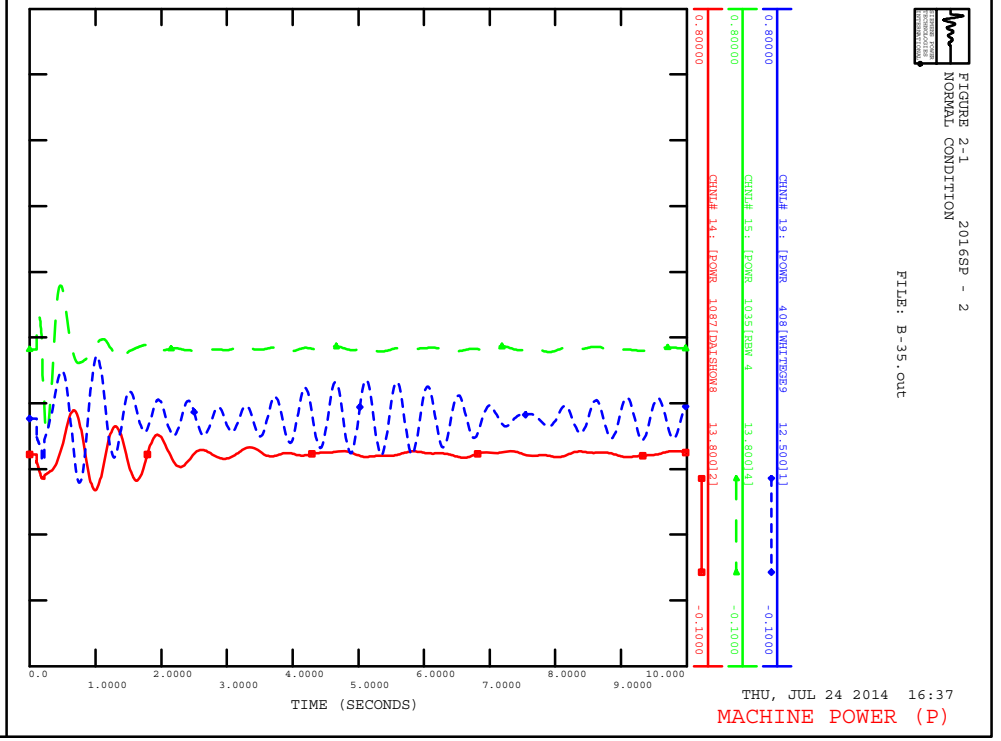


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-35.out
CHNU# 19: [POWR 408[WHITEGE9 12.500[1]
CHNU# 15: [POWR 1035[RBM 4 13.800[4]
CHNU# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (P)

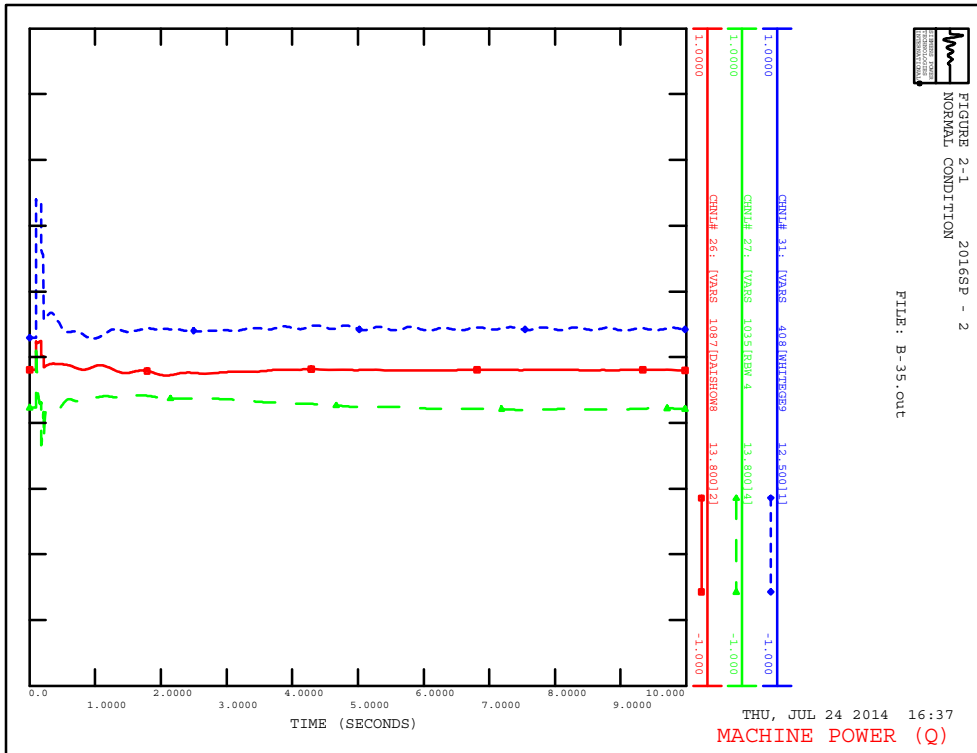


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-35.out
THU, JUL 24 2014 16:37
MACHINE POWER (Q)
TIME (SECONDS)

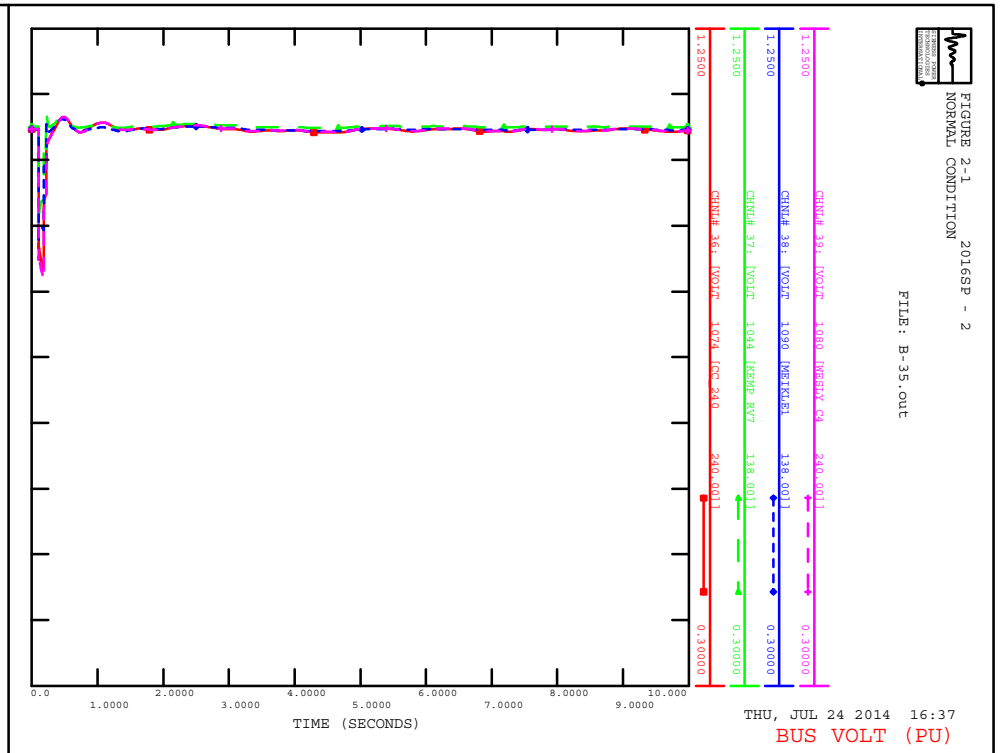


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-35.out
THU, JUL 24 2014 16:37
BUS VOLT (PU)
TIME (SECONDS)

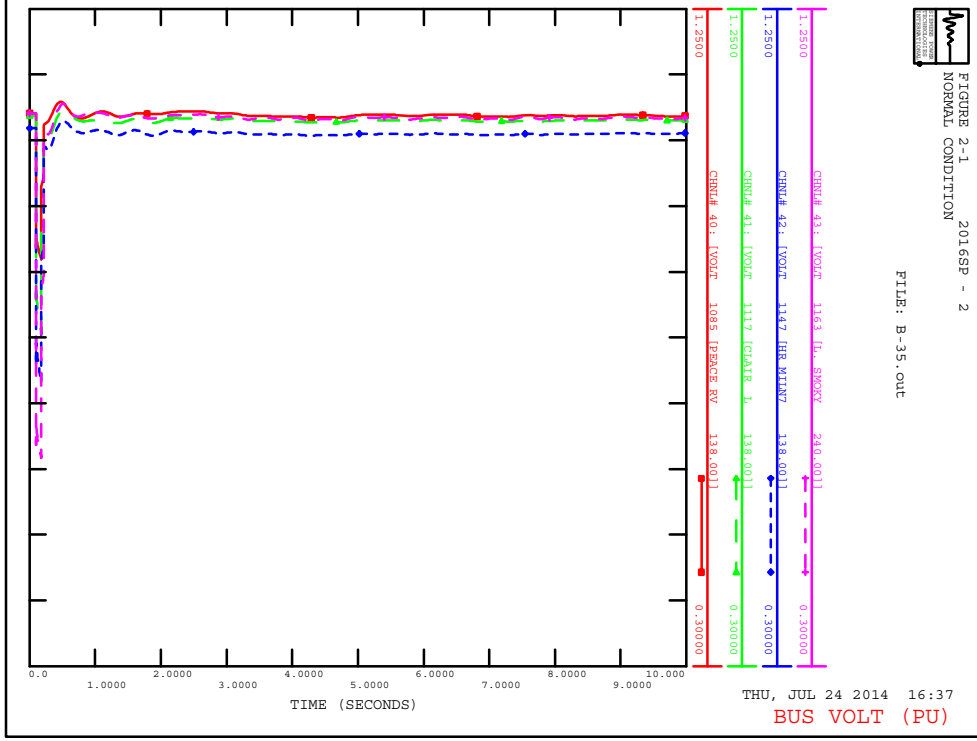


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-35.out
THU, JUL 24 2014 16:37
BUS VOLT (PU)
TIME (SECONDS)

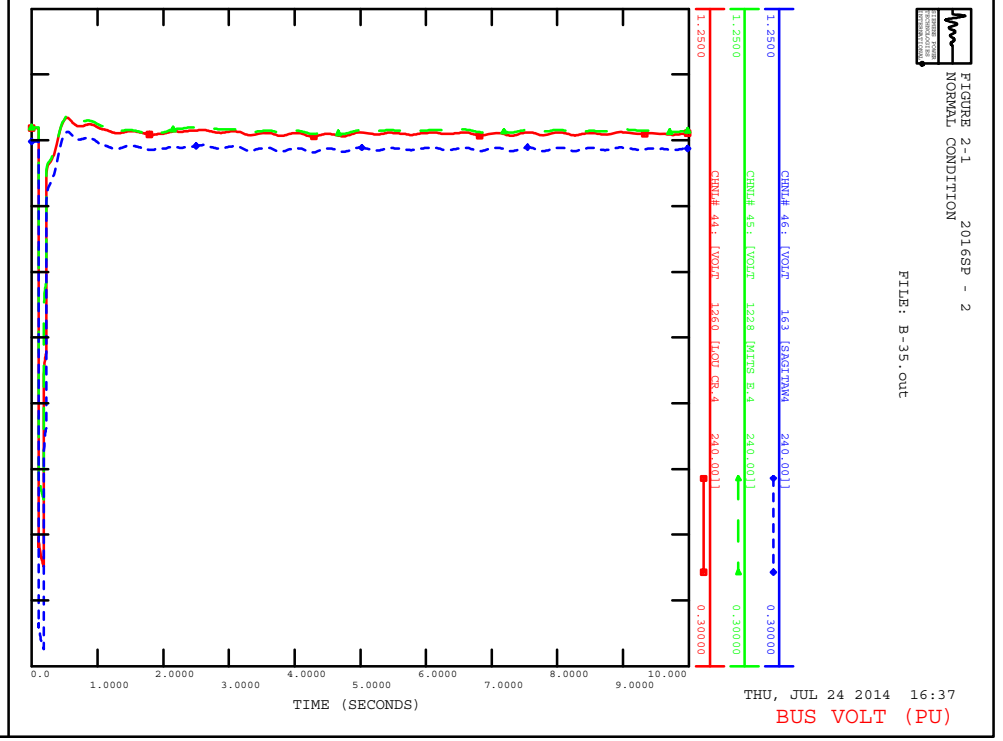


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-35.out
THU, JUL 24 2014 16:37
BUS VOLT (PU)
TIME (SECONDS)

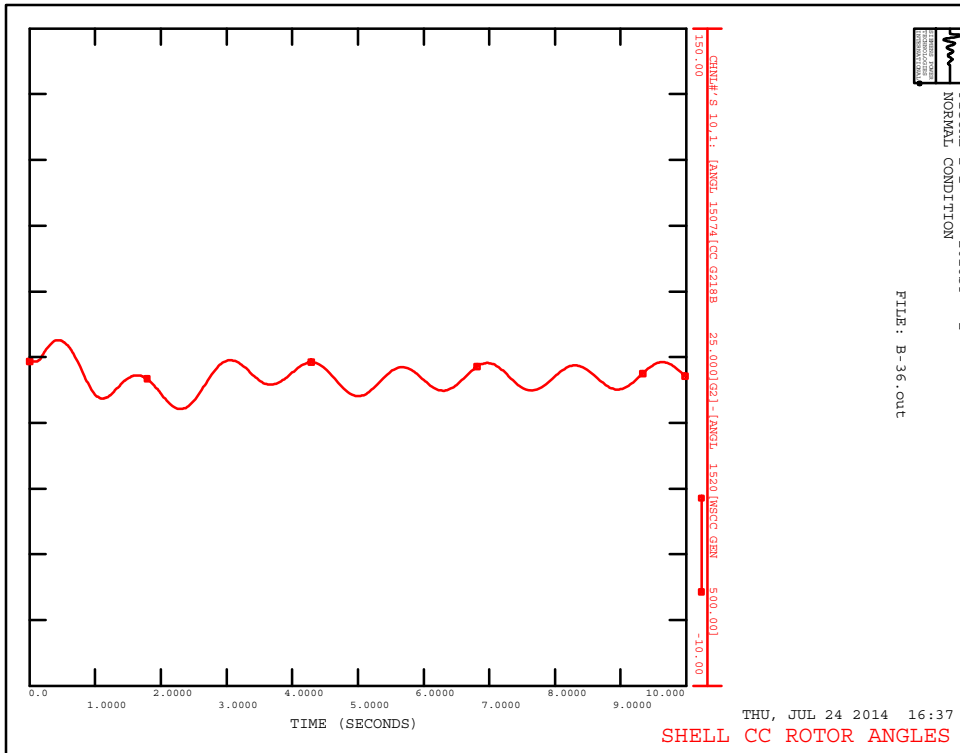


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-36.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC ROTOR ANGLES

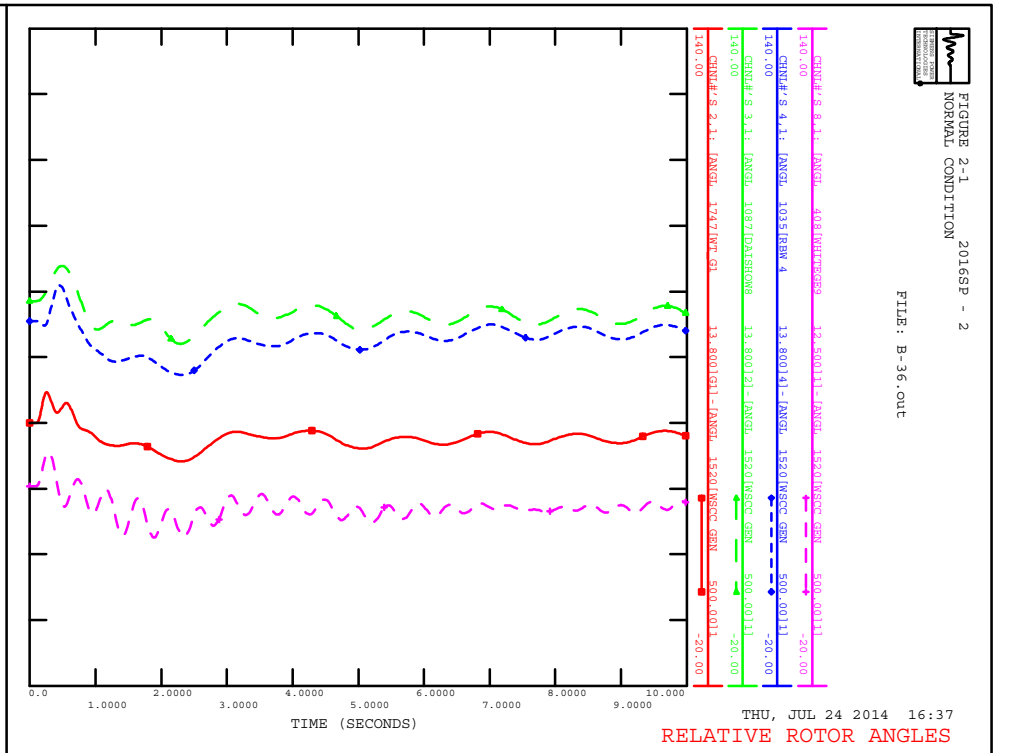


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-36.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
RELATIVE ROTOR ANGLES

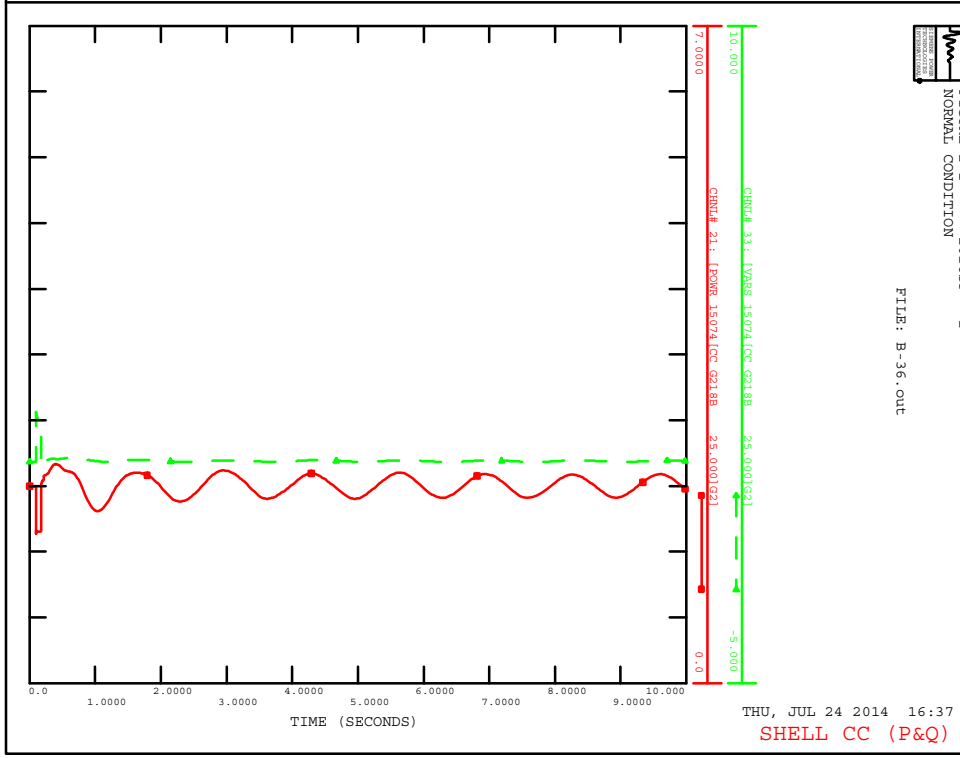


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-36.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC (P&Q)

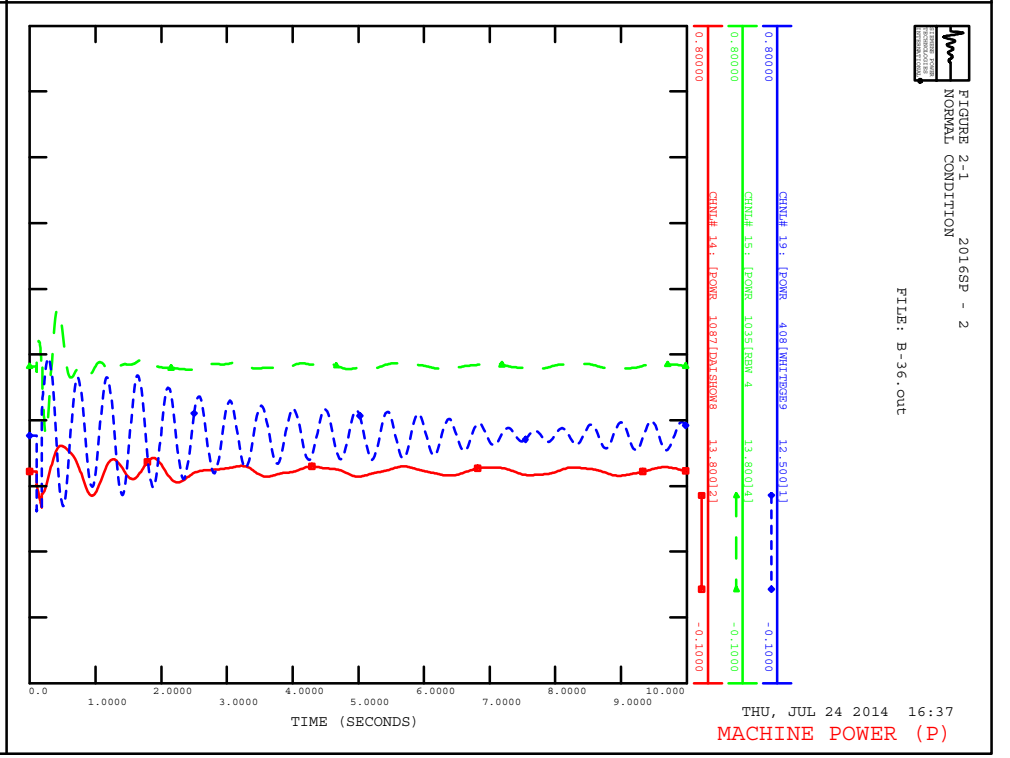


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-36.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (P)

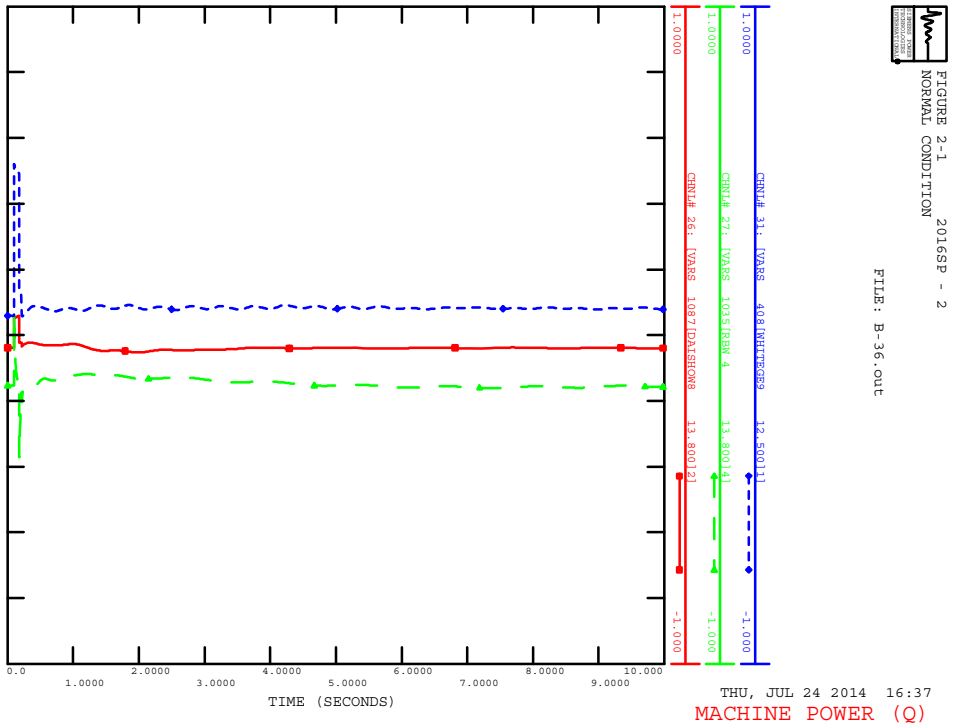


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-36.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (Q)

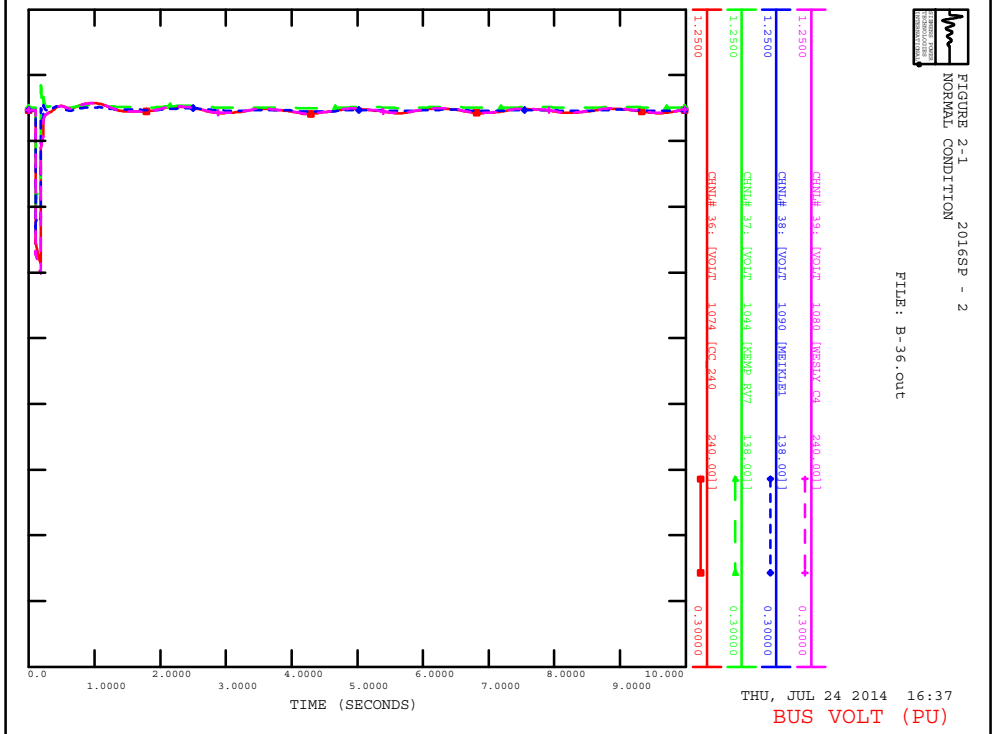


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-36.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

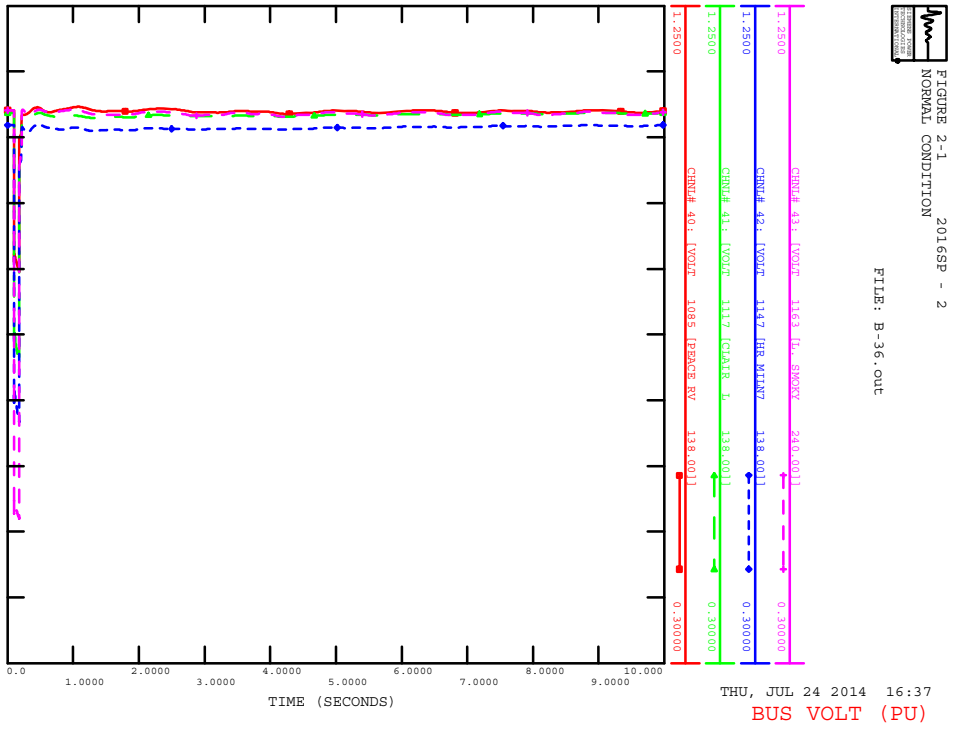


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-36.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

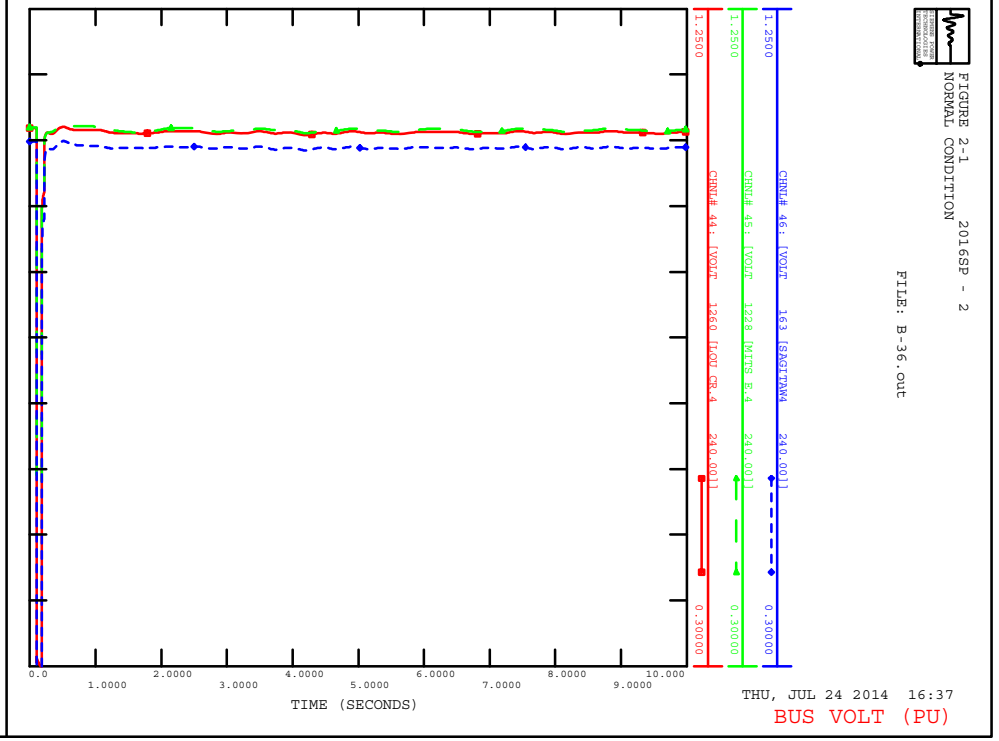


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-36.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

Transient Stability Plots
2016 Summer Light (Case 8)

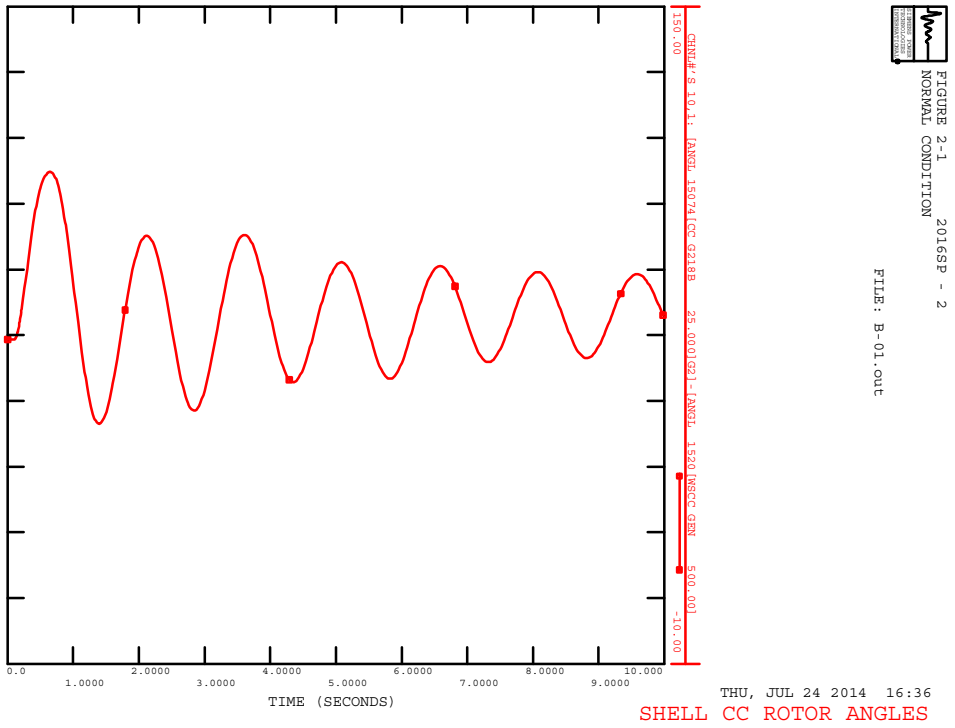


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-01.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

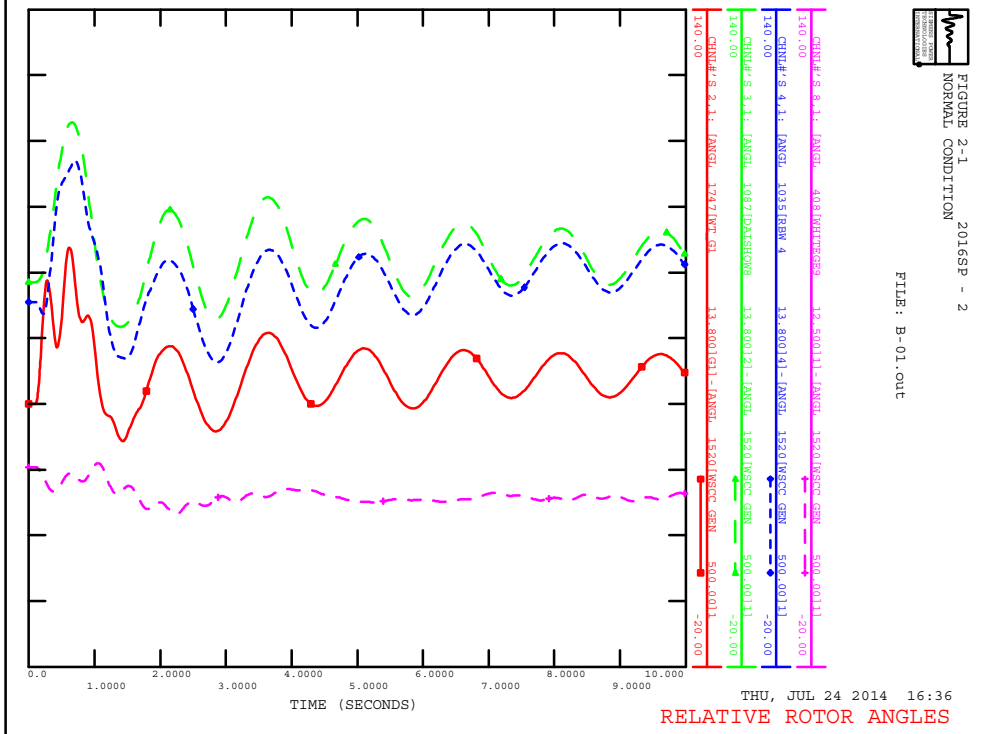


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-01.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

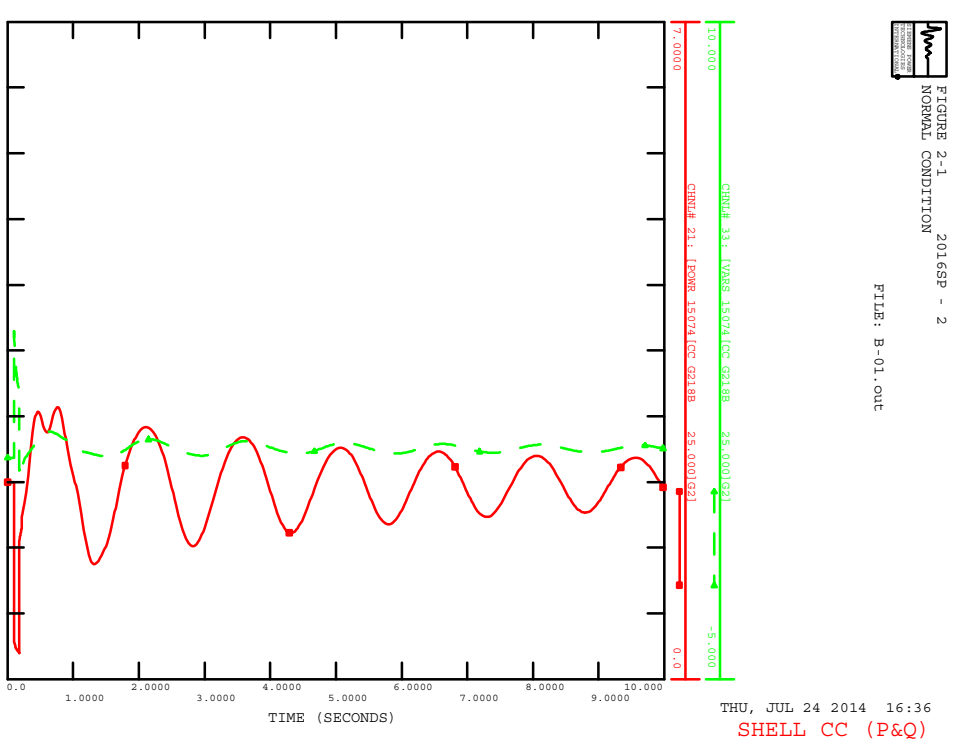


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-01.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

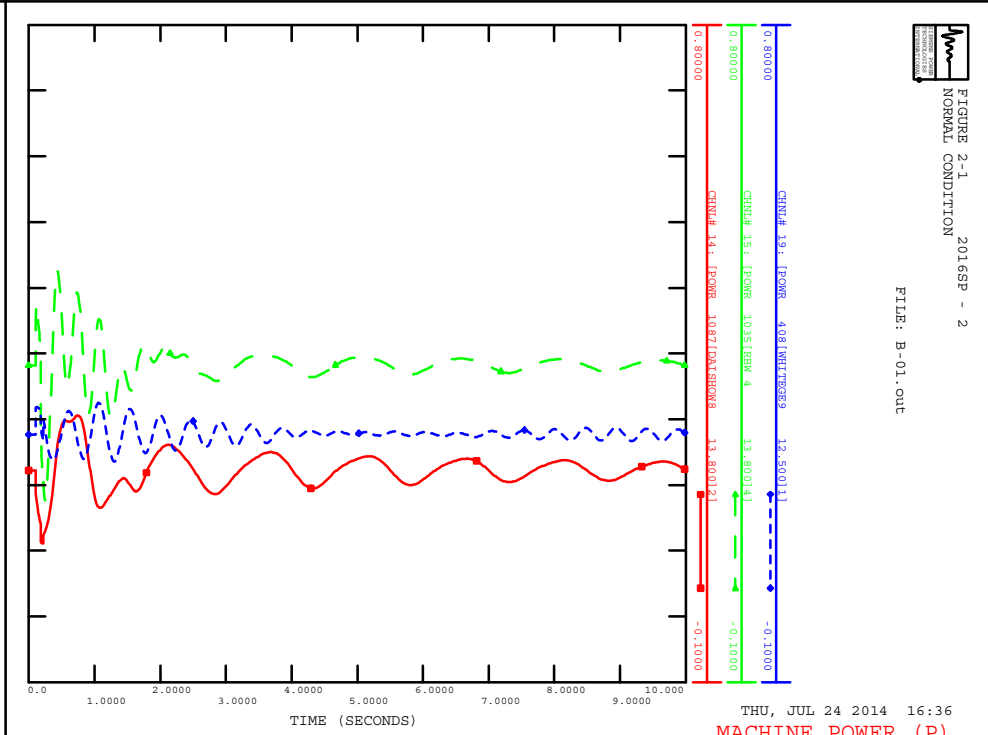


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-01.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

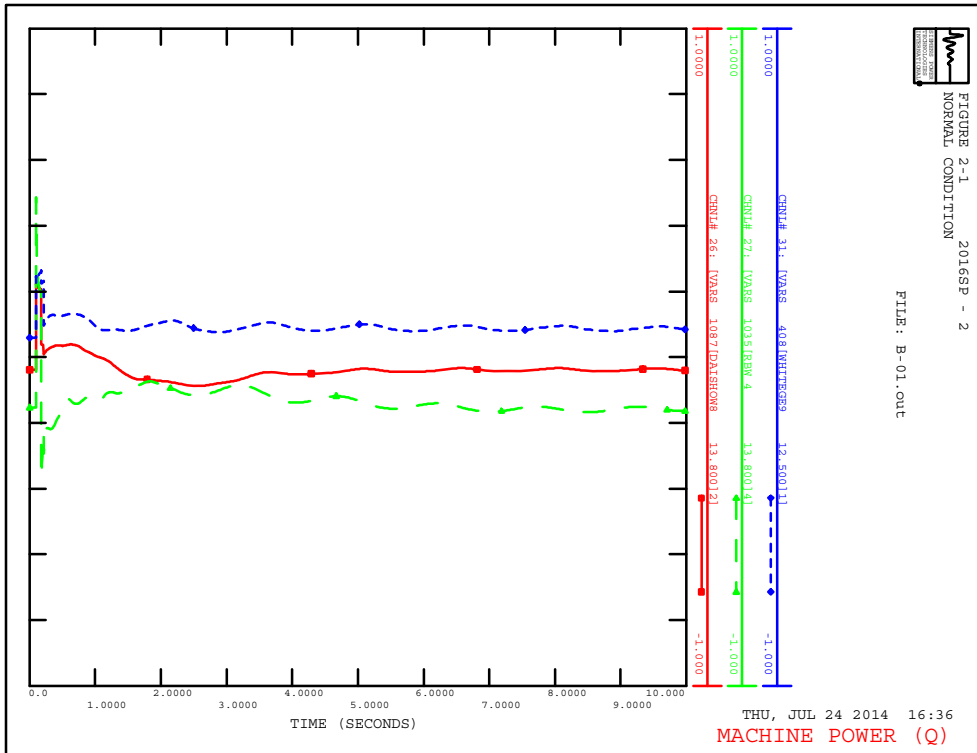


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-01.out
CHNI# 26: [VARS 1087 [DAISHOWA 13.800 [2]
CHNI# 27: [VARS 1035 [RBW 4 13.800 [4]
CHNI# 31: [VARS 408 [WHITEGB9 12.500 [1]
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

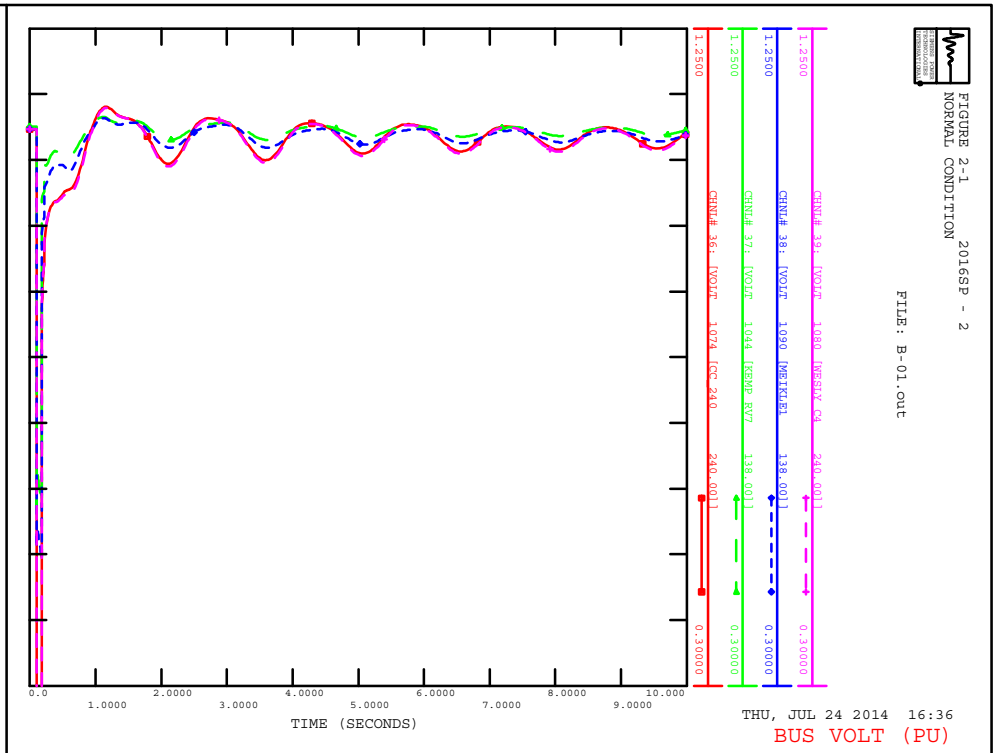


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-01.out
CHNI# 36: [VOLT 1074 [CC 240 240.00] [
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00] [
CHNI# 38: [VOLT 1090 [MEIKLE1 138.00] [
CHNI# 39: [VOLT 1080 [NRSIX C4 240.00] [
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

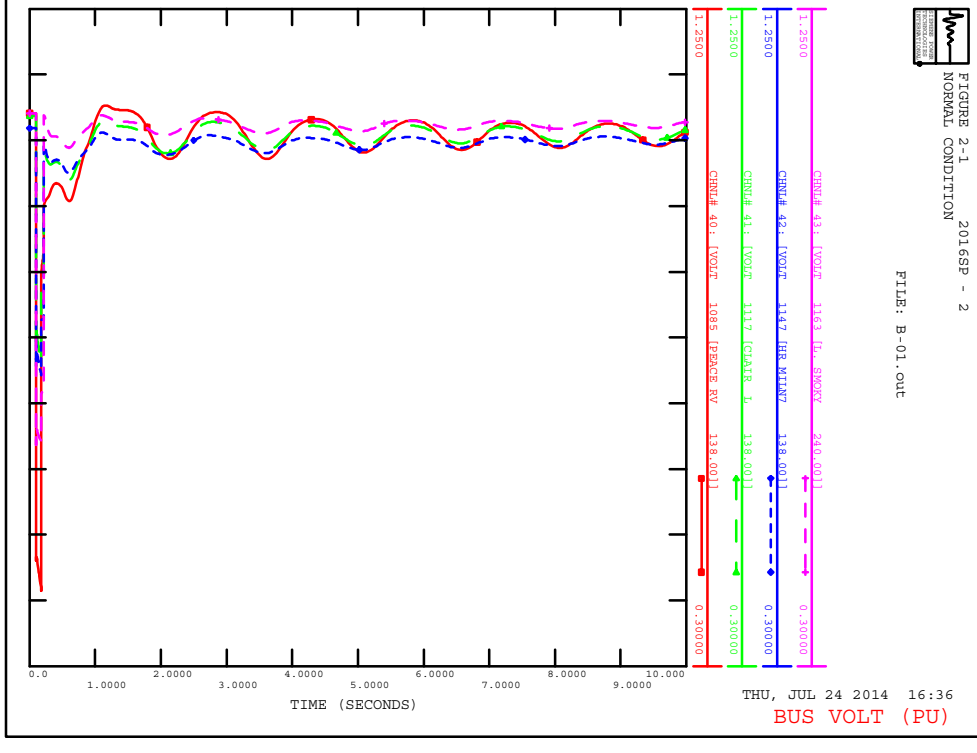


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-01.out
CHNI# 40: [VOLT 1085 [PEACE RV 138.00] [
CHNI# 41: [VOLT 1117 [CLAIR L 138.00] [
CHNI# 42: [VOLT 1142 [HR MIAN7 138.00] [
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00] [
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

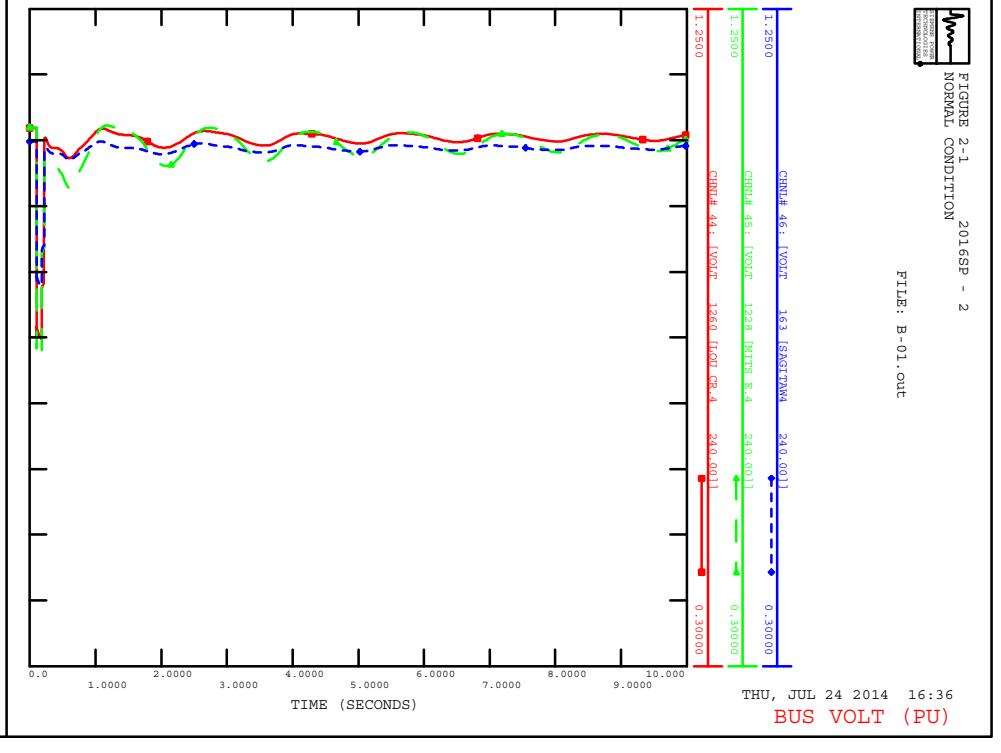


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-01.out
CHNI# 44: [VOLT 1260 [FOX CR 4 240.00] [
CHNI# 45: [VOLT 1228 [MITS E-4 240.00] [
CHNI# 46: [VOLT 163 [SAGITAW4 240.00] [
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

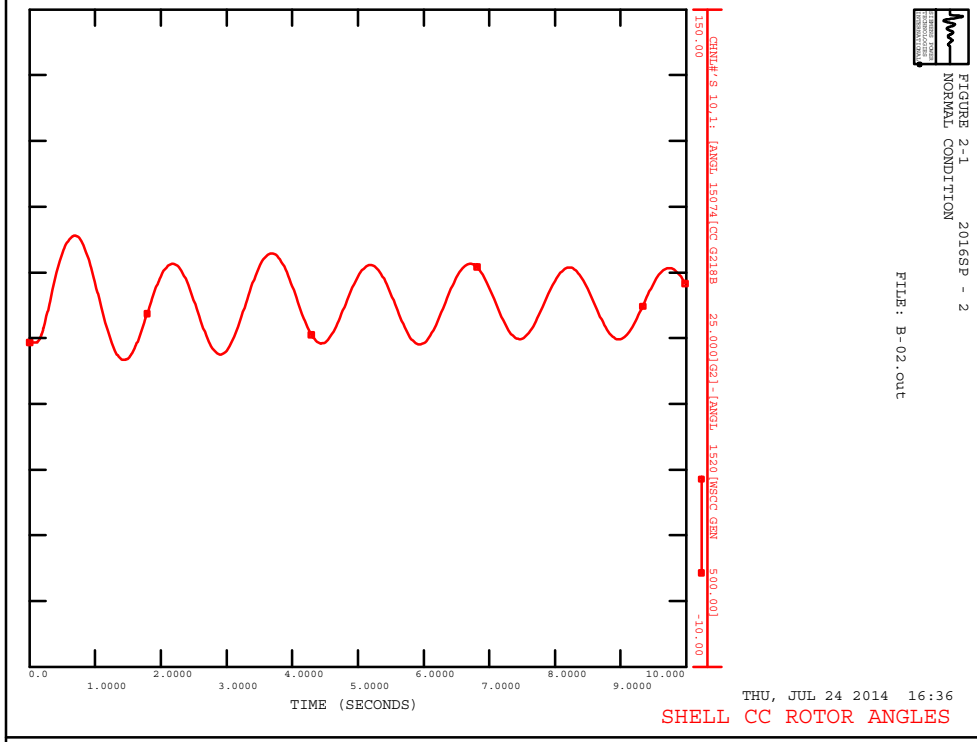


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-02.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

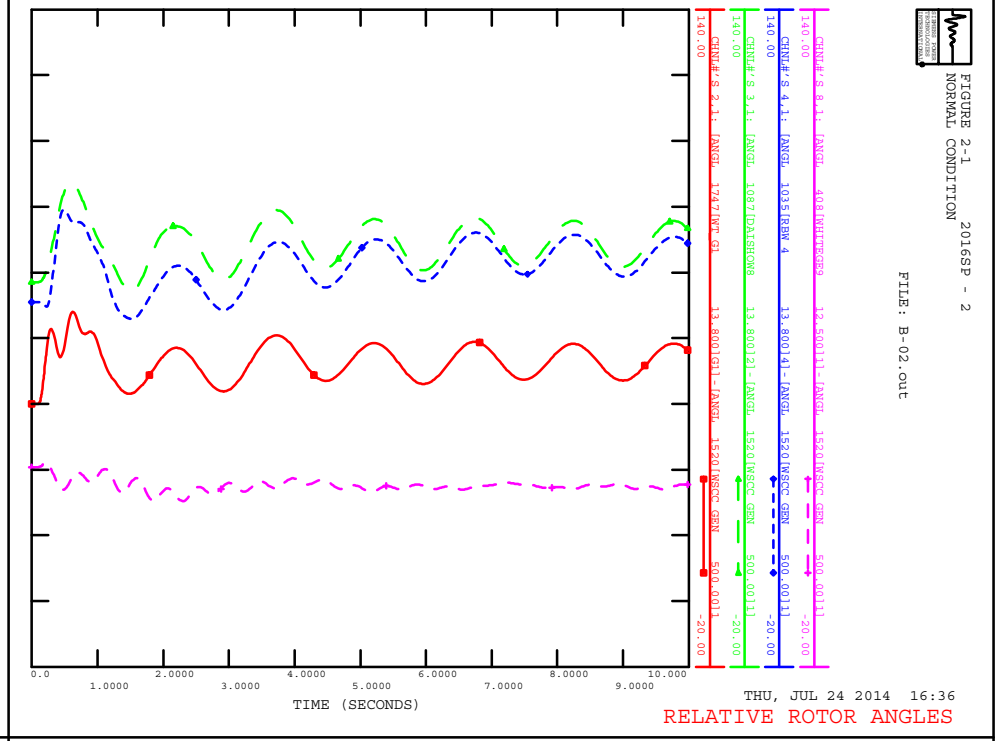


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-02.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

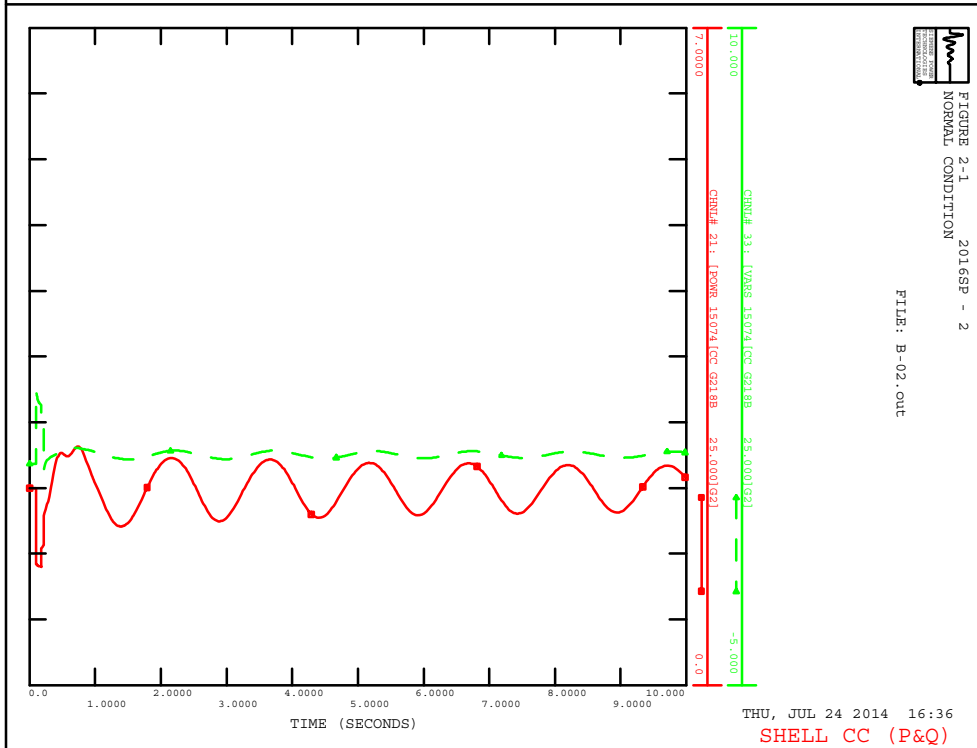


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-02.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

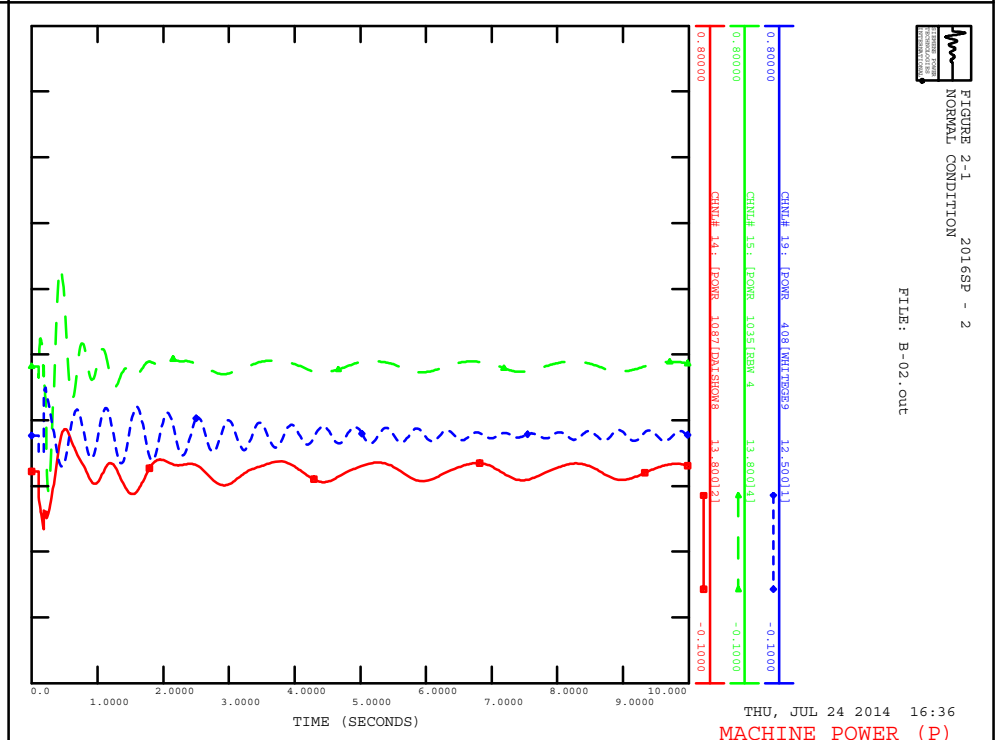


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-02.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

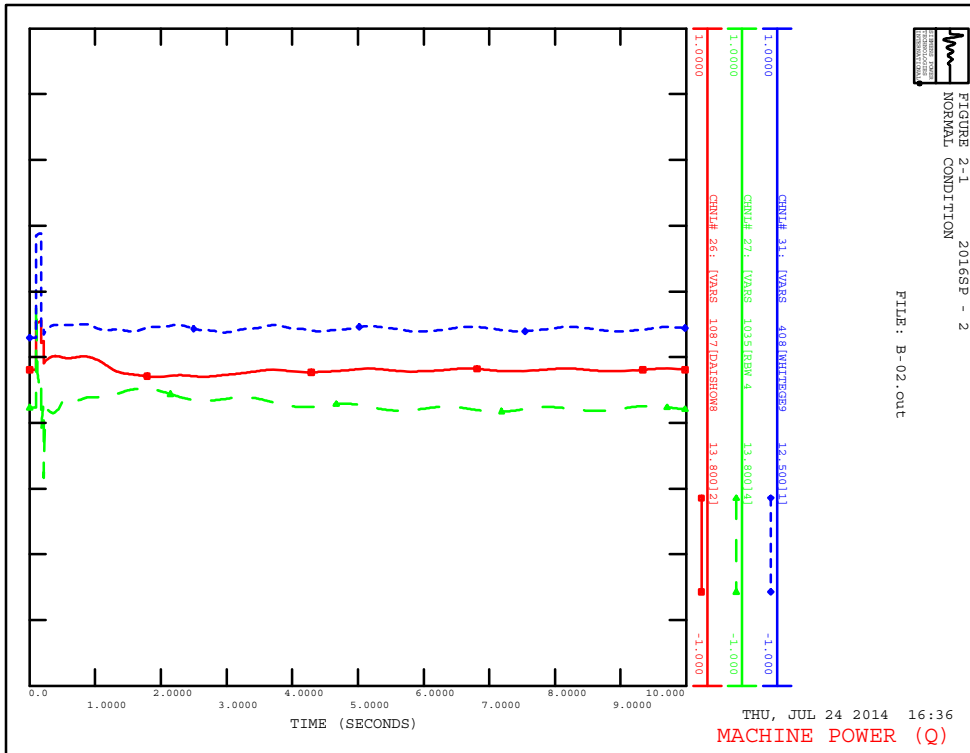


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-02.out
CHNI# 31: [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27: [VARS 1035 [RBW 4 13.800]4]
CHNI# 26: [VARS 1087 [DAISHOW8 13.800]2]
1.0000
-1.000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

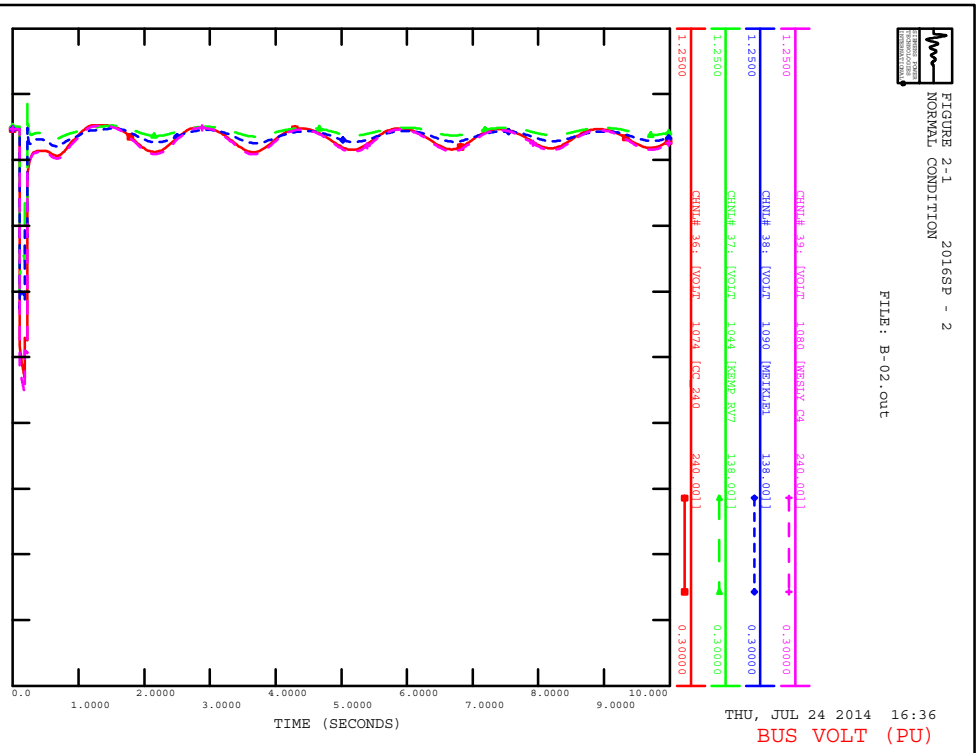


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-02.out
CHNI# 39: [VOLT 1080 [MESIX C4 240.00]
CHNI# 38: [VOLT 1090 [MESIKLE1 138.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 36: [VOLT 1074 [CC 240 240.00]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

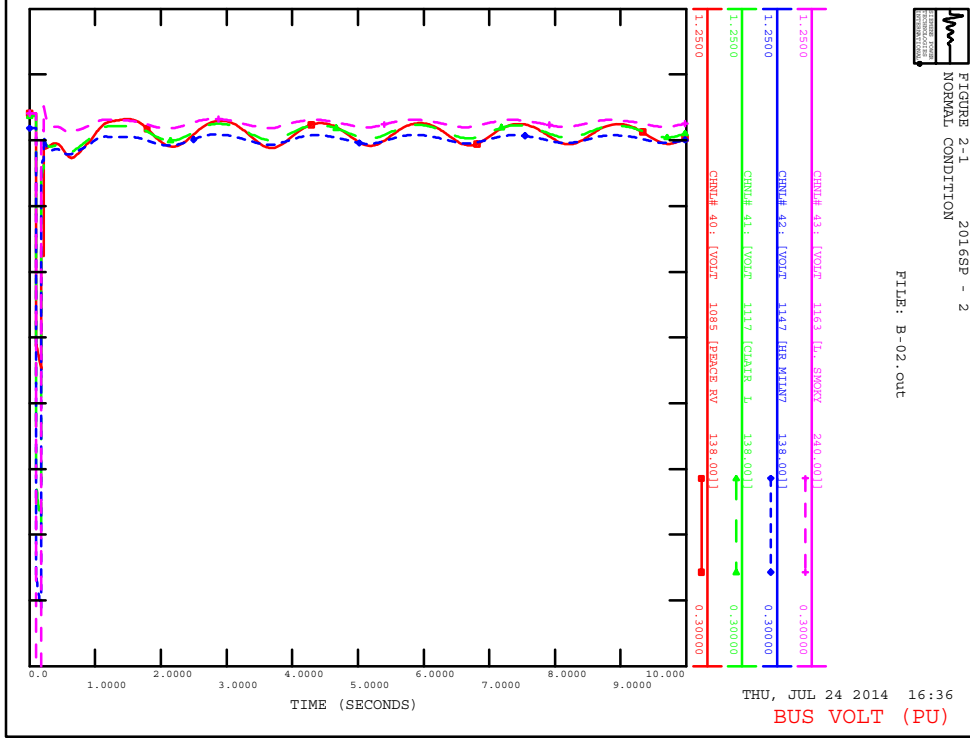


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-02.out
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00]
CHNI# 42: [VOLT 1142 [HR MTN7 138.00]
CHNI# 41: [VOLT 1117 [CHAIR L 138.00]
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

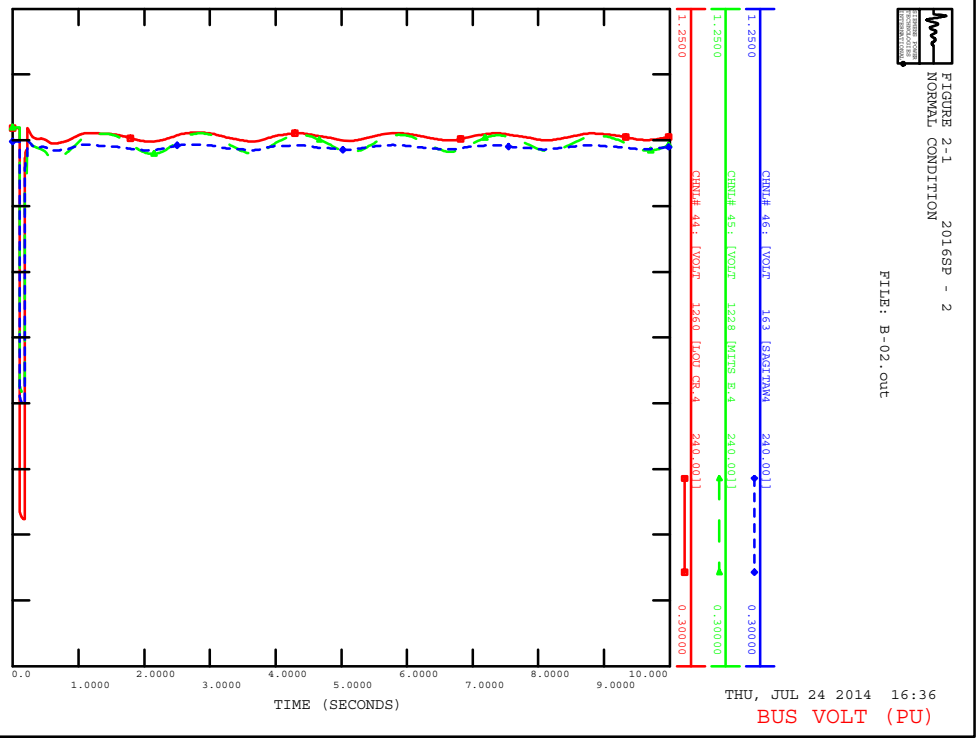


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-02.out
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
CHNI# 45: [VOLT 1228 [MTS B.4 240.00]
CHNI# 44: [VOLT 1260 [FOT CR.4 240.00]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

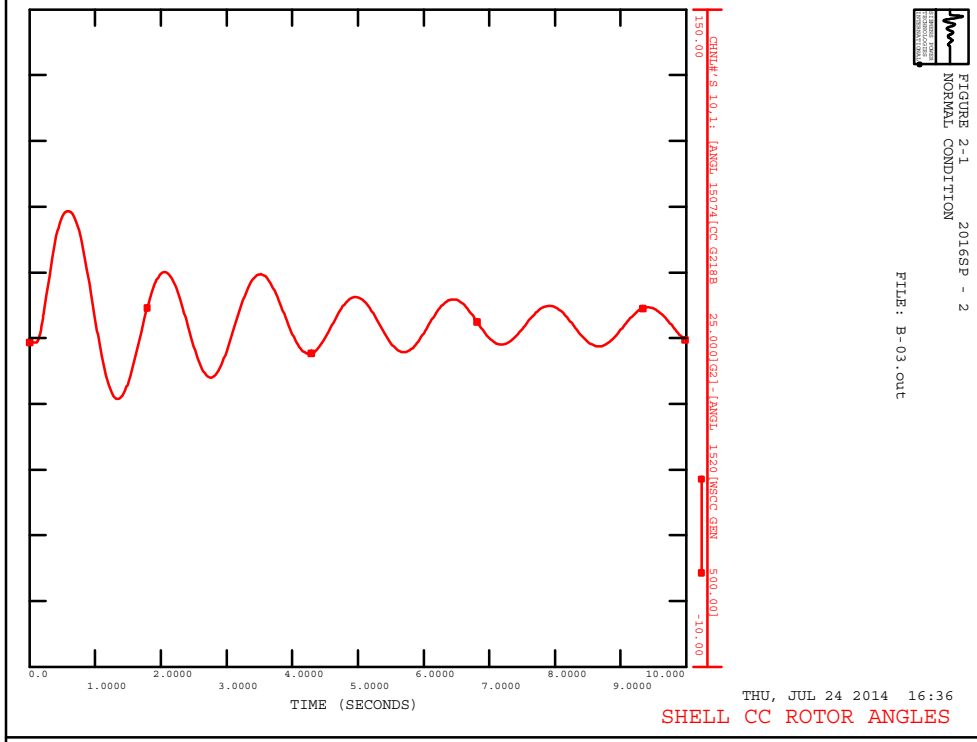


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-03.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

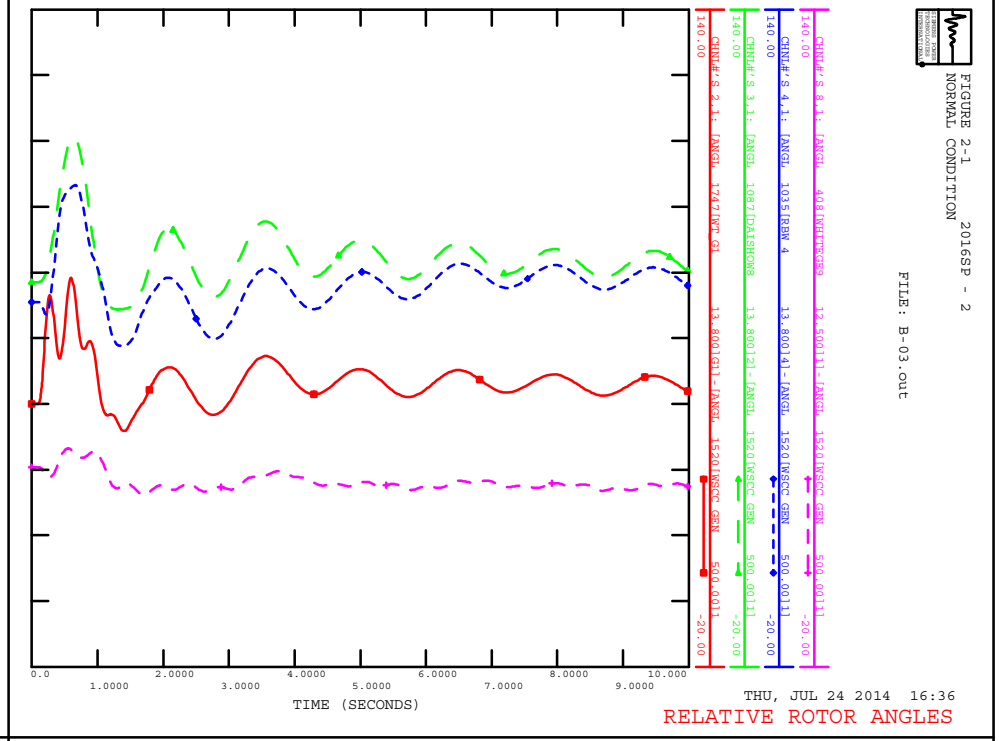


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-03.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

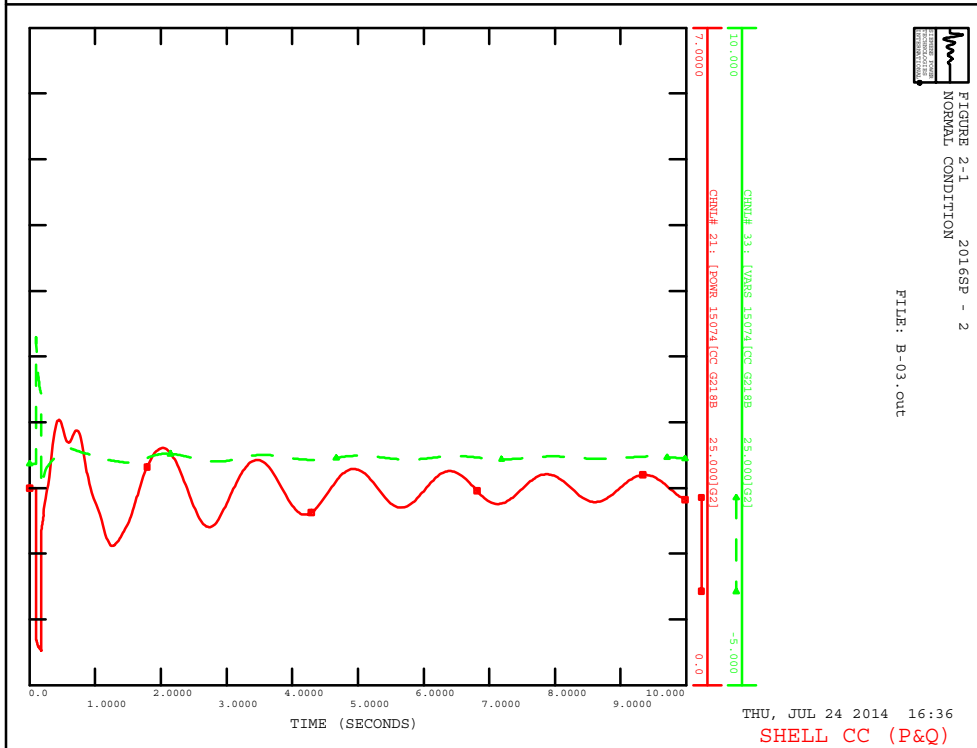


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-03.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

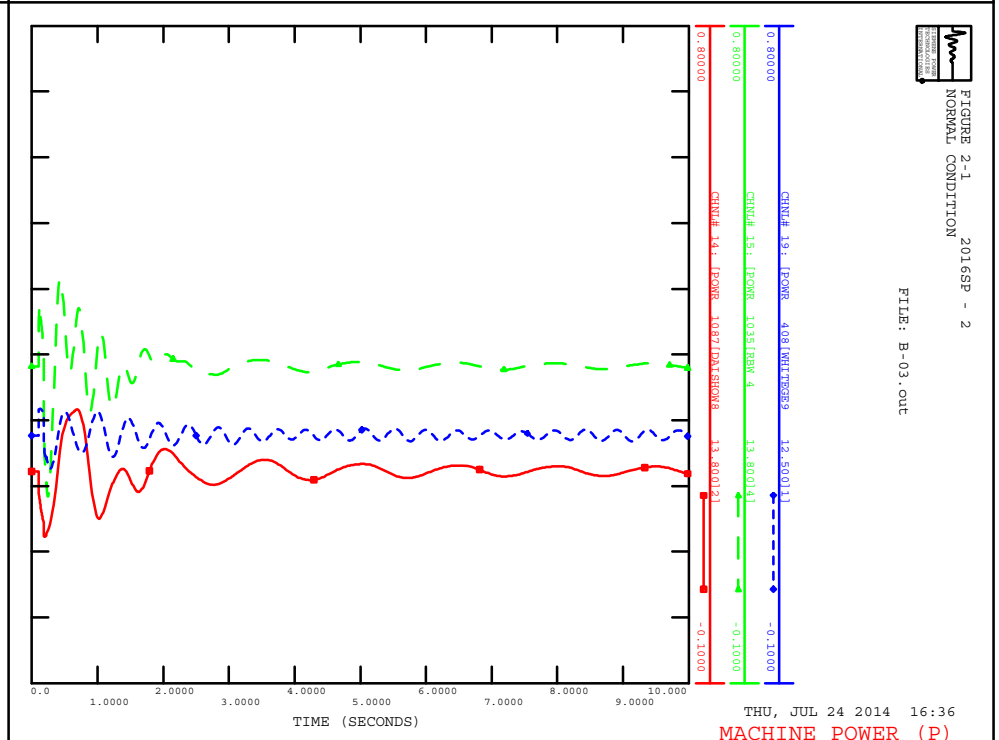


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-03.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

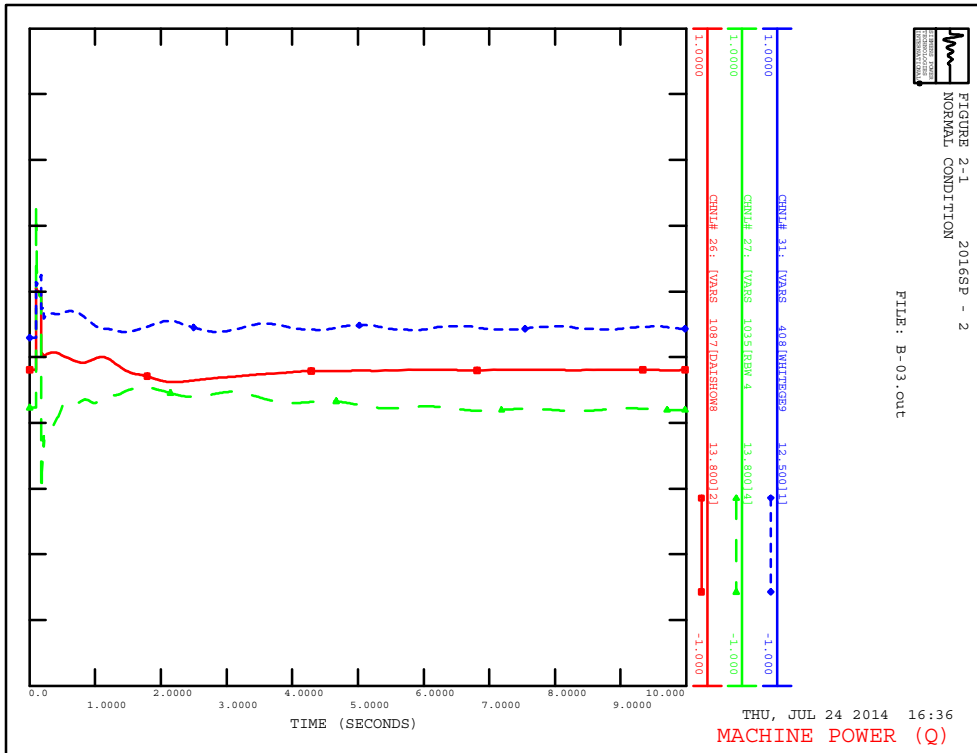


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-03.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

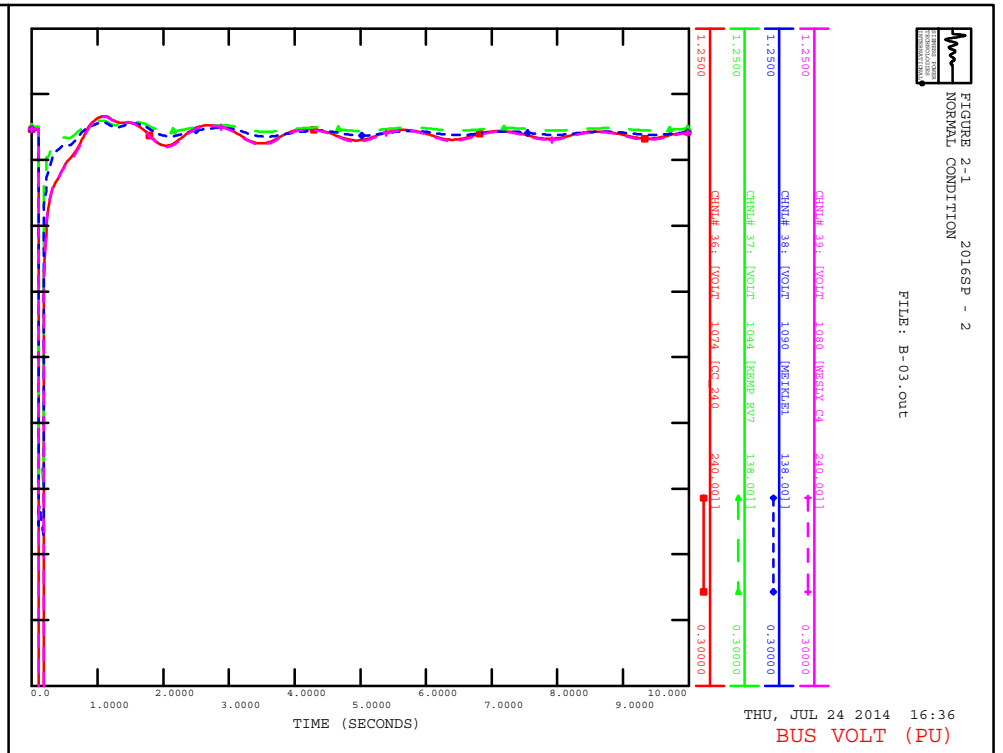


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-03.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

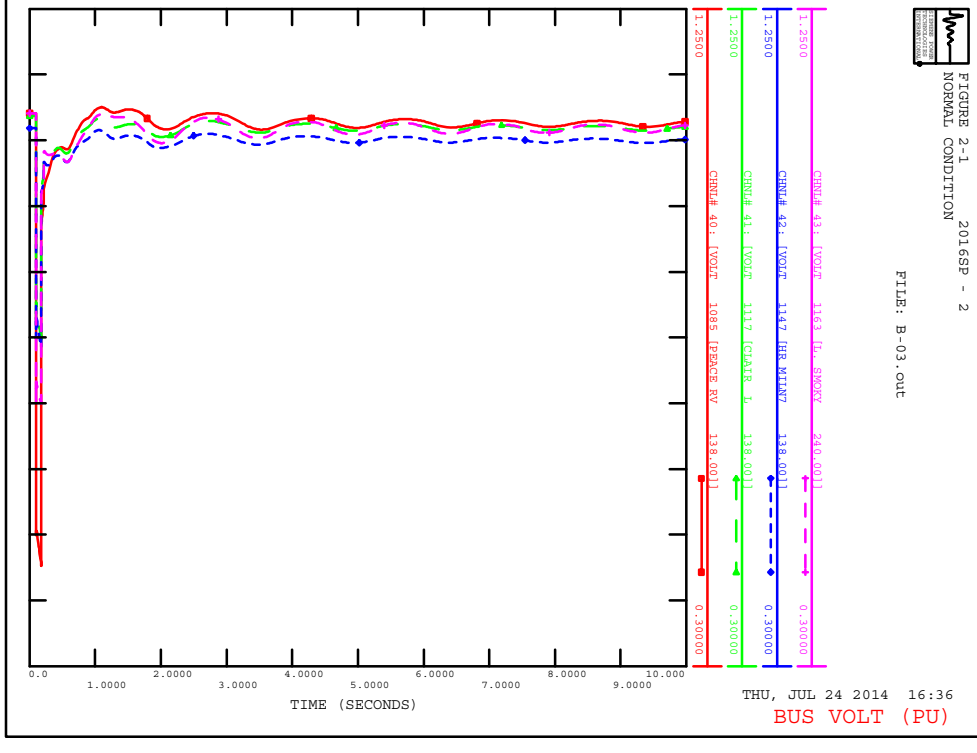


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-03.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

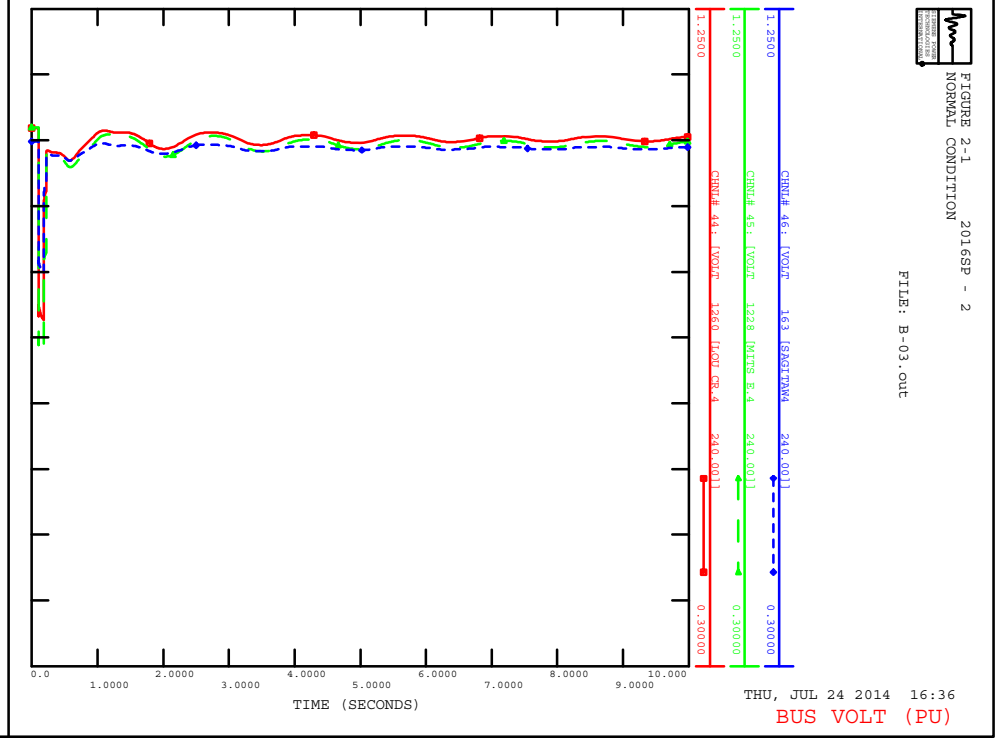


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-03.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

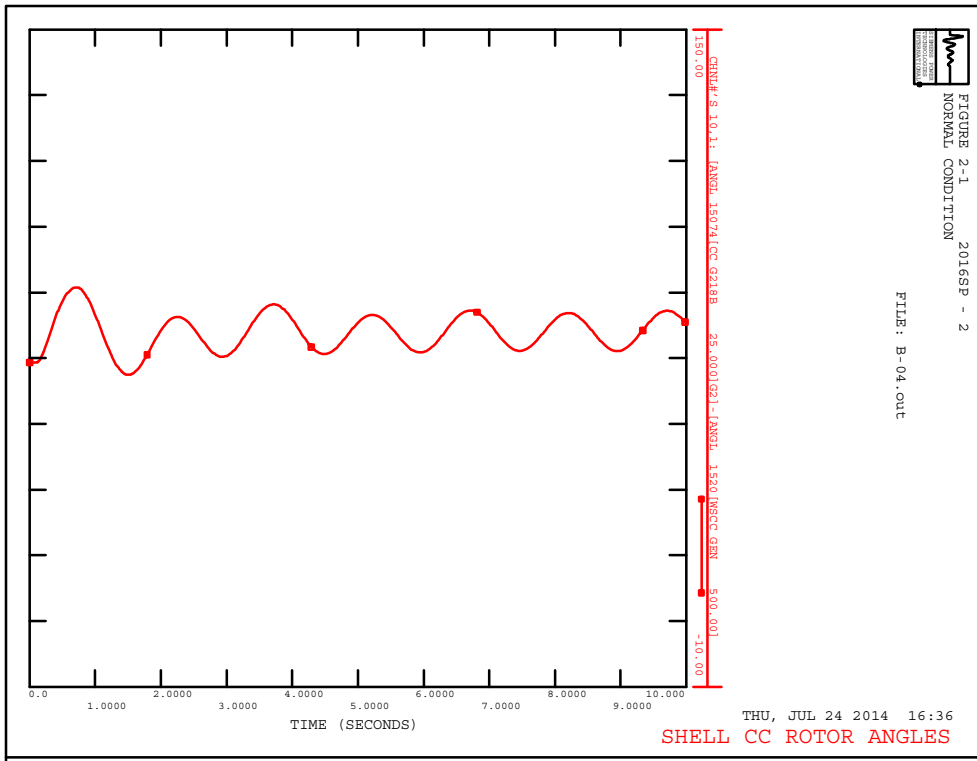


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-04.out
CHNL#'S 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

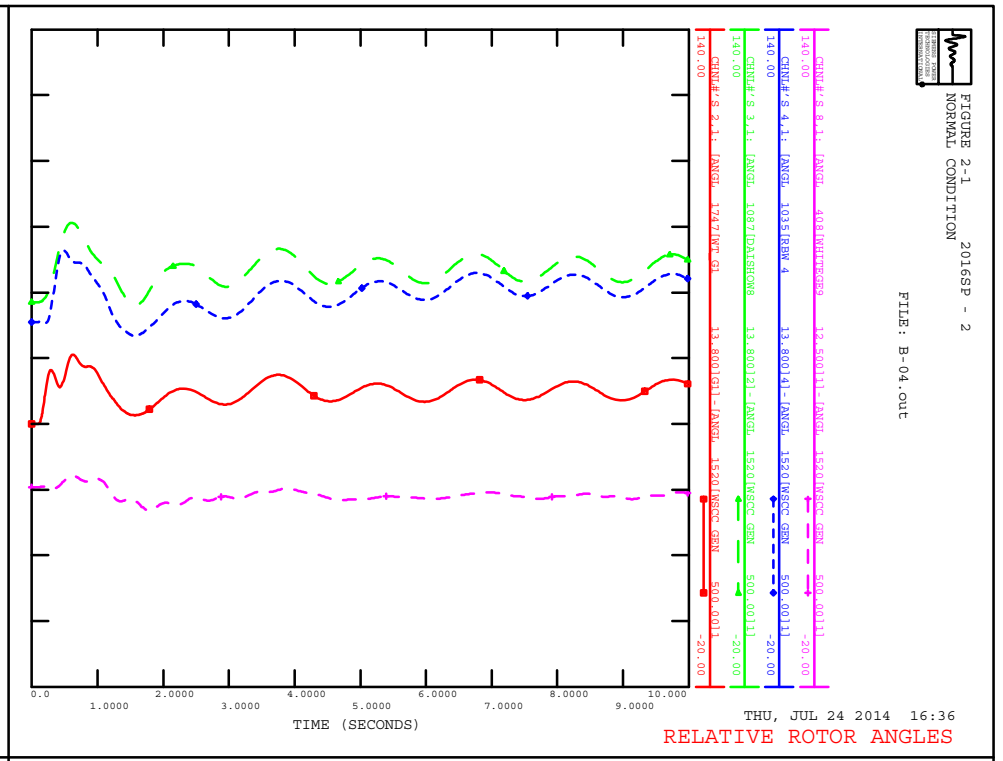


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-04.out
CHNL#'S 8,1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 3,1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 2,1: [ANGL 1747[WT G1 13.800[1]-[ANGL 1520[NSCC GEN 500.00]]
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

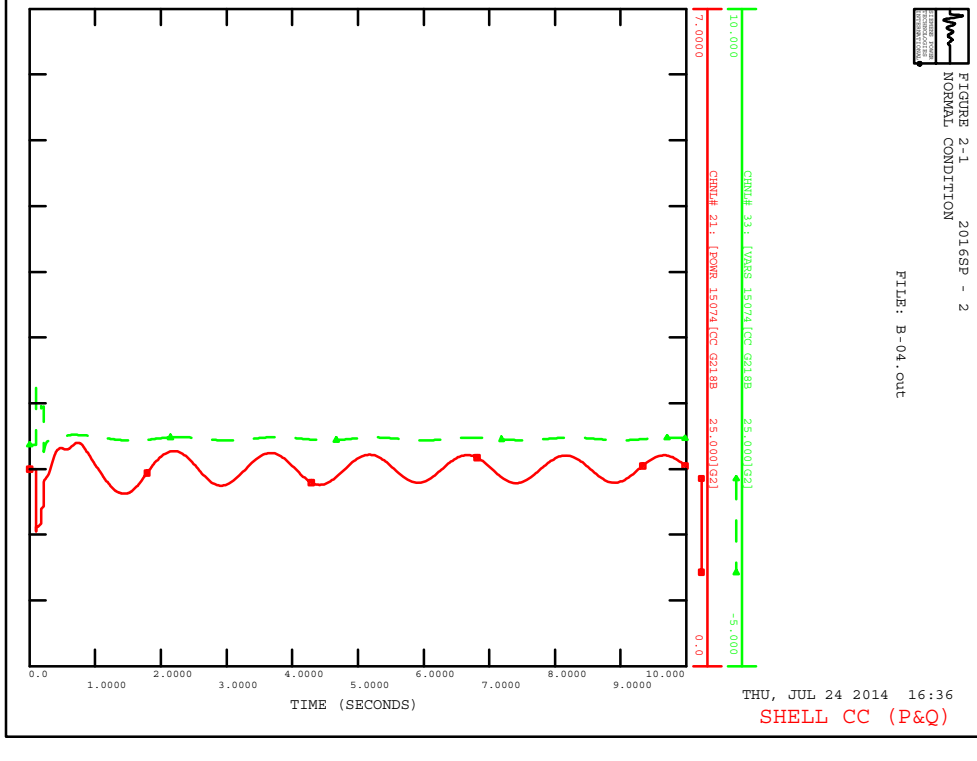


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-04.out
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

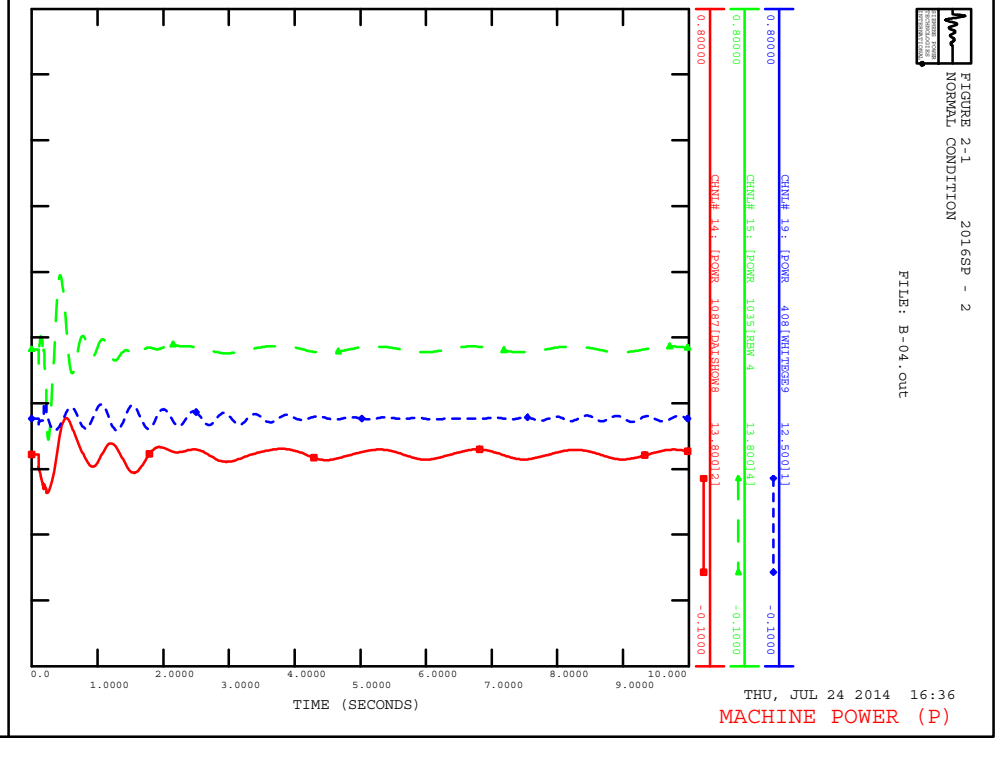


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-04.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

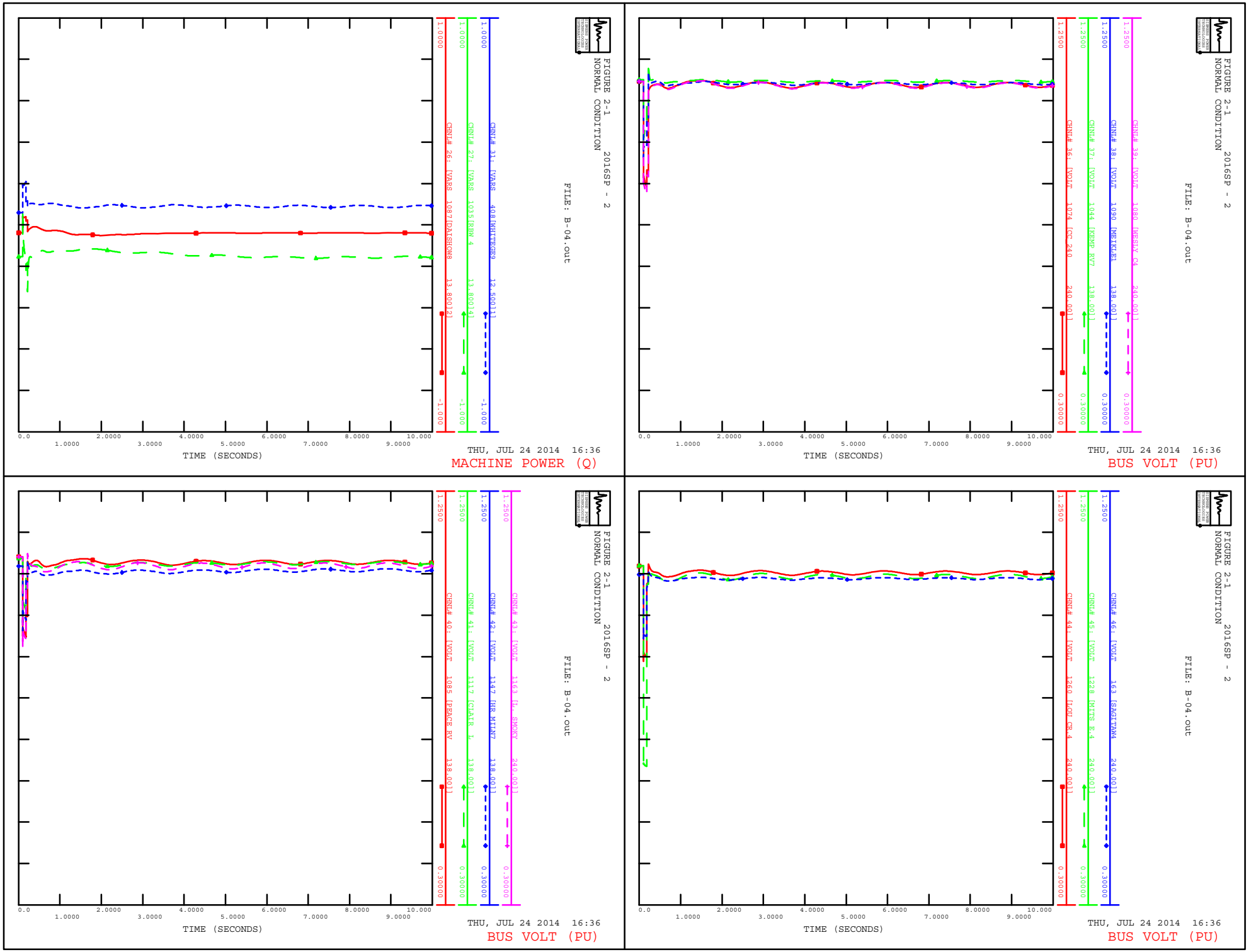


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-04.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)
FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-04.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)
FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-04.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)
FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-04.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

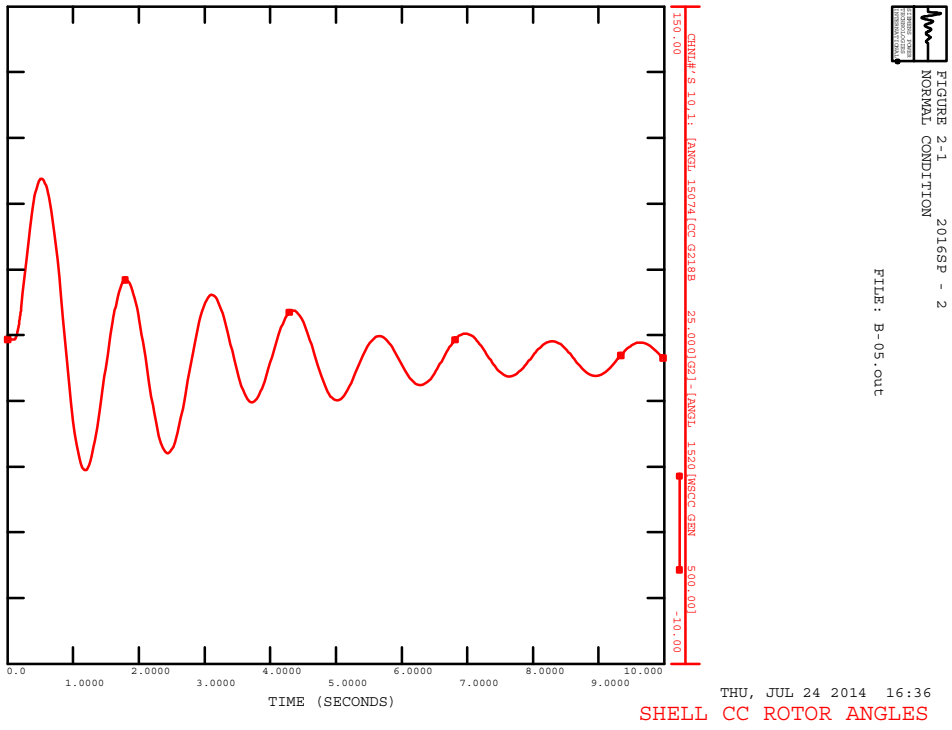


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-05.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

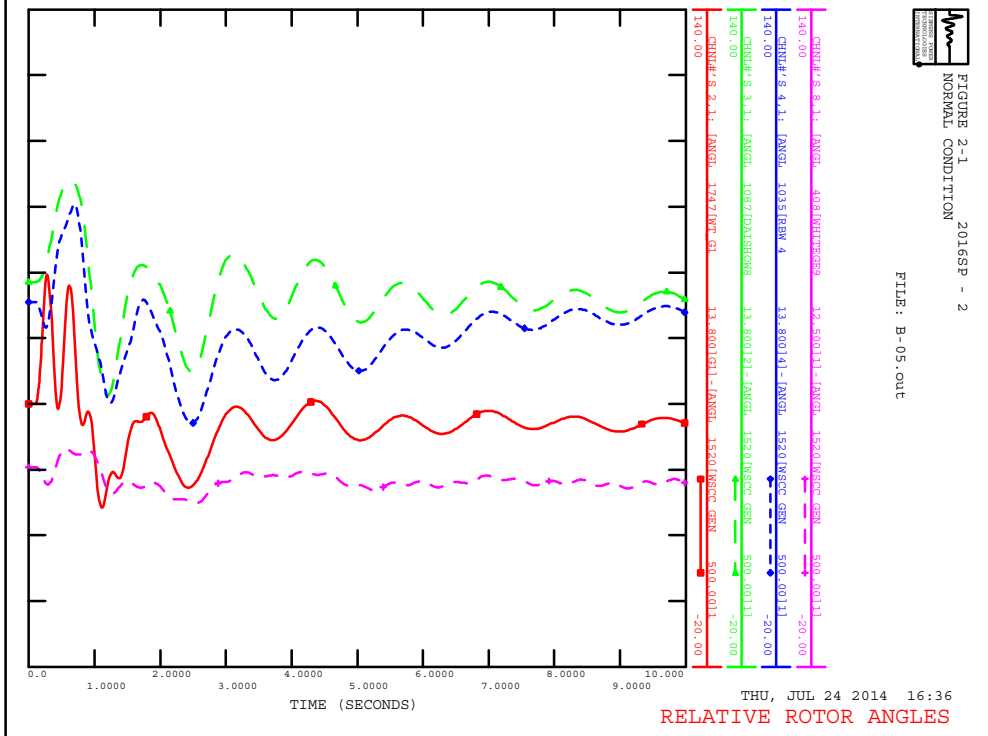


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-05.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

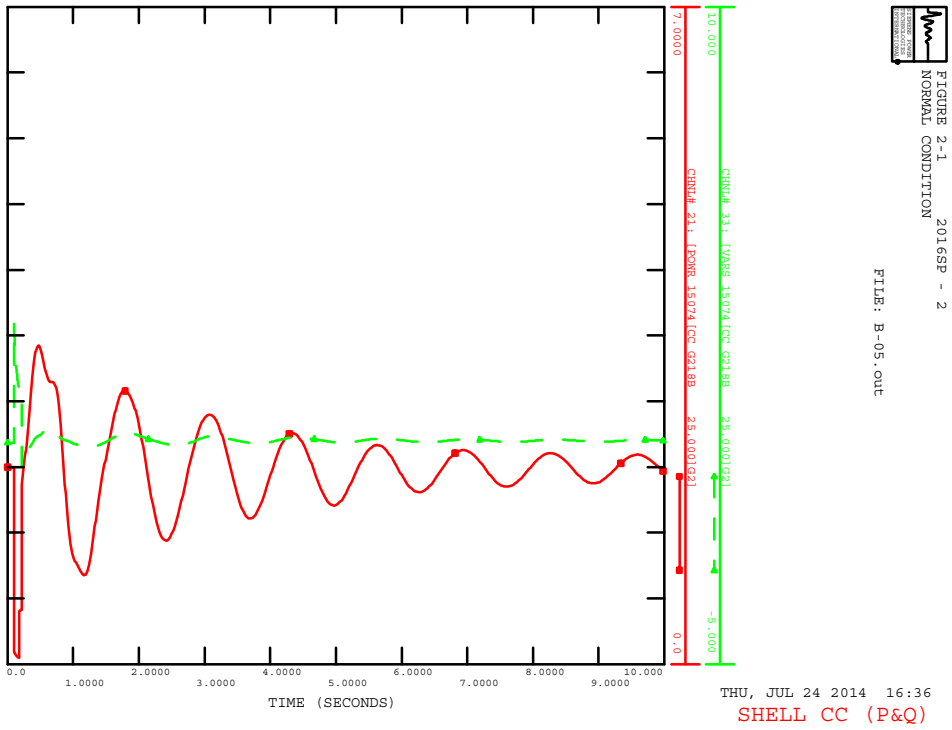


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-05.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

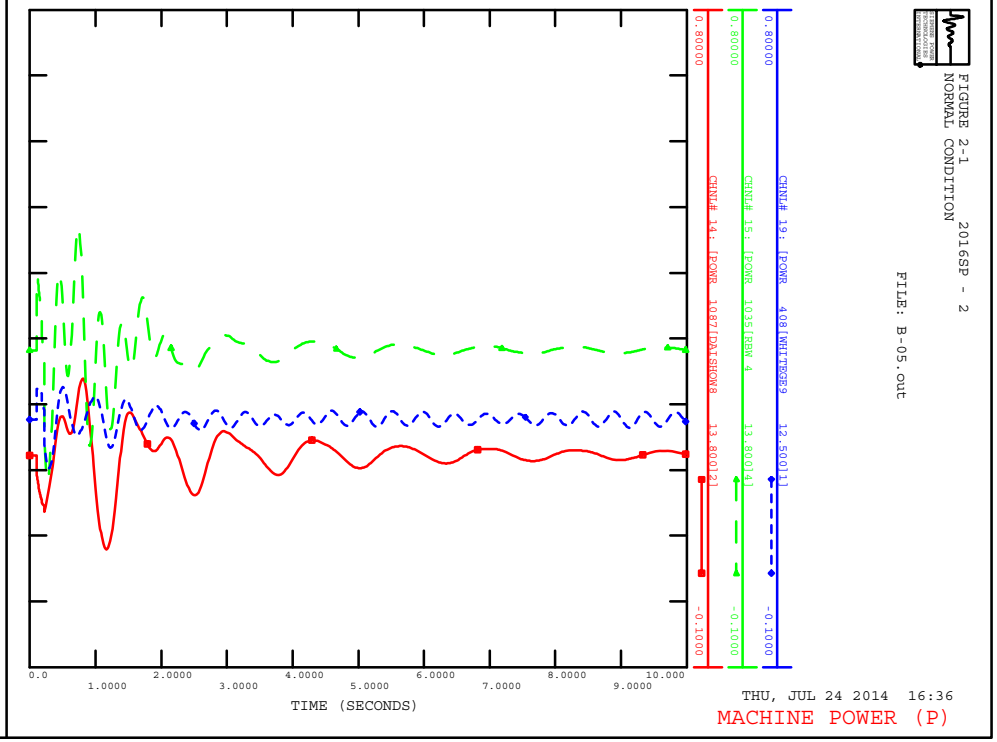


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-05.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

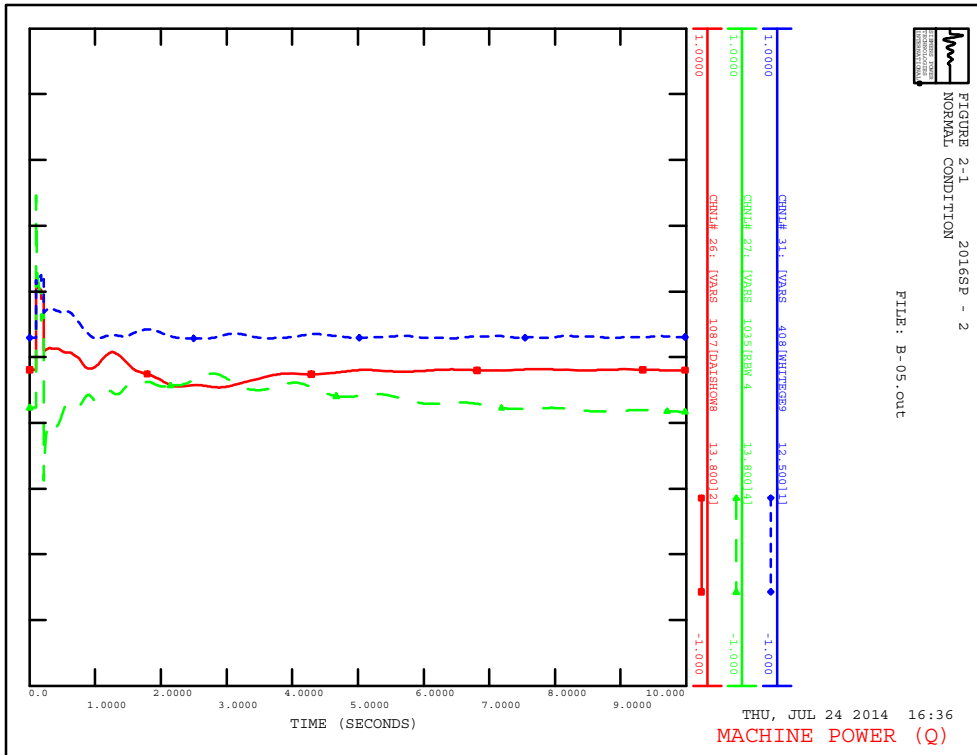


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-05.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

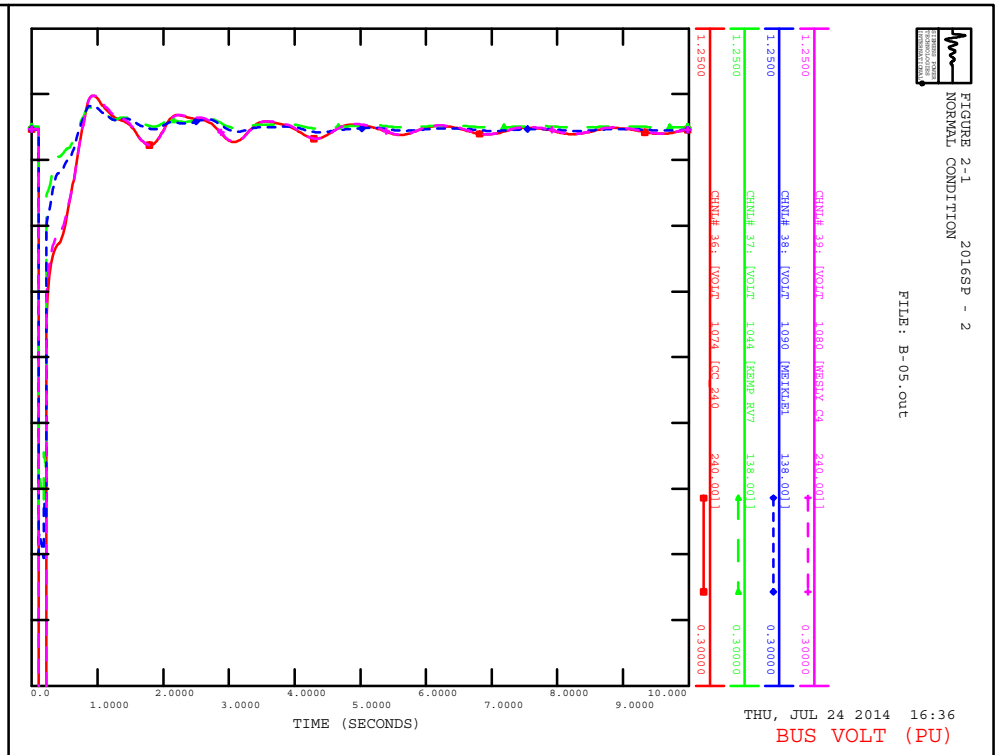


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-05.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

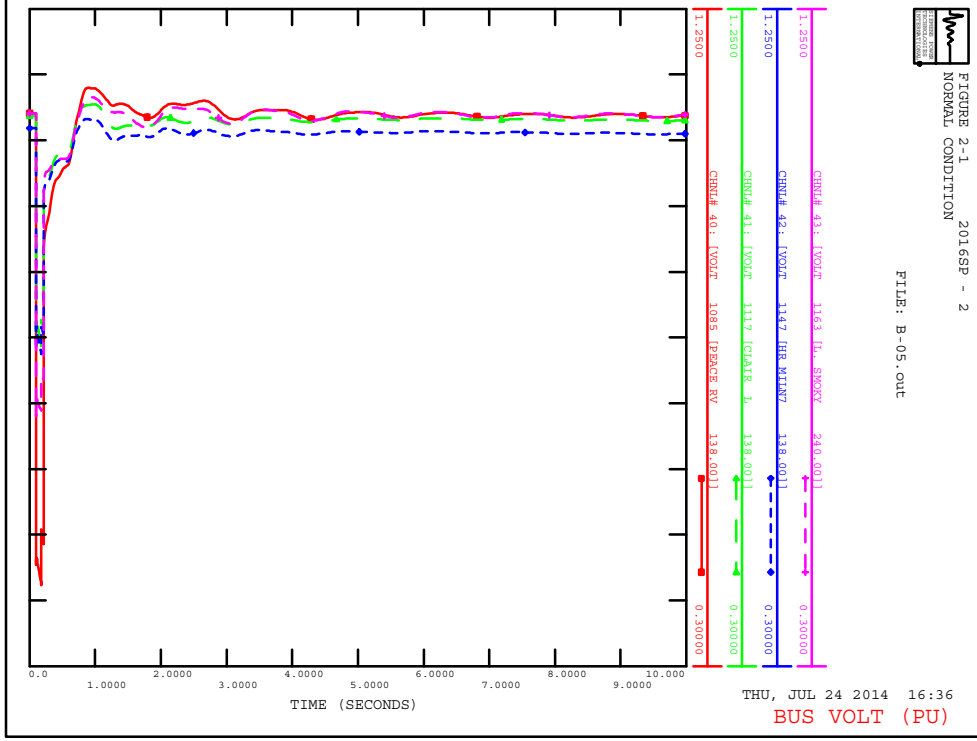


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-05.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

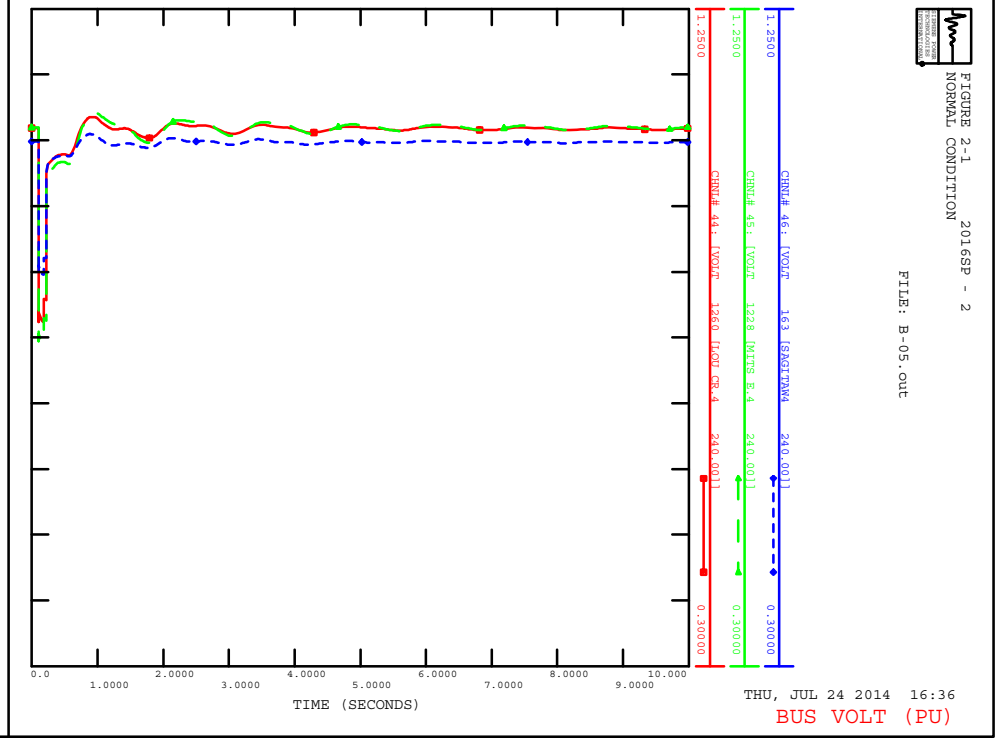


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-05.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

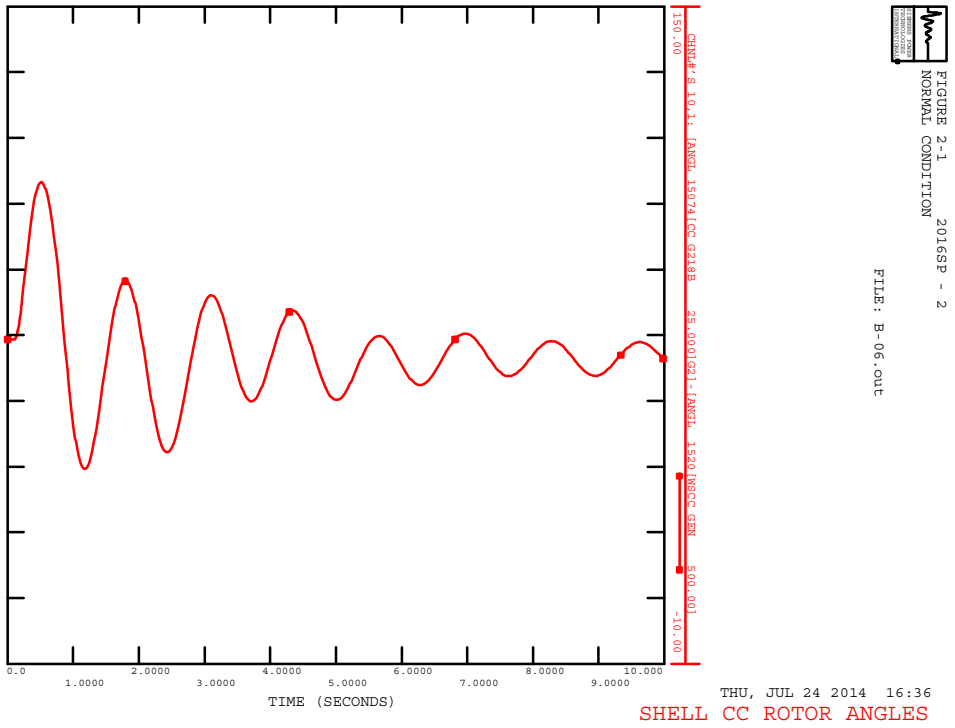


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-06.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

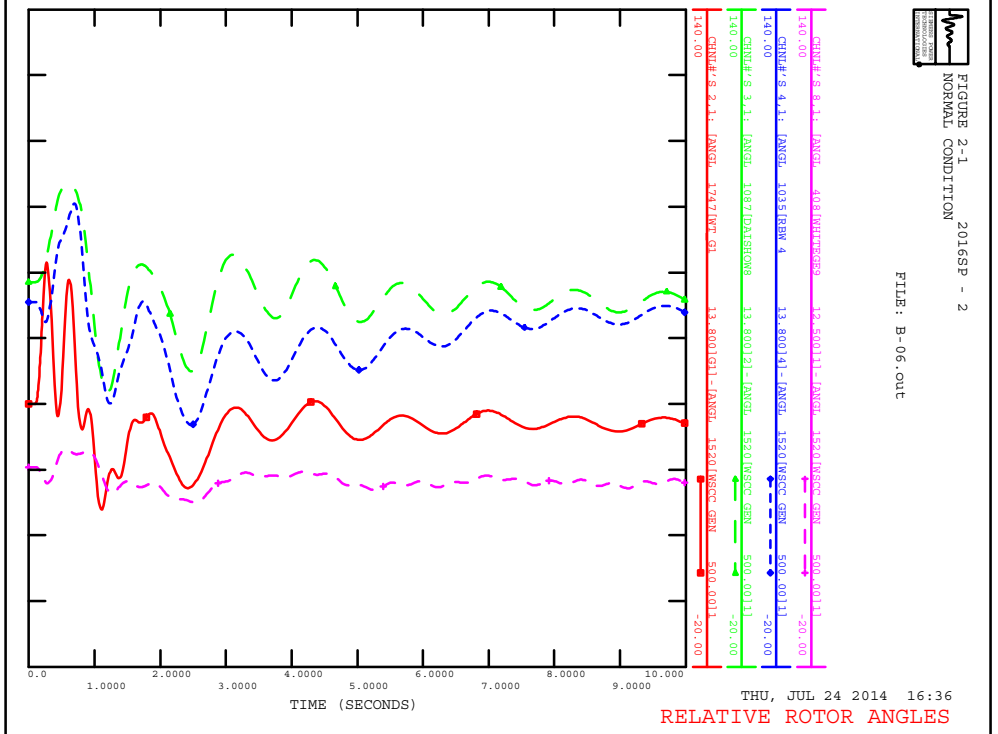


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-06.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

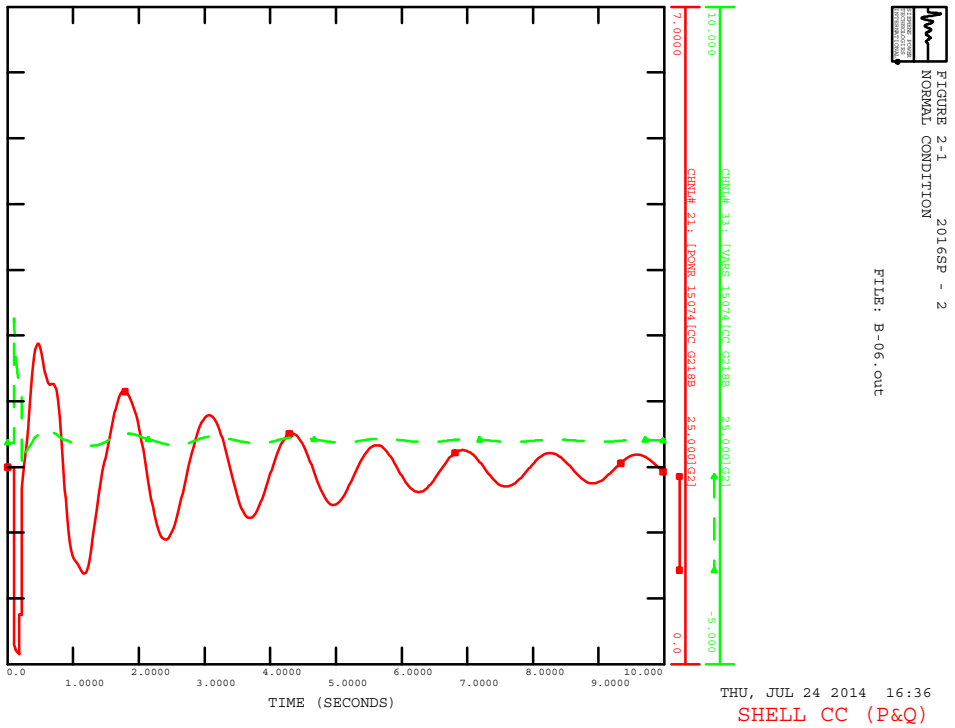


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-06.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

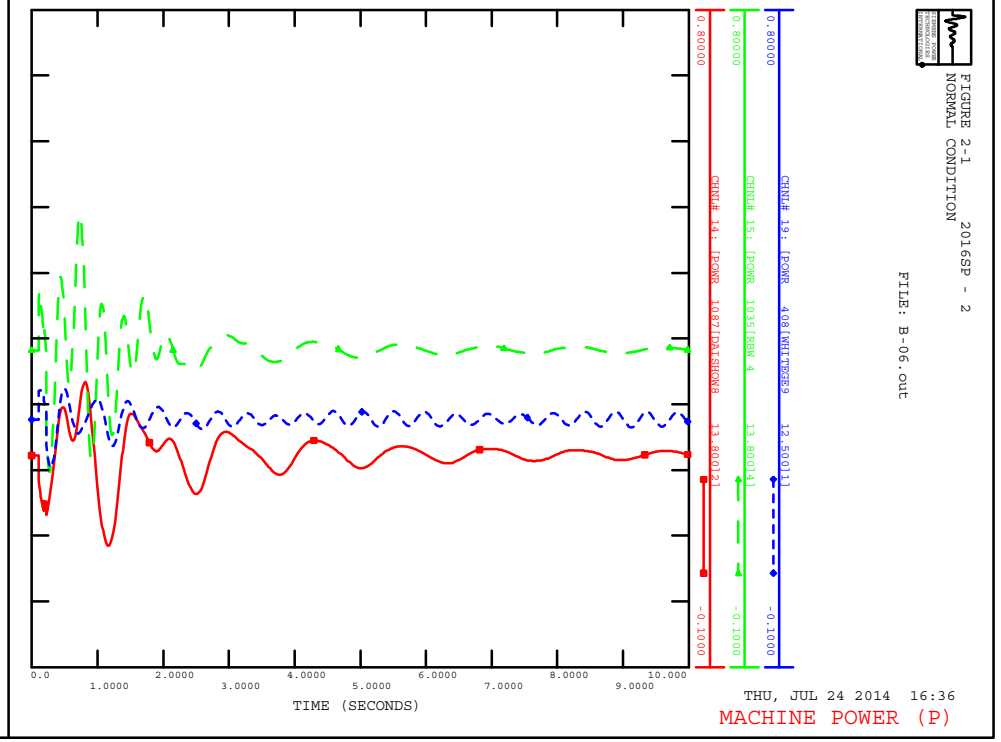


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-06.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

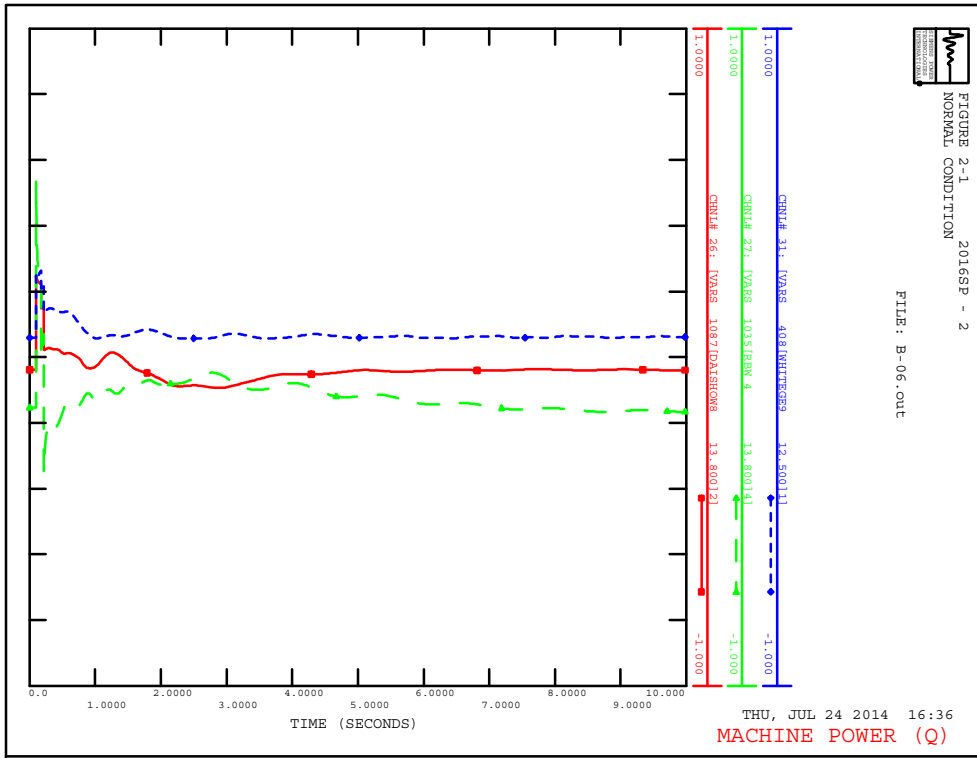


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-06.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

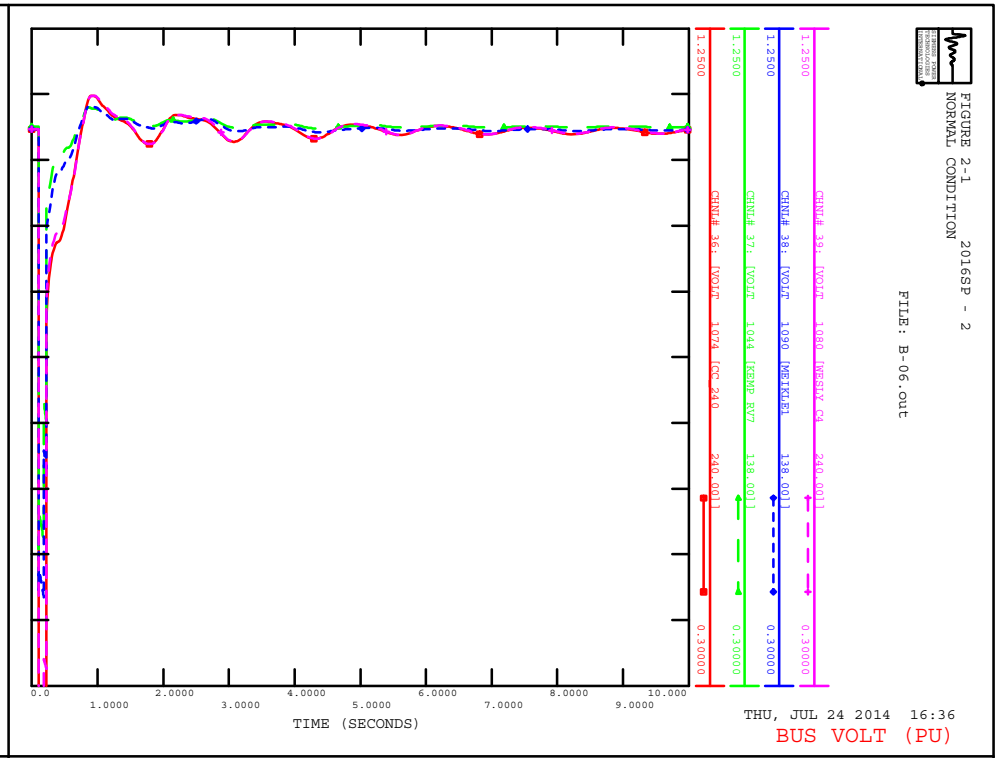


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-06.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

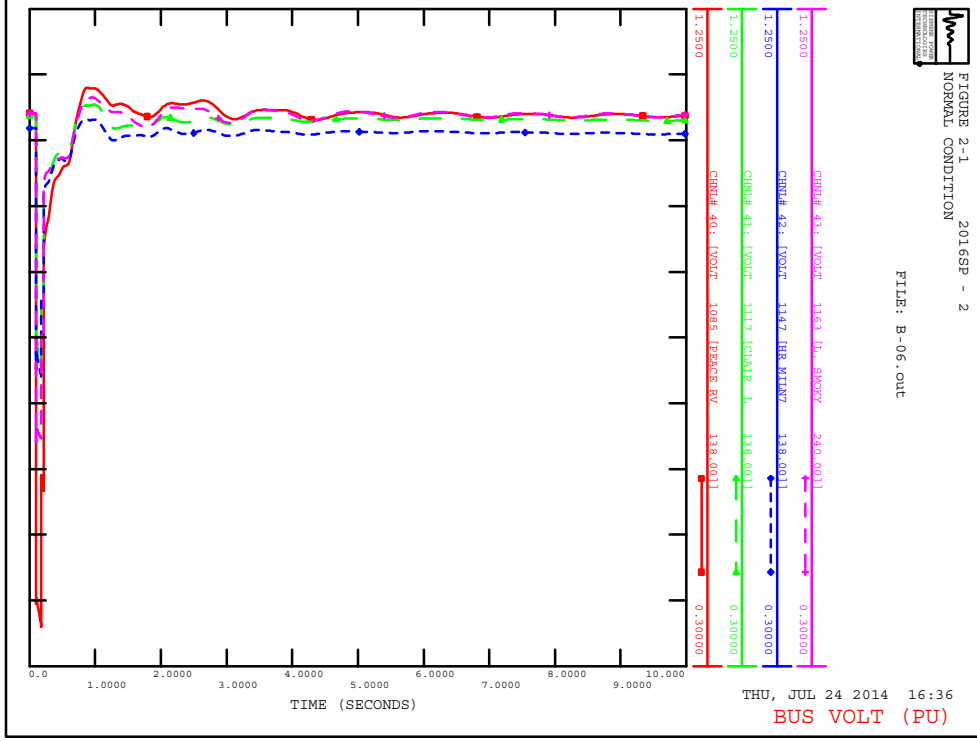


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-06.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

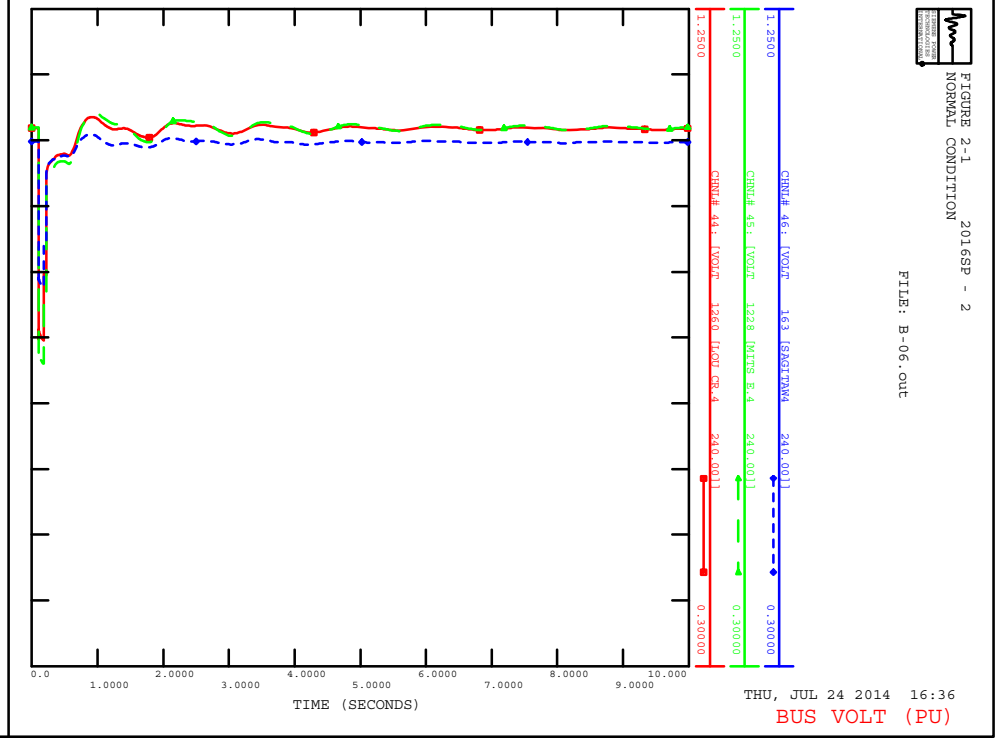


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-06.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

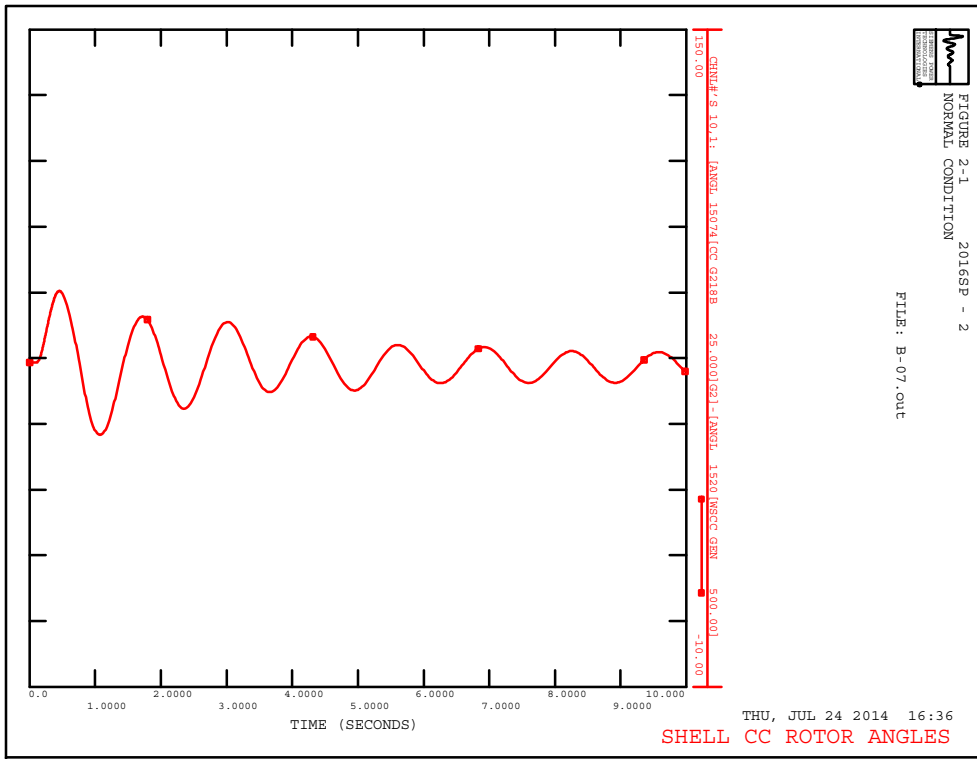


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-07.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

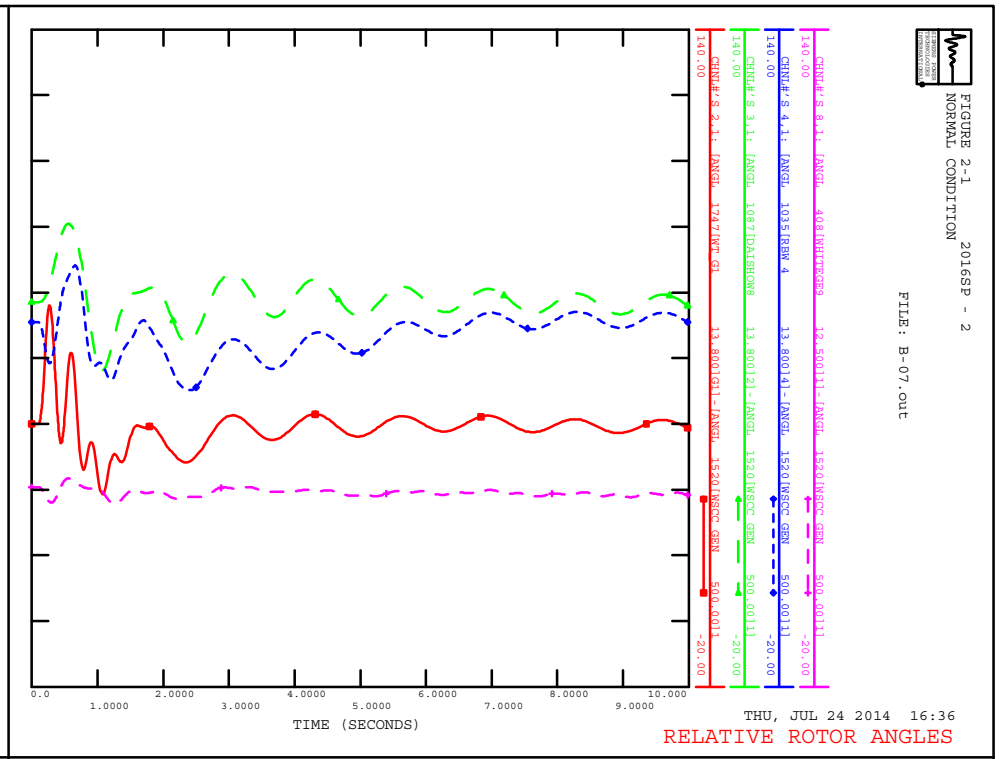


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-07.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

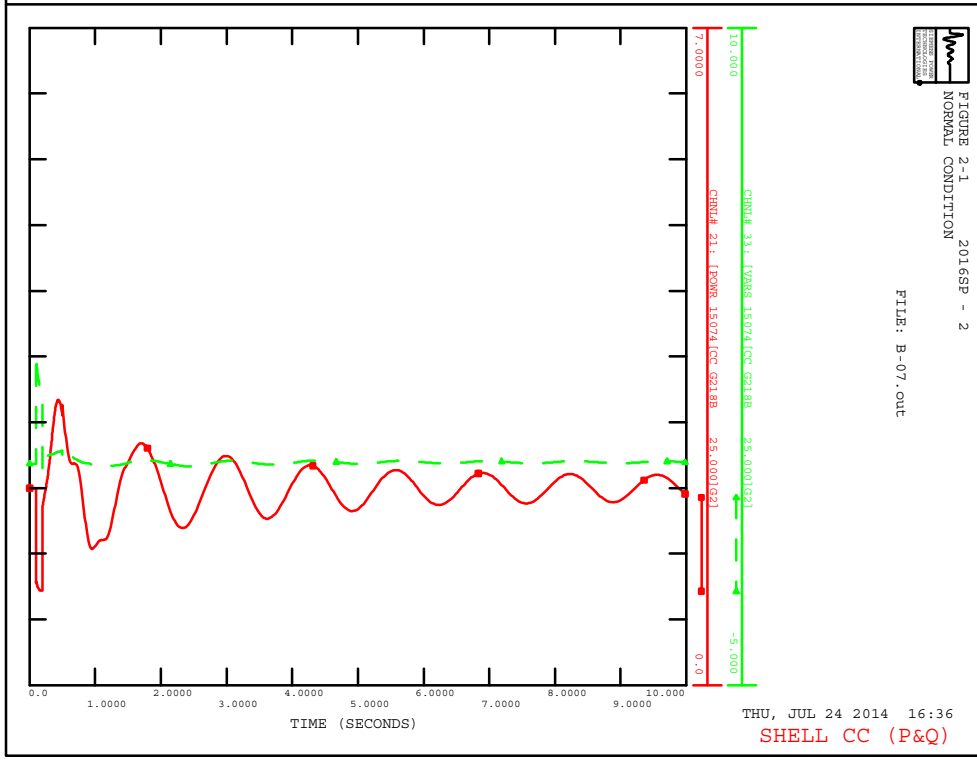


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-07.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

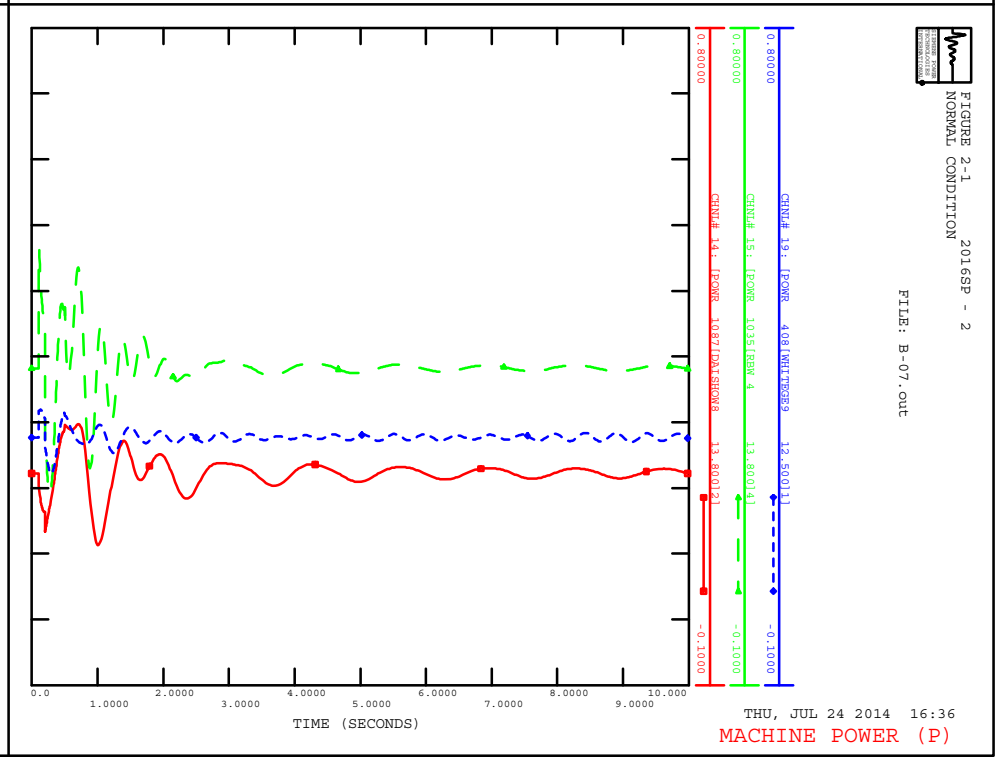


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-07.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

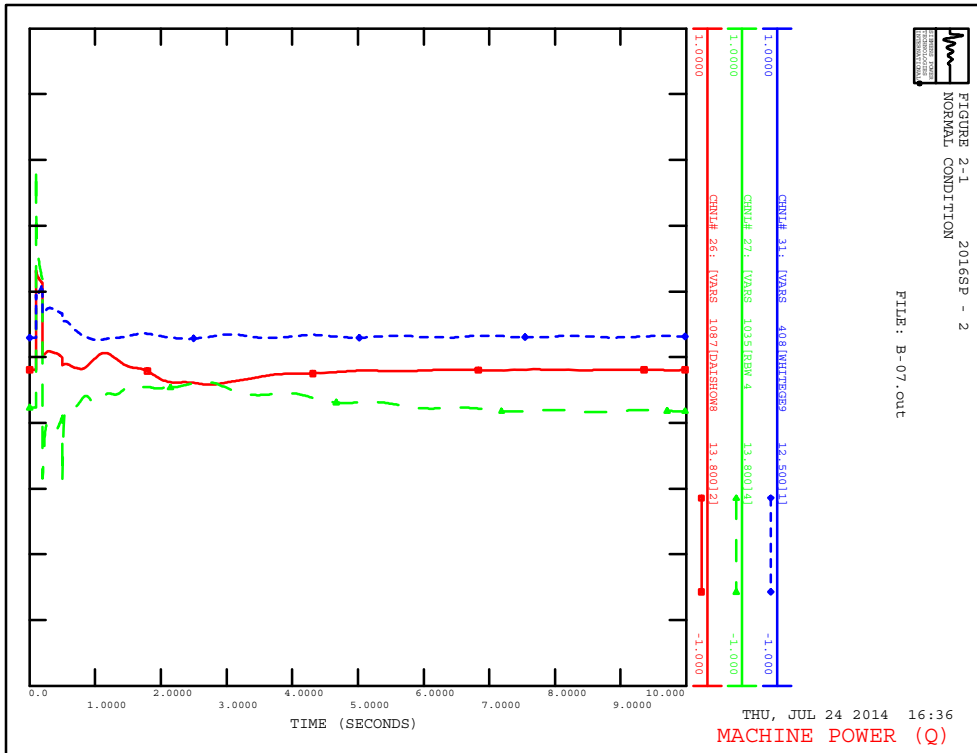


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-07.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

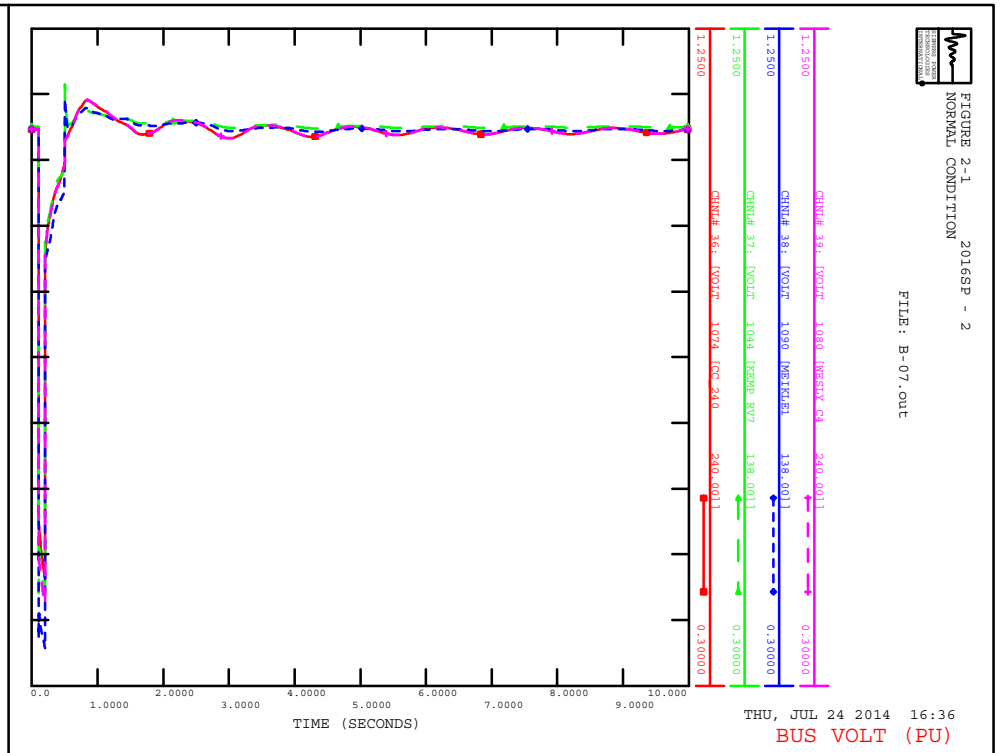


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-07.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

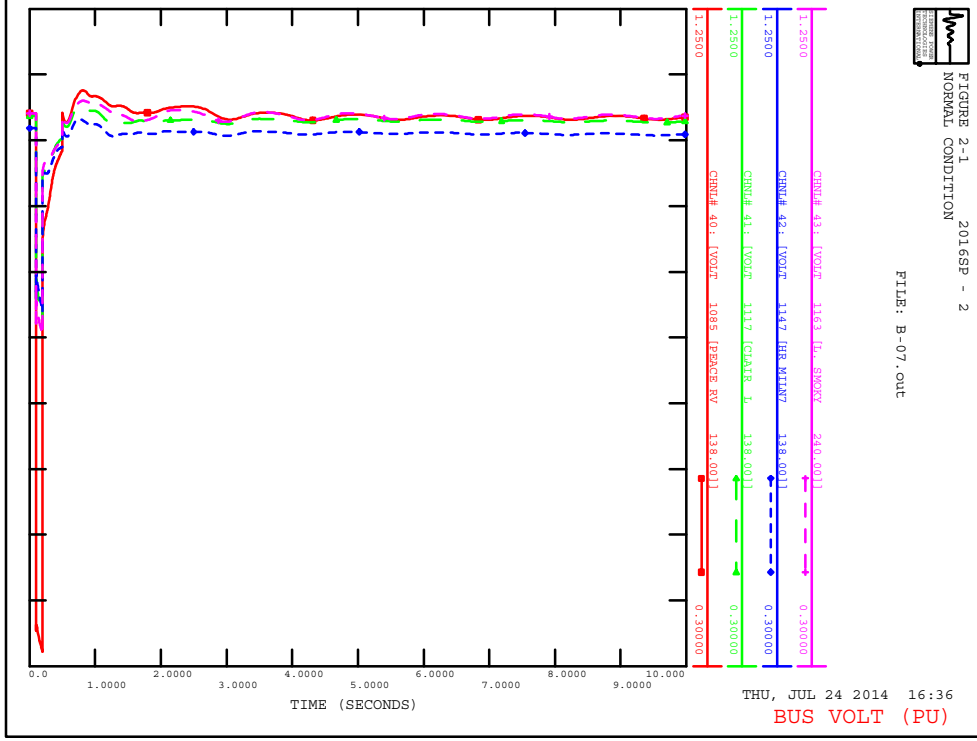


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-07.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

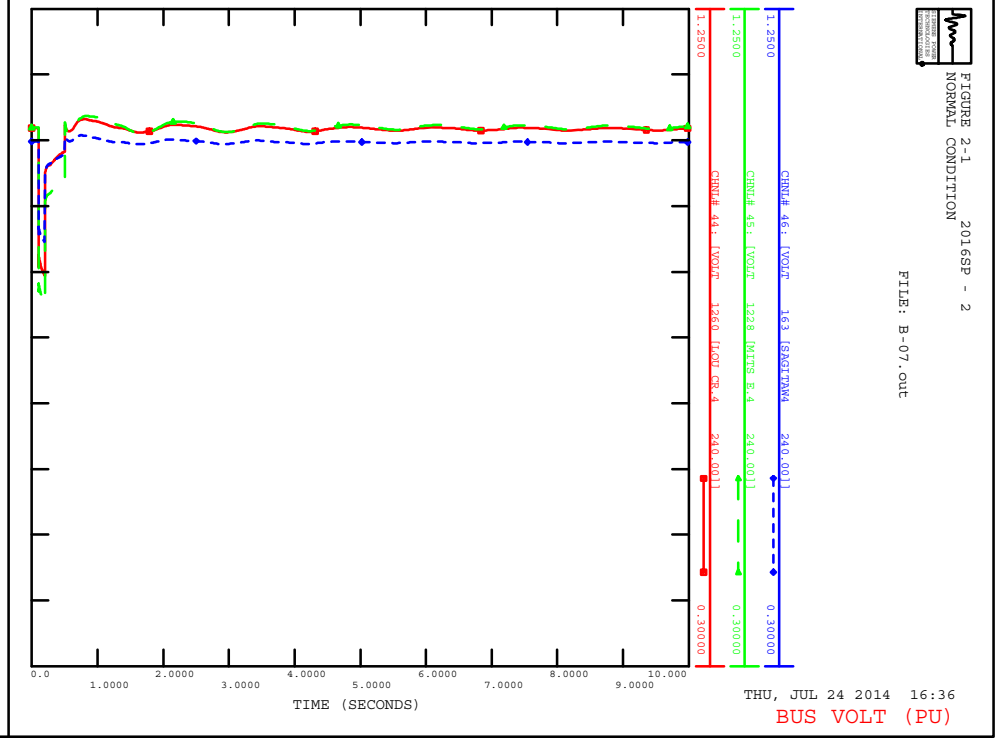


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-07.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

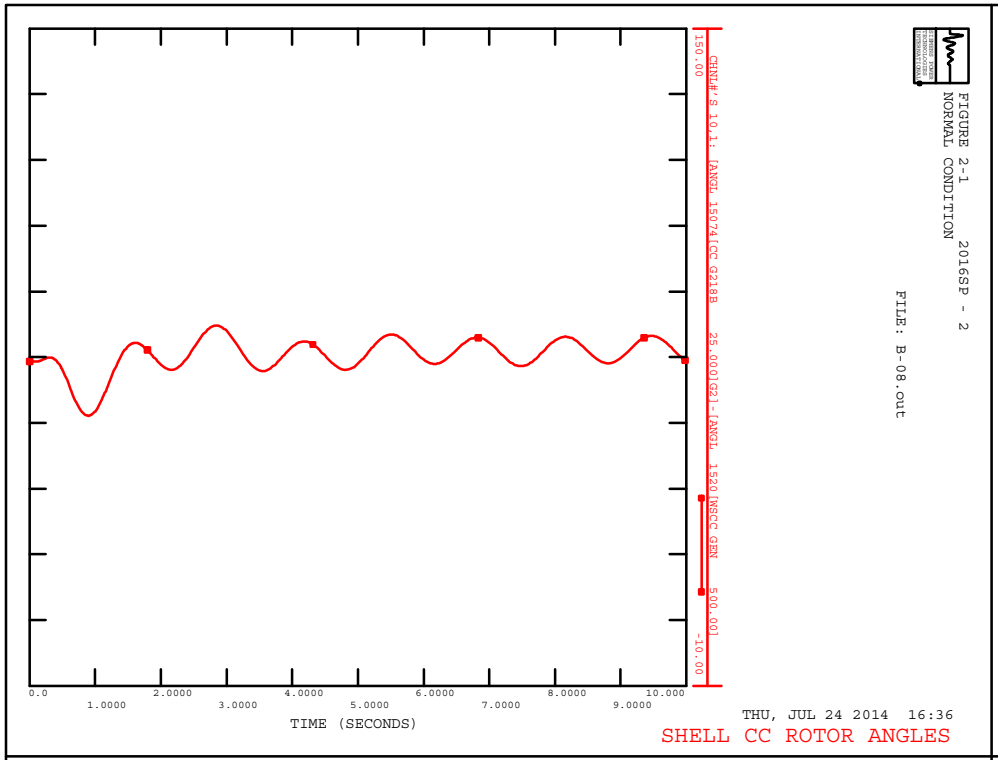


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-08.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

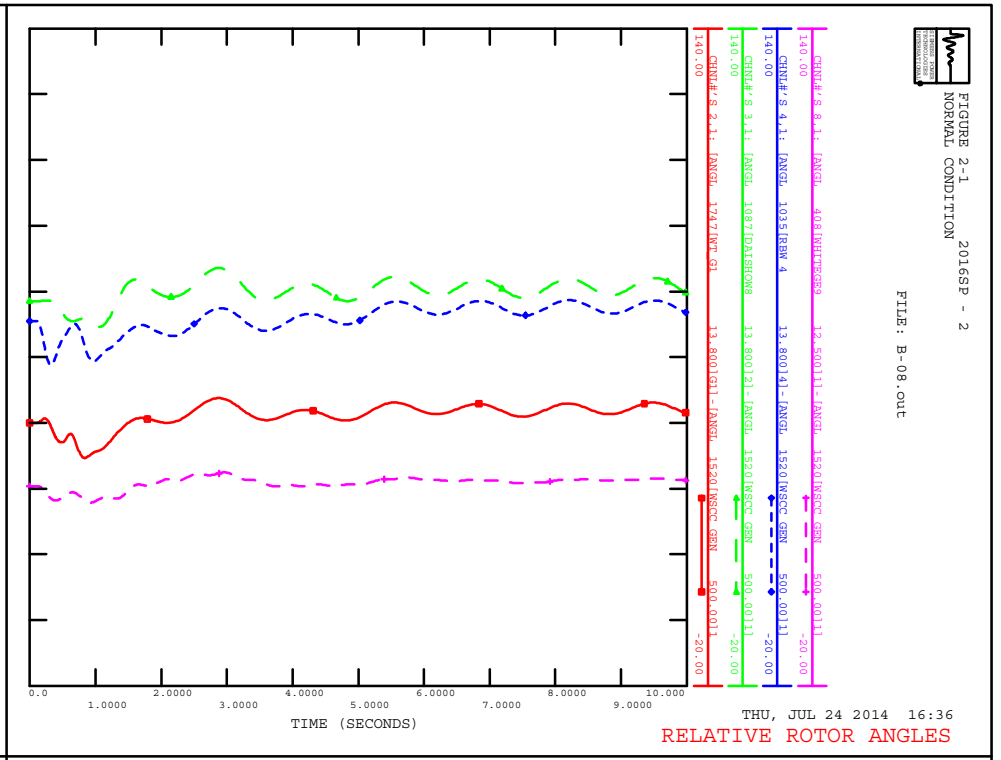


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-08.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

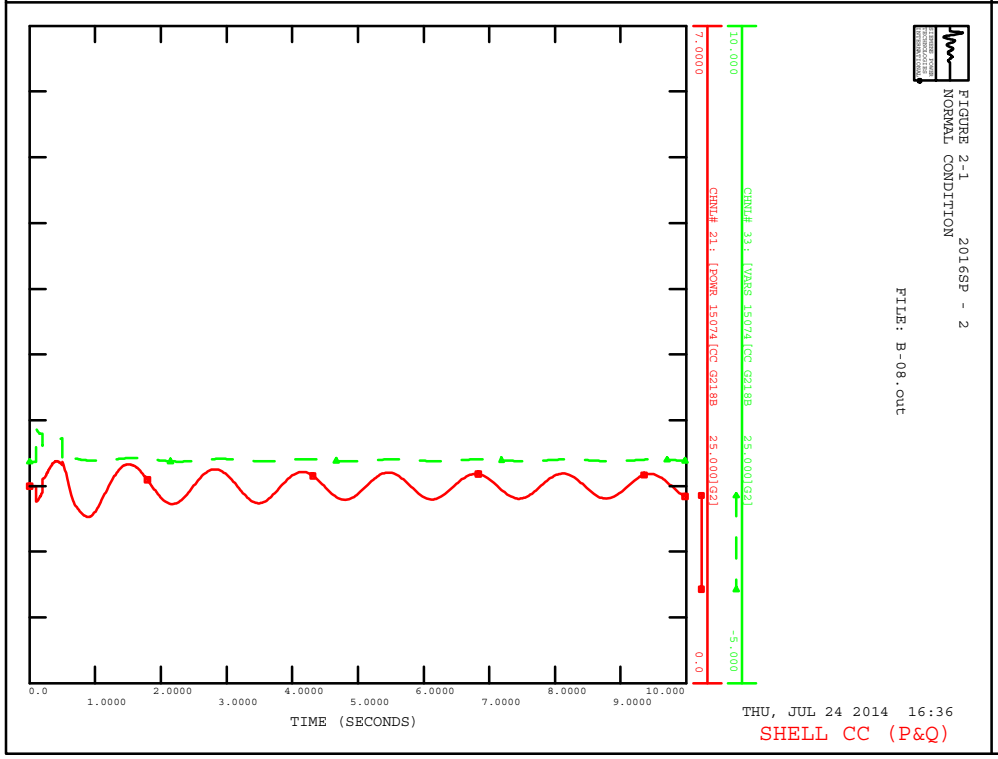


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-08.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

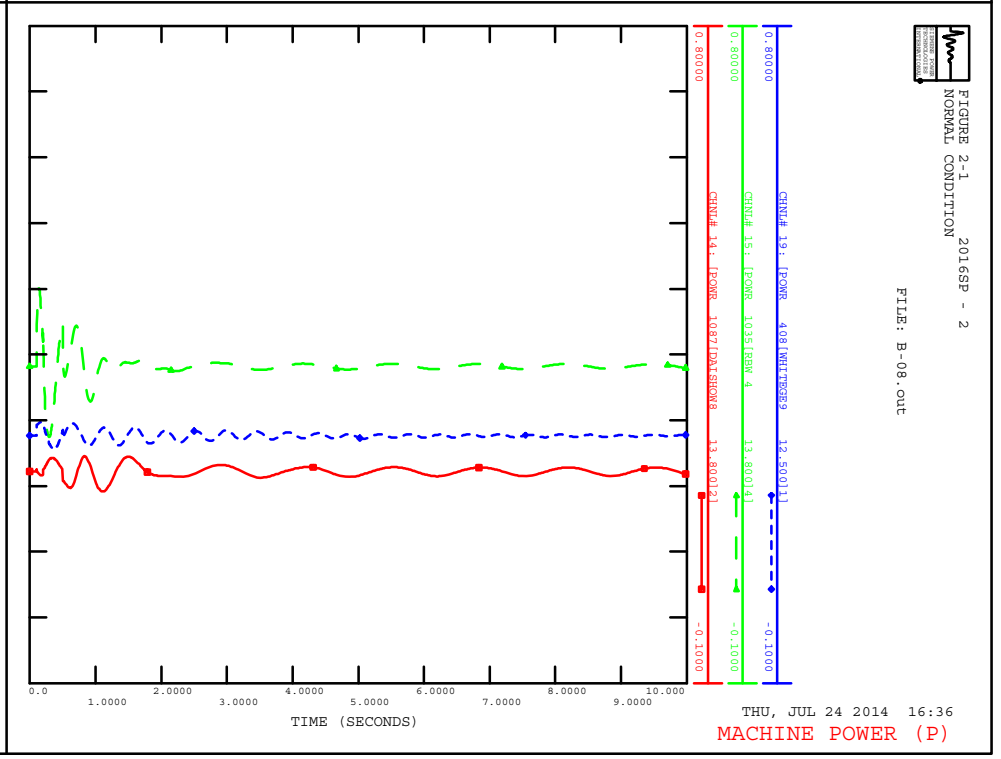


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-08.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

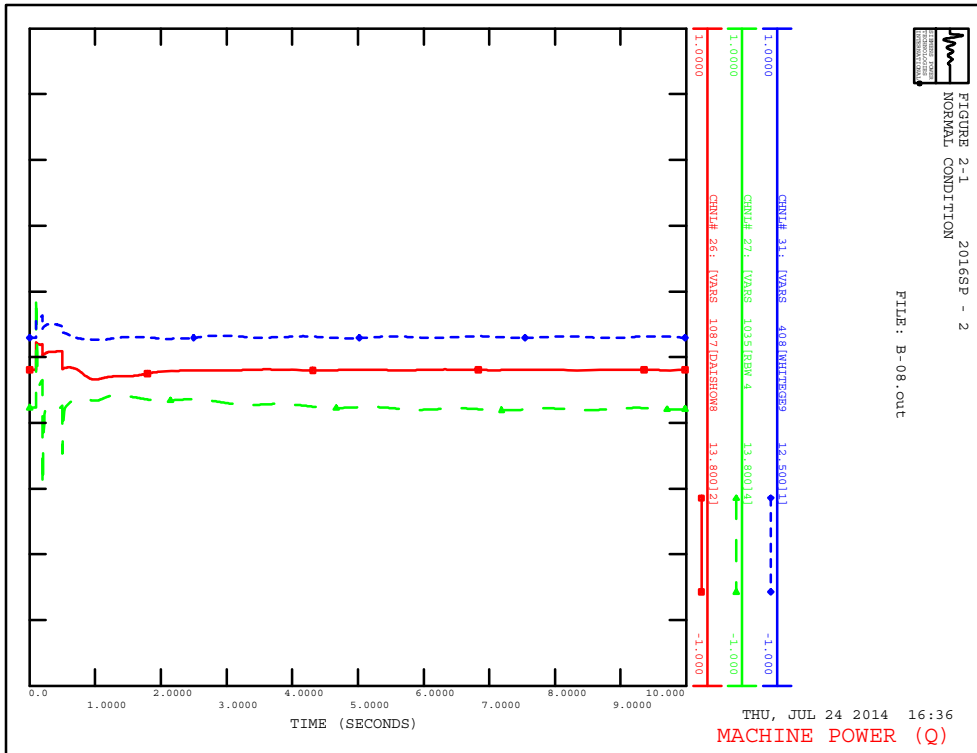


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-08.out
CHNI# 26: [VARS 1087 [DAISHOW8 13.800 [2]
CHNI# 27: [VARS 1035 [RBW 4 13.800 [4]
CHNI# 31: [VARS 408 [WHITEGB9 12.500 [1]
-1.000
1.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

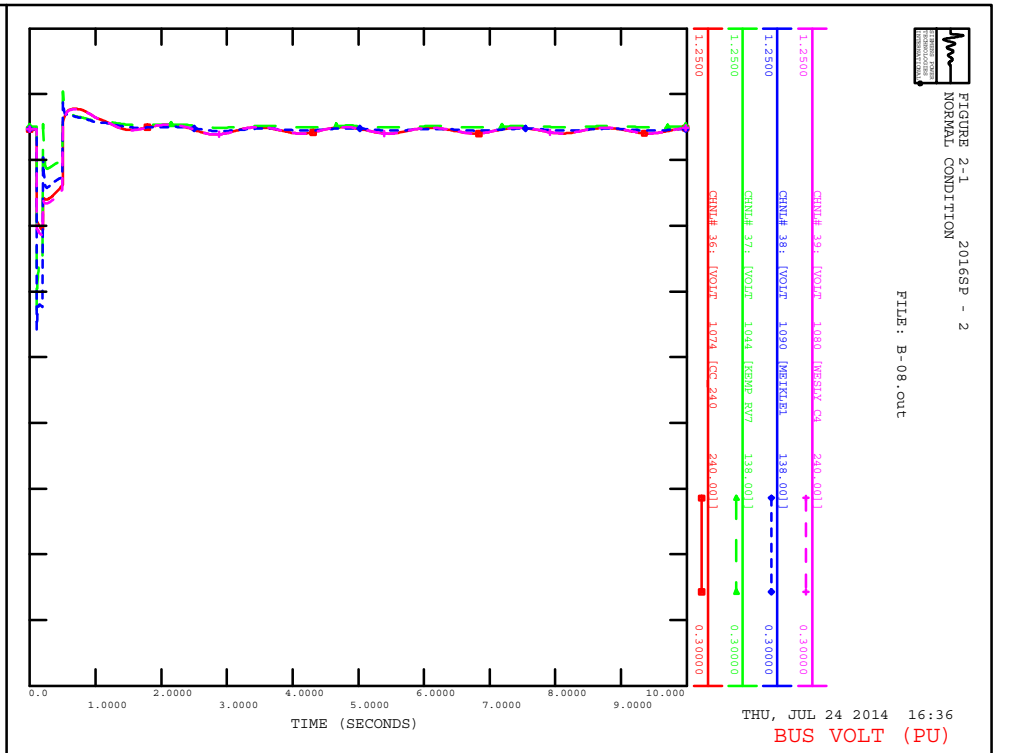


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-08.out
CHNI# 36: [VOLT 1074 [CC 240 240.00] [2]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00] [4]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.00] [1]
CHNI# 39: [VOLT 1080 [MESIK C4 240.00] [3]
0.30000
1.2500
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

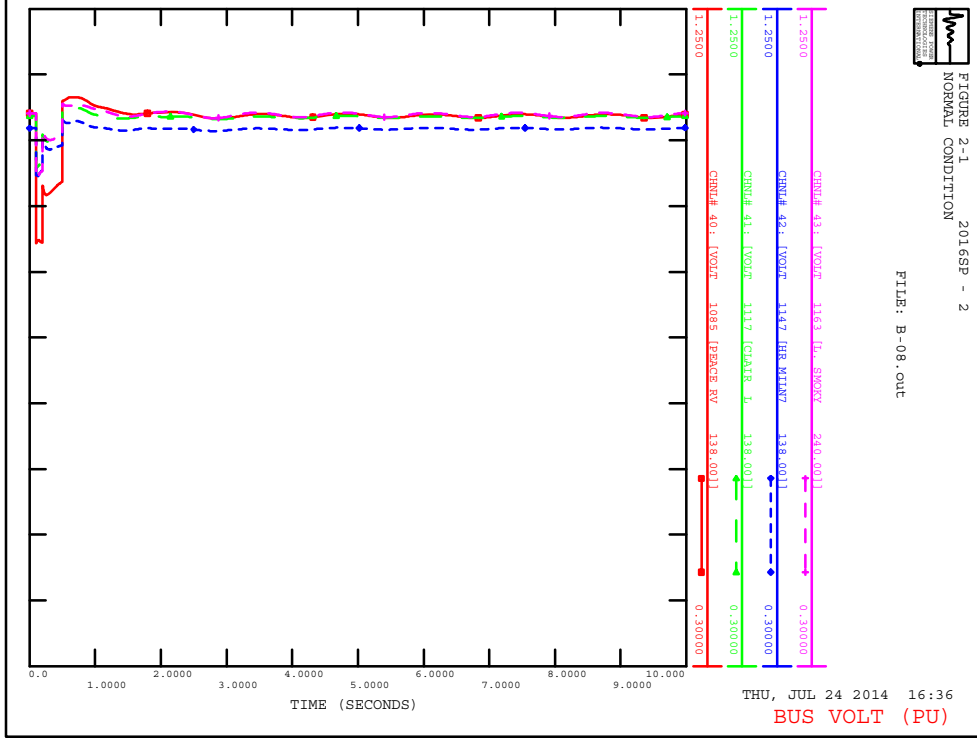


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-08.out
CHNI# 40: [VOLT 1085 [PEACE RV 138.00] [2]
CHNI# 41: [VOLT 1117 [CHAIR L 138.00] [4]
CHNI# 42: [VOLT 1142 [HR MIAN7 138.00] [1]
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00] [3]
0.30000
1.2500
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

