Section 2: Customer Operations/Capital Expenditures

Q. Volume 1, Section 2, page 2-37. Please provide Newfoundland Power's 2024-2028 capital plan. What are Newfoundland Power's critical areas of focus in its capital spending over this period?

A. Newfoundland Power's *2024-2028 Capital Plan*, as filed with its *2024 Capital Budget Application*, is provided as Attachment A.

Table 1 provides the Company's 2024-2028 capital plan by asset class.

Table 1:
2024-2028 Capital Plan
By Asset Class
($000s)

Asset Class	**2024F**[1]	**2025F**	**2026F**	**2027F**	**2028F**
Distribution	54,865	55,033	56,938	54,287	54,307
Substations	20,605	20,824	23,299	23,799	25,160
Transmission	15,064	13,488	15,109	17,987	20,521
Generation	5,640	8,318	13,058	22,051	18,723
Information Systems	6,180	11,019	9,575	11,052	10,778
Transportation	3,806	4,867	4,839	5,525	5,298
General Property	2,340	2,960	3,065	3,255	2,987
Telecommunications	502	925	328	441	134
Allowance for Unforeseen Items	750	750	750	750	750
General Expenses Capitalized	4,500	4,500	4,500	4,500	4,500
Total	**114,252**	**122,684**	**131,461**	**143,647**	**143,158**

Newfoundland Power's areas of focus in its capital spending over the 2024 to 2028 period reflect a continued focus on maintaining current levels of overall service reliability in light of increasing risk to reliability due to the age of the Company's electrical

[1] Total is reduced by $1,000,000 from what is presented in Attachment A to reflect the reduction of $1,000,000 across the *Extensions, New Street Lighting,* and *Relocate/Replace Distribution Lines for Third Parties* programs within the Distribution asset class in accordance with Order No. P.U. 2 (2024), page 3, lines 27-32.

system.[2] Additionally, the Company's investment priorities over the next five years reflect an increased focus on the planned refurbishment of assets to extend their useful service lives and the replacement of assets that become deteriorated or fail in service.[3] Finally, the Company's investment priorities over the forecast period reflect a relatively stable level of investment required to connect new customers and respond to system growth. While customer connections are forecast to decline over the next five years, system load growth driven by residential development in urban areas, electrification of heating systems, and electric vehicle adoption is forecast to offset this decline.[4]

The Company also notes that increased generation expenditures in 2027 and 2028 reflect the requirement to address two of the Company's gas turbines: Greenhill and Wesleyville. These gas turbines have been in service for 47 and 53 years, respectively. Inspections have identified that both gas turbines are approaching end of life. In addition, thermal generation units in Port aux Basques have been in service since the 1960s and are also approaching the end of their useful service lives. Refurbishment or replacement projects are expected to be required for these thermal generation assets.[5]

[2] For example, substation power transformers are the most critical equipment in substations. Approximately 35% of substation power transformers have exceeded the industry expected useful service life of 50 years. An additional 34% will reach 50 years in service over the next decade. See Attachment A, pages A-8 to A-16.

[3] For example, investments in the Distribution asset class include the continuation of longstanding corrective and preventative maintenance programs, as well as an increase in distribution feeder refurbishment projects. See Attachment A, page A-17.

[4] Ibid., pages A-4 and A-5. See also the response to Request for Information PUB-NP-052.

[5] Ibid., pages A-15 and A-16.

2024-2028 Capital Plan

NEWFOUNDLAND POWER
A FORTIS COMPANY

2024-2028 Capital Plan

June 2023

TABLE OF CONTENTS

Page

1.0 PLAN OVERVIEW 1

2.0 PLANNING CONTEXT 2
2.1 General 2
2.2 Customer Outlook 2
2.3 Operations Outlook 3
2.4 Asset Condition Outlook 7

3.0 SUMMARY OF PLANNED EXPENDITURES 15
3.1 General 15
3.2 Planned Expenditures by Investment Classification 15
3.3 Planned Expenditures by Asset Class 17

Appendix A: Capital Projects and Programs: 2024-2028

1.0 PLAN OVERVIEW

Newfoundland Power Inc. ("Newfoundland Power" or the "Company") prepares a five-year capital plan to provide reasonable predictability of future investment priorities. The capital plan incorporates the best available information on future customer, operational and electrical system requirements. All planned investments undergo detailed engineering reviews prior to being submitted for approval to the Newfoundland and Labrador Board of Commissioners of Public Utilities (the "Board").

The Company's current capital plan forecasts average annual investments of approximately $131.2 million from 2024 to 2028. This level of investment is expected to be required to continue providing customers with access to safe and reliable service at the lowest possible cost.

Newfoundland Power's operations are focused on maintaining current levels of overall service reliability for customers. While the Company is targeting stability in its reliability performance, the age of its electrical system poses an increasing risk to this objective. The risk of equipment failure is expected to increase as many assets approach or exceed the end of their expected useful service lives, including substation power transformers, distribution and transmission wooden support structures and overhead conductor.

Newfoundland Power is currently undertaking a review of its asset management practices and has developed a framework for scope, stages and timelines for the review. Through this review, the Company is aiming to ensure the next generation of its asset management technology can effectively meet future requirements.

Newfoundland Power's investment priorities over the next five years reflect an increased focus on the planned refurbishment of assets to extend their useful service lives and the replacement of assets that become deteriorated or fail in service. The refurbishment and replacement of existing assets is forecast to account for an average of approximately $74 million of annual capital expenditures from 2024 to 2028, or 56% of total annual expenditures.

The Company's investment priorities over the forecast period reflect a relatively stable level of investment required to connect new customers and respond to system growth. While customer connections are forecast to decline over the next five years, system load growth driven by residential development in urban areas, electrification of heating systems, and electric vehicle adoption is forecast to offset this decline. Responding to customer and system growth is forecast to account for an average of approximately $28.9 million of annual capital expenditures from 2024 to 2028, or 22% of total annual expenditures.

2.0 PLANNING CONTEXT

2.1 General

Newfoundland Power's investment priorities and five-year capital plan reflect the capital expenditures necessary to meet its statutory obligations under the *Public Utilities Act* and *Electrical Power Control Act, 1994*. The capital plan is updated annually with the latest forecasts of customer and system load growth, anticipated operational requirements and electrical system condition. This section provides an overview of forecast requirements in these areas, which form the basis of the Company's investment priorities over the next five years.

2.2 Customer Outlook

Newfoundland Power has an obligation to provide customers with equitable access to an adequate supply of power.[1] Capital investments are required annually to connect new customers to the electrical system and to respond to increases in electrical system load.

The Company has experienced declining requests for new service connections in recent years due to a decrease in new home construction throughout its service territory. At the same time, system load growth has been concentrated in urban areas.[2] These trends are expected to continue.

Table 1 provides the forecast number of new customer connections from 2024 to 2028.

Table 1
Forecast New Customer Connections
(2024F-2028F)

	2024F	2025F	2026F	2027F	2028F
New Customer Connections	2,053	1,943	1,828	1,702	1,537

New customer connections are forecast to decline from 2,053 in 2024 to 1,537 in 2028. Approximately 37% of new customer connections over the next five years are forecast to occur in the province's largest urban centre, the Northeast Avalon.

System load growth is expected to continue to be driven by residential development in urban areas, government plans to electrify heating systems in provincial buildings, and residential electrification of heating systems.[3] Efforts to electrify provincial buildings and other

1 See section 3(b)(ii) of the *Electrical Power Control Act, 1994.*
2 For example, of 19 *Feeder Additions for Load Growth* projects completed over the last five years, 17 projects have been on the Avalon Peninsula, including 13 on the Northeast Avalon.
3 Transformer capacity additions at Kelligrews and Hardwoods substations are forecast to be required to respond to load growth on the Northeast Avalon.

electrification opportunities are expected to be pursued as part of the Provincial Government's *Renewable Energy Plan*.[4] In addition, the Provincial Government in partnership with the Federal Government, recently announced the expansion of a rebate program to support approximately 10,000 homeowners to transition their homes from oil heat to electric heat.[5]

System load growth is also expected to be affected by electric vehicle ("EV") adoption over the forecast period. Load growth associated with EVs is expected to increase annually, with the potential for approximately 38,000 EVs on the province's roads in the next ten years, requiring more than 260 GWh of energy.[6] Newfoundland Power has designed an *EV Load Management Pilot Project* to study options for managing the impact of EVs on peak demand.[7]

Over the longer term, increased peak demand due to EV adoption may result in dynamic rate structures becoming cost-effective for customers. A 2019 market potential study completed by Dunsky Energy Consulting determined that dynamic rates may become cost-effective for customers between 2030 and 2034.[8] Dynamic rate structures will take several years and require investments in Advanced Metering Infrastructure ("AMI").[9] The Company anticipates commencing a transition to meters with advanced functionality such as interval data, time-of-use data, demand read and reset, and remote disconnect capabilities as early as 2027.

