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March 31, 2026

Board of Commissioners of Public Utilities
Prince Charles Building
120 Torbay Road, P.O. Box 21040
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Attention: Mike McNiven
Board Secretary

**Re: Electrical Service Provided to the Great Northern Peninsula – Inquiry by the Great Northern Chamber of Commerce – Hydro's Reply**

On February 12, 2026, Newfoundland and Labrador Hydro ("Hydro") received correspondence from the Board of Commissioners of Public Utilities ("Board") advising that they had received correspondence from the Great Northern Chamber of Commerce ("Chamber") requesting a review of the electrical service on the Great Northern Peninsula. The Board requested responses to each of the issues raised by the Chamber.

Hydro had also received correspondence directly from the Chamber on January 16, 2026, requesting a detailed response regarding substantially the same issues raised in its correspondence to the Board.

Hydro welcomes feedback from its customers and values the opportunity to understand any concerns they may have. Hydro has conducted a comprehensive review of reliability, service quality, capital investment and operating and maintenance ("O&M") costs for the Great Northern Peninsula,[1] as outlined below. Hydro believes the service provided to the Great Northern Peninsula reflects an appropriate balance of least cost, reliability, and environmental responsibility, consistent with Hydro's legislative mandate. While the region experienced a number of outages in December 2025 as a result of adverse weather conditions, the frequency of outages in the area is generally aligned with the overall average Hydro customers on the Island Interconnected System over the last five years. In addition, the average duration of outages for this area in the last five years is generally less than that of other Hydro customers on the Island Interconnected System for the same time period.

Hydro believes targeted capital investment and ongoing maintenance activities associated with its assets that serve the Great Northern Peninsula are performed consistently and are sufficient to meet customer needs. Rural areas, including the Great Northern Peninsula, also benefit from regionalized projects that are required to meet province-wide planning criteria.

Hydro has actively engaged with municipal and provincial government officials, as well as customers, to address concerns and identify solutions. Hydro has implemented and will continue to implement enhancements to planning and communications based on the feedback it has received. These include ongoing reviews of backup power sources and key infrastructure to help inform decisions during and

[1] The Great Northern Peninsula is defined as communities north of Deer Lake, including Main Brook, Roddickton, St. Anthony, Parson's Pond, Sally's Cove, Bear Cove, Plum Point, Glenbernie, Wiltondale, Rocky Harbour, Cow Head, Daniel's Harbour, and Hawke's Bay.

after outages, and proactive solutions such as standby teams and increased information-sharing to help municipalities and businesses implement emergency response plans to best navigate service interruptions. Feedback is important to Hydro, and it will continue to inform the work performed.

Hydro has provided more detailed responses to the issues raised by the Chamber, as well as the additional information requested by the Board, below.

**1) Review of Hydro's service quality and reliability performance for the Great Northern Peninsula.**

Hydro measures reliability performance using SAIDI[2] and SAIFI,[3] which are industry standards on outage duration and frequency, as well as asset availability and forced outage rates. These are the same metrics used by other utilities across Canada.

SAIDI explains the average duration, or how long customers are without power over a given period of time. It adds the total customer outage hours and divides it by the total number of customers served. A lower SAIDI value means outages are shorter or restored more quickly, indicating better service reliability.

SAIFI explains the average frequency, or how often customers experience power outages over a given period of time. It counts the total number of sustained power interruptions per customer across the system and divides that by the total number of customers served. A lower SAIFI value means outages happen less frequently, reflecting a more reliable electricity system.

Reliability performance data for the Great Northern Peninsula compared to Hydro's Customer Average for the period of 2021–2025, as well as Hydro's 2025 Corporate Target, is outlined in Table 1. The average SAIDI and SAIFI for the Great Northern Peninsula are comparable to Hydro's corporate target, with SAIDI values better than the target, while SAIFI values are slightly worse.

