

**Attachment C**  
**to**  
**Notice of Final Amendments to the**  
**Transmission System Code and the Distribution System Code**

**December 18, 2018**

**EB-2016-0003**

**Comparison Version of Final Amendments**  
**relative to the current Transmission System Code**

*Note: This attachment consolidates all three sets of amendments relative to the current Transmission System Code, with yellow shading indicating the initial revisions to the original September Proposed Amendments and grey shading indicating the final revisions set out in this Notice. Underlined text indicates additions and strikethrough text indicates deletions. Numbered titles are included for convenience of reference only.*

Section 6.3 of the Transmission System Code is amended as follows:

**6.3 COST RESPONSIBILITY FOR NEW AND MODIFIED CONNECTIONS**

- 6.3.12 Subject to section 6.3.18A, F for a single generator customer, a transmitter shall attribute to that generator customer the cost of any required modification to a transmitter-owned connection facility required to serve the rated peak output of the generation facilities.
- 6.3.13 Subject to section 6.3.18A, F for a single load customer, a transmitter shall attribute to that load customer the cost of any new transmitter-owned connection facility or any modification to such connection facility required to serve that part of the customer's new load that exceeds the total normal supply capacity of any connection facility already serving that customer, as reasonably projected by the load forecast provided by the load customer or by such modified load forecast as may be agreed by the load customer and the transmitter.
- 6.3.14 Subject to section 6.3.18A, W where more than one generator customer triggers the need for a modification to a transmitter-owned connection facility,

a transmitter shall attribute the cost of the modification to those generator customers:

- (a) in accordance with such methodology as may be agreed between the transmitter and all such generator customers; or
- (b) failing such agreement, in proportion to the rated peak output of their respective generation facilities and, in the case of line connection facilities, taking into account the ~~relative~~-length of line used by each generator customer in proportion to the length of line being shared by the customers.

6.3.15 Subject to section 6.3.18A, Ww where more than one load customer triggers the need for a new or modified transmitter-owned connection facility, a transmitter shall attribute the cost to those load customers:

- (a) in accordance with such methodology as may be agreed between the transmitter and all such load customers; or
- (b) failing such agreement, in proportion to their respective non-coincident incremental peak load requirements, as reasonably projected by the load forecasts provided by each such load customer or by such modified load forecast as may be agreed by such load customer and the transmitter and, in the case of line connection facilities, taking into account the ~~relative~~-length of line used by each load customer in proportion to the length of line being shared by the customers.

6.3.16 Subject to section 6.3.18A, F for a new or modified transmitter-owned connection facility that will serve a mix of load customers and generator customers, a transmitter shall attribute the cost of the new connection facility or modification to ~~the those~~ customers based on their proportional benefit, which the transmitter shall determine by considering such factors as the incremental rated peak output of each generation facility, the non-coincident incremental peak load requirements of each load customer, and the length of line used by each customer in proportion to the length of line being shared by the customers. ~~that cause the net incremental coincident peak flow on the connection facility that triggered the need for the new or modified connection facility. If and to the extent that the net incremental coincident peak flow is triggered by one or more load customers, the~~

~~transmitter shall attribute the cost to each of those triggering load customers in the manner set out in section 6.3.15. If and to the extent that the net incremental coincident peak flow was triggered by one or more generator customers, the transmitter shall attribute the cost to each of those triggering generator customers in the manner set out in section 6.3.14.~~

6.3.18A Where one or more **load** customers triggers the need for a new or modified transmitter-owned connection facility and the IESO undertakes an assessment at the request of a transmitter that confirms the new or modified connection facility will also address a broader network system need, the transmitter shall determine the proportional benefit **and the related attribution of costs** between the triggering customer(s), **collectively**, and the network pool. ~~In doing so,~~ The transmitter shall **then** attribute the **collective triggering customer costs accordingly. The transmitter shall determine the capital contribution to be made by the to each triggering load customer(s) in accordance with the methodology set out in section 6.3.12, 6.3.13, 6.3.14, 6.3.15 or 6.3.16, as applicable based on that proportional benefit and each load customer's non-coincident incremental peak load requirements, as reasonably projected by the load forecasts provided by each load customer.**

6.3.18AB Where section 6.3.18A applies, the transmitter shall apply to the Board for approval of the attribution of costs between the triggering **load** customer(s) and the network pool. Where the Board approves a different attribution of costs, the transmitter shall recalculate the capital contribution to be made by the triggering **load** customer(s).

