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*Newfoundland & Labrador*

**BOARD OF COMMISSIONERS OF PUBLIC UTILITIES**

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**IN THE MATTER OF THE  
2024 CAPITAL BUDGET APPLICATION**

**FILED BY  
NEWFOUNDLAND AND LABRADOR HYDRO**

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**DECISION AND ORDER  
OF THE BOARD**

**ORDER NO. P.U. 35(2023)**

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**BEFORE:**

**Dwanda Newman, LL.B.  
Vice-Chair**

**John O'Brien, FCPA, FCA, CISA  
Commissioner**

**Christopher Pike, LL.B., FCIP  
Commissioner**

**NEWFOUNDLAND AND LABRADOR  
BOARD OF COMMISSIONERS OF PUBLIC UTILITIES**

**REASONS FOR DECISION**

**ORDER NO. P.U. 35(2023)**

**IN THE MATTER OF** the **Electrical Power Control Act, 1994**, SNL 1994, Chapter E-5.1 (the “**EPCA**”) and the **Public Utilities Act**, RSNL 1990, Chapter P-47 (the “**Act**”), as amended, and regulations thereunder; and

**IN THE MATTER OF** an application by Newfoundland and Labrador Hydro for an Order pursuant to sections 41 and 78 of the **Act**: (a) approving capital expenditures for 2024 projects and multi-year projects commencing in 2024; (b) approving its 2024 Capital Budget; and (c) fixing and determining its average rate base for 2022.

**BEFORE:**

Dwanda Newman, LL.B.  
Vice-Chair

John O’Brien, FCPA, FCA, CISA  
Commissioner

Christopher Pike, LL.B., FCIP  
Commissioner

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## 1 **DECISION SUMMARY**

2

3 The Board will approve Hydro's 2024 Capital Budget in the amount of \$96,452,300 which includes  
4 expenditures of:

- 5 • \$44,232,500 which require Board approval;
- 6 • \$11,972,600 which do not require Board approval; and
- 7 • \$40,247,200 previously approved by the Board.

8

9 The Board is satisfied that the proposed expenditures for new projects/programs which require  
10 the approval of the Board are justified based on the evidence which shows that these  
11 expenditures are reasonable and necessary.

12

13 The Board approves Hydro's 2022 average rate base in the amount of \$2,334,120,000 on the  
14 basis that it complies with established practice and relevant Board Orders.

15

16 The Board also directs Hydro to file a report in its next capital budget application with respect to  
17 capital planning for the Bay d'Espoir Hydroelectric Generating Facility.

18

### 19 **1. BACKGROUND**

20

21 Section 41 of the **Act** requires a public utility to submit an annual capital budget of proposed  
22 improvements or additions to its property for approval of the Board no later than December 15<sup>th</sup>  
23 in each year for the next calendar year. A utility must also include an estimate of contributions  
24 toward the cost of improvements or additions to its property which it intends to demand from  
25 its customers.

26

27 Subsection 41(3) of the **Act** prohibits a utility from proceeding with the construction, purchase  
28 or lease of improvements or additions to its property without the prior approval of the Board  
29 where the cost of the construction or purchase or lease is in excess of the amount prescribed in  
30 the regulations. Section 3 of **Public Utilities Regulations**, NLR 40/23, sets the threshold for Board  
31 approval at \$750,000. Before this regulation was promulgated in 2023, capital expenditures in  
32 excess of \$50,000 required Board approval.

33

34 Section 78 of the **Act** gives the Board the authority to fix and determine the rate base for the  
35 service provided or supplied by a utility and also gives the Board the power to revise the rate  
36 base. Section 78 also guides the Board on the elements included in a utility's rate base.

37

38 The process and schedule to be followed for capital budget applications is set out in the Board's  
39 Capital Budget Application Guidelines (Provisional), January 2022 (the "Guidelines").<sup>1</sup> On June  
40 12, 2023, the Board directed that the utilities' 2024 Capital Budget Applications should be filed  
41 adhering to these Guidelines. The Board conducted this proceeding pursuant to the Guidelines.

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<sup>1</sup> The Capital Budget Application Guidelines were established in 2007. The provisional guidelines established in 2022 are being reviewed in a separate Board process.

## 2. APPLICATION

Newfoundland and Labrador Hydro (“Hydro”) filed its 2024 Capital Budget Application with the Board on July 12, 2023 and filed revisions on August 18, 2023 and September 21, 2023 (the “Application”). The Application requested that the Board make an order:

- (a) approving Hydro’s 2024 capital purchases and construction projects in excess of \$750,000;
- (b) approving Hydro’s 2024 Capital Budget in the amount of \$96,452,300; and
- (c) fixing and determining Hydro’s 2022 rate base of \$2,334,120,000.

### 2.1. Process

Notice of the Application, including an invitation to participate, was published on July 22, 2023. Details of the Application and supporting documentation were posted on the Board’s website.

Newfoundland Power Inc. (“Newfoundland Power”), a group of industrial customers (the “Island Industrial Customer Group”),<sup>2</sup> a group of communities in Labrador (the “Labrador Interconnected Group”),<sup>3</sup> and the Consumer Advocate, Dennis Browne, KC (the “Consumer Advocate”) intervened (“Intervenors”) in the Application.

On August 8, 2023 Hydro provided an overview of the Application in a presentation to Board staff and the Intervenors. This process afforded participants with an opportunity to ask questions or raise areas of concern with respect to the Application.

The Board, Newfoundland Power, the Island Industrial Customer Group, the Labrador Interconnected Group, and the Consumer Advocate initially issued 195 Requests for Information (“RFIs”) to Hydro. Hydro responded to these requests on September 11, 2023.

On September 25, 2023 Grant Thornton LLP, the Board’s financial consultant, filed a report on its review of the calculation of Hydro’s 2022 average rate base. The Board provided this report to the parties.

On October 5 and 6, 2023 the Board, Newfoundland Power, and the Consumer Advocate issued additional 43 RFIs related to the Application. Hydro responded to these requests on October 20, 2023.

Newfoundland Power and the Consumer Advocate filed written submissions on November 14, 2023. On November 15, 2023 the Island Industrial Customer Group confirmed they would not be making a submission. Hydro filed its reply submission on November 21, 2023.

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<sup>2</sup> Corner Brook Pulp and Paper Limited, Braya Renewable Fuels (Newfoundland) LP and Vale Newfoundland and Labrador Limited are the members of the Island Industrial Customer Group.

<sup>3</sup> The communities of Sheshatshiu, Happy Valley-Goose Bay, Wabush, and Labrador City are the members of the Labrador Interconnected Group.

## 1 **2.2. Submissions**

2

3 The Intervenors did not oppose the Application. Newfoundland Power submitted that it did not  
4 object to any proposed expenditures in the Application. The Consumer Advocate did not take  
5 issue with Hydro's 2024 Capital Budget or the projects and programs but raised four issues  
6 relating to the Guidelines, capital expenditure carryovers, asset management planning and  
7 renewable generating sources.

8

9 Hydro requested that the Board approve the Application and addressed the four issues raised by  
10 the Consumer Advocate.

