

May 30, 2014

Dear Loss Factor Stakeholders,

Re: Changes to 2014 Loss Factors Due to Updated Project Information by May 01, 2014

As a part of the annual loss factor calculation, the AESO determines loss factors for existing and new loss factor customers expected to be in-service in the next calendar year. Loss factor customers are those customers who receive credits or are assessed charges for losses. Loss factors are based, in part, on estimated in-service date (ISD) and supply transmission service (STS) for new projects, as well as demand opportunity service (DOS). If a project ISD, and/or STS, and/or DOS contracts change, the loss factor process must take these changes into account.

From November 01, 2013 to May 01, 2014, the AESO received ISD and/or STS changes for several generation and transmission projects, as well as new DOS contract requests. Please see Appendix 1 for details. These changes and requests triggered the AESO to conduct a loss factor recalculation to determine the impact on 2014 loss factors. The loss factor recalculation shows that a number of customer's loss factors have changed above the $\pm 0.25\%$ threshold. Based on ISO Rules Section 501.10, these customers will be issued updated loss factors which will be effective from June 1st, 2014. Customers that have experienced a change of over $\pm 0.25\%$ in their loss factors are highlighted in Appendix 2.

The ISD and STS updates to generation projects also required adjustments to the Loss Factors Generic Stacking Order (GSO). Please refer to <u>Updates to 2014 Loss Factors Generic Stacking Order (GSO) Due to Updated Project Information Received by May 01, 2014</u> document posted on May 30, 2014 to view all the updates to the GSO.

If you have any questions, please contact lossfactor@aeso.ca.

Yours truly,

Original signed by

John Kehler

Director, System Performance

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Appendix 1: Summary of Changes Due to Loss Factor Customers and ISDs

Project and Subproject Number	Project Name	Season(s) of the Projects in the posting in November 2013	Season changes to 2014 Loss Factors due to Updated Project Information					
	Generation							
901	Imperial Oil Cold Lake Expansion Nabiye Plant	Summer, Fall	Fall					
1453	Fortis Genalta Carson Creek Generator - STS Increase	Winter, Spring, Summer, Fall	Spring, Summer, Fall					
739	NRGreen Windfall Power Generating Station	Winter, Spring, Summer, Fall	Summer, Fall					
1470	TransCanada Bear Creek MC Increase and Switchgear Upgrade	None	Fall					
1499	Northstone Power Elmworth Generator	None	Summer, Fall					
1498	Medicine Hat 41S Equipment Change and STS Increase	None	Summer, Fall					
1345	Fortis ANC (Alberta Newsprint Company) - Generation	Winter, Spring, Summer, Fall	Summer, Fall					
		DOS						
	Daishowa (839S)	None	Summer, Fall					
	Amoco Empress (163S)	Winter, Spring, Summer, Fall	None					
	Syncrude Standby (848S)	Winter, Spring, Summer, Fall	None					
Transmission								
787-41	Southern Alberta Transmission Reinforcement	Spring, Summer, Fall	Winter, Spring, Summer, Fall					
1343-1	New Fidler Substation Connection	Winter, Spring, Summer, Fall Summer, Fall						

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Project and Subproject Number	Project Name	Season(s) of the Projects in the posting in November 2013	Season changes to 2014 Loss Factors due to Updated Project Information	
629-1	Alberta Industrial Heartland Bulk Transmission Development	Winter, Spring, Summer, Fall	Fall	
1117-3	FATD - East Calgary Development	None	Fall	
786-2	Edmonton Region 240kV Line Upgrades	Spring, Summer, Fall	None	
786-5	Edmonton Region 240kV Line Upgrades	Spring, Summer, Fall	None	
1267	Algar Area System Reinforcement	Fall	None	
811-4	Central East Area Transmission Development	Fall	None	
811-7	Central East Area Transmission Development	Winter, Spring, Summer, Fall	Fall	
811-20	Central East Area Transmission Development	Winter, Spring, Summer, Fall	Spring, Summer, Fall	
811-2	Central East Area Transmission Development	Summer, Fall	Fall	

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Appendix 2: Updated 2014 Loss Factors Effective June 01 2014

