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June 12, 2025

Lana Myatt Senior Regulatory Analyst Nova Scotia Power PO Box 910 Halifax, NS B3J 2W5

Dear Ms. Myatt:

M12201 – Nova Scotia Power Inc. – CI C0061289 – IT – Next Generation Network Security Design – \$1,814,216

On April 7, 2025, NS Power applied to the Nova Scotia Energy Board for approval for a Next Generation Network Security Design project at an estimated cost of \$1,814,216. The project's objective is to enhance the existing information technology (IT) network and firewall infrastructure to effectively manage cyber threats, resolve operational complexities, and facilitate future business objectives.

Project description

NS Power seeks to strengthen its security by changing the network configuration and adding a new Virtual Private Network (VPN). The utility states that through an enhanced verification process for users and devices accessing the network, the risk of data breaches and unauthorized access can be reduced. Overall, this project is part of a broader strategy to ensure that the IT networks and firewalls are "secure, scalable, and able to fully support business requirements".

This project involves redesigning and reconfiguring the network traffic routing, standardizing the IT firewall design and configuration, overhauling the current firewall infrastructure, adding network access controls and adjusting NS Power's site-to-site and remote VPN configurations. Changing the current security infrastructure will create the framework to move to a Zero Trust Network (ZTN).

Revised Project Scope

The Next Generation Network Security Design project was first identified in the 2024 Annual Capital Expenditure (ACE) Plan as an item for subsequent submittal with an estimated cost of \$2,632,635. Following the preliminary network design, the project scope was revised, and the IT and operational technology (OT) projects were segmented, because the requirements for the OT network(s) are unique from those of the IT network(s). The OT scope was split from this CI and incorporated into C0061284 -OT Cyber Security Control Implementation Phase 1, which was listed in the Updated 2024 Q3 Capital Report as a project costing less than \$1 million.

NS Power reassessed the project as it advanced and decided the scope of C0071652 - IT - ZTN Security and Restrictive Network Controls (listed in the 2025 ACE Plan as a project less than \$1 million) would be re-incorporated into this project as they were more closely related. All other scopes (2026 and beyond) remain independent projects.

Procurement

The existing network infrastructure is comprised of Cisco products. NS Power decided to procure the new technology through its existing vendor. It said replacement with an alternative system would require significant time, effort, and cost, and was not considered a viable alternative. Moving to a non-Cisco suite of network security products would need a complete redesign and update to NS Power's IT Network. This would require significant investment in operational systems, software, hardware, and implementation services. The VPN upgrade is also with the existing vendor as it is the evolution of the current remote access VPN technology. NS Power added that this approach will avoid costs associated with transitioning licenses from legacy Cisco products to new products supported by new vendors, as well as avoiding costs for software support and integration by the utility's managed service provider.

On May 5, 2025, the Board issued Information Requests (IRs) to NS Power to which responses were received on May 26, 2025. In its responses, NS Power provided clarity on this project's budget and addressed questions about the network's estimated useful life and procurement strategy.

Findings

NS Power explained that a majority of its network equipment was "End of Life" in 2016. The network architecture was created by adding various capabilities and technologies over several years, making the average age of these assets more than 15 years old. The legacy equipment is more than seven years old and is unable to provide "the type of security that this new architecture requires". However, NS Power said useful life for these assets is defined by its ability to support new assets, rather than years in use. It added that functionality and ability to maintain security, patching and supportability are also considered. NS Power expects that many assets can continue to be used for lower security needs.

NS Power submitted that the project will "establish a secure and resilient network architecture that safeguards critical assets and ensures confidentiality, integrity, and availability of data and resources." It added that the project is needed now because:

The complexities of NS Power's network and firewall infrastructure make management and security difficult to monitor, measure and enforce. It is challenging to meet new and emerging security threats in a rapid manner to maintain a low risk to NS Power. As the organization continues to grow, new risks are emerging, including additional regulatory requirements (such as SOX, and PIPEDA), securing cloud environments, and the increased targeting of cyberattacks aimed at critical infrastructure. This underscores the need for ensuring that NS Power's IT network and firewall infrastructures are secure, scalable, and extensible.

In addition to reducing operational complexity for the maintenance and administration of its network and firewall devices and associated configurations, NS Power said that the project will "improve cybersecurity capabilities and reduce the risk of a cyber incident".

Having reviewed the application, the Board is satisfied that project is justified and the cost is appropriate. The Board finds that the project is needed, in the words of NS Power, to enhance the existing IT network and firewall infrastructure to effectively manage cyber threats, resolve operational complexities, and facilitate future business objectives.

The Board also finds that it was reasonable in the circumstances to continue with the Cisco suite of products rather than to pursue alternative products. The Board accepts NS Power's evidence that seeking an alternative system would require significant time, effort and cost. This would need a complete redesign and update of the utility's IT network and require significant investment in operational systems, hardware, software and implementation services.

The Board approves the requested capital expenditure of \$1,814,216 for the Next Generation Network Security Design project.

On Monday, April 28, 2025, after the filing of this application, NS Power announced that it had been the subject of a cyber security incident involving unauthorized access into certain parts of the IT systems in its network. It was later revealed that the intrusion occurred on or about March 19, 2025, and was detected on April 25, 2025. The Board has initiated an inquiry into this cyber incident and has engaged cyber security experts to assist it in this investigation.

Notwithstanding the Board's approval of this capital application, certain aspects of the state and management of NS Power's IT network infrastructure and cyber security preparedness will likely be reviewed in the investigation. This approval does not preclude a prudency assessment of the adequacy of NS Power's IT systems and its management of those systems, including its cyber security preparedness.

Yours truly,

Roland A. Deveau, K.C. Vice Chair

c. William Mahody, K.C., Board Counsel

REDACTED (CONFIDENTIAL INFORMATION REMOVED)

Nova Scotia POWER An Emera Company			
Project Title: IT - Network Next Generation Security Design			
Cl Number: C0061289			Date: April 7, 2025
Expenditure Profile			Type of Filing
Year	Budget Amount	Project Estimate	X Capital Project Authorization
			Unforeseen and Unbudgeted (U&U)
2024	820,758	802,632	Planned & Advanced (P&A)
2025	928.086	1,011,564	X Subsequent Approval Item
2020	020,000		Authorization to Overspend (ATO)
			Scope Change
			Final Cost (FIN)
Total	\$2,632,635	\$1,814,216	
Submitted on behalf of NOVA SCOTIA POWER INCORPORATED			
Authorized Signatory Dave Pickles Chief Operating Office	er Ap	DATE ril 4, 2025	June 12, 2025