

1 **Q. The Dunsky report states on page 30 that incentive programs could accelerate**  
2 **adoption in the short-term, but have a limited long term impact compared to**  
3 **infrastructure deployment and may not be a suitable approach for intervention.**  
4

5 **In response to PUB-NP-036 Newfoundland Power stated that EV incentives are not**  
6 **expected to be required over the longer term and increasing the adoption of EVs over**  
7 **the short term through incentives will have multiple benefits.**  
8

9 **(a) Please explain on what basis Newfoundland Power has chosen to adopt**  
10 **incentive programs, even on a short term basis, when Dunsky has questioned**  
11 **whether they are a suitable approach for intervention.**  
12

13 **(b) Please explain why Newfoundland Power has chosen to adopt incentive**  
14 **programs when such incentives are already being offered by the provincial**  
15 **and federal governments.**  
16

17 **A. *This Request for Information relates to the Electrification, Conservation and Demand***  
18 ***Management Plan: 2021-2025 (the “2021 Plan”) developed in partnership by***  
19 ***Newfoundland Power Inc. (“Newfoundland Power”) and Newfoundland and Labrador***  
20 ***Hydro (“Hydro”) (collectively, the “Utilities”) and the related Technical Conference***  
21 ***presented by the Utilities on February 1, 2022. Accordingly, the response reflects***  
22 ***collaboration between the Utilities.***  
23

24 The market potential study completed by Dunsky Energy Consulting (the “Study”) is  
25 designed to identify the theoretical potential for electrification in the province. The Study  
26 also provides a high-level assessment of the practical means through which that potential  
27 could be achieved.<sup>1</sup> The Study is not designed to identify the specific programs that  
28 should be implemented by the Utilities. This view is shared by Dunsky as it states:  
29

30 *“The potential study is not intended to give granular information about measures*  
31 *in specific segments, but rather give a macro view of efficiency potential.*  
32 *Moreover, it is not a program design document that accurately forecast savings*  
33 *achieved through Utility programs in a given future year, but rather quantify the*  
34 *total potential opportunities that exist under specific parameters.”<sup>2</sup>*  
35

36 Dunsky assessed the potential effectiveness of 3 levers available to the Utilities to  
37 increase EV adoption in the province: (i) Direct Current Fast Charger (“DCFC”)  
38 deployment; (ii) Level 2 charger deployment; and (iii) vehicle incentives.<sup>3</sup> Each lever  
39 was assessed based on 2 different investment levels to provide an indication of how  
40 varying levels of investment in these areas could increase EV adoption and electrical  
41 system load.<sup>4</sup>

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<sup>1</sup> See Newfoundland Power’s Application, Volume 2, Schedule C, page 16 of 325.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid., pages 138 to 140 of 325.

<sup>4</sup> Each lever was assessed based on a low investment scenario of \$5 million and a high investment scenario of \$20 million. See Newfoundland Power’s Application, Volume 2, Schedule C, page 140 of 325.

1 The Study found that DCFC and Level 2 charger deployment could be expected to have  
2 the highest impact on EV adoption and electrical system load. The Study suggested that  
3 DCFC deployment should be a priority to increase EV load growth in the province, but  
4 also noted that over-investment could have diminishing returns. The Study therefore  
5 recommended the Utilities consider a diversified portfolio of investments to complement  
6 DCFC investment, including Level 2 charging, load management programs, commercial  
7 fleet programs and education and awareness initiatives.<sup>5</sup>  
8

9 The electrification initiatives included in the 2021 Plan are broadly consistent with the  
10 recommendations of the Study, including the recommendation for a diversified portfolio  
11 of complementary initiatives.<sup>6</sup>  
12

13 (a) The Utilities have been jointly delivering programs to increase customers'  
14 adoption of new technologies for over a decade. The 2021 Plan was developed  
15 following the same approach the Utilities have applied in developing all prior  
16 plans. Plan development commenced with the Study to identify the theoretical  
17 potential to increase electrification in the province and opportunities to achieve  
18 that potential. Further research was then conducted to identify which practical  
19 measures would be appropriate and cost-effective in this jurisdiction. This  
20 research was informed by the Utilities' long-term experience in delivering  
21 customer programs and included customer surveys, stakeholder consultations,  
22 assessments of industry best practices, and cost-effectiveness testing.<sup>7</sup>  
23

24 In the Utilities' experience, there are often multiple barriers to increasing  
25 customers' adoption of new technologies. Typical barriers include upfront costs  
26 and customers' awareness of the benefits of those technologies. Successfully  
27 increasing customers' adoption of these technologies requires strategically  
28 addressing each barrier.  
29

30 Ultimately, there are only 3 types of levers available to the Utilities to increase  
31 EV adoption in the province: (i) incentive programs; (ii) public charging  
32 investment; and (iii) education and awareness. The 2021 Plan includes  
33 investments in each of these levers, as each lever is necessary to address a distinct  
34 barrier to customers' adoption of EVs.

