Q. **Reference: Application, Schedule 1, page 1.**

It is stated "For the 2024 Resource Adequacy Plan, three forecasts were developed to reflect the range of forecasted Island Interconnected System load requirements…"

a) Has Hydro updated these forecasts? If so, please provide.

b) (i) Has Hydro determined how a move to marginal cost pricing at the retail level, effective January 2027, would affect the forecast increases in island load requirements?

(ii) Please provide Hydro's latest estimate of its all-in marginal cost for winter and non-winter seasons.

c) What new options is Hydro exploring to reduce load growth as an alternative to adding costly capacity?

d) Can demand-side measures to reduce energy consumption and system peaks be more economic than adding capacity to the IIS?

e) Does the encouragement and subsidization of electrification help address the energy and capacity challenges faced by the IIS?

A. **a)** Newfoundland and Labrador Hydro ("Hydro") filed its 2023 Load Forecast,[1] which was used in the analysis for the 2024 Resource Adequacy Plan, in March 2024. Hydro provided its 2024 Load Forecast update within the 2025 Build Application,[2] and most recently, Hydro filed its 2025 Load Forecast with the Board of Commissioners of Public Utilities ("Board") on November 5, 2025.[3] Hydro continues to model three forecasts—Reference Case (the expected load), Slow Decarbonization (which assumes a lower load than expected), and

[1] "Long-Term Load Forecast Report – 2023," Newfoundland and Labrador Hydro, March 28, 2024.
[2] "2025 Build Application – Bay d'Espoir Unit 8 and Avalon Combustion Turbine," Newfoundland and Labrador Hydro, March 21, 2025, sch. 3, app. A.
[3] "2025 Island Interconnected System Load Forecast Report," Newfoundland and Labrador Hydro, November 5, 2025.

Accelerated Decarbonization (which assumes a higher-than-expected load) for use in resource planning.

Summarized below are the current demand growth expectations included in the 2025 Load Forecast through the study period of 2026 to 2036:

- Slow Decarbonization/Electrification: 146 MW.
- Reference Case: 211 MW.
- Accelerated Electrification/Decarbonization: 419 MW.

The results of the three 2025 long-term planning forecast scenarios for the Island Interconnected System project overall load growth for the Island in every scenario across the forecast horizon. The compound annual growth rate ("CAGR") ranges from 0.8% in the Slow Electrification scenario to 2.2% in the Accelerated Electrification scenario. This is compared to the 2024 Island Interconnected System Forecast, in which the CAGR ranged from 0.9% in the Slow Decarbonization scenario to 2.1% in the Accelerated Decarbonization scenario. Therefore, there is an immaterial difference between the CAGR in the 2024 and 2025 Load Forecasts.

As a result, the 2025 Load Forecast continues to support the Minimum Investment Required Expansion Plan as recommended by Hydro within its 2024 Resource Adequacy Plan,[4] and the construction and installation of the Bay d'Espoir Unit 8 and Avalon Combustion Turbine ("Avalon CT") as proposed in the 2025 Build Application, currently before the Board.

b) (i) Currently, Hydro forecasts average domestic rates based on Newfoundland Power Inc.'s ("Newfoundland Power") existing rate design, taking into consideration the Government of Newfoundland and Labrador's current rate mitigation plan, assumptions on future rate mitigation, and an allowance for increases associated with Newfoundland Power's costs. The forecast of average domestic rates is used to determine the elasticity impacts on load.

[4] "2024 Resource Adequacy Plan – An Update to the Reliability and Resource Adequacy Study," Newfoundland and Labrador Hydro, rev. August 26, 2024 (originally filed July 9, 2024).

Newfoundland Power currently has a consultant engaged in a rate design review. The purpose of the rate design review is to evaluate the appropriateness of Newfoundland Power's rate designs and consider potential alternative rate designs with particular attention to changes in marginal costs due to the integration of the Muskrat Falls project, including the interconnection to the North American grid. The outcome of this rate design review and approval of any recommended changes to rate design will determine if a change from the current approach to determine the elasticity impacts on load is required.

(ii) Please refer to CA-NLH-003, Attachment 1, for the most recent long-term outlook for marginal costs. These costs are reflective of the costs as of December 2024 and do not reflect the updated costs for Bay d'Espoir Unit 8 and the Avalon CT that were included in the 2025 Build Application. Hydro will be issuing updated marginal costs in the first quarter of 2026, which will include the costs included in Hydro's 2025 Build Application.

c) On November 5, 2025, Hydro filed the 2025 Energy Solutions Potential Study,[5] which was undertaken by both Hydro and Newfoundland Power (collectively "the Utilities") and an external consultant, Posterity Group ("2025 Potential Study"). This correspondence showed that Hydro has already included a significant amount of energy and capacity savings from Conservation and Demand Management ("CDM") in its load forecast when compared to the 2025 Potential Study, primarily driven by Newfoundland Power's CDM forecast. Hydro will evaluate the effects of the new five-year CDM forecast in its 2026 load forecast update. By reducing the load forecast for expected CDM, electric vehicle ("EV") demand management, and the natural adoption of heat pumps, Hydro has already identified several options as alternatives to capacity additions, and despite the system benefits associated with these alternatives having reduced forecast load growth, capacity additions are still required.

