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**NOTICE OF REVISED PROPOSAL TO AMEND A CODE
FURTHER REVISED PROPOSED AMENDMENTS TO THE TRANSMISSION
SYSTEM CODE**

BOARD FILE NO: EB-2008-0003

**To: All Licensed Electricity Transmitters
All Participants in Consultation Process EB-2008-0003**

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

I. Background

A. The October and April Proposed Amendments

On October 29, 2008, the Board issued a Notice of Proposal to Amend a Code (the "October Notice") in which it proposed a number of amendments to the Code (the "October Proposed Amendments") that were designed to promote the implementation of the government's policy objectives by facilitating the timely and economically efficient connection of renewable generation facilities in a manner that does not create undue risk for ratepayers. More specifically, the October Proposed Amendments contemplated the implementation of a "hybrid" approach to cost responsibility in relation to "enabler" facilities, being transmission facilities intended to connect multi-proponent clusters of renewable generation resources. Under the proposed hybrid approach:

- enabler facilities would be developed, built, operated and owned by a transmitter;
- the costs associated with an enabler facility would be pooled temporarily;

- each generator would make a pro-rata capital contribution towards the cost of the enabler facility as and when it became ready to connect, calculated as a share of the cost of the enabler facility equal to the generation facility's capacity; and
- outstanding costs for any "unsubscribed" portions of an enabler facility would be included in the transmitter's rate base and be recovered from transmission ratepayers.

Having considered the comments received from stakeholders on the October Proposed Amendments, the Board determined that revisions to the October Proposed Amendments were warranted. The Board issued a Notice of Revised Proposal to Amend a Code on April 15, 2009 (the "April Notice"). The revised proposed amendments (the "April Revised Proposed Amendments") addressed issues relating to cost responsibility for generation facilities outside a renewable resource cluster; security deposits; the connection of load facilities to an enabler facility; the determination of capital contributions; cost allocation; and certain definitional issues.

The Board received 13 comments on the April Revised Proposed Amendments from a variety of stakeholders, including the Ontario Power Authority ("OPA"), the Independent Electricity System Operator ("IESO"), and representatives of distributors, generators, ratepayers and aboriginal communities. These are available for viewing on the Board's website at www.oeb.gov.on.ca on the "Transmission Connection Cost Responsibility Review" webpage on the "OEB Key Initiatives" portion of the "Industry Relations" section of the website.

Since issuance of the April Notice, additional detail has become available regarding the implications of the *Green Energy and Green Economy Act, 2009* – and more specifically of the implementation of the feed-in-tariff program referred to in that *Act* – in relation to the subject-matter of this consultation. As a result, the Board believes that further proposed amendments are warranted, as set out in section II.A below. Moreover, based on the comments received on the April Revised Proposed Amendments, the Board has determined that certain additional proposed amendments are warranted, as set out in section II.B below. Attachment A to this Notice sets out the proposed amendments to the Code as revised. For convenience, Attachment B to this Notice contains a comparison version that shows all of the most recent proposed revisions relative to the April Revised Proposed Amendments. Also for convenience, Attachment C to this Notice contains a comparison version that shows all of the proposed revisions relative to the current version of the Code.

II. Further Revised Proposed Amendments

A. *The Green Energy and Green Economy Act, 2009* and the Feed-in-Tariff Program

1. Introduction

Bill 150, the *Green Energy and Green Economy Act, 2009*, was introduced before the Board issued the April Notice. Since that time, the *Green Energy and Green Economy*

Act, 2009 (the “GEGEA”) has received Royal Assent, and all of the amendments to the *Electricity Act, 1998* and the *Ontario Energy Board Act, 1998* that are relevant to the subject-matter of this consultation were proclaimed into force on September 9, 2009. Among other things, the GEGEA has amended the *Electricity Act, 1998* to make provision for the implementation of a “feed-in-tariff” (“FIT”) program by the OPA. The FIT program is designed to procure energy from renewable energy sources using standard program rules, standard contracts and standard pricing.

Work on the development of the FIT program is proceeding, and greater detail is now available regarding the nature of the program and the role that information from the program is expected to play in the planning process.

2. Basis for Identification of Enabler Facilities

In both the October Proposed Amendments and the April Revised Proposed Amendments, the Board proposed that a connection facility be treated as an enabler facility in either of the following two circumstances:

- i. where the connection facility is identified as an “enabler facility” and the associated renewable resource cluster is identified as such in an integrated power system plan (“IPSP”) that has been approved by the Board under Part II.2 of the *Electricity Act, 1998*; or
- ii. where the associated renewable resource cluster is the subject of a direction issued by the Minister of Energy and Infrastructure (the “Minister”) to the OPA under section 25.32 of the *Electricity Act, 1998*.

In its comments on both sets of proposed amendments, the OPA suggested that the Board also assume some independent role in designating a connection facility as an enabler facility in appropriate cases, based on applications by interested parties. Other participants made similar comments. In the April Notice, the Board expressed the view that renewable resource clusters should be established in a planning context where the best or most promising renewable resources are first in line for development. While the Board remains of that view, the Board believes that this objective can be met in two additional circumstances beyond the two identified above.

First, the Board notes that, in the context of the implementation of the FIT program, the OPA will be in a good position to ascertain the more promising locations of renewable resource clusters based on the response to that program. The OPA will, through its administration of the FIT program, be well-positioned to identify the renewable resource potential in any given area and to assess the comparative viability and merits of – and interest in – different areas in terms of generator siting. Individual generation proponents, on the other hand, would not be well-placed to make these assessments.

