

1 Q. Reference: Hydro's November 30, 2016 *Energy Supply Risk Assessment*.
2 On Page 9 of the Liberty Consulting Group *Review of Newfoundland and Labrador*
3 *Hydro Power Supply Adequacy and Reliability Prior to and Post Muskrat Falls – Final*
4 *Report*, it states:

5 *"The failure of both units during each of the last three winters gives a strong basis*
6 *for concern that the chances this capacity will be there when needed are not good.*
7 *Any capacity assessment that assumes a good chance of both units starting when*
8 *needed must be considered questionable in our opinion."*

9 Has Hydro conducted a risk assessment that assumes the Hardwoods and
10 Stephenville gas turbines are unavailable? If so, please provide the results of the
11 assessment. If not, why not?

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14 A. Hydro has not conducted a risk assessment analysis that assumes both ends of both
15 Hardwoods and Stephenville are unavailable at the same time.

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17 In the calculation of Expected Unserved Energy for Hydro's Energy Supply Risk
18 Assessment, unit availabilities are modelled probabilistically. This means that each
19 unit is modelled at its projected availability based on the appropriate reliability
20 metric (i.e. DAFOR, UFOP) and the model considers the impact of any and all
21 combinations of unit availability based on these inputs. As such, Hydro has not
22 modeled this assumption directly, but rather, this has been modeled implicitly given
23 the nature of the analysis.

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25 Hydro reiterates, as noted in table 1, page 25, of the Energy Supply Risk
26 Assessment, that a loaner leased engine is being maintained on the island in the
27 event there is an issue with any one of the four engines.

- 1 For additional discussion regarding the availability of Hardwoods and Stephenville,
- 2 please also refer to Hydro's response to PUB-NLH-636 and PUB-NLH-637.