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

August 8, 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 the Construction and Installation of Ultra-Fast Electric Vehicle Charging Stations

Enclosed please find Newfoundland and Labrador Hydro's ("Hydro") application for the construction and installation of ultra-fast electric vehicle ("EV") charging stations.

Hydro currently operates 23 public Direct Current Fast Chargers ("DCFC") across the province, including 14 units which were installed along the Trans-Canada Highway in 2021. Since their commissioning, usage has increased significantly, resulting in congestion and wait times during peak travel periods. Phase 1 of the Ultra-Fast DCFC project, approved under the Board of Commissioners of Public Utilities Order No. P.U. 21(2023), was proposed to help address this issue by adding seven DCFCs at five high-traffic locations. As discussed in Schedule 1, Phase 1 includes a total of 11 chargers, which are expected to be in service by fall 2025.[1]

To further alleviate congestion and support growing EV adoption, Hydro now proposes to install additional DCFCs at seven sites across the province. This includes five 400 kW chargers at five sites on the Island Interconnected System and two 120 kW chargers at two sites in Southern Labrador. Each DCFC will have two plugs and the capability of charging two EVs simultaneously for a total of 14 DCFCs.2 The Southern Labrador sites will incorporate solar generation and battery storage to offset diesel-generated electricity and reduce impact on the rural deficit. Further details on the proposed project is provided in Schedule 1 to the Application.

Due to long lead times associated with specialized charging equipment (in excess of six months from the order date), as well as the time required to secure site hosts, Hydro is seeking approval through a supplemental capital application in order to adhere to project timelines associated with external funding.

This project is in partnership with the Government of Newfoundland and Labrador ("Government") who will fund the majority of the capital cost of the $4.3 million project; Hydro will contribute the remaining funds necessary beyond what is funded by Government ($0.5 million). The capital funds Hydro expends on this project are not proposed for inclusion in its regulated rate base for recovery from customers at this time.

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[1] This project now includes ten ultra-fast chargers, and one new under $750,000 capital project for a DCFC in Conne River.
[2] Hydro's application includes 14 DCFCs in total, plus two backup chargers that will be installed at the sites in Southern Labrador.

Should you have any questions, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO

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

Encl.

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

Ultra-Fast Direct Current Fast Chargers – Phase 2

Construction and Installation

August 8, 2025

An application to the Board of Commissioners of Public Utilities

newfoundland labrador hydro

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 an Order approving Phase 2 of the construction and installation of Direct Current Fast Chargers ("DCFC") pursuant to Section 41(3) of the *Act* ("Application").

To: The Board of Commissioners of Public Utilities ("Board")

THE APPLICATION OF HYDRO STATES THAT:

A. Background

1. Hydro, 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*.

2. Hydro currently operates a network of 23 public DCFCs in the province, including 14 units installed along the Trans-Canada Highway ("TCH"). Since their commissioning in August 2021, usage has increased significantly, resulting in congestion and user wait times during peak travel periods.

3. To address these issues, Phase 1 of the Ultra-Fast DCFC project—approved under Board Order No. P.U. 21(2023)—proposed the installation of seven additional DCFCs at five of Hydro's most utilized TCH locations.[1] These units, expected to be commissioned in fall 2025, are intended to expand network capacity, reduce congestion, and provide faster charging. They are also expected to result in a further increase in public charging by electric vehicles ("EV") owners.

[1] As a result of additional funding received by the Government of Newfoundland and Labrador for three additional chargers, the scope of this project has increased to ten DCFC. Further, the approval by Hydro of an under $750,000 capital project for "Install of Public EV Ultra-Fast Charger (2024-2025) Conne River", will result in the construction of a total of eleven chargers in summer 2025 as shown in Table 2 of Schedule 1.

4. The monthly energy sales from DCFCs since August 2023 is shown in Chart 1 of Schedule 1 to this Application; there is a notable peak during the summer months resulting in congestion and wait times for users. Hydro expects this trend to continue as more EVs are operated within the province by both residents and tourists.

B. Application

5. Hydro has the opportunity to avail of funding from the Government of Newfoundland and Labrador ("Government") to install additional DCFCs at seven charging sites across the province, with a capability of charging 14 vehicles simultaneously, as well as two additional chargers as backup for the two proposed sites in Labrador ("Project"). These chargers will add further capacity for growth and alleviate congestion, in addition to providing faster charging times reflecting advancements in EV charging technology.