11

## 12 **3. BOARD DECISION**

13

14 In considering the Application, the Board must assess whether approval of the proposals is  
15 consistent with the statutory obligations imposed on the Board and Hydro.<sup>4</sup> In particular section  
16 3(b) of the **EPCA** requires a public utility to manage and operate its facilities for the efficient  
17 production, transmission and distribution of power in a manner that would result in consumers  
18 in the province having equitable access to an adequate supply of power at the lowest possible  
19 cost, in an environmentally responsible manner, consistent with reliable service.<sup>5</sup> In making its  
20 determinations, the Board balances the interests of customers and the utility to ensure  
21 reasonable levels of capital spending to provide for least-cost, environmentally responsible,  
22 reliable and safe service. The Guidelines state:

23

24 The Board considers the interests of both customers and utilities in determining whether  
25 proposed capital expenditures should be approved. Appropriate capital spending is in the  
26 interest of both customers and utilities as customers benefit from a utility which is well  
27 positioned to provide safe, reliable and adequate service and utilities benefit when the  
28 rates to be paid by customers are reasonable and just. Cost, performance and risk are  
29 among the factors considered by the Board in determining whether capital expenditures  
30 are appropriate and necessary to ensure the delivery of power to customers at the lowest  
31 possible cost consistent with reliable service.<sup>6</sup>

32

33 The burden of proof is on the utility to provide sufficient evidence to justify its capital budget  
34 application proposals. In accordance with the legislation, regulations and Guidelines, Hydro  
35 included information relating to the proposed 2024 Capital Budget, capital expenditures and  
36 2022 average rate base. The Application also included specific information required to be filed in  
37 compliance with previous Board Orders including a status report on 2023 capital expenditures,  
38 an overview of future operation and capital expenditure requirements for the Holyrood Thermal  
39 Generating Station, a five-year capital plan, as well as evidence relating to deferred charges and  
40 a reconciliation of average rate base to invested capital. As required by the Guidelines, the

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<sup>4</sup> Sections 37 and 54 of the **Act** and sections 3 and 4 of the **EPCA**.

<sup>5</sup> Legislative changes in May 2023 added environmental considerations to the Board's mandate.

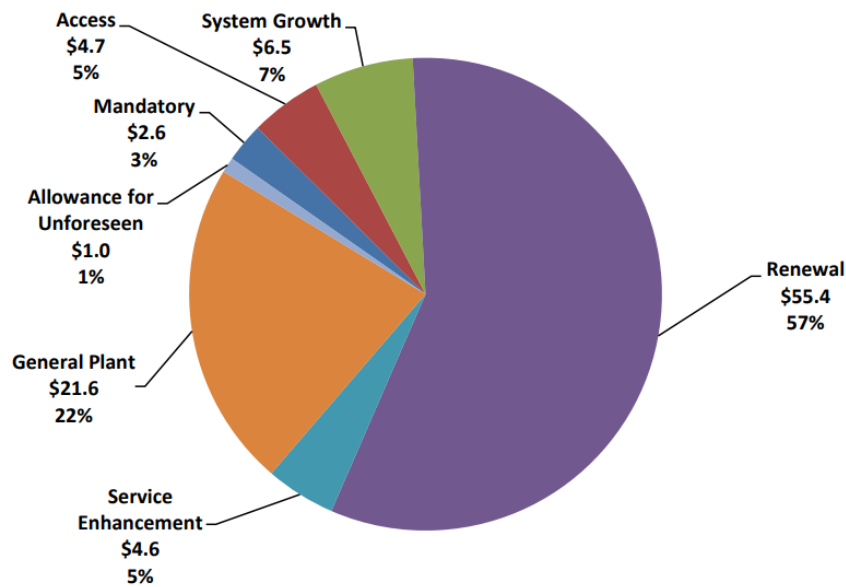
<sup>6</sup> Guidelines, pages 1-2.

1 Application included a prioritized list of all projects and programs organized by investment  
2 classification.

3

4 Hydro's proposed 2024 Capital Budget by investment classification is shown below.<sup>7</sup>

### Hydro 2024 Capital Budget Proposal by Investment Classification (\$ Millions)



5 The Board has reviewed the Application and supporting materials, the responses to the RFIs,  
6 Grant Thornton's report and the parties' submissions. The Board's determinations in relation to  
7 the proposed capital expenditures, the 2024 Capital Budget, the 2022 average rate base and the  
8 issues raised by the Consumer Advocate are set out below.

9

#### 10 **3.1. Proposed Capital Expenditures**

11

12 This is the first capital budget application filed by Hydro since the amendments to the legislation  
13 to increase the monetary threshold for expenditures requiring the prior approval of the Board to  
14 \$750,000. There are 33 proposed projects and programs over \$750,000 which require the  
15 approval of the Board.<sup>8</sup> There are 51 proposed projects and programs with expenditures less  
16 than \$750,000 which do not require the approval of the Board.<sup>9</sup> There are 34 projects and  
17 programs previously approved by the Board.<sup>10</sup>

18

19 The evidence provided in support of the proposed expenditures in excess of \$750,000 includes  
20 program or project descriptions, asset condition information, alternatives, justifications, risk

<sup>7</sup> Application, Schedule 1, 2023 Capital Budget Overview, page 25, Chart 15.

<sup>8</sup> Proposed expenditures are \$44,232,500 in 2024, \$31,823,000 in 2025 and \$4,153,100 in 2026.

<sup>9</sup> Proposed expenditures are \$11,972,600 in 2024 and \$3,862,800 in 2025.

<sup>10</sup> Proposed expenditures are \$40,247,200 in 2024, \$14,149,100 in 2025 and \$250,000 in 2026.

1 assessments and costing methodologies. The Application also includes engineering and technical  
2 reports. Significant additional information in relation to the proposed projects and programs was  
3 provided in response to the RFIs filed in this proceeding. The evidence also includes a description  
4 of the projects and programs with expenditures less than \$750,000.

5  
6 The Board's findings with respect to the proposed Mandatory, Access, General Plant, Renewal,  
7 Service Enhancement, System Growth and Allowance for Unforeseen Items expenditures are  
8 discussed below.

9  
10 3.1.1. Mandatory

11  
12 Mandatory investments are those expenditures which are associated with work prescribed by a  
13 governing body such as the provincial government, the federal government or the Board. The  
14 2024 mandatory expenditures in the amount of \$2,605,700 account for approximately 3% of  
15 Hydro's proposed 2024 Capital Budget, increased from less than 1% of Hydro's 2023 Capital  
16 Budget.

17  
18 There is one mandatory project with expenditures over \$750,000 requiring the approval of the  
19 Board. This project involves the refurbishment an oil storage tank at the Holyrood Thermal  
20 Generating Station with expenditures of \$1,920,000 in 2024.<sup>11</sup> Based on the evidence the  
21 inspection of Tank 4, which was last inspected in 2010, is necessary in 2024 to satisfy the  
22 requirements of the Certificate of Approval issued by the provincial government.

23  
24 There is also one mandatory project which does not require the approval of the Board with total  
25 expenditures of \$91,600 in 2024 and \$429,000 in 2025.<sup>12</sup> In addition the mandatory expenditures  
26 include a project previously approved by the Board with expenditures in the amount of \$594,100  
27 in 2024.<sup>13</sup>

28  
29 The Board is satisfied that Hydro's proposal to refurbish fuel oil storage Tank 4 at the Holyrood  
30 Thermal Generating Station is required to comply with provincial regulations. The Board accepts  
31 the mandatory expenditures associated with the project approved in a previous capital budget  
32 application on the basis that the evidence confirms that there have been no material changes in  
33 the scope, nature or magnitude of this project. The Intervenor did not oppose the mandatory  
34 expenditures and did not provide any specific comments on these expenditures. The Board finds  
35 that the proposed mandatory expenditures are required to enable Hydro to meet its obligation  
36 to comply with provincial regulations.

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<sup>11</sup> Refurbish Fuel Oil Storage Tank (2024)-Holyrood.

<sup>12</sup> Application, Proposals Under \$750,000, page 6.

<sup>13</sup> Application, 2024 Capital Budget Overview, Appendix B.



1 3.1.2. Access

2

3 Investments in access are those required to meet Hydro's obligation to provide customers with  
4 access to electricity services. The 2024 access expenditures of \$4,742,700 account for  
5 approximately 5% of Hydro's proposed 2024 Capital Budget similar to Hydro's 2023 Capital  
6 Budget.

7

8 There is one access program with expenditures over \$750,000 requiring the approval of the  
9 Board. This program is to provide service connections and street lights with proposed  
10 expenditure of \$4,272,000 in 2024.<sup>14</sup> This is an annual allotment for new service connections and  
11 street lights based on past expenditures and forecasted activity within the Central, Northern, and  
12 Labrador regions.

