Q. **Reference: Volume I, Section 6.2.2, pages 6.6–6.7; Volume III, Exhibit 14; and Volume II, Exhibit 4, Section 2.1.2.2, Tables 3 and 4**

The Application proposes to continue classifying Holyrood TGS generation costs (excluding fuel) on a test year forecast capacity factor basis and fuel costs as 100% energy.

a) State the 2027TY forecast capacity factor used to classify Holyrood TGS generation costs, show its calculation, and provide the resulting demand and energy percentages in comparison with the corresponding 2019TY values.

b) Reconcile the continued capacity-factor classification with the evidence that the Holyrood TGS now operates "primarily to provide system reliability and backup generation…" (Exhibit 4, page 6) and that units are held at minimum output of 70 MW per unit for system support rather than economic energy service, and explain why a resource retained principally for reliability during the Bridging Period is not classified predominantly as demand-related.

c) Quantify, for the 2027TY, the portion of forecast Holyrood TGS fuel consumption attributable to operating the units at minimum stable output for reliability purposes versus dispatch above minimum to serve energy requirements, and discuss whether the minimum-output portion of fuel is causally demand-related.

d) Provide alternative classification scenarios for Holyrood TGS generation and fuel costs (including a demand-classified minimum-load fuel scenario) with the resulting class revenue requirement impacts.

e) Confirm the class revenue requirement impact of the 563 kWh per barrel conversion factor relative to the 2019TY value of 583 kWh per barrel, and identify which classes bear the efficiency degradation associated with minimum-output operation.

A. **a)** The 2027 Test Year forecast capacity factor used to classify Holyrood Thermal Generating Station ("Holyrood TGS") generation costs, excluding fuel costs, is 11.16%.

The forecast capacity factor is calculated by dividing the forecast net generation from Holyrood TGS by the annual net production capability of the generating station, as follows:

Forecast Capacity Factor = Forecast Net Production ÷ (Net Capacity × Hours in a Year)

Forecast Capacity Factor = 455,225,658 kWh ÷ (466 MW × 1000 × 8,760 Hours)

Forecast Capacity Factor = 11.16%

The 2027 Test Year forecast net production of 455.2 GWh is provided in Schedule A-V, while Schedule F 4.3 presents the capacity factor calculation using net production of 455,225,658 kWh, net capacity of 466 MW, and 8,760 hours.

The capacity factor represents the percentage of Holyrood TGS generation costs, excluding fuel, classified as energy-related. The remaining percentage is classified as demand-related.

Table 1 compares the resulting 2027 Test Year classification percentages with the corresponding 2019 Test Year values.

Table 1: Classification Percentages

Test Year	2019TY	2027TY	Change
Capacity Factor/Energy Classification	15.74%	11.16%	-4.58%
Demand Classification	84.26%	88.84%	4.58%

This classification applies only to Holyrood TGS generation costs excluding fuel. Holyrood TGS fuel costs continue to be classified as 100% energy-related, consistent with Hydro's proposed continuation of the cost-of-service treatment described in Chapter 6 of Newfoundland and Labrador Hydro's ("Hydro") 2026 General Rate Application ("GRA").

b) For Cost of Service purposes, as Holyrood's forecast capacity factor declines, a greater proportion of its non-fuel generation costs is allocated to demand. The capacity factor for the 2019 Test Year was 15.74% compared to 11.16% proposed in the 2027 Test Year,

resulting in a higher proportion of costs being allocated to demand as usage of the facility declines.

c) The capacity of Holyrood TGS is required to be available to support the Island Interconnected System during the "Bridging Period."[1] During this period, the main function of Holyrood TGS is to provide a backup of the loss of the Labrador-Island Link ("LIL") bipole.[2] In addition, Holyrood TGS supports operating reserves and can provide an energy injection into the Island Interconnected System during periods of drought (i.e., sustained periods of below average inflows), at times operating above minimum, if required. Under normal operating conditions, to balance cost versus reliability, Hydro has been endeavouring to maintain two units online operating at minimum during the winter peak load period, with one unit in standby.

