All our energy.
All the time.

MARITIME ELECTRIC
A FORTIS COMPANY

August 14, 2025

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

Dear Commissioners:

Response to PEI Federation of Agriculture Expert Report and Synapse Comments
Docket UE22503

On May 14, 2021, Maritime Electric Company, Limited ("Maritime Electric" or the "Company") filed a Rate Design Application (the "Application") with the Island Regulatory and Appeals Commission (the "Commission") seeking approval of the first stage of rate design changes. Since then, the Company has responded to several interrogatories from the Commission; the Commission's consultant, Synapse Energy Economics, Incorporated ("Synapse"); an Added Party Intervenor ("Intervenor"), the Prince Edward Island Federation of Agriculture ("PEIFA"); and others.

On May 2, 2025, the Commission submitted a procedural letter to Maritime Electric and the Added Party Intervenors indicating that the Commission intended to hold a public hearing in September or October 2025.[1] In the procedural letter, the Commission requested that the PEIFA and the Prince Edward Island Energy Corporation ("PEIEC," the only other Intervenor) submit any pre-hearing written submissions, including expert reports, by June 13, 2025. The Commission indicated that Synapse would have the opportunity to respond to pre-hearing written submissions and expert reports by July 11, 2025.

On June 27, 2025, following an extension granted by the Commission, the PEIFA filed a report prepared by Melissa Davies of MNYD Consulting, Incorporated and Patrick Bowman of Bowman Economic Consulting, Incorporated (the "Davies and Bowman Report").[2] To date, no written submissions or interrogatories have been filed by the PEIEC.

On July 18, 2025, the Commission filed comments from Synapse regarding the Davies and Bowman Report ("Synapse Comments").[3]

Maritime Electric submits this letter in response to the PEIFA's Davies and Bowman Report and the Synapse Comments.

Summary of Issues
There are several issues raised by the Davies and Bowman Report and the Synapse Comments pertaining to Maritime Electric's Application and 2023 Cost Allocation Study ("CAS"), the latter of which was filed with the Commission on October 31, 2024.[4] The primary issues, which Maritime Electric addresses in this letter, are as follows:

1 Exhibit C-7.
2 Exhibit FA-5.
3 Exhibit C-10.
4 Docket UE21232.

- The treatment of the residual Charlottetown Thermal Generating Station ("CTGS") Capital Reserve Variance amortization in Account No. 9412;
- The treatment of $3,218,000 in Account No. 7400;
- The use of the average of the three highest monthly system peak loads (referred to as "3CP") as the coincident peak ("CP") allocator for allocating demand-related costs in the 2023 CAS;
- The use of the "basic customer method" for classification of distribution system costs in the 2023 CAS;
- The potential introduction of a separate farm rate class; and
- The treatment of customers in Cohort 7.

Account No. 9412

The Davies and Bowman Report suggests that the amount of $2,134,000 in Account No. 9412 related to amortization of the residual CTGS Capital Reserve Variance in the 2023 CAS was incorrectly classified as not being linked to capacity, based on the observation that these costs were traditionally 100 per cent allocated as demand-related.[5] However, a review of Schedule 3.0 of the 2023 CAS shows that the $2,134,000 amount was assigned to the Generation function.[6] In the 2023 CAS, the Generation function is for Maritime Electric-owned on-Island generation facilities in Charlottetown and Borden-Carleton. In past CASs the amortization for the CTGS was also assigned to the Generation function; therefore, Maritime Electric believes that the Davies and Bowman Report is incorrect in suggesting that there has been a change from past CASs.

Account No. 7400

The Davies and Bowman Report is correct in taking issue with the treatment of $3,218,000 in Account No. 7400. In Schedule 6.0 of the 2023 CAS,[7] Account No. 7400 is incorrectly labeled as "Loan Payment Cable Interconnection Financing" and is incorrectly included in the $5,266,000 amount for Energy Costs in the Generation function shown in Schedule 3.0.[8] The $3,218,000 in Account No. 7400 is instead for Point Lepreau Debt Financing, and should be assigned to the Purchased Power function, with a classification of 25 per cent demand-related and 75 per cent energy-related (i.e., the same treatment as Point Lepreau fixed costs).

As demonstrated in Table 1 below, the correction of this mislabelled amount does not materially change the results or conclusions of the 2023 CAS. Table 1 includes a calculation of the Residential Farm subclass revenue-to-cost ("RTC") ratio, of 90.3 per cent, reflecting the correction of the mislabelled amount (Column G), which is materially unchanged from the RTC ratio of 90.2 per cent, reflecting the incorrect labelling (Column B).

