

1 Q. Please provide the definition of Hydro's system operating states (i.e., normal, high-
2 risk, emergency), and the procedures implemented upon declaration of each
3 operating state.

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6 A. Hydro's normal operating state is considered the day-to-day operation of the power
7 system by the Energy Control Centre (ECC) to ensure safe and reliable power.

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9 From a transmission system perspective, this includes:

- 10 1. Monitoring system voltage conditions and making adjustments to ensure
11 they are within acceptable levels;
- 12 2. Using Energy Management System (EMS) applications to identify potential
13 contingencies and prepare accordingly; and
- 14 3. Authorizing maintenance outages on transmission equipment, including
15 implementing switching procedures to ensure such maintenance is
16 performed safely.

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18 Hydro also issues weather advisories to internal stakeholders in the event of
19 upcoming adverse conditions. An advisory would be issued for the following
20 criteria:

- 21 1. Sustained winds > 90 km/h with gusts > 110 km/h.
- 22 2. > 15 cm of snow forecasted in a 12 hour period.
- 23 3. Freezing rain forecasted to be sustained for > 4 hours.
- 24 4. > 25 mm of rain in 1 hour or > 50 mm of rain in 24 hours.
- 25 5. Freezing drizzle forecasted to be sustained for > 8 hours.

1 Based on the advisory, appropriate personnel in the regions will make preparations
 2 using Hydro's Severe Weather Preparedness Protocol. Each region uses a severe
 3 weather checklist to ensure the proper steps are taken to prepare. In addition,
 4 standby generation would be tested from the ECC and any deficiencies addressed
 5 to ensure proper operation.

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 7 From a generation perspective, the ECC monitors the load forecast and dispatches
 8 generation to meet the demand. The available generation reserves will be
 9 calculated for the current day and the following four days and an assessment will be
 10 made and notification issued to stakeholders when available generation reserves
 11 are below the stated thresholds, as defined below.

Available Reserves	Energy Control Centre Response	Expected Action	Alert Level
> Largest Generating Unit	Normal Operations		0
< Largest Generating Unit	Advise Stakeholders	Load Reduction	1
< ½ Largest Generating Unit	Advise Stakeholders	Conservation	2
Zero/Deficit; hold frequency = 59.8 Hz	Advise Stakeholders	Rotating Outages	3

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 14 The ECC uses the Generation Reserves Protocol to maintain sufficient spinning
 15 reserves, maintain the reliability of the Island Interconnected System and minimize
 16 service impacts to customers. Please see CA-NLH-008 for a complete copy of this
 17 Protocol.