

AESO Transmission Customer (Generation and Load) Projects - Quarterly Report



- see notes at the end of this document for report terminology and definitions

Project Number	Project Name	Project Description	Need Description	NID Filed	NID Approved	P and L Filed	P and L Approved	Forecast or Actual ISD	TFO	Year NID Valid	NID Estimate	PPS Estimate	TFO Forecast Cost	Project Status
308	ENMAX 26S substation modifications	ENMAX 26S New Substation Construction	DFO Load Growth	2005-03-10	2005-11-25	2008-09-08	2008-10-21	2008-11-21	ENMAX	2005	6,350,000	5,455,890	5,450,000	Awaiting TFO Final Costs
376	TransAlta Wind Blue Trail Wind Farm	Transmission Facilities to accommodate a 66 MW Wind Farm	Wind Generation Addition or Upgrades	2008-11-19		2008-11-26		2010-07-05	AML	2007	630,000	514,000	514,000	Awaiting AUC Decision on Combined Filing
									TransAlta			211,001	211,001	
384	ENMAX Taber Wind Project	138 kV Transmission line upgrades as well as upgrades at Fincastle 336S and Taber Wind 134S	Wind Generation Addition or Upgrades	2006-04-25	2006-07-18	2006-05-16	2006-05-23	2006-12-25	AML	2006	6,350,000	7,100,000	7,100,000	Commissioning Phase
389	Vision Quest Seven Persons Wind Farm	Transmission upgrades to supply 120 MW Wind Farm.	Wind Generation Addition or Upgrades					2999-12-31	AML					Planning Stage
392	VisionQuest - Waterton Wind Farm	Transmission upgrades to supply 300 MW Wind Farm.	Wind Generation Addition or Upgrades					2999-12-31	AML					Planning Stage
393	TransAlta Wind Summerview Ph. II Wind Farm	Transmission upgrades to supply 60 MW Wind Farm near Pincher Creek.	Wind Generation Addition or Upgrades					2011-06-30	AML		1,179,337		1,179,337	Planning Stage
423	CNRL Horizon Project 240 kV Connection	Add 240 kV breaker at Dover and termination of 9L08. Expansion of Joslyn Creek to add 5-240 kV breakers and termination of 9L09, 9L66 and two 240 kV lines (owned by CNRL) to CNRL Horizon station.	Industrial Interconnection or Expansion	2004-12-22	2005-04-22	2006-05-03	2006-06-12	2007-08-21	ATCO	2004	13,800,000	15,048,000	14,260,000	Commissioning Phase
425	ENMAX No. 6 Substation	New 138 kV distribution point of delivery DTS	DFO Load Growth	2004-09-08	2005-03-04	2007-03-31	2008-06-06	2009-06-30	ENMAX	2004	6,050,000	5,955,000	8,005,490	Under Construction

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437	ATCO Brintnell Transformer Upgrade	Install two 25kV breakers, a bus tie MOD, and a 25kV gangswitch complete with protection and control. Relocate spare 260-25kV LTC transformer from Paintearth sub to new bay at Brintnell sub. Relocate high impedance transformer 901T from Brintnell to spare bay at Paintearth. Salvage 42MVA voltage regulator at Brintnell and install a new 30/40/50MVA voltage regulator at Paintearth.	DFO Load Growth	2008-02-20	2008-07-30	2008-11-07	2009-03-11	2009-06-30	ATCO	2007	3,116,000	4,822,200	4,368,000	Awaiting AUC Decision On Facilities Application
440	Fortis- New Dry Creek (Airdrie) Sub	New 138/25 kV Substation and transmission line	DFO Load Growth	2004-12-23	2005-05-13	2006-11-22	2007-03-16	2008-12-01	AML	2004	7,000,000	11,500,000	12,500,000	Awaiting TFO Final Costs
444	MEG Energy 240 kV Interconnection	25km of 240 kV line and modifications to Christina Lake substation to connect MEG Energy customer owned Conklin substation.	Industrial Interconnection or Expansion	2005-09-19	2005-12-08	2005-09-19	2005-12-08	2006-09-21	AML	2005	10,654,000	10,654,000	14,224,871	Awaiting TFO Final Costs
456	ENMAX No.47 Substation	New 138/25 kV substation with 1 - 30/40/50 MVA transformer, 10 - 25 kV breakers. Approximately 12 km of transmission line to interconnect the new station. 1 - 138 kV breaker at Beddington 162S DTS	DFO Load Growth	2006-06-30	2006-10-02	2008-04-25		2010-06-30	AML			1,980,000	1,980,000	Awaiting AUC Decision On Facilities Application
									ENMAX	2008	13,120,000	14,630,346	14,630,346	
459	Suncor Chin Chute Wind Farm	20km of 138 kV transmission line.	Wind Generation Addition or Upgrades	2006-04-18	2006-05-12	2006-05-16	2006-08-18	2006-10-30	AML	2006	3,950,000	5,885,000	5,516,000	Awaiting TFO Final Costs
462	Enel Alberta Castle Rock Wind Farm	Wind Power Inc Transmission Facilities to accommodate 115MW Wind Farm	Wind Generation Addition or Upgrades					2010-08-10	AML	2008	48,997,516		48,997,516	Preparing Need Filing
473	BA Energy Heartland Project	New point of interconnection for the Heartland upgrader project to service 35 MW of load	Industrial Interconnection or Expansion	2006-06-23	2006-07-18	2006-11-14	2007-06-19	2007-12-20	AML	2005	11,669,919	9,700,000	11,336,575	Awaiting TFO Final Costs

