

1 Q. **Reference: Application, Volume I, Section 6.7 Rates for Island Industrial Customers.**

2 Hydro states a customer with a 100% load factor records 720 hours of use in a thirty-day month.
3 Section 6.7.2 states the first block energy rate is based on a 300-hours of use block boundary.

4 a) Does Hydro propose to use a 300-hour block regardless of whether a particular billing
5 cycle is longer or shorter than 30 days?

6 b) Would Hydro prorate the hours in billing cycles that are longer or shorter than 30 days?

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

10 a) Newfoundland and Labrador Hydro proposes to use a block boundary that adjusts for the
11 length of the billing month. The 300 Hours of Use ("HOU") block boundary is based on the
12 average number of hours in a month over the course of a year, which is 730 hours. HOU is a
13 measure that reflects a customer's load factor. Accordingly, a 300 HOU boundary in a 730-
14 hour month corresponds to a load factor of 41.1% ($300 \div 730$).

15 Because the number of hours varies by month, the HOU boundary also varies from month to
16 month. Specifically, the monthly HOU boundary is determined by the number of days in the
17 month while maintaining the same underlying load factor of 41.1%. Therefore, the table
18 below presents the monthly HOU boundaries corresponding to each month's number of
19 hours. In leap years, the February HOU boundary is 286 hours.

Month	Days	Hours	HOU Boundary	Load Factor
January	31	744	306	41.1%
February	28	672	276	41.1%
March	31	744	306	41.1%
April	30	720	296	41.1%
May	31	744	306	41.1%
June	30	720	296	41.1%
July	31	744	306	41.1%
August	31	744	306	41.1%
September	30	720	296	41.1%
October	31	744	306	41.1%
November	30	720	296	41.1%
December	31	744	306	41.1%
Average	30.42	730	300	41.1%

- 1 **b)** As stated in part a), Hydro proposes that the HOU boundary vary with the number of days in
2 the billing cycle. To maintain a consistent load factor threshold of 41.1%, the HOU boundary
3 for a given billing cycle is calculated as: **HOU Boundary = 41.1% x (Days in Billing Cycle x 24)**.
- 4 Therefore, the applicable HOU boundary is directly proportional to the number of days in
5 the billing cycle. This approach ensures that the same load factor threshold is maintained
6 regardless of billing cycle length.