

Appendix J

Letter to Town of Charlottetown and Pinset's Arm -
March 17, 2023

Info Sheet for Town of Charlottetown





Newfoundland and Labrador Hydro
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March 17, 2023

Charlottetown Town Council
PO Box 151
Charlottetown, NL A0K 5Y0

Attention: Rick Oram
Mayor, Town of Charlottetown

Dear Mayor Oram,

Thank you for your letter, dated February 1, 2023, regarding the provision of electricity to the Towns of Charlottetown and Pincott's Arm.

Let me start by reiterating our commitment to the needs of residents of Charlottetown and Pincott's Arm. Newfoundland and Labrador Hydro's ("Hydro") mandate and commitment, as regulated by the Board of Commissioners of Public Utilities ("PUB"), is to provide a safe, reliable supply of electricity in a least-cost fashion. Hydro recognizes that in the case of southern Labrador, due to its remoteness and the weather conditions experienced, the safety and reliability of the electricity supply are paramount.

Hydro acknowledges your concern regarding the length of time to construct a regional diesel generating station for southern Labrador, as well as your concern for the safety of your communities, as discussed during our meeting on March 9, 2023. Enclosed is information regarding Hydro's approach to long-term electricity supply for the southern Labrador region and highlights Hydro's commitments to the more near-term issues discussed in the meeting.

Hydro is also committing to meeting with town officials as required and providing written quarterly updates on the status of the supply of electricity for the near and long term.

1.0 Fire Safety

Town representatives and members of the Volunteer Fire Department have expressed their concern for the safety of the communities given the fires that have occurred. We understand these concerns and assure the towns that we are committed to managing and maintaining our sites, and working in partnership with you, to ensure a safe and reliable supply of power to the communities.

Hydro will work with the town and its Volunteer Fire Department to develop protocols in case of fire at Hydro's site. These protocols will clarify the expectations of the fire department at Hydro's site, as well as cover associated hazards. These protocols will allow appropriate access to ensure public safety, protect town equipment, and protect town infrastructure.

Hydro will contact the Town Manager to arrange a meeting to kick off the development of fire safety protocols.

Hydro is currently reviewing the orientation and spacing of the mobile generation units located on the concrete floor of the former generating station. Hydro is scheduled to make modifications to this setup in May 2023 when the newest, largest unit (Unit 2108) is installed. Hydro will rearrange the physical layout of the mobile units on site to further mitigate the risks associated with fire spreading.

Hydro will also ensure that the doors on the mobile units are kept closed during operation to guard against the possibility of fire spreading outside the container. Engineering solutions are being implemented to address coolant issues that have caused the previous fires. In addition, Hydro is working with several vendors to determine whether a suitable fire suppression product is available on the market that could be placed inside the containers that house the generators. Fire suppression systems are used to extinguish, control, or in some cases, entirely prevent fires from occurring or spreading.

Hydro commits to continuing to update the town on initiatives such as these in its quarterly written updates and during the process of the development of fire safety protocols.

2.0 Recent Mobile Generator Steam Release Update

Hydro's Operations team reviewed the recent observation of steam coming from a mobile generator at the site. Operations crews confirmed that it was steam, not smoke from a fire, as had been the query of concerned residents.

Due to cold temperatures on the morning of February 23, 2023, Hydro experienced a freeze-up on rental Unit 820 in Charlottetown, which resulted in the release of steam from the unit. There were no safety-related issues or concerns with generating capacity on site because of this event. After the installation of Unit 2108 in May 2023, rental Unit 820 will be returned to its owner, as it is not considered a core winter operation unit.

3.0 Current Power Solution and Capacity

As noted, Hydro will provide quarterly updates to the town on all matters of concern regarding electricity supply and want to assure residents that they, and their businesses, have a reliable supply of power today and until a permanent solution is in place.

Hydro acknowledges that a fixed and permanent generating station is preferable to mobile generators; however, Hydro is ensuring that multiple redundant units, i.e. backups to backups, are available to minimize the risk of customer impact. As such, there is sufficient excess capacity on site in Charlottetown to meet peak community load forecasts even if multiple units are unavailable, as shown in Figure 1.