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475	Syncrude G11, G12, G21 Upgrade	Syncrude G11, G12 & G21 generators	Gas Generation Addition or Upgrades	2005-05-10	2005-11-07	2006-07-18	2006-07-18	2008-10-15						Commissioning Phase
476	Kinder Morgan Watson Creek 104S	20 km of 138 kV transmission lines and a 138/4.16 kV substation.	Industrial Interconnection or Expansion	2006-05-15	2006-06-09	2006-08-23	2006-10-31	2007-12-07	AML	2005	8,000,000	11,900,000	14,233,601	Awaiting TFO Final Costs
477	Kinder Morgan Bilby 105S	New 138 kV transmission tap.	Industrial Interconnection or Expansion	2006-05-15	2006-06-09	2006-08-02	2006-09-26	2007-01-22	AML	2005	360,000	830,000	830,000	Awaiting TFO Final Costs
478	Kinder Morgan Paddle River 106S	0.1km of 138 kV transmission line and 138/4.16 kV substation.	Industrial Interconnection or Expansion	2006-01-30	2006-06-16	2006-08-02	2006-09-06	2007-05-03	AML	2005	4,100,000	4,200,000	4,550,000	Awaiting TFO Final Costs
479	Naturener Wild Rose Wind Farm	Transmission Facilities to interconnect West Windeau Inc. a proposed 200 MW Wind Farm	Wind Generation Addition or Upgrades					2010-12-23	AML					TFO/AESO Preparing Combined Filing
482	Montana Alberta Tie (MATL)	Build a new substation 6 km north of Lethbridge including 3-240 kV breakers in a ring configuration and 1km of D/C 240kV line to accommodate MATL interconnection.	Merchant Line	2006-04-22	2008-01-31	2006-12-13	2008-01-31	2010-06-15	AML	2006	7,834,445	9,200,000	9,200,000	AUC Approved - Facilities Approval Conditions Met
487	ATCO Updike 886S	30km of new 138 kV transmission line and new 144/2 5kV substation. DTS	DFO Load Growth	2006-05-25	2006-08-30	2008-10-08		2010-02-01	ATCO	2005	5,956,000	13,023,000	9,028,000	Awaiting AUC Decision On Facilities Application
496	Suncor Firebag Stage 3	2 New Co-Gen Plants, new 260 kV transmission Line	Gas Generation Addition or Upgrades					2013-09-01						Behind The Fence Work
500	Transalta Keephills 3	The addition of 3 - 500 kV breakers and completion of 500 kV main bus and two diameters. Interconnection of Keephills 3 generator to one of the 500 kV diameters.	Coal Generation Addition or Upgrades	2008-01-13	2008-06-20			2010-02-26	AML	2010	31,727,170	75,029,737	67,149,011	TFO Preparing Facilities Application
									EPCOR	2010	115,282		115,282	
									TransAlta					
502	Kettles Hill Wind Farm Expansion	Minimal TFO work involving Scada upgrades and additional PMU data gathering - Customer owned substation will be adding two 138/34.5 kV, 40 MVA transformers	Wind Generation Addition or Upgrades					2009-12-01	AML	2008	26,900		26,900	Planning Stage

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503	Crystal Lake 722S add 2nd 144/25 kV, 30/40/50 MVA transformer and 144 kV breaker	Add second 144/25 kV, 30/40/50 MVA transformer and 144 kV breaker at Crystal Lake 722S substation.	DFO Reliability Requirements	2006-04-20	2006-05-12	2008-06-11	2008-11-14	2008-12-15	ATCO	2007	2,300,000	3,789,000	3,789,000	Awaiting TFO Final Costs
506	EPCOR New Clover Bar 25 kV supply	Establish 25 kV supply at CloverBar for EDI DTS	DFO Load Growth	2006-08-22	2006-10-12	2007-01-19	2007-03-12	2009-01-29	EPCOR	2006	7,800,000	8,800,000	11,580,545	Awaiting TFO Final Costs
509	Naturener Yagos Wind Farm	Transmission Facilities to interconnect a 100 MW Wind Farm located near Pincher Creek. Plans indicate connection to Goose Lake.	Wind Generation Addition or Upgrades					2999-12-31	AML	2007	10,043,787		10,043,785	Planning Stage
510	ENEL Alberta HWY 785 Wind Farm	Transmission Facilities to accommodate 235MW Wind Farm	Wind Generation Addition or Upgrades					2999-12-31	AML					Planning Stage
513	Pteragen Peace Butte 116 MW Wind Farm	Transmission Facilities to interconnect a 116 MW Wind Farm south of Bullshead 523S. T-tap to 600L Tothill 219S	Wind Generation Addition or Upgrades					2010-04-15	AML	2007	1,192,363		1,192,363	Preparing Need Filing
518	Ghost Pine Wind Farm	Addition of transmission line, T-tap and customer owned substation to 75 MW Wind Farm	Wind Generation Addition or Upgrades					2010-12-01	ATCO	2006	2,668,564		2,668,564	TFO/AESO Preparing Combined Filing
519	Alberta Wind Energy Old Man River Wind Farm	Addition of transmission line, T-tap and customer owned substation to 46 MW Wind Farm	Wind Generation Addition or Upgrades					2010-12-31	AML	2006	9,336,476		9,336,476	Preparing Need Filing
524	Enel Alberta Riverview Wind Farm	Altalink Transmission Facilities to accommodate 115MW Wind Farm	Wind Generation Addition or Upgrades					2999-12-31	AML					Planning Stage
526	Fortis-TransCanada Keystone Pumpstation #1	Supply to new TransCanada Pumpstation #1. Build Lakesend 508S. 26km 144kV line from Ribstone Creek 892S	Industrial Interconnection or Expansion	2007-11-14	2008-08-18	2009-01-26		2009-12-31	AML	2006	10,129,404	5,562,000	5,562,000	Awaiting AUC Decision On Facilities Application
									ATCO	2006	4,067,000	10,371,000	10,991,000	
527	ATCO Electric - TransCanada Keystone Pumpstation #2	Supply to new TransCanada Pumpstation #2	Industrial Interconnection or Expansion	2007-11-14	2008-04-30	2008-12-22		2009-11-30	ATCO	2006	5,059,000	13,744,000	8,501,000	Awaiting AUC Decision On Facilities Application

