NLH-LAB-011. Re: "Newfoundland and Labrador Hydro's Proposed Network Addition Policy and Transmission Expansion Study – Addendum", page 23. "It is further recommended that the Board of Commissioners of Public Utilities order Newfoundland and Labrador Hydro to continue work, in collaboration with stakeholders, in order to explore possible modification to the "advancement" approach retained by Newfoundland and Labrador Hydro, or the possible application of 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."

a) Please confirm the FERC network upgrade policy referred to in the report is actually a FERC policy and not an HQD policy and provide the referenced policy.

b) Please explain why having a new customer covered by the policy taking full cost responsibility for the network additions is superior to the advancement approach proposed by Newfoundland and Labrador Hydro to consider the benefits of the network additions to both parties. Which approach is considered to be more consistent with established regulatory principles and why?

c) Which approach would be more beneficial to economic development in Labrador?

d) What impact would the full cost responsibility approach have on economic investment by Industrial customers in Labrador? Would it be more likely to dissuade economic investment? If not, why not?

RESPONSE:

Mr. Raphals states:

a) The policy referred to is indeed a FERC policy, which requires a new customer to take full cost responsibility for the network additions required to provide service to it. FERC's network upgrade policy is not articulated in a single policy document, and it has evolved over the course of several decades.

FERC's *pro forma* open access transmission tariff, issued as part of its important Order 890, states:

> **27. Compensation for New Facilities and Redispatch Costs**
>
> Whenever a System Impact Study performed by the Transmission Provider in connection with the provision of Firm Point-To-Point Transmission Service identifies the need for new facilities, the Transmission Customer shall be responsible for such costs to the extent consistent with Commission policy.

The "Commission policy" referred to here is generally summarized by the principle "higher of". This policy was succinctly explained by Judy Chang of the Brattle Group in written testimony presented to the Régie de l'énergie in 2014 on behalf of Hydro-Québec Transmission (HQT).[17] She explains that "The FERC transmission policy regarding cost recovery for network upgrades is that a transmission provider can charge a customer, either a new or an existing customer requesting additional transmission service, the higher of the incremental cost of transmission or the embedded cost, but not both." The incremental cost is a monthly rate based on the revenue requirement associated with the upgrade. Assuming that the incremental cost is greater than the regular rate, this means that, over the life of the project, the new Transmission Customer will be responsible for the full costs of the upgrade, as set out in s. 27.

It is important to keep in mind that, as FERC has no jurisdiction over retail sale of electricity, its transmission policies are directed at the wholesale market only, while seeking to avoid adverse impact on retail customers ("native load"). As Ms. Chang wrote, "The network upgrade policies in the U.S. center on protecting existing transmission customers from excess costs induced by network upgrades associated with customers requesting transmission services." In Canadian jurisdictions where, unlike the US, the same regulator has jurisdiction over both the retail and wholesale markets, some adaptions are inevitably necessary.

Furthermore, Canadian utilities are not under FERC's jurisdiction, so they are free to depart from FERC policies. Most Canadian utilities do endeavour to conform as much as possible to those policies, as FERC can require non-jurisdictional utilities to have in place Open Access Transmission Tariffs (OATTs) that are consistent with or superior to FERC's *pro forma* tariff for reciprocity and market access reasons. However, in judging such conformity, FERC has demonstrated more flexibility than it does for its own jurisdictional utilities. [18]

It should be noted that, despite the creation of the NLSO and the approval by the Board of certain documents in P.U. 3(2018), Hydro has not enacted an OATT that is consistent with or superior to FERC's *pro forma* tariff nor, to the best of my knowledge, has it indicated its intention to do so.

For utilities under FERC's jurisdiction, FERC is unambiguous: Transmission Providers *must* recover the cost of network upgrades by a monthly charge, and not by a lump-sum payment.[19] However, Hydro-Québec and other Canadian utilities have taken the opposite approach, and FERC has never made an issue of this non-conformity.[20]

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[17] An excerpt from this document was provided as an appendix to my expert report in Hydro's 2013 Amended GRA, and is reproduced as Attachment 1 to this response.

[18] See 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, pages 5-10, for a review of Canadian practices.

[19] FERC, Order 890, paragraph 870.

[20] It is also worth noting that, in some compliance filings in relation to Order 890 and in Order 1000, FERC has allowed participant funding of certain inter-regional transmission projects.

The network addition policy of HQ Transmission (HQT) is based on this FERC policy but diverges from it. FERC requires that the Transmission Provider offer the new customer an incremental rate, according to its "higher of" policy, rather than an upfront capital contribution, as required by Quebec and other Canadian utilities.

The HQT policy places the focus instead on "rate neutrality" for transmission rates. Section 27 of the HQT OATT refers to its Attachment J, "Transmission Provider Policy on Network Upgrades", which specifies in detail how upgrade costs will be paid for.

Rather than using rates based on incremental costs, as described in FERC's "higher-of" policy, Attachment J instead sets a maximum amount that the Transmission Provider will contribute, per kW, to the cost of upgrades, based on the assumption that the new Transmission Customer, through its point-to-point rates, will reimburse that amount over 20 years (Section E). Any upgrade costs beyond that maximum level ($634/kW) must be paid by the Transmission Customer. The "BC Hydro Offset" described by Christensen (at page 6) functions in a similar way.

