BURCHELL WICKWIRE BRYSON LLP

lawyers | avocats

1801 Hollis Street, Suite 1800 Halifax, Nova Scotia Canada B3J 3N4

> t. 902.423.6361 f. 902.420.9326

www.bwbllp.ca

Sarah L. MacLeod 902.423.6361 slmacleod@bwbllp.ca

File: OPTIM-1088355

June 20, 2023

VIA E-MAIL cblundon@pub.nl.ca

Cheryl Blundon
Director of Corporate Services and Board Secretary
The Board of Commissioners of Public Utilities
Prince Charles Building
120 Torbay Road, P.O. Box 21040
St. John's, NL A1A 5B2

Dear Ms. Blundon:

Re: Newfoundland and Labrador Hydro – 2021 Capital Budget Supplemental Application Approval of the Construction of Phase 1 of Hydro's Long-term Supply Plan for Southern Labrador – Requests for Information

Enclosed are Requests for Information NCC-NLH-001 to NCC-NLH-017 regarding the above-noted application.

If you have any questions or require any clarification, please do not hesitate to contact me.

Yours very truly,

BURCHELL WICKWIRE BRYSON LP

In Mac Lead.

Sarah L. MacLeod

SLM

cc:

Newfoundland and Labrador Hydro Shirley Walsh shirleywalsh@nlh.nl.ca

NLH Regulatory nlhregulatory@nlh.nl.ca

Newfoundland Power Inc. Dominic Foley <u>dfoley@newfoundlandpower.com</u>

NP Regulatory@newfoundlandpower.com

Dennis Browne, K.C. dbrowne@bfma-law.com Consumer Advocate

Stephen Fitzgerald sfitzgerald@bfma-law.com Sarah Fitzgerald sarahfitzgerald@bfma-law.com

Bernice Bailey bbailey@bfma-law.com

Industrial Customer Group

Paul Coxworthy <u>pcoxworthy@stewartmckelvey.com</u> Dean Porter <u>dporter@poolealthouse.ca</u> Denis Fleming <u>dfleming@coxandpalmer.com</u>

Senwung Luk sluk@oktlaw.com Labrador Interconnected Group

Nick Kennedy nkennedy@oktlaw.com

IN THE MATTER OF the *Electrical Power Control Act, 1994*, SNL, 1994, c E-5.1 (the "*EPCA*") and the *Public Utilities Act*, RSNL 1990, c P-47 (the "*Act*"), as amended, and regulations thereunder; and

IN THE MATTER OF an Application by Newfoundland and Labrador Hydro ("Hydro") for an Order approving the Construction of Phase 1 of Hydro's Long-Term Supply Plan for Southern Labrador, pursuant to Section 41(3) of the *Act*.

REQUESTS FOR INFORMATION

Submitted by NunatuKavut Community Council ("NCC")

Long-Term Supply for Southern Labrador NCC-NLH-001 to NCC-NLH-017

Submitted on: June 20, 2023

REQUESTS FOR INFORMATION

NCC-NLH-001

In the Final Report of the Commission of Inquiry Respecting the Muskrat Falls Project, Key Recommendation 1 states:

The Government of Newfoundland and Labrador should never undertake, on its own or through one of its Crown corporations or agencies, the planning, approval or construction of any large project (meaning a project with a budget of \$50 million or more) without:

b. Providing well-defined oversight after consideration of oversight processes instituted in other jurisdictions.

Please provide details on how Hydro intends to provide "well-defined oversight" during this project, including but not limited to, all contingencies in place to continually assess, mitigate, reduce, and manage any risk, particularly with the proposed non-phased approach.

NCC-NLH-002

As set out in Table 5: Project Schedule at page 16 of Schedule 2, front-end engineering and project approval is set to be completed in the Third Quarter of 2023 with environmental assessment following shortly thereafter.

- (a) Please provide any details as to how expected environmental assessment processes may have been impacted by the revised application.
- (b) Please provide a detailed plan and any contingencies should the environmental assessment process result in any delays.
- (c) Please provide any plans and processes for how Hydro intends to ensure appropriate tracking, monitoring, and follow up of any commitments that it makes as part of the environmental assessment process.
- (d) At Section 5 on page 17 of Schedule 2, Hydro states that it will consult with the NCC as part of the environmental assessment process to address its stated concerns. Please provide further details on how Hydro intends to consult with NCC as part of the environmental assessment process.

NCC-NLH-003

In several areas of the revised application, Hydro has added the language that the project meets its mandate to provide "reliable service at least cost, in an environmentally responsible manner" (see, for example, paragraph 19 of the revised application).

Please provide any justification and rationale for how the proposed regional diesel plant is environmentally responsible, as well as any analysis that was completed to reach this conclusion.

NCC-NLH-004

Please provide details on local air quality and emission concentrations within a specified radius (for example, 1 km) of the proposed regional diesel plant and provide a comparison to the air quality and emission concentration results of the existing diesel power plant in the region of Port Hope Simpson.