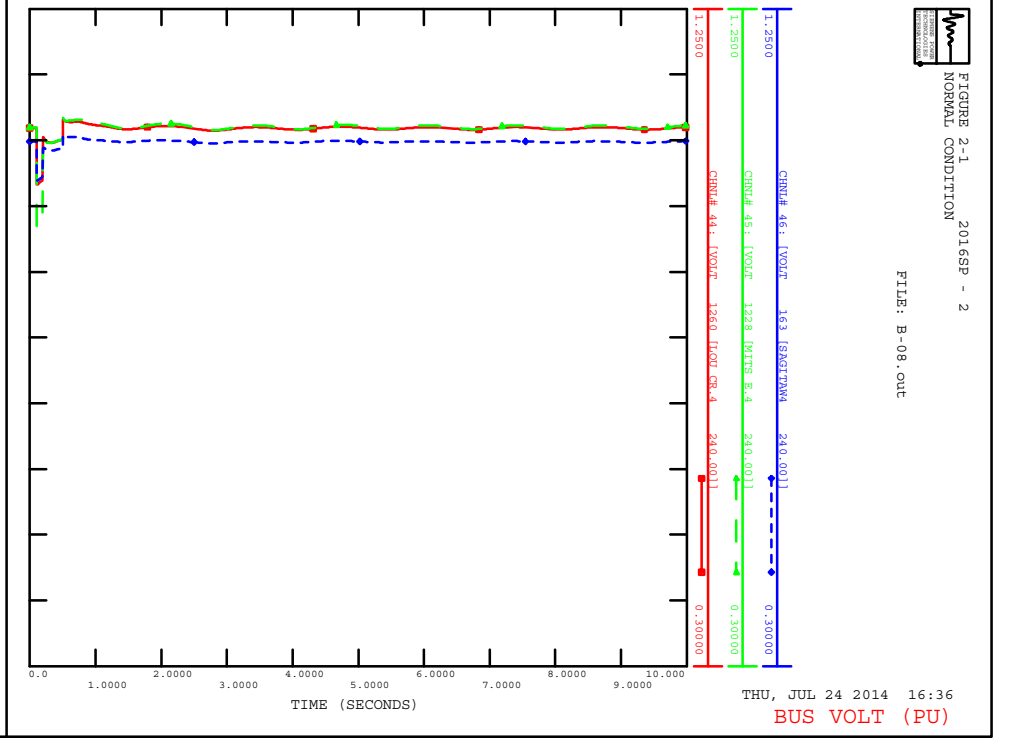


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-08.out
CHNI# 44: [VOLT 1260 [FOX CR 4 240.00] [2]
CHNI# 45: [VOLT 1228 [MITS B-4 240.00] [4]
CHNI# 46: [VOLT 163 [SAGITAW4 240.00] [1]
0.30000
1.2500
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

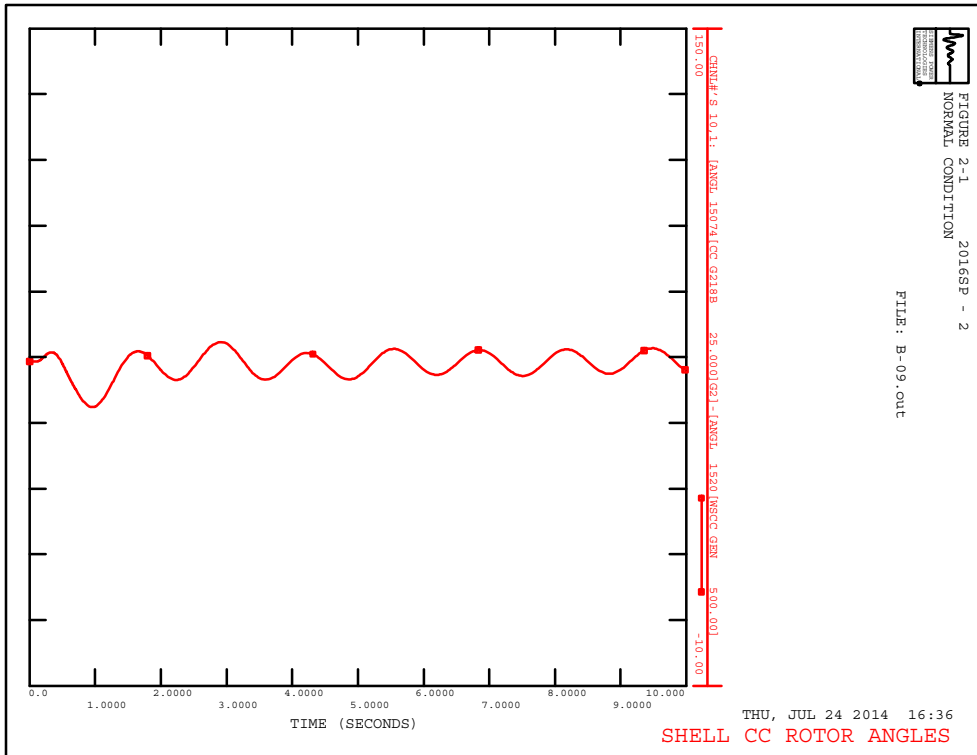


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-09.out
CHNL# 10.1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
150.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

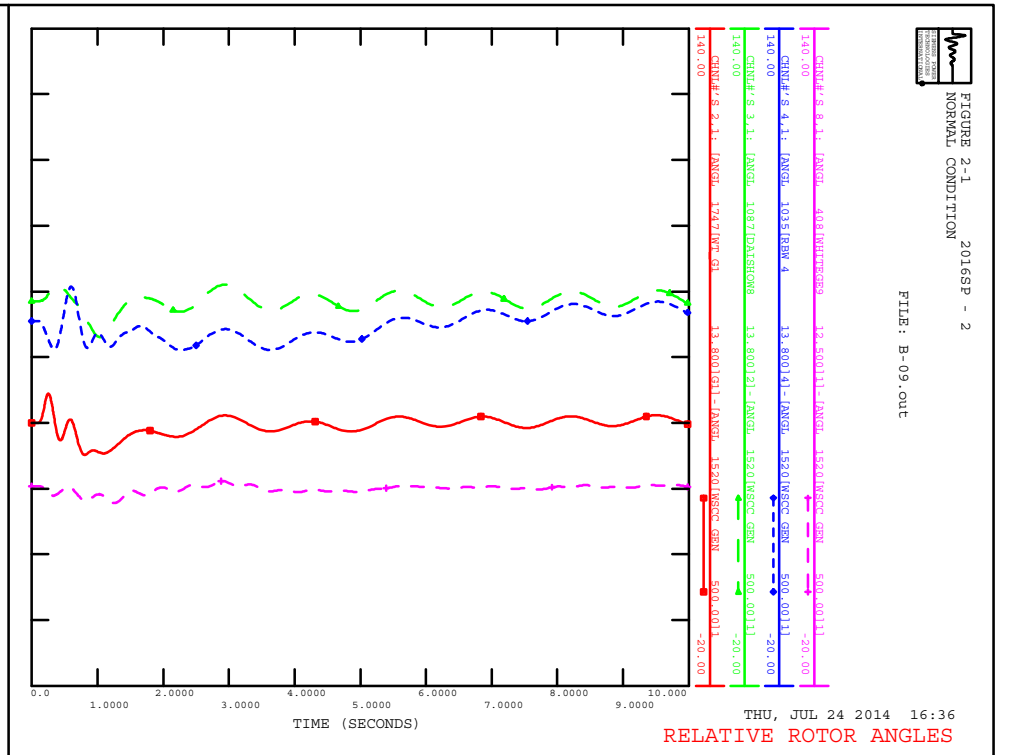


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-09.out
CHNL# 8.1: [ANGL 408[WHITESB9 12.500[1] [ANGL 1520[NSCC GEN 500.00]]
CHNL# 4.1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3.1: [ANGL 1087[DAISHON8 13.800[2] [ANGL 1520[NSCC GEN 500.00]]
CHNL# 2.1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

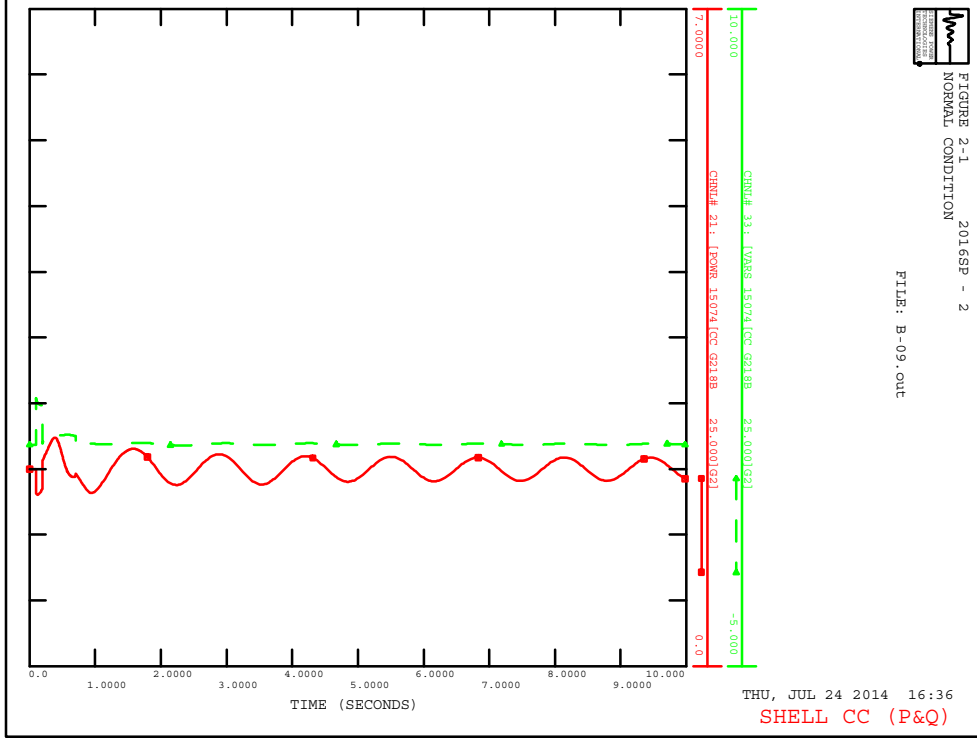


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-09.out
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
7.0000
0.0
10.000
-5.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

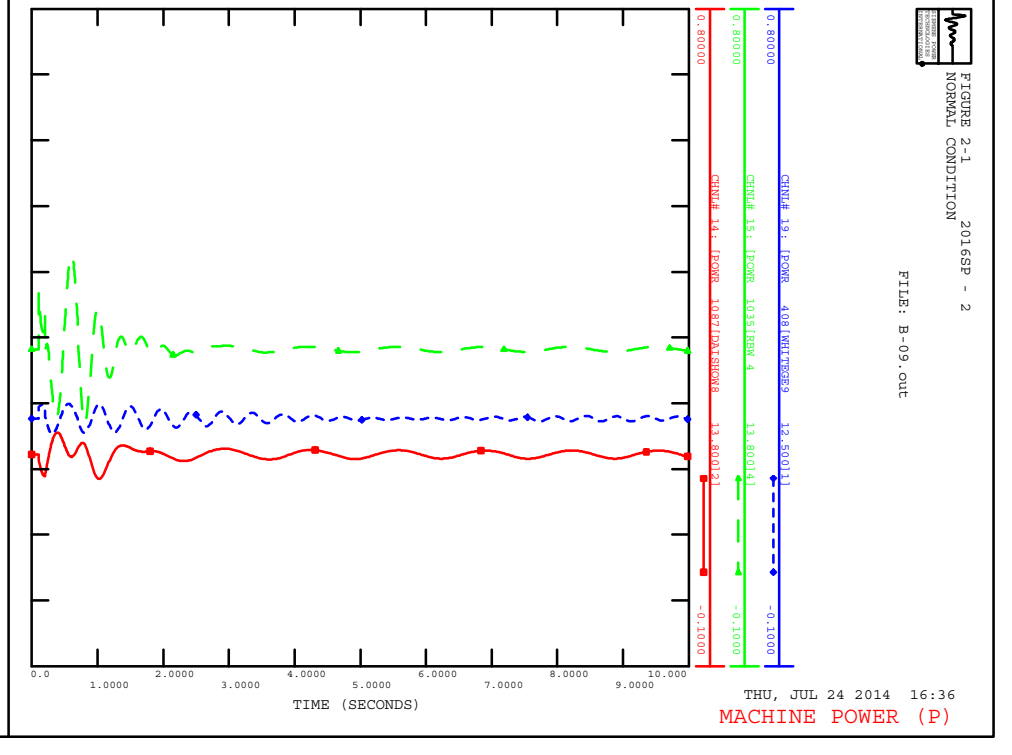


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-09.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

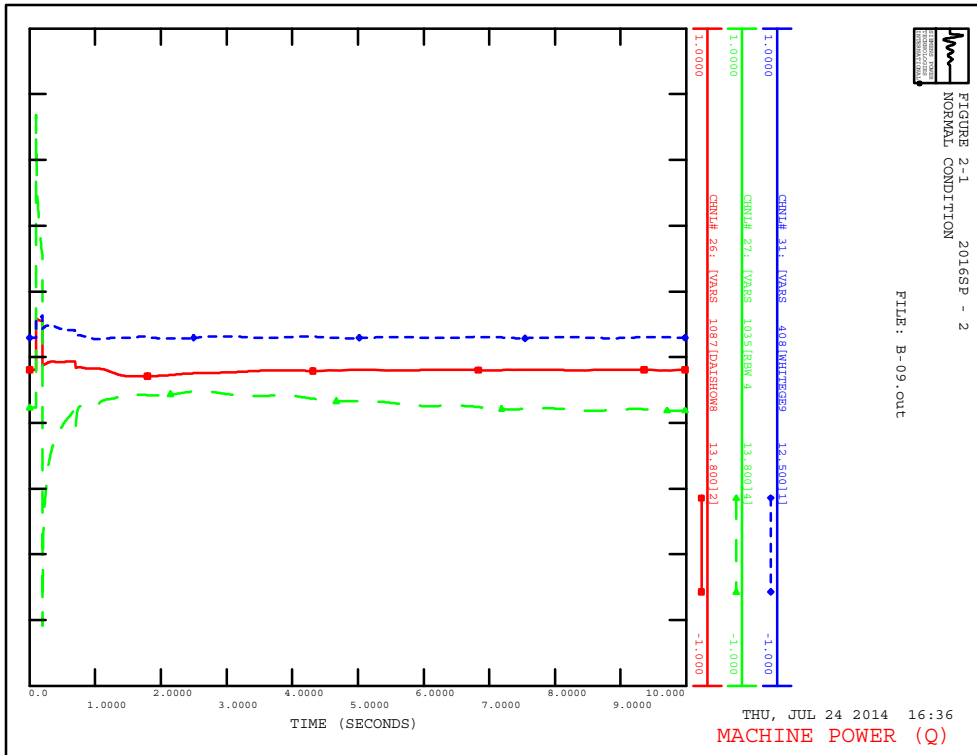


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-09.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

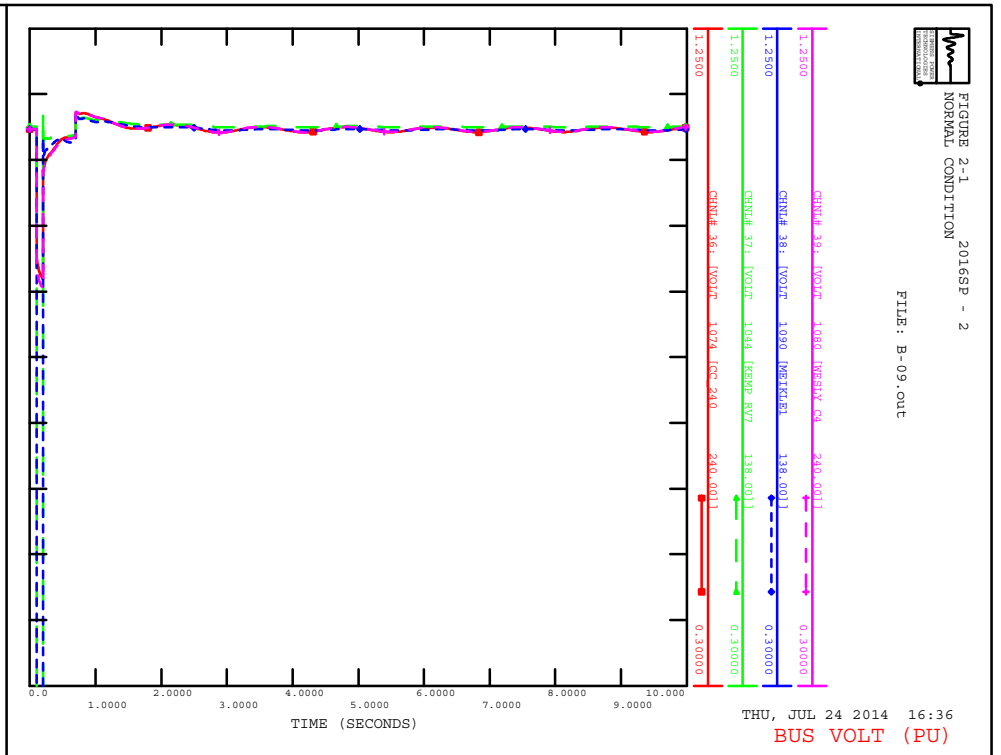


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-09.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

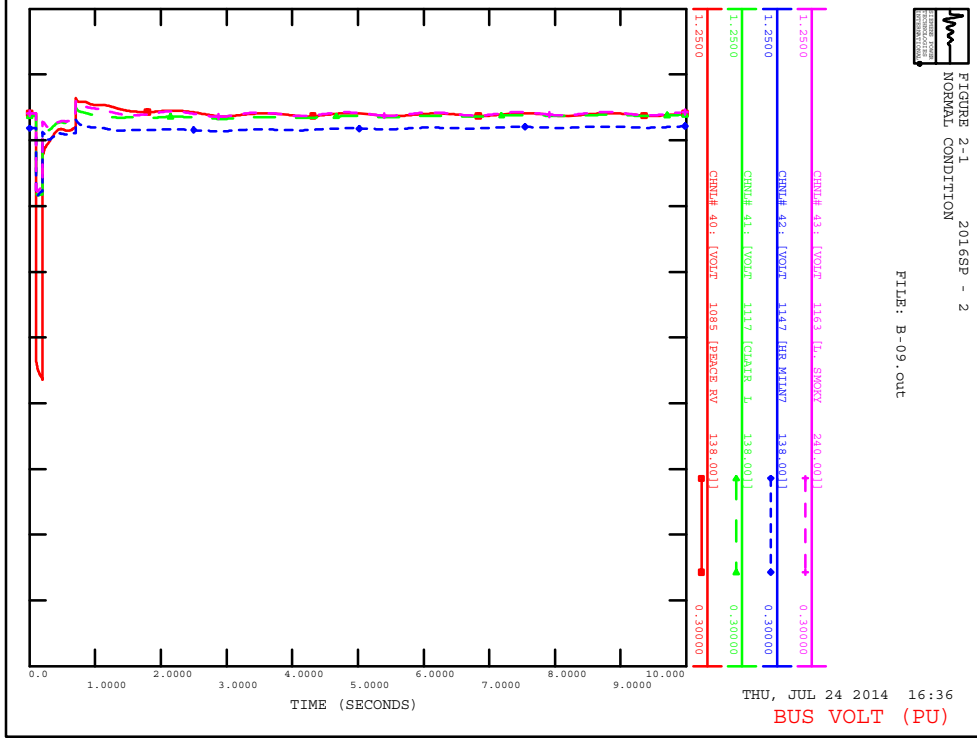


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-09.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

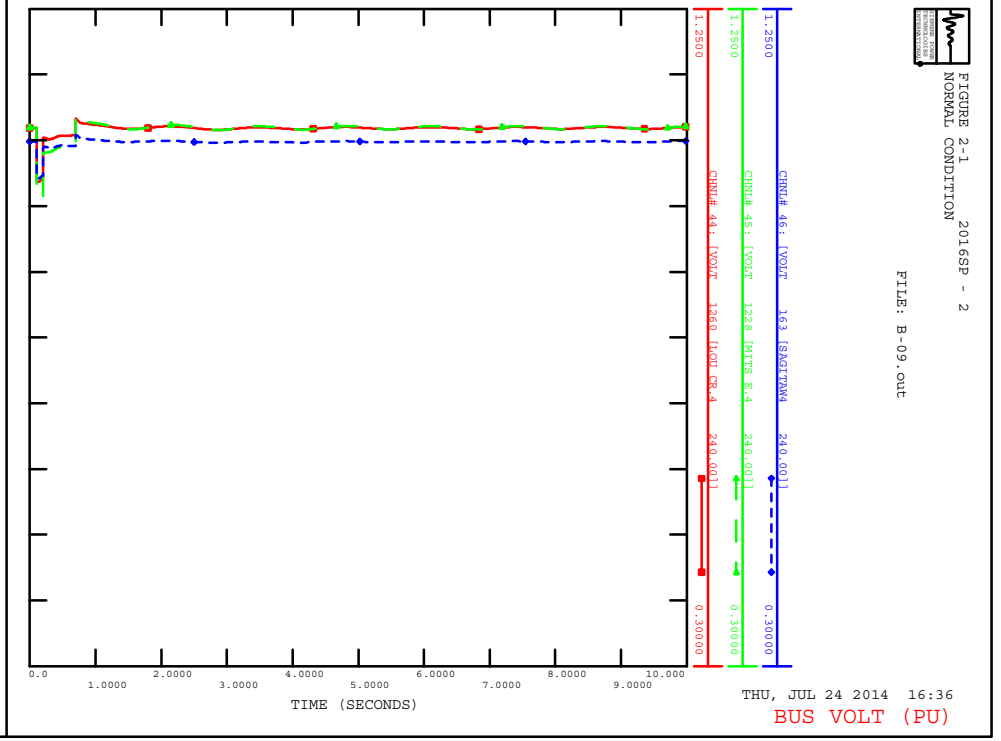


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-09.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

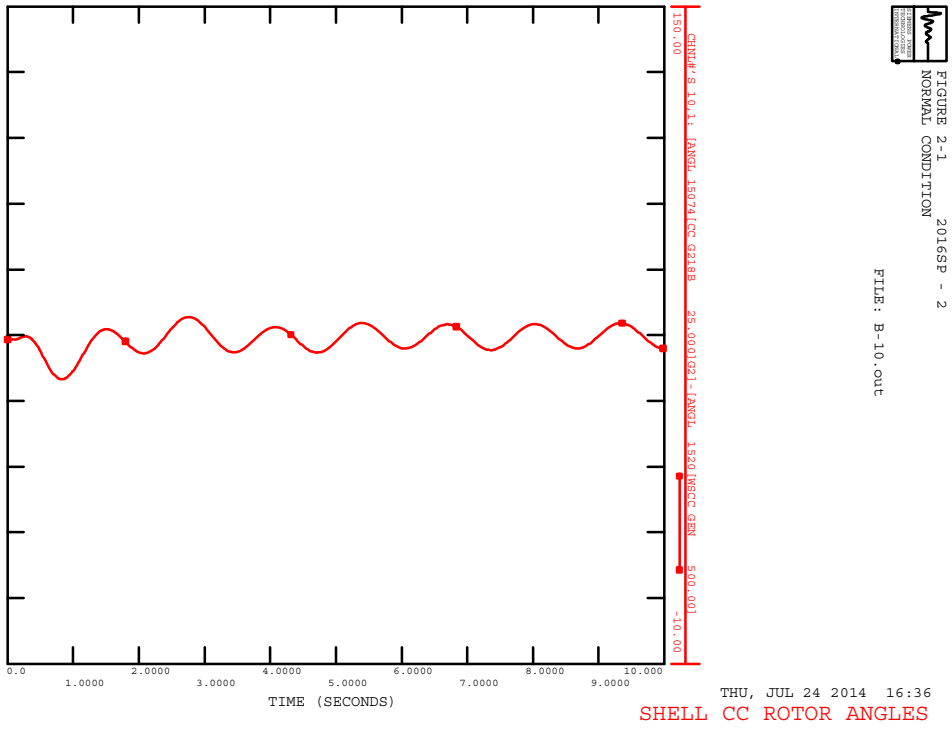


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-10.out
CHNL#'S 10,1: [ANGL 15074[CC G218B
25.000[G2]-[ANGL 1520[NSCC GEN
-500.00]
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

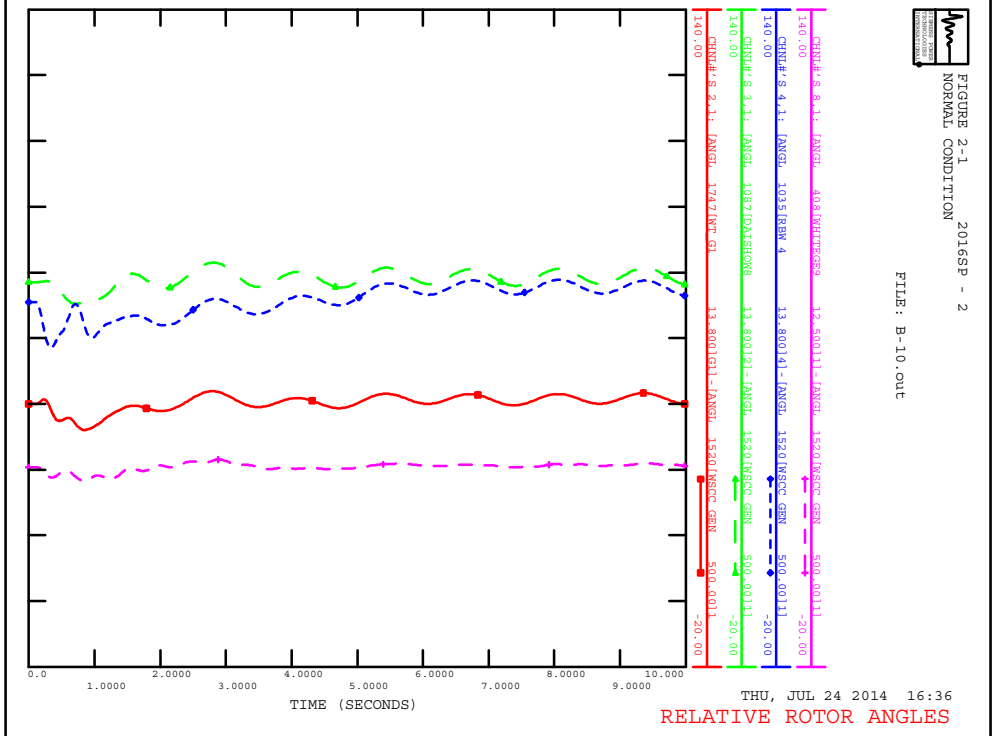


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-10.out
CHNL#'S 8,1: [ANGL 408[WHITESB9
12.500[1]-[ANGL 1520[NSCC GEN
-500.00]
CHNL#'S 4,1: [ANGL 1035[RBM 4
13.800[4]-[ANGL 1520[NSCC GEN
-500.00]
CHNL#'S 3,1: [ANGL 1087[DAISHON8
13.800[2]-[ANGL 1520[NSCC GEN
-500.00]
CHNL#'S 2,1: [ANGL 1747[WT G1
13.800[1]-[ANGL 1520[NSCC GEN
-500.00]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

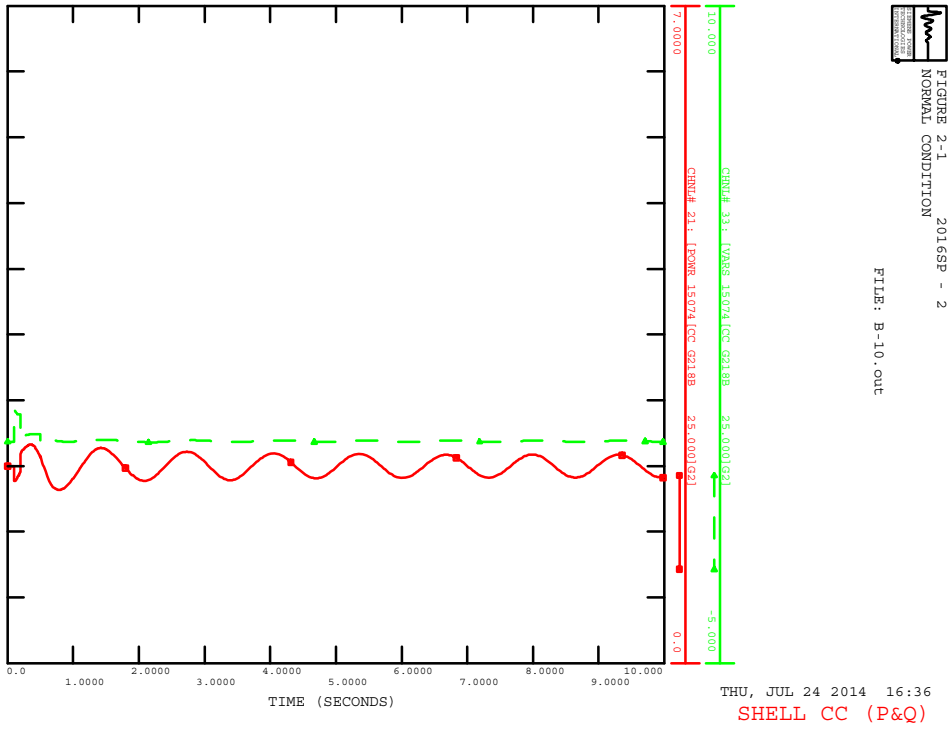


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-10.out
CHNL# 33: [VARS 15074[CC G218B
25.000[G2]
CHNL# 21: [POWR 15074[CC G218B
25.000[G2]
10.000
-5.000
7.0000
0.0
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

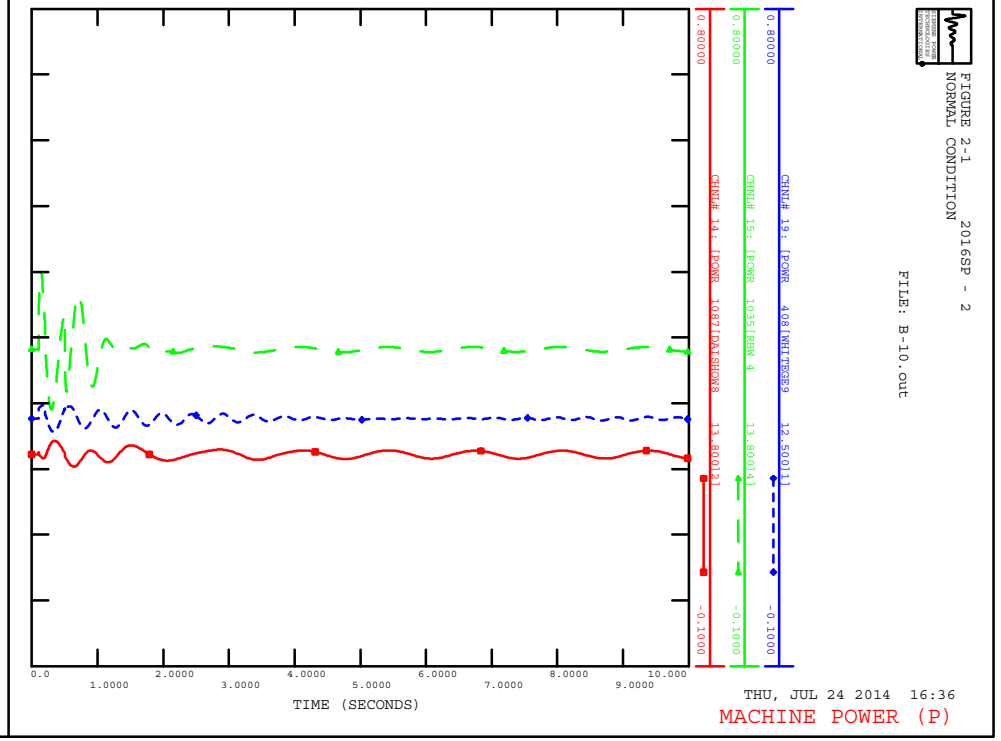


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-10.out
CHNL# 19: [POWR 408[WHITESB9
12.500[1]
CHNL# 15: [POWR 1035[RBM 4
13.800[4]
CHNL# 14: [POWR 1087[DAISHON8
13.800[2]
CHNL# 13: [POWR 1747[WT G1
13.800[1]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-10.out

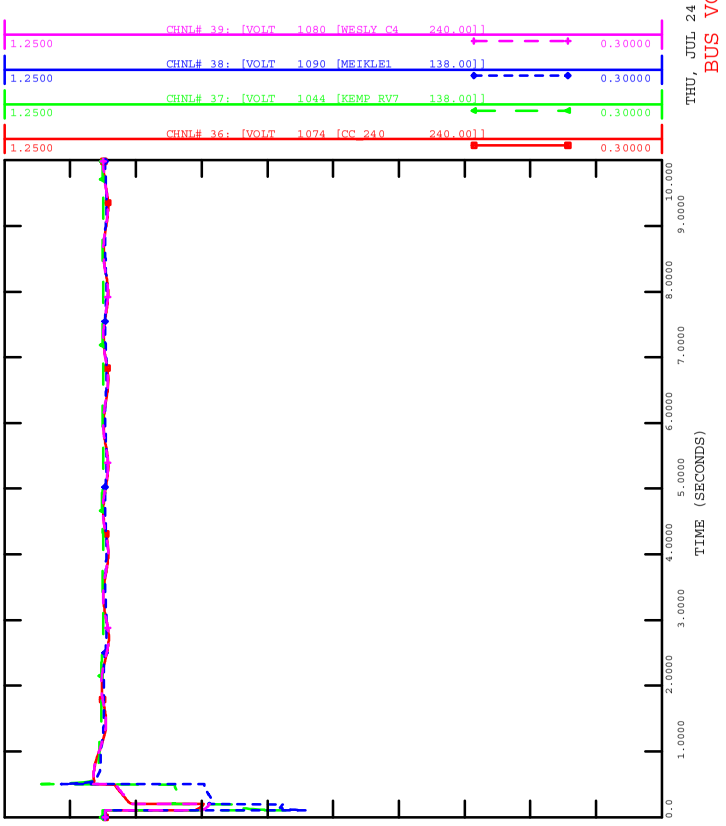


FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-10.out

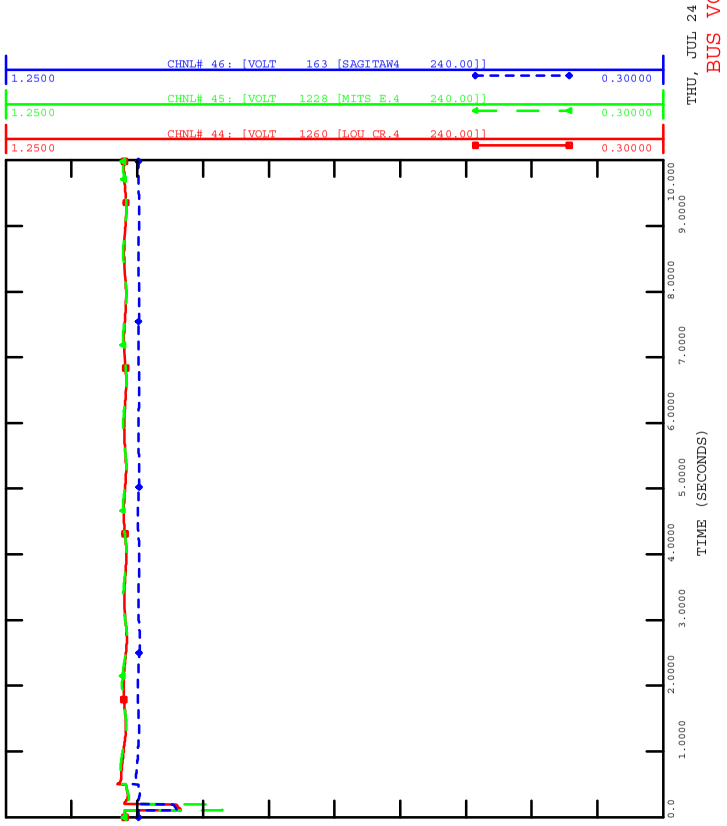


FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-10.out

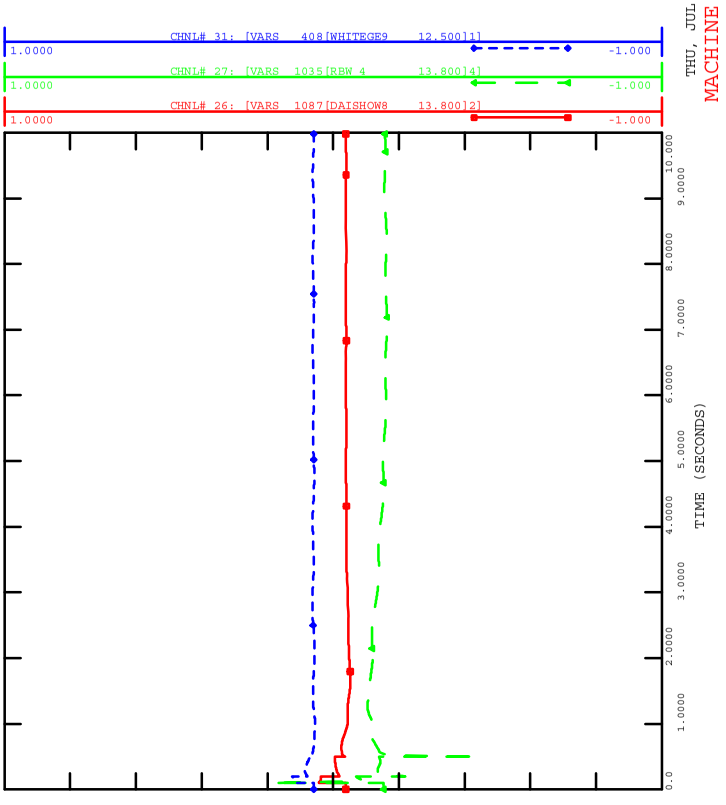
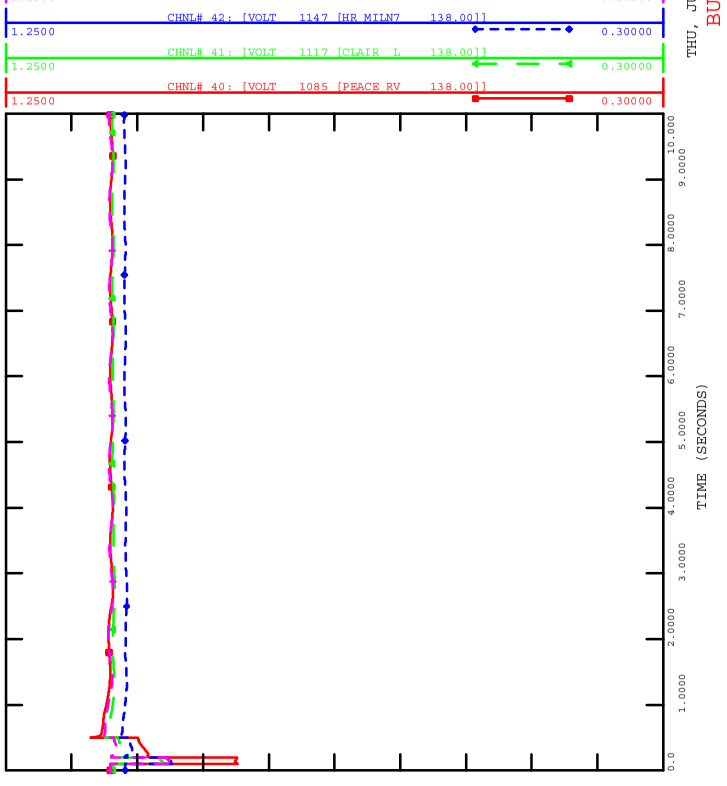


FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-10.out



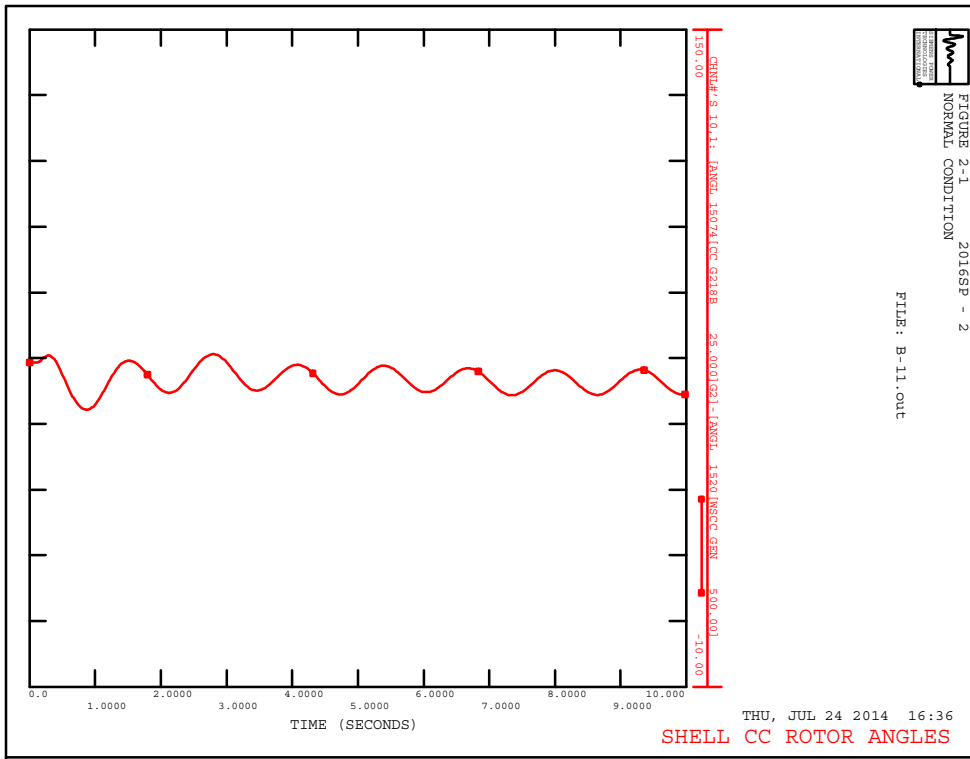


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-11.out
CHNL# 10.1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

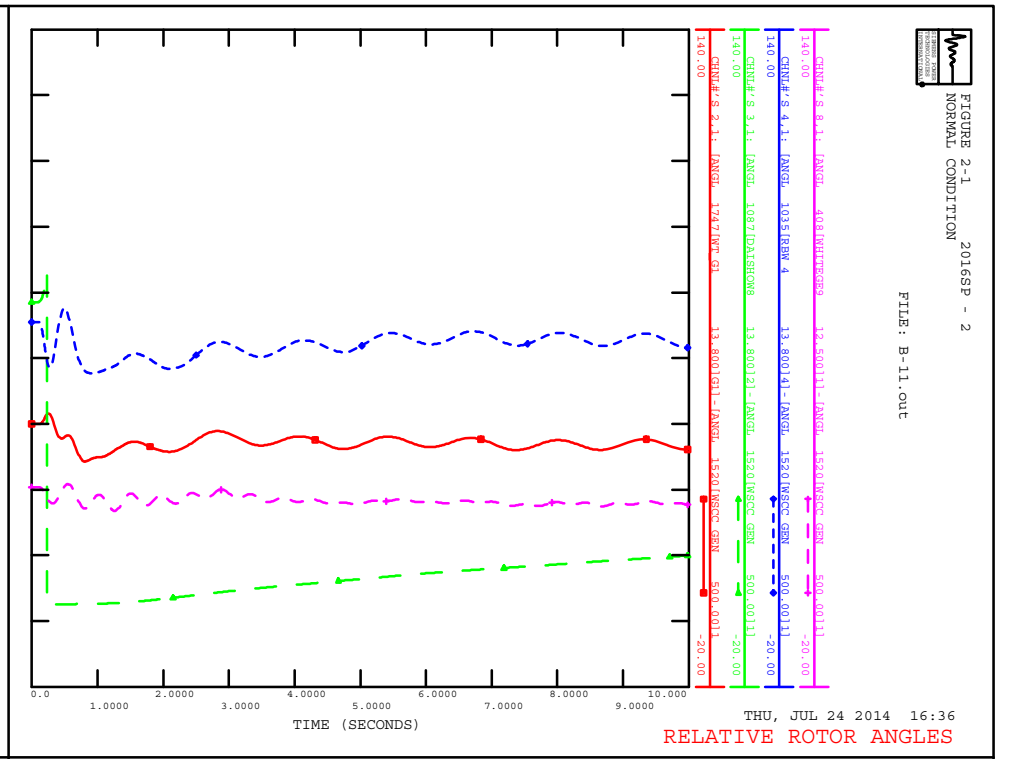


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-11.out
CHNL# 8: 1: [ANGL 408[WHITEGE9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 4: 1: [ANGL 1035[RBM 4 13.800[14]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3: 1: [ANGL 1087[DAISHON8 13.800[12]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 2: 1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

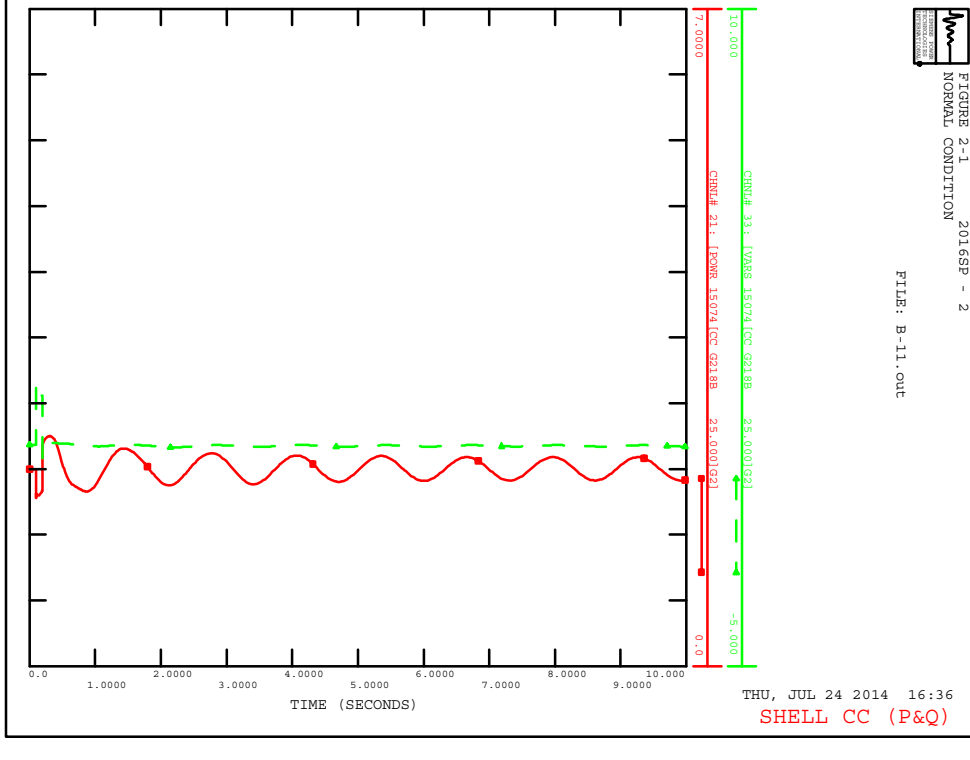


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-11.out
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
7.0000
0.0
10.000
-5.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

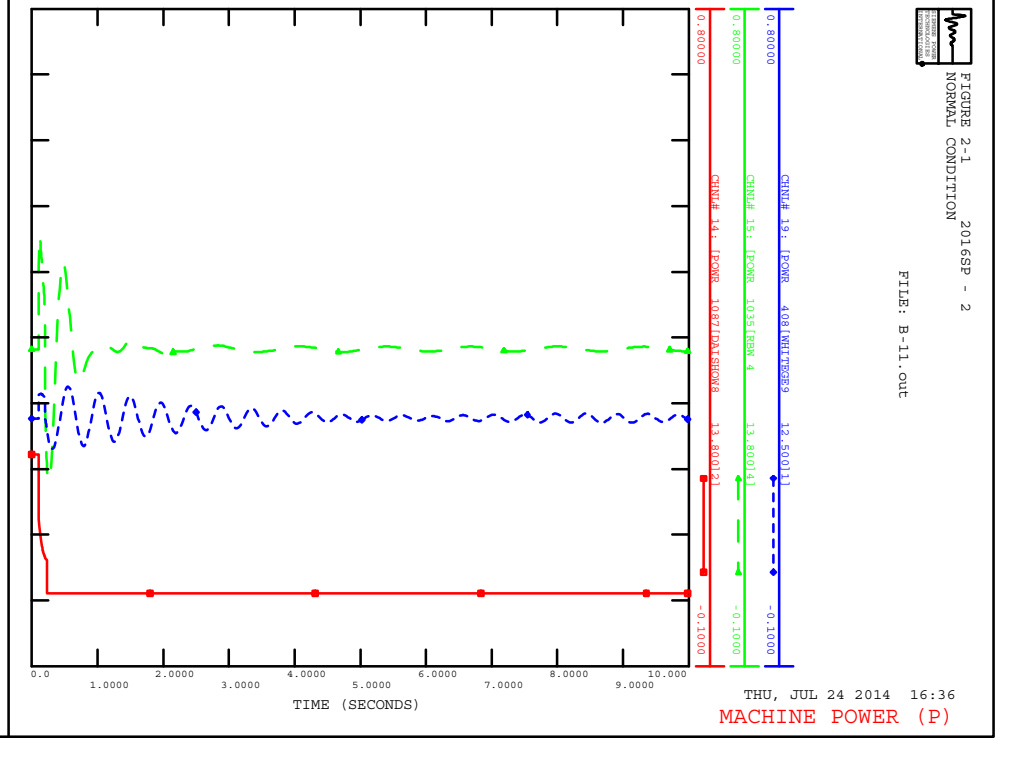


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-11.out
CHNL# 19: [POWR 408[WHITEGE9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[14]
CHNL# 14: [POWR 1087[DAISHON8 13.800[12]
0.80000
-0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

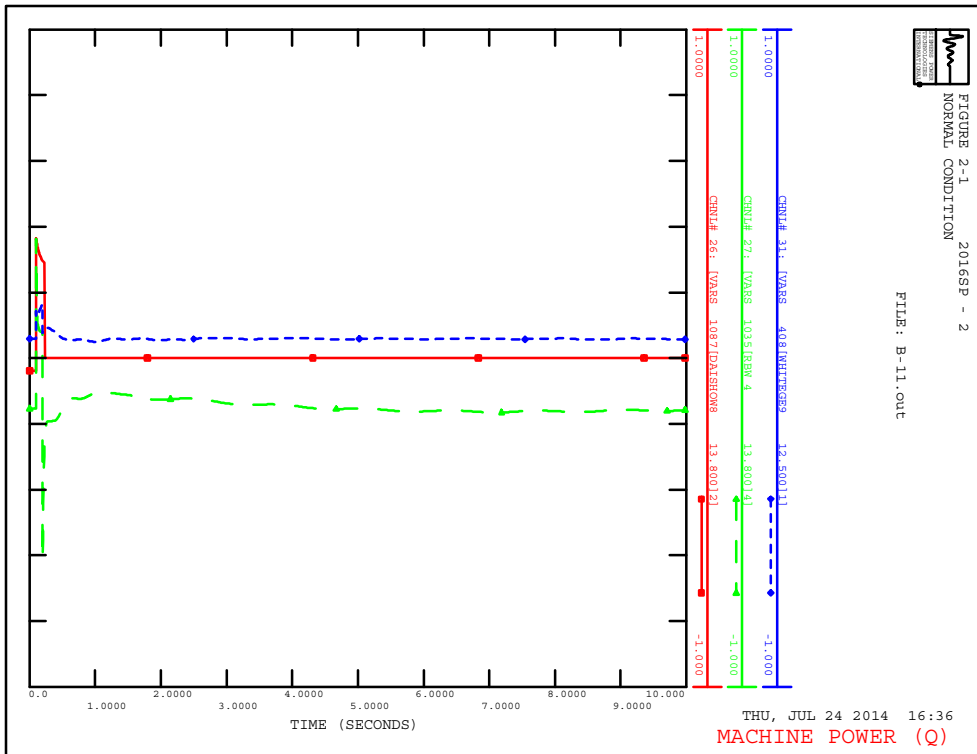


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-11.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

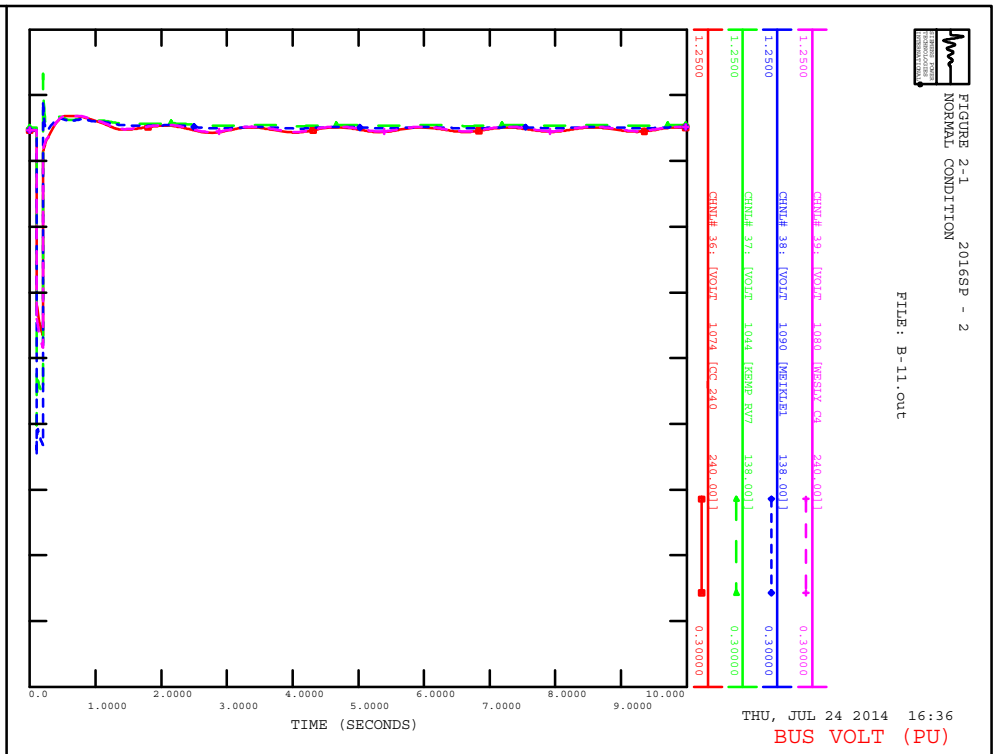


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-11.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

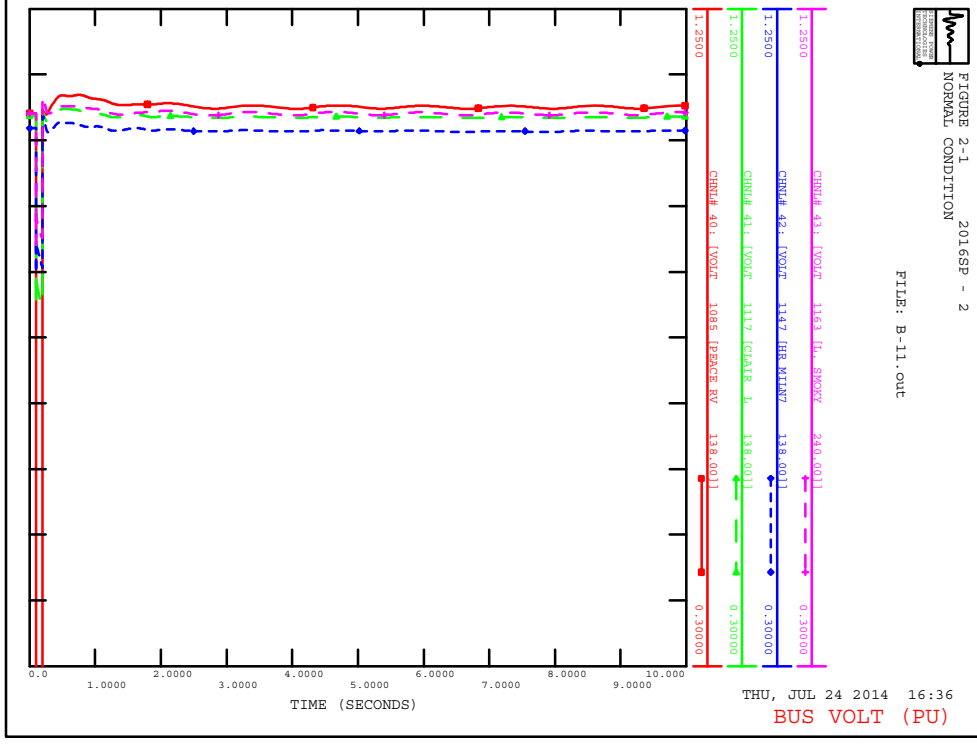


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-11.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

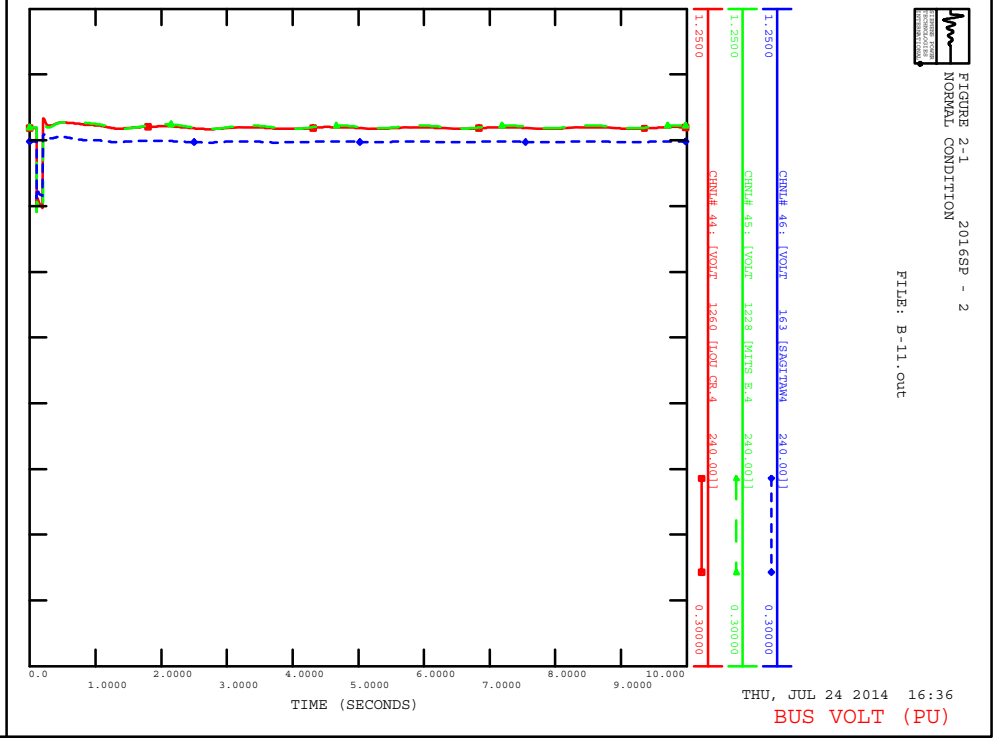


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-11.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

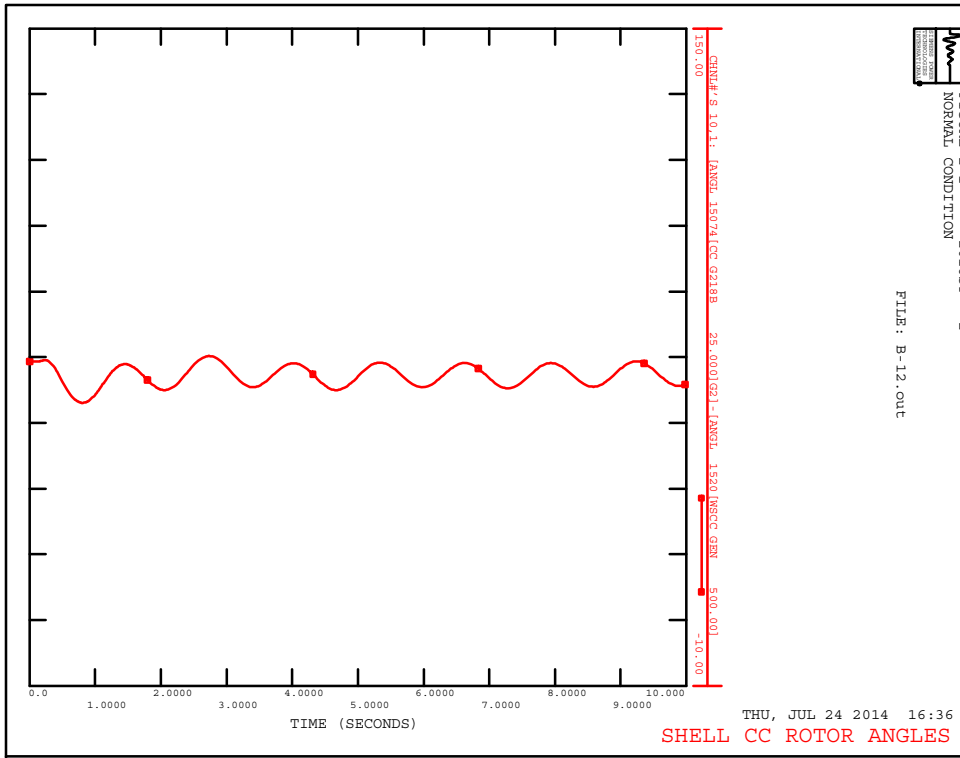


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-12.out
CHNL# 10.1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

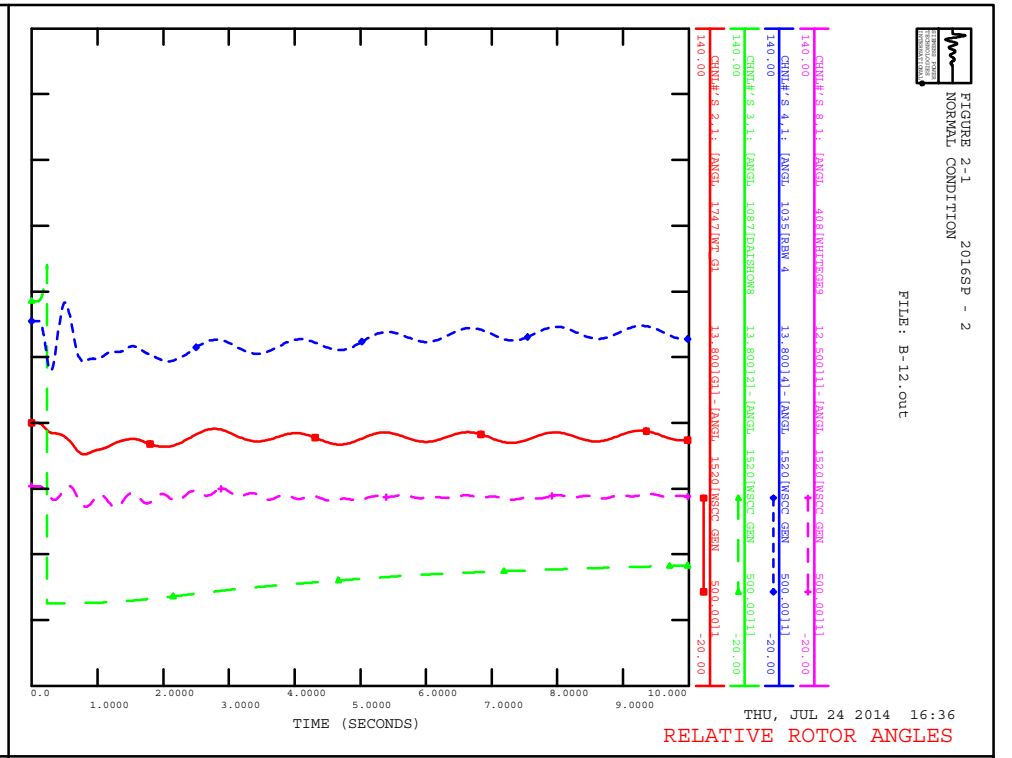


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-12.out
CHNL# 8.1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 4.1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3.1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 2.1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

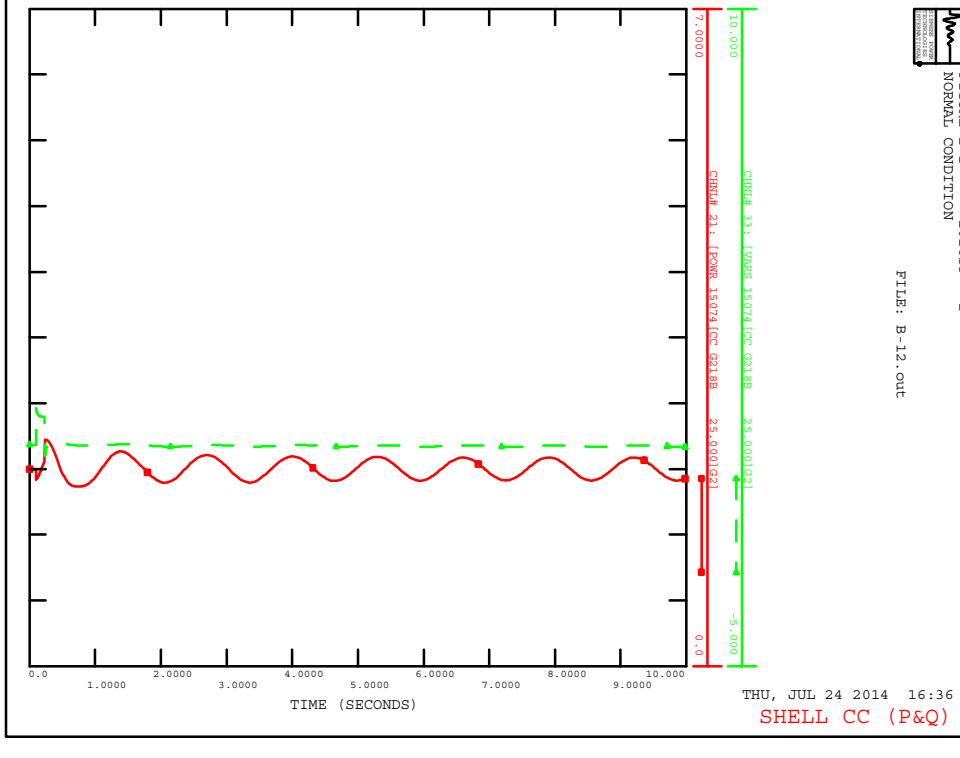


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-12.out
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
7.0000
10.000
0.0
-5.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

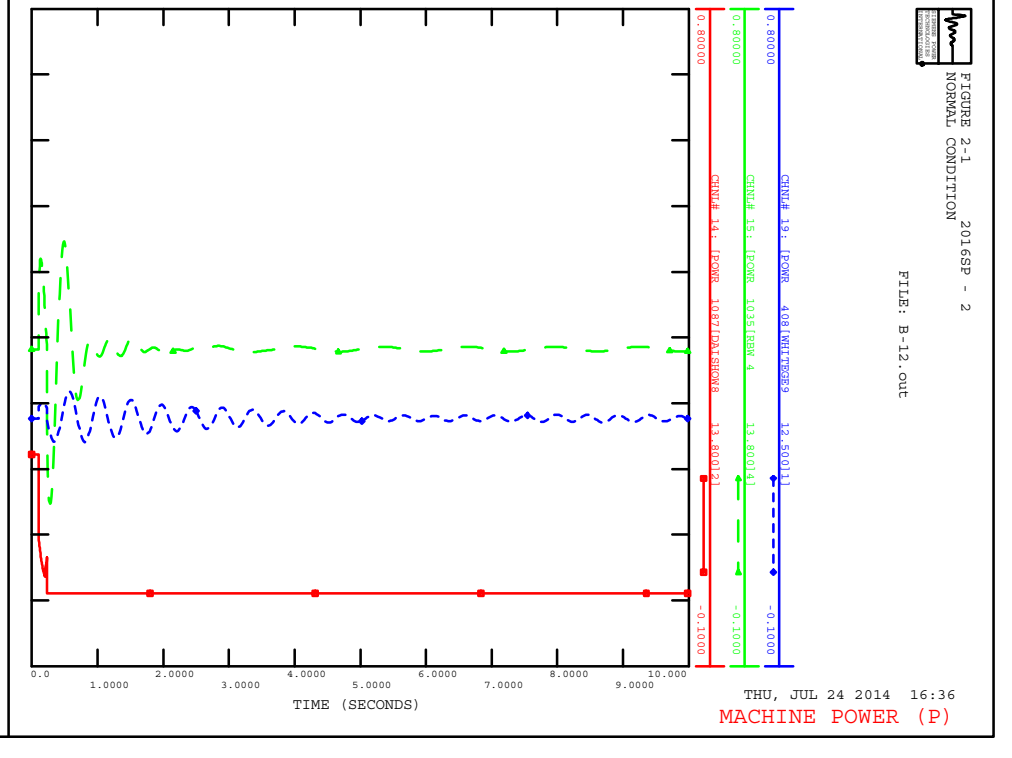


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-12.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
0.80000
-0.1000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

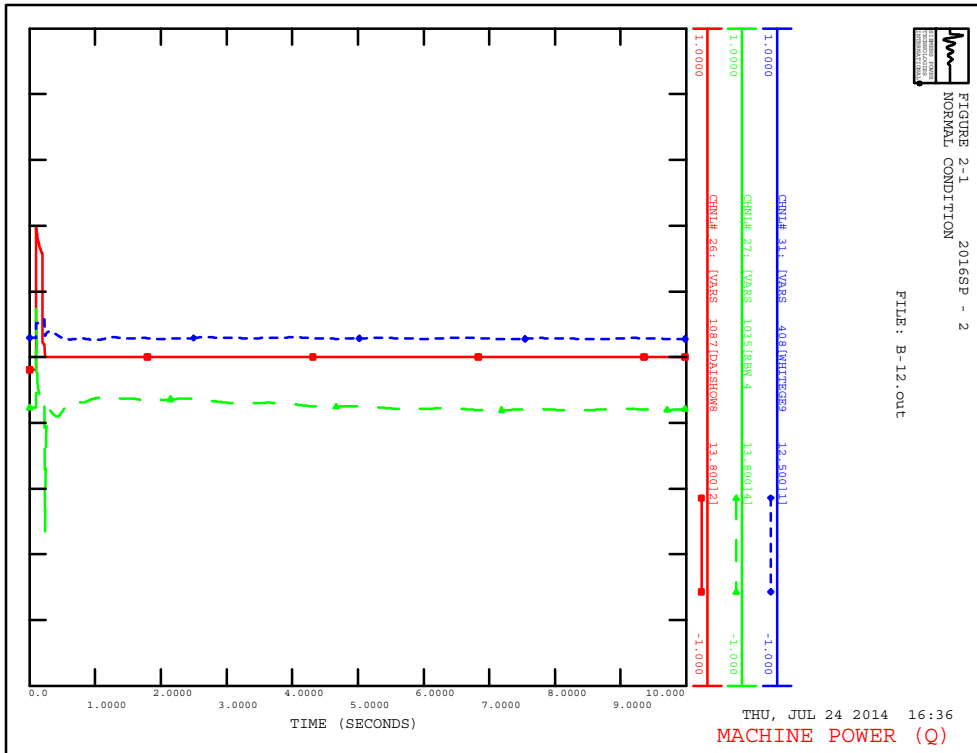


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-12.out
CHNI# 26: [VARS 1087[DAISHOWB 13.80012]
CHNI# 27: [VARS 1035[RBW 4 13.80014]
CHNI# 31: [VARS 408[WHITEGB9 12.50011]
1.0000
-1.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

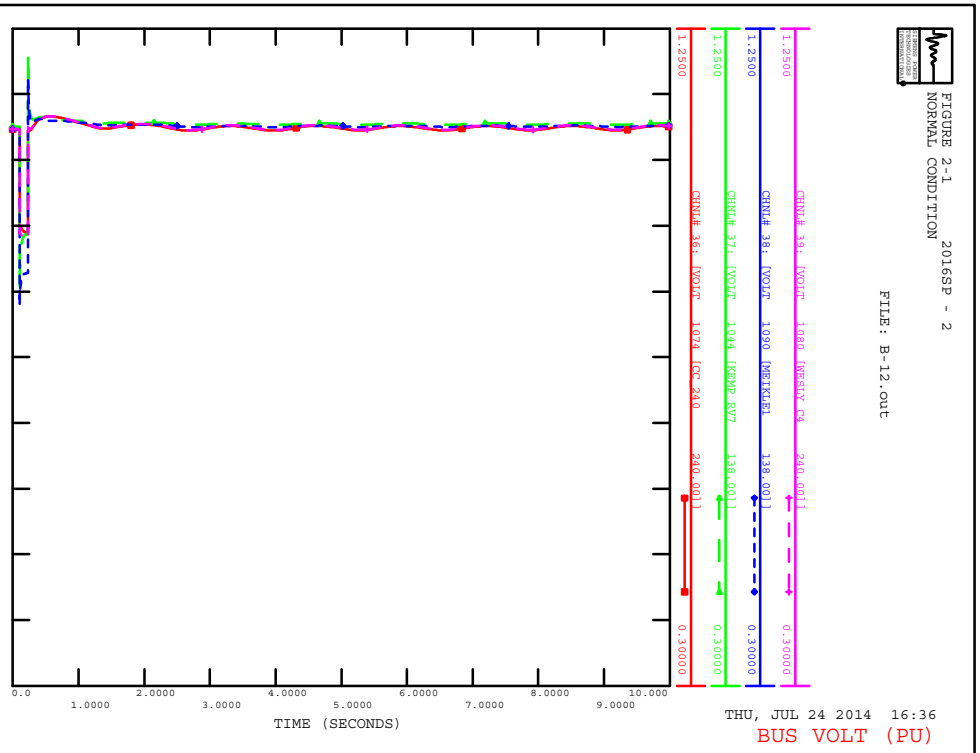


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-12.out
CHNI# 36: [VOLT 1074 [CC 240 240.001]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.001]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.001]
CHNI# 39: [VOLT 1080 [MESIK C4 240.001]
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

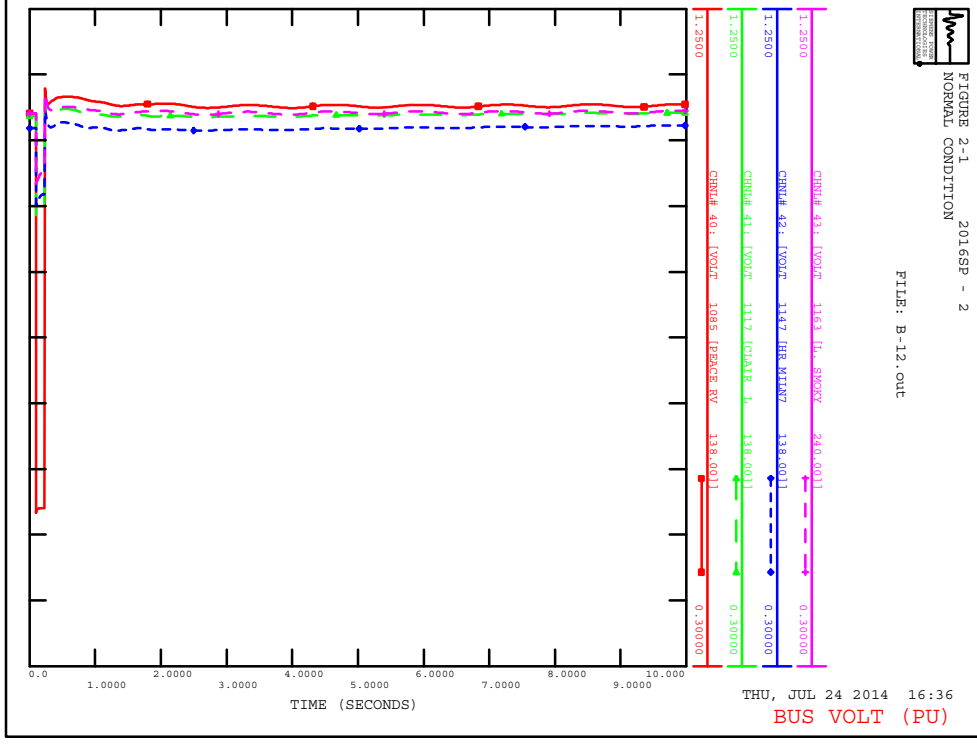


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-12.out
CHNI# 40: [VOLT 1085 [PEACE RV 138.001]
CHNI# 41: [VOLT 1117 [CLAIR L 138.001]
CHNI# 42: [VOLT 1142 [KR MIAN7 138.001]
CHNI# 43: [VOLT 1163 [L. SMOKY 240.001]
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

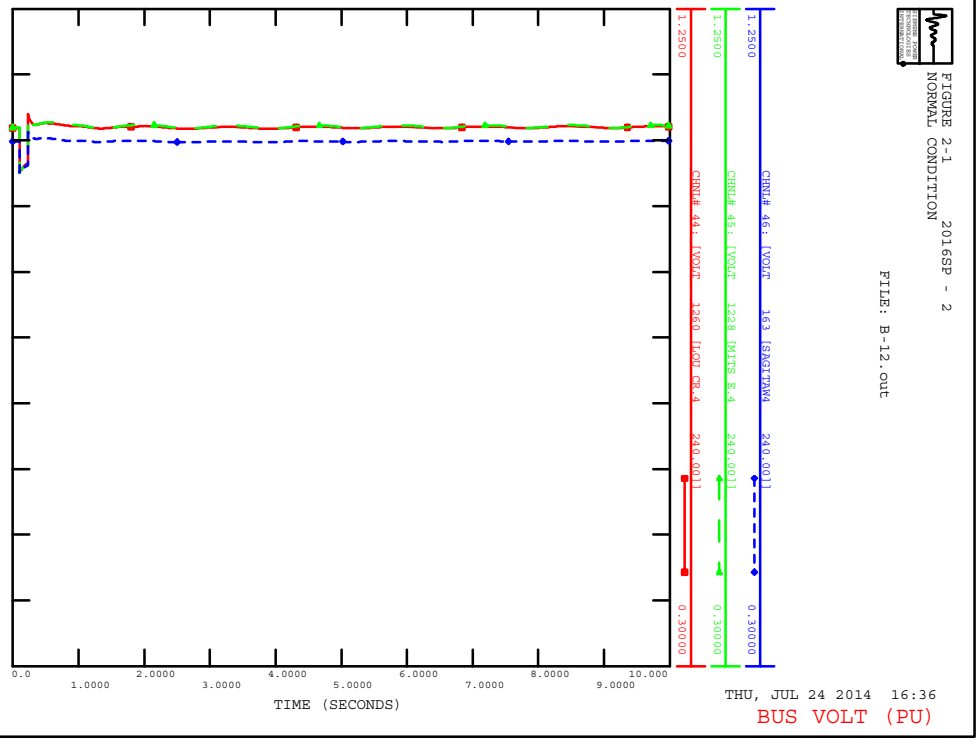


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-12.out
CHNI# 44: [VOLT 1260 [FOX CR 4 240.001]
CHNI# 45: [VOLT 1228 [MITS B-4 240.001]
CHNI# 46: [VOLT 163 [SAGITAW4 240.001]
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

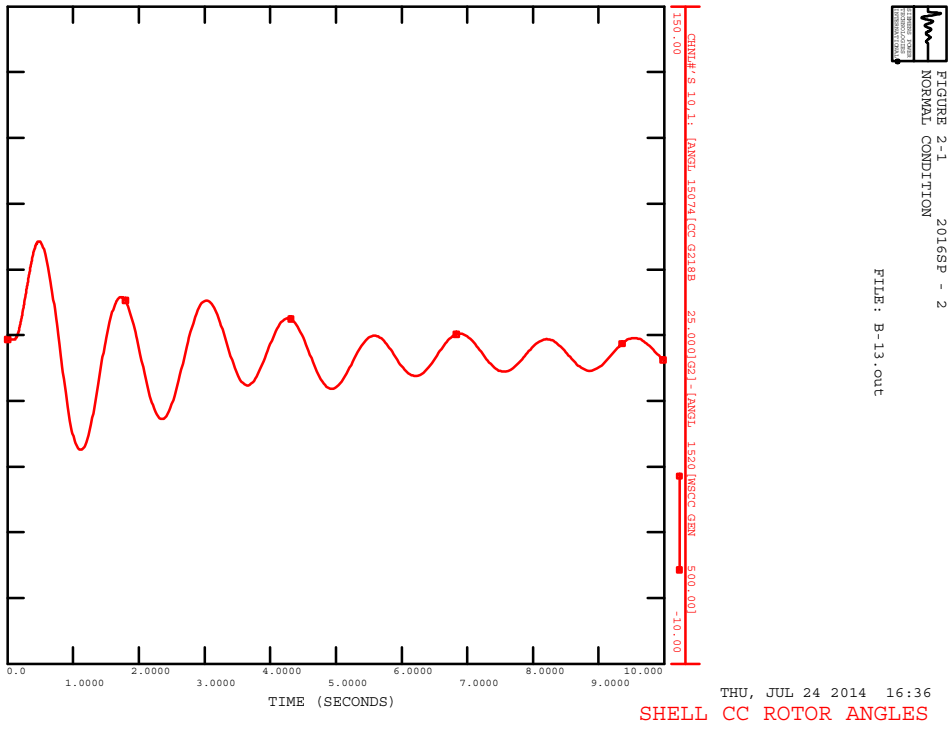


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-13.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

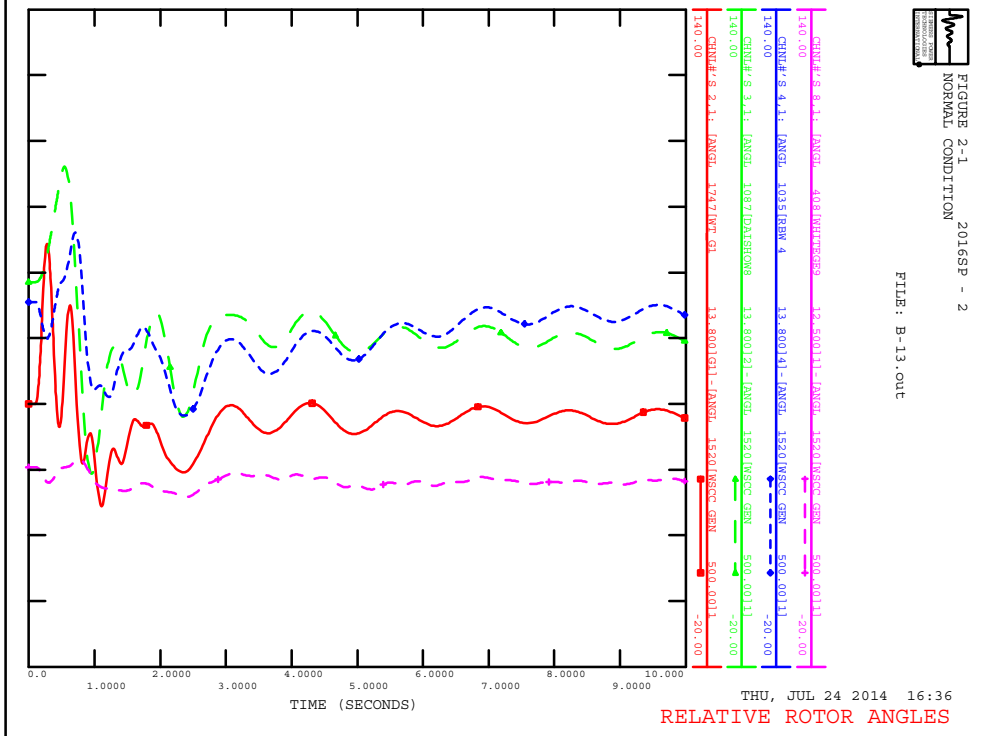


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-13.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

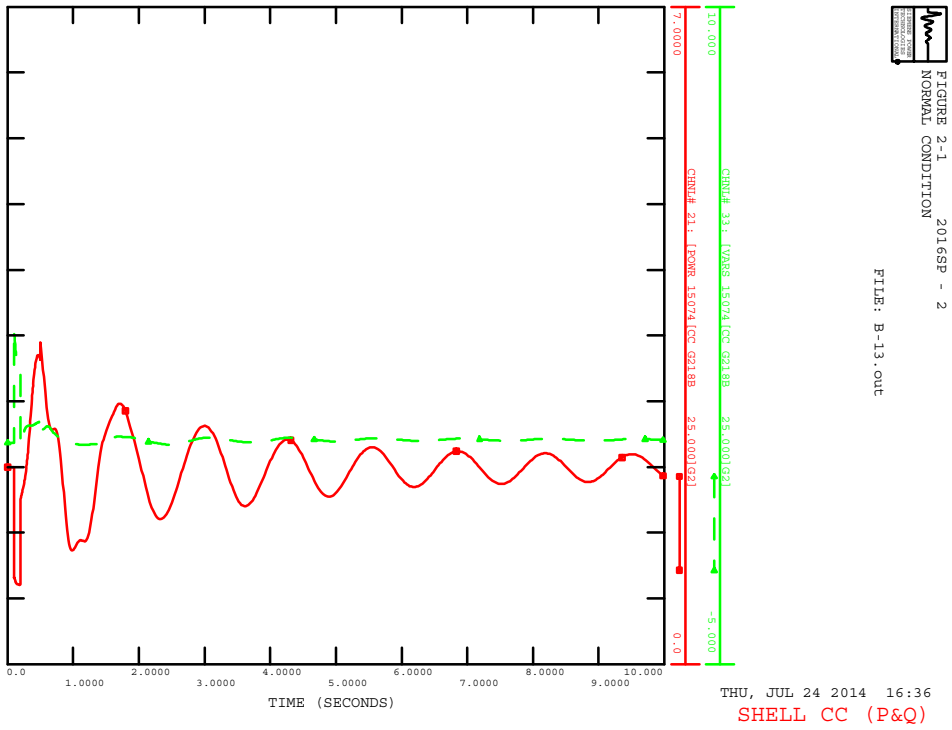


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-13.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

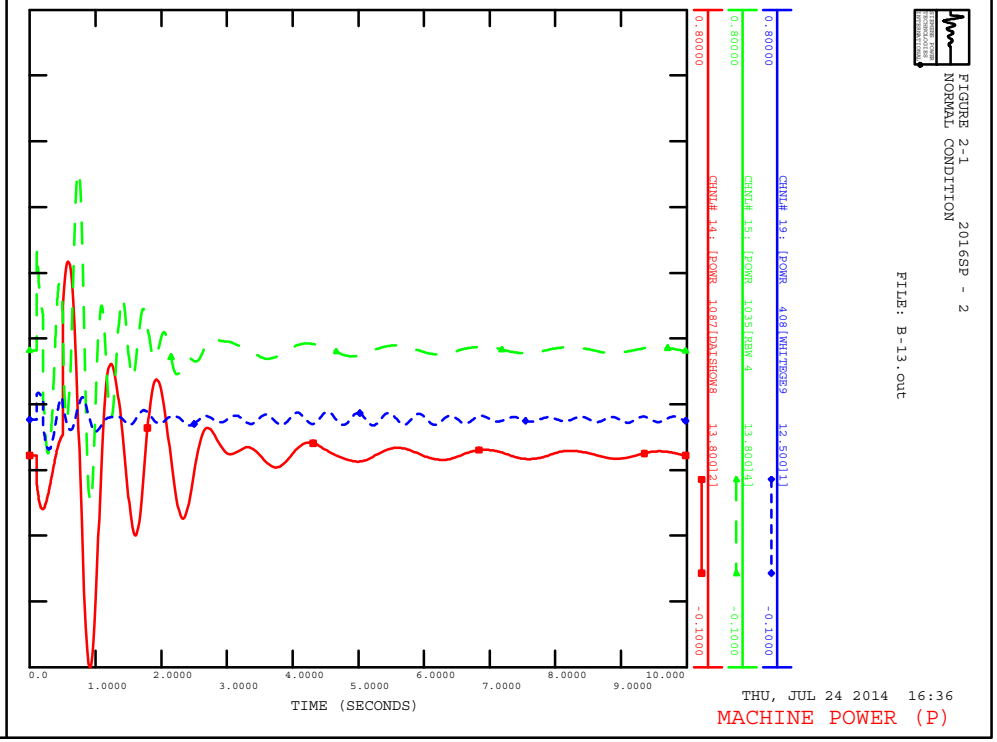


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-13.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

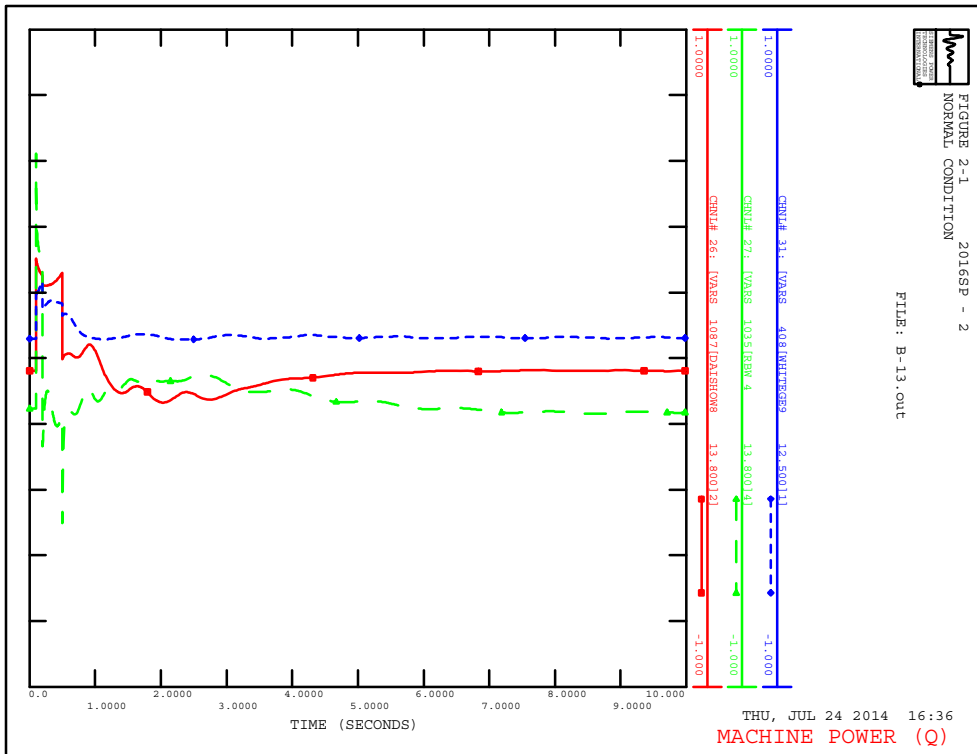


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-13.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

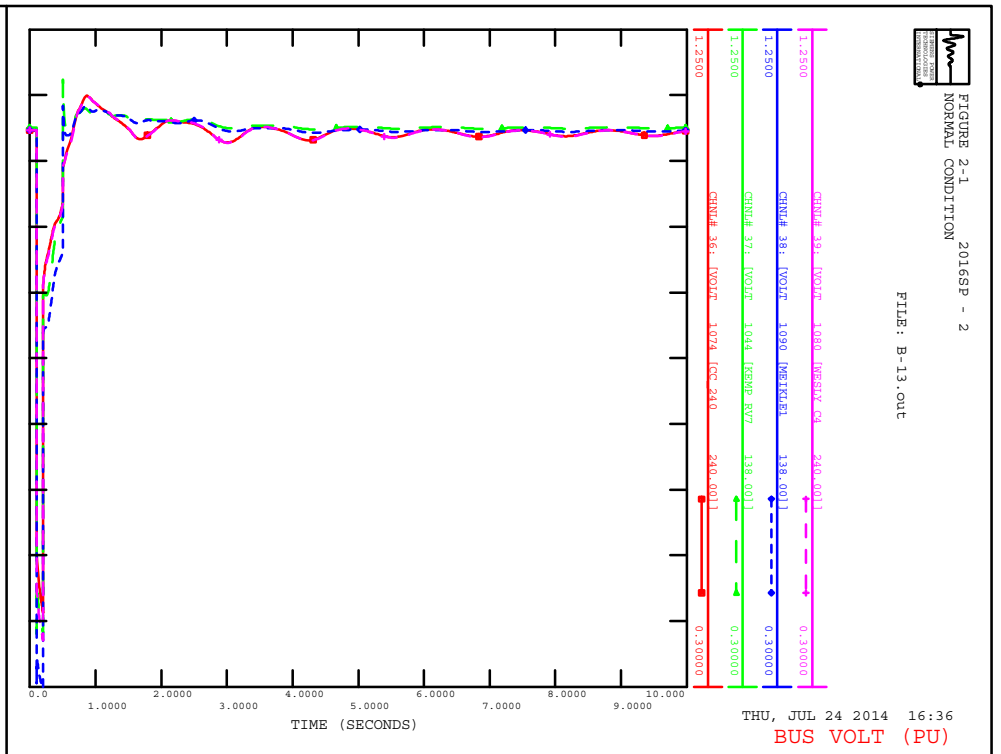


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-13.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

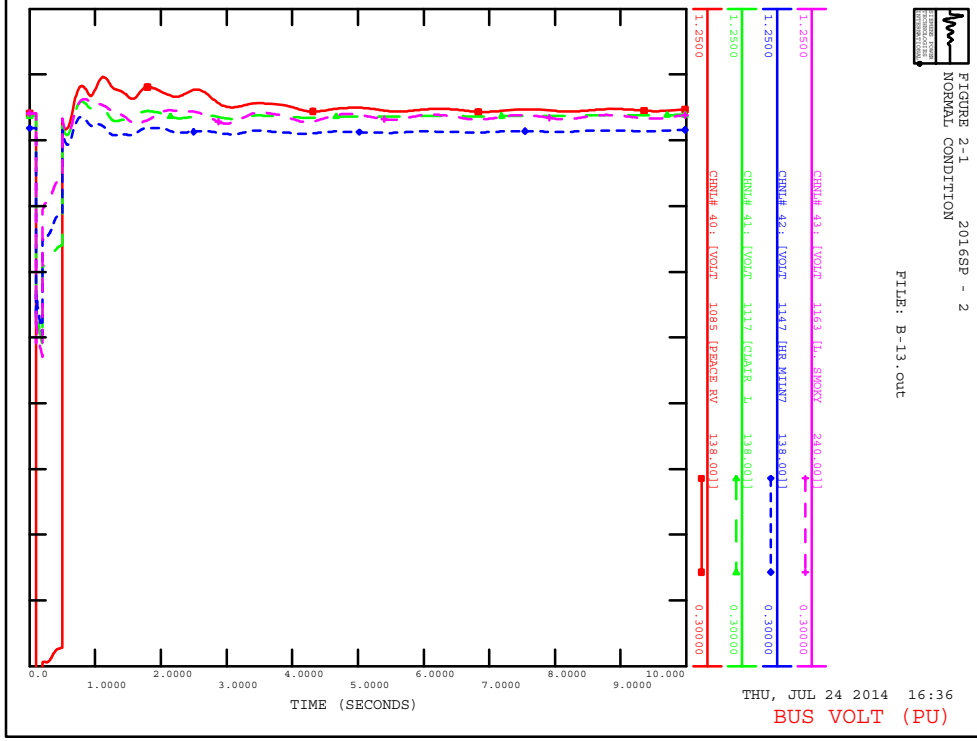


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-13.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

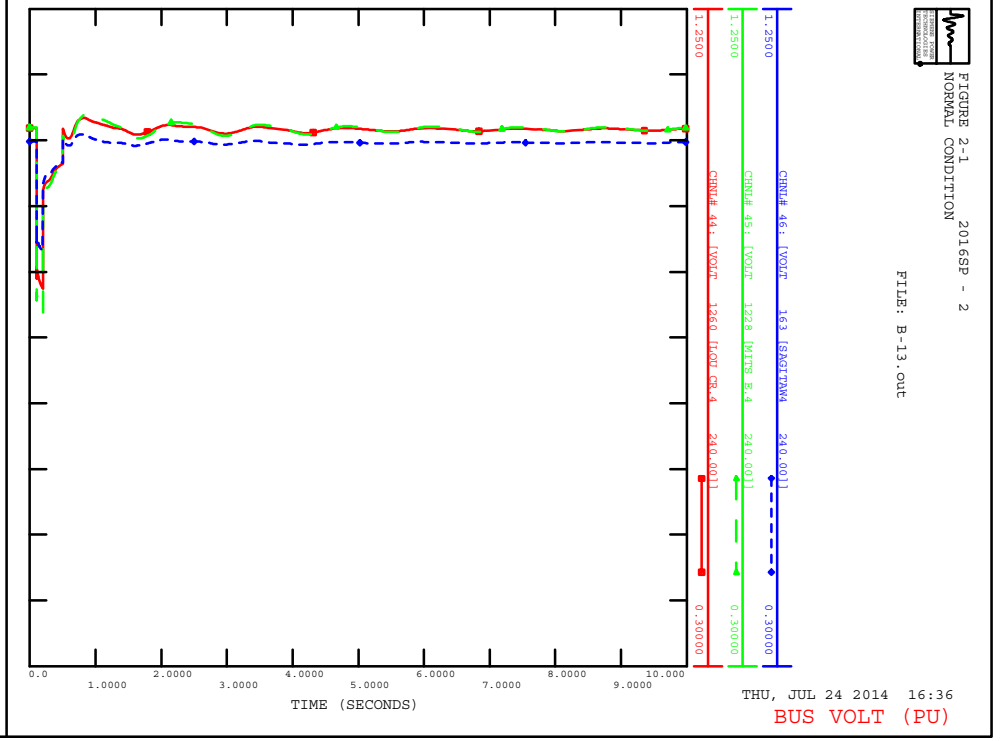


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-13.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

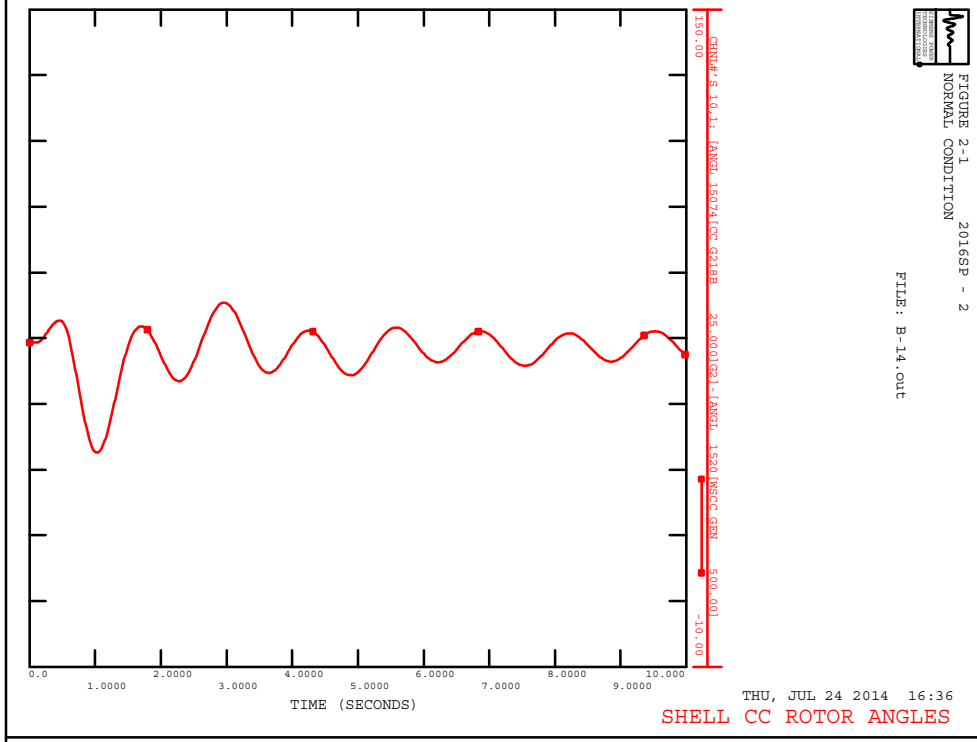


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-14.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

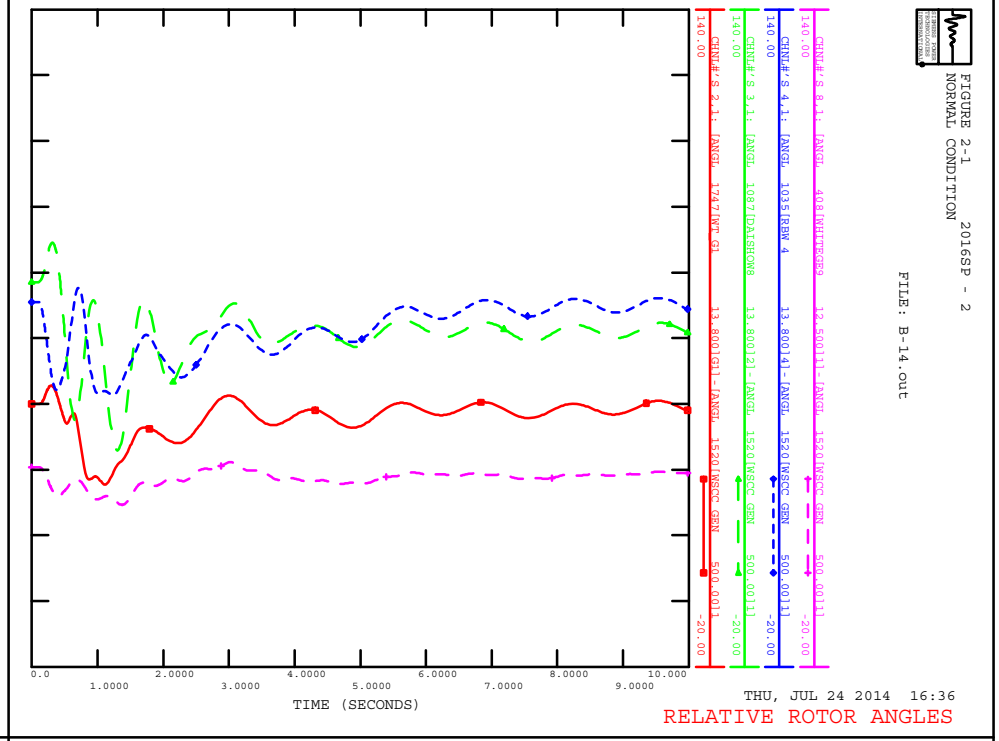


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-14.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

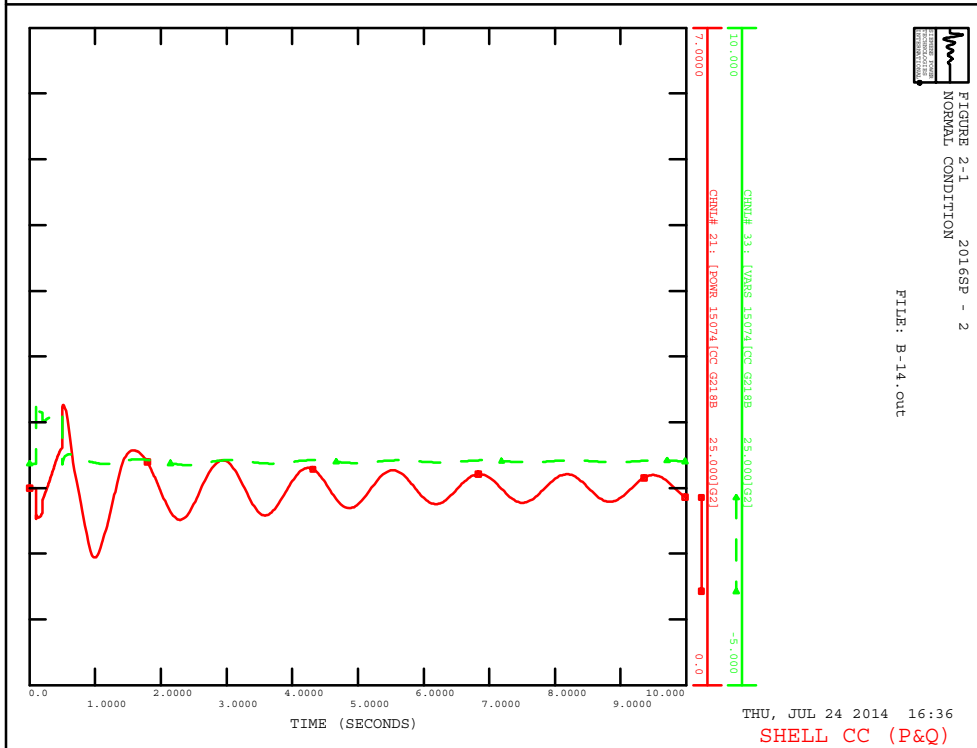


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-14.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

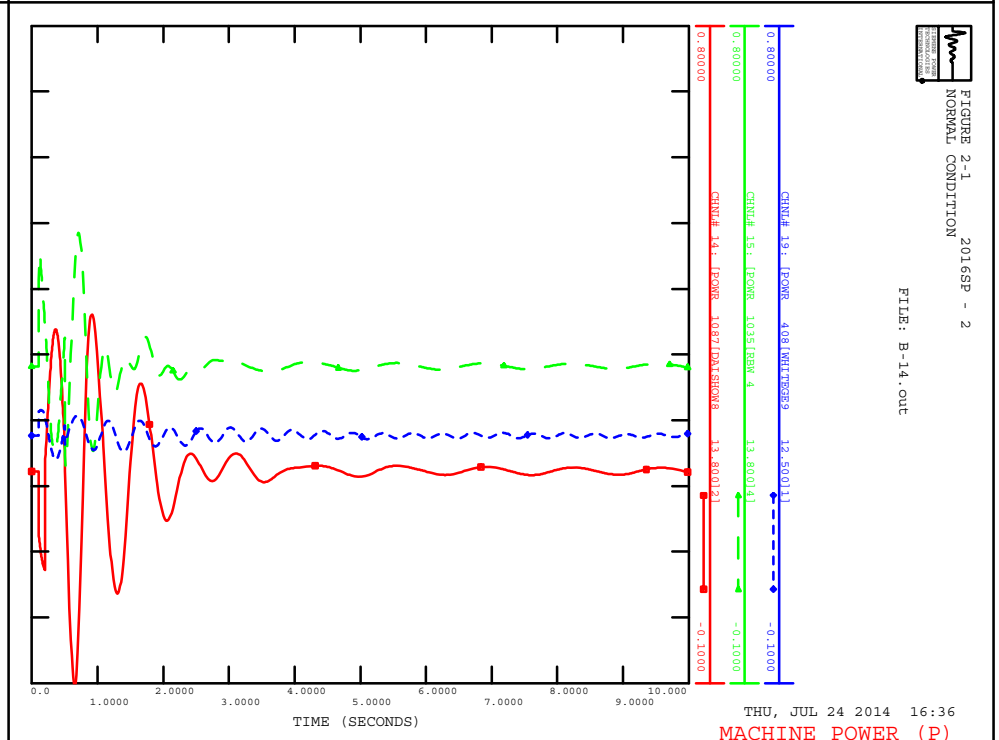


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-14.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

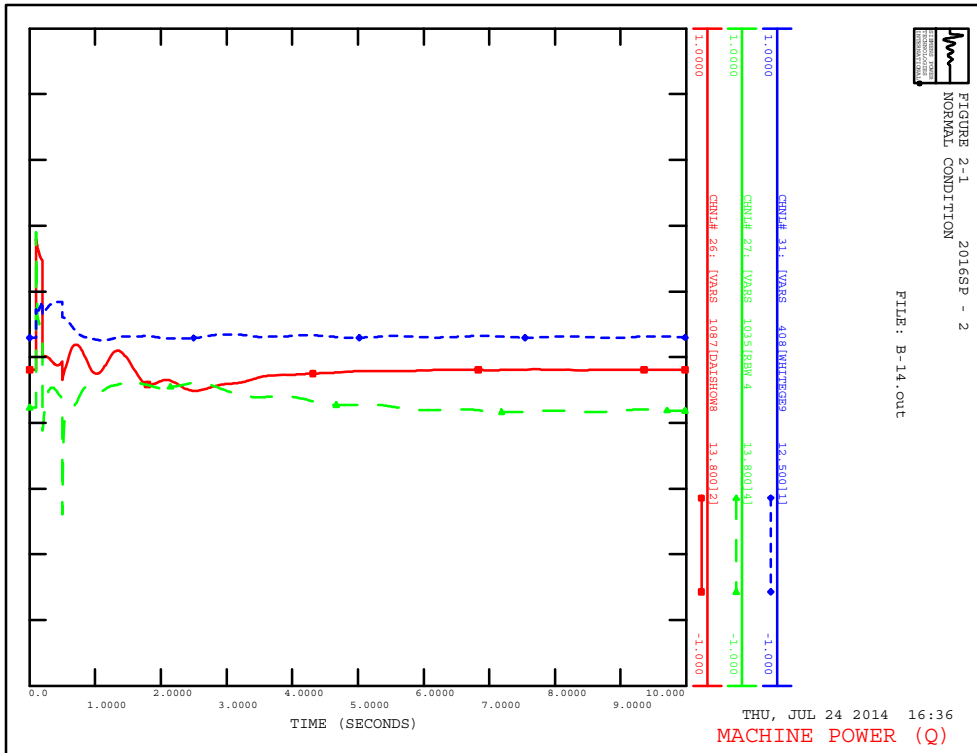


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-14.out
CHNI# 31: [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27: [VARS 1035[RBW 4 13.800]4]
CHNI# 26: [VARS 1087[DAISHOWB 13.800]2]
1.0000
-1.000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

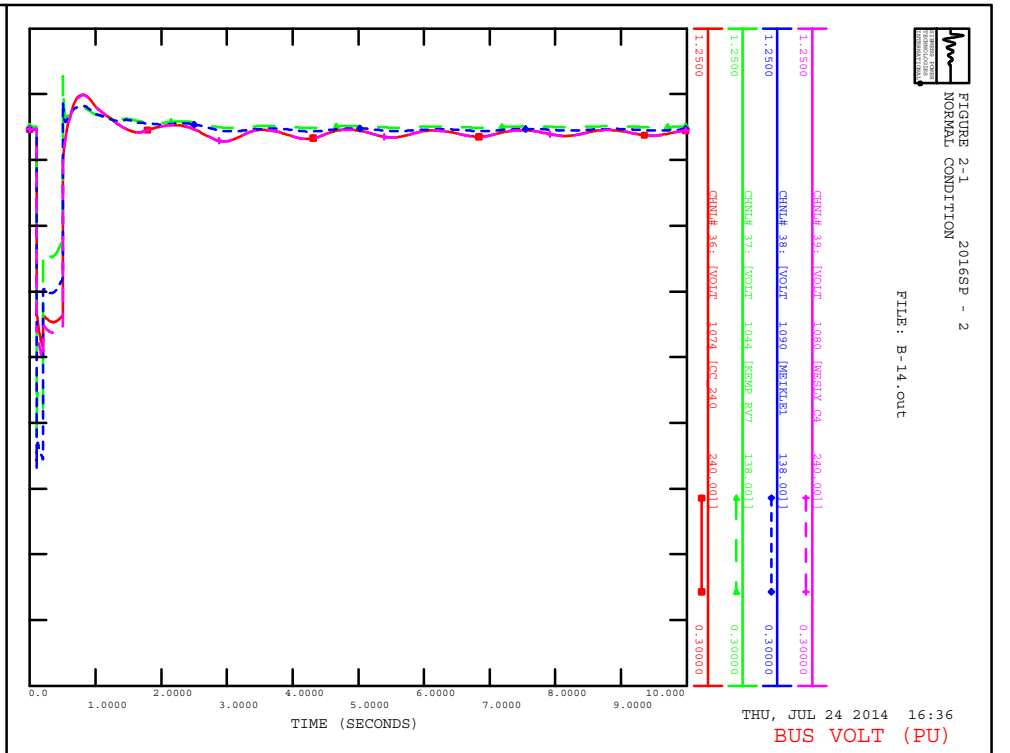


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-14.out
CHNI# 39: [VOLT 1080 [MESIX C4 240.00]]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.00]]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]]
CHNI# 36: [VOLT 1074 [CC 240 240.00]]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

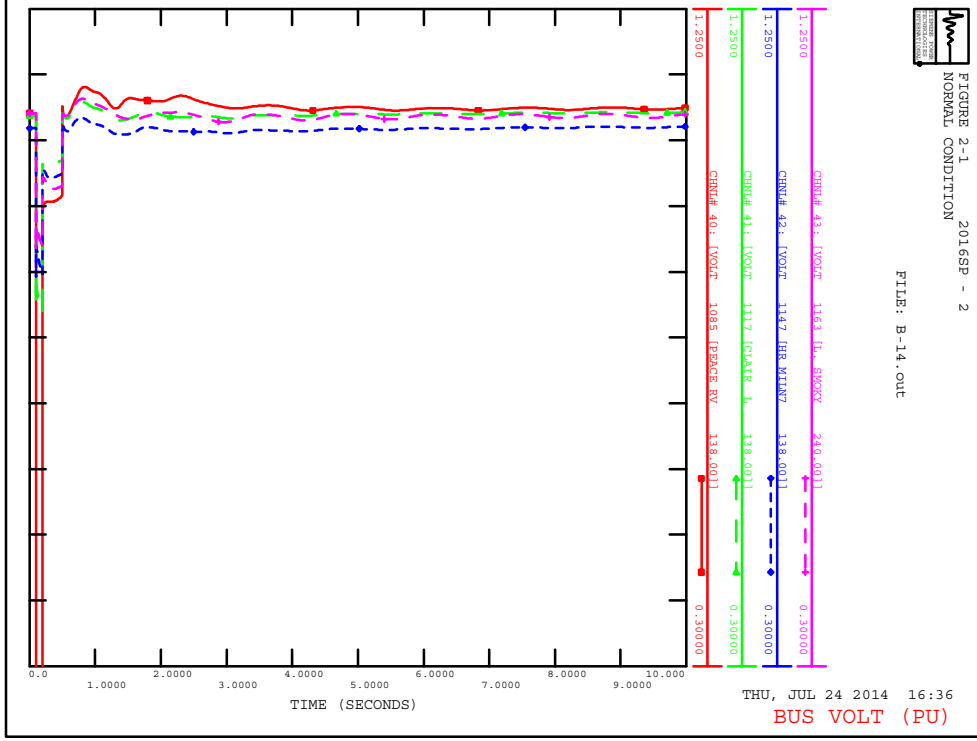


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-14.out
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00]]
CHNI# 42: [VOLT 1142 [KR MIAN7 138.00]]
CHNI# 41: [VOLT 1117 [CHAIR L 138.00]]
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

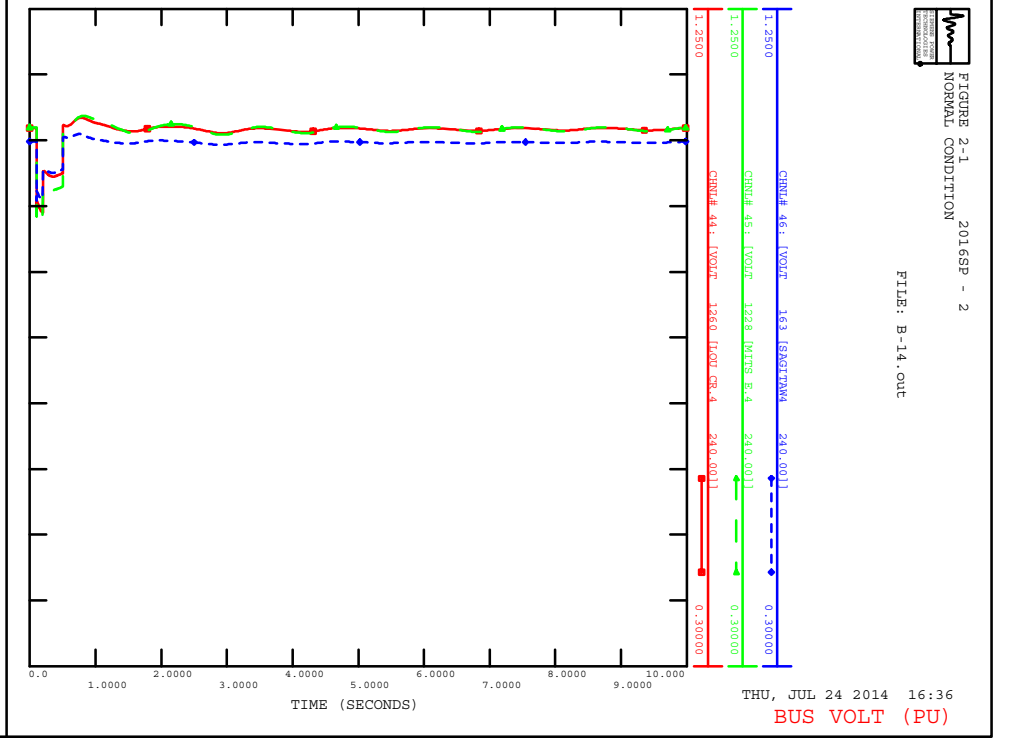


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-14.out
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]]
CHNI# 45: [VOLT 1228 [MTCS B-4 240.00]]
CHNI# 44: [VOLT 1260 [FOX CR-4 240.00]]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

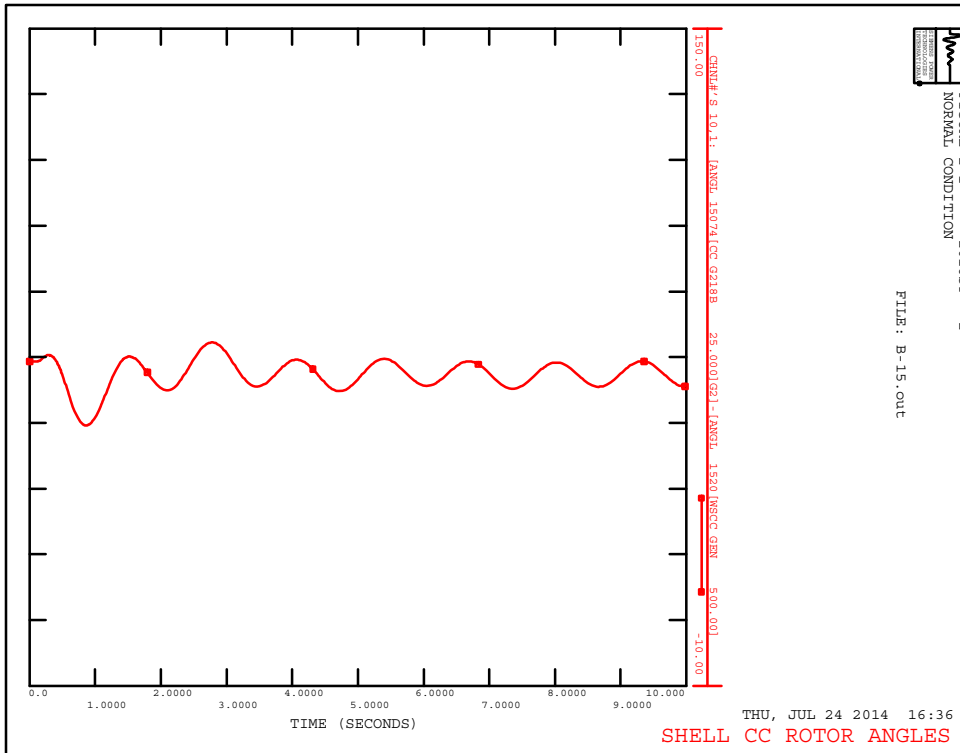


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-15.out
CHNL# 8 8.1: [ANGL 408[WHITESB9 12.5001]1] [ANGL 1520[NSCC GEN 500.001]1]
CHNL# 4 4.1: [ANGL 1035[RBM 4 13.80014]-[ANGL 1520[NSCC GEN 500.001]1]
CHNL# 3 3.1: [ANGL 1087[DAISHON8 13.80012] [ANGL 1520[NSCC GEN 500.001]1]
CHNL# 2 2.1: [ANGL 1747[WT G1 13.80013]-[ANGL 1520[NSCC GEN 500.001]1]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-15.out
CHNL# 10 10.1: [ANGL 15074[CC G218B 25.00012]-[ANGL 1520[NSCC GEN 500.001]1]
-50.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

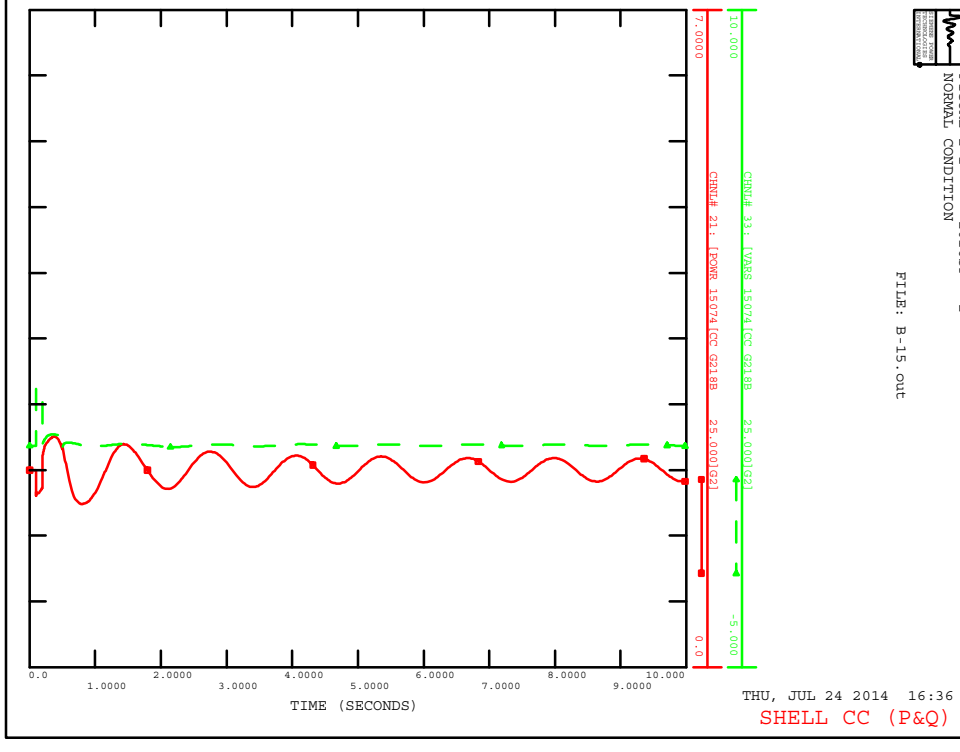


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-15.out
CHNL# 19: [POWR 408[WHITESB9 12.5001]1]
CHNL# 15: [POWR 1035[RBM 4 13.80014]
CHNL# 14: [POWR 1087[DAISHON8 13.80012]
0.80000
-0.10000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-15.out
CHNL# 33: [VARS 15074[CC G218B 25.00012]
CHNL# 21: [POWR 15074[CC G218B 25.00012]
10.000
-5.000
7.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

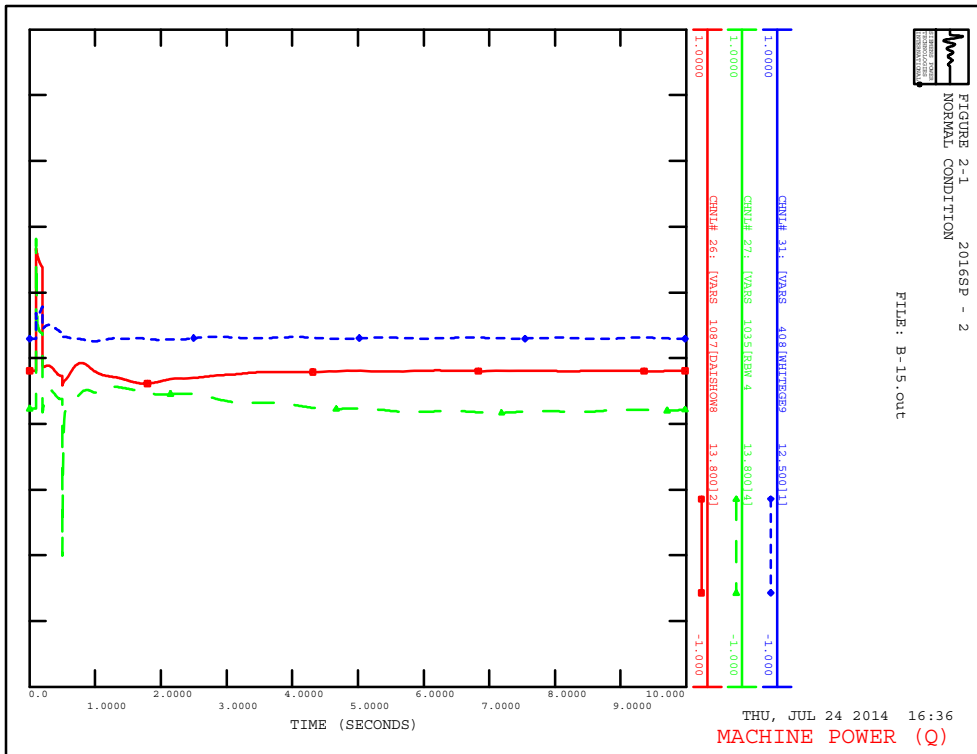


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-15.out
CHNI# 26: [VARS 1087 [DAISHOWA 13.80012]
CHNI# 27: [VARS 1035 [RBW 4 13.80014]
CHNI# 31: [VARS 408 [WHITEGB9 12.50011]
1.0000
-1.000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

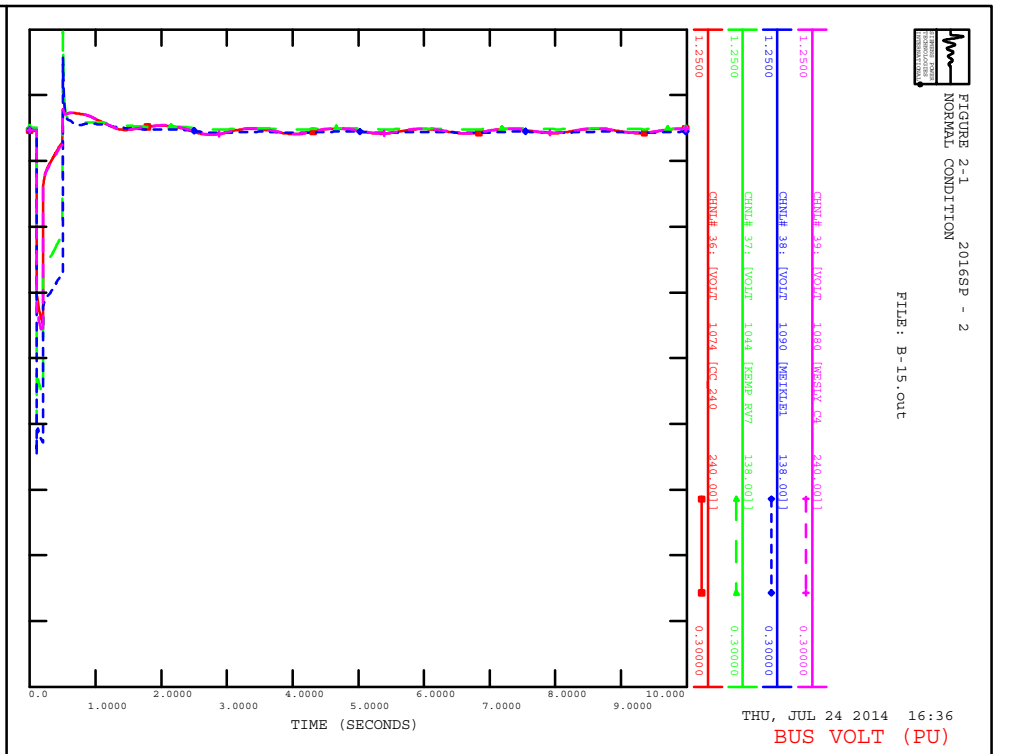


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-15.out
CHNI# 36: [VOLT 1074 [CC 240 240.001]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.001]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.001]
CHNI# 39: [VOLT 1080 [NRSIX C4 240.001]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

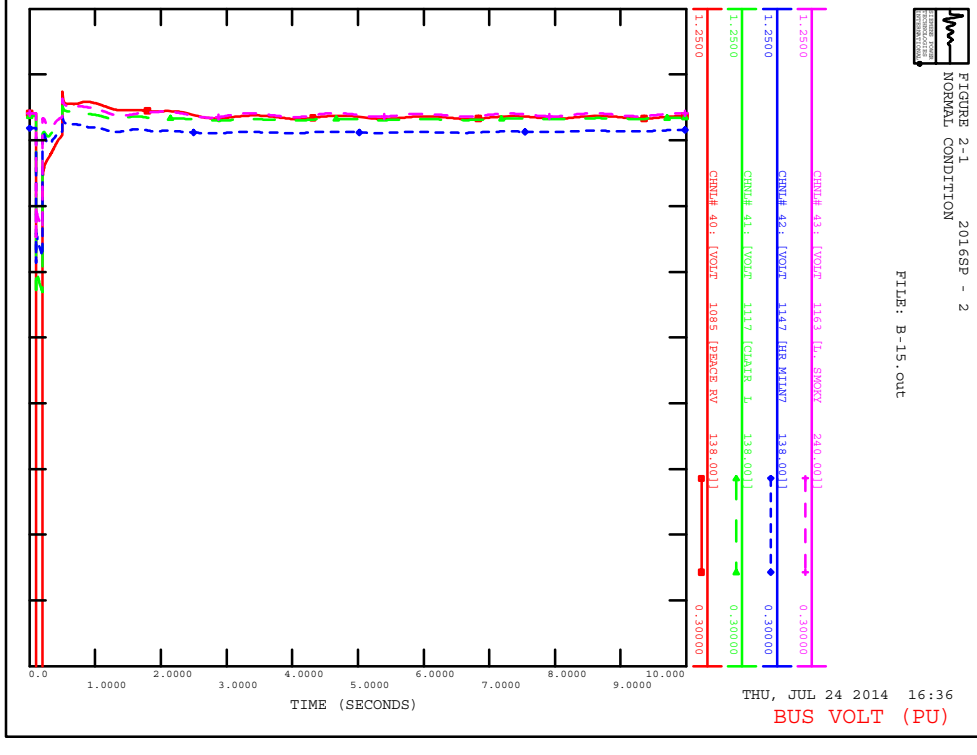


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-15.out
CHNI# 40: [VOLT 1085 [PEACE RV 138.001]
CHNI# 41: [VOLT 1117 [CHAIR L 138.001]
CHNI# 42: [VOLT 1142 [KR MLNT 138.001]
CHNI# 43: [VOLT 1163 [L. SMOKY 240.001]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

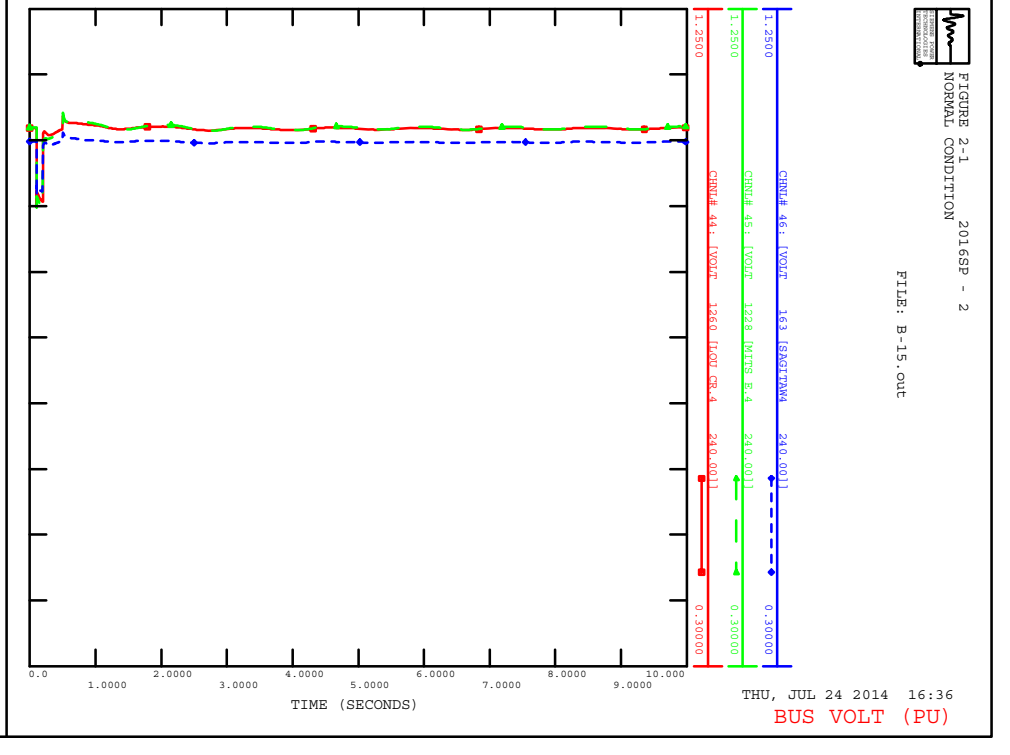


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-15.out
CHNI# 44: [VOLT 1260 [FOX CR 4 240.001]
CHNI# 45: [VOLT 1228 [MITS B 4 240.001]
CHNI# 46: [VOLT 163 [SAGITAW4 240.001]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

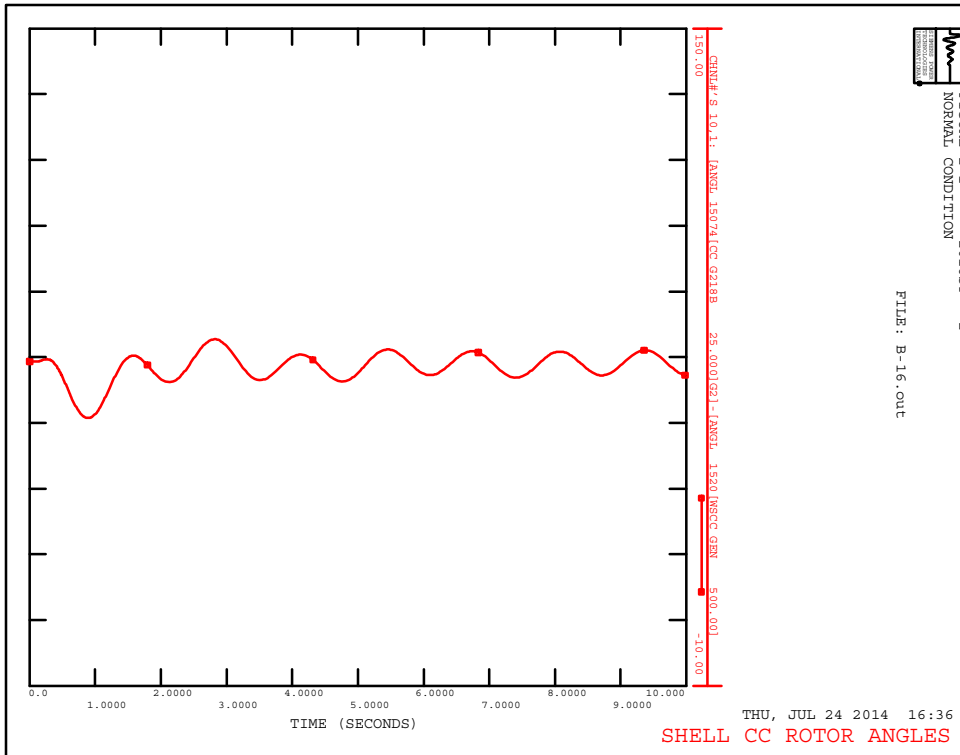


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-16.out
CHNL# 10.1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

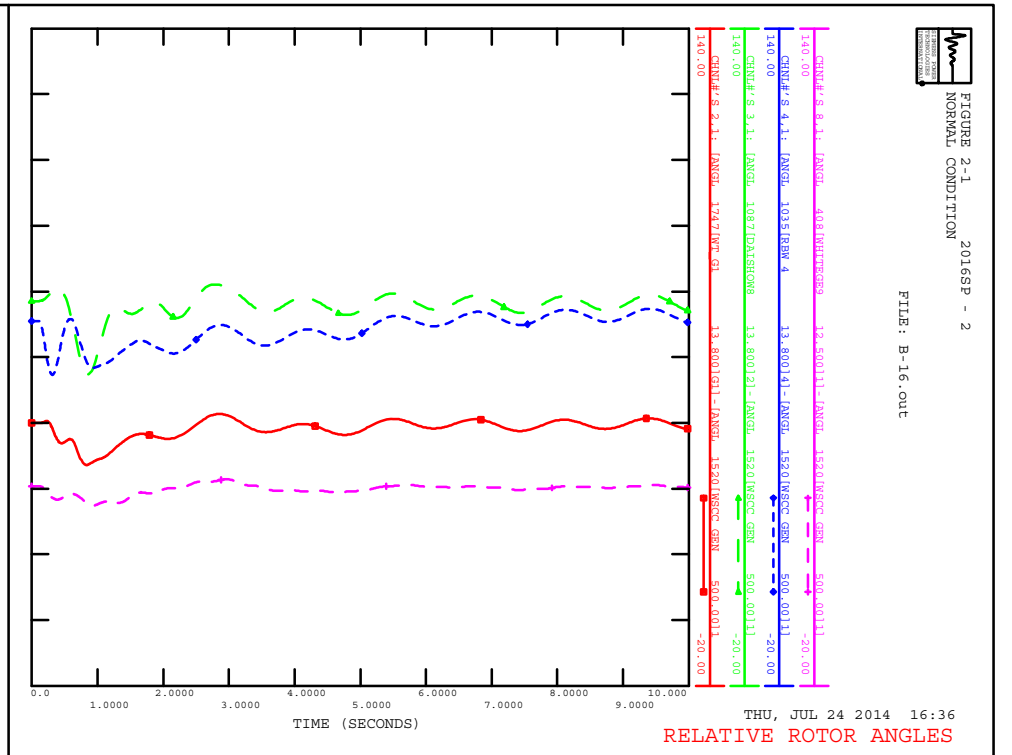


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-16.out
CHNL# 8.1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 4.1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3.1: [ANGL 1087[DAISHOW8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 2.1: [ANGL 1747[WT G1 13.800[1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

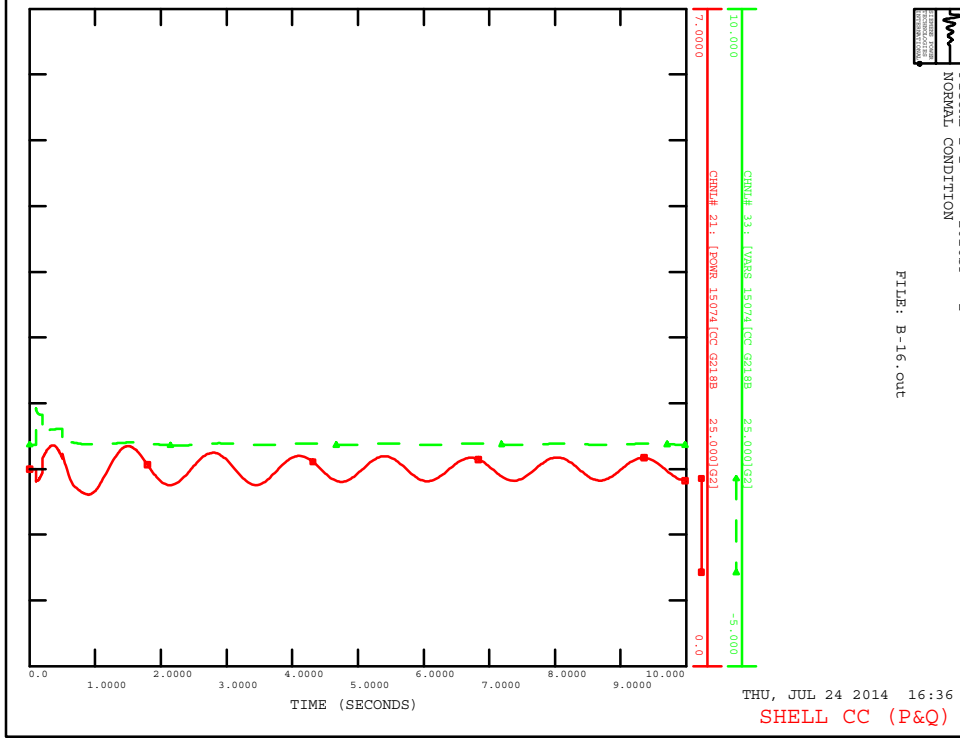


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-16.out
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

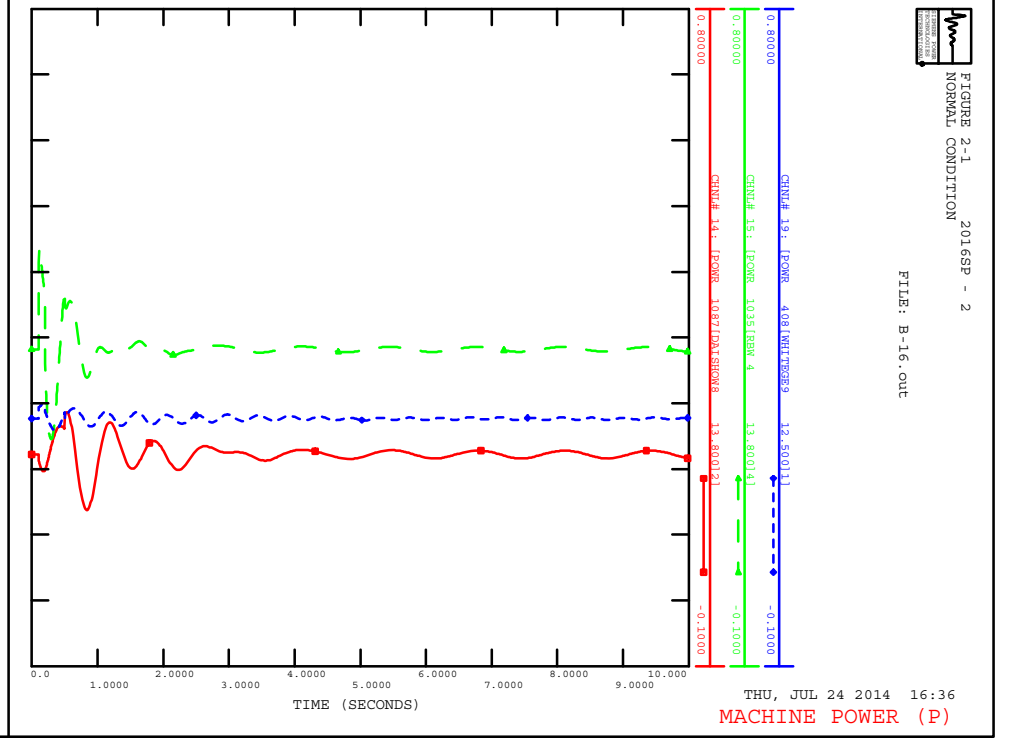


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-16.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHOW8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

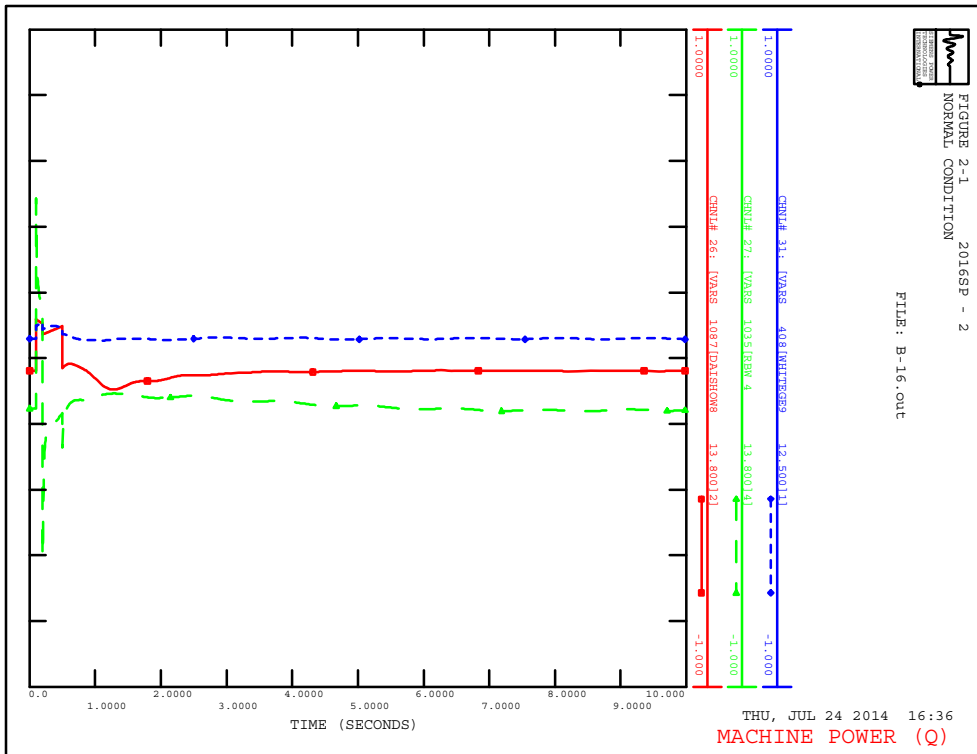


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-16.out
CHNI# 26: [VARS 1087 [DAISHOWB 13.80012]
CHNI# 27: [VARS 1035 [RBW 4 13.80014]
CHNI# 31: [VARS 408 [WHITEGB9 12.50011]
1.0000
-1.000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

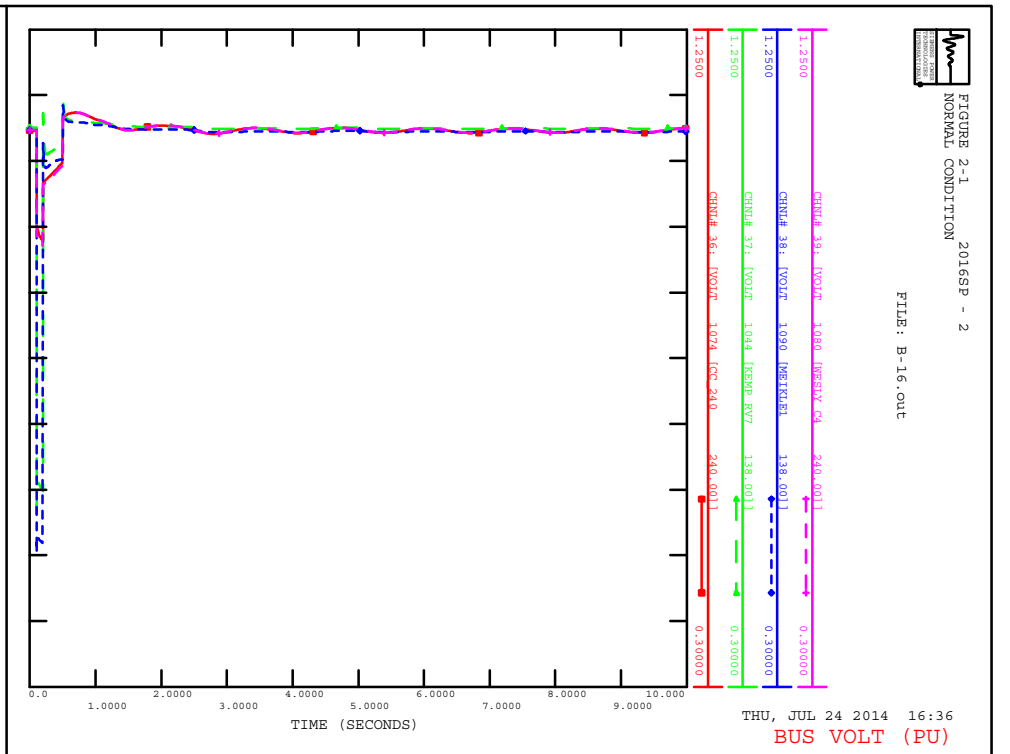


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-16.out
CHNI# 36: [VOLT 1074 [CC 240 240.001]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.001]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.001]
CHNI# 39: [VOLT 1080 [MESIK C4 240.001]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

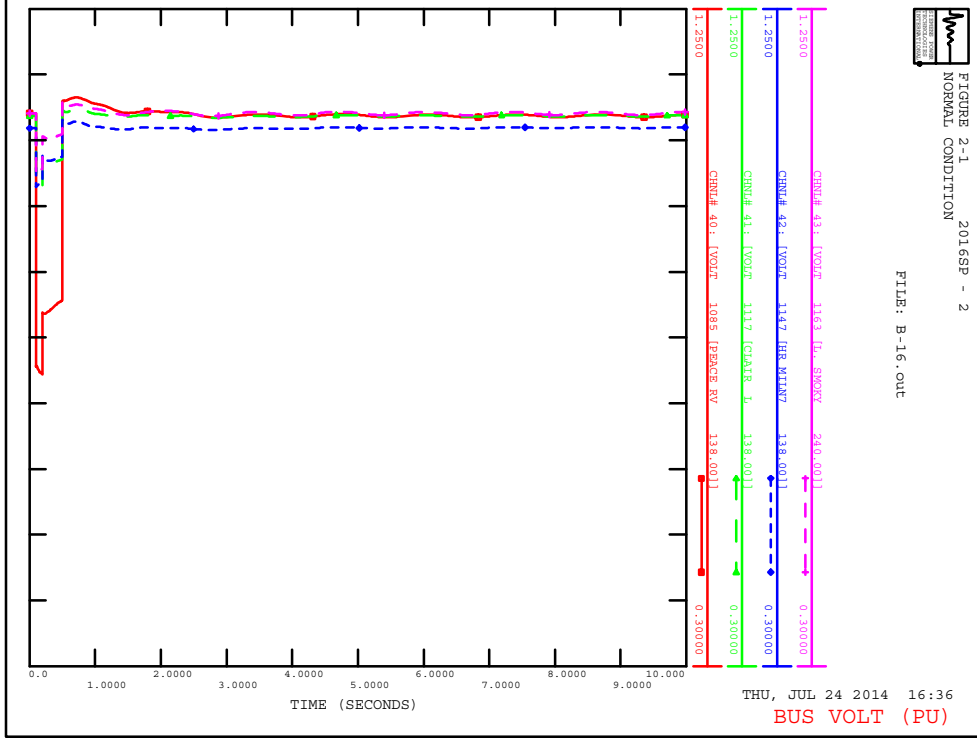


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-16.out
CHNI# 40: [VOLT 1085 [PEACE RV 138.001]
CHNI# 41: [VOLT 1117 [CHAIR L 138.001]
CHNI# 42: [VOLT 1142 [KR MIANT 138.001]
CHNI# 43: [VOLT 1163 [L. SMOKY 240.001]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

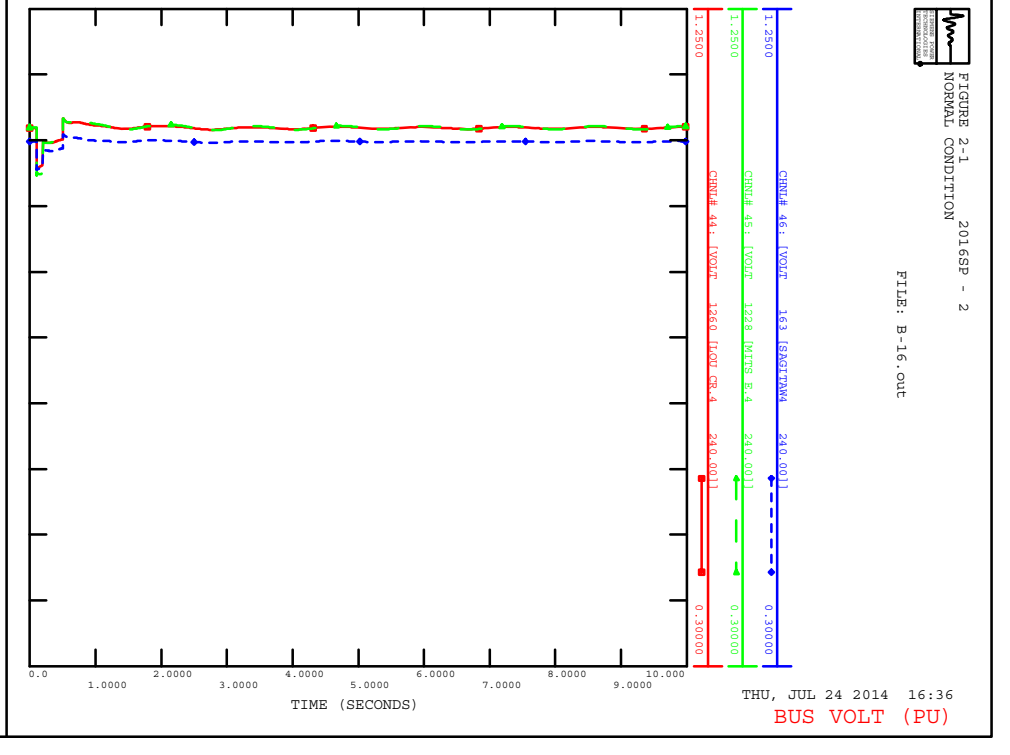


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-16.out
CHNI# 44: [VOLT 1260 [FOX CR 4 240.001]
CHNI# 45: [VOLT 1228 [MITS B 4 240.001]
CHNI# 46: [VOLT 163 [SAGITAW4 240.001]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

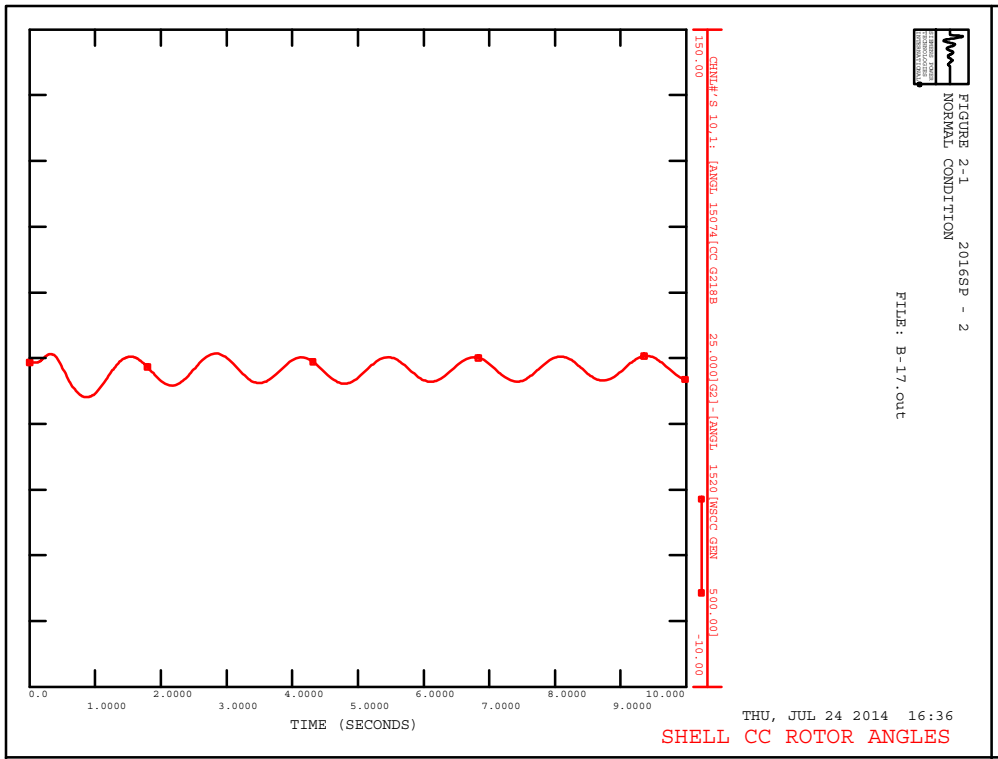


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-17.out
THU, JUL 24 2014 16:36
TIME (SECONDS)
SHELL CC ROTOR ANGLES

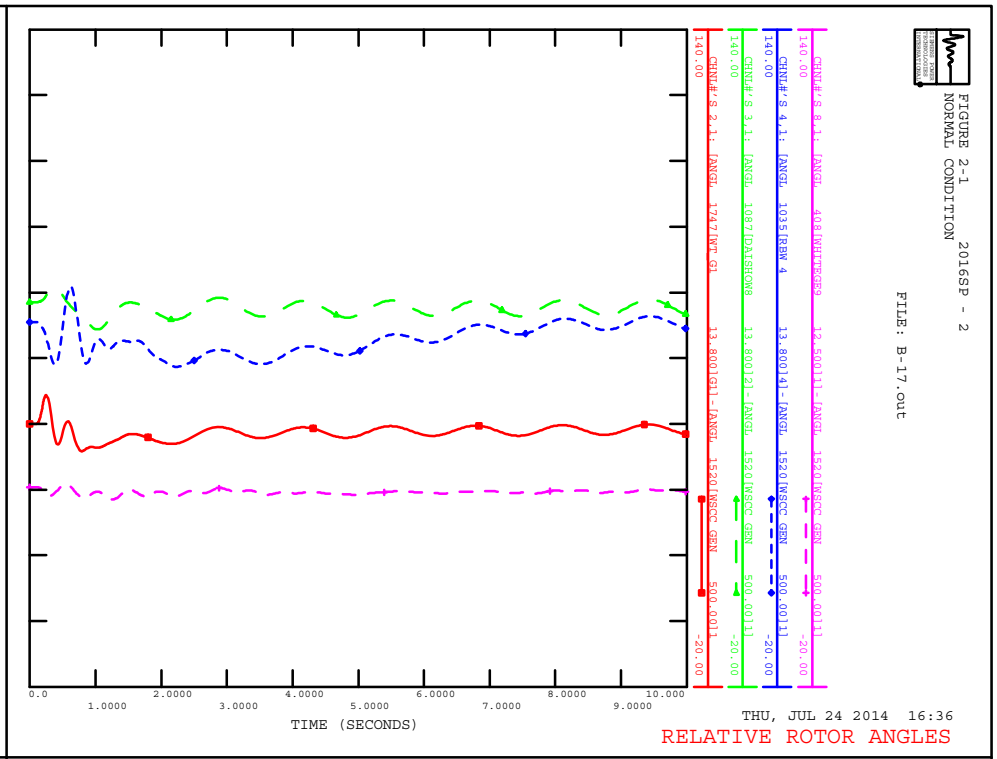


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-17.out
THU, JUL 24 2014 16:36
TIME (SECONDS)
RELATIVE ROTOR ANGLES

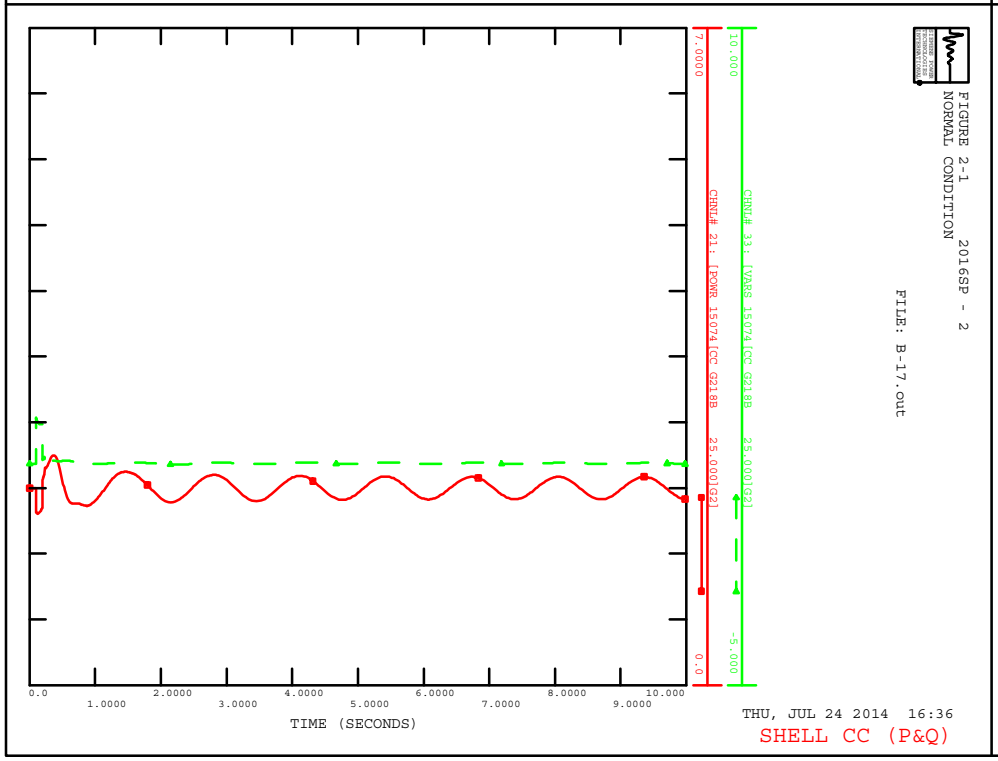


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-17.out
THU, JUL 24 2014 16:36
TIME (SECONDS)
SHELL CC (P&Q)

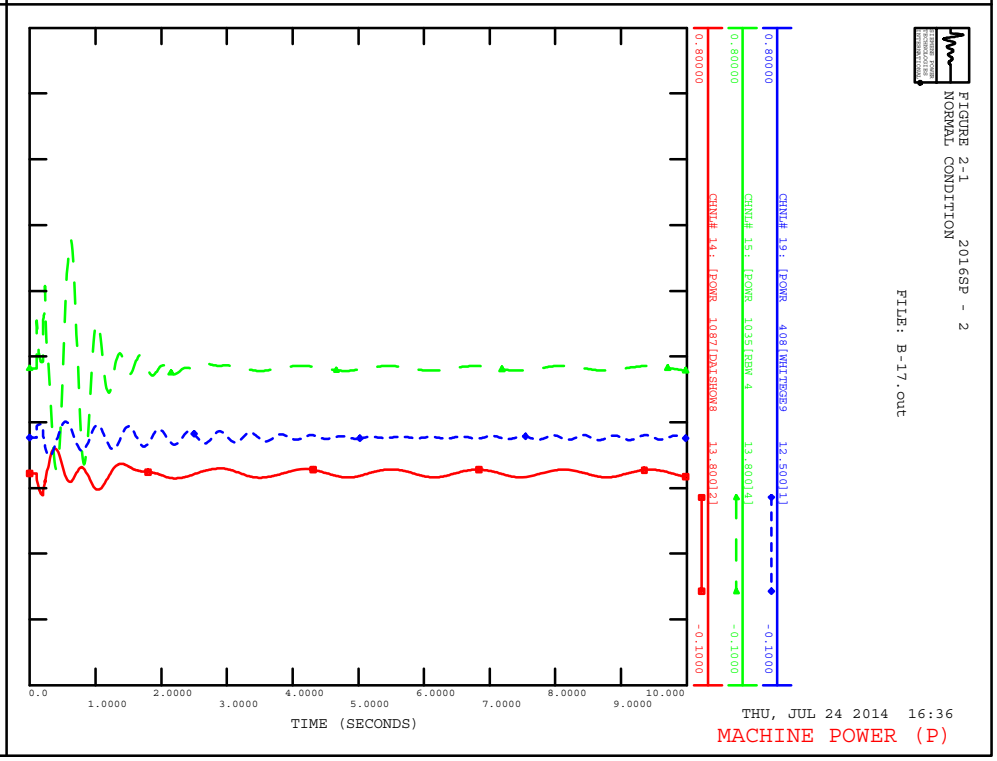


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-17.out
THU, JUL 24 2014 16:36
TIME (SECONDS)
MACHINE POWER (P)

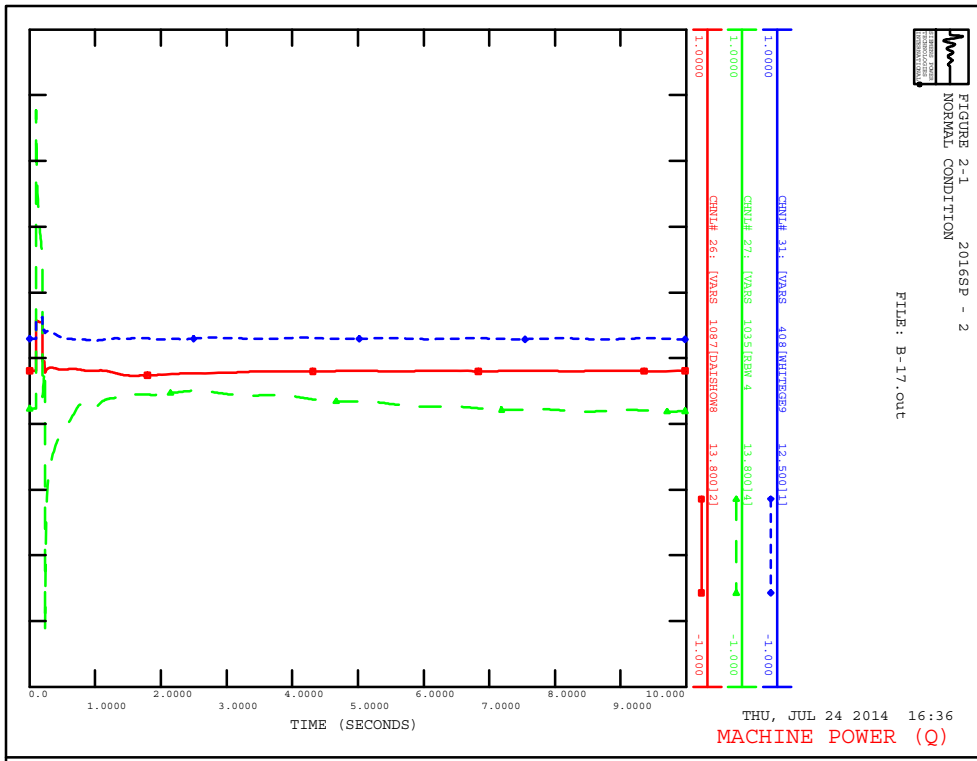


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-17.out
THU, JUL 24 2014 16:36
MACHINE POWER (Q)
TIME (SECONDS)

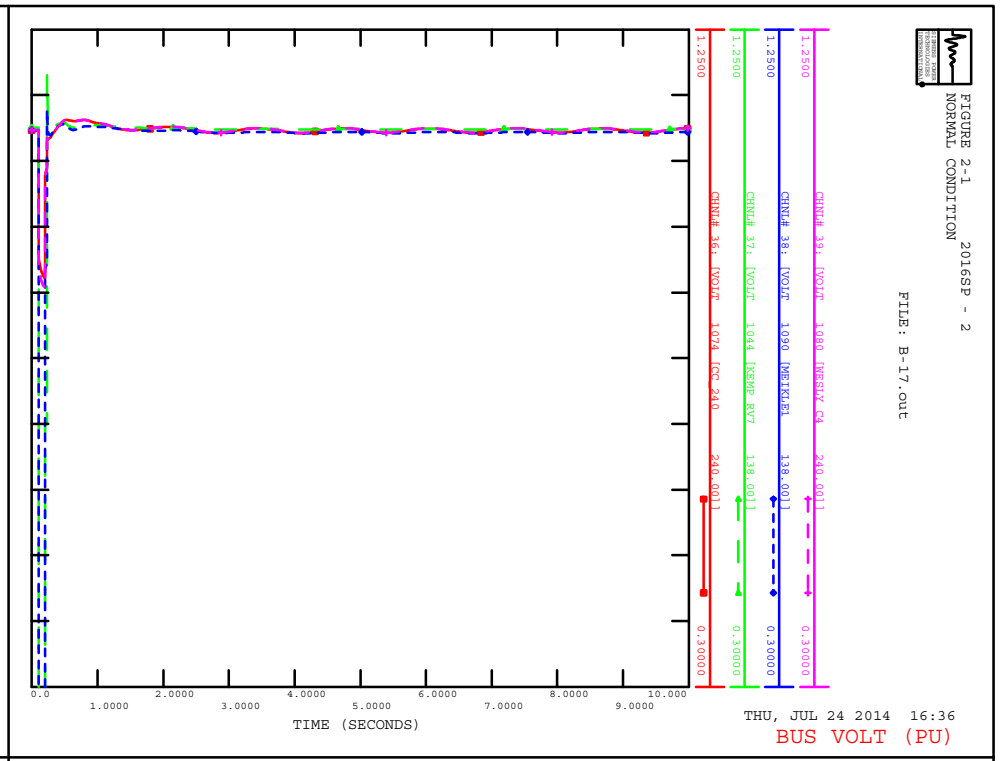


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-17.out
THU, JUL 24 2014 16:36
BUS VOLT (PU)
TIME (SECONDS)

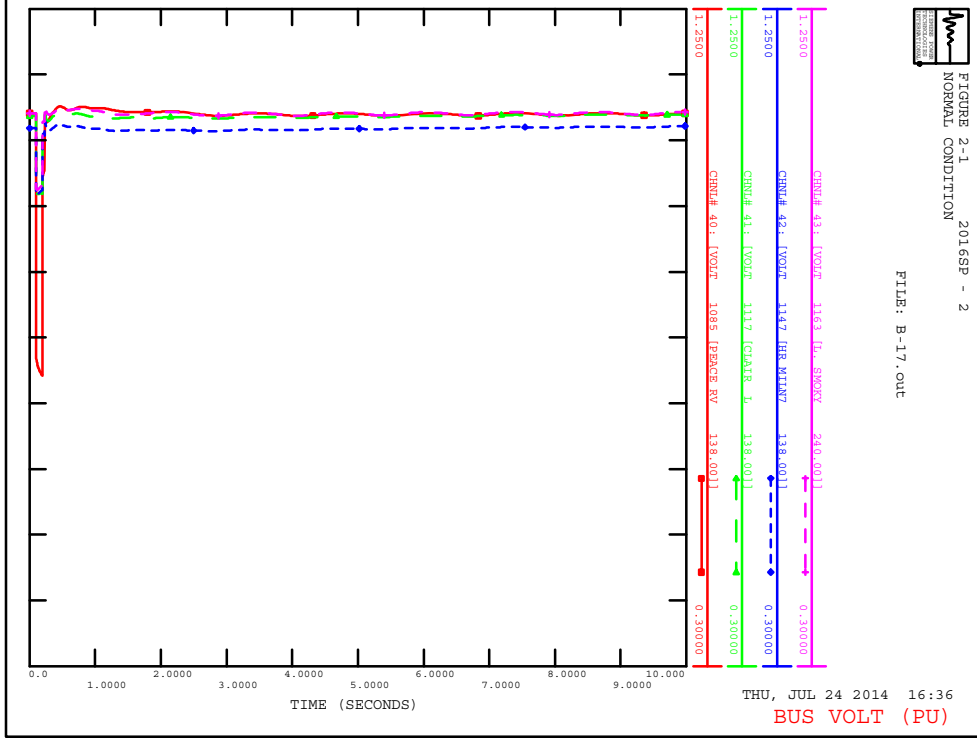


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-17.out
THU, JUL 24 2014 16:36
BUS VOLT (PU)
TIME (SECONDS)

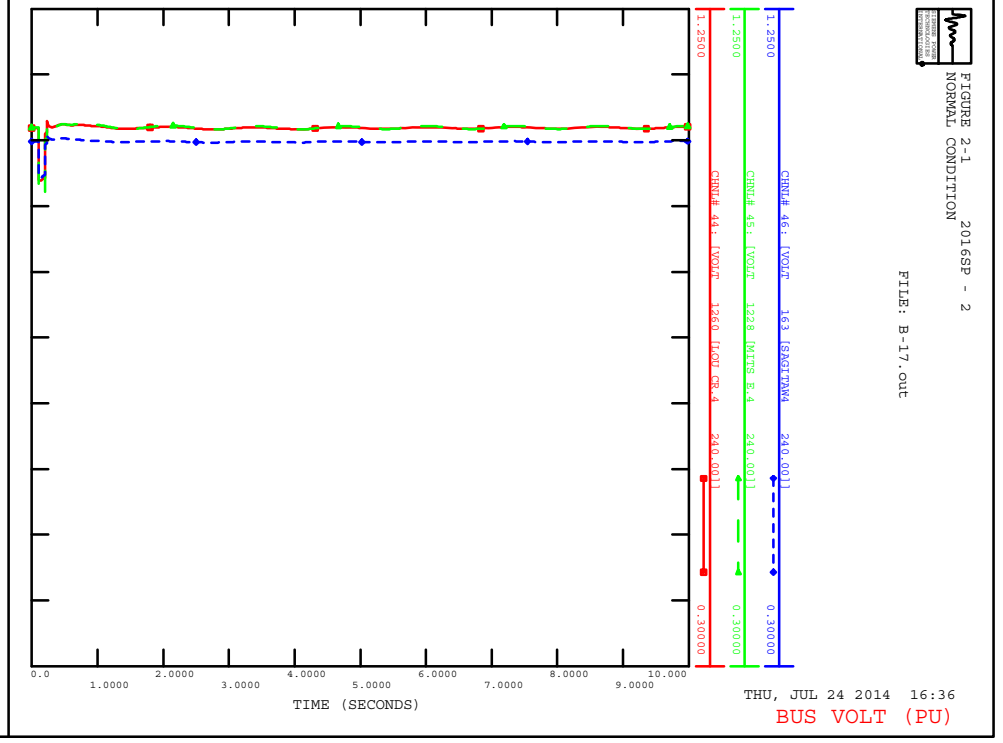


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-17.out
THU, JUL 24 2014 16:36
BUS VOLT (PU)
TIME (SECONDS)

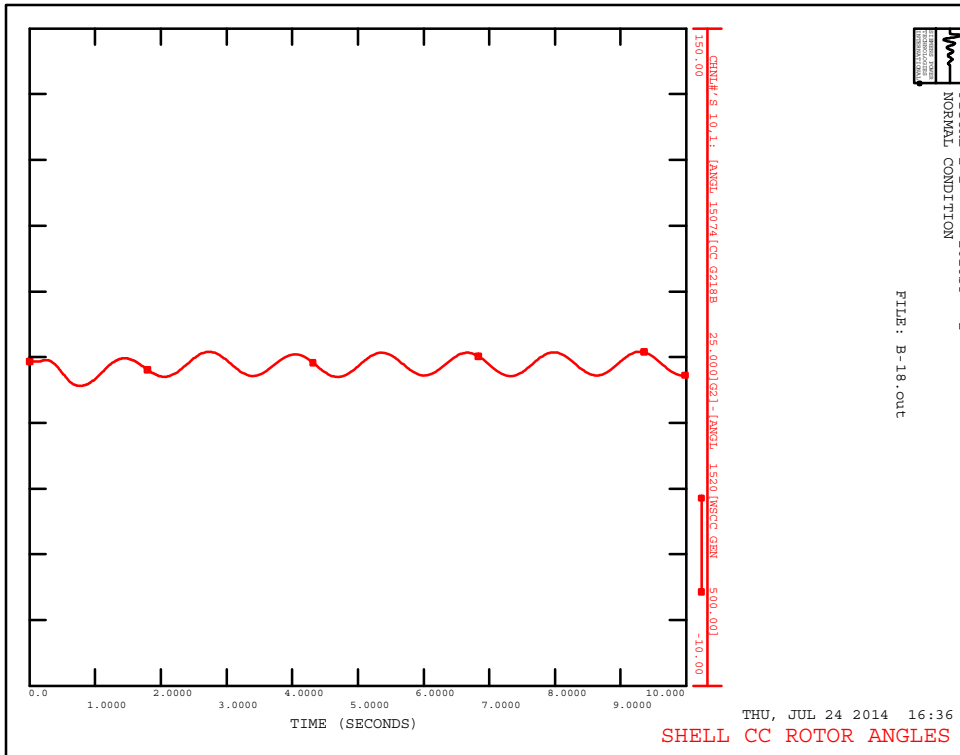


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-18.out
CHNL# 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

