



NEWFOUNDLAND AND LABRADOR  
**BOARD OF COMMISSIONERS OF PUBLIC UTILITIES**  
120 Torbay Road, P.O. Box 21040, St. John's, Newfoundland and Labrador, Canada, A1A 5B2

E-mail: shirleywalsh@nlh.nl.ca

2021-10-01

Shirley Walsh  
Senior Legal Counsel, Regulatory  
Newfoundland and Labrador Hydro  
P.O. Box 12400  
Hydro Place, Columbus Drive  
St. John's, NL A1B 4K7

Dear Ms. Walsh:

**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 PUB-NLH-031 to PUB-NLH-050 regarding the above-noted application.

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

Yours truly,

Cheryl Blundon  
Board Secretary

CB/cj

Enclosure

ecc **Newfoundland and Labrador Hydro**  
NLH Regulatory, E-mail: NLHRegulatory@nlh.nl.ca  
**Newfoundland Power Inc.**  
Dominic Foley, E-mail: dfoley@newfoundlandpower.com  
NP Regulatory, E-mail: regulatory@newfoundlandpower.com  
**Consumer Advocate**  
Dennis Browne, Q.C., E-mail: dbrowne@bfma-law.com  
Stephen Fitzgerald, E-mail: sfitzgerald@bfma-law.com  
Sarah Fitzgerald, E-mail: sarahfitzgerald@bfma-law.com  
Bernice Bailey, E-mail: bbailey@bfma-law.com

**Industrial Customer Group**  
Paul Coxworthy, E-mail: pcoxworthy@stewartmckelvey.com  
Dean Porter, E-mail: dporter@poolealthouse.ca  
Denis Fleming, E-mail: dfleming@coxandpalmer.com  
**Labrador Interconnected Group**  
Senwung Luk, E-mail: sluk@oktlaw.com  
Julia Brown, E-mail: jbrown@oktlaw.com

1 **IN THE MATTER OF**  
2 the *Electrical Power Control Act, 1994*,  
3 SNL 1994, Chapter E-5.1 (the “*EPCA*”)  
4 and the *Public Utilities Act*, RSNL 1990,  
5 Chapter P-47 (the “*Act*”), as amended, and  
6 regulations thereunder; and  
7

8 **IN THE MATTER OF** an application by  
9 Newfoundland and Labrador Hydro (“Hydro”)  
10 for an order approving the construction of Phase 1  
11 of Hydro’s long-term supply plan for Southern  
12 Labrador, pursuant to section 41(3) of the *Act*.

---

**PUBLIC UTILITIES BOARD  
REQUESTS FOR INFORMATION**

**PUB-NLH-031 to PUB-NLH-050**

**Issued: October 1, 2021**

---

- 1 **General**  
2
- 3 **PUB-NLH-031** Further to the response to PUB-NLH-001, page 7 of 10, lines 2-6:  
4 a) Given that the fire at the Charlottetown diesel generating station  
5 occurred in 2019 and that Hydro has been working on a proposal for the  
6 long-term supply for southern Labrador since the early 2000s, what are  
7 the circumstances that are prompting Hydro to express some degree of  
8 urgency at this time?  
9 b) The analysis in Hatch’s November 10, 2020 report entitled “Labrador  
10 Interconnection Option Study – Final Report” showed status quo as the  
11 cheapest alternative. Hydro’s own analysis shows that the proposed  
12 project will cost customers more than Alternative 1 until the mid-2030s.  
13 Do these analyses provide support for a possible deferral of the proposed  
14 project? If not, please explain.  
15 c) Please provide additional detail to support Hydro’s position that the  
16 existing arrangement in Charlottetown would not be able to operate an  
17 additional winter season even if it successfully operates through this  
18 upcoming winter?  
19 d) Is there any circumstance where it would be possible to extend the  
20 operation of the existing arrangement in Charlottetown safely and  
21 reliably for an additional three to five years? If not, please explain.  
22
- 23 **PUB-NLH-032** Further to the response to PUB-NLH-001, page 8 of 10, lines 13-14:  
24 a) Would the advent of firm renewable power in the next twenty years have  
25 any impact on Hydro’s current proposed solution? If so, please detail  
26 how this technology advancement would be incorporated into Hydro’s  
27 proposed solution.  
28 b) Does Hydro believe that diesel-burning technology will still be the  
29 source of the long-term supply for southern Labrador at the end of the  
30 50-year study period (i.e., into the 2070s)? If yes, please provide the  
31 rationale for that belief. If no, why was a 50-year study period selected?  
32
- 33 **PUB-NLH-033** Further to the response to PUB-NLH-001, page 8 of 10, lines 21-22:  
34 a) What is Hydro’s view on the role and responsibility of a utility in  
35 relation to determining whether new industry-impacting technologies  
36 should be introduced into the electrical system?  
37 b) By utilizing a 50-year study period, is Hydro “making assumptions” that  
38 diesel-generating technology will still be viable from a climate and  
39 technology perspective over the entire life of study period? Please  
40 explain.  
41
- 42 **PUB-NLH-034** Further to the response to PUB-NLH-002, Attachment 1, Table - Forecast  
43 Revenue Requirements and Rate Impacts, please confirm that the table shows  
44 that Alternative 1 requires less total revenue than Alternative 3A until the year  
45 2038.  
46
- 47 **PUB-NLH-035** Further to the response to NP-NLH-022, page 1 of 2, lines 7-8, the report  
48 referenced in Hydro’s response is entitled “Condition Assessment Final  
49 Report for Condition Assessment of Ten Diesel Plants” and was completed

