

PUB-LAB-001: Reference Philip Raphals Export Report, page 54, paragraph 3.

It is stated that "It is recommended that Hydro continue to explore the approach underlying the FERC network upgrade policy whereby a new customer covered by the policy must take full cost responsibility for the network additions required to provide service." Is a policy that has a new customer paying the entire upgrade costs, without any credit for accompanying reliability improvements to the overall system, consistent with the "beneficiary pays" approach that the FERC appears to be moving towards? Please provide the rationale for your position.

RESPONSE:

Mr. Raphals states:

Hydro has not identified, nor am I aware of, any other utility that offsets compensation for reliability improvements against their required contribution to the capital cost of network upgrades required to provide service to them.

In invoking FERC's *beneficiary pays* approach in support of its proposal, Hydro takes the notion out of context and applies it in ways that are not contemplated by FERC.

FERC's Order 1000, which articulated this concept, sought to ensure that cost allocation for *inter-jurisdictional and inter-regional* projects took into account the distribution of benefits for such projects — in other words, that if Region B derives benefits from a transmission upgrade in Region A, that it should share the costs of that upgrade. Order 1000 did not alter the longstanding FERC policy that *within* the territory of a Transmission Provider, a new customer must take full cost responsibility for network additions required to provide service. (See NLH-LAB-011a.)

The inter-regional aspect of Order 1000 emerges clearly from the Christensen Associates ("Christensen") review, provided as an appendix to Hydro's Network Addition Policy Review. For example, Christensen writes:

Changes in load levels and transactions specific to areas can have large price and reliability impacts across entire regions. Similarly, expansion of network facilities in specific areas can relieve congestion and provide reliability benefits across fairly large regions. Thus, the benefits from an upgrade are potentially distributed widely, over several regions and service territories, while the allocation of costs via peak demand share may bear little relationship to the distribution of benefits.¹ (underlining added)

¹ Christensen Associates Energy Consulting, LLC, Transmission Cost Allocation Methods to Account for Network Additions ("Christensen"), July 18, 2018, Appendix A to Network Additions Policy Review, Oct. 1, 2018, page 4 of 24 (p. 23 pdf).

Christensen reviews the status of *beneficiary pays* approaches in the US and in Canada. Their analysis demonstrates that these developments are meant to ensure that out-of-region entities which benefit from transmission upgrades contribute to those upgrades' costs. In Christensen's concluding section, they write:

Deregulation and open access have both increased the relative importance of transmission costs and complicated cost allocation, since some transmission projects provide benefits to customers in more than one region and to customers in multiple jurisdictions. Indeed, within-service territory—and within-region— cost allocation has been revealed to contain spatial bias when parties outside the jurisdiction may participate significantly in the benefits arising from the implementation of transmission projects. As a consequence, major developments in the form of beneficiary methods are being evaluated and implemented. Yet, despite this evolution of methodology, the *load ratio share* methodology is still widely used, once the spatial distribution of benefits, and thus costs, is determined.²
(underlining added)

Christensen concludes as follows:

Based on developments in both Canada and the U.S., it appears that Hydro would benefit from investigating *beneficiary pays* methods for allocating the costs of investment in new transmission facilities. The beneficiaries of such investment are unlikely to be exclusively Hydro customers, suggesting that traditional methods will be inadequate. Since other Canadian utilities will likely be pursuing research in this area in the near future, Hydro can likely share the burden of research with other Crown corporations and it may be appropriate to collaborate with other utilities toward a common end. Similarly, further review of Ontario and U.S. methods, especially those of nearby U.S. ISO/RTOs, may prove of value, contributing to the formulation of Hydro's New Additions Policy.³

Christensen's analysis makes no mention of Hydro's Network Addition Policy proposal. Indeed, the passage above suggests that Christensen assumed that Hydro was developing a policy to govern upgrades needed to serve out-of-province transmission customers, for which "traditional methods will be inadequate", rather than domestic loads, for which they likely are.

There may be specific cases in which the type of reliability improvement credit Hydro outlines in the NAP may be appropriate. For example, in cases where the need for a system upgrade has been identified to meet reliability concerns and where the upgrade required to serve a new customer makes that reliability upgrade unnecessary, it might be appropriate to share the costs for the upgrade between new and existing customers,

² Ibid., pages 22 of 24 (p. 41 pdf).

³ Ibid., page 24 of 24 (p. 43 pdf).

following the example of the Ontario Energy Board decision presented as an appendix to the Christensen report.

However, providing this type of credit on an exceptional, case-by-case basis is very different from Hydro's proposal to systematically provide a credit against upgrade costs, based on an estimate of EUE derived from avoided generation costs that are not in fact avoided. See also NLH-LAB-004.

While I find Hydro's proposal to be unsatisfactory, I am not in a position to suggest an alternate proposal at this time. I suggest that, if the Board wishes to ensure that a new customer that requires a transmission upgrade will receive an appropriate credit for resulting reliability improvements, a subsequent proceeding be devoted to developing such a policy. For this reason, I have recommended that the Board approve Hydro's proposal, without the EUE reliability credit, on a provisional basis, and return to the question of reliability benefits at a later date.