6.3.19 Where a distributor is required under this Code to provide a capital contribution to a transmitter, the transmitter shall permit the capital contribution to be provided in equal installments over a period of time not to exceed five years **unless a longer period is approved by the Board**. Where a distributor provides the capital contribution in installments, the transmitter shall charge interest on the unpaid balance at the **OEB's Board's** prescribed construction work in progress (CWIP) rate which is updated quarterly and published on the **OEB Board's** website. The interest charges shall accrue monthly commencing on the date the connection asset goes into service and be paid annually, as part of each installment payment.

6.3.20 For the purposes of section 3.6.1 ~~3.2.4A~~ of the Distribution System Code, the transmitter shall, upon the request of a ~~host~~-transmission-connected distributor, calculate the capital contribution amount for each distributor and each distribution-connected large load customer with a non-coincident peak demand exceeding 5 MW that contributes to the need for a new or modified transmitter-owned connection facility using the methodology and inputs described in Appendix 5 of this Code. The transmitter shall calculate any true-ups in respect of each capital contribution in accordance with the true-up provisions of section 6.5.

Section 6.7 of the Transmission System Code is amended as follows:

**6.7 REPLACEMENT ~~AND~~; RELOCATION ~~AND BYPASS-OF EXISTING~~ CONNECTION FACILITIES**

6.7.2 Where a transmitter-owned connection facility has reached its end-of-life and is ~~planned to be~~ retired and replaced with a new connection facility ~~is determined to be the optimal solution~~, the transmitter shall undertake an assessment, in consultation with any affected customers, to determine the appropriate capacity of the replacement connection facility. ~~Where the asset is replaced, the~~The transmitter shall either:

- (a) ~~not recover a capital contribution from a customer to replace that connection facility, where the new facility is the same capacity or lower capacity; or~~
- (b) ~~recover a capital contribution from a customer to replace the connection facility, where the customer requires additional capacity. The capital contribution shall be limited to the incremental cost relative to the cost of a like-for-like replacement facility.~~

~~transmitter's connection facility is retired, the transmitter shall not recover a capital contribution from a customer to replace that connection facility.~~6.7.2A  
Where a transmitter-owned connection facility has not reached its end-of-life and is replaced at the request of a customer, the transmitter shall recover a capital contribution from the customer. The capital contribution shall be equal to the remaining net book value of the replaced asset plus the advancement cost.

~~6.7.5 When a load customer provides its own connection facility to serve new load or transfers new load to the connection facility of another person, the transmitter shall not require bypass compensation from that customer~~

~~6.7.6 Subject to sections 6.7.2, 6.7.7 and 6.7.8, for all or a portion of existing load a load customer may bypass a transmitter-owned connection facility with its own connection facility or the connection facility of another person, provided that the load customer compensates the transmitter.~~

~~6.7.7 For the purposes of sections 6.7.6 and 11.2.1, but subject to section 6.7.8, the transmitter shall calculate bypass compensation by first multiplying the net book value of the bypassed connection facility, including a salvage credit and reasonable removal and environmental remediation costs, if applicable, by the bypassed capacity on the relevant connection facility. The transmitter shall then divide the resulting figure by the total normal supply capacity of the bypassed connection facility. For purposes of this calculation:~~

~~(a) the bypassed capacity on the relevant connection facility shall be equal to the difference between the customer's existing load on that connection facility at the time of bypass and the customer's average monthly peak load in the three-month period following the date on which bypass occurred; and~~

~~(b) the normal supply capacity of the bypassed connection facility shall be determined by the transmitter in accordance with the Board-approved procedure referred to in section 6.2.7.~~

~~6.7.8 Where an economic evaluation, including an economic evaluation referred to in section 6.3.9 or 6.3.17A, was conducted by a transmitter for a load customer in relation to a connection facility on the basis of a load forecast, a transmitter shall not, during the economic evaluation period to which the economic evaluation relates, require bypass compensation from a customer under section 6.7.6 in relation to any load that represents that customer's contracted capacity.~~

~~6.7.9 A transmitter should avoid overloading a connection facility above its total normal supply capacity. Where a connection facility has been overloaded, and a customer transfers the overload to its own connection facility or to the~~

~~connection facility of another person, the transmitter shall not require bypass compensation from that customer.~~

~~6.7.10 A transmitter shall promptly notify the Board upon becoming aware that a load customer that is a distributor intends to bypass a transmitter-owned connection facility with its own connection facility or the connection facility of another person.~~

~~6.7.11 Where a transmitter becomes aware that a load customer intends to bypass a transmitter-owned connection facility with its own connection facility or the connection facility of another person, the transmitter shall promptly notify all other load customers served by the connection facility that is intended to be bypassed.~~

Section 11.2 of the Transmission System Code is amended as follows: (Note: Sections 11.2.4 to 11.2.10 were formerly sections 6.7.5 to 6.7.11)