While the Board remains of the view that enabler facilities should not be designated by the Board on application by individual generation project proponents, the Board believes that a connection facility should qualify as an enabler facility if it is intended to connect a renewable resource cluster identified by the OPA based on information and

assessments made through the implementation of the FIT program. As discussed in section II.3 below, qualification for enabler facility status in these cases is proposed to be contingent on the project satisfying certain “screening criteria”.

Second, as indicated in the April Notice, the GEGEA confirms a central role for the Board in relation to the approval of system expansion or reinforcement plans developed by transmitters to accommodate renewable generation. Although the Board has yet to provide guidance specifically in relation to transmission system planning, it has issued initial guidelines in relation to distribution system planning (G-2009-0087). While the relationship between transmission system plans and any approved IPSP has not, since issuance of the April Notice, become clearer, the Board believes that the transmission system planning process can provide a further forum for the identification of promising renewable resource clusters and associated enabler facilities. Accordingly, the Board is proposing that a connection facility should qualify as an enabler facility where it is identified as such, and where the associated renewable resource cluster is identified as such, in a Board-approved transmission system plan filed by a transmitter under the deemed condition of the transmitter’s licence referred to in subsection 70(2.1) of the Act.

The Board is proposing to amend sections 2.0.28A and 2.0.57A of the Code to give effect to the above proposals.

3. Enabler Screening Criteria for OPA-identified Clusters

The Board expects that, under the FIT program, renewable generators will have a greater role in driving the quantity and location of renewable generation facilities in the Province. The Board believes that, in the context of this more proponent driven process, it is desirable to make provision for screening criteria that can serve to promote the development of the more economic clusters of renewable resources.

The Board is therefore proposing that the hybrid approach to cost responsibility for enabler facilities should only apply where the enabler facility proposal satisfies certain screening criteria (sections 2.0.28A and 3A of the Code). The enabler screening criteria would apply as mandatory elements only where the proposed enabler facility is associated with a renewable resource cluster that has been identified by the OPA as discussed in section II.2 above. In other words, the enabler screening criteria would not apply as mandatory elements where the enabler facility is identified as such in an approved IPSP or in a Board-approved transmission plan, or where the associated renewable resource cluster is the subject of a direction issued by the Minister. While it is anticipated that a Board panel tasked with the review of the IPSP or of a transmission plan would apply the enabler screening criteria in any event, the Board believes it appropriate for the panel to retain the discretion to determine, in appropriate cases based on the evidence before it, that a connection facility should qualify as an enabler facility even if the screening criteria would not be met.

The Board is proposing that there be two screening criteria as follows:

- the capacity of the associated renewable resource cluster must be at least 100 MW; and
- subject to the exception noted below, if the proposed enabler facility is a line connection facility it must be at least 10 km long.

The minimum capacity criterion will ensure that uneconomically small clusters are not developed at the expense of larger ones.

The minimum length criterion for line connection facilities will confirm that enabler facilities are a more economical option than multiple connections by individual proponents. Where a renewable resource cluster is closer to the grid, it is more likely that the cost of the enabler facility, together with the cost of the individual proponent connections to it, would be higher than the aggregate cost of all individual connections to the transmission system. However, the Board recognizes that there may be instances where this is not the case. Therefore, the Board is also proposing that a line connection that is less than 10 km be treated as an enabler facility where the OPA demonstrates that the enabler facility approach is a superior option, for technical or cost effectiveness reasons, to that of individual proponent connections (or to connections that are coordinated by proponents). The Board recognizes that clusters that are located closer to the transmission system may encounter the coordination problems that the Board's approach to enabler facilities is principally intended to resolve. However, the Board believes that resolving such coordination problems should not come at the expense of the development of enabler facilities that are more costly than individual or coordinated connections.

With respect to transformation facilities, the Board is proposing that they be subject only to the minimum capacity criterion, and references in this Notice to "criteria" should be interpreted accordingly. To the extent that there is a cost advantage to enabler treatment for a larger transformation facility relative to several smaller ones each serving a smaller number of proponents, this cost advantage is not likely to be affected by distance from the grid. The enabler solution should, in the Board's view, remain available to resolve coordination issues in relation to transformation facilities.

The Board notes that satisfying the enabler screening criteria means that a connection facility is eligible to be treated as an enabler facility initially as the basis on which development of the facility can proceed. If, at the leave to construct stage, the enabler screening criteria continue to be met, the enabler facility designation would remain in place for construction, ownership and future operation purposes. If, however, at the leave to construct stage it appears that the project would, based on then-current information, fail to satisfy either criterion (or, in the case of a transformation connection facility, the minimum capacity criterion only), the Board may determine that enabler treatment is not warranted for those going-forward purposes. However, the Board would retain the flexibility to maintain enabler treatment in such cases where the deviation or discrepancy is not material in the circumstances. The Board is proposing to confirm that this is the case as part of the proposed amendments to the Code (section 3A).

Ultimately, whether or not the enabler facility proceeds to construction, and the determination of the optimal size and configuration of the enabler facility, will also remain to be confirmed at the leave to construct stage.

The Board recognizes that leave to construct is not required for all transmission projects, and that the Board may therefore not have the opportunity to confirm continued eligibility for enabler facility treatment at the leave to construct stage in all cases. Where no leave to construct proceeding will occur, the Board will obtain confirmation from the transmitter of such continued eligibility prior to commencement of construction, and will address any concerns about continued eligibility through an appropriate process at that time.