Coincident Peak Allocator

3CP Allocator

The Davies and Bowman Report is correct in stating that the use of 3CP for allocating demand-related costs is a change from past CASs. Historically, Maritime Electric CASs used the single highest system peak load (referred to as "1CP") to allocated demand-related costs. When using 1CP, demand-related costs for each customer class (or subclass) are allocated based on each class' share of 1CP. However, in 2023, a polar vortex weather event, with temperatures as low as -27.1 degrees Celsius,[9] resulted in an extremely high system peak on February 4, 2023. As a

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5 Davies and Bowman Report page 40.
6 2023 CAS Appendix B page 25.
7 2023 CAS Appendix B page 69.
8 2023 CAS Appendix B page 25.
9 Based on Environment Canada weather data from the Charlottetown Airport.

result, and to avoid significant volatility between CASs, Chymko Consulting Limited, Maritime Electric's consultant, agreed to use 3CP to allocate demand-related costs in the 2023 CAS. Using 3CP to allocate demand-related costs uses the same methodology as 1CP, but the average of the three highest monthly peaks (i.e., January, February and December for Maritime Electric) is used instead of the single highest peak. Using 3CP resulted in 2023 CAS results that were more consistent with the 2020 CAS and reduced volatility in the results.

The Davies and Bowman Report and its results rely significantly on the revision made to Maritime Electric's 2023 CAS by using 1CP instead of 3CP (referred to as the "2023 CAS Status Quo"). Discussions and conclusions in the Davies and Bowman Report are based on this 2023 CAS Status Quo revision, which is explained in Section 3.3 on page 26 of the report. Maritime Electric does not agree with this revision.

For clarity, Table 1 shows the estimated RTC ratios for the Residential Farm subclass under various CP allocation approaches (e.g., 1CP or 3CP) for allocating demand-related costs.

TABLE 1
Revenue-to-Cost Ratios for Residential Farm Subclass

		2020 CAS (revised)	2023 CAS (as filed)	2023 CAS (Status Quo)[a]	2023 CAS (revised with Account No. 7400 Lepreau debt financing moved to purchased power)			
		Dec 16 HE 18:00[b] 1CP	3CP	Feb 4 HE 18:00 1CP	Jan 12 HE 09:00 1CP	Feb 4 HE 18:00 1CP	Dec 21 HE 18:00 1CP	3CP
		A	B	C	D	E	F	G
Maritime Electric CP (kW)		255,412	306,623	358,463	275,733	358,463	294,422	306,623
Residential Farm subclass CP (kW)		8,780	9,196	7,922	10,091	7,922	9,576	9,196
Base Revenue ($,000)	X	5,753	6,226	6,224	6,226	6,226	6,226	6,226
Allocated costs ($,000)	Y	6,631	6,901	6,343	7,185	6,407	6,977	6,895
Revenue to Cost ratio (%)	X / Y	86.8%	90.2%	98.1%	86.7%	97.2%	89.2%	90.3%

a. Represents the Davies and Bowman Report 2023 CAS Status Quo revision.
b. HE refers to hour ending.

The labeled columns listed in Table 1 are as follows:

- Column A shows the results of the 2020 CAS (revised),[10] as filed on January 27, 2022, with a correction filed on December 12, 2023,[11] which used 1CP.
- Column B shows the results of the 2023 CAS (as filed), which used 3CP.
- Columns C shows the Davies and Bowman Report 2023 CAS Status Quo revision, with the Account No. 7400 correction and Account No. 9412 change discussed, herein, which used 3CP.
- Columns D, E, F and G reflect the Account No. 7400 correction discussed, herein.

10 Exhibit M1(d).
11 Exhibit M11 letter to Ryan P. MAcDonald.

- Column D shows the results of the 2023 CAS if 1CP is used based on the January system peak.
- Column E shows the results of the 2023 CAS if 1CP is used based on the February system peak. This corresponds to the 1CP that the Davies and Bowman Report used for the 2023 CAS Status Quo revision. Therefore, the difference between Columns C and E is the treatment of Account No. 9412 discussed, herein.
- Column F shows the results of the 2023 CAS if 1CP is used based on the December system peak.
- Column G shows the updated results of the 2023 CAS with 3CP used.

Table 1 shows that the system peak load on February 4 (Columns C and E) was much higher than the January 12 (Column D) and December 21 (Column F) monthly system peak loads. Using the February 4 peak as the 1CP (Column E) results in a smaller allocation of demand-related costs to the Residential Farm subclass and a higher RTC ratio of 97.2 per cent. An RTC ratio of 97.2 per cent is a significant increase over the 2020 CAS RTC ratio of 86.8 per cent (Column A), and is attributable to an abnormal condition (i.e., the polar vortex weather event of February 4).

