AESO Transmission System 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/NIF Filed	NID/NIF Approved	P and L Filed	P and L Approved	Planned ISD	Forecast or Actual ISD	TFO	Year NID Valid	NID/NIF Estimate	PPS Estimate	TFO Forecast Cost	Project Status
246	Cordel-Metiskow / Hansman Lake	105km of 240kV transmission line from Cordell to Metiskow, 240kv breaker additions at Cordell, new 240/138kV Hansman Lake substation and a connection from Hansman Lake to existing Metiskow.	Required to maintain reliability of supply to growing load in the Metiskow/Provost area.	2003-08-07	2004-02-24	2004-08-03	2005-05-18	2004-08-01	2006-11-30	ATCO & AML	2003	35,000,000	36,260,000	36,260,000	95% completed. Small scope of work still to be completed at Cordel. Expected to be 100% completed by end of November, 2006.
255	AESO - PMU Installation at Sundance 310P	Installation of Phasor Measurement Unit	WECC reliability requirement to meet power system monitoring needs.	2004-04-16	2004-06-03			2004-12-01	2005-06-30	AML	2004	139,000	139,000	320,000	Final Costs received and under review.
256	AESO - PMU Installation at Langdon 102S	Installation of Phasor Measurement Unit.	WECC reliability requirement to meet power system monitoring needs.	2004-04-16	2004-06-03			2004-12-01	2005-06-30	AML	2004	168,000	168,000	218,000	Final Costs received and under review.
257	AESO - PMU Installation at Amoco Empress 163S	Installation of Phasor Measurement Unit.	WECC reliability requirement to meet power system monitoring needs.	2004-04-16	2004-06-03			2004-12-01	2005-06-30	AML	2004	129,000	129,000	181,000	Final Costs received and under review.
301	Michichi Creek - Three Hills	70km of 138kV transmission line from Michichi Creek to Three Hills, substation modifications at Michichi Creek and Three Hills and salvage of some existing 72kV circuits.	Required to maintain reliability of supply to growing load in the Drumheller/Three Hills area.	2003-08-07	2004-03-05	2005-03-24	2005-05-18	2004-06-01	2006-02-28	ATCO	2003	9,530,000	14,100,000	12,880,938	Substantially complete. Awaiting installation by ATCO Electric of capacitor banks at BullPound
379	Lethbridge - Close Eastern Loop	Lethbridge - close eastern 138kV Loop	Required for reliability purposes	2005-02-24	2005-04-28	2005-08-22	2005-10-18	2006-06-15	2006-06-15	AML	2005	245,000	319,000	344,000	Substantially complete. Minor telecom change required.
388	500KV North/South Transmission Line	South-KEG 500 kV Conversion (Part 1 of 2, see project 560 for part 2)	Part 1-South-KEG 500 kV Conversion	2004-05-10	2005-04-22	2006-04-13	2006-06-28	2007-10-31	2007-10-31	AML	2004	36,152,000	66,331,373	66,331,373	S-KEG conversion outage schedule and risk management plan being finalized. Site preparation in Oct & Nov 2006 AESO Website @ http://www.aeso.ca/5998.html
										EPCOR	2004	2,562,000	3,065,768	3,065,766	
										EPCOR & TransAlta	2004	386,000			
										EPDC	2004	722,000			

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416	SW 240kV Transmission	Goose Lake to Peigan and Peigan to N. Lethbridge 240 kV lines and upgrades of existing 138 kV stations.	Project required to provide access for growing wind generation in the Pincher Creek area.	2004-03-31	2005-05-17	2005-12-21		2006-04-01	2008-05-22	AML	2004	77,000,000	98,881,662	123,163,887	Direct Assigned to AltaLink, TransAlta and City of Lethbridge for their portions of the project. Direct Assigned to AltaLink for the 2nd 240 kV circuit from Peigan 59S to N. Lethbridge 370S FACILITY APPLICATIONS STATUS: Facility Application Dates: Pincher to Peigan - Dec 21, 2005 Drywood - Jan 12, 2006 Magrath - Jan 12, 2006 Thermal Upgrade - Jan 16, 2006 Stirling/820L - Feb 8, 2006 Peigan to Lethbridge - March 1, 2006 Reconductor 170L - April 13, 2006 Pincher Creek Tfmer Upgrade - June 9, 2006 Applications to be Filed: 138 kV line - 170L/725L Approved Applications: Magrath - Feb 6, 2006 Drywood - March 29, 2006 Thermal Upgrade - Feb 15, 2006 Pincher Creek Tfmer Upgrade - July 24, 2006 Stirling/820L - August 30, 2006 ESTIMATE NOTES: NID Estimate does not include E&S, AFUDC & Contingency
										Leth.	2005		26,899	26,899	
										TransAlta			249,000	249,000	
431	Janet Capacitor Bank Breaker	New 138kV Capacitor Bank Breaker	Maintain reliability	2004-05-17	2004-07-29		2005-02-18	2004-12-10	2005-04-03	AML	2004	518,000	334,000	365,000	Project Closeout underway
434	Calgary Area Capacitor Banks	Capacitor banks located at Sarcee, East Calgary and Janet substations.	New capacitor banks in the Calgary area to meet reliability requirements.	2004-11-25	2005-06-08	2005-09-15	2005-10-20	2006-02-28	2005-12-28	AML	2004	8,910,000	8,588,000	9,122,000	Complete. Awaiting final costs.
447	788L Upgrade	Upgrade 138kV line between Lac LaBiche and Heart Lake	To meet ratings requirements.	2004-12-01	2005-02-15	2005-02-18	2005-04-13	2005-03-01	2006-03-31	AML	2004	1,352,000	1,352,000	1,870,000	Physically complete. AltaLink have to provide data and final costs.

