

NOVA SCOTIA ENERGY BOARD

IN THE MATTER OF: THE PUBLIC UTILITIES ACT

- and -

IN THE MATTER OF: AN APPLICATION by NOVA SCOTIA POWER INCORPORATED
for Approval of CI C0067908 – POA Boiler Refractory
Refurbishment 2025 – \$1,378,466

NON-CONFIDENTIAL INFORMATION REQUESTS

To: **Lana Myatt**
Senior Regulatory Analyst
Nova Scotia Power Incorporated
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By email: Lana.Myatt@nspower.ca

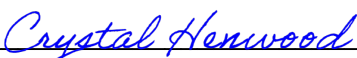
From: Board Staff
Nova Scotia Energy Board

Responses Due: **Friday, August 22, 2025**

Copies: 1electronic copy (PDF searchable)

Contact Person: **Chris Jiang, P.Eng.**
Senior Advisor, Electrical
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Issued at Halifax, Nova Scotia, this 31st day of July, 2025.



Crystal Henwood, Regulatory Affairs Officer/Clerk

Request IR-1:

Reference to page 1 of 5, NS Power notes “work completed on the same asset” in the list below:

- 2022 C0040846 POA Boiler Refractory Replacement 2022 - \$940,602
- 2023 C0052274 POA Boiler Refractory Replacement 2023 - \$874,151
- 2024 C0060244 POA Boiler Refractory Replacement 2024 - \$954,965
- 2026 TBD POA Boiler Refractory Replacement 2026 - \$TBD
- 2027 TBD POA Boiler Refractory Replacement 2027 - \$TBD

- a) Please confirm whether these Capital Investments (CIs) pertain to separate work not included in the current application.
- b) Please provide a detailed cost estimate or expense breakdown for each individual project.
- c) Please submit comprehensive project scopes, including:
 - i. The work completed in previous projects, and
 - ii. The planned scope of work for upcoming projects.
- d) All listed projects, including the current one (CI C0067908), involve refractory replacement within the boiler system and are scheduled over a six-year period.
 - i. What criteria were used to define the scope of work for each individual project?
 - ii. How does NS Power prioritize these projects and determine their respective start dates?
 - iii. Please describe NS Power’s overall strategy for segmenting the boiler system into components and organizing them into annual replacement projects.

Request IR-2:

Reference to page 1 of 5, NS Power notes that “This work is crucial to maintaining safe and efficient boiler operation and minimizing the risk of unplanned outages. Refractory materials are installed in the following key areas:

- Cyclones (two total)
- Combustor-to-cyclone crossover ducts (two total)
- Cyclone-to-back pass crossover ducts (two total)
- Loop seal cans (two total)
- Cyclone return legs (four total)
- Lower combustor

- a) Please confirm whether any work has been undertaken to address the issues outlined above.

- 1 b) If any work has been completed, please provide a detailed description of the specific
2 activities undertaken and indicate the expected service life of the refurbishment or
3 replacement.
- 4 c) If no work has been completed to date, please explain how the project budget estimate
5 was developed. Specifically, describe the process, assumptions, and methodology used
6 to determine the estimate, and provide an explanation for the proposed cost variances.
- 7 d) Please submit any professional studies or technical analyses that support the proposed
8 refractory work.
- 9

10 **Request IR-3:**

11 Reference to page 2 of 5, NS Power notes that “Therefore, executing this project during the
12 scheduled 2025 maintenance outage is ideal, as it allows for a comprehensive refractory
13 inspection, routine refurbishment, and a targeted replacement program of components that
14 require replacements based on the risk rating in the Asset Management Methodology.”

- 15 a) Please explain the NS Power Asset Management Methodology, including a detailed
16 explanation of the Risk Rating system used to assess and prioritize assets.
- 17 b) Please provide a description of all major equipment within the POA, including:
- 18 • Their primary functions
 - 19 • Key components within each system
 - 20 • Typical service life versus current age of those components, and
 - 21 • The factors that influence their operational lifespan.

22 The equipment categories to be addressed may include:

- 23 i. Fuel handling systems — from fuel supply to burner delivery
 - 24 ii. Cooling water systems and condensers
 - 25 iii. Combustion systems, heat transfer processes, steam production, and utilization
 - 26 iv. Ash handling systems — from ash generation to final disposal
 - 27 v. Instrumentation and control systems
- 28

29 **Request IR-4:**

30 Does NS Power intend to carry out both Project CI C0067908 (refractory replacement) (M12373)
31 and C0067906 (boiler refurbishment) (M12372) concurrently?

- 32 a) If so, please explain why the projects have been planned separately.
- 33 b) If not, please explain why not.

- 1 c) Please explain why Boiler refractory projects are separated from other boiler
2 refurbishment projects.
3

4 **Request IR-5:**

5 Based on Nova Scotia Power's historical data:

- 6 a) What is the typical service life expected from the proposed refurbishment?
7 b) Could you please specify the date of the most recent refurbishment or replacement of the
8 same refractory system?
9 c) If a previous refurbishment was completed, what was the anticipated service life at the
10 time of that work?
11

12 **Request IR-6:**

13 Reference to 2025 10-Year System Outlook (M12386), page 17 of 64 (Figure 7), NS Power notes
14 that Point Aconi will be retired on 2029/2030.

- 15 a) How does the proposed boiler refractory system refurbishment align with NS Power's goal
16 of achieving 80% renewable energy generation by 2030?
17 b) Please explain NS Power's regular maintenance strategies and procedures for Point
18 Aconi.
19 c) Does NS Power intend to adjust its maintenance strategies in light of the planned
20 retirement?
21 d) If so, please outline the revised maintenance strategies and provide a detailed plan
22 covering the period from 2025 to 2030.
23 e) If not, please explain the reasoning for maintaining the current maintenance approach.
24