

2024 Capital Budget Application

Overview Presentation

August 8, 2023



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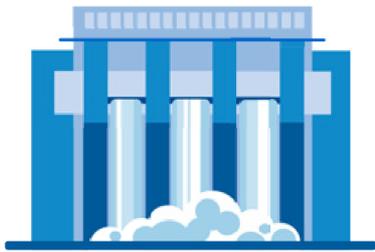
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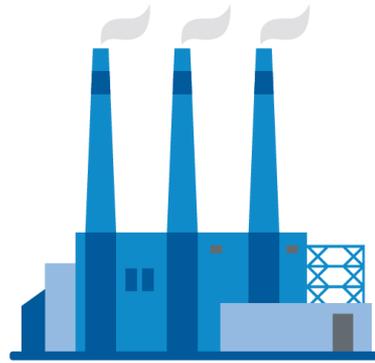
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BACKGROUND

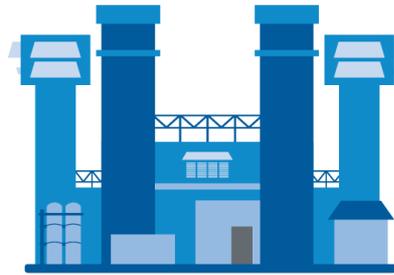
System Overview



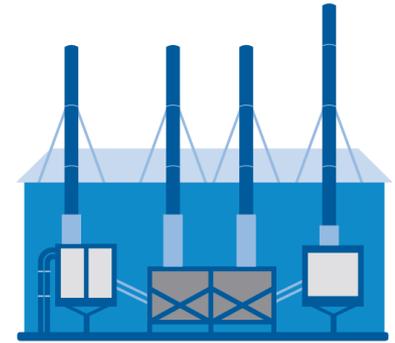
9 HYDROELECTRIC
GENERATING STATIONS



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, Hydro reviews the following factors with respect to 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:
 - Holyrood Thermal Generating Station (“Holyrood TGS”)
 - Penstocks

