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June 24, 2021



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

Dear Commissioners:

**Comprehensive Review of the Energy Cost Adjustment Mechanism
Docket UE20603**

Please find attached the Company's responses to Interrogatories from Commission Staff with respect to the Comprehensive Review of the Energy Cost Adjustment Mechanism.

Yours truly,

MARITIME ELECTRIC

A handwritten signature in blue ink that reads "Gloria Crockett".

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

GCC18
Enclosure



**Response to Interrogatories from Commission Staff
with respect to the
Comprehensive Review
of the
Energy Cost Adjustment Mechanism
Docket UE20603**

Submitted June 24, 2021

Maritime Electric

The Island Regulatory and Appeals Commission (the "Commission"), in assessing the Comprehensive Review of the Energy Cost Adjustment Mechanism submitted by Maritime Electric Company, Limited ("Maritime Electric" or "MECL"), requests responses to the following interrogatories:

- IR-1 The Murphy Report filed in 2004 concluded that capacity costs should not properly be recovered through the ECAM. The Report stated that capacity costs are able to be reasonably forecast for inclusion in basic rates. However, MECL is proposing that capacity costs (namely account 7002 & account 7049) remain in the ECAM.
- a. Please provide justification for continuing to recover capacity costs through the ECAM.

Response:

In the Company's Comprehensive Review of the Energy Cost Adjustment Mechanism ("ECAM Report") filed with the Commission on June 1, 2020, the criteria used to recommend costs that should remain in ECAM are:

- The account and changes in the costs included therein are largely outside the control of the Utility; and
- The potential variance from forecast, individually or in aggregate, may have a significant or material impact on customer rates or the Company's earnings in a particular year.

Further, the JT Browne Consulting Report¹ provided the following opinion:

"the ECAM proposed in the MECL Report, including the criteria for including the accounts in the ECAM is consistent with established regulatory principles and practice."

For customer rate setting purposes, the annual forecast amount for capacity costs are included in the ECAM Base Rate² calculation and recovered annually through basic rates. As a result, only the variances outside the Company's control are deferred in the ECAM balance on the Company's balance sheet.

The capacity costs recorded in account 7002 and 7049 should continue to be recovered through the ECAM because there is the potential for these costs to vary significantly and these variations are largely outside the Company's control.

Account 7002 records the cost of Firm Capacity that is forecast a year or more in advance of when it is needed and is currently based on pricing in the current Energy Purchase Agreement

¹ The JT Browne Consulting Report, also filed with the Commission on June 1, 2020, is a report by an independent third party engaged by the Company to provide an opinion on whether the on the Company's ECAM as proposed in the Comprehensive Review of the Energy Cost Adjustment Mechanism is consistent with established regulatory principles and practices.

² The ECAM Base Rate per kWh is calculated as the total forecast energy costs applicable to ECAM divided by the total forecast net purchased and produced energy in kWh.

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("EPA") with New Brunswick Energy Marketing ("NBEM"). Account 7049 records the cost of incremental capacity that is generally identified a month or less in advance of when it is needed and must be purchased outside the EPA.

There are two primary elements that influence the total cost of a product, price and volume demand. In theory, if both price and volume are stable and predictable then the total cost can be accurately forecast.

The following discussion will demonstrate that the unit price of capacity, up to the forecast level in the EPA, is stable and predictable; however, the volume is not. The variability caused by volume (i.e., demand for energy) can significantly impact the level of capacity required (and resulting cost) and Maritime Electric cannot control that variability. Furthermore, the unit cost of the excess capacity is not known in advance, and while Maritime Electric negotiates in good faith to secure a fair unit price for excess capacity, Maritime Electric is essentially a 'price taker'.

Unit Price of Capacity

Maritime Electric is currently purchasing system capacity³ from NBEM under a five-year EPA that will expire on December 31, 2026⁴. During the negotiation of this EPA, Maritime Electric provided NBEM with a forecast of the expected capacity for the five-year term of the agreement. See Table 1 which is Appendix 3 from the EPA. In this regard, the supply of capacity up to the forecast level and the corresponding unit price is stable and predictable.

**Table 1
Appendix 3 of the Energy Purchase Agreement**

Appendix 3 – Firm Capacity Pricing

Capacity Pricing Schedule (\$CAD)		
Period	Capacity (MW)	Charge (per kW month)
Mar 1, 2019- Dec 31, 2019	115	██████
Jan 1, 2020 – Dec 31, 2020	120	██████
Jan 1, 2021- Dec 31, 2021	125	██████
Jan 1, 2022- Dec 31, 2022	165	██████
Jan 1, 2023 – Dec 31, 2023	173	██████
Jan 1, 2024 – Dec 31, 2024	180	██████
Jan 1, 2025 – Dec 31, 2025	185	██████
Jan 1, 2026 – Dec 31, 2026	190	██████

The unit price of any excess capacity, if required, is negotiated as needed and may be higher than unit pricing secured through the EPA. This introduces variability in the forecasting of capacity costs.

³ Purchasing system capacity includes reserving the required generating capacity and associated transmission capacity in order to deliver the product to PEI.

⁴ The contract, originally set to expire on February 29, 2024 was extended to 2026 on October 22, 2020.

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It should be noted that the forecast capacity secured in the EPA is the amount of capacity Maritime Electric is obligated to purchase even if the actual required capacity turns out to be lower. However, if Maritime Electric is able to provide NBEM with two-years written notice⁵, Clause 3.2-b(i) in the EPA allows a decrease in Firm Capacity below those levels in Appendix 3. Removing this portion of capacity cost from the ECAM would also remove the ability to return to customers any cost savings that result from any decreases in the forecast level of capacity.

Volume of Capacity

Capacity volume, more accurately referred to as demand, is measured in megawatts (“MW”) and system capacity (i.e., total capacity) must equal or exceed peak load⁶. There are a number of factors outside the Company’s control that can cause peak load to change and those factors most relevant to Maritime Electric’s peak load are discussed below.

Weather and Heating Load

On Prince Edward Island (“PEI”), peak load has occurred during the winter season due to heating load⁷, as such winter weather trends play a significant role in estimating future peak load. As the use of electricity for space heating increases and/or winter weather is colder than normal, Maritime Electric’s peak load will continue to be difficult to accurately forecast. Such variability is outside the Company’s control.

For example, in 2019 the winter peak load for January and February was trending higher than expected. This meant that the 2019 capacity forecast provided to NBEM was too low. Maritime Electric informed NBEM additional capacity of 30 MW in January and 15 MW in February was needed. The cost of this incremental capacity was approximately \$200,000 and was recorded in account 7049. The ability to record this additional cost through the ECAM allowed the Company an opportunity to recover a cost required to serve customers over which it had no control.

Electrification of Space Heating and Transportation

Electrified space heating has been on an upward trend for the past decade and has driven most of the load growth experienced by the Company in recent years. Government incentives related to heat pumps is expected to prolong this trend. With more reliance on electric space heating and the impact that climate change is having on winter weather patterns, variability in load projections is expected to increase.

