
Newfoundland & Labrador
BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

IN THE MATTER OF THE
APPLICATION FOR APPROVAL TO CONSTRUCT
A NEW REGIONAL DIESEL GENERATING STATION AND
INTERCONNECTION IN SOUTHERN LABRADOR
FILED BY
NEWFOUNDLAND AND LABRADOR HYDRO

ORDER NO. P.U. 12(2025)

BEFORE:

Dwanda Newman, LL.B.
Vice-Chair

John O'Brien, FCPA, FCA, CISA
Commissioner

Christopher Pike, LL.B., FCIP
Commissioner

**NEWFOUNDLAND AND LABRADOR
BOARD OF COMMISSIONERS OF PUBLIC UTILITIES**

ORDER NO. P.U.12(2025)

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

IN THE MATTER OF
an application by Newfoundland and Labrador Hydro for approval to construct a new regional diesel generating station and interconnection in Southern Labrador.

BEFORE:

Dwanda Newman, LL.B.
Vice-Chair

John O’Brien, FCPA, FCA, CISA
Commissioner

Christopher Pike, LL.B., FCIP
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1 1. DECISION SUMMARY

2

3 The Application for approval of capital expenditures to construct a new regional diesel
4 generating station and interconnection in Southern Labrador is not approved. The Board finds
5 that Hydro failed to demonstrate that the proposed project would result in power being
6 delivered to customers at the lowest possible cost, in an environmentally responsible manner,
7 consistent with reliable service. In particular, the Board finds that:

8 i) The revised project costs of \$110.9 million are not supported;

9 ii) The assumed replacements of the community diesel generating stations are not
10 justified;

11 iii) Hydro has not sufficiently prioritized the development of renewable generation;

12 iv) There was inadequate study of the potential interconnection with the Labrador
13 Interconnected system; and

14 v) Hydro should take immediate steps to reevaluate solutions to ensure access to safe
15 and reliable power for the communities of Charlottetown and Pinsent's Arm.

16

17 Given the criticality of the issues for Charlottetown and Pinsent's Arm, Hydro should revisit its
18 plan for the continued provision of reliable service to these communities while it develops and
19 implements a new long-term plan for Southern Labrador. Considering the clear stakeholder
20 preference for the implementation of solutions which are in keeping with the move to "green"
21 energy, Hydro should prioritize the early development of renewables as a part of its plans for the
22 region. All of this work should proceed in concert with the stakeholders, and alongside renewed
23 efforts by Hydro to ensure that it fulfills its duty to consult.

24

25 2. APPLICATION

26

27 On July 16, 2021 Newfoundland and Labrador Hydro ("Hydro") filed an application seeking
28 approval of capital expenditures in the amount of \$49.9 million to proceed with Phase 1 of a
29 project for the long-term supply for Southern Labrador, with completion in 2024 (the
30 "Application"). Phase 1 included the construction of a new diesel generating plant in Port Hope
31 Simpson and 50 km of 25 kV distribution line to interconnect the communities of Port Hope
32 Simpson and Charlottetown and Pinsent's Arm. Phase 2 to interconnect Mary's Harbour and
33 Lodge Bay was scheduled for 2030 at an estimated cost of \$15.2 million. Phase 3 to interconnect
34 St. Lewis in 2045 was estimated to cost \$7.5 million. The total estimated cost of all three phases
35 of the proposed project was \$72.6 million.¹

36

37 Several revisions to the Application were filed by Hydro throughout this proceeding:

- 38 • On May 31, 2023 the Application was revised to propose the construction of the regional
39 diesel generating station and the interconnection of the communities in a single
40 unphased project, at a total cost of \$86.4 million, with completion in 2027.

¹ Upon completion of Phase 1, updated cost estimates were to be completed to revise the economic analyses and determine the optimal timing for future phases. Hydro would file for approval for future phases at a future date.

- 1 • On October 5, 2023 the Application was revised increasing the costs to \$87.9 million,
2 with completion in 2028.
- 3 • On December 18, 2023 Hydro amended its request and asked for conditional approval
4 subject to Hydro fulfilling its duty to consult and receipt of environmental approval.
- 5 • On December 6, 2024 Hydro revised the estimated project costs to \$110.9 million, with
6 completion in 2029, and requested approval without the previously requested condition.
7

8 **3. PROCESS**

9

10 The intervenors in this proceeding were Newfoundland Power Inc. (“Newfoundland Power”); the
11 Consumer Advocate, Mr. Dennis Browne, KC; the Island Industrial Customer Group;² the
12 Labrador Interconnected Group;³ and NunatuKavut Community Council (“NCC”).⁴
13

14 On August 12, 2021 requests for information (“RFIs”) were filed by the Board, Newfoundland
15 Power and the Labrador Interconnected Group, which were answered by Hydro on September
16 9, 2021. A second round of RFIs was filed by the Board and Newfoundland Power on October 1,
17 2021, which were answered by Hydro on October 15, 2021.
18

19 On November 3 and 4, 2021 the Board received public comments from a number of communities
20 and individuals in Southern Labrador raising issues relating to environmental concerns,
21 consultation and alternative energy sources and renewables. On November 5, 2021 the Board
22 advised the parties that these comments raised important issues for the Board to consider.
23

24 On November 10, 2021 Hydro requested that the review schedule for the Application be paused
25 to allow further stakeholder consultation and engagement. On November 16, 2021 the Board
26 paused the review schedule.
27

28 On January 31, 2022 Hydro filed a summary in relation to its stakeholder engagement and
29 requested that the review schedule be resumed.
30

31 On March 17, 2022 Hydro filed supplemental information with the Board providing additional
32 technical and economic analysis of alternatives.
33

34 On April 7, 2022 the Board advised Hydro that more information was required before the review
35 schedule could be restarted and directed that Hydro engage an independent expert. On April 26,
36 2022 Hydro requested reconsideration of the Board’s request. The Board advised on May 16,
37 2022 that it had considered Hydro’s request and determined that the information on the record

² The members of the Industrial Customer Group are Corner Brook Pulp and Paper Limited, Braya Renewable Fuels (Newfoundland) GP Inc., and Vale Newfoundland and Labrador Limited.

³ The members of the Labrador Interconnected Group are the communities of Sheshatshiu, Happy Valley-Goose Bay, Wabush, and Labrador City.

⁴ NCC was accepted as an Intervenor on June 6, 2023.

1 was insufficient to allow proper consideration of the Application and that an independent expert
2 should be engaged.

3

4 On November 25, 2022 Hydro advised that it had retained Midgard Consulting Inc. (“Midgard”)
5 to provide an independent review of its proposal.

6

7 On March 31, 2023 Hydro filed Midgard’s report and advised that it was considering how it would
8 address Midgard’s recommendations.⁵

9

10 On May 31, 2023 Hydro filed a revised Application proposing the changes recommended by
11 Midgard, with revised estimated costs and schedule.

12

13 On June 20, 2023 RFIs were filed by the Board and Newfoundland Power, which were answered
14 by Hydro on July 7 and July 13, 2023.

15

16 On August 1, 2023 the Board requested additional information and analysis with respect to the
17 Application proposals. On October 5, 2023 Hydro filed a report from Midgard providing
18 additional analysis of the scenarios requested by the Board.⁶ Hydro also revised the Application
19 on October 5, 2023 increasing the project costs and delaying schedule completion.

20

21 On October 24, 2023 RFIs were filed by the Board, Newfoundland Power and NCC which were
22 answered by Hydro on November 8, 2023.

23

24 Over the period November 22, 2023 to December 8, 2023 the Board received additional
25 submissions and comments from the Intervenors and stakeholders.

26

27 On December 18, 2023 Hydro filed its reply requesting conditional approval of the Application
28 subject to Hydro’s fulfillment of the duty to consult and receipt of environmental approval.

29

30 On January 3, 2024 and January 26, 2024, the Board requested further information with respect
31 to Hydro’s new request for conditional approval. Hydro provided the requested information on
32 January 12, 2024 and February 13, 2024.

33

34 Over the period February 29, 2024 to March 13, 2024 submissions and comments were filed by
35 the Intervenors and stakeholders. Hydro filed its reply on March 19, 2024.

36

37 On December 6, 2024 Hydro filed an update increasing the project costs to \$110.9 million and
38 delaying project completion and requesting that the project be approved without the previously
39 requested condition.

⁵ Midgard Report, dated March 28, 2023.

⁶ Midgard Report, dated October 3, 2023.

1 On January 9 and 10, 2025 submissions and comments were filed. On January 16, 2025 Hydro
2 filed its reply.

3

4 **4. SUBMISSIONS AND COMMENTS**

5

6 Newfoundland Power submitted that the proposed project had the highest up-front capital cost
7 and that a high degree of confidence was required that lower cost options are not available, or
8 will not be available in the future.⁷ Newfoundland Power submitted that the alternative with the
9 continuation of the diesel generating stations in Charlottetown, Mary's Harbour, Port Hope
10 Simpson and St. Lewis was worthy of further consideration.

11

12 NCC initially requested that the Application be denied and that NCC be engaged from the outset
13 on any further discussions on energy solutions for NunatuKavut communities.⁸ NCC also noted
14 that Hydro had not addressed the opportunity to introduce renewable energy options. NCC
15 submitted that it had a significant concern with the impact of a large diesel plant on the
16 environment and its communities and that it was unclear the project met the requirement of
17 power being provided in an environmentally responsible manner.⁹ NCC noted concerns in
18 relation to the lack of renewable energy developments and the early and appropriate
19 engagement with NCC. NCC subsequently stated that it did not object to the proposed project,
20 conditional on Hydro fulfilling its duty to consult, prioritizing renewable integration and
21 supporting NCC involvement, participation and ownership of renewable projects. NCC later
22 confirmed its position and noted that while it did not oppose conditional approval, the next
23 stages of environmental assessment and engagement and fulfillment of the duty to consult and
24 accommodate NCC were important for NCC's continued support.¹⁰

25

26 Nunacor Development Corporation requested that the Application be stopped as it did not
27 adhere to Indigenous consultation or represent the spirit of the Community Development
28 Agreement.¹¹ Nunacor Development Corporation also stated that it and NCC needed to be
29 engaged from the outset on any further discussions on energy solutions for NunatuKavut
30 communities.

31

32 The Town of Mary's Harbour submitted comments on five separate dates each time indicating
33 that it did not support the construction of a new regional diesel plant. The Town stated:

- 34 i) on November 3, 2021 that other alternatives should have been explored further and that
35 the proposed project is not the greenest, most environmentally friendly option;
36 ii) on June 6, 2023 that it was disappointed with the Application and that the proposed
37 least-cost option was not the greenest, most environmentally friendly option;

⁷ Newfoundland Power Submission, dated November 30, 2023, page 3.

⁸ NCC Letter, dated November 4, 2021 (before intervenor status).

⁹ NCC Submission, dated December 8, 2023.

¹⁰ NCC Submissions, dated March 12, 2024, and January 9, 2025.

¹¹ Nunacor Development Corporation Letter, dated November 4, 2021.