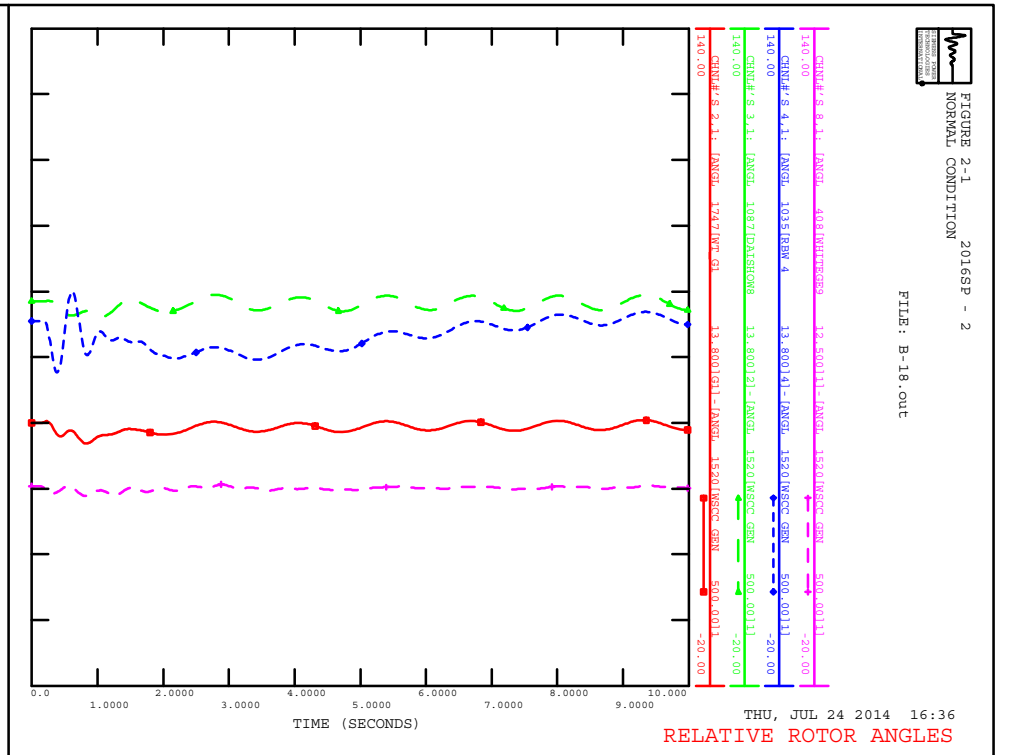


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-18.out
CHNL# 8,1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3,1: [ANGL 1087[DAISHOW8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 2,1: [ANGL 1747[WT G1 13.800[1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

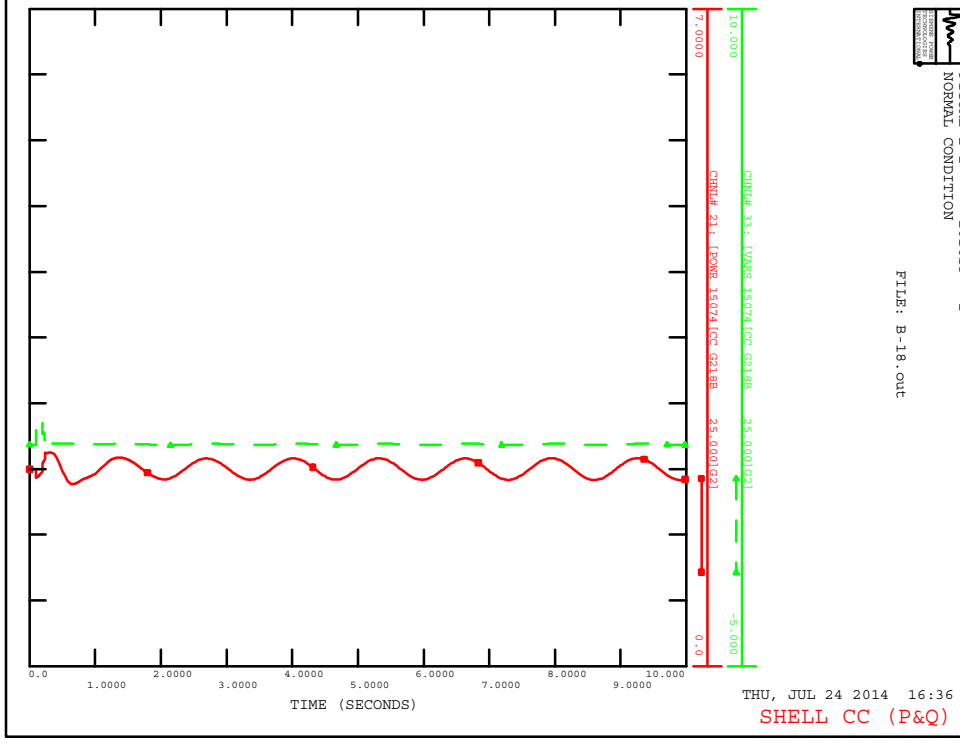


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-18.out
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
7.0000
-5.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

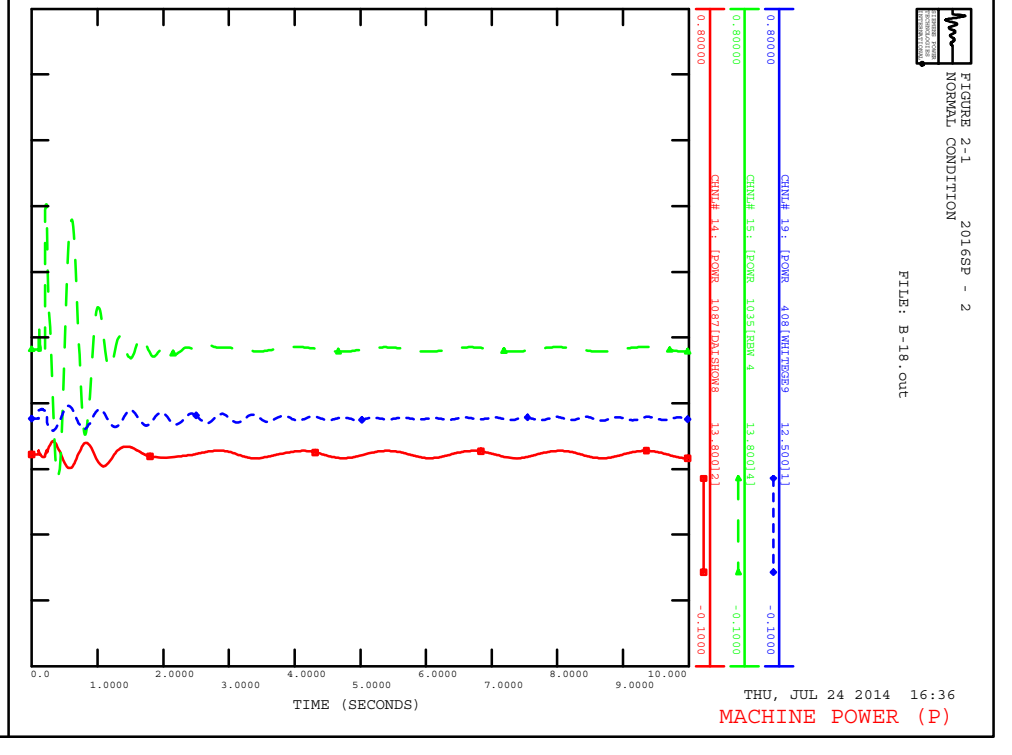


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-18.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHOW8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-18.out

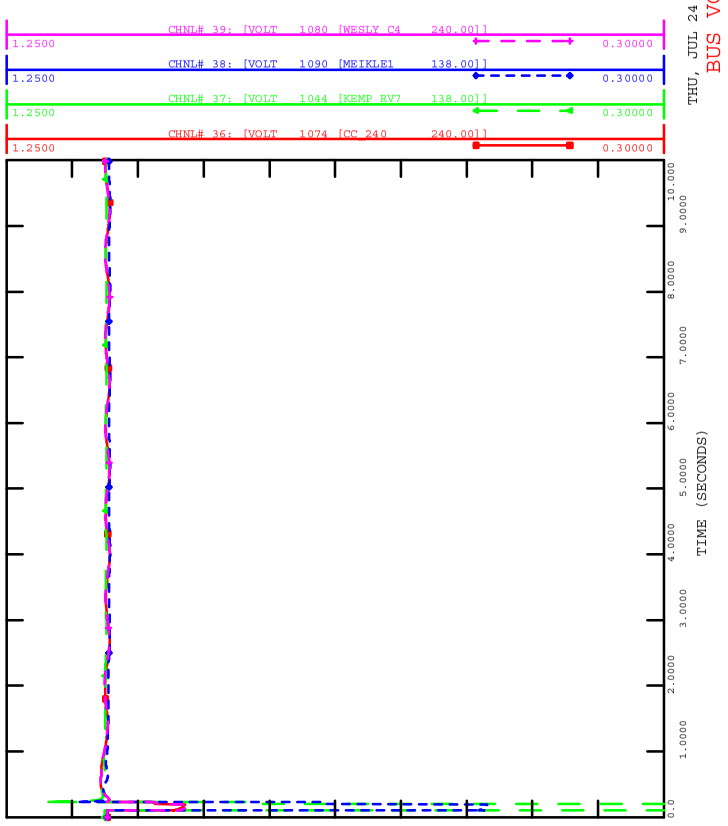


FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-18.out

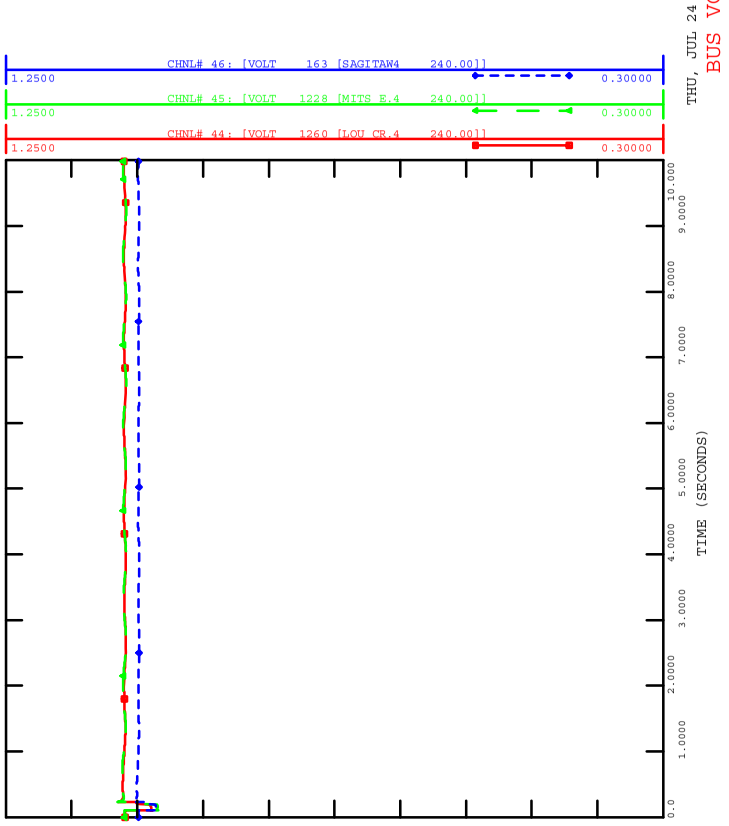


FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-18.out

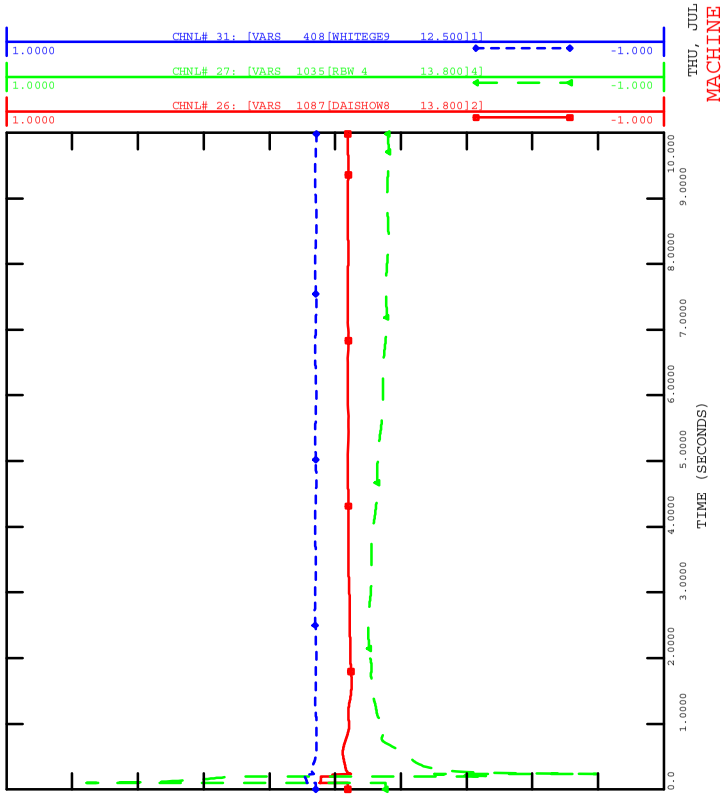
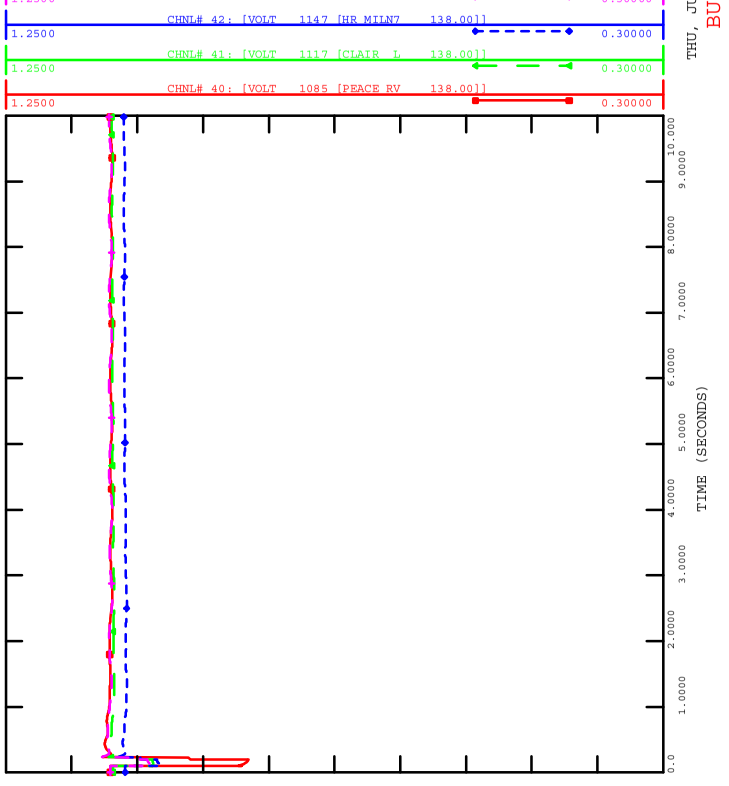


FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-18.out



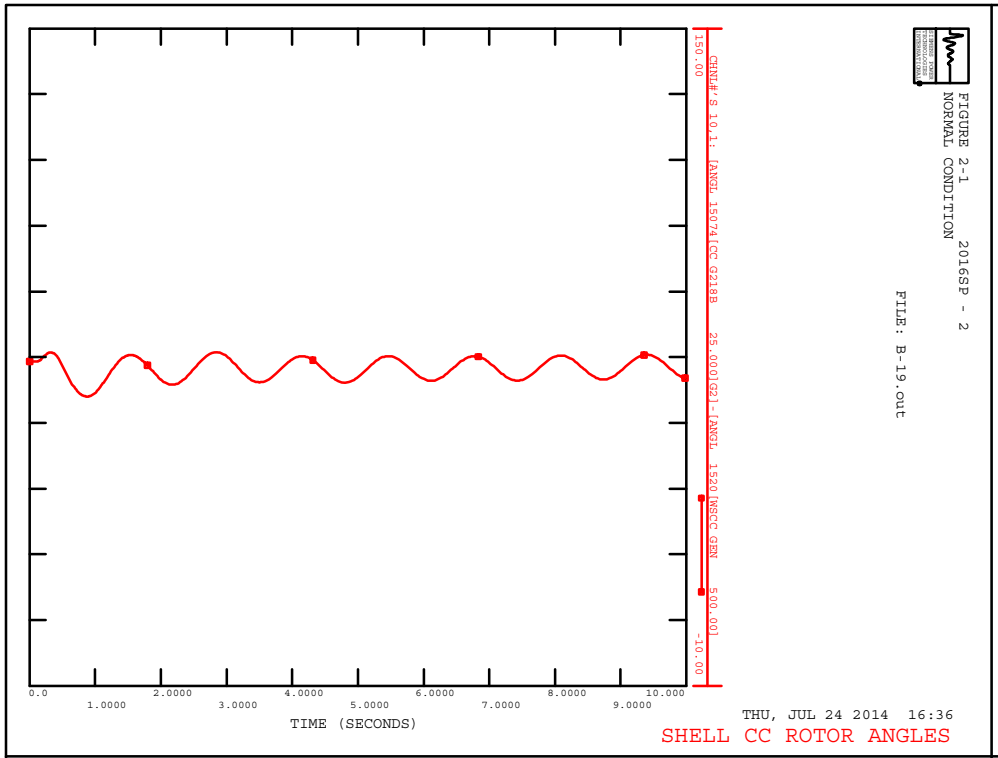


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-19.out
CHNL#'S 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

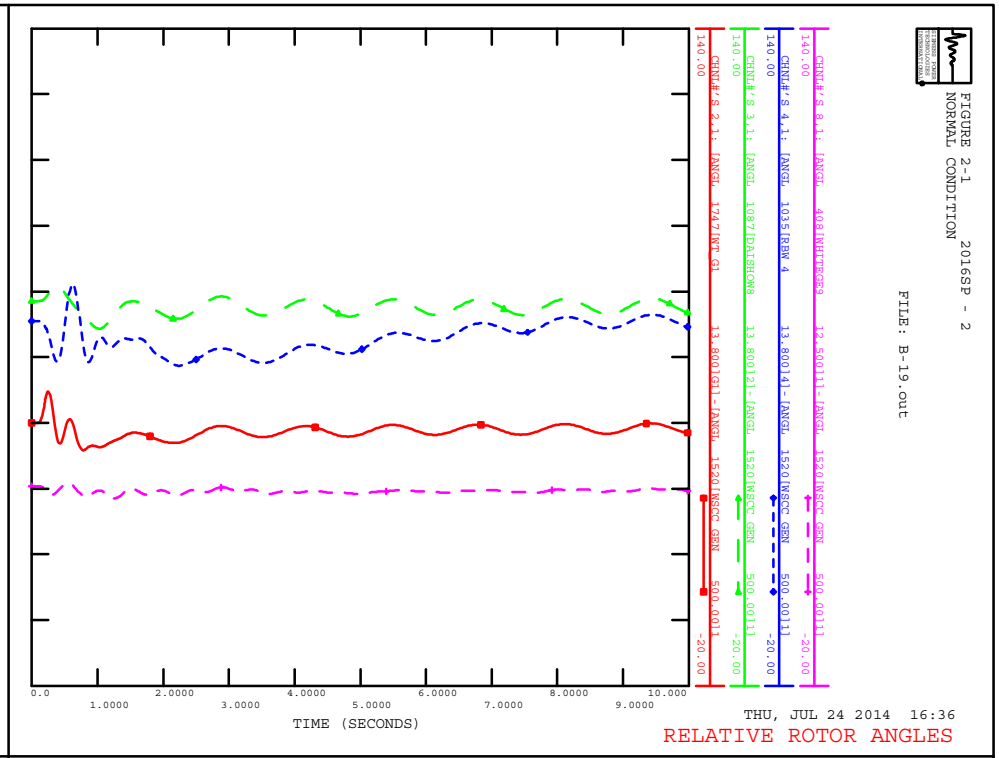


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-19.out
CHNL#'S 8,1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 3,1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 2,1: [ANGL 1747[WT G1 13.800[1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

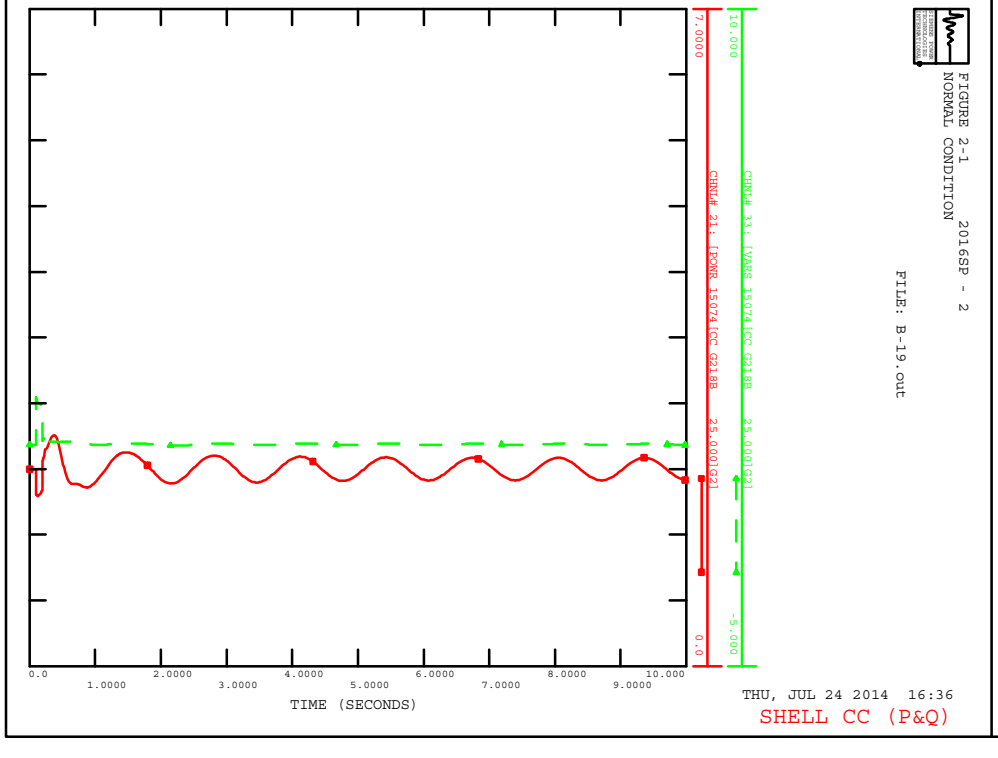


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-19.out
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

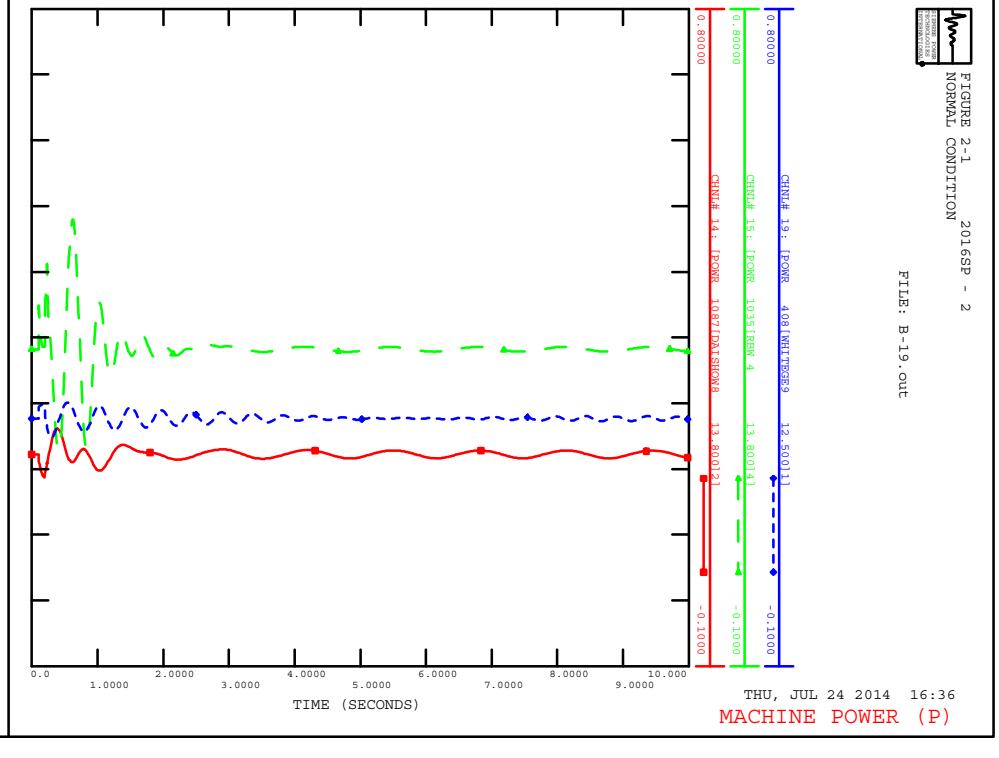


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-19.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

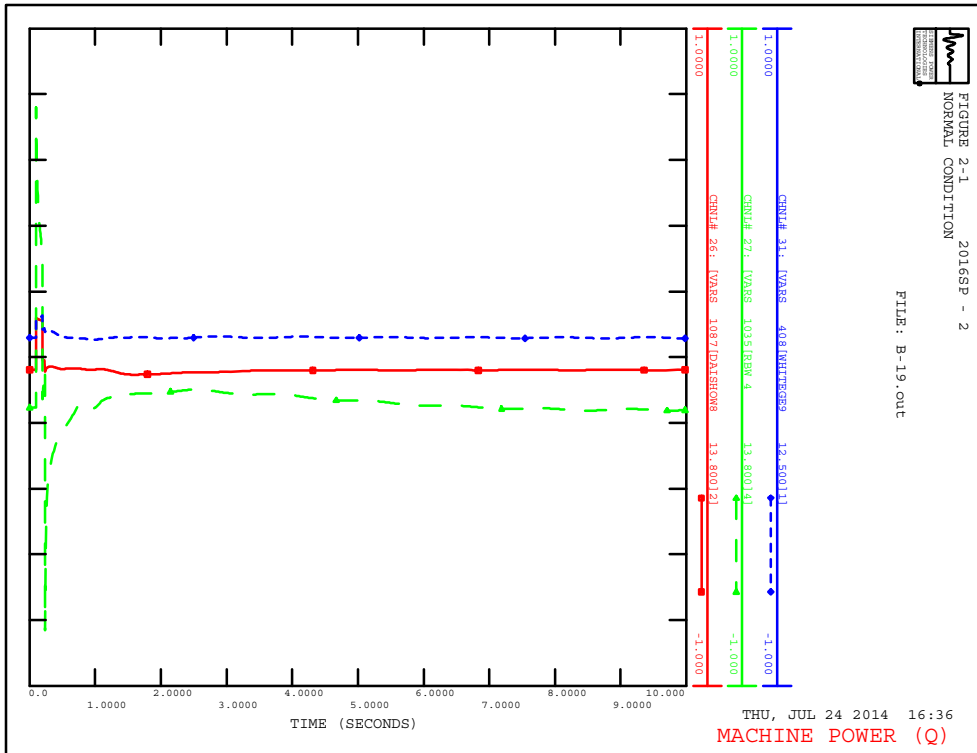


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-19.out
THU, JUL 24 2014 16:36
TIME (SECONDS)
MACHINE POWER (Q)

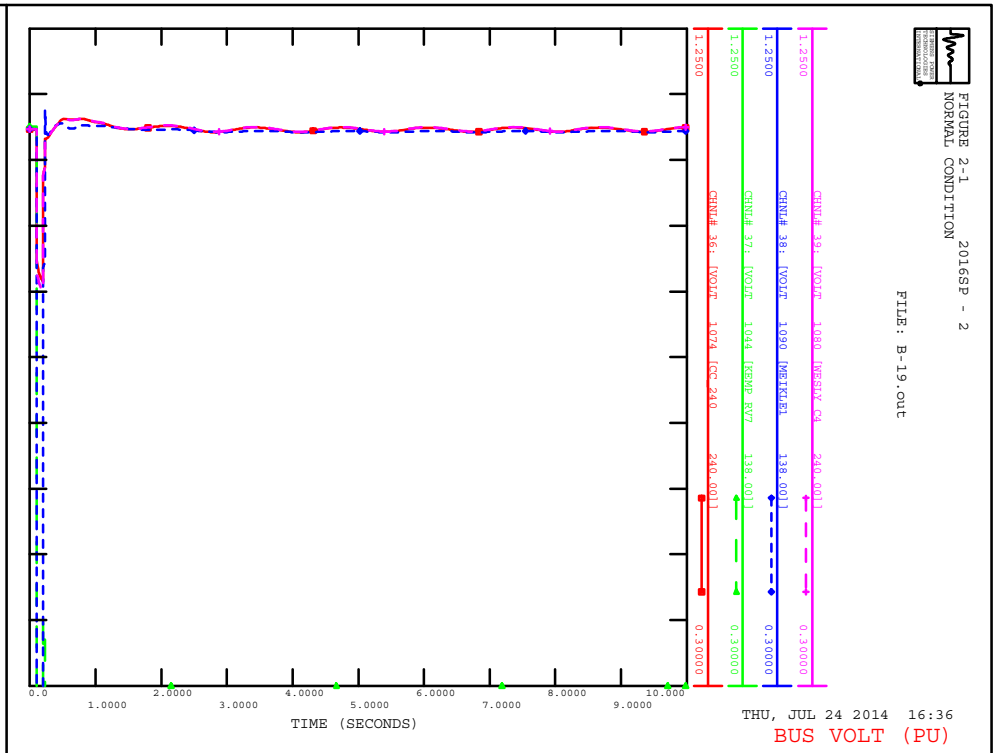


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-19.out
THU, JUL 24 2014 16:36
TIME (SECONDS)
BUS VOLT (PU)

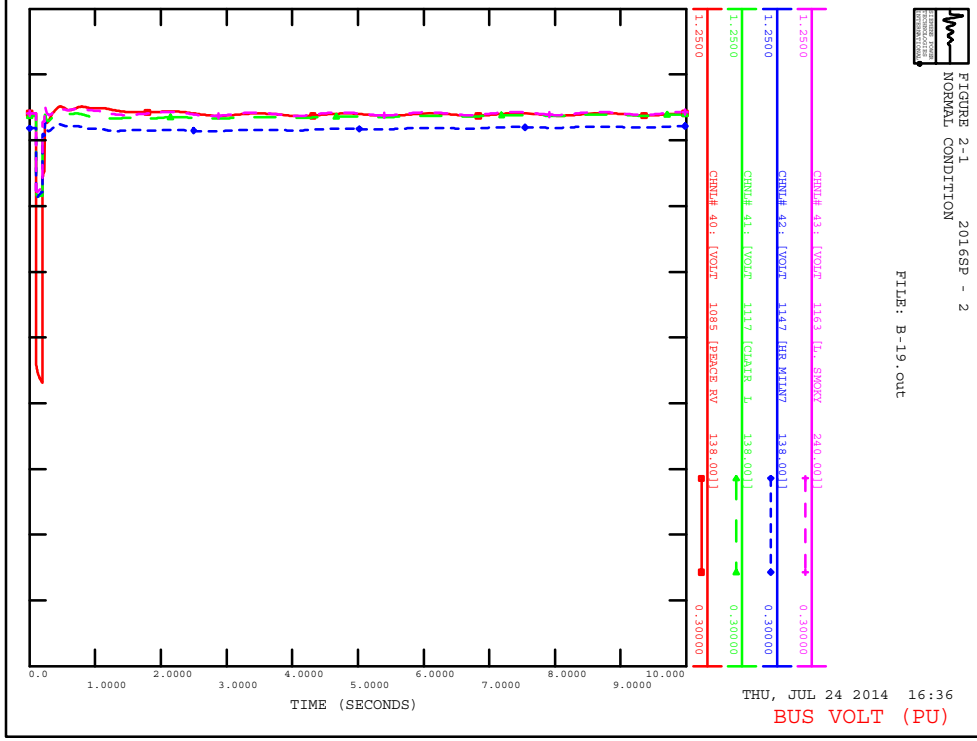


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-19.out
THU, JUL 24 2014 16:36
TIME (SECONDS)
BUS VOLT (PU)

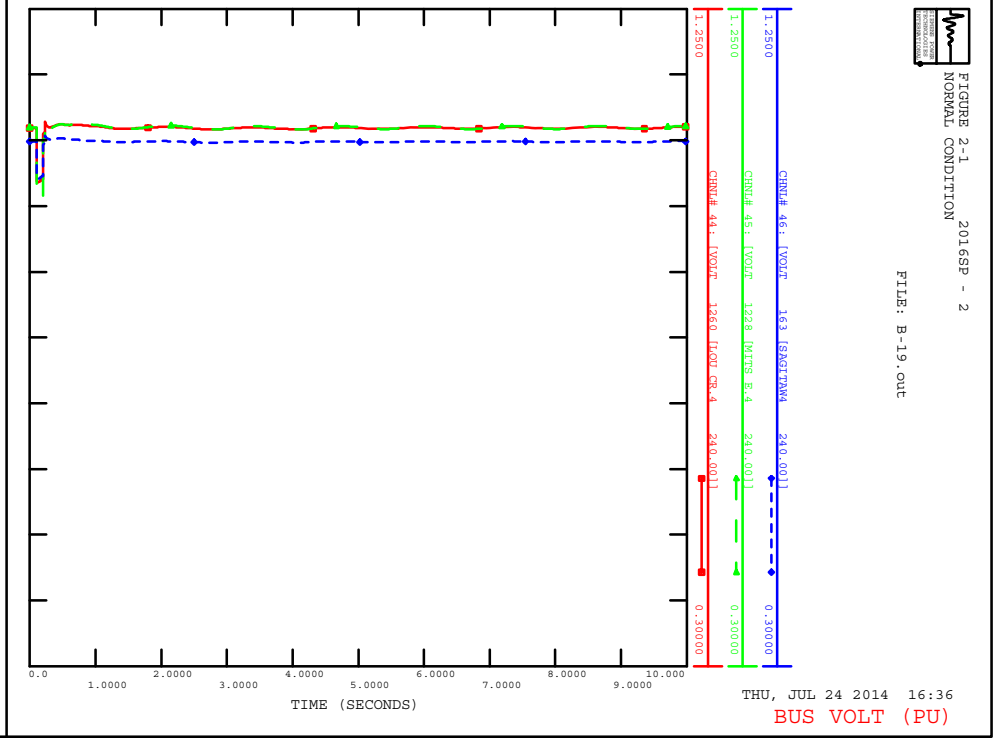


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-19.out
THU, JUL 24 2014 16:36
TIME (SECONDS)
BUS VOLT (PU)

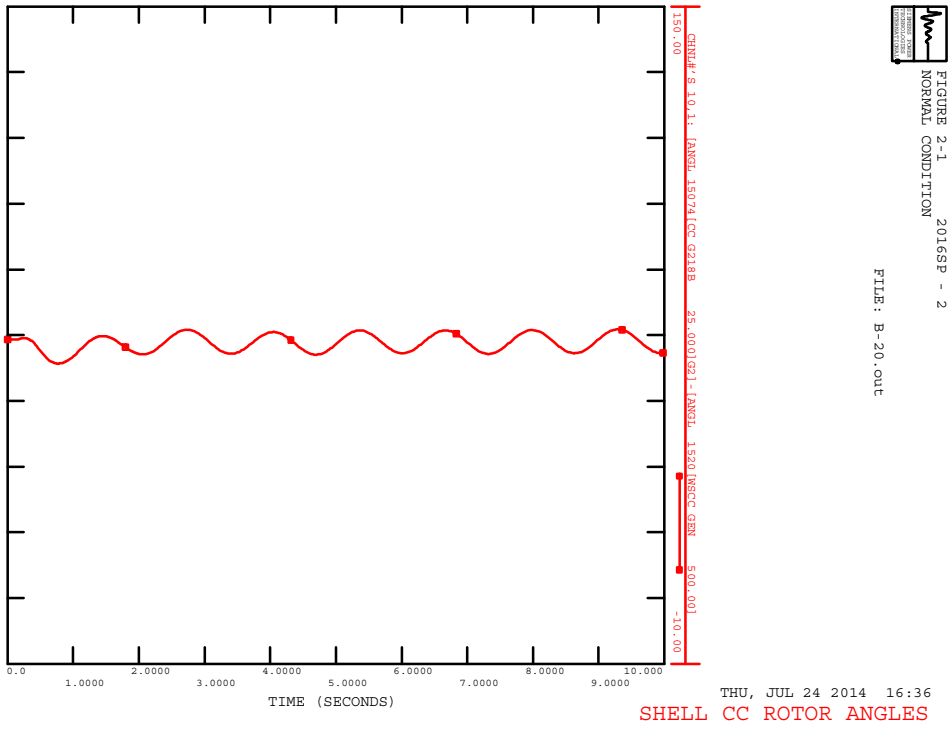


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-20.out
CHNL# 10.1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

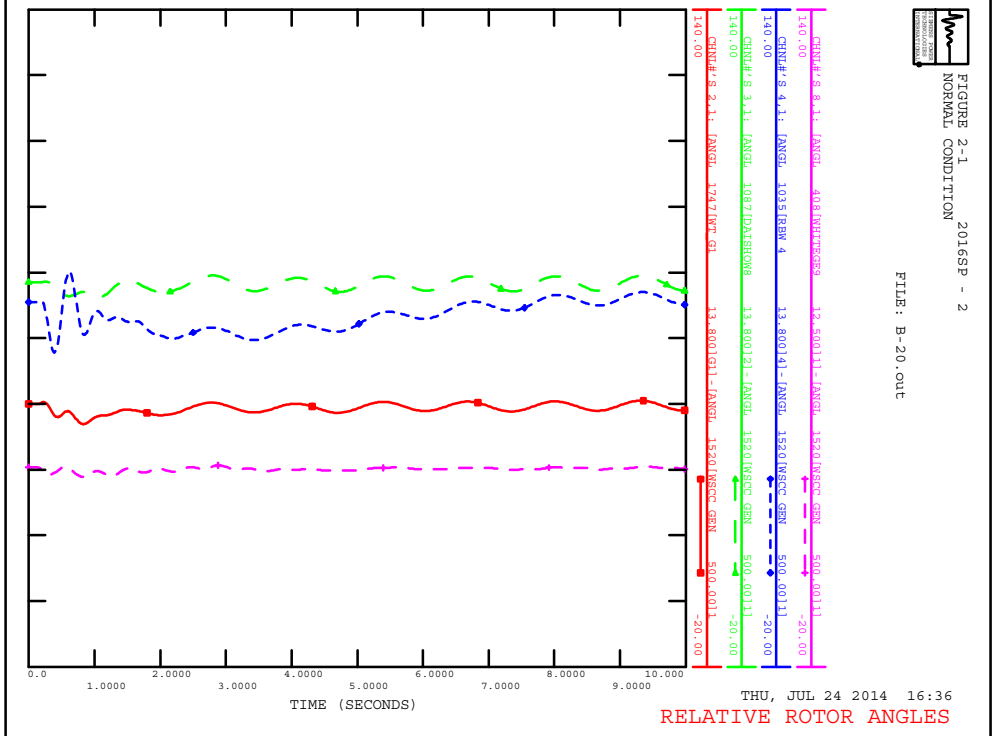


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-20.out
CHNL# 8.1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 4.1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3.1: [ANGL 1087[DAISHOW8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 2.1: [ANGL 1747[WT G1 13.800[1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

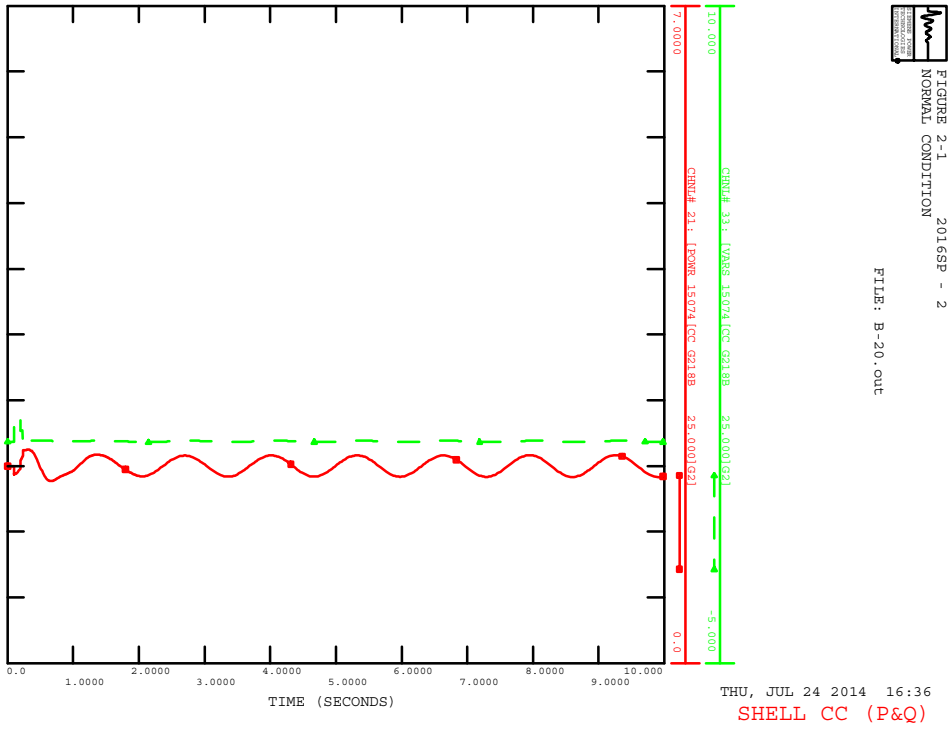


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-20.out
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
10.000
7.0000
-5.000
0.0
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

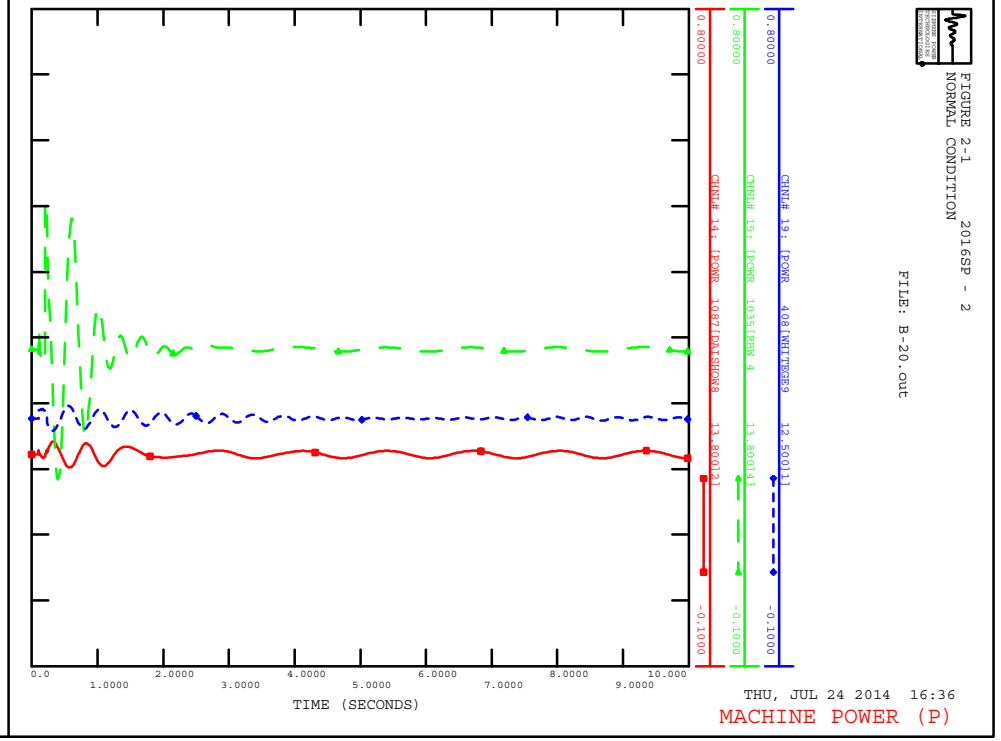


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-20.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHOW8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-20.out

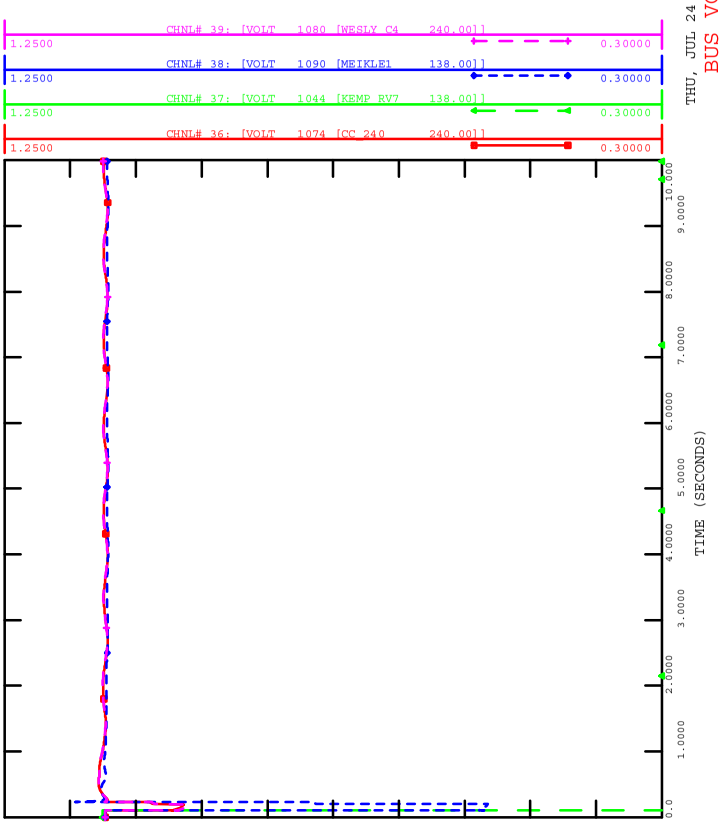


FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-20.out

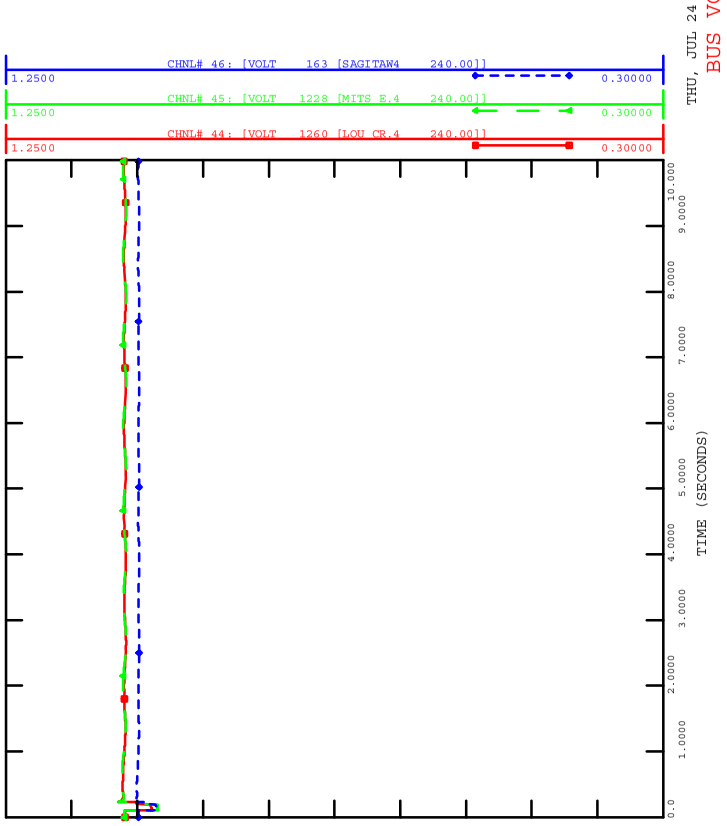


FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-20.out

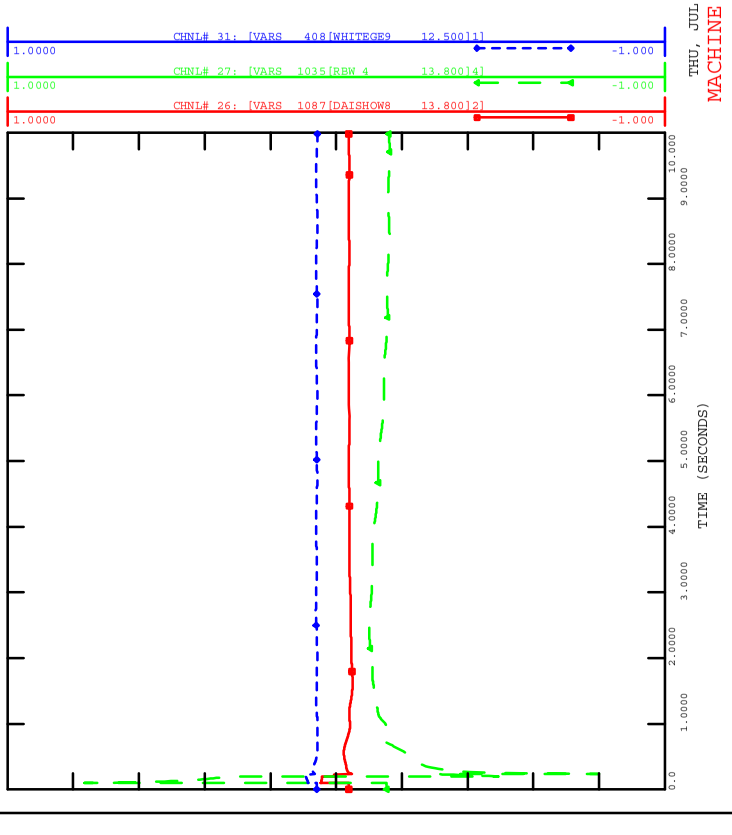
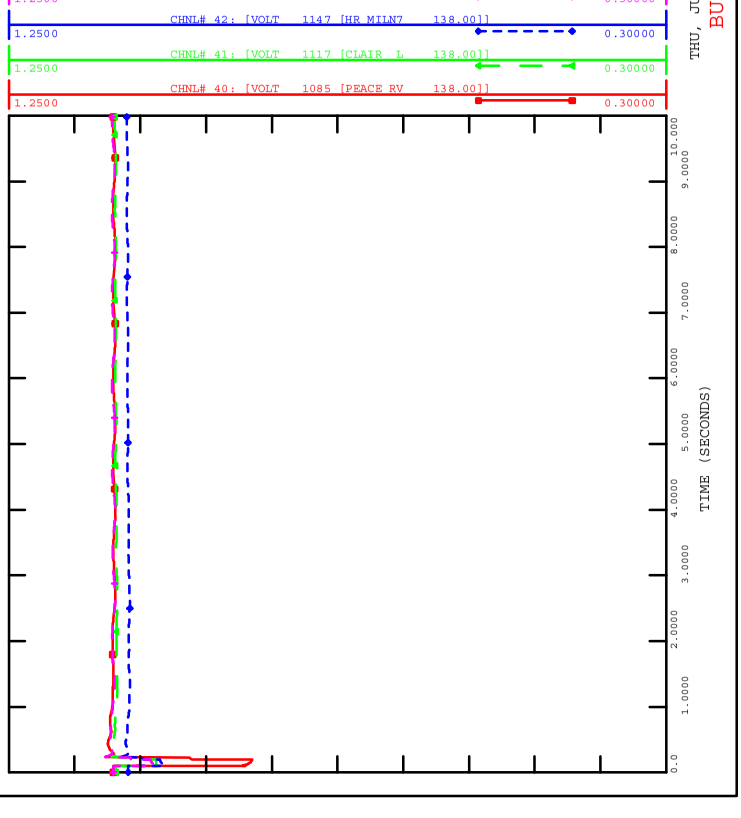


FIGURE 2-1 2016SP - 2
NORMAL CONDITION

FILE: B-20.out



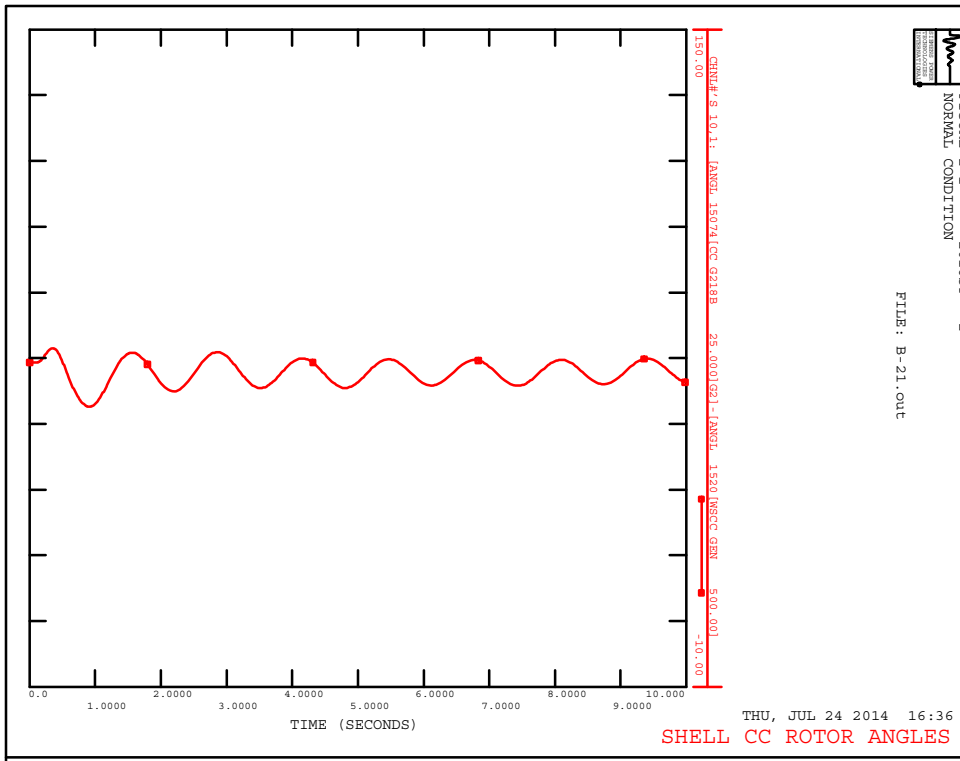


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-21.out
CHNL# 10.1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

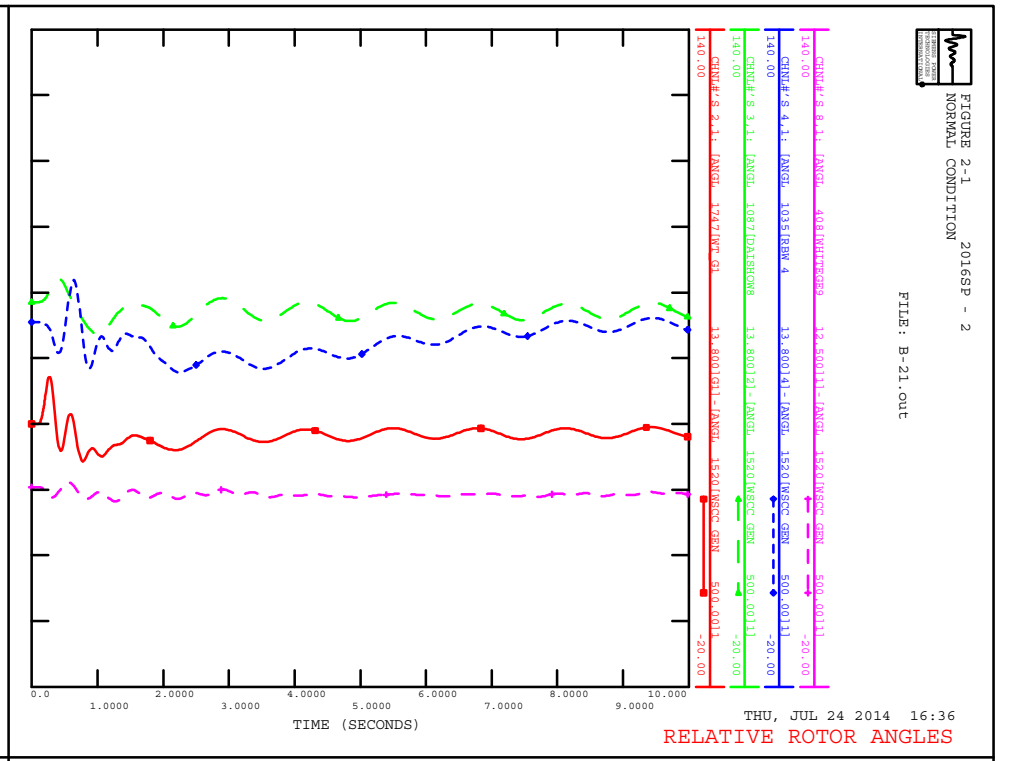


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-21.out
CHNL# 8.1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 4.1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3.1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 2.1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

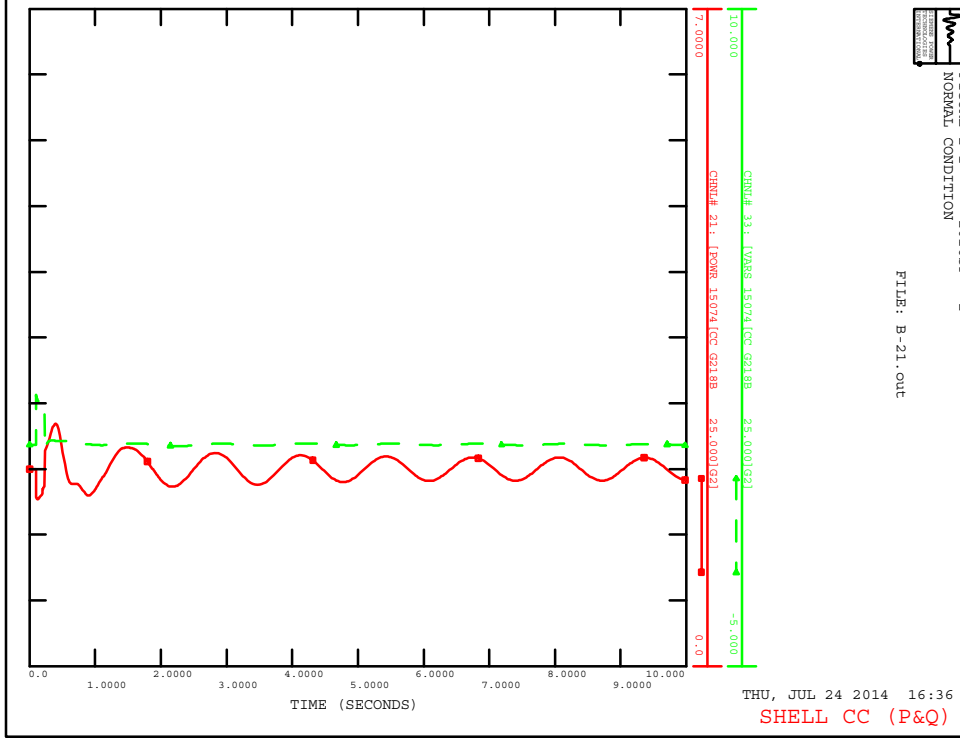


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-21.out
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
7.0000
10.000
0.0
-5.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

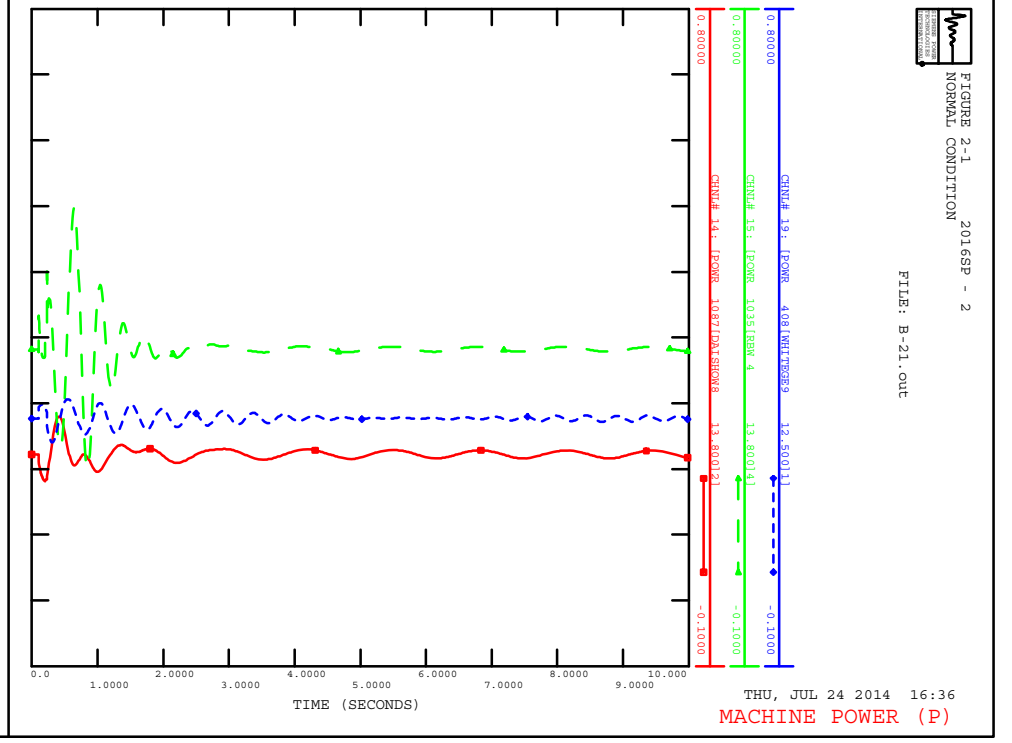


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-21.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

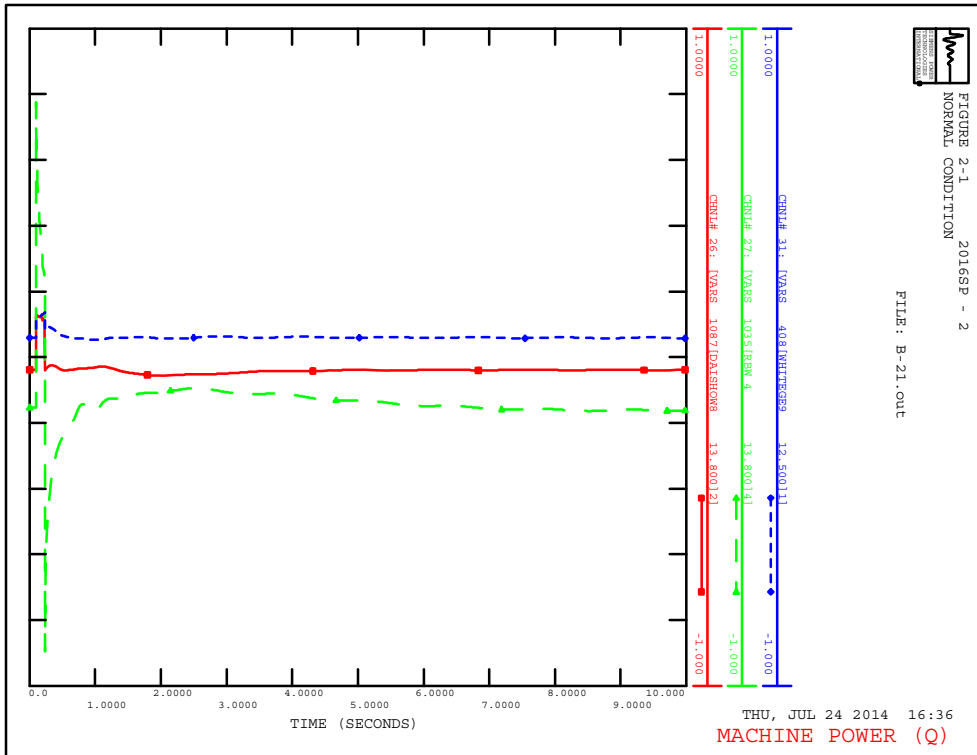


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-21.out
CHNI# 31: [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27: [VARS 1035[RBW 4 13.800]4]
CHNI# 26: [VARS 1087[DAISHOW8 13.800]2]
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

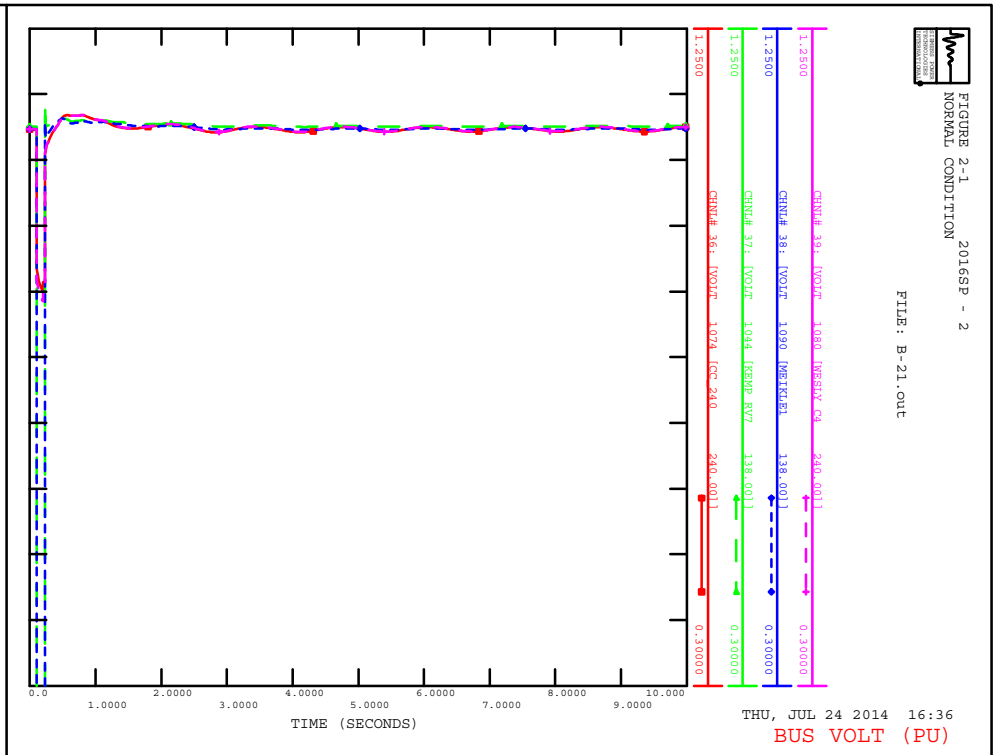


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-21.out
CHNI# 38: [VOLT 1090 [MEIKLE1 138.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 36: [VOLT 1074 [CC 240 240.00]
CHNI# 33: [VOLT 1080 [NRSIX C4 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

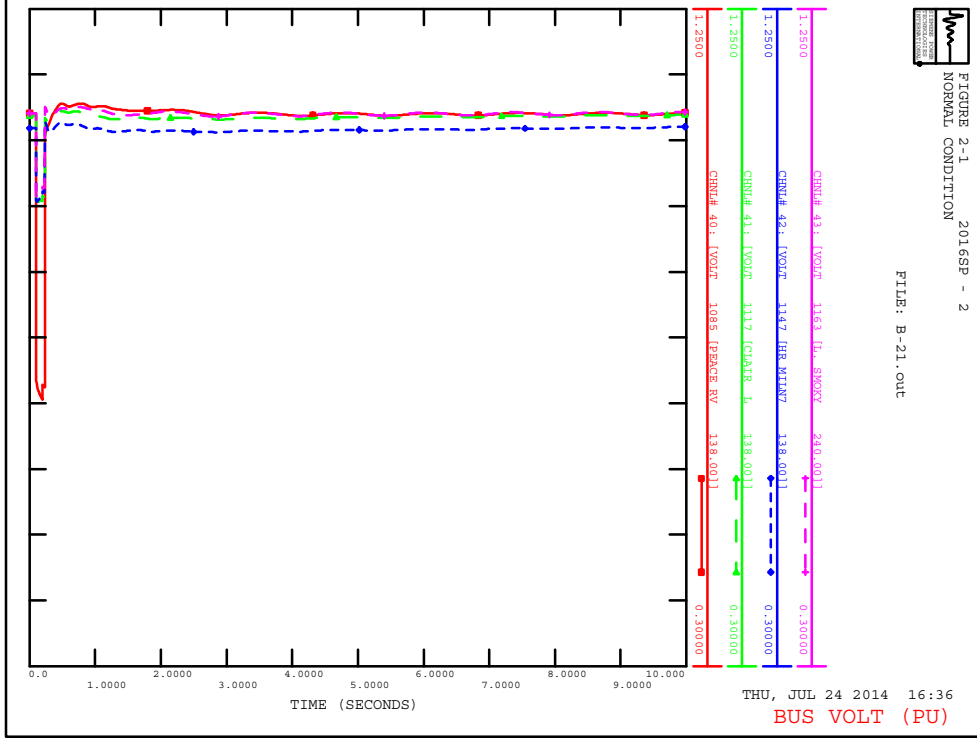


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-21.out
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]
CHNI# 41: [VOLT 1117 [CHAIR L 138.00]
CHNI# 42: [VOLT 1142 [KR MLNT 138.00]
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

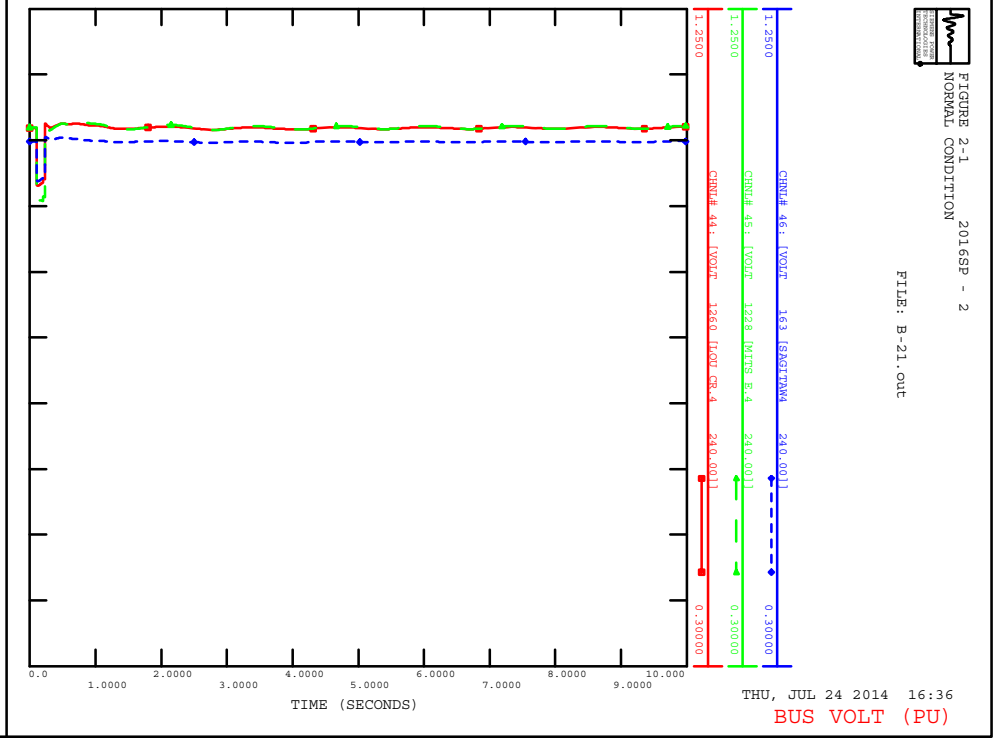


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-21.out
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
CHNI# 45: [VOLT 1228 [MITS B-4 240.00]
CHNI# 44: [VOLT 1260 [FOX CR-4 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

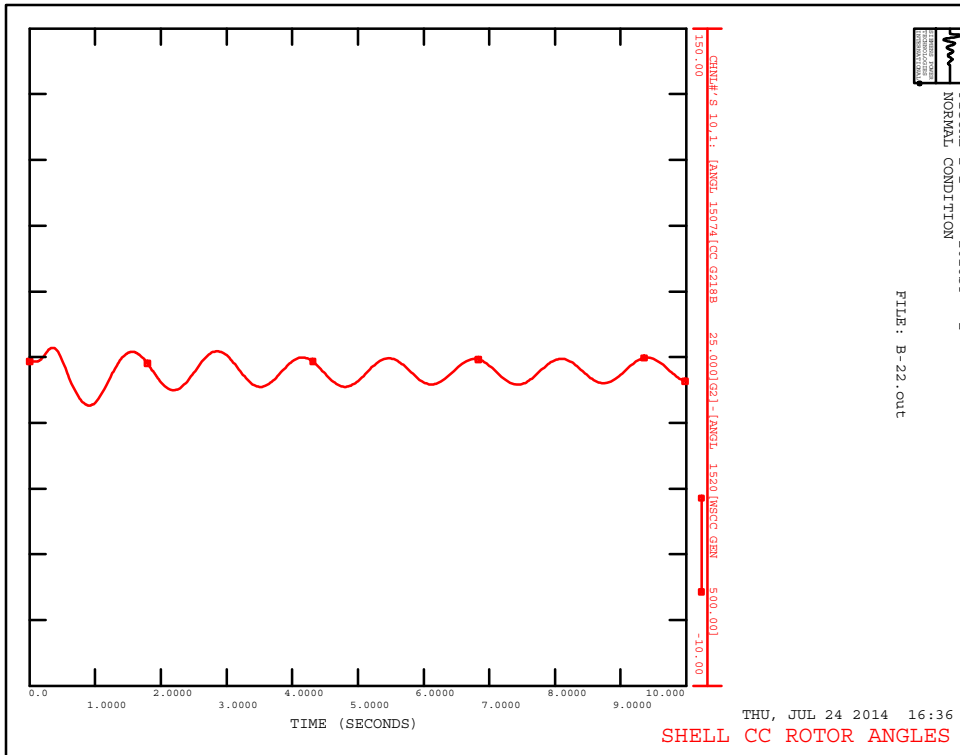


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-22.out
CHNL# 10.1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
-150.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

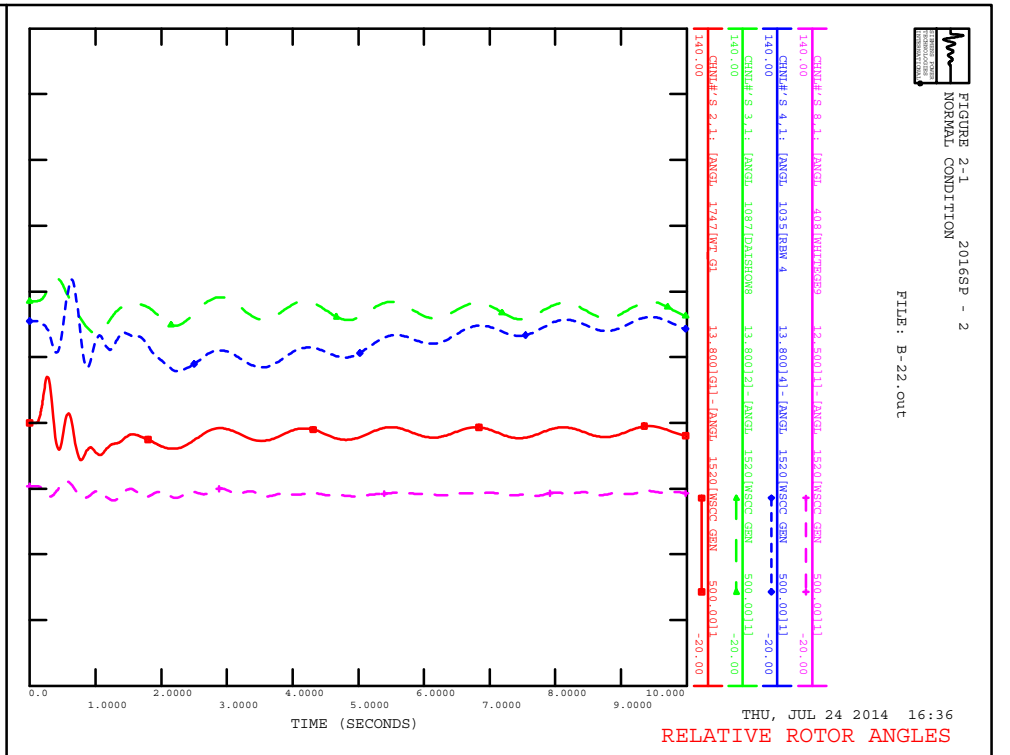


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-22.out
CHNL# 8.1: [ANGL 408[WHITESB9 12.500[1] [ANGL 1520[NSCC GEN 500.00]]
CHNL# 4.1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3.1: [ANGL 1087[DAISHON8 13.800[2] [ANGL 1520[NSCC GEN 500.00]]
CHNL# 2.1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

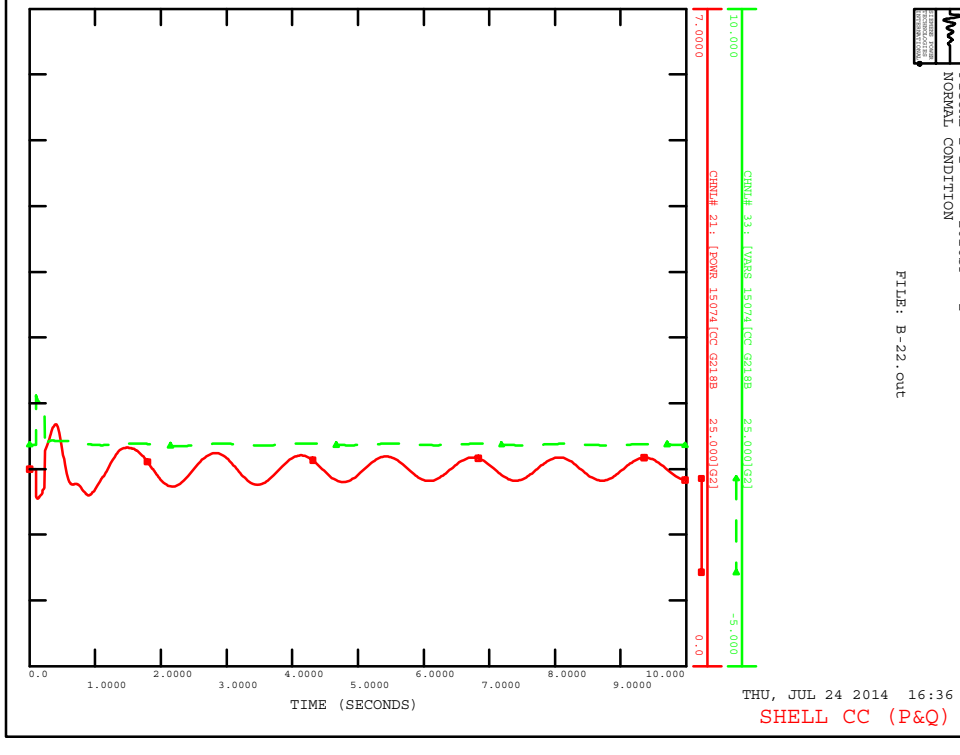


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-22.out
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

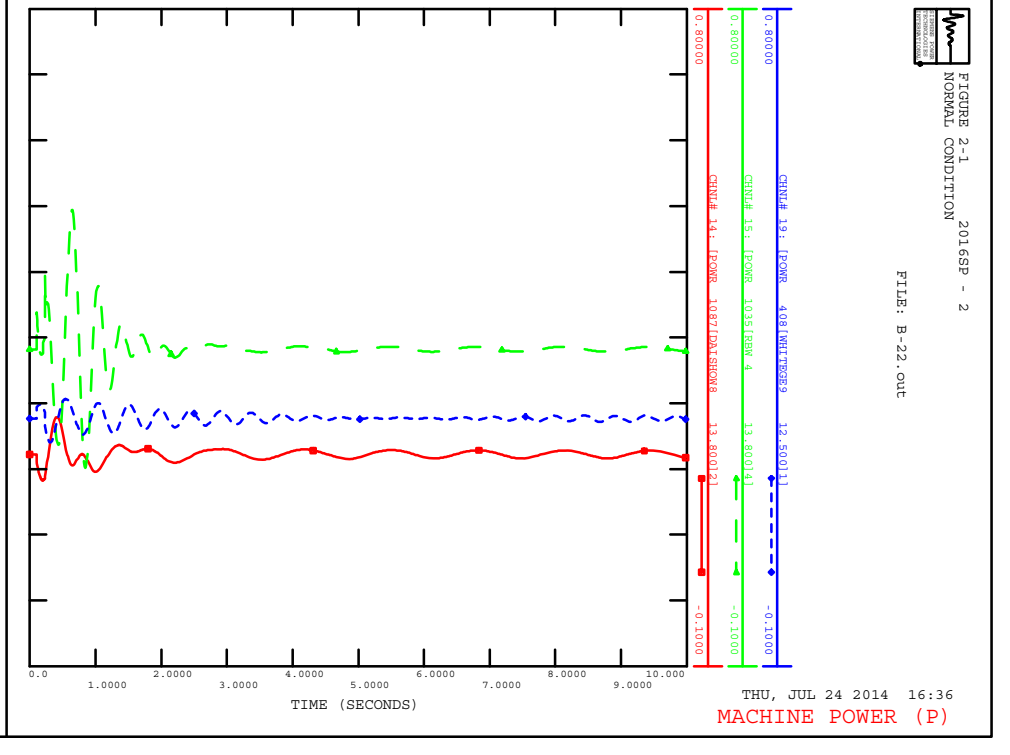


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-22.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

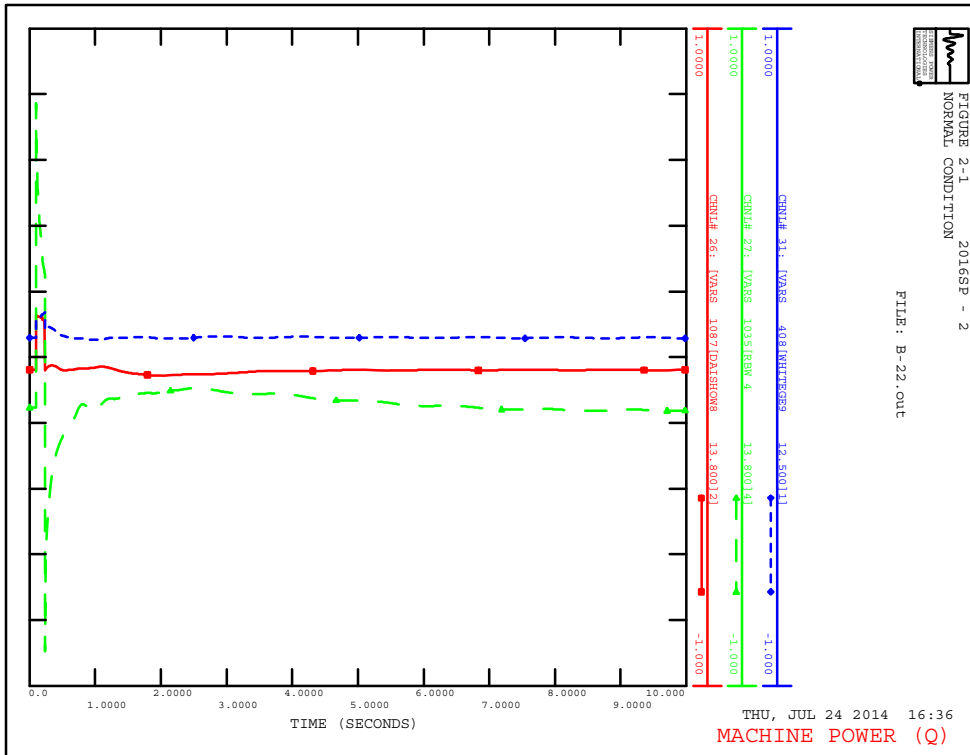


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-22.out
CHNI# 31: [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27: [VARS 1035[RBM 4 13.800]4]
CHNI# 26: [VARS 1087[DAISHOWB 13.800]2]
1.0000
-1.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

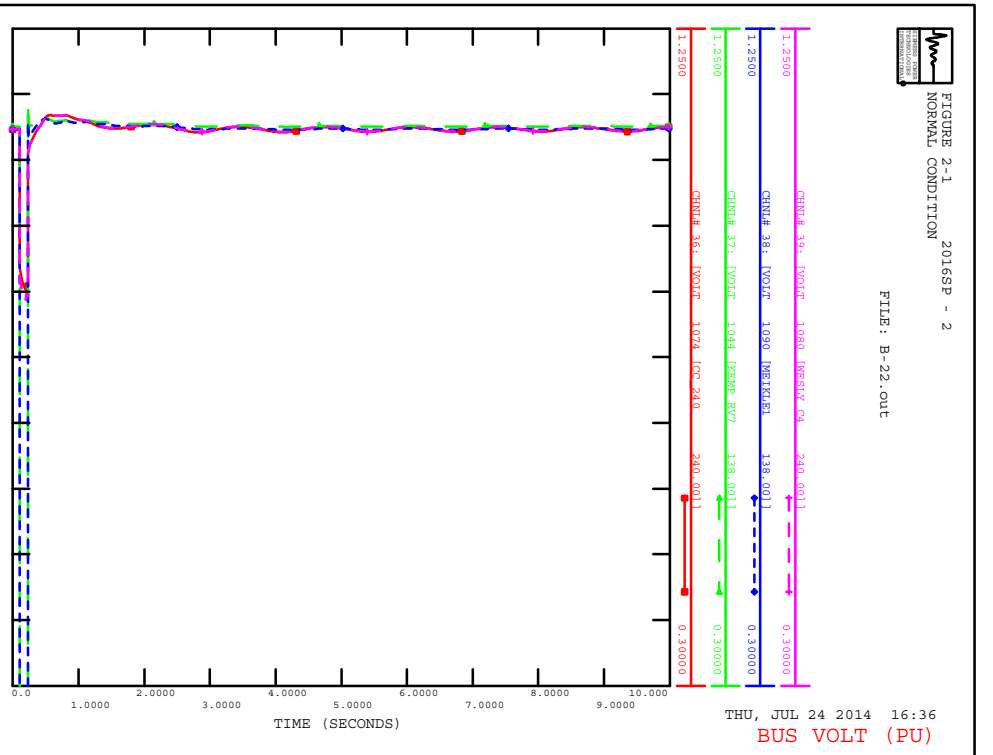


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-22.out
CHNI# 39: [VOLT 1080 [MESIC C4 240.00]
CHNI# 38: [VOLT 1090 [MESIKLE1 138.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 36: [VOLT 1074 [CC 240 240.00]
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

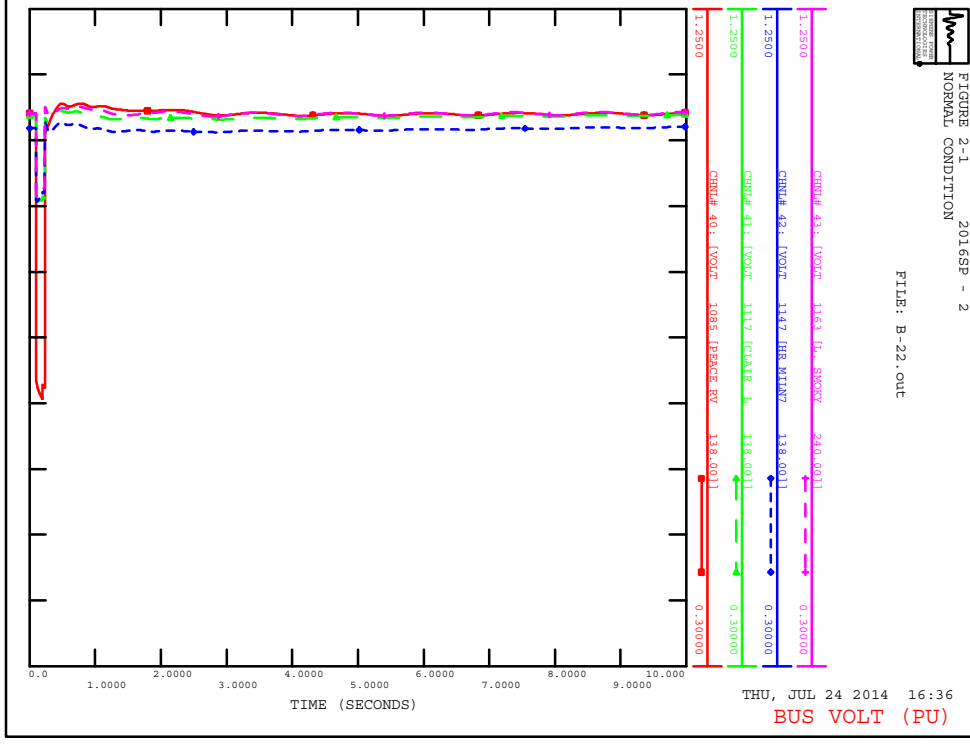


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-22.out
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00]
CHNI# 42: [VOLT 1142 [RR MTANT 138.00]
CHNI# 41: [VOLT 1117 [CHAIR L 138.00]
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

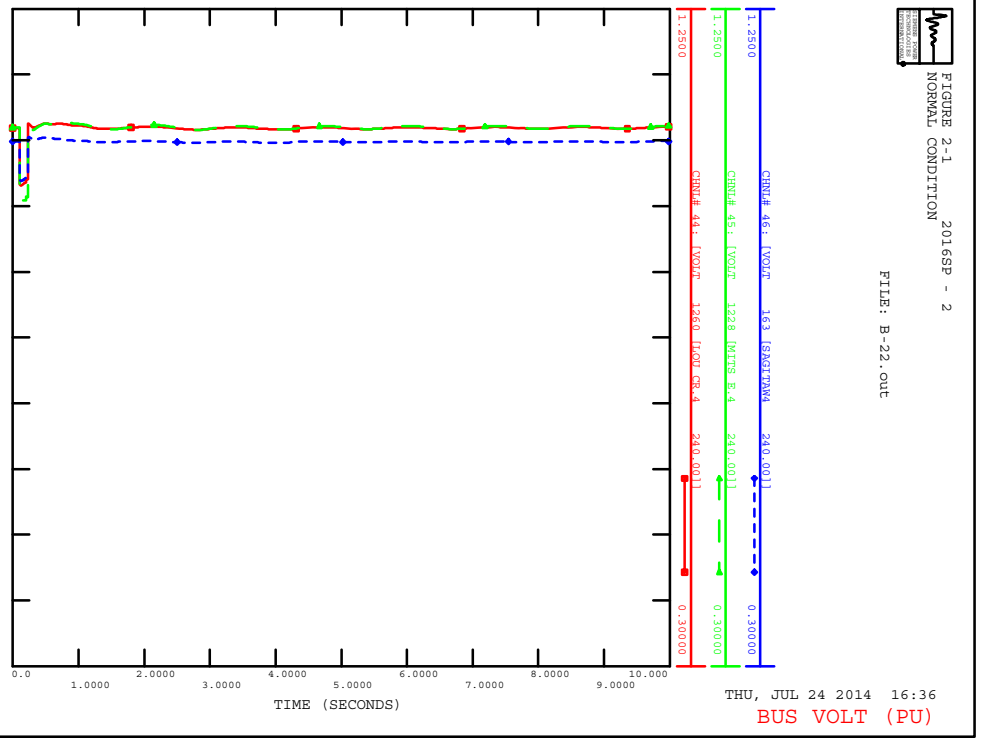


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-22.out
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
CHNI# 45: [VOLT 1228 [MTES B-4 240.00]
CHNI# 44: [VOLT 1260 [FOT CR-4 240.00]
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

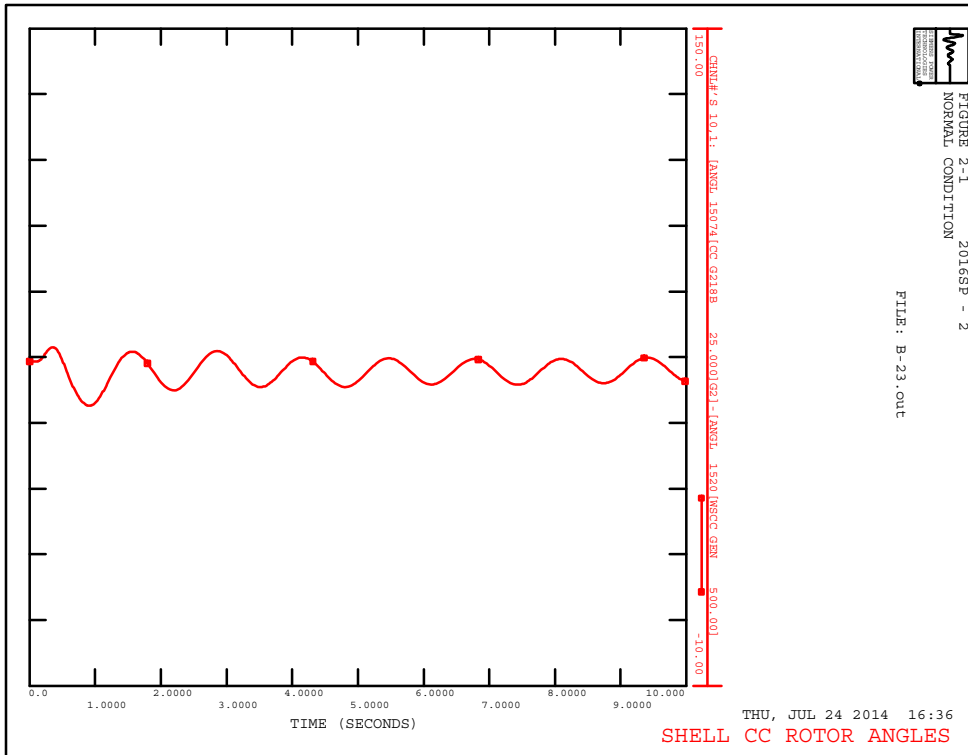


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-23.out
CHNL# 10.1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

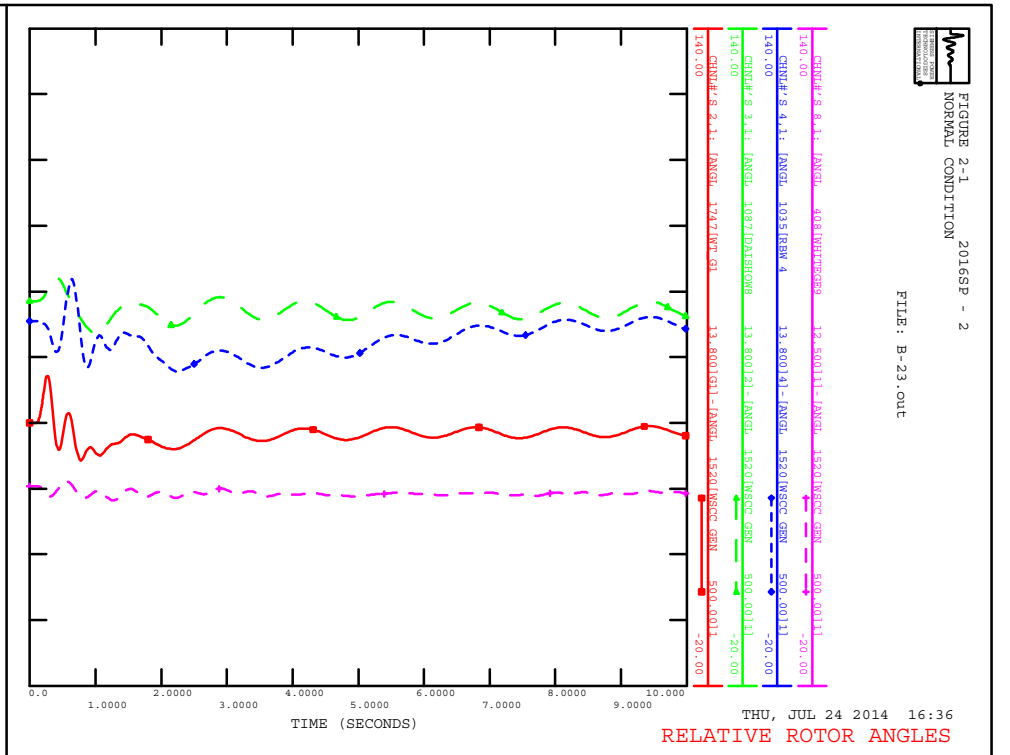


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-23.out
CHNL# 8.1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 4.1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3.1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 2.1: [ANGL 1747[WT G1 13.800[1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

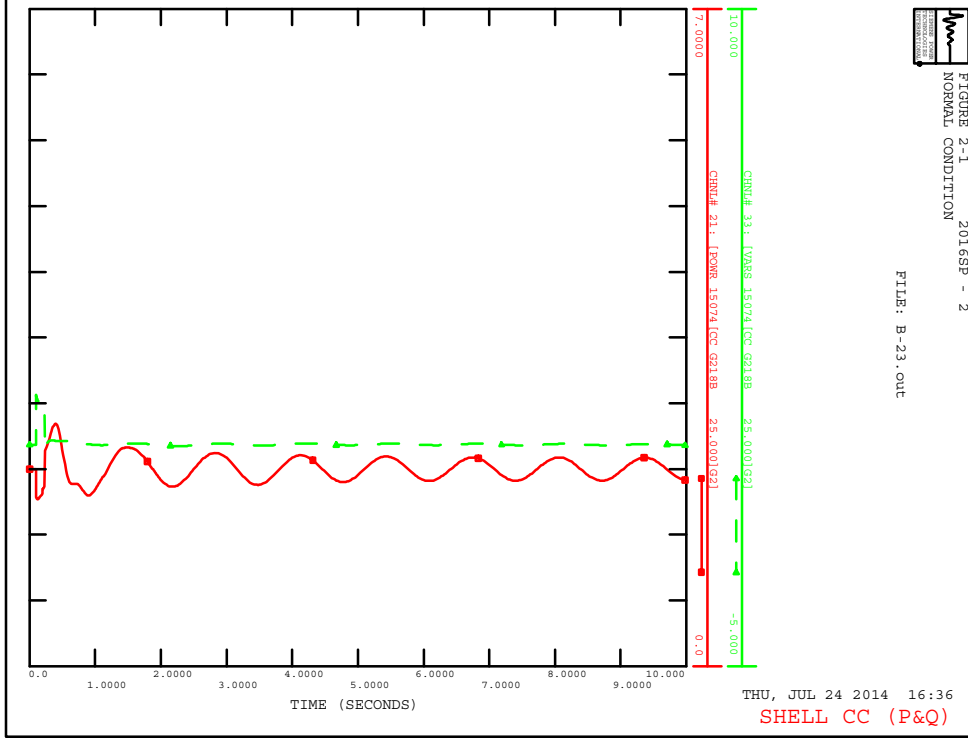


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-23.out
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
7.0000
10.000
0.0
-5.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

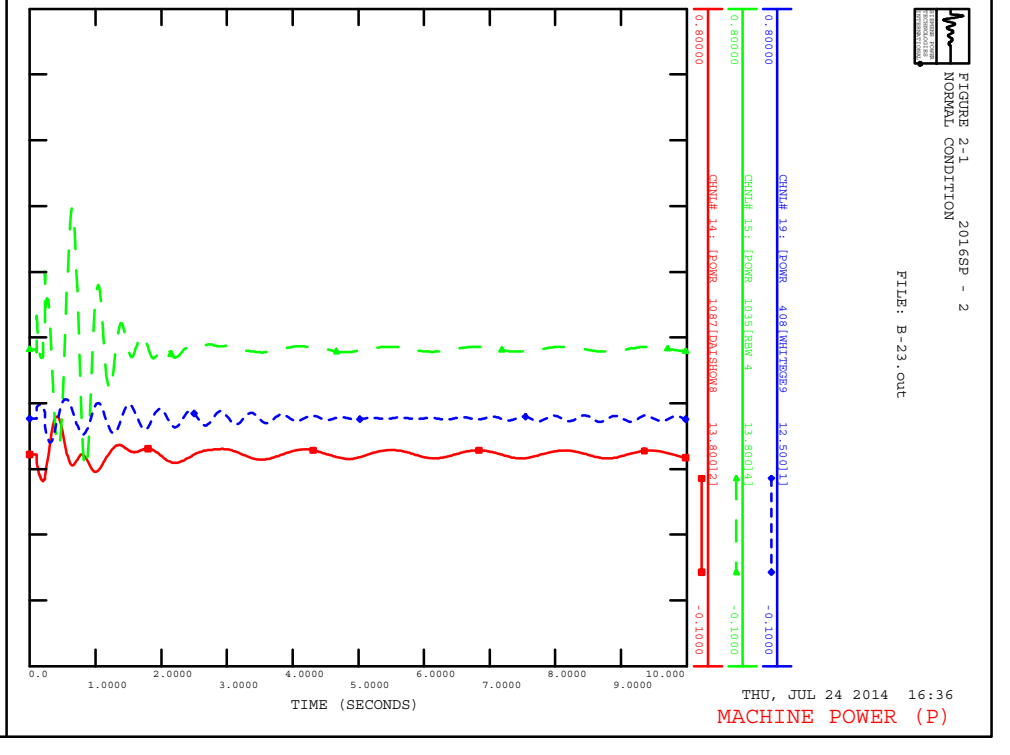


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-23.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

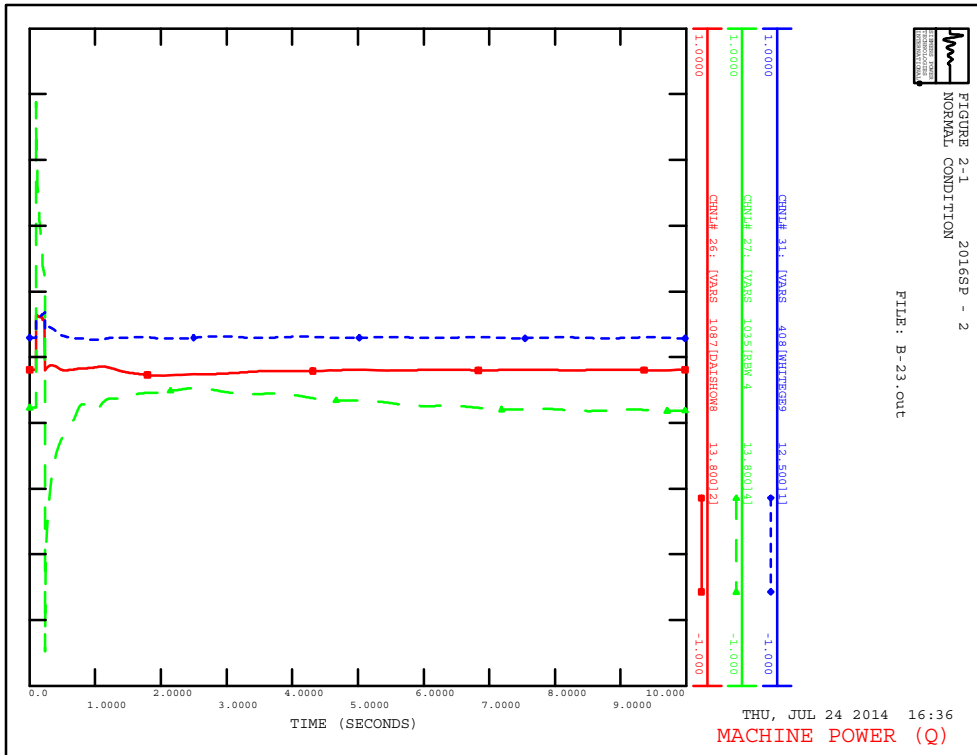


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-23.out
CHNI# 31: [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27: [VARS 1035[RBW 4 13.800]4]
CHNI# 26: [VARS 1087[DAISHOW8 13.800]2]
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

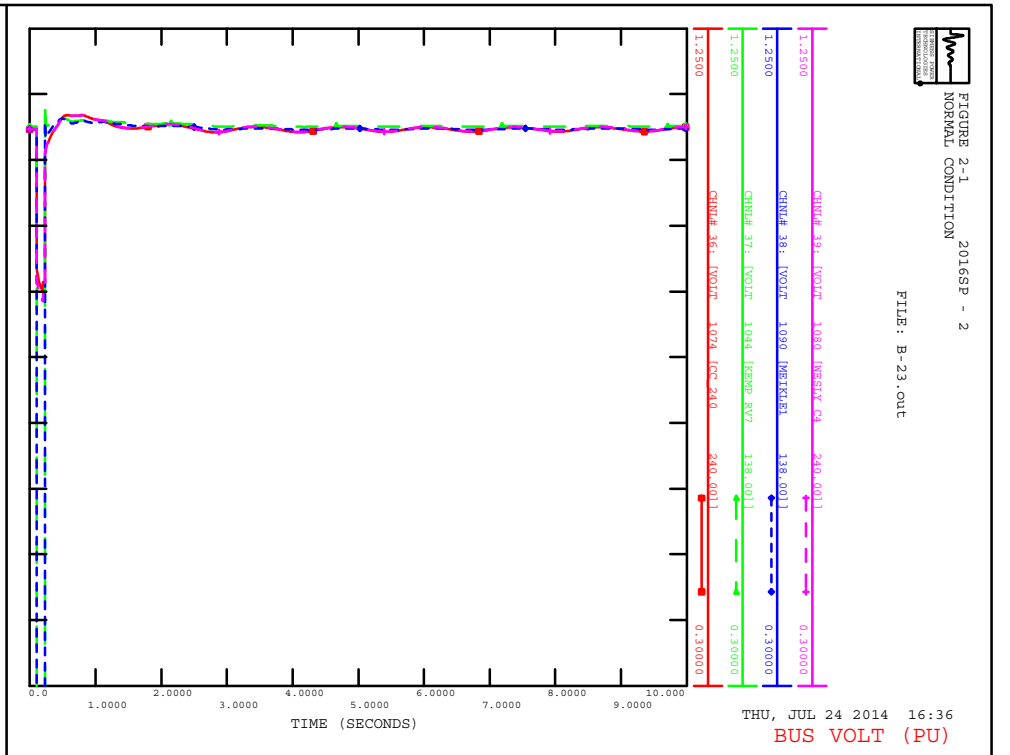


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-23.out
CHNI# 39: [VOLT 1080 [MESIX C4 240.00]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 36: [VOLT 1074 [CC 240 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

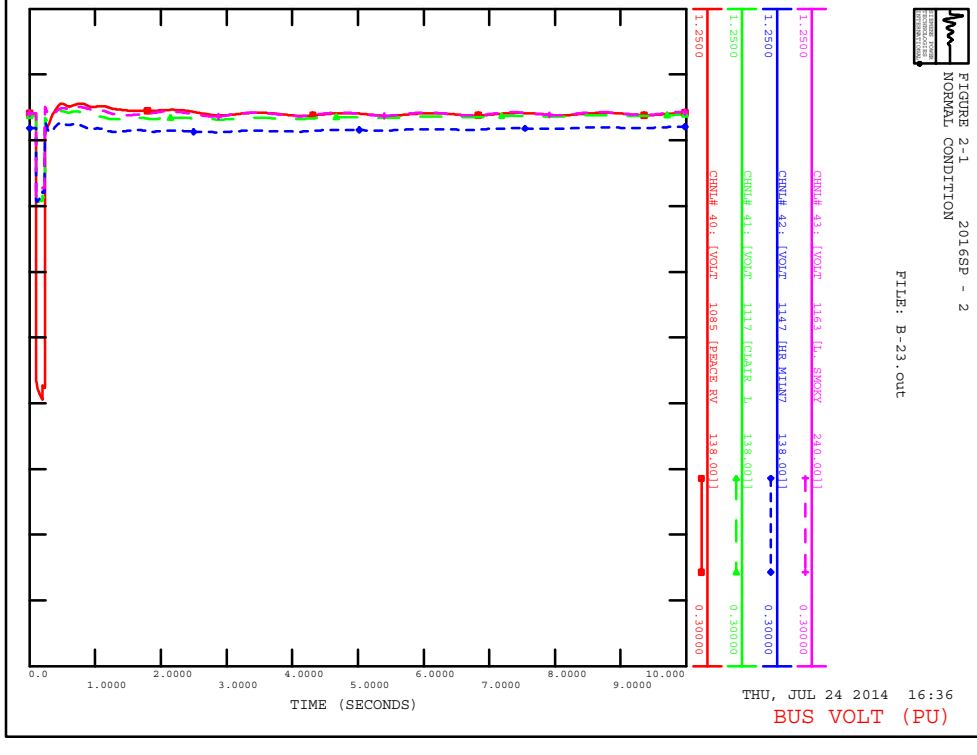


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-23.out
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00]
CHNI# 42: [VOLT 1142 [HR MIAN7 138.00]
CHNI# 41: [VOLT 1117 [CHAIR L 138.00]
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

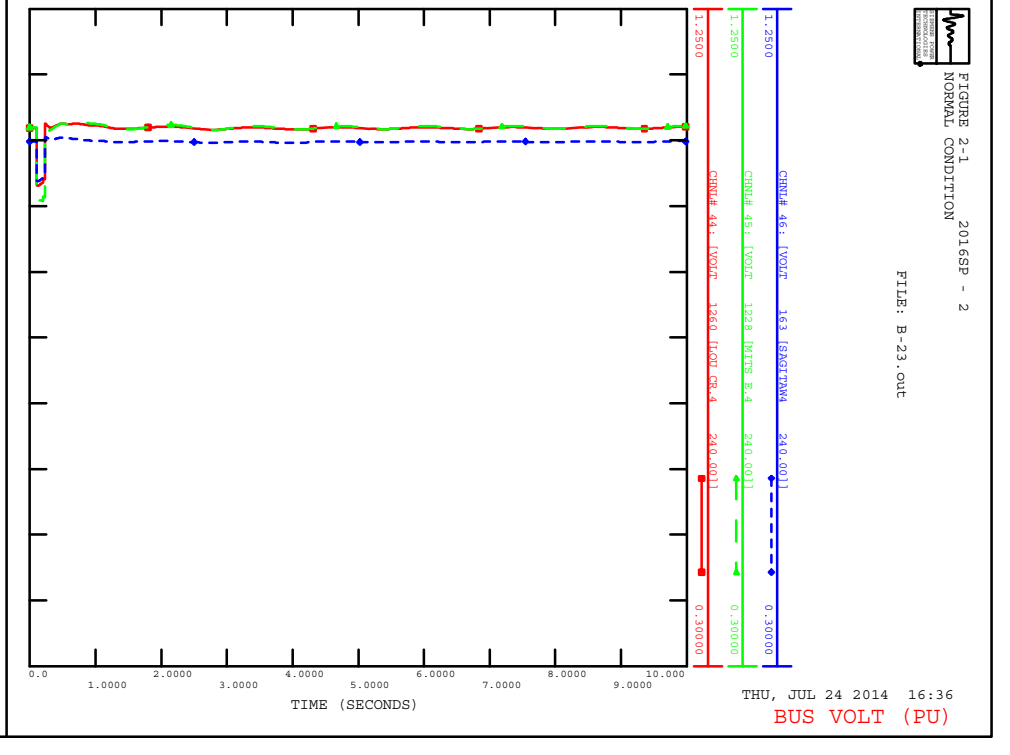


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-23.out
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
CHNI# 45: [VOLT 1228 [MTTS B.4 240.00]
CHNI# 44: [VOLT 1260 [FOT CR.4 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

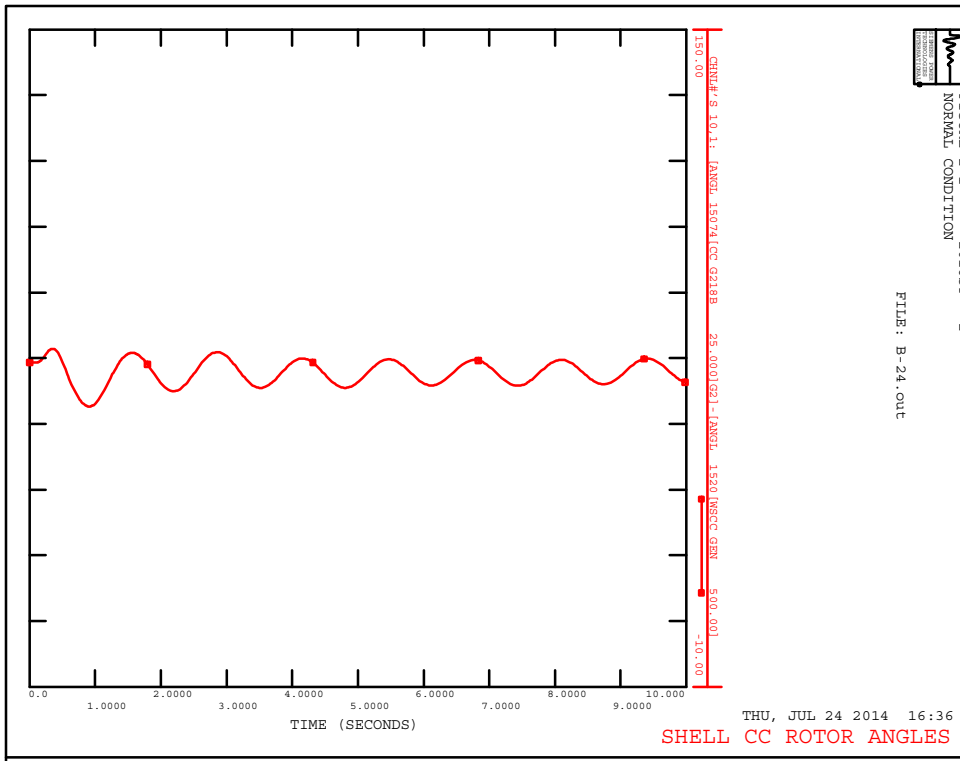


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-24.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

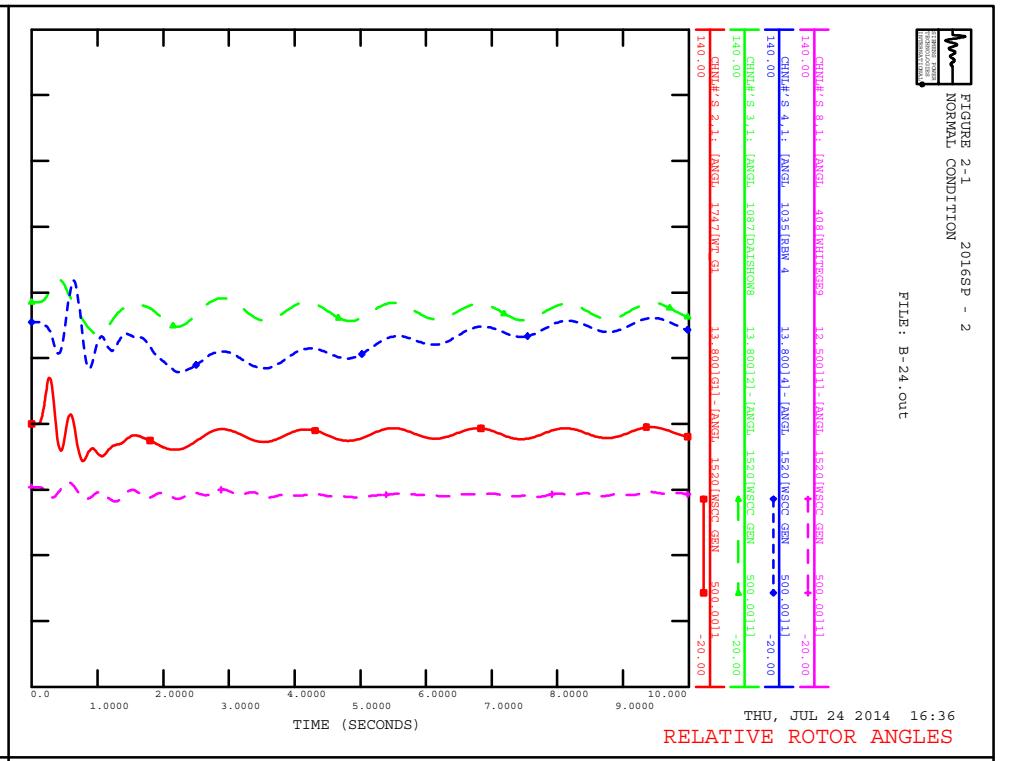


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-24.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

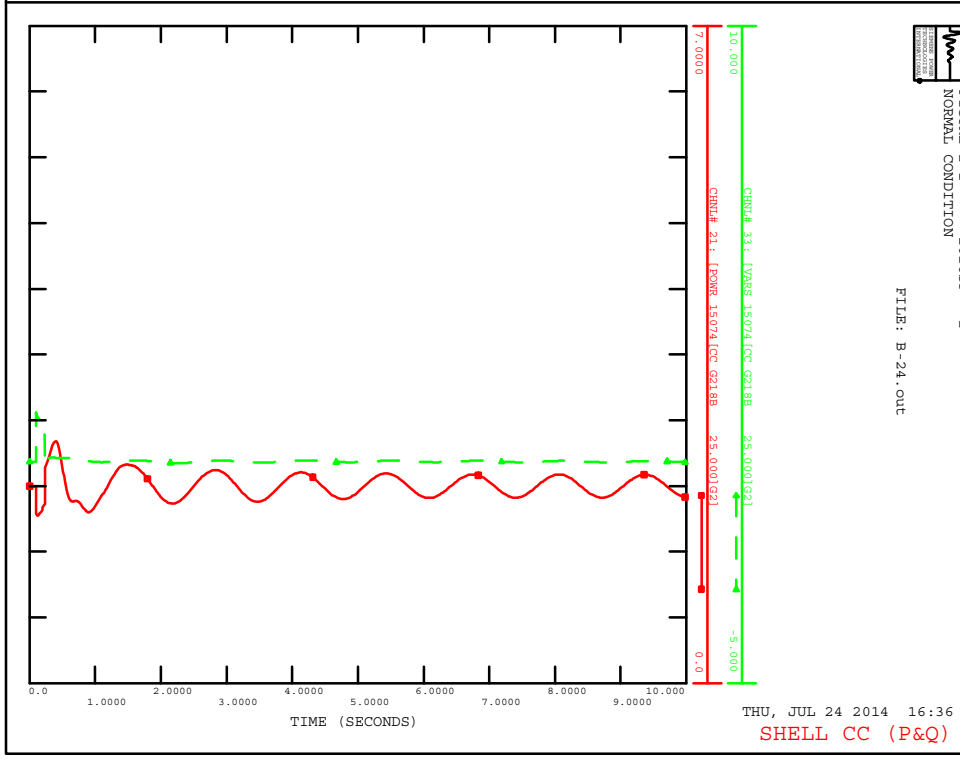


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-24.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

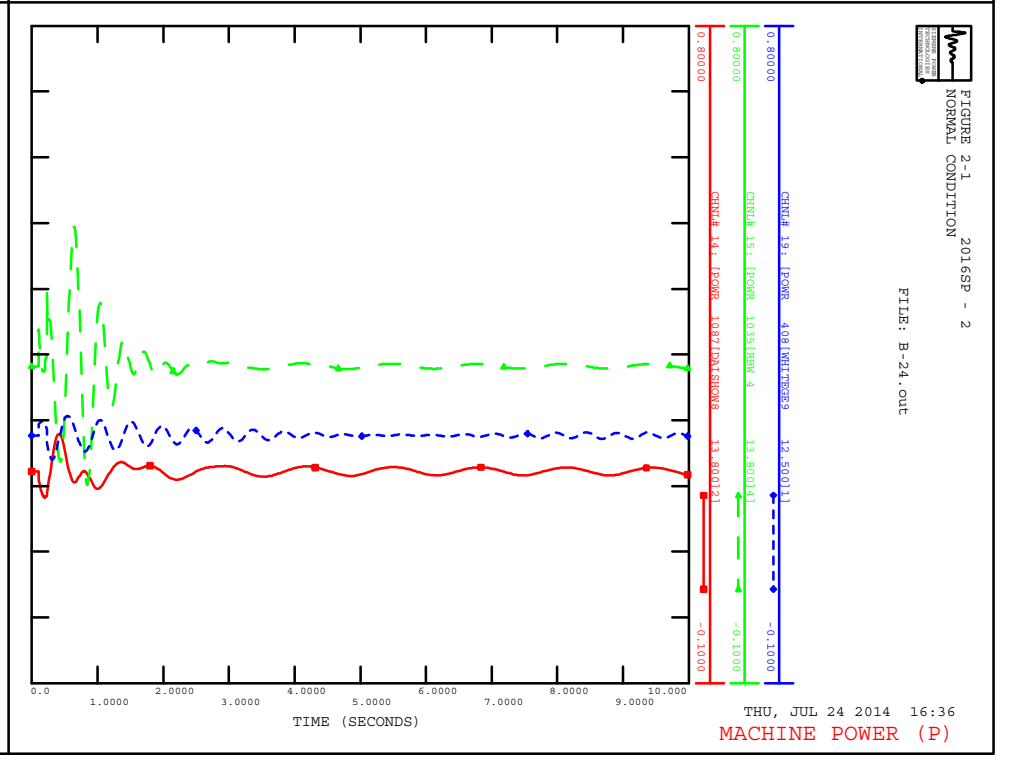


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-24.out
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

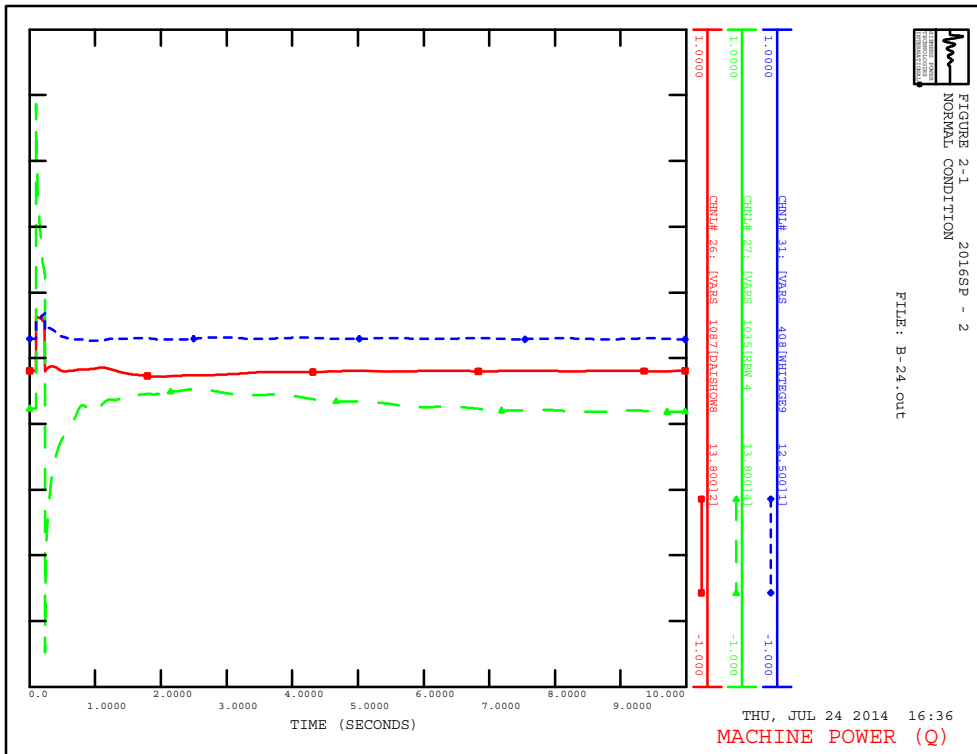


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-24.out
CHNI# 26: [VARS 1087 [DAISHOWB 13.80012]
CHNI# 27: [VARS 1035 [RBW 4 13.80014]
CHNI# 31: [VARS 408 [WHITEGB9 12.50011]
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

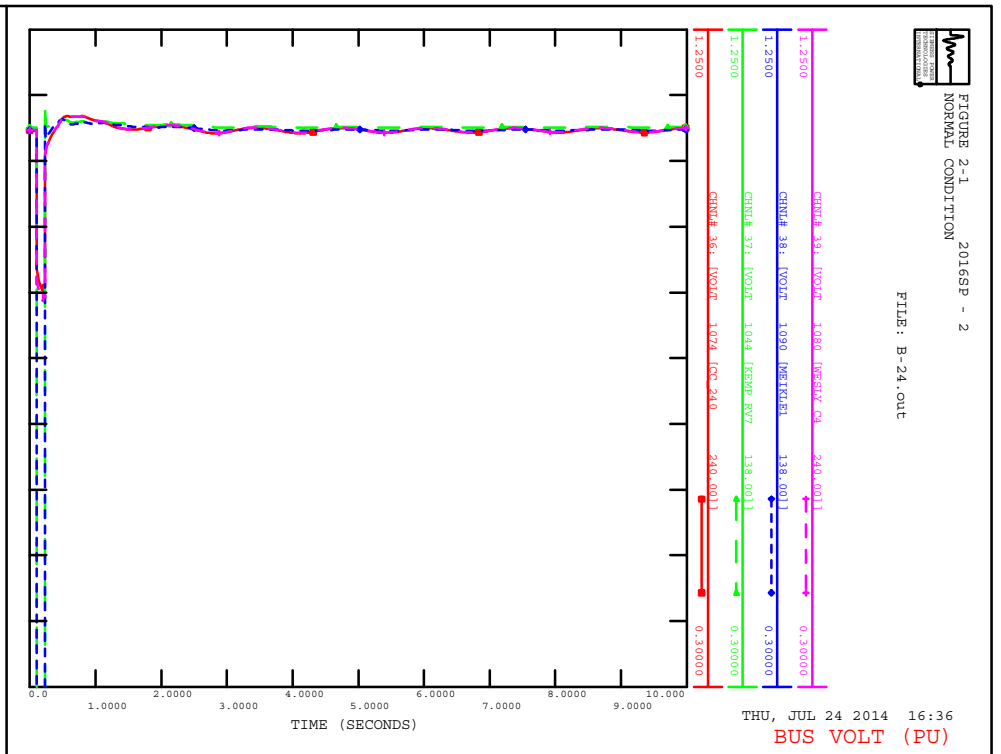


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-24.out
CHNI# 36: [VOLT 1074 [CC 240 240.001]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.001]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.001]
CHNI# 39: [VOLT 1080 [NRSIX C4 240.001]
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

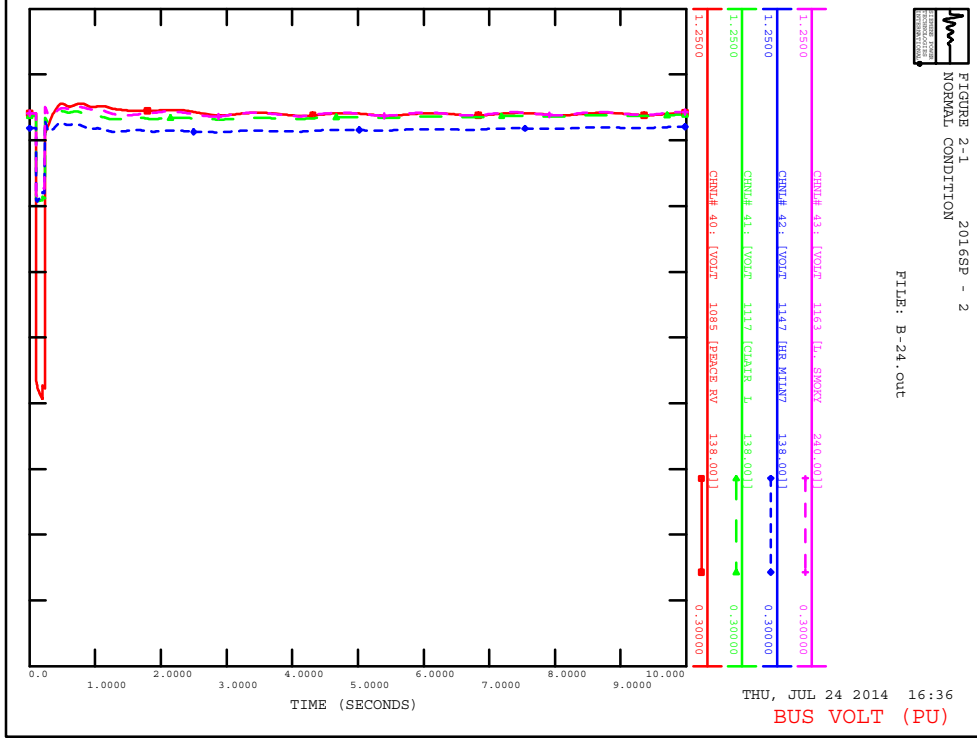


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-24.out
CHNI# 40: [VOLT 1085 [PEACE RV 138.001]
CHNI# 41: [VOLT 1117 [CHAIR L 138.001]
CHNI# 42: [VOLT 1142 [HR MIAN7 138.001]
CHNI# 43: [VOLT 1163 [L. SMOKY 240.001]
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

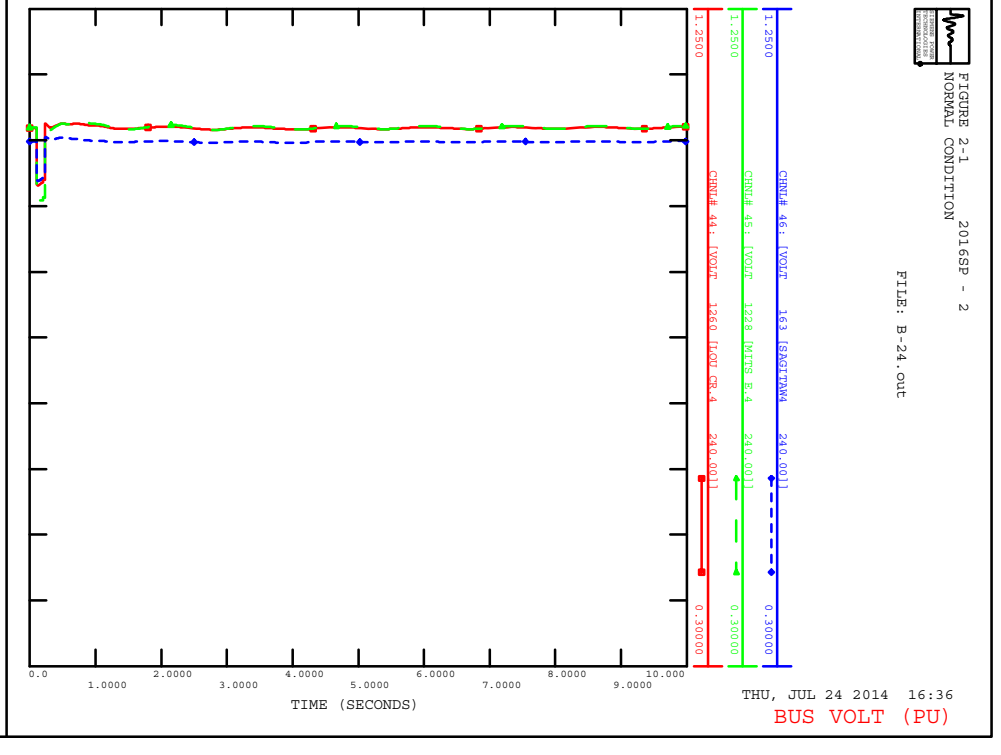


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-24.out
CHNI# 44: [VOLT 1260 [FOX CR 4 240.001]
CHNI# 45: [VOLT 1228 [MITS B-4 240.001]
CHNI# 46: [VOLT 163 [SAGITAW4 240.001]
TIME (SECONDS)
THU, JUL 24 2014 16:36
BUS VOLT (PU)

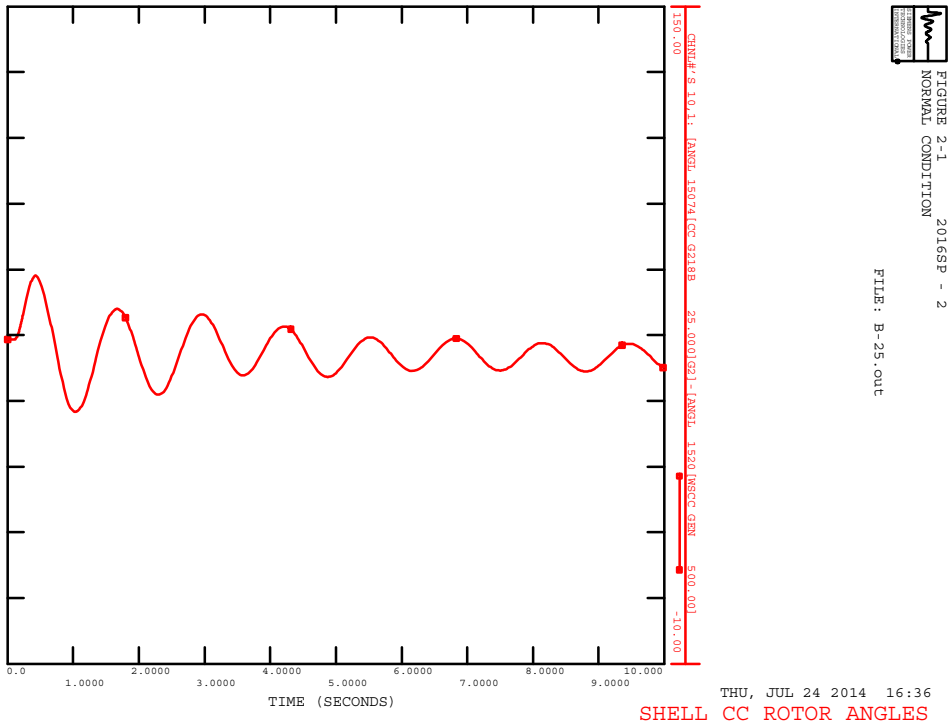


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-25.out
CHNL#'S 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
-50.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC ROTOR ANGLES

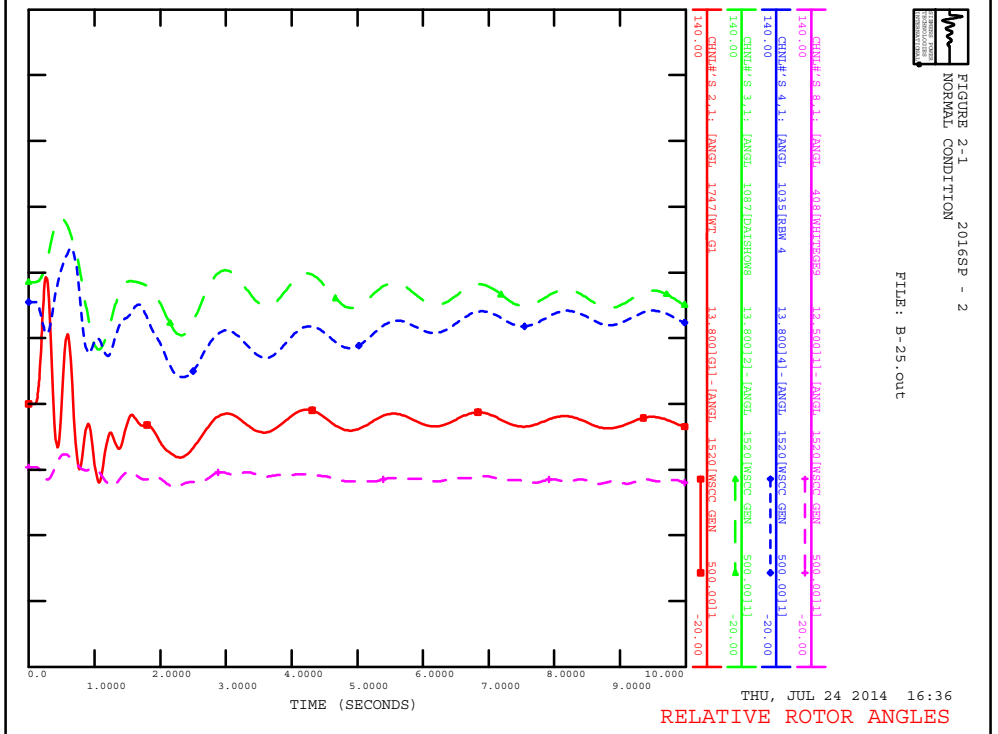


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-25.out
CHNL#'S 8,1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 3,1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
RELATIVE ROTOR ANGLES

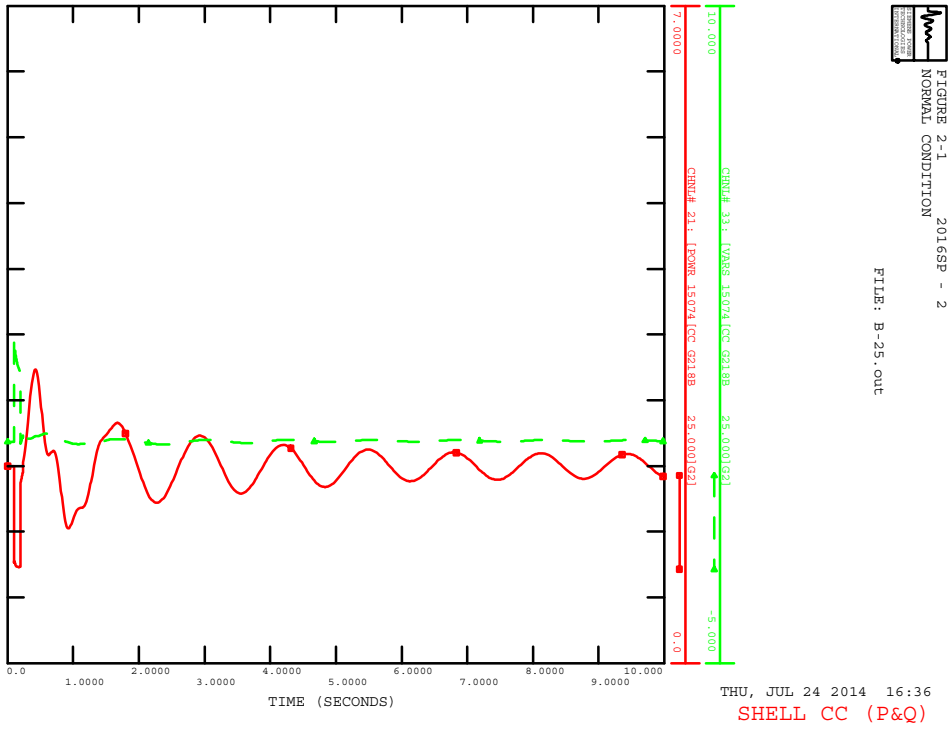


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-25.out
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
SHELL CC (P&Q)

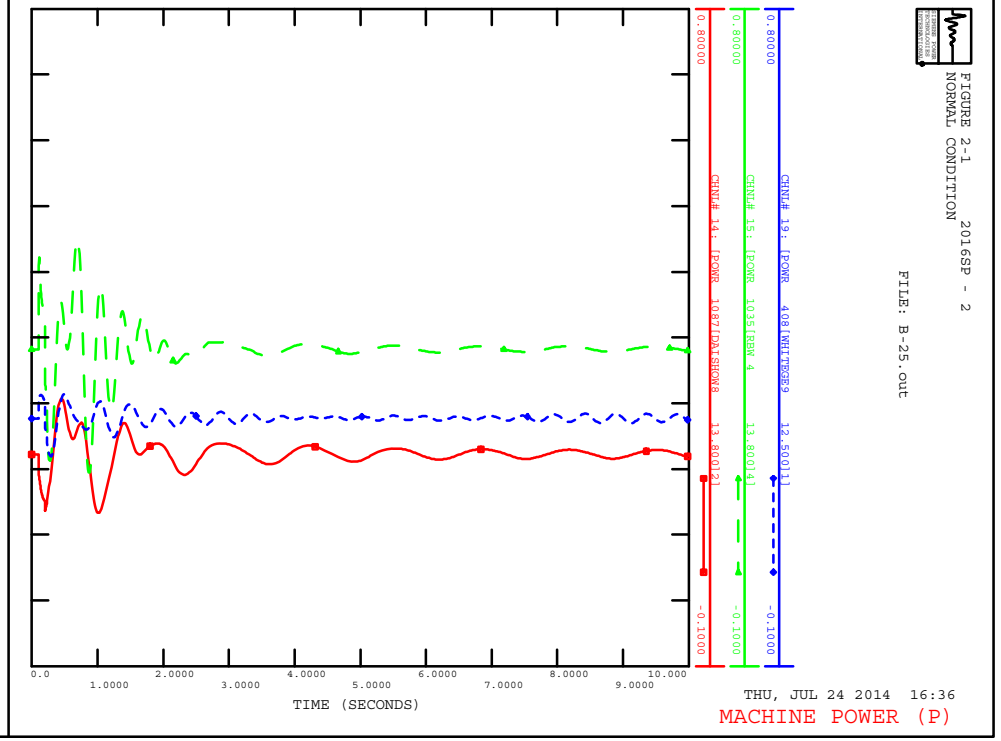


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-25.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (P)

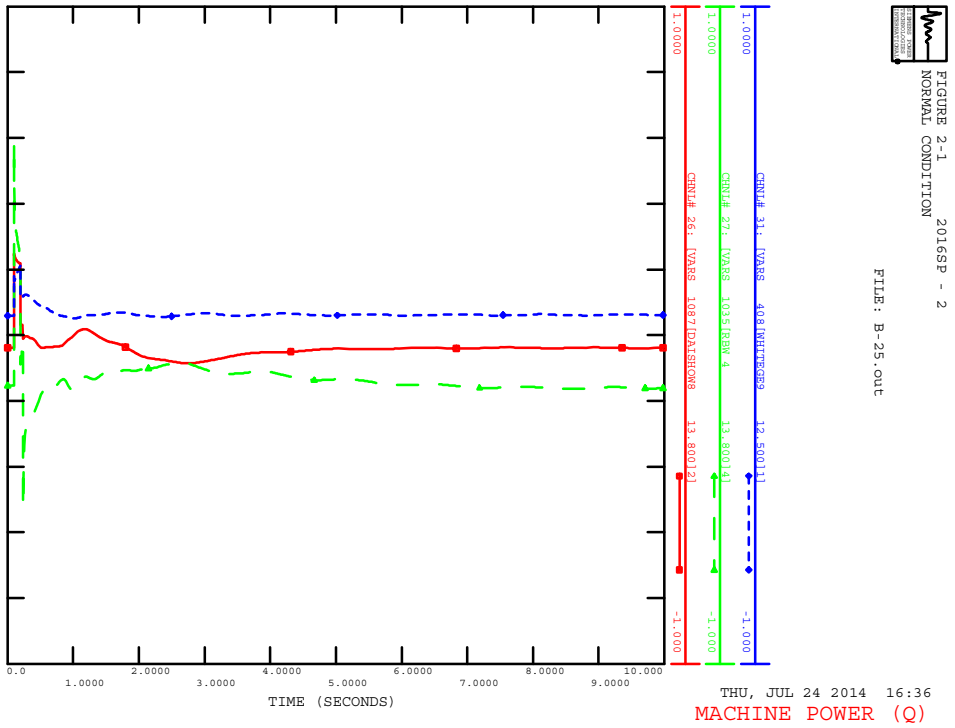


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-25.out
CHNI# 31: [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27: [VARS 1035[RBW 4 13.800]4]
CHNI# 26: [VARS 1087[DAISHOWB 13.800]2]
TIME (SECONDS)
THU, JUL 24 2014 16:36
MACHINE POWER (Q)

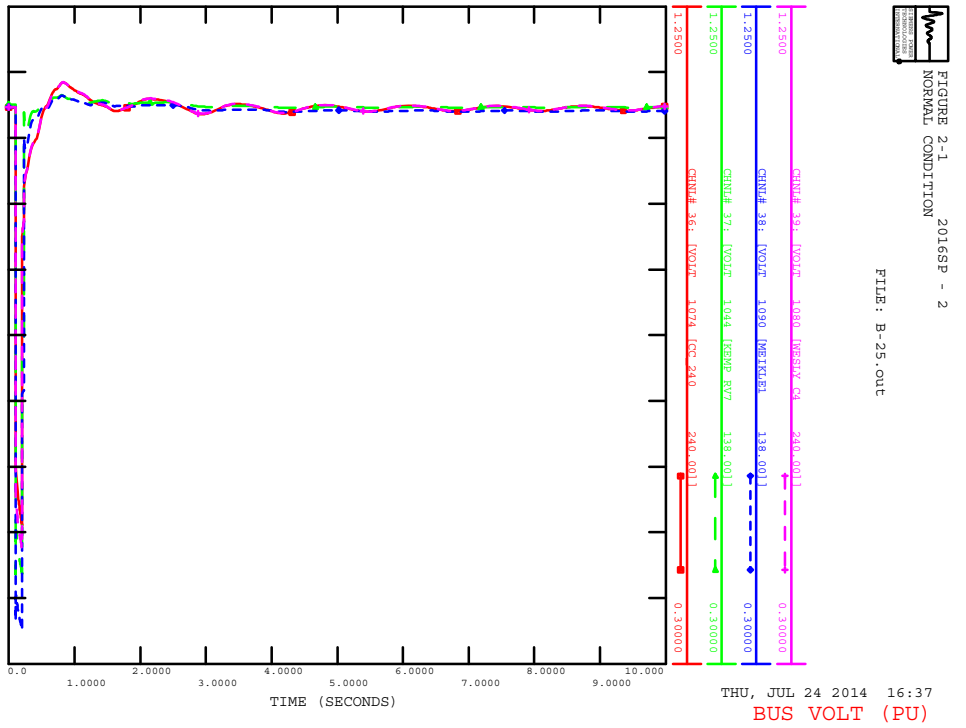


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-25.out
CHNI# 39: [VOLT 1080 [NRSIX C4 240.00]
CHNI# 38: [VOLT 1090 [MSIKLE1 138.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 36: [VOLT 1074 [CC 240 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

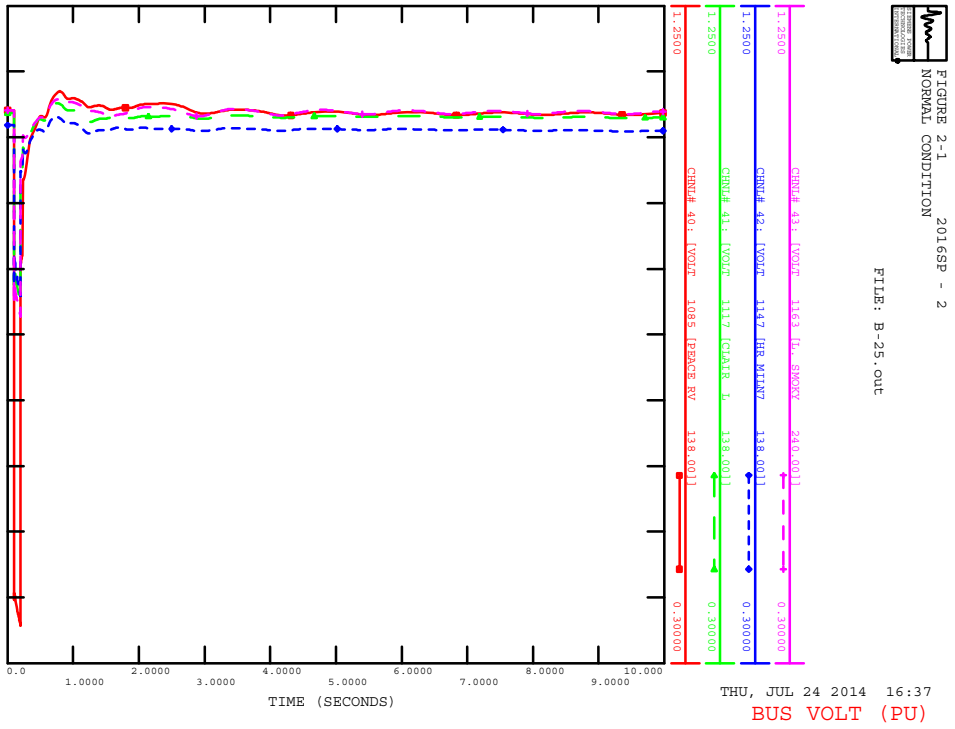


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-25.out
CHNI# 43: [VOLT 1163 [L SMOKY 240.00]
CHNI# 42: [VOLT 1142 [HR MTN7 138.00]
CHNI# 41: [VOLT 1117 [CHAIR L 138.00]
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

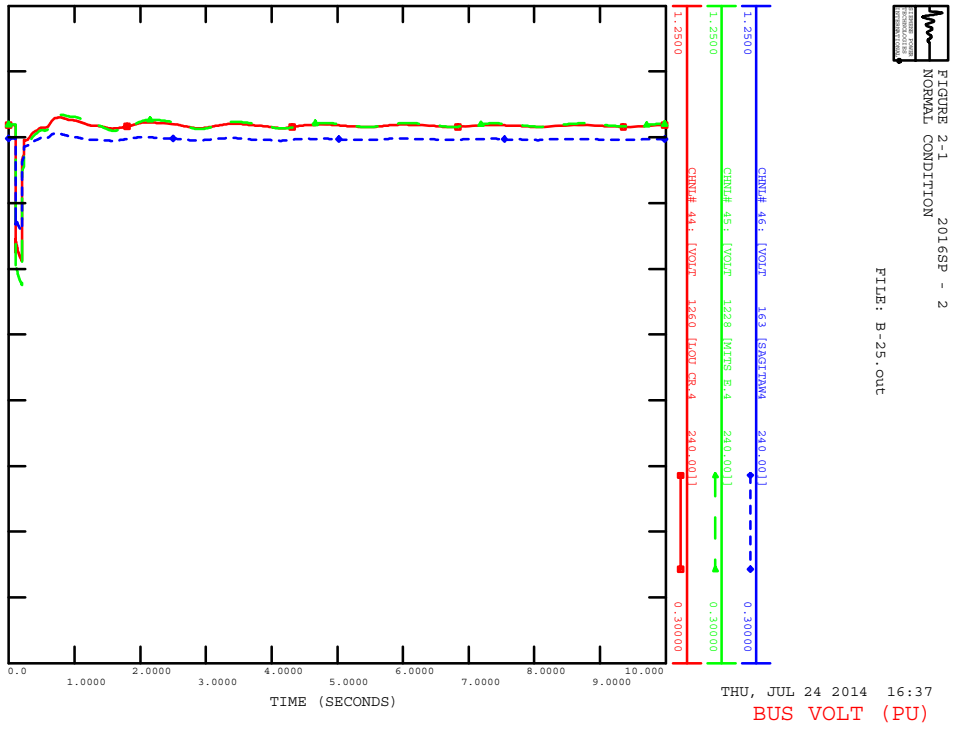


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-25.out
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
CHNI# 45: [VOLT 1228 [MTNS B-4 240.00]
CHNI# 44: [VOLT 1260 [FOU CR-4 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

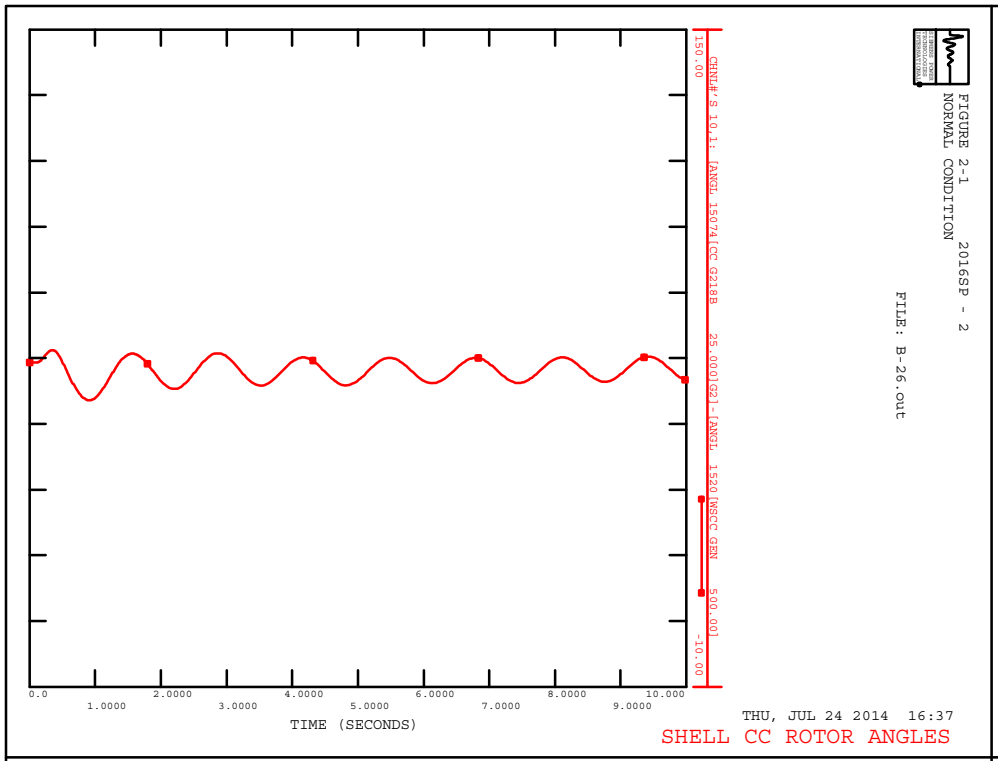


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-26.out
CHNL#'S 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC ROTOR ANGLES

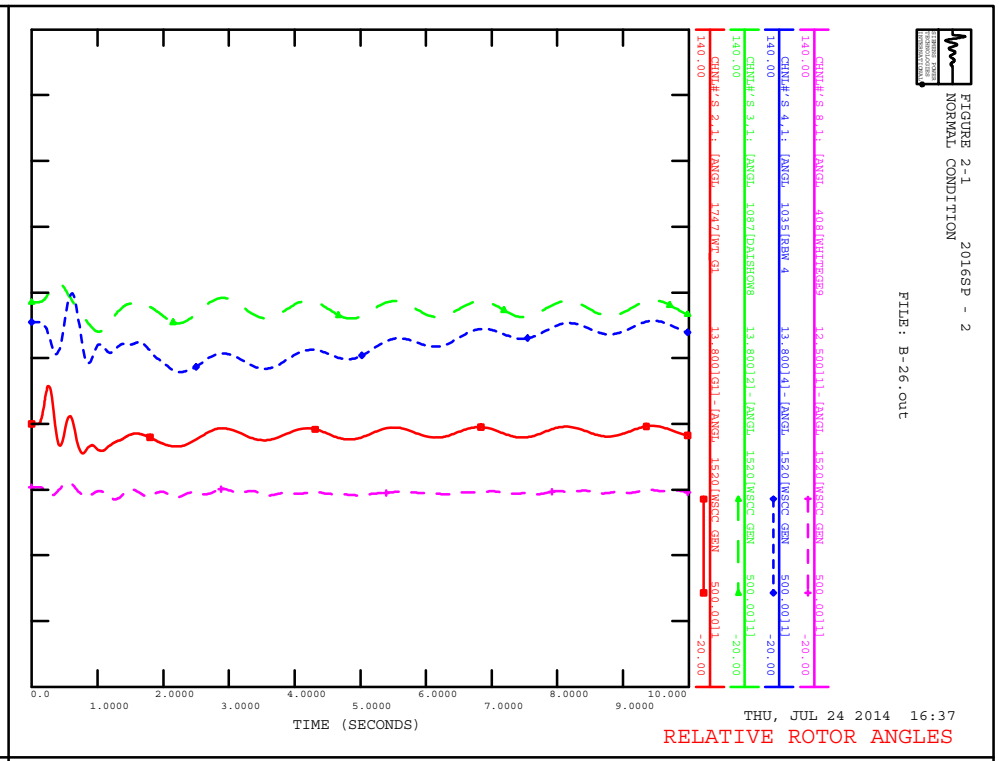


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-26.out
CHNL#'S 8,1: [ANGL 408[WHITESB9 12.500[1] [ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 3,1: [ANGL 1087[DAISHOW8 13.800[2] [ANGL 1520[NSCC GEN 500.00]]
CHNL#'S 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
RELATIVE ROTOR ANGLES

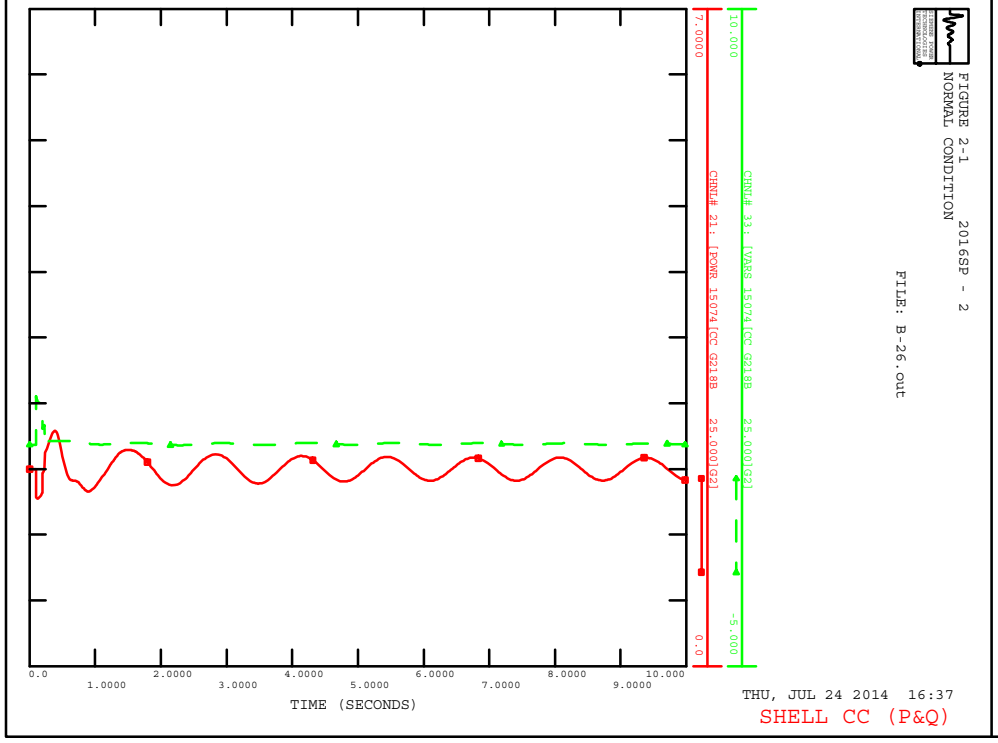


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-26.out
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC (P&Q)

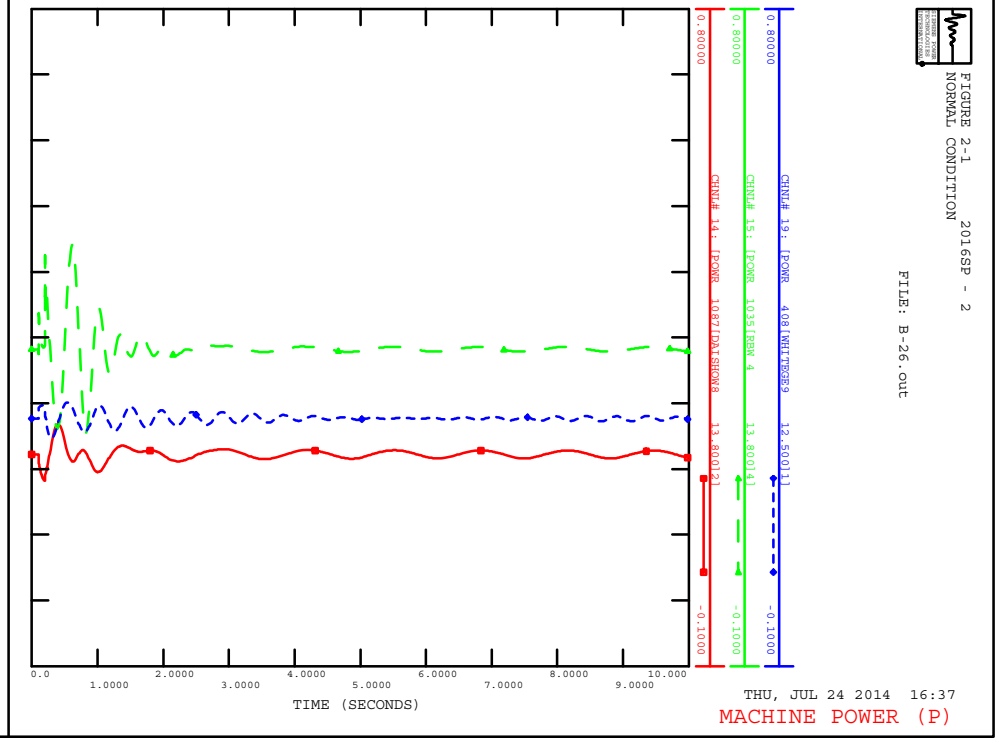


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-26.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHOW8 13.800[2]
0.80000
-0.1000
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (P)

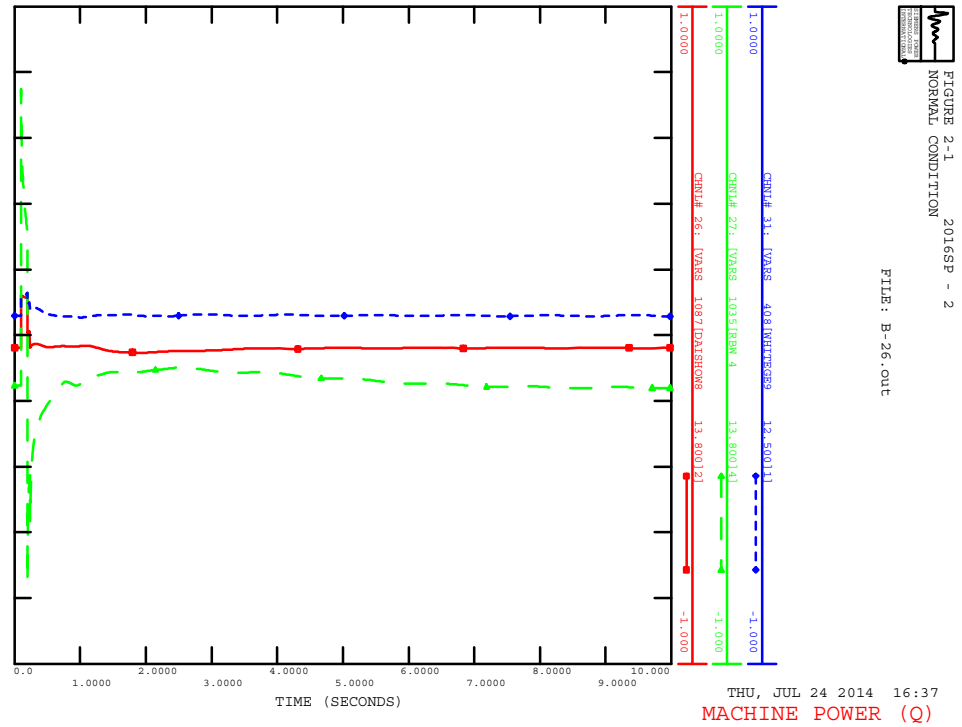


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-26.out
CHNI# 26: [VARS 1087[DAISHOWA 13.800[2]
CHNI# 27: [VARS 1035[RBW 4 13.800[4]
CHNI# 31: [VARS 408[WHITEGB9 12.500[1]
-1.000
1.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (Q)

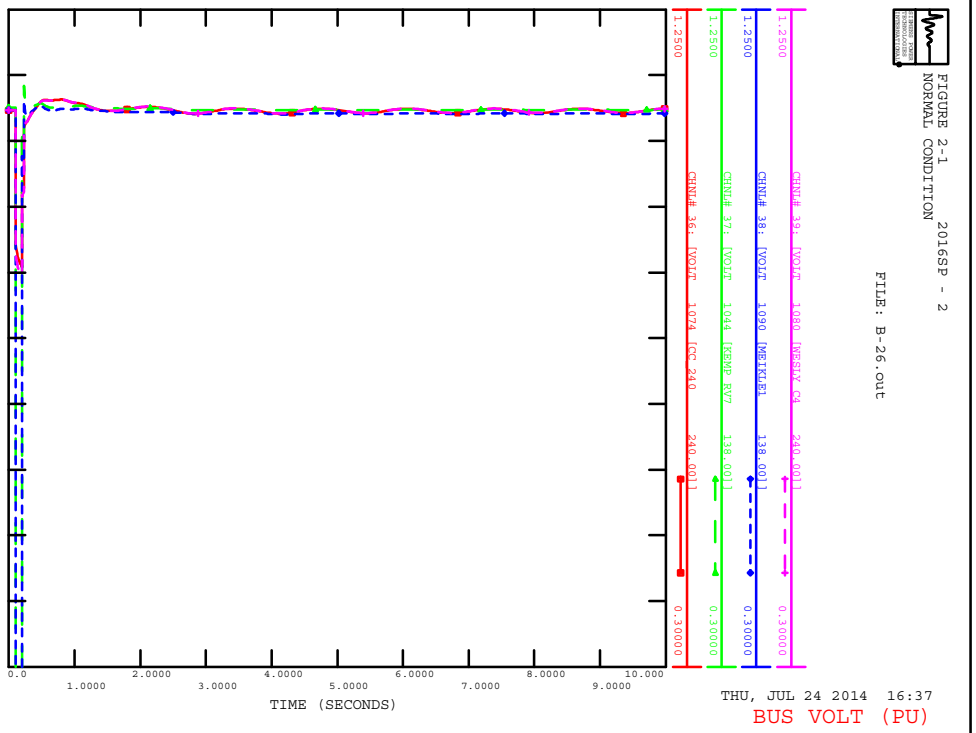


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-26.out
CHNI# 36: [VOLT 1074 [CC 240
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00[1]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.00[1]
CHNI# 39: [VOLT 1080 [NESBIT C4 240.00[1]
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

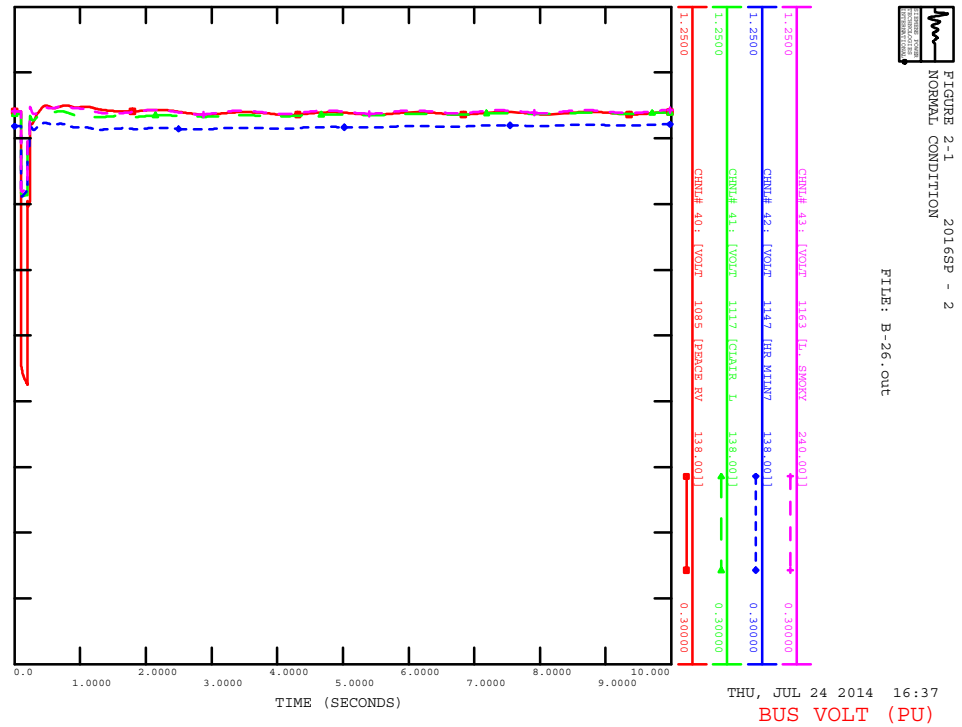


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-26.out
CHNI# 40: [VOLT 1085 [PEACE RV 138.00[1]
CHNI# 41: [VOLT 1117 [CHATR 1 138.00[1]
CHNI# 42: [VOLT 1142 [KR MIANT 138.00[1]
CHNI# 43: [VOLT 1163 [T. SMOKY 240.00[1]
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

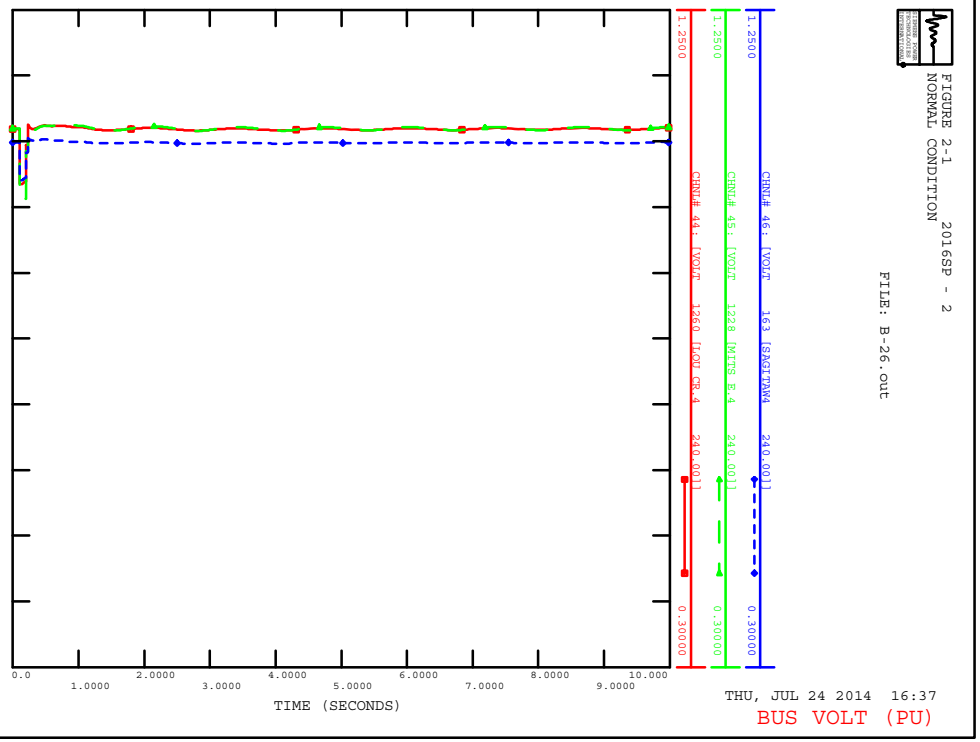


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-26.out
CHNI# 44: [VOLT 1260 [FOX CR 4
CHNI# 45: [VOLT 1228 [MTRS B-4
CHNI# 46: [VOLT 163 [SAGITAW4
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

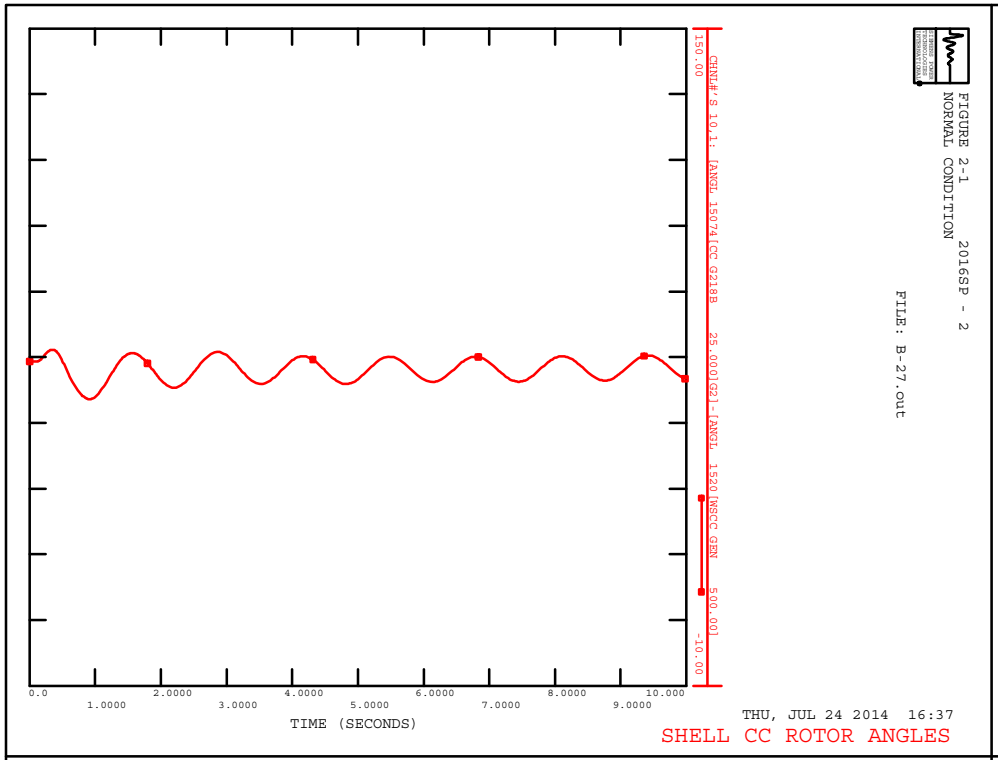


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-27.out
CHNU#'S 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC ROTOR ANGLES

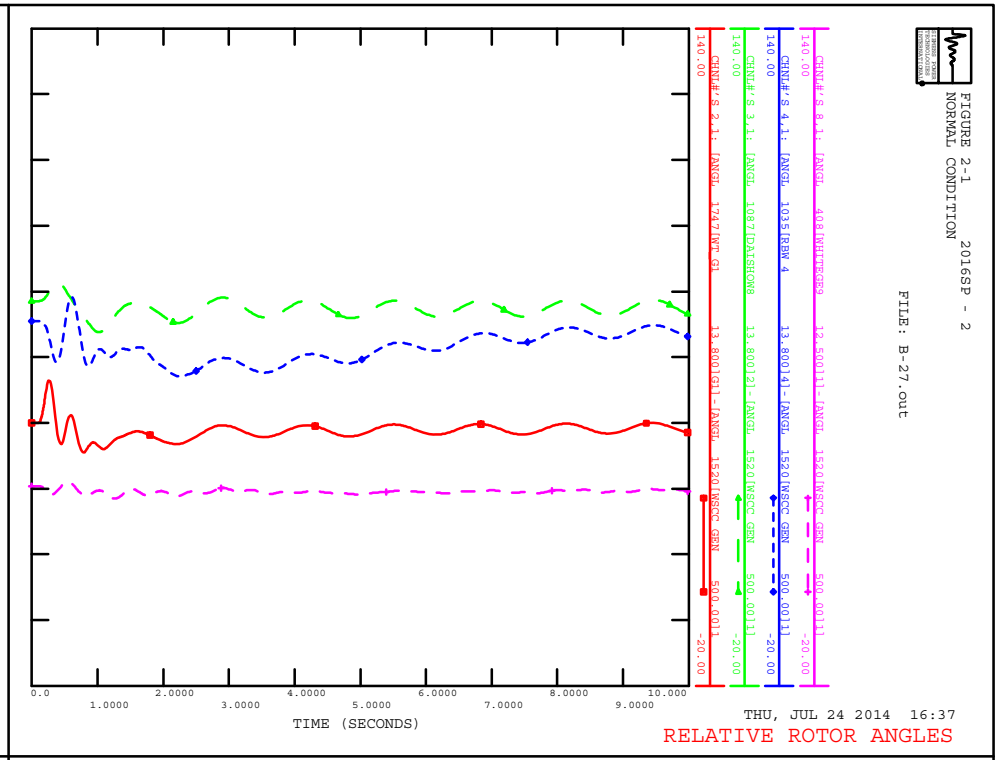


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-27.out
CHNU#'S 8,1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 3,1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 2,1: [ANGL 1747[WT G1 13.800[1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
RELATIVE ROTOR ANGLES

