MARITIME ELECTRIC
A FORTIS COMPANY

June 28, 2013

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

Dear Commissioners:

Please find enclosed 10 copies of Maritime Electric's 2014 Capital Budget.

If you require further information, please do not hesitate to contact me at (902) 629-3667.

Yours truly,

MARITIME ELECTRIC

S. D. Loggie
Vice President, Finance and Corporate Services
and Chief Financial Officer

SDL26
Encl. as noted

C A N A D A

PROVINCE OF PRINCE EDWARD ISLAND

BEFORE THE ISLAND REGULATORY
AND APPEALS COMMISSION (the "Commission")

IN THE MATTER of the Application of Maritime Electric Company, Limited for approval of a 2014 Capital Budget.

1. Maritime Electric Company, Limited ("Maritime Electric") is a corporation incorporated under the laws of Canada with its head or registered office at Charlottetown, and carries on a business as a public utility within the scope of the *Electric Power Act* engaged in the production, purchase, transmission and distribution of electricity in Prince Edward Island.

2. Maritime Electric has developed a Capital Budget for the year 2014. The budget includes capital expenditures of the usual sort.

3. Maritime Electric requests approval by the Commission of the 2014 capital expenditures described in this evidence attached as Schedule "A" and Maritime Electric hereby applies for such approval.

4. The proposed 2014 Capital Budget constitutes proposed capital expenditures to be made in 2014, for items which Maritime Electric requires in order to properly serve its customers.

5. Attached hereto as Schedule "B" is an affidavit attesting to the truth of the evidence in Schedule "A".

DATED this 28th day of June, 2013.

Maritime Electric Company, Limited

Thomas P. Laughlin, Counsel for the Applicant whose address for service is:
65 Grafton Street, PO Box 2140
Charlottetown PE C1A 8B9
Telephone: (902) 629-4554
Facsimile: (902) 566-5283
E-mail: tlaughlin@smss.com

Schedule A

2014 CAPITAL BUDGET EVIDENCE

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

SECTION:

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

INTRODUCTION

Under Section 17 (1) of the Electric Power Act, Maritime Electric (the "Company") is required to submit to the Island Regulatory and Appeals Commission, for its approval, an annual Capital Budget of proposed improvements or additions to the property of the public utility. This is the evidence in support of the Company's proposed 2014 Capital Budget. The total amount proposed is consistent with the PEI Energy Accord inputs and does not include any provision for the installation of new interconnection upgrades. Any required amounts for that project would be addressed through a separate application for approval. Schedule 1-1 outlines the level of the Company's actual and proposed capital expenditures over the 2005-2014 periods.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE
SCHEDULE 1-1
SUMMARY OF CAPITAL EXPENDITURES (2005-2014)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2013	2014
	Actual	Actual	Actual	Actual	Actual	Actual	Actual*	Actual*	Budget	Forecast*	Budget
Generation											
Charlottetown Plant	20,704,628	3,855,935	1,454,480	1,645,014	907,390	974,905	824,540	2,316,166	837,000	837,000	726,000
Borden Plant	407,981	132,664	666,496	162,289	1,263,651	64,719	600,300	59,333	560,000	560,000	1,462,000
	21,112,609	3,988,599	2,120,976	1,807,303	2,171,041	1,039,624	1,424,840	2,375,499	1,397,000	1,397,000	2,188,000
Distribution and Transmission											
Distribution	10,785,945	11,291,216	15,216,155	15,199,296	15,982,270	16,066,121	18,566,934	17,311,934	18,540,000	18,128,400	17,271,000
Transmission	1,538,732	6,283,295	4,387,363	12,226,942	5,437,318	2,147,002	2,439,900	4,363,468	3,417,000	3,816,700	7,244,000
	12,324,677	17,574,511	19,603,518	27,426,238	21,419,588	18,213,123	21,006,834	21,675,402	21,957,000	21,945,100	24,515,000
Corporate	741,851	754,751	765,915	732,796	547,743	726,626	1,051,067	1,006,519	1,048,000	1,055,000	870,000
Sub-total	34,179,137	22,317,861	22,490,409	29,966,337	24,138,372	19,979,373	23,482,741	25,057,420	24,402,000	24,397,100	27,573,000
Capitalized General Expense	1,667,818	1,844,273	1,845,861	1,982,504	2,190,512	2,179,629	371,689	263,704	441,000	441,000	439,000
Interest During Construction	2,174,493	637,555	409,683	319,302	321,691	317,828	333,182	295,027	147,000	147,000	100,000
	38,021,448	24,799,689	24,745,953	32,268,143	26,650,575	22,476,830	24,187,612	25,616,151	24,990,000	24,985,100	28,112,000
Less: Customer Contributions	(615,754)	(657,278)	(3,511,826)	(11,438,104)	(5,313,287)	(532,001)	(1,106,139)	(760,444)	(275,000)	(275,000)	(275,000)
Net Capital Expenditures	37,405,694	24,142,411	21,234,127	20,830,039	21,337,288	21,944,829	23,081,473	24,855,707	24,715,000	24,710,100	27,837,000

* Includes actual and forecast carryovers.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