- 1 iii) on November 22, 2023 that it did not think that diesel generated power was acceptable
2 as a long-term solution and that it did not support the construction of a regional diesel
3 plant to provide the Town with electricity for the next 50 years;
4 iv) on February 29, 2024 that it did not support conditional approval of the proposed
5 project; and
6 v) on January 9, 2025 that it did not support the construction of a regional diesel plant in
7 southeastern Labrador and that all communities should receive clean, affordable energy.
8 In the Town’s view, a regional diesel plant would prevent future growth in the area.
9

10 The Town of St. Lewis expressed concerns with the lack of public consultation and stated that
11 green energy projects needed to be explored, not diesel.¹² The Mayor of St. Lewis commented
12 that he did not support a new electricity source potentially being a diesel plant due to
13 environmental, reliability and efficiency concerns.¹³
14

15 The Town of Charlottetown supported the approval of the proposed project on the basis that it
16 would meet the communities’ immediate needs and benefit the entire region, noting 20% more
17 efficient diesel use, better potential to offset diesel power with renewable resources and no
18 decrease in employment. In addition it would be better able to meet future growth in the region
19 while addressing growing concerns connected with environmental changes.¹⁴ The Town stated
20 that while it was initially not pleased with Hydro’s decision to build a new multi-community
21 regional diesel plant, when it was explained that the plant would be converted to a regional back
22 up plant when a clean energy source is found or power from Churchill Falls could be diverted, it
23 agreed it was in the best interest of the region.¹⁵ The Town stated that it could understand the
24 opposition to the proposed project but noted that even with a potential hydro transmission line,
25 diesel back up would still be required.¹⁶
26

27 Port Hope Simpson supported the proposed project for a number of reasons, including Hydro’s
28 conclusion that it was the most economical option, it could be expected to outperform the
29 existing plants, and it would provide a greater opportunity to offset diesel fuel with renewable
30 energy. Based on the Town’s research there are approximately 200 remote communities in
31 Canada that are served by diesel generation and in its opinion, the technology had not reached
32 a point where small communities can operate solely on “green energy”.¹⁷
33

34 The Combined Councils of Labrador commented that the proposed project was proposed
35 without input from the general public and stated that residents would not accept the proposed

¹² Town of St. Lewis Letter, dated November 4, 2021.

¹³ Mayor of St. Lewis Letter, dated November 4, 2021.

¹⁴ Stakeholder Engagement Summary Report, January 31, 2022, Attachment 2, page 7, Town of Charlottetown Letter, dated January 24, 2022.

¹⁵ Town of Charlottetown Letter, dated April 11, 2022.

¹⁶ Town of Charlottetown Letter, dated June 16, 2023.

¹⁷ Stakeholder Engagement Summary Report, January 31, 2022, Attachment 2, page 4, Port Hope Simpson Letter, dated January 19, 2022.

1 project as it would limit access to clean, cheap energy and not help entice business.¹⁸ The
2 Combined Councils of Labrador stated that it looked forward to working with partners on a
3 cleaner alternative for electricity in Labrador.

4

5 Other comments filed with the Board included:

- 6 • Fifteen residents of the Town of Mary's Harbour signed a form letter stating that they
7 were disappointed with the proposal to provide Southern Labrador with future power
8 via diesel generation and asking to be connected to the Interconnected system near
9 Happy Valley-Goose Bay.¹⁹
- 10 • One individual expressed concern with the continued use of diesel and stated that the
11 proposal did not help with growing energy demand in the area.²⁰ It was suggested that
12 Hydro re-do its plan and engage in a consultation process with the residents of Southern
13 Labrador.
- 14 • Another individual commented that it was ironic that Hydro would propose a regional
15 diesel plant when Federal and Provincial governments were pushing for green energy
16 and offering rebates to switch from burning fossil fuels to heat homes.²¹ It was suggested
17 that diesel power is not good for the environment and that the cost will be unaffordable.
- 18 • Two university professors, Dr. Carlson and Dr. Way, suggested that renewable-based
19 energy generation was wrongly excluded from consideration by Hydro and that there
20 were deficiencies in Midgard's report.²²

21

22 Hydro filed a summary in relation to its stakeholder engagement in early 2022 setting out that
23 the preferred alternative of a majority of the stakeholders was interconnection to the Labrador
24 Interconnected system, as it would allow the communities to be served by hydroelectric
25 sources.²³ These stakeholders felt that recommending a diesel generating station to serve the
26 communities in Southern Labrador was contradictory to provincial and federal priorities to
27 reduce reliance on non-renewable sources of energy and reduce greenhouse gas emissions.
28 Some stakeholders questioned whether it would be more effective to rebuild the diesel
29 generating station in Charlottetown, allowing Hydro to focus its efforts on securing funding and
30 support to advance the longer-term preference for the interconnection to the Labrador
31 Interconnected system. Community representatives noted that despite having two of the largest
32 hydroelectric resources in their backyard, their communities continue to rely on diesel
33 generation and could not avail of this renewable resource. It was suggested that opportunities
34 for regional expansion could be much more significant with the interconnection to the Labrador
35 Interconnected system and it was noted that customers on the Labrador Interconnected system
36 pay lower rates. In addition, two stakeholders wrote Hydro as follows:

- 37 • NCC, on behalf of itself and Nunacor, requested that Hydro address how and under what
38 conditions renewable generation could be added with the proposed project, how the

¹⁸ Combined Councils of Labrador Letter, dated November 1, 2021.

¹⁹ Signed Petitions from Public, dated November 3, 2021.

²⁰ B.R. Letter (Redacted), dated November 3, 2021.

²¹ J.J. Letter, dated November 24, 2023.

²² Queen's University Letter, dated January 9, 2025.

²³ Stakeholder Engagement Summary Report, January 31, 2022.

1 project will impact the financial viability of adding distributed renewable energy and the
 2 schedule of possible renewable energy investments. NCC asked that the various options
 3 be compared from a societal perspective, accounting for the cost of carbon emissions,
 4 local economic benefits from distributed renewable generation and demand-side
 5 management investment.²⁴

- 6 • The Town of Mary's Harbour stated that it did not support and did not want to provide
 7 their community with diesel generated power into the future. The Town suggested that
 8 Hydro construct a new diesel plant in Charlottetown and explore the most affordable
 9 options for clean energy in Labrador.²⁵

10
 11 Hydro submitted in reply that it had provided numerous sensitivity analyses which all had
 12 determined the proposed project to be the least-cost solution.²⁶ Hydro submitted that the
 13 evidence continued to support the proposal to construct a regional diesel plant with an
 14 interconnected system and requested that the Application be approved.²⁷

15 **5. PROPOSED PROJECT AND ALTERNATIVES**

16
 17
 18 The Application proposed the construction of a regional diesel generating station in Port Hope
 19 Simpson and the phased interconnection of the communities with an N-2 planning standard. The
 20 estimated cost of phase 1 was \$49.9 million with total costs of \$72.6 million for all three phases.
 21 Long-term supply options for Southern Labrador have been under review for some time but the
 22 need for a long-term solution was expedited due to the October 2019 fire at the Charlottetown
 23 Diesel Generating Station which left Charlottetown and Pinsent's Arm served exclusively by
 24 mobile generation. Initially the Application set out the following six alternatives:

- 25 • Community diesel generating stations with mobile generation in Charlottetown
- 26 • Community diesel generating stations with a new plant in Charlottetown
- 27 • A new regional diesel generating station and phased interconnection of the communities
- 28 • A new regional diesel generating station with immediate interconnection of the
 29 communities
- 30 • Interconnection with the Labrador Interconnected system ("LIS")
- 31 • Interconnection with hydro generation in Southern Labrador

32
 33 Hydro's analysis focused on the first four alternatives as the interconnection with the LIS and the
 34 hydro generation options were considered not viable.²⁸

²⁴ Stakeholder Engagement Summary Report, January 31, 2022, Attachment 2, page 1, NCC Letter, dated December 16, 2021.

²⁵ Stakeholder Engagement Summary Report, January 31, 2022, Attachment 2, page 9, Town of Mary's Harbour Letter, dated January 26, 2022.

²⁶ Hydro Reply, dated December 18, 2023.

²⁷ Hydro Request for Approval, dated December 6, 2024.

²⁸ Application, dated July 16, 2021, Schedule 1, page 7-8.

1 After having discussions with Newfoundland Power, Hydro advised that it had reviewed two
2 additional alternatives:²⁹

- 3 • Immediate interconnection of the communities without a regional diesel generating
4 station; and
- 5 • Immediate interconnection of the communities with a regional diesel generating
6 station when the plant in Mary's Harbour is scheduled to be replaced in 2030.

7
8 Hydro advised after review of these alternatives, that the proposed phased interconnection of
9 the communities with a regional diesel generating station continued to be the least-cost option.

10
11 Midgard addressed the eight alternatives identified by Hydro as well as variations of these
12 alternatives and concluded that the least-cost option was the immediate construction of a
13 regional diesel generating station and interconnection of the communities with renewables to
14 an N-1 planning standard. Midgard recommended that Hydro pursue the immediate
15 interconnection and construction of a regional diesel plant while pursuing cost-competitive
16 renewable energy procurement opportunities to offset day to day diesel consumption.

17
18 After review of Midgard's recommendations, Hydro revised its proposals and requested approval
19 of the immediate interconnection of the communities with a regional diesel generating station
20 constructed to an N-1 planning standard, though an additional engine bay was included at the
21 station to allow for an N-2 planning standard, if required in the future. The proposed regional
22 diesel generating station would have an installed capacity of approximately 6,300 kW and the
23 distribution infrastructure would include 133 kilometres of 25 kV distribution lines
24 interconnecting the communities of Charlottetown, Pinsent's Arm, Port Hope Simpson, Mary's
25 Harbour, Lodge Bay, and St. Lewis, with 25 kV voltage conversion in the communities (the
26 "Project"). The total estimated cost of the proposed Project was \$86.4 million which was
27 increased to \$87.9 million in October of 2023 and \$110.9 million in December of 2024.

28
29 Newfoundland Power submitted that Hydro's proposed alternative has the highest upfront
30 capital cost compared to any other alternative. Newfoundland Power stated:

31
32 Because of its significant upfront capital cost, proceeding with the proposed alternative
33 requires a high degree of confidence that less expensive alternatives are not available or are
34 not likely to occur in the future.³⁰

35
36 Hydro disagreed with Newfoundland Power's assessment that it had not established a sufficient
37 degree of confidence that the proposed Project is the least-cost solution. Hydro asserted that
38 the selection of an alternative that is not supported as least-cost by the preponderance of
39 evidence on the record, such as the continued operation of the community diesel generating
40 stations, would be inconsistent with prudent decision-making.

²⁹ Hydro Letter, dated March 17, 2022.

³⁰ Newfoundland Power Submission, dated November 30, 2023.

