

1 Q. **Reference: Schedule 5 2024 Capital Expenditures Overview, page B-46-47.**

2 Hydro states that Replace Transformer T7 - Holyrood is a one-year project (2020) that has  
3 extended into 2024 with the variances in overall project expenditures attributed to higher-than-  
4 originally estimated transformer transportation costs. In its response to Request for Information  
5 NP-NLH-054 of its 2020 Capital Budget Application, Hydro provided a table showing the Project  
6 Scope Cost Breakdown to Replace Transformer T7 - Holyrood Terminal Station Project.

7 a) Please provide an updated to that table by adding a column that shows the actual  
8 breakdown of project expenditures for comparison with project budget.

9 b) Due to the difficulties experienced in executing this project what lessons were learned  
10 from the relocation of Transformer T31 from Churchill Falls to Holyrood?

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13 A. a) Please refer to Table 1 showing the breakdown of project expenditures and forecast for  
14 comparison with the project budget.

**Table 1: Project Scope Cost Breakdown  
to Replace Transformer T7 – Holyrood Terminal Station Project<sup>1</sup>  
(\$000)**

Item	Original Budget Estimate	Expenditures and Forecast to May 31, 2024
Remove and Dispose of Holyrood T7	116.0	394.8
Remove Churchill Falls T31	161.5	250.0
Transportation of T31 to Holyrood	135.0	1,700.0
Refurbish, Install and Commission T31	1,382.2	1,192.2
Complete Protection and Metering Upgrades	270.4	350.0
Complete Commissioning with Holyrood T6 and T8	48.9	50.0
<b>Subtotal</b>	<b>2,114.0</b>	<b>3,937.0</b>
Project Management/Planning/Common Activities <sup>2</sup>	185.2	223.3
IDC <sup>3</sup> /Contingency	378.9	290.5
<b>Total Project</b>	<b>2,678.1</b>	<b>4,450.8</b>

- 1           **b)** Valuable lessons were learned from the difficulties experienced in executing this project.  
2           These lessons will be applied to future projects involving the transportation of large  
3           equipment, such as transformers, including:
- 4           ● Additional planning should be completed during the budget estimate phase to better  
5           assess the risks and constraints associated with alternative transportation routes (e.g.,  
6           roads, bridges, ferries, rail, etc.), for better selection and estimating of the preferred  
7           route; and
  - 8           ● Critical equipment dimensions and weight should be verified with field measurements  
9           and confirmed to be within transportation route limitations. For the project to replace  
10          Holyrood Transformer T7, the manufacturer’s as-built drawings were available for the  
11          transformer, but they did not accurately show the transformer height for shipment, and  
12          the transformer was unable to be accepted on the planned marine ferry.

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<sup>1</sup> Engineering judgement was used to categorize the actual expenditures and forecast into the activities listed in this table, as the activities in Hydro’s work breakdown structure for this project do not align one-to-one with the item categories in this table.

<sup>2</sup> Other project activities (not confined to a single project milestone).

<sup>3</sup> Interest during construction (“IDC”).