

2025 Capital Budget Application

Overview Presentation

August 13, 2024



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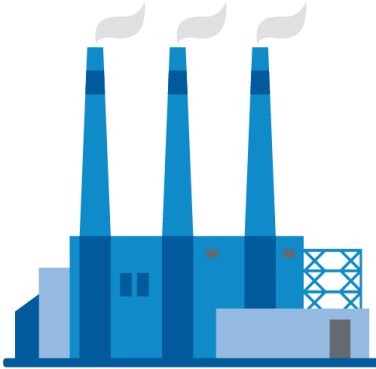
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BACKGROUND

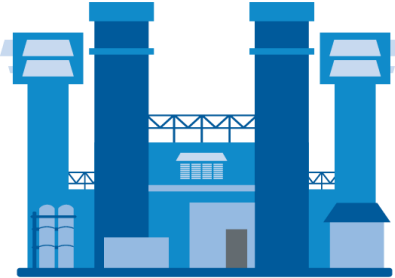
System Overview



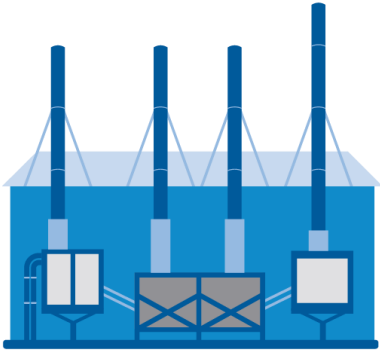
9 HYDROELECTRIC GENERATING STATIONS



1 OIL-FIRED PLANT



4 GAS TURBINES



23 DIESEL GENERATING STATIONS

69 HIGH-VOLTAGE TERMINAL STATIONS

24 LOWER-VOLTAGE INTERCONNECTED DISTRIBUTION SUBSTATIONS

MORE THAN **7,200km** OF TRANSMISSION & DISTRIBUTION LINES

Capital Investment Strategy



Invest responsibly in the electrical system to the benefit of customers



Balance system reliability, environmental responsibility, and customer cost



Evidence-based decision-making reflecting asset performance and operational and system requirements

Capital Plan Considerations

When considering the inclusion or deferral of capital projects in its capital plan, Newfoundland and Labrador Hydro (“Hydro”) reviews the following factors for the proposed scope of work:

Operational Risks

- What is the risk to individual assets?
- What is the criticality of the asset to the electrical system and Hydro Operations?

Cumulative Risk

- Hydro is managing risks across the system:
 - Reliability of new assets
 - Reliability of aging assets

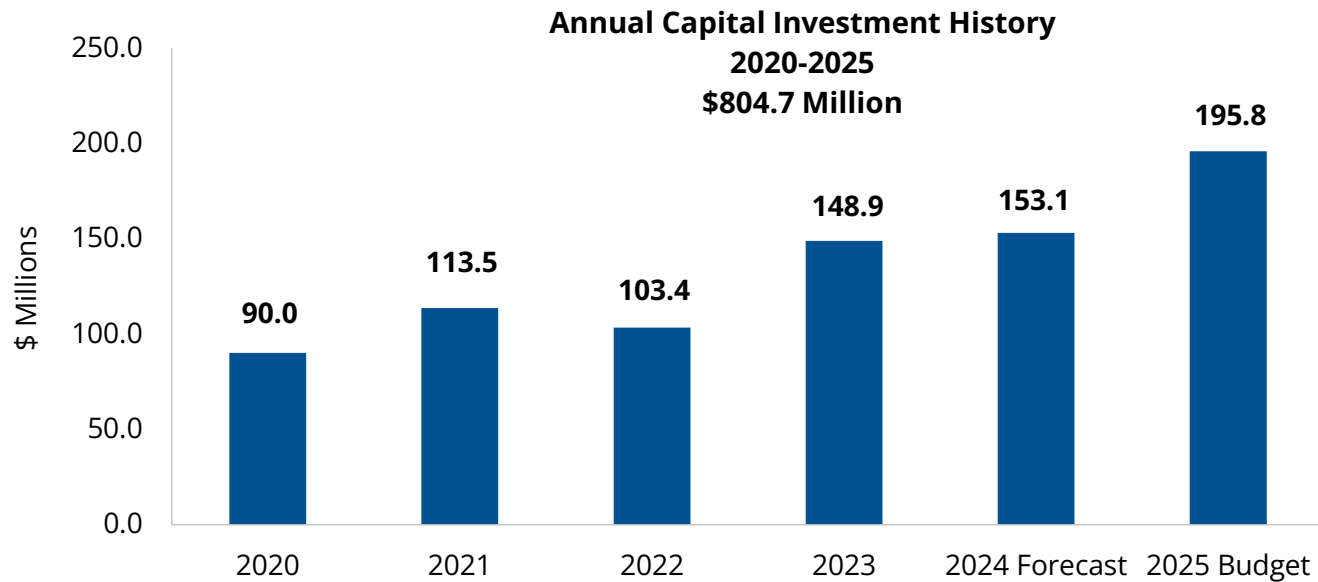
Ability to Execute

- Outage availability
- Resource availability (engineering and construction)
- Supply chain risks

