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September 24, 2021

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: 2021 Electrification, Conservation and Demand Management Application –
Comments on 2021 Supplemental Capital Expenditures**

A. INTRODUCTION

Newfoundland Power Inc. (“Newfoundland Power” or the “Company”) filed its *2021 Electrification, Conservation and Demand Management Application* with the Board on December 16, 2020 (“Newfoundland Power’s Application”). On June 16, 2021, Newfoundland and Labrador Hydro (“Hydro”) filed an *Application for Approvals Required to Execute Programming Identified in the Electrification, Conservation and Demand Management Plan 2021-2025* (“Hydro’s Application”). The applications reflect the utilities’ continued collaboration in developing and delivering customer programs. On August 30, 2021, the Board advised that both applications would be joined and proceed as one matter.

The applications propose, among other items, supplemental capital expenditures for 2021 to construct an electric vehicle (“EV”) charging network in the province. On September 17, 2021, the Board requested comments from parties on 3 specific issues relating to the proposed EV charging network: (i) the Board’s jurisdiction to order the recovery of costs from ratepayers; (ii) whether the proposed capital expenditures should be approved by the Board; and (iii) whether the associated costs should be recovered from ratepayers.¹

The Consumer Advocate and Island Industrial Customer Group (“IIC Group”) provided comments on the 3 identified issues on September 22, 2021. The IIC Group indicated that certain of its comments are specific to Hydro’s Application.

¹ The Board indicated that the issue of how costs would be recovered (i.e. including the cost as capital assets in rate base or placing costs in a deferral account) would be left to a later process. These issues are therefore not addressed in Newfoundland Power’s comments.

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Part B of this response provides relevant background information on the applications. Part C provides Newfoundland Power's comments on the 3 issues identified by the Board. Part D provides the Company's response to the Consumer Advocate's comments.

B. BACKGROUND

Newfoundland Power and Hydro have jointly delivered customer conservation and demand management ("CDM") programs since 2009. These programs have been successful at addressing specific barriers to customers' adoption of energy-efficient technologies and have yielded significant cost savings for customers.²

The utilities have developed a new plan to guide customer program delivery from 2021 to 2025 (the "2021 Plan").³ The 2021 Plan continues longstanding CDM programs and introduces customer electrification programs.

The potential value of customer electrification programs was assessed by the Board as part of the reference on Muskrat Falls Project rate mitigation in 2019. Following commissioning of the Muskrat Falls Project, the quantity of electricity generated in the province is forecast to exceed domestic requirements by approximately 3.5 TWh. The Board determined that maximizing domestic load through electrification, improving energy efficiency and using demand response to reduce system peak and allow for increased export sales would lead to the best outcomes for customers.⁴ The Board recommended the utilities and Provincial Government work together to develop a comprehensive and coordinated approach on the most appropriate programs for the province.⁵ The utilities' work on electrification and CDM potential was described as "critical" and it was recommended that a plan be submitted to the Board in 2021.⁶

The 2021 Plan represents the comprehensive and coordinated approach recommended by the Board. It was developed by the utilities in consultation with the Provincial Government. Plan development commenced with a detailed market potential study by Dunskey Energy Consulting ("Dunskey").⁷ Dunskey applied Newfoundland and Labrador-specific inputs to assess the potential for electrification in the province. Dunskey determined that the greatest potential for electrification relates to increasing the province's adoption of EVs.

² Since 2009, customers participating in CDM programs have realized electricity bill savings of approximately \$118 million. All customers have benefitted from reduced system costs of approximately \$137 million over this period. See Newfoundland Power's Application, Volume 1, Evidence, page 5.

³ See Newfoundland Power's Application, Volume 2, 2021 Plan.

⁴ See *Reference to the Board: Rate Mitigation Options and Impacts, Muskrat Falls Project – Final Report*, February 7, 2020, page iii.

⁵ *Ibid.*, page ii.

⁶ *Ibid.*, pages ii and 109.

⁷ See Newfoundland Power's Application, Volume 2, Schedule C.