1 The Board notes that this Application proposed major changes for the supply of power to
2 Southern Labrador with the development of a new regional diesel generating station and a new
3 transmission system connecting six communities that were previously served by diesel
4 generating stations situated in four of the communities. Throughout this proceeding several
5 issues arose in relation to the evidence filed in support of the proposed Project. These issues are
6 discussed below:

- 7 i) the increase in Project costs to \$110.9 million;
- 8 ii) diesel generating station replacement;
- 9 iii) renewable generation;
- 10 iv) interconnection with the LIS;
- 11 v) Charlottetown Supply; and
- 12 vi) Hydro's duty to consult.

13 14 **5.1. Increase in Project Costs**

15
16 On December 6, 2024 Hydro advised that the proposed Project costs had increased to \$110.9
17 million. This is approximately \$23 million or 26% higher than the previous cost estimate, fourteen
18 months earlier. Despite this significant increase, Hydro did not revise the Application and did not
19 file updated evidence from Midgard.

20
21 Hydro explained that there are three primary drivers for the increase in the direct project costs:

- 22 • Project oversight cost increases of approximately \$4.5 million increased the estimated
23 direct project costs by approximately 6%. Hydro did not provide a breakdown of these
24 costs but explained that this increase is due to a number of factors, including the
25 involvement of Hydro's Major Projects department and the engagement of an
26 engineering procurement and construction management ("EPCM") consultant. Hydro did
27 not explain why or how placing responsibility for the Project with its Major Projects
28 department resulted in cost increases. Hydro explained that it determined that an EPCM
29 consultant should be engaged based on its further project planning and as a result of
30 lessons learned in another major project, considering the complexity of this Project and
31 the criticality of ensuring timely completion.
- 32 • Inflationary increases to equipment and material costs of approximately \$6.6 million,
33 increased the estimated direct project costs by approximately 9%. Hydro stated that the
34 October 2023 estimates were out of date and were updated to better reflect current
35 industry and market conditions. Hydro did not provide a breakdown of these cost
36 increases and did not explain why these costs would have increased by such a large
37 percentage in 14 months.
- 38 • The refinement of deliverables resulted in an increase of \$3.5 million in direct project
39 costs or almost 5%. Hydro advised that as it continued front-end planning for this Project
40 throughout 2024 it determined that several updates were necessary. The most significant
41 changes were additional electrical equipment within the distribution system design,
42 including distribution transformers and reclosers, insurance costs, additional FEED costs,
43 and necessary commissioning resources. Hydro did not provide an explanation as to why

1 these refinements were necessary and why these were not identified earlier in this
2 process.

3
4 In addition to the three drivers addressed by Hydro, the indirect project costs also increased
5 significantly. These costs include contingency, interest and escalation and are typically a
6 percentage of direct costs. According to Hydro indirect project costs increased by approximately
7 \$8.3 million. This is an increase of approximately 55%. Hydro did not provide details as to this
8 increase or an explanation as to why the increase in these costs was so much higher than the
9 increase in direct project costs which increased by approximately 20%. The magnitude of the
10 increase in indirect project costs is not consistent with Hydro's explanation that these costs are
11 determined based on direct project costs.

12
13 The Board notes that Hydro concluded that even with the increase in costs to \$110.9 million the
14 proposed Project continues to be the least-cost option based on Midgard's sensitivity analysis.
15 Midgard's analysis showed that the proposed Project continued to be least-cost with
16 interconnection cost increases of up to 50%. The Board notes that the estimated interconnection
17 costs are approaching this level as they have increased by 34%, even without considering the
18 potential range of costs.³¹ Given that Midgard's sensitivity analysis showed that small changes in
19 assumptions can have a significant impact, the Board has concerns as to such a significant change
20 in costs being considered in isolation from other potential changes. The sensitivity analysis
21 showed that changing certain assumptions significantly decreased the number of scenarios
22 where the proposed Project was the favoured alternative.³² Based on Midgard's sensitivity
23 analysis the proposed Project becomes the least-cost alternative in year 19 of the analysis and
24 there were a number of scenarios where it is not least-cost.³³ With the significant increase in
25 costs, it is now likely that the proposed Project would not be the least-cost alternative until much
26 later and there would likely be even more scenarios where it would not be least-cost. The Board
27 does not accept that it is reasonable to conclude that the revised costs are least-cost based on
28 the sensitivity analysis previously conducted by Midgard.

29
30 The Board is not satisfied that Hydro has provided sufficient detail to support the increase in the
31 estimated proposed Project costs. It is not clear whether there was a full analysis of the
32 circumstances to determine whether there were other changes which may impact the least-cost
33 analysis. The Board finds that without additional evidence and analysis it is not possible to assess
34 the significant change in the costs and whether the proposed Project would result in power being
35 delivered to customers at the lowest possible cost, in an environmentally friendly manner,
36 consistent with reliable service.

³¹ Class 3 estimates have an accuracy range of -20% to +30%.

³² PUB-NLH-097, page 1. This sensitivity analysis represents a range of reasonable alternatives including the timing of the forecast capital spending and the extension of life of the community diesel plants.

³³ PUB-NLH-097, Attachment 1, page 7.

5.2. Diesel Generating Station Replacement

As part of the proposed Project, the diesel generating stations at St. Lewis, Port Hope Simpson and Mary's Harbour would be retired when the regional plant is commissioned, long before the end of the useful life of these stations.³⁴ Most of the alternatives to the proposed Project were evaluated assuming that these plants would be replaced when they reached 40 years of service or before.³⁵

Newfoundland Power submitted that Hydro has in practice maintained its diesel generating stations beyond 40 years of service and noted that the cost of the assumed replacement of the diesel generating stations at St. Lewis, Port Hope Simpson and Mary's Harbour is approximately \$111 million. Newfoundland Power stated:

In Newfoundland Power's submission, it is important for the Board to have a clear understanding of whether these diesel generating stations can be maintained, operated, and potentially expanded in the future in a manner similar to the \$10.4 million project that was recently completed in Makkovik. If such projects are possible, the estimated capital cost of \$111 million to replace three diesel generating stations could be avoided by completing refurbishment projects of approximately \$31 million. This could influence whether Hydro's proposed alternative is the least cost alternative.³⁶

Newfoundland Power submitted that the replacement of the diesel generating stations was not justified on the basis of load growth which has remained relatively stable since 2001 and is forecast to remain stable. Newfoundland Power observed the capacity of the existing diesel generating stations in Mary's Harbour, Port Hope Simpson, and St. Lewis appear capable of meeting future demand in all scenarios except where load increases by 2% annually.³⁷

Hydro stated that it believes that the 40-year life is a reasonable assumption for the diesel generating stations and that one cannot assume that plant life can be extended indefinitely. Hydro noted that the sensitivity analysis conducted by Midgard included plant life extension to 50 years of service and the proposed Project remained least-cost in 88% of the scenarios.³⁸

Midgard's reports do not address the assumed 40-year useful life of the diesel generating stations in any level of detail.³⁹ Midgard subsequently clarified that it had reviewed the diesel generating stations in service and found that Hydro's maintenance program and retirement dates

³⁴ PUB-NLH-045; NP-NLH-075; NCC-NLH-007.

³⁵ Application, dated July 16, 2021, Attachment 1, Economic and Technical Assessment, pages 18 and 33; Hydro letter, dated March 17, 2022, Technical Note RP-TN-051, pages 5 and 6, Technical Note RP-TN-054, page 7; PUB-NLH-045.

³⁶ Newfoundland Power Submission, November 30, 2023, page 5.

³⁷ Midgard Report, dated October 3, 2023, page 39, Table 18.

³⁸ PUB-NLH-097, Attachment 1, sets out that the proposed Project remains least-cost in 80%, not 88% of the scenarios.

³⁹ Midgard Report, dated March 28, 2023, on page 73; Midgard Report, dated October 3, 2023, page 11.

1 were generally consistent with other similar utilities and was prudent in retention of units.⁴⁰ This
2 appears to be a very high level review and does not include a condition assessment or associated
3 engineering work.⁴¹ Midgard also did not address Hydro's practice with respect to diesel
4 generating station replacement. Midgard acknowledged that it was possible to extend the
5 operational lives of the existing generating stations but suggested that it may be more costly and
6 noted that the proposed Project with the early retirement of the stations was found to be the
7 lowest cost scenario.⁴²

8
9 The Board notes that Hydro has never replaced a diesel generating station except in the case of
10 a capacity shortfall or a catastrophic event, such as a fire.⁴³ Hydro has eleven diesel generating
11 stations which are older than 40 years.⁴⁴ Apart from the diesel generating stations involved in
12 this Application, Hydro has identified only two plants that are nearing the need for replacement.
13 Hydro's two oldest diesel generating stations, Paradise River and Rigolet, which were constructed
14 in 1970 and 1976, respectively, have not yet been replaced. These stations have continued to
15 meet the needs of the communities with refurbishments and upgrades to prolong the life of
16 these stations.⁴⁵

17
18 According to the Application the schedule for the replacement of diesel generating stations at
19 St. Lewis, Port Hope Simpson and Mary's Harbour was established based on the service life,
20 capacity, and condition of these plants.⁴⁶ Hydro explained that it considers a number of factors
21 when considering replacement of a diesel generating station, including the role of the station,
22 i.e. stand-by versus prime power, its condition and age.⁴⁷ Hydro also stated that it seeks to extend
23 the life of its diesel generation stations through refurbishment and upgrades and, generally
24 speaking, replacement is not considered until either asset condition and/or load growth
25 requirements dictate the necessity.⁴⁸ The evidence as to the condition and capacity of the St.
26 Lewis, Port Hope Simpson and Mary's Harbour diesel generating stations is discussed below.

⁴⁰ PUB-NLH-068.

⁴¹ PUB-NLH-070.

⁴² PUB-NLH-070.

⁴³ PUB-NLH-023; PUB-NLH-043.

⁴⁴ PUB-NLH-035; PUB-NLH-045; NP-NLH-089.

⁴⁵ PUB-NLH-035; PUB-NLH-045, pages 4 and 5; NP-NLH-089. Hydro's 2023 Capital Budget Application Five-Year Capital Plan (2023-2027) included a multi-year project to replace the Paradise River Diesel Generating station in 2025 and 2026. The 2024 Capital Budget Application Five-Year Capital Plan (2024-2028) did not include the replacement of either Paradise River or Rigolet diesel generating stations. The 2025 Capital Budget Application Five-Year Capital Plan (2025-2029) included the replacement of the Rigolet diesel generating station in a multi-year project over the 2028 to 2031 period.

⁴⁶ Application, dated June 10, 2021, Long Term Supply Study, page 18.

⁴⁷ NP-NLH-089.

⁴⁸ PUB-NLH-045, page 4.

