



NEWFOUNDLAND AND LABRADOR
BOARD OF COMMISSIONERS OF PUBLIC UTILITIES
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2021-07-15

Dominic Foley
Corporate Counsel
Newfoundland Power Inc.
55 Kenmount Road, P.O. Box 8910
St. John's, NL A1B 3P6


Dear M. Foley:

Re: Newfoundland Power Inc. - 2021 Electrification, Conservation and Demand Management Application - Requests for Information

Enclosed are Requests for Information PUB-NP-032 to PUB-NP-068 regarding the above-noted application.

If you have any questions, please do not hesitate to contact the Board's Legal Counsel, Ms. Jacqui Glynn, by email, jglynn@pub.nl.ca or telephone (709) 726-6781.

Yours truly,


Cheryl Blundon
Board Secretary

CB/cj
Enclosure

ecc **Newfoundland Power Inc.**
NP Regulatory, E-mail: regulatory@newfoundlandpower.com
Newfoundland & Labrador Hydro
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1 **IN THE MATTER OF** the *Public*
2 *Utilities Act*, (the “Act”); and

3
4 **IN THE MATTER OF** an application by
5 Newfoundland Power Inc. for the approval of an
6 economic test and a deferral account to provide
7 for recovery of costs proposed to be incurred in
8 2021 for customer electrification programs,
9 pursuant to sections 58 and 80 of the *Act*; and

10
11 **IN THE MATTER OF** an application by
12 Newfoundland Power Inc. for the approval of
13 supplemental 2021 capital expenditures related
14 to the construction of an Electric Vehicle Charging
15 Network, pursuant to section 41(3) of the *Act*.

**PUBLIC UTILITIES BOARD
REQUESTS FOR INFORMATION**

PUB-NP-032 to PUB-NP-068

Issued: July 15, 2021

- 1 **PUB-NP-032** Please advise as to the policy guidance that was provided by the provincial
2 government in the development of the 2021 Plan.
3
- 4 **PUB-NP-033** Please provide the eligibility guidelines for the commercial and residential EV
5 and charging infrastructure incentives and in particular address:
6
7 a) whether the EV incentives are available to utility customers only, and if
8 so, are they available to customers on the Island Interconnected system
9 only, are household members of utility customers eligible and how will the
10 “at-cash rebate” be provided to utility customers only; and
11 b) the requirements with respect to eligible vehicles, including whether used
12 vehicles are eligible, whether a second incentive for a second vehicle is
13 available, and whether there are limits as to the cost of the vehicle.
14
- 15 **PUB-NP-034** Please confirm whether the electrification initiatives relate only to the Island
16 Interconnected system and if not, whether costs will be incurred and recovered
17 with respect to the other systems in the province. Please confirm that the costs
18 of electrification initiatives for other systems will not be recovered from
19 Newfoundland Power customers.
20
- 21 **PUB-NP-035** The Conservation Potential Study (the “Dunsky” report) states at page 111
22 that EV incentives are typically provided at the federal or provincial level and
23 limited case studies are available related to utilities providing EV purchase
24 incentives. In light of this please explain why the recovery of the costs of the
25 proposed utility EV incentives should be approved in this province.
26
- 27 **PUB-NP-036** The Dunsky report states at page 109 that EV incentives have a significantly
28 lower cost-effectiveness than infrastructure deployment and also states, at
29 page 116, that although incentive programs could accelerate adoption in the
30 short-term, they have limited long-term impact on the market and may not be
31 a suitable approach for intervention. In light of this please explain why the
32 recovery of the costs of the proposed utility EV incentives should be approved
33 in this province.
34
- 35 **PUB-NP-037** The Dunsky report states at page 116 that EV charging load management will
36 be critical to handle the system impacts of EVs and benefit financially from
37 EV adoption. In light of this will there be any requirements for recipients of
38 the EV incentives with respect to managing load?
39
- 40 **PUB-NP-038** The Dunsky report states at page 104 that programs involving EV charging
41 infrastructure incentives are usually not effective at driving additional EV
42 adoption and mostly benefit existing EV adopters and increase free ridership.
43 However, the incentives can be used to cover the incremental cost of smart
44 chargers for EV adopters to enable networking and load management
45 functionalities. In light of this please explain whether the recipients of the EV
46 charging infrastructure incentive will be participating in the EV Demand
47 Response Pilot Program or will be subject to other load management
48 requirements. If there are no load management requirements why should the