EVs are a rapidly emerging technology globally.⁸ Utility involvement in transportation electrification is increasing throughout North America. For example, a February 2021 report from the Edison Electric Institute found that “[e]lectric companies increasingly are engaged in many different facets of electric transportation,” with 52 electric companies having regulatory approval for filings related to transportation electrification.⁹

Without utility intervention, there are forecast to be approximately 41,000 EVs in Newfoundland and Labrador by 2034. Following implementation of the 2021 Plan, this number is forecast to more than triple, increasing to approximately 140,000 EVs on the province’s roads by 2034.¹⁰

The 2021 Plan seeks to accelerate the adoption of EVs by addressing specific barriers to customers’ adoption of this technology. In a survey conducted by MQO Research, 32% of Newfoundland and Labrador residents ranked cost as the primary barrier to EV adoption, while 24% ranked availability of charging stations as the primary barrier to EV adoption.¹¹

The 2021 Plan addresses these barriers through: (i) investments in public fast charging infrastructure through the proposed EV charging network; (ii) incentive programs to reduce the upfront cost of purchasing an EV and associated charger; (iii) customer education and awareness; and (iv) research programs primarily focused on effective load management.¹²

While implementation of each component of the 2021 Plan is necessary to fully address barriers to EV adoption, the Board has bifurcated the applications to ensure timely consideration of the proposed EV charging network and allow the utilities an opportunity to avail of federal funding that offsets costs to customers. Newfoundland Power’s comments herein are therefore limited to the issues identified by the Board in relation to the EV charging network.

C. NEWFOUNDLAND POWER’S COMMENTS

i) *Jurisdiction of the Board*

In Order No. P.U. 27 (2020), the Board determined that the provision of EV charging services is not a service within the meaning of the *Public Utilities Act* (the “Act”), and did not require the Board’s approval of a rate, toll or charge at that time. This determination was specific to the circumstances that existed at that time and the consideration of the application at issue. The Board did not, however, determine whether EV charging services are subject to the legislative authority of the province.

The Board’s jurisdiction is established under the Act and the *Electrical Power Control Act, 1994* (the “EPCA”).

⁸ For a brief history of EV charger development, see response to Request for Information CA-NP-060.

⁹ See Edison Electric Institute, *Electric Transportation Biannual State Regulatory Update*, February 2021.

¹⁰ See Newfoundland Power’s Application, Volume 1, Exhibit 2, page 4.

¹¹ See response to Request for Information PUB-NP-035, page 2.

¹² For a summary of each element of the 2021 Plan, see response to Request for Information PUB-NP-035.

The Act provides the Board with broad jurisdiction in regulating public utilities. Section 41(3) of the Act requires a public utility to obtain Board approval prior to undertaking an improvement or addition to its property in excess of \$50,000. Section 118 of the Act establishes that the Act shall be construed liberally in order to accomplish its purposes and that the Board has, in addition to the powers specified in the Act, all additional, implied and incidental powers which may be appropriate or necessary to carry out the powers specified in the Act.

The EPCA sets out the provincial power policy. The provincial power policy requires that sources and facilities for the production, transmission and distribution of power be managed and operated in a manner that results in power being delivered to customers at the lowest possible cost consistent with reliable service.¹³ Section 4 of the EPCA requires the Board to implement the provincial power policy and, in doing so, to apply tests that are consistent with generally accepted sound public utility practice.

The legislative framework permits the Board to exercise its judgment in determining which costs are to be recovered from ratepayers. Section 78(2)(h) permits the Board to include in a utility's rate base other fair and reasonable expenses the Board thinks appropriate and basic to the utility's operation. Section 80(2) establishes that a utility's return shall be in addition to those expenses the Board allows as reasonable and prudent and property chargeable to an operating account.

While EV charging services are not a "service" within the meaning of the Act, the EV charging network will contribute to lower customer rates for electrical service over the longer term, as discussed below. The provision of least-cost, reliable electrical service is a basic requirement of Newfoundland Power's management of its operations.

Newfoundland Power submits that the province's legislative framework is designed to be interpreted liberally and allows the Board to exercise its judgment in ensuring the requirements of the provincial power policy are met. The Company submits that it is within the Board's jurisdiction to determine which costs are consistent with least-cost, reliable service delivery. As the implementer of the provincial power policy, it is also within the Board's jurisdiction to permit the recovery of these costs in customer rates if they are judged to be appropriate, reasonable and prudent.

ii) Approval of Capital Expenditures

The Act requires approval of the Board prior to a public utility undertaking improvements or additions to its property in excess of \$50,000. This would include Newfoundland Power's proposed supplemental capital expenditures of \$1,538,000 in 2021 to install an EV charging network.

¹³ See section 3(b)(iii) of the EPCA.

In Order No. P.U. 7 (2020), the Board approved capital expenditures of approximately \$2.0 million for Hydro to construct 14 EV charging stations throughout the province. In making its decision, the Board referenced the province's low EV penetration, that Newfoundland and Labrador is the only province without a network to provide EV charging services, and that the absence of a charging network poses a barrier to market development. These factors remain essential in considering the utilities' current applications.

