



APPrO

ASSOCIATION OF
POWER PRODUCERS
OF ONTARIO

APPrO comments on the Revised Proposed Amendments to the Transmission System Code (EB-2008-0003)

May 6, 2009

The Association of Power Producers of Ontario (APPrO) appreciates this opportunity to comment on the revisions to the Transmission System Code (TSC) amendments and the explanatory comments provided by the Ontario Energy Board (the Board) in its Notice of Revised Proposal to Amend a Code issued April 15, 2009 (the Notice). APPrO remains committed to the EB-2008-0003 Consultation Process and its members actively support expanding the electricity system to facilitate renewable generation development.

While APPrO continues to believe that enabler facilities benefit energy consumers in general and therefore should be treated as network assets, the Association agrees with the Board that comments on the revisions should focus on implementing the approved Hybrid Option without further delay. APPrO also agrees with the Board that additional changes to the planning framework may be required if Bill 150 is passed.

The following comments are submitted to assist the Board in finalizing the revisions to the proposed TSC changes required to implement the Hybrid Option and to highlight APPrO's main concern that the enabler facilities should be built to facilitate the optimal development of renewable generation within the Province.

On pages 4 to 6 of the Notice, the Board describes the designation process and how the development work will be completed while avoiding approval duplication. As indicated by the Board, need and costs will be approved in principle early in the process but capacity, end-point and design technology will be determined in the leave-to-construct ("LTC") proceeding. APPrO recommends that facility capacity and the expected location of potentially-connected generation be estimated and that that estimate be included in the Board's invitation of applications by transmitters to undertake development activities related to the enabler facility. APPrO suggests that this would facilitate the development work and cost assessments of those prospective transmitter applicants.

The authorized total capacity of the line is a significant concern given the assumptions that "not all connecting generating facilities will be known at the time of construction" (page 12, point 2), and that other connections such as load (page 12, point 3) and non-renewable

generation (page 9, point 6) will be allowed. To avoid stranding viable renewable energy resources, APPrO recommends that the enabler facilities be sized to accommodate all the generation that can reasonably be expected to be viable and require service over the useful life of the line. APPrO understands that Hydro One uses a similar approach to size its transmission lines based on the volume projected over the economic life of the line, usually 40 years. While this is normally applied to load connections, the principle remains the same in the context of enabler facilities, and is even more apt now that load customers are allowed to connect to enabler facilities. It would be economically inefficient to build a line to accommodate a narrow definition of expected users, only to be obliged to build additional capacity in essentially the same location a few years later when more users require service. Because there is risk that the Economic Connection Test (ECT) being developed by the Ontario Power Authority will apply different planning assumptions than those employed by the OEB, APPrO recommends co-ordinating the analysis used in the two processes for determining optimum facility size.

In stressing the need for optimally-sized capacity, APPrO notes that the original intent of the enabler facility was to provide a connection to groups of renewable generators that could not otherwise afford to connect on their own. By building an enabler facility with insufficient capacity to connect all of the potentially viable generators within the resource cluster, the transmitter may ultimately be ensuring connection for only a portion of the renewable resource (especially if other loads and non-renewable generation that has not been included in the design capacity are allowed to connect before all of the renewable generation) and would make it even more difficult and expensive to connect the stranded generators. Under this approach, the stranded sites would be significantly worse off than before and the connecting generators would have to pay more than they otherwise would to connect to the transmission grid since the common costs of the initial enabler facility would be shared by fewer connections. Accordingly, APPrO recommends that enabler facilities be built large enough to accommodate all generation connections (including non-renewable generation and renewable generation outside the cluster) reasonably expected to require service within the expected operating life of the line. Such long-term estimates should guide the level of expenditures approved in the leave-to-construct process as well as the OPA's Economic Connection Test for transmission.

In point 4.ii on page 13, the Board proposes a change to the definition of renewable generation to align it with the term "renewable energy source" as defined in the *Electricity Act, 1998*. The same terminology is being used in Bill 150. In making this change, APPrO requests that the Board clarify that commitments made to connect to or use transmission facilities will not be invalidated by a later change in the definition of what is accepted as a renewable energy source under the Electricity Act.

In point 4.iii on page 13, the Board proposes that a connecting generator would pay the *pro rata* share of the depreciated cost of the enabler facility based on the relative length of the line used by the generator. While APPrO supports the Board's proposal to use the

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depreciated cost of the enabler facility, with the pro rata share being based on the capacity of the generator connection compared to the capacity of the overall facility, we believe that distance-based charges would be problematic. Requiring payments to be based on the relative length of the line used by the generator would create additional complications including the stranding of renewable resources. It would make it less attractive for generators to build near the end of a line, and reduce the likelihood of project completion for those in such locations. Such an arrangement could encourage “end-of-the-line” generators to wait until the enabler cost is sufficiently depreciated to make the connection viable. In addition, the use of a relative line length model will introduce further anomalies into the calculation because line cost is not always a direct function of line length. Further uncertainties and potential inequities would flow from such distance-based calculations, particularly if the line capacity between the intermediately-located generator and the network is greater than the line capacity further out, and if line and/or connection configurations change over time.

If all of the potential generation connections in a cluster contribute to the cost of the enabler facility on a *pro rata* basis without regard for the relative length of the line used by each of the generators, certainty will improve and the cost per unit of capacity will be lower on average because of the larger number of connections. Under this approach, the total costs would be pooled and paid equally by all of the parties that are benefiting from the line, based on their usage. Under a distance based connection charge, the generators at the end of the line would be disadvantaged because they would be asked to pay significantly more than the generators closest to the transmission grid. Unless these costs can be passed through to end users in the commodity charge, some of the end-of-the line generators may not participate. This would reduce the amount of new renewable generation available to the system, and would make the entire proposition less certain and less feasible for others in the same vicinity, because their *pro rata* costs would increase.

APPrO appreciates the Board’s efforts in moving the transmission connection process forward by confirming that:

1. Enabler line losses will likely be recovered in the IESO uplift charge;
2. All generators connecting to the enabler facility will pay their *pro rata* share of the costs;
3. Generators will provide their own radial lines;
4. Security deposits will not be required to support the construction of enabler facilities;
5. Capital contributions will continue to be based on each transmitter’s Board-approved connection procedures;
6. No additional payments will be required for enabler facility operation and maintenance; and
7. Full costs of enabler facilities will include costs that are normally capitalized.

These are significant steps in a positive direction and APPrO looks forward to working with its members, industry participants and the Board to implement these changes and the proposed revisions expeditiously.

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All of which is respectfully submitted.

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A handwritten signature in black ink, consisting of a large, sweeping loop followed by a few smaller, connected strokes.

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