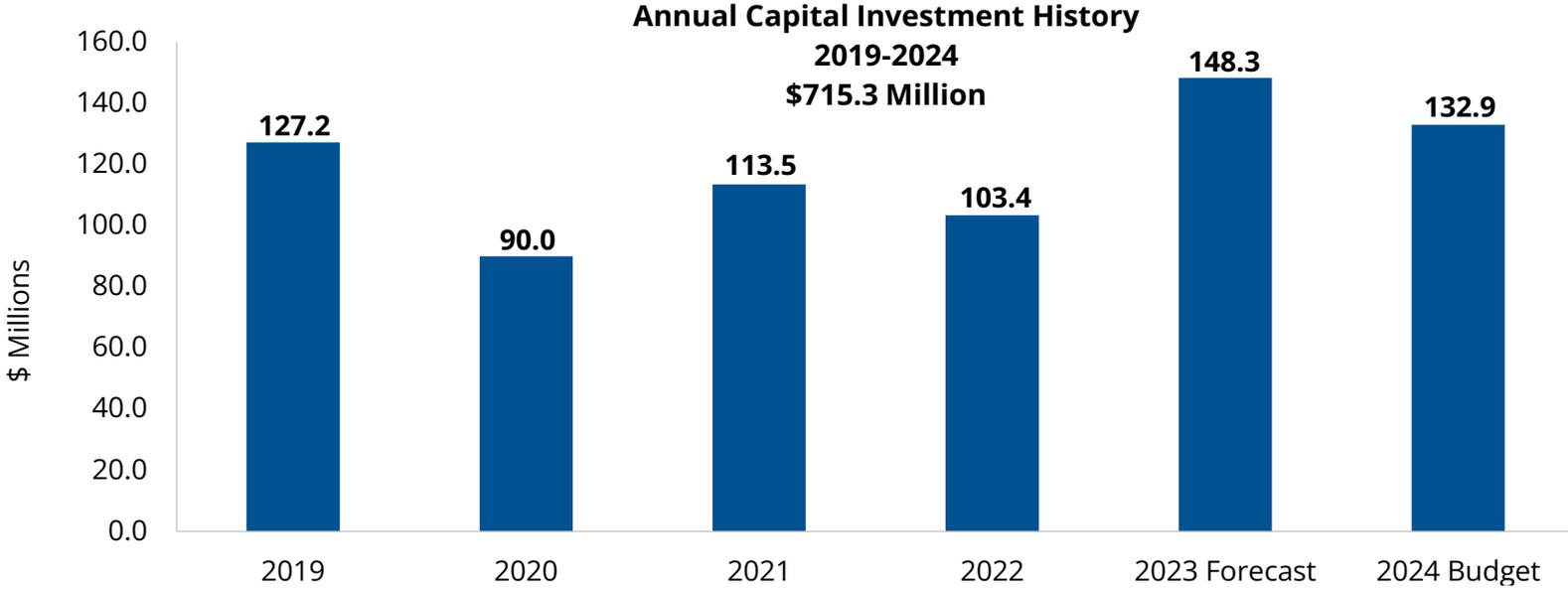
Ability to Execute

- 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 2023 Forecast is an estimate of expected capital expenditure based on June 2023 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 2024 differs from the 2024 Capital Budget Application (“CBA”) of \$97.3 million, as it includes all anticipated capital expenditures. The additional expenditures include approved supplemental applications such as the Bay d’Espoir Weld Refurbishment and Section Replacement (\$13.2 million) and the Holyrood Last Stage Blades (\$2.8 million). It also includes potential supplemental and major projects such as the Electric Vehicle Charging Stations (\$1.8 million) and the Long-Term Supply for Southern Labrador (\$17.8 million)

2024 CAPITAL BUDGET APPLICATION

2024 Capital Budget Overview

**\$97.3
Million**

~58% New Investments

- \$57.2 million

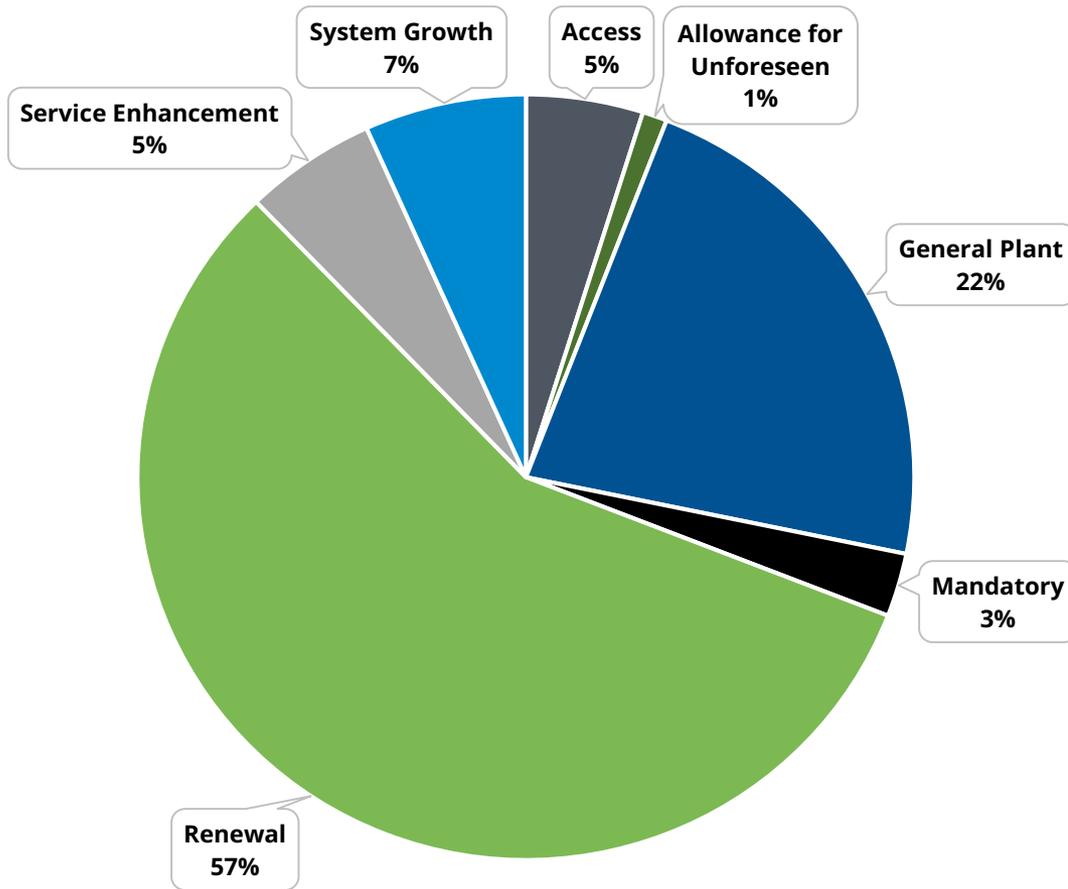
~42% Continuing Investments

- \$40.1 million
- Reflects multi-year projects/programs continuing from prior years