B. Other

1. Use of Line Length as a Cost Allocator

In the April Revised Proposed Amendments, the Board proposed to use relative line length as a component of the calculation of each generator's pro-rata share of the cost of an enabler facility.

Some generator representatives raised concerns regarding this approach. One commented that that it may risk stranding some renewable resources and encourage "end-of-the-line" generators to delay connection while the line depreciates. The same stakeholder also noted that anomalies might result in the calculation as line cost is not always a direct function of line length. Another stakeholder noted that the Board's proposed approach would not result in a level playing field, since an "accident of geography" would favour one generator over another. This stakeholder also stated that the proposal would act as a disincentive for remote resource connection and is therefore not in keeping with the original intention underlying the development of the enabler facility concept.

The Board acknowledges that use of line length for purposes of allocating costs amongst generators in a cluster may result in fewer connections being made, or not being made as quickly as might otherwise be the case. As such, the approach may be less supportive of the Board's new objective of promoting the connection of renewable resources as set out in the GEGEA amendment to the Act. The Board therefore does not believe that this approach should be retained, and is proposing to amend section 6.3.14A of the Code to remove the line length concept.

2. Line Losses

In the April Notice, the Board indicated that line losses for enabler facilities would be settled through existing IESO mechanisms through uplift charges. The IESO suggested in its comments that the Board should clarify how a delivery point will be defined for an enabler facility. If the Board were to determine that the delivery point is the point at which the enabler facility meets the transmission system, the IESO suggested that the Board would then need to determine an appropriate method for allocating the losses among all entities given that existing IESO procedures account for a single entity or

customer behind a delivery point. However, if the delivery point is the point at which generators connect to the enabler facility then no new method of allocating line losses is needed.

The Board confirms that, for enabler facilities, there will be a delivery point at each point at which a facility is connected to the enabler facility. The Board is proposing for clarity to amend section 2.0.14 of the Code to that effect.

III. Issues Where No Further Revisions are Proposed

1. Determination of Enabler Facility Capacity and End Point

Several stakeholders expressed concern about the capacity and endpoint of an enabler facility being determined only at the time of the leave to construct proceeding. They noted that, as this proceeding comes relatively late in the approval process, accurate information about the size and configuration of the enabler facility would not be known early enough to facilitate good planning by generators. Generator risk could therefore be increased and investment could be delayed. Some stakeholders suggested that the end point and capacity should be at least estimated before or during the “leave to develop” process.

The Board expects that good estimates of the capacity and end point of an enabler facility will be available prior to the leave to construct process, and that those estimates should generally be adequate to support planning by generators. The Board remains of the view that it is important that the Board retain the discretion to address issues associated with the capacity and/or end point of an enabler facility at the leave to construct stage as and where that may be required based on the evidence that is before the Board at that time.

2. Single vs. Multiple Proponents (Ownership Criterion)

Some stakeholders commented that the hybrid approach will not provide a level playing field, noting in particular that where an enabler facility is ultimately not constructed, the costs would be borne by ratepayers rather than by the generator proponents. The same would not be true of a single proponent, who under the Code would lead the developmental work itself. Some stakeholders also commented that multiple proponents would benefit from a transmitter’s economies of scale whereas a single proponent would not.

As indicated in both the October Notice and the April Notice, in the Board’s view the principal issue to be addressed is that of resolving the potential coordination problems that may arise during the development phase in the case of multiple proponent clusters. The Board remains of the view that the hybrid option is the preferred approach. The Board is not persuaded that the cost responsibility rules set out in the Code require revision in relation to single proponent projects.

3. Definition of “Transmission Service”

One stakeholder suggested that the definition of “transmission service” in the Code be amended to clarify that the concept includes transmission services provided with respect to enabler facilities. The Board notes that the definition of “transmission service” in the Code refers to, among other things, such transmission service as may be described in a transmitter’s rate order. The Board believes that the definition as currently drafted is sufficiently flexible to accommodate transmission services provided with respect to enabler facilities, and that the requested clarification is therefore not required.

IV. Anticipated Costs and Benefits

The anticipated costs and benefits of the proposal to adopt the hybrid approach to cost responsibility for enabler facilities and of the associated proposed amendments to the Code were set out in the October Notice, and interested parties should refer to the October Notice for further information in that regard. Similarly, the anticipated costs and benefits associated with the April Revised Proposed Amendments were addressed in the April Notice, and interested parties should refer to the April Notice for further information in that regard.

The proposed addition of two supplemental processes in or by which connection facilities can be designated as enabler facilities reflects developments that are contemplated in the GEGEA, while satisfying the objective of ensuring that renewable resource clusters and enabler facilities are identified in an appropriate planning context where the most promising renewable resources are first in line for development.

The proposed incorporation of enabler screening criteria will provide an additional safeguard that can ensure that the interests of ratepayers are better protected. The minimum MW capacity criterion contained in these proposed amendments will help to ensure that higher quality resources are developed and thus will increase the margin of benefit over cost on average with respect to these investments. The minimum distance criterion for line connection facilities will provide greater protection to ratepayers by ensuring that enabler facility treatment is limited to circumstances where that treatment is expected to be a less costly solution than individual or coordinated connections.

The removal of line length as a component of the calculation of each generator’s pro-rata share of the cost of an enabler facility will better support the Board’s new objective of promoting the connection of renewable resources. The Board does not expect that this proposal will result in incremental costs for transmitters or ratepayers, although it will affect the allocation of costs as among connecting generators.