**Table 1: Average SAIDI and SAIFI for the Great Northern Peninsula (2021–2025)**

| Service Area | SAIDI | SAIFI |
|---|---|---|
| Great Northern Peninsula | 15.67 | 5.99 |
| Hydro's Customer Average[4] | 17.94 | 5.61 |
| 2025 Hydro's Corporate Target[5] | 17.30 | 5.43 |

For the period of 2021–2025, 27% of outages experienced by the Great Northern Peninsula were planned outages, 24% of outages were caused by equipment issues,[6] 20% caused by adverse weather, 19% caused by tree contacts, and 10% caused by unplanned outages to the transmission system.

[2] System Average Interruption Duration Index ("SAIDI") is a reliability key performance indicator for distribution service, measuring service continuity in terms of the average cumulative duration of outages per customer served during the year.
[3] System Average Interruption Frequency Index ("SAIFI") is a reliability key performance indicator for distribution service, measuring the average cumulative number of sustained interruptions per customer per year.
[4] This data is equivalent to the 2026 Corporate Target. The previous five-year average is utilized to set Hydro's Corporate Target for SAIDI and SAIFI each year for Hydro's residential and general service customers.
[5] Hydro uses the five-average of SAIDI and SAIFI for the period 2020–2024 as its 2025 Corporate Target.
[6] Equipment found to be defective during an event is replaced at that time, if spare equipment is available. If spare equipment is not available, the equipment is tagged for replacement and addressed through Hydro's capital investment program.

Hydro's grid infrastructure is designed and constructed to withstand environmental loading as per Hydro's engineering design standards, based on *Good Utility Practice*,[7] compliant with engineering and industry standards, and site-specific historical operating experience. For transmission and distribution lines, this loading criteria changes through various geographical regions within the province, to ensure that equipment is designed for the conditions in which it operates.[8] The condition of equipment is monitored through established inspection programs, which focus primarily on condition assessment and outage statistics. Hydro monitors the performance of its assets, and when issues with asset performance or reliability are identified, Hydro undertakes proactive infrastructure upgrades that are recommended to prevent issues from occurring.

Outage information for both planned and unplanned outages is provided on Hydro's outage page, located on the company's public website, as well as posted on Hydro's social media accounts. Where possible, Hydro keeps customers informed of outage updates in a timely fashion. Information is typically provided every two hours or when a significant update is available. Hydro strives to account for the impacts that outages may have on hospitals, medical services, senior living facilities, and businesses, in particular, by applying additional scrutiny to planned outages affecting these customers. Hydro works closely with these customers to address required accommodations.

**2) Assess whether current maintenance and capital investment levels are sufficient and equitable.**

Hydro conducts regular and comprehensive preventative maintenance and inspections on infrastructure serving the Great Northern Peninsula and its customers, in accordance with *Good Utility Practice*. Critical preventative maintenance and inspections are monitored for progress and completion through both Hydro's Annual Work Plan and Winter Readiness Plan each year. Hydro monitors asset performance and reliability to ensure that maintenance and capital investment are sufficient.

The Great Northern Peninsula system includes 16 terminal stations and approximately 700 km of transmission line, providing service to 13 communities. The Great Northern Peninsula service area is illustrated in Figure 1.

[7] Hydro defines "*Good Utility Practice*" in the same manner as defined in the *Water Management Regulations* under the *Electrical Power Control Act, 1994*. *Good Utility Practice* means those practices, methods or acts, including but not limited to the practices, methods or acts engaged in or approved by a significant portion of the electric utility industry in Canada, that at a particular time, in the exercise of reasonable judgment, and in light of the facts known at the time a decision is made, would be expected to accomplish the desired result in a manner which is consistent with laws and regulations and with due consideration for reliability, safety, environmental protection, and economic and efficient operations.

[8] The lines on the Northern Peninsula are designed for radial ice loads up to 1.5 inches and wind loads up to 110 miles per hour.

