WHENEVER. WHEREVER.
We'll be there.

NEWFOUNDLAND POWER
A FORTIS COMPANY

June 20, 2023

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

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

Dear Ms. Blundon:

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

Please find enclosed Newfoundland Power's Requests for Information NP-NLH-063 to NP-NLH-083 in relation to the above noted Application.

If you have any questions please contact the undersigned at your convenience.

Yours truly,

Dominic Foley
Legal Counsel

Enclosures

ec. Shirley A. Walsh
Newfoundland and Labrador Hydro

Paul Coxworthy
Stewart McKelvey

Jason Cooke, KC
Burchell Wickwire Bryson LLP

Dennis Browne, KC
Browne Fitzgerald Morgan & Avis

Senwung Luk
Olthuis Kleer Townshed LLP

**Newfoundland Power Inc.**
55 Kenmount Road • P.O. Box 8910 • St. John's, NL A1B 3P6
PHONE (709) 737-5000 ext 6200 • FAX (709) 737-2974 • **dfoley@newfoundlandpower.com**

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

**IN THE MATTER OF** an application by Newfoundland and Labrador Hydro ("Hydro") for an Order approving the construction of [] Hydro's long-term supply plan for southern Labrador, pursuant to Section 41(3) of the *Act*.

---

**Requests for Information by**
**Newfoundland Power Inc.**

**NP-NLH-063 to NP-NLH-083**

**June 20, 2023**

---

**Requests for Information**

NP-NLH-063 Reference: Response to Request for Information NP-NLH-010.

Please update the response to Request for Information NP-NLH-010 to include Hydro's updated alternatives. In the update to Attachment 1 of NP-NLH-010 please show data in the Recovery of Incremental Revenue Requirement table without comparison to the chosen alternative.

NP-NLH-064 Reference: Response to Request for Information NP-NLH-043.

Please provide a table showing the change in population for the Southern Labrador communities over the past 25 years. The information can be obtained through the Newfoundland and Labrador Community Accounts website: https://www.communityaccounts.ca.

NP-NLH-065 Reference: Midgard Consulting *Southern Labrador Communities – Integrated Resource Plan*, March 28, 2023, Page 5, Lines 19-24.

*"A series of supply scenarios, capable of meeting NLH's capacity, reliability, and energy supply requirements, were developed. These included alternatives previously studied by NLH as well as some new ones (such as the use of compressed natural gas as a fuel source). Various scenario parameters were investigated, including transmission and generation alternatives with varying levels of project phasing to defer capital costs. Scenarios were compared using a 25-year Discounted Cash Flow ("DCF") Model. A planning period of 25-years is considered appropriate for this study."*

Midgard's recommended alternative involves the immediate construction of a 25kV interconnected system and regional diesel generating station at a cost of $86.4 million. Other alternatives include phased approaches that involve capital expenditures over a longer period of time as those capital expenditures are required. How has Midgard assessed the risk that its recommended alternative may not continue to be the least-cost alternative over the 25-year planning period due to unforeseen factors such as a decline in customer load in southern Labrador.

NP-NLH-066 Reference: Midgard Consulting *Southern Labrador Communities – Integrated Resource Plan*, March 28, 2023, Page 35, Table 7 and Figure 3.

Hydro's monthly gross peak demand data for the southern Labrador communities shows a high summer peak demand for communities of Mary's Harbour and Charlottetown due to seasonal fish processing facilities. Have the fish processing facilities responsible for the high peak demand in the summer months and overall peak demand requirements for southern Labrador, provided a contribution to Hydro for their service? If so, please provide details of the contribution. If not, why not?

NP-NLH-067 Reference: Midgard Consulting *Southern Labrador Communities – Integrated Resource Plan*, March 28, 2023, Page 35, Table 7 and Figure 3.

While not anticipated at this time, how could a potential closure of the fish processing facilities in Mary's Harbour and Charlottetown during the 25-year evaluation period affect Midgard's recommendation for long-term supply for southern Labrador? For example, if one or more of the fish processing facilities were to close, would another alternative be considered the least cost alternative?

