

1 Q. **Reference page 8, lines 13-15, *Labrador Interconnected System Network Additions Policy***
2 ***Summary Report***

- 3 a. Explain how the “uncertainty associated with duration for customers who do not meet the
4 definition of Industrial Customers” is reflected in load forecast of the Transmission
5 Expansion Plan.
- 6 b. Explain how the “uncertainty associated with duration for customers who do not meet the
7 definition of Industrial Customers” may affect the Transmission Expansion Plan.

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10 A. a. In general, Newfoundland and Labrador Hydro’s (“Hydro”) load forecasts for customers who
11 do not meet the definition of Industrial Customers reflect assumptions with respect to customer
12 duration if appropriate information is known to support such assumptions. For example, if the
13 service is temporary in nature or, in the case of a small mining operation, the service coincides
14 with the expected exhaustion of the mine’s resource base.

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16 The baseline load forecasts relied upon for the “Labrador Interconnected System Transmission
17 Expansion Study”¹ for those customers who do not meet the definition of Industrial Customers
18 include the forecast energy (GWh) requirements of residential, general service, and area lighting
19 customers and their resultant system demand (MW) requirements. Hydro's customer forecast
20 and associated loads result from:

- 21 • A forecast of annual net customer change² combined with a forecast of annual energy
22 intensity³ (kWh/year or MWh/year) used to derive an annual load requirements forecast
23 or;
- 24 • A forecast of annual net load (MWh) change.⁴

25 In this regard, Hydro’s load forecast methodology accounts for uncertainty associated with
26 duration for customers as it is implicit in the historical data from which the forecast is derived.

¹ “Labrador Interconnected System Transmission Expansion Study,” April 3, 2019 (rev. 2), originally filed October 31, 2018.

² Based on historical data and historical data trends

³ Ibid.

⁴ Ibid.

1 With the exceptions noted above, Hydro does not prepare its load forecasts based on estimates
2 of gross customer additions or gross load additions, and there is no explicit accounting or
3 assumptions with respect to the duration for customers who do not meet the definition of
4 Industrial Customers.

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6 Only the data centre customers that were able to be served under existing capacity supply limits
7 were approved for service and formed the basis for the baseline load forecast. As only a fraction
8 of the service applications identified as data centres were included, much of the uncertainty
9 associated with the duration of those data centre customers and their associated system load
10 requirements was excluded.

11
12 **b.** Transmission investments to meet load growth are generally high cost and can contribute
13 to material increases in customer rates. In planning to serve load growth, the objective is to
14 select the network addition project that meets the objectives of least-cost and reliable service
15 for the long term. Investing in transmission network additions to serve load growth that may
16 dissipate within a few years can result in excess capacity for the long term. If the transient
17 customer load had not been considered, a lower-cost transmission plan may have been
18 selected. Overinvestment in transmission expansion from potentially transient customers can
19 result in materially higher customer rates for the remaining customers on the system.