1 **5.2.1. St. Lewis**

2

3 St. Lewis is Hydro’s newest diesel generating station having been built in 2006.⁴⁹ It is less than
4 20 years old and based on the evidence it continues to be in good condition.⁵⁰ It is clear from
5 the evidence that there is sufficient capacity at this plant to serve the forecast load.⁵¹ Despite its
6 relative newness and the fact that the capacity is adequate to serve the forecast load, Hydro
7 assumed that it would be replaced when it has reached 40 years of service.⁵² Hydro stated:

8

9 The projected replacement of the St. Lewis Diesel Generating Station in 2045 is 22 years
10 away. Hydro cannot accurately predict the condition or suitability of the plant at that time;
11 however, Hydro must include reasonable assumptions and has projected its replacement
12 date based on Hydro’s historical experience operating and maintaining its diesel generating
13 stations on isolated systems.⁵³

14

15 The Board notes that the costs that Midgard estimated to upgrade this plant to extend its service
16 life to 50 years were only approximately \$440,000 and there was no evidence as to the costs of
17 a further extension.⁵⁴ The Board finds that the evidence does not demonstrate that it is
18 reasonable to assume that diesel generating station at St. Lewis would be replaced when it has
19 reached 40 years of service, given its condition and that it is appropriately sized to meet the
20 forecast load.

21

22 **5.2.2. Port Hope Simpson**

23

24 The diesel generating station at Port Hope Simpson is one of Hydro’s newest diesel generating
25 stations having been constructed in 1995.⁵⁵ According to Hydro and Midgard the current capacity
26 is sufficient to meet the existing and forecast load.⁵⁶ While this plant has exceeded its design
27 capacity, based on the evidence it is possible to replace units with larger ones which would result
28 in excess firm capacity.⁵⁷ Based on the evidence the Port Hope Simpson has adequate capacity.⁵⁸

29

30 In terms of condition, the Port Hope Simpson diesel generating station is 30 years old and,
31 according to Hydro, it is not well suited to reliably meet the needs of customers in the

⁴⁹ PUB-NLH-045.

⁵⁰ PUB-NLH-035, Hatch Report, Condition Assessment Final Report, dated December 18, 2009, page 22.

⁵¹ NP-NLH-061; PUB-NLH-072; Hydro letter, dated March 17, 2022, Attachment 2, Technical Note RP-TN-089, pages 3 to 4, and Midgard Report, dated March 28, 2023, page 45.

⁵² PUB-NL-046.

⁵³ NP-NLH-090, pages 2-3.

⁵⁴ PUB-NLH-097, Attachment 1, pages 5-6.

⁵⁵ PUB-NLH-045.

⁵⁶ Application, dated July 16, 2021, Attachment 1, page 18; PUB-NLH-046; Midgard Report, dated March 28, 2023, page 45.

⁵⁷ Midgard Report, dated March 28, 2023, page 45; NP-NLH-087; Hydro letter, dated March 17, 2022, Technical Note RP-TN-051, page 4.

⁵⁸ NP-NLH-061, PUB-NLH-072; Hydro Letter, dated October 5, 2023, Attachment 2, Technical Note RP-TN-089, pages 3-4.

1 community, as it requires significant upgrades to address condition and space constraints.⁵⁹
2 Significant work and capital cost is expected to be required to address the anticipated condition
3 of the plant, consisting of a major refurbishment.⁶⁰ The Board notes that there was little evidence
4 as to specific work required at this plant and the associated costs. The costs estimated by
5 Midgard to upgrade Port Hope Simpson to extend its service life to 50 years were not significant,
6 approximately \$2.04 million.⁶¹ There was no evidence as to the costs of further life extension.
7 The Board finds that the evidence does not demonstrate that it is reasonable to assume that the
8 Port Hope Simpson diesel generating station would be replaced when it reaches 40 years of
9 service and that it would be uneconomic to extend its service life.

10 11 **5.2.3. Mary's Harbour**

12
13 The diesel generating station at Mary's Harbour was constructed in 1994, and is still relatively
14 new compared to other Hydro diesel generating stations.⁶² The Application proposed that this
15 plant be replaced in 2030 before it reaches 40 years of service though in one alternative the
16 operation of this plant was extended to 2035 to coincide with the replacement of the plant in
17 Port Hope Simpson.⁶³

18
19 The Application set out that the capacity at the Mary's Harbour diesel generating station is
20 adequate to meet the assumed load.⁶⁴ This is based on the assumption that mobile generation
21 is included in capacity, consistent with Hydro's Rural Planning Standard.⁶⁵ Midgard did not agree
22 that mobile generation should be included in capacity and as a result concluded that there was
23 a capacity shortfall at the Mary's Harbour diesel generating station. According to Midgard the
24 use of mobile generation as a planning resource to supply baseload electricity is not suitable and
25 the mobile units at this plant should not be used to calculate capacity.⁶⁶ It was Midgard's view
26 that mobile generation comprises an unsustainably important component of the supply mix at
27 the Mary's Harbour diesel generating station.⁶⁷ Hydro agreed with Midgard that mobile
28 generation should not be included in capacity to meet winter load but was less clear as to
29 whether it should be included to meet summer load.⁶⁸ The analysis filed in the May and October
30 2023 revisions to the Application included mobile generation in the capacity to meet summer

⁵⁹ NP-NLH-090; PUB-NLH-045.

⁶⁰ PUB-NL-046.

⁶¹ PUB-NLH-097, Attachment 1, pages 5-6.

⁶² PUB-NLH-045.

⁶³ PUB-NLH-090; Midgard Report, dated October 3, 2023, page 28.

⁶⁴ Application, dated July 16, 2021, Schedule 1, page 3; Application, dated July 16, 2021, Attachment 1: Economic and Technical Assessment, pages 2 and 4; Hydro letter, dated March 17, 2022, Attachment 1, Technical Note RP-TN-051, Southern Labrador-Interconnection without Regional Diesel Plant, page 2; LAB-NLH-005.

⁶⁵ Application, dated July 16, 2021, Schedule 1, page 3 and 33; Application, dated July 16, 2021, Schedule 1, Appendix D.

⁶⁶ Midgard Report, dated March 28, 2023, pages 6, 39 and 45; NP-NLH-087.

⁶⁷ Midgard Report, dated March 28, 2023, page 38.

⁶⁸ Midgard Report, dated March 28, 2023, Attachment 1, page 39; NP-NLH-087.

1 peak load.⁶⁹ It is not clear if this was an oversight or if it reflects an assessment by Hydro that
2 mobile generation may be considered firm for summer peak in the circumstances.

3
4 Based on the evidence the capacity at the Mary's Harbour diesel generating station is adequate
5 to meet load for most of the year, even excluding the mobile units. Whether mobile generation
6 is included in capacity for the summer is an important issue since there is a potential capacity
7 shortfall in the summer if mobiles are not included, depending on the load forecast used.⁷⁰ The
8 Board accepts the evidence that mobile generation should not be included in firm capacity for
9 winter peak, but finds that the evidence was not clear as to whether mobile generation should
10 be included in firm capacity to meet summer peak for Mary's Harbour. Hydro included mobile
11 generation in its summer capacity analysis whereas Midgard didn't.⁷¹ Midgard did not address
12 Hydro's practice with respect to mobile generation or the particular circumstances in Mary's
13 Harbour. In particular, Midgard did not address whether there should be different considerations
14 for summer peak as assumed by Hydro. The Board notes that the summer peak is for relatively
15 short periods in the May - June timeframe when the use of mobile generation would be of less
16 concern than it would be in the winter.⁷² The Board finds that the evidence does not demonstrate
17 that there is a capacity deficit at the Mary's Harbour diesel generating station.

18
19 In terms of the condition of the Mary's Harbour diesel generating station, according to Hydro it
20 is not well suited to reliability meet the needs of customers, and requires significant upgrades to
21 address condition and space constraints over the study period.⁷³ The building envelope is
22 showing signs of age, the roof is in poor condition, has experienced roof leaks and would need
23 to be fully replaced if the plant were to continue to operate beyond 2027.⁷⁴

24
25 The Board notes that the capital cost of extending the replacement of the Mary's Harbour plant
26 from 2030 to 2035 to match the replacement date for the Port Hope Simpson plant was
27 estimated to be less than \$2 million.⁷⁵ This would involve the completion of outstanding capital
28 work, including roof replacement, distribution re-conductoring, and service conductor
29 replacement. It is not clear on the record whether Hydro completed any additional analysis as
30 to what would be required to extend the life of this plant beyond 2035, however Midgard
31 estimated that extending the service life of this plant to 50 years would require upgrades costing
32 approximately \$4.28 million.⁷⁶ The Board notes that three new fuel storage tanks were installed

⁶⁹ Application, dated July 16, 2021, page 3, both revisions state Mary's Harbour has firm capacity of 1,090 kW.

⁷⁰ The forecast in the Application, Midgard's Report and PUB-NLH-072 are different. Application, dated July 16, 2021, Attachment 1, Long-Term Supply Study for Southern Labrador: Economic & Technical Assessment, page 4, Table 2 and Appendix A; Hydro Letter, dated October 5, 2023, Technical Note RP-TN-089, page 3 and 4 and Technical Note RP-TN-051, page 2; NP-NLH-061.

⁷¹ Hydro Letter, dated March 17, 2022, Technical Note RP-TN-051, page 2.

⁷² Midgard Report, dated March 28, 2023, Attachment 1, page 35.

⁷³ NP-NLH-090.

⁷⁴ PUB-NLH-065; PUB-NLH-045; NP-NLH-090.

⁷⁵ Hydro Letter, dated October 5, 2023, Attachment 1, Midgard Report, dated October 3, 2023, pages 20 and 31; Attachment 2, Technical Note RP-TN-089, page 10. This does not include estimated cost for fire suppression.

⁷⁶ PUB-NLH-097, Attachment 1, pages 5-6.

1 at this plant in 2022.⁷⁷ While the Board accepts that the Mary's Harbour plant is the oldest of
2 the Southern Labrador diesel generating stations and is in the worst condition, the Board finds
3 that the evidence does not demonstrate that it is reasonable to assume that it would be replaced
4 in 2030, as proposed, or when it reaches 40 years of service in 2035, and that it would be
5 uneconomic to extend its service life.

6
7 In conclusion, the Board finds that Hydro's assumption that the diesel generating stations at St.
8 Lewis, Port Hope Simpson and Mary's Harbour would be replaced at 40 years of service or earlier
9 is not consistent with Hydro's past practice.⁷⁸ Hydro has never replaced a diesel generating
10 station in the absence of a capacity deficit or a catastrophic loss.⁷⁹ In addition, the Board notes
11 that Hydro did not assume that the new regional diesel generating station would be replaced at
12 40 years of service.⁸⁰ Based on the evidence as to the load, capacity and condition of St. Lewis,
13 Port Hope Simpson and Mary's Harbour, the Board is not satisfied that it is reasonable to assume
14 that these stations would be replaced when they reach 40 years of service or before. While
15 capital costs would be required to extend the service lives of these stations, the evidence does
16 not demonstrate that these costs would outweigh the savings associated with delaying the
17 replacement of these stations.⁸¹

18
19 The Board believes that it is probable that it would be economic to maintain one or more of the
20 community diesel plants for some time beyond 40 years, particularly the St. Lewis and Port Hope
21 Simpson plants. The Board notes that the life extension of the diesel generating stations to 50
22 years had a significant impact on the sensitivity analysis.⁸² While there was no analysis extending
23 the service life of the diesel generating stations beyond 50 years, this would push the
24 replacement of both the St. Lewis and Port Hope Simpson plants beyond the analysis period
25 which could change the least-cost analysis significantly. This would not be an unreasonable
26 assumption given Hydro's history of never having replaced a diesel plant in the absence of
27 catastrophic failure or capacity shortfall.

