



## ALBERTA UTILITIES COMMISSION

**IN THE MATTER OF the *Alberta Utilities Commission Act, S.A. 200t, c. A-37.2***

**AND IN THE MATTER OF the *Electric Utilities Act, S.A. 2003, c. E-5.1***

**AND IN THE MATTER OF the Conversion of Generator Unit Transformers at the Genesee Substation, in support of the South KEG Conversion Project**

### APPLICATION

#### Overview and Background

1. This is an application by the Alberta Electric System Operator (“AESO”) for an order or orders of the Alberta Utilities Commission (“AUC” or “Commission”) in respect of the AESO’s tariff. Specifically, the application seeks an order or orders concerning the recovery of certain costs to be incurred by market participants in respect of the required conversion of generator unit transformers at the Genesee Substation E330P in connection with the conversion of the existing Keephills-Ellerslie-Genesee (“KEG”) transmission line from 240 kV to 500 kV operation.

2. By Application No. 1456698, filed on or about April 13, 2006, EPCOR Transmission Inc. – which has since amalgamated with another corporation and is now known as EPCOR Distribution & Transmission Inc. (“EDTI”) – sought approvals from the Alberta Energy and Utilities Board (“Board”) pursuant to the *Hydro and Electric Energy Act* (“HEEA”) concerning the conversion of existing transmission lines from Keephills Substation 320P to Genesee Substation E330P and from Genesee Substation E330P to Ellerslie Substation 89S, from 240 kV to 500 kV operation, commonly referred to as South KEG Conversion Project. Specifically, approvals were sought in order to:
  - (a) alter and operate the Genesee E330P Substation to 500 kV operation;
  - (b) alter and operate the portion of transmission line 1203L which EDTI operates, to 500 kV operation; and
  - (c) alter and operate a portion of transmission line 1209L, which EDTI operates, to 500 kV operation.
3. On June 28, 2006, the Board approved the foregoing applications by EDTI, subject to the conditions set out therein. Copies of the relevant permits and licences issued by the Board are attached to this application as Appendix “A”, and are together referred to as the “EDTI South KEG Approvals”.
4. Upon issuance of the EDTI South KEG Approvals, the AESO undertook discussions with the owners and operators of generating units 1, 2 and 3 at Genesee, as well as the Balancing Pool, which is the PPA Buyer for Genesee

Units 1 and 2, concerning the best method of implementing 500 kV operation at the Genesee E330P Substation.

**Genesee Substation – Unit Transformer Project**

5. As noted in the Overview and Background above, it is necessary for certain work to be undertaken in association with the South KEG Conversion Project, in order to convert four (4) Genesee unit transformers from 240 kV to 500 kV operation, and in that regard, for such unit transformers to be taken out of service for limited periods of time, for the benefit of Alberta's Interconnected Electric System, or AIES ("Unit Transformer Project").
  
6. The owner of Genesee Units 1 and 2 is EPCOR Power Development Corporation ("EPDC"). Genesee Unit 3 is jointly owned by TransAlta Energy Corporation ("TEC") and by EPCOR Power (Genesee) Limited Partnership, of which 99% of the partnership units are held by EPDC. The owners of Genesee Units 1, 2 and 3 are collectively referred to as the "Owners."

In the course of discussions between the AESO and the Owners, a relevant consideration was that if possible, the Unit Transformer Project should coincide with the Owners' planned generator unit maintenance shutdowns at Genesee. From the AESO's perspective, another relevant consideration was the ongoing reliability of the AIES, which suggested that the Unit Transformer Project should, if possible, be carried out on a coordinated basis over the shortest possible timeframe, but not necessarily on a staggered basis in order to coincide with planned generator unit maintenance shutdowns.

7. In light of the foregoing considerations, the Owners and the AESO agreed to proceed with the conversion work in 2007. Subsequent to reaching such agreement, however, the AESO was advised by the Owners that a 500 kV generator transformer had failed certain required testing at the manufacturer's facilities and could not be made available to meet the agreed-upon dates. The AESO determined that moving ahead with the conversion without the availability of this 500 kV generator transformer posed an unacceptable risk to the reliability of the AIES. In the result, the AESO and the Owners have come to a subsequent agreement respecting revised dates for the conversion work that will allow it to be completed prior to the AESO's requested in service date of June, 2008.