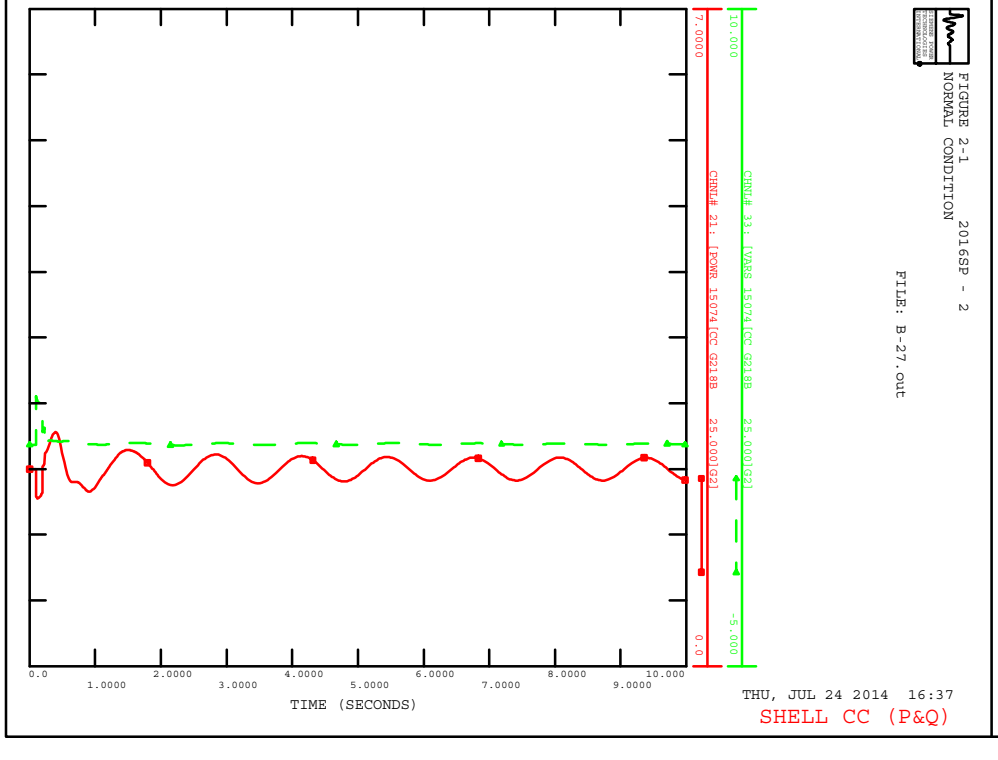


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-27.out
CHNU# 33: [VARS 15074[CC G218B 25.000[G2]
CHNU# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC (P&Q)

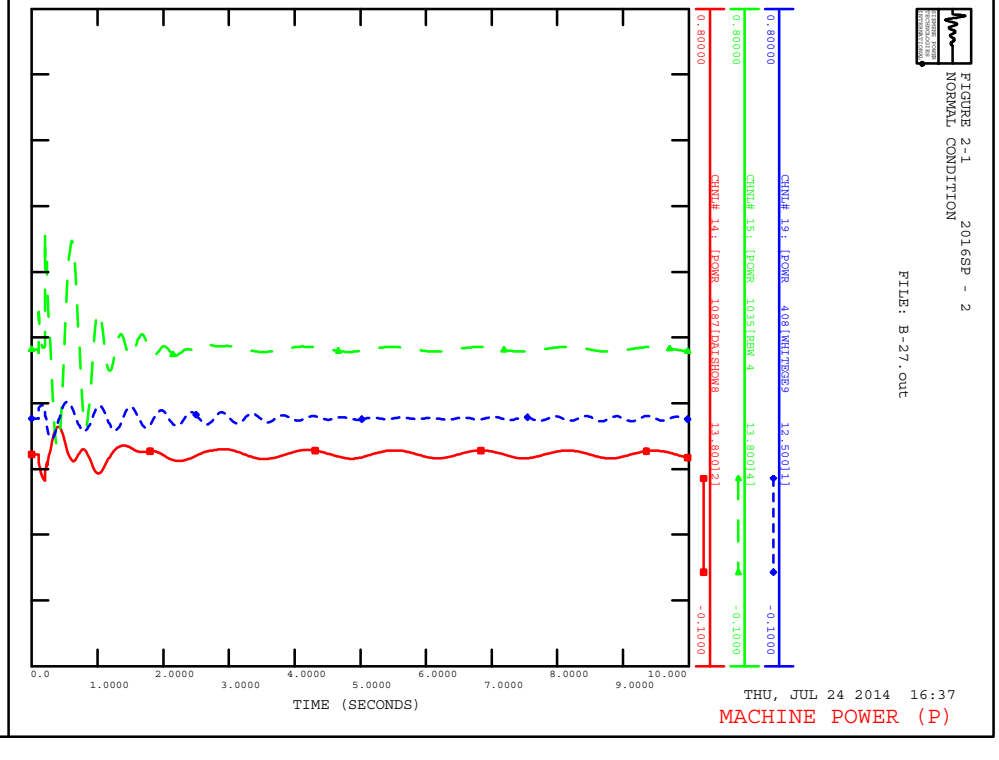


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-27.out
CHNU# 19: [POWR 408[WHITESB9 12.500[1]
CHNU# 15: [POWR 1035[RBM 4 13.800[4]
CHNU# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (P)

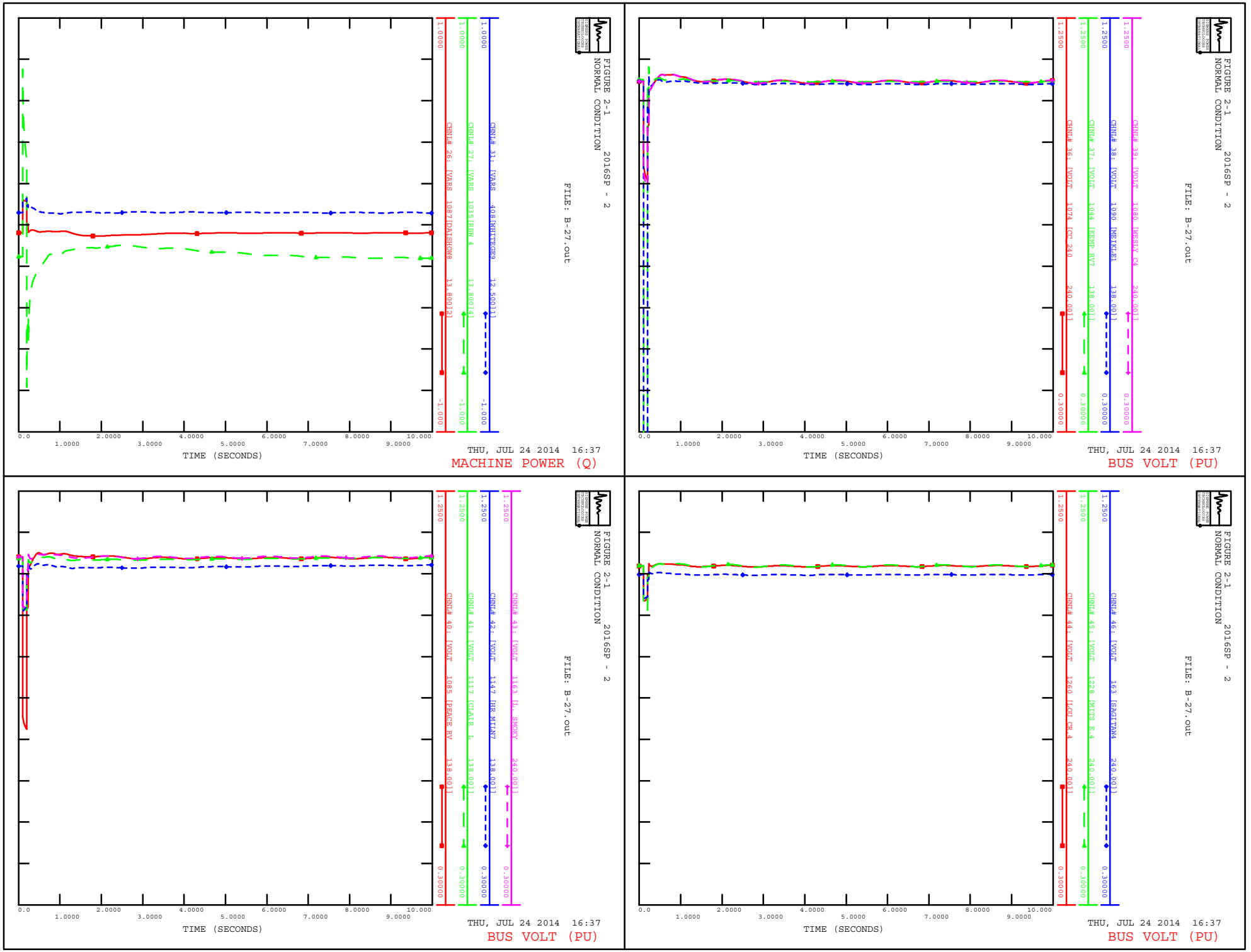


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-27.out
CHNI# 31: [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27: [VARS 1035 [RBW 4 13.800]4]
CHNI# 26: [VARS 1087 [DAISHOWB 13.800]2]
1.0000
-1.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (Q)
FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-27.out
CHNI# 39: [VOLT 1080 [WESK1 C4 240.00]
CHNI# 38: [VOLT 1090 [WESKLE1 138.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 36: [VOLT 1074 [CC 240 240.00]
1.2500
0.30000
THU, JUL 24 2014 16:37
BUS VOLT (PU)
FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-27.out
CHNI# 43: [VOLT 1163 [L SMOKY 240.00]
CHNI# 42: [VOLT 1142 [HR MTN7 138.00]
CHNI# 41: [VOLT 1117 [CHAIR L 138.00]
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]
THU, JUL 24 2014 16:37
BUS VOLT (PU)
FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-27.out
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
CHNI# 45: [VOLT 1228 [MTNS B-4 240.00]
CHNI# 44: [VOLT 1260 [FOU CR-4 240.00]
THU, JUL 24 2014 16:37
BUS VOLT (PU)

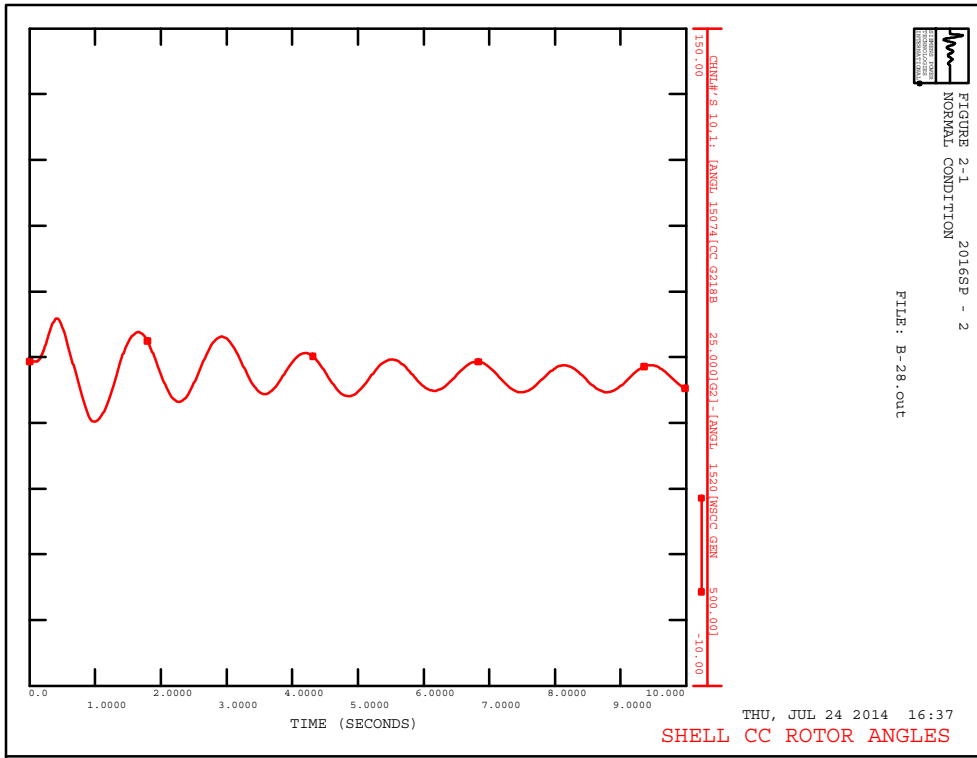


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-28.out
CHNL# 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC ROTOR ANGLES

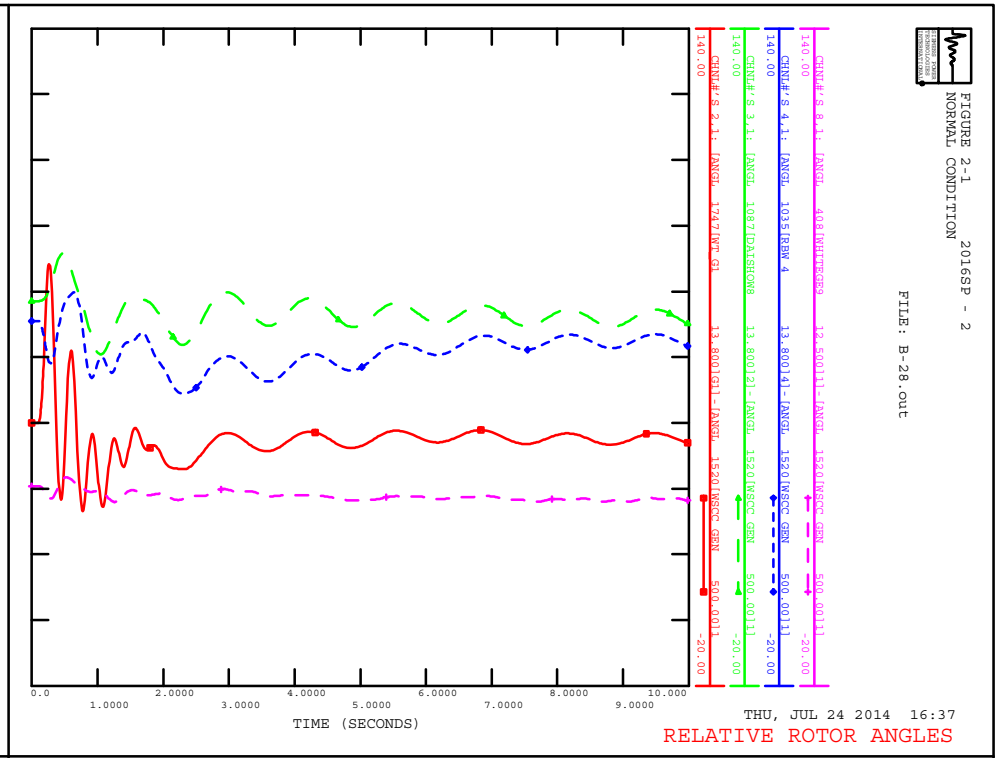


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-28.out
CHNL# 8,1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3,1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
RELATIVE ROTOR ANGLES

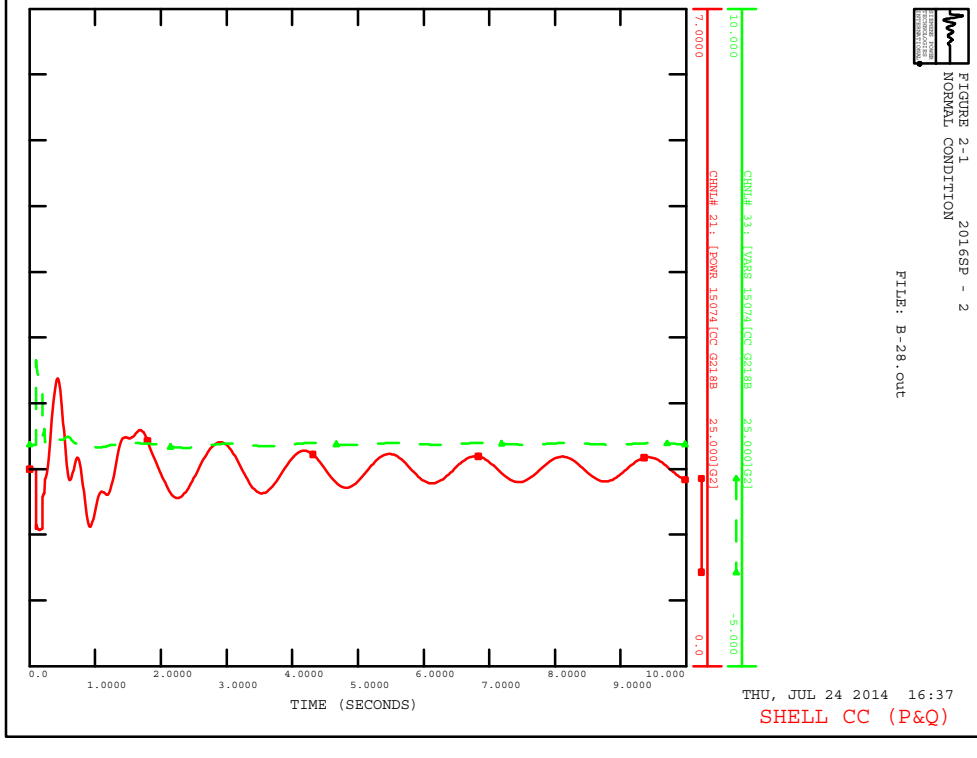


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-28.out
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
7.0000
10.000
0.0
-5.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC (P&Q)

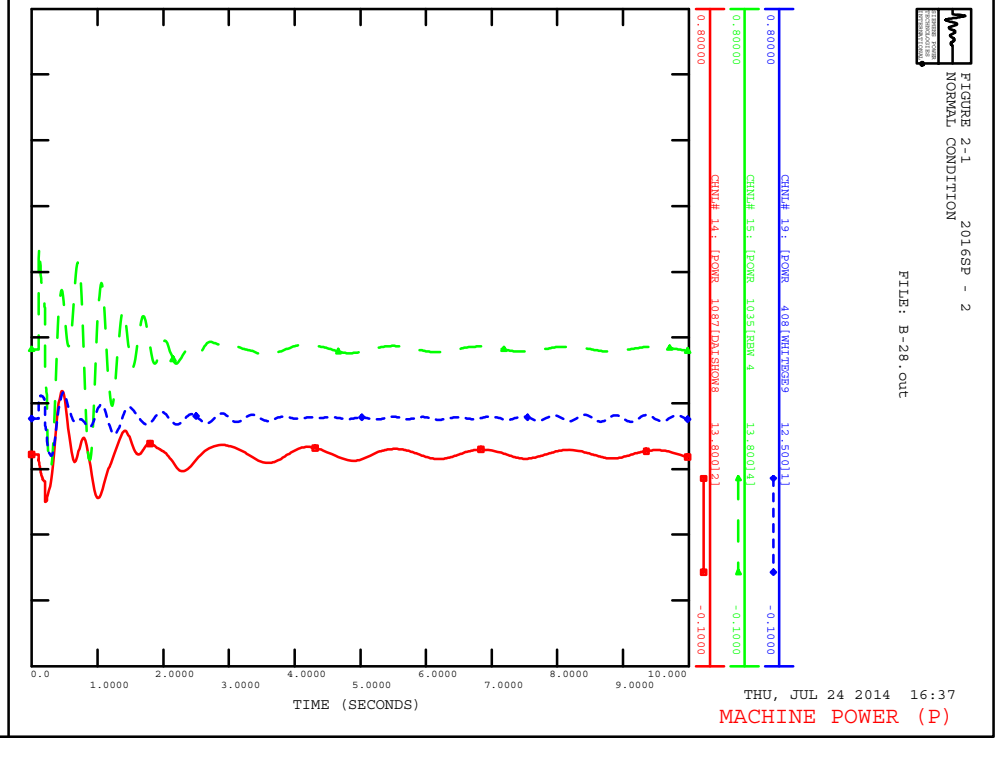


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-28.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
0.80000
-0.1000
-0.1000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (P)

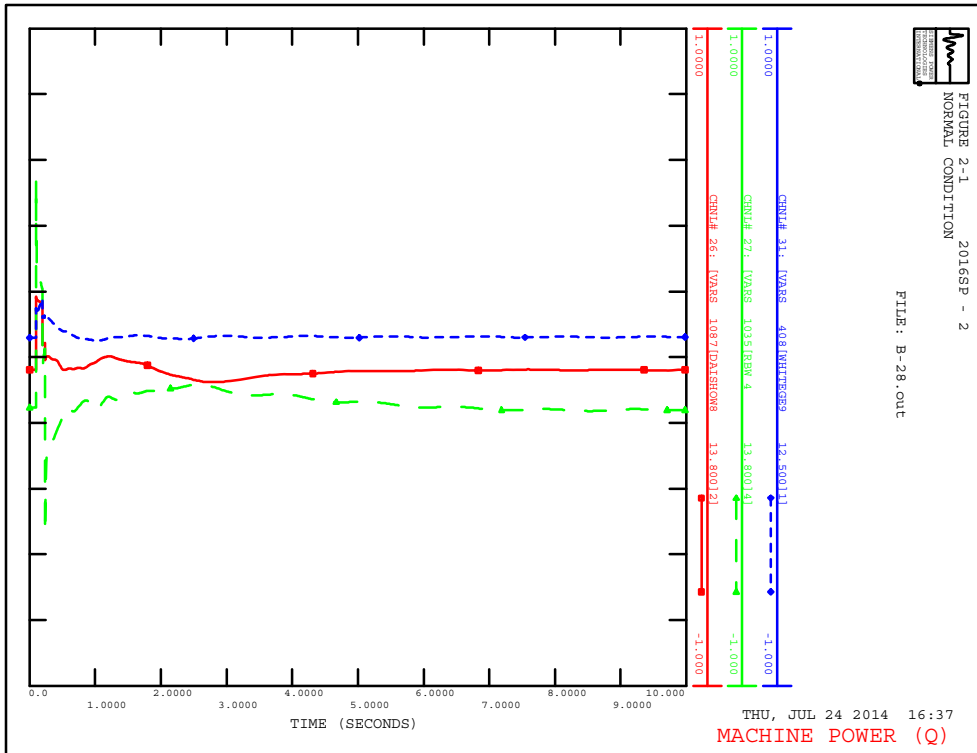


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-28.out
CHNI# 26: [VARS 1087[DAISHOWB 13.80012]
CHNI# 27: [VARS 1035[RBW 4 13.80014]
CHNI# 31: [VARS 408[WHITEGB9 12.50011]
-1.000
1.0000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (Q)

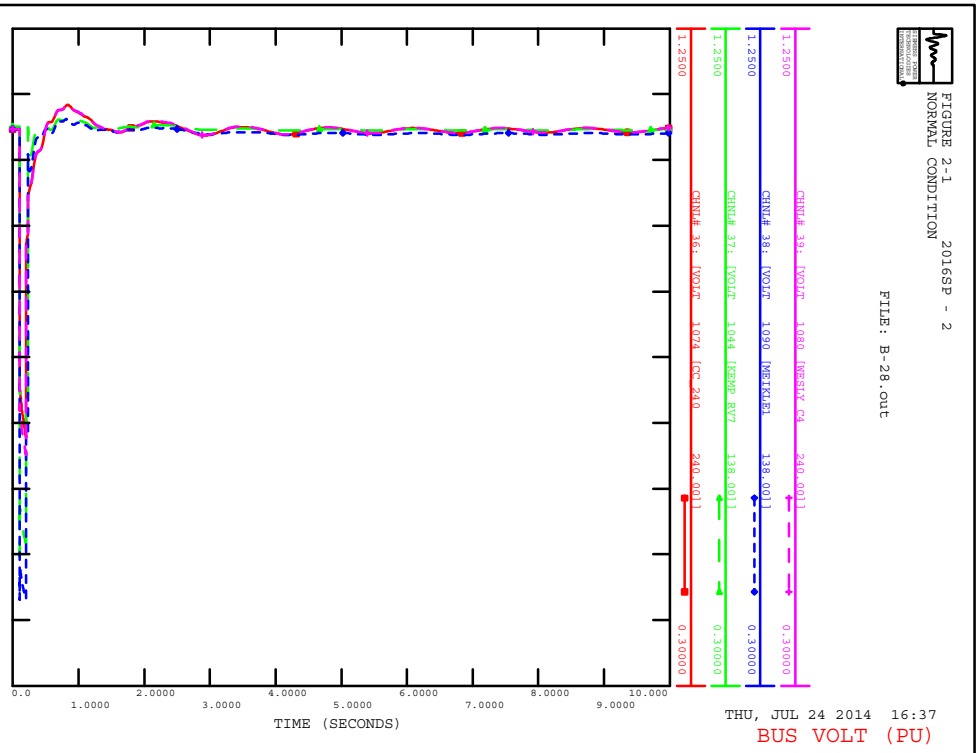


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-28.out
CHNI# 36: [VOLT 1074 [CC 240 240.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.00]
CHNI# 39: [VOLT 1080 [NRSIX C4 240.00]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

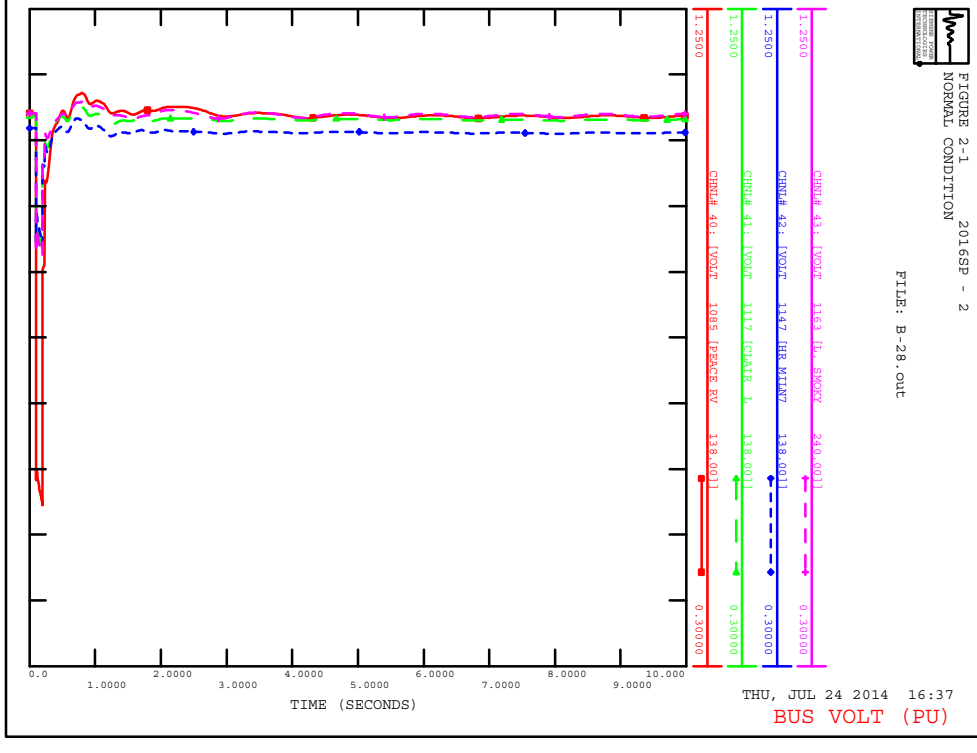


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-28.out
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]
CHNI# 41: [VOLT 1117 [CLAIR L 138.00]
CHNI# 42: [VOLT 1142 [HR MIAN7 138.00]
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

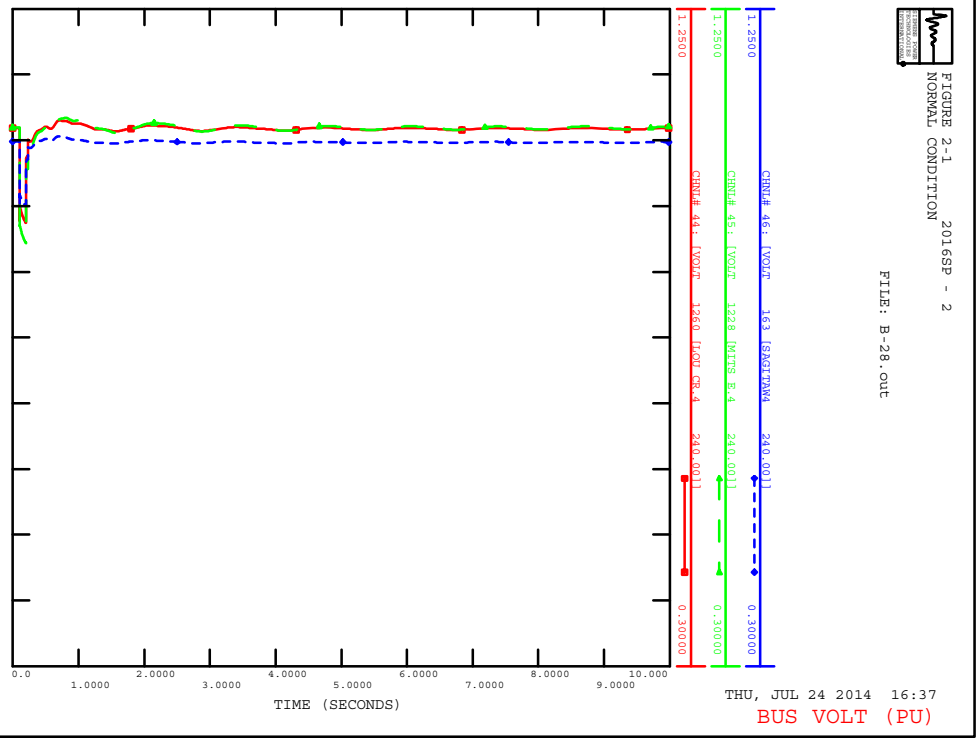


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-28.out
CHNI# 44: [VOLT 1260 [FOX CR 4 240.00]
CHNI# 45: [VOLT 1228 [MITS B 4 240.00]
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

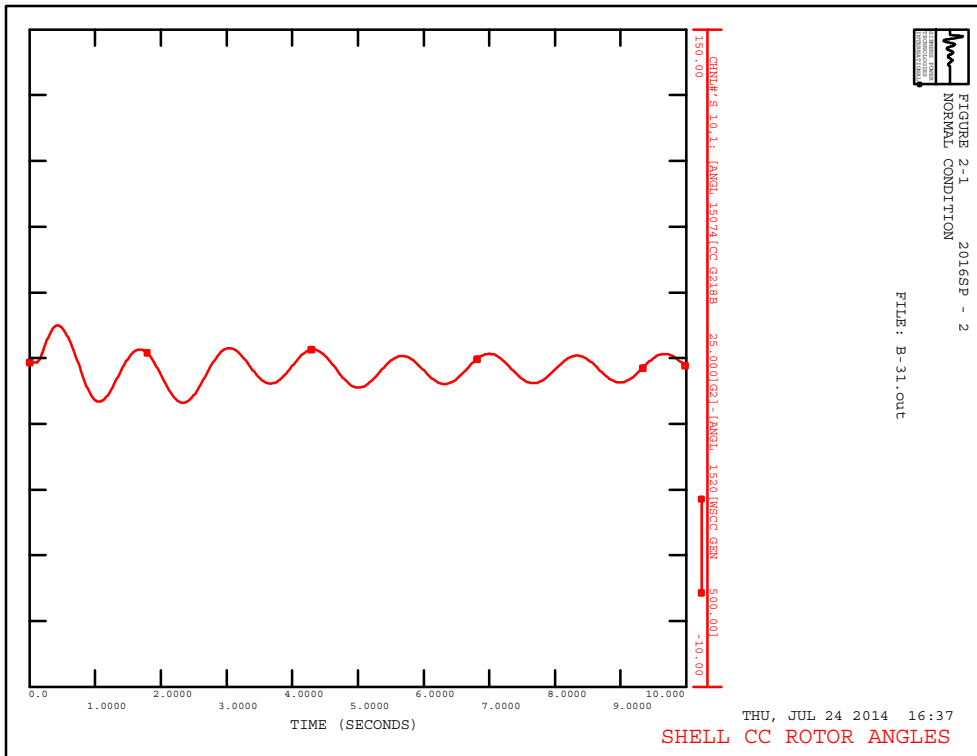


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-31.out
CHNL# 10.1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
-50.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC ROTOR ANGLES

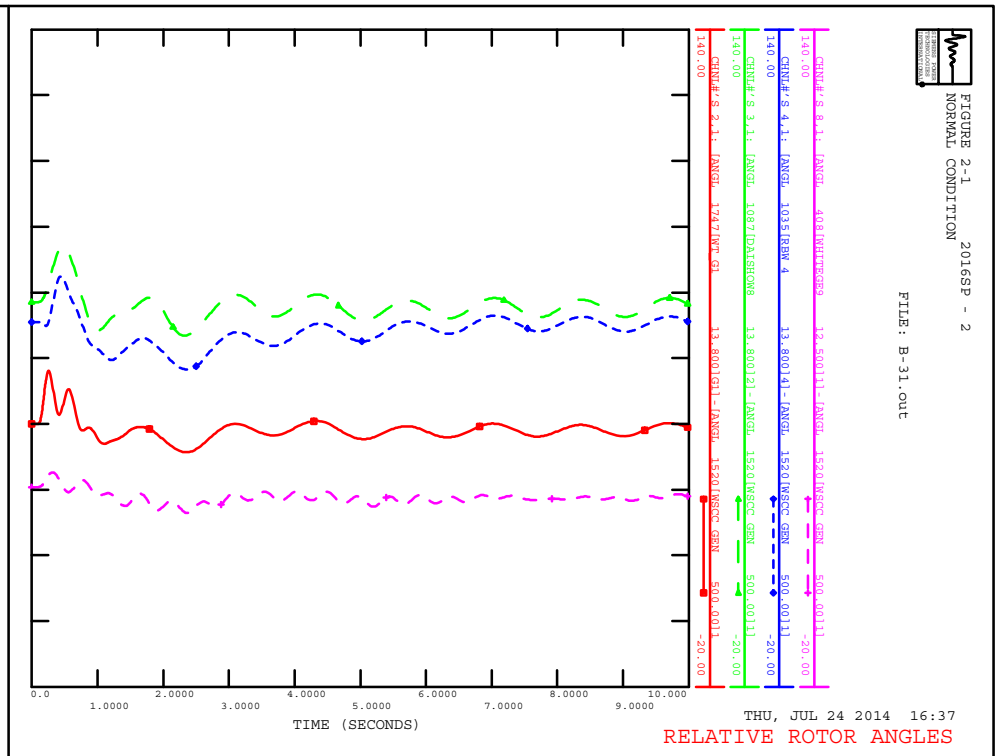


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-31.out
CHNL# 8.1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 4.1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3.1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 2.1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
RELATIVE ROTOR ANGLES

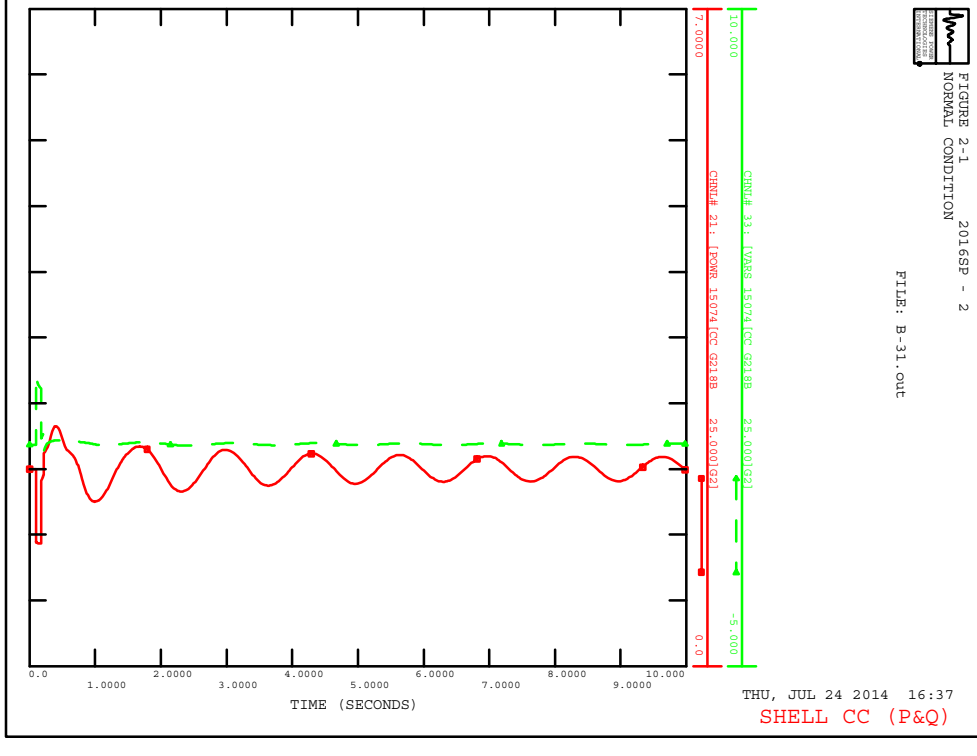


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-31.out
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC (P&Q)

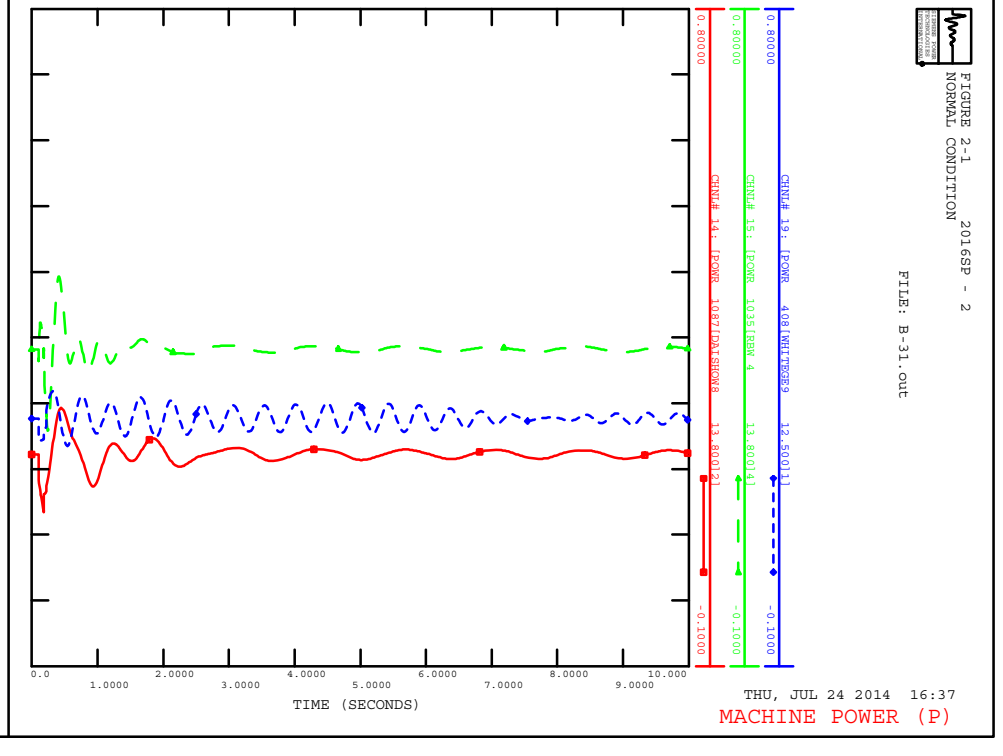


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-31.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (P)

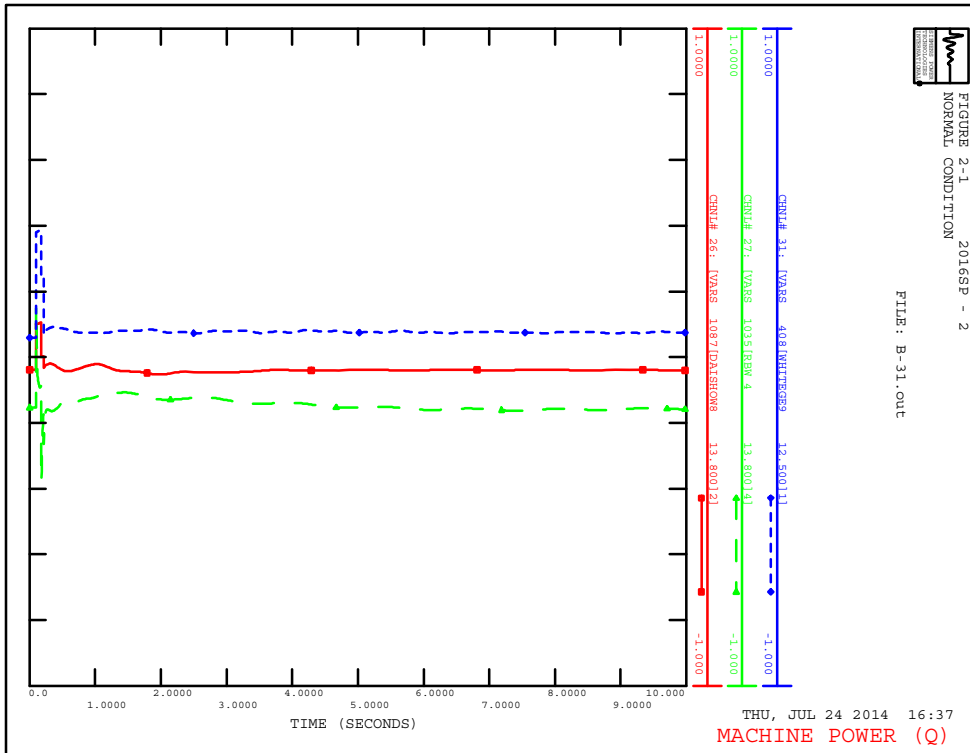


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-31.out
CHNI# 31: [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27: [VARS 1035[RBW 4 13.800]4]
CHNI# 26: [VARS 1087[DAISHOWB 13.800]2]
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (Q)

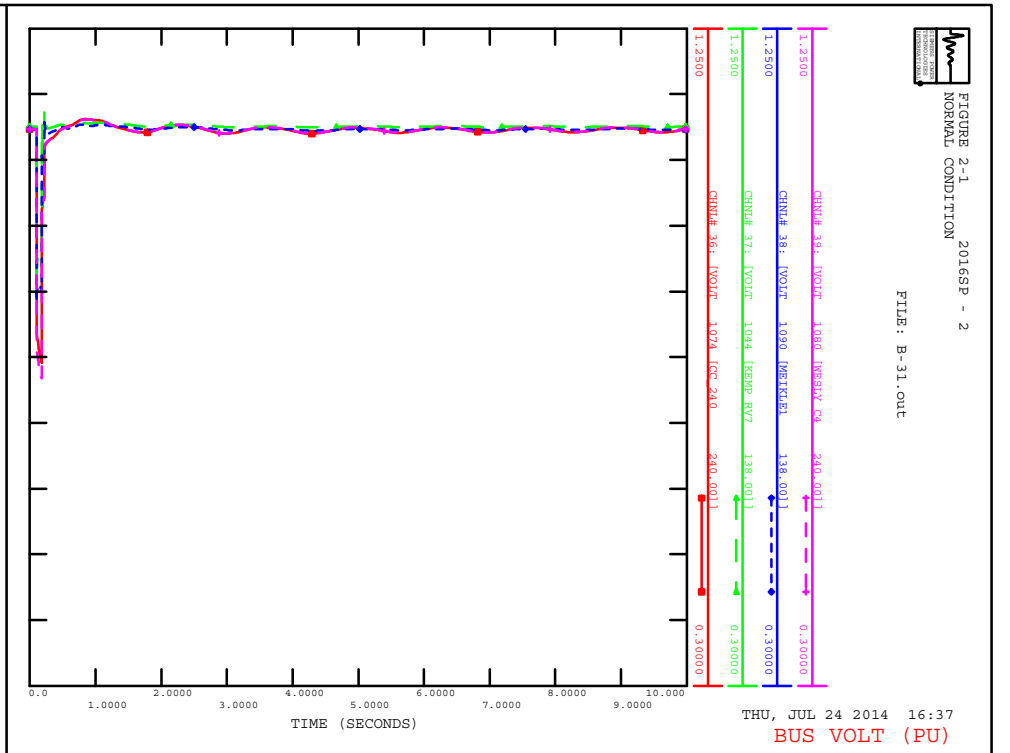


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-31.out
CHNI# 39: [VOLT 1080 [MESIK C4 240.00]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 36: [VOLT 1074 [CC 240 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

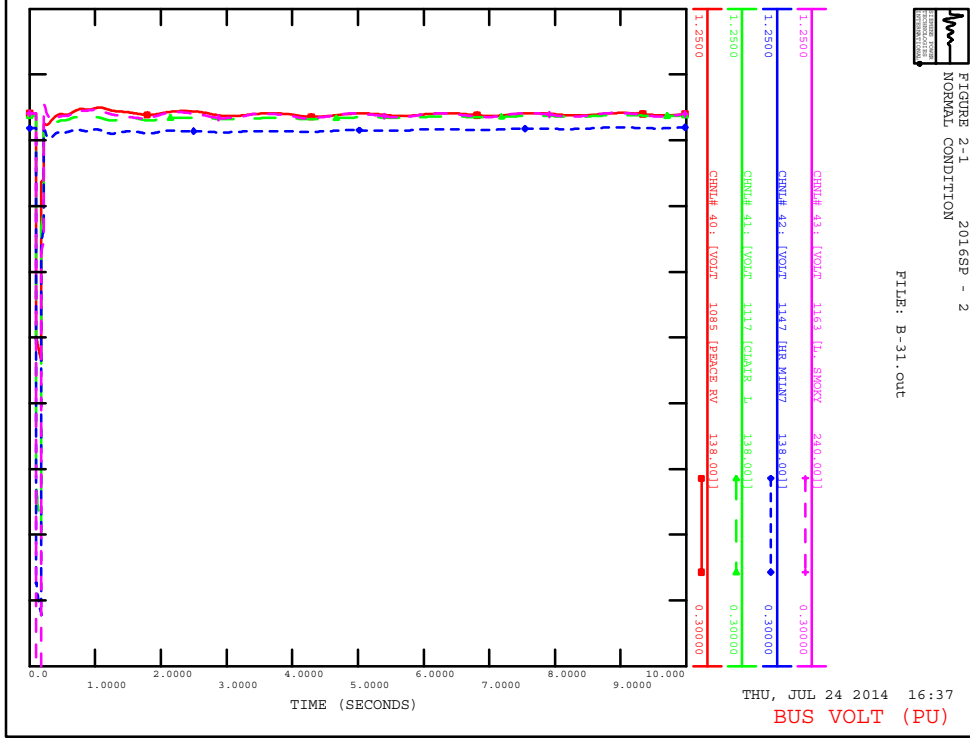


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-31.out
CHNI# 43: [VOLT 1163 [W. SMOKY 240.00]
CHNI# 42: [VOLT 1142 [KR MLIN7 138.00]
CHNI# 41: [VOLT 1117 [CHAIR L 138.00]
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

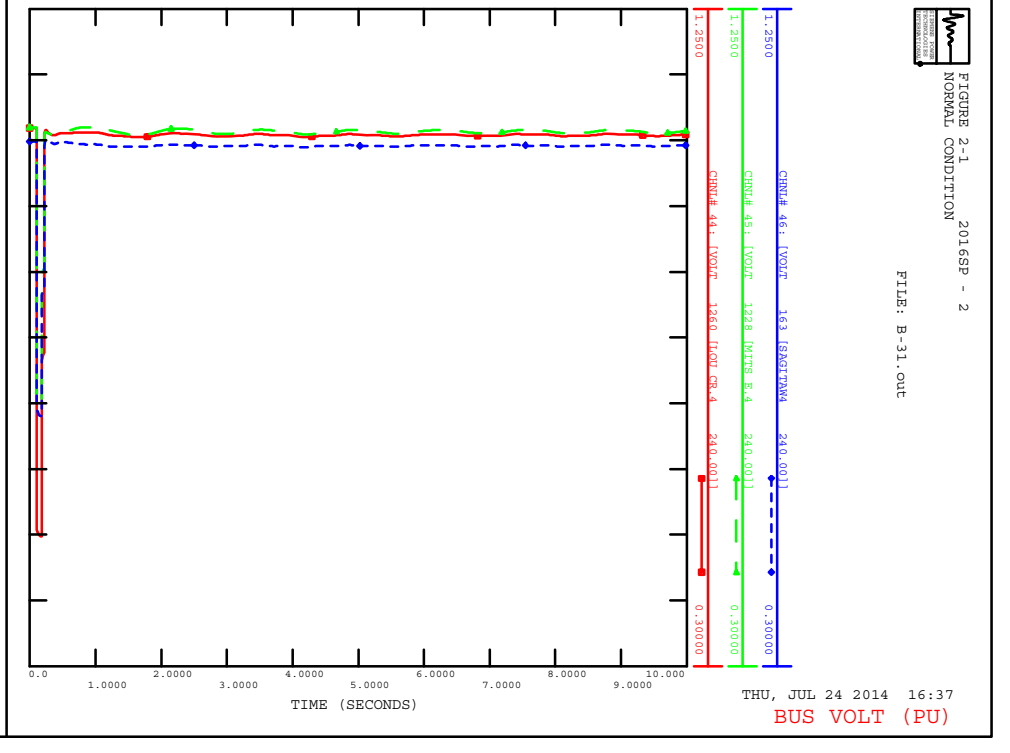


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-31.out
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
CHNI# 45: [VOLT 1228 [MTS B-4 240.00]
CHNI# 44: [VOLT 1260 [FOX CR-4 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

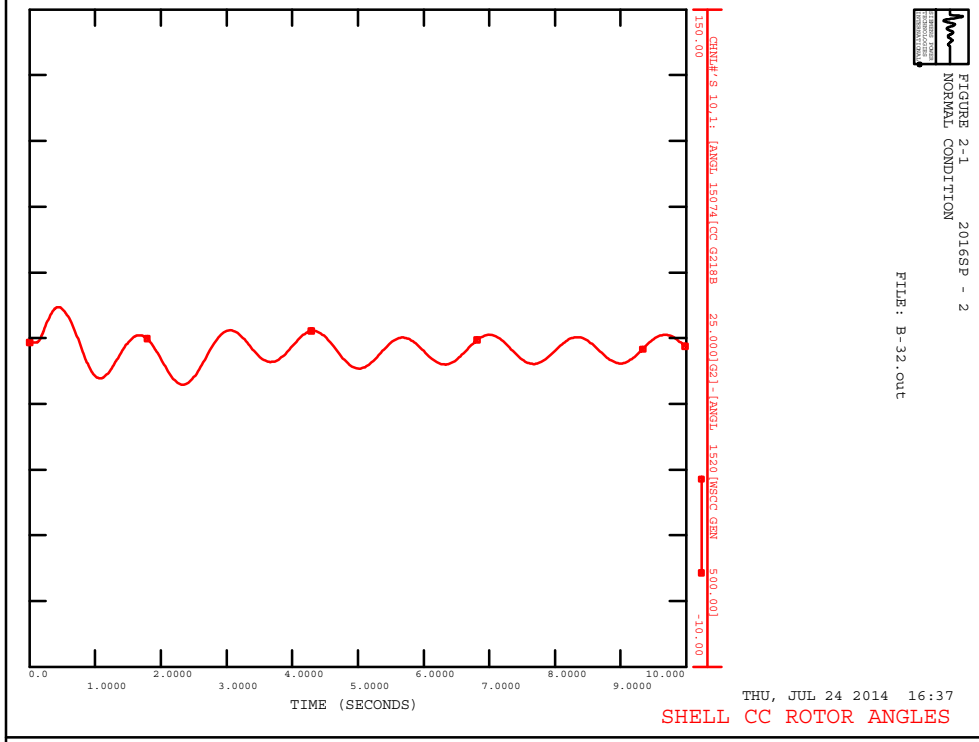


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-32.out
CHNU#'S 10,1: [ANGL 15074[CC G218B
25.000[G2]-[ANGL 1520[NSCC GEN
-500.00]
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC ROTOR ANGLES

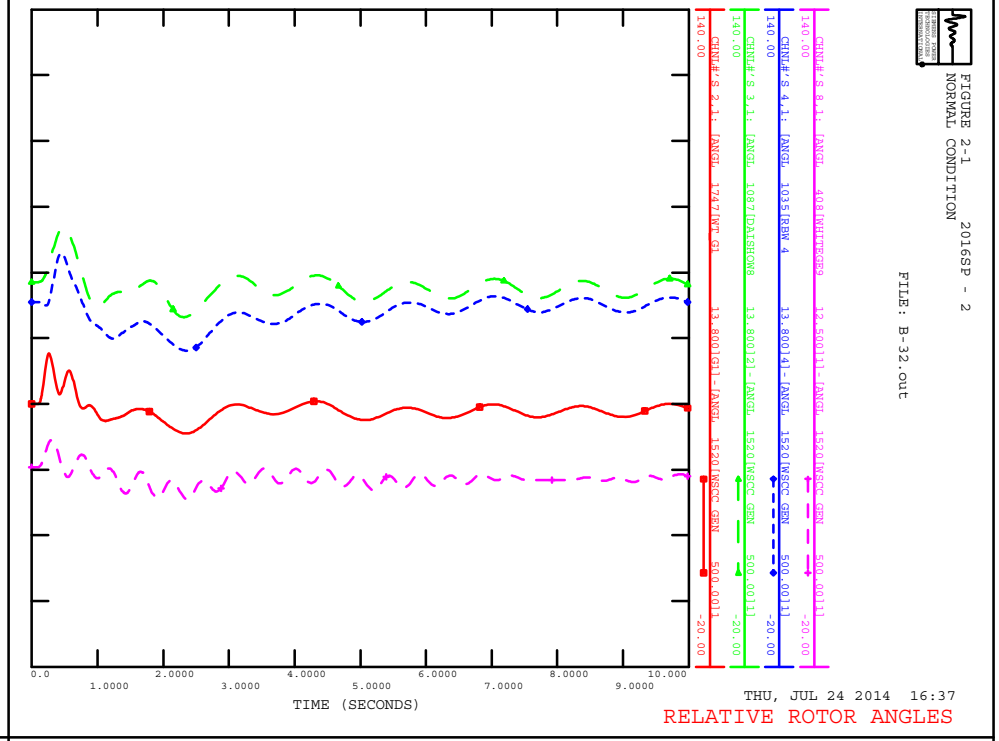


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-32.out
CHNU#'S 8,1: [ANGL 408[WHITESB9
12.500[1]-[ANGL 1520[NSCC GEN
-500.00]
CHNU#'S 4,1: [ANGL 1035[RBM 4
13.800[4]-[ANGL 1520[NSCC GEN
-500.00]
CHNU#'S 3,1: [ANGL 1087[DAISHON8
13.800[2]-[ANGL 1520[NSCC GEN
-500.00]
CHNU#'S 2,1: [ANGL 1747[WT G1
13.800[G1]-[ANGL 1520[NSCC GEN
-500.00]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
RELATIVE ROTOR ANGLES

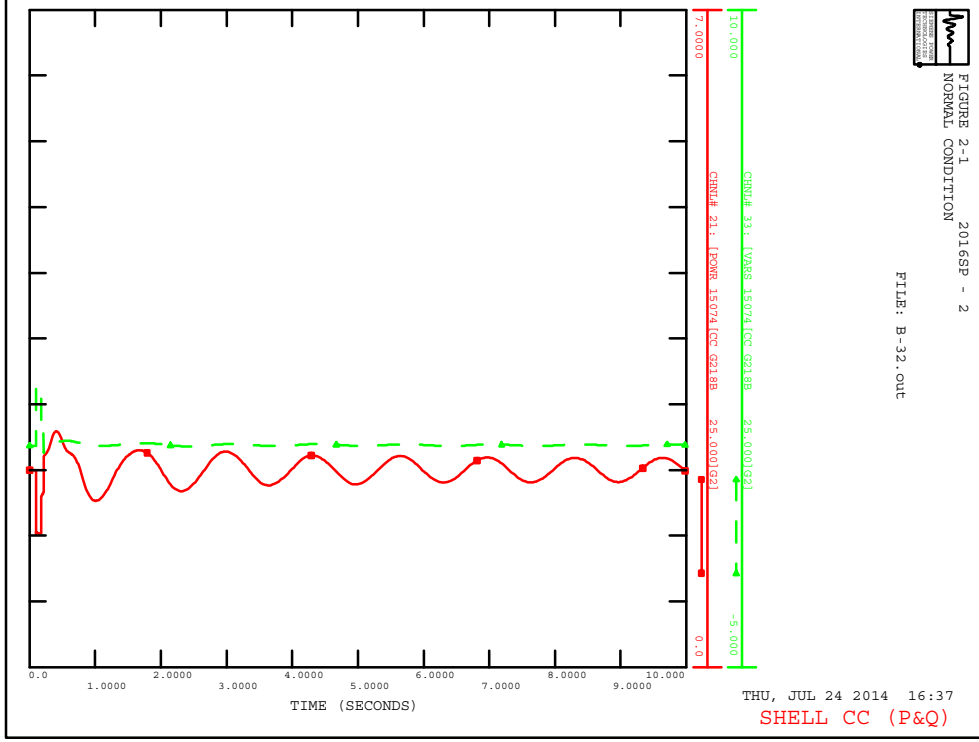


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-32.out
CHNU# 33: [VARS 15074[CC G218B
25.000[G2]
CHNU# 21: [POWR 15074[CC G218B
25.000[G2]
10.000
-5.000
7.0000
0.0
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC (P&Q)

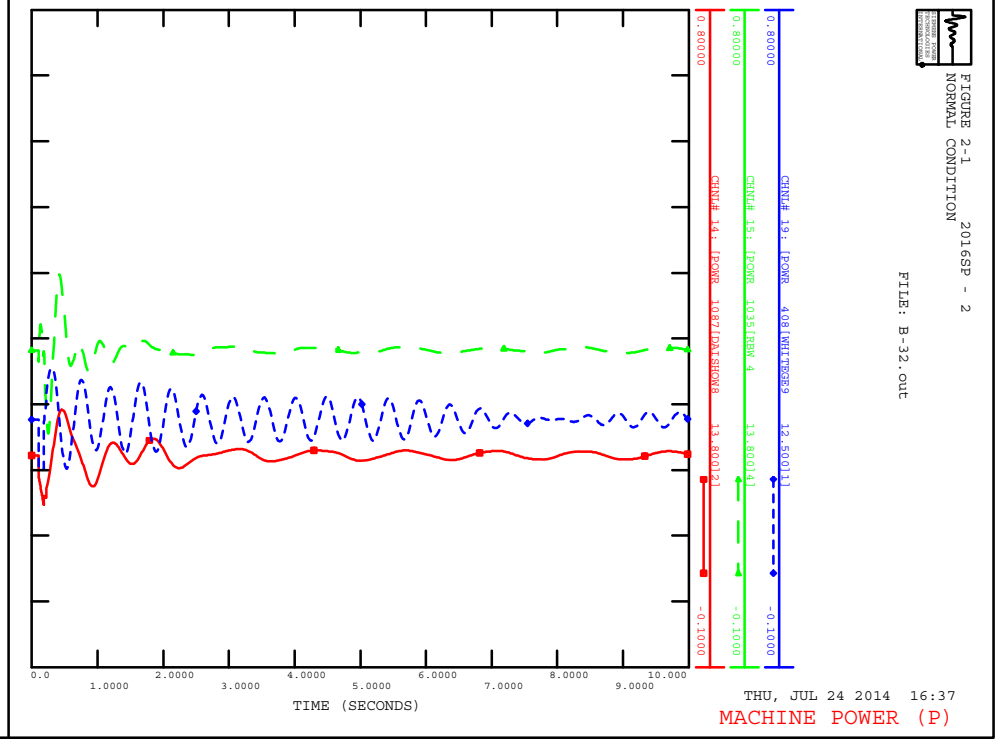


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-32.out
CHNU# 19: [POWR 408[WHITESB9
12.500[1]
CHNU# 15: [POWR 1035[RBM 4
13.800[4]
CHNU# 14: [POWR 1087[DAISHON8
13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (P)

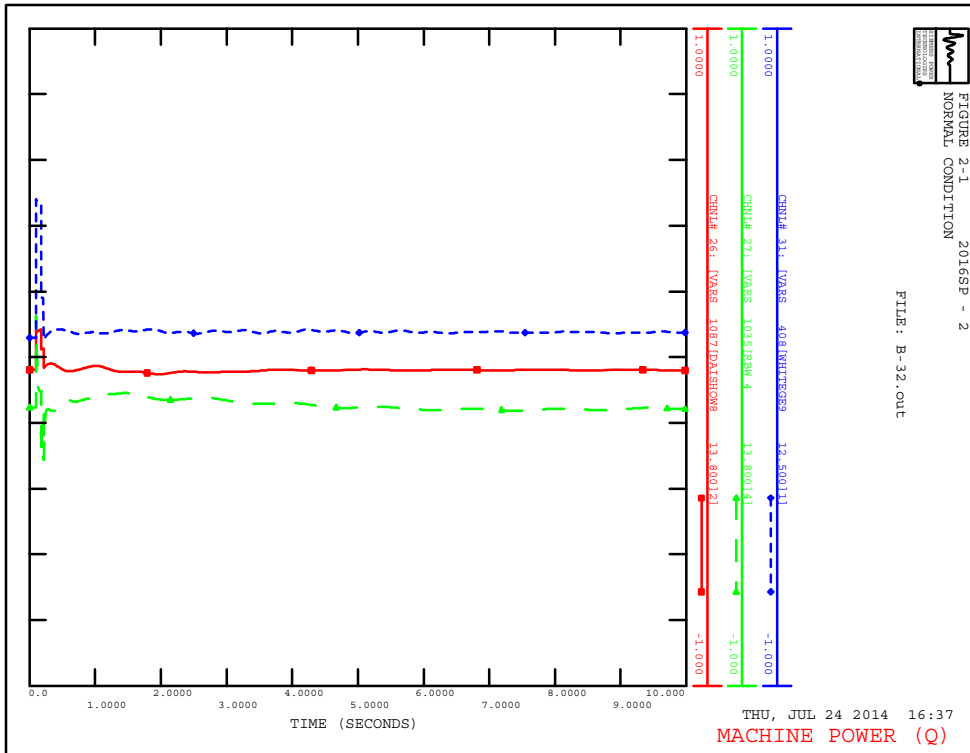


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-32.out
CHNI# 26: [VARS 1087 [DAISHOW8 13.800[2]
CHNI# 27: [VARS 1035 [RBW 4 13.800[4]
CHNI# 31: [VARS 408 [WHITEGB9 12.500[1]
1.0000
-1.000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (Q)

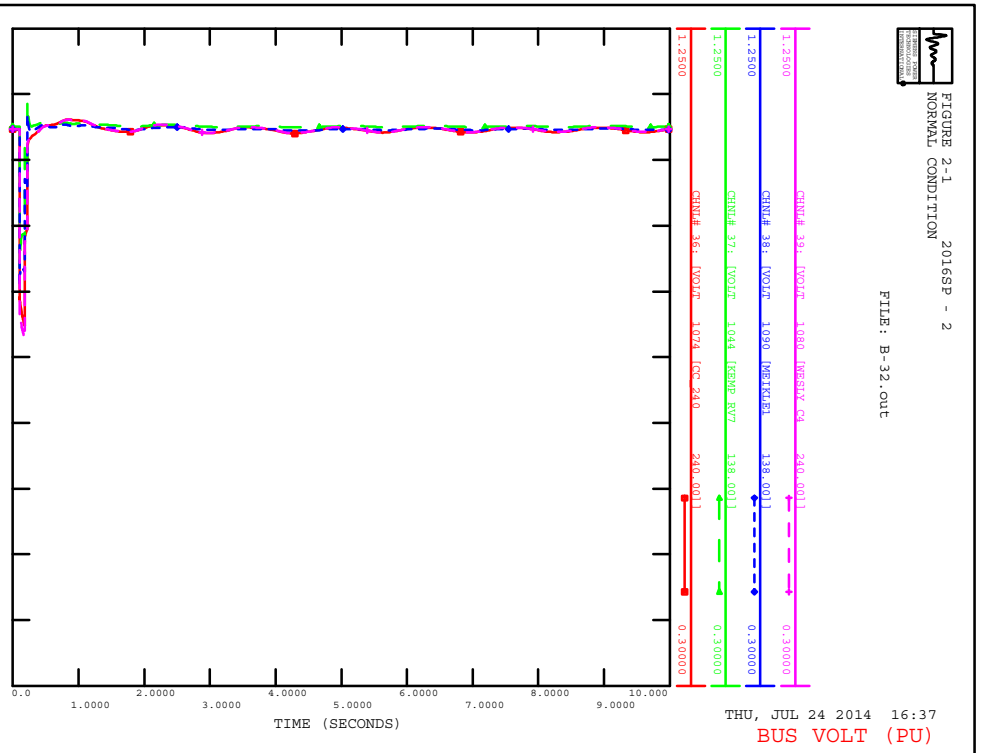


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-32.out
CHNI# 36: [VOLT 1074 [CC 240 240.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.00]
CHNI# 39: [VOLT 1080 [MESIK C4 240.00]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

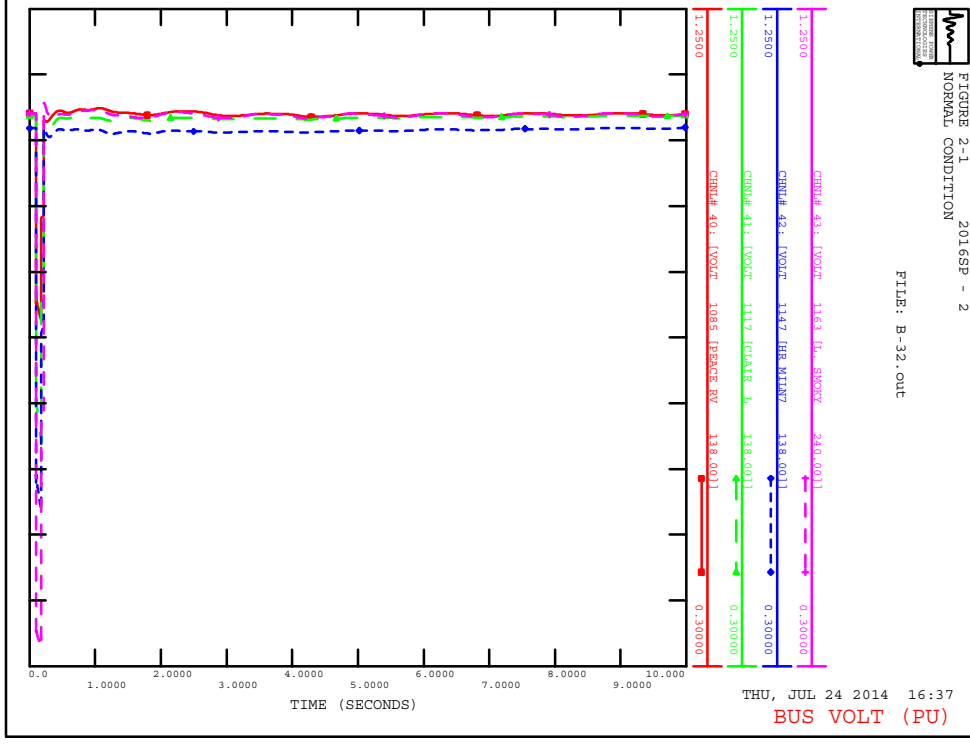


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-32.out
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]
CHNI# 41: [VOLT 1117 [CLAIR 1 138.00]
CHNI# 42: [VOLT 1142 [HR MIAN7 138.00]
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

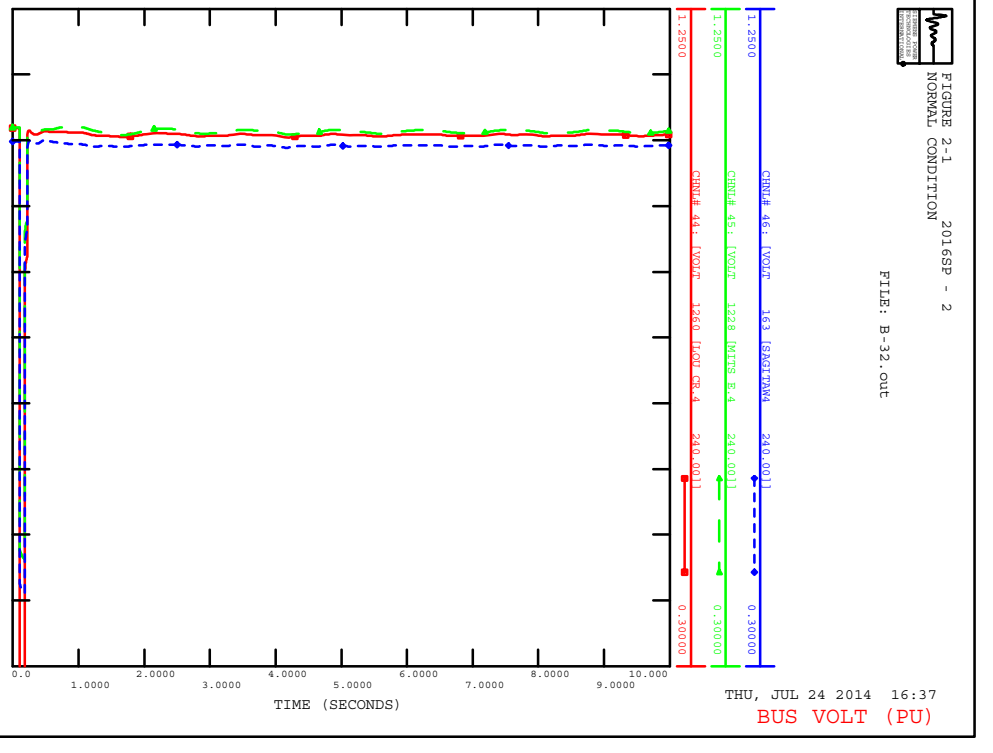


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-32.out
CHNI# 44: [VOLT 1260 [FOX CR 4 240.00]
CHNI# 45: [VOLT 1228 [MITS B-4 240.00]
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

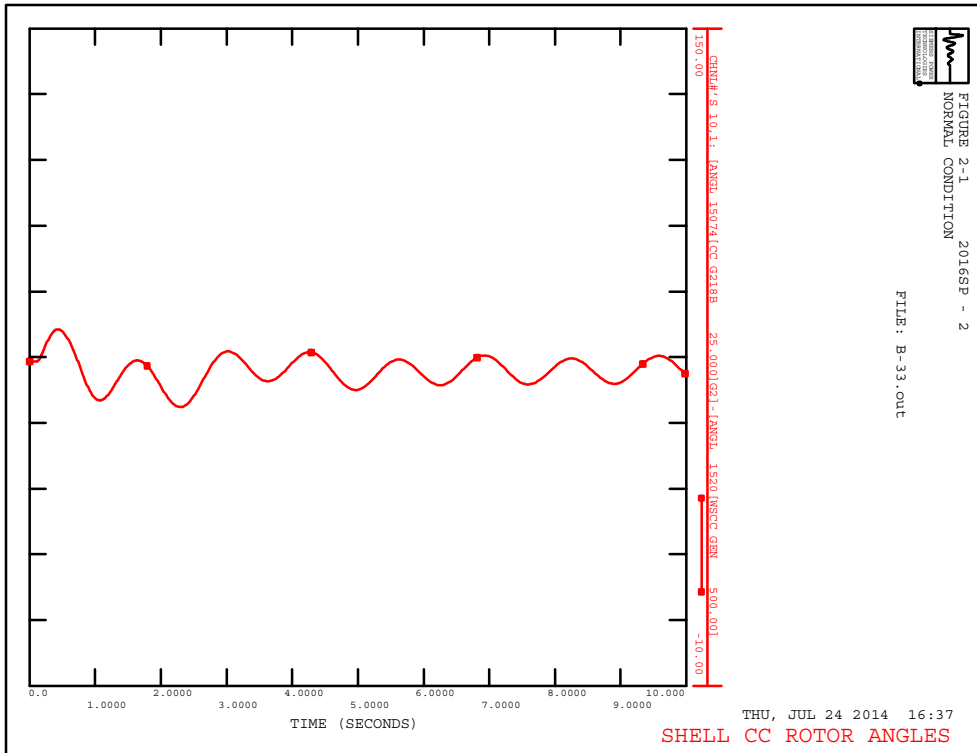


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-33.out
CHNL# 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
-50.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC ROTOR ANGLES

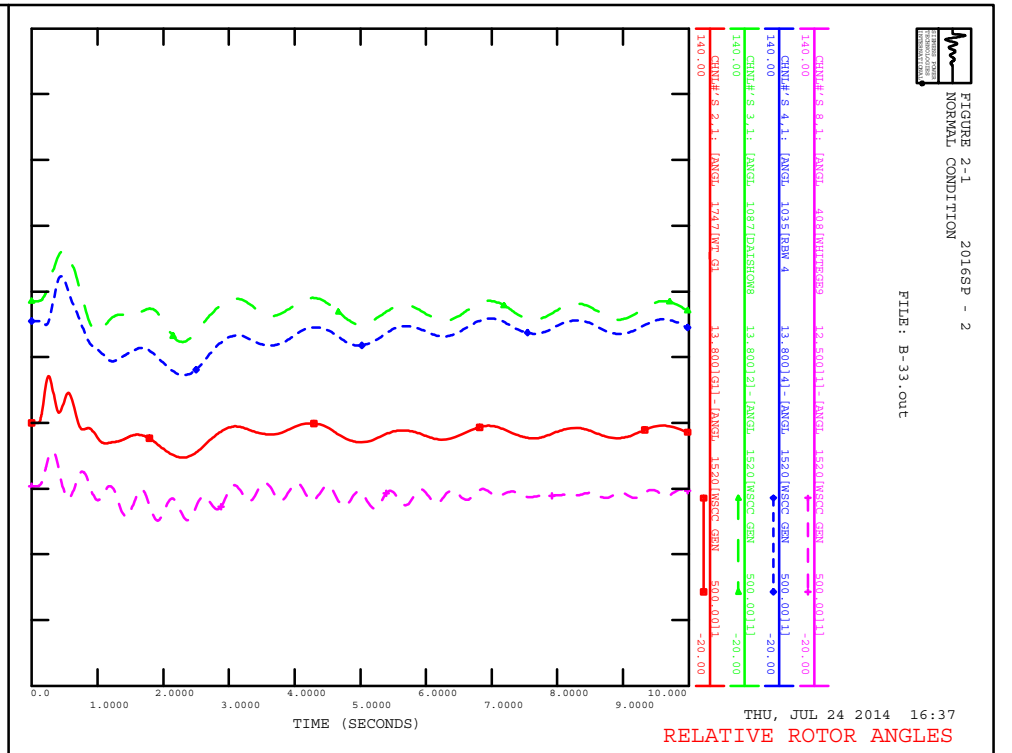


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-33.out
CHNL# 8,1: [ANGL 408[WHITEGE9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 3,1: [ANGL 1087[DAISHOW8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
RELATIVE ROTOR ANGLES

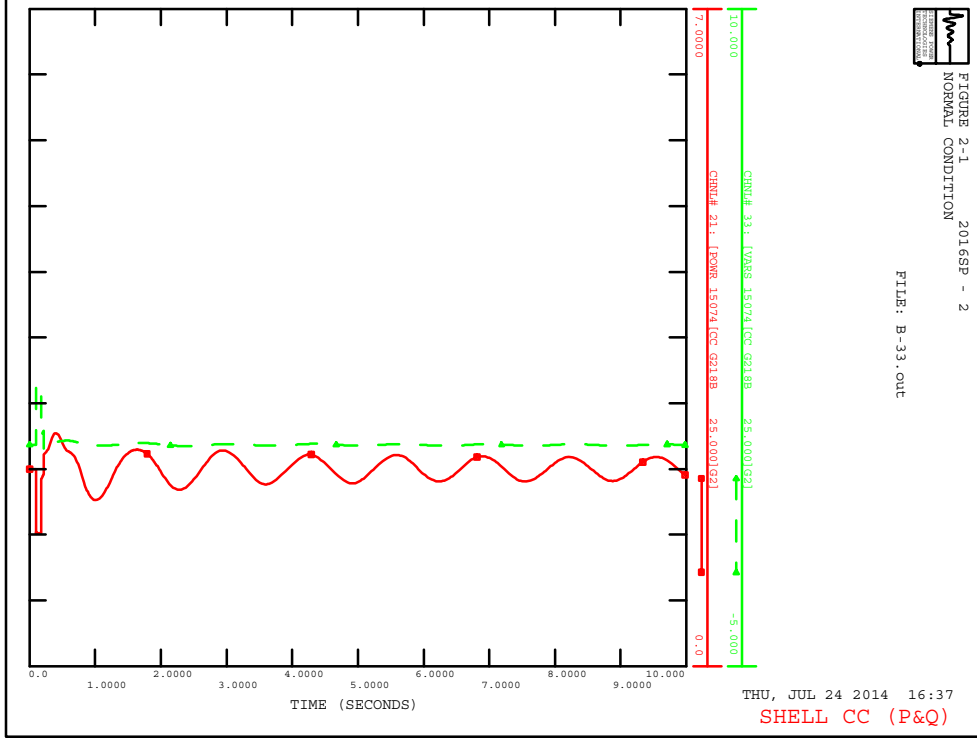


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-33.out
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC (P&Q)

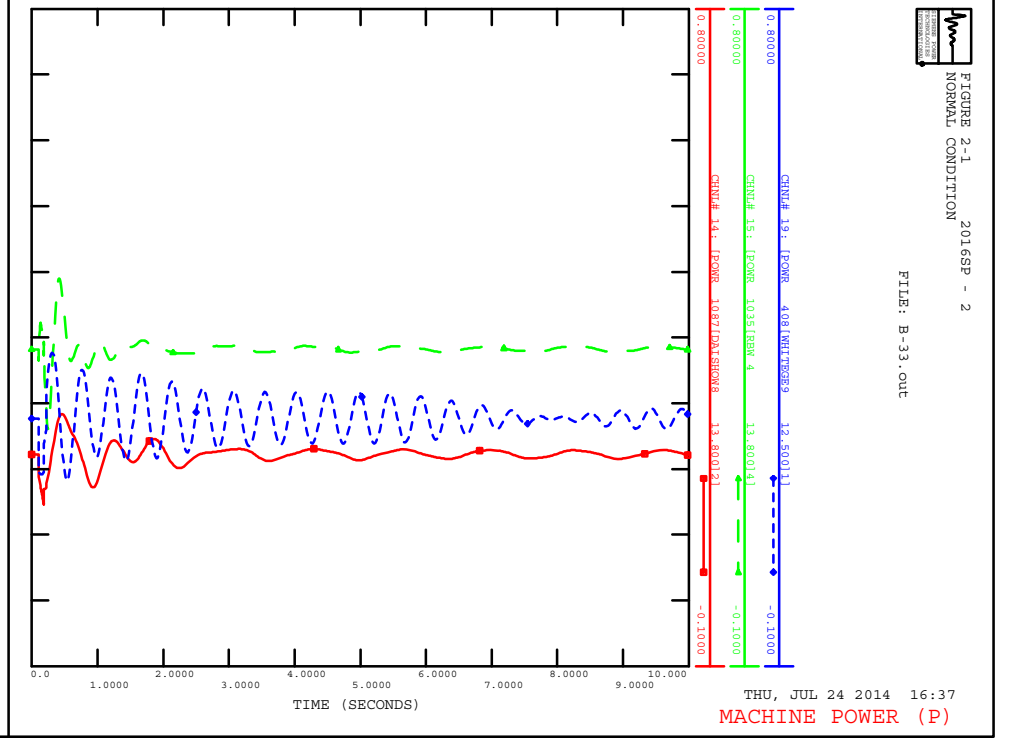


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-33.out
CHNL# 19: [POWR 408[WHITEGE9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHOW8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (P)

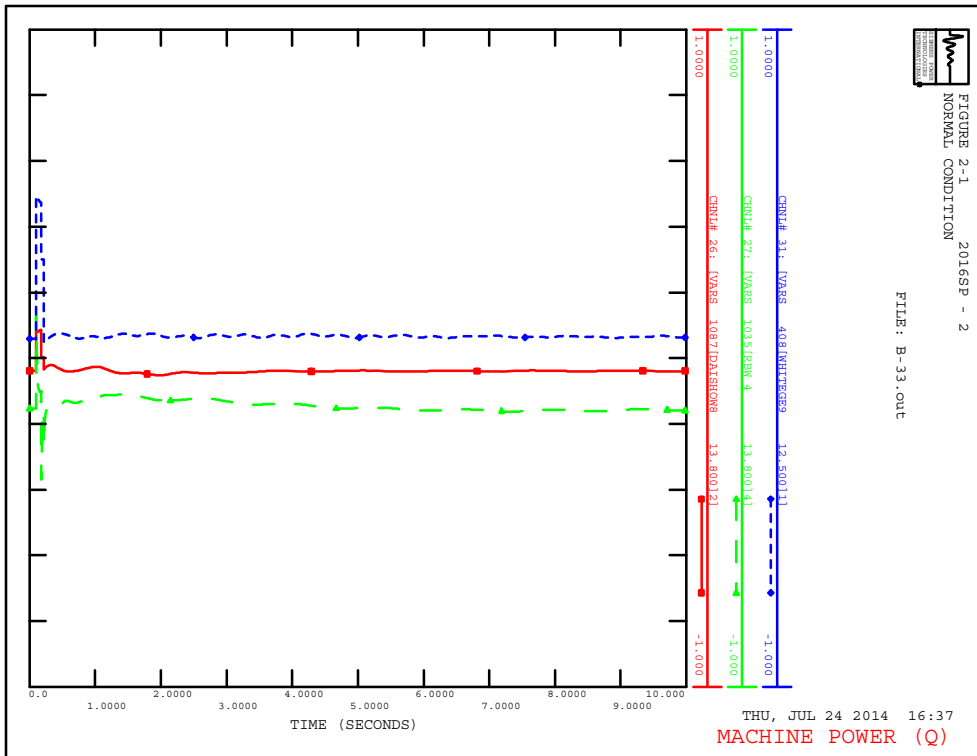


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-33.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (Q)

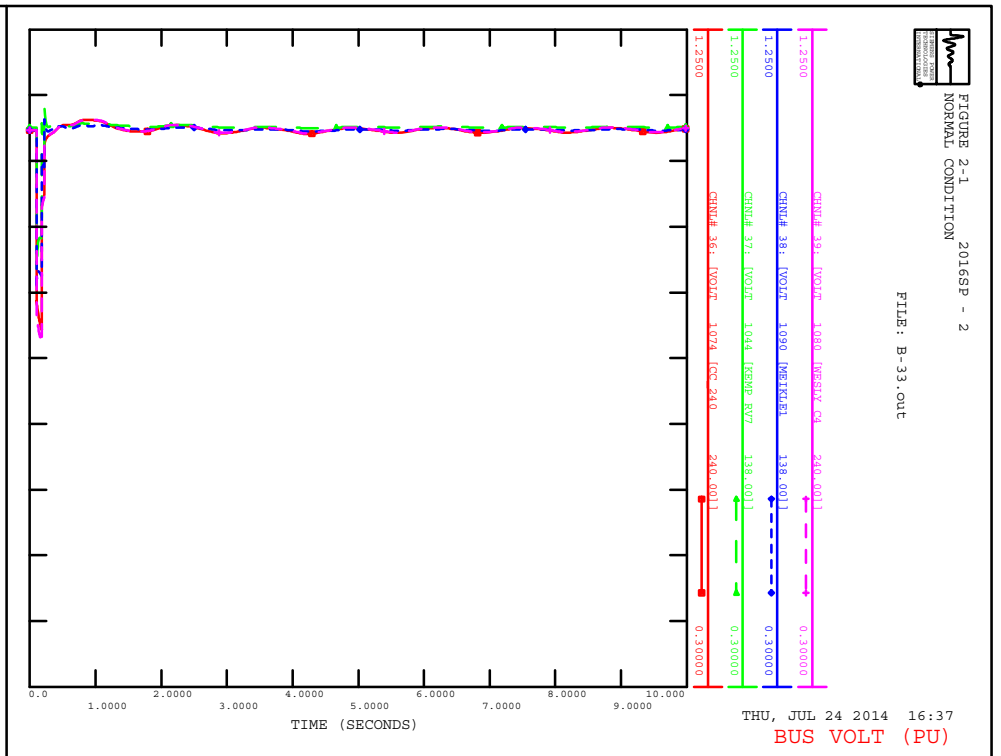


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-33.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

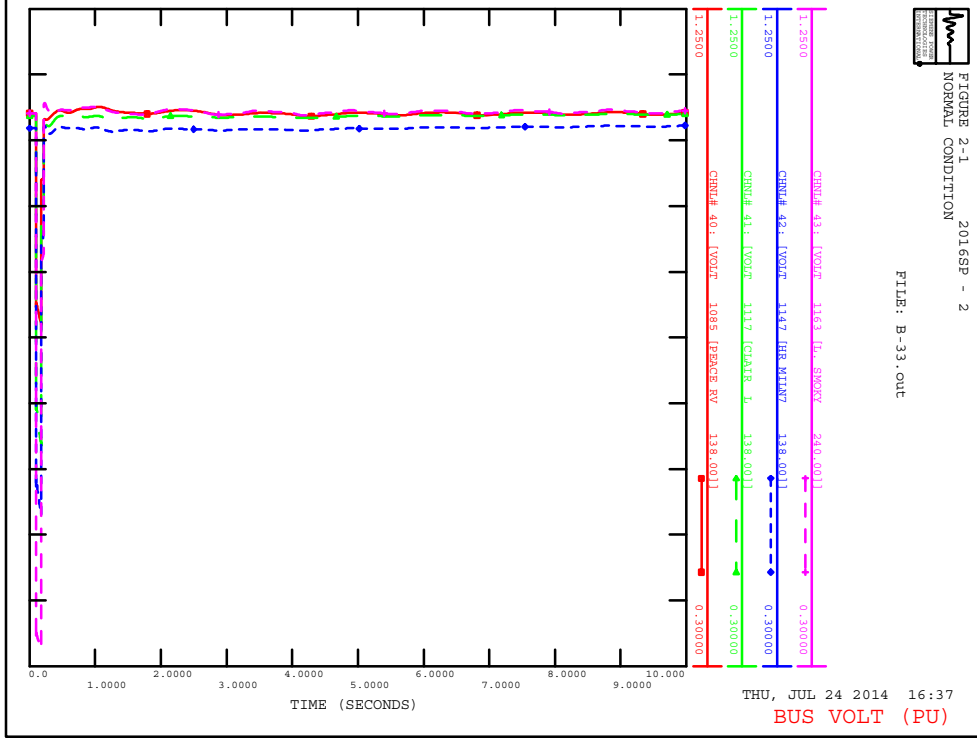


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-33.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

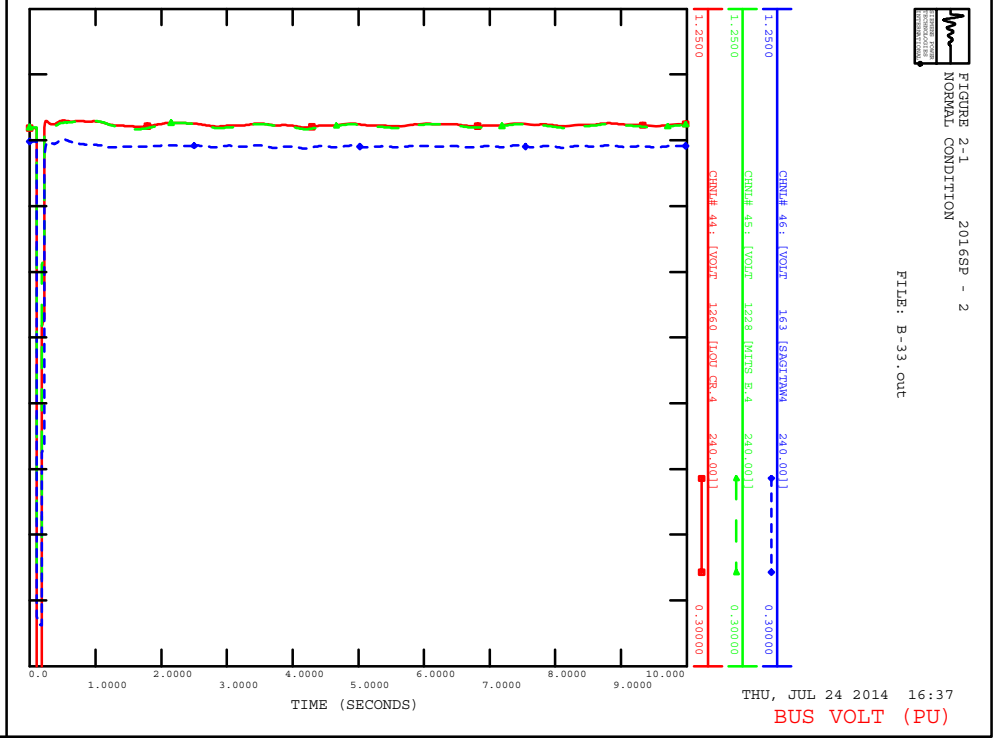


FIGURE 2-1
NORMAL CONDITION 2016SP - 2
FILE: B-33.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

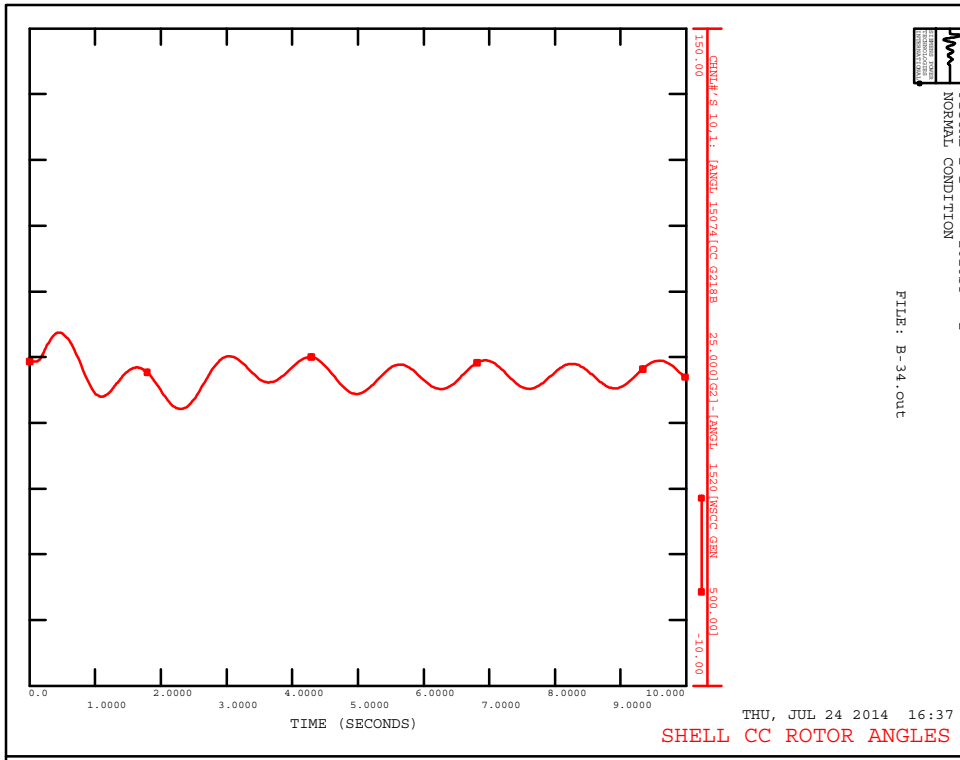


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-34.out
CHNU#'S 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC ROTOR ANGLES

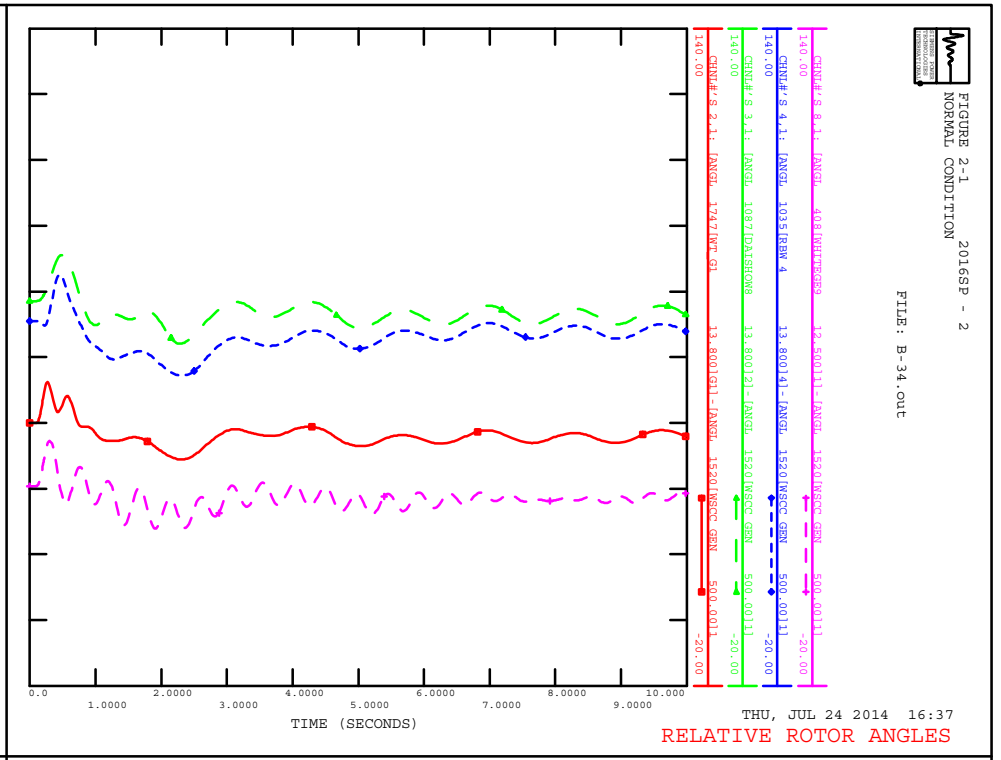


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-34.out
CHNU#'S 8,1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 3,1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
RELATIVE ROTOR ANGLES

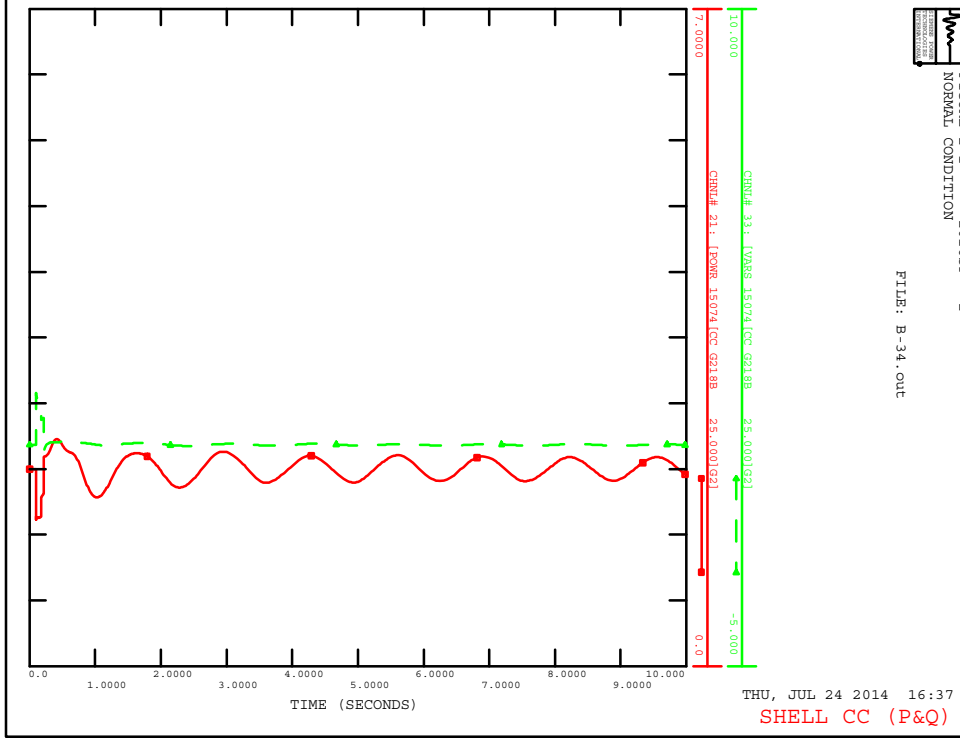


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-34.out
CHNU# 33: [VARS 15074[CC G218B 25.000[G2]
CHNU# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC (P&Q)

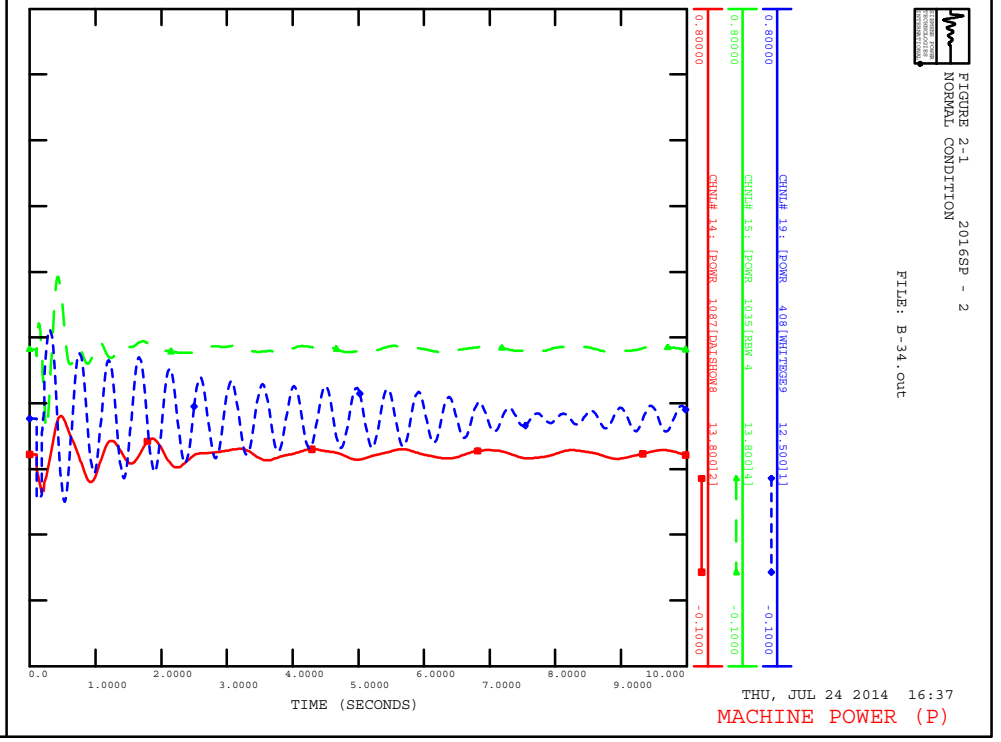


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-34.out
CHNU# 19: [POWR 408[WHITESB9 12.500[1]
CHNU# 15: [POWR 1035[RBM 4 13.800[4]
CHNU# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (P)

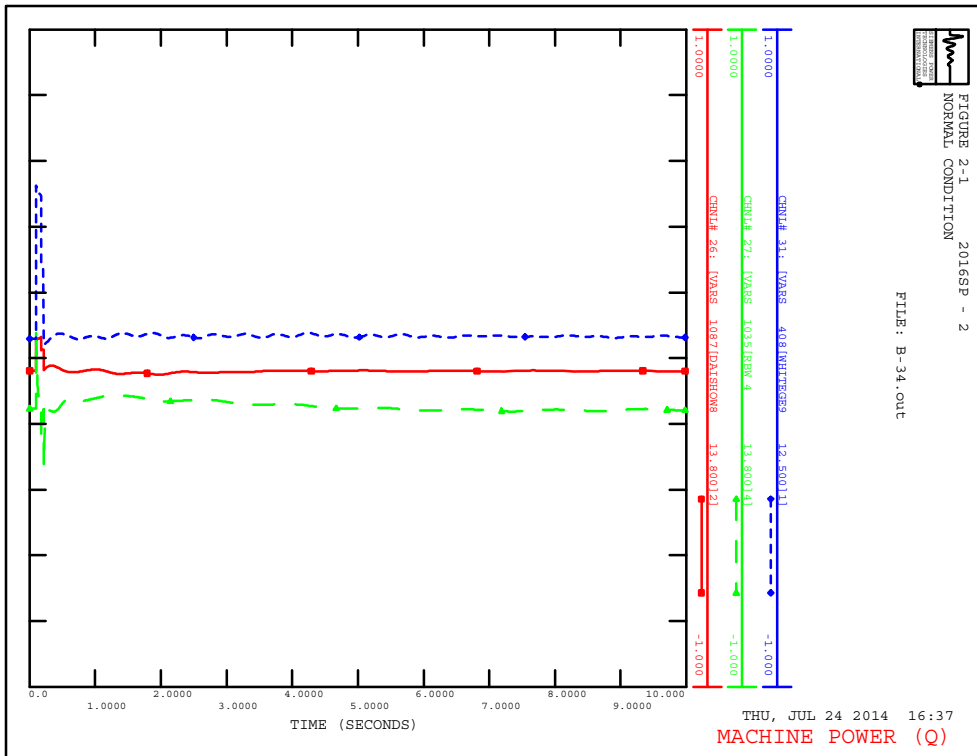


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-34.out
CHNI# 26: [VARS 1087 [DAISHOW8 13.800[2]
CHNI# 27: [VARS 1035 [RBW 4 13.800[4]
CHNI# 31: [VARS 408 [WHITEGB9 12.500[1]
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (Q)

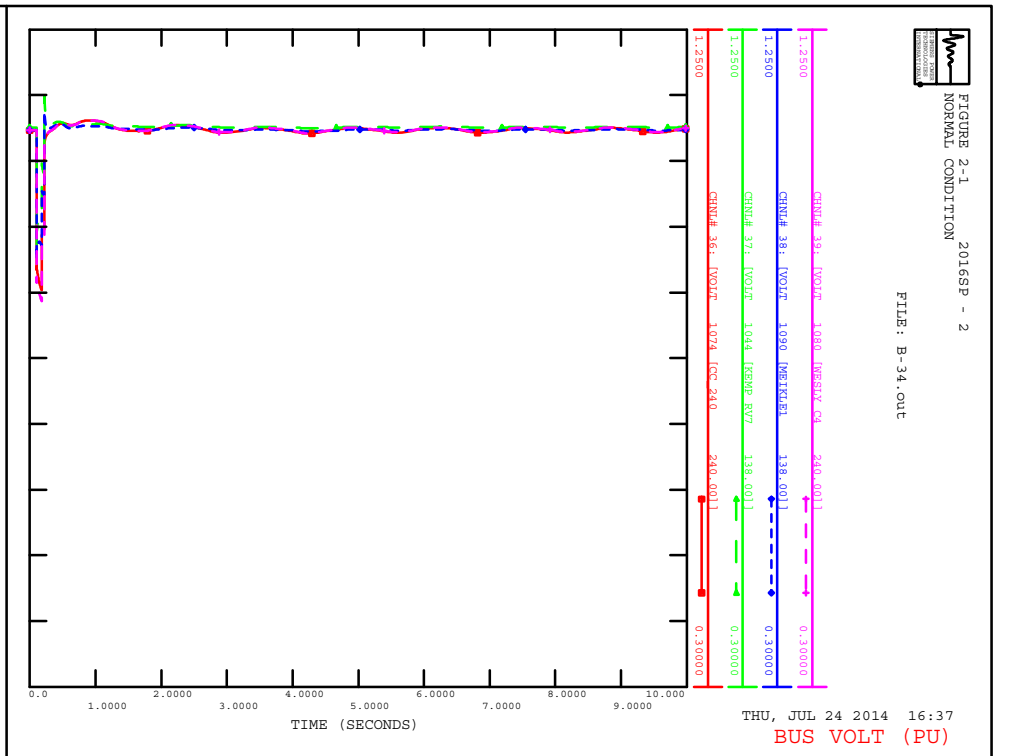


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-34.out
CHNI# 36: [VOLT 1074 [CC 240 240.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 38: [VOLT 1090 [MEIKLE1 138.00]
CHNI# 39: [VOLT 1080 [MESIC C4 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

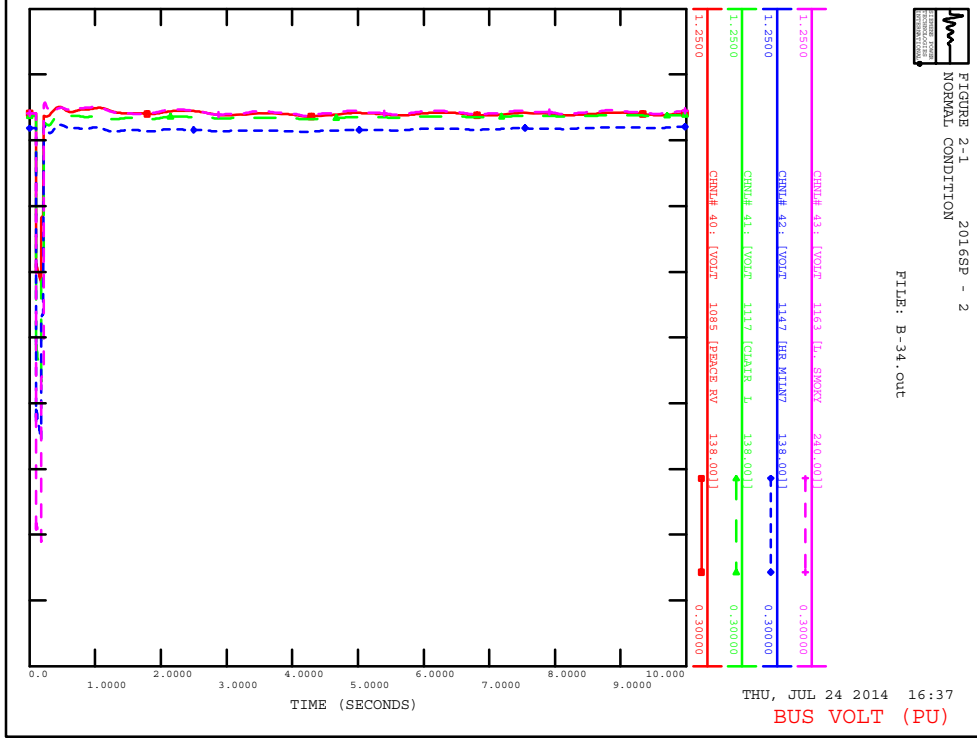


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-34.out
CHNI# 40: [VOLT 1085 [PEARCE RV 138.00]
CHNI# 41: [VOLT 1117 [CLAIR L 138.00]
CHNI# 42: [VOLT 1142 [RB MIAN7 138.00]
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

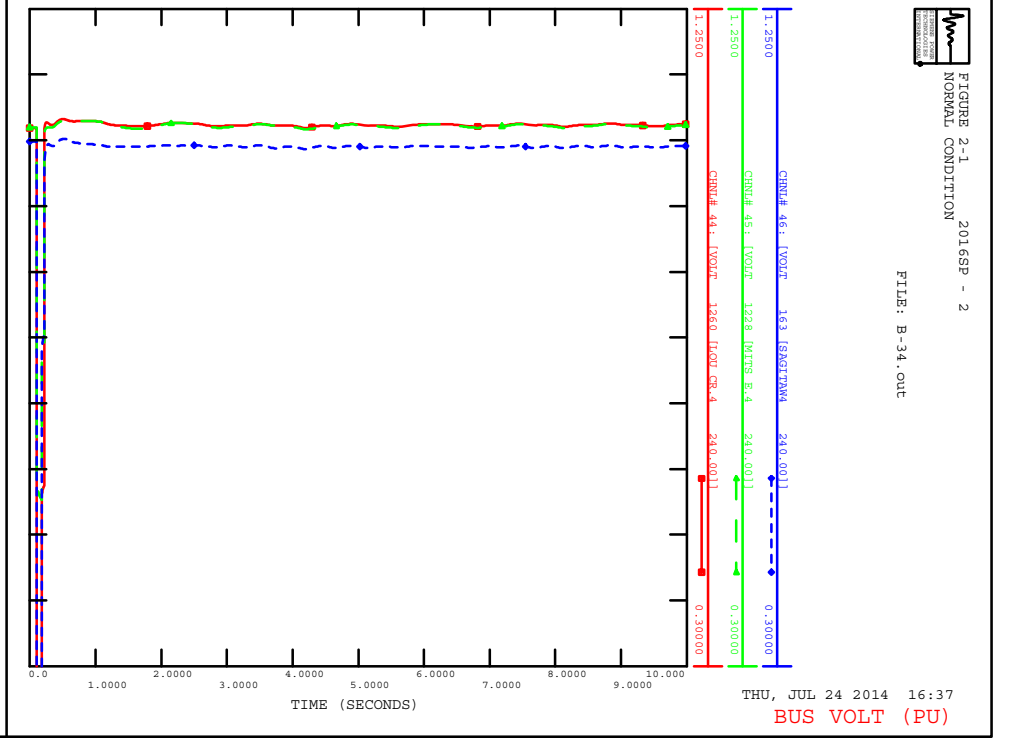


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-34.out
CHNI# 44: [VOLT 1260 [FOY CR 4 240.00]
CHNI# 45: [VOLT 1228 [MTS B-4 240.00]
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

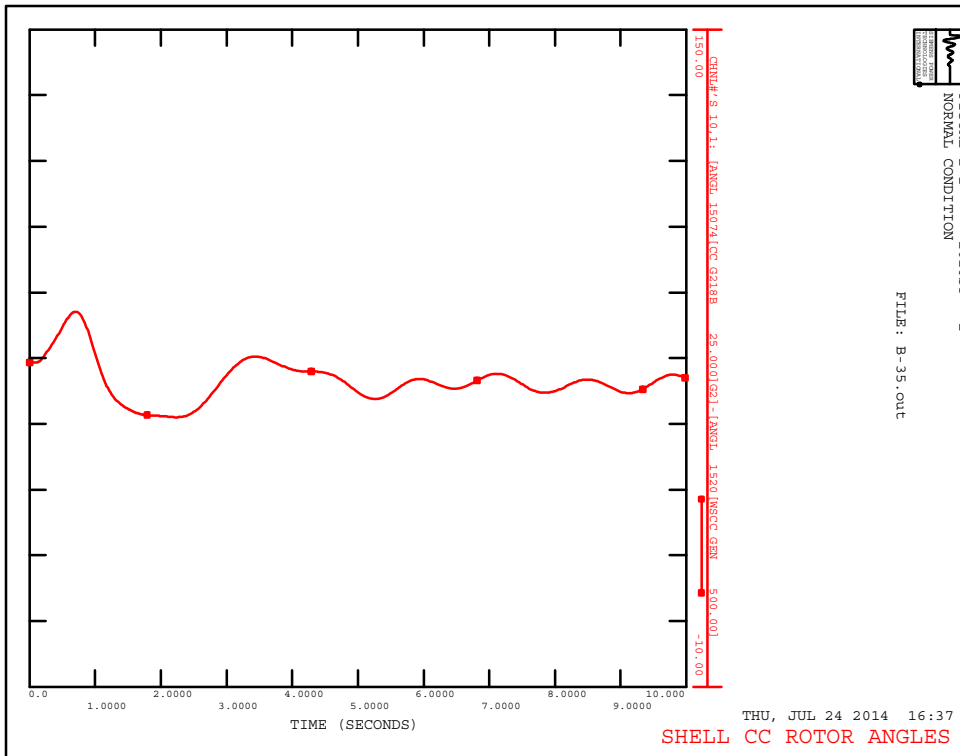


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-35.out
CHNU#'S 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC ROTOR ANGLES

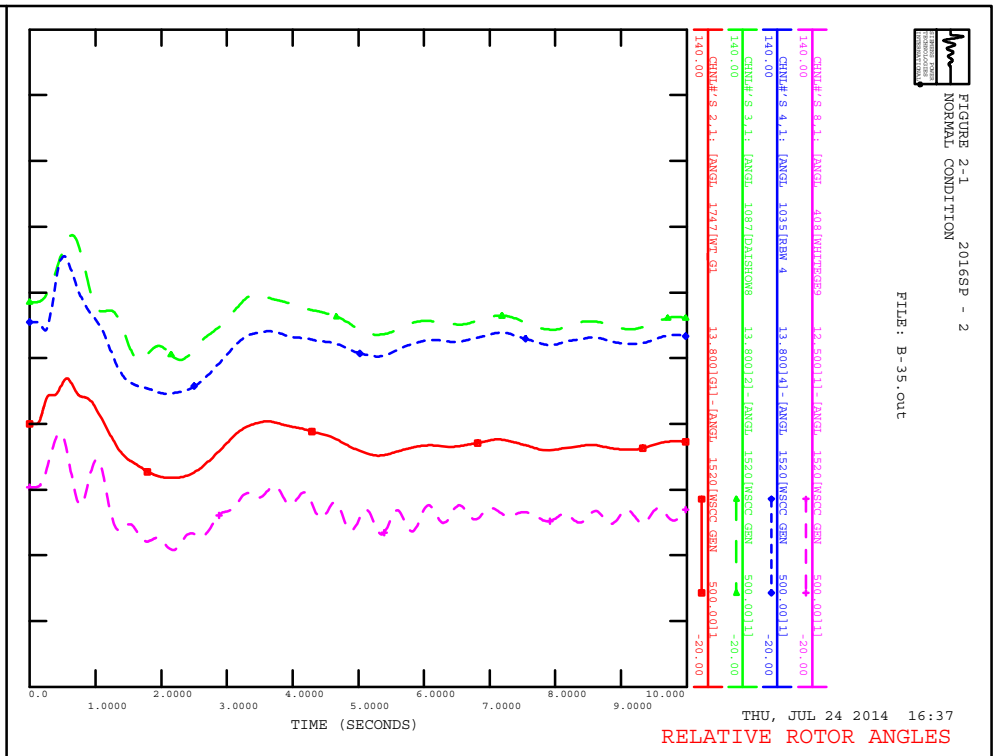


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-35.out
CHNU#'S 8,1: [ANGL 408[WHITEGE9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 3,1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
RELATIVE ROTOR ANGLES

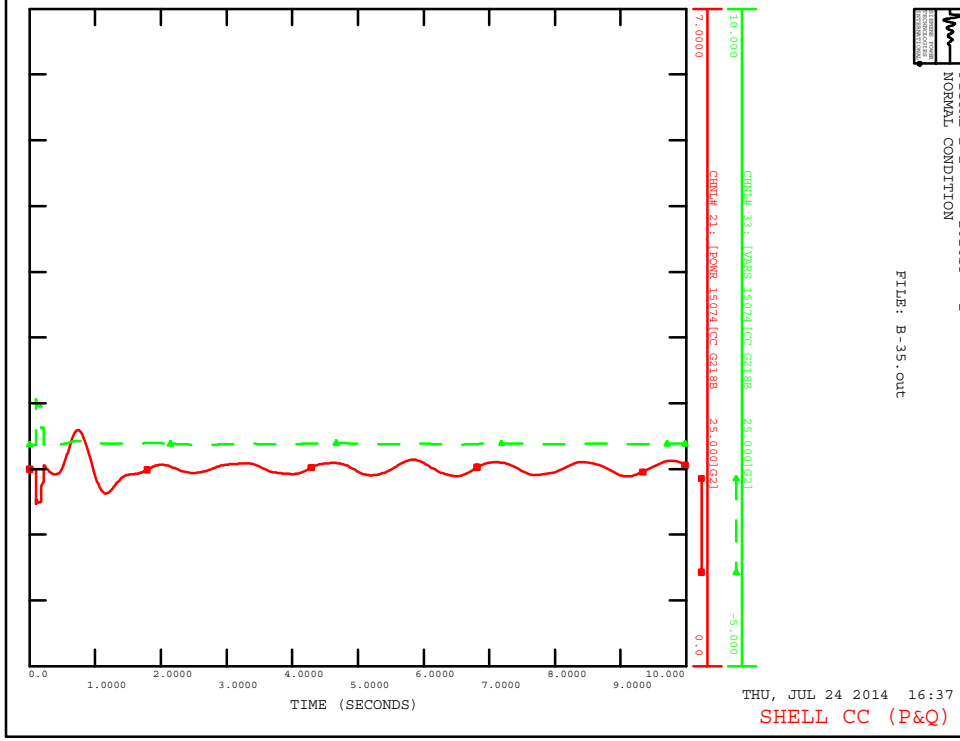


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-35.out
CHNU# 33: [VARS 15074[CC G218B 25.000[G2]
CHNU# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC (P&Q)

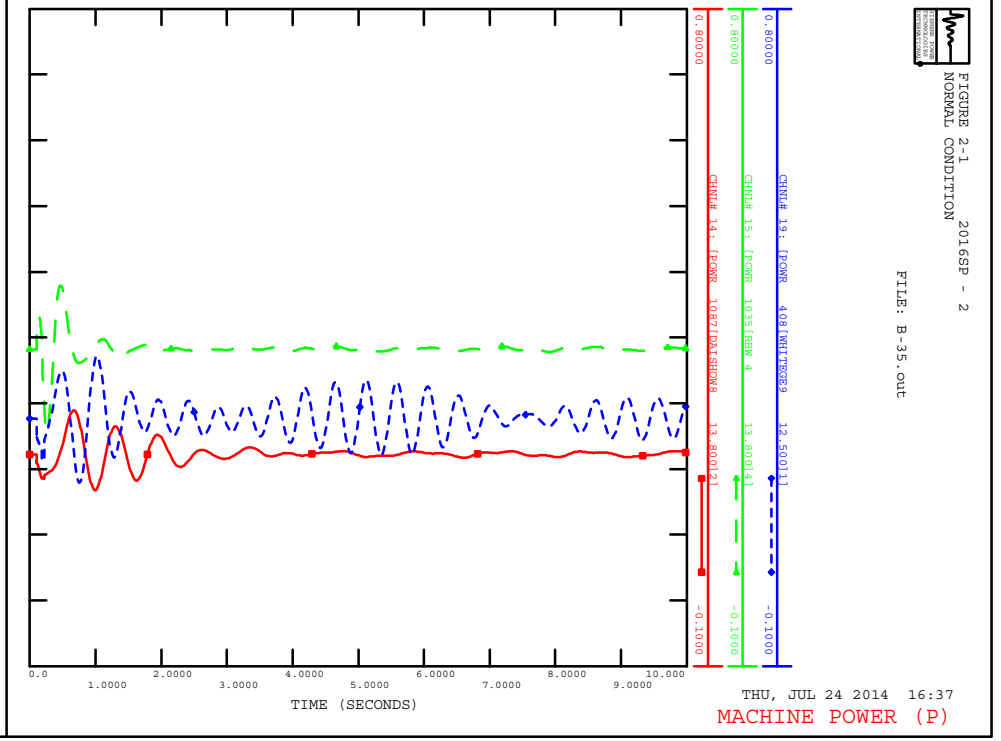


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-35.out
CHNU# 19: [POWR 408[WHITEGE9 12.500[1]
CHNU# 15: [POWR 1035[RBM 4 13.800[4]
CHNU# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (P)

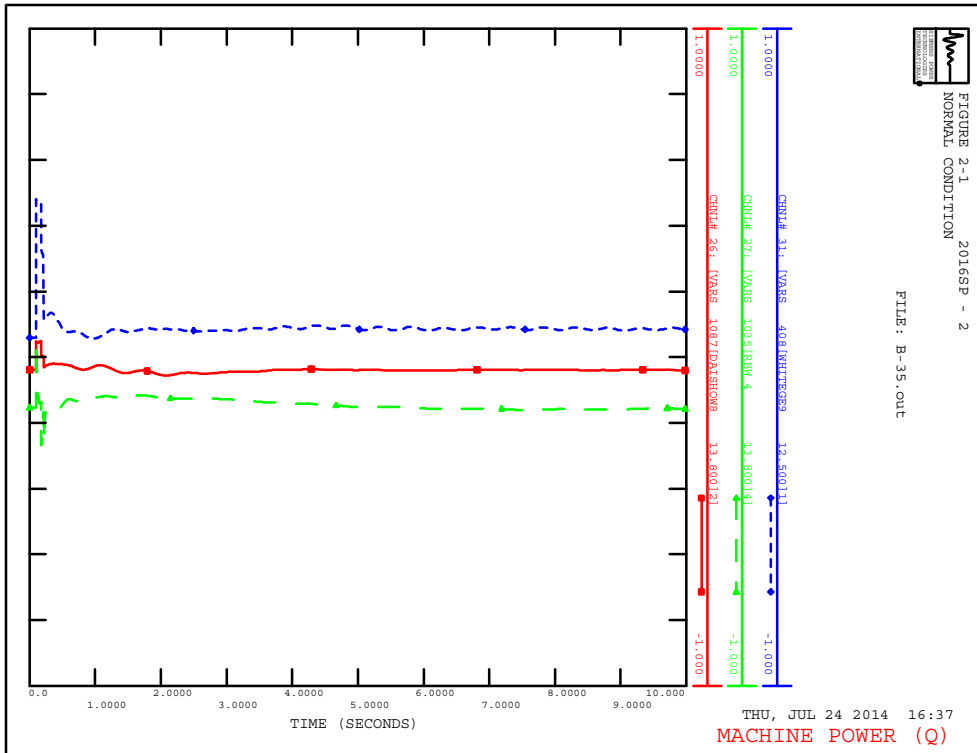


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-35.out
THU, JUL 24 2014 16:37
MACHINE POWER (Q)
TIME (SECONDS)

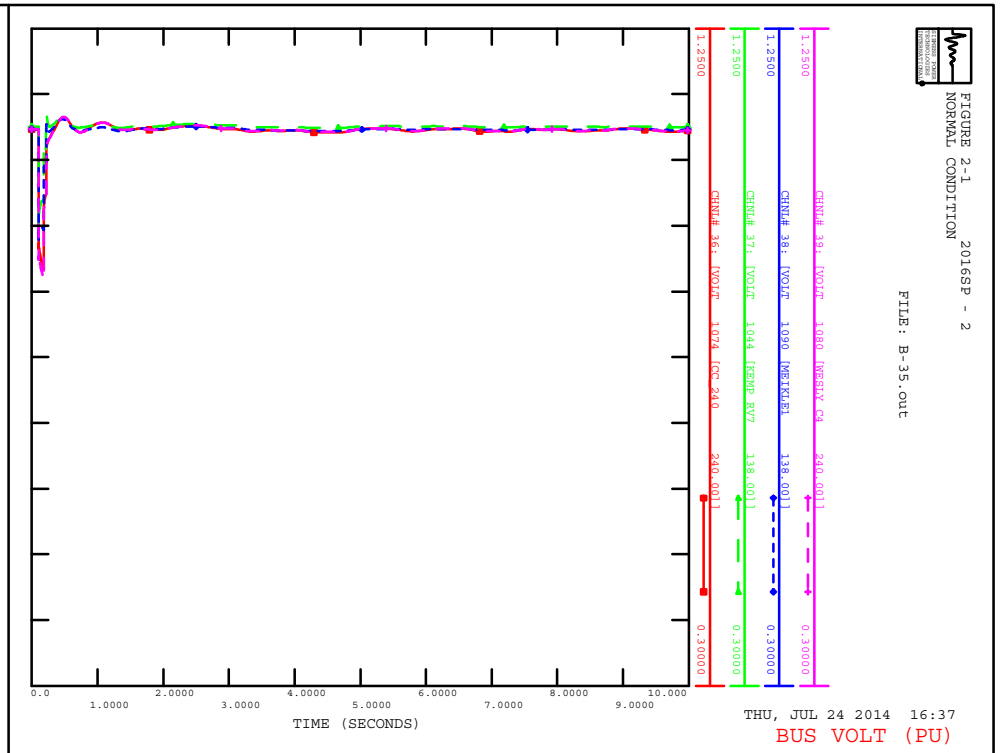


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-35.out
THU, JUL 24 2014 16:37
BUS VOLT (PU)
TIME (SECONDS)

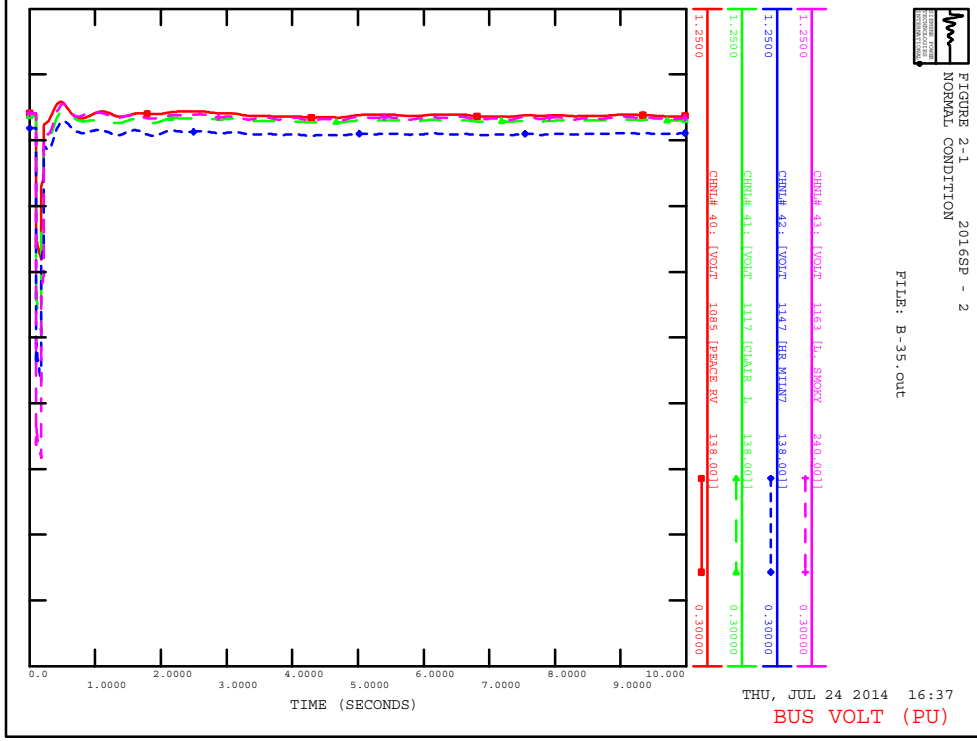


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-35.out
THU, JUL 24 2014 16:37
BUS VOLT (PU)
TIME (SECONDS)

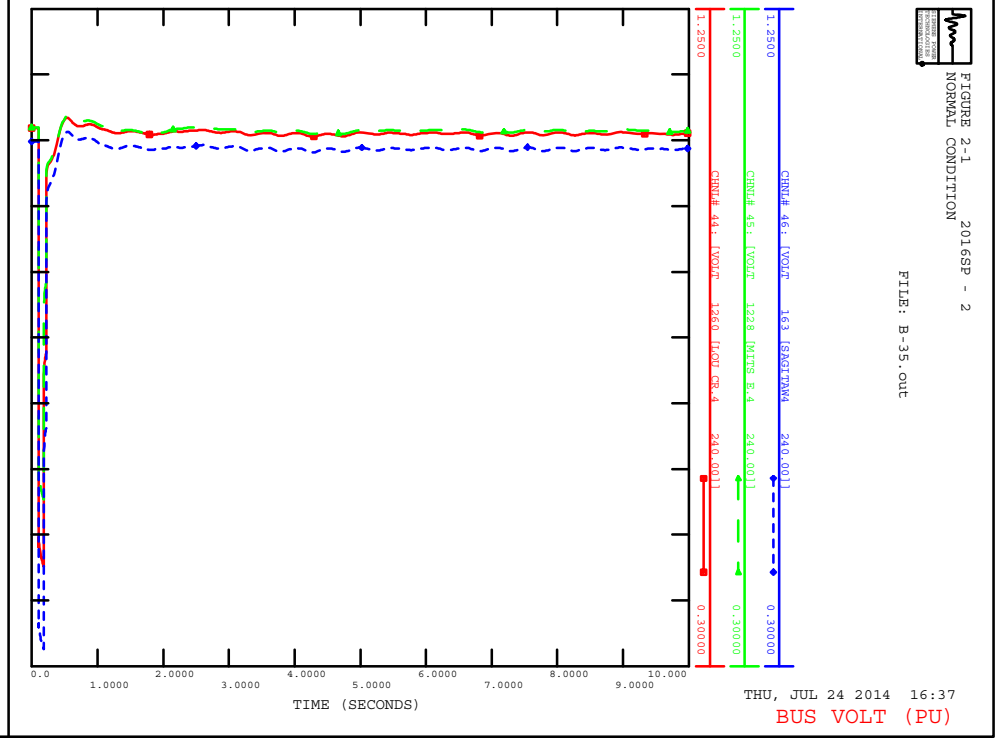


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-35.out
THU, JUL 24 2014 16:37
BUS VOLT (PU)
TIME (SECONDS)

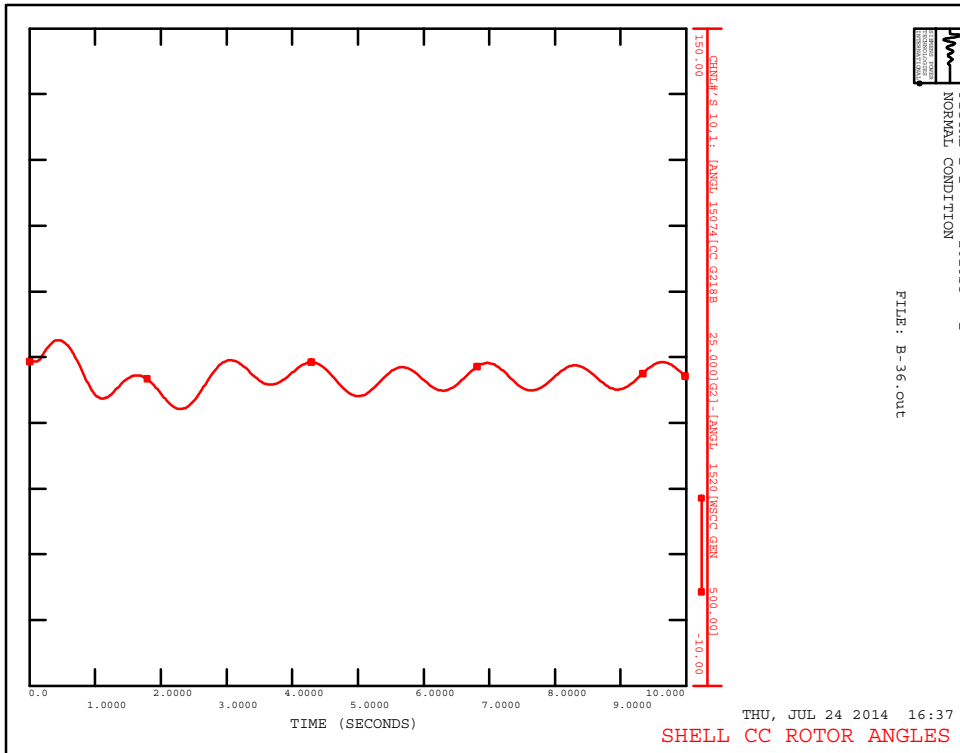


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-36.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC ROTOR ANGLES

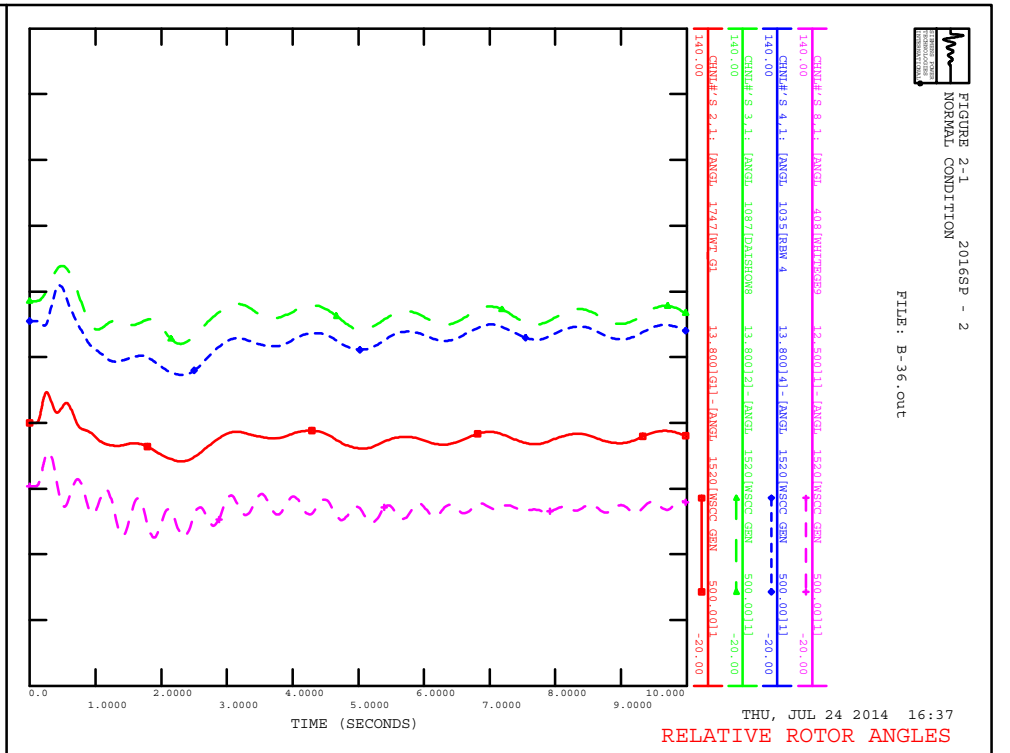


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-36.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
RELATIVE ROTOR ANGLES

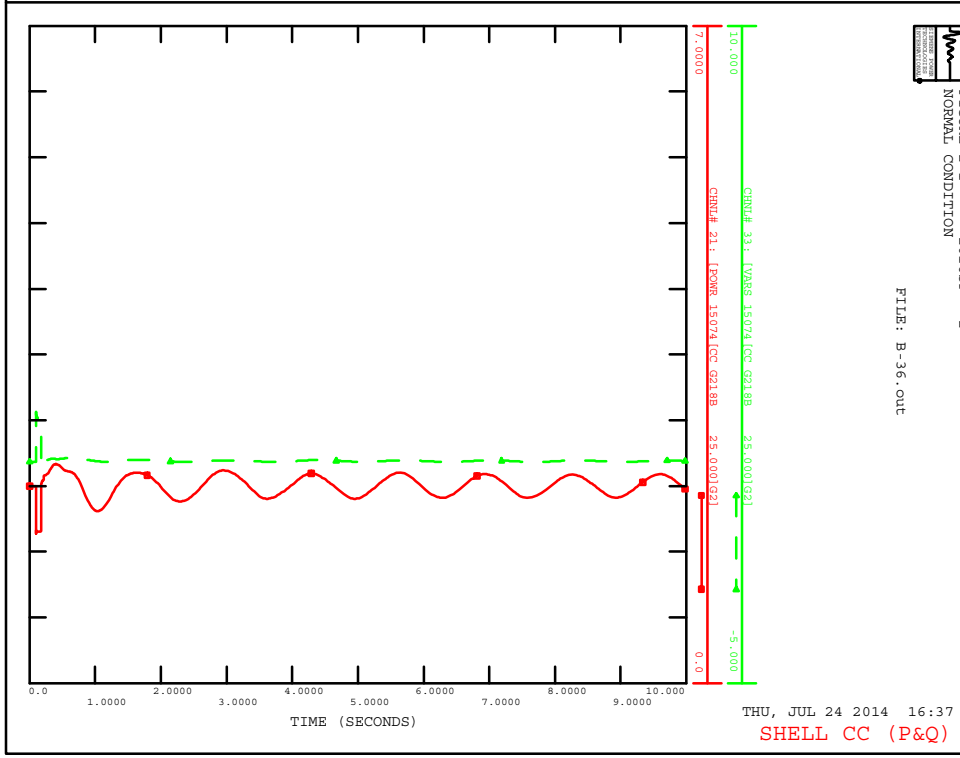


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-36.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
SHELL CC (P&Q)

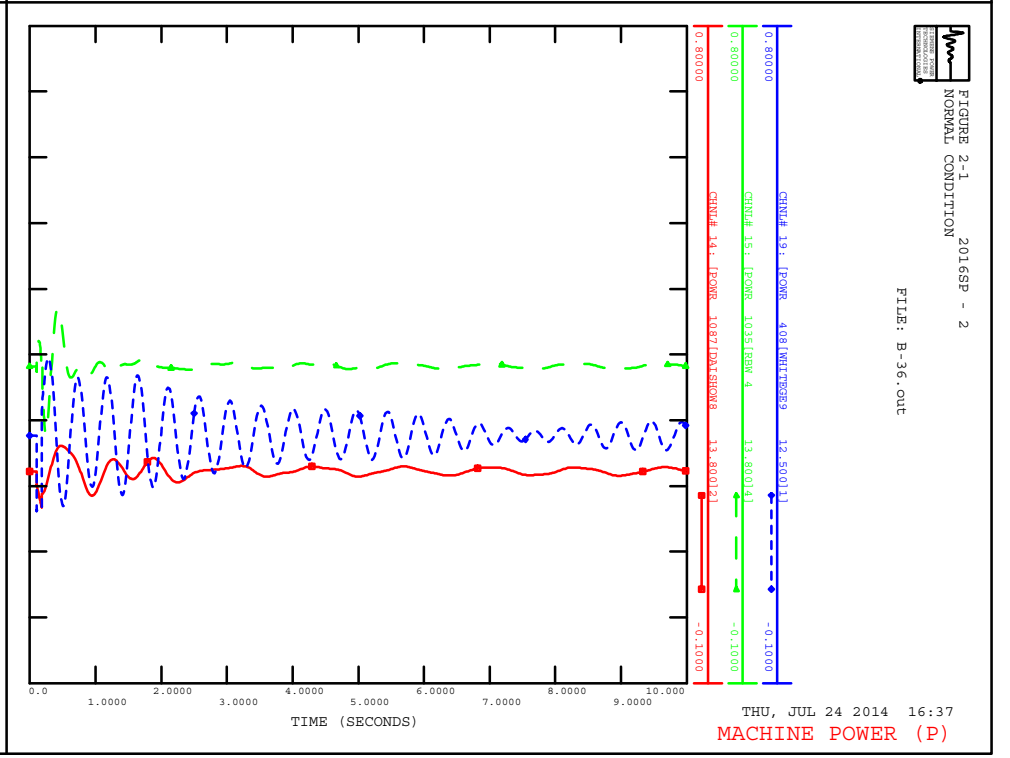


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-36.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (P)

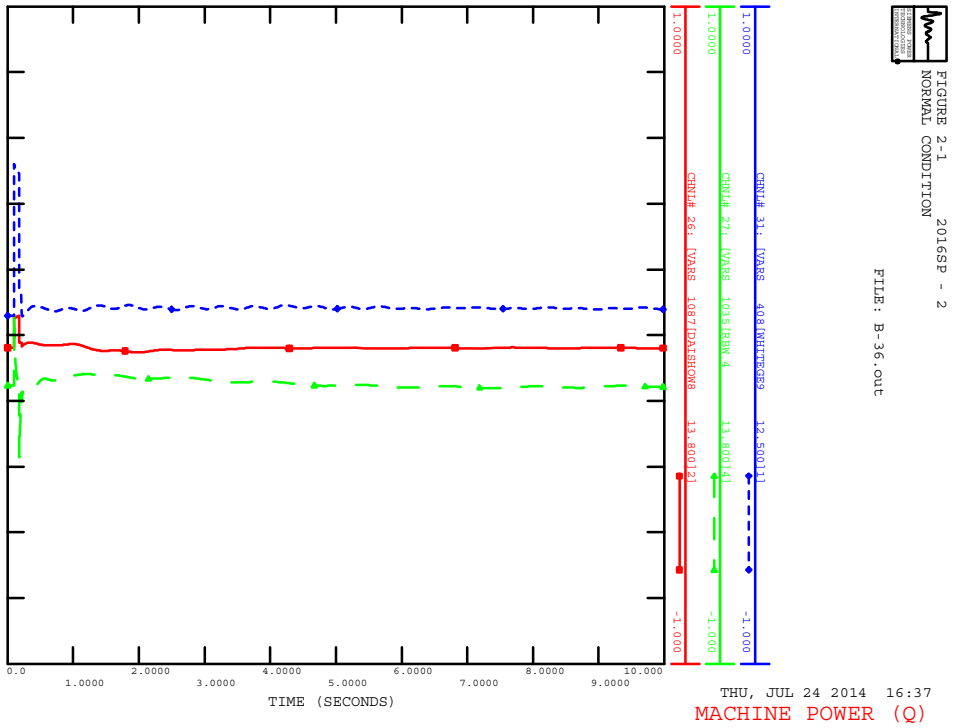


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-36.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
MACHINE POWER (Q)

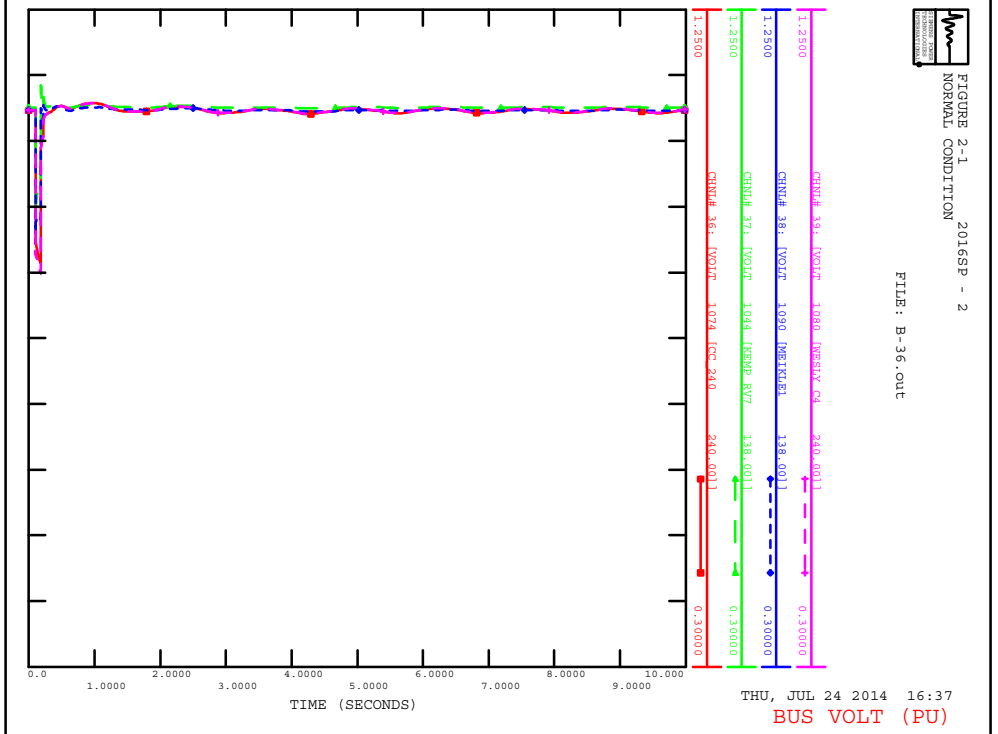


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-36.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

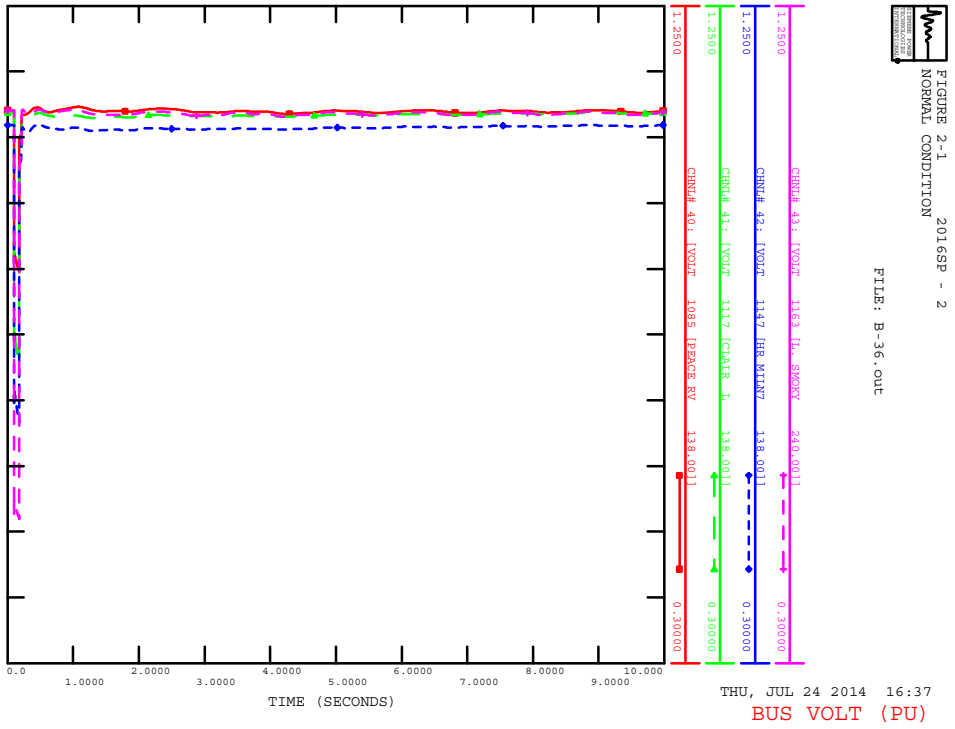


FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-36.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

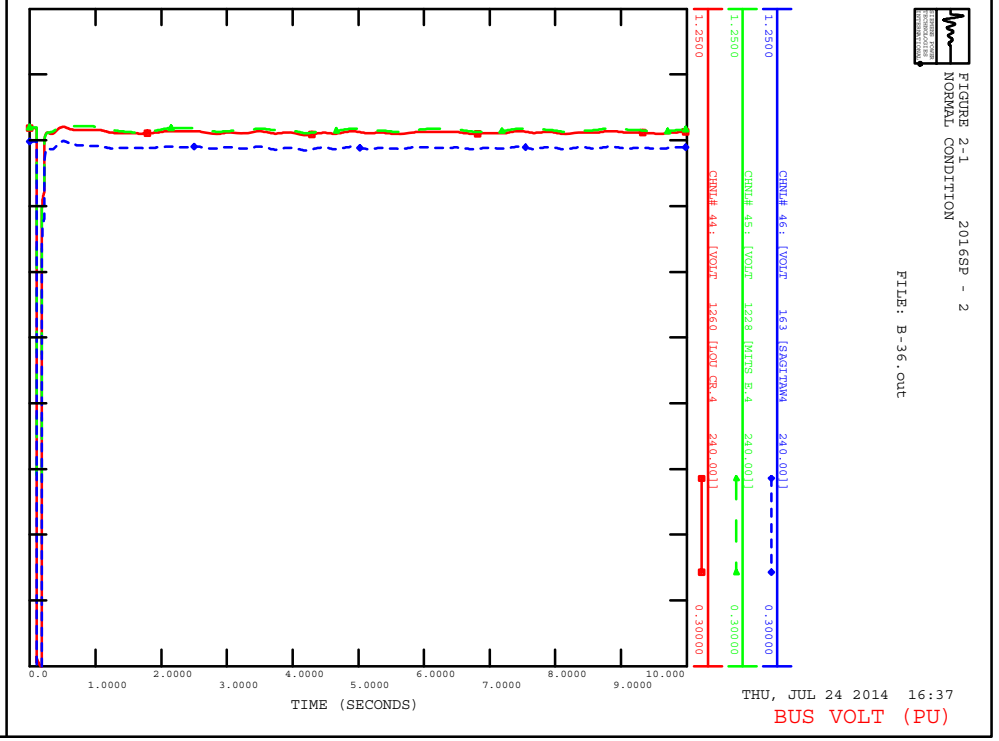
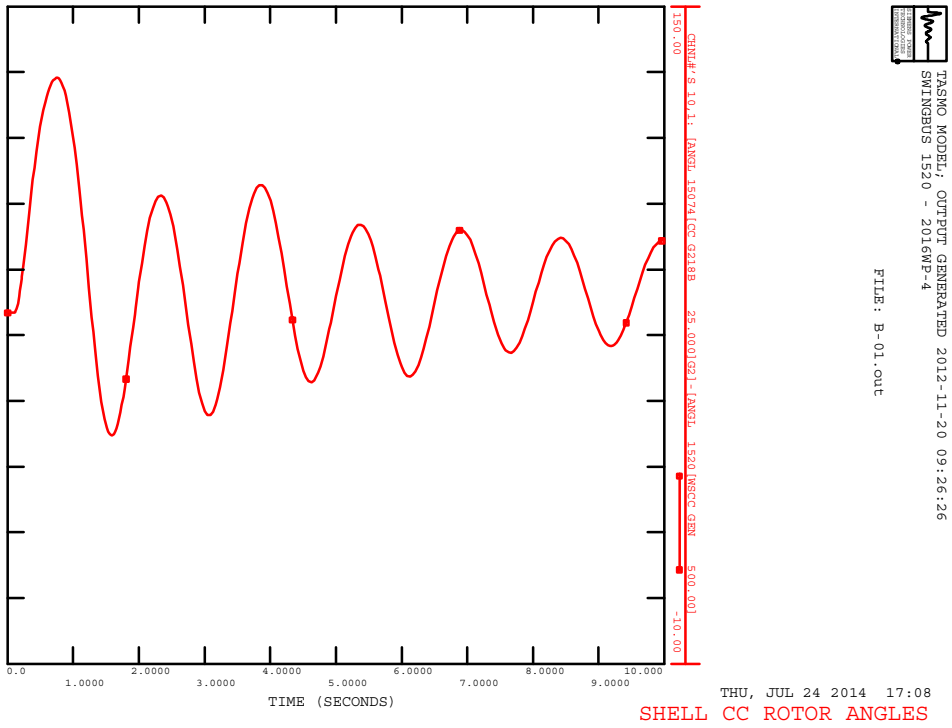
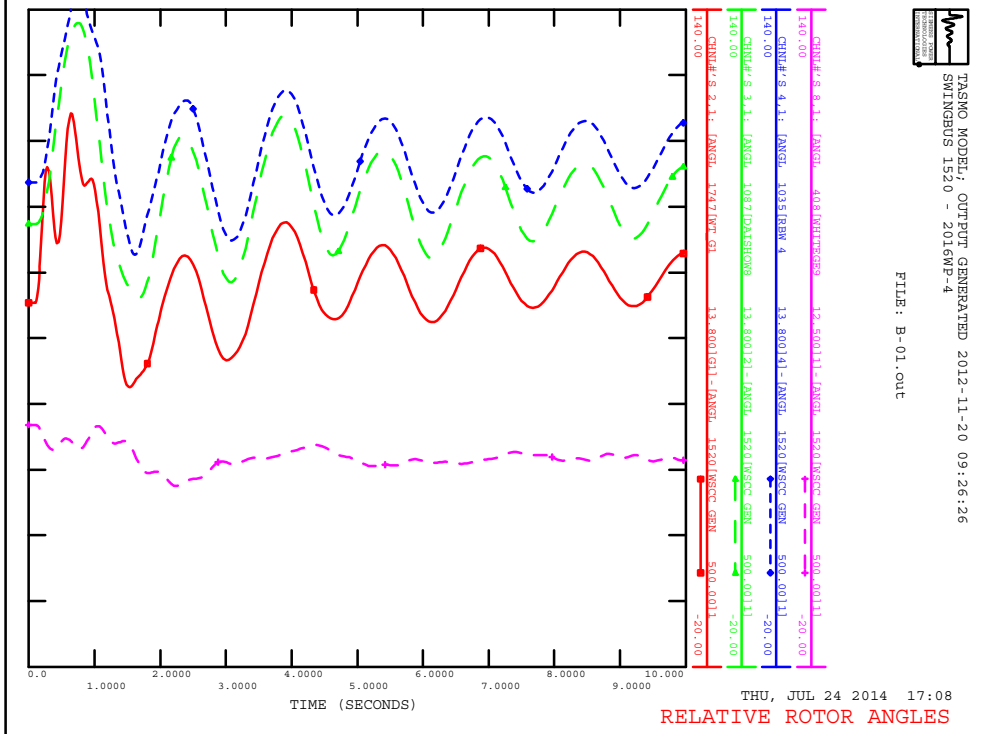
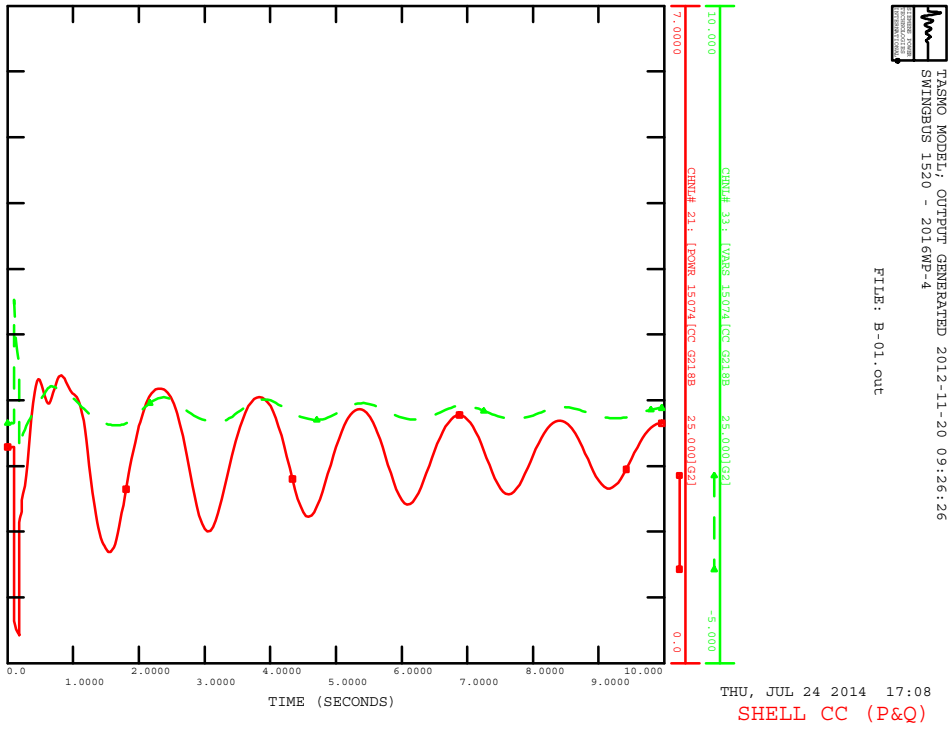


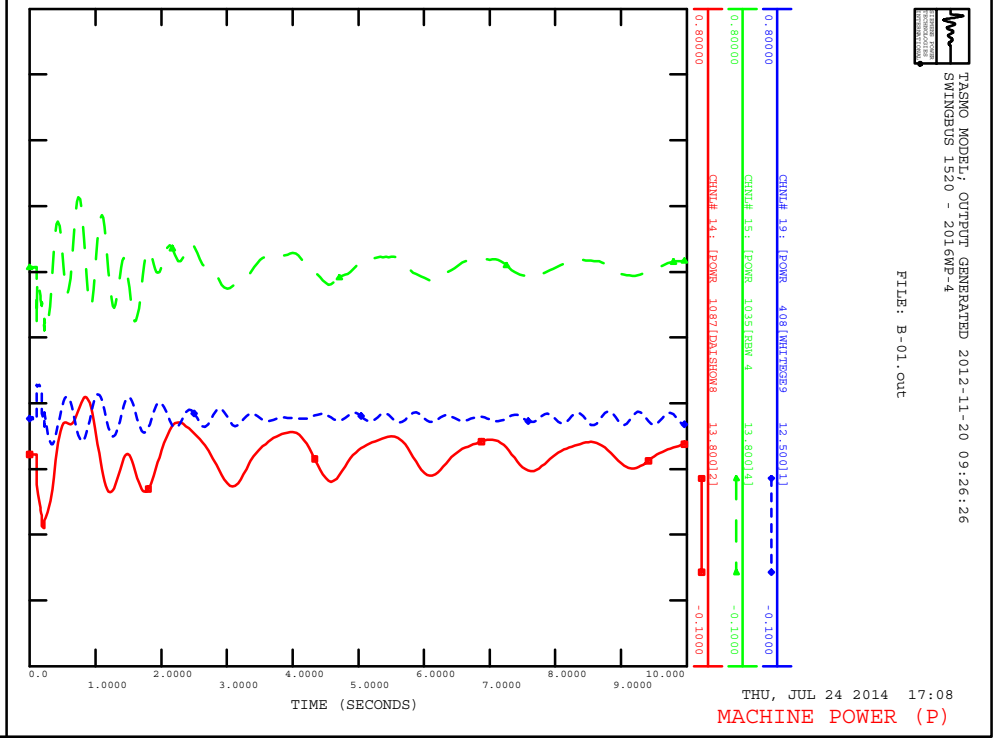
FIGURE 2-1
NORMAL CONDITION
2016SP - 2
FILE: B-36.out
TIME (SECONDS)
THU, JUL 24 2014 16:37
BUS VOLT (PU)

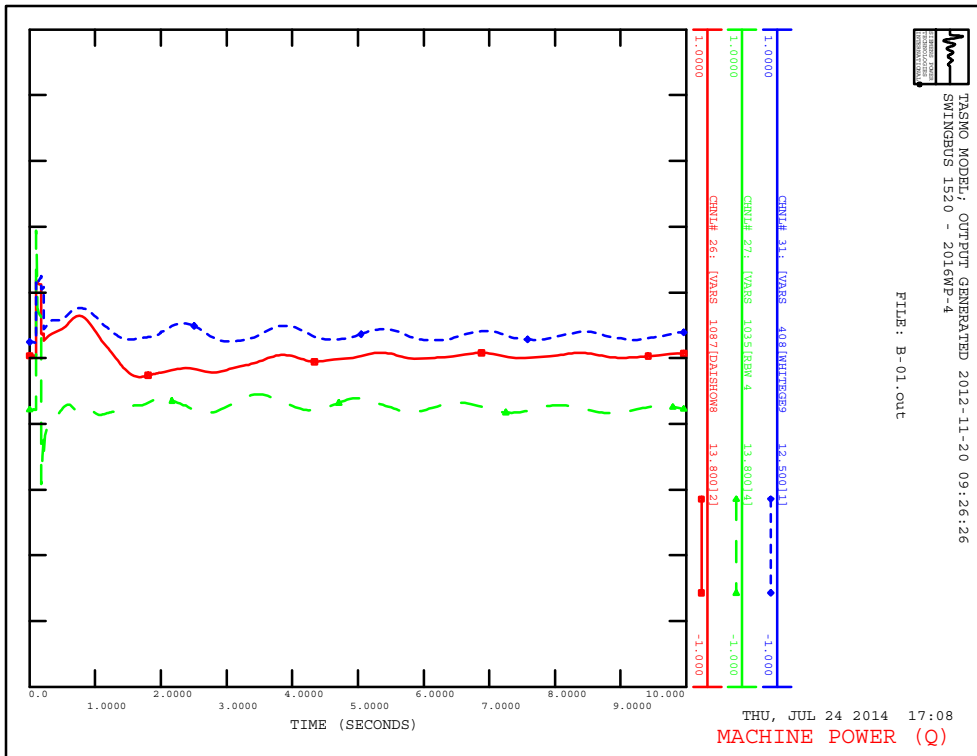
Transient Stability Plots
2016 Winter Peak (Case 9)

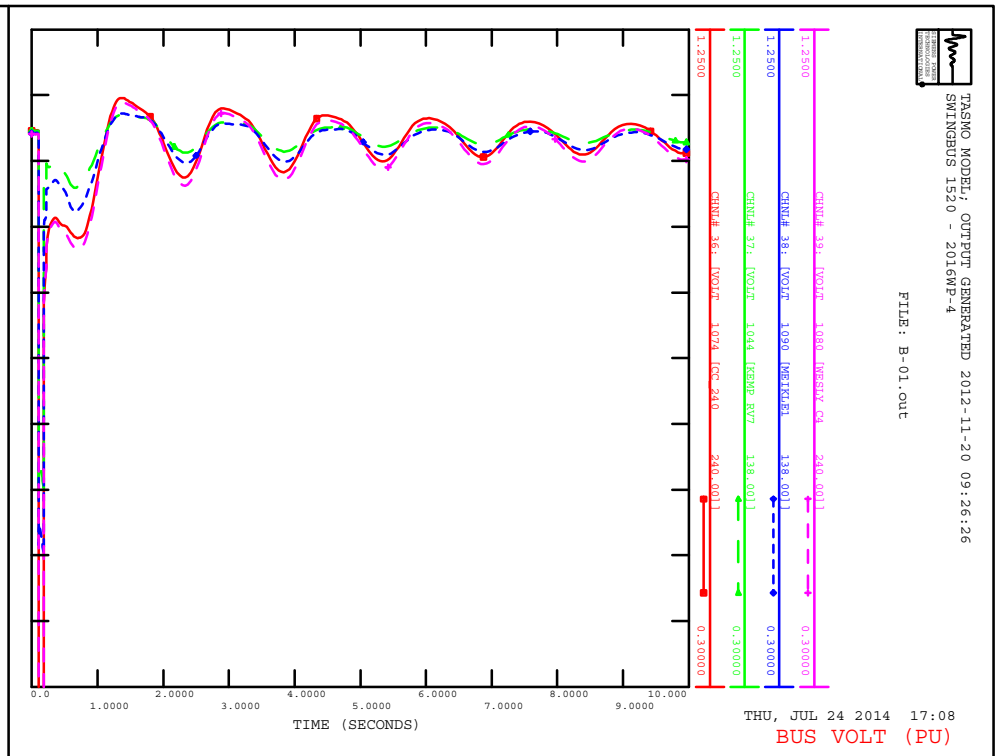

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-01.out
CHNU#'S 10,1: [ANGL 15074[CC G21BB 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
SHELL CC ROTOR ANGLES

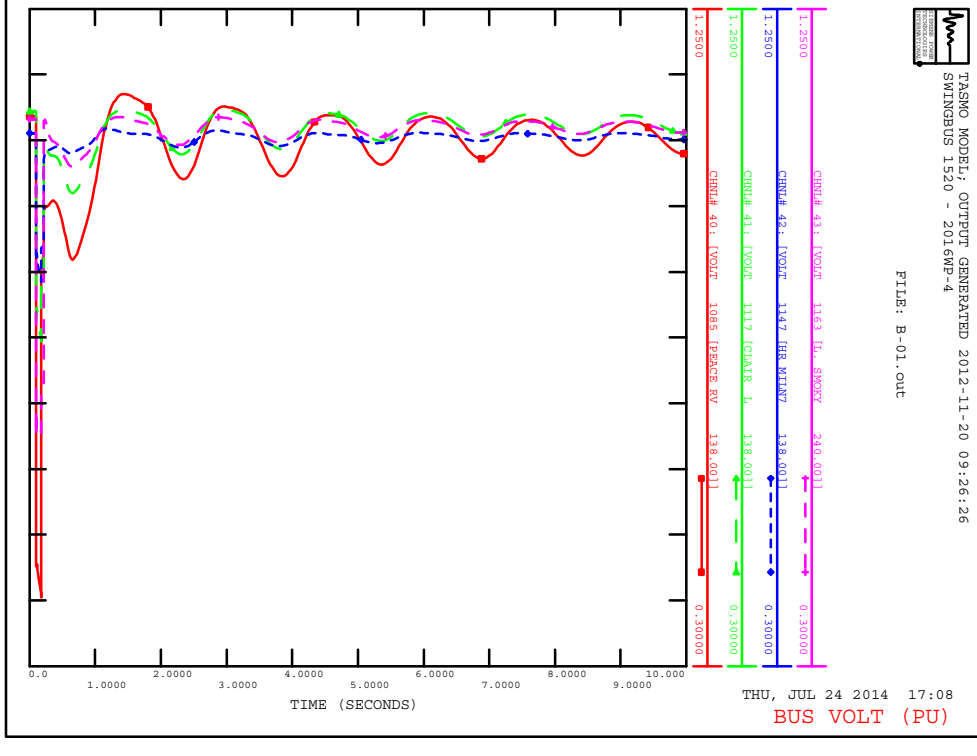

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-01.out
CHNU#'S 8,1: [ANGL 408[WHITESB9 12.500[1] [ANGL 1520[NSCC GEN 500.00[1]
CHNU#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00[1]
CHNU#'S 3,1: [ANGL 1087[DAISHON8 13.800[2] [ANGL 1520[NSCC GEN 500.00[1]
CHNU#'S 2,1: [ANGL 1747[WP1 G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00[1]
140.00
-20.00
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
RELATIVE ROTOR ANGLES

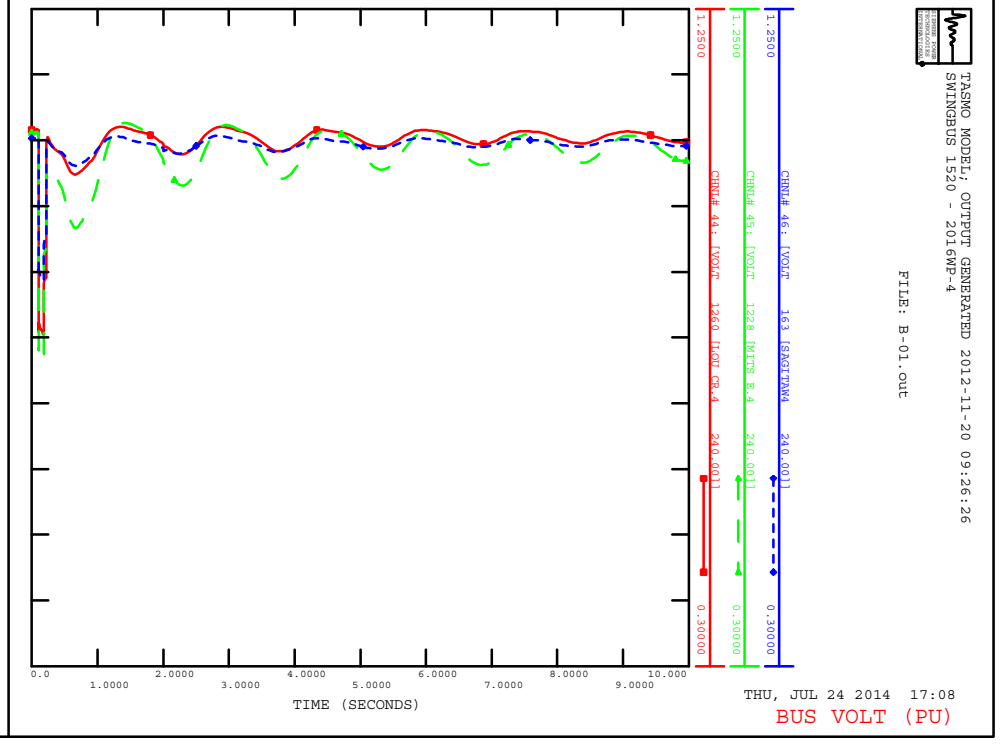

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-01.out
CHNU# 33: [VARS 15074 [CC G21BB 25.000[G2]
CHNU# 21: [POWR 15074[CC G21BB 25.000[G2]
10.000
-5.000
7.0000
0.0
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
SHELL CC (P&Q)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-01.out
CHNU# 19: [POWR 408[WHITESB9 12.500[1]
CHNU# 15: [POWR 1035[RBM 4 13.800[4]
CHNU# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
MACHINE POWER (P)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-01.out
THU, JUL 24 2014 17:08
MACHINE POWER (Q)
TIME (SECONDS)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-01.out
THU, JUL 24 2014 17:08
BUS VOLT (PU)
TIME (SECONDS)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-01.out
THU, JUL 24 2014 17:08
BUS VOLT (PU)
TIME (SECONDS)

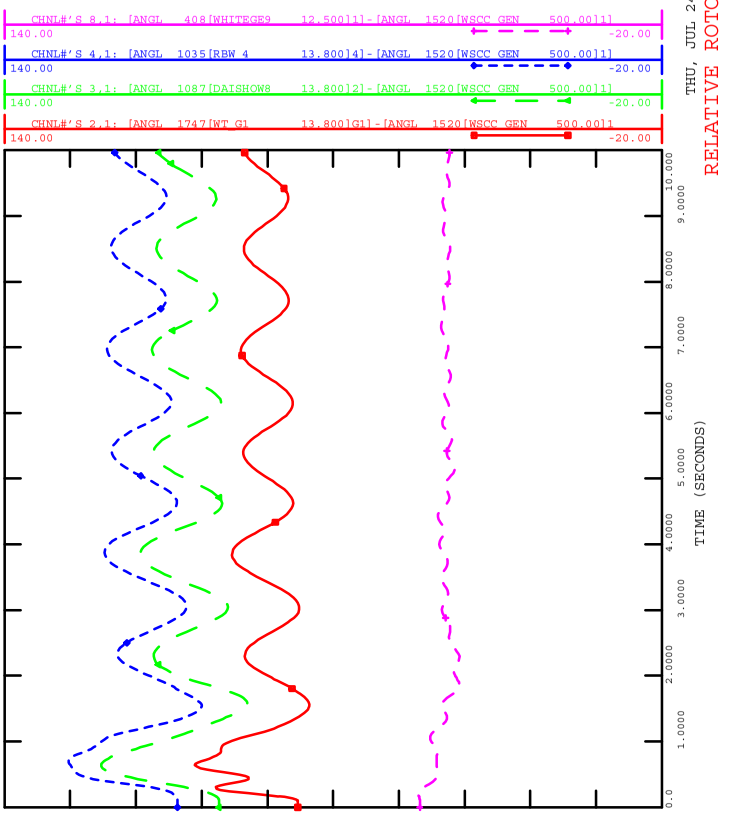

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-01.out
THU, JUL 24 2014 17:08
BUS VOLT (PU)
TIME (SECONDS)

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-02.out

THU, JUL 24 2014 17:08

RELATIVE ROTOR ANGLES

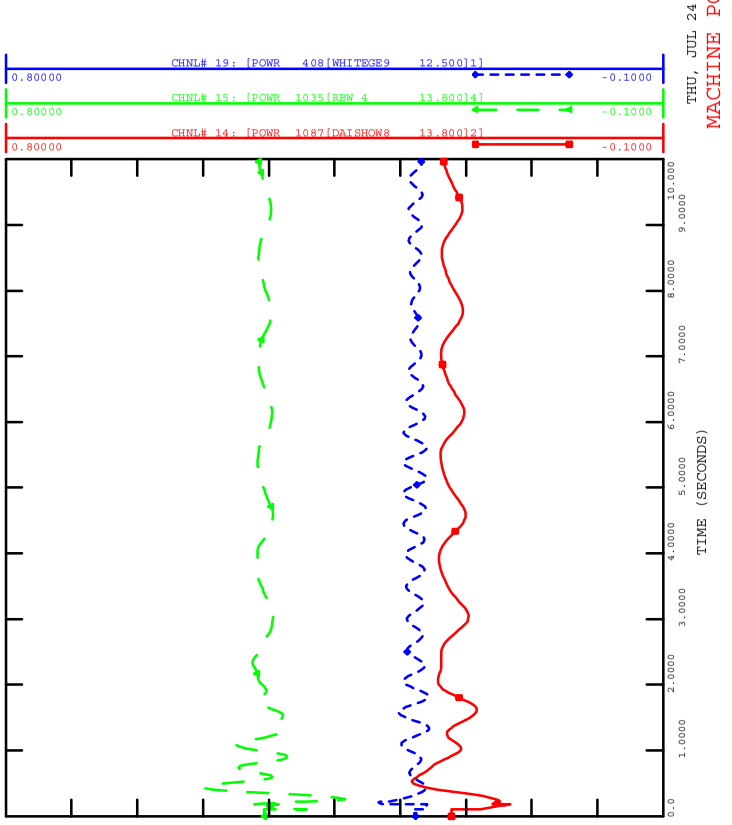


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-02.out

THU, JUL 24 2014 17:08

MACHINE POWER (P)

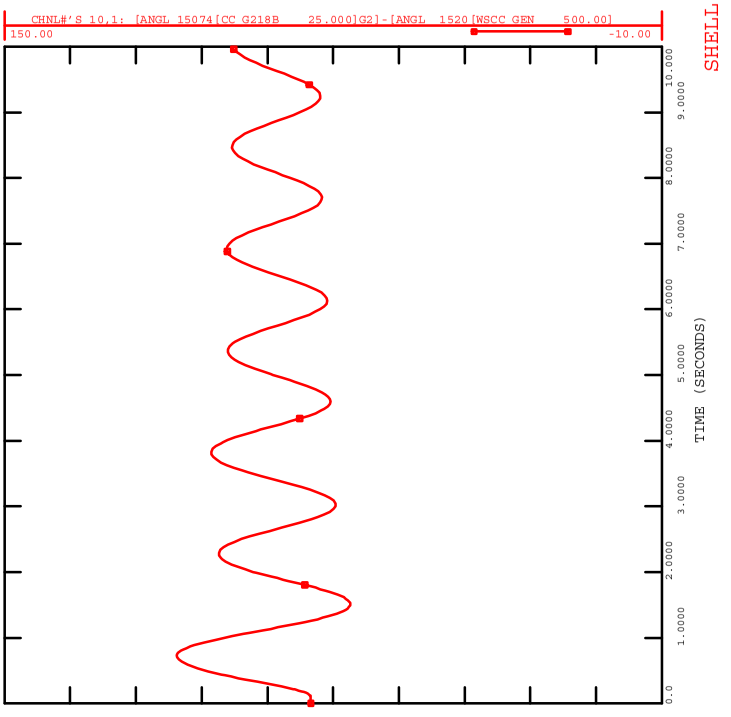


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-02.out

THU, JUL 24 2014 17:08

SHELL CC ROTOR ANGLES

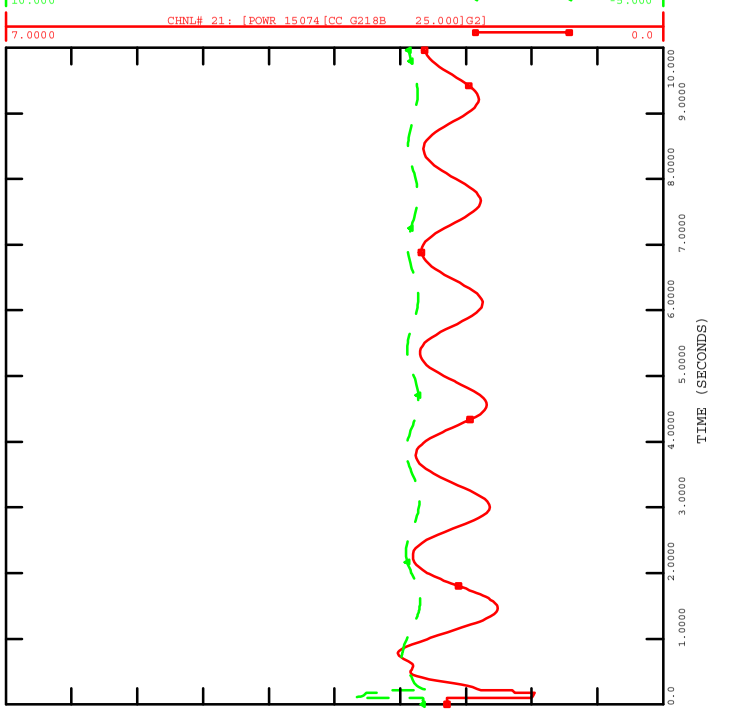


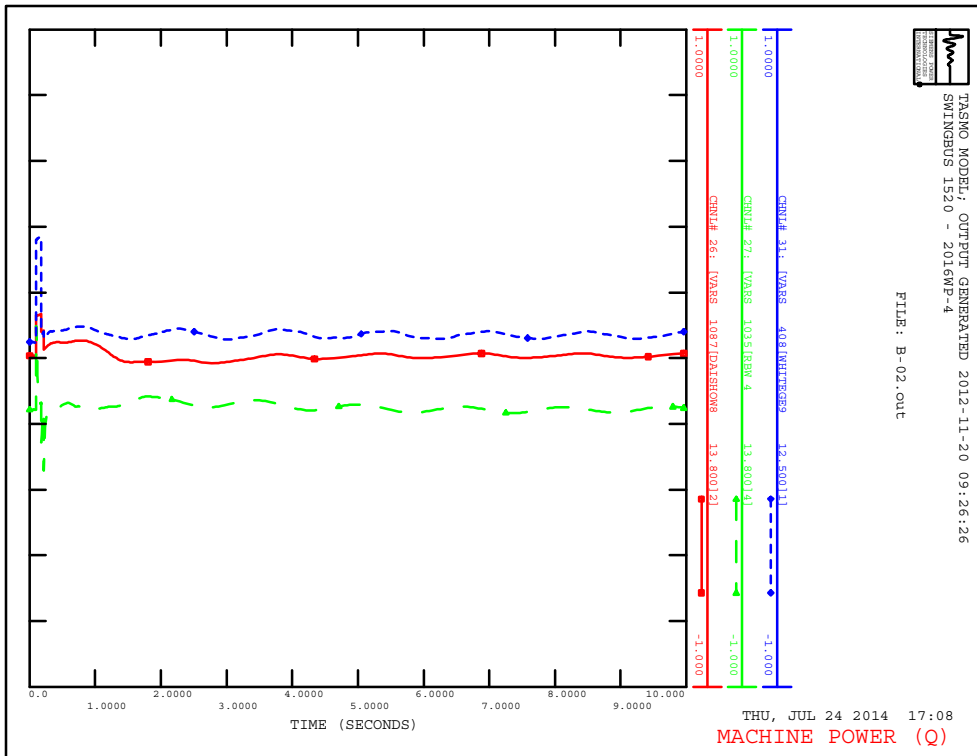
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