The total planned capital expenditure is \$132.9 million

Total planned 2024 capital expenditure anticipated to be recovered through customer rates is \$129.4 million

2024 Capital Budget by Investment Classification



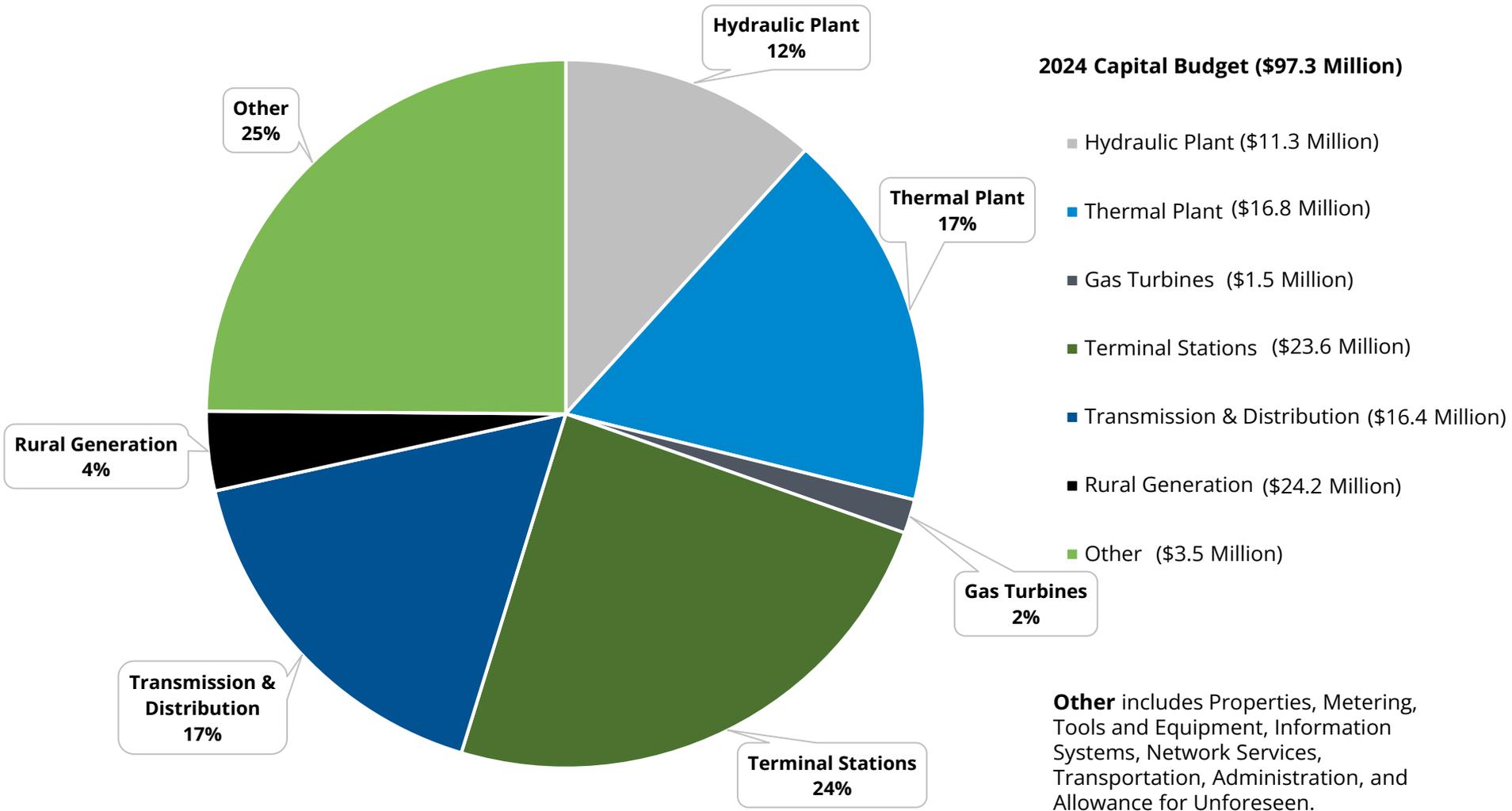
Hydro's Focus

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