Should customer connections and system load growth vary from forecast, the capital investments required to accommodate this growth will also vary.

2.3 Operations Outlook

Newfoundland Power has an obligation to provide reliable service to its customers at the lowest possible cost. Providing customers with reliable service requires capital investments to maintain the condition of the electrical system and the Company's operational response capabilities when outages occur.

4 See the Provincial Government's *Renewable Energy Plan,* section *1.4 Electrify Transport and Space-Heating*.

5 In a news release dated March 13, 2023, the Provincial and Federal Governments announced the new multi-year program to expand their collective efforts for residential home heating rebates. The initiative will assist residents looking to switch from oil furnaces to electricity heating technologies.

6 Dunsky Energy + Climate Advisors estimated that the province will have 38,000 EVs in the next ten years. By 2040, Dunsky estimates that there will be more than 160,000 EVs in Newfoundland and Labrador. See Newfoundland and Labrador Hydro's *Reliability and Resource Adequacy - 2022 Update, Volume III: Long-Term Resource Plan,* pages 44-45, October 3, 2022.

7 Newfoundland Power filed an application associated with the *EV Load Management Pilot Project* with the Board on June 2, 2023.

8 See *Schedule E – Potential Study Addendum: Demand Response Assessment* filed as part of the *Electrification, Conservation and Demand Management Plan: 2021-2025*.

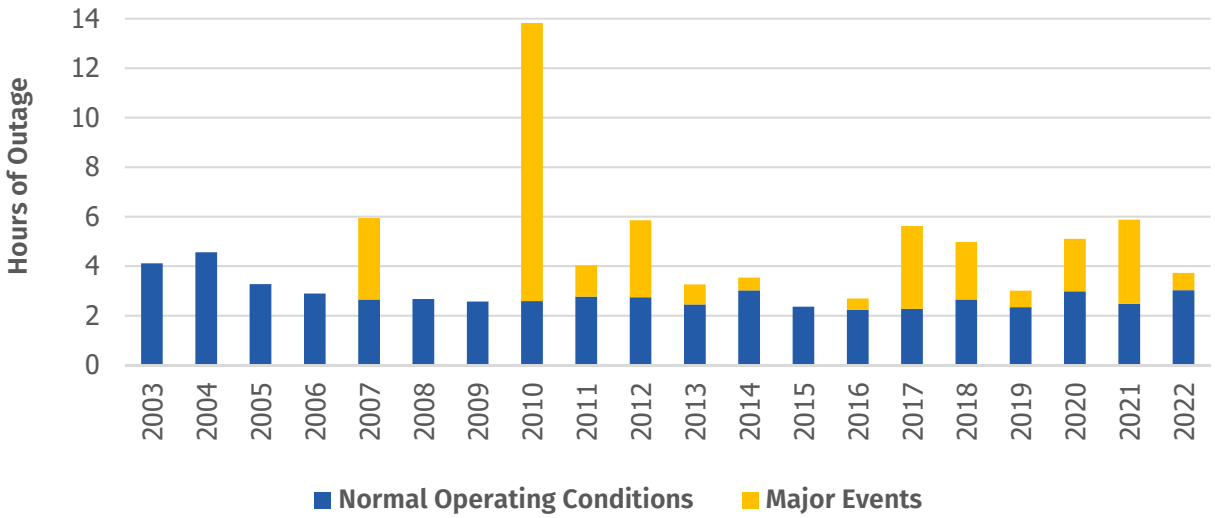
9 For example, Newfoundland Power's deployment of Automated Meter Reading technology required over five years to implement. The deployment of AMI would be more substantial as, in addition to replacing existing meters, the Company would be required to implement new communications infrastructure, a meter data management system, and new customer rate structures.

Customers have indicated a reasonable level of satisfaction with Newfoundland Power's service delivery over the last decade.[10] The Company's operations are focused on maintaining current levels of overall service reliability for customers. Annual performance targets for service reliability are established based on the Company's performance over the most recent five-year period, excluding major events.

For 2024, Newfoundland Power is targeting an average annual frequency of 2.0 outages per customer and an average duration of 2.7 outage hours per customer. Annual performance targets over the ensuing five years are expected to be reasonably consistent with current targets, but may vary depending on actual results over this period.

Figure 1 shows the average duration of outages experienced by Newfoundland Power's customers from 2003 to 2022 including major events.[11]

Figure 1
Newfoundland Power
Outage Duration Including Major Events
(2003 to 2022)



Major customer outages due to severe weather have become more frequent in the Company's service territory, causing customer outages in nine of the last ten years compared to just four years in the prior decade.

[10] Overall customer satisfaction with Newfoundland Power's service averaged 86% from 2013 to 2022. Customer satisfaction averaged 93% when customers were surveyed about their direct interactions with field staff, including technologists and field service representatives.

[11] Major events generally affect the duration of outages more than the frequency of outages. For example, a hurricane may result in a single outage that lasts several days. From 2003 to 2022, major events have resulted in an average SAIFI of 0.3, ranging as high as an average SAIFI of 1.2 in 2010.

While the Company aims to maintain a consistent level of service reliability for customers, severe weather events can have a significant impact on the service provided to customers. Such events exceed the design parameters of the electrical system and may result in widespread damage and extended customer outages. Recent examples include a severe blizzard in January 2020 and Hurricane Fiona in September 2022.[12] Restoring service to customers following such events typically requires a robust operational response as well as capital investments to repair damage to the electrical system.[13]

The amount of capital investment required to restore service to customers following severe weather is highly variable and presents a risk to Newfoundland Power's customers and its forecast expenditures.[14] This risk highlights the importance of ensuring the electrical system is resilient and designed to standards that reflect local climatic conditions, as well as the importance of maintaining effective emergency response capabilities through measures such as electrical system automation.[15]

The reliability of bulk electricity supply from Newfoundland and Labrador Hydro ("Hydro") also affects the reliability experienced by Newfoundland Power's customers. Hydro's *Reliability and Resource Adequacy Study – 2022 Update* recommends that the Holyrood Thermal Generating Station, as well as the Hardwoods Gas Turbine, remain available as backup generation in the event of a prolonged outage of the Labrador Island Link and until long-term supply sources have been reviewed, approved, and constructed.[16] Without their replacement, Hydro states that the Island Interconnected System will be significantly capacity constrained.[17] Hydro also proposes beginning the regulatory process to seek approval to construct Bay d'Espoir Unit 8.[18] It is currently uncertain what supply resources will be required to ensure adequate reliability for Newfoundland Power's customers in the future. Hydro has indicated that new generation could require eight years to implement from the time of recommendation to commissioning.[19] These matters are currently under review as part of the Board's *Reliability and Resource Adequacy Study Review*.

---

12 Hurricane Fiona in September 2022 resulted in wind gusts in excess of 170 kilometres per hour. Over a three-day period, Newfoundland Power experienced island wide outages resulting from extreme winds and storm surges associated with Hurricane Fiona. Newfoundland Power employees worked throughout the period to restore power to customers and address safety issues associated with damage caused by the storm. In particular, restoration efforts were impacted on the west coast of the island in the Wreckhouse area, where winds exceeded 120 kilometres per hour all day and into the late evening.

13 For example, capital expenditures of approximately $7.5 million were required to restore service to customers in 2010 following a severe ice storm and Hurricane Igor. These expenditures were approved in Order Nos. P.U. 17 (2010) and P.U. 35 (2010).

14 The Federal Government has recognized the importance of adapting the Atlantic energy sector to climate change. The Federal Government states "Adaptation to climate change by the energy sector in the Atlantic provinces will require re-examination of design standards for transmission and distribution infrastructure, to enable it to better withstand extreme weather events." See *From Impacts to Adaptation: Canada in a Changing Climate 2007*, Government of Canada, page 154.

15 The principal design standard for distribution and transmission line design in Canada is the CSA standard C22.3 No.1-15, Overhead Systems. This standard recognizes four classifications of weather load conditions for ice accumulation, wind loading, and temperature. These are: (i) medium loading B; (ii) medium loading A; (iii) heavy; and (iv) severe. Newfoundland Power's service territory has heavy and severe loading classifications. Only two other provinces are identified as having severe weather loading areas. These are: (i) parts of northern and southern Manitoba; and (ii) rural parts of eastern Quebec, including the Gaspe Peninsula.

16 See Hydro's *Reliability and Resource Adequacy Study – 2022 Update,* October 3, 2022, page P.6.

17 See Hydro's *Reliability and Resource Adequacy Study – 2022 Update, Volume III: Long Term Resource Plan*, October 3, 2022, page 51, lines 25-27.

18 See Hydro's *Reliability and Resource Adequacy Study – 2022 Update,* October 3, 2022, page P.6.

19 See Hydro's *Reliability and Resource Adequacy Study – 2022 Update*, page 4.

Newfoundland Power's capital plan currently includes the retirement of the Wesleyville and Greenhill gas turbines and replacement with a single mobile gas turbine. As a result of Hydro's *Reliability and Resource Adequacy Study – 2022 Update*, the Company has initiated a review of this plan to evaluate the benefits of continuing to operate stationary units in these areas. The evaluation of alternatives will be coordinated with Hydro to examine the impact that any generation addition or removal will have on Hydro's *Reliability and Resource Adequacy Study*.

