VOLUME 2: CUSTOMER, ENERGY AND DEMAND FORECAST

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- Q. Reference: NLH-NP-002, and PUB-NP-097
 - a) In reference to Table 3 in Newfoundland Power's response to PUB-NP-097, please provide the forecast demand impact per customer by year. How does this forecast demand impact compare to Newfoundland Power's average domestic customer diversified peak demand?
 - b) Please provide the data in Table 1 of Newfoundland Power's response to NLH NP-002 by customer class.

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A. a) Table 1 provides the forecast demand impact per customer by year for the data outlined in Table 3 of Request for Information PUB-NP-097.

Table 1: Forecast Electric Vehicle Demand Impact Per Customer 2023-2026

Year	Demand Impact Per	
	Customer (kW)1	
2023	1.0	
2024	1.5	
2025	1.5	
2026	1.7	

Demand impacts per customer are derived using the average system load factor of 49.35%. Newfoundland Power's domestic class load factor is 47.9%.

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b) Table 1 in response to Request for Information NLH-NP-002 provides the number of new domestic customers and impacts during the forecast period based on average domestic customer usage.

Changes in demand impact per customer in each year are influenced by the mix of vehicles forecast to be adopted. For example, commercial light duty vehicles and medium and heavy-duty vehicles are forecast to consume more energy than residential light duty vehicles.

² Class load factors are from the 2006 Load Research Study.

1 2 Table 2 below provides the number of new small general service customers and the associated sales and demand impact during the forecast period.³

Table 2: **New Small General Service Customer Forecast Impacts**

Year	New Customers Per Year	Cumulative Sales Impacts (GWh)	Cumulative Demand Impact (MW) ⁴
2023	174	8	1.8
2024	109	13	3.0
2025	101	18	4.1
2026	94	22	5.1

Due to the diversity in commercial sectors and energy usage patterns, new large general service customers are added to the forecast on a per-customer basis based on available information relating to construction and connection timelines, rather than based on new customer connections as forecasted for Rate 2.1. As such, large customer data is not reflected in Table 2. For Rate 2.3, customers, energy sales and demand are forecast to be 15, 36 GWh and 8 MW higher, respectively, over the 2022 to 2026 period. For Rate 2.4, customers are forecast to be 2 lower, while energy sales and demand are forecast to be 122 GWh and 28 MW higher, respectively, over the 2022 to 2026 period. For annual changes in customers and energy for Rates 2.3 and 2.4, see the 2025/2026 General Rate Application, Tab 3, Appendix B.

Based on a 5-year average system load factor of 49.35%