13

14 There is also one program which does not require the approval of the Board with expenditures  
15 of \$470,700 in 2024.<sup>15</sup> There are no access expenditures for projects or programs previously  
16 approved by the Board.

17

18 The Board is satisfied that Hydro's access expenditures are necessary to address Hydro's  
19 obligation to connect new customers. The Intervenors did not oppose the access expenditures  
20 and did not provide any specific comments on these expenditures. The Board finds that the  
21 proposed access expenditures are required to enable Hydro to meet its obligation to provide  
22 customers with access to electricity services.

23

24 3.1.3. General Plant

25

26 General Plant investments are related to assets which are not part of the generation,  
27 transmission, and distribution systems used by Hydro to support its daily business and operational  
28 activities. The 2024 general plant expenditures of \$21,582,200 account for approximately 22% of  
29 Hydro's proposed 2024 Capital Budget, increased from approximately 11% of Hydro's 2023  
30 Capital Budget.

31

32 There are nine general plant projects/programs with expenditures over \$750,000 requiring the  
33 approval of the Board. The proposed expenditures for these projects/programs are \$5,932,400  
34 in 2024, \$9,239,800 in 2025 and \$15,500 in 2026. These projects/programs include expenditures  
35 for vehicles and mobile equipment, buildings and structures and technology and telecontrol  
36 assets.

37

- 38 • Expenditures of \$2,556,700 in 2024, \$5,590,300 in 2025 and \$15,500 in 2026 are  
39 proposed for four projects and two programs for vehicles and mobile equipment.<sup>16</sup> Based

---

<sup>14</sup> Provide Service Extensions (2024).

<sup>15</sup> Application, Proposals Under \$750,000, page 1.

<sup>16</sup> Replace Light-Duty and Heavy-Duty Vehicles (2024-2026), Replace Mobile Equipment (2024-2025), Purchase 50' Material Handler Aerial Device on Tracked Unit (2024-2026)-Happy Valley Goose Bay, and Replace Grader Unit V9829(2024)-Bay d'Espoir.

1 on the evidence these expenditures will allow Hydro to replace 30 light-duty and 8 heavy-  
 2 duty motor vehicles as well as mobile equipment based on established replacement  
 3 criteria.

- 4 • Expenditures of \$296,400 in 2024 and 2,858,600 in 2025 are proposed for two projects  
 5 for buildings and structures.<sup>17</sup> These expenditures will allow roof replacement and  
 6 building envelope refurbishment based on the age of the structure and condition  
 7 assessment findings.
- 8 • Expenditures of \$3,079,300 in 2024 and \$790,900 in 2025 are proposed for three  
 9 projects/programs to upgrade information and operational technology, and telecontrol  
 10 assets.<sup>18</sup> These expenditures will address obsolescence and keep information and  
 11 operational technology and communications assets current to maintain reliability,  
 12 security and continued vendor support.

13  
 14 There are also 23 general plant projects/programs which do not require the approval of the Board  
 15 with total expenditures of \$4,583,600 in 2024 and \$1,274,900 in 2025.<sup>19</sup> In addition the general  
 16 plant expenditures include 11 projects/programs previously approved by the Board in the  
 17 amount of \$11,066,200 in 2024 and \$1,363,200 in 2025.<sup>20</sup>

18  
 19 The Board notes that the proposed general plant investment is higher in 2024 than it was last  
 20 year but is satisfied that these expenditures are necessary to maintain and upgrade assets in  
 21 support of Hydro's operations. The Board accepts the general plant expenditures associated with  
 22 projects/programs approved in previous capital budget applications on the basis that the  
 23 evidence in this Application confirms that there have been no material changes in the scope,  
 24 nature or magnitude of these projects/programs. The Intervenors did not oppose the general  
 25 plant expenditures and did not provide any specific comments on these expenditures. The Board  
 26 finds that Hydro's proposed general plant expenditures are justified, appropriate and necessary  
 27 to ensure the delivery of power to its customers at the lowest possible cost, in an environmentally  
 28 responsible manner, consistent with reliable service.

#### 29 30 3.1.4. Renewal

31  
 32 Renewal investments are those which are required to replace or refurbish system assets to  
 33 maintain the ability to provide customers with their current electricity services. The 2024 renewal  
 34 expenditures of \$55,354,900 account for approximately 57% of Hydro's proposed 2024 Capital  
 35 Budget, decreased from 70% of Hydro's 2023 Capital Budget.

36  
 37 There are nineteen renewal projects/programs with expenditures over \$750,000 requiring the

---

<sup>17</sup> Replace Powerhouse 1 Roof (2024-2025)-Bay d'Espoir, and Refurbish Outbuilding and Powerhouse Building Envelopes (2024-2025)-Holyrood.

<sup>18</sup> Perform Software Upgrades and Minor Enhancements (2024), Replace VHF Radio System (2024-2025), and Replace MDR8000 Microwave Radios (2024-2025).

<sup>19</sup> Application, Proposals Under \$750,000, pages 1 to 5. The six tools and equipment programs are combined into two programs in this list.

<sup>20</sup> Application, 2024 Capital Budget Overview, Appendix B.

1 approval of the Board with expenditures of \$29,741,200 in 2024, \$20,141,400 in 2025 and  
 2 \$3,902,300 in 2026. These expenditures relate to condition assessments, equipment overhauls,  
 3 in-service failures, and asset refurbishment or replacement.

- 4
- 5 • Expenditures of \$7,723,000 in 2024 are proposed for two condition assessment  
 6 programs.<sup>21</sup> These condition assessments are part of long-standing programs which allow  
 7 Hydro to identify damaged or deteriorated components that are at risk of failure at the  
 8 Holyrood Thermal Generating Station and on its wood pole transmission system.
- 9 • Expenditures of \$6,010,600 in 2024 are proposed for two equipment overhaul  
 10 programs.<sup>22</sup> These programs involve expenditures on routine maintenance and overhauls  
 11 to keep Hydro's thermal equipment in reliable operating condition. The overhaul cycles  
 12 are consistent with the original equipment manufacturer's recommendations, generally  
 13 follow a usage-based schedule and reflect observations in previous overhauls.
- 14 • Expenditures of \$10,654,100 are proposed for four programs to address in-service  
 15 failures.<sup>23</sup> The in-service failures programs address circumstances which require Hydro to  
 16 refurbish or replace equipment immediately because it has failed, is about to fail or has  
 17 deteriorated more quickly than anticipated. The work is identified through preventive  
 18 maintenance programs using various condition-based assessments and testing  
 19 procedures. The proposed expenditures are based on the age and service history of the  
 20 equipment and a three-year history of spending for in-service failures, adjusted for current  
 21 labour and material costs and other factors.
- 22 • Expenditures of \$5,353,500 in 2024 and \$20,141,400 in 2025 and \$3,902,300 in 2026 are  
 23 proposed for eleven projects/programs to refurbish or replace assets that are  
 24 deteriorated, at the end of their service life or are obsolete.<sup>24</sup> These projects and programs  
 25 involve work that has been identified based on age, condition assessment, industry  
 26 standards and environmental regulations. The refurbishment and/or replacement of  
 27 these assets is supported based on concerns about performance, reliability, physical  
 28 condition, the availability of parts and compliance with environmental regulations and  
 29 industry standards.
- 30

31 There are also twenty-two renewal projects/programs which do not require the approval of the  
 32 Board with total expenditures of \$6,368,400 in 2024 and \$1,773,000 in 2025.<sup>25</sup> In addition the  
 33 renewal expenditures include 16 projects/programs previously approved by the Board in prior

---

<sup>21</sup> The Boiler Condition Assessment and Miscellaneous Upgrades (2024)-Holyrood, and Wood Pole Line Management Program (2024).

<sup>22</sup> Overhaul Unit 1 Turbine, Valves and Generator (2024)-Holyrood; and Overhaul Diesel Units (2024).