Newfoundland Power's operations and capital investments must adapt to increasing cybersecurity risks. Cybersecurity risks have increased materially for critical infrastructure operators in recent years, including electric utilities. Newfoundland Power expects that more frequent upgrades of its operations technologies and computing hardware will be required going forward to manage increasing cybersecurity risks.

Market conditions following the COVID-19 pandemic continue to pose a risk to Newfoundland Power's *2024-2028 Capital Plan*. Supply chain disruptions have contributed to reduced availability and extended delivery times for certain materials, including heavy-duty vehicles, conductor and power transformers. Inflationary pressure on materials also increased following the COVID-19 pandemic. In response, the Company has increased its use of multi-year capital projects. This includes substation refurbishment and modernization projects where power transformer replacements are required and the procurement of heavy-duty fleet vehicles. The Company continues to monitor market conditions to assess potential impacts on its operations.

2.4 Asset Condition Outlook

2.4.1 General

Newfoundland Power's electrical system is maintained through a combination of preventative and corrective maintenance programs and long-term asset management strategies. The most recent independent review of Newfoundland Power's engineered operations was conducted by The Liberty Consulting Group in 2014. The review found that the Company's asset management conforms to good utility practice.[20]

A significant portion of Newfoundland Power's electrical system assets were constructed in the 1960s and 1970s following provincial electrification efforts in rural areas. As a result, a large quantity of assets with expected useful service lives of between 50 and 60 years, such as conductor and wooden support structures, are now aging beyond their expected useful service lives. While age is not the primary determinant as to whether an asset requires refurbishment or replacement, it provides a reasonable indication of the probability that an asset may begin to fail.

[20] See The Liberty Consulting Group, *Executive Summary of Report on Island Interconnected System to Interconnection with Muskrat Falls addressing Newfoundland Power Inc.*, December 17, 2014, page ES-1.

The effect of age on the condition of Newfoundland Power's electrical system can be observed through its recent experience with equipment failures. An average of approximately 1,200 equipment failures per year were experienced on the distribution system from 2018 to 2022, which represents a 34% increase compared to the previous five-year period.[21] The upward trend in equipment failures is primarily driven by overhead conductor that has become deteriorated due to its age and exposure to climatic conditions.[22]

Newfoundland Power is exposed to increasing risk of equipment failure going forward due to the age of its electrical system. As detailed below, significant portions of major equipment in the distribution, transmission and substation asset classes have exceeded or are approaching the end of their useful service lives.

Maintaining the safe and reliable operation of the electrical system will require increased investments in the planned refurbishment and replacement of electrical system assets. Newfoundland Power is undertaking a review of its asset management practices to ensure its practices continue to be adequate, given the age of its electrical system, and remain consistent with industry best practices. The Company has developed a framework for the asset management review which provides information on the scope, stages and timelines for the review.

The asset management review is expected to require two years to complete. This timeline is driven, in part, by the upcoming obsolescence of Newfoundland Power's core asset management technology. This technology has been in service for approximately two decades and is expected to reach end of life in 2026.[23] Through this review, the Company is aiming to ensure the next generation of its asset management technology can effectively meet future requirements.

During a current state assessment, Newfoundland Power has benchmarked its asset management maturity against clauses of ISO 55001.[24] This is a standard approach used by utilities to understand the current state of their asset management and provides a tool against which progress can be monitored along their asset management journey. Opportunities for assessment were identified and categorized in three areas: (i) organizational approach; (ii) plans and processes; and (iii) data and technology. The target state assessment will evaluate the costs and benefits of the identified opportunities to determine whether they would support Newfoundland Power's objective of continuing to provide safe and reliable service to its customers at the lowest possible cost. The results of the target state assessment will inform the development of an implementation plan to guide the next phase of Newfoundland Power's asset management journey. Opportunities will be prioritized for implementation based on the costs and benefits to Newfoundland Power's customers and its operations.

---

21 Includes failures of cutouts, primary conductor, insulators, poles, distribution transformers and other equipment. Does not include service wire failures, which are replaced upon failure and not inspected as part of Newfoundland Power's *Distribution Inspection and Maintenance Practices.*

22 On average, 197 conductor failures occurred annually from 2013 to 2017. This compares to an average of 325 conductor failures annually from 2018 to 2022.

23 Newfoundland Power was notified by the vendor of its asset management technology that the software will no longer be supported as of December 31, 2026.

24 ISO 55001 is an internationally recognized standard for asset management practices.

The implementation of these opportunities, if determined to be beneficial, is expected to require a phased approach over several years. Opportunities will be prioritized for the asset classes that are most critical in serving customers. Newfoundland Power notes that its asset management review is a long-term initiative. The framework for conducting the review was completed in 2022 and the results of the review are expected to be available in 2024.

2.4.2 Distribution

Newfoundland Power operates approximately 300 distribution feeders. Distribution feeders are inspected on a seven-year cycle to identify deficiencies. High-priority deficiencies are corrected during the year in which they are identified through the *Reconstruction* program. Other deficiencies are corrected in a planned manner in the following year through the *Rebuild Distribution Lines* program and individual refurbishment projects for feeders where deterioration is most pronounced.

The distribution system performance is addressed through the longstanding *Distribution Reliability Initiative* project, which targets the worst performing feeders for capital investment.[25]

Newfoundland Power's distribution system includes approximately 229,000 wooden support structures and overhead conductor on approximately 9,500 kilometres of distribution line. Industry experience indicates an average expected useful service life of 54 years for distribution wooden support structures and 50 years for distribution overhead conductor.[26]

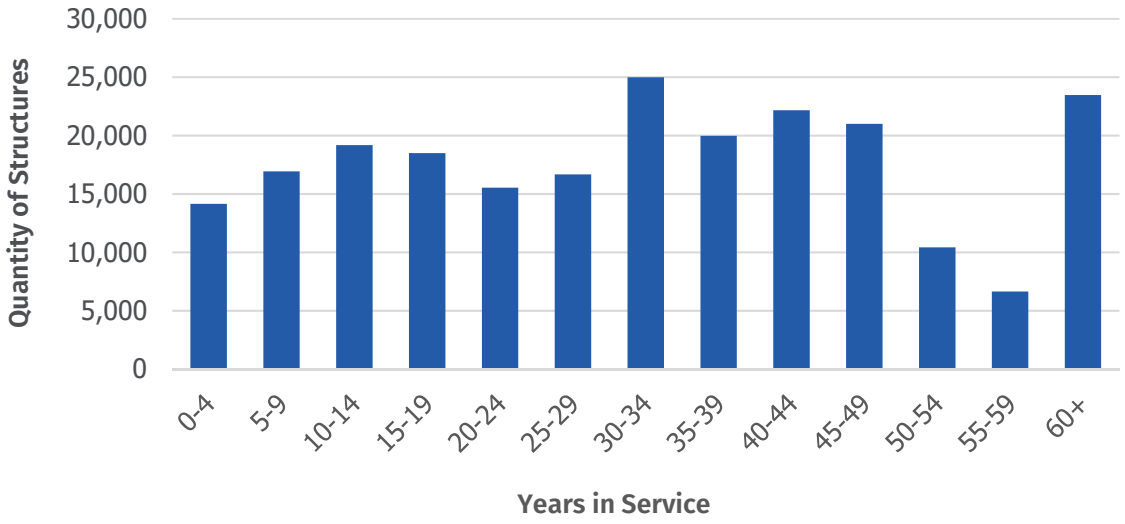
The risk of equipment failure on the Company's distribution system is currently high as large quantities of wooden support structures and overhead conductor have exceeded their expected useful service lives.

[25] The *Distribution Reliability Initiative* project has evolved in recent years to include isolated specific sections of feeders or neighbourhoods that are experiencing poor reliability performance. Newfoundland Power implemented a new Outage Management System in 2019. The system is capable of providing outage data with greater granularity and precision than was previously possible. This data is incorporated into the *Distribution Reliability Initiative* to permit a more targeted approach to required capital upgrades.

[26] The average industry expected useful service lives of distribution assets were derived from information filed with the Federal Energy Regulatory Commission ("FERC"). Electric utilities subject to FERC's jurisdiction are required to file a Form 1 report annually. Form 1 reports are publicly available and provide financial and operational information for electric utilities. A total of 38 utilities were included in the analysis.

Figure 2 provides the age distribution of wooden support structures on the Company's distribution system.