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During Winter 2023 (i.e., present day to May 2023), with the units installed on site, there is enough generation to meet the forecasted peak community load (highest usage over this period in the community) of 756 kW if three of the largest units were out of service. Winter 2024 will be evaluated further throughout the upcoming months; however, generation availability should at minimum mirror that of Winter 2023.

During Summer 2023 (i.e., June 2023 to October 2023), with units that will be installed on site, there is enough generation to meet a forecasted peak community load (highest usage over this period in the community) of 1,547 kW if two of the largest units were out of service.

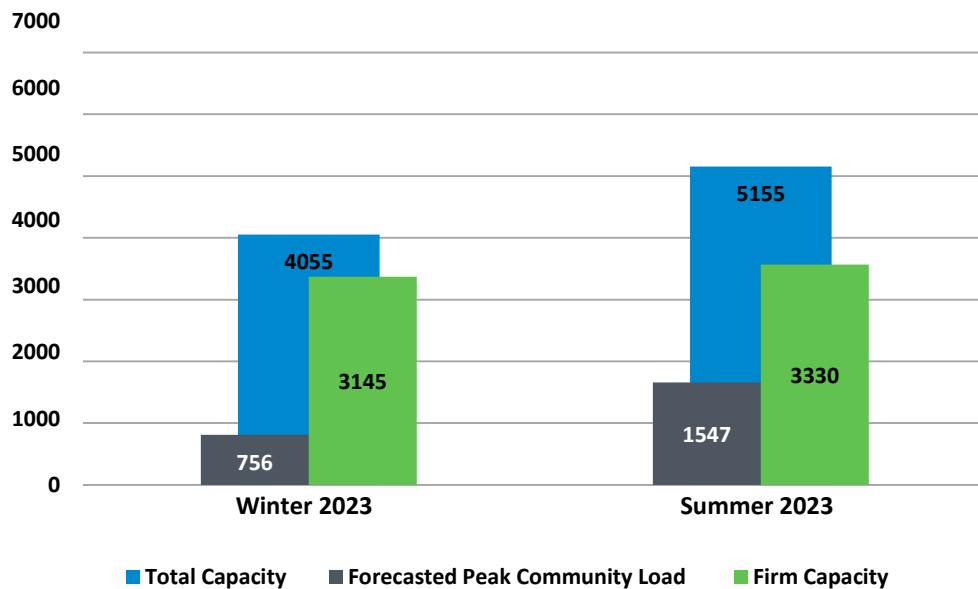


Figure 1: Charlottetown Excess Capacity by Season (kW)¹

Please see Attachment 1 for an illustration of the generation and further details on each unit.

4.0 Response Times

With respect to the response to generating station maintenance issues, Hydro has staff strategically stationed in Labrador that are able to respond in a timely manner.

Hydro will ensure open communication with the town and management personnel will be available to support with enquiries.

¹ Total capacity is defined as the total available generation, while firm capacity is defined as the available generation with the largest unit out of service.

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5.0 Emergency Power Supply for Fire Hydrant Pumps during Power Outages

Hydro will work with the town to understand options for backup generation for critical facilities. While Hydro cannot buy, own, or operate town infrastructure, such as backup generators, Hydro will provide reasonable support, including working with government agencies, to aid in the determination of what is needed and, when possible, implementation.

6.0 Status of Proposed Regional Diesel Generating Station and Regulatory Process Update

Hydro continues to work through the regulatory process with the PUB to support a decision as soon as possible. Midgard Consulting Inc.'s ("Midgard") independent assessment will be complete by the end of March 2023 and will provide the PUB with detailed information regarding the suggested long-term solution. Hydro will provide the report to the PUB and will provide a copy of this report to the town at the same time. Hydro will also provide an overview session to town representatives and will work with the town's schedule to hold this session at the town's convenience.

Hydro anticipates submitting Midgard's report to the PUB on March 31, 2023, at which time Hydro will ensure that the results are also shared with southern Labrador stakeholders. Hydro will request that the PUB resume the regulatory review process and will express the need for urgency in proceeding with the review. Hydro will make any updates to its application and evidence that may be necessary due to the passage of time, and the receipt of Midgard's report, to enable the review process to proceed without further delay.

