

Final Terms of Reference (TOR) for Review of NS Power Five-Year Reliability Plan March 13, 2026

Introduction and Background

In the Board's decision on the 2023 Annual Performance Standards (M11624), the Board directed that:

...a comprehensive written version of NS Power's five-year reliability plan is needed to understand how service improvements will be achieved and against which progress in achieving the performance goals can be tracked. This plan must include specific actions and related timing, demonstrate why these specific investments were selected and quantify the level of reliability or resilience improvement expected from each investment.

NS Power's reliability plan recommends \$200 million to \$300 million annually between 2025 and 2029, for a total investment of \$1.3 billion. The plan proposes investments in three programs:

- (1) storm hardening – equipment replacement (73% of total budget),
- (2) storm hardening – vegetation management (21% of total budget), and
- (3) advanced grid modernization (6% of total budget).

The plan projects a reduction in SAIFI and SAIDI based upon the total investment. NS Power defines several performance goals:

- Reduce SAIDI by 20 percent from the current five-year average of 5.10 (reaching 4.10 in 2029)
- Achieve the Performance Standards SAIFI target of 2.05
- Achieve the Performance Standards for restoring service to customers within 48 hours after a Major Event.

Synapse was hired by the Board to assess NS Power's five-year reliability plan and summarize our findings in a report. Synapse will seek to answer key questions, including:

- How did NS Power determine the type and scale proposed investments in its five-year reliability plan?
 - What criteria were used to evaluate the scope and scale of investments?
 - Did NS Power examine practices at similar or peer utilities? How did this inform the reliability plan?
 - What root causes or drivers of reliability issues were examined to determine system and feeder-level solutions? How was this examination performed and was it sufficiently robust to support the proposed mitigations?
 - Did NS Power solicit input on reliability concerns from particular communities, customer types, or customers classes, including but not limited to the Mi'kmaq of Nova Scotia, customers who are medically-dependent on electricity, low-income customers, communities served by equipment that is overloaded or feeders that are constrained, critical facilities, customers with or required to have backup power, and/or Industrial customers? If so, how?
 - Did NS Power analyze disparities in reliability experienced by particular communities, customer types, or customers classes, including but not limited to the Mi'kmaq of Nova Scotia, customers who are medically-dependent on electricity, low-income customers,

- critical facilities, customers with or required to have backup power, and/or Industrial customers? If so, how?
 - Did NS Power design its plan to address disparities in reliability for certain populations, including but not limited to the Mi'kmaq of Nova Scotia and vulnerable customers? If so, how?
 - Is the level of investment proportional to the reliability challenges faced by the jurisdiction and the opportunity for improvement?
- What criteria were used to prioritize investments?
 - What considerations were used to determine and prioritize investments? What weight did NS Power give to each of these considerations in the prioritization?
 - Did NS Power target or consider how reliability investments affect particular communities customer types, or customers classes, including but not limited to the Mi'kmaq of Nova Scotia, customers who are medically-dependent on electricity, low-income customers, communities served by equipment that is overloaded or feeders that are constrained, critical facilities, customers with or required to have backup power, and/or Industrial customers? If so, how?
 - Does the NS Power Reliability Plan maximize benefits and minimize costs? If so, how?
 - Does the NS Power Reliability Plan consider affordability, including rate and bill impacts for a representative range of customer classes? If so, how?
 - Did NS Power study and/or consider the impacts of its proposed vegetation management and infrastructure plans on the livelihood of the Mi'kmaq of Nova Scotia including the land, mineral, plant and other natural resources, and animals upon which the Mi'kmaq of Nova Scotia depend for survival and economic well being? If so, how?
- How did NS Power estimate impacts on key reliability metrics?
- Will improvements to reliability be measured over time and incorporated into NS Power's five-year plan in future years? How will this be accomplished?
- Were any alternative plans considered? If so, what were the alternatives and why was this plan selected over the other(s)?

Synapse will ask discovery to NS Power for data, including but not limited to:

- NS Power inputs, assumptions, and results, ideally at the feeder level, regarding benefits and costs of proposed investments;
- Reliability data for the system as a whole, by feeder, and aggregated for feeders serving certain populations, including but not limited to the Mi'kmaq of Nova Scotia and vulnerable customers;
- Criteria and considerations used to inform the solutions selected, investment levels, and prioritization, including but not limited to the impacts on the Mi'kmaq of Nova Scotia, customers who are medically-dependent on electricity, low-income customers, communities served by equipment that is overloaded or feeders that are constrained, critical facilities, customers with or required to have backup power, and Industrial customers;
- Information collected regarding backup power, including but not limited to the Mi'kmaq of Nova Scotia, vulnerable customers, and/or populations that experience poor reliability.

