

WHENEVER. WHEREVER.
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November 10, 2022

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

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

Dear Ms. Blundon:

Re: Newfoundland Power's 2023 Capital Budget Application – Submission of Newfoundland Power Inc.

Please find enclosed the original and 10 copies of the Submission of Newfoundland Power in relation to the Company's 2023 Capital Budget Application.

If you have any questions, please contact the undersigned.

Yours truly,

NEWFOUNDLAND POWER INC.

A handwritten signature in blue ink that reads "Dominic Foley". The signature is fluid and cursive, with a large, stylized "D" and "F".

Dominic Foley
Legal Counsel

Enclosures

c. Shirley A. Walsh
Newfoundland and Labrador Hydro

Dennis Browne, K.C.
Browne Fitzgerald Morgan Avis & Wadden

Newfoundland Power Inc.

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IN THE MATTER OF the *Public Utilities Act* (the "Act"); and

IN THE MATTER OF capital expenditures and rate base of Newfoundland Power Inc.; and

IN THE MATTER OF an application by Newfoundland Power Inc. for an order pursuant to Sections 41 and 78 of the Act:

- (a) approving single-year 2023 capital expenditures in the amount of \$93,292,000;
- (b) approving multi-year projects with capital expenditures of \$10,483,000 in 2023 and \$10,645,000 in 2024; and
- (c) fixing and determining a 2021 rate base of \$1,202,946,000.

**SUBMISSION OF
NEWFOUNDLAND POWER INC.**

November 10, 2022

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1 **1.0 INTRODUCTION**

2 Newfoundland Power Inc. (“Newfoundland Power” or the “Company”) filed its *2023 Capital*
3 *Budget Application* (the “Application”) with the Board of Commissioners of Public Utilities of
4 Newfoundland and Labrador (the “Board”) on June 29, 2022.

5
6 The Application seeks an order of the Board, pursuant to section 41(1) of the *Public Utilities Act*,
7 approving single-year 2023 capital expenditures of \$93,292,000, and multi-year capital
8 expenditures for 2023 and 2024 totalling \$10,483,000 and \$10,645,000, respectively. Including
9 \$19,688,000 in 2023 capital expenditures associated with multi-year projects previously
10 approved by the Board, the 2023 Capital Budget totals \$123,463,000. The Application also
11 seeks an order of the Board, pursuant to section 78 of the *Public Utilities Act*, fixing and
12 determining the Company’s average rate base for 2021 in the amount of \$1,202,946,000.

13
14 **2.0 OVERVIEW**

15 This submission will: (i) review the legislative framework under which the Application is
16 brought; (ii) address specific compliance requirements; (iii) summarize the process engaged in
17 by the Board and participants in reviewing the Application; (iv) address issues raised in the
18 submission of the intervenors; (v) address the other proposals not raised in the submission of
19 the intervenors; and (vi) conclude with Newfoundland Power’s submissions with respect to the
20 Application.

21
22 **3.0 LEGISLATIVE FRAMEWORK**

23 Section 37(1) of the *Public Utilities Act* states that a public utility shall provide service and
24 facilities which are reasonably safe and adequate and just and reasonable. Section 37(1) is a
25 cornerstone of Newfoundland Power’s obligation to serve its customers.

1 Section 3(b) of the *Electrical Power Control Act, 1994* provides that all sources and facilities for
2 the production, transmission and distribution of power should be managed and operated in a
3 manner that would result in: (i) the most efficient production, transmission and distribution of
4 power; (ii) customers having equitable access to an adequate supply of power; and (iii) power
5 being delivered to customers at the lowest possible cost consistent with reliable service.

6
7 Section 41(1) of the *Public Utilities Act* requires a public utility to submit, for the Board's
8 approval, an annual capital budget of proposed improvements or additions to its property.

9 Section 41(3) prohibits the Company from proceeding with an improvement or addition to its
10 property in excess of \$50,000 without the Board's prior approval.

11
12 The principal focus of this proceeding is whether Newfoundland Power's 2023 Capital Budget of
13 approximately \$123.5 million is reasonably required to meet its statutory obligations to serve its
14 customers.

15
16 Newfoundland Power submits that its 2023 Capital Budget of approximately \$123.5 million
17 represents the capital expenditures which are necessary to maintain its electrical system and to
18 continue meeting its statutory obligations under Section 37(1) of the *Public Utilities Act* and
19 Section 3(b) of the *Electrical Power Control Act, 1994*.

20

21 **4.0 COMPLIANCE MATTERS**

22 In Order No. P.U. 19 (2003) (the "2003 Rate Order"), the Board required evidence relating to
23 deferred charges and a reconciliation of average rate base to invested capital be filed with
24 future capital budget applications. The Application complies with the requirements of the 2003
25 Rate Order.

1 In Order No. P.U. 35 (2003) (the "2004 Capital Order"), the Board required specific information,
2 and in particular a five-year capital plan, be provided with future capital budget applications.
3 The Application satisfies the requirements of the 2004 Capital Order.

4
5 In Order No. P.U. 32 (2007) (the "2008 Rate Order"), the Board approved Newfoundland
6 Power's calculation of rate base in accordance with the Asset Rate Base Method. The
7 Application complies with the requirements of the 2008 Rate Order.

8
9 In Order No. P.U. 2 (2019) (the "2019 Rate Order"), the Board approved a change in the
10 capitalization of pension expense. The Application complies with the requirements of the 2019
11 Rate Order.

12
13 In Order No. P.U. 3 (2022) (the "2022 Rate Order"), the Board approved a change in the
14 calculation of General Expenses Capitalized to remove pension costs. The Application complies
15 with the requirements of the 2022 Rate Order.

16
17 In Order No. P.U. 36 (2021) (the "2022 Capital Order"), the Board required a status report on
18 2022 capital budget expenditures be filed with the Application. The Application complies with
19 the requirements of the 2022 Capital Order.

20
21 The Board issued the *Capital Budget Application Guidelines (Provisional)* (the "Provisional
22 Guidelines") on December 20, 2021. The Provisional Guidelines provide direction on the
23 classification, categorization, materiality and evidentiary requirements for proposed capital
24 expenditures. The Board noted that strict adherence to all aspects of the Provisional Guidelines

1 may not be possible, and that stakeholders should make best efforts to respect the spirit and
2 intent of the Provisional Guidelines.

3 Reference: Correspondence from the Board Re: Provisional Capital Budget Application
4 Guidelines, dated December 20, 2021, page 2.

5 The Application complies with the Board’s direction on the Provisional Guidelines and all
6 applicable directives of the Board.

7

8 **5.0 PROCESS**

9 On July 14, 2022, the Board issued a schedule of dates for hearing the Application. The
10 schedule provided for, among other items, an introductory presentation, the submission of
11 requests for information (“RFIs”), the filing of intervenor evidence, and written submissions.

12

13 Newfoundland Power gave an introductory presentation on the Application on
14 July 25, 2022. Board staff, Newfoundland and Labrador Hydro (“Hydro”) and the Consumer
15 Advocate attended the presentation.

16

17 On August 8, 2022, Newfoundland Power received 188 RFIs on the Application, including 24
18 RFIs issued by the Board, 37 RFIs issued by Hydro, and 127 RFIs issued by the Consumer
19 Advocate. Newfoundland Power responded to these RFIs on August 22, 2022.

20

21 On August 30, 2022, the Consumer Advocate requested a technical conference on the
22 Application. The Board granted this request on September 1, 2022. The technical conference
23 was held on September 9, 2022, and addressed nine issues identified by the Consumer
24 Advocate. Board staff, Hydro and the Consumer Advocate were in attendance.

1 An additional 52 RFIs were filed by the Consumer Advocate following the technical conference.

2 Newfoundland Power responded to these RFIs on October 3, 2022.

3

4 On October 12, 2022, the Consumer Advocate submitted a request to the Board for an oral
5 hearing on the Application. Newfoundland Power responded to the Consumer Advocate's
6 request on October 14, 2022. On October 18, 2022, the Board issued its determination that the
7 Consumer Advocate had not met the onus of demonstrating that an oral hearing was necessary.

8

9 On November 3, 2022, written submissions on the Application were filed by Hydro ("Hydro's
10 Submission") and the Consumer Advocate (the "Consumer Advocate's Submission"). Sections 6
11 and 7 of this submission outline Newfoundland Power's responses to Hydro's Submission and
12 the Consumer Advocate's Submission, respectively. Section 8 summarizes the proposals in the
13 Application not raised in the intervenors' submissions.

14

15 **6.0 RESPONSE TO HYDRO'S SUBMISSION**

16 Hydro does not object to the approval of the Application, with exception of the proposed
17 *Transmission Line 55L Rebuild* project. Hydro disputes that the risk to reliability and customer
18 service presented by Transmission Line 55L is such that it justifies capital investment at this
19 time. Hydro submitted that, in its view, the project should be further deferred.

20 Reference: Hydro's Submission, page 2.

21

22 The *Transmission Line 55L Rebuild* project is a two-year project that involves rebuilding
23 Transmission Line 55L from Blaketown ("BLK") Substation to Clarkes Pond ("CLK") Substation to
24 address deterioration and deficiencies identified through inspection. Transmission Line 55L was

1 originally constructed in 1971, except for a 1.0 kilometre section constructed in 1968, and
2 serves approximately 3,400 customers in the Placentia area.

3 Reference: Application, Report 3.1 2023 Transmission Line Rebuild, page 1.

4

5 The rebuild of Transmission Line 55L is proposed as part of the Company's *Transmission Line*
6 *Rebuild Strategy*. The *Transmission Line Rebuild Strategy* recognizes the critical role that
7 transmission lines play in providing reliable service to large numbers of customers and outlines
8 a long-term plan to rebuild the Company's oldest and most deteriorated transmission lines. It
9 establishes a structured and proactive approach where required rebuild projects would be
10 prioritized based on: (i) the physical condition of a line; (ii) the risk of failure; and (iii) the
11 impact a failure would have on the service provided to customers.