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466	Downtown Edmonton 240 kV Supply	240kV cable from Castle Downs to new McDougall substation, alterations at Victoria substation and interconnection between Victoria and McDougall substations.	Rrequired to maintain reliability to downtown Edmonton.	2005-04-08	2005-07-14	2006-06-15		2008-05-31	2008-06-01	EPCOR	2005	34,900,000	54,304,760	54,304,760	Facilities application filed in June, 2006.
541	Hangingston - MacMillan 144 kV System Upgrade	Addition of 1 - 144 kV breaker, 1 - 10 Mvar cap bank, and 1- 25 kv breaker at Hangingstone 820S moterized disconnects and SCADA at Altar 875S and Crow 860S substations.	Project required to address power quality and relaibility concerns on the 144 kV transmission system and connected stations between Parsons and McMillan	2006-04-26	2006-05-24			2007-06-01	2007-06-01	ATCO	2005	1,656,324	2,532,000	2,532,000	Direction Issued September 26, 2006.
560	500KV North/South Transmission Line	Genesee to Langdon 500kV Line (Part 2 of 2, see project 388 for Part 1)	Project required to relieve congestion and maintain reliability. Part 2- Genesee to Langdon 500kV Line	2004-05-10	2005-04-22	2006-09-18		2009-10-31	2009-10-31	AML	2004	288,869,000	511,650,000	511,650,000	R&V Hearing complete and waiting for EUB decision Applications for P & L were filed by TFOs AESO Website @ http://www.aeso.ca/5998.html
										EPCOR	2004	10,255,000	16,201,577	16,201,577	
569	144 kV CT upgrades/changes on 7L23 and 7L61	144 kV CT Upgrades on 7L23 and 7L61at Lubicon 780S, Mitsue 732S and Nipisi 796S to eliminate thermal restrictions on lines.	To increase power transfer capabilities on 7L23 and 7L61 - CT upgrades at Lubicon 780S, Nipisi 796S and Mitsue 732S are required	2006-03-06	2006-08-17			2008-12-15	2008-12-15	ATCO	2005	600,000		600,000	Functional spec issued Sept 5, awaiting PPS
570	Lubicon 780S Install 2-30 mvar cap banks and all associated equipment and material	Lubicon 780S - Install 2 - 30 Mvar cap banks, 3-144kv breakers and all associated equipment and material	To provide voltage and var support - Part of the Northwest transmission development	2006-03-06	2006-08-17			2008-04-15	2008-04-15	ATCO	2005	3,000,000		3,000,000	RFS for PPS issued and RFS for equipment purchase. Final func spec issued
571	Friedenstal 800S Install 1-15 mvar Cap Bank and all associated equipment and material	Friedenstal 800S Install 1 - 15 Mvar cap bank, 1-144 kv breaker and all associated equipment and material	Part of the Nothwest Transmission upgrade project	2006-03-06	2006-08-17			2007-12-15	2007-12-15	ATCO	2005	2,044,700	2,044,700	2,044,700	RFS issued for PPS and Equipment. Final func spec issued. PPS received Oct 4