6. The proposed Project will be developed to align with advancements in EV technology. Hydro intends to install five 400 kW ultra-fast chargers at five sites on the Island Interconnected System. Each charger has two charging connections, allowing two vehicles to be charged simultaneously at up to 200 kW each, or a single vehicle at up to 400 kW. This configuration will enable compatible EVs to charge from 10% to 80% in as little as 18 minutes and will assist with reducing congestion for existing and future EV owners.

7. Currently, there is a more than 675 km gap between the Flowers Cove and Happy Valley-Goose Bay DCFCs in Labrador. To address this connectivity issue, Hydro is proposing to install two 120 kW chargers at two sites (L'Anse-au-Loup and Port Hope Simpson) in Labrador. Each unit has two charging connections, with the capability of charging two cars simultaneously. Each site will also include a backup charger for a total of three plugs per site for Southern Labrador.

8. There are unique challenges associated with deploying DCFC infrastructure in Southern Labrador due to its reliance on remote diesel generation. To address the service gap while minimizing impact on the electrical system and rural deficit, Hydro intends to pair each of the proposed chargers in this region with solar generation and battery storage. This configuration is designed to allow charging to over 100 vehicle charges annually with minimal grid demand, necessary only for reliability.

9. This Project will allow for increased numbers of EVs to be owned and operated within the province which will serve to significantly reduce greenhouse gas emissions when compared to internal combustion engines and will help address gaps in regional service areas in the province.

10. The estimated capital cost of this Project is $4,263,000. Hydro anticipates receiving the majority of the Project costs, up to $3.8 million, from Government funding. Hydro will contribute the remaining funds necessary for the Project; however, the capital funds Hydro expends on this Project are not proposed for inclusion in its regulated rate base for recovery from customers at this time.

11. Further details on the Project, including the specific work and the proposed time frame for that work, are detailed in the report attached to this Application as Schedule 1.

C. Newfoundland and Labrador Hydro's Request

12. Hydro hereby requests that the Board make an Order, pursuant to Section 41(3) of the *Act,* approving the Project and Hydro's capital expenditure of approximately $4,263,000 as more particularly described in this Application and in the report attached as Schedule 1.

DATED at St. John's in the province of Newfoundland and Labrador on this 8th day of August 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

Ultra-Fast Direct Current Fast Chargers – Phase 2

Construction and Installation

Ultra-Fast Direct Current Fast Chargers Phase 2 – Construction and Installation

Location: Various

Investment Classification: Access

Asset Category: Distribution

Executive Summary

In partnership with the Government of Newfoundland and Labrador ("Government"), Newfoundland and Labrador Hydro ("Hydro") is proposing to install new Direct Current Fast Chargers ("DCFC") at seven sites across the province. Five sites will be located on the Island Interconnected System and two will be located in Southern Labrador. Within this application for the proposed new DCFCs, each charging connector is referred to as a DCFC; there will be a total of 14 DCFCs installed over the seven sites in the province.[1] These stations will serve to alleviate congestion and provide faster charging speeds to compatible electric vehicles ("EV") on the Island, while enhancing regional connectivity in Southern Labrador where there are currently no DCFCs.

Each of the five sites on the Island will have a 400 kW charger that has two charging connectors and thus the ability to charge two EVs simultaneously. Compatible vehicles will be able to charge from 10% to 80% state of charge in under 20 minutes. There will be two charging sites in Southern Labrador, designed to limit the impact on the electrical system. Each site will combine a battery storage system and renewable generation with a charger that has a total output of 120 kW and two charging connectors with the capability of charging two vehicles simultaneously.

This project will allow for increased numbers of EVs to be owned and operated within the province which will serve to significantly reduce Greenhouse Gas ("GHG") emissions when compared to internal combustion engines.[2] The life-to-date reduction in GHG emissions from Hydro's existing EV chargers is

[1] Each site in Labrador will include an additional backup charger, for a total of 16 chargers in this project.