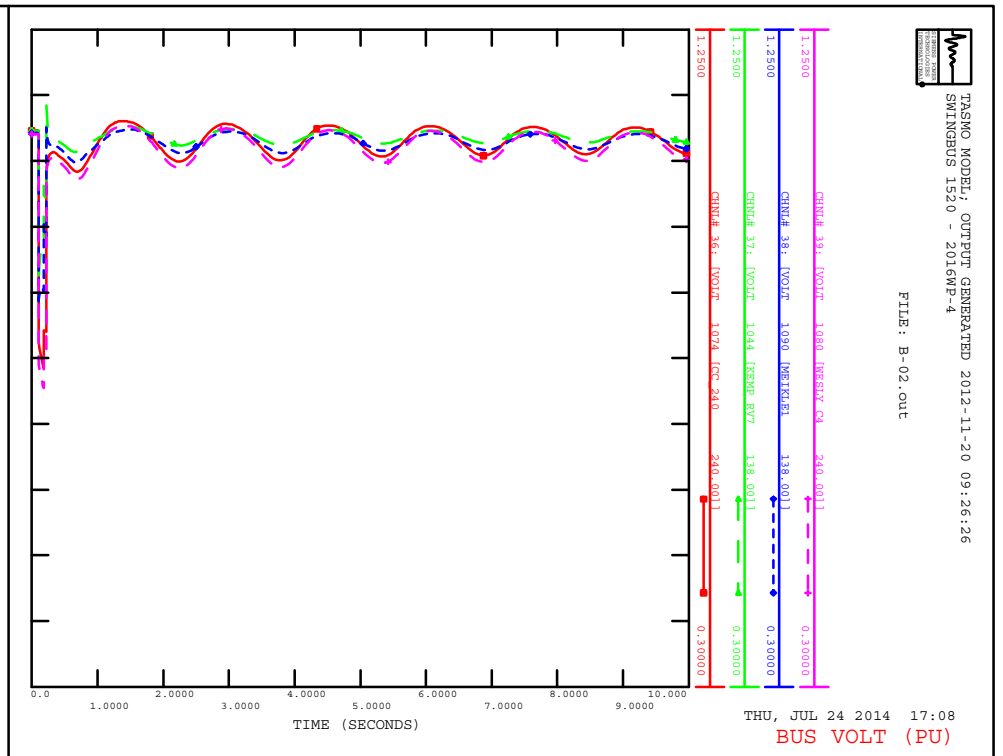
FILE: B-02.out

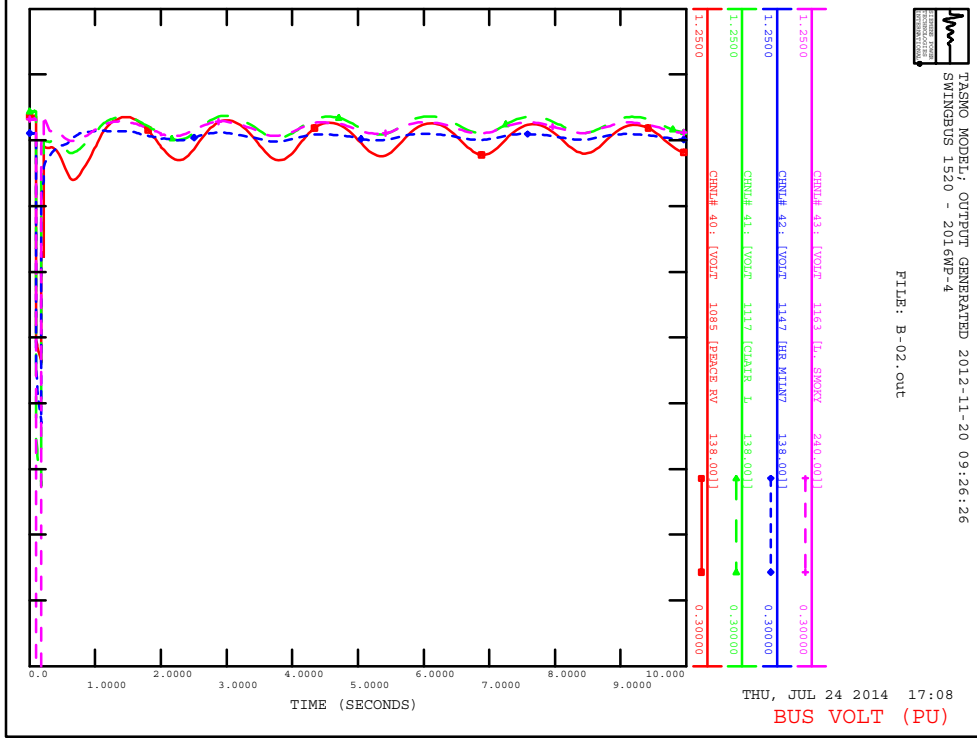
THU, JUL 24 2014 17:08

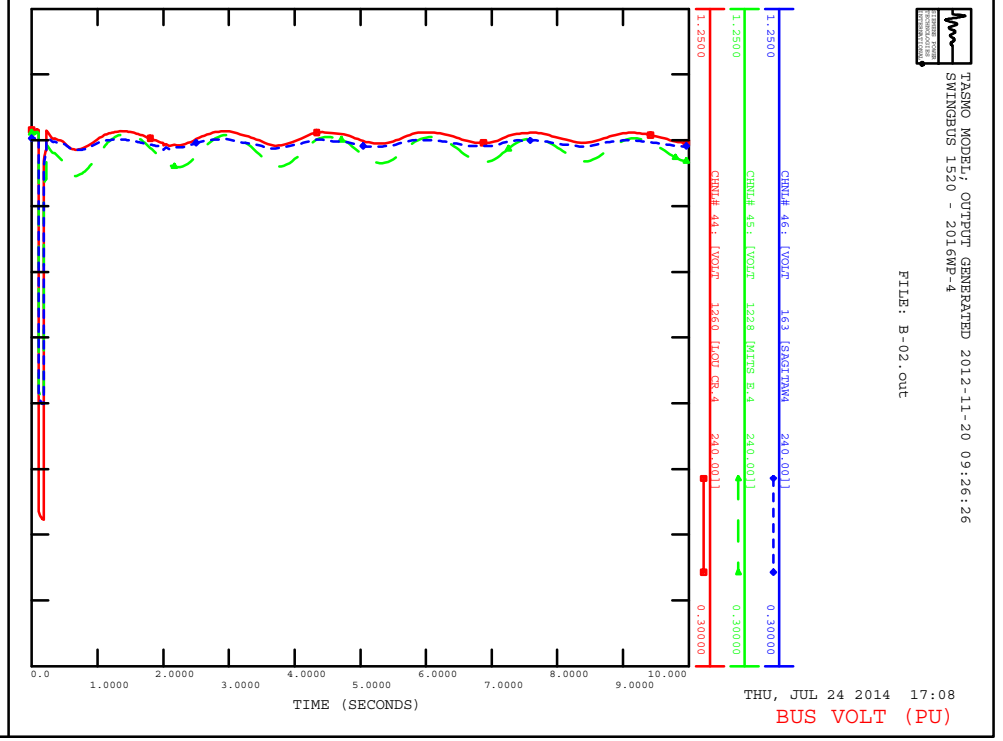
SHELL CC (P&Q)

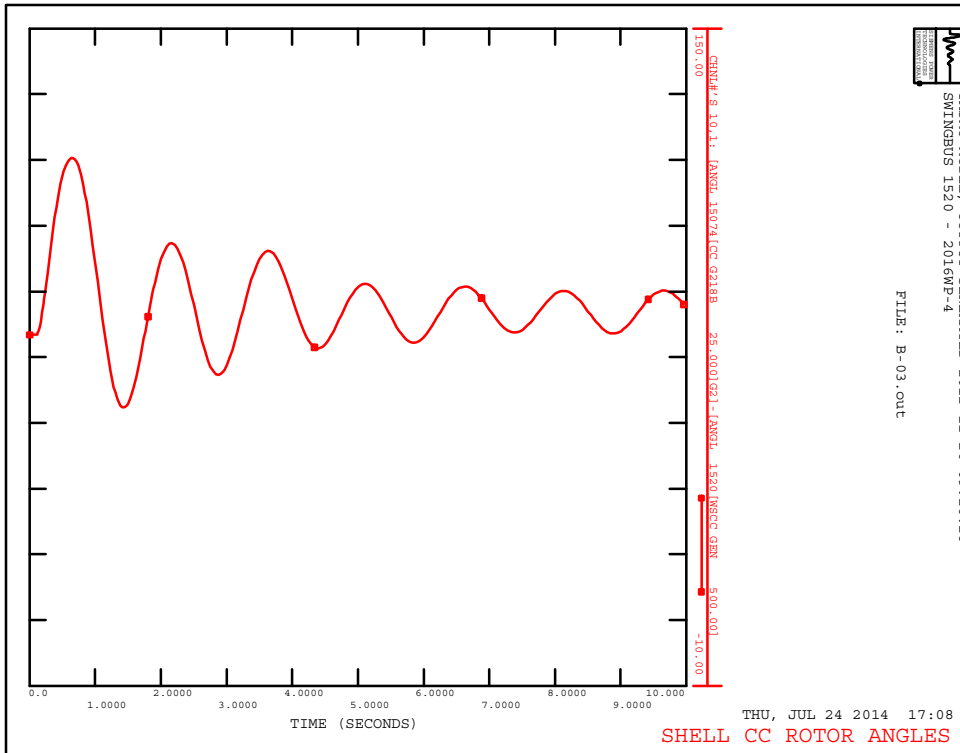


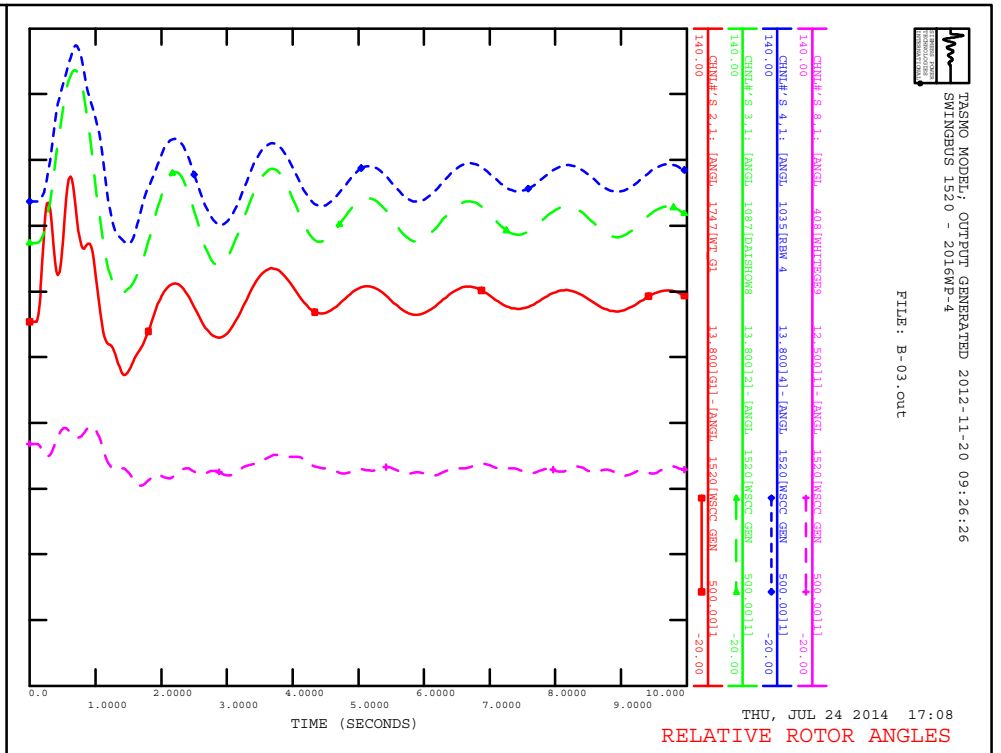

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-02.out
THU, JUL 24 2014 17:08
MACHINE POWER (Q)
TIME (SECONDS)

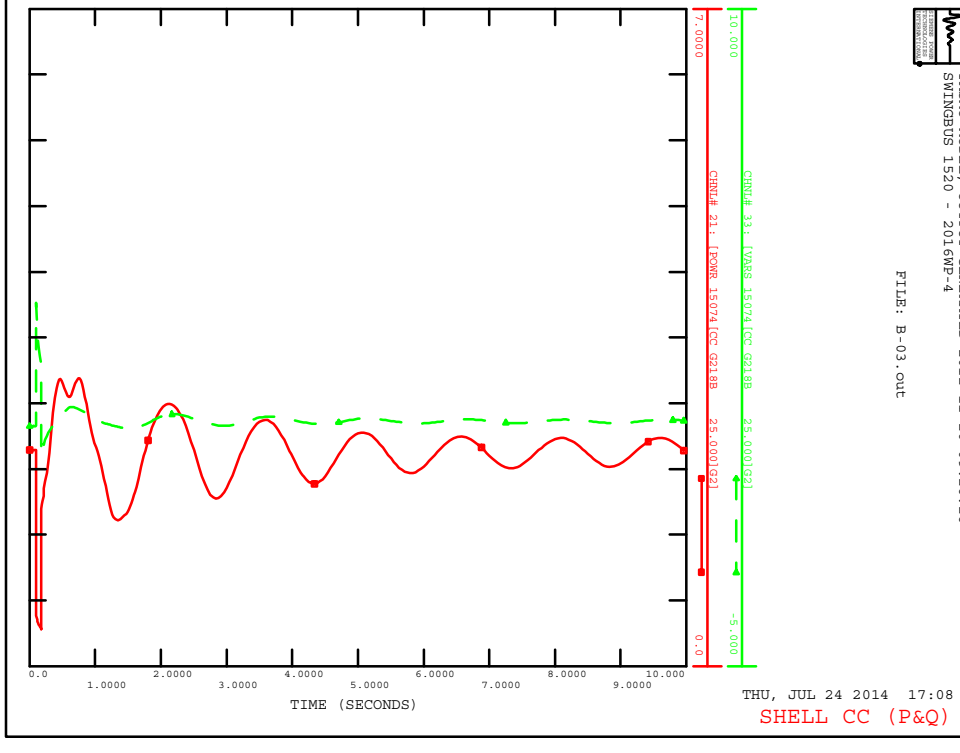

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-02.out
THU, JUL 24 2014 17:08
BUS VOLT (PU)
TIME (SECONDS)

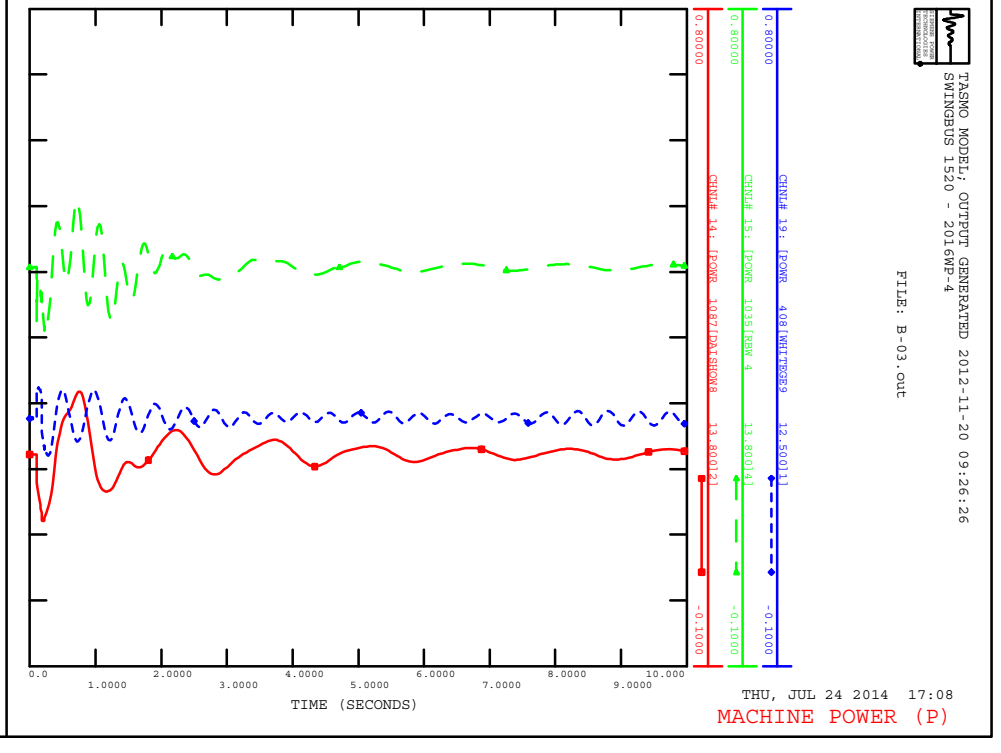

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-02.out
THU, JUL 24 2014 17:08
BUS VOLT (PU)
TIME (SECONDS)

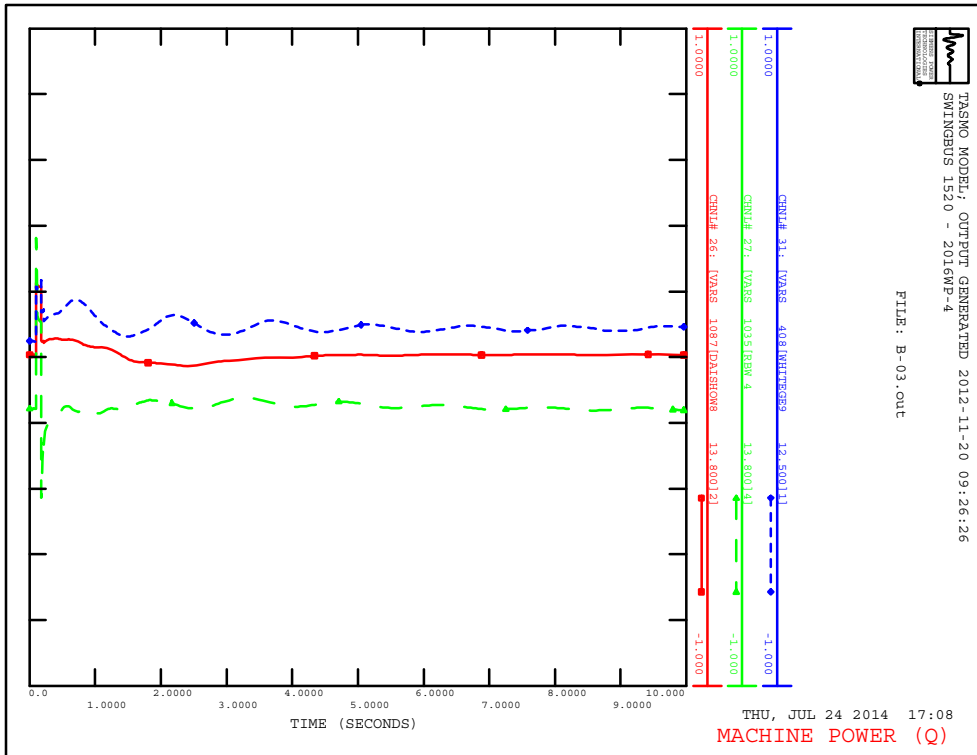

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-02.out
THU, JUL 24 2014 17:08
BUS VOLT (PU)
TIME (SECONDS)

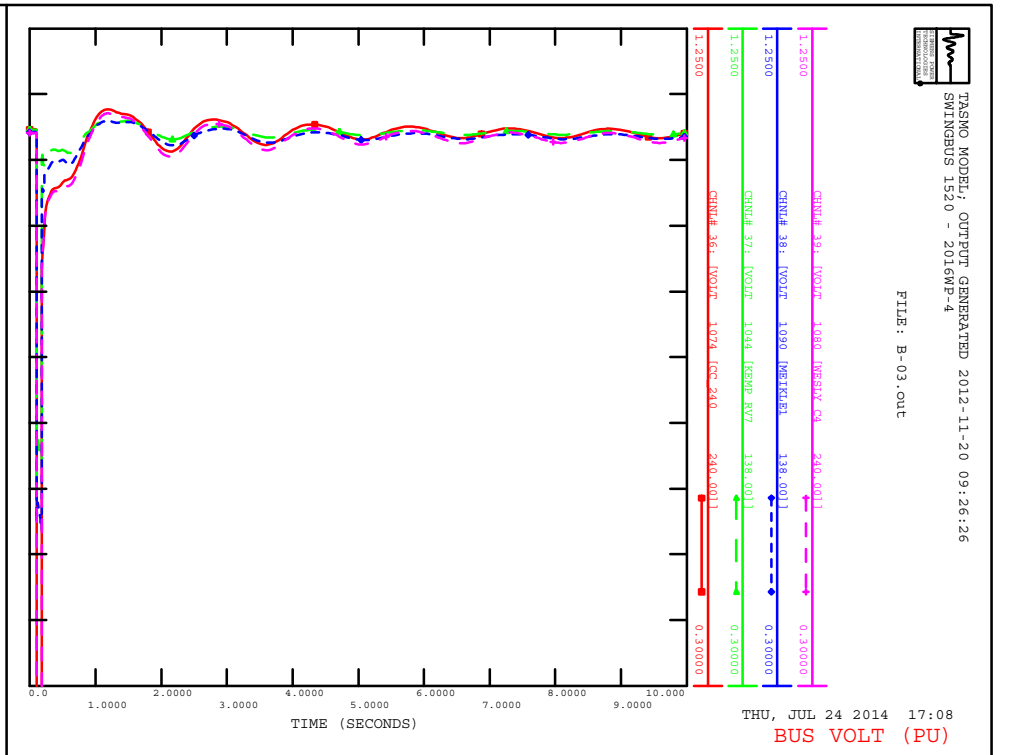

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-03.out
CHNU#'S 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
-50.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
SHELL CC ROTOR ANGLES

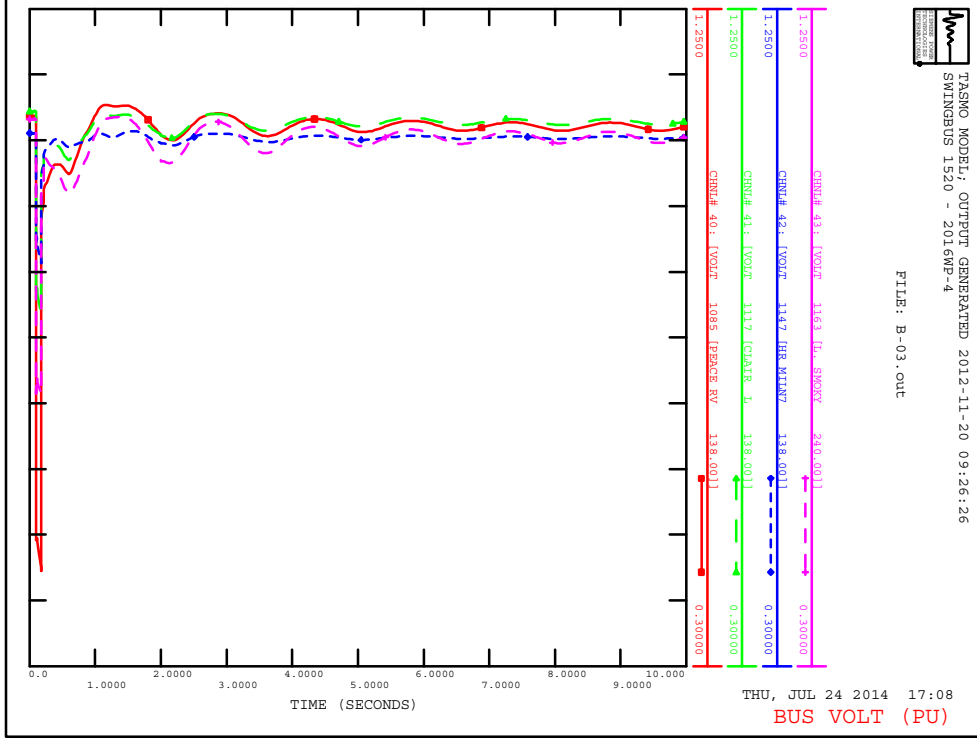

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-03.out
CHNU#'S 8,1: [ANGL 408[WHITESB9 12.500[1] [ANGL 1520[NSCC GEN 500.00[1]
CHNU#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00[1]
CHNU#'S 3,1: [ANGL 1087[DAISHOW8 13.800[2] [ANGL 1520[NSCC GEN 500.00[1]
CHNU#'S 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00[1]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
RELATIVE ROTOR ANGLES

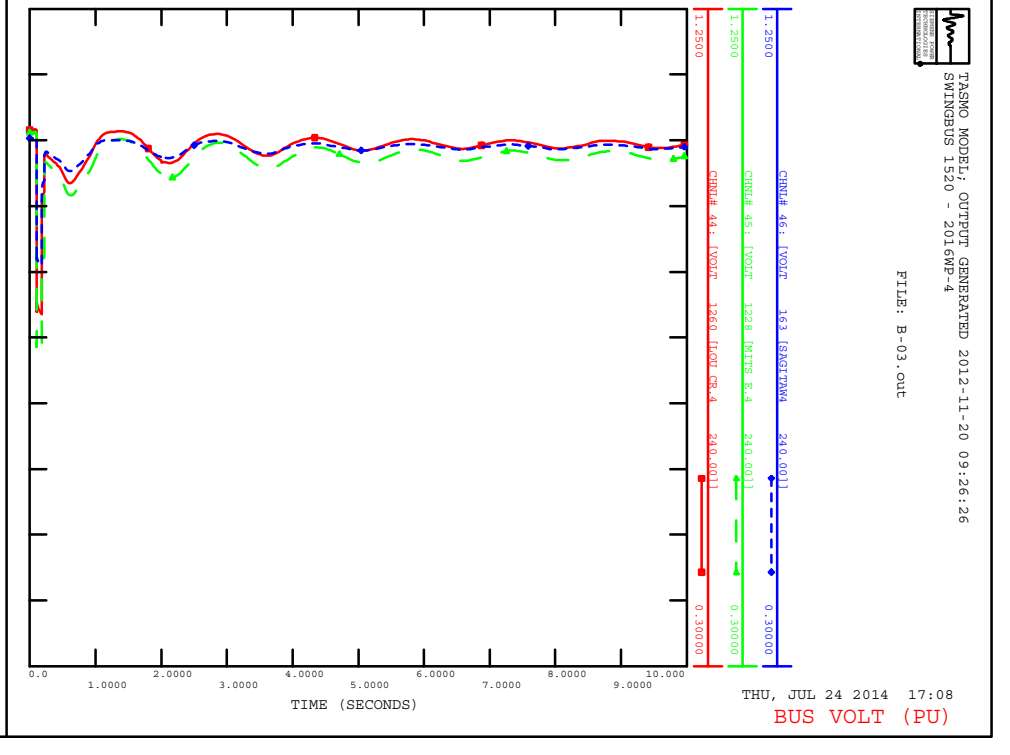

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-03.out
CHNU# 21: [POWR 15074[CC G218B 25.000[G2]
CHNU# 33: [VARS 15074[CC G218B 25.000[G2]
7.0000
10.000
0.0
-5.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
SHELL CC (P&Q)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-03.out
CHNU# 19: [POWR 408[WHITESB9 12.500[1]
CHNU# 15: [POWR 1035[RBM 4 13.800[4]
CHNU# 14: [POWR 1087[DAISHOW8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
MACHINE POWER (P)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-03.out
CHNI# 31; [VARS 408 [WHITEGB9 12.500]]
CHNI# 27; [VARS 1035 [RBW 4 13.800]]
CHNI# 26; [VARS 1087 [DAISHOWB 13.800]]
THU, JUL 24 2014 17:08
TIME (SECONDS)
MACHINE POWER (Q)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-03.out
CHNI# 39; [VOLT 1080 [MESIK C4 240.00]]
CHNI# 38; [VOLT 1090 [MESIKLE1 138.00]]
CHNI# 37; [VOLT 1044 [KEMP RV7 138.00]]
CHNI# 36; [VOLT 1074 [CC 240 240.00]]
THU, JUL 24 2014 17:08
TIME (SECONDS)
BUS VOLT (PU)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-03.out
CHNI# 43; [VOLT 1163 [T. SMOKY 240.00]]
CHNI# 42; [VOLT 1142 [HR MIAN7 138.00]]
CHNI# 41; [VOLT 1117 [CHAIR L 138.00]]
CHNI# 40; [VOLT 1085 [PEACE RV 138.00]]
THU, JUL 24 2014 17:08
TIME (SECONDS)
BUS VOLT (PU)

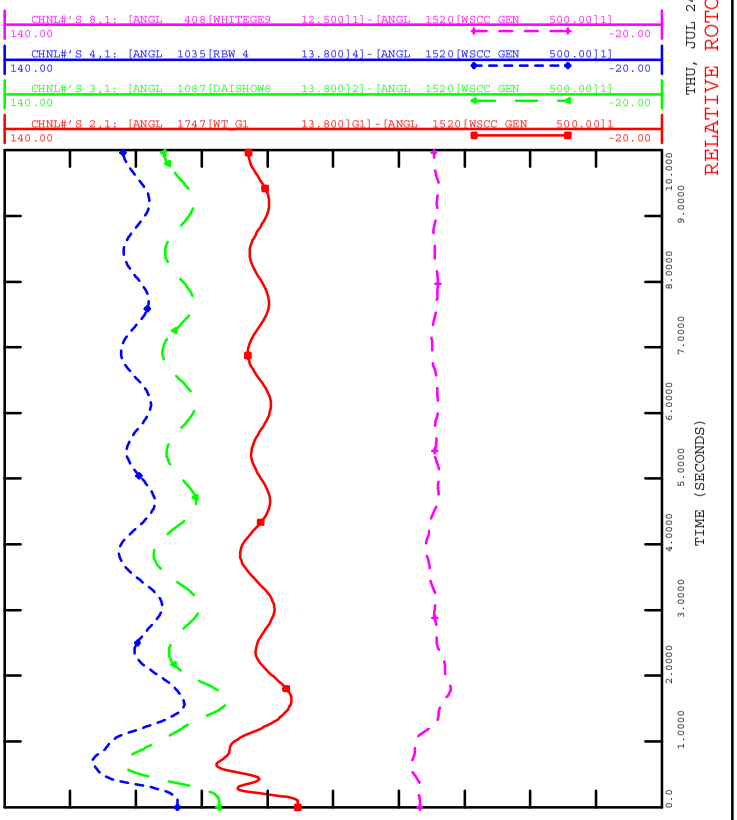

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-03.out
CHNI# 46; [VOLT 163 [SAGITAW4 240.00]]
CHNI# 45; [VOLT 1228 [MTS B-4 240.00]]
CHNI# 44; [VOLT 1260 [FOU CR-4 240.00]]
THU, JUL 24 2014 17:08
TIME (SECONDS)
BUS VOLT (PU)

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-04.out

THU, JUL 24 2014 17:08

RELATIVE ROTOR ANGLES

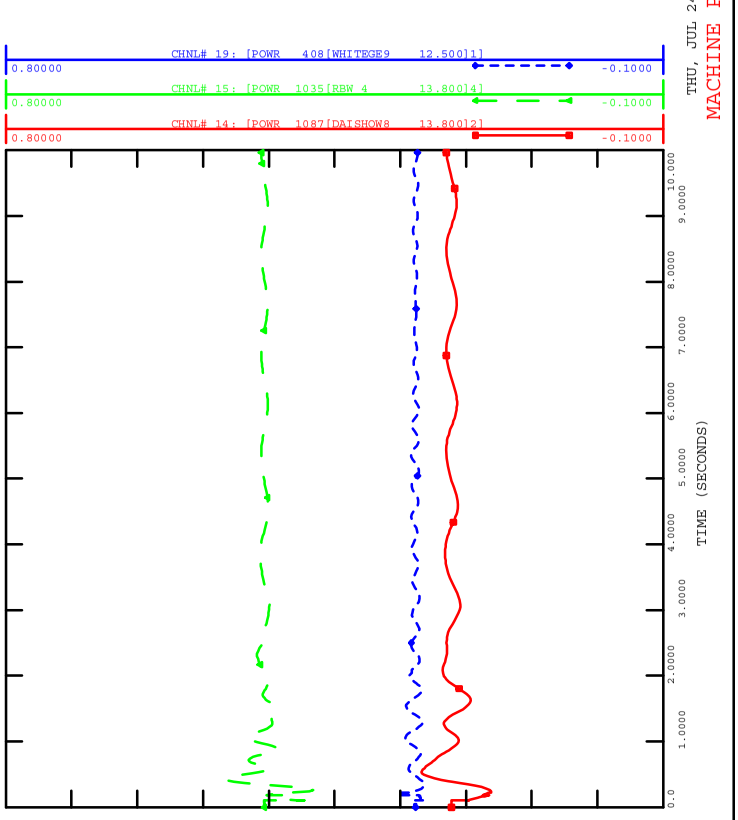


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-04.out

THU, JUL 24 2014 17:08

MACHINE POWER (P)

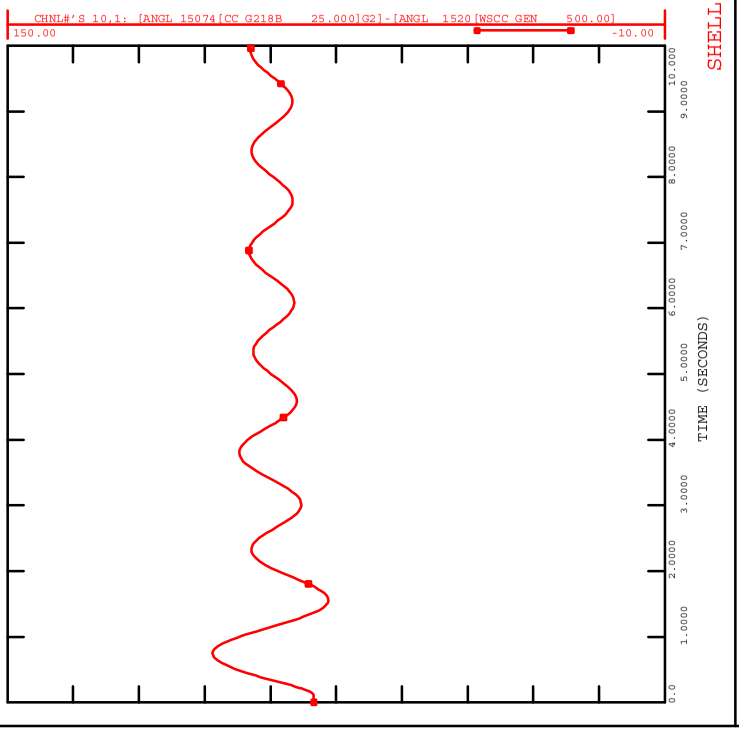


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-04.out

THU, JUL 24 2014 17:08

SHELL CC ROTOR ANGLES

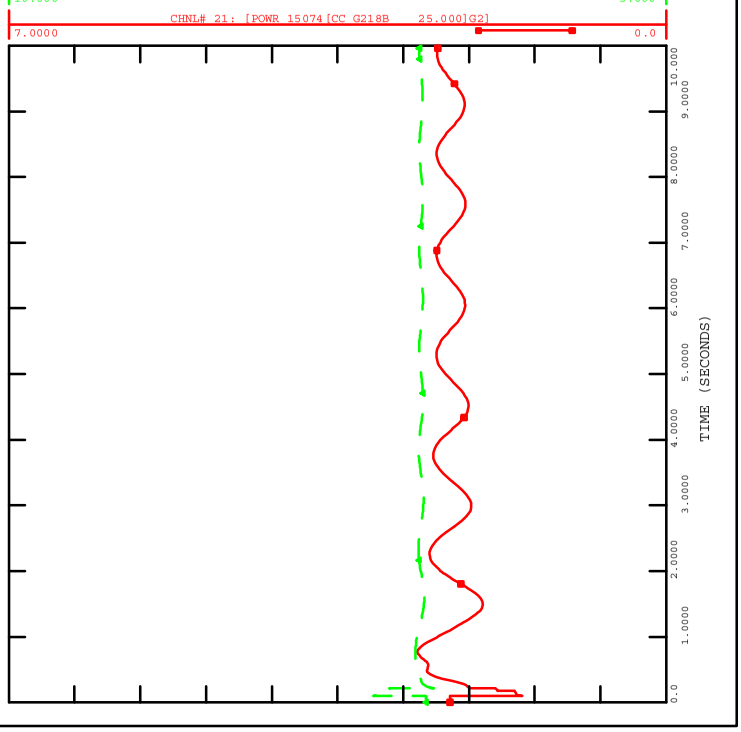


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-04.out

THU, JUL 24 2014 17:08

SHELL CC (P&Q)



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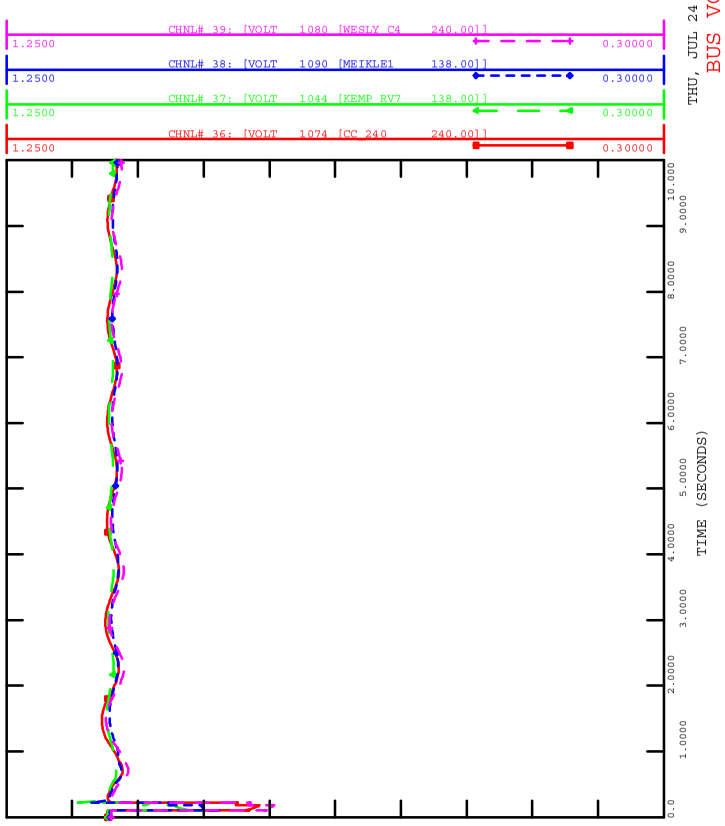
SWINGBUS 1520 - 2016WP-4

FILE: B-04.out

THU, JUL 24 2014 17:08



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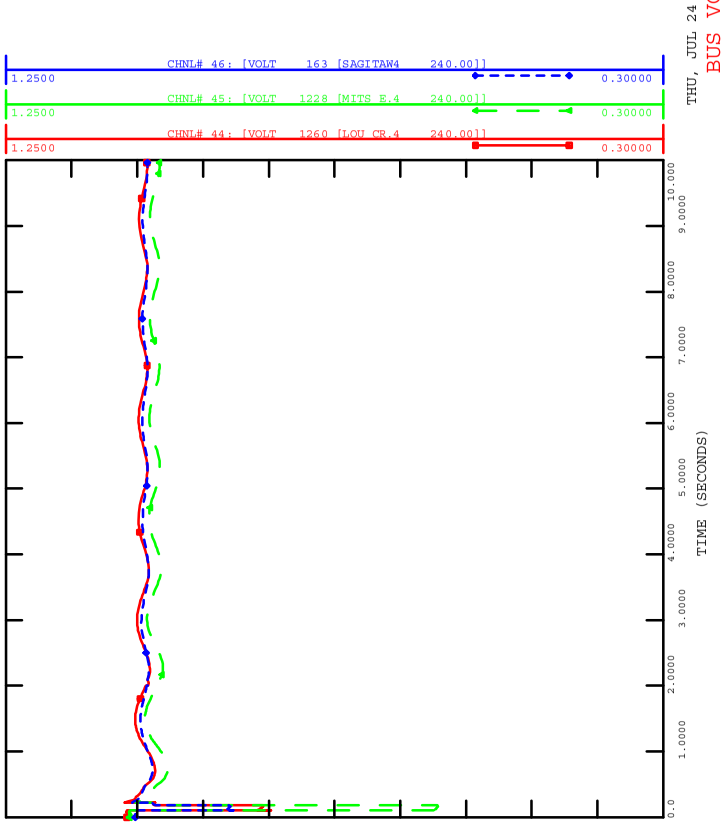
SWINGBUS 1520 - 2016WP-4

FILE: B-04.out

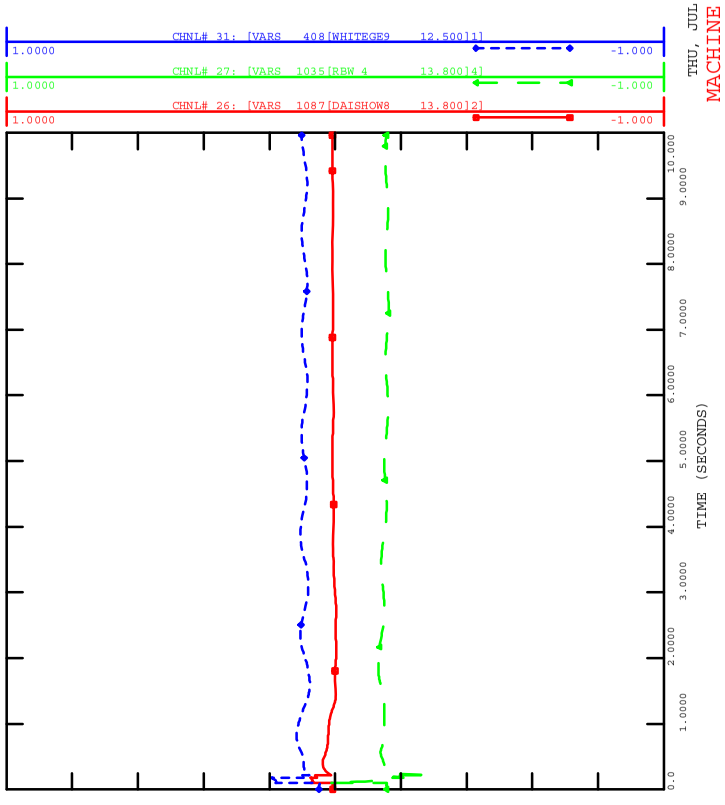
THU, JUL 24 2014 17:08



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-04.out

THU, JUL 24 2014 17:08



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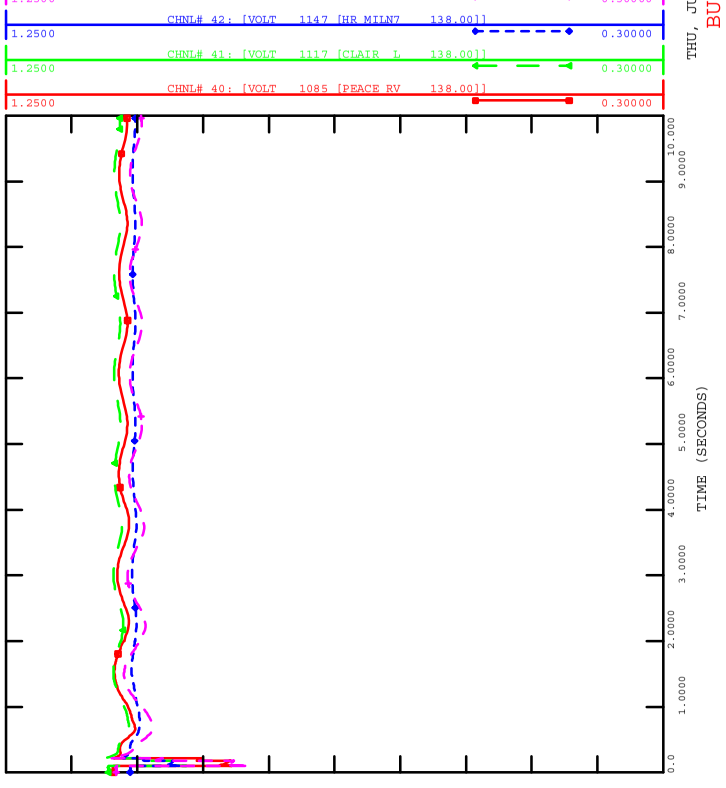
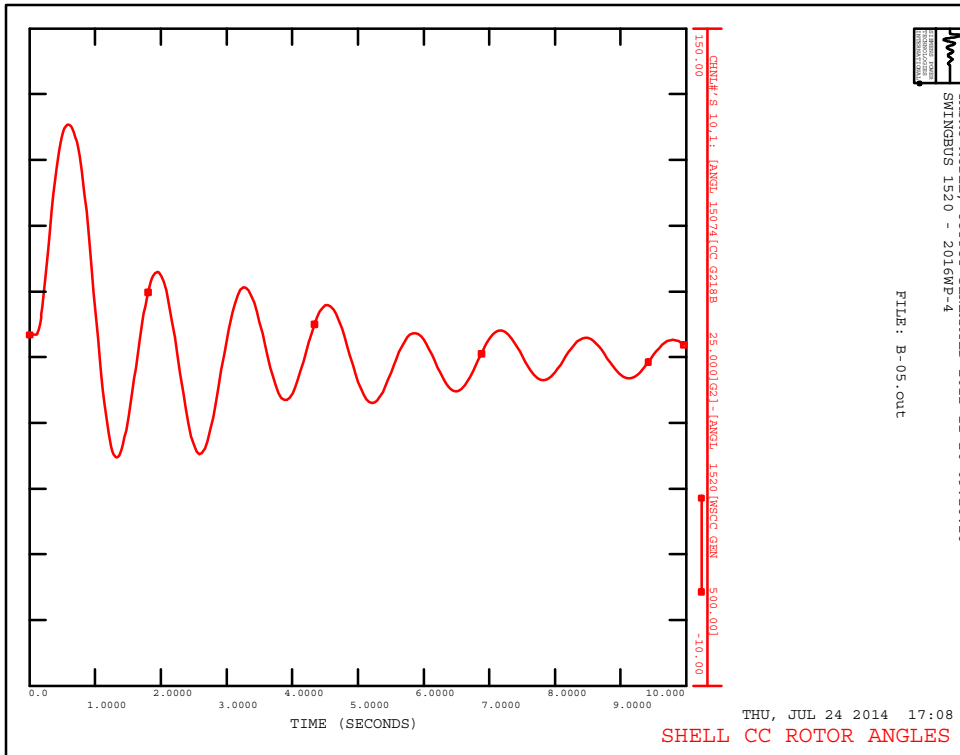
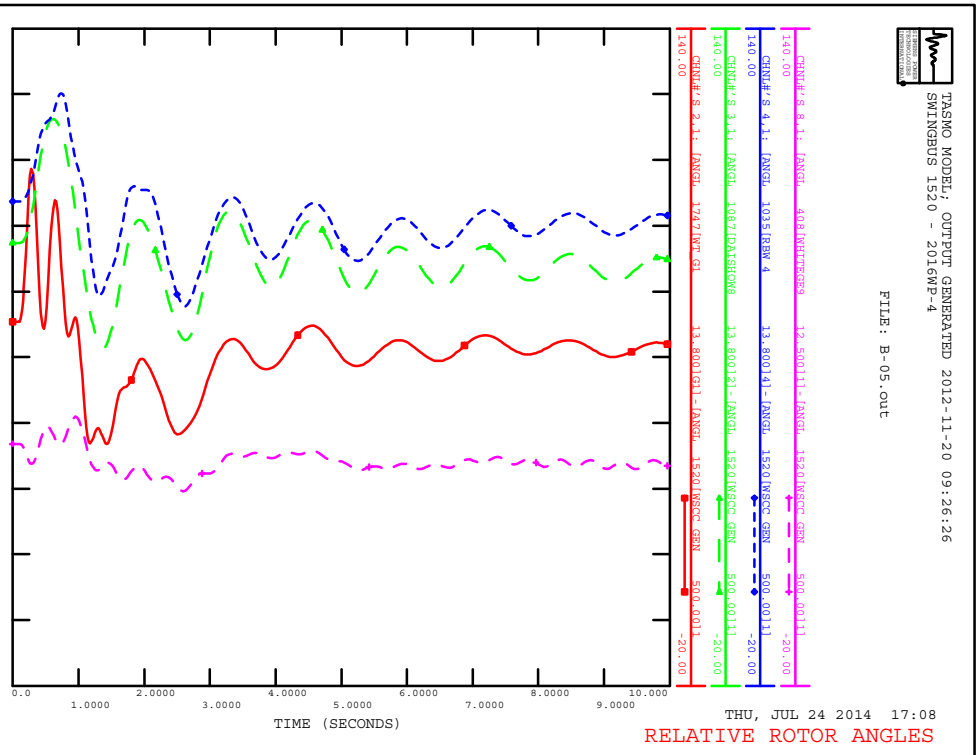
SWINGBUS 1520 - 2016WP-4

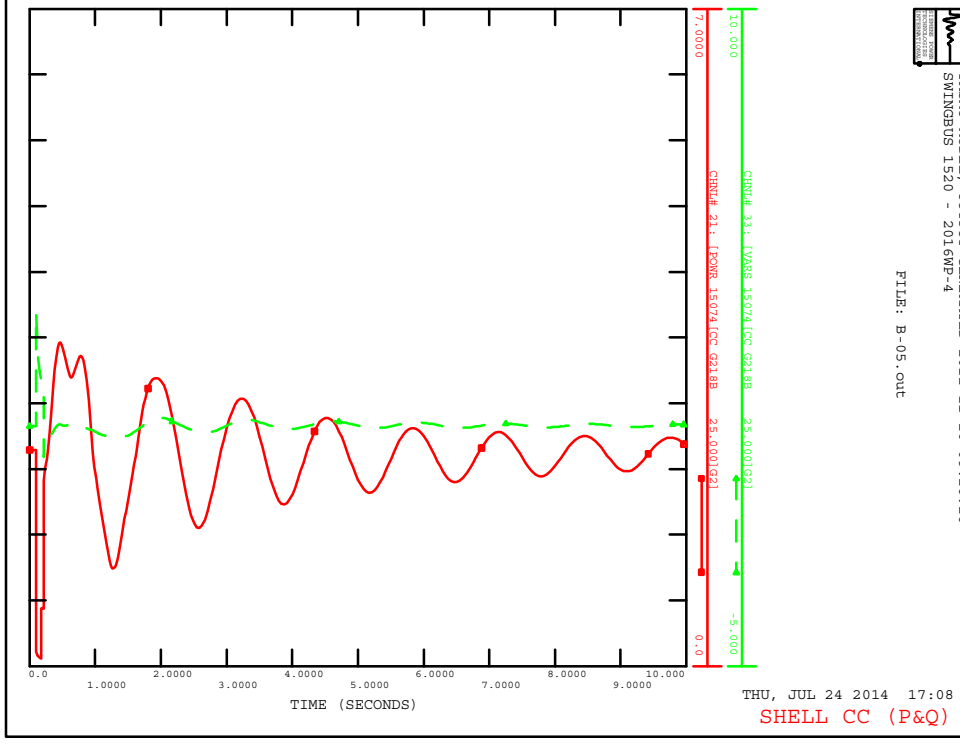
FILE: B-04.out

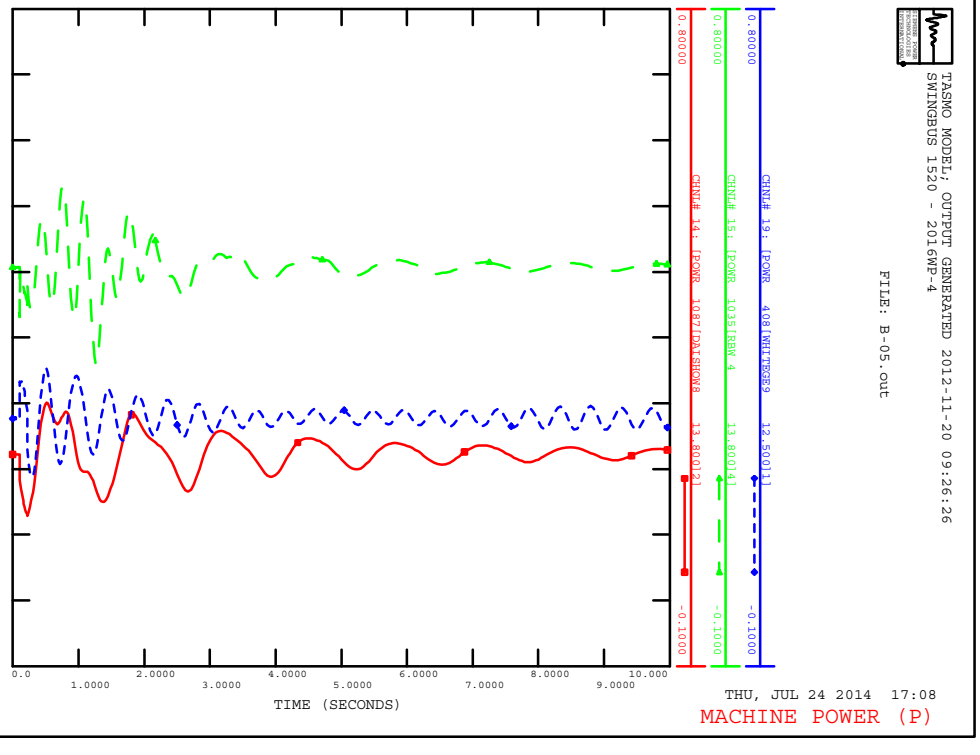
THU, JUL 24 2014 17:08

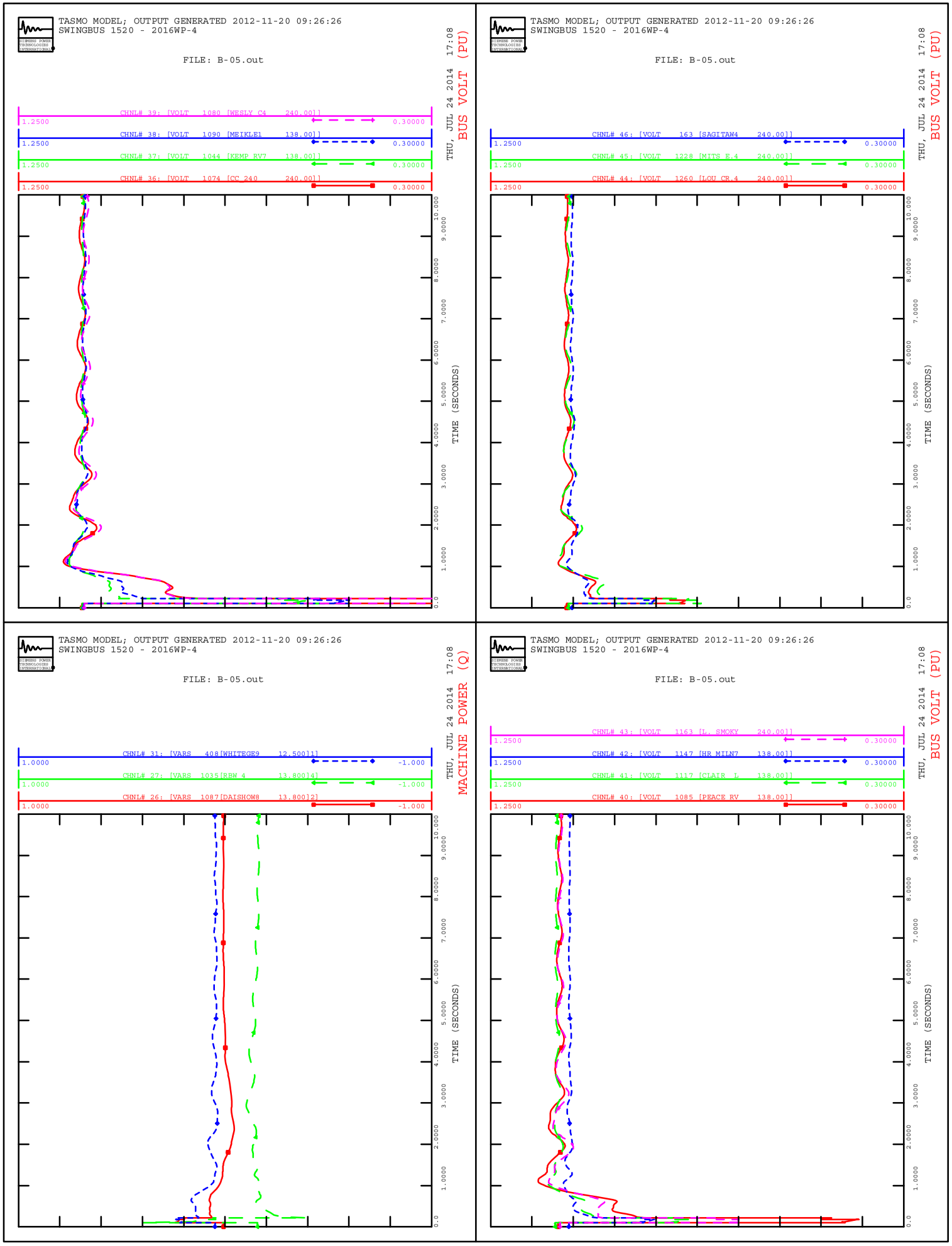


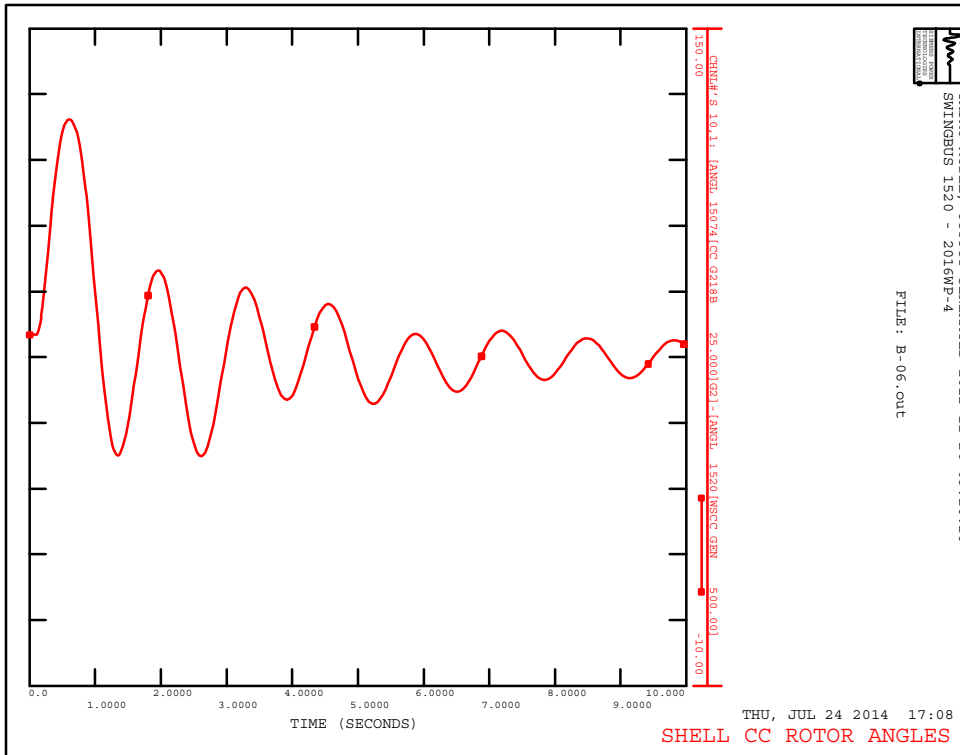

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-05.out
CHNU#'S 10,1: [ANGL 15074[CC G21BB 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
-50.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
SHELL CC ROTOR ANGLES

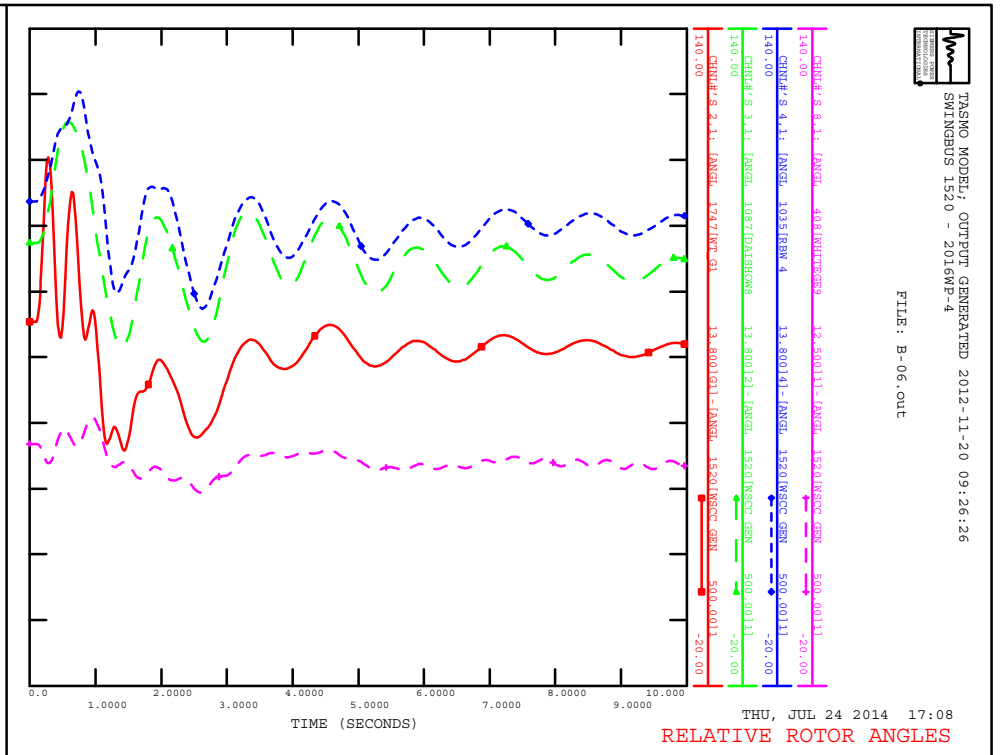

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-05.out
CHNU#'S 8,1: [ANGL 408[WHITESB9 12.500[1] [ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 3,1: [ANGL 1087[DAISHOW8 13.800[2] [ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
RELATIVE ROTOR ANGLES

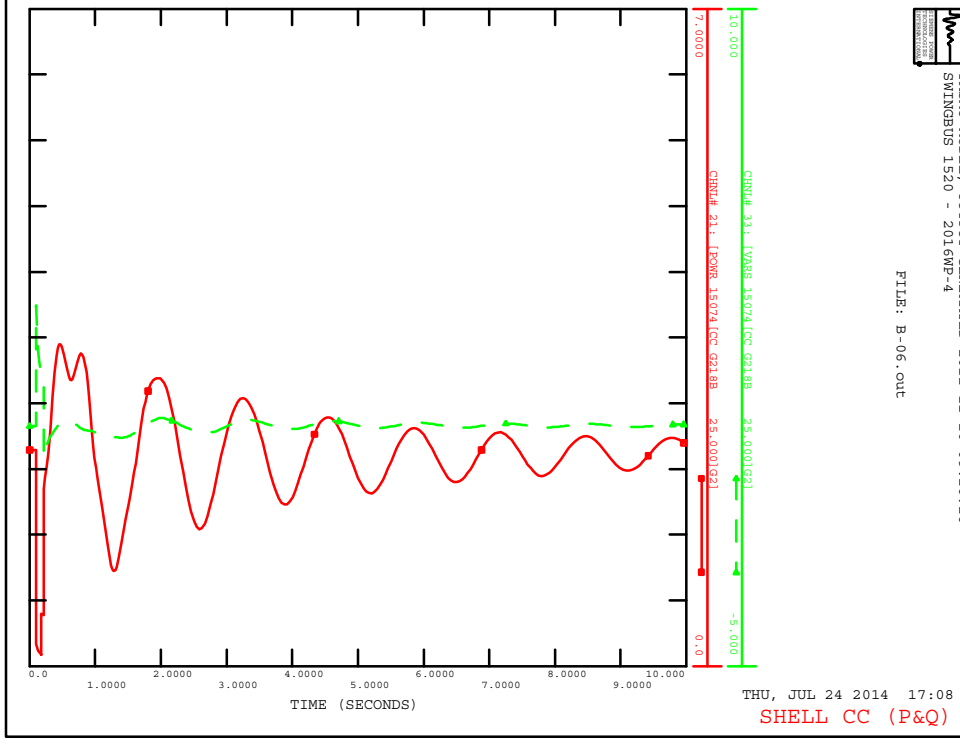

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-05.out
CHNU# 33: [VARS 15074 [CC G21BB 25.000[G2]
CHNU# 21: [POWR 15074[CC G21BB 25.000[G2]
10.000
-5.000
7.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
SHELL CC (P&Q)

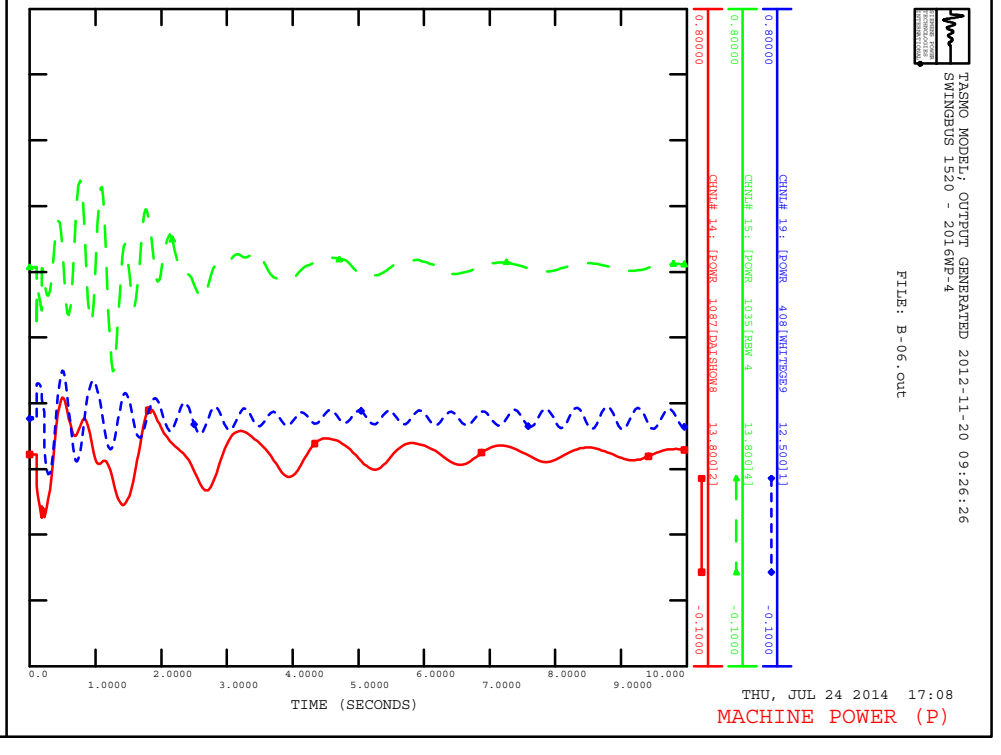

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-05.out
CHNU# 19: [POWR 408[WHITESB9 12.500[1]
CHNU# 15: [POWR 1035[RBM 4 13.800[4]
CHNU# 14: [POWR 1087[DAISHOW8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
MACHINE POWER (P)

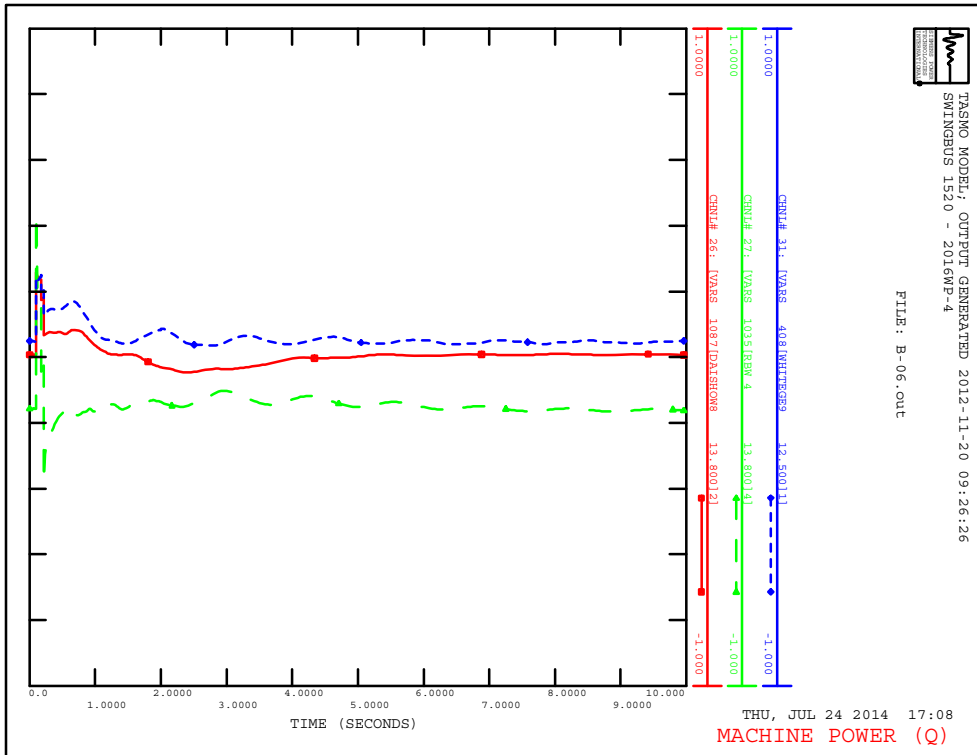

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-05.out
THU, JUL 24 2014 17:08
BUS VOLT (PU)
CHNL# 39: [VOLT 1080 [WESLY C4 240.00]]
CHNL# 38: [VOLT 1090 [MEIKLE1 138.00]]
CHNL# 37: [VOLT 1044 [KEMP RV7 138.00]]
CHNL# 36: [VOLT 1074 [CC 240 240.00]]
1.2500
0.30000
TIME (SECONDS)
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-05.out
THU, JUL 24 2014 17:08
BUS VOLT (PU)
CHNL# 46: [VOLT 163 [SAGITAW4 240.00]]
CHNL# 45: [VOLT 1228 [MITS E.4 240.00]]
CHNL# 44: [VOLT 1260 [LOU CR.4 240.00]]
1.2500
0.30000
TIME (SECONDS)
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-05.out
THU, JUL 24 2014 17:08
MACHINE POWER (Q)
CHNL# 31: [VARS 408[WHITEGE9 12.500]1]
CHNL# 27: [VARS 1035[RBW 4 13.800]4]
CHNL# 26: [VARS 1087[DAISHOW8 13.800]2]
1.0000
-1.000
TIME (SECONDS)
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-05.out
THU, JUL 24 2014 17:08
BUS VOLT (PU)
CHNL# 43: [VOLT 1163 [L. SMOKY 240.00]]
CHNL# 42: [VOLT 1147 [HR MLN7 138.00]]
CHNL# 41: [VOLT 1117 [CLAIR L 138.00]]
CHNL# 40: [VOLT 1085 [PEACE RV 138.00]]
1.2500
0.30000
TIME (SECONDS)

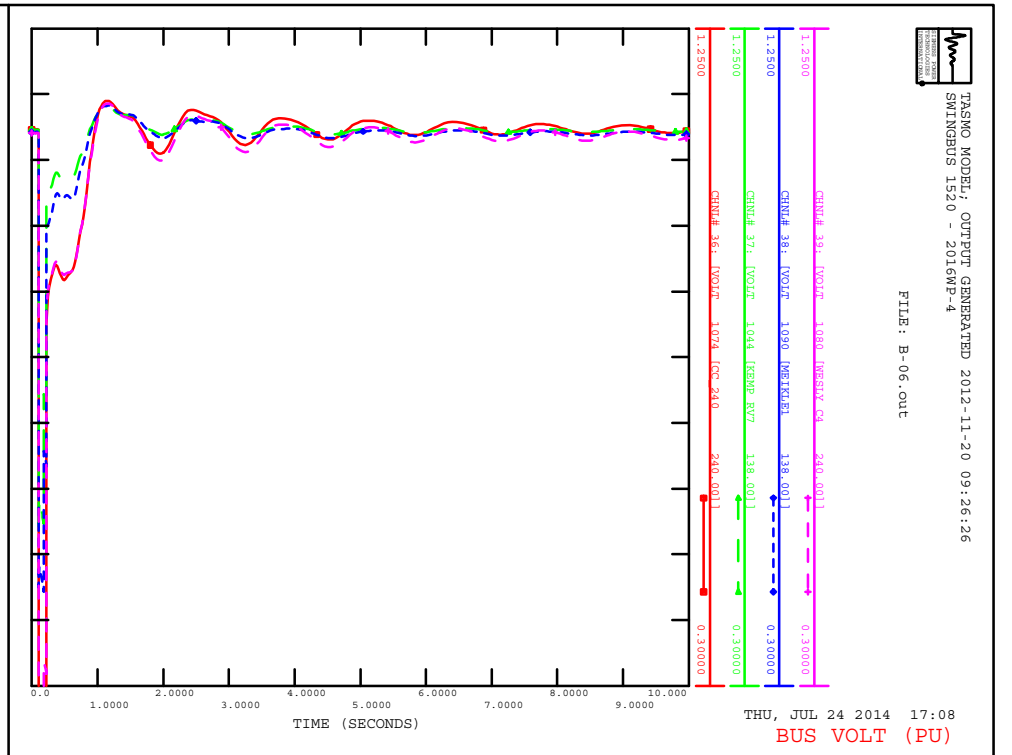

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-06.out
CHNU#'S 10,1: [ANGL 15074[CC G21BB 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
-50.00
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
SHELL CC ROTOR ANGLES

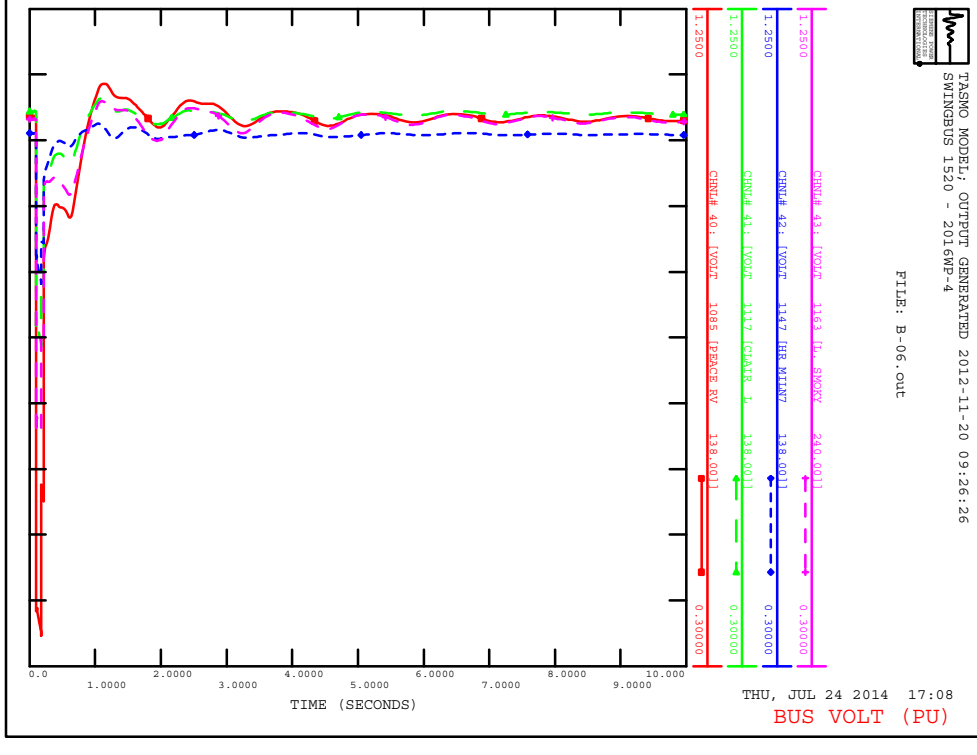

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-06.out
CHNU#'S 8,1: [ANGL 408[WHITESB9 12.500[1] [ANGL 1520[NSCC GEN 500.00[1]
CHNU#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00[1]
CHNU#'S 3,1: [ANGL 1087[DAISHOW8 13.800[2] [ANGL 1520[NSCC GEN 500.00[1]
CHNU#'S 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00[1]
140.00
-20.00
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
RELATIVE ROTOR ANGLES

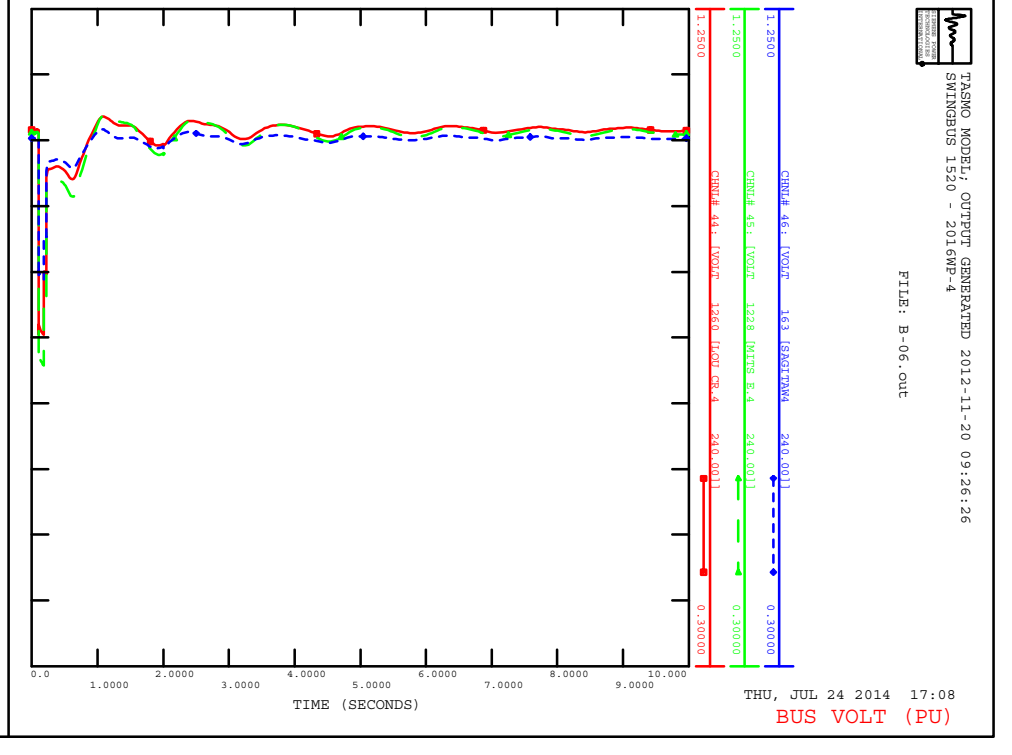

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-06.out
CHNU# 33: [VARS 15074[CC G21BB 25.000[G2]
CHNU# 21: [POWR 15074[CC G21BB 25.000[G2]
10.000
-5.000
7.0000
0.0
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
SHELL CC (P&Q)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-06.out
CHNU# 19: [POWR 408[WHITESB9 12.500[1]
CHNU# 15: [POWR 1035[RBM 4 13.800[4]
CHNU# 14: [POWR 1087[DAISHOW8 13.800[2]
0.80000
-0.1000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
MACHINE POWER (P)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-06.out
CHNI# 31; [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27; [VARS 1035 [RBW 4 13.800]4]
CHNI# 26; [VARS 1087 [DAISHOW8 13.800]2]
TIME (SECONDS)
THU, JUL 24 2014 17:08
MACHINE POWER (Q)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-06.out
CHNI# 39; [VOLT 1080 [MESIK C4 240.00]
CHNI# 38; [VOLT 1090 [MEIKLE1 138.00]
CHNI# 37; [VOLT 1044 [KEMP RV7 138.00]
CHNI# 36; [VOLT 1074 [CC 240 240.00]
TIME (SECONDS)
THU, JUL 24 2014 17:08
BUS VOLT (PU)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-06.out
CHNI# 43; [VOLT 1163 [W. SMOKY 240.00]
CHNI# 42; [VOLT 1142 [HR MLNT 138.00]
CHNI# 41; [VOLT 1117 [CLAIR 1 138.00]
CHNI# 40; [VOLT 1085 [PEACE RV 138.00]
TIME (SECONDS)
THU, JUL 24 2014 17:08
BUS VOLT (PU)

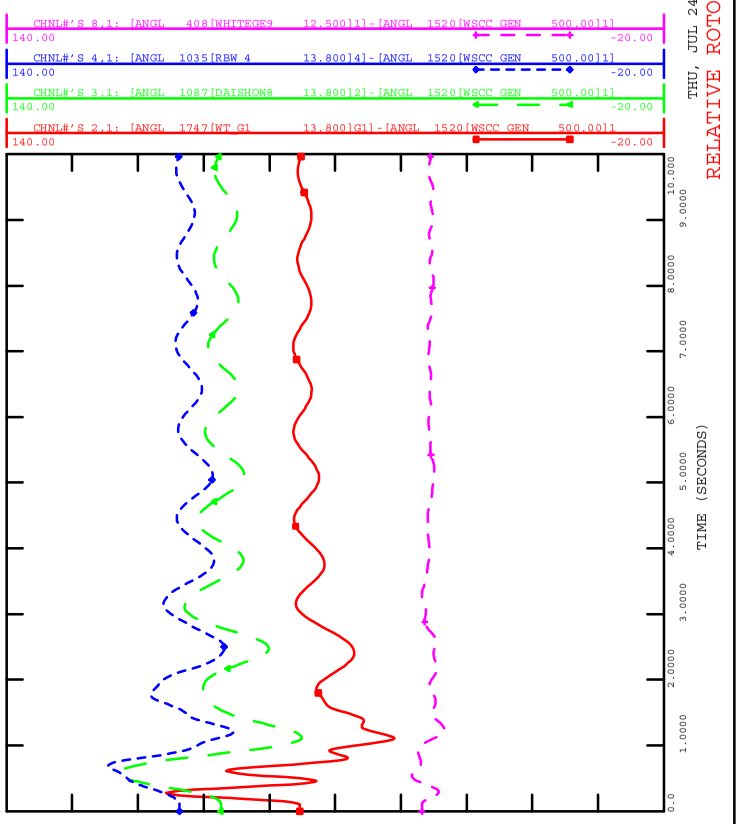

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-06.out
CHNI# 46; [VOLT 163 [SAGITAW4 240.00]
CHNI# 45; [VOLT 1228 [MTS E.4 240.00]
CHNI# 44; [VOLT 1260 [FOX CR.4 240.00]
TIME (SECONDS)
THU, JUL 24 2014 17:08
BUS VOLT (PU)

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-07.out

THU, JUL 24 2014 17:08

RELATIVE ROTOR ANGLES

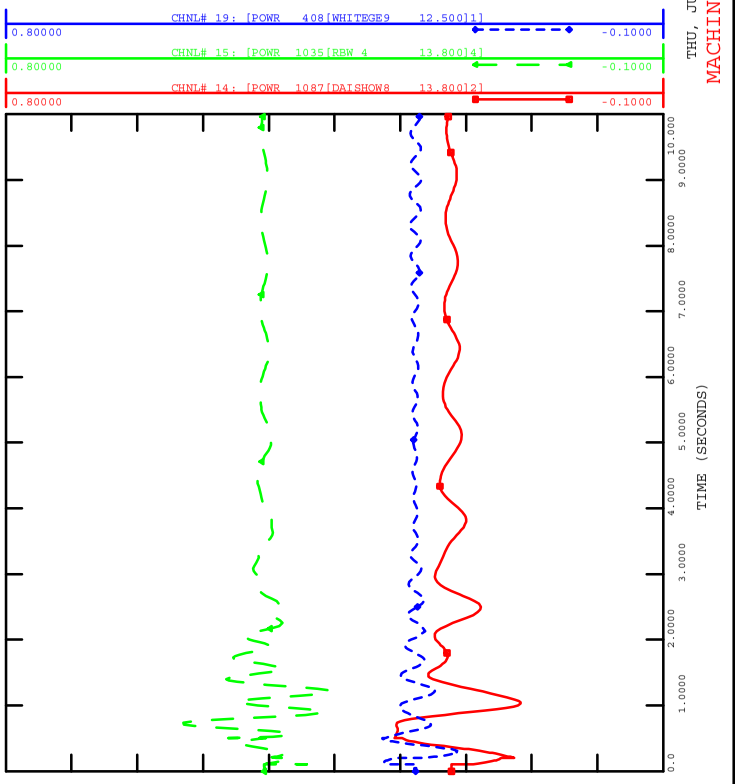


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-07.out

THU, JUL 24 2014 17:08

MACHINE POWER (P)

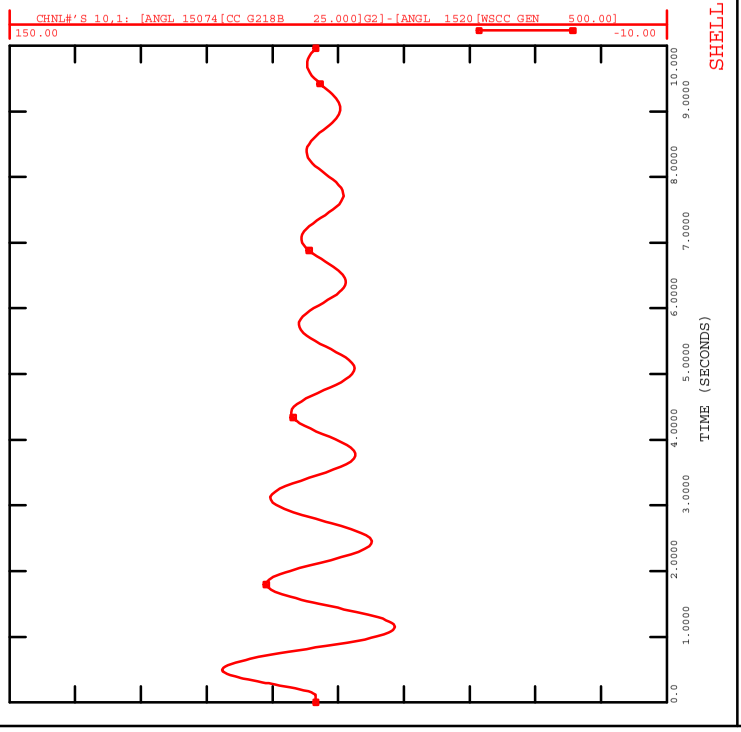


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-07.out

THU, JUL 24 2014 17:08

SHELL CC ROTOR ANGLES

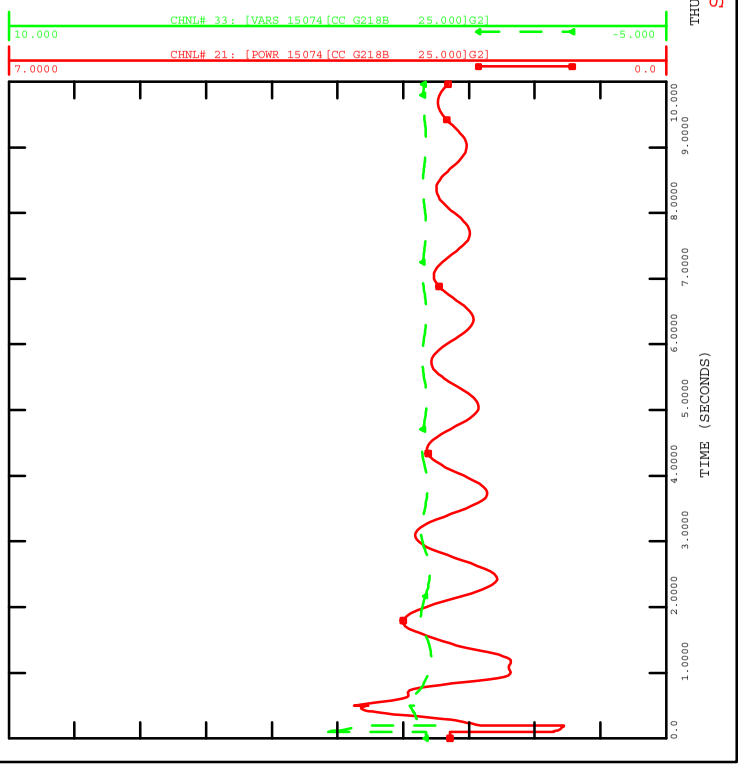


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-07.out

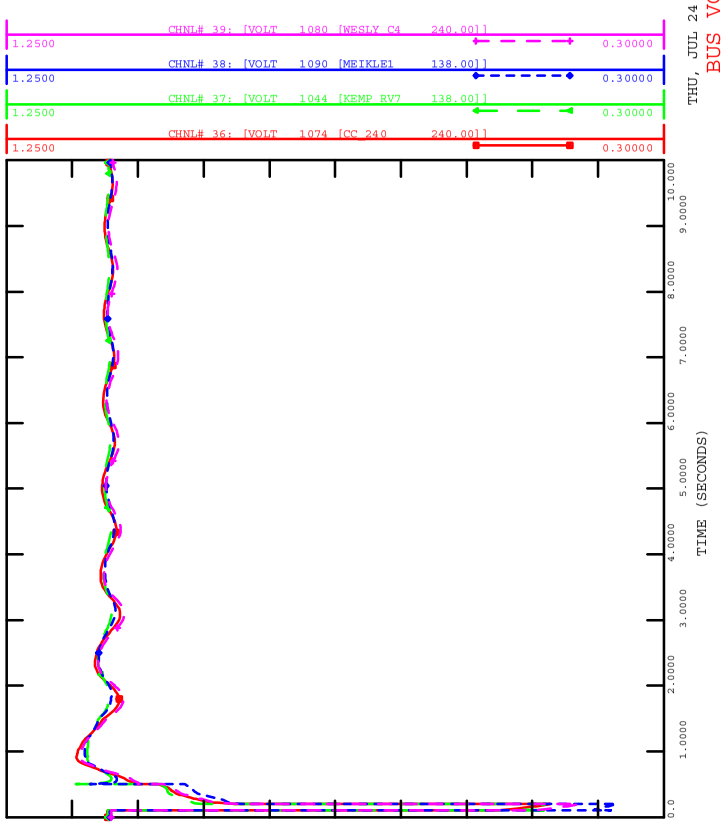
THU, JUL 24 2014 17:08

SHELL CC (P&Q)



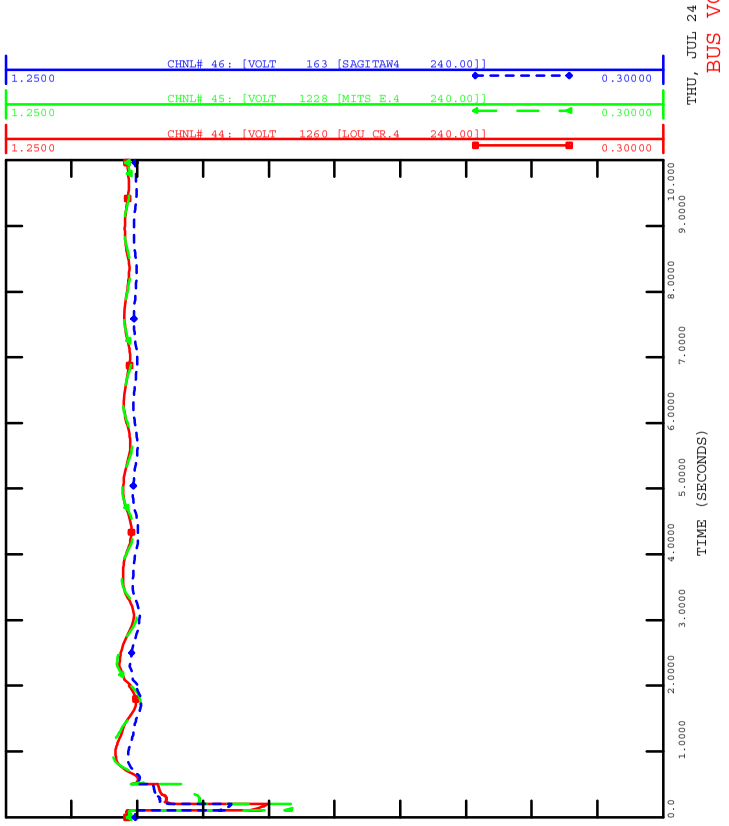
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-07.out



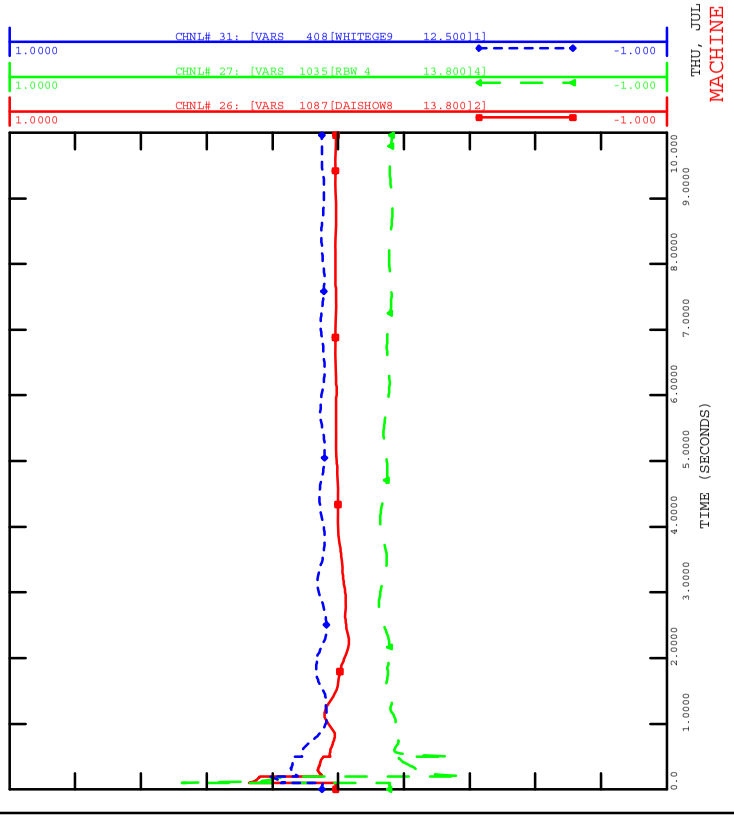
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-07.out



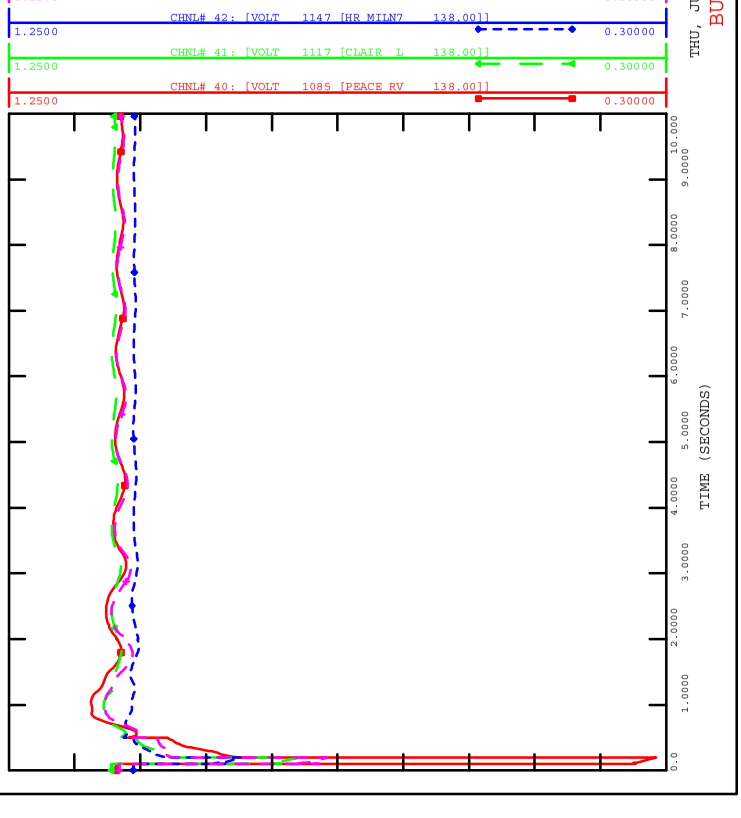
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

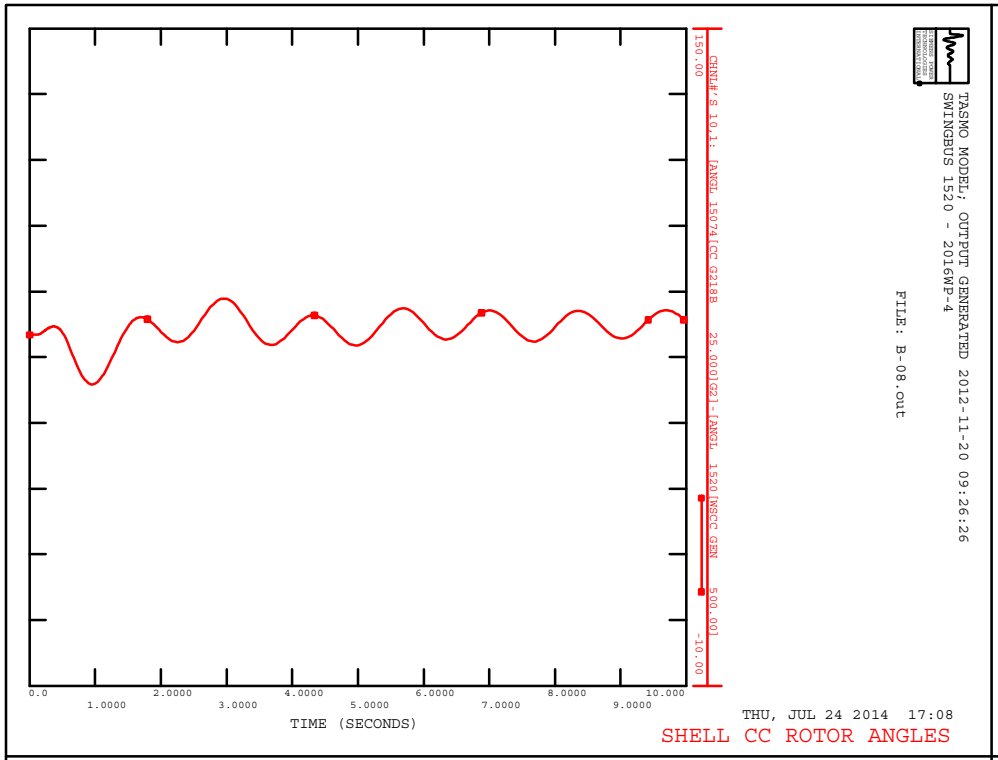
FILE: B-07.out

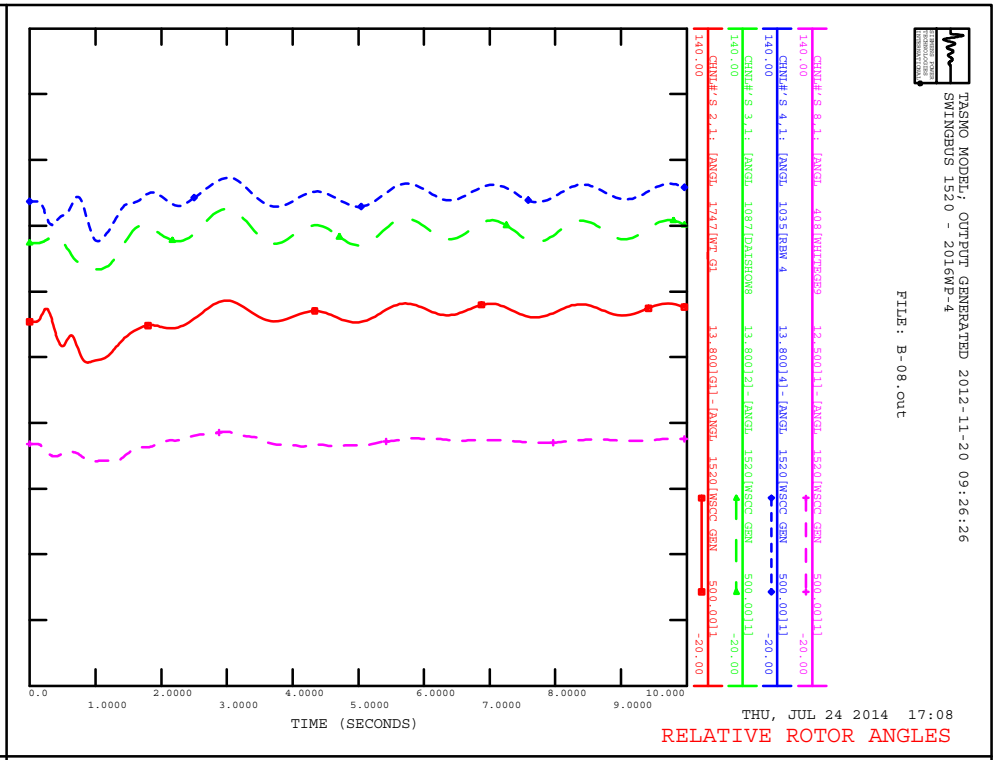


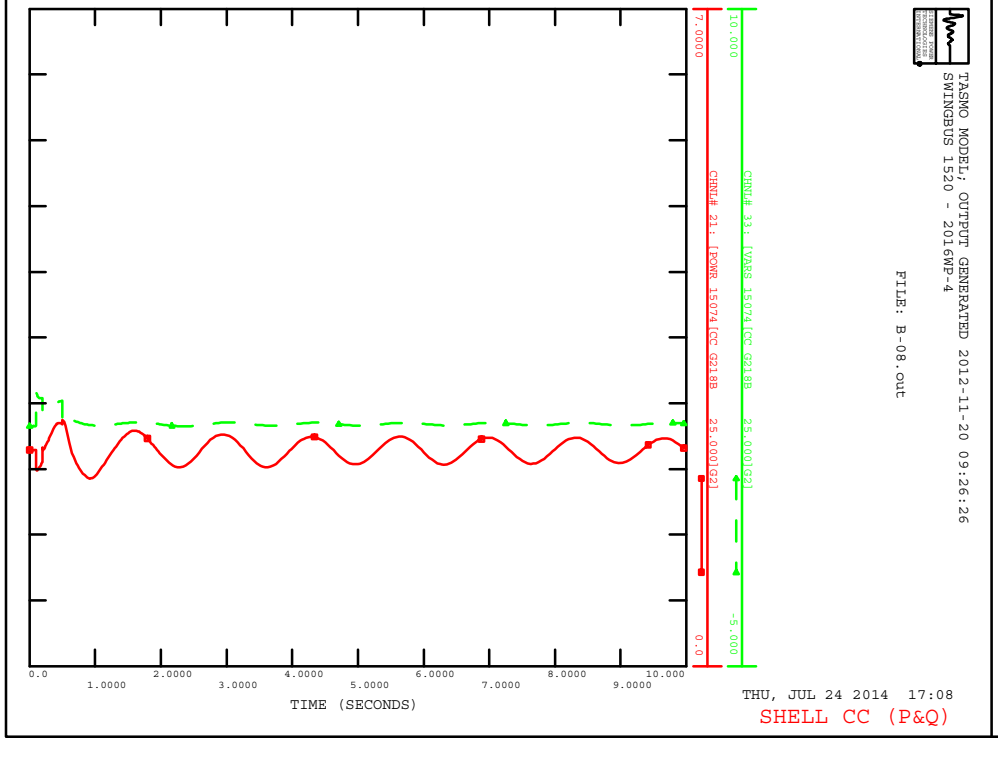
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

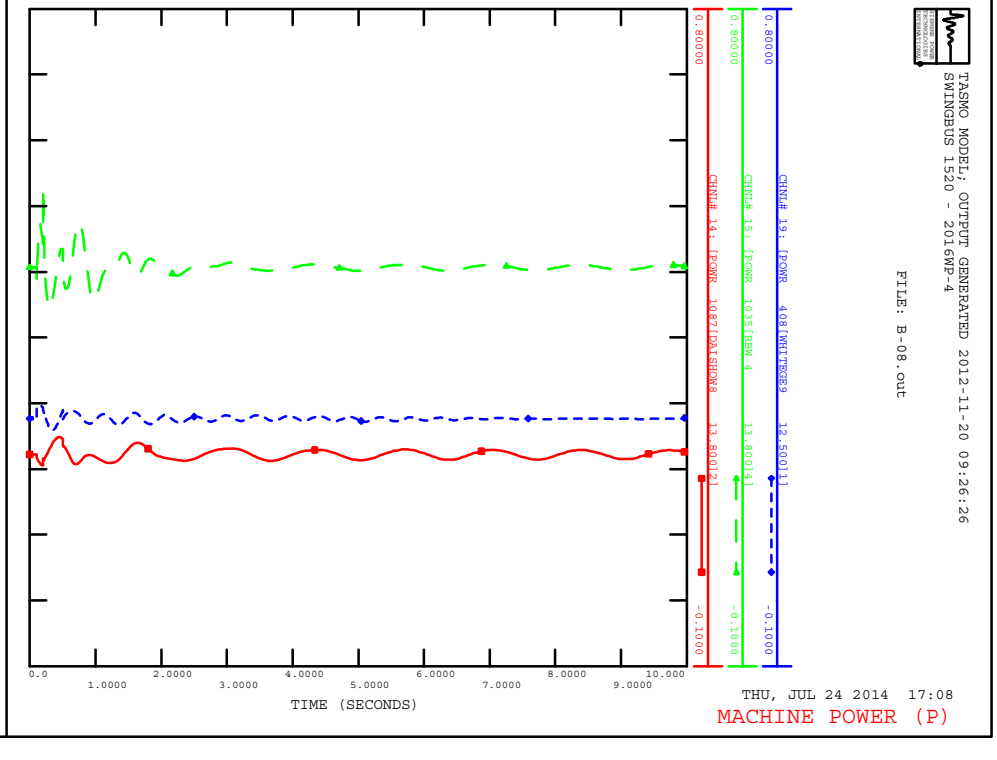
FILE: B-07.out

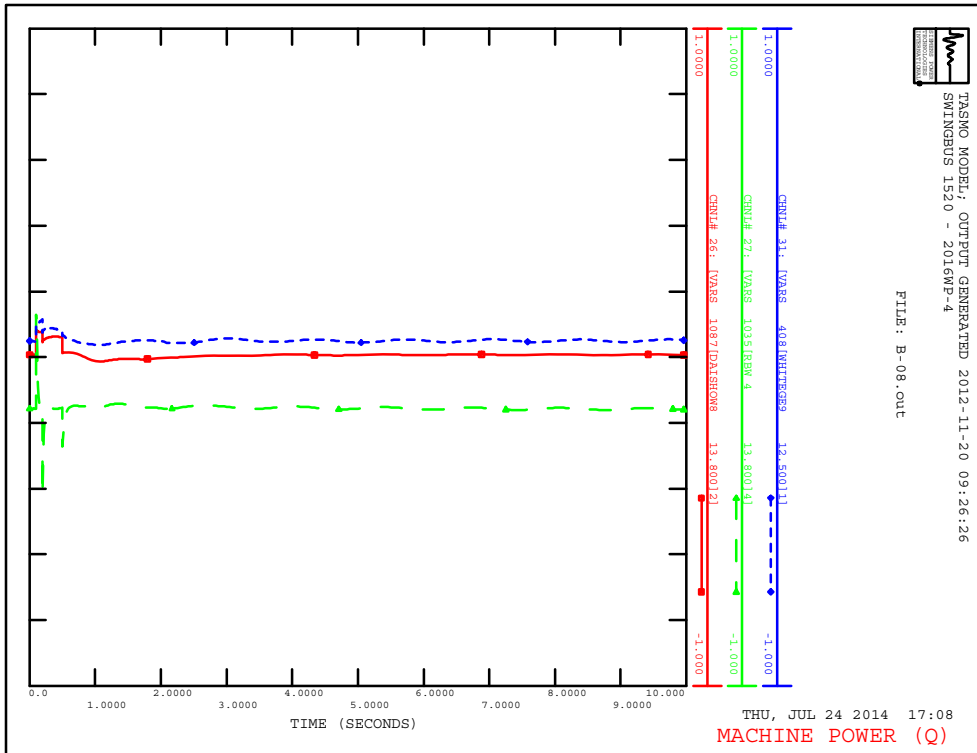


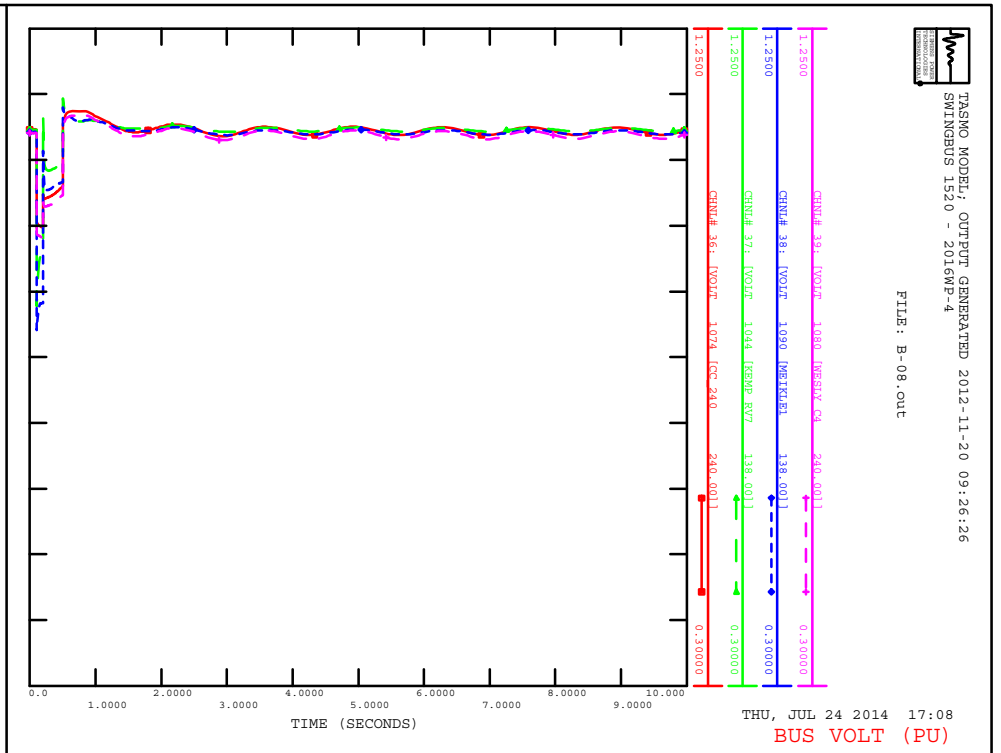

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-08.out
CHNU#'S 10,1: [ANGL 15074[CC G21BB 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
-50.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
SHELL CC ROTOR ANGLES

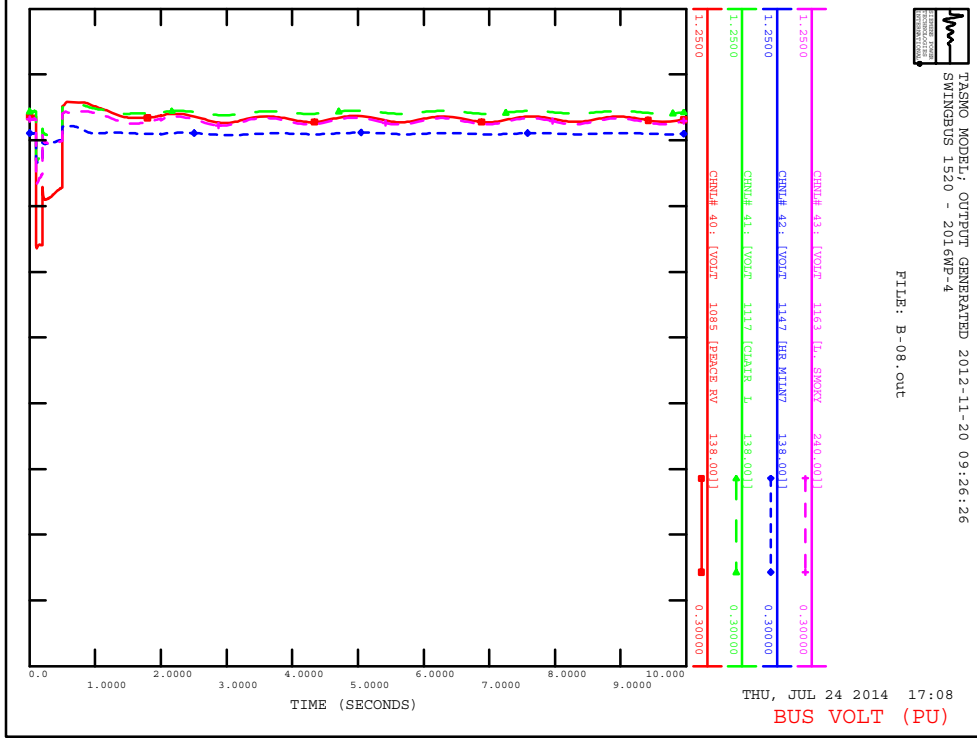

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-08.out
CHNU#'S 8,1: [ANGL 408[WHITESB9 12.500[1]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 3,1: [ANGL 1087[DAISHON8 13.800[2]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
RELATIVE ROTOR ANGLES

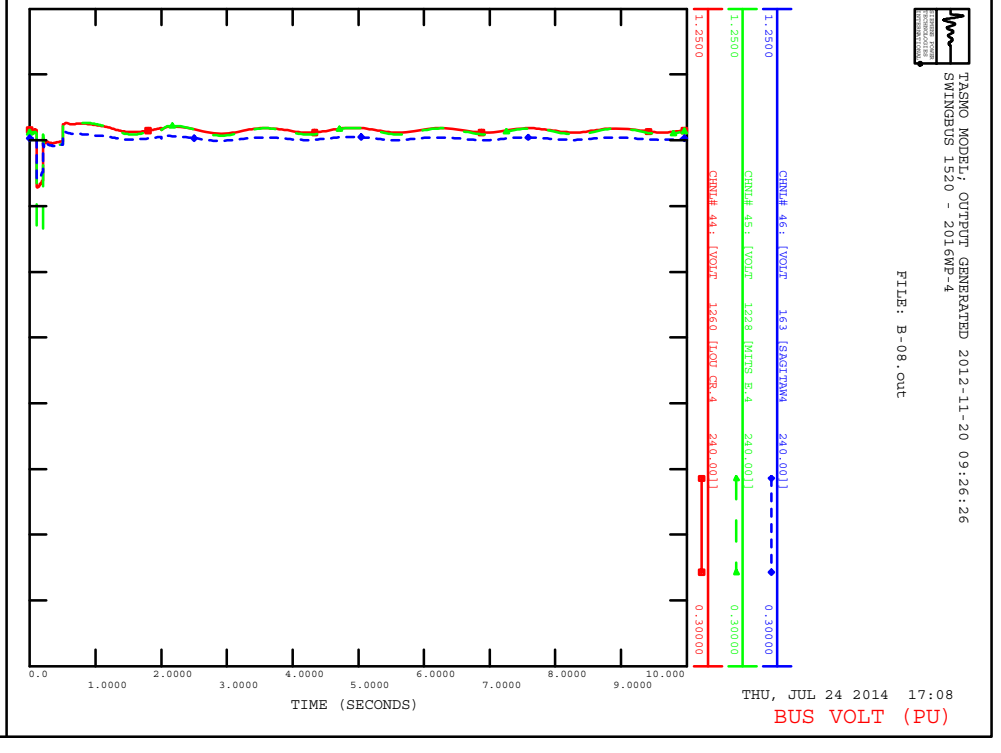

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-08.out
CHNU# 33: [VARS 15074[CC G21BB 25.000[G2]
CHNU# 21: [POWR 15074[CC G21BB 25.000[G2]
10.000
-5.000
7.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
SHELL CC (P&Q)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-08.out
CHNU# 19: [POWR 408[WHITESB9 12.500[1]
CHNU# 15: [POWR 1035[RBM 4 13.800[4]
CHNU# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
MACHINE POWER (P)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-08.out
TIME (SECONDS)
THU, JUL 24 2014 17:08
MACHINE POWER (Q)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-08.out
TIME (SECONDS)
THU, JUL 24 2014 17:08
BUS VOLT (PU)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-08.out
TIME (SECONDS)
THU, JUL 24 2014 17:08
BUS VOLT (PU)

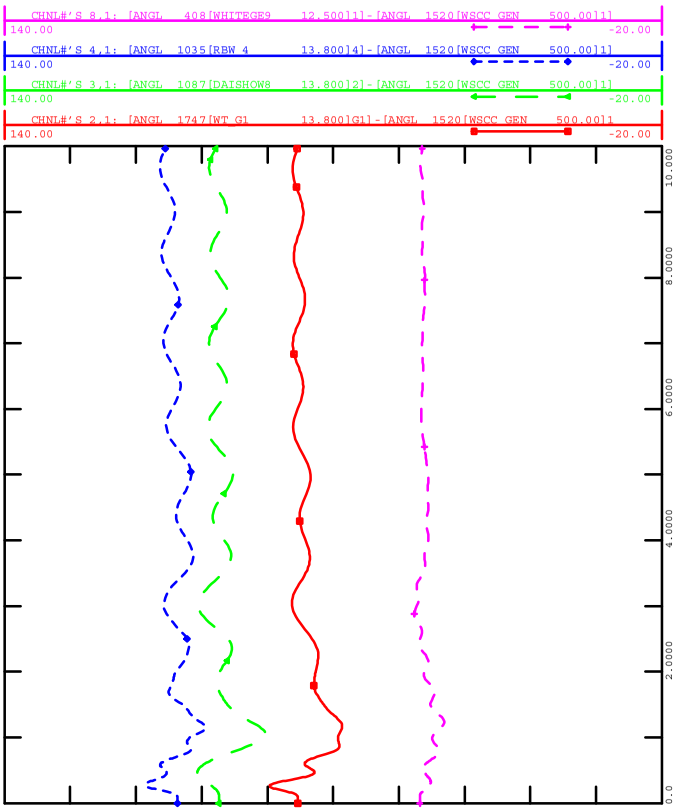

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-08.out
TIME (SECONDS)
THU, JUL 24 2014 17:08
BUS VOLT (PU)

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-09.out

THU, JUL 24 2014 17:08

RELATIVE ROTOR ANGLES

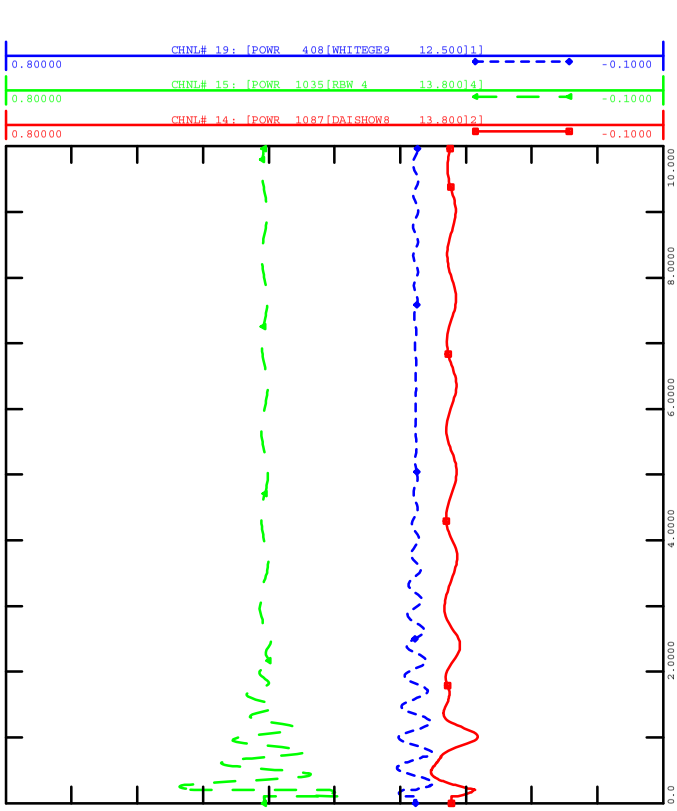


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-09.out

THU, JUL 24 2014 17:08

MACHINE POWER (P)

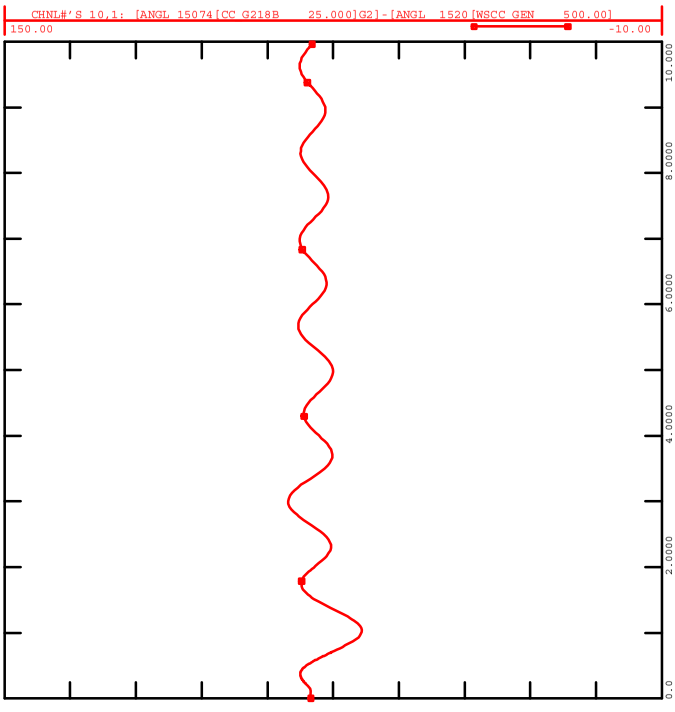


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-09.out

THU, JUL 24 2014 17:08

SHELL CC ROTOR ANGLES

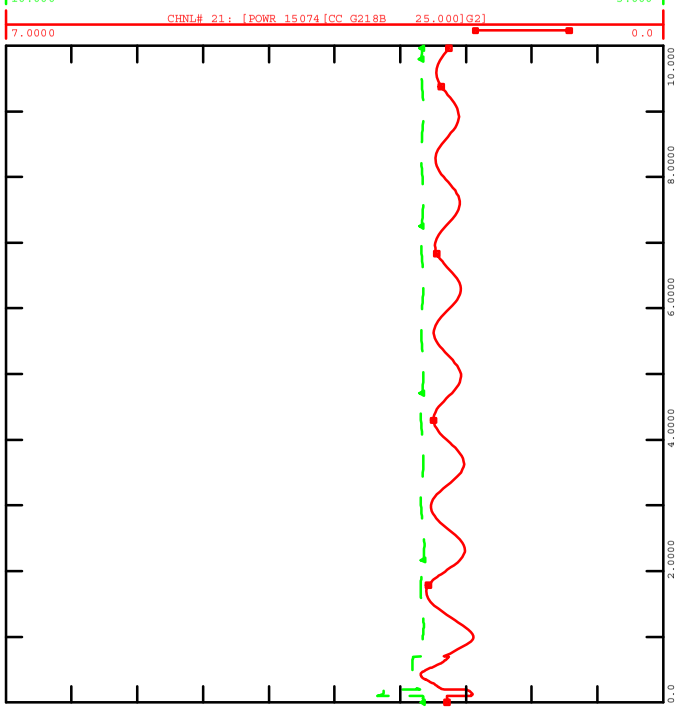


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-09.out

THU, JUL 24 2014 17:08

SHELL CC (P&Q)

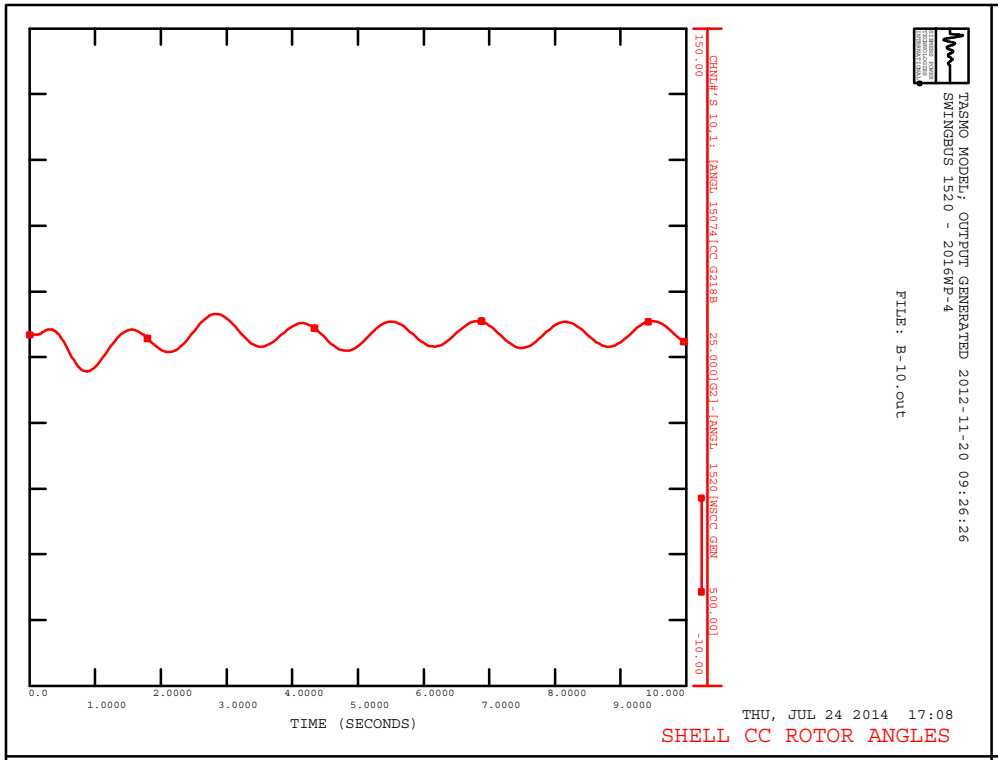


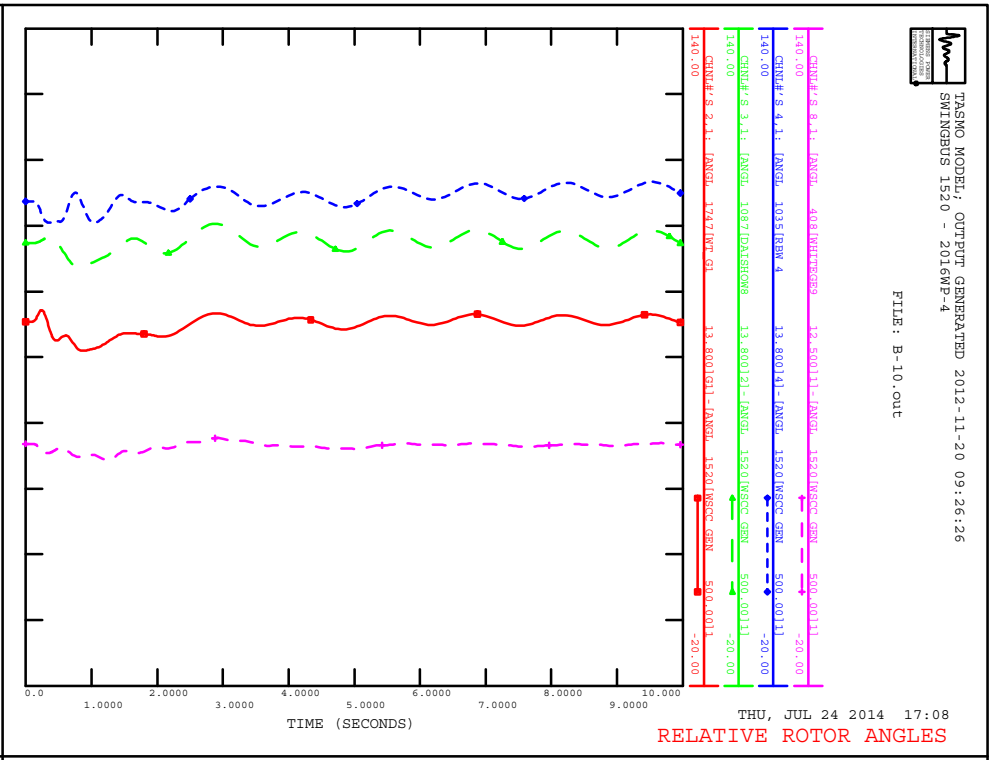
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-09.out
CHNI# 31: [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27: [VARS 1035 [RBW 4 13.800]4]
CHNI# 26: [VARS 1087 [DAISHOW8 13.800]2]
1.0000
-1.000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
MACHINE POWER (Q)

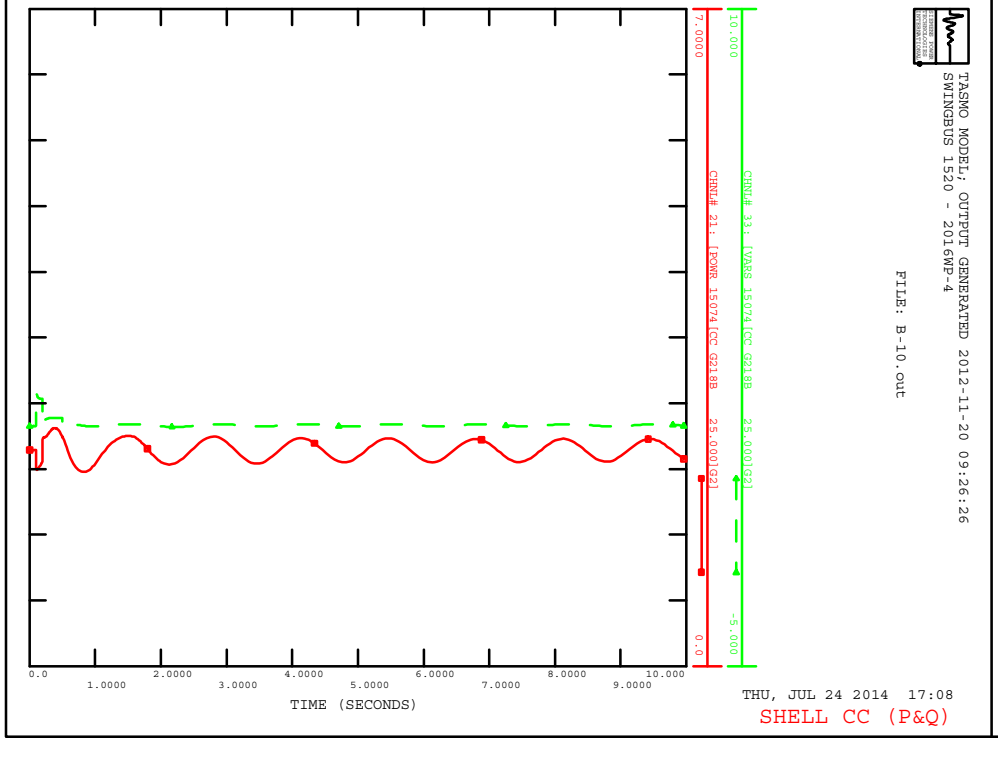
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-09.out
CHNI# 39: [VOLT 1080 [MESIK C4 240.00]]
CHNI# 38: [VOLT 1090 [MESIKLE1 138.00]]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]]
CHNI# 36: [VOLT 1074 [CC 240 240.00]]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
BUS VOLT (PU)

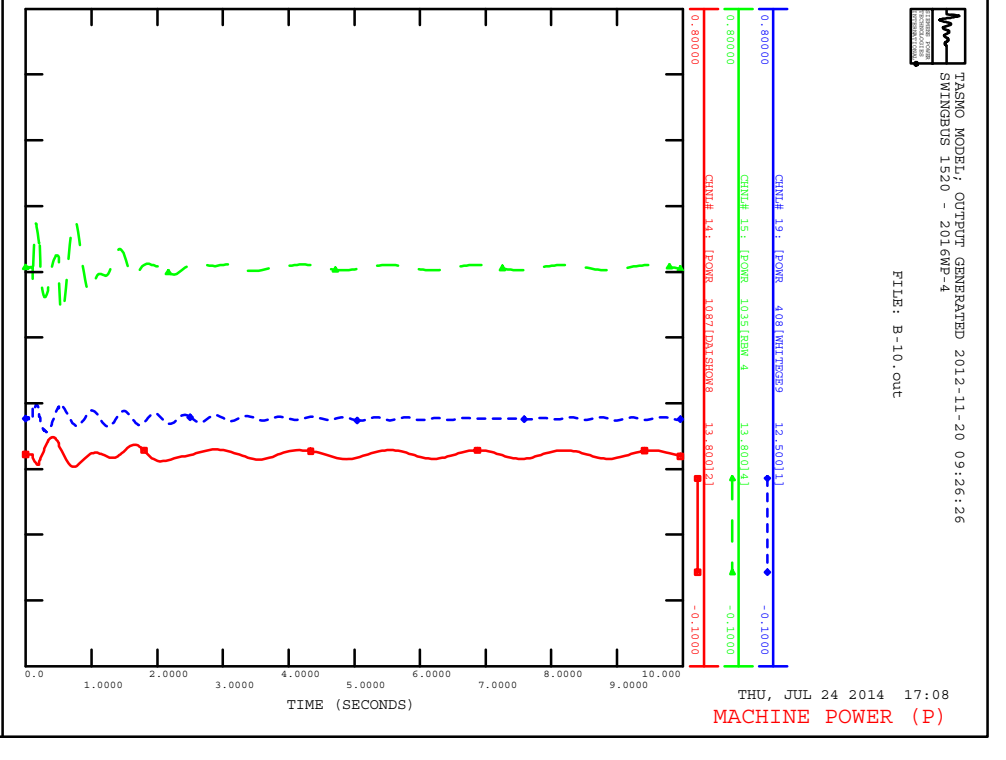
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-09.out
CHNI# 43: [VOLT 1163 [T. SMOKY 240.00]]
CHNI# 42: [VOLT 1142 [HB MTAN7 138.00]]
CHNI# 41: [VOLT 1117 [CHAIR 1 138.00]]
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
BUS VOLT (PU)

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-09.out
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]]
CHNI# 45: [VOLT 1228 [MTS E.4 240.00]]
CHNI# 44: [VOLT 1260 [FOX CR.4 240.00]]
1.2500
0.30000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
BUS VOLT (PU)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-10.out
CHNL# S 10.1: [ANGL 15074[CC G21BB 25.000[G2]-[ANGL 1520[NSCC GEN 500.00] -10.00
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
SHELL CC ROTOR ANGLES

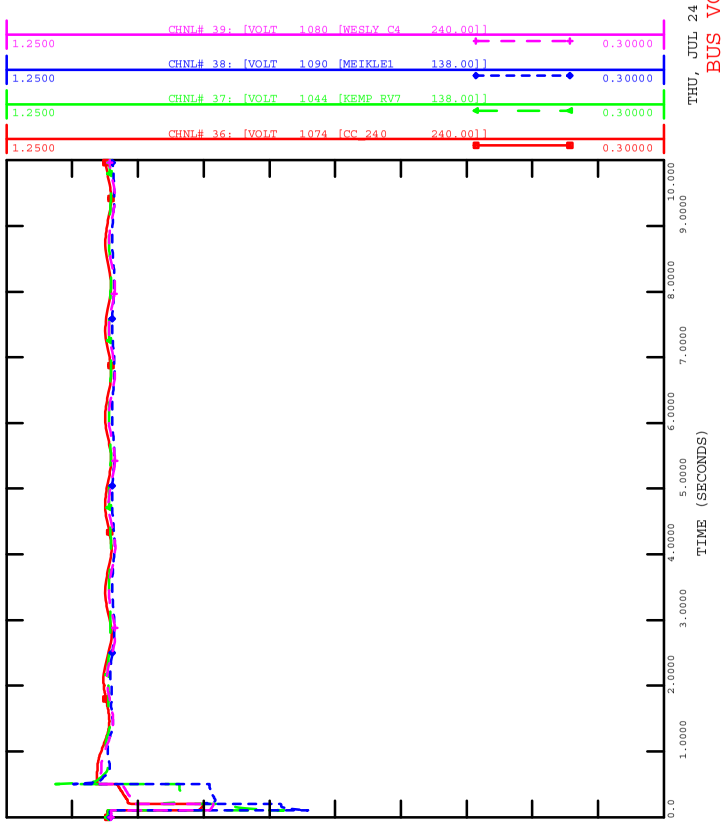

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-10.out
CHNL# S 8.1: [ANGL 408[WHITESB9 12.500[1] [ANGL 1520[NSCC GEN 500.00[1] -20.00
CHNL# S 4.1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00[1] -20.00
CHNL# S 3.1: [ANGL 1087[DAISHON8 13.800[2] [ANGL 1520[NSCC GEN 500.00[1] -20.00
CHNL# S 2.1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00[1] -20.00
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
RELATIVE ROTOR ANGLES


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-10.out
CHNL# 33: [VARS 15074 [CC G21BB 25.000[G2] -5.000
CHNL# 21: [POWR 15074[CC G21BB 25.000[G2] 0.0
7.0000
10.000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
SHELL CC (P&Q)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-10.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1] -0.1000
CHNL# 15: [POWR 1035[RBM 4 13.800[4] -0.1000
CHNL# 14: [POWR 1087[DAISHON8 13.800[2] -0.1000
0.80000
0.80000
0.80000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
MACHINE POWER (P)

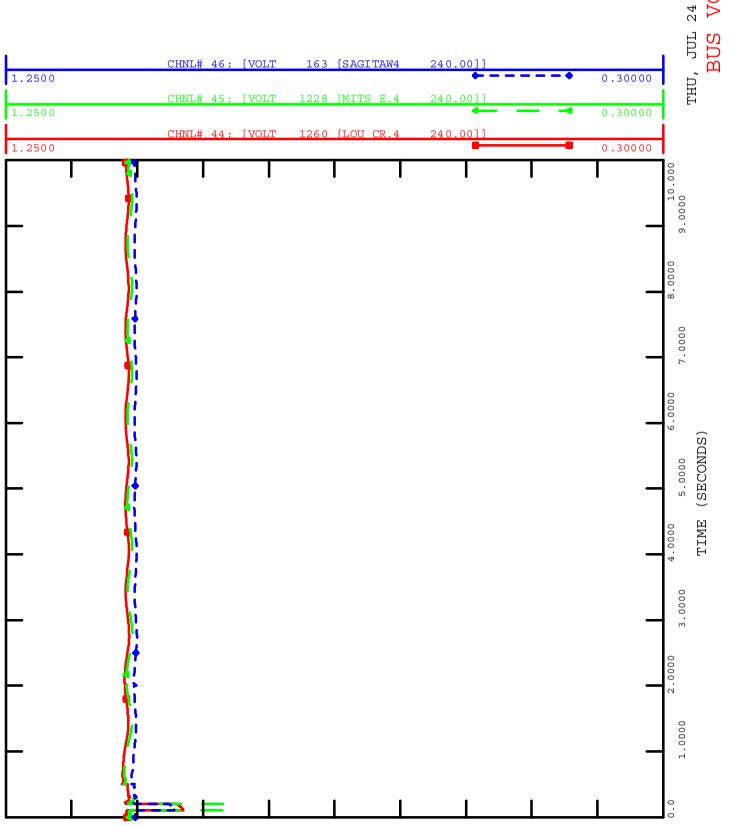
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-10.out



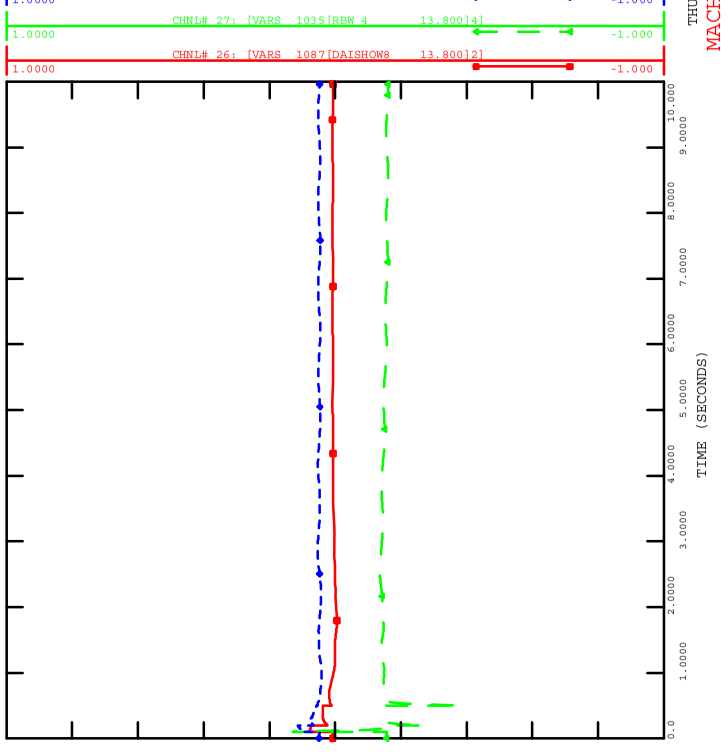
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-10.out



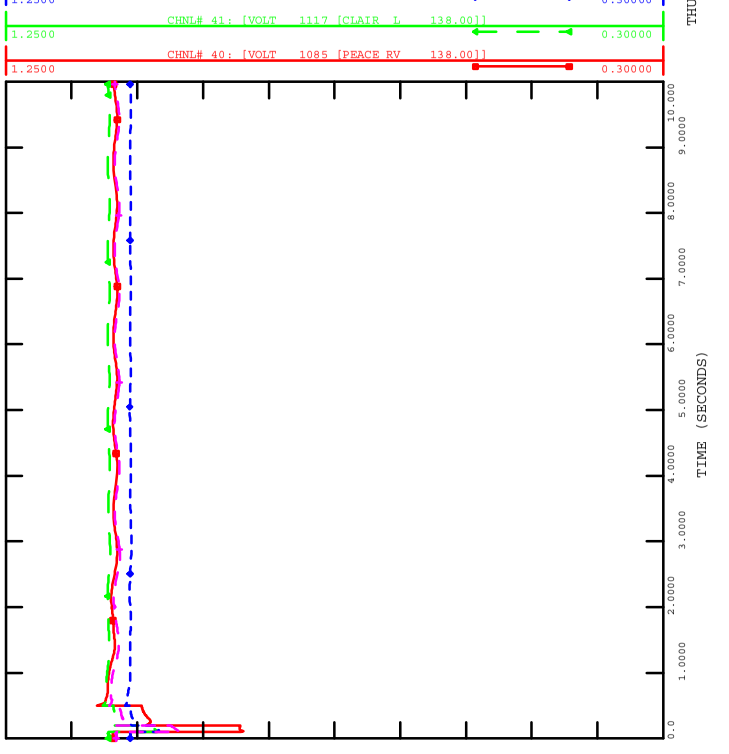
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-10.out



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-10.out

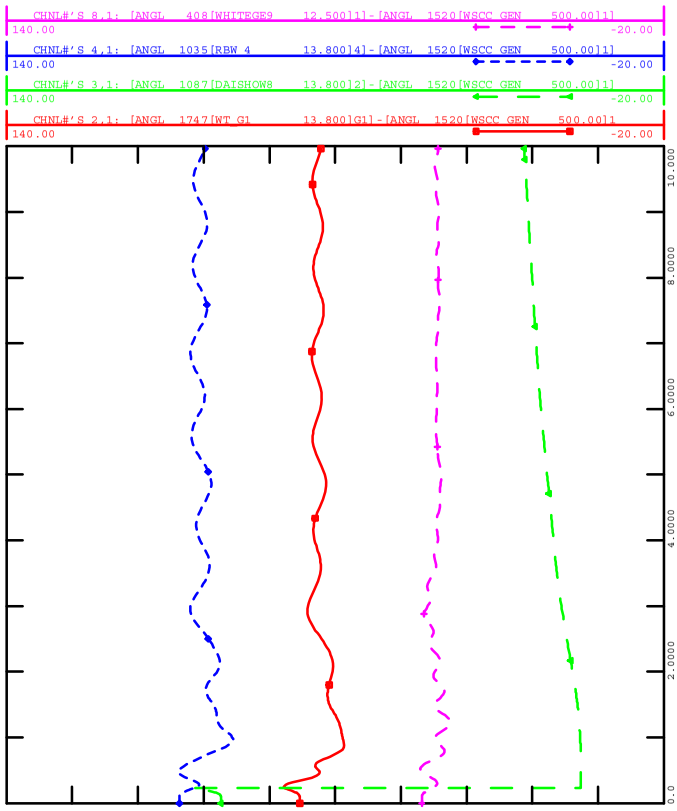


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-11.out

THU, JUL 24 2014 17:08

RELATIVE ROTOR ANGLES

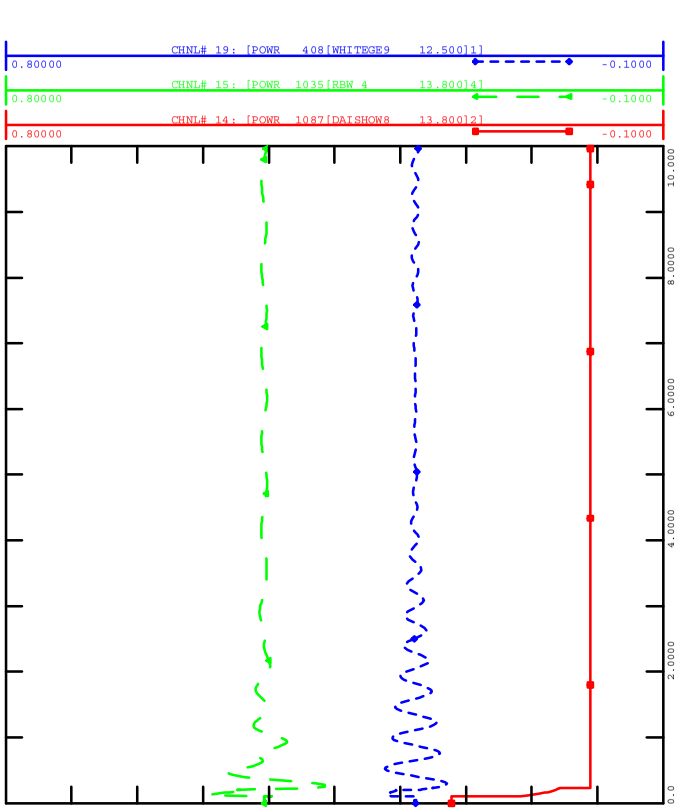


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-11.out

THU, JUL 24 2014 17:08

MACHINE POWER (P)

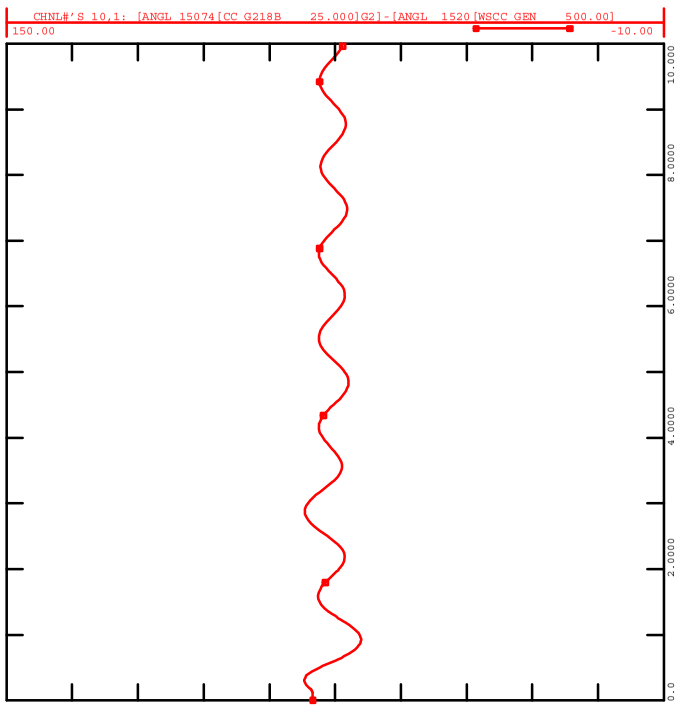


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-11.out

THU, JUL 24 2014 17:08

SHELL CC ROTOR ANGLES

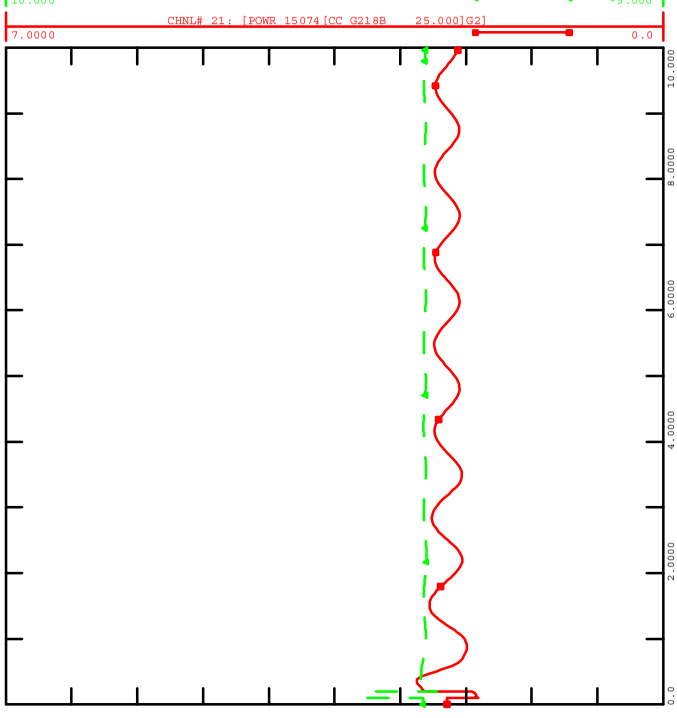


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-11.out

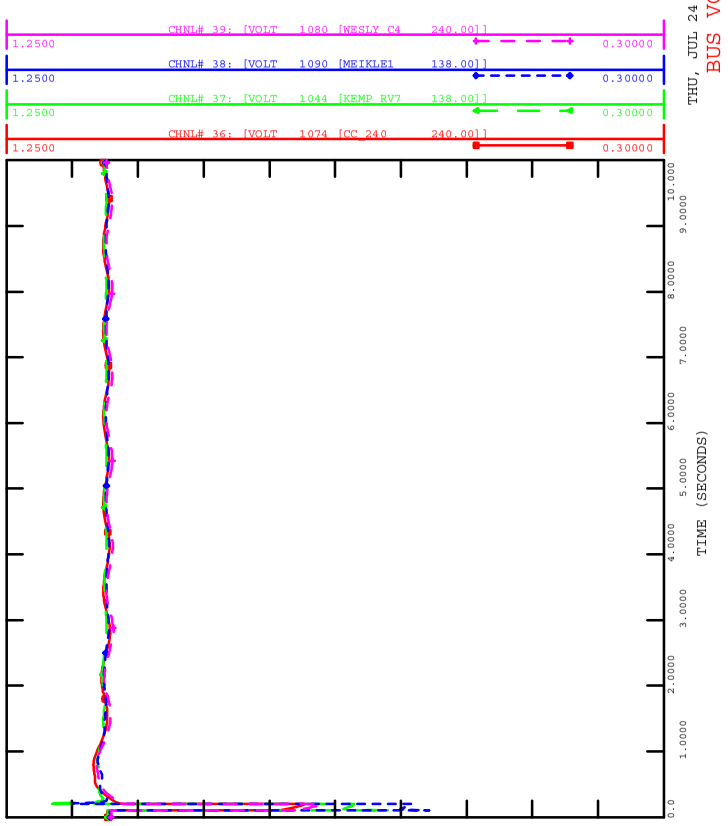
THU, JUL 24 2014 17:08

SHELL CC (P&Q)



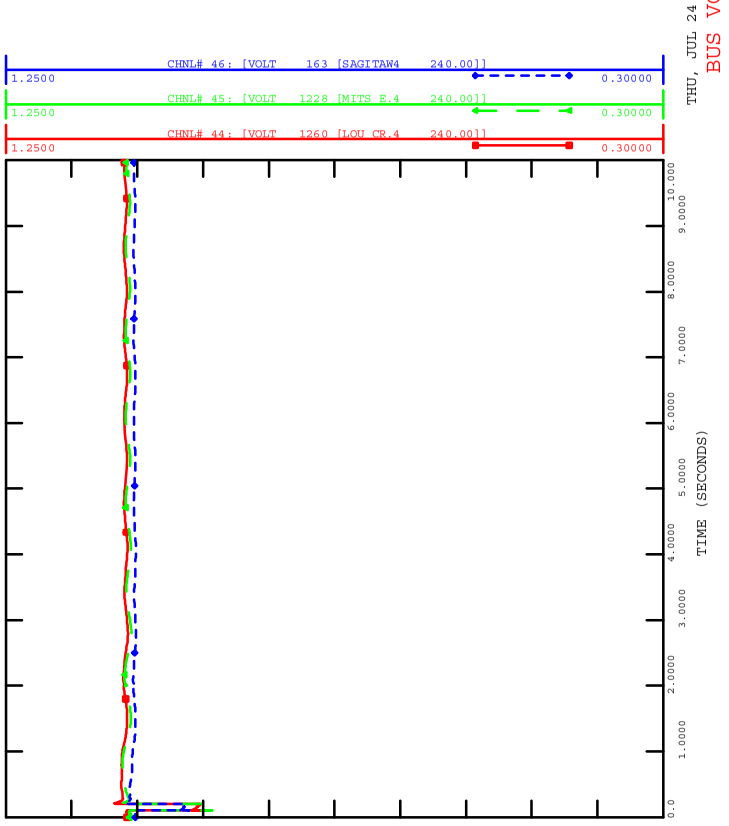
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-11.out



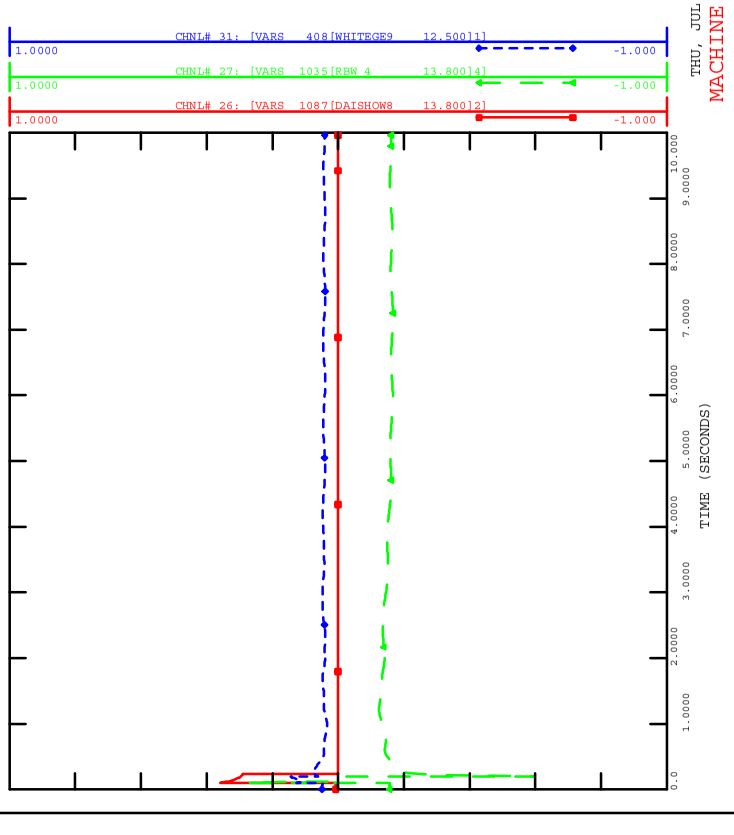
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-11.out



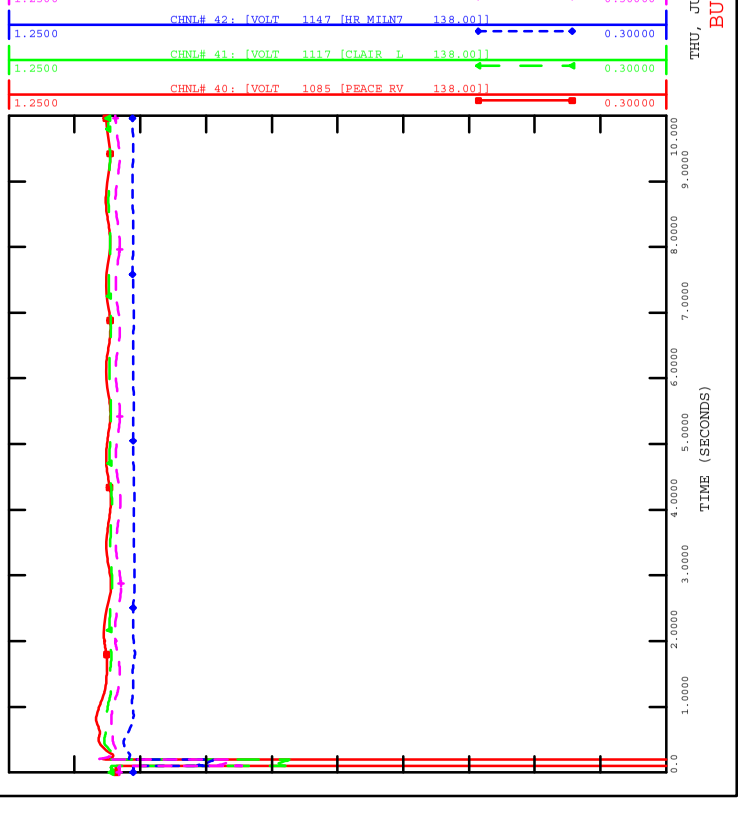
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-11.out



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-11.out

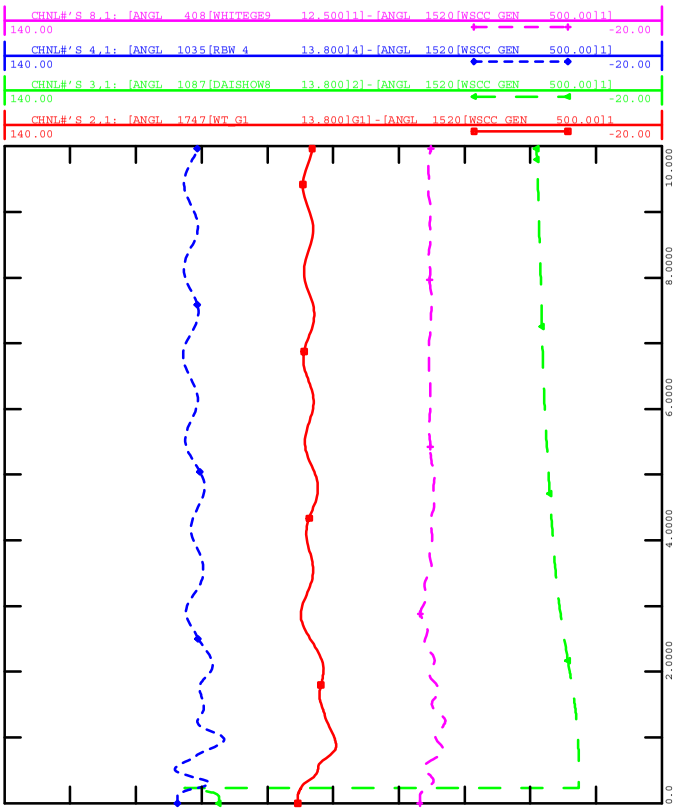


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-12.out

THU, JUL 24 2014 17:08

RELATIVE ROTOR ANGLES

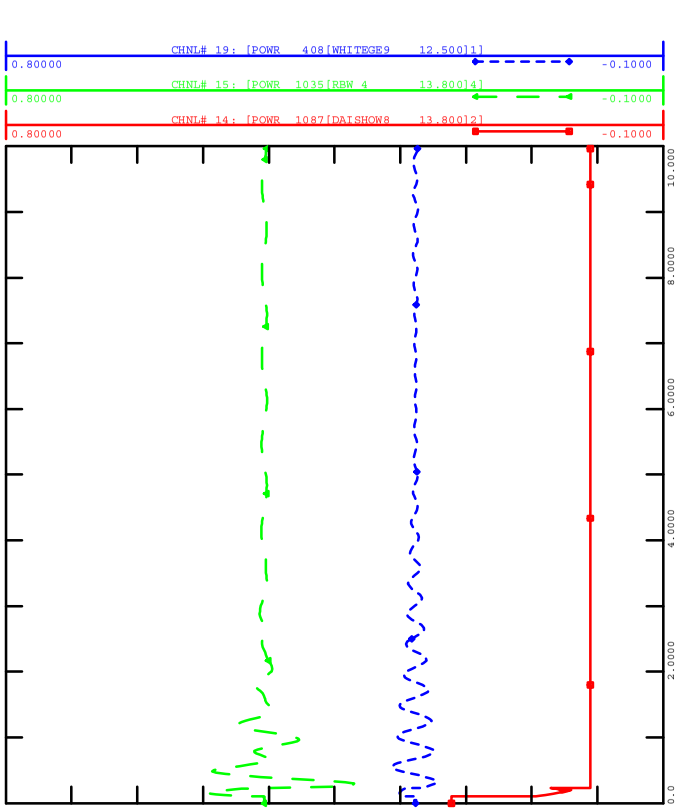


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-12.out

THU, JUL 24 2014 17:08

MACHINE POWER (P)

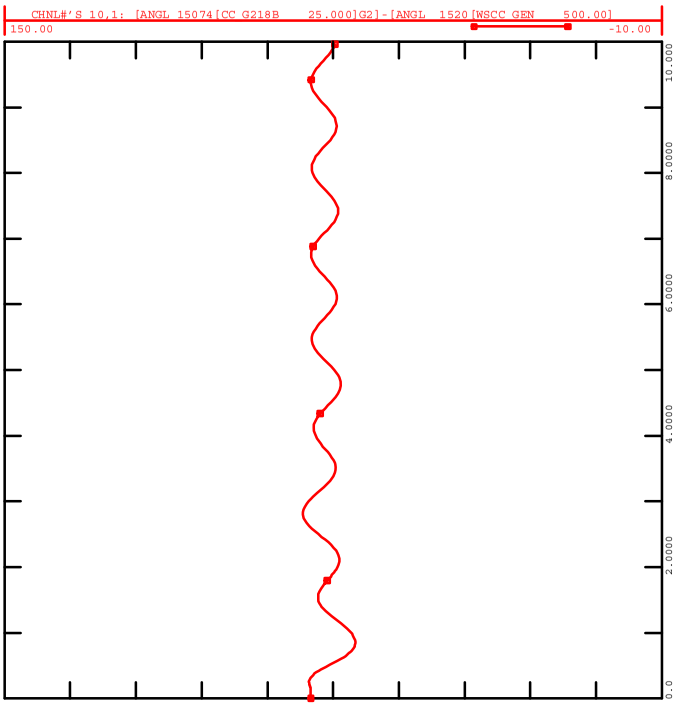


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-12.out

THU, JUL 24 2014 17:08

SHELL CC ROTOR ANGLES

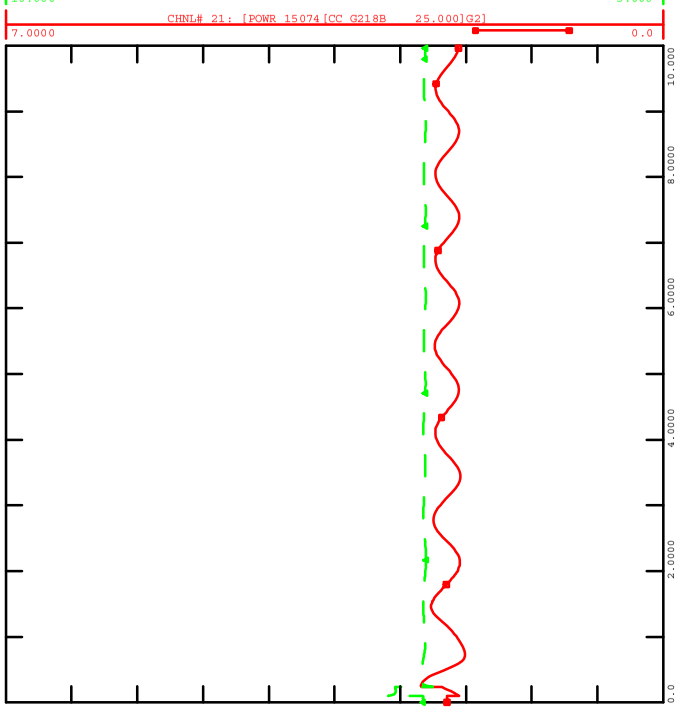


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-12.out

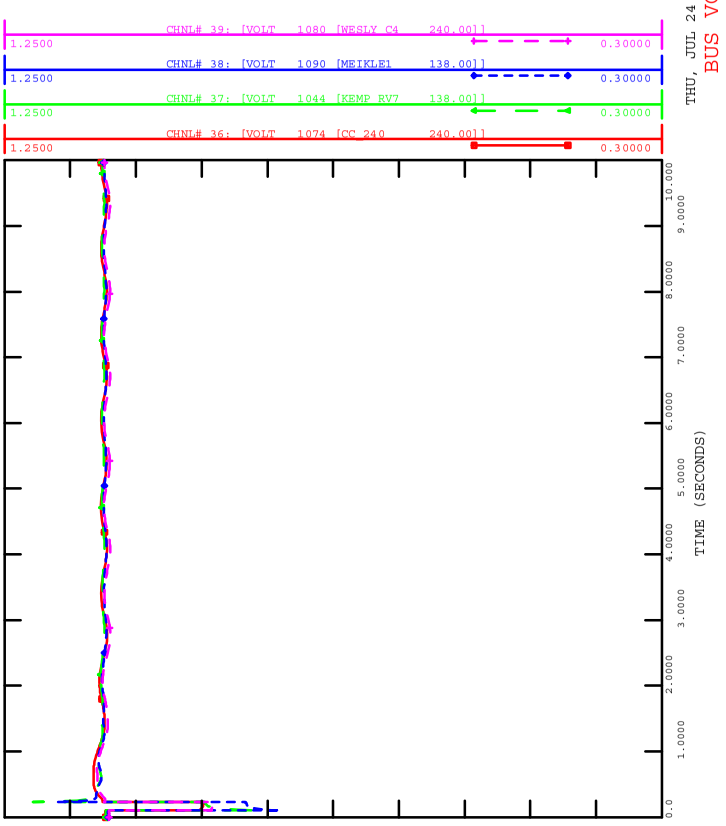
THU, JUL 24 2014 17:08

SHELL CC (P&Q)



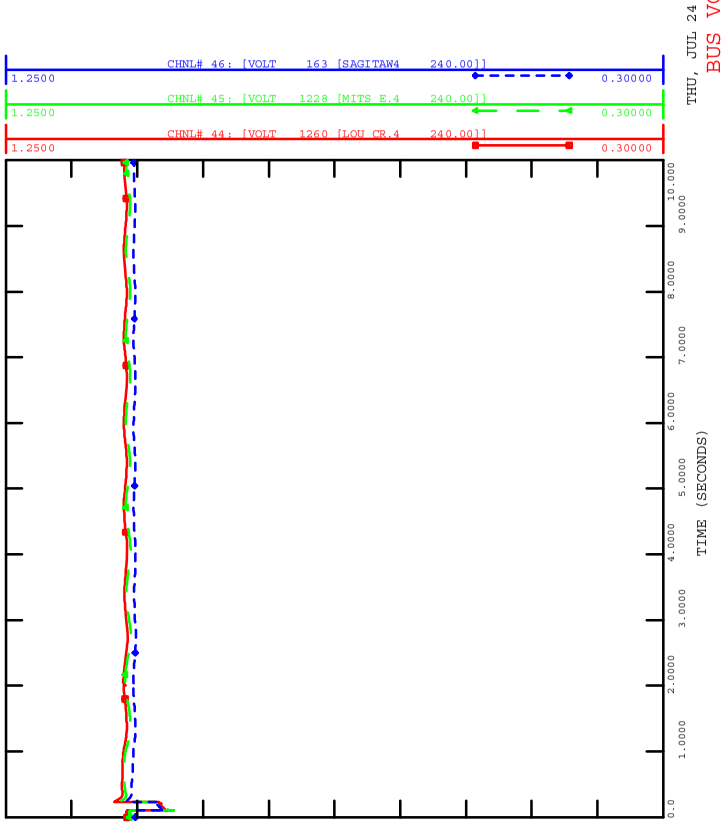
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-12.out



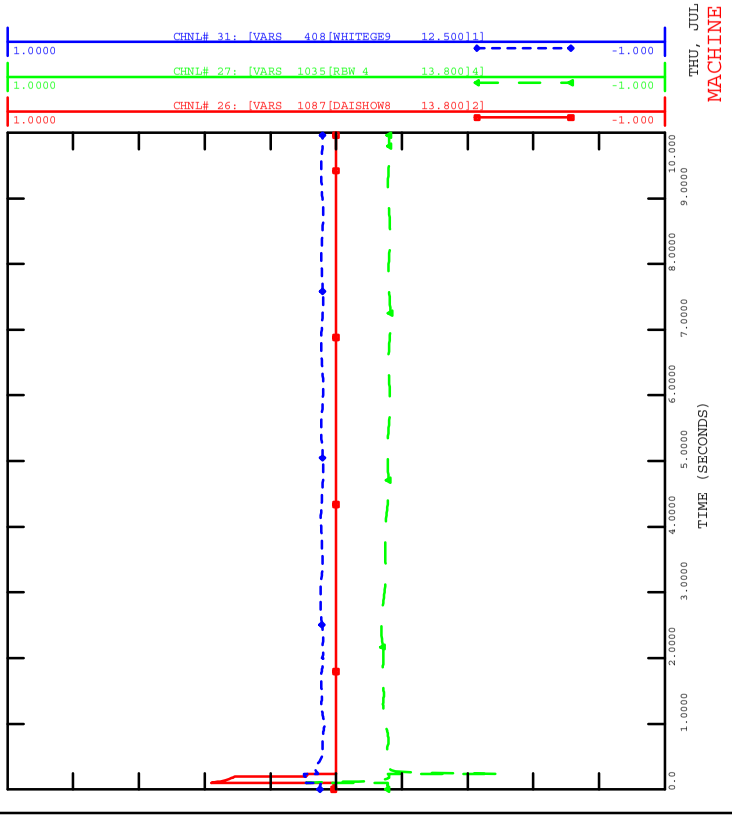
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-12.out



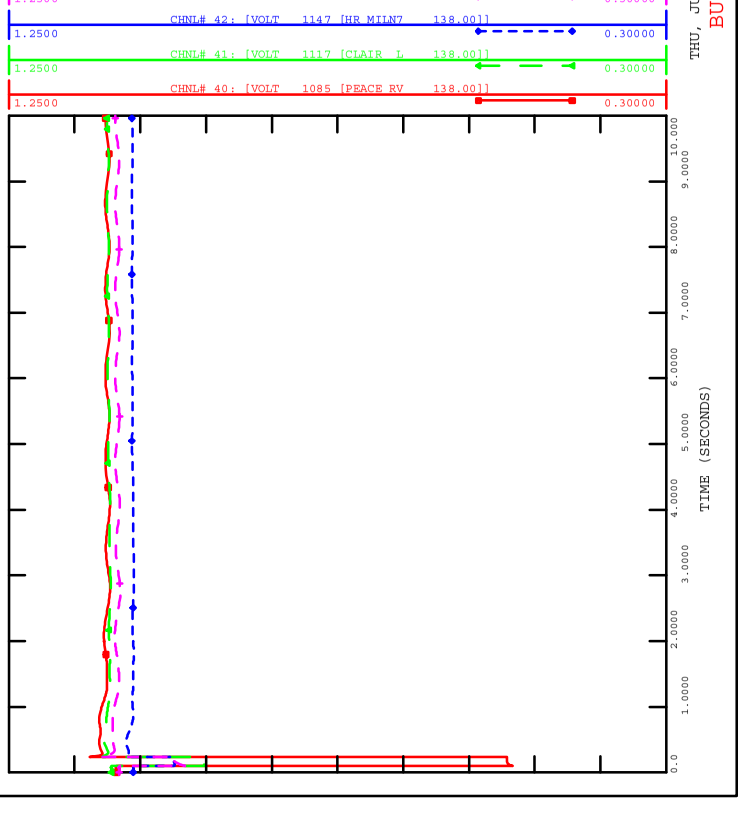
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

