

Delivered by Email
carly.duerr@altalink.ca

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

Attention: Carly Duerr - Director, Projects & Operations Support

Dear Ms. Duerr,

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 the North Lethbridge 370S Substation Modification Project – Project No. P7073 (the “Project”)

For the reasons set out below, the AESO has decided to approve the above-described Project transmission development under the AESO's abbreviated needs approval process (“ANAP”).

BACKGROUND

1. The AESO has identified thermal criteria violations on the 138 kV transmission lines 725AL and 823L following the loss of the North Lethbridge 370S substation transformer T1. As a result, there is a need for transmission system development to alleviate the thermal criteria violations.¹
2. The AESO determined that the identified thermal criteria violations can be addressed by the following transmission development:
 - (a) Modify the existing North Lethbridge 370S substation, including adding one 138 kilovolt (kV) circuit breaker; and
 - (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.²

(collectively, the “Transmission Development”).

3. Pursuant to Section 39 of the *Electric Utilities Act*, the AESO directed AltaLink Management Ltd., in its capacity as the legal owner of transmission facilities in the area (“TFO”):

¹ The Planning Report is available on the Project's page on the AESO website.

² Details and configuration of equipment required for the Transmission Development, including substation single-line diagrams, are more specifically described in the AESO Functional Specification, which is available on the Project's page on the AESO website.

- (a) To prepare a cost estimate for the Transmission Development (“TFO Capital Cost Estimate”). In the TFO Capital Cost Estimate, the TFO estimated the in-service cost of the Transmission Development to be approximately \$1.5 million;³
 - (b) To assist the AESO in completing the AESO’s participant involvement program (“PIP”). Between March 2021 and April 2021, the TFO used various methods to notify stakeholders about the need for the Project and the AESO’s proposed Transmission Development to meet the need on the AESO’s behalf. A summary of this notification is provided in the AESO PIP Summary;⁴ 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.
4. Further, in considering whether to approve the Transmission Development under the ANAP, and in accordance with subsection 3(3) of the ANAP Rule, the AESO:
- (a) Performed a comparison, in consultation with the TFO, of the options considered to address the need for development, and determined that the Transmission Development is the AESO’s preferred option to mitigate the identified thermal criteria violations;
 - (b) Assessed transmission system performance prior to and following the Transmission Development, in accordance with reliability standards;⁵
 - (c) Obtained and reviewed a summary of the environmental and land use effects of the Transmission Development from the TFO;⁶
 - (d) Obtained and reviewed the TFO Capital Cost Estimate of the Transmission Development; and
 - (e) Obtained and reviewed an implementation schedule for the Transmission Development from the TFO.
5. In considering whether to approve the Transmission Development under the ANAP, and in accordance with subsections 3(1) and 3(2) of the ANAP Rule, the AESO:
- (a) Notified stakeholders of the need for development in accordance with the PIP requirements for needs identification documents set out in Appendix A2 of Alberta Utilities Commission Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments*, as part of the PIP carried out by

³ The TFO’s cost estimate is in nominal dollars using a base year of 2021 with escalation considered. Further details of this cost estimate, which has an accuracy level of +20%/-10%, can be found in the TFO Capital Cost Estimate, which is available on the Project’s page on the AESO website.

⁴ The AESO’s PIP Summary is available on the Project’s page on the AESO website.

⁵ The Planning Report, is available on the Project’s page on the AESO website.

⁶ The TFO Environmental and Land Use Confirmation Letter is available on the Project’s page on the AESO website.

the TFO on behalf of the AESO, and by posting the AESO Notification to the AESO's website and in the AESO's Stakeholder Newsletter on March 25, 2021;

- (b) Provided thirty days' notice, by way of a posting to the AESO website, of the ISO's intention to consider the Project for approval under the ANAP Rule and supporting documents on July 7, 2021; and
- (c) Determined that there are no concerns or objections with the need for the Project that have not been resolved.

ELIGIBILITY AND APPROVAL

6. The AESO has determined that the Transmission Development is required and is in the public interest and is eligible for approval under the ANAP in accordance with subsection 2(b) of the ANAP Rule.
7. Pursuant to subsection 4(1) of the ANAP Rule, the AESO approves the Transmission Development under the ANAP ("Approval").
8. The AESO may cancel or amend this Approval if the Transmission Development is not in service by January 1, 2023, which is six months following the scheduled in-service date of July 1, 2022.
9. The AESO prepared or reviewed the following documents for the Project in support of the Approval, which are available on the Project's page on the AESO website at <https://www.aeso.ca/grid/projects/north-lethbridge-370s-substation-modification-project/>
 - (a) Planning Report - *North Lethbridge 370S Substation Modification*, prepared by the AESO;
 - (b) TFO Capital Cost Estimate, prepared by the TFO;
 - (c) A summary of the PIP carried out by the TFO and the AESO, prepared by the AESO;
 - (d) Confirmation by the TFO of its assessment of land use and environmental effects, prepared by the TFO; and
 - (e) Functional Specification - *North Lethbridge 370S Substation Modification V2 dated January 29, 2021*, prepared by the AESO.

Should you have any questions regarding this approval letter, please contact Brenda Hill, Regulatory Administrator, at brenda.hill@aeso.ca

Sincerely,



Digitally signed by Dennis
Frehlich

Date: 2021.08.09 14:28:42 -06'00'

Dennis Frehlich, P. Eng.
Vice President, Grid Reliability