



Hydro Place, 500 Columbus Drive.  
P.O. Box 12400, St. John's, NL  
Canada A1B 4K7  
t. 709.737.1400 f. 709.737.1800  
www.nlh.nl.ca

October 29, 2020

Board of Commissioners of Public Utilities  
Prince Charles Building  
120 Torbay Road, P.O. Box 21040  
St. John's, NL A1A 5B2

Attention: Ms. Cheryl Blundon  
Director of Corporate Services & Board Secretary

Dear Ms. Blundon:

**Re: Application for Approval to Replenish the Allowance for Unforeseen Items Account**

The enclosed application seeks approval of the restoration of the Allowance for Unforeseen Items account to \$1,000,000, which amount is in accordance with Board Order No. P.U. 6(2020), and which Hydro believes to be an appropriate and prudent amount at this time. Newfoundland and Labrador Hydro's Allowance for Unforeseen Items Account balance has been diminished by the expenditures associated with the Charlottetown Diesel Plant Fire and the Charlottetown Generator Replacement. The unforeseen projects that are ongoing are detailed in Schedule 1 to this application.

Should you have any questions, please contact the undersigned.

Yours truly,

**NEWFOUNDLAND AND LABRADOR HYDRO**

A handwritten signature in blue ink that reads "Shirley A. Walsh".

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Shirley A. Walsh  
Senior Legal Counsel - Regulatory  
SAW/sk

Encl.

ecc: **Board of Commissioners of Public Utilities**  
Jacqui Glynn  
PUB Official Email

**Newfoundland Power**  
Gerard M. Hayes  
Regulatory Email

**Consumer Advocate**

Dennis M. Browne, Q.C., Browne Fitzgerald Morgan & Avis  
Stephen F. Fitzgerald, Browne Fitzgerald Morgan & Avis  
Sarah G. Fitzgerald, Browne Fitzgerald Morgan & Avis  
Bernice Bailey, Browne Fitzgerald Morgan & Avis

**Industrial Customer Group**

Paul L. Coxworthy, Stewart McKelvey  
Denis J. Fleming, Cox & Palmer  
Dean A. Porter, Poole Althouse

**Praxair Canada Inc.**

Sheryl E. Nisenbaum

**Teck Resources Limited**

Shawn Kinsella



## **Application for Approval to Replenish the Allowance for Unforeseen Items Account**

**October 29, 2020**

**An application to the Board of Commissioners of Public Utilities**





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

**IN THE MATTER OF** an Application by Newfoundland and Labrador Hydro (“Hydro”) pursuant to subsection 41(3) of the *Act* for the approval of a capital expenditure to supplement the Allowance for Unforeseen Items for the construction and purchase of certain improvements and additions to its property.

**To: The Board of Commissioners of Public Utilities (“Board”)**

**THE APPLICATION OF HYDRO STATES THAT:**

**A. Background**

1. Hydro is a corporation continued and existing under the *Hydro Corporation Act, 2007*, is a public utility within the meaning of the *Act*, and is subject to the provisions of the *EPCA*.
2. Section 41(3) of the *Act* states that a public utility shall not proceed with the construction, purchase or lease of improvements, or additions to its property where:
  - a) The cost of the construction or purchase is in excess of \$50,000; or
  - b) The cost of the lease is in excess of \$5,000 in a year of the lease, without the prior approval of the Board.
3. Hydro has had two unforeseen capital projects to date in 2020, as well as the continuation of an unforeseen capital project from 2019, all of which met the criteria for the Allowance for Unforeseen Items. The expenditures for these projects have reduced the approved 2020 allowance of \$1,000,000 to \$783,580 as at September 30, 2020.

4. The unforeseen capital project continued from 2019 is the Charlottetown Diesel Plant Fire with a 2020 spend, as of the end of September 2020, of \$142,853. The Charlottetown Generator Replacement project arose in 2020 with a budget estimate of \$73,500 and has incurred expenditures of \$73,567. The second project arising in 2020, the Port Hope Simpson Engine Failure, has a budget estimate of \$120,000. There have been no expenditures on this project as of the end of September 2020. Notice of these unforeseen projects was provided to the Board by Hydro on July 29, 2020<sup>1</sup> and September 14, 2020, respectively. Further details respecting these projects are enclosed as Schedule 1 to this application.

**B. Application**

5. Where expenditures have been made in a year and the account balance has diminished, the Capital Budget Guidelines permit a utility to apply for approval of an additional amount in the Allowance for Unforeseen Items Account provided the utility shows that usage of the account has been consistent with the guidelines.
6. Hydro submits that it remains prudent to maintain an appropriate Unforeseen Allowance of \$1,000,000 to permit Hydro to address unforeseen events that may arise during the remainder of 2020, particularly during the critical winter months. Hydro requests that the Board approve a supplementary allowance of \$216,420 to maintain the full allowance of \$1,000,000.

