Q. (Reference CA-NP-033(c)) Newfoundland Power suggests that CDM programs should not focus solely on reducing system peak and that programs focused solely on reducing system peak, other than *those that Newfoundland Power and Newfoundland and Labrador Hydro ("Hydro") already have in place through the Curtailable Service Option (Newfoundland Power) and the industrial curtailment program (Hydro),* would not be cost-effective until after 2030. Newfoundland Power goes on to point out that its CDM programs over 2021-2025 would have some reducing effects on system peak.

(a) Is it accurate to interpret this to mean that these 2021-2025 CDM programs' primary intent is to reduce energy consumption and their impact on system peak would be a beneficial secondary impact?

(b) In Table 1, which is included in Newfoundland Power's response, among its CDM programs the Small Technology Program would reduce peak demand by 17.8 MW for a program cost of approximately $2.6 million but Benchmarking would reduce peak demand by 1.7 MW for a cost of almost $5 million; only about 10% of the impact for nearly double the cost. How can a $5 million expenditure to reduce system peak by 1.7 MW be cost-effective?

(c) Please provide Table 1 with an additional column showing the cost per MW of reduced peak demand for each program listed in that table.

(d) Are the reductions in peak demand, as given in the table, all collectively coincident with system peak?

A. (a) Newfoundland Power does not characterize the energy savings and peak demand savings of its CDM programs as primary or secondary benefits.

(b) The cost-effectiveness of CDM programs is assessed for each program using the Total Resource Cost ("TRC") test and Program Administrator Cost ("PAC") test. Use of these tests to evaluate the cost-effectiveness of CDM programs was approved by the Board in Order No. P.U. 18 (2016).

The question answered by the TRC test is whether utility system costs and customers' costs will collectively be reduced. The question answered by the PAC test is whether utility system costs will be reduced.[1] In both cases, a program is considered cost-effective if it yields a result equal to or greater than 1.0.

Table 1 on the next page provides the forecast TRC and PAC results for the Small Technology program and Benchmarking program from 2021 to 2025.[2]

[1] See National Efficiency Screening Project, *National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources*, 2020, page 3-14.

[2] The Small Technology Program is anticipated to end after 2022. At that time, it is expected that regulations may prohibit the manufacturing of certain lower efficiency models of light bulbs, such as halogens. LED bulbs, which make up a majority of technologies rebated under the program, are expected to become the market standard at that time.

Table 1:
CDM Programs
TRC and PAC Results
2021F to 2025F

CDM Program	TRC	PAC
Benchmarking	1.3	1.3
Small Technology	1.7	2.7

The Benchmarking program and Small Technology program were evaluated to be cost-effective using both the TRC test and the PAC test.

(c) Table 2 recreates the referenced table with an additional column to show the cost per MW of reduced peak demand for each program listed in the table.

Table 2:
CDM Programs
Peak Demand Reductions and Program Costs
2021F to 2025F

CDM Program	Peak Demand Reduction (MW)	Program Costs ($000s)	Cost per MW ($000)
Insulation and Air Sealing Program	27.4	9,147	334
Thermostat Program	4.3	2,315	538
Small Technology Program	17.8	2,584	145
HRV Program	0.9	1,104	1,227
Benchmarking	1.7	4,970	2,924
Low Income	3.2	1,885	589
Business Efficiency Program	14.5	9,954	686
Total	**69.8**	**31,959**	**458**

The information provided in Table 2 is practically limited. Most CDM programs provide a peak demand benefit that extends beyond the year the technology is installed.[3] The useful life of the technology is reflected in cost-effectiveness testing, but is not reflected in the requested table. The benefits of energy savings are also not included in the requested table.

(d) Yes, the reductions in peak demand are coincident with system peak.

[3] For example, the peak demand benefits from an insulation project will be realized for 25 years.