12 Reference: Application, Report 3.1 2023 Transmission Line Rebuild, page 1; PUB-NP-024;
13 CA-NP-111.

14 Newfoundland Power disagrees with Hydro's statement that the risk to reliability and customer
15 service presented by Transmission Line 55L is not significant enough to justify capital
16 investment at this time. Transmission Line 55L is critical, as it is a radial line that serves as the
17 sole source of supply for 3,400 customers in the Placentia area. An equipment failure on the
18 line would result in outages to all customers served by the line. Given its criticality, a run-to-
19 failure approach whereby the Company waits for reliability indices to degrade before
20 undertaking capital investments would result in poor service reliability being experienced for
21 thousands of customers for several years and would not be prudent.

22 Reference: NLH-NP-030; CA-NP-176.

23

24 The rebuilding of Transmission Line 55L has been deferred by 15 years through routine
25 maintenance. The number of work requests resulting from deficiencies identified on

1 Transmission Line 55L in recent years was such that continued maintenance could not
2 practically address the widespread deterioration on the line. An engineering assessment
3 determined that 253 of 490 poles on the line are deteriorated to the point where replacement is
4 required. Many of the wood pole structures on Transmission Line 55L are experiencing
5 significant shell separation, and many poles can no longer be climbed safely by Powerline
6 Technicians. In addition, 61 structures were identified as having deteriorated insulators and
7 crossarms or other hardware deficiencies. The deteriorated condition of Transmission Line 55L
8 makes it susceptible to equipment failure due to severe wind, ice or snow loading, and poses a
9 high risk to the delivery of reliable service to customers in the Placentia area.

10 Reference: Application, Report 3.1 2023 Transmission Line Rebuild, page 3; PUB-NP-024;
11 CA-NP-139, Attachment A; CA-NP-172; CA-NP-176.

12 Newfoundland Power evaluated three alternatives to identify the least cost solution to address
13 the deteriorated condition of Transmission Line 55L. These alternatives included: (i) completing
14 continued capital maintenance by addressing the deficiencies identified in 2022 and deferring
15 the replacement of other components; (ii) rebuilding the line in its existing right of way; and
16 (iii) rebuilding the line in a new right of way. The assessment of alternatives included an
17 economic analysis which determined that rebuilding the line in a new right of way is the least-
18 cost alternative on a net present value basis.

19 Reference: Application, Report 3.1 2023 Transmission Line Rebuild, pages 4-8;
20 NLH-NP-031; CA-NP-161.

21 Hydro's Submission recommending the deferral of the rebuilding of Transmission Line 55L is
22 effectively the first alternative described above. This alternative would result in higher costs to
23 customers and would not be consistent with Newfoundland Power's obligation to provide
24 reliable service to customers at the lowest possible cost.

1 Overall, the criticality of Transmission Line 55L and the widespread and significant deterioration
2 exhibited on the line demonstrates that there is a high risk to the delivery of reliable service to
3 customers. Newfoundland Power submits that the *Transmission Line 55L Rebuild* project is
4 required to provide reliable service to its customers at the lowest possible cost and should be
5 approved.

6

7 **7.0 RESPONSE TO CONSUMER ADVOCATE'S SUBMISSION**

8 **7.1 General Comments**

9 This section addresses general comments made in the Consumer Advocate's Submission
10 regarding Newfoundland Power's level of capital spending and its relationship to rate base, the
11 use of payback periods, and the Company's proposed asset management review.

12

13 The Consumer Advocate states that: (i) Newfoundland Power, as well as Hydro, should be
14 focusing on finding ways to reduce costs and limit capital expenditures to what is absolutely
15 necessary and fully justified; (ii) Newfoundland Power's rate base has been rising at a much
16 higher rate than the general price level over the past 20 years; (iii) payback periods are a valid
17 consideration in an economic analysis; (iv) Newfoundland Power will continue to increase
18 capital spending unless the Board takes action; and (v) Newfoundland Power should focus its
19 proposed asset management review toward meeting the requirements set out in the Provisional
20 Guidelines.

21 Reference: Consumer Advocate's Submission, pages 2-3.

22

23 Newfoundland Power manages its capital expenditures through a comprehensive capital
24 planning process. The capital planning process serves to balance the cost and reliability of the
25 service provided to its customers. Before any capital expenditures are included in

1 Newfoundland Power’s capital budget applications, the Company assesses whether the
2 expenditure is necessary to: (i) meet federal or provincial laws; (ii) provide customers with
3 equitable access to an adequate supply of power; (iii) provide reliable service to customers at
4 least cost; or (iv) maintain safe and adequate facilities in serving customers. Only those
5 expenditures determined to be necessary to meet one or more of these requirements are
6 proposed for Board approval.

7 Reference: PUB-NP-004.

8
9 Capital projects are reviewed and updated annually to reflect the latest condition assessments,
10 forecasts of electrical system load, changes in economic factors or industry requirements, and
11 changes in operational requirements. As capital projects move from the forecast period to the
12 budget year, they are examined in detail to further assess the scope and justification of the
13 required work. When it is determined that a capital expenditure may be necessary,
14 Newfoundland Power assesses all viable alternatives for executing the required work. This
15 includes both alternatives to the scope of a capital expenditure, such as a like-for-like
16 replacement or upgrade, and alternatives that could result in the deferral of capital
17 expenditures. The Application includes seven capital projects that were previously deferred or
18 modified and are now proposed for 2023, and one capital project that was planned for future
19 years but was advanced to 2023. There are five capital projects that were planned for 2023
20 but have been deferred to future years.

21 Reference: Application, 2023 Capital Budget Overview, Appendix B; PUB-NP-004.

1 The Company's cost management associated with its capital expenditures has been previously
2 recognized by the Board. In Order No. P.U. 36 (2021), the Board stated:

3 *The record shows that Newfoundland Power's capital planning process is*
4 *comprehensive and includes reasonable controls on capital spending.*

5
6 Newfoundland Power submits that it continues to focus on managing capital expenditures while
7 maintaining acceptable levels of service reliability for customers. Since 2011, Newfoundland
8 Power has had plant investment levels consistent with other Atlantic Canadian utilities while
9 maintaining the top service reliability of any distribution utility in Atlantic Canada. From a
10 customer cost perspective, Newfoundland Power's contribution to average customer rates
11 increased by approximately 16% from 2014 to 2023. On an inflation-adjusted basis, the
12 Company's contribution to average customer rates decreased by 1%.

13 Reference: Application, 2023 Capital Budget Overview, Section 2.3 Balancing Cost and
14 Service; Order No. P.U. 36 (2021), page 45, lines 15-17.

15 With respect to the Consumer Advocate's submission on the increase in Newfoundland Power's
16 rate base over the past 20 years, the Company submits that using the GDP deflator is not a
17 reasonable comparison to measure increases in utility rate base. Utilities throughout North
18 America are facing the same requirement for increased capital spending to replace aging assets.
19 As outlined above, the Company's investments have increased at a rate consistent with the
20 average of other Atlantic Canadian utilities over the 10-year period ending 2020.

21 Reference: Application, 2023 Capital Budget Overview, Section 2.3.4 Atlantic Canadian
22 Comparison.

23 In the context of the Application, Newfoundland Power disagrees with the Consumer Advocate's
24 statement that payback periods are a valid consideration in an economic analysis. The
25 Consumer Advocate quotes the Harvard Business School to support the claim that payback

1 periods are a valid consideration in an economic analysis. However, these comments appear
2 largely focused on industries with immediate cash flow issues, are not specific to the utility
3 industry, and do not reflect the provincial power policy.

4
5 As part of the record of this proceeding, the Company has highlighted an academic reference
6 that demonstrate the weaknesses of using payback periods for complex, long-term investment
7 decisions. The primary weakness is that a payback period fails to give weight to the difference
8 in consequences following the breakeven point. Such an analysis would not provide a fulsome
9 view of the customer benefits of long-life utility assets. Industry best practice is to assess the
10 costs and benefits of capital investments on a net present value basis over the life of an asset,
11 with sensitivity analyses to account for potential future uncertainties. This is the approach used
12 in the Application. It is also the approach required by the Board’s Provisional Guidelines. The
13 Provisional Guidelines do not require evaluations of payback periods.

14 Reference: CA-NP-174.

15
16 Newfoundland Power disagrees with the Consumer Advocate’s statement that it will continue to
17 increase capital spending without Board intervention. Section 41(3) of the *Public Utilities Act*
18 prohibits the Company from proceeding with an improvement or addition to its property in
19 excess of \$50,000 without the Board’s prior approval. The Company files a five-year capital
20 plan to provide reasonable predictability of anticipated capital expenditures necessary for the
21 delivery of safe, reliable service to customers at the lowest possible cost. Newfoundland
22 Power’s forecast increase in capital expenditures over the next five years reflects the age of its
23 electrical system and an expected increase in the need to replace and refurbish assets as they
24 reach the end of their service lives. As part of this proceeding, the Company provided an
25 assessment of the age of its assets and identified that its customers are exposed to increased

1 risks of outages due to equipment failure as the electrical system ages. As explained above,
2 the Company follows a comprehensive capital planning process and only those expenditures
3 determined to be necessary are proposed for Board approval.

4 Reference: Application, 2023-2027 Capital Plan, Section 2.4 Asset Condition Outlook.

5

6 **7.2 Specific Comments**

7 The Consumer Advocate's Submission provides comments on six specific capital projects
8 proposed for 2023. This section provides an overview of each of the six capital projects,
9 summarizes the Consumer Advocate's comments on each project, and provides the Company's
10 response to those comments.

11

12 ***LED Street Lighting Replacement***

13 *Project Overview*

14 The Application proposes 2023 capital expenditures of \$5,453,000 for the *LED Street Lighting*
15 *Replacement* project.

16

17 The *LED Street Lighting Replacement* project involves the replacement of existing High Pressure
18 Sodium ("HPS") fixtures with LED fixtures. The project is a continuation of the *LED Street*
19 *Lighting Replacement Plan* originally filed with the Board as part of Newfoundland Power's *2021*
20 *Capital Budget Application*. LED fixtures result in lower overall costs for customers due to lower
21 energy and maintenance costs which more than offset upfront capital costs. Current customer
22 rates for LED street lights are between 12% and 44% lower than customer rates for HPS street
23 lights. Customers begin receiving the benefit of the lower rates upon installation of LED
24 fixtures.

