M12784

NOVA SCOTIA ENERGY BOARD

IN THE MATTER OF: **THE PUBLIC UTILITIES ACT**

- and -

IN THE MATTER OF: **A REVIEW of NOVA SCOTIA POWER INCORPORATED**'s 2025 Annual Performance Standards Report

INFORMATION REQUESTS

To: **Nova Scotia Power Incorporated**
Jennifer Ross
Director, Regulator Planning & Compliance
By Email: Jennifer.ross@nspower.ca

From: Board Staff
Nova Scotia Energy Board

Responses Due: **Friday, May 29, 2026**

Copies: 1electronic copy (PDF searchable)

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Issued at Halifax, Nova Scotia, this 7th day of May 2026.

Crystal Henwood, Clerk of the Board

Request IR-1:

Please provide data on all outage events in 2025, as an Excel file, including the same information provided for planned outages in Appendix K, and noting which outages were planned and which were unplanned.

Request IR-2:

a) How does the utility currently evaluate transmission system reliability to supply electrical energy to major load regions of the utility?
b) Has the utility recently performed any analysis to evaluate the transmission system reliability to supply electrical energy to major load regions of the utility?
    i. If yes, please provide the report.
    ii. If not, why not?

Request IR-3:

a) Has the utility conducted any statistical analysis over the years to demonstrate that, for the given level of investment, it has increased customer satisfaction, decreased operating costs, and provided a predictable and consistent level of reliability?
    i. If yes, please provide a summary of that analysis for each of the items noted, along with the detailed analysis reports.
    ii. If not, please provide comments on each of the items noted, along with the justification for why they are not required.

Request IR-4:

The Board understands that the System Average Interruption Frequency Index (SAIFI) denominator is the number of customers. There has been an increase of 32,136 customers from 2021 to 2025. Out of the total 32,136 customers added since 2021, nearly 48% are in the metro region which could be considered high customer density region compared to the utility's other operating regions.

a) How does the utility determine and measure actual performance when the numerator and/or denominator changes year over year?
b) Please provide the percent change in SAIFI for each year from 2021 to 2025.

Request IR-5:

Since 2020 through 2025, please provide the total number of planned outages along with the total outage duration.

Request IR-6:

a) Did any of the opt-out customers receive an estimated bill in 2025?
   i. If so, please explain why actual manual meter readings were not obtained.
   ii. If so, how many opt-out customers received estimated bills and how many estimated bills did those customers receive?

Request IR-7:

Page 9 of the report notes the following:

> NS Power is already seeing positive results from the $206 million invested in the first year of the reliability plan. There was a 19 percent reduction in outages due to trees coming into contact with power lines in 2025 compared to 2024 and an 18 percent reduction in outages due to equipment failures…

Since 2021, for primary overhead distribution lines, please provide the yearly data for each of NS Power's four operating regions (West, Metro, Northeast, and Cape Breton), where applicable, in an Excel sheet:

a) A breakdown of the number of customers.
b) A breakdown of total primary overhead distribution lines, including voltage level, length in kilometers, number of customers served, number of outages experienced, and total customer hours of interruptions.
c) For the distribution circuits identified in b), please provide a percentage breakdown of the outage causes, money spent on reliability projects, along with a breakdown of those projects by categories within the utility's control, such as replacing defective equipment and vegetation management.
d) For the distribution lines identified in b), please indicate what percentage of the line does not require any vegetation management.
   i. Please provide the percentage breakdown of outage causes, along with the number of customers served, the number of outages experienced, and the total customer hours of interruptions, reported separately for distribution lines that require vegetation management and those that do not.

e) A breakdown of total substations, including primary and secondary voltage level, number of customers served, number of outages experienced, and total customer hours of interruptions.

f) For the substations identified in b), please provide a percentage breakdown of the outage causes, money spent on reliability projects, along with a breakdown of those projects by categories within the utility's control such equipment replacement, protection and control system improvements and redundant feeds.

g) Residential and business customer satisfaction metrics regarding the ability to restore power quickly.