NCC-NLH-005

Paragraph 8 of the revised application states that: "Alternatives involving the interconnection of multiple isolated systems are expected to further facilitate the integration of renewable energy in the future, as such systems are better suited to absorb fluctuations in supply that are commonly experienced from renewable generation, allowing for a greater penetration of renewable energy on the system."

In addition, Hydro's revised application appears to rely on the finding in the Integrated Response Plan provided by Midgard Consulting Inc. (the "Midgard Report") that the fully interconnected system configuration facilitates greater penetration of incremental renewable energy sources sooner (see, for example, pages 5 and 8 of Schedule 2).

- (a) Please provide the existing renewable energy penetration maximums per each of the eight isolated diesel power plants in NCC territory (in terms of percentage and in units of energy – recent three-year average), and the value of increased renewable energy penetration in the proposed regional diesel plant, displacing the existing four power plants (again in percentage and units of energy – three-year average).
- (b) Please provide details regarding how the revised application (including the revised project schedule) will affect when renewable energy projects are expected to be researched, developed, and executed in the area.

NCC-NLH-006

At Section 3.7.6 on page 10 of Schedule 2, Hydro states that it accepts Midgard's recommendation to "evaluate available technologies as diesel units come due for replacement" since "renewable energy technologies are not currently technically or economically feasible for the provision of firm capacity."

- (a) Please provide clarification as to how Hydro intends to evaluate available technologies as diesel units come due for replacement as the revised application now proposes a non-phased approach and retirement before the end of life of the current diesel plants.
- (b) If the intention is to continue with a phased replacement, please provide a detailed schedule and plan for this evaluation, including but not limited to, when the diesel units are expected to need replacements and what criteria will be used.

NCC-NLH-007

Please provide the proposed decommissioning schedule for the four current diesel systems: (a) Charlottetown and Pinsent's Arm, (b) Mary's Harbour and Lodge Bay, (c) Port Hope Simpson, and (d) St. Lewis based on immediate interconnection of all six communities with a single regional diesel generating station in Port Hope Simpson.

NCC-NLH-008

At Section 3.7.4 on page 9 of Schedule 2, Hydro states that it "is committed to continuing to work with its community and Indigenous partners to support the development of renewable energy sources and maximize the penetration of renewable energy on the interconnected system."

- (a) Does an independent power producer (IPP) have to wait for regional diesel project completion until renewable energy systems can be interconnected to the regional grid? If not, please outline the capacity limitations and other important considerations relevant to IPP project development.
- (b) How does Hydro envision the working relationship with an Indigenous IPP throughout the regional diesel development stages? Would the Indigenous IPP representative have the opportunity to provide input at the project development stage to address items, such as value engineering opportunities, that best suit renewable energy development?

(c) Please provide details on what support will be available to Indigenous partners and how it will be accessed.

NCC-NLH-009

At Section 5 on page 17 of Schedule 2, Hydro states the following:

Both Hydro and Midgard have assessed the use of renewable energy sources for the provision of firm capacity on isolated systems and have each concluded that transmission connections to interconnected systems do not meet the criteria of least cost. Additionally, due to the distance (over 400 kilometres) of the line required to interconnect the Southern Labrador Communities with the Labrador Interconnected System, backup generation would be required in the form of diesel generation. Finally, renewable Long-Term Supply for Southern Labrador — Evidence Supporting the Revised Application energy resources with Battery Energy Storage Systems are technically and economically prohibitive and are expected to remain so for the foreseeable future. The use of diesel generation remains the only viable solution that is consistent with Hydro's legislated mandate.

- a) Should energy storage, renewable energy generation technologies, and combinations thereof progress to a level of sufficient firm capacity and reliability required by Hydro, how will Hydro account for this in the regional diesel design considerations, particularly if a sufficient level of capacity and reliability is achieved before the end life of the asset?
- b) Does Hydro share the end goal of fully displacing diesel generation?

NCC-NLH-010

As highlighted in the Introduction on page 2 of Schedule 2, Midgard recommends that "Hydro should continue to support and procure incremental low-cost renewable energy through power purchase agreement (PPA) partnerships with community and Indigenous partners."

Please confirm that PPA rates will either remain at 90% diesel-displacement rates (or better) for future renewable energy developments in isolated diesel electricity generation regions.

NCC-NLH-011

At Attachment 1, Appendix C to Schedule 1, Hydro's Southern Labrador Reliability Study concluded the following:

A southern Labrador interconnection would improve the overall system performance of the southern Labrador isolated diesel systems <u>as long as the regional diesel plant has a redundancy of N-2.</u> This would improve the overall unavailability average of the four communities by 0.058%, which is equal to approximately 8.72 MWh of EUE or a 5.08 hour reduction in time spent without power per year. This project will also provide many benefits that were not able to be quantified in the reliability calculations which will have operational and planning benefits and could further improve system reliability beyond what was calculated. Overall the proposed interconnection is expected to improve the overall reliability of the southern Labrador system. [emphasis added]

At Section 3.7.3 at page 8 of Schedule 2, Hydro states that it:

has accepted Midgard's recommendations regarding generating unit redundancy and has revised the design of the regional diesel generating station to N-1 redundancy. Hydro decided to retain the regional diesel generating station footprint as originally proposed, with the additional engine bay available to establish N-2 redundancy if required. This approach ensures that the regional diesel generating station meets standard redundancy criteria while providing the option for N-2 redundancy if necessary in the future. Hydro will monitor the reliability of the interconnected system to determine if N-2 redundancy is required to ensure reliable service.