<sup>23</sup> Distribution System In-Service Failures, Miscellaneous Upgrades, and Street Lights (2024), Thermal In-Service Failures (2024), Hydraulic In-Service Failures (2024), and Terminal Station In-Service Failures (2024).

<sup>24</sup> Replace Diesel Gensets (2024-2026), Upgrade Power Transformers (2024-2025), Replace Protective Relays (2024-2025), Renew Circuit Breakers (2024-2025), Renew Distribution Feeders (2024-2045), Replace Disconnects (2024-2025), Replace Instrument Transformers (2024-2025), Refurbish Intake 1 (2024-2025)-Bay d'Espoir, Flatten Downstream Slope (2024-025)-Hinds Lake, Refurbish Surge Tank 1(2024-2025)-Bay d'Espoir, and Replace Power Line Carrier (2024-2025)-TL247.

<sup>25</sup> Application, Proposals Under \$750,000, pages 6 to 12.

1 capital budget applications in the amount of \$19,245,300 in 2024, \$6,835,300 in 2025 and  
2 \$250,000 in 2026.<sup>26</sup>

3  
4 The Board notes that renewal expenditures continue to make up the majority of Hydro's capital  
5 expenditures though they are lower in 2024 than they were in 2023. The Board accepts that  
6 Hydro's renewal-driven capital investment aims largely to sustain current system-level reliability  
7 as its assets age. The Board is satisfied based on the evidence that approval of the proposed  
8 renewal expenditures is necessary to allow Hydro to assess, replace and refurbish system assets  
9 to support the continued provision of safe and reliable electric service. The Board accepts the  
10 renewal expenditures associated with projects and programs approved in previous capital budget  
11 applications on the basis that the evidence confirms that there have been no material changes in  
12 the scope, nature or magnitude of these projects/programs. The Board notes that the Intervenor  
13 did not oppose the renewal expenditures and did not offer any specific comments on the renewal  
14 projects or programs. The Board is satisfied that the proposed expenditures for the renewal  
15 projects and programs appropriately balance the need for Hydro to maintain its system while  
16 minimizing the costs to be funded by its customers. The Board finds that Hydro's proposed  
17 renewal expenditures are justified, appropriate and necessary to ensure the delivery of power to  
18 customers at the lowest possible cost, in an environmentally responsible manner, consistent with  
19 reliable service.

20

#### 21 3.1.5. Service Enhancement

22

23 Service enhancement investments are those which modify Hydro's system to meet operational  
24 requirements more efficiently or effectively, involving year over year projects/programs  
25 associated with safety, environmental protection, automation, and poorly performing feeders.  
26 The 2024 service enhancement expenditures of \$4,618,900 account for approximately 5% of  
27 Hydro's proposed 2024 Capital Budget capital expenditures, decreased from approximately 10%  
28 of Hydro's 2023 Capital Budget.

29

30 There are two service enhancement projects/programs with expenditures over \$750,000  
31 requiring the approval of the Board with expenditures of \$1,366,900 in 2024, \$2,441,800 in 2025  
32 and \$235,300 in 2026. These expenditures relate to distribution feeders and meters.

33

- 34 • Expenditures of \$1,064,300 in 2024 and \$2,227,400 in 2025 are proposed to upgrade  
35 Hydro's worst performing distribution feeders.<sup>27</sup> This work is to refurbish a distribution  
36 feeder in the L'Anse-au-Loup Distribution System which has been prioritized through the  
37 examination of reliability performance data and recent condition assessments.
- 38 • Expenditures of \$302,600 in 2024, \$214,400 in 2025 and \$235,300 in 2026 are proposed  
39 to replace meters.<sup>28</sup> This work involves the replacement of obsolete meters and  
40 associated test switches which are manually read with industrial meters with demand,

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<sup>26</sup> Application, 2024 Capital Budget Overview, Appendix B.

<sup>27</sup> Upgrade of Worst Performing Distribution Feeders (2024-2025).

<sup>28</sup> The Automate Bulk Metering (2024-2026).

1 load profile, and remote communications capabilities and network connection to  
2 facilitate remote reading which will improve accuracy and provide potential cost savings.

3  
4 There are also four service enhancement projects/programs which do not require the approval  
5 of the Board with total expenditures of \$458,300 in 2024 and \$385,000 in 2025.<sup>29</sup> In addition the  
6 2024 service enhancement expenditures include three projects/programs previously approved  
7 by the Board in the amount of \$2,793,700 in 2024.<sup>30</sup>

8  
9 The Board notes that Hydro's proposed service enhancement expenditures are intended to  
10 address distribution system reliability risks and operational efficiency. The Board is satisfied that  
11 the approval of the proposed service enhancement expenditures would allow Hydro to meet  
12 operational requirements more efficiently and effectively. The Board accepts the service  
13 enhancement expenditures associated with projects/programs approved in previous capital  
14 budget applications on the basis that there have been no material changes in the scope, nature  
15 or magnitude of these projects/programs. The Intervenor did not oppose the service  
16 enhancement expenditures and did not provide any specific comments on these expenditures.  
17 The Board finds that Hydro's proposed service enhancement expenditures are justified,  
18 appropriate and necessary to ensure the delivery of power to its customers at the lowest possible  
19 cost, in an environmentally responsible manner, consistent with reliable service.

#### 20 21 3.1.6. System Growth

22  
23 System growth investments are those which modify Hydro's system to meet forecast changes in  
24 customer electricity resource requirements. The 2024 system growth expenditures of \$6,547,900  
25 account for approximately 7% of the 2024 Capital Budget, increased from approximately 3% in  
26 Hydro's 2023 Capital Budget.

27  
28 There are no new system growth projects or programs proposed in the Application. The system  
29 growth expenditures are made up of three projects which were previously approved by the Board  
30 in prior capital budget applications with expenditures of \$6,547,900 in 2024 and \$5,950,600 in  
31 2025.<sup>31</sup>

32  
33 The Board notes that the system growth expenditures are associated with the continuation of  
34 previously approved projects to address load growth in Labrador West. The Board accepts these  
35 expenditures on the basis that the evidence in this Application confirms that there have been no  
36 material changes in the scope, nature or magnitude of these projects. The Intervenor did not  
37 oppose the system growth expenditures and did not provide any specific comments on these  
38 expenditures. The Board finds that Hydro's proposed system growth expenditures are justified,  
39 appropriate and necessary to ensure the delivery of power to its customers at the lowest possible  
40 cost, in an environmentally responsible manner, consistent with reliable service.

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<sup>29</sup> Application, Proposals Under \$750,000, page 13.

<sup>30</sup> Application, 2024 Capital Budget Overview, Appendix B.

<sup>31</sup> Application, 2024 Capital Budget Overview, Appendix B.

1 3.1.7. Allowance for Unforeseen Items

2

3 The Application proposes a \$1,000,000 Allowance for Unforeseen Items in 2024. This allowance  
4 will permit Hydro to proceed with unbudgeted capital expenditures so that it can respond  
5 expeditiously to events affecting the electrical system. This allowance is consistent with the  
6 amount approved in Hydro's previous capital budget applications and accounts for approximately  
7 1% of its 2024 Capital Budget. The Intervenor did not oppose the proposed Allowance for  
8 Unforeseen Items. The Board finds that Hydro's proposed Allowance for Unforeseen Items will  
9 facilitate the provision of least-cost reliable and safe service, in an environmentally responsible  
10 manner, by enabling Hydro to respond expeditiously to unexpected events that may adversely  
11 affect the electrical system.

12

13 **3.2. Proposed 2024 Capital Budget**

14

15 Hydro's proposed 2024 Capital Budget is \$96,452,300 which includes expenditures of  
16 \$44,232,500 requiring Board approval, \$11,972,600 not requiring Board approval and  
17 \$40,247,200 previously approved by the Board.