Request IR-8:

Page 9 of the report states: "NS Power is already seeing positive results from the $206 million invested in the first year of the reliability plan. There was a 19 percent reduction in outages due to trees coming into contact with power lines in 2025 compared to 2024 and an 18 percent reduction in outages due to equipment failures."

a) Please confirm that the noted percentage reductions in outages excludes any outages associated with MEDs and EEDs.

   i. If not confirmed:

      A. Please provide the percentage reductions in tree contact and equipment failure outages, excluding any outages associated with MEDs and EEDs.

         I) Please provide the underlying outage data upon which these calculations are based.

      B. Please provide the number of outages related to tree contacts (exclusive of those associated with MEDs and EEDs) for each year from 2020 to 2025.

      C. Please provide the number of outages related to equipment failures (exclusive of those associated with MEDs and EEDs) for each year from 2020 to 2025.

   ii. If confirmed:

      A. Please provide the underlying outage data upon which these calculations are based.

      B. Please provide the number of outages related to tree contacts (exclusive of those associated with MEDs and EEDs) for each year from 2020 to 2025.

C. Please provide the number of outages related to equipment failures (exclusive of those associated with MEDs and EEDs) for each year from 2020 to 2025.

iii. Board staff notes that in response to NSEB IR-185 in M12619 (2026 ACE Plan), NS Power provided a table showing outages caused by equipment failures in 2024 and 2025. The outage numbers noted in that Information Request response are 2,426 for 2024 and 2,091 for 2025. This represents an approximate 14% reduction in outages caused by failure of equipment from 2024 to 2025. Please reconcile this with NS Power's statement on page 9 of the 2025 Performance Standard Report that this was an 18% reduction.

Request IR-9:

Page 9 of the report states: "Outages caused by trees making contact with power lines were at the lowest levels in the last five years both in terms of how many tree-related outages occurred on the system and how long they lasted. NS Power invested $45 million in vegetation management in 2025, building on an additional $45 million investment in 2024 and representing an 80 percent increase over the 2019-2023 five-year annual average of ~$25 million."

a) For each year from 2020 to 2025, for outages caused by tree contacts only (exclusive of those associated with MEDs and EEDs) please provide a table identifying the following:
   i. The total number of customer interruptions (CI).
   ii. The total number of customer hours of interruptions.
   iii. The customer average interruption duration index.

b) Please identify the percentage reduction/increase in customer hours of interruption resulting in outages due to tree contacts only (excluding those resulting from MEDs and EEDs) from:
   i. 2020 to 2025.
   ii. 2023 to 2024.
   iii. 2024 to 2025.

c) For each year from 2020 to 2025, for outages caused by tree contacts only on lines on which NS Power completed vegetation management work in those years (exclusive of any outages associated with MEDs and EEDs) please provide a table identifying the following:
   i. The total number of customer interruptions.
   ii. The total number of customer hours of interruptions.
   iii. The customer average interruption duration index.

d) Please identify the percentage reduction/increase in customer hours of interruption resulting in outages due to tree contacts only on lines on which NS Power completed vegetation management work in those years (exclusive of any outages associated with MEDs and EEDs) from:
   i. 2020 to 2025.
   ii. 2023 to 2024.
   iii. 2024 to 2025.

e) Please provide a table identifying NS Power's total annual expenditures on:
   i. O&M vegetation management.
   ii. Capital vegetation management (including routine D010 and New ROW spending) for each year from 2019 to 2025.

Request IR-10:

Page 9 of the report, when discussing the Five-Year Reliability Plan, states:

> The commitment to the Plan, included in NS Power's 2026 Annual Capital Expenditure (ACE) Plan, will help continue improving reliability for customers, while balancing the lowest rates possible and addressing the realities of climate change Nova Scotians are facing.

a) How does NS Power achieve the "lowest rate possible" while striving to improve reliability in a climate change environment?

b) What rate impact analysis does NS Power do when deciding to submit reliability projects to the Board for approval or otherwise implementing the Five-Year Reliability Plan?

