December 11, 2009

To: Loss Factor Stakeholders

Re: <u>Treatment of New Generators, Transmission Must Run Generation and DC losses</u>

Several important issues were raised at the October 27, 2009 loss factor stakeholder meeting. In order to address the issues, the AESO is asking for your feedback on a number of items. Changes arising from these consultations may result in changes to the loss factor rule. The items are:

Effect of New Generators on Loss Factors: The AESO updated 2009 loss factors twice in the last two months of the year because of unexpected advancement of in-service-dates (ISDs) of several new generators.

A situation involving changes like these has not occurred since the new loss factor methodology has been in place. The loss factor process incorporates new generators in the next year's loss factor calculation as per the AESO loss factor rule.

The process to include new generators in the loss factor calculation involving advanced in-service dates (ISDs) into the current year needs to be updated. An illustration of possible scenarios can be used to discuss some options involving these ISD changes.

The current calculation process includes the total anticipated output of a generator across the entire season even if the generator is commissioned part way though the season. The inclusion of the full season causes changes in the loss factor calculation. In order to improve the accuracy of the results caused by changes to commissioning schedules on loss factors the AESO proposed the following options:

1. Assume the generator's output is zero for the partial season in which it is commissioned.
2. Scale the anticipated generation in accordance to the number of months it will be in season either 1/3 (1 month) or 2/3 (2 months) of the anticipated output.

Options 1 and 2 may cause other generators' loss factors to change as per AESO rule 9.2.2.b (except for option 1 when a new generator is advanced to the last quarter of the current year).

Transmission Must Run (TMR) Generators: Each year the AESO prepares the Generic Stacking Order (GSO) for the loss factor base cases. The GSO is an important component in the determination of loss factors. The GSO is prepared based on historical settlement data and on SCADA dispatched data. The settlement data includes energy and TMR components for TMR dispatched units. The GSO process separates the TMR and energy components. The process is used to ensure TMR dispatches were evaluated fairly.

Milner Power Inc (MPI) suggested in a recent letter to the AESO "*MPI's view is that forecast reduction or elimination of TMR should be treated in a similar way to anticipated generator retirements.*" MPI further recommend "*As a part of an ongoing process, MPI recommends that prior to constructing the Generic Stacking Order, the AESO review the anticipated in service date of transmission upgrades that are tied to TMR, update the anticipated TMR requirements, and incorporate anticipated reductions/retirements into the GSO the following year.*"

Currently in the GSO, the historical data (as defined in the AESO loss factor rules) are used for TMR like other generators.

In the interest of ensuring the generation data is being used properly in areas employing TMR, the AESO is considering two options –

1. Treating TMR generators like other existing generators. As new transmission is built, obviating the need for TMR, these generators may not be used as frequently but their bidding behavior may change.
2. Treating TMR generators like generation retirement as the anticipated effect of NW transmission development is reduction/elimination of the TMR amount.

DC Losses: Presented by Teshmont on October 27, 2009 in the stakeholders' meeting. The issues to be discussed will be:

1. The treatment of DC facilities in the 2014 forecasted loss factor estimates without a definitive DC loss methodology, and
2. Methodologies to be considered with respect to DC losses and loss factors and corresponding software changes.

As the 2014 loss factor estimates are planned to be provided prior to March 31, 2010, an interim methodology for the treatment of DC losses was discussed on October 27, and will be employed.

The AESO would appreciate your comments, suggestions and proposals on the items listed above by January 8, 2010. If required, meetings to discuss these issues will be set early in 2010.

Yours truly,

"original signed by"

Robert Baker, P.Eng.
Forecasting Services