



October 22, 2010

Loss Factor Stakeholder Team

Re: Draft Loss Factors for 2011

The AESO has completed its preliminary calculation of 2011 loss factors and the draft results are attached. The analysis includes the application of the 2011 Generic Stacking Order (GSO) results published earlier this summer to the 2011 loss factor Base Cases published on October 15, 2010 on the AESO web site. The draft loss factors are determined by applying our methodology to this information. The AESO will be posting the final 2011 loss factors on or before November 05, 2010.

In order to provide perspective on the draft values, the AESO offers the following:

**Load treatment:**

- As in previous years, in the 2011 loss factor calculation, only transmission loads were *unassigned*<sup>1</sup>. Consistent with our methodology, these loads were not included in the loss factor calculation. Therefore the loss factors are based on generation less the behind the fence load levels at all relevant Generation Buses while maintaining the appropriate GSO level at the MPID bus.
- The load used in the base cases is consistent with the latest AESO long term load forecast.

**Inter-Tie Losses**

- Import loss factors in 2011 reflect the implementation of the 2007 Transmission Regulation.
- The settlement tie line losses are shown in Table 1

**Table 1 – Tie Line Losses**

Tie	Transaction Type	Loss Factor (%)	Average Loss Charge (%)	Settlement LF (%)
BC	Import	-0.46	0.98	0.52
	Export	-	1.02	1.02
SK	Import	0.89	2.50	3.39
	Export	-	2.30	2.30

**Shift Factor:**

- The preliminary shift factor for 2011 has been determined at 0.70%. The 2010 shift factor was 1.05%, representing a difference of 0.35%.

<sup>1</sup> Please check Section 2.2 of [Loss Factor Calculation Methodology - Effective January 01, 2009](http://www.aeso.ca/downloads/Loss_Factor_Calculation_Methodology_-_Effective_January_01_2009.pdf) ([http://www.aeso.ca/downloads/Loss\\_Factor\\_Calculation\\_Methodology\\_-\\_Effective\\_January\\_01\\_2009.pdf](http://www.aeso.ca/downloads/Loss_Factor_Calculation_Methodology_-_Effective_January_01_2009.pdf))

**Weighting Factor:**

- The AESO has applied unequal weighting factor to the raw loss factors based on historical load levels. Table 2 shows the seasonal weighting factors.

**Table 2 – Seasonal Weighting Factors**

	Winter		Spring		Summer		Fall	
	Duration	Weight	Duration	Weight	Duration	Weight	Duration	Weight
<b>High</b>	<b>125</b>	<b>5.8%</b>	<b>50</b>	<b>2.3%</b>	<b>100</b>	<b>4.5%</b>	<b>75</b>	<b>3.4%</b>
<b>Medium</b>	<b>1100</b>	<b>50.9%</b>	<b>1350</b>	<b>61.2%</b>	<b>1225</b>	<b>55.5%</b>	<b>1300</b>	<b>59.5%</b>
<b>Low</b>	<b>935</b>	<b>43.3%</b>	<b>807</b>	<b>36.6%</b>	<b>883</b>	<b>40.0%</b>	<b>810</b>	<b>37.1%</b>

Generally, the 2011 loss factors reflect changes in the AIES as would be expected through normal generation, load and transmission changes and large generator maintenance schedules.

Please provide any comments on the draft 2011 loss factors in writing to [lossfactor@aeso.ca](mailto:lossfactor@aeso.ca) by October 29, 2010.

Yours truly,

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cc:  
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2011 Alberta Loss Factors - 2010-10-21, Draft

