

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

2 Please explain any fuel supply constraints that may arise with respect to the selection of a  
3 combustion turbine (CT) as a supply option and how Hydro satisfied itself that fuel supply is not  
4 an impediment to the selection of a 150 MW CT in the Minimum Investment Required  
5 Expansion Plan.

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8 A. In late 2023, Newfoundland and Labrador Hydro (“Hydro”) contracted a Fuel Market Study  
9 which had the following conclusions:<sup>1</sup>

- 10 • The Canadian refining sector is facing structural and regulatory pressure that may  
11 reduce the availability of No. 2 Diesel fuel but the United States refining sector has a  
12 more stable forecast.
- 13 • There are risks in Hydro’s existing supply chain processes including limited supplier  
14 responses to requests for proposals as well as logistical challenges<sup>2</sup> in emergency fuel  
15 supply.
- 16 • Some alternative fuels have potential but pricing, sourcing and storage of large volumes  
17 of fuels remains a challenge.

18 While Hydro is confident that the existing local fuel supply is sufficient to support the new  
19 150 MW CT,<sup>3</sup> it recognizes that there remain risks as identified above. To satisfy a long-term  
20 outlook and availability of a viable fuel supply, Hydro is investigating two options.

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<sup>1</sup> For a detailed investigation of fuel types and the associated constraints, please refer to the Stantec Long-Term Fuel Supply Study found in the “2024 Resource Adequacy Plan – An Update to the Reliability and Resource Adequacy Study,” Newfoundland and Labrador Hydro, rev. August 26, 2024 (originally filed July 9, 2024), app. C, att. 4.

<sup>2</sup> Hydro plans to use the new On-Avalon Combustion Turbine (“CT”) for emergency/peak power generation. This operating philosophy can result in a sudden and urgent need for fuel. It is estimated that approximately 44 trucks per day will be required to operate both the existing Holyrood CT and the new proposed CT plants at full capacity. This can be partially mitigated through additional on-site storage; however, large inventories require significant initial investment as well as strict inventory management to prevent fuel stability/quality issues.

<sup>3</sup> This was supported by Hatch Ltd. (“Hatch”) in its Concept Design Study, filed with the “Combustion Turbine Feasibility Study – Overview,” Newfoundland and Labrador Hydro, September 29, 2023, wherein Hatch determined that No. 2 diesel fuel delivery for the 150 MW scenario is achievable, based on current market conditions and in consideration of the existing Holyrood CT.

1 First, Hydro has recently issued an Expression of Interest ("EOI") to potential fuel suppliers for  
2 feedback on available supply, delivery methods, future alternative fuels, and inventory  
3 management. Please refer to Hydro's response to NP-NLH-102 of this proceeding for details on  
4 the response to the EOI.

5 Secondly, Hydro is developing work scopes to either refurbish or replace the existing marine  
6 jetty at the Holyrood Thermal Generating Station. A condition assessment will be required by a  
7 third party to determine the current marine jetty condition. Hydro believes the culmination of  
8 both the EOI response and jetty condition assessment will lead to solutions to mitigate potential  
9 future risks with long-term fuel security for the 150 MW CT option.