## 11. EMBEDDED GENERATION AND BYPASS COMPENSATION

### 11.2 BYPASS COMPENSATION

11.2.1 A transmitter shall require bypass compensation from a customer if:

- (a) the customer disconnects its load facility from the transmitter's connection facilities and subsequently connects that facility to a generation facility or to the another load facility that is not owned by the transmitter facilities of any person such that both the load facility and a generation facility are connected to the transmitter's transmission facilities on that customer's person's side of the connection point; and ~~(b)~~ the transmitter will no longer receive line connection or transformation connection rate revenues in relation to that disconnected facility; or

- (b) the customer, while retaining its connection to the transmitter's transmission system, also connects its load facility to a generation facility or to another load facility that is not owned by the transmitter such that the customer reduces its load served directly

by the transmitter's transmission system, and the line connection or transformation connection rate revenues in relation to that facility will be reduced.

The transmitter shall calculate bypass compensation using the methodology set out in section 11.2.6-6.7.7.

11.2.4 When a load customer provides its own connection facility to serve new load or transfers new load to the connection facility of another person, the transmitter shall not require bypass compensation from that customer.

11.2.5 Subject to sections 6.7.2, 11.2.6 and 11.2.7, for all or a portion of existing load a load customer may bypass a transmitter-owned connection facility with its own connection facility or the connection facility of another person, provided that the load customer compensates the transmitter.

11.2.6 For the purposes of sections 11.2.1 and 11.2.5, but subject to section 11.2.7, the transmitter shall calculate bypass compensation by first multiplying the net book value of the bypassed connection facility, including a salvage credit and reasonable removal and environmental remediation costs, if applicable, by the bypassed capacity on the relevant connection facility. The transmitter shall then divide the resulting figure by the total normal supply capacity of the bypassed connection facility. For purposes of this calculation:

- (a) the bypassed capacity on the relevant connection facility shall be equal to the difference between the customer's existing load on that connection facility at the time of bypass and the ~~customer's~~ highest rolling three-month average of the customer's ~~monthly~~ non-coincident peak demand load in the ~~thre~~twelve-month period following the date on which bypass occurred; and
- (b) the normal supply capacity of the bypassed connection facility shall be determined by the transmitter in accordance with the Board-approved procedure referred to in section 6.2.7.

11.2.7 Where an economic evaluation, including an economic evaluation referred to in section 6.3.9 or 6.3.17A, was conducted by a transmitter for a load customer in relation to a connection facility on the basis of a load forecast, a transmitter shall not require bypass compensation from a customer under section 11.2.5 in relation to any load that represents that customer's contracted capacity, during the related economic evaluation period.

11.2.8 A transmitter should avoid overloading a connection facility above its total normal supply capacity. Where a connection facility has been overloaded, and a customer transfers the overload to its own connection facility or to the connection facility of another person, the transmitter shall not require bypass compensation from that customer.

11.2.9 A transmitter shall promptly notify the Board upon becoming aware that a load customer that is a distributor intends to bypass a transmitter-owned connection facility with its own connection facility or the connection facility of another person.

11.2.10 Where a transmitter becomes aware that a load customer intends to bypass a transmitter-owned connection facility with its own connection facility or the connection facility of another person, the transmitter shall promptly notify all other load customers served by the connection facility that is intended to be bypassed.

Section 6.3.17A of the Transmission System Code is amended as follows:

6.3.17A For the purposes of section 6.3.17, the transmitter shall determine the amount of:

(a) the refund to the initial customer ~~and of the financial contribution~~ from the subsequent customer by calculating a revised capital contribution amount using the prescribed economic evaluation methodology set out in section 6.5 and the same inputs as used in the original economic evaluation except for load (which will be based on the actual load of the initial customer up to the time of connection of the subsequent customer and a revised load forecast for the remainder of the economic evaluation period) and



revised attributed cost (which will be determined using transmitter will then use the methodology set out in section 6.3.14, 6.3.15 or 6.3.16, as applicable); to allocate the revised capital contribution amount to the initial and subsequent customers. and

(b) The the financial contribution from the subsequent customer by calculating a capital contribution amount using the prescribed economic evaluation methodology set out in section 6.5 and the same inputs as used in the original economic evaluation except for load (which will be based on the subsequent customer's load forecast for the remainder of the economic evaluation period) and attributed cost (which will be determined using the methodology set out in section 6.3.14, 6.3.15 or 6.3.16, as applicable). -refund to the initial customer shall be determined by subtracting the initial customer's allocated share of the revised capital contribution amount from the original capital contribution amount paid by the initial customer.