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All the time.



August 17, 2026

Ms. Cheryl Bradley
Island Regulatory and Appeals Commission
PO Box 577
Charlottetown PE C1A 7L1



Dear Ms. Bradley:

***Response to Additional Interrogatories from Commission Staff
On-Island Capacity for Security of Supply Project (UE20742)***

Please find attached Maritime Electric Company, Limited's ("Maritime Electric") responses to additional interrogatories from Commission Staff (Exhibit C-31) with respect to the On-Island Capacity for Security of Supply Project Application and associated Supplemental Filing, filed with the Commission on December 18, 2024, and August 14, 2025, respectively.

Yours truly,

MARITIME ELECTRIC

A handwritten signature in blue ink, appearing to read "M. Francis".

Michelle Francis
Vice President, Finance & Chief Financial Officer

MF33
Enclosure



**RESPONSES TO ADDITIONAL INTERROGATORIES
FROM
COMMISSION STAFF**

**On-Island Capacity for Security of Supply Project
(UE20742)**

Submitted August 17, 2026



AFFIDAVIT

CANADA

PROVINCE OF PRINCE EDWARD ISLAND

**BEFORE THE ISLAND REGULATORY
AND APPEALS COMMISSION**

IN THE MATTER of Section 17(1) of the *Electric Power Act* (R.S.P.E.I. 1988, Cap. E-4) and **IN THE MATTER** of the Application of Maritime Electric Company, Limited for the approval of a 2024 Supplemental Capital Budget Request for the On-Island Capacity for Security of Supply Project.

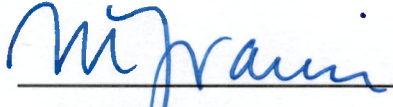
AFFIDAVIT

I, T. Michelle Francis of Emyvale, in Queens County, Province of Prince Edward Island,
MAKE OATH AND SAY AS FOLLOWS:

1. I am the Vice President, Finance and Chief Financial Officer for Maritime Electric Company, Limited and as such have personal knowledge of the matters deposed to herein, except where noted, in which case I rely upon the information of others and in which case I verily believe such information to be true.
2. I prepared or supervised the preparation of the attached Interrogatory responses and to the best of my knowledge and belief the responses are true in substance and in fact.

SWORN TO at Charlottetown,
Prince Edward Island, the 17th
day of August, 2026.


A Commission for taking affidavits in the
Supreme Court of Prince Edward Island


T. Michelle Francis



INTERROGATORIES

The Prince Edward Island Regulatory and Appeals Commission (the “Commission”), in assessing the Application by Maritime Electric Company, Limited (“Maritime Electric” or “MECL”) for approval of the On-Island Capacity for Security of Supply Project (the “Application”), requests responses to the following interrogatories from Maritime Electric:

Interim Measures

IR-92 Attached as Attachment A is the Commission's letter to Maritime Electric dated December 11, 2025 respecting its Rotating Outages Plan. Attached as Attachment B is Maritime Electric's response dated January 6, 2026.

- a. Confirm that the information provided in Maritime Electric's January 6, 2026 response remains current. If not, identify and explain all material changes to Maritime Electric's Rotating Outages Plan, mitigation measures, operational strategies, and planning assumptions since that filing.
- b. Provide any updates to the information contained in Attachment B that have occurred since January 6, 2026, including any additional mitigation measures, operational strategies, or contingency planning implemented or under consideration.

Response:

- a. Confirmed. The information provided in Maritime Electric Company, Limited's (“Maritime Electric” or the “Company”) remains current.
- b. Refer to the response to IR-92(a).

IR-93 MECL is seeking approval to purchase two 50 MW combustion turbines on the basis that there is an immediate and urgent need for additional on-Island capacity. However, assuming approval is granted, the expected commercial operation date for the combustion turbines is October 2029.

- a. To date, what steps has MECL taken to reduce or otherwise manage its peak load?
- b. What plans does MECL have in place, or what steps does MECL intend to take, to manage or reduce its peak load until a capacity solution is secured/operational?
- c. Explain MECL's mitigation measures and/or operational strategies to reduce the likelihood of rotating outages until a capacity solution is secured/operational.
- d. What tools or resources does MECL have to reduce or otherwise manage its peak load? This could include, for example, implementing controllable demand side management programs, implementing incentivized rates, effective use of smart meter technology (including pilot programs), or any other strategy that may be used to shift electricity usage from peak to off-peak periods. Discuss all possible options, notwithstanding the need for regulatory approval or additional capital or operating expenditures.

Response:

- a. Maritime Electric has taken several steps, within its control, to reduce or manage peak load. These steps include communicating with interruptible customers, supporting efficiencyPEI's demand response pilot program, supporting an EV charging peak reduction pilot, launching a grid status tool, and promoting energy conservation. These steps are discussed below.

