

November 17, 2025

lane.myatt@nspower.ca

Lana Myatt
Senior Regulatory Analyst
Nova Scotia Power Inc.
1223 Lower Water Street
Halifax, NS B3J 3S8

Dear Ms. Myatt:

M12418 – Nova Scotia Power Inc. – CI 49036 – Avon 2 Controls Upgrade

On August 5, 2025, Nova Scotia Power Inc., (NS Power) filed an application with the Nova Scotia Energy Board (Board) for approval to upgrade and modernize the Avon 2 Hydro Station control system at an estimated cost of \$1,073,463.

Project Description

The Avon 2 generating station is a single unit powerhouse that, on average, generates 9.4 GWh of hydroelectricity a year. The control system is out of date and at the end of its operational life. NS Power seeks approval to upgrade to a modern control system that will provide real-time information and improve NS Power's ability to identify and address problems, thereby improving operational efficiency.

The Avon 2 upgrade plans involve installing new instrumentations, Programmable Logic Controllers (PLCs), network infrastructure, and data transfers. These upgrades will allow NS Power to remotely and locally control and monitor the station and log data when the unit trips. This functionality will improve the communication system and the dam's environmental monitoring. NS Power plans to complete this project at the same time as the Switchgear Replacement project to reduce operational downtime to a single outage.

NS Power intends to proceed with the same controls upgrading approach used at other hydro stations and lessons learned from previous projects to proactively address potential issues and reduce the risk of unexpected problems. Contingency has been budgeted at 20% with the expectation that there may be a need for contingency from market volatility for contracted installation and additional refurbishments that may be needed but cannot be assessed until the control system is removed.

This project was listed in the 2025 ACE Plan matter M12012 with a project budget of \$496,293. After revising the project scope and receiving vendor quotes, the project budget was re-estimated at \$1,073,463.

Findings

Information Requests (IRs) were issued by Board Staff on September 25, 2025, to which NS Power submitted its responses on October 20, 2025. The responses to IRs explained that the project will include a new PLC that is in keeping with systems used at NS Power's other generating stations, but only some of the instrumentation will be new and other instrumentation will have its components replaced. NS Power elaborated on its methodology to reduce capital project risk and provided an overview of the lessons learned that will help it to proactively address problems.

NS Power was asked about the potential risks from market volatility and to provide an estimate of the value of the volatility. It was explained that some of that risk is known, as installation costs are higher than expected, which will require NS Power to use about 20% of the contingency budget. Other market risks are expected to be insignificant because the major items are under firm fixed-price contracts.

Board staff asked about the amount of time planned for this project to be completed. NS Power estimates it will take 427 person-days and provided a comparison to other control upgrade projects which showed that the estimate for this project is significantly higher. NS Power attributes the increase in labour to a change in planning whereby the design work for the PLC and control panel will be done internally. This is expected to reduce delays with design reviews and updates.

NS Power confirmed that multiple vendors were invited to a Request for Proposals, however only a limited number of proposals were received.

Having reviewed the application, the Board is satisfied that the project is justified, and the cost is appropriate. The Board finds that the project is needed to enhance the operational capabilities and ensure NS Power maintains the reliability of the Avon 2 station.

The Board approves the requested capital expenditure of \$1,073,463 for the Avon 2 Controls Upgrades project.

Yours very truly,



Bruce H. Fisher, MPA, CPA
Member

c. William Mahody, K.C.





NSEB APPROVAL SHEET

Project Title: HYD - Avon 2 Controls Upgrade

CI Number: 49036

Date: August 5, 2025

Expenditure Profile			Type of Filing	
Year	Budget Amount	Project Estimate	☒	Capital Project Authorization
2016	2,264	2,264	☐	Unforeseen and Unbudgeted (U&U)
2017	53,101	53,101	☐	Planned & Advanced (P&A)
2018	(21,903)	(21,903)	☒	Subsequent Approval Item
2019	(1,765)	(1,765)	☐	Authorization to Overspend (ATO)
2020	-	-	☐	Final Cost (FIN)
2021	-	-		
2022	-	-		
2023	1,245	1,245		
2024	7,382	8,313		
2025	391,178	644,142		
2026	64,791	388,065		
Total	\$496,293	\$1,073,463		

COMMENTS

This project was originally included in the 2025 ACE Plan as a carryover project, but would have more appropriately been listed as a project less than \$1,000,000.

Submitted on behalf of NOVA SCOTIA POWER INCORPORATED

Authorized Signatory
Dave Pickles
Chief Operating Officer

DATE

August 5, 2025

Approved on behalf of NOVA SCOTIA ENERGY BOARD

DATE

November 17, 2025