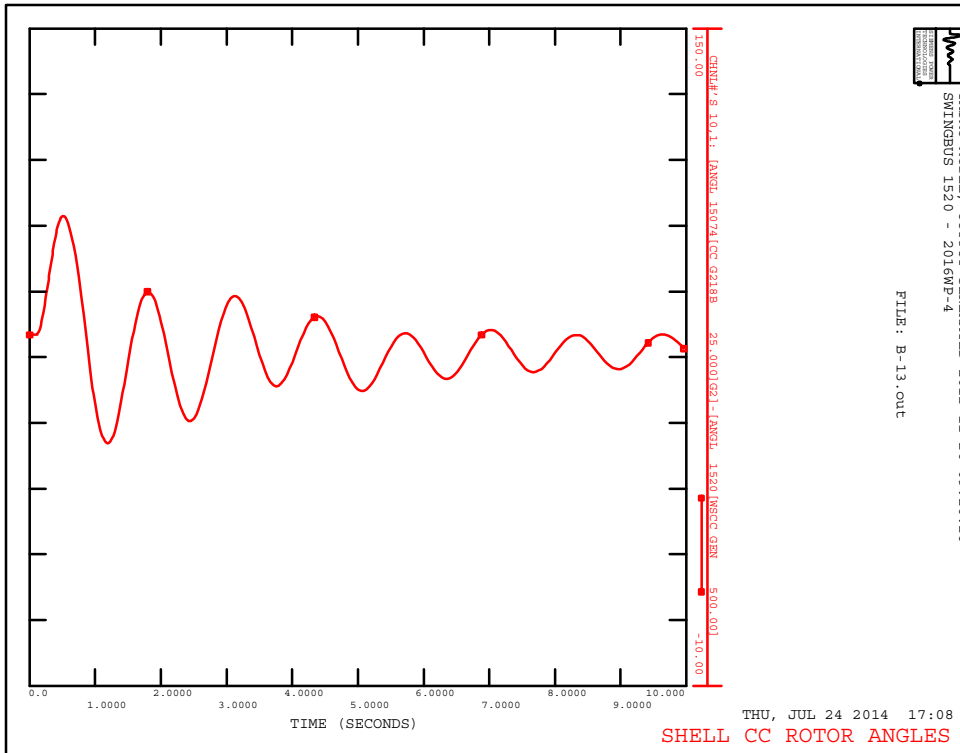
FILE: B-12.out

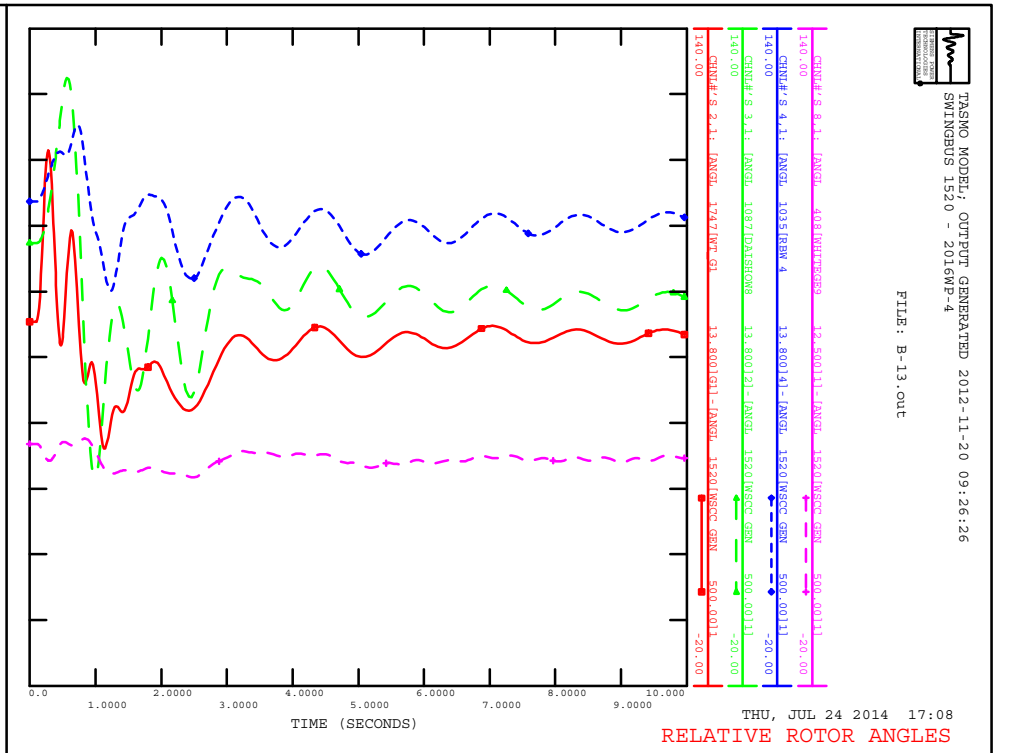


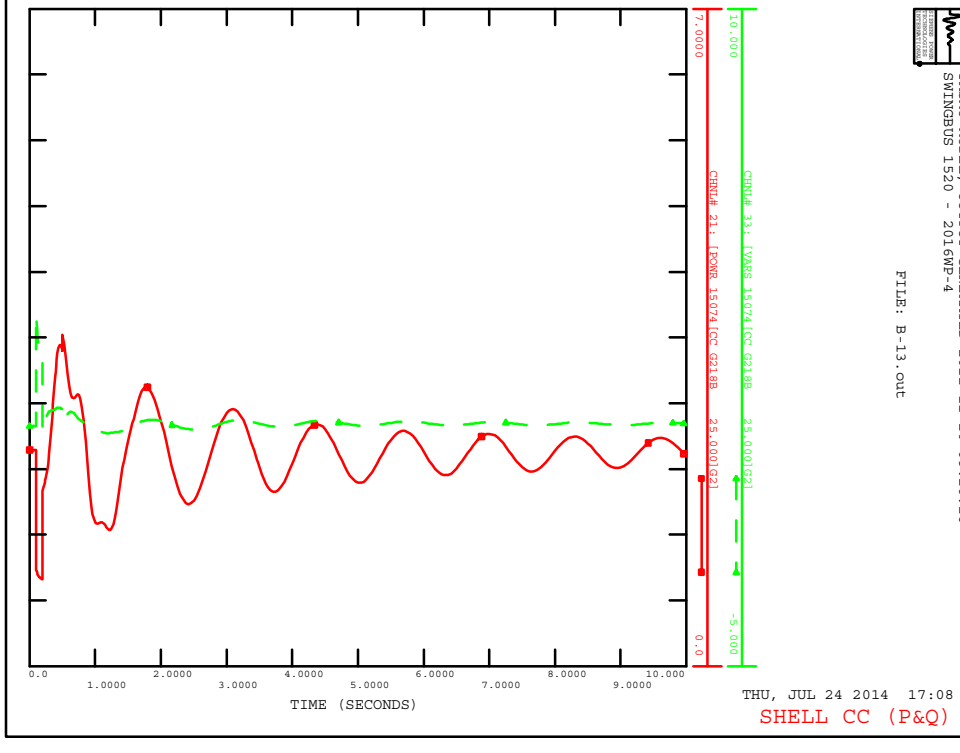
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

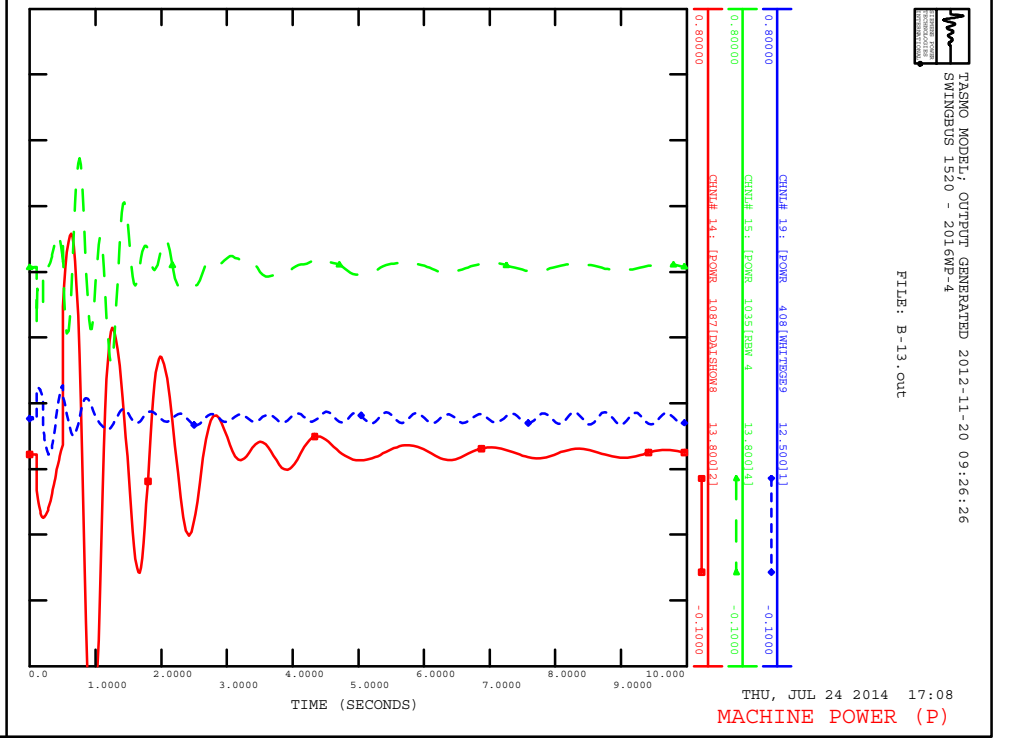
FILE: B-12.out

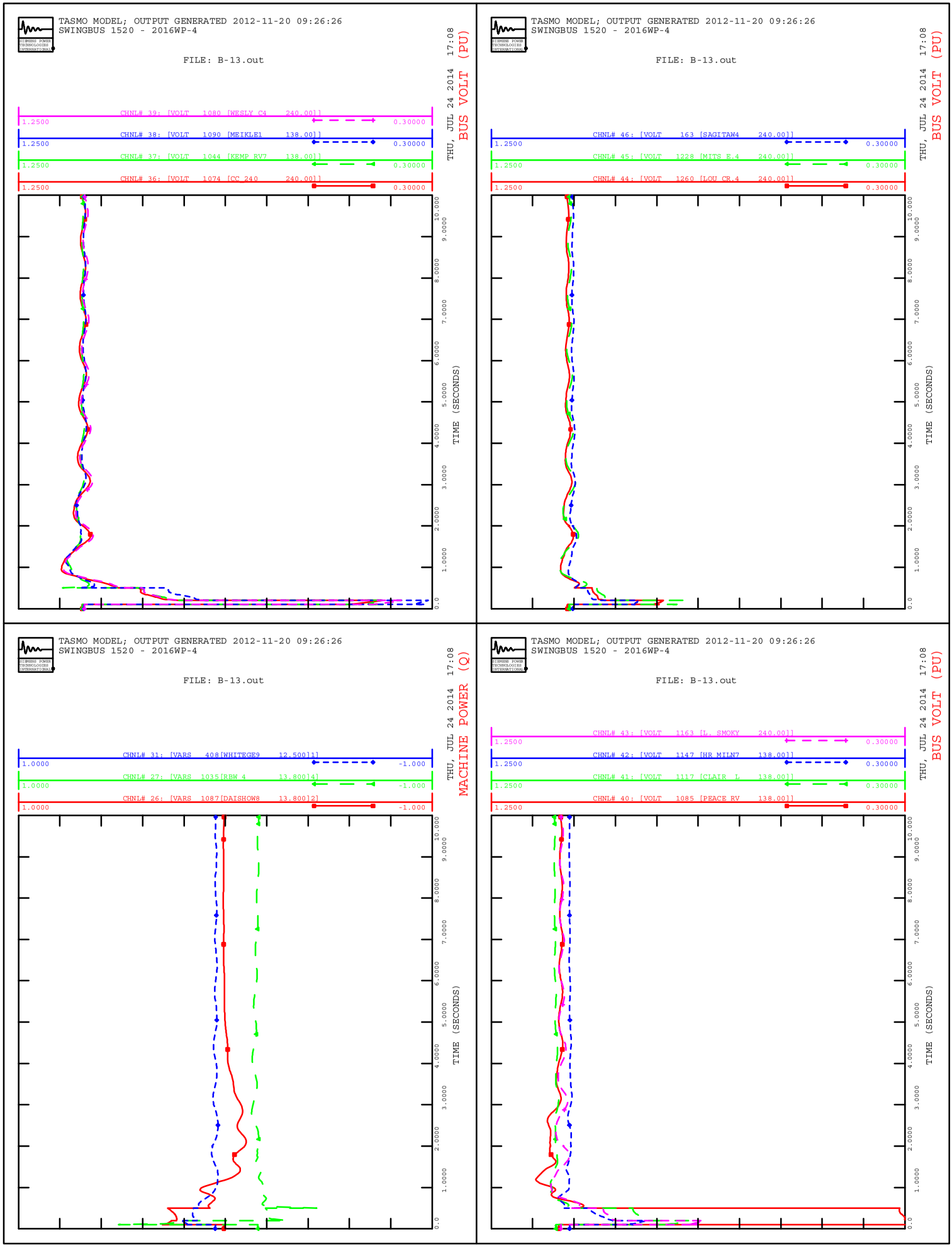



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-13.out
CHNL# S 10.1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
SHELL CC ROTOR ANGLES


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-13.out
CHNL# S 8.1: [ANGL 408[WHITESB9 12.500[1] [ANGL 1520[NSCC GEN 500.00]]
CHNL# S 4.1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNL# S 3.1: [ANGL 1087[DAISHON8 13.800[2] [ANGL 1520[NSCC GEN 500.00]]
CHNL# S 2.1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
RELATIVE ROTOR ANGLES


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-13.out
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
CHNL# 33: [VARS 15074[CC G218B 25.000[G2]
7.0000
10.000
0.0
-5.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
SHELL CC (P&Q)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-13.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
MACHINE POWER (P)

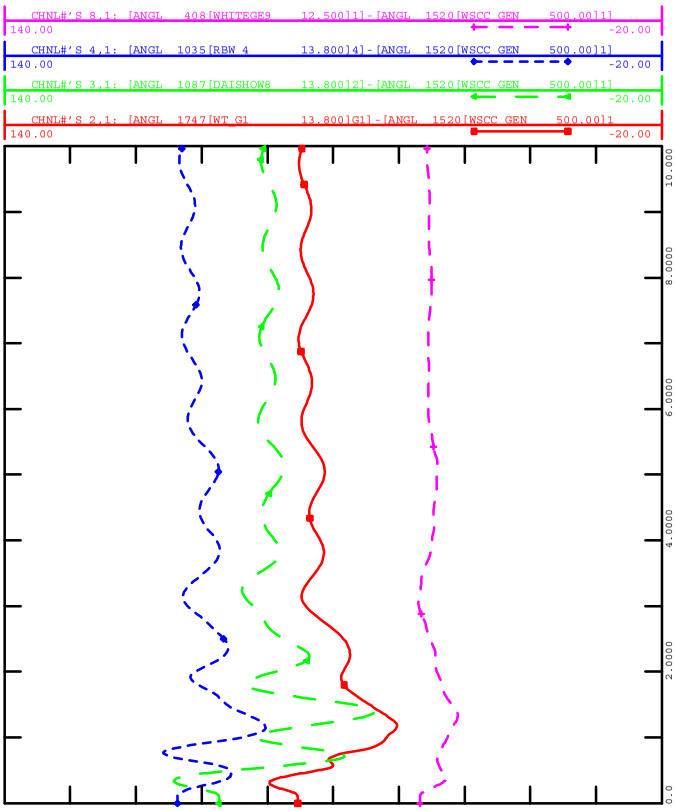

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-13.out
THU, JUL 24 2014 17:08
BUS VOLT (PU)
CHNL# 39: [VOLT 1080 [WESLY C4 240.00]]
CHNL# 38: [VOLT 1090 [MEIKLE1 138.00]]
CHNL# 37: [VOLT 1044 [KEMP RV7 138.00]]
CHNL# 36: [VOLT 1074 [CC 240 240.00]]
1.2500
0.30000
TIME (SECONDS)
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-13.out
THU, JUL 24 2014 17:08
BUS VOLT (PU)
CHNL# 46: [VOLT 163 [SAGITAW4 240.00]]
CHNL# 45: [VOLT 1228 [MITS E.4 240.00]]
CHNL# 44: [VOLT 1260 [LOU CR.4 240.00]]
1.2500
0.30000
TIME (SECONDS)
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-13.out
THU, JUL 24 2014 17:08
MACHINE POWER (Q)
CHNL# 31: [VARS 408[WHITEGE9 12.500]1]
CHNL# 27: [VARS 1035[RBW 4 13.800]4]
CHNL# 26: [VARS 1087[DAISHOW8 13.800]2]
1.0000
-1.000
TIME (SECONDS)
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-13.out
THU, JUL 24 2014 17:08
BUS VOLT (PU)
CHNL# 43: [VOLT 1163 [L. SMOKY 240.00]]
CHNL# 42: [VOLT 1147 [HR MLN7 138.00]]
CHNL# 41: [VOLT 1117 [CLAIR L 138.00]]
CHNL# 40: [VOLT 1085 [PEACE RV 138.00]]
1.2500
0.30000
TIME (SECONDS)

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-14.out

THU, JUL 24 2014 17:08

RELATIVE ROTOR ANGLES

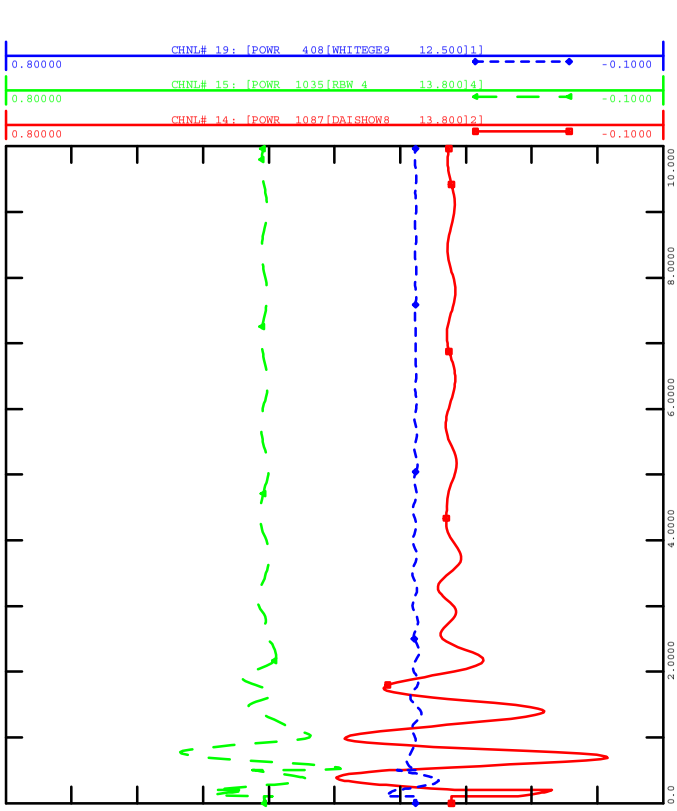


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-14.out

THU, JUL 24 2014 17:08

MACHINE POWER (P)

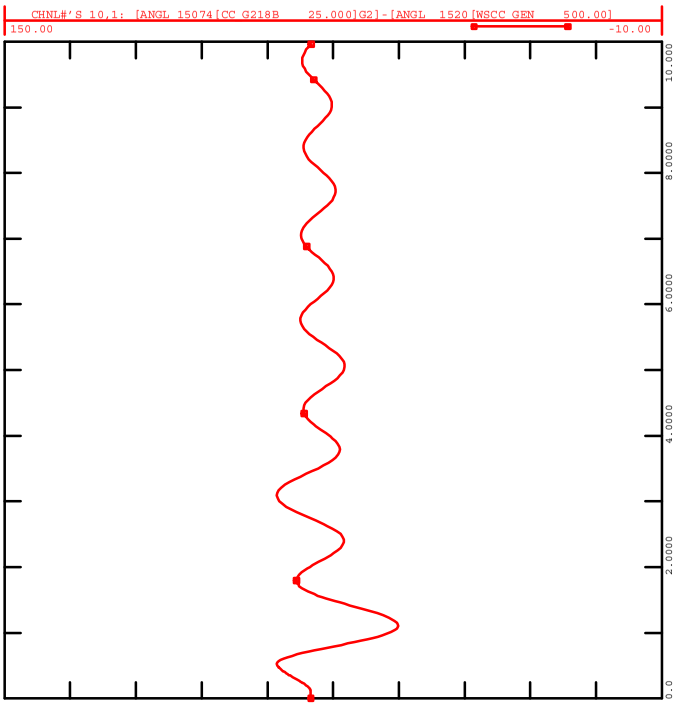


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-14.out

THU, JUL 24 2014 17:08

SHELL CC ROTOR ANGLES

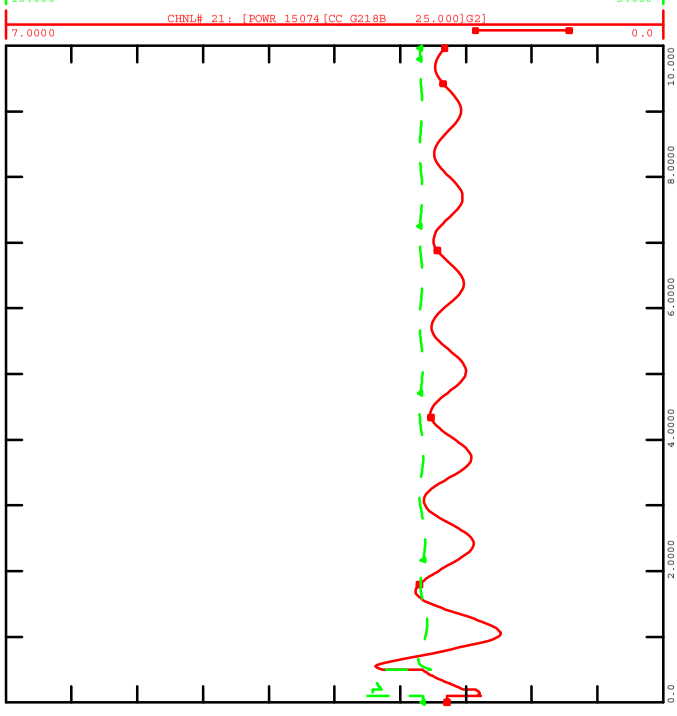


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-14.out

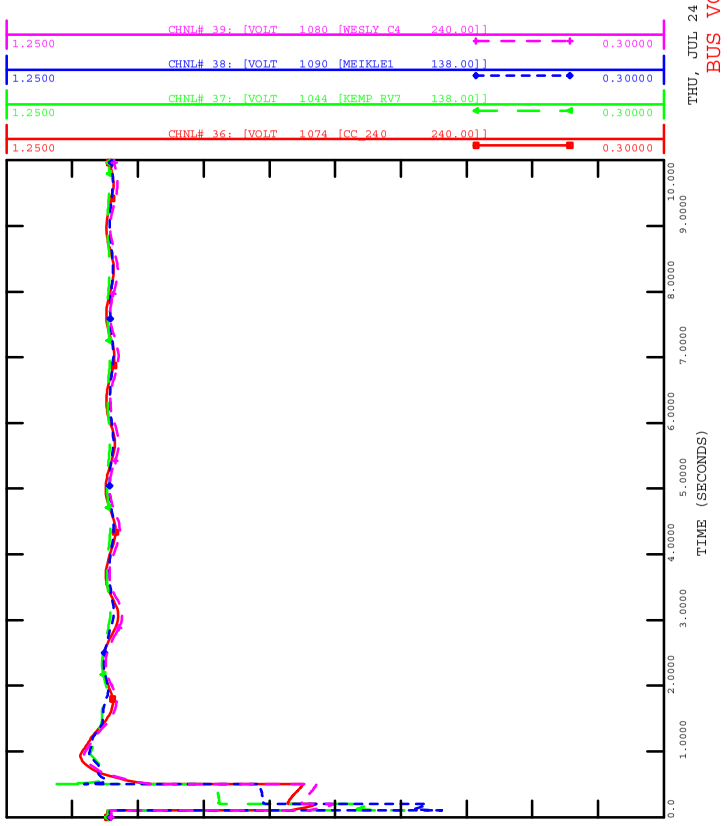
THU, JUL 24 2014 17:08

SHELL CC (P&Q)



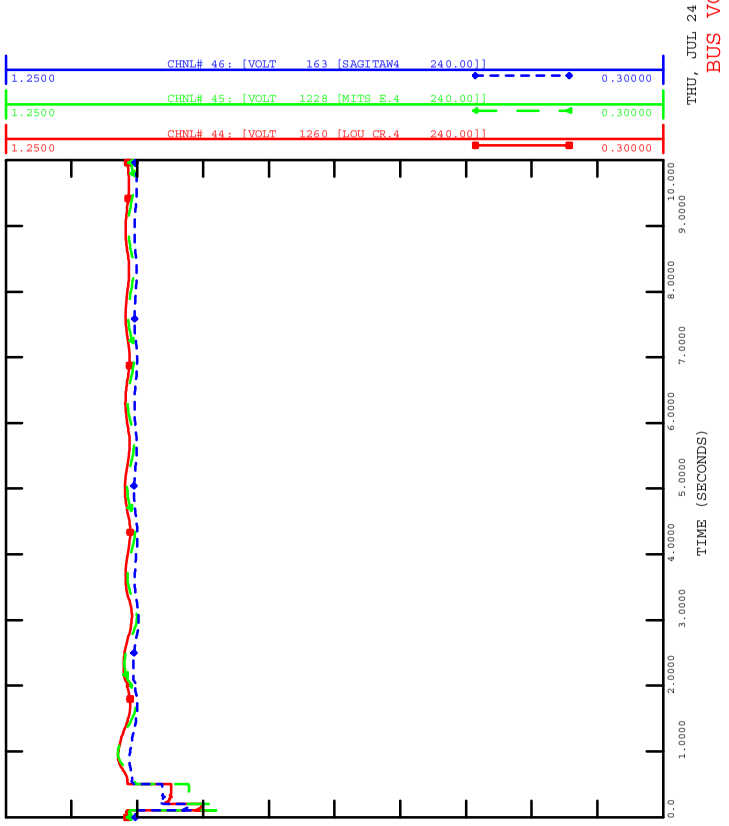
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-14.out



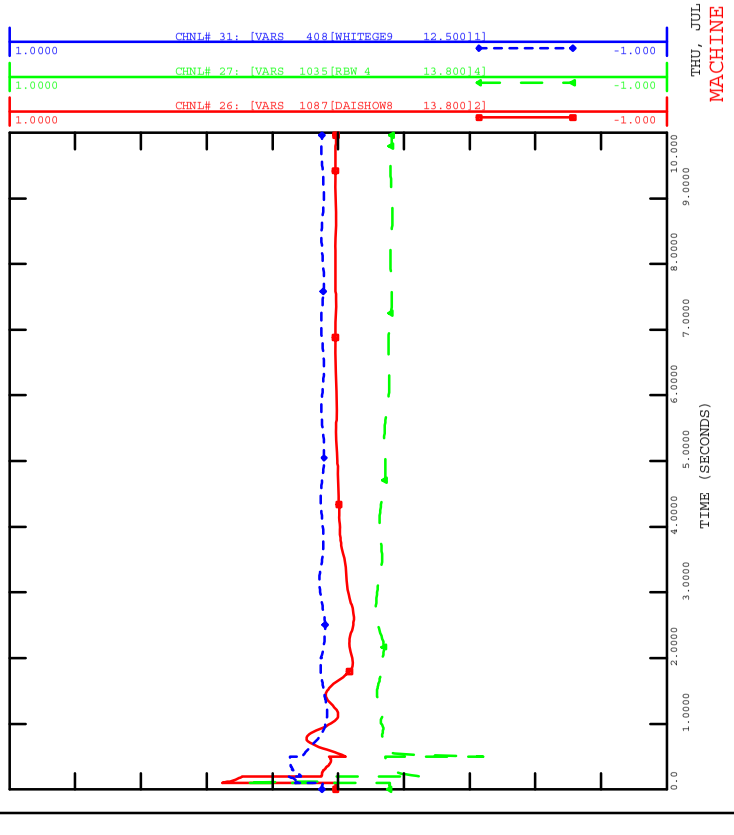
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-14.out



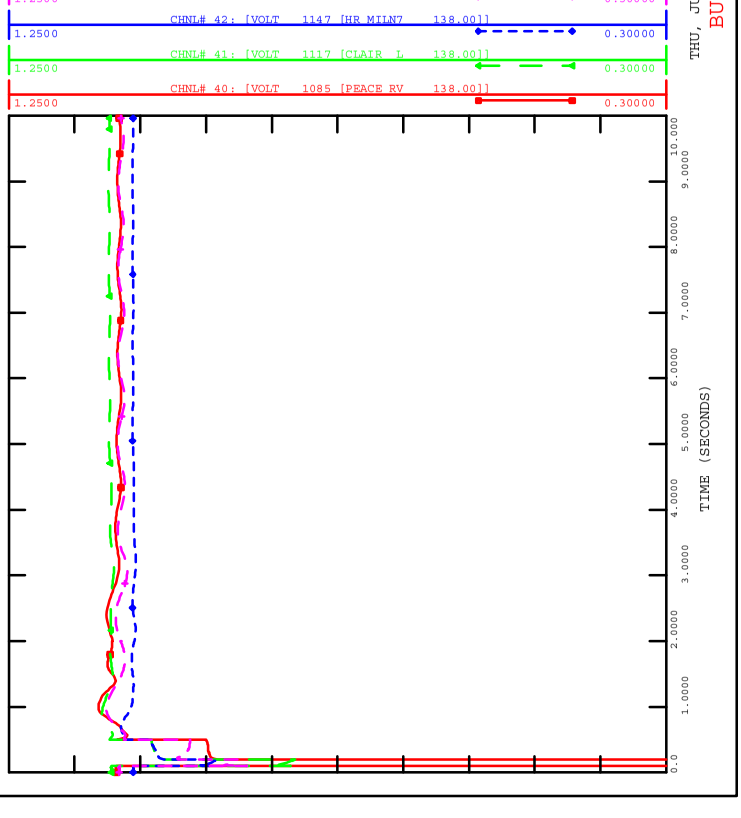
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

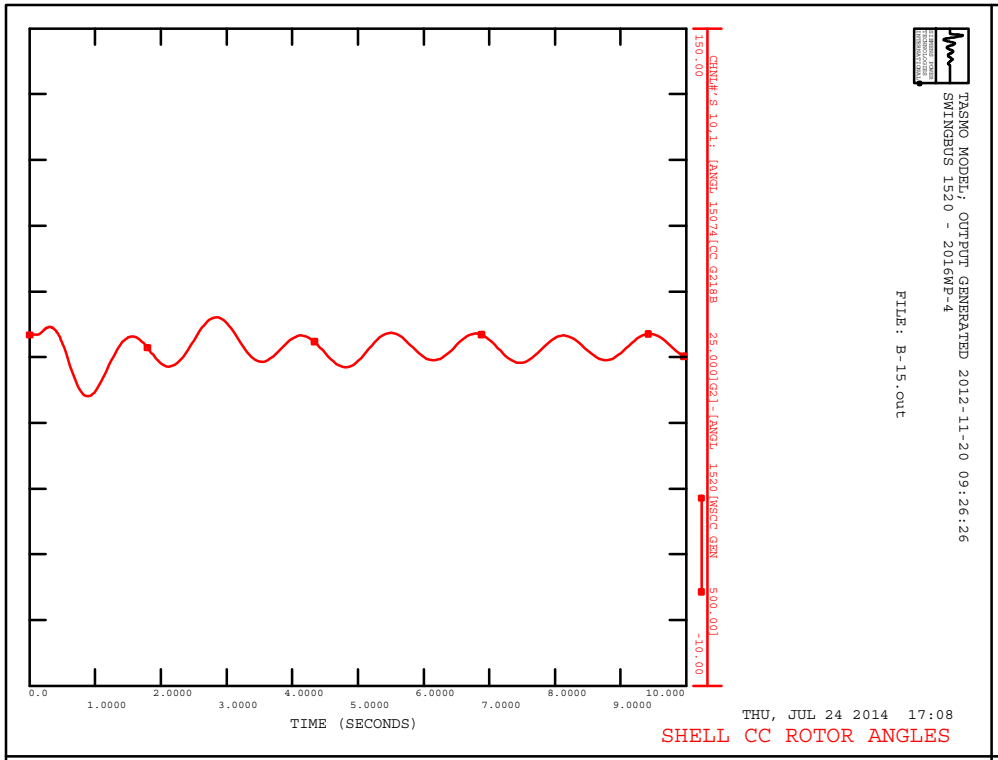
FILE: B-14.out

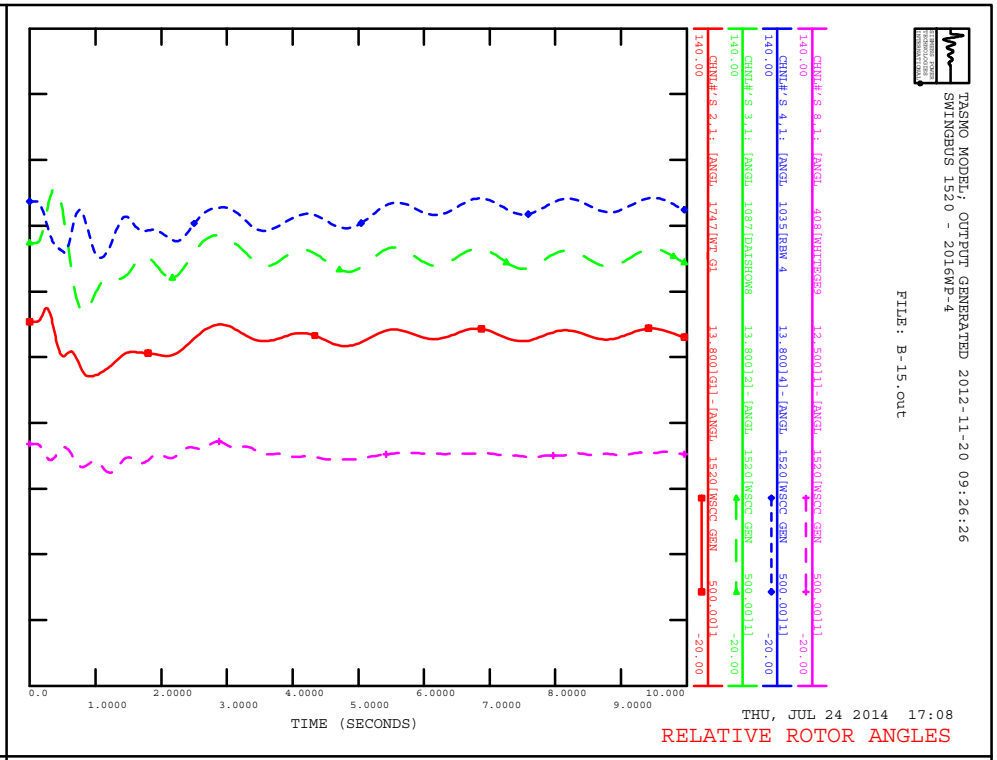


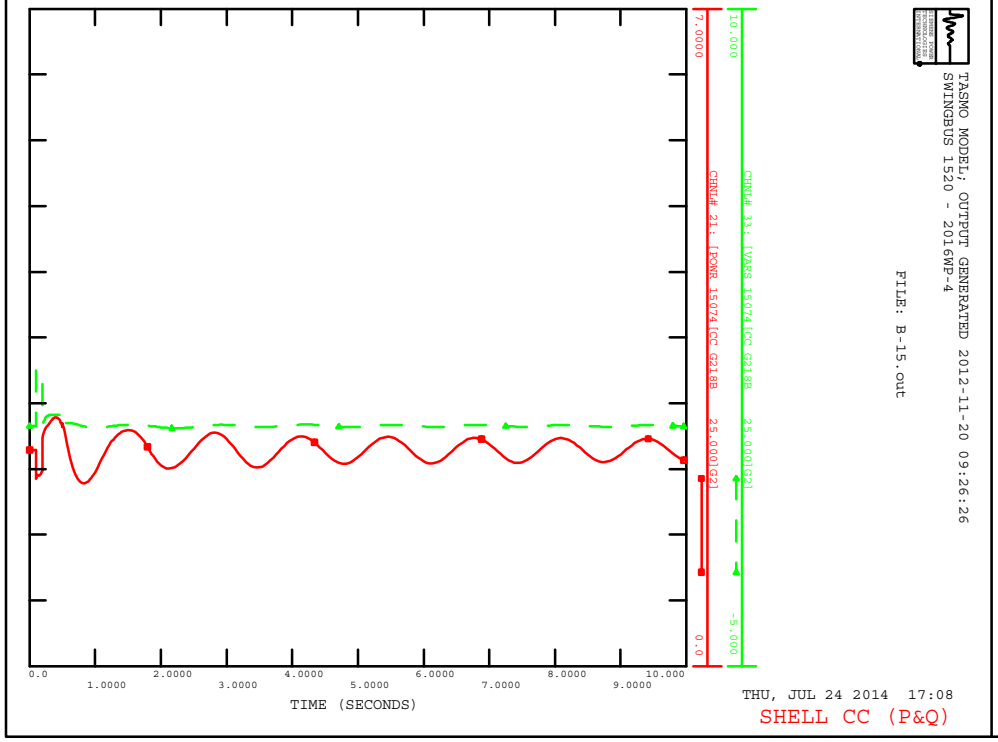
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

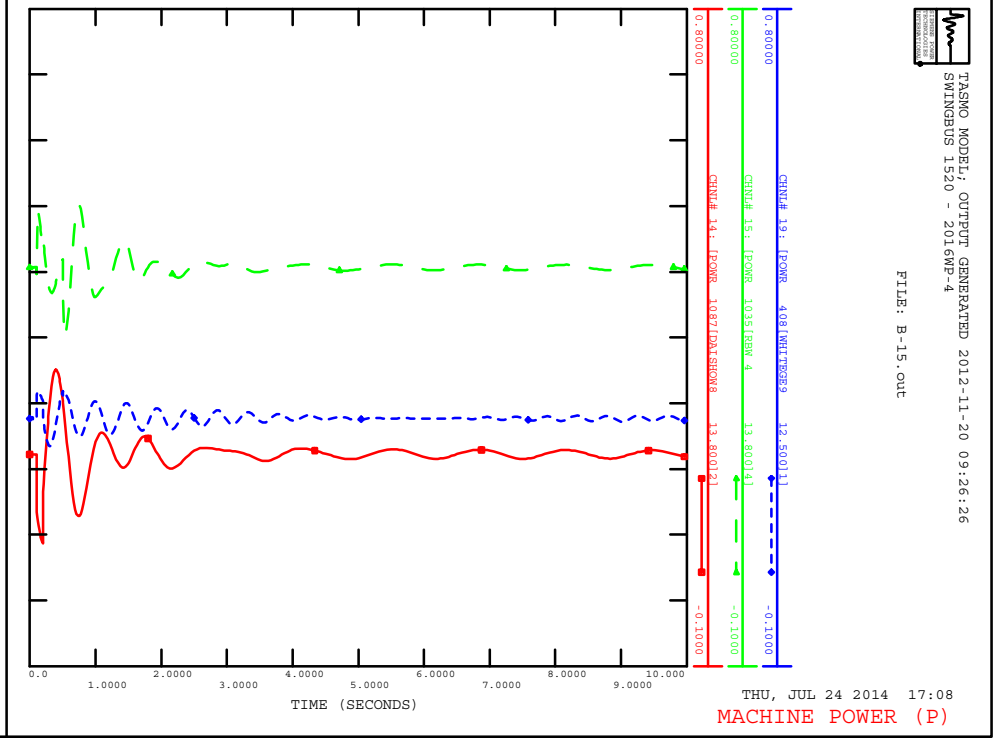
FILE: B-14.out




TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-15.out
CHNU#'S 10.1: [ANGL 15074[CC G21BB 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
SHELL CC ROTOR ANGLES

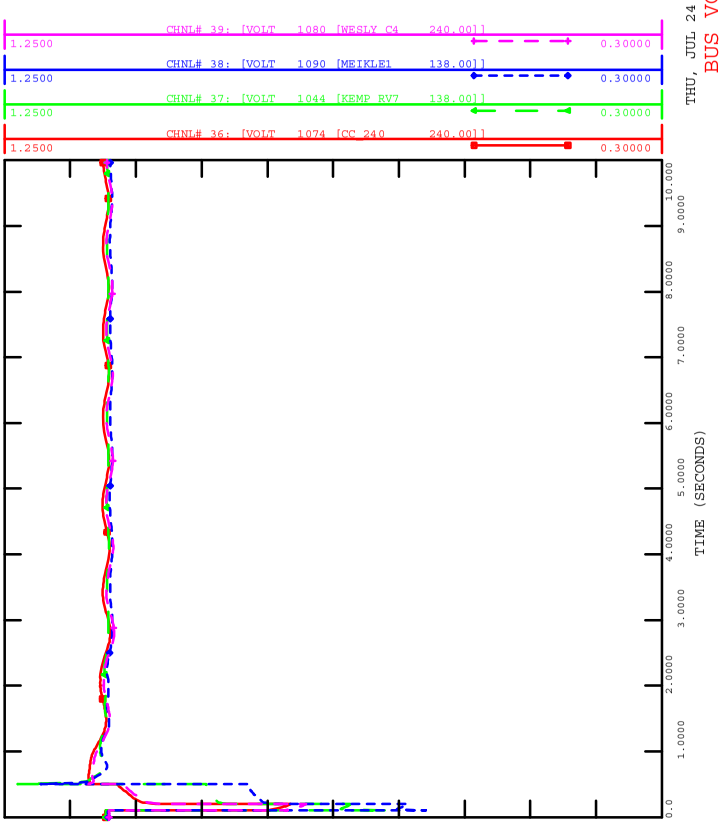

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-15.out
CHNU#'S 8.1: [ANGL 408[WHITESB9 12.500[1] [ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 4.1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 3.1: [ANGL 1087[DAISHON8 13.800[2] [ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 2.1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
-20.00
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
RELATIVE ROTOR ANGLES


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-15.out
CHNU# 33: [VARS 15074 [CC G21BB 25.000[G2]
CHNU# 21: [POWR 15074[CC G21BB 25.000[G2]
10.000
-5.000
0.0
7.0000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
SHELL CC (P&Q)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-15.out
CHNU# 19: [POWR 408[WHITESB9 12.500[1]
CHNU# 15: [POWR 1035[RBM 4 13.800[4]
CHNU# 14: [POWR 1087[DAISHON8 13.800[2]
0.80000
-0.1000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
MACHINE POWER (P)

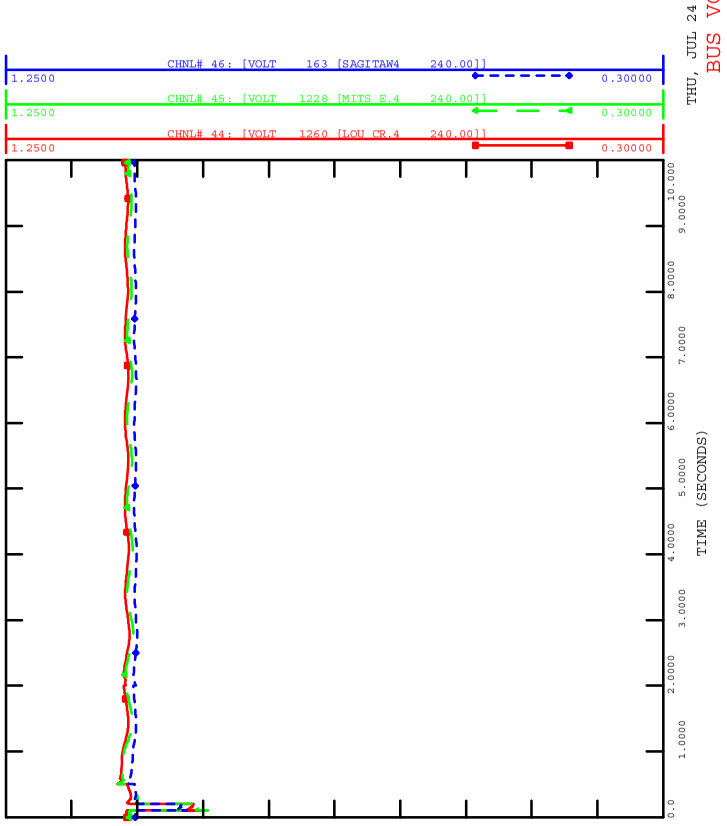
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-15.out



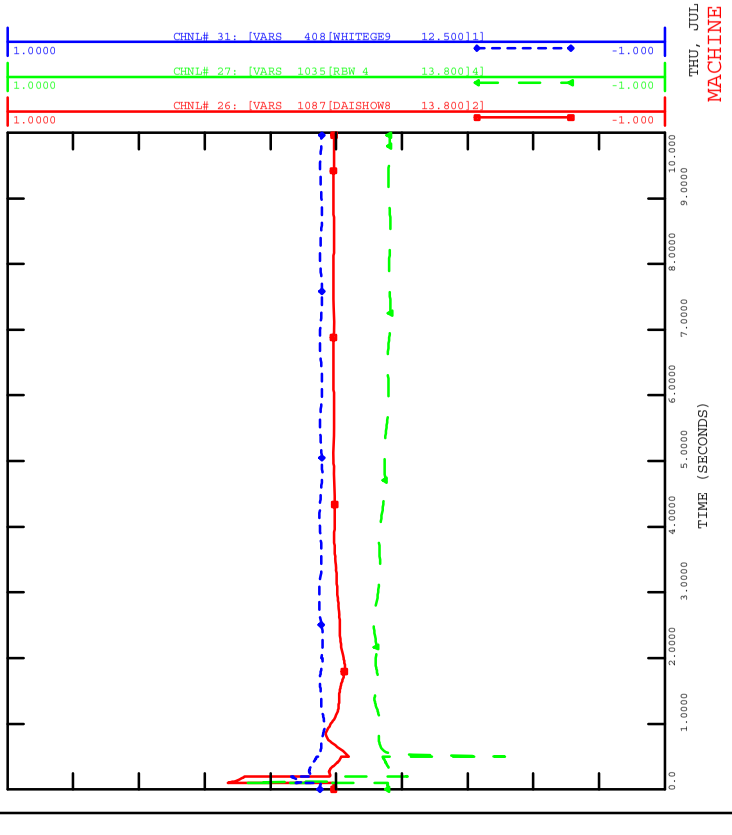
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-15.out



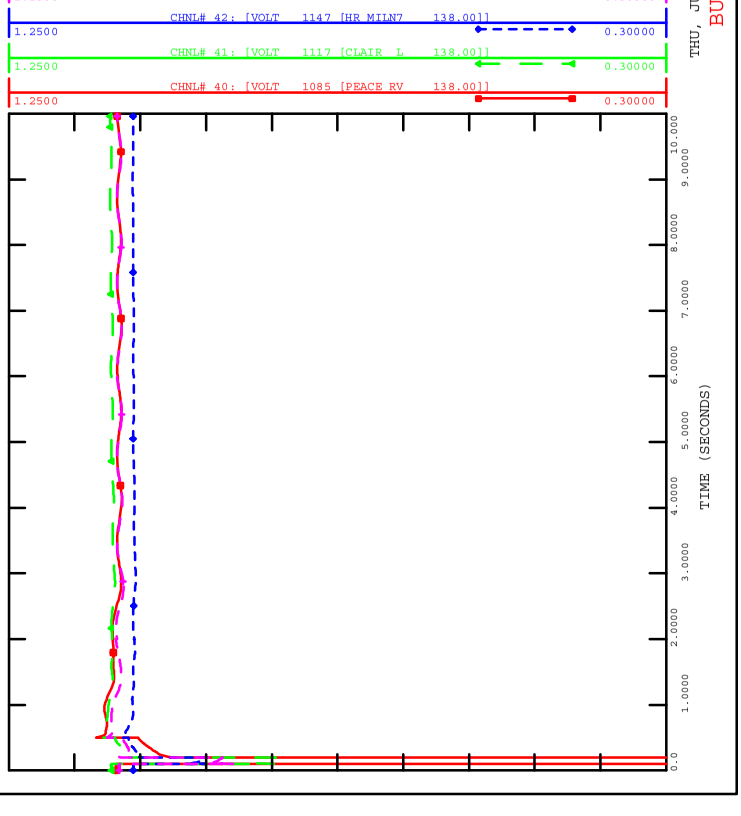
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-15.out



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-15.out

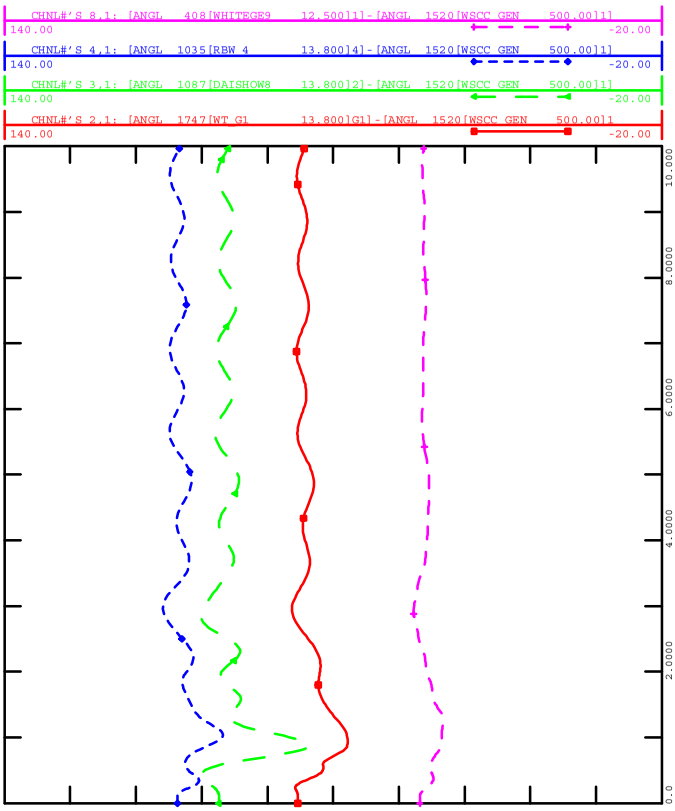


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-16.out

THU, JUL 24 2014 17:08

RELATIVE ROTOR ANGLES

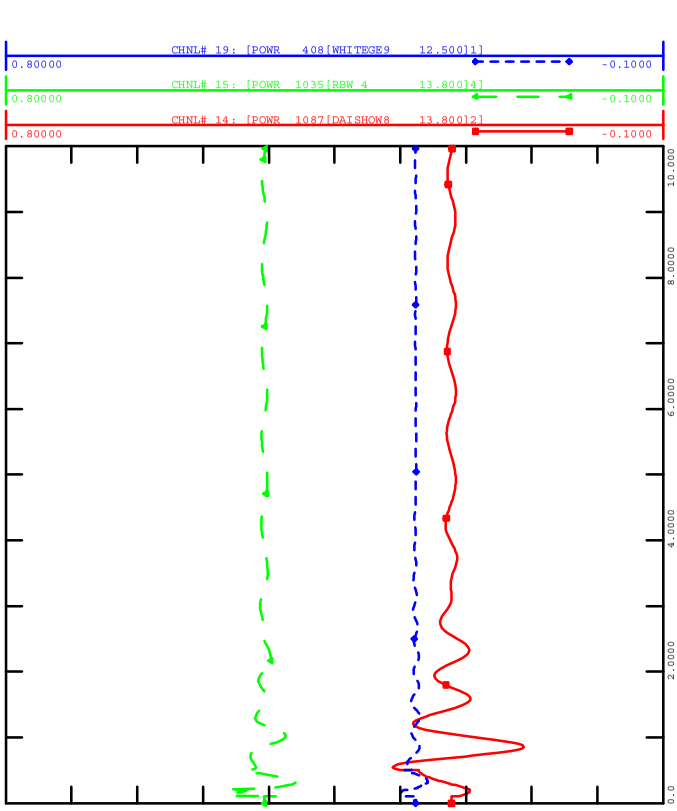


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-16.out

THU, JUL 24 2014 17:08

MACHINE POWER (P)

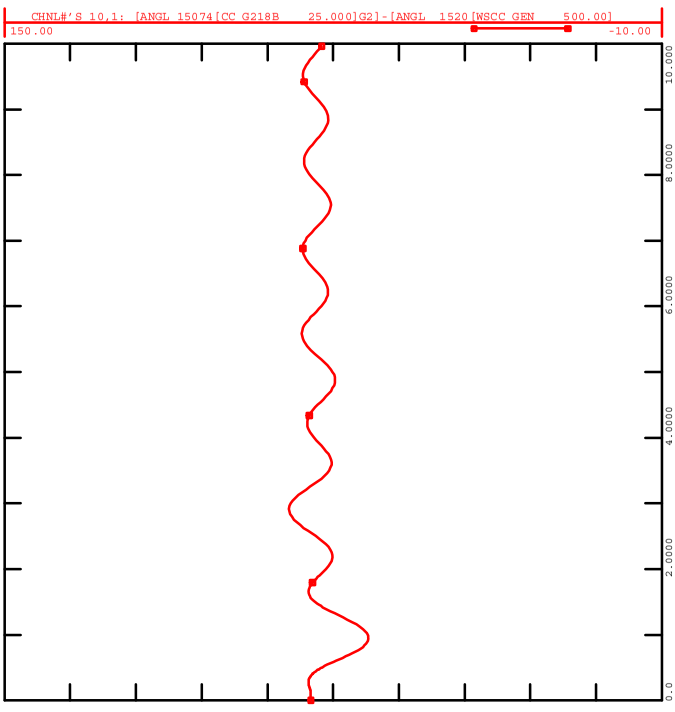


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-16.out

THU, JUL 24 2014 17:08

SHELL CC ROTOR ANGLES

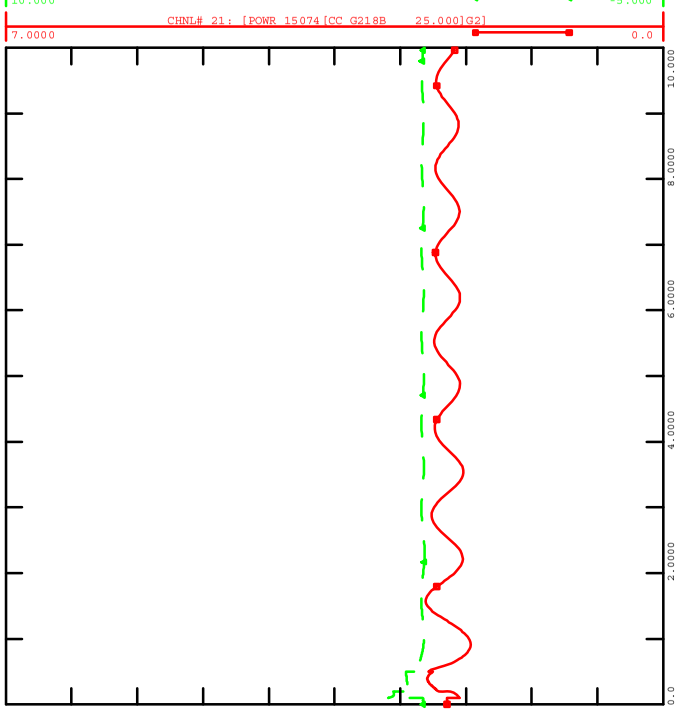


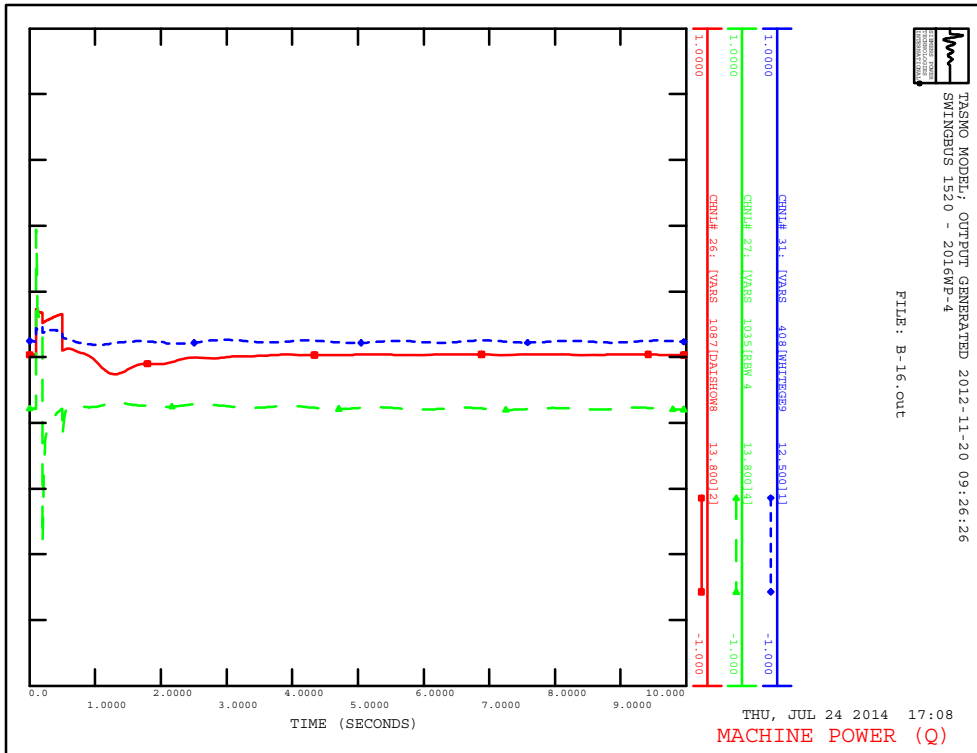
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

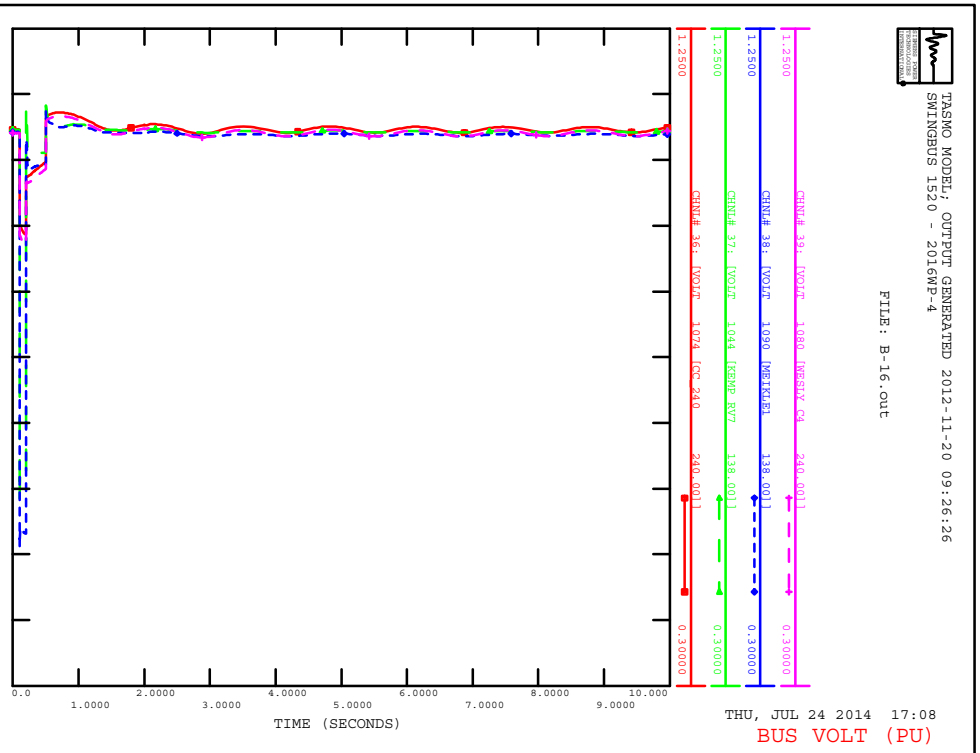
FILE: B-16.out

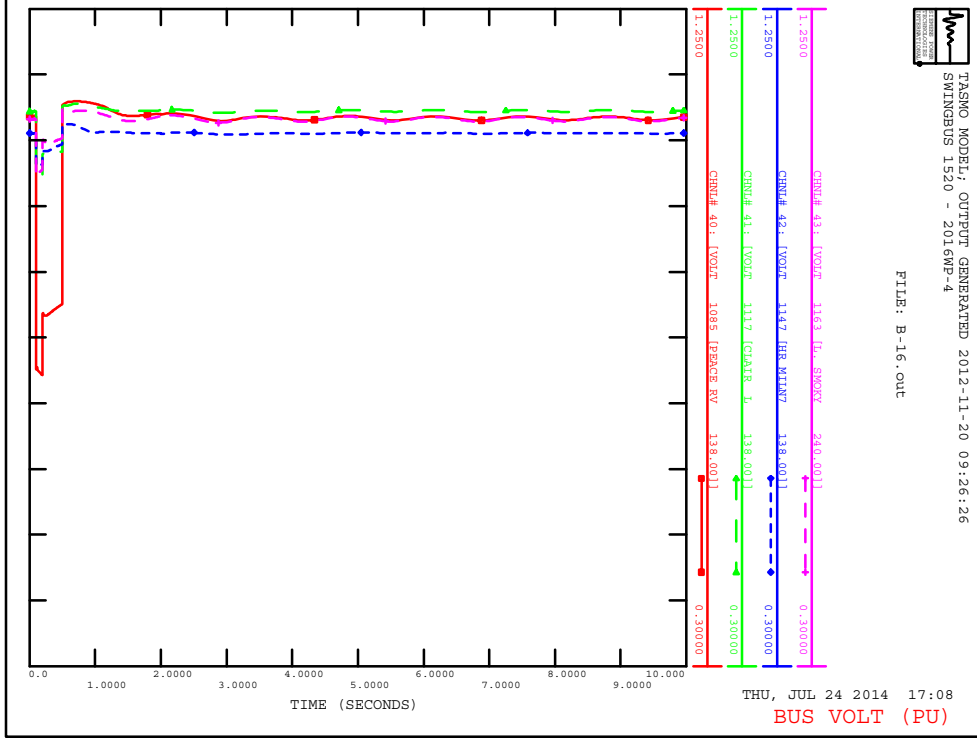
THU, JUL 24 2014 17:08

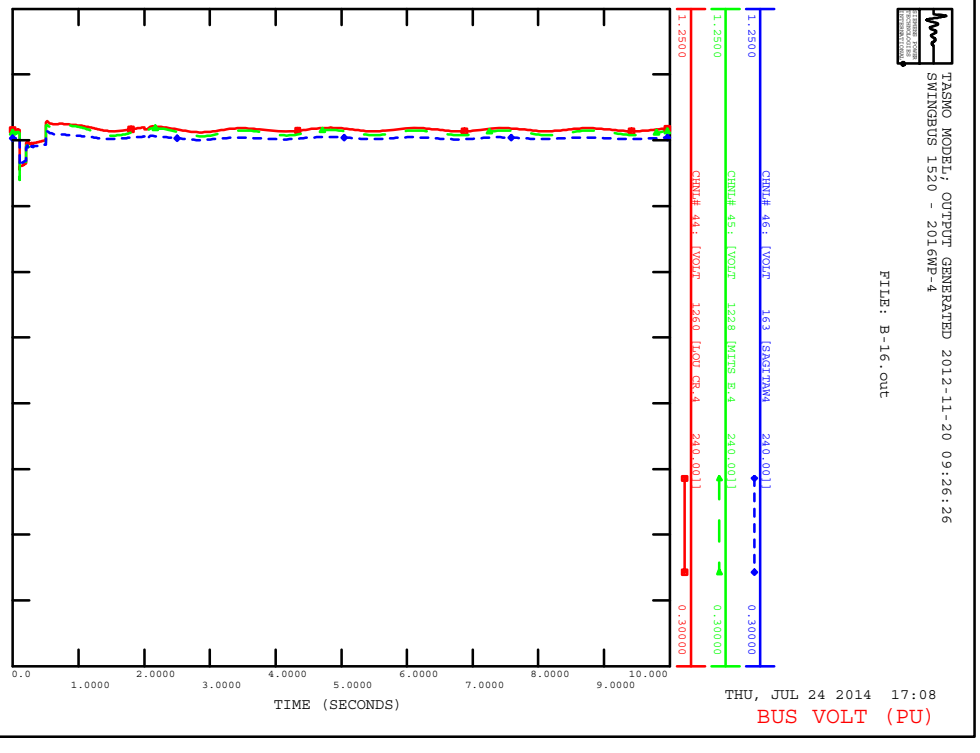
SHELL CC (P&Q)




TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-16.out
CHNI# 31; [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27; [VARS 1035 [RBW 4 13.800]4]
CHNI# 26; [VARS 1087 [DAISHOW8 13.800]2]
1.0000
-1.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
MACHINE POWER (Q)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-16.out
CHNI# 39; [VOLT 1080 [NESIK C4 240.00]
CHNI# 38; [VOLT 1090 [MEIKLE1 138.00]
CHNI# 37; [VOLT 1044 [KEMP RV7 138.00]
CHNI# 36; [VOLT 1074 [CC 240 240.00]
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
BUS VOLT (PU)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-16.out
CHNI# 43; [VOLT 1163 [W. SMOKY 240.00]
CHNI# 42; [VOLT 1142 [HR MTAN7 138.00]
CHNI# 41; [VOLT 1117 [CHAIR 1 138.00]
CHNI# 40; [VOLT 1085 [PEACE RV 138.00]
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
BUS VOLT (PU)

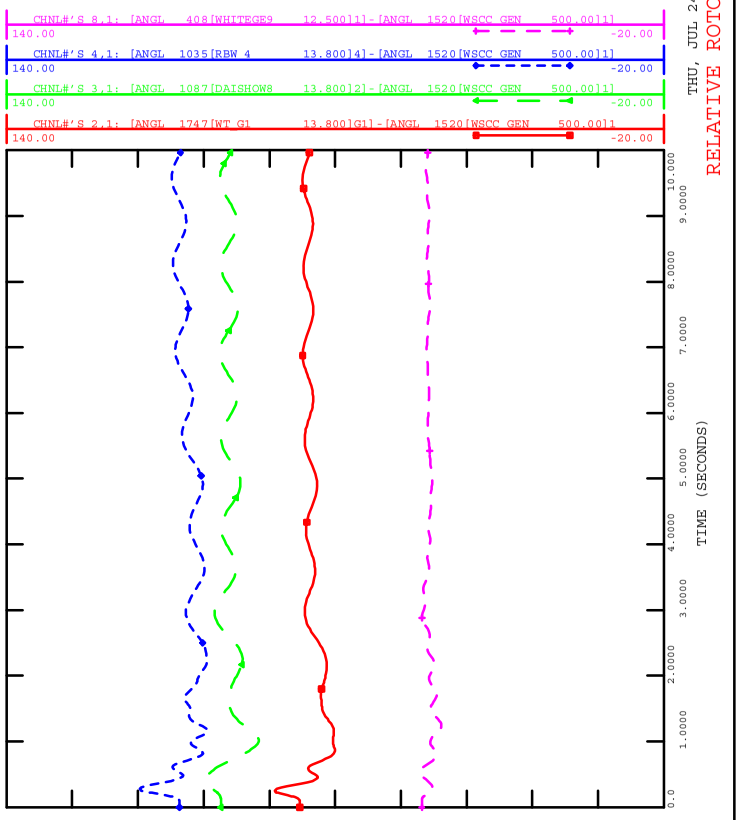

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-16.out
CHNI# 46; [VOLT 163 [SAGITAW4 240.00]
CHNI# 45; [VOLT 1228 [MTS B.4 240.00]
CHNI# 44; [VOLT 1260 [FOU CR.4 240.00]
1.2500
0.30000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:08
BUS VOLT (PU)

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-17.out

THU, JUL 24 2014 17:08

RELATIVE ROTOR ANGLES

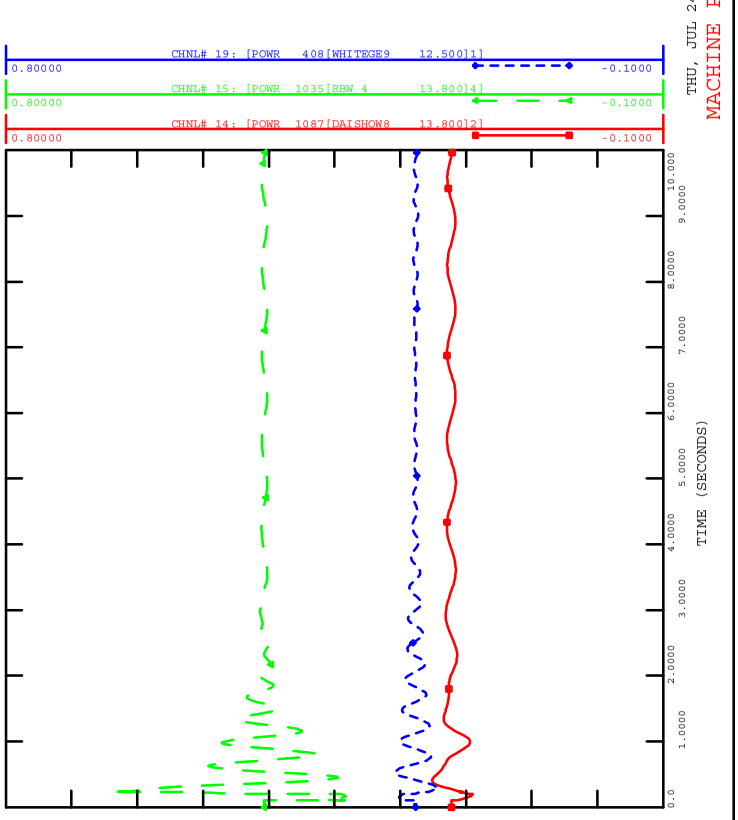


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-17.out

THU, JUL 24 2014 17:08

MACHINE POWER (P)

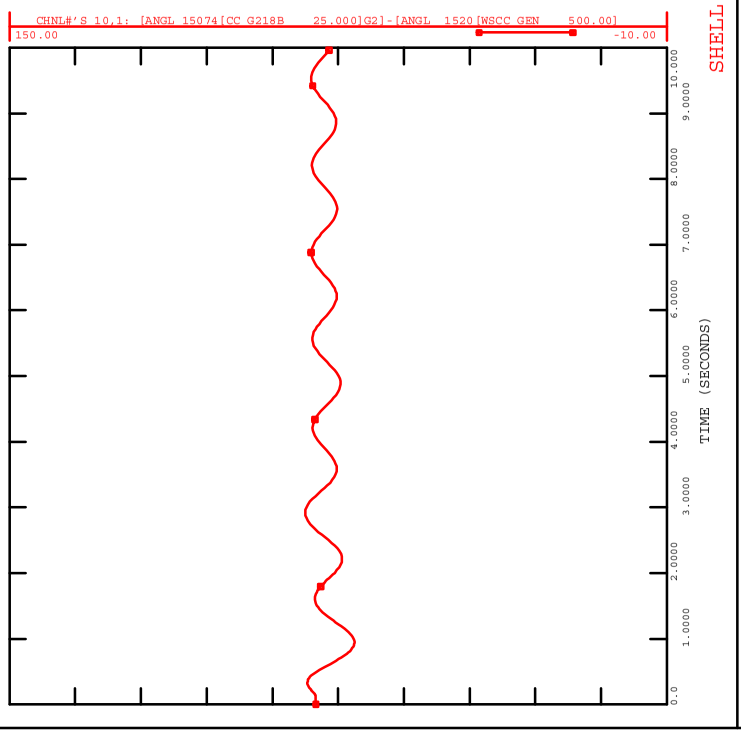


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-17.out

THU, JUL 24 2014 17:08

SHELL CC ROTOR ANGLES

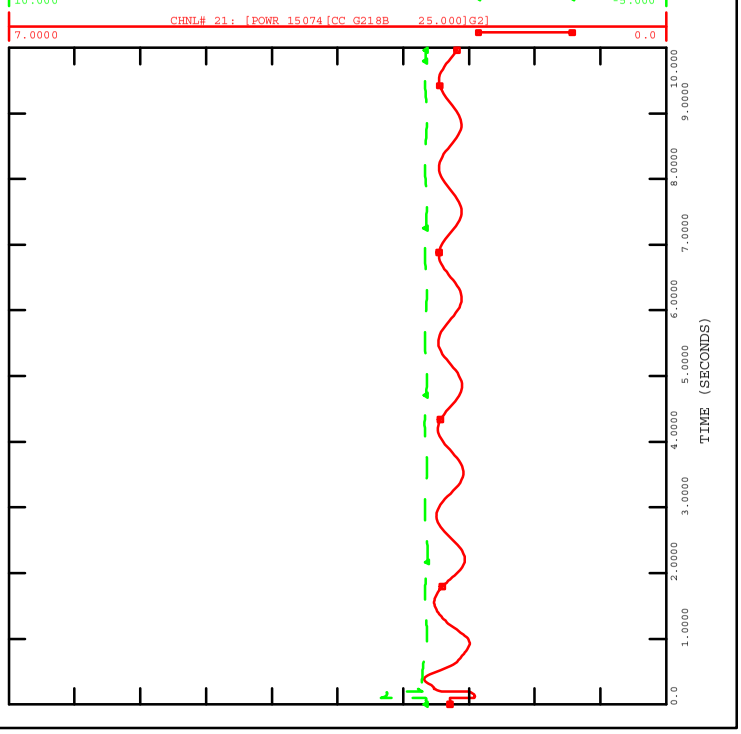


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-17.out

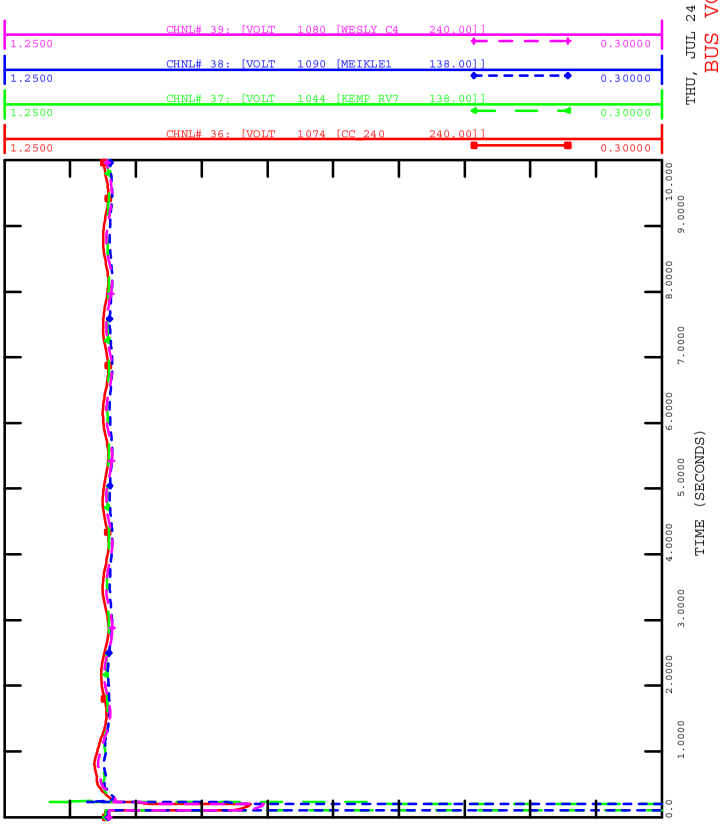
THU, JUL 24 2014 17:08

SHELL CC (P&Q)



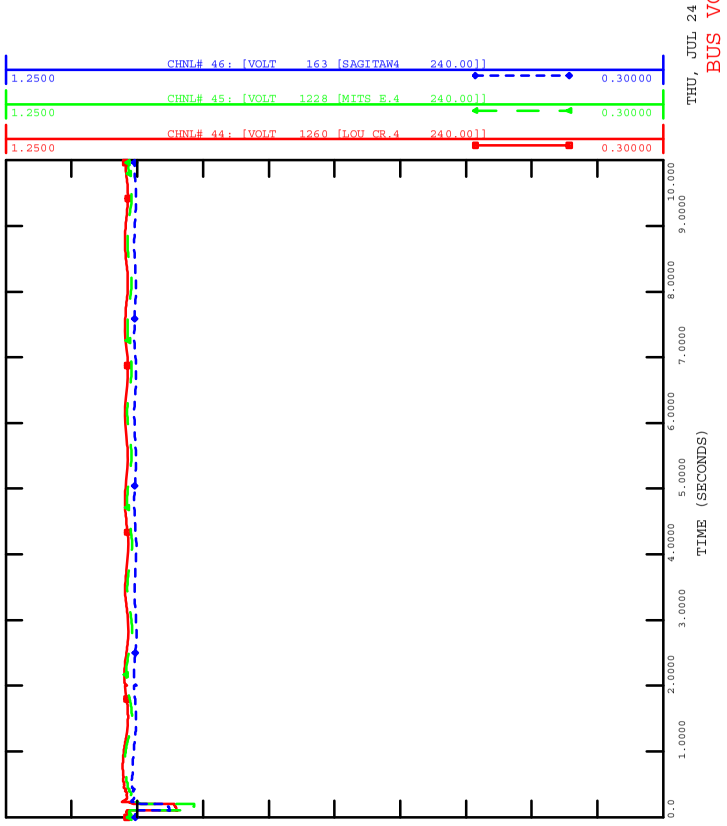
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-17.out



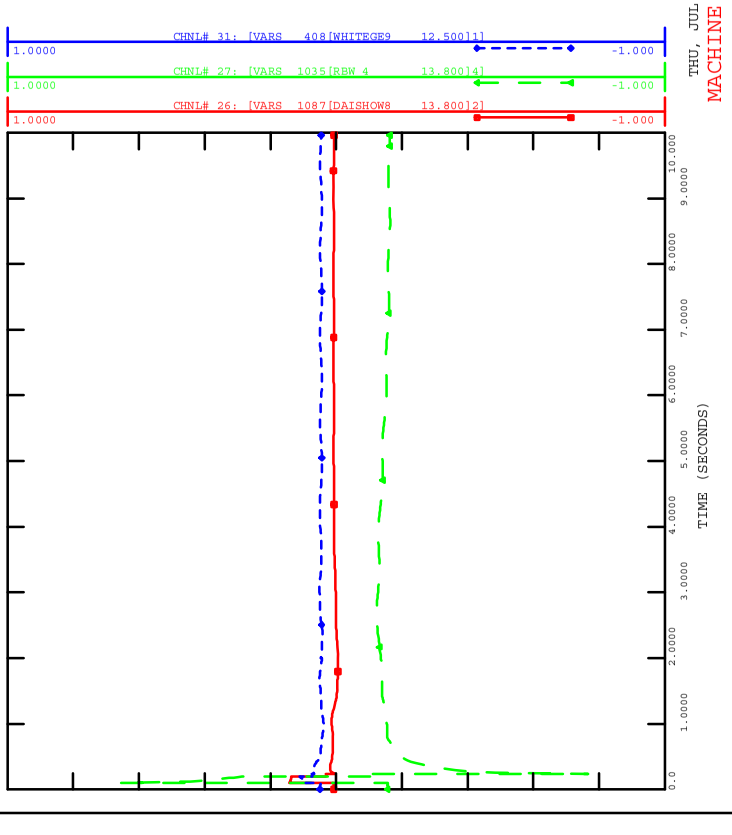
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-17.out



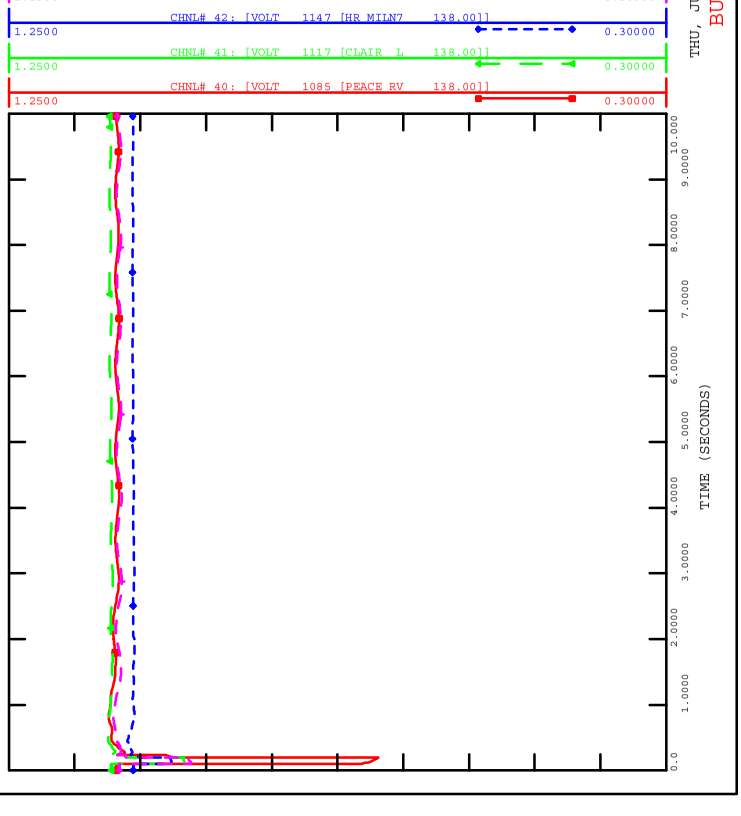
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-17.out



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-17.out

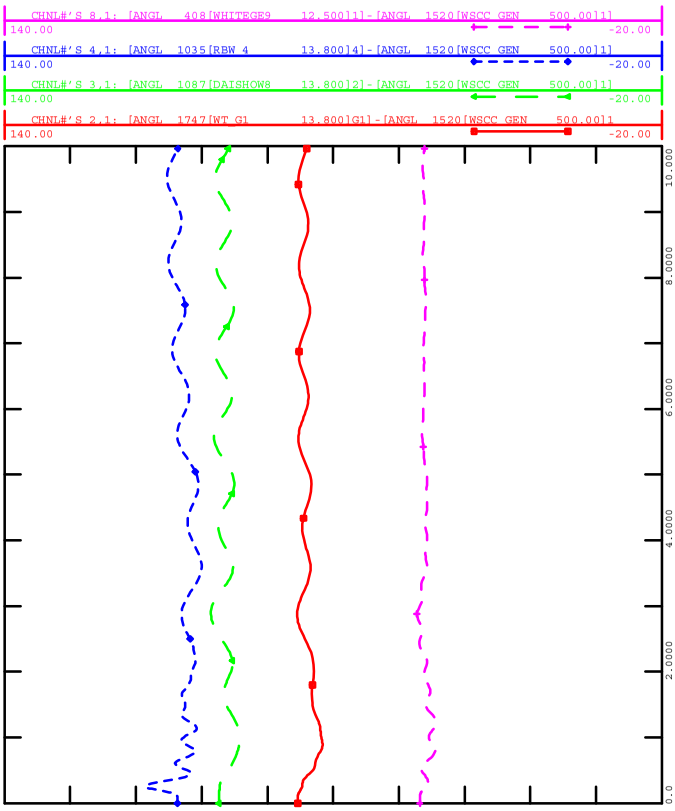


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-18.out

THU, JUL 24 2014 17:09

RELATIVE ROTOR ANGLES

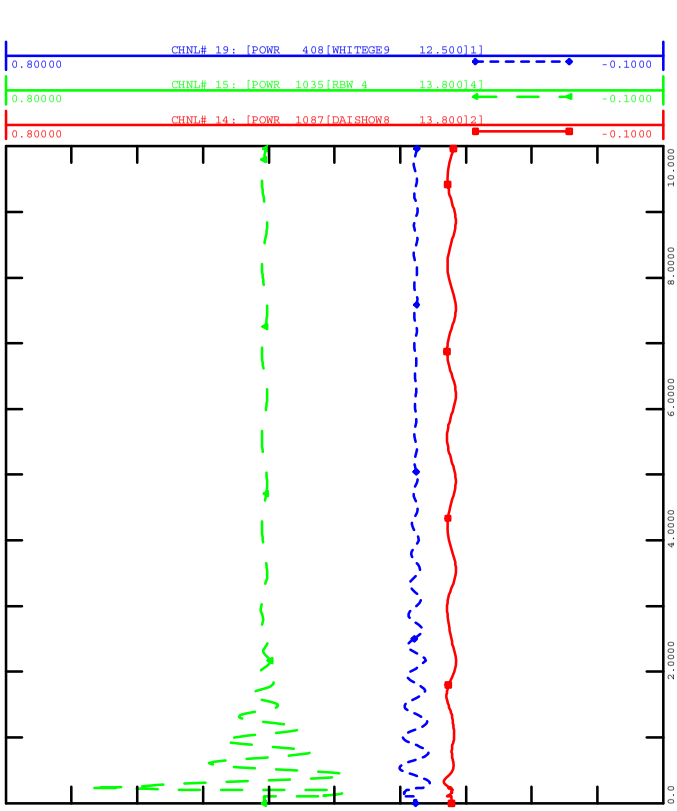


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-18.out

THU, JUL 24 2014 17:09

MACHINE POWER (P)

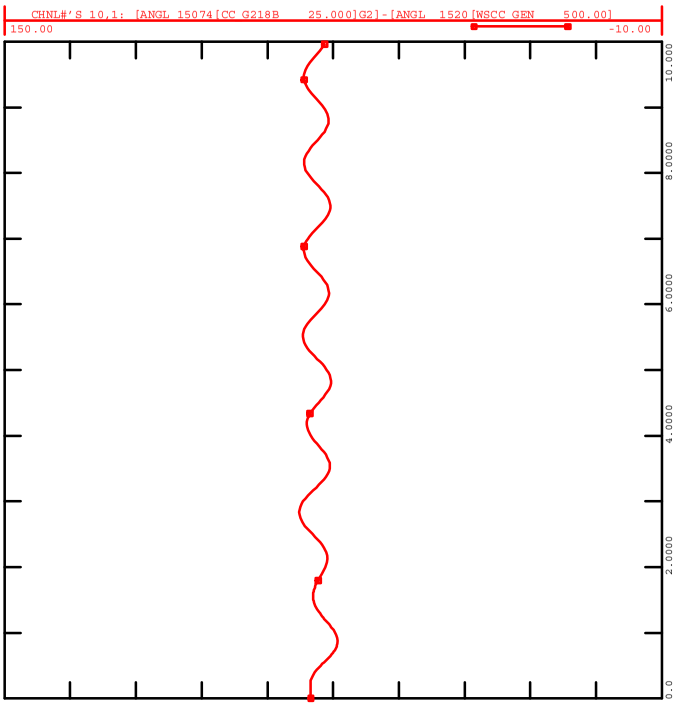


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-18.out

THU, JUL 24 2014 17:09

SHELL CC ROTOR ANGLES

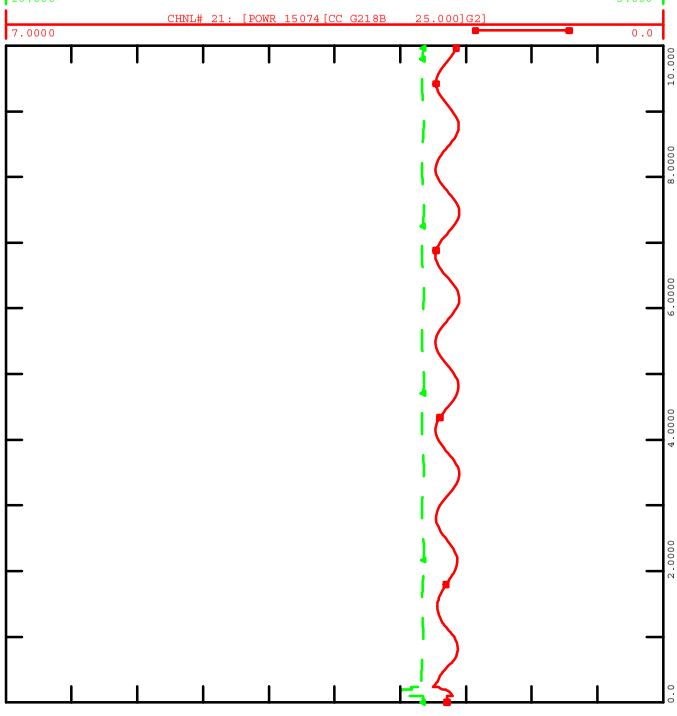


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-18.out

THU, JUL 24 2014 17:09

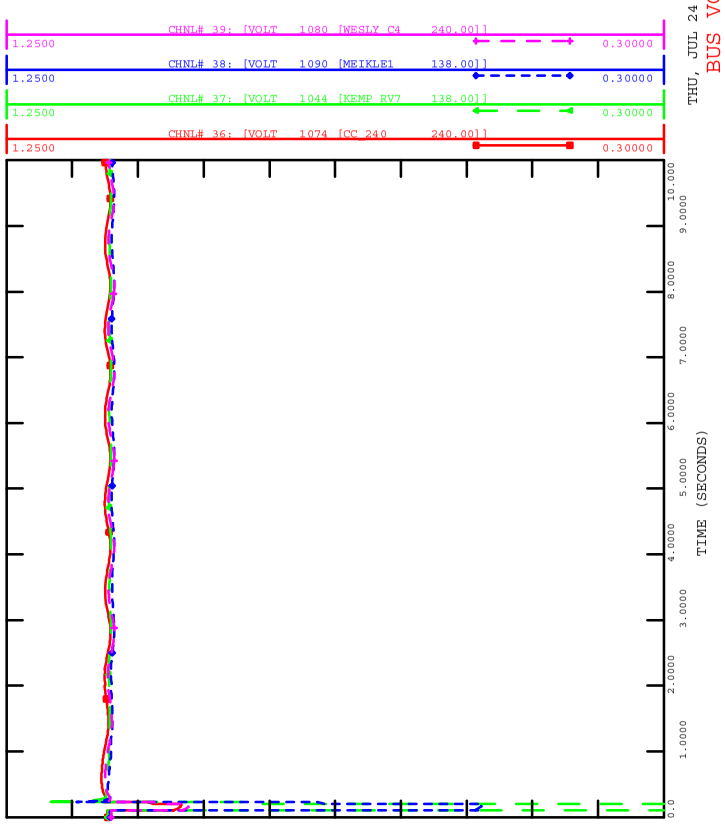
SHELL CC (P&Q)



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-18.out

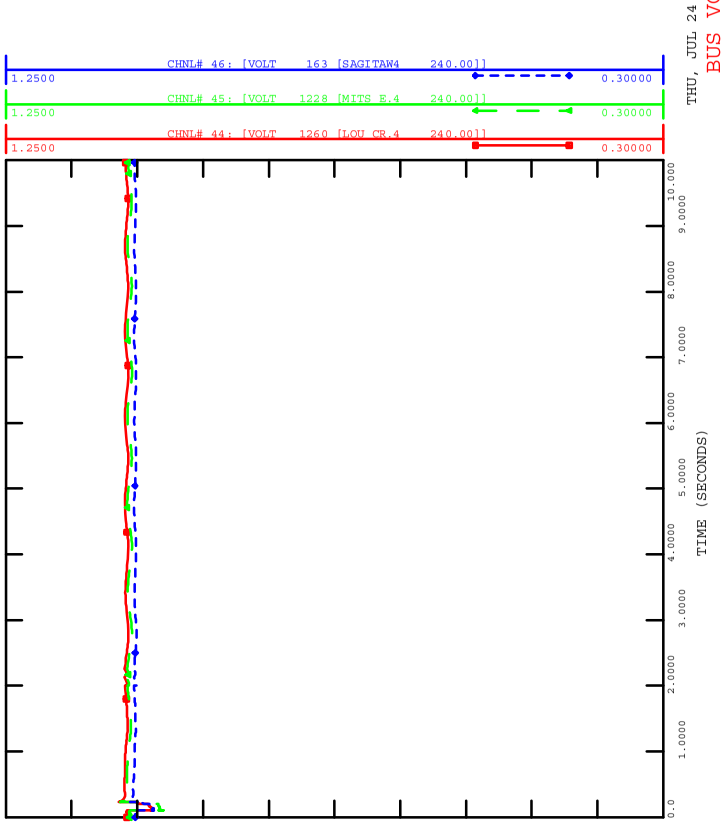
THU, JUL 24 2014 17:09



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-18.out

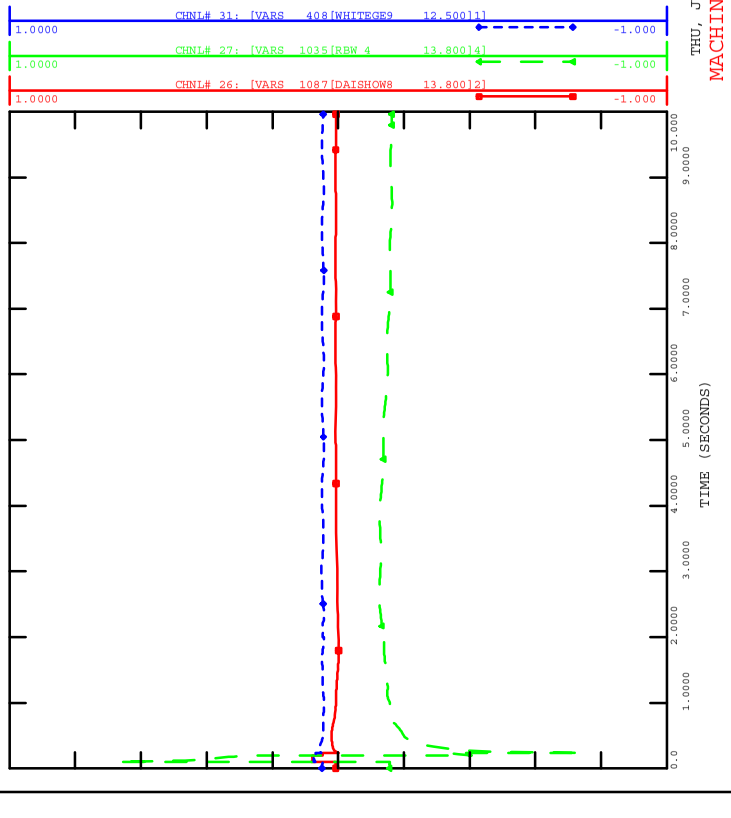
THU, JUL 24 2014 17:09



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-18.out

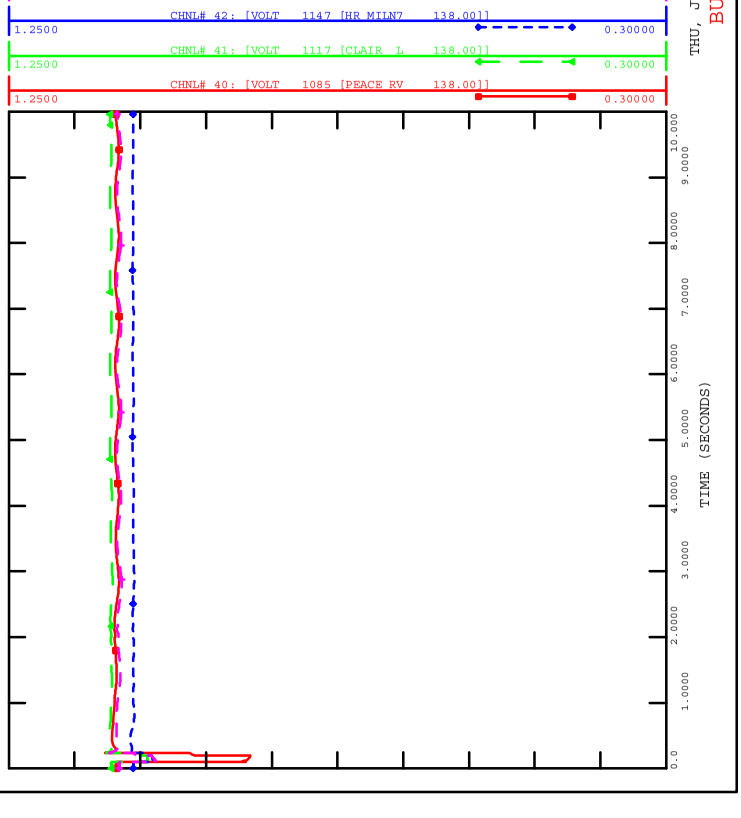
THU, JUL 24 2014 17:09



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-18.out

THU, JUL 24 2014 17:09

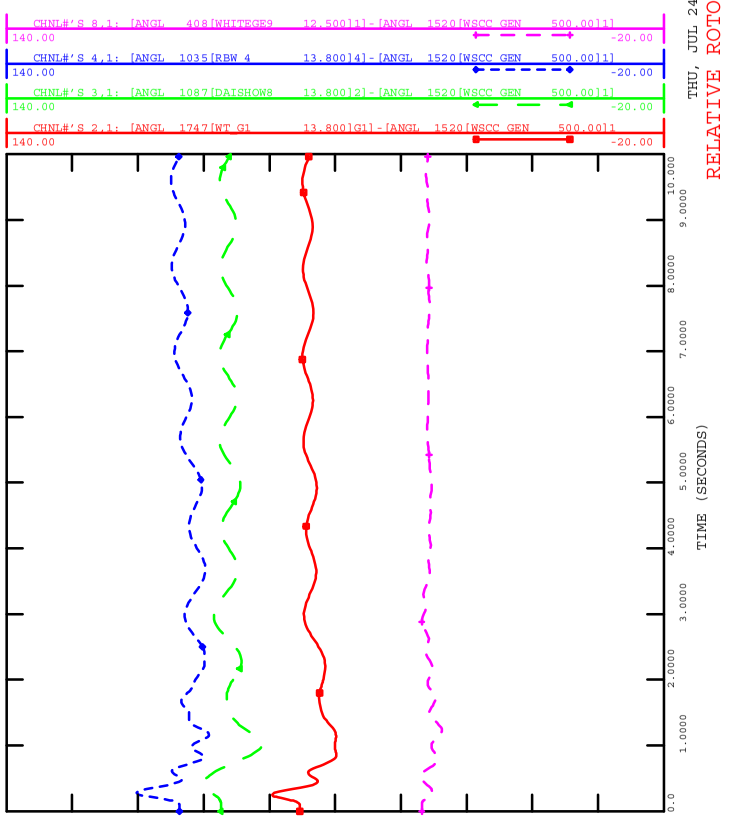


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-19.out

THU, JUL 24 2014 17:09

RELATIVE ROTOR ANGLES

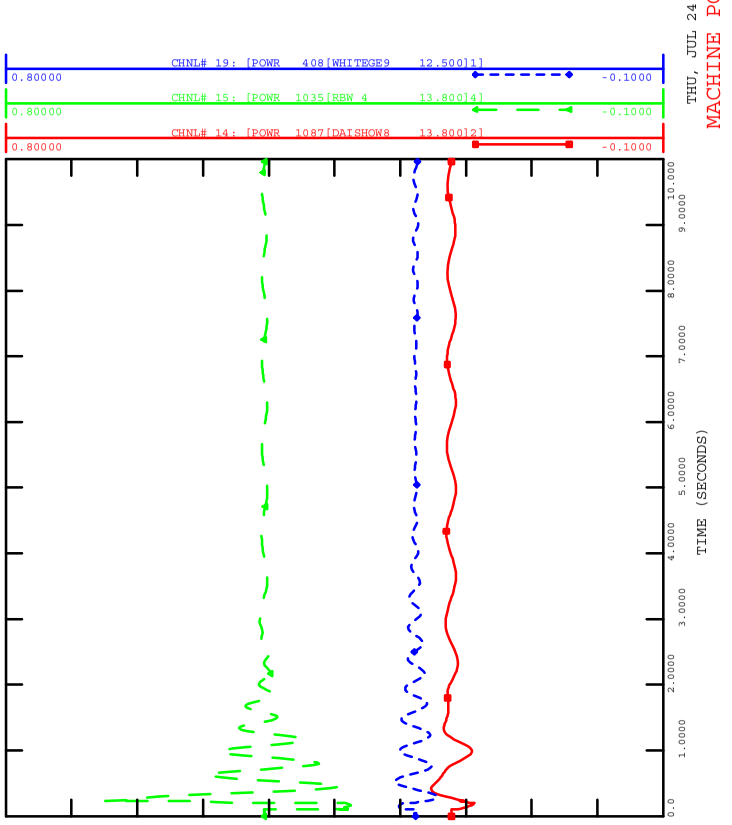


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-19.out

THU, JUL 24 2014 17:09

MACHINE POWER (P)

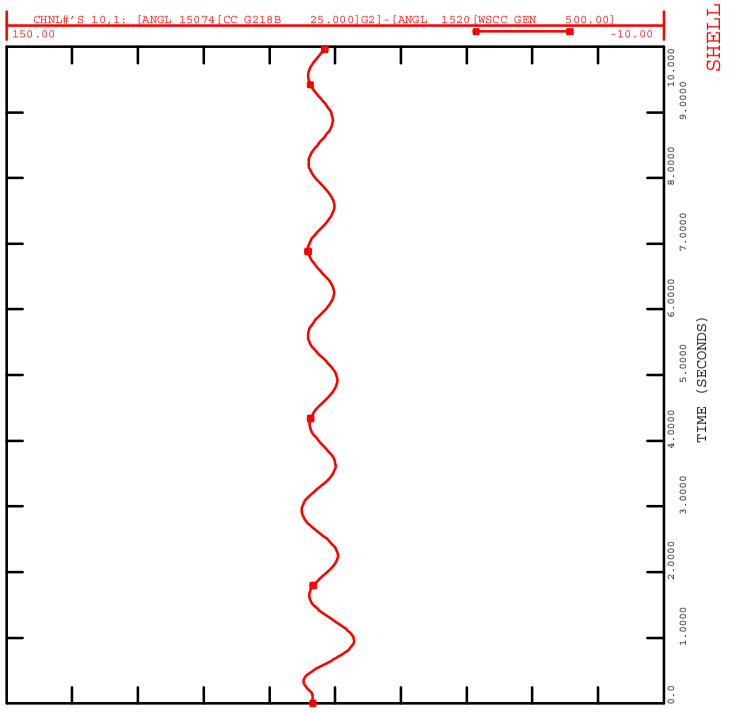


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-19.out

THU, JUL 24 2014 17:09

SHELL CC ROTOR ANGLES

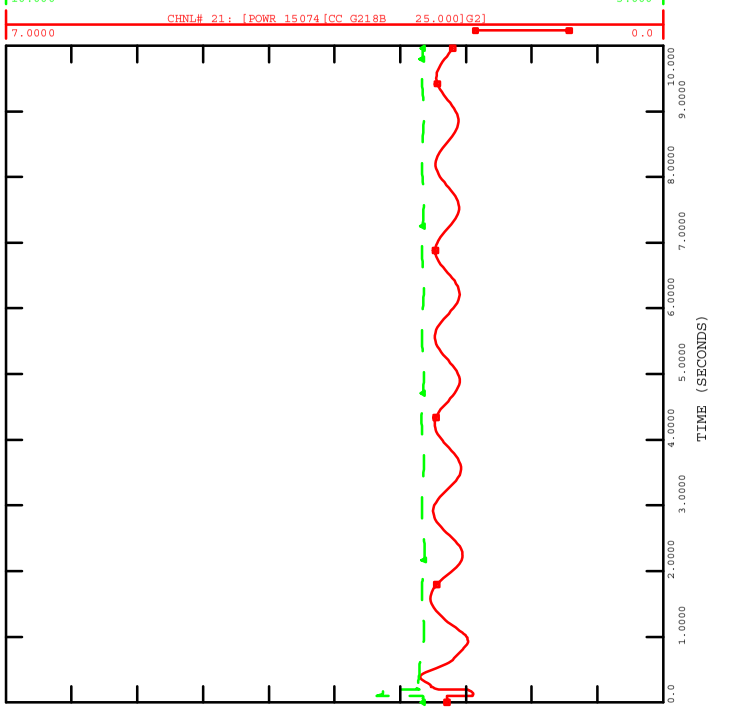


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-19.out

THU, JUL 24 2014 17:09

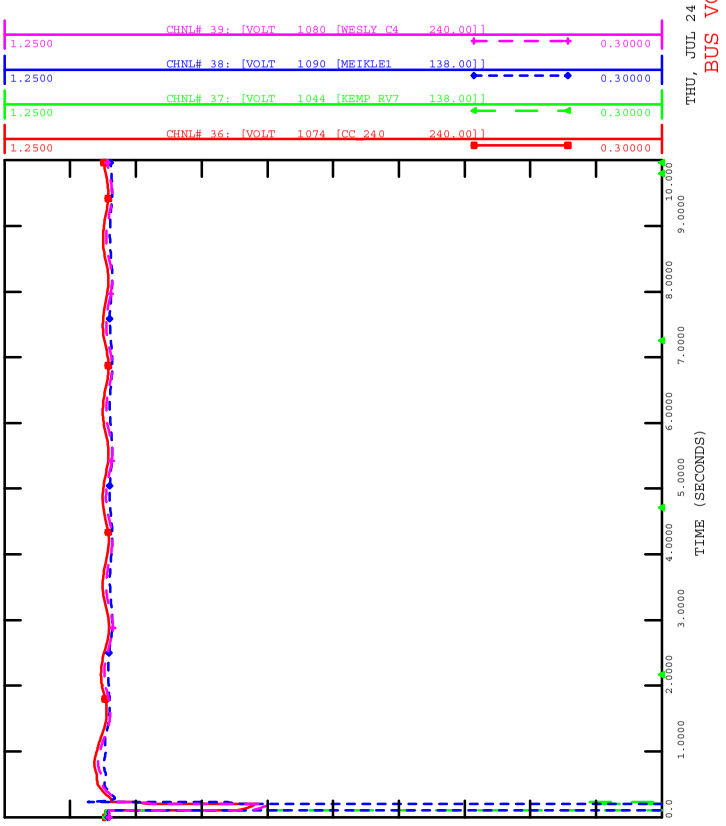
SHELL CC (P&Q)



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-19.out

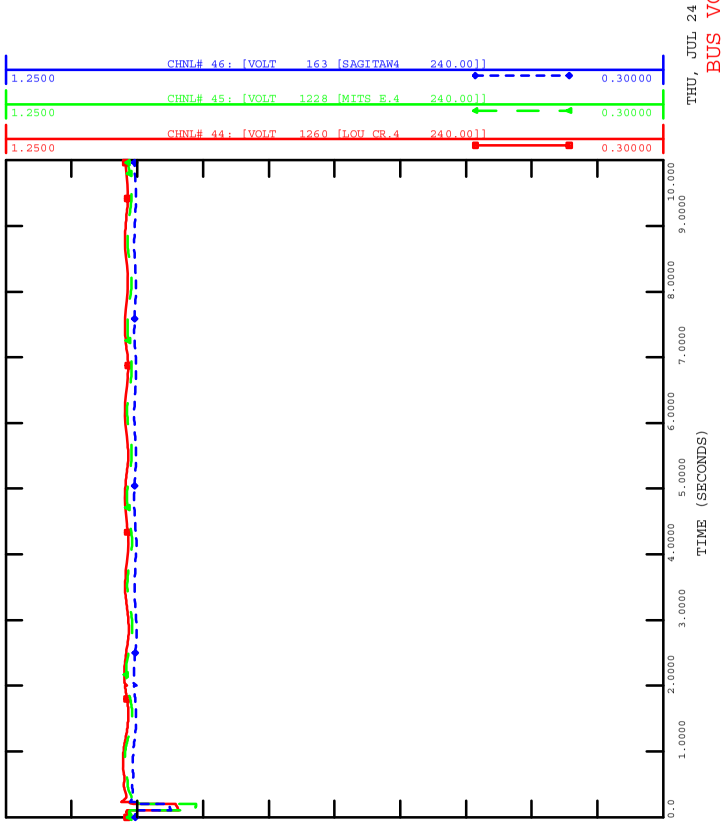
THU, JUL 24 2014 17:09



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-19.out

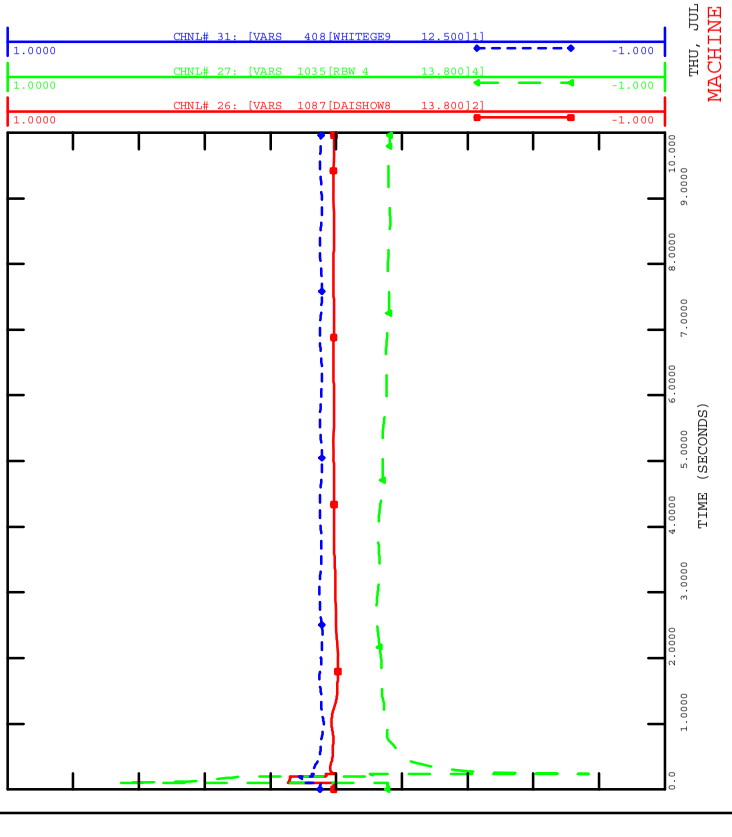
THU, JUL 24 2014 17:09



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-19.out

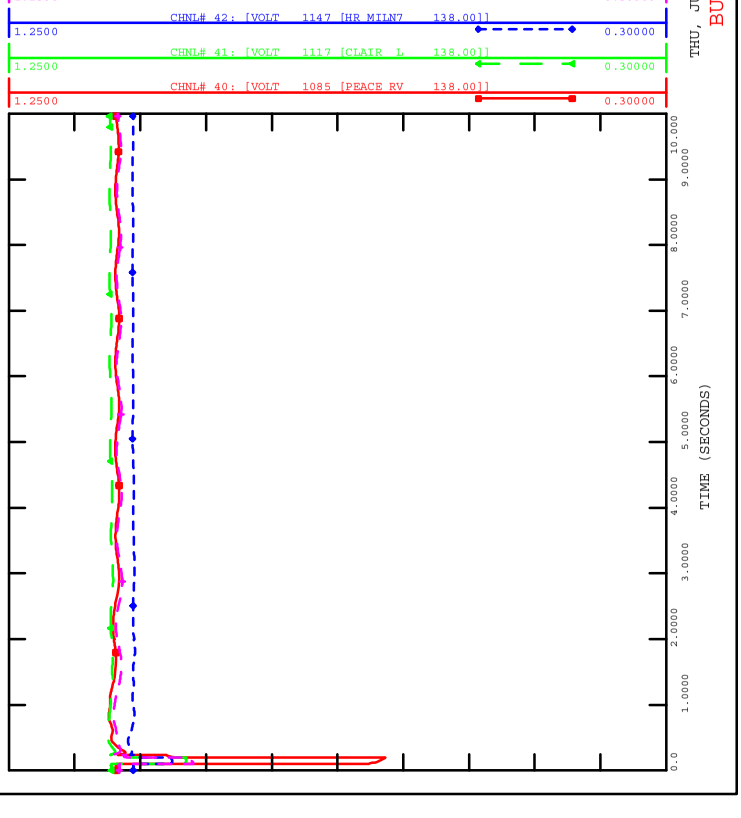
THU, JUL 24 2014 17:09



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-19.out

THU, JUL 24 2014 17:09

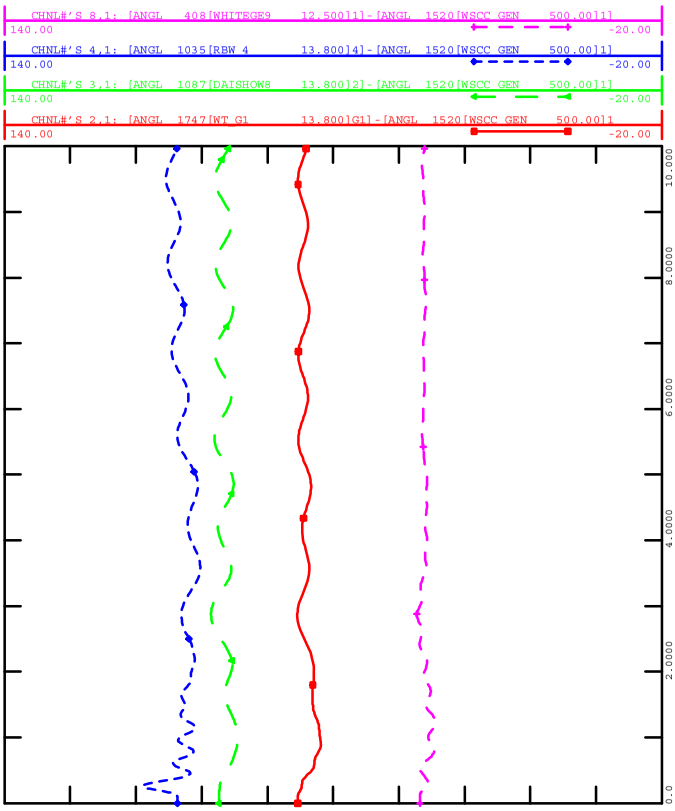


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-20.out

THU, JUL 24 2014 17:09

RELATIVE ROTOR ANGLES

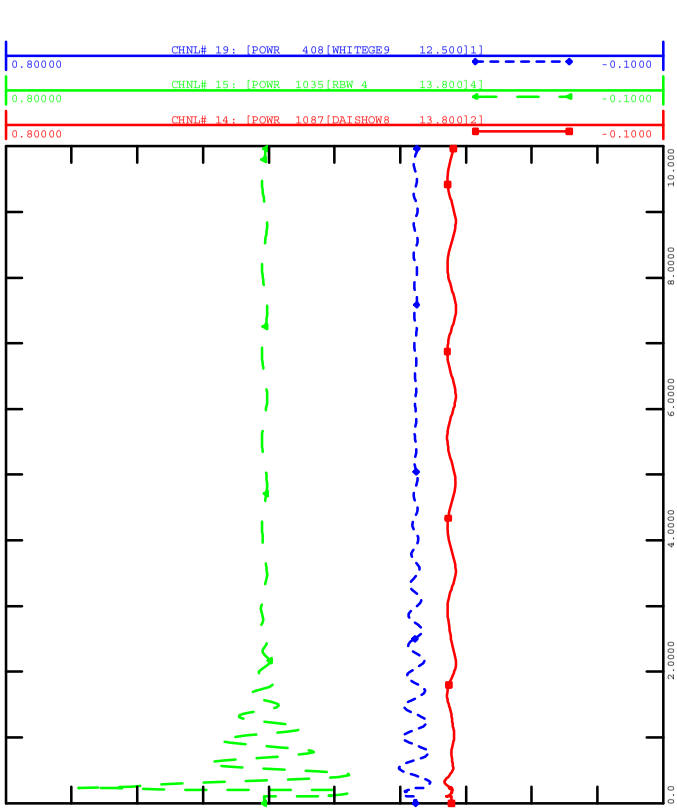


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-20.out

THU, JUL 24 2014 17:09

MACHINE POWER (P)

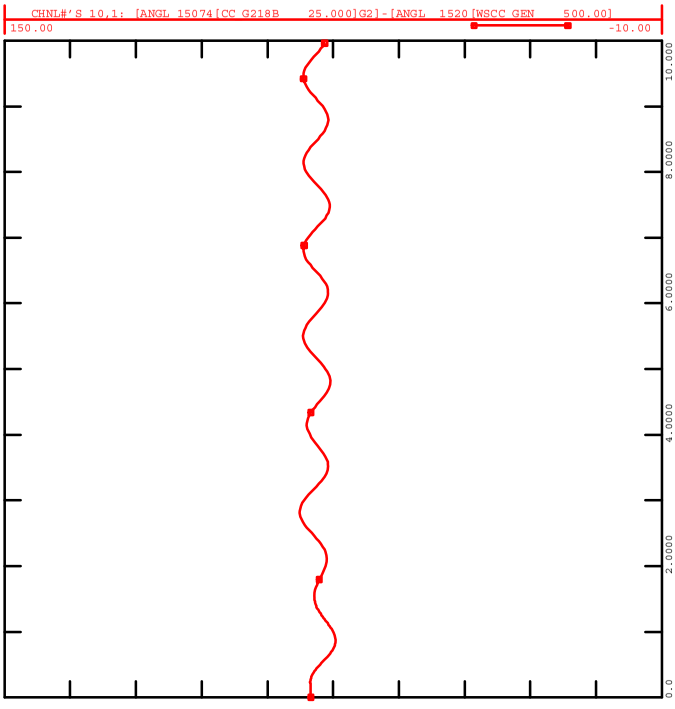


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-20.out

THU, JUL 24 2014 17:09

SHELL CC ROTOR ANGLES

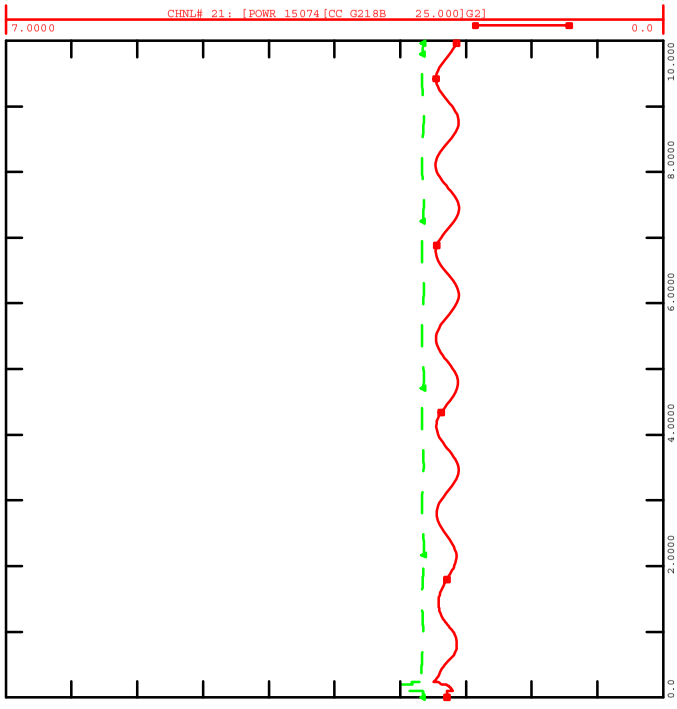


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-20.out

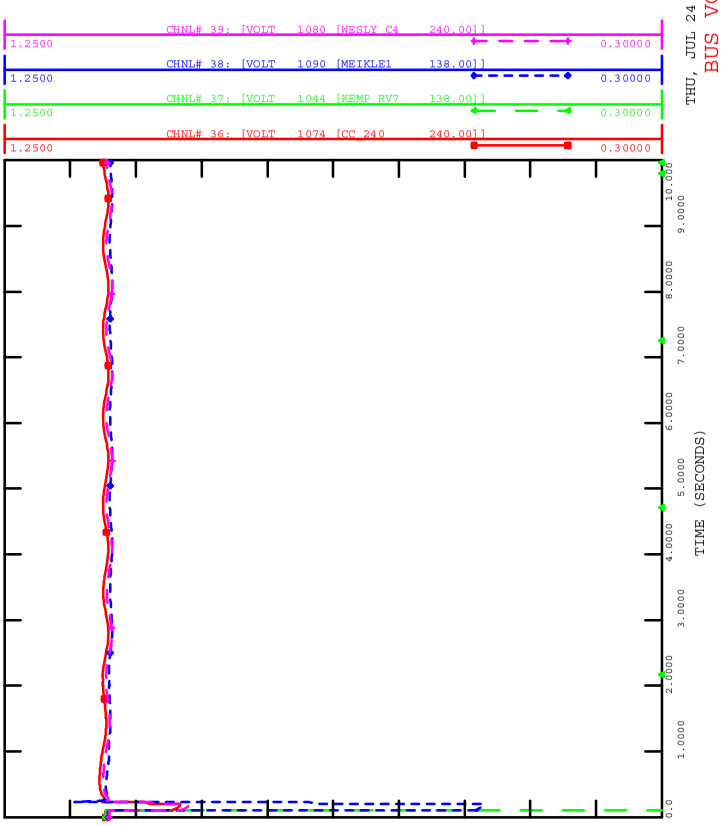
THU, JUL 24 2014 17:09

SHELL CC (P&Q)



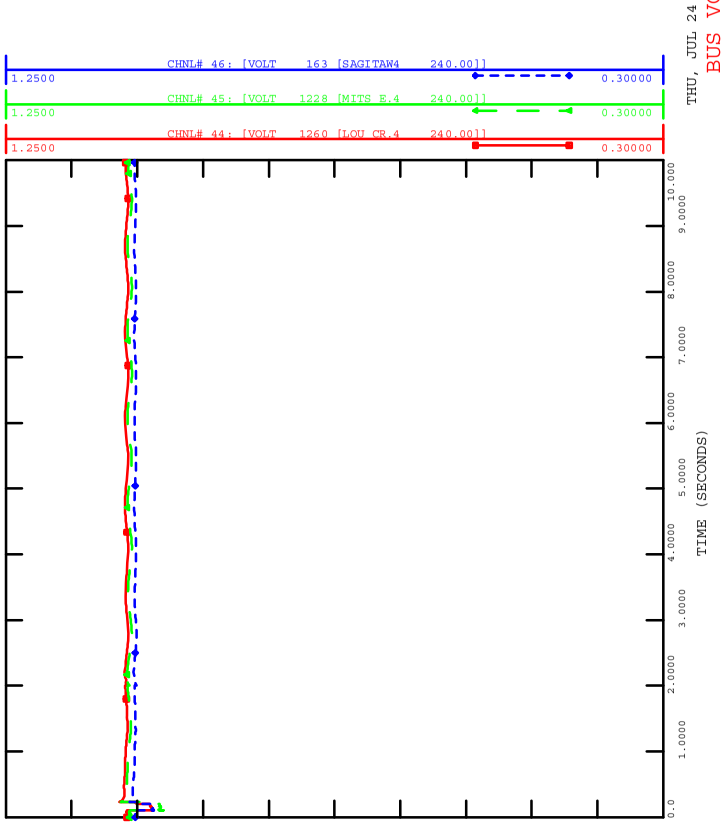
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-20.out



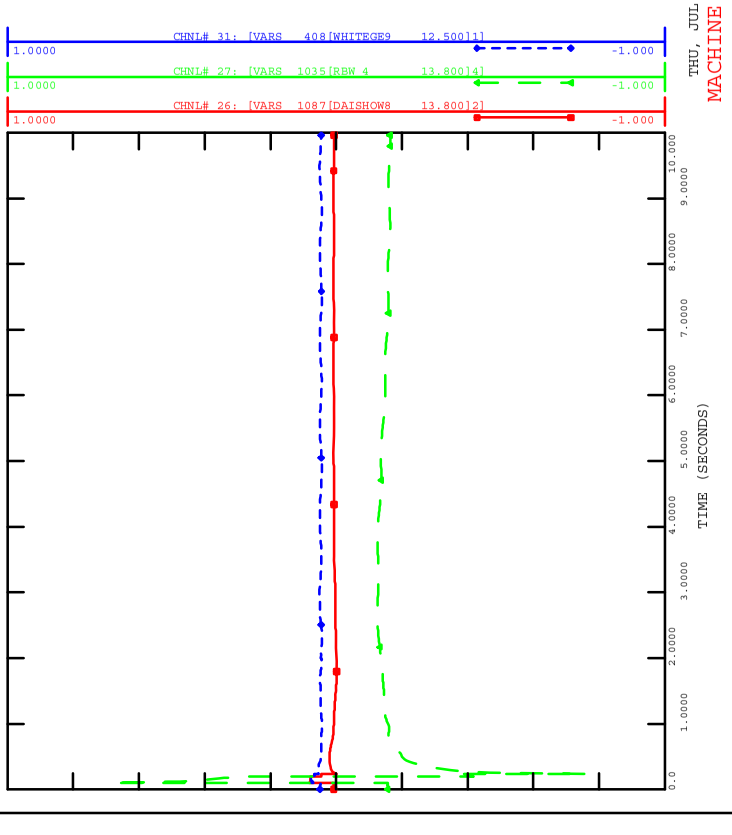
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-20.out



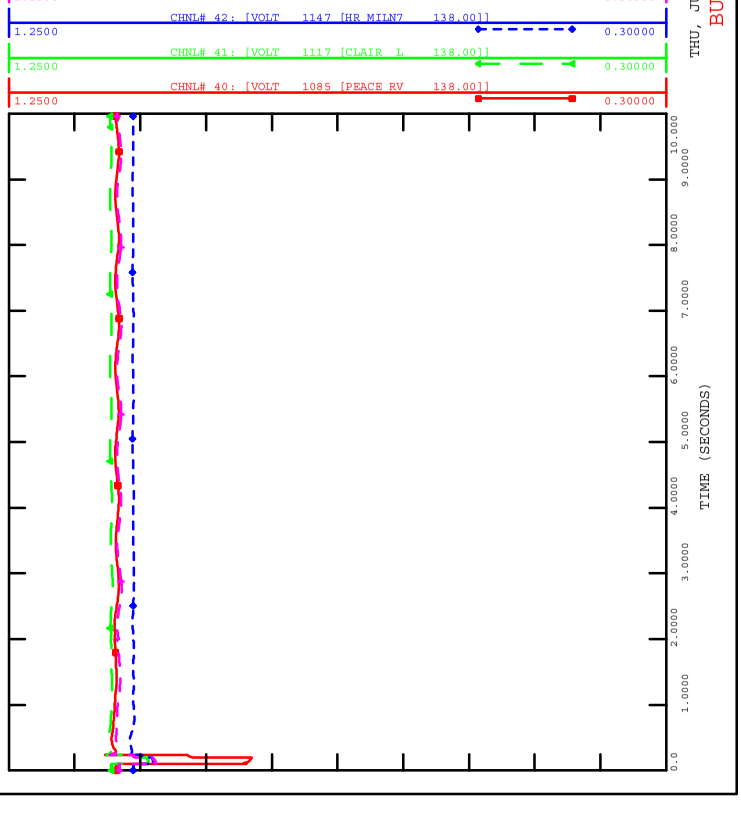
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

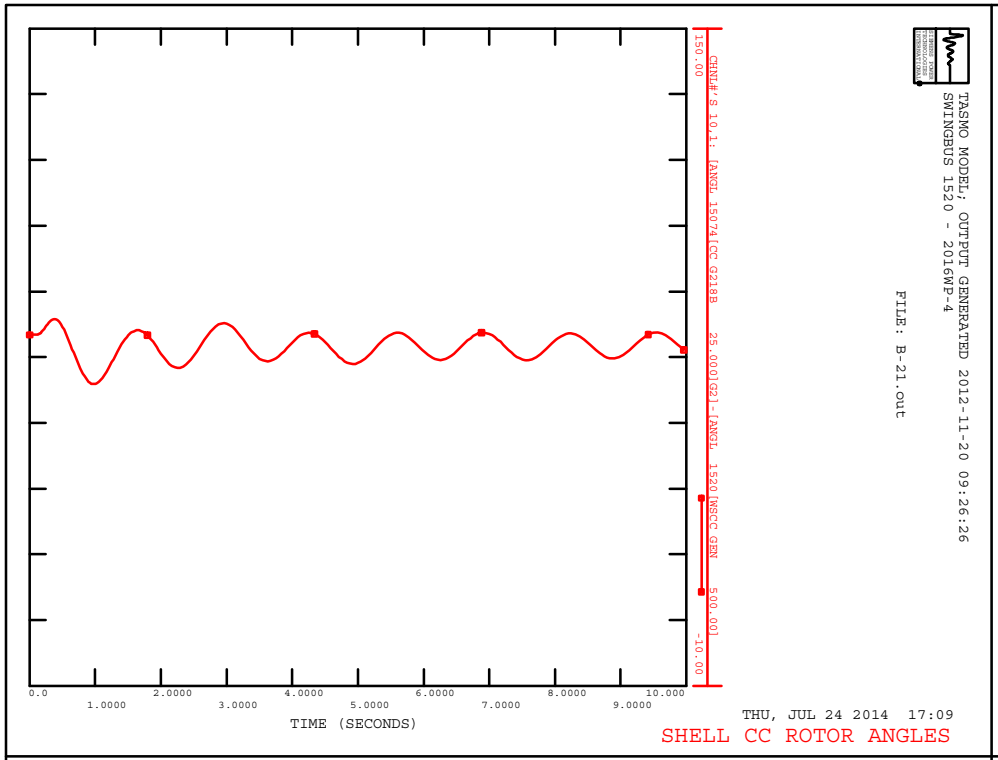
FILE: B-20.out

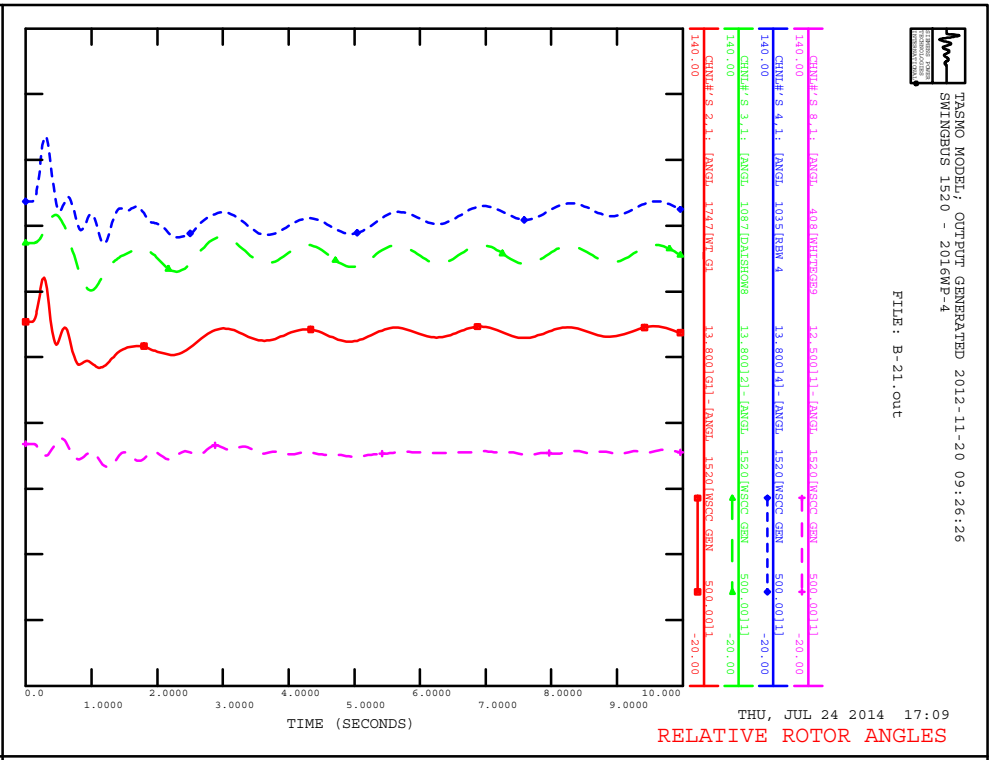


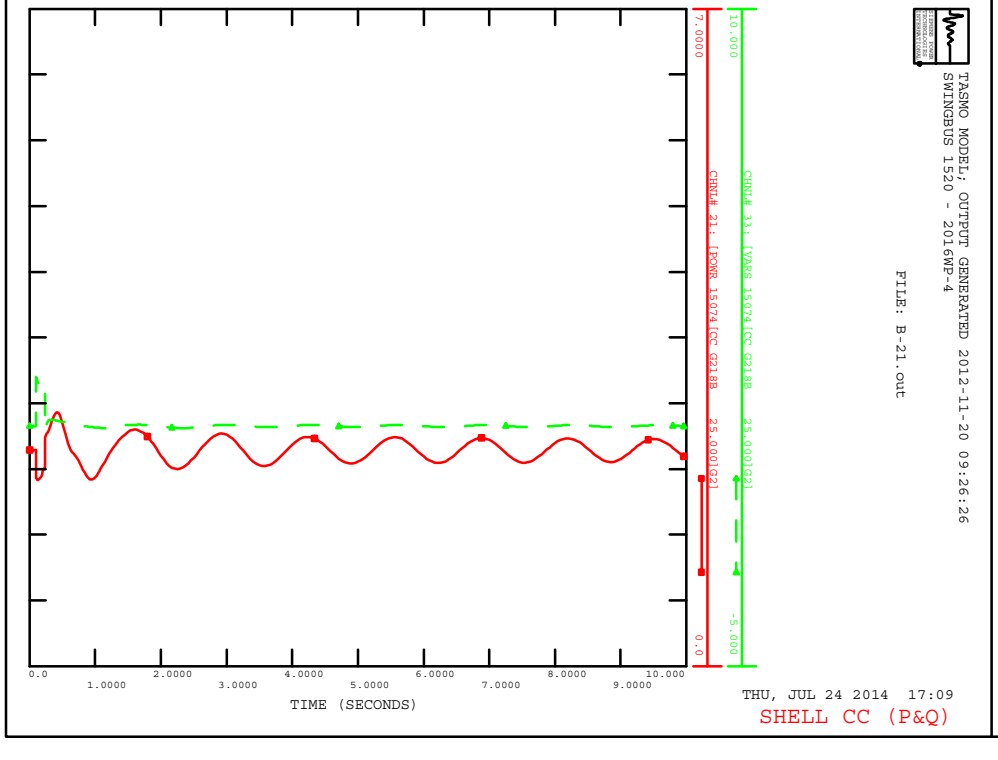
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

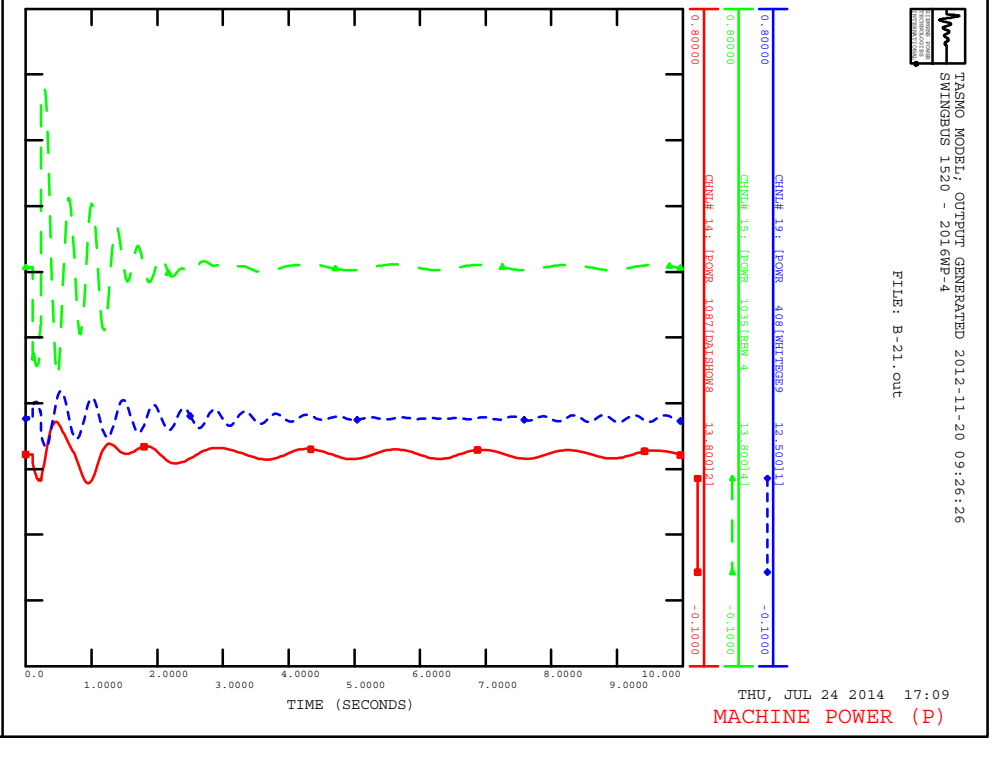
FILE: B-20.out




TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-21.out
CHNU#'S 10,1: [ANGL 15074[CC G21BB 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
-50.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
SHELL CC ROTOR ANGLES

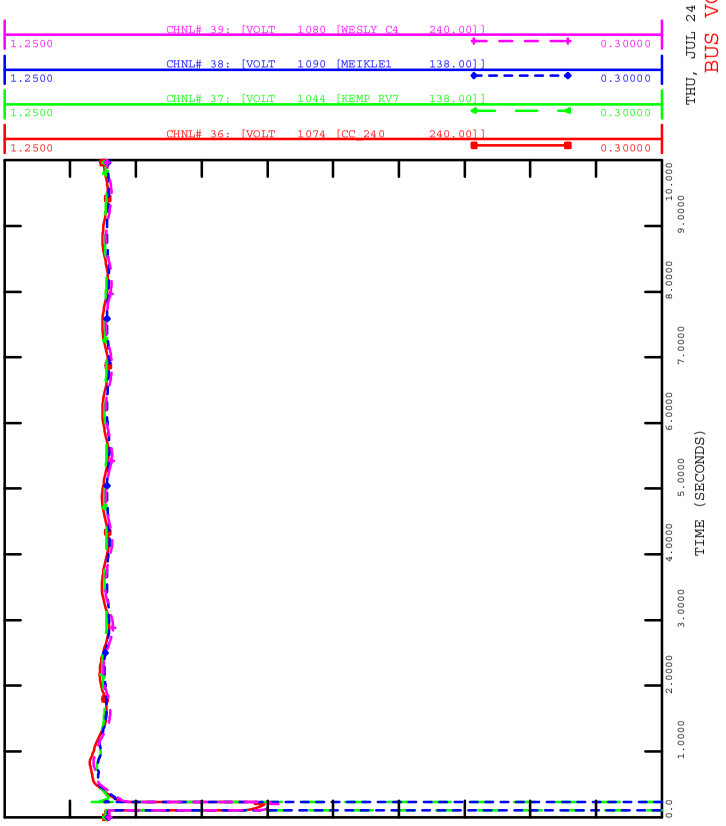

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-21.out
CHNU#'S 8,1: [ANGL 408[WHITESB9 12.500[1] [ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 3,1: [ANGL 1087[DAISHOW8 13.800[2] [ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
RELATIVE ROTOR ANGLES


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-21.out
CHNU# 33: [VARS 15074[CC G21BB 25.000[G2]
CHNU# 21: [POWR 15074[CC G21BB 25.000[G2]
10.000
-5.000
7.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
SHELL CC (P&Q)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-21.out
CHNU# 19: [POWR 408[WHITESB9 12.500[1]]
CHNU# 15: [POWR 1035[RBM 4 13.800[4]]
CHNU# 14: [POWR 1087[DAISHOW8 13.800[2]]
0.80000
-0.10000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
MACHINE POWER (P)

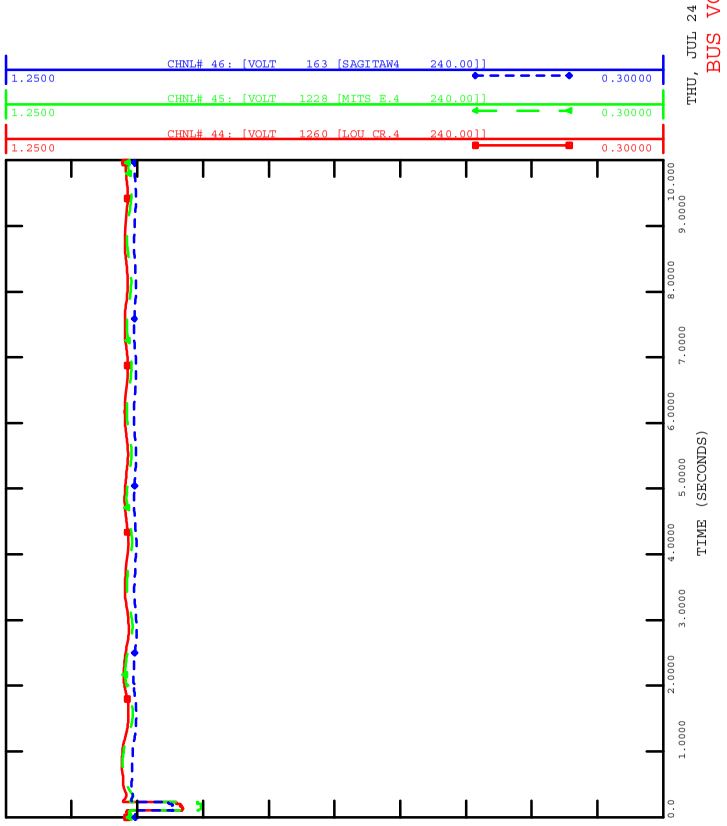
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-21.out



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-21.out



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

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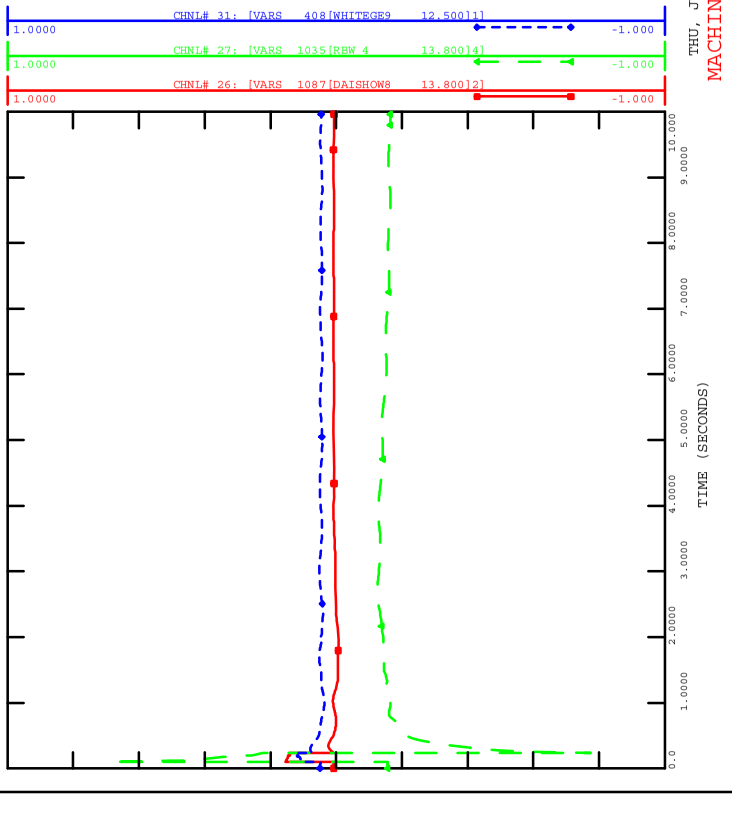
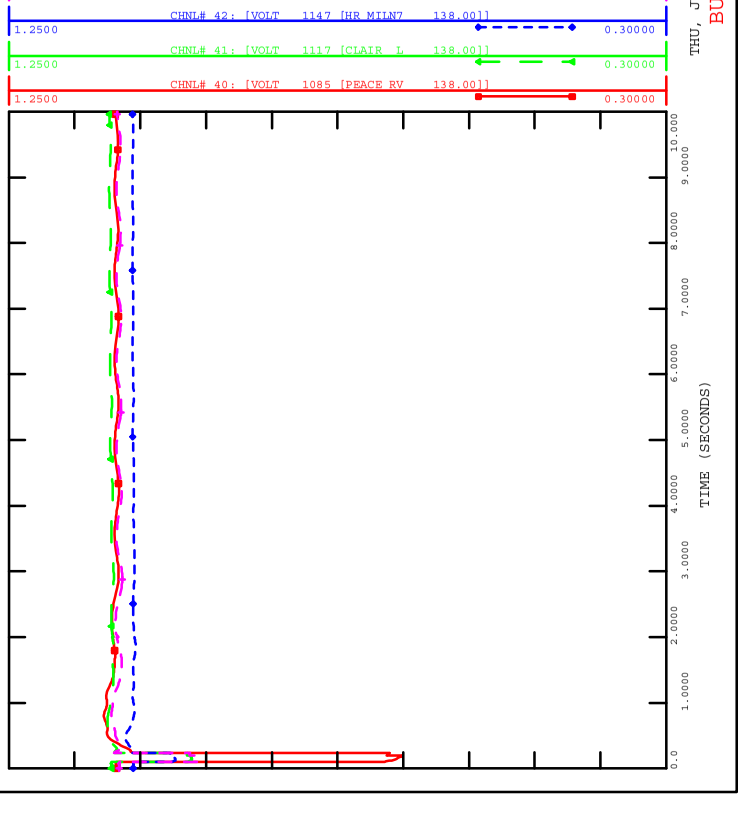


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-21.out

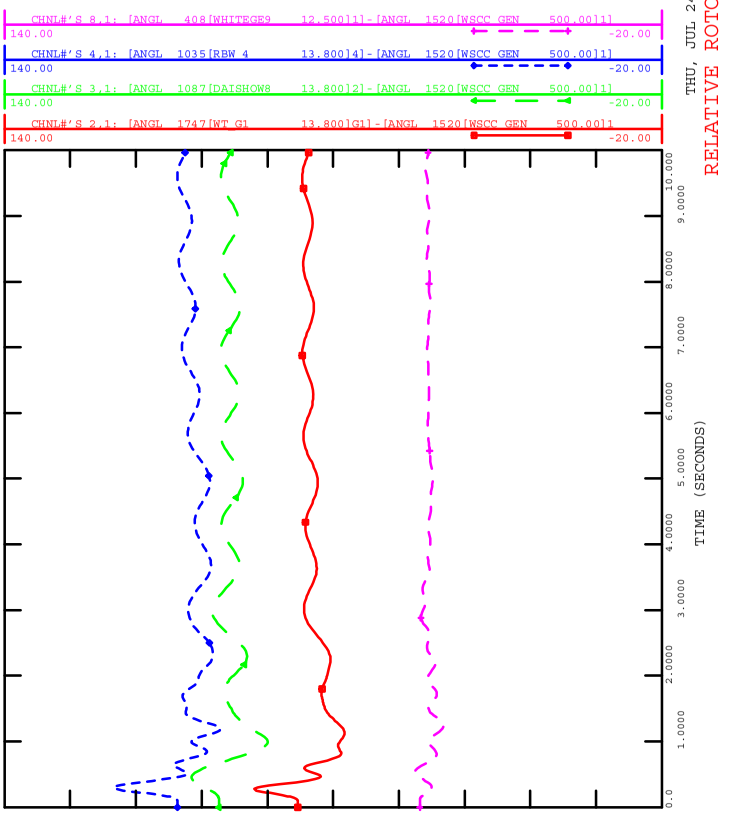


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-22.out

THU, JUL 24 2014 17:09

RELATIVE ROTOR ANGLES



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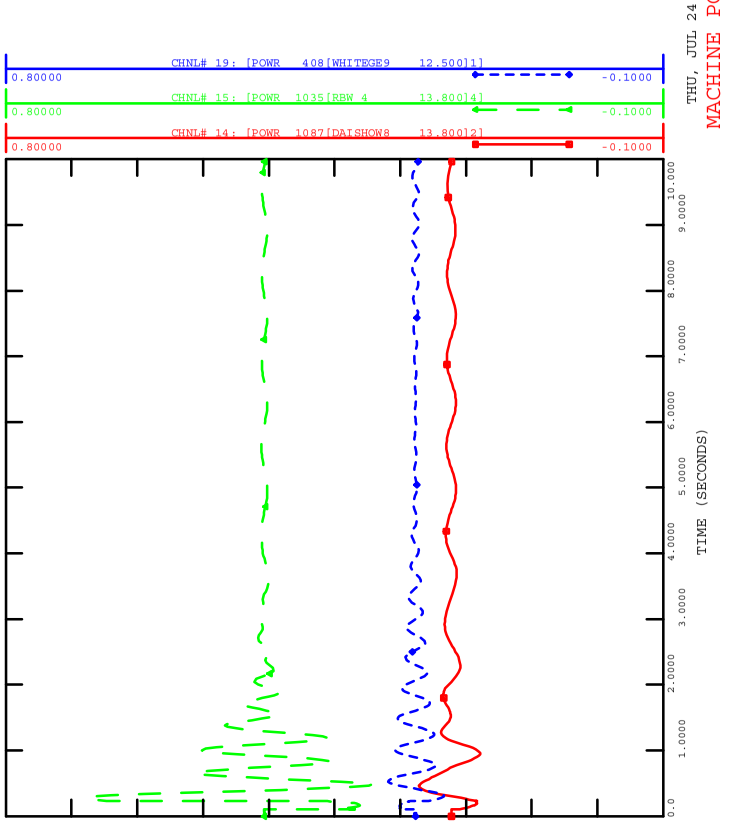
SWINGBUS 1520 - 2016WP-4

FILE: B-22.out

THU, JUL 24 2014 17:09

MACHINE POWER (P)

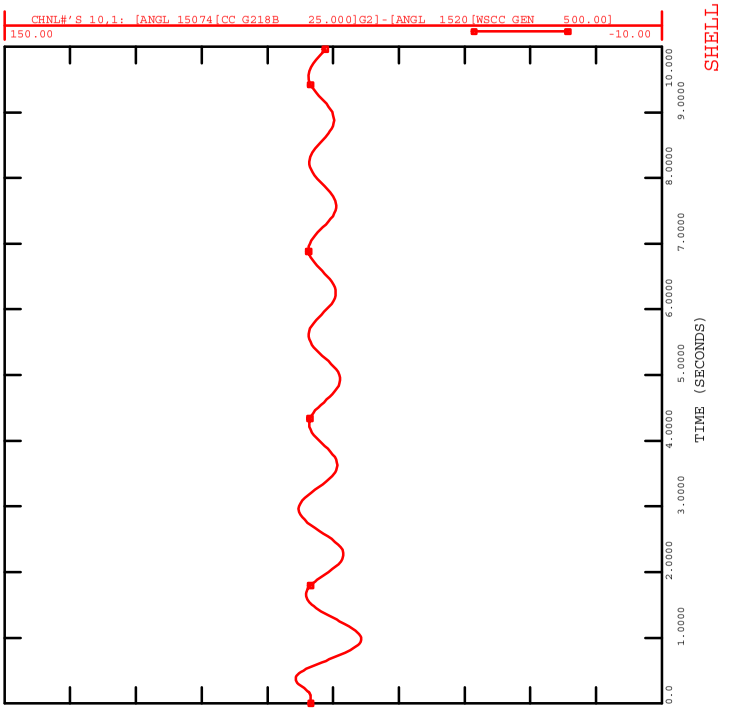


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-22.out

THU, JUL 24 2014 17:09

SHELL CC ROTOR ANGLES

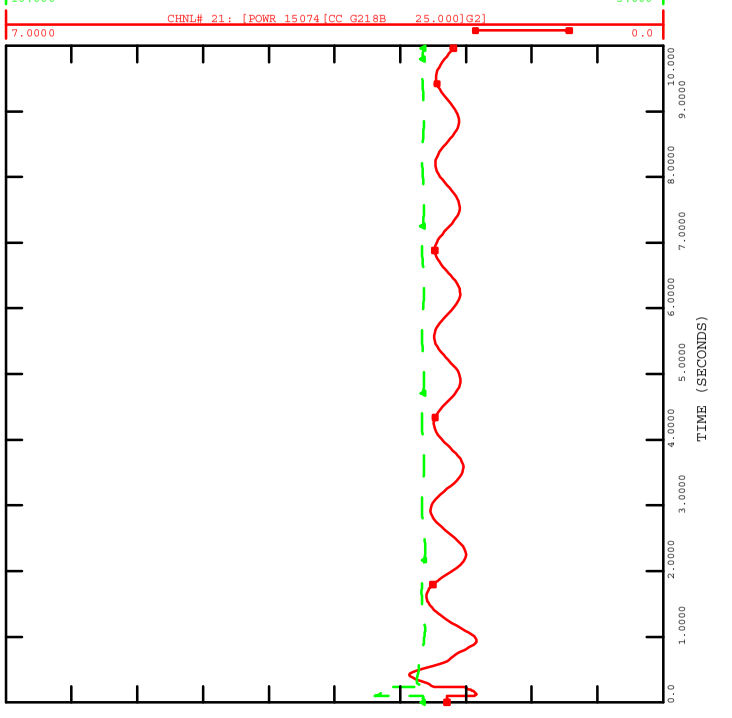


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-22.out

THU, JUL 24 2014 17:09

SHELL CC (P&Q)



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SWINGBUS 1520 - 2016WP-4

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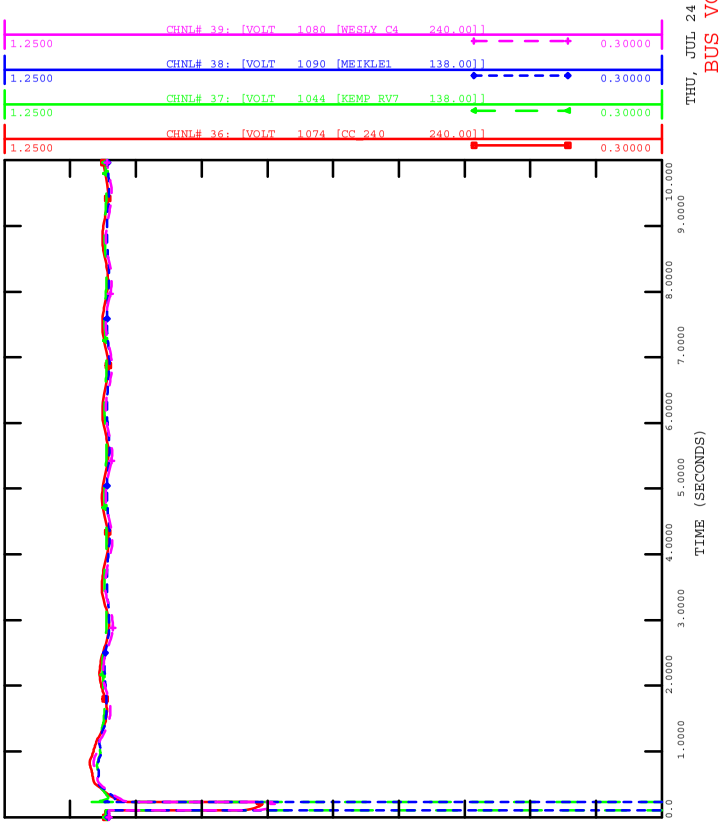

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SWINGBUS 1520 - 2016WP-4

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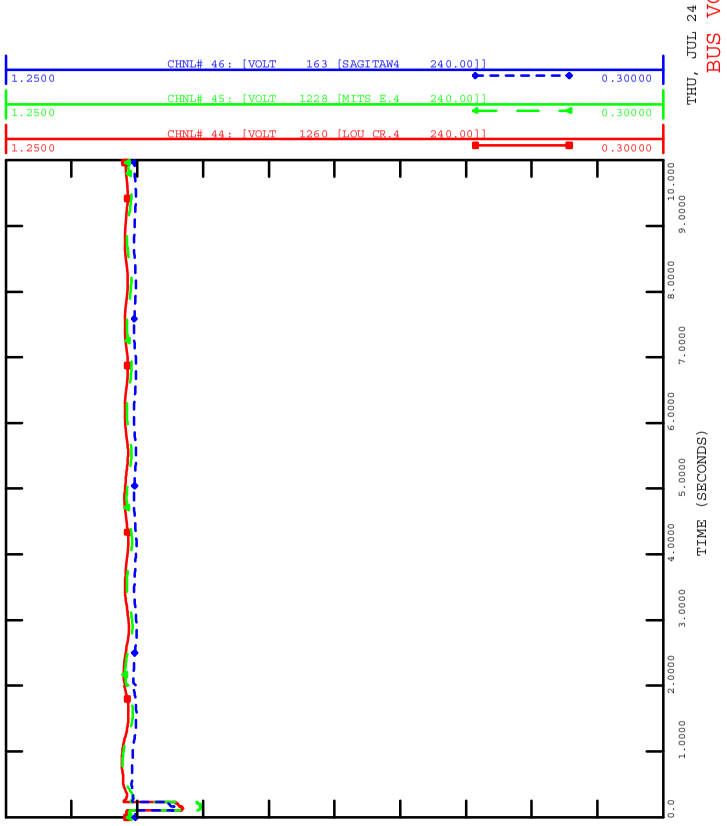

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

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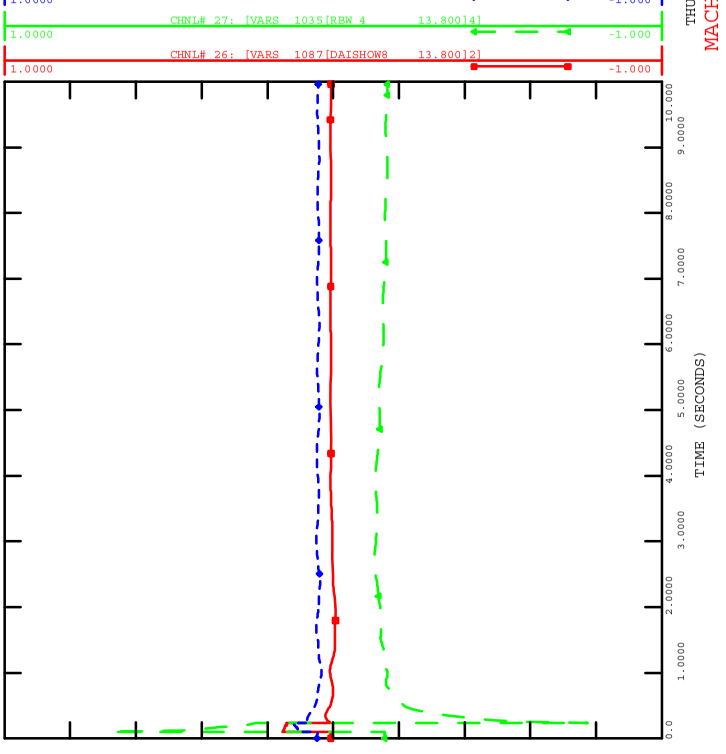

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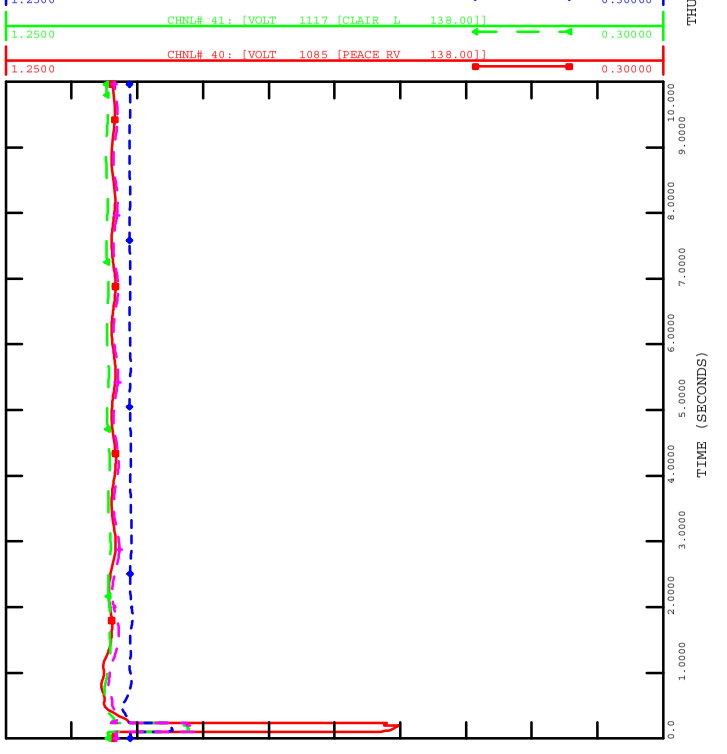
SWINGBUS 1520 - 2016WP-4

FILE: B-22.out



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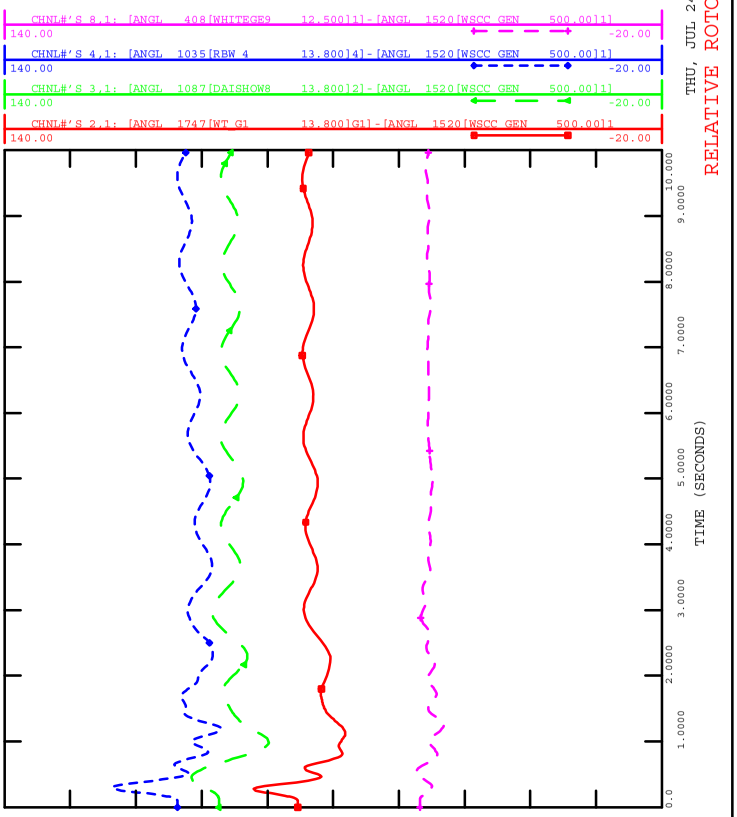
SWINGBUS 1520 - 2016WP-4

FILE: B-23.out

THU, JUL 24 2014 17:09

RELATIVE ROTOR ANGLES

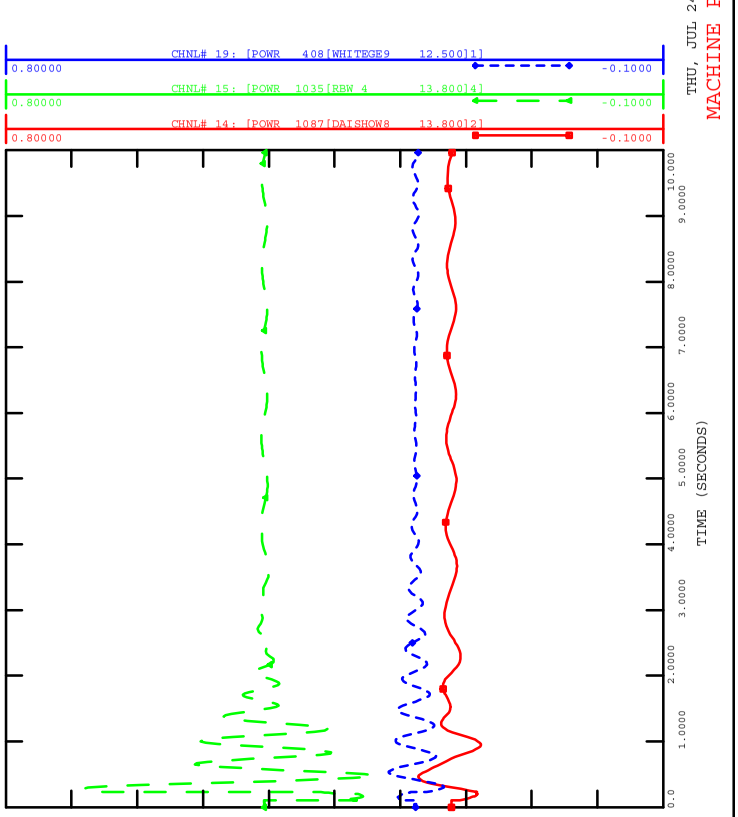


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-23.out

THU, JUL 24 2014 17:09

MACHINE POWER (P)

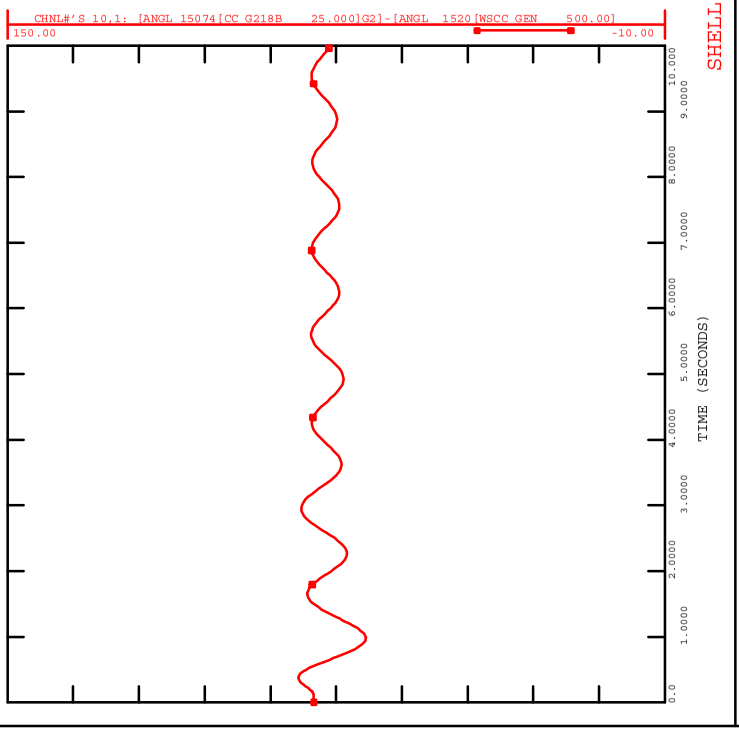


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-23.out

THU, JUL 24 2014 17:09

SHELL CC ROTOR ANGLES

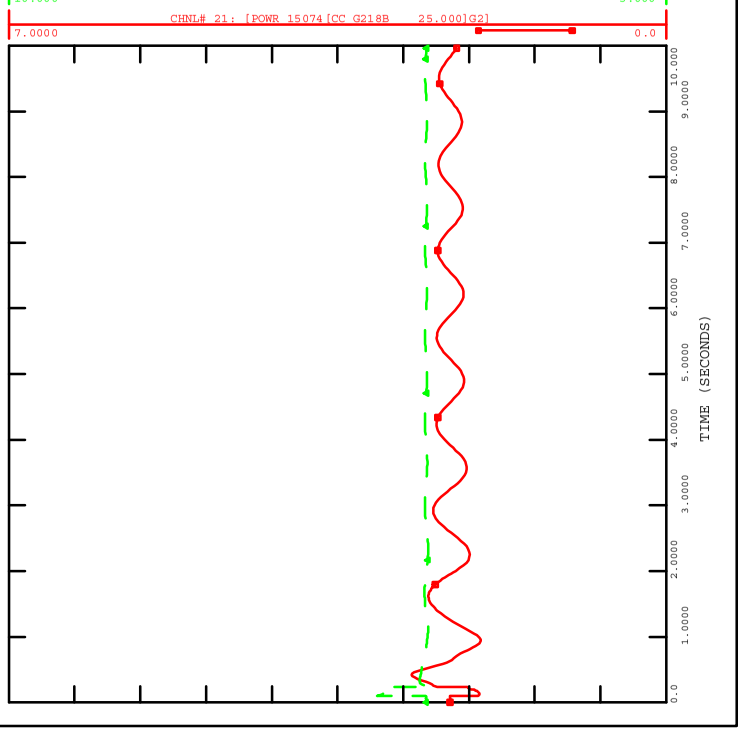


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-23.out

THU, JUL 24 2014 17:09

SHELL CC (P&Q)



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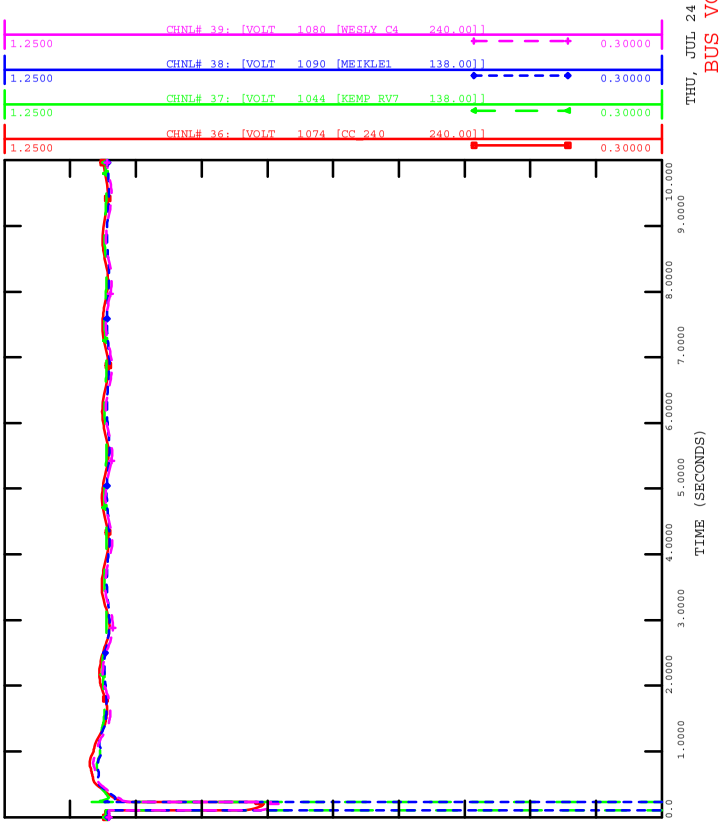
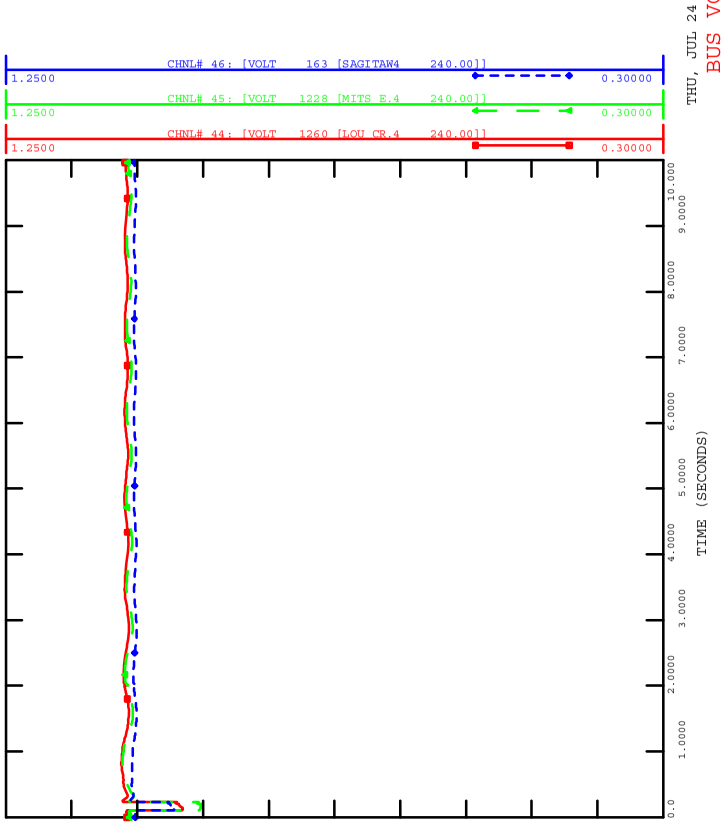
SWINGBUS 1520 - 2016WP-4

FILE: B-23.out



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-23.out



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SWINGBUS 1520 - 2016WP-4

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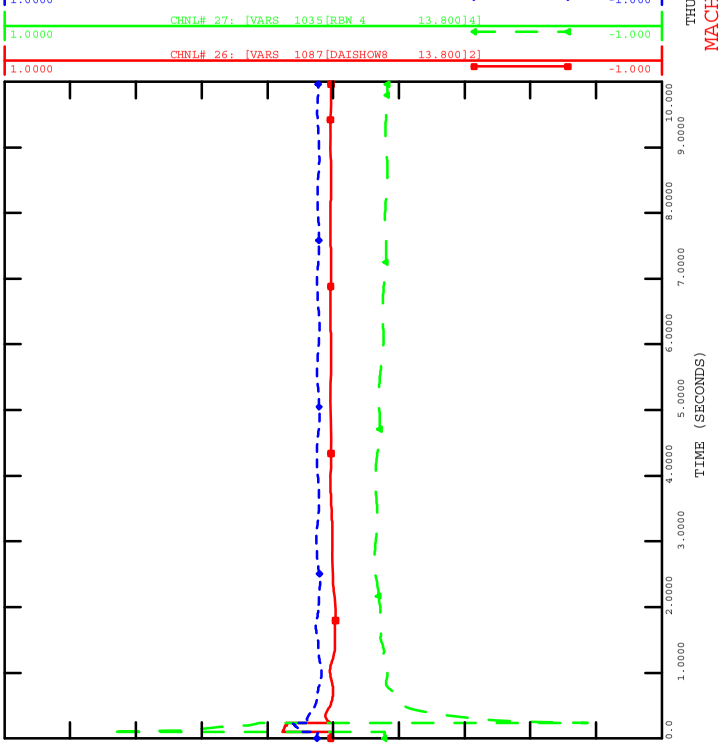