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528	Keystone Pump Station #3	Supply to new TransCanada Pumpstation #3	Industrial Interconnection or Expansion	2007-11-14	2008-06-09	2008-12-23		2009-12-31	ATCO	2006	3,903,000	7,857,000	6,181,000	Awaiting AUC Decision On Facilities Application
529	Keystone Pump Station #4	Supply to new TransCanada Pumpstation #4	Industrial Interconnection or Expansion	2007-11-14	2008-04-30	2008-12-22		2009-11-30	AML	2006	75,158	151,000	151,000	Awaiting AUC Decision On Facilities Application
									ATCO	2006	5,803,000	14,639,000	9,216,000	
559	North West Upgrader Facility near Ft Sask	Build new 240 kV transmission line and substation.	Industrial Interconnection or Expansion	2008-06-09				2011-12-11	AML	2006	40,140,856		40,140,856	Awaiting AUC Decision On Need
561	Husky Sunrise	Install about 44 km of single circuit 240 kV transmission line (9L26) from Muskeg River area to the Black Fly 934S (ATCO Owned Station) and 4 km of double circuit 240 kV transmission line to Sunrise 925S (Husky Owned).	Industrial Interconnection or Expansion	2007-05-23	2007-11-22			2012-04-01	ATCO	2010	75,419,620	79,661,000	79,661,000	Planning Stage
563	PetroCanada Fort Hills	Transmission facilities to interconnect Bitumen Extraction Mine and Processing Facility	Industrial Interconnection or Expansion	2007-05-08	2007-11-22	2008-06-09	2008-08-28	2999-12-31	ATCO	2009	11,501,020	12,199,000	12,199,000	Project On Hold
578	Kinder Morgan Canada Terminal	Industrial 240 kV connection North of Fort McMurray.	Industrial Interconnection or Expansion					2999-12-31	ATCO	2007	11,130,000		11,130,000	Project On Hold
579	City of Lethbridge Bowron 674S Upgrade	Upgrade the distribution capacity at Bowron 674S by adding a second transformer. DTS	DFO Load Growth	2007-01-26	2007-02-16	2007-08-16	2007-08-22	2009-06-08	Leth.	2006	2,192,970	2,410,504	2,955,362	Under Construction
583	Shell Albian Muskeg River Mine	Expansion of operations due to the Jack Pine development by Shell.	Industrial Interconnection or Expansion	2007-12-20	2008-02-12	2008-04-09	2008-06-06	2009-05-31	ATCO	2008	600,000	600,000	600,000	Commissioning Phase
584	Fortis South Leduc New Sub	South Leduc New 138/25kV Substation proposed to serve the load growth in the area. DTS	DFO Load Growth					2010-07-27	AML	2008	21,086,684	18,576,000	18,576,000	TFO/AESO Preparing Combined Filing
585	Fortis Broadmoor 420S 138/25 kV Station	Urban 138 kV interconnection. DTS	DFO Load Growth	2008-01-14	2008-04-30	2008-11-17		2009-10-07	AML	2006	11,395,402	10,563,000	10,563,000	Awaiting AUC Decision On Facilities Application

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587	Waupisoo 405S Substation	Enbridge Waupisoo Midpoint Pump Station Connection	DFO Load Growth	2007-04-19	2007-11-09	2007-11-21	2008-01-16	2008-05-21	AML	2008	9,879,588	10,545,000	10,545,000	Awaiting TFO Final Costs
588	Kinder Morgan Jackpine Pumpstation	Industrial 240 kV interconnection.	Industrial Interconnection or Expansion					2999-12-31	ATCO	2007	11,130,000		11,130,000	Project On Hold
593	EPCOR Clover Bar Peaker	Substation additions at CloverBar substation First Phase generation (40 MW) connected to existing 72 kV breaker	Gas Generation Addition or Upgrades	2006-11-27	2007-03-06	2007-03-15	2007-04-27	2009-10-15	EPCOR	2006	2,330,000	2,231,644	2,231,644	Under Construction
595	ATCO-Statoil - Leismer	Transmission Facilities to supply 24 MW of customer load	Industrial Interconnection or Expansion	2007-11-06	2008-03-20	2008-09-23	2009-03-04	2009-09-30	AML	2008	23,592,000	21,000,000	21,000,000	Under Construction
									ATCO	2008	4,820,000	8,704,000	8,704,000	
616	Petro-Canada Fort Hills Sturgeon Upgrader	Build 240 kV line from Lamoureux substation to Sturgeon Upgrader	Industrial Interconnection or Expansion					2999-12-31	AML	2006	24,100,000	40,532,000	40,532,000	Project On Hold
619	Transalta Keephills 3 - Station Service	Addition of a 138 kV supply for Keephills 3 interconnection; install a 138 kV breaker at Keephills 320P and construction of a 138 kV line to Keephills 3 generator site.	Industrial Interconnection or Expansion	2008-02-13	2008-04-30	2008-11-18	2009-01-21	2009-08-07	AML	2009	3,004,160	2,931,805	3,004,160	Under Construction
623	Northern Lights Partnership Mining/Bitumen Extraction On Hold	Install about 60 km of single circuit 240 kV transmission line (9L21) by tapping 9L32 to the Audet 922S (ATCO Owned Station) and short double circuit 240 kV transmission line to Northern Lights 913S (Synenco Owned)	Industrial Interconnection or Expansion					2012-07-01	ATCO	2010	68,039,953		68,039,953	Project On Hold
630	ENMAX No. 37 Feeder Addition	Addition of one feeder originating at No. 37 Substation.	DFO Load Growth	2007-08-14	2007-09-14	2008-05-02	2008-06-13	2009-04-01	ENMAX	2007	497,000	607,921	607,921	Awaiting TFO Final Costs
637	Fortis Tilley 498S Transformer and Breaker Addition	Install a second 138 kV/25 kV supply transformer and 25 kV feeder.	DFO Load Growth	2008-04-21	2008-07-08	2008-04-21	2008-07-08	2008-10-28	AML	2007	3,848,931	3,935,000	4,084,000	Awaiting TFO Final Costs

