

WHENEVER. WHEREVER.
We'll be there.



July 29, 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 2021 Electrification, Conservation and Demand Management Application; and Newfoundland and Labrador Hydro – Approvals Required to Execute Programming Identified in the Electrification, Conservation and Demand Management Plan 2021-2025 Application – Comments of Newfoundland Power

Please find enclosed Newfoundland Power's Comments in relation to the above mentioned.

Should you have any questions, please contact the undersigned.

Yours truly,

A handwritten signature in black ink that reads "Lindsay Hollett".

Lindsay Hollett
Senior Legal Counsel &
Assistant Corporate Secretary

Enclosure

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IN THE MATTER OF the Public Utilities Act (the “Act”), the Electrical Power Control Act, 1994, SNL 1994, Chapter E-5.1 (“EPCA”), and regulations thereunder; and

IN THE MATTER OF an application by Newfoundland Power Inc., pursuant to sections 58 and 80 of the Act, for the approval of an economic test and a deferral account to provide for recovery of costs proposed to be incurred in 2021 for customer electrification programs; and

IN THE MATTER OF an application by Newfoundland Power Inc., pursuant to section 41(3) of the Act, for the approval of supplemental 2021 capital expenditures related to the construction of an Electric Vehicle Charging Network; and

IN THE MATTER OF an application by Newfoundland and Labrador Hydro pursuant to sections 58, 71 and 80 of the Act, for the approval of an economic test and deferral of Electrification, Conservation and Demand Management (“ECDM”) program costs in the proposed ECDM Cost Deferral Account for future recovery through the proposed ECDM Cost Recovery Adjustment; and

IN THE MATTER OF an application by Newfoundland and Labrador Hydro, pursuant to section 41(3) of the Act, for the approval of supplemental 2021 capital expenditures related to the construction of an Electric Vehicle Charging Network.

2021 Electrification, Conservation and Demand Management Application

Comments of Newfoundland Power Inc.

July 29, 2022

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Attachment A: Proposed Change to the Rate Stabilization Clause

1 **1.0 INTRODUCTION**

2 Newfoundland Power Inc.’s (“Newfoundland Power” or the “Company”) *2021 Electrification,*
3 *Conservation and Demand Management Application* (“Newfoundland Power’s Application”)
4 was filed with the Newfoundland and Labrador Board of Commissioners of Public Utilities
5 (the “Board”) on December 16, 2020.

6
7 Newfoundland Power’s Application contains proposals necessary to enable the delivery of
8 electrification initiatives that will provide a rate mitigating benefit for its customers. On June 16,
9 2021, Newfoundland and Labrador Hydro (“Hydro”) filed a separate application to enable the
10 delivery of equivalent electrification initiatives to its customers (“Hydro’s Application”). In
11 August 2021, the Board joined both applications to proceed as one matter.

12
13 Newfoundland Power supports the approval of Hydro’s Application as it will ensure all
14 customers served by the Island Interconnected System have access to a consistent set of
15 initiatives. While the Company’s comments do not address any issues that may be specific to
16 Hydro’s Application, the information provided herein may be helpful to the Board in considering
17 Hydro’s proposals.

18
19 Newfoundland Power’s Application contains three proposals to enable the delivery of customer
20 electrification initiatives:

- 21
22 (i) The approval of supplemental capital expenditures for 2021 totaling \$1,538,000 to
23 commence construction of an Electric Vehicle (“EV”) Charging Network;
24 (ii) The approval of the Electrification Cost Deferral Account to provide recovery of
25 costs associated with implementing customer electrification initiatives; and
26 (iii) The approval of the Modified Total Resource Cost (“mTRC”) test for the economic
27 evaluation of electrification incentive programs for customers.

28
29 These proposals were submitted for Board approval pursuant to sections 58, 80 and 41(3) of the
30 *Public Utilities Act*.

1 Certain of these proposals have been subject to Board orders following the filing of
2 Newfoundland Power’s Application. The Board approved the proposed supplemental capital
3 expenditures for the EV Charging Network in Order No. P.U. 30 (2021). The Board approved
4 the Electrification Cost Deferral Account in Order No. P.U. 3 (2022) as part of Newfoundland
5 Power’s *2022/2023 General Rate Application*.

6
7 Approval of the mTRC test for the economic evaluation of electrification incentive programs is
8 the sole proposal included in Newfoundland Power’s Application remaining under review.
9 Following the Company’s *2022/2023 General Rate Application*, the Board directed that a
10 proposal to establish a 10-year amortization period for recovery of costs included in the
11 Electrification Cost Deferral Account be addressed as part of the current proceeding.¹

12
13 Newfoundland Power’s comments herein address the appropriateness of utility intervention in
14 transportation electrification, and the outstanding issues of approval of the mTRC test and the
15 amortization of costs included in the Electrification Cost Deferral Account. The principal focus
16 of these comments is whether the proposals are reasonable and prudent in providing the
17 Company’s customers with reliable electrical service at the lowest possible cost.

18
19 To provide context for the Board’s consideration of Newfoundland Power’s proposals, the
20 Company’s comments will: (i) provide background information relevant to Newfoundland
21 Power’s Application; (ii) summarize the Company’s outstanding proposals and how they are
22 consistent with provincial legislation, sound public utility practice and established Board
23 practice; (iii) respond to comments received from the parties; and (iv) conclude with a summary
24 of the Company’s submissions.

¹ See Order No. P.U. 3 (2022), page 11, lines 3 to 6.

1 **2.0 BACKGROUND**

2 **2.1 2021 Plan**

3 Newfoundland Power’s Application was filed with the Board following the development of the
4 *Electrification, Conservation and Demand Management Plan: 2021-2025* (the “2021 Plan”).
5 The 2021 Plan is the fourth consecutive plan jointly developed by Newfoundland Power and
6 Hydro (collectively, the “Utilities”) under the takeCHARGE partnership.

7
8 The 2021 Plan was developed based on a comprehensive market potential study completed by
9 Dunsky Energy Consulting (the “Dunsky Study”). Development of the 2021 Plan was also
10 informed by local customer research, stakeholder consultations, industry best practices and the
11 Utilities’ long term experience in delivering customer programs.

12

13 The 2021 Plan continues longstanding conservation and demand management (“CDM”) initiatives
14 and introduces customer electrification initiatives. Both CDM and electrification initiatives are
15 aimed at increasing customers’ adoption of technologies that result in lower costs for participating
16 customers and lower overall costs for electricity customers generally.

17

18 The Utilities have been offering customer CDM initiatives on a coordinated basis since 2009.
19 These initiatives consistently benefit customers through electricity bill savings and lower system
20 costs. For example, customers participating in CDM incentive programs are forecast to achieve
21 electricity bill savings of approximately \$185 million from 2021 to 2025. The implementation of
22 CDM incentive programs is forecast to benefit all Newfoundland Power customers through a
23 reduction in system costs of approximately \$107 million over this period.²

24

25 The CDM initiatives included in the 2021 Plan continue to be implemented in a manner that
26 complies with existing orders of the Board. This includes Board orders concerning the economic
27 evaluation and recovery of costs associated with CDM initiatives. Accordingly, Newfoundland
28 Power’s Application does not contain proposals related to the continued implementation of CDM
29 initiatives for customers.³

² See Newfoundland Power’s Application, Volume 1, Evidence, page 11, lines 1 to 3.