The proposal to expressly address the treatment of line losses will provide greater clarity with respect to the implementation and treatment of enabler facilities. The Board does not expect that this proposal will result in any incremental costs for generators, transmitters, or ratepayers.

V. Coming Into Force

As was the case with the October Proposed Amendments and the April Revised Proposed Amendments, the Board is proposing that the amendments to the Code as set out in Attachment A come into force on the date on which they are published on the Board's website after having been made by the Board. This is reflected in the proposed amendment to section 13 of the Code.

VI. Cost Awards

Cost awards will be available under section 30 of the Act to eligible persons in relation to the provision of comments on the revised proposed amendments to the Code set out in Attachment A, **to a maximum of 10 hours**.

VII. Invitation to Comment

All interested parties are invited to make written comments on the revised proposed amendments set out in Attachment A by **September 25, 2009**. As indicated in the April Notice, the Board does not intend to revisit its proposal to adopt the hybrid approach, nor does it intend to revise its approach to the issues identified in section III of this Notice. The Board therefore requests that interested parties focus their comments on the proposed revisions described in section II of this Notice.

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
Toronto, Ontario
M4P 1E4

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.errr.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-2008-0003** and include your name, address, telephone number and, where available, your e-mail address and fax number.

This Notice, including the attached proposed amendments to the Code, and all written comments received by the Board in response to this Notice, will be available for public viewing on the Board's web site at www.oeb.gov.on.ca and at the office of the Board during normal business hours.

If you have any questions regarding the revised proposed amendments to the Code described in this Notice and set out in Attachment A, please contact David Brown at 416-440-8123. The Board's toll free number is 1-888-632-6273.

DATED at Toronto, September 11, 2009.

ONTARIO ENERGY BOARD

Original signed by

Kirsten Walli
Board Secretary

Attachments: Attachment A: Revised Proposed Amendments to the
Transmission System Code

Attachment B: Comparison Version Showing Revised Proposed
Amendments to the Transmission System Code relative to the April
Revised Proposed Amendments (for information purposes only)

Attachment C: Comparison Version Showing Revised Proposed
Amendments relative to the Current Transmission System Code
(for information purposes only)

Attachment A

Revised Proposed Amendments to the Transmission System Code

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

1. Section 2.0.13 of the Transmission System Code is amended by adding the following to the end of that section immediately before the semi-colon:

, and includes an enabler facility

2. Section 2 of the Transmission System Code is amended by adding the following immediately after section 2.0.28:

2.0.28A *“enabler facility” means a line connection facility or a transformation connection facility that is or will be constructed, owned and operated by a transmitter and to which two or more generation facilities that are included in a renewable resource cluster are connected or intend to connect to convey energy into a transmitter’s transmission system, where any of the following apply: (a) the connection facility is identified as an “enabler facility” and the associated renewable resource cluster is identified as such in an integrated power system plan that has been approved under Part II.2 of the Electricity Act or in a Board-approved plan filed with the Board by a transmitter pursuant to the deemed condition of the transmitter’s licence referred to in paragraph 2 of subsection 70(2.1) of the Act; (b) the associated renewable resource cluster is the subject of a direction issued by the Minister to the Ontario Power Authority under section 25.32 of the Electricity Act on or after [•] [insert date of coming into force of this amendment] and the Board, on the advice of the Ontario Power Authority, has determined that a connection facility is required; or (c) the OPA has provided the Board with written advice identifying the associated renewable resource cluster as one for which an enabler facility would be desirable, and the Board has determined that a connection facility is required and that the connection facility satisfies the screening criteria set out in section 3A.*

3. Section 2.0.14 of the Transmission System Code is amended by adding the following to the end of that section immediately before the semi-colon:

and, in the case of an enabler facility, means each point of connection between the enabler facility and any customer facility connected to the enabler facility

4. Section 2.0.57 of the Transmission System Code is deleted and replaced with the following:

2.0.57 “renewable generation” means a generation facility that generates electricity using a renewable energy source as defined in the Electricity Act;

5. Section 2 of the Transmission System Code is amended by adding the following immediately after section 2.0.57:

2.0.57A “renewable resource cluster” means a geographic area where resources suitable for renewable generation are present and where the renewable generation facilities are not, or are not expected to be, owned or controlled by the same person and that is identified as such in: (a) an integrated power system plan approved under Part II.2 of the Electricity Act or a Board-approved plan filed with the Board by a transmitter pursuant to the deemed condition of the transmitter’s licence referred to in paragraph 2 of subsection 70(2.1) of the Act; (b) a direction issued by the Minister to the Ontario Power Authority under section 25.32 of the Electricity Act; or (c) written advice from the OPA to the Board;

6. Section 3 of the Transmission System Code is amended by adding the following immediately after section 3.0.13:

3A. SCREENING CRITERIA FOR ENABLER FACILITIES

3A.1 The following are the screening criteria that must be satisfied by a connection facility in order to qualify as an enabler facility where clause (c) of the definition of “enabler facility” applies:

- (a) the capacity of the associated renewable resource cluster is at least 100 MW; and*
- (b) if the proposed enabler facility is a line connection facility, either:*
 - i. the proposed line connection facility is at least 10 km in length; or*
 - ii. the OPA has satisfied the Board that the line connection facility should qualify as an enabler facility because such treatment would be superior, for technical or cost effectiveness reasons, to the generation facilities in the associated renewable resource cluster connecting directly to the transmitter’s existing transmission facilities individually or on a coordinated basis.*

3A.2 Nothing in section 3A.1 shall prevent the Board from determining, in a proceeding to consider an application made under section 92 of the Act, that a connection facility should maintain its qualification as an enabler facility notwithstanding that the enabler facility no longer satisfies the screening criteria set out in section 3A.1, if the Board is satisfied that the deficiency is not material in the circumstances.

