

- 1 Q. **Reference: Labrador Expansion Study, pages 11 (pdf 19) and Appendix B, page 9 (p. 73**
2 **pdf)**
- 3 Preamble:
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- 5 Table 3 (page 11) provides a Baseline Coincident Peak forecast for Labrador West growing
6 from 342.4 MW in 2018 to 382.9 MW in 2043.
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- 8 Table 2 of Appendix B (page 73 pdf) shows these same values in the column identified as
9 “baseline peak”, and adds separate columns for “Data Centre”, rising from 27.1 MW in
10 2020 to 51.5 MW in 2022 and remaining at that level through 2043, and a final column
11 “Coincident Peak with Alderon”, which appears to add 65 MW to the “Coincident Peak with
12 Data Centres” column, from 2022 through 2043.
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- 14 Note 9 to Table 2 specifies that the baseline peak load forecast includes Hydro Rural, IOC
15 and Tacora.
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- 17 a) Please break down the Baseline Peak column into:
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- 19 i) Regular loads excluding and data centre and industrial loads;
20 ii) Data centre loads; and
21 iii) Industrial loads.
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- 23 b) Please explain the source and justification for the forecast of data centre loads found in
24 Table 2 of Appendix B, which grow from 0 in 2019 to 27.1 MW in 2020 to 51.5 MW in
25 2022, and remain at that level through 2043.
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- 27 c) Please describe and quantify Hydro’s perception of the uncertainty of these forecast
28 data centre loads, compared to the other future loads in the forecast. Insofar as Hydro

1 considers the forecast data centre loads to be more uncertain, please explain how it
2 has integrated that uncertainty into its planning process;

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4 d) Please provide an update on the Alderon project, including Hydro's estimate of the
5 likelihood that it will represent a 65 MW load starting in 2022;

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7 e) Please provide an update regarding any other potential mining projects in Labrador of
8 which Hydro is aware, indicating for each one:

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10 i) The amount of power (MW) that would eventually be required;

11 ii) The earliest date at which that power could be required; and

12 iii) Hydro's estimation as to the likelihood that this power will be need at this date.

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14 f) Please discuss what criteria Hydro used to determine which potential loads to include
15 in the Baseline Load Forecast.

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17 g) Please provide a forecast for Labrador East similar to one shown in Table 2 of Appendix
18 B, showing potential future load additions for data centre and other uses.

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21 A. a) Please refer to Table 2 of Newfoundland and Labrador Hydro's ("Hydro") response to
22 LAB-NLH-074.

23

24 b) The forecast of data centre load found in the "Labrador Interconnected System
25 Transmission Expansion Study," App. B, at p. 9, Table 2 reflects Hydro's forecast of the
26 coincident customer loads based on the loads provided by the customers and indicated on
27 the applications for electrical service received by Hydro. This forecast of customer
28 coincident loads reflects the loads that have not been approved for service and have not
29 been included in Hydro's baseline forecast.

1 c) Hydro does not have data or information available that can be relied upon to quantify
2 the uncertainty of data centre loads reflected in the load forecasts. Hydro has observed via
3 various media reports that the data centre loads forecast for the Labrador Interconnected
4 System represent only a portion of a much larger global demand for the data centre
5 industry. Hydro believes the uncertainty with local data centre load is likely to be
6 associated with the ability of the local industry to remain competitive compared with other
7 jurisdictions. The approach used by Hydro in this instance to integrate load uncertainty into
8 its planning process has been to develop both baseline and sensitivity load forecast cases
9 from which alternate system expansion plans have been developed.

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11 d) There are currently no ongoing discussions between Hydro and Alderon with respect to
12 project start-up timelines. The 65 MW load requirement reflects the information provided
13 to Hydro during previous discussions with Alderon; however, Hydro does not have an
14 estimate of the likelihood that the project will represent a 65 MW load starting in 2022.
15 Hydro considers the project to be probable under certain economic conditions and in that
16 regard has chosen to evaluate the transmission system impacts through the sensitivity
17 analysis included in the study.

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19 e) Hydro is not currently evaluating other potential mining projects in Labrador.

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21 f) Please refer to Hydro's response to PUB-NLH-064.

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23 g) Please refer to the "Labrador Interconnected System Transmission Expansion Study,"
24 App A, at p. 4, Table 2, which provides the coincident peak loads in kilowatts of potential
25 future load additions for data centres and the Department of National Defence central
26 heating plant. These forecasted loads would be incremental to the baseline forecast for
27 Labrador East presented in the "Labrador Interconnected System Transmission Expansion
28 Study," Sec. 3.1, at p. 11, Table 3. Hydro notes that the Department of National Defence
29 has subsequently indicated that the peak load for the central heating plant could be as high
30 as 20 MW.