



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



Regional Planning and Cost Allocation Review – EB-2016-0003

Working Group meeting #1 - Webinar

Tuesday July 12, 2016

Agenda

- 1) Introduction – OEB
- 2) Presentation – IESO
- 3) Presentation – Hydro One
- 4) Discussion

1. OEB's Introduction



Purpose

This consultation is aimed at ensuring the cost responsibility provisions for load customers in the OEB's Transmission System Code (TSC) and Distribution System Code (DSC) are aligned and facilitate regional planning and the implementation of regional infrastructure plans.

Working Group meeting #1

Today's working group is focussed on identifying the gaps and inconsistencies that currently exist before moving to the proposed solution phase in Working Group meeting #2.

Hydro One and IESO will start us off followed by a discussion aimed at identifying other issues that exist.

Introduction - OEB

Before we conclude we should have:

- 1) A clear understanding of the gaps and inconsistencies
- 2) Objectives for Working Group meeting #2 along with a date for the next meeting

Scope Clarification

- OEB kick-off letter noted the focus of this consultation is load customers
- Some letters of participation identified that cost responsibility rules related to generation needed to be included
- Code provisions that focus solely on generators (e.g., enabler lines) remain out-of-scope for this consultation as identified in the kick-off letter
- **However, staff wishes to clarify that code provisions involving both load and generator customer are in scope for this consultation**

2. IESO's Presentation



REGIONAL PLANNING AND COST ALLOCATION REVIEW (EB-2016-0003)

July 12, 2016

Introduction

- Through hands on experience in regional planning, the IESO has seen that cost allocation rules influence behaviours and investment decisions by transmitters, distributors and other customers
- The IESO's goal is to promote the lowest overall cost integrated solution (i.e. wires and non-wires) for Ontario ratepayers that meets the integrated needs of an area
- With that end in mind, the IESO has identified a number of cost allocation issues that, in our view, make it challenging to implement the optimal planning solution
- The IESO has also identified a number of other issues, including ensuring communities have a say in the type of infrastructure planned for their area – such as a choice of the level of reliability and type of solution – and are accordingly able to contribute any incremental costs associated with their preferred solution

IESO Identified Cost Allocation Issues

1. Beneficiary Pays Approach
2. Recognition of lumpy investments
3. Non-wires options to alleviate transmission investments
4. Cost allocation for Local Choices
5. Lack of Cost Sharing between Generation and Load

ISSUE #1: Beneficiary Pays Approach

- The IESO supports the OEB's principle that customers and/or ratepayers that benefit from new or reinforced transmission should pay their share of the costs
- However, the IESO's view is that a broader application of the beneficiary pays principle should be pursued
 - When system reinforcement is required, a broad analysis of potential benefits should be undertaken

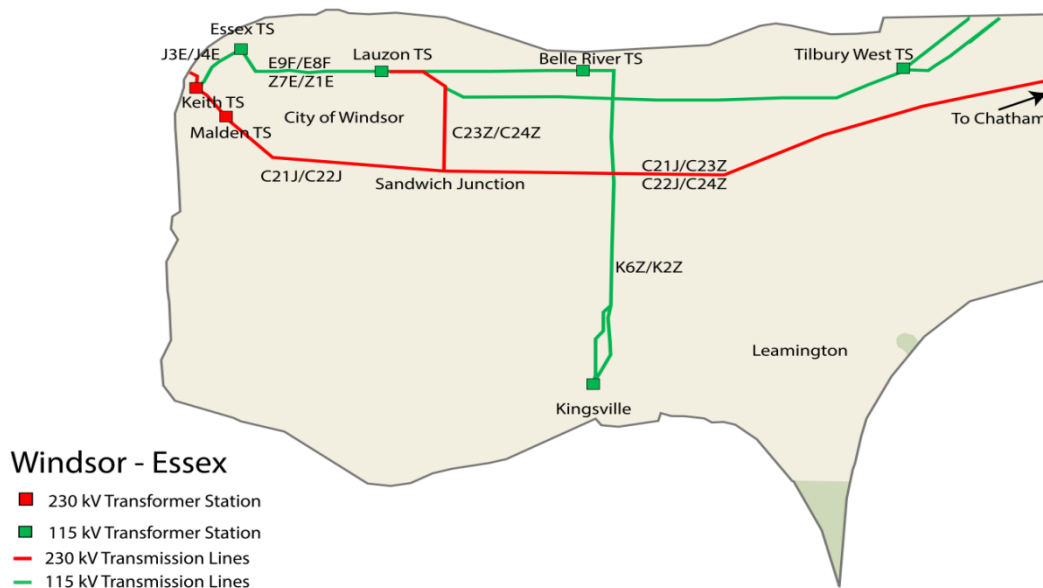
ISSUE #1: Beneficiary Pays Approach

The IESO believes that the principle should not only consider system vs. local benefits, but should also consider other potential benefits, such as:

- cost apportionment between customers;
- end-of-life (“EOL”) cost considerations;
- sustainment impacts; and
- impacts on neighbouring systems or LDCs.