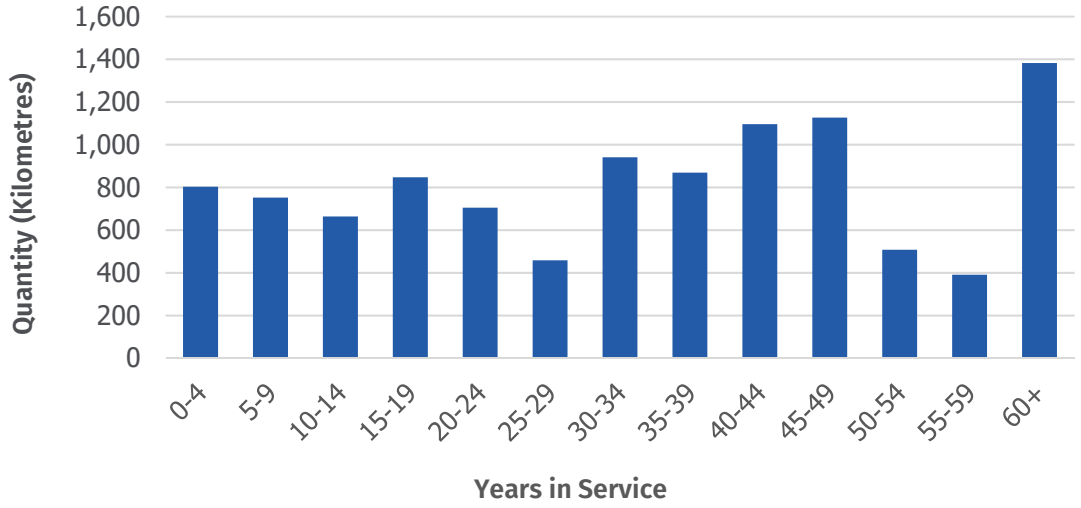
Figure 2
Distribution Wooden Support Structures
Asset Age



Approximately 13% of distribution wooden support structures have exceeded the average industry expected useful service life of 54 years. An additional 14% of distribution wooden support structures will reach 54 years in service over the next decade.

Figure 3 provides the age distribution of overhead conductor on the Company's distribution system.

Figure 3
Distribution Overhead Conductor
Asset Age



Approximately 22% of distribution overhead conductor has currently exceeded the average industry expected useful service life of 50 years. An additional 21% of distribution overhead conductor will reach 50 years in service within the next decade.

2.4.3 Transmission

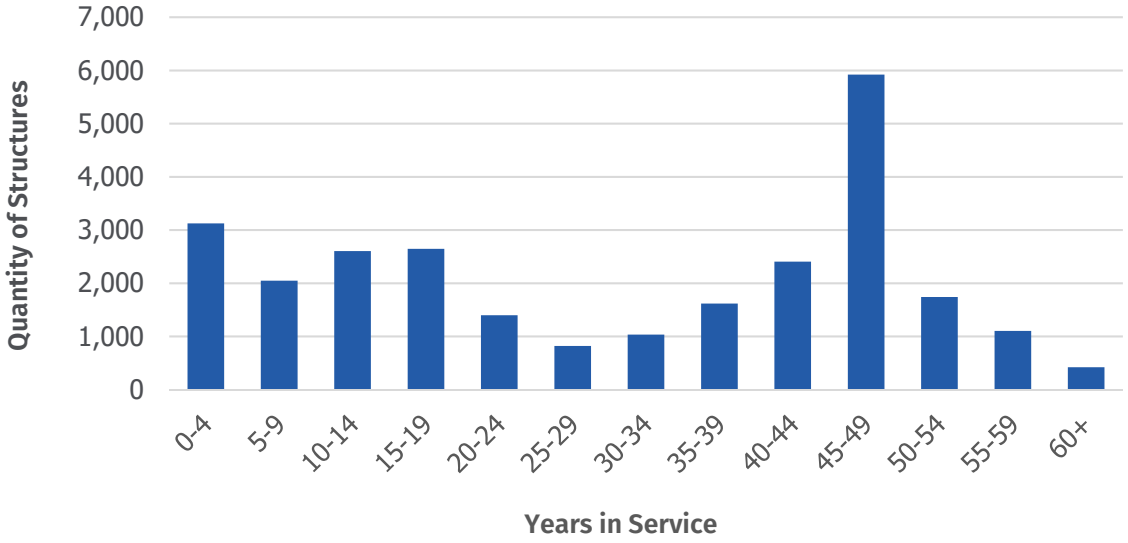
Transmission lines are the backbone of the electricity system serving customers. Transmission lines are inspected annually to identify deficiencies. Deficiencies are prioritized for correction based on severity through the annual *Transmission Line Maintenance* program. The condition of the transmission system is also maintained through planned rebuild projects completed in accordance with the *Transmission Line Rebuild Strategy*, which targets the Company's oldest and most deteriorated transmission lines.

Newfoundland Power's transmission system includes approximately 27,000 wooden support structures and overhead conductor on approximately 2,100 kilometres of transmission line. Industry experience indicates an average expected useful service life of 58 years for transmission wooden support structures and 63 years for transmission overhead conductor.[27]

The Company's operations are exposed to an increasing risk of equipment failure on the transmission system going forward due to the age of wooden support structures and overhead conductor.

Figure 4 provides the age distribution of wooden support structures on the Company's transmission system.

Figure 4
Transmission Wooden Support Structures
Asset Age

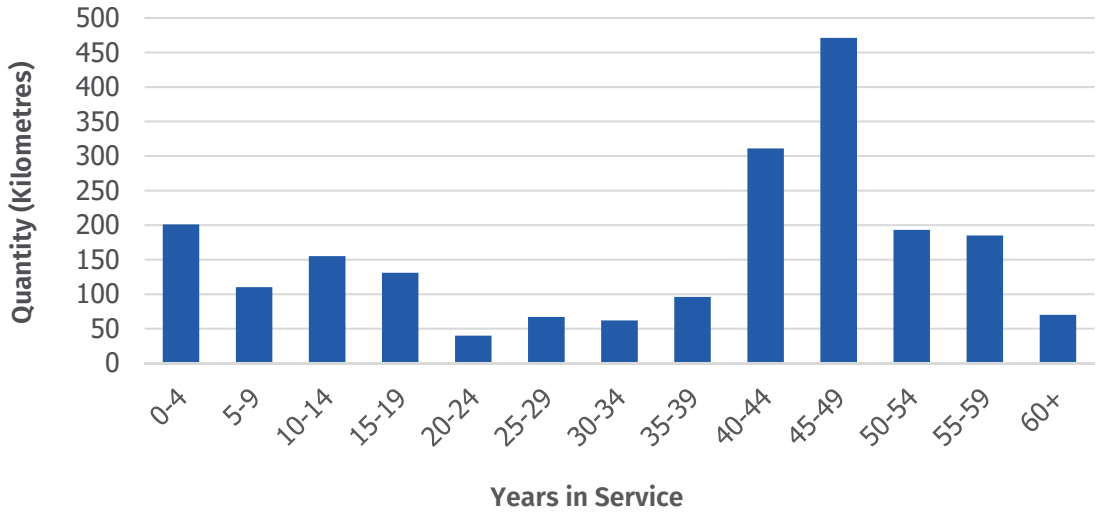


[27] The average industry expected useful service lives of transmission assets were derived from information filed with FERC. A total of 38 utilities were included in the analysis.

Approximately 2% of transmission wooden support structures have exceeded the average industry expected useful service life of 58 years.[28] An additional 11% of transmission wooden support structures will reach 58 years in service over the next decade.

Figure 5 provides the age distribution of overhead conductor on the Company's transmission system.

Figure 5
Transmission Overhead Conductor
Asset Age



Approximately 3% of transmission overhead conductor has currently exceeded the average industry expected useful service life of 63 years. An additional 18% of transmission overhead conductor will reach 63 years in service within the next decade.