The Dunsky study included with the applications found that the single largest factor influencing the adoption of EVs in the province is access to charging infrastructure.¹⁴ Access to charging infrastructure in Newfoundland and Labrador lags behind that of other Canadian provinces. According to Natural Resources Canada, there are over 5,400 EV charging stations across Canada. The majority of public charging stations are concentrated in Quebec (47%), Ontario (25%) and British Columbia (17%). Newfoundland and Labrador ranks last among the provinces, with 0.4% of total charging stations in Canada.¹⁵

While access to charging stations is growing throughout Canada, this development is not occurring in Newfoundland and Labrador. The Consumer Advocate provides recent examples of EV charging projects by Canadian Tire¹⁶ and Petro-Canada.¹⁷ These examples included the installation of charging stations in central and Western Canada, and from British Columbia to Nova Scotia. Newfoundland Power submits that these examples do not suggest that investment of this nature will reach the province in the near future, as the Consumer Advocate suggests. Rather, these examples serve to underline the weak business case for private sector development in EV charging stations in this province by showcasing that private investment is occurring elsewhere, but not in this jurisdiction.

The weak business case in this province reflects both the upfront costs of installing EV charging stations and the limited number of EVs in the province. EV adoption will continue to be constrained in Newfoundland and Labrador without sufficient access to a planned and deliberate public charging network that allows for travel across the province.¹⁸

The EV charging network includes the installation of charging stations on major highways throughout the province. Hydro installed 14 charging stations in 2021. Combined, the utilities

¹⁴ See Newfoundland Power's Application, Volume 2, Schedule C, page 139 of 325.

¹⁵ See Newfoundland Power's Application, Volume 1, Evidence, page 25, footnote 58.

¹⁶ Canadian Tire partnered with Natural Resources Canada and the Government of British Columbia to construct 54 EV fast charging stations at Canadian Tire locations in central and western Canada. See <https://www.canada.ca/en/natural-resources-canada/news/2020/01/canada-partners-with-canadian-tire-to-build-one-of-canadas-largest-ev-charging-networks.html>.

¹⁷ Petro-Canada's EV fast charging network includes 57 charging stations from Victoria, British Columbia, to Halifax, Nova Scotia. See <https://www.petro-canada.ca/en/personal/fuel/canadas-electric-highway>.

¹⁸ The Dunsky study states: "Additionally, utility deployment of charging infrastructure would also lead to benefits from optimizing station placement within the distribution system to avoid infrastructure upgrades." See Newfoundland Power's Application, Volume 2, Schedule C, page 145 of 325.

propose to install 19 additional charging stations in 2021 and 12 in 2022.¹⁹ The installation of additional charging stations is expected to be minimal following 2022, and will be based on gaps in the network, usage data and customer wait times.²⁰

The number of charging stations proposed for installation by the utilities effectively represents the minimum necessary to achieve geographic coverage across the Island of Newfoundland. The EV charging network will achieve a distance between charging stations of 60 kilometres.²¹ This is consistent with Natural Resources Canada's guidance that the optimal distance between charging stations is 65 kilometres. This guidance is particularly relevant as it relates to the federal funding applied for by the utilities. This funding would reduce the cost of the EV charging network recovered from Newfoundland Power's customers by approximately 36% in 2021.

Achieving geographic coverage across the Island of Newfoundland will address customers' range anxiety related to owning an EV, which is a primary barrier to EV adoption. Increasing EV adoption will, over time, improve the business case for future private sector investment in charging stations.

Newfoundland Power submits the supplemental capital expenditures proposed for 2021 relating to the EV charging network are consistent with expenditures approved in a previous order of the Board and should be approved.

iii) Recovery from Ratepayers

As outlined above, it is within the Board's jurisdiction to approve capital expenditures that contribute to lower rates for customers, and to permit the recovery of those costs in customer rates when they are appropriate, reasonable and prudent.

Newfoundland Power's electrification programs will provide a rate mitigating benefit to its customers over the long term. At the time of developing the 2021 Plan, electrification programs were forecast to provide additional net revenue of approximately \$34 million by 2034. This equates to a rate mitigating benefit for customers of 0.5¢/kWh that year.²² On July 28, 2021, the Provincial Government provided an updated rate mitigation target that is now 9% higher than the

¹⁹ Of the 45 EV charging stations planned to be installed by the utilities by year-end 2022, 42 would be located on the Island Interconnected System. See response to Request for Information PUB-NP-046, page 2.