CDM continues to be a priority for Hydro in meeting its statutory obligation for least cost, environmentally responsible, reliable service. Hydro has appropriately reflected the energy

[5] "Energy Solutions Potential Study – Final Report," Posterity Group, May 5, 2025, filed as an attachment to "Newfoundland and Labrador Hydro – 2025 Capital Budget Supplemental Application –Application for Capital Expenditures for the Purchase and Installation of Bay d'Espoir Unit 8 and Avalon Combustion Turbine – Additional Information – 2025 Energy Solutions Potential Study," Newfoundland and Labrador Hydro, November 5, 2025.

and capacity savings from CDM in its analysis. The quantum of CDM savings is informed by Board-approved cost-effectiveness testing, which uses system marginal costs as an input. Initiatives proposed by the utilities are required to pass this cost-effectiveness testing. However, these opportunities are not unlimited—as outlined in the 2025 Potential Study. **Even after taking into account cost-effective CDM, the system requires capacity additions in order for Hydro to reliably serve customers.**

d) Please refer to Hydro's response to part c).

e) Managed electrification can have benefits for the electrical system and users. For example, growing the number of EVs in the province while promoting charging in off-peak hours can provide incremental revenues which are greater than the marginal cost of supply.[6] New sources of revenue can help fund capacity additions for all ratepayers.

It is Hydro's position that it is prudent to plan for and manage increased electricity use, plan to meet these requirements reliably, and capture any benefits associated with this transition. Failure to do so could result in increased costs and decreased levels of reliability for customers.

[6] Using Hydro's 2024 Marginal Costs, including the marginal cost of distribution and losses, reflecting forecast peak demand and energy sales for EVs per Hydro's load forecast, and current island interconnected domestic rates. This analysis does not reflect the cost of any programming or incentives to shift user charging to off-peak hours due to uncertainty around the timing and type of underlying technology. Hydro will continue to evaluate this metric as marginal costs are updated and the impact of EVs on the electrical system is refined. Hydro's 2024 Marginal Costs have not been updated to reflect the costs of the resource options included in the 2025 Build Application. Hydro will publish updated marginal costs in the first quarter of 2026 that will include the most recent costs of Bay d'Espoir Unit 8 and the Avalon CT.

2024 Marginal Cost Projection for 2025-2045
Island Interconnected System

Energy Supply Costs					
	Winter		Summer	Winter	Annual
Year	On-Peak $/MWh	Off-Peak $/MWh	All-Hours $/MWh	All-Hours $/MWh	All-Hours $/MWh
2025	96.81	83.68	33.20	89.58	51.89
2026	97.38	82.75	31.87	89.33	50.92
2027	91.92	74.93	29.48	82.57	47.08
2028	83.91	65.53	30.07	73.79	44.56
2029	75.68	63.02	27.99	68.71	41.49
2030	70.94	60.12	24.19	64.98	37.71
2031	68.62	56.41	22.45	61.90	35.53
2032	68.73	55.39	23.53	61.38	36.08
2033	70.60	58.01	23.38	63.67	36.74
2034	72.28	61.63	23.25	66.42	37.56
2035	71.25	63.11	24.37	66.77	38.42
2036	68.83	61.13	25.08	64.59	38.18
2037	74.16	64.15	25.46	68.65	39.78
2038	74.73	65.21	26.63	69.49	40.84
2039	76.48	67.86	26.16	71.73	41.27
2040	80.58	74.69	29.29	77.33	45.22
2041	78.70	74.57	29.77	76.43	45.24
2042	78.41	73.07	29.47	75.47	44.72
2043	82.28	75.38	27.81	78.48	44.61
2044	85.12	77.92	27.49	81.15	45.28
2045	87.47	81.69	28.37	84.29	46.91

Capacity Costs			
Year	Generation $/kW	Transmission $/kW	G&T $/kW
2025	335.02	21.05	356.06
2026	341.26	21.51	362.77
2027	347.62	21.99	369.61
2028	354.11	22.47	376.58
2029	360.72	22.97	383.69
2030	367.46	23.48	390.94
2031	374.33	24.00	398.33
2032	381.34	24.53	405.87
2033	388.48	25.08	413.56
2034	395.77	25.63	421.40
2035	403.20	26.20	429.40
2036	410.77	26.78	437.55
2037	418.49	27.38	445.87
2038	426.36	27.99	454.35
2039	434.39	28.61	463.00
2040	442.58	29.24	471.82
2041	450.92	29.89	480.81
2042	459.43	30.56	489.99
2043	468.11	31.24	499.35
2044	476.96	31.93	508.89
2045	485.99	32.64	518.63

Notes:

Base of Energy, Generation Capacity and Transmission Capacity is NL Hydro's Marginal Cost - December 2024

Winter Season defined as December through March.

On Peak Hours Winter 7:00 a.m. to 10:00 p.m., Monday through Friday

On Peak Hours Summer 8:00 a.m. to 10:00 p.m., Monday through Friday