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July 15, 2022

Via E-Mail

Newfoundland and Labrador Board of Commissioners of Public Utilities 120 Torbay Road P.O. Box 21040 St. John's, NL A1A 5B2

Ms. G. Cheryl Blundon, Director of Corporate Services Attention: and Board Secretary

Dear Ms. Blundon:

Re: Newfoundland and Labrador Hydro – Approvals Required to Execute Programming Identified in the Electrification. Conservation and Demand Management Plan 2021-2025 Application; and Newfoundland Power Inc. - 2021 Electrification, Conservation and Demand Management Application

These are the comments of the Island Industrial Customer (IIC) Group (Braya Renewable Fuels (Newfoundland) LP (formerly NARL Refining Limited Partnership), Corner Brook Pulp and Paper Limited, and Vale Newfoundland and Labrador Limited) on the above Application.

The Island Industrial Customers Group ("IIC") comprises the following current industrial customers of Newfoundland and Labrador (NL) Hydro ("Hydro"): Braya Renewable Fuels (Newfoundland) LP (formerly NARL Refining Limited Partnership), Corner Brook Pulp and Paper Limited, and Vale Newfoundland and Labrador Limited. As the members of the IIC are not customers of Newfoundland Power, the IIC has not analyzed Newfoundland Power's Application and these submissions are limited to Hydro's Application.

The IIC relies on the submissions of InterGroup dated May 4, 2022 (The "InterGroup Submission") and InterGroup's responses to RFIs filed May 26, 2022 (the "InterGroup RFI Responses"). These submissions are intended to be read in conjunction with the InterGroup Submission and the InterGroup RFI Responses.

The IIC supports Conservation and Demand Management ("CDM") generally and Electrification, Conservation and Demand Management ("ECDM") in particular for both their economic impacts and reduction of greenhouse gas emissions. However, with the rate impacts of the Muskrat Falls project looming, it is imperative that Hydro's focus, including when deciding which CDM/ECDM programs to pursue and how to design them, is on providing a solution to the significant rate increases Hydro's customers are facing in the short term. If the methodology for screening ECDM programs being requested by Hydro in the within Application is approved, Hydro may proceed with programs that, rather than mitigating the Muskrat Falls' rate impacts, exacerbate them. These submissions are intended to provide an alternative methodology for screening and designing CDM/ECDM programs with the goal of short term rate mitigation in mind.

The Application and Scope of Comments

In the within Application, Hydro is seeking approval of the following items:

- 1. The use of a Modified Total Resource Cost test ("mTRC") for ECDM programs;
- Modifications to the CDM Cost Deferral Account, to permit deferral of ECDM activities on all systems;
- Modifications to the CDM Cost Recovery Adjustment, to apply to the ECDM account; and
- 4. Supplemental Capital Expenditures for EV charging infrastructure.

Item 4 was already approved in the Board's Order P.U. 30(2021). With respect to the CDM Cost Deferral Account and Recovery Adjustments (items 2 and 3 above), the IIC takes no issue with Hydro's request. As such, the IIC's submissions are limited to the first matter only – the use of an mTRC test for ECDM programs.

While these comments are addressed in the context of electrical vehicle charging stations, the IIC is not commenting on any individual programming. Rather, the IIC's submissions are limited to the standard to be used to screen and determine which ECDMs should be pursued. As Hydro's request was narrow (i.e. the use of mTRC to justify electrical vehicle infrastructure), the IIC's comments are made in this context and any reference to electrical vehicle infrastructure are meant to illustrate the concerns with mTRC within this context as opposed to arguing against electrical vehicle infrastructure for electrification.

The Process for Approving ECDM/CDM

With growing balances in the Supply Cost Variance Deferral Account and the imminent rate increases created by full commissioning of the Muskrat Falls project, it is imperative that Hydro use ECDM as an aid to rate mitigation, as opposed to ECDM exacerbating the problem. Ensuring rate stability in the short term and reasonable electrical rates in general through rate mitigation and allowing Hydro to design ECDM programs that allow Hydro to use the excess power from Muskrat Falls in a way that maximizes benefits to the Provincial economy overall, is especially important to existing and new members of the IIC. Rate mitigation and flexibility in how excess Muskrat Falls' power is used are key to (i) ensuring that current members of

the IIC can stay in the Province and remain competitive in global markets and (ii) attracting new Industrial Customers to the Province.¹

