



September 28, 2007

Loss Factor Stakeholder Team

Re: Draft Loss Factors for 2008

The AESO has completed its preliminary calculation of 2008 loss factors and the draft results are attached. The analysis includes the application of the 2008 Generic Stacking Order (GSO) results published earlier this summer to the 2008 Base Cases published in September on the AESO web site. On September 27 the base cases were updated with small changes and reposted on the AESO web site. The AESO is hosting a meeting on the draft loss factors on October 04, 2007 (from 11:00-12:00 at the Delta Bow Valley Hotel) and will accept comments on the loss factors until October 19, 2007. The AESO will be posting the final 2008 loss factors on or before November 02, 2007.

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

**Load treatment:**

- In the 2008 loss factor calculation, only transmission loads were unassigned. Similar to 2007, 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 load forecast for 2008.

**Overall results:**

- The Northwest area has less credit or more charges than in the 2007 Loss Factors. The Rainbow and North West area generation dispatched in the 2008 cases are higher than what was dispatched in the 2007 cases, mainly because of Transmission Must Run (TMR) and 146 MW of new generation additions. There is also a change in some of the bus load levels in the Northwest and Rainbow areas also affecting the loss factors.
- The South area (including the majority of existing and proposed wind generation) receives more credits/less charges than 2007. The Southwest transmission project was not included in the base cases in 2007 and the expected in-service-date has moved to the end 2008. Lower generation and higher load has resulted in a more favorable loss treatment in 2008 than in 2007.
- The Lake Wabamun area loss factors are experienced small changes relative to the 2007 loss factors. The changes are due to the added capacity in the Sundance area
- Sheerness and Battle River generation are lower in most of the 2008 base cases based on the lower actual 2007 output resulting in lower loss factors.
- The Fort McMurray area loss factors are higher in general, in 2008 due to higher generation dispatches in the cases.

- Import and export loss factors in 2008 reflect the reduced generation and higher load patterns in the base cases. The result is higher export loss factors and lower import loss factors.

**Shift Factor:**

- The preliminary shift factor for 2008 has been determined at 0.97%. The 2007 shift factor was 1.34%, representing a reduction of 0.37%.

**Weighting Factor:**

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

Generally, the 2008 loss factors reflect changes in the AIES as would be expected through normal generation and load growth and large generator maintenance schedules.

Yours truly,

*Original signed by*

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Operations Forecasting, AESO

cc: Jerry Mossing  
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2008 Alberta Loss Factors. 2007-09-27, Draft

MP-ID*	Facility Name	PSS/E Bus	Normalized and Compressed Loss Factor (%)	Loss Factor Asset	Difference % in Loss Factor to System Average
NX01	BALZAC	290	-0.5	Gen	-5.27
BAR	BARRIER	216	-2.1	Gen	-6.90
BR3	BATTLE RIVER #3	1491	4.8	Gen	-0.06
BR4	BATTLE RIVER #4	1491	4.8	Gen	-0.06
BR5	BATTLE RIVER #5	1469	3.9	Gen	-0.87
BCRK	BEAR CREEK G1	10142	0.2	Gen	-4.60
BCR2	BEAR CREEK G2	10142	0.2	Gen	-4.60
BPW	BEARSPAW	183	-1.5	Gen	-6.32
BIG	BIGHORN	103	2.3	Gen	-2.52
BRA	BRAZEAU	153	2.6	Gen	-2.20
0000045411	BUCK LAKE	80	3.6	Gen	-1.17
CES1	CALPINE CTG	187	-0.4	Gen	-5.24
CES2	CALPINE STG	187	-0.4	Gen	-5.24
TC01	CARSELAND	5251	-0.5	Gen	-5.31
CAS	CASCADE	175	-2.6	Gen	-7.44
CR1	CASTLE RIVER	234	1.1	Gen	-3.66
EC01	CAVALIER	247	0.0	Gen	-4.78
CMH1	CITY OF MEDICINE HAT	680	-0.5	Gen	-5.35
Project593_1_SUP	CLOVER BAR PEAKER (STAGE 1 - LM6000)	516	4.9	Gen	0.06
CRE1	COWLEY EXPANSION 1	264	3.1	Gen	-1.74
CRE2	COWLEY EXPANSION 2	264	3.1	Gen	-1.74
CRE3	COWLEY NORTH	264	3.1	Gen	-1.74
PKNE	COWLEY RIDGE WIND POWER PHASE1	264	3.1	Gen	-1.74
CRWD	COWLEY RIDGE WIND POWER PHASE2	264	3.1	Gen	-1.74
DA11	DIASHOWA	1088	-1.1	Gen	-5.91
DOWGEN15M	DOW GTG	61	4.7	Gen	-0.15
DRW1	DRYWOOD 1	4226	0.6	Gen	-4.21
FNG1	FORT NELSON	1016	1.2	Gen	-3.62
EC04	FOSTER CREEK G1	1301	6.2	Gen	1.41
GN1	GENESEE 1	524	6.4	Gen	1.60
GN2	GENESEE 2	524	6.4	Gen	1.60
GN3	GENESEE 3	524	6.4	Gen	1.60
GHO	GHOST	180	-1.9	Gen	-6.71
0000022911	GLENWOOD	4245	0.6	Gen	-4.22
GPEC	GRANDE PRAIRIE ECOPOWER CENTRE	1101	-0.3	Gen	-5.14
HSB	HORSESHOE	171	-2.1	Gen	-6.89
HRM	HR MILNER	1147	3.6	Gen	-1.19
INT	INTERLAKES	376	-1.5	Gen	-6.34
KAN	KANANASKIS	193	-2.0	Gen	-6.80
KH1	KEEPHILLS #1	420	6.4	Gen	1.55
KH2	KEEPHILLS #2	420	6.4	Gen	1.55
KHW1	KETTLES HILL WIND ENERGY PHASE 2	402	1.3	Gen	-3.48
IOR1	MAHKESES, COLD LAKE	56789	5.1	Gen	0.31
AKE1	McBRIDE	901	0.7	Gen	-4.08
MKRC	McKAY RIVER	1274	6.0	Gen	1.21
Project_444_2	MEG ENERGY	405	5.9	Gen	1.14
MKR1	MUSKEG	1236	6.2	Gen	1.37
NX02	NEXEN OPTI	1241	5.2	Gen	0.43
Project672_1_SUP	Northern Prairie Power Project	1120	3.2	Gen	-1.63
NPC1	NORTHSTONE ELMWORTH	19134	-1.0	Gen	-5.78
NOVAGEN15M	NOVA JOFFRE	383	1.5	Gen	-3.35
OMRH	OLDMAN	230	1.6	Gen	-3.21
WEY1	P&G WEYERHAUSER	1141	2.0	Gen	-2.82
Project513_1_SUP	PEACE BUTTE WIND FARM	294	0.8	Gen	-3.98
0000039611	PINCHER CREEK	4224	1.3	Gen	-3.48
0000035311	PLAMONDON	4304	0.0	Gen	-4.77
POC	POCATERRA	214	-2.2	Gen	-7.02
PH1	POPLAR HILL	1118	-3.7	Gen	-8.47
PR1	PRIMROSE	1302	5.4	Gen	0.56
RB1	RAINBOW 1	1031	1.5	Gen	-3.35
RB2	RAINBOW 2	1032	0.8	Gen	-4.04
RB3	RAINBOW 3	1033	-0.7	Gen	-5.53

