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August 18, 2022

Ms. Cheryl Mosher Island Regulatory & Appeals Commission PO Box 577 Charlottetown PE C1A 7L1

Dear Ms. Mosher:

## UE20946 – 2023 – 2025 General Rate Application Response to Interrogatories from Mr. John te Raa

Please find attached the Company's responses to interrogatories from Mr. John te Raa with respect to the Company's 2023 – 2025 General Rate Application filed with the Commission on June 20, 2022.

Yours truly,

MARITIME ELECTRIC

Ilaña Crockett

Gloria Crockett, CPA, CA Manager, Regulatory & Financial Planning

GCC24 Enclosure

180 Kent Street • PO Box 1328 • Charlottetown, PE C1A 7N2 telephone 1-800-670-1012 • fax 902-629-3665 • maritimeelectric.com

All our energy. All the time.



Via email: johnteraa@gmail.com

August 18, 2022

Mr. John te Raa 1848 Hardy Mill Rd – Rte 220 York PE C0A 1P0

Dear Mr. te Raa:

#### UE20946 – 2023 – 2025 General Rate Application Responses to Interrogatories

Please find attached the Company's responses to your interrogatories with respect to the Company's 2023 – 2025 General Rate Application filed with the Commission on June 20, 2022.

Yours truly,

MARITIME ELECTRIC

Maria acchett

Gloria Crockett, CPA, CA Manager, Regulatory & Financial Planning

GCC25 Enclosure

180 Kent Street • PO Box 1328 • Charlottetown, PE C1A 7N2 telephone 1-800-670-1012 • fax 902-629-3665 • maritimeelectric.com



# RESPONSE TO INTERROGATORIES FROM MR. JOHN TE RAA

Docket UE20946 General Rate Application

Submitted August 18, 2022





- **IR-1** Regarding capacity and energy requirements at the end of the time period of this rate application on February 28, 2026.
  - a) What is the forecasted system demand including the required system reserves?
  - b) What is the contractual capacity obtained from Point Lepreau?
  - c) What is the accredited capacity of wind energy purchases made from the PEI Energy Corporation?
  - d) What is the accredited capacity owned by Maritime Electric?
  - e) In the Introduction subsection 3.1.1 line 14 and 15 it states "an agreement for the purchase of capacity and system energy from NB Power". How many Megawatts are specified in this agreement?
  - Regarding NB Power capacity purchases. An agreement is not a contract. An existing contract purchasing system capacity and system energy terminates February 29, 2024.

Beyond February 29, 2024 how secure are the availability and pricing for purchased capacity used in this application?

g) Subsection 3.1.1 makes no reference to NBEM as a supplier of capacity and/or energy.

Please explain the ownership and governance structure of NBEM.

Does NBEM operate at arm's length from NB Power?

#### Response:

The following table provides information for IR-1 (a) through to (e) for the years ended December 31, 2025 and December 31, 2026, as information as of February 28, 2026 is not available.

(Megawatts or MW)		2025	2026
Maritime Electric peak load		298	304
Less impact of demand side management		(4)	(5)
Less interruptible load		(14)	(14)
Plus 15% planning reserve		42	43
Total required generating capacity	Α	322	328
Borden Generating Station		40	40
Combustion Turbine #3		49	49
Point Lepreau Generating Station		29	29
Wind effective load carrying capability		24	24
Short-term capacity purchases		185	190
Total available generating capacity	В	327	332
Capacity surplus	C = B - A	5	4

- a) The forecast of system demand, including required system reserves, (i.e., total required generating capacity) is forecast to be 322 MW at December 31, 2025 and 328 MW at December 31, 2026.
- b) The contractual capacity obtained from the Point Lepreau Generating Station is 29 MW.
- c) The accredited capacity (i.e., effective load carrying capacity) of wind energy purchased from the PEI Energy Corporation is 24 MW.
- d) Maritime Electric owns 40 MW of capacity associated with the two combustion turbines at Borden Generating Station and 49 MW associated with the combustion turbine #3 in Charlottetown.
- e) As shown in the table above, short-term capacity purchases per Maritime Electric's Energy Purchase Agreement ("EPA") with New Brunswick Energy Marketing ("NBEM") are 185 MW for 2025 and190 MW for 2026. Note that these forecasts were established as of October 2020 when the term of the EPA was extended.
- f) Maritime Electric's contract with NBEM originally covered the period of March 1, 2019 to February 29, 2024. Maritime Electric extended this contract to December 31, 2026. Beyond 2026, the availability and pricing for purchased capacity is not known.
- g) New Brunswick Energy Marketing Corporation, a wholly owned subsidiary of NB Power, conducts energy trading activities in markets outside of New Brunswick, purchases electricity to meet demand in and outside of New Brunswick, and sells excess energy generated in New Brunswick.

