

## **Transmission Loss Factor Methodology**

### **Transition Proposal**

#### **Premise of Proposal:**

The transition plan to be successful must balance the wishes of those parties desiring a transition plan and those parties paying the transition costs. The AESO believes that the transition period must be short and is recommending two years, i.e. all generating units would be assigned their calculated loss factors for 2008. The second condition was that the transitioned loss factors for 2006 must as a minimum comply with the loss factor boundary defined in Section 19(2)(f). Any generating units with loss factors residing outside of the loss factor envelope would be clipped to conform to the boundaries. The following proposal meets these requirements with the exception of ten cases where clipping is required.

#### **Proposal:**

All generating units whose current (2005) loss factors are less than the 2006 proposed loss factor will have their loss factors transition two thirds of the difference towards the 2006 loss factors in 2006 (unless clipping is required to meet the requirements of Section 19(2)(f)), transition half the remaining difference in 2007 and will be assigned their actual loss factors in 2008. The cost of this transition will be paid for by forecasting the transition cost as the targeted Calibration Factor balance for the year. Normally the calibration factor is forecasted to be zero for the year. Therefore the cost of the program will be recovered through the year by the Calibration Factor and the cost will be socialized and paid for by all generating units.

#### **Costs and Examples:**

The forecasted total cost of transmission losses for 2006, as stated in the AESO's recent GTA filing, is \$131,000,000. For the purpose of this proposal the AESO has assumed that the 2007 cost for transmission losses will be the same as 2006. The AESO estimate of the transition costs are as follows:

- Total cost increase for losses to the generating units whose loss factors will increase in charges is estimated to be approximately \$12 million,
- Year one (2006) costs of the transition proposal is  $1/3 \times \$12\text{million} = \$4\text{ million}$  which is approximately 5% of the total forecasted cost of losses for 2006,
- Year two (2007) cost of the transition program is  $1/6 \times \$12\text{ million} = \$2\text{ Million}$  which is approximately 2.5% of the total assumed cost of losses for 2007, and
- Total transition costs shared through Calibration Factor = approximately \$6 million over two years.

Examples of the loss factor changes for generating units are as shown in the table below. Note that numbers highlighted in blue exceed the loss factor envelope and therefore will be clipped to one times system average losses (in this case to -4.8%). Therefore the loss factors assigned to these units in 2007 would not exceed the loss factor envelope in 2007 as shown for the Popular Ridge generating unit.

**Uncorrected Table**

Gen	Existing	New	Difference	1st yr		2nd Yr
DSH PLNT	-15.50	0.65	-16.2	-4.73	-4.08	-2.04
P & G	-13.03	1.87	-14.9	-3.10	-1.23	-0.61
POPLAR-4	-17.40	-2.73	-14.7	-7.62	-10.35	-5.18
FORT NEL	-11.28	1.33	-12.6	-2.87	-1.54	-0.77
HR MILNER	-7.73	4.61	-12.3	0.50	5.11	2.55
STURGEON	-7.05	2.35	-9.4	-0.78	1.57	0.78
INTERLAKES	-11.63	-2.27	-9.4	-5.39	-7.66	-3.83
POCATERR	-11.63	-2.27	-9.4	-5.39	-7.66	-3.83
CASCADE	-11.20	-1.89	-9.3	-4.99	-6.88	-3.44
RAINBOW	-10.90	-1.61	-9.3	-4.71	-6.32	-3.16
HORSESHOE	-11.10	-1.92	-9.2	-4.98	-6.90	-3.45
KANANASKIS	-11.00	-1.9	-9.1	-4.93	-6.83	-3.42
BARRIER	-10.90	-1.9	-9.0	-4.90	-6.80	-3.40
RUNDLE	-10.85	-1.93	-8.9	-4.90	-6.83	-3.42
THREE SISTERS	-10.85	-1.93	-8.9	-4.90	-6.83	-3.42
GHOST GE	-10.75	-1.86	-8.9	-4.82	-6.68	-3.34
SPRAY	-10.60	-1.86	-8.7	-4.77	-6.63	-3.32
BALZAC T	-9.45	-0.82	-8.6	-3.70	-4.52	-2.26
CARSELAND	-9.43	-0.96	-8.5	-3.78	-4.74	-2.37
DRYWOOD	-10.08	-1.66	-8.4	-4.47	-6.13	-3.06
BEARSPAW	-9.58	-1.66	-7.9	-4.30	-5.96	-2.98
CAVALIER	-9.03	-1.42	-7.6	-3.96	-5.38	-2.69

**System Average**

4.8

**Corrected Table**

<b>Gen</b>	<b>Existing</b>	<b>New</b>	<b>Difference</b>	<b>1st yr</b>		<b>2nd Yr</b>
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POPLAR-4	-17.40	-2.73	-14.7	-4.80	-7.53	-3.77
FORT NEL	-11.28	1.33	-12.6	-2.87	-1.54	-0.77
HR MILNER	-7.73	4.61	-12.3	0.50	5.11	2.55
STURGEON	-7.05	2.35	-9.4	-0.78	1.57	0.78
INTERLAKES	-11.63	-2.27	-9.4	-4.80	-7.07	-3.54
POCATERR	-11.63	-2.27	-9.4	-4.80	-7.07	-3.54
CASCADE	-11.20	-1.89	-9.3	-4.80	-6.69	-3.35
RAINBOW	-10.90	-1.61	-9.3	-4.71	-6.32	-3.16
HORSESHOE	-11.10	-1.92	-9.2	-4.80	-6.72	-3.36
KANANASKIS	-11.00	-1.9	-9.1	-4.80	-6.70	-3.35
BARRIER	-10.90	-1.9	-9.0	-4.80	-6.70	-3.35
RUNDLE	-10.85	-1.93	-8.9	-4.80	-6.73	-3.37
THREE SISTERS	-10.85	-1.93	-8.9	-4.80	-6.73	-3.37
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**System Average**  
4.8