Hydro anticipates that the PUB will set a review schedule, which may include any combination of additional rounds of requests for information ("RFI"), technical conferences, or a formal hearing. As part of that review process, generally as the final step, intervenors, such as Newfoundland Power Inc. and the Consumer Advocate, are provided with the opportunity to file a written submission outlining their position on any outstanding issues, provide any additional context for consideration by the PUB, and indicate their support or opposition to the project. Hydro is then afforded the opportunity to file a written submission addressing any outstanding issues or concerns.

The PUB then considers all available information and evidence to come to a decision regarding project approval. After deliberation, the PUB will then issue a "Board Order" outlining its decision.

Hydro is unable to speculate on the timeframe for a Board Order; however, as stated, Hydro will continue to advocate for expediency. Following the filing of the Midgard report with the PUB and the subsequent resumption of the regulatory review process, Hydro is committed to working with the PUB, intervenors, and stakeholders to ensure timely approval of this project and allow Hydro to move forward with the implementation of a long-term solution for the residents of Charlottetown and Pinseint's Arm, as well as the southern Labrador region.

Once approved, Hydro will work to construct the proposed project as expeditiously as possible. The early stages of project execution mostly include procurement activities. An update on the schedule and status will be provided to the towns once the regulatory process has resumed. In the unlikely event that the project is not approved, Hydro will work urgently with all stakeholders to propose an alternative solution that can be executed as quickly as possible.

Hydro will continue to update the town on the status of the regulatory process in its quarterly written updates and in any subsequent meetings with town officials.

The sections that follow provide a high-level view of the activities completed to-date as well as the activities remaining after the project is approved by the PUB and are organized to ensure construction of the long-term solution is as expedited as possible. Please see Attachment 2 for an illustration of the timeline of activities.

6.1 Phase 1

- October 2019:
 - The Charlottetown Diesel Generating Station is lost due to a fire. Hydro implements an interim supply solution for the Charlottetown system using mobile diesel generators and immediately begins planning a long-term solution to replace the Charlottetown Diesel Generating Station.
- Late 2020:
 - Hydro finalizes the Labrador Interconnection Options Study to assess the requirements to connect communities to the existing electricity grid. This study investigates interconnection options in terms of cost, opportunities for renewable integration, and opportunities for fuel displacement. The estimated cost to interconnect all of southern Labrador is estimated at \$545 million.

6.2 Phase 2

- July 2021:
 - Hydro files its capital application with the PUB for the construction of a regional diesel generating station and the interconnection of communities in southern Labrador, enabling increased renewable energy projects and significantly reduced diesel consumption.
- September 2021:
 - Hydro submits responses to the first round of RFIs from the PUB and interveners regarding its capital application.
- October 2021:
 - The PUB receives written correspondence from the public and community stakeholders; and
 - Regulatory review paused to allow for additional stakeholder engagement.
- April to December 2022:
 - The PUB informs Hydro that the review schedule would remain paused until Hydro completes an additional analysis in the form of a planning study, including an integrated resource plan, assessing all reasonable options for the provision of service in the region;

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- Hydro engages Midgard to complete an additional analysis; and
- Midgard undertakes an analysis of options for supply for the southern Labrador region with a report delivery date of March 2023.
- January to March 2023:
 - Hydro continues to advance activities that support its proposal should it be approved, including:
 - Completion of a review of the preliminary diesel generating station and substation design;
 - Completion of a review of the preliminary major equipment selection and sizing;
 - Update of overall project estimate, as the original project estimate was completed in 2021;
 - Overall project schedule will be dictated by equipment lead times and construction windows due to the location of the site and harsh winter conditions (late May to November will be a constraint for the majority of outside work); and
 - The project must be approved by the PUB before any project-related design/procurement activates progressing.