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

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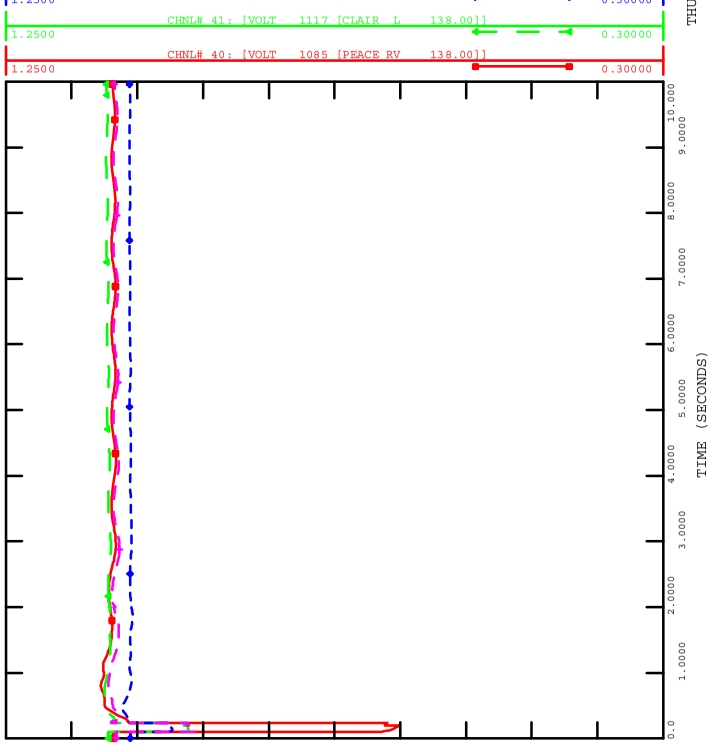
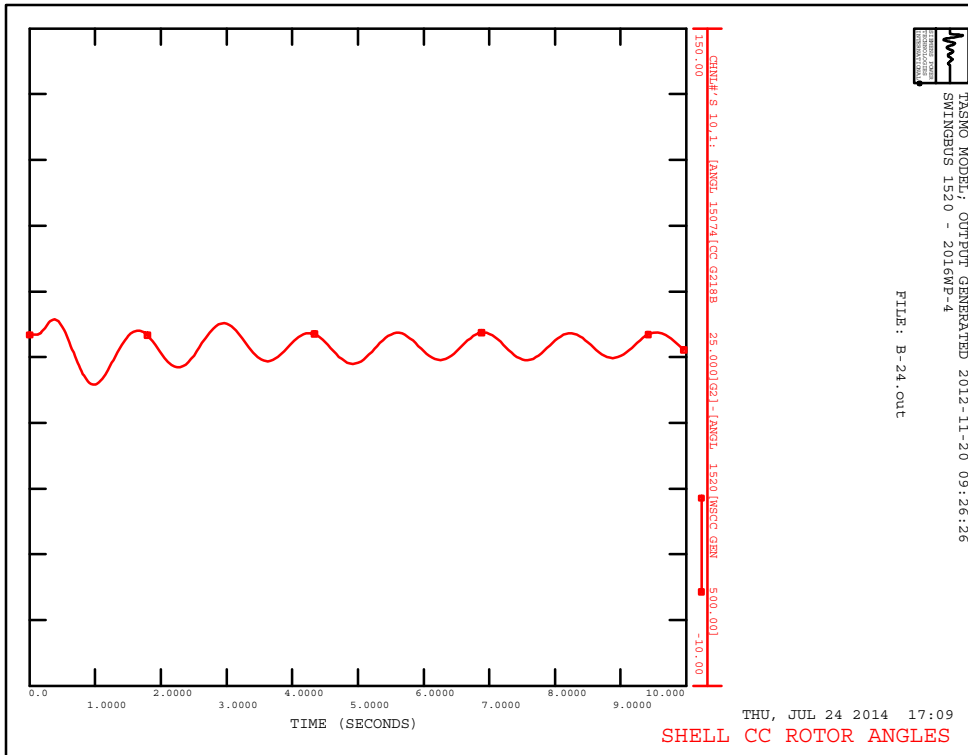
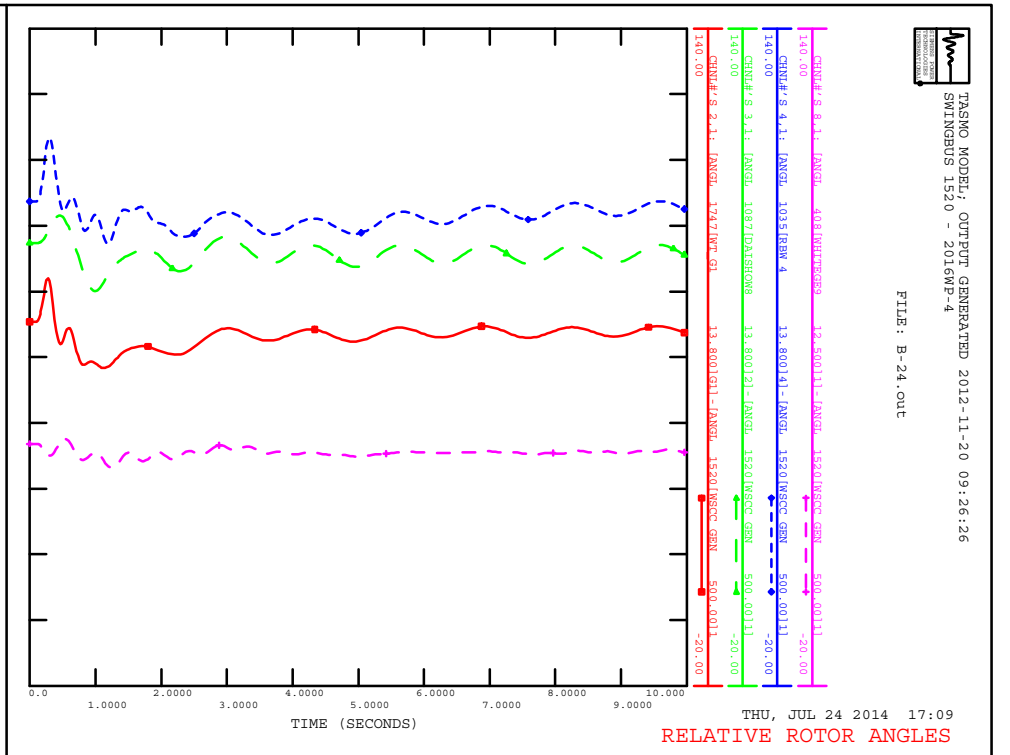
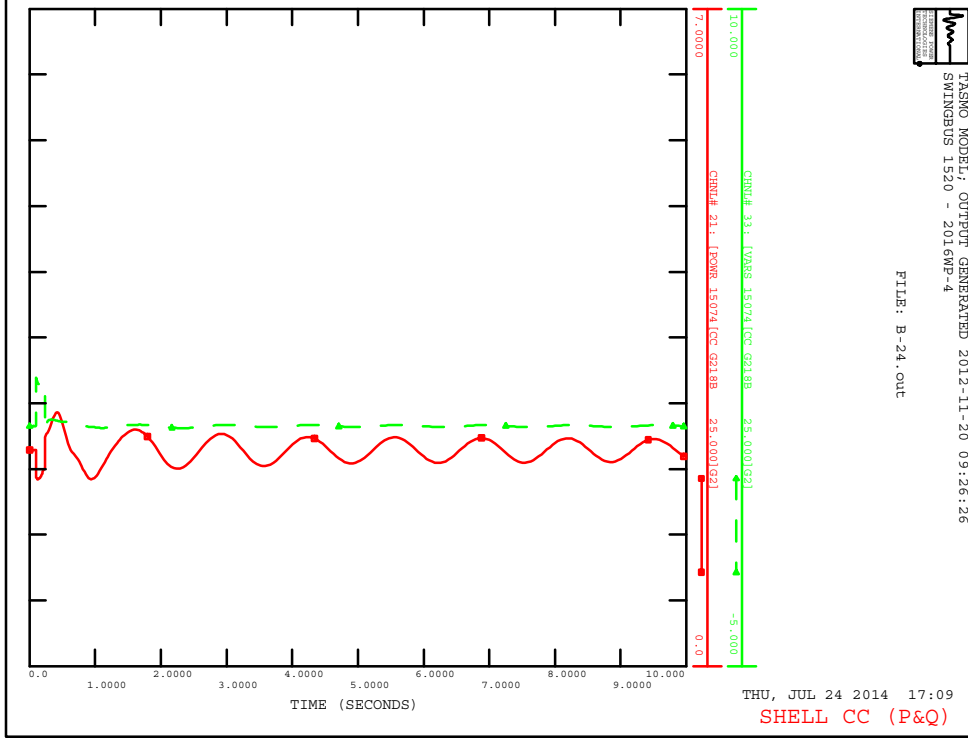
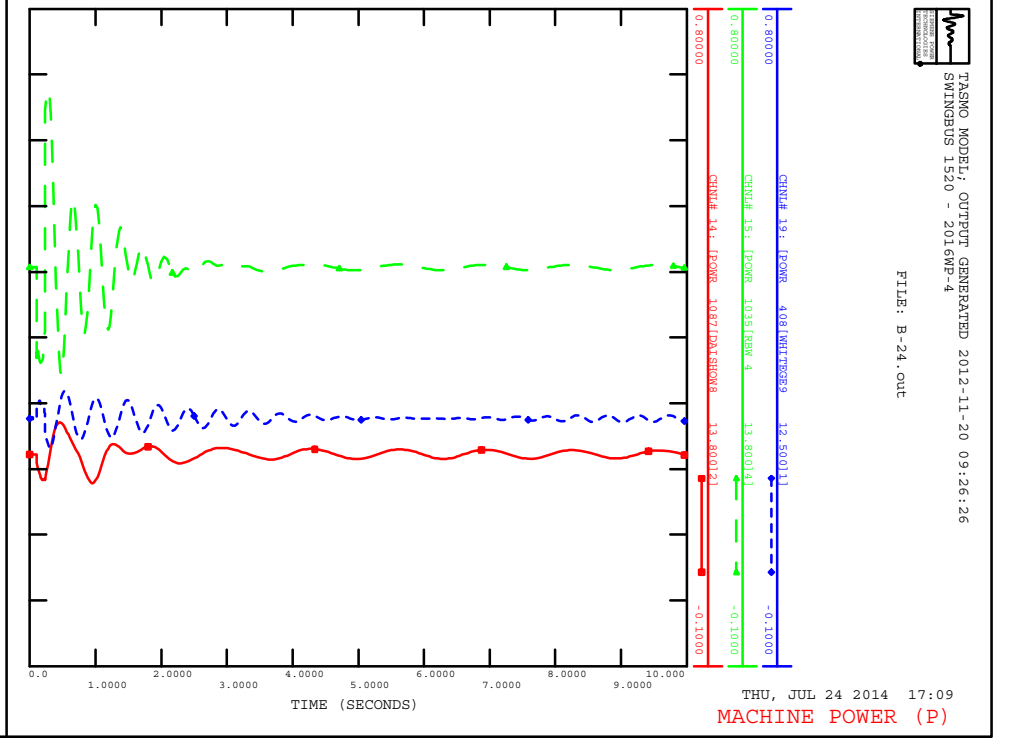



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-24.out
CHNU#'S 10,1: [ANGL 15074[CC G21BB 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
-50.00
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
SHELL CC ROTOR ANGLES

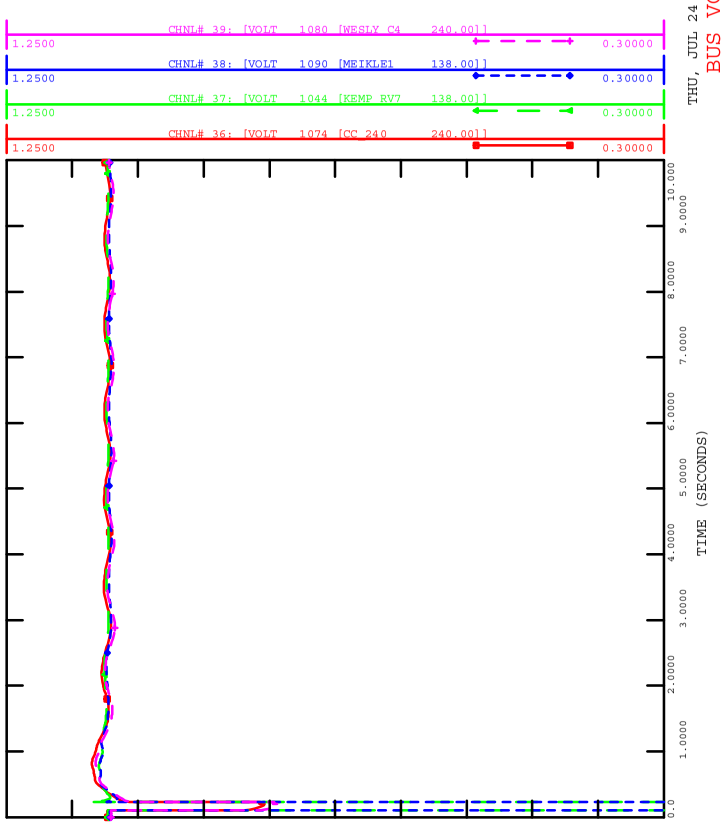

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-24.out
CHNU#'S 8,1: [ANGL 408[WHITESB9 12.500[1] [ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 3,1: [ANGL 1087[DAISHOW8 13.800[2] [ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
RELATIVE ROTOR ANGLES


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-24.out
CHNU# 21: [POWR 15074[CC G21BB 25.000[G2]
CHNU# 33: [VARS 15074[CC G21BB 25.000[G2]
7.0000
0.0
10.000
-5.000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
SHELL CC (P&Q)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-24.out
CHNU# 19: [POWR 408[WHITESB9 12.500[1]
CHNU# 15: [POWR 1035[RBM 4 13.800[4]
CHNU# 14: [POWR 1087[DAISHOW8 13.800[2]
0.80000
-0.10000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
MACHINE POWER (P)

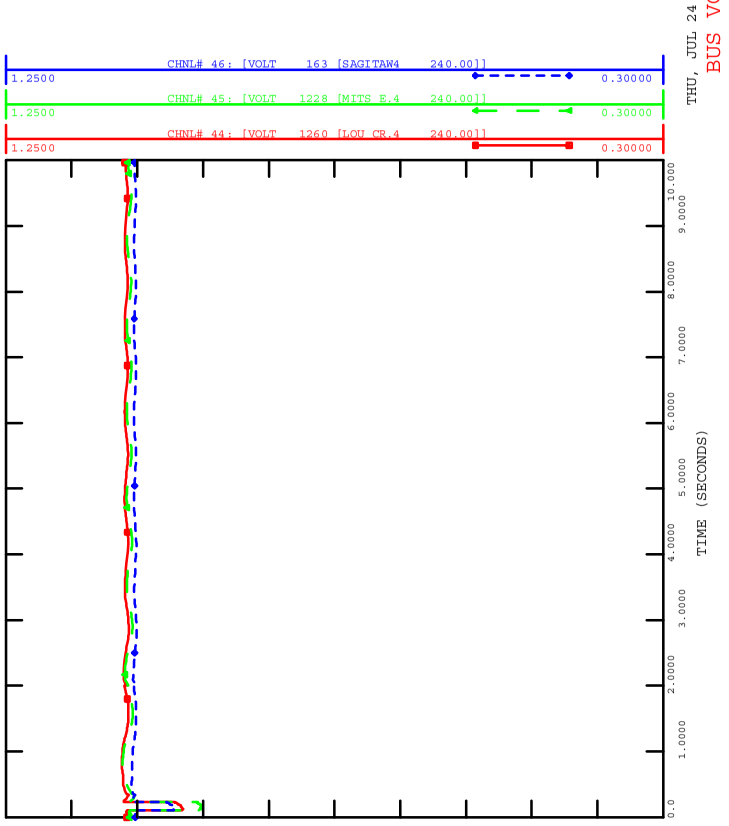
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-24.out



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-24.out



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SWINGBUS 1520 - 2016WP-4

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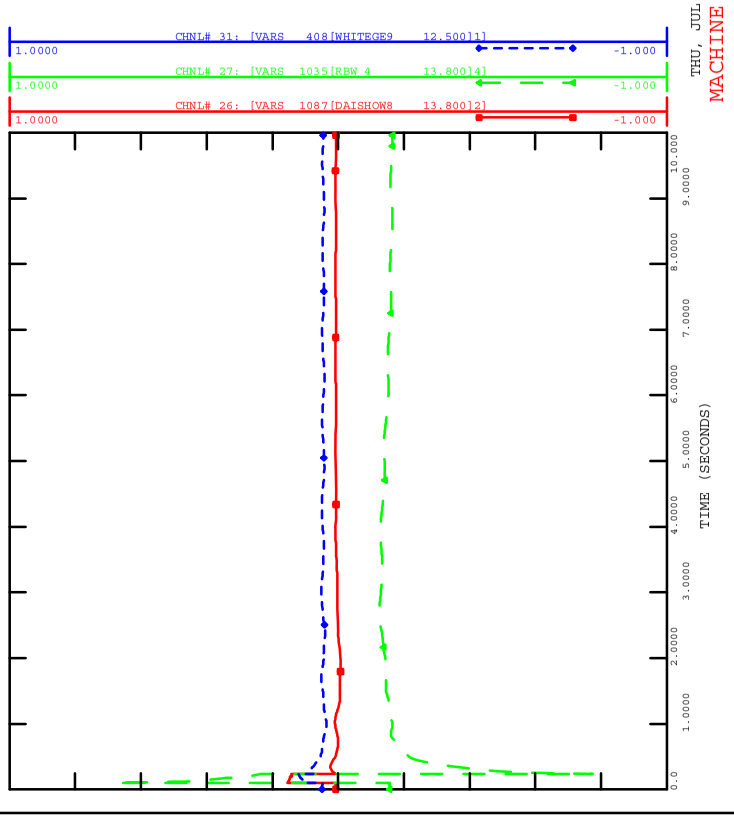
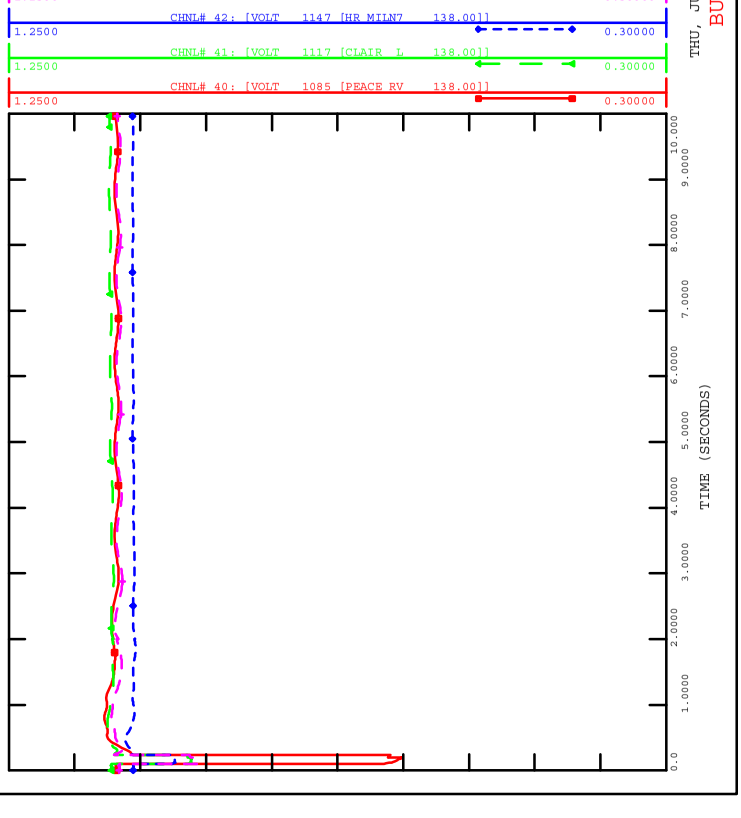
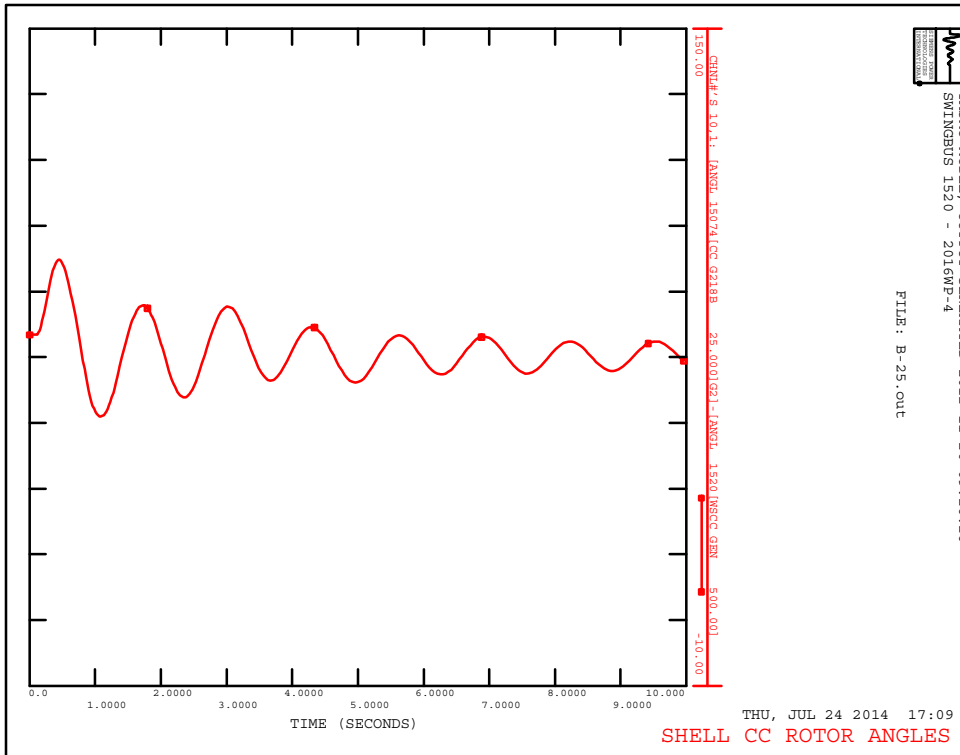
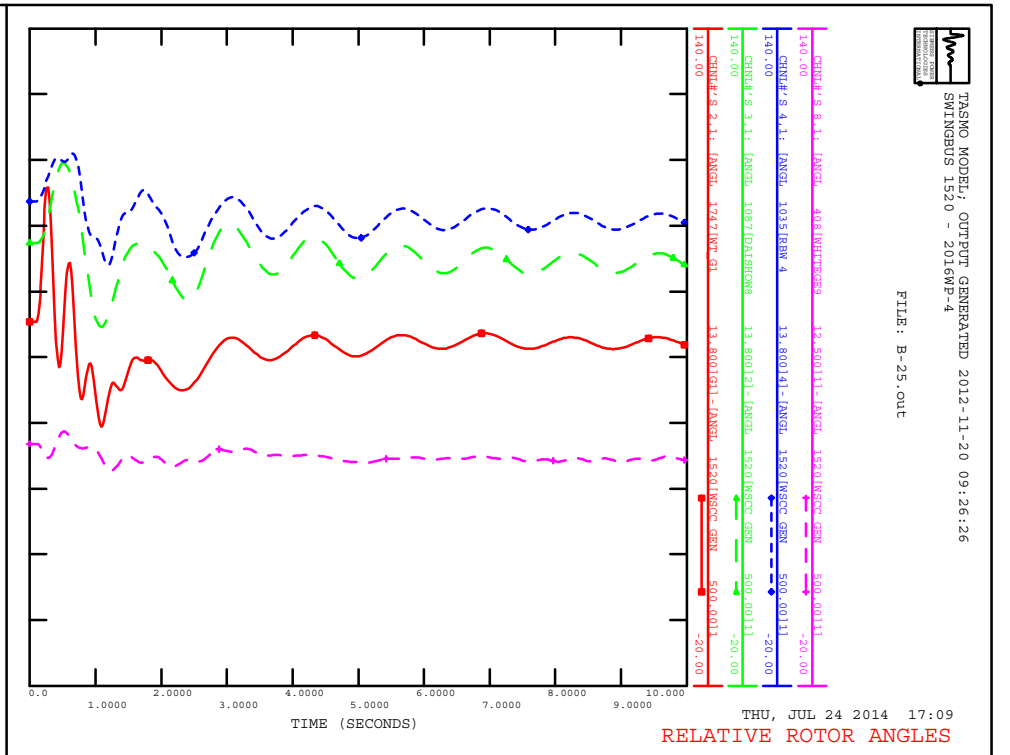


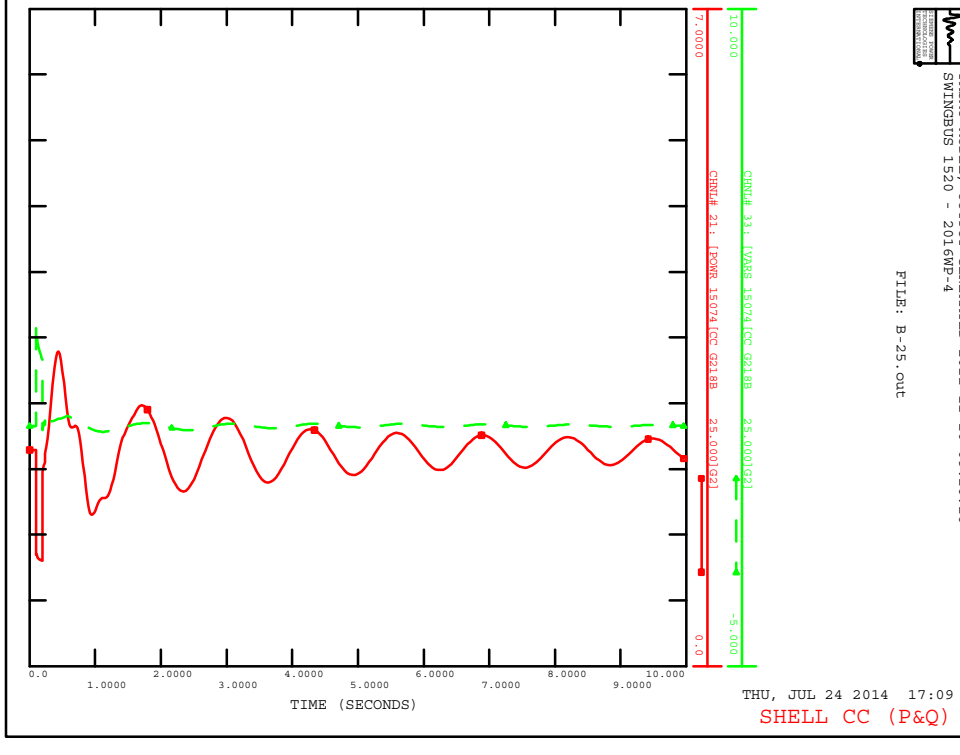
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

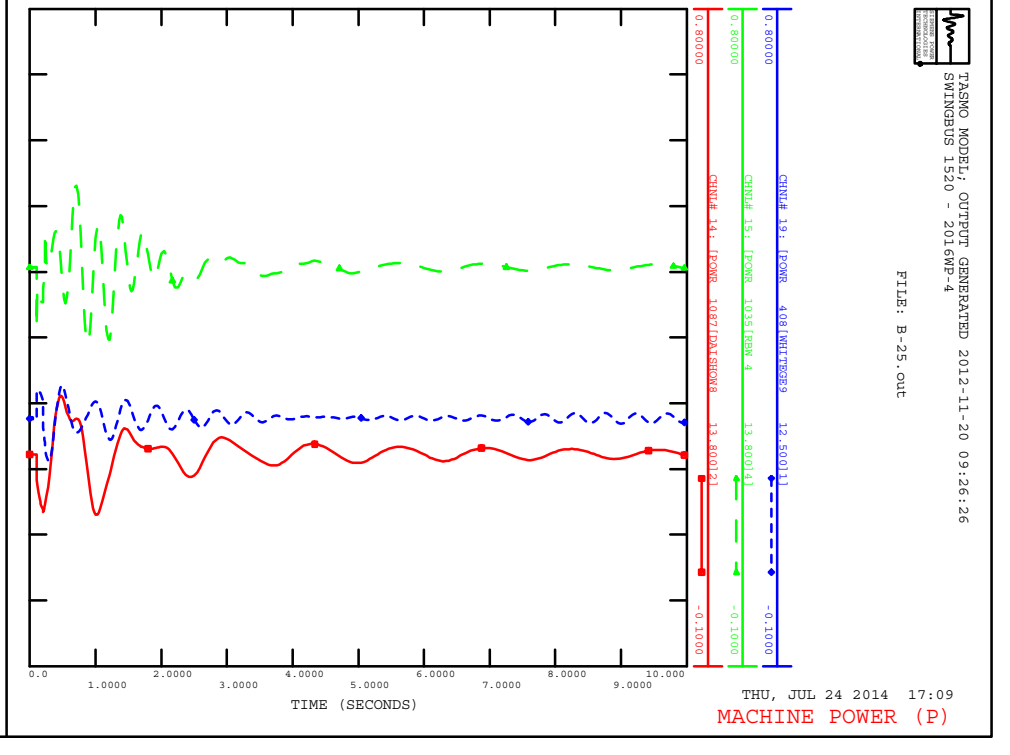
FILE: B-24.out




TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-25.out
CHNU#'S 10,1: [ANGL 15074[CC G21BB 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
TIME (SECONDS)
THU, JUL 24 2014 17:09
SHELL CC ROTOR ANGLES

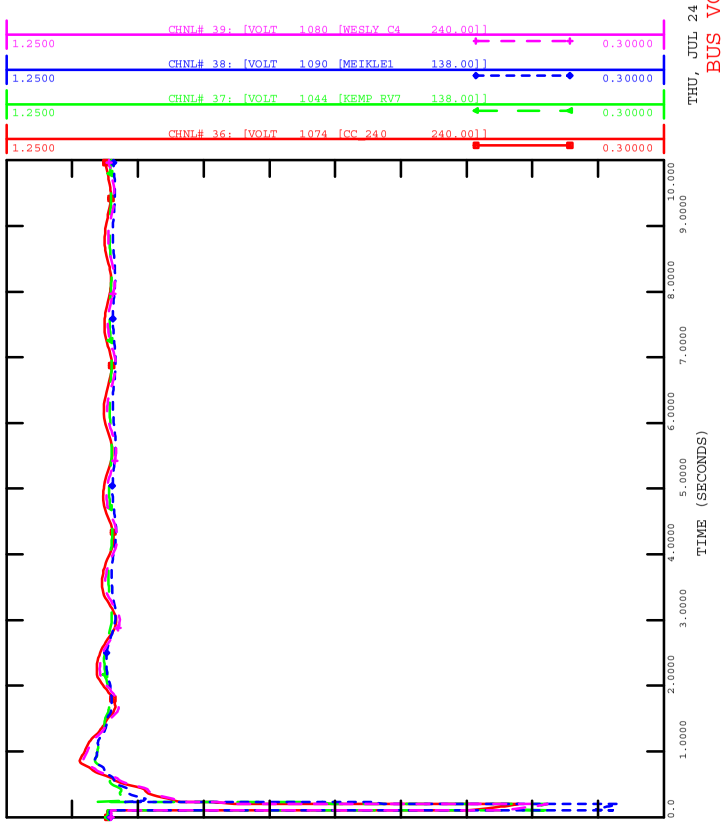

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-25.out
CHNU#'S 8,1: [ANGL 408[WHITESB9 12.500[1] [ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 3,1: [ANGL 1087[DAISHOW8 13.800[2] [ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
-20.00
TIME (SECONDS)
THU, JUL 24 2014 17:09
RELATIVE ROTOR ANGLES


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-25.out
CHNU# 21: [POWR 15074[CC G21BB 25.000[G2]
CHNU# 33: [VARS 15074[CC G21BB 25.000[G2]
0.0
-5.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
SHELL CC (P&Q)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-25.out
CHNU# 19: [POWR 408[WHITESB9 12.500[1]
CHNU# 15: [POWR 1035[RBM 4 13.800[4]
CHNU# 14: [POWR 1087[DAISHOW8 13.800[2]
-0.1000
TIME (SECONDS)
THU, JUL 24 2014 17:09
MACHINE POWER (P)

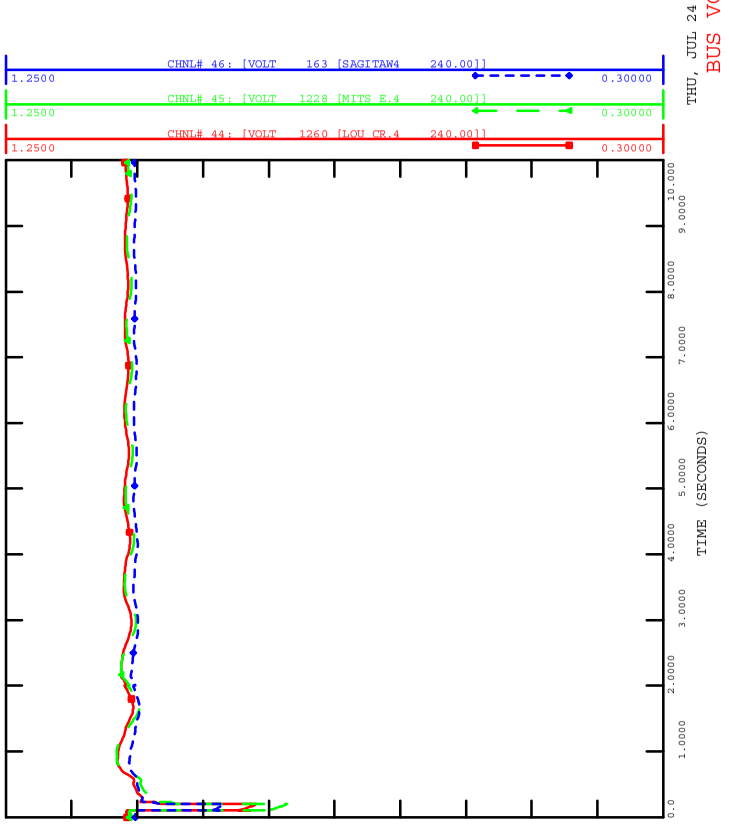
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-25.out



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-25.out



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

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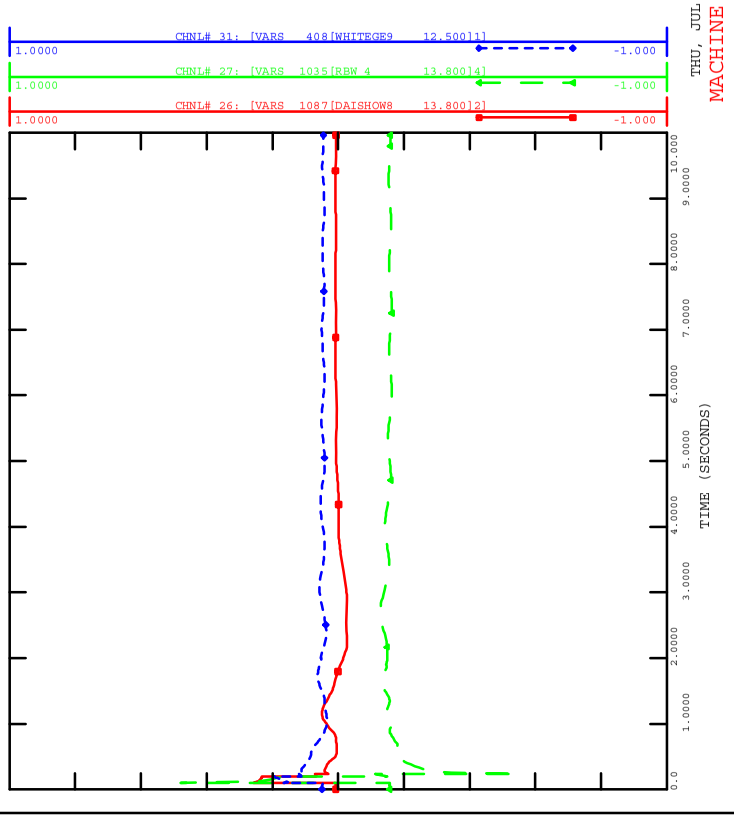
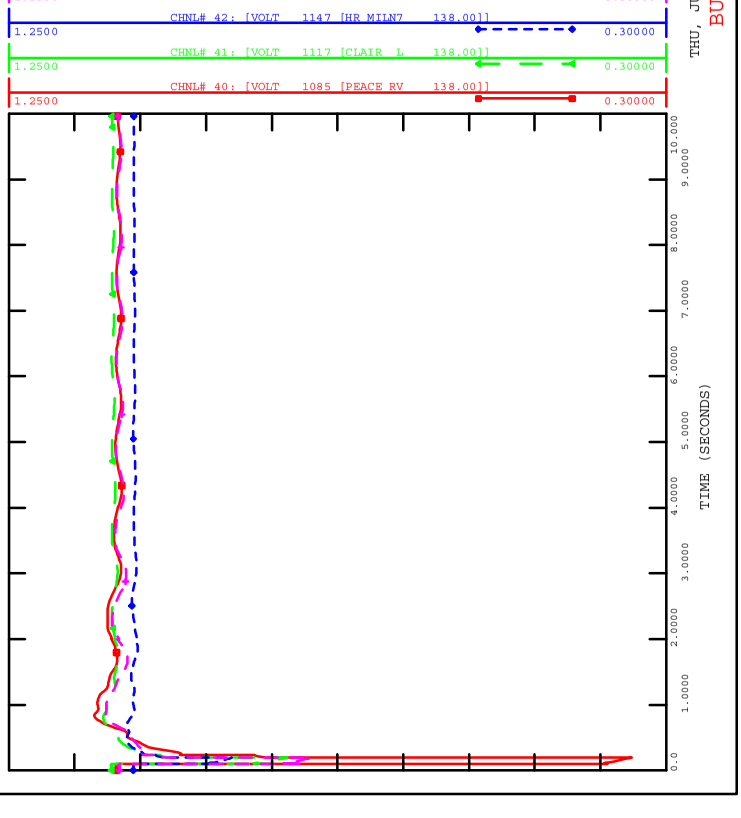


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-25.out

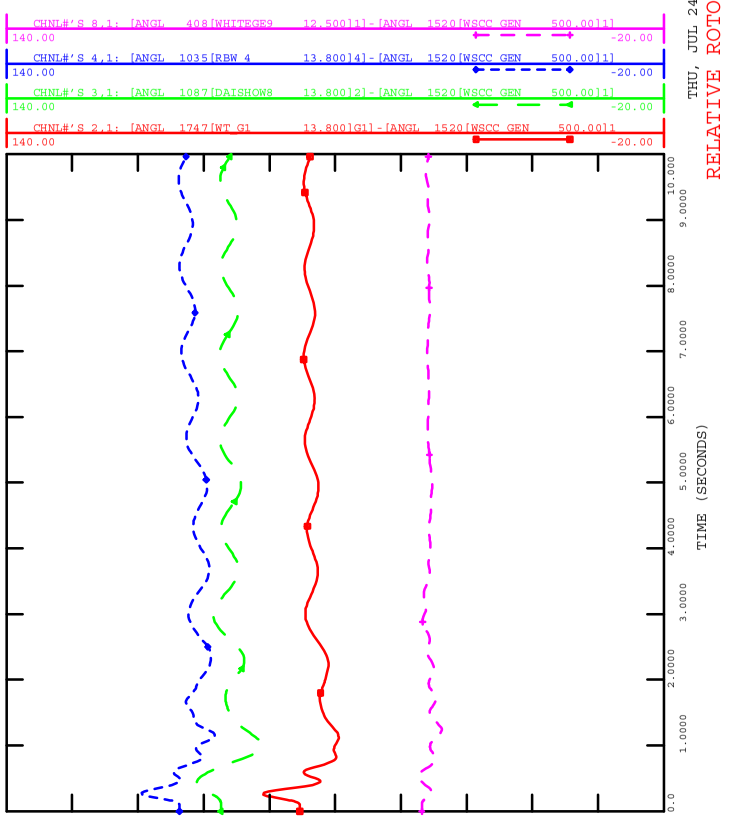


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-26.out

THU, JUL 24 2014 17:09

RELATIVE ROTOR ANGLES

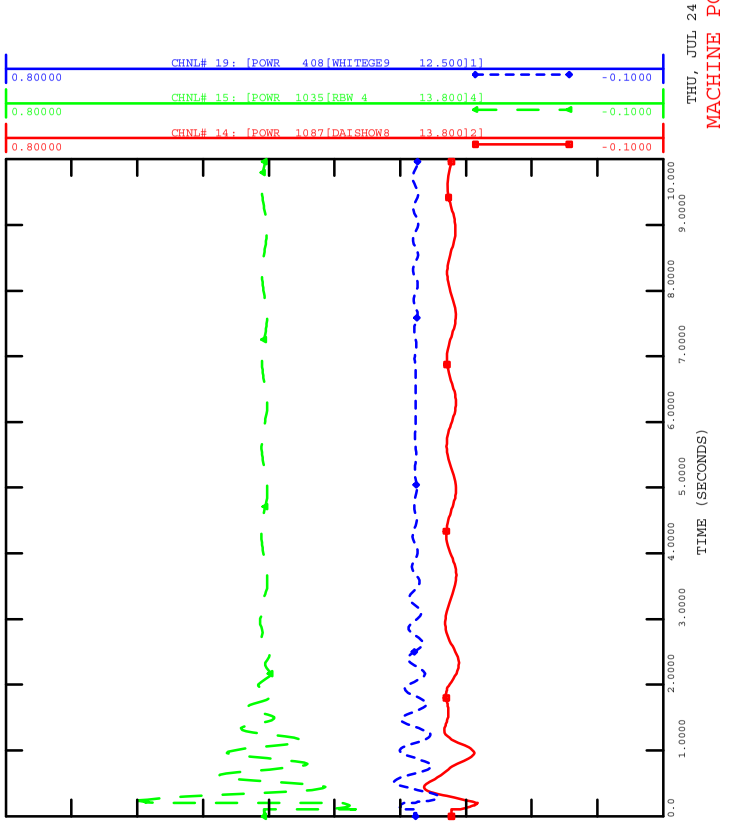


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-26.out

THU, JUL 24 2014 17:09

MACHINE POWER (P)

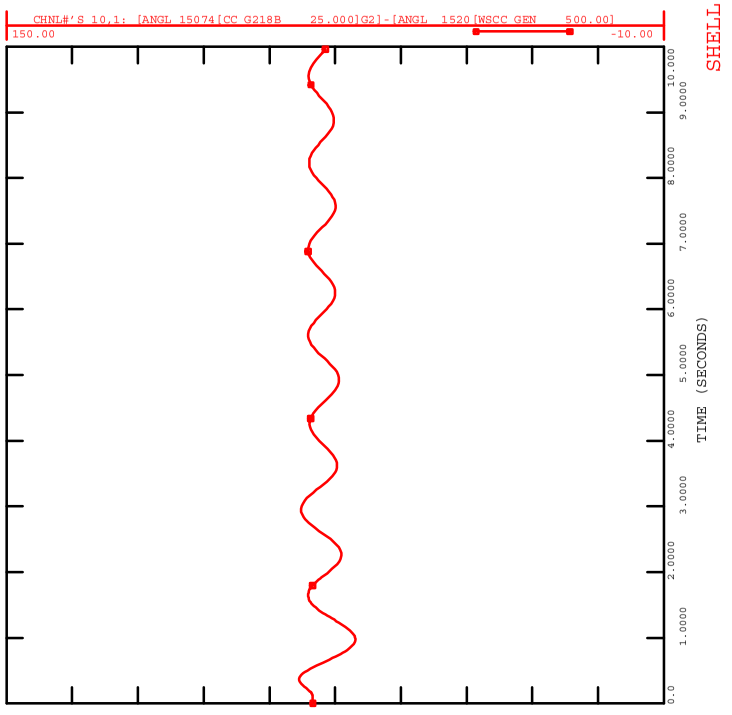


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-26.out

THU, JUL 24 2014 17:09

SHELL CC ROTOR ANGLES

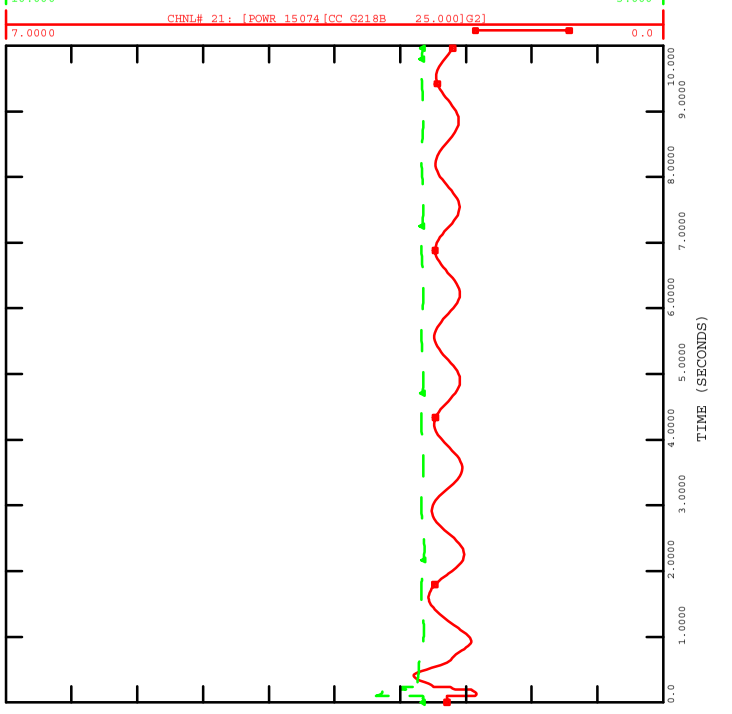


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-26.out

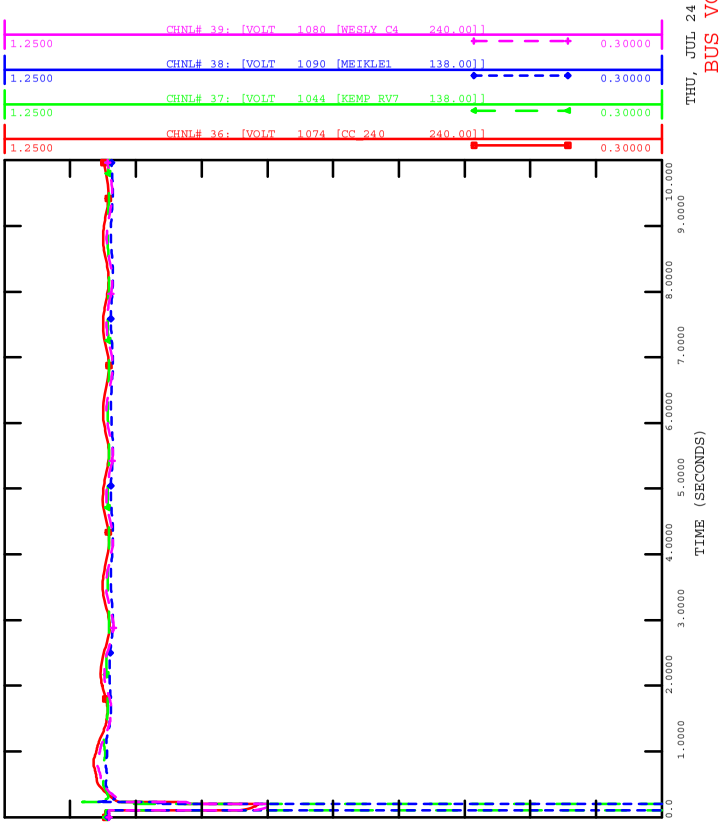
THU, JUL 24 2014 17:09

SHELL CC (P&Q)



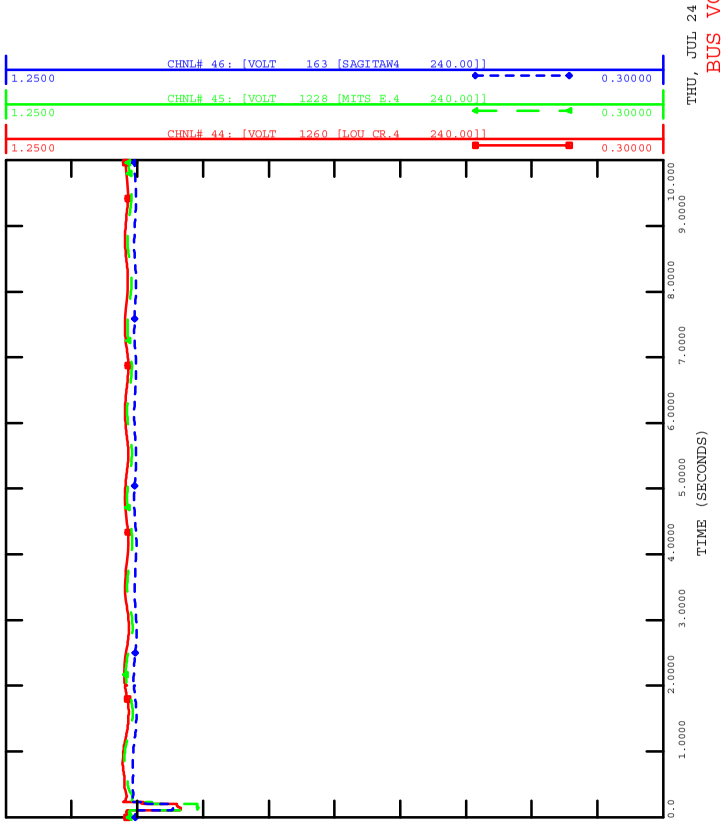
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-26.out



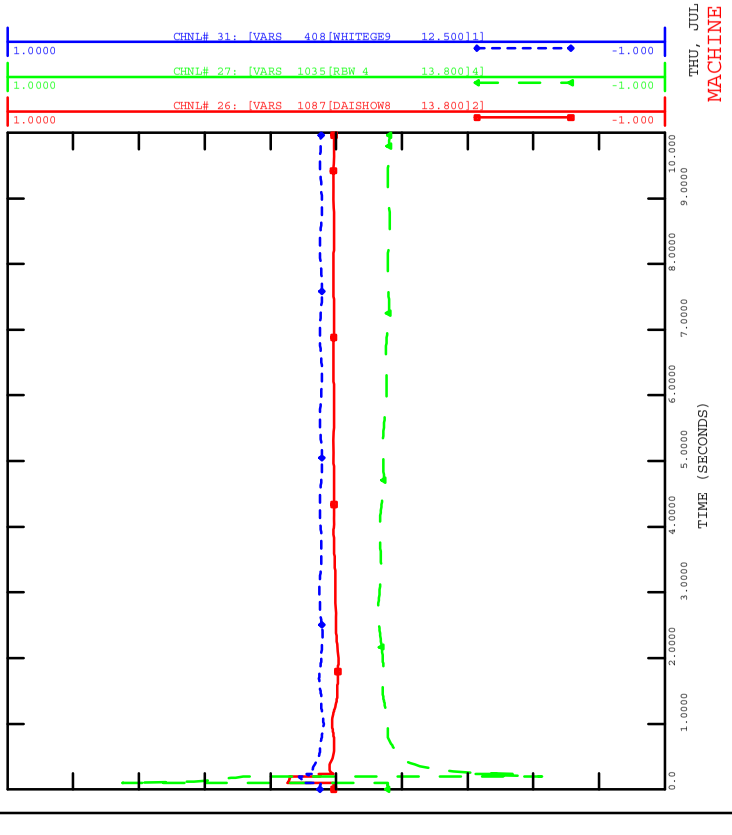
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-26.out



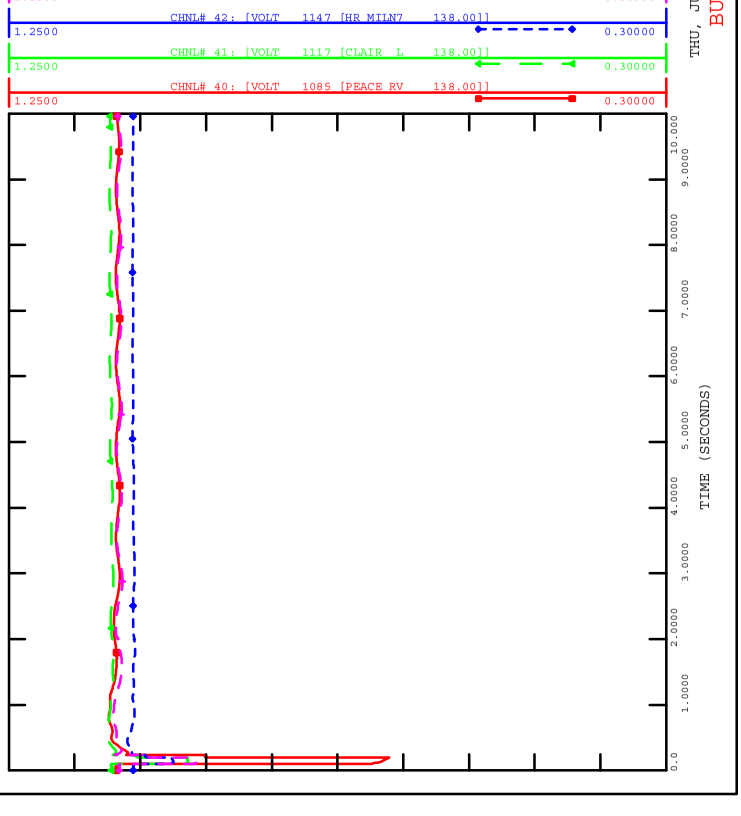
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

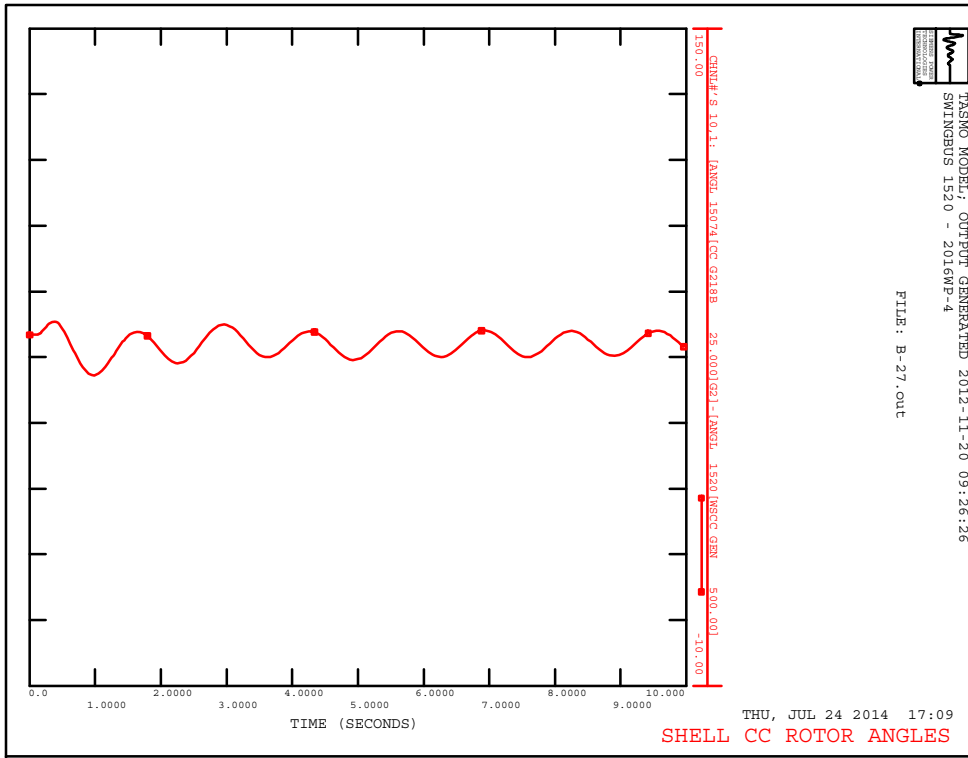
FILE: B-26.out



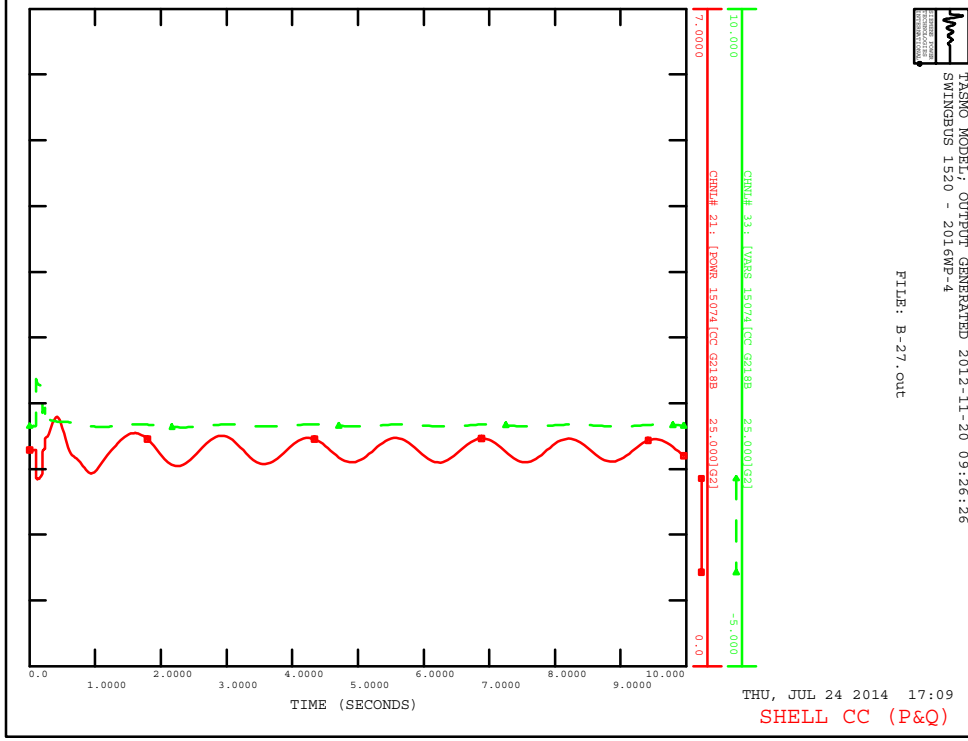
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-26.out




TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-27.out
CHNL# S 8 1: [ANGL 408[WHITESB9 12.500]1] [ANGL 1520[NSCC GEN 500.00]1]
CHNL# S 4 1: [ANGL 1035[RBM 4 13.800]4] [ANGL 1520[NSCC GEN 500.00]1]
CHNL# S 3 1: [ANGL 1087[DAISHON8 13.800]2] [ANGL 1520[NSCC GEN 500.00]1]
CHNL# S 2 1: [ANGL 1747[WT G1 13.800]G1] [ANGL 1520[NSCC GEN 500.00]1]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
RELATIVE ROTOR ANGLES

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-27.out
CHNL# S 10 1: [ANGL 15074[CC G21BB 25.000]G2] [ANGL 1520[NSCC GEN 500.00]1]
150.00
-10.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
SHELL CC ROTOR ANGLES

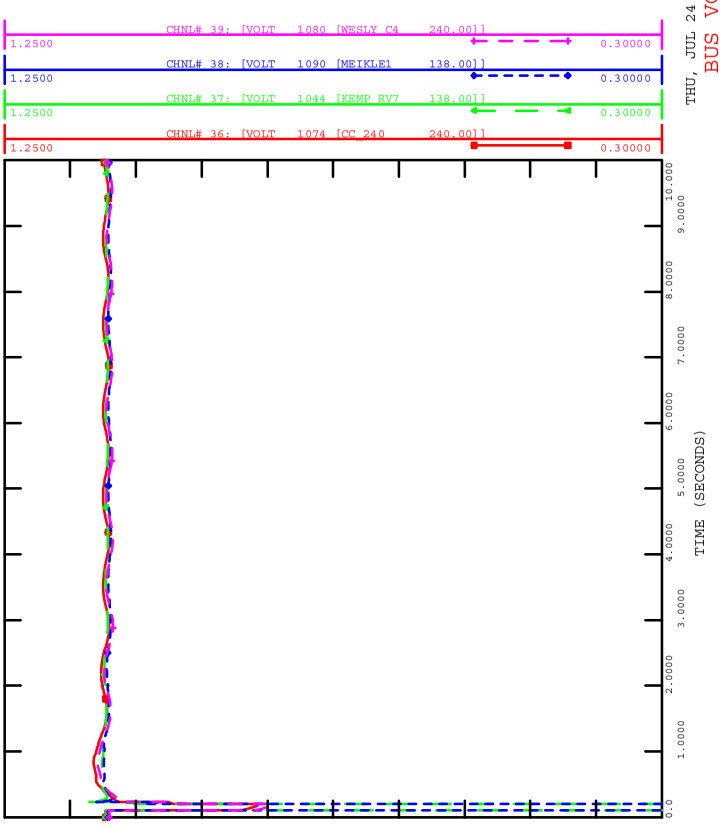

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-27.out
CHNL# 19: [POWR 408[WHITESB9 12.500]1]
CHNL# 15: [POWR 1035[RBM 4 13.800]4]
CHNL# 14: [POWR 1087[DAISHON8 13.800]2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
MACHINE POWER (P)

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-27.out
CHNL# 33: [VARS 15074[CC G21BB 25.000]G2]
CHNL# 21: [POWR 15074[CC G21BB 25.000]G2]
10.000
-5.000
7.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
SHELL CC (P&Q)

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-27.out

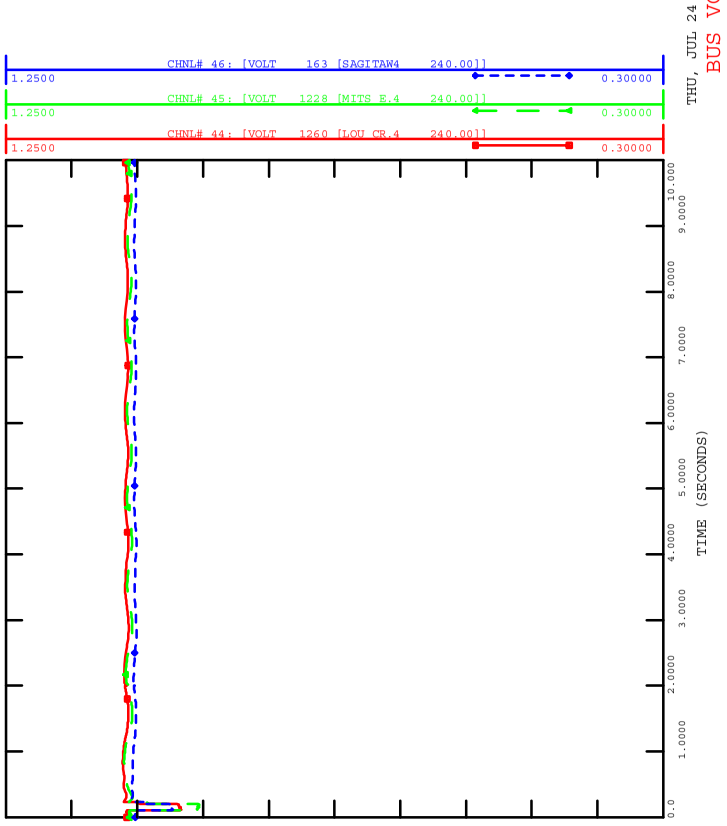
THU, JUL 24 2014 17:09



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-27.out

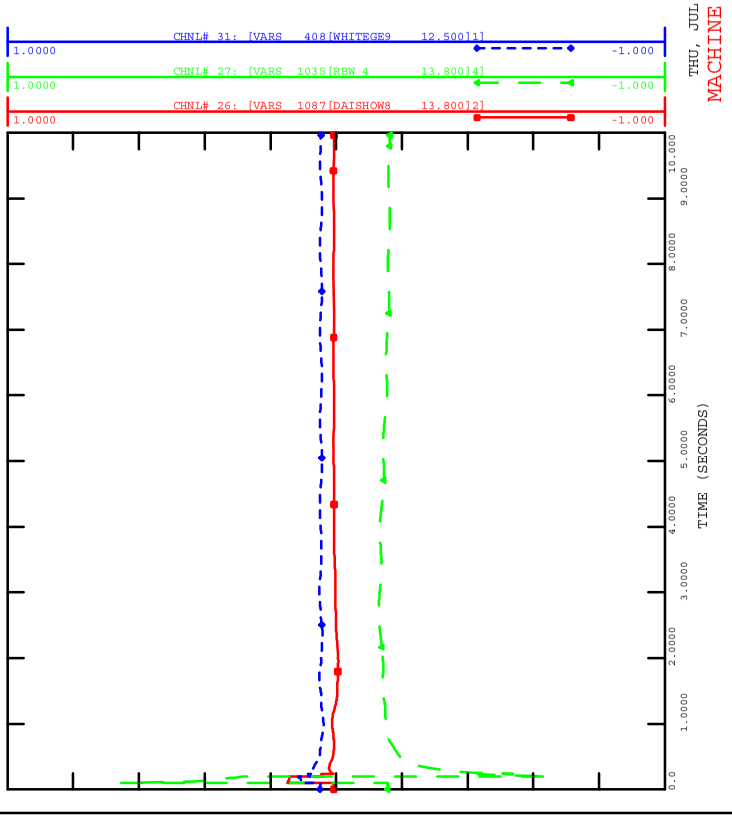
THU, JUL 24 2014 17:09



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-27.out

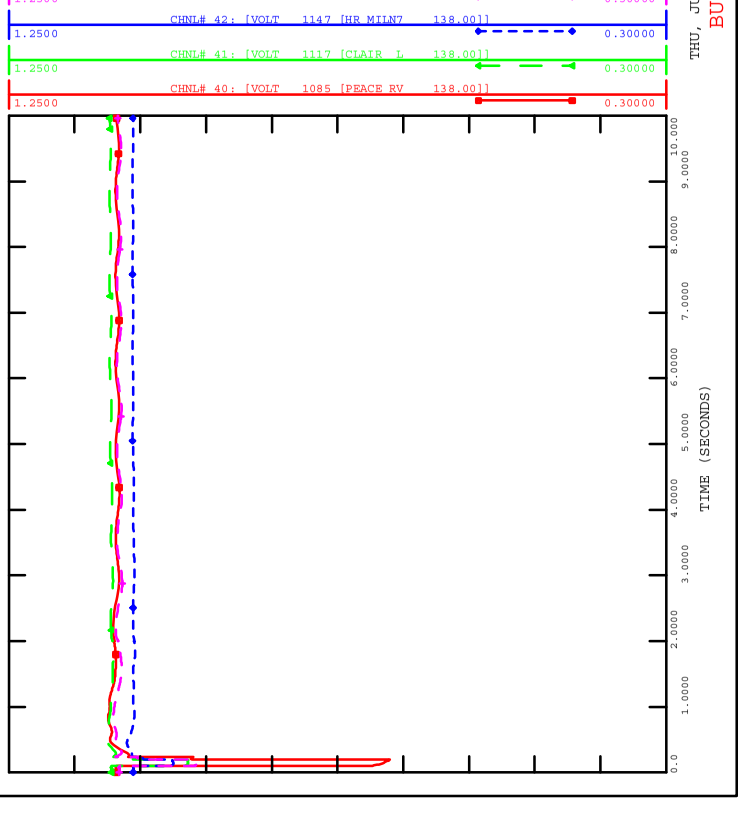
THU, JUL 24 2014 17:09

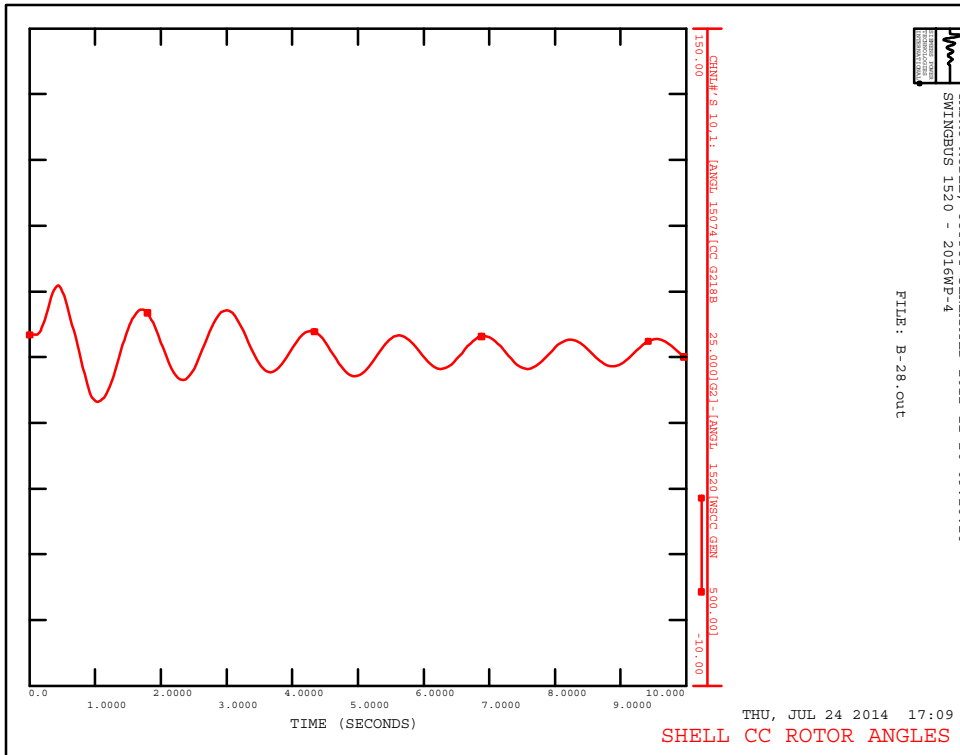


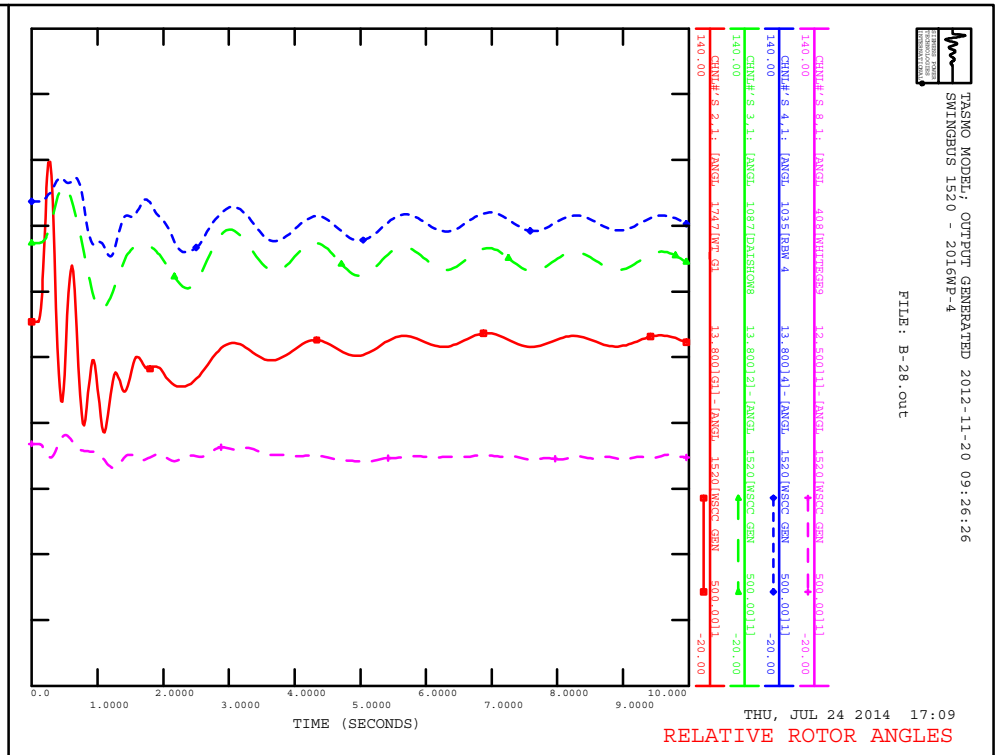
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

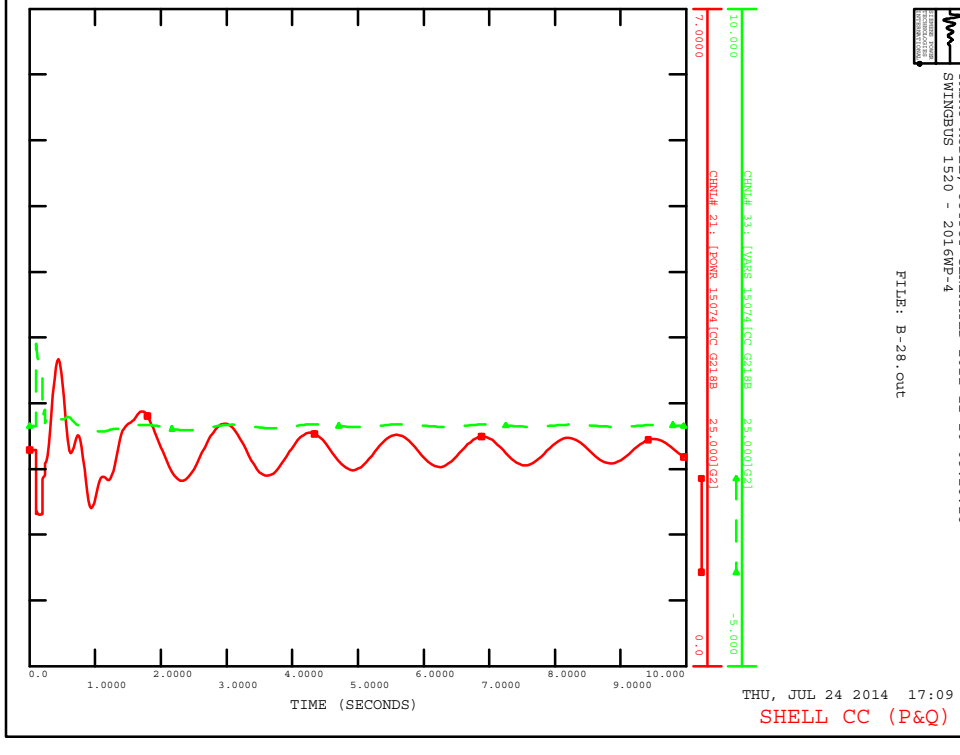
FILE: B-27.out

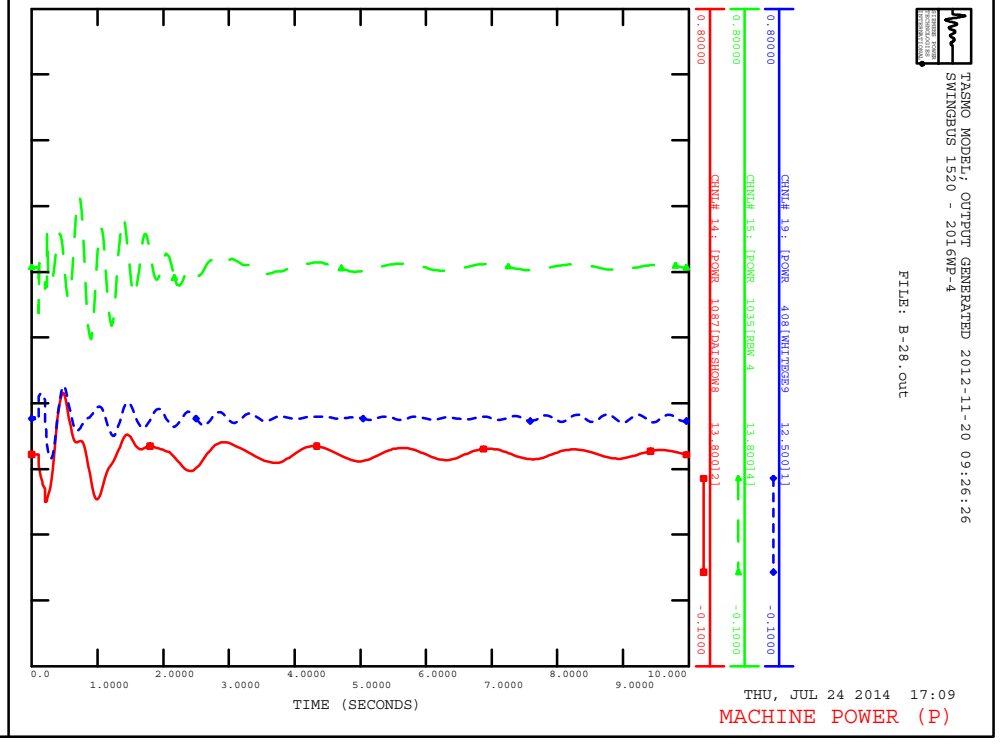
THU, JUL 24 2014 17:09




TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-28.out
CHNU#'S 10,1: [ANGL 15074[CC G21BB 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
-50.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
SHELL CC ROTOR ANGLES

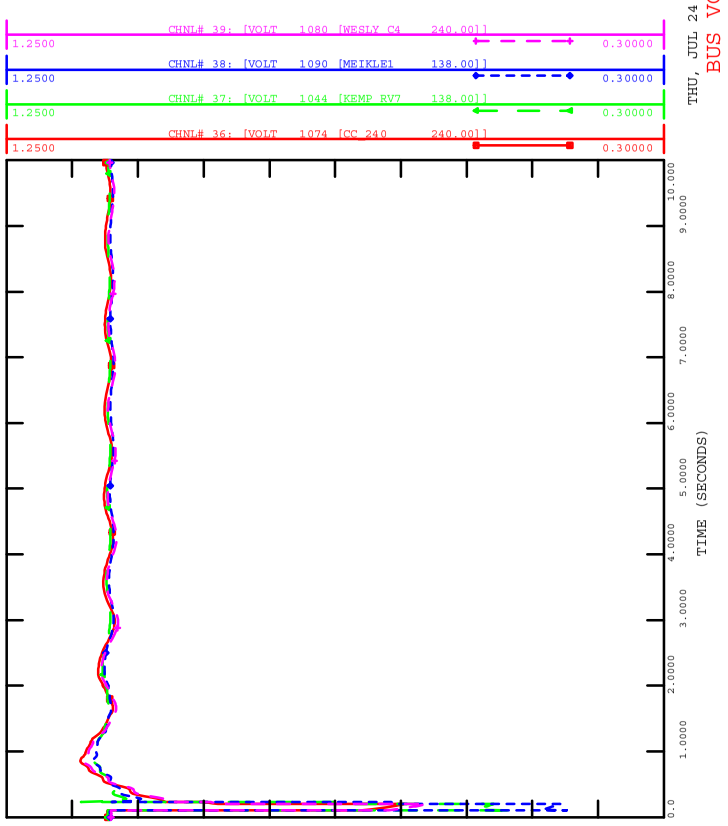

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-28.out
CHNU#'S 8,1: [ANGL 408[WHITESB9 12.500[1] [ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 3,1: [ANGL 1087[DAISHOW8 13.800[2] [ANGL 1520[NSCC GEN 500.00]]
CHNU#'S 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00]]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
RELATIVE ROTOR ANGLES


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-28.out
CHNU# 33: [VARS 15074[CC G21BB 25.000[G2]
CHNU# 21: [POWR 15074[CC G21BB 25.000[G2]
10.000
-5.000
7.0000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
SHELL CC (P&Q)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-28.out
CHNU# 19: [POWR 408[WHITESB9 12.500[1]
CHNU# 15: [POWR 1035[RBM 4 13.800[4]
CHNU# 14: [POWR 1087[DAISHOW8 13.800[2]
0.80000
-0.1000
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
MACHINE POWER (P)

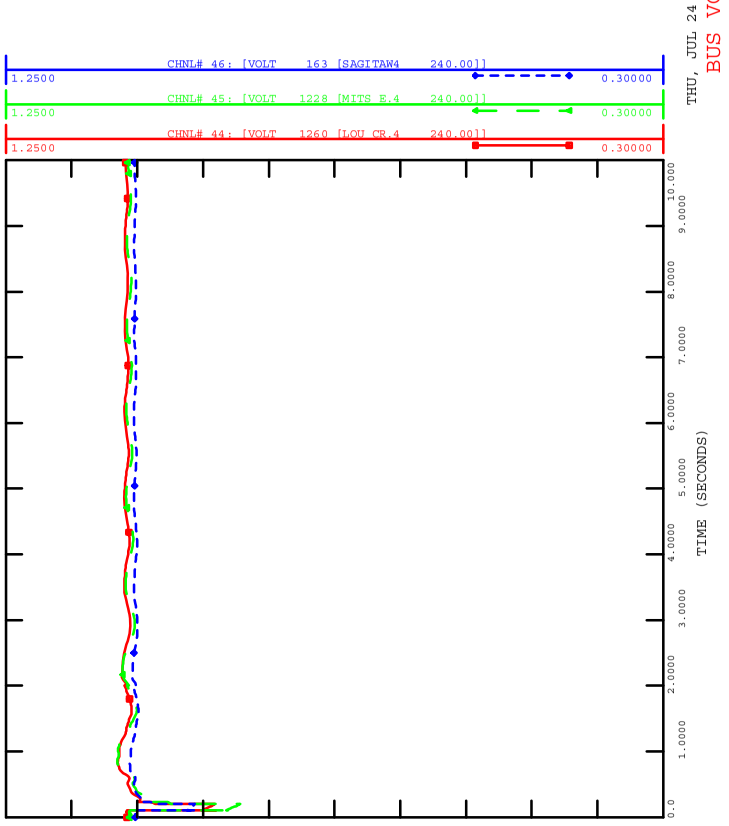
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-28.out



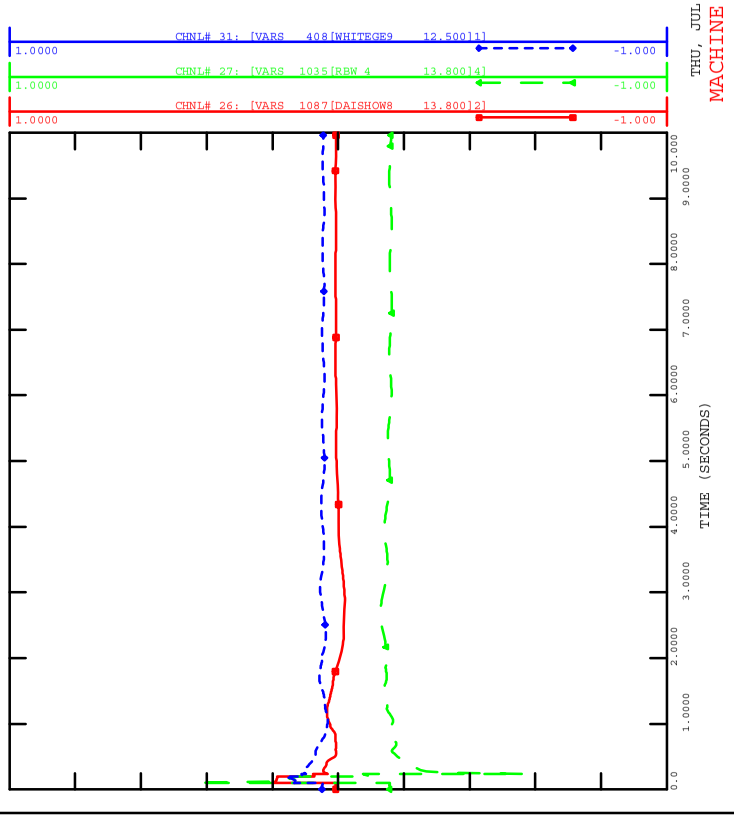
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-28.out



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-28.out



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

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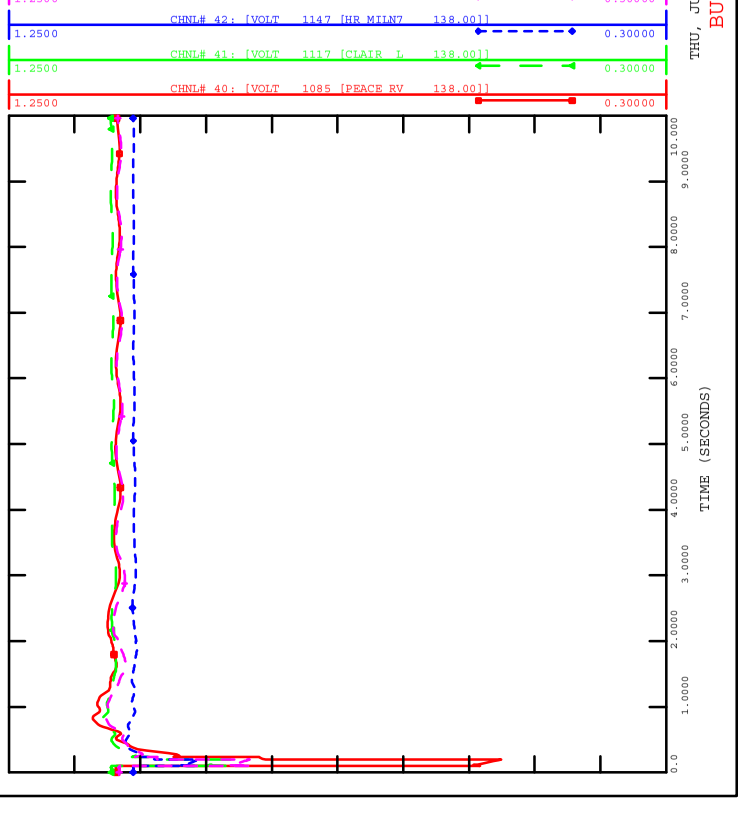
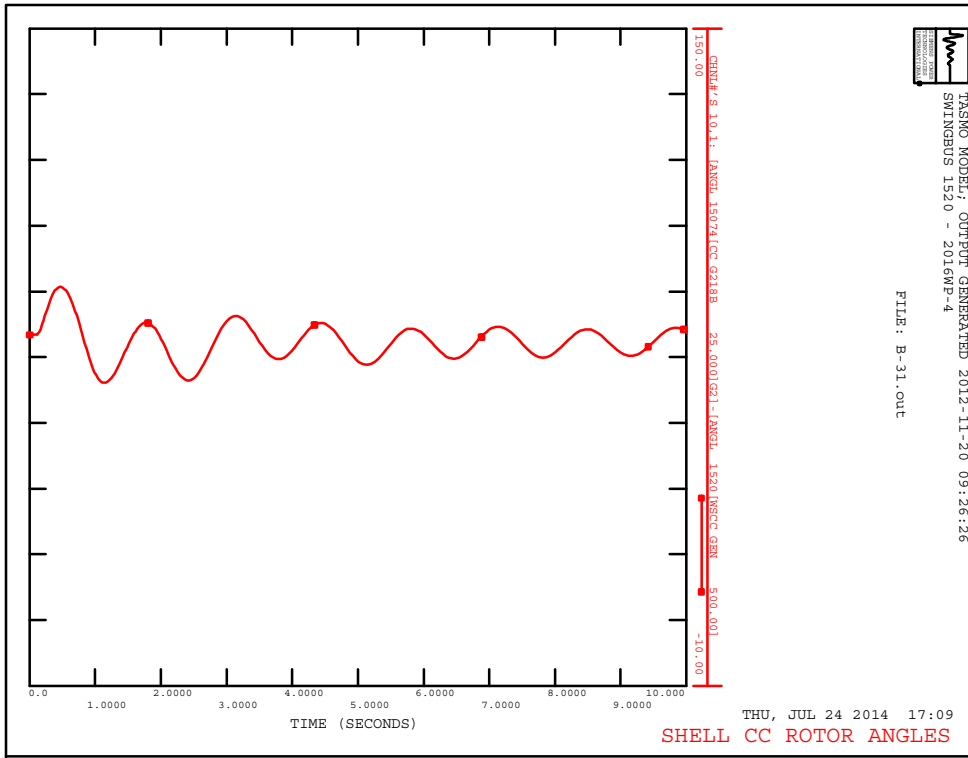
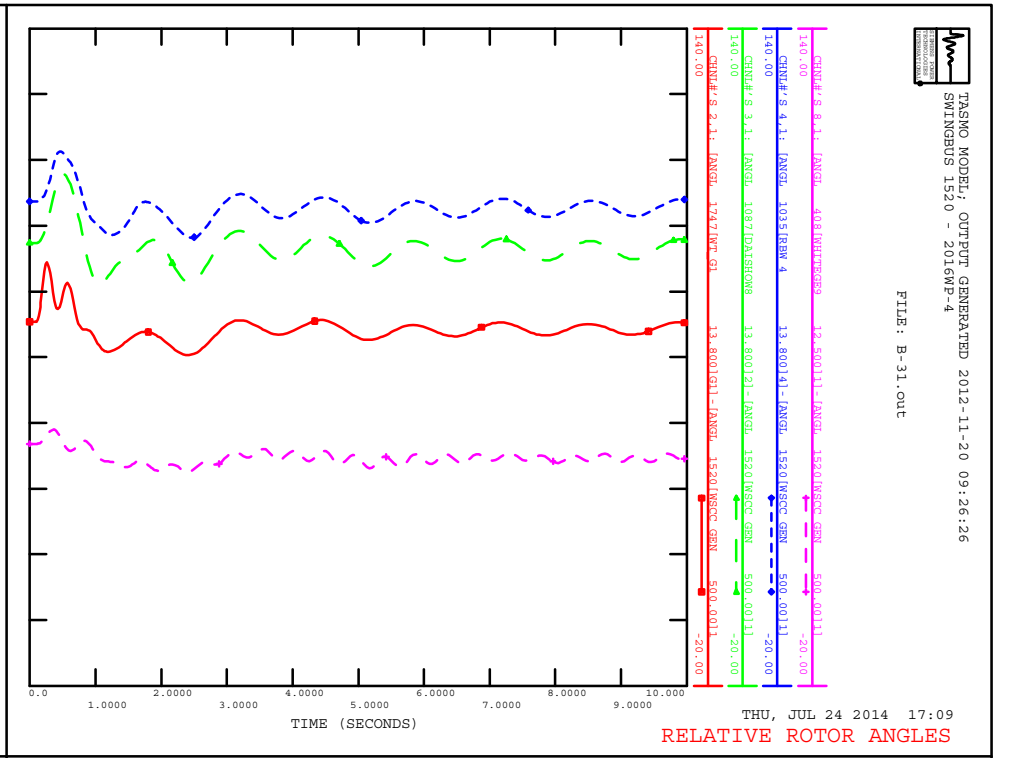
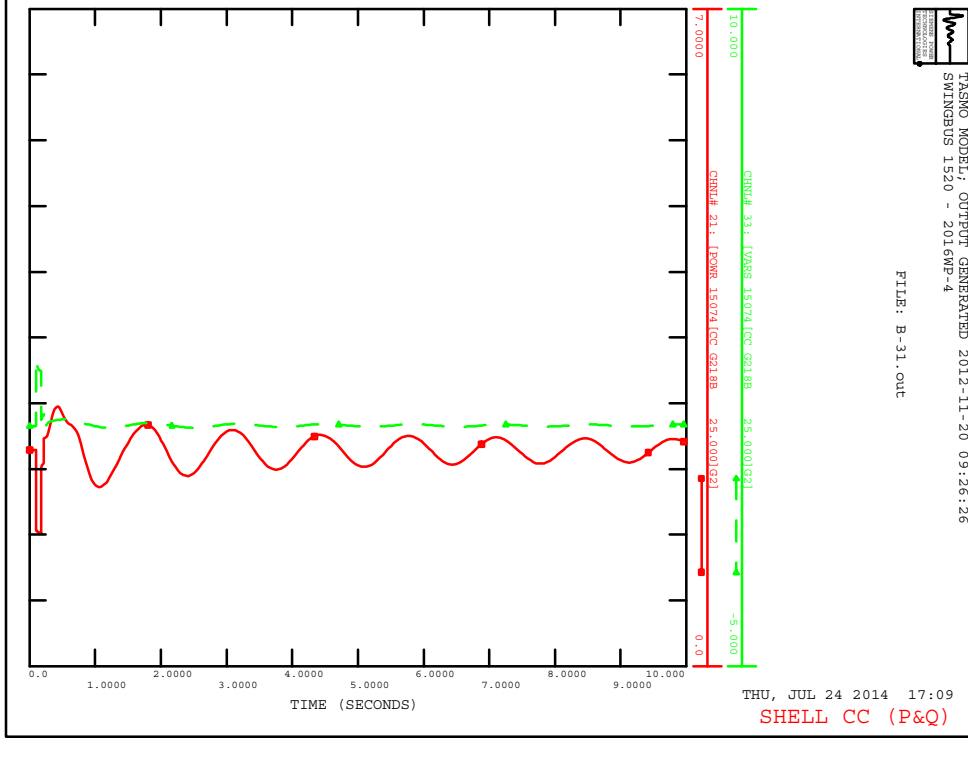
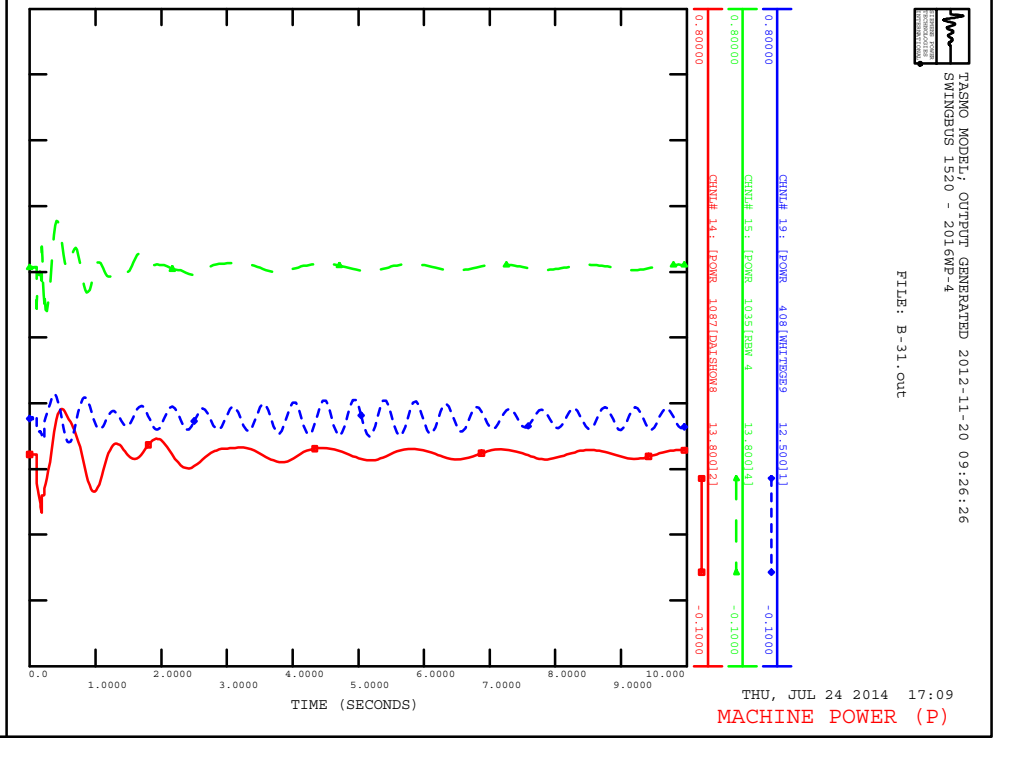



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-31.out
CHNL#'S 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
-50.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
SHELL CC ROTOR ANGLES

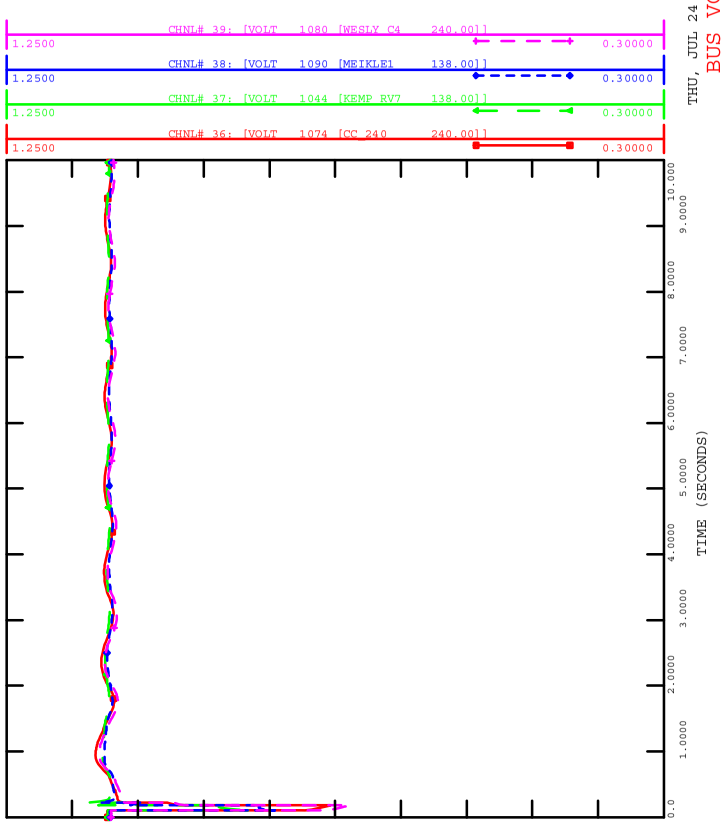

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-31.out
CHNL#'S 8,1: [ANGL 408[WHITESB9 12.500[1] [ANGL 1520[NSCC GEN 500.00[1]
CHNL#'S 4,1: [ANGL 1035[RBM 4 13.800[4]-[ANGL 1520[NSCC GEN 500.00[1]
CHNL#'S 3,1: [ANGL 1087[DAISHOW8 13.800[2] [ANGL 1520[NSCC GEN 500.00[1]
CHNL#'S 2,1: [ANGL 1747[WT G1 13.800[G1]-[ANGL 1520[NSCC GEN 500.00[1]
140.00
-20.00
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
RELATIVE ROTOR ANGLES


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-31.out
CHNL# 33: [VARS 15074 [CC G218B 25.000[G2]
CHNL# 21: [POWR 15074[CC G218B 25.000[G2]
10.000
-5.000
7.0000
0.0
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
SHELL CC (P&Q)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-31.out
CHNL# 19: [POWR 408[WHITESB9 12.500[1]
CHNL# 15: [POWR 1035[RBM 4 13.800[4]
CHNL# 14: [POWR 1087[DAISHOW8 13.800[2]
0.80000
-0.1000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
MACHINE POWER (P)

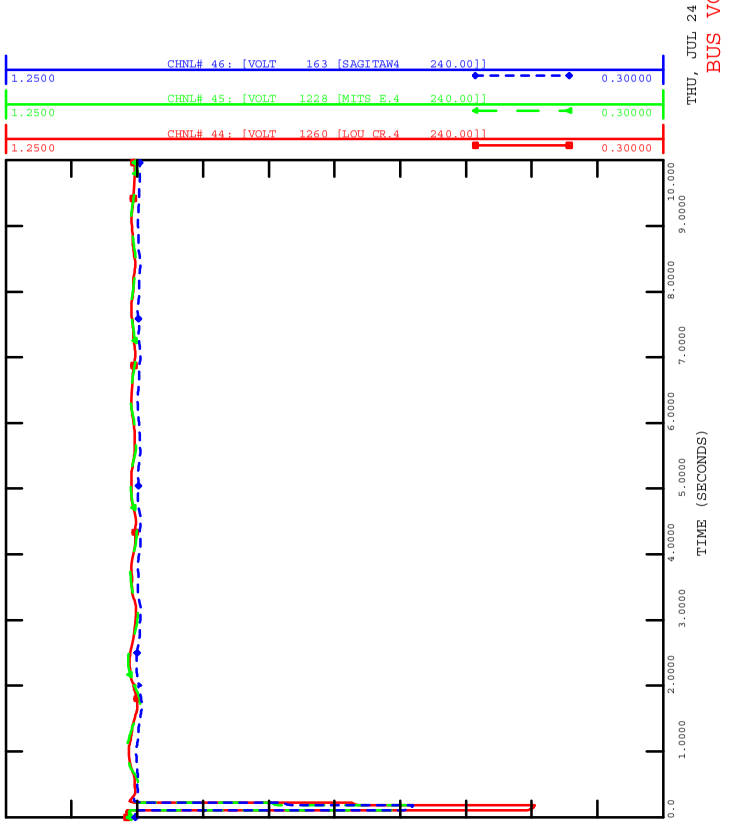
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-31.out



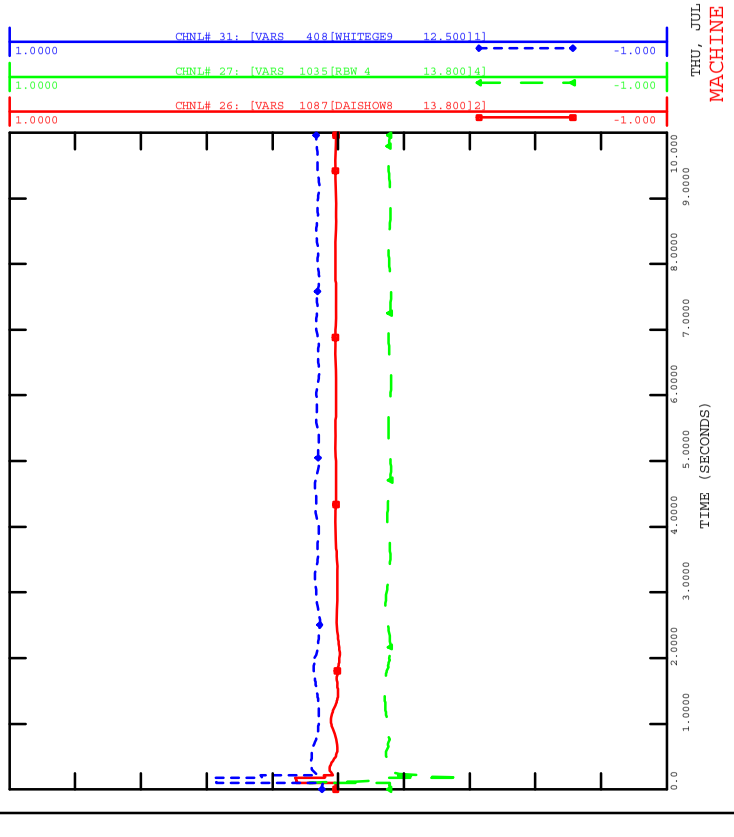
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-31.out



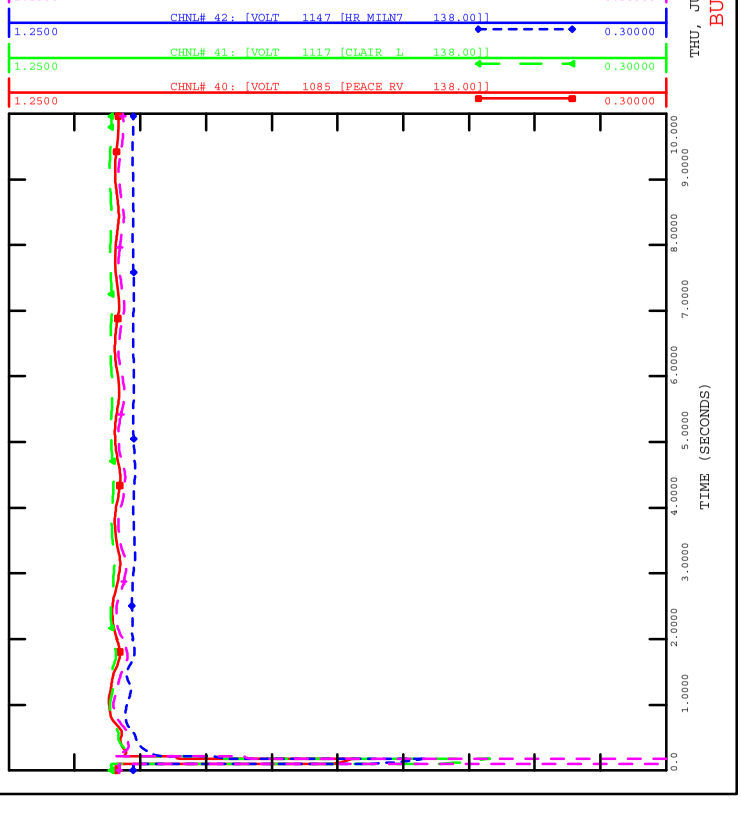
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-31.out



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-31.out

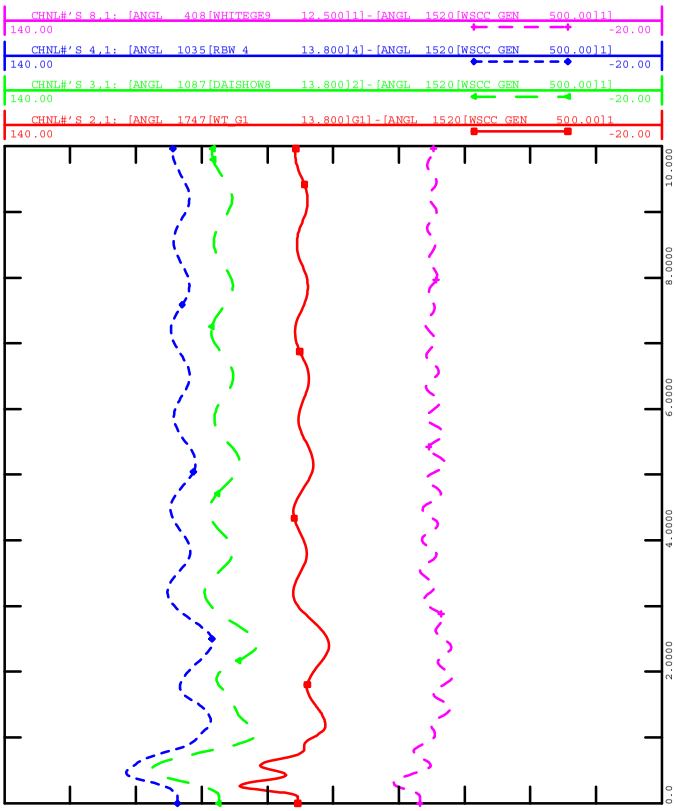


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-32.out

THU, JUL 24 2014 17:09

RELATIVE ROTOR ANGLES

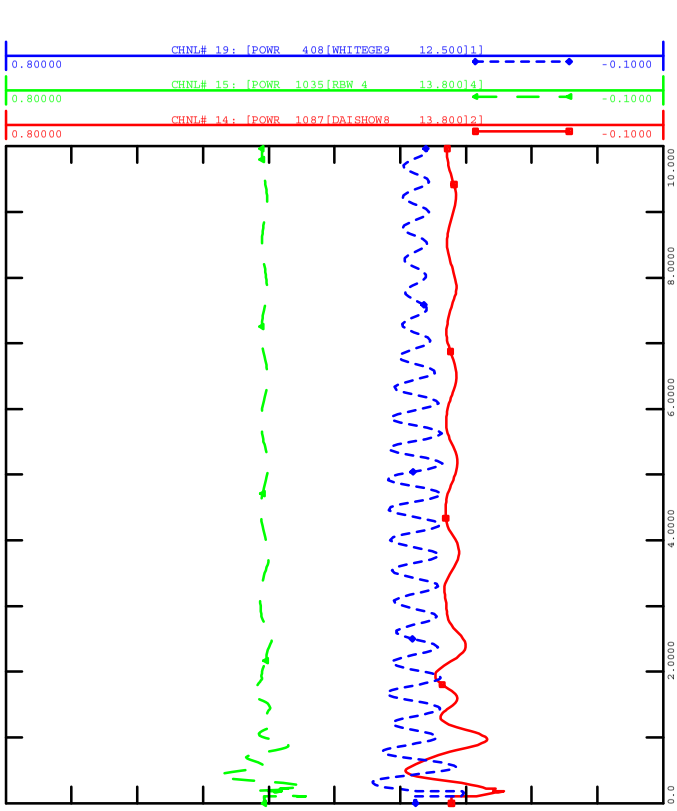


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-32.out

THU, JUL 24 2014 17:09

MACHINE POWER (P)

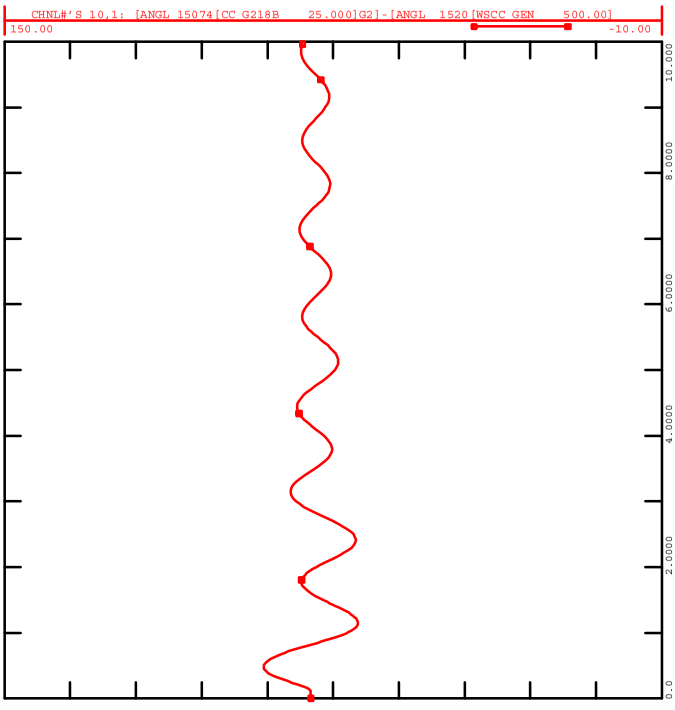


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-32.out

THU, JUL 24 2014 17:09

SHELL CC ROTOR ANGLES

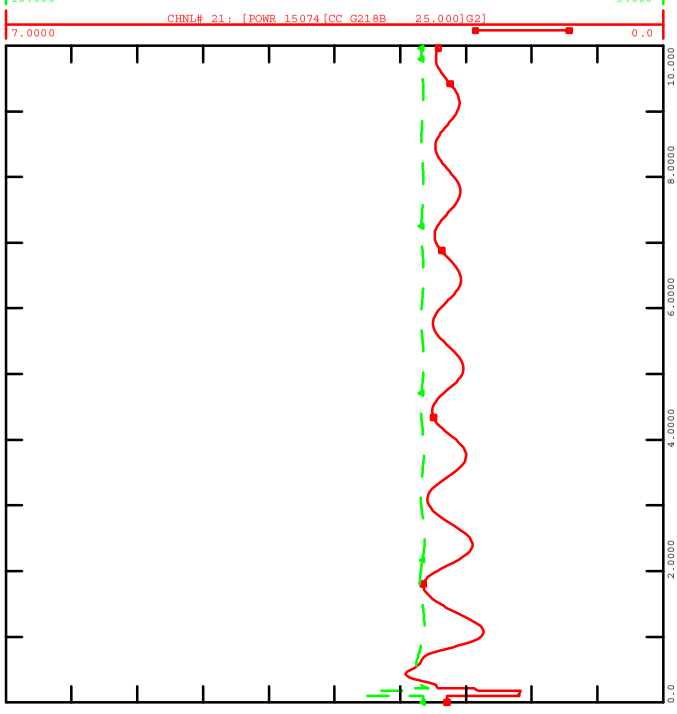


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-32.out

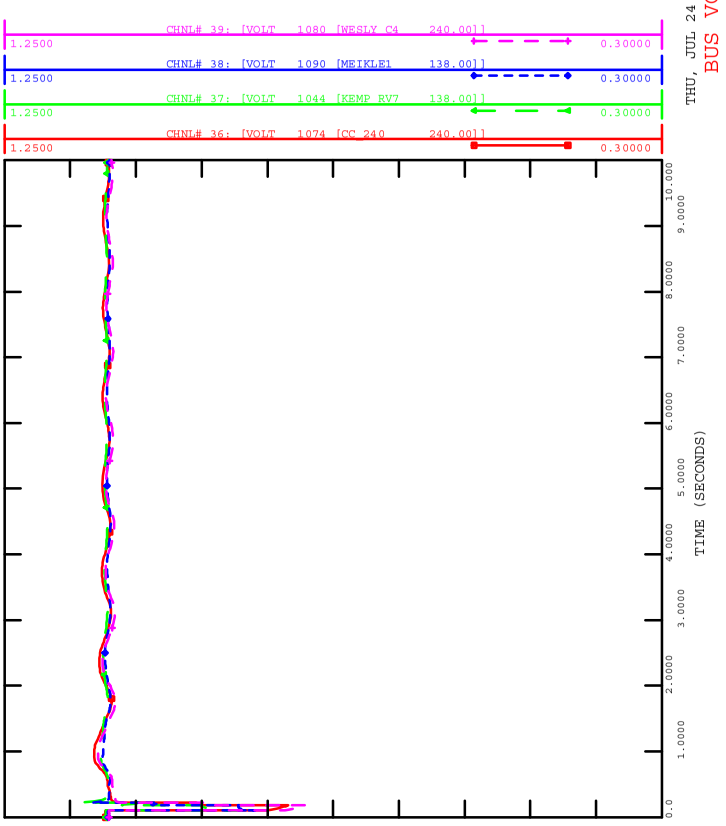
THU, JUL 24 2014 17:09

SHELL CC (P&Q)



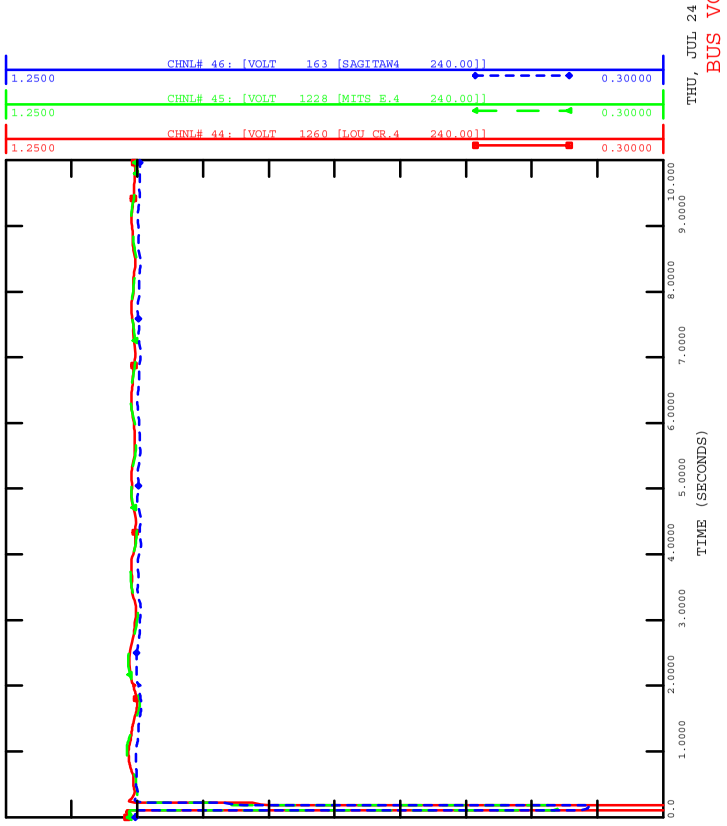
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-32.out



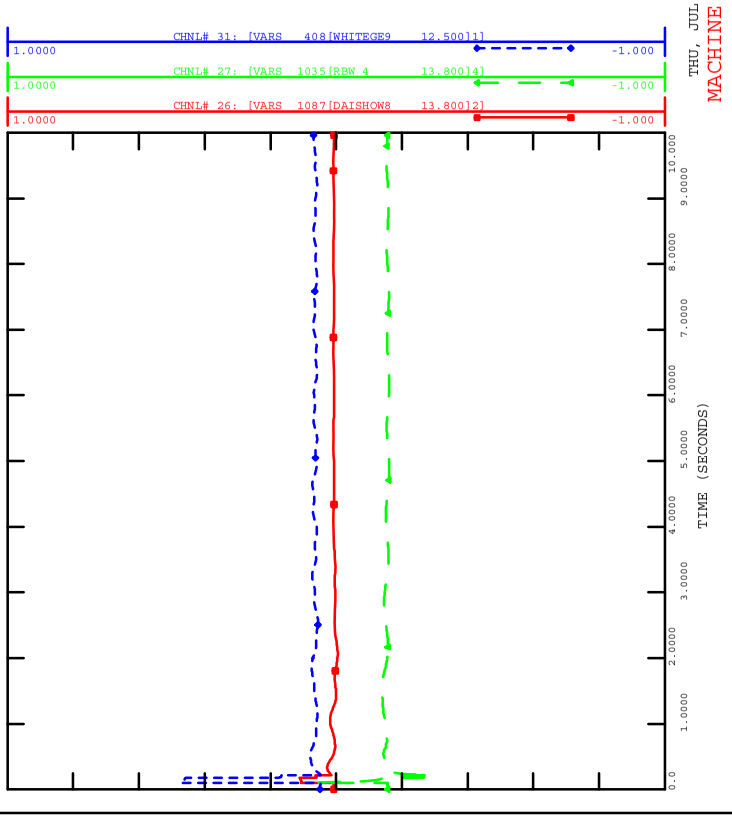
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-32.out



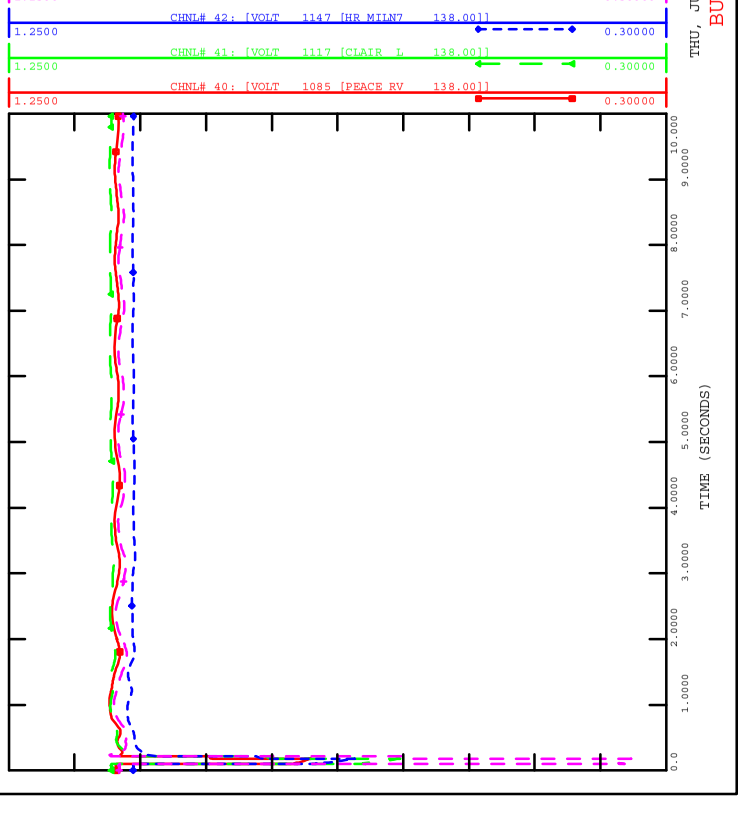
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

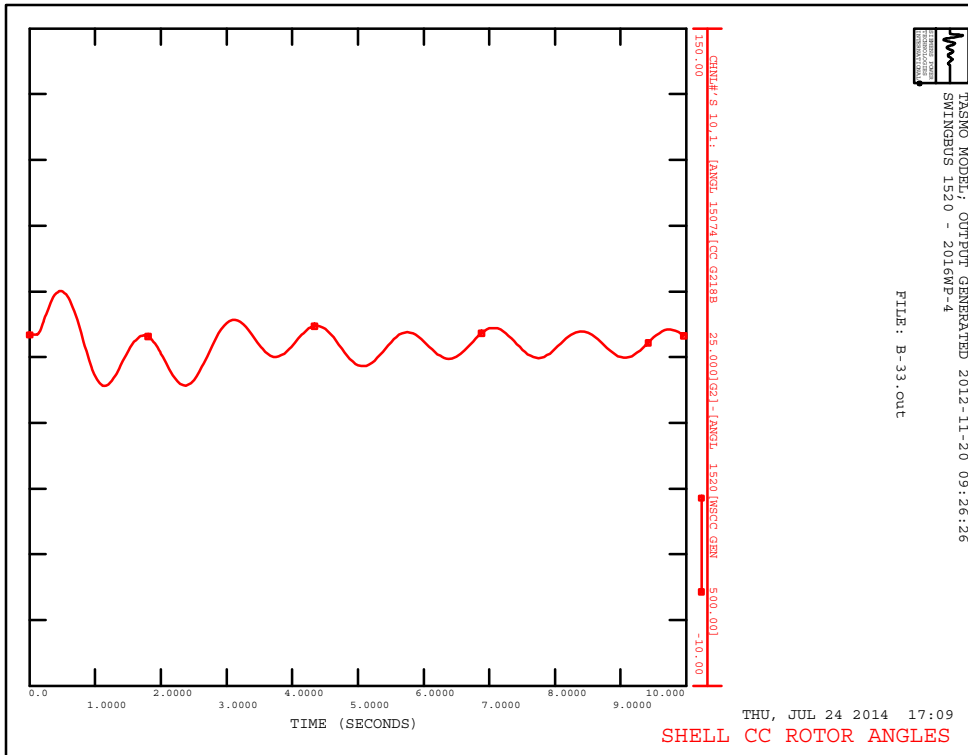
FILE: B-32.out

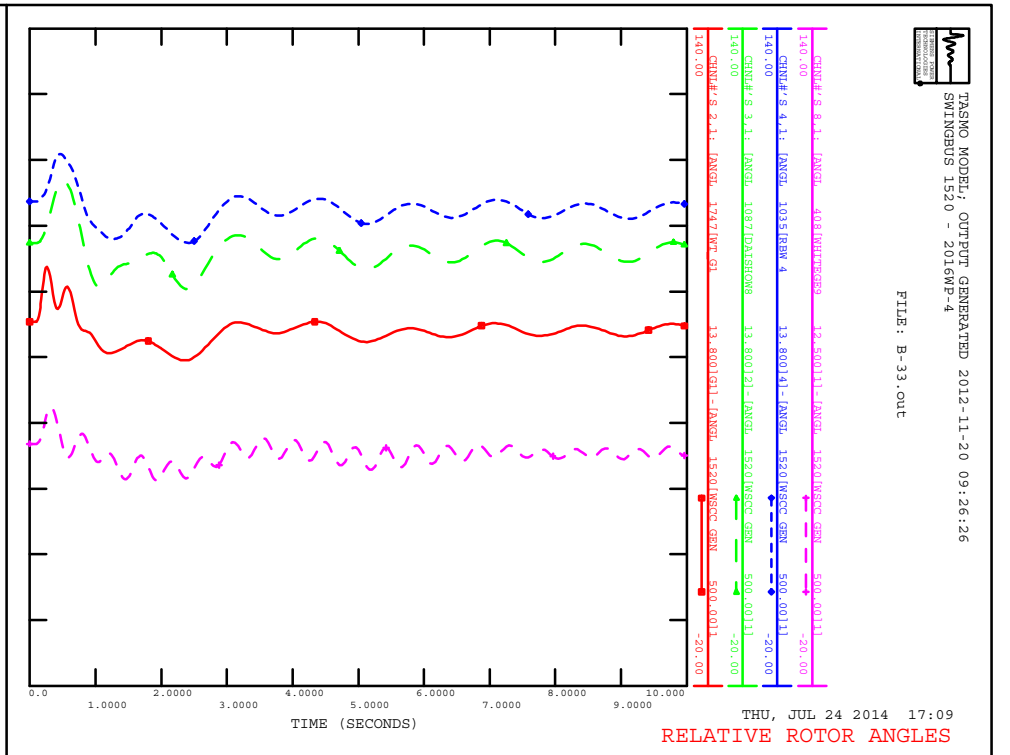


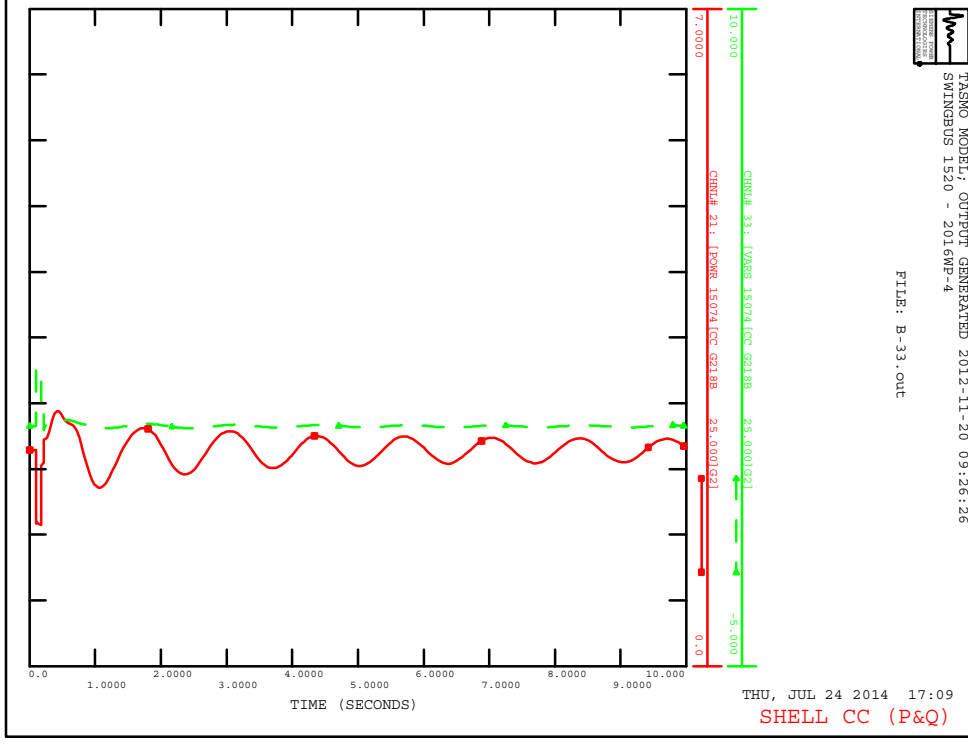
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

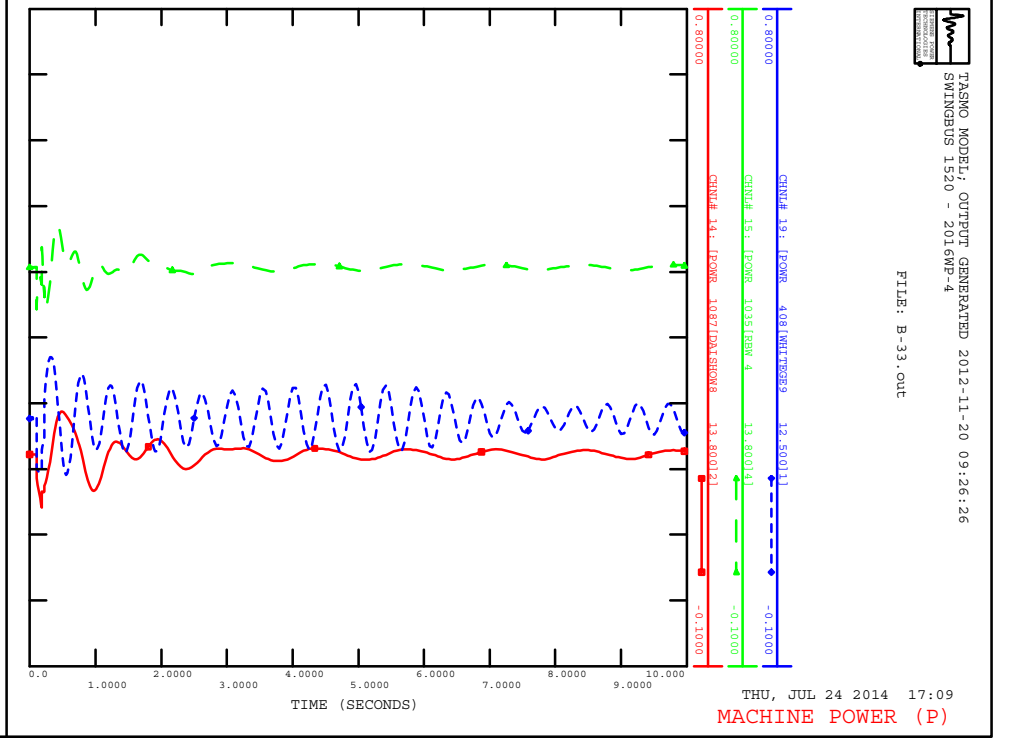
FILE: B-32.out




TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-33.out
CHNU#'S 10,1: [ANGL 15074[CC G218B 25.000[G2]-[ANGL 1520[NSCC GEN 500.00]
-10.00
-50.00
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
SHELL CC ROTOR ANGLES


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-33.out
CHNU#'S 8,1: [ANGL 408[WHITESB9 12.500[1] [ANGL 1520[NSCC GEN 500.00[1]
CHNU#'S 4,1: [ANGL 1035[RBM 4 13.800[4] [ANGL 1520[NSCC GEN 500.00[1]
CHNU#'S 3,1: [ANGL 1087[DAISHON8 13.800[2] [ANGL 1520[NSCC GEN 500.00[1]
CHNU#'S 2,1: [ANGL 1747[WT G1 13.800[G1] [ANGL 1520[NSCC GEN 500.00[1]
140.00
-20.00
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
RELATIVE ROTOR ANGLES

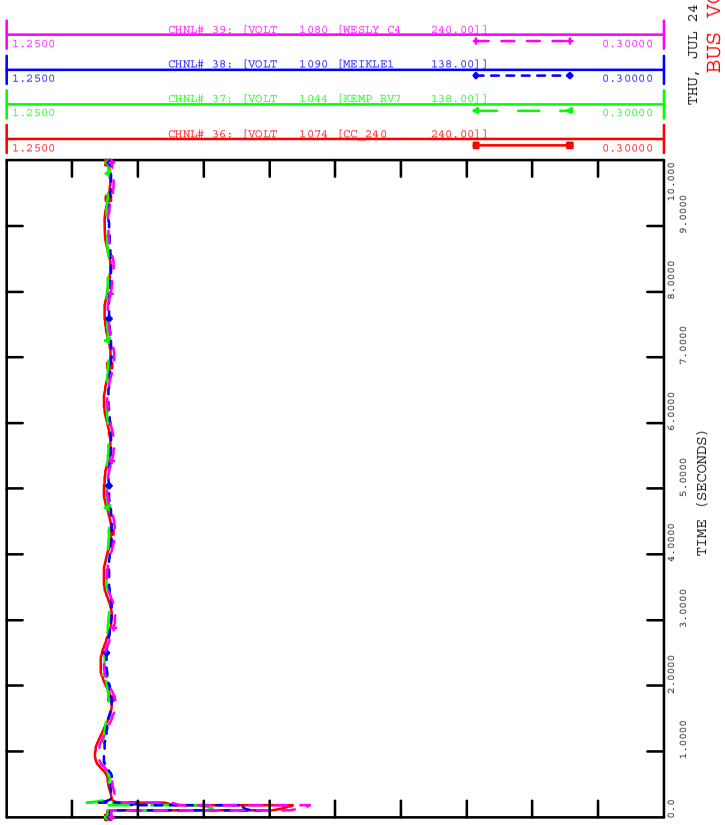

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-33.out
CHNU# 21: [POWR 15074[CC G218B 25.000[G2]
CHNU# 33: [VARS 15074[CC G218B 25.000[G2]
7.0000
10.000
0.0
-5.000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
SHELL CC (P&Q)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-33.out
CHNU# 19: [POWR 408[WHITESB9 12.500[1]
CHNU# 14: [POWR 1087[DAISHON8 13.800[2]
CHNU# 15: [POWR 1035[RBM 4 13.800[4]
0.80000
-0.1000
0.0 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
MACHINE POWER (P)

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-33.out

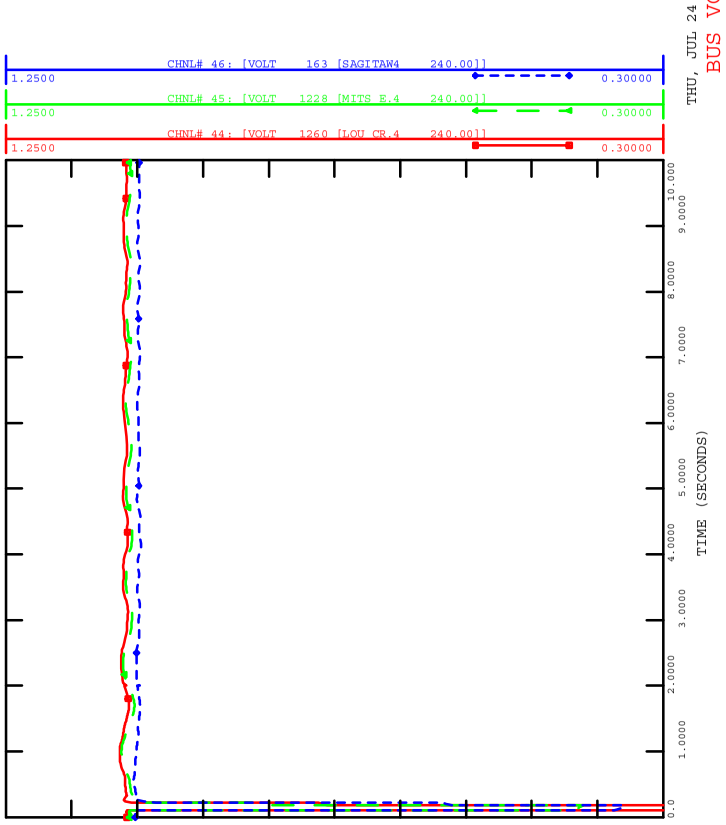
THU, JUL 24 2014 17:09



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-33.out

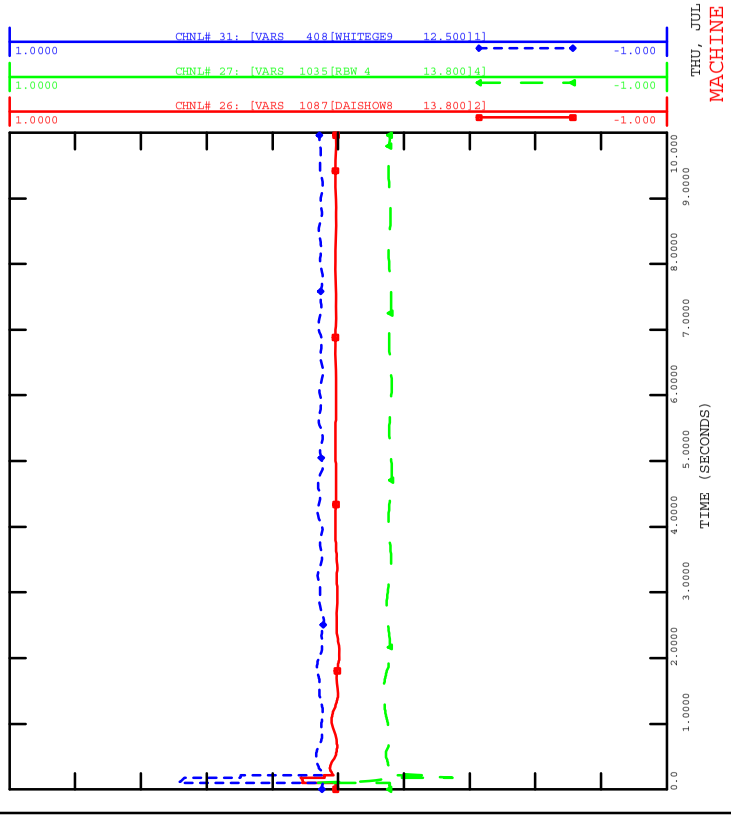
THU, JUL 24 2014 17:09



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-33.out

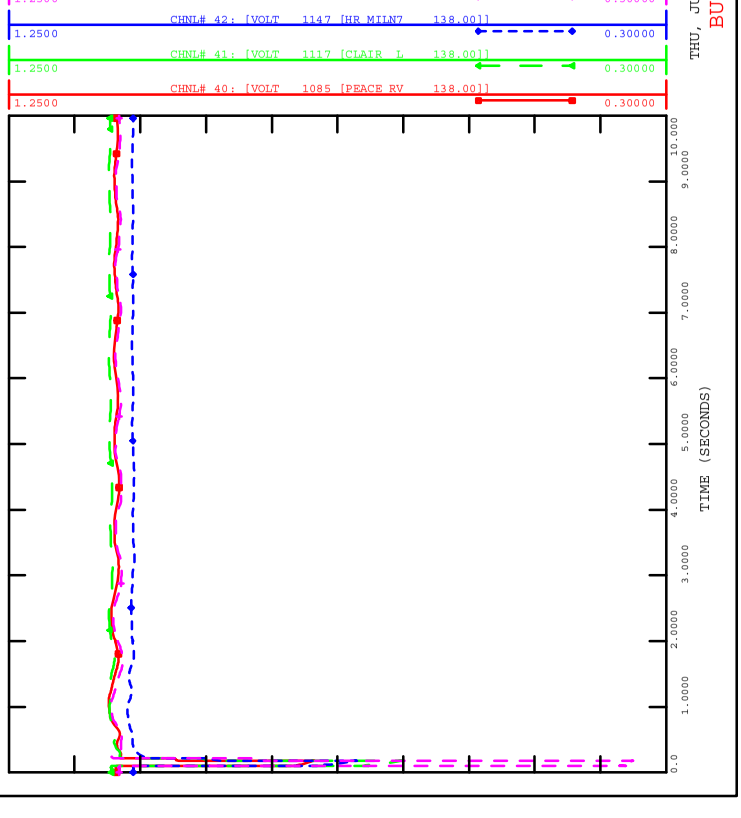
THU, JUL 24 2014 17:09



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-33.out

THU, JUL 24 2014 17:09

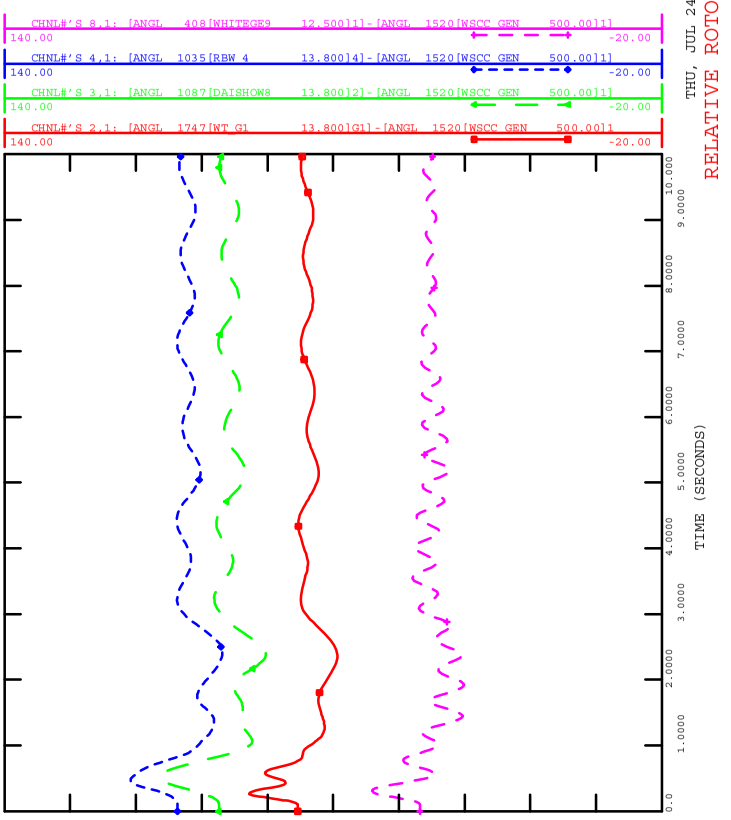


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-34.out

THU, JUL 24 2014 17:09

RELATIVE ROTOR ANGLES

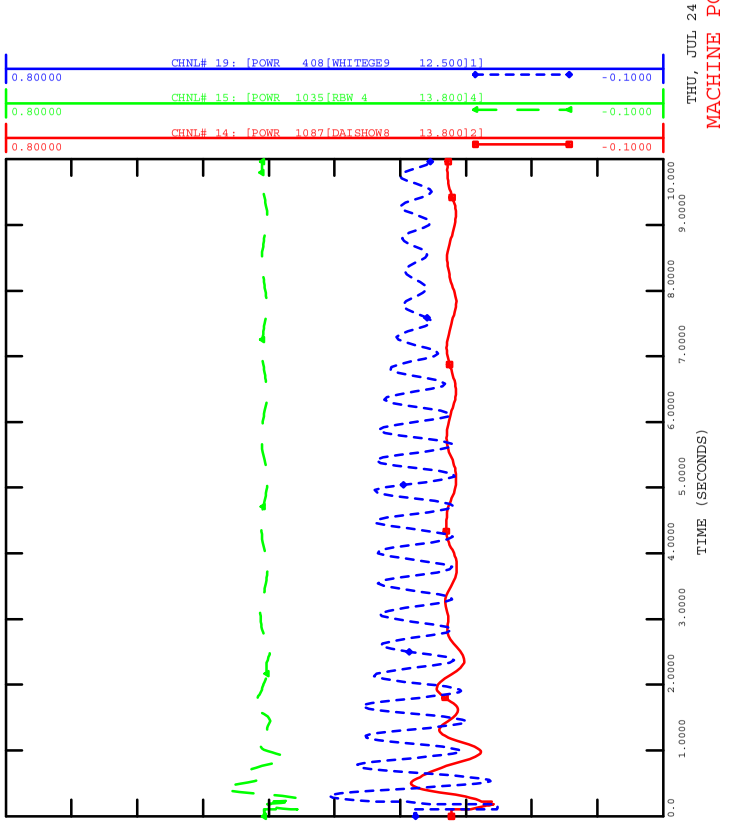


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-34.out

THU, JUL 24 2014 17:09

MACHINE POWER (P)

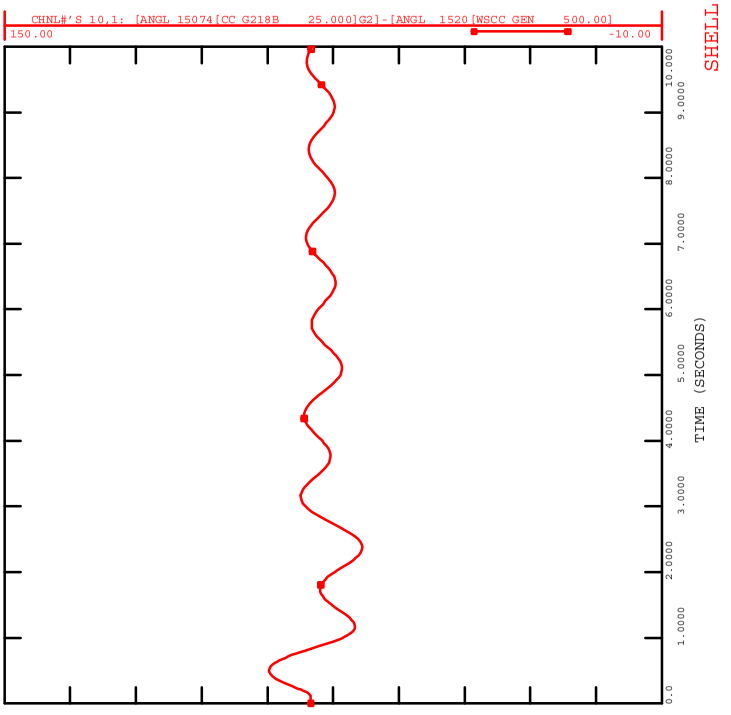


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-34.out

THU, JUL 24 2014 17:09

SHELL CC ROTOR ANGLES

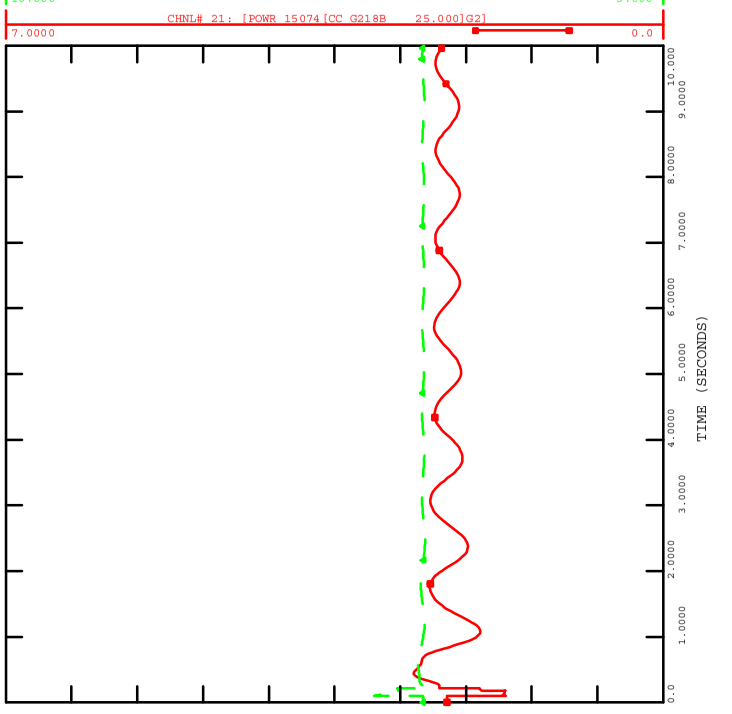


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-34.out

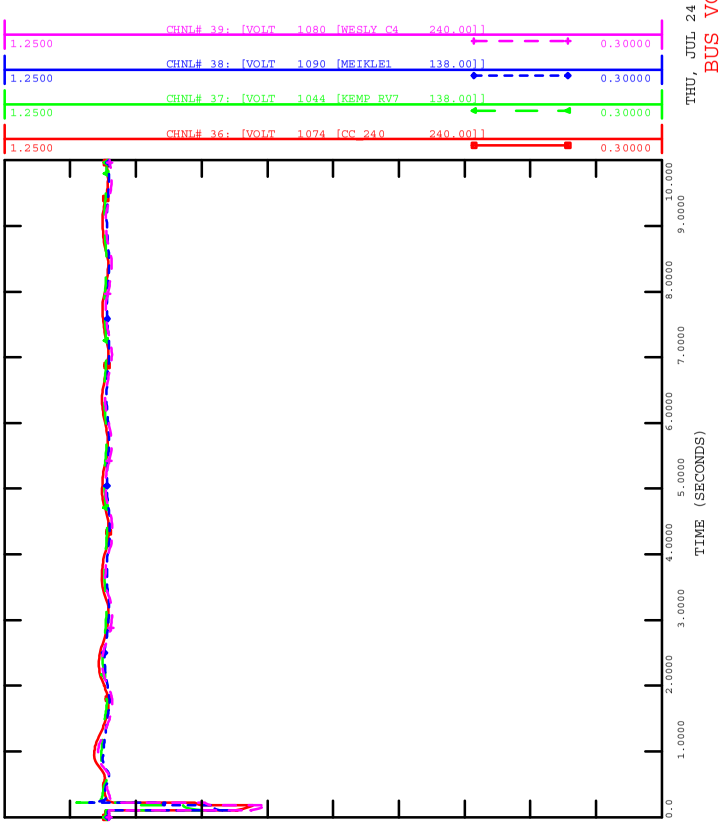
THU, JUL 24 2014 17:09

SHELL CC (P&Q)



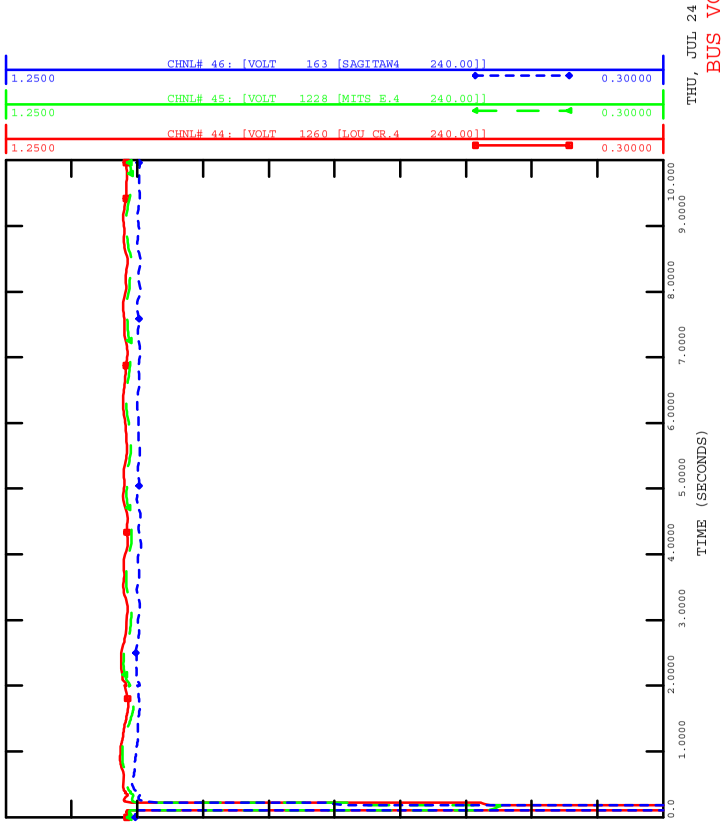
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-34.out



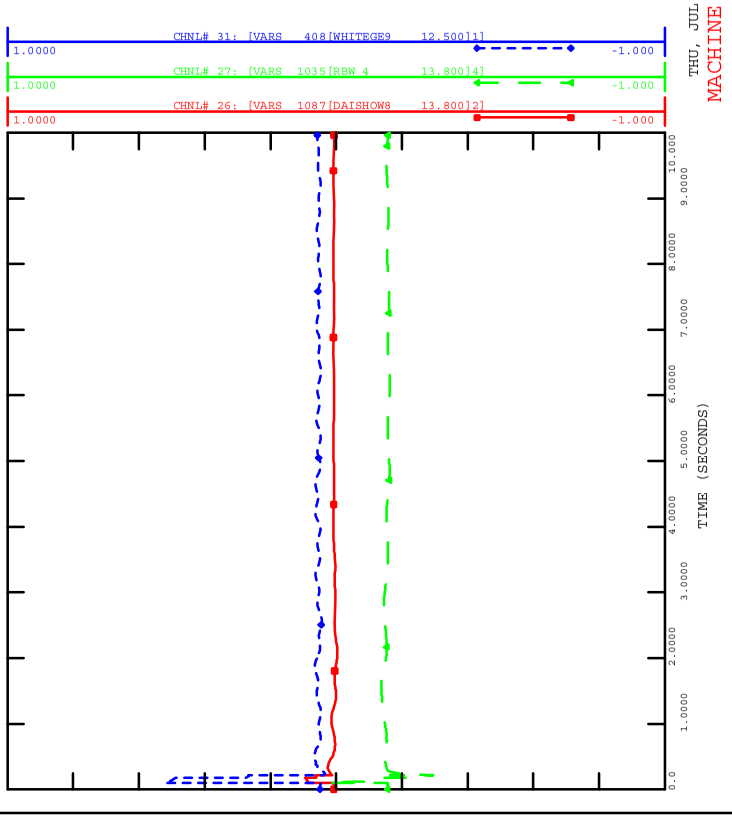
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-34.out



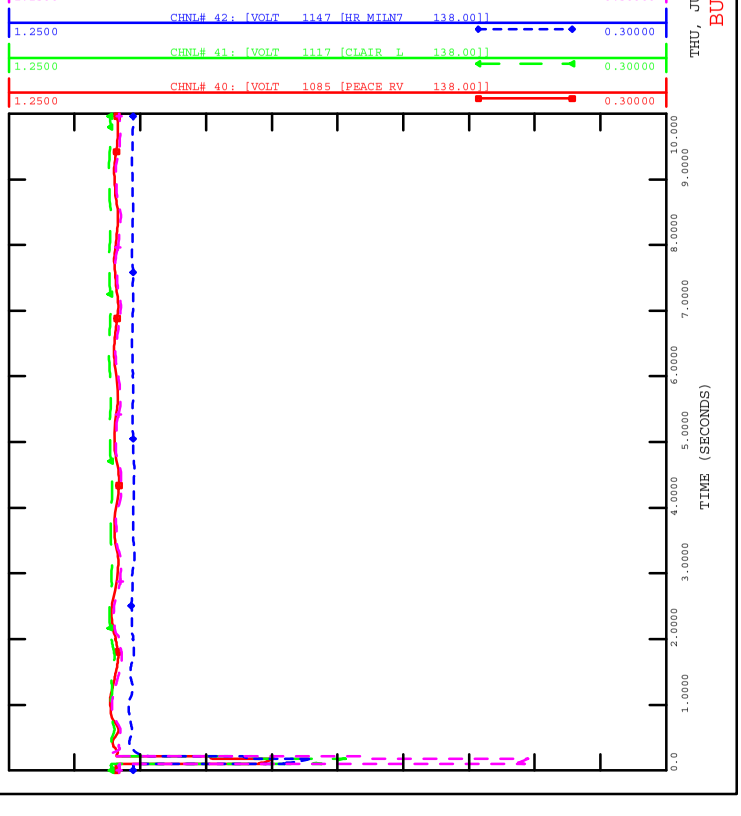
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-34.out



TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-34.out

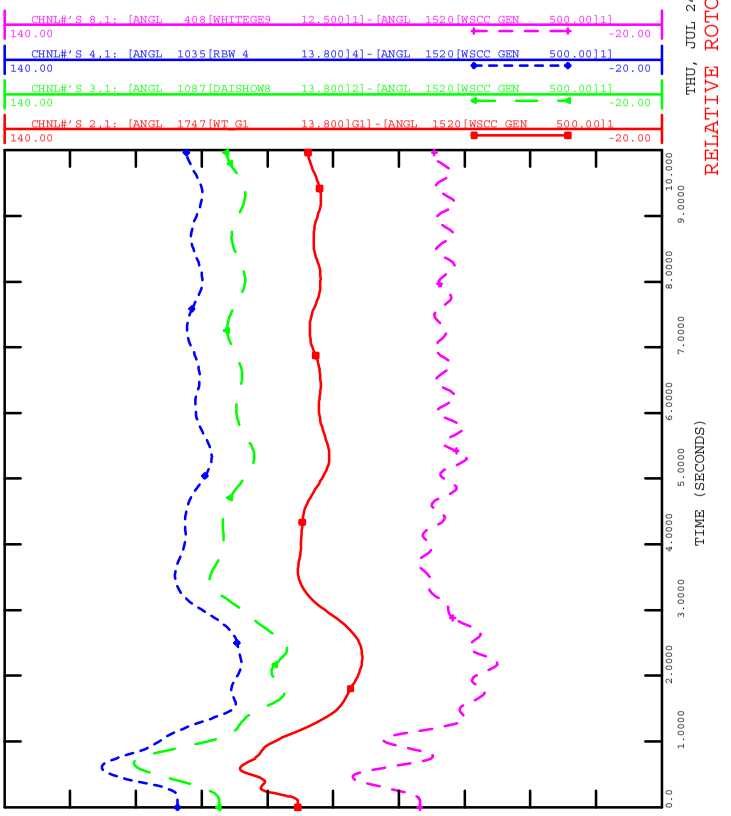


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-35.out

THU, JUL 24 2014 17:09

RELATIVE ROTOR ANGLES

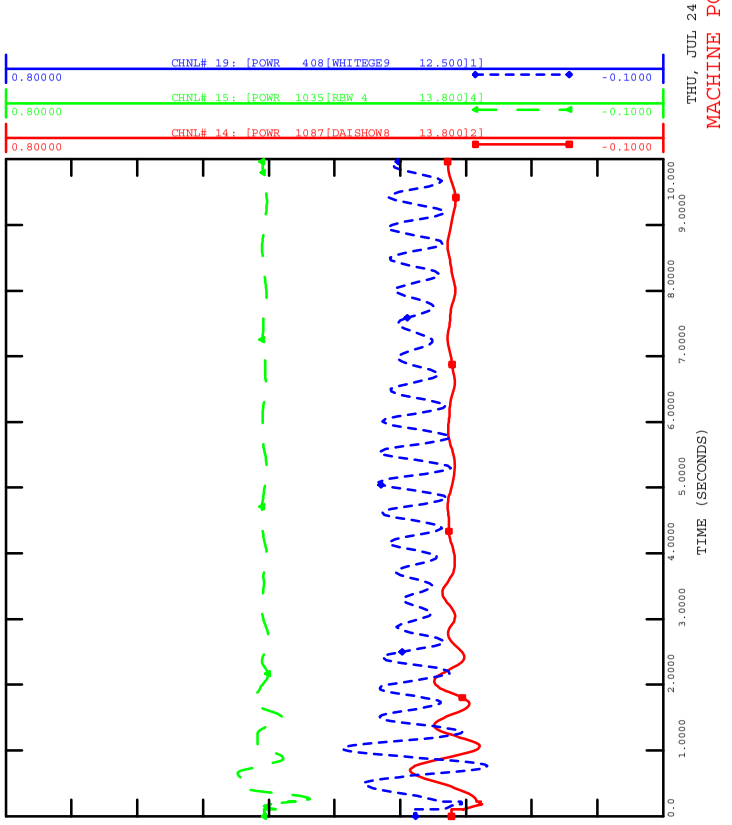


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-35.out

THU, JUL 24 2014 17:09

MACHINE POWER (P)

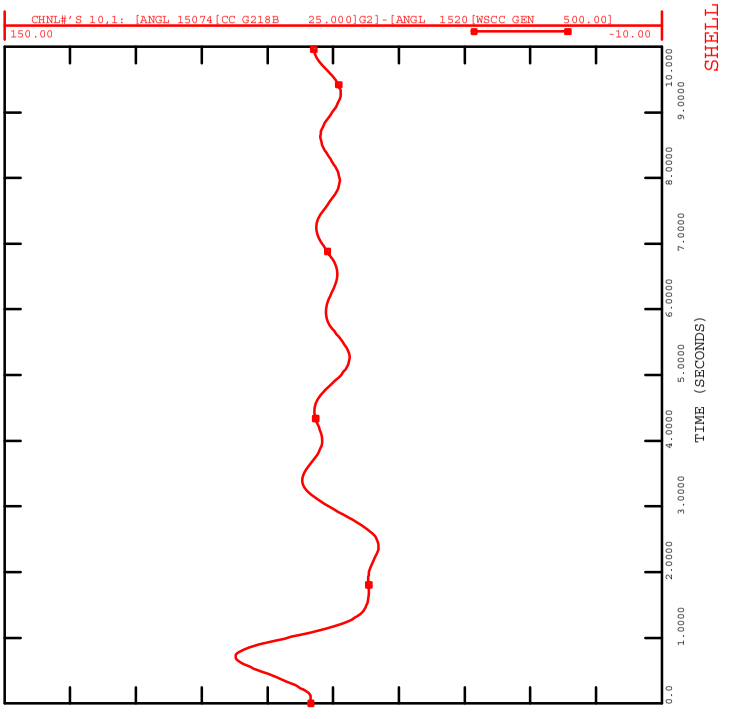


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-35.out

THU, JUL 24 2014 17:09

SHELL CC ROTOR ANGLES

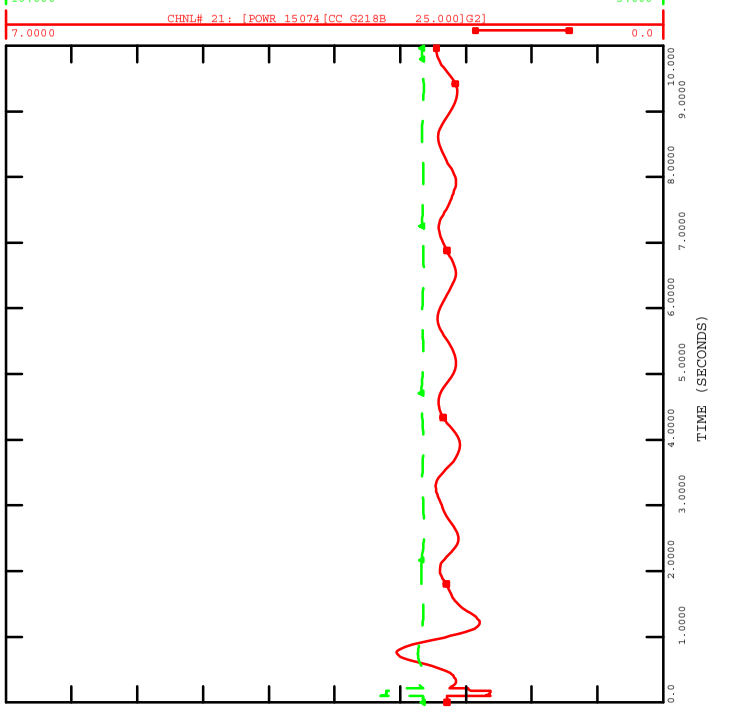


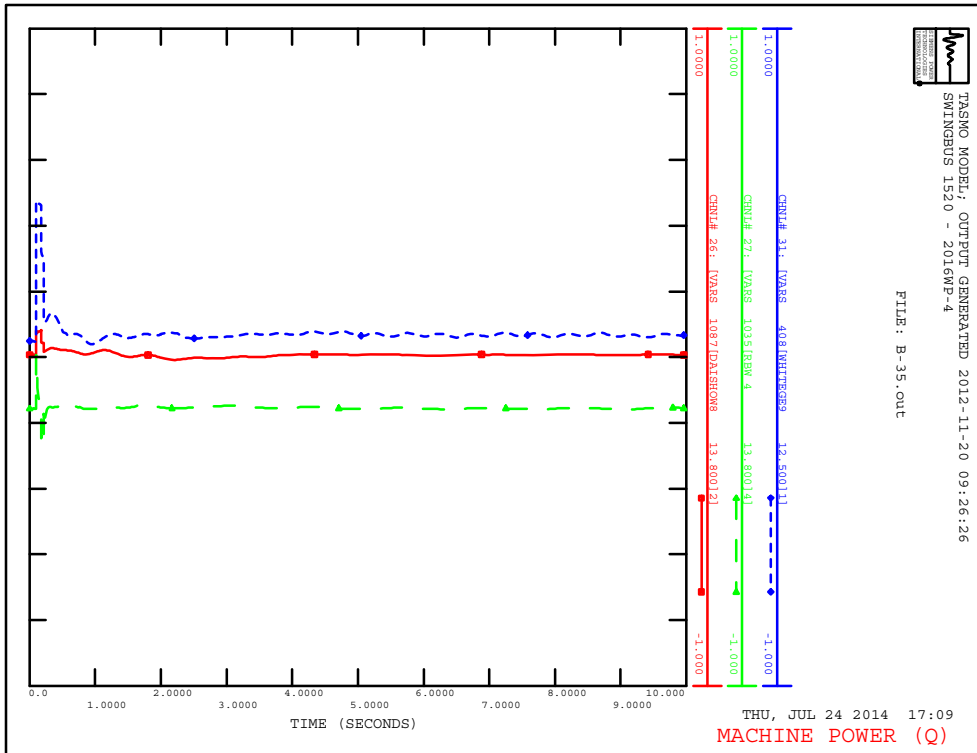
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

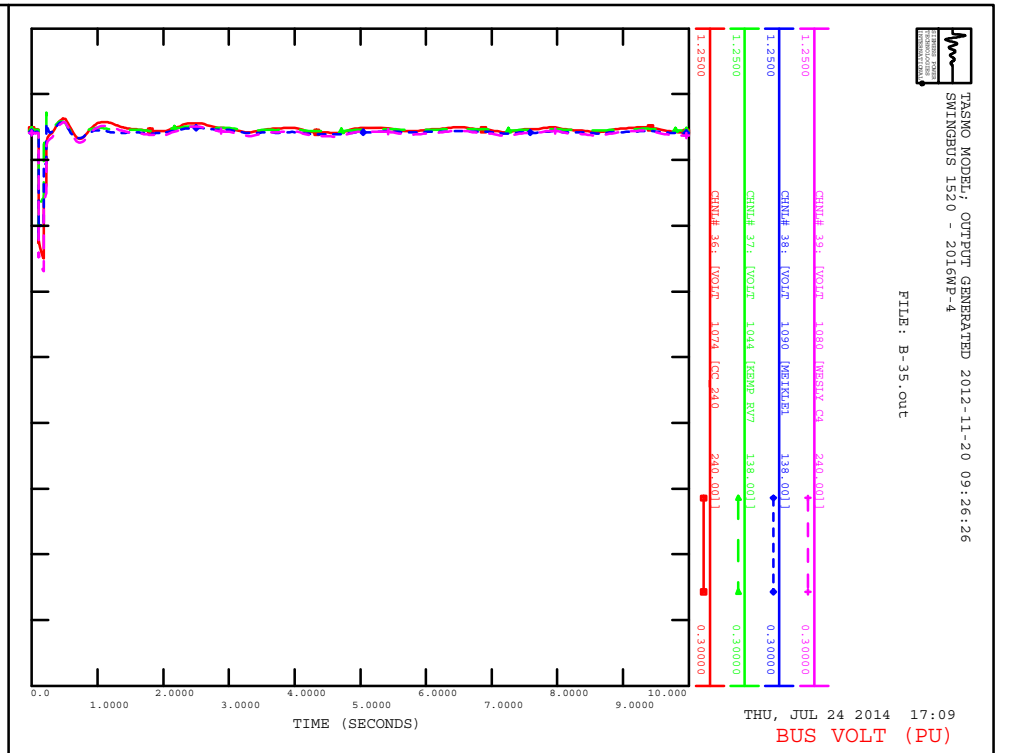
FILE: B-35.out

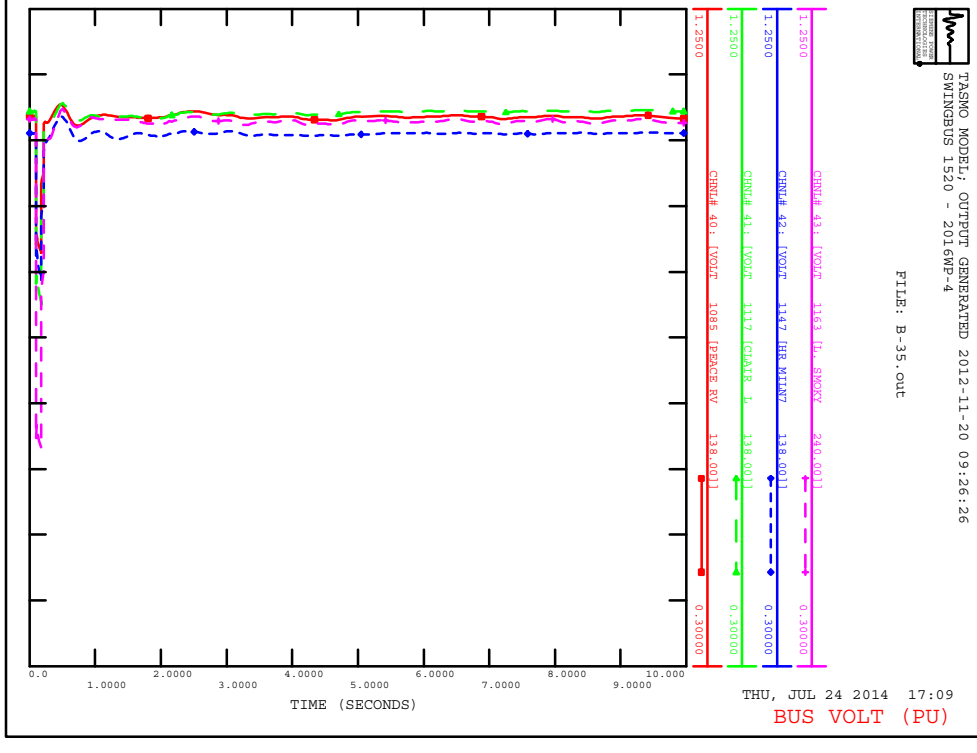
THU, JUL 24 2014 17:09

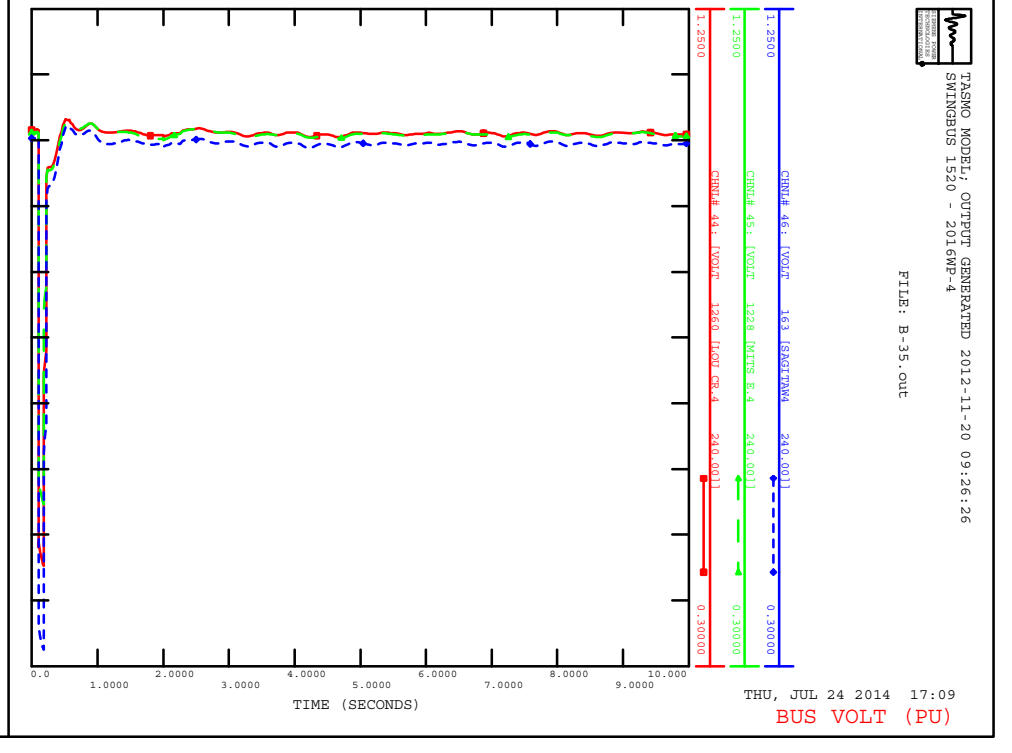
SHELL CC (P&Q)




TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-35.out
CHNI# 31: [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27: [VARS 1035 [RBW 4 13.800]4]
CHNI# 26: [VARS 1087 [DAISHOW8 13.800]2]
TIME (SECONDS)
THU, JUL 24 2014 17:09
MACHINE POWER (Q)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-35.out
CHNI# 39: [VOLT 1080 [MESIC C4 240.00]
CHNI# 38: [VOLT 1090 [MESIKLE1 138.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 36: [VOLT 1074 [CC 240 240.00]
TIME (SECONDS)
THU, JUL 24 2014 17:09
BUS VOLT (PU)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-35.out
CHNI# 43: [VOLT 1163 [L. SMOKY 240.00]
CHNI# 42: [VOLT 1142 [HR MTANT 138.00]
CHNI# 41: [VOLT 1117 [CHAIR L 138.00]
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]
TIME (SECONDS)
THU, JUL 24 2014 17:09
BUS VOLT (PU)

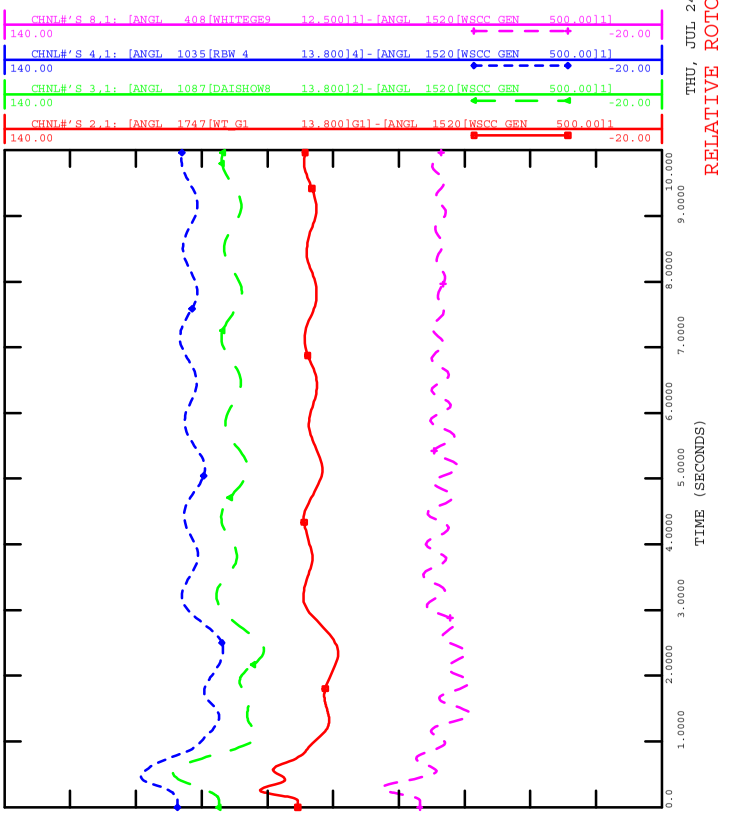

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-35.out
CHNI# 46: [VOLT 163 [SAGITAW4 240.00]
CHNI# 45: [VOLT 1228 [MTES E-4 240.00]
CHNI# 44: [VOLT 1260 [FOT CR-4 240.00]
TIME (SECONDS)
THU, JUL 24 2014 17:09
BUS VOLT (PU)

TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-36.out

THU, JUL 24 2014 17:09

RELATIVE ROTOR ANGLES

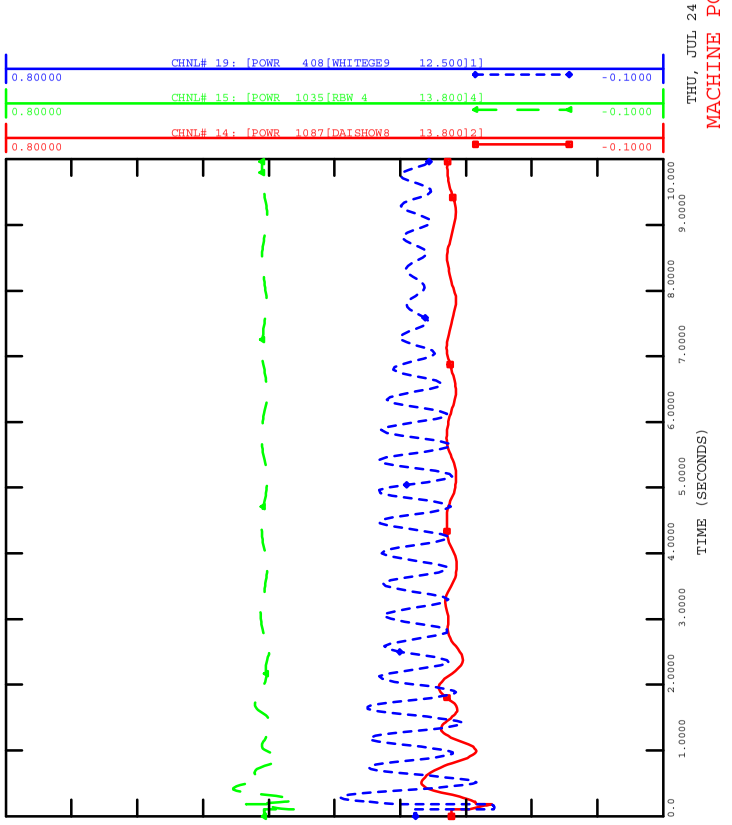


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-36.out

THU, JUL 24 2014 17:09

MACHINE POWER (P)