²⁰ Newfoundland Power's investment in the EV charging network is forecast to decrease significantly in 2023, averaging approximately \$410,000 annually from 2023 to 2025. See Newfoundland Power's *2022 Capital Budget Application, 2022 Capital Plan*, page B-2.

²¹ For information on the location of EV charging stations, including a map of the geographic coverage to be achieved, see response to Request for Information PUB-NP-046.

²² The customer rate impact of 0.5¢/kWh was determined by dividing the net revenue impact of \$33.9 million in 2034 by projected Company energy sales, including energy sales from electrification, of 6,527 GWh. See Newfoundland Power's Application, Volume 1, Evidence, page 18, line 13, to page 19, line 8.

previously indicated target of 13.5 ¢/kWh. This would increase the rate mitigating benefit of electrification programs to 0.65 ¢/kWh by 2034.²³

Without ensuring minimum geographic coverage of charging infrastructure to enable travel across the province, customers will remain unlikely to purchase an EV. Private sector investment in EV charging infrastructure is not occurring in this province. Utility investment in EV charging infrastructure is therefore essential to achieving the rate mitigating benefit of electrification programs for customers. Increased EV penetration will, over time, improve the business case for future private sector investment in charging infrastructure.

The rate mitigating benefit of electrification programs is consistent with the delivery of power to customers at the lowest possible cost consistent with reliable service, as required by the provincial power policy. The Board routinely approves for recovery through customer rates expenditures that are proven to contribute to least-cost, reliable service delivery over long-term time horizons. This includes, for example, Newfoundland Power's *LED Street Lighting Replacement Plan*, which is forecast to reduce energy and maintenance costs to customers by approximately \$52 million over 20 years.²⁴

The approval of costs related to electrification programs is consistent with the Board's approval of costs related to CDM programs. Both electrification and CDM programs result in lower overall costs for customers. In Order No. P.U. 13 (2009), the Board indicated that CDM program costs are reasonable and prudent and should be recovered from customers.

The recovery of costs from ratepayers is also consistent with current public utility practice. In Prince Edward Island, the Island Regulatory and Appeals Commission approved recovery of Maritime Electric's cost to install EV charging infrastructure.²⁵ The Florida Public Service Commission recently approved the recovery of Duke Energy Florida's costs to install 100 utility-owned charging stations.²⁶

Newfoundland Power submits that the capital expenditures associated with the EV charging network are consistent with least-cost, reliable service delivery and current public utility practice, and should therefore be recovered from ratepayers.

²³ For information on the Provincial Government's updated rate mitigation target, see response to Request for Information PUB-NP-051.

²⁴ For information on the Board's approval of capital expenditures that provide longer-term customer benefits, see response to Request for Information PUB-NP-066.

²⁵ Maritime Electric's proposal was approved on a pilot basis. The return on its investment is the same return allowed on all other capital investments. For information on this proceeding, see Island Regulatory and Appeals Commission, Docket #UE20732, Order UE20-05, as referenced in response to Request for Information PUB-NP-045.

²⁶ All costs associated with Duke Energy Florida's EV charging stations are captured in the utility's cost of service. See Duke Energy Florida, *2021 Settlement Agreement*, January 14, 2021, and Final Order PSC-2021-0202-AS-EI approving the *2021 Settlement Agreement*, as referenced in response to Request for Information PUB-NP-045.

D. RESPONSE TO CONSUMER ADVOCATE’S COMMENTS

The Consumer Advocate takes the position that “*there is no legislative jurisdiction for the Board to order that the cost of the EV charging stations be paid by ratepayers*” as it is “*beyond the powers of the Board.*”²⁷

The Consumer Advocate states that the proposed capital expenditures should not be approved by the Board. The Consumer Advocate alleges long-term implications for the utilities dominating the EV charging market have not been addressed and the “*demand for EV charging services can be met by others,*” which would reduce risks to ratepayers.²⁸

The Consumer Advocate opposes the recovery of costs from ratepayers for similar reasons. The Consumer Advocate takes the position that it is an unregulated business that is not subject to the Board’s jurisdiction. The Consumer advocate further alleges the utilities are “*interfering with a market where competition is fully expected to develop*” and that recovery from ratepayers would grant the utilities an unfair advantage in the charging market.²⁹

The Consumer Advocate did not specifically address how the proposed EV charging network is beyond the powers of the Board. As outlined above, the province’s legislative framework provides the Board with a broad range of powers in regulating the province’s public utilities and implementing the provincial power policy. This was acknowledged by the IIC Group, which also takes the position that the Board has jurisdiction to order the costs be recovered from ratepayers.³⁰

Customer electrification programs, including the proposed EV charging network, provide long-term rate mitigating benefits and are therefore in the best interests of all Newfoundland Power customers. This is consistent with requirement of the provincial power policy for least-cost, reliable service delivery.