		2014
Generation		
G-1	Charlottetown Plant Buildings and Services Projects	$ 463,000
G-2	Charlottetown Plant Boiler Projects	153,000
G-3	Charlottetown Plant Turbine-Generator Projects	110,000
G-4	Borden Plant Projects	1,462,000
		2,188,000
Distribution		
D-1	Replacements due to Storms, Collision, Fire and Road Alterations	1,233,000
D-2	Distribution Transformers	3,666,000
D-3	Services and Street Lighting	4,035,000
D-4	Line Extensions	1,860,000
D-5	Line Rebuilds	3,254,000
D-6	System Meters	803,000
D-7	Distribution Equipment	1,625,000
D-8	Transportation Equipment	795,000
		17,271,000
Transmission		
T-1	Substation Projects	1,572,000
T-2	Transmission Projects	1,614,000
T-3	Y-104 Multi-Year Project	4,058,000
		7,244,000
Corporate		
C-1	Corporate Services	252,000
C-2	Information Technology	618,000
		870,000
Sub-total		**27,573,000**
	Capitalized General Expense	439,000
	Interest During Construction	100,000
	Less: Customer Contributions	(275,000)
Total		$ **27,837,000**

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

GENERATION

The Role of Maritime Electric On-Island Generation

Maritime Electric owns three on-Island generation facilities that are available on a stand-by basis. Those facilities are:

Charlottetown Thermal Generating Station	5 Generators	60 MW
Borden Generating Station	2 Generators	40 MW
Charlottetown Combustion Turbine # 3 (CT3)	1 Generator	50 MW

Although the primary role of Maritime Electric's generation is backup for the existing submarine cables, benefits are also realized through reduced purchased energy costs. The annual value of the avoided capacity and operating reserve purchases is approximately $4.8 million, based on the current Energy Purchase Agreement with NB Power. In addition, this generation provides on-Island supply in times of supply curtailment from off-Island energy suppliers. They also supply energy during transmission line outages in New Brunswick or PEI.

The Generation Capital Budget is made up of projects required to keep the generating facilities in a state of readiness to meet operating considerations and reliability requirements as set out in the Company's Energy Purchase Agreement with NB Power, safety regulations, boiler inspection branch recommendations, cable overloading, contingency planning and insurance requirements.

For 2014, the Company is continuing to defer projects at the Charlottetown Plant that relate to the life extension of the facility.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

G-1 Charlottetown Plant Buildings and Services Projects — *$ 463,000*

The G-1 category includes expenditures required for buildings and support systems for the Charlottetown Plant facilities. Support systems include but are not limited to:

- Energy Control Centre (ECC) provides 24 hour operation of the Maritime Electric electrical system including energy purchases, load and wind forecasting, generation dispatch and line crew dispatch;
- River Pumphouse provides cooling water for the thermal generation units at the Charlottetown Plant;
- Fuel Tanks provide storage of fuel for a minimum of 7 days generation at full load;
- Lighting within the Charlottetown generation facilities; and
- Other equipment such as sump pumps and fuel pipe lines.

1. New Heating System for Charlottetown Plant — $ 249,000

This item provides for a new heating system for the Charlottetown Plant building shell and boilers. The separate boiler and building shell heating systems proposed will be isolated from each other to ensure that the total capacity of each system is below regulation limits which would require the facility to be manned. This will enable the further redeployment of employees for 5 months of the year.

2. ECC Heating and Essential Service Generator Upgrade — $ 128,000

With the proposed changes to the Charlottetown Plant heating system, changes to the ECC heating system are required. This item provides for the replacement of the existing steam heat exchanger with an electric boiler. As well, the added load of an electric boiler requires an increase in backup generator capacity.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

3. Charlottetown Plant Miscellaneous Buildings and Services $ 86,000

A provision has been made for a number of smaller projects which have been identified for the Charlottetown Plant:

- Parts Storage Improvements $ 5,000

  This is a provisional amount, based on experience, to improve the parts storage system. This includes areas such as the steel storage area, the tool crib and caged stores in West Royalty and the Charlottetown Plant.

- Door and Window Replacements $ 5,000

  This is a provisional amount, based on experience, to replace plant doors and windows.

- Process Pipeline Replacements $ 10,000

  This is a provisional amount to replace sections of process piping (city water, chemical, fuel, propane, condensate, steam) that are corroded and require upgrading.

- Plant Lighting Systems $ 4,000

  This provides for improvements to the Plant's operating and emergency lighting systems.

- Sump Pump Replacement $ 10,000

  This is a provisional amount to replace one sump pump per year.

- Safety Equipment $ 5,000

  This is a provisional amount, based on experience, for replacements and upgrades of safety equipment and gear for confined space rescue, confined space entry, industrial hygiene and health and first aid.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

- ECC Screen Display $ 47,000

  This is to expand the existing screen display at the ECC and add four new screens as well as the corresponding hardware and software and miscellaneous materials. This will result in operational flexibility in monitoring multiple systems including energy flow, frequency and voltage levels, cable monitoring, transmission scheduling, wind generation and security cameras simultaneously.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

G-2 Charlottetown Plant Boiler Projects — *$ 153,000*

The G-2 category expenditures relate to the boilers and boiler systems associated with the Company's thermal generating units. Boilers typically include numerous sub-systems required for operation such as: fuel oil system, combustion air system, burner safety management system, auxiliary steam system, feedwater system, sootblower system, boiler chemicals system, instrument air system, boiler furnace, boiler steam tubing, smoke stacks, emission monitoring system, boiler control and emission control equipment.