1 by Hatch in December, 2009. In this report, Hatch recommended that the  
2 Rigolet and Paradise River diesel plants be replaced.

- 3 a) Please provide a copy of the report.  
4 b) Please confirm that the Rigolet and Paradise River diesel plants have  
5 not been replaced since the 2009 Hatch report.  
6 c) Please confirm that replacement of the Paradise River diesel project is  
7 included in the five-year capital plan as a 2025 project in Hydro's 2022  
8 Capital Budget Application but was not included in the five-year plan  
9 filed with Hydro's 2021 Capital Budget Application. If yes, please  
10 explain why it was not included in the five-year plan filed with Hydro's  
11 2021 Capital Budget Application.  
12 d) Please identify the measures implemented by Hydro to delay  
13 replacement of the Rigolet and Paradise River diesel plants.  
14 e) What is Hydro's policy with respect to extending the life of an existing  
15 station through refurbishment/repair versus a wholesale replacement of  
16 the station?  
17 f) Has Hydro's policy on refurbishment/repair vs replacement changed in  
18 recent years?  
19 g) Please list any previous instances where Hydro has identified a  
20 replacement of a diesel generating station for reasons other than load  
21 growth or a catastrophic event.  
22

23 **PUB-NLH-036** Further to the response to LAB-NLH-015, Attachment 3, has Hatch revised  
24 its November 10, 2020 report entitled "Labrador Interconnection Option  
25 Study – Final Report" to incorporate diesel genset and diesel generating  
26 station replacement costs into the analysis? If yes, please provide the updated  
27 report. If not, please explain why not.  
28

### 29 **Schedule 1 – Long-Term Supply for Southern Labrador – Phase 1**

30  
31 **PUB-NLH-037** Further to the response to PUB-NLH-014, what are the savings associated  
32 with the re-utilization of the existing three genset units upon completion of  
33 the new central diesel plant in Port Hope Simpson?  
34

35 **PUB-NLH-038** Further to the response to PUB-NLH-015:  
36 a) Please respond to the RFI using Alternative 3A project costs only (i.e.,  
37 without using Alternative 1 as a comparison).  
38 b) Please respond to the RFI using Alternative 4 (Interconnection to the  
39 Labrador Interconnected system) project costs only.  
40

41 **PUB-NLH-039** Further to the response to NP-NLH-003, page 1 of 2, lines 2-3, has Hydro or  
42 the Government of Newfoundland and Labrador approached the Government  
43 of Canada to fully or partial fund an interconnection from southern Labrador  
44 to the Labrador Interconnected system similar to that described in Alternative  
45 4? If yes, please provide details and/or documentation. If no, please explain  
46 why not given that there appears to be federal support for such initiatives in  
47 reducing CO<sub>2</sub>e emissions.

