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# Newfoundland and Labrador Hydro's Proposed Network Addition Policy and Transmission Expansion Study — Supplemental Report

submitted to the  
NL Public Utilities Board

on behalf of

the Labrador Interconnected Group

by

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In its Memorandum of May 31, 2019 (“the Memorandum”), filed as part of Hydro’s Reply, Christensen Associates Energy Consulting (“CAEC”) commented on several “issues of fact” in relation to my RFI responses, in order to address perceived “misstatements”.

In this brief supplemental report, I will review the passages they cited. I will also comment on several of the substantive issues raised by their comments, including an, in my opinion, important misinterpretation of FERC policy.

### **1.1. Comments 1-3 (PUB-LAB-001)**

Three of the passages cited by CAEC come from my response to PUB-LAB-001. As outlined below, CAEC’s comments regarding PUB-LAB-001 do not in fact identify either factual errors or misstatements in my RFI answer. Furthermore, nothing in the comments suggests that FERC or any other regulator has used the *beneficiary pays* concept to modify longstanding network upgrade policy regard cost allocation for network upgrades *within* a network, but only in the context of regional transmission planning. As explained below, “beneficiary pays” is a term of art that is used by FERC in the latter context (regional transmission planning), and this concept does not affect its longstanding policies regarding cost assignment for network upgrades made necessary by a new service request.

#### **1.1.1. Comment 1 (PUB-LAB-001, page 2)**

The first passage cited by CAEC as a “misstatement” in the Memorandum is the first sentence of my response PUB-LAB-001:

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 response, CAEC offers the opinion that: “We believe that such offsets do exist, although they may not always be perceived as offsets,” but does not actually identify any other utility that uses such offsets. CAEC then goes on to discuss FERC policy; that discussion is addressed below.

CAEC does not note or otherwise contest the two paragraphs that immediately follow this sentence quoted from PUB-LAB-001:

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.) (underlining added)

The unrefuted points raised in these paragraphs contradict CAEC's comment about the flexibility of the United States Federal Energy Regulatory Commission (FERC) in its treatment of transmission upgrade costs. FERC is indeed very flexible about some things, but not about others. It is important to be clear which is which.

In Order 890 (referred to in the 2<sup>nd</sup> paragraph on page 2 of the Memorandum), FERC did indeed show openness to “regional differences in planning process”, but not to regional differences in charges for network upgrades.

The planning processes referred to were an innovation in Order 890, where FERC found that the *pro forma* open access transmission tariff (OATT) required under Order 888 was not in fact sufficient to create fully competitive electricity markets. One of the new steps it took in that Order was to require utilities under its jurisdiction to undertake transparent and inclusive planning processes, but it did not dictate the precise form those processes should take. Rather, given the innovative and important nature of the reforms adopted, it allowed considerable flexibility. The merits of each regionally defined process would be examined in the subsequent conformity filings.

(Order 890) 435. In order to limit the opportunities for undue discrimination described above and in the NOPR, and to ensure that comparable transmission service is provided by all public utility transmission providers, including RTOs and ISOs, the Commission concludes

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that it is necessary to amend the existing pro forma OATT to require coordinated, open, and transparent transmission planning on both a local and regional level. ...

437. Accordingly, each public utility transmission provider is required to submit, as part of a compliance filing in this proceeding, a proposal for a coordinated and regional planning process that complies with the planning principles and other requirements in this Final Rule. (underlining added)

Regarding charges for network upgrades, Order 890 showed no flexibility at all, as seen in paragraphs 870-885, which rejected calls for modification to the iron-clad requirement regarding incremental rates, discussed in NLH-LAB-011.<sup>1</sup>

CAEC segues from FERC's flexibility regarding planning processes in Order 890 to its flexibility regarding transmission expansion planning and cost allocation in Order 1000. It fails however to note the important distinction made in the passage from PUB-LAB-001 quoted above, namely that Order 1000 was concerned with region-wide transmission planning processes and the cost allocations inherent in them. It did not address, and its conclusions did not modify, the longstanding policies in place concerning the costs resulting from a transmission addition made necessary by a service request from an individual customer, within a jurisdictional utility subject to a FERC-approved OATT. The "beneficiary pays" approach set out in Order 1000 in no way modifies FERC's longstanding transmission upgrade policy, whereby a utility can choose between charging a rolled-in rate and an incremental rate based on the revenue requirements of the network upgrade. Rather, it relates specifically to the allocation of costs of transmission investments that flow directly from a regional or inter-regional transmission planning process.

