

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)

NON-CONFIDENTIAL INFORMATION REQUESTS

To: **Nova Scotia Power Inc.**
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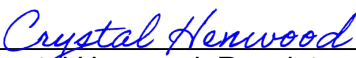
From: **Nova Scotia Utility and Review Board**
Board Staff

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

Copies: 1 electronic copy (PDF searchable)

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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:

Please indicate when construction work will occur, including the estimated completion date for this project.

a) Please indicate the percentage of the project work that has been completed by the ATO Application date.

b) Does NS Power expect further delays to this project? If so, please explain.

Request IR-2:

Please confirm that NS Power has included all the measures required by DFO in the “Capital Project Detailed Cost Estimate” and in the project specifications and design.

a) Has NS Power made any changes to the DFO requirements in the project specifications and design? If so, please explain why and whether approval from DFO has been obtained.

Request IR-3:

Please confirm the Version number and date of the CDA Guidelines to which the proposed project is designed.

Request IR-4:

In Undertaking U-6 submitted by NS Power as part of the 2019 ACE Plan proceeding (Matter M08984), NS Power stated:

(a) Riprap work is not included in the scope of this project. The riprap on the embankments remains in good condition with no signs of erosion or instability. Although the riprap sizing may be smaller than the recommended sizing, the condition of the riprap, the change in the flood levels in the reservoir, and the fact that the embankments are also protected by islands just upstream of the dam were all considered in the assessment process and it was determined that the existing riprap was performing adequately and replacement or refurbishment is not required at this time.

(b) There is no minimum freeboard work related to embankments included in the scope of this project. With the change in the design of the dam to have a free overflow section and rubber dam sections, the discharge capacity will be increased, which will lower the flood levels in the upstream reservoir. Based on the increased discharge capacity, the freeboard requirements will be met and the corewall elevations will be adequate.

(c) Concrete erosion work is included in the scope of this project. The existing dam has concrete deterioration issues on the main deck and on the upstream and downstream sides of the dam. As part of the new design, the concrete deck will be removed and replaced with a steel walkway and the crest and downstream spillway sections will be refaced.

1 Please confirm that the above statements by NS Power still apply to the project.

- 2 a) If not confirmed, please explain why they no longer apply, and identify the related cost
3 associated with each change.
4

5 **Request IR-5:**

6 In response to NSUARB IR-65d) in the 2019 ACE Plan Proceeding (M08994), NS Power stated:

7 The new structure will be constructed on the footprint of the existing structure with only a
8 small extension of the footprint on the downstream side of the dam. The extension on the
9 downstream side is additional concrete required to complete the new spillway surface of
10 the dam and is approximately 5 feet in width at the tallest section. The width of the concrete
11 extension varies per height of the dam.

12 Please confirm that this remains the case.

- 13 a) If not confirmed, please explain and identify the related cost associated with any change
14 from this statement.
15

16 **Request IR-6:**

17 In response to NSUARB IR-65f) in the 2019 ACE Plan Proceeding (M08994), NS Power stated:

18 Potential geotechnical issues were reviewed as part of the design phase of the project.
19 Since the existing dam is founded on bedrock and the new dam will be constructed on the
20 same footprint as the existing dam, no geotechnical issues are anticipated at this time.

21 Please confirm that this remains the case.

- 22 a) If not confirmed, please explain and identify the related cost associated with any change
23 from this statement.

- 24 b) Has NS Power completed a detailed geotechnical investigation at the project site to
25 confirm geotechnical conditions for incorporation into project design and construction?

26 i. If not, why not?

27 ii. If so, please describe the work completed and provide a copy of the related
28 geotechnical report.
29

30 **Request IR-7:**

31 Given the new (as compared to the 2019 ACE Plan Submission) project requirements and costs
32 for environmental permitting, fish passage, environmental offsetting, temporary lowering of the
33 reservoir, and additional archaeological assessment and Mi'kmaw engagement requirements, did
34 NS Power re-evaluate project options to assess whether other options beyond the one currently
35 proposed may now be more cost effective (i.e., lower cost)?