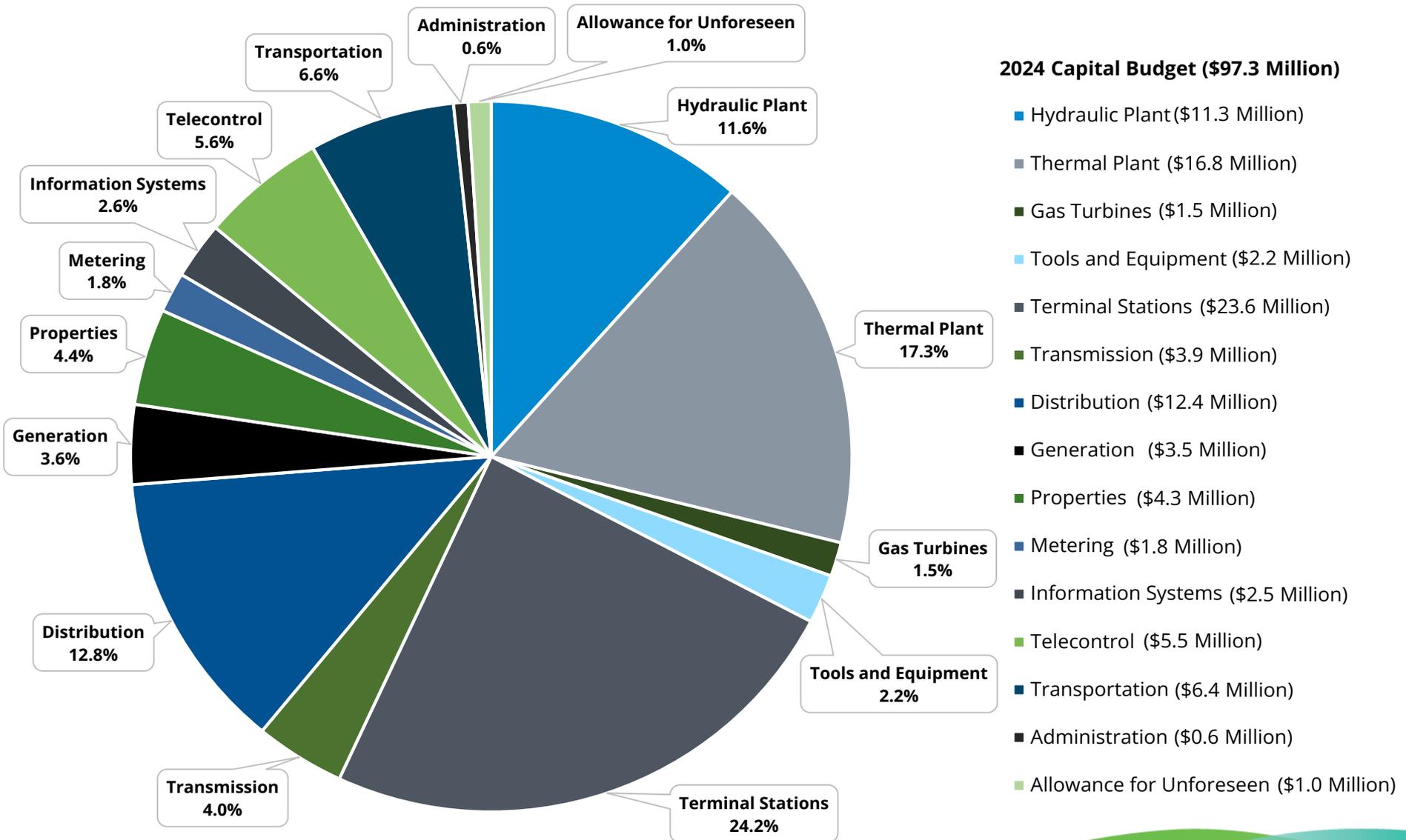
2024 Capital Budget (\$97.3 Million)

- Access (\$4.7 Million)
- Allowance for Unforeseen (\$1.0 Million)
- General Plant (\$21.7 Million)
- Mandatory (\$2.6 Million)
- Renewal (\$55.4 Million)
- Service Enhancement (\$5.3 Million)
- System Growth (\$6.6 Million)

