FOR WORKING GROUP PURPOSES ONLY

Ontario Energy Board
Commission de l'énergie de l'Ontario

Regional Planning & Cost Allocation

Working Group Meeting #3: OEB staff's Current Thinking on Key Issues

April 25, 2017

Purpose

To present OEB staff's current thinking on key issues and obtain Working Group feedback before recommending changes to the Board related to cost allocation (responsibility) to facilitate regionally planned projects

Presentation Overview

- Customer Affordability – Bill mitigation and facilitating Region Plan implementation
- Allocation of Tx Connection Costs to *Network* Pool
  - New and Existing Approaches
- Upstream Investment Apportionment to Distribution-connected Customers
  - Embedded Distributors & Large Customers
- End-of-Life Connection Asset Replacements
- LDC Feeder Transfer – Facilitating distribution solutions to address regional needs
- Next Steps

Background – Summary (1)

Renewed Regulatory Framework (2012)

- TSC cost responsibility rules needed to facilitate regional plan implementation
- Greater emphasis on 'beneficiary' pays principle
- Pooling of connection costs (i.e., socialization) not necessary nor desirable
- Use TSC lens for a holistic examination of DSC cost responsibility rules

Proposed Supplementary TSC Amendment (2013)

- Triggering customers not held responsible for portion of Connection facility costs that address Network system needs
- Apportionment is consistent with RRFE Report, given shift in emphasis to "beneficiary pays"
- If more cost effective solution involves modifications to a connection facility serving another customer(s), *non-triggering* customers should not have to bear any cost if no need for additional capacity (i.e., no benefit)
- Placed "on hold" when informed SECTR application would be submitted

Background – Summary (2)

HONI SECTR Application (2015)

- Highlighted gaps and inconsistencies between DSC and TSC with respect to cost allocation
- Emphasized consistency with Proposed Supplementary TSC Amendment
- HONI proposed to apply TSC rules at distribution level to allocate *upstream investment* costs
- OEB determined more appropriate to review proposals requiring code amendments as part of broader policy initiative

Pickle Lake (2016)

- How would cost allocation be applied for this project

Purpose of Consultation

Review DSC and TSC to identify gaps and inconsistencies related to cost responsibility for load customers and revise codes to achieve following outcomes

- Align codes with OEB Cost Responsibility and Regional Planning principles (i.e. Beneficiary Pays and Optimal Solution)
- Broaden application of Beneficiary Pays principle
- Address challenges highlighted in SECTR case and Pickle Lake
- Increase alignment between the two codes where appropriate
  - Ensure appropriate level of flexibility to meet local needs maintained in DSC
  - Take into account different types of customers

Guiding Principles

- **Optimal Infrastructure Solution** – Cost effective wires investment(s) identified in a Regional Infrastructure Plan (RIP) that meet regional needs

- **Beneficiary Pays** – All beneficiaries of a wires investment will contribute their share. Cost allocation based on customer's proportional use of connection asset in a RIP. Costs not allocated to any load customer (consumer, distributor) or generator that will not benefit

- **Open, Transparent and Inclusive** – Process to determine cost of wires investment and appropriate allocation of costs to beneficiaries is transparent and includes all affected parties

Customer Affordability / Rate Mitigation

Affordability (1)

As noted in SECTR proceeding, smaller LDCs have noted they have difficulty with providing large capital contributions

- "Lumpy" connection investments vs. "Gradual" load growth
- Usually due to costs associated with excess capacity at the time
- Commonly referred to as an "*LDC Affordability*" issue
  - Sometimes LDCs have expressed concerns about '*Customer Affordability' (i.e., bill impacts)*
  - Staff believes it is primarily a '*Customer Affordability'* issue
- Can be a barrier to RIP Optimal Solution

Four Options Considered

1. Rate Adder – *before in-service*
2. Development Charge – *before in-service*
3. Annual Installments (capital contribution) – *after in-service*
4. Capacity Charge

Affordability (2)

Staff's Current Thinking

- Rate Adder – *Near term* measure
- Development (Like) Charge – *Longer term* measure

Rate Adder – Enable LDCs to build pool of funds ahead of time to reduce capital contribution related to upstream transmission connection investments

