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NEWFOUNDLAND POWER
A FORTIS COMPANY

April 25, 2025

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

Attention: Jo-Anne Galarneau
Executive Director and Board Secretary

Dear Ms. Galarneau:

Please find enclosed Newfoundland Power's *2024 Conservation, Demand Management and Electrification Report*, filed in compliance with Order No. P.U. 7 (1996-97).

If you have any questions, please contact the undersigned.

Yours truly,

Dominic Foley
Legal Counsel

Enclosure

ec. Shirley Walsh
Newfoundland and Labrador Hydro

Dennis Browne, KC
Browne Fitzgerald Morgan & Avis

Newfoundland Power Inc.
55 Kenmount Road • P.O. Box 8910 • St. John's, NL A1B 3P6
PHONE (709) 693-3206 • FAX (709) 737-2974 • **dfoley@newfoundlandpower.com**

2024 Conservation, Demand Management and Electrification Report

April 25, 2025

Table of Contents

Page

1.0 Introduction

In Order No. P.U. 7 (1996-97), the Newfoundland and Labrador Board of Commissioners of Public Utilities (the "Board") ordered, in effect, that Newfoundland Power Inc. ("Newfoundland Power" or the "Company") file annual progress reports on its demand side management activities, including conservation activities.

Since 2009, Newfoundland Power and Newfoundland and Labrador Hydro ("Hydro" and together with Newfoundland Power, the "Utilities") have offered conservation and demand management ("CDM") programs on a joint and coordinated basis under the takeCHARGE brand. Customer CDM programs were implemented by the Utilities throughout 2024 in a manner consistent with past practice and existing Board orders.

Electrification initiatives in 2024 consisted of the operation of ten electric vehicle ("EV") charging stations, approved by the Board in Order No. P.U. 30 (2021), work associated with the EV Load Management Pilot Project, approved by the Board in Order No. P.U. 23 (2023) as well as customer education and awareness activities.

The Utilities also commissioned an updated Electrification, Conservation and Demand Management Potential Study ("Potential Study") for the Island Interconnected System ("IIS") in 2024.[1] The study identifies cost-effective energy and demand reduction measures and quantified achievable energy savings potential by sector and end-use. The study also includes forecast impacts of electrification, such as the uptake of electric vehicles and other fuel switching opportunities.

While CDM programs and electrification initiatives under the takeCHARGE partnership are available throughout the province, this report focuses on the results and evaluation of Newfoundland Power's CDM programs and electrification initiatives.

2.0 CDM Programs

2.1 Program Delivery

Newfoundland Power's CDM programs provide residential and commercial customers with incentives that result in quantifiable energy and demand savings.

In 2024, Newfoundland Power offered four CDM programs for residential customers. These programs targeted: (i) insulation and air sealing; (ii) heat recovery ventilators ("HRVs"); (iii) low-cost behavioural changes through the Benchmarking Program;[2] and (iv) the Energy Savers Kit Program, which provides free energy efficiency kits to income qualified customers. These programs reduce electrical energy consumption and peak demand.

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1 The Potential Study was conducted by Posterity Group. Posterity Group is a Canadian based consultancy firm that aims to help energy planners assess opportunities and risks associated with the energy transition. For further information on the study, see section *2.3 Program Planning*.

2 Also referred to as the Home Energy Report program, the Benchmarking Program involves using social norms to encourage friendly competition to reduce electricity consumption by comparing customers' energy usage with homes having similar attributes.

In 2024, Newfoundland Power launched a pilot program called the "All-In Attic Insulation Program" for income qualified customers.[3] Customers who qualified received a fully funded attic insulation upgrade, including labour. Newfoundland Power started accepting customer applications in May of 2024 with project installations beginning in September of 2024. At the end of 2024, 99 installations were completed, with the remaining approximately 150 installations to be completed in early 2025. Newfoundland Power will evaluate the results of the pilot in 2025.

The Company continued to offer the Business Efficiency Program for commercial customers in 2024. The Business Efficiency Program has three components: (i) prescriptive rebates; (ii) custom energy rebates; and (iii) custom demand rebates. Prescriptive rebates provide money back when customers purchase and install eligible products. For custom energy rebates, a takeCHARGE employee consults with the customer to develop an energy saving project that is customized to their individual circumstances.[4] Custom demand rebates are available to commercial customers who implement individualized demand reduction measures that are economically viable and provide measurable demand reduction during peak times.[5]

[3] Income criteria aligned with those used for the Energy Savers Kit Program, which are based on Statistics Canada Low-Income Cutoffs. Incomes were validated with the Canada Revenue Agency before applications were approved.