28 29 **5.3. Renewable Generation**

30
31 The increased potential for renewable generation is one of the cited benefits of the proposed
32 Project as renewables can be more easily integrated into larger systems that are less sensitive to
33 fluctuations in supply or demand.⁸³ In addition, it was noted that the proposed Project would
34 reduce design restrictions and the number of control systems and provide for a single control
35 system to command all renewable systems.⁸⁴

⁷⁷ Capital Expenditures and Carryover Report for the Period Ended December 31, 2022, dated March 31, 2023, pages 30-31. Three new fuel storage tanks were installed in 2022, approved in Order No. P.U. 37(2021).

⁷⁸ NP-NLH-020.

⁷⁹ PUB-NLH-023; PUB-NLH-043.

⁸⁰ PUB-NLH-045, page 4.

⁸¹ PUB-NLH-097, Attachment 1, pages 5-6.

⁸² PUB-NLH-097, Attachment 1, pages 7-10.

⁸³ Application, dated October 5, 2023, Schedule 1, page 16.

⁸⁴ Application, dated October 5, 2023, Attachment 1, Appendix B, page 4.

1 Newfoundland Power submitted that Southern Labrador currently has significant potential to
2 accommodate renewable energy projects and noted that the continued operation of the
3 community diesel generating stations has 87% of the renewable energy potential of the
4 proposed Project.⁸⁵ Newfoundland Power noted that Hydro currently has no renewable sources
5 of generation in Charlottetown, Port Hope Simpson and St. Lewis and 50% of the renewable
6 potential continues to be available in Mary's Harbour.

7
8 The NCC raised concerns about the impact that a large diesel plant would have on the
9 environment and its communities given the impacts of climate change and noted that power is
10 to be provided in an environmentally responsible manner.⁸⁶

11
12 Most of the community and other stakeholder commentary supported the implementation of
13 green solutions for Southern Labrador. The Town of Mary's Harbour objected to the installation
14 of the new regional diesel plant and stated that it strongly believes that it is not the right
15 approach given the global movement towards clean energy and referenced the initiatives by
16 both the Federal and Provincial Governments for a greener environment and cleaner energy.⁸⁷
17 The Town of St. Lewis stated that more green energy projects are needed including hydro, wind
18 and solar power.⁸⁸ The Mayor of St. Lewis questioned whether the installation of the diesel
19 would be a step backward. The Combined Councils of Labrador stated that coastal Labrador
20 residents do not accept the proposed Project because it limits their access to clean, cheap
21 energy.⁸⁹ A letter signed by fifteen residents expressed concerns about the proposed Project,
22 stating that it is not an environmentally friendly solution. Another resident urged the Board to
23 reject Hydro's Application as it does not conform to the best interests of the residents of
24 Southern Labrador and the expectations of clean green energy for the region.⁹⁰ Two university
25 professors urged the Board not to approve the proposed Project on the basis that Hydro did not
26 fairly consider renewable generation options, noting that renewable-based energy generation
27 was wrongly excluded from consideration and the costs of renewable generation were not
28 accurately considered.⁹¹

29
30 The Towns of Charlottetown and Port Hope Simpson both supported the proposed Project. Port
31 Hope Simpson's support was based, in part, on the potential for renewable energy and greater
32 opportunity to offset diesel consumption.⁹² The Town of Charlottetown stated:

33
34 When it was decided by NL Hydro engineering that a new multi-community regional plant
35 was the best solution, our community council was not pleased. The thought that a new
36 diesel power plant was being proposed by NL Hydro made no sense as the world is moving

⁸⁵ Newfoundland Power Submission, dated November 30, 2023.

⁸⁶ NCC Submission, dated December 7, 2023.

⁸⁷ Mary's Harbour Town Council Letter, dated February 29, 2024.

⁸⁸ Town of St. Lewis Letter, dated November 4, 2021.

⁸⁹ Combined Councils of Labrador Letter, dated November 1, 2021.

⁹⁰ BR Letter, dated November 2, 2021.

⁹¹ Dr. Jordan T. Carlson and Dr. Robert G. Way Letter, dated January 9, 2025.

⁹² Port Hope Simpson Town Council Letter, dated January 19, 2022.

1 towards newer, cleaner and environmentally safer power solutions. However, when it was
2 explained that this new plant would only be the primary station at first, then it would be
3 converted to the regional backup station when a clean energy source is found or power from
4 Churchill Falls could be diverted to the region, our council agreed that this was in the best
5 interest of the region.⁹³
6

7 Hydro submitted in its reply that its planned approach is to integrate renewable energy sources
8 through power purchase partnerships with Indigenous and Community groups to ensure it is
9 focused on meeting its mandate for the safe and reliable provision of electricity in an
10 environmentally responsible manner while building on partnerships with local and Indigenous
11 stakeholders and leveraging the tax and financial incentives that may be available to these
12 groups.⁹⁴
13

14 The Board notes that the environmental impact of the proposed Project was the overriding issue
15 in this proceeding. It is clear that the stakeholders in the region feel that it is critical that the
16 long-term solution for Southern Labrador prioritizes the integration of renewable generation
17 sources. The comments filed expressed significant concerns in relation to the long-term reliance
18 on diesel fuel as an energy source in Southern Labrador and indicated a desire for more
19 renewable energy sources. While both Charlottetown and Port Hope Simpson supported the
20 proposed Project, it was on the basis of the increased potential for clean energy. Charlottetown's
21 support was based on the assumption that the regional diesel generating station would become
22 a backup source of generation, however this assumption is not supported by the evidence as this
23 plant was not assumed to be a backup supply during the study period of up to 50 years. It is clear
24 that the installation of a new regional diesel generating station and an interconnected system
25 with diesel generation as the primary source of generation is not consistent with the expressed
26 desire of the vast majority of the stakeholders for the implementation of more environmentally
27 friendly solutions.
28

29 Renewable generation was also an important issue for the Board in its review of this Application.
30 Very early in the proceeding, the Board identified information gaps with respect to renewable
31 generation and specifically directed Hydro to provide additional information as to the timelines
32 for the integration of alternative energy sources for Southern Labrador. The Board asked Hydro
33 to address the shift towards renewable energy and the provincial government's renewable
34 energy plan which identifies pursuing renewable energy development in regulated electricity-
35 isolated diesel-powered systems.⁹⁵
36

37 Both Midgard and Hatch also stressed the importance of renewable generation for Southern
38 Labrador. Midgard's analysis showed that the proposed Project with renewables was least-cost
39 and that renewables were of value in the regional plant alternative and the community
40 generation alternative. Midgard recommended that Hydro should proceed with efforts to

⁹³ Town of Charlottetown Letter, dated April 11, 2022.

⁹⁴ Hydro's Reply, dated January 16, 2025, page 3.

⁹⁵ Letter to Hydro, dated April 7, 2022; PUB-NLH-083.

1 support and procure incremental low-cost renewable energy supplies.⁹⁶ The 2020 Hatch report
 2 also addressed renewable generation in Southern Labrador and recommended that Hydro
 3 explore renewable opportunities to reduce diesel fuel consumption.⁹⁷

4
 5 The Board notes that Hydro decided that it would not develop wind or solar power in the region
 6 on its own behalf based on the costs set out in the 2020 Hatch report.⁹⁸ Hydro did not address
 7 whether Midgard's report which found that the addition of renewables was least-cost in most
 8 alternatives would impact this decision. While Hydro stated that it intends to work with
 9 stakeholders regarding renewable energy projects, it did not provide a plan and did not indicate
 10 that this was a priority in the immediate future. Hydro advised that it was "willing to engage in
 11 discussions for power purchase agreements with independent power producers."⁹⁹ Hydro stated
 12 that it was interested in providing technical and regulatory support to advance these projects
 13 but provided little evidence that it has taken any steps or made specific efforts to partner with
 14 other groups that may be interested in pursuing the development of renewable resources in
 15 Southern Labrador.¹⁰⁰

16
 17 While the evidence shows that the proposed Project would result in an increase in the potential
 18 for renewable generation in the Southern Labrador region, the Board notes that there is
 19 significant renewable potential currently available in the communities which is not utilized.
 20 Charlottetown, Port Hope Simpson and St. Lewis currently have no renewable generation
 21 sources and 50% of the renewable energy potential in Mary's Harbour continues to be
 22 available.¹⁰¹ Currently the renewable potential in Southern Labrador is 64% of the forecasted
 23 demand. The proposed Project would increase this to 74%.¹⁰² This is a marginal increase which
 24 is estimated to result in a reduction in diesel fuel usage of 166,400 liters.¹⁰³

25
 26 It is also not clear that the increased potential for renewable energy can be achieved or that it
 27 would be economic. Midgard explained that at low levels, the integration of renewable resources
 28 into a diesel-backed system is straightforward but noted operational challenges as the
 29 penetration of renewables into the system increases.¹⁰⁴ Based on the evidence, as renewable
 30 energy penetration increases the amount of generation and battery energy storage increases
 31 exponentially, therefore, the amounts of allowable renewable energy calculated may not be

⁹⁶ Midgard Report, dated March 28, 2023, page 85.

⁹⁷ LAB-NLH-015, Attachment 3, Hatch Labrador Interconnection Options Study, November 10, 2020, page 20.

⁹⁸ LAB-NLH-015 (Revision 1, dated October 5, 2021), page 4.

⁹⁹ LAB-NLH-015 (Revision 1, dated October 5, 2021), page 4.

¹⁰⁰ PUB-NLH-083 and PUB-NLH-084.

¹⁰¹ Application, dated May 31, 2023, Attachment 1, Appendix B, Southern Labrador-Renewable Energy Study, page 2.

¹⁰² $9,723,736/15,152,000 = 64\%$; $11,186,734/15,152,000 = 74\%$.

¹⁰³ Application, dated May 31, 2023, Attachment 1, Appendix B: Southern Labrador-Renewable Energy Study, page 3. The renewable potential of the proposed Project is 11,186,734 kWh compared to 9,723,736 kWh with the continued operation of the community diesel generating stations, which was estimated to reduce diesel fuel usage by 3,023,442 liters, as compared to a reduction of 2,857,042 litres.

¹⁰⁴ Midgard Report, dated March 28, 2023, page 91.

1 economic.¹⁰⁵ Further, the amount and/or type of renewable energy source(s) could adversely
2 affect system stability and therefore the magnitude of renewable energy penetration could be
3 limited.¹⁰⁶

4
5 Given the existing renewable potential, the Board questions the value of the marginal increase
6 in renewable potential associated with the proposed Project and whether it is practically
7 achievable in the foreseeable future. Based on the evidence the Board finds that Hydro has not
8 demonstrated that there are benefits with respect to increased potential for renewable
9 generation associated with the proposed Project that are likely to be realized in the near to
10 medium term. Hydro suggested that a delay in the proposed Project could postpone the
11 integration of renewable energy in the region, however the proposed Project does not include
12 any additional renewable generation sources and Hydro did not provide a timeline or plan for
13 renewable generation additions.¹⁰⁷ The Board is concerned that the proposed Project which
14 involves the installation of a new regional diesel generating station and a new interconnected
15 system, with a construction period of 4 to 5 years, would serve to further delay the
16 implementation of renewable generation sources in the Southern Labrador region.

