Q. In regard to the Island Hydroelectric Supply Refresh Study (October 1, 2024), Section 5.0 (pdf pages 21-22) please:

a) Indicate specific anticipated activities, timing and budgets for each activity stream (e.g., environmental, engineering, hydrological monitoring, consultation).

b) Provide the expected decision dates when any project(s) are anticipated to move to being "formally considered for expansion planning".

c) Indicate which of the 5 options identified for further study by AtkinsRealis are anticipated to proceed to more detailed review, and which (if any) are already considered screened out. Please indicate any projects that have already been screened out due to "operational requirements" and provide specific details about what operational requirements led to the filtering (e.g., cost, location, seasonality, etc.).

d) For each of the 5 sites identified for further study, please indicate the current status with respect to hydrological monitoring (e.g., incomplete data, need to extrapolate or interpolate) and the additional hydrological monitoring sites and/or data Hydro is anticipating to have installed to address these weaknesses, along with timelines.

e) Provide Hydro's response to each of the 9 recommendations for additional work provided by AtkinsRealis at pdf page 213 of the submission (Attachment 1 page 189 of 231).

f) Indicate why Gisborne Lake and Piper's Hole did not receive cost estimates in Table 7 (pdf page 18 of 351) and indicate the timing, if any, for expected production of cost estimates.

A. **a)** Through the Island Hydroelectric Supply Refresh Study ("Refresh Study"), Newfoundland and Labrador Hydro ("Hydro") intended to update, or refresh, the hydroelectric potential within the island portion of the province to inform future supply options should the Accelerated Decarbonization load forecast materialize. This Refresh Study represents a preliminary step in this process where Hydro is seeking to identify potential hydroelectric

developments. In this initial step, technical viability analyses are performed at a conceptual level to screen developments.

In this study, Hydro assessed the hydroelectric generation potential that was previously established in the late 1980s and developed an updated list of hydro generation options for the Island, with a focus on capacity. There have already been a number of hydroelectric sites (i.e., Bay d'Espoir Unit 8, Cat Arm Unit 3, Island Pond, Round Pond, Portland Creek) identified as possible opportunities for future development within Hydro's supply stack as outlined in the 2024 Resource Adequacy Plan. It is anticipated that brownfield sites, such as Cat Arm Unit 3, will be a lower-cost option for the system versus the greenfield sites identified by the Refresh Study.

It was identified in the 2024 Resource Adequacy Plan that, should load growth be materially higher than the Reference Case load forecast, additional resource options would need to be added to the supply stack. In the 2024 Resource Adequacy Plan, this was modelled as a 50 MW proxy capacity placeholder. While there are other resource options that could be added in the future, such as via technology advancements, Hydro's intent in refreshing a previously completed study was to quickly ensure preliminary study work was completed and ready to advance for further study in the event load growth began trending towards levels noted in the Accelerated Decarbonization load forecast.

It must be noted that the outcomes of the Refresh Study are not sufficient to deem a project viable. Rather, it represents the beginning of an iterative process involving multiple considerations relating to engineering, system planning, and environmental stewardship.

At this time, Hydro has no plans to proceed with the development of any of the options included in the Refresh Study. If the Accelerated Decarbonization load forecast were to occur in future, Hydro would seek to expand the resource supply options within its supply stack and progress the options identified by the Refresh Study to a viability assessment, the scope of which may include some of the recommendations made by AtkinsRealis within its report.

b) Please refer to part a) of this response.

c) Please refer to part a) of this response.

d) Please refer to part a) of this response.

e) Please refer to part a) of this response.

f) At this time Hydro has no plans to proceed with the development of Gisborne Lake or Piper's Hole in the near future, as there are a number of hydroelectric sites (i.e., Cat Arm Unit 3, Island Pond, Round Pond, Portland Creek) that Hydro considers to be more viable for inclusion in its supply stack. These sites provide more benefits for the cost and carry less development impacts. Therefore further investigation of Gisborne Lake and Piper's Hole is not necessary at this time.