NP-NLH-068 Reference: Midgard Consulting *Southern Labrador Communities – Integrated Resource Plan*, March 28, 2023, Page 36, Line 7.

*"This IRP utilizes NLH's 2022 load forecast, which predicts relatively low overall growth for the region."*

Has Midgard considered the risk of load decline that could potentially occur over the 25-year evaluation period due to a declining population or potential reduction in commercial load? If so, please explain. If not, why not?

NP-NLH-069 Reference: Midgard Consulting *Southern Labrador Communities – Integrated Resource Plan*, March 28, 2023, Page 74, IRP Scenario H.

Midgard IRP Scenario H describes a transmission interconnection between the southern Labrador communities and the Labrador Interconnected System. It also describes the need for a new regional diesel generating station for the purpose of backup generation. What other alternatives did Midgard consider for backup generation in this scenario? For example, did Midgard consider that the existing diesel generating stations in each of the communities would serve as sufficient long-term source of backup capacity since the diesel gensets would no longer be required for prime power?

NP-NLH-070 Reference: Midgard Consulting *Southern Labrador Communities – Integrated Resource Plan*, March 28, 2023, Section 8 – Sensitivity Analysis, Pages 87-89.

Please provide a sensitivity analysis that includes an estimate of the proceeds from Hydro's insurance claim relating to the 2019 fire at the Charlottetown diesel generating station.

NP-NLH-071 Reference: Midgard Consulting *Southern Labrador Communities – Integrated Resource Plan*, March 28, 2023, Section 8 – Sensitivity Analysis, Pages 87-89.

Please provide sensitivity analyses that include a 25% and 50% increase in capital costs for each of the alternatives.

NP-NLH-072 Reference: Midgard Consulting *Southern Labrador Communities – Integrated Resource Plan*, March 28, 2023, Page 88, Lines 7-11.

*"Decreases in future load would simply reduce diesel use while not alleviating NLH from securing requisite capacity resources in the near term. While a phased approach would potentially shelter NLH from this risk, the cost differential of $5 million between the recommended scenario and the least-cost phased scenarios is considered a significant cost to protect against future uncertainty."*

Please provide a sensitivity analysis that includes an annual 1% decline in customer capacity and energy requirements over the 25-year evaluation period.

NP-NLH-073 Reference: Hydro's letter Re: Long-Term Supply for Southern Labrador – Phase 1 – Midgard Consulting Inc. Report, May 31, 2023, Page 2.

*"Midgard's report highlights several benefits of interconnecting the communities to a regional generating facility, including operational savings due to reduced fuel consumption, improved system reliability, reduced capital costs, and greater potential for renewable penetration."*

Does Hydro anticipate operational savings due to less labour requirements associated with one regional generating station as opposed to four separate isolated generating stations? If so, please provide details of those operational savings including whether Hydro will experience a reduction in full-time equivalent ("FTE") requirements.

NP-NLH-074 Reference: Hydro's letter Re: Long-Term Supply for Southern Labrador – Phase 1 – Midgard Consulting Inc. Report, May 31, 2023, Page 2.

*"Midgard notes that proceeding with the full interconnection, rather than phased interconnection, is more cost-effective…"*

Please summarize the key factors that led Midgard to conclude that full interconnection was more appropriate than the phased interconnection recommended by Hydro in its original Application.

NP-NLH-075 Reference: Hydro's Revised Application for Approval of Construction of Hydro's Long-Term Supply Plan for Southern Labrador, *Schedule 1 – Long-Term Supply for Southern Labrador – Phase 1,* May 31, 2023, Page 2, Lines 10-11.

*"There are four neighbouring communities in southern Labrador that are currently supplied by separate isolated diesel systems, namely Charlottetown, Mary's Harbour, Port Hope Simpson, and St. Lewis…"*

Please confirm that Hydro plans to retire the Charlottetown, Mary's Harbour, Port Hope Simpson, and St. Lewis isolated diesel plants immediately, or very soon after, construction and commissioning of a new regional diesel generating station.