Interruptible Customers

Maritime Electric has recently contacted all interruptible customers to inform them about the potential need for interruptions during upcoming peak periods and to confirm their readiness to curtail load, if required. The Company has a total of 14 megawatts ("MW") of interruptible customer load.

efficiencyPEI Demand Response Pilot Program

Refer to the response to IR-93(d).

Electric Vehicle Charging Peak Reduction Pilot

Maritime Electric is currently supporting a province-wide artificial-intelligence behind-the-meter electric vehicle ("EV") charging pilot being developed by BluWave-ai. The pilot project is aimed to demonstrate BluWave-ai's EV Everywhere solution, which encourages customers with EVs who wish to participate to shift EV charging during times that are better for the grid (e.g., during periods of high renewable energy generation or at nighttime). Although BluWave-ai's project is independent of Maritime Electric, Maritime Electric's support includes providing historical load data, live load and generation data feeds, and other related system information. In exchange, BluWave-ai will share data with Maritime Electric, including where and when EV charging is occurring, how much EV charging load is currently and expected to be on the system, how much flexibility is

available to shift charging to better times for the grid, and how local drivers respond to signals shaping charging behaviour. This information is expected to help support the potential development of innovative rates that incent customers to shift EV charging load to off-peak periods.

The BluWave-ai EV Everywhere solution is under development; however, once operational, the Prince Edward Island (“PEI”) pilot project is estimated to result in approximately 1 MW of peak load reduction.

Grid Status Index

In January 2026, Maritime Electric launched a grid status index tool on its website to provide advanced notice to customers in the event of potential capacity shortages and encourage customers to conserve energy, if required.

Promoting Energy Conservation

The Company also actively promotes energy conservation tips through its website and social media platforms, to provide load management information to customers. This can help customers reduce their electricity bills and help conserve energy during peak periods.

- b. On December 11, 2025, the Commission issued a letter to Maritime Electric regarding its Restoration Plan for Rotating Power Outages, which included the following request:

The Commission also requests that Maritime Electric identify any mitigating measures or operational strategies in place to reduce the likelihood of implementing rotation outages. This should include any steps the utility make take to manage peak demand, secure additional supply, or encourage customer conservation prior to initiating service interruptions.¹

In the Company’s response letter, dated January 6, 2026, the Company stated that “rotating outages are a last resort when demand exceeds supply (i.e., capacity)”.² The Company also stated, among other things, the following:

During a supply shortage, the Company’s only option to avoid a rotating outage is to ask customers to reduce demand. The Company has a limited number of interruptible customers and when a supply shortage is likely to occur those customers will be interrupted. At the same time, the Company will initiate our Communication Plan asking all customers to reduce consumption during those peak hours. However, the Company does not expect these potential reductions will be sufficient to avoid rotating outages.³

- c. Maritime Electric has engaged in and continues to pursue operational strategies to reduce the likelihood of rotating outages, including collaborating with other electric utilities in the region, inquiring about the availability of additional firm capacity from the New Brunswick

¹ Exhibit C-31, Attachment A.

² Exhibit C-31, Attachment B, page 2.

³ Exhibit C-31, Attachment B, page 3.

Energy Marketing Corporation (“NBEM”), and increasing the non-firm interconnection transmission capacity. These strategies are discussed below.

Collaboration with Other Electric Utilities

Maritime Electric has and will continue to collaborate with other electric utilities in the region during high load periods. As the broader northeast region faces potential capacity shortages, electric utilities in New Brunswick, Nova Scotia, Newfoundland and Labrador, Quebec, and Northern Maine (United States) will continue to work together to share capacity resources, as available.

Additional Firm Capacity from the New Brunswick Energy Marketing Corporation

Refer to Maritime Electric’s response to IR-46 from Commission Staff, submitted on July 24, 2026.⁴ Through discussions with NBEM, NBEM has recently indicated that a total of 195 MW, 200 MW and 205 MW of firm capacity will be available in 2027, 2028 and 2029, respectively. These capacity amounts are slightly higher than the 190 MW values previously indicated by Maritime Electric. Although the amount of firm capacity available is not sufficient to address Maritime Electric’s capacity deficit, this additional capacity will help reduce the likelihood of rotating outages until additional capacity is available on-Island.

New Brunswick Power Corporation’s (“NB Power”) Renewable Integration and Grid Security (“RIGS”) Project is currently expected to be commissioned in mid-2028. As a result, Maritime Electric is inquiring with NBEM whether there is any capacity available from the RIGS project during the early years, on a temporary basis. The availability of capacity is unknown at this time and will be dependent on the final commissioning date of the RIGS Project and load growth in New Brunswick prior to commissioning. Maritime Electric will continue to investigate the possibility of temporary capacity from the RIGS Project with NBEM in upcoming years, subject to availability and firm transmission constraints through the interconnection.