25 Reference: Application, Schedule B, pages 2-4.

1 Consumer Advocate’s Submission

2 The Consumer Advocate states that the higher upfront capital costs of LED street lights place
3 an immediate and heavier burden on ratepayers in exchange for the prospects of gains after
4 almost 20 years, and that a lengthy payback period is suggestive of greater risk. The Consumer
5 Advocate submits that customers would not experience any reduction in service by continuing
6 to operate HPS street lights, because faulty street lights would either be repaired or replaced
7 with LED street lights upon failure.

8 Reference: Consumer Advocate’s Submission, pages 4-8.

9

10 Newfoundland Power’s Response

11 Newfoundland Power disagrees with the Consumer Advocate’s statement that the *LED Street*
12 *Lighting Replacement* project for 2023 places a burden on customers.

13

14 The Company provided an updated economic analysis for the continued execution of the *LED*
15 *Street Lighting Replacement Plan*. This analysis showed that the continued execution of the
16 plan will reduce overall costs to customers by approximately \$29.1 million. On a net present
17 value basis, continuation of the plan reduces costs to customer by approximately \$4.3 million.
18 The plan is consistent with Canadian utility practice and has received the support of the largest
19 municipal organization in the province, Municipalities Newfoundland and Labrador. Deferring
20 the *LED Street Lighting Replacement* project for 2023, as recommended by the Consumer
21 Advocate, would result in Newfoundland Power’s Street and Area Lighting customers continuing
22 to pay higher rates. Such a decision would be inconsistent with Canadian utility practice, the
23 provincial power policy and customers’ expectations.

24 Reference: Application, Schedule B, pages 3-4; PUB-NP-007 (1st Revision).

1 Newfoundland Power disagrees that the length of the project’s payback period exposes
2 customers to greater risks. The Company took a conservative approach in evaluating the *LED*
3 *Street Lighting Replacement Plan* to ensure it was in the best interest of customers. For
4 example, in the economic analysis, the Company did not apply inflation to non-labour costs and
5 assumed a relatively high failure rate for its LED fixtures. Using a conservative approach
6 provides a degree of flexibility in the analysis in the event that cost factors change over time.
7 Newfoundland Power performed several sensitivity analyses requested by the Consumer
8 Advocate in relation to the plan. The analyses showed that the plan remains economic for
9 customers in eight of the 11 requested scenarios. Further sensitivity analyses, which updated
10 the 11 scenarios to reflect inflation for non-labour costs and the current LED fixture failure rate
11 information from the Company’s supplier, demonstrated that the *LED Street Lighting*
12 *Replacement Plan* remains economic for customers under all of the requested scenarios.

13 Reference: PUB-NP-007 (1st Revision); CA-NP-128; CA-NP-130.

14
15 If Newfoundland Power were to revert back to a practice of maintaining HPS street lights and
16 installing an LED fixture only when an HPS fixture cannot be repaired, more than 30 years
17 would be required for all customers to realize the full benefit of LED street lighting service. In
18 addition to resulting in lower overall customer costs, LED street lights provide better lighting
19 quality and more reliable service for customers through reduced street light outages.

20 Reference: Application, Schedule B, page 3; PUB-NP-007 (1st Revision).

21
22 Newfoundland Power submits that the *LED Street Lighting Replacement* project is required to
23 provide reliable service to customers at the lowest possible cost and should be approved.

1 ***Electric Vehicle Charging Network***

2 The Application proposes 2023 capital expenditures of \$594,000 for the *Electric Vehicle*
3 *Charging Network* project.

4
5 The *Electric Vehicle Charging Network* project is part of Newfoundland Power’s *Electrification,*
6 *Conservation and Demand Management Plan: 2021-2025* (the “2021 ECDM Plan”). The *Electric*
7 *Vehicle Charging Network* aims to provide access to public fast charging, which is a primary
8 barrier to customers’ adoption of electric vehicles (“EVs”). Three EV charging stations are
9 proposed for 2023. Each charging station will include a Direct Current Fast Charger (“DCFC”)
10 and a Level 2 charger, which will be installed at high usage locations of the EV charging
11 network to reduce wait times and provide customers with reasonable access to charging.

12 Reference: Application, Schedule B, pages 19-21.

13

14 *Consumer Advocate’s Submission*

15 The Consumer Advocate notes that it has argued against utility ownership of charging stations
16 as a regulated undertaking with capital costs and any operating losses being funded by
17 ratepayers. The Consumer Advocate raises concerns regarding increased cost estimates for EV
18 charging stations. The Consumer Advocate submits that if Newfoundland Power and Hydro
19 were to not enter the market any further, developments would incentivize private business
20 entry prior to 2026. The Consumer Advocate further submits that the Board should regulate
21 the price of charging. Finally, the Consumer Advocate submits that no more electrification
22 measures should be undertaken as long as Hydro’s Holyrood Thermal Generating Station
23 (“Holyrood”) serves as a base-load facility for the high-load winter months.

24 Reference: Consumer Advocate’s Submission, pages 8-9.

1 Newfoundland Power's Response

2 Newfoundland Power disagrees with the Consumer Advocate's statement that utility ownership
3 of charging stations should not be funded by ratepayers. At the time of filing the 2021 ECDM
4 Plan, the rate mitigating benefit of planned electrification initiatives was estimated at
5 approximately 0.5 ¢/kWh by 2034. The rate mitigating benefit has since increased to
6 approximately 0.9 ¢/kWh by 2034 due to changes in marginal costs and an updated rate
7 mitigation target from the Provincial Government. As these initiatives provide a rate mitigating
8 benefit to customers over the longer term, it is consistent with the provincial power policy and
9 appropriate to recover the proposed capital investments in EV charging infrastructure through
10 customer rates. This is consistent with the Board's findings in its order approving capital
11 expenditures for the EV Charging Network in 2021. In Order P.U. 30 (2021), the Board stated:

12 *The Board is satisfied that the 2021 capital expenditures proposed in the*
13 *Newfoundland Power Application and the Hydro Application for EV charging*
14 *stations will benefit customers and should be approved with recovery of the*
15 *costs associated with the Island EV charging stations from customers, net of*
16 *federal funding.*

17 Reference: PUB-NP-011; Order No. P.U. 30 (2021), page 13, lines 18-22.

18

19 The revised estimate of \$594,000 for three charging stations in 2023 reflects the Company's
20 experience with the construction of charging stations since the 2021 ECDM Plan was filed in
21 December 2020 and higher costs within the local market for environmental testing and civil and
22 electrical installation. Despite increases in project costs, the forecast rate mitigating benefit of
23 electrification initiatives remains relatively unchanged, still reaching 0.9 ¢/kWh by 2034.

24 Reference: PUB-NP-009; CA-NP-133.

1 In Order No. P.U. 30 (2021) approving Newfoundland Power’s installation of 10 EV charging
2 stations in 2021, the Board recognized that there was a weak business case for private
3 investment in EV charging infrastructure. At that time, the evidence showed that the weak
4 business case was a result of the upfront costs of installing EV charging infrastructure and the
5 limited number of EVs in the province. Newfoundland Power and Hydro provided an update to
6 the Board on market conditions on June 17, 2022 as part of the proceeding seeking approval of
7 the 2021 ECDM Plan. The update established that the reasons underpinning the weak business
8 case for private sector investment in EV charging in the province and justification for utility
9 intervention have persisted.

10

11 By establishing EV charging infrastructure in the province, including reasonable geographic
12 coverage and adequate access in high usage areas, Newfoundland Power will accelerate EV
13 adoption in the province, thereby improving the business case for private sector investment in
14 EV charging infrastructure over time.

15 Reference: CA-NP-134.

16

17 Furthermore, the market potential study completed by Dunskey Energy Consulting (the “Dunskey
18 Study”) determined there would be considerable capacity for additional charger deployment in
19 the province beyond the levels planned by the utilities or any commitments currently made by
20 municipal or provincial governments. The Dunskey Study determined that up to 2,000 Level 2
21 charging ports and 200 DCFC ports may be helpful to promote EV adoption. Based on this
22 market potential, private sector and government investments would need to increase
23 dramatically in order to nullify the benefit of planned utility investments in EV charging

1 infrastructure, which consists of 57 charging ports by 2025. Such investment levels are not
2 expected to occur in the near term.

3 Reference: CA-NP-046.

4

5 Newfoundland Power disagrees with the Consumer Advocate's submission that the Board should
6 regulate the price of charging. The Company selected a rate of charging of \$15.00/hour for its
7 DCFC stations to be consistent with the rate charged by Hydro, which was based on a
8 comparison to rates charged elsewhere in Atlantic Canada. Charging a market-based rate is
9 standard industry practice. Maintaining a reasonable charging price that is comparable to other
10 jurisdictions is essential to encouraging EV adoption.

11 Reference: CA-NP-179.

12

13 As part of its 2023 Capital Budget Application, Hydro addressed the potential impact the
14 continued use of Holyrood could have on the marginal cost of energy and electrification
15 initiatives. In response to RFI CA-NLH-062 in that proceeding, Hydro provided that Holyrood
16 would most likely be used for capacity purposes and, as such, the marginal cost of energy on
17 the Island Interconnected System would remain market-based as outlined in the 2021 ECDM
18 Plan.

19

20 Newfoundland Power submits that the *Electric Vehicle Charging Network* project is required to
21 provide a rate mitigating benefit for customers that is consistent with the delivery of reliable
22 service at the lowest possible cost and should be approved.

1 *Transmission Line 55L Rebuild***2 Project Overview**

3 The Application proposes 2023 capital expenditures of \$5,328,000 and 2024 capital
4 expenditures of \$5,284,000 for the *Transmission Line 55L Rebuild* project.

5
6 As described in Section 6 of this submission, the *Transmission Line 55L Rebuild* project is a two-
7 year project to rebuild Transmission Line 55L from BLK Substation to CLK Substation to address
8 deterioration and deficiencies identified through inspection.

