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August 5, 2022

Island Regulatory and Appeals Commission  
PO Box 577  
Charlottetown PE C1A 7L1



Dear Commissioners:

**Response to Synapse Review of Proposed Rate Changes  
(Docket UE22503)**

On May 14, 2021, Maritime Electric Company, Limited (“Maritime Electric” or the “Company”) filed an application with the Island Regulatory and Appeals Commission (“Commission”) seeking approval of the first stage of rate design changes (“Stage 1 Rate Design Application”). The Commission subsequently engaged Synapse Energy Economics, Inc. (“Synapse”) to review and assess the reasonableness of Maritime Electric’s proposals, as well as certain elements of Maritime Electric’s cost allocation methodology. On May 13, 2022, Synapse issued its resulting report.

Maritime Electric welcomes the opportunity to provide comments on Synapse’s conclusions and recommendations. In the following discussion, the Company will also highlight how some of Synapse’s recommendations align with the Company’s proposal for the second stage of rate design.

**Recommendations for the Declining Block Rate Structure<sup>1</sup>**

Maritime Electric is pleased that Synapse agreed with the Company’s proposal to gradually eliminate the declining block rate structure for the residential class.

Synapse goes on to recommend that the Company reexamine the inclusion of large farm customers within the residential rate class, which is addressed in the next section.

**Recommendations for Customer Classes<sup>2</sup>**

Synapse recommended that Maritime Electric install additional load research meters so that it can gain a better understanding of the usage patterns of large farm customers. Synapse suggested that Maritime Electric use the resulting data to consider whether a new rate class for large farm customers is warranted, acknowledging that “the development of a new rate class cannot be accomplished using accurate load data in the near term”.

Synapse’s recommendation to install additional load research meters is not a viable option. Instead, the collection of additional data must be delayed until advanced metering infrastructure (“AMI”) is implemented.

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<sup>1</sup> Synapse, Review of Maritime Electric’s Proposed Rate Changes, section 3.2, page 9

<sup>2</sup> Synapse, Review of Maritime Electric’s Proposed Rate Changes, section 4.5, page 19

Existing supply chain issues are affecting the delivery of meters and would make it challenging, if not impossible, to install the recommended meters on a timely basis. The existing load research meters (i.e., bridge meters) were a customized order specifically for Maritime Electric's load study. In the event that Maritime Electric placed another customized order, given the current delivery delays for "off-the-shelf" meters, it is expected that this small customized order would not be a priority for the meter supply company. It is expected that the implementation of AMI would likely coincide with the delivery of any additional load research meters, rendering them redundant. Once AMI is implemented, the Company will be able to obtain sufficient load data to properly evaluate its customer rate classes.

Maritime Electric is not convinced by Synapse's analysis that a separate farm class is warranted. The Company believes that some farm customers, if allowed to choose between remaining in the residential class after the elimination of the declining block rate or moving to the small industrial class, will choose to move to the small industrial class, potentially addressing the concerns expressed by Synapse. However, Maritime Electric will consider Synapse's recommendation in the future broader analysis necessary to determine the second phase of rate design.

### **Recommendations Regarding the Residential Service Charge<sup>3</sup>**

Synapse recommended that "the Company undertake an analysis of its costs and propose a new method for classifying distribution costs", indicating that Maritime Electric has not conducted a minimum system analysis. Synapse then presented various reasons why the basic customer method should be the method ultimately adopted.

Maritime Electric agrees with Synapse's recommendation to analyze its costs and resulting allocations. As part of the second stage of this rate design process, there will be many aspects of the current rate structure that need to be analyzed, including cost allocation, rate class definitions, and rate structures that incentivize conservation and/or change consumption patterns. Maritime Electric expects to engage experts and conduct this additional analysis as part of the second stage of rate design.

At this time, the Company would like to point out that its current methodology for classifying distribution costs continues to be a reasonable approach and we do not believe that the basic customer method is an appropriate methodology given Maritime Electric's facts and circumstances.