ISSUE #1: Beneficiary Pays Approach (Cont'd)

Example #1 - SECTR Project



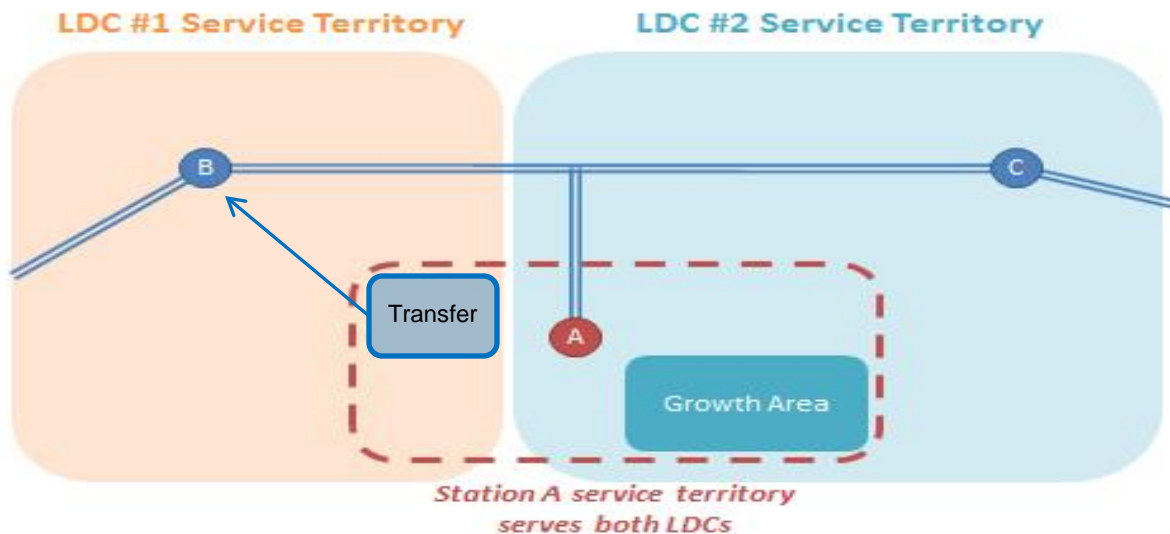
Two Regional Planning Needs in Windsor-Essex:

1. Need for additional supply capacity in the Kingsville-Leamington area to supply forecast growth in electricity demand
2. Need for additional restoration capability on the 115 kV system (the J3E-J4E subsystem) to comply with the ORTAC

ISSUE #1: Beneficiary Pays Approach (Cont'd)