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641	Syncrude Plant 31 72 kV Switchyard	Load increase with Syncrude ISO	Industrial Interconnection or Expansion					2009-06-30						Planning Stage
643	ENMAX No. 9 Transformer Upgrades	Upgrade the 2 existing 28 MVA transformers to 2 - 50 MVA transformers at the Enmax No. 9 Substation	DFO Load Growth	2007-03-16	2007-04-16	2008-03-06	2008-05-29	2009-09-30	ENMAX	2007	5,214,131	5,775,408	5,775,408	Under Construction
648	FortisAlberta Sylvan Lake New Substation	New 138/25 kV Substation DTS	DFO Load Growth	2007-11-01	2008-06-26	2009-01-30		2009-10-01	AML	2007	15,162,375	11,093,000	11,093,000	Awaiting AUC Decision On Facilities Application
649	Enbridge Rosyth Transformer Addition	Transformer addition to Enbridge Rosyth 296S.	Industrial Interconnection or Expansion	2007-10-12	2007-11-09	2007-11-20	2007-12-05	2008-09-04	AML	2007	4,192,917	4,371,000	4,012,373	Awaiting TFO Final Costs
650	FortisAlberta Burdett Transformer Addition	Installation of a 25/33/42 MVA, 138/25kV transformer.	DFO Load Growth	2007-10-23	2008-02-21	2008-04-21	2008-07-07	2008-12-11	AML	2007	3,949,000	4,359,000	4,645,000	Awaiting TFO Final Costs
651	FortisAlberta Balzac Transformer Addition	Installation of a second 138kV/25kV, 25/33/42 MVA supply transformer and two additional 25 kV breakers in Balzac 391S substation.	DFO Load Growth	2008-04-25	2008-07-08	2008-04-25	2008-07-08	2008-10-28	AML	2007	4,375,654	4,192,000	4,454,000	Awaiting TFO Final Costs
652	FortisAlberta Stavely Transformer Addition	Replace existing 12/13.5 MVA transformer and 15MVA 25 kV regulator pair with a 15/20/25 MVA LTC transformer.	DFO Load Growth	2007-10-17	2007-11-29	2008-01-11	2008-02-15	2008-10-20	AML	2007	4,866,136	4,263,000	4,859,137	Awaiting TFO Final Costs
655	FortisAlberta Devon 14S Conductor Upgrade	Upgrade overhead conductor from 3/0 to 477 MCM	DFO Reliability Requirements			2008-07-18	2008-08-21	2008-12-23	AML	2006	308,474	441,000	473,800	Awaiting TFO Final Costs
656	TransAlta Sundance 5 Upgrade	Upgrade existing Sundance Unit 5 to 53 MW of Net Generation	Coal Generation Addition or Upgrades	2007-08-01	2007-09-07			2009-08-06						Under Construction
658	FortisAlberta Fort Assiniboine Phase 2	Install an additional 138/25 kV 15/20/25 MVA LTC transformer, remove the installed operational spare transformer, and install one 25 kV breaker.	DFO Load Growth	2008-07-31	2008-10-09	2008-08-01	2008-10-09	2009-07-31	AML	2008	5,652,083	5,727,000	6,347,248	Under Construction