Electrified transportation currently has little penetration in the PEI passenger vehicle market and negligible impact on energy demand requirements. However, Federal and Provincial purchase enticements for electric vehicles (“EVs”) and plug-in hybrid EVs will incent earlier adoption than previously planned. This will increase energy demand and will likely increase peak load, which will increase the level of capacity needed. The rate at which this will occur is unknown and outside the Company’s control.

⁵ While the EPA requires two-years written notice; NBEM has, on occasion, accepted a shorter notice period.

⁶ Peak load is the maximum energy demand at a point in time.

⁷ The use of electricity for space heating increases heating load. Use of air conditioning in the summer is also contributing to load growth. However, summer peak load continues to be lower than winter peak load, which means only the winter peak load currently drives the need for more system capacity.

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Electrification of space heating is having a more immediate impact on Maritime Electric's peak load than electrification of transportation. However, continuing to allow capacity costs to be recovered through the ECAM will allow the Company an opportunity to recover any incremental capacity costs, which are outside the Company's control.

Impact of the Economy

The expansion or contraction of the economy on PEI affects the demand for electricity which, in turn, impacts peak load, and the impact can happen quickly.

For example, Table 2 shows the Company's forecast of Firm Capacity per the EPA that was signed in February 2018 compared to an updated forecast as of November 2019.

**Table 2
Firm Capacity Forecast**

Period	Firm Capacity Forecast as of February 2018 (MW)	Firm Capacity Forecast as of November 2019 (MW)	Variance (MW)
Mar 1, 2019 - Dec 31, 2019	95	115	+ 20
Jan 1, 2020 - Dec 31, 2020	95	120	+ 25
Jan 1, 2021 - Dec 31, 2021	95	125	+ 25
Jan 1, 2022 - Dec 31, 2022	130	160	+ 30
Jan 1, 2023 - Dec 31, 2023	130	160	+ 30
Jan 1, 2024 – Feb 29, 2024	130	160	+ 30

Shortly after the February 2018 EPA was signed, the PEI economy started to grow faster than anticipated and the Company's analysis indicated that the February 2018 forecast of Firm Capacity had quickly become outdated and too low. In less than 24 months, as of November 2019, the five-year forecast of Firm Capacity increased by 20 to 30 MW per year. This change in forecast capacity was outside the Company's control and would have had a material negative impact on the Company's earnings if capacity costs were no longer permitted to flow through the ECAM.

This demonstrates that the variability in capacity costs can be significant and it can occur with very little lead time.

Capacity Decreases

The discussion of weather and heating load, electrification of space heating and transportation, and the economy relate to factors that are expected to increase the need for capacity. However, if forecast capacity is determined to be too high, Clause 3.2-b(i) in the EPA allows a decrease in Firm Capacity below those levels in the EPA Appendix 3 – Firm Capacity Pricing if two-years

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written notice⁸ is provided. Therefore, continuing to permit capacity costs to flow through the ECAM also allows decreases in capacity costs to be passed on to customers.

Multi-Year Rate Setting Periods

The Company and the Commission have both recognized that multi-year rate setting periods are a cost effective⁹, beneficial means of providing predictable customer rate adjustments. However, it is important to note that variability does occur between the forecast of capacity costs for a multi-year period and actual capacity costs, and that variability can be significant.

Table 3 provides a comparison of the forecast capacity costs for the 2016 General Rate Agreement (“GRA”) and the 2019 General Rate Application to the actual capacity costs incurred for those periods¹⁰.

Table 3 Forecast versus Actual Capacity Costs						
Description	2016 GRA			2019 General Rate Application		
	2016	2017	2018	2019	2020	2021
Firm Capacity (Account 7002)						
Application Forecast	\$ 1,418,000	\$ 2,846,154	\$750,000	\$ 5,086,500	\$ 6,600,000	\$ 6,600,000
Actual Incurred*	1,418,000	2,550,000	3,075,000	5,199,100	7,156,200	7,500,000
Over (Under) Variance**	-	(296,154)	2,325,000	112,600	556,200	900,000
Other Capacity (Account 7049)						
Application Forecast	84,099	-	-	52,063	9,907	19,329
Actual Incurred*	136,386	110,000	159,475	240,625	-	14,000
Over (Under) Variance**	52,287	110,000	159,475	188,562	(9,907)	(5,329)

* 2021 is an updated forecast amount as the actual incurred amount will not be known until the end of the year.

** Over variance to be recovered from customers and under variance to be refunded to customers.

The variances in Table 3 demonstrate that even during a relatively short period of time (i.e., a three-year period) there can be significant variability between forecast and actual capacity costs, further supporting the continued recognition of capacity costs through the ECAM.

⁸ While the EPA requires two-years written notice, NBEM has, on occasion, accepted a shorter notice period.

⁹ Murphy Report, 2004, page 2, “Time and cost savings relating to fewer and/or shorter rate hearings”.

¹⁰ The comparisons provided in the Comprehensive Review of the ECAM Report to the Commission were to the corresponding year’s annual budget, which are updated throughout a rate setting period as new information becomes available.

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IR-2 The Murphy Report concluded that volume fluctuations (i.e. costs for the volume of energy above the budget level) should not properly be recovered through the ECAM.

- a. In light of the Murphy Report, please provide justification for continuing to recover volume fluctuations through the ECAM.

Response:

As demonstrated in the discussion that follows, the Murphy Report conclusion pertaining to volume fluctuations is incorrect. Therefore, fluctuations in the volume of energy sold should continue to be recovered or refunded through the ECAM to ensure the Company has a fair opportunity to recover the costs of providing service.

Fundamental cost accounting principles define a cost variance as the difference between actual and budget cost and is made up of two elements, a price variance and volume variance.

A price variance is the difference between the actual versus expected price of whatever is being measured, multiplied by a standard number of units. Electric rates are designed by the Company to collect revenue from customers that includes a forecast base energy cost per kWh (i.e., price), which is based on a forecast. To the extent that actual energy costs incurred are above or below the forecast base energy cost per kWh, this variance currently flows through to the ECAM balance on the Company's balance sheet.

A volume variance is the difference between the actual versus expected unit volume of whatever is being measured, multiplied by a standard price per unit. In the case of ECAM, the volume variance is the difference between the actual net purchased and produced energy¹¹ ("NPP"), measured in kWh, and the budget NPP energy multiplied by the ECAM Base Rate. To the extent that the Company sells more energy than expected, the additional energy cost (i.e., increase in kWh sold multiplied by the base ECAM rate) is currently passed through to the Company's income statement. Alternatively, if the Company sells less energy than expected, the reduced energy costs are passed through to the Company's income statement. This is a critical step to ensuring that the energy costs that flow through to the income statement reflect changes in sales volume from budget.

The Murphy Report was written in 2004 and is now almost 17 years old. At the time, Mr. Murphy's evidence looked solely to historical fuel adjustment mechanisms that existed in the 50 years prior to 2004 and has no resemblance to energy cost deferrals in Canada as they exist today¹² which appropriately capture variances in both price and volume.