A provision has been made for a number of smaller boiler projects which have been identified at the Charlottetown Plant.

- Miscellaneous Tool Replacements — $ 12,000

  This is a provisional amount to purchase new or replacement tools for the Plant's Electrical and Instrumentation Shop.

- Large Motor Refurbishment — $ 6,000

  Based on experience a provisional amount is included in the budget to rewind a large motor each year.

- Miscellaneous Boiler Improvements — $ 83,000

  Each year the Plant's power boilers are inspected before being laid up for the Summer. These inspections identify tube replacements and upgrades that must be completed before the next startup. This provisional amount is contingent on inspection results.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

- Boiler Insulation Replacement Improvements $ 52,000

  The Plant was constructed during a period when insulating materials often contained asbestos. This insulation degrades over time and must be replaced to prevent airborne Asbestos Containing Material (ACM) from endangering the health of workers. The Company has a policy of immediate replacement of any ACM found to be in poor condition. This is a provisional amount based upon past experience for asbestos replacement related to the steam boilers.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

G-3 Charlottetown Plant Turbine-Generator Projects *$ 110,000*

The G-3 category covers expenditures associated with the steam turbines, generators and the 50 MW Combustion Turbine (CT3). The steam turbines and generators include such systems as: main steam system, auxiliary steam system, bleed steam system, lube oil system, relay oil system, cooling and auxiliary cooling water systems, air extraction system, condensate system, generator excitation system and vibration monitoring system.

1. Miscellaneous Turbine Projects $ 110,000

A provision has been made for a number of smaller projects which have been identified for the turbines at the Charlottetown Plant:

- Turbine Insulation (Asbestos) Replacement $ 56,000

  The Plant was constructed during a period when insulating materials often contained asbestos. This insulation degrades over time and must be replaced to prevent airborne Asbestos Containing Material (ACM) from endangering the health of workers. The Company has a policy of immediate replacement of any ACM found to be in poor condition. This is a provisional amount based upon past experience for asbestos replacement associated with the steam turbines.

- Steam Turbine Improvements $ 27,000

  Each year the Plant's steam turbines are inspected before being laid up for the Summer. These inspections identify replacements and upgrades that must be completed before the next startup. This provisional amount is contingent on inspection results.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

- Combustion Turbine Improvements $ 27,000

  Improvement and upgrade requirements will become more prevalent as combustion turbine CT3 accumulates operating hours, therefore, this provisional amount is to address any operational deficiencies that arise during the year.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

G-4 Borden Plant Projects — *$ 1,462,000*

This category provides for expenditures related to the facilities at the Borden Plant which are stand-by and peaking units that also supply ancillary services needed for reliability purposes. The Borden Plant houses two diesel fueled combustion turbines (CT1 and CT2) rated at a combined 40 MW. This facility also includes: three diesel fuel storage tanks, a fuel tanker truck offloading facility, a maintenance building, two control rooms, lube oil storage building, a storage building for a spare length of submarine cable and a 69 kV substation with two step-up transformers.

1. Rewind of Generator Rotor (CT2) — $ 1,438,000

In 2009, electrical insulation issues were found with the generator rotor for Borden Unit #2. General Electric/Brush, the original equipment manufacturer, recommended a rewind of the generator rotor. This project will rewind the generator rotor and extend the rotor life by approximately 20 years.

2. Miscellaneous Borden Projects — $ 24,000

A provision has been made for enclosure renovations for both Borden units. The Borden units are located adjacent to the Northumberland Strait and thus salt spray can cause significant corrosion damage to the turbine enclosures. A provisional amount, based on previous experience, is included in the budget each year for needed repair work including sandblasting, metal patching and replacement, and painting.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

DISTRIBUTION

Maritime Electric's proposed 2014 Distribution Capital Budget continues to be driven by the need to replace aged assets and to add infrastructure to service new customers.

The Company's asset database continues to be used to identify assets for priority replacement. While the Company continues with its pole replacement activities, Management is again seeking to maintain its efforts to replace aged Distribution Equipment – Item D-7. The majority of this equipment is located within substations and its failure could result in large extended outages. Substation circuit breaker replacements are now budgeted under Item T-1 Substation Project.

D-1 Replacements due to Storms, Collision, Fire and Road Alterations *$ 1,233,000*

This is a provisional amount for replacements due to storms, motor vehicle accidents, fire and road alterations. The budget provision continues to provide for weather events and traditional levels of Government road widening activity.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

D-2 Distribution Transformers — *$ 3,666,000*

This provides for the purchase and installation of new transformers and related equipment to serve new customers, address load growth for existing customers and to replace deteriorated units. An amount for the replacement of transformers under the spill prevention program is also included.

Pole Mounted kVA				
5 year average annual requirement		37,600 kVA		
Spill Prevention Program		3,000 kVA		
Total		40,600 kVA		
Cost				
Purchase	40,600 kVA @	$62.81/kVA	$ 2,550,000	(Rounded)
Installation	40,600 kVA @	$14.43/kVA	$ 586,000	(Rounded)
Sub-total			$ 3,136,000	(Rounded)
Pad Mounted kVA				
5 year average annual requirement		14,100 kVA		
Cost	14,100 kVA @	$37.59/kVA	$ 530,000	(Rounded)
Total (Rounded)			$ 3,666,000	

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

D-3 Services and Street Lighting — *$ 4,035,000*

This amount provides for construction of distribution service lines to serve new customers, replacement of aged service lines and provision of street and yard lighting as requested by customers. These expenditures (and those in Item D-4) are expected to be partially offset by customer contributions.

