

Project No. 7065

Delivered by Email
paula.ciccarelli@altalink.ca

AltaLink Management Ltd.,
in its capacity as general
partner of AltaLink, L.P.
2611 – 3rd Avenue SE
Calgary, Alberta T2A 7W7

Attention: Paula Ciccarelli – Director, Project Controls and Governance

Delivered by Email
Khull@epcor.com

EPCOR Distribution & Transmission Inc.
North Service Centre
12116 – 107 Street
Edmonton, Alberta T5G2S7

Attention: Kristine Hull - Director, Transmission

Dear Ms. Ciccarelli and Ms. Hull:

RE: Approval by the Independent System Operator, operating as the Alberta Electric System Operator (the “AESO”) under Section 501.3 of the ISO Rules *Abbreviated Needs Approval Process* (the “ANAP Rule”) for Keephills Area Transmission Re-configuration – Project No. 7065 (the “Project”)¹

1. For the reasons set out below, the AESO has decided to approve the above-described Project under the ANAP rule. The AESO has determined that the Project is required to mitigate certain reliability criteria violations arising as a result of outages planned by TransAlta Corporation (“TransAlta”) for Sundance generating units 1, 2, 3, 4 and 5.

¹ Capitalized terms not defined herein, shall have the meaning given to them in the ISO Tariff or the ISO Rules as amended from time to time.

Public

BACKGROUND

2. On April 19, 2017, TransAlta notified the AESO of the following outage plans:

- Sundance Unit 1 will retire on January 1, 2018; and
- Sundance Unit 2 will be mothballed on January 1, 2018 for a period of two years.

The scheduled retirement and mothball outage occurred as planned.

3. On December 6, 2017, TransAlta notified the AESO of planned mothball outages for each of Sundance generating units 3, 5 and 4, as follows:

- Sundance Unit 3, will be mothballed on April 1, 2018 for a period of up to two years;
- Sundance Unit 5, will be mothballed on April 1, 2018 for a period of up to one year; and
- Sundance Unit 4, will be mothballed on April 1, 2019 for a period of up to two years.

4. During the respective outage periods, Sundance Units 1, 2, 3, 4, 5 will each have a capability of 0 MW.

5. As described in the AESO's Engineering Study Report for the *Keephills Area Transmission Re-configuration* dated March 15, 2018 ("Keephills ESR"), the AESO has determined that, as a result of the mothball outages and commencing April 1, 2018, there may be reliability criteria violations in the AESO's Northwest Planning region and west of the City of Edmonton, and that the Project is the appropriate means of alleviating the identified reliability criteria violations.

6. The AESO has consulted with AltaLink Management Ltd. ("AltaLink") and EPCOR Transmission and Distribution Inc. ("EDTI"), as the legal owners of transmission facilities in the area, and determined that the reliability criteria violations described in the Keephills ESR will be alleviated by the Project, comprised of the following elements (collectively, the "Transmission Development"):

AltaLink Scope of Work

- (a) add 240 kV jumpers (short segments of wire) between the existing 240 kV transmission lines 1043L and 1045L to connect the existing Keephills, Sundance, and Jasper substations; and

AltaLink and EDTI Scope of Work

- (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.

7. Pursuant to Section 39 of the *Electric Utilities Act*, the AESO required AltaLink and EDTI, as the TFOs in the area:

- (a) to prepare cost estimates for the Transmission Development. In the cost estimate prepared by AltaLink, AltaLink estimated the in-service cost of its scope of work to be \$1.7 Million.² In the cost estimate prepared by EDTI, EDTI estimated the in-service cost of its scope of work to be \$0.1 Million.³
 - (b) to provide stakeholders with a notification of the need for the Transmission Development (“AESO Notification”), as part of the participant involvement program (“PIP”) carried out by AltaLink. AltaLink 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 AltaLink. In AltaLink’s PIP report, AltaLink confirmed that the AESO Notification was sent to stakeholders within 200 metres of the 1045L Right-of-Way Project area⁴ and 800 metres of the 1045AL Termination Point Project area⁵ and other interested parties identified by AltaLink. AltaLink confirmed that no concerns or objections were raised by any stakeholders about the need for the Transmission Development or the AESO’s preferred option to meet the need; 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
8. 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) performed a comparison, in consultation with AltaLink and EDTI, of the reasonable and viable alternatives examined to address the need for development, and determined that

