

March 28, 2012

Dear Loss Factor Stakeholders:

Re: **Changes to 2012 Loss Factors Due to Updated Project Information**

As 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 loss factors) Loss factors are based, in part, on the estimated in-service date (ISD) of new assets. Changes to a project ISDs occur as the connection of projects proceeds. The loss factor process takes these changes into account.

In the winter of 2012, the AESO has received modified ISDs for major transmission projects and new loss factor customers. In addition to modified ISDs for generation projects, major transmission projects/subprojects have been delayed. Some project ISDs have advanced into 2012 while others have withdrawn. The addition of new loss factor customers has required the AESO to calculate loss factors for these customers to facilitate financial settlement. The addition and removal of generating sources and transmission projects may affect existing loss factor customers that are adjacent to the projects that require updates. Please see Appendix 1 for a summary of project additions and removals.

As a result of these updated project ISDs, multiple loss factor customers have experienced changes in their loss factors that exceed the 0.25% threshold stated in ISO Rule Section 9.2.2.b. Therefore, these customers will be issued updated loss factors.

The updated loss factors are given in Appendix 2. Customers that have experienced a change of  $\pm 0.25\%$  in their loss factors have been highlighted. These loss factors will be effective starting April 01, 2012 to coincide with the Q2 calibration factor (CF).

The updates to generation projects has also required adjustments be made to the Loss Factors Generic Stacking Order (GSO). Please refer to the [Updates to 2012 Loss Factors Generic Stacking Order Due to Updated Project Information](#) document posted March 28, 2012 to view all the updates to the GSO.

If you have any questions, please call Peng Wang at 403-539-2805 or email [lossfactor@aeso.ca](mailto:lossfactor@aeso.ca)

Yours truly,

*Original signed by*

Fred Ritter, P.Eng.  
Technical Lead, Engineering

## Appendix 1: Summary of Changes Due to Loss Factor Customer Additions

AESO Project Number	Sub Project	AESO Project Name	Final Alberta Loss Factors for 2012 [Posted: November 3, 2011] <sup>1</sup>	Changes to 2012 Loss Factors Due to Updated Project Information <sup>2</sup>
<b>Generation</b>				
496	1	Suncor Firebag 3 STS Increase	winter, spring, summer, fall	spring, summer, fall
915	1	BC Hydro Fort Nelson Generating Station Upgrades	winter, spring, summer, fall	spring, summer, fall
519	1	Alberta Wind Energy Old Man River Wind Farm	spring, summer, fall	none
462	1	Enel Alberta Castle Rock Wind Farm	none	summer, fall
1243	1	Harmattan Upgrade	none	summer, fall
1315	1	Naturener Rim Rock - Matl Temporary Connection	none	fall
<b>Transmission</b>				
936	1	Pincher Creek Area 240/138 kV Transmission Development	summer, fall	none

<sup>1</sup> Identifies which season(s) the projects were included when the "Final Alberta Loss Factors for 2012" was posted.

<sup>2</sup> Identifies which season(s) the projects were included when the "Changes to 2012 Loss Factors Due to Updated Project Information" was posted.

AESO Project Number	Sub Project	AESO Project Name	Final Alberta Loss Factors for 2012 [Posted: November 3, 2011] <sup>1</sup>	Changes to 2012 Loss Factors Due to Updated Project Information <sup>2</sup>
812	3,4,5,6,7,8,11, 14,15,16,	Hanna Region Transmission Development	fall	none

