

# **Ontario Energy Board**

## **Proposed Amendments to the Distribution System Code: Cost Responsibility Policy for Distributed Generation**

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### **Ontario Power Authority Comments**

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## **Background**

On June 5, 2009, the Ontario Energy Board (the “Board”) issued a Notice of Proposal to Amend a Code. The Board’s Proposed Amendments to the Distribution System Code (“DSC”) addressed changes to the current approach to assigning cost responsibility as between a distributor and a generator in relation to the connection of renewable generation facilities to distribution systems.

The OPA supports the Board’s initiatives in this regard, to the extent that they will encourage renewable energy generation by removing certain barriers to participation. Examination of these cost responsibility issues now will enable timely connection of renewable generation that is contracted under the OPA’s feed-in-tariff (“FIT”) program, and support the Government’s policy in this regard as contained in the Green Energy and Green Economy Act (“GEA”).

The proposed amendments provide for three investment types, with corresponding cost responsibilities: connection assets, the costs of which are borne by the generator; expansions, for which the costs are shared between the generator and distributor on the basis of a \$/MW cap; and renewable enabling improvements, borne by the distributor. These categories would appear to provide a good initial starting point for assigning cost responsibility to accommodate the immediate requirements of the GEA; however, with experience the boundaries between the investment categories may become less distinct. As distributors’ planning cycles become normalized, cost recovery methods are developed, and with the potential regulations prescribing circumstances under which transmitters and distributors must bear certain connection costs, opportunities to re-examine these policies will likely arise.

## **Connection Assets**

The amendments as proposed provide for the assignment of cost responsibility of that portion of the distribution system used to connect a customer to the existing main distribution system from the ownership demarcation point of the generator. This is based on the assumption that these assets cannot, at the time of construction, reasonably be expected to connect any other customer.

The OPA agrees that this is a logical approach, but suggests that some provision should be made for the possibility that these connection assets have the potential to be used by subsequent, unforeseen customers. The DSC should make some provision for this eventuality by providing a mechanism whereby a portion of the original generator’s payment for these assets may be refunded. This may encourage proponents to seek more efficient siting of generation facilities to take advantage of existing connection options.

## Expansions

The Board has specifically asked for comments on the methodology for establishing the cap and the overall cap size. The OPA notes that the range of costs for an average length feeder appears to be fairly large. Other stakeholders with greater direct experience may be in a position to provide more data to ensure that the cap level is reasonable and truly representative of average connection costs for renewable energy generation connection. The OPA would urge the Board in establishing the cap to not set the cap at the low end of the range. The likely effect of such an approach would be to significantly constrain investments in expansions until such time as distributors have approved distribution plans.

The OPA suggests that it may be desirable to further clarify the definition and cost treatment of “Expansions”. A request for improvements at the request of one generator is clearly an expansion, but the proposal is unclear in how to treat requests from multiple parties. Clarification is suggested regarding how the cap would be applied and the remaining costs allocated among multiple proponents. Specifically, the OPA understands that the cost cap for an expansion shared between multiple proponents would be based on the aggregate capacity of the multiple generation projects.

The Board is not proposing to revise its current approach with regard to upstream costs, which will remain the responsibility of the generator, and will not be included in the calculation of the expansion cap. In support of its proposal, the Board has stated that gaming opportunities with regard to connection to distribution or transmission systems would be created. The OPA notes that gaming opportunities would not necessarily be eliminated by assigning upstream costs to the generator. Appendix A to this submission illustrates the impact of upstream costs to the generator’s choice in connection point. The assignment of upstream costs to the generator will only serve as a deterrent to inefficient connection choices if the cost to connect to the embedded distributor is less than or equal to the combined cost of the connection for the embedded and host distributors.

Given the impact of upstream costs under the scenarios illustrated, the OPA suggests that it would be appropriate to include upstream distribution costs for eligibility within the cap calculation. Removal of consideration of upstream costs for consideration by the generator will facilitate connection point choices based on system efficiency, rather than project economics. These upstream costs can represent a significant investment to the generator, and provide multiple benefits to other system users. In addition, including upstream distribution costs within the cap will ensure more equitable treatment of projects with similar characteristics when connecting to an embedded, rather than a host, distributor.

## **Non-Renewable Generation**

While the proposed amendments have been developed specifically to facilitate the connection of renewable energy generation, the OPA notes that these amendments will also enable other forms of distributed generation, including CHP projects. A CHP generator connecting to the system subsequent to the completion of improvements to facilitate renewable generation (whether as a result of an expansion or as a result of distributors' plans) may be in a position to take advantage of system improvements for which it would previously have been responsible.

While the intent of the proposed amendments to the DSC are specifically meant to facilitate renewable energy connection, it should be recognized that other types of distributed generation will also be connecting to distribution systems. The OPA suggests that the proposed category of Renewable Enabling Improvements should be more appropriately titled distributed generation-enabling improvements.

The OPA appreciates the Board's efforts to expedite these Proposed Amendments, which will be required to facilitate renewable generation connection and looks forward to their timely implementation.

## APPENDIX A

### Connection Alternatives for a 10MW Generator

<b>Scenario 1:</b>	<b>Distributor Cost</b>	<b>Generator Cost</b>
<u>Connection Point A:</u>		
Embedded Distributor Cost	\$900,000	\$0
Host Distributor Cost (upstream)	\$0	\$0
<u>Connection Point B:</u>		
Embedded Distributor Cost	\$900,000	\$0
Host Distributor Cost (upstream)	\$300,000	\$300,000

Generator requests Connection Point A, which is the most efficient connection and the least cost option for the generator.

<b>Scenario 2:</b>	<b>Distributor Cost</b>	<b>Generator Cost</b>
<u>Connection Point A:</u>		
Embedded Distributor Cost	\$900,000	\$0
Host Distributor Cost (upstream)	\$0	\$0
<u>Connection Point B:</u>		
Embedded Distributor Cost	\$600,000	\$0
Host Distributor Cost (upstream)	\$300,000	\$300,000

Either connection point is efficient, however the generator will prefer Connection Point A as the least cost option.

<b>Scenario 3:</b>	<b>Distributor Cost</b>	<b>Generator Cost</b>
<u>Connection Point A:</u>		
Embedded Distributor Cost	\$900,000	\$0
Host Distributor Cost (upstream)	\$0	\$0
<u>Connection Point B:</u>		
Embedded Distributor Cost	\$400,000	\$0
Host Distributor Cost (upstream)	\$200,000	\$200,000

Generator requests Connection Point A, which is the least efficient connection, but is the least cost option for the generator.