

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
Subsequent Approval of a Partially Confidential Capital Item: CI
C0071528 – FLISR Implementation**

NON-CONFIDENTIAL INFORMATION REQUESTS

To: **Lana Myatt**
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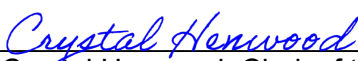
From: **Nova Scotia Energy Board**
Board Staff

Responses Due: **Thursday, September 18, 2025**

Copies: 1 electronic copy (PDF searchable)

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Issued at Halifax, Nova Scotia, this 27th day of August, 2025.



Crystal Henwood, Clerk of the Board

Request IR-1:

- a) Starting in 2023, for each feeder selected in this application, please provide a list of outages, reasons, durations and the number of customers affected.
- b) Starting in 2020, please provide a percentage breakdown of the reasons for the outages.
- c) Starting in 2020, please list all activities along with their investment dollar values that were undertaken to improve the reliability of each feeder.
- d) Please explain the reasons and limitations that have prevented the utility from improving the reliability of these feeders so far.

Request IR-2:

- a) How does the utility currently become aware of outages? Please explain.
- b) How does the utility currently log outage data? Please explain.
- c) For each feeder, please provide the percentage of customers that already have Advanced Metering Infrastructure (AMI).
- d) For each feeder, please list alternative methods, such as supervisory control and data acquisition, for detecting outages or faults.
- e) Please explain specifically why the AMI's last gasp method or the outage detection methods mentioned above could not reduce the percentage of outages for each of the feeders referenced in this application.
- f) Please explain why AMI data, Remote Terminal Unit data, or any existing technology could not have been used to determine the likelihood of which feeder substation protection device is likely to open?

Request IR-3:

- a) Starting in 2020, please provide the SAIDI and SAIFI for each of the feeders.
- b) Please provide the expected SAIDI and SAIFI improvements for each of the feeders following the implementation of this project.
- c) Please provide the expected percentage decrease in the outage reasons noted above, following the implementation of this project.
- d) How the performance of this project will be tracked. Please explain the process.

Request IR-4:

- a) For each feeder, please elaborate, compared to Fault Location, Isolation and Service Restoration (FLISR) technology, whether any technical and cost-benefit analysis has been

conducted to reduce the propagation of outages using similar technologies such as sectionalizers, automatic reclosers, or other suitable devices.

i. If yes, please share the analysis including cost benefit analysis.

ii. If not, why not?

b) Please explain the process used to select FLISR technologies over other similar options. Additionally, provide a document summarizing the analysis of the benefits of this technology compared to others considered, including cost.

Request IR-5:

The application notes implementation of three versions of FLISR technologies and equipment in four geographic areas within Nova Scotia.

a) Keeping the reasons for outages noted above in mind, please list the rationale behind selecting different versions of FLISR for different feeders.

b) Please provide cost breakdown of FLISR technologies for each feeder mentioned in the application.

c) What is the operational cost impact of this project on the rate base over the years?

Request IR-6:

Page 1 of the application notes that "To complete this project, new intelligent protection and telecom equipment will be installed in strategic locations along targeted feeders, connected via telecommunications, and integrated into NS Power's backend systems."

a) Please explain why a similar technology that could use existing communication infrastructure was not selected.

Request IR-7:

Attachment 1, 2 and 3 notes that "Deficiencies in protection and/or coordination will be identified and recommendations for improvements will be provided. Computer generated log-log plots shall be provided to indicate the degree of system protection and coordination by displaying the time-current characteristics of series connected overcurrent devices and other pertinent system parameters."

a) Please provide GIS maps showing circuit connections for each feeder/location to display the proposed FLISR solution.

b) On the map, please indicate the specific locations of all FLISR equipment and other associated protection devices.

- c) Provide a brief explanation of how the FLISR installation is expected to enhance grid resilience, particularly in terms of reliability, fault response, and service restoration.
- d) Please explain whether any deficiencies or limitations were identified during the planning, installation, or early operation of this project?
- e) If deficiencies have been identified, please explain whether NS Power may pursue any additional projects to address them.

Request IR-8:

The “Contingency Statement” on page 3 of the application states that “Contingency for this project has been determined using a combination of internal subject matter expert judgement (professional engineers and field personnel) based on previous recloser and IntelliRupter install work and the nonbinding contingency guidelines. Consistent with the maturity matrix, this project is being filed as a class 3 estimate with a contingency value of 15%. The risks intended to be covered by the contingency include unexpected delays that may arise during the installation due to weather or scheduling logistics, which could affect installation cost. It also accounts for the potential need for additional material if damage occurs at installation locations from weather events during the execution period.”

- a) Onsite commissioning is a task that depends heavily on weather and site conditions.
 - i. Please confirm whether NS Power includes potential onsite commissioning interruptions as part of its contingency planning estimation criteria.

Request IR-9:

- a) Please confirm whether the funding has been issued to NS Power and if any agreement has been signed.
- b) Please provide details on the funding requirements and conditions.