**C. Newfoundland and Labrador Hydro's Request**

7. Therefore, Hydro makes Application that the Board make an Order approving, pursuant to Section 41(3) of the *Act*, the additional amount of \$216,420 to be added to the Allowance for Unforeseen Items Account.

**D. Communications**

8. Communications with respect to this Application should be forwarded to Shirley A. Walsh, Senior Legal Counsel, Regulatory for Hydro.

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<sup>1</sup> Letter dated July 28, 2020 and filed with the Board on July 29, 2020.

DATED at St. John's in the Province of Newfoundland and Labrador this 29th day of October 2020.

**NEWFOUNDLAND AND LABRADOR HYDRO**



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Shirley A. Walsh  
Counsel for the Applicant  
Newfoundland and Labrador Hydro,  
500 Columbus Drive, P.O. Box 12400  
St. John's, NL A1B 4K7  
Telephone: (709) 685-4973  
email: shirleywalsh@nlh.nl.ca







## Schedule 1

### Allowance for Unforeseen Notifications





Hydro Place, 500 Columbus Drive,  
P.O. Box 12400, St. John's, NL  
Canada A1B 4K7  
t. 709.737.1400 f. 709.737.1800  
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July 28, 2020

Board of Commissioners of Public Utilities  
Prince Charles Building  
120 Torbay Road, P.O. Box 21040  
St. John's, NL A1A 5B2

Attention: Ms. Cheryl Blundon  
Director of Corporate Services & Board Secretary

Dear Ms. Blundon:

**Re: Charlottetown Generator Failure  
Allowance for Unforeseen Items Notification**

### Background

Newfoundland and Labrador Hydro ("Hydro") has 24 diesel generating stations, 19 of which are prime power stations<sup>1</sup> serving a total of approximately 4,400 customers. One of these diesel generating stations is located in Charlottetown and serves the communities of Charlottetown and Pinsent's Arm. The Charlottetown Diesel Generating Station ("Charlottetown DGS") was destroyed in a fire on October 7, 2019 and options for replacement are under review by Hydro. The Charlottetown DGS site presently has three mobile diesel generating units ("gensets") serving the community: Unit 2088 (910 kW), Unit 2089 (725 kW), and Unit 2102<sup>2</sup> (910 kW). Isolated diesel generating stations are designed to ensure that firm power<sup>3</sup> can be delivered in the event of failure of the largest generation unit.

### Charlottetown Unit 2102

Hydro sourced Unit 2102 as part of its initial response to the Charlottetown fire,<sup>4</sup> and the unit has remained on-site since that time. On July 20, 2020, Unit 2102 was placed online to support maintenance and operating requirements, as well to ensure periodic start-up testing.<sup>5</sup> During that time, Unit 2102 tripped offline causing an outage. Hydro inspected the unit between July 20, 2020 and July 27, 2020 and confirmed that the generator portion of the genset has shorted windings in the rotor.

As a result of this failure, Hydro currently does not have adequate backup at this site as the remaining two gensets are required to be in service to serve the town load, which includes the shrimp plant<sup>6</sup> that is resuming production this week. The remaining two gensets have a combined capacity of 1,635 kW. Peak

<sup>1</sup> Prime power stations are not interconnected to the grid and rely on the power supplied by the diesel generation units for capacity and energy.

<sup>2</sup> Unit 2102 is on loan from the Lower Churchill Project. It is Hydro's intent to submit an application for approval of the acquisition of this unit.

<sup>3</sup> Firm power is calculated as the summation of the capacity of all units minus the capacity of the largest unit.

<sup>4</sup> The unit was deemed to be a viable option given its availability, low level of operating hours (500 hours prior to relocation), and compatibility with other units in Hydro's fleet.

<sup>5</sup> Unit 2102 has incurred approximately 400 hours of operation since its relocation.

<sup>6</sup> The shrimp plant employs upwards of 100 people and is the economic driver in the area.

Ms. C Blundon  
Public Utilities Board

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load while the shrimp plant is operating is forecast to be 1,544 kW and is not expected to exceed available generation capacity.

#### Unit 2102 Generator Replacement

With Unit 2102 out of service, failure of a second genset will result in outages for the communities and/or the shrimp plant. Of the two remaining gensets, Unit 2089 has recently undergone a planned overhaul, while Unit 2088 is scheduled for overhaul later this year. To ensure an acceptable level of reliability in this area, a replacement generator is required. Assessment and refurbishment of the existing generator was considered, however due to the greater lead time associated with this alternative and, thus, increased risk to the provision of reliable service to the customers of Charlottetown and Pinsent's Arm, this alternative was deemed unacceptable.

Hydro is undertaking immediate action to purchase a new generator so as to avoid any delay that could have serious negative consequences to the delivery of safe, reliable service in Charlottetown and Pinsent's Arm. To complete this purchase, Hydro will utilize the Allowance of Unforeseen Items Account pursuant to the guidelines for the use of that account. The new generator will be compatible with both Units 2102 and 2088, as well as other units in Hydro's fleet, and is estimated to cost \$88,500. Hydro has sourced a new replacement generator and expects to have it installed by August 7, 2020.