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572	Ksituan 754S - install 1-15 mvar cap bank and all associated equipment and material	Ksituan 754S - Install 1 - 15 Mvar cap bank, 1-144kv breaker and all associated equipment and material	Part of the Nothwest Transmission upgrade project	2006-03-06	2006-08-17			2007-12-15	2007-12-15	ATCO	2005	2,500,000	1,324,500	1,324,500	RFS for PPS and equipment issued. Final func spec issued. PPS received Oct 4
573	Goodfare 815S - install 2-15 mvar cap banks and all associated equipment and material	Goodfare 815S Install 2 - 15 Mvar cap banks, 3-144 kv breakers and all associated equipment and material	Part of the Northwest Transmission upgrade project	2006-03-06	2006-08-17			2007-12-15	2007-12-15	ATCO	2005	3,000,000	2,809,800	2,809,800	RFS issued for PPS and equipment purchase. Final func spec issued. PPS received Oct 4
574	Big Mountain 845S - install 1-30 mvar cap bank and all associate equipment and material	Big Mountain 845S Install 1 - 30 Mvar cap bank, 1-144kv breaker and all associated equipment and material	Part of the Nothwest Transmission upgrade project	2006-03-06	2006-08-17			2008-04-15	2008-04-15	ATCO	2005	1,500,000		1,500,000	Request for Service (RFS) for PPS and equipment purchase issued. Final func spec issued
575	Little Smoky 813S - install 3-30 mvar cap banks and all associated equipment and material	Little Smoky 813S Install 3 - 30 Mvar cap banks,5-144 kv breakers and all associated equipment and material	Part of the Nothwest Transmission upgrade project	2006-03-06	2006-08-17			2008-12-15	2008-12-15	ATCO	2005	5,500,000		5,500,000	Request for Service (RFS) for PPS and equipment purchase. Final func spec issued
576	Louise Creek 809S - install 2nd 240/144 kv transformer	Louise Creek 809S Install 1 - 240/144 kV 200 Mva transformerand all associate equipment and material	Need for Northwest Transmission upgrade project filed on Mar 6/06	2006-03-06	2006-08-17			2008-04-15	2008-04-15	ATCO	2005	4,000,000		4,000,000	Request for Service (RFS) for PPS and equipment purchase. Final func spec issued
577	Cranberry Lake 827S install 30 MVAR SVC and all associated equipment and material	Cranberry Lake 827S Install 1 - 30 Mvar SVC and all associated equipment and material	Need for Northwest Transmission upgrade project filed on Mar 6/06	2006-03-06	2006-08-17			2008-12-15	2008-12-15	ATCO	2005	10,000,000		10,000,000	Request for Service (RFS) for PPS issued
598	240 kv line 9L15 - Brintnell 876S to Wesley Creek 834S	Single circuit 240 kv line from Wesley Creek 834S to Brintnell 876S. Install 2-300 mva 240/144 kv transformers at Wesley Creek 834S, modifications at Brintnell 876S	Reinforce the Northwest Alberta Transmission System	2006-03-06	2006-08-17			2010-03-31	2010-05-07	ATCO	2005	103,000,000		103,000,000	Draft functional specs issued to ATCO on Sept 5

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599	134 km Double circuit 144 kv line 7L131/7L106 - Wesley Creek 834S to New Meikle 905S station	Construct 134 km d/c 144 kv line 7L131/7L106 - Wesley Creek 834S to a new Meikel 905S. Modifications at Wesley Creek 834S, construct new Meikle 905S station and modifications at Hotchkiss 788S	Reinforce the Northwest	2006-03-06	2006-08-17			2010-05-31	2010-05-21	ATCO	2005	64,000,000		64,000,000	Draft functional spec issued to ATCO Sept 5
600	105 km 144 kv line 7L133 - Sulphur Point 828S to High Level 786S	Build 105km of single circuit 144 kv line 7L133 - Sulphur Point 828S to High Level 786S Modifications at Sulphur Point 828S and High Level 786S.	Increase supply and reliability in the Northwest.	2006-03-06	2006-08-17			2010-10-31	2011-05-23	ATCO	2005	18,000,000		18,000,000	Draft Functional Spec issued to ATCO
601	High Level 786S - Install - 5 +30 Mvar SVC	High Level 786S - install - 5 +30 mvar SVC and all associated equipment and material	Reinforce Northwest area	2006-03-06	2006-08-17			2010-12-31	2011-03-31	ATCO	2005	10,000,000		10,000,000	Draft func spec issued to ATCO
602	112km single circuit 144 kv line 7L113 - Ring Creek 853S to New Arcenceil 930S station	Construct 112 km single circuit 144 kv line 7L113 from Ring Creek 853S to Arcenceil 930S. Modifications at Ring Creek and Rainbow Lake 791S	Northwest area upgrades	2006-03-06	2006-08-17			2011-03-31	2011-05-23	ATCO	2005	24,000,000		24,000,000	Draft func spec issued Sept 5
603	Arcenceil 930S Station - Install -30 +50 mvar Synch condenser and all associated equipment	Arcenceil 930S - install - 30+50 mvar synch condenser and all associated equipment and material	Northwest area upgrade	2006-03-06	2006-08-17			2011-05-31	2009-09-30	ATCO	2005	12,000,000		12,000,000	Draft func spec issued to ATCO
604	Arcenceil 930S - install 30 mvar cap bank and all associated equipment and amterial	Arcenceil 930S - install 30 mvar cap bank and all associated equipment and material	Northwest upgrade project	2006-03-06	2006-08-17			2011-06-30	2009-09-30	ATCO	2005	1,500,000		1,500,000	Draft func spec issued to ATCO
605	Arcenceil 930S - install - 20 +30 mvar SVC and all associated equipment and material	Arcenceil 930S - install - 20+30 mvar SVC and all associated equipment and material	Northwest area upgrade project	2006-03-06	2006-08-17			2011-07-31	2009-09-30	ATCO	2005	13,500,000		13,500,000	Draft func spec issued to ATCO