[4] Incentives are provided on an individualized basis for projects that are cost-effective from the customer and utility perspective. Rebates are paid on the energy savings the customer achieves in the first year of the project.

[5] Under the Business Efficiency Program, customers can receive incentives for demand reduction based on the amount of demand they are able to reduce during peak times. This one-time incentive is based on project demand savings at $100 per kW per month over the December to March period. Eligible demand savings projects must achieve a minimum savings of 50 kW and must be maintained over five years.

2.2 Program Results

Table 1 provides customer participation in Newfoundland Power's CDM programs for 2024, as well as the estimated energy and peak demand savings achieved by new participants.[6]

Table 1:
Newfoundland Power
CDM Program Participation and Savings
(2024)

	Customer Participation	Annual Energy Savings (MWh)	Peak Demand Savings (kW)
Residential Programs			
Insulation and Air Sealing Program	1,263	3,455	2,393
HRV Program	697	387	119
Benchmarking Program	75,105	15,644	10,900
Energy Savers Kit Program	2,676	2,269	636
Commercial Programs			
Business Efficiency Program	395	4,684	851
Total All Programs	**80,136**	**26,439**	**14,899**

In 2024, the Company's CDM programs achieved energy savings of 26.4 GWh and peak demand savings of 14.9 MW. The Benchmarking Program resulted in the highest contribution to energy and peak demand savings in 2024, comprising approximately 59% of total energy savings and 73% of total peak demand savings.

In addition to CDM programs, the Company continued to offer the Curtailable Service Option to Rate 2.3 and 2.4 customers in 2024. Twenty-three General Service customers participated in the Curtailable Service Option during the 2023-2024 winter season, providing an average aggregate load reduction of approximately 11.5 MW.[7]

Appendix A of this report provides the detailed results for each CDM program for 2024 and over the life of the programs.

2.3 Program Planning

A Potential Study for the IIS was commissioned by the Utilities in 2024. In general, a Potential Study provides a framework, consistent with North American best practices, to assess utility demand side management programming. The findings enable the Utilities to focus on cost-effective technologies and begin assessment of market characteristics to guide program

[6] Unless otherwise noted, estimated savings indicated in this report are provided on an annualized basis. Actual savings during the year of participation will be less, since this depends on the actual timing of installation. Due to the nature of customer behavioural changes, Benchmarking Program savings are assumed for one year only.

[7] This load reduction is exercised to reduce demand on the electrical system when generation reserves fall below normal operating levels.

development. It also allows the Utilities to understand baseline trends of electricity usage in the absence of any utility programs. Potential Studies are undertaken every 5 years to inform the Utilities multi-year plans for electrification, conservation and demand management.

The current Potential Study will identify energy and demand savings potential from energy efficiency, energy impacts from electrification of space and water heating and electric vehicles, and impacts of demand response initiatives by sector for the 2025-2040 period. The Potential Study will be completed in Q2 2025 and will be included as part of the Utilities' next five-year plan, scheduled to be completed by the end of 2025.

2.4 Program Evaluation

The cost-effectiveness of CDM programs is evaluated using the Total Resource Cost ("TRC") test and Program Administrator Cost ("PAC") test, as approved by the Board in Order No. P.U. 18 (2016). These tests are applied annually to assess the cost-effectiveness of CDM programs. Both tests provide a benefit-to-cost ratio whereby a result of 1.0 or greater indicates that a program is cost-effective.

Table 2 provides the TRC and PAC test results for Newfoundland Power's CDM programs in 2024.[8]

Table 2:
Newfoundland Power
CDM Program Cost-Effectiveness Results
(2024)

Program	TRC Test	PAC Test
Insulation and Air Sealing Program	4.2	4.5
HRV Program	1.7	2.3
Energy Savers Kit Program	4.3	4.3
Benchmarking Program	6.2	6.2
Business Efficiency Program	1.7	3.5
Total Portfolio	**3.3**	**4.4**

The TRC and PAC test results indicate that the customer benefits of Newfoundland Power's CDM programs were at least 3.3 times the cost of implementing those programs in 2024.[9]

In addition to cost-effectiveness testing, Newfoundland Power evaluates changes in market factors that may impact its program delivery. This may include third-party evaluations of certain programs to assess changes in technologies, industry standards or customers behavior. Third-party evaluations were conducted of the following programs and initiatives in 2024:

[8] The TRC and PAC tests were conducted using updated marginal cost information provided by Hydro in the first quarter of 2025.