# Appendix 2: Updated 2012 Loss Factors Effective April 01 2012



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	235	0.53	Gen	-3.66
NX01	BALZAC	290	0.87	Gen	-3.32
BAR	BARRIER	216	-0.43	Gen	-4.62
BR3	BATTLE RIVER #3	1491	5.97	Gen	1.78
BR4	BATTLE RIVER #4	1491	5.97	Gen	1.78
BR5	BATTLE RIVER #5	1469	5.10	Gen	0.91
BCRK	BEAR CREEK G1	10142	-3.57	Gen	-7.76
BCR2	BEAR CREEK G2	10142	-3.57	Gen	-7.76
BPW	BEARSPAW	184	0.06	Gen	-4.13
BIG	BIGHORN	103	1.88	Gen	-2.31
BTR1	BLUE TRAIL WIND FARM	328	2.64	Gen	-1.55
BRA	BRAZEAU	56153	2.35	Gen	-1.84
GOC1	BRIDGE CREEK	1145	0.00	Gen	-4.19
0000045411	BUCK LAKE	80	3.30	Gen	-0.89
TC01	CARSELAND	5251	0.99	Gen	-3.21
CAS	CASCADE	175	-0.95	Gen	-5.14
CR1	CASTLE RIVER	234	2.49	Gen	-1.70
EC01	CAVALIER	247	1.29	Gen	-2.90
CHIN	CHIN CHUTE	406	0.00	Gen	-4.19
CMH1	CITY OF MEDICINE HAT	680	1.39	Gen	-2.80
ENC1	CLOVER BAR 1	516	3.95	Gen	-0.24
ENC2	CLOVER BAR 2	516	3.95	Gen	-0.24
ENC3	CLOVER BAR 3	516	3.95	Gen	-0.24
CNR5	CNRL HORIZON	1263	2.80	Gen	-1.39
CRE1	COWLEY EXPANSION 1	264	4.30	Gen	0.11
CRE2	COWLEY EXPANSION 2	264	4.30	Gen	0.11
CRE3	COWLEY NORTH	264	4.30	Gen	0.11
PKNE	COWLEY RIDGE WIND POWER PHASE1	264	4.30	Gen	0.11
CRWD	COWLEY RIDGE WIND POWER PHASE2	264	4.30	Gen	0.11
DAI1	DIASHOWA	1088	-1.80	Gen	-5.99
DKSN	DICKSON DAM 1	4006	4.97	Gen	0.78
DOWGEN15M	DOW GTG	61	3.51	Gen	-0.68
DV1	DRAYTON VALLEY PL IPP	4332	0.00	Gen	-4.19
DRW1	DRYWOOD 1	4226	2.28	Gen	-1.91
Project462_1_GEN	CASTLE ROCK WIND FARM	221	2.32	Gen	-1.87
Project1315_1_GEN	NATURENER RIM ROCK - MATL TEMPORARY CONNECTION	451	2.19	Gen	-2.00
CES1	ENMAX CALGARY ENERGY CENTRE CTG	187	0.94	Gen	-3.25
CES2	ENMAX CALGARY ENERGY CENTRE STG	187	0.94	Gen	-3.25
CRS1	ENMAX CROSSFIELD ENERGY CENTER	503	1.05	Gen	-3.14
CRS2	ENMAX CROSSFIELD ENERGY CENTER	503	1.05	Gen	-3.14
CRS3	ENMAX CROSSFIELD ENERGY CENTER	503	1.05	Gen	-3.14
FNG1	FORT NELSON	20000	3.21	Gen	-0.98
AFG1TX	FORTISALBERTA AL-PAC PULP MILL	392	1.14	Gen	-3.05
EC04	FOSTER CREEK G1	1301	3.44	Gen	-0.75
0000001511	FT MACLEOD	4237	1.24	Gen	-2.95
GN1	GENESEE 1	525	5.65	Gen	1.45
GN2	GENESEE 2	525	5.65	Gen	1.45
GN3	GENESEE 3	525	5.65	Gen	1.45
GHO	GHOST	180	-0.46	Gen	-4.65
NEP1	GHOST PINE WIND FARM	603	3.72	Gen	-0.47
0000022911	GLENWOOD	245	2.43	Gen	-1.76
GPEC	GRANDE PRAIRIE ECOPOWER CENTRE	1101	-3.85	Gen	-8.04
0000025611	HARMATTAN GAS PLANT DG	4123	-0.46	Gen	-4.65
HSH	HORSESHOE	171	-0.42	Gen	-4.61
HRM	HR MILNER	1147	-0.90	Gen	-5.09
INT	INTERLAKES	376	0.84	Gen	-3.35
KAN	KANANASKIS	193	-0.37	Gen	-4.56
KH1	KEEPHILLS #1	420	6.13	Gen	1.94
KH2	KEEPHILLS #2	420	6.13	Gen	1.94
KH3	KEEPHILLS #3	610	5.57	Gen	1.38
KHW1	KETTLES HILL WIND ENERGY PHASE 2	402	2.68	Gen	-1.51
IOR1	MAHKESES COLD LAKE	56789	4.54	Gen	0.35
AKE1	MCBRIDE	901	2.01	Gen	-2.18
MKRC	MCKAY RIVER	1274	2.99	Gen	-1.20
MEG1	MEG ENERGY	405	3.44	Gen	-0.75
MKR1	MUSKEG	1236	2.67	Gen	-1.53
NX02	NEXEN OPTI	1241	3.73	Gen	-0.47
NPP1	NORTHERN PRAIRIE POWER PROJECT	1120	-6.15	Gen	-10.35
NPC1	NORTHSTONE ELMWORTH	1134	-6.05	Gen	-10.25
NOVAGEN15M	NOVA JOFFRE	383	1.84	Gen	-2.36
OMRH	OLDMAN	230	2.72	Gen	-1.47
WEY1	P&G WEYERHAUSER	1146	-3.03	Gen	-7.22
0000039611	PINCHER CREEK	224	2.51	Gen	-1.68
POC	POCATERRA	214	0.42	Gen	-3.77
PH1	POPLAR HILL	1118	-5.92	Gen	-10.11
PR1	PRIMROSE	1302	2.22	Gen	-1.97
RB1	RAINBOW 1	1031	1.35	Gen	-2.84
RB2	RAINBOW 2	1032	2.00	Gen	-2.19
RB3	RAINBOW 3	1028	1.60	Gen	-2.59
RL1	RAINBOW 4	83	1.49	Gen	-2.70
RB5	RAINBOW 5	1037	1.57	Gen	-2.63
RYMD	RAYMOND RESERVOIR	413	0.00	Gen	-4.19
TC02	REDWATER	50	3.24	Gen	-0.95
RUN	RUNDLE	195	-0.64	Gen	-4.83
SH1	SHEERNESS #1	1484	5.14	Gen	0.95
SH2	SHEERNESS #2	1484	5.14	Gen	0.95
SHCG	SHELL CAROLINE	4370	-0.22	Gen	-4.41
SCTG	SHELL SCOTFORD	43	3.03	Gen	-1.16