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<sup>5</sup> See Newfoundland Power's Application, Volume 2, Schedule C, page 138 of 325.

<sup>6</sup> As examples, the following were included in the Study's diversified investment scenario and are also included in the 2021 Plan: (i) DCFC deployment focused on achieving geographic coverage across the Island of Newfoundland through an EV charging network; (ii) public DCFC and Level 2 charger deployment through the Utilities' make-ready model; (iii) Level 2 charger incentives to address the upfront cost of installing Level 2 chargers that are capable of demand management; (iv) commercial fleet and EV demand response pilot programs; and (v) education and awareness initiatives.

<sup>7</sup> For example, in the Study, Dunskey outlined an opportunity to offer customers an appliance recycling program, which upon further analysis by the Utilities' was deemed to be cost prohibitive. Dunskey also identified an opportunity for a residential new construction program through incentivizing the use of more energy efficient materials. Following consultation with local builders and trade associations, the Utilities determined that most local builders were already building to the standard suggested by Dunskey and the program was ruled out.

1 EV incentive programs for residential and commercial customers are included in  
2 the 2021 Plan on the basis that:

- 3
- 4 (i) Incentives are essential to addressing a primary barrier to customers’  
5 adoption of EVs. Annual surveys completed by MQO Research show  
6 vehicle cost and access to public charging are the 2 primary barriers to EV  
7 adoption in Newfoundland and Labrador. In 3 of the last 4 years, the cost  
8 of an EV was the top barrier identified. Incentives will address this barrier  
9 by reducing the upfront cost of purchasing an EV.
- 10
- 11 (ii) Incentives have proven effective in achieving market transformation. In  
12 the Utilities’ long-term experience, incentive programs are effective in  
13 increasing adoption of new technologies.<sup>8</sup> Industry research has shown  
14 that incentives have increased EV adoption in other jurisdictions.<sup>9</sup>  
15 Consultations with local stakeholders, including the Automobile  
16 Dealership Association of Newfoundland and Labrador, have validated the  
17 Utilities’ view that incentives would be effective in increasing EV  
18 adoption.<sup>10</sup>
- 19
- 20 (iii) Incentives can provide a meaningful contribution towards maximizing  
21 domestic load in the province. The Study shows that EV incentives could  
22 increase EV load by 16% to 32% over the short term, and 8% to 9% over  
23 the long-term. While the Study observed that EV adoption is impacted  
24 more by access to public charging, a long-term contribution of 8% to 9%  
25 is meaningful in maximizing domestic load in the province.<sup>11</sup>
- 26
- 27 (iv) Incentives are a cost-effective means of increasing EV adoption. The  
28 Study showed incentive programs can be implemented in a cost-effective  
29 manner when done at investment levels included in the 2021 Plan.<sup>12</sup> All  
30 incentive programs included in the 2021 Plan have been assessed to ensure  
31 they are designed in manner that is cost-effective for customers.<sup>13</sup>

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<sup>8</sup> For example, incentive programs have proven to be effective for Newfoundland Power’s customers for energy-efficient technologies such as windows, insulation, thermostats and heat recovery ventilators.

<sup>9</sup> See Newfoundland Power’s Application, Volume 2, Schedule D, page 5 of 5.

<sup>10</sup> For example, Drive Electric NL provided, in their view, that incentives would be effective. Discussions with the Automobile Dealership Association of Newfoundland and Labrador indicated that commitments to EV purchase incentive programs could influence the supply of EVs in the market.

<sup>11</sup> See Newfoundland Power’s Application, Volume 2, Schedule C, page 139 of 325.

<sup>12</sup> Dunsky found that over-investment in one area, such as charging infrastructure or EV incentives, may not be cost-effective. For example, utility investment in EV incentives of \$20 million showed a negative NPV. Newfoundland Power’s investment in EV incentives outlined in the 2021 Plan is approximately \$7 million, closer to the \$5 million investment scenario assessed by Dunsky which provided a positive NPV and thus was shown to be cost-effective. See Newfoundland Power’s Application, Volume 2, Schedule C, page 143 of 325.