18

19 While Hydro's proposed 2024 Capital Budget is higher than its 2023 Capital Budget of  
20 \$90,828,700, the Board accepts that Hydro took deliberate action to reflect a level of investment  
21 that appropriately balances reliability and cost concerns in light of increasing rate pressures and  
22 other planned capital work.<sup>32</sup> Based on the evidence Hydro's utility asset management practices  
23 aim to reduce investment to the minimum capital level which is prudent and does not  
24 compromise customer reliability, safety or environment.<sup>33</sup> The Board notes that Hydro reviewed  
25 previously approved multi-year projects/programs to identify opportunities for budget  
26 refinement and, as a result, multi-year projects/programs with expenditures in 2024 were  
27 reduced by \$8.1 million.<sup>34</sup> Hydro also evaluated all ongoing projects to determine whether  
28 deferral was an option resulting in the deferral of other capital expenditures totalling  
29 approximately \$10.5 million.<sup>35</sup>

30

31 As already discussed the Board has found that the proposed 2024 expenditures in excess of  
32 \$750,000 for the construction, purchase or lease of improvements or additions to Hydro's  
33 property are reasonable and justified. The Board has also accepted the expenditures associated  
34 with projects and programs previously approved by the Board based on the evidence confirming  
35 that there have been no material changes in the scope, nature or magnitude of these projects  
36 and programs. While expenditures under \$750,000 do not require approval of the Board under  
37 subsection 41(3) of the **Act**, they are included in Hydro's proposed 2024 Capital Budget which  
38 requires the approval of the Board pursuant to subsection 41(1) of the **Act**. The Board has  
39 reviewed the information provided in relation to these expenditures and accepts that they should

---

<sup>32</sup> Hydro Submission, pages 1 to 2.

<sup>33</sup> 2024 Capital Budget Overview, page 1.

<sup>34</sup> \$6.2 million was moved to future years and the remainder was eliminated from the budget. 2024 Capital Budget Overview, page 23.

<sup>35</sup> 2024 Capital Budget Overview, Table 6, page 19.

1 be included in Hydro's 2024 Capital Budget. The Board is satisfied that the approval of Hydro's  
 2 2024 Capital Budget is appropriate to ensure that Hydro can continue to provide service that is  
 3 reasonably safe and adequate and just and reasonable as required by section 37 of the **Act**. The  
 4 Board believes that Hydro's proposed 2024 Capital Budget represents a reasonable balance of  
 5 costs and reliability. The Board notes that the Intervenor did not oppose the approval of Hydro's  
 6 2024 Capital Budget. The Board finds that the proposed 2024 Capital Budget in the amount of  
 7 \$96,452,300 is justified, reasonable and necessary to ensure the delivery of power to customers  
 8 at the lowest possible cost, in an environmentally responsible manner, consistent with reliable  
 9 service.

### 11 3.3. Average Rate Base

12  
 13 The Application requested that the Board fix and determine Hydro's 2022 average rate base in  
 14 the amount of \$2,334,120,000.

**Computation of Average Rate Base  
 for the Year Ended December 31, 2022  
 (\$000s)**

	<b>2022</b>
Total Capital Assets	\$2,186,606
<b>Deduct Items Excluded from Rate Base</b>	
Work in Progress	(22,755)
Asset Retirement Obligations (net of amortization)	(2,734)
Net Capital Assets	2,161,117
Net Capital Assets, Previous Year	2,165,756
Unadjusted Average Capital Assets	2,163,437
<b>Deduct</b>	
Average Net Capital Assets Excluded from Rate Base	(8,628)
Average Capital Assets	2,154,809
Cash Working Capital Allowance	10,312
Fuel Inventory	70,512
Supplies Inventory	38,856
Average Deferred Charges	59,632
<b>Average Rate Base at Year-End</b>	<b>\$2,334,120</b>

15 Grant Thornton reviewed Hydro's proposed average rate base for 2022 and concluded that the  
 16 proposed 2022 average rate base accords with established practice and relevant Board Orders.

17  
 18 The Board notes that the proposed 2022 rate base reflects the impacts of the Holyrood Thermal  
 19 Generating Station Unit 2 transformer replacement which was completed under the Allowance  
 20 for Unforeseen Items account.<sup>36</sup> The Board has reviewed the final report related to this

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<sup>36</sup> Order No. P.U. 34(2021).

1 replacement and is satisfied that it is appropriate for the associated expenditures to be included  
2 in Hydro's 2022 average rate base.<sup>37</sup> The Intervenor did not comment on Hydro's proposed 2022  
3 average rate base or the expenditures relating to the Holyrood Thermal Generating Station Unit  
4 2 transformer replacement. The Board fixes and determines Hydro's average rate base for 2022  
5 in the amount of \$2,334,120,000.

#### 6 7 **3.4. Other Issues**

8  
9 The Board notes that while the Intervenor did not object to the approval of the Application, the  
10 Consumer Advocate commented on four other issues.

##### 11 12 3.4.1. Provisional Capital Budget Guidelines

13  
14 The Consumer Advocate submitted that the Board's provisional Capital Budget Guidelines must  
15 be finalized to ensure benefits to consumers are maximized and that changes in asset  
16 management practices are consistent with industry changes and best practices emerging in other  
17 jurisdictions.

18  
19 In its reply, Hydro noted that the process to finalize the Guidelines is underway in a process  
20 separate from this Application.

21  
22 The Board notes that the current Guidelines were established provisionally in January 2022 and  
23 are the subject of an ongoing separate Board process which involves other parties not  
24 participating in this Application. The Guidelines are not an issue in this proceeding and will  
25 continue to be addressed in a separate process with the participation of all interested parties.

##### 26 27 3.4.2. Carryovers

28  
29 The Consumer Advocate submitted that Hydro's asset management practices and execution  
30 continue to be problematic and urged the Board to encourage Hydro to address project execution  
31 issues to ensure certainty of supply for customers. The Consumer Advocate pointed out that  
32 Hydro will carry over approximately \$40,000,000 of capital work planned for 2022 and noted  
33 similar carryovers for the last 10 years. In the Consumer Advocate's view this is concerning at a  
34 time when there is significant uncertainty relating to the province's electricity supply.

35  
36 In its reply, Hydro stated that the causal factors for capital expenditure carryovers are varied and  
37 must be considered when assessing the impact of carryovers on system reliability. Hydro  
38 explained that approximately half of the reported carryovers were due to changes in cash flow  
39 within the schedule for multi-year projects and have no impact on the asset in-service date or  
40 system reliability. The remaining carryovers were generally due to supply chain constraints  
41 outside of Hydro's control or due to strategic decisions made in the best interest of ratepayers

---

<sup>37</sup> "Holyrood Thermal Generation Station Transformer T2 Failure – Final Report," Newfoundland and Labrador Hydro, February 8, 2022.



1 and system reliability. According to Hydro carryovers cannot be fully avoided, given the size and  
2 complexity of its capital program. Hydro submitted that it has successfully minimized the impacts  
3 of carryovers on system reliability.

4  
5 The Board accepts that carryovers are an inevitable part of any capital program and good planning  
6 and oversight are critical to provide for well managed capital execution to minimize cost  
7 escalation and impacts on subsequent year project execution. The evidence filed in this  
8 Application demonstrates that the 2022 carryovers in the amount of \$39,990,800, included  
9 \$15,310,000 attributed to the strategic deferral of work on five items, \$13,635,000 related to  
10 supply chain issues and \$8,756,000 associated with delays in the environmental assessment  
11 process.<sup>38</sup> The Board accepts Hydro's explanation for the strategic deferral of expenditures based  
12 on updated asset condition information, updated electrical system planning requirements, and  
13 revised project execution plans within multi-year projects. The Board is also satisfied that the  
14 remainder of 2022 carryovers were largely beyond Hydro's control being related primarily to  
15 supply chain issues and delayed project approval by outside agencies. The Board is satisfied that  
16 it is not necessary based on the evidence in this proceeding to provide direction to Hydro with  
17 respect to project execution at this time. Nevertheless the Board acknowledges Hydro's high  
18 levels of carryovers in recent years and believes that continued oversight is required with respect  
19 to this issue. The Board will continue to monitor Hydro's carryovers to determine whether Hydro  
20 should be directed in the future to take any specific additional actions.

