

January 30, 2026

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Lana Myatt
Senior Regulatory Analyst
Nova Scotia Power Inc.
P.O. Box 910
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Dear Ms. Myatt:

M12508 – Nova Scotia Power Inc. (NS Power) CI C0080112: HYD Big Falls Unit 6 Rotor Re-Insulation (U&U) – \$1,025,626

The Board has reviewed NS Power's application dated October 6, 2025. NS Power requested Board approval of a capital expenditure for the re-insulation of 42 of 44 rotor poles on Big Falls Unit 6's generator. This includes refurbishment of slip rings, brushes and brush boxes, disassembly, re-assembly and balancing of the generating unit at an estimated cost of \$1,025,626. The remaining two rotor poles were refurbished in 2023 and do not require additional work.

Board staff issued Information Requests (IRs) on October 30, 2025, and December 9, 2025, to which the utility responded on November 21, 2025, and January 7, 2026, respectively. A request for confidentiality following *Rule 12* of the *Board Regulatory Rules* was submitted by NS Power on October 6, 2025. The Board approved NS Power's request for confidentiality.

The Big Falls Hydro Station, located on the Mersey River, has been in operation since 1929 and has two generating units, each with a capacity of 5.3 MW.

In the application, the utility noted that during a May 2025 investigation into an oil leak, it discovered broken insulation on the generator's rotor poles. The utility hired a third-party vendor to perform inspection, assessment, and remediation. The utility provided the vendor's report, which included findings, repair recommendations, and estimated costs. The report recommended that 25 poles be removed for repair and cautioned that there is a very high probability that issues will arise over the coming years with the remaining poles. In addition to this work, the report also recommended further work on the slip rings, brushes, and brush boxes.

In response to IR-7, NS Power stated that rewinding all 42 poles provides the best long-term value for customers. Although the remaining poles may continue operating for an unknown period, all poles are of similar age and condition, so their deterioration is expected to be consistent. In addition, replacing the remaining 17 poles at a later date would require another

outage, rotor removal, and additional labour for disassembly and reassembly. Including all 42 poles in the current scope also reduces the unit cost per pole, lowering the overall cost impact.

The Board agrees with NS Power's assessment that it is best to refurbish all 42 poles. While the vendor recommended immediate replacement of 25 poles, the vendor also said there was a high probability that all the 42 poles would need attention in the relatively near future. Replacing all 42 poles at this time would reduce costs and eliminate the uncertainty of potential rotor failure in the remaining poles, thereby increasing the overall reliability of the generating unit. Interestingly, if the refurbishments were done in phases, while the cost would likely be higher, each phase might not reach the \$1 million threshold requiring Board approval.

Based on the information provided, the Board finds the work necessary, and the corresponding cost is justified. Accordingly, this will confirm that the Board has approved NS Power's request in the amount of \$1,025,626, with respect to this capital expenditure request.

The Board often asks about power generation as part of its capital expenditure review process. In response to IR-2(b), NS Power provided the power produced by each unit (Big Falls 5 and Big Falls 6) for the past five years. The 2025 data only covers from January to August. The total generation from Big Falls 5 and Big Falls 6 over this five-year period was 133,599 MWh and 53,147 MWh, respectively. The responses to IR-10(a) and IR-10(c) addressed why Unit 6's generation has been so low compared to Unit 5 since 2023 and the economic impact of the lower energy production at Big Falls 6 compared to Unit 5. NS Power explained that Unit 6 was out of service for most of 2023, 2024, and 2025, resulting in significantly lower generation compared to Unit 5. The economic impact of the lower production at Unit 6 is dependent on several factors. The amount of rain and water available in any given year, and how this water can be used to generate power when Unit 6 was unavailable, are important considerations. NS Power said when Unit 6 was unavailable, Unit 5 operated more than usual, whereas typically these units would be swapped to have equal run times. As a result, NS Power said a direct comparison between the two units is misleading, as Unit 5's higher production reflects increased utilization rather than normal operating conditions.

The Board understands that there was significant work done on Unit 6 between 2023 and 2025. The Board acknowledges the utility's practice of rotating units to maintain equal run time and that this can be adjusted so that available water is used to produce power in Unit 5, to the extent possible, when Unit 6 is not operational. The Board also understands that water levels may impact power generation in both scenarios. However, NS Power's hydro assets are an important component of the overall generation mix and require substantial capital expenditures. The Board remains concerned that Unit 6 has been offline for significant periods since 2023. The significant year-to-year variations in total generation output is also a concern. The combined generation outputs of Units 5 and 6 in 2021, 2022, 2023, and 2024 were: 42,508 MWh, 53,133 MWh, 39,377 MWh, and 24,769 MWh, respectively. A similar variation in generation was observed for M12590 Lower Great Brook, where combined output increased by 5,606 MWh from 2021 to 2022, followed by a decrease of 11,096 MWh from 2022 to 2023, and a decrease of 13,813 MWh from 2022 to 2024. In this context, to the extent possible, NS Power must ensure that the hydro-generating units operate at their optimal economic level consistently.



Yours very truly,

A handwritten signature in blue ink, consisting of the letters 'RM' followed by a horizontal line.

Richard J. Melanson, LL.B.
Member



NSEB APPROVAL SHEET

Project Title: HYD Big Falls Unit 6 Rotor Re-Insulation

CI Number: C0080112

Date: October 6, 2025

Expenditure Profile			Type of Filing	
Year	Budget Amount	Project Estimate	☒	Capital Project Authorization
			☒	Unforeseen and Unbudgeted (U&U)
			☐	Planned & Advanced (P&A)
			☐	Subsequent Approval Item
			☐	
2025		692,018	☐	Authorization to Overspend (ATO)
2026		195,706	☐	Scope Change
2027		137,902	☐	Final Cost (FIN)
Total	\$0	\$1,025,626		

COMMENTS

Submitted on behalf of NOVA SCOTIA POWER INCORPORATED



Authorized Signatory
Dave Pickles
Chief Operating Officer

DATE

October 1, 2025

Approved on behalf of NOVA SCOTIA ENERGY BOARD



DATE

January 30, 2026