¹¹ Net purchased and produced energy is the summation of the energy produced by Maritime Electric-owned generation plus energy purchased from external generation both on- and off-Island less energy consumed by Maritime Electric facilities. The net total represents the energy consumed by customers.

¹² See Appendix 3 of the JT Browne Consulting Report on the Energy Cost Adjustment Mechanism provided as Appendix 2 to the Comprehensive Review of the Energy Cost Adjustment Mechanism filed with the Commission on June 1, 2020.

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On page 5 of the Murphy report, it states:

It is forecast that during 2004, MECL's total volume of energy [purchased] will be 9,995,0000 kWh above the level that was predicted when the budget for 2004 was prepared... thus MECL's proposed ECAM costs must be reduced by the amount of the average incremental purchased energy cost of 6.71 cents/kWh times the increased volume, an amount of \$670,655."

This leads to the Murphy Report's first conclusion on page 6 that "Costs for the volume of energy above the budget level" should not be included in ECAM.

Where Mr. Murphy erred is that the ECAM formula as it exists already addresses the issue of increased volume due to higher sales. This is accomplished by charging the actual NPP multiplied by the forecast energy cost per kWh to the income statement. Table 1 shows the operation of the ECAM formula as it exists compared to Mr. Murphy's erred assumption on its application.

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TABLE 1				
Comparison of Maritime Electric and the Murphy Report's Interpretation of the Operation of ECAM				
2004 ECAM Reconciliation		Maritime Electric (1)	Murphy (2)	Difference (3 = 2-1)
Actual Gross Energy Costs	A	\$ 74,070,532	\$ 74,070,532	\$ -
Lepreau Amortization	B	560,293	560,293	-
Total Costs Applicable for ECAM	C = A + B	74,630,825	74,630,825	-
Adjustment re: Murphy Report	D	-	(670,665)	(670,665)
	E = C + D	\$ 74,630,825	\$ 73,960,161	\$ (670,665)
Total NPP (kWh) - Actual vs Budget	F	1,058,466,149	1,049,743,000	(8,723,149)
ECAM Base Rate	G	\$ 0.0673	\$ 0.0673	\$ 0.0673
Total Base Energy Costs	H = F x G	\$ 71,234,772	\$ 70,647,704	\$ (587,068)
ECAM Adjustment per Income Statement (difference between Actual and Base)	I = E - H	\$ 3,396,053	\$ 3,312,457	\$ (83,597)
Net Energy Costs per Income Statement	J = A - I	\$ 70,674,479	\$ 70,758,075	\$ (83,597)
Reconciliation of Difference				
Forecast 2004 NPP (kWh) per Appendix 2 of Murphy Report	K			1,059,738,000
Actual NPP (kWh) for 2004 as per F above	L			1,058,466,149
Volume Variance	M = K - L			(1,271,851)
ECAM Base Rate	N = E			\$ 0.0673
Cost of Volume Variance	O = M x N			\$ (85,596)
Difference in NPP (kWh) per Appendix 2 Murphy Report	P			9,995,000
ECAM Base Rate	Q = N		\$ 0.0673	
Rate used by Murphy to calculate difference (page 21 of Murphy Report)	R		0.0671	
Difference in Energy Cost per kWh per Murphy Report	S = Q - R			0.0002
Total Difference due to Rate Differential	T = P x S			\$ 1,999
Reconciled Difference	U = O + T			\$ (83,597)

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Under item (7) on page 21 of his report, Mr. Murphy states that "... MECL recovers its costs for this additional costs at its tariff rates. Allowing such costs as part of ECAM would mean that MECL would be recovering these costs twice." This statement could only be true if the volume of energy passing through to the income statement is the budget NPP, as illustrated above in Mr. Murphy's operation of ECAM. However, that is not how the ECAM formula operates as illustrated above by the Maritime Electric operation of ECAM.

As per the letter from J. W. Geldert to IRAC dated January 5, 2005¹³, the Company choose to expense the adjustment of \$670,655 proposed in the Murphy Report (dated December 28, 2004) in order to close the books for 2004 even though the Company considered this an error by Mr. Murphy in his conclusions. In doing so, the Company essentially double charged its income statement for the energy costs associated with the additional volume of energy required to meet sales as follows:

1. The actual energy costs as a result of higher sales volume are included in Gross Energy Costs but excluded from flowing through to ECAM, and remain as an expense on the Income Statement.
2. Base energy costs were recorded at the actual NPP multiplied by the ECAM Base Rate thereby expensing the associated energy costs for higher sales volume a second time.

As a result, the ECAM adjustment reported on the Company's Income Statement for 2004 was \$2,725,389 (\$3,396,053 - \$670,655) and Net Energy Costs were \$71,345,143 (\$70,674,479 + \$670,655). This is a direct contradiction to Mr. Murphy's conclusion on page 21 of his report and is illustrated Table 2.

TABLE 2				
Comparison of 2004 Results Under Normal Operation of ECAM and Actual Results Including Murphy Adjustment				
2004 ECAM Reconciliation		Normal Operation of ECAM	Actual 2004 Financial Statements¹⁴	Overstatement of 2004 Net Energy Costs Expensed
Actual Gross Energy Costs	A	\$ 74,070,532	\$ 74,070,532	\$ -
Lepreau Amortization	B	560,293	560,293	-
Total Costs Applicable for ECAM	C = A + B	74,630,825	74,630,825	-
Adjustment re: Murphy Report	D	-	(670,665)	(670,665)
	E = C + D	\$ 74,630,825	\$ 73,960,161	\$ (670,665)
Total Actual NPP (kWh)	F	1,058,466,149	1,058,466,149	-
ECAM Base Rate	G	\$ 0.0673	\$ 0.0673	\$ -
Total Actual Base Energy Costs	H = F x G	\$ 71,234,772	\$ 71,234,772	\$ -
ECAM Adjustment per Income Statement (Difference Between Actual & Base)	I = E - H	\$ 3,396,053	\$ 2,725,389	\$ (670,665)
Net Energy Costs per Income Statement	J = A - I	\$ 70,674,479	\$ 71,345,143	\$ (670,665)

¹³ Attached hereto as IR #2 – Attachment 1 for ease of reference.

¹⁴ Month end financial statements for December 31, 2004 are attached hereto as IR #2 – Attachment 2.

Changing the ECAM mechanism to operate in this manner would expose the Company to significant risk when sales volume variances occur. This can be demonstrated by comparing the financial results for each of the last two fiscal years when the Company experienced significant fluctuations in sales volumes compared to budget. Fiscal year 2019 demonstrates the impact of an unexpected increase in sales volume while fiscal 2020 demonstrates the impact of an unexpected decrease in sales volume.

In 2019, the economy on PEI was accelerating with new housing starts well above historical levels and high uptake of government programs supporting electrification of space heating. This led to sales being 4.7 per cent higher than plan. Had the Company reduced the gross energy costs flowing through the ECAM by the energy costs incurred to meet the increased sales volume in addition to recording base energy costs at the actual NPP, the Company would have recorded additional energy costs of \$5.5 million.