Maritime Electric is not a party to transactions between NB Power and NBEM.

**IR-2** Regarding residential energy charge increases. Referring to Section 3 subsection 3.2.2 - Table 3.1 Proposed customer rates.

	2022	2023	2024	2025
Residential – First Block	0.1532	0.1592	0.1652	0.1715
Residential – Second Block	0.1228	0.1265	0.1313	0.1362
Spread	0.030	0.033	0.034	0.035

Maritime Electric proposes to increase the spread between first block energy and second block energy from 3 cents to 3.5 cents. This is contrary to efforts being made to reduce the spread between second block and first block energy.

In UE08-01 it was agreed to eliminate the second block.

In UE10-03 this agreement was suspended due to intervention from the Government.

Docket 20940 UE10-03 was issued July 12, 2010. Section 4.2 second Block Tariff and Rate Design, lays out the issues.

- a) In light of the above, please explain Maritime Electric's justification to increase the spread in favor of the second block residential customers to 3.5 cents from 3.0 cents per kWh?
- b) In the below table please provide, accurate to four significant figures, the further breakdown between first and second block energy sales in GWh for the years 2023, 2024 and 2025.

	2022	2023	2024	2025
Revenue Requirement (\$000)	\$	\$ 130,251	\$ 138,666	\$ 147,044
Total Energy Sales GWH		723.5	742.8	763.9
Space Heating GWH		229.8	244.3	258.8
Residential – First Block				
Residential – Second Block				
Non-space heating GWh		493.7	498.5	505.1
Residential – First Block				
Residential – Second Block				
\$/kWh	\$	\$ 0.180	\$ 0.187	\$ 0.192

## Response:

a) Maritime Electric filed a stage 1 rate design application with the Commission on May 14, 2021. This application, Docket UE22503, includes a proposal to remove the residential declining second block over a four-year period. The application is currently being reviewed by the Commission and is separate from this Application. The timing of any related rate changes associated with Docket UE22503 is not yet known and is subject to due regulatory process.

	2022	2023	2024	2025
Revenue Requirement (\$000)	\$ 124,902	\$ 130,251	\$ 138,666	\$ 147,044
Space Heating (gigawatt or GWh)	222.8	229.8	244.3	258.8
Non-space heating (GWh)	505.1	493.7	498.5	505.1
Subtotal Energy Sales (GWh)	727.9	723.5	742.8	763.9
Non-seasonal Residential – First Block (GWh)	608.5	604.9	621.0	638.6
Non-seasonal Residential – Second Block (GWh)	95.6	95.0	97.5	100.3
Seasonal Residential – First Block (GWh)	21.7	21.5	22.1	22.7
Seasonal Residential – Second Block (GWh)	2.1	2.1	2.2	2.
\$/kWh	\$ 0.172	\$ 0.180	\$ 0.187	\$ 0.192

#### b) The requested information is provided in the following table.

The forecast allocation between the monthly residential first and second block sales is based on the weighted average of actual monthly first and second block sales for 2019 and 2020 for year-round and seasonal customers.<sup>1</sup> The sales forecast of first and second block sales does not distinguish between space heating and non-space heating load.

<sup>&</sup>lt;sup>1</sup> The load and sales forecast was prepared in the fall of 2021 prior to 2021 sales figures being finalized for the year.

**IR-3** Regarding the proposed General Service energy charges increases. Referring to Section 3 subsection 3.2.2 - Table 3.1 Proposed customers rates.

	2022	2023	2024	2025	
Residential – First Block	0.1532	0.1592	0.1652	0.1715	0.018
Residential – Second Block	0.1228	0.1265	0.1313	0.1362	0.013
increase					0.032
General Service – First Block	0.1871	0.1956	0.203	0.2107	0.024
General Service – Second Block	0.1241	0.1279	0.1328	0.1377	0.014
increase					0.037

Maritime Electric proposes to increase the General Service unit energy cost by 3.7 cents per kWh while the residential unit energy is increased by 3.2 cents per kWh. This is an extra 0.5 cents over the proposed residential rate increase. This is contrary to any and all instructions/concerns/recommendations/orders issued by IRAC.

I refer Maritime Electric to Docket UE20944 Order UE19-08, the following sections.