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	-1.07	Gen	-5.20
NX01	BALZAC	290	-0.22	Gen	-4.35
BAR	BARRIER	216	-1.65	Gen	-5.78
BR3	BATTLE RIVER #3	1491	4.88	Gen	0.75
BR4	BATTLE RIVER #4	1491	4.88	Gen	0.75
BR5	BATTLE RIVER #5	1469	4.10	Gen	-0.02
BCRK	BEAR CREEK G1	10142	-1.51	Gen	-5.64
BCR2	BEAR CREEK G2	10142	-1.51	Gen	-5.64
BPW	BEARSPAW	183	-1.13	Gen	-5.26
BLYR	BELLY RIVER IPP	447	0.45	Gen	-3.68
BIG	BIGHORN	103	1.60	Gen	-2.53
BTR1	BLUE TRAIL WIND FARM	328	1.05	Gen	-3.08
BRA	BRAZEAU	56153	1.58	Gen	-2.55
GOC1	BRIDGE CREEK	19145	0.00	Gen	-4.13
0000045411	BUCK LAKE	80	3.13	Gen	-0.99
TC01	CARSELAND	5251	-0.20	Gen	-4.33
CAS	CASCADE	175	-2.08	Gen	-6.21
CR1	CASTLE RIVER	234	0.57	Gen	-3.56
EC01	CAVAILIER	247	0.08	Gen	-4.05
CHIN	CHIN CHUTE	406	0.00	Gen	-4.13
CMH1	CITY OF MEDICINE HAT	680	-0.68	Gen	-4.80
ENC1	CLOVER BAR 1	516	3.94	Gen	-0.18
ENC2	CLOVER BAR 2	516	3.94	Gen	-0.18
ENC3	CLOVER BAR 3	516	3.94	Gen	-0.18
CNR5	CNRL HORIZON	1263	4.83	Gen	0.70
CRE1	COWLEY EXPANSION 1	264	2.40	Gen	-1.73
CRE2	COWLEY EXPANSION 2	264	2.40	Gen	-1.73
CRE3	COWLEY NORTH	264	2.40	Gen	-1.73
PKNE	COWLEY RIDGE WIND POWER PHASE1	264	2.40	Gen	-1.73
CRWD	COWLEY RIDGE WIND POWER PHASE2	264	2.40	Gen	-1.73
DAI1	DIASHOWA	1088	-0.32	Gen	-4.44
DKSN	DICKSON DAM 1	4006	3.88	Gen	-0.24
DOWGEN15M	DOW GTG	61	3.79	Gen	-0.34
DV1	DRAYTON VALLEY PL IPP	4332	0.00	Gen	-4.13
DRW1	DRYWOOD 1	4226	0.39	Gen	-3.74
Project462_1_SUP	ENEL ALBERTA CASTLE ROCK WIND FARM	221	0.81	Gen	-3.31
CES1	ENMAX CALGARY ENERGY CENTRE CTG	187	-0.08	Gen	-4.21
CES2	ENMAX CALGARY ENERGY CENTRE STG	187	-0.08	Gen	-4.21
FNG1	FORT NELSON	1016	4.34	Gen	0.21
Project837_1_GEN	FORTISALBERTA AL-PAC PULP MILL	2392	-3.57	Gen	-7.70
EC04	FOSTER CREEK G1	1301	4.78	Gen	0.65
0000001511	FT MACLEOD	4237	0.29	Gen	-3.84
GN1	GENESEE 1	525	5.62	Gen	1.49
GN2	GENESEE 2	525	5.62	Gen	1.49
GN3	GENESEE 3	525	5.62	Gen	1.49
GHO	GHOST	180	-1.69	Gen	-5.82
Project518_1_SUP	GHOST PINE WIND FARM	603	2.39	Gen	-1.74
0000022911	GLENWOOD	4245	0.22	Gen	-3.91
GPEC	GRANDE PRAIRIE ECOPOWER CENTRE	1101	-1.86	Gen	-5.99
Project723_1_SUP	GREENGATE HALKIRK WIND PROJECT	1435	4.92	Gen	0.79
HSH	HORSESHOE	171	-1.68	Gen	-5.81
HRM	HR MILNER	1147	2.15	Gen	-1.98
INT	INTERLAKES	376	-0.35	Gen	-4.47
KAN	KANANASKIS	193	-1.64	Gen	-5.76
KH1	KEEPPHILLS #1	420	6.26	Gen	2.13
KH2	KEEPPHILLS #2	420	6.26	Gen	2.13
Project_500_1	KEEPPHILLS #3	610	5.60	Gen	1.48
KHW1	KETTLES HILL WIND ENERGY PHASE 2	402	0.82	Gen	-3.31
IOR1	MAHKESES COLD LAKE	56789	5.89	Gen	1.77
AKE1	McBRIDE	901	0.60	Gen	-3.53
MKRC	McKAY RIVER	1274	5.01	Gen	0.88
MEG1	MEG ENERGY	405	5.00	Gen	0.87
MKR1	MUSKEG	1236	5.10	Gen	0.97
NX02	NEXEN OPTI	1241	5.86	Gen	1.74
NPP1	NORTHERN PRAIRIE POWER PROJECT	1120	-4.38	Gen	-8.51
NPC1	NORTHSTONE ELMWORTH	19134	-4.13	Gen	-8.26
NOVAGEN15M	NOVA JOFFRE	383	1.43	Gen	-2.70

