Reference: Hydro's letter Re: Long-Term Supply for Southern Labrador - Phase 1 - Midgard 1 Q. 2 Consulting Inc. Report, May 31, 2023, Page 2. 3 "Midgard notes that proceeding with the full interconnection, rather than 4 phased interconnection, is more cost-effective..." Please summarize the key factors that led Midgard to conclude that full interconnection was 5 6 more appropriate than the phased interconnection recommended by Hydro in its original 7 Application. 8 9 10 A. This response has been provided by Midgard Consulting Inc. ("Midgard"). 11 Midgard concluded that the full interconnection was more appropriate than a phased 12 interconnection because it produced a lower Net Present Cost. Drivers that impact this conclusion are the fixed carrying costs of individual diesel generating stations, increased 13 efficiency of operation, and higher fuel efficiency realized by utilizing a smaller number of more 14 efficient generators which reduces future fuel use and cost. Additionaly, full interconnection 15 allows for greater penetration of procured renewable resources which, when procured at a 16 price nominally less than forecast diesel cost, further reduces future diesel use and cost. 17 18 Newfoundland and Labrador Hydro's proposal of a phased approach was prudent at the time, but factors have since changed to favour a full interconnection. The previous analysis, which 19 20 recommended a phased approach as being less expensive, was performed from mid-2020 to mid-2021. At that time there was more service life available on the Mary's Harbour facility 21 22 before replacement. Furthermore, due to the passage of time since the original estimates were 23 completed, the net present cost of future capital expenditures is comparatively higher due to a 24 shorter discounting period. There were also lower fuel costs which reduced the impact of fuel 25 efficiency cost savings.