1. Service Lines

Estimate:	Single phase	$ 2,032,000		
	Three phase	$ 1,173,000	**$**	**3,205,000**

2. Underground Service Lines

Estimate:	Single phase	$ 288,000		
	Three phase	$ 192,000	**$**	**480,000**

3. Street and Yard Lighting **$ 350,000**

The street and yard lighting amount includes a provision of $100,000 to accommodate the incremental cost of replacing approximately 500 HPS street lights with LED street lighting units. Benefits to the customer in the conversion of LED street lighting come from reduced electricity consumption and maintenance requirements. This provision is subject to regulatory approval of LED street lighting rates.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

D-4 **Line Extensions** ***$ 1,860,000***

This amount provides for the extension of single phase and three phase distribution lines to serve new customers and includes a new 2.5 kilometre distribution feeder from the Crossroads Substation to the Stratford area. This new feeder is required due to load growth in Stratford including the new waterfront development. Also, this feeder will improve reliability to the Town of Stratford as this new line will function as a second feed to the area. Furthermore, long single phase extensions to accommodate new seasonal customers and extensions required due to area load growth continue to be key factors in the level of costs incurred in this account. These expenditures, like those in Item D-3, are expected to be partially offset by customer contributions.

The two new distribution feeders from the UPEI Substation (a 1.2 kilometre tie line feeder and a .8 kilometre Charlottetown Mall feeder) are included in Capital Budget item T-2.3 (Rebuild of T-13 Transmission Line) as the construction will require the rebuild of 69 kV transmission line T-13 to accommodate the additional distribution feeder infrastructure on the same transmission poles.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

D-5 Line Rebuilds — *$ 3,254,000*

The data gathered from the 2009 Field Audit and Assessment Project continues to be utilized to prioritize single phase and three phase rebuilds, pole for pole replacements, porcelain cutout replacements and other reliability improvement activities. The budget amount is reduced from previous budget requirements to allow for an increase in the transmission budgets required for the construction of the 138 kV transmission line (Y-104). These expenditures will allow the Company to continue to address the issue of aged infrastructure and improve reliability, voltage levels and reduce losses.

1. Single Phase and Three Phase Rebuilds — $ 2,184,000

This provides for the rebuilding of distribution lines including joint use lines. Lines are prioritized for rebuild based on the condition of poles and conductors, the length of spans, historical reliability issues associated with the line and historical load growth. These rebuilds improve both reliability and voltage, allow for future load growth and, in many cases, will lead to a reduction in losses. Approximately 30 kilometres of single phase and three phase distribution lines are planned to be rebuilt in 2014. The majority of these rebuilds will be in areas with Eastern Cedar poles that are 40 years or older and approaching the end of their useful life as well as distribution lines with inadequate conductor size to properly service the load. The rebuild projects currently planned for 2014 are listed in the following table:

MARITIME ELECTRIC COMPANY, LIMITED

2014 CAPITAL BUDGET EVIDENCE

Rebuild Location	Line #	KM	# of phases	Comments	2012 Customers Hrs.	2011 Customers Hrs.	2010 Customers Hrs.	2009 Customers Hrs.	2008 Customers Hrs.
Annandale Rd.	DM5527	2.5 km	Three Phase	#2 ACSR conductor, as well 94% of the line has Eastern Cedar poles. Poles and wire in poor condition. Distribution line feeds 143 customers. Re-conductoring the line will reduce losses over the life of the line.	0	0	0	0	0
Wood Islands	DV19250	1.8 km	Single Phase	#2 ACSR conductor, as well 54% of the line has Eastern Cedar poles. Poles and wire in poor condition. Distribution line feeds 69 customers.	0	0	0	0	917
Old Georgetown Rd.	CR469, CR439	7.6 km	Three Phase	Distribution line feeds 151 customers. 65% of the poles in this section of line are Eastern Cedar poles that are in poor condition.	0	0	357	0	0
Colville Rd.	WR 2500	5.5 km	Three Phase	Distribution line feeds 78 customers. 35% of the poles in this section of line are Eastern Cedar poles that are in poor condition.	0	0	0	462	434

MARITIME ELECTRIC COMPANY, LIMITED

2014 CAPITAL BUDGET EVIDENCE

Rebuild Location	Line #	KM	# of phases	Comments	2012 Customers Hrs.	2011 Customers Hrs.	2010 Customers Hrs.	2009 Customers Hrs.	2008 Customers Hrs.
T-3 Under build	AB33108	1.4 km	Three Phase	This is a 1970's vintage transmission line that is in poor condition. Rebuilding the line will improve voltage, reduce losses by approximately 17 kW, increase loading capabilities and improve reliability.	0	301	0	0	998
Taylor Rd.	AB360	2.0 km	Single Phase	#6 Solid copper conductor, as well 32% of the line has Eastern Cedar poles. Poles and wire in poor condition. Distribution line feeds 32 customers. Re-conductoring the line will reduce losses over the life of the line.	0	0	31	0	0
MacIsaac Rd. & Richard's Rd.	WL3500	2.6 km	Single Phase	Required to close a 2.6 km gap which will improve the voltage and reliability for customers in the area as there will be an alternate feed.	0	0	0	0	0
Freetown Rd. (Rt. 8)	AB3375 & AB 3336	6.5 km	Three Phase	#4 copper conductor, as well 75% of the line has Eastern Cedar poles. Poles and wire in poor condition. Distribution line feeds 66 customers. Re-conductoring the line will reduce losses over the life of the line.	0	131	99	0	0

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

2. Pole for Pole Replacement **$ 500,000**

The Company owns approximately 120,000 distribution poles. The proposed budget amount is to be used to replace approximately 450 individual poles in 2014.

