



May 16, 2008

**Re: Update to Stakeholders - Heartland Transmission Development and other projects planned in the area**

Dear Stakeholder;

Throughout 2007, the Alberta Electric System Operator (AESO) conducted a participant involvement program to discuss our outlook for major electricity transmission reinforcement into the Industrial Heartland area of Alberta in Sturgeon, Strathcona and Lamont Counties. During a series of Open Houses and meetings, the AESO received feedback from stakeholders related to the development of transmission facilities to support the growing demand in this area.

The purpose of this letter is to inform you of the AESO's recommendation and next steps for transmission reinforcement for the Heartland area as well as inform you of an AESO Needs Identification Document (NID) for another project planned in the area.

In previous correspondence, the AESO had indicated its intention to file a Needs Identification Document (NID) for the reinforcement into the Heartland area with the Alberta Utilities Commission (AUC) in April 2008. A NID is an application only the AESO can submit seeking regulatory approval of the need for transmission reinforcement. After approval of the NID by the AUC the next step in the process is for the Transmission Facility Owner (TFO) to prepare and submit a Facilities Application with the AUC seeking regulatory approval of the specific technical and siting aspects of the transmission reinforcement. In short this means there are two steps in the regulatory process; the need and the facilities.

The AESO has recognized some public concerns with the separated Need and Facilities approval process for this project. In response to these concerns, we now intend to file our Needs Identification Document with the AUC at the same time the TFOs (EPCOR and AltaLink in this case) file their Facilities Application, which is currently expected to be completed in October 2009. In the NID, the AESO will recommend a preferred option for transmission reinforcement. The AUC will then be able to consider both the NID and the Facilities Application at the same time.

Although the AESO will not be filing the NID at this time we have narrowed down the options from those that had previously been identified. Based on the input received during the participant involvement program and our technical and cost analysis, the AESO has concluded that an "East side double-circuit 500/240 kilovolt ("kV") (Option IIIB), as outlined below, is our preferred option at this time. We have further concluded that there is a second viable option, a "West side double-circuit 500 kV" (Option IB), as outlined below, capable of meeting the electricity needs in the Heartland area.

The two options are:

**Option IIIB: East side double-circuit 500/240 kV**

This option involves a new double circuit 500/240 kV transmission line from the existing Ellerslie substation to a new substation, to be known as Eastwood 457S, which will be proposed to be built to interconnect the Fort Hills Sturgeon Upgrader Project. The two circuits would be initially energized at 240 kV. [Please note: During the detailed engineering design process to be conducted by the TFOs the final line design may result in a double circuit 500/500 kV structure being proposed.] As part of the detailed route analysis to be conducted by the TFOs they will be exploring route options both inside and outside the existing Transportation and Utilities Corridor (TUC) located around the City of Edmonton. This Corridor has been identified and zoned for various infrastructure, including transmission lines, by the Alberta government. The TFOs will identify a preferred route for the transmission line during the development of a Facilities Application.

**Option IB: West side double-circuit 500 kV**

This option involves a new double circuit 500 kV line from the existing 1202L circuit to a new 500 kV substation to be located in the Industrial Heartland area. As part of the detailed route analysis to be conducted by the TFOs they will be exploring route options both inside and outside the existing Transportation and Utilities Corridor (TUC) located around the City of Edmonton. The TFOs will identify a preferred route for the transmission line during the development of a Facilities Application.

Included with this transmission reinforcement, regional transmission development in the Industrial Heartland area is needed to provide the electricity from the potential new substation in the Industrial Heartland area to the customer load sites. The recommendation for this regional reinforcement is a 240 kV “ring” to be located within the Industrial Heartland area. This mitigates land impact and increases both technical performance and reliability. This regional development will also be included as part of the next steps for the Heartland Transmission Development.

A summary report providing further details of the AESO’s analysis will be posted to our web site in mid May; to view or download a copy please visit our web site at [www.aeso.ca](http://www.aeso.ca) and follow the path Transmission -> Consultations -> Heartland Transmission Development.

The AESO has directed the TFO’s, AltaLink and EPCOR, to develop the detailed siting and routing Facilities Application based on the two options outlined above. As part of developing the Facilities Application, the Transmission Facility Owners will be conducting a participant involvement program, including Open Houses and direct landowner contact of potentially affected parties. The option to be recommended to the AUC, either “East side double-circuit 500/240 kV” (Option IIIB) or “West side double-circuit 500 kV” (Option IB), will be based on the conclusions reached in the NID and the Facilities Application. The TFO Facilities Application will define specifically where the transmission line will be located and which landowners will have facilities on their land. It should be noted that after the TFOs have completed their detailed study only one of these two options will be recommended, by the AESO, to the AUC for approval.

This package also includes information regarding another AESO NID for a project in the Edmonton area you may find of interest, namely;

- Need for 240 kV transmission reinforcement and upgrades to existing lines between the Lake Wabamun and Edmonton regions. The AESO will file a Needs Identification Document with the AUC in June 2008. The AESO will also be advertising this project in area newspapers.

We would like to thank everyone who has participated in our participant involvement program to this point and has provided valuable feedback into these transmission plans. This feedback continues to be instrumental in assisting the AESO in determining the options above and the next steps of the transmission reinforcement process.

If you have any questions, suggestions or concerns, please contact:

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Respectfully,



Neil Millar, P.Eng  
Vice-President, Transmission

*The AESO is committed to protecting your personal privacy in accordance with Alberta's Personal Information Protection Act. Any personal information collected by the AESO with regard to this project may be used to provide you with further information about the project, may be disclosed to the Alberta Utilities Commission (and as a result, may become public), and may also be disclosed to the eligible Transmission Facility Owner. If you have any questions about how the AESO will use and disclose your personal information collected with regard to this project, please contact us at 888.866.2959 or at [stakeholder.relations@ieso.ca](mailto:stakeholder.relations@ieso.ca).*