7. Section 6.2.24 of the Transmission System Code is amended by adding the following immediately after the phrase “for the construction of a connection facility,” in the first sentence:

other than an enabler facility,

8. Section 6.3.3 of the Transmission System Code is amended by deleting the phrase “a generator customer’s needs,” in the first sentence and replacing it with the following:

the needs of one or more generation customers or is required to construct an enabler facility,

9. Section 6.3.4 of the Transmission System Code is deleted and replaced with the following:

Where a transmitter has to modify a transmitter-owned connection facility to meet the needs of one or more generator customers or is required to construct an enabler facility, the transmitter shall require the applicable generator customer or customers to make a capital contribution to cover the cost of the modified connection facility or of the enabler facility, calculated in accordance with the economic evaluation methodology set out in section 6.5.

10. Section 6.3.8 of the Transmission System Code is deleted and replaced with the following:

A transmitter shall not require a customer to make a capital contribution for capacity added by the transmitter to a transmitter-owned connection facility in anticipation of future load growth not attributable to that customer or in anticipation of the future capacity requirements of other generator customers. For this purpose, where the transmitter-owned connection facility is an enabler facility, the capacity requirements of the renewable generation facilities expected to connect to the enabler facility shall not be considered as future capacity requirements.

11. Section 6.3.9 of the Transmission System Code is amended by deleting the words “as described in section 6.3.14, 6.3.15 or 6.3.16” at the end of the second sentence and replacing it with the following:

as described in section 6.3.14, 6.3.14A, 6.3.15 or 6.3.16

12. Section 6.3 the Transmission System Code is amended by adding the following immediately after section 6.3.10:

6.3.10A *Despite section 6.3.10, a transmitter may not require a security deposit in relation to the construction of an enabler facility.*

13. Section 6.3 of the Transmission System Code is amended by adding the following immediately after section 6.3.14:

6.3.14A *Where a transmitter is required to construct an enabler facility, the transmitter shall attribute the cost of the enabler facility, depreciated to the time of connection, to generator customers connecting to the enabler facility from time to time in proportion to the nameplate capacity of their respective generation facilities at the time of connection expressed as a percentage of the total capacity of the enabler facility. For this purpose, the total capacity of the enabler facility shall be determined on the basis of its capacity at the time at which the enabler facility comes into service.*

14. Section 6.3 of the Transmission System Code is amended by adding the following immediately after section 6.3.16:

6.3.16A *Despite section 6.3.16:*

- (a) *a transmitter shall not attribute the cost of an enabler facility to a load customer that connects to the enabler facility unless section 6.3.2 applies; and*
- (b) *a transmitter shall attribute the cost of an enabler facility to generator customers in accordance with section 6.3.14A.*

15. Section 6.3.17 of the Transmission System Code is amended by adding the following immediately after the phrase “for the construction of a connection facility,” in the first sentence:

other than an enabler facility,

16. Section 6.5 of the Transmission System Code is amended by adding the following immediately after section 6.5.1:

6.5.1A *Where a transmitter constructs an enabler facility, the cost to be attributed to generator customers under section 6.3.14A shall be the fully allocated cost of the enabler facility. The transmitter shall include the capital cost of equipment installed on transmitter-owned connection facilities by the transmitter for monitoring the performance of the generation facilities and for verification testing of fault protection equipment associated with the generation facilities. If any generator customer elects to have verification*

testing costs included in the economic evaluation rather than paying such costs on an “as incurred” basis over time, the transmitter shall also include the present value of the estimated cost of doing periodic verification testing of its monitoring and testing equipment and, if necessary, of similar equipment owned by the generator customer. The transmitter shall include the present value of the operation and maintenance costs associated with an enabler facility.

17. Section 13 of the Transmission System Code is amended by adding the following immediately after section 13.0.1:

13.0.2 *Except where expressly provided otherwise, any amendments to this Code shall come into force on the date on which the Board publishes the amendments by placing them on the Board’s website after they have been made by the Board.*

Attachment B

**Comparison Version of Revised Proposed Amendments to the Transmission
System Code Relative to the April Revised Proposed Amendments**

(for information purposes only)

(See attached document)

Attachment B

Comparison Version Showing Revised Proposed Amendments to the Transmission System Code relative to the April Revised Proposed Amendments (for information purposes only)

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

1. Section 2.0.13 of the Transmission System Code is amended by adding the following to the end of that section immediately before the semi-colon:

, and includes an enabler facility

2. Section 2 of the Transmission System Code is amended by adding the following immediately after section 2.0.28:

2.0.28A *“enabler facility” means a line connection facility or a transformation connection facility that is or will be constructed, owned and operated by a transmitter and to which two or more generation facilities that are included in a renewable resource cluster are connected or intend to connect to convey energy into a transmitter’s transmission system, where either any of the following apply: (a) the connection facility is identified as an “enabler facility” and the associated renewable resource cluster is identified as such in an integrated power system plan that has been approved under Part II.2 of the Electricity Act; or in a Board-approved plan filed with the Board by a transmitter pursuant to the deemed condition of the transmitter’s licence referred to in paragraph 2 of subsection 70(2.1) of the Act; (b) the associated renewable resource cluster is the subject of a direction issued by the Minister to the Ontario Power Authority under section 25.32 of the Electricity Act on or after [•] [insert date of coming into force of this amendment] and the Board, on the advice of the Ontario Power Authority, has determined that a connection facility is required; or (c) the OPA has provided the Board with written advice identifying the associated renewable resource cluster as one for which*

an enabler facility would be desirable, and the Board has determined that a connection facility is required and that the connection facility satisfies the screening criteria set out in section 3A.

