

1 Q. **Reference: General**

2 a) Please identify any capital expenditures reflected in either the 2025 capital budget or the
3 five-year capital plan associated with advancement of the use of operational technologies.

4 b) Please provide an update on Hydro’s plan to advance the use of operational technology and
5 the capital investments required.

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8 A. a) Newfoundland and Labrador Hydro (“Hydro”) is primarily focused on supporting two
9 technology areas: Information Systems (“IS”) and Operational Technology (“OT”). Hydro IS
10 focuses on support systems that primarily deal with business and administrative processes
11 such as email, financial, and human resources systems. OT provides support for
12 infrastructure and applications that control, monitor, and operate the electrical grid,
13 Hydro’s Industrial Control Systems, and Supervisory Control and Data Acquisition (“SCADA”)
14 system.

15 In Hydro’s 2025 Capital Budget Application, the SCADA Points Application, Perform Software
16 Upgrades and Minor Enhancements, Update Cybersecurity Infrastructure, Upgrade Core OT
17 Infrastructure, and Upgrade Energy Management System Programs and Projects have been
18 proposed with the primary focus to improve operational technologies. The Perform
19 Software Upgrades and Minor Enhancements Program also includes submissions related to
20 Information Systems in addition to the OT requirements.

21 b) The Perform Software Upgrades and Minor Enhancements, Update Cybersecurity
22 Infrastructure, Upgrade Core OT Infrastructure, and Upgrade Energy Management System
23 Programs recur each year with an average annual investment of \$1.5 million. As outlined in
24 Hydro’s Five-Year Capital Plan, Hydro’s intends to continue to support these programs with
25 similar average-annual investments in future years.

26 Where applicable, Hydro has utilized the results of internal consultations and third-party
27 consultant engagements completed in early 2019 to inform its current framework for

1 analyzing the use of operational technologies, in tandem with ongoing input from staff and
2 applicable shareholders. All this information is considered when determining what solutions
3 to implement that increase efficiency with a goal of enhancing cyber security, and reducing
4 long-term costs for consumers while meeting our business requirements. Technologies are
5 divided and tracked in the areas of planning and engineering, utility and management,
6 SCADA, server management and hardware, security, and architecture review, with annual
7 updates to, and reviews of, medium- and long-term planning.