

NOVA SCOTIA UTILITY AND REVIEW BOARD

IN THE MATTER OF: THE PUBLIC UTILITIES ACT

- and -

IN THE MATTER OF: AN APPLICATION by Nova Scotia Power Incorporated (“NS Power”) for approval of Capital Work Order CI 50518 – HYD Ruth Falls Main Dam Refurbishment - \$15,445,508 (ATO)

REDACTED INFORMATION REQUESTS

To: **Nova Scotia Power Inc.**
Lana Myatt
Senior Regulatory Analyst
By e-mail: lane.myatt@nspower.ca

From: **Nova Scotia Utility and Review Board**
Board Counsel Consultants

Responses Due: **Tuesday, December 3, 2024**

Copies: 1 electronic copy (PDF searchable)

Contact Person: **Michael Potyok, P.Eng.**
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Issued at Halifax, Nova Scotia, this 12th day of November, 2024.



Crystal Henwood, Regulatory Affairs Officer/Clerk

WITH RESPECT TO THE APPLICATION:

Request IR-1:

With reference to Page 2 of the Application:

- a) Please provide the original engineering drawings (e.g., general arrangement drawings) of the preferred alternative from the earliest design stage available (e.g., on which the 2019 ACE estimate was based).
- b) Please provide both the most recent engineering drawings (e.g., general arrangement drawings) of the preferred alternative, as modified to reflect DFO and other permitting requirements. Please include a high-level overview that describes key design modifications associated with the preferred alternative (Option 4).

Request IR-2:

With reference to Page 3 & 5-6 of the Application:

- a) Please provide the original estimated costs for archaeological investigation and Mi'kmaq engagement prior to the additional \$400,000 noted on Page 3. Please break the original costs down according to the accounts listed in the table on page 5-6 of the Application.
- b) On Page 6, in relation to the an additional \$[REDACTED] for Mi'kmaq engagement, why were there no costs originally allocated to this line item?
- c) Please clarify the allocation of the \$400,000 additional costs for archaeology and Mi'kmaq engagement. Please break the additional costs down according to the accounts listed in the table on page 5-6 of the Application.
- d) How are the additional \$400,000 of costs distributed between archaeological work and Mi'kmaq engagement activities?

Request IR-3:

With reference to Page 5 of the Application:

- a) Please provide a detailed breakdown of the approximate \$1.4 million increase in materials costs, specifying how much is attributable to the additional scope (modifications to fishway, fish passage weirs, upgrades to the diversion louvre, and eel ramp installation), how much is due to inflation and market fluctuations affecting the cost of the original scope, and how much is due to any other factors.

Request IR-4:

With reference to Page 6 of the Application:

- a) Please confirm that the additional \$499,999 contingency is exclusively allocated to address uncertainty around DFO offsetting costs.
 - i. If not, please specify which other project factors this added contingency relates to and identify the corresponding portions.
- b) Please provide a detailed breakdown of the AFUDC Interest increase from \$272,553 to \$884,768, including contributions from the following factors: accrued interest since 2019, project scope increases, higher interest rates and any other relevant factors.

Request IR-5:

With reference to Page 9 of the Application:

With reference to AACE Recommended Practice No. 69R-12, "Cost Estimate Classification System – As Applied in Engineering, Procurement, and Construction for the Hydropower Industries", which characterizes a Class 1 estimate as follows:

CLASS 1 ESTIMATE	
Description: Class 1 estimates are generally prepared for discrete parts or sections of the total project rather than generating this level of detail for the entire project. The parts of the project estimated at this level of detail will typically be used by subcontractors for bids, or by owners for check estimates. The updated estimate is often referred to as the current control estimate and becomes the new baseline for cost/schedule control of the project. Class 1 estimates may be prepared for parts of the project to comprise a fair price estimate or bid check estimate to compare against a contractor's bid estimate, or to evaluate/dispute claims. Typically, overall engineering is from 65% to 100% complete (some parts or packages may be complete and others not) and would comprise virtually all engineering and design documentation of the project, and complete project execution and commissioning plans. Maturity Level of Project Definition Deliverables: Key deliverable and target status: All deliverables in the maturity matrix complete. 65% to 100% of full project definition. End Usage: Generally, owners and EPC contractors use Class 1 estimates to support their change management process. They may be used to evaluate bid checking, to support vendor/contractor negotiations, or for claim evaluations and dispute resolution. Construction contractors may prepare Class 1 estimates to support their bidding and to act as their final control baseline against which all actual costs and resources will now be monitored for variations to their bid. During construction, Class 1 estimates may be prepared to support change management.	Estimating Methodology: Class 1 estimates generally involve the highest degree of deterministic estimating methods and require a great amount of effort. Class 1 estimates are prepared in great detail, and thus are usually performed on only the most important or critical areas of the project. All items in the estimate are usually unit cost line items based on actual design quantities. Expected Accuracy Range: Typical accuracy ranges for Class 1 estimates are -3% to -10% on the low side, and +3% to +15% on the high side, depending on the technological complexity of the project, appropriate reference information, and other risks (after inclusion of an appropriate contingency determination). Ranges could exceed those shown if there are unusual risks. Alternate Estimate Names, Terms, Expressions, Synonyms: Full detail, release, fall-out, tender, firm price, bottoms-up, final, detailed control, forced detail, execution phase, master control, fair price, definitive, change order estimate.

At Page 8 of the Application, NS Power states that the project has “maturity matrix (65-100%, Class 1)”. At Page 9 of the Application, NS Power states that “the project cost estimate is at Class 1 maturity level with 95% of deliverables completed/defined towards this class of estimate”.

a) In addition to the maturity level being of Class 1, please confirm that the cost estimate submitted (excluding the noted DFO permitting portion) also aligns with the above AACE 69R-12 Class 1 classification criteria with respect to the estimating methodology and the expected accuracy range.

i. If not confirmed, please detail how the cost estimate provided deviates from the Class 1 characterization.

b) Please provide details on whether firm bids or price commitments have been obtained from contractors and suppliers to support the cost estimate. Please indicate which portions of the estimate are based on firm bid pricing versus projections.

WITH RESPECT TO ATTACHMENT 1 OF THE APPLICATION:

Request IR-6:

With reference to Pages 1-3 of Attachment 1 of the Application:

a) Please provide copies each of the seven DFO communications to NS Power listed in Attachment 1 of the Application.

b) Please describe or summarize the alternatives considered when modifying the project in response to DFO requirements.

i. Was a cost-benefit analysis conducted to evaluate these alternatives? If yes, please provide the analysis. If no, why not?

c) Were options considered that would have eliminated the need for the lake level decrease once the permitting costs associated with the lake level decrease became ?

i. If yes, please describe or summarize the options considered.

ii. If no, why not?