As noted in NLH-LAB-011, care must be taken when extrapolating policies from the world of open access transmission to a retail context within a single utility. FERC policies are an

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<sup>1</sup> FERC does however sometimes accord more flexibility to multi-state Independent System Operators (ISO) and Regional Transmission Organizations (RTO) than it does to utilities under its jurisdiction that are not members of such organizations. (See for example Order 2003, paras. 28 and 827.)

important referent for Canadian utilities, as they are generally clearly articulated and based upon exhaustive analysis, but the contextual differences must not be forgotten. Above all, given the vast range of different situations and contexts to which FERC must respond, it is essential to carefully read the nuances of FERC policies, to guard against misapplication.

In the present case, CAEC and Hydro fail to distinguish between:

- a) Network upgrade policies carried out by a jurisdictional utility applying its own FERC-compliant OATT;
- b) Network upgrades that create benefits in other regions, in particular those governed by RTOs or ISOs; and
- c) Transmission planning procedures.

Case a) is governed by Order 890 and the many following orders that implemented it. Network upgrades are directly assigned to the customer that required them, based on a “but for” analysis, described below. CAEC has not advanced any references indicating that FERC shows flexibility in this regard.

Case b) is governed by Order 1000 and its many following orders, and on the “beneficiary pays” method it articulates. Upgrade costs are shared among the various regions that benefit from the upgrade, based on their relative share of the reliability benefits. In Order 1000, FERC did not prescribe a precise method, leaving considerable flexibility for compliance filings.

Case c) is also governed by Order 890 and the subsequent compliance filings. As noted above, Order 890 created an obligation to carry out collaborative transmission planning, but did not prescribe how. It thus left considerable flexibility for compliance filings.

Of these three policy areas, a) is the only one which is relevant to Hydro’s NAP. While FERC left considerable flexibility and room for regional differences in b) and c), it did not do so in a). It is thus misleading to invoke this supposed flexibility, as it is not relevant to the case at hand.

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The “but for” analysis that FERC to this day applies to the question of network upgrades under an OATT is well described in a recent Order concerning the Southwest Power Pool (SPP).

Under its OATT:

SPP performs a traditional “but for” test (i.e., identifies system constraints and any network upgrades that would not be necessary but for the transmission service requests) and includes needed network upgrades in an Aggregate Facilities Study. SPP also determines the cost allocation and recovery for these upgrades, referred to as Service Upgrades, pursuant to Attachment Z1, which provides for direct assignment of their costs to the transmission customer whose transmission service request gave rise to the need for the network upgrade.<sup>2</sup> (emphasis added)

When such an upgrade subsequently allows the provision of service to a new customer which would not have been possible “but for” the upgrade, SPP’s OATT provides revenue credits to the party to whom the upgrade was directly assigned:

3. Attachment Z2 (Revenue Crediting for Upgrades) provides that transmission customers, network customers, generator interconnection customers, and project sponsors may receive revenue credits for network upgrades whose costs have been directly assigned to them (i.e., Creditable Upgrades). The directly-assigned network upgrade costs are recoverable, with interest, from customers taking new transmission service that could not have been provided “but for” the Creditable Upgrade in the form of credit payment obligations, until the amount owed to the upgrade sponsor (i.e., the transmission customer or generator interconnection customer) that was directly assigned the costs of the Creditable Upgrade is zero.<sup>3</sup> (underlining added)

Thus, at each step, the “but for” analysis is critical. The full costs of the upgrade are directly assigned to the new customer if they would not have been required “but for” its service request. And, to avoid the free rider problem and the disincentive that would result from making the party that moves first shoulder the full cost of the upgrade, future users will be obliged to reimburse the first mover for a share of those costs, if it would not have been possible to provide service to the future user “but for” the upgrade directly assigned to the first mover. This is FERC’s solution

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<sup>2</sup> 163 FERC ¶ 61,092, May 4, 2018, page 2, para. 2.

<sup>3</sup> Ibid., para. 3.

— within the framework of an OATT for network upgrades which do not raise inter-regional issues — to the concern raised by CAEC on page 4 of the Memorandum, where it wrote:

To summarize, the notion of *beneficiary pays*-based cost allocation generally improves upon the comparatively rough justice associated with load-ratio share or various notions of *the load that triggered the investment pays the full freight*-basis of cost allocation when applied in cases where benefits accrue broadly across many loads.

#### 1.1.2. Comment 2 (PUB-LAB-001, page 3)

CAEC's second comment concerns my statement: "Christensen's analysis makes no mention of Hydro's Network Addition Policy proposal." CAEC acknowledges that this statement is neither factually incorrect nor a misstatement, stating "CAEC's report to Hydro predates Hydro's network additions policy proposal, so there would be no reason for our report to provide such mention". CAEC warns, however, that my statement, « viewed expansively, might be interpreted to suggest that Hydro's policy proposal is not consistent with our recommendations or that it does not reflect the information provided in that review. »

It was not my intention that my statement be read in this expansive manner.

