Q. Reference: Application, Attachment 1, Page 7, Lines 21 - 23 1 2 On Page 7 at Lines 21-23, Hydro states: 3 Based on historical data collected for a critical dry period (Winter 1987), it was determined that the available firm generation from both hydro sites may not 4 5 satisfy the forecasted power requirements for all four communities during the winter months. 6 7 To address the critical dry period, has Hydro considered either mobile generation or renewable 8 resources to satisfy the forecasted power requirements for all four communities during the winter months? 9 10 11 12 Newfoundland and Labrador Hydro ("Hydro") did not consider mobile generation as it would Α. present an unacceptable level of risk to safety and reliability. Additionally, there are concerns 13 regarding increased environmental risks and operating costs associated with mobile diesel 14 generators. Examples include: 15 16 Safety concerns such as limited physical space and arc-flash hazards; 17 Environmental concerns such as low fuel efficiency and higher probability of fuel spills; and Reliability concerns such as limited protection and control, and lack of condition monitoring. 18 Additional concerns regarding the long-term use of mobile generation for firm, year-round 19 20 capacity in Labrador's isolated communities are further outlined in Hydro's application and its response to PUB-NLH-001. 21 22 Hydro did not consider renewable resources as they are intermittent in nature and are only available when solar and wind resources are available. Intermittent renewable energy would not 23 24 be suitable to compensate for the firm generation concerns related to the limited storage

<sup>&</sup>lt;sup>1</sup> "Long-Term Supply for Southern Labrador – Phase 1," Newfoundland and Labrador Hydro, July 16, 2021, sch. 1, att. 1, sec. 3.2, pp. 14–17.

- available across the two hydro sites, one of which is a run-of-river hydro plant, as the resources
- 2 may not be available when needed.