

1 **Q. Reference: Volume I, Section 6.7, Table 6-7; and Volume III, Exhibit 17**

2 The Winter Block 2 price (8.889 cents) exceeds the Block 1 price (6.694 cents), producing an
3 inclining block in winter and a declining block in non-winter months.

4 **a)** Provide, by customer and by month, the marginal energy price each customer would
5 face under the proposal (including all riders) and compare it to Hydro's forecast
6 marginal cost in that month.

7 **b)** Identify the months and customers for which the marginal price is the Block 1 rate
8 rather than the Block 2 rate, and quantify the associated efficiency loss.

9 **c)** Discuss the incentive properties of the seasonal inversion — in particular, whether a
10 customer near the boundary in winter has an incentive to increase billing demand
11 (enlarging Block 1) to avoid the higher winter Block 2 price, and how the design guards
12 against such behaviour.

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

16 **a)** Please refer to the table on the next page.¹

¹ The rider values included in this table are those in effect as of May 11, 2026, corresponding to the filing date of the *Pricing for a Revised Island Industrial Rate for Newfoundland and Labrador Hydro* report. Subsequent updates to rider values are not reflected in the table.

	January	February	March	April	May	June	July	August	September	October	November	December
Block 1 Prices	\$0.0669	\$0.0669	\$0.0669	\$0.0669	\$0.0669	\$0.0669	\$0.0669	\$0.0669	\$0.0669	\$0.0669	\$0.0669	\$0.0669
Block 2 Prices	\$0.0889	\$0.0889	\$0.0889	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0889
Forecast Marginal Cost	\$0.1277	\$0.1006	\$0.0434	\$0.0256	\$0.0231	\$0.0272	\$0.0475	\$0.0425	\$0.0270	\$0.0267	\$0.0447	\$0.0872
Customer 1												
Marginal Cost	\$0.0889	\$0.0889	\$0.0889	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0889
Marginal Cost with Riders	\$0.1064	\$0.1064	\$0.1064	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.1064
Differential (Marginal Cost - Forecast)	-\$0.0388	-\$0.0117	\$0.0454	\$0.0072	\$0.0098	\$0.0057	-\$0.0147	-\$0.0097	\$0.0059	\$0.0061	-\$0.0118	\$0.0017
Customer 2												
Marginal Cost	\$0.0889	\$0.0889	\$0.0889	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0889
Marginal Cost with Riders	\$0.1064	\$0.1064	\$0.1064	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.1064
Differential (Marginal Cost - Forecast)	-\$0.0388	-\$0.0117	\$0.0454	\$0.0072	\$0.0098	\$0.0057	-\$0.0147	-\$0.0097	\$0.0059	\$0.0061	-\$0.0118	\$0.0017
Customer 3												
Marginal Cost	\$0.0889	\$0.0889	\$0.0889	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0889
Marginal Cost with Riders	\$0.1064	\$0.1064	\$0.1064	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.1064
Differential (Marginal Cost - Forecast)	-\$0.0388	-\$0.0117	\$0.0454	\$0.0072	\$0.0098	\$0.0057	-\$0.0147	-\$0.0097	\$0.0059	\$0.0061	-\$0.0118	\$0.0017
Customer 4												
Marginal Cost	\$0.0889	\$0.0889	\$0.0889	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0889
Marginal Cost with Riders	\$0.1064	\$0.1064	\$0.1064	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.1064
Differential (Marginal Cost - Forecast)	-\$0.0388	-\$0.0117	\$0.0454	\$0.0072	\$0.0098	\$0.0057	-\$0.0147	-\$0.0097	\$0.0059	\$0.0061	-\$0.0118	\$0.0017
Customer 5												
Marginal Cost	\$0.0889	\$0.0889	\$0.0889	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0889
Marginal Cost with Riders	\$0.1064	\$0.1064	\$0.1064	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.1064
Differential (Marginal Cost - Forecast)	-\$0.0388	-\$0.0117	\$0.0454	\$0.0072	\$0.0098	\$0.0057	-\$0.0147	-\$0.0097	\$0.0059	\$0.0061	-\$0.0118	\$0.0017
Customer 6												
Marginal Cost	\$0.0889	\$0.0889	\$0.0889	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0889
Marginal Cost with Riders	\$0.1064	\$0.1064	\$0.1064	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.1064
Differential (Marginal Cost - Forecast)	-\$0.0388	-\$0.0117	\$0.0454	\$0.0072	\$0.0098	\$0.0057	-\$0.0147	-\$0.0097	\$0.0059	\$0.0061	-\$0.0118	\$0.0017
Customer 6												
Marginal Cost	\$0.0889	\$0.0889	\$0.0889	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0328	\$0.0889
Marginal Cost with Riders	\$0.1064	\$0.1064	\$0.1064	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.0504	\$0.1064
Differential (Marginal Cost - Forecast)	-\$0.0388	-\$0.0117	\$0.0454	\$0.0072	\$0.0098	\$0.0057	-\$0.0147	-\$0.0097	\$0.0059	\$0.0061	-\$0.0118	\$0.0017

1 **b)** Marginal pricing, by customer, is as follows:

- 2 i. Customers 1,2,5, and 6 face marginal prices that are determined by the Block 2 rate
3 in all months.
- 4 ii. Customers 3 and 4 each have months in which there is no Block 2 usage and, as a
5 result, their marginal price is equal to the Block 1 rate in those months.
- 6 iii. Customer 3 faces the Block 1 marginal price from May through November, while
7 Customer 4 faces the Block 1 marginal price in November.

8 The proposed Hours of Use design offers an efficiency gain relative to the current design,
9 because the Block 2 price reflects Hydro's forecast of its marginal costs in each season, and
10 this forecast is updated regularly between rate applications. In contrast, the current tariff,
11 absent rider values, is not adjusted. If we consider the share of months in which the Block 2
12 price is not at the margin, this amounts to 8 of 72 months. Put otherwise, eight ninths of
13 customer-months each year offer marginal cost-based pricing to customers. Thus, even
14 though a marginal cost-based price does not apply to a large share of load, it does apply to
15 the incremental consumption decisions of most customers in most months.

c) The fact that the energy pricing of the first block is inclining block rather than declining block
at the proposed level of demand price does not present a material problem in terms of
incentives. As mentioned elsewhere, a customer would still want to control their peak
demand since an increase in peak demand has billing implications for multiple subsequent
months. Money saved from shifting load from block 2 to block 1 is offset not only by an
increase demand charge in that month but in subsequent months. Additionally, the shift in
share serves to increase the energy charge in subsequent non-winter months.