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1 **Request IR-1:**

2  
3 **Reference: Page 2.**

4  
5 **Option 4 was selected as the preferred alternative as it is the most cost**  
6 **effective. Option 4 is approximately \$500,000 less costly than the next closest**  
7 **option. Option 4 also meets the operational requirements to manage system**  
8 **and the design flows.**

9  
10 **Given that this project is more than double the original budget, please confirm whether NSPI**  
11 **has re-evaluated the Options and confirmed that Option 4 remains \$500,000 less costly than**  
12 **the next closest option and if so, please provide an updated amount or cost analysis. If not,**  
13 **why has NSPI not re-evaluated the Options?**

14  
15 **Response IR-1:**

16  
17 **Please refer to NSUARB IR-7.**

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**Request IR-2:**

**Reference: Page 2.**

**Additional project costs of approximately \$4.4 million are directly attributable to the additional work required to obtain the necessary environmental permits from Fisheries and Oceans Canada (DFO), Nova Scotia Department of Environment and Climate Change (NSECC), as well as an authorization in accordance with Transport Canada's Navigation Protection Program to temporarily lower the Ruth Falls Reservoir by approximately 18 feet while constructing the new dam.**

**(a) Please provide a copy of the TC - NPP permit application and approval, DFO application and copies of all correspondence with DFO.**

**(b) Please explain why this "necessary" permitting was not contemplated at the time of the original application? If it was contemplated, please confirm the variance, and explain why the costs are so much higher for this permitting requirement?**

**(c) Please explain why the temporary lowering of the reservoir was not contemplated? If it was contemplated, please confirm the variance, and explain why the costs are higher?**

**Response IR-2:**

**(a) Please refer to NSUARB IR-12.**

**(b) Please refer to CA IR-3, part (a).**

**(c) The Company planned to complete the work with the reservoir temporarily lowered as part of the original project plan. The variance in costs is associated with DFO Fisheries Act Authorization requirements for the drawdown. At the time of the original application, a**

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1        FAA was not required. This requirement is a result of the modernization of the Fisheries  
2        Act in 2019.

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1 **Request IR-3:**

2  
3 **Reference: Page 2.**

4  
5 **Subsequent to the approval of the original filing, NS Power was required to**  
6 **obtain a Fisheries Act Authorization (FAA) for the work from DFO, which**  
7 **was not required at the time of original filing. This FAA contained new**  
8 **conditions around fish passage requirements as well as requirements for NS**  
9 **Power to implement an Environmental Offsetting Program.**

10  
11  
12 **(a) Please clarify what is meant by “which was not required at the time of the original**  
13 **filing”, i.e. was it a change in legislative requirements, or driven by a change in the**  
14 **scope of the Project? Please explain.**

15  
16 **(b) When did NSPI become aware that the FAA was required? Given the significant**  
17 **additional expenses tied to the FAA, why did NSPI not reapply to the Board at that**  
18 **time?**

19  
20 **Response IR-3:**

21  
22 **(a) At the time of original filing, a Fisheries Act Authorization (FAA) was not required.**  
23 **However, with the royal ascent of the 2019 Fisheries Act in June 2019, the changes in the**  
24 **Act led to the requirement for FAA for Ruth Falls.**

25  
26 **(b) DFO determined a FAA was required in March 2020 after NS Power submitted a request**  
27 **for DFO to review the Ruth Falls project for requirements under the modernized Act in**  
28 **December 2019. NS Power did not reapply to the Board until cost certainty, as impacted**  
29 **by increased environmental regulatory requirements, was achieved.**

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**Request IR-4:**

**Reference: Page 3.**

**Although the costs of the Project have increased since receiving Board approval, the primary justification of the Project remains the same: refurbishment of the Ruth Falls Main Dam water-retaining structures (embankments, spillway and sluiceway) is required to address the structural and freeboard deficiencies and meet current CDA Guidelines.**

**And Reference: Matter M08984, 2019 ACE Plan, Exhibit N-07 – NSPI (NSUARB) RIR – 16 (e).**

- (a) Please confirm that all five options listed on page 2 of the Application at the time of original approval would have addressed the deficiencies and CDA Guidelines noted and confirm whether or not all five options would continue to do so.**
- (b) In light of the significantly increased costs associated with refurbishment, has NSPI considered the option of selling this asset or decommissioning? If so please explain.**
- (c) Please provide an updated cost comparison chart, as provided in the original application in response to Board IR 16 (e), including the option of decommissioning the asset (if applicable).**

