

1 **Q. In response to PUB-NP-019 filed during the 2025 Capital Budget Application,**  
2 **Newfoundland Power provided its strategy for climate change adaptation. Are**  
3 **there any projects or programs within the 2026 Capital Budget Application that**  
4 **are proposed as a result of this strategy?**

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6 **A.** Newfoundland Power (the "Company") considers climate change to be a significant risk  
7 factor in its business. The purpose of the Company's Climate Change Adaptation Plan  
8 (the "Plan") is to ensure that empirical information on the forecast impacts of climate  
9 change in Newfoundland and Labrador is assessed and incorporated into planning and  
10 decision-making activities. The Plan also recommends a number of adaptation efforts to  
11 reduce risk in both the short and long term by ensuring the resilience of the electrical  
12 system and minimizing the impact on customers. The examples below illustrate how  
13 these recommendations are reflected in the projects and programs proposed in the  
14 *2026 Capital Budget Application* (the "Application").

### 15 16 **Changes to Design Standards**

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18 Consistent with the Plan, the Company now constructs distribution and transmission  
19 assets to CSA Severe Loading Standards to account for increased frequency, duration  
20 and intensity of major weather events as described in the Plan. Prior to this change,  
21 portions of the Company's distribution and transmission assets were built to the lesser  
22 standard of "CSA Heavy".<sup>1</sup>

23  
24 In recent years, a distribution wind and ice loading analysis design tool has been  
25 implemented to incorporate non-linear analysis into distribution design standards. This  
26 tool enables designers to accurately model guying, attachment heights, and angles along  
27 the distribution route, resulting in more accurate loading analysis for each structure. With  
28 this more detailed analysis, designers can build in capacity for future attachments  
29 without overbuilding.

30  
31 Wind events in coastal areas have highlighted another area where design considerations  
32 can help strengthen the electrical system. Sections of line exposed to these coastal  
33 winds are considered candidates for higher insulating value equipment – see, for  
34 example, the *Distribution Reliability Initiative* project completed in 2022.<sup>2</sup> This project  
35 upgraded a section of line on the BCV-04 feeder in the coastal area of the Town of  
36 Portugal Cove – St. Phillip's with insulators rated for 35 kV to provide the increased  
37 creepage distance required to prevent insulator flashover due the salt spray conditions  
38 experienced in this location.

39  
40 Another one of the adaptation efforts recommended in the Plan is to relocate distribution  
41 and transmission assets from the back country to the roadside where feasible and least  
42 cost. Consistent with this recommendation, the 100L Transmission Line Rebuild project  
43 proposed in the Application will partially relocate the transmission line from the existing

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<sup>1</sup> For example, see the response to Request for Information CA-NP-060 for a discussion of the change from "CSA Heavy" to "CSA Severe" design standards with respect to the *Transmission Line 55L Rebuild* project.

<sup>2</sup> See Newfoundland Power's *2022 Capital Budget Application*, report 4.1 *Distribution Reliability Initiative*.

transmission right-of-way to the roadside. This relocation will improve access to the relocated part of the line for maintenance and repairs.

The Company has also evaluated Polesaver technology, as recommended in the Plan, for use on untreated poles located within buffer zones of Protected Public Water Supply Areas ("PPWSAs"). Poles in PPWSAs are particularly vulnerable to extreme weather conditions such as high winds and flood activity within floodplains, due to their proximity to large open bodies of water. The use of Polesaver wraps safeguards these poles from water damage and groundline rot, thereby improving their resiliency during extreme weather.

These changes to design standards are applicable to all transmission and distribution line construction completed under projects and programs in the Application. This includes projects such as the *100L Transmission Rebuild* project, and programs such as *Extensions, Reconstruction* and *Rebuild Distribution Lines*.

### **Improvements to Grid Resiliency and Operational Response**

The Plan also highlights the importance of grid resiliency, improving the system's ability to continue operating and to return the system to normal operations quickly after it sustains localized damage. The Distribution Feeder Automation project deploys downline reclosers throughout the Company's operating territory, improving system resiliency during significant weather events by reducing the need for manual intervention and enabling automated load transfers between distribution feeders.<sup>3</sup>

The Outage Management System ("OMS") is another essential tool used during day-to-day operations and the management of large-scale outages resulting from major weather events. Through integration with the Company's Workforce Management System, incidents are dispatched to field staff for assessment. Information from the field is then updated in the OMS to inform planning and prioritization efforts. Resources, such as vegetation management, pole setting and line crews, are effectively dispatched to minimize outage durations and maximize operational response.<sup>4</sup>

### **Technology Upgrades**

The Geographic Information System ("GIS") is identified in the Plan as a supporting asset necessary for enabling several initiatives related to the Plan. The 2026 *Geographic Information System Upgrade* project ensures the Company will continue to have the necessary tools to support initiatives such as flood risk and wildfire tracking.<sup>5</sup>

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<sup>3</sup> For more information on the Distribution Feeder Automation project, see Newfoundland Power's *2020 Capital Budget Application*, report *4.5 Distribution Feeder Automation*.

