

September 10, 2021

Board of Commissioners of Public Utilities
Prince Charles Building
120 Torbay Road, P.O. Box 21040
St. John's, NL A1A 5B2

Attention: Ms. Cheryl Blundon
Director of Corporate Services & Board Secretary

Dear Ms. Blundon:

Re: Application for Approvals Required to Execute Programming Identified in the Electrification, Conservation and Demand Management Plan 2021–2025

The Island Industrial Customer Group (“IIC”) filed correspondence with the Board of Commissioners of Public Utilities (“Board”) on September 7, 2021 in regards to Newfoundland and Labrador Hydro’s (“Hydro”) above-mentioned application in which they state that they are concerned that some of Hydro’s responses to requests for information (“RFI”), filed on August 13, 2021, do not sufficiently address a number of issues raised in the RFI process.

The IIC detail various issues where it believes Hydro has made insufficient responses; the letter also requests that a technical conference be convened to provide Hydro the opportunity to further address these issues. The IIC also submit that the requested technical conference should address the appropriate derivation of marginal costs, as well as “the appropriate weighting” of TRC tests with other conservation and demand management (“CDM”) measures “that more appropriately track impact to rates and contributions towards rate mitigation.” The IIC did not specify which other CDM measures they would consider to be more appropriate in the context of rate mitigation.

Responses to RFIs

The IIC identified six RFI responses for which they have concerns; Hydro’s responses are as follows.

1. IC-NLH-001

The IIC did not identify any specific issues with Hydro’s response to IC-NLH-001, rather their comment was that “[t]he IIC Group are concerned that it is, at best, premature to pre-approve the mTRC test in relation to future electrification programs. The IIC Group is of the view that further justification for the use of the mTRC test, and further consideration of other potentially applicable test and metrics, is needed.”

As outlined in the RFI responses identified in the information which follows and the evidence on the record, there is more than adequate support within the utility industry for the use of the evaluation methods proposed by Hydro. Hydro’s proposed evaluation approach is in line with industry practice and national standards.

Hydro's response to PUB-NLH-021 outlines the other jurisdictions that use overall cost assessments such as the mTRC in evaluating electrification programming, as well as Hydro's use of a net present value ("NPV") analysis as a secondary assessment. This combined approach ensures that: (i) electrification programs are sufficiently economic to enable customer participation and (ii) customer participation in electrification programs will provide a rate-mitigating benefit to all customers over the long term.

The benefits of this combined approach, and its consistency with the National Standard Practice Manual, are detailed in Hydro's responses to PUB-NLH-022 and PUB-NLH-023. Further, in PUB-NLH-023, Hydro committed to updating the NPV analysis annually to allow the Board and parties to track the impact of electrification on rate-mitigation efforts for the Island Interconnected System.

Hydro's response to PUB-NLH-024 identified a third-party consultant's survey of current utility practice which confirmed that the mTRC is consistent with the approach of other utilities in conducting overall cost assessments of electrification programs.

Finally, Hydro's response to PUB-NLH-029 provided further justification for the approval of the mTRC test, in conjunction with a secondary assessment (NPV analysis) in the context of Hydro's application. It is important to recognize that the benefits of electrification take time to accrue and Hydro is proposing an amortization of the electrification, conservation and demand management ("ECDM") costs to minimize intergenerational equity concerns for existing customers.

In Hydro's view, the evidence currently on the record justifies the use of the mTRC, supported by a secondary assessment of a NPV analysis for electrification programming to ensure benefits accrue to all customers on the Island Interconnected System over the long term. Hydro believes the evidence before the Board demonstrates that Hydro's proposed approach is consistent with good utility practice.¹

2. IC-NLH-005(c)

The IICs express concern with Hydro's response in that the results of the Program Administrator Cost Test ("PAC" or "PACT") were not provided for the proposed electrification programming. The proposed electrification programs seek to build domestic load in order to increase revenues on the Island Interconnected System to provide rate-mitigation benefits to all customers over the long term.

