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NOTICE OF REVISED PROPOSAL TO AMEND A CODE

REVISED PROPOSED AMENDMENTS TO THE DISTRIBUTION SYSTEM CODE

BOARD FILE NO.: EB-2008-0102

VIA E-MAIL AND WEB POSTING

**To: All Licensed Electricity Distributors
All Participants in Consultation Process EB-2006-0226
All Participants in Consultation Process EB-2008-0102
All Other Interested Parties**

Re: Process for Connecting Small Generation Facilities

The Ontario Energy Board (the "Board") is giving notice under section 70.2 of the *Ontario Energy Board Act, 1998* of revised proposed amendments to the Distribution System Code (the "DSC").

I. Background

The process by which generation facilities are connected to a distribution system varies depending on the size of the connecting generation facility. Currently, the DSC contains a very simple and expedited connection process for "micro-embedded generation facilities", defined as embedded generation facilities with a name-plate rated capacity of 10 kW or less. By contrast, a more complex and lengthier connection process applies for larger generators. Among other things, the connection process for larger generation facilities includes a first-come/first-served queuing mechanism under which generation connection applicants are placed into a queue following completion of a connection impact assessment by the distributor. Micro-embedded generation facilities are not subject to the queuing requirement.

On May 16, 2008, the Board issued a Notice of Proposal (the “May Notice”) in which it proposed amendments to the DSC to simplify the process for connecting smaller-sized generation facilities that utilize a non-intermittent technology (the “Proposed Amendments”). Specifically, the Proposed Amendments were intended to implement a more expeditious process for connecting generation facilities that have a name-plate rated capacity in the range of >10 kW and ≤ 250 kW and that utilize solar, water, biomass/biofuel or fuel cell technology. They did so by extending to these facilities the same simplified and expedited connection process that currently applies to micro-embedded generation facilities. The Board also proposed that the simplified and expedited process apply both to existing generation projects that are awaiting connection as well as to future projects.

The May Notice set out background information relating to connection processes under the Code and to the status of two relevant distributed generation initiatives; namely, the Renewable Energy Standard Offer Program (“RESOP”) administered by the Ontario Power Authority (“OPA”) and the farm-based bio-mass generation development program of the Ontario Ministry of Agriculture, Food and Rural Affairs (“OMAFRA”).

The Board received written comments on the Proposed Amendments from 11 interested parties, including the OPA, OMAFRA, representatives of electricity distributors and representatives of electricity generators. These are available for viewing on the Board’s website at www.oeb.gov.on.ca on the “Distribution System Code Proposed Amendment” webpage on the “OEB Key Initiatives” portion of the “Industry Relations” section of the website.

Representatives of generators were supportive of the Proposed Amendments, but suggested that the simplified connection process also be made applicable to facilities that generate power using wind or natural gas. The OPA and OMAFRA were also supportive of the Proposed Amendments. One stakeholder proposed that the size of generation facility that should be permitted to connect and “export” some or all of its production to the distribution system should vary depending on whether the connection is to a single phase line or a three phase line, and that any generation facility that is operated so as to be fully load displacement should be connected regardless of size. Two stakeholders suggested that consideration also be given to simplifying the connection process for facilities with a capacity as high as 500 kW.

While one distributor commented that the Proposed Amendments are acceptable and will not result in material incremental costs, other representatives of distributors expressed a number of concerns relating to the implications of the Proposed Amendments for system reliability and power quality. Among the concerns expressed were the following:

- The connection of a generation facility with a name-plate rated capacity in the range of >10 kW and ≤ 250 kW can have a detrimental impact on the safety and reliability of a distribution system and on the quality of power delivered to other customers. This problem will be exacerbated where there are multiple generation facilities connecting to a single distribution or transmission line. As such, a technical or engineering review may be required to confirm that the impact of the connection is manageable. Failure to allow for a technical review will increase the risk that the generation facility will need to be disconnected in the future while remediation activities are undertaken to resolve power quality or reliability problems, and this often at greater expense than would have been the case had system changes been incorporated into the original connection design. In extreme cases, reconnection of the generation facility may not be possible.
- In some cases, the connection of a generation facility with a name-plate rated capacity in the range of >10 kW and ≤ 250 kW cannot be accommodated due to insufficient available capacity or the potential for exceeding technical limits. As such, a distributor must be permitted to determine whether capacity is available and to refuse to connect where capacity is lacking or where technical limits would be exceeded if the connection were to proceed.
- In determining whether or not capacity is available, the distributor should consider as unavailable any capacity that has already been allocated to generators in the queue. Otherwise, there is a greater risk that larger generators that currently have queue positions will be unable to connect because the capacity allocated to them may be taken up by generation facilities in the >10 kW and ≤ 250 kW name-plate rated capacity category. In addition, it will be important for any embedded distributor to confirm availability of capacity with its host distributor prior to connecting these generation facilities.
- The timelines for connection that would apply to a generation facility with a name-plate rated capacity in the range of >10 kW and ≤ 250 kW cannot be met in