[9] The primary difference in the TRC and the PAC is the TRC includes the customer costs to participate in a program, whereas the PAC includes only utility costs.

(i) Small Business Direct Install Program

Guidehouse completed an evaluation of the Small Business Direct Install Program in 2024. From October 2022 to April 2024, the Utilities partnered with Summerhill to offer customers the "Small Business Direct Install Pilot Program".[10] The pilot offered free assessments and installations of eligible efficient lighting and water-saving measures to customers in select communities in the utility rate class 2.1.[11] As part of the program, an assessor or electrical contractor visited each interested business to assess potential energy savings. If significant opportunities were identified, the energy savings technologies were installed.

A total of 734 businesses were identified as eligible for the pilot program. Of these, 102 businesses received assessments, and 79 businesses completed installations. The estimated annual energy savings from customers who received installations was 0.51 GWh.[12] Despite a high conversion rate of 77% from assessments to installations, challenges in engaging customers for assessments and costs associated with direct installation and in-person assessments resulted in a TRC of 0.6, rendering the pilot not cost-effective to continue as a program.

While the program was successful in providing energy efficiency upgrades for 79 businesses, the program faced several challenges that would likely be more pronounced if the pilot were expanded to all areas in the Utilities' service territories. For example, the program showed the highest degree of success when door to door canvassing was completed for customer recruitment as opposed to using telephone or e-mail for recruitment. Door to door canvassing would increase cost and likely present challenges with labour availability due to the geographic size and population distribution of Newfoundland and Labrador. Even in more urban areas of the province, labour availability posed a challenge for both assessors and contractors to complete the work.

While energy savings opportunities for small businesses remain, a direct installation program is not cost-effective.

(ii) Benchmarking Program

The Benchmarking Program promotes behavioural changes to improve customers' energy efficiency. Benchmarking involves the use of social norms to encourage friendly competition to reduce electricity consumption. The 2024 evaluation showed high levels of participant engagement with the program. Approximately 95% of users reported that they read their Home Energy Reports and found the most value in the comparison to similar homes and the comparison of their own energy use to previous

[10] Summerhill is a Canadian company that has been delivering energy efficiency and demand response programs for over 30 years.

[11] Eligible communities included St. John's, Mount Pearl, Goulds, Paradise, Conception Bay South, Corner Brook, Deer Lake, Rocky Harbour, Cow Head, Norris Point and Trout River.

[12] Savings and participants include customers in Hydro's service territory.

months and years. The evaluation also confirmed the energy and peak demand savings associated with the program.

(iii) *EV Load Management Pilot*

Guidehouse completed a third-party evaluation of the EV Load Management Pilot in 2024. The pilot began in the fourth quarter of 2023 and aims to understand EV charging behaviours in the province and the effectiveness, costs and challenges of different strategies to shift EV load to off peak periods.

In 2024, customer recruitment for the first winter season was completed and demand management events occurred. Despite challenges with technology compatibility for both EV chargers and EV telematics, 58 customers were enrolled in the program for the first winter. Of these, 23 were placed in the control group, 27 in the passive management group and 8 in the active management group.[13]

The evaluation indicated that both active and passive load management strategies show evidence of successful load curtailment, particularly the passive treatment in the evening period. The passive treatment group demonstrated clear load curtailment during the evening peak period, while active events later in the season showed more clear curtailment as technical issues with this group were resolved over the course of the pilot. Secondly, the evaluation indicated a general shift in EV charging from the evening period to overnight. However, there is less load curtailment potential during the morning period due to low baseline demand, as customers typically do not charge their vehicles at that time. Thirdly, the evaluation indicated that continuing the pilot would be beneficial to improving impact estimates. Data collected during the Spring/Summer/Fall of 2024 would help improve the baseline estimates for EV charging and more enrolled participants (particularly those with EV chargers) would provide a larger sample from which to estimate impacts.