As illustrated in Table 3, higher energy costs of \$5.5 million would have more than offset 2019 RORA adjustment of \$3.5 million and reduced regulated earnings by \$1.3 million (after factoring in the income tax impact). The Company's resulting Regulated ROE would have been 8.50 per cent, well below the allowed ROE of 9.35 per cent.

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Table 3 Comparison of Actual 2019 Financial Results to 2004 Murphy Report Adjustment					
2019 ECAM Reconciliation		Maritime Electric	2004 Murphy Adjustment	Overstatement of Net Energy Costs Expensed	
Actual Gross Energy Costs	A	\$127,020,670	\$127,020,670		
Insurance, Property Tax and Training not included in ECAM	B	(828,143)	(828,143)		
Lepreau and DSM Amortization	C	250,598	250,598		
Total Costs Applicable for ECAM	D = A + B + C	126,443,125	126,443,125		
Adjustment re: Murphy Report	E	-	(5,451,062)		
	F = D + E	\$126,443,125	\$120,992,063		
Total Actual NPP (kWh)	G	1,385,298,410	1,385,298,410		
ECAM Base Rate	H	\$0.09161	\$0.09161		
Total Base Energy Costs	I = G x H	\$126,907,187	\$126,907,187		
Difference Between Actual and Base	J = F - I	(464,062)	(5,915,125)		(5,451,062)
Net Energy Costs per Income Statement	K = J - A	\$127,484,732	\$132,935,795		\$5,451,062
Regulated Earnings per 2019 Financial Statements	L	\$14,262,630			
Increase in Energy Costs per Murphy Report	M	(5,451,062)			
Reversal of 2019 RORA Adjustment	N	3,509,123			
Tax Impact of Additional Energy Costs and RORA	O = (M + N) x 31%	602,001			
Revised Regulated Earnings	P = L + M + N + O	\$12,922,692	V = P/S	8.50%	
Average Regulated Common Equity per 2019 FS	Q	\$152,614,404			
After Tax Adjustment of Murphy Report Adjustment @ 50%	R = (M + N + O) x 50%	(669,969)			
Revised Common Equity	S = Q + R	151,944,435	W = S / U	39.23%	
Average Total Debt per 2019 FS	T	235,414,037	X = T / U	60.77%	
Revised Average Total Debt & Equity	U	\$387,358,472		100.00%	

While 2020 started out on a similar trend to 2019, the onset of the COVID-19 pandemic in mid-March had a dramatic impact on the Island economy and electricity sales growth dropped accordingly. Sales in 2020 were 4.7 per cent below plan. Had the Company increased the gross energy costs flowing through ECAM by the energy costs saved from the reduced sales volume in addition to recording lower base energy costs at the actual NPP, the Company would have recorded \$5.4 million less in energy expenses.

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As illustrated in Table 4, lower energy costs of \$5.4 million would have resulted in the Company recording a corresponding RORA adjustment of \$5.0 million in 2020 and increased regulated earnings by \$0.3 million (after factoring in the income tax impact), thereby achieving the Company's maximum Regulated ROE of 9.35 per cent.

Table 4				
Comparison of Actual 2020 Financial Results to 2004 Murphy Report Adjustment				
2020 ECAM Reconciliation		Maritime Electric	Murphy	Understatement of Net Energy Costs Expensed
Actual Gross Energy Costs	A	\$129,519,544	\$ 129,519,544	
Insurance, Property Tax and Training not included in ECAM	B	(904,732)	(904,732)	
Lepreau and DSM Amortization	C	221,047	221,047	
Total Costs Applicable for ECAM	D = A + B + C	128,835,859	128,835,859	
Adjustment re: Murphy Report	E	-	5,405,587	
	F = D + E	\$128,835,859	\$ 134,241,446	
Total NPP (kWh)	G	1,391,802,566	1,391,802,566	
ECAM Base Rate	H	\$ 0.09161	\$ 0.09161	
Total Base Energy Costs	I = G x H	\$127,503,033	\$ 127,503,033	
Difference Between Actual and Base	J = F - I	1,332,826	6,738,413	5,405,587
Net Energy Costs per IS	K = J - A	\$128,186,718	\$ 122,781,131	\$ (5,405,587)
Regulated Earnings per 2020 Financial Statements	L	\$ 14,382,353		
Decrease in Energy Costs per Murphy Report	M	5,405,587		
Adjustment to RORA	N	(5,025,000)		
Tax Impact of Additional Energy Costs and RORA	O = (M + N) x 31%	(117,982)		
Revised Regulated Earnings	P = L + M + N + O	\$ 14,762,940	V = P / S	9.35%
Average Regulated Common Equity per 2020 FS	Q	\$157,695,640		
After Tax Adjustment of Murphy Report Adjustment @ 50%	R = (M + N + O) x 50%	190,294		
Revised Common Equity	S = Q + R	157,885,934	W = S / U	39.26%
Average Total Debt per 2020 FS	T	244,291,569	X = T / U	60.74%
Revised Average Total Debt and Equity	U	\$401,177,503		100.00%

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Approved basic customer rates are set based on recovering energy costs at the ECAM Base Rate. The ECAM, as it currently operates, adjusts energy costs due to volume changes in kWh sales by recording energy expenses at the actual NPP incurred multiplied by the ECAM Base Rate, thereby ensuring a proper matching of revenue and expense. Changing the mechanism to exclude gross energy costs due to sales volume changes while still recording base energy costs at the actual NPP results in double counting variances in energy costs due to volumetric changes in sales, as first demonstrated in the Table 2. Additionally, Tables 3 and 4 further demonstrate how changing the mechanism in this manner would introduce improper matching of revenue and expense and result in earnings volatility for the Company and customer electricity rate instability.

Maritime Electric

- IR-3 With respect to Account 7415 - MICF Government-Owned Miscellaneous Labour & Expense, the account description indicates that costs incurred in the maintenance of Government-owned facilities associated with the Maritime Interconnection are included in this account.
- a. Please explain why this account cannot be appropriately budgeted and included in base rates.
 - b. Please provide further justification for the inclusion of this account in the ECAM.

Response:

- a. Account 7415 captures all costs associated with operating and maintaining the four Government-owned submarine cables, which is required by the cable interconnection lease agreements. Such operating and maintenance costs include: (i) the cable interconnection debt collection payments; (ii) NB schedule 9 charges; (iii) contributions to the cable contingency fund; and (iv) cable inspections and testing costs, and repairs and maintenance costs. For customer rate setting purposes, the annual forecast costs are included in the ECAM Base Rate calculation and recovered annually in customer basic rates. As a result, only variances outside the Company's control are captured in the ECAM balance on the Company's balance sheet.

Cable Interconnection Debt Collection Payments

The cable interconnection debt collection payments are fixed for the current five year term, March 1, 2017 to February 28, 2022, of the PEI-NB Interconnection Facilities Debt Collection Agreement (the "Agreement"). However, under the terms of the Agreement, the debt collection renewal rates will be adjusted to incorporate any changes required to the allocation of cost to the City of Summerside and Maritime Electric (i.e., the collection ratios), changes in the interest rate available to the PEIEC, and any shortfall in collections due to other input changes during the term of the agreement.