17
18 Despite the importance of this issue, the clear preference of the stakeholders for renewable
19 generation, the concerns expressed by the Board and the recommendations of both Midgard
20 and Hatch, the proposed Project does not include any new renewable generation and the
21 Application does not set out a plan for the implementation of new renewable generation in the
22 short, medium or long-term.¹⁰⁸ This is a significant issue and a significant gap in the Application.

23
24 The Board notes that the **Act** was recently changed to require that power be delivered at the
25 lowest possible cost, in an environmentally responsible manner, consistent with reliable service.
26 While the Board accepts that fully renewable/battery supported systems may not be economic
27 for some years, the Board notes that battery technology appears to be developing rapidly and is
28 already being implemented in at least two communities in the Province.¹⁰⁹ Further, there are
29 increasing examples in other jurisdictions of new projects involving battery and other renewable
30 technologies.¹¹⁰ The Board is not satisfied that Hydro has made reasonable efforts to advance
31 the development of renewable generation in Southern Labrador.

¹⁰⁵ Application, dated May 31, 2023, Attachment 1, Appendix B: Southern Labrador Renewable Energy Study, pages 1 to 2.

¹⁰⁶ Application, dated May 31, 2023, Attachment 1, Appendix B: Southern Labrador Renewable Energy Study, pages 1 to 2.

¹⁰⁷ Hydro Update, dated December 6, 2024, Attachment 2, page 8.

¹⁰⁸ NCC-NLH-005; LAB-NLH-015 (Revision 1).

¹⁰⁹ Midgard Report, dated March 28, 2023, page 90. Mary's Harbour has a photovoltaic/battery storage project and Ramea has a wind/battery storage project. Application for the Interconnection and Integration of the Puffin Wind Inc. Renewable Energy Project, January 28, 2025.

¹¹⁰ For example, June 17, 2024, CBC story Regulator Oks Nova Scotia Power's \$354 million battery project: <https://www.cbc.ca/news/canada/nova-scotia/nsp-battery-storage-system-approved-1.7235197>.

1 **5.4. Interconnection to the Labrador Interconnected System**

2

3 One of the alternatives addressed in the Application was the interconnection of the Southern
4 Labrador communities to the Labrador Interconnected System (“LIS”). The preliminary estimated
5 cost of this alternative was in excess of \$400 million. Due to the magnitude of these costs, the
6 interconnection of the Southern Labrador communities to the LIS was not considered for further
7 analysis.¹¹¹

8

9 The communities and other stakeholders in Southern Labrador indicated a preference for the
10 interconnection to the LIS alternative and suggested that further study was needed. According
11 to Hydro’s stakeholder engagement summary the majority of stakeholders opposed the
12 proposed Project as the preferred option was a large-scale interconnection to central
13 Labrador.¹¹² The Mary’s Harbour Town Council stated that interconnection to the LIS is definitely
14 the preferred option for providing electricity to the region for the future and noted that Midgard
15 barely mentioned this option.¹¹³ The Mayor of St. Lewis questioned why the clean energy of
16 Muskrat Falls cannot be supplied to the communities in Southern Labrador.¹¹⁴ The Combined
17 Councils of Labrador questioned the level of research into the possibility of an interconnection
18 with the LIS.¹¹⁵ The Town of Charlottetown expressed concerns about losing the opportunity for
19 interconnection to the LIS and stated that it agreed that the regional diesel generating station
20 was the best option after being advised that it would be converted to a backup station when a
21 clean energy source is found or when power is brought to the Town from Churchill Falls.¹¹⁶
22 Fifteen residents wrote the Board to express disappointment with continued use of diesel and
23 suggested that the interconnection to the LIS should be studied further.¹¹⁷

24

25 Hydro submitted in reply that the interconnection option is not least-cost and that the proposed
26 Project does not preclude future interconnection.¹¹⁸

27

28 Despite the fact that from the earliest stage of this proceeding the stakeholders indicated a
29 preference for an interconnection with the rest of Labrador, there was little evidence provided
30 in relation to this alternative. It was evaluated based on a preliminary cost estimate which
31 indicated that the total capital costs would be in excess of over \$400 million.¹¹⁹ According to
32 Hydro the total cost of \$437.5 million was based on a high-level cost estimate from 2014,

¹¹¹ Application, dated July 16, 2021, Schedule 1, page 7; PUB-NLH-010; NP-NLH-048.

¹¹² Stakeholder Engagement Summary Report, January 31, 2022, page 5.

¹¹³ PUB-NLH-016, Attachment 1, Mary’s Harbour Town Council Letter, November 1, 2021, June 6, 2023, November 22, 2023 and February 29, 2024.

¹¹⁴ Mayor of St. Lewis Letter, dated November 4, 2021.

¹¹⁵ Combined Councils of Labrador Letter, dated November 1, 2021.

¹¹⁶ Town of Charlottetown Letter, dated April 11, 2022.

¹¹⁷ Letters from residents, dated November 3, 2021; Letters, dated November 2, 2021, January 9, 2023, and November 24, 2023.

¹¹⁸ Hydro Reply, dated January 16, 2025, page 3; Stakeholder Engagement Summary Report, January 31, 2022, Attachment 1, page 6 and 10.

¹¹⁹ Application, dated July 16, 2021, page 7; NP-NLH-048.

1 updated in 2016.¹²⁰ This estimate reflects 400 kms of 138 kV transmission line, voltage
 2 conversion to 25 kV in all four communities, a terminal station in Port Hope Simpson and 133
 3 kms of 25 kV distribution line.¹²¹ Hydro subsequently provided another estimate of \$350 million
 4 based on the estimates set out in the 2020 Hatch Report for all of Southern Labrador.¹²² The
 5 2020 Hatch Report detailed the interconnection of Southern Labrador by a radial 138/69 kV
 6 interconnection along road ways but did not include a regional diesel generating station.¹²³ This
 7 report concluded that a transmission line along the improved roadways could be easier to
 8 maintain and provide reliable service.¹²⁴ Hydro concluded that even with the reduced cost
 9 estimate of \$350 million this alternative would not be viable in comparison with other
 10 alternatives.¹²⁵ Hydro subsequently provided an updated estimate of the capital cost of the
 11 interconnection option of \$429.5 million.¹²⁶

12
 13 Midgard also evaluated the interconnection to the LIS alternative. Midgard estimated capital
 14 costs of \$338 million for this alternative based on the transmission voltage interconnection
 15 previously studied by Hatch.¹²⁷ Midgard's alternative also included construction of the regional
 16 diesel plant as a secondary source of capacity based on the assumption that the Charlottetown
 17 and Mary's Harbour diesel generating stations would require replacement.¹²⁸ Midgard estimated
 18 the net present cost of all future costs for this option to be \$292.5 over the 25-year study
 19 period.¹²⁹

20
 21 Based on the evidence, the interconnection with the LIS alternative was not the subject of a
 22 comprehensive engineering analysis. The cost estimates were high level and largely based on
 23 relatively dated information. The details of this alternative were not clear and do not appear to
 24 have been consistent throughout the proceeding and there was no reconciliation of the various
 25 differences. In particular there was little explanation with respect to the assumptions in relation
 26 to backup generation for the transmission line. It was not clear whether the construction of a
 27 regional diesel generating station would be necessary following transmission line construction
 28 and whether the continuation of the community diesel generating stations was studied. In
 29 addition, there was little discussion of transmission line design, for example whether 138 kV or
 30 69 kV construction was required. The associated cost information was at a high level and was

¹²⁰ NP-NLH-004; LAB-NLH-015, Attachment 3, "Hatch Labrador Interconnection Options Study," page 68. The 2014 high level cost estimates provided in 2016 were based on information from 2011 in relation to Northern Ontario.

¹²¹ Application, dated July 16, 2021, Schedule 1, page 30 and 31; NP-NLH-004.

¹²² NP-NLH-004, page 2. The 2020 Hatch Report estimated the costs of interconnecting all the communities in Southern Labrador, excluding L' Anse au Loup.

¹²³ LAB-NLH-015, Attachment 3, Hatch Report, Labrador Interconnection Options Study, November 10, 2020, page 11.

¹²⁴ LAB-NLH-015, Attachment 3, Hatch Report, Labrador Interconnection Options Study, November 10, 2020, page 54.

¹²⁵ NP-NLH-004.

¹²⁶ NP-NLH-076.

¹²⁷ Midgard Report, dated March 28, 2023, page 74 and 79.

¹²⁸ Midgard Report, dated March 28, 2023, page 4 and 74; NP-NLH-069; NP-NLH-076.

¹²⁹ Midgard Report, dated March 28, 2023, page 75 and 82 and Appendix E.

1 somewhat dated. It is not clear whether there was reference to more recent cost information as
2 to transmission line construction in this Province or other comparators.

3
4 There was also little information provided in relation to the efforts that were made to assess
5 funding opportunities. Hydro indicated that potential federal funding for transmission line
6 infrastructure was explored but there were no federal programs that would outright fund the
7 majority of a large-scale interconnection and alternative ownership model opportunities would
8 require years of collaboration. Hydro stated that they met with several federal departments to
9 explore funding opportunities and confirmed that funding exists for small community-level
10 renewable projects across Canada.¹³⁰ The evidence does not show that Hydro pursued these
11 funding opportunities. The Board notes that a new transmission line was recently commissioned
12 in northern Ontario through a partnership between Fortis Inc. and local indigenous groups which
13 received funding from federal and provincial governments.¹³¹

14
15 Given the importance of this matter for the region and the clear stakeholder preference for
16 interconnection with the rest of Labrador, the Board is not satisfied that the interconnection to
17 the LIS was adequately explored as part of a comprehensive long-term plan for Southern
18 Labrador. The Board notes that with the recent signing of a Memorandum of Understanding with
19 Quebec for further hydroelectric development in Labrador there will likely be continued interest
20 in an interconnection.

21 **5.5. Charlottetown Supply**

22
23
24 The Application proposed the construction of a regional diesel generating station to serve
25 Southern Labrador, including Charlottetown and Pinsent's Arm, to be completed in the fourth
26 quarter of 2029.¹³² Charlottetown and Pinsent's Arm have been served by mobile generation
27 since the diesel generating station was destroyed by fire in 2019. According to the Application
28 this is not viable as a long-term supply of firm, reliable power since mobile generation units are
29 not designed for long-term operation in harsh northern climates.¹³³

30
31 The Town of Charlottetown advised that it understood that reliance on backup generators was a
32 short-term solution pending development of a permanent solution.¹³⁴ According to the Town all
33 parties agree that reliance on a backup power supply is not a safe long-term solution.¹³⁵

34
35 Hydro submitted that it has taken appropriate measures to ensure Charlottetown and Pinsent's
36 Arm have access to adequate reliable power while it implements a long-term solution for
37 Southern Labrador.

