

1 Q. Reference: RRAS, 2022 Update, Vol. I, page ( pdf)

2 Citation:

3 Given the current evolving nature of the Newfoundland and Labrador  
4 Interconnected System and the evolution of system reliability as Hydro  
5 continues to work towards fully integrating the Muskrat Falls Hydroelectric  
6 Generating Facility, the focus of this filing addresses LIL reliability, the need for  
7 on-Island resources, and how existing thermal generation and standby sources  
8 can support these requirements in the interim. There remains a high level of  
9 uncertainty regarding the potential load growth on the Labrador Interconnected  
10 System, due to significant customer requests following the implementation of  
11 the Network Additions Policy, and on the Island Interconnected System, due to  
12 electrification and electric vehicle (“EV”) adoption and the possibility of new  
13 mines as well as wind and hydrogen projects. The grid implications of wind  
14 integration into the existing system have not been included in this analysis, as  
15 the Wind Development Process<sup>22</sup> is ongoing. However, Hydro recognizes wind  
16 integration is likely to have a material impact on system operations and future  
17 resource additions. (underlining added)

18 To what extent can any of the conclusions of this 2022 Update be relied upon, given the high  
19 level of uncertainty and the fact that the analysis does not take into account an important  
20 element which is likely to have material impact on future resource additions?

21

22

23 A. Canadian utilities are facing a changing landscape requiring decisions regarding additions and  
24 other changes to the electrical systems due in large part to accelerating electrification. In fact,  
25 Electricity Canada anticipates the electricity system in Canada will double or triple in size,<sup>1,2</sup>  
26 indicating rapidly changing inputs to system planning all across Canada. Due to changing  
27 assumptions for utilities, resource planning cannot conclude after a single filing. Utilities must  
28 repeatedly update system input assumptions as they evolve, which is the case in this province.

---

<sup>1</sup> “Power and Utility Industry Trends: How can Canada’s energy and utility companies prepare for a net-zero future?,” PwC Canada,  
<<https://www.pwc.com/ca/en/industries/energy/publications/how-can-canadas-energy-and-utility-companies-prepare-for-a-net-zero-future.html>>.

<sup>2</sup> “A clean electricity standard in support of a net-zero electricity sector: discussion paper,” Environment and Climate Change Canada, March 16, 2022,  
<<https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/achieving-net-zero-emissions-electricity-generation-discussion-paper.html#toc6>>.

1 As Newfoundland and Labrador Hydro (“Hydro”) cannot anticipate having all static inputs that  
2 could affect decision-making, Hydro is updating its Reliability and Resource Adequacy Study  
3 every year with new information that becomes available. Hydro acknowledges that the  
4 uncertainty about what will happen in the future could, in hindsight, affect a decision today;  
5 however, to not make decisions while awaiting more certainty that may or may not come in a  
6 reasonable timeframe is not prudent. If Hydro was to await certainty for every potential system  
7 impact, it is likely that few decisions could be made; this would likely result in negative impacts,  
8 such as unavailable supply for new customer load or lack of investment for reliability purposes.  
9 Hydro proposes to make incremental decisions to evolve the system based on what is  
10 reasonably known at the time.

11 The focus of the “Reliability and Resource Adequacy Study – 2022 Update (“2022 Update”)<sup>3</sup>  
12 addressed reliability of the Labrador-Island Link (“LIL”), the need for on-Island resources, and  
13 how existing thermal generation and standby sources can support these requirements in the  
14 interim. The information needed to support the 2022 Update, such as the continued assessment  
15 of the reliability of the LIL and the assessment to determine the potential long-term viability of  
16 the Holyrood Thermal Generating Station, resulted in a two-year delay in Reliability and  
17 Resource Adequacy Study updates. The current evolving nature of the Newfoundland and  
18 Labrador Interconnected System and the evolution of system reliability are such that Hydro’s  
19 intent is to update and file the assessment of resource adequacy annually with the information  
20 available at that time. The annual filings will allow for the development and assessment of  
21 supply adequacy under various potential future realities and each update will provide additional  
22 information on the analysis conducted throughout the year and include revised results  
23 incorporating that analysis.

24 Since the “Reliability and Resource Adequacy Study – 2019 Update,”<sup>4</sup> Unit 8 at the Bay d’Espoir  
25 Hydroelectric Generating Facility (“Bay d’Espoir Unit 8”) has been the proposed option for  
26 adding additional firm generation capacity to the Island Interconnected System. Given the  
27 projected long-term needs for incremental on-Island generation identified in the 2022 Update,  
28 Hydro proposed to begin the regulatory process to seek approval to construct Bay d’Espoir

---

<sup>3</sup> “Reliability and Resource Adequacy Study - 2022 Update,” Newfoundland and Labrador Hydro, October 3, 2022.

<sup>4</sup> “Reliability and Resource Adequacy Study – 2019 Update,” Newfoundland and Labrador Hydro, November 15, 2019.

1           Unit 8 as the first step of a phased and incremental approach. In Hydro’s view, this addition is  
2           needed for all expected reasonable future system needs and does not risk oversupplying the  
3           province.

4           While material impacts to the Newfoundland and Labrador Interconnected System were  
5           considered, Hydro maintains that more information and analysis are prudent in order to make  
6           educated assumptions that could further impact the long-term plan. Recognizing there are other  
7           factors that can have a material impact on system operations and future resource additions, the  
8           conclusions of the 2022 Update include the information available at the time of filing and will be  
9           updated and refined accordingly in subsequent annual filings.

10          Hydro believes that its proposed conclusions and assumptions can be relied upon for the  
11          incremental nature of decisions making required at this time. Continuing to wait for more  
12          information to materialize from government initiatives, customers, or other system impacts in  
13          the coming years could have negative consequences for near and long-term supply.