<sup>4</sup> See Newfoundland Power's *2025 Capital Budget Application*, report *6.1 Outage Management System Upgrade*.

<sup>5</sup> The GIS also integrates with the Company's OMS and workforce management systems to improve customer communication and operational responses before, during and after severe weather events, as required.

Newfoundland Power has implemented several GIS-based initiatives to address climate change related issues.

For example, coastal erosion is a recognized impact of climate change. For this reason, coastal erosion rate data provided by the Government of Newfoundland and Labrador have been integrated into the GIS. This allows the Company to identify areas that are vulnerable to shoreline degradation, enabling the identification and avoidance of high-risk zones and reducing the potential for infrastructure damage and service disruption due to erosion-related events. In addition, areas at elevated risk of salt contamination have been identified within the GIS. Salt exposure is a known contributor to infrastructure degradation, particularly affecting materials that are susceptible to corrosion and insulators where salt buildup can lead to electrical performance issues and increased maintenance needs.



*Figure 1: Provincial Public Protected Water Supply Areas illustrated as a layer in GIS.*

The Company has also integrated publicly available environmental information into GIS to inform decision making in both the short and long term. This includes wildfire information from the Newfoundland and Labrador Department of Fisheries, Forestry and Agriculture, as shown in Figure 2, and weather alerts from Environment Canada. Incorporating this data into GIS allows wildfire and severe weather events to be correlated with Company assets, enabling improved customer communication and operational responses.

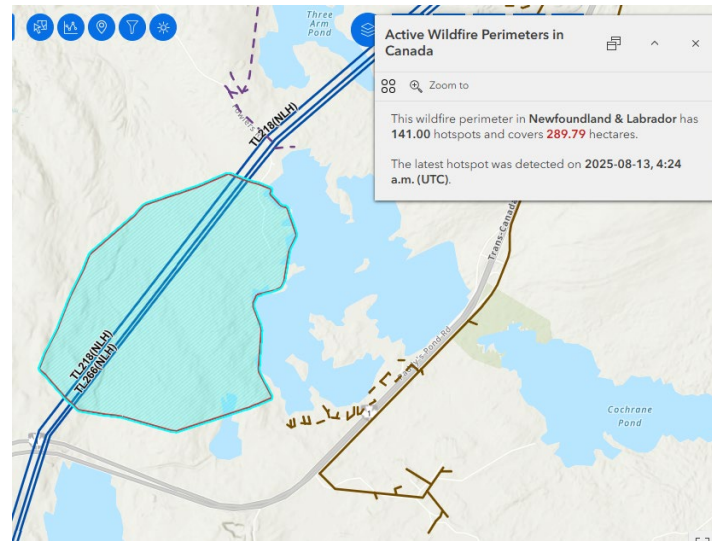


Figure 2: Wildfire extent illustrated as a layer in GIS.

## Concluding

In conclusion, the recommendations of the Climate Change Adaptation Plan have been effectively incorporated into multiple projects and programs proposed in the Application and within the day-to-day operations of the Company. Newfoundland Power has made significant strides in adapting to climate change by integrating these recommendations into their planning and decision-making processes. This includes changes to design standards, such as constructing distribution and transmission assets to CSA Severe Loading Standards and implementing a distribution wind and ice loading analysis design tool. Additionally, projects like the *100L Transmission Line Rebuild* and the use of Polesaver technology demonstrate the Company's commitment to enhancing the resiliency of its infrastructure.

Furthermore, improvements to grid resiliency and operational response, such as the *Distribution Feeder Automation* project, highlight the company's proactive approach to mitigating the risks associated with climate change. The integration of GIS technology to support initiatives like flood risk and wildfire tracking further underscores Newfoundland Power's dedication to addressing climate change related issues.

Newfoundland Power continues to evaluate the risks of climate change and evaluate mitigation efforts to ensure delivery of reliable and environmentally conscious service to customers in a manner that is least cost.