

1 Q. **Reference: Volume II, Perform Boiler Condition Assessment and Miscellaneous Upgrades**
2 **(2027) – Holyrood**

3 The estimated cost is \$10,119,700. Hydro states that this annual project began in 2017 and that
4 the 2027 scope includes replacement of Unit 3 High-Pressure Heater #6.

5 a) Please itemize the \$10,119,700 by condition-assessment work and each named asset
6 replacement, including the cost of Unit 3 High-Pressure Heater #6. Identify internal
7 labour, contractor, material, contingency, and other costs.

8 b) For each replacement, provide remaining life to March 31, 2030; the cost and risk of
9 proceeding in 2027, condition-based deferral, and an in-service failure; and whether the
10 work is required for safe and reliable steam operation in the winters of 2027/28 and
11 2028/29.

12 c) Please explain the capitalization basis for the condition-assessment work and distinguish
13 any operating expense.

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16 A. a) Please refer to Table 1 for an itemized listing of the project budget estimate for the
17 Perform Boiler Condition Assessment and Miscellaneous Upgrades (2027) – Holyrood
18 project.

Table 1: Project Estimate Breakdown – Perform Boiler Condition Assessment and Miscellaneous Upgrades (2027) – Holyrood

Item	Description	Cost Type	2027(\$000)
Condition Assessment	Non-Destructive Inspection	Contract	330.0
	Analysis and Reporting	Contract	70.0
Refurbishment and Replacement	Air Heater Baskets Procurement and Replacement	Contract	500.0
	Gas Outlet Expansion Joints Procurement and Replacement	Contract	1,040.0
	Unit 3 High-Pressure Heater No. 6 Procurement (2027 Portion ¹)	Contract	700.0
	Unit 3 High-Pressure Heater No. 6 Installation	Contract	350.0
	Boiler Cladding and Insulation Replacement	Contract	275.0
	Boiler Refractory Repairs	Contract	100.0
	Labour and Materials for Refurbishment and Replacement of Boiler Internal Components ²	Contract	4,410.0
	Project Management, Engineering and Construction Labour	Internal Labour	804.6
Material Supply	Owner's Supplied Materials	Material (Inventory/P.O.)	130.0
Interest and Escalation			539.1
Contingency			871.0
Total			10,119.7

- 1 **b)** Newfoundland and Labrador Hydro ("Hydro") evaluates each asset based on its condition
2 and remaining useful service life. The costs and risks associated with proceeding in 2027,
3 condition-based deferral, or in-service failure were considered as part of the project scope
4 and timing. While the specific impact varies by asset, deferral generally increases the
5 likelihood of equipment failure, unplanned or forced outages, and emergency repairs. The
6 proposed replacements are considered necessary to maintain safe and reliable operation
7 through the winters of 2027–2028 and 2028–2029. High-pressure steam systems pose
8 significant safety and reliability risk if deficiencies are not addressed when identified; Hydro
9 therefore believes that deferral of corrective measures on identified deficiencies would be
10 imprudent and inconsistent with safe and reliable operation of the asset.

¹ Air Heater No. 6 was ordered under the Perform Boiler Condition Assessment and Miscellaneous Upgrades (2026) – Holyrood project. It is forecast that 35% of the heater cost will be under the 2026 project, and 65% in 2027.

² This includes items such as tubes, tees and elbows, and high-pressure piping, and associated work such as scaffolding and heat insulation removal and re-installation.

1 c) Hydro capital assets may be subject to major inspections that occur at regular intervals
2 over the useful life of an asset to maintain the safety and reliability of the facility or plant
3 or to meet certain safety certification or government regulation. Each material instance of
4 a major inspection is considered to be a separate component of property, plant and
5 equipment and are capitalized where they are required for the continued operation of an
6 asset, result in future economic benefit for more than one year, and the cost of the item
7 can be measured reliably. If the cost of a new inspection is recognized in the carrying
8 amount of property, plant and equipment, then the remaining carrying amount of a
9 previous inspection must be derecognized.

10 Inspection activities are evaluated as either Level 1 or 2 and assessed in conjunction with
11 the materiality of the activity to determine whether such activities are to be capitalized:

12 i. A Level 1 Condition Assessment is a walk through, visual, external
13 inspection providing sufficient detail by the assessor to clearly define
14 the work required to address identified deficiencies, to enable an
15 accurate cost estimate to be made, and a clear description to be
16 provided of the scope of the restoration/repairs/replacement/ removal
17 for the work to be done. Where the assessor does not have the ability
18 to clearly define the repair, it would indicate that the deficiencies
19 require more rigorous assessment or specialist knowledge and would be
20 flagged by the Level 1 Assessor for a Level 2 Assessment to be
21 undertaken. Level 1 inspection activities are generally not capitalized.

22 ii. A Level 2 Condition Assessment is an assessment undertaken by a
23 professional or certified specialist having the knowledge, skill and
24 experience in the design, construction and operation of the facility type
25 and may require knowledge and use of specialized equipment in the
26 assessment of the facility. Level 2 Condition Assessments are more
27 thorough in comparison to Level 1 and often involve the dismantling of
28 the equipment. Upon completion of a Level 2 condition assessment the
29 asset would be either replaced, refurbished or a detailed listing of the

1 required replacement parts would be developed. Level 2 inspection
2 activities are generally capitalized.

3 In the case of the project to Perform Boiler Condition Assessment and Miscellaneous
4 Upgrades, a specialized boiler service contractor has been engaged to perform all boiler
5 and high-energy piping assessments and upgrades. This project has been integral in
6 supporting the safe and reliable operation of steam supply systems at the Holyrood
7 Thermal Generating Station. The assessment is related to internal components of the
8 boilers and associated steam supply systems, and maintain reliability by discovering
9 damaged or deteriorated components that are at risk of failure. These criteria qualify
10 this work as a Level 2 Condition Assessment and it is therefore eligible for capitalization
11 per Hydro's capitalization policies.