2.4.4 Substations

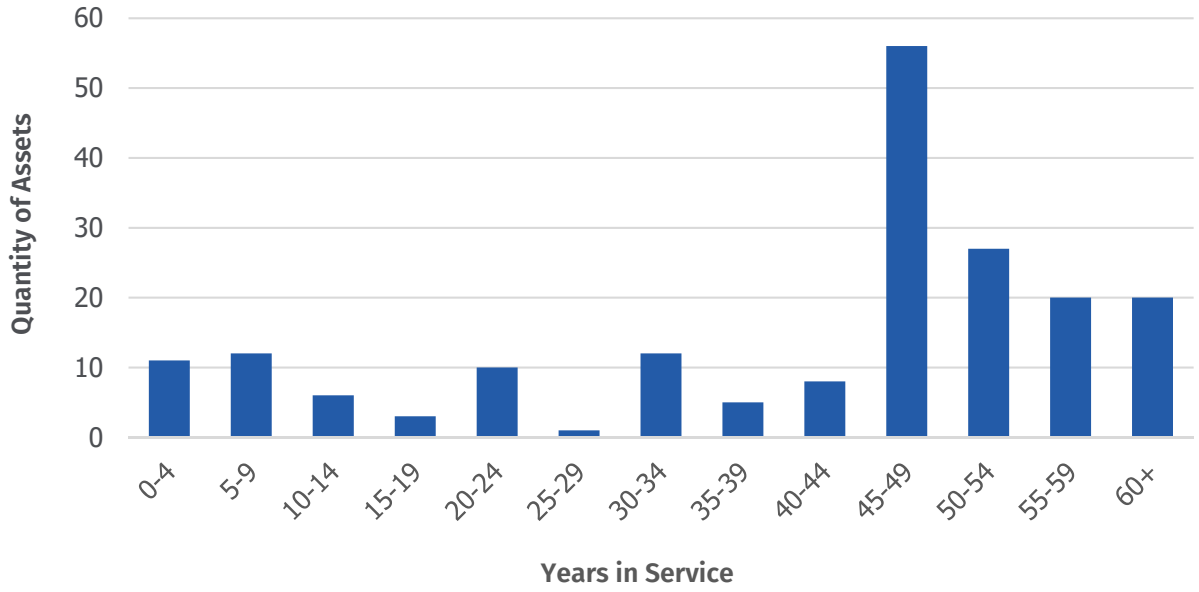
Newfoundland Power operates 131 substations throughout its service territory. Substations are inspected eight times annually to identify deficiencies and required maintenance. Equipment that fails in service or is at imminent risk of failure is addressed under the *Substation Replacements Due to In-Service Failures* program. Major refurbishment projects are implemented in accordance with the Company's *Substation Refurbishment and Modernization Plan*. The Company has also recently implemented a component-based program to address obsolete substation protection and control systems within Newfoundland Power's substations.

[28] This is a result of the execution of the Company's *Transmission Line Rebuild Strategy* which commenced in 2006 and will be approximately 85% complete by the end of 2024. The strategy outlined a long-term plan to rebuild the Company's aging transmission lines.

The most critical equipment in substations is power transformers. There are currently 191 power transformers in operation at Newfoundland Power's substations. Industry experience suggests the service life of a power transformer is typically between 30 to 50 years under ideal conditions.[29] Based on the current age profile, the Company's power transformers are exposed to a high risk of equipment failure.

Figure 6 provides the age distribution of Newfoundland Power's substation power transformers.

Figure 6
Substation Power Transformeres
Asset Age



Approximately 35% of substation power transformers have exceeded the industry expected useful service life of 50 years. An additional 34% of substation power transformers will reach 50 years in service over the next decade.

2.4.5 Generation

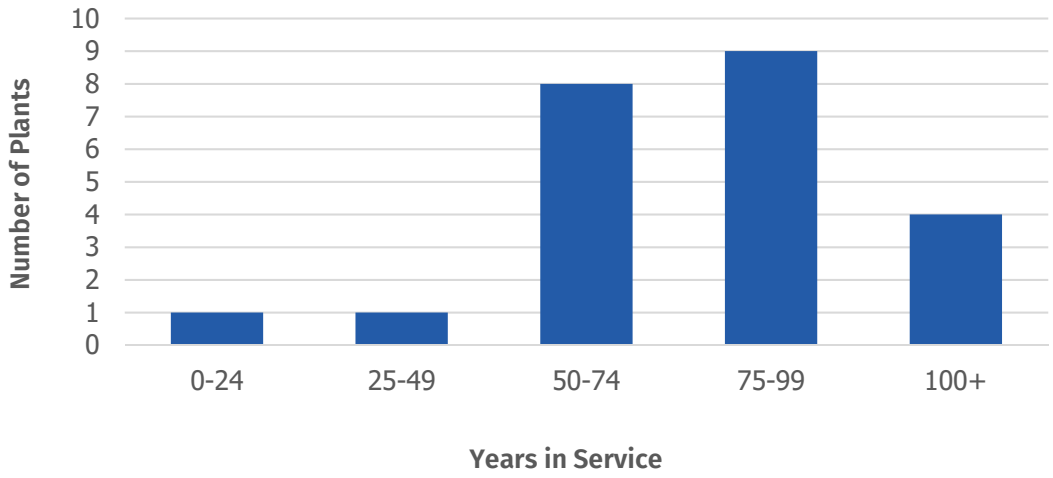
Newfoundland Power operates 23 hydro plants that collectively generate 438 GWh annually at a capacity of 98 MW. These plants provide low-cost electricity to customers. The Company also operates six thermal plants that supply customers experiencing localized outages and provide system support when requested by Hydro.

[29] Practical conditions, such as high ambient temperature, high loading and fault exposure, can reduce the expected service life of power transformers. High temperatures have an adverse effect on the insulating properties inside the transformer and cause the premature aging of power transformers. Insulation deterioration on the windings naturally occurs over time and is accelerated by exposure to high temperatures. Insulation that is found to be degraded is a major indicator that a power transformer has reached end of life. See International Council on Large Electric Systems ("CIGRE"), *Asset Management Decision Making Using Different Risk Assessment Methodologies*, 2013, page 94.

Generating plants are routinely inspected by plant operators to identify deficiencies. Equipment that fails or is at imminent risk of failure is addressed under the *Hydro Plant Replacements Due to In-Service Failures* program, *Thermal Plant Replacements Due to In-Service Failures* program and *Hydro Facility Rehabilitation* project. Major plant refurbishment projects, such as penstock replacements, are accompanied by economic analyses to confirm that continued operation of a plant is least-cost for customers.

Figure 7 provides the number of hydro plants in operation by age as of 2022.

Figure 7
Hydro Plants
Asset Age



Of Newfoundland Power's 23 hydro plants, 17 have been in service for between 50 and 100 years and four have been in service for over 100 years. Many of these plants have undergone refurbishment projects to extend their useful service lives, including generator and turbine refurbishments, protection and control upgrades, and penstock replacements. Based on the current age profile, refurbishment projects are expected to continue to be required to extend the useful service lives of these hydro plants when proven economic for customers.[30]

Newfoundland Power's Greenhill and Wesleyville gas turbines have been in service for 47 years and 53 years, respectively. Inspections have identified that both gas turbines are approaching end of life. In addition, thermal generation units in Port aux Basques have been in service since

[30] In circumstances where the life extension of a hydro plant is not economic compared with the cost of replacement energy and capacity, the Company will include in the economic analysis the cost associated with decommissioning the hydro plant including the environment and sediment management costs.

the 1960s and are also approaching the end of their useful service lives.[31] Refurbishment or replacement projects are expected to be required for the Company's thermal generation assets.[32]

3.0 SUMMARY OF PLANNED EXPENDITURES

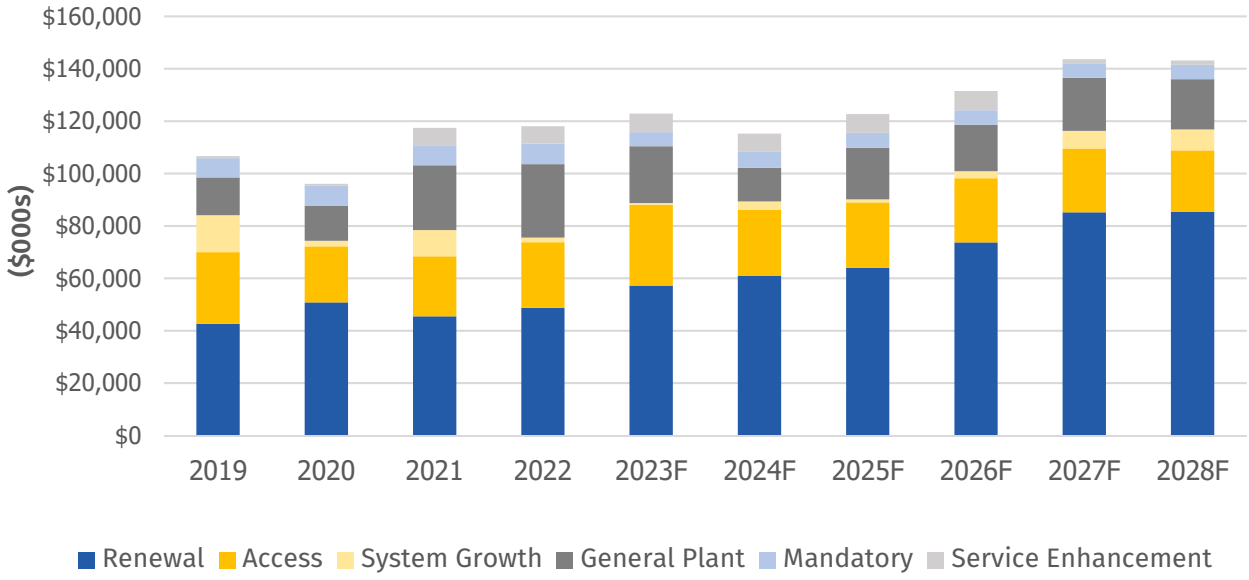
3.1 General

Newfoundland Power's *2024-2028 Capital Plan* forecasts average annual capital expenditures of approximately $131.2 million from 2024 to 2028. This section provides a breakdown of forecast capital expenditures by investment classification and asset class.[33]

3.2 Planned Expenditures by Investment Classification

Figure 8 provides historical and forecast capital expenditures from 2019 to 2028 by investment classification.