- Before in-service (pre-smoothing mechanism)
- Consistent with OEB approach for ICM/ACM and LDC funding of renewable connections / smart meters (for rate mitigation purposes)
- Starts when connection investment identified in DSP / RIP and application approved, with recovery from all customers of LDC
- Target recovery of 'portion' (ensure new customers contribute)
- Would require change to DSP filing guidelines

Affordability (3)

Development 'like' Charge - Lump sum charge paid primarily by new customers (in new homes) like Municipal Dev. Charges

- Creates pool of funds before asset in service (like Rate Adder)
- Builds on municipal development charge approach used to fund all other 'hard' infrastructure services (water, wastewater, roads)
- Unlike Rate Adder:
  - Intended to offset LDC's capital contribution to transmitter
  - Mitigates rate impacts for *existing* customers but increases impact on *new* customers (relative to status quo)
  - Based on *estimated* costs rather than *actual* costs
- *Any reason this approach would work for all other 'hard municipal' infrastructure services but not electricity infrastructure services?*

Smaller LDCs with low load growth may not generate sufficient revenue to substantially reduce capital contribution

Affordability (4)

Annual Installments – Transmitter required to allow for remaining capital contribution to be provided in annual 'installment' payments by LDC, where customer bill impacts too high due to 'lump sum' capital contribution

- After in-service (post-smoothing mechanism)
- 5 year cap (to limit additional interest costs)
  - Formulaic approach to determine # of years, with bill impact less than 10%
- LDC pays transmitter interest, so transmitter not negatively impacted
- LDC option maintained to provide lump sum
- Staff prefers Rate Adder as it avoids additional interest costs
- *However, should OEB staff consider proposing as a 'back-stop / contingency' smoothing mechanism?*
  - *For example, if Rate Adder (and/or Development 'like' Charge) adopted but did not build up sufficient pool of funds, option available if bill impact for average residential customer over 10%*

Affordability (5)

Capacity Charge – Customer (e.g., LDC) pays for only capacity currently required, while all Ontario consumers in connection pool are responsible for cost of excess capacity related to dedicated asset

- **Staff not planning to propose for reasons below**
- Does not align with 'beneficiary pays' principle (while other options available that do align)
- Cost allocation rules should be based on principle (not size of LDCs)
- Approach used for Transmission 'Enabler' Lines to facilitate renewable generation
- Large customers have opposed socializing connection asset costs since initial OEB Tx Cost Allocation proceeding (RP-1999-0044)
  - Concern - Some have already paid for own connection assets and therefore would be double-charged
  - Staff shares that concern (i.e., non-beneficiary pay twice)

Allocation of Tx Connection Costs to *Network* Pool

Allocation of Costs to Network Pool (1)

- Currently all transmission connection investment costs are recovered from triggering customer(s) under TSC, even if broader network system also benefits
- OEB has already approved a capacity based methodology to allocate a portion of costs to Network Pool – Dual Function Lines (DFL)
- Two proposed methodologies – HONI / IESO SECTR proposal & OEB Proposed Supplementary TSC Amendment
  - Next slide provides high level summary of both methodologies

Staff's Current Thinking

- Build on current DFL approach by amending TSC to enable other methodologies that allocate a portion of Connection investment costs to the Network pool (i.e., non-capacity based), where demonstrated that broader Network system also benefits

Allocation of Costs to Network Pool (2)

- **SECTR:** Methodology in application not only based on capacity (reliability benefit based on ORTAC – restoration need)
  - Apportionment based on relative contributions to total costs if *load customer* and *network system* needs were addressed *separately*
  - Network portion (%) of aggregate cost (under separate solution scenario) applied to cost of single integrated solution
  - Network/Customer proportional benefit may differ based on project
  - See Appendix A for illustrative example

- **Proposed Supplementary TSC Amendment:** Avoided Network investment costs via more cost effective Connection investments
  - Network investment avoided would have been recovered from all ratepayers
  - Recover *Incremental* Connection costs that exceed triggering customer needs from all ratepayers (via Network pool), where more costly upstream Network investment avoided (based on capacity)
  - All ratepayers in pool better off / triggering customer(s) no worse off

- OEB staff believes these two methodologies are *complementary* (i.e., not competing) and both have merit

Dual Function Line

- Perform both Network and Connection functions
- For over a decade, OEB has accepted methodology in HONI applications to allocate costs between network and customer connections (based on capacity)
- In OEB staff's view, likely the best 'proportional benefit' methodology (not subjective)