NP-NLH-076 Reference: Hydro's Revised Application for Approval of Construction of Hydro's Long-Term Supply Plan for Southern Labrador, *Schedule 1 – Long-Term Supply for Southern Labrador – Phase 1, Attachment 1 – Long-Term Supply Study for Charlottetown: Economic & Technical Assessment,* Page 33, Table 7: Major Capital Cost Summary.

Please provide an updated summary of the estimated capital costs associated with every phase of each alternative in the same format provided in Table 7 of the referenced report.

NP-NLH-077 Reference: Hydro's Revised Application for Approval of Construction of Hydro's Long-Term Supply Plan for Southern Labrador, *Schedule 1 – Long-Term Supply for Southern Labrador – Phase 1, Attachment 1 – Long-Term Supply Study for Charlottetown: Economic & Technical Assessment,* Page 42, Lines 1-4.

*"The classification of the probability of occurrence for capital costs is based on the expected accuracy of a Class 5 estimate which ranges between -20% to -50% and +30% to +100% with a 50% level of confidence; therefore, any case where the percent change is within one of these ranges it is assumed to have a 50% probability of occurrence."*

and Midgard Consulting *Southern Labrador Communities – Integrated Resource Plan*, March 28, 2023, Page 76, Lines 13-18.

*"Capital costs used in the DCF Model are considered Class 5 according to the AACE Cost Estimate Classification System. Most capital costs are derived from cost estimates previously prepared by NLH and subsequently escalated to 2023 costs.*

*An independent check of select costs were undertaken and previous NLH cost estimates were deemed appropriate and location specific. Class 5 estimates are considered to be a suitable level of accuracy for this planning study."*

Considering the estimated capital cost of the project of $86.4 million, the relatively wide range of costs associated with a Class 5 estimate and the relatively narrow net present cost ("NPC") differences between alternatives, please explain why using a Class 5 estimate is appropriate for evaluating long-term supply alternatives in southern Labrador.

NP-NLH-078 Reference: Hydro's Revised Application for Approval of Construction of Hydro's long-term supply plan for southern Labrador, *Schedule 2 – Long-Term Supply for Southern Labrador – Evidence Supporting the Revised Application,* May 31, 2023, Page 14, Footnote 18.

*"Hydro's insurance claim relating to the 2019 fire at the Charlottetown Diesel Generating Station is ongoing. Should this claim result in a payment to Hydro, such payment will be applied to reduce the revenue requirement associated with this project."*

Since the filing of the revised application, has Hydro concluded its insurance claim relating to the Charlottetown Diesel Generating Station? If so, please provide the details including Hydro's deductible and any proceeds related to settlement. If not, when does Hydro expect to resolve the insurance claim and when does Hydro anticipate it will be able to provide it to the Board as part of Hydro's revised application?

NP-NLH-079 Reference: Hydro's Revised Application for Approval of Construction of Hydro's long-term supply plan for southern Labrador, *Schedule 2 – Long-Term Supply for Southern Labrador – Evidence Supporting the Revised Application,* May 31, 2023, Page 14, Lines 2-8.

*"Hydro has forecasted the net impact of the selected alternative to its revenue requirement in comparison to the reconstruction of the Charlottetown Diesel Generating Station with continued operation as isolated systems. Compared to the isolated systems option, the interconnection of the Southern Labrador Communities is expected to generate an incremental revenue requirement increase of $2.3 million by 2030, due to higher upfront capital costs. Hydro forecasts a reduction in net incremental revenue requirements of $1.1 million in 2035 and $6.2 million by 2050."*

Please update the information referenced above based on: (i) a 25% increase in capital costs associated with the chosen alternative; and (ii) a 50% increase in capital costs associated with the chosen alternative.

NP-NLH-080 Reference: Hydro's Revised Application for Approval of Construction of Hydro's long-term supply plan for southern Labrador, *Schedule 2 – Long-Term Supply for Southern Labrador – Evidence Supporting the Revised Application,* May 31, 2023, Page 15, Chart 2: Incremental Revenue Requirements for Interconnection vs Isolated and Table 4: Forecast Incremental Rate Impacts (%).