6.3 Phase 3: Anticipated Milestones

- March 2023:
 - File the Midgard Report with the PUB by end of March 2023.
- April 2023:
 - Hydro anticipates the resumption of regulatory review.
- 2023:
 - Building on the actions already taken to be ready to proceed:
 - Issue tender for the consultant design contract to allow for expedited design and procurement, which is required due to significantly increased equipment delivery timelines in recent years. This process will be expedited but a detailed and thorough design is critical to the timely and cost-effective completion of the project;
 - Order equipment identified as a long delivery (generally includes gensets, switchgear, power transformers and pre-engineered building) when design progresses as 24+-month deliveries are anticipated;
 - Order long delivery equipment (generally includes gensets, transformers, switchgear and pre-engineered building);
 - Expedite design activities to issue, award, and complete site works with a Year 2 start date;

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- Explore options to complete site-clearing activities if they are considered a benefit to the overall schedule;
- Complete geotechnical testing and reporting to finalize civil and structural design;
- Investigate distribution line routing—geotechnical investigations and the start of detailed design; and
- Progression of the detailed design packages by the consultant.

6.4 Phase 4

- 2024:
 - Finalize the design required to proceed with the site works contract;
 - Tender and award site works contract to ensure the earliest possible start date due to winter conditions;
 - Commence site work and complete foundations;
 - Tender, award, and commence distribution line contract starting with distribution line clearing;
 - Complete detailed design of diesel generating station building layout, including mechanical and electrical details and power generating systems; and
 - Tender construction contract for building and equipment installation.

6.5 Phase 5

- 2024–2025:
 - Commence building construction contract;
 - Install a pre-engineered building, which must be weather-tight by winter to receive equipment and start installation;
 - Receive long lead time equipment ordered in Year 1 (e.g., pre-engineered building, gensets, switchgear, transformers);
 - Complete distribution line contract; and
 - Commence installation of equipment in the diesel generating station building along with auxiliary systems including fuel, compressed air, ventilation, fuel supply, etc.

6.6 Phase 6

- 2026:
 - Complete installation of equipment in the diesel generating station building along with auxiliary systems including fuel, compressed air, ventilation, fuel supply, etc.;
 - Complete substation work; and
 - Progress equipment commissioning and testing.

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6.7 Phase 7

- 2027:
 - Complete commissioning and testing of power generating equipment and distribution lines;
 - Place the regional diesel generating station into service; and
 - If PUB approval is obtained in this summer for this project, and considering the activities and schedule noted in Section 6.0, a permanent diesel generating station can be in service in 4 years.

7.0 Timeline for Proposed Regional Diesel Generating Station

Hydro understands that the progression of a resolution to supply the towns and the southern Labrador region has taken a significant amount of time. This is due to several factors; however, it does not diminish the town's frustration with the process.

Some stakeholders, including the Charlottetown Town Council, are questioning Hydro's approach to supply the towns via a regional diesel generating station in Port Hope Simpson and feel it is more effective to rebuild the diesel generating station in Charlottetown. The direct rebuild of the Charlottetown Diesel Generating Station to the same specifications that existed before the 2019 fire might appear to be the straightforward approach; however, there are limitations with that design and it is not appropriate for long-term supply for Charlottetown. For example, the previous diesel generating station did not have adequate capacity to meet Hydro's firm capacity criteria without the support of mobile units to support peak summer loading conditions. It is Hydro's view that it would be imprudent to rebuild the exact facility that previously existed without consideration for the current and future needs of the facility and community.

Hydro also notes that, due to the required regulatory process and the delivery lead times of equipment, the timeframe for the construction of a replacement diesel generating station in Charlottetown would be equivalent to the timeframe for the regional diesel generating station.

8.0 Conclusion

As a regulated utility, Hydro must demonstrate to the PUB and other regulatory stakeholders that its proposals are necessary to reliably and safely supply electricity to its customers and that the project is the least-cost solution to achieve that reliable and safe supply. Hydro is confident that its proposed regional diesel generating station would result in the lowest total lifecycle cost for all generating assets in southern Labrador. Hydro will continue to work with the PUB to get the proposed project approved as quickly as possible.

Hydro is also committed to providing a written update to the town every quarter, or more frequent as may be required, as the project advances. The format and content will likely evolve as the file advances over time.

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Charlottetown Town Council

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We sincerely appreciate the town's continued willingness to engage with us as we work to manage this challenging situation.