MP-ID*	Facility Name	PSS/E Bus	Normalized and Compressed Loss Factor (%)	Loss Factor Asset	Difference % in Loss Factor to System Average
OMRH	OLDMAN	230	0.82	Gen	-3.31
WEY1	P&G WEYERHAUSER	1141	-1.66	Gen	-5.79
0000039611	PINCHER CREEK	4224	0.71	Gen	-3.42
POC	POCATERRA	214	-1.04	Gen	-5.17
PH1	POPLAR HILL	1118	-4.29	Gen	-8.41
PR1	PRIMROSE	1302	3.61	Gen	-0.52
RB1	RAINBOW 1	1031	1.04	Gen	-3.09
RB2	RAINBOW 2	1032	0.45	Gen	-3.68
RB3	RAINBOW 3	1033	1.24	Gen	-2.88
RL1	RAINBOW 4	1035	1.62	Gen	-2.50
RB5	RAINBOW 5	1037	1.24	Gen	-2.89
RYMD	RAYMOND RESERVOIR	413	0.00	Gen	-4.13
TC02	REDWATER	50	3.54	Gen	-0.59
RUN	RUNDLE	56197	-1.73	Gen	-5.86
SH1	SHEERNESS #1	1484	3.04	Gen	-1.09
SH2	SHEERNESS #2	1484	3.04	Gen	-1.09
SHCG	SHELL CAROLINE	3370	-0.90	Gen	-5.03
SCTG	SHELL SCOTFORD	43	3.50	Gen	-0.63
GWW1	SODERGLEN	358	1.25	Gen	-2.87
SPR	SPRAY	310	-1.76	Gen	-5.89
0000038511	SPRING COULEE	4246	-1.47	Gen	-5.60
STMY	ST MARY IPP	3448	0.00	Gen	-4.13
0000006711	STIRLING	4280	-0.31	Gen	-4.44
ST1	STURGEON 1	1166	-0.04	Gen	-4.17
ST2	STURGEON 2	1166	-0.04	Gen	-4.17
IEW1	SUMMERVIEW 1	336	1.19	Gen	-2.94
IEW2	SUMMERVIEW 2	336	1.19	Gen	-2.94
CRS1	SUMMIT CROSSFIELD ENERGY CENTRE	503	0.08	Gen	-4.05
CRS2	SUMMIT CROSSFIELD ENERGY CENTRE	503	0.08	Gen	-4.05
CRS3	SUMMIT CROSSFIELD ENERGY CENTRE	503	0.08	Gen	-4.05
SCR3	SUNCOR HILLRIDGE WIND FARM	389	-0.22	Gen	-4.35
SCR2	SUNCOR MAGRATH	251	0.52	Gen	-3.61
SCR1	SUNCOR MILLENIUM	1208	5.20	Gen	1.07
SD1	SUNDANCE #1	135	5.49	Gen	1.36
SD2	SUNDANCE #2	135	5.49	Gen	1.36
SD3	SUNDANCE #3	135	5.49	Gen	1.36
SD4	SUNDANCE #4	135	5.49	Gen	1.36
SD5	SUNDANCE #5	135	5.49	Gen	1.36
SD6	SUNDANCE #6	135	5.49	Gen	1.36
SCL1	SYNCRUDE	1205	4.98	Gen	0.86
TAB1	TABER WIND	343	-0.82	Gen	-4.94
TAY1	TAYLOR HYDRO	670	0.81	Gen	-3.32
TAY2	TAYLOR WIND PLANT	670	0.81	Gen	-3.32
THS	THREE SISTERS	379	-1.76	Gen	-5.89
Project854_1_GEN	TRANSALTA ARDENVILLE WIND FARM	739	1.27	Gen	-2.86
VVW1	VALLEYVIEW 1	1171	0.84	Gen	-3.29
VVW2	VALLEYVIEW 2	1172	0.64	Gen	-3.48
WTRN	WATER IPP	3449	0.00	Gen	-4.13
0000040511	WAUPISOO	2417	-1.85	Gen	-5.98
WST1	WESGEN	14	0.00	Gen	-4.13
EAGL	WHITE COURT	410	0.00	Gen	-4.13
BCHIMP	BCH - Import	56765	-0.46	Imp	-4.59
SPCIMP	SPC - Import	1473	0.89	Imp	-3.24
0000016301	Amoco Empress (163S)	262	0.66	DOS	-3.47
0000079301	ANG Cochrane (793S)	191	3.50	DOS	-0.63
341S025	Syncrude Standby (848S)	1200	-4.51	DOS	-8.64

Notes:

\* MP-ID - point where loss factors assessed

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

Loss factors effective from January 01, 2011 to December 31, 2011.

System Average Losses, %: **4.13**

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