

**TFO O&M Cost Causation Study Working Group
Meeting Notes for May 25, 2009**

The following notes summarize items on which participants had discussion of substance. If an agenda item was simply reviewed and acknowledged, it is not included in these notes.

1 Participants

- AltaLink: James Yeo (representing AltaLink TFO)
- ENMAX: Penny Haldane (representing ENMAX Power TFO and DFO)
- EPCOR: Stan Yee (representing EPCOR TFO and DFO, by conference call)
- AESO: John Martin and David Michaud
- Consultant to AESO: Arnie Reimer

2 Action Items

- (a) **AESO** Revise scope of study to reflect discussion in items 3 and 5.

3 Next Meeting

- (a) 1:00-3:00 PM on Thursday, June 18, 2009.

4 TFO O&M Cost Causation Study

- (a) For previous study filed with 2006 tariff application, TFOs provided extensive confidential facilities data by line and substation. This O&M study looks like it won't require as extensive data nor confidential data. If necessary, Arnie will sign confidentiality agreements with the TFOs as was done for the prior study.
- (b) The study will include the four largest TFOs in the province: AltaLink, ATCO Electric, ENMAX Power, and EPCOR. At this time it doesn't appear there will be significant extra costs for the TFOs to provide the necessary data, but if so payment of those TFO costs would need to be addressed.
- (c) The cost-effectiveness of the study should be assessed. In its 2007 GTA Refiling, the AESO estimated the study would incur on the order of \$100,000 in AESO and consultant costs. This estimate still seems appropriate, and the value of the study seems worth that expenditure.

5 Definition of TFO O&M

- (a) TFO O&M could be defined very broadly as all TFO costs except capital-related costs, or very narrowly as costs of those departments directly involved in operation and maintenance of transmission facilities in the field. The broader definition is easiest to deal with and generally aligns with the rate structure. Use of a narrower definition would leave the issue of how to deal with the balance of non-capital-related costs. Participants support the adoption of a broad definition of TFO O&M for this study.
- (b) TFO costs identified as capital maintenance will not be considered as O&M for the study.

6 Years of Data for Study

- (a) Arnie will use five years of data for the study, from 2005 to 2009 inclusive. The original study in 2005 was based on facilities data for 2003 and 2004. The different data years should not be a problem as the transmission system has not changed extensively over those years.

- (b) Although the study will be based on five years of data, the study will examine O&M over the life of the transmission facilities.
- (c) Information for the study will rely in large part on interviews with TFO employees, and interpretation of the information by Arnie. The study will generally be less data-intensive than the original cost causation study.

7 Scope of Study

- (a) The draft study scope suggested examining the type of maintenance — whether predictive, preventive, or reactive. After discussion, participants concluded those distinctions are not relevant to the outcome of the study and should be removed from the study scope.
- (b) In discussion after the meeting, Arnie noted the draft study scope did not mention reviewing the level of the 12% O&M charge. The examination of TFO O&M should lend itself to addressing that issue, as well. The direction on the 12% O&M charge has been included in the revised study scope enclosed with these notes.
- (c) The study should include a summary of the questions asked during the TFO interviews.

8 Expected Outcome of Study

- (a) The 2006 Transmission Cost Causation Update filed with the AESO's 2007 GTA included the following functionalization and classification of all TFO costs (both capital and O&M):

Function	Total	Classification		
		Demand (\$/MW)	Usage (\$/MWh)	Customer (\$/month)
Bulk System	41.7%	34.2%	7.5%	-
Local System	17.4%	14.3%	3.1%	-
POD	40.9%	35.0%	-	5.9%
Total	100.0%	83.5%	10.6%	5.9%

Note: Totals may not add due to rounding

- (b) The TFO O&M study is expected to result in a similar table that functionalizes and classifies O&M costs. The table above would then be used for the approximately 67% to 75% of TFO costs that are capital-related, while the O&M study table would be used for the balance of approximately 25% to 33% of TFO costs that are considered O&M-related.
- (c) For consistency between both studies, high-voltage switchgear in substations will continue to be functionalized as POD costs, as in the original study.
- (d) The functionalization of O&M costs will primarily be based on the TFO interviews. So far, the only item that may be problematic appears to be telecontrol equipment.

9 Initial Indications

- (a) O&M appears to be incurred to maintain or improve reliability of transmission facilities, and reliability-related costs are generally classified as demand-related costs. No energy-related costs have yet been suggested for O&M activities.

10 Enclosure

- (a) Revised TFO O&M Cost Causation Study Scope