³ See Newfoundland Power’s Application, Volume 1, Evidence, page 3, lines 1 to 5.

1 The electrification initiatives included in the 2021 Plan would provide a rate mitigating benefit for
2 Newfoundland Power's customers over the longer term, primarily by accelerating the province's
3 adoption of EVs. EV adoption in Newfoundland and Labrador remains the lowest of any Canadian
4 province. Data from the Provincial Government indicates there were only 284 EVs in the province
5 as of 2021. EVs accounted for only 1.4% of annual vehicle sales in the province in the first quarter
6 of 2022, as compared to 17.1% in British Columbia and 13.6% in Quebec.⁴

7
8 The Dunskey Study determined that transportation electrification represents the single largest
9 opportunity to maximize domestic energy usage in Newfoundland and Labrador, with the potential
10 to more than triple the number of EVs in the province by 2034. Without market intervention, the
11 Dunskey Study forecasts there will be approximately 41,000 EVs on the province's roads by 2034.
12 Implementation of the 2021 Plan could increase this number to approximately 140,000 EVs over the
13 same time horizon.⁵

14
15 At the time of filing the 2021 Plan, planned electrification initiatives were forecast to provide
16 additional net revenue of approximately \$123 million from 2021 to 2034, or \$62 million on a net
17 present value ("NPV") basis. This increase in net revenue would provide a rate mitigating benefit
18 for customers of approximately 0.5 cents/kWh by 2034, equating to electricity bill savings of
19 \$100 during that year for an average residential customer with electric heating.⁶

20
21 The forecast rate mitigating benefit of planned electrification initiatives has increased since the
22 filing of the 2021 Plan due to changes in marginal costs and an updated rate mitigation target
23 from the Provincial Government. The electrification initiatives included in the 2021 Plan are
24 currently forecast to provide a rate mitigating benefit of 0.9 cents/kWh by 2034.⁷ This would
25 equate to electricity bill savings of \$180 during that year for an average residential customer with
26 electric heating.⁸

⁴ See correspondence from the Utilities to the Board regarding *Response to Request for Market Conditions Update*, dated June 17, 2022, page 7, Table 1.

⁵ See Newfoundland Power's Application, Volume 1, Exhibit 2, page 4.

⁶ See Newfoundland Power's Application, Volume 1, Evidence, page 19, lines 1 to 11.

⁷ See response to Request for Information TC-PUB-NP-005 (1st Revision), Attachment B, page 1, Table 1.

⁸ For an example of how customer bill impacts are calculated, see Newfoundland Power's Application, Volume 1, Evidence, page 19, footnote 47.

1 While planned electrification initiatives would provide a rate mitigating benefit for customers
2 over the longer term, such benefits will not be realized if utility interventions are not pursued.
3 The Dunsky Study determined that system costs will increase without utility intervention in
4 transportation electrification. This is attributable to an increase in capacity-related system costs
5 due to an increase in peak demand resulting from the unmanaged charging of EVs.⁹

6
7 The 2021 Plan lays the foundation for ensuring load management initiatives are undertaken in a
8 manner that will maximize the benefits of EV adoption for customers and avoid exposing
9 customers to increasing system costs that would place upward pressure on customer rates.

11 **2.2 Public Policy Context**

12 Following commissioning of the Muskrat Falls Project, the quantity of electricity generated in the
13 province is forecast to exceed domestic requirements for electricity, resulting in a surplus of over
14 3 TWh annually. This places the province in a unique position where increasing domestic energy
15 usage, while managing peak demand, would lead to lower electricity rates for customers.

16
17 This dynamic was recognized by the Board as part of the *Reference on Rate Mitigation Options and*
18 *Impacts*. As part of that proceeding, the Board found that:

19
20 “*[M]aximizing domestic load through electrification, improving energy efficiency and*
21 *using demand response to reduce peak and allow for increased export sales leads to the*
22 *best outcomes for customers.*”¹⁰

23
24 The Board subsequently recommended the Utilities and the Provincial Government work together
25 on a comprehensive and coordinated approach to developing the most appropriate programs for the
26 province and that a comprehensive plan be submitted by the Utilities to the Board in 2021.¹¹

⁹ See response to Request for Information PUB-NP-037.

¹⁰ See Newfoundland Power’s Application, Volume 1, Evidence, page 6, lines 17 to 19.

¹¹ See Newfoundland Power’s Application, Volume 1, Evidence, page 7, lines 1 to 4.

1 Muskrat Falls Project rate mitigation and energy efficiency continue to be key policy objectives of
2 the Provincial Government. The Provincial Government provided a letter of support for the
3 Utilities' 2021 Plan in December 2020, stating the Board's findings as part of the *Reference on*
4 *Rate Mitigation Options and Impacts* clearly demonstrated that planned CDM and electrification
5 initiatives have excellent potential to assist with provincial rate mitigation objectives.¹² The
6 Provincial Government provided two additional letters in March 2022 confirming its continued
7 support. The letters noted that existing government initiatives to promote EV adoption are
8 designed to complement the initiatives included in the Utilities' 2021 Plan.¹³

9
10 The rate mitigating benefit of planned electrification initiatives is consistent with the
11 requirements of the provincial power policy, which requires that customers be provided with
12 reliable service at the lowest possible cost.¹⁴

13
14 The contribution of electrification initiatives to least-cost service delivery was recognized by the
15 Board in Order No. P.U. 30 (2021). In that order, the Board approved the Utilities' proposed
16 investments in the EV Charging Network on the basis that it would contribute to increased EV
17 uptake in the province, which will ultimately contribute to increased sales of electricity,
18 increased revenues and, with appropriate load management measures, reduced costs for
19 customers.¹⁵

20 21 **2.3 Review Process**

22 Newfoundland Power's Application has been the subject of a thorough review process since its
23 filing with the Board on December 16, 2020.

24
25 On January 19, 2021, the Board established a schedule for hearing Newfoundland Power's
26 Application. The schedule provided for Requests for Information ("RFIs") and responses,
27 followed by comments and replies from the parties. Newfoundland Power received 69 RFIs in
28 January 2021, responses to which were filed on February 9, 2021. Comments from Hydro and

¹² See Newfoundland Power's Application, Volume 2, Schedule M.

¹³ See response to Request for Information TC-PUB-NP-003, Attachment A.

¹⁴ See section 3(b)(iii) of the *Electrical Power Control Act, 1994*.

¹⁵ See the Board's Reasons for Decision in issuing Order No. P.U. 30 (2021), page 13, lines 13 to 17.

1 the Consumer Advocate were provided on February 15, 2021 and March 1, 2021, respectively.
2 Newfoundland Power filed its response to these comments on March 5, 2021.

3
4 Hydro's Application was filed on June 16, 2021. Following receipt of Hydro's Application, the
5 Board determined that it required additional information on Newfoundland Power's proposals
6 and established a schedule to provide further opportunity for all parties to ask additional RFIs.
7 In July 2021, an additional 69 RFIs were received on Newfoundland Power's Application and
8 129 RFIs were received on Hydro's Application. The Utilities filed responses to all RFIs in
9 August 2021.