all cases, particularly where a technical or engineering review is required. As an alternative to prescribed timelines, consideration could be given to timelines that focus on communication steps between the distributor and the generator.

- Cost responsibility for generator connections must be considered, particularly where the generation facility is not proposing to connect at an existing customer location. Cost responsibility should also be considered in relation to the costs to remediate generator connections that create power quality or reliability issues.
- Any new requirements relating to generator connections should apply prospectively only.

In addition, one distributor noted that generation facilities greater than 167 kVA (approximately 150 kW) require three phase service and therefore will not be able to connect to the majority of that distributor's distribution lines since most of its residential, farm and small general service customers are served on single phase supply.

II. Summary of Revised Proposed Amendments to the DSC

The Board remains of the view that the connection process for smaller generation facilities can be expedited relative to the process that is currently set out in the DSC. However, in light of the comments received from stakeholders the Board has determined that revisions to the approach embodied in the Proposed Amendments are warranted. The following is a summary of revised amendments to the DSC that the Board is now proposing (the "Revised Proposed Amendments"). The text of all of the Revised Proposed Amendments is set out in Attachment A to this Notice.

The Board is satisfied that the connection process that currently applies to generation facilities that have a name-plate rated capacity of 10 kW or less remains appropriate for facilities of that size. Accordingly, the Board is proposing to retain the existing definition of "micro-embedded generation facility". With respect to the connection process currently applicable to micro-embedded generation facilities, the Board notes that it is currently focussed on facilities that are going to be located at existing customer connections. Although this is expected to remain the most likely configuration for micro-embedded generation facilities, the Board considers it prudent to make provision for the eventuality that a micro-embedded generation facility might be located other than at an existing customer connection. Accordingly, the Board is proposing to amend section

6.2.6 of the DSC to include timelines for connecting a micro-embedded generation facility that is not intended to be located at an existing customer connection. The 60-day period proposed for this purpose is consistent with the timelines applicable to load customers and the timelines applicable to small embedded generation facilities that do not trigger system reinforcement or expansion. The Board is also proposing to amend section 6.2.7 of the DSC to accommodate the possibility that the connection of a micro-embedded generation facility might involve changes (and associated costs) beyond metering changes.

The Board acknowledges the comments of stakeholders to the effect that the connection of generation facilities with a name-plate rated capacity in the range of >10 kW and \leq 250 kW can have implications for system reliability or the quality of power provided to other customers. However, the Board believes that such facilities present, in relative terms, a lower risk and also believes that the risk remains at this lower level even for facilities that have a name-plate rated capacity of up to 500 kW if connected to a line that is 15 kV or higher. The Board also notes that such facilities are among the few that are currently eligible under programs such as RESOP and the OMAFRA initiative referred to above, the latter of which has been made available on a time-limited basis. As such, the Board believes that it is appropriate and in keeping with government policy to maximize connection opportunities for such facilities.

The Board is proposing that the connection process currently applicable to small embedded generation facilities should continue to apply to all small embedded generation facilities (including those with a name-plate rated capacity in the range of >10 kW and \leq 250 kW) with the following exceptions:

- i. The following generation facilities will be exempt from the queuing process:
(a) those with a name-plate rated capacity in the range of >10 kW and \leq 250 kW if connecting to a less than 15 kV line; and (b) those with a name-plate rated capacity in the range of >10 kW and \leq 500 kW if connecting to a 15 kV or greater line (amended section 6.2.4.2). The Board is proposing to include in the DSC a new defined term - "exempt small embedded generation facility" - to refer to these facilities (amended section 1.2).
- ii. In determining the feasibility of the connection of an "exempt small embedded generation facility", and in conducting any connection impact assessment for such a facility, the distributor must include as available any capacity that has

been set aside for a generation facility that is in the queue (new section 6.2.8A).