- 36 a) If not:

- 1 i. Why not?
- 2 ii. Please explain specifically why NS Power has confidence that Option 4 remains
- 3 the lowest cost option for the project.
- 4 b) If so:
- 5 i. Please provide the results of this analysis, complete with a table showing the
- 6 updated cost estimate for each option, similar to the table provided in response to
- 7 NSUARB IR-65e) in the 2019 ACE Plan proceeding (M08984).
- 8 ii. Did NS Power consider other options beyond the five alternatives noted on Page
- 9 2 of 10 of the current Application?
- 10 a. If not, why not?
- 11 b. If so, please describe these options, complete with a related cost estimate,
- 12 and explain why they were dropped from further consideration.
- 13

14 **Request IR-8:**

15 The Board understands that Option 4 has been selected for the proposed project, as described
16 on page 2 of 10 of the Application, while Option 5, a new dam, has been discarded. In this context,
17 please explain what NS Power means when it says "...while constructing the new dam" on page
18 2 of 10 of the current Application where NS Power states: "Environmental Permitting
19 Requirements – Additional project costs of approximately \$4.4 million are directly attributable to
20 the additional work required to obtain the necessary environmental permits from Fisheries and
21 Oceans Canada (DFO), Nova Scotia Department of Environment and Climate Change (NSECC),
22 as well as an authorization in accordance with Transport Canada's Navigation Protection Program
23 to temporarily lower the Ruth Falls Reservoir by approximately 18 feet while constructing the new
24 dam."

25
26 **Request IR-9:**

27 On page 2 of 10 of the current Application, NS Power states that it requires an authorization in
28 accordance with Transport Canada's Navigation Protection Program to temporarily lower the Ruth
29 Falls Reservoir by approximately 18 feet while constructing the new dam.

- 30 a) Please explain why the reservoir needs to be temporarily lowered by 18 feet.
- 31 b) Was the requirement to temporarily lower the reservoir a requirement of the original project
- 32 plan as presented in the 2019 ACE Plan Application (M08984)? Please explain.

1 **Request IR-10:**

2 Regarding the Account Variance Sheet on pages 5 and 6 of the current Application:

3 a) For the “Materials” Line Item:

- 4 i. Please identify the percentage increase in materials cost that NS Power has
5 allowed for since the 2019 ACE Plan Application and provide support to justify this
6 allowance.
- 7 ii. Please identify the cost of materials associated with new scope items that were
8 not included in the 2019 ACE Plan Application.

9 b) For the “Contracts” Line Item:

- 10 i. Please identify the percentage increase in contracts cost that NS Power has
11 allowed for since the 2019 ACE Plan Application and provide support to justify this
12 allowance.
- 13 ii. Please identify the cost of contracts associated with new scope items that were
14 not included in the 2019 ACE Plan Application.
- 15 iii. Please identify the cost of additional security for the exposed archeological sites,
16 explain how this cost was developed, and explain why this cost is required beyond
17 those that were envisioned in the 2019 ACE Plan Application.
- 18 iv. Please identify the additional pumping, mobilization and demobilization cofferdam
19 costs and explain why these costs are required beyond those that were envisioned
20 in the 2019 ACE Plan Application.
- 21 v. Please identify the cost of additional site supervision resulting from delays in
22 project execution.
- 23 a. Please explain why these costs are required beyond those that were
24 envisioned in the 2019 ACE Plan Application.
- 25 b. Please explain how a delay project execution results in additional site
26 supervision costs.

27 c) Please explain why freight costs associated with delivery of rubber bladders and sluice
28 gates were not included in the 2019 ACE Plan Application.

29 d) For the “Consulting” Line Item: Please explain why the costs associated with
30 archaeological assessments and mitigation are required beyond those that were
31 envisioned in the 2019 ACE Plan Application.

32 e) Please explain why equipment rental costs were not included in the 2019 ACE Plan
33 Application.

- 1 f) Please explain why Mi'kmaw Engagement costs were not included in the 2019 ACE Plan
2 Application.