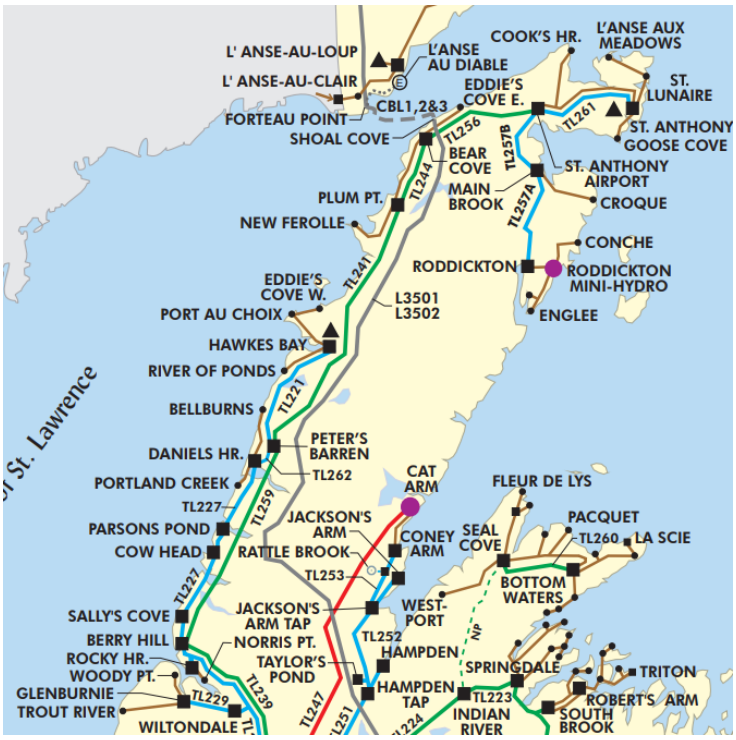


**Figure 1: The Great Northern Peninsula Service Area**

The St. Anthony Diesel Plant and the Hawkes Bay Diesel Plant are both utilized as a source of backup power for the Great Northern Peninsula. These plants were originally implemented as the main power generation source for the region before it could be served by the province's electrical grid. Interconnection north of Hawkes Bay Terminal Station to the grid became feasible in the 1990s, and since that time, firm power to the entire Great Northern Peninsula region has been provided by the Island's generation and transmission infrastructure. Hydro has used these plants to support the upper regions of the peninsula during outages to the interconnected system.

Hydro's O&M costs on the Great Northern Peninsula are higher on a per customer basis than in other comparable regions of the province.[9] These expenditures demonstrate that Hydro conducts work as necessary in any given region to ensure system requirements and reliability are maintained, and that Hydro does not limit those activities based on the number of customers in each area. Table 2 outlines the 2020–2025 O&M costs for the Great Northern Peninsula. While the level of O&M expenditures varies significantly by region, this is not a reflection of prioritization or differing maintenance philosophies but rather reflects the number of assets required to serve the region and geographical factors. Finding a like-for-like comparator within Hydro is challenging due to regional differences in line length, number of terminal stations, customer base, and overall asset dispersion. This is further complicated by the unique configuration of the two Island diesel-interconnected generation systems that were installed prior to interconnection.

For a general comparison of operations and maintenance costs, Hydro conducted an analysis comparing the radial section of the Great Northern Peninsula from Peters Barren to the St. Anthony Diesel Plant with the radial system on the Connaigre Peninsula, specifically from Bay d'Espoir to Barachoix.

[9] In Table 2, Hydro has utilized, for comparison purposes, one region that is comparable in geography and electrical infrastructure, including radial transmission lines.

**Table 2: Great Northern Peninsula O&M Costs (2020–2025)**

| Region | O&M Costs ($) | O&M Costs Per Customer ($) |
|---|---|---|
| Great Northern Peninsula[10] | 12,267,038 | 1,804 |
| Connaigre Peninsula | 3,664,342 | 1,392 |

Hydro does not generally manage its assets based solely on age or service life. In many cases, condition assessments, along with replacement criteria, are used to plan renewal and replacement work. Condition assessments combine visual inspections, data monitoring, and evaluation of maintenance history to determine the remaining useful service life. Assets are prioritized for refurbishment or replacement based on risk factors such as safety, reliability, and cost-effective service.

Capital investments are approved annually by the Board as part of the Capital Budget Application ("CBA") process. Over the past five years, Hydro has invested approximately $19.2 million in infrastructure serving the Great Northern Peninsula, including approximately $0.7 million in backup generation, $3.8 million in transmission infrastructure, $6.3 million in terminal stations, and $8.5 million in distribution infrastructure.