1 **Schedule 1 - Long-Term Supply for Southern Labrador - Phase 1: Appendix A Stakeholder**  
 2 **Engagement**

3  
 4 **PUB-NLH-040** Further to the response to PUB-NLH-016, Attachment 1, page 1 of 2, first  
 5 paragraph:

- 6 a) Has Hydro received feedback from other Labrador communities that are  
 7 not in support of Hydro's proposal with respect to the long-term supply  
 8 for southern Labrador? If so, please include details and/or  
 9 documentation.  
 10 b) Has Hydro received feedback from Labrador communities that are in  
 11 support of Hydro's proposal with respect to the long-term supply for  
 12 southern Labrador? If so, please provide details and/or documentation.  
 13 c) Did Hydro respond to the correspondence from the Town Council of  
 14 Mary's Harbour? If so, please provide details and/or documentation.  
 15 d) Is Hydro aware of responses from any of the individuals copied on the  
 16 correspondence from the Town Council of Mary's Harbour? If so,  
 17 please provide details and/or documentation.  
 18 e) Did Hydro provide to all the parties consulted a copy of its application  
 19 to the Board for the approval of its proposal for the long-term supply for  
 20 southern Labrador? If not, please identify the parties that were not  
 21 copied and explain the rationale for not providing them with a copy.  
 22

23 **PUB-NLH-041** Further to the response to PUB-NLH-016, Attachment 1, page 1 of 2, second  
 24 paragraph, did consultation with municipalities occur prior to the  
 25 development of Hydro's proposal with respect to the long-term supply for  
 26 southern Labrador? If so, please identify the municipalities consulted. If not,  
 27 please explain.  
 28

29 **Attachment 1- Long-Term Supply for Southern Labrador - Economic and Technical**  
 30 **Assessment**

31  
 32 **PUB-NLH-042** Further to the response to PUB-NLH-019, page 3 of 4, lines 3-4, the mining  
 33 company completed its Deep Fox Phase 3 drill program in August 2021 and  
 34 plans to announce results at the end of October. Has Hydro assessed the  
 35 impact, if any, of this potential mine development on its proposal with respect  
 36 to the long-term supply for southern Labrador? If so, please provide details  
 37 on the anticipated impact. If not, why not?  
 38

39 **PUB-NLH-043** Further to the response to PUB-NLH-023, page 2 of 2, Table 1 indicates that  
 40 for the past 27 years the primary driver for diesel generating station  
 41 replacement has been either a catastrophic event (e.g., fire) or load growth in  
 42 the community resulting in supplemental space being required in the station  
 43 to house additional generation.

- 44 a) Please confirm that no diesel generating stations have been replaced due  
 45 simply to age and/or condition of the building in the last 27 years. If not  
 46 confirmed please identify the diesel generating stations that were  
 47 replaced due to the age and/or condition of the building.  
 48 b) Please confirm that when major repairs are required to a diesel  
 49 generating station structure (e.g., roof replacement, upgrades to building

1 exterior, etc.), such repairs are typically proposed through capital  
 2 budget applications without the need to replace the entire diesel  
 3 generating station.  
 4

5 **PUB-NLH-044** Further to the response to LAB-NLH-015, page 3 of 5, lines 23-27, please  
 6 provide the estimates and assumptions Hydro used in deriving the diesel unit  
 7 and diesel plant replacement costs in its economic analysis.  
 8

9 **PUB-NLH-045** Reference: Application, Attachment 1 - Long-Term Supply for Southern  
 10 Labrador - Economic and Technical Assessment: Table 4 shows that the  
 11 Mary's Harbour diesel generating station is scheduled to be replaced after 36  
 12 years of service, the Port Hope Simpson diesel generating station is scheduled  
 13 to be replaced after 40 years of service, and the St. Lewis diesel generating  
 14 station is scheduled to be replaced after 39 years of service.

- 15 a) The Mary's Harbour and Port Hope Simpson diesel generating stations  
 16 were placed in service in 1994 and 1995 respectively. Why is the Mary's  
 17 Harbour diesel generating station being retired with a service life four  
 18 years less than Port Hope Simpson?
- 19 b) What is the anticipated life span of a diesel generating station before  
 20 replacement is required within Hydro's service territory?
- 21 c) What are the current service ages of each of the 23 diesel generating  
 22 stations within Hydro's service territory?
- 23 d) What are the current retirement dates for each of the 23 diesel generating  
 24 stations?
- 25 e) Please confirm that the economic analysis completed on Alternatives  
 26 3A and 3B did not include any provision for the replacement of the Port  
 27 Hope Simpson diesel generating station over the 50-year study period.  
 28 If confirmed, please explain why the expected service life of the Port  
 29 Hope Simpson proposed diesel generating station appears to be  
 30 significantly longer than the service lives of other diesel generating  
 31 plants. If not confirmed, please identify the year the replacement  
 32 occurred within the economic analysis and the estimated cost of the  
 33 replacement.  
 34