The 2014 budget amount has been reduced, relative to recent budgets, to accommodate the cost of construction of transmission line Y-104.

3. Porcelain Cutout Replacement Program **$ 570,000**

Porcelain cutout failures have created system reliability issues and employee safety concerns such that Management had started this program a few years ago. Each year, replacements are made and prioritized by the number of customers that could be affected by a cutout failure.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

D-6 System Meters — *$ 803,000*

This amount provides for the purchase and installation of revenue metering and associated equipment. Details of the amounts are as follows:

1. Watt-hour Meters — $ 138,000

The residential Remote Interrogation (RI) meter program has proven successful in reducing meter reading labour costs and related transportation expenses, enhancing customer service and improving safety for meter readers. RI meters are read monthly which increases bill accuracy and eliminates estimates. The following quantities reflect forecasted requirements to service new customers and accommodate Measurement Canada's sampling and retest requirements.

RI meters - residential	600
RI meters - network and three phase meters	270
Total	870

Installed Cost: 870 meters @ $158.62

2. Combination Meters — $ 504,000

With the success of the residential program for RI meters, the program is being extended to combination meters (meters capable of capturing both demand and energy consumption data). The combination meters currently in use have to be retested every 4 years. When an existing combination meter is due for testing, it will be upgraded to a digital RI meter, which currently has a 10 year retest or sealing period. In 2014, 370 existing combination meters are scheduled for retest plus an additional 370 combination meters will be converted to digital RI meters. A total conversion from existing combination meters to digital RI combination meters is expected to be complete by the end of 2015.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

Units

RI Program	570
Customer Growth	135
Replacements due to aging, vandalism	35
Total	740

Installed Cost: 740 meters @ $681.08

3. Miscellaneous Metering Equipment **$ 41,000**

This provides for miscellaneous metering equipment such as voltage and current transformers for commercial customers, wiring supplies, security bands, sealing rings and colored indicator tags.

4. Outdoor Metering Tanks **$ 120,000**

This provides for new outdoor metering tanks including the replacement of aged metering tanks at Master Packaging, the Pooles Corner Potato Facility and the UPEI Substation.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

D-7 Distribution Equipment *$ 1,625,000*

1. System Equipment **$ 1,427,000**

This provides for the replacement of aged equipment used to provide voltage support, communication, protection and control of the Company's assets. In 2013, seven new radio repeater sites were established on existing towers aimed at improving coverage for field staff. In 2014, the mobile radio system upgrade will be completed by establishing two communication channels. One channel will be for Customer Service communication and the other channel will be for Operations communication. The items identified for 2014 are listed in the following table:

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

System Equipment 2014	Material	Labor	Total
Voltage Regulators, Reclosers and Controllers	**$ 309,000**	**$ 122,000**	**$ 431,000**
Electronic Reclosers	$ 93,000		
Recloser Controllers to replace obsolete FXB Controllers	$ 21,000		
Voltage Regulator Controls Replacement	$ 20,000		
Two Sets (6)- Voltage Regulators	$ 124,000		
Capacitor Bank Controllers	$ 10,000		
Capacitor Banks and Parts	$ 31,000		
Voltage Regulator and Recloser Parts	$ 10,000		
Circuit Breakers and Power Transformer Upgrades	**$ 171,000**	**$ 72,000**	**$ 243,000**
Power Transformer Maintenance Parts	$ 7,000		
Transformer Oil	$ 31,000		
Transformer Oil Reconditioning	$ 21,000		
69 kV and 138 kV Breaker Contacts	$ 26,000		
Annual Dissolved Gas Analysis	$ 25,000		
Tap Changer Contacts - Auto Transformer	$ 25,000		
Replacement Parts for 138 kV Breaker	$ 26,000		
Transformer Monitoring System	$ 10,000		
Teleprotection and Relay Replacement	**$ 75,000**	**$ 55,000**	**$ 130,000**
Teleprotection and Relay Replacement	$ 75,000		
Communication Equipment	**$ 251,000**	**$ 178,000**	**$ 429,000**
Aging Battery Bank Replacement	$ 21,000		
Mobile and Portable Radios	$ 20,000		
SCADA RTU Retro-Fit Parts	$ 10,000		
Vehicle Antenna (Radio and RI Meters)	$ 4,000		
Mobile Communication	$ 145,000		
New Substation Communications	$ 51,000		
Distribution	**$ 87,000**	**$ 82,000**	**$ 169,000**
Recloser Bypass Switches	$ 20,000		
13.8 kV City Circuit Switches	$ 52,000		
Voltage Regulator Bypass Switches	$ 15,000		
Test Equipment	**$ 25,000**		**$ 25,000**
Doble Power Factor Test Equipment	$ 25,000		
Total	**$ 918,000**	**$ 509,000**	**$ 1,427,000**

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

2. Meter Shop Equipment **$ 45,000**

This provides for power quality test equipment, voltmeters and meter test equipment as required.

