

1 Q. **Transmission Operations**

2 The response to PUB-NLH-102 indicated that 15 of Hydro's terminal stations do not
3 have Supervisory Control and Data Acquisition (SCADA) remote control and 14 do
4 not have SCADA monitoring. Identify these terminal stations (and the voltages).
5 Explain how the Energy Control Centre (ECC) indirectly monitors and controls these
6 (or at least those that it owns) terminal stations without the benefit SCADA.

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9 A. The 14 terminal stations that have no remote control or monitoring through SCADA
10 are:

- 11 1. Bottom Waters – 138 kV;
- 12 2. Barachiox – 69 kV;
- 13 3. Coney Arm – 69 kV;
- 14 4. Conne River – 69 kV;
- 15 5. English Harbour West – 69 kV;
- 16 6. Hampden – 69 kV;
- 17 7. Jackson's Arm – 69 kV;
- 18 8. Main Brook – 69 kV;
- 19 9. Parson's Pond – 69 kV;
- 20 10. Duck Pond – 66 kV;
- 21 11. Glenburnie – 66 kV;
- 22 12. Rocky Harbour – 66 kV;
- 23 13. Sally's Cove – 66 kV; and
- 24 14. Witondale – 66 kV.

1 The station that has some level of monitoring but no SCADA control is:

- 2 1. Corner Brook Frequency Converter – 66 kV.

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4 From an operational perspective, all of the stations that have no control or
5 monitoring are directly connected to a distribution system, hence supplying
6 customers. The ECC will use the SCADA information from nearby connected
7 stations to determine if there is an issue at or downstream of the uncontrolled and
8 unmonitored station. If there are issues detected, the ECC will dispatch crews to
9 the affected station. The crews will then report back to the ECC when the problem
10 is found and what the expected restoration time will be.

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12 The Corner Brook Frequency Converter station is monitored by the ECC. The
13 operators view the SCADA status and telemetry to determine if the frequency
14 converter trips offline or if there are any active alarms. If this occurs, the ECC would
15 notify field personnel (or an on-call person after hours) to inform them of the
16 problem. Field personnel are then responsible for any shutdowns or start-ups of
17 the unit or local monitoring, as required.