- 1 recovery of the costs of the proposed utility EV charging infrastructure
2 incentives be approved at this time.
3
- 4 **PUB-NP-039** Was any analysis conducted as to the optimal amount of the utility EV and
5 charging infrastructure incentives in terms of how effective varying amounts
6 of incentives would be in removing barriers and accelerating EV adoption
7 over the short and long term?
8
- 9 **PUB-NP-040** What is the impact of the provincial budget announcement on May 31, 2021
10 with respect to EV rebates and will provincial government funding impact the
11 utility EV or charging infrastructure incentives either in terms of cost or
12 effectiveness?
13
- 14 **PUB-NP-041** Explain the reason for the difference in the amount of the commercial EV
15 charging infrastructure incentive of up to \$3,000 and the residential incentive
16 of up to \$500.
17
- 18 **PUB-NP-042** The Dunsky report suggests on page 113 that generally medium and heavy-
19 duty vehicles and buses were found to be more sensitive to economics and
20 will require substantial support in the form of incentives or changes in key
21 economic factors to trigger any significant shift in adoption beyond natural
22 market uptake. In light of this has there been any analysis of whether the
23 proposed incentives will be effective and why the recovery of the costs of the
24 proposed commercial utility EV incentives should be approved for this
25 province at this time?
26
- 27 **PUB-NP-043** The Dunsky report states at page 94, that with a large incentive of 70% of
28 incremental costs along with enabling strategies to help reduce barriers,
29 approximately 3.5% of commercial floor space adopts some form of heat
30 pump heating system to displace oil-fired heating while only marginal
31 numbers of customers adopt heat pump domestic water heaters over oil-fired
32 heating systems. Please provide available analysis which demonstrates that the
33 proposed recovery from customers of the costs associated with the Custom
34 Electrification program incentives should be approved at this time. What are
35 the considerations associated with waiting to implement this program until the
36 completion of the Small Business Direct Install Pilot Program and until there
37 is further study with respect to the peak demand impacts?
38
- 39 **PUB-NP-044** Please provide all available information with respect to other Canadian
40 provinces where EV and charging infrastructure incentives are offered by a
41 utility and costs are recovered from customers. If the costs of EV and charging
42 infrastructure incentives are generally not recovered from utility customers in
43 other provinces, please explain why the proposed recovery from customers in
44 this province should be approved.
45
- 46 **PUB-NP-045** Please provide all available information with respect to other Canadian
47 provinces where utilities have installed DCFC and Level 2 charging stations
48 and have recovered the costs from customers, including a return. If the costs

- 1 of the DCFC and Level 2 charging stations are typically not recovered from
 2 customers in other provinces, please explain why the proposed recovery from
 3 utility customers in this province should be approved.
 4
- 5 **PUB-NP-046** The Dunsky report states at page 111 that the light-duty vehicle market is
 6 severely constrained by the lack of public charging infrastructure and there is
 7 currently a lack of a solid business case for DCFC charging stations in the
 8 third-party market. Please provide any analysis conducted of the optimal
 9 number of utility DCFC charging stations for each year over the period 2021
 10 to 2025.
 11
- 12 **PUB-NP-047** Please explain how the costs associated with the “make-ready model” will be
 13 treated.
 14
- 15 **PUB-NP-048** Are there deadlines related to the federal funding available for DCFC and
 16 Level 2 charging stations?
 17
- 18 **PUB-NP-049** Please provide a detailed breakdown of the total estimated annual costs of the
 19 electrification programming proposals for 2021 to 2025 (both utilities
 20 combined), setting out the costs separately for all aspects of the proposals,
 21 including each of the programs, customer education and research, the pilot
 22 programs, and the DCFC and Level 2 charging stations.
 23
- 24 **PUB-NP-050** Please explain how the costs associated with the electrification proposals will
 25 be shared/apportioned by the utilities, addressing each aspect of the proposals
 26 separately?
 27
- 28 **PUB-NP-051** Would the approach which is taken by the provincial government with respect
 29 to mitigating rates following the commissioning of the Muskrat Falls project
 30 have the potential to impact the timing or amount of the estimated
 31 electrification rate mitigation benefits which are passed on to customers?
 32
- 33 **PUB-NP-052** Newfoundland Power’s response to PUB-NP-024 states that the majority of
 34 jurisdictions that evaluate the cost-effectiveness of electrification programs
 35 use an overall cost assessment. The response does not indicate whether any of
 36 the seven jurisdictions identified in Table 1 that evaluate cost-effectiveness of
 37 electrification program, which are all from the US, do so using only the
 38 mTRC test as proposed. The response also suggests that two of the seven
 39 (California and Oregon) use multiple tests.
 40
- 41 a) Is this jurisdictional information the basis on which the proposed mTRC
 42 test is claimed to be consistent with accepted utility practice?
 43 b) Can it be inferred from the table provided that no Canadian jurisdictions
 44 currently assess cost-effectiveness of electrification programming?
 45
- 46 **PUB-NP-053** Footnote 14 in Table I-2 of Schedule I of the Electrification Conservation
 47 Demand Management Plan 2021-2025 states that “Overall cost assessment
 48 includes utilities that are using the TRC, SCT or a test created by the utility