Request IR-11:

Page 9 of the report states: "NS Power is already seeing positive results from the $206 million invested in the first year of the reliability plan."

Please provide the five-year average outage frequency and duration results (similar to SAIDI and SAIFI) for only those parts of NS Power's system where the $206 million was actually invested in the first year of the reliability plan.

Request IR-12:

Page 10 of the report states: "Targeted reliability work on 46 priority feeders across the province was completed in 2025 for targeted equipment replacements, protection upgrades, load growth upgrades, building to roadside and tree trimming."

a) For each year from 2020 to 2025, for outages caused by equipment failure only (exclusive of those associated with MEDs and EEDs) please provide a table identifying the following:
    i. The total number of customer interruptions.
    ii. The total number of customer hours of interruptions.
    iii. The customer average interruption duration index.
b) Please identify the percentage reduction/increase in customer hours of interruption resulting in outages due to equipment failure only (excluding those resulting from MEDs and EEDs) from:
    i. 2020 to 2025.
    ii. 2023 to 2024.
    iii. 2024 to 2025.
c) Please provide a table identifying NS Power's total annual expenditures on capital spending related to T&D equipment failure for each year from 2019 to 2025.

Request IR-13:

Page 10 of the report notes that the targeted reliability work on 46 priority feeders across the province were completed in 2025 for targeted equipment replacements, protection upgrades, load growth upgrades, building to roadside and tree trimming.

a) Please provide a breakdown of the total investment on these feeders based on categories noted above.
b) Please provide the underlying data, such as total customer hours of interruptions or the number of outages experienced, that were used to select these feeders over the others.
c) Please provide the performance metrics that will be used to determine the effectiveness of the investments on these feeders and how they will be tracked.

Request IR-14:

Page 11 of the report notes that 6 substations and 23 downline protective devices were upgraded to include remote control and telemetry. Engineering planning and procurement is now under way for additional devices for substations in 2026. Grid Modernization upgrades such as these are proven methods to decrease the duration of outages for customers.

a) Please provide the list of projects that were completed on the 6 substations and the 23 downline protective devices along with the associated cost.
b) What performance metrics were the utility aiming to achieve with these projects?

c) What level of improvement is expected after these projects, and how will the utility measure performance before and after implementation?

Request IR-15:

Figure 1 on page 12 of the report presents a bar chart of Improvement in SAIFI from 2021 to 2025, showing the annual SAIFI experienced by NS Power customers and the improvement over time, from more than 2.25 outages per year down to 1.57 outages per year in 2025. Figure 2 on page 12 of the report shows the annual System Average Interruption Duration Index (SAIDI) and the improvement over the last five years, from 5.23 hours to 4.79 hours.

Based on the customer data provided in Matters M12775 and M10548, the Board notes that the utility's total number of customers was 525,924 in 2021 and 558,060 in 2025. Since 2021, please provide the yearly data for each of NS Power's four operating regions (West, Metro, Northeast, and Cape Breton), where applicable, in an Excel sheet:

a) Number of Customers.
b) SAIFI and SAIDI bar chart as provided in Figure 1 and Figure 2.
c) Number of outages experienced, and the total customer-hours of interruptions.

Request IR-16:

Regarding Figures 1 and 2 on pages 12-13: Please provide a similar Figure to show the customer average interruption duration index for each year from 2021 to 2025.

Request IR-17:

Regarding the foreign interference outage causes listed on page 15 of the report: For each year from 2021 to 2025, please provide the number of outage events caused by each of the foreign interference causes, and provide the total number of outages on NS Power's system (exclusive of planned outages, and outages resulting from MEDs, EEDs and SEDs immediately following an MED or EED).