Hydro's approved and scheduled 2026 capital projects for the Great Northern Peninsula include projects and programs to proactively address assets that have reached the end of their useful service life, as outlined in Table 3. Hydro's planned 2026 investments relate to the replacement of critical equipment that has reached the end of its service life. For example, Hydro plans to replace reclosing controllers and protective relay equipment that are critical to protecting Hydro's transmission lines and equipment and ensuring timely restoration in the event of an outage, while Hydro's Wood Pole Line Management Program is a comprehensive transmission line inspection and refurbishment program that ensures the reliability of its wood pole transmission lines. Additional information can be found in Hydro's 2026 CBA.[11]

[10] The Great Northern Peninsula is defined as the radial portion of the Island Interconnected System on the Great Northern Peninsula, that includes of all generation, transmission, distribution and terminal stations north of the community of Bellburns.
[11] "2026 Capital Budget Application," Newfoundland and Labrador Hydro, July 15, 2025.

**Table 3: 2026 Great Northern Peninsula Planned Capital Investment**

| Location | Scope of Work |
|---|---|
| Cow Head Terminal Station | Reclosing Controller Replacement |
| Bear Cove Terminal Station | Power Transformer Refurbishment |
| | 48V Battery Bank and Charger Replacement |
| Roddickton Terminal Station | Remote Terminal Unit Replacement |
| St. Anthony Airport Terminal Station | 48V Battery Bank and Charger Replacement |
| Various Stations | Protective Relay Replacements |
| | Administrative Network Equipment Replacement |
| | SCADA[12] Network Equipment Replacement |
| Transmission Lines | Wood Pole Line Management Program[13] |

These capital investments include proactive asset renewal to maintain reliability and improve service quality to the Great Northern Peninsula. Investment considered for the period up to 2030 is addressed in question 4.

**3) Require Hydro to provide publicly available, region-specific reliability data.**

Reliability of service is integral to Hydro's mandate, with the majority of expenditures related to maintaining or improving reliability. Chart 1 and Chart 2 demonstrates the reliability performance metrics for customers on the Northern Peninsula[14] in relation to Hydro's Island and Labrador customers for 2021–2025.[15]

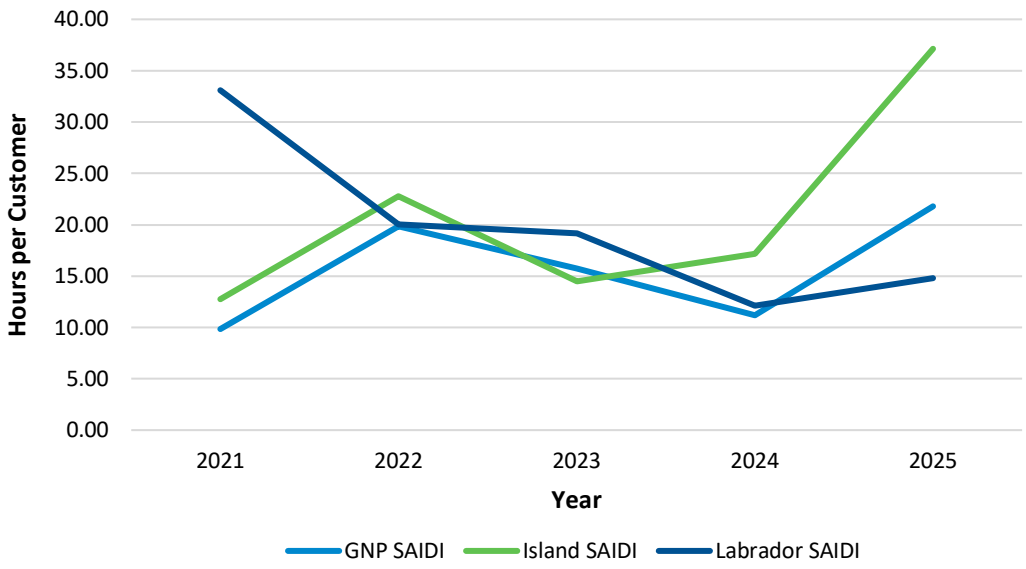


**Chart 1: SAIDI for the Great Northern Peninsula (2021–2025)**

[12] Supervisory Control and Data Acquisition ("SCADA").
[13] Transmission lines included in Hydro's 2026 Wood Pole Line Management Program include inspections of TL244, TL241, and TL262.
[14] *Supra,* f.n. 1.
[15] The performance metrics values include major events.