After the initial evaluation, it was determined the pilot would run for a second winter season. To date, the pilot has enrolled 175 customers. The second season of the pilot began on December 1, 2024 and had load management events until the end of March 2025. Another third-party evaluation will be conducted after the study period and will be provided to Newfoundland Power to better understand the viability of EV Load Management in the province.

[13] The passive management group is influenced by simulated price signals to shift their charging behaviour but does not give up control of their charging to the utility. The charging for the active management group is controlled by the utility with the customer having the ability to opt-out of events.

3.0 Education and Awareness

3.1 Media and Advertising

Throughout 2024, broadcast, print, online and social media advertising created awareness for residential and commercial CDM programs.

The 2024 takeCHARGE marketing survey conducted by MQO Research continued to show high levels of takeCHARGE program awareness among customers. In 2024, 88% of households surveyed had heard of the takeCHARGE program, most often associating it with rebates, financing or discounts and tips on how to save energy. Of those that were familiar with takeCHARGE, 54% recalled the source being from television, with 22% from Facebook, and 19% from online advertising.

Twelve takeCHARGE inserts were included with electricity bills throughout the year. These inserts included energy-saving tips for homeowners and promoted participation in the rebate programs.

The 16th annual *Energy Efficiency Week* ran from October 1 to 7, 2024 highlighting the importance of energy efficiency to Newfoundland Power and its customers. The week focused on giving customers the information they need to help save energy and money. Customers had the opportunity to connect with takeCHARGE energy experts at local hardware locations island-wide and participate in a virtual energy efficiency webinar. Additionally, the week featured municipal proclamations of *Energy Efficiency Week* and two media spots on the NTV Evening News First Edition and OzFM.

takeCHARGE celebrated its 11th *Business Efficiency Week* from October 21 to 27, 2024. The week focused on providing commercial customers with the tools they need to help save energy and money in their organizations. Customers had the opportunity to connect with takeCHARGE energy experts at local electrical distributor pop-up events and business industry tradeshows.

Customers continued to visit TakeChargeNL.ca for a range of energy solutions advice and program details. The website received over 567,000 visits in 2024.

In 2024 enhanced accessibility features were introduced on the takeCHARGE website to support the diverse needs of utility customers. A clickable icon provides users with the ability to adjust settings to suit their accessibility needs. Adjustments can be made to accommodate vision impairment, hearing impartment, cognitive disabilities and seizure sensitivities. The website can also be made ADHD friendly or be customized to provide help with reading and focusing.

3.2 Community Outreach

The takeCHARGE team raises awareness of energy conservation and CDM programs through a variety of community and outreach activities.

takeCHARGE participated in 53 external events and completed 27 external presentations throughout 2024, providing multiple opportunities to connect directly with customers.[14] Some of the key events included the Canadian Home Builders Association of Newfoundland and Labrador's *Home Show*, the *Downhome Expo*, the Municipalities Newfoundland and Labrador annual Conference and Municipal Symposium, the 50+ Federation Annual Conference, the econext Annual Conference, the Senior's Wellness Show, and Memorial University of Newfoundland and Labrador's Botanical Gardens *Merry and Bright Festival.* Presentations were delivered to a variety of audiences including customers at three separate "Customer Energy Forums" hosted by Newfoundland Power in Carbonear, Clarenville and Burin. Other presentations were delivered to groups such as Energy NL, CHBA-NL Housing Forum and ACOA.

"The Energy Source", an e-mail newsletter aimed at providing customers and partners with the latest information on rebates energy-saving tips and events, grew its subscriber base to 7,971 customers in 2024, an increase of 114% over 2023. In 2024 eight residential newsletters, five business/partner newsletters and five electric vehicle newsletters were sent to customers. Open rates for these emails range from 42% to 82%, well above industry average.[15]

The 2024 *takeCHARGE of Your Town Challenge* received 22 proposals from municipalities for energy-efficient upgrades within their communities. The Town of Grand Falls-Windsor was awarded $10,000 to install mini-split heat pumps at the Corduroy Brook Nature Centre which will expand their ability to host community groups and events at the Centre.

Newfoundland Power educated students on energy conservation through the *takeCHARGE Kids in Charge ("K-I-C") Start* school program. The program offers presentations for Kindergarten to Grade 6 students and contests that promote energy-efficient behaviours for primary, elementary and high school students. In 2024, takeCHARGE completed 17 presentations across 13 schools, reaching 976 students.