Example #2 - Feeder Transfer

Overview of area



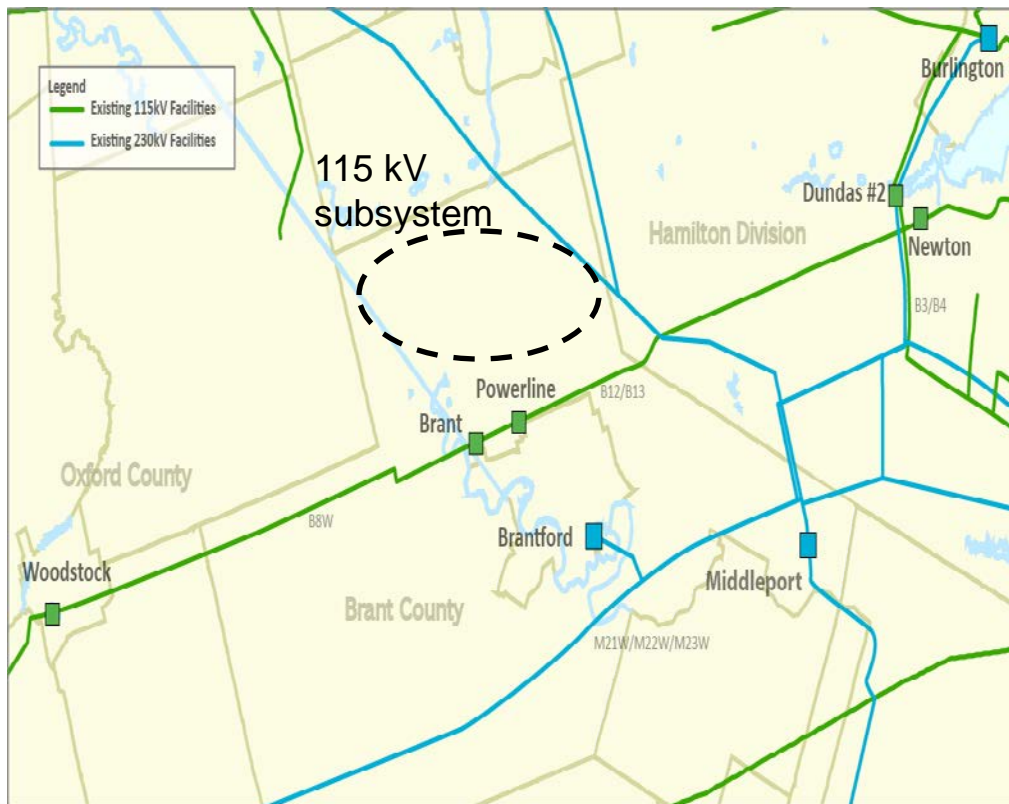
- LDC #1 is capable of transferring 15 MW from station A to Station B, which would enable LDC #2 to serve its growth area.
- Only other alternative is to upgrade the transmission line, at twice the cost, and much greater community impact

ISSUE #2: Recognition of Lumpy Investments

- LDCs often experience slow, incremental load growth, but investments are lumpy and cannot be sized to perfectly match requirements
- In some cases, this can result in investments not being made because parties cannot afford them
- LDCs cannot always afford the “optimal” regional solution, but they have obligations to provide reliable service to their customers
- The LDC may therefore choose to have a higher level of unreliability or may be forced to pay for the lumpy solution
 - No mechanism is currently in place to assist with paying for lumpy investments

ISSUE #2: Recognition of Lumpy Investments (Cont'd)

Brant Sub-Region



- After the recommended Demand Response (DR) pilot and other incremental options currently under consideration are exhausted, the next option to meet incremental demand growth in the Brant area is a lumpy investment in the form of a new station and line.

ISSUE #3: Non-Wires options to alleviate transmission investments

- In some circumstances, non-wires investments (generation, demand response (“DR”), conservation, storage, etc.) can alleviate transmission and distribution constraints, or defer transmission/distribution investments
 - There is often a bias towards whichever investments are paid for by the network – either through the GA or through the network transmission pool
 - There is currently no mechanism in place to recover non-wire investments through rates

ISSUE #3: Non-Wires options to alleviate transmission investments (Cont'd)

Midtown Toronto



- IESO study in midtown Toronto was to determine if non-wires options (i.e., conservation, distributed generation, etc.) can be acquired and deployed to offset increasing electricity demand in the Toronto region.
 - This may help to defer the need for local infrastructure investments.
 - Challenge is that there is currently no mechanism to allow recovery of non-wire investments through rates.

ISSUE #4: Payment for Local Choices

- An LDC (or community) may propose a system solution that will address local needs by going beyond the 'base' solution or minimum standards
- Currently there is no mechanism in place to allow local communities to fund these local choices

Examples:

- Desire by some community members to bury transmission lines underground
- Higher standards for urban centers

ISSUE #5: Lack of Cost Sharing between Generation and Load

- Generation and load use the same assets, and both may benefit from a system enhancement, but according to the Transmission System Code (TSC) only one contributes

ISSUE #5: Lack of Cost Sharing between Generation and Load (Cont'd)

Examples:

- Combined heat and power (CHP) facilities in the Kingsville-Leamington area will benefit from additional capacity provided by the SECTR project and could not connect or get a contract without it, however, as this investment is primarily driven by load customers, CHP facilities will “free ride”
- If generation was the primary driver the situation would flip and load would “free ride”

3. Hydro One's Presentation



REGIONAL PLANNING AND COST RESPONSIBILITY, EB-2016-0003

HYDRO ONE DISTRIBUTION'S PERSPECTIVE

**ONTARIO ENERGY BOARD WEBINAR,
JULY 12, 2016**

- The Context
- A Synopsis of Hydro One's SECTR Proposal
- A Year Later – Another Look (Questions and Issues)
- Conclusions

THE CONTEXT

- Focus -- the determination of financial responsibility for large investments between project beneficiaries at the DX system level.
- By ‘large investments,’ we mean costs of large TX projects *and* the DX investments related to those (and any resulting capital contributions required).
- Fundamental question -- How to assign responsibility for such costs:
 - between host and embedded LDCs, and
 - between LDCs (ratepayers, pooled) and end-use customers who require and benefit from such investments.