- 360. The residential second block is not, however, the only aspect of MECL's rate structure that is contrary to the principles behind the *Electric Power Act*. General Service customers are currently paying 22 percent more than the cost to serve them. This is not reasonable, publicly justifiable, or non-discriminatory. This is also not a new development, and is consistent with the results of the 2014 Cost Allocation Study.
- 361. Despite General Service customers already paying significantly more than their cost of service, MECL is proposing a rate increase for General Service customers as part of the present Application. At the hearing, MECL was asked to justify the proposed rate increase for the General Service rate class in light of the already high RTC ratio. MECL was unable to do so.
- 366. Despite MECL's failure to file the rate design study and proposed rate structure, this Commission is not prepared to allow the inequities to continue during the rate setting period.
- 369. Any rate structure proposed by the Company shall ensure that all customer classes have a RTC ratio within a range of 90 percent to 110 percent. According to Multeese, this is an appropriate short to medium term goal. However, the Company shall be required to move RTC ratios within a range of 95 to 105 over the longer term. The Commission deems a RTC ratio of 95 to105 to be the appropriate target range for all rate classes and must be used by MECL for all rate classes commencing March 1, 2022.
- a) Please justify the current proposed rate increase for the General Service rate relative to the proposed Residential Service rate increase as being just and reasonable.

b) The table below is a first approximation to calculate the relative rate impacts on the Residential and General Service Rates when the 2024 and 2025 General Service rate increase is limited to 1%. At year 2025 the required Residential Rate is increased by 0.4 cents per kWh. The General Service rate drops by 0.8 cents per kWh. As a first approximation this appears to be realistic and achievable in the current rate application.

Please provide a revised Table 3-1 based on the proposed 2023 General Service rate followed by annual 1% increases for the year 2024 and 2025. While holding the combined Residential and General Service Revenue Requirements at the same dollar values as shown.

	2022	2023	2024	2025
Energy Sales GWh				
Residential		723.5	742.8	763.9
General Service		400.4	397.7	395.8
Revenue Requirement (\$000)				
Residential	\$	\$ 130,251	\$ 138,666	\$ 147,044
General Service		69,702	72,108	74,172
Total		199,953	210,684	221,216
\$/kWh		0.180	0.187	0.192
\$/kWh		0.174	0.181	0.187
Residential		130,251	140,285	150,113
General Service (1% increase)		69,702	70,399	71,103
Total		199,953	210,684	221,216
\$/kWh		0.180	0.189	0.197
\$/kWh		0.174	0.177	0.180
variance		-	 0.002	0.004
variance		-	0.004	0.008

c) What will be the RTC ratio at year 2025 based on the MECL proposed rate structure and what will be the RTC ratio based on the revised 1% increased rate structure?

## Response:

a) The Company filed a stage 1 rate design application with the Commission on May 14, 2021. This application, Docket UE22503, includes a proposal to reduce the energy charge for the General Service class over four years to offset the additional revenue from Residential, Large Industrial and Street Lighting classes as proposed in the related application such that the overall impact is revenue neutral to the Company. That application is currently being reviewed by the Commission and is separate from this Application. The timing of any related rate changes associated with Docket UE22503 is not yet known and is subject to due regulatory process.

b) The purpose of this General Rate Application is to consider changes in rates related to the Company's revenue requirement only. The Company filed a stage 1 rate design application with the Commission on May 14, 2021, Docket UE22503, which includes a proposal to increase the second block Residential energy charge to be equivalent to the first block energy charge and fully offset the increase revenue from this class to reduce the energy charge for the General Service class.

The rate design application also proposed that further rate design changes will be necessary to bring the revenue-to-cost ("RTC") ratio of the General Service class within the Commission's target range of 95 to 105 and that the Company will file specific rate recommendations for stage 2 rate design changes. The stage 2 rate design application will consider technological advancements and other relevant information such as interim load study results. The Company will consider various rate design alternatives including that which is proposed in this interrogatory for stage 2 rate design proposals.

c) See the response to IR-3(b). The purpose of this General Rate Application is to consider the rate impact of proposed changes in the Company's forecast revenue requirement. As such, the Company does not believe the proposals in this application will have a material impact on RTC ratios for the various customer classes.

The expected impact of the Company's stage 1 rate design application filed on May 14, 2021 can be found in Table 8 of that application.

## IR-4 Point Lepreau Energy Supply Costs

Docket UE20604 ECAM Rate increase Dec. 17 2021 Maritime Electric requested a rate increase to cover costs of three unplanned outages in 2021. Table C-2 Point Lepreau Energy Supply Costs shows for 2021 a variance of \$1,146,000 (5%). The reason for this variance is explained in Appendix C section C.1.1 Point Lepreau of this application.

a) Replacement energy costs of \$4,995,650 were incurred during this outage as per Table 3 Section 6.2 Docket UE20604.

Where in Table C-1 Energy Supply Costs by Source is this expenditure located and identified?

b) For the years 2019 thru 2025 in the table following please provide the missing data as defined.

