



April 11, 2008

Rob Baker
AESO
2500, 330 - 5th Avenue SW,
Calgary, Alberta
T2P 0L4

TransCanada Energy Ltd.
450 - 1st Street S.W.
Calgary, Alberta, Canada T2P 5H1

tel 403.920.2087
fax 403.920.2362
email vince_kostesky@transcanada.com
web www.transcanada.com

Dear Rob:

Re: Voltage Profile in Loss Factor Base Cases

In response to the AESO's letter dated March 19, 2008 regarding a proposal by the AESO on developing the bus voltages for the loss factor base cases, TransCanada offers the following comments;

TransCanada generally supports the AESO's plan to improve the accuracy of the voltage profiles in the loss factor models. Improving accuracy within the models, based on actual transmission system operation, will result in a more accurate loss factor signal to generators.

The AESO has proposed that all of the voltage tolerances in the loss factor models be changed to plus or minus 1% or 2.5% from the current range of plus or minus 5%. TransCanada supports this change in concept as plus or minus 5% is outside the AESO operating range provided in OPP 702.

Ideally the AESO should review the historic bus voltage information in a manner similar to the determination of the generator output in the loss factor models. The average bus voltage would be calculated during the peak, median and low hours as determined by the loss factor methodology. However, performing this calculation for the 600 to 700 buses in the 12 models may not be the most efficient use of AESO resources. TransCanada prefers that the AESO use historical bus voltages for the buses that deliver or consume the highest amount of electric energy or are the key buses in the Province. The AESO could adopt a practice of determining historical bus voltages for buses over 500 MW on the 240 kV or 500 kV systems. The AESO could also use the historical bus voltage method in key geographic areas of the 240 kV or 500 kV systems. For example, the buses with over 500 MW would include the major coal fired generators in Alberta and buses in the Grande Prairie, Ft McMurray, Calgary, Red Deer and Lethbridge areas. This would ensure that the major generators in the province and the major load buses in key geographic areas of the province would be adjusted to reflect historical bus voltage levels. This approach will ensure there is adequate accuracy in the calculation of transmission losses.

For other bus voltages on the transmission system, the AESO should ensure that OPP 702 has been applied to the loss factor models. OPP 702 provides the “Desired Range” for the bus voltages in Alberta and all bus voltages in the models should be within the desired range.

TransCanada recommends that the accurate determination of the bus voltages continues to be a key practice utilized by the AESO when refining the loss factor models.

If you require any further information or have question, please do not hesitate to contact either myself at (403) 920-2087 or Larry Sibbald at (403) 920-6853

Regards

(Original signed by)

Vince Kostas
Director, Market Services

Cc: Larry Sibbald - Consultant