**Response IR-4:**

- (a) Confirmed. All five options listed on page 2 of the Original Application would address the deficiencies and CDA Guidelines, both at the time of the original application and all five options continue to do so.**
- (b) The Company has not considered selling or decommissioning the Ruth Falls Generating Station. Ruth Falls is included in small hydro capacity and is a part of the path to achieve 2030 legislated requirements. Please refer to IG IR-8 part (c) and IG IR-13 part (b).**
- (c) Please refer to NSUARB IR-7.**

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**Request IR-5:**

**Reference: Page 6.**

**The original contingency amount remains unchanged, however additional contingency has been added to cover uncertainty around the amount of offsetting costs required by DFO, which has yet to be confirmed and has the potential to vary significantly.**

**(a) Please explain how NSPI calculated or determined the additional \$0.5million to be added to the contingency?**

**(b) What does NSPI mean by this “has the potential to vary significantly”? Does NSPI anticipate that the project costs could increase even more, especially considering refurbishment activities have not started yet and are forecasted to commence in July 2025?**

**Response IR-5:**

**(a) Based on feedback received from DFO indicating the 2,700 m<sup>2</sup> originally submitted for offsetting by NS Power was insufficient, the Company contracted the Confederacy of Mainland Mi'kmaq (CMM) to update the offsetting plan with additional offsetting measures. Based on feedback from DFO and internal subject matter expertise, NS Power estimated that approximately 20,000 m<sup>2</sup> could be expected as a sufficient offsetting amount based on the total size of area exposed as a result of the drawdown. NS Power used an average offsetting cost of \$25/m<sup>2</sup> based on costs of other projects executed to date. Another \$500,000 was added as a contingency to account for possible increases in the amount of offsetting required for the Project through DFO's regulatory review and Crown consultation. The additional \$500,000 in contingency could increase the total amount of offsetting to 40,000 m<sup>2</sup> or more, as the cost per m<sup>2</sup> of offset decreases due to efficiencies gained in offset execution as more area is added.**

**(b) Please refer to CA IR-14.**

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1 **Request IR-6:**

2  
3 **Reference: Attachment 1, page 1, row 3.**

4  
5 **July 8, 2021 - DFO indicated that due to a change in scope of the project, they**  
6 **will not be providing comments on NS Power's May 8, 2021 submission until**  
7 **an updated construction execution plan is provided to DFO.**

8 **On July 12, 2021 NS Power submitted an application for watercourse**  
9 **alteration to NSECC to complete a portion of the Ruth Falls project separately**  
10 **from the larger refurbishment project...**

11  
12 **It appears that NSPI altered the project some time in 2021, which resulted in these additional**  
13 **delays. Please explain why the project was altered, and how did that impact the overarching**  
14 **capital application that had previously been approved?**

15  
16 **Response IR-6:**

17  
18 **Please refer to CA IR-11, part (b).**

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1 **Request IR-7:**

2  
3 **Reference: Matter M08984, 2019 ACE Plan – Exhibit N-20, NSPI Undertaking Responses,**  
4 **U-6, pdf page 20-21.**

5  
6 **Preamble: This capital project, CI 50518 was approved by the Board as part of the 2019**  
7 **ACE Plan. Some concerns regarding this project were raised at the hearing, and as part of**  
8 **the undertaking responses, and, as quoted in the 2019 ACE Plan decision, 2019 NSUARB 60,**  
9 **at para 23:**

10  
11 **NS Power confirmed that the project does not include embankment riprap**  
12 **work but does include replacement of the existing concrete deck with a steel**  
13 **walkway, as well as refacing of the crest and downstream spillway sections.**  
14 **The company also confirmed that the dam will have an increased discharge**  
15 **capacity, thereby negating the need to raise the embankment and spillway**  
16 **corewalls and wingwalls to meet Canadian Dam Association freeboard**  
17 **requirements.**

18  
19 **(a) Please confirm whether the responses given by NSPI still apply? If not, what has**  
20 **changed?**

21  
22 **(b) If there are any corrections needed to the statements made in that undertaking, please**  
23 **provide an explanation as to why these changes were not contemplated at the time the**  
24 **project was approved.**

25  
26 **Response IR-7:**

27  
28 **(a) Confirmed.**

29  
30 **(b) N/A**

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**Request IR-8:**

- (a) What is the remaining useful life of the Ruth Falls generating station?
- (b) What is the generation capacity of the Ruth Falls generating station?
- (c) Can the Malay Falls hydro generating station still produce energy, if Ruth Falls were decommissioned?