The debt collection payment also includes contributions to a sinking fund that may be adjusted when the debt collection agreement is renewed¹⁵. The Company's next General Rate Application ("GRA") will be for a three-year rate setting period beginning on March 1, 2022. The debt collection payments for that three-year period will not be known prior to the filing of the GRA and the debt collection payments will likely change during that three-year period. Furthermore, the Company has no control over the extent to which the debt collection payments may change. To ensure the Company has a fair opportunity to recover the debt collection payment amount, variances in that amount should continue to be included in the ECAM.

NB Schedule 9 Charges

The NB Schedule 9 charge is incurred monthly under the current terms of the NB Power Open Access Transmission Tariff ("OATT"). The NB Schedule 9 charge is an operating, maintenance and administration ("OM&A") related carrying charge and includes both direct and indirect OM&A expense and taxes. Maritime Electric incurs a NB Schedule 9

¹⁵ The current term of the agreement will expire on February 28, 2022.

Maritime Electric

charge related to the direct assignment interconnection facility at Cape Tormentine. Similar to Maritime Electric's OATT, the NB Power OATT is updated regularly to ensure that the OATT rates are fair and reasonable. Hence, the amounts charged are subject to changes and Maritime Electric has no control over the timing or amount of changes to the tariff. To the extent that NB Power experiences a material change in its OM&A charges, it is reasonable to assume that it would request and receive approval for a change to the NB Schedule 9 charge to recover those costs. To ensure the Company has a fair opportunity to recover NB Schedule 9 charges, variances in that amount should continue to be included in the ECAM.

Contributions to the Cable Contingency Fund

Under the terms of the PEI-NB Interconnection Lease Agreement, Maritime Electric is required to remit \$375,000 annually to the PEIEC for a Cable Contingency Fund (the "Fund") until the balance of the fund reaches \$5.0 million¹⁶. The Fund will be held in trust with interest by the Prince Edward Island Energy Corporation ("PEIEC") for Capital Replacements up to the amount of the fund.

While there is limited risk that the annual contribution will change, the Company recommends that all costs related to the submarine cables, including the contribution to the Fund, continue to be recorded in account 7415.

Cable Testing and Inspections, Repairs and Maintenance Costs

The four submarine cables are in the Northumberland Strait which experiences harsh weather conditions. The Company budgets annually for inspections¹⁷ and electrical testing for the cables on a rotational basis. It is difficult; however, to accurately predict the cost to remediate issues that may be uncovered through the inspection process.

The Northumberland Strait also experiences high volumes of marine traffic from small fishing vessels to large cargo and cruise ships. In December 1997, a potato vessel dragged its anchor across one of the original cables and severed the connection. The resulting repairs took several weeks to complete and the costs were significant. In this incident, the repairs were covered by Maritime Electric's insurance¹⁸; however, any insurance claim is susceptible to denial and there could be instances where such an incident would not be covered by insurance.

In 2012, a leak in one of the original submarine cables resulted in significant repair and remediation costs over the course of two years. The majority of the costs were approved for recovery from the Cable Contingency Fund. However, not all costs were recovered and as a result, significant variances¹⁹ from budget were incurred by the Company and flowed through the ECAM account.

¹⁶ Based on Maritime Electric's contributions to the fund from 2013 to date, it is expected that the fund will reach the \$5.0 million balance in 2027, depending on the outcome of the Maritime Electric's Complaint filed under Section 12.5 of the OATT filed with the Commission on February 3, 2021.

¹⁷ Inspections require hiring highly experienced diving teams to perform visual inspections of the cables for undermining (exposed areas under the cables), areas of the cables where the top is exposed, leaks in the oil system for Cables 1 and 2, etc.

¹⁸ Under the terms of the lease agreements in place, the Company is required to insure the cables at replacement cost.

¹⁹ In 2012, actual costs were \$389,000 or 1,435 per cent higher than budget and in 2013 actual costs were \$401,000 or 1,375 per cent higher than budget.

Maritime Electric

As demonstrated by the above examples, there is a significant uncertainty in forecasting the cost of testing, inspecting, repairing and maintaining the submarine cables. To ensure the Company has a fair opportunity to recover these costs, variances should continue to be included in the ECAM.

- b. Maritime Electric does not own the four submarine cables. However, under the terms of the cable lease agreements, Maritime Electric shall operate, maintain and repair the cables in accordance with Good Utility Practice. In urgent or emergency situations, without Owner consultation and prior approval, Maritime Electric shall respond with operating, maintenance and repair actions. This obligation creates an uncertainty around budget amounts, and as outlined in the response to part a. of this interrogatory, and a potential variance, could have a material impact on customer rates or the Company's earnings. For these reasons, Account 7415 – M.I.C.F. Government-Owned Miscellaneous Labour & Expense should remain in ECAM.



IR-2 - Attachment 1

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**MARITIME
ELECTRIC**
A FORTIS COMPANY

January 5, 2005

Island Regulatory and Appeals Commission
501 - 134 Kent Street, PO Box 577
Charlottetown, PE C1A 7L1

Dear Sirs;

Re: Murphy Report

This is in response to Mr. John Murphy's report "Evaluation of Maritime Electric Company Limited Proposed Energy Cost Adjustment Mechanism" dated December 28, 2004.

Identification of Expense Categories Qualifying Within ECAM

In his review, Mr. Murphy proposes that a number of expense classifications that Maritime Electric has included within ECAM should be excluded from the calculation and included in recovery from Basic Rates. In his conclusion (p.25) Mr. Murphy notes:

"Although it is recognized that during the 2001 - 2003 timeframe MECL was allowed to include all of the other costs within the ECAM, it would be inconsistent with other jurisdictions to allow such costs to form part of the ECAM in the long term. The regulator has many options regarding how it might make the change from the previous practice to a more theoretically correct future."

While Maritime Electric does not necessarily agree with Mr. Murphy's view on what expense classifications should be included in ECAM, it does agree with his observations that the Company's proposal should be viewed as a transitional one, to be reviewed when the Company files its next application for rates, currently expected to be in early 2006. Accordingly, Maritime Electric proposes that Mr. Murphy's comments in this regard be deferred for consideration at that time, and that the Company's proposal be viewed as a transitional mechanism.

.../2



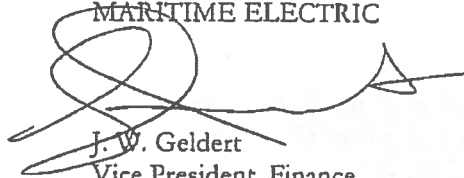
IR-2 - Attachment 2

Cost Due to Volume-Level Changes in Total Purchased Power

On Page 21 of his report, Mr. Murphy asserts that as a result of energy sales being above budget, Maritime Electric's proposed ECAM will see a double recovery of \$670,665 in 2004. Maritime Electric believes Mr. Murphy to be in error in his conclusion; however, in order to enable the Company to close its books for 2004, Maritime Electric is prepared to expense that amount in its 2004 accounts.

