

1 Q. **Soldiers Pond to Hardwoods Corridor Upgrade, Volume II, Tab 9, Page 4, Figure**
2 Please describe, in detail, how Hydro would supply electricity to Newfoundland
3 Power's customers on the Northeast Avalon Peninsula in the event of an outage to
4 the entire Soldiers Pond terminal station. In the response, please indicate the
5 generation and transmission capacity that would be available on the Northeast
6 Avalon Peninsula should such an outage occur.

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9 A. It is noted that systems specification and design at Soldiers Pond Terminal Station
10 are such that there shall be no common mode failures. The design includes
11 redundant sources of station supply, dual battery banks, dual chargers, and dual
12 protection systems. The control building is also equipped with fire suppression
13 systems. An event resulting in an outage to the entire terminal station would
14 therefore have to be caused by catastrophic external forces such as a natural
15 disaster. The probability of such an event would be classified as "rare" or
16 "extremely improbable".

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18 While there would be a small probability of such an event, Hydro's response to an
19 extended outage of the terminal station would involve the execution of a
20 contingency plan to maximize the availability of supply to Newfoundland Power's
21 customers on the Northeast Avalon Peninsula.

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23 The contingency plan would employ the 138 kV interconnection between Western
24 Avalon Terminal Station and Holyrood Terminal Station, the Holyrood Combustion
25 Turbine, the Hardwoods Gas Turbine, and Newfoundland Power's available
26 hydroelectric generation. The contingency plan would also specify the 230 kV

1 transmission line interconnections that would be made to bypass Soldiers Pond
2 Terminal Station in the event of a catastrophic failure.

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4 As part of the Lower Churchill integration, Hydro will be reviewing its existing power
5 system operating procedures, restoration plans, contingency plans and other
6 related documentation. This review is expected to commence in 2016. A number
7 of the procedures, plans and documents require completion of studies of the
8 integrated power system before a meaningful review can take place. These studies
9 are expected to be completed in by early 2017.