Figure 8
Capital Expenditures by Investment Classification
(2019-2028F)



[31] The thermal generation supplying the Port aux Basques area consists of the diesel generating unit PAB-G1, which was placed into service in 1969, and the Mobile Gas Turbine #1 ("MGT"), which was placed into service in 1974. MGT is no longer able to be transported due to the deteriorated condition of the trailer chassis. It is now permanently stationed at the Company's Grand Bay Substation on the southwest coast of Newfoundland. This thermal generation, along with Rose Blanche Hydro Plant and other mobile generators, supply the Port aux Basques area for planned and unplanned outages on Hydro's transmission lines TL214 and TL215.

[32] These refurbishment or replacement projects will be informed by the Board's ongoing *Reliability and Resource Adequacy Study Review*.

[33] Capital expenditures are organized by investment classification in accordance with the Board's provisional *Capital Budget Application Guidelines* effective January 2022.

Forecast increases in capital expenditures over the next five years are primarily observed in the Renewal investment classification. Investments in the Renewal classification are driven by the need to replace or refurbish assets that are deteriorated, deficient or fail in service. Renewal investments are forecast to account for approximately 56% of capital expenditures from 2024 to 2028, compared to approximately 44% over the previous five-year period.

Increases in Renewal investments reflect the age and condition of Newfoundland Power's electrical system. Renewal investments in the Distribution asset class include the continuation of longstanding corrective and preventative maintenance programs, as well as an increase in distribution feeder refurbishment projects. Renewal investments in the Substations and Transmission asset classes reflect increases in the amount of work to be completed under the *Transmission Line Rebuild Strategy* and *Substation Refurbishment and Modernization Plan* over the forecast period. Renewal investments in the Generation asset class reflect both an increase in refurbishment projects for hydro plants, the planned replacement of the Wesleyville and Greenhill gas turbines with a new mobile unit,[34] and the requirement to address aging thermal generation in Port aux Basques.

Expenditures in other investment classifications are expected to be reasonably stable over the forecast period.

Access and System Growth investments are forecast to account for approximately 22% of annual capital expenditures over the forecast period. This reflects a forecast decline in customer connections over the next five years, which will be offset by increased electrification efforts in both transportation and heating system conversions. Approximately $3 million of investments in each of 2027 and 2028 relate to transformer capacity additions at Kelligrews and Hardwoods substations to respond to load growth on the Northeast Avalon. Investments are also driven by increased system load due to EV adoption, with planned expenditures of approximately $3.7 million by 2028 for distribution system upgrades.

General Plant investments are forecast to account for approximately 14% of annual capital expenditures over the next five years. General Plant investments are expected to continue to be driven by expenditures in the Information Systems asset class. Information Systems account for over half of General Plant investments over the forecast period. Capital expenditures for Information Systems are largely driven by more frequent upgrades being required for third-party software products due to increasing cybersecurity threats and vendor requirements.

Service Enhancement investments are forecast to account for approximately 4% of annual capital expenditures over the next five years. Service Enhancement investments reflect continued automation of the distribution system and conclusion of the *LED Street Lighting Replacement Plan* in 2026.

[34] Options to address the deteriorated condition of the Wesleyville and Greenhill gas turbines are under review as a result of Hydro's *Reliability and Resource Adequacy Study – 2022 Update* and the uncertainty around supply resources.

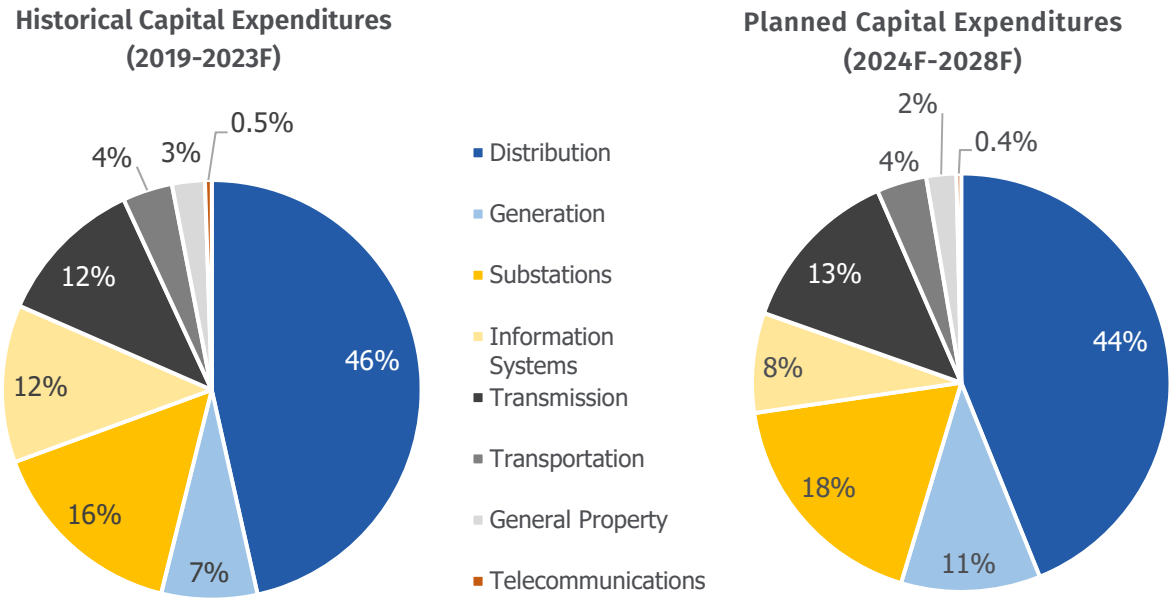
Mandatory investments are forecast to account for approximately 4% of annual capital expenditures over the next five years. Mandatory investments reflect conclusion of the *PCB Removal* project in 2025. Expenditures after 2025 reflect capital expenditures resulting from Board Orders, including *General Expenses Capitalized*, the *Allowance for Unforeseen Items*, and the *Allowance for Funds Used During Construction*.

3.3 Planned Expenditures by Asset Class

3.3.1 Breakdown by Asset Class

Figure 9 provides a comparison of historical and forecast capital expenditures by asset class.[35]

Figure 9
Capital Expenditures by Asset Class



The Distribution asset class is forecast to continue to account for the largest proportion of capital expenditures from 2024 to 2028. The Substations, Transmission and Generation asset classes are expected to account for a larger portion of capital expenditures over the forecast period in comparison to the last five years. This is primarily driven by major refurbishment and replacement projects within those asset classes, as described below.

[35] Excludes expenditures relating to General Expenses Capitalized and the Allowance for Unforeseen Items.

3.3.2 Distribution

Table 2 provides historical and forecast distribution capital expenditures from 2019 to 2028.

Table 2
Distribution
Capital Expenditures
($000s)

Actual/Forecast					Average
2019	2020	2021	2022	2023F	2019-2023F
46,801	44,391	50,866	50,434	53,671	49,233

Plan					Average
2024F	2025F	2026F	2027F	2028F	2024F-2028F
55,865	55,033	56,938	54,287	54,307	55,286

Distribution capital expenditures are forecast to average approximately $55.3 million annually from 2024 to 2028. This compares to an average of approximately $49.2 million annually over the previous five-year period.[36]

Newfoundland Power's capital maintenance programs for its distribution assets, *Rebuild Distribution Lines* and *Reconstruction*, are planned to continue at a combined average cost of approximately $12.5 million annually. Refurbishment projects for individual distribution feeders are expected to increase over the forecast period, with annual expenditures increasing from approximately $1.5 million in 2024 to approximately $5.5 million in 2028.

Expenditures related to the *Distribution Reliability Initiative* are forecast to average approximately $1.9 million annually as the Company continues to target the worst performing feeders, or specific sections of feeders, on its distribution system.[37]

[36] The increase in Distribution capital expenditures over the period from 2021 to 2026 is attributed to the *LED Street Light Replacement* project.

[37] Each year, Newfoundland Power assesses and ranks the reliability performance of its over 300 distribution feeders and completes targeted capital investments, when appropriate, as part of the *Distribution Reliability Initiative*. See the *2024 Capital Budget Application,* report *1.1 Distribution Reliability Initiative.*

3.3.3 Substations

Table 3 provides historical and forecast substations capital expenditures from 2019 to 2028.

Table 3
Substations
Capital Expenditures
($000s)

Actual/Forecast					Average
2019	2020	2021	2022	2023F	2019-2023F
17,133	14,720	15,507	14,196	20,672	16,446

Plan					Average
2024F	2025F	2026F	2027F	2028F	2024F-2028F
20,605	20,824	23,299	23,799	25,160	22,737

Substations expenditures are forecast to average approximately $22.7 million annually from 2024 to 2028. This compares to an average of approximately $16.4 million annually over the previous five-year period.