The evidentiary record in this proceeding establishes that Hydro's proposal to use mTRC is acceptable, but only as a secondary test. The problem with TRC/mTRC as a primary test at this time and in this electrical system is that it does not ensure, and can even run contrary to, the goal of rate mitigation. While the test measures the impact on the utility and **participating** customers **collectively**, it fails to ensure that there is benefit to the utility and **non-participating** customers individually. Because of this, a program can pass the TRC/mTRC test if it provides significant benefits to participating customers but leaves the utility and non-participating customers either neutral or even materially worse off. With the challenges facing Island rate payers, including the members of the IIC, with the commissioning of the Muskrat Falls project, it is imperative that any approved CDM measures, including electrification measures, benefit both the utility and non-participating customers in the short term (and not just potentially in the longer term, where benefits to non-participating customers are uncertain at best).

The IIC submits that, with Muskrat Falls project cost recovery, Hydro needs to (i) adjust its methodology for screening and designing CDM/ECDM projects and (ii) change the timeline over which a project's economics are considered from the life of the project to a more short term focused approach.

The Process for Evaluating CDM/ECDM Projects

Rather than using TRC/mTRC to determine whether a program is approved, the IIC submits that Hydro should apply the following process to determine whether a given project is in the best interest of its customers and Hydro:

- <u>STEP 1:</u> Rather than using mTRC as a primary test for screening ECDM programs, the primary test for whether an ECDM program is approved should be based on resource cost/value. In particular, rather than mTRC, Hydro should use the Program Administrator Cost ("PAC") test and the Net Present Value ("NPV") test as the primary tests for evaluation of CDM and ECDM programs. These tests, one of which has been approved by the Board (PAC)² in the context of CDM and one of which (NPV) is noted by Hydro to be the secondary test it will use on ECDM programs, make utility economics the main concern in considering whether a program is approved. Ensuring that utility economics are improved by a program in turn protects non-participating customers.³
- <u>STEP 2:</u> After applying PAC/NPV as the primary test, Hydro should apply mTRC for ECDM (and TRC for CDM) as secondary tests. Following this process will ensure that, when determining whether a program is worth pursuing, Hydro's focus is on the program's cost-effectiveness for both the utility and the customer.

 $^{^{1}}$ A further discussion of this issue can be found at TC-PUB-IC-4 and NLH-IC-4(a).

² See P.U. 18(2016), page 50 and PUB-NLH-29.

³ For a further discussion on the use of PAC and NPV, please see TC-PUB-IC-1. Note, Intergroup's response to TC-PUB-IC-1 contains a typo. Under bullet 1, the end of second sentence reads "and the same deal is made with 10 people" whereas it should read "and the same deal is made with 5 people". The math in the answer is based on the hypothetical deal being made with 5 people.

• <u>STEP 3:</u> Even if the program is deemed worth pursuing after both the PAC/NPV and TRC/mTRC tests are applied, Hydro should ensure that the program's rate impacts are acceptable. While rate impacts over the life of the program are considered as part of the NPV test, which Hydro plans to use as a secondary test for electrification programs, rate impacts are not considered in mTRC test (Hydro's proposed primary test for electrification), TRC (test for CDM) or PAC (test for CDM).

As established by InterGroup in the InterGroup Submission and the InterGroup RFI Responses, by applying both value-related tests (NPV, including revenue changes) and the Rate Impact Measure ("RIM") test,⁴ Hydro would be able to establish a given program's effect on rates. In particular, this third step will determine whether the subject program creates distributional problems and whether or not some customer's rates will in fact have to go up to pay for the program. Only if step 3 raises serious and uncorrectable fairness and distributional effects would it be used to screen out a program.⁵ Rather than being used to determine whether a program should proceed, the third step's primary focus would be on program design and would require Hydro to focus on how to manage the program's distributional effects to ensure fairness between customers.