3. Section 2.0.14 of the Transmission System Code is amended by adding the following to the end of that section immediately before the semi-colon:

and, in the case of an enabler facility, means each point of connection between the enabler facility and any customer facility connected to the enabler facility

4. Section 2.0.57 of the Transmission System Code is deleted and replaced with the following:

2.0.57 *“renewable generation” means a generation facility that generates electricity using a renewable energy source as defined in the Electricity Act;*

45. Section 2 of the Transmission System Code is amended by adding the following immediately after section 2.0.57:

2.0.57A *“renewable resource cluster” means a geographic area ~~identified as such in an integrated power system plan approved under Part II.2 of the Electricity Act or in a direction issued by the Minister to the Ontario Power Authority under section 25.32 of the Electricity Act~~ where resources suitable for renewable generation are present and where the renewable generation facilities are not, or are not expected to be, owned or controlled by the same person and that is identified as such in: (a) an integrated power system plan approved under Part II.2 of the Electricity Act or a Board-approved plan filed with the Board by a transmitter pursuant to the deemed condition of the transmitter’s licence referred to in paragraph 2 of subsection 70(2.1) of the Act; (b) a direction issued by the Minister to the Ontario Power Authority under section 25.32 of the Electricity Act; or (c) written advice from the OPA to the Board;*

56. Section 3 of the Transmission System Code is amended by adding the following immediately after section 3.0.13:

3A. SCREENING CRITERIA FOR ENABLER FACILITIES

3A.1 The following are the screening criteria that must be satisfied by a connection facility in order to qualify as an enabler facility where clause (c) of the definition of “enabler facility” applies:

(a) the capacity of the associated renewable resource cluster is at least 100 MW; and

(b) if the proposed enabler facility is a line connection facility, either:

i. the proposed line connection facility is at least 10 km in length; or

ii. the OPA has satisfied the Board that the line connection facility should qualify as an enabler facility because such treatment would be superior, for technical or cost effectiveness reasons, to the generation facilities in the associated renewable resource cluster connecting directly to the transmitter’s existing transmission facilities individually or on a coordinated basis.

3A.2 Nothing in section 3A.1 shall prevent the Board from determining, in a proceeding to consider an application made under section 92 of the Act, that a connection facility should maintain its qualification as an enabler facility notwithstanding that the enabler facility no longer satisfies the screening criteria set out in section 3A.1, if the Board is satisfied that the deficiency is not material in the circumstances.

7. Section 6.2.24 of the Transmission System Code is amended by adding the following immediately after the phrase “for the construction of a connection facility,” in the first sentence:

other than an enabler facility,

68. Section 6.3.3 of the Transmission System Code is amended by deleting the phrase “a generator customer’s needs,” in the first sentence and replacing it with the following:

the needs of one or more generation customers or is required to construct an enabler facility,

79. Section 6.3.4 of the Transmission System Code is deleted and replaced with the following:

Where a transmitter has to modify a transmitter-owned connection facility to meet the needs of one or more generator customers or is required to construct an enabler facility, the transmitter shall require the applicable generator customer or customers to make a capital contribution to cover the cost of the modified connection facility or of the enabler facility, calculated in accordance with the economic evaluation methodology set out in section 6.5.

- | [810](#). Section 6.3.8 of the Transmission System Code is deleted and replaced with the following:

A transmitter shall not require a customer to make a capital contribution for capacity added by the transmitter to a transmitter-owned connection facility in anticipation of future load growth not attributable to that customer or in anticipation of the future capacity requirements of other generator customers. For this purpose, where the transmitter-owned connection facility is an enabler facility, the capacity requirements of the renewable generation facilities expected to connect to the enabler facility shall not be considered as future capacity requirements.

- | [911](#). Section 6.3.9 of the Transmission System Code is amended by deleting the words “as described in section 6.3.14, 6.3.15 or 6.3.16” at the end of the second sentence and replacing it with the following:

as described in section 6.3.14, 6.3.14A, 6.3.15 or 6.3.16

- | [4012](#). Section 6.3 the Transmission System Code is amended by adding the following immediately after section 6.3.10:

6.3.10A *Despite section 6.3.10, a transmitter may not require a security deposit in relation to the construction of an enabler facility.*

- | [4413](#). Section 6.3 of the Transmission System Code is amended by adding the following immediately after section 6.3.14:

6.3.14A *Where a transmitter is required to construct an enabler facility, the transmitter shall attribute the cost of the enabler facility, depreciated to the time of connection, to generator customers connecting to the enabler facility from time to time in proportion to ~~i)~~ the nameplate capacity of their respective generation facilities at the time of connection expressed as a percentage of the total capacity of the enabler facility ~~and ii) where the enabler facility is a line connection facility, the relative length of line used by each generator customer.~~ For*

this purpose, the total capacity of the enabler facility shall be determined on the basis of its capacity at the time at which the enabler facility comes into service.