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666	ATCO Electric Hangingstone Substation Upgrade	Addition of one 144kV breaker, 1-42 MVA 144/25 kV transformer and 1 25 kV breaker at the ATCO Hangingstone substation.	DFO Load Growth	2007-05-15	2007-06-11	2008-01-14	2008-03-26	2008-12-19	ATCO	2008	5,341,440	5,075,000	3,400,000	Awaiting TFO Final Costs
672	Northern Prairie Power Project 90MW Peaking Generator	90 MW Gas turbine peaking power - 144 kV Interconnection to Poplar Hill 790S and system protection and telecommunication changes	Gas Generation Addition or Upgrades	2007-11-14	2007-12-14	2008-05-16	2008-08-13	2008-11-24	ATCO	2008	3,703,900	4,283,000	4,283,000	Commissioning Phase
675	EnCana Corporation Borealis SAG D	ATCO Electric application for a staged SAG D facility on behalf of EnCana	Industrial Interconnection or Expansion					2011-02-01	ATCO	2011	49,643,817		49,643,817	Project On Hold
677	ENMAX No. 8 Substation Transformer Increase	Capacity Increase to a 50 MVA Transformer at the ENMAX # 8 Substation	DFO Load Growth	2007-11-05	2008-02-04	2008-12-23		2010-06-30	ENMAX	2009	4,512,949	5,779,282	5,779,282	Awaiting AUC Decision On Facilities Application
682	ENMAX No. 7 Transformer Addition	Transformer addition at Enmax # 7 sub due to load growth	DFO Load Growth	2007-11-05	2007-12-04	2008-09-05	2008-11-12	2009-12-15	ENMAX	2008	4,579,183	4,643,000	4,643,000	Under Construction
683	Kirby In-Situ Oil Sands Plant	Transmission facilities to enable 138kV interconnection of CNRL proposed SAGD Plant	Industrial Interconnection or Expansion					2012-02-01						Project On Hold
692	Dapp Power Westlock Expansion	Addition of 12.5 MW of Gas Fired Generation to existing 16.5 MW Biomass Fired Power Plant	Other Generation Addition or Upgrades			2007-11-16	2008-06-03	2010-03-01						Under Construction
694	FortisAlberta 90 MW Aux Sable Fort Saskatchewan Extraction plant	90 MW Aux Sable Fort Saskatchewan Extraction plant	Industrial Interconnection or Expansion					2999-12-31	AML	2007	12,953,012		12,953,012	Project On Hold
695	Greengate Stirling 100 MW Wind Farm	Transmission facilities to supply 100 MW Stirling Wind Farm	Wind Generation Addition or Upgrades					2011-04-01						TFO/AESO Preparing Combined Filing
698	FortisAlberta Fort Saskatchewan 25 kV breaker addition	25 kV breaker addition at Fort Saskatchewan 54S Sub.	DFO Load Growth	2007-08-08	2007-09-07	2007-10-17	2008-01-15	2009-04-20	AML			447,000	712,000	Under Construction

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700	TransAlta Highvale Mine	Relocation and upgrade of service to dragline	Industrial Interconnection or Expansion	2008-02-22	2008-05-06	2009-04-07		2009-12-15	AML	2007	7,662,713	7,576,000	7,576,000	Awaiting AUC Decision On Facilities Application
702	FortisAlberta Hardisty Area System Upgrade	Build the new 478S Tucuman system substation with the addition of Fortis Alberta 1 x 25/33/42 MVA 138/25kV transformer. DTS	DFO Load Growth					2009-09-15	AML	2008	12,059,952	13,581,695	12,059,952	TFO/AESO Preparing Combined Filing
703	Maxim Power Skaro Peaking Station	180 MW Simple Cycle Peaking Station	Gas Generation Addition or Upgrades					2999-12-31	AML	2007	2,330,000		2,330,000	Preparing Need Filing
706	Fortis Alberta Bruderheim Transformer Addition	Addition of a 15/20/25 MVA transformer at Bruderheim DTS	DFO Load Growth	2007-12-10	2008-02-04	2008-04-10	2008-06-24	2009-07-01	AML	2007	5,070,962	4,365,000	4,775,116	Under Construction
707	Suncor Energy Firebag SAGD Project Stage 4	Addition of 2 Cogen Units(gen 193 & 194) at Suncor Firebag	Gas Generation Addition or Upgrades					2014-09-01						Behind the Fence Work
708	Fortis Alberta Blackfalds/Lacombe Upgrade	Addition of a 15/20/25 MVA transformer at Blackfalds and an upgrade from a 15/20 MVA transformer to a 15/20/25 MVA transformer at Lacombe	DFO Load Growth	2008-01-14	2008-03-27	2008-04-25	2008-07-02	2008-12-01	AML	2007	4,969,368	5,241,000	5,241,000	Awaiting TFO Final Costs
709	Connacher Great Divide Oilsand SAGD Project	Interconnection to a New SAGD Facility	Industrial Interconnection or Expansion					2999-12-31	ATCO	2008	10,317,000		12,409,992	Preparing Need Filing
710	ATCO La Crete Substation	New 144/25 kV Substation in the High Level Area with 66km of 144kV Line	DFO Load Growth	2008-05-30	2008-09-04			2011-03-31	ATCO	2008	26,539,700		26,539,700	Awaiting TFO PPS Estimate
711	Inter-Pipelines Vermillion Pump Station	Service for 8MW Pump Station in the Vermillion Area DTS	Industrial Interconnection or Expansion					2009-12-31	AML	2008	6,866,442		6,866,442	TFO/AESO Preparing Combined Filing
									ATCO	2008	300,000		300,000	
712	ATCO Friedenstal 800S Transformer Addition	A new 144/72/25 kV transformer addition to Friedenstal 800S Substation	DFO Reliability Requirements					2010-12-31	ATCO	2008	4,588,000		4,588,000	Awaiting TFO PPS Estimate