<sup>13</sup> All incentive programs included in the 2021 Plan are assessed using the modified Total Resource Cost test to ensure they are designed to be cost-effective. For more information, see Newfoundland Power’s Application, Volume 1, Evidence, Section 3.3.2 Economic Justification.

(v) Incentives would provide a rate mitigating benefit for customers. A *pro forma* analysis indicates that removing EV incentives would reduce the rate mitigating benefit provided by the 2021 Plan.<sup>14</sup>

Overall, the EV incentive programs included in the 2021 Plan have been judged to be appropriate, cost-effective, and consistent with provincial rate mitigation objectives as they will support maximizing domestic load. This is consistent with the least-cost delivery of reliable service to the Utilities' customers.

(b) The upfront cost of purchasing an EV is currently approximately \$20,000 higher than the cost of purchasing an internal combustion engine vehicle. This is a substantial price differential.

The Federal Government currently offers an incentive that reduces this price differential by \$5,000, or approximately ¼. Even with the \$5,000 federal incentive, which has existed since 2019, residents of Newfoundland and Labrador continue to identify the cost of an EV as a primary barrier to adoption.

The \$2,500 EV incentive included in the 2021 Plan was designed to work in conjunction with the \$5,000 federal incentive to provide a total reduction in the upfront cost of an EV of \$7,500. Combining provincial and federal incentives for EVs is commonplace across Canada.

Table 1 shows the total EV incentive amounts offered across Canada, including both provincial and federal incentive amounts.

**Table 1:  
Total EV Purchase Incentive Amounts in Canada**

Province	Total EV Incentive
Quebec	\$13,000
Prince Edward Island	\$10,000
New Brunswick	\$10,000
Northwest Territories	\$10,000
Yukon	\$10,000
British Columbia	\$8,000
Nova Scotia	\$8,000

The median total EV incentive amount offered in other provinces across Canada is \$10,000, within a range of \$8,000 to \$13,000.<sup>15</sup> The total combined incentive

<sup>14</sup> See response to Request for Information TC-PUB-NP-001.

<sup>15</sup> See response to Request for Information TC-PUB-NP-005, Attachment C for the provincial incentive amounts only.

1 in Newfoundland and Labrador as a result of the 2021 Plan was designed to be  
2 \$7,500, slightly below the range observed across Canada. The EV incentive  
3 amount included in the 2021 Plan appears reasonable in the Canadian context.  
4

5 On May 31, 2021, the Provincial Government announced the *Electric Vehicle*  
6 *Adoption Accelerator* program to encourage the purchase of EVs.<sup>16</sup> In March  
7 2022, the Provincial Government announced continuation of this program with an  
8 estimated budget of approximately \$0.9 million. Effective April 1, 2022, the  
9 program will provide a \$2,500 rebate for EV purchases and \$1,500 for plug-in  
10 hybrid vehicle purchases.<sup>17</sup> The program is currently expected to end in March  
11 2023.  
12

13 The EV incentives in the 2021 Plan continue to be appropriate to offer following  
14 announcement of the provincial program because:  
15

- 16 (i) The provincial program is designed to be complementary to the Utilities'  
17 2021 Plan. For example, the provincial program could increase  
18 cumulative net revenues estimated in the 2021 Plan by approximately  
19 \$1.3 million by 2034, thereby increasing the associated rate mitigating  
20 benefit for customers.<sup>18</sup>  
21

22 The Provincial Government provided letters of support in March 2022 that  
23 confirm their support of the Utilities' 2021 Plan, which are provided as  
24 Attachment A to this response.  
25

- 26 (ii) The combined incentive amount would continue to be reasonable when  
27 combined with the provincial program. Under this scenario, the total  
28 incentive available in Newfoundland and Labrador would be \$10,000,  
29 which is consistent with the median throughout Canada. The incremental  
30 cost of purchasing an EV would be \$10,000 under this scenario.  
31
- 32 (iii) The provincial program is short term in nature and is scheduled to end in  
33 March 2023. By comparison, the Utilities' longer-term commitment could  
34 help influence the supply of EVs in the province, as indicated by the  
35 Automobile Dealership Association of Newfoundland and Labrador.<sup>19</sup>

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<sup>16</sup> See, for example, slide 19 of the *Budget 2021 Technical Briefing*, dated May 31, 2021.