A central issue of the Consumer Advocate’s comments is a belief that the private EV charging market will develop in the province without utility intervention. However, the examples cited in the Consumer Advocate’s comments regarding private sector development suggest that provincial conditions are undesirable for private sector development at this time. There is no evidence provided of private sector investment in Newfoundland and Labrador. The Dunskey study, which was acknowledged by the Board’s consultant as an in-depth analysis that should be used for program design, reiterates that it is not reasonable to expect sufficient private sector investment in this province in the near-term.³¹

²⁷ See the Consumer Advocate’s comments, page 9.

²⁸ Ibid.

²⁹ Ibid.

³⁰ See the IIC Group’s comments, pages 1 and 3.

³¹ The Board retained Synapse Energy Economics (“Synapse”) as part of the Reference on Rate Mitigation Options and Impacts. For Synapse’s comments on the Dunskey study, see Synapse’s *Phase 2 Report on Muskrat Falls Project Rate Mitigation*, Revision 1 – September 25, 2019, page 126.

Any allegation that Board approval would grant the utilities an unfair advantage in the charging market is unfounded. The 2021 Plan effectively represents the minimum number of chargers required to achieve geographic coverage that would allow travel across the Island of Newfoundland. It is expected that, once this barrier is addressed, EV adoption will increase, improving the business case for future private sector investment over time.

A simple comparison to fuel pumps in the province illustrates the future potential for private sector investment if barriers to EV adoption are adequately addressed. Data recently provided by Measurement Canada indicates there are over 3,000 fuel pumps in Newfoundland and Labrador.³² This compares to only 45 EV charging stations planned for installation by the utilities by year-end 2022. This comparison illustrates that the utilities' planned charging stations will not impede or "crowd out" the competitive market.³³ The utilities have proposed charging a market-based rate for charging services, which is standard industry practice and is also conducive to fostering a competitive environment.³⁴

Newfoundland Power disagrees with the Consumer Advocate's assertions that no effort was made to determine what it might take to "overcome hurdles" to private sector investment or that the 2021 Plan has not been discussed with customers.³⁵

Private sector investment will be encouraged by the utilities over the near-term through a make-ready model. The make-ready model includes the installation of electrical infrastructure to enable customers to purchase and install a fast charger.³⁶ Customers will be provided with a credit of up to \$50,000 per site to offset up-front costs. However, private sector interest in the program over the planning period is currently expected to be limited largely due to the low number of EVs in the province.

Development of the 2021 Plan was informed by a customer consultation process and consultation with industry experts.³⁷ Letters of support for the 2021 Plan have been provided by the Provincial Government, the Alliance for Transportation Electrification, and Drive Electric NL.³⁸

Newfoundland Power disagrees that the 2021 Plan contravenes the federal *Competition Act*. Newfoundland Power and Hydro are not competitors engaging in price fixing, as regulated under the *Competition Act*. Rather, the utilities are collaborating to offer a consistent set of regulated programs to customers in their respective service territories.

³² Provided by Measurement Canada in September 2021 based on log of fuel pump meters requiring inspection.

³³ See the Consumer Advocate's comments, page 4.

³⁴ A sample of 10 North American electric utilities showed that rates charged by utilities for EV charging services generally reflect market rates. See response to Request for Information PUB-NP-026, page 2, Table 1.

³⁵ See the Consumer Advocate's comments, pages 6 and 8.

³⁶ See Newfoundland Power's Application, Volume 2, 2021 Plan, pages 14-15.

³⁷ *Ibid.*, Schedule G.

³⁸ *Ibid.*, Schedule M.

E. CONCLUSION


Newfoundland Power submits that it is within the Board’s jurisdiction, consistent with its mandate to implement the provincial power policy, to approve an EV charging network that has been proven to contribute to lower customer rates. The proposed EV charging network represents the minimum geographic coverage required to address a primary barrier to EV adoption in the province. Addressing this barrier will permit the successful delivery of customer electrification programs and provide a long-term rate mitigating benefit for Newfoundland Power’s customers.

Newfoundland Power submits that its 2021 supplemental capital expenditures to construct an EV charging network should be approved, with recovery of costs through customer rates.

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

Yours truly,

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