Alberta Reliability Standards Program Work Plan Update: January 2018 Contact: ars_comments@aeso.ca

	NERC and WECC Standards	Applicability	Related ISO Rules	Stakeholder Consultation	Forward to the AUC	Forecast Effective Date ²
1. Approved by Al	JC					
FAC-008-AB-3	Facility Ratings Methodology	MP	Sections 502.15, 304.6 and 502.2 of the ISO rules	Mar 23 2017 - Apr 20, 2017 Defined terms consultation: April 7, 2017 - May 5, 2017	October 2 2017	January 1, 2019 – New Facilities January 1, 2020 – Existing Facilities
2. Forwarded to the						
3. Under Develop	nent					
PER-003-AB-1	Operating Personnel Credentials	ISO/MP		November 23 2017	Q1 2017	The first day of the calendar quarter following three full calendar quarters after approval by the Commission
PRC-025-AB-1	Generator Relay Loadability	MP	Section 502.5 of the ISO rules	Q1 2018	Q2 2018	The first day of the calendar quarter that follows twenty full calendar quarters after approval by the Commission
PRC-023-AB-4	Transmission Relay Loadability	MP		Q1 2018	Q2 2018	The first day of the calendar quarter following one full calendar quarter after approval by the Commission
PRC-005-AB-6	Protection System, Automatic Reclosing, and Sudden Pressure Relaying Maintenance	MP		Q1 2018	TBD	TBD
CIP-014-AB-2	Physical Security	ISO/MP	Section 501.2 of the ISO rules	TBD	TBD	TBD
COM-001-AB-3	Communications	ISO/MP	Section 502.4 of the ISO rules	Q2 2018	Q3 2018	TBD
COM-002-AB-4	Operating Personnel Communications Protocols	ISO/MP		Q2 2018	Q3 2018	TBD
TOP-007-WECC-AB1-1	System Operating Limits	ISO		N/A - Recommend Retirement of Standard	January, 2018	The first business day of the week following approval by the Commission
TOP-007-AB-0	Reporting System Operating Limit and Interconnection Reliability Operating Limit Violations	ISO		N/A - Recommend Retirement of Standard	January, 2018	The first business day of the week following approval by the Commission
PER-001-AB-0.2	Operating Personnel Responsibility and Authority	ISO		N/A - Recommend Retirement of Standard	January, 2018	The first business day of the week following approval by the Commission
INT-006-AB-4	Response to Interchange Authority	ISO		N/A	Q1 2018	The first day of the calendar quarter following one full calendar quarter after approval by the Commission
INT-009-AB-2.1	Implementation of Interchange	ISO		N/A	Q1 2018	The first day of the calendar quarter following one full calendar quarter after approval by the Commission
INT-010-AB-2.1	Interchange Initiation of Modification for Reliability	ISO		N/A	Q1 2018	The first day of the calendar quarter following one full calendar quarter after approval by the Commission
INT-001-AB-3	Interchange Information	ISO		N/A - Recommend Retirement of Standard	Q1 2018	The first day of the calendar quarter following one full calendar quarter after approval by the Commission
INT-003-AB-2	Interchange Transaction Implementation	ISO		N/A - Recommend Retirement of Standard	Q1 2018	The first day of the calendar quarter following one full calendar quarter after approval by the Commission
4. Development P	ending					
BAL-001-2	Real Power Balancing Control Performance	ISO				In effect in US, July 1, 2016
BAL-003-1.1	Frequency Response	ISO				In effect in US, April 1, 2015
BAL-006-2	Inadvertant Interchange	ISO				In effect In US, April 1, 2014
MOD-025-AB-2	Verification and Data Reporting of Generator Real and Reactive Power Capability and Synchronous Condenser Reactive	MP				In effect in US, July 1, 2016
PRC-019-AB-2	Coordination of Generating Unit or Plant Capabilities, Voltage Regulating Controls, and Protection	MP				In effect in US, July 1 2016