- iii. An offer to connect made in relation to an “exempt small embedded generation facility” may be revoked by the distributor if it is not accepted by the generator within 60 days (amended section 6.2.12).

The Board is proposing that the above apply to all “exempt small embedded generation facilities”, regardless of the technology used. Given that the process for connecting these facilities would largely remain the same as it is today in terms of reliability and customer impact considerations, the Board does not believe that it is necessary to create any distinction based on the technology used.

The Board notes that, to date, generation projects in the range of those proposed to qualify as “exempt small embedded generation facilities” have been few in number and have not been concentrated on any particular distribution facilities. In addition, the Board understands that many (if not most) distribution facilities in the Province currently have sufficient available capacity to accommodate at least some of these projects, even when accounting for capacity associated with projects that are in the queue. Moreover, there is no certainty that all projects that are currently in a queue will necessarily proceed to connection.

The Board recognizes that implementation of the proposed approach may, based on existing conditions, risk displacing a small number of projects that are currently in the queue. The Board also notes that the risk of projects being displaced may be greater in some locations than in others, particularly if and as the number of “exempt small embedded generation facilities” seeking connection increases. To allow for appropriate management of this risk, the Board is also proposing to amend the DSC to require a distributor to notify and seek direction from the Board promptly upon becoming aware that the connection of an “exempt small embedded generation facility” cannot reasonably be managed by the distributor without displacing a project that is in the queue (new section 6.2.8B).

As indicated in the May Notice, the Board is aware that there are currently a small number of projects in the range of >10 kW and ≤ 250 kW whose applications for connection are pending. The Board remains of the view that such projects should now be processed outside of the queue and is also of the view that the same should apply to

the larger projects that are also proposed to qualify as “exempt small embedded generation facilities”. The Board is therefore proposing to amend the DSC accordingly (new section 6.2.4.3).

The Board is also taking this opportunity to provide clarification regarding the connection process applicable to load displacement facilities. In accordance with 6.2.1 of the DSC, the connection process set out in section 6.2 of the DSC does not apply to an embedded generation facility that is “used exclusively for load displacement purposes”. It has come to the Board’s attention that some distributors are requiring load displacement generators that have a RESOP contract with the OPA to be placed in the queue. The Board wishes to clarify that, for the purposes of section 6.2.1 of the DSC, the Board considers that an embedded generation facility is “used exclusively for load displacement purposes” so long as the power produced by the generation facility is no more than the power consumed by the associated load. The fact that the load displacement generator may have a RESOP contract with the OPA does not affect that outcome. Accordingly, section 6.2 of the DSC, including the queuing requirement, does not apply to such facilities.

III. Anticipated Costs and Benefits of the Revised Proposed Amendments

The Board anticipates that proponents of generation projects that qualify as “exempt small embedded generation facilities” will benefit from the Revised Proposed Amendments as they will result in a faster generation connection process. Connection of these generation facilities can be effected within shorter timelines while retaining the ability to address any reliability and customer impact issues. Placing a ceiling on the duration of an offer to connect made in relation to these generation facilities will help to ensure that projects do not remain dormant and outstanding for extended periods of time.

The Revised Proposed Amendments will facilitate the connection of generation facilities that remain eligible for RESOP contracts while the program is undergoing review by the OPA, and will support other government policy initiatives such as the OMAFRA program referred to above. While the Board does not believe that this will be at the expense of generation projects that are already in a queue, appropriate safeguards have been included in the Revised Proposed Amendments to allow the Board to consider that eventuality should it arise.

The Board does not believe that implementation of the Revised Proposed Amendments will result in material incremental costs being borne by distributors.

IV. Coming Into Force

The Board proposes that the Revised Proposed Amendments to the DSC described above and set out in Attachment A to this Notice come into force on the date that the final amendments are published on the Board's website.

V. Invitation to Comment

All interested parties are invited to comment in writing on the Board's Revised Proposed Amendments to the DSC set out in Attachment A by **January 9, 2009**. As indicated in the May Notice, the Board will not be granting cost awards in this matter.