Synapse will also review and consider:

- NS Power's annual performance standards and reports
- Relevant Board Decisions impacting reliability investments, such as M11692 – 2025 Storm Cost Recovery Rider
- 2025 Annual Capital Expenditure Plan (M12012)
- EA Technologies September 2023 Asset Management Review for the Board, and other

- subsequent reviews and utility updates
- Synapse experience with practices and lessons learned in other utilities
- Approaches NS Power has applied to date to solicit input from, analyze the impacts to, and apply solutions related to the reliability plan that both recognize and improve the experiences of the Mi'kmaq of Nova Scotia as Section 35 constitutionally protected rights holders.

The remainder of this TOR is organized as follows:

1. Scope of TOR
2. Proposed Review Process and Tentative Schedule
3. Detailed Description of Key Steps in the Process

Scope of TOR

Synapse will include the following topics in its assessment:

- Review of NS Power's historical reliability performance standards and current SAIDI and SAIFI targets.
 - Review and summary of recent NS Power annual performance standards report, including annual targets and modifications over time.
 - Summary of NS Power's performance relative to targets.
 - Assessment of the extent to which NS Power has analyzed or could analyze the reliability experienced by particular communities, customer types, or customers classes, including but not limited to the Mi'kmaq of Nova Scotia, customers who are medically-dependent on electricity, low-income customers, communities served by equipment that is overloaded or feeders that are constrained, critical facilities, customers with or required to have backup power, and/or Industrial customers.
 - Review of NS Power's methodology for establishing the stated performance goals and analysis of how performance improvements were determined, including how current vegetation management practices are expected to improve reliability within and beyond the utility right-of-ways.
 - Comparison of NS Power reliability to like Canadian and U.S. utilities to put the types and level of threat, proposed level of investment, and reliability performance in perspective (using publicly available data). Synapse will work with NS Power to select like utilities based on factors such as geography, topography, environment, weather and climate, customer density, regulatory or political drivers, and utility infrastructure.
 - Recommendations on how to evaluate progress against the goals in the near- and long-terms and whether and the extent to which the investments proposed in NS Power's 5-year plan will help achieve 2025 performance targets.
- Assessment of how NS Power selects and prioritizes reliability improvements in its 5-year plan.
 - Assessment if and how NS Power solicited input on reliability concerns and potential solutions from particular communities, customer types, or customers classes, including but not limited to the Mi'kmaq of Nova Scotia, customers who are medically-dependent on electricity, low-income customers, communities served by equipment that is overloaded or feeders that are constrained, critical facilities, customers with or required to have backup power, and/or Industrial customers.
 - Assess, where data is available, the prioritization criteria, prioritization methodology, asset level prioritization, and any special considerations given for different customer types, levels of customer criticality, and/or specific geographies.
 - Assessment of if and how the investment plan is designed to address disparities in reliability experienced by particular communities, customer types, or customers classes, including but not limited to the Mi'kmaq of Nova Scotia, customers who are medically-dependent on electricity, low-income customers, communities served by equipment that

