

1 Q. **Reference: Chapter 6, Sections 6.7 to 6.7.3; Exhibit 17**

2 Hydro states that the proposed Second Block Energy rates are intended to expose incremental
3 industrial energy consumption to marginal-cost pricing.

4 a) Define the term "*incremental consumption*" as used in developing the proposed Island
5 Industrial rate design.

6 b) Explain whether the 300-hour boundary was developed to distinguish between existing
7 industrial consumption and consumption expected to occur in response to the proposed
8 Second Block pricing.

9 c) Explain whether existing or forecast base industrial consumption will be priced at the
10 proposed marginal-cost-based Second Block Energy rates.

11 d) Explain how Hydro determined that First Block revenues together with demand-charge
12 revenues will recover the Island Industrial class's embedded costs after accounting for
13 existing consumption billed at Second Block rates.

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

17 a) Incremental consumption is defined as a departure from the consumption level that
18 underpins the billing data used in the analysis. These data are scaled to customer and class
19 billing quantities.

20 b) The block boundary value of 300 hours of use was not developed to distinguish between
21 existing consumption and that expected in response to the new pricing and design
22 structure. The block boundary value was chosen to make it likely that most customers
23 would, at their existing load and load factors, exceed the block boundary in most billing
24 months. The purpose of this objective is to make it likely that customers expect that the
25 price of additional load is based on marginal cost

1 **c)** If customer consumption levels are as forecasted for the general rate application, most
2 customers will have some load in block 2 in most months. That is, the marginal price of
3 consumption will be Newfoundland and Labrador Hydro’s forecast marginal cost for that
4 season. This price will apply to the customer’s block 2 consumption.

5 **d)** The Hours-of-Use (“HOU”) design collects a utility’s revenue requirements, net of expected
6 block 2 consumption, at expected block 2 prices. As with other tariffs, actual consumption,
7 and thus actual revenue recovery, can depart from expected levels that underpin tariff
8 design. However, as long as consumption remains in block 2 and billing demand remains
9 constant (at Power on Order), customer changes in consumption under the HOU design
10 produce changes in billings that equal (forecasted) changes in marginal cost, without
11 affecting recovery of required revenues. In contrast, a standard tariff, in which price
12 typically differs from marginal cost, produces changes in recovery of required revenues.