Yours truly,

MARITIME ELECTRIC

A handwritten signature in black ink, appearing to be "J. W. Geldert", written over the printed name.

J. W. Geldert
Vice President, Finance
& Chief Financial Officer

JWG03

Maritime Electric Company, Limited
Monthly Report
to
Island Regulatory and Appeals Commission
December 2004

- Balance Sheet
- Statement of Earnings
- Cash Flow
- Retained Earnings & Long-Term Debt Schedule
- Statement of Revenue
- Statement of Operating Expenses
- Statement of General Expenses
- Statement of Capital Projects
- Analysis of Kilowatt Hour Sales and Unit Revenue
- Statement of Purchased and Produced Energy Costs
- Ratio Analyses

Maritime Electric
Balance Sheet
December 31, 2004
(unaudited)

	This Year	Last Year	Change
ASSETS			
Fixed Assets:			
Property, plant and equipment	317,099,121	293,006,862	24,092,259
Less: Accumulated amortization	108,237,863	101,711,427	6,526,436
	208,861,258	191,295,435	17,565,823
Other Long-Term Assets			
Costs recoverable from customers	19,508,989	20,783,600	(1,274,611)
Investment in FortisUS Energy	15,296,022	15,296,022	
Deferred charge	3,361,739	3,922,033	(560,294)
	38,166,750	40,001,655	(1,834,905)
Current Assets			
Cash	91,832	358,449	(266,617)
Accounts receivable	15,705,842	14,969,219	736,623
Costs recoverable from customers - current	2,500,000		2,500,000
Materials and supplies	3,331,829	3,245,747	86,082
Prepaid expenses	414,469	412,757	1,712
	22,043,972	18,986,172	3,057,800
	269,071,980	250,283,262	18,788,718

SHAREHOLDER'S EQUITY AND LIABILITIES

Shareholder's Equity			
Common shares	31,100,681	31,100,681	
Retained earnings	68,815,964	61,636,565	7,179,399
	99,916,645	92,737,246	7,179,399
Long-Term Debt	92,000,000	92,000,000	
Other Long-Term Liabilities			
Employee future benefits	7,644,333	6,802,940	841,393
Future income taxes	17,999,894	18,499,694	(499,800)
Contributions	11,287,317	11,091,535	195,782
	36,931,544	36,394,169	537,375
Current Liabilities			
Short-term borrowings	22,065,000	12,100,000	9,965,000
Future income taxes	2,169,000	1,173,000	996,000
Accounts payable and accrued liabilities	15,989,791	15,878,847	110,944
	40,223,791	29,151,847	11,071,944
	269,071,980	250,283,262	18,788,718

Capital Structure as at Balance Sheet Date - PEI

Total Debt	57.4%	57.3%	0.1%
Common Equity	42.6%	42.7%	-0.1%

Maritime Electric
Statement of Earnings
For the Twelve Months Ending December 31, 2004
(unaudited)

	Current Month		Year to Date		12 Months to Date	
	This Year	Budget	Last Year	This Year	Last Year	Budget
Gross Revenue	9,977,416	8,096,458	9,234,878	116,906,692	96,269,938	96,605,056
ECAM 2003 Recovery	1,333,350			(1,500,000)		
Net Revenue	11,310,766	8,096,458	9,234,878	115,406,692	96,269,938	96,605,056
Operating Expenses						
Energy costs	6,093,600	6,876,545	6,603,869	74,070,532	70,779,644	70,668,864
ECAM adjustment	1,134,349	(1,825,589)	(1,778,628)	(2,725,389)	(17,408,404)	(16,874,381)
Net energy costs	7,227,949	5,050,956	4,825,241	71,345,143	53,371,240	53,794,483
Transmission and distribution	259,207	224,277	335,281	2,659,484	2,663,230	2,720,711
General	1,228,251	817,225	1,583,018	9,799,569	9,518,415	9,081,862
	8,715,408	6,092,458	6,743,539	83,804,196	65,552,886	65,597,056
Amortization - other	46,691	46,691	78,381	560,294	940,574	560,294
Amortization - fixed assets	707,768	713,308	768,205	8,615,784	8,206,555	8,559,707
Operating Income	1,840,900	1,244,001	1,644,754	22,426,418	21,569,923	21,887,999
Financing Expenses						
Long-term debt	722,979	722,980	722,979	8,675,750	8,675,750	8,675,760
Short-term debt	62,786	82,909	54,561	512,496	606,650	838,000
Interest charged to construction	(4,841)	(129,980)	(56,701)	(531,861)	(260,671)	(797,000)
	780,923	675,909	720,839	8,656,385	9,021,729	8,716,760
Earnings Before Income Taxes	1,059,976	568,092	923,915	13,770,034	12,548,194	13,171,239
Income taxes	418,673	228,000	348,876	5,590,635	5,370,627	5,290,000
Net Earnings	641,303	340,092	575,039	8,179,399	7,177,567	7,881,239

Maritime Electric
Statement of Cash Flows
For the Twelve Months Ending December 31, 2004
(unaudited)

	<u>This Year</u>	<u>Last Year</u>
Cash Flows from (used in) Operating Activities		
Net Earnings	8,179,399	7,177,567
Items not affecting cash		
Amortization	8,615,784	8,206,555
Amortization - other	560,294	940,574
Future income taxes	496,200	(885,920)
Accrued employee future benefits	841,393	929,192
	18,693,070	16,367,968
Current assets	(824,417)	416,127
Current liabilities	110,945	3,571,554
	17,979,598	20,355,649
Cash Flows from (used in) Investing Activities		
Costs recoverable from customers	(1,225,389)	(859,562)
Fixed assets	19,559	(1,144)
Fixed assets	(26,806,448)	(16,529,574)
	(28,031,837)	(17,389,136)
Cash Flows from (used in) Financing Activities		
Change in short-term borrowings	9,965,000	(3,125,000)
Contributions	820,622	640,905
Dividends	(1,000,000)	
	9,785,622	(2,484,095)
Increase (Decrease) in Cash	(266,617)	482,418
Cash (Bank Indebtedness), Beginning of Period	358,449	(123,968)
Cash (Bank Indebtedness), End of Period	91,832	358,450
Additional Information		
Amortization - contributions	(624,840)	(622,145)

Maritime Electric
Statement of Retained Earnings
For the Twelve Months Ending December 31, 2004
and
Schedule of Long-Term Debt
December 31, 2004

	<u>2004</u>	<u>2003</u>
Statement of Retained Earnings		
Balance at the beginning of the period	61,636,565	54,458,998
Earnings applicable to common shares	8,179,399	7,177,567
Dividends Paid	1,000,000	
	<u>68,815,964</u>	<u>61,636,565</u>
Balance at the end of the period	<u>68,815,964</u>	<u>61,636,565</u>