9 Reference: Application, Report 3.1 2023 Transmission Line Rebuild, page 1.

10

11 Consumer Advocate's Submission

12 The Consumer Advocate states that the condition of Transmission Line 55L is less worrisome
13 than presented by Newfoundland Power. The Consumer Advocate notes the Company did not
14 quantify the risk of project deferral, the expected improvement in reliability, or the expected
15 improvement in maintenance costs. The Consumer Advocate states it is unclear why the entire
16 line must be replaced rather than only the damaged poles and suggests that Newfoundland
17 Power's *Transmission Inspection and Maintenance Practices* are deficient. The Consumer
18 Advocate submits the Board should direct Newfoundland Power to continue to maintain the line
19 and incorporate information from Hydro's Wood Pole Line Management Program update in its
20 *Transmission Inspection and Maintenance Practices*.

21 Reference: Consumer Advocate's Submission, pages 10-11.

1 Newfoundland Power's Response

2 Newfoundland Power disagrees with the Consumer Advocate's statements regarding the
3 *Transmission Line 55L Rebuild* project and submits they are not reflective of the evidence on
4 the record of this proceeding.

5
6 Transmission lines are the backbone of the electrical system providing service to customers. As
7 explained in Section 6, Newfoundland Power takes a proactive approach to rebuilding its oldest
8 and most deteriorated transmission lines based on their condition and criticality in serving
9 customers. The Company's transmission lines are maintained to operate to a high standard of
10 reliability. Newfoundland Power does not rely on reliability indices, which are lagging indicators,
11 to justify capital upgrades on its transmission system. Doing so would result in a poor quality of
12 service being experienced by large numbers of customers. Transmission Line 55L is a radial
13 line that serves as the sole source of supply for 3,400 customers in the Placentia area.

14 Reference: CA-NP-176.

15
16 The transmission line has been inspected annually over the last decade. The primary outcomes
17 of inspections are work requests to address deficiencies. Planners create work requests for
18 deficiencies categorized as Emergencies, TD1, TD2 and TD4. Deficiencies categorized as TD4
19 are deficiencies that require correction as part of Newfoundland Power's longer-term capital
20 planning process. The purpose of creating TD4 work requests is to track the level of
21 deficiencies on a transmission line in order to inform future capital investment priorities. The
22 number of identified deficiencies categorized as TD4 on Transmission Line 55L has increased
23 significantly over the last decade.

24 Reference: NLH-NP-027; CA-NP-139.

1 As outlined in Section 6, the rebuild of Transmission Line has been deferred by 15 years
2 through routine maintenance. The number of work requests created in recent years was such
3 that the Company determined capital upgrades could no longer be deferred. An engineering
4 assessment was subsequently completed to quantify the overall condition of the line. The
5 engineering assessment determined that approximately half of the poles on the line are
6 deteriorated to the point where replacement is required, with additional deteriorated
7 components distributed throughout the line. Many of the poles cannot be safely climbed which
8 is an impediment to Newfoundland Power’s ability to provide reliable service to its customers.
9 Reference: CA-NP-139.

10
11 The engineering assessment enabled Newfoundland Power to identify the least cost alternative
12 to address the line’s deteriorated condition. As discussed in Section 6, three alternatives were
13 evaluated to address the deteriorated condition of Transmission Line 55L. The approach of
14 completing continued capital maintenance by addressing the deficiencies identified in the 2022
15 inspection and deferring the replacement of other components, as suggested by the Consumer
16 Advocate, was the first alternative evaluated. An economic analysis determined that rebuilding
17 the line in a new right of way has both a lower capital cost and is the least cost alternative on a
18 net present value basis. As such, proceeding in the manner suggested by the Consumer
19 Advocate would be more costly for customers than the alternative proposed in the Application.

20
21 While the project is not justified based on operating cost efficiencies, rebuilding Transmission
22 Line 55L in a new right of way would improve access to the line, enabling more efficient
23 inspections and the use of aerial devices when completing work rather than climbing poles.

1 These operating efficiencies are expected to reduce operating costs associated with inspections,
2 maintenance and outage response.

3 Reference: CA-NP-176.

4

5 Newfoundland Power assessed the risk of deferring the Transmission Line 55L Rebuild project
6 using its risk matrix methodology. This assessment is largely qualitative in nature, but provides
7 a reasonable view of the risks to which customers would be exposed if the project did not
8 proceed. An equipment failure on Transmission Line 55L would result in outages to all
9 customers served by the line. The deterioration of the transmission line poses a high risk to the
10 delivery of reliable service to the 3,400 customers served by Transmission Line 55L. In total
11 over the last two decades, customers served by Transmission Line 55L have experienced over
12 10 million customer outage minutes.

13 Reference: Application, Schedule B, pages 106-107.

14

15 The rebuild of Transmission Line 55L and the *Transmission Line Rebuild Strategy* cannot be
16 deferred until Hydro's test and treat program is completed. The Board has previously
17 recognized that it would be inappropriate for Newfoundland Power to review its inspection
18 practices prior to the completion of Hydro's test and treat program in 2023. The *Transmission*
19 *Line Rebuild Strategy* was developed in response to the age and condition of the Company's
20 transmission lines and recognizes the important role that transmission lines play in providing
21 reliable service to large numbers of customers. Newfoundland Power stated it is waiting for the
22 findings of Hydro's test and treat program before determining whether a wood pole test and
23 treatment program would have any impact on its *Transmission Inspection and Maintenance*
24 *Practices*. However, a test and treat program would not address the existing pole deterioration

1 exhibited on transmission lines of the vintage included in the *Transmission Line Rebuild*
2 *Strategy*, including Transmission Line 55L.

3 Reference: CA-NP-111; Order No. P.U. 37 (2020), page 14, line 33 to page 15, line 7.

4

5 Newfoundland Power submits that the *Transmission Line 55L Rebuild* project is supported by
6 comprehensive evidence that Transmission Line 55L is critical to serving customers and exhibits
7 widespread deterioration. This project is required to provide reliable service to customers at
8 the lowest possible cost and should be approved.

9

10 ***Distribution Reliability Initiative***

11 *Project Overview*

12 The Application proposes 2023 capital expenditures of \$656,000 and 2024 capital expenditures
13 of \$1,015,000 for the *Distribution Reliability Initiative* project.

14

15 The *Distribution Reliability Initiative* targets the replacement of deteriorated poles, conductor
16 and hardware on the worst performing feeders on Newfoundland Power's distribution system.

17 The proposed 2023 capital project involves a targeted refurbishment of a 6.5 kilometre section
18 of Summerford ("SUM") Substation distribution feeder SUM-01 serving customers on New World
19 Island and the installation of two automated downline reclosers.

20 Reference: Application, Report 1.1 Distribution Reliability Initiative.

21

22 *Consumer Advocate's Submission*

23 The Consumer Advocate states that Newfoundland Power does not specify the criteria used to
24 determine when a feeder requires refurbishment. The Consumer Advocate further states that
25 the Company did not quantify the risk of project deferral, the expected improvement in

1 reliability or the expected improvement in maintenance costs, and that there is no way for
2 intervenors to judge if refurbishing this feeder is more desirable than refurbishing any other
3 feeder on the system.

4 Reference: Consumer Advocate’s Submission, page 12.

5

6 *Newfoundland Power’s Response*

7 Newfoundland Power disagrees with the Consumer Advocate’s statements regarding the
8 *Distribution Reliability Initiative* and submits they are not reflective of the evidence on the
9 record of this proceeding.

10

11 The methodology used to assess the Company’s worst performing feeders is described on the
12 record of this proceeding. The *Distribution Reliability Initiative* involves: (i) calculating reliability
13 performance indices for all feeders; (ii) analyzing the reliability data for the 15 worst performing
14 feeders to identify the cause of the poor reliability performance; and (iii) completing
15 engineering assessments for those feeders where poor reliability performance cannot be directly
16 related to isolated events that have already been addressed. Capital expenditures are only
17 proposed when they will address the cause of poor reliability performance. Targeting capital
18 investments in areas where customers experience among the worst service reliability is
19 consistent with the delivery of least-cost, reliable service, and is consistent with good utility
20 practice.

21 Reference: Application, Report 1.1 Distribution Reliability initiative, page 1.

22

23 Newfoundland Power assessed the risk of deferring the *Distribution Reliability Initiative* using its
24 risk matrix methodology. This assessment is largely qualitative in nature, but provides a
25 reasonable view of the risks to which customers would be exposed if the project did not

1 proceed. Customers served by this feeder experienced an average outage duration of 8.0 hours
2 annually over the last five years, which is more than four times the Company's average.
3 Deferring the refurbishment of distribution feeder SUM-01 would result in customers on New
4 World Island continuing to experience poor reliability and would be inconsistent with
5 maintaining acceptable and equitable levels of service reliability for customers throughout
6 Newfoundland Power's service territory.

7 Reference: Application, Schedule B, pages 9-10.

8
9 Newfoundland Power has quantified the historical impact of the *Distribution Reliability Initiative*
10 on the reliability of service provided to customers. The analysis showed the project has
11 resulted in the reliability of its worst performing feeders coming in line with the Company's
12 corporate average. Distribution feeder SUM-01 has experienced reliability performance
13 comparable to feeders previously refurbished under this project. A targeted refurbishment of
14 distribution feeder SUM-01 is consistent with past projects approved under Newfoundland
15 Power's *Distribution Reliability Initiative*. The project aims to improve performance of SUM-01
16 such that it approaches the average level of reliability experienced by customers throughout the
17 Company's service territory at the lowest possible cost. Further, while the project is not
18 justified on reduced operating costs, rebuilding a section of distribution feeder SUM-01 is
19 expected to improve the reliability performance of that feeder, thereby reducing operating costs
20 associated with responding to customer outages.

21 Reference: Application, Schedule B, pages 9-10; Application, Report 1.1 Distribution
22 Reliability Initiative, page 1; CA-NP-158; CA-NP-176.

23 Newfoundland Power submits that the *Distribution Reliability Initiative* appropriately targets
24 capital expenditures in an area where customers experience among the worst service reliability

1 in the Company's service territory. This project is required to provide customers with reliable
2 service at the lowest possible cost and should be approved.

3

4 ***Distribution Feeder Automation***

5 *Project Overview*

6 The Application proposes 2023 capital expenditures of \$1,054,000 for the *Distribution Feeder*
7 *Automation* project.

8

9 The *Distribution Feeder Automation* project involves increasing automation of the distribution
10 system through the installation of downline reclosers. Electrical system automation improves
11 the resiliency of the electrical system to severe weather and is an efficient means of maintaining
12 overall levels of service reliability for customers. For 2023, 17 devices are proposed to be
13 installed on 15 feeders.

