

February 29, 2016

Mr. Mark Lanigan Island Regulatory and Appeals Commission PO Box 577 Charlottetown PE C1A 7L1

Dear Mr. Lanigan:

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The Island Regulatory and Appeals Commission

2015 Capital Budget Variance Report

Please find attached five copies of our 2015 Capital Budget Variance Report.

If you have any questions, please do not hesitate to contact me at 629-3696.

Yours truly,

MARITIME ELECTRIC

Jason C. Roberts

Director, Regulatory & Financial Planning

JCR06 Enclosure

MARITIME ELECTRIC COMPANY, LIMITED 2015 CAPITAL BUDGET VARIANCE REPORT

February 29, 2016

TABLE OF CONTENTS

MARITIME ELECTRIC COMPANY, LIMITED 2015 CAPITAL BUDGET VARIANCE REPORT

SECTION:	
1	Introduction
2	Summary
3	Generation
4	Distribution
5	Transmission
6	Corporate
7	Capitalized General Expense
8	Interest During Construction
Appendix I	Schedule of Deferred Capital Budget Items
Appendix II	Schedule of Capital Budget Expenditures From Prior Years Completed in
	2015

MARITIME ELECTRIC COMPANY, LIMITED 2015 CAPITAL BUDGET VARIANCE REPORT INTRODUCTION

On November 20, 2014, the Island Regulatory and Appeals Commission issued Order UE14-04 approving an Application by Maritime Electric Company, Limited ("Maritime Electric" or the "Company") in respect of its 2015 Capital Budget. This report provides a description of the variances from the approved 2015 Capital Budget.

Total capital expenditures (net of contributions in aid of construction) for 2015 were \$2,199,680, or approximately 8 per cent, under the approved budget. The Company has deferred certain 2015 capital projects, totalling \$2,237,000, to 2016 (Appendix I). The total capital expenditure variance, after consideration of projects deferred to 2016, is \$37,320 over budget (see Summary Table on Page 2-1). This variance reflects Management's focus to continuously review, prioritize and rationalize capital spending. The over budget variance of \$37,320 was driven primarily due to higher than planned expenditures on distribution replacements due to storms, collision, fire and road alterations (\$908,000), higher than planned expenditures on distribution equipment (\$75,000), higher than planned expenditures on transmission substation projects (\$74,000); higher costs incurred for Y-104 transmission project (\$232,000); higher than expected allowance for funds used during construction (\$176,000) and cost overages in several other budget categories (\$46,000).

These over budget variances were partially offset by lower than planned expenditures on generation asset improvements (\$181,000), lower than planned installations of distribution transformers (\$570,000), lower than planned costs for system meters (\$265,000), lower costs for services and street lighting (\$415,000) and lower costs for corporate projects (\$43,000).

In 2015, the Company completed \$1,227,385 of previously approved capital project work that was in progress at the end of 2014. A schedule of these projects is provided in Appendix II.

MARITIME ELECTRIC COMPANY, LIMITED 2015 CAPITAL BUDGET VARIANCE REPORT SUMMARY

	Approved 2015 Budget	2015 Expenditures	Estimated Expenditures in 2016	Total Expected Expenditures	Variance From <u>Budget</u>	Approved 2016 Budget
Generation	\$ 1,210,000	\$ 586,132	\$ 443,000	\$ 1,029,132	\$ (180,868	\$ 1,215,000
Distribution	16,774,000	15,692,293	834,000	16,526,293	(247,707	17,538,000
Transmission	7,690,000	7,093,431	908,000	8,001,431	311,431	10,399,000
Corporate	944,000	849,272	52,000	901,272	(42,728	1,214,000
Capitalized General Expense	455,000	458,433	-	458,433	3,433	494,000
Interest During Construction	200,000	376,452		376,452	176,452	200,000
Sub-Total	\$27,273,000	\$ 25,056,013	\$ 2,237,000	\$27,293,013	\$ 20,013	\$31,060,000
Less: Contributions in Aid of Construction	(400,000)	(382,693)		(382,693)	17,307	(400,000)
Net Total	\$26,873,000	\$24,673,320	\$ 2,237,000	\$26,910,320	\$ 37,320	\$30,660,000

