1 Study Purpose

The study will allow the AESO to respond to the following AUC directions:

**Direction 4D in Decision 2005-096 (page 23)**
However, the Board also considers that a reasonable portion of TFO costs are related to O&M and that a material percentage of these may be energy related. Unfortunately, the impact of this factor does not appear to have been researched in this current study and therefore the Board cannot draw a firm conclusion respecting its impacts on the demand charge. Nonetheless, based upon the percentage that O&M expenses comprise of a TFO’s revenue requirement, the Board considers that such an analysis would support a reasonable classification of costs as energy related. The Board expects the AESO to address these issues in future cost of service studies.

**Direction 20A in Decision 2005-096 (page 69)**
While the Board believes that the adoption of a 12% prepaid O&M surcharge is directionally appropriate and should be applied for the purposes of the 2006 tariff, the Board is not convinced that sufficient evidence has been gathered to determine that 12% figure appropriately tracks costs. Accordingly, the Board directs the AESO to conduct further analysis of the appropriate amount of the prepaid O&M surcharge and to reflect their findings in the design of the surcharge included no later than with the AESO’s 2008 General Tariff Application.

**Direction 2 in Decision 2007-106 (page 25)**
The Board directs the AESO to compare the value of the additional TCCU refinement recommendations proposed by PS Technologies against the cost of performing the additional research, present the results in its next GTA, and to propose at its next GTA any refinements it considers warranted.

**Direction 18 in Decision 2007-106 (page 106)**
Direction 20A instructed the AESO to conduct a study of incremental TFO O&M to be included in the AESO’s 2008 GTA. However, as the AESO did not advance the completion of this direction in the Application, as it did with other aspects of the customer contribution policy (such as the AESO’s advancement of the cost study used in support of the AESO’s revised maximum investment function), the Board does not have any basis at this time to revise its finding in Decision 2005-096 that, on average, $0.12 of incremental TFO O&M costs will be generated by each $1.00 of capital investment in an interconnection facility. However, additional research into the relationship between incremental TFO O&M costs and POD capital costs remains valuable. Accordingly, the Board directs the AESO to respond to Direction 20A from Decision 2005-096 in its next GTA.

2 Study Summary

Produce a report for the AESO that will be part of the next AESO GTA outlining operating and maintenance costs of electric transmission systems. The report will address the directions listed
above from Decisions 2005-096 and 2007-106. The report will study and provide recommendations for the functionalization and classification of O&M costs for use in AESO’s transmission tariff design.

3 Study Scope

1. Identify Total Revenue Requirement for four largest TFOs in Alberta for 2 or 3 historical years, by year:
   a. Breakdown of costs into capital and O&M
   b. Breakdown of O&M costs

2. Study O&M costs:
   a. Over the service life of the facilities
   b. By the type of facilities
      i. Transmission lines
      ii. Substations and switching apparatus
      iii. Transformers
      iv. Protection and Controls
      v. Telecommunication

3. Develop relationship of:
   a. O&M costs in relation to capital costs
   b. O&M costs in relation to transmission functions
      i. Bulk
      ii. Local
      iii. POD
   c. O&M costs in relation to:
      i. Demand related
      ii. Energy related
      iii. Fixed

4 Schedule and Cost

The time to complete the study is estimated at six months. Within this period, there will be requests to TFOs for cost information, and time will be required for response. Following the compilation of data, stakeholder information sessions will be held to update stakeholders as to progress and direction as well as preliminary results. Stakeholders will be afforded an opportunity to provide input.