A Zero-Emissions Vehicle ("ZEV") Workshop was held on May 14, 2024. The workshop was a partnership between the City of St. John's and takeCHARGE. It brought together municipal representatives and local stakeholders to discuss issues and opportunities associated with the adoption of ZEVs. The workshop concluded with a consensus on the critical role of municipalities and utilities have in the ZEV transition and the need for continued collaboration among all stakeholders to achieve a zero-emissions future.

[14] The decrease in the number of events in 2024 compared to previous years is attributable to the end of the Instant Rebate program, which involved retail coordinators hosting several events per week at select retail locations.

[15] The average open rate for other companies using the same e-mail platform, MailChimp, is 36%.

3.3 Trade Allies and Partners

In 2024, takeCHARGE was recognized for playing a key role in advancing energy efficiency and demonstrating the value of investing in smart energy choices when it received its eighth and ninth ENERGY STAR® Canada Awards. The awards recognized takeCHARGE with "Promotional Campaign of the Year" for the fourth time in five years for work completed creating education and awareness about ENERGY STAR products. Additionally, takeCHARGE was awarded with the "Sustained Excellence" award.[16] This award recognizes an organization that has maintained or surpassed its ENERGY STAR commitment and accomplishments of the previous years.

In October 2024 takeCHARGE received the Small Utility Excellence award at the E Source Forum.[17] This award recognizes exceptional utility initiatives that enhance customer satisfaction. takeCHARGE received this award for the Energy Savers Kit program, which delivers free energy efficiency kits to income-qualified customers. The award recognized takeCHARGE for its partnership with Newfoundland and Labrador Housing to remove barriers to providing kits to Housing clients.

In 2024, takeCHARGE hosted the sixth *Luminary Awards* in October. The *Luminary Awards* recognize companies, organizations, communities and individuals across Newfoundland and Labrador that are taking steps to use energy wisely, and inspiring others to do the same. This year, 13 awards were distributed in seven different categories.[18]

takeCHARGE continued its partnership with Fire and Emergency Services NL to supplement their "Electric Vehicle Safety for First Responders" training. This training provides firefighters with hands on knowledge of EV components and how to disable the main high voltage battery(s) in emergency situations. In 2024, takeCHARGE presented at eight fire stations with an estimated 205 volunteer firefighters attending.

Newfoundland Power continued administering the Oil to Electric rebate program for its customers on behalf of both the Federal and Provincial governments in 2024. The program aims to reduce greenhouse gas ("GHG") emissions by removing oil heating sources from homes by providing rebates for a variety of electric heating systems, including enhanced rebates for customers installing heat pumps and those with low to moderate incomes. Administering this program allows Newfoundland Power to obtain information on where oil to electric heating conversions are happening on the grid, and more accurately forecast load impacts from fuel switching. Additionally, takeCHARGE can identify participants of the Oil to Electric program who may now be eligible for other offerings, enabling cross-promotion of programs such as the takeCHARGE Insulation and Air Sealing and Energy Savers Kits.

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16 See ENERGY STAR Canada Awards.

17 E Source is a utilities-focused consulting, research, and data science company.

18 Awards were provided in the categories of "Community Impact Award", "Leadership Award", "Innovation Award", "Partnership Award", "Sustained Excellence Award", "Electric Vehicle Awareness Award", and the "BIG Award". Award winners can be found on the takeCHARGE website.

4.0 Electric Vehicle Charging Network

In Order No. P.U. 30 (2021), Newfoundland Power's proposed supplemental 2021 capital expenditure for the deployment of 10 electric vehicle charging stations was approved. Each of these stations contains a 62.5 kW direct current fast charger ("DCFC") and a 7.2 kW Level 2 charger.

Table 3 shows the number of sessions, the energy usage and revenue from each Newfoundland Power owned public EV charging station for 2024, which experienced a growth in the number of charging station sessions of approximately 20%.[19] The chargers listed in Table 3 had a reported uptime or availability of 99.4% in 2024.

