Q. (Reference Application)

a) Has Newfoundland Power calculated the benefit to cost ratios of time-of-use rates for its customers?

b) How do they compare to benefit to cost ratios of CDM and electrification programs?

A. *This Request for Information relates to the Electrification, Conservation and Demand Management Plan: 2021-2025 (the "2021 Plan") developed in partnership by Newfoundland Power and Newfoundland and Labrador Hydro ("Hydro" or, collectively, the "Utilities"). Accordingly, the response reflects collaboration between the Utilities.*

a) Yes, the benefit-to-cost ratio of dynamic rates, including time-of-use rates, was considered in the "*DR Potential Addendum Final Report"* completed by Dunsky Energy Consulting ("Dunsky").[1] The benefit-to-cost ratio was assessed through the Program Administrator Cost ("PAC") test. Under this test, a result of 1.0 or greater is required for an initiative to be considered cost effective.

Table 1 provides the forecast PAC test results for dynamic rates over time.[2]

Table 1:
PAC Test Results
Dynamic Rates
(2020 to 2034)

Year	PAC Result
2020	0.5
2024	0.5
2029	0.7
2034	1.2

The results indicate that dynamic rates are not forecast to be cost-effective for customers until after 2030.

b) All planned conservation and demand management ("CDM") and electrification programs were assessed to be cost-effective for customers.[3]

[1] See the *2021 Electrification, Conservation and Demand Management Application*, Volume 2, Schedule E.
[2] Ibid., page 11 of 25.
[3] See the response to Request for Information PUB-NP-054.

Table 2 provides the forecast PAC results for planned customer CDM programs.[4]

Table 2:
PAC Test Results
CDM Programs

Program	PAC Result
Insulation and Air Sealing	7.5
Thermostat	2.2
HRV	2.2
Instant Rebates	2.6
Benchmarking	1.3
Low Income	2.7
Business Efficiency Program	4.3

The cost-effectiveness of customer electrification programs is evaluated using a modified Total Resource Cost ("mTRC") test. Similar to the PAC test, a result of 1.0 or greater is required for an initiative to be considered cost effective.[5]

Table 3 provides the forecast mTRC results for planned customer electrification programs.

Table 3:
mTRC Test Results
Electrification Programs

Program	mTRC Result
Residential EV & Charging Infrastructure Program	1.9
Commercial EV & Charging Infrastructure Program	2.2
Custom Commercial Electrification	2.1

[4] Customer CDM programs are also evaluated using a Total Resource Cost ("TRC") test. For the TRC results of CDM programs, see Newfoundland Power's *2021 Electrification, Conservation and Demand Management Application*, Volume 2, Schedule L, page 5 of 5.

[5] See response to Request for Information PUB-NP-024 for the definition of the mTRC.