

1 Q. a) For each of Hydro's rural service areas, provide a list indicating the location and date of
2 implementation of installed and scheduled to be installed automation and monitoring
3 systems.

4 b) Indicate the operations enabled by each system and the type of power interruptions or
5 restoration activities each technology is capable of isolating, avoiding, detecting or
6 minimizing.

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9 A. As noted in Newfoundland and Labrador Hydro's ("Hydro") response to PUB-NLH-117 of this
10 proceeding, Hydro's approach to the implementation of new technology is to assess potential
11 investments in the context of its established reliability objectives, customer needs, operational
12 requirements, and the overall cost of providing service. Hydro evaluates individual technologies
13 on their merits and considers the extent to which the expected reliability, operational, safety,
14 and other benefits provide a reasonable balance with the associated costs ultimately borne by
15 customers.

16 As part of Hydro's 2027 Capital Budget Application ("CBA"),¹ Hydro is proposing the
17 implementation of a Distribution Equipment SCADA Additions project to enable remote control
18 and monitoring of electrical distribution equipment within substations. This project will install
19 new communications infrastructure at six terminal stations, including Jackson's Arm,
20 Glenburnie, Parson's Pond, Farewell Head, Roddickton, and Bottom Waters.

21 The requested information is provided in Table 1. For Hydro's isolated diesels, most systems are
22 controlled from the plants' control systems,² and not the Energy Control Center ("ECC") for
23 monitoring.

¹ "2027 Capital Budget Application," Newfoundland and Labrador Hydro, July 14, 2026, vol. II, sch. 7, prog. 25.

² Isolated diesel plants had remote monitoring systems installed as part of "Upgrade Diesel Plant Production Data Collection Equipment" project from Hydro's 2014 CBA.

Table 1: Automation and Monitoring Systems – Hydro Rural Service Areas

Location	Asset	Automation and Monitoring System	Year Installed
Labrador Interconnected	Happy Valley-Goose Bay	ECC Remote Controlled	Installed 2003
	Wabush Terminal Station	ECC Remote Controlled	Installed 2019 ³
	Labrador City Quartzite and Vanier Substations	ECC Remote Controlled	Installed 2007
	Wabush substation	ECC Remote Controlled	Planned for 2028
Great Northern Peninsula	Various Site Locations ⁴	ECC Remote Controlled	1990s; ⁵ 2018; ⁶ planned for 2026–2028. ⁷
Baie Verte Peninsula	Bottom Waters Terminal Station	ECC Remote Controlled	Installed 2018
Fogo Island	Farewell Head Terminal Station	ECC Remote Controlled	Installed 2009
	Change Islands Reclosers	ECC Remote Controlled	Installed 2011
	Fogo Island Substation	Proposed ECC Remote Controlled	Starting in 2027
Connaigre Peninsula	English Harbour West Terminal Station	ECC Remote Controlled Reclosers	Installed 2019
	Barachoix Terminal Station	ECC Remote Controlled Reclosers	Installed 2019
Southwest Coast	Doyles Terminal Station	ECC Remote Controlled	Installed 1990s
	Grandy Brook Terminal Station	ECC Remote Controlled	Installed 1990s

- 1 **b)** The sites outlined in Table 1 equipped with ECC remote control capability have 24/7
2 monitoring of terminal station systems via Supervisory Control and Data Acquisition
3 (“SCADA”) back to ECC. This includes the status of major equipment, including breakers and
4 disconnect switches, synchronous condensers (Wabush Terminal Station), diesel generator
5 backup units (St. Anthony Diesel Plant and Hawke’s Bay Diesel Plant), alarms, sequence of
6 events from changes happening with status of equipment, real time analog values,⁸ remote

³ Converted from Churchill Falls Control to ECC Control.

⁴ 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, Glenburnie, Wiltondale, Rocky Harbour, Cow Head, Daniel’s Harbour, and Hawke’s Bay.

⁵ St Anthony Diesel, St Anthony Terminal Station, Bear Cove Terminal Station, Plum Point Terminal Station, Roddickton Terminal Station, Hawkes Bay Plant, Daniel Harbour Terminal Station, Cow Head Terminal Station, Berry Hill Terminal Station and Peters Barren Terminal Station.

⁶ Rocky Harbour Substation - ECC remote control to Reclosers Only.

⁷ Wiltondale Terminal Station – SCADA will be completed during the Newfoundland Power Inc. line connection to this station. Project timeline: 2026 to 2028. Parsons Pond and Glenburnie Terminal Station - planned for Hydro’s 2027 CBA.

⁸ Typically monitored values are MW, MVAR, kV of lines and station bus.

1 control of breakers and disconnects, and start and stop of diesel back up units and
2 synchronous condenser units.⁹ This technology allows for early detection of changes on the
3 system to improve the information available to ECC during system events in order to
4 respond more appropriately. For example, the sequence of events tracker automatically
5 alerts the departments responsible for key assets when timestamping issues occur in the
6 field, sends notices directly to those groups, and supports corrections needed for trending,
7 root cause analysis, and problem resolution. Additionally, Hydro's Distribution Equipment
8 SCADA Additions project will allow for two-way communication between Hydro's ECC and
9 substation distribution equipment, including improved power system management through
10 identification of issues and outages in a timely manner. The ability to remotely control
11 distribution equipment will improve outage response time and public safety.

⁹ Sites listed in Table 1 which have remote control capability on reclosers only have ECC 24/7 monitoring of that individual line recloser (status, analog values, and control). All other equipment in those stations is not visible to ECC.