Request IR-18:

Regarding Figure 3 on page 16 of the report:

a) Does NS Power agree that the current SAIDI performance target has been set with consideration of inclusion of outages caused by foreign inference?
    i. If not, please explain.

b) Does NS Power agree that if the current SAIDI performance target had been set to exclude the impacts of outages caused by foreign interference, the target would be lower than the current target?
    i. If not, please explain.
c) Since the SAIDI calculation has the sum of all customer interruption durations as the numerator, which is a unit of time, why is the cause of the interruption relevant?

Request IR-19:

Page 16 of the report, Figure 3

Please provide the annual contribution of foreign interference outages ("outside control" to SAIDI and SAIFI for the past 10 years.

Request IR-20:

Regarding Section 2.1 "Potential for Future Improvements in Performance Standards", on page 17 of the report, NS Power states: "This data shows that as the standards become more stringent as performance improves that the bar that feeders must meet to achieve the feeder standards will become increasingly challenging."

a) Does NS Power agree that as its reliability performance improves, its performance targets should become stricter to reflect the improved performance? Please explain.
    i. If not, without stricter performance targets, what regulatory tools would the Board have to incent NS Power from simply maintaining its performance/reliability once it has consistently met a certain performance target?
b) Is NS Power suggesting that, as performance improves, there is a point where the gains achieved by applying two standard deviations to the five-year average, in setting the Circuit Average Interruption Duration Index (CKAIDI) and Circuit Average Interruption Frequency Index (CKAIFI) standards, no longer justify the costs? If so, please explain.

Request IR-21:

Page 18 of the report, Figure 4. The graph appears to show feeders 57W-402 and 91W-411 exceeding the 2025 CKAIFI threshold but the text below the graph suggests that 57W-401 and 91W-411 exceeded the threshold.

a) Please confirm whether it was 57W-401 or 57W-402 that exceeded the threshold and advise whether this discrepancy has any other impacts on any of the information in Exhibit N-1.

Request IR-22:

Regarding s. 3.1 of the report, on page 24, NS Power says:

> Billing inquiries increased following the cyber incident, driving an increase in overall call volumes (~+46 percent) and additional support and assistance (~+189 percent) above historical levels.

a) What time frame was used to establish the "historical levels"?

Request IR-23:

Page 25 of the report and Appendix A and Appendix B

a) Please confirm, or explain in detail otherwise, that the reduced service level percentages beginning in June 2025 shown in Appendix A coincides with the significant increase in estimated bills beginning in May 2025.
b) Please provide details about the changes in the "composition and complexity" of customers interactions referenced on p. 25 of 115, line 11.
c) Please discuss in detail the extent to which customer calls between June and November related to problems with customers understanding NS Power's estimation process and problems with the accuracy of the estimates themselves.

Request IR-24:

Page 27 of the report states: "Approximately 40 additional customer care representatives were added through the summer and fall of 2025 to help address the new trend in both call volume and length. NS Power hired all successfully qualified customer service representatives from our recruitment efforts, with no caps during recruitment."

a) Please provide more detailed information about NS Power's recruitment efforts for customer care representatives after the cybersecurity breach.
b) Please provide the posting and closing dates of all recruitment efforts for customer care representatives in 2025 after the cybersecurity breach.
c) How many people applied for the positions, out of which only 40 were ultimately selected.

Request IR-25:

Figure 10 of the report on page 30 shows system availability for customer outage notifications in 2025. The data network was available 66.58% of the time.

a) What kinds of customer notification services access the data networks, and how were those services not impacted when the data networks were unavailable?

Request IR-26:

Page 36 and Appendix G of the report states: “The elevated Polite Disconnect rate in 2025 is attributable to the impacts of the April 2025 cyber incident, as trunking capacity was limited at the contingency contact centre site, where NS Power staff answered outage calls in the first few weeks following the incident.”

a) Please explain how the trunking capacity was limited.
b) Please explain why the trunking capacity at the continency contact site was limited, given that it would be expected that this site would operate in the context of business interruptions when it would be assumed that circumstances might exist that would drive significant call volumes.