Increased substations expenditures are driven by the Company's *Substation Refurbishment and Modernization Plan*. Forecast expenditures over the next five years reflect the refurbishment and modernization of 23 substations, including the Oxen Pond, Gambo, Memorial, and Old Perlican substations in 2024, and a two-year project at Islington Substation commencing in 2024. The refurbishment and modernization of these substations is necessary to address deteriorated equipment and infrastructure, and to upgrade protection and control systems. The average annual cost for substation refurbishment and modernization projects is approximately $14.9 million from 2024 to 2028.[38]

Forecast substation expenditures also include approximately $5.0 million annually to address in-service equipment failures in substations, as well as other expenditures to upgrade or replace deficient equipment and respond to system load growth. An addition to the spare transformer inventory is planned for 2026.

[38] The Company is forecasting the requirement to replace five substation power transformers over the next five years. These transformers have been identified based on their age relative to the rest of the Company's fleet, and will be further evaluated through detailed condition assessments as they move from the forecast year to the budget year.

3.3.4 Transmission

Table 4 provides historical and forecast transmission capital expenditures from 2019 to 2028.

Table 4
Transmission
Capital Expenditures
($000s)

Actual/Forecast					Average
2019	2020	2021	2022	2023F	2019-2023F
11,940	10,069	11,274	15,587	12,284	12,231

Plan					Average
2024F	2025F	2026F	2027F	2028F	2024F-2028F
15,064	13,488	15,109	17,987	20,521	16,434

Transmission capital expenditures are forecast to average approximately $16.4 million annually from 2024 to 2028. This compares to an average of approximately $12.2 million annually over the previous five-year period.

Increased transmission expenditures are driven by an increase in the kilometres of transmission line to be rebuilt annually to complete the *Transmission Line Rebuild Strategy*.[39] As of the end of 2022, execution of this strategy will be 79% complete. Forecast expenditures from 2024 to 2028 include rebuild projects on ten transmission lines throughout the Company's service territory. The average annual cost of transmission line rebuild projects is approximately $12.8 million from 2024 to 2028.

Forecast transmission expenditures also include capital maintenance of transmission line structures at an annual average cost of approximately $2.7 million.[40]

[39] The lines remaining to be completed in the 2024 to 2028 period include three 138 kV H-frame construction transmission lines. The extended line length for these rebuilds, and the 138 kV H-frame construction, are the primary drivers for the increase in transmission expenditures.

[40] Newfoundland Power is currently undertaking a review of its asset management practices. Newfoundland Power's capital plan does not include any forecast transmission capital maintenance expenditures associated with any changes to the Company's transmission line asset management practices, including the chemical re-treatment of transmission line wood poles, resulting from this review. Any changes to Newfoundland Power's transmission line asset management practices would be included as part of a future capital budget application.

3.3.5 Generation

Table 5 provides historical and forecast generation capital expenditures from 2019 to 2028.

Table 5
Generation
Capital Expenditures
($000s)

Actual/Forecast					Average
2019	2020	2021	2022	2023F	2019-2023F
10,086	6,833	9,766	2,635	9,811	7,826

Plan					Average
2024F	2025F	2026F	2027F	2028F	2024F-2028F
5,640	8,318	13,058	22,051	18,723	13,558

Generation capital expenditures are forecast to average approximately $13.6 million annually from 2024 to 2028.[41] This compares to an average of approximately $7.8 million annually over the previous five-year period.

Increased generation expenditures include the planned purchase of a second mobile gas turbine that will replace the existing Greenhill and Wesleyville gas turbines.[42] The cost of purchasing a second mobile gas turbine is approximately $7.5 million in 2026 and $9.9 million in 2027. Expenditures of approximately $10 million in 2028 are forecast to address aging thermal generation in Port aux Basques.[43]

Increased generation expenditures also reflect a forecast requirement to undertake refurbishment projects at nine hydro plants over the next five years. The average annual cost of hydro plant refurbishment projects is approximately $3.4 million from 2024 to 2028.

41 Generation-Hydro capital expenditures are forecast to average approximately $7.8 million annually from 2024 to 2028. Generation-Thermal capital expenditures are forecast to average approximately $5.8 million annually from 2024 to 2028.

42 Options to address the deteriorated condition of the Wesleyville and Greenhill gas turbines are under review as a result of Hydro's *Reliability and Resource Adequacy Study – 2022 Update* and the uncertainty around supply resources.

43 Newfoundland Power has two thermal generation plants located in Port aux Basques. These include: (i) the 6.0 MW MGT which was brought into service in 1974; and (ii) the 2.5 MW Port au Basques diesel generator which was brought into service in 1969. Customers on the southwest portion of the province are served by Hydro's radial transmission line TL214. The thermal generation plants located in Port aux Basques are utilized when Hydro is completing maintenance on the transmission line or in response to unscheduled outages to the line.

3.3.6 Information Systems

Table 6 provides historical and forecast information systems capital expenditures from 2019 to 2028.

Table 6
Information Systems
Capital Expenditures
($000s)

Actual/Forecast					Average
2019	2020	2021	2022	2023F	2019-2023F
7,034	7,347	15,468	21,493	12,940	12,856

Plan					Average
2024F	2025F	2026F	2027F	2028F	2024F-2028F
6,180	11,019	9,575	11,052	10,778	9,721

Information systems capital expenditures are forecast to average approximately $9.7 million annually from 2024 to 2028. This compares to an average of approximately $12.9 million annually over the previous five-year period.

The decrease in information systems expenditures is a result of the conclusion of the *Customer Service System Replacement* project in 2023. Expenditures from 2024 to 2028 are expected to be driven by more frequent software and hardware upgrades required to manage cybersecurity risks and to meet vendor requirements. Forecast expenditures include upgrades to the Company's Geographic Information System, Asset Management, and Outage Management System, among others.

3.3.7 Transportation

Table 7 provides historical and forecast transportation capital expenditures from 2019 to 2028.

Table 7
Transportation
Capital Expenditures
($000s)

Actual/Forecast					Average
2019	2020	2021	2022	2023F	2019-2023F
4,223	3,515	4,555	3,089	4,968	4,070

Plan					Average
2024F	2025F	2026F	2027F	2028F	2024-2028F
3,806	4,867	4,839	5,525	5,298	4,867

Transportation capital expenditures are forecast to average approximately $4.9 million annually from 2024 to 2028. This compares to an average of approximately $4.1 million annually over the previous five-year period.

The increase in transportation capital expenditures from 2024 through 2028 primarily reflects inflation and the number of heavy, medium, and light duty fleet and passenger vehicles forecast to be replaced over the period.

3.3.8 General Property

Table 8 provides historical and forecast general property capital expenditures from 2019 to 2028.

Table 8
General Property
Capital Expenditures
($000s)

Actual/Forecast					Average
2019	2020	2021	2022	2023F	2019-2023F
2,862	2,459	2,703	2,855	2,505	2,677

Plan					Average
2024F	2025F	2026F	2027F	2028F	2024F-2028F
2,340	2,960	3,065	3,255	2,987	2,921

General Property capital expenditures are forecast to average approximately $2.9 million annually from 2024 to 2028. This compares to an average of approximately $2.7 million annually over the previous five-year period.

General Property capital expenditures are driven by deterioration in Company-owned buildings. Several of Newfoundland Power's area offices are over 30 years old and certain building components require replacement. Expenditures over the 2024 to 2028 period are driven by refurbishments required at the Company's head office in St. John's and area offices in Gander and Grand Falls-Windsor.

3.3.9 Telecommunications

Table 9 provides historical and forecast telecommunications capital expenditures from 2019 to 2028.

Table 9
Telecommunications
Capital Expenditures
($000s)

Actual/Forecast					Average
2019	2020	2021	2022	2023F	2019-2023F
312	112	511	571	1,268	555

Plan					Average
2024F	2025F	2026F	2027F	2028F	2024F-2028F
502	925	328	441	134	466

Telecommunications capital expenditures are forecast to average approximately $0.5 million annually from 2024 to 2028. This compares to an average of approximately $0.6 million annually over the previous five-year period.

Expenditures from 2024 to 2028 are comparable to the previous five-year average. Telecommunications expenditures over the next five years are primarily driven by the replacement of the Company's Very High Frequency ("VHF") mobile radio system in 2025 and the construction of fibre optic cables.[44]

[44] Newfoundland Power's VHF mobile radio communications use a system provided by Bell Mobility. Other users of this system include Hydro and some departments of the Provincial Government. The Provincial Government has started a process to transition away from the current VHF radio system to a new province-wide public safety radio system. Newfoundland Power is investigating options to provide its field staff with mobile radio communications in the event the current Bell Mobility VHF technology is retired. The budget estimate of $0.8 million is currently based on the purchase of mobile radio units which are compatible with the new public safety radio system.