Point Lepreau	2019	2020	2021	2022	2023	2024	2025			
Actual cost	\$24,442,271	\$23,984,800	\$25,758,455							
Forecast cost	\$23,986,000	\$24,356,000	\$24,612,000	\$24,529,250	\$25,480,902	\$24,660,636	\$25,647,122			
Outage days			100	60		50				
Maint. & Repair Difference			\$1,618,141							
Variance	\$456,000	\$(371,000)	\$1,146,455							
Fuel & Cost Capital (Savings)			\$(471,686)							
Replacement Energy Cost			\$4,995,650							
MWh received		218,053	204,193							
MWh Energy delivered	221,219	211,087	197,670							
Replacement energy MWh			54,510							
As defined below.										
Main. & Repair Difference	IR - 4 John te l	Raa Docket UE2	20604							
Variance	Appendix C Ta	ble C-2 this app	lication Docket l	JE20946						
Fuel & Cost Capital (Savings)	by difference									
Replacement Energy Cost	Table 3 section	n 6.2 of the appli	cation Docket U	E20604						
MWh received	IR-2 John te R	aa Docket UE20	604							
MWh Energy delivered	IR-4 Roger Kir	IR-4 Roger King Docket UE20604								
Replacement energy MWh	IR-1 Roger Kir	IR-1 Roger King Docket UE20604								

## Response:

a) Replacement energy, when required, is sourced through the Energy Purchase Agreement ("EPA") with New Brunswick Energy Marketing ("NBEM") for planned outages. For unplanned outages, the replacement energy is sourced from NBEM but is based on market prices at the time of the outage. All replacement energy costs were included in the "EPA with NBEM" rows in Table C.1 in Appendix C.

#### (UE20946) General Rate Application **Responses to Interrogatories** from John te Raa - July 29, 2022

## **Maritime Electric**

b) The requested information is provided in the following table based on information available at this time.

Point Lepreau	2019	2020	2021	2022	2023	2024	2025
Actual Cost (\$)	24,442,271	23,984,800	25,758,455	n/a	n/a	n/a	n/a
Forecast Cost (\$)	23,986,000	24,356,000	24,612,000	24,529,250	25,480,902	24,660,636	25,647,122
Outage Days	48	62	100	60	0	50	0
Maintenance and Repair Difference (\$)	(9,978)	(303,989)	1,618,141	n/a	n/a	n/a	n/a
Variance (\$)	456,271	(371,200)	1,146,455	n/a	n/a	n/a	n/a
Fuel and Cost Capital (Savings) (\$)	466,049	(67,211)	(471,686)	n/a	n/a	n/a	n/a
Replacement Energy Cost (\$) <sup>2</sup>	n/a	n/a	4,995,650	n/a	n/a	n/a	n/a
Energy Received (MWh)	228,518	218,053	204,193	212,280	254,040	219,936	254,040
Energy Delivered (MWh)	221,219	211,087	197,670	205,499	245,924	212,910	245,934
Replacement energy (MWh)	32,684	43,600	54,510	41,760	0	34,104	0

Shaded information is the new information provide in response to the interrogatory. "n/a" refers to information that is either not available or cannot be provided due to confidentiality.

<sup>2</sup> Replacement energy cost in 2019 and 2020 was due to planned outages, for which the replacement energy is provided under the EPA and is considered confidential, in accordance with the terms and conditions of the EPA. Likewise, replacement energy cost forecast in 2022 and 2024 is related to planned outages and is considered confidential.

- **IR-5** Company use and system losses Table 5-1
  - a) Please provide a breakdown between use and system losses.
  - b) What is the annual electricity use at 180 Kent St.?
  - c) How many buildings does Maritime Electric have that require electricity? Does Maritime Electric meter and record its monthly electricity use at these buildings?

#### Response:

a) The following table provides Company use and system losses broken out separately.

Net Purchased and Produced Energy (GWh)									
Description	2019 Actual	2020 Actual	2021 Actual	2022 Forecast	2023 Forecast	2024 Forecast	2025 Forecast		
Energy Sales	1,286.9	1,292.8	1,326.0	1,396.9	1,391.7	1,412.2	1,431.1		
Company Use	2.2	2.2	2.2	2.3	2.4	2.4	2.4		
System Losses	96.2	96.8	103.4	105.0	104.6	102.8	104.1		
Total	1,385.3	1,391.8	1,431.6	1,504.2	1,498.7	1,517.4	1,537.6		

b) Annual electricity use at 180 Kent Street for 2021 was 362,916 kilowatt hours ("kWh").

c) At the end of 2021, Maritime Electric had 24 buildings that require electricity, all of which are metered.