1	Q.	Reference: Volume I: Holyrood Overview
2		
3		Hydro states on page 11, line 1, with reference to the 2020-2024 planned capital expenditures
4		for Holyrood that "All of the projects in the plan are required for the Phase 3 operation."
5		
6		Given the uncertainty surrounding the timing of Phase 3 operations has Hydro considered
7		deferring any of the 31 planned thermal capital projects listed on page A-4 in Appendix A of Tab
8		2020-2024 Capital Plan? If so please identify the projects that are being considered for deferral.
9		
10		
11	Α.	Newfoundland and Labrador Hydro ("Hydro") has considered the uncertainty surrounding the
12		timing of Phase 3 operations and is prepared to take appropriate action as specifics change. As
13		outlined in the Holyrood Overview, ¹ all of the 31 planned capital projects for the Holyrood
14		Thermal Generating Station ("Holyrood TGS") in the 2020–2024 Capital Plan are required for
15		Phase 3 operation, which is operation of the plant as a single unit synchronous condensing
16		facility. The site will also remain active with transmission, terminal station, gas turbine, and
17		diesel generation activity and infrastructure.
18		
19		There are some projects on this list with timing linked to the transition to Phase 3 operation.
20		These projects are intended to optimize the performance of the equipment for Phase 3
21		operation, once it is no longer required for generation and must be done after the transition has
22		taken place. This includes the following projects: Replace Stage II Electrical Distribution
23		Equipment; Install Lube Oil/Seal Oil Systems Unit 3; Inspect and Upgrade Light Oil System;
24		Replace Stage I 4160 Vac Breakers; Replace Unit 3 Protective Relaying; and Refurbish Stage II
25		Cooling Water Pumphouse. Should there be a delay in the end of steam date, Hydro will adjust
26		the capital plan and may defer such projects until after the transition to Phase 3 operation,
27		adjusting for condition and age as necessary.

¹ "2020 Capital Budget Application," Newfoundland and Labrador Hydro, August 1, 2019, vol. II "Holyrood Thermal Generating Station - Overview Future Operations and Capital Expenditure Requirements."

1 The 2020–2021 Holyrood TGS Rewind Unit 3 Stator project timing has been optimized to take into account Holyrood TGS end of steam and the in-service timing of the Labrador-Island Link 2 ("LIL"), including the potential variability in the timing of the full in-service of LIL. Hydro will 3 continue to monitor the progress of the LIL; however, Hydro believes that the timing to rewind 4 the Holyrood TGS Unit 3 Stator is optimally within the proposed 2020–2021 timeframe given the 5 6 information available. In making this decision, Hydro considered system needs to serve 7 customers, uncertainty in LIL in-service timing and Muskrat Falls project schedules, the 8 likelihood of a lengthy outage window being available, and the potential impact of a stator 9 failure on outage duration, cost, and availability of risk mitigation options. The timing of this 10 project also aligns with the current Holyrood Asset Retirement Obligation Plan where the stator rewind on Unit 3 occurs in parallel with burning down remaining fuel in Units 1 and 2. The 11 12 recommendations made by Hydro's consultants, based on an assumption of synchronous condenser only operation after March 2021, were considered in light of in-service timing of LIL 13 14 and potential future additional and more demanding generator operation. The proposed timing was selected as optimal. 15

16

Hydro discussed its approach with General Electric and the feedback received supported the
position that increased demands from the combined effects of factors such as electrical stress
and age would increase the risk of an operational failure of the stator winding, which often leads
to damage in other components.