NEWFOUNDLAND AND LABRADOR HYDRO



Jennifer Williams

President

JW/sk

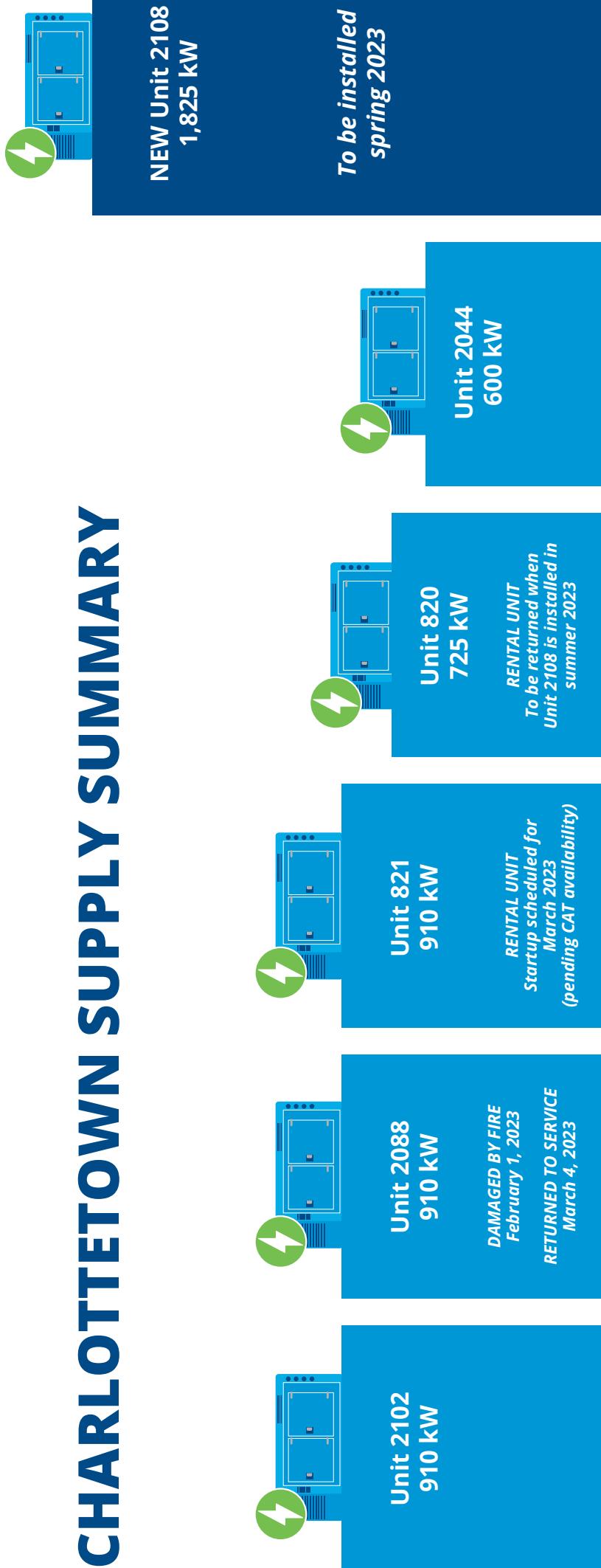
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Attachment 1

Charlottetown Supply Summary



CHARLOTTETOWN SUPPLY SUMMARY



WINTER 2023

- Winter Peak Load Forecast = 756 kW
- Available Units: 2102, 2088, 821, 820, and 2044
- Total Capacity = 4,055 kW
- Firm Capacity* = 3,145 kW

*Firm capacity assumes the largest unit (Unit 2102) is not available

SUMMER 2023

- Summer Peak Load Forecast = 1,547 kW
- Available Units: 2102, 2088, 821, 2044, and 2108
- Total Capacity = 5,155 kW
- Firm Capacity* = 3,330 kW

*Firm capacity assumes the largest unit (Unit 2108) is not available

Attachment 1, Appendix A

Charlottetown Supply Details



Charlottetown Supply Details

1.0 Current Power Solution

Hydro acknowledges that a fixed and permanent generating station is preferable to mobile generators. However, Hydro is ensuring that multiple redundant units, i.e., backups to backups, are available to minimize the risk of customer impact. To further address the situation, Units 2102 and 2088 have been retrofitted for full winter operation and have adequate capacity for the communities. The sections that follow provide additional detail on each unit.

