

December 1, 2016

Project No. 1711

EPCOR Distribution & Transmission Inc.  
North Service Centre  
12116 – 107 St.  
Edmonton, AB T5G 2S7

Attention: Steve Swystun, P.Eng. – Senior Specialist, Distribution Planning

Dear Mr. Swystun:

**RE: Approval by the Independent System Operator, operating as the Alberta Electric System Operator (“AESO”) under Section 501.3 of the ISO Rules *Abbreviated Needs Approval Process* (“ANAP Rule”) for the Victoria Substation Modification – AESO Project No. 1711**

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On November 16, 2015, EPCOR Distribution & Transmission Inc. (“EDTI”), in its capacity as the legal owner of an electric distribution system (“DFO”), submitted a request for system access service (“SASR”) to the AESO to reliably serve new demand for electricity in the City of Edmonton (AESO Planning Area 60, Edmonton).

For the reasons set out below, the AESO has decided to approve the transmission development required to respond to the SASR under the AESO’s abbreviated needs approval process (“ANAP”).

## **BACKGROUND**

As described in the SASR and accompanying documents, EDTI has requested system access service from the AESO in order to reliably serve new loads of approximately 18 MVA in downtown Edmonton. EDTI has advised the AESO that the new loads cannot be served by using only the existing electric distribution system, due to insufficient available capacity on the existing distribution feeders. EDTI is requesting the addition of transmission facilities to reliably address this distribution system capacity concern.

The SASR involves an increase to EDTI’s existing Rate DTS, *Demand Transmission Service*, contract capacity of approximately 6 MW.

The AESO has collaborated with EDTI, in its capacity as both the DFO and legal owner of transmission facilities (“TFO”) in the area, and has determined that the SASR can be addressed through modifications to the existing Victoria substation, comprised of the following elements:

- (a) add two 15 kV circuit breakers; and

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- (b) modify, alter, add or remove equipment, including switchgear, and any operational protections, control and telecommunication devices required to undertake the work as planned and ensure proper integration with the transmission system

(collectively, the “Transmission Development”).

Pursuant to Section 39 of the *Electric Utilities Act*, the AESO directed EDTI as the TFO in the area:

- (a) to prepare a cost estimate for the Transmission Development. In the cost estimate, EDTI estimated the in-service cost of the Transmission Development to be approximately \$170,000;<sup>1</sup>
- (b) to notify stakeholders of the need to respond to the SASR (“AESO Notification”), as part of the participant involvement program (“PIP”) carried out by EDTI. EDTI was also directed to provide the AESO with a report (i) listing all of the stakeholders that received the AESO Notification, together with the date of such notification, and (ii) summarizing the PIP that was carried out by EDTI. In EDTI’s PIP report, EDTI confirmed that the AESO Notification was sent to stakeholders within 200 metres of the substation site via Canada Post bulk mail service to areas within the T5H and T5J Forward Sortation areas, specifically the LC0039, LC0047, LC0037, LC0033 and LC0019 letter carrier walks. EDTI confirmed that no concerns or objections were raised by any stakeholders about the need for the Transmission Development; and
- (c) subject to the issuance by the AESO of this approval letter, to proceed to obtain all approval(s) required from the Alberta Utilities Commission to construct and operate the transmission facilities required for the Transmission Development.

Further, in considering whether to approve the Transmission Development under the ANAP, and in accordance with Section 3 of the ANAP Rule, the AESO:

- (a) reviewed the last five-year recorded and 10-year forecast peak substation load for the points of delivery identified in the Distribution Deficiency Report submitted to the AESO by EDTI;

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<sup>1</sup> The TFO’s cost estimate is in nominal dollars using a base year of 2016 with escalation considered. Further details of this cost estimate, which has an accuracy level of +20%/-10%, can be found in the TFO Project Cost Estimate Sheet, which will be made available on the AESO website.

- (b) performed a comparison, in collaboration with EDTI, in its capacity as the DFO and TFO, of the reasonable and viable alternatives examined to respond to the SASR, and determined that the Transmission Development is the preferred alternative;<sup>2</sup>
- (c) assessed transmission system performance prior to connection, and has assessed transmission system performance impact following connection, by way of connection studies or other studies to determine the adequacy of the system including power flow studies and stability studies, in accordance with the AESO's planning criteria; and
- (d) notified stakeholders of the need to respond to the SASR, as part of the PIP carried out by the AESO.

### **ELIGIBILITY AND APPROVAL**

In accordance with Section 2 of the ANAP Rule, the AESO has determined that the Transmission Development is eligible for approval under the ANAP.

The AESO has further determined that:

- (a) EDTI has made all appropriate applications to the AESO to obtain the system access service requested in the SASR;
- (b) the Transmission Development will provide EDTI with a reasonable opportunity to exchange electricity and ancillary services; and
- (c) the Transmission Development will properly respond to EDTI's SASR.

Accordingly, and pursuant to Section 4(a) of the ANAP Rule, the AESO approves the Transmission Development under the ANAP ("Approval").

### **SUPPORTING DOCUMENTATION**

The AESO prepared or reviewed the following documents in support of the Approval, which will be made available at <https://www.aeso.ca/grid/projects/>:

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<sup>2</sup> The alternatives examined by the AESO are discussed in Section 5 and Section 8 of the *Connection Engineering Study Report for AUC Application, EPCOR Victoria Substation E511S Breaker Addition*, which will be made available on the AESO website.

1. DFO Distribution Deficiency Report – *Distribution Deficiency Report (DDR) Victoria Substation (E511S) Breaker Additions*, submitted by EDTI;
2. AESO Transmission Connection Alternatives Comparison, prepared by the AESO;
3. Connection Assessment – *Connection Engineering Study Report for AUC Application, EPCOR Victoria Substation E511S Breaker Addition*, prepared by the AESO;
4. TFO Project Cost Estimate Summary Sheet, submitted by EDTI;
5. the AESO's summary of the PIP carried out by EDTI and the AESO;
6. confirmation from EDTI regarding EDTI's assessment of Environmental and Land Use Aspects; and
7. the AESO's Functional Specification – *EPCOR Victoria Substation E511S Breaker Addition, Functional Specification (Project Number 1711)*.

Should you have any questions regarding this approval letter, please contact Brenda Hill, Regulatory Coordinator, at 403-539-2850 or [brenda.hill@aeso.ca](mailto:brenda.hill@aeso.ca).

Sincerely,

Greg Retzer  
Vice-President, Transmission Projects

cc: EDTI in its capacity as TFO