1 Q. Reference: Attachment 1, page 4, Table 2: The Revised Budget. The revised budget includes a 2 in the EPCM support. 3 a) Attachment 1, page 6, Hydro states that it is appropriate to involve external expertise due to 4 the complexity of the project. What has changed from the original budget and scope 5 development that has resulted in Hydro's decision to supplement Hydro's internal team 6 with external expertise? 7 b) Why was the need for the additional EPCM support now being proposed not recognized and included in the original application in December, 2022? 8 9 c) 10 d) Does Hydro anticipate that external EPCM will be required for other anticipated penstock 11 12 repairs or will Hydro gain the internal expertise to oversee these projects through the 13 execution of the replacement and refurbishment of Penstock 1 project? 14 15 16 A. a) Newfoundland and Labrador Hydro ("Hydro") has created a Major Projects Department to 17 oversee the management of its major projects. As part of this department, Hydro is combining existing expertise in project management, contract management, and project 18 19 controls with new resources and personnel for larger-scale project development, and continues to grow its internal expertise in the appropriate areas. 20 21 Hydro continues to improve its planning processes for major projects. Through the 22 development of processes and procedures for major projects and the detailed planning for 23 the Bay d'Espoir Penstock 1 Section Replacement and Weld Refurbishment Project, Hydro 24 recognized that additional support would be required to ensure the success of the project. 25 Hydro engaged external support for contract management, project controls, and, primarily, 26 site support, such as resources dedicated to construction management, site safety, and field

engineering. For this project, Hydro engaged the majority of these additional resources externally through an EPCM¹ contract.

Additionally, Hydro has engaged senior cost estimators with major projects experience to improve Hydro's cost estimates, including more detailed planning of owner's oversight requirements. The lessons learned from this project have already been incorporated in future cost estimates for major projects.

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



**d)** As stated in part a) of this response, Hydro's Major Projects Department was developed to oversee all major projects and will continue to grow its internal expertise in the appropriate areas.

During the planning phases of each project, a contracting and execution strategy is developed that dictates if an EPCM, EPC<sup>2</sup> or other approach is appropriate. This decision is based on the nature and risks associated with the project; however, it can also be influenced by the capability and capacity of the Owner's team and market conditions. For example, site personnel are often contractors that move from project to project and are rarely employees of the Owner, and are therefore well-suited to be sourced through an EPCM contract.

<sup>&</sup>lt;sup>1</sup> Engineering, Procurement, and Construction Management ("EPCM").

<sup>&</sup>lt;sup>2</sup> Engineering, Procurement, and Construction ("EPC").

- 1 Additionally, major refurbishments of Bay d'Espoir Penstocks 2 and 3 may require an EPCM
- 2 consultant whereas smaller penstock remediation projects likely would not.