MP-ID*	Facility Name	PSS/E Bus	Normalized and Compressed Loss Factor (%)	Loss Factor Asset	Difference % in Loss Factor to System Average
RL1	RAINBOW 4, RL1	1035	-0.6	Gen	-5.41
RB5	RAINBOW 5	1037	-0.6	Gen	-5.39
TC02	REDWATER	50	4.5	Gen	-0.29
RG10	ROSSDALE 10	507	4.7	Gen	-0.16
RG8	ROSSDALE 8	507	4.7	Gen	-0.16
RG9	ROSSDALE 9	507	4.7	Gen	-0.16
RUN	RUNDLE	197	-2.1	Gen	-6.87
SH1	SHEERNESS #1	1484	2.8	Gen	-2.03
SH2	SHEERNESS #2	1484	2.8	Gen	-2.03
Project532	SHELL CAROLINE 378S	3370	-0.6	Gen	-5.38
SCTG	SHELL SCOTFORD	43	4.9	Gen	0.07
GWV1	SODERGLEN	358	0.9	Gen	-3.86
SPR	SPRAY	310	-2.1	Gen	-6.88
0000038511	SPRING COULEE	4246	-0.2	Gen	-5.01
0000006711	STIRLING	4280	-0.8	Gen	-5.60
ST1	STURGEON 1	1166	2.0	Gen	-2.84
ST2	STURGEON 2	1166	2.0	Gen	-2.84
IEW1	SUMMERVIEW 1	336	1.7	Gen	-3.07
SCR1	SUNCOR	1208	5.9	Gen	1.14
SCR3	SUNCOR HILLRIDGE WIND FARM	389	-1.5	Gen	-6.27
SCR2	SUNCOR MAGRATH	251	-0.3	Gen	-5.08
SD1	SUNDANCE #1	135	6.8	Gen	1.95
SD2	SUNDANCE #2	135	6.8	Gen	1.95
SD3	SUNDANCE #3	135	6.8	Gen	1.95
SD4	SUNDANCE #4	135	6.8	Gen	1.95
SD5	SUNDANCE #5	135	6.8	Gen	1.95
SD6	SUNDANCE #6	135	6.8	Gen	1.95
SCL1	SYNCRUDE	1205	6.1	Gen	1.31
TAB1	TABER WIND	343	-1.5	Gen	-6.32
TAY1	TAYLOR HYDRO	670	0.8	Gen	-4.04
TAY2	TAYLOR WIND PLANT	670	0.8	Gen	-4.04
THS	THREE SISTERS	379	-1.8	Gen	-6.62
VVW1	VALLEYVIEW	1171	1.8	Gen	-3.05
Project667_1_SUP	VALLEYVIEW # 2	1172	2.4	Gen	-2.39
WB4	WABAMUN #4	133	6.4	Gen	1.56
BCHEXP	BCH - Export	56765	5.7	Exp	0.88
BCHIMP	BCH - Import	56765	-1.8	Imp	-6.62
SPCEXP	SPC - Export	1473	6.6	Exp	1.77
SPCIMP	SPC - Import	1473	-2.9	Imp	-7.71
MATL_EXP	MATL - Export	167	5.0	Exp	0.21
MATL_IMP	MATL - Import	167	-2.1	Imp	-6.90
0000016301	Amoco Empress (163S)	262	5.1	DOS	0.27
DOWLOD15M	DOW Ft Saskatchewan ISD	9961	-4.0	DOS	-8.76
0000079301	ANG Cochrane (793S)	191	8.6	DOS	3.75
341S025	Syncrude Standby (848S)	1200	-4.8	DOS	-9.62

**Notes:**

\* MP-ID - point where loss factors assessed

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

Loss factors effective from January 1 to December 31 2008.

System Average Losses, %: 4.81

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