Total Investment

- Hydro is cognizant of the rate impacts of capital investment on customers
- Hydro strives for an investment level with an appropriate balance between cost and reliability

Capital Investment History



- The annual capital investment history excludes capital contribution in aid of construction (“CIAC”) but does include the corresponding capital. It also excludes front-end engineering design costs related to future years and other adjustments.
- 2020 reflects a lower level of expenditures due to the impacts of the COVID-19 pandemic on work execution.
- The 2024 Forecast estimates expected capital expenditure based on May 2024 month-end reporting. The estimate is subject to change and change management processes will be utilized to update the forecast throughout the year.
- The capital plan outlook for 2025 differs from the 2025 Capital Budget Application (“CBA”) of \$135.7 million, as it includes all anticipated capital expenditures including approved and anticipated supplemental expenditures.

2025 CAPITAL BUDGET APPLICATION

2025 Capital Budget Overview

Key Takeaways

- 2025 Capital Budget represents a material increase in planned capital expenditures compared to recent years, driven by increased investment in asset renewal and a period of sustained high inflation in recent years.
 - The 2025 CBA proposed investment equates to 5.8% of the net book value of Hydro's regulated property, plant and equipment, and intangible assets.
 - Investments related to the renewal of existing core assets account for two-thirds of Hydro's planned 2025 capital expenditures.
- Impacts to customers will be limited as a result of rate mitigation; through to and including 2030, the Government of Newfoundland and Labrador ("Government") has committed to target domestic rate increases limited to 2.25% annually.

"It is in everyone's interest – customers, utilities, regulators, and policymakers – to ensure reliability investments are prioritized."

"Electricity in Canada: Always On," Electricity Canada, May 2, 2024.

2025 Capital Budget Overview

**\$135.7
Million**

~64% New Investments

- \$86.7 Million

~36% Continuing Investments

- \$49 Million
- Reflects multi-year projects/programs continuing from prior years

The total planned capital expenditure is \$195.8 Million

2025 Capital Budget Overview

Proposal Deferral, Cancellation, and Additions

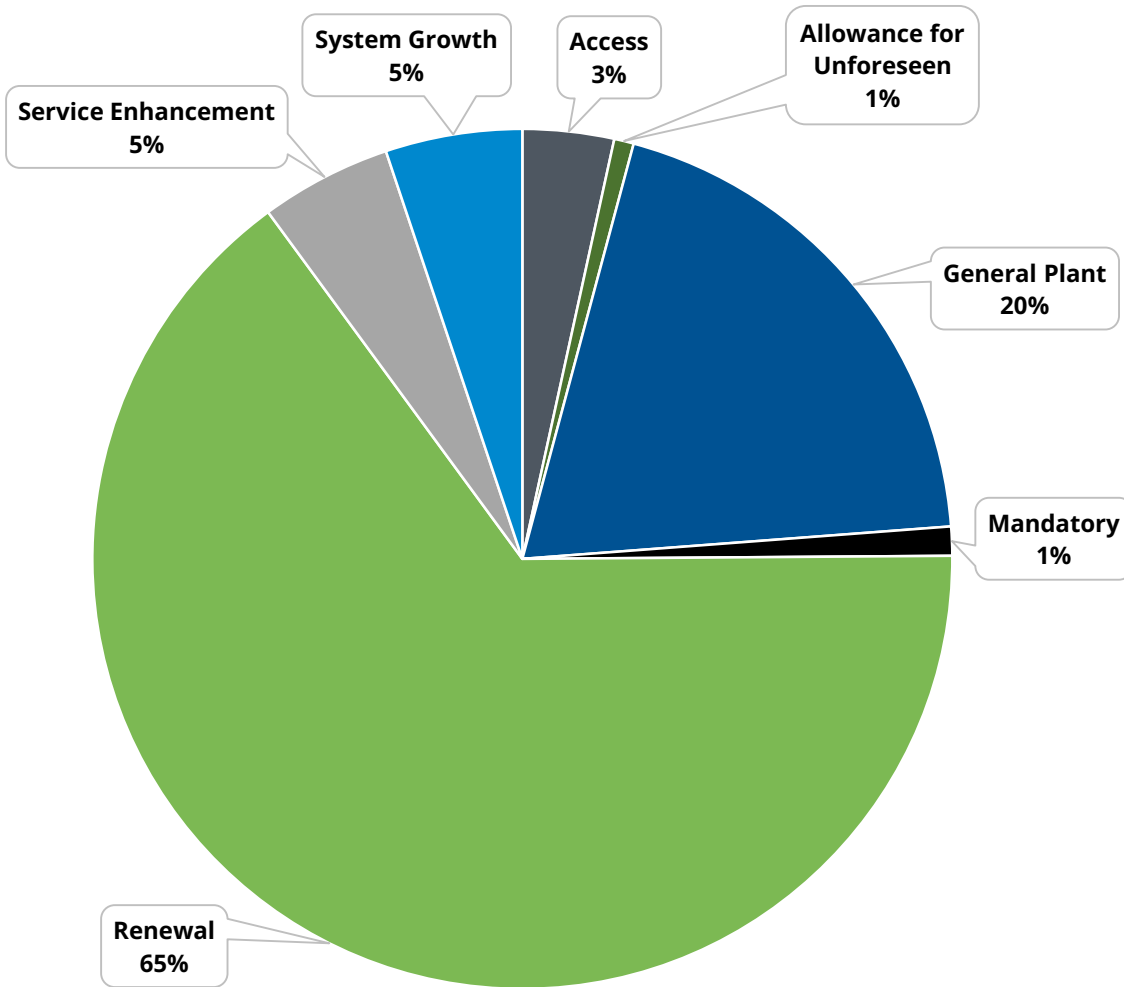
- Deferral considered for each proposal in light of the condition of the asset and its criticality to the system.
- Occasionally, proposals are cancelled that were previously identified in capital plans but are no longer required.
- Proposals may be added as a result of changing system conditions; the majority of additions in 2025 are a result of the extension of the operation of the Stephenville Gas Turbine as per the 2024 Resource Plan.

