



Newfoundland and Labrador Hydro
Hydro Place, 500 Columbus Drive
P.O. Box 12400, St. John's, NL
Canada A1B 4K7
t. 709.737.1400 | f. 709.737.1800
nlhydro.com

December 5, 2025

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

Attention: Jo-Anne Galarneau
Executive Director and Board Secretary

Re: Application for Approval of Distribution Upgrades in English Harbour West and for a Contribution in Aid of Construction for a Portion of the Costs

Please find enclosed Newfoundland and Labrador Hydro's ("Hydro") application for approval to upgrade a portion of a three-phase line and construct a new three-phase line extension to meet a large service request from Pennecon Industrial Limited ("Customer") and address the impact of the Customer's request on the distribution system. Hydro's application also requests approval of a Contribution in Aid of Construction ("CIAC") from the Customer, as the proposed work is driven by the Customer's request.

The cost of the line construction is estimated to be \$3,250,700, with an estimated completion schedule of August 2027. The analysis of the options and justification for the construction is provided in Schedule 2 to Hydro's application. The amount of the CIAC, calculated in accordance with Clause 5(e) of the CIAC Policy: Distribution Line Extensions and Upgrades to General Service Customers, approved by the Board of Commissioners of Public Utilities ("Board") in Board Order No. P.U. 27(2005) ("Policy") is \$1,786,976.44, excluding HST. This includes the application of all applicable Policy credits, as well as a betterment credit that was provided as the least-cost alternative to meet the Customer's request for service also results in additional capacity to the English Harbour West Distribution System in excess of what is required to serve this Customer.

The Customer's request for service, the detailed CIAC calculation pursuant to the Policy, and the Customer's agreement to the CIAC are all appended to the application.

Should you have any questions, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO

A handwritten signature in blue ink, appearing to read "Shirley A. Walsh", written over a horizontal line.

Shirley A. Walsh
Senior Legal Counsel, Regulatory
SAW/rr.mc

Board of Commissioners of Public Utilities

ecc:

Board of Commissioners of Public Utilities

Jacqui H. Glynn
Ryan Oake
Board General

Island Industrial Customer Group

Paul L. Coxworthy, Stewart McKelvey
Denis J. Fleming, Cox & Palmer
Glen G. Seaborn, Poole Althouse

Labrador Interconnected Group

Senwung F. Luk, Olthuis Kleer Townshend LLP
Nicholas E. Kennedy, Olthuis Kleer Townshend LLP

Consumer Advocate

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

Newfoundland Power Inc.

Dominic J. Foley
Douglas W. Wright
Regulatory Email

Approval of a Distribution Upgrades in English Harbour West and for a CIAC for a Portion of the Costs

December 5, 2025

An application to the Board of Commissioners of Public Utilities



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

IN THE MATTER OF an application by Newfoundland and Labrador Hydro (“Hydro”) for approval of Distribution System Upgrades for English Harbour West (“EHW”), and for approval of a Contribution in Aid of Construction (“CIAC”) for a portion of the costs.

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, 2024*, is a public utility within the meaning of the *Act*, and is subject to the provisions of the *EPCA*.

B. Application

2. Hydro has received a request from Pennecon Industrial Ltd. (“Customer”) for additional service at the Belleoram Quarry in EHW that represents a load increase on the EHW Distribution System of approximately 1,600 kW. The Customer’s request for service is attached as Schedule 3. Based on load-flow analysis, this additional load will cause a portion of the EHW Distribution System to experience voltages and conductor overloading that will violate Hydro’s distribution planning criteria once the Customer is connected. Hydro’s analysis with respect to the impact of the load request is detailed in the report regarding the EHW Distribution System Upgrades, attached to this application as Schedule 1.
3. Hydro has determined that deferral of this work is not a viable alternative, as discussed in Schedule 1. Hydro performed an analysis of four viable alternatives to address the criteria violations and completed an economic evaluation of these alternatives to determine the least-cost option consistent with providing reliable service to Hydro’s customers.

4. Hydro's economic evaluation, detailed in Schedule 1, indicates that the alternative to reconductor a section of the three-phase distribution feeder with 477 ASC¹ overhead conductor, and a 5.5-kilometre three-phase line extension to the Customer's requested new service location. This is the least-cost alternative that meets all the technical criteria, allowing the Customer to be served while mitigating the resulting risks to the system.
5. The proposed project has an estimated capital cost of \$3,250,700 with a project completion schedule of August 2027.
6. As this project is necessary due to the increase in load requirements of the distribution system for the delivery of the additional load to serve the Customer, the Customer is required to pay a CIAC. The calculation of the CIAC is provided in Schedule 2 to this application. As the cost of the line upgrade was estimated to be greater than \$100,000, Hydro used the detailed cost estimate specified in Clause 5(e) of the CIAC Policy: Distribution Line Extensions and Upgrades to General Service Customers, approved by Board Order No. P.U. 27(2005) ("Policy").
7. The chosen alternative is the least-cost alternative to meet the requirements of the system resulting from the Customer's request for service; however, the alternative results in additional capacity being provided on the EHW system beyond what is required for the Customer. As such, Hydro has calculated a betterment credit to apply to the Customer's CIAC in the amount of the incremental cost of providing that same capacity increase without the customer's load.
8. As illustrated on the calculation sheet in Schedule 2, the CIAC amount is \$1,786,976.44 after application of all applicable credits and the betterment credit, and excluding HST. The Customer has agreed to the above-noted amount of the CIAC, which Hydro will review after a period of 24 months from the date service is made available to determine the reasonableness of the original calculation. The difference will be charged or refunded to the Customer's account, as applicable, per Clause 9 of the Policy. The Customer Request for Service and Customer CIAC Quote Acceptance are attached hereto as Schedule 3.
9. Clause 10(ii) of the Policy states that the Company shall apply to the Board for approval of all line extensions or upgrades involving CIACs where the cost of the line extension or upgrade is calculated pursuant to Clause 5(e).

¹ Aluminum Stranded Conductor ("ASC").

10. The proposed expenditures are necessary for Hydro to provide service and facilities to its customers that are reasonably safe and adequate and just and reasonable as required pursuant to Section 37 of the *Act*.
11. The proposed CIAC is necessary to ensure that Hydro's investment is compensatory over the useful life of the upgrade and will not be to the detriment of Hydro's other customers.

C. Newfoundland and Labrador Hydro's Request

12. Hydro requests that the Board make an Order:
 - (i) Pursuant to Section 41(3) of the *Act*, approving the capital expenditures necessary for the upgrades to the existing distribution line and construction of a new segment of three-phase line, and
 - (ii) Pursuant to Section 41(5) of the *Act*, approving a CIAC of \$1,786,976.44, excluding HST, as calculated under the Policy to apply to the Customer.

D. Communications

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

DATED at St. John's in the province of Newfoundland and Labrador on this 5th day of December 2025.

NEWFOUNDLAND AND LABRADOR HYDRO



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

Schedule 1

Additions for Load Growth and Customer
Interconnection – English Harbour West (2026–2027)



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Attachment 1: Distribution Planning Criteria

Additions for Load Growth and Customer Interconnection – English Harbour West (2026–2027)

Location: English Harbour West (“EHW”)

Investment Classification: Load Growth

Asset Category: Distribution

Cost: \$3,250,700

1.0 Introduction

Newfoundland and Labrador Hydro (“Hydro”) owns and operates distribution systems in the rural communities it serves. Each distribution system typically consists of a terminal station coupled with wood pole distribution feeder(s) that supply power from the terminal station to service drops throughout a community.

In April 2024, Hydro received a service request for a new industrial facility in an area currently served by the EHW Distribution System. The location of the EHW Distribution System is shown in Figure 1. The existing system cannot accommodate the additional load associated with this request, as it would create low-voltage conditions that violate Hydro’s distribution planning criteria.¹ Operating outside of Hydro’s distribution planning criteria increases the risk of damage or malfunction of customer and Hydro-owned equipment.

¹ Hydro’s distribution planning criteria are a set of criterion that ensures an adequate supply of power to customers served on Hydro’s distribution systems. These criteria are described and explained in Attachment 1. Criteria relevant to this project are presented in Section 2.1.



Figure 1: Location of EHW

- 1 In Hydro’s 2025 Capital Budget Application (“CBA”),² Hydro proposed a project to improve the reliability of
- 2 the EHW Distribution System as part of the Upgrade Worst Performing Distribution Feeders Program. This
- 3 program involved reconstruction, pole and pole hardware replacement, conductor replacement, and

² “2025 Capital Budget Application,” Newfoundland and Labrador Hydro, July 16, 2024, sch. 7, prog. 2.