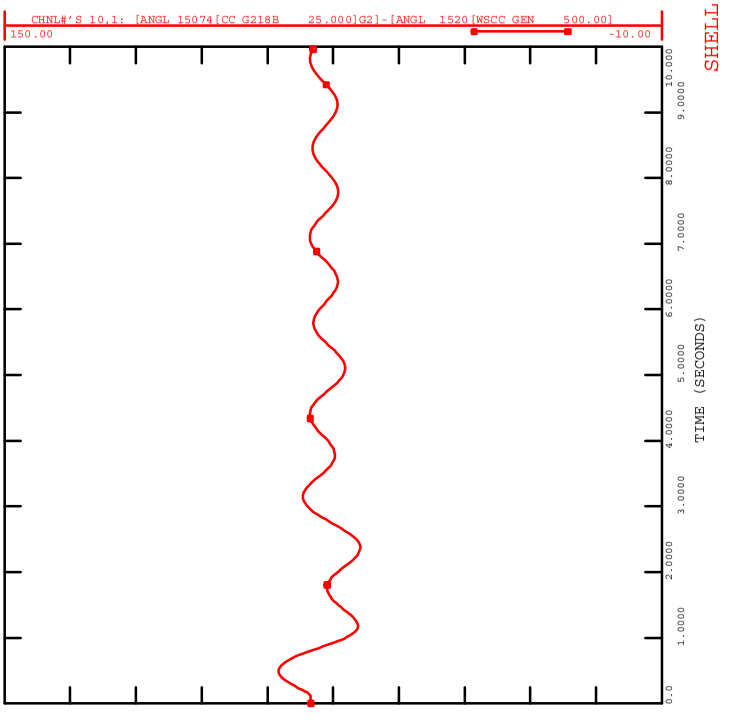


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

FILE: B-36.out

THU, JUL 24 2014 17:09

SHELL CC ROTOR ANGLES

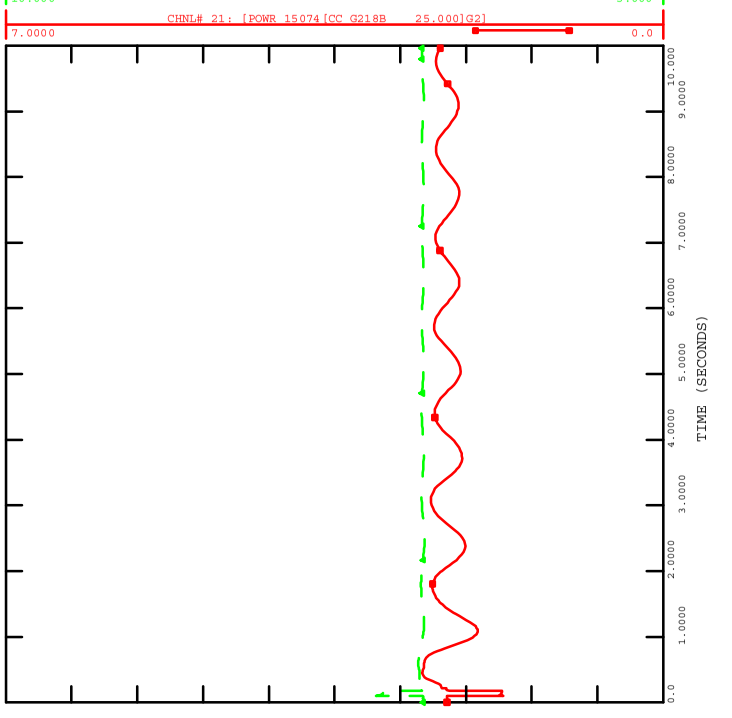


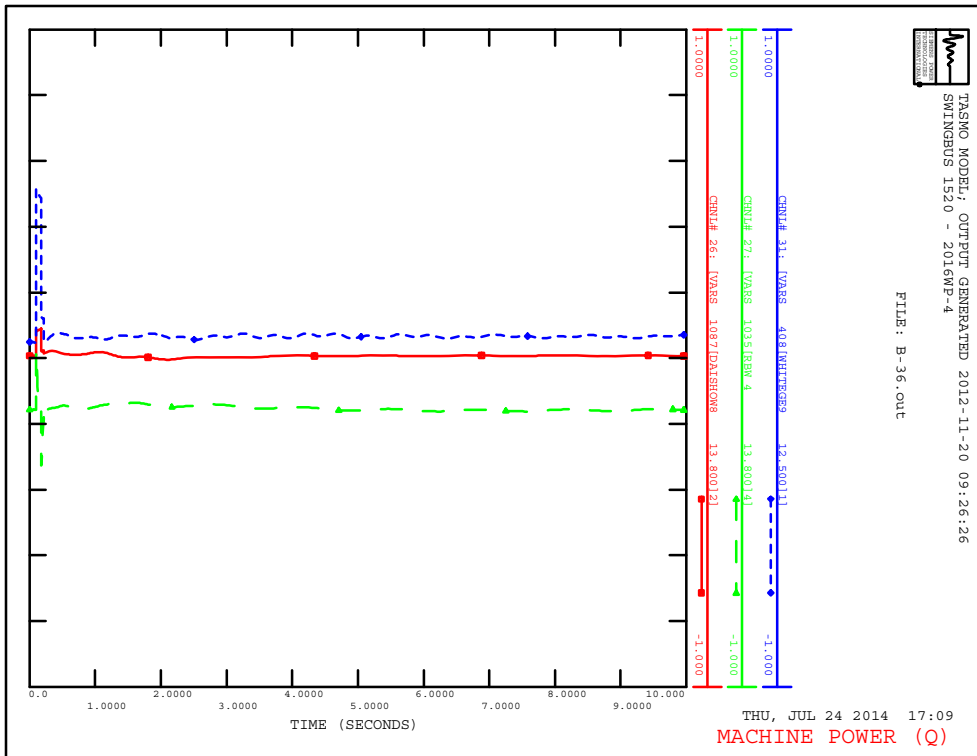
TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4

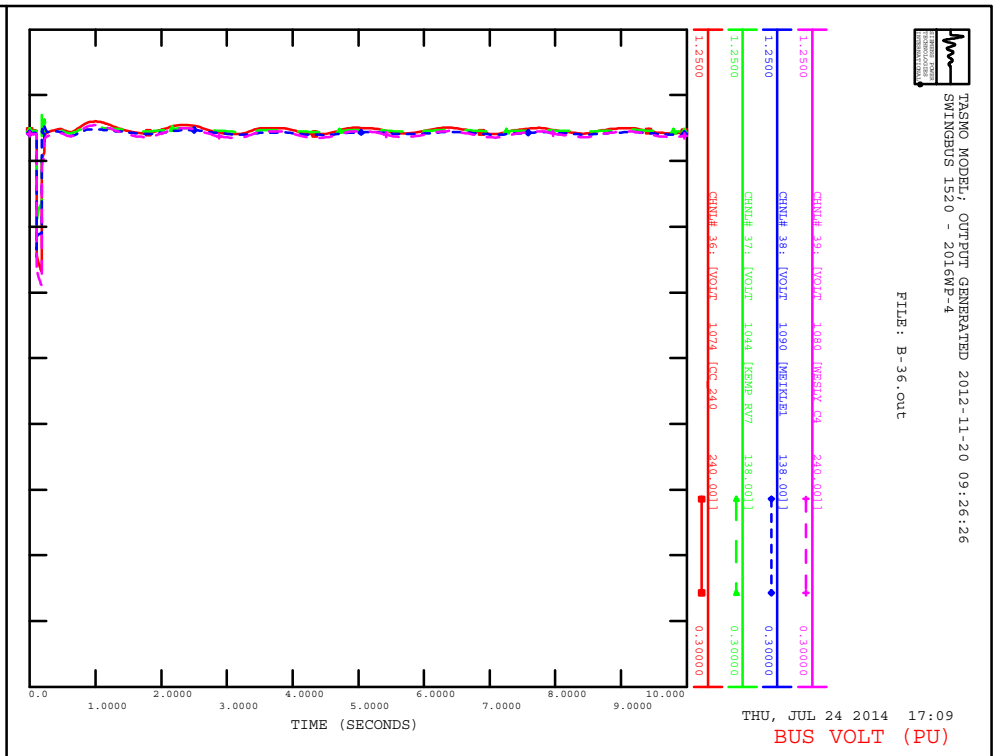
FILE: B-36.out

THU, JUL 24 2014 17:09

SHELL CC (P&Q)




TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-36.out
CHNI# 31: [VARS 408 [WHITEGB9 12.500]1]
CHNI# 27: [VARS 1035[RBW 4 13.800]4]
CHNI# 26: [VARS 1087[DAISHOW8 13.800]2]
1.0000
-1.000
0.0
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
MACHINE POWER (Q)


TASMO MODEL; OUTPUT GENERATED 2012-11-20 09:26:26
SWINGBUS 1520 - 2016WP-4
FILE: B-36.out
CHNI# 39: [VOLT 1080 [MESIK C4 240.00]
CHNI# 38: [VOLT 1090 [MESIKLE1 138.00]
CHNI# 37: [VOLT 1044 [KEMP RV7 138.00]
CHNI# 36: [VOLT 1074 [CC 240 240.00]
1.2500
0.30000
0.0
1.0000
2.0000
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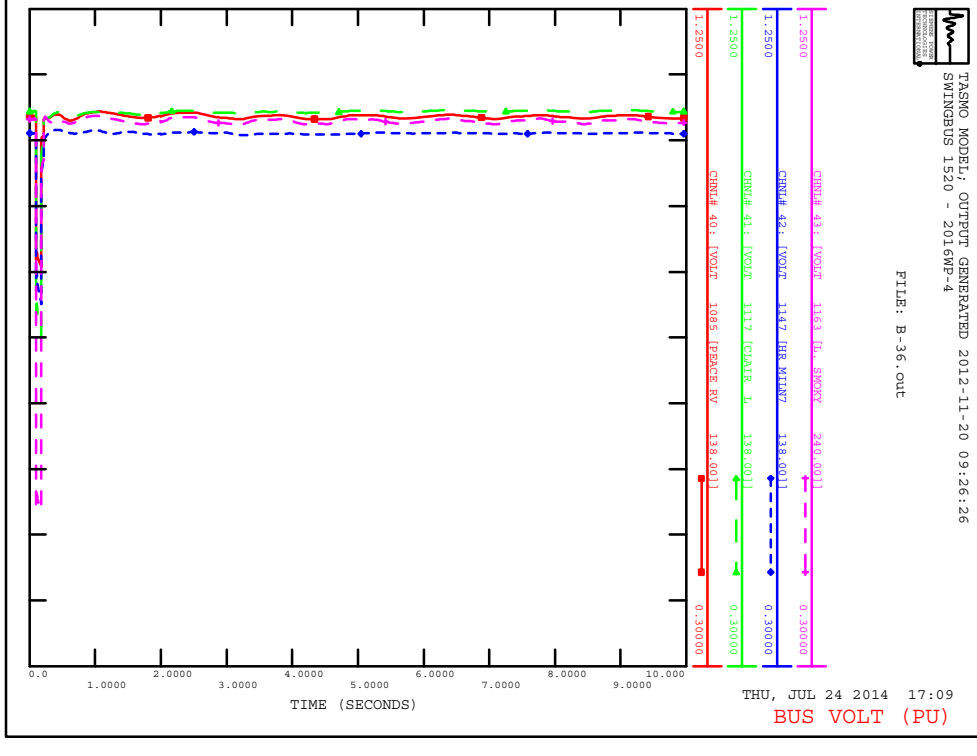
8.0000
9.0000
10.000
TIME (SECONDS)
THU, JUL 24 2014 17:09
BUS VOLT (PU)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SWINGBUS 1520 - 2016WP-4
FILE: B-36.out
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CHNI# 42: [VOLT 1142 [RB MLINT 138.00]
CHNI# 41: [VOLT 1117 [CHAIR L 138.00]
CHNI# 40: [VOLT 1085 [PEACE RV 138.00]
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0.0
1.0000
2.0000
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4.0000
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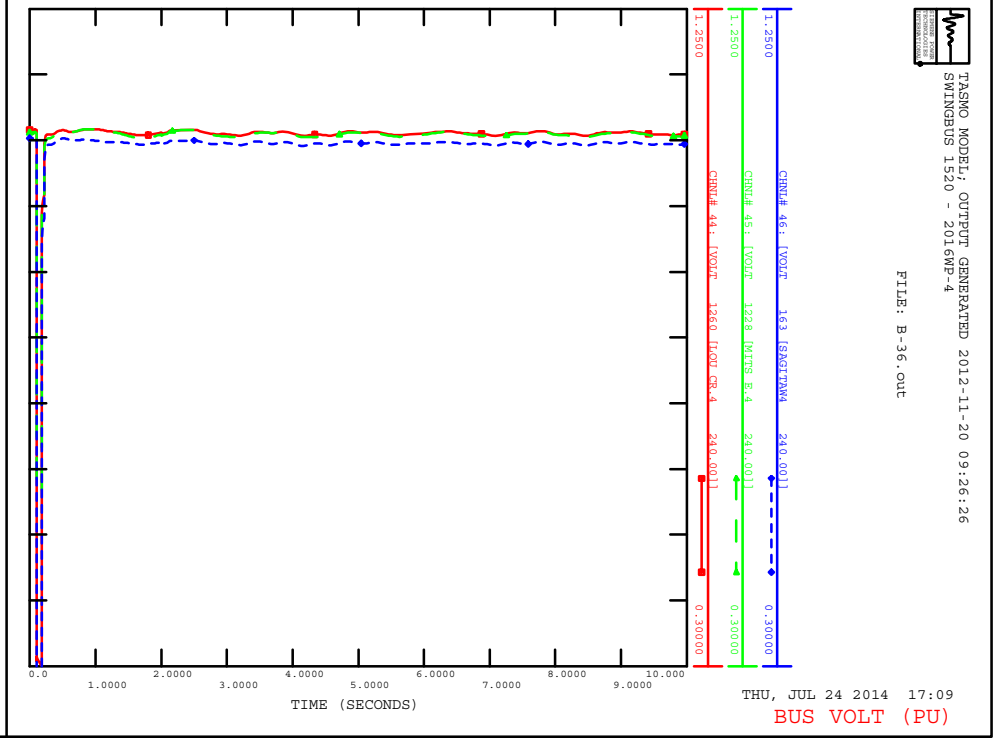
TIME (SECONDS)
THU, JUL 24 2014 17:09
BUS VOLT (PU)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SWINGBUS 1520 - 2016WP-4
FILE: B-36.out
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CHNI# 45: [VOLT 1228 [MTS E-4 240.00]
CHNI# 44: [VOLT 1260 [FOT CR-4 240.00]
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6.0000
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TIME (SECONDS)
THU, JUL 24 2014 17:09
BUS VOLT (PU)

Attachment F

Power Flow Plots for Sensitivity Analysis (Case 11 to 17)

Post-Project Power Flow Plot
2015 Summer Peak (Case 11)

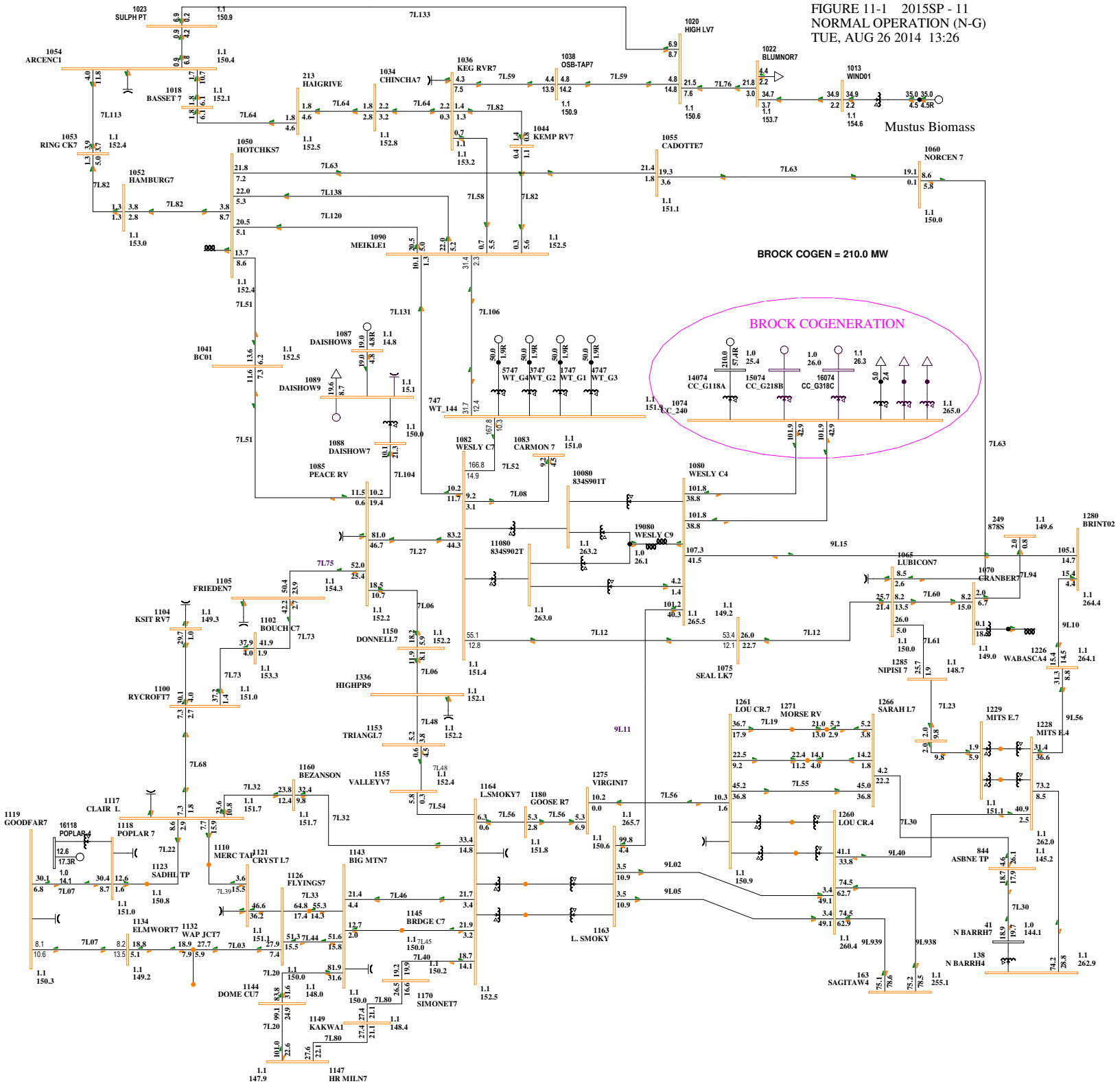
FIGURE 11-1 2015SP - 11
NORMAL OPERATION (N-G)
TUE, AUG 26 2014 13:26
Mustus Biomass
BROCK COGEN = 210.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
1082 WESLY C7
1083 CARMON 7
10080 834S901T
11080 834S902T
19080 WESLY C9
1080 WESLY C4
1065 LUBICON7
1070 CRANBER7
249 878S
1280 BRINT02
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1100 RYCROFT7
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1117 CLAIR L
1118 POPLAR 7
16118 POPLAR 4
1119 GOODFAR7
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1143 BIG MTN7
1145 BRDGE C7
1170 SIMONET7
1163 L. SMOKY
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
7L133
7L113
7L64
7L82
7L63
7L138
7L120
7L58
7L131
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7L45
7L40
7L80
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7L07
7L22
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7L44
7L33
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7L76
7L94
7L60
7L61
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9L56
9L40
9L02
9L05
9L939
9L938

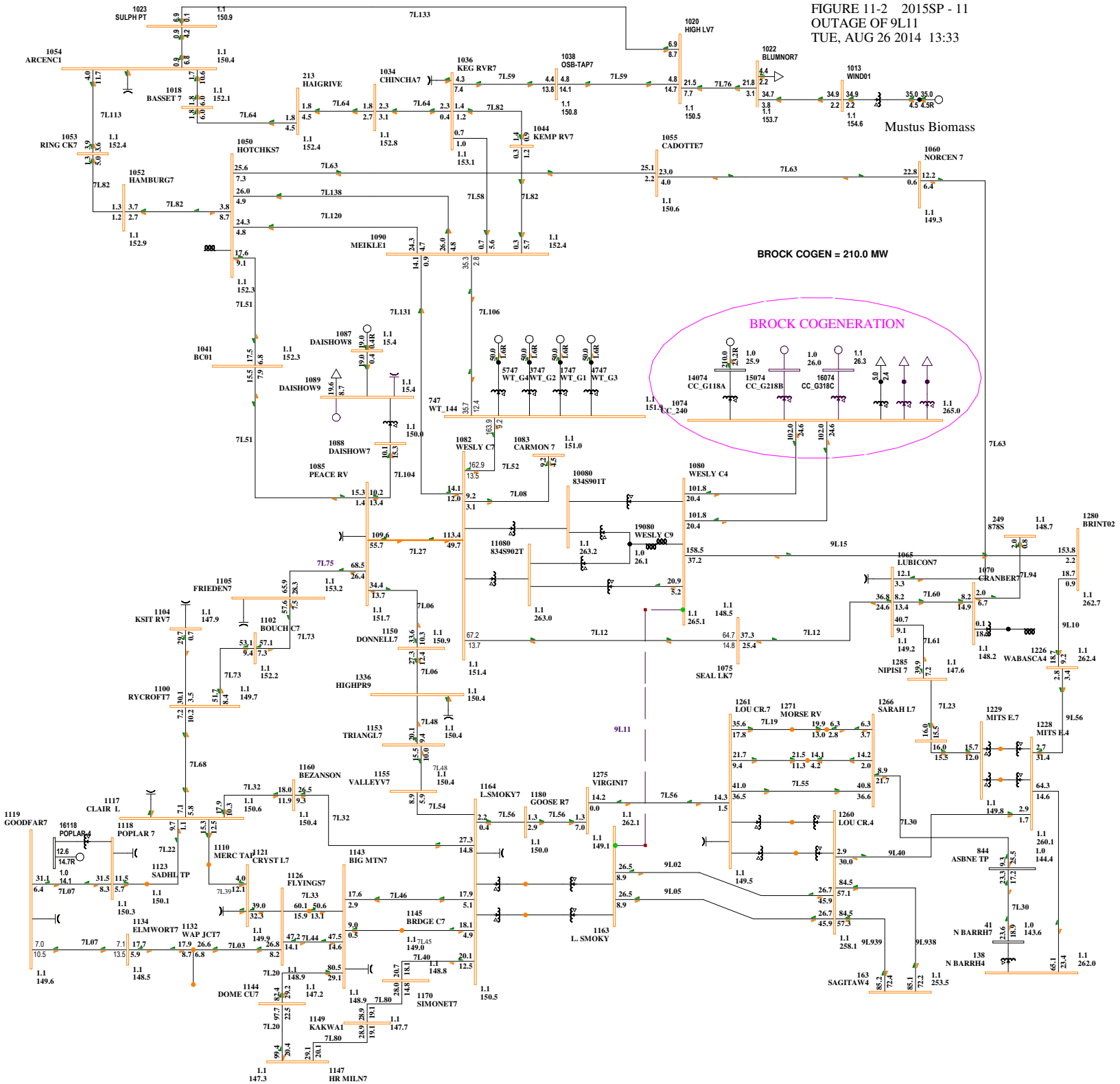
FIGURE 11-2 2015SP - 11
OUTAGE OF 9L11
TUE, AUG 26 2014 13:33
Mustus Biomass
BROCK COGEN = 210.0 MW
BROCK COGENERATION
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1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
1082 WESLY C7
1083 CARMON 7
1080 WESLY C4
10080 834S901T
19080 WESLY C9
11080 834S902T
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
249 878S
1280 BRINT02
1065 LUBICON7
1070 CRANBER7
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1100 RYCROFT7
1336 HIGHPR9
1150 DONNELL7
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1117 CLAIR L
1118 POPLAR 7
16118 POPLAR 4
1119 GOODFAR7
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1143 BIG MTN7
1145 BRDGE C7
1170 SIMONET7
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1163 L. SMOKY
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
7L133
7L113
7L64
7L82
7L63
7L138
7L120
7L58
7L131
7L106
7L51
7L27
7L104
7L08
7L52
7L12
7L75
7L73
7L06
7L68
7L32
7L48
7L54
7L56
7L22
7L07
7L03
7L20
7L80
7L45
7L44
7L46
7L33
7L39
7L40
7L23
7L60
7L61
7L94
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9L56
9L02
9L05
9L40
9L939
9L938

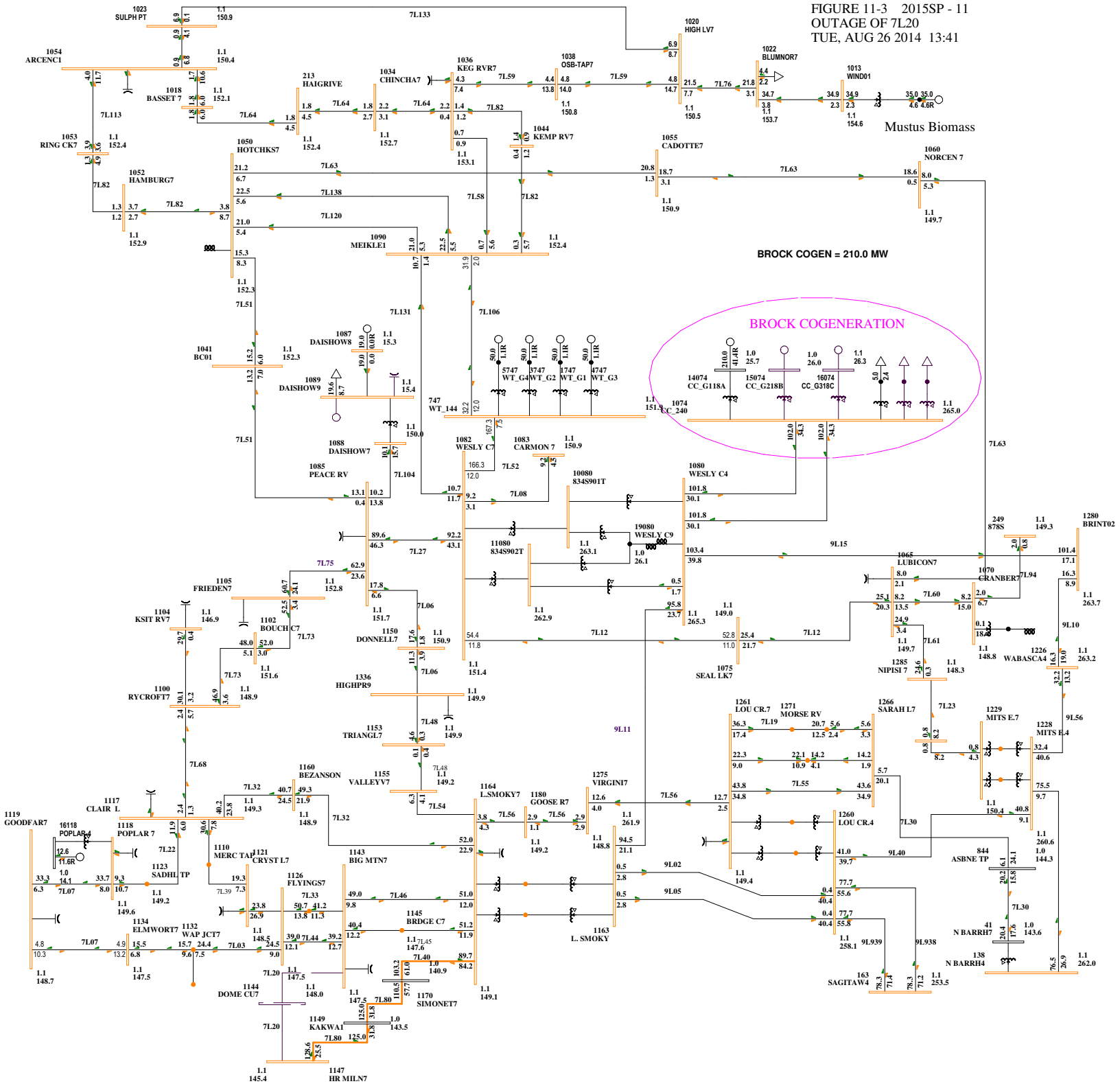
FIGURE 11-3 2015SP - 11
OUTAGE OF 7L20
TUE, AUG 26 2014 13:41
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BROCK COGEN = 210.0 MW
BROCK COGENERATION
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1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
1082 WESLY C7
1083 CARMON 7
10080 834S901T
1080 WESLY C4
19080 WESLY C9
11080 834S902T
1065 LUBICON7
1070 CRANBER7
249 878S
1280 BRINT02
1105 FRIEDEN7
1104 KSIT RV7
1102 BOUCH C7
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
1100 RYCROFT7
1160 BEZANSON
1155 VALLEYV7
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1163 L. SMOKY
1143 BIG MTN7
1145 BRDGE C7
1126 FLYINGS7
1132 WAP JCT7
1134 ELMWORT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1170 SIMONET7
1117 CLAIR L
1118 POPLAR 7
16118 POPLAR 4
1119 GOODFAR7
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1075 SEAL LK7
1285 NIPISI 7
1226 WABASCA4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
1074 CC_240
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
747 WT_144
7L133
7L63
7L64
7L82
7L113
7L138
7L120
7L58
7L131
7L106
7L51
7L75
7L104
7L52
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7L54
7L48
7L56
7L12
9L15
9L11
9L02
9L05
9L40
9L939
9L938
7L94
7L60
7L61
7L23
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7L30
7L07
7L03
7L44
7L46
7L45
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7L39
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7L59
7L76
7L82
7L51
7L63
7L64
7L82
7L75
7L73
7L54
7L32
7L48
7L56
7L12
9L11
9L02
9L05
9L40
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9L938
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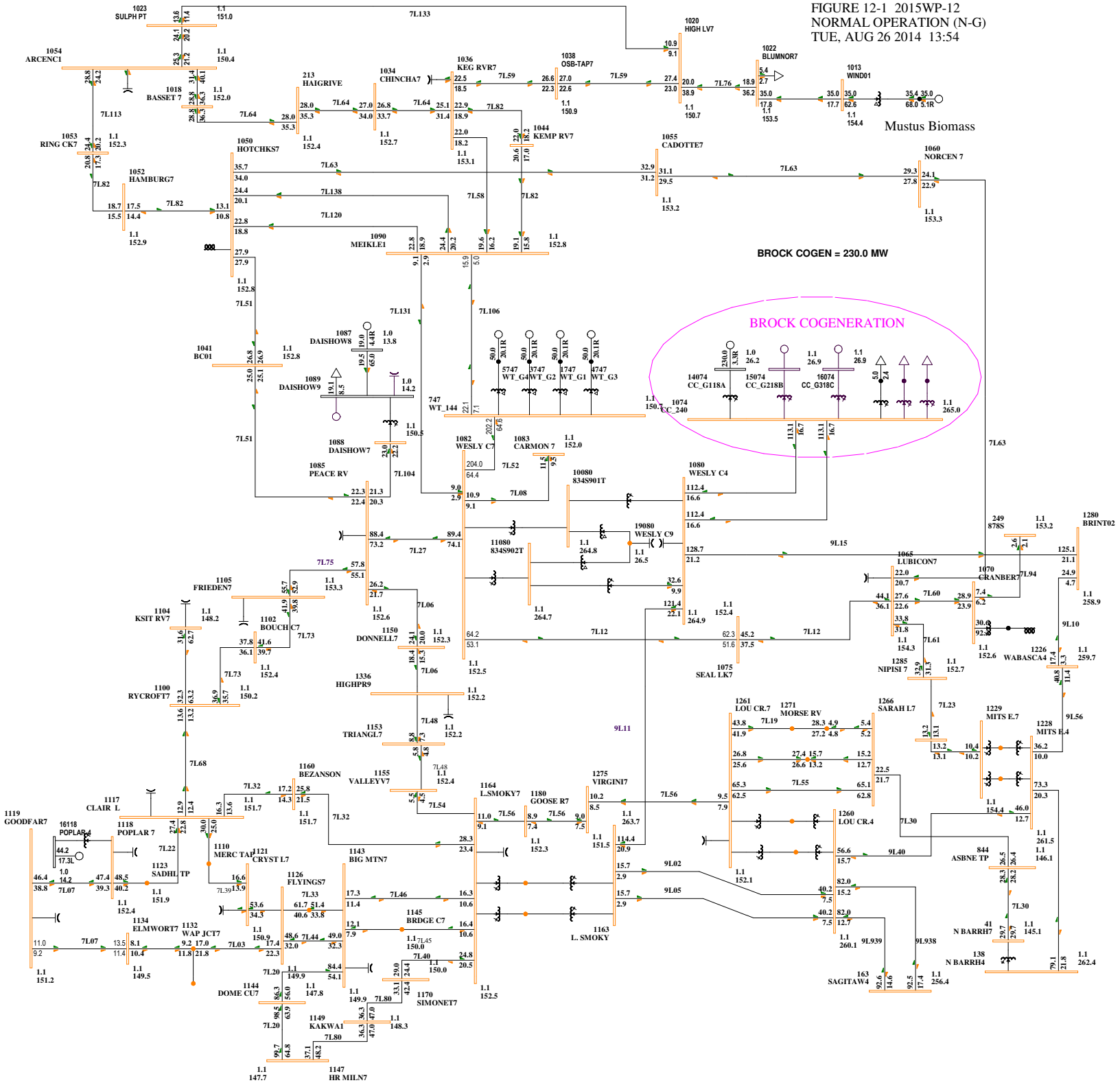
7L60
7L61
7L23
9L56
9L10
7L30
7L07
7L03
7L44
7L46
7L45
7L40
7L80
7L20

Post-Project Power Flow Plot
2015 Winter Peak (Case 12)

FIGURE 12-1 2015WP-12
NORMAL OPERATION (N-G)
TUE, AUG 26 2014 13:54



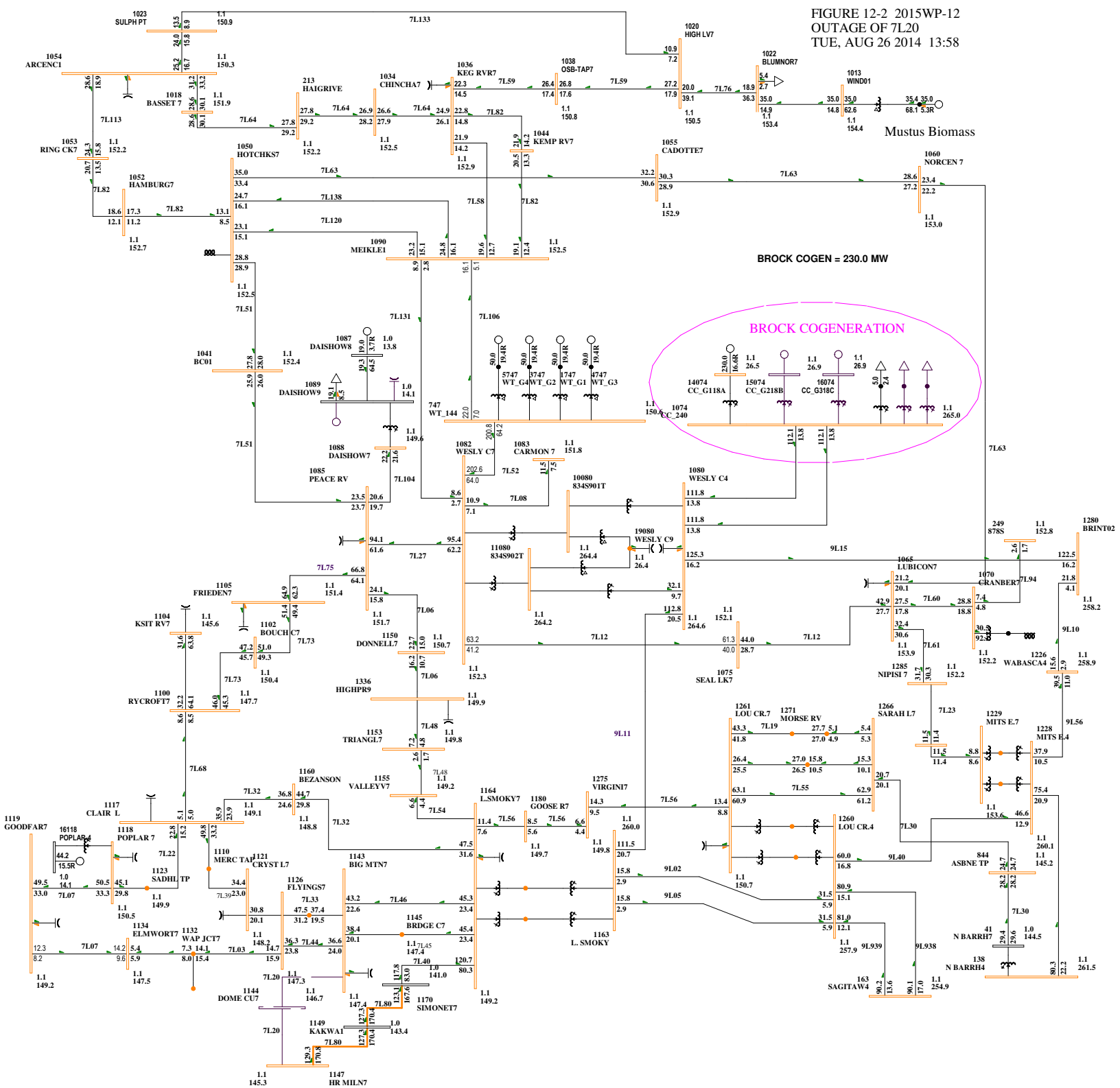


FIGURE 12-2 2015WP-12
OUTAGE OF 7L20
TUE, AUG 26 2014 13:58
Mustus Biomass
BROCK COGEN = 230.0 MW
BROCK COGENERATION
1023 SULPH PT
7L133
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1054 ARCENC1
1018 BASSET 7
7L113
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1053 RING CK7
1050 HOTCHKS7
1055 CADOTTE7
1060 NORCEN 7
1052 HAMBURG7
7L82
7L63
7L138
7L120
7L58
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
7L131
7L106
1041 BC01
7L51
7L104
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
1082 WESLY C7
1083 CARMON 7
7L52
7L08
10080 834S901T
1080 WESLY C4
19080 WESLY C9
11080 834S902T
7L27
7L75
1105 FRIEDEN7
1102 BOUCH C7
7L73
1104 KSIT RV7
1150 DONNELL7
7L06
1336 HIGHPR9
1100 RYCROFT7
7L68
1153 TRIANGL7
7L48
1155 VALLEYV7
1160 BEZANSON
1117 CLAIR L
1119 GOODFAR7
16118 POPLAR 4
1118 POPLAR 7
7L22
1123 SADHL TP
7L07
1110 MERC TAP
1121 CRYST L7
7L32
7L54
1164 L.SMOKY7
1180 GOOSE R7
7L56
1275 VIRGINI7
9L11
1143 BIG MTN7
7L46
1126 FLYINGS7
7L33
7L39
1145 BRDGE C7
7L45
1134 ELMWORT7
1132 WAP JCT7
7L03
7L44
1144 DOME CU7
7L20
1149 KAKWA1
7L80
1170 SIMONET7
1163 L. SMOKY
9L02
9L05
1261 LOU CR.7
1271 MORSE RV
7L19
1260 LOU CR.4
7L55
7L30
9L40
1266 SARAH L7
7L23
1229 MITS E.7
1228 MITS E.4
9L56
844 ASBNE TP
41 N BARRH7
138 N BARRH4
7L30
9L939
9L938
163 SAGITAW4
1065 LUBICON7
1070 CRANBER7
7L94
7L60
7L61
1285 NIPISI 7
1226 WABASCA4
1280 BRINT02
249 878S
9L15
9L10
7L12
1075 SEAL LK7

Post-Project Power Flow Plot
2015 Winter Peak (Case 13)

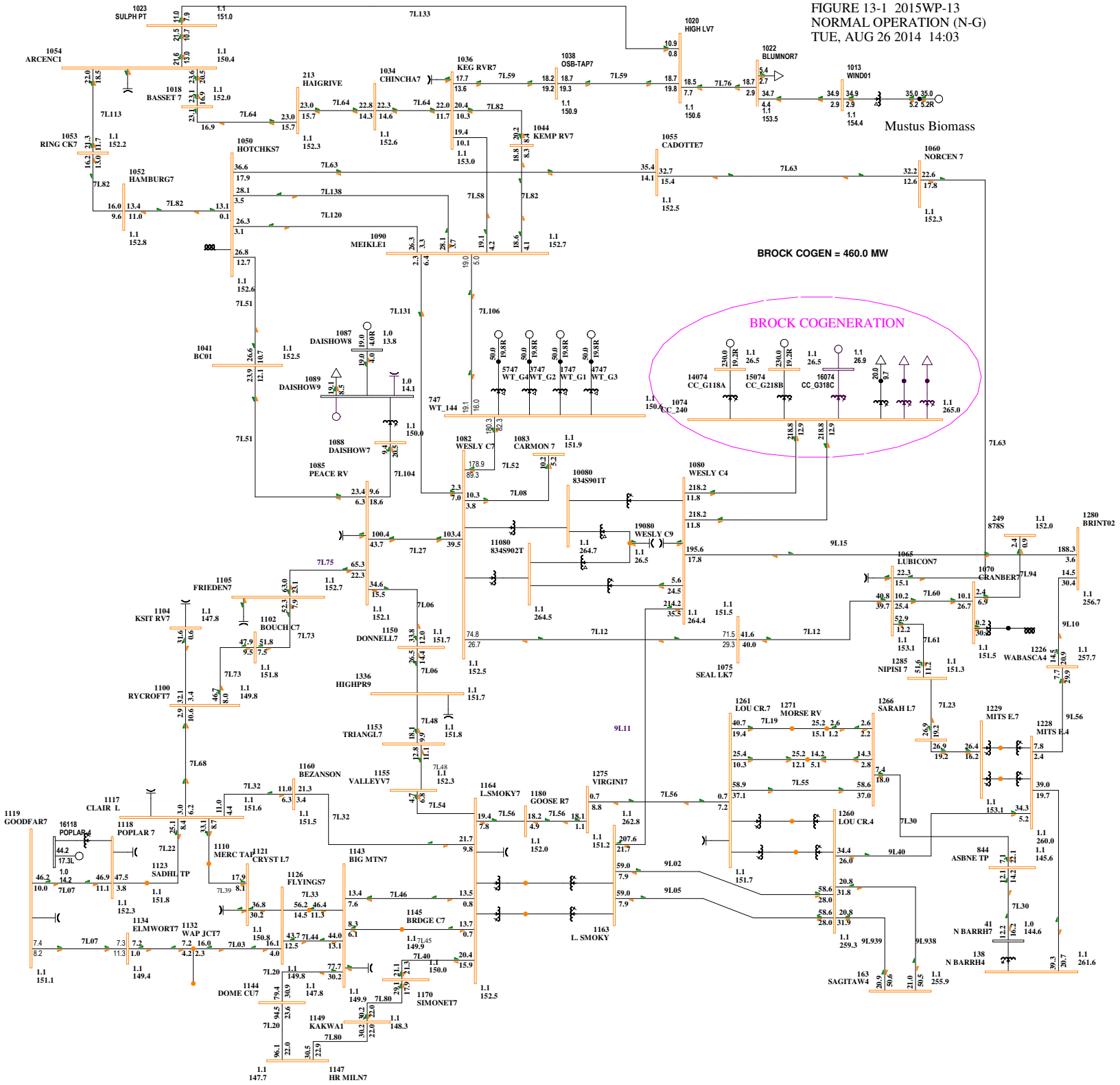


FIGURE 13-1 2015WP-13
NORMAL OPERATION (N-G)
TUE, AUG 26 2014 14:03
Mustus Biomass
BROCK COGEN = 460.0 MW
BROCK COGENERATION
1023 SULPH PT
7L133
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1054 ARCENC1
1018 BASSET 7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1053 RING CK7
7L113
1050 HOTCHKS7
1052 HAMBURG7
1055 CADOTTE7
1060 NORCEN 7
7L63
7L64
7L82
7L58
7L59
7L76
7L82
7L138
7L120
7L51
7L131
7L106
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
1082 WESLY C7
1083 CARMON 7
1080 WESLY C4
10080 834S901T
19080 WESLY C9
11080 834S902T
7L52
7L08
7L104
7L27
7L06
7L12
9L15
1065 LUBICON7
1070 CRANBER7
7L94
7L60
7L61
9L10
249 878S
1280 BRINT02
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
1105 FRIEDEN7
7L75
1102 BOUCH C7
7L73
1104 KSIT RV7
1100 RYCROFT1
7L68
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
7L48
1155 VALLEYV7
7L54
1160 BEZANSON
7L32
1117 CLAIR L
1118 POPLAR 7
16118 POPLAR 4
1119 GOODFAR7
7L22
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
7L33
7L39
1134 ELMWORT7
7L07
1132 WAP JCT7
7L03
1144 DOME CU7
7L20
1149 KAKWA1
7L80
1147 HR MILN7
1143 BIG MTN7
7L46
1145 BRDGE C7
7L45
7L40
1170 SIMONET7
1164 L.SMOKY7
7L56
1180 GOOSE R7
1275 VIRGINI7
9L11
9L02
9L05
1163 L. SMOKY
1261 LOU CR.7
1271 MORSE RV
7L19
1266 SARAH L7
7L23
1229 MITS E.7
1228 MITS E.4
9L56
1260 LOU CR.4
7L30
9L40
844 ASBNE TP
41 N BARRH7
138 N BARRH4
9L939
9L938
163 SAGITAW4
7L55
7L71

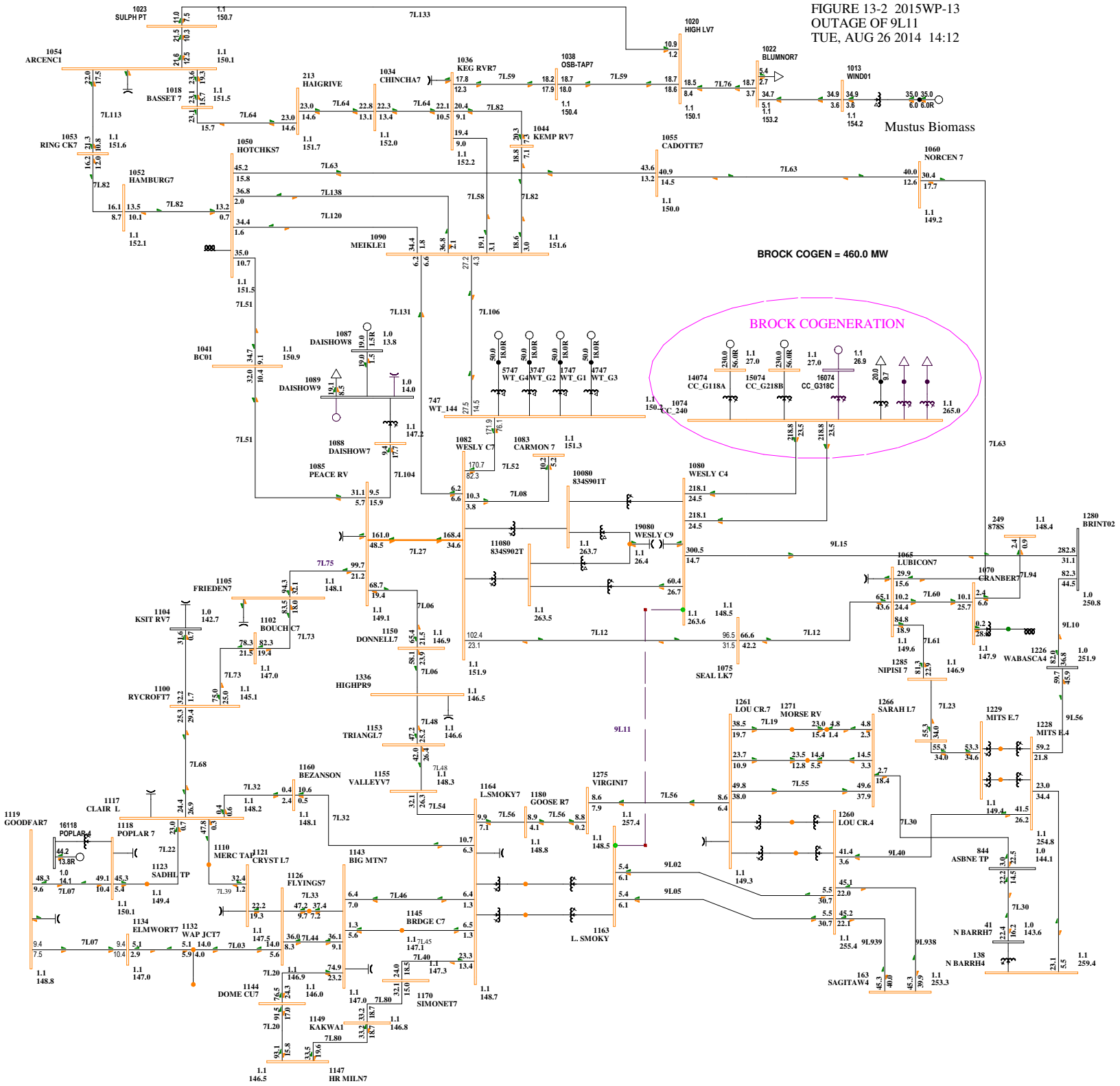


FIGURE 13-2 2015WP-13
OUTAGE OF 9L11
TUE, AUG 26 2014 14:12
Mustus Biomass
BROCK COGEN = 460.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
1082 WESLY C7
1083 CARMON 7
10080 834S901T
1080 WESLY C4
19080 WESLY C9
11080 834S902T
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1100 RYCROFT7
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1163 L. SMOKY
1065 LUBICON7
1070 CRANBER7
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1229 MITS E.7
1228 MITS E.4
1260 LOU CR.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
1280 BRINT02
249 878S
1117 CLAIR L
1118 POPLAR 7
16118 POPLAR4
1119 GOODFAR7
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1143 BIG MTN7
1145 BRDGE C7
1132 WAP JCT7
1134 ELMWORT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1170 SIMONET7
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
163 SAGITAW4
7L133
7L63
7L64
7L82
7L113
7L138
7L120
7L58
7L131
7L106
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7L08
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7L73
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7L32
7L22
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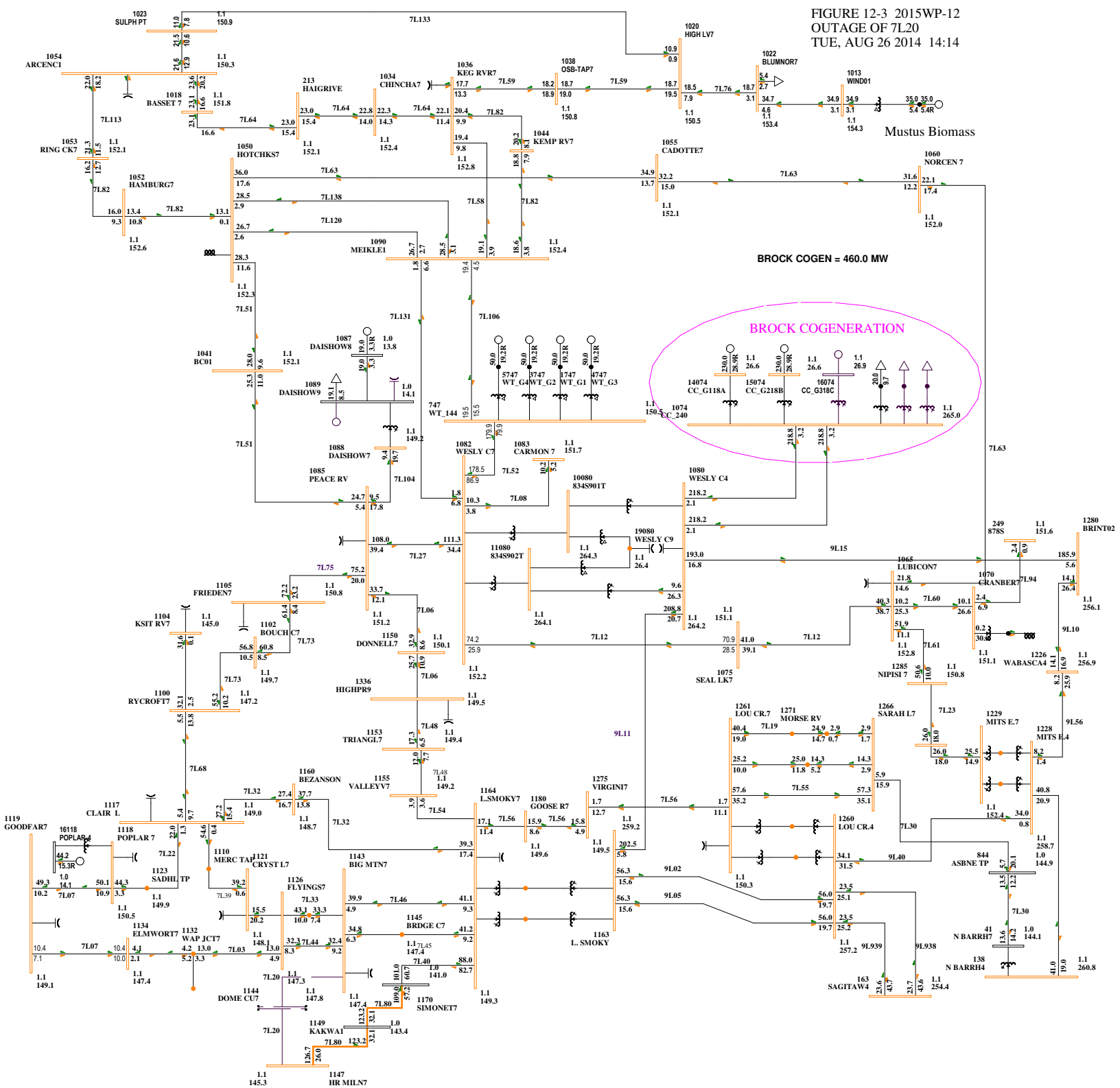
FIGURE 12-3 2015WP-12
OUTAGE OF 7L20
TUE, AUG 26 2014 14:14
Mustus Biomass
BROCK COGEN = 460.0 MW
BROCK COGENERATION
1023 SULPH PT
7L133
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1054 ARCENC1
1018 BASSET 7
7L113
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1053 RING CK7
1050 HOTCHKS7
1052 HAMBURG7
1055 CADOTTE7
1060 NORCEN 7
7L63
7L82
7L64
7L59
7L76
7L82
7L138
7L58
7L120
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
7L131
7L106
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
747 WT_144
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
1041 BC01
7L51
7L104
1082 WESLY C7
1083 CARMON 7
7L52
7L08
10080 834S901T
1080 WESLY C4
19080 WESLY C9
11080 834S902T
7L27
7L75
1105 FRIEDEN7
1104 KSIT RV7
1102 BOUCH C7
7L73
1150 DONNELL7
7L06
1336 HIGHPR9
1100 RYCROFT7
7L68
1153 TRIANGL7
7L48
1155 VALLEYV7
1160 BEZANSON
7L32
1117 CLAIR L
1118 POPLAR 7
16118 POPLAR 4
1119 GOODFAR7
7L22
1123 SADHL TP
7L07
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
7L33
7L39
1134 ELMWORT7
1132 WAP JCT7
7L03
1144 DOME CU7
7L20
1149 KAKWA1
7L80
1147 HR MILN7
1143 BIG MTN7
7L46
1145 BRDGE C7
7L45
7L40
1170 SIMONET7
1164 L.SMOKY7
1180 GOOSE R7
7L56
1275 VIRGINI7
7L54
1163 L. SMOKY
9L02
9L05
9L11
7L12
7L94
7L60
7L61
7L23
7L30
9L40
9L939
9L938
9L10
9L56
9L15
1065 LUBICON7
1070 CRANBER7
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1229 MITS E.7
1228 MITS E.4
1260 LOU CR.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
249 878S
1280 BRINT02

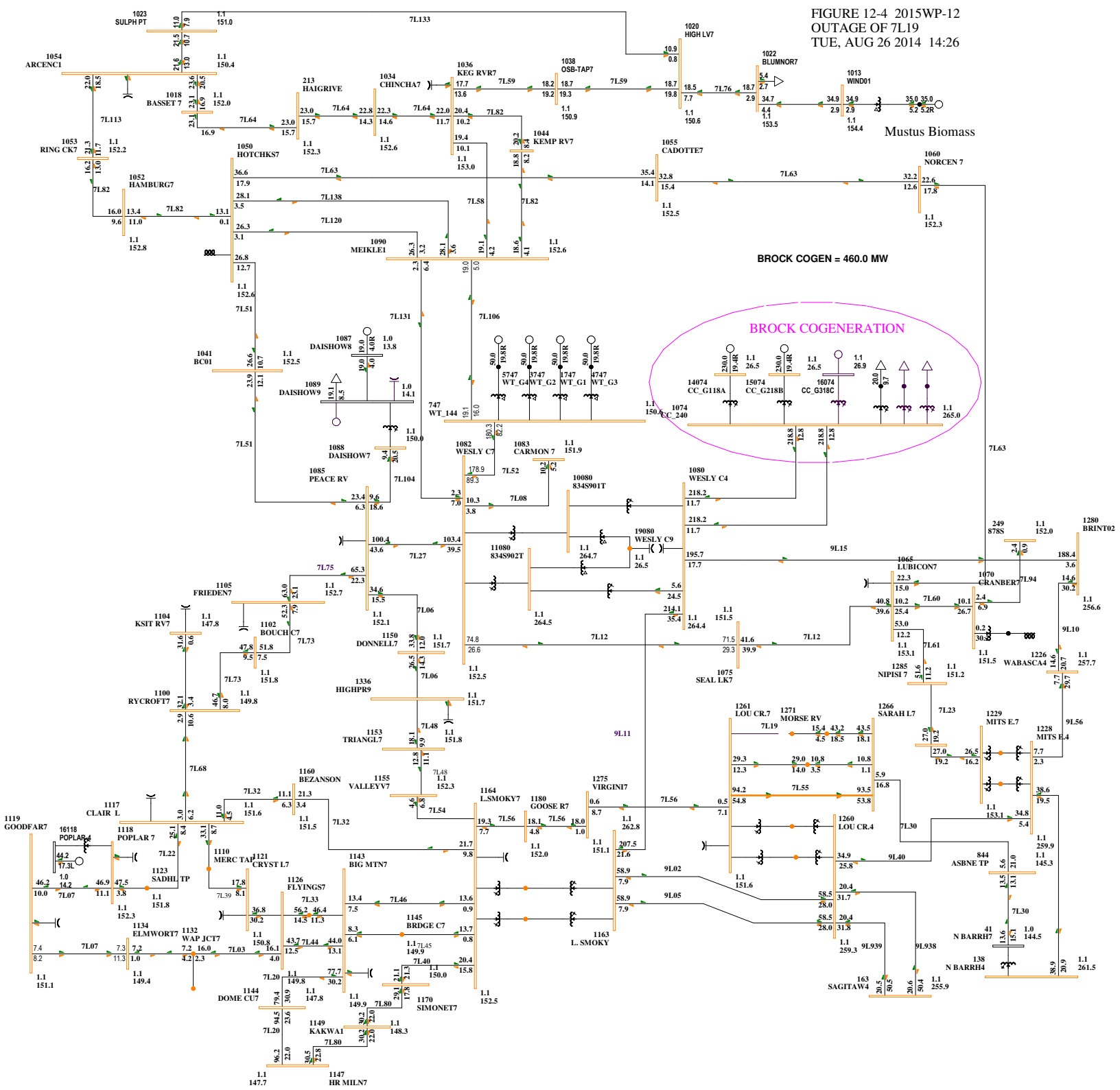
FIGURE 12-4 2015WP-12
OUTAGE OF 7L19
TUE, AUG 26 2014 14:26
Mustus Biomass
BROCK COGEN = 460.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1044 KEMP RV7
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
1082 WESLY C7
1083 CARMON 7
10080 834S901T
1080 WESLY C4
19080 WESLY C9
11080 834S902T
1065 LUBICON7
1070 CRANBER7
249 878S
1280 BRINT02
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1100 RYCROFT1
1119 GOODFAR7
16118 POPLAR4
1118 POPLAR 7
1117 CLAIR L
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1143 BIG MTN7
1145 BRDGE C7
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1170 SIMONET7
1163 L. SMOKY
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
1285 NIPISI 7
1226 WABASCA4
1075 SEAL LK7
1074 CC_240
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
747 WT_144
7L133
7L113
7L64
7L63
7L82
7L138
7L120
7L58
7L131
7L106
7L51
7L104
7L52
7L08
7L27
7L75
7L06
7L73
7L12
9L15
7L94
7L60
7L61
9L10
7L23
9L56
9L11
7L68
7L32
7L54
7L56
7L48
7L22
7L07
7L03
7L46
7L20
7L80
7L45
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9L40
7L30
9L939
9L938

Post-Project Power Flow Plot
2016 Summer Peak (Case 14)

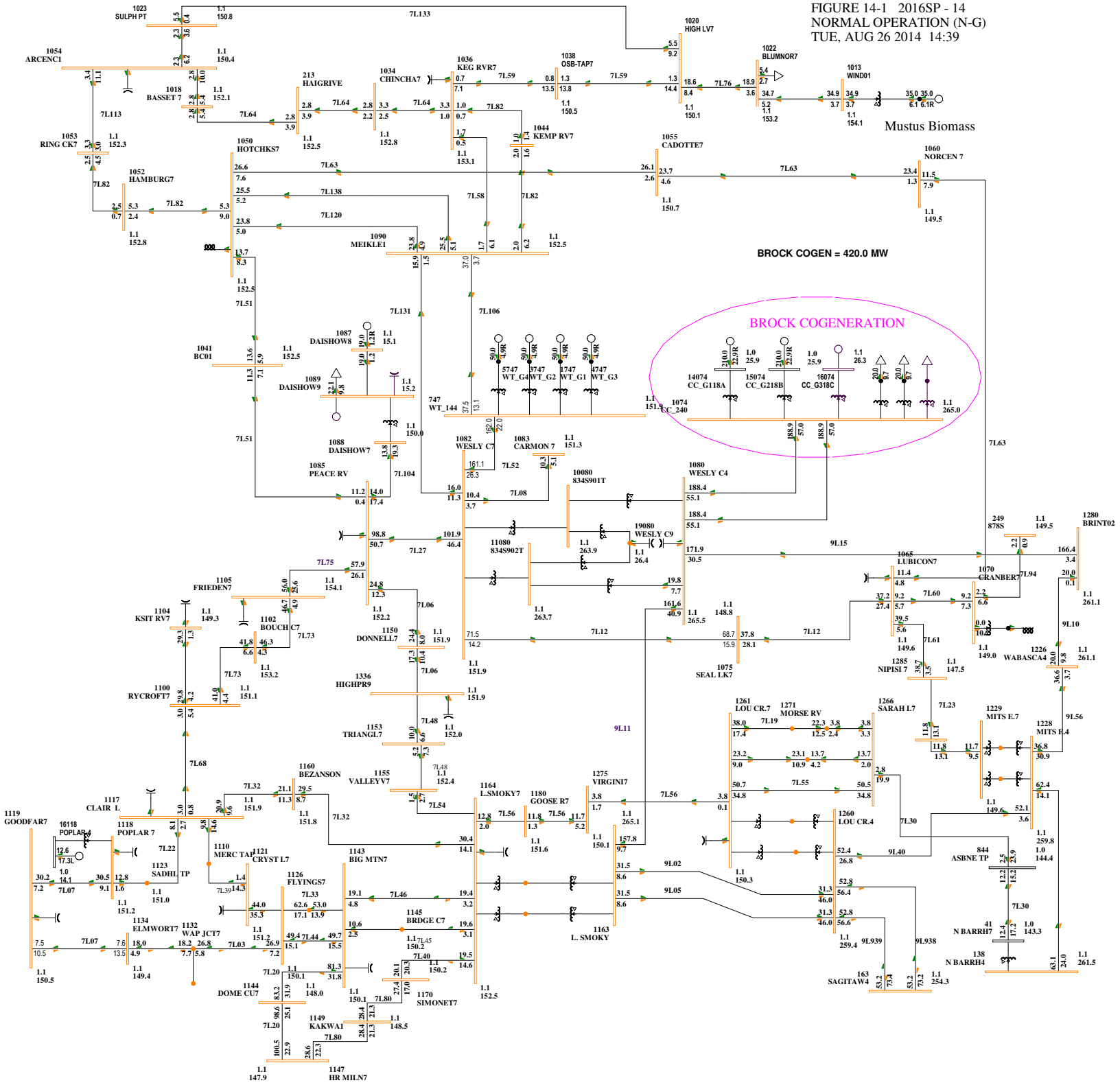
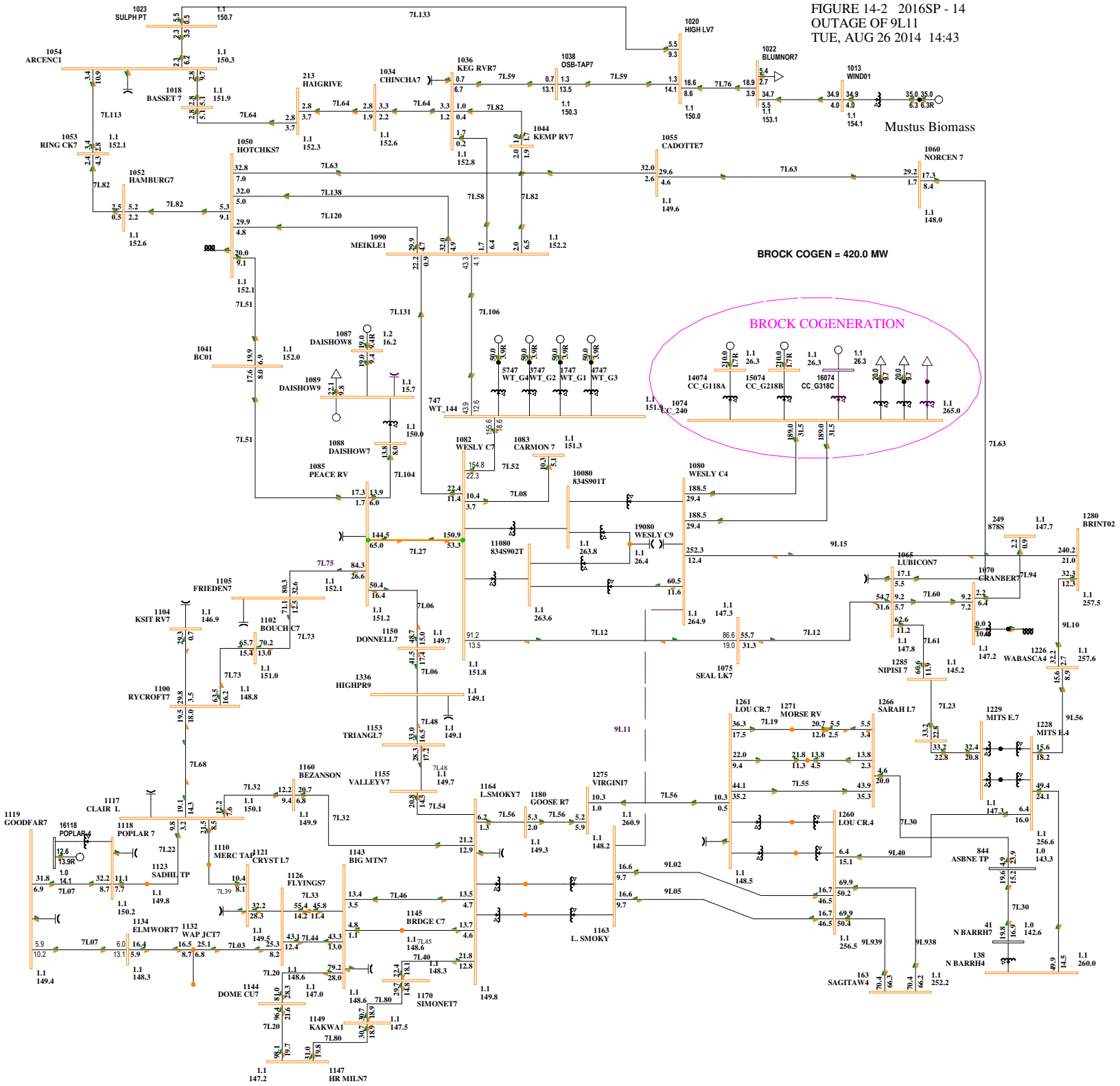


FIGURE 14-1 2016SP - 14
NORMAL OPERATION (N-G)
TUE, AUG 26 2014 14:39
Mustus Biomass
BROCK COGEN = 420.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
1082 WESLY C7
1083 CARMON 7
10080 834S901T
1080 WESLY C4
19080 WESLY C9
11080 834S902T
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1100 RYCROFT7
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1117 CLAIR L
1118 POPLAR 7
16118 POPLAR 4
1119 GOODFAR7
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1145 BRDGE C7
1143 BIG MTN7
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1163 L. SMOKY
1170 SIMONET7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1134 ELMWORT7
1132 WAP JCT7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1075 SEAL LK7
1065 LUBICON7
1070 CRANBER7
1285 NIPISI 7
1226 WABASCA4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
1280 BRINT02
249 878S
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
7L133
7L63
7L64
7L82
7L113
7L51
7L131
7L106
7L104
7L75
7L73
7L68
7L22
7L32
7L54
7L56
7L46
7L33
7L44
7L03
7L07
7L20
7L80
7L48
7L06
7L27
7L08
7L52
7L12
7L58
7L59
7L76
7L82
7L138
7L120
7L94
7L60
7L61
7L23
7L30
9L11
9L15
9L10
9L56
9L40
9L02
9L05
9L939
9L938

FIGURE 14-2 2016SP - 14
OUTAGE OF 9L11
TUE, AUG 26 2014 14:43



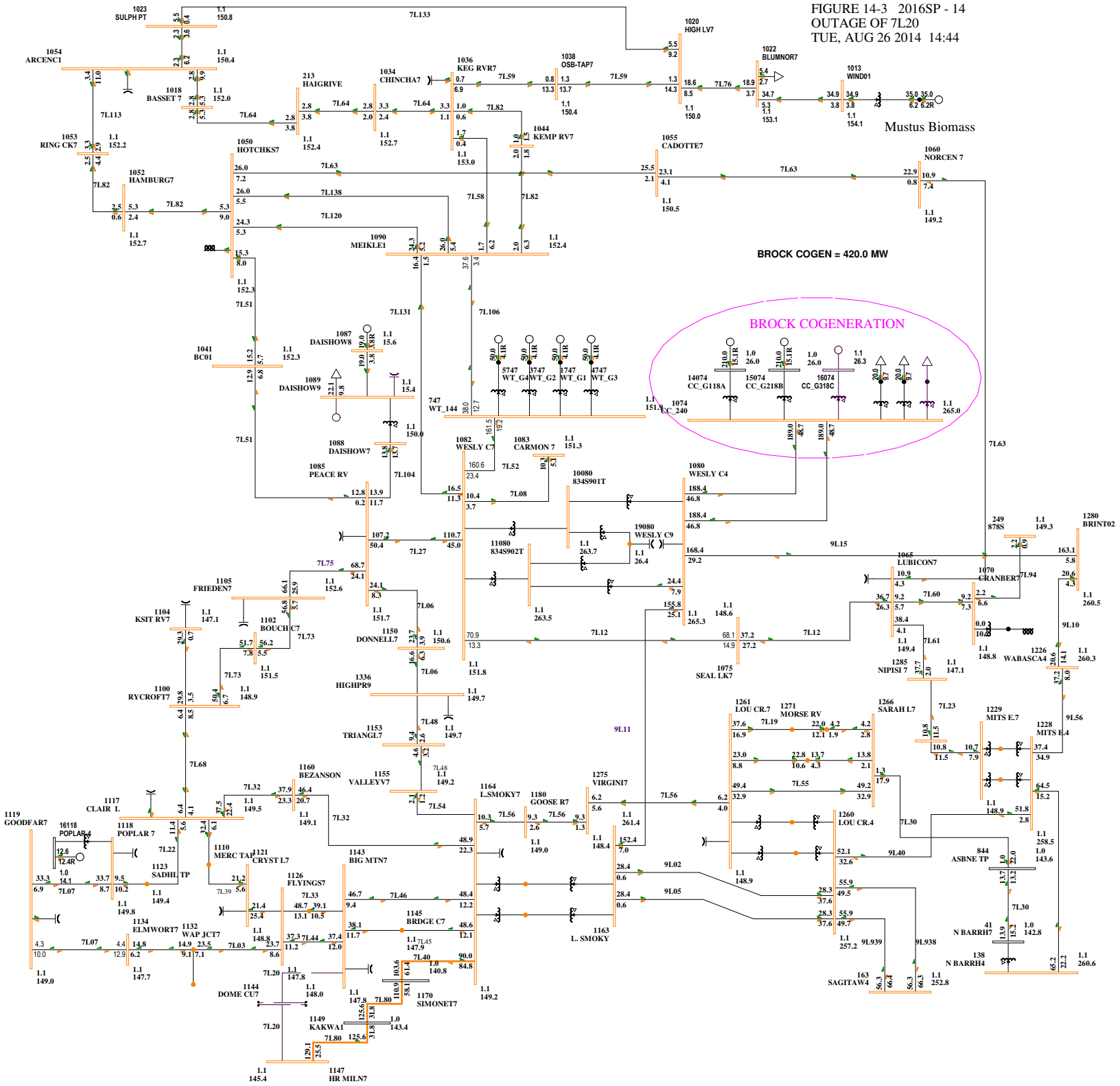


FIGURE 14-3 2016SP - 14
OUTAGE OF 7L20
TUE, AUG 26 2014 14:44
Mustus Biomass
BROCK COGEN = 420.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1044 KEMP RV7
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
1082 WESLY C7
1083 CARMON 7
1080 WESLY C4
10080 834S901T
19080 WESLY C9
11080 834S902T
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1100 RYCROFT7
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1163 L. SMOKY
1065 LUBICON7
1070 CRANBER7
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
249 878S
1280 BRINT02
1117 CLAIR L
1118 POPLAR 7
1119 GOODFAR7
16118 POPLAR_4
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1134 ELMWORT7
1132 WAP JCT7
1143 BIG MTN7
1145 BRDGE C7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1170 SIMONET7
7L133
7L113
7L64
7L82
7L63
7L138
7L120
7L58
7L131
7L106
7L51
7L104
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7L08
7L52
7L12
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7L73
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7L07
7L03
7L39
7L22
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9L15
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9L02
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9L939
9L938
7L94
7L60
7L61
7L23
7L30

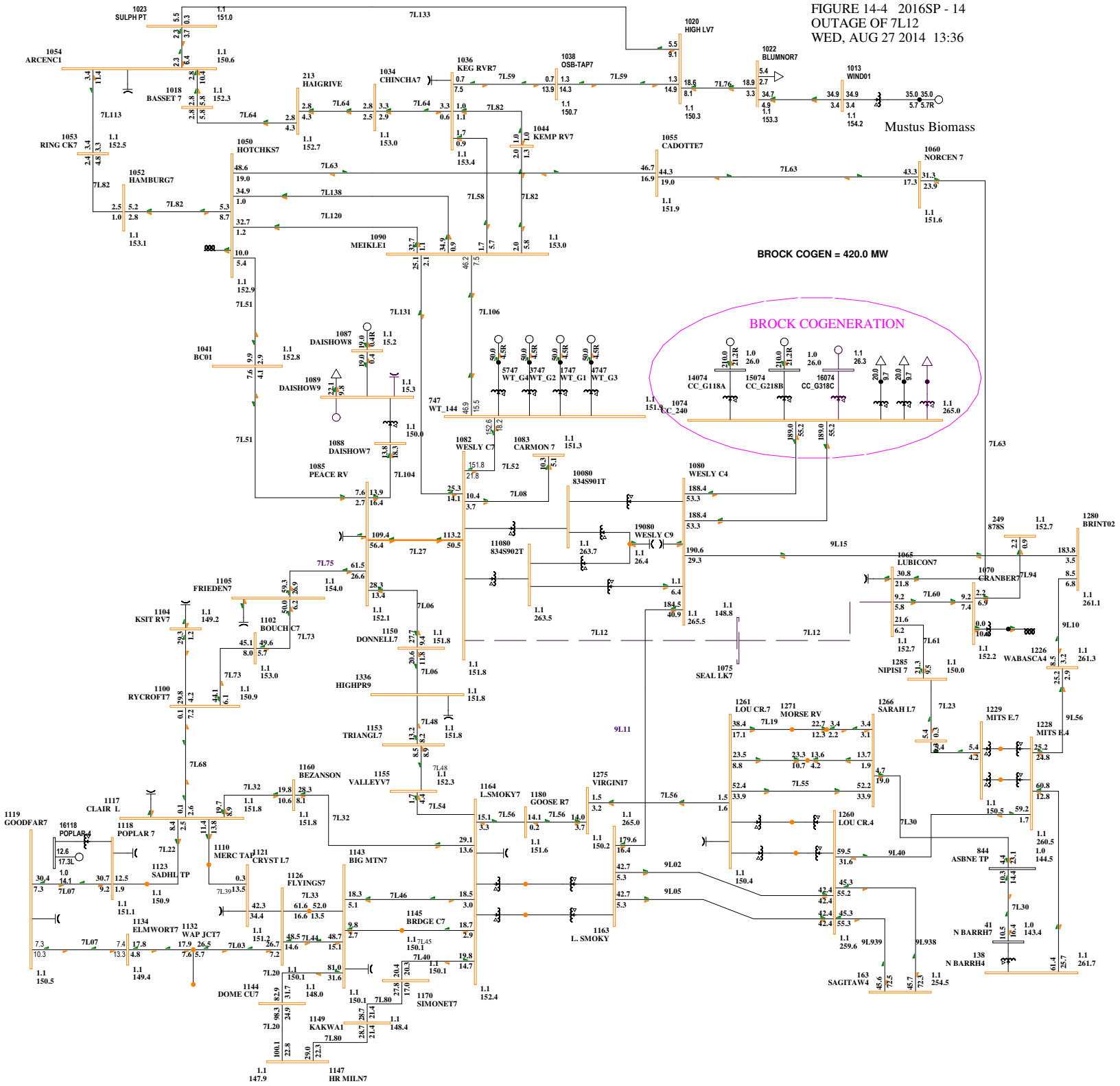


FIGURE 14-4 2016SP - 14
OUTAGE OF 7L12
WED, AUG 27 2014 13:36
Mustus Biomass
BROCK COGEN = 420.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1044 KEMP RV7
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1041 BC01
1085 PEACE RV
1082 WESLY C7
1083 CARMON 7
10080 834S901T
1080 WESLY C4
19080 WESLY C9
11080 834S902T
1065 LUBICON7
1070 CRANBER7
249 878S
1280 BRINT02
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1150 DONNELL7
1336 HIGHPR9
1100 RYCROFT7
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1117 CLAIR L
1118 POPLAR 7
1119 GOODFAR7
16118 POPLAR 4
1110 MERC TAP
1121 CRYST L7
1123 SADHL TP
1126 FLYINGS7
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1143 BIG MTN7
1145 BRDGE C7
1170 SIMONET7
1163 L. SMOKY
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
1074 CC_240
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
747 WT_144
7L133
7L113
7L64
7L63
7L82
7L138
7L120
7L58
7L59
7L76
7L82
7L51
7L131
7L106
7L104
7L52
7L08
7L27
7L75
7L06
7L73
7L68
7L32
7L48
7L54
7L56
7L46
7L33
7L44
7L03
7L07
7L20
7L80
7L40
7L45
7L39
7L22
7L94
7L60
7L61
7L12
7L23
7L55
7L30
9L15
9L11
9L10
9L56
9L02
9L05
9L40
9L939
9L938

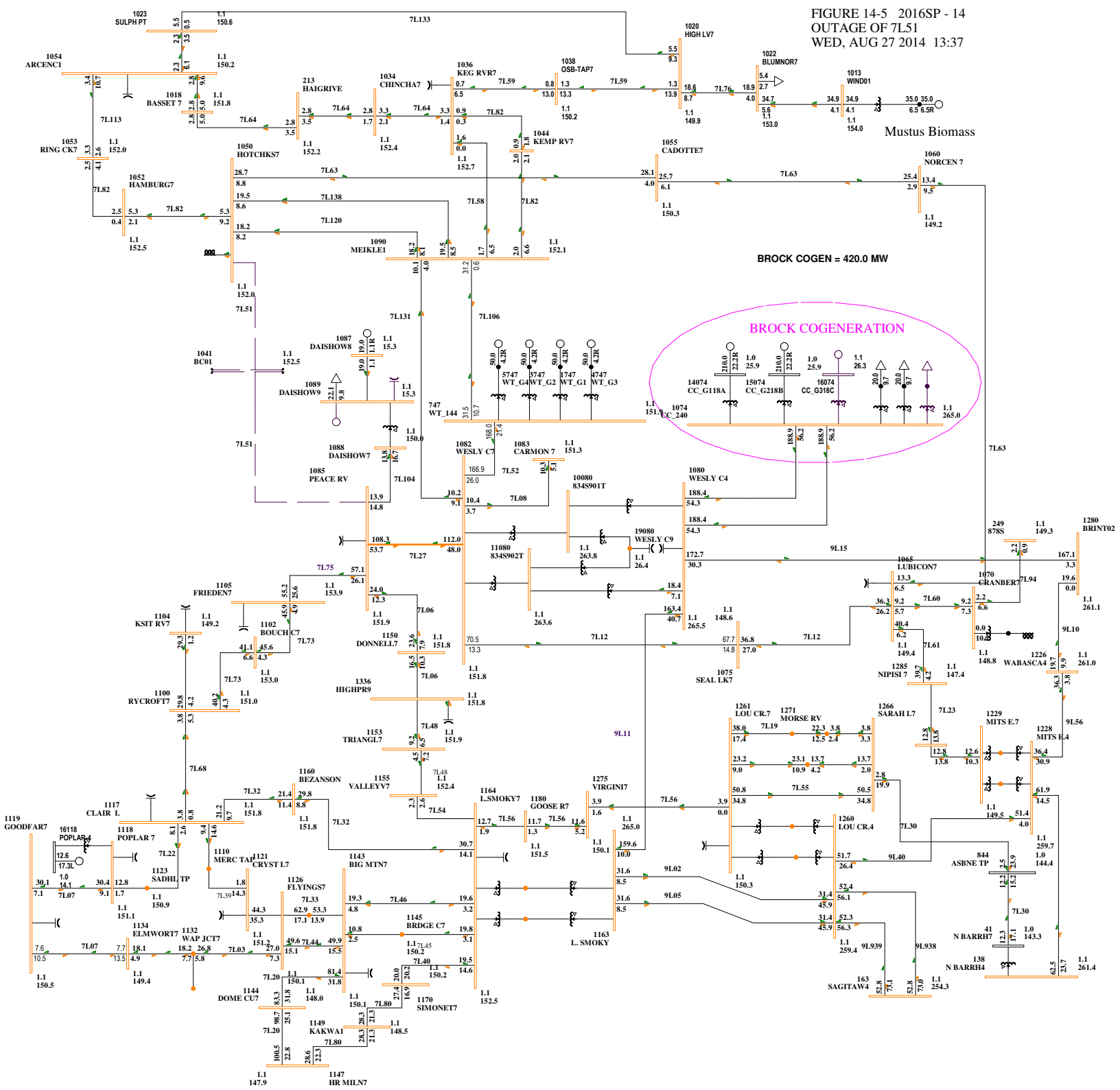
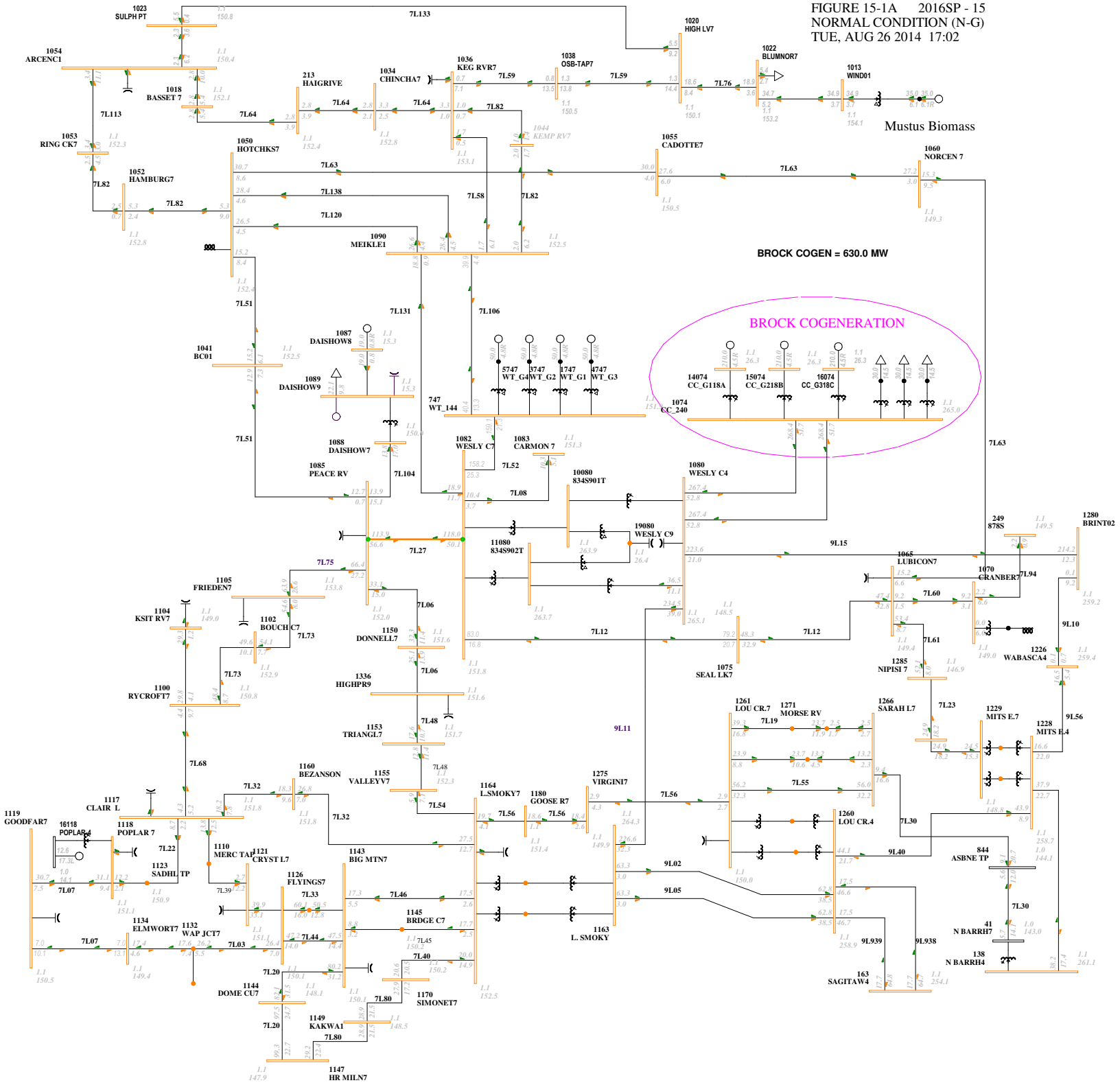


FIGURE 14-5 2016SP - 14
OUTAGE OF 7L51
WED, AUG 27 2014 13:37
Mustus Biomass
BROCK COGEN = 420.0 MW
BROCK COGENERATION
1023 SULPH PT
7L133
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1054 ARCENC1
1018 BASSET 7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1053 RING CK7
1050 HOTCHKS7
1055 CADOTTE7
1060 NORCEN 7
1052 HAMBURG7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1041 BC01
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
747 WT_144
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
1088 DAISHOW7
1085 PEACE RV
1082 WESLY C7
1083 CARMON 7
10080 834S901T
1080 WESLY C4
11080 834S902T
19080 WESLY C9
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
1100 RYCROFT7
1160 BEZANSON
1155 VALLEYV7
1117 CLAIR L
1119 GOODFAR7
16118 POPLAR 4
1118 POPLAR 7
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1143 BIG MTN7
1145 BRDGE C7
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1163 L. SMOKY
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1170 SIMONET7
1065 LUBICON7
1070 CRANBER7
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
249 878S
1280 BRINT02
7L51
7L63
7L106
7L131
7L138
7L120
7L82
7L64
7L113
9L15
9L11
9L10
9L56
9L40
9L02
9L05
9L939
9L938

Post-Project Power Flow Plot
2016 Summer Peak (Case 15)

FIGURE 15-1A 2016SP - 15
NORMAL CONDITION (N-G)
TUE, AUG 26 2014 17:02



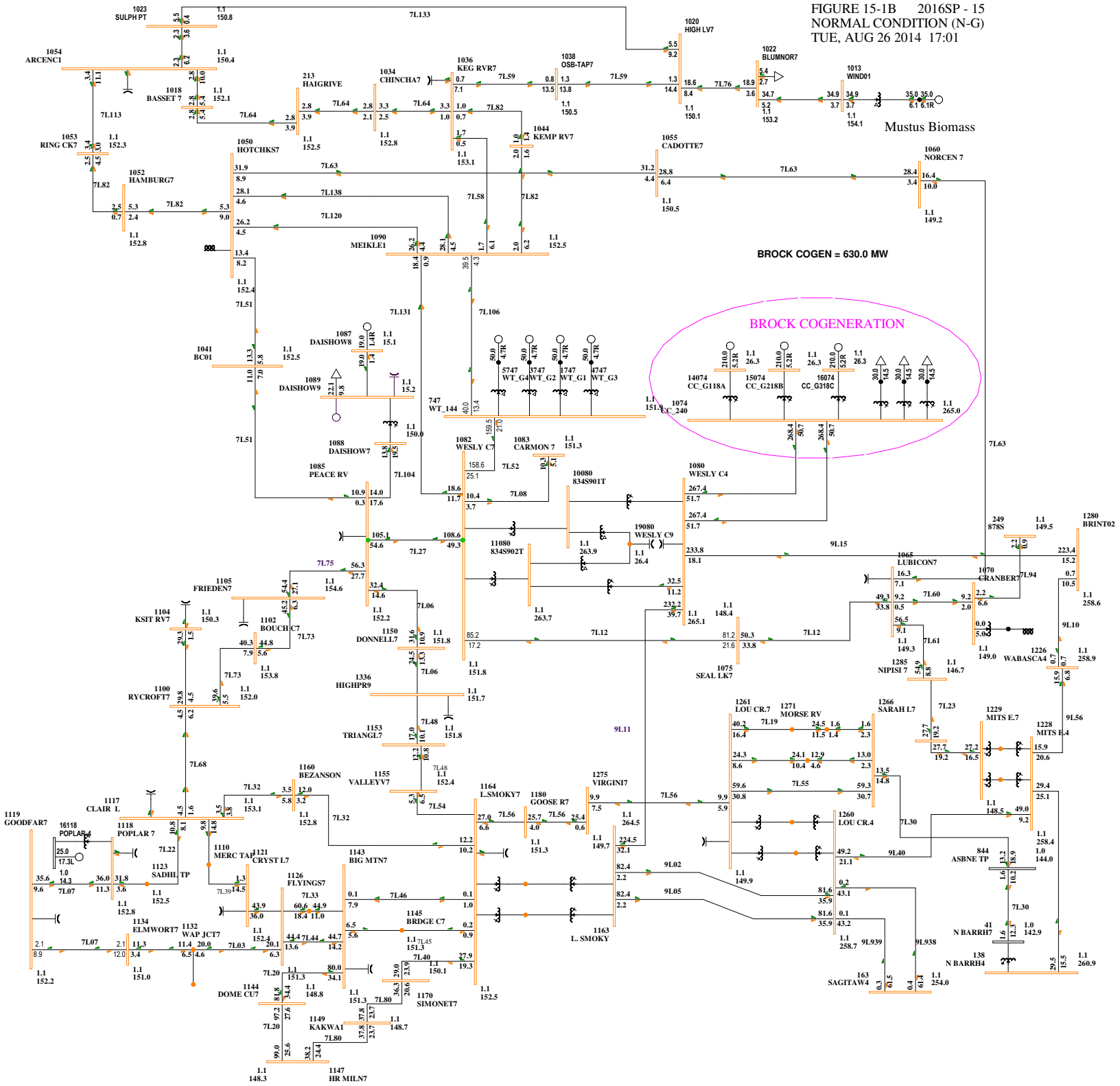


FIGURE 15-1B 2016SP - 15
NORMAL CONDITION (N-G)
TUE, AUG 26 2014 17:01
Mustus Biomass
BROCK COGEN = 630.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1044 KEMP RV7
1055 CADOTTE7
1060 NORCEN 7
1050 HOTCHKS7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
1082 WESLY C7
1083 CARMON 7
10080 834S901T
11080 834S902T
19080 WESLY C9
1080 WESLY C4
1065 LUBICON7
1070 CRANBER7
249 878S
1280 BRINT02
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1100 RYCROFT7
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1117 CLAIR L
1118 POPLAR 7
16118 POPLAR4
1119 GOODFAR7
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1143 BIG MTN7
1145 BRDGE C7
1170 SIMONET7
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1163 L. SMOKY
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
7L133
7L113
7L64
7L82
7L63
7L138
7L120
7L58
7L131
7L106
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7L20
7L03
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7L33
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7L59
7L76
7L08
7L52
9L11
9L02
9L05
9L15
9L10
9L56
9L40
9L939
9L938
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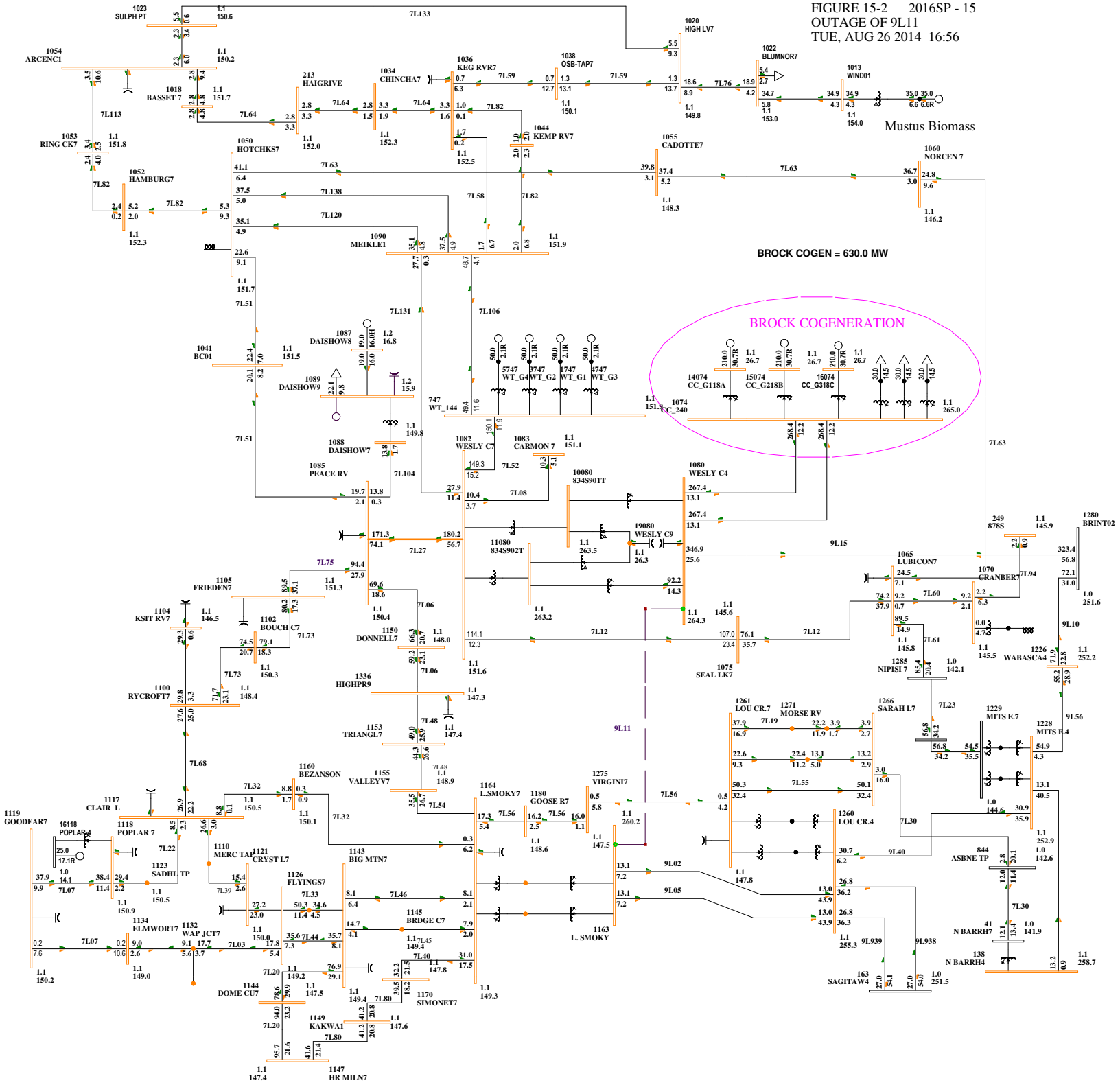
7L23
7L55
7L30

FIGURE 15-2 2016SP - 15
OUTAGE OF 9L11
TUE, AUG 26 2014 16:56



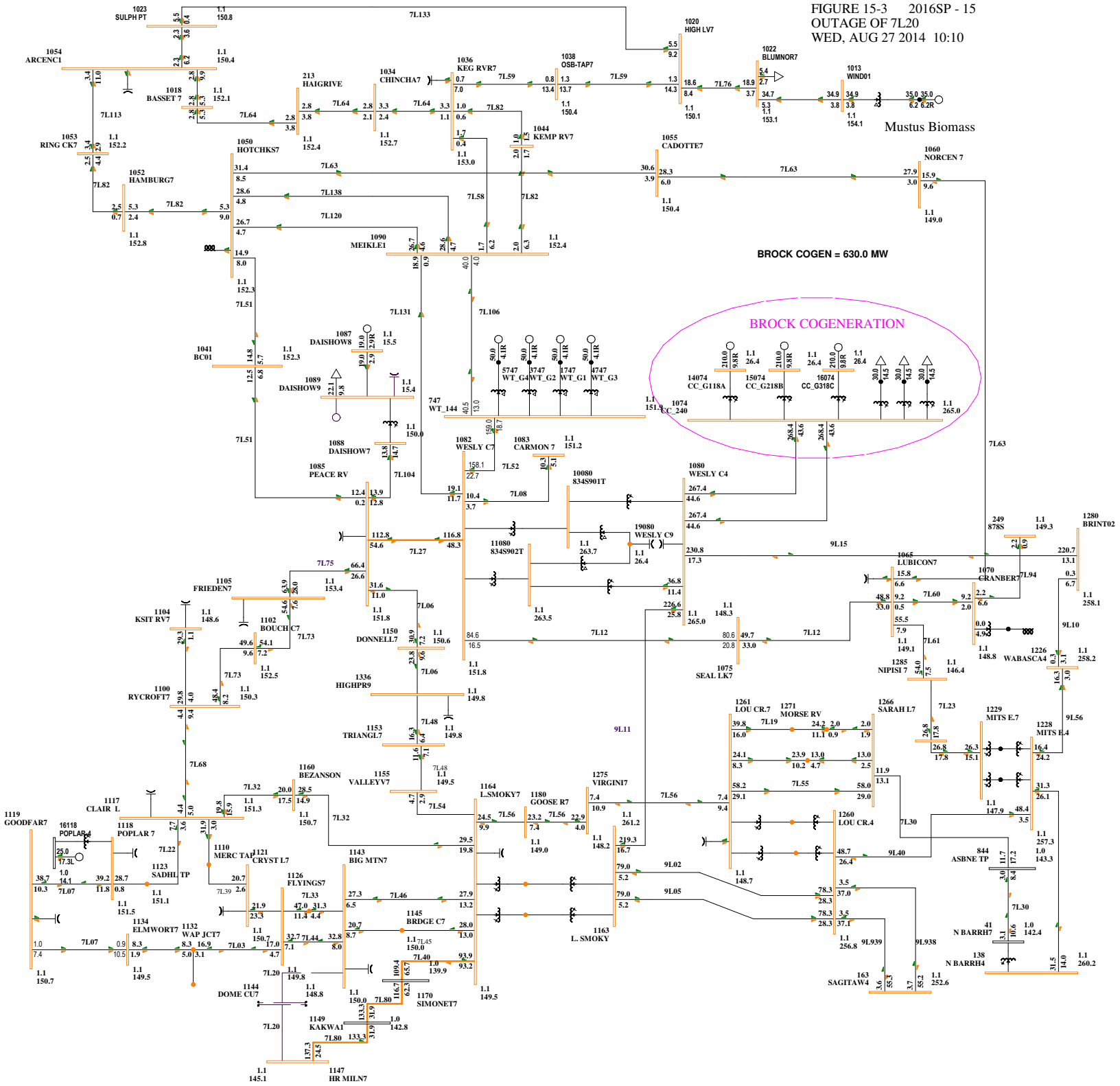


FIGURE 15-3 2016SP - 15
OUTAGE OF 7L20
WED, AUG 27 2014 10:10
Mustus Biomass
BROCK COGEN = 630.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1044 KEMP RV7
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
1082 WESLY C7
1083 CARMON 7
10080 834S901T
1080 WESLY C4
19080 WESLY C9
11080 834S902T
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1100 RYCROFT7
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1163 L. SMOKY
1143 BIG MTN7
1145 BRDGE C7
1170 SIMONET7
1149 KAKWA1
1147 HR MILN7
1144 DOME CU7
1134 ELMWORT7
1132 WAP JCT7
1126 FLYINGS7
1121 CRYST L7
1110 MERC TAP
1123 SADHL TP
1118 POPLAR 7
16118 POPLAR 4
1117 CLAIR L
1119 GOODFAR7
1065 LUBICON7
1070 CRANBER7
1285 NIPISI 7
1226 WABASCA4
1228 MITS E.4
1229 MITS E.7
1280 BRINT02
249 878S
1075 SEAL LK7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
747 WT_144
1074 CC_240
7L133
7L63
7L64
7L82
7L113
7L51
7L131
7L106
7L138
7L120
7L58
7L27
7L75
7L104
7L08
7L06
7L12
9L15
7L60
7L61
7L94
9L10
7L73
7L68
7L32
7L22
7L48
7L54
9L11
7L56
7L23
9L56
7L30
9L40
9L02
9L05
9L939
9L938
7L07
7L03
7L39
7L33
7L44
7L46
7L45
7L40
7L20
7L80
7L55

FIGURE 15-4 2016SP - 15
OUTAGE OF 7L19
WED, AUG 27 2014 10:07

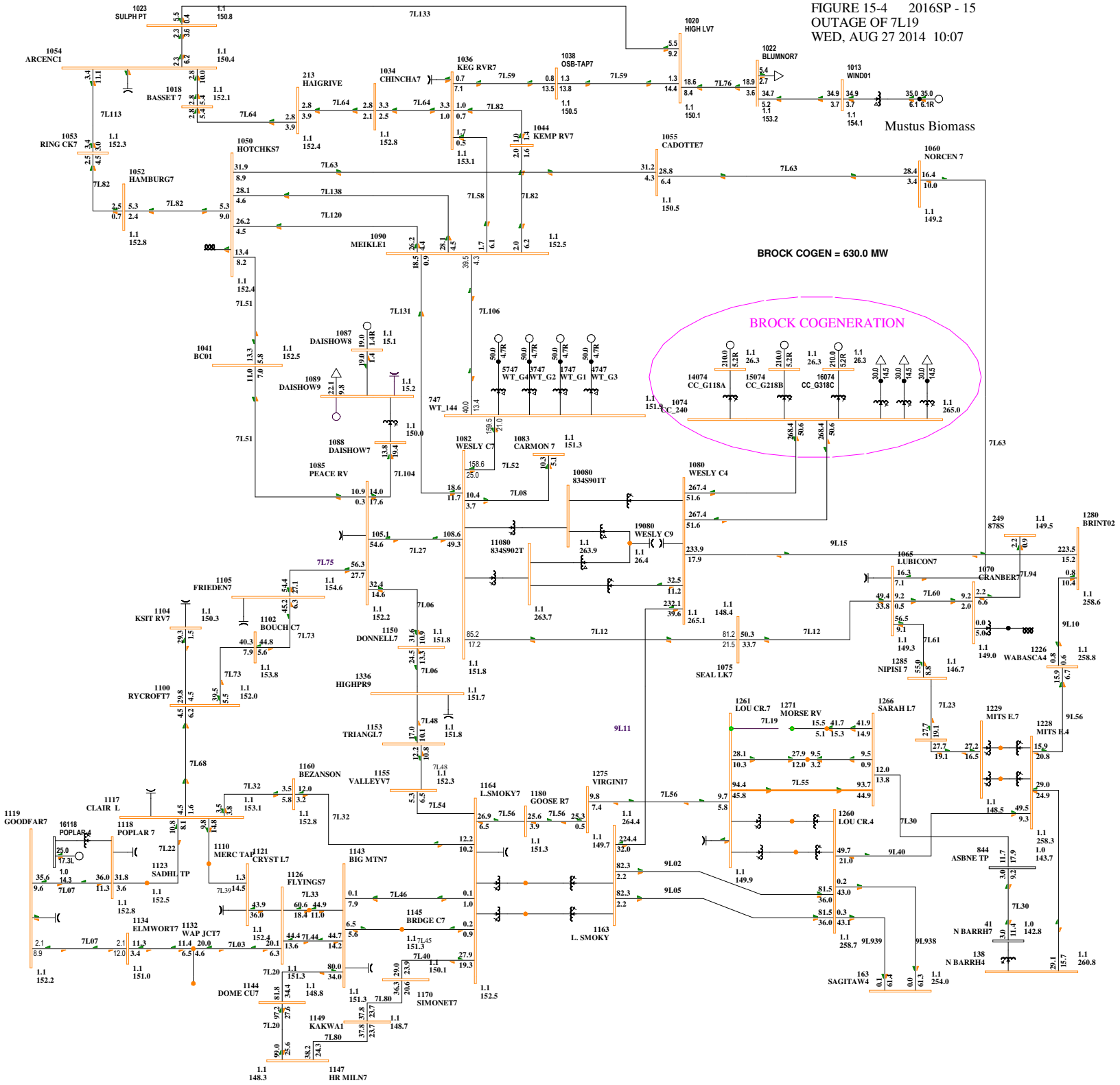
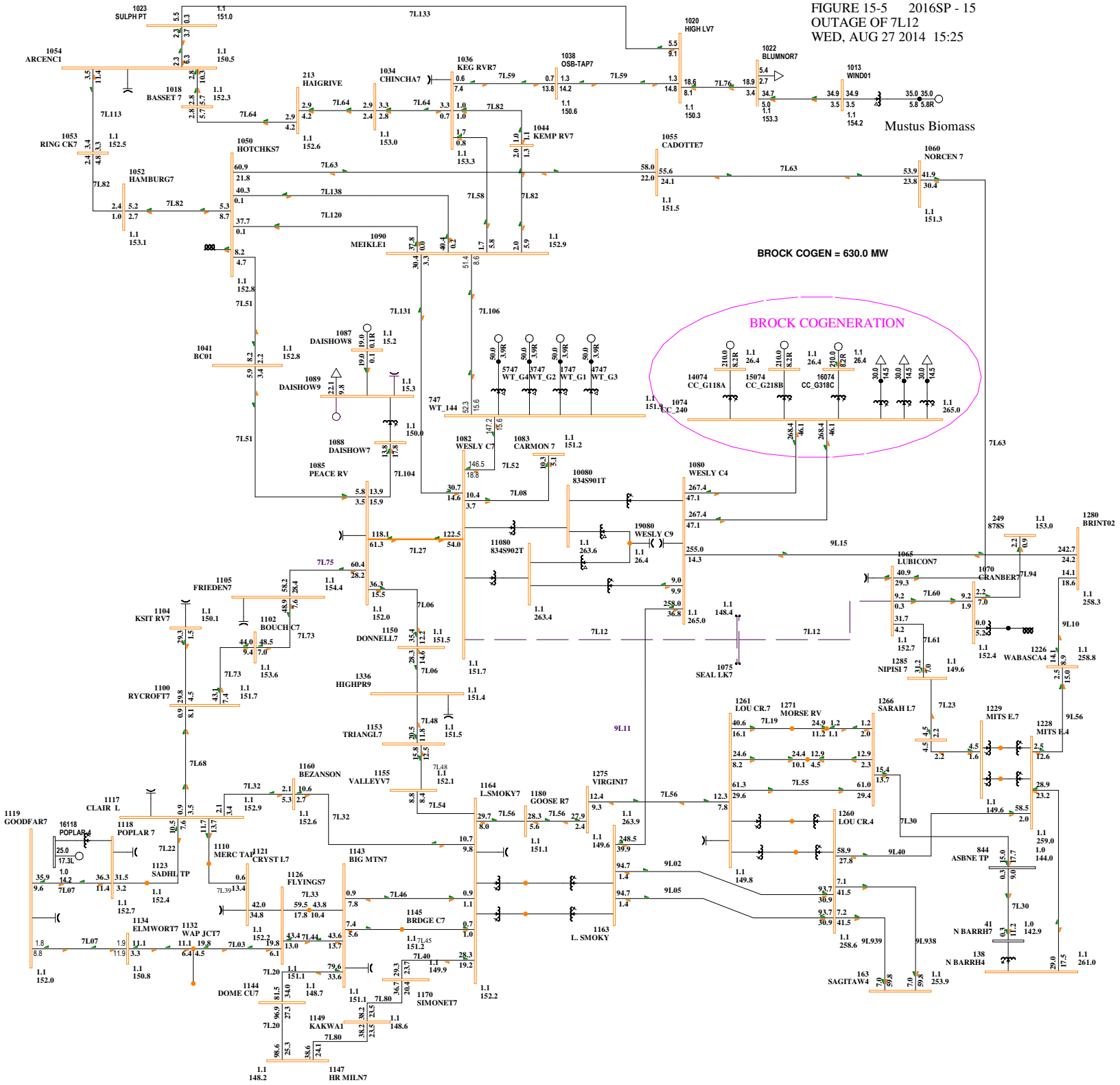


FIGURE 15-5 2016SP - 15
OUTAGE OF 7L12
WED, AUG 27 2014 15:25



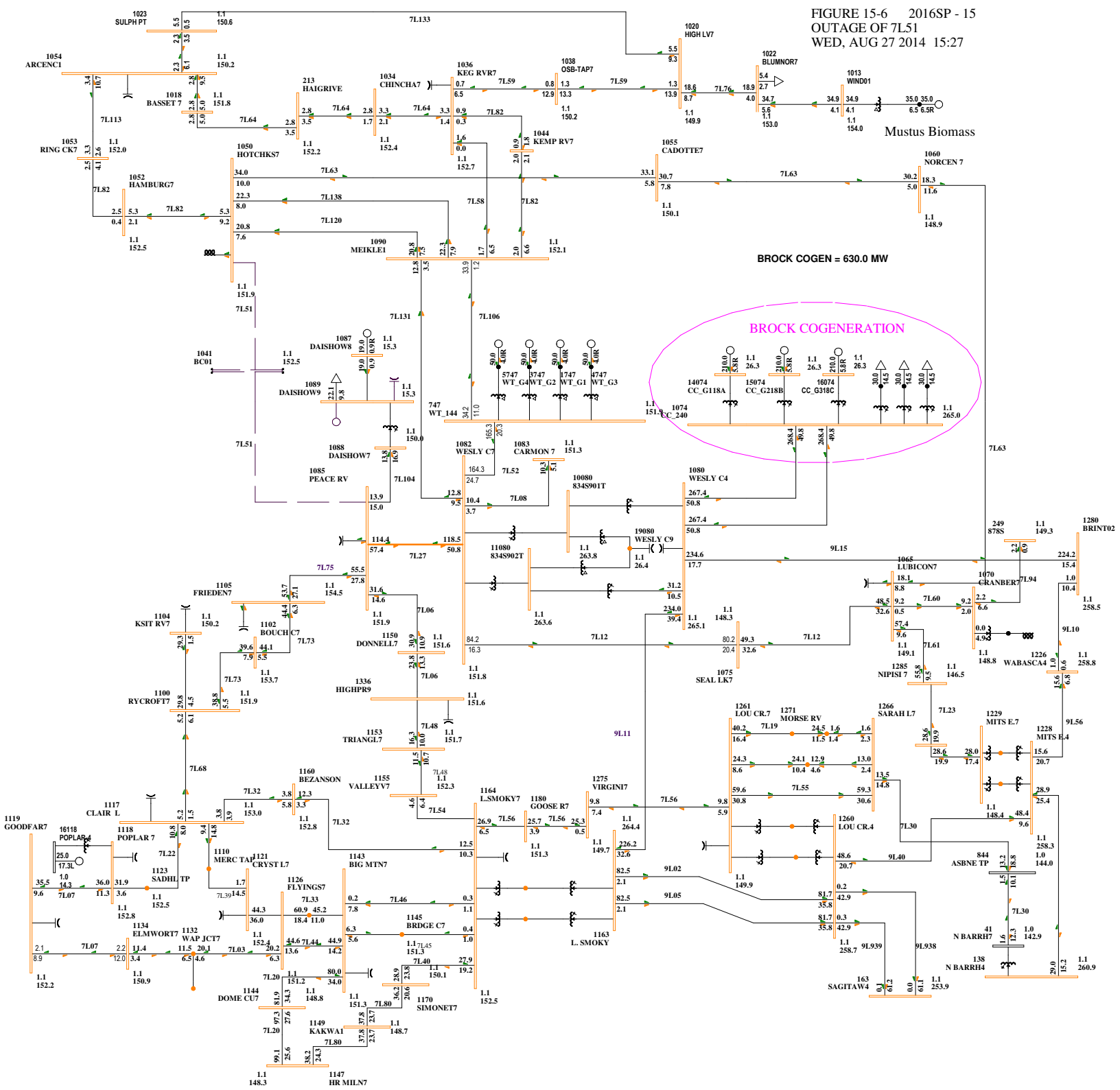


FIGURE 15-6 2016SP - 15
OUTAGE OF 7L51
WED, AUG 27 2014 15:27
Mustus Biomass
BROCK COGEN = 630.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1041 BC01
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1105 FRIEDEN7
1104 KSIT RV7
1102 BOUCH C7
1100 RYCROFT7
1119 GOODFAR7
16118 POPLAR 4
1118 POPLAR 7
1117 CLAIR L
1123 SADHL TP
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1143 BIG MTN7
1145 BRDGE C7
1170 SIMONET7
1163 L. SMOKY
1164 L.SMOKY7
1155 VALLEYV7
1153 TRIANGL7
1336 HIGHPR9
1160 BEZANSON
1050 HOTCHKS7
1090 MEIKLE1
1213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1055 CADOTTE7
1060 NORCEN 7
1082 WESLY C7
1083 CARMON 7
1080 WESLY C4
10080 834S901T
11080 834S902T
19080 WESLY C9
1074 CC_240
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
747 WT_144
1065 LUBICON7
1070 CRANBER7
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
249 878S
1280 BRINT02
7L133
7L113
7L64
7L82
7L63
7L138
7L120
7L58
7L51
7L131
7L106
7L104
7L27
7L75
7L73
7L06
7L68
7L32
7L22
7L07
7L03
7L39
7L20
7L80
7L48
7L54
7L56
7L46
7L45
7L40
7L59
7L76
7L94
7L60
7L61
7L23
7L30
9L11
9L02
9L05
9L40
9L939
9L938
9L15
9L10
9L56

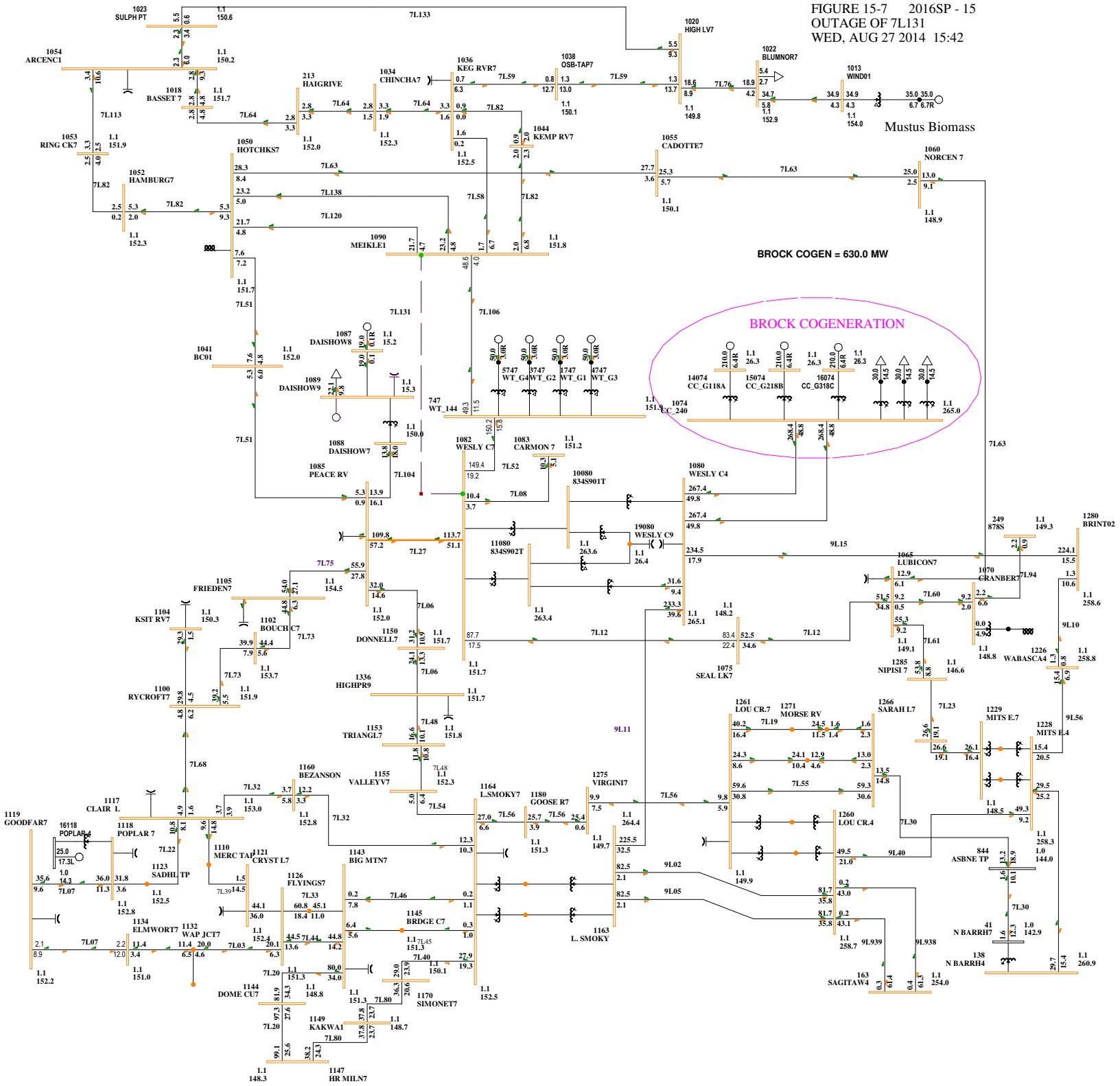
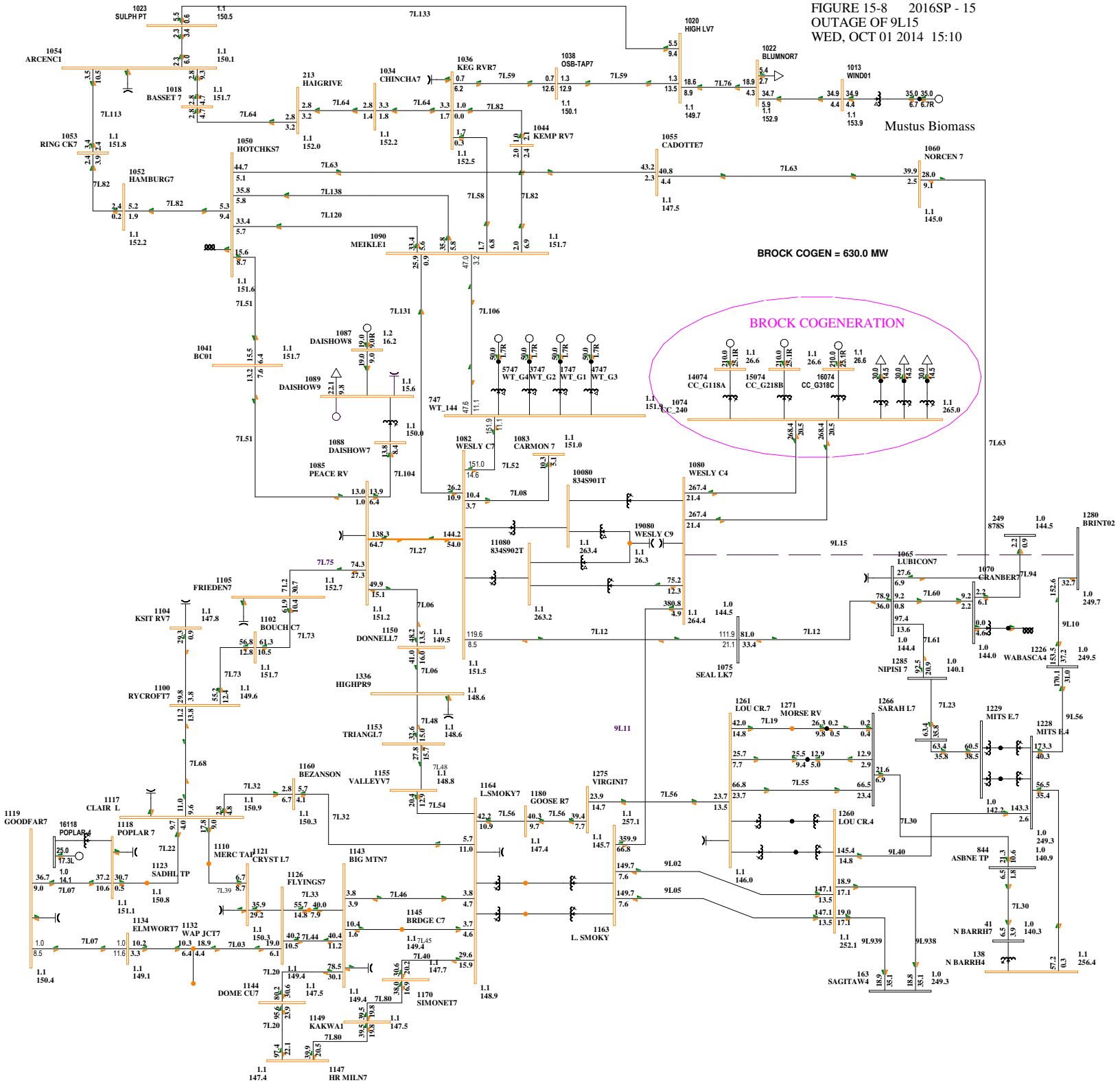


FIGURE 15-7 2016SP - 15
OUTAGE OF 7L131
WED, AUG 27 2014 15:42
Mustus Biomass
BROCK COGEN = 630.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1052 HAMBURG7
1050 HOTCHKS7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1044 KEMP RV7
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
1082 WESLY C7
1083 CARMON 7
10080 834S901T
11080 834S902T
19080 WESLY C9
1080 WESLY C4
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1100 RYCROFT7
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1163 L. SMOKY
1065 LUBICON7
1070 CRANBER7
1285 NIPISI 7
1075 SEAL LK7
1226 WABASCA4
1280 BRINT02
249 878S
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1229 MITS E.7
1228 MITS E.4
1260 LOU CR.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
1119 GOODFAR7
16118 POPLAR 4
1118 POPLAR 7
1117 CLAIR L
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1143 BIG MTN7
1145 BRDGE C7
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1170 SIMONET7
7L133
7L131
7L106
7L63
7L64
7L82
7L58
7L138
7L120
7L51
7L104
7L52
7L08
7L27
7L75
7L06
7L73
7L68
7L32
7L54
7L56
7L48
7L12
9L11
9L15
7L60
7L61
7L94
9L10
9L56
7L23
7L30
9L40
9L02
9L05
9L939
9L938
7L76
7L59
7L82
7L113
7L07
7L22
7L39
7L33
7L46
7L44
7L03
7L20
7L80
7L45
7L40

FIGURE 15-8 2016SP - 15
OUTAGE OF 9L15
WED, OCT 01 2014 15:10



Post-Project Power Flow Plot
2016 Summer Light (Case 16)

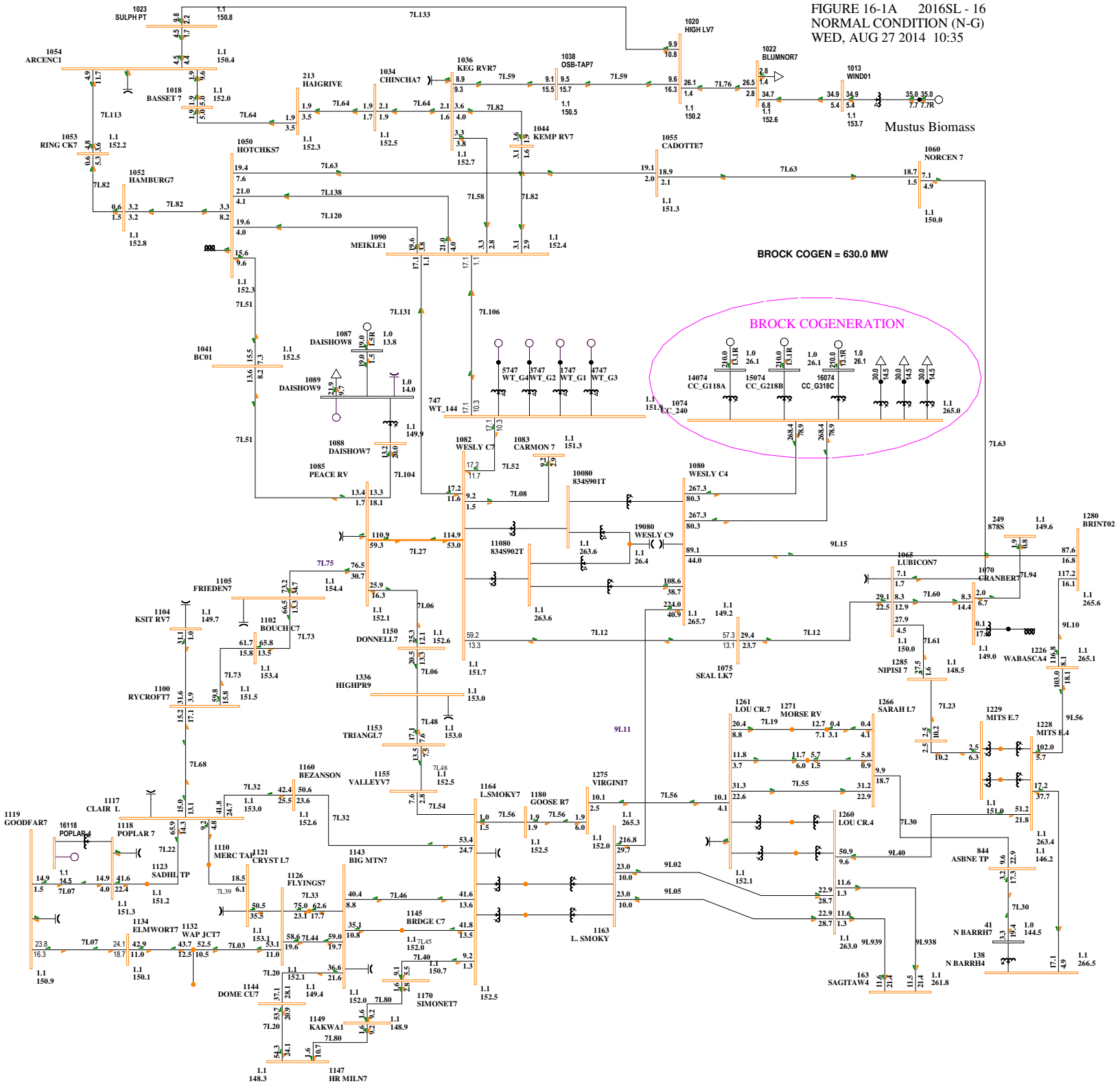


FIGURE 16-1A 2016SL - 16
NORMAL CONDITION (N-G)
WED, AUG 27 2014 10:35
Mustus Biomass
BROCK COGEN = 630.0 MW
BROCK COGENERATION
1023 SULPH PT
7L133
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1054 ARCENC1
1018 BASSET 7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1053 RING CK7
1050 HOTCHKS7
1055 CADOTTE7
1060 NORCEN 7
1052 HAMBURG7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
747 WT_144
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
1082 WESLY C7
1083 CARMON 7
10080 834S901T
1080 WESLY C4
19080 WESLY C9
11080 834S902T
1065 LUBICON7
1070 CRANBER7
249 878S
1280 BRINT02
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1150 DONNELL7
1336 HIGHPR9
1100 RYCROFT1
1153 TRIANGL7
1155 VALLEYV7
1160 BEZANSON
1117 CLAIR L
1119 GOODFAR7
16118 POPLAR4
1118 POPLAR 7
1123 SADHL TP
1110 MERC TAP
1121 CRYST L7
1126 FLYINGS7
1143 BIG MTN7
1145 BRDGE C7
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1170 SIMONET7
1163 L. SMOKY
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1285 NIPISI 7
1226 WABASCA4
1075 SEAL LK7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
7L113
7L82
7L64
7L63
7L138
7L120
7L58
7L51
7L131
7L106
7L104
7L52
7L08
7L27
7L75
7L06
7L73
7L68
7L32
7L22
7L07
7L03
7L44
7L20
7L80
7L48
7L54
7L56
7L59
7L76
7L94
7L60
7L61
7L12
7L23
7L30
9L15
9L11
9L10
9L56
9L02
9L05
9L40
9L939
9L938

FIGURE 16-1B 2016SL - 16
NORMAL CONDITION (N-G)
WED, AUG 27 2014 10:36

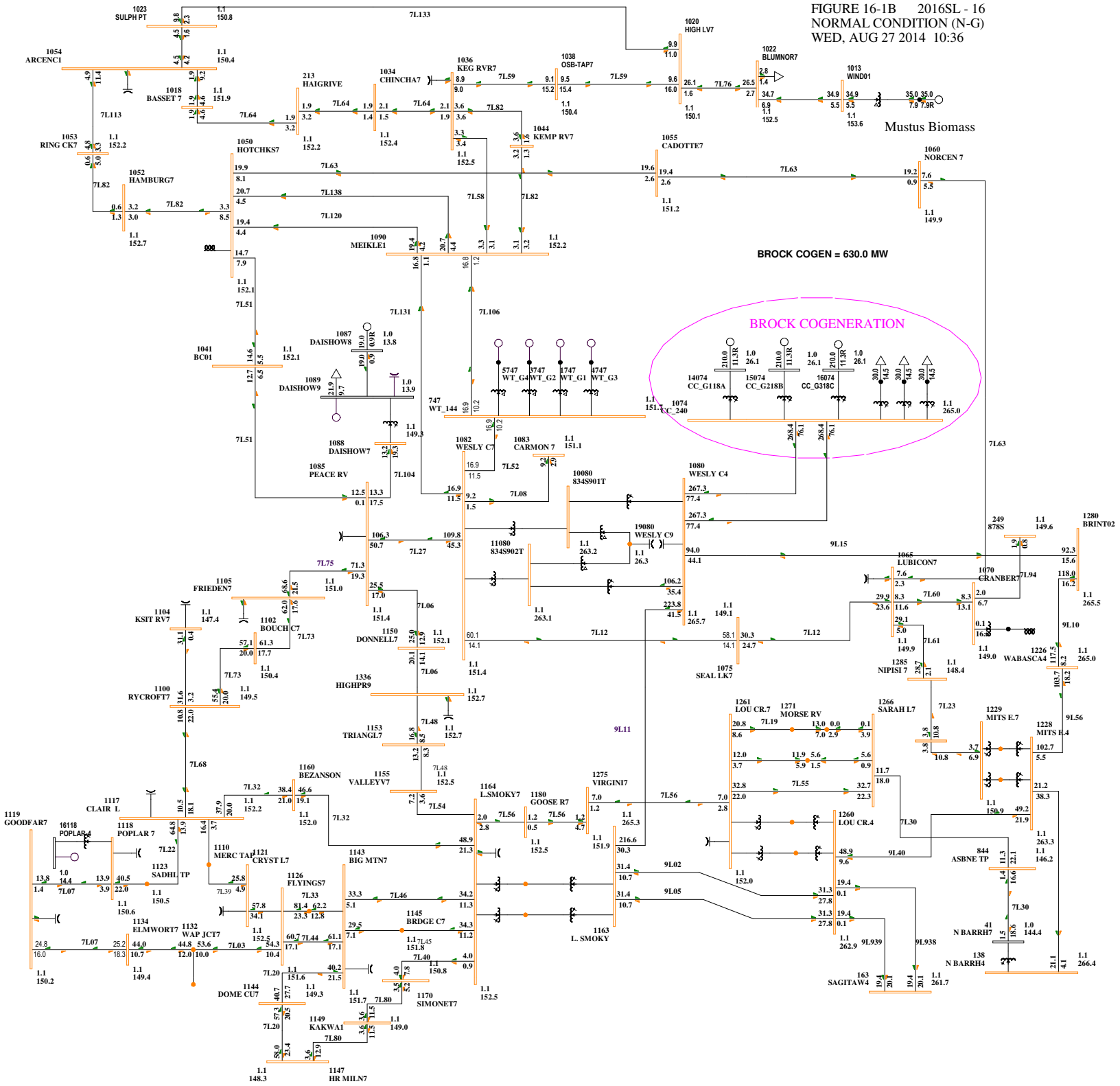


FIGURE 16-2 2016SL - 16
OUTAGE OF 9L11
WED, AUG 27 2014 10:48

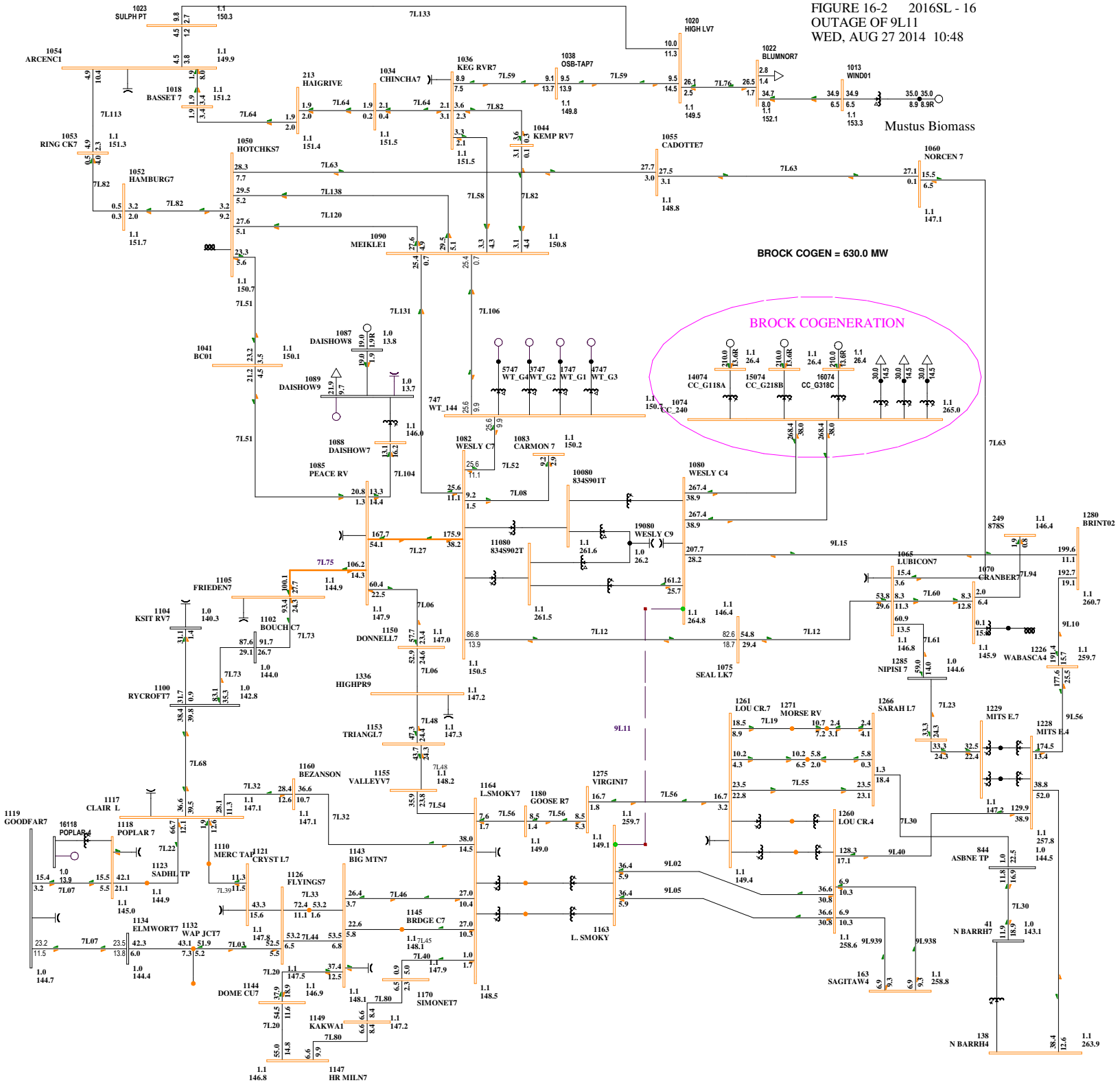


FIGURE 16-3 2016SL - 16
OUTAGE OF 9L15
WED, AUG 27 2014 11:10

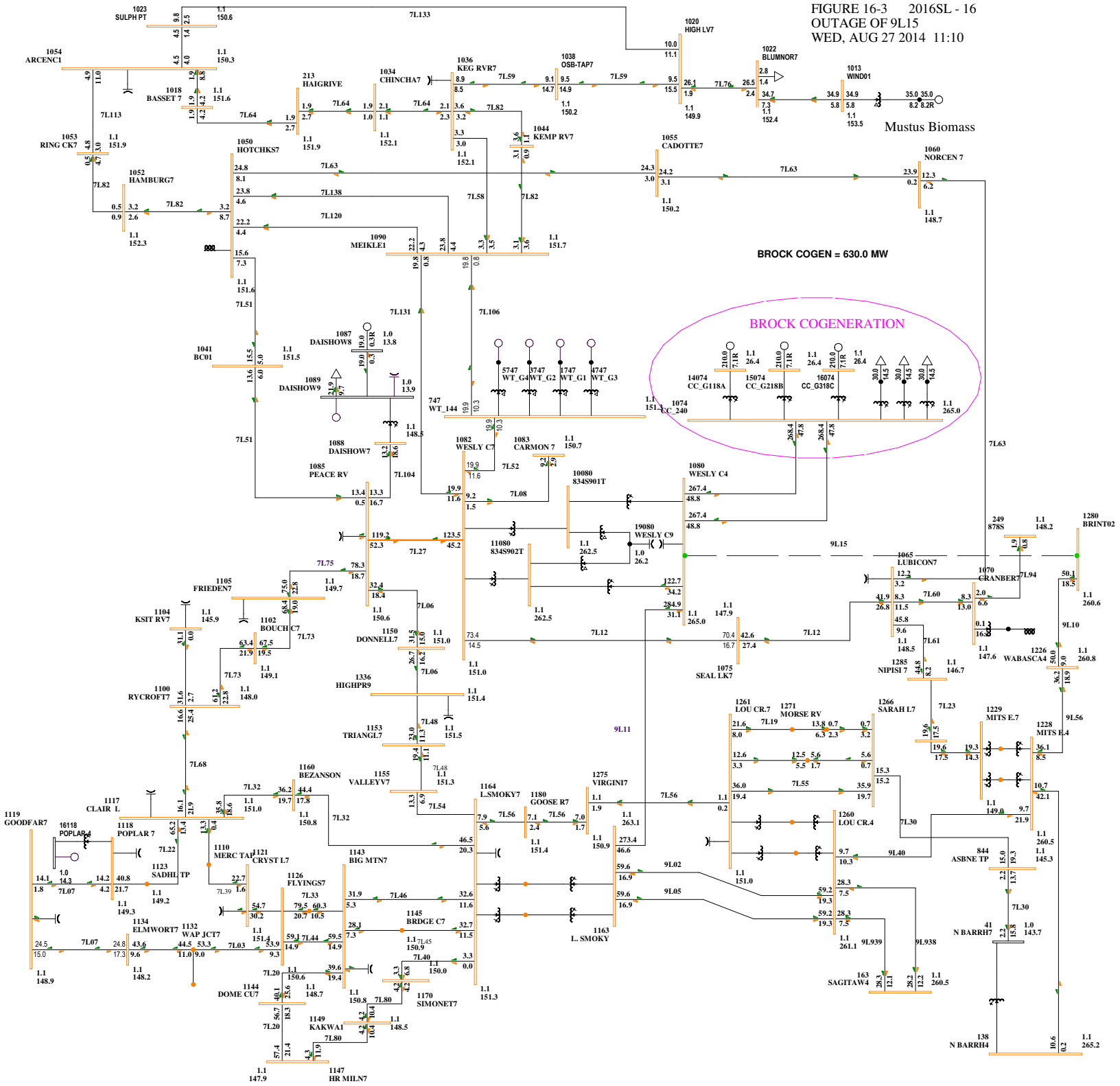


FIGURE 16-4 2016SL - 16
OUTAGE OF 7L22
WED, AUG 27 2014 11:18

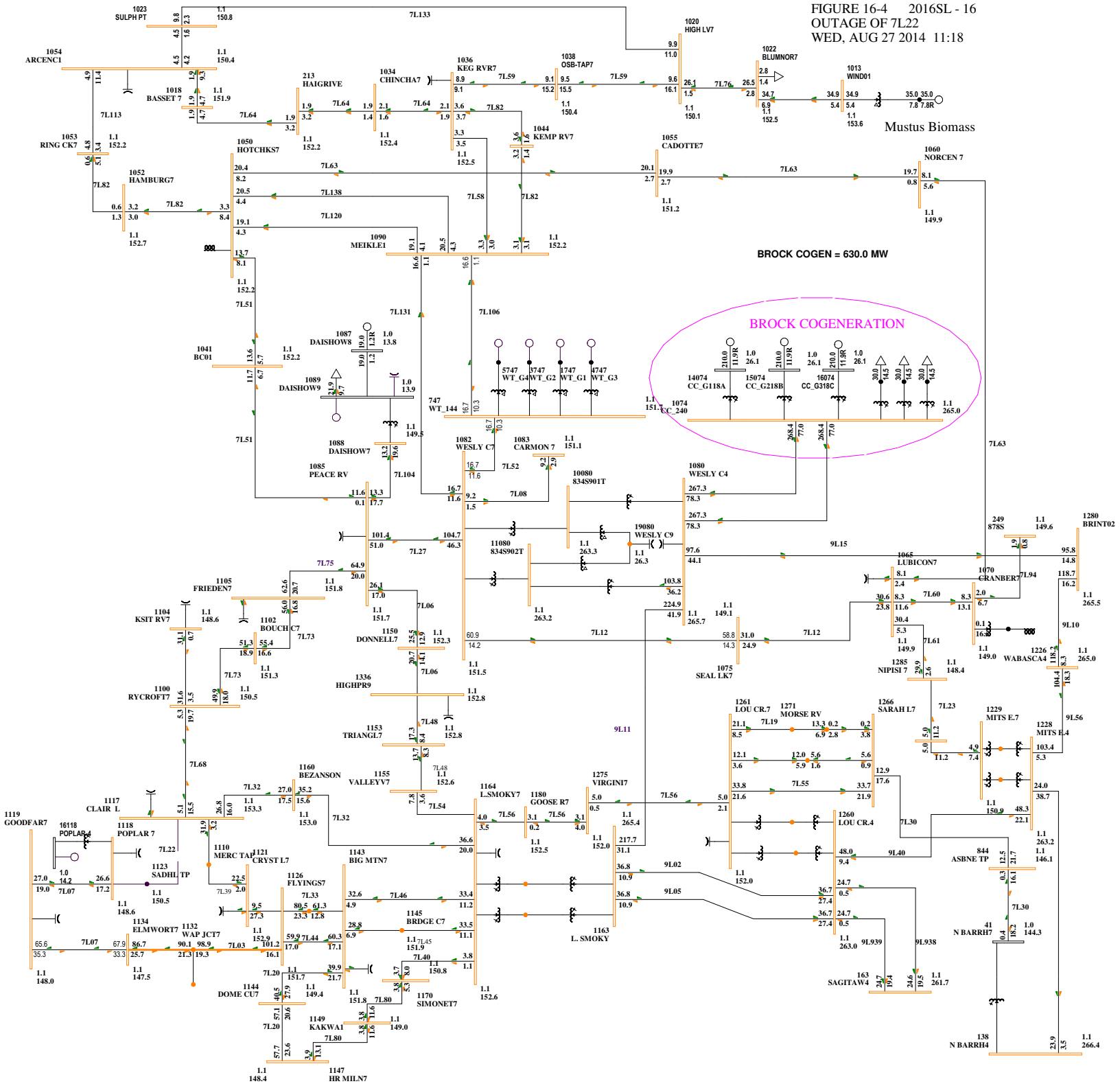


FIGURE 16-5 2016SL - 16
OUTAGE OF 7L12
WED, AUG 27 2014 15:32

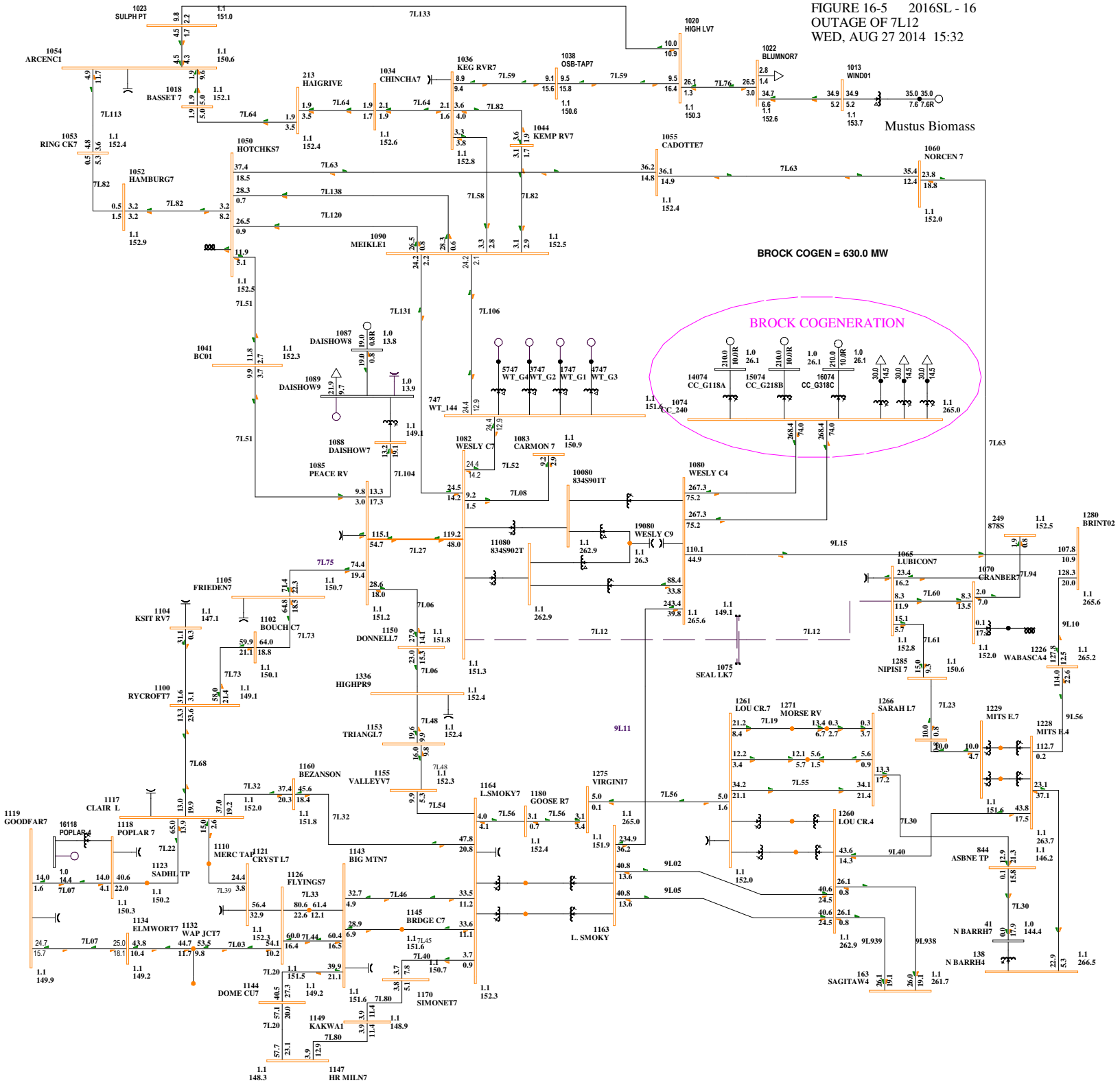
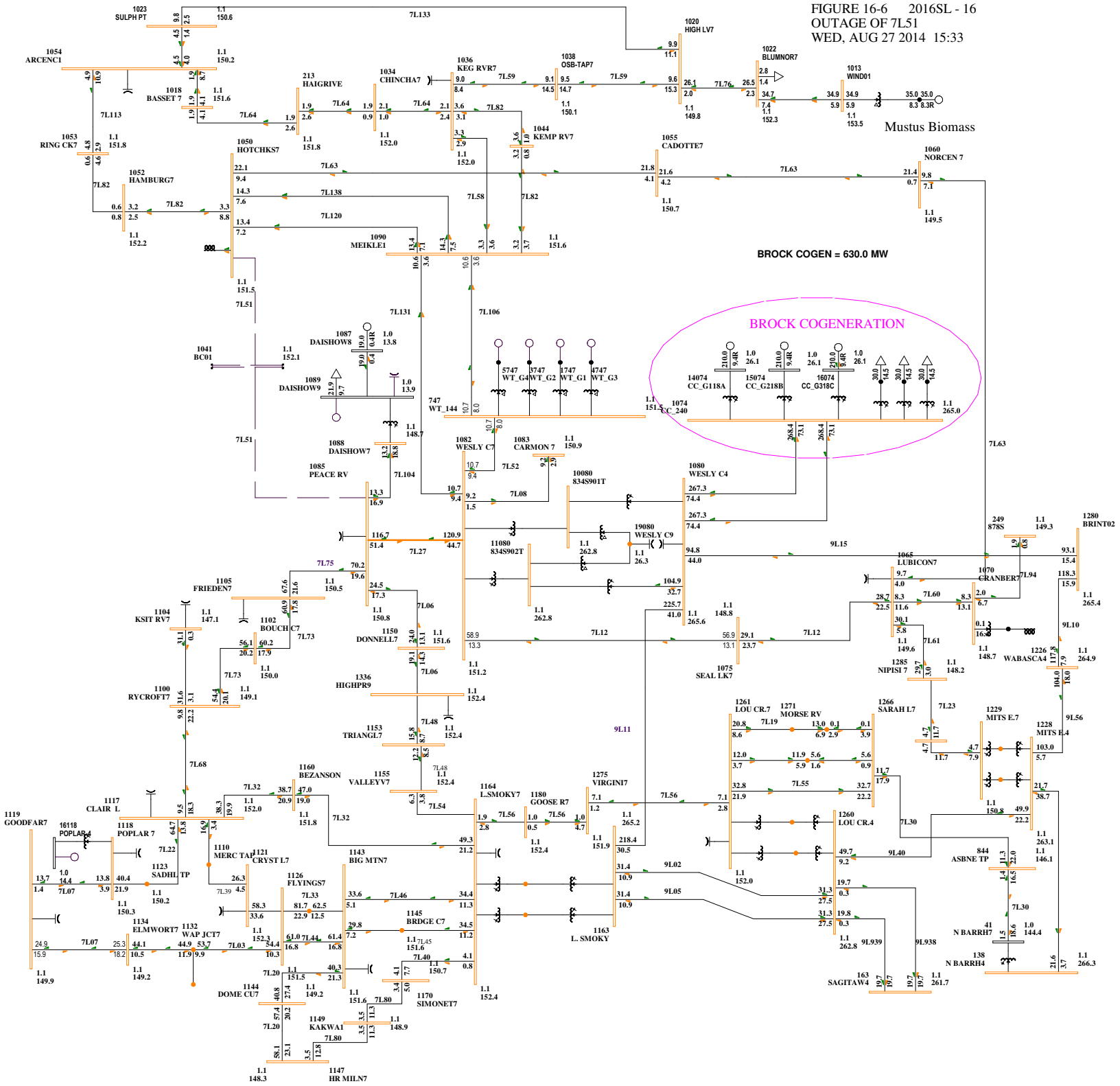


FIGURE 16-6 2016SL - 16
OUTAGE OF 7L51
WED, AUG 27 2014 15:33



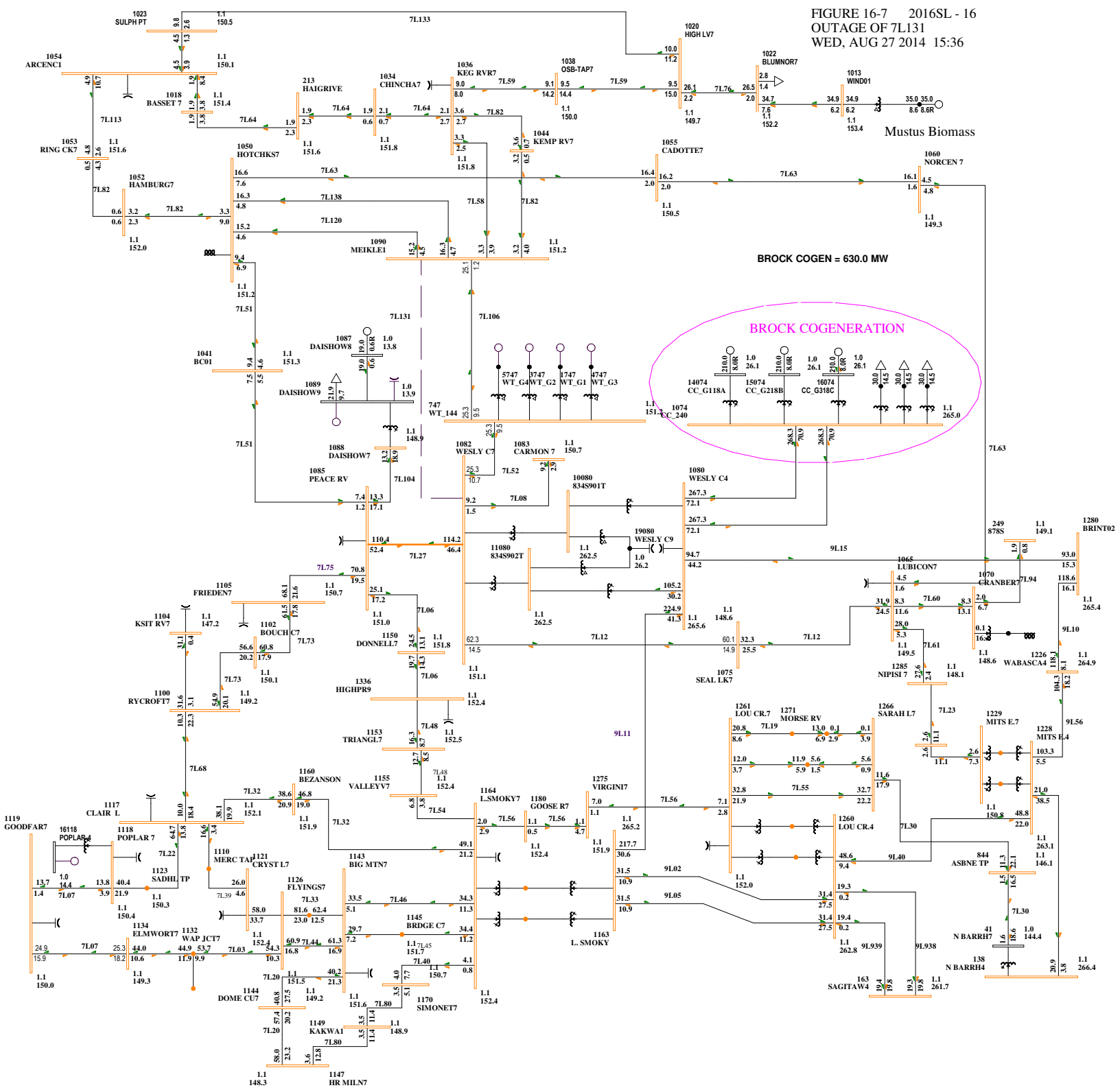


FIGURE 16-7 2016SL - 16
OUTAGE OF 7L131
WED, AUG 27 2014 15:36
Mustus Biomass
BROCK COGEN = 630.0 MW
BROCK COGENERATION
1023 SULPH PT
1054 ARCENC1
1018 BASSET 7
1053 RING CK7
1050 HOTCHKS7
1052 HAMBURG7
213 HAIGRIVE
1034 CHINCHA7
1036 KEG RVR7
1038 OSB-TAP7
1044 KEMP RV7
1020 HIGH LV7
1022 BLUMNOR7
1013 WIND01
1055 CADOTTE7
1060 NORCEN 7
1090 MEIKLE1
1087 DAISHOW8
1089 DAISHOW9
1088 DAISHOW7
1085 PEACE RV
1041 BC01
747 WT_144
5747 WT_G4
3747 WT_G2
1747 WT_G1
4747 WT_G3
14074 CC_G118A
15074 CC_G218B
16074 CC_G318C
1074 CC_240
1082 WESLY C7
1083 CARMON 7
10080 834S901T
11080 834S902T
19080 WESLY C9
1080 WESLY C4
1065 LUBICON7
1070 CRANBER7
249 878S
1280 BRINT02
1226 WABASCA4
1285 NIPISI 7
1075 SEAL LK7
1105 FRIEDEN7
1102 BOUCH C7
1104 KSIT RV7
1150 DONNELL7
1336 HIGHPR9
1153 TRIANGL7
1100 RYCROFT1
1160 BEZANSON
1155 VALLEYV7
1164 L.SMOKY7
1180 GOOSE R7
1275 VIRGINI7
1163 L. SMOKY
1143 BIG MTN7
1145 BRDGE C7
1126 FLYINGS7
1121 CRYST L7
1110 MERC TAP
1117 CLAIR L
1118 POPLAR 7
16118 POPLAR 4
1119 GOODFAR7
1123 SADHL TP
1134 ELMWORT7
1132 WAP JCT7
1144 DOME CU7
1149 KAKWA1
1147 HR MILN7
1170 SIMONET7
1261 LOU CR.7
1271 MORSE RV
1266 SARAH L7
1260 LOU CR.4
1229 MITS E.7
1228 MITS E.4
844 ASBNE TP
41 N BARRH7
138 N BARRH4
163 SAGITAW4
7L133
7L131
7L106
7L63
7L64
7L82
7L51
7L113
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9L02
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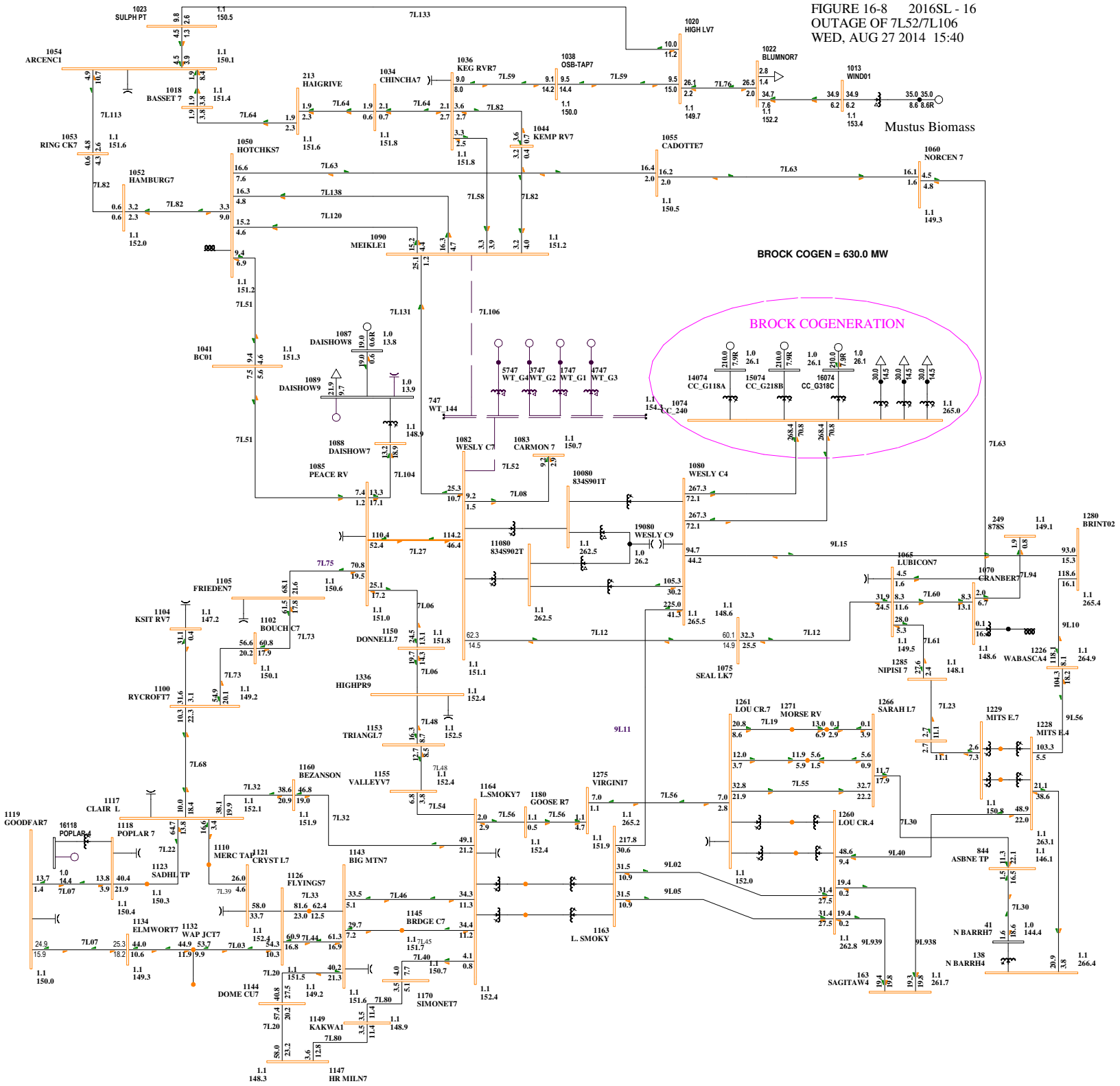
9L939
9L938

FIGURE 16-8 2016SL - 16
OUTAGE OF 7L52/7L106
WED, AUG 27 2014 15:40



Post-Project Power Flow Plot
2016 Winter Peak (Case 17)

FIGURE 17-2 2016WP-17
OUTAGE OF 9L11
WED, AUG 27 2014 15:48

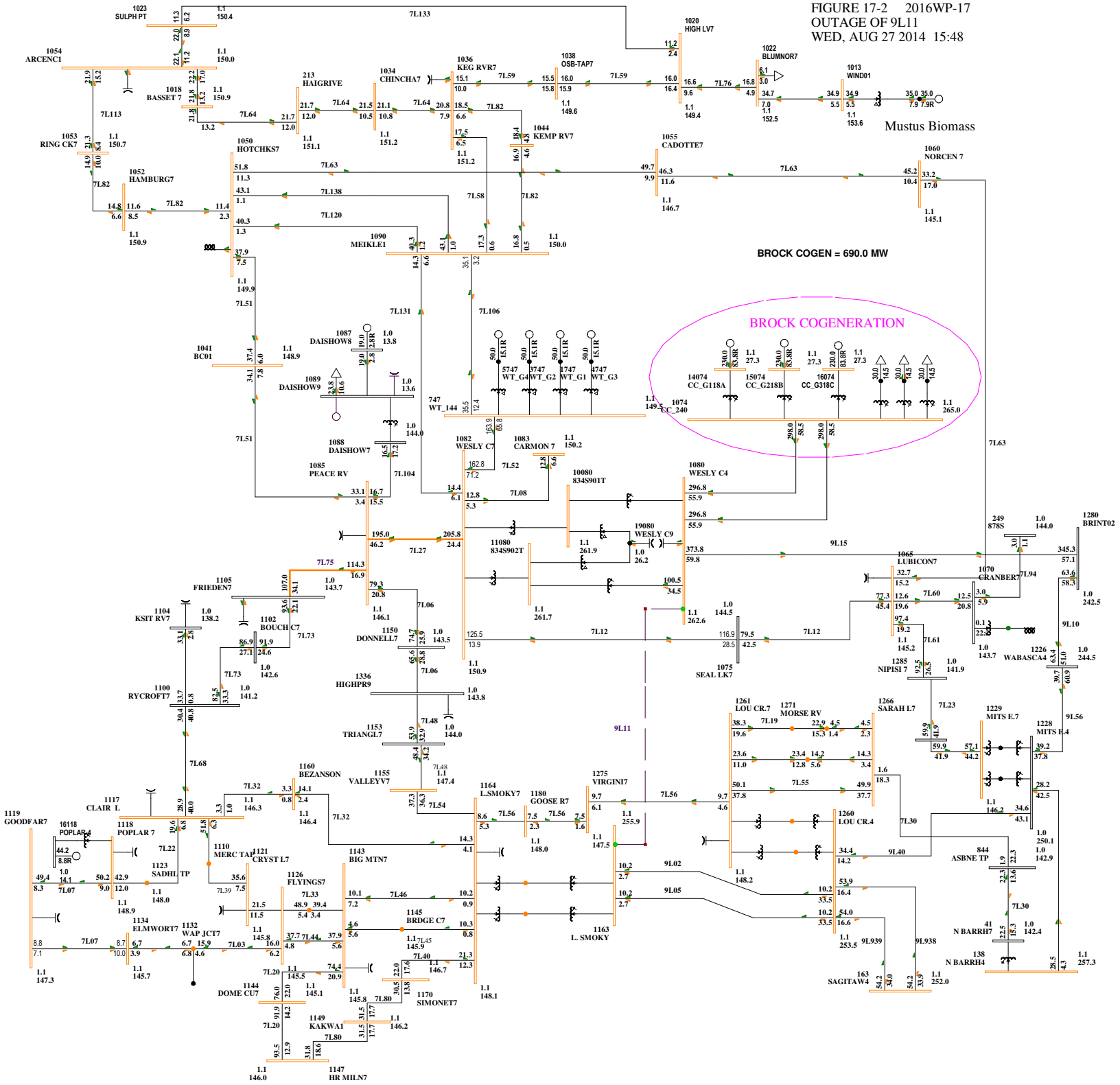


FIGURE 17-3 2016WP-17
OUTAGE OF 9L15
WED, AUG 27 2014 15:50

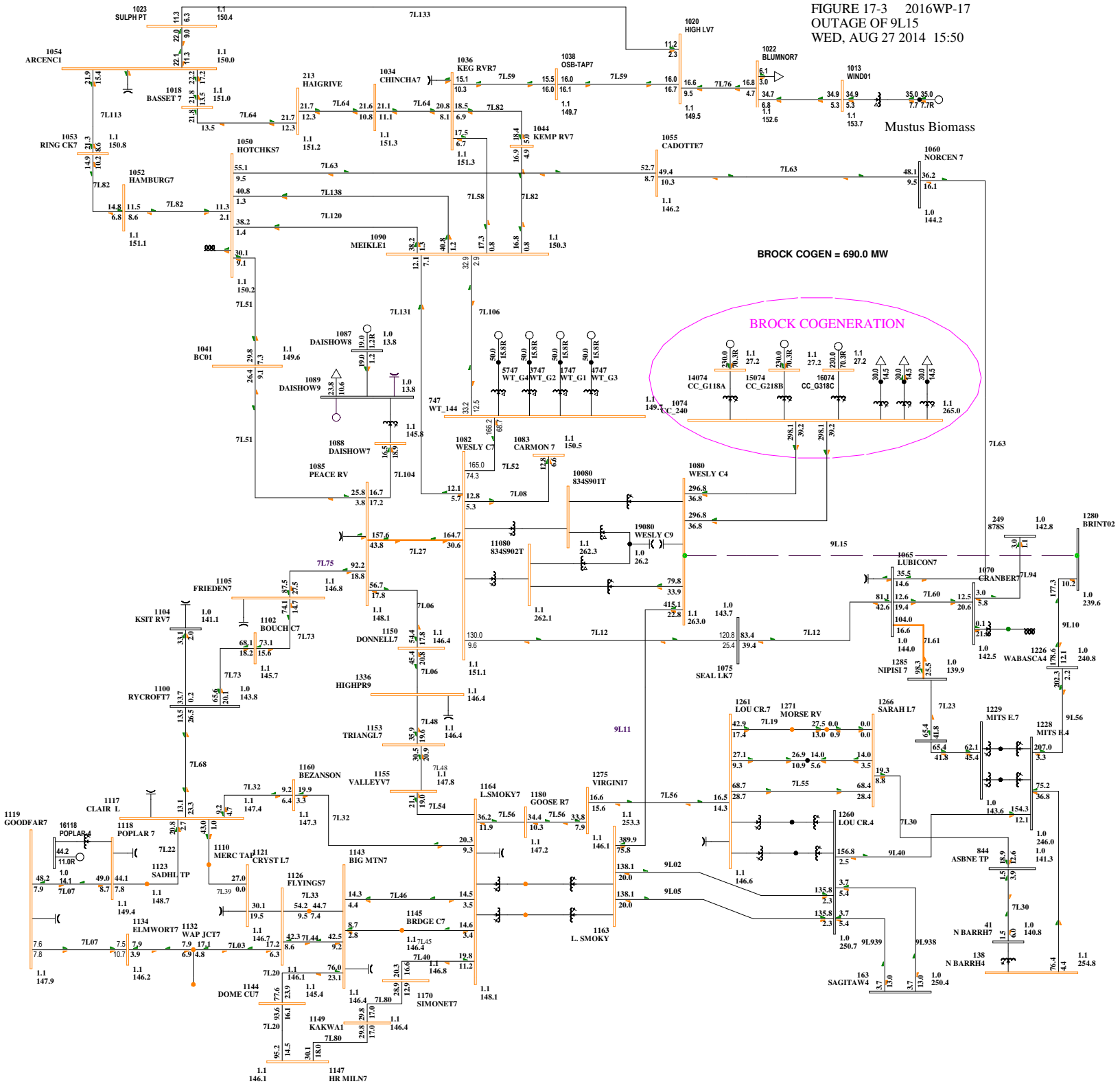
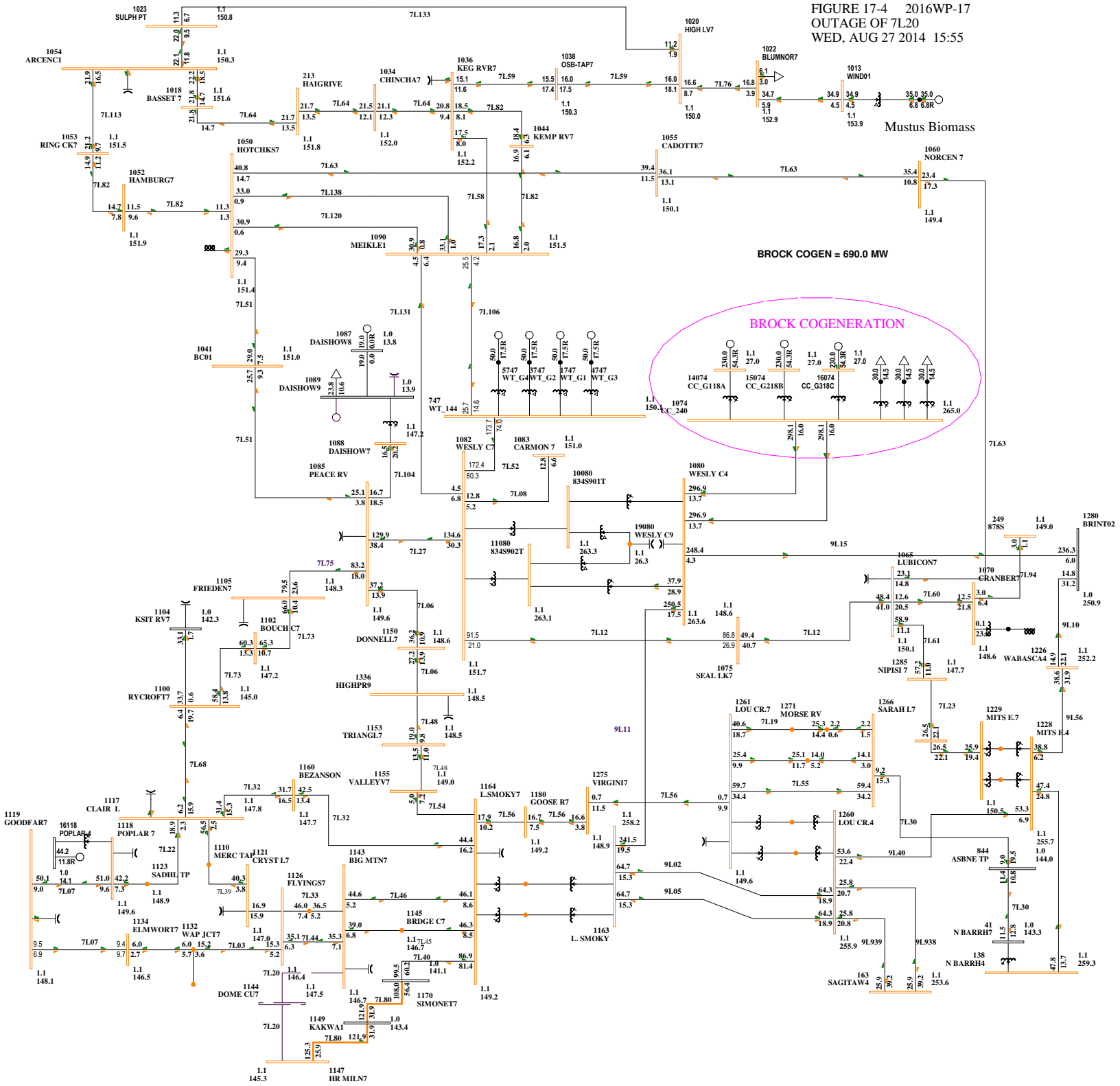


FIGURE 17-4 2016WP-17
OUTAGE OF 7L20
WED, AUG 27 2014 15:55



Attachment G

Generator Effectiveness Factors in Northwest Region

Generator Effectiveness Factors on Northwest Region
(2016 Summer Peak, N-0 condition)

Bus No	*Bus Name*	*ID*	*Area*	*Rating*	Generator Effectiveness Factors 7L27
408	WHITEGE9 12.500	1	26	31.8	-0.02
1015	FORT NE9 13.800	1	17	52.2	-0.04
1019	FORT NE8 13.800	2	17	28	-0.04
1031	RBW 1 14.400	1	17	28.8	-0.04
1032	RBW 2 14.400	2	17	44.1	-0.04
1033	RBW 3 14.400	3	17	19.5	-0.04
1035	RBW 4 13.800	4	17	52.7	-0.04
1037	RBW5 14.400	5	17	52.7	-0.04
1087	DAISHOW8 13.800	2	19	25.1	-0.66
1089	DAISHOW9 13.800	1A	19	40	-0.66
1146	P&G 8 13.800	1A	20	49.2	-0.12
1148	HR MILN9 15.000	1	22	160	-0.14
1167	STURGEA9 14.400	1	23	11.3	-0.06
1168	STURGEB9 4.2000	2	23	8.4	-0.06
1171	VALLEYG1 13.800	1	23	52.7	-0.06
1173	VALLEYG2 13.800	2	23	52.7	-0.06
1232	AEC #29 13.800	G1	21	3	0
1232	AEC #29 13.800	G2	21	3	0
1232	AEC #29 13.800	G3	21	3	0
2296	ALB GENB 13.800	10	26	6.5	0
2296	ALB GENB 13.800	G6	26	6.5	0
2296	ALB GENB 13.800	G7	26	6.5	0
2296	ALB GENB 13.800	G8	26	6.5	0
2296	ALB GENB 13.800	G9	26	6.5	0
4296	ALB GENA 13.800	G1	26	6.5	0
4296	ALB GENA 13.800	G2	26	6.5	0
4296	ALB GENA 13.800	G3	26	6.5	0
4296	ALB GENA 13.800	G4	26	6.5	0
4296	ALB GENA 13.800	G5	26	6.5	0
1747	WT_G1 13.800	G1	19	50	0.12
3747	WT_G2 13.800	G2	19	50	0.12
4747	WT_G3 13.800	G3	19	50	0.12
5747	WT_G4 13.800	G4	19	50	0.12
14074	CC_G118A 25.000	G1	19	230	0.1

15074	CC_G218B 25.000	G2	19	230	0.1
16074	CC_G318C 25.000	G3	19	230	0.1
16118	POPLAR-4 13.800	1	20	52.7	-0.16
17101	GPEP39 13.800	2	20	28.8	-0.12
17120	LOWE2 13.800	1	20	79.2	-0.16
18142	BEARCK2 13.800	1	20	58	-0.12
19142	BEARCK3 13.800	2	20	38.6	-0.12
19145	BRDGE C9 25.000	1	20	6	-0.15
20134	ELMWORTH 6.9000	9	20	9.2	-0.16

Note:

1. Negative generator effectiveness factors means that power flow over specific line will proportionally decrease with the increase of generation
2. Positive generator effectiveness factors means that power flow over specific line will proportionally increase with the increase of generation
3. Highlighted are generators with higher generator effectiveness factors