

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 the Storm Outage Analysis Report – December 19-20, 2025

INFORMATION REQUESTS

To: **Nova Scotia Power Incorporated**
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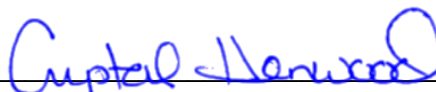
From: **Board Staff**
Nova Scotia Energy Board

Responses Due: **Friday, April 17, 2026**

Copies: 1 electronic copy - PDF searchable

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Crystal Henwood, Clerk of the Board

Request IR-1:

The report states that actual measurements were unavailable for the Metro region and forecast values from December 19, 2025, at 04:00 were used instead. Please explain:

- a) Why actual Metro observations were unavailable;
- b) What alternative observed weather sources existed;
- c) Whether actual observations from nearby stations were reviewed; and
- d) How reliance on forecast data affects the report's conclusions.

Request IR-2:

Please provide NS Power's storm event cause assignment methodology, including definitions, decision rules, hierarchy of cause coding, and the proportion of events whose causes were confirmed by field inspection versus inferred from outage management system records.

Request IR-3:

For all outages attributed to tree contact, please provide a detailed breakdown, including:

- a) The number and percentage of incidents involving trees located within the maintained right-of-way;
- b) The number and percentage involving hazard or "danger" trees located outside the right-of-way;
- c) The number and percentage attributable to customer-owned trees;
- d) A comparison of impacts to service lines versus primary distribution lines;
- e) A classification of affected feeders by urban versus rural designation;
- f) The date of the most recent vegetation management work performed on each affected line segment;
- g) Any prior patrol records, inspections, or hazard notifications associated with those segments; and
- h) The total number of unique customer impacts from this storm attributable specifically to tree-related outages.

Request IR-4:

For all outages attributed to adverse weather, please provide:

- a) The observed or inferred cause or contributing factor for each outage (e.g., wind, lightning, ice, flooding); and

- b) A summary of customer interruptions and Customer Hours of Interruption (CHI), categorized by each identified adverse weather mechanism.

Request IR-5:

Please provide a comprehensive list of all outages classified as resulting from equipment failure or mechanical failure. For each outage, include:

- a) The type of equipment involved;
- b) The age of the equipment at the time of failure;
- c) Any known prior defects or issues; and
- d) The findings of any post event review, including whether the failure was determined to be primarily driven by weather, age, or maintenance factors.

Request IR-6:

Please provide a detailed explanation for each loss of supply or transmission outage referenced in the report. For each event, include:

- a) The number of unique customers affected and the duration of the outage;
- b) Whether system redundancy existed and how it functioned during the event; and
- c) Whether this failure mode had been previously identified in planning studies or maintenance assessments.

Request IR-7:

Please provide restoration performance in the following additional forms:

- a) Restoration within 6,12,24 and 48 hours measured from each outage start, not storm onset; and
- b) The number of outages by region and by cause category.

Request IR-8:

Please provide Customer Hours of Interruption (CHI), Customer Interruptions (CI), and average outage duration, categorized by the following event types:

- a) Transmission-supplied events;
- b) Substation events;
- c) Feeder backbone events;
- d) Lateral events;
- e) Service line events; and

1 f) Customer specific outages.

2
3 **Request IR-9:**

4 Section 5 refers to the storm bringing, "... upwards of 40 mm of heavy rain that tapered off before
5 temperatures fell below freezing". Provide the following for each zone where customers were
6 restored after temperatures fell below freezing:

- 7 a) The number of customers restored after temperatures fell below freezing;
8 b) How far below freezing temperatures fell before customers were restored; and
9 c) How long temperatures were below freezing until customers were restored.

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11 **Request IR-10:**

12 The report refers to a January 4-5, 2018 storm. Compared to the December 19-20, 2025 storm,
13 the January 2018 storm included snow, ice pellets and freezing rain; interrupted 144,439 more
14 customers; had 17,994 fewer customer hours of interruption; had 0.95% more customers restored
15 in 48 hours; involved >160 fewer field resources; and had peak winds 35 km/h higher. The
16 January 2018 storm appears to have been more severe and interrupted more customers yet
17 involved significantly less resources, resulting in fewer customer hours of interruption and having
18 more customers restored within 48 hrs. Why?

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20 **Request IR-11:**

21 The report states that "Over 600 field resources were mobilized to restore power in affected areas"
22 and that "Transmission crews were staged near possible transmission events to allow for quick
23 response".

- 24 a) What was the actual number of field resources used?
25 b) What is the average hourly cost of 1 field resource?
26 c) What is the total number of hours that field resources were on stand-by or unable to work
27 but still being paid?

28
29 **Request IR-12:**

30 Section 6 refers to a "Prediction model".

- 31 a) Explain the prediction model used by NS Power for this storm.
32 b) How does the model work?
33 c) What was the model used to predict?
34 d) How did NS Power use the information from the model?

Request IR-13:

In M12592, the Board recently approved NS Power's capital expenditure application for ECC Dynamic Line Rating (DRL) Implementation on transmission lines L-6415a, L-6415b, L-7003, L-7004, L-7005, L-8001, and L-8004. In response to IR-11 (d-f), NS Power said:

In cases where the unexpected loss of a transmission line or corridor would result in larger system impacts, such as in November 2018, advanced notice of emerging issues provided by the DLR sensors and software allows NS Power System Operators and other personnel to implement mitigation measures. This can have a positive impact on the overall system performance. For extreme events such as the November 2018 ice storm, NS Power estimates that with earlier knowledge of the developing adverse conditions, proactive actions to stage additional mainland generation and limit imports could have been taken and customer impacts could have been significantly reduced (by an estimated 50%).
[Emphasis added]

[M12592, Exhibit N-2, response to IR-11(d-f)]

- a) Did any of the transmission lines approved for the DLR project, L-6415a, L-6415b, L-7003, L-7004, L-7005, L-8001, and L-8004, cause impacts to customers from the December 19-20, 2025 storm? If so, which ones and what were the Causes and Sub-Causes?
- b) For each of the above transmission lines that caused impacts to customers from the storm, provide the Zone, Date/Time, Weather Station, Direction (Degrees), Wind (km/h), Max Wind Gusts (km/h), Temp (°C), Cause, Sub-Cause, Description, Customers Impacted and Duration (Hours).
- c) Explain any differences in how this storm was handled compared to how it would have been handled if the DRL project was complete and the sensors fully operational. For each zone, explain and quantify the expected differences in the number of customers impacted and the duration of outages.

Request IR-14:

The report's lesson learned section identifies observations but does not demonstrate what action NS Power has/will take. Please provide a comprehensive action plan arising from this storm Does NS Power intend to make any changes to its vegetation management program as a result of lessons learned from this storm? If so, what changes? If not, why not?