Project Number	Project Name	Project Description	Need Description	NID Filed	NID Approved	P and L Filed	P and L Approved	Forecast or Actual ISD	TFO	Year NID Valid	NID Estimate	PPS Estimate	TFO Forecast Cost	Project Status
718	Greengate Wintering Hills Wind Project	Transmission Facilities to accommodate a 150MW Greengate Wintering Hills Wind Project	Wind Generation Addition or Upgrades					2999-12-31						Preparing Customer Proposal
719	ENMAX 800 MW Generation Project	800 MW Generation Facility and Associated Substation - 3 phase project	Gas Generation Addition or Upgrades					2012-06-01						Preparing Customer Proposal
720	Fortis Alberta Edgerton Transformer Upgrade	Upgrade 138kV transformer to 15/20/25 MVA LTC	DFO Load Growth	2008-12-29		2009-01-13		2009-12-01	AML	2009	2,919,839	3,590,000	3,590,000	Awaiting AUC Decision on Combined Filing
721	Fortis Alberta Peace Butte Substation Upgrade	Addition of 138/25kV 15/20/25 MVA transformer and 25 kV breaker at 404 Substation DTS	DFO Load Growth	2008-08-12	2008-10-22	2008-08-14	2008-10-22	2009-05-12	AML	2007	4,397,930	4,596,000	4,596,000	Under Construction
722	InterPipeline Fund - Lindbergh Pumpstation	Transmission Facilities to accommodate a 7MW Pumpstation DTS	Industrial Interconnection or Expansion					2009-12-31	ATCO	2008	18,625,000	14,930,000	18,625,000	TFO/AESO Preparing Combined Filing
723	Greengate Halkirk Wind Project	Transmission Facilities to accommodate a 150MW Wind Farm	Wind Generation Addition or Upgrades					2010-09-01						Preparing Need Filing
725	Shell AOSP Commissioning Power Scotford 807L T-Tap	Install a T-Tap from 807L to Customer owned 402S Substation for construction & commissioning power to Shell Athabasca Oilsands Project (AOSP) Upgrader Expansion.	Industrial Interconnection or Expansion	2008-04-30	2008-08-06	2008-09-26	2008-10-28	2010-10-01	AML	2009	3,400,000	2,895,000	2,895,000	Under Construction
726	ATCO Michichi Creek Breaker Addition	25kV breaker additions at Michichi Creek 802S	DFO Load Growth	2009-03-05		2009-03-10		2009-06-01	ATCO	2007	831,000	998,000	998,000	Awaiting AUC Decision on Combined Filing
728	Greengate Blackspring Ridge Wind Project	Transmission Facilities to accommodate 300MW Wind Farm	Wind Generation Addition or Upgrades					2010-09-01						Preparing Need Filing
730	ENMAX Crossfield Energy Centre Interconnection	ENMAX 120MW Peaking Plant Interconnection	Gas Generation Addition or Upgrades	2008-10-10	2009-03-18	2008-11-28	2009-03-18	2009-07-01	AML	2008	7,137,972	8,600,000	8,600,000	Under Construction

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733	FortisAlberta Blackmud 155S Transformer Addition	Upgrade to 155S including one 138/25kV transformer and two 25kV breakers	DFO Load Growth	2009-02-20				2009-11-15	AML	2009	5,137,973	5,738,000	5,738,000	Awaiting AUC Decision on Combined Filing
734	FortisAlberta Wainwright 51S Transformer Addition	Fortis Alberta Wainwright 138-25kV Transformer Addition	DFO Load Growth	2009-02-13				2009-12-01	AML	2009	8,006,784	6,494,000	6,494,000	Awaiting AUC Decision on Combined Filing
743	Greengate Pine Lake Wind Project	Transmission Facilities to accommodate 120MW Wind Farm	Wind Generation Addition or Upgrades					2999-12-31						Preparing Customer Proposal
744	TransCanada Saddlebrook Generating Station	350MW Combined Cycle Generating Facility	Gas Generation Addition or Upgrades					2011-06-29	AML	2008	15,569,931		15,569,931	TFO/AESO Preparing Combined Filing
747	Maxim Power Milner Unit 2	500MW Coal Fired Generation	Coal Generation Addition or Upgrades					2013-09-20	ATCO					Project On Hold
748	ATCO Three Hills Breaker Addition	25kV Breaker Addition	DFO Load Growth	2008-12-29	2009-02-27	2009-01-12	2009-02-27	2009-08-01	ATCO	2008	422,000	415,000	415,000	Under Construction
755	ATCO Dome Cutbank Regulator	Regulator Upgrade due to DFO load growth DTS	DFO Load Growth	2008-12-29		2009-01-12		2009-08-01	ATCO	2008	470,050	750,000	750,000	Awaiting AUC Decision on Combined Filing
757	Greengate Chigwell Wind Project	150 MW Wind Farm	Wind Generation Addition or Upgrades					2999-12-31						Preparing Customer Proposal
768	ATCO Ethel Lake Substation Upgrade	Capacity Upgrade - New 144/25kV transformer to replace 144/72kV and 72/25kV transformers DTS	DFO Load Growth					2010-05-01	ATCO	2007	2,784,000	2,934,000	2,934,000	Project On Hold
769	EPCOR Summerside Substation	Load growth driving new POD in South Edmonton. DTS	DFO Load Growth	2008-12-19		2008-12-23		2010-09-01	AML	2007	320,000	412,000	320,000	Awaiting AUC Decision on Combined Filing
									EPCOR	2007	16,500,000	20,727,611	16,500,000	
775	ATCO Crow Lake Breaker Addition	Breaker addition (25kV) to existing crow substation	DFO Load Growth					2009-09-30	ATCO	2009	1,171,000	1,241,000	1,241,000	TFO/AESO Preparing Combined Filing

