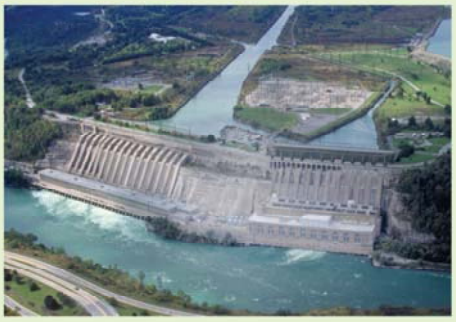
Ontario Power Authority Submission

EB-2011-0140

Proceeding to designate a transmitter to carry out development work for the East-West Tie line

Phase 2

May 9, 2013



ONTARIO POWER AUTHORITY

East-West Tie Line Designation Proceeding – Phase 2
Ontario Power Authority Submission

Background

On February 2, 2012 the Ontario Energy Board ("Board") initiated a proceeding to designate an electricity transmitter to undertake development work for a new transmission line between Northeast and Northwest Ontario: the East-West Tie line. This process was initiated in response to a letter from the Minister of Energy to the Chair of the Board suggesting that the Board's designation process, outlined in its *Framework for Transmission Project Development Plans*, could be used to select the most qualified and cost-effective transmission company to develop the East-West Tie line.

The Board adopted a two-phase process for the designation proceeding. In Phase 1, the Board established specifics for the proceeding, including decision criteria, filing requirements, obligations and consequences arising on designation, the hearing process for Phase 2, and the schedule for the filing of applications for designation. To date, Phase 2 has included designation applications by six registered transmitters, interrogatories from the Board, interrogatory responses, the Phase 2 Board staff submission, applicants' arguments in chief, and oral sessions in Thunder Bay. The Ontario Power Authority ("OPA") has participated throughout this process through, inter alia, the submission of a report presenting a preliminary assessment of need for a new East-West Tie line[1], the filing of Phase 1 submissions, the filing of Aboriginal consultation records, and the proposal of interrogatories.

On March 4, 2013 the Board issued Procedural Order No. 6, by which it determined a process and schedule for Phase 2 submissions. This was updated on April 29, 2013, through Procedural Order No. 7. In response to these Procedural Orders, the OPA respectfully submits its Phase 2 written submissions below. The OPA is also in receipt of the Phase 2 Board staff submission, dated April 8, 2013, which invites the OPA to include in its Phase 2 submission "any update it can offer with respect to the need for the East-West Tie expansion."[2] The OPA provides an update with respect to the need for the East-West Tie expansion as part of its Phase 2 written submissions below.

Written Submissions

1. East-West Tie Design: Single-Circuit versus Double-Circuit Options

As part of the Board's designation process, applicants have submitted proposals for both single-circuit and double-circuit designs. While both categories of design are technically feasible, as confirmed in the Independent Electricity System Operator's ("IESO") Feasibility Study[3], the OPA submits that a double-circuit design is preferable to a single-circuit design for the East-West Tie expansion.

---

[1] "Long Term Electricity Outlook for the Northwest and Context for the East-West Tie Expansion" report ("OPA Report"). June 30, 2011.
[2] Phase 2 Board staff submission, page 7. April 8, 2013.
[3] "IESO Feasibility Study: An assessment of the westward transfer capability of various options for reinforcing the East-West Tie" ("IESO Feasibility Study"). August 18, 2011.

As discussed in the IESO Feasibility Study, a double-circuit design requires less complex system operation and associated station facilities than a single-circuit design. For example, following the loss of a new single-circuit line, the IESO would be required to either dispatch additional generating resources or to arm load rejection, in order to maintain the targeted transfer capability. No similar operating measures would be required for a double-circuit design.[4] A single-circuit design would also require the installation of series compensation, adding complexity to the transmission system and its operation when compared to a double-circuit design.

An additional benefit of a double-circuit design is its potential for future expandability. As indicated by the IESO, a double-circuit line has a higher thermal rating of up to about 800 MW, which can be exploited for future expansion through the addition of further voltage control or compensation equipment, while a single-circuit line would be limited to a maximum transfer capability of approximately 680 MW.[5] [6] While single-circuit options have the potential to stage construction in order to meet the targeted 650 MW transfer level over time, the OPA sees greater value in the potential for future expandability rather than in the potential for staging.

Finally, it is not clear to the OPA whether all of the necessary facilities and costs associated with a single-circuit design have been included in the designation applications. Any costs associated with additional facilities could reduce the difference in total cost between the single-circuit and double-circuit options.