14 Reference: Application, Schedule B, pages 12-16; CA-NP-151.

15

16 *Consumer Advocate's Submission*

17 The Consumer Advocate submits that the deployment scenarios for downline reclosers do not
18 mention cost or reliability improvement and that Newfoundland Power did not quantify the risk
19 of project deferral, the expected improvement in reliability or the expected improvement in
20 maintenance costs.

21 Reference: Consumer Advocate's Submission, page 14.

22

23 *Newfoundland Power's Response*

24 Newfoundland Power disagrees with the Consumer Advocate's statements and submits that
25 they are not reflective of the evidence on the record of this proceeding.

1 Downline reclosers are installed in locations intended to optimize benefits for customers. These
2 locations are selected based on the Company’s established deployment scenarios, a distribution
3 feeder’s geographic location, customer demographics, and other factors. The deployment
4 scenarios provide a structured approach to optimizing the placement of downline reclosers to
5 ensure they provide the maximum benefit to customers. In this way, Newfoundland Power
6 considers the cost of installing a downline recloser relative to service improvement.

7 Reference: Application, Schedule B, page 12; CA-NP-045; CA-NP-151.

8

9 Newfoundland Power assessed the risk of deferring the *Distribution Feeder Automation* project
10 using its risk matrix methodology. This assessment is largely qualitative in nature, but provides
11 a reasonable view of the risks to which customers would be exposed if the project did not
12 proceed. Equipment failures on the distribution system are trending upward with an increase of
13 approximately 29% over the last decade. At the same time, significant customer outages due
14 to severe weather have become more frequent in the Company’s service territory, causing
15 customer outages in nine of the last 10 years compared to just three years in the prior decade.
16 Customer outage events can have a significant impact on the service reliability experienced by
17 customers and can require a complex and costly response to restore service in a timely manner.
18 Automated downline reclosers, which can be remotely operated in the event of an outage,
19 reduce operating costs associated with outage response activities. For example, field crews do
20 not need to patrol sections of line to identify the cause and location of an outage. This permits
21 timely identification of the cause and location of outages, expediting the restoration of service
22 to customers.

23 Reference: Application, Schedule B, pages 15-16; NLH-NP-015; CA-NP-151; CA-NP-176.

1 Newfoundland Power has quantified the historical benefits of these devices during two recent
2 severe weather events. For example, the operation of five downline reclosers during a severe
3 blizzard in January 2020 avoided approximately 3.5 million customer outage minutes without
4 the assistance of field crews. The operation of 12 downline reclosers during Hurricane Larry in
5 September 2021 avoided approximately 3.8 million customer outage minutes, allowing field
6 crews to focus on restoration efforts for customers who were affected by the storm.

7 Reference: Application, Schedule B, page 15; CA-NP-151.

8
9 The 17 automated downline reclosers proposed for installation under the 2023 *Distribution*
10 *Feeder Automation* project will provide a reliability and efficiency benefit to approximately
11 10,000 customers served by Newfoundland Power’s distribution system.

12 Reference: CA-NP-151.

13
14 Newfoundland Power submits that the *Distribution Feeder Automation* project supports the
15 Company’s efficient and effective response to customer outages. This project is required to
16 provide customers with reliable service at the lowest possible cost and should be approved.

17
18 ***Substation Spare Transformer Inventory***

19 *Project Overview*

20 The Application proposes 2023 capital expenditures of \$1,500,000 for the *Substation Spare*
21 *Transformer Inventory* project.

22
23 The *Substation Spare Transformer Inventory* project involves the purchase of a 15/20/25 MVA,
24 66-25/12.5 kV power transformer in 2023 to serve as an emergency spare. This transformer

1 specification will provide emergency backup for a significant portion of Newfoundland Power's
2 fleet of substation power transformers.

3 Reference: Application, Schedule B, page 88; Application, Report 2.2 Substation Spare
4 Transformer Inventory.

5 Consumer Advocate's Submission

6 The Consumer Advocate submits that increasing electricity demand, as forecast in Hydro's
7 *Reliability and Resource Adequacy Study – 2022 Update*, would enable Newfoundland Power to
8 continue relying on transformers that are removed from service due to load growth to
9 supplement its spare transformer inventory. The Consumer Advocate submits that Board
10 approval of the purchase of a spare power transformer in this Application will lead to further
11 capital spending on purchases of spare transformers in future applications.

12 Reference: Consumer Advocate's Submission, page 15.

13

14 Newfoundland Power's Response

15 Newfoundland Power disagrees with the Consumer Advocate's statement that the *Substation*
16 *Spare Transformer Inventory* project should not be approved on the basis of increasing
17 electricity demand.

18

19 Newfoundland Power's customers are exposed to increasing risk of extended outages due to
20 the failure of aging and deteriorated power transformers. Approximately one third of the
21 Company's power transformers have exceeded the industry expected useful service life of 50
22 years. Newfoundland Power has experienced an increased number of power transformer
23 failures over the last decade. A total of 11 power transformer failures occurred over the past
24 five years compared to four power transformer failures over the previous five-year period.
25 Extended customer outages resulting from a power transformer failure and lack of an available

1 spare present an immediate and ongoing risk to the Company’s ability to provide reliable service
2 to customers. An assessment of alternatives determined that maintaining an inventory of
3 power transformers by purchasing units to act as emergency spares is the recommended
4 approach to help mitigate risks of customer outages resulting from increasing power
5 transformer failures.

6 Reference: Application, Schedule B, pages 89-91; Application, Report 2.2 Substation Spare
7 Transformer Inventory, pages 4-5.

8 Newfoundland Power prepares its system load forecast annually to reflect forecast customer
9 requirements, including its most recent Customer, Energy and Demand Forecast. This forecast
10 is based on economic inputs from the Conference Board of Canada, which includes forecast
11 housing starts, and reflects known electrification plans, such as Government plans to electrify
12 heating systems in provincial buildings and forecast load associated with EVs. There are
13 currently no power transformer replacements due to load growth included in the Company’s
14 five-year capital plan. As a result, Newfoundland Power cannot rely on transformers removed
15 due to load growth to maintain an adequate inventory of spare power transformers over the
16 near-term. Potential longer-term growth as referenced by the Consumer Advocate will not
17 mitigate near-term risks.

18 Reference: Application, 2023-2027 Capital Plan, page 2; Application, Report 2.2 Substation
19 Spare Transformer Inventory, page 6.

20 With respect to potential further capital spending, Newfoundland Power will assess the
21 condition of its existing spare transformers and its inventory requirements annually to
22 determine the need for any additional spare units. If additional capital expenditures become

1 necessary in the future, the Company would seek further Board approval through future capital
2 budget applications.

3 Reference: Application, Report 2.2 Substation Spare Transformer Inventory, page 14;
4 PUB-NP-022; CA-NP-058.

5 Maintaining a reasonable inventory of spare units is consistent with current utility practice. The
6 *Substation Spare Transformer Inventory* project will help mitigate risks of extended customer
7 outages as a result of a failure of a power transformer. Newfoundland Power submits that this
8 project is required to continue delivering reliable service to customers at the lowest possible
9 cost and should be approved.

10

11 **8.0 OTHER PROPOSALS**

12 Neither the Consumer Advocate nor Hydro provided comments on the remaining 51 projects
13 and programs filed in the Application. This section provides an overview of each of the
14 remaining capital projects and programs, organized by asset class, and their justification.

15

16 **8.1 Distribution**

17 ***Corner Brook Acute Care Hospital Redundant Supply***

18 The Application proposes 2023 capital expenditures of \$2,690,000 to modify Bayview (“BVS”)
19 Substation distribution feeder BVS-03 to provide the new Corner Brook Acute Care Hospital,
20 anticipated to be completed in November 2023, with a redundant supply of power. Due to the
21 critical nature of the load and essential electrical system standards for health care facilities, the
22 customer requested a backup supply to provide redundant service. In accordance with clause
23 9(c) of Newfoundland Power’s *Schedule of Rates, Rules and Regulations*, the redundant supply
24 is considered a special facility and will be fully funded by the customer. Newfoundland Power

1 submits that this project is necessary to supply an adequate supply of power and should be
2 approved.

3 Reference: Application, Schedule B, pages 5-7.

4

5 ***Feeder Additions for Load Growth***

6 The Application proposes 2023 capital expenditures of \$670,000 for the *Feeder Additions for*
7 *Load Growth* project. The project will address overload conditions on two distribution feeders in
8 the Torbay area. A section of Pulpit Rock ("PUL") Substation distribution feeder PUL-01 is
9 proposed to be upgraded from single-phase to three-phase to address an overload condition
10 that has developed in the area of Marine Drive. A section of distribution feeder PUL-04 is
11 proposed to be upgraded from single-phase to three-phase to address an overload condition in
12 the Forest Landing subdivision.

13

14 Overload conditions on these lines are generally due to increases in customer numbers supplied
15 by these lines as well as higher loads from large home renovations and electrical service
16 upgrades. The proposed capital expenditures for the *Feeder Additions for Load Growth* project
17 are required to ensure the delivery of power to customers in the Torbay area in the most
18 efficient manner, and at the lowest possible cost consistent with reliable service. This project
19 should therefore be approved.

20 Reference: Application, Schedule B, pages 17-18.

21

22 ***Distribution Feeder SLA-05 Refurbishment***

23 The Application proposes 2023 capital expenditures of \$565,000 to refurbish Stamp's Lane
24 ("SLA") Substation distribution feeder SLA-05 in St. John's. A section of distribution feeder
25 SLA-05 is experiencing overload conditions and is heavily deteriorated. This section of

1 distribution feeder consists of rear lot construction in a predominantly residential area.
2 Customers in the area are exposed to risks of outages due to equipment failure as a result of
3 the feeder’s deteriorated condition and existing overload conditions. The deteriorated
4 infrastructure and overload conditions pose a safety hazard as equipment failures can result in
5 energized lines coming into contact with customers’ property. Addressing these deficiencies is
6 necessary to mitigate risks of equipment failure and potential outages to customers in the Oxen
7 Pond Road area of St. John’s and this project should therefore be approved.

