

1 Q. **Reference: 2024 Resource Adequacy Plan**

2 Please refer to the Resource Adequacy Plan, Appendix C, Section 3.0. For the firm energy
3 analysis, please provide, in Excel format:

- 4 a) All model outputs/results
- 5 b) All model assumptions
- 6 c) All model inputs
- 7 d) Hourly firm energy demand
- 8 e) Hourly firm energy supply
- 9 f) Hourly firm energy, by supply resource
- 10 g) Hourly energy profile, by supply resource, if different from (f)
- 11 h) Hourly firm energy of the LIL
- 12 i) Hourly energy profile of the LIL, if different from (h)
- 13 j) Hourly firm energy imports
- 14 k) Hourly firm energy exports
- 15 ~~l) Hourly~~
- 16 m) Spillage (hourly, if available; otherwise, by year)
- 17 n) Hourly wind curtailments
- 18 o) Time horizon of study period
- 19 p) Transmission losses
- 20 q) Generation forced outage rates

- 1 A. Please refer to PUB-NLH-328, Attachment 1 for the model's inputs and outputs. The following
2 specifically summarizes the location of each requested item:
- 3 a) Please refer to tab labelled "Results."
- 4 b) Please refer to all tabs except for the one labelled "Results."
- 5 c) Please refer to part b).
- 6 d) Please refer to the tabs labelled "Load – Ref," "Load – Slow," and "Load - Accel" for the
7 hourly load forecast for the three load forecast cases. Please note that Newfoundland and
8 Labrador Hydro does not distinguish between the terms "load," "demand," and "firm
9 demand."
- 10 e) Hourly firm energy supply was not an input to this analysis. For annual firm energy supply
11 assumptions, please refer to the tab labelled "Firm Gen."
- 12 f) Please refer to part e).
- 13 g) Please refer to part e).
- 14 h) Please refer to the tabs labelled "Firm LIL – Ref," "Firm LIL – Slow," and "Firm LIL - Accel" for
15 the calculated hourly Labrador-Island Link firm energy (that can be used to serve load on the
16 Island) for the three load forecast cases.
- 17 i) Please refer to part h).
- 18 j) There are no firm energy imports assumed in this analysis.
- 19 k) Please refer to the tab labelled "ML Profile" for the assumed hourly firm exports over the
20 Maritime Link.
- 21 m) No spill was assumed in this analysis. It would be highly unlikely for there to be any spill
22 from our hydroelectric resources during a repeat of the critical dry sequence.
- 23 n) No wind curtailments were assumed in this analysis.
- 24 o) The study period aligns with the study period of the 2024 Resource Adequacy Plan, which is
25 the ten-year period from 2025 through 2034. Data for 2024 is also included in the Excel
26 spreadsheet.

- 1 **p)** A constant loss value of 3.34% has been assumed in this analysis to represent transmission
- 2 and distribution losses. This value is shown in the tab labelled "Inputs."
- 3 **q)** Generation-forced outage rates are not an input to the firm energy analysis.