#### 21 22 3.4.3. Asset Management Plan for Bay d'Espoir

23  
24 The Consumer Advocate submitted that Hydro should develop an overall asset management plan  
25 for the refurbishment of the Bay d'Espoir Hydroelectric Generating Facility to ensure it can be  
26 relied on to provide reliable supply to customers and to assess if it makes sense to continue to  
27 refurbish the plant or embark on an option to replace the capacity and energy it supplies. The  
28 Consumer Advocate submitted that without an overall asset management plan for Bay d'Espoir  
29 the parties and the Board cannot know if it makes economic sense to continue to refurbish the  
30 plant or embark on an option to replace the capacity and energy it supplies.

31  
32 In its reply, Hydro submitted that its asset management plans for hydraulic generating assets are  
33 tailored to each asset, enable fulsome evaluation of asset condition and prudent and informed  
34 decision-making. According to Hydro an overall condition assessment, such as that undertaken  
35 for the Holyrood Thermal Generating Station in 2021–2022, is not necessary or beneficial for  
36 making informed and prudent asset management decisions about its hydraulic generating assets  
37 at Bay d'Espoir. Hydro submitted that the sustaining capital investments proposed in the  
38 Application are necessary and expected to realize the design life of the Bay d'Espoir Facility.

39  
40 The Board notes that the Bay d'Espoir Facility is a critical hydraulic generating asset. Significant  
41 capital expenditures are proposed for this facility in 2024 and significant additional expenditures  
42 are planned for future years. In addition Hydro is currently investigating the potential expansion

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<sup>38</sup> PUB-NLH-076, Attachment 1. The remaining expenditures were \$2,289,800.

1 of this facility and this will be addressed as a part of the Board’s ongoing Reliability and Resource  
2 Adequacy Review. The Board also notes that Hydro is conducting an asset management review  
3 which will address all of its assets including Bay d’Espoir. It may be some time before these  
4 reviews are completed and a new approach to asset management for Bay d’Espoir is developed.  
5 As a result the Board believes it is premature to direct Hydro to develop an asset management  
6 plan for the refurbishment of the Bay d’Espoir Facility. The Board does believe, however, that it  
7 would be helpful for Hydro to include in its next capital budget application a report setting out its  
8 capital plan for the Bay d’Espoir Facility addressing anticipated and potential work and  
9 expenditures over the 2025-2034 period.

#### 10 3.4.4. Variability and Non-Dispatchability of Renewable Generation Sources

11 The Consumer Advocate submitted that the Board should direct Hydro and/or Newfoundland  
12 Power to gain a better understanding of the integration of non-dispatchable resources, non-wires  
13 alternatives, behind-the-meter generation and the role of “prosumers” in meeting the future  
14 electricity of the province. The Consumer Advocate expressed concern that Hydro is conducting  
15 a Reliability and Resource Adequacy Study without information on how other North American  
16 utilities plan on combining non-dispatchable resources with other generation resources. In the  
17 Consumer Advocate’s view government net-zero carbon efforts are likely to make customer-  
18 owned generation and battery storage economically viable options as fossil fuels are ruled out as  
19 potential supply options. The Consumer Advocate also noted that uncertainty in the reliability of  
20 supply to the Island Interconnected System is likely to increase interest in customer-owned  
21 generation and battery storage.  
22  
23

24 In its reply Hydro submitted that it is giving full consideration to all viable sources of capacity and  
25 energy through its Reliability Adequacy Plan. Hydro noted that during 2023 it has filed studies  
26 with the Board addressing wind integration, battery energy storage systems, and pumped storage  
27 at its existing reservoirs. Hydro has also submitted plans to file a study into the viability of pumped  
28 storage at greenfield sites during 2024. Hydro notes that as a system with low load and  
29 constrained interconnections to neighbouring systems, Hydro must evaluate generating sources  
30 within this context and that information on the integration of renewable sources in other  
31 jurisdictions provides limited value.  
32

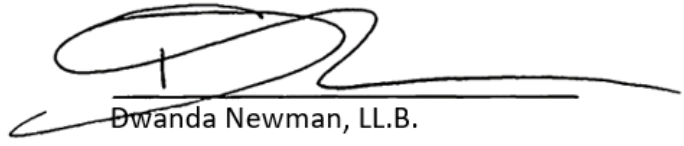
33 The Board notes that the issues raised by the Consumer Advocate with respect to renewable  
34 generation sources and net-zero carbon efforts are important ongoing issues which have  
35 ramifications beyond Hydro’s 2024 Capital Budget Application. These issues are a significant part  
36 of the ongoing Reliability and Resource Adequacy Review and will come to the forefront in future  
37 capital planning for utilities in the province as the technology continues to develop and become  
38 more widely accepted. The Board believes that it would be premature and inappropriate to direct  
39 Hydro as a part of this Application to study the issues raised by the Consumer Advocate with  
40 respect to variability and non-dispatchability of renewable generation sources.  
41

1 **4. BOARD ORDER**

2  
3 **IT IS THEREFORE ORDERED:**

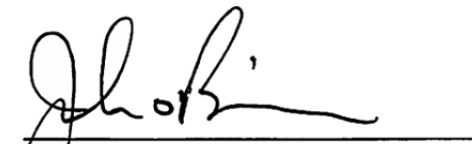
- 4
- 5 1) Hydro's proposed construction and purchase of improvements or additions to its property  
6 in excess of \$750,000 to be completed in 2024, as set out in Schedule A to this Order, are  
7 approved.
- 8
- 9 2) Hydro's proposed multi-year construction and purchase of improvements or additions to  
10 its property in excess of \$750,000, as set out in Schedule B to this Order, are approved.
- 11
- 12 3) Hydro's proposed 2024 Capital Budget for improvements or additions to its property in  
13 the amount of \$96,452,300, as set out in Schedule C to this Order, is approved.
- 14
- 15 4) Hydro's proposed average rate base for the year ended December 31, 2022 is hereby fixed  
16 and determined at \$2,334,120,000.
- 17
- 18 5) Unless otherwise directed by the Board Hydro shall file with, its 2025 Capital Budget  
19 Application, a report in relation to the Holyrood Thermal Generating Station addressing  
20 the continued operation of the facility until the later of March 31, 2030 or the anticipated  
21 conclusion of generation operations.
- 22
- 23 6) Unless otherwise directed by the Board Hydro shall file, with its 2025 Capital Budget  
24 Application, a report in relation to the Bay d'Espoir Hydroelectric Generating Facility  
25 addressing its capital plan for this facility over the 2025-2034 period.
- 26
- 27 7) Unless otherwise directed by the Board, Hydro shall file a report on its 2024 capital  
28 expenditures by April 1, 2025.
- 29
- 30 8) Unless otherwise directed by the Board Hydro shall provide, in conjunction with its 2025  
31 Capital Budget Application, a status report on the 2024 capital expenditures showing for  
32 each project:
- 33
- 34 i. the approved budget for 2024;
- 35 ii. the expenditures prior to 2024;
- 36 iii. the 2024 expenditures to the date of application;
- 37 iv. the remaining projected expenditures for 2024;
- 38 v. the variance between the projected total expenditures and the approved budget;
- 39 vi. an explanation of the variance.
- 40
- 41 9) Hydro shall pay all costs and expenses of the Board incurred in connection with the  
42 Application.