Increased Non-Firm Interconnection Capacity

Refer to Maritime Electric’s response to IR-44(c) from Commission Staff, filed on July 24, 2026.⁵ By request from Maritime Electric, NB Power has recently advised Maritime Electric that an incremental 40 MW of non-firm transmission capacity could be available to serve PEI through the interconnection by the winter of 2026/27. The availability of this incremental transfer capability is dependent on New Brunswick and regional system conditions and is expected to decrease as NB Power load increases, becoming unavailable as New Brunswick system load approaches its historic peak levels. Furthermore, increased transfer capability does not guarantee the availability of additional imports, as both non-firm transmission capability and surplus non-firm energy must be available simultaneously. Maritime Electric and NB Power continue to assess the accessibility of this additional transfer capability, which may require the implementation of automatic load shedding schemes. Although the non-firm transmission capacity is not expected to be available during peak periods, it may help reduce the likelihood or duration of rotating outages during non-peak periods.

⁴ Exhibit M-30, pages 36-37.

⁵ Exhibit M-30, pages 32-33.

- d. Refer to the responses to IR-93(a) and IR-93(b).

In responding to the question, it is helpful to categorize and explain the various demand-side management ("DSM") strategies mentioned. For the purpose of this response, Maritime Electric refers to DSM as initiatives intended to influence the amount or timing of electricity consumption, which Maritime Electric considers in three broad categories: (1) energy efficiency, (2) demand response programs, and (3) innovative rate structures. The three broad DSM categories are described below.

Category 1: Energy Efficiency Programs

Energy efficiency measures reduce the overall amount of electricity required to provide a given service, such as space heating, water heating, lighting, or appliance usage. These measures permanently lower electricity consumption and can also reduce peak demand, where the associated end use contributes to system peaks. Examples currently promoted through efficiencyPEI include heat pump programs, LED lighting initiatives, energy efficient appliances, home energy retrofits, and other building efficiency upgrades, some of which formed part of the Prince Edward Island Energy Corporation's ("PEIEC") latest Energy Efficiency and Conservation ("EE&C") Plan.

Peak reductions associated with energy efficiency measures in PEIEC's Commission-approved EE&C plans are directly incorporated into Maritime Electric's peak forecast and are already accounted for; however, despite the forecast energy efficiency impacts, electricity demand and winter peak requirements are projected to continue increasing due to factors such as population growth, housing development, and the electrification of heating and transportation.

Category 2: Demand Response Programs

Demand response programs reduce or shift electricity consumption during periods when demand on the electrical system is highest, by directly controlling customer equipment. Unlike energy efficiency measures, which reduce overall energy use, demand response programs primarily focus on changing the timing of electricity consumption to reduce peak demand. Examples include controllable water heaters, smart thermostats, interruptible supply or curtailment programs, demand load control systems, dual-fuel heating systems, customer-owned energy storage, and other technologies that reduce or shift electricity consumption during system peaks.

The PEIEC's latest EE&C Plan identified several demand response initiatives, including pilot projects for energy storage, interruptible rates and curtailment, dual-fuel systems, and demand load control systems.

Category 3: Innovative Rate Structures

Innovative rate structures use pricing signals to encourage customers to shift electricity consumption away from higher-cost or peak-demand periods, and toward lower-cost or off-peak periods. Rather than directly controlling customer equipment, these programs rely on customer response to rate incentives. Examples include time-of-use ("TOU") rates, critical peak pricing, and other time-varying rate structures that provide lower prices during off-peak periods and higher prices during peak periods.

Maritime Electric's Advanced Metering for Sustainable Electrification Project, approved by the Commission in October 2024, will enable consideration of such rate designs in the future by providing the interval consumption data necessary to administer them. While innovative rate structures can contribute to peak demand reduction, PEI studies have found that the achievable peak reductions are relatively modest compared to the Province's forecast capacity requirements, because PEI's winter peak periods are characterized by a comparatively flat load profile.⁶ Accordingly, Maritime Electric considers innovative rate structures to be a component of a broader DSM strategy, rather than a standalone solution to the capacity requirements that underpin this Application.

Responsibility for Energy Efficiency and Demand Response Programs Rests with PEIEC

In December 2013, through amendments to the PEI *Electric Power Act*, DSM initiatives were made the responsibility of public utilities (at the time, the PEIEC was not deemed a public utility). As a result, on June 3, 2015, Maritime Electric submitted a Demand Side Management and Energy Conservation Plan (2015-2020) to the Commission. On November 3, 2015, the Company's plan, including the proposed demand response measures (Category 2), was largely denied by the Commission through Order UE15-02.

