Reference: 2023-2027 Capital Plan

Q. Page 12 Newfoundland Power states "A system planning study is being conducted to inform the long-term plan for these gas turbines."

What preliminary options are being considered in the system planning study concerning the long-term plan for the gas turbines?

A. Given the current condition and age of the Wesleyville and Greenhill gas turbines, both generating units are considered end-of-life and will be removed from service once deemed no longer safe or capable to operate.

The options to address the reliability impacts of removing the gas turbines from service include:

- (i) Replace the existing gas turbine capacity with new stationary units.
- (ii) Add to the existing portable generation fleet and consider setting the primary location for some unit(s) to be the existing Wesleyville and/or Greenhill gas turbine sites.¹
- (iii) Upgrade/relocate existing transmission lines where outage response times can be improved.
- (iv) Build new transmission lines to provide backup to the system currently supported by existing gas turbines.
- (v) Examine other sources of production that can be used to supply customers during transmission line outages such as renewable generation and energy storage.²
- (vi) Do nothing.

The evaluation of alternatives will be coordinated with Newfoundland and Labrador Hydro ("Hydro") to examine the impact that any generation addition or removal will have on Hydro's updated *Reliability and Resource Adequacy Study*.³

The Company currently has two mobile generators, the mobile diesel and the new mobile gas turbine that was approved by the Board as a multi-year project in Order P.U. 37(2017). Locating any new mobile generators at the existing Wesleyville and Greenhill sites has the advantage of being able to reuse existing fuel storage and other onsite facilities, in addition to maintaining the existing reliability benefits.

² Other sources would include distributed energy sources owned by customers.

Hydro's *Reliability and Resource Adequacy Study* is considering generation alternatives to meet the overall supply requirements for the Newfoundland and Labrador power system. Locating generation at the end of radial transmission systems, such as the Bonavista North system from Gambo Substation to Wesleyville Substation, may provide a least cost option for addressing both overall system generation requirements and the local reliability requirements on radial systems.