Request IR-27:

Figure 18 on page 43 shows customer impact and restoration time-all-in.

a) Provide a breakdown of customers impacted based on five or more updated Estimated Time to Restore (ETR), along with their corresponding restoration times and locations.
b) What is the process and criteria for issuing an updated ETR and provide a specific example.

Request IR-28:

Regarding Figure 29 and 30 in the report (pages 52-53): Board staff notes that the CI numbers in the Figures do not appear to match those provided in responses to NSEB IR-184 and IR-185 in M12619 (2026 ACE Plan). Please reconcile and provide revised Figures 29 and 30 as may be required.

Request IR-29:

On page 53, the utility notes Figure 30 shows the Equipment Failure outage event count dropping each year and the outage hours being the lowest since 2021.

a) Please clarify that although customer interruptions reached their lowest level in 2025, customer hours of interruptions remained close to 2021 levels and were higher than in 2020, despite the significantly higher number of interruptions in those years.

Request IR-30:

Page 56 of the report, Figure 32

a) Please extend Figure 32 to also include the same data for 2016-2025.

Request IR-31:

Regarding Wreck Cove Feeder 85S-401, on page 62 of the report states:

> On November 23, 2025 a full outage affected all the customers on 85S-401 for 2.85 hours. The outage was caused by a transmission-related issue associated with generator testing at the Wreck Cove Hydro Generating Station. The outage occurred at 5:51 PM and was restored safely at 8:43 PM. The interruption resulted from inadvertent effects of testing at the Wreck Cove plant's Life Extension and Modernization project and the generator coming back online. The underlying issue has since been corrected to prevent recurrence.

a) What was the underlying issue and why did it cause inadvertent effects?

b) How was the underlying issue corrected?

Request IR-32:

The report indicates Wreck Cove Feeder 85S-401 serves approximately 2,266 customers, has 255 kms of distribution poles, and that 45 kms of this line remain off-road. On page 69, the report states that the Wreck Cove Bring-to-Roadside project will relocate "…approximately 0.4 kms of three-phase distribution on feeder 85S-401 from a cross-country alignment to a roadside location along Route 30 near Wreck Cove." The Pleasant Bay Road Widening project will relocate approximately 0.85 kms of this line to roadside. Figure 45 indicates an estimated total cost of $444,719 for the two projects that will bring approximately 1.25 kms of the line to roadside. Figure 45 also shows that from 2019 to 2026, the utility has spent or will spend a total of $1,650, 916 on bring-to-roadside projects impacting a total of approximately 5.95 kms of the line (although the Halfway Brook project has a pole replacement component).

a) What are the current plans for the remaining 43.75 kms of the distribution line that will still be off-road?

b) How does the cost per km of bringing portions of the line to roadside impact future reliability investment decisions?

c) How many of the 152 outages in 2025, reported at page 62 of the report, occurred on the off-road portion of the distribution line?

d) What impact did these off-road interruptions have on CKAIDI and CKAIFI for this line?

e) Did any of the 152 outages in 2025 occur on portions of the line that had been brought to roadside since 2019?

Request IR-33:

Page 111 of the report, Figure 80

a) Please explain what activities are associated with "switching" planned outages.

b) Please explain the differences between planned outages relating to “switching” and those related to “reliability” and why a planned outage was categorized as one or the other for planned outages in 2025.

c) Please restate Figure 80 to show planned outage durations by outage type based on customer-hours of interruption.

d) Please restate Figure 3 (p. 16 of 115) to highlight the impact of “switching” planned outages on monthly SAIDI.

e) Please discuss the impact of “switching” planned outages on NS Power’s failure to meet the SAIDI target and what can be done to mitigate the impact of these planned outages on customer-hours of interruptions.