

July 30, 2012

Dear Loss Factor Stakeholders:

## Re: 2012 Recalculated Loss Factors

As part of the annual loss factor calculation, the AESO forecasts the loss energy volume for the year the loss factors are in effect. This loss forecast is adjusted quarterly with the latest available actual loss volume data as part of the calibration factor (CF) process. The loss forecast for Q3 has decreased over the initial forecast. The AESO delayed the release of the Q3 CF in order to carry out additional analysis to confirm the basis for the reduction in loss forecast.

The issues that prompted the earlier decision arose from changes in total loss volumes that did not appear to correlate with any system changes. The AESO has determined that post-final restated metering data was not propagating through the AESO's systems after final settlement to the calibration factor calculations. Some large post-final data adjustments from 2010 and 2011 which occurred earlier in 2012 resulted in the apparent lack of correlation. The data used for the calibration factor calculations has been fully updated, such that total loss volume changes now correlate with system changes such as the impacts of the shutdown of Sundance 1 and 2 units in late 2010 and the high hydro production and high import volumes that have occurred to date during 2011-2012.

The ISO Rule Section 9.2.2.b. stipulates that if the system average loss changes by an amount greater than 5% a system wide recalculation of loss factors may be required. The AESO has determined the magnitude of the change in the system average loss does warrant this recalculation for all loss factor sites. Table 1 shows the change in the forecast, the system average loss and the shift factor.

In addition to the updated loss forecast, the AESO has taken this opportunity to include updated information for generation projects. Please see Table 2 and the <u>2012 Generic Stacking Order</u> page for more details on the projects.

Please refer to Appendix 1 for the recalculated loss factor values effective August 1, 2012 and coinciding with the Updated Q3 CF.

If you have any questions, please contact <a href="lossfactor@aeso.ca">lossfactor@aeso.ca</a>

Yours truly,

Original signed by

Fred Ritter, P.Eng. Chief Engineer

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Table 1: 2012 Recalculated Loss Factor vs. Previous 2012 Loss Factors

		Changes to 2012 Loss factors Due to Updated Project Information (Posted March 28 <sup>th</sup> 2012)	Final Alberta Loss Factors for 2012 (Posted: November 3, 2011)
Effective Date	August 1 2012	April 1 2012	January 1 2012
Loss Forecast	2.24 TWh	2.58 TWh	2.58 TWh
System Average Loss	3.61%	4.19%	4.19%
Shift Factor	0.46%	1.07%	1.09%

**Table 2: 2012 Q3 Updated Generation Projects** 

AESO Project Number	Sub Project	AESO Project Name	Changes to 2012 Loss Factors Due to Updated Project Information (Posted March 28 <sup>th</sup> 2012)	2012 Recalculated Loss Factors	
Generation					
707	1	Suncor Firebag 4 STS Increase	none	fall	
1315	1	Naturener Rim Rock - MATL Temporary Connection	fall	none	

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## Appendix 1: 2012 Recalculated Loss Factors Effective August 01 2012