¹³⁰ Stakeholder Engagement Summary Report, January 31, 2022, pages 7-10; PUB-NLH-039.

¹³¹ Wataynikanetap Power press release, dated December 13, 2024.

¹³² Hydro Request for Approval, dated December 6, 2024.

¹³³ Application, dated July 16, 2021, Schedule 1, page 1,

¹³⁴ Town of Charlottetown Letter, dated April 11, 2022, page 1.

¹³⁵ Town of Charlottetown Letter, dated June 16, 2022, page 2.

1 The need for a long-term solution for the provision of reliable service to Charlottetown and
 2 Pinsent's Arm was a primary driver for this Application and was a critical issue throughout this
 3 proceeding. The Board has been closely monitoring the circumstances since the fire in 2019 to
 4 ensure the continued provision of reliable service to Charlottetown and Pinsent's Arm and that
 5 the communities are kept advised. Reporting to the Board began within days of the fire and
 6 continued throughout this proceeding.¹³⁶ Based on the information provided to the Board there
 7 have been a number of issues at the Charlottetown plant since the fire. These issues and the
 8 actions taken by Hydro to ensure the continued provision of reliable power to the communities
 9 are summarized below:

- 10 • On the night of the fire power was restored using the two mobile diesel generators on
 11 site and thereafter another mobile unit was brought online by March of 2020.¹³⁷
- 12 • In July of 2020 one of the mobile generating units failed, was repaired and placed back
 13 in service in August of 2020.¹³⁸
- 14 • In December of 2021 the Board was informed that a spare mobile generator was
 15 stationed on site.¹³⁹
- 16 • In July of 2022 one of the three mobile units was damaged by fire and another mobile
 17 unit was winterized and brought into service later that summer.¹⁴⁰
- 18 • In late 2022 a 1825 kW mobile unit was placed in service and another mobile unit was
 19 winterized.¹⁴¹
- 20 • In February of 2023 a fire damaged a winterized unit which was repaired and returned to
 21 service in March of 2023 with upgrades to address the issues that led to the fire.¹⁴²
- 22 • In the latter part of 2023 a 725 kW rental unit was removed from service and a 600 kW
 23 unit was moved from Charlottetown and replaced with a winterized 725 kW unit from
 24 Mary's Harbour.¹⁴³
- 25 • Throughout 2024 there were no major issues reported with respect to the Charlottetown
 26 plant and supply to the communities.

27
 28 While there have been changes to the units in place at the Charlottetown plant in the years
 29 since the fire, there is as of yet no long-term solution and the communities continue to be
 30 supplied exclusively with mobile generation. The current configuration at the Charlottetown
 31 plant is set out in the figure below:

¹³⁶ Board letters to Hydro, November 16, 2021, December 21, 2021, April 7, 2022, May 16 and 19, 2022, June 30, 2022, June 30, 2023 and August 1, 2023.

¹³⁷ Charlottetown Diesel Generating Station Fire - Preparation for Winter Operation Allowance for Unforeseen Items Final Report, dated March 9, 2020.

¹³⁸ Charlottetown Generator Failure - Allowance for Unforeseen Items Final Report, dated September 8, 2020.

¹³⁹ Hydro Letter, dated December 13, 2021, page 2.

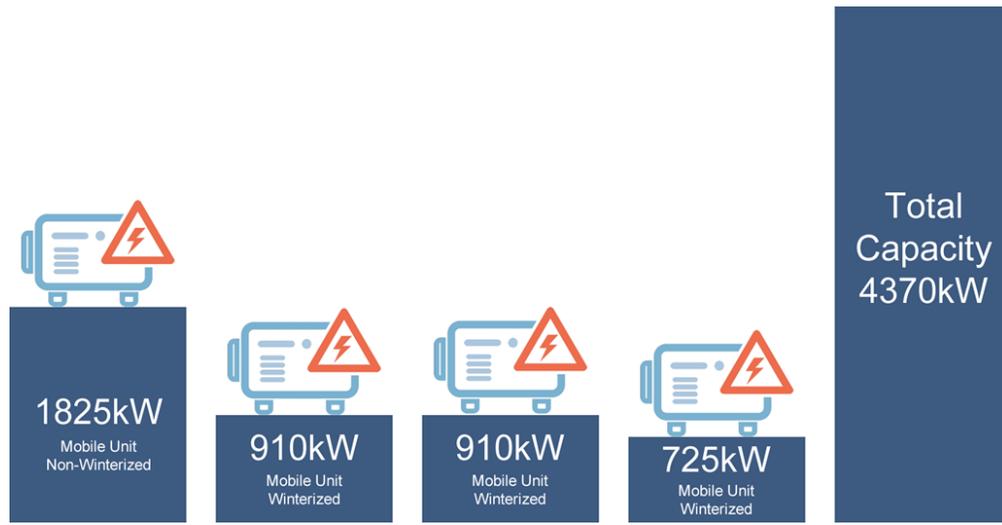
¹⁴⁰ Hydro Letter, dated August 19, 2022.

¹⁴¹ Order P.U. 32(2022), dated November 7, 2022.

¹⁴² PUB-NLH-052, Appendix J, Attachment 1, page 13.

¹⁴³ Hydro Long-Term Supply for Southern Labrador, Service to Charlottetown - Additional Information, dated August 19, 2023, page 2.

Charlottetown Diesel Generating Station Configuration



1 In Hydro's view, this is not a reasonable configuration for the long-term. According to Hydro
 2 mobile generation is not the ideal solution for medium or long-term utility power supply due to
 3 safety concerns, such as limited physical space and arc-flash hazards, low fuel efficiency, and
 4 greater risk of fuel spills.¹⁴⁴ Hydro also raised reliability concerns such as limited protection and
 5 control and the lack of condition monitoring. According to Hydro the climate characteristics of
 6 the region add additional complexities for mobile generation. Hydro stated:

7
 8 With continued operation of mobile generation in Charlottetown, Hydro anticipates that it
 9 will continue to experience similar operational and reliability challenges that it has faced
 10 since their implementation in 2019, which has included unit outages and loss of units due
 11 to fire.¹⁴⁵

12

13 Midgard also addressed the use of mobile generation in Charlottetown and stated that
 14 temporary mobile diesel gensets were put in place as a result of the fire, pending a long-term
 15 solution.¹⁴⁶ Midgard stated a permanent solution for Charlottetown is needed as soon as
 16 possible. According to Midgard the use of mobile generation as a planning resource to supply
 17 baseload electricity is not suitable.¹⁴⁷

18

19 The Board accepts the evidence that the use of mobile generation exclusively to supply the
 20 Charlottetown load is not an acceptable long-term solution.¹⁴⁸ Nevertheless mobile generation
 21 was the only immediate solution for Charlottetown following the October 2019 fire and based
 22 on the evidence continues to be the only available solution in the short-term. The Board notes

¹⁴⁴ Hydro Letters, dated May 16, 2022 and May 19, 2022, June 21, 2022.

¹⁴⁵ PUB-NLH-051.

¹⁴⁶ Midgard Report, dated March 28, 2023, page 33.

¹⁴⁷ Midgard Report, dated March 28, 2023, page 6.

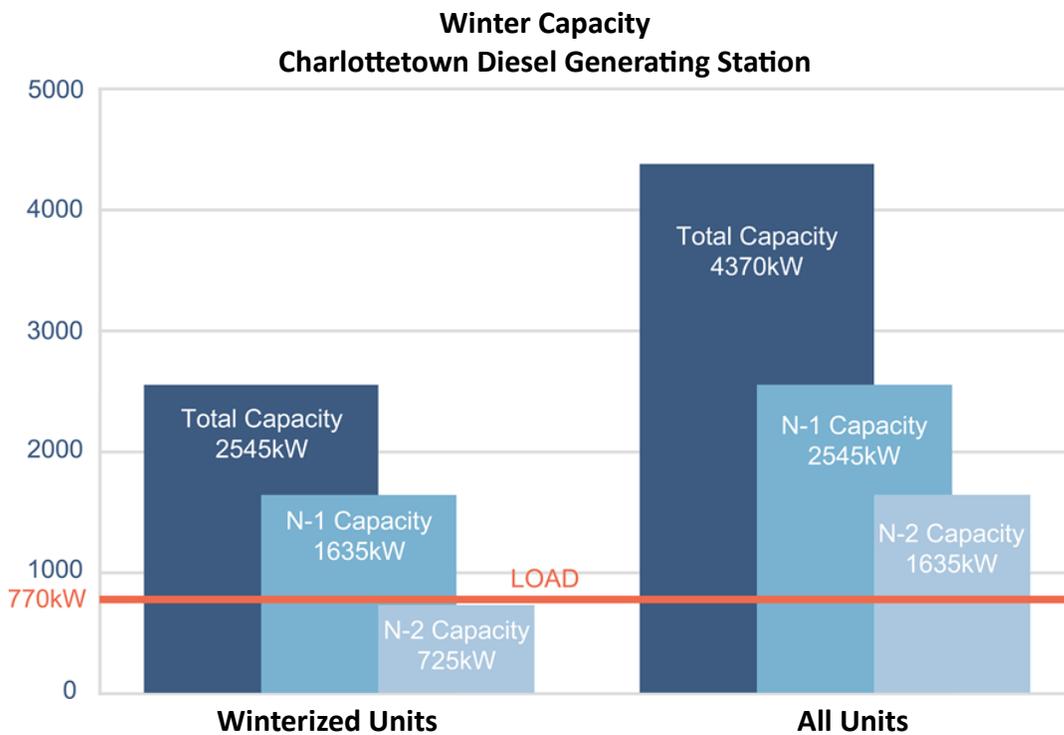
¹⁴⁸ As discussed in Section 5.2 the Board accepts that the use of mobile generation to meet winter peak is not acceptable in the long-term in most circumstances.

1 that Hydro has taken measures to mitigate the risks associated with the use of mobile
 2 generation. Hydro stated:

3
 4 To continue to mitigate these risks, Hydro intends to maintain N-2 redundancy, winterize
 5 units when feasible, and rent units in the event that units are removed from service or
 6 damaged beyond repair.¹⁴⁹
 7

8 Hydro has winterized the units to the extent possible by installing remote radiators, remote after-
 9 coolers, snow hoods for intake vents and additional heating in the containers housing the units.
 10 Hydro noted that even with these enhancements, it believes there is a reliability risk operating
 11 the mobile units in severe winter conditions.¹⁵⁰
 12

13 The Board notes that with the addition of the new 1825 kW unit in 2023 there is now adequate
 14 capacity in the summer to meet peak load on an N-2 standard, which is higher than Hydro’s Rural
 15 Planning Standard guideline of N-1.¹⁵¹ Whether the N-2 standard is met in the winter depends
 16 on whether non-winterized units are included in the capacity analysis. The winter capacity in
 17 Charlottetown, both with and without winterized units, is set out in the figure below:¹⁵²



¹⁴⁹ PUB-NLH-051.

¹⁵⁰ Long-Term Supply for Southern Labrador - Service to Charlottetown - Additional Information from Hydro, August 18, 2023, Footnote 3.