Projects Cancelled/Deferred: \$18.3 million (56 projects) from 2025

- 17 projects have been cancelled, removing \$4.8 million.
- 39 projects have been deferred to future years, removing \$13.5 million.

Projects Added: \$4.1 million (12 projects) to 2025

2025 Capital Budget by Investment Classification



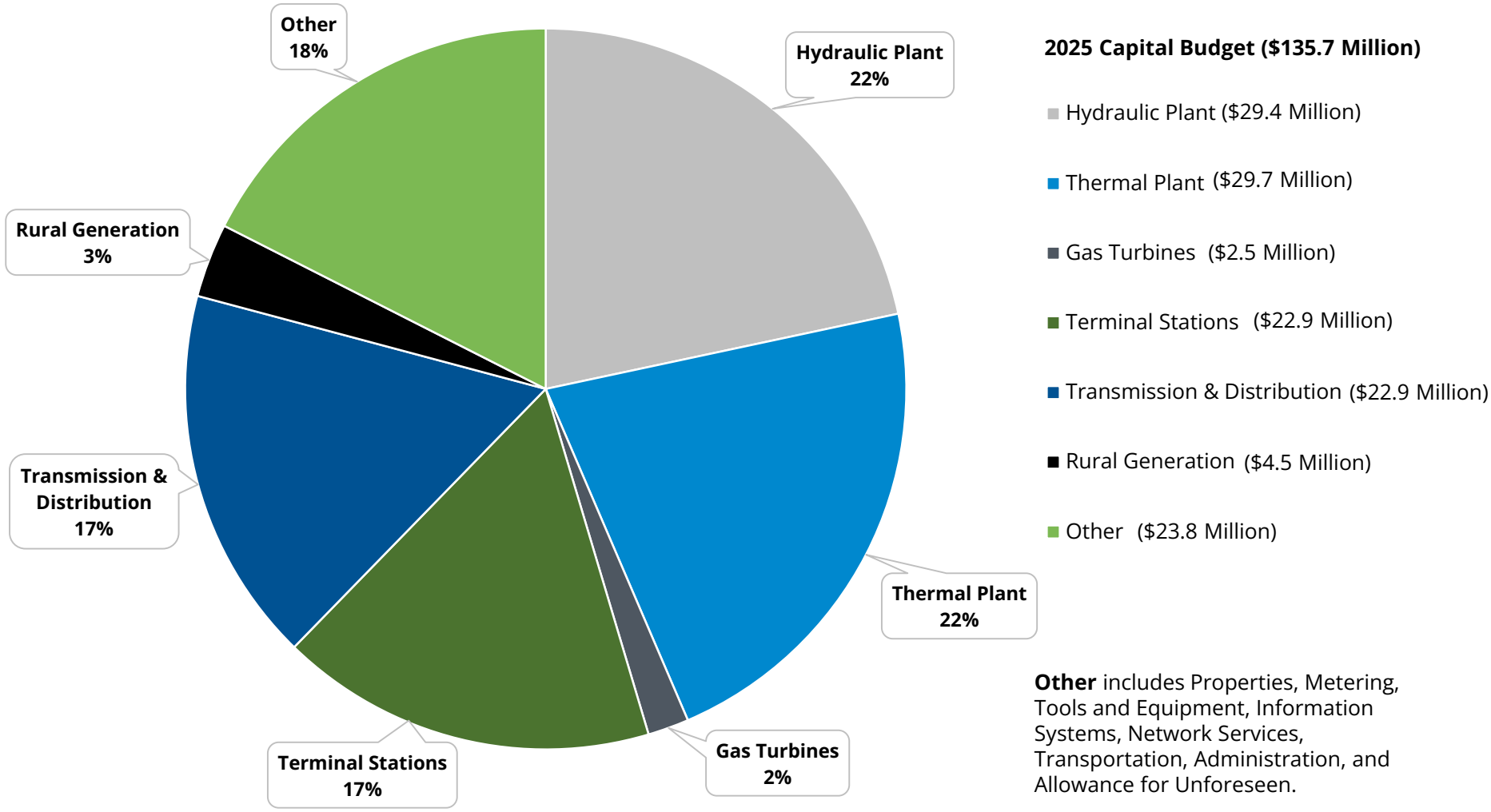
Hydro's Focus

- Classification of investments is reflective of capital plan considerations and asset management strategy drivers.

