Q. Reference: Midgard Consulting Southern Labrador Communities – Integrated Resource Plan,
March 28, 2023, Page 74, IRP Scenario H.

Midgard IRP Scenario H describes a transmission interconnection between the southern Labrador communities and the Labrador Interconnected System. It also describes the need for a new regional diesel generating station for the purpose of backup generation. What other alternatives did Midgard consider for backup generation in this scenario? For example, did Midgard consider that the existing diesel generating stations in each of the communities would serve as sufficient long-term source of backup capacity since the diesel gensets would no longer be required for prime power?

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

Midgard considered a number of alternatives for redundant capacity (backup generation) including retaining the existing plants. The lowest cost option for firm capacity over the selected timeframe was a regional plant, driven in large part because in the time required to permit and build an interconnection to the Labrador Interconnected System (assumed in the "Southern Labrador Communities - Integrated Resource Plan" to be ten years) the two largest southern Labrador community generating stations will require replacement (Charlottetown since it is currently running portable generation, and Mary's Harbour because it would reach end of life.) Since these plants will have been replaced before any interconnection to the Labrador Interconnected System could be implemented, it was logical that this station should provide the necessary redundancy. Even if redundant generation could be obtained at no cost, Scenario H would still have the highest capital cost of all scenarios considered.

<sup>&</sup>lt;sup>1</sup> "Southern Labrador Communities - Integrated Resource Plan," Midgard Consulting Inc., March 28, 2023.