¹⁵¹ Application, dated July 21, 2021, Schedule 1, Attachment 1, Appendix D, RP-S-002, dated August 21, 2020.

¹⁵² Peak winter load in 2023 is assumed to be 770 kW based on PUB-NLH-072, but it is noted that Hydro used 756 kW for 2023 in its letter to Charlottetown dated March 17, 2023; PUB-NLH-052, Appendix J; and 764 kW was referenced in RP-TN-089 used by Midgard response to Board, Table 2.

1 The Board notes that Hydro has a non-winterized unit at Charlottetown that could be winterized
2 and a unit at the Port Hope Simpson generating station which could be moved to Charlottetown
3 and winterized. Either option is available to Hydro to meet the N-2 standard in the winter with
4 winterized units.

5
6 The Board accepts that the continued use of mobile generation is not an acceptable long-term
7 solution for Charlottetown. The Charlottetown diesel generating station was destroyed in a fire
8 in 2019 over five years ago and Charlottetown continues to be supplied by mobile generation.
9 The Board notes that Hydro’s original proposal in July of 2021 would have resulted in a solution
10 for Charlottetown in September of 2024 but with each revision to the Application this date was
11 pushed out. Based on the latest proposal the long-term solution for Charlottetown and Pinsent’s
12 Arm is not scheduled to be implemented until the end of 2029, over four years from now. While
13 Hydro has advised that it is not able to provide a long-term solution for Charlottetown and
14 Pinsent’s Arm earlier than the end of 2029, the Board encourages Hydro to revisit this issue as
15 part of its assessment of its next steps for Southern Labrador.

16 17 **5.6. Duty to Consult**

18
19 NCC asserted that Hydro is obliged to discharge the Crown’s constitutionally enshrined duty to
20 consult and accommodate it as an Aboriginal rightsholder affected by the proposed Project.¹⁵³
21 NCC stated that, while it does not oppose Hydro’s application, it “expects a fulsome and engaging
22 environmental assessment process, which prioritizes renewable energy development and
23 integration.”¹⁵⁴ Hydro accepted that it has a duty to consult and make reasonable
24 accommodation with respect to NCC’s interests, and acknowledged that it has not yet reached
25 an agreement with NCC on the discharge of this duty.¹⁵⁵

26
27 The Board expects that Hydro’s future requests for approval of capital expenditures associated
28 with a long-term supply plan for Southern Labrador will be supported with confirmation that
29 Hydro has satisfactorily discharged its duty to consult.

30 31 **6. CONCLUSION**

32
33 At the conclusion of this lengthy proceeding the Board finds itself in the difficult position of
34 having to reject the Application. The Board does not do so lightly. Charlottetown and Pinsent’s
35 Arm have been without a permanent solution to replace the diesel generating station destroyed
36 by fire since 2019. The Board notes that the approval of the proposed Project would have meant
37 the continued use of mobile generation to serve Charlottetown and Pinsent’s Arm until the end
38 of 2029.

¹⁵³ NCC Submission, dated December 7, 2023, page 5.

¹⁵⁴ NCC Submission, dated January 9, 2025, page 1.

¹⁵⁵ Hydro Submission, dated March 19, 2024; NCC-NLH-017 b).

1 It is clear that the issues raised by this Application are of great importance to the stakeholders
2 in the region. More commentary was received by the Board on this Application than in any other
3 similar proceeding in recent memory. The vast majority of these comments expressed
4 reservations about the proposed Project, largely on the basis that it is not an environmentally
5 responsible solution. The communities in Southern Labrador are currently served almost
6 exclusively by diesel generation. While reliance on diesel generators to provide dependable
7 energy and capacity to remote isolated loads continues to be prevalent in Canada, it is clear that
8 the stakeholders would like to see new approaches and a move towards a new future with more
9 environmentally responsible solutions.

10
11 The Board believes that more could and should be done by Hydro to ensure the development of
12 alternatives which are more consistent with community and government objectives in this
13 developing area. While the proposed Project would increase the potential for renewable
14 generation, the evidence does not show that this increase would be of value given the unused
15 potential now available and the lack of a plan or timeline for the addition of renewable
16 generation.

17
18 The development of a plan for the Southern Labrador region has been under review for many
19 years. The Board notes that the Application did not address the recommendations of a report
20 completed for Hydro in November of 2020 which reviewed the available alternatives for supply
21 in Southern Labrador. This report addressed a list of potential alternatives, including
22 interconnection to the Labrador Interconnected system. It was concluded, based on preliminary
23 analysis, that maintaining the community diesel generating stations with the implementation of
24 renewables in the communities was the least-cost solution.¹⁵⁶ It was recommended that several
25 of the identified alternatives be chosen for further study and that Hydro pursue the
26 implementation of renewables. Instead Hydro filed this Application seven months later
27 recommending the installation of a regional diesel generating station, retirement of the
28 community diesel generating station and interconnection of the communities with no
29 renewables included.

30
31 Throughout this proceeding there were significant issues and delays as a result of Hydro's
32 changing proposals and inconsistent and inadequate evidence. In early 2022 the Board wrote
33 Hydro setting out concerns in relation to the Application and the evidence. Specifically, the Board
34 stated:

35
36 The Application requests approval of significant capital expenditures for a major generation
37 and transmission project which will change the way in which four communities in Southern
38 Labrador are supplied. A new interconnected system (referred to as the Southern Labrador
39 Mini-Grid) would be created with a new large diesel generating plant in a central community
40 and associated transmission infrastructure to interconnect the other communities in phases
41 over time as the existing diesel units are decommissioned. The estimated capital
42 expenditures associated with Phase I of this project are approximately \$50 million and the

¹⁵⁶ LAB-NLH-015 (Revision 1), Attachment 3, Hatch Report - Labrador Interconnection Options Study, November 10, 2024, page 19.

1 total project cost, including Phase 2 and 3, is approximately \$72 million. Given the scope
 2 and magnitude of the proposed project and the potential customer impact, it is critical that
 3 the Application be fully supported with comprehensive information and analyses which
 4 addresses all reasonable alternatives and circumstances.¹⁵⁷
 5

6 At the end of this proceeding Hydro has now advised that the estimated cost of the proposed
 7 Project has increased to \$110.9 million. This is substantial considering that the Project would
 8 continue the dependance on fossil fuels, requiring significant ongoing operational costs.¹⁵⁸ The
 9 Board notes that before this significant cost increase, Hydro estimated that recovery of the
 10 Project cost would be result in a rate increase of approximately 1.5% for Newfoundland Power
 11 customers, which would flow through to customers in Southern Labrador, and a 2.0% increase
 12 for Labrador Interconnected customers.¹⁵⁹ Given the latest significant increase in Project costs
 13 these rate impacts can now be expected to be even higher.¹⁶⁰
 14

15 At the conclusion of this proceeding, and despite the Board's many requests for clarification and
 16 additional information, it is disappointing to have to conclude that Hydro has not demonstrated
 17 that the Application should be approved. In particular, the Board finds that:

- 18 i) The revised Project costs of \$110.9 million are not supported;
- 19 ii) The assumed replacements of the community diesel generating stations are not
 20 justified;
- 21 iii) Hydro has not demonstrated that it has sufficiently prioritized the development of
 22 renewable generation;
- 23 iv) There was inadequate study of the potential interconnection with the Labrador
 24 Interconnected system; and
- 25 v) Hydro should take immediate steps to reevaluate solutions to ensure access to safe and
 26 reliable power for Charlottetown and Pinsent's Arm.
 27

28 Despite the criticality of the issues for the region, particularly for Charlottetown and Pinsent's
 29 Arm, Hydro has failed to demonstrate that the proposed new regional diesel generating station
 30 is the appropriate solution for Southern Labrador. While diesel generation may continue to be
 31 part of the solution for the communities of Southern Labrador, the burden is on Hydro to
 32 demonstrate that its specific proposal to construct and install a new regional diesel generating
 33 station with interconnection of the communities would result in power being delivered to
 34 customers in the Province at the lowest possible cost, in an environmentally responsible manner,
 35 consistent with reliable service. Hydro has failed to meet this burden.
 36

37 The Board reiterates its concern in relation to the provision of reliable service to Charlottetown
 38 and Pinsent's Arm while a new long-term solution for Southern Labrador is being developed. The
 39 Board believes that it is critical that Hydro immediately revisit its plan for the provision of safe,

¹⁵⁷ Letter to Hydro, dated April 7, 2022.

¹⁵⁸ PUB-NLH-015, Attachment 1. Before the costs of the Project escalated to \$110.9 million, the revenue requirement to 2070, including operational costs, was estimated to be \$609.4 million.

¹⁵⁹ The population in the Southern Labrador region is approximately 880.

¹⁶⁰ NP-NLH-081; NP-NLH-085.

1 reliable service to Charlottetown and Pinsent’s Arm, while it develops a new long-term plan for
2 Southern Labrador, in the context of the overall supply of power in Labrador. Hydro should also
3 take immediate steps to ensure the early development of renewables in the region, either on its
4 own or in partnership with others. This work should be done in concert with the stakeholders in
5 the region, and should fully address all reasonable alternatives, including the potential
6 interconnection with the Labrador Interconnected system. All of this work should proceed
7 alongside renewed efforts by Hydro to ensure that it fulfills its duty to consult.

8

9 **7. ORDER**

10

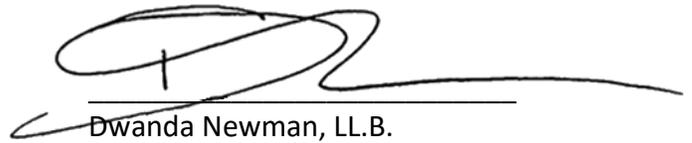
11

12 **IT IS THEREFORE ORDERED THAT:**

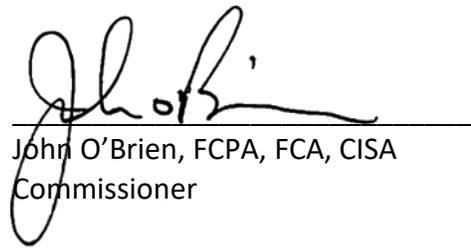
13

- 14 1. Newfoundland and Labrador Hydro’s Application for approval of capital expenditures to
15 construct a new regional diesel generating station and interconnection in Southern
16 Labrador is not approved.
- 17
- 18 2. Newfoundland and Labrador Hydro shall pay all expenses of the Board arising from this
19 Application.

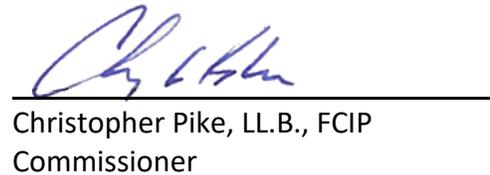
DATED at St. John’s, Newfoundland and Labrador this 31st day of March 2025.



Dwanda Newman, LL.B.
Vice-Chair



John O'Brien, FCPA, FCA, CISA
Commissioner



Christopher Pike, LL.B., FCIP
Commissioner



Jo-Anne Galarnreau
Executive Director and Board Secretary

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