MP-ID*	Facility Name	PSS/E Bus	Normalized and Compressed Loss Factor (%)	Loss Factor Asset	Difference % in Loss Factor to System Average
0000034911	ALTAGAS PARKLAND	4235	0.66	Gen	-2.73
NX01	BALZAC	290	0.38	Gen	-3.01
BAR	BARRIER	216	0.16	Gen	-3.23
BR3	BATTLE RIVER #3	1491	6.44	Gen	3.05
BR4	BATTLE RIVER #4	1491	6.44	Gen	3.05
BR5	BATTLE RIVER #5	1469	5.60	Gen	2.21
BCRK	BEAR CREEK G1	10142	-5.65	Gen	-9.04
BCR2	BEAR CREEK G2	10142	-5.65	Gen	-9.04
BPW	BEARSPAW	184	-0.18	Gen	-3.57
BIG	BIGHORN	103	4.70	Gen	1.31
BTR1	BLUE TRAIL WIND FARM	328	3.99	Gen	0.60
BRA	BRAZEAU	56153	2.06	Gen	-1.33
GOC1	GOLD CREEK	19145	0.00	Gen	-3.39
0000045411	BUCK LAKE	4080	2.10	Gen	-1.29
TC01	CARSELAND	5251	-0.03	Gen	-3.42
CAS	CASCADE	175	-0.46	Gen	-3.85
CR1	CASTLE RIVER	234	3.06	Gen	-0.33
CRR1	ENEL ALBERTA CASTLE ROCK WIND FARM	221	3.18	Gen	-0.33
EC01	CAVAILIER	247	1.54	Gen	-1.85
CHIN	CHIN CHUTE	406	2.50	Gen	-0.89
CMH1	CITY OF MEDICINE HAT	680		Gen	
ENC1	CLOVER BAR 1	516	1.14	Gen	-2.25
ENC2	CLOVER BAR 2	516	2.91	Gen	-0.48
ENC3	CLOVER BAR 2	516	2.91	Gen	-0.48
CNR5	CNRL HORIZON	1263	2.91	Gen	-0.48
CRE1	COWLEY EXPANSION 1	264	2.50	Gen	-0.89
CRE2	COWLEY EXPANSION 2	264	4.47	Gen	1.08
CRE3	COWLEY PARANSION 2 COWLEY NORTH	264	4.47	Gen	1.08
PKNE	COWLEY NORTH COWLEY RIDGE WIND POWER PHASE1	264	4.47	Gen	1.08
CRWD			4.47		1.08
	COWLEY RIDGE WIND POWER PHASE2	264	4.47	Gen	1.08
DAI1	DIASHOWA	1088	-3.61	Gen	-7.01
DOWGEN15M	DOW GTG	61	2.65	Gen	-0.74
DRW1	DRYWOOD 1	4226	3.02	Gen	-0.37
CES1	ENMAX CALGARY ENERGY CENTRE CTG	187	0.51	Gen	-2.88
CES2	ENMAX CALGARY ENERGY CENTRE STG	187	0.51	Gen	-2.88
CRS1	ENMAX CROSSFIELD ENERGY CENTER	503	0.93	Gen	-2.46
CRS2	ENMAX CROSSFIELD ENERGY CENTER	503	0.93	Gen	-2.46
CRS3	ENMAX CROSSFIELD ENERGY CENTER	503	0.93	Gen	-2.46
FNG1	FORT NELSON	20000	-4.32	Gen	-7.71
AFG1TX	FORTISALBERTA AL-PAC PULP MILL	392	0.13	Gen	-3.26
EC04	FOSTER CREEK G1	1301	2.06	Gen	-1.33
0000001511	FT MACLEOD	4237	2.16	Gen	-1.23
GN1	GENESEE 1	525	4.39	Gen	1.00
GN2	GENESEE 2	525	4.39	Gen	1.00
GN3	GENESEE 3	525	4.39	Gen	1.00
GHO	GHOST	180	0.26	Gen	-3.13
NEP1	GHOST PINE WIND FARM	603	4.12	Gen	0.73
0000022911	GLENWOOD	4245	2.51	Gen	-0.88