1 installation of new protection equipment. This project was approved by the Board of Commissioners of
2 Public Utilities in Order No. P.U. 28(2024).

3 To accommodate the request for additional load, Hydro is proposing additional upgrades to the EHW
4 Distribution System. This will include installing 477 ASC³ overhead conductor of a 23-kilometre (“km”) section
5 of three-phase distribution feeder⁴ and construction of a 5.5 km three-phase line extension to the location of
6 the requested new service location. The total cost of this project is approximately \$3.25 million, with
7 approximately \$1.79 million in costs contributed by the customer. The amount contributed by the customer
8 represents the incremental cost to upgrade the existing 23 km section of feeder, the new 5.5 km line
9 extension and associated hardware, net of any applicable credits as per Hydro’s Contribution in Aid of
10 Construction (“CIAC”) Policy, as well as a betterment credit for incremental capacity on the system as
11 described in Section 4.3.

12 Due to the timing of the request for service, Hydro is making a supplemental application for approval to align
13 this work with the previously approved EHW scope; this allows for execution efficiencies and timely
14 interconnection of the customer.

15 **2.0 Project Description and Justification**

16 Hydro has determined that, based on Hydro’s analysis provided in Section 3.2, connecting the new service
17 request will result in a violation of Hydro’s low voltage planning criteria on the EHW Distribution System.
18 Additional details on the planning criteria violations are included in Section 4.0.

19 This project is required to meet the growing needs of the area served by the EHW Distribution System. To
20 allow for the customer’s requested service connection while avoiding the violation of the low voltage
21 planning criteria, Hydro is proposing further work in addition to the ongoing EHW distribution reliability
22 upgrade project. This includes installing 477 ASC on a 23 km section of the existing distribution system and
23 construction of a 5.5 km three-phase line extension to the location of the new service request.

³ Aluminum Stranded Conductor (“ASC”).

⁴ 477 ASC will provide additional feeder capacity and creates less voltage drop on the line than the conductor originally proposed in the 2025 CBA.

3.0 Asset Overview

3.1 Asset Background

The EHW Distribution System was constructed in the 1960s and consists of a three-phase, 25 kV distribution feeder, EHW-L1, supplied by the EHW Terminal Station (“EHW TS”). This distribution feeder services approximately 796 residential customers.⁵ The existing feeder configuration has two points of voltage regulation to maintain acceptable operating voltages that are within Hydro’s distribution planning criteria. The layout of the EHW-L1 feeder and the proposal location for the new service are shown in Figure 2.

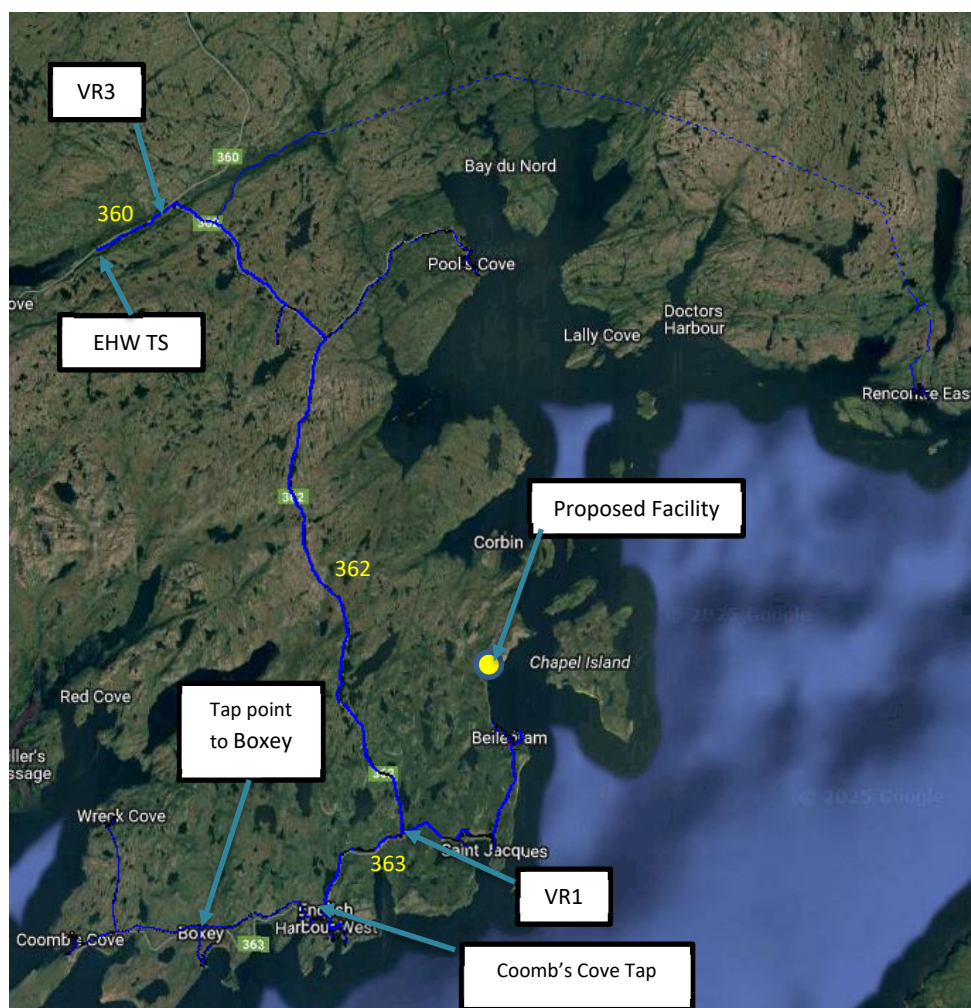


Figure 2: Layout of EHW-L1 and Proposed Site

⁵ As of October 2025.

The three-phase distribution feeder EHW-L1 leaves EHW TS and extends along the Bay d’Espoir Highway, Route 30, for approximately 3.5 km. The line then extends approximately 1.5 km along Route 362 and connects to a 41 km single-phase tap that provides power to the community of Rencontre East. The line continues approximately 6 km along Route 362 as a three-phase feeder and connects to an 8.5 km single-phase tap that supplies power to the community of Pool’s Cove. The line extends approximately 20 km along Route 362 and splits into two major taps at the intersection of Route 362 and Route 363. The east side tap provides power to the communities of St. Jacques and Belleoram, and the west side tap provides power to the communities of EHW, Mose Ambrose, Boxey, Coombs Cove and Wreck Cove.

3.2 New Load Request

In mid-2024, Hydro received a request for electrical service for a new quarry, crushing operation, and ship loading facility at the end of Belleoram’s Northern Coastal Road. This area is served by the EHW Distribution System.

Hydro reviewed the service request to estimate how it would impact the system peak load. Once connected, the new facility is expected to increase the forecasted peak load on EHW-L1 by approximately 1.6 MW.

4.0 Analysis

Hydro completed a load flow study⁶ of the EHW Distribution System to analyze the impact of the additional load. The study indicated that if a new load is added to the system, voltage levels would fall below Hydro’s extreme low voltage planning criteria,⁷ as shown in . Therefore, upgrades to the EHW Distribution System are required before the proposed facility can be connected.

⁶ Load flow study was completed using CYME power engineering software.

⁷ Hydro’s extreme low voltage criteria is defined as system voltages lower than 112 V on a 120 V base.