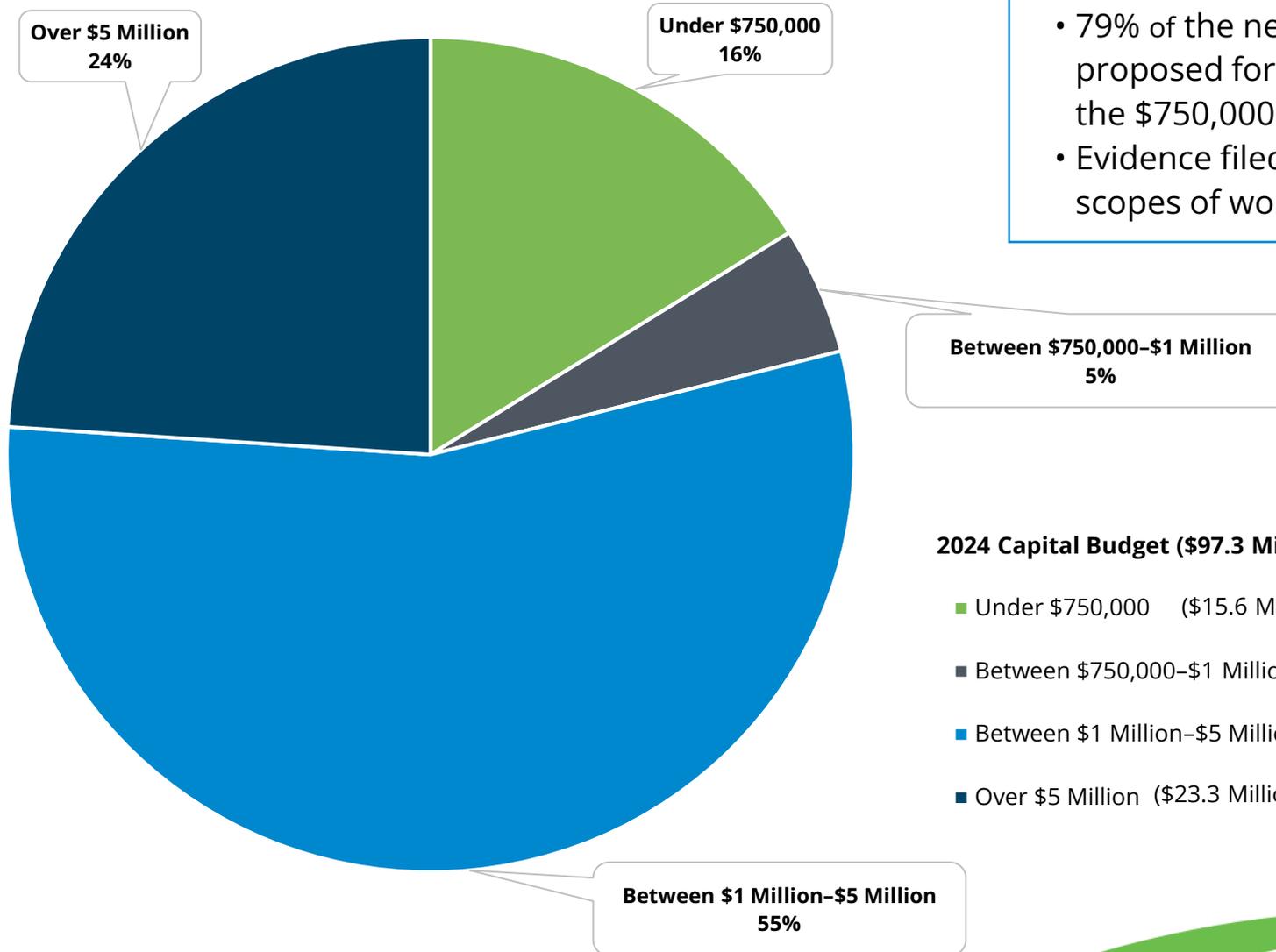
2024 Capital Budget by Asset Classification