The Davies and Bowman Report referenced a filing related to Maritime Electric's On-Island for Security of Supply Project Application that stated that the 2023 system peak on February 4 was now considered the norm.[12] Maritime Electric wishes to clarify that the filing referenced expressed that the system peak experienced in 2023 under *abnormal winter conditions* is now considered the norm under *normal winter conditions*. Maritime Electric's statement of the "norm" was in reference to the system peak, not the winter conditions. This is an important distinction, as the Davies and Bowman Report's argument for using 1CP in the 2023 CAS relies on the assumption that the February 4, 2023, winter conditions of -27.1 degrees Celsius were normal.

Using 1CP in the 2023 CAS presents significant volatility due to extreme weather conditions during the February 4 system peak. In the New Brunswick Energy and Utilities Board ("NBEUB") CAS matter referenced in the Davies and Bowman Report,[13] Patrick Bowman, on behalf of J.D. Irving Limited, filed a testimony stating that "[w]hile the purest measure of system peak conditions would be represented by a single hour, it may be appropriate to use more than a single hour to avoid quirks of singular incidents that may drive volatility."[14] The testimony also mentions that the peak pertaining to the matter occurred on February 4, 2023 (a Saturday), which "if used as the sole input, [may] lead to a different load profile for certain classes than the more typical weekday peak." Maritime Electric agrees with the above noted statements of Bowman's testimony for the NBEUB matter.

Using the December 21 or January 12 system peak as the 1CP allocator (Table 1 Columns D and E) in the 2023 CAS is more reflective of normal weather conditions during the system peak and produces results that are more consistent with the 2020 CAS (Column A). While there is validity to the assertion by the Davies and Bowman Report that using 3CP can mute the impact of the highest peak load, Maritime Electric believes that the use of 3CP (Column G) is appropriate and will result in more consistent (i.e., less volatile) CAS results over time.

An additional source of volatility that the use of 3CP may help mitigate is the potential transition from an evening peak (e.g., hour ending 18:00) to a morning peak (e.g., hour ending 8:00 am or

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12 Referenced in Davies and Bowman Report page 26 (see footnote 78).
13 Matter No. 554.
14 Pre-Filed Testimony of Patrick Bowman in Regard to Matter 554, New Brunswick Power Class Cost Allocation Study ("CCAS") Methodology Review, page 21 (Exhibit JDI04,01).

9:00 am), the latter of which is typical for New Brunswick, which has a high penetration of electric space heating. The Davies and Bowman Report argued that farm customers, which peak in the morning, are not adversely impacting the system peak, which occurs in the evening.[15] However, as shown in Table 1, the January 2023 monthly peak occurred in the morning for the hour ending 9:00 am (Column D). Additionally, the 2021 and 2024 annual system peaks (1CP) both occurred during the morning. As Maritime Electric's system peak potentially transitions to the morning, the use of 1CP could result in more volatility in RTC ratios from one CAS to the next for subclasses such as farms, which contribute more to the system peak during the morning than in the evening. The use of 3CP is an appropriate solution to avoid volatility in CAS results due to Maritime Electric's system peak potentially transitioning from the evening to the morning.

NARUC Coincident Peak Criterion

The Davies and Bowman Report references the National Association of Regulatory Utility Commissioners ("NARUC") Electric Utility Cost Allocation Manual,[16] which specifies that, if using more than one system peak for demand allocation (e.g., 3CP), the determination of the hours to include should be based on the load for those hours being within 10 per cent of the 1CP value (i.e., at least 90 per cent of the 1CP). The Davies and Bowman Report notes that the January and December 2023 monthly system peaks (used to calculate 3CP) are less than 90 per cent of the February peak (i.e., the 1CP), and thus, using a 3CP allocator for the 2023 CAS does not meet the NARUC criterion.[17]

A possible solution, as discussed in the Davies and Bowman Report, is to use the average of the ten highest historical peaks as an alternative allocator to 3CP. However, as shown in Table 2, all Maritime Electric's ten highest peaks in 2023 are less than 90 per cent of the single coincident peak of 359 MW on February 4, thus also do not meet the NARUC criterion. The fact that none of the ten highest peaks in 2023 meet the NARUC criterion further validates that the February 4 peak was abnormal and that using 1CP would introduce volatility in the CAS results.

Even though the use of 3CP for the 2023 CAS does not meet the NARUC criterion, Maritime Electric believes that it is appropriate given the abnormal February 4 polar vortex weather event.

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15 Davies and Bowman Report page 20.
16 Davies and Bowman Report page 27.
17 Ibid.