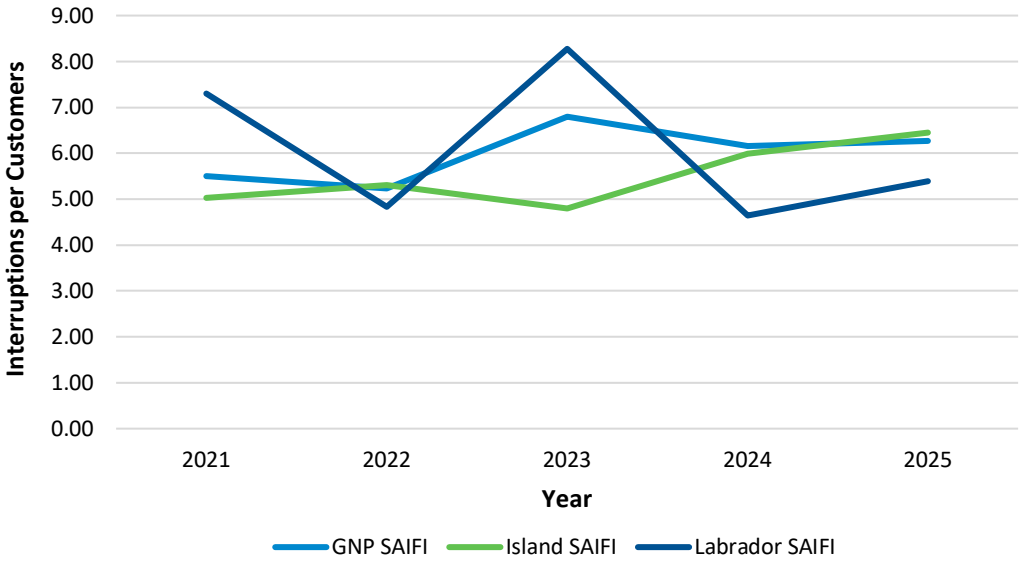


**Chart 2: SAIFI for the Great Northern Peninsula (2021–2025)**

Average outage duration for the Great Northern Peninsula, as indicated by the SAIDI performance presented in Chart 1, has generally been shorter than the average for Hydro customers on the Island over the past five years. The increase in SAIDI on the Great Northern Peninsula in 2025 is primarily due to significant winter storm events in December 2025, which caused a higher number of weather-related interruptions. In December 2025, there were five interruptions that were caused by the impacts of adverse weather on the region. Causes included tree contact as well as damage to transmission lines and equipment. Outages caused by adverse weather events may result in longer outage durations, as adverse weather events may create unsafe conditions in allowing crews to identify and rectify system issues.

Outage frequency for the Great Northern Peninsula is generally consistent with that of Hydro customers on the Island over the past five years, as presented in Chart 2. In 2023, there was a slight increase in SAIFI on the Great Northern Peninsula due to a higher number of loss-of-supply outages, which include outages to the transmission system caused by tree contacts, adverse weather, or defective equipment.[16]

**4) Consider directing Hydro to develop a long-term reliability and reinvestment plan for the Great Northern Peninsula.**

Hydro has processes and practices in place to appropriately determine when reinvestment is required for all assets. Reinvestment decisions are based on condition, reliability, and risk. Identification of required work is typically determined through condition and reliability data, while prioritization of this work is determined by risk. Risk is calculated as the product of impact and the likelihood of failure.[17]

Hydro's reinvestment strategy focuses on the proactive renewal of end-of-life assets and proposes capital investments to improve system reliability and service to customers. Hydro also plans to undertake investments aimed at improving service, such as distribution automation, which will aid

[16] The 2023 SAIFI value is slightly higher than the 2025 SAIFI value, which is equivalent to the impact of one outage affecting approximately 5,000 customers.
[17] An overview of Hydro's risk matrix can be found in "2026 Capital Budget Application," Newfoundland and Labrador Hydro, July 15, 2025, app. G, p. 1.

in reducing restoration times. Table 4 outlines the planned capital investment for the Great Northern Peninsula over the period 2026–2030.