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	NERC and WECC Standards	1	Rules	Consultation	AUC	Forecast Effective Date ²
5. First Version to	be Adopted in Alberta - FERC Approved				Status	
EOP-010-1	Geomagnetic Disturbance Operations			In effect in US, April 1, 2015; R5 in effect on April 1, 2017		
EOP-011-1	Emergency Operations				In effect in US, April 1	
FAC-013-2	Assessment of Transfer Capability for the Near-term Transmission Planning Horizon			FERC approved November 11, 2011		
IRO-017-1	Outage Coordination				In effect in US, April 1	1, 2017
MOD-001-1a	Available Transmission System Capability				In effect in US, April 4	l, 2011
MOD-008-1	Transmission Reliability Margin Calculation Methodology				In effect in US,June 1	8, 2007
MOD-026-1	Verification of Models and Data for Generator Excitation Control System or Plant Volt/Var Control Functions			FERC approved March 20, 2014		
MOD-027-1	Verification of Models and Data for Turbine/Governor and Load Ctrl				FERC approved March	20, 2014
MOD-029-2a	Rated System Path Methodology				In effect in US, July 1	, 2014
MOD-031-2	Demand and Energy Data				In effect in US, October	
MOD-032-1	Data for Power System Modeling and Analysis				In effect in US, July 1	, 2015
MOD-033-1	Steady-State and Dynamic System Model Validation				In effect in US, July 1	
PRC-002-2	Disturbance Control Performance	ISO/MP			In effect in US, July 1	
PRC-006-2	Automatic Underfrequency load shedding	ISO/MP			In effect in US, October	
PRC-015-1	Special Protection System Data and Documentation		704C		In effect in the US, Apri	
PRC-016-1	Remedial Action Scheme Misoperations				In effect in the US, Apri	•
PRC-017-1	Remedial Action Scheme Maintenance and Testing				In effect in the US, Apri	•
PRC-024-2	Generator Frequency and Voltage Protective Relay Settings	MP			In effect in the US, July	•
TOP-001-3	Transmission Operations				In effect in US, April 1	•
TOP-002-4	Operation Planning				In effect in US, April 1	•
TOP-003-3	Operational Reliability Data			In effect in US, January 1		except R5) R5 in effect April 1, 2017
TOP-004-2	Transmission Operations				In effect in US, January	
TOP-008-1	Response to Transmission Limit Violations				In effect in US, June 1	8, 2007
	Adopted Standards - FERC Approved				Status	
BAL-002-2	Disturbance Control Standard - Contingency Reserve for Recovery from a Balancing Contingency Event			FERC A _l	pproved January 19, 2017	
BAL-005-1	Balancing Authority Control				In effect in the US Janua	•
CIP-003-6	Cyber Security - Security Management Controls				In effect in US, April 1	
CIP-004-6	Cyber Security - Personnel and Training				, ,	3,4.4 in effect July 1, 2017)
CIP-006-6	Cyber Security - Physical Security of BES Cyber Systems			In effect in	n US, July 1, 2016 (R3.1 i	, ,
CIP-007-6	Cyber Security - System Security Management				In effect in US, July 1	
CIP-009-6	Cyber Security - Recovery Plans for BES Cyber Systems				JS, July 1, 2016 (R2.1 -2.:	, ,
CIP-010-2	Cyber Security - Configuration Change Management and Vulnerability Assessments			In effect in US, August 5,	2016 (all requirements, e	except R4) R4 in effect April 1, 2017
CIP-011-2	Cyber Security - Information Protection				In effect in US, July 1	, 2016
EOP-001-2.1b	Emergency Operations Planning				In effect in US, July 1	, 2013
EOP-002-3.1	Capacity and Energy Emergencies				In effect in US, September	
EOP-003-2	Load Shedding Plans				In effect in US, October	
EOP-004-3	Event Reporting				In effect in the US, Apri	l 1, 2017
FAC-001-3	Facility Interconnection Requirements				In effect in the US Janua	ary 1 2019
FAC-002-2	Facility Interconnection Studies				In effect in US, January	· ·
FAC-003-4	Transmission Vegetation Management				In effect in US, October	
FAC-010-3	System Operating Limits Methodology for the Planning Horizon				In effect in the US, Apri	l 1, 2017
FAC-011-3	System Operating Limits Methodology for the Operations Horizon				In effect in the US, Apri	l 1, 2017
IRO-001-4	Reliability Coordination - Responsibilities				In effect in US, April 1	, 2017
IRO-002-4	Reliability Coordination - Monitoring and Analysis				In effect in US, April 1	1, 2017
IRO-008-2	Reliability Coordinator Operational Analyses and Real-time Assessments				In effect in US, April 1	1, 2017
IRO-010-2	Reliability Coordinator Data Specification and Collection			R1, R2, in effect	ct in US, January 1, 2017.	R3 in effect April 1, 2017
IRO-014-3	Coordination Among Reliability Coordinators				In effect in US, April 1	1, 2017
IRO-018-1(i)	Reliability Coordinator Real-time Reliability Monitoring and Analysis Capabilities				In effect in the US Apri	l 1 2018
MOD-019-0.1	Reporting of Interruptible Demands and Direct Control Load Management				FERC Approved, May	13, 2009
PRC-004-5(i)	Protection System Misoperation Identification and Correction				In effect in US, April 2	
