

1    Q.    **Reference: Application, Holyrood Thermal Generating Station Overview**

2            What alternatives to converting Holyrood Unit 3 to synchronous condenser operation were/are  
3            being considered by Hydro?

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6    A.    The Island Interconnected System is entering a period of rapid change and expansion through  
7            the projects recommended through Newfoundland and Labrador Hydro's ("Hydro") Resource  
8            Adequacy Plan proceeding and the 2025 Build Application for the integration of a new  
9            Combustion Turbine on the Avalon and the addition of an eighth unit at Bay d'Espoir  
10           Hydroelectric Generating Station, in addition to the integration of energy resources such as  
11           wind, the location of which is yet to be determined. Given the significant changes proposed or  
12           ongoing on the system, Hydro is assessing the optimal form and location of reactive power and  
13           short-circuit support required by the Island Interconnected System. To that end, Hydro is  
14           assessing integrated synchronous condenser ("SC") capabilities on assets such as new  
15           combustion turbines, stand-alone SCs at various locations on the system, Power Electronic  
16           Solutions such as Static Synchronous Compensator (STATCOM), Grid-forming Inverters coupled  
17           with Bulk Electric Systems, and the utilization of Holyrood Unit 3 as a SC, as well as various  
18           combinations thereof.