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July 12, 2022

Via E-Mail

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

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

Dear Ms. Blundon:

# Re: Newfoundland and Labrador Hydro's Application for Approval of Various Supplemental Capital Projects at Holyrood Thermal Generation Station (TGS)

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.

## Scope of these Comments

The IIC Group, based and in reliance upon the information presented by Hydro in its Application and its responses to requests for information, has no specific concerns about Hydro's justifications for any of the capital expenditures Hydro seeks to have approved by this Application, with the exception of continuing questions about the timing of the Refurbishment of Tank 2, which we will address further below.

Overall, however, the IIC Group are greatly concerned about the prospect of further substantial capital expenditures being proposed by Hydro before a firm decision has been made about the long-term future of the Holyrood TGS after March 2024.

## Comments on Refurbishment of Day Tank

As adverted to above, while the IIC Group posed a number of requests for information regarding the proposed refurbishment of the Day Tank capital expenditures, the IIC Group, based and in reliance upon Hydro's responses to those requests of information, has no remaining questions or concerns. In saying this, the IIC Group are relying upon Hydro's information in response to IC-NLH-007 on the cost savings that might be obtained by partial replacement of the tank floor:

"Hydro estimated that the budget for a partial replacement of the tank floor could reduce the budget by up to 20%. The cost to clean, inspect, and prepare the tank for the floor work (including jacking up and temporarily supporting the tank) constitutes the bulk of the cost in the proposed project, and would be the same for 100% floor replacement as it would be for 10%

floor replacement. Because of this, the potential savings that would be associated with a partial versus a full replacement is small."

The IIC Group have also taken note of the following statement by Hydro in its response to IC-NLH-007:

"Hydro will inspect and assess the condition of the floor during the proposed project. If the floor is found in considerably better condition than expected, installation of patch plates in some areas may be cheaper than 100% floor replacement, and may realize some cost savings. Hydro will avail of any opportunity to reduce costs by reducing the amount of floor replaced."

The IIC Group respectfully requests that the Board include in its Order on this Application a requirement for Hydro to report in a timely manner on the results of the assessment of the condition of the tank floor and on whether costs of this project were able to be reduced by reducing the amount of floor replaced.

## **Comments on Refurbishment of Tank 2**

The IIC Group have remaining questions about the process which led to the apparent change in the remaining life of the Tank 2 floor from to 2027 to 2023.5. This change in the remaining life assessment came about over the course of just over 2 years (October 2018 to February 2021), and based on no new data. Per Hydro's response to IC-NLH-011:

"The same inspection data was used in this assessment as was used in 2018. The provincial regulator requested that a different API3 standard (API RP 5754 18) be used in the analysis of the data. Based on this latest assessment, the provincial regulator agreed to accept operation of Tank 2 until June 2023 and not beyond."

#### - the opinion of Hydro's consultant

There is no indication in the Application record that Hydro's consultant is of the opinion that its 2018 assessment of the remaining life is no longer reliable.

Per IC-NLH-010, Attachment 1, page 5 of 14 of the October 2018 TEAM Industrial Services Report, Hydro's consultant reported the following:

"Remaining life for areas with up to 40% corrosion in 2008 = 2008 + 19 = 2027

It is also relevant to note that while a linear corrosion rate is assumed due to a lack of historical data, the corrosion rate has likely decelerated in recent years. This is due to improvements that have been made to the tank farm where Tank No. 2 is located. For the majority of the tanks service life, the bottom and several feet of the first shell course were submerged in water. In 2009 the tank farm was upgraded with a new drainage system which resulted in reconfiguring the tank compound. The geography was modified to promote drainage to the new drain locations. In summary, <u>it is our opinion that the calculations above represent a worst-case scenario for the remaining floor life</u>. Based on experience and industry standards, we expect the corrosion rate to be reduced now that the tank floor is no longer submerged in water." [underlining added]

Per IC-NLH-014, Attachment 4, March 2021 Hydro Letter, page 2 of 3, Hydro apparently in consultation with its consultant, advised the provincial regulator:

"We would like to highlight that the corrosion rate, as calculated under the API 653 code, assumes linear corrosion. Corrosion is more aggressive during the early years when the floor plates were newly installed, and the rate slows down as an oxidizing layer of rust forms. Assuming a linear corrosion pattern over the entire life of the floor produces a more aggressive corrosion rate than the actual rate in later years because of the natural decrease in corrosion over time is not accounted for. In addition, significant upgrades to the tank farm drainage system were completed in 2009, which further slowdown the rate of corrosion."

The above information strongly indicates that the corrosion rate can be reasonably assessed to be non-linear and to have slowed considerably, and that the 2018 assessment of remaining life as being to 2027 was reasonably prudent – indeed, as stated above, a "worst case scenario".

#### - apparently incomplete information

We do not appear to have complete information as to why Hydro's consultant, and ultimately Hydro acquiesced, to the reassessment of the remaining life, from 2027 to 2023.5, by application of the standard API RP 575 instead of AP 653.