As noted in the National Standard Practice Manual, most jurisdictions that have adopted the PACT test to evaluate cost effectiveness have done so "primarily for [energy efficiency] resources."² The California Standard Practice Manual³ notes that the PACT ". . . cannot be used to evaluate load building programs."⁴

¹ Please refer to Hydro's response to PUB-NLH-021.

² National Standard Practice Manual, Page 3-2. In addition to the PACT test (referred to in the National Standard Practice Manual as the Utility Cost Test), other common cost-effectiveness tests for energy-efficiency programs include the Societal Cost Test and the Total Resource Cost Test.

³ As noted in the National Standard Practice Manual, traditional screening tests such as the PACT have been used in the California Standard Practice Manual for several decades to assess cost-effectiveness.

⁴ California Standard Practice Manual, Page 24.

This view was shared by ICF, the consultant responsible for the electrification model, which confirmed that the PAC is typically used in energy conservation programs and further confirmed that no other utility clients or regulators have asked for the PAC to evaluate load building programs.

On these bases, Hydro's model was not designed to compute the PAC ratio for electrification programming and therefore this information cannot be supplied.

It is unclear to Hydro why the IIC require this ratio to evaluate the electrification programming, given doing so would not be consistent with public utility practice.

3. IC-NLH-021

The IIC states that, in their view, Hydro has given insufficient consideration to the potential impact of a proposed federal government requirement for 100% of zero-emission vehicle sales by 2035. It is important to note that the potential study filed in support of Hydro's application assumed 100% of new vehicles sales would be zero-emission vehicles by 2040.

As noted in Hydro's response to IC-NLH-021, the federal government date of 2035 was first announced on June 29, 2021 and, to Hydro's knowledge, the Government of Canada has not yet instituted any regulatory measures with respect to this target. Given this target has not yet been made mandatory, the uncertainty associated with such targets over 15 to 20 years, and any future actions being contingent on the current federal election as well as future governments,⁵ Hydro did not engage Dunsky Energy Consulting to update the potential study for revised provincial electric vehicle ("EV") adoption levels, recalculate all cost-effectiveness ratios, and reforecast all EV-related energy sales to 2034 as requested by the IIC.

Regardless of the exact federal timeline, charging infrastructure (both public and at homes and businesses) will be required on the Island Interconnected System before EVs will be broadly adopted. In Hydro's view, the potential study has presented a robust analysis of forecasted EV adoption under various scenarios⁶ and it is unclear why an announcement of the intent to change a mandate before an election would require a material revision to Hydro's potential study in order for the IIC to consider the current application.

4. IC-NLH-026

The IIC states that they "... take issue with Hydro's failure to provide any estimates of rate impacts." This RFI requested that Hydro provide the estimated impact to rates of 15 years of forecast energy savings from traditional CDM programs.

In order to complete a rate impact analysis Hydro would need to calculate the revenue impacts of the forecast energy savings, relative to revenue requirements over this same time horizon. Due to the uncertainty with respect to future customer rates associated with a 15-year time horizon, as well as uncertainty surrounding rate mitigation for the Island Interconnected System, a rate impact analysis has not been completed.

⁵ Commitments from political parties in 2021 range from 30% of vehicles by 2030, to 50% by 2030, and 100% by 2035.

⁶ Schedule 3, Page 6.

Hydro provided the forecast energy savings in the response to this RFI,⁷ however, Hydro does not have 15 years of forecast revenue requirements or cost of service studies on which to base this analysis; therefore, any attempt to compute the rate impact to the IICs would not be accurate and would imply a level of precision which this analysis cannot reasonably provide.

5. IC-NLH-027

The IIC takes issue with Hydro's review of the report by Synapse Energy Economics, prepared for the Board in the *Rate Mitigation Options and Impacts Reference* hearing, regarding the electrification of space and water heating. The IIC states that "... a cursory review is not sufficient to support Hydro's conclusion that such programs have limited potential." Hydro's use of the term "cursory" may have given an inaccurate impression of its review of that report. Hydro reviewed the Synapse Energy Economics report and the underlying assumptions noted in that report, in its efforts to be responsive to the RFI from the IIC, but was unable to do an in-depth comparison due to not having access to all information relied on by Synapse Energy Economics. As noted in Hydro's response, Synapse Energy Economics was retained by the Board and as such Hydro does not have access to any information with respect to Synapse's work beyond that filed under the Board's *Rate Mitigation Options and Impacts Reference* proceeding. Hydro's conclusion that there is limited potential to electrify space and water heating due to unfavorable customer economics is based upon the potential study by Dunsky Energy Consulting Hydro filed in support of its application.⁸

Regardless, Hydro's position on the electrification potential of space and water heating is fully supported by its evidence and its own consultant.