TABLE 2 10 Highest Maritime Electric Daily Peaks for 2023				
Month	**Day**	**Hour Ending**	**Daily Peak (MW)**	**Per Cent of 1CP (%)**
February	2	08:00	283	78.8
February	3	19:00	317	88.3
February	**4**	**18:00**	**359**	**100.0**
February	5	10:00	301	83.8
February	24	19:00	283	78.8
February	25	20:00	281	78.3
February	28	08:00	286	79.7
December	14	18:00	287	79.9
December	21	18:00	295	82.1
December	22	18:00	290	80.8

Basic Customer Method for Classification of Distribution Costs

In a Synapse report filed on May 13, 2022,[18] and in the Synapse Comments, Synapse suggests the use of the "basic customer method" for the classification of distribution costs in Maritime Electric's CASs. On August 5, 2022, Maritime Electric submitted a Response to Synapse Review of Proposed Rate Changes[19] that explains why Maritime Electric believes that the "basic customer method" is not an appropriate methodology for classifying distribution costs. Maritime Electric agrees with the conclusion by the Davies and Bowman Report that "[t]here is no basis in Canadian experience, nor in Maritime Electric facts, for adoption of the Synapse recommendations to use the "basic customer method" for classification of distribution system costs."[20]

Separate Farm Rate Class

The Davies and Bowman Report indicates that farms should have their own separate rate class and that the Small Industrial rate class is not appropriate as an option of farms. The rationale for this assertion is based on the results of the Davies and Bowman Report 2023 CAS Status Quo revision (shown in Column C of Table 1), which uses 1CP. The results of the 2023 CAS Status Quo revision show an RTC ratio of 98.1 per cent and an average cost to serve of 13.35 cents/kWh for the Residential Farms subclass, the latter of which is below the average cost to serve of 15.00 cents/kWh for the Small Industrial rate class. However, this rationale is not valid when the 2023 CAS results are calculated based on 3CP (shown in Column G of Table 1), which results in an RTC ratio of 90.3 per cent and an average cost to serve of 14.52 cents/kWh.[21]

In Maritime Electric's Response to IR-25(a) from the PEIFA,[22] filed on August 15, 2024, potential new farm class rates were provided excluding and including the seven "other" customers. In Maritime Electric's Response to IR-15 from the Commission,[23] filed on May 12, 2023, Maritime Electric demonstrated that estimated revenue from farms moved to the Small Industrial class

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18 Exhibit C4.
19 Exhibit M8 page 3.
20 Davies and Bowman Report page 28.
21 $6,895,000 divided by 47,500,000 kWh = 14.52 cents/kWh.
22 Exhibit M12 page 28.
23 Exhibit M10 page 28.

would not be materially different than the potential farm class, and that the farms that move to the Small Industrial class would have an RTC ratio of 1.01.

In past submissions, under its proposal of giving farms the option of remaining on the Residential class or moving to the Small Industrial class, Maritime Electric demonstrated that larger farms are more likely to move to the Small Industrial class and smaller farms are more likely to remain on the Residential class. However, if a separate farm rate is established, all farms would be moved to the new rate, even if they would be better served under the Residential rate. Given the significant difference in consumption levels and patterns of various farms (e.g., size and type of operation), the introduction of a new farm class may unfairly disadvantage smaller farms and introduce inter-class inequity that would otherwise not exist if farms were given the option to choose between the Residential and Small Industrial classes.

For the reasons noted above, Maritime Electric maintains its position that providing farms with the option of remaining on the Residential class or moving to the Small Industrial rate class is appropriate.

Treatment of Cohort 7 Customers
Maritime Electric disagrees with the Davies and Bowman Report and the Synapse Comments regarding the exclusion of specific farm operations from a potential farm rate.

As stated in Maritime Electric's Response to IR-1(a) from Synapse filed on March 2, 2022,[24] Maritime Electric's Schedule of Rates and General Rules and Regulations defines a farm as *"a holding on which agricultural operations are carried out. Agricultural operations include the production of field crops including grain, vegetables, seed and forage crops; animal and dairy products including milk, cream, eggs, meat and poultry products, poultry hatcheries, nurseries and greenhouses for the production of crops or bedding plants, fur farms apiaries, fish hatcheries and fish farms."*

Maritime Electric explained why, based on the above definition of a farm, the customers in Cohort 7 would qualify for a potential separate farm rate, with the only exceptions being one beef slaughterhouse that ceased operation in 2020 (that would remain in the Residential class) and three grain-handling operations (that should be served under the General Service or Small Industrial classes).

Yours truly,

MARITIME ELECTRIC

Michelle Francis
Vice President, Finance & Chief Financial Officer

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[24] Exhibit 7 page 1.