Per IC-NLH-10, Attachment 2, 18 February 2021 Letter from TEAM Industrial Services, page 1 of 3

"We have conducted a review of the API Recommended Practice 575. The review of API RP 575 was recommended in an email response provided by the Department of Environment, Climate Change and Municipalities dated February 12, 2021, regarding the previously requested internal inspection interval for Tank No.2."

Hydro, in its response to IC-NLH-014, did not provide a copy of the February 12, 2021 email response provided by the Department referred to above, and nor of the email or other communication prompting that response.

Per IC-NLH-014, Attachment 3, March 5, 2021 Department of Environment, Climate Change and Municipalities Letter, page 1:

"Thank you for your letter and corresponding supporting documentation as provided on March 4, 2021."

Hydro, in its response to IC-NLH-014, did not provide a copy of the above referenced letter and corresponding documentation as provided to the Department on March 4, 2021.

#### - no assessment of risk vs. need to extend remaining life to only March 2024 (1 year)

Hydro has, by IC-NLH-001, been asked to provide some quantitative measure to the probability of a need to extend the life of the Holyrood TGS beyond March 2024 (only 9 months after the status quo remaining life of Tank 2) but says that it is unable to do so, ostensibly because it does not have information it says it will have by end of this September, a mere 2 ½ months away. It is noteworthy in this regard that Hydro first acknowledged to stakeholders at least as far back as November 30, 2020 (the Reliability and Resource Adequacy Study Review technical conference) that it needed to assess the long-term viability and role of the Holyrood TGS. The

fact, that over 19 months later, a decision has not yet been reached on whether the future role of the Holyrood TGS justifies substantial expenditures to extend its remaining life is difficult to reconcile with Hydro's rate mitigation mandate.

Hydro has also not provided any meaningful measure of the risk entailed by maintaining the status quo for Tank 2 for just a further 9 months, from mid 2023 to March 2024. In Hydro's response to IC-NLH-012, Hydro only states that there is an "elevated" risk of failure.

It is respectfully submitted that more meaningful responses to the above questions should be reasonably expected to justify a \$4.725 million proposed capital expenditure.

## - if refurbishment of Tank 2 is approved

If the Board, notwithstanding the above questions, determines that the refurbishment of Tank 2 should be approved, then the IIC Group respectfully submit that Hydro should be required to demonstrate further efforts to reduce the scope of work to the minimum necessary for reasonable mitigation of risk for a further 9 months to March 2024.

In this regard, the IIC Group notes the following from Hydro's response to IC-NLH-013, at page 2 of 2:

"Hydro excluded from the proposed project the electrical and instrumentation scope of work that was completed on Tank 3 in 2012 as it is not required to extend the next required out-of service inspection date and can therefore be delayed. In addition, in order to minimize the cost, Hydro proposed in this project to install a platform on the tank roof to enable workers to safely perform work tasks above the tank instead of replacing the tank roof which is anticipated to require major repairs or full replacement based on previous inspection findings. The cost estimate for a full roof replacement is \$1.9 million; however, the cost estimate for the roof platform (included in the project budget) is \$250,000.

Hydro anticipates that the full proposed Tank 2 refurbishment scope of work is required to maintain the tank operation reliability; however, Hydro will inspect and assess the condition of the tank during the proposed project and will avail of any reasonable opportunity to reduce the scope of work."

If the Board determines that the refurbishment of Tank 2 should be approved then the IIC Group respectfully requests that the Board include in its Order on this Application a requirement for Hydro to report in a timely manner on the results of the assessment of the condition of the tank and on whether costs of this project were able to be reduced by the reduction of the scope of work to the minimum necessary for reasonable mitigation of risk for a further 9 months to March 2024.

# Hydro's Reliability and Resource Adequacy Study (RRAS) and the future of the Holyrood TGS

The IIC Group has already adverted to above that Hydro expects to provide "a clear basis" for investment in the Holyrood TGS by the end of this September (2022).

Per IC-NLH-001:

"Newfoundland and Labrador Hydro ("Hydro") is unable to quantify the probability in the manner posited at this time.

"Hydro's submission at the end of September as part of the Reliability and Resource Adequacy Study Review proceeding will provide clear direction on future generation requirements from Holyrood TGS. Timelines will be confirmed, and Hydro and its stakeholders will have a clear basis for determinations regarding investment and reliability."

The IIC Group notes that, at least as recently as Hydro's March 31, 2022 letter to the Board in the RRAS Review, it was expected that the above Hydro filings to determine the future of the Holyrood TGS would be completed by the end of August 2022. Hydro notified the Board that these filings would be delayed, and that it "intends" to make those filings by September 30, 2022, by correspondence dated June 15, 2022 (9 days after the filing of this Application).

The IIC Group respectfully submit that any further slippage in the scheduled completion of Hydro's filings in the RRAS Review, and any delay in completing the review of the future role of the Holyrood TGS, risks exposing Hydro's rate payers to further significant capital expenditures on the Holyrood TGS without reasonable long term justification.

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

Yours truly,

Stewart McKelvey

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PLC/plc

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