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776	Laricina Saleski SAG D Project	SAG D Facility - staged load 2014 - 10MW, 2016 - 30MW, 2018 - 65MW, 2019 - 100MW	Industrial Interconnection or Expansion					2014-02-28	ATCO					Preparing Customer Proposal
777	Laricina Germain SAG D Project	SAG D Facility - staged load ph 1: 10 MW 2012 ph 2: 30 MW 2013 ph 3: 65 MW 2016 ph 4: 100 MW 2017	Industrial Interconnection or Expansion					2012-02-01	ATCO					Awaiting TFO PPS Estimate
778	ATCO Mahihkan Breaker	25kV Breaker Addition DTS	DFO Load Growth	2009-01-27	2009-04-01	2009-02-03	2009-04-01	2009-09-01	ATCO	2007	359,000	354,000	354,000	Under Construction
779	ATCO Mercer Hill Substation Upgrade	Transformer upgrade	DFO Load Growth	2009-03-09		2009-03-19		2009-12-31	ATCO	2007	1,998,000		1,998,000	Awaiting AUC Decision on Combined Filing
801	FortisAlberta Dry Creek Substation Upgrade	Transformer addition & 3 25 kV Breakers	DFO Load Growth					2010-06-01	AML			4,850,000	4,850,000	TFO/AESO Preparing Combined Filing
804	FortisAlberta Northwest Cardiff Substation Upgrade	Transformer addition and 2 25 kV breakers DTS	DFO Load Growth	2009-02-17		2009-02-27		2009-12-01	AML			7,687,000	7,687,000	Awaiting AUC Decision on Combined Filing
805	Greengate Halkirk II Wind Project	150MW Wind Farm	Wind Generation Addition or Upgrades					2999-12-31						Preparing Customer Proposal
806	FortisAlberta Hayter Breaker Addition	One 25 kV breaker addition DTS	DFO Load Growth	2008-12-29	2009-01-30	2009-01-12	2009-01-30	2009-06-01	AML			604,400	604,400	Under Construction
808	ATCO - Enbridge Pipelines Bonnyville Pumpstation 144 kV Interconnection	ATCO - Enbridge Bonnyville Pumpstation. 144/4.16 kV interconnection - tap off 7L124 New sub - 940S Beartrap.	Industrial Interconnection or Expansion					2012-09-01	ATCO	2008	12,522,000		12,522,000	Project On Hold
809	Enbridge Pipelines Vermilion Pumpstation	ATCO - Enbridge Vermilion Pumpstation. 144 kV interconnection New sub - 918S Bauer	Industrial Interconnection or Expansion					2012-09-01	ATCO	2008	7,433,000		7,433,000	Project On Hold

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814	ATCO - Husky Caribou SAGD Project	ATCO - Husky-Caribou SAGD new 144/25 kV POD New sub - 924S Fisher Creek. Install 20 MVAR Cap Bank at Grande Centre 846S - System	Industrial Interconnection or Expansion					2011-02-01	ATCO	2008	8,260,000		8,260,000	Preparing Need Filing
815	Nova Chemicals Joffre Reliability Upgrade	Improve reliability of 138kV Bus No 2 addition of a 138kV breaker	Industrial Interconnection or Expansion					2999-12-31	AML	2008	583,581		583,581	TFO/AESO Preparing Combined Filing
823	ENMAX No 26 Substation Upgrades	Addition of 2-50MVA transformers at No. 26 Substation	DFO Load Growth	2008-11-28		2008-12-03		2010-02-28	ENMAX	2008	8,181,550	8,011,966	8,011,966	Awaiting AUC Decision on Combined Filing
824	FortisAlberta Balzac Capacity Increase	Add two 25 kV breakers	DFO Load Growth					2010-04-01	AML			8,011,965	8,011,965	TFO/AESO Preparing Combined Filing
826	ATCO Horsetail 982S 144kV/25kV POD	144/25 kV distribution POD	DFO Load Growth					2011-08-01						Awaiting Customer Decision
829	ENMAX No 54 Substation	138- 25 kV substation	DFO Load Growth					2012-03-01						Awaiting Customer Decision
830	Glacier Power Dunvegan Hydro Electric Project	100MW run-of-river hydro generation	Hydro Generation Addition or Upgrades					2012-07-01						Planning Stage
831	FortisAlberta Fort Saskatchewan Area POD	138/25 kV substation w 25/33/42 MVA LTC & 3 25 kV breakers	DFO Load Growth					2011-02-01						Customer Application Being Processed
835	Enbridge Hardisty New Substation	New 138 kV/4.16 kV 20/26 MVA Clipper 656S substation in Enbridge Hardisty. DTS	Industrial Interconnection or Expansion	2009-04-14				2009-09-01	AML			124,500	124,500	Awaiting AUC Decision on Combined Filing
836	City of Red Deer 14S Breaker Addition	Addition of 25 kV breaker	DFO Load Growth					2009-12-01	Red Deer	2008	215,000	215,000	215,000	TFO/AESO Preparing Combined Filing
842	ATCO Algar Substation Upgrade	Second transformer	DFO Load Growth					2011-06-01						Planning Stage

Project Number	Project Name	Project Description	Need Description	NID Filed	NID Approved	P and L Filed	P and L Approved	Forecast or Actual ISD	TFO	Year NID Valid	NID Estimate	PPS Estimate	TFO Forecast Cost	Project Status
844	TransAlta Sundance Unit 3 Upgrades	Upgrade capacity of thermal unit.	Coal Generation Addition or Upgrades					2012-09-01						Preparing Customer Proposal
848	TransAlta Keephills 1 Uprate	Increase 23-35 MW to existing unit	Coal Generation Addition or Upgrades			2008-12-30		2011-11-01						Awaiting AUC Decision On Facilities Application
849	TransAlta Keephills 2 Uprate	Increase 23-35 MW to eexisting unit	Coal Generation Addition or Upgrades			2008-12-30		2012-05-01						Awaiting AUC Decision On Facilities Application
853	FortisAlberta Cold Creek Substation Upgrades	Upgrade both transformers to 25/33/42 MVA and add 25 kV breaker	DFO Load Growth					2010-10-01						TFO/AESO Preparing Combined Filing
854	TransAlta Ardenville Wind Farm	66 MW Wind Farm	Wind Generation Addition or Upgrades					2012-01-01						Planning Stage
855	FortisAlberta Spruce Grove Substation	New 138/25 kV substation	DFO Load Growth					2011-10-01						Planning Stage
858	FortisAlberta Tucuman Substation Upgrades	138/25 kV transformer addition	DFO Load Growth					2012-06-01						Awaiting TFO PPS Estimate
859	ENMAX 5 Sub Capacity Upgrades	substation transformers and 13.2kV network bus	DFO Load Growth					2013-03-13						Planning Stage
860	TransAlta Tempest Wind Farm	289.5 MW wind farm interconnection.	Wind Generation Addition or Upgrades					2011-12-01						Planning Stage
861	ENMAX No 6 Substation	138 kV/25 kV & 13.8 kV substation	DFO Load Growth					2011-07-15						Planning Stage
864	TransCanada Keystone KXL Pumpstation #4	13 MW Load addition	Industrial Interconnection or Expansion					2012-06-01						Preparing Customer Proposal
867	ATCO Electric Southern Pacific Corp. SAGD Project	10,000 bpd SAGD Facilities	Industrial Interconnection or Expansion					2011-06-01						Planning Stage
873	ENMAX No 36 Substation	138/25 kV transformer addition	DFO Load Growth					2011-07-15						Planning Stage