Table 3:
Electric Vehicle Charging Stations Statistics
2024

Charger Locations	Number of Sessions	Energy Usage (kWh)	Revenue ($)
Paradise	2,032	58,562	18,212
Carbonear	570	12,983	4,483
Robinsons	332	7,861	2,349
Lewisporte	315	10,215	3,264
Marystown	305	9,052	2,970
Port Rexton	292	7,208	2,304
Bonavista	153	4,358	1,321
Fermeuse	94	1,722	718
St. Mary's	65	1,094	432
Trepassey	53	1,084	373
Total	**4,211**	**114,139**	**36,426**

5.0 CDM Costs

Table 4 on the following page summarizes Newfoundland Power's CDM-related costs from 2020 to 2024.

[19] There were 3,513 charging sessions in 2023. (4,211-3,513)/3,513 = 19.9%.

Table 4:
Newfoundland Power
CDME Costs
($000s)

	2020	2021	2022	2023	2024
General Costs					
Customer Education and Support[20]	429	489	527	639	537
Planning[21]	429	262	331	804	734
Total General Costs	***858***	***751***	***858***	***1,443***	***1,271***
Program Costs					
Insulation and Air Sealing Program[22]	1,393	1,176	1,350	1,500	2,296
Thermostat Program[23]	324	294	146	57	0
HRV Program	157	205	229	214	271
Benchmarking Program[24]	770	974	986	1,122	798
Instant Rebates Program[25]	973	1,020	959	927	0
Energy Savers Kit Program	-	103	288	370	323
Business Efficiency Program	1,344	1,035	938	1,259	1,317
Total Program Costs	***4,961***	***4,807***	***4,896***	***5,449***	***5,005***
Capital Costs					
CDM Capital Expenditures[26]	57	41	72	61	64
EV Charging Network[27]	-	-	1,481	-	-
Total Capital Costs	***57***	***41***	***1,553***	***61***	***64***
Other Costs					
EV Load Management Pilot				242	423
EV Charging Network[28]	-	-	28	99	49
Curtailable Service Option	398	403	408	432	446
Total Other Costs	***398***	***403***	***436***	***773***	***918***
Total Costs	**6,274**	**6,002**	**7,743**	**7,726**	**7,258**

[20] Costs are shown net of approximately $48,000 in funding received from Natural Resources Canada in 2022, $69,000 in 2023 and $105,000 in 2024 associated with EV education and awareness activities.

[21] Planning costs in 2020 reflect completion of the 2021 Plan. Costs in 2023 reflect the completion of end use surveys, the start of the Potential Study, the Small Business Direct Install program and conclusion of the Heat Pump Study. Costs in 2024 are associated with the Potential Study and next Conservation, Demand Management and Electrification plan.

[22] Costs in 2024 reflect an increase in the attic insulation rebate amount and the "All In Attic Insulation Pilot".

[23] Thermostat Program costs decreased in 2022 due to lower participation. Costs in 2023 reflect the close out of the program.

[24] Benchmarking expenses in 2023 include a one-time upgrade fee of $250,000 for the vendors updated platform.

[25] Instant Rebates Program ended in 2023.

[26] Capital expenditures are associated with improvements to the takeCHARGE website and the Company's tracking systems. Variations are based upon requirements for new and concluding programs.

[27] 2022 costs are shown net of $550,000 in funding received from Natural Resources Canada for charging stations.

[28] Costs related to the operation and maintenance of the EV Charging Network. Costs in 2023 represent the first full year of Charging Network operation and include pre-paying of network fees for the next five years with a cost savings of $11,000.

6.0 Outlook

Newfoundland Power understands the concerns customers have about their electricity bills, especially during colder months when energy bills are at their highest. Through the takeCHARGE partnership, Newfoundland Power offers programs and education to help customers reduce their energy usage and reduce their energy bill. Newfoundland Power will continue to provide CDM programs and education for customers in 2025 and beyond. This includes (i) continuation of community outreach events, (ii) adding educational resources to the takeCHARGE website that will help customers understand their electricity usage, (iii) reviewing existing customer programs, and (iv) planning for new initiatives in the next five-year plan from 2026 to 2030 (the "2026 Plan").

The Utilities are currently developing the 2026 Plan, which is anticipated to be completed by the end of 2025. The 2026 Plan will represent the accumulation of the work completed by the Potential Study, local market research and a jurisdictional scan of other winter-peaking utilities to determine what CDM programs are cost-effective to offer to customers, what pilot programs may be worth pursuing for further study and the expected impacts of electrification on the utility system load curve and peak.[29] Based on their cost-effectiveness, it is expected that all existing energy efficiency programs will continue into the 2026 Plan. The 2026 Plan will consider demand response pertaining to space heating and the expansion of program offerings available to income-qualified customers. The 2026 Plan will also outline the Utilities continued community outreach, stakeholder engagement, and education and awareness activities.