Schedule of Long-Term Debt

First Mortgage Bonds		
12% Series - due 2010	15,000,000	15,000,000
11.5% Series - due 2016	12,000,000	12,000,000
8.55% Series - due 2018	15,000,000	15,000,000
7.57% Series - due 2025	15,000,000	15,000,000
8.625% Series - due 2027	15,000,000	15,000,000
8.92% Series - due 2031	20,000,000	20,000,000
	<u>92,000,000</u>	<u>92,000,000</u>

Maritime Electric
Statement of Revenue
For the Twelve Months Ending December 31, 2004
(unaudited)

Description	Current Month		Year to Date		12 Months to Date	
	This Year	Budget	This Year	Budget	This Year	Budget
Electric Revenue						
Residential	4,806,272	3,998,500	55,131,900	46,594,700	55,131,900	46,594,700
General Service I	3,392,207	2,851,700	41,108,523	35,068,100	41,108,523	35,068,100
General Service II	52,845	42,000	616,468	525,400	616,468	525,400
Small Industrial	576,565	382,200	6,881,656	5,123,100	6,881,656	5,123,100
Large Industrial	735,980	626,600	9,371,910	7,946,700	9,371,910	7,946,700
Street and Yard Lighting	137,508	116,300	1,625,184	1,412,200	1,625,184	1,412,200
Unmetered	18,787	13,700	190,168	138,900	190,168	138,900
	9,720,165	8,031,000	114,925,811	96,809,100	114,925,811	96,809,100
Transmission	46,161	45,000	503,376	494,900	503,376	494,900
Other						
Penalty Revenue	36,932	33,800	433,505	385,900	433,505	385,900
Service Connections	34,628	31,300	425,857	424,800	425,857	424,800
Miscellaneous Revenue	139,530	39,900	618,145	449,300	618,145	449,300
	211,090	105,000	1,477,506	1,260,000	1,477,506	1,260,000
Gross Revenue	9,977,416	8,181,000	116,906,692	98,564,000	116,906,692	98,564,000
Cost of Capital						
ECAM 2003 Recovery	1,333,350	(84,542)	(1,500,000)	(1,958,944)	(1,500,000)	(1,958,944)
Total Revenue	11,310,766	8,096,458	115,406,692	96,605,056	115,406,692	96,605,056

Maritime Electric
Statement of Operating Expenses
For the Twelve Months Ending December 31, 2004
(unaudited)

Description	Current Month		Year to Date		12 Months to Date	
	This Year	Budget	This Year	Budget	This Year	Budget
Purchased Energy Costs						
NR Power	3,611,295	2,903,353	42,802,529	33,145,744	42,802,529	33,145,744
Ismera	166,005	1,188,703	3,852,294	13,105,875	3,852,294	13,105,875
Point Lepreau	896,797	865,678	11,395,973	10,084,364	11,395,973	10,084,364
Dalhousie	887,486	769,471	9,980,107	9,004,257	9,980,107	9,004,257
Wind and Other	206,992	322,409	2,282,106	2,939,789	2,282,106	2,939,789
	<u>5,768,575</u>	<u>6,049,614</u>	<u>70,313,010</u>	<u>64,345,610</u>	<u>70,313,010</u>	<u>68,280,029</u>
On-Island Production Costs						
Generation Fuel Bunker	83,031	672,742	1,505,706	672,742	1,505,706	672,742
Diesel	23,522	4,323	174,425	51,645	174,425	51,645
Operating and Maintenance	218,472	149,866	2,077,391	1,664,418	2,077,391	1,664,418
	<u>325,026</u>	<u>826,931</u>	<u>3,757,522</u>	<u>2,388,835</u>	<u>3,757,522</u>	<u>2,388,835</u>
Gross Energy Costs	<u>6,093,600</u>	<u>6,876,545</u>	<u>74,070,532</u>	<u>70,668,864</u>	<u>74,070,532</u>	<u>70,668,864</u>
ECAM Adjustment	<u>1,134,349</u>	<u>(1,825,589)</u>	<u>(2,725,389)</u>	<u>(16,874,381)</u>	<u>(2,725,389)</u>	<u>(16,874,381)</u>
Net Energy Costs	<u>7,227,949</u>	<u>5,050,956</u>	<u>71,345,143</u>	<u>53,794,483</u>	<u>71,345,143</u>	<u>53,794,483</u>
Transmission and Distribution						
Maintenance Substations	8,338	7,754	87,385	83,128	87,385	92,630
Rights of Way	40,671	25,998	440,269	504,160	440,269	600,678
Lines	105,354	84,595	1,136,589	1,141,135	1,136,589	1,010,421
Line Control Devices	6,137	15,265	84,274	103,379	84,274	93,486
Transformers	41,267	39,960	479,764	448,797	479,764	477,056
Meters	36,623	10,217	156,563	151,275	156,563	162,698
Communication System	6,875	9,035	110,344	95,048	110,344	107,947
Supervisory Scada System	3,930	12,853	58,751	49,040	58,751	64,674
Engineering	10,011	18,600	104,049	111,121	104,049	111,121
Miscellaneous Labor and Expense			1,496	87,269	1,496	
Total	<u>259,207</u>	<u>224,277</u>	<u>2,659,484</u>	<u>2,720,711</u>	<u>2,659,484</u>	<u>2,720,711</u>

Maritime Electric
Statement of General Expenses
For the Twelve Months Ending December 31, 2004
(unaudited)

Description	Current Month		Year to Date		12 Months to Date	
	This Year	Budget	This Year	Budget	This Year	Budget
General Expenses	551,548	327,876	818,051	3,661,628	4,001,602	3,661,628
Supervision and Management	31,087	85,766	106,187	1,011,940	871,324	1,011,940
Administrative Support and General Administrat	42,738	50,412	53,495	602,205	545,988	602,205
Customer Service Support	54,995	54,522	50,575	626,110	562,354	626,110
Meter Reading	46,596	45,026	40,528	537,947	593,870	537,947
Insurance	191,082	136,849	137,443	1,634,994	1,619,962	1,634,994
Property Taxes	3,496	30,000	1,743	145,000	160,464	145,000
Directors' Fees	71,716	34,076	329,943	381,739	381,053	381,739
Professional Services	173,833	9,709	12,665	115,991	264,685	115,991
Uncollectible Accounts	-45,031	19,240	27,825	210,000	646,416	210,000
Regulation	16,131	23,749	4,562	154,308	151,851	154,308
General Property Expenses (net)						
Total	1,228,251	817,225	1,583,018	9,081,862	9,799,569	9,081,862

Maritime Electric
Statement of Capital Projects
For the Twelve Months Ending December 31, 2004
(unaudited)