MARITIME ELECTRIC COMPANY, LIMITED 2015 CAPITAL BUDGET VARIANCE REPORT GENERATION

Generation – Summary

		Approved 2015 Budget	2015 Actual	2015 <u>Variance</u>	Approved 2016 Budget
_	Charlottetown Plant Buildings and Services Projects	\$ 31,000	\$ 18,429	\$ (12,571)	\$ 98,000
~ -	Charlottetown Plant Boiler Projects	203,000	37,387	(165,613)	283,000
	Charlottetown Plant Turbine-Generator Projects	693,000	395,338	(297,662)	680,000
G-4	Borden Plant Projects	283,000	134,978	(148,022)	154,000
	Total	\$1,210,000	\$ 586,132	\$ (623,868)	<u>\$1,215,000</u>

G-1 Charlottetown Plant Buildings and Services Projects

Variance \$(12,571)

The G-1 budget category was approximately \$13,000 or 41 per cent under budget. The G-1 category for 2015 consisted of miscellaneous expenditures required for buildings and support systems (i.e. parts storage improvements; door and window replacements; process pipeline replacements; etc.) at the Charlottetown Plant. The budget amounts were provisional based on past experience; however, no major issues materialized during the year resulting in lower than budgeted expenditures.

G-2 Charlottetown Plant Boiler Projects

Variance \$(165,613)

The G-2 budget category was approximately \$166,000 or 82 per cent under budget. The G-2 category for 2015 consisted of miscellaneous boiler projects at the Charlottetown Plant. The Boiler Insulation Replacement budget was underspent in 2015 due to project labour resource availability and lower than budgeted material costs for insulation replacement work. The budget amounts for Boiler Improvements and Large Motor Refurbishments were provisional based on past experience; however, no major issues materialized during the year resulting in lower than budgeted expenditures.

MARITIME ELECTRIC COMPANY, LIMITED 2015 CAPITAL BUDGET VARIANCE REPORT GENERATION

G-3 Charlottetown Plant Turbine-Generator Projects

Variance \$(297,662)

Excluding the carryover noted below, the G-3 budget category was approximately \$298,000 or 43 per cent under budget. With the carryover, the G-3 category will be approximately \$145,000 or 21 per cent over budget.

Several projects (i.e. Replace Generator AVR on Unit No. 9; Turbine Insulation Replacements; Steam Turbine Improvements and Combustion Turbine Improvements) included in this category were under budget by a total of \$104,000 due to lower costs for materials and labour.

Expenditures of \$249,165 relating to project development costs for the proposed 50 MW Charlottetown Combustion Turbine 4 (CT4) Project have been included in this budget category. An Application was filed with the Commission on June 24, 2015 seeking approval to design, construct and commission a 50 MW combustion turbine generator in order to meet forecast load requirements in 2017. Since then, Maritime Electric has confirmed the ability to procure access to an additional 50 MW of capacity from NB Power and therefore on January 29, 2016 withdrew its original Application. Upon withdrawal of the Application, the Company retired the accumulated work-in progress from capital in 2016.

One item in the G-3 Category, with an approved budget of \$443,000, has been deferred until 2016:

i. <u>Installation of Snow Hood for CT3 (Deferral to 2016 - \$443,000)</u>

This project has been carried over to 2016 as the original equipment manufacturer (OEM) was unable to complete the design and fabrication of the components in 2015.

MARITIME ELECTRIC COMPANY, LIMITED 2015 CAPITAL BUDGET VARIANCE REPORT GENERATION

G-4 Borden Plant Projects

Variance \$(148,022)

The G-4 budget category was approximately \$148,000 or 52 per cent under budget. This is mainly due to the Fuel Heaters for CT1 and CT2 Project which came in \$141,000 under budget due to lower than expected equipment and labour costs. The provisional budget amount for Miscellaneous Borden Projects was also approximately \$7,000 below budget.