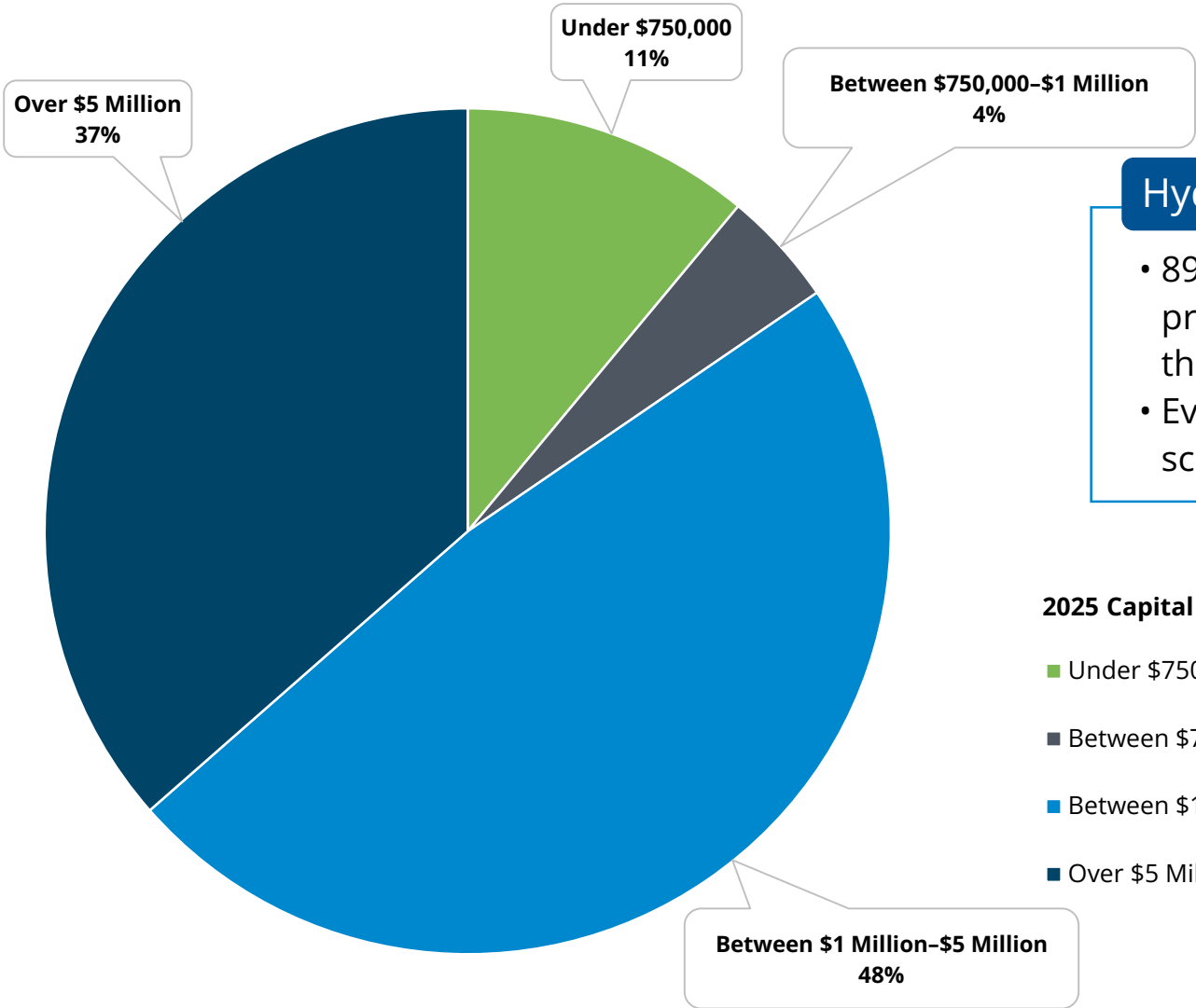
2025 Capital Budget (\$135.7 Million)

- Access (\$4.7 Million)
- Allowance for Unforeseen (\$1.0 Million)
- General Plant (\$26.6 Million)
- Mandatory (\$1.5 Million)
- Renewal (\$88.3 Million)
- Service Enhancement (\$6.7 Million)
- System Growth (\$7.0 Million)