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MP-ID*	Facility Name	PSS/E Bus	Normalized and Compressed Loss Factor (%)	Loss Factor Asset	Difference % in Loss Factor to System Average
GPEC	GRANDE PRAIRIE ECOPOWER CENTRE	1101	-6.01	Gen	-9.40
HAL1	CAPITAL POWER HALKIRK WIND PROJECT	1435	5.68	Gen	2.29
0000025611	HARMATTAN GAS PLANT DG 4123 0.48		0.48	Gen	-2.91
HSH	HORSESHOE	171	0.44	Gen	-2.95
HRM	HR MILNER	1147	-3.33	Gen	-6.72
INT	INTERLAKES	376	2.20	Gen	-1.19
KAN	KANANASKIS	193	0.40	Gen	-2.99
KH1	KEEPHILLS #1	420	5.09	Gen	1.70
KH2	KEEPHILLS #2	420	5.09	Gen	1.70
KH3	KEEPHILLS #3	610	4.33	Gen	0.94
KHW1	KETTLES HILL WIND ENERGY PHASE 2	402	3.28	Gen	-0.11
IOR1	MAHKESES COLD LAKE	56789	2.88	Gen	-0.51
AKE1	MCBRIDE	901	3.06	Gen	-0.33
MKRC	MCKAY RIVER	1274	2.65	Gen	-0.74
MEG1	MEG ENERGY	405	2.15	Gen	-1.24
MATLIMP	MONTANA TIE LINE	451	3.18	Gen	-0.21
MKR1	MUSKEG	1236	2.55	Gen	-0.84
NX02	NEXEN OPTI	1241	2.42	Gen	-0.84
NPP1	NORTHERN PRAIRIE POWER PROJECT	1120	-8.72	Gen	-12.11
NPC1	NORTHSTONE ELMWORTH	1134	-8.13	Gen	
NOVAGEN15M	NOVA JOFFRE	383		Gen	-11.52
OMRH	OLDMAN	230	1.05	Gen	-2.34
WEY1	P&G WEYERHAUSER	1140	3.42	Gen	0.03
			-5.89		-9.28
0000039611	PINCHER CREEK	4224	3.11	Gen	-0.28
POC	POCATERRA	214	1.55	Gen	-1.84
PH1	POPLAR HILL	1118	-8.89	Gen	-12.28
PR1	PRIMROSE	1302	0.80	Gen	-2.59
RB1	RAINBOW 1	1031	-5.00	Gen	-8.39
RB2	RAINBOW 2	1032	-3.88	Gen	-7.27
RB3	RAINBOW 3	1028	-4.81	Gen	-8.20
RL1	RAINBOW 4	83	-4.84	Gen	-8.23
RB5	RAINBOW 5	1037	-4.92	Gen	-8.31
RYMD	RAYMOND RESERVOIR	413	4.03	Gen	0.64
TC02	REDWATER	50	2.41	Gen	-0.98
RUN	RUNDLE	195	0.74	Gen	-2.65
SH1	SHEERNESS #1	1484	4.69	Gen	1.30
SH2	SHEERNESS #2	1484	4.69	Gen	1.30
SHCG	SHELL CAROLINE	370	0.72	Gen	-2.67
SCTG	SHELL SCOTFORD	43	2.51	Gen	-0.88
GWW1	SODERGLEN	358	3.93	Gen	0.54
SPR	SPRAY	310	0.72	Gen	-2.67
0000038511	SPRING COULEE	4246	2.24	Gen	-1.15
0000006711	STIRLING	4280	2.17	Gen	-1.22
ST1	STURGEON 1	1166	-2.66	Gen	-6.05
ST2	STURGEON 2	1166	-2.66	Gen	-6.05
IEW1	SUMMERVIEW 1	336	3.86	Gen	0.47
IEW2	SUMMERVIEW 2	336	3.86	Gen	0.47
SCR3	SUNCOR HILLRIDGE WIND FARM	389	2.13	Gen	-1.26
SCR2	SUNCOR MAGRATH	251	3.02	Gen	-0.37
SCR1	SUNCOR MILLENIUM	1208	3.01	Gen	-0.38
SCR4	SUNCOR WINTERING HILLS WIND ENERGY PROJECT	759	5.19	Gen	1.80
SD1	SUNDANCE #1	135	3.95	Gen	0.56
SD2	SUNDANCE #2	135	3.95	Gen	0.56
	SUNDANCE #3	135	3.95	Gen	0.56
SD3					



MP-ID*	Facility Name	PSS/E Bus	Normalized and Compressed Loss Factor (%)	Loss Factor Asset	Difference % in Loss Factor to System Average
SD5	SUNDANCE #5	135	3.95	Gen	0.56
SD6	SUNDANCE #6	135	3.95	Gen	0.56
SCL1	SYNCRUDE	1205	2.65	Gen	-0.74
TAB1	TABER WIND	343	1.20	Gen	-2.19
TAY1	TAYLOR HYDRO	670	3.43	Gen	0.04
THS	THREE SISTERS	379	0.31	Gen	-3.08
ARD1	TRANSALTA ARDENVILLE WIND FARM	739	4.31	Gen	0.92
VVW2	ATCO VALLEY VIEW 2	1172	-2.31	Gen	-5.70
VVW1	VALLEYVIEW	1172	-2.31	Gen	-5.70
WST1	WESGEN	21	0.00	Gen	-3.39
EAGL	WHITE COURT	410	0.00	Gen	-3.39
NRG3	NRGREEN WINDFALL POWER GENERATING STATION	1674	-0.13	Gen	-3.52
ANC1	Fortis ANC (Alberta Newsprint Company) - Generation	298	0.48	Gen	-2.92
0000065911	FORTIS GENALTA CARSON CREEK GENERATOR - STS INCREASE	4325	-1.31	Gen	-4.70
OWF1	ALBERTA WIND ENERGY OLD MAN RIVER WIND FARM	ERTA WIND ENERGY OLD MAN RIVER WIND FARM 543 3.71		Gen	0.32
EGC1	1 ENMAX SHEPARD ENERGY CENTRE		0.86	Gen	-2.53
BSR1	BLACKSPRING RIDGE I WIND PROJECT	736	3.60	Gen	0.20
Project901_1_GEN	IMPERIAL OIL COLD LAKE EXPANSION NABIYE PLANT	1351 0.15		Gen	-3.24
321S033	Daishowa (839S)	1088 4.89		DOS	1.50
0000079301	ANG Cochrane (793S)	191	0.95	DOS	-2.44

NOTES:

* MP-ID - point where loss factors assessed
For loss factors, "-" means credit, "+" means charge
Loss factors effective from June 01, 2014 to December 31, 2014.
System Average Losses, %:
3.39
For more information, please visit www.aeso.ca

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2014 Tie Loss Factors

Tie	Transaction Type	Loss Factor (%)	Average Loss Charge (%)	Settlement LF (%)
ВС	Import	1.07	0.98	2.05
ВС	Export	-	0.66	0.66
SK	Import	2.93	2.50	5.43
	Export	-	2.30	2.30

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