- | [4214](#). Section 6.3 of the Transmission System Code is amended by adding the following immediately after section 6.3.16:

6.3.16A *Despite section 6.3.16:*

- (a) *a transmitter shall not attribute the cost of an enabler facility to a load customer that connects to the enabler facility unless section 6.3.2 applies; and*
- (b) *a transmitter shall attribute the cost of an enabler facility to generator customers in accordance with section 6.3.14A.*

- | [4315](#). Section 6.3.17 of the Transmission System Code is amended by adding the following immediately after the phrase “for the construction of a connection facility,” in the first sentence:

other than an enabler facility,

- | [4416](#). Section 6.5 of the Transmission System Code is amended by adding the following immediately after section 6.5.1:

6.5.1A *Where a transmitter constructs an enabler facility, the cost to be attributed to generator customers under section 6.3.14A shall be the fully allocated cost of the enabler facility. The transmitter shall include the capital cost of equipment installed on transmitter-owned connection facilities by the transmitter for monitoring the performance of the generation facilities and for verification testing of fault protection equipment associated with the generation facilities. If any generator customer elects to have verification testing costs included in the economic evaluation rather than paying such costs on an “as incurred” basis over time, the transmitter shall also include the present value of the estimated cost of doing periodic verification testing of its monitoring and testing equipment and, if necessary, of similar equipment owned by the generator customer. The transmitter shall include the present value of the operation and maintenance costs associated with an enabler facility.*

- | [4517](#). Section 13 of the Transmission System Code is amended by adding the following immediately after section 13.0.1:

13.0.2

Except where expressly provided otherwise, any amendments to this Code shall come into force on the date on which the Board publishes the amendments by placing them on the Board's website after they have been made by the Board.

Attachment C

**Comparison Version of Revised Proposed Amendments to the Transmission
System Code Relative to the Current Transmission System Code**

(for information purposes only)

(See attached document)

Attachment C

Comparison Version of Revised Proposed Amendments to the Transmission System Code Relative to the Current Transmission System Code (for information purposes only)

Note: The text of the proposed amendments is set out in italics below, for ease of identification only. Only those sections are shown that are new proposed sections or where there are proposed changes to sections of the current Code.

- 2.0.13 "connection facilities" means line connection facilities and transformation connection facilities that connect a transmitter's transmission system with the facilities of another person, *and includes an enabler facility;*
- 2.0.28A *"enabler facility" means a line connection facility or a transformation connection facility that is or will be constructed, owned and operated by a transmitter and to which two or more generation facilities that are included in a renewable resource cluster are connected or intend to connect to convey energy into a transmitter's transmission system, where any of the following apply: (a) the connection facility is identified as an "enabler facility" and the associated renewable resource cluster is identified as such in an integrated power system plan that has been approved under Part II.2 of the Electricity Act or in a Board-approved plan filed with the Board by a transmitter pursuant to the deemed condition of the transmitter's licence referred to in paragraph 2 of subsection 70(2.1) of the Act; (b) the associated renewable resource cluster is the subject of a direction issued by the Minister to the Ontario Power Authority under section 25.32 of the Electricity Act on or after [•] [insert date of coming into force of this amendment] and the Board, on the advice of the Ontario Power Authority, has determined that a connection facility is required; or (c) the OPA has provided the Board with written advice identifying the associated renewable resource cluster as one for which an enabler facility would be desirable, and the Board has determined that a connection facility is required and that the connection facility satisfies the screening criteria set out in section 3A.*
- 2.0.14 "connection point" means a point of connection between a

transmitter's transmission facilities and a customer's facilities and, in the case of an enabler facility, means each point of connection between the enabler facility and any customer facility connected to the enabler facility;

2.0.57 ~~"renewable generation" means generation facilities that generate electricity using one or more of the following sources: wind, sun, biomass, bio-oil, biogas, landfill gas or water;~~ "renewable generation" means a generation facility that generates electricity using a renewable energy source as defined in the Electricity Act;

2.0.57A "renewable resource cluster" means a geographic area where resources suitable for renewable generation are present and where the renewable generation facilities are not, or are not expected to be, owned or controlled by the same person and that is identified as such in: (a) an integrated power system plan approved under Part II.2 of the Electricity Act or a Board-approved plan filed with the Board by a transmitter pursuant to the deemed condition of the transmitter's licence referred to in paragraph 2 of subsection 70(2.1) of the Act; (b) a direction issued by the Minister to the Ontario Power Authority under section 25.32 of the Electricity Act; or (c) written advice from the OPA to the Board;

[after section 3.0.13]:

3A. SCREENING CRITERIA FOR ENABLER FACILITIES

3A.1 The following are the screening criteria that must be satisfied by a connection facility in order to qualify as an enabler facility where clause (c) of the definition of "enabler facility" applies:

- (a) the capacity of the associated renewable resource cluster is at least 100 MW; and
- (b) if the proposed enabler facility is a line connection facility, either:
 - i. the proposed line connection facility is at least 10 km in length; or
 - ii. the OPA has satisfied the Board that the line connection facility should qualify as an enabler facility

because such treatment would be superior, for technical or cost effectiveness reasons, to the generation facilities in the associated renewable resource cluster connecting directly to the transmitter's existing transmission facilities individually or on a coordinated basis.

