

1 Q. **Reference: Reliability and Resource Adequacy Study 2022 Update, Volume III, page 37, Tables**
 2 **12 and 13.**

3 Provide the capacity factors of the incremental generation options in each of the four cases with
 4 incremental generation under the average and severe cases.

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7 A. The PLEXOS model considers each hour of the six-week shortfall analysis simulation
 8 independently. As a result, the model will give an accurate representation of the probability of
 9 generation shortfall in any hour; however, the cumulative result over the six-week period will
 10 tend to revert to the average. Because the capacity factor is calculated over the six-week period,
 11 the model cannot accurately produce capacity factor data for the severe case.

12 The actual dispatch of each of these units would depend on the specific unit characteristics,
 13 which could put them above or below existing units in the dispatch order. Due to this, the
 14 incremental generation options have been grouped with similar units for the purposes of
 15 calculating the capacity factor. Unit 8 at the Bay d’Espoir Hydroelectric Generating Facility (“Bay
 16 d’Espoir”) has been grouped with the other units at the Bay d’Espoir facility and the incremental
 17 generation has been grouped with the Holyrood Gas Turbine for the purposes of this analysis.
 18 The results can be seen in Table 1.

Table 1: Capacity Factors for Incremental Generation

Case	Bay d’Espoir Generating Station ¹	Gas Turbines ²
No Incremental Generation	98%	78%
+ Bay d’Espoir Unit 8	96%	45%
+ Bay d’Espoir Unit 8 and 100 MW	96%	37%
+ Bay d’Espoir Unit 8 and 200 MW	96%	28%
+ Bay d’Espoir Unit 8 and 300 MW	96%	21%

¹ Includes Bay d’Espoir Units 1 to 7 in all cases and Unit 8 in cases where that unit is included in the system.

² Includes Holyrood Gas Turbine in all cases and the additional incremental generation in the cases where it is included in the system.