- (a) Please provide details on the analysis that was completed since the original application and in response to the Midgard Report which supports the change from N-2 to N-1.
- (b) Please expand on the difference in system reliability outcomes now that the revised application lowers the system reliability from N-2 to N-1 standards. How would system reliability be impacted in the six NCC communities based on this change?
- (c) What is the probability that the additional engine bay would be needed to increase to N-2? Explain difference in proposal and evaluation from original application.

NCC-NLH-012

At Hydro's response to RFI no. PUB-NLH-016, Hydro stated:

Some parties expressed concern about the potential for reduced staff as a result of the proposed new operational configuration. No significant changes in overall staffing levels are expected; however, Hydro will complete a detailed operational review that will determine staffing requirements for the new plant and distribution system, which will inform

the development of reasonable staffing plans considering plant retirement timelines through to 2045.

Please provide updated information regarding reasonable staffing plans and detailed operational reviews regarding expected employment levels and opportunities.

NCC-NLH-013

Please confirm that Hydro's proposed regionalized diesel plant design will integrate and supply power to the Fish Plant in Pinsent's Arm, currently supplied by a diesel generator.

NCC-NLH-014

Please provide Hydro's plans to support and develop the required infrastructure in the surrounding communities to facilitate the project. For example, paving of access roads to prevent degradation and dust generation to community and town infrastructure.

NCC-NLH-015

At Section 5 on page 17 of Schedule 2, Hydro states the following:

Hydro will consult with the NCC as part of the Environmental Assessment process to address its stated concerns. These concerns include the integration of renewable sources in southern Labrador to ensure that the solution is environmentally responsible, as well as **commercial considerations for the NCC relating to construction, ownership, and benefits associated with Hydro projects such as the proposed Southern Labrador Interconnection.** Hydro is committed to working with the NCC to enable them to develop and maximize renewable sources of supply in southern Labrador. Hydro is also committed to supporting the advancement of NCC initiatives that align with Hydro's mandate to provide power at the lowest possible cost, in an environmentally responsible manner, consistent with reliable service. [emphasis added]

- (a) Please clarify how consultation regarding "commercial considerations" are expected to be a part of the "Environmental Assessment process."
- (b) Please provide a detailed plan and process for the proposed consultation with NCC regarding "commercial considerations ... [] ... relating to construction, ownership, and benefits associated with the project."

NCC-NLH-016

At Section 4.1.2 on page 13 of Schedule 2, the revised application states:

Hydro's Original Application included the construction of 53 kilometres of 25 kV distribution lines interconnecting the communities of Charlottetown, Pinsent's Arm, and Port Hope Simpson and 25 kV voltage conversion in those communities. There is no change to these proposed distribution lines. The 25 kV interconnection will include the construction of a new 25 kV distribution line, comprised of 477 aluminum-stranded conductors, along highway Routes 510 and 514 between Port Hope Simpson and Charlottetown. A short segment of 25 kV line will also be constructed to connect to the existing distribution system in Port Hope Simpson. In addition, a fibre optic line will be installed for communication purposes. Also included are 25 kV voltage conversions for the existing distribution systems in each community and the installation of a 200 A voltage regulator at the Charlottetown end of the 25 kV interconnection.

With Hydro's acceptance of Midgard's recommendation to advance the full interconnection of all communities, the project scope (originally planned for Phases 2 and 3) now also includes the construction of an additional 80 kilometres of 25 kV distribution lines interconnecting the communities of Mary's Harbour, Lodge Bay, and St. Lewis and 25 kV voltage conversion in those communities.

Based on the transmission requirements outlined in Hydro's proposed amended application, please comment on the ability of Indigenous Participation in the planned transmission. Does Hydro's plan include Indigenous Partners playing a role in this process? If so, please elaborate on Hydro's engagement plan for this collaboration.

NCC-NLH-017

At Section 5 on page 17 of Schedule 2, Hydro states the following:

To date, Hydro has met with community representatives in Charlottetown and Pinsent's Arm as well as Mary's Harbour, Port Hope Simpson, and St. Lewis; the NunatuKavut Community Council ("NCC"); the Minister of Labrador Affairs; the Minister Responsible for Indigenous Affairs and Reconciliation; and the Member of the House of Assembly for the region. Hydro will continue to inform and consult with these stakeholders throughout the approval and execution process. Hydro is also committed to working with the NCC to ensure Hydro has met its Duty to Consult.

(a) Please provide a detailed plan setting out the intended engagement process for stakeholders.

(b) Please provide a detailed plan setting out the intended process for meeting the Duty to Consult and Accommodate with NCC as a rights holder.