1.1 Unit 2102

Unit 2102 (910 kW) has been providing reliable service since early 2020. The upgrades completed in 2022 have increased unit reliability for winter usage through a reduction of cold air being introduced to the container.

This unit has been critical to continued service in the community and has performed very well through the recent extreme cold temperatures experienced in the region.

Further upgrades are planned for 2023 to ensure optimal operation during winter conditions.

1.2 Unit 2088

Unit 2088 (910 kW) was winterized as a part of the response to the original diesel generating station fire in 2019/2020. The unit experienced a fire in early February 2023. It was returned to service on March 4, 2023.

Further upgrades are being completed in 2023 to address the issues that lead to the February 2023 fire, which will increase reliability and ensure optimal operation during winter service.

1.3 Unit 2044

Unit 2044 (600 kW) is available for generation and connected for operation if preferred Units 2102 and 2088 are unavailable or undergoing maintenance as required. It is equipped with a remote radiator and can be relied upon in most winter conditions if required.

1.4 Rental Units

Two rental mobile units are available and connected for operation if preferred Units 2102 and 2088 are unavailable or undergoing maintenance. These units can be relied upon throughout the majority of the year; however, during harsh winter conditions, other options are preferred.

Rental Unit 820 (725 kW) is currently experiencing issues that are planned to be addressed by Toromont CAT. Hydro expects that this unit will be returned to the vendor upon installation of the larger unit, Unit 2108, in May/June 2023.

Rental Unit 821 (910 kW) was shipped to the site in early March 2023 and is expected to be available for service by March 24, 2023.

1.5 Unit 2108

Unit 2108 (1,825 kW) is a mobile genset that was purchased from Muskrat Falls. It is currently in St. John's for refurbishment and preventative maintenance work. Hydro expects this unit to be on site in Charlottetown in late April 2023 in preparation for installation in May 2023, prior to the opening of the fish processing facility.