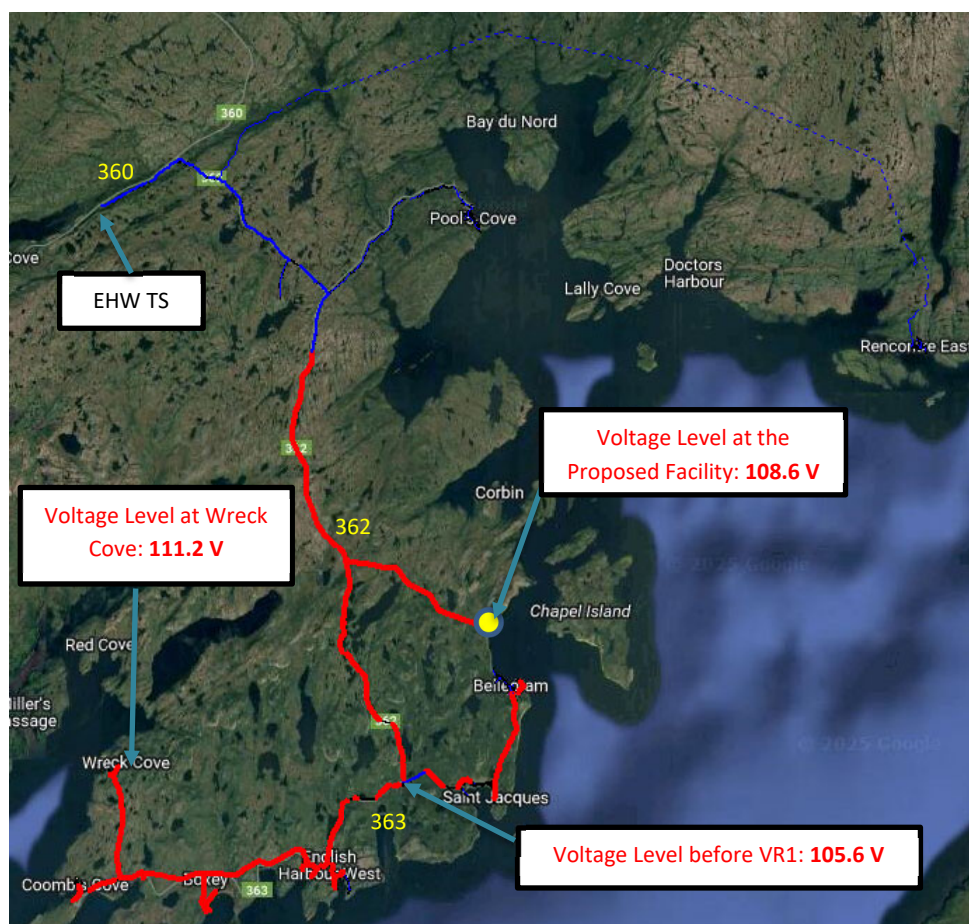


Figure 3: Impact of Proposed Site Connection on EHW Voltage⁸

4.1 Evaluation of Alternatives

Hydro considered the following alternatives to address voltage concerns associated with additional load on the EHW Distribution System:

- Deferral;
- Reconductor with 477 ASC (23 km) and Upgrade Single-Phase to Three-Phase;
- Reconductor with 4/0 AASC (39 km), Voltage Regulator Installation, and Upgrade Single-Phase to Three-Phase;
- Reconductor with 477 ASC (23 km) and 4/0 AASC (16 km); and

⁸ The red line represents areas of substandard voltage.

- Reconductor with 477 ASC (23 km) and 5.5 km Line Extension.

4.1.1 Deferral

As described in Section 4.0 of this report, the connection of the new facility cannot occur without or prior to, taking steps to address the voltage issue described above. The customer's connection could not proceed in advance of a project intended to address these issues due to the material risk of planning criteria violations and the resulting risk to the supply of adequate power. Therefore, deferring the project would result in further delay in connecting the new facility. Hydro has a statutory obligation to supply electric energy to customers. As such, deferral is not a viable option.

4.1.2 Reconductor with 477 ASC (23 km) and Upgrade Single Phase to Three-Phase

This alternative involves reconductoring 23 km of the feeder trunk with 477 ASC. The reconductoring would begin at EHW TS and continue along the trunk of the distribution system. It also includes upgrading a 5.2 km section of single-phase distribution line along Route 363, from Coomb's Cove tap to Boxey tap, and a 0.8 km section of single-phase line from Belleoram to pole 834 to three-phase.

Additionally, this alternative includes constructing a 0.75 km three-phase line extension from the existing infrastructure to the new service location. The capital cost to complete this alternative is \$5,098,470.

4.1.3 Reconductor with 4/0 AASC (39 km), Voltage Regulator Installation, and Upgrade Single-Phase to Three-Phase

This alternative involves reconductoring 39 km of the feeder from EHW TS along the trunk of the distribution system with 4/0 AASC, installing voltage regulators at the midpoint of the distribution feeder, and upgrading a 5.2 km section of single-phase distribution line along Route 363, from Coomb's Cove tap to Boxey tap, and a 0.8 km section of single-phase line from Belleoram to pole 834 to three-phase.

This alternative also includes constructing a 0.75 km three-phase line extension from the existing infrastructure to the new service location. The capital cost to complete this alternative is \$6,259,118.

4.1.4 Reconductor with 477 ASC (23 km) and 4/0 AASC (16 km)

This alternative involves reconductoring 23 km of the feeder from EHW TS along the trunk of the distribution system with 477 ASC and continuing with reconductoring the next 16 km of the feeder along the trunk up to Belleoram with 4/0 AASC.

Additionally, this alternative includes constructing a 1.5 km three-phase line extension from the existing infrastructure to the new service location. The capital cost to complete this alternative is \$4,619,604.

4.1.5 Re-conductor with 477 ASC (23 km) and 5.5 km Line Extension

This alternative involves reconductoring 23 km of the feeder from EHW TS along the trunk of the distribution system with 477 ASC and constructing a 5.5 km three-phase tap from pole 537 to the new service location. It also includes installing a three-phase recloser at the beginning of the tap.

The capital cost to complete this alternative is \$3,250,700.

4.2 Least-Cost Evaluation

Based on the alternatives considered, a detailed least-cost evaluation was performed to determine the appropriate alternative. Deferral was not considered to be a viable option and was not included in the least-cost evaluation.

This 20-year economic analysis considered the capital costs, operation and maintenance costs, cost of losses, and the salvage value of any assets removed from service. Table 1 presents the cumulative present worth (“CPW”) of the four technically viable alternatives and the difference in CPW between each alternative to determine which option is the least-cost.

Table 1: Least-Cost Evaluation Summary (\$)

Alternatives	CPW	CPW Difference between the Alternative and the Least-Cost Alternative
Alternative 1: Reconductor with 477 ASC (23 km) and Upgrade Single-Phase to Three-Phase	5,144,677	866,955
Alternative 2: Reconductor with 4/0 AASC (39 km), Voltage Regulator Installation, and Upgrade Single-Phase to Three-Phase	5,844,706	1,566,983
Alternative 3: Reconductor with 477 ASC (23 km) and 4/0 AASC (16 km)	5,530,181	1,252,458
Alternative 4: Reconductor with 477 ASC (23 km) and 5.5 km Line Extension	4,277,723	-

4.3 Recommended Alternative

The economic analysis, summarized in Table 1, determined that Alternative 4: “Reconductor with 477 ASC (23 km) and 5.5 km Line Extension” is the least-cost alternative that meets all the technical criteria.

This alternative involves constructing a new section of line tapped off the existing feeder, allowing Hydro to supply power to the proposed site while bypassing all intermediate communities. It provides operational flexibility by allowing Hydro to disconnect the large general service customer from the other customers served by EHW-L1, and vice versa. Hydro recommends Alternative 4 as the least-cost alternative to meet the system requirements of the EHW Distribution System.

While Alternative 4 is the least-cost alternative to meet the projected system requirements of the distribution system as a result of the customer’s request for service, its selection inherently provides additional capacity on the EHW system beyond that required by the customer. Hydro has therefore applied a betterment credit in determining the required customer contribution, calculated as the incremental cost of providing that same capacity increase absent the new customer’s load. In the absence of the customer’s additional load, to obtain the same or similar level of capacity increase to the system, the least-cost option would be to reductor the line using 4/0 AASC rather than 1/0 AASC as was originally planned. This upgrade would have an estimated cost of \$497,516.

4.3.1 Risk of Asset Stranding

As the load on the EHW system is stable, and the customer has indicated an anticipated service life of 35 years, the risk of asset stranding is considered minimal.

5.0 Scope of Work

An overview of the work to be completed under this project beginning in 2026 is outlined below. The locations of these activities are shown in Figure 4.

- Reconductoring a 23 km section of the feeder using 477 ASC for the primary and 4/0 AASC for the neutral. This will include installing additional poles and hardware to accommodate the larger conductor.
- Constructing a 5.5 km three-phase tap from pole 537 to the new service location using 4/0 AASC for the primary and 1/0 AASC for the neutral.
- Installing a three-phase recloser at the beginning of the tap.

