

October 17, 2006

Loss Factor Stakeholder Team

## Re: Draft Loss Factors for 2007

The AESO has completed its preliminary calculation of 2007 loss factors and the draft results are attached. The analysis includes the application of the 2007 Generic Stacking Order (GSO) results published earlier this summer to the 2007 Base Cases published in early October on the AESO web site. The results have been posted on the AESO web site. The AESO is hosting a meeting on the draft loss factors on Oct 24, 2006 and will accept comments on the loss factors until October 26, 2006. The AESO will be posting the final 2007 loss factors on November 3, 2006.

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

## **Changes to load treatment:**

- In the development of the 2007 loss factor base cases, a small adjustment in the base cases was necessary to account for transmission and behind the fence loads. In the 2006 loss factor determination, all loads (transmission and behind the fence) were unassigned in the loss factor calculation process. Loss Factors were calculated based on Generation Levels at the Generation Bus. The base cases were correctly adjusted to maintain the Net-To-Grid (NTG) MW level at the measurement point (MPID) bus as indicated in the 2006 GSO. In the 2007 loss factor calculation, only transmission loads were unassigned and were not included in the calculation. This represents a more appropriate load assignment process. 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.
- In re-evaluating the loss factor for 2006, the only real change was to the import, export, and DOS loss factors due to changes in the Shift Factor. These changes were relatively small.
- The load used in the base cases is consistent with the latest AESO load forecast for 2007.

## **Overall results:**

- The Northwest area has less credit than in the 2006 posted Loss Factors. The Rainbow area generation dispatched in the 2007 cases is higher than what was dispatched in the 2006 cases, even though the 2006 GSO values are numerically higher.
- The South West area (including the majority of existing and proposed wind generation) receives less credits/more charges due to the delays in the SW transmission development project. The project is not included in the base cases in 2007 as the expected in-service-date has moved to 2008. For the 2006 loss factors, the SW development was included.

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- The Lake Wabamun area loss factors are lower than 2006 loss factors due to the historically lower generation in the area which reduces the flow in the backbone in most of the cases. Also, the Genesee 3 output is lower than the estimate made in 2006.
- Sheerness and Battle River generation are higher in most of the 2007 base cases than in the 2006 cases resulting in higher loss factors.
- The Fort McMurray area loss factors are lower in general except for Syncrude, in 2007 due to lower generation dispatches in the cases. The Syncrude dispatch is higher in 2007 cases in most of the scenario base cases.
- Import and export loss factors on both Alberta and Saskatchewan inter-ties is more favorable than listed in the 2006 posted loss factors with the exception of Import to Saskatchewan.

# Shift Factor:

• The preliminary shift factor for 2007 has been determined at 1.34%. The 2006 shift factor was 1.93%, representing a reduction of 0.59%.

# Weighting Factor:

• The AESO is applying unequal weighting factor to the raw loss factors based on historical load levels. In 2006, the AESO applied equal weighting for all 12 scenarios.

Generally, the 2007 loss factors are similar to the 2006 loss factors. The major differences in the cases are slight changes in historical generation, an increased system load, and changes in the actual generation connected in the south area of the province.

Yours truly,

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