10
11 On August 30, 2021, the Board advised that Newfoundland Power's Application and Hydro's
12 Application would be joined and proceed as one matter.

13
14 On September 7, 2021, the Island Industrial Customer Group (the "IIC Group") requested that
15 the Board convene a technical conference on the Utilities' applications. The Board subsequently
16 determined that a technical conference would be beneficial for the parties and granted a request
17 made by Hydro to separate the proposed supplemental capital expenditures for the EV Charging
18 Network from the other proposals in the Utilities' applications. Intervenors provided comments
19 on the proposed supplemental capital expenditures on September 22, 2021, followed by
20 responses from the Utilities on September 24, 2021. The Board approved the proposed
21 supplemental capital expenditures in Order No. P.U. 30 (2021) issued on September 29, 2021.

22
23 A technical conference on the Utilities' applications was held on February 1, 2022. The
24 technical conference was jointly hosted by the Utilities and attended by representatives of the
25 Consumer Advocate, the IIC Group and Board staff. Following the technical conference,
26 Newfoundland Power received 50 RFIs and Hydro received 76 RFIs. The Utilities filed
27 responses to all RFIs in March 2022.

28
29 On April 19, 2022, the Board set a schedule allowing for expert reports to be filed. The IIC
30 Group filed an expert report prepared by Patrick Bowman of InterGroup Consultants Ltd. on

1 May 4, 2022 (the “InterGroup Report”). The IIC Group subsequently responded to 31 RFIs on
2 the InterGroup Report.

3
4 On June 3, 2022, the Board requested the Utilities provide an update on any changes in market
5 conditions that may affect the information filed in support of their applications. The Utilities
6 jointly filed the requested market conditions update on June 17, 2022.

7
8 Following the market conditions update, the Board established a schedule allowing for further
9 comments from the parties. Comments were filed by the Consumer Advocate and IIC Group in
10 July 2022. The comments filed by the IIC Group indicate they are specific to Hydro’s
11 Application, but provide certain commentary that is also relevant to Newfoundland Power’s
12 proposals. Newfoundland Power’s response therefore addresses the comments filed by the
13 Consumer Advocate and the comments filed by the IIC Group that are relevant to the Company’s
14 proposals.

15
16 In total, the review of the Utilities’ applications has included responses to 393 RFIs issued to the
17 Utilities, a technical conference, an expert report, and three rounds of comments and responses
18 from the parties.

19
20 **3.0 NEWFOUNDLAND POWER’S APPLICATION**

21 **3.1 General**

22 To provide context for the Board’s consideration of Newfoundland Power’s Application, this
23 section provides an overview of the customer electrification initiatives included in the 2021 Plan,
24 including how the initiatives are appropriate and are in keeping with industry practice. This
25 section also summarizes the evidence supporting the Company’s proposals to use the mTRC test
26 for evaluating the cost-effectiveness of electrification incentive programs and to amortize the
27 recovery of costs related to electrification initiatives over 10 years.

1 3.2 Customer Electrification Initiatives

2 Evidence

3 The objective of the electrification initiatives included in the 2021 Plan is to provide a rate
4 mitigating benefit to customers by encouraging the adoption of technologies that maximize
5 domestic energy use while enabling the Utilities to manage impacts on peak demand.
6

7 Encouraging customer adoption of new technologies requires strategically addressing barriers to the
8 adoption of those technologies. The initiatives included in the 2021 Plan are designed to address
9 specific barriers to customers' adoption of electric technologies, primarily EVs. Barriers to
10 customers' adoption of EVs were identified through annual surveys conducted by MQO
11 Research. Over the last four years, Newfoundland and Labrador residents have consistently
12 indicated the primary barriers to EV adoption are the upfront cost of purchasing an EV and
13 access to public charging. For example, in 2020, 32% of residents ranked the upfront cost of an
14 EV as the primary barrier, while 24% of residents ranked the availability of public charging as
15 the primary barrier.¹⁶
16

17 There are four categories of electrification initiatives included in the 2021 Plan:
18

19 (i) Investments in EV Charging Infrastructure

20 Access to publicly available EV charging infrastructure in Newfoundland and Labrador
21 lags behind other jurisdictions. Private sector investment in charging infrastructure is
22 currently constrained by a weak business case due to the cost of installing this
23 infrastructure and the limited number of EVs in the province.¹⁷
24

25 The 2021 Plan includes investments in publicly available EV charging infrastructure
26 through a utility-owned EV Charging Network and a make-ready model that encourages
27 private sector development. The EV Charging Network includes the installation,
28 operation and maintenance of charging infrastructure directly by the Utilities. The
29 make-ready model includes the installation of electrical infrastructure to enable

¹⁶ See response to Request for Information TC-PUB-NP-001.

¹⁷ See response to Request for Information PUB-NP-035.

1 commercial customers to purchase and install publicly available charging stations.¹⁸
2 Ensuring access to publicly available charging infrastructure will alleviate customers'
3 range anxiety related to owning an EV, thereby addressing a primary barrier to EV
4 adoption.

5
6 (ii) Electrification Incentive Programs

7 The 2021 Plan includes incentive programs for residential and commercial customers to
8 reduce the up-front cost of purchasing an EV. The cost of purchasing an EV is currently
9 approximately \$20,000 higher than the cost of purchasing an equivalent internal
10 combustion engine (“ICE”) vehicle.¹⁹ Incentive amounts for EVs are planned to be
11 \$2,500 for a fully electric vehicle and \$1,000 for a plug-in hybrid vehicle. EV incentive
12 amounts were determined based on an assessment of market conditions, industry trends
13 and potential rate mitigating benefits for customers. Incentive amounts would be
14 adjusted over time as EVs approach cost parity with ICE vehicles.²⁰

15
16 The 2021 Plan also includes incentives to address the higher cost of purchasing a
17 “smart” charger with networking capabilities that can support load management
18 initiatives. Charger incentive amounts of \$500 for residential customers and \$3,000 for
19 commercial customers are planned to address the incremental cost of purchasing “smart”
20 chargers. The higher incentive amount for commercial customers reflects the higher
21 installation costs for those customers.²¹

22
23 While the 2021 Plan focuses primarily on transportation electrification, it also
24 includes a Custom Electrification Program to incentivize other electrification
25 opportunities. Under this program, incentives would be individualized to meet the
26 specific needs of commercial customers, such as the purchase of electric forklifts.²²

¹⁸ See Newfoundland Power’s Application, Volume 2, 2021 Plan, pages 14 to 15.

¹⁹ See response to Request for Information TC-PUB-NP-005 (1st Revision).

²⁰ See response to Request for Information PUB-NP-039.

²¹ See response to Request for Information PUB-NP-041.

²² See Newfoundland Power’s Application, Volume 2, Schedule F, pages 7 to 8.