MARITIME ELECTRIC COMPANY, LIMITED 2015 CAPITAL BUDGET VARIANCE REPORT DISTRIBUTION

<u>Distribution – Summary</u>

	Approved 2015 Budget	2015 Actual	2015 <u>Variance</u>	Approved 2016 Budget
D-1 Replacements due Storms, Collision, Fi	to re			
and Road Alterations	\$ 1,000,000	\$ 1,907,865	\$ 907,865	\$ 1,042,000
D-2 Distribution Transformers	3,354,000	2,784,256	(569,744)	3,219,000
D-3 Services and Stre				
Lighting	4,493,000	4,078,108	(414,892)	4,623,000
D-4 Line Extensions	1,677,000	1,687,655	10,655	2,344,000
D-5 Line Rebuilds	3,257,000	3,265,083	8,083	3,145,000
D-6 System Meters	680,000	415,481	(264,519)	635,000
D-7 Distribution Equipment	1,350,000	1,425,023	75,023	1,778,000
D-8 Transportation				
Equipment	963,000	128,822	(834,178)	752,000
Sub-Total	\$16,774,000	\$15,692,293	\$(1,081,707)	\$17,538,000
Less:Contributions in Aid	of			
Construction	(400,000)	(382,693)	17,307	(400,000)
Total	<u>\$16,374,000</u>	<u>\$15,309,600</u>	<u>\$(1,064,400)</u>	<u>\$17,138,000</u>

D-1 Replacements due to Storms, Collision, Fire and Road Alterations Variance \$907,865

The increase over the budget was substantially due to significant damage to the transmission and distribution system as a result of the severe ice storm that occurred on December 4, 2015. Damage from the storm included 111 broken poles, 14 damaged transformers, 5 kilometres of conductor requiring replacement and wide spread power outages. Crews from Saint John Energy, Emera Utility Services, Tri-wire and H-Line contractors assisted Maritime Electric crews in restoring service.

MARITIME ELECTRIC COMPANY, LIMITED 2015 CAPITAL BUDGET VARIANCE REPORT DISTRIBUTION

The variance was also impacted by increased pole movements requested by the Department of Transportation and Infrastructure Renewal (TIR) as a result of bridge damage in Prince County in December 2014 due to a significant amount of rainfall. There were five bridges in Rosebank, Huntley - Route 12, Allan Road - Tyne Valley, Howlan Road and Arlington that were washed away requiring Maritime Electric to reroute power lines to enable TIR to safely replace these bridges in 2015.

D-2 Distribution Transformers

Variance \$(569,744)

The D-2 budget category was \$569,744 or 17 per cent under budget. The variance was due to the lower than budgeted new services and street lighting. Maritime Electric also is using more refurbished transformers at a lower cost compared to purchasing new transformers. The 2015 Spill Prevention Plan was completed with less labour than originally forecast.

D-3 Services and Street Lighting

Variance \$(414,892)

The D-3 budget category was approximately \$415,000 or 9 per cent under budget as a result of lower installation costs under the LED streetlight program. The budget variance is primarily attributed to new overhead and underground services being 42 per cent and 19 per cent, respectively, lower in 2015 compared to the trailing 5 year average. Efficiencies were gained by planning the LED conversion in geographic areas with a high density of high pressure sodium lights thereby reducing the transportation component of the overall installation cost.

D-4 Line Extensions

Variance \$10,655

The D-4 budget category was \$10,655 or 0.6 per cent over budget.

D-5 Line Rebuilds

Variance \$8,083

The D-5 budget category was \$8,083 or 0.3 per cent over budget.

MARITIME ELECTRIC COMPANY, LIMITED 2015 CAPITAL BUDGET VARIANCE REPORT DISTRIBUTION

D-6 System Meters

Variance \$(264,519)

The D-6 budget category was approximately \$265,000 or 38 per cent under budget. Much of the variance is attributed to the purchase of fewer meters and a reduction in metering material inventory due to the recent conversion from electromechanical meters to Remote Interrogation meters. The inventory of current transformers (CTs) used in larger metering installations was also reduced since a one size CT now fits many more customer service entrances.

Meter requirements driven by new services were also lower in 2015 and there were no additional industrial type customers requiring more expensive ION meters. In the past, new substations required metering tanks to track substation loads; this function is now accomplished by collecting this information from digital relays. Where metering tanks are still required, Maritime Electric now builds them internally which has reduced the capital costs of metering tank installations.