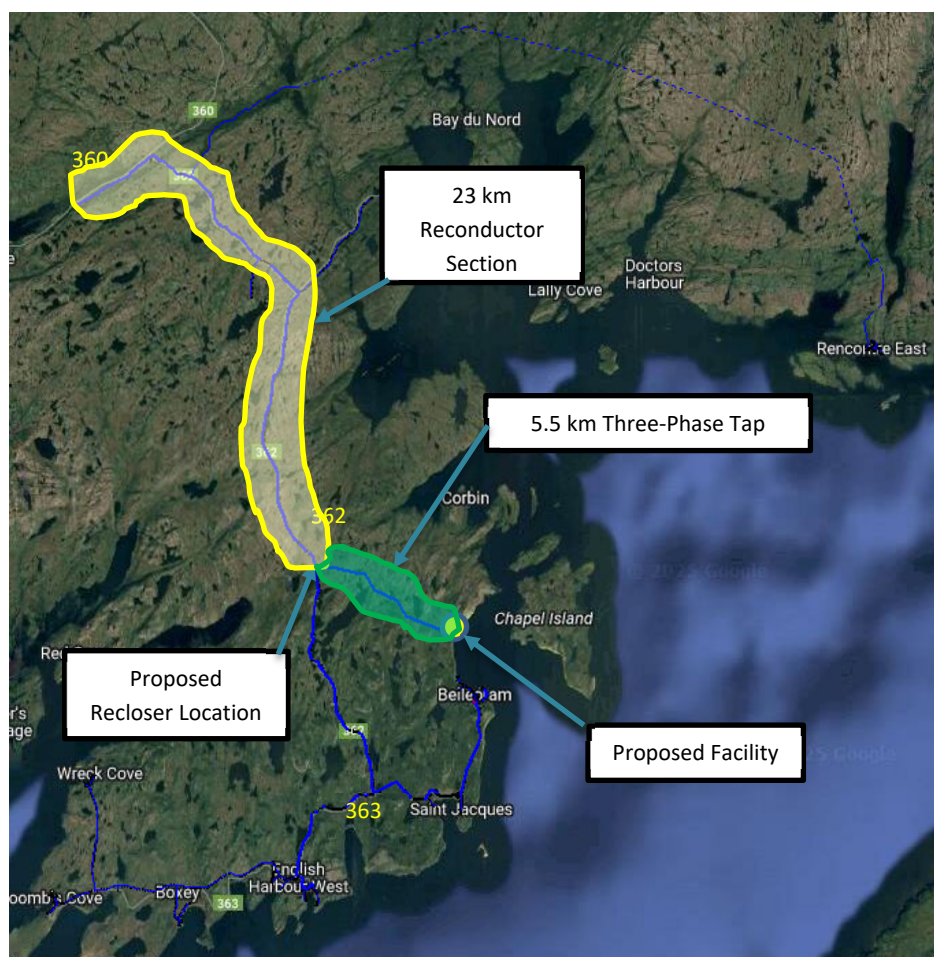


Figure 4: Overview of Work Scope and Associated Locations

- 1 The estimate for this Project is shown in Table 2.

Table 2: Project Estimate (\$000)⁹

Project Cost	2026	2027	Beyond	Total
Material Supply	1,496.4	0.0	0.0	1,496.4
Labour	475.5	89.6	0.0	565.1
Consultant	0.0	0.0	0.0	0.0
Contract Work	166.8	339.5	0.0	506.2
Other Direct Costs	14.6	23.2	0.0	37.8
Interest and Escalation	143.1	171.6	0.0	314.7
Contingency	262.8	67.7	0.0	330.4
Total	2,559.1	691.6	0.0	3,250.7

⁹ Totals may not add due to rounding.

5.1 Project Schedule

The schedule for this project is shown in Table 3.

Table 3: Project Schedule

Activity	Start Date	End Date
Planning:		
Planning	January 2026	August 2026
Design:		
Design	January 2026	August 2026
Procurement:		
Materials order	January 2026	October 2026
Construction:		
Construction	May 2026	May 2027
Commissioning:		
Commissioning	May 2027	June 2027
Closeout:		
Complete closeout documentation	July 2027	August 2027

6.0 Conclusion

Hydro completed a detailed system impact study that indicates the existing distribution system in EHW is unable to support the additional load growth associated with the new service request without causing low voltage conditions that violate Hydro’s distribution planning criteria. If the system is not upgraded, the increase in load on the system will create operating voltages outside of Hydro’s system planning criteria. In these situations, customer and Hydro-owned equipment on the distribution system could potentially malfunction or sustain damage due to overloading or abnormal voltage conditions.

Hydro performed an analysis of four technically viable alternatives to address the criteria violations and completed an economic evaluation of these alternatives to determine the least-cost option, consistent with reliable service. Based on the economic evaluation, the alternative to reconductor 23 km of the feeder and construct a 5.5 km three-phase tap connected to the existing feeder is the least-cost alternative.

This alternative has an estimated capital cost of \$3,250,700 with scheduled project completion in August 2027. This project is being driven by load growth on the system, prompted by a single customer. The customer will contribute \$1,786,976, excluding HST, to the project cost in the form of a CIAC.

Schedule 1: Additions for Load Growth and Customer Interconnection – English Harbour West (2026–2027)

- 1 This contribution is net of a credit to the customer for benefits to the overall system that are not directly
- 2 necessary to serve the customer.

Attachment 1

Distribution Planning Criteria



RURAL PLANNING STANDARD

Distribution Planning Criteria

Doc # RP-S-003

Date: 2020/10/02

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Rural Planning – Standard – Distribution Planning Criteria
Document #: RP-S-003

Purpose

1 Purpose

Hydro's distribution planning criteria are established to ensure an adequate supply of power to customers served on Hydro's distribution systems. As a general rule to guide Hydro's planning activities the following criteria have been adopted.

2 Voltage Level Criteria

- A) The range of normal operating voltage is based on the Canadian Standard CSA CAN3-C235-83 ("Preferred Voltage Levels...") and the CEA "Distribution Planner's Guide".
- B) Voltage Unbalance – maximum 2% voltage unbalance.
- C) Voltage Flicker Limit – maximum of 5% voltage flicker.
- D) Temporary Overvoltage – maximum 110% overvoltage

2.1 Operating Voltage

Hydro uses the CSA standard *CAN3-C235-83 – Preferred Voltage Levels for AC Systems 0 – 50,000 V* as the guide for determining acceptable steady-state voltage limits at customers' service entrances. This is a National Standard of Canada that establishes a guideline for voltage standards for AC Systems in Canada. It was adopted by Hydro as its standard for the range of acceptable voltages that will be provided to customers and is used by utilities across Canada. A standard for voltage levels is necessary because the devices connected to the electrical system are designed to operate within a certain range of voltages. When voltages supplied to the device deviate from this acceptable range, the device can be damaged or fail to function properly. The standard is meant to ensure that the devices connected to the electrical system will receive voltage within their normal operating range so that they function normally and damage does not occur.

The standard refers to two separate operating conditions, normal and extreme. The normal operating condition is applied when the distribution system is operating as designed and not experiencing continuous operation outside design limits. The extreme operating condition is applied during continuous operation of a power system outside of design limits and planned capital or operating work is scheduled to be carried out to correct the issue. These conditions do not include voltages levels experienced during fault conditions or heavy starting loads.

Under normal operating conditions where there are no operational anomalies and the feeder is performing as designed, the customer service entrance voltage must be held between a minimum of 110 V for single-phase customers and 112 V for three-phase customers and a maximum of 125 V for a nominal 120 V service. Table 1 displays the normal and extreme operating condition nominal voltage ranges for many types of electrical services.

Table 1: Recommended Voltage Variation Limits for Circuits up to 1000V, at Service Entrances¹

Nominal System Voltages	Voltage Variation Limits Applicable at Service Entrances			
	Extreme Operating Conditions			
	Normal Operating Conditions			
Single Phase (V)	Lower Limit		Upper Limit	
120/240	106/212	110/220	125/250	127/254
240	212	220	250	254
480	424	440	500	508
600	530	550	625	635
Three Phase 4-Conductor (V)				
120/208Y	110/190	112/194	125/216	127/220
240/416Y	220/380	224/338	250/432	254/440
277/480Y	245/424	254/440	288/500	293/508
347/600Y	306/530	318/550	360/625	367/635
Three-Phase 3-Conductor (V)				
240	212	220	250	254
480	424	440	500	508
600	530	550	625	635

The standard also states that primary service voltages are to be supplied within six percent of the nominal system voltage.