8 Reference: Application, Schedule B, pages 22-27.

9

10 ***Distribution Feeder PEP-02 Refurbishment***

11 The Application proposes 2023 capital expenditures of \$550,000 to refurbish Loop 34 of
12 Pepperrell (“PEP”) Substation distribution feeder PEP-02 in St. John’s. Loop 34 consists of
13 1.2 kilometres of 48-year-old underground conductor that has experienced 20 primary
14 conductor faults between 2004 and 2022. The primary conductor faults are becoming more
15 frequent, with eight faults occurring since July 2020. An engineering assessment of the Loop
16 34 infrastructure, including failure frequency, asset age, condition assessment, and method of
17 installation, identified that the existing underground infrastructure has reached the end of its
18 useful service life. Replacing the deteriorated underground infrastructure on Loop 34 is
19 necessary to provide equitable and reliable service to customers in the Virginia Park area of
20 St. John’s and should be approved.

21 Reference: Application, Schedule B, pages 28-32.

1 ***Allowance for Funds Used During Construction***

2 The Application proposes 2023 capital expenditures of \$247,000 for *Allowance for Funds Used*
3 *During Construction*, which will be charged on distribution work orders with an estimated
4 expenditure of less than \$50,000 and a construction period in excess of three months. Such
5 allowances are consistent with Order No. P.U. 32 (2007) and regulated Canadian utility practice.
6 The proposed allowance is required to ensure the delivery of power to customers at the lowest
7 possible cost consistent with reliable service and should be approved.

8 Reference: Application, Schedule B, page 33.

9

10 ***Extensions***

11 The Application proposes 2023 capital expenditures of \$12,218,000 for the *Extensions* program.
12 The *Extensions* program is required to provide customers with equitable access to an adequate
13 supply of power. The program enables the connection of new customers to the distribution
14 system and the upgrading of existing lines to accommodate increased electrical system loads
15 and should be approved.

16 Reference: Application, Schedule B, pages 34-36.

17

18 ***Reconstruction***

19 The Application proposes 2023 capital expenditures of \$6,699,000 for the *Reconstruction*
20 program. The *Reconstruction* program is a corrective maintenance program that involves the
21 replacement of deteriorated or damaged distribution structures and electrical equipment. The
22 program addresses high-priority deficiencies identified during inspections or recognized during
23 operational problems, including customer outages and trouble calls. The *Reconstruction*
24 program permits the timely correction of high-priority deficiencies on the distribution system
25 that result in customer outages and unsafe operation of the electrical system. The program is

1 required to provide safe and reliable service to customers at the lowest possible cost and should
2 be approved.

3 Reference: Application, Schedule B, pages 37-40.

4

5 ***Rebuild Distribution Lines***

6 The Application proposes 2023 capital expenditures of \$4,945,000 the *Rebuild Distribution Lines*
7 program. This program involves the replacement of deteriorated distribution structures and
8 electrical equipment that have been identified through inspections or engineering reviews. The
9 *Rebuild Distribution Lines* program proposes to address deficiencies on 43 distribution feeders,
10 each serving an average of approximately 1,000 customers, in 2023. The *Rebuild Distribution*
11 *Lines* program permits the planned correction of deficiencies identified on the distribution
12 system that would otherwise result in customer outages. The program is required to provide
13 reliable service to customers at the lowest possible cost and should be approved.

14 Reference: Application, Schedule B, pages 41-45.

15

16 ***Relocate/Replace Distribution Lines for Third Parties***

17 The Application proposes 2023 capital expenditures of \$3,803,000 for the *Relocate/Replace*
18 *Distribution Lines for Third Parties* program. The *Relocate/Replace Distribution Lines for Third*
19 *Parties* program is necessary to accommodate third party requests to relocate or replace
20 distribution lines. The program is required to maintain safe and adequate facilities and should
21 be approved.

22 Reference: Application, Schedule B, pages 46-49.

1 Replacement Transformers

2 The Application proposes 2023 capital expenditures of \$3,345,000 for the *Replacement*
3 *Transformers* program. The *Replacement Transformers* program is required to replace
4 transformers that have failed in service or have deteriorated, including transformers exhibiting
5 severe rust, and are at imminent risk of failure. Failure and deterioration of transformers can
6 result in oil leaks that lead to environmental contamination. The program is required to provide
7 reliable service to customers at the lowest possible cost and should be approved.

8 Reference: Application, Schedule B, pages 50-53.

9

10 New Transformers

11 The Application proposes 2023 capital expenditures of \$2,967,000 for the *New Transformers*
12 program. This program includes the cost of purchasing transformers to serve customer growth.
13 The number of new transformers required to be installed varies annually based on customer
14 growth and load density on sections of distribution feeders. The program is required to provide
15 equitable access to an adequate supply of power and should be approved.

16 Reference: Application, Schedule B, pages 54-56.

17

18 New Services

19 The Application proposes 2023 expenditures of \$2,916,000 for the *New Services* program. The
20 *New Services* program permits the installation of service wires necessary to connect customers'
21 premises to the electrical system. The program is required to provide equitable access to an
22 adequate supply of power and should be approved.

23 Reference: Application, Schedule B, pages 57-59.

1 ***New Street Lighting***

2 The Application proposes 2023 capital expenditures of \$2,618,000 for the *New Street Lighting*
3 program. The *New Street Lighting* program involves the installation of new street lighting
4 fixtures based on customers’ service requests. The program is required to provide customers
5 with equitable access to Street and Area Lighting service and should be approved.

6 Reference: Application, Schedule B, pages 60-62.

7

8 ***Replacement Street Lighting***

9 The Application proposes 2023 capital expenditures of \$770,000 for the *Replacement Street*
10 *Lighting* program. The *Replacement Street Lighting* program involves the replacement of failed
11 street light poles and hardware, including overhead and underground wiring and pole-mounting
12 brackets. These failed components result in outages to Street and Area Lighting customers.

13 The program is required to provide safe and reliable service to its customers at the lowest
14 possible cost and should be approved.

15 Reference: Application, Schedule B, pages 63-65.

16

17 ***Replacement Meters***

18 The Application proposes 2023 capital expenditures of \$662,000 for the *Replacement Meters*
19 program. The *Replacement Meters* program involves the replacement of deteriorated meters
20 for existing customers and the sampling and replacement of meters in accordance with the
21 requirements of the *Electricity and Gas Inspection Act (Canada)*. The *Replacement Meters*
22 program also addresses the failure of meters on customers’ premises. The program is required
23 to provide customers with equitable access to an adequate supply of power, is required to

1 maintain compliance with government regulations, and should be approved.

2 Reference: Application, Schedule B, pages 66-69.

3

4 **Replacement Services**

5 The Application proposes 2023 capital expenditures of \$546,000 for the *Replacement Services*
6 program. Service wires are replaced upon the receipt of trouble calls from customers and
7 subsequent follow-up that identifies a failure. The failure of a service wire can pose a safety
8 hazard when an energized wire becomes detached from a customer’s premises or when service
9 wire insulation becomes deteriorated. The program is required to provide safe and reliable
10 service to customers and should be approved.

11 Reference: Application, Schedule B, pages 70-72.

12

13 **New Meters**

14 The Application proposes 2023 capital expenditures of \$297,000 for the *New Meters* program.
15 The *New Meters* program involves the purchase and installation of meters for new customers.
16 The program is required to provide equitable access to an adequate supply of power and should
17 be approved.

18 Reference: Application, Schedule B, pages 73-75.

19

20 **8.2 Substations**

21 **Walbournes Substation Refurbishment and Modernization**

22 The Application proposes 2023 capital expenditures of \$4,955,000 to replace and modernize
23 deteriorated equipment at the Walbournes (“WAL”) Substation in the City of Corner Brook. The
24 WAL Substation was built in 1966 and services 6,900 customers in the Corner Brook area.
25 A condition assessment determined the substation contains a significant amount of deteriorated

1 and obsolete equipment. Additionally, new transformer spill containment foundations are
2 required and upgrades are required to the substation's ground grid. This project is required to
3 maintain safe and adequate facilities and to maintain reliable service to customers at the lowest
4 possible cost and should be approved.

5 Reference: Application, Report 2.1, 2023 Substation Refurbishment and Modernization,
6 Appendix A.

7 ***Molloy's Lane Substation Refurbishment and Modernization***

8 The Application proposes 2023 capital expenditures of \$4,827,000 to replace and modernize
9 deteriorated equipment at the Molloy's Lane ("MOL") Substation. The MOL Substation was built
10 in 1960 and services 8,900 customers in the west end of St. John's. A condition assessment of
11 the substation shows that it contains a significant amount of deteriorated and obsolete
12 equipment. The substation also lacks standard transformer spill containment to protect against
13 environmental hazards. This project is required to maintain safe and adequate facilities, to
14 maintain reliable service to customers at the lowest possible cost, and should be approved.

15 Reference: Application, Report 2.1, 2023 Substation Refurbishment and Modernization,
16 Appendix B.

17 ***Long Pond Substation Capacity Expansion***

18 The Application proposes 2023 capital expenditures of \$3,313,000 to increase capacity at the
19 Long Pond ("LPD") Substation on the campus of Memorial University. Increasing the capacity of
20 LPD Substation is necessary to accommodate increased loads stemming from Memorial
21 University's boiler electrification project. The Company intends to apply to the Board for a
22 contribution in aid of construction by Memorial University of \$0.00, as required, prior to
23 incurring any capital costs associated with the *Long Pond Substation Capacity Expansion*

1 project. Newfoundland Power submits that this project is necessary to provide an adequate
2 supply of power and should be approved.

3 Reference: Application, Schedule B, pages 85-87; PUB-NP-017.

4

5 ***Substation Protection and Control Replacements***

6 The Application proposes 2023 capital expenditures of \$667,000 for the *Substation Protection*
7 *and Control Replacements* project. This project involves the replacement of obsolete
8 electromechanical relays. In 2023, the *Substation Protection and Control Replacements* project
9 will include modernizing the obsolete protection equipment at Oxen Pond Terminal Station and
10 Hardwoods Terminal Station, and the replacement of 14 communications gateways. Keeping
11 obsolete equipment in service without vendor support increases the risk of extended outages to
12 large numbers of customers and increases the risk of cybersecurity incidents. This project is
13 required to maintain reliable service to customers at the lowest possible cost and should be
14 approved.

