1

Q.

Α.

12

13

14

17 18 19 (Reference 2026-2030 Capital Plan) Regarding the Greenhill and Wesleyville thermal pants, it is stated (page 1) "These units have been in service approximately 50 years and have reached the end of their useful service life." a) What is the capacity of each?

- b) Please provide a table showing annual energy output and days in operation for each plant for the years 1994 to 2024 inclusive.
- c) If these plants were to be refurbished, would NL Hydro contribute to the cost in light of the fact (page 12) they "are required to mitigate transmission planning contingencies associated with Hydro's Sunnyside and Stonybrook 230kV transmission loops"?
- a) The rated capacity of the Greenhill ("GRT") gas turbine is 25 MW.¹ The rated capacity of the Wesleyville ("WES") gas turbine is 14.7 MW.²
- b) Newfoundland Power maintains records of annual energy output and days in operation up to and including 2004.

Tables 1 and 2 show the annual energy output and days in operation for the GRT and WES gas turbines from 2004 to 2024.

Table 1 Operating Information – GRT Gas Turbine				
Year	Energy Output (kWh)	Days in Operation		
2004	184,504	32		
2005	165,523	30		
2006	385,796	20		
2007	120,206	22		
2008	356,030	25		
2009	397,458	13		
2010	81,499	15		
2011	5,680	7		
2012	85,312	15		
2013	876,872	23		
2014	1,781,984	31		
2015	440,650	25		
2016	1,223,430	25		

The GRT gas turbine has been de-rated to 20 MW due to cracks in the power turbine casing.

<sup>&</sup>lt;sup>2</sup> The WES gas turbine has been de-rated to 8 MW due to ongoing gearbox and power turbine issues.

2017	956,423	30
	,	
2018	514,835	24
2019	203,348	18
2020	138,726	15
2021	235,875	16
2022	85,762	13
2023	252,804	18
2024	85,970	11

Table 2 Operating Information – WES Gas Turbine			
Year	Energy Output (kWh)	Days in Operation	
2004	310,278	17	
2005	119,108	12	
2006	550,369	31	
2007	108,416	14	
2008	89,378	8	
2009	334,667	21	
2010	715,593	26	
2011	339,764	12	
2012	184,727	12	
2013	494,894	24	
2014	283,426	12	
2015	112,935	14	
2016	111,833	6	
2017	822,527	31	
2018	265,166	22	
2019	95,862	13	
2020	92,489	16	
2021	92,801	15	
2022	60,078	13	
2023	101,305	12	
2024	74,745	10	

c) No, it is not expected that Newfoundland and Labrador Hydro ("Hydro") would contribute to the costs to refurbish the WES and GRT gas turbine sites. The WES and GRT gas turbines are dispatched to provide standby and emergency generation, both locally and for the Island Interconnected System ("IIS"), and to minimize customer outages during scheduled maintenance on transmission, distribution and/or substation assets. The units are also dispatched routinely at the request of Hydro. Newfoundland Power receives a generation credit towards its billing demand charges from Hydro associated with the Company's thermal generating facilities.