

1 Q. **Reference: Application, 2024 Capital Expenditures Overview**

2 Has Hydro experienced a significant increase in transformer costs? Please provide a table  
3 showing average unit transformer costs in each of the past 5 years, and forecast for each of the  
4 next 5 years.

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7 A. The five-year historical and the forecast average unit cost of Newfoundland and Labrador  
8 Hydro’s (“Hydro”) distribution transformers through 2029 are shown in Table 1. Hydro has  
9 forecast future expenditures for its distribution transformers based on the supply agreement  
10 with the transformer manufacturer, with cost escalation applied.

11 The significant cost increase beginning in 2022 is due to a combination of supply chain issues  
12 associated with the COVID-19 pandemic, increased demand, and geopolitical volatility, a new  
13 supply agreement with the transformer manufacturer, and a change in the design specification  
14 of distribution transformers to align with that used by Newfoundland Power Inc.

**Table 1: Historical and Forecast Average Unit Cost  
Distribution Transformers (2019–2029)**

Year	Average Unit Cost (\$)
2019	3,648
2020	3,563
2021	3,724
2022	7,751
2023	7,977
2024	8,256
2025	8,487
2026	8,725
2027	8,987
2028	9,247
2029	9,515

1 The five-year historical and the forecast average unit cost of Hydro’s power transformers  
2 through 2029 are shown in Table 2. Please note that the years 2020–2022, and 2027–2029 are  
3 not included in Table 2 as no power transformers were installed or are planned for installation  
4 during those years.

5 Typically, Hydro forecasts future expenditures for its power transformers based on historical  
6 pricing, with cost escalation applied, as is the case for one of the units noted for 2026. The other  
7 units identified for 2024, 2025, and 2026 are the actual cost as their order has been placed.  
8 Hydro has observed a cost increase for these transformers in recent years, likely due to supply  
9 chain issues associated with the COVID-19 pandemic. As the cost of a power transformer is  
10 highly dependent on sizing, voltage, and configuration, the average cost per unit varies  
11 significantly due to each being a bespoke (i.e., custom-designed) product.

**Table 2: Historical and Forecast Average Unit Cost  
Power Transformers (2019–2029)<sup>1</sup>**

<b>Year</b>	<b>Average Unit Cost (\$000)<sup>2</sup></b>	<b>Unit Quantity</b>
2019	107	1
2023	982	1 <sup>3</sup>
2024	3,221	1
2025	3,142	1
2026	4,065	2

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<sup>1</sup> Table 2 excludes power transformers identified for purchase as part of major projects, such as Unit 8 Installation - Bay d'Espoir and Avalon Combustion Turbine.

<sup>2</sup> The average unit cost reflects the year in which power transformer installation occurs, which is typically two to three years after the issuance of the purchase order.

<sup>3</sup> This excludes the \$984,000 paid for the purchase of a used unit.