15 Reference: Application, Schedule B, pages 92-94.

16

17 ***Substation Ground Grid Upgrades***

18 The Application proposes 2023 capital expenditures of \$563,000 to complete ground grid
19 upgrades at three substations to ensure compliance with industry standards and to address
20 identified deficiencies. Engineering assessments have determined that Hardwoods, Cape
21 Broyle, and Seal Cove substations have deteriorated and substandard ground grids. This can
22 result in unsafe conditions for employees working in the substations as well as the general
23 public who may be in close proximity to a substation yard. The *Substation Ground*

1 *Grid Upgrades* project is required to maintain safe and adequate facilities and should be
2 approved.

3 Reference: Application, Schedule B, pages 95-97.

4

5 ***PCB Bushing Phase-out***

6 The Application proposes 2023 capital expenditures of \$425,000 to remove polychlorinated
7 biphenyls ("PCB") from transformers. The phase-out of PCBs is mandated by the *Government*
8 *of Canada PCB Regulation (SOR/2008-273)*, and requires that transformer bushings, breakers
9 and instrument transformers with PCB concentrations of greater than 50 ppm be removed from
10 service by the end of 2025. Newfoundland Power plans to replace three potential transformers
11 and three current transformers in 2023 that have PCB concentrations in excess of 50 ppm. This
12 project is required to comply with government regulations and should be approved.

13 Reference: Application, Schedule B, pages 98-99.

14

15 ***Substation Replacements Due to In-Service Failures***

16 The Application proposes 2023 capital expenditures of \$4,422,000 for the *Substation*
17 *Replacements Due to In-Service Failures* program. The *Substation Replacements Due to*
18 *In-Service Failures* program addresses equipment at substations that fails in service or is at
19 imminent risk of failure as well as maintaining an adequate inventory of spare parts to respond
20 to in-service failures. The need to replace substation equipment is determined based on
21 in-service failures, testing, inspections, and operating experience. This program allows
22 Newfoundland Power to respond to equipment failures that occur throughout normal operations
23 and should be approved.

24 Reference: Application, Schedule B, pages 100-103.

1 **8.3 Transmission**

2 **Transmission Line Maintenance**

3 The Application proposes 2023 capital expenditures of \$2,610,000 for the *Transmission Line*
4 *Maintenance* program. The *Transmission Line Maintenance* program involves the replacement
5 of transmission line infrastructure that has failed or is at risk of failure and includes a
6 component to accommodate third-party requests to relocate or replace sections of transmission
7 lines. The *Transmission Line Maintenance* program allows for both corrective and preventative
8 maintenance on the Company’s transmission system. Each transmission line is inspected
9 annually to identify deficiencies. Identified deficiencies are prioritized for maintenance based on
10 the severity of deterioration observed in the field. This program is required to maintain reliable
11 service to customers at the lowest possible cost and should be approved.

12 Reference: Application, Schedule B, pages 108-112.

13

14 **8.4 Generation – Hydro**

15 **Mobile Hydro Plant Refurbishment**

16 The Application proposes 2023 capital expenditures of \$1,666,000 and 2024 capital
17 expenditures of \$2,480,000 for the *Mobile Hydro Plant Refurbishment* project. The Mobile
18 hydroelectric plant (the “Mobile Plant”) was commissioned in 1951 and provides approximately
19 9% of the total normal hydroelectric production of Newfoundland Power. The Company
20 conducted a detailed condition assessment of the Mobile Plant. A lifecycle cost analysis
21 confirmed that continued operation of the Mobile Plant will provide an economic benefit for
22 Newfoundland Power’s customers over the longer term. This project is required to maintain
23 reliable service to customers at the lowest possible cost and should be approved.

24 Reference: Application, Report 4.2 Mobile Hydro Plant Refurbishment.

1 Sandy Brook Hydro Plant Generator Refurbishment

2 The Application proposes 2023 capital expenditures of \$1,577,000 for the *Sandy Brook Hydro*
3 *Plant Generator Refurbishment* project. The project involves refurbishing the generator at the
4 Sandy Brook hydroelectric plant (the “Sandy Brook Plant”) and will include rewinding the
5 generator stator and re-insulating the generator rotor while the Sandy Brook Plant is out of
6 service for replacement of the penstock. The Sandy Brook Plant was placed into service in 1963
7 and provides 6.7% of the total normal hydroelectric production of Newfoundland Power. An
8 updated analysis confirmed that operation of the Sandy Brook Plant continues to provide an
9 economic benefit for customers. This project is required to maintain reliable service to
10 customers at the lowest possible cost and should be approved.

11 Reference: Application, Report 4.1 Sandy Brook Hydro Plant Generator Refurbishment.

12

13 Hydro Facility Rehabilitation

14 The Application proposes 2023 capital expenditures of \$877,000 for the *Hydro Facility*
15 *Rehabilitation* project. The project involves the replacement or refurbishment of deteriorated
16 plant components that have been identified through routine inspections, operating experience
17 and engineering studies. For 2023, the project includes replacing the deteriorated gatehouse
18 building structure West Country Pond as part of the Pierre’s Brook hydroelectric development,
19 replacing the deteriorated access road bridge for the Lockston hydroelectric development, and
20 replacing obsolete protection and control systems at the Seal Cove hydroelectric development.
21 The *Hydro Facilities Rehabilitation* project is required to maintain reliable service to customers
22 at the lowest possible cost and should be approved.

23 Reference: Application, Schedule B, pages 122-126.

1 **Hydro Plant Replacements Due to In-Service Failures**

2 The Application proposes 2023 capital expenditures of \$662,000 for the *Hydro Plant*
3 *Replacements Due to In-Service Failures* program. The *Hydro Plant Replacements Due to*
4 *In-Service Failures* program involves the refurbishment or replacement of structures and
5 equipment due to damage, deterioration, corrosion, technical obsolescence, and in-service
6 failures. This program is required to maintain reliable service to customers at the lowest
7 possible cost and should be approved.

8 Reference: Application, Schedule B, pages 127-130.

9

10 **8.5 Generation – Thermal**

11 **Thermal Plant Replacements Due to In-Service Failures**

12 The Application proposes 2023 capital expenditures of \$335,000 for the *Thermal Plant*
13 *Replacements Due to In-Service Failures* program. Newfoundland Power operates six thermal
14 generating facilities that provide a combined 44.5 MW of emergency capacity for the Island
15 Interconnected System. These thermal plants are operated to supply customers during planned
16 and unplanned outages on the electrical system. The *Thermal Plant Replacements Due to*
17 *In-Service Failures* program consists of the refurbishment or replacement of thermal plant
18 structures and equipment due to damage, deterioration, corrosion and in-service failure. This
19 program is required to maintain reliable service to customers at the lowest possible cost and
20 should be approved.

21 Reference: Application, Schedule B, pages 132-135.

1 **8.6 Information Systems**

2 **Application Enhancements**

3 The Application proposes 2023 capital expenditures of \$1,538,000 for the *Application*
4 *Enhancements* project. The project involves the enhancement or replacement of five software
5 applications in 2023 to reduce costs to customers or improve customer service delivery,
6 including the Digital Forms Portfolio, the Geographic Information System (“GIS”), the Virtual
7 Meeting System, the Environment, Health and Safety System, and the takeCHARGE Website.
8 This project also includes various minor enhancements to respond to unforeseen requirements
9 encountered throughout the year. The *Applications Enhancement* project is required to
10 maintain reliable service to customers at the lowest possible cost and should be approved.

11 Reference: Application, Schedule B, pages 137-140.

12

13 **Shared Server Infrastructure**

14 The Application proposes 2023 capital expenditures of \$1,176,000 for the *Shared Server*
15 *Infrastructure* project. The project includes the addition, upgrade and replacement of computer
16 hardware components and related technology associated with shared server infrastructure and
17 peripheral equipment. For 2023, there are three items required to improve the functionality of
18 Newfoundland Power’s shared server infrastructure: (i) Backup and Disaster Recovery
19 Infrastructure Replacement; (ii) Server Infrastructure Upgrades; and (iii) Customer Contact
20 Centre Infrastructure Upgrade. Deferring these upgrades would threaten the secure and
21 reliable operation of hardware and software used in providing service to customers. This
22 project should therefore be approved.

23 Reference: Application, Schedule B, pages 141-144.

1 ***System Upgrades***

2 The Application proposes 2023 capital expenditures of \$962,000 for the *System Upgrades*
3 project. This project involves upgrades to third-party software products that make up the
4 Company’s information systems. For 2023, system upgrades are proposed for the Quality
5 Management module of the Company’s Contact Management System (“CMS”), Human Resource
6 Management System, Financial Management System, SCADA system and Database
7 Management Software. The *System Upgrades* project is required to maintain secure and
8 adequate facilities and to maintain reliable service to customers at the lowest possible cost and
9 should be approved.

10 Reference: Application, Schedule B, pages 145-150.

11

12 ***Cybersecurity Upgrades***

13 The Application proposes 2023 capital expenditures of \$882,000 for the *Cybersecurity Upgrades*
14 project. The project involves upgrades to the Company’s cybersecurity infrastructure, including
15 new technologies to reduce risk and enhance security in the areas of network and firewall
16 security in operation technologies and SCADA environments, and endpoint/server security and
17 hardening. Cybersecurity threats are continuously evolving and becoming more sophisticated.
18 Continual improvements in cybersecurity resilience and response capabilities are necessary to
19 respond to this evolving threat. The *Cybersecurity Upgrades* project should therefore be
20 approved.