First, the Company's assumptions regarding the portion of costs classified as customer-related is reasonable because the Company currently follows the guidelines of the National Association of Regulatory Utility Commissioners Electric Utility Cost Allocation Manual ("NARUC Manual").<sup>4</sup> It states: "When the utility installs distribution plant to provide service to a customer and to meet the individual customer's peak demand requirements, the utility must classify distribution plant data separately into demand- and customer-related costs."<sup>5</sup> The NARUC Manual provides the following table for guidance in classifying distribution costs as customer-related and demand-related.

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<sup>3</sup> Synapse, Review of Maritime Electric's Proposed Rate Changes, section 5.5, page 26

<sup>4</sup> NARUC Manual: <https://pubs.naruc.org/pub/53A3986F-2354-D714-51BD-23412BCFEDFD>

<sup>5</sup> NARUC Manual, page 90

<b>Table 1 Classification of Distribution Plant<sup>6</sup></b>			
<b>FERC USofA<sup>7</sup></b>	<b>Description</b>	<b>Demand related</b>	<b>Customer related</b>
360	Land and Land Rights	X	X
361	Structures and Improvements	X	X
362	Station Equipment	X	-
363	Storage Battery Equipment	X	-
364	Poles, Towers and Fixtures	X	X
365	Overhead Conductors and Devices	X	X
366	Underground Conduit	X	X
367	Underground Conductors and Devices	X	X
368	Line Transformers	X	X
369	Services	-	X
370	Meters	-	X
371	Installations on Customer Premises	-	X
371	Leased Property on Customer Premises	-	X
373	Street Lighting and Signal Systems	-	-

Maritime Electric's distribution system provides service to customers in a dual role. One role is to attach new customers; from a cost classification perspective, this purpose is customer related. The other role is to meet the peak demand requirements, which from a cost classification perspective, is demand related. For this reason, among others, the NARUC Manual guidance is a reasonable methodology for Maritime Electric to use.

Furthermore, Table 7 in Synapse's report demonstrates that Maritime Electric is not the only utility to classify distribution costs as customer related. Hydro One and NB Power classify a comparable percentage of distribution costs as customer related, and to a lesser degree so does the majority of the remaining utilities in Table 7. Manitoba Hydro and Consumers Energy are the only two utilities presented in Table 7 that can be inferred to use the basic customer method, as demonstrated by their three zero percentages. As a whole, this table demonstrates that regulators have determined that a variety of methodologies are acceptable, including the methodology used by Maritime Electric and previously accepted by the Commission.

With respect to Synapse's comment on Maritime Electric having not conducted a minimum system analysis, the Company has not done so because its facts and circumstances have not sufficiently changed to warrant such an analysis. The Company believes the reasons presented by Synapse as to why the basic customer method should be used do not apply to Maritime Electric's circumstances.

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<sup>6</sup> NARUC Manual, page 87, table 6-1

<sup>7</sup> FERC USofA refers to the Federal Energy Regulatory Commission's Uniform System of Accounts.

Synapse refers to the Electric Cost Allocation for a New Era: A Manual by the Regulatory Assistance Project ("RAP Manual") to support their recommendation. The RAP Manual states: "The key texts and most of the analytical principles currently used for cost allocation were developed between the 1960s and the early 1990s. Since that time, the electric system in the United States has been undergoing another period of dramatic change. That includes a wide range of interrelated advancements in technology, policy and economics:

1. Major advances in data collection and analytical capabilities.
2. Restructuring of the industry in many parts of the country, including new wholesale electricity markets, new retail markets and new market participants.
3. New consumer interests and technologies that can be deployed behind the meter, including clean distributed generation, energy efficiency, demand response, storage and other energy management technologies.
4. Dramatic shifts in the relative cost of technologies and fuels, including massive declines in the price of variable renewable resources like wind and solar and sharp declines in the cost of energy storage technologies.
5. The potential for beneficial electrification of end uses that currently run directly on fossil fuels – for example, electric vehicles in place of vehicles with internal combustion engines.

Many, if not all, of these changes have quantifiable elements that can and should be incorporated directly into the regulatory process, including cost allocation."<sup>8</sup>

The RAP Manual refers to changes that have occurred to the electric system in the United States, which are not directly applicable to Maritime Electric, as discussed below.

With respect to the first bullet, the RAP Manual is referring to the data collected via AMI, which Maritime Electric has not yet deployed.