D-7 Distribution Equipment

Variance \$75,023

The D-7 budget category was approximately \$75,000 or 5 per cent over budget. The variance was primarily due to a higher than budgeted exchange rate for equipment purchased from the United States.

D-8 Transportation Equipment

Variance \$(834,178)

Excluding the units deferred or carried over to 2016 noted below, the D-8 budget category was approximately \$834,000 or 87 per cent under budget. With the carryover noted below, the D-8 category will be on budget. The delay in the delivery of vehicles relates to the fact that truck chassis and diggers for two digger trucks are built in the United States where up to a one year delivery time is required. It was also determined that single axle trucks would not meet spring weight restrictions on PEI and therefore the two budgeted digger trucks needed to be changed from single axle to a tandem axle chassis.

MARITIME ELECTRIC COMPANY, LIMITED 2015 CAPITAL BUDGET VARIANCE REPORT DISTRIBUTION

The following budget provisions for 2 components of category D-8, totaling \$834,000, will be deferred or carried over to 2016:

i. Construction Services 1/4 Ton Trucks (Deferral to 2016 - \$59,000)

Two 1/4 ton trucks were ordered in November of 2015 but were not received by end of year. These vehicles are expected to be delivered by March 2016.

ii. <u>Digger Trucks (Deferral to 2016 - \$775,000)</u>

Although these two digger trucks were designed and ordered in 2015, they will not be received until 2016.

MARITIME ELECTRIC COMPANY, LIMITED 2015 CAPITAL BUDGET VARIANCE REPORT TRANSMISSION

Transmission – Summary

		Approved 2015 Budget	2015 Actual	2015 <u>Variance</u>	Approved 2016 Budget
T-1	Substation Projects	\$ 1,794,000	\$ 1,259,535	\$ (534,465)	\$ 4,941,000
T-2	Line Projects	1,982,000	1,688,142	(293,858)	2,574,000
T-3	Y-104 Multi-Year Project	3,914,000	4,145,755	231,755	2,884,000
	Sub-Total	\$ 7,690,000	\$ 7,093,432	\$ (596,568)	\$10,399,000

T-1 Substation Projects

Variance \$(534,465)

The Charlottetown Airport Substation lease agreement with the Charlottetown Airport Authority Inc. was signed in December 2015. Approximately \$98,000 in costs were incurred in 2015 on this project. Consequently, the completion of the Charlottetown Airport Substation was deferred until 2016 at an expected additional cost of \$608,000. With this carryover, the T-1 project category will be approximately \$73,500 or 4 per cent over budget. This is primarily due to higher than budgeted US exchange incurred on substation equipment.

The following project has been deferred until 2016:

i. Charlottetown Airport Substation - \$608,000

T-2 Line Projects

Variance \$(293,858)

The T-2 budget category was approximately \$294,000 or 15 per cent under budget primarily as a result of the deferred construction of the 3 kilometre T-15 transmission line extension from Mount Edward Road to the new Charlottetown Airport Substation. This project is expected to be completed in 2016 when the substation is complete at a cost of \$300,000. With this carryover, the T-2 project category will be on budget.

MARITIME ELECTRIC COMPANY, LIMITED 2015 CAPITAL BUDGET VARIANCE REPORT TRANSMISSION

The following project has been deferred until 2016:

i. T-15 Transmission Extension - \$300,000

T-3 Y-104 Multi-Year Project

Variance \$231,755

As discussed with Commission staff in September, construction of the 20 kilometre section from Acadian Drive to Scotchfort identified for construction this year was completed below the budget. This outcome was due primarily to the realignment of the route along government roadway right-of-way, thus reducing the expenditures for easement acquisitions, vegetation clearing and environmental assessments. Maritime Electric was successful in continuing with construction and tree cutting for an additional 7 kilometres beyond the 20 kilometres that was identified to be carried out this year using the total 2015 budget amount.