	_		Normalized and		Difference % in Loss
MP-ID*	Facility Name	PSS/E Bus	Compressed Loss	Loss Factor Asset	Factor to System
			Factor (%)	Asset	Average
0000034911	ALTAGAS PARKLAND	235	-0.16	Gen	-3.77
NX01	BALZAC	290	0.24	Gen	-3.37
BAR BR3	BARRIER BATTLE RIVER #3	216 1491	-1.02 5.33	Gen Gen	-4.63 1.72
BR4	BATTLE RIVER #3	1491	5.33	Gen	1.72
BR5	BATTLE RIVER #4 BATTLE RIVER #5	1469	4.47	Gen	0.86
BCRK	BEAR CREEK G1	10142	-4.25	Gen	-7.86
BCR2	BEAR CREEK G2	10142	-4.25	Gen	-7.86
BPW	BEARSPAW	184	-0.56	Gen	-4.16
BIG	BIGHORN	103	1.24	Gen	-2.37
BTR1	BLUE TRAIL WIND FARM	328	2.05	Gen	-1.56
BRA	BRAZEAU	56153	1.71	Gen	-1.90
GOC1	BRIDGE CREEK	1145	0.00	Gen	-3.61
0000045411	BUCK LAKE	80	2.63	Gen	-0.97
TC01	CARSELAND	5251	0.36	Gen	-3.25
CAS CR1	CASCADE	175	-1.54	Gen	-5.15
CRT CRR1	CASTLE RIVER	234	1.69 1.22	Gen	-1.91
EC01	CASTLE ROCK WIND FARM CAVAILIER	247	0.66	Gen Gen	-2.39 -2.95
CHIN	CHIN CHUTE	406	0.00	Gen	-3.61
CMH1	CITY OF MEDICINE HAT	680	0.79	Gen	-2.82
ENC1	CLOVER BAR 1	516	3.36	Gen	-0.25
ENC2	CLOVER BAR 2	516	3.36	Gen	-0.25
ENC3	CLOVER BAR 3	516	3.36	Gen	-0.25
CNR5	CNRL HORIZON	1263	2.58	Gen	-1.03
CRE1	COWLEY EXPANSION 1	264	3.49	Gen	-0.12
CRE2	COWLEY EXPANSION 2	264	3.49	Gen	-0.12
CRE3	COWLEY NORTH	264	3.49	Gen	-0.12
PKNE	COWLEY RIDGE WIND POWER PHASE1	264	3.49	Gen	-0.12
CRWD	COWLEY RIDGE WIND POWER PHASE2	264	3.49	Gen	-0.12
DAI1	DIASHOWA	1088	-2.51	Gen	-6.12
DKSN	DICKSON DAM 1	4006	4.30	Gen	0.69
DOWGEN15M DV1	DOW GTG DRAYTON VALLEY PL IPP	61 4332	2.91 0.00	Gen	-0.70
DRW1	DRYWOOD 1	4226	1.86	Gen Gen	-3.61 -1.75
CES1	ENMAX CALGARY ENERGY CENTRE CTG	187	0.32	Gen	-3.28
CES2	ENMAX CALGARY ENERGY CENTRE STG	187	0.32	Gen	-3.28
CRS1	ENMAX CROSSFIELD ENERGY CENTER	503	0.44	Gen	-3.17
CRS2	ENMAX CROSSFIELD ENERGY CENTER	503	0.44	Gen	-3.17
CRS3	ENMAX CROSSFIELD ENERGY CENTER	503	0.44	Gen	-3.17
FNG1	FORT NELSON	20000	2.76	Gen	-0.84
AFG1TX	FORTISALBERTA AL-PAC PULP MILL	392	0.63	Gen	-2.97
EC04	FOSTER CREEK G1	1301	2.91	Gen	-0.70
0000001511	FT MACLEOD	4237	0.56	Gen	-3.05
GN1	GENESEE 1	525	5.04	Gen	1.43
GN2	GENESEE 2	525	5.04	Gen	1.43
GN3 GHO	GENESEE 3 GHOST	525 180	5.04 -1.07	Gen Gen	1.43 -4.68
NEP1	GHOST PINE WIND FARM	603	3.05	Gen	-4.00
0000022911	GLENWOOD	245	1.61	Gen	-1.99
GPEC	GRANDE PRAIRIE ECOPOWER CENTRE	1101	-4.50	Gen	-8.11
0000025611	HARMATTAN GAS PLANT DG	4123	-1.26	Gen	-4.87
HSH	HORSESHOE	171	-1.04	Gen	-4.65
HRM	HR MILNER	1147	-1.55	Gen	-5.15
INT	INTERLAKES	376	0.29	Gen	-3.32
KAN	KANANASKIS	193	-0.98	Gen	-4.59
KH1	KEEPHILLS #1	420	5.52	Gen	1.91
KH2	KEEPHILLS #2	420	5.52	Gen	1.91
KH3	KEEPHILLS #3	610	4.96	Gen	1.35
KHW1	KETTLES HILL WIND ENERGY PHASE 2	402	1.88	Gen	-1.73
IOR1	MAHKESES COLD LAKE	56789	4.05	Gen	0.44
AKE1	MCBRIDE MCKAY BIVER	901	1.42	Gen	-2.19
MKRC MEG1	MCKAY RIVER MEG ENERGY	1274 405	2.60 2.94	Gen Gen	-1.01 -0.67
MKR1	MUSKEG	1236	2.94	Gen	-0.67
NX02	NEXEN OPTI	1241	3.41	Gen	-0.91
NPP1	NORTHERN PRAIRIE POWER PROJECT	1120	-6.83	Gen	-10.44
NPC1	NORTHSTONE ELMWORTH	1134	-6.75	Gen	-10.36
NOVAGEN15M	NOVA JOFFRE	383	1.22	Gen	-2.39