**DATED** at St. John's, Newfoundland and Labrador this 21<sup>st</sup> day of December 2023.



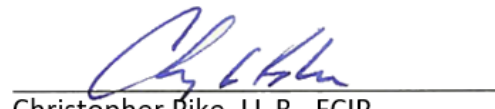
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Dwanda Newman, LL.B.  
Vice-Chair




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John O'Brien, FCPA, FCA, CISA  
Commissioner



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Christopher Pike, LL.B., FCIP  
Commissioner



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Jo-Anne Galarneau  
Executive Director and Board Secretary

Newfoundland and Labrador Hydro  
2024 Capital Budget  
Single-Year Projects Over \$750,000  
(\$000)

**2024**

**Access**

Provide Service Extensions (2024)	4,272.0	
<b>Total Access</b>		<b>\$ 4,272.0</b>

**Mandatory**

Refurbish Fuel Oil Storage Tank 4 (2024) - Holyrood	1,920.0	
<b>Total Mandatory</b>		<b>\$ 1,920.0</b>

**Allowance for Unforeseen**

Allowance for Unforeseen Items (2024)	1,000.0	
<b>Total Allowance for Unforeseen</b>		<b>\$ 1,000.0</b>

**Renewal**

Thermal In-Service Failures (2024)	3,508.7	
Terminal Station In-Service Failures (2024)	1,300.0	
Hydraulic In-Service Failures (2024)	1,500.0	
Distribution System In-Service Failures, Miscellaneous Upgrades, and Street Lights (2024)	4,345.4	
Overhaul Diesel Units (2024)	829.2	
Boiler Condition Assessment and Miscellaneous Upgrades (2024) - Holyrood	3,957.8	
Overhaul Unit 1 Turbine Valves and Generator (2024) - Holyrood	5,181.4	
Wood Pole Line Management (2024)	3,765.2	
<b>Total Renewal</b>		<b>\$ 24,387.7</b>

**General Plant**

Replace Grader Unit V9829 (2024) - Bay d'Espoir	836.7	
Perform Software Upgrades and Minor Enhancements (2024)	864.2	
<b>Total General Plant</b>		<b>\$ 1,700.9</b>

<b>Total Expenditures Single-Year Projects over \$750,000</b>		<b>\$ 33,280.6</b>
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**Newfoundland and Labrador Hydro**  
**2024 Capital Budget**  
**Multi-Year Projects Over \$750,000**  
**(\$000)**

<b>Classification</b>	<b>Project Description</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>Total</b>
Renewal	Replace Power Line Carrier (2024-2025) - TL247	87.2	667.4		754.6
	Replace Instrument Transformers (2024-2025)	154.9	714.8		869.7
	Replace Protective Relays (2024-2025)	1,388.4	2,050.7		3,439.1
	Replace Disconnects (2024-2025)	127.4	1,358.1		1,485.5
	Upgrade Power Transformers (2024-2025)	864.6	2,711.3		3,575.9
	Flatten Downstream Slope (2024-2025) - Hinds Lake	276.1	2,953.4		3,229.5
	Refurbish Surge Tank 1 (2024-2025) - Bay d'Espoir	175.8	2,111.4		2,287.2
	Renew Circuit Breakers (2024-2025)	183.9	2,779.3		2,963.2
	Renew Distribution Feeders (2024-2025)	1,287.3	1,245.1		2,532.4
	Refurbish Intake 1 (2024-2025) - Bay d'Espoir	272.1	3,071.9		3,344.0
	Replace Diesel Gensets (2024-2026)	535.8	478.0	3,902.3	4,916.1
Service Enhancement	Automate Bulk Metering (2024-2026)	302.6	214.4	235.3	752.3
	Upgrade Worst-Performing Distribution Feeders (2024-2025)	1,064.3	2,227.4		3,291.7
General Plant	Replace MDR8000 Microwave Radios (2024-2025)	953.5	500.3		1,453.8
	Replace Powerhouse 1 Roof (2024-2025) - Bay d'Espoir	140.2	1,819.2		1,959.4
	Refurbish Outbuilding and Powerhouse Building Envelopes (2024-2025) - Holyrood	156.2	1,039.4		1,195.6
	Replace Light- and Heavy-Duty Vehicles (2024-2026)	1,479.1	4,148.8	8.4	5,636.3
	Replace VHF Radio System (2024-2025)	1,261.6	290.6		1,552.2
	Replace Mobile Equipment (2024-2025)	216.9	599.7		816.6
		Purchase 50' Material Handler Aerial Device on Tracked Unit (2024-2026) - Happy Valley Goose Bay	24.0	841.8	7.1
<b>Total Multi-Year Projects over \$750,000 commencing in 2024</b>		<b>\$ 10,951.9</b>	<b>\$ 31,823.0</b>	<b>\$ 4,153.1</b>	<b>\$ 46,928.0</b>

**Newfoundland and Labrador Hydro  
2024 Capital Budget  
(000s)**

Projects/Programs Over \$750,000 to be completed in 2024	33,280.6
Multi-Year Projects/Programs over \$750,000 commencing in 2024	10,951.9
Projects/Programs Under \$750,000 to be completed in 2024 <sup>1</sup>	9,673.4
Multi-Year Projects/Programs under \$750,000 commencing in 2024 <sup>2</sup>	2,299.2
Multi-Year Projects/Programs previously approved by the Board prior to 2024 <sup>3</sup>	40,247.2
<b>Total 2024 Capital Budget</b>	<b>96,452.3</b>

<sup>1</sup> See Schedule C: Appendix 1 for details.

<sup>2</sup> See Schedule C: Appendix 2 for details.

<sup>3</sup> See Schedule C: Appendix 3 for details.

**Newfoundland and Labrador Hydro**  
**2024 Capital Budget**  
**Single-Year Projects Under \$750,000**  
**(\$000)**

**2024**

**Access**

Purchase Meters and Metering Equipment (2024)	470.7	
<b>Total Access</b>		\$ 470.7

**Renewal**

Gas Turbine In-Service Failures (2024)	358.0	
Transmission In-Service Failures (2024)	158.5	
Penstock Level II Condition Assessment (2024) - Upper Salmon	382.8	
Diesel In-Service Failures (2024)	488.3	
Replace 48 V Battery Banks and Chargers (2024)	422.2	
Purchase Mobile Devices (2024)	155.6	
Upgrade Remote Terminal Units (2024)	165.9	
Overhaul Hydraulic Units (2024)	323.8	
Replace Timber Crib and Insulation (2024) - Burnt Dam Spillway	161.8	
Overhaul Pumps (2024) - Holyrood	661.0	
Overhaul Marine Terminal Loading Arms (2024) - Holyrood	511.0	
Inspect Fuel Tanks (2024) - Hardwoods Gas Turbines	692.9	
Telecommunications In-Service Failure (2024)	91.4	
<b>Total Renewal</b>		\$ 4,573.2

**Service Enhancement**

Remove Safety Hazards (2024)	198.3	
Install Anemometer (2024) - Cat Arm	68.6	
<b>Total System Enhancement</b>		\$ 266.9

**General Plant**

Purchase Office Equipment Less Than \$50,000 (2024)	50.0	
Purchase Tools and Equipment Less than \$50,000 (2024) - Gas Turbine	18.6	
Purchase Tools and Equipment Less than \$50,000 (2024) - Hydraulic Plants	209.4	
Purchase Tools and Equipment Less than \$50,000 (2024) - Thermal Plants	167.1	
Replace Network Communications Equipment (2024)	180.7	
Purchase Tools and Equipment Less than \$50,000 (2024) - Central Region	188.2	
Purchase Tools and Equipment Less than \$50,000 (2024) - Northern Region	97.0	
Purchase Tools and Equipment Less than \$50,000 (2024) - Labrador Region	120.1	
Upgrade Energy Management System (2024)	366.4	
Purchase Personal Computers (2024)	555.9	
Replace Peripheral Infrastructure (2024)	276.8	
Upgrade Core OT Infrastructure (2024)	174.7	
Purchase Tools and Equipment Less than \$50,000 (2024) - Telecontrol	45.6	
Replace SONET Multiplexors (2024)	430.4	
Update Cyber Security Infrastructure (2024)	281.3	
Minor Telecommunications Enhancements (2024)	96.9	
Replace CCTV Cameras (2024)	317.6	
General Property Rehabilitation (2024) - Hydro Place	234.0	
Upgrade HVAC Supervisory Controllers (2024) - Hydro Place	149.6	
Upgrade SCADA Network (2024)	402.3	
<b>Total General Plant</b>		\$ 4,362.6