Under extreme operating conditions the distribution system is operating outside of the normal operating voltage limits and an operational anomaly has been identified on the system. In this case, work must be planned to correct the deficiency so that voltages remain within the normal operating condition limits. During extreme operating conditions, the customer service entrance nominal voltage must range from a minimum of 106 V for single-phase customers and 110 V for three-phase customers to a maximum of 127 V for a nominal 120 V service.

If the customer service entrance nominal voltage falls outside of the extreme voltage range as outlined in the CSA standard, emergency work must be completed as soon as possible to rectify the issue. If not, damage to customer equipment may occur. Hydro is responsible for ensuring voltage levels up to the service entrance, i.e. weatherhead, are within stated limits.

The above CSA standard has been adopted by Hydro to ensure customer service entrance voltages remain within the stated limits. However, planning engineers complete system design and analysis using nominal voltages on primary distribution feeders. To relate the two, the System Planning Department references the CEA Distribution Planners Manual. The manual provides estimates of the average voltage drop that

¹ From CSA standard CAN3–C235–83 (R2006) – Preferred Voltage Levels for AC Systems 0 – 50,000 V, Table 3 - Recommended Voltage Variation Limits for Circuits up to 1000 V, at Service Entrances.

can be anticipated between the primary and the service entrance to define a minimum and maximum planning voltage on a 120 V base for the primary distribution line.

Table 2 and Table 3 outline the Hydro standard voltage drop for each line section and transformer between the primary conductor and the service entrance for single phase and three phase customers respectively.

Table 2: Preferred Voltage at the Primary for Single Phase Customers

		Voltage (120 V Base)	
		Heavy Load	Light Load
Service Entrance Voltage*		110	125
Voltage Drop at	Service Drop Wire	1	0.375
	Secondary Conductor	2	-
	Distribution Transformer	3	1.125
Total Voltage Drop from Primary to Service Entrance		6	1.5
Voltage at Primary		116	126.5
Note: Some customers are supplied from express service drops. Therefore, no secondary voltage drop occurs under the light load condition. * Hydro is responsible for voltage up to the service entrance.			

Table 3: Preferred Voltage at the Primary for Three Phase Customers

		Voltage (120 V Base)	
		Heavy Load	Light Load
Service Entrance Voltage*		112	125
Voltage Drop at	Service Drop Wire	1	0.375
	Secondary Conductor	-	-
	Distribution Transformer	3	1.125
Total Voltage Drop from Primary to Service Entrance		4	1.5
Voltage at Primary		116	126.5

Note: 3Φ General Service Customers are normally supplied from express drops off their own transformer bank. Therefore, no secondary voltage drop occurs.

*** Hydro is responsible for voltage up to the service entrance.**

Therefore, Hydro uses a planning voltage range of 116 V to 126.5 V on distribution primary lines, assuming a 120 V base.

2.2 Voltage Unbalance

Voltage unbalance occurs when loads are not equally distributed across all three phases of a distribution feeder. The percentage voltage unbalance is calculated as the maximum phase voltage deviation from the average voltage, divided by the average voltage, multiplied by 100%. It is common on many Hydro

distribution systems to have long single phase lines with large end of line loads which can increase voltage unbalance. A feeder experiencing a high percentage of voltage unbalance can cause excessive motor heating, increasing the likelihood of failure.

2.3 Voltage Flicker

Voltage flicker is a transient phenomenon that occurs when large loads are switched on the system causing an instantaneous change in voltage. Usually this is experienced during motor starting or pick-up of a large customer load. In these cases, a dip in voltage is experienced due to the increase in current flow, causing lights to flicker. This can dim lighting and interrupt motor operation. Hydro will allow a maximum of 5% voltage flicker before work must be initiated to correct the problem. If voltage flicker worsens, the problem becomes much more noticeable and pronounced. Hydro addresses flicker at the operational level by setting limitations on the amount of current the system can supply to a customer without causing disturbances to other customers on the system.

2.4 Temporary Overvoltage

Temporary overvoltage is an increase in ac voltage greater than 1.1 pu for a duration longer than 1 min. Overvoltages can be the result of load switching (e.g., switching off a large load) or of variations in the reactive compensation on the system (e.g., switching on a capacitor bank). Poor system voltage regulation capabilities or controls can cause overvoltages.

3 Equipment Loading

Increases in customer load on distribution feeders can lead to overloading of overhead conductor and/or related equipment. A detailed load flow analysis will indicate areas which are experiencing current overloads during peak load conditions. Equipment affected by overloads includes transformers, circuit breakers, reclosers, voltage regulators and switches.

Equipment loading shall be no greater than 100% of its planning rating. These ratings indicated the maximum peak load permitted on a system component during normal operating conditions. It is recognised that under emergency or abnormal operating conditions, such as after recovering from extended outages, system components may be operated above the planning ampacity.

One abnormal operating conditions that is of particular importance when planning distribution systems is Cold Load Pick-Up (CLPU). CLPU is the amount of electricity that customers demand as they are re-energized after being without electrical service for an extended period of time. This is a function of the profile of customers/loads connected to a feeder. Generally, feeders with a high penetration of electric heating have the highest CLPU factors. The CLPU factor is defined as the CLPU divided by the normal winter peak load. If the maximum CLPU on a feeder is unknown, then the CLPU factor is assumed to be 2.0 and the duration is assumed to be 1.0 hour.

To manage CLPU on distribution system, utilities divide distribution feeder into sections so that not all load has to be picked up at the one time. This allows utilities to defer the substantial costs of upgrading a distribution system. However, doing this decreases the reliability of the system in terms of the System Average Interruption Duration Index (SAIDI) because customers are subjected to longer outages. For this reason only two designated sections may be permitted per feeder. These sections are separated by a sectionalizing switch that shall be located such that it maximized the planning ampacity for the system.

The optimum location for a sectionalizing switch is at the point where 66.67% of the load is on the first portion of the feeder and 33.33% of the load is on the second section of the feeder. Under this situation when recovering from an extended outage, when the first section of the feeder is energized the CLPU will be 133.3% ($66.67\% \times 2$) of the full feeder peak load. After this load settles the load on the first section will be back to 66.67% of the feeder peak load. When the second section of the feeder is energized, the load on the second feeder will be 66.67% of peak load ($33.33\% \times 2$) and the total feeder load will be 133.3% of peak load (66.67% first section + 66.67% second section).

To include CLPU and sectionalizing into Hydro's planning ratings the following formula is used.

- Planning Factor = Sectionalizing Factor * CLPU Factor

Where:

- CLPU Factor = CLPU load/winter peak load, (assumed as 2.0 unless system specific data is available)
- Sectionalizing Factor = amount of load in first section of feeder, (assumed to be 66.67% of feeder load unless physical constraints prevent this)

As a result the Planning Factor will range between 1.33 and 2.0, indicating a temporary loading between 133% and 200% of normal peak load when recovering from a CLPU event.

Planning ratings are determined based on Equipment Rating and Planning Factor which vary depending on the equipment being studied. Below is a summary on how Planning Ratings are calculated:

- A) Transformers and Voltage Regulators: Planning Rating = 100% of name plate rating
- B) Overhead Bare Conductor: Planning Rating = Winter Ampacity / Planning Factor
- C) Reclosers: Planning Rating = Overload Capability/Planning Factor

3.1 Transformers and Voltage Regulators

The thermal limits of distribution step down transformers, and voltage regulators are based on IEEE – C57.91-1981. This standard shows the amount of load a transformer can withstand without affecting its service life. Although the amount of load on these transformer varies by transformer type, it is necessary to plan based on the worst case scenario so only the lowest overload capability will be utilized.

The planning ampacity for distribution transformers will depend on the configuration of the substation:

- In a distribution substation, the planning rating of the transformer will be 100% of the 30° C nameplate rating. By restricting the system peak load to the name plate rating, a 175% overload capability² provides capacity to restore a distribution system after an extended outage where CLPU is present.
- The planning ampacity for diesel plant substation transformer is provided in *RP-S-002 Rural Isolated Systems Generation Planning Criteria*

As stated above, CLPU on a particular distribution system may range from 133% of peak load to 200% of peak load depending on the sectionalizing ability of the distribution system. For distribution systems that contain one distribution feeder and where the CLPU exceeds 175% of the normal winter peak load, a sectionalizing switch may be required on the feeder to limit CLPU. Where substations contain two or more feeders and a CLPU potential greater than 175% of the name plate rating exists, in addition to sectionalizing, feeders may need to be restored on a sequential basis to limit CLPU.