1 The Utilities have not proposed the Board approve these programs. Rather, the
2 Utilities have proposed the Board approve an economic test that all incentive
3 programs be required to pass in order to ensure they are cost-effective for customers.
4 All planned electrification incentive programs have been designed to pass the mTRC
5 test, which indicates they are cost-effective for customers.²³

6
7 The approval of an economic test, rather than specific program parameters, provides
8 the Utilities with flexibility to adapt incentive programs in a timely manner in
9 response to changing market conditions. Economic test results and any changes to
10 planned programs would be reported to the Board annually. This is consistent with
11 the Utilities' long term approach to delivering CDM programs and is explained in
12 further detail in section 3.3.1 of Newfoundland Power's comments provided below.

13
14 (iii) Customer Education

15 Increasing customers' adoption of new technologies requires education on the benefits
16 of those technologies. The 2021 Plan includes initiatives to educate customers on the
17 benefits of owning an EV and other electric technologies. Education initiatives include
18 online resources and outreach activities, such as tradeshow. The Utilities will also
19 continue to focus on building industry partnerships to advance EV adoption, including
20 partnerships with automobile dealers.²⁴

21
22 (iv) Research

23 Utility intervention is essential to managing capacity-related system costs as EV
24 adoption increases. The Dunsky Study estimates that approximately 85% of EV load
25 can be shifted to off-peak periods through load management.

26
27 The 2021 Plan includes two pilot programs to research effective strategies for load
28 management. The EV Demand Response Pilot program will allow the Utilities to
29 explore the most effective options to shift EV charging to off-peak periods. The

²³ See Newfoundland Power's Application, Volume 1, Evidence, section 3.3.2 Economic Justification.

²⁴ See Newfoundland Power's Application, Volume 2, 2021 Plan, page 21.

1 Custom Fleet Pilot program will allow the Utilities to understand barriers to adopting
2 medium and heavy-duty EVs and options to encourage off-peak charging of those
3 vehicles.²⁵
4

5 The customer electrification initiatives included in the 2021 Plan are consistent with industry
6 practice. Of 43 North American jurisdictions that offer electrification programs: (i) 32
7 jurisdictions provide incentives for EVs or chargers; (ii) 31 jurisdictions invest in EV charging
8 infrastructure; and (iii) 27 jurisdictions provide custom electrification solutions for commercial
9 customers.²⁶
10

11 An issue interrogated as part of this proceeding is whether it is appropriate for the Utilities to
12 offer EV incentive programs, particularly given government intervention in this sector.
13

14 Utility involvement in transportation electrification is increasing throughout North America. For
15 example, a February 2021 report from the Edison Electric Institute found that “[e]lectric
16 companies increasingly are engaged in many different facets of electric transportation,” with 52
17 electric companies having received regulatory approval for filings related to transportation
18 electrification.²⁷
19

20 EV incentive programs are typically offered to support the achievement of a jurisdiction’s
21 specific policy goals. For example, EV incentive programs provided by utilities in British
22 Columbia are funded under the government’s CleanBC plan. The circumstances in
23 Newfoundland and Labrador are unique in that increasing EV adoption will provide a direct
24 benefit to utility customers by way of lower electricity rates over the longer term.²⁸ The Dunskey
25 Study determined that EV incentives could increase EV load by 16% to 32% over the short term,
26 and 8% to 9% over the longer term.²⁹

²⁵ See Newfoundland Power’s Application, Volume 2, 2021 Plan, pages 22 to 23.

²⁶ See Newfoundland Power’s Application, Volume 1, Evidence, page 14, footnote 38.

²⁷ See response to Request for Information PUB-NP-035.

²⁸ See response to Request for Information PUB-NP-035.

²⁹ See response to Request for Information PUB-NP-030.

1 In the Utilities' experience, incentives have proven effective in addressing barriers to the
2 adoption of new technologies in Newfoundland and Labrador. This has been observed in the
3 substantial customer benefits realized through the delivery of CDM incentive programs. The
4 effectiveness of incentives in supporting market transformation can also be observed in other
5 jurisdictions. Jurisdictions with long term experience in delivering EV incentives, such as
6 British Columbia and Quebec, have the highest rates of EV adoption in Canada.³⁰

7
8 Existing government initiatives to encourage EV adoption will be complementary to the
9 initiatives included in the 2021 Plan. The Federal Government has offered a \$5,000 incentive for
10 the purchase of an EV since 2019, which has been extended to run until 2025. The federal
11 incentive program was accounted for in the analysis completed in the Dunsky Study and in the
12 development of the 2021 Plan.³¹ The Provincial Government has offered a \$2,500 incentive for
13 the purchase of an EV since 2021. The provincial incentive program was designed by
14 government to be complementary to the initiatives included in the 2021 Plan.³² There is no
15 current funding commitment for the provincial incentive program beyond March 2023.

16
17 Implementation of the 2021 Plan would result in a total incentive amount of \$10,000 for a
18 customer purchasing a qualifying EV in Newfoundland and Labrador. A combined incentive
19 amount of \$10,000 would reduce the incremental cost of purchasing an EV by about half.³³

20
21 The total EV incentive amount that would be available in Newfoundland and Labrador upon
22 implementation of the 2021 Plan appears reasonable in the Canadian context. Total incentive
23 amounts offered in other Canadian jurisdictions that provide EV incentives range from \$8,000 to
24 \$13,000. The average total incentive amount offered in Canada is approximately \$10,000, with
25 incentives totaling \$10,000 available in Prince Edward Island, New Brunswick, Northwest
26 Territories and Yukon.³⁴

³⁰ See correspondence from the Utilities to the Board regarding *Response to Request for Market Conditions Update*, dated June 17, 2022, page 7, Table 1.

³¹ See Newfoundland Power's Application, Volume 2, Schedule C, page 138 of 325.

³² See response to Request for Information TC-PUB-NP-003, Attachment A.

³³ See response to Request for Information TC-PUB-NP-003, page 4, lines 10 to 22.

³⁴ See response to Request for Information TC-PUB-NP-003, page 4, Table 1.

1 In addition to planned EV purchase incentives, the Utilities’ planned incentive for EV “smart”
2 chargers is required to encourage the adoption of chargers that can support load management
3 initiatives. Customers that receive a charger incentive would be recruited to participate in the
4 Utilities’ planned EV Demand Response Pilot program, which is designed to study the most
5 effective options to manage the peak demand impacts of EVs.³⁵

6
7 Ultimately, a coordinated effort in delivering electrification initiatives would enable the Utilities
8 to strategically remove barriers to transportation electrification in Newfoundland and Labrador.
9 By removing these barriers, the Utilities would support market transformation in a manner that
10 provides a long term rate mitigating benefit to their customers.³⁶

11 12 Submission

13 Newfoundland Power submits that the electrification initiatives included in the 2021 Plan are
14 consistent with industry practice, would be complemented by existing government initiatives,
15 and would provide a long term rate mitigating benefit to its customers.

16 17 **3.3 Application Proposals**

18 **3.3.1 Cost-Effectiveness Testing**

19 Evidence

20 Newfoundland Power’s Application proposes the use of the modified Total Resource Cost (“mTRC”)
21 test to evaluate the cost-effectiveness of electrification incentive programs.³⁷

22
23 The mTRC test assesses the Utilities’ costs to administer an incentive program and the costs and
24 savings to customers resulting from participating in that program. This determines whether
25 electrification incentive programs would provide an economic benefit to participating customers,
26 which is essential to encouraging their participation in those programs. The mTRC test also
27 ensures that the Utilities’ costs of delivering an incentive program do not exceed the benefits

³⁵ See response to Request for Information PUB-NP-037.

