

1 Q. **System Reliability**

2 Further to the response to PUB-NLH-105 confirm that Hydro does not have
3 transmission or distribution “reliability” engineers nor specific on-going annual
4 reliability enhancement programs addressing worse performing feeders, multiple
5 device operations, or any programs specifically addressing reliability indices, such as
6 number of customer interruptions, and System Average Interruption Frequency
7 Index (SAIFI) or System Average Interruption Duration Index (SAIDI), but that Hydro
8 does include weighted scoring of project reliability improvements as part of its
9 equipment upgrades, replacements, and additions projects.

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12 A. Hydro does not have distribution or transmission reliability engineers solely
13 dedicated to system performance and reliability. However, Hydro does have
14 equipment engineers that investigate worse performing feeders and multiple
15 device operations. Please refer to Hydro's responses to PUB-NLH-335 and PUB-NLH-
16 337, which are reproduced below:

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- 18 • Hydro's response to PUB-NLH-335: “Since the inception of the Long
19 Term Asset Planning Department in 2010, Hydro has developed a
20 systematic program for addressing its worse performing feeders. Worse
21 performing feeders are identified through the analysis of key
22 performance indicators SAIFI and SAIDI. The condition assessment
23 inspections are reviewed for all feeders and correlated to the worse
24 performing ones. A long-term plan is created to address deficiencies and
25 the work is prioritized based on condition, and worse performers.”

- 1 • Hydro's response to PUB-NLH-337: "Hydro monitors the number of
2 operations on distribution related protective devices on a monthly basis.
3 If it is observed that a protective device has an abnormally high number
4 of operations, then a technical assessment work order is created to
5 investigate the causes. The findings of the assessment, and the remedial
6 actions required would then dictate whether the issues can be resolved
7 through Operation and Maintenance (O&M) work or by capital projects."

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9 Hydro does include weighted scoring of project reliability improvements as part of
10 its capital program. SAIDI and SAIFI are analyzed down to the equipment
11 component level in order to understand which components in a system are causing
12 the trouble. Replacing or refurbishing a component that is contributing to the poor
13 performance of a system will thereby lead to the reduction of the overall SAIDI and
14 SAIFI numbers and an improvement in reliability.