specifically for electrification that evaluates programs from the perspective of the customer, the utility and the ability to meet policy objectives.”

- a) Is the proposed mTRC test a jurisdiction specific test?
- b) Is the proposed mTRC test used in other jurisdictions?
- c) What considerations at the jurisdictional level would be incorporated into a jurisdiction-specific test such as the mTRC test?

PUB-NP-054

On page 2 of 3, lines 22-27 of Newfoundland Power’s response to PUB-NP-024, in relation to Newfoundland Power’s application “*Electrification, Conservation and Demand Management*” stated the following in its description of the mTRC test:

“Referred to in the National Standard Practice Manual as a jurisdiction specific test, the mTRC test includes utility system impacts and customer impacts and can also include impacts associated with achieving applicable policy goals.”

Page 3-14 of the National Standard Practice Manual states that a jurisdiction-specific test includes the utility system impacts, **plus** those impacts associated with achieving applicable policy goals.

- a) What specific policy goals, if any, have been included in the proposed mTRC test?
- b) Is it proposed that the mTRC test would be the primary test for evaluating cost-effectiveness of electrification programming?
- c) Was the use of a secondary cost-assessment test to supplement the mTRC test considered? What secondary tests could be used in this case? What factors would inform a decision to use a secondary test?

PUB-NP-055

Did the utilities consult with or seek an expert opinion on the appropriate cost-effectiveness test(s) to use for electrification programs in this jurisdiction?

PUB-NP-056

Newfoundland Power’s response to PUB-NP-029 states the proposed mTRC test “is designed to ensure customer programs are cost-effective from both a customer and utility perspective.”

- a) Is the customer cost-effectiveness assessed at the individual customer level i.e. only those customers who purchase EVs?
- b) Are individual customer incentives provided by the utility accounted for in this assessment?

PUB-NP-057

Newfoundland Power’s response to PUB-NP-029 suggests that federal incentives may be important contributors to the cost-effectiveness evaluation of electrification programs.

- a) Do the mTRC analyses provided assume the same level of federal incentives available for each year of the full analysis period 2021-2025?

- 1 b) If these incentives decreased or are eliminated over the same period how
 2 would the mTRC results change?
 3 c) If the federal incentives are reduced or eliminated during this period,
 4 would the utilities seek to replace the loss of federal incentives or increase
 5 the utility incentive to reflect the loss?
 6

PUB-NP-058

7 Have the mTRC analyses been subject to any sensitivity analysis to assess the
 8 impact of future changes in market factors such as changes in the price of
 9 EVs, number of EVs purchased, changes in consumption of EVs and changes
 10 in marginal costs?
 11

PUB-NP-059

12 In the response to PUB-NP-029, Newfoundland Power stated that if the
 13 annual update of the mTRC analyses shows that a program is no longer cost-
 14 effective the program would be modified or suspended. If a program(s) is
 15 suspended or modified how would this affect the delivery of other planned
 16 electrification programming or are the programs independent?
 17

PUB-NP-060

18 In response to PUB-NP-031 Newfoundland Power provided the calculation
 19 for the mTRC test for the residential EV and charging infrastructure program.
 20 The benefits captured in this calculation include only the fuel and
 21 maintenance savings for customers that switch from a fossil-fuelled powered
 22 vehicle to an EV.
 23