### **Direct Costs**

8. The Owners have provided the AESO with high level estimates of the costs of labour, equipment, materials, engineering and project management ("Direct Costs") of the Unit Transformer Project, which are currently as follows:
  - (a) Genesee Unit 1 (including the spare transformer) - \$2,049,100.00;
  - (b) Genesee Unit 2 - \$1,080,350.00;
  - (c) Genesee Unit 3 - \$1,404,618.00.
9. The current estimates of the Direct Costs of the Unit Transformer Project, totalling \$4,534,068 are considered accurate +/- 30 percent. The AESO has reviewed such estimates, considers them to be reasonable, and will review updates to those estimates as they are received. The agreements between the

AESO and the Owners incorporate certain audit rights in favour of the AESO in respect of the costs of the Unit Transformer Project actually incurred in order that the AESO may be satisfied that such actual costs are reasonable.

**Indirect Costs**

10. The AESO and the Owners acknowledge that the generators may incur costs or losses arising from outages or extension of such outages beyond the time frames of scheduled maintenance, or curtailment of generation at Genesee, in relation to the Unit Transformer Project (“Indirect Costs”).

**Inclusion of Unit Transformer Project Costs for Recovery under the AESO’s Tariff**

11. The Unit Transformer Project will require the Owners to undertake work on their property and equipment which will substantially benefit the AIES, and which will necessitate outages at Genesee Units 1, 2 and 3.
12. In the AESO’s submission, the cost to the AIES of maintaining a safe and reliable supply of energy from the Genesee generators if the Unit Transformer Project were not undertaken would be significantly higher than if the Unit Transformer Project is undertaken.
13. The Commission has broad jurisdiction and authority to include in the AESO’s tariff prudent costs and expenses incurred by it and associated with the discharge by the AESO of its statutory duties, responsibilities and functions under the *Electric Utilities Act*.

The AESO submits that the actual Direct Costs of the Unit Transformer Project, as described herein, will constitute such prudent costs and expenses.

Accordingly, the AESO respectfully submits that the Commission should find that such actual Direct Costs should be (a) paid by the AESO to the Owners upon presentation of acceptable documentation to substantiate their quantum and reasonableness, and (b) recovered under the AESO's tariff.

14. The AESO submits that the questions of (a) whether the Indirect Costs of the Unit Transformer Project should be payable by the AESO to the Owners, and (b) if so, the amount of such Indirect Costs so payable, should be determined by the Commission. If such Indirect Costs are determined by the Commission to be payable, then the AESO submits that the Commission should find that such Indirect Costs should be recovered under the AESO's tariff.

The AESO understands that the Owners will make a separate submission to the Commission in this application on the matter of the quantum of Indirect Costs that the Owners believe should be paid to the Owners and recoverable under the AESO's tariff.

### **Relief**

15. The AESO respectfully requests that the Commission issue an Order or Orders:
  - (a) directing that the actual Direct Costs of the Unit Transformer Project be paid by the AESO to the Owners upon presentation of acceptable documentation to substantiate their quantum and reasonableness, and that such actual Direct Costs shall be recovered under the AESO's tariff;

- (b) determining:
  - (i) whether the Indirect Costs of the Unit Transformer Project are payable by the AESO to the Owners;
  - (ii) if so, the quantum of such Indirect Costs payable by the AESO to the Owners; and
  - (iii) that such Indirect Costs as are found by the Commission to be payable by the AESO to the Owners shall be recovered under the AESO's tariff.
  
- (c) confirming that the actual costs of the Unit Transformer Project, as determined by the Commission to be recoverable under the AESO's tariff, will be subject to necessary deferral account treatment consistent with such treatment generally accorded by the Alberta Energy and Utilities Board concerning the AESO's forecast revenue requirement; and
  
- (d) granting such other relief as the Commission may deem necessary.

ALL OF WHICH IS RESPECTFULLY SUBMITTED THIS 14<sup>th</sup> DAY OF APRIL, 2008.

ALBERTA ELECTRIC SYSTEM OPERATOR

Per: \_\_\_\_\_  
Heidi Kirrmaier  
Vice President, Regulatory