2024 Capital Budget by Asset Classification



2024 Capital Budget by Materiality



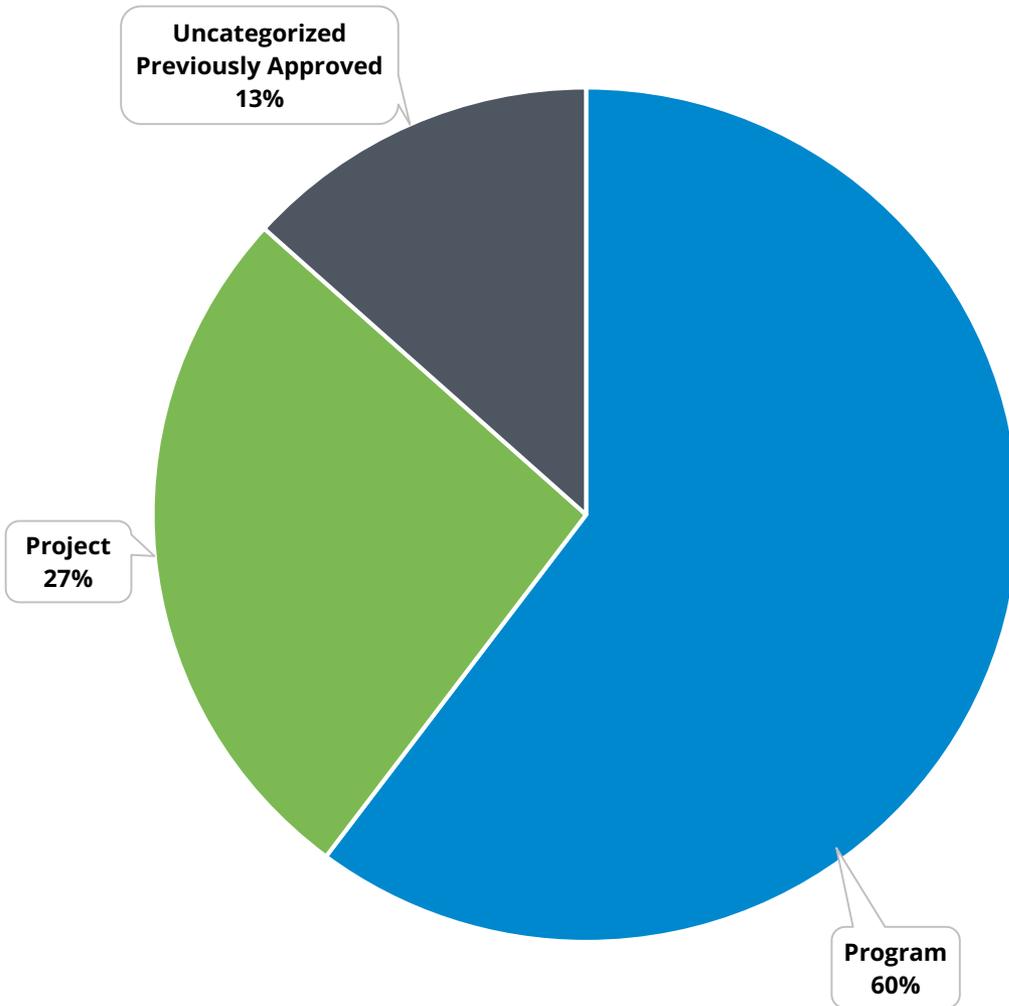
Hydro's Focus

- 79% of the new expenditures proposed for 2024 are over the \$750,000 threshold.
- Evidence filed for 40% of scopes of work proposed.

2024 Capital Budget (\$97.3 Million)

- Under \$750,000 (\$15.6 Million)
- Between \$750,000-\$1 Million (\$4.8 Million)
- Between \$1 Million-\$5 Million (\$53.6 Million)
- Over \$5 Million (\$23.3 Million)

2024 Capital Budget by Investment Type



2024 Capital Budget (\$97.3 Million)

- Program (\$58.6 Million)
- Project (\$25.7 Million)
- Uncategorized Previously Approved (\$13.0 Million)