From a GRA perspective, the production plan is produced utilizing average Island inflows, not below average inflows that could be experienced during a drought period. Therefore, additional thermal injection to support reservoir storage is not a consideration of the GRA filing. Rather, it is assessed based on the number of Holyrood TGS units required to be online to support system reliability until new generation can be approved, constructed, and reliability integrated into the Island Interconnected System, which is beyond the scope of the 2027 Test Year. Under normal operating conditions and average inflows, the energy injected into the system from Holyrood TGS production is a direct result of the reliability requirement. Therefore, the Holyrood TGS forecasted production, and therefore fuel consumption, in the 2027 Test Year is directly attributable to operating the units at minimum stable output for reliability purposes only.

The question arises whether the fuel costs associated with minimum stable output should be classified as demand-related. Hydro reviewed this issue in its Cost of Service

[1] Hydro considers the Bridging Period to be from the present to 2030, or until such time that sufficient alternative generation is commissioned, adequate performance of the LIL is proven, and generation reserves are met. During the Bridging Period, the system would rely primarily on existing sources of generation capacity to maintain reliability while new generation capacity is being built.
[2] Hydro protects against the loss of the LIL bipole such that if it were to occur, there is sufficient generation to restore customers within 30 minutes.

Methodology Application in 2025.[3] Hydro concluded, based partly on a memorandum by Christensen Associates Energy Consulting,[4] that continuing to treat these fuel costs as energy-related was justified on the basis of past practice in the jurisdiction, industry practice, and the likely small share of fuel costs, which limits the cost allocation impacts of moving to demand- related allocation.

d) Please refer to Hydro's response to CA-NLH-154 of this proceeding for alternative classifications of fuel, which shows the allocation of fuel costs using the forecast 2027 capacity factor and assuming 100% demand classification. These scenarios show the range of values resulting from different classifications of Holyrood TGS fuel.

e) The 2027 Test Year forecast includes Holyrood TGS net production of approximately 455.2 GWh, a No. 6 fuel conversion factor of 563 kWh per barrel, forecast fuel consumption of approximately 808,571 barrels, and a No. 6 fuel cost of $80.40 per barrel (Volume 1 - Schedule A-V).

To determine the impact of the proposed 563 kWh per barrel conversion factor relative to the 2019 Test Year value of 583 kWh per barrel, Hydro held the 2027 Test Year Holyrood TGS production and forecast fuel price constant. The calculation is provided in Table 2.

Table 2: Holyrood TGS Production and Fuel

Calculation	563 kWh/bbl	583 kWh/bbl	Variance
Holyrood Production (kWh)	455,225,658	455,225,658	--
Conversion Factor (kWh/bbl)	563	583	(20)
Calculated Fuel Consumption (bbl)	808,571	780,833	27,738
No. 6 Fuel Price ($/bbl)	80.40	80.40	--
No. 6 Fuel Cost ($ Million)	65.01	62.78	2.23

[3] "Cost of Service Methodology Application," Newfoundland and Labrador Hydro, August 22, 2025, sch. 1, sec. 2.10. http://www.pub.nl.ca/applications/NLH2025CostOfServiceMethodology/app/From%20NLH%20-%20Application%20for%20Cost%20of%20Service%20Methodology%20-%202025-08-22.PDF

[4] "Cost of Service Methodology Application," Newfoundland and Labrador Hydro, August 22, 2025, att. 5. http://www.pub.nl.ca/applications/NLH2025CostOfServiceMethodology/app/From%20NLH%20-%20Application%20for%20Cost%20of%20Service%20Methodology%20-%202025-08-22.PDF

The approximate allocation of the $2.23 million impact on revenue requirement is shown in Table 3, based on Schedule G 1.2 (no rate mitigation):

Table 3: Revenue Requirement Impact[5]

Customer Class	563 kWh/bbl ($ Million)	583 kWh/bbl ($ Million)	Variance ($ Million)	% of Total
Newfoundland Power	1,009.62	1,007.73	**1.89**	**84.84%**
Island Industrial Customers	77.08	76.89	**0.19**	**8.65%**
Hydro Rural Interconnected Customers	119.42	119.28	**0.15**	**6.51%**
Total	**1,206.13**	**1,203.90**	**2.23**	**100%**

The efficiency degradation associated with operating Holyrood TGS units at minimum output is borne by all Island Interconnected System Customer classes.

[5] Numbers may not add due to rounding.