Given the technical benefits of a double-circuit design, and lack of clarity around the total cost of the single-circuit options, the OPA submits that a double-circuit design is preferable to a single-circuit design for the East-West Tie expansion.

2. Project In-service Date

The East-West Tie expansion is an important component of the long-term integrated plan for the Northwest. The OPA notes that most applicants have proposed to bring the new East-West Tie line into service by 2018. This timeline is consistent with the OPA's understanding of typical transmission development timelines, and based on the evidence of most applicants, is a reasonable timeline without necessitating significant increases in cost and/or project risk. The OPA submits that a 2018 in-service date is appropriate for the East-West Tie expansion, and would not support the suggestion of increasing costs significantly in order to bring the line into service by 2017, as proposed by some applicants.

3. First Nation and Métis Participation / Consultation

As previously stated, the OPA encourages applicants to build positive and constructive relationships with First Nation and Métis communities, and believes that applicants should begin these activities early, and coordinate with the Crown.[7] [8] Early engagement assists developers in assessing potential project costs

[4] IESO Feasibility Study. August 18, 2011.
[5] OEB Procedural Order No. 6, Appendix A, page 5. March 4, 2013
[6] "Application of RES Canada Transmission LP for Designation as an Electricity Transmitter to Develop the East-West Tie Line", Exhibit H-2-3. January 4, 2013.
[7] "OPA's Role and Background/Highlights with the East-West Tie Project" presentation. January 10, 2012.

related to Aboriginal participation, and any accommodation of Aboriginal or Treaty Rights impacted by the transmission project.[9]

The OPA notes that Ontario's Long-Term Energy Plan states, "Ontario also recognizes that Aboriginal communities have an interest in economic benefits from future transmission projects crossing through their traditional territories and that the nature of this interest may vary between communities."[10]

In addition, the OPA notes that the Minister's letter to the Board, dated March 29, 2011, states, "[The Minister of Energy] would expect that the weighting of decision criteria in the Board's designation process takes into account the significance of aboriginal participation to the delivery of the transmission project."

Applicants have outlined a variety of approaches to First Nation and Métis participation and consultation in their designation applications. The OPA considers First Nation and Métis participation and consultation an important aspect in the selection of a designated transmitter and encourages the Board to take such participation and consultation activities and plans into account in making decisions in this matter.

4. Need for the new East-West Tie Line

In June 2011, the OPA published a report entitled, the "Long Term Electricity Outlook for the Northwest and Context for the East-West Tie Expansion". This report provided a preliminary assessment of the long-term supply needs of the Northwest. Alternatives to address longer-term needs were categorized as: internal generation or an expanded East-West Tie. The OPA found that expansion of the East-West Tie was the preferred alternative to meeting the needs of the Northwest based on economic, flexibility, technical, operational and other considerations.[11]

In the Phase 2 Board staff submission, dated April 8, 2013, Board staff invited the OPA to include in its Phase 2 submission "any update it can offer with respect to the need for the East-West Tie expansion." Based on the OPA's current analysis, the OPA submits that there continues to be a need for the East-West Tie expansion to maintain a reliable and cost-effective supply of electricity to the Northwest over the long term.

A number of factors have evolved since the publication of the OPA's June 2011 report. Electricity demand forecasts for the Northwest have increased, due to increased activity in the mining sector. The expanded East-West Tie has become the long-term foundation for Northwest supply, around which internal supply resources will be developed. Finally, capital costs for the East-West Tie expansion, based on applicants' designation filings, are consistent with those estimated in the OPA's June 2011 report. Together these factors support and strengthen the selection of the East-West Tie expansion as the

[8] Phase 1 OPA Submission, page 3. May 7, 2012.
[9] OPA Report, page 17. June 30, 2011.
[10] Ontario's Long-Term Energy Plan, page 48. November 23, 2010.
[11] OPA Report, page 19. June 30, 2011.

preferred alternative to maintain a reliable and cost-effective supply of electricity to the Northwest over the long term.

The Phase 2 Board staff submission states, "the Board may wish to receive the update from the OPA before considering the revised development schedule for the designated transmitter."[12] The OPA respectfully submits that the need update included in this written submission should be sufficient to allow the designated transmitter to re-file its development schedule shortly after the Board issues its designation decision.

The OPA expects to provide a comprehensive need update as evidence in a Leave to Construct proceeding for the East-West Tie expansion. However, if the Board requires a more detailed need update at this time, the OPA expects that it could provide such an update within sixty days of the Board's designation decision.

The OPA appreciates the opportunity to provide its submissions in this matter, and looks forward to the Board's designation decision and to working with the designated transmitter.

[12] Phase 2 Board staff submission, page 8. April 8, 2013.