As retail loads do not pay point-to-point transmission rates, the application of this policy to them is problematic. In Quebec, a lengthy proceeding is still underway regarding the contributions that HQD makes to fund HQT's network upgrades caused by domestic demand. HQD's policies for recovering these costs from retail customers are also in flux.

The Ontario Energy Board, in a decision presented as Appendix B to Christensen, applies the Beneficiary Pays concept to the sharing of costs between several distributors, which is in a certain sense analogous to the inter-regional context of Order 1000. It does not, however, address the sharing of costs within a distribution territory for a transmission upgrade required by a new customer. Indeed, the example offered in the decision (***Proposed Proportional Benefit Approach: An Illustrative Example***)[21] involves the sharing of <u>costs</u> between the new customer and the utility, not the offsetting of estimated consumer benefits against costs, as proposed by Hydro.

FERC's reason for insisting on monthly incremental charges instead of lump-sum payments is the concern that requiring lump-sum payments is "inconsistent with our ratemaking policy and has the potential to discourage customers from proceeding with service requests."[22] This must however be understood in the context of a) the fact that FERC's jurisdiction is limited to transmission services in the wholesale market and b) the fact that FERC's primary goal, under the *Energy Policy Act of 1993* which gave rise to all these developments, is to promote competition in the US wholesale market. As the Board does not share those policy orientations, it need not be bound by policies that flow from them.

b) Having a transmission customer requiring a network addition take full cost responsibility for that addition has been FERC policy for more than 20 years. The policy is designed to ensure that additions

[21] Ontario Energy Board, Proposed Amendments to the Transmission System Code and the Distribution System Code to Facilitate Regional Planning, Board File No.: EB-2016-0003 (Sept. 21, 2017), Christensen, Appendix B, page 6 (page 50 pdf).

[22] FERC, Order 890, para. 870.

made in order to provide service to a new transmission customer do not increase the rates of regular retail customers ("native load").

Care must be taken when extrapolating policies from the world of open access transmission to a retail context within a single utility. Historically, utilities have grown by increasing their capacity in response to load growth, and the present policy should not serve to block that process. However, when certain large or otherwise exceptional new loads are deemed to be outside of the normal course of load growth, such that rolling in the costs of the upgrades required to serve them would impose unacceptable rate increases on other retail customers, transmission policy can indeed provide useful guidance.

In the examples reviewed in my report (section 2.4.2), the methodology proposed by Hydro for evaluating advancement costs resulted in the new customer bearing in most cases between 50% and 75% of the capital costs made necessary by the new load. However, that amount is further reduced by the estimated reduction in EUE which, while potentially constituting an improvement in service quality, has no direct financial benefit to customers. Furthermore, as discussed in NLH-LAB-004, the approach used to value EUE is problematic, as is its use for this purpose.

That said, Hydro's proposal is a substantial improvement over the *status quo*, which is why I recommended on page 57 that it be adopted provisionally:

> **It is recommended that the proposed Network Addition Policy be adopted provisionally. It is further recommended that the Board order Hydro to continue work, in collaboration with stakeholders, in order to explore the various modifications suggested herein.**

However, compared to the other network upgrade policies mentioned in my report, it falls short. As mentioned in section (a) above, FERC's network upgrade policy is designed to protect existing transmission customers (and native load) from excess costs by network upgrades associated with customers requesting transmission services. HQT's approach is based on maintaining rate neutrality for transmission rates — in other words, ensuring that the long-term transmission rate will be the same with the upgrade as it would be without. Hydro's proposal achieves neither of these aims.

It is of course up to the Board to determine which regulatory principles should apply with respect to a network upgrade policy for the Labrador Interconnected System, which is in many ways unique. However, Hydro's proposed approach would result in substantially greater rate impacts to other consumers than would the network upgrade policies of either HQT or of FERC.

c) Comparing the economic development impacts of these two different approaches is beyond the scope of my report and my expertise.

That said, on a preliminary and common sense basis:

It might appear that imposing the capital costs of transmission improvements required to provide service to a new customer on the existing customer base would promote economic development. However, substantial rate increases are generally understood to have an adverse impact on economic development. Properly assessing the development impacts of the two approaches would require taking into account, at a minimum, a) the economic implications of the resulting rate increases for existing and potential businesses and residential ratepayers, and b) the actual amount of job creation (number, duration and quality) that would result from the new loads. Evidence from other jurisdictions suggests that, for the cryptocurrency industry, job gains may be small and short-lived.

d) Opining on the potential impacts on economic investment by Industrial customers in Labrador is beyond the scope of my report and my expertise.

That said, on a preliminary and common sense basis:

If a proposed project were in a location and of a size that would require significant investments in transmission upgrades, it is indeed possible that the full cost responsibility approach might dissuade an industrial customer from making such an investment. Whether that outcome is problematic or not will depend, among other things, on the interplay of the factors mentioned in the previous response. Should it deem the project to be in the public interest, the government might also choose to subsidize it directly, which, in my opinion, would be more appropriate than creating a regulatory policy that, with less transparency, imposes those same costs on other consumers.