PRC-004-WECC-2	Protection System and Remedial Action Scheme Misoperation				In effect in the US, Apri	
PRC-010-1	Undervoltage Load Shedding				In effect in US, April 2	
PRC-012-2	Remedial Action Schemes				In effect in the US Janua	
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	NERC and WECC Standards	Applicability 1	Related ISO Rules	Stakeholder Consultation	Forward to the AUC	Forecast Effective Date ²
PRC-026-1	Relay Performance During Stable Power Swings			R1 in effect in US, January 1, 2018. R2 to R4 in effect January 1, 2020		
TOP-001-4	Transmission Operations				In effect in the US July	1 2018
TOP-010-1(i)	Real-time Reliability Monitoring and Analysis Capabilities				In effect in the US Apri	1 2018
TPL-001-4	Transmission System Planning Performance Requirements			In effect in the US, January 1, 2015		
TPL-007-1	Transmission System Planned Performance for Geomagnetic Disturbance Events			In effect in the US, July 1, 2017. R2 in effect July 1, 2018. R5 in effect January 1, 2019. R3		
VAR-002-WECC-2	Automatic Voltage Regulators			In effect in US, April 1, 2015		
VAR-501-WECC-2	Power System Stabilizers			In effect in US, April 1, 2015		
VAR-002-4	Generator Operation for Maintaining Network Voltage Schedules			FERC Approved, May 29, 2015		
7. New Versions	of Adopted/New Standards - Filed with FERC			Status		
BAL-002-2(i)	Disturbance Control Standard - Contingency Reserve for Recovery from a Balancing Contingency Event				Filed with FERC August	
CIP-003-7	Security Management Controls				Filed with FERC, March	
CIP-005-6	Cyber Security – Electronic Security Perimeter(s)			Filed with FERC, September 26, 2017		
CIP-010-3	Cyber Security – Configuration Change Management and Vulnerability Assessments			Filed with FERC, September 26, 2017		
CIP-013-1	Cyber Security – Supply Chain Risk Management			Filed with FERC, September 26, 2017		
EOP-004-4	Event Reporting			Filed with FERC March 27 2017		
EOP-005-3	System Restoration from Blackstart Resources			Filed with FERC March 27 2017		
EOP-006-3	System Restoration Coordination			Filed with FERC March 27 2017		
EOP-008-2	Loss of Control Center Functionality			Filed with FERC March 27 2017		
IRO-002-5	Reliability Coordination - Monitoring and Analysis			Filed with FERC March 6 2017		
IRO-005-4	Reliability Coordination – Current-Day Operations			Filed with FERC, April 16, 2013		
IRO-009-2	Reliability Coordinator Actions to Operate within IROLs			Filed with FERC, September 16, 2015		
MOD-001-2	Available Transmission System Capability			Filed with FERC, February 10, 2014		
PER-006-1	Specific Training for Personnel			Filed with FERC, September 2, 2016		
PRC-001-2	System Protection Coordination			Filed with FERC, April 16, 2013		
PRC-006-SERC-02	Automatic Underfrequency Load Shedding Requirements			Filed with FERC September 8 2017		
PRC-027-1	Coordination of Protection Systems for Performance During Faults			Filed with FERC, September 2, 2016		
TOP-006-3	Monitoring System Conditions			Filed with FERC April 4, 2013		
VAR-001-4.2	Voltage and Reactive Control			Filed with FERC, August 18, 2017		
VAR-002-4.1	Generator Operation for Maintaining Network Voltage Schedules			Filed with FERC, August 18, 2017		
VAR-501-WECC-3.1	Power System Stabilizer			Filed with FERC August 18 2017		
8. New Versions	of Adopted/New Standards - NERC BOT Approved				Status	
PRC-005-5	Protection System, Automatic Reclosing and Sudden Pressure Relaying Maintenance				NERC BOT approved Ma	ay 7, 2015
9. Projects to be	Confirmed N/A in Alberta - FERC Approved				Status	

Changes from the last posting are in red text.

Footnote 1 - For new standards, the applicability represents the entities that the amendments apply to.

Footnote 2 - The effective date is not firm and the actual date is dependent upon approval by the Commission.

Footnote 3 - The AESO reviewed the standard and came to the conclusion that the proposed changes do not directly affect market participants. Therefore, consultation with market participants to address the foregoing is not required.

The Alberta Reliability Standards Project Work Plan (the "Work Plan") is for general information purposes only and the Alberta Electric System Operator reserves the right to change or modify the Work Plan at any time without notice. Under no circumstances will the Alberta Electric System Operator, its members, officers, employees, contractors or agents, or any of their respective affiliates, be liable for any errors or omissions in, or any losses, damages or claims whatsoever, whether in contract, tort or otherwise, arising from use of or reliance upon, the Work Plan or any information contained herein. Parties using or relying on the Work Plan do so solely at their own risk, and all information contained herein should be independently verified.