³⁶ See response to Request for Information CA-NP-045.

³⁷ See Newfoundland Power’s Application, Volume 1, The Application, page 2, paragraph 10.

1 provided to customers, which is necessary to confirm that utility investment is beneficial for
2 customers.³⁸

3
4 The mTRC test is conceptually similar to the Total Resource Cost (“TRC”) test approved by the
5 Board in Order No. P.U. 18 (2016) for evaluating CDM incentive programs. Both the mTRC and
6 TRC tests determine program cost-effectiveness from the perspectives of the customer and the
7 utility. The primary difference is that, unlike the TRC test, the mTRC test considers non-electrical
8 customer benefits, including lower fuel and maintenance costs associated with owning an EV.
9 These non-electrical benefits are essential to the customer economics of electrification programs,
10 but are not currently essential to the customer economics of CDM programs in this jurisdiction.³⁹

11
12 The mTRC test was developed based on the principles outlined in the *National Standard*
13 *Practice Manual* (the “Manual”). The Manual is the authoritative source on best practices for
14 evaluating customer programs. The principles recommended in the Manual include, among
15 others, designing a test to align with a jurisdiction’s specific policy goals.⁴⁰ The mTRC test
16 aligns with the provincial goal of rate mitigation by ensuring the adoption of EVs and other
17 electric technologies that can maximize domestic energy usage is done in a manner that is cost-
18 effective for customers.

19
20 The mTRC test is applied in conjunction with an NPV analysis. The NPV analysis assesses the
21 rate mitigating benefit to be provided to Newfoundland Power’s customers based on all four
22 categories of electrification initiatives included in the 2021 Plan. The combined use of the
23 mTRC test and the supporting NPV analysis ensures that: (i) electrification incentive programs
24 are sufficiently economic to enable customer participation; and (ii) all electrification initiatives
25 will provide a rate mitigating benefit to all Newfoundland Power customers.⁴¹

26
27 The use of an overall cost assessment through the mTRC test is consistent with sound practice in
28 electrification program delivery. A survey conducted by independent consultant Econoler Inc.

³⁸ See response to Request for Information PUB-NP-053.

³⁹ See Newfoundland Power’s Application, Volume 1, Evidence, page 17, lines 9 to 12.

⁴⁰ See response to Request for Information PUB-NP-053.

⁴¹ See response to Request for Information PUB-NP-052.

1 identified seven North American jurisdictions that undertake cost-effectiveness testing for
2 electrification programs. All seven jurisdictions apply an overall cost assessment as part of their
3 cost-effectiveness testing. These overall cost assessments consider non-electrical or other societal
4 benefits, and are conceptually similar to the mTRC test. Three of the seven surveyed jurisdictions
5 also assess customer rate impacts, which is consistent with the Utilities' use of the NPV analysis to
6 assess rate impacts.⁴²

7
8 Regulators in other jurisdictions have approved the use of an mTRC test in evaluating customer
9 programs. For example, the Colorado Public Utilities Commission approved calculating the
10 cost-effectiveness of electrification offerings using an mTRC test. The Public Service
11 Commission of Wisconsin also found it is reasonable to use an mTRC test to evaluate the cost-
12 effectiveness of programs.⁴³ Additionally, the use of an NPV analysis to assess the economic
13 benefits of utility investment is accepted regulatory practice in this jurisdiction.

14
15 If approved, the results of the mTRC test and NPV analysis would be updated annually to ensure
16 electrification initiatives continue to be beneficial for Newfoundland Power's customers. The
17 updated results would be provided to the Board through existing reporting mechanisms for CDM
18 initiatives.

19
20 Submission

21 Newfoundland Power submits that use of the mTRC test to evaluate the cost-effectiveness of
22 electrification incentive programs is consistent with existing Board practice for CDM programs and
23 sound public utility practice. The combined use of the mTRC test and supporting NPV analysis will
24 ensure that all customer electrification initiatives are implemented in a cost-effective manner that
25 achieves rate mitigating benefits for customers.

⁴² See Newfoundland Power's Application, Volume 1, Evidence, page 18, lines 7 to 11; response to Request for Information PUB-NP-024.

⁴³ See response to Request for Information PUB-NP-053.

1 3.3.2 Cost Recovery

2 Evidence

3 The Board has approved the establishment of the Electrification Cost Deferral Account to provide
4 for the deferred recovery of costs associated with implementing electrification initiatives.

5
6 The definition of the Electrification Cost Deferral Account was amended as part of the Company's
7 2022/2023 General Rate Application to include recovery of capital expenditures related to the EV
8 Charging Network. The account will also include: (i) costs incurred for electrification incentive
9 program development, delivery and evaluation; (ii) costs to operate Company-owned charging
10 stations; and (iii) costs for studies that are greater than \$100,000, such as pilot programs. The
11 account will be credited with the receipt of government funding related to electrification
12 initiatives and revenues associated with the operation of Company-owned charging stations.

13
14 Newfoundland Power has proposed a 10-year amortization period for recovery of costs included in
15 the Electrification Cost Deferral Account by way of amending Clause II.9 of the Rate Stabilization
16 Clause.⁴⁴ The recovery of such costs through the Rate Stabilization Clause is consistent with the
17 current approach to recovering costs associated with CDM initiatives.⁴⁵ Attachment A provides
18 the proposed change to the Rate Stabilization Clause to facilitate recovery of costs in the
19 Electrification Cost Deferral Account.

20
21 The recovery through customer rates of costs associated with electrification initiatives, including
22 infrastructure investments, is common utility practice in North America.⁴⁶ Current public utility
23 practice indicates costs associated with electrification initiatives are typically recovered over
24 periods of five to 15 years. Costs for pilot programs and EV incentive programs are generally
25 recovered over periods of five to 10 years. As examples, Consumers Energy in Michigan
26 recovers electrification pilot program costs over five years, while Xcel Energy in Colorado
27 recovers electrification program costs over 10 years. Costs for EV infrastructure are generally
28 recovered over periods of 10 to 15 years. As examples, utilities in New York recover costs for

⁴⁴ See Newfoundland Power's 2022/2023 General Rate Application, Volume 1, The Application, paragraph 11.

⁴⁵ See Newfoundland Power's Schedule of Rates, Rules and Regulations, effective July 1, 2022, page 18.

⁴⁶ See response to Request for Information PUB-NP-027.

1 make-ready charging infrastructure for EVs over 15 years, and rebates for EV chargers are
2 recovered over 10 years in New Mexico and Oregon.⁴⁷

3
4 An amortization period of 10 years aligns with the average service life of Direct-Current Fast
5 Charger (“DCFC”) infrastructure installed as part of the EV Charging Network, as well as the
6 technologies included in the Company’s electrification incentive programs. The average life of
7 these technologies is determined based on the forecast weighted persistence of energy usage over
8 the period 2021 to 2025. The weighted persistence of energy usage measures the period over
9 which benefits are accrued for customers through electrification programs. Results are weighted
10 based upon the percentage of total energy usage attributable to each program. The weighted
11 persistence of energy usage is 9.6 years for Newfoundland Power’s electrification incentive
12 programs.⁴⁸

13
14 A 10-year amortization period for recovery of costs included in the Electrification Cost Deferral
15 Account will therefore align the period for cost recovery with the period over which customers
16 experience the benefits of electrification initiatives. This is consistent with the regulatory
17 principle of intergenerational equity, which holds that ratepayers in a given period should pay
18 only the costs necessary to provide them with service in that period.