Three (3) paper copies of each filing must be provided, and should be sent to:

Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street
Suite 2700
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The Board requests that interested parties make every effort to provide electronic copies of their filings in searchable/unrestricted Adobe Acrobat (PDF) format, and to submit their filings through the Board's web portal at www.err.oeb.gov.on.ca. A user ID is required to submit documents through the Board's web portal. If you do not have a user ID, please visit the "e-filings services" webpage on the Board's website at www.oeb.gov.on.ca, and fill out a user ID password request. Additionally, interested parties are requested to follow the document naming conventions and document submission standards outlined in the document entitled "RESS Document Preparation – A Quick Guide" also found on the e-filing services webpage. If the Board's web portal is not available, electronic copies of filings may be filed by e-mail at boardsec@oeb.gov.on.ca.

Those that do not have internet access should provide a CD or diskette containing their filing in PDF format.

Filings to the Board must be received by the Board Secretary by **4:45 p.m.** on the required date. They must quote file number **EB-2008-0102** and include your name, address, telephone number and, where available, your e-mail address and fax number.

This Notice, including the Revised Proposed Amendments to the DSC set out in Attachment A, and all written comments received by the Board in response to this Notice, will be available for public inspection on the Board's website at www.oeb.gov.on.ca and at the office of the Board during normal business hours.

If you have any questions regarding the proposed amendments described in this Notice, please contact Gordon Ryckman at 416-440-8109 or by e-mail at Gordon.Ryckman@oeb.gov.on.ca. The Board's toll free number is 1-888-632-6273.

DATED at Toronto, December 9, 2008.

ONTARIO ENERGY BOARD

Original Signed By

Kirsten Walli
Board Secretary

Attach: Attachment A: Revised Proposed Amendments to the Distribution System Code

Attachment A

Revised Proposed Amendments to the Distribution System Code

Note: The text of the proposed amendments is set out in italics below, for ease of identification only.

1. Section 1.2 of the Distribution System Code is amended by adding the following immediately after the definition of “enhancement”:

“exempt small embedded generation facility” means an embedded generation facility which is not a micro-embedded generation facility and which has a name-plate rated capacity of 250 kW or less in the case of a facility connected to a less than 15 kV line and 500 kW or less in the case of a facility connected to a 15 kV or greater line;

2. Section 6.2.4.2 of the Distribution System Code is amended by adding the following to the end of the first sentence:

or an exempt small embedded generation facility;

3. Section 6.2.4 of the Distribution System Code is amended by adding the following immediately after section 6.2.4.2:

6.2.4.3 Any application to connect an exempt small embedded generation facility that was received by a distributor prior to the date of coming into force of this section shall be processed by the distributor in accordance with the provisions of this Code applicable to such generation facilities as though the application to connect had been received by the distributor on the date of coming into force of this section.

4. Section 6.2.6 of the Distribution System Code is amended as follows:

- i. by adding the following immediately after the first sentence:

Where the proposed micro-embedded generation facility will be located other than at an existing customer connection, the distributor shall, within 60 days of receiving the application, make an offer to connect or provide reasons for refusing to connect the proposed generation facility.

- ii. by deleting the word “The” at the beginning of the first sentence and replacing it with the following:

In either case, the

5. Section 6.2.7 of the Distribution System Code is amended as follows:
- i. by deleting the phrase “make any necessary metering changes and”; and
 - ii. by deleting the phrase “for the costs of any necessary metering changes” and replacing it with the following:

for the connection costs, including costs for any necessary new or modified metering.

6. Section 6.2 of the Distribution System Code is amended by adding the following immediately after section 6.2.8:

6.2.8A Notwithstanding any other provision of this Code, a distributor shall, for the purposes of determining the connection feasibility of an exempt small embedded generation facility and of determining the impact of such facility on the distributor’s distribution system and on any customers of the distributor, treat any capacity associated with a generation facility that is in a queue referred to in section 6.2.4.2 as available capacity.

6.2.8B Where a distributor believes that, by virtue of the operation of section 6.2.8A, the connection of an exempt small embedded generation facility cannot reasonably be managed by the distributor without adversely affecting the queue position of a generation facility, the distributor shall promptly so notify the Board in writing. In such a case, and notwithstanding any other provision of this Code, the distributor shall not take any further steps to connect the exempt small embedded generation facility without further direction from the Board.

7. Section 6.2.12 of the Distribution System Code is amended by adding the following immediately after paragraph b:

An offer to connect made to an applicant proposing to connect an exempt small embedded generation facility may be revoked by the distributor if not accepted by the applicant within 60 days.