**Table 4: Great Northern Peninsula Proposed Capital Investment (2026–2030)**

| Location | Scope of Work |
|---|---|
| Berry Hill Terminal Station | Breaker and Transformer Protection Relay Replacement |
| | Recloser Replacement |
| | Addition of Transformer Online Dissolved Gas Analyzer |
| | Transmission Line Protection Relay Replacement |
| Bear Cove Terminal Station | 48V Battery Bank and Charger Replacement |
| Cow Head Terminal Station | Reclosing Controller Replacement |
| | Addition of Transformer Online Dissolved Gas Analyzer |
| | Transmission Line Protection Relay Replacement |
| Deer Lake Terminal Station | Recloser Replacement |
| | Transmission Line Protection Relay Replacement |
| Peter's Barren Terminal Station | Addition of Transformer Online Dissolved Gas Analyzer |
| Rocky Harbour Terminal Station | Addition of Transformer Online Dissolved Gas Analyzer |
| Roddickton Woodchip Terminal Station | Recloser Replacement |
| | Remote Terminal Unit Replacement |
| | Replace Instrument Transformers |
| St. Anthony Airport Terminal Station | Addition of Transformer Online Dissolved Gas Analyzer |
| | 48V Battery Bank and Charger Replacement |
| St. Anthony Diesel Plant Terminal Station | Addition of Transformer Online Dissolved Gas Analyzer |
| | Transformer Protection Relay Replacement |
| Various Stations | Distribution Automation[18] |
| | Administrative Network Equipment Replacement |
| | SCADA Network Equipment Replacement |
| Transmission Lines | Wood Pole Line Management Program[19] |

These investments are intended to renew or enhance the system as a means to ensure safe and reliable service to the Great Northern Peninsula.

**5) Ensure that rural and remote communities receive safe, adequate, and reliable electrical service, as required under the Board's mandate.**

Hydro's infrastructure on the Great Northern Peninsula is evaluated and prioritized for upgrades under the same criteria as all other Hydro assets. Issues identified through comprehensive inspections are used to prioritize capital investments and upgrades, supported by condition ratings and operational reports, such as historical outage data.

[18] Stations located on the Great Northern Peninsula with distribution equipment connected to Hydro's SCADA system include Rocky Harbour Terminal Station, Bear Cove Terminal Station, Hawkes Bay Terminal Station, St. Anthony Diesel Plant Terminal Station, Daniels Harbour Terminal Station, Cow Head Terminal Station, Roddickton Woodchip Terminal Station, and Plum Point Terminal Station. Advanced monitoring and feeder modernization have already been achieved through the SCADA connections to these stations.

[19] Transmission lines included in Hydro's Wood Pole Line Management Program include TL244, TL241, TL262, TL226, TL227, TL229, TL239, TL256, TL257, and TL261. With the ever-intensifying weather, Hydro has advanced many future inspections to 2026.

As outlined above, reliability performance for infrastructure serving the Great Northern Peninsula is comparable to Hydro's Corporate Target, as well as overall SAIDI and SAIFI for Hydro customers on the Island and Labrador. Hydro has made investments and upgrades to the electrical system that serves the Great Northern Peninsula over recent years. To complement reliability and capital investments, Hydro employees are strategically located on the Northern Peninsula to appropriately serve customers in this area and respond to outages in the region. Hydro also has a sharing of services and equipment agreement with Newfoundland Power Inc., which enables the shared usage of critical equipment, such as mobile substations, should they be required. The agreement is designed to enhance service reliability to customers and create cost efficiencies.

**In addition to the above issues raised by the Chamber, the Board requested that Hydro identify any initiatives that have been undertaken or are included in its capital budget planning that will contribute to improved service reliability for the area, as well as information on how Hydro has been utilizing new technology in locating and/or minimizing the duration of outages.**

Hydro has implemented storm and weather hardening standards for line replacements and new lines that meet the defined criteria for applications, which include a wider right-of-way, shorter spans, armless construction, composite crossarms on dead-ends, additional guy wires, stronger poles, an increased number of dead-ends, heavier conductor, and higher creepage insulators.