- is overloaded or feeders that are constrained, critical facilities, customers with or required to have backup power, and/or Industrial customers.
 - Determine if and how NS Power is accounting for backup power in their estimates of reliability impacts of various investments.
- Assessment of NS Power's proposed investment costs and benefits to determine the extent to which NS Power has maximized benefits and minimized costs of its reliability plan in a manner that is in public interest.
 - Definition of cost-effectiveness and associated metric(s) for assessment.
 - Evaluation of data and analysis completed by NS Power to estimate costs and benefits.
 - Assessment of whether NS Power applied the Project Delivery Model (PDM) to this reliability plan, especially the cost minimization practices.
 - Assessment of types of benefits included such as reductions in operational, maintenance, or capital expenditures and avoided storm response or outage management costs.
 - Assessment of, where data is available, the extent to which the benefits accrue to the utility and its customers.
 - Assessment of, where data is available, the degree to which different customers are expected to benefit from proposed reliability improvements.
 - Assessment of the materialization of benefits to specific locations and worst performing circuits, to the extent data is available.
 - Provide guidance to the Board regarding how and whether to consider Value of Lost Load (VoLL) based on residential and/or non-residential studies specific to NS (as available) or data from other Canadian utilities, such as Alberta Electric System Operator (AESO) and the Independent Electricity System Operator (IESO) in Ontario (as placeholders, if NS-specific data is not available).
- Assessment of affordability, with consideration of a range of customer classes.
 - Definition of affordability and associated metric(s) for assessment.
 - Estimates of rate and bill impacts for several illustrative customer classes.
 - Assessment of data specific to low income customers, and identification of avenues for consideration of low income customers in planning and prioritization.
- Assessment of scenarios to maximize reliability improvements through cost-effectiveness analysis and consideration of ways to minimize rate and bill impacts. This may include:
 - Reprioritization of proposed solutions and/or impacts to particular communities, customer types, or customers classes, including but not limited to the Mi'kmaq of Nova Scotia, customers who are medically-dependent on electricity, low-income customers, communities served by equipment that is overloaded or feeders that are constrained, critical facilities, customers with or required to have backup power, and/or Industrial customers.
 - Changes to the magnitude of investments in proposed solutions and/or service quality improvements for particular communities, customer types, or customers classes, including but not limited to the Mi'kmaq of Nova Scotia, customers who are medically-dependent on electricity, low-income customers, communities served by equipment that is overloaded or feeders that are constrained, critical facilities, customers with or required to have backup power, and/or Industrial customers.
 - Consideration of solutions not included in the analysis, such as non-wires alternatives including backup power.
 - Changes to the timing of proposed investments and expenditures.

Proposed Review Process and Schedule

This proposed review process and schedule enables Synapse to complete this assessment in time for NS Power to incorporate key findings and recommendations from our final report into its 2027 ACE Plan.

Steps of the Review Process	Schedule
Notices of Participation	December 2, 2025
Synapse sends draft TOR to participants	January 20, 2026
Initial virtual technical conference	January 27, 2026
Participant written feedback to Synapse on draft TOR	February 13, 2026
Filing of final TOR	March 13, 2026
Information Requests to NS Power	March 30, 2026
Responses to Information Requests from NS Power	April 22, 2026
Draft Report by Synapse to participants, including preliminary findings and recommendations	July 7, 2026
Second virtual technical conference	July 20, 2026 (approximate, and to be determined)
Participants provide written feedback on Synapse report	August 7, 2026
Filing of final Synapse report, including final findings and recommendations	August 31, 2026

Detailed Description of Key Steps in the Process

- **Initial Virtual Technical Conference:** A two-hour technical conference will be held to allow for discussion of issues and potential solutions after participants review the draft TOR.
- **Written Comments on draft TOR:** Approximately three weeks after the initial technical conference, stakeholders and NS Power will provide written comments to Synapse on the elements included in the scope of the draft TOR and the extent to which these or other additional elements require review.
- **Filing of final TOR:** Synapse will consider participant feedback on the draft TOR and finalize the TOR with the Board.
- **Information Requests from Synapse to NS Power:** After filing the final TOR, Synapse will need to submit information requests to NS Power to further understand the methods and assumptions behind the reliability plan.
- **Sharing of Draft Report with Participants:** Synapse will write a draft report assessing the five-year reliability plan, including preliminary findings and recommendations that are actionable in the immediate term. Participants will be invited to submit comments on the draft report. As there is limited time between the issuance of the final report and NS Power's 2027 ACE Plan filing, NS Power can begin to consider and apply the immediately actionable findings and recommendations in its 2027 ACE Plan.
- **Second Virtual Technical Conference:** Synapse will hold a second two-hour technical conference to discuss the draft report and address any suggested refinements and to discuss proposed modifications to NS Power's reliability plan. Following the technical conference, participants will again have an opportunity to provide further written comments.
- **Written comments on Synapse's draft report:** Approximately three weeks after the second technical conference, stakeholders and NS Power will provide written comments to Synapse on the draft report.
- **Final Synapse Report:** A final version of the Synapse report with findings and recommendations on NS Power's reliability plan will be filed with the Board and parties will be invited to file submissions or comments with the Board. At this point, the Board will also determine if an oral hearing is needed prior to issuing a decision in this matter.