**Response IR-8:**

- (a) The estimated remaining life on the Ruth Fall's major components (e.g. turbines and generators), is estimated to be at least 14 years. Major replacement or refurbishment on two of the turbines planned for 2038 and generating units will be overhauled as necessary based on asset health assessments. As per the 2020 IRP conclusions, the long-term outlook supports continued sustaining investment in these small hydro assets over the 25-year planning horizon.
- (b) The Ruth Falls Generating Station contains three generating units with a total installed capacity of 7.72 MW.
- (c) Yes, the Malay Falls Generating Station is positioned upstream of the Ruth Falls Generating Station; therefore, Malay Falls could still generate if the Ruth Falls Generating Station was decommissioned. The overall generation from the Sheet Harbour Hydro System would decrease by approximately 66 percent, as the majority of generation is attributed to the Ruth Falls Generating Station and additional investment may be required at the Malay Falls Generating Station to maintain the Malay Tailwater levels.

**REDACTED**

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**Request IR-9:**

**With respect to the additional costs associated with archaeology and Mi'kmaq engagement referenced on page 3 of 10,**

**(a) Please confirm that NSPI was aware prior to the original application that the area surrounding the Ruth Falls Dam and Spill, including the reservoir exhibited high potential for impacting archaeological resources. If not confirmed, please explain.**

**(b) Please provide a variance from the original approved amounts and elaborate on the "further engagement".**

**(c) If costs for archaeology and Mi'kmaq engagement were not included in the original application, please explain why not.**

**Response IR-9:**

(a) NS Power was not aware the reservoir exhibited high potential for impacting archaeological resources prior to the original application. A desktop Archaeological Resource Impact Assessment (ARIA) was completed for the Ruth Falls headpond in 2023 to inform the development of an archaeological protection plan for the drawdown as referenced in CA IR-13, part (c), which determined the headpond was considered elevated potential to encounter archaeological resources.

The area surrounding the Ruth Falls Dam and Spill was understood by NS Power to be high potential for archaeological resources at the time of the original application. NS Power completed an ARIA in 2017 and follow up shovel testing in 2018, which confirmed that areas to be impacted by construction activities were cleared from further archaeological assessment/investigation.

**REDACTED**

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1 (b) Please refer to CA IR-13, part (c).

2  
3 (c) In the original submission KMKNO Capacity Payments were budgeted and added to the  
4 "Consulting" cost code in the amount of \$ [REDACTED] instead of a dedicated "Mi'kmaq  
5 Engagement" cost code.  
6

7 Archaeological costs for the drawdown for the Ruth Falls Project were not included in the  
8 original application; this was an oversight by NS Power. However, the cost associated with  
9 an archaeological protection for a drawdown at the time of the original application would  
10 have been immaterial compared to the revised costs in the ATO application. As an  
11 example, an archaeological reconnaissance was conducted during the drawdown of  
12 Wright's Reservoir, as part of the Wright's Dam Refurbishment project in 2015, by a  
13 qualified archaeological consultant for approximately \$11,500. The area of Wright's  
14 Reservoir is significantly larger than Ruth Headpond.  
15

16 Revised archaeological costs in NS Power's ATO application are a result of increased  
17 expectations and requirements for archaeological protection during extended drawdowns  
18 which have evolved since 2018.

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**Request IR-10:**

**Reference: Ex. N-2, letter from Kevin Mullen, GreenQuest Power.**

**(a) Has NSPI received an offer (formal or informal overture) from GreenQuest Power to acquire the Ruth Falls hydro system or any other small hydro asset as referenced in the letter? Please explain and provide a summary of the timing and nature of those discussions.**

**(b) Is there any legislative or regulatory impediment to a sale of these assets? Please explain, with specific reference to the statute and section.**

**(c) Has NSPI evaluated the cost/benefit of a sale and subsequent PPA in relation to the output of the Ruth Falls generating station (or any other hydrogeneration). If so, please provide. If not, why not?**

**Response IR-10:**

**(a) No. Other than as set out in response to NSUARB IR-13, NS Power has had no communication with GreenQuest Power regarding an offer to acquire the Ruth Falls Hydro System or any other small hydro assets as referenced in GreenQuest Power's letter to the NSUARB dated October 21, 2024.**

**(b) Yes. As set out in Section 62 of the Public Utilities Act, the NSUARB must approve the sale of any part of the undertaking of a public utility. Furthermore there are operational authorizations under provincial and federal legislation that would need to be transferred or assigned as part of any sale. Those include Approvals for water storage and withdrawal administered by NS Department of Environment and Climate Change (NSECC) and any Authorizations or Letters of Advice under the *Federal Fisheries Act* or *Species at Risk Act* for the operation of the hydro system.**

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- 1 (c) No. NS Power has not received a proposal for the sale and subsequent PPA in relation to  
2 Ruth Falls Generating Station from GreenQuest Power, and as such the Company has not  
3 completed a cost/benefit analysis.