

1 Q. **Reference: Volume I, Section 6.7.1**

2 The 2027 Test Year average embedded demand cost for Island Industrial customers is
3 \$17.54/kW per month. Hydro proposes a demand charge of \$5.50/kW-month which will recover
4 approximately 31 percent of embedded demand costs, with the remainder through the first-
5 block energy charge.

6 a) Explain why the proposed approach is more efficient than a cost reflective rate with a
7 demand charge of \$17.54/kW-month.

8 b) What type of customer behavior impacts can be produced or expected by not reflecting the
9 full demand-related cost in the demand charge?

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12 A. *This response was provided by Christensen Associates Energy Consulting.*

13 a) While a demand charge of \$17.54/kW-month may be more explicitly cost reflective,
14 Newfoundland and Labrador Hydro ("Hydro") does not consider it materially more efficient
15 than the proposed design. While a higher demand charge would recover a larger share of
16 demand-related costs directly through the demand component of the rate, the resulting
17 customer incentives would be broadly similar to those provided by the proposed hours of-
18 use design. Christensen Associates Energy Consulting discusses the rate design alternatives
19 of the demand charge in their report.¹ Under the proposed approach, demand-related
20 costs are recovered through a combination of the demand charge and the Block 1 energy
21 charge. Because the Block 1 billing determinant is tied to customer demand, an increase in
22 their peak demand increases the quantity of energy billed under the Block 1 price and
23 therefore increases the customer's bill. Similarly, under a rate with a \$17.54/kW-month
24 demand charge, customers would face a direct charge associated with increasing peak
25 demand. Although the mechanisms differ, both designs provide a strong incentive to
26 manage peak demand and improve load factor.

¹ "2026 General Rate Application," Newfoundland and Labrador Hydro, May 27, 2026, vol. III, exh. 17, p. 4.

1 In addition, both designs provide the same marginal price signal for incremental energy
2 consumption once a customer's usage exceeds the Block 1 threshold. Customers with
3 Block 2 usage face the same marginal-cost-based energy price regardless of whether more
4 demand-related costs are recovered through a demand charge or through the Block 1
5 energy charge. Consequently, both approaches encourage customers to make efficient
6 decisions regarding when and how much energy they consume. The principal difference
7 between the two approaches is therefore not the efficiency of the price signals, but the
8 allocation of fixed cost recovery between the demand charge and the Block 1 energy
9 charge. Lastly, Hydro selected the proposed demand charge and rate structure to be more
10 consistent with the existing Utility Rate, which also contains a demand charge and a two-
11 block energy charge. The current and proposed demand charge of the Utility Rate is
12 \$5.00/kW-month and \$5.50/kW-month, respectively.

- 13 **b)** Hydro does not expect materially different customer behavior from recovering a portion of
14 demand-related costs through the Block 1 energy charge rather than through a higher
15 demand charge. Under both approaches, customers face a strong incentive to manage
16 peak demand because increasing peak demand results in higher costs. Similarly, customers
17 with usage above the Block 1 threshold face the same marginal-cost-based Block 2 energy
18 price under either design. As a result, the incentive to shift energy consumption away from
19 higher-cost periods and make efficient energy-use decisions is largely unchanged. The
20 primary impact of not reflecting the full demand-related cost in the demand charge is
21 therefore on the allocation of cost recovery between rate components, rather than on
22 customer behavior. Hydro expects the proposed design to produce similar incentives for
23 both peak demand management and efficient energy consumption while maintaining
24 greater consistency with the existing Utility Rate structure.