MP-ID*	Facility Name	PSS/E Bus	Normalized and Compressed Loss Factor (%)	Loss Factor Asset	Difference % in Loss Factor to System Average
GWW1	SODERGLÉN	358	2.91	Gen	-1.28
SPR	SPRAY	310	-0.57	Gen	-4.76
0000038511	SPRING COULEE	246	1.41	Gen	-2.78
STMY	ST MARY IPP	3448	2.10	Gen	-2.09
0000006711	STIRLING	3450	-0.07	Gen	-4.26
ST1	STURGEON 1	1166	-1.25	Gen	-5.44
ST2	STURGEON 2	1166	-1.25	Gen	-5.44
IEW1	SUMMERVIEW 1	336	3.26	Gen	-0.93
IEW2	SUMMERVIEW 2	336	3.26	Gen	-0.93
SCR3	SUNCOR HILLRIDGE WIND FARM	389	1.25	Gen	-2.94
SCR2	SUNCOR MAGRATH	251	1.92	Gen	-2.27
SCR1	SUNCOR MILLENIUM	1208	2.97	Gen	-1.22
SCR4	SUNCOR WINTERING HILLS WIND ENERGY PROJECT	759	4.84	Gen	0.65
SD3	SUNDANCE #3	135	4.54	Gen	0.35
SD4	SUNDANCE #4	135	4.54	Gen	0.35
SD5	SUNDANCE #5	135	4.54	Gen	0.35
SD6	SUNDANCE #6	135	4.54	Gen	0.35
SCL1	SYNCRUDE	1205	2.59	Gen	-1.61
TAB1	TABER WIND	343	0.84	Gen	-3.35
TAY1	TAYLOR HYDRO	670	1.74	Gen	-2.45
TAY2	TAYLOR WIND PLANT	670	1.74	Gen	-2.45
THS	THREE SISTERS	379	-0.57	Gen	-4.77
ARD1	TRANSALTA ARDENVILLE WIND FARM	739	2.96	Gen	-1.23
VVW2	ATCO VALLEY VIEW 2	1172	-0.94	Gen	-5.13
VVW1	VALLEYVIEW	1172	-0.94	Gen	-5.13
WTRN	WATER IPP	3449	2.47	Gen	-1.72
0000040511	WAUPISOO	417	0.18	Gen	-4.01
WST1	WESGEN	21	0.00	Gen	-4.19
EAGL	WHITE COURT	410	0.00	Gen	-4.19
Project723_1_SUP	CAPITAL POWER HALKIRK WIND PROJECT	1435	5.69	Gen	1.50
0000016301	Amoco Empress (163S)	262	-0.49	DOS	-4.68
0000079301	ANG Cochrane (793S)	191	3.40	DOS	-0.79
341S025	Syncrude Standby (848S)	1200	-0.82	DOS	-5.01

Notes:

\* MP-ID - point where loss factors assessed

For loss factors, "-" means credit, "+" means charge

Loss factors effective from April 01, 2012 to December 31 2012.

System Average Losses, %: **4.19**

For more information, please visit [www.aeso.ca](http://www.aeso.ca)

**Table 1: 2012 Tie Loss Factors**

Tie	Transaction Type	Loss Factor (%)	Average Loss Charge (%)	Settlement LF (%)
BC	Import	1.32	0.94	2.26
	Export	-	0.96	0.96
SK	Import	3.10	2.50	5.60
	Export	-	2.30	2.30