Program

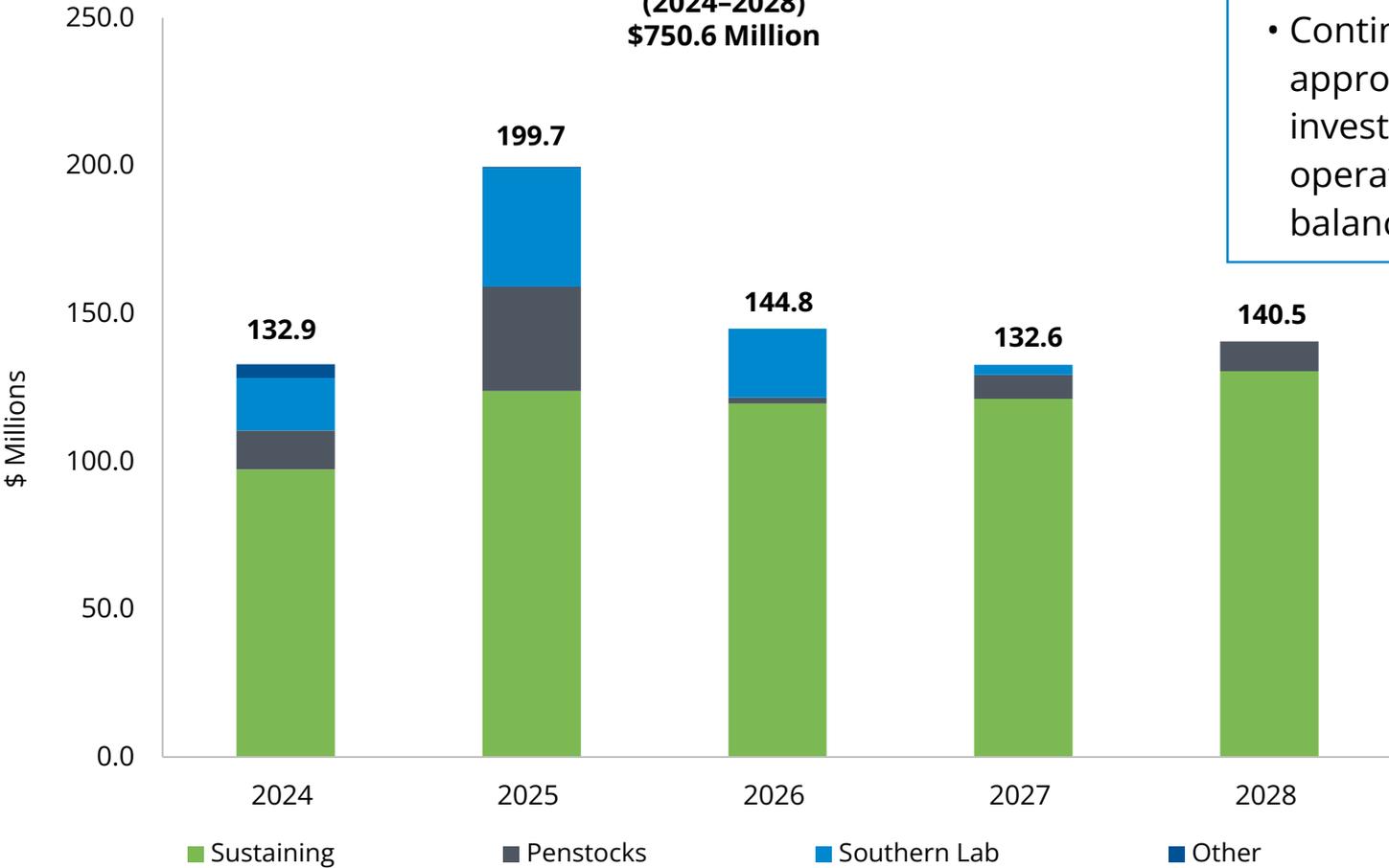
- Ongoing and repetitive
- Based on asset class
- No defined end date
- Annually renewed budget that changes with volume

Project

- 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: 2024-2028

**Capital Budget and Major Capital Projects
(2024-2028)
\$750.6 Million**



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 2024 capital budget as it includes all anticipated capital expenditures such as supplemental applications, major projects and CIAC.

UPDATES TO APPROACH

Updates to Approach

Based on review of last year's filing and associated feedback, Hydro has made the following adjustments:

Split out the Terminal Station Renewal Program into Five Separate Programs

- The efficiencies thought to be gained by the combination did not materialize

Refinements to the Risk Matrix Evaluation

- To remove some of the subjectivity and allow for greater granularity of risk identification

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)		2	13	7	
High (4)			5	12	2
Moderate (3)			7	13	8
Low (2)		1	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)	18	4			
High (4)	11	5			
Moderate (3)	24	4			
Low (2)	4	3			
Very Low (1)			1		
Likelihood	Very Low (1)	Low (2)	Moderate (3)	High (4)	Very High (5)

HOLYROOD THERMAL GENERATING STATION

Holyrood Thermal Generating Station

Hydro has committed to having the Holyrood TGS available as a generation source until 2030 or until such time as alternate supply is available. Key assumptions include:

- Units will mostly be online during the winter operating season so no additional capital for increase in starts and stops
- Maintenance philosophy will not change
- No additional capital investment to improve recall time
- Current reliability targets will be maintained
- Only three fuel oil tanks are required for reliable operation
- Asset plan for Transmission and Rural Operations assets are not included in these costs
- Decommissioning costs are not included

Holyrood Thermal Generating Station

Holyrood TGS Capital Plan

- 2024 Investments included in this Capital Budget Application is \$16.8 million
 - Primarily generation related work
- Total 2024 planned Capital Expenditure is \$19.6 million
 - Includes previously approved supplemental projects
- Hydro's five-year plan includes \$99 million for the Holyrood TGS
- Planned capital expenditures to 2030 for the Holyrood TGS is \$119 million
- These expenditures are slightly less than those referenced in the Holyrood Condition Assessment report.

