



April 19, 2006

Sent via e-mail

AESO Stakeholders

AESO 2005-2006 General Tariff Application

Dear Stakeholder:

Re: **AESO 2007 Tariff — 2006 Cost Causation Study Preliminary Report**
AESO 2007 Tariff — Customer Contribution Policy Study Update

On February 16 and 28, 2006, the AESO distributed revised terms of reference documents for both a 2006 Cost Causation Study and a Customer Contribution Policy Study. This letter provides a status report on the studies and includes an attached preliminary report for the 2006 Cost Causation Study.

The collection and analysis of data for the Cost Causation Study has required more time than anticipated. The study to date has focused on the bulk system analysis listed as the first activity in the terms of reference, as it was considered to require the most extensive analysis. Work is also underway on other areas of the cost study, but results are not yet available. The AESO expects that the final study will not be completed until late May.

In the 2007 Rates Consultation Discussion Paper distributed by the AESO on December 13, 2005, the AESO proposed that individual monthly coincident peak billing would continue to be used in 2007 to recover the demand component of the bulk system charge. However, the results of the cost causation study preliminary report have brought into question the coincident demand premise for bulk system cost causation. The AESO therefore invites stakeholders to review the preliminary report and provide responses to the following views of the AESO.

1. The preliminary study discusses the correlation of Alberta Internal Load (AIL) with factors that cause expansion of the transmission bulk system. This correlation was investigated through three approaches:
 - (a) qualitative discussion with transmission system planners;
 - (b) quantitative analysis of 240 kV line loads and AIL load; and
 - (c) quantitative analysis of percentage of 240 kV line thermal capacity and AIL load (not yet completed).

The AESO considers these three approaches to provide an appropriate and comprehensive examination of correlation of AIL load with factors that cause expansion of the transmission bulk system.

2. The AIL load profile is relatively flat, with the summer peak load in 2005 approximately 90% of the winter peak load. In addition, the original *Transmission Cost Causation Study*

2500, 330 - 5th Ave SW Calgary, Alberta T2P 0L4
t (403) 539-2450 | f (403) 539-2949 | www.aeso.ca

identified that 55% of points of delivery experienced peak load conditions in the winter and 45% experienced peak load conditions in other periods. The preliminary study has also found that transmission upgrades are driven by concerns that occur both in the winter and in the summer. Given these findings, the bulk system rate design should generally provide equal weighting to all months.

3. The preliminary study has confirmed that transmission system planning is very complex. It is not dominated by any one simple factor such as AIL peak load, but instead responds to a large number of independent factors such as generation patterns, regional loads, and summer and winter thermal capacities. Most 240 kV circuits (59 of 88, or 67%) exhibit only small correlation (Pearson's coefficients less than 0.30, either positive or negative) with AIL load. A significant number of 240 kV circuits (26 of 88, or 30%) exhibit line loading that is inversely proportional to AIL load. Given these factors, the AESO considers that cost causation does not support the recovery of bulk system costs on the basis of coincidence with AIL peak.
4. The time of maximum stress on bulk system circuits does not necessarily coincide with the time of AIL peak load. The evidence does not support the classification of the bulk system in Alberta on either a 1 CP (one annual coincident peak) or 12 CP (twelve monthly coincident peaks, equally weighted) basis, nor is there clear evidence to point to another superior method of classifying costs based on cost causation. In the absence of a classification that is clearly cost driven, the AESO suggests that other rate design principles should be considered. Specifically, considerations of practicality, including simplicity, convenience, understandability, acceptability, and billing ease, suggest that reverting to recovery of bulk system costs based on billing capacity should be considered.
5. The original *Transmission Cost Causation Study* concluded that the bulk system should be classified 81.5% as demand-related and 18.5% as energy-related based on a minimum system analysis. The AESO then reduced the demand-related component further to reflect the coincidence of AIL peak with time of maximum stress, using a coincidence factor, based on data for the 500 kV N-S path, of 71.1%. The demand-related component became $81.5\% \times 71.1\% = 57.9\%$, and the balance (42.1%) of bulk system costs was classified as energy-related. The preliminary study has determined the average coincidence factor for all 240 kV lines to be 56%. If the coincident demand component for recovery of bulk system costs is retained in the DTS rate, it should therefore be reduced to recover only $81.5\% \times 56\% = 45.6\%$ of the bulk system costs, with the balance (54.4%) classified as energy-related.

The AESO encourages stakeholders to provide feedback on the above comments and the preliminary study results using the attached comment form. Stakeholders are requested to return comments to the AESO by Wednesday, May 3, 2006. The AESO will post all comments on its website and distribute a response matrix with AESO comments by May 17, 2006.

In relation to the Customer Contribution Study the collection of data has required more time than anticipated. The AESO is working to complete the data collection and proceed to the analysis phase. Preliminary results will be made available to stakeholders as soon as possible.

Please provide your comments to John Martin at john.martin@aeso.ca. If you have questions on the cost study preliminary results, the contribution study discussed in this letter, or on the 2007 tariff consultation in general, please contact John Martin at (403) 539-2465 or Ed Hucman at (403) 539-2469 (both in Calgary) or by e-mail to john.martin@aeso.ca or ed.hucman@aeso.ca.

All information on the 2007 tariff consultation is available on the AESO's website at www.aeso.ca by following the paths:

- Tariff ► Current Consultations ► 2007 Rates, and
- Tariff ► Current Consultations ► 2007 Terms and Conditions.

Yours truly,

[original signed by]

John Martin
Manager, Regulatory

cc: Heidi Kirrmaier, Vice President, Regulatory, AESO
Ed Hucman, Manager, Regulatory, AESO