[2] The proposed project seeks to offset diesel generation emissions from chargers in Southern Labrador through the inclusion of solar generation and a battery storage system. The system will be designed to produce enough energy on an annual basis to charge more than 100 vehicles annually, while also limiting any impact on the rural deficit associated with increased load from EV charging.

estimated at nearly 1,200 tonnes. This estimated reduction is directly from vehicle charging at Hydro's public EV charging stations and does not include GHG reductions from at-home charging.

The estimated project cost is approximately $4.3 million with planned completion by first quarter of 2027. Hydro has secured approximately 90% of the funds required for this project from Government,[3] with minimal expenditure of Hydro funds. Hydro is not proposing approval of cost recovery at this time.

[3] The Government has committed $3.8 million towards this project. These amounts and funding ratios are subject to final project costs.

Contents

1.0 Introduction

Hydro currently operates a network of 23 public DCFCs in the province.[4] Hydro installed the province's first 14 DCFC installations along the Trans Canada Highway ("TCH") in 2021. Since these chargers were commissioned in August 2021, usage has grown rapidly leading to congestion and user wait times during peak travel periods. Energy sales from DCFCs over the past two years, with notable peaks during the summer months, is shown in Chart 1. Hydro expects this trend to continue as more EVs are operated within the province by both residents and tourists.

Phase 1 of the Ultra-Fast DCFC Project which proposed new DCFCs to be installed at five of Hydro's most utilized sites along the TCH, was approved in Board Order No. P.U. 21(2023).[5] These units are planned for commissioning during the summer of 2025, and are expected to result in a further increase in public charging by EV owners.

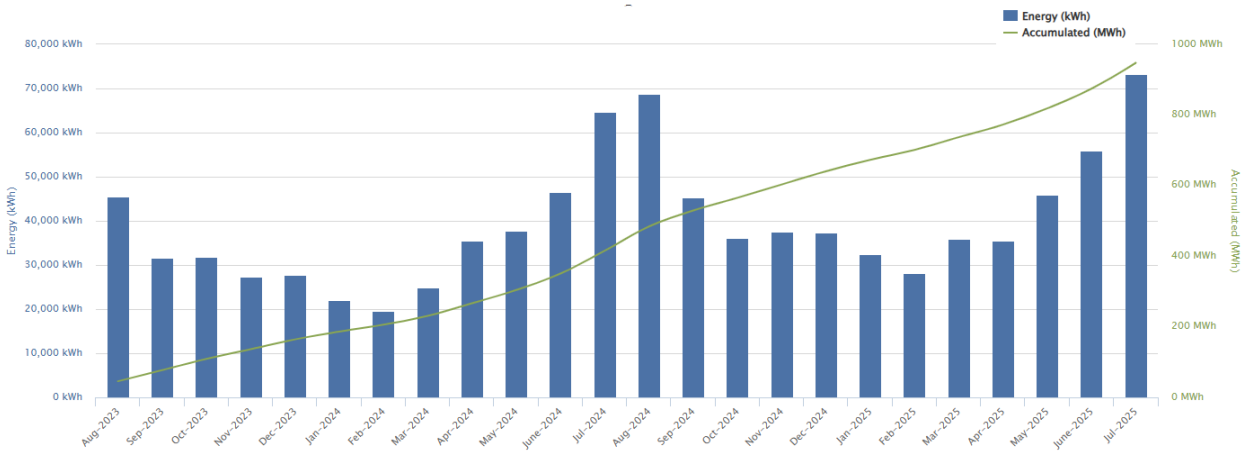

Chart 1: Monthly DCFC Energy Sales – Existing Sites

In partnership with the Government, Hydro is proposing to construct Phase 2 of the Ultra-Fast DCFC Project at seven sites across the province. These new chargers will add further capacity for growth and alleviate congestion, in addition to providing faster charging times reflecting advancements in EV charging technology. With the majority of the capital cost associated with the project to be contributed by the Government, Hydro will not be seeking to recover any costs from ratepayers at this time.

[4] A portion of Hydro's chargers are operated under the takeCHARGE partnership.
[5] This project now includes ten Ultra-Fast chargers; there has also been a new under $750,000 capital project for a DCFC in Conne River.

