

1 **Q. (Reference Application Schedule B, Thermal Plant Facility Rehabilitation, page 8 of**  
 2 **99) It is stated “This project is justified on the obligation to provide reliable service to**  
 3 **customers at least cost and cannot be deferred.”**  
 4

5 **a) Please provide evidence based on reliability criteria that Newfoundland Power**  
 6 **will be unable to provide reliable service at least cost if it were to delay this project.**

7 **b) Please quantify the impact on the following if the project were delayed by two**  
 8 **years: 1) reliability, 2) cost, and 3) the risk and consequences of failure.**

9 **c) What is the risk that the thermal plants will become stranded in the future?**  
 10

11 A. a) Newfoundland Power manages its capital expenditures in a manner that balances both  
 12 the cost and reliability of the service provided to its customers.<sup>1</sup> The Company is  
 13 focused on maintaining current levels of overall service reliability for its customers at  
 14 the lowest possible cost.<sup>2</sup> The 2022 *Thermal Plant Facility Rehabilitation* project is  
 15 consistent with this objective.  
 16

17 Newfoundland Power’s thermal plants provide a combined 44.5 MW of emergency  
 18 capacity to the Island Interconnected System. These plants are used to minimize  
 19 customer outages during scheduled maintenance on transmission, distribution or  
 20 substation assets.<sup>3</sup> They also provide standby and emergency generation for the  
 21 Island Interconnected System.  
 22

23 With respect to criteria, rehabilitation work for Newfoundland Power’s thermal plants  
 24 is completed for in-service failures and deterioration identified during routine  
 25 inspections, engineering studies and operating experience. Examples include the  
 26 replacement or rehabilitation of fuel lines, fuel pumps and auxiliary power units. The  
 27 2022 *Thermal Plant Facility Rehabilitation* project is based on historical expenditures  
 28 required to address in-service failures and deterioration at these facilities.  
 29

30 Maintaining emergency backup generation through the 2022 *Thermal Plant Facility*  
 31 *Rehabilitation* project is consistent with maintaining current levels of service  
 32 reliability for customers at the lowest possible cost, as further described in part b).  
 33

34 b) Delaying the *Thermal Plant Facility Rehabilitation* project by 2 years increases the  
 35 risk that in-service failures or components at imminent risk of failure would not be  
 36 addressed. The primary consequence of thermal plant failures is reduced service  
 37 reliability for customers.<sup>4</sup>

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<sup>1</sup> See response to Request for Information NLH-NP-042.

<sup>2</sup> See response to Request for Information CA-NP-014.

<sup>3</sup> Mobile diesel and gas turbine generators are frequently deployed throughout the Company’s service territory for planned transmission, distribution and substation outages when the duration of the planned outage justifies the transport of the generator to the site.

<sup>4</sup> For information on Newfoundland Power’s approach to quantifying risks and benefits, see response to Request for Information CA-NP-014.

1 Newfoundland Power's thermal plants have provided a reliability benefit to  
2 customers during both planned and unplanned customer outages. For example, the  
3 Company's mobile gas turbines, referred to as MGT and MG2, operated to minimize  
4 customer outages during planned electrical system maintenance in 2020. The  
5 operation of MGT avoided approximately 8.9 million customer outage minutes in  
6 June 2020. An additional 8.1 million customer outage minutes were avoided in  
7 August 2020 with the operation of MG2.

8  
9 Additionally, Newfoundland Power's thermal plants have been dispatched over 100  
10 times at the request of Newfoundland and Labrador Hydro since 2017 to provide  
11 capacity support for the Island Interconnected System.

12  
13 Delaying the 2022 *Thermal Plant Facility Rehabilitation* project would therefore be  
14 inconsistent with maintaining reliable service for customers at the lowest possible  
15 cost.

16  
17 c) See response to Request for Information CA-NP-102.