The Timeline for Evaluating CMD/ECDM Projects

As discussed in the InterGroup Submission, in defining the methodology for approving CDM/ECDM programs, it is necessary to look at the policy objectives of the jurisdiction in which the methodology will be applied. Given the unique challenges on the Island System created by the economics of Muskrat Falls' project cost recovery, the primary objective for any Hydro program has to be rate mitigation in the short term. As such, when determining whether a program should proceed, it is essential that Hydro complete an analysis of the program's short term impacts as opposed to looking only at cost/benefits over the life of the program. As pointed out by InterGroup in the InterGroup Submission⁶ and at NLH-IC-4(b), NLH-IC-4(c) and NLH-IC-5(a), determining a program's value over the life of the program as opposed to the short term can result in Hydro approving projects that will cause a rate increase in the near future to obtain net benefits in the more distant future. The approval of such a project would exacerbate the negative rate profile created by Muskrat Falls.

To ensure that an otherwise economic program does not amplify the Muskrat Falls' rate impacts Hydro customers are currently facing, the IIC submits that Hydro should be directed to ensure that its program assessment focuses on the early years of any program. In particular, while assessments can be conducted over the life of a program, they should be reported in increments of 5 years. In applying to have a program approved, Hydro should have to show that any program it is seeking approval for has a positive net revenue impact from the outset or, at worst, has a zero net rate impact at implementation and achieves a positive

⁴ See TC-PUB-IC-1 and TC-PUB-IC-2 for an analysis of why the RIM test is valuable for a rate impacts analysis as opposed to a test to screen out programing.

⁵ See TC-PUB-IC-1.

⁶ See pp. 9 and 10.

net revenue impact within no more than 5 years.⁷ If a program fails to meet this standard, a review should be conducted to determine whether the program's economics can be improved with modifications to the design or whether the program should be rejected and replaced by a program with more favorable economics.

Conclusions

The IIC submit that Hydro's request to use mTRC as part of an assessment of electrification should be approved as a complement to the Total Resource Cost (TRC) test for CDM. However, as discussed in greater detail above, in the InterGroup Submission and in the InterGroup RFI Responses, the mTRC (and TRC) test should be used as a secondary test. The primary test for CDM and ECDM program screening should be the utility-focused PAC and NPV tests. Consistent with the need to ensure rate mitigation in the short term, the analysis should also include an assessment of rate impacts with the focus being on economics and rate impacts over the short term as opposed to the life of the program. Applying both PAC/NPV and TRC/mTRC and focusing on short term rate impacts will ensure that any CDM/ECDM programs approved for implementation are consistent with the Government's position that rate mitigation is the top priority for the Island System.

InterGroup's analysis of Hydro's electric vehicle infrastructure shows that, on its own, there is a possibility that the program could benefit participating customers but exacerbate the looming rate impacts on the utility and its non-participating customers. This potential for negative impacts from a program that passes the mTRC test is in contrast to other program offerings noted in the record. For example, an industrial-focused curtailment program provides exceptional utility rate metrics, reported in Hydro's filing to exceed a PAC test ratio of 25 over all time horizons⁸. While NPVs and rate impacts are not reported for these measures, the extremely positive PACs (a utility-focused measure) would suggest that the program would have significant positive rate impacts over the near and long term. Similarly, electrification programming designed to foster the expansion of industrial Interruptible Energy by providing a rate that slightly exceeds the foregone export revenue could exhibit immediate positive rate impacts for participating and non participating customers. As noted by InterGroup in the InterGroup Submission, Manitoba Hydro provides such a program to it's industrial customers through its Surplus Energy Program⁹, which offers non-capacity backed interruptible energy at prices slightly above export prices. Offering large commercial customers the ability to utilize such energy at an attractive rate could promote electrification through the replacement of fuel heating with electric boilers. Such a program would pass every stage of a well designed ECDM analysis as it would provide a net benefit to the system by being more economic than the next best alternative (export sales). With proper design, the only potential adverse impact of such a program (increasing utility peak load) can be fully mitigated by including appropriate customer response tools (e.g., interruption protocols and short notice periods) in the program. Such a program would also have wider ranging effects on the Provincial economy as it would foster large scale/industrial development.

⁷ See NLH-IC-2 for a discussion of Hydro's projections for specific programs and more detailed examples.

⁸ For example, see Hydro's Application, pdf pages 381-382 of 510.

⁹ See Manitoba PUB Order 46-22, page 38.

The IIC submits that, in addition to requiring Hydro to follow the CDM/ECDM program assessment set out by Intergroup, the Board should encourage Hydro and NP to include a program similar to Manitoba Hydro's Surplus Energy Program in its CDM/ECDM offerings.

We trust these comments will be found to be in order.

Yours very truly,

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