

1 Q. Hydro's correspondence dated October 5, 2023, Attachment 1, Midgard Consulting Inc's Report,  
2 Appendix E. The August 1, 2023 correspondence from the Board (Item 5) requested that  
3 Hydro/Midgard provide the same analysis using a 50-year life expectancy for the diesel  
4 generating stations rather than the approximate 40-year life expectancy that is currently used in  
5 the analysis. The years of construction for the diesel generating stations located at Mary's  
6 Harbour, Port Hope Simpson, and St. Lewis are 1994, 1995, and 2006 respectively.

7 a) With respect to the 50-year life expectancy analysis contained within Appendix E, please  
8 explain why the replacement dates for the Mary's Harbour, Port Hope Simpson and St.  
9 Lewis diesel generating stations remain at 2030, 2035 and 2045 rather than being  
10 moved to 2044, 2045 and 2056 respectively so as to correspond with a 50-year life  
11 expectancy.

12 b) Please complete the analysis requested within Item 5 of the August 1, 2023  
13 correspondence from the Board using the 2044, 2045 and 2056 retirement dates for  
14 Mary's Harbour, Port Hope Simpson, and St. Lewis diesel generating stations  
15 respectively.

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18 A. *This response has been provided by Midgard Consulting Inc. ("Midgard").*

19 a) As the existing diesel generating stations (Mary's Harbour, Port Hope Simpson and St. Lewis)  
20 were designed for a 40-year lifespan rather than a 50-year lifespan, Midgard modelled the  
21 existing diesel generating stations with a 40-year lifespan and pushed the replacement dates  
22 of the new diesel generating stations out to 50 years. The refurbishment cycle used had a  
23 refurbishment at year 35 of "new" station life equal to 10% of the capital cost of the  
24 generating station, exclusive of generators.

25 b) Midgard has revised its analysis to include the life extension of the existing diesel generating  
26 stations to 50 years, including estimated refurbishments and upgrades required to achieve  
27 this life extension; this scenario has been named "Islanded Life Extension." Detailed analysis  
28 of this scenario, including sensitivity analysis, is included in Midgard's report "Analysis of

1 Additional Southern Labrador Scenarios Requested Through Information Requests NP-NLH-  
2 093 and PUB-NLH-099,” provided in Hydro’s response to PUB-NLH-097, Attachment 1 of this  
3 proceeding.