3. Line Equipment **$ 153,000**

This provides for the replacement of line test equipment such as field leakage meters, hotline sticks and phasing sticks, line safety equipment such as hard cover-up and fall arrest equipment and material handling equipment such as presses and dies, running blocks and chain hoists. This also provides for the purchase of a mechanical pole testing device used to test the strength and life expectancy of a wood pole.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

D-8 Transportation Equipment — *$ 795,000*

The Company's transportation fleet consists of large line vehicles with boom and/or digger attachments, cars, small trucks, vans, pole and wire trailers and other equipment. For the large line vehicles, the chassis are targeted for replacement approximately every 10 years. Periodic inspections of the booms are performed to determine the timing and method of refurbishment which extends the life of the booms by approximately 10 years. Small vehicle replacements depend on age, mileage and type of service; however, the life span is approximately 5 to 10 years. The following schedule outlines the vehicles proposed for replacement or re-chassis in 2014:

	Vehicle Replaced	Description	Location	Age (Yrs)	Replacement Cost
1.	06-04-21	Ford Escape	Meter Reader Central District	8	$35,000
2.	07-05-25	GMC Canyon Truck	Construction Services	7	$35,000
3.	09-06-28	Toyota Tundra 4x4	Construction Services	10	$35,000
4.	04-12-59	Digger Truck (tandem axle) (new chassis and boom)	Eastern Line Department	10	$340,000
5.	03-12-53	Digger Truck (single axle) (new chassis and boom)	Central Line Department	13	$280,000
6.	Allowance for unforeseen capital expenditures				$70,000
Total					$795,000

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

TRANSMISSION

The Transmission category reflects the Company's activities for the expansion and replacement of the 138 kV and 69 kV transmission system. This includes transmission lines, substations, power transformers and protection devices such as circuit breakers.

Construction of the multi-year Y-104 Transmission Line project continues in 2014 with two sections of new transmission lines proposed: a 6.5 kilometre section from the West Royalty Substation to Acadian Drive and a 4 kilometre section from the Mount Stewart Road to the Peakes Road. Load growth in the West St. Peter's area has necessitated the establishment of a new substation earlier than planned. Consequently, the overall project timeline has been revised.

T-1 Substation Projects — *$ 1,572,000*

1. UPEI Substation Project Phase II — $ 902,000

The electrical load in the northern section of Charlottetown has grown and is expected to continue to grow with numerous retail businesses being established in this area. A new substation is under construction to supply the load growth, off load existing city feeders, reduce electrical losses and address UPEI's need to upgrade its substation.

This 69 kV/13.8 kV substation will be constructed over a two year period, which started with Phase I in 2013. Phase II of the UPEI Substation project will include procurement, installation, testing and commissioning of a new circuit switcher, 20 MVA transformer as well as protection and control equipment.

The total cost of this two year project is estimated at $1.85 million of which $948,000 was approved for 2013.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

2. <u>138 kV Breaker Replacement</u> $ 160,000

This is a provision to replace a 138 kV breaker in Borden. This will be the first 138 kV breaker to be replaced as part of a 138 kV breaker replacement program. The original breaker will be refurbished and used as a system spare.

3. <u>69 kV Breaker Replacement</u> $ 450,000

Of the twenty-five 69 kV breakers that are currently in service, fourteen are over 40 years old and, based on test results, should be replaced. It has become difficult to complete maintenance on these breakers as gaskets and internal parts are no longer available. This is a provision to replace 4 breakers.

4. <u>Miscellaneous projects</u> $ 60,000

This is a provision for miscellaneous substation fence upgrades and the replacement of the Alberton Substation ground grid.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

T-2 Transmission Projects — *$ 1,614,000*

1. 69 kV and 138 kV Switch Program — $ 400,000

This is a provision to purchase and install 138 kV switches for the West St. Peter's Substation and 69 kV switches for the UPEI Substation. In addition, there is provision to upgrade and extend the life of selected 69 kV and 138 kV switches. Specific upgrades and life extensions are planned for switches on 138 kV transmission lines at the Bedeque, Sherbrooke and Borden Substations.

2. Transmission Line Refurbishment — $ 834,000

The 69 kV and 138 kV transmission lines are the backbone of Maritime Electric's electric delivery system. This provision will help ensure system reliability through the following:

- Completion of a full scale inspection, with related required priority improvements, to the accessibility of corridor right-of-ways and refurbishment of emergency and Priority 1 deficiencies of the remaining half of 69 kV T-1 transmission line between West Royalty and Sherbrooke. The first half of this project will be completed in 2013.
- Completion of a ground inspection of 138 kV transmission lines Y-101, Y-103, Y-105, Y-107, Y-109, Y-111 and Y-113.
- Completion of mechanical pole testing of 1970's vintage transmission lines Y-101, Y-103, T-8 and T-3.
- Replacement of 300 horizontal insulators on the T-21 transmission line.
- Installation of dampers on the T-5 transmission line to reduce galloping during heavy winds.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

3. Rebuild a Section of T-13 Transmission Line $ 300,000

This is a provision to upgrade 2 kilometres of the 69 kV transmission line T-13, which interconnects the West Royalty Substation and Charlottetown Plant Substation, to accommodate two additional distribution feeders and new fibre optic cable from the new UPEI Substation. To accommodate the distribution under-build and fibre optic cable, taller and larger poles are required along this section. A Tie-Line Feeder (1.2 kilometres) will improve reliability for the 13.8 kV City of Charlottetown system and a Charlottetown Mall Feeder (0.8 kilometres) will improve reliability by serving as a backup feed for the University Avenue Feeder from the West Royalty Substation.