2.0 Background

The total number of DCFC sessions in 2024 by location is provided in Table 1.[6]

Table 1: Total DCFC Sessions at Existing Sites

Location	2024 Sessions
St. John's West (Galway)	3,114
Goobies	2,281
Whitbourne	2,248
Gander	1,298
Deer Lake	1,218
Bishop's Falls	1,174
Corner Brook	1,052
Port Blandford	967
Southbrook	939
Holyrood	915
Glovertown	912
Port Aux Basques	453
Rocky Harbour	326
Stephenville	248
Cow Head	165
Flowers Cove	159
Labrador City	155
St. Anthony	115
Port Aux Choix	103
Birchy Head	95
Happy Valley-Goose Bay	84
Churchill Falls	73
Roddickton	16
Total	**18,110**

Table 2 provides the list of sites that have been selected for expansion through both the previously approved Phase 1 and the herein proposed Phase 2 of the Ultra-Fast DCFC Project. These sites were selected based on a combination of factors, including addressing congestion at high usage sites and regional connectivity.

[6] Successful charging session (i.e. at least 0.1 kWh of energy was dispensed) at DCFCs only.

Table 2: Site Listing and Number of DCFC Charging Connections[7]

Location	Phase 1 Expansion	Phase 2 Expansion
St. John's – West	2	-
St. John's – East	-	2
Whitbourne	2	-
Carbonear	-	2
Clarenville	2	-
Gander	2	-
Conne River[8]	1	-
Grand Falls-Windsor	-	2
Deer Lake	2	-
Corner Brook	-	2
Hawke's Bay	-	2
L'Anse Aux Loup	-	2
Port Hope Simpson	-	2
Total	**11**	**14**

New chargers in St. John's East, Carbonear,[9] Grand Falls-Windsor,[10] and Corner Brook are in response to high levels of demand at existing charging sites. The remaining sites support regional connectivity, enabling EV travel to new areas of the province.

3.0 Project Description and Justification

Hydro's proposed locations for the Ultra-Fast[11] DCFCs in the context of the existing and in-progress DCFCs in the province are provided in Figure 1.

[7] Excludes the chargers proposed as backup in Southern Labrador.
[8] As reported in Hydro's Quarterly Summary for the Quarter ended December 31, 2024, "Install Public EV Ultra-Fast Charger (2024–2025) Conne River" was approved internally by Hydro at a total cost of $0.5 million, including $0.2 million funded through a Contribution In Aid of Construction.
[9] Paradise and Carbonear are the two most highly used charging sites operated by Newfoundland Power Inc. according to the company's 2024 Conservation, Demand Management and Electrification Report dated April 25, 2025.
[10] Grand Falls-Windsor was selected in response to demand at Hydro's Bishop's Falls site, which has limited ability to expand due to site layout restrictions.
[11] The proposed DCFC chargers in Labrador are not considered Ultra-Fast, as discussed further in Section 4.0.