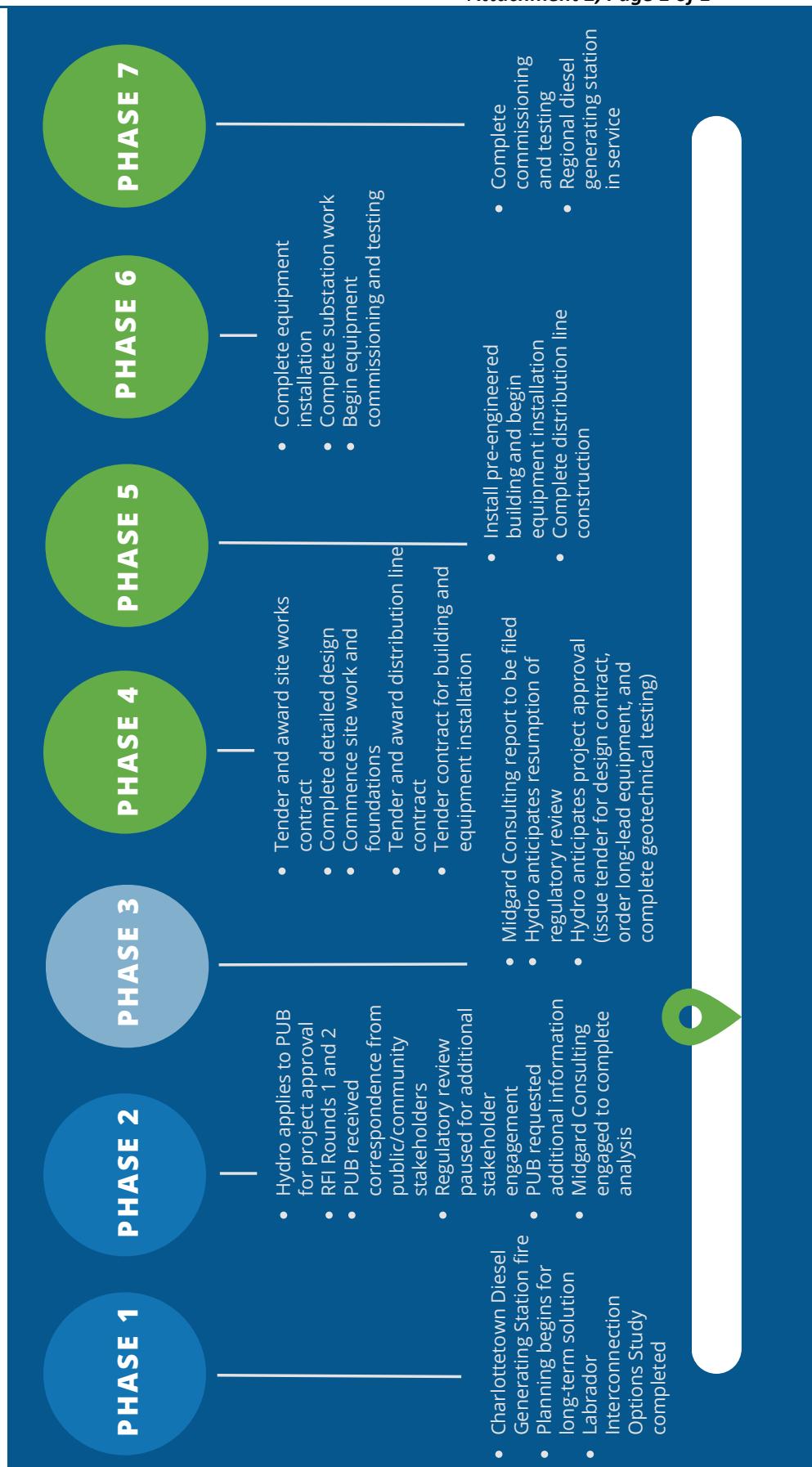
Attachment 2

Regional Diesel Generating Station Timeline



TOWN OF CHARLOTTETOWN

REGIONAL DIESEL GENERATING STATION TIMELINE





Charlottetown Town Hall Information Sheet

1. Fire Safety

Hydro will work with the town and its Volunteer Fire Department to develop protocols in case of fire at Hydro's site. These protocols will clarify the expectations of the fire department at Hydro's site, as well as cover associated hazards. These protocols will allow appropriate access to ensure public safety, protect town equipment, and protect town infrastructure.

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Hydro will also ensure that the doors on the mobile units are kept closed during operation to guard against the possibility of fire spreading outside the container. Engineering solutions are being implemented to address coolant issues that have caused the previous fires. In addition, Hydro is working with several vendors to determine whether a suitable fire suppression product is available on the market that could be placed inside the containers that house the generators. Fire suppression systems are used to extinguish, control, or in some cases, entirely prevent fires from occurring or spreading.

Hydro commits to continuing to update the town on initiatives such as these in its quarterly written updates and during the process of the development of fire safety protocols.

2. Current Power Solution

As noted, Hydro will provide quarterly updates to the town on all matters of concern regarding electricity supply and want to assure residents that they, and their businesses, have a reliable supply of power to today and until a permanent solution is in place.

Hydro acknowledges that a fixed and permanent generating station is preferable to mobile generators; however, Hydro is ensuring that multiple redundant units, i.e., backups to backups, are available to minimize the risk of customer impact. As such, there is sufficient excess capacity on site in Charlottetown to meet peak community load forecasts even if multiple units are unavailable, see Figure 1.

During Winter 2023 (i.e., present day to May 2023), with the units installed on site, there is enough generation to meet the forecasted peak community load (highest usage over this period in the community) of 756 kW with three of the largest units out of service. Winter 2024 will be evaluated further throughout the upcoming months; however, generation availability should at minimum mirror of Winter 2023.

During Summer 2023 (i.e., June 2023 to October 2023), with units that will be installed on site, there is enough generation to meet a forecasted peak community load (highest usage over this period in the community) of 1,547 kW with two of the largest units out of service.