² The 175% overload capability is based on a 25% loading bonus due ambient temperatures and a 50% loading bonus due to the equivalent load before a CLPU peak load.

3.2 Conductors

Overloads on bare overhead conductor are identified during load flow analysis for the particular distribution feeder. Hydro has adopted the IEEE738³ method for calculating the continuous ampacity of overhead conductor based on ambient temperatures. Table 4 below shows the continuous and planning ampacities for Hydro's most commonly used aerial conductors.

Table 4: Conductor Planning Ratings

Size and Type	Cont. Labrador Winter Ampacity	Cont. Island Winter Ampacity	Planning Ampacities Planning Factor = 2.0		Planning Ampacities Planning Factor = 1.33	
			Lab Winter Ampacity	Island Winter Ampacity	Lab Winter Ampacity	Island Winter Ampacity
#4 Copper	226	196	113	98	170	147
#2 ACSR	244	213	122	107	183	160
1/0 AASC	358	317	179	159	269	238
2/0 AASC	412	365	206	183	309	274
2/0 ASCR	389	345	195	173	292	259
4/0 AASC	557	493	279	247	418	370
477 ASC	904	800	452	400	678	600

These ampacities indicate the maximum allowable amperage on an aerial conductor under any circumstance during winter. These calculations are based on the assumptions found in Hydro's Distribution Planning Assumptions Standard.

3.3 Reclosers

The planning rating for reclosers is based on the overload capability of the recloser. This overload capability varies by model type and manufacturer. For example, most of Hydro's reclosers are cooper VWVE reclosers. These reclosers have an overload capability of 150% for a maximum of 2 hours. Therefore the planning rating for reclosers will be overload capability of the recloser divided by the planning factor of the feeder. For the Cooper VWVE reclosers this will be 646 A.

3.4 Switches

Hydro has two standard types of switches, group operated switches and single-phase cutouts. Group operated switches are rated for load breaking and are operated by a single handle to break all phases at the same time. These switches do not use any fuses for line protection. Single-phase cutouts are used

³ IEEE738 - IEEE Standard for Calculating the Current-Temperature of Bare Overhead Conductors

for isolating sections of line once they have been de-energized, as they are not rated to break load. Cutouts, however, can be fused to a number of ratings depending on the protection requirements. For planning and analysis purposes, the System Planning Department uses 100% of the continuous current rating for switches. Gang switches are rated for 600A per phase, where solid blade (no fuse) cutouts are rated for 300A. If the cutout is fused, the rating then becomes the rating of the installed fuse.

3.5 Circuit Breakers

The planning rating for circuit breakers is based on the IEEE std C37.010-1979. This standard provides the overload capabilities of circuit breakers for ambient temperatures less than the 40 deg name plate rating.

3.6 Load Imbalance

Load imbalance occurs when customer loads are not equally distributed across all three phases of a distribution feeder. The percentage of load imbalance is calculated as the maximum phase load deviation from the average load, divided by the average load, multiplied by 100%. A highly unbalanced load on a feeder can lead to a high degree of voltage unbalance along the feeder due to varying voltage drop on the phase conductors. An unbalanced feeder will experience higher losses due to currents flowing in the neutral circuit.

Rural Planning – Standard – Distribution Planning Criteria
 Document #: RP-S-003

Document Summary

Document Summary

Document Owner:	Rural Planning
Document Distribution:	Rural Planning

Revision History

Revision	Prepared by	Reason for change	Effective Date
1.0	Scott Henderson	Criteria added to DMS	2020/10/02
2.0	Scott Henderson	Modified transformer loading criteria to reflect 46kV transfer to TP	2020/10/02

Document Approvers

Position	Signature	Approval Date
Team lead, Rural Planning		2020/10/02

Document Control

Regarding Transmission and Rural Planning documents: The electronic version of this document is the CONTROLLED version. Please check the Transmission and Rural Planning Document Management System SharePoint site for the official copy of this document. This document, when downloaded or printed, becomes UNCONTROLLED.

Schedule 2

CIAC calculation for Belleoram Quarry –
English Harbour West



CIAC calculation for Belleoram Quarry - English Harbour West

(using detailed estimated construction cost)		File #	425.85.50/012.1622772
Detailed Construction Cost	3,250,700.00		
Less Incremental Betterment Credit	(497,516.00)		*See Note
	2,753,184.00		
O&M factor	7%		
O&M amount	192,722.88		From 2025 CIAC Costing Manual
Construction Cost + O&M	2,945,906.88		
Less Joint use credit	(407,875.44)		40% of installed cost of poles plus 7% O&M factor
Less Company Investment	(7,055.00)		85m @ \$83/m
Primary Metering Charge	30,000.00		
Less Load Based Investment	(774,000.00)		3450KVA-10KVA x \$225/KVA (20-24.99% load factor)
	1,786,976.44		
HST	15%		
	268,046.47		
Total CIAC	2,055,022.91		

Prepared by: _____ Date: _____

Approved by: _____ Date: _____

CIAC Summary: To reconductor existing 23km of line from 1/0 to 4/0 and build an additional 5.5km of new line.

Note : Hydro's portion of the upgrade for reconductoring the first 23 km from 1/0 to 4/0, with an estimated cost of \$497,516.00

Schedule 3

Request for Service General Information





REQUEST FOR SERVICE GENERAL INFORMATION

CUSTOMER INFORMATION

Name	Pennecon
Current Address	1309 Topsail Road, St. John's, NL, A1B 3N4
Service Address	Belleoram
Phone Number	c/o Kyle Tucker – 709-687-0884