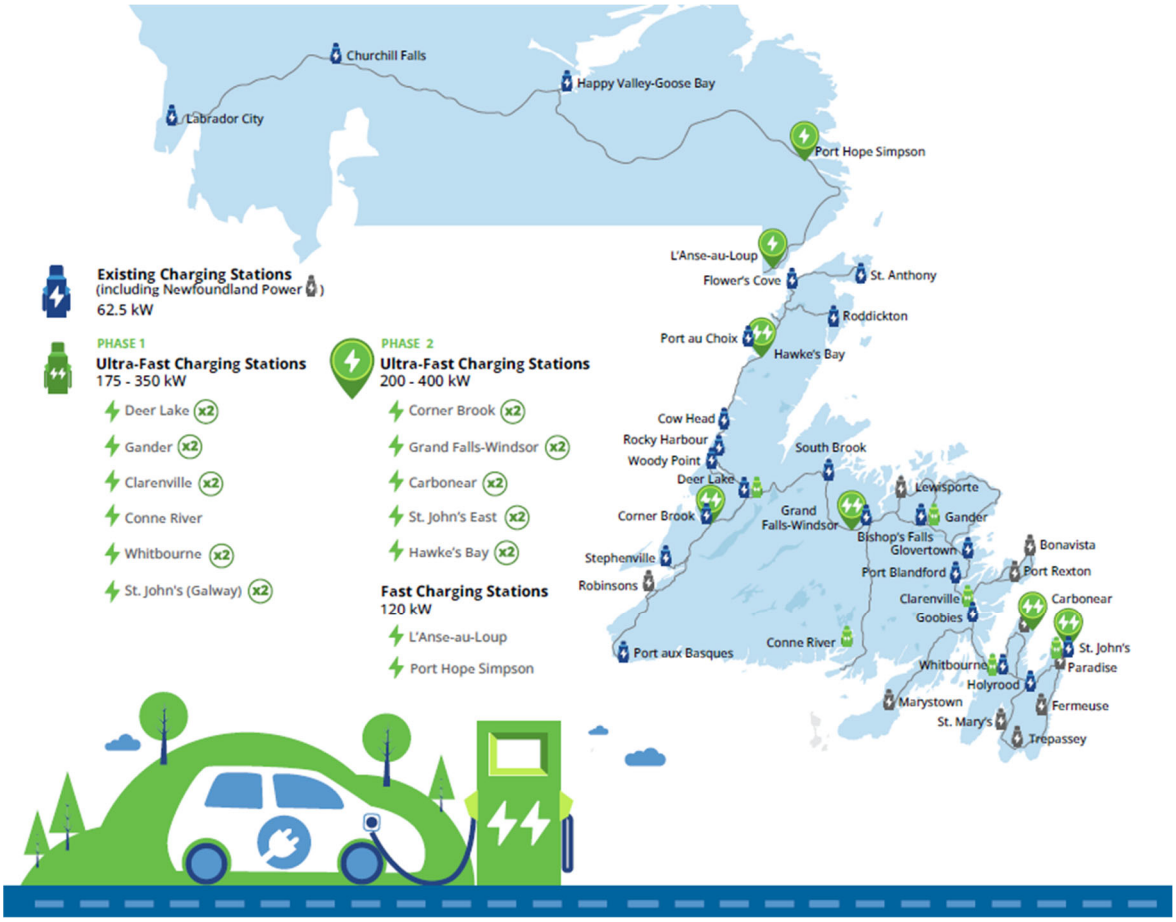

Figure 1: Proposed Locations of Ultra-Fast Chargers

Hydro is proposing to install the Phase 2 Ultra-Fast DCFCs in response to customer demand, to improve regional connectivity for EV owners, and reduce GHG emissions from the transportation sector. Hydro will seek new site host arrangements at the proposed locations, consistent with its existing site host model.

4.0 Asset Overview

Consistent with Hydro's past practice, Phase 2 of the Ultra-Fast charging network will be constructed to meet the demands of emerging EV technology. Hydro's 23 original DCFCs are capable of supplying 62.5 kW to a single vehicle. Phase 1 of the Ultra-Fast charging network will see the installation of eleven 175 kW+ DCFCs in the summer of 2025, with those on the TCH operating in a paired configuration able to supply a single vehicle with up to 350 kW.[12] Phase 2 of the project proposes another power level

[12] Conne River is a 180 kW charger, capable of supplying two vehicles simultaneously at up to 90 kW each or a single vehicle at up to 180 kW. This site also includes a 24 kW DCFC for backup purposes.

increase for DCFCs located on the Island Interconnected System; chargers in Southern Labrador will be designed to limit their potential impact on the electrical system, as discussed further below, while still providing fast charging speeds for users.

4.1 Island Interconnected System Chargers

In response to the increased charging capabilities of newer EVs, Hydro intends to install five 400 kW chargers on the Island Interconnected System, each with two charging connections. These chargers would be equipped with one CCS[13] and one NACS[14] charging cable, capable of charging two EVs simultaneously at up to 200 kW each or a single EV at up to 400 kW. This will allow for significantly faster charging for vehicles capable of accepting high power rates, charging from 10% to 80% in as little as 18 minutes. By way of comparison, Hydro's current DCFCs would require approximately 50 minutes to provide the same amount of energy.

4.2 Southern Labrador Chargers

There are unique challenges associated with the installation of DCFCs in Southern Labrador, requiring a different approach from past DCFC installations on the province's interconnected grids. Southern Labrador currently represents a large gap in Hydro's charging network, with over 675 km between the DCFCs in Flowers Cove and Happy Valley-Goose Bay. This distance is well beyond the effective range of most EVs, making EV travel in this region of the province very difficult. Additionally, power generation in Southern Labrador is primarily supplied by diesel generation. This project aims to limit the impact on the electrical system and the rural deficit, while still addressing the need for EV charging in this region of the province.