² AltaLink’s cost estimate is in nominal dollars using a base year of 2018 with escalation considered. Further details of this cost estimate, which has an accuracy level of +30%/ -20%, can be found in the TFO Project Cost Estimate Sheet, which will be made available on the AESO website.

³ EDTI’s cost estimate is in nominal dollars using a base year of 2018 with escalation considered. Further details of this cost estimate, which has an accuracy level of +30%/ -20%, can be found in the TFO Project Cost Estimate Sheet, which will be made available on the AESO website.

⁴ This is a section of the existing transmission line 1045L right-of-way where 240 kV jumpers (short segments of wire) between the existing 240 kV transmission lines 1043L and 1045L will be added.

⁵ This is where the proposed termination of the new portion of the 240 kV transmission line 1045AL will terminate.

the Transmission Development is the AESO's preferred option to mitigated the identified reliability criteria violations;

- (b) assessed the capital cost of the Transmission Development by way of cost estimates received from AltaLink and EDTI;
 - (c) assessed transmission system performance prior to connection, and has assessed transmission system performance impact following connection, by way of engineering studies, to determine the adequacy of the system including power flow studies and stability studies, in accordance with the AESO's planning criteria;
 - (d) obtained and reviewed a summary of the environmental and land use effects of the Transmission Development from AltaLink;
 - (e) obtained and reviewed a summary of the implementation schedule for the Transmission Development from AltaLink; and
 - (f) notified stakeholders of the need for development, as part of the PIP carried out by AltaLink on behalf of the AESO, and by posting the AESO Notification to the AESO's website on February 27, 2018 as part of the AESO's stakeholder newsletter.
9. The Transmission Development alleviates reliability criteria violations that may occur starting April 1st, 2018 in the AESO's Northwest Planning region and west of the City of Edmonton. Given the timing and nature of the need, the AESO did not consider a 20-year load and generation forecast of the interconnected electric system to support the need for development.

ELIGIBILITY AND APPROVAL

- 10. In accordance with Section 2(b) of the ANAP Rule, the AESO has determined that the Transmission Development is eligible for approval under the abbreviated needs approval process ("ANAP").
- 11. Pursuant to Section 4(a) of the ANAP Rule, the AESO approves the Transmission Development under the ANAP ("Approval").
- 12. The AESO may cancel or amend this approval if the Transmission Development is not in service by May 5, 2019, which is one year following the targeted in-service date of May 5, 2018.
- 13. The AESO prepared or reviewed the following documents in support of the Approval which can be obtained at www.aeso.ca/grid/projects/keephills-area-transmission-reconfiguration:
 - (a) The Keephills ESR;
 - (b) Project Cost Estimates, prepared by AltaLink and EDTI for the Project;

- (c) A summary of the PIP carried out by AltaLink and the AESO, prepared by the AESO, for the Project;
- (d) Confirmation by AltaLink of its assessment of land use and environment aspects for the Project;
- (e) *AESO Transmission Planning Criteria – Basis and Assumptions*, prepared by the AESO; and
- (f) *AESO Functional Specification – Keephills Area Transmission Re-Configuration Functional Specification V1 dated February 14, 2018*, prepared by the AESO.

Should you have any questions regarding the Approval or this approval letter, please contact Brenda Hill at 403-539-2850 or brenda.hill@aeso.ca.

Sincerely,



Jerry Mossing
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Jerry Mossing
Vice-President, Transmission