19
20 Submission

21 Newfoundland Power submits that amending Clause II.7 of the Rate Stabilization Clause to
22 establish a 10-year amortization period to recover costs associated with electrification initiatives
23 is consistent with sound public utility practice, current Board practice for CDM initiatives, and
24 regulatory fairness principles. Approval of this amendment would provide for the first transfer
25 to the Rate Stabilization Account to occur on March 31, 2023, which would be reflected in the
26 July 1, 2023 customer rate adjustment.

⁴⁷ See Newfoundland Power’s 2022/2023 General Rate Application, Volume I, Section 3: Finance, page 3-56, footnotes 151 and 152.

⁴⁸ See Newfoundland Power’s 2022/2023 General Rate Application, Volume I, Section 3: Finance, page 3-56, footnote 153.

1 **4.0 RESPONSE TO CONSUMER ADVOCATE’S COMMENTS**

2 **4.1 General**

3 The Consumer Advocate filed comments on the Utilities’ applications in July 2022 (the
4 “Consumer Advocate’s Comments”). The Consumer Advocate’s Comments outline seven
5 specific issues respecting the Utilities’ applications. For ease of reference, Newfoundland
6 Power’s response is organized according to these seven issues.

7
8 **4.2 Response to Specific Issues**

9 Issue #1

10 The Consumer Advocate questions why there is a need for the Utilities to provide incentives
11 when: (i) EVs will reach cost parity in three short years or less; (ii) both the federal and
12 provincial governments are providing their own EV purchase incentives; and (iii) the Federal
13 Government intends to mandate EV sales.

14
15 At the time of filing Newfoundland Power’s Application, EVs were forecast to reach cost parity
16 with ICE vehicles in 2025. The point at which EVs and ICE vehicles are expected to reach cost
17 parity has since been delayed due to inflationary increases affecting EV batteries following the
18 COVID-19 pandemic. The best available information currently indicates price parity may be
19 delayed by up to two years due to these impacts.⁴⁹ The Utilities plan to adjust incentive amounts
20 over time as the price gap closes between EV and ICE vehicles.

21
22 As described previously, the federal EV incentive was accounted for in the development of the
23 Utilities’ 2021 Plan, and the provincial EV incentive is designed by government to complement
24 the initiatives included in the 2021 Plan. Implementation of the EV incentive program included
25 in the 2021 Plan would reduce the price gap between EVs and ICE vehicles by about half and
26 provide a total EV incentive amount in Newfoundland and Labrador that is comparable to
27 amounts offered in other jurisdictions.

⁴⁹ See response to Request for Information TC-PUB-NP-005 (1st Revision).

1 The potential impacts of the Federal Government’s planned zero-emission vehicles mandate
2 were addressed in the Utilities’ market conditions update provided in June 2022. While details
3 as to how the planned mandate will function are not yet available, other jurisdictions have
4 successfully combined sales mandates and vehicle incentives to support increased EV
5 adoption.⁵⁰

6
7 Based on these considerations, there remains a strong business case for the Utilities to offer EV
8 incentive programs in order to provide rate mitigating benefits for their customers.

9
10 Issue #2

11 The Consumer Advocate observes challenges with operation of the Labrador Island Link (“LIL”)
12 and questions why the Utilities would embark on a program to accelerate electricity consumption
13 in the province when the Holyrood Thermal Generating Station continues to be the marginal
14 plant for meeting system energy requirements. The Consumer Advocate states there is no
15 evidence to date that excess energy is available or will be reliably available next winter.

16
17 The customer benefits of accelerating EV adoption are long term in nature. With
18 implementation of the 2021 Plan, EVs are forecast to add approximately 0.5 GWh and 2.4 GWh
19 of load in the first two years of implementation.⁵¹ This would not be expected to have a material
20 impact on near term supply planning or system costs. By contrast, EVs are forecast to add
21 approximately 657 GWh of energy usage over the longer term, providing a rate mitigating
22 benefit for customers.

23
24 Issue #3

25 The Consumer Advocate observes oil and gasoline prices have increased over the last year and
26 claims that such increases provide the public with significant incentive to purchase EVs, thereby
27 nullifying the need for the Utilities to accelerate EV adoption.

⁵⁰ See correspondence from the Utilities to the Board regarding *Response to Request for Market Conditions Update*, dated June 17, 2022, page 6.

⁵¹ See Newfoundland Power’s Application, Volume 2, Schedule L, page 1 of 5, Table L-1.

1 Fuel prices are not a primary determinant as to whether customers will purchase an EV. This is
2 confirmed in the Dunskey Study, which states:

3
4 *“Electricity rates and fuel costs have limited impact on the uptake of EVs in the personal*
5 *segment. Research indicates that consumers in the personal [light-duty vehicle] segment*
6 *are **more likely to consider the upfront cost rather than total cost of ownership of EVs***
7 *when making a purchase decision.”⁵² [emphasis added]*

8
9 This finding is consistent with recent local market research. A focus group completed by MQO
10 Research in April 2022 confirmed that, while rising fuel prices and environmental benefits are
11 factors when considering purchasing an EV, the upfront cost to purchase an EV and the
12 availability of charging stations continue to be the primary barriers to adoption.⁵³ Investments in
13 EV incentive programs and charging infrastructure continue to be necessary to address these
14 barriers.

15
16 Issue #4

17 The Consumer Advocate observes that the St. John’s City Council has passed a proposal for the
18 installation of 26 Level 2 EV charging stations and questions how many other government and
19 private sector entities are likely to follow suit, nullifying the need for regulated utilities to own
20 and operate charging stations.

21
22 The Utilities’ EV Charging Network is substantially different in scope than the charging stations
23 planned by the City of St. John’s from two perspectives.

24
25 First, the Utilities’ EV Charging Network is focused on the installation of DCFC infrastructure
26 along major transportation routes. A total of 56 DCFC ports are planned for installation as part
27 of this network. DCFC infrastructure can charge an EV in approximately one hour. Level 2
28 chargers, as planned by the City of St. John’s, require an average of nine hours to charge an

⁵² See Newfoundland Power’s Application, Volume 2, Schedule C, page 136 of 325.

⁵³ See correspondence from the Utilities to the Board regarding *Response to Request for Market Conditions Update*, dated June 17, 2022, page 2.

1 EV.⁵⁴ While Level 2 chargers are suitable for certain applications, DCFC infrastructure is
2 typically required along highways and other major transportation routes where customers
3 generally stop for only short periods of time.

4
5 Second, the Utilities' EV Charging Network is designed to achieve the geographic coverage
6 necessary to permit travel across the Island of Newfoundland in an EV. The establishment of
7 this minimum infrastructure is necessary to address customers' range anxiety related to owning
8 an EV.⁵⁵ While investments by municipalities, such as the City of St. John's, are helpful to
9 promoting EV adoption, localized investments will not result in adequate geographic coverage of
10 EV charging infrastructure across the Island.