The T-3 budget category was approximately \$232,000 or 6 per cent over budget primarily due to additional tree clearing that was completed in the Fall of 2015 to prepare for the construction of 20 kilometres of transmission line in first half of 2016. One of the stipulations of the Environmental Impact Assessment for the project is that tree clearing is prohibited between May and September because of the bird nesting season. Since this is a multi-year project, the decision was made to complete the tree clearing in the Fall. The resulting overage in this budget category in 2015 will be offset by a reduction of costs that will be incurred to complete the line in 2016 and 2017.

MARITIME ELECTRIC COMPANY, LIMITED 2015 CAPITAL BUDGET VARIANCE REPORT CORPORATE

Corporate – Summary

		•	pproved <u>5 Budget</u>	 2015 Actual	<u>V</u>	2015 ariance	pproved l6 Budget
C-1	Corporate General	\$	260,000	\$ 232,698	\$	(27,302)	\$ 300,000
C-2	Information Technology		684,000	 616,574		(67,426)	914,000
	Total	\$	944,000	\$ 849,272	\$	(94,728)	\$ 1,214,000

C-1 Corporate General

Variance \$(27,302)

The C-1 budget category was approximately \$27,000 or 9 per cent under budget for the year. There were unplanned expenditures in this category including costs to replace the oil water separator system at the West Royalty Service Centre to comply with environmental code. These were accommodated through reduced purchases under the approved Racking Project and savings achieved through a competitive bid process for West Royalty Service Centre Roof Recoating and Awning Replacement project.

C-2 Information Technology

Variance \$(67,426)

	pproved 15 Budget	2015 Actual	<u>v</u>	2015 Variance	pproved 16 Budget
C-2-1 Hardware Acquisitions	\$ 214,000	\$ 176,063	\$	(37,937)	\$ 450,000
C-2-2 Purchased Software and Upgrades	239,000	253,188		14,188	251,000
C-2-3 Other IT Services/Projects	 231,000	 187,323		(43,677)	213,000
Total	\$ 684,000	\$ 616,574	\$	(67,426)	\$ 914,000

MARITIME ELECTRIC COMPANY, LIMITED 2015 CAPITAL BUDGET VARIANCE REPORT CORPORATE

C-2-1 Hardware Acquisitions

Variance \$(37,937)

The C-2-1 category was under budget by approximately \$38,000 or 18 per cent. This is substantially attributable to a \$31,000 software purchase that had originally been budgeted as hardware. At the time of purchase, it was determined that a software solution provided more functionality at a lower cost.

C-2-2 Purchased Software and Upgrades

Variance \$14,188

The C-2-2 category was over budget by approximately \$14,000 or 6 per cent. This is substantially attributable to a \$31,000 software purchase that had originally been budgeted as hardware (as noted in C-2-1 above).

C-2-3 Other IT Services/Projects

Variance \$(43,677)

The other IT Services/Projects budget was approximately \$44,000, or 19 per cent below budget. \$52,000 in projects are deferred to 2015 as noted below which will result in the category being \$8,000, or 4 per cent, over budget. The overage is attributable to costs incurred adding additional features to the Remote Payment System. These features were required to accommodate the closure of the payment stations at the Kent Street Customer Service Centre.

The following projects have been deferred until 2016:

- i. Joint Use Project \$21,000
- ii. Great Plains System Integration \$31,000

MARITIME ELECTRIC COMPANY, LIMITED 2015 CAPITAL BUDGET VARIANCE REPORT CAPITALIZED GENERAL EXPENSE

This amount includes a portion of administrative costs that are properly recognized as part of the Company's overall capital expenditure program. These expenditures represent an allocation of administrative costs, not specific to any one capital project, but rather as part of the overall development, implementation and management of the Company's approved annual Capital Budget.

Capitalized General Expense

	Aı	Approved		2015		2015		Approved	
	2015 Budget		Actual		Variance		2016 Budget		
Capitalized General Expense	\$	455,000	\$	458,433	\$	3,433	\$	494,000	

The resulting variance is less than 1 per cent of the approved budget.

MARITIME ELECTRIC COMPANY, LIMITED 2015 CAPITAL BUDGET VARIANCE REPORT INTEREST DURING CONSTRUCTION

This amount represents an allowance for funds used during the construction of certain assets. It is reflected in the Company's financial results as an offset to financing costs, ultimately charged to fixed assets and recovered through amortization over the life of the assets.