<b>Total Expenditures Single-Year Projects Under \$750,000</b>		<b>\$ 9,673.4</b>
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**Newfoundland and Labrador Hydro**  
**2024 Capital Budget**  
**Multi-Year Projects Under \$750,000**  
**(\$000)**

<b>Classification</b>	<b>Project Description</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>Total</b>
Renewal	Replace Annunciator - Phase 2 (2024-2025) - Bay d'Espoir	294.1	187.5		481.6
	Replace Terminal Station Battery Banks and Chargers (2024-2025)	71.8	120.9		192.7
	Replace Annunciator Panels (2024-2025) - Cat Arm	160.2	191.2		351.4
	Upgrade UPS 1 & 2 (2024-2025) - Holyrood	263.0	107.6		370.6
	Upgrade Unit 1 Control System (2024-2025) - Holyrood	468.3	184.3		652.6
	Upgrade DCS Hardware - Units 1 and 2 (2024-2025) - Holyrood	195.2	277.3		472.5
	Upgrade Data Alarm Systems (2024-2025) - Western Avalon Terminal Station	137.0	156.9		293.9
	Replace Circuit Breaker Reclosing Controllers (2024-2025) - TL247	112.4	215.8		328.2
	Upgrade Distribution (2024-2025) - Bay d'Espoir Terminal Station 2	93.2	331.5		424.7
Service Enhancement	Construct Maintenance Platform (2024-2025) - Holyrood Gas Turbine	130.5	228.7		359.2
	Upgrade Instrumentation (2024-2025) - Hardwoods Gas Turbine	60.9	157.2		218.1
General Plant	Replace Powerhouse 1 Air Conditioning Unit (2024-2025) - Bay d'Espoir	57.8	231.2		289.0
	Refurbish Control Building (2024-2025) - Grandy Brook and Doyles	109.4	444.7		554.1
	Install Fire Protection in 230 kV Stations (2024-2025) - Voisey's Bay	53.8	599.0		652.8
Mandatory	Upgrade Station Lighting (2024-2025) - Bottom Waters, Deer Lake, Doyles, Indian River, and Western Avalon Terminal Stations	91.6	429.0		520.6
<b>Total Multi-Year Projects under \$750,000 commencing in 2024</b>		<b>\$ 2,299.2</b>	<b>\$ 3,862.8</b>	<b>\$ 0.0</b>	<b>\$ 6,162.0</b>

**Newfoundland and Labrador Hydro**  
**2024 Capital Budget**  
**Multi-Year Projects Previously Approved by the Board**  
**(\$000)**

Approved	Classification	Project Description	2023 and Prior	2024	2025	2026	Total
P.U. 2(2023)	Renewal	Terminal Station Renewal Program (2023-2024)	1,733.7	5,584.5			7,318.2
		Circuit Breakers Renewal Program (2023-2024)	216.9	3,595.1			3,812.0
		Install Breaker Failure Protection (2023-2024) - Sunnyside	73.5	216.2			289.7
		Diesel Genset Replacement Program (2023-2025)	819.1	174.0	1,883.1	250.0	3,126.2
		Replace Diesel Genset 1 (2023-2024) - Ebbegunbaeg	298.0	728.3			1,026.3
		Refurbish Superstructure (2023-2024) - Salmon River Spillway	328.3	2,500.0			2,828.3
		Replace Powerhouse Station Service Panel (2023-2024) - Upper Salmon	591.8	976.7			1,568.5
		Replace Oil Mist Separator (2023-2024) - Happy Valley Gas Turbine	138.5	262.1			400.6
		Major Condition Assessment and Miscellaneous Refurbishments Synchronous Condenser 1 and 2 (2023-2024) - Wabush Terminal Station	577.2	516.1			1,093.3
		Replace Data Alarm System Annunciators (2023) - Buchans	61.2	104.8			166.0
		Replace Circuit Breaker Reclosing Controllers (2023-2024) - Hardwoods	81.6	149.6			231.2
		Replace Intermediate Fuel Storage Tanks (2023-2024) - Nain	127.4	593.7			721.1
		Replace Power Line Carrier (2023-2024) - TL223 and TL224	105.3	852.4			957.7
		System Growth	Additions for Load Growth - Upgrade Transformer Capacity (2023-2024) - Jean Lake Terminal Station	580.0		5,436.1	
	Service Enhancement	Upgrade of Worst-Performing Distribution Feeders (2023-2024)	73.4	1,372.6			1,446.0
		Install Oil Spill Containment Transformer T1S (2023-2024) - Cat Arm	155.1	426.5			581.6
	General Plant	Install Fire Protection in 230 kV Stations (2023-2024) - Deer Lake	79.2	535.3			614.5
		Replace Light- and Heavy-Duty Vehicles (2023-2025)	1,308.1	2,584.6	473.3		4,366.0
		Water System Condition Assessment and Upgrades (2023) - Bay d'Espoir	161.0	504.9			665.9
		Replace Building Exterior (2023-2024) - Postville	124.6	558.7			683.3
		Replace HVAC System (2023-2024) - Bishop's Falls	43.4	128.8			172.2
		Upgrade Water and Fire Suppression Systems (2023-2024) - Bishop's Falls	353.7	2,886.3			3,240.0
		Replace Diesel Shop Building (2023-2025) - Bishop's Falls	168.0	1,254.1	889.9		2,312.0
	Replace Mobile Equipment (2023-2024)	541.2	187.3			728.5	
Mandatory	Replace Terminal Station Lighting (2023-2024)	323.3	594.1			917.4	
<b>Total Multi-Year Projects commencing in 2023</b>			<b>\$ 9,063.5</b>	<b>\$ 27,286.7</b>	<b>\$ 8,682.4</b>	<b>\$ 250.0</b>	<b>\$ 45,282.6</b>

**Newfoundland and Labrador Hydro**  
**2024 Capital Budget**  
**Multi-Year Projects Previously Approved by the Board**  
**(\$000)**

Approved	Classification	Project Description	2023 and Prior	2024	2025	2026	Total
<b>P.U. 37(2021)</b>	Renewal	Diesel Genset Replacement Unit 2012 - L'Anse-Au-Loup	2,853.1	210.2			3,063.3
		Diesel Genset Replacement Unit 2039 - St. Lewis	1,980.8				1,980.8
	Service Enhancement	Replace Metering System	4,881.2	994.6			5,875.8
	General Plant	Purchase 85' Material Handler Aerial Device on Track Unit	1,286.1	67.8			1,353.9
		Purchase 46' Material Handler Aerial Device on Track Unit	719.2	38.8			758.0
		Replace Light- and Heavy-Duty Vehicles (2022-2024)	1,162.2	2,319.6			3,481.8
<b>Total Multi-Year Projects commencing in 2022</b>			<b>\$ 12,882.6</b>	<b>\$ 3,631.0</b>	<b>\$ 0.0</b>	<b>\$ 0.0</b>	<b>\$ 16,513.6</b>
<b>P.U. 2(2021)</b>	Renewal	Refurbish Ebbegunbaeg Control Structure	9,945.2	2,781.6	4,952.2		17,679.0
	System Growth	Wabush Terminal Station Upgrades	8,870.1	3,808.0			12,678.1
		Additions for Load - Wabush Substation Upgrades	7,439.7	2,739.9	514.5		10,694.1
	<b>Total Multi-Year Projects commencing in 2021</b>			<b>\$ 26,255.0</b>	<b>\$ 9,329.5</b>	<b>\$ 5,466.7</b>	<b>\$ 0.0</b>
<b>Total Multi-Year Projects Previously Approved by the Board</b>			<b>\$ 48,201.1</b>	<b>\$ 40,247.2</b>	<b>\$ 14,149.1</b>	<b>\$ 250.0</b>	<b>\$ 102,847.4</b>