Staff's Current Thinking

- Continue with methodology but consider any tweaks (if any) that may improve on it
  - OEB staff is not aware of any recent material review
  - If methodology can be improved upon, staff believes this is appropriate time (i.e., not in future rate proceeding)
  - *Any opportunities to broaden scope of applying DFL approach?*

Upstream Investment Apportionment to Distribution-connected Customers

Inconsistent approach to LDCs

Currently, in TSC, *Host* LDC is required to pay transmitter but, in DSC, *Embedded* LDC is exempt from providing capital contribution to *Host* LDC even if they are cause of upgrade

- Cross-subsidization under status quo

Staff's Current Thinking

Align DSC with TSC to ensure Embedded LDCs are responsible for their share of upstream transmission connection costs

- Treating all LDCs the same would bring an end to customers of *Host* LDCs subsidizing customers of *Embedded* LDCs

Note: Economic evaluation performed to determine if any capital contribution is required to cover their share of costs

Inconsistent approach to Large Customers

Distribution-connected customers not required to provide a capital contribution for upstream transmission connection upgrades they cause

- Cost now recovered from *all* of LDCs customers
- *Transmission-connected* customers pay

Staff's Current Thinking

- Ensure Large Distribution-connected customers responsible for cost related to their required incremental capacity – not any excess (if not dedicated connection asset)
- Define size of 'large' customer as *500 kW or higher*
  - Alignment with recent Global Adjustment related Class A threshold

Note: Economic evaluation performed to determine if any capital contribution is required to cover the cost for which they are responsible.

Recognition of End of Life Replacement (3 Scenarios)

Replacements: End of Life (1)

***Like-for-like* (EOL)** – Under TSC, asset is replaced at no cost to customer where connection asset reaches End of Life (EOL) and like-for-like (i.e., same capacity)

Staff's Current Thinking

Amend DSC to align with TSC to address like-for-like gap

***Not like-for-like* (EOL)** – Under TSC, if EOL and customer requests upgrade (i.e. more capacity), customer currently pays 100% of cost even though it may only require a small portion of the capacity

- Penalizes customer (e.g., industrial) where expanding operations
- Does not recognize 'value' to the pool of revitalization of assets

Staff's Current Thinking

Amend TSC to ensure customer pays only *incremental* cost (i.e., cost exceeding like-for-like)

- Analogous to all load customers receiving EOL like-for-like credit (i.e., treated the same)

Replacements: End of Life (2)

***Not like-for-like* (EOL)** – Where load customer capacity requirements have substantially declined over time, unclear in TSC if EOL asset can be replaced with lower capacity connection asset

- Brought to staff's attention that transmitter is replacing with same capacity where less capacity would suffice
- Disincentive for transmitter to "right-size" – reduces rate base
- All ratepayers in connection pool bear all like-for-like replacement costs (including unnecessary capacity in such cases)

Staff's Current Thinking

Amend TSC to identify 'EOL replacements' can also involve lower capacity connection assets – not limited to like-for-like

OEB would expect transmitters to "right-size" EOL connection replacements to reduce cost borne by all ratepayers

- Should be reflected in Regional Plan
- Reflects increased emphasis on reducing load (e.g., CDM) by consumers
  - Two related recommended changes above (not like-for-like scenarios) would apply to both TSC & DSC

LDC Feeder Transfer

Amend DSC to facilitate investment involving two LDCs (in regional plan) to avoid higher cost upstream transmission investment

- IESO proposal in WG process
- Example:
  - LDC (A) requiring more capacity makes investment to connect to a distribution line of LDC (B) which has excess capacity and no future growth expected
  - LDC (B) fully compensated by LDC (A) for any costs incurred, so only beneficiary pays
- Achieves OEB regional planning goal – least cost wires investment that addresses regional need

Staff's Current Thinking

- OEB staff supports IESO proposal

Next Steps

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- OEB staff recommendations to Board (reflecting Working Group member feedback)
- Issue Notice of Proposed Code Amendments
- Feedback from all Interested Stakeholders
- Issue Notice of Final Code Amendments
  - Given breadth of proposed changes, may require another round with Revised Proposed Code Amendments

Questions / Comments?

Appendix A: SECTR Proportional Benefit Approach