2025 Capital Budget by Asset Classification



2025 Capital Budget by Materiality



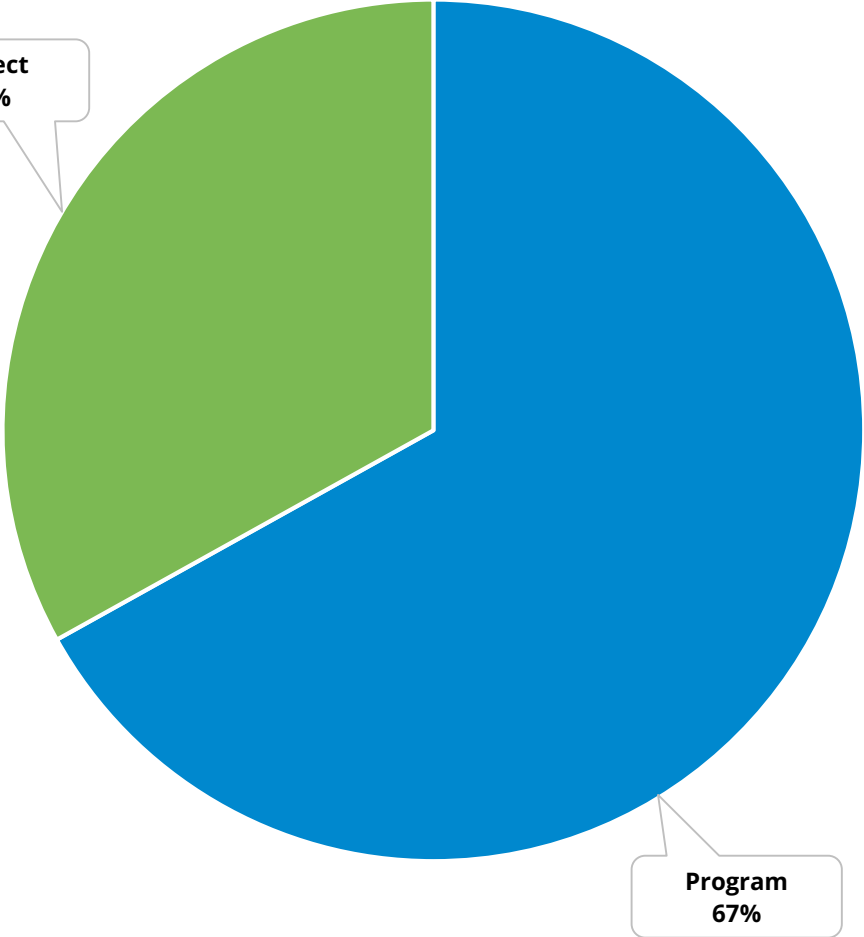
Hydro's Focus

- 89% of the new expenditures proposed for 2025 are over the \$750,000 threshold.
- Evidence filed for 51% of scopes of work proposed.

2025 Capital Budget (\$135.7 Million)

- Under \$750,000 (\$15.0 Million)
- Between \$750,000-\$1 Million (\$6.0 Million)
- Between \$1 Million-\$5 Million (\$65.2 Million)
- Over \$5 Million (\$49.5 Million)