3A.2 *Nothing in section 3A.1 shall prevent the Board from determining, in a proceeding to consider an application made under section 92 of the Act, that a connection facility should maintain its qualification as an enabler facility notwithstanding that the enabler facility no longer satisfies the screening criteria set out in section 3A.1, if the Board is satisfied that the deficiency is not material in the circumstances.*

6.2.24 Where a customer has made a capital contribution for the construction of a connection facility *other than an enabler facility*, and where that capital contribution includes the cost of capacity on the connection facility not needed by the customer, the transmitter shall provide a refund, calculated in accordance with section 6.2.25, to the customer if that capacity is assigned to another load customer within five years of the date on which the connection facility comes into service. Where such a refund is required under section 6.2.25, the transmitter shall require a financial contribution, calculated in accordance with section 6.2.25, from the subsequent customer.

6.3.3 Except where a transmitter has to modify a transmitter-owned connection facility to meet ~~a generator customer's needs~~, *the needs of one or more generation customers or is required to construct an enabler facility*, the transmitter shall require a generator customer to provide its own dedicated connection facilities and any equipment for monitoring and testing that is required by the transmitter to be installed on the customer side of the connection with the transmitter's transmission system.

~~6.3.4 Where a transmitter has to modify a transmitter-owned connection facility to meet a generator customer's needs, the transmitter shall require the generator customer to make a capital contribution to cover the cost of the modification, calculated in accordance with the economic evaluation methodology set out in section 6.5.~~

Where a transmitter has to modify a transmitter-owned connection facility to meet the needs of one or more generator customers or is required to construct an enabler facility, the transmitter shall require the applicable generator customer or customers to make a capital contribution to cover

the cost of the modified connection facility or of the enabler facility, calculated in accordance with the economic evaluation methodology set out in section 6.5.

- 6.3.8 ~~A transmitter shall not require a customer to make a capital contribution for capacity added to a connection facility in anticipation of future load growth not attributable to that customer.~~

A transmitter shall not require a customer to make a capital contribution for capacity added by the transmitter to a transmitter-owned connection facility in anticipation of future load growth not attributable to that customer or in anticipation of the future capacity requirements of other generator customers. For this purpose, where the transmitter-owned connection facility is an enabler facility, the capacity requirements of the renewable generation facilities expected to connect to the enabler facility shall not be considered as future capacity requirements.

- 6.3.9 Where a transmitter is, at the time at which it is constructing a connection facility for a customer, aware of another future customer that will need capacity within five years of the construction of the connection facility, the transmitter shall add that capacity to the connection facility at the time of construction, provided that it obtains a security deposit in a form referred to in section 6.3.11 from that future customer to cover the cost of that additional capacity. The amount of the capital contribution to be obtained from the current customer and the amount or value of the security deposit to be collected from the future customer shall be determined using the economic evaluation methodology set out in section 6.5, the load forecasts of both customers and the methodology for attributing that capital contribution ~~as described in section 6.3.14, 6.3.15 or 6.3.16.~~ *as described in section 6.3.14, 6.3.14A, 6.3.15 or 6.3.16.* At the time of connection of the future customer's facilities, the transmitter shall where required redo the original economic evaluation using the same inputs except for any revised load forecast provided by the future customer. This will determine the amount of capital contribution to be collected from the future customer. Where the security deposit is in the form of cash, the transmitter shall return the security deposit to the future customer at the time of connection of its facilities to the connection facility, together with interest at the rate referred to in section 6.3.11, less the amount of the future customer's capital contribution. Where the security deposit is in a form other than cash, the transmitter shall return the security deposit to the future customer upon receipt of the customer's capital contribution.

- 6.3.10A *Despite section 6.3.10, a transmitter may not require a security deposit in relation to the construction of an enabler facility.*

6.3.14A *Where a transmitter is required to construct an enabler facility, the transmitter shall attribute the cost of the enabler facility, depreciated to the time of connection, to generator customers connecting to the enabler facility from time to time in proportion to the nameplate capacity of their respective generation facilities at the time of connection expressed as a percentage of the total capacity of the enabler facility. For this purpose, the total capacity of the enabler facility shall be determined on the basis of its capacity at the time at which the enabler facility comes into service.*

6.3.16A *Despite section 6.3.16:*

- (a) *a transmitter shall not attribute the cost of an enabler facility to a load customer that connects to the enabler facility unless section 6.3.2 applies; and*
- (b) *a transmitter shall attribute the cost of an enabler facility to generator customers in accordance with section 6.3.14A.*

6.3.17 *Where a customer has made a capital contribution for the construction of a connection facility other than an enabler facility, and where that capital contribution includes the cost of capacity on the connection facility in excess of the customer's needs in order to comply with facilities standards or good utility practice, the transmitter shall provide a refund, calculated in accordance with section 6.2.25, to the customer if that available capacity is assigned to another customer within five years of the date on which the connection facility comes into service. The transmitter shall require a financial contribution from the subsequent customer to cover the amount of that refund.*

6.5.1A *Where a transmitter constructs an enabler facility, the cost to be attributed to generator customers under section 6.3.14A shall be the fully allocated cost of the enabler facility. The transmitter shall include the capital cost of equipment installed on transmitter-owned connection facilities by the transmitter for monitoring the performance of the generation facilities and for verification testing of fault protection equipment associated with the generation facilities. If any generator customer elects to have verification testing costs included in the economic evaluation rather than paying such costs on an "as incurred" basis over time, the transmitter shall also include the present value of the estimated*

cost of doing periodic verification testing of its monitoring and testing equipment and, if necessary, of similar equipment owned by the generator customer. The transmitter shall include the present value of the operation and maintenance costs associated with an enabler facility.

13.0.2 *Except where expressly provided otherwise, any amendments to this Code shall come into force on the date on which the Board publishes the amendments by placing them on the Board's website after they have been made by the Board.*