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606	Little Smoky 813S - install 100 mvar SVC and all associated equipment and material	Little Smoky 813S - Install 100 mvar SVC and all associated equipment and material	Notthwest system upgrade project	2006-03-06	2006-08-17			2011-08-31	2010-07-30	ATCO	2005	14,500,000		14,500,000	Draft functional spec issued on Sept 5, 2006
608	AltaLink Benalto 17S Capacitor Bank Addition	Addition of 110MVAr Capacitor Bank at Benalto 17S	Edmonton Area Reactive Power support	2007-07-21				2006-06-15	2007-06-15	AML & EPCOR	2006	9,800,000		9,800,000	Awaiting PPS Estimate Notes: NID Estimate provided in this project includes costs for Projects # 608 to #612 inclusive (i.e costs not broken out seperatly)
609	EPCOR Jasper Substation Capacitor Bank Addition	Addition of 110 MVAr Cap Bank at Jasper Substation	Edmonton Area Reactive Power support	2006-07-21				2006-06-15	2007-06-15	EPCOR					Awaiting PPS Estimate Notes: See Project # 608 for NID estimate
610	AltaLink Nisku 149S Capacitor Bank Addition	Install 30 MVAr Capacitor Bank at Nisku 149S	Edmonton Area Reactive Power support	2006-07-21				2006-06-15	2007-06-15	AML					Awaiting PPS Estimate Notes: See Project # 608 for NID estimate
611	EPCOR Clover Bar Substation Capacitor Bank Addition	Installation of 36 MVAr Capacitor Bank at Clover Bar Substation	Edmonton Area Reactive Power support	2006-07-21				2006-06-15	2007-06-15	EPCOR					Awaiting PPS Estimate Notes: See Project # 608 for NID estimate
612	AltaLink Shell Scotford 409S Capacitor Bank Addition	Installation of 54 MVAr Capacitor Bank at Shell Scotford 409S	Edmonton Area Reactive Power support	2006-07-21				2006-06-15	2007-06-15	AML					Awaiting PPS Estimate Notes: See Project # 608 for NID estimate
625	East Calgary POW Switch	POW switch to be installed on C1 (C3) and pre-insertion resistor to C2 (C4)	Upgrade required to mitigate communication interference					2007-01-31	2007-01-31	AML					Awaiting NID Estimate

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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/NIF Filed: For Sytem Projects over $10 million, this is the date that the AESO submits to the EUB a Need Information Document (NID) for approval as per the requirement of Section 34(1) of the Act. For System Projects under $10 million or Customer Interconnections, this is the date the AESO submits to the EUB a Need Information Filing (NIF) for information purposes (The EUB will post the NIF on its website for comment, if no comments are received the EUB will notify the AESO and the AESO will then proceed with Direct Assigning the project to the TFO(s)).

3. NID/NIF Approved: This is the date the NID is approved by the EUB or for a NIF, this is typically 21 days after the NIF is filed for information purposes.

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 EUB. For Projects with mutiple 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 EUB. For Projects with mutiple applications, this is the date the last application is approved.

6. Planned ISD: In colaboration with the TFO, and taking into consideration the customers requirements, this is the initial in-service-date(ISD) that the AESO has established at the NID/NIF or Interconnection Proposal (IP) stage of the project.

7. 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.

8. TFO: These are the Transmsion 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

9. 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 escaltion to put the estimate in the year the Project is expected to go in service)

10. NID/NIF Estimate: Is a +/- 30 % estimate that is provided by the TFO and accompanies the NID or NIF submitted to the EUB. The AESO uses the estimate to assist with project scope decisions. The The TFO's are required to submit the estimate in the format as per the requirements of the ISO Rule 9.1 avialable on the AESO WEB site.

11. 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 requested. 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.

12. 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.

13. Project Status: This provides a brief status of the project.