A SYNOPSIS OF HYDRO ONE'S SECTR PROPOSAL



PRINCIPLES

Beneficiary Pays

- If an investment benefits an LDC's system, that LDC's pool pays.
- If an investment benefits a customer, the customer pays.

Proportional Benefit

- Beneficiaries pay according to the proportion of the overall benefit received.

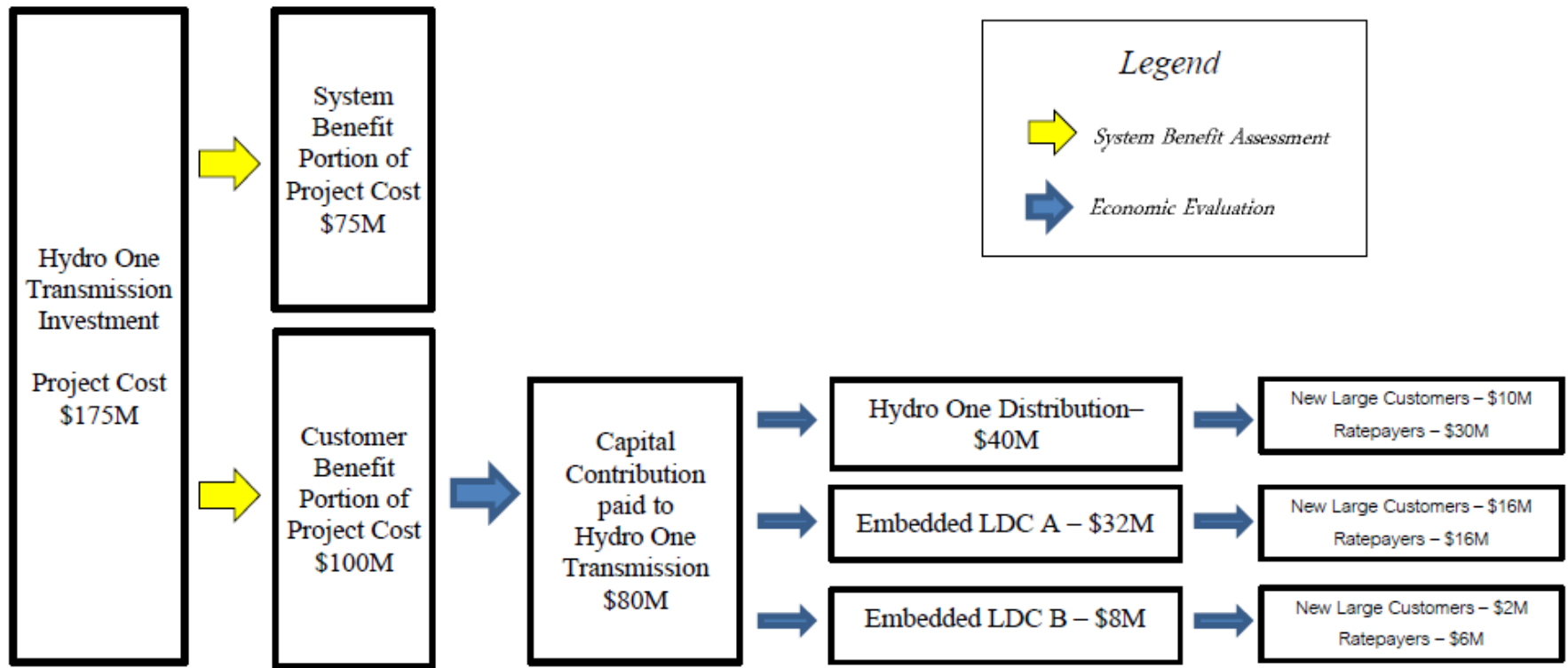
APPLICATION IN SECTR

- Host and embedded LDCs are beneficiaries of the project; both treated as if TX-connected from a cost responsibility perspective.
- Large DX-connected end-use customers also considered to be beneficiaries.
- "Benefit" -- incremental capacity created by the investment; therefore, costs are assigned according to each beneficiary's proportion of the total incremental capacity.