The takeCHARGE EV Load Management Pilot will be completed in 2025. The findings of this study, in combination with the results of the Potential Study, will provide valuable information in determining the challenges and opportunities for managing EV charging.

[29] Programs are evaluated for cost-effectiveness based on marginal cost data provided by Newfoundland and Labrador Hydro. Marginal cost data provides the value of each kWh and kW avoided through CDM programs. These values are used in the TRC and PAC test used by the Utilities.

Appendix A
takeCHARGE Program Descriptions and Results

1.0 Introduction

The following tables provide details of customer participation levels, savings results achieved and the levelized utility cost ("LUC") for each CDM program for 2024 and since implementation.[30] The TRC and PAC test results for 2024 are based upon forecast marginal costs of energy and capacity.[31]

The estimated annual energy and peak demand savings in each year represent the savings resulting from participants in that year. The estimated life to date energy and peak demand savings reflect the energy savings associated with energy-saving technologies that have been installed by all participants in the program. These savings will continue to occur each year for the life of the installed measures.

2.0 Residential Programs

2.1 Insulation and Air Sealing Program

The objective of the Insulation Program is to provide incentives to increase the insulation R-value in residential basements, crawl spaces and attics, thereby increasing the efficiency of the homes' building envelope. Eligibility for the program is limited to electrically heated homes, determined on the basis of annual energy usage and homes built before January 1, 2014. Home retrofit projects are eligible. Customers can receive an incentive of 75% of basement wall or ceiling insulation material costs up to $1,000, and 75% of attic insulation material costs up to $1,000.

In 2022 the insulation program was expanded to include insulation for heating ducts in unconditioned spaces, as well as an air sealing component. Customers applying for duct insulation can receive an incentive of 50% of their material costs up to $500, and air sealing customers can receive an incentive of up to $500 depending on the results of their pre and post air sealing assessments.

[30] The LUC represents the economic cost to the utility (per kWh) to save energy considering only utility program costs (i.e. program development, marketing, incentives and administration costs), not customer costs.

[31] The TRC test accounts for customer costs and benefits, whereas the PAC test accounts for costs and benefits incurred by the utility only.

Table A-1 shows the customer participation levels, savings results achieved, and the LUC for the Insulation and Air Sealing Program for 2024 and since implementation.

Table A-1:
Insulation and Air Sealing Program Results

	Customer Participation	Energy Savings (MWh)	Peak Demand Savings (kW)	LUC (¢/kWh)
2024	1,263	3,455	2,393	5.9
Life to Date[32]	20,479	57,995	24,119	3.2

2024 TRC Result: 4.2
2024 PAC Result: 4.5

2.2 Heat Recovery Ventilator ("HRV") Program

The HRV Program encourages customers to purchase a high efficiency HRV to improve the efficiency of their home. Eligible measures in this program include HRV models that have a sensible recovery efficiency of 70% or more. Customers who purchase a high efficiency HRV can receive a rebate of $175. All customers are eligible for this program regardless of the age of their home or heat source.

Table A-2 shows the customer participation levels, savings results achieved, and the LUC for the HRV Program for 2024 and since implementation.

Table A-2:
HRV Program Results

	Customer Participation	Energy Savings (MWh)	Peak Demand Savings (kW)	LUC (¢/kWh)
2024	697	387	119	8.8
Life to Date	5,177	2,857	890	7.6

2024 TRC Result: 1.7
2024 PAC Result: 2.3

[32] "Life to Date" represents the program results since the launch of the program.

2.3 Benchmarking Program

The Benchmarking Program encourages customers to adopt energy-efficient behavioural changes. Participants receive home energy reports that provide insight into their home's electricity use. The reports help customers understand changes in their usage over time, as well as how they compare to similar homes. Reports also include practical tips on how to save energy moving forward. The program includes an online portal component that allows customers to engage even further through weekly challenges and personalized savings plans.

Customers were randomly selected as participants in this program. Program participants broadly reflect the composition of Newfoundland Power's customer base in heating type and geographic distribution. No financial incentive is offered for this program.