2025 Capital Budget by Investment Type

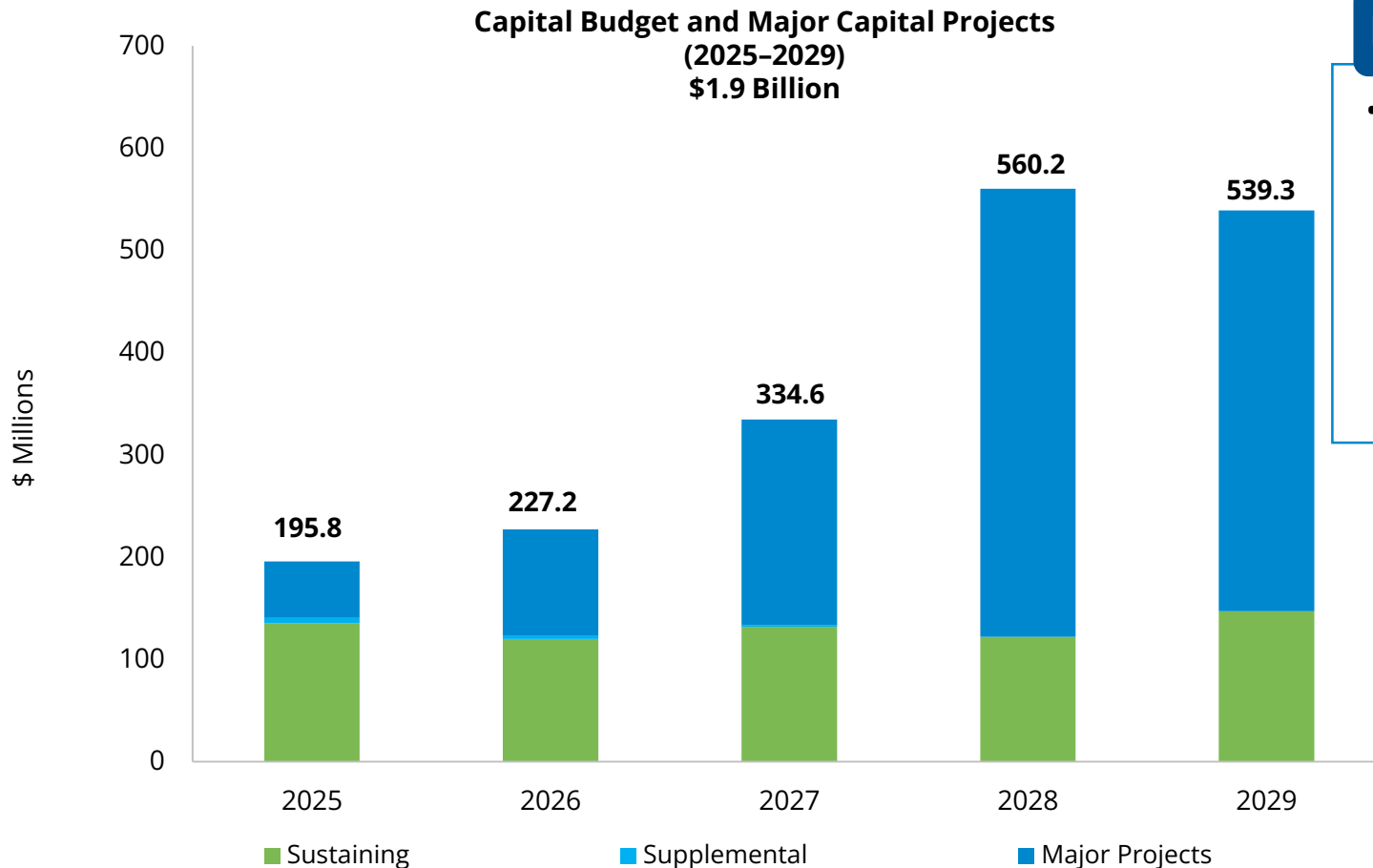


2025 Capital Budget (\$135.7 Million)

- Program (\$90.8 Million)
- Project (\$44.9 Million)

Program	<ul style="list-style-type: none">• Ongoing and repetitive• Based on asset class• No defined end date• Annually renewed budget that changes with volume
Project	<ul style="list-style-type: none">• Work on one well defined asset or group of assets• Schedule has defined start and stop dates• Budget is defined over a fixed period of time

Five-Year Capital Plan Outlook: 2025–2029



Hydro's Focus

- Continued focus on appropriate level of investment to manage operational risk and balance rate impacts.

- The capital plan outlook differs from the 2025 Capital Budget as it includes all anticipated capital expenditures such as supplemental applications, major projects, and CIACs.

RISK ASSESSMENT

Risk Assessment

Based on Safety,
Environment, and
Reliability per
Guidelines

Corporate Risk
Evaluation Matrix is
Aligned with ISO
31000

Assessed Risk
Pre- and Post-
Implementation of
Capital Work

Impact	Pre-Implementation Risk Scores				
Very High (5)		4	7	8	1
High (4)		1	11	19	1
Moderate (3)			4	4	11
Low (2)			1	2	1
Very Low (1)					
Likelihood	Very Low (1)	Low (2)	Moderate (3)	High (4)	Very High (5)

Impact	Post-Implementation Risk Scores				
Very High (5)	15	4			
High (4)	23	8	1		
Moderate (3)	16	3			
Low (2)	3	2			
Very Low (1)					
Likelihood	Very Low (1)	Low (2)	Moderate (3)	High (4)	Very High (5)

HOLYROOD THERMAL GENERATING STATION

Holyrood Thermal Generating Station

This report outlines Hydro's operational outlook, maintenance strategy, and capital plan for 2025–2030.

- Beginning with Hydro's 2013 CBA, the Board of Commissioners of Public Utilities ("Board") requested an overview in relation to the proposed Capital Expenditures for the Holyrood Thermal Generating Station ("Holyrood TGS").
- Given Hydro's commitment to having the Holyrood TGS available as a generation source until 2030 or alternate supply is available, the Board requested a more comprehensive report with its 2024 CBA, with an updated report to be provided with its 2025 CBA, outlining its planned operation and estimated capital costs over the full period.

Holyrood Thermal Generating Station

Holyrood TGS Capital Plan

- Hydro has committed to having the Holyrood TGS available as a generation source until 2030 or until such time an alternate supply is available.
- 2025 Investments included in this CBA is \$29.7 million.
 - Primarily generation-related work.
- Hydro's five-year plan includes \$124.1 million for the Holyrood TGS.
- Planned capital expenditures through 2030 for the Holyrood TGS is \$127.5 million.
- These expenditures are slightly more than those referenced in the Holyrood Condition Assessment report.
 - There is a refresh of the Condition Assessment report to be completed in 2024, which will be considered in detail relative to the transition scenarios and assumptions.

Hydro will continue to look for opportunities to save fuel at the Holyrood TGS, move units to cold standby as soon as system risks allow, and where possible, expedite new generation projects.

BAY D'ESPOIR HYDROELECTRIC GENERATING STATION

Bay d'Espoir Hydroelectric Generating Station

- Beginning with Hydro's 2025 CBA, the Board requested a report setting out its capital plan for the Bay d'Espoir facility, addressing anticipated and potential work and expenditures over the 2025–2034 period.
- This facility is a critical hydraulic generating asset, with an installed capacity of 613.4 MW generating an average of 2,672 GWh of energy annually (~41% of Hydro's average annual Island energy sales).
 - Provides continuous base-load generation, as well as unit dispatch to meet higher demand at system peaks.

To ensure these assets continue to be managed efficiently, Hydro plans and schedules capital investments to minimize impacts to generation availability while maximizing the useful life of the assets.

Bay d'Espoir Hydroelectric Generating Station

Bay d'Espoir Capital Expenditure Outlook – 2025–2034

2025–2029

- Primarily renewal-driven capital.
- Total investment of approximately \$251.4 million; average annual capital expenditure of \$50.3 million.
 - This total excludes anticipated Major Project expenditures associated with Bay d'Espoir Unit 8 Installation.

