

1 Q. **Reference: Response to PUB-NLH-108, Cost of Service Methodology Technical Conference**
2 **presentation, Slides 39-46**

3 When considering Newfoundland Power's hydro generation contribution during peak, Hydro
4 assessed all formal requests to maximize both Island and Avalon hydro generation two weeks
5 leading up to the system peak.

6 a) Describe what Hydro considered in the assessment.

7 b) How did Hydro determine that Newfoundland Power's run of the river plants would
8 recover from requests to maximize hydro generation over a two-week period during the
9 winter season?

10 c) Slides 42 through 44 identify 24 instances over the period 2017 through 2024 where
11 Hydro requested Newfoundland Power to maximize hydro generation during the winter
12 months. However, Slide 45 identifies 304 instances in the winter months where Hydro
13 formally requested Newfoundland Power to maximize hydro generation. Explain the
14 differences in the number of instances and the impact of the difference on
15 Newfoundland Power's ability to maximize hydro generation on the days surrounding
16 peak day?

17 d) On Slide 46 Hydro states it did not find any reason to excludes any years from the 5-year
18 average Generation Credit at peak. Yet, the data for February 20, 2020 and February 11,
19 2021 indicate that Hydro made requests to maximize Newfoundland Power's hydro
20 generation on 7 and 9 days respectfully in the prior 14-day period. What is the basis of
21 Hydro's determination that this number of requests would not have depleted
22 Newfoundland Power's reservoirs to the point where those dates would be excluded
23 from the 5-year average?

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26 A. a) In assessing Newfoundland Power Inc.'s ("Newfoundland Power") hydro generation
27 contribution during the system peak, Newfoundland and Labrador Hydro ("Hydro")

1 reviewed all formal requests from the Energy Control Centre (“ECC”) to maximize hydro
2 generation in the two weeks leading up to the Island peak. For this assessment, Hydro
3 considered requests for both Avalon Hydro and All Hydro generation to evaluate the
4 potential impact on reservoir depletion and available hydrology.

5 Hydro quantified the frequency of these requests. A five-year rolling average indicated that
6 approximately five to six requests are typically issued over a 14-day period preceding the
7 Island peak. This analysis was undertaken to determine whether hydrologic conditions or
8 reservoir management considerations could have materially affected Newfoundland
9 Power's hydro generation contribution at the time of peak demand.

10 Based on the assessment, Hydro concluded that available hydrology was not a limiting
11 factor and therefore was not a factor in the calculation of Newfoundland Power's
12 generation capacity credit.

13 **b)** Hydro did not assess the recovery characteristics of individual Newfoundland Power run-of-
14 river hydro plants. Rather, Hydro reviewed the frequency of formal ECC requests to
15 maximize hydro generation during the 14 days preceding the Island peak to determine
16 frequency. The review indicated that an average of approximately five to six such requests
17 occurred during the period over the preceding five years. Based on this assessment, Hydro
18 concluded that available hydrology was not a limiting factor and therefore did not consider
19 potential recovery of individual run-of-river facilities to be material to the determination of
20 Newfoundland Power's generation capacity credit. Each day, Newfoundland Power
21 determines and provides its available hydraulic capacity to Hydro, including the capacity
22 available to meet peak load requirements. Newfoundland Power is responsible for
23 managing the dispatch of its hydraulic generation, including consideration of its available
24 water and storage, and reflecting that accordingly in its daily reporting.

25 **c)** The 24 instances identified on Slides 42 through 44 and the 304 instances identified on Slide
26 45 represent different analyses.

27 The 24 instances on Slides 42 through 44 relate to Hydro's assessment of Newfoundland
28 Power's generation contribution during annual system peak periods. For each year, Hydro

1 assessed the annual peak day, as well as the day immediately preceding and following the
2 peak day, including the peak hour and adjacent hours.

3 The 304 instances on Slide 45 represent all formal ECC requests to maximize Newfoundland
4 Power hydro generation during the winter months from 2017 to 2024. As this analysis
5 includes all winter-season requests, rather than only those associated with annual peak
6 periods, the number of instances is substantially higher.

7 The difference in the number of instances does not affect Hydro's assessment of
8 Newfoundland Power's ability to maximize hydro generation during annual peak periods.
9 The 24 instances were used to assess Newfoundland Power's generation contribution at
10 peak, while the 304 instances were reviewed to assess the frequency of requests to
11 maximize hydro generation and whether available hydrology was a limiting factor.

12 **d)** Hydro did not establish a specific threshold of requests that would indicate reservoir
13 depletion. Rather, Hydro reviewed the frequency of formal ECC requests to maximize hydro
14 generation during the 14 days preceding annual system peak and found that the frequency
15 of requests observed in 2020 and 2021 were not considered excessive. Hydro did not
16 identify evidence that Newfoundland Power's generation contribution during these years
17 was materially affected by hydrologic limitations and, therefore, did not identify a basis to
18 exclude either year from the calculation of the five-year average Generation Credit at peak.
19 In addition, Newfoundland Power is responsible for managing the dispatch of its hydraulic
20 generation, including consideration of its available water and storage, and reflecting that
21 accordingly in its daily hydraulic capacity report to Hydro, including the capacity available to
22 meet peak load requirements.