Therefore, Hydro intends to install at each site Southern Labrador,[15] a 120 kW charger with a battery storage system and solar generation.[16] This configuration will target sufficient solar generation to supply over 100 vehicle charging sessions annually, and the battery storage system will ensure only a minimal grid connection is required for reliability (between 20 and 40 kW). A render of the proposed installation is provided in Figure 2.

[13] Combined Charging System.
[14] North American Charging Standard.
[15] These sites are currently planned to be located in L'Anse Aux Loup and Port Hope Simpson.
[16] Due to the limited amount of public EV charging in this region, Hydro plans to add an additional lower power charger at each site for backup purposes.

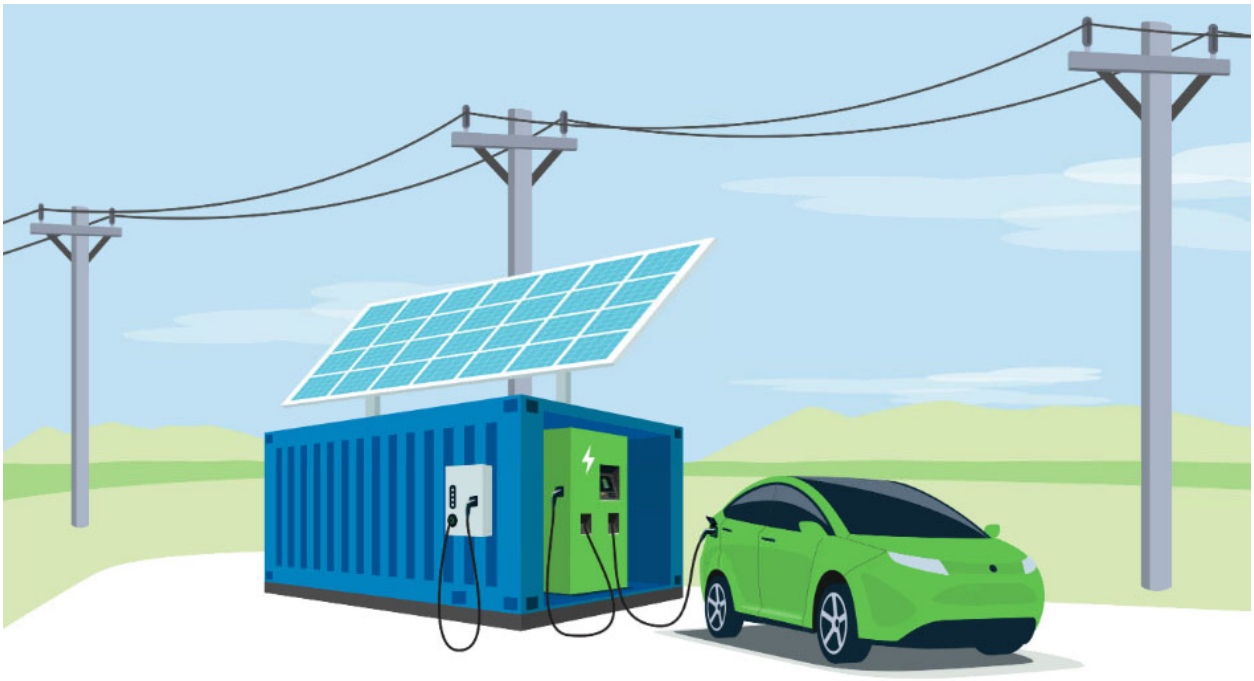

Figure 2: Isolated DCFC with Solar and Batteries

The Southern Labrador chargers will be equipped with one CCS and one NACS connector and be able to charge a single EV up to 120 kW, or two EVs simultaneously at 60 kW each. Each site will also include a backup charger for a total of three plugs per site in Southern Labrador. Current plans for site configuration would include approximately 120 kWh of battery storage to limit the capacity requirements on the electrical system. This site design will allow Hydro to provide DCFC in Southern Labrador with little to no impact on firm capacity requirements or the rural deficit.