4. Environmental Impact Assessment for the Extension of T-15 Transmission Line from Sherwood Road to Charlottetown Airport $ 80,000

The Company is assessing the feasibility of a new substation near the Charlottetown Airport to accommodate load growth in the Airport Industrial Park. This provision allows for a route selection and an Environmental Impact Assessment to be completed for approximately 2 kilometres of 69 kV transmission line from Sherwood Road to the Charlottetown Airport area.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

T-3 Y-104 Multi-Year Project *$ 4,058,000*

1. Y-104 Transmission Line $ 3,058,000

Transmission line T-4 between the Charlottetown Plant and the Lorne Valley Substation was built in 1965 and is approaching the end of its useful life. It is proposed that a new 138 kV transmission line be constructed over the next three years from the West Royalty Substation to the Church Road Substation, a distance of approximately 80 kilometres, utilizing a portion of the existing T-4 transmission line. The construction of Y-104 will also accommodate additional wind development in Eastern PEI and a new substation in West St. Peter's to accommodate future load growth in the area.

This is a provision to build 22.5 kilometres of 138 kV transmission line in three sections in 2014:

- 6.5 kilometres from West Royalty Substation to Acadian Drive,
- 4 kilometres from Mount Stewart Road to Peakes Road, and
- 12 kilometres from Peakes Road to a new substation in West St. Peter's.

2. West St. Peter's Substation $ 750,000

The existing Scotchfort Substation is no longer close to the area's load center due to load growth in the Morell/West St. Peter's area. It was originally anticipated that a new substation would be constructed in Mount Stewart in 2017; however, due to unexpected load growth of an existing customer in the West St. Peter's area, a new 138 kV/12.5 kV West St. Peter's Substation will be required next year. In 2014, an existing transformer will supply the growing load. In 2017, a new 138 kV/12.5 kV 10 MVA transformer will be installed together with protection and control equipment.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

3. <u>West Royalty 138 kV Breaker</u> $ 250,000

This is a provision for a new breaker for the Y-104 transmission line and associated switches at the West Royalty Substation.

The following table outlines the estimated annual costs for the Y-104 transmission line project.

	Y-104 Project Description	KM	Approved/ Proposed Cost
2012	Church Road 45/60/75 auto-transformer, 138 kV breaker and bay		$ 2,679,000
2012	EIA for Mount Stewart Road Route 22 to Church Road		$ 300,000
	Total 2012		**$ 2,979,000**
2013	Easements from existing T-4 to Church Road		$ 150,000
	Total 2013		**$ 150,000**
2014	Riverside Bypass West Royalty Substation to Acadian Drive	6.5 km	$ 885,000
2014	Mount Stewart Road to Peake's Road	4 km	$ 545,000
2014	138 kV Line Extension to West St. Peter's Substation	12 km	$ 1,628,000
2014	West St. Peter's Substation		$ 750,000
2014	West Royalty 138 kV breaker		$ 250,000
	Total 2014		**$ 4,058,000**
2015	Acadian Drive to Peake's Road	30 km	$ 4,800,000
	Total 2015		**$ 4,800,000**
2016	Peake's Road to Curtis Road	30 km	$ 4,200,000
	Total 2016		**$ 4,200,000**
2017	Church Road 138 kV breaker		$ 750,000
2017	West St. Peter's 138 kV transformer		$ 500,000
2017	Curtis Road to Church Road Substation	10 km	$ 1,400,000
	Total 2017		**$ 2,650,000**
	Total	**92.5 km**	**$ 18,837,000**

The above total estimated cost, and project timeline, may vary in future years depending on the final transmission route and system configuration.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

CORPORATE

C-1 Corporate Services *$ 252,000*

The following projects are required to ensure the safety, security and efficient operation of the Company's facilities.

1. Outdoor Racking for Polemount Transformers - West Royalty Service Centre **$ 80,000**

This provides for upgrading the north section of the Service Centre adjacent to the existing pole storage area with a stabilized concrete section and the installation of pallet racking to safely store between 350 - 400 polemount transformers. These transformers are currently stored in this location at ground level which increases the risk of damage to the transformers and equipment and injury to individuals working in the area. The racking will allow the transformers to be stored more efficiently and will also allow the facility to recoup up to 4,500 square feet of stabilized working area.