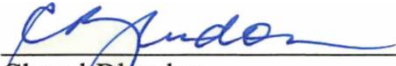
35 **PUB-NLH-046** Further to the response to NP-NLH-021, page 1 of 1, lines 6-12:

- 36 a) The Port Hope Simpson diesel generating station has three units with an  
 37 installed capacity of 1,725 kW with a total firm capacity of 1,000 kW.  
 38 The load forecast indicates a forecast peak load of 627 kW in 2021 for  
 39 Port Hope Simpson growing to 647 kW by the year 2070. While it is  
 40 acknowledged that Port Hope Simpson exceeds its design plant capacity  
 41 of 1500 kW, please explain why Hydro is of the view that an extension  
 42 to the Port Hope Simpson diesel generating station "would be  
 43 unavoidable given the current forecasted growth" for Port Hope  
 44 Simpson when it appears that there is ample firm capacity available to  
 45 accommodate forecasted growth up to the year 2070?
- 46 b) The St. Lewis diesel generating station has three units with an installed  
 47 capacity of 1,020 kW with a total firm capacity of 565 kW. The load  
 48 forecast for St. Lewis indicates a peak load of 329 kW in 2021 and  
 49 remaining there up to the year 2070. Given that the design plant capacity

- 1 of 2000 kW and firm capacity of 565 kW appear more than adequate,  
 2 please confirm that it is the “existing conditions” associated with the St.  
 3 Lewis diesel generating plant that is driving the need for replacement.  
 4 If confirmed, please identify the existing conditions that are driving the  
 5 need for replacement. If not confirmed, please identify the driver for  
 6 replacement.  
 7
- 8 **PUB-NLH-047** Further to the response to NP-NLH-004, page 2 of 3, Table - Transmission  
 9 Lines, the table lists the distance from Happy Valley-Goose Bay to Muskrat  
 10 Fall Intersection as 300 km.  
 11 a) Please confirm that distance is actually significantly less (i.e.,  
 12 approximately 45 km).  
 13 b) Please confirm that the resultant CAPEX figures shown in the table are  
 14 correct.  
 15
- 16 **PUB-NLH-048** Further to the response to NP-NLH-024, page 2 of 2, Table 1:  
 17 a) Please provide a similar analysis in the event that two of the three  
 18 generating stations remain.  
 19 b) Please provide a similar analysis in the event that one of the three  
 20 generating stations remains.  
 21
- 22 **PUB-NLH-049** Further to the response to NP-NLH-026, page 1 of 1, lines 13-14:  
 23 a) What are the current specific contingency plans for each of the  
 24 following individual communities: Charlottetown, Port Hope Simpson,  
 25 Mary’s Harbour, and St. Lewis?  
 26 b) How would each of these contingency plans change as a result of  
 27 implementing Alternative 3A?  
 28 c) Does Hydro plan to have access to sufficient mobile generation (either  
 29 via its own fleet or through rental organizations) to provide adequate  
 30 power to the four communities being served by the central Port Hope  
 31 Simpson diesel generating station in the event that the plant was to  
 32 become non-operational? If so, please identify the Hydro-owned mobile  
 33 generation that would be deployed as well as the amount of additional  
 34 mobile generation that would have to be garnered from other sources.  
 35 d) Does Hydro have concerns with respect to the transport of mobile  
 36 generation to these relatively remote communities in emergency  
 37 situations especially during winter months?  
 38
- 39 **PUB-NLH-050** Further to the response to NP-NLH-038, page 1 of 1, lines 13-14:  
 40 a) How many tonnes annually of CO<sub>2</sub>e are expected as a result of  
 41 Alternative 3A?  
 42 b) What contingency plans does Hydro have in the event that the allowable  
 43 annual limit was lowered such that Alternative 3A exceeded the annual  
 44 limit.

**DATED** at St. John's, Newfoundland and Labrador, this 1<sup>st</sup> day of October, 2021.

**BOARD OF COMMISSIONERS OF PUBLIC UTILITIES**

Per   
Cheryl Blundon  
Board Secretary