2030–2034

- Primarily represent time-based capital interventions.
 - Subject to change based on planned and future condition assessments, routine maintenance, and inspection activities.
- Investment of approximately \$15.8 million; average annual capital expenditure of \$3.1 million.

Hydro remains committed to completing regular routine inspections, overhauls, and condition assessments in Bay d'Espoir to ensure that the most accurate asset information is available for consideration in the management of the province's power grid.

SPECIFIC INVESTMENT HIGHLIGHTS

Investments Over \$5 Million

Hydro Continues to Manage its Investments to Ensure a Balance of Cost and Reliable Service

Hydro is Proposing Six Projects/Programs in the 2025 CBA in this Materiality Category

Project/Program	2025 Budget (\$ Million)	Total Budget (\$ Million)
Overhaul Turbine and Valves - Unit 3 - Holyrood	16.0	16.0
Distribution System In-Service Failures, Miscellaneous Upgrades and Street Lights	6.4	6.4
Rewind Stator – Hinds Lake	5.2	14.9
Upgrade Worst-Performing Distribution Feeders	2.7	8.9
Replace Light- and Heavy-Duty Vehicles	2.7	7.5
Replace Diesel Gensets	0.4	6.2

Investments Over \$5 Million

Overhaul Turbine and Valves - Unit 3 - Holyrood

- Hydro is proposing to complete the nine-year overhaul of the turbine and the three-year overhaul of the valves for Unit 3.
- The program scope also includes the remediation of a crack in the lower steam chest of the turbine.¹
- Unit 3 turbine and turbine valves were last performed in 2016 and 2022, respectively. As such, according to the established overhaul cycles, an overhaul is required in 2025.

¹ Cost associated with the steam chest welding repair is estimated to be \$4 million.

Investments Over \$5 Million

Rewind Stator – Hinds Lake

- Hydro is proposing a two-year project to replace the stator winding and install online monitoring equipment to the 75 MW Hinds Lake generating unit.
- The generating unit at Hinds Lake is 44 years old and the winding is original to the unit.
- Visual inspection and electrical testing confirm that the stator winding has deteriorated and replacement is required to ensure continued safe and reliable operation of the unit.

Investments Over \$5 Million

Upgrade Worst-Performing Distribution Feeders

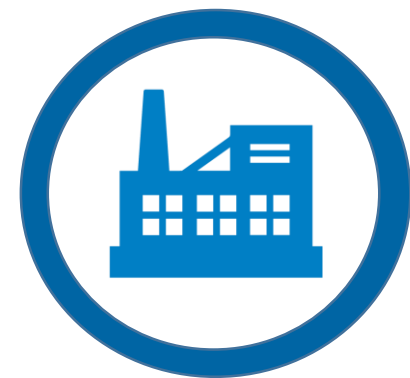
- Hydro is proposing to improve the reliability performance of English Harbour West Line 1 (EHW-L1) based on SAIDI, SAIFI, and CHI performance, as well as feeder condition.
- EHW-L1 feeder also selected for upgrade under the Renew Distribution Feeders Program.
- In 2025, Hydro has combined the scope of the two programs for completion under the Upgrade Worst-Performing Distribution Feeders Program.
- EHW-L1 has several deteriorated poles, cross arms, damaged conductor spans, substandard primary conductors and substandard insulators which contribute to the feeder's reliability performance.

Labrador Interconnected Investments



Total Newly Proposed Labrador Investment = ~\$4.8 Million

- Asset Renewal Programs (\$3.3 Million)
- Access Programs (Meters, Extensions) (\$1.5 Million)



Specifically Assigned Investments

**Total Specifically Assigned Investments = \$1.0 Million
in 2025**

- Circuit Breaker and Disconnect Replacement (Tacora: < \$0.1 Million)
- Transformer Protection Relay Replacement (Braya: \$0.4 Million)
- Terminal Station Control Building Fire Protection (Vale: \$0.6 Million)
- Circuit Breaker Overhaul (Teck: <0.1 Million)

CUSTOMER IMPACT

Revenue Requirement Impact

- 2025 capital investments, on a *pro-forma* basis, expected to result in increases of **approximately \$4.0 Million and \$15.6 Million in revenue requirement** for 2025 and 2026, respectively
- Relative to the 2019 Test Year, this represents an increase in Hydro's total revenue requirement of **approximately 0.6% and 2.4%** in 2025 and 2026, respectively
- Estimates do not reflect any potential reductions in operating and maintenance costs associated with the capital projects proposed

While Hydro's expenditures will increase, in part due to the infrastructure required to meet growing electricity needs, the impacts to customers will be limited as a result of the province's rate mitigation plan.

Through to and including 2030, the Government has committed to target domestic rate increases limited to 2.25% annually.

CONCLUSION

Conclusion

2025 Capital Budget

- Requesting approval for \$135.7 million of capital investment in its 2025 CBA.
 - 2025 Capital Budget represents a material increase in planned capital expenditures, driven by increased investment in asset renewal and a high inflation in recent years.
- Hydro believes all of the expenditures proposed in its 2025 CBA are prudent and necessary for the safe and reliable operation of the electrical system.
 - Deferred or cancelled over \$18 million in 2025.
- While Hydro's expenditures will increase, impacts to customers will be limited as a result of the province's rate mitigation plan.