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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
OMRH					
WEY1	P&G WEYERHAUSER	1146	-3.65	Gen	-7.26
0000039611	PINCHER CREEK	224	1.65	Gen	-1.95
POC	POCATERRA	214	-0.14	Gen	-3.75
PH1	POPLAR HILL	1118	-6.56	Gen	-10.16
PR1	PRIMROSE	1302	1.70	Gen	-1.90
RB1	RAINBOW 1	1031	0.88	Gen	-2.73
RB2	RAINBOW 2	1032	1.50	Gen	-2.11
RB3	RAINBOW 3	1028	1.13	Gen	-2.48
RL1	RAINBOW 4	83	1.02	Gen	-2.59
RB5	RAINBOW 5	1037	1.07	Gen	-2.54
RYMD	RAYMOND RESERVOIR	413	0.00	Gen	-3.61
TC02	REDWATER	50	2.63	Gen	-0.98
RUN	RUNDLE	195	-1.27	Gen	-4.88
SH1	SHEERNESS #1	1484	4.53	Gen	0.92
SH2	SHEERNESS #2	1484	4.53	Gen	0.92
SHCG	SHELL CAROLINE	4370	-0.92	Gen	-4.53
SCTG	SHELL SCOTFORD	4370	2.46	Gen	-4.55
			2.46		-1.15
GWW1	SODERGLEN	358		Gen	
SPR	SPRAY	310	-1.20	Gen	-4.81
0000038511	SPRING COULEE	246	0.64	Gen	-2.97
STMY	ST MARY IPP	3448	0.53	Gen	-3.08
0000006711	STIRLING	3450	-0.64	Gen	-4.25
ST1	STURGEON 1	1166	-1.88	Gen	-5.49
ST2	STURGEON 2	1166	-1.88	Gen	-5.49
IEW1	SUMMERVIEW 1	336	2.46	Gen	-1.15
IEW2	SUMMERVIEW 2	336	2.46	Gen	-1.15
SCR3	SUNCOR HILLRIDGE WIND FARM	389	0.64	Gen	-2.97
SCR2	SUNCOR MAGRATH	251	1,32	Gen	-2.29
SCR1	SUNCOR MILLENIUM	1208	3.19	Gen	-0.42
SCR4	SUNCOR WINTERING HILLS WIND ENERGY PROJECT	759	4.22	Gen	0.61
SD3	SUNDANCE #3	135	3.93	Gen	0.33
SD4	SUNDANCE #4	135	3.93	Gen	0.33
SD5	SUNDANCE #5	135	3.93	Gen	0.33
SD6	SUNDANCE #6	135	3.93	Gen	0.33
SCL1	SYNCRUDE	1205	2.85	Gen	-0.76
		343	0.22		
TAB1	TABER WIND			Gen	-3.39
TAY1	TAYLOR HYDRO	670	1.12	Gen	-2.48
TAY2	TAYLOR WIND PLANT	670	1.12	Gen	-2.48
THS	THREE SISTERS	379	-1.25	Gen	-4.86
ARD1	TRANSALTA ARDENVILLE WIND FARM	739	2.36	Gen	-1.25
VVW2	ATCO VALLEY VIEW 2	1172	-1.55	Gen	-5.15
VVW1	VALLEYVIEW	1172	-1.55	Gen	-5.15
WTRN	WATER IPP	3449	0.99	Gen	-2.62
0000040511	WAUPISOO	417	-0.42	Gen	-4.03
WST1	WESGEN	21	0.00	Gen	-3.61
EAGL	WHITE COURT	410	0.00	Gen	-3.61
Project723_1_SUP	CAPITAL POWER HALKIRK WIND PROJECT	1435	4.67	Gen	1.06
0000016301	Amoco Empress (163S)	262	-1.02	DOS	-4.63
0000079301	ANG Cochrane (793S)	191	2.75	DOS	-0.86
341S025	Syncrude Standby (848S)	1200	-1.50	DOS	-5.11

Notes:

\* MP-ID - point where loss factors assessed
For loss factors, "-" means credit, "+" means charge
Loss factors effective from August 01, 2012 to December 31 2012.
System Average Losses, %:
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**Tie Loss Factors** 

DO T':	Transaction Type	Loss Factor (%)	Average Loss Charge (%)	Settlement LF (%)
BC Tie	Import	0.75 0.94		1.69
	Export	-	0.96	0.96
SK Tie	Transaction	Loss Factor (%)	Average Loss	Settlement
	Туре	LUSS Factor (70)	Charge (%)	LF (%)
	Import	2.40	2.50	4.90
	Export	-	2.30	2.30

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