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874	FortisAlberta Fickle Lake Substation	upgrade transformer T1 to 15/20/25 MVA LTC	DFO Load Growth					2010-12-01						Planning Stage
880	ATCO Sturgeon 734S Transformer Upgrade	ATCO to upgrade the existing transformer at the Sturgeon 734S substation.	DFO Load Growth					2011-02-01	ATCO		3,369,000		3,369,000	Awaiting Customer Decision
881	FortisAlberta May River Substation	substation c/w one 25 kV feeder breaker compatible with Christina Lake Area Plan	DFO Load Growth					2010-03-01						Awaiting TFO NID Estimate
892	ATCO High Level 786S Transformer Upgrade	ATCO to upgrade transformer at High Level 786S	DFO Load Growth					2010-12-17	ATCO		3,654,000		3,654,000	Awaiting TFO PPS Estimate
895	ENMAX No. 24 Substation Capacity Upgrade	50 MVA transformer capacity upgrade	DFO Load Growth					2011-04-01						Planning Stage
897	FortisAlberta Fort Assiniboine 234S Upgrade	138/25 kV source transformer addition and 25 kV breaker addition	DFO Load Growth					2011-06-01						Planning Stage
898	FortisAlberta - Enermark Kirby SAG-D Facility	4.7 MW SAG-D Facility near Leismer 72S	Industrial Interconnection or Expansion					2011-02-01						Awaiting TFO NID Estimate
899	ATCO Tower Road POD		DFO Load Growth					2011-03-01						Planning Stage
902	FortisAlberta Hardisty 377S Upgrade	25 kV breaker addition	DFO Load Growth					2010-09-01						Planning Stage
915	BC Hydro Fort Nelson Generating Station Upgrades	convert from open cycle plant to closed cycle plant by replacing existing gas turbine with a dry low emission type GE LM 6000 gas turbine, upgrading the existing Once Through Steam Generator for maximizing waste heat recovery and adding a new Steam Turbine Generator	Other Generation Addition or Upgrades					2011-11-30						Planning Stage

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917	FortisAlberta Westlock Substation Breaker Addition	25 kV breaker addition	DFO Load Growth					2010-03-01						

Notes:

1. Project Number: This is a number that is assigned by the AESO to each project that could potentially be Direct Assigned to a TFO by the AESO.
2. NID Filed: This is the date that the AESO submits to the AUC a Need Information Document (NID) for approval as per the requirement of Section 34(1) of the Act.
3. NID Approved: This is the date the NID is approved by the AUC.
4. P and L Filed: This is the date that the TFO's Permit and License application (sometimes referred to as the Facility Application) is registered with the AUC. For Projects with mutple applications, this is the date the first application is registered.
5. P and L Approved: This is the date that the TFO's Permit and License application is approved by the AUC. For Projects with mutple applications, this is the date the last application is approved.
6. Forecast or Actual ISD: This is the most recent information the TFO has provided to the AESO on the expected ISD. This information is typically provided to the AESO in the PPS (Proposal to Provide Service) or Project Monthly Reports provided by the TFO.
7. TFO: These are the Transmission Facility Owners (TFO) who have provided and are responsible for the estimates, schedule, construction and costs for the project. The TFO's eligible are designated by service territory as defined in ISO Rule 9.1. Eligible TFO's are as follows;
 - AML: Altalink L.P.
 - ATCO: ATCO Electric Ltd
 - EPCOR: EPCOR Transmission Inc.
 - ENMAX: ENMAX Power Corporation
 - TAU: TransAlta Utilities Corp
 - Leth: City of Lethbridge
 - RD: City of Red Deer
8. Year NID Valid: This indicates the year of validity of the NID estimate (i.e. an estimate may be completed in 2006 \$'s but should include escalation to put the estimate in the year the Project is expected to go in service)
9. NID Estimate: Is a +/- 30 % estimate that is provided by the TFO and accompanies the NID submitted to the AUC. The AESO uses the estimate to assist with project scope decisions. The TFO's are required to submit the estimate in the format as per the requirements of the ISO Rule 9.1 available on the AESO WEB site.
10. PPS Estimate: Is a +20/-10% estimate that accompanies the TFO's Proposal to Provide Service's (PPS) document. Prior to the AESO Direct Assigning a project to a TFO, the TFO must submit a PPS to the AESO for review. The AESO will review the document c/w the estimate to ensure that the scope of the services provided in the PPS are as per request. The TFO's are required to submit the PPS and estimate in the format as per the requirements of the ISO Rule 9.1 available on the AESO WEB site.
11. TFO Forecast Cost: This is the most recent cost estimate provided by the TFO. This could come from the TFO provided NID Estimate, PPS Estimate, Monthly Project Report (for projects over \$1 million), Project Variance Report or Final Cost Report.
12. Project Status: This provides a brief status of the project.