CAEC's comment 2 also reaffirm its interpretation of "the *beneficiary pays* approach now gaining currency in both the United States and Canada ». As I explained in my response, *beneficiary pays* is not a new approach that is gradually supplanting longstanding network upgrade policy, but rather a new policy that applies to precise circumstances that were not envisaged by earlier policies — namely, network additions in one jurisdiction that create benefits in another jurisdiction.

#### 1.1.3. Comment 3 (PUB-LAB-001, page 3)

CAEC disputes my interpretation of its statement:



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“The beneficiaries of such investment are unlikely to be exclusively Hydro customers, suggesting that traditional methods will be inadequate.”

It writes:

The phrase “The beneficiaries of such investment are unlikely to be exclusively Hydro customers...” suggests that the upgrades are precipitated by within-service territory native loads. If the purpose of the report was to provide guidance to Hydro for the development of “...policy to govern upgrades needed to service out-of-province transmission customers...”, the phrase would have read something akin to “The beneficiaries of such investment are unlikely to be exclusively wholesale out-of-province customers...”. (underlining added)

I find this statement confusing. In the cases covered by the NAP, the upgrades are precipitated by within-service territory native loads. But who are the beneficiaries of the investment? If not Hydro customers, then who can they be, other than out-of-province entities? On my reading, the sentence clearly does not refer to in-province investments benefiting other Hydro retail customers, which is precisely the focus of Hydro’s proposed policy.

In the following paragraphs, CAEC expands further upon its earlier report, with regard to the OEB decision found in Appendix B to its earlier report. However, the difference between the context of that OEB decision and the present proposed Network Addition Policy is glossed over. In fact, the OEB decision respects the interjurisdictional context of FERC’s *beneficiary pays* policy, in applying it to investments which create benefits for more than one distribution network :

...the allocation of the costs should reflect the extent each distributor (and its customers) caused the need for and benefit from a connection facility investment. (underlining added)

As noted in my response, the OEB decision applies in situations 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. This is seen in the detailed example of the application of this policy found in the sidebar on page 6 of the OEB decision (Appendix B of the CAEC report). This is very different from Hydro’s proposed policy, which provides a

reliability benefit to the triggering customer even when no action would otherwise have been taken to improve reliability.

**1.2. Comment 4 (PUB-LAB-002)**

CAEC does not dispute my interpretation of Hydro's calculations with respect to the calculation of EUE and outage costs.

**1.3. Comment 5 (PUB-LAB-003)**

In this comment, as in those reviewed above, the Memorandum expresses disagreement with my statement, but CAEC does not describe a factual inaccuracy or a misstatement.

I must also take issue with CAEC's reference to "FERC's habits of structural flexibility in developing cost assignment", for which no references are provided. As noted above, FERC shows great flexibility with respect to certain matters, and not to others. Cost assignment of network additions that would not be required "but for" a service request from a transmission customer is not one of those matters. Rather, it is an area where, to the best of my knowledge, FERC has consistently called for rigorous application of its longstanding policies, firmly embedded in its *pro forma* OATT.

**1.4. Comment 6 (PUB-LAB-004)**

The Comment reads as follows :

We do not question Mr. Raphals' response as a matter of factual error, but instead wish to note that the possibility raised may not be meaningful. If transmission upgrades are essentially "lumpy" in nature, it may be that upgrades will generate a greater than necessary improvement in reliability. Valuing a more than necessary reduction in EUE does not seem infeasible or inappropriate, and it probably doesn't matter that past regulatory filings have not yet considered this question.

Once again, the Memorandum raises no factual inaccuracy or a misstatement, contrary to its preamble. Transmission upgrades are indeed "lumpy", and valuing unnecessary reliability

improvements based on the fiction of avoided gas turbine fuel can result in imposing significant portions of the costs of those lumpy upgrades — even when they would not be required “but for” the new customer — on the remaining clientèle.

CAEC’s affirmation that it “probably doesn’t matter that past regulatory filings have not yet considered this question » is surprising. While regulatory bodies must from time to time address issues that no other regulator has addressed, regulatory precedent (or the lack thereof) is always relevant. If Hydro is indeed asking the Board to create new solutions that have never been applied before, it is incumbent upon it to present a firm foundation for the regulatory innovation it proposes. In my opinion, the filings presented in support of Hydro’s proposed customer reliability benefit credit do not meet that standard.