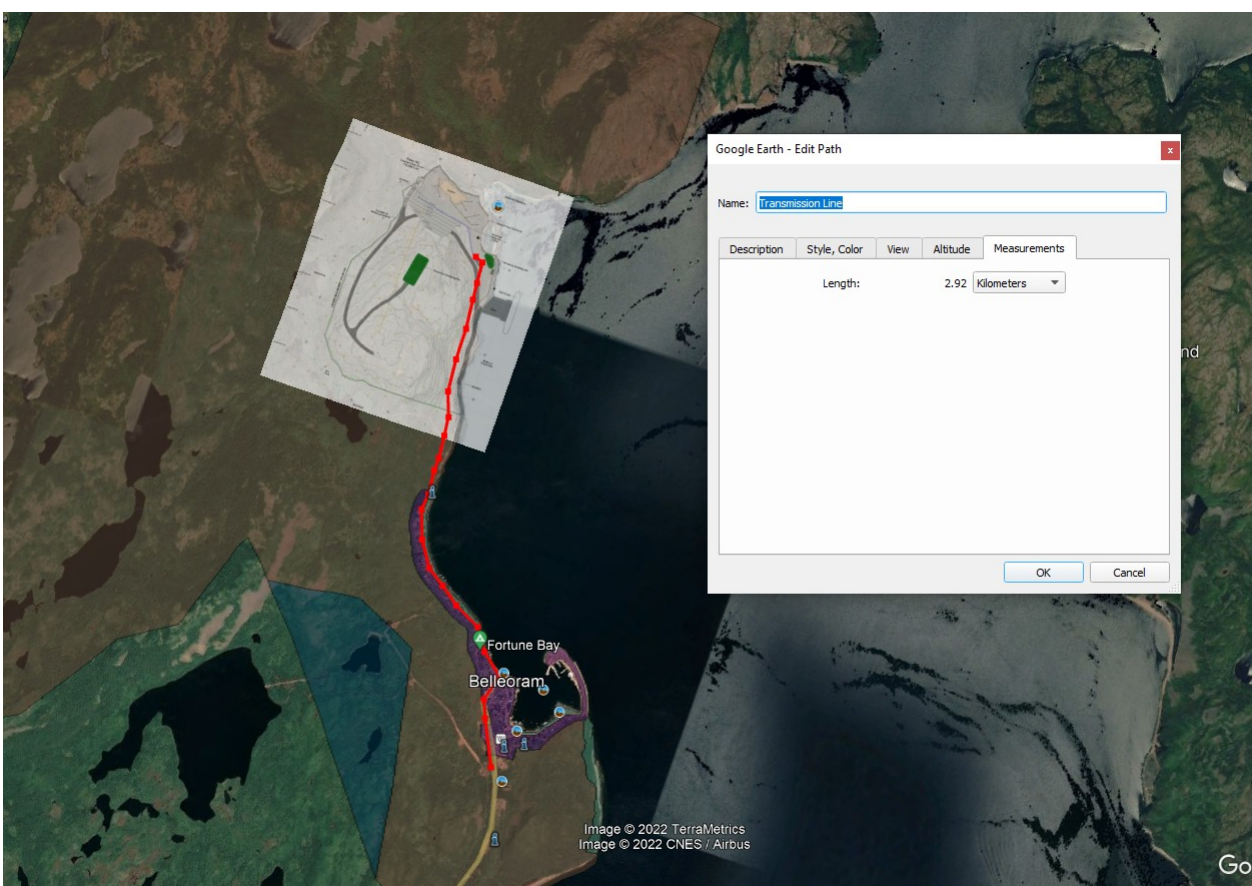
GENERAL SERVICE ONLY

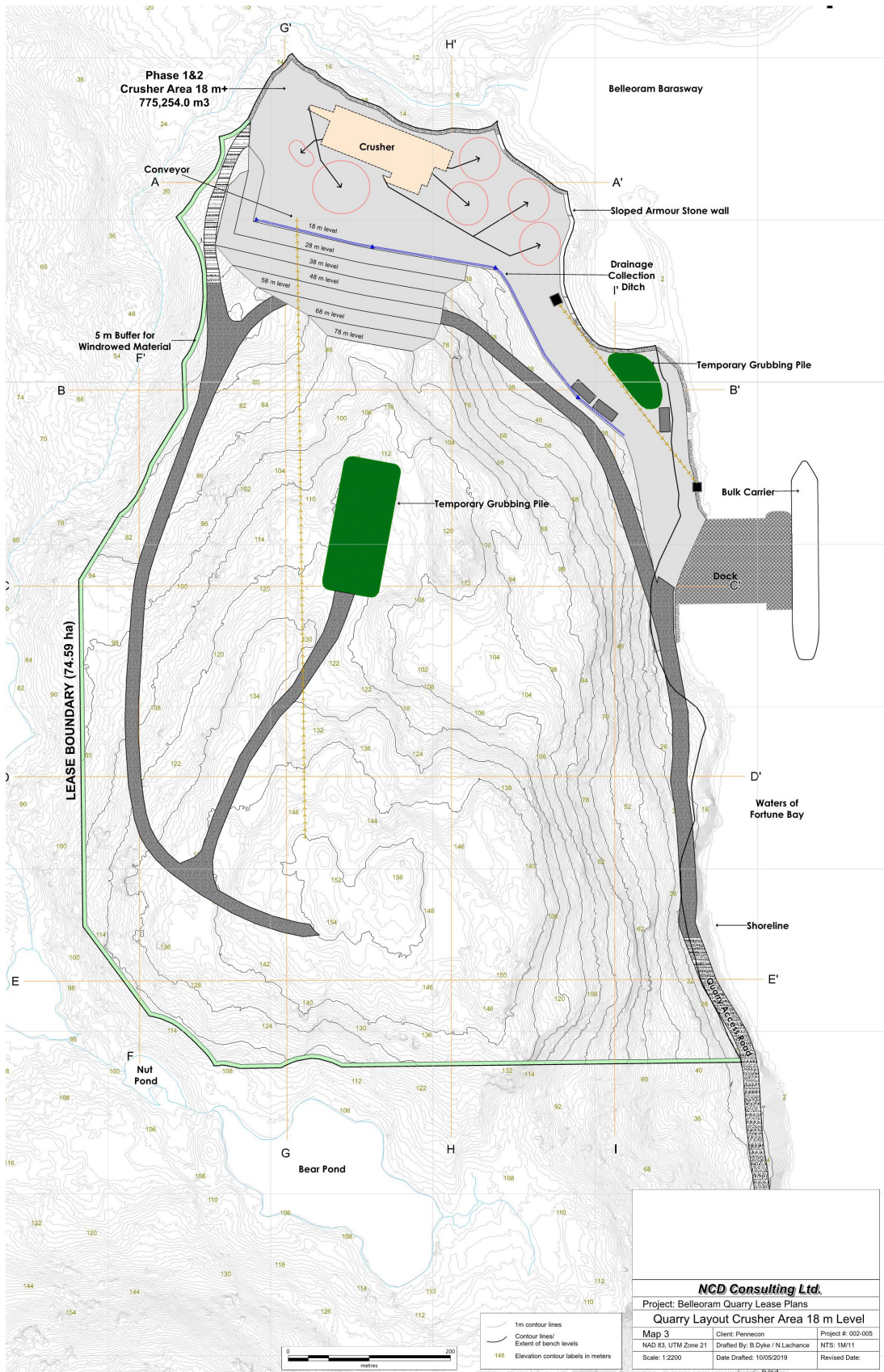
1.	Nature of business: Pennecon Industries Belleoram																			
2.	Location of Premises:	<table border="0"> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Public Road</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Within Community</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Municipal or Other Plan</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td>Permanent Service</td> <td><input checked="" type="checkbox"/> <input type="checkbox"/></td> </tr> </table> <p>The service is a new quarry off the end of the community of Belleoram's northern coastal road. See attached drawings</p>	Yes	No	Public Road	<input checked="" type="checkbox"/> <input type="checkbox"/>	Within Community	<input checked="" type="checkbox"/> <input type="checkbox"/>	Municipal or Other Plan	<input checked="" type="checkbox"/> <input type="checkbox"/>	Permanent Service	<input checked="" type="checkbox"/> <input type="checkbox"/>								
Yes	No																			
Public Road	<input checked="" type="checkbox"/> <input type="checkbox"/>																			
Within Community	<input checked="" type="checkbox"/> <input type="checkbox"/>																			
Municipal or Other Plan	<input checked="" type="checkbox"/> <input type="checkbox"/>																			
Permanent Service	<input checked="" type="checkbox"/> <input type="checkbox"/>																			
3.	Single Phase Service <input type="checkbox"/> Three Phase Service <input checked="" type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>																		
4.	Service Voltage: Local distribution voltage (25 kV?)																			
5.	Service Size in Amps: 3.9 MVA Service Conductor Size (mcm): TBD Conductor Type: <input type="checkbox"/> Cu, <input type="checkbox"/> Al. Lugs Required: <input type="checkbox"/> Single, <input type="checkbox"/> Double																			
6.	Please provide breakdown of connected load (attach separate sheet if more room required). <table border="0" style="width: 100%;"> <tr> <td></td> <td align="center"><u>1 Phase</u></td> <td align="center"><u>3 Phase</u></td> </tr> <tr> <td>Lighting (kW)</td> <td align="center"><u>50</u></td> <td align="center"><u> </u></td> </tr> <tr> <td>Heating (kW)</td> <td align="center"><u>200</u></td> <td align="center"><u> </u></td> </tr> <tr> <td>Miscellaneous (kW)</td> <td align="center"><u> </u></td> <td align="center"><u> </u></td> </tr> <tr> <td>Motors (kW)</td> <td align="center"><u> </u></td> <td align="center"><u>3200</u></td> </tr> <tr> <td>Total (kW)</td> <td align="center"><u> </u></td> <td align="center"><u> </u></td> </tr> </table>			<u>1 Phase</u>	<u>3 Phase</u>	Lighting (kW)	<u>50</u>	<u> </u>	Heating (kW)	<u>200</u>	<u> </u>	Miscellaneous (kW)	<u> </u>	<u> </u>	Motors (kW)	<u> </u>	<u>3200</u>	Total (kW)	<u> </u>	<u> </u>
	<u>1 Phase</u>	<u>3 Phase</u>																		
Lighting (kW)	<u>50</u>	<u> </u>																		
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Miscellaneous (kW)	<u> </u>	<u> </u>																		
Motors (kW)	<u> </u>	<u>3200</u>																		
Total (kW)	<u> </u>	<u> </u>																		
7.	Estimated Peak Demand: 3450 kW (Total kW of load <i>expected</i> to be on at the same time)																			
8.	Estimated annual load factor: 0.9 – April 1 to November 30, 300 kW December 1 to March 31 Or estimated annual consumption (kWh)																			
9.	If applicable, the expected service life: 35 years																			
10.	A copy of the customer's electrical drawings. – Not yet available																			
11.	A copy of the customer's site plan. – See below																			
12.	Date service required (ready for connection). Spring 2026																			
13.	Primary metering requested (extra charges may apply). TBD (subject to the customer supplying and maintaining all distribution facilities beyond the point of supply)																			
14.	Temporary / Construction power requested (extra charges may apply). No																			

Customer/Electrician signature verifies that his information is accurate and understands information is subject to a 2 year review:

Prepared by: Kyle B. Tucker on behalf of Pennecon Date: April 1, 2024

From Customer - Please note that this application is based on preliminary data and subject to additional discussions with NL Hydro. Service sizing is accurate, with plans for up to 2.5 MVA for the first 5 years, expanding to full load afterwards. Detailed electrical drawings are not yet available, but will be determined at a later date, and with input from Hydro service connection details.