With respect to the second bullet, a wholesale electricity market has not developed in Atlantic Canada due to the small number of potential market participants. Maritime Electric continues to purchase its energy supply from New Brunswick and the PEI Energy Corporation.

With respect to the third bullet, technologies such as clean distributed distribution and demand response, while emerging, are not yet a major factor on the Prince Edward Island system. Their system penetration is still relatively small, and the Company is at the stage of taking a long-term view of their potential impacts. The Company believes that the load data available after the introduction of AMI would provide a more solid foundation for determining whether to follow a different cost allocation methodology.

With respect to the fourth bullet, while the relative price of variable renewable resources like wind and solar has sharply declined over the last few decades, the price paid by Maritime Electric is determined through legislation.

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<sup>8</sup> RAP Manual, page 17

With respect to the fifth and final bullet, Prince Edward Island is only beginning to experience the impact of vehicle electrification. Significant peak load and energy impacts resulting from electrified transportation are still several years away.

Taken as a whole, the above changes have little or no impact on Maritime Electric's distribution and transmission system at this time. Thus, the RAP Manual provides no basis for disregarding the NARUC Manual in regard to the classification of distribution lines and transformers.

Ultimately, Maritime Electric continues to believe that the current methodology is acceptable. Nonetheless, it is not unreasonable that the second phase of rate design also include an evaluation of the methodology for classifying distribution costs.

#### **Recommendations Regarding Alternative Rate Designs<sup>9</sup>**

Synapse recommends that Maritime Electric continue to explore alternative rate designs. On a related note, Synapse recommended that the Company assess the potential cost savings associated with reducing system peak demand as well as the potential benefits of avoiding or deferring capacity-related investments.

Maritime Electric agrees with Synapse's recommendation to continue to explore alternative rate designs.

As indicated in the Stage 1 Rate Design Application and in Synapse's report, the Company plans to replace its Customer Information System ("CIS") and install AMI, subject to Commission approval. When completed, a new CIS along with AMI will enable more innovative rate design, such as time-of-use rates.

Once AMI is commissioned, the Company will begin the detailed data collection and analysis that is necessary for the development of innovative rate design. During this development stage, the Company will evaluate how customers' consumption patterns are impacting system peak, with a view to evaluating all available options for incentivizing customers to change their consumption patterns to help manage system peak. Such analysis will include the potential cost savings associated with reducing system peak demand as well as the potential benefits of avoiding or deferring capacity-related investments on the transmission and distribution system, if feasible.

With respect to Synapse's recommendation that the Company assess the potential cost saving associated with reducing system peak demand, they also recommended that "the Company obtain additional price quotes from [New Brunswick Energy Marketing] for varying levels of capacity requirements".<sup>10</sup>

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<sup>9</sup> Synapse, Review of Maritime Electric's Proposed Rate Changes, section 6.2, page 28.

<sup>10</sup> Synapse, Review of Maritime Electric's Proposed Rate Changes, page 28

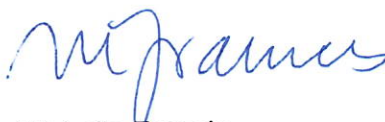
Maritime Electric has secured its generation planning capacity requirements through to the end of 2026 via its Energy Purchase Agreement (“EPA”) with New Brunswick Energy Marketing. Procuring capacity quotes at this time will not impact the Company’s price of purchased capacity until after the EPA expires on December 31, 2026, at which point market conditions and market prices may be significantly different from today. Nonetheless, Maritime Electric has recently engaged a third-party consultant to complete an on-Island generation capacity study, which will include the evaluation of available options for meeting its capacity obligations in the medium and long term.<sup>11</sup> That evaluation will include the expected cost of available capacity options.

**Conclusion**

Maritime Electric believes that Synapse’s report along with our comments above further supports the proposed order as presented in Section 11 of the Stage 1 Rate Design Application. It is evident that a second stage of rate design is required and Maritime Electric will consider Synapse’s recommendations throughout the development of this second stage.

Yours truly,

MARITIME ELECTRIC



Michelle Francis  
Vice President, Finance &  
Chief Financial Officer

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<sup>11</sup> The Commission-approved 2022 Capital Budget includes an on-Island generation capacity study.