- 24 a) Please explain the basis upon which the proposed mTRC test should be
 25 approved given that the test includes significant non-energy benefits that
 26 accrue only to certain customers in the form of direct cost savings while
 27 including costs that will be paid for by all customers?
 28 b) Excluding the forecast rate mitigation impact of 0.5 cents per kWh in
 29 2034, are there other benefits to all customers associated with the
 30 proposed electrification programs?
 31 c) On what basis was the discount rate of 6% selected?
 32 d) Do the total costs in Column H of the mTRC analyses include any costs
 33 associated with equipment replacement due to changing technologies or
 34 obsolescence?
 35 e) Please provide Tables 1, 2 and 3 showing the impact of the elimination of
 36 federal incentives as of 2023, 2025, 2028 and 2030.
 37 f) Please provide the mTRC calculations including the federal incentive and
 38 the recent provincial EV incentive announced May 31, 2021 in the
 39 Provincial Budget but excluding the utility EV incentive. What impact
 40 would this have on the utilities' proposed electrification program?
 41

PUB-NP-061

42 In its Electrification, Conservation and Demand Management application
 43 Newfoundland and Labrador Hydro proposes to charge the capital cost of its
 44 DCFC charging stations on the Island Interconnected system to a deferral
 45 account rather than including the costs in rate base as a capital asset. What
 46 would be the advantages and disadvantages of Newfoundland Power
 47 recording the capital costs of its DCFC and Level 2 charging stations in its
 48 electrification deferral account? Please address impacts on the net present


- 1 value analysis, regulated rate base and revenue requirements as well as any
2 other considerations, including any issues related to the requirements
3 associated with US generally accepted accounting principles?
4
- 5 **PUB-NP-062** In its Electrification, Conservation and Demand Management application,
6 Newfoundland and Labrador Hydro proposes to combine the costs related to
7 the electrification programs with its CDM program costs in its proposed
8 Electrification CDM Cost Deferral Account. What are the advantages and
9 disadvantages of this approach and are there issues which would need to be
10 addressed before determining whether Newfoundland Power should take a
11 similar approach?
12
- 13 **PUB-NP-063** Please provide a detailed breakdown of the Newfoundland Power costs
14 estimated to be included in the deferral account in the period 2021 to 2025
15 setting out the costs separately for all aspects of the proposals, including each
16 of the programs, customer education and research, the pilot programs, and the
17 costs associated with the DCFC and Level 2 charging stations.
18
- 19 **PUB-NP-064** Provide a breakdown of the net present value and the estimated rate mitigation
20 benefits for the electrification proposals separately for the commercial EV and
21 charging infrastructure incentives, the residential EV and charging
22 infrastructure incentives, the Custom Electrification Program incentives and
23 the DCFC and Level 2 chargers.
24
- 25 **PUB-NP-065** Please provide a sensitivity analysis of the estimated rate mitigation benefits,
26 provided in Exhibit 2, Appendix A, associated with the electrification
27 proposals addressing potential differences in the significant assumptions such
28 as the rates and the load?
29
- 30 **PUB-NP-066** Please address the issue of intergenerational equity with respect to the
31 electrification proposals and particularly the fact that costs are incurred
32 beginning in 2021 but the rate mitigation benefits do not materialize until later
33 in the period 2021 to 2034.
34
- 35 **PUB-NP-067** Please explain how the DCFC expenditures meet the test of being used and
36 useful in the provision of service as set out in sections 64, 68 and 78 of the
37 *Public Utilities Act*? Please provide any supporting legal and regulatory
38 precedent.
39
- 40 **PUB-NP-068** In footnote 25, page 6, Exhibit 2 of the Application, Newfoundland Power
41 provided an estimate of \$5,000 for annual operating and maintenance costs for
42 each charging site. In response to CA-NP-016, Newfoundland Power provided
43 an estimate of \$219,000 for 2022 relating to “Charger Station Operating
44 Costs”, which would equate to approximately 44 charging sites. Please
45 provide a reconciliation of the \$5,000 per site and the \$219,000 estimate based
46 on the 20 charging sites that Newfoundland Power proposes to have in place
47 by the end of 2022. Also please confirm whether or not the operating and

1 maintenance costs for Level 2 chargers will be included in the proposed
2 Electrification Deferral Account.

DATED at St. John's, Newfoundland this 15th day of July, 2021.

BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

Per



Cheryl Blundon
Board Secretary