<sup>17</sup> See the Provincial Government's news release entitled *Government Announces Five-point Plan to Help Newfoundlanders and Labradorians with the High Cost of Living*, dated March 15, 2022.

<sup>18</sup> See Attachment H of response to Request for Information TC-PUB-NP-005 for further information.

<sup>19</sup> A report by Dunsky prepared for Transport Canada in March 2021 shows that while inventory levels in Canada are increasing, Newfoundland and Labrador continues to be under-supplied. This is due, in part, to automakers continuing to focus their inventory in Quebec, British Columbia and to a lesser extent, Ontario. For example, in February 2021, 36 EV models were available in Quebec compared to 7 EV models in Newfoundland and Labrador. See *Dunsky Energy Consulting, Zero Emission Vehicle Availability* - [https://www.dunsky.com/wp-content/uploads/2021/12/DunskyZEVAvailabilityReport\\_2021-04-1.pdf](https://www.dunsky.com/wp-content/uploads/2021/12/DunskyZEVAvailabilityReport_2021-04-1.pdf)

**Provincial Government Letters of Support**



Government of Newfoundland and Labrador  
**Environment and Climate Change**  
Office of the Minister

MAR 18 2022

COR-2022-218

Byron Chubbs  
Vice President  
Newfoundland Power  
Email: [bchubbs@newfoundlandpower.com](mailto:bchubbs@newfoundlandpower.com)

Kevin Fagan  
Vice President  
Newfoundland and Labrador Hydro  
Email: [KevinFagan@nlh.nl.ca](mailto:KevinFagan@nlh.nl.ca)

Dear Byron Chubbs and Kevin Fagan:

**Re: Electrification, Conservation and Demand Management Plan: 2021-2025**

Passenger vehicles account for about 16 percent of total greenhouse gas emissions in Newfoundland and Labrador. The electric vehicle initiatives and charging infrastructure proposed in Newfoundland Power and Newfoundland and Labrador Hydro's **Electrification, Conservation and Demand Management Plan: 2021-2025** will assist with emission reduction efforts and meeting our collective goal of net zero emissions by 2050.

In 2021, the Government announced a rebate program to support increased adoption of electric vehicles in our province. On March 15, 2022 the Government announced an additional \$1.9 million investment for electric vehicle charging infrastructure and the continuation of rebates into 2022-23 to encourage further electric vehicle adoption.

These initiatives were and continue to be designed to complement the utilities' Management Plan. We are committed to continue working with the utilities to advance electrification of the transportation sector and ensure our combined initiatives achieve maximum benefits for the people of Newfoundland and Labrador.

I sincerely appreciate your efforts in these areas and look forward to our continued collaboration.

Sincerely,

A handwritten signature in blue ink, appearing to read "Bernard Davis".

**HON. BERNARD DAVIS, MHA**  
District of Virginia Waters – Pleasantville  
Minister



Government of Newfoundland and Labrador  
Department of Industry, Energy and Technology  
Office of the Minister

March 21, 2022

Mr. Byron Chubbs  
Vice President  
Newfoundland Power

Mr. Kevin Fagan  
Vice President  
Newfoundland and Labrador Hydro

Dear Mr. Chubbs and Mr. Fagan:

**Re: Electrification, Conservation and Demand Management Plan: 2021-2025**

On December 16, 2020, I wrote you in support of Newfoundland Power and Newfoundland and Labrador Hydro's "Electrification, Conservation and Demand Management Plan: 2021-2025". My letter noted the actions in that plan can assist with the Government of Newfoundland and Labrador's rate mitigation efforts. This government continues to implement policies and programs to support rate mitigation and continues to support the utilities' 2021-2025 electrification and CDM plan.

In 2021, our government announced the Electric Vehicle Adoption Accelerator program to support increased adoption of electric vehicles in our province. On March 15, 2022, we announced an additional \$1.9 million for electric vehicle charging infrastructure, as well as a \$2,500 rebate for consumers and \$1,500 rebate for the purchase of plug-in hybrid vehicles to help encourage the purchase of electric vehicles. Government is also seeking \$1 million in federal support. These initiatives complement the utilities' plan.

We appreciate the utilities' efforts and remain committed to working together to advance transportation electrification and maximizing the benefits of our energy resources for the people of the province.

Sincerely,

A handwritten signature in blue ink, appearing to read "Andrew Parsons".

**ANDREW PARSONS, QC**  
Minister of Industry, Energy and Technology

c. Hon. Bernard Davis  
Minister, Environment & Climate Change