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

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 Three Projects/Programs in the 2024 CBA In This Materiality Category

Project/Program	2024 Budget (\$ Million)	Total Budget (\$ Million)
Overhaul Unit 1 Turbine Valves and Generator - Holyrood	5.1	5.1
Purchase Spare Generator Step Up Transformer	0.7	7.8
Replace Light- and Heavy-Duty Vehicles	1.5	5.6

Investments Over \$5 Million



Purchase Spare Generator Step-Up (“GSU”) Transformer

- Hydro is proposing the purchase of a spare GSU transformer to return its compliment of ‘universal’¹ spare transformers to two
- This was highlighted as a risk due to the failure of two GSUs within nine months
- Should the current spare be required Hydro would not have a spare should another failure occur
- Lead time for new transformers is two years

¹ Universal refers to its ability to be used at the Holyrood TGS, Bay d’Espoir, Upper Salmon, and Granite Canal.

Investments Over \$5 Million



Replace Light- and Heavy-Duty Vehicles

- Hydro is proposing the purchase of 30 light-duty vehicles and 8 heavy-duty vehicles to maintain appropriate fleet operation and reliability
- Accounting for operational and execution efficiencies in combining this program Hydro's estimate can be broken down as:
 - \$2.2 million on light-duty vehicles
 - \$3.4 million on heavy-duty vehicles

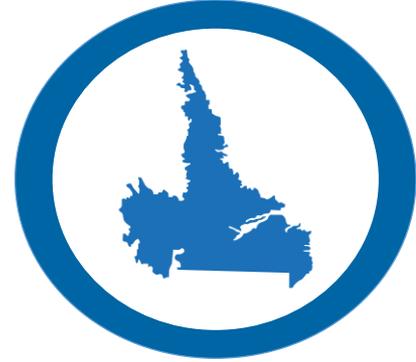
Buildings and Properties Investments

Description	2024 Budget (\$ Million)	Total Budget (\$ Million)
Previously Approved	5.3	7.1
Commencing in 2024	1.0	5.9
Total	6.3	13.0

Hydro is Committed to Managing the Risk Associated with its Aging Properties While Balancing the Reliability and Cost of the Service Provided

Five-Year Plan is Reflective of the Criticality of These Assets to System Reliability

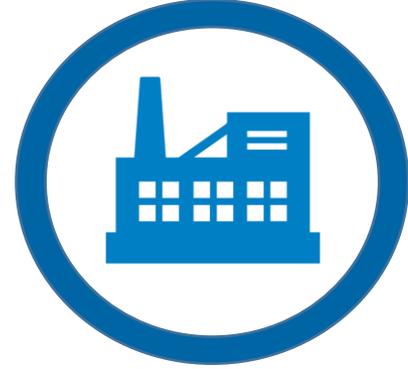
Labrador Interconnected Investments



Total Labrador Investment = ~\$13.2 Million

- Continuation of Load Growth Projects for Labrador West (\$6.5 Million)
- Asset Renewal Programs (\$5.2 Million)
- Access Programs (Meters, Extensions) (\$1.3 Million)
- Tools and Equipment (\$0.2 Million)

Specifically Assigned Investments



Total Specifically Assigned Investments = \$1.7 Million

- Circuit Breaker and Protection Upgrades (IOC: \$1.2 Million)
- Transformer Bushing Replacement (Braya: \$0.4 Million)
- Terminal Station Control Building Fire Protection (Vale: < \$0.1 million)

CUSTOMER IMPACT

Revenue Requirement Impact

- 2024 capital investments, *on a pro-forma basis*, expected to result in increases of **approximately \$2.9 Million and \$10.7 Million in revenue requirement** for 2024 and 2025, respectively
- Relative to the 2019 Test Year, this represents an increase in Hydro's total revenue requirement of **approximately 0.4% and 1.7%** in 2024 and 2025, respectively
- Estimates do not reflect any potential reductions in operating and maintenance costs associated with the capital projects proposed

Estimated Customer Impacts

System	2024	2025
Island Interconnected System	0.4%	1.5%
Labrador Interconnected System: Rural	0.7%	2.8%
Labrador Industrial: Transmission Billings	4.3%	15.8%
Labrador Industrial: Total Billings	0.4%	1.4%

- Impacts are relative to 2019 Test Year revenue requirements
- The estimated impact on Island Interconnected System customers reflects investments in that system and rural deficit areas
- Labrador Industrial impacts are shown relative to demand charges and total billings
- Estimates do not reflect potential reductions in operating and maintenance costs associated with the capital projects proposed

Questions?



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