11
12 The deployment of EV charging infrastructure in Newfoundland and Labrador continues to lag
13 behind the remainder of Canada. There has been no private sector investment in publicly
14 available DCFC infrastructure since the filing of the 2021 Plan. The Provincial Government
15 announced a \$1 million EV charging infrastructure investment on April 22, 2022. While details
16 of the Provincial Government's planned investment are not yet available, it is intended to
17 complement the Utilities' EV Charging Network.⁵⁶

18
19 Furthermore, the Dunskey Study determined there would be considerable capacity for additional
20 charger deployment in the province beyond the levels planned by the Utilities or any
21 commitments currently made by municipal or provincial governments. The Dunskey Study
22 determined that up to 2,000 Level 2 charging ports and 200 DCFC ports may be helpful to
23 promote EV adoption.⁵⁷ Based on this market potential, private sector and government
24 investments would need to increase dramatically in order to nullify the Utilities' investment in
25 the EV Charging Network. Such investment levels are not expected to occur over the near term.

⁵⁴ See Newfoundland Power's Application, Volume 1, Exhibit 2, page 4.

⁵⁵ See correspondence from Newfoundland Power to the Board regarding *Comments on 2021 Supplemental Capital Expenditures*, dated September 24, 2021, page 6.

⁵⁶ See correspondence from the Utilities to the Board regarding *Response to Request for Market Conditions Update*, dated June 17, 2022, page 5.

⁵⁷ See Newfoundland Power's Application, Volume 2, Schedule C, page 139 of 325.

1 Issue #5

2 The Consumer Advocate observes that the province's inflation rate reached 8.0% in May 2022
3 and states that electricity consumers can ill afford a near term rate increase as a result of an
4 electrification program rationalized by dubious long term rate mitigating benefits.

5
6 The long term benefits of customer electrification initiatives are much greater than the short term
7 costs. An increase in customer rates due to electrification initiatives would be minimal over the
8 near term, with a forecast increase of 0.006 cents/kWh in the first year of implementing the 2021
9 Plan. This would equate to an average annual customer bill increase of approximately \$1.20
10 during that year for a residential customer with electric heating.⁵⁸ The long term customer
11 benefit is significantly greater, with a forecast decrease of 0.9 cents/kWh by 2034. This would
12 equate to average annual customer bill savings of approximately \$180 during that year for a
13 residential customer with electric heating.⁵⁹

14
15 The long term rate mitigating benefit of customer electrification initiatives is based on the
16 detailed analysis completed in the Dunskey Study and an NPV analysis, which is a methodology
17 that has been previously accepted by the Board for evaluating the economic benefits of utility
18 investments.⁶⁰

19
20 Issue #6

21 The Consumer Advocate observes the Board has issued provisional guidelines for capital budget
22 applications and claims the electrification applications do not meet the requirements set out for
23 capital projects in those guidelines.

24
25 The Board's *Capital Budget Application Guidelines (Provisional)* are effective January 1, 2022
26 and are only applicable to applications for approval of capital expenditures. The Utilities'

⁵⁸ See response to Request for Information TC-PUB-NP-005 (1st Revision), Attachment B, page 1, Table 1, which assumes implementation of the 2021 Plan would commence in 2022. For an example of how customer bill impacts are calculated, see Newfoundland Power's Application, Volume 1, Evidence, page 19, footnote 47.

⁵⁹ See response to Request for Information TC-PUB-NP-005 (1st Revision), Attachment B, page 1, Table 1. For an example of how customer bill impacts are calculated, see Newfoundland Power's Application, Volume 1, Evidence, page 19, footnote 47.

⁶⁰ See response to Request for Information PUB-NP-066.

1 proposed 2021 supplemental capital expenditures were filed prior to the issuance of these
2 guidelines and have already been approved by the Board. The proposals contained in
3 Newfoundland Power’s Application that are currently under review by the Board are not subject
4 to these guidelines.

5
6 Issue #7

7 The Consumer Advocate references the Provincial Government’s announcement of its review of
8 legislation governing Board oversight of the electricity sector and claims that this could
9 significantly impact Board jurisdiction and utility involvement in activities that are not directly
10 related to the supply and delivery of electricity.

11
12 At present, there is no indication as to what legislative amendments may result from the review,
13 or when amended legislation would be in force. Absent any government direction to the
14 contrary, it is expected that the Board will continue to regulate the Utilities pursuant to the
15 existing legislative framework, including the review of the Utilities’ applications and the
16 issuance of an order when the Board is satisfied that it has the information necessary to issue a
17 decision.

18
19 **5.0 RESPONSE TO IIC GROUP’S COMMENTS**

20 **5.1 General**

21 The IIC Group filed comments in July 2022 (the “IIC Group’s Comments”). The IIC Group’s
22 Comments indicate general support for electrification and CDM initiatives, but raise issues
23 regarding the approach used to evaluate the cost-effectiveness of customer incentive programs.

24
25 The IIC Group’s Comments state that they are limited to Hydro’s Application and do not include
26 an analysis of Newfoundland Power’s Application. However, given the Utilities have proposed
27 the same approach to evaluating customer incentive programs, certain of the IIC Group’s
28 Comments are relevant to the Board’s consideration of Newfoundland Power’s Application and
29 are therefore addressed below.

1 **5.2 Response to Specific Issues**

2 The IIC Group's Comments provide two recommendations that are relevant to Newfoundland
3 Power's Application: (i) the proposal of an alternative process for evaluating the cost-
4 effectiveness of customer incentive programs; and (ii) a change in the timeframe over which the
5 cost-effectiveness of programs is evaluated.

6 7 Alternative Evaluation Process

8 The alternative methodology proposed by the IIC Group involves using the Program
9 Administrator Cost ("PAC") test and NPV analysis as the primary test for both CDM and
10 electrification programs, followed by the use of the TRC test and mTRC test as secondary tests
11 for CDM and electrification programs, respectively. The IIC Group proposes that the Rate
12 Impact Measure ("RIM") test be used to assess rate impacts.

13
14 CDM incentive programs are evaluated according to the TRC and PAC tests, as approved by the
15 Board in Order No. P.U. 18 (2016). The use of these tests has ensured CDM incentive programs
16 provide significant benefits for customers. The use of these tests continues to be consistent with
17 industry practice, with a survey of seven Canadian jurisdictions showing that all jurisdictions use
18 either the TRC test or the PAC test to evaluate CDM programs.⁶¹ Accordingly, Newfoundland
19 Power views continued use of the TRC and PAC tests as appropriate in evaluating CDM
20 incentive programs.

21
22 Newfoundland Power considered the use of alternative methodologies in determining whether
23 the mTRC test and NPV analysis were most appropriate in evaluating the customer benefits of
24 electrification incentive programs.