As part of Hydro's 2026 CBA, Hydro proposed a project to materially widen a right-of-way near Gros Morne National Park. The project is necessary to support reliability and public safety, as the transmission lines along the right of way are the worst-performing lines amongst Hydro's transmission lines for tree contacts. Hydro's proposal in the 2026 CBA stated that the project is prudent and necessary because it reduces the risk of outages, provides safety for travellers on the right-of-way and reduces the risk of forest fires. In Board Order No. P.U. 2(2026), the Board accepted that widening the right-of-way is required for increased reliability and public safety and that doing so to reduce tree contacts can reduce forced outages and increase public safety. However, the Board concluded that the right-of-way widening project should be part of Hydro's vegetation management strategy and is not a capital expenditure. Hydro will prioritize the work necessary to ensure reliability and public safety is completed and remains committed to right-of-way widening in this area. Hydro will provide a further update to the Board following the conclusion of the vegetation management jurisdictional scan and development of vegetation management policy directed by the Board in its Order.

Hydro has observed increased wear on certain line hardware components, which generally correlates to higher wind intensities experienced by equipment. Failure of this hardware results in customer outages. Hydro intends to use unmanned aerial vehicles more extensively on the Great Northern Peninsula to supplement its climbing inspections and snowmobile patrols to ensure identification of excessively worn hardware before failure.

Hydro has also implemented climate-related designs on its system, such as increasing creepage distance on the station equipment at the Holyrood Terminal Station, where flashover from ocean salt spray resulted in equipment failures. This design criteria will be implemented in other Hydro terminal stations, including those on the Great Northern Peninsula, if equipment inspections demonstrate similar salt spray conditions.

Hydro intends to engage a consultant in 2026 to assist with the completion of a Climate Change Risk Assessment, which will assess the potential risks of climate change across Hydro's assets system wide. This assessment is intended to result in a Climate Change Adaptation Plan, with actionable items. Hydro is also conducting a life extension condition assessment on the St. Anthony and Hawke's Bay diesel

plants in 2026. The scope of this assessment will support any justification for the recommended next steps for these assets.

**Additional Information – Customer Communications and Engagement**

Hydro consults residents and businesses in planning decisions, both generally and in relation to specific projects and system requirements, to inform capital planning, understand evolving load demand, and best mitigate the effects of regional outages. Engagement with residential and commercial customers is achieved through a number of feedback methods, including surveys, customer service communications, and social media engagement. Hydro also meets and corresponds with government representatives and municipalities to understand concerns in local areas, which are used to better serve customers.

In the case of the Northern Peninsula, Hydro is using feedback received to inform feeder prioritization, improve outage response, and refine communication strategies. These activities have allowed Hydro to better understand the needs of the region when an outage occurs, and how to best mitigate the effects of an outage on individuals and businesses. In addition, employees have met with local officials to address concerns as they arise, while further understanding how Hydro can help communities engage their emergency response plans and inform residents of outage updates. Hydro has also engaged in discussions with departmental and regional government representatives to identify solutions to issues raised in the region.

Through the regulatory process, Hydro's capital applications are subject to public submissions from intervenors, who ask questions and provide comments to the Board, who in turn uses that information in approval decisions. The information gathered from customers is utilized alongside other factors related to system planning, as well as meeting Hydro's mandated requirement to best meet the optimal balance of reliability, environmental responsibility, and least cost.

In summary, Hydro believes it has demonstrated that its capital planning and expenditures, repair and refurbishment activities, staffing levels, and ongoing infrastructure reviews support the safe and reliable delivery of power to customers on the Great Northern Peninsula, in a manner consistent with Hydro's mandate. Reliability and investment in the region are consistent with that of other regions which Hydro serves. Past, current, and planned capital investments and system planning activities position Hydro to meet the specific needs of the region while continuing to maintain overall system requirements and prudent cost management.

Should you have any questions or comments, please contact the undersigned.

Yours truly,

**NEWFOUNDLAND AND LABRADOR HYDRO**

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ecc:

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