APPENDIX A:

Capital Projects and Programs: 2024-2028

Table A-1 2024-2028 Capital Plan By Asset Class ($000s)					
Asset Class	2024F	2025F	2026F	2027F	2028F
Distribution	55,865	55,033	56,938	54,287	54,307
Substations	20,605	20,824	23,299	23,799	25,160
Transmission	15,064	13,488	15,109	17,987	20,521
Generation	5,640	8,318	13,058	22,051	18,723
Information Systems	6,180	11,019	9,575	11,052	10,778
Transportation	3,806	4,867	4,839	5,525	5,298
General Property	2,340	2,960	3,065	3,255	2,987
Telecommunications	502	925	328	441	134
Allowance for Unforeseen Items	750	750	750	750	750
General Expenses Capitalized	4,500	4,500	4,500	4,500	4,500
Total	$115,252	$122,684	$131,461	$143,647	$143,158

Table A-2 2024-2028 Capital Plan Distribution ($000s)					
	2024F	2025F	2026F	2027F	2028F
Project					
Feeder Additions for Load Growth	2,811	1,150	2,384	2,470	1,960
Distribution Reliability Initiative	1,915	1,500	1,750	2,000	2,250
Distribution Feeder Automation	888	899	909	920	931
LED Street Lighting Replacement	5,541	5,654	5,738	0	0
Distribution Feeder GDL-02 Refurbishment	667	0	0	0	0
Distribution Feeder OXP-01 Refurbishment	840	0	0	0	0
Distribution Feeder Refurbishments	0	2,681	3,001	4,720	5,508
Allowance for Funds Used During Construction	260	263	266	269	273
Distribution Feeder BIG-02 Relocation	196	0	0	0	0
Program					
Extensions	12,140	11,725	11,264	10,722	9,906
Reconstruction	6,953	7,104	7,262	7,431	7,608
Rebuild Distribution Lines	4,974	5,086	5,202	5,326	5,456
New Services	2,847	2,758	2,656	2,533	2,345
Replacement Services	457	467	478	490	502
New Meters	302	291	279	566	522
Replacement Meters	571	703	731	1,525	1,415
New Transformers	3,264	3,310	3,359	3,417	3,479
Replacement Transformers	3,681	3,732	3,788	3,853	3,924
New Street Lighting	2,629	2,681	2,736	2,795	2,858
Replacement Street Lighting	863	878	895	913	932
Relocate/Replace Distribution Lines for Third Parties	4,066	4,151	4,240	4,337	4,438
Total	$55,865	$55,033	$56,938	$54,287	$54,307

Table A-3 2024-2028 Capital Plan Substations ($000s)					
	2024F	2025F	2026F	2027F	2028F
Project					
PCB Removal	544	125	0	0	0
Substation Ground Grid Upgrades	580	609	640	672	705
Oxen Pond Substation Bus Upgrade	451	0	0	0	0
Oxen Pond Substation Switch Replacement	316	0	0	0	0
Gambo Substation Refurbishment & Modernization	5,267	0	0	0	0
Memorial Substation Refurbishment & Modernization	4,351	0	0	0	0
Old Perlican Substation Refurbishment & Modernization	3,356	0	0	0	0
Islington Substation Refurbishment & Modernization	308	4,706	0	0	0
Substation Spare Power Transformer Inventory	0	40	1,950	0	0
Substation Refurbishment & Modernization	0	9,807	14,812	14,110	15,597
Substation Feeder Termination	0	0	250	250	0
Additions Due to Load Growth	0	0	0	3,000	3,000
Program					
Substation Replacements Due to In-Service Failures	4,797	4,887	4,982	5,087	5,198
Substation Protection and Control Replacements	635	650	665	680	660
Total	**$20,605**	**$20,824**	**$23,299**	**$23,799**	**$25,160**

Table A-4 2024-2028 Capital Plan Transmission ($000s)					
	2024F	2025F	2026F	2027F	2028F
Project					
Transmission Line 94L Rebuild[45]	4,276	0	0	0	0
Transmission Line 55L Rebuild[46]	5,284	0	0	0	0
Transmission Line 146L Rebuild	2,152	9,209	0	0	0
Transmission Line 24L Relocation	701	0	0	0	0
Transmission Line Rebuild	0	1,584	12,366	14,191	14,667
Transmission Line Additions	0	0	0	1,000	3,000
Program					
Transmission Line Maintenance	2,651	2,695	2,743	2,796	2,854
Total	$15,064	$13,488	$15,109	$17,987	$20,521

[45] Multi-year capital project approved in Order No. P.U. 36 (2021).
[46] Multi-year capital project approved in Order No. P.U. 38 (2022).

Table A-5 2024-2028 Capital Plan Generation ($000s)					
	2024F	2025F	2026F	2027F	2028F
Project					
Hydro Facility Rehabilitation	794	940	959	978	998
Mobile Hydro Plant Refurbishment[47]	2,480	0	0	0	0
Mobile Hydro Plant Surge Tank Refurbishment	977	0	0	0	0
Mobile Hydro Plant Penstock Refurbishment	0	639	0	0	0
Lookout Brook Hydro Plant Refurbishment	362	1,573	0	0	0
Tors Cove Hydro Plant Refurbishment	0	0	511	6,006	0
Horsechops Hydro Plant Refurbishment	0	2,468	0	0	3,066
Rose Blanche Hydro Plant Refurbishment	0	950	0	0	0
Cape Broyle Hydro Plant Refurbishment	0	702	3,050	0	0
Lawn Hydro Plant Refurbishment	0	0	0	0	3,226
Victoria Hydro Plant Refurbishment	0	0	0	4,087	0
Morris Hydro Plant Refurbishment	0	0	0	0	319
Gas Turbine Replacement	0	0	7,470	9,890	0
Port aux Basques Thermal Generation	0	0	0	0	10,000
Program					
Hydro Plant Replacements Due to In-Service Failures	716	729	744	760	776
Thermal Plant Replacements Due to In-Service Failures	311	317	324	330	338
Total	$5,640	$8,318	$13,058	$22,051	$18,723

[47] Multi-year capital project approved in Order No. P.U. 38 (2022).

Table A-6 2024-2028 Capital Plan Information Systems ($000s)					
	2024F	2025F	2026F	2027F	2028F
Project					
System Upgrades	957	5,488	2,695	4,404	3,715
Application Enhancements	1,892	1,439	1,393	918	1,292
Cybersecurity Upgrades	930	940	950	960	970
Microsoft Enterprise Agreement	297	297	297	320	320
Network Infrastructure	420	475	800	700	525
Operations Technology	0	750	2,000	1,500	1,250
Shared Server Infrastructure	964	900	700	1,500	1,946
Program					
Personal Computer Infrastructure	720	730	740	750	760
Total	**$6,180**	**$11,019**	**$9,575**	**$11,052**	**$10,778**

Table A-7 2024-2028 Capital Plan Transportation ($000s)					
	2024F	2025F	2026F	2027F	2028F
Project					
Replace Vehicles and Aerial Devices 2023-2024[48]	1,866	0	0	0	0
Replace Vehicles and Aerial Devices 2024-2025	1,940	2,869	0	0	0
Replace Vehicles and Aerial Devices 2025-2026	0	1,998	2,449	0	0
Replace Vehicles and Aerial Devices 2026-2027	0	0	2,390	2,963	0
Replace Vehicles and Aerial Devices 2027-2028	0	0	0	2,562	2,543
Replace Vehicles and Aerial Devices 2028-2029	0	0	0	0	2,755[49]
Total	$3,806	$4,867	$4,839	$5,525	$5,298

[48] Multi-year capital project approved in Order No. P.U. 38 (2022).
[49] First year of a two-year multi-year project in 2028 and 2029.

Table A-8 2024-2028 Capital Plan General Property ($000s)					
	2024F	2025F	2026F	2027F	2028F
Project					
Company Building Renovations	175	1,310	1,390	1,550	1,250
Energized Conductor Support Tools	539	0	0	0	0
Program					
Additions to Real Property	655	665	676	688	701
Physical Security Upgrades	401	407	413	421	429
Tools and Equipment	570	578	586	596	607
Total	$2,340	$2,960	$3,065	$3,255	$2,987

Table A-9 2024-2028 Capital Plan Telecommunications ($000s)					
	2024F	2025F	2026F	2027F	2028F
Project					
Fibre Optic Cable Build	380	0	200	310	0
Radio System Replacement	0	800	0	0	0
Program					
Communications Equipment Upgrades	122	125	128	131	134
Total	$502	$925	$328	$441	$134

Table A-10 2024-2028 Capital Plan Allowance for Unforeseen Items ($000s)					
	2024F	2025F	2026F	2027F	2028F
Project					
Allowance for Unforeseen Items	750	750	750	750	750
Total	$750	$750	$750	$750	$750

Table A-11 2024-2028 Capital Plan General Expenses Capitalized ($000s)					
	2024F	2025F	2026F	2027F	2028F
Project					
General Expenses Capitalized	4,500	4,500	4,500	4,500	4,500
Total	$4,500	$4,500	$4,500	$4,500	$4,500