5.0 Analysis

5.1 Evaluation of Alternatives

Hydro considered the following alternatives:

- Project deferral; and
- Construct and install Ultra-Fast DCFCs.

5.1.1 Deferral

The deferral of this project would place Government funding at risk. This funding includes requirements for project completion and equipment in-service dates which, in combination with long equipment lead times, requires that Hydro begin seeking site hosts and place equipment orders in the coming months.

5.1.2 Construct and Install Ultra-Fast DCFCs

Proceeding with this project will enable Hydro to meet growing customer demand (including higher charging acceptance rates of new EVs), and lower GHG emissions from the transportation sector, all while availing of third-party funds. The planned configuration of the Southern Labrador sites would realize these benefits with minimal impact on the diesel electrical system or the rural deficit.

5.1.3 Least-Cost Evaluation

There are no viable alternatives identified to facilitate a least-cost evaluation. The project is majority funded by Government.

This project will allow for increased numbers of EVs to be owned and operated within the province which will serve to significantly reduce GHG emissions when compared to internal combustion engines.

5.1.4 Recommended Alternative

The construction and installation of Ultra-Fast DCFCs was the only viable alternative identified, as additional charging capacity is required to meet growing customer demand and higher charging acceptance rates of new EVs.

5.1.5 Risk of Asset Stranding

The risk of asset stranding of Ultra-Fast DCFCs is low. Hydro has selected either highly utilized charging sites or areas of the province which are currently underserved for installation. Further, there will be a legacy role for Ultra-Fast DCFCs as EV charging technology continues to evolve, as there is for Hydro's existing DCFCs. The added availability of DCFCs will also help improve charging capacity at peak travel times to meet the growing demand for EVs.

6.0 Scope of Work

6.1 Project Budget

The estimate for this project is shown in Table 3.

Table 3: Project Estimate ($000)

Project Cost	2025	2026	2027	Total
Material Supply	0.0	2,880.0	0.0	**2,880.0**
Labour	68.3	61.4	0.0	**129.7**
Consultant	16.0	36.0	0.0	**52.0**
Contract Work	0.0	697.8	74.8	**772.6**
Other Direct Costs	1.3	0.0	0.0	**1.3**
Interest and Escalation	2.8	36.6	4.4	**43.8**
Contingency	8.6	367.5	7.5	**383.6**
Total	**97.0**	**4,079.3**	**86.7**	**4,263.0**

6.2 Project Schedule

The schedule for this project is shown in Table 4.

Table 4: Project Schedule

Activity	Start Date	End Date
Planning:		
Project initiation.	September 2025	September 2025
Design:		
Detailed electrical/site design.	February 2026	May 2026
Request electrical service.	February 2026	April 2026
Procurement:		
Equipment procurement.	August 2025	May 2026
Land leases.	August 2025	March 2026
Tender for civil and electrical work.	June 2026	August 2026
Construction:		
Civil work.	August 2026	November 2026
Electrical work.	October 2026	November 2026
Commissioning:		
Final hookup and commissioning.	November 2026	January 2027
Closeout:		
Project closeout.	January 2027	March 2027

7.0 Conclusion

Hydro's EV fast charging network is experiencing congestion and wait times during peak travel periods. Further, there are areas of the province that remain unserved with respect to public EV charging infrastructure. Hydro is proposing to construct DCFCs at seven new sites across the province in an effort to alleviate congestion, provide faster charging speeds to customers, and enable EV travel to currently unserved areas. Of the seven new DCFC sites, five will be located on the Island and two will be located in Southern Labrador. Each charger will have the capability of charging two EVs simultaneously for a total of 14 new DCFCs. The sites in Southern Labrador will also be equipped with one backup charger at each site.

Hydro anticipates receiving funding for approximately 90% of the capital costs associated with this project,[17] and is not proposing approval of cost recovery at this time. This project will allow for increased numbers of EVs to be owned and operated within the province which will serve to significantly reduce GHG emissions when compared to internal combustion engines.

[17] Subject to final project costs.

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 for an Order approving Phase 2 of the construction and installation of Direct Current Fast Chargers pursuant to Section 41(3) of the *Act* ("Application").

AFFIDAVIT

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

1) I am the Director of Engineering, 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 8th day of August 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