Q. Is it not premature for NP to be spending significant amounts of capital on its generating capacity before Hydro's 2020 Reliability and Resource Access Study has been completed and there is a better idea of the value of capacity? Is it in the interests of ratepayers to continue to fund such expenditures, given the potential impact that Muskrat Falls will have on a need to purchase power from NP?

A. **General**

Newfoundland Power's capital expenditure proposals for its generation facilities presented in the 2021 Capital Budget Application are not premature. The proposed expenditures are necessary to ensure the continued operation of generation facilities that meaningfully contribute to the provision of least-cost electrical service to Newfoundland Power's customers.[1]

The total capital expenditure proposed for Newfoundland Power's generating capacity in the *2021 Capital Budget Application* is $11.5 million.[2] This compares to the previous 5-year average generation capital expenditure of $10.6 million.[3]

Newfoundland Power's decisions with respect to continued investment in its generation facilities give appropriate consideration to the matters to be considered in the Board's ongoing review of Hydro's Reliability and Resource Adequacy Study.

Hydro does not purchase the output of Newfoundland Power's generation facilities. Newfoundland Power's generation reduces its requirement to purchase power from Hydro.

The RRA Study

In November 2018, Hydro submitted the *Reliability and Resource Adequacy Study* to the Board (the "RRA Study"). The RRA Study provides a review of planning criteria, an in-depth view of near-term reliability, Hydro's long-term planning considerations and Hydro's proposed action plan.[4]

In February 2019, the Board initiated a review of the RRA Study. Hydro provided an update to the RRA Study in November 2019 (the "2019 Update"). The Board's

[1] For further information on why hydro facility related projects included in the *2021 Capital Budget Application* should proceed in 2021, see the responses to Requests for Information CA-NP-024, CA-NP-103, CA-NP-105 and CA-NP-106. For information on the contribution of Newfoundland Power's thermal plants to the provision of service to customers, see the *2021 Capital Budget Application, Volume 1, Schedule B,* page 8.

[2] The $11.5 million is comprised of: (i) the *Hydro Facility Rehabilitation Project* of $1.8 million, (ii) the *Topsail Hydro Plant Refurbishment Project* of $9.4 million and (iii) the *Thermal Plant Facility Rehabilitation Project* of $0.3 million. See the *2021 Capital Budget Application, Volume 1, Schedule B,* page iii.

[3] See the *2021 Capital Budget Application, Volume 1, 2021 Capital Plan, Table 14*, page 34.

[4] See Hydro's cover letter for the RRA Study to the Board, dated November 16, 2018.

consultant has also provided summary reports on the RRA Study.[5] A further update of the RRA Study is due to be filed with the Board in November 2020.

The 2019 Update provides information on both near-term and long-term reliability. In the near term, until the Labrador Island Link (the "LIL") is operational, the 2019 Update indicates there is risk that the available resources will be insufficient to provide acceptable supply reliability to customers.[6] The 2019 Update also notes that, once the LIL is in operation, the line will go through a period of testing and will be subject to "potential operational unknowns" during its first years of operation.[7] This gives rise to further supply reliability concerns in the first years of operation of the LIL.

With respect to the longer term, following the planned decommissioning of the Holyrood Thermal Generation Station (the "Holyrood TGS") and the Stephenville and Hardwoods Gas Turbines, six of twelve resource expansion scenarios described in the 2019 Update indicate a requirement for capacity additions prior to 2030.[8] These scenarios do not include consideration of the risk that a LIL failure may also create a need for additional generation resources.[9]

2020 Outlook

The results of the RRA Study and the 2019 Update indicate that there are both near-term and longer-term reliability concerns on the Island Interconnected System. In the longer term, the study results indicate, further generation additions may be required.

Newfoundland Power is not aware of any information that would suggest the 2020 update to the RRA Study will materially alter the current outlook with respect to reliability concerns or the longer-term need for capacity additions.[10]

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5 For example, see The Liberty Consulting Group's report, *Review of Newfoundland and Labrador Hydro's Reliability and Resource Adequacy Study*, August 19, 2019.

6 See Hydro's report, *Reliability and Resource Study Review – Near Term reliability Report – May 2020, May 15, 2020, Table 6*. In five of 10 scenarios, the LOLH criteria of 2.80 (hours) is exceeded prior to the LIL being placed into service. Indicating to Newfoundland Power that until the Labrador Island Link is operational, there is risk that there are insufficient supply resources to provide acceptable reliability to customers.

7 See Hydro's report, *Reliability and Resource Study Review – Near Term reliability Report – May 2020, May 15, 2020*, page 9, lines 3 to 5.

8 See Hydro's report, *Reliability and Resource Adequacy Study – 2019 Update, Volume III: Long Term Resource Plan*, page 44 line 24 to page 45 line 5.

9 The impact of failure of the LIL is a consideration in the Board's ongoing review of the RRA Study. For example, the 2019 Update indicates that if a three-week bipole outage on the LIL were to occur at time of system peak, varying degrees of rotating outages could be expected for the majority of the outage period. See Hydro's report, *Reliability and Resource Adequacy Study – 2019 Update, Volume III: Long Term Resource Plan*, page 37, lines 1-2.

10 For example, Newfoundland Power's demand requirements are forecast to be relatively stable over the next 5 years as follows: 2020: 1,367 MW, 2021: 1,361 MW, 2022: 1,363 MW, 2023: 1,362 MW, 2024: 1,359 MW, and 2025: 1,360 MW. Approximately 88% of Hydro's generation requirements at system peak on the Island Interconnected System relate to Newfoundland Power's load. See Hydro's *2017 GRA Compliance Application, Exhibit 14: 2019 Test Year Cost of Service for Rate Setting, Schedule 3.1A*, page 1 of 1, line 14.

Newfoundland Power does not anticipate that the role of its hydro plants will change materially following the completion of the Muskrat Falls Project, and that they will continue to be required to provide low cost energy to customers, capacity support on the Island Interconnected System and localized reliability support.[11]

For these reasons, it is Newfoundland Power's assessment that investment in its generation capacity as proposed in the *2021 Capital Budget Application* is in the interest of ratepayers.

[11] For information on the pre- and post-Muskrat Falls role of Newfoundland Power's hydro production facilities, see the response to Request for Information PUB-NP-010.