Interest During Construction

	A	Approved		2015		2015		Approved	
	2015 Budget		Actual		Variance		2016 Budget		
Interest During Construction	\$	200,000	\$	376,452	\$	176,432	\$	200,000	

The increase over budget reflects changes in the actual timing associated with expenditures compared to the budgeted timing and the carryover of certain projects.

MARITIME ELECTRIC COMPANY, LIMITED 2015 CAPITAL BUDGET VARIANCE REPORT

SCHEDULE OF DEFERRED CAPITAL BUDGET ITEMS

The following schedule outlines the projects (approved in Order UE14-04) deferred from 2015. Certain of the expenditures associated with these projects were incurred in 2015. Outlined are proposed expenditures to complete the projects in 2016.

Project ID	<u>Description</u>	Budget	Costs Incurred in 2014	Costs Incurred in 2015	Deferred to 2016	<u>Comments</u>
G-3-1	Installation of Snow Hood on CT3	\$ 443,000	\$ -	\$ -	\$ 443,000	See Section G-3
D-8	Transportation Equipment 2014 (Note 1)	795,000	382,823	359,775	35,000	See Notes 1 and 2 below.
D-8	Transportation Equipment 2015	963,000	-	128,822	834,000	See Section D-8
T-1-1	Charlottetown Airport Substation	706,000	-	98,420	608,000	See Section T-1
T-2-3	T-15 Line Extension to Charlottetown Airport Substation	600,000	1	85,244	300,000	See Section T-2
C-2-4	Joint Use Management System	56,000	-	34,874	21,000	See Section 6
C-2-7	Finance System Integration	35,000	-	3,440	31,000	See Section 6
	TOTAL	<u>\$3,598,000</u>	<u>\$ 382,823</u>	<u>\$ 710,575</u>	<u>\$2,272,000</u>	See Note 2

Note 1: This 2014 capital project was approved in Order UE13-04.

Note 2: Amounts deferred to 2016 include deferrals from 2015 totalling \$2,237,000 and a deferral from 2014 totalling \$35,000 (see Section D-8) for a total of \$2,272,000.

MARITIME ELECTRIC COMPANY, LIMITED 2015 CAPITAL BUDGET VARIANCE REPORT

SCHEDULE OF CAPITAL BUDGET EXPENDITURES FROM PRIOR YEARS COMPLETED IN 2015

Project			Cost Incurred	Cost Incurred		
<u>ID</u>	<u>Description</u>	<u>Budget</u>	<u>in 2014</u>	<u>in 2015</u>	<u>Total</u>	<u>Variance</u>
G-4-1	Rewind C72 Rotor (see Note 1)	\$ 1,438,000	\$ 1,248,607	\$ 99,664	\$ 1,348,271	\$ (89,729)
D-7-1	Distribution Equipment	983,000	826,874	80,000	906,874	(76,126)
T-2-1	69 kV and 138 kV Switch Installation Work	400,000	246,189	82,138	328,327	(71,673)
T-3-2	West St. Peter's Substation	750,000	35,998	816,256	852,254	102,254
T-3-3	West Royalty 138 kV Breaker	250,000	152,526	98,099	250,625	625
C-2-5	Substation Camera Pilot	25,000	-	2,055	2,055	(22,945)
C-2-6	Intranet Software	36,000	3,783	26,624	30,407	(5,593)
C-2-7	Asset Management	55,000	32,895	19,634	52,529	(2,471)
T-2-1	UPEI Substation (see Note 2)	948,000	963,208	2,915	966,123	18,123
	TOTAL	<u>\$ 4,885,000</u>	<u>\$ 3,510,080</u>	<u>\$ 1,227,385</u>	<u>\$ 4,737,465</u>	<u>\$ (147,535)</u>

Note 1: 2015 costs were incurred for the release of holdbacks related to the project.

Note 2: This Project was originally approved in 2013. Project was substantially completed in 2014 but a small amount of follow-up work was completed in 2015.