The proposals presented within this application align with Hydro's mandate to provide safe, reliable and least-cost service in an environmentally responsible manner, and support Hydro's focus to maintain the level of reliability expected while ensuring prudent and reasonable expenditures.

Questions?

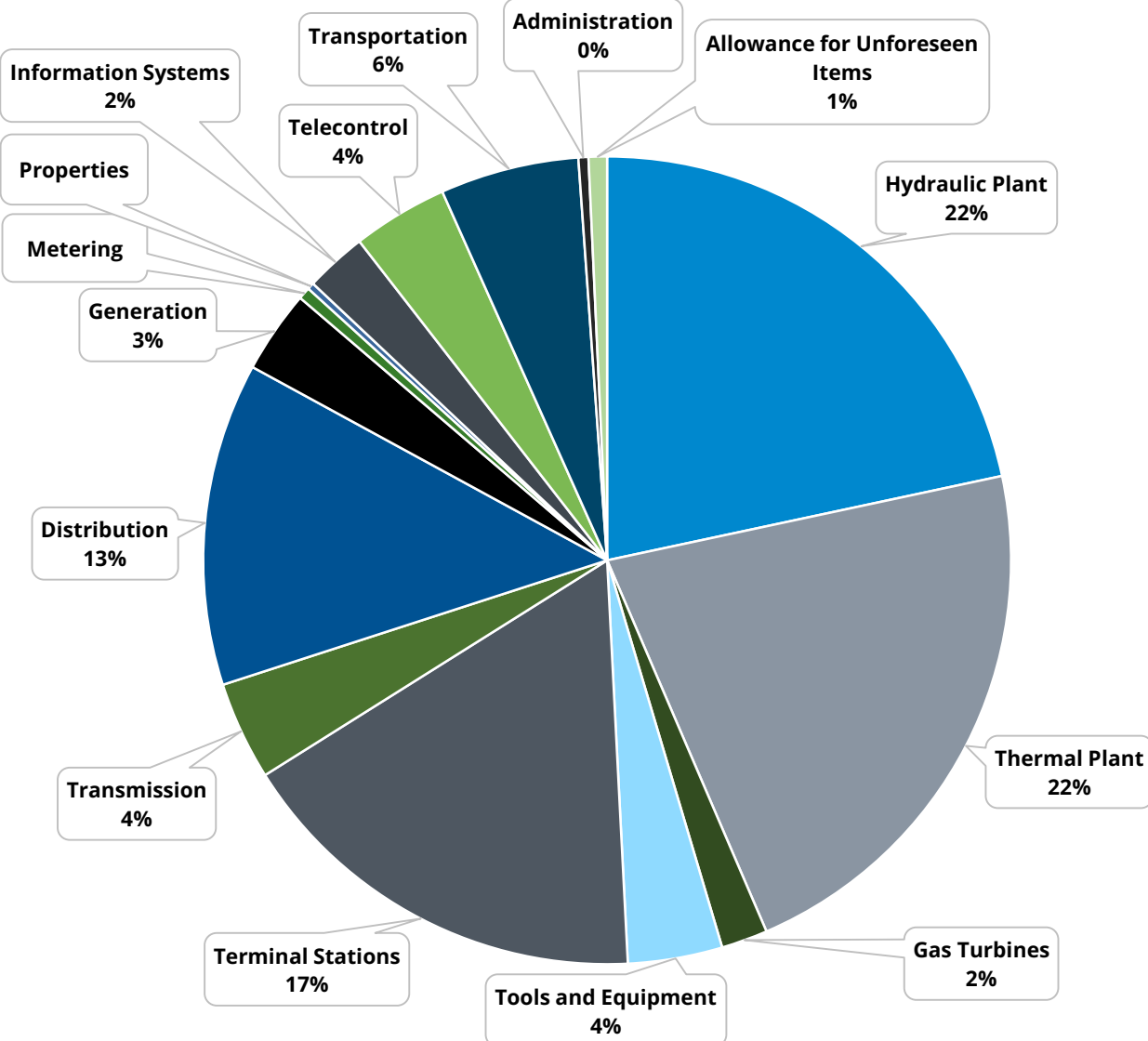


nlhydro.com



ADDITIONAL INFORMATION

2025 Capital Budget by Asset Classification



2025 Capital Budget (\$135.7 Million)

- Hydraulic Plant (\$29.4 Million)
- Thermal Plant (\$29.7 Million)
- Gas Turbines (\$2.5 Million)
- Tools and Equipment (\$5.1 Million)
- Terminal Stations (\$22.9 Million)
- Transmission (\$5.3 Million)
- Distribution (\$17.5 Million)
- Generation (\$4.5 Million)
- Metering (\$0.4 Million)
- Properties (\$0.7 Million)
- Information Systems (\$3.4 Million)
- Telecontrol (\$5.2 Million)
- Transportation (\$7.5 Million)
- Administration (\$0.5 Million)
- Allowance for Unforeseen Items (\$1.0 Million)