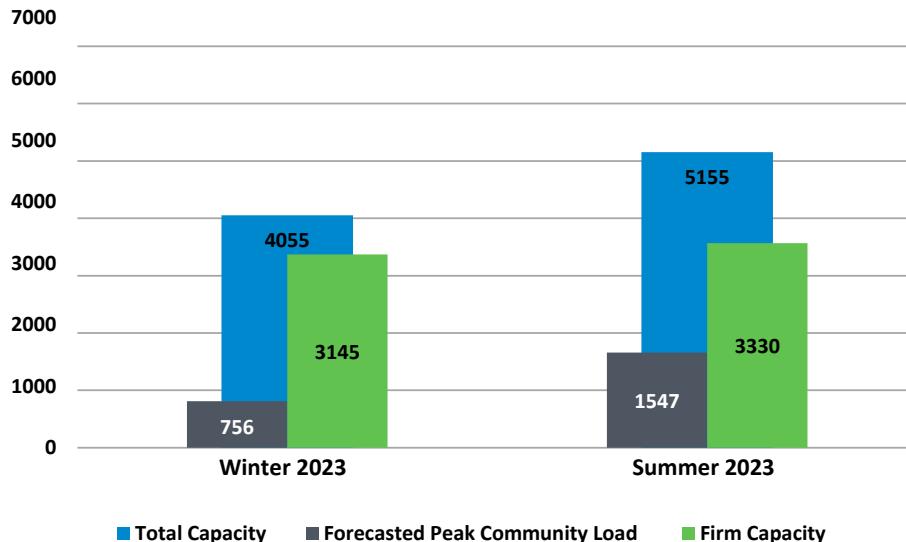


Figure 1: Charlottetown Excess Capacity by Season (kW)¹

3. Response Times

With respect to the response to generating station maintenance issues, Hydro has staff strategically stationed in Labrador that are able to respond in a timely manner.

Hydro will ensure open communication with the town and management personnel will be available to support with enquiries.

4. Emergency Power Supply for Fire Hydrant Pumps during Power Outages

Hydro will work with the town to understand options for backup generation for critical facilities. While Hydro cannot buy, own, or operate town infrastructure, such as backup generators, Hydro will provide reasonable support, including working with government agencies, to aid in the determination of what is needed and, when possible, implementation.

¹ Total capacity is defined as the total available generation, while firm capacity is defined as the available generation with the largest unit out of service.

5. Status of Proposed Regional Diesel Generating Station and Regulatory Process Update

Hydro continues to work through the regulatory process with the regulator to support a decision as soon as possible. Hydro has solicited a third-party consultant to review the proposed project. The third-party assessment will be completed by the end of March 2023 and will be provided to the PUB as well as the town. This assessment will provide the regulator with detailed information regarding the suggested long-term solution.

Hydro will also provide an overview session to the town representatives and will work with the town's schedule to hold this session at the town's convenience.

CHARLOTTETOWN SUPPLY SUMMARY



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- Winter Peak Load Forecast = 756 kW
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Hydro anticipates submitting this third-party assessment to the regulator on March 31, 2023, at which time Hydro will ensure that the results are also shared with the southern Labrador stakeholders. Hydro will request that the regulator resume the review process and will express the need for urgency in proceeding with the review.

Following the filing of the third-party assessment with the regulator and the subsequent resumption of the review process, Hydro is committed to working with the regulatory, intervenors, and stakeholders to ensure timely approval of this project and allow Hydro to move forward with the implementation of a long-term solution for the residents of Charlottetown and Pinson's Arm, as well as the southern Labrador region.

Once approved, Hydro will work to construct the proposed project as expeditiously as possible. The early stages of project execution mostly include procurement activities. An update on the schedule and status will be provided to the towns once the regulatory process has resumed.

In the unlikely event that the project is not approved, Hydro will work urgently with all stakeholders to propose an alternative solution that can be executed as quickly as possible.

Please refer to the Regional Diesel Generating Station Timeline, which outlines the activities completed to date and the remaining activities to be completed after the project is approved by the regulator to ensure as expedited as possible construction of the long-term solution.

TOWN OF CHARLOTTETOWN REGIONAL DIESEL GENERATING STATION TIMELINE



Hydro will continue to update the town on the status of the regulatory process in its quarterly written updates and in any subsequent meetings with town officials.