A SYNOPSIS OF HYDRO ONE'S SECTR PROPOSAL, cont'd



Flow of Costs Diagram (Illustrative Only)



A SYNOPSIS OF HYDRO ONE'S SECTR PROPOSAL, cont'd



- **CCRAs**
 - Beneficiaries required to enter into CCRAs with Hydro One DX.
 - CCRAs to include initial contribution based on required capacity, load forecast and estimated project costs, as well as terms for true-ups and other conditions.
- **Treatment of Large End-Use Customer Beneficiaries**
 - Large DX-connected end-use customers who benefit from the investments also responsible for contributions.
 - Capital contributions determined in the manner proposed for LDCs.
- **Treatment of SECTR-Related DX Costs**
 - Uses the TX process for initial capacity and cost responsibility assignment, then DSC rules for the economic evaluation.

BALANCING FAIRNESS AND FEASIBILITY

THE 'BALANCING ACT' RAISES QUESTIONS ON ISSUES SUCH AS:

- Clear identification of beneficiaries
- Consistent treatment of beneficiaries, i.e., alignment of approach:
 - between TX and DX and
 - within DX, between LDC ratepayers (pooled) and benefiting customers
- The value of precision
- Planning certainty

BENEFICIARIES – CLEAR IDENTIFICATION

Hydro One DX continues to believe that those who require and are assigned incremental capacity arising from a project investment are the beneficiaries of that incremental capacity. Therefore:

- where embedded LDCs benefit from new/upgraded TX and host DX facilities, they should pay their fair share,
- the most feasible approach to assigning cost responsibility for TX investments, is to treat embedded LDCs as though they are TX-connected, and
- large DX-connected end-use customers also should pay their share if they benefit from large investments that otherwise would not be needed.

The proposed SECTR approach becomes increasingly complex as the number of customers seeking connection, rises, however.

CONSISTENT TREATMENT / ALIGNMENT OF APPROACH

- Should one process be established for all situations?
 - Does it depend on the size of the investments?
 - Does it depend on the number of beneficiaries?
 - What are the appropriate decision rules for deciding the approach?
- Must the cost responsibility treatment in the TSC and DSC be aligned, in terms of defining beneficiaries, processes used and time horizon?

THE VALUE OF PRECISION

- Precision in capacity and cost assignment, load and revenue true-ups, followed by refunds and/or payments helps ensure greater fairness in the eventual cost assignment between:
 - host and embedded LDCs,
 - DX pools and benefiting end-use customers, and
 - today's and tomorrow's beneficiaries.
- Hydro One DX continues to believe that the precision of the SECTR approach is appropriate for the assignment of TX and DX costs between itself and embedded LDCs.
- There may be other approaches for working with large DX end-use customers - due to the complexity and administrative burden of the SECTR approach (for both LDCs and customers).

PLANNING CERTAINTY

Hydro One believes that:

- The SECTR approach would result in more disciplined forecasting and planning from all parties, leading to more prudent investments, overall.
- Clear rules help participants avoid time-consuming debates on contributions, enabling planning of DX systems and determining financial commitments with greater certainty.
- The rules and related administrative effort should be reasonable.

ON THE ISSUE OF ADMINISTRATIVE EFFICIENCY...

- How far down to allocate the costs – LDCs only, large ST customers, all ST customers, large GS customers, etc.?
- Is there value in a ‘blended approach’ which:
 - uses the SECTR method for assigning TX and related DX costs between the host and embedded LDCs, and
 - splits the remaining TX and DX costs between DX ratepayers and large DX-connected end-use customers, utilizing routine rate recovery methods for the former and a form of capacity charge for the latter.
- Is there value in treating such DX investments at the DX system level as system enhancements as defined in the DSC, i.e., pooled?

TO CONCLUDE...

This proposal was discussed in some detail at the SECTR Technical Conference a year ago.

We listened to participants' questions and comments and our thinking has evolved since then.

We believe that the industry needs an approach to cost assignment which provides fairness, clarity, predictability and reasonable ease of implementation.

4. Discussion



Working Group meeting #2

- Objectives
- Date- Aug 5th, 9:30 to 12:30



Thank you for your attention ...

Questions / Comments?