Concurrently, the Province released its Prince Edward Island Provincial Energy Strategy 2016/17 in September 2015, which included an action item to set up an independent energy efficiency utility for the Province to administer all DSM initiatives. Subsequently, in December 2017, amendments were made to the *Electric Power Act* deeming the PEIEC as a public utility for the purposes of DSM, thus assigning to the Province the responsibility for DSM initiatives. This is where DSM rests today.

Since the changes to the *Electric Power Act* in 2017, the PEIEC has submitted two Energy Efficiency and Conservation ("EE&C") Plans for approval from the Commission.

The first EE&C Plan, submitted on June 29, 2018, and approved on May 17, 2019, contained energy efficiency programs (Category 1).

The second EE&C Plan, submitted on December 31, 2021, and approved on April 23, 2024, contained both energy efficiency programs and demand response programs (Categories 1 and 2). The plan spanned a three-year term from March 1, 2023, to February 28, 2026, and incorporated demand response initiatives such as customer-owned energy storage, customer curtailment and load control programs. The plan estimated that demand response initiatives would achieve a peak reduction of 20.5 MW by 2026, which Maritime Electric included in its capacity forecasts. However, in its response to IR-16(a) from Commission Staff, the PEIEC confirmed that there are currently no demand response programs operational.⁷ Since these planned demand response initiatives have not been implemented, the peak demand and capacity deficit is larger than projected.

From December 2025 to March 2026, Maritime Electric participated in several discussions with efficiencyPEI regarding the commencement of demand response pilot programs.

⁶ Refer to Maritime Electric's response to IR-16(b) from Synapse Energy Economics, Inc., Exhibit M-6.

⁷ Exhibit EC-11.

However, in April 2026, Maritime Electric was advised by efficiencyPEI that all work had been paused.

Maritime Electric has not received any further updates from efficiencyPEI on the status of the pilot programs.

Innovative Rate Structures will be Considered Through Rate Design

In May 2021, Maritime Electric filed a Rate Design Application with the Commission for Stage 1 rate design changes, which proposed eliminating the residential second block.⁸ In April 2026, the Commission approved the application via Order UE26-02, with some exceptions.

The original Rate Design Application stated that proposed Stage 2 rate design changes would be submitted to the Commission and would commence after March 1, 2025, following the completion of Stage 1 rate design changes. However, due to the delay in obtaining approval for Stage 1 rate design changes, Stage 1 changes are now not expected to be completed until 2029. With the Commission having issued a decision on Stage 1 in April 2026, Maritime Electric expects to begin work on a Stage 2 Rate Design submission later this year.

As part of its Stage 2 Rate Design submission, Maritime Electric intends to study innovative rate structures (Category 3), including time-varying rates that incentivize customers to shift load from peak to off-peak periods. Depending on Maritime Electric's findings, innovative rate pilots may be proposed as part of the Stage 2 submission. However, as AMI technology is required to administer time-varying rate structures, Maritime Electric must first complete its Advanced Metering for Sustainable Electrification Project ("AMI Project") before innovative rate structures (including pilots) can be implemented. Approval of the AMI Project application, submitted by Maritime Electric in November 2022, was received in October 2024.⁹ As discussed in the response to IR-94(a), the Company expects the Advanced Metering for Sustainable Electrification Project to be completed in second quarter of 2028.

⁸ Docket UE22503, Exhibit M-1.

⁹ Docket UE20737.

MARITIME ELECTRIC

IR-94 The Commission previously approved Maritime Electric's Customer Information System and Advanced Metering Infrastructure ("AMI") project, which includes the deployment of smart meters across the Island.

- a. Provide an update on the current status of the AMI deployment, including the number and percentage of customers for whom smart meters have been installed to date, together with the anticipated timeline for completion.
- b. Discuss whether Maritime Electric has considered implementing pilot programs or other initiatives utilizing the AMI infrastructure, including time-of-use or other demand-responsive rate designs, to assist in reducing or shifting peak demand prior to the anticipated in-service date of the proposed combustion turbines. If not, explain why not.

Response:

In November 2022, Maritime Electric applied to the Commission for the AMI Project, which included the installation of Advanced Metering Infrastructure ("AMI").¹⁰ The original application included a four-year project schedule commencing in the first quarter of 2023 with completion estimated in the fourth quarter of 2026. However, approval of the project was not received from the Commission until October 2024 (Order UE26-02). As a result, the project did not commence until the first quarter of 2025 and is now expected to be completed in the second quarter of 2028.

- a. As of August 2026, approximately 49,000 smart meters have been installed, representing approximately 53 per cent of the total meters to be replaced. The anticipated timeline for completion of the AMI meter and network equipment installations is the third quarter of 2027, and the anticipated timeline for completion of the combined Customer Information System and AMI project is the second quarter of 2028.
- b. Refer to the response to IR-93(d).

¹⁰ Docket UE20737, Exhibit M-1.