Please update Chart 2 and Table 4 to show *only* the effects of Hydro's chosen alternative to Hydro's revenue requirement as opposed to how it is presented in the evidence which shows revenue requirement of the chosen alternative in comparison to revenue requirement of another alternative.

NP-NLH-081 Reference: Hydro's Revised Application for Approval of Construction of Hydro's long-term supply plan for southern Labrador, *Schedule 2 – Long-Term Supply for Southern Labrador – Evidence Supporting the Revised Application,* May 31, 2023, Page 15, Footnote 20.

*"The forecast rate impact of the total project is approximately 1.5% for the end consumer on the Island Interconnected System and 2.0% for consumers on the Labrador Interconnected System. Assumes the average revenue to cost ratio for customers on the Labrador Isolated System in the 2019 Test Year is 24%, which represents their portion of costs recovered through rates."*

a) What additional revenue does Hydro anticipate it will receive from ratepayers in southern Labrador given that Hydro expects a relatively stable customer load over the 25-year evaluation period?

b) Considering that Hydro expects a relatively stable customer load in southern Labrador over the 25-year evaluation period, please explain how Hydro can expect to recover approximately 24% of the cost of the project from customers in southern Labrador.

c) Please recalculate the customer rate impact based on the response to Part a) above.

d) Since Newfoundland Power's customers pay approximately 96% of Hydro's rural deficit, please confirm that virtually all of the cost of Hydro's long-term plan to supply customers in southern Labrador will be borne by Newfoundland Power's customers.

NP-NLH-082 Reference: Hydro's Revised Application for Approval of Construction of Hydro's long-term supply plan for southern Labrador, *Schedule 2 – Long-Term Supply for Southern Labrador – Evidence Supporting the Revised Application,* May 31, 2023, Page 15, Footnote 20.

*"The forecast rate impact of the total project is approximately 1.5% for the end consumer on the Island Interconnected System and 2.0% for consumers on the Labrador Interconnected System. Assumes the average revenue to cost ratio for customers on the Labrador Isolated System in the 2019 Test Year is 24%, which represents their portion of costs recovered through rates."*

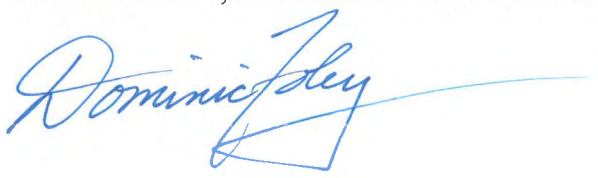
Has Hydro had discussions with the provincial government regarding whether Newfoundland Power customers' subsidization of the rural deficit remains appropriate given the need for the government to subsidize Newfoundland Power customer rates due to the Muskrat Falls Project? If not, why not?

NP-NLH-083 Reference: Hydro's Revised Application for Approval of Construction of Hydro's long-term supply plan for southern Labrador, *Schedule 2 – Long-Term Supply for Southern Labrador – Evidence Supporting the Revised Application,* May 31, 2023, Page 15, Footnote 20.

*"The forecast rate impact of the total project is approximately 1.5% for the end consumer on the Island Interconnected System and 2.0% for consumers on the Labrador Interconnected System. Assumes the average revenue to cost ratio for customers on the Labrador Isolated System in the 2019 Test Year is 24%, which represents their portion of costs recovered through rates."*

Is the rate impact referenced above included in rate projections associated with provincial government rate mitigation plans or Hydro's rate projections outlined in its October 3, 2022 Reliability and Resource Adequacy Study – 2022 Update?

**RESPECTFULLY SUBMITTED** at St. John's, Newfoundland and Labrador, this 20th day of June 2023.



**NEWFOUNDLAND POWER INC.**
P.O. Box 8910
55 Kenmount Road
St. John's, Newfoundland A1B 3P6

Telephone: (709) 737-5500 ext 6200
Telecopier: (709) 737-2974