3
4 **Request IR-11:**

5 Regarding the Capital Project Detailed Cost Estimate on pages 7 and 8 of the current Application:

- 6 a) Has construction of the project been tendered?
7 i. If so, please provide a copy of each tender submission.
8 ii. If not, what is the expected tender date and close of tender date.
9 b) Please confirm that Consulting Services for the project were procured using a competitive
10 RFP/tender process.
11 i. If not confirmed, please explain why such a procurement process was not used.
12 c) For "Regular Labour", please provide a breakdown of costs in the same format as was
13 project in the Capital Project Detailed Cost Estimate submitted in the 2019 ACE Plan
14 Application.
15 d) Please explain why Materials costs associated with "Supply of Gates and Actuators" and
16 "Supply of Rubber Dams" are lower than the costs shown in the 2019 ACE Plan
17 Application.
18 e) Please explain why Materials costs associated with "Backup generator during winter
19 construction" and "Generator for Compressor Building" were not included in the 2019 ACE
20 Plan Application.
21 f) Please describe the work scope included in "General Contract – LNTP".
22 g) Please explain why Contracts cost associated with "Rubber Dam Installation" is lower than
23 the cost shown in the 2019 ACE Plan Application.
24 h) Please explain why each of the following Contracts costs were not included in the 2019
25 ACE Plan Application: Rubber Dam Inspection, Wiring electrical to Compressor Building,
26 Pre-Clearing nesting bird survey, and Concrete Testing.
27 i) Under "Contracts", please explain why "Escalation Costs due to execution deferral" are
28 not included in the other line item costs.
29 j) Please explain the significant increase in Contracts "Construction Supervision" cost as
30 compared to the 2019 ACE Plan Application and explain how the cost was developed.
31 k) Please explain the significant increase in Consulting "Conceptual/Detailed design of
32 refurb" cost as compared to the 2019 ACE Plan Application "Design" cost and explain how
33 the cost was developed.

- 1 l) Please describe the scope of “Offsetting (West River Project)” costs and explain how the
- 2 cost was developed.
- 3 m) Please provide documentation from DFO confirming the scope of the required Offsetting
- 4 work.
- 5 n) What is the Class level and expected accuracy of the project cost estimate?
- 6

7 **Request IR-12:**

8 Regarding the summary of correspondence between DFO and NS Power provided in Attachment
9 1 of the current Application:

- 10 a) Please provide copies of the referenced correspondence between DFO and NS Power.
- 11 b) With regards to DFO’s supplemental information request of August 4, 2020:
 - 12 i. Please explain why the information requested by DFO was not provided in NS
 - 13 Power’s original June 24, 2020, response given NS Power’s experience on other
 - 14 similar hydro projects.
 - 15 ii. Please explain why it took approximately nine months to respond to DFO’s
 - 16 request.
- 17 c) With regards to DFO’s supplemental information request of July 8, 2021:
 - 18 i. Please confirm that DFO’s referenced “change in scope” is related to NS Power’s
 - 19 decision to complete a portion of the Ruth Falls project separately from the larger
 - 20 refurbishment project.
 - 21 a. If not confirmed, please describe the referenced “change in scope”.
 - 22 ii. Please describe NS Power’s reasoning for completing a portion of the Ruth Falls
 - 23 project separately from the larger refurbishment project.
 - 24 a. Please describe this specific scope of work.
 - 25 b. Please provide a breakdown of the cost to complete this scope of work.
 - 26 c. Please confirm that the construction work associated with this scope was
 - 27 procured using a competitive procurement process.
 - 28 i) If not confirmed, please explain why such a procurement process
 - 29 was not used.
 - 30 iii. Please explain why it took approximately six months to respond to DFO’s request.
 - 31 d) With regards to DFO’s letter of January 29, 2024, please describe the “other
 - 32 considerations” that DFO stated still must be addressed.
 - 33 e) What was the date of NS Power’s response to DFO’s email of June 6, 2024?

Request IR-13:

With regards to Exhibit N-2 filed in the current Matter:

a) Has NS Power had any discussions with GreenQuest Power related to GreenQuest Power acquiring the Ruth Falls hydropower assets?

i. If so, please provide a summary of these discussions.

a. Please explain specifically why NS Power believes GreenQuest Power's offer to acquire the assets is not viable.

b) Has NS Power had any discussions with GreenQuest Power related to GreenQuest Power acquiring any other of NS Power's existing hydropower assets?

i. If so, please provide a summary of these discussions.

a. If NS Power believes that such acquisitions are not viable, please explain specifically why NS Power believes this is the case.