2. Western Service Centre Expansion - Phase II **$ 105,000**

This amount provides for the second phase of modifications to the Western Service Centre. Phase 1 of the expansion, which was approved in the 2013 Capital Budget Application, will include all government permits, environmental assessments, engineering, surveying, ground preparation, foundation installation and paving at the Service Centre. Phase 1 is scheduled to commence in the second half of 2013 with Phase 2, subject to approval, continuing immediately thereafter for completion in the first half of 2014. Phase 2 will include the costs to complete the addition to the existing facility and provide the necessary truck bays and materials storage areas. Once completed, security of the Company's materials and equipment will be improved as the temporary storage trailer will be removed and the building will be capable of having all line trucks parked inside the Service Centre.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

3. Office Modifications - West Royalty Service Centre $ 27,000

This provides for modifications to the office space area at the West Royalty Service Centre to improve the workstation layout for the Survey group and to more effectively utilize the available workspace for private meetings and safety training. The existing meeting area is an open area which is underutilized due to its size and lack of privacy whereas the Survey group's workspace is small and lacks a source of natural light. The modifications will provide the necessary renovations and upgrades in the office area to allow the Survey group to re-locate to the meeting area with ergonomic workstations and provide space for a backup Call Centre at the West Royalty Service Centre. The smaller area currently occupied by the Survey group will be converted to a meeting room that will provide the necessary privacy and meeting space.

4. Unforeseen Capital Expenditures $ 40,000

This amount provides an allowance for unforeseen capital expenditures at all Company properties.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

C-2 Information Technology — *$ 618,000*

The Company recognizes the critical role that Information Technology plays in meeting its objectives. To this end, the Company proposes to the following initiatives.

1. Hardware Acquisitions — $ 165,000

Servers	$ 45,000
Communications Equipment	30,000
Personal Computers	40,000
Printers	20,000
Installation Costs	30,000
Total	$ 165,000

2. Purchased Software and Upgrades — $ 242,000

Microsoft Suite	$ 85,000
Great Plains Financials	30,000
ESRI Mapping System	27,000
Maximo Asset Management	24,000
Software Development Tools	25,000
Smaller Miscellaneous Software	26,000
Installation Costs	25,000
Total	$ 242,000

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

3. Health Safety and Environment (HSE) Software $ 35,000

HSE Software assists Maritime Electric in the management of safety programs, environmental protection plans and the health of its workers. This project will see the replacement of existing software that has been discontinued by the Vendor. Both internally developed and externally sourced software solutions will be evaluated.

4. Work Management/Dispatching $ 40,000

Maritime Electric receives several types of work requests that by their nature are handled by different systems including customer outage calls, field maintenance issues and requests for new services. This project will develop software to consolidate work requests into a central location for efficient dispatching and updating. The project will focus on providing a centralized management console, reports and alerts to assist the dispatcher in managing work orders from various sources.

5. Substation Camera Pilot $ 25,000

In 2012, a project was completed to upgrade the Company's security camera infrastructure at the district operating facilities and Kent Street offices. This project will extend similar infrastructure into three substations as a pilot. Drivers for the project are theft deterrent, incident investigation aid and the ability to monitor facilities remotely.

6. Intranet Software $ 36,000

This project will see the implementation of software that will improve the functionality and ease of use of the Company's intranet which runs on software that was developed in the late 1990's. Focus will be on improving access to applications, shared content, forms and document management.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

7. Asset Management **$ 55,000**

The Company uses asset management software to assist in the maintenance of many of its tangible assets, including boilers, turbines and substation equipment. The current asset management solution has become costly to maintain and does not serve the needs of all areas of the Company. This project will include evaluating other procured solutions, the benefits of building a customized system and any associated development costs.

8. Employee Training Software **$ 20,000**

This amount will be used to build on the success of the Customer Service Training project of 2012. Additional modules will be added to the system as it broadens to serve other areas of the Company. New modules will include the Energy Control Centre Operator training procedures, Combustion Turbine operating procedures and Customer Service etiquette training.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

CAPITALIZED GENERAL EXPENSE *$ 439,000*

This amount includes a portion of administrative costs (predominately labour) that are properly recognized as part of the Company's overall capital expenditure program. These recurring 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 capital budget program.

MARITIME ELECTRIC COMPANY, LIMITED
2014 CAPITAL BUDGET EVIDENCE

INTEREST DURING CONSTRUCTION *$ 100,000*

This represents an allowance for the cost of funds used during the construction of certain assets. It is reflected in the accounts as an offset to financing costs and is based on the Company's cost of borrowing. This amount is allocated to the related assets and recovered through amortization over the life of the assets.

SCHEDULE "B"

C A N A D A

PROVINCE OF PRINCE EDWARD ISLAND

BEFORE THE ISLAND REGULATORY
AND APPEALS COMMISSION (the "Commission")

IN THE MATTER of the Application of Maritime Electric Company, Limited for approval of a 2014 Capital Budget.

We, Fred J. O'Brien, of Alberton, in Prince County, Steven D. Loggie and John D. Gaudet, of Charlottetown, in Queens County, Province of Prince Edward Island, MAKE OATH AND SAY AS FOLLOWS:

1. THAT we are respectively the President and Chief Executive Officer, Vice-President, Finance and Corporate Services and Chief Financial Officer and Vice-President, Operations and Engineering of Maritime Electric Company, Limited and, as such, have a personal knowledge of the matters hereto deposed to except where otherwise indicated.
2. THAT we prepared or supervised the preparation of the evidence which is, with this affidavit, attached as Schedule "A" of the application to which this affidavit is attached.
3. THAT the information included in the evidence is true and correct.

SEVERALLY SWORN to at the city of Charlottetown, County of Queens Province of Prince Edward Island by Fred J. O'Brien, Steven D. Loggie and John D. Gaudet on the 27th day of June, 2013.

A Commissioner for Taking Affidavits in the Supreme Court.

Fred J. O'Brien

Steven D. Loggie

John D. Gaudet