

1 **Volume 2: Tab 3, Customer, Energy and Demand Forecast Report**

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- 3 **Q. Volume 2, Tab 3, pages 5 of 8 to 7 of 8.**
- 4 a) Please provide Newfoundland Power’s estimated conversions from oil heating to
- 5 electric heating for each year in the period 2023 to 2026 and illustrate the impact
- 6 on the sales forecast.
- 7 b) Please provide the source of Newfoundland Power’s estimated conversions from
- 8 oil heating to electric heating.
- 9 c) Please compare the forecast conversions from oil heating to electric heating per
- 10 year to the target conversions of the Government of Newfoundland and
- 11 Labrador, if available and provide the Government ‘s forecast.
- 12 d) Please provide Newfoundland Power’s estimate of Electric Vehicle sales in its
- 13 service area for the period 2023 to 2026 and illustrate the impact of increased
- 14 Electric Vehicle usage on the sales forecast.
- 15 e) Please compare the forecast Electric Vehicle sales for each test year to the
- 16 forecast Electric Vehicle sales for 2025 and 2026 provided in the most recent
- 17 analysis completed by Dunsky for Newfoundland Power. Please explain any
- 18 variances.
- 19
- 20 **A. a) Table 1 provides Newfoundland Power’s forecast residential oil heating to electric**
- 21 **heating conversions for the period 2023 to 2026 and the sales forecast impact.¹**

**Table 1:
Residential Oil Heating to Electric Heating Conversions**

Year	Conversions per Year	Annual Sales Forecast Impacts² (GWh)	Cumulative Sales Forecast Impact³ (GWh)
2023	1,700	13	13
2024	3,100	24	37
2025	2,900	22	59
2026	1,800	14	73
Total	9,500	73	

¹ For the energy impacts of government building electrification including the oil to electric boiler replacement at Memorial University, see the response to Request for Information PUB-NP-091. The total impact of the cumulative sales by 2026 on peak demand of those initiatives, based on a 5-year average system load factor of 49.35%, is an estimated: 6 MW by 2024; 31 MW by 2025; and 32 MW by 2026.

² Newfoundland Power has estimated the average energy impact of domestic conversion from oil heating to electric heating to be approximately 7,600 kWh annually, based on the difference in average use for a domestic all-electric customer versus a domestic regular customer.

³ The total impact of the cumulative sales by 2026 on peak demand, based on a 5-year average system load factor of 49.35%, is an estimated: 9 MW by 2024; 14 MW by 2025; and 17 MW by 2026.

- 1 b) The forecast of residential oil heating to electric heating conversions is based on
 2 projected uptake in the Oil to Electric program that takeCHARGE is administering on
 3 behalf of the Government of Newfoundland and Labrador.⁴
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- 5 c) Table 2 provides the forecast of oil heating to electric heating conversions through the
 6 Oil to Electric Program that takeCHARGE is administering on behalf of the
 7 Government of Newfoundland and Labrador.

Table 2:
Oil to Electric Heating Conversion Forecast by
Provincial Government Fiscal Year Ended March 31

Fiscal Year	Conversions
2023	2,382
2024	3,574
2025	2,981
2026	1,494
Total	10,434

- 8 d) See the response to Request for Information PUB-NP-054 for forecast electric vehicle
 9 adoption.
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11 Table 3 provides the estimated sales impact from electric vehicles based on this
 12 forecast for the period 2023 to 2026.

Table 3:
Sales Forecast Impacts of Electric Vehicle Usage
2023-2026

Year	Annual Sales Impact (GWh)	Cumulative Sales Impact (GWh) ⁵
2023	1.2	1.2
2024	3.1	4.3
2025	4.4	8.7
2026	6.5	15.2
Total	15.2	

- 13 e) Newfoundland Power's current forecast of electric vehicle adoption uses information
 14 provided by Dunskey Energy + Climate Advisors for Newfoundland and Labrador
 15 Hydro's *Resource and Reliability Adequacy Study 2022 Update*.

⁴ Modified from the Government of Newfoundland and Labrador's fiscal year, March 31, to a calendar year basis and adjusted to account for customers in Newfoundland Power's service territory only versus the entire province. The Company is forecasting an additional 400 conversions from January 1, 2027 to March 31, 2027 for a total of 9,900 conversions in its service territory associated with the program.

⁵ By 2026, the 15.2 GWh total cumulative impact is forecast to be 8 GWh related to the domestic class (i.e. light duty vehicles) and 7.2 GWh related to the general service class (with 5.3 GWh related to commercial light and medium duty vehicles and 1.9 GWh related to buses and heavy duty vehicles). The total impact of the cumulative sales by 2026 on peak demand, based on a 5-year average system load factor of 49.35%, is an estimated: 1 MW by 2024; 2 MW by 2025; and 4 MW by 2026.