

1 **Q. (2021 Electrification, Conservation and Demand Management Application, Volume**
2 **1, page 9) The introduction of a new low-income plan is proposed for 2022 (lines 13**
3 **– 14). It will include an energy efficiency kit at no cost for income-qualified**
4 **customers. Table 1 (page 10) shows energy savings associated with this program and**
5 **Table 3 (page 13) shows the economic evaluation.**

6 (a) How will NP define an “*income-qualified*” customer?

7 (b) If the program were extended to all household customers, what would be the
8 forecast energy savings, costs and benefits of the program? Would it pass the
9 Total Resource Cost (TRC) and Program Administrator Cost (PAC) tests?

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11 A. (a) Program details, including eligibility criteria, would be finalized upon approval of
12 the *2021 Electrification, Conservation and Demand Management*
13 *Application*. This is consistent with the utilities’ longstanding approach to
14 designing customer CDM programs.

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16 The program forecast outlined in the *Electrification, Conservation and Demand*
17 *Management Plan: 2021-2025* (the “2021 Plan”) used Statistics Canada’s
18 provincial Low Income Cut-Off (“LICO”) threshold as a guideline.¹ LICO
19 considers household income based on the number of occupants in the home. For
20 the Low Income Kit Program forecast, participants were considered eligible if they
21 were within 1.3 times the LICO. Other utilities offering low income programs,
22 such as FortisBC, use 1.3 times LICO for program eligibility.

23
24 (b) CDM programs are designed to address specific barriers to customers’ adoption of
25 energy-efficient technologies. Without targeting programs towards addressing
26 specific barriers, the costs of program delivery can outweigh the customer benefits.
27 This is largely attributable to program free ridership. Free ridership occurs when
28 participants would have chosen the more energy-efficient product even without
29 availing of the program. As a result, program costs increase without a
30 corresponding increase in program benefits.

31
32 The Low Income Kit Program is designed to provide a free energy efficiency kit to
33 income-qualified customers. Customers with lower incomes are less likely to
34 participate in CDM programs due to the upfront cost. Free energy efficiency kits
35 specifically address this barrier for customers with low income.

36
37 A number of variables would need to be considered in extending the Low Income
38 Kit Program to all household customers. These variables would include
39 installation rates of technologies provided, the technologies the customers already
40 have in place and free ridership.²

¹ As defined by Statistics Canada, the LICOs are income thresholds below which a family will likely devote a larger share of its income on the necessities of food, shelter and clothing than the average family. See <https://www150.statcan.gc.ca/n1/pub/75f0002m/2012002/lico-sfr-eng.htm>.

² For example, if a customer is provided a free LED bulb, but all lights in their house have already been converted to LED, there is no benefit to the customer or the utility as the customer would simply replace a burned-out LED with another LED, providing no energy savings.

1 The cost of extending the Low Income Kit Program to all households substantially
2 outweighs the customer benefits.

3
4 The Low Income Kit Program is forecast to cost approximately \$2 million.
5 Newfoundland Power estimates that it would cost approximately \$16 million to
6 extend this program to all residential customers.³

7
8 The Low Income Kit Program is forecast to achieve energy savings of
9 approximately 5 GWh. The Company estimates that extending this program to all
10 residential customers would result in energy savings of 9 GWh.⁴

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12 In effect, extending the Low Income Kit Program to all customers would provide
13 1.8 times the energy savings at 8 times the cost to customers.

14
15 Extending the Low Income Kit Program to all customers would not pass the Total
16 Resource Cost test or the Program Administrator Cost test. A score of 1.0 or
17 greater is required to pass these tests. Newfoundland Power’s analysis estimates
18 that extending the Low Income Kit Program to all customers would result in a
19 Total Resource Cost test result of 0.8 and a Program Administrators Cost test of
20 0.6.⁵

³ This is based on estimated procurement, delivery and labour requirements and assumes no application or screening process is required. If required, this would increase the labour requirements for the program.

⁴ Lower energy savings are forecast when providing kits to all customers due to anticipated high levels of free ridership and low rates of installation.

⁵ A free ridership rate of 64% is assumed based upon the number of customers categorized by Statistics Canada as low income in Newfoundland and Labrador, with a 40% buffer for program income qualification considerations, compared to the number of customers in Newfoundland Power’s service territory.