25
26 Use of the PAC test to evaluate electrification incentive programs was considered.
27 Newfoundland Power currently applies the PAC test to evaluate whether CDM incentive
28 programs will provide a reduction in system costs that is greater than the planned program
29 investment. This reduction in system costs is achieved through a combination of reduced energy
30 costs and reduced capacity costs. While a reduction in system costs is a key objective of CDM

⁶¹ See Newfoundland Power's Application, Volume 2, Schedule I, page 1.

1 programs, it is not applicable to electrification programs. Rather, electrification incentive
2 programs result in increased electricity usage, which ultimately results in higher system costs.
3 An electrification incentive program could therefore not be designed in a manner that would pass
4 the PAC test.

5
6 The Company also considered use of the RIM test to assess the rate mitigating benefit of
7 electrification programs. The Manual does not recommend use of the RIM test to assess cost-
8 effectiveness or rate impacts. This is because the RIM test can provide an indication of whether
9 a program will have a negative or positive impact on rates, but does not define the magnitude of
10 the change.⁶² An NPV analysis was therefore identified as a more appropriate means through
11 which to determine the customer rate impacts of planned electrification initiatives as a whole, as
12 it identifies both the directionality and magnitude of the change in customer rates.

13
14 Newfoundland Power also considered use of the Societal Cost test to evaluate electrification
15 incentive programs. The Societal Cost test is an overall cost assessment that is similar to the
16 mTRC test, but includes other societal benefits, such as job creation benefits or greenhouse gas
17 emission reductions.⁶³ Use of the Social Cost test was determined not to be appropriate at this
18 time as these societal benefits do not currently form part of the provincial power policy.

19
20 Based on this assessment, the combined use of the mTRC test and supporting NPV analysis was
21 determined to be the most appropriate approach to evaluate the cost-effectiveness of
22 electrification incentive programs and the rate mitigating benefits of electrification initiatives as
23 a whole.

24 25 Change in Evaluation Timeframe

26 The IIC Group's Comments state that the primary objective of any customer program should be
27 rate mitigation in the short term and that programs should show a positive net revenue impact
28 from the outset or, at worst, a zero net rate impact at implementation.

⁶² See response to Request for Information PUB-NP-024.

⁶³ See response to Request for Information PUB-NP-024.

1 Transforming the province's transportation sector by encouraging the adoption of EVs will take
2 time to achieve. This is consistent with Newfoundland Power's long term experience in
3 delivering CDM initiatives, which provided modest energy savings of 2.5 GWh at their
4 introduction in 2009, increasing to 197 GWh in 2020.

5
6 As described in response to the Consumer Advocate's Comments, the short term rate impacts of
7 electrification initiatives for Newfoundland Power's customers are modest, with a customer rate
8 increase of approximately 0.006 cents/kWh during the first year of implementation and a
9 decrease of approximately 0.9 cents/kWh over the longer term. Focusing on minor short term
10 rate impacts to the exclusion of long term customer benefits would effectively preclude the
11 implementation of initiatives that could maximize domestic energy usage for customers, as the
12 benefits of any initiative that necessitates market transformation would take time to achieve.

13
14 The use of a long term timeframe in conducting economic analyses is consistent with the
15 recommendations of the Manual. The Manual states that evaluations of cost-effectiveness
16 should have a study period that is long enough to include the long-run benefits and costs of
17 programs, and that this approach is necessary since energy resources can last decades and
18 decisions made today can affect costs and benefits far into the future.⁶⁴

19
20 The use of a long term timeframe is also consistent with regulatory practice in this jurisdiction.
21 For example, in Order No. P.U. 37 (2020), the Board recognized the upfront investment and
22 customer benefits associated with Newfoundland Power's *LED Street Lighting Replacement*
23 *Plan*. In that order, the Board recognized that a six-year investment will ultimately provide an
24 economic benefit for customers over 20 years. The NPV analysis for the *LED Street Lighting*
25 *Replacement Plan* showed a negative customer impact for the first six years, with a positive NPV
26 of approximately \$4.9 million over 20 years.⁶⁵

⁶⁴ See response to Request for Information TC-CA-NP-004, Attachment A, page 2-7.

⁶⁵ See response to Request for Information PUB-NP-066.

1 Based on these considerations, the use of a long term timeframe for evaluating the cost-
2 effectiveness of customer electrification initiatives is consistent with industry practice and
3 regulatory practice in this jurisdiction.

4 5 **6.0 CONCLUSION**

6 Newfoundland Power submits that the customer electrification initiatives included in the 2021
7 Plan are consistent with: (i) the provision of least-cost, reliable service to customers; (ii) the
8 Board's recommendations as part of the *Reference on Rate Mitigation Options and Impacts*; and
9 (iii) industry practice. Existing government initiatives to promote EV adoption will be
10 complementary to the initiatives included in the 2021 Plan.

11
12 Newfoundland Power's Application proposes the use of the mTRC test to evaluate the cost-
13 effectiveness of electrification incentive programs. Use of the mTRC test to evaluate the cost-
14 effectiveness of electrification incentive programs is consistent with existing Board practice for
15 CDM programs and sound public utility practice. The combined use of the mTRC test and
16 supporting NPV analysis will ensure that customer electrification initiatives are implemented in a
17 cost-effective manner that achieves rate mitigating benefits for customers.

18
19 Newfoundland Power has proposed establishing a 10-year amortization period for recovery of
20 costs included in the previously approved Electrification Cost Deferral Account. A 10-year
21 amortization period is consistent with sound public utility practice and the regulatory principle of
22 intergenerational equity.

23
24 Newfoundland Power submits there is no evidence before the Board that demonstrates: (i) the
25 proposals are inconsistent with least-cost, reliable service delivery or provincial legislation;
26 (ii) the proposals are inconsistent with sound public utility practice or past practice of the Board;
27 or (iii) that rejecting the proposals would be beneficial for customers.

28
29 Newfoundland Power submits its proposals are consistent with its statutory obligation to provide
30 reliable service to customers at the lowest possible cost and should be approved.

1 If the foregoing proposals are approved, effective regulatory oversight would be achieved by
2 way of annual reports to the Board that provide updated results of the mTRC test and NPV
3 analysis, progress towards implementing electrification initiatives and associated costs.
4

5 **RESPECTFULLY SUBMITTED** at St. John's, Newfoundland and Labrador, this 29th day of
6 July, 2022.



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Attachment A:
Proposed Change to the Rate Stabilization Clause

**Newfoundland Power Inc.
Proposed Change to the Rate Stabilization Clause**

It is proposed that Clause II.9 of the Rate Stabilization Clause be replaced with the following:

9. On March 31st of each year, beginning in 2023, the Rate Stabilization Account shall be increased on a before tax basis, by the Electrification Cost Recovery Transfer.

The Electrification Cost Recovery Transfer, expressed in dollars, will be calculated to provide for the recovery of costs charged annually to the Electrification Cost Deferral Account over a 10-year period, commencing in the year following the year in which the Electrification Cost Deferral is charged to the Electrification Cost Deferral Account.

The Electrification Cost Deferral Account will identify the year in which each Electrification Cost Deferral was incurred.

The Electrification Cost Recovery Transfer for each year will be the sum of individual amounts representing 1/10th of each Electrification Cost Deferral, which individual amounts shall be included in the Electrification Cost Recovery Transfer for 10 years following the year in which the Electrification Cost Deferral was recorded.