Table A-3 shows the customer participation levels, savings results achieved, and the LUC for the Benchmarking Program for 2024 and since implementation.

Table A-3:
Benchmarking Program Results

	Customer Participation	Energy Savings (MWh)	Peak Demand Savings (kW)	LUC (¢/kWh)
2024	75,105	15,644	10,900	5.1
Life to Date[33]	75,105	15,644	10,900	6.1[34]

2024 TRC Result: 6.2
2024 PAC Result: 6.2

[33] Due to the nature of customer behavioural changes, benchmarking savings are assumed for one year only.
[34] While Benchmarking Program savings are claimed for one year, the LUC for the life of program is derived considering the sum of savings and program costs in all years the program has been offered.

2.4 Energy Savers Kit Program

The Energy Savers Kit Program provides free energy efficiency kits to income qualified customers. Customers are qualified based upon their net income and the number of people living in the household. Qualifying customers receive a kit with specific contents depending on if they have electric heat or not.[35] Customers who install all products in their kit may see energy savings of up to $100 per year.

Table A-4 shows the customer participation levels, savings results achieved, and the LUC for the Energy Savings Kit Program for 2024 and since implementation.

Table A-4:
Energy Savers Kit Program Results

	Customer Participation	Energy Savings (MWh)	Peak Demand Savings (kW)	LUC (¢/kWh)
2024	2,676	2,269	636	3.6
Life to Date	7,485	5,653	968	2.9

2024 TRC Result: 4.3
2024 PAC Result: 4.3

[35] Customers who do not have electric heat do not receive all of the kit contents such as weatherproofing items that will decrease their space heating costs. They do receive items such as LED bulbs and showerheads to reduce their electricity costs for these end uses.

3.0 Commercial takeCHARGE Programs

3.1 Business Efficiency Program

The objective of the Business Efficiency Program is to improve electrical energy efficiency in a variety of commercial facilities and equipment types. Program components include financial incentives based on energy savings, and other financial and educational supports to enable commercial facility owners to identify and implement energy efficiency and demand reduction projects. This program is available for existing commercial facilities that can save energy or reduce demand by installing more efficient equipment and systems. The program includes custom project incentives and rebates for specific measures on a per unit basis.

Table A-5 shows the customer participation levels, savings results achieved, and the LUC for the Business Efficiency Program for 2024 and since implementation.

Table A-5:
Business Efficiency Program Results

	Customer Participation	Energy Savings (MWh)	Peak Demand Savings (kW)	LUC (¢/kWh)
2024	395	4,684	851	3.5
Life to Date	3,890	56,306	9,899	3.0

2024 TRC Result: 1.7
2024 PAC Result: 3.5

4.0 Total Results of takeCHARGE Programs

Table A-6 shows the participation levels, savings results achieved, and the LUC for all of the programs for 2024 and since implementation.[36]

Table A-6:
takeCHARGE Programs
Total Results

	Customer Participation	At-the-Cash Rebates	Energy Savings (MWh)	Peak Demand Savings (kW)	LUC (¢/kWh)	Provincial LUC (¢/kWh)[37]
2024	80,136	0	26,439	14,899	4.7	5.0
Life to Date	157,139[38]	4,114,014	255,090	71,953	3.3	3.4

Table A-7 shows the TRC and PAC test results for Newfoundland Power's residential and commercial portfolios, along with the provincial portfolio, which includes Hydro's Island Interconnected System costs and energy savings.

Table A-7:
takeCHARGE Programs
TRC and PAC Test Results
(2024)

	TRC Result	PAC Result
Residential Portfolio	4.4	4.7
Commercial Portfolio	1.7	3.5
Provincial Portfolio	3.2	4.1

[36] Life to date numbers reflect the impacts of programs that have previously ended but the savings from those programs continue. This includes the ENERGY STAR Windows program (8,905 participants, 9,934 MWh and 3,106 kW), the Thermostat Program (28,810 participants, 24,924 MWh and 3,400 kW), and the Small Technologies Program (7,288 participants, 81,777 MWh and 18,671 kW).

[37] "Provincial LUC" represents the combined cost and energy savings of the Utilities' Island Interconnected CDM program offerings.

[38] Prior years' participants in the Benchmarking Program are not included in this number.