

1 Q. Please describe the protective relay work which has been completed in response to
2 the Henville Consulting recommendations provided in 2010, 2011, and 2013. What
3 relay work is planned?
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6 A. Henville Consulting completed reports in December 2010 and December 2011 on
7 the protection performance of the ten 230 kV lines east of Bay d'Espoir. Henville
8 Consulting did not prepare a report for the Island Interconnected System in 2013. A
9 capital budget proposal was submitted in 2012 for 2013 to replace the Optimho
10 relay on line TL242 between Holyrood and Hardwoods. In 2013 it was decided not
11 to replace the Optimho relays on TL242 due to the future construction of the
12 Soldier's Pond station which will change the protection scheme for TL242 from
13 distance relaying to a differential scheme for primary protection 1. Primary
14 protection 2 will remain as a distance relaying scheme. As well changes were made
15 in 2013 in response to the recommendations contained in the report *January 11,*
16 *2013 - Winter Storm Events - Power System Performance Review Report* prepared
17 by the Internal Power System Review and Analysis Committee.
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19 The primary protection 1 relay (Areva Optimho) on line TL203 from Sunnyside
20 Terminal Station to Western Avalon Terminal Station will be replaced in 2015 with
21 the selection of a replacement relay and engineering being completed in 2014. The
22 primary protection 1 and 2 relays (Areva Optimho and Schweitzer SEL-321) on
23 TL201 (Western Avalon to Hardwoods), TL217 (Western Avalon to Holyrood) and
24 TL242 (Holyrood to Hardwoods) will be replaced by the year 2017 with the
25 construction of the Soldier's Pond station for the Lower Churchill Project. The line
26 protection at the Western Avalon, Holyrood and Hardwoods ends will have to
27 match the protection being installed at Soldier's Pond.

- 1 The primary protection 1 relays (Areva Optimho) on lines TL202, TL206, TL207,
- 2 TL237, TL218 and TL236 will be scheduled, with one line completed per year,
- 3 starting in 2018.