21 Reference: Application, Schedule B, pages 151-152.

22

23 ***Network Infrastructure***

24 The Application proposes 2023 capital expenditures of \$419,000 for the *Network Infrastructure*
25 project. The project involves the addition of network components that provide employees with

1 access to applications and data used in providing efficient and effective service to customers.
2 For 2023, this project includes the replacement of network and Voice over Internet Protocol
3 (“VOIP”) equipment, which has reached the end of its service life and will no longer receive
4 updates from the manufacturer to mitigate cybersecurity vulnerabilities. This project is required
5 to maintain reliable service to customers at the lowest possible cost and should be approved.
6 Reference: Application, Schedule B, pages 153-154.
7

8 ***Personal Computer Infrastructure***

9 The Application proposes 2023 capital expenditures of \$600,000 for the *Personal Computer*
10 *Infrastructure* program. This program involves the replacement or upgrade of personal
11 computers (“PCs”) that have reached the end of their service lives. This program also includes
12 the replacement of peripheral equipment, including monitors, mobile devices, and workgroup
13 printers. A total of 146 PCs are estimated to be replaced in 2023. Failure to replace PCs that
14 are at end of life could impede the delivery of service to customers, including responses to
15 customer trouble calls and other enquiries. This program should therefore be approved.
16 Reference: Application, Schedule B, pages 155-159.
17

18 ***8.7 Telecommunications***

19 ***Communications Equipment Upgrades***

20 The Application proposes 2023 capital expenditures of \$118,000 for the *Communications*
21 *Equipment Upgrades* program. This program involves the replacement or upgrade of
22 communications equipment, including radio communications equipment associated with
23 electrical system operations, and data communications equipment providing remote monitoring
24 and control capabilities associated with the Company’s SCADA system. Should communications
25 equipment fail, Newfoundland Power would be required to dispatch employees to physically

1 monitor and operate field devices. Failure of communications equipment could also result in a
2 loss of communication among employees working in the field, which can pose safety risks to
3 employees working with energized equipment. This program should therefore be approved.

4 Reference: Application, Schedule B, pages 161-164.

5

6 **8.8 General Property**

7 **Company Building Renovations**

8 The Application proposes 2023 capital expenditures of \$741,000 for the *Company Building*
9 *Renovations* project. This project involves completing renovations at the Port Aux Basques
10 District Building and the Kenmount Road Office Building.

11

12 The Port Aux Basques District Building was constructed in 1982 and is the base of operations
13 for eight employees and equipment necessary to serve customers in the area. A condition
14 assessment showed deterioration and deficiencies with the parking lot, architectural brick,
15 entrance systems, ventilation and air conditioning systems, electrical panel, and backup
16 emergency power system. Correcting deteriorated and deficient equipment at the Port Aux
17 Basques facility is necessary to maintain the facility as an adequate workspace for employees.

18

19 The Kenmount Road Office Building is Newfoundland Power's corporate headquarters in
20 St. John's, originally constructed in 1969 and expanded in 1980. The basement floor of the
21 building is original construction and is used by the Technology Department. A condition
22 assessment of the space determined that certain equipment specific to server rooms is not
23 suitable for employee workspaces and must be removed. Reconfiguration of a largely vacant
24 server room is necessary to create additional workspaces for personnel in the Technology
25 Department.

1 The *Company Building Renovation* project is required to provide safe and adequate facilities
2 necessary to maintain service to customers and should be approved.

3 Reference: Application, Schedule B, pages 166-170.

4

5 ***Physical Security Upgrades***

6 The Application proposes 2023 capital expenditures of \$576,000 for the *Physical Security*
7 *Upgrades* project. The project involves upgrading physical security infrastructure at
8 Newfoundland Power’s facilities throughout its service territory. Security upgrades will be
9 performed in 10 substations throughout 2023 to deter the entry of unauthorized persons and
10 reduce the likelihood of copper theft. Upgrades to security infrastructure will also be performed
11 at three Company facilities and eight hydro plant facilities.

12

13 The unauthorized entry of personnel within Company facilities, including substations, can result
14 in property damage and exposure to energized equipment or hazardous materials. This can
15 create safety hazards for individuals entering the facilities, including employees, which can
16 result in serious injuries occurring. Completing security upgrades at the Company’s facilities is
17 required to maintain safe and adequate facilities to ensure the safety of employees and the
18 general public and should be approved.

19 Reference: Application, Schedule B, pages 171-172.

20

21 ***Additions to Real Property***

22 The Application proposes 2023 capital expenditures of \$654,000 for the *Additions to Real*
23 *Property* program. This program involves upgrading, refurbishing and replacing equipment and
24 facilities due to damage, deterioration, corrosion, in-service failure, and organizational changes.
25 Newfoundland Power’s office buildings range in age from three years to 64 years, with an

1 average age of 44 years. There is an ongoing requirement to upgrade or replace equipment
2 and facilities at these buildings due to failure or age-related deterioration. Correcting such
3 deficiencies in a timely manner is necessary to avoid the temporary closure of facilities and
4 subsequent disruptions to Company operations. This program is necessary to maintain safe and
5 adequate facilities and should be approved.

6 Reference: Application, Schedule B, pages 173-176.

7

8 ***Tools and Equipment***

9 The Application proposes 2023 capital expenditures of \$534,000 for the *Tools and Equipment*
10 program. This program involves adding or replacing tools and equipment used in day-to-day
11 operations to provide safe and reliable service to customers. Tools and equipment are used by
12 Powerline Technicians, Engineering Technologists, Engineers and Tradespersons during day-to-
13 day operations. Specialized tools and equipment are required to maintain, repair, diagnose or
14 commission system assets required to deliver service to customers. Office furniture deteriorates
15 with use over time and eventually requires replacement. This project is necessary to maintain
16 safe and adequate facilities and should be approved.

17 Reference: Application, Schedule B, pages 177-180.

18

19 ***8.9 Transportation***

20 ***Replace Vehicles and Aerial Devices 2023-2024***

21 The Application proposes 2023 capital expenditures of \$2,833,000 and 2024 capital
22 expenditures of \$1,866,000 for the *Replace Vehicles and Aerial Devices 2023-2024* project.

23 This project involves the addition and replacement of heavy/medium duty fleet, light duty fleet,
24 passenger and off-road vehicles. Newfoundland Power has identified 28 passenger vehicles and
25 four light duty vehicles for replacement in 2023 and four heavy/medium duty vehicles for

1 replacement in 2024. Failing to replace vehicles that are in poor condition and have reached
2 the end of their useful service lives could result in vehicles being out of service for prolonged
3 periods, which could impede Newfoundland Power’s response to customer outages as well as
4 maintenance of the electrical system, ultimately leading to reduced service reliability for
5 customers. Therefore, this project is necessary to maintain reliable service to customers at the
6 lowest possible cost and should be approved.

7 Reference: Application, Schedule B, pages 182-186.

8

9 **8.10 Unforeseen Allowance**

10 **Allowance for Unforeseen Items**

11 The Application proposes 2023 capital expenditures of \$750,000 for the *Allowance for*
12 *Unforeseen Items*. This project is necessary to permit unforeseen capital expenditures that
13 have not been budgeted elsewhere. The purpose of the account is to permit the Company to
14 act expeditiously to respond to events affecting the electrical system in advance of seeking
15 specific approval of the Board. This project provides funds for timely service restoration in
16 accordance with section V.A.7 of the Provisional Guidelines and should be approved.

17 Reference: Application, Schedule B, page 188.

18

19 **8.11 General Expenses Capitalized**

20 **General Expenses Capitalized**

21 The Application proposes 2023 capital expenditures of \$4,000,000 for *General Expenses*
22 *Capitalized* (“GEC”). GEC are general expenses of Newfoundland Power that are capitalized due
23 to the fact that they are related, directly or indirectly, to the Company’s capital projects and
24 programs. The GEC project is required to implement the Company’s capital program and is
25 justified on the same basis as the capital projects to which it relates. Expenses are charged to

1 GEC in accordance with Order No. P.U. 3 (2022) and the methodology presented in
2 Newfoundland Power's *2022/2023 General Rate Application*. For these reasons, the project
3 should be approved.

4 Reference: Application, Schedule B, page 190.

5

6 **9.0 CONCLUSIONS**

7 **9.1 Capital Expenditures**

8 The projects and programs proposed in the Application are necessary to: (i) respond to
9 customer growth and changes in customer requirements; (ii) replace deteriorated, deficient or
10 failed equipment; (iii) respond to mandatory requirements; (iv) address safety and
11 environmental issues; or (v) maintain or improve operational efficiencies and customer service
12 levels.

13

14 Hydro does not object to approval of the Application, with the exception of the *Transmission*
15 *Line 55L Rebuild* project. Hydro's objections to the *Transmission Line 55L Rebuild* project have
16 been addressed in this submission. The submissions of the Consumer Advocate challenging
17 certain capital expenditures proposed in the Application have also been addressed in this
18 submission.

19

20 The Company submits that there is no evidence before the Board that: (i) contradicts the
21 engineering judgments reflected in the capital projects and programs presented in the
22 Application; (ii) demonstrates reasonable alternatives that were not considered by
23 Newfoundland Power; or (iii) demonstrates that not proceeding with a particular capital project
24 is a preferable alternative.

1 Newfoundland Power submits that pursuant to Section 41(1) of the *Public Utilities Act*, single-
2 year 2023 capital expenditures of \$93,292,000 and multi-year capital expenditures of
3 \$10,483,000 in 2023 and \$10,645,000 in 2024 should be approved. Including \$19,688,000 in
4 2023 capital expenditures associated with multi-year projects previously approved by the Board,
5 the 2023 Capital Budget of \$123,463,000 represents the capital expenditures required in 2023
6 to meet its statutory obligations, including the delivery of reliable service to its customers at the
7 lowest possible cost.

8

9 **9.2 Rate Base**

10 Newfoundland Power has requested that the Board fix and determine the Company’s 2021
11 average rate base. Schedule C to the Application shows Newfoundland Power’s actual average
12 rate base for 2021.

13

14 The Board’s financial consultants, Grant Thornton, have reviewed the calculation of
15 Newfoundland Power’s 2021 actual average rate base and confirmed that it is accurate and in
16 accordance with established practice and Board Orders.

17 Reference: Grant Thornton, Letter to the Board Re: Newfoundland Power Inc. - 2023 Capital
18 Budget Application, dated September 7, 2022.

19 Based upon the evidence before the Board, and pursuant to Section 78 of the *Public Utilities*
20 *Act*, the Board should fix and determine Newfoundland Power’s average rate base for 2021 at
21 \$1,202,946,000.

- 1 **RESPECTFULLY SUBMITTED** at St. John's, Newfoundland and Labrador, this 10th day of
- 2 November, 2022.



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