Description	Current Month	Year to Date	Budget	Percent of Budget Spent
Production				
10001 - CTGS Building and Services Projects	2,656	82,076	159,000	51.62%
10002 - CTGS Boiler Projects	16,387	423,290	534,000	79.27%
10003 - CTGS Turbine Generator Projects	374,153	941,923	950,000	99.15%
10163 - CTGS Gas Turbine	2,648,797	9,620,462		
20004 - BGS Projects	55,089	110,617	232,000	47.68%
	3,097,082	11,178,368	1,875,000	596.18%
Transmission and Distribution				
70200 - Replacements Storms, Road Alterations	70,085	469,415	453,000	103.62%
70202 - Distribution Transformers	51,308	2,058,997	1,856,000	110.94%
70203 - Services and Street Lighting	185,288	2,283,118	1,708,000	133.67%
70204 - Line Extensions	(8,081)	1,025,802	1,014,000	101.16%
70205 - Line Rebuilds	173,877	2,434,961	2,044,000	119.13%
	472,477	8,272,293	7,075,000	116.92%
Less Contributions	147,388	(820,622)	(725,000)	113.19%
	619,865	7,451,671	6,350,000	117.35%
70206 - System Meters	99,390	505,608	379,000	133.41%
70207 - T & D Equipment	110,917	539,440	580,000	93.01%
70209 - Communications	10,914	151,847		
70210 - T & D Projects	(23)	24,402		
70220 - Substation Projects	259	1,137	1,120,000	0.10%
80219 - Transmission Projects	128,369	1,295,370	1,166,000	111.10%
	969,691	9,969,475	9,595,000	103.90%
Corporate				
90130 - Corporate Services	1,439	151,083	149,000	101.40%
90131 - Hardware Aquisitions	11,367	114,833	122,000	94.13%
90132 - Customer Network Development	2,613	7,276	63,000	11.55%
90133 - Software Development and Upgrades	17,166	157,013	180,000	87.23%
90134 - Mapping and GIS	(646)	90,305	107,000	84.40%
90136 - Energy Purchase System	2,529	50,929	25,000	203.72%
90138 - Field Efficiency	5,902	38,471	63,000	61.07%
90139 - Billing System Upgrades	7,444	60,765	52,000	116.86%
90141 - Transportation Equipment	81,998	556,926	611,000	91.15%
	129,812	1,227,601	1,372,000	89.48%
Total Capital	4,196,585	22,375,444	12,842,000	174.24%
General Expense Capitalized	162,489	1,538,836	1,484,000	103.70%
Interest Charged to Construction	4,841	531,861	196,000	271.36%
	4,363,915	24,446,141	14,522,000	168.34%

Maritime Electric
Analysis of Kilowatt Hour Sales and Unit Revenue
For the Twelve Months Ending December 31, 2004
(unaudited)

	Current Month		Year to Date		2004
	This Year	Budget	This Year	Budget	
Kilowatt Hour Sales					
Residential	37,493,377	36,912,000	410,672,368	408,749,000	408,749,000
General Service I	28,606,290	28,524,000	341,516,960	341,266,000	341,266,000
General Service II	429,260	414,000	5,002,534	5,010,000	5,010,000
Small Industrial	5,588,242	4,304,000	67,411,630	57,858,000	57,858,000
Large Industrial	11,200,472	12,100,000	145,296,477	146,948,000	146,948,000
Street & Yard Lighting	458,736	450,000	5,419,342	5,320,000	5,320,000
Unmetered	135,804	132,000	1,446,346	1,298,000	1,298,000
Total Kilowatt Hour Sales	83,912,181	82,836,000	976,765,657	966,449,000	966,449,000
Unit Revenue (\$0.0000)					
Residential	0.1282	0.1083	0.1342	0.1140	0.1140
General Service I	0.1186	0.1000	0.1204	0.1028	0.1028
General Service II	0.1231	0.1014	0.1232	0.1049	0.1049
Small Industrial	0.1032	0.0888	0.1021	0.0885	0.0885
Large Industrial	0.0657	0.0518	0.0645	0.0541	0.0541
Street & Yard Lighting	0.2998	0.2584	0.2999	0.2655	0.2655
Unmetered	0.1383	0.1038	0.1315	0.1070	0.1070
Total Average Unit Revenue	0.1158	0.0970	0.1177	0.1002	0.1002

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Maritime Electric
Statement of Purchased and Produced Energy Costs
For the Twelve Months Ending December 31, 2004
(unaudited)

	Current Month		Year to Date		2004 Budget
	This Year	Last year	This Year	Budget	
Purchased Energy (kWh)					
NB Power	61,490,000	56,209,000	645,266,000	462,564,000	462,564,000
Emera		(600,000)	20,924,000	171,680,000	171,680,000
Point Lepreau	19,375,000	20,304,000	194,052,000	209,621,500	209,621,500
Dalhousie	13,128,000	13,234,000	151,211,000	152,833,500	152,833,500
Wind and Other	4,236,040	4,185,902	38,677,340	47,544,000	47,544,000
	<u>98,229,040</u>	<u>93,332,902</u>	<u>1,050,130,340</u>	<u>1,044,243,000</u>	<u>1,044,243,000</u>
On-Island Generation (kWh)					
Charlottetown Plant					
Gross	181,000	688,640	11,257,540	5,000,000	5,000,000
Station Service	(282,720)	(494,589)	(3,325,611)		
Net	<u>(101,720)</u>	<u>194,051</u>	<u>7,931,929</u>	<u>5,000,000</u>	<u>5,000,000</u>
Borden Plant					
Gross	68,000	15,000	887,000	500,000	500,000
Station Service	(54,347)	(55,840)	(483,120)		
Net	<u>13,653</u>	<u>(40,840)</u>	<u>403,880</u>	<u>500,000</u>	<u>500,000</u>
Total NPP Gross	<u>98,478,040</u>	<u>94,036,542</u>	<u>1,062,274,880</u>	<u>1,049,743,000</u>	<u>1,049,743,000</u>
Total NPP Net	<u>98,140,973</u>	<u>93,486,113</u>	<u>1,058,466,149</u>	<u>1,049,743,000</u>	<u>1,049,743,000</u>
Costs per kWh					
All Sources (npp)	0.0626	0.0711	0.0705	0.0679	0.0679
NB Power	0.0587	0.0691	0.0663	0.0717	0.0717
Emera		-0.3577	0.1841	0.0763	0.0763
Point Lepreau	0.0487	0.0550	0.0616	0.0508	0.0508
Dalhousie	0.0676	0.0584	0.0660	0.0589	0.0589
Wind and Other	0.0489	0.0526	0.0590	0.0618	0.0618
Charlottetown Plant	2.8027	2.1228	0.4358	0.4613	0.4613
Borden Plant	2.9247	-0.6694	0.7442	0.1651	0.1651

Maritime Electric
Ratio Analyses
For the Twelve Months Ending December 31, 2004
(unaudited)

	<u>Year to Date</u>	<u>12 MTD Average</u>
Capital Structure		
Total Debt	114,065,000	109,082,500
Common Equity	<u>84,620,623</u>	<u>81,030,924</u>
	198,685,623	190,113,424
Percent		
Total Debt	57.4%	57.4%
Common Equity	<u>42.6%</u>	<u>42.6%</u>
	<u>100.0%</u>	<u>100.0%</u>
Return on Capital		
Interest on Debt	9,188,246	9,188,246
Net Earnings	8,179,399	8,179,399
Cost of Total Debt		8.4%
Return on Equity		10.1%
Interest Coverage - SP	2.60	2.60
Interest Coverage - TD	3.88	3.88