Newfoundland and Labrador Hydro
Hydro Place, 500 Columbus Drive
P.O. Box 12400, St. John's, NL
Canada A1B 4K7
t. 709.737.1400 | f. 709.737.1800
nlhydro.com

June 9, 2025

Kyle Tucker
Angler Solutions Inc.
100 New Gower Street, Suite 803
St. John's, NL A1C 6K3

Pennecon Industrial Ltd.

All information contained in this letter is subject to the approval of the Board of Commissioners of Public Utilities. All calculations are subject to change, based on the ruling of this Board.

Dear Kyle Tucker:

Thank you for your inquiry on the availability and cost of providing three phase electrical service to the Pennecon mining quarry located in Belleoram. According to the Contribution in Aid of Construction (CIAC) Policy approved by the Board of Commissioners of Public Utilities, general service customers requiring a line extension greater than 85 meters are required to pay a portion of the construction cost of the line extension. The amount of the charge depends on both the length of the extension required and the energy requirements of the customer.

A Hydro representative has reviewed your request and has developed a design for the line extension. The cost to construct the distribution infrastructure to supply your facility is \$2,560,976.44 + \$384,146.47 HST totaling \$2,945,122.91. However, based on your facility requiring a three phase service with an estimated maximum demand of 3450 kW, Hydro will provide an additional investment credit of \$774,000.00 toward the line construction and upgrade. Your contribution toward the construction of the extension (CIAC) is **\$1,786,976.44 + 268,046.47 HST totaling \$2,055,022.91**. If the above load data is not accurate, please contact us before July 9, 2025 with the correct information as your CIAC requirement may be adjusted as a result of the two-year review.

Two years following the connection of the electrical service the CIAC will be reviewed to determine the accuracy of the estimated load requirements provided to us. It is therefore important that the original load information be as accurate as possible. The CIAC will be recalculated using the actual load data for the 12 months preceding the review and if there is a variation of more than \$100.00 from the original CIAC, the

Pennecon Industrial Ltd.
June 9, 2025

Page 2 of 3

difference will be applied to the electricity account for this service as either a credit, or an additional charge.

Your CIAC Reference Number for the above quote is 1622772 and is valid until December 9, 2025. After this date, a new quotation must be calculated to reflect possible changes in labor and material costs. Hydro, however, reserves the right to make adjustments within this six (6) month period if errors are discovered in the calculation of this estimate, in which case you will be notified immediately of the change.

This CIAC will require Public Utility Board (PUB) approval. If you wish to proceed with the request, please sign and return the Quote Acceptance Form so that Hydro may proceed with preparation of an application to the PUB for approval of this project.

If you wish to proceed with the request, please have the following completed and returned in the enclosed envelope. Hydro will not proceed with construction of the line extension until the following is received:

- **A completed and duly signed copy of the enclosed Quote Acceptance Form.**
- **Payment of the CIAC.**

Construction of your line extension, and your entitlement to any refunds or partial refunds of your CIAC, are subject to the following conditions:

1. Before construction begins, Hydro requires standard easement rights for any portion of the line that will be constructed over private property. This ensures that Hydro has access to the line and equipment should the need arise. Hydro will arrange for any necessary easements. If however, easements cannot be obtained for the proposed route, an alternate route will be determined and a corresponding CIAC will be calculated.

Please note: it may take 12 months to obtain easements from the Provincial Crown Lands Department if the line extension involves Crown Land. Permission for line construction and related work near bodies of water will take considerably longer due to stringent environmental regulations.

2. Should additional customers connect to the line extension within 10 years from the date of its construction, you may be entitled to a refund. Hydro will calculate the refund in accordance with established guidelines as approved by the Board of Commissioners of Public Utilities.

Pennecon Industrial Ltd.
June 9, 2025

Page **3** of **3**

3. Hydro shall make all reasonable efforts to identify when a CIAC refund is required due to additional customers connecting to the line extension and to ensure the appropriate refund is paid within 90 days of any new connection. If your refund is not processed within 90 days of the connection of another customer, the refund amount will earn interest for each day past the 90-day deadline.
4. Hydro retains legal title to the line and may connect other customers to it at any time.
5. Hydro is responsible for the maintenance of the line and for its eventual replacement.

Newfoundland and Labrador Hydro looks forward to serving you. If you require additional information regarding your CIAC, please call toll-free at 1-888-737-1296 between 8:30 a.m. and 4:00 p.m., Monday to Friday.

Sincerely yours,
NEWFOUNDLAND & LABRADOR HYDRO



Kristy O'Rielly
Customer Services

Enclosures

H.S.T Registration #121394928RT0001

c.c. S.Young, NLH – Bay D’Espoir
M. LaVallee, NLH – Bishop’s Falls
File: 425.85.50/012.1622772



Newfoundland and Labrador Hydro
Hydro Place, 500 Columbus Drive
P.O. Box 12400, St. John's, NL
Canada A1B 4K7
t. 709.737.1400 | f. 709.737.1800
nlhydro.com

CIAC Quote Acceptance - General Service

All rates and fees charged for electric service, and the Rules and Regulations governing the provision of that service, are approved by the Rules & Regulations governing the provision of that service, are approved by the Newfoundland and Labrador Board of Commissioners of Public Utilities.

The undersigned ("the Customer") requests Newfoundland and Labrador Hydro (the Company") to provide electrical service at the location listed below.

CIAC Reference No:	1622772		
Customer Name:	Continental Stone Ltd.	Current Account No:	
Consultants Name (if applicable):	Angler Solutions		
Property Location:	Belleoram		
Present Mailing Address:	1309 Topsail Road, PO Box 8274, Station A		
City/Town:	St. John's	Province:	NL
		Postal Code:	A1B 3N4
Present Street Address:			
		Cit / Town:	
Home Phone No:			
Customer's Signature:		Work Phone No:	(709) 763 2013
		Date:	September 26, 2025
Customer's Title:	Senior VP, Construction Materials	Occupation:	Engineer
	Brandon MacDonald		

The basic level of company investment provided to all new general service customers is 85 meters of three phase line extension. Additional company investment may be provided depending on the customer's load requirements and resulting revenue to Newfoundland and Labrador Hydro. This additional investment will be based on the estimated demand and energy consumption derived from the load information provided by you.

All CIACs are reviewed after two years from the date of construction of the line extension to determine the accuracy of load information used in the CIAC calculation process. Variations in recalculated CIAC amounts of \$100 or greater will be applied to the customer's account (the revised amount may result in either a refund or an addition charge).

Please indicate whether you wish to accept any additional load based company investment at this time or whether you would prefer to await the results of our two year review:

☒ I wish to accept the additional load based company investment now. I acknowledge I will be subject to a 2 year review and any variance of \$100 or greater will be charged / credited to my account.

☐ I do not wish to accept the additional load based company investment at this time. I would prefer to await the results of the two year review.

By accepting the additional load based company investment now, I agree to pay to the Company a contribution in aid of construction of \$ 2,055,022.91 (including HST) for provision of that service. By declining to accept the additional load based company investment now, I agree to pay to the Company a contribution in aid of construction of \$ 2,945,122.91 (including HST) for provision of that service.

Affidavit



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

IN THE MATTER OF an application by Newfoundland and Labrador Hydro (“Hydro”) for approval of Distribution System Upgrades for English Harbour West (“EHW”), and for approval of a Contribution in Aid of Construction (“CIAC”) for a portion of the costs.

AFFIDAVIT

I, Paul Dillon, of St. John’s in the province of Newfoundland and Labrador, make oath and say as follows:

- 1) I am Director of Engineering, Engineering and Technology, 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 5th day of December 2025, before me:



Barrister, Newfoundland and Labrador
Witnessed through the use of audio-visual technology
in accordance with the *Commissioners for Oaths Act*
and *Commissioners for Oaths Regulations*



Paul Dillon