Should you have any questions, please contact the undersigned.

Yours truly,

**NEWFOUNDLAND AND LABRADOR HYDRO**



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Shirley A. Walsh  
Senior Legal Counsel – Regulatory  
SAW/kd

ecc: **Board of Commissioners of Public Utilities**  
Jacqui Glynn  
PUB Official Email



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September 14, 2020

Board of Commissioners of Public Utilities  
Prince Charles Building  
120 Torbay Road, P.O. Box 21040  
St. John's, NL A1A 5B2

Attention: Ms. Cheryl Blundon  
Director of Corporate Services & Board Secretary

Dear Ms. Blundon:

**Re: Port Hope Simpson Engine Failure  
Allowance for Unforeseen Items Notification**

Newfoundland and Labrador Hydro ("Hydro") has 23 diesel generating stations, 18 of which are prime power stations<sup>1</sup> serving a total of approximately 4,400 customers. Isolated diesel generating stations are designed to ensure that firm power<sup>2</sup> can be delivered in the event of failure of the largest generation unit. One of these diesel generating stations is located in Port Hope Simpson. The Port Hope Simpson Generating Station presently has three diesel generating units ("gensets") serving the community: Unit 2073 (455 kW), Unit 2099 (545 kW), and Unit 2100 (725 kW). On September 8, 2020, Unit 2099 was online serving the full town load when it tripped offline. Power was restored using Unit 2100.

#### **Port Hope Simpson Unit 2099**

Hydro installed Unit 2099 in 2018 as part of a capital project which installed two new units, 2099 and 2100. Unit 2099 has accumulated approximately 8,100 operating hours since installation.

The initial trouble code on Unit 2099 identified an under frequency event which was suspected to be the result of a failed fuel pump. Following the replacement of the fuel pump, an attempted restart was not successful. Further investigation was completed and it was determined that an engine valve cracked and fell into the cylinder, making contact with the piston, thus resulting in engine failure. It has been determined that the engine is not salvageable.

As a result of this failure, Hydro currently is in violation of its firm capacity criteria. The remaining two gensets have a combined capacity of 1,180 kW. Peak load for Port Hope Simpson during the winter 2020–2021 season is forecast to be 794 kW and is not expected to exceed available generation capacity.

#### **Unit 2099 Engine Replacement**

To ensure reliability standards are met, a replacement engine is required. Hydro is in the process of procuring a new engine from the manufacturer CAT. This expenditure, estimated to be \$120,000

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<sup>1</sup> Prime power stations are not interconnected to the grid and rely on the power supplied by the diesel generation units for capacity and energy.

<sup>2</sup> Firm power is calculated as the summation of the capacity of all units minus the capacity of the largest unit.

Ms. C Blundon  
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including shipping and installation, will be completed under the Allowance for Unforeseen Items Account pursuant to the guidelines for the use of that account.

Of the two remaining gensets in Port Hope Simpson, Unit 2073 has 5,000 hours since its last overhaul and 65,500 hours in its lifetime. Unit 2100 has 7,300 hours in its lifetime and is forecast for its first overhaul in 2023. With Unit 2099 out of service, failure of a second genset would result in outages for the community. Hydro has identified an interim solution (i.e. relocation of a mobile diesel generating unit from Makkovik) should delivery of a new unit have a longer lead time.

Hydro is currently working with the manufacturer to confirm the anticipated delivery date of the new engine.

Should you have any questions, please contact the undersigned.

Yours truly,

**NEWFOUNDLAND AND LABRADOR HYDRO**



Shirley A. Walsh  
Senior Legal Counsel, Regulatory  
SAW/kd

ecc: **Board of Commissioners of Public Utilities**  
Jacqui Glynn  
PUB Official Email



## Affidavit





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


**IN THE MATTER OF** an Application by Newfoundland and Labrador Hydro (*"Hydro"*) pursuant to subsection 41(3) of the *Act* for the approval of a capital expenditure to supplement the Allowance for Unforeseen Items for the construction and purchase of certain improvements and additions to its property.

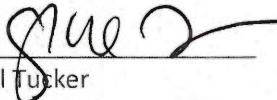
**AFFIDAVIT**

I, Gail Tucker, of St. John's in the Province of Newfoundland and Labrador, make oath and say as follows:

1. I am Senior Manager, Regulatory, Newfoundland and Labrador Hydro, the Applicant named in the attached application.
2. I have read and understand the foregoing application.
3. To the best of my knowledge, information, and belief, all of the matters, facts, and things set out in this application are true.

**SWORN** at St. John's in the )  
Province of Newfoundland and )  
Labrador this 29th day of )  
October 2020 before me: )

  
\_\_\_\_\_  
Barrister – Newfoundland and Labrador

  
\_\_\_\_\_  
Gail Tucker