6. IC-NLH-028

The IIC does not take issue with this response, but rather comments that Hydro's marginal costs are "untested" and therefore forecast rate mitigation benefits accruing from electrification and CDM programs cannot be relied upon.

As noted in Hydro's response,⁹ there is uncertainty with respect to marginal cost; however, it is known that with the integration of the Muskrat Falls assets, there will be excess energy available while capacity will be limited. The timing of additional capacity requirements will be influenced by both the rates for future years (which remain uncertain) and the result of the ongoing *Resource and Reliability Adequacy Study Review* proceeding. While marginal energy costs are uncertain as they can vary depending on out-of-province market fluctuations by season and time of day, on average the forecast market value is materially lower than the potential revenue that can result by selling the excess energy to customers on the Island Interconnected System.

Hydro believes it would be a mistake to allow the uncertainty in the exact marginal capacity cost and marginal energy cost to prevent action in making progress in achieving future benefits for customers by implementing strategic electrification decisions today. The focus of the ECDM plan is to incent and manage load growth associated with electrification to ensure all customers benefit in future from using the excess energy available to serve load growth on the Island Interconnected System

⁷ Please refer to Hydro's response to IC-NLH-026.

⁸ Schedule 3, Page 7.

⁹ Please refer to Hydro's responses to IC-NLH-028 and IC-NLH-029 for details and support for the marginal costs used in the application.

while limiting the requirement for additional peak capacity to serve the load growth resulting from electrification.

CDM Measures

The IIC also request that the technical conference address the weighting of TRC tests with other CDM measures “that more appropriately track impact to rates and contributions towards rate mitigation.” The IIC did not specify which other CDM measures they would consider to be more appropriate in the context of rate mitigation.

The mTRC test was developed based on the principles outlined in the National Standard Practice Manual.¹⁰ Hydro notes that its proposed tests are consistent with sound public utility practice, including an annual NPV analysis to ensure electrification programming continues to result in rate mitigation benefits for all customers on the Island Interconnected System over the long term.¹¹ In Hydro’s view, the proposed tests appropriately track contributions towards rate mitigation.

Concluding

In Hydro’s view, the information outlined within demonstrates that the evidence currently on the record sufficiently addresses the issues raised by the IIC. It is Hydro’s view that a technical conference will not result in any additional or more robust evidence being made available and is therefore not necessary.

Hydro believes that the regulatory process should continue with the party comments and applicant replies, as per the original schedule, which has the added benefit of preserving Hydro’s ability to maximize its access to the approved federal funding of more than \$1 million for public EV charging stations,¹² if the proposed supplemental capital is approved. Should the Board decide additional regulatory procedure is necessary, Hydro suggests that the Board consider separating the proposed supplemental capital expenditure for EV charging stations from the other issues to enable it to be considered on a timely and stand-alone basis; such an approach would address the risk that a regulatory process beyond the end of September 2021 would pose to the approved funding.¹³ Loss of all or a portion of the approved funding will increase the cost of this electrification infrastructure to customers.¹⁴

Should you have any questions, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO



Shirley A. Walsh
Senior Legal Counsel, Regulatory
SAW/sk

Encl.

¹⁰ Please refer to Hydro’s response to PUB-NLH-021.

¹¹ Please refer to Hydro’s response to PUB-NLH-023.

¹² 19 stations for both Hydro and Newfoundland Power x \$55,000 each. Please refer to Hydro’s response to PUB-NLH-041.

¹³ Please refer to Hydro’s response to PUB-NLH-017.

¹⁴ Please refer to Hydro’s response to PUB-NLH-041.

ecc: **Board of Commissioners of Public Utilities**

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