All our energy.
All the time.

MARITIME ELECTRIC
A FORTIS COMPANY

February 25, 2021

Hand Del
3:10pm
MLa

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

Dear Ms. Mosher:

2019 Capital Budget Variance Report Docket UE20731
Response to Interrogatories from Commission Staff

Please find attached the Company's response to the interrogatories filed by Commission Staff with respect to the 2019 Capital Budget Variance Report. An electronic version will follow shortly.

If you have any questions, please do not hesitate to contact me at 902-629-3641.

Yours truly,

MARITIME ELECTRIC

Gloria Crockett

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

GCC05
Enclosure

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

The Island Regulatory and Appeals Commission (the "Commission"), in assessing the reasonableness of the 2019 Capital Budget Variance Report submitted by Maritime Electric Company, Limited ("Maritime Electric" or the "Company"), requests responses to the following interrogatories:

IR-1 In regards to section 5.5 Line Rebuilds - please provide capital expenditures for each of the subcategories which were presented in the 2019 capital budget. Specifically:

a. Single phase & three phase rebuilds,
b. Distribution Line Refurbishment,
c. C.1 Porcelain Cutout Replacement Program,
d. C.2 Eastern Cedar Pole Replacement Program, and
e. Supplemental Budget Request – Broadband.

Response:

The following table provides the requested breakdown of the budget and actual expenditures for each of the subcategories in section 5.5 Line Rebuilds of the 2019 Capital Budget Application:

Section 5.5 Line Rebuilds					
Capital Project Subcategory	**Approved 2019 Budget (A)**	**2019 Actual Expenditures (B)**	**Carryover to 2020 (C)**	**Total Expected Expenditures (D = B+C)**	**Expected Variance From Budget (E = D-A)**
Single and Three Phase Rebuilds	$ 2,115,000	$ 1,563,090	$ -	$ 1,563,090	$ (551,910)
Distribution Line Refurbishment	680,000	840,116	-	840,116	160,116
Porcelain Cutout Replacement Program	300,000	285,975	-	285,975	(14,025)
Eastern Cedar Pole Replacement Program	1,150,000	1,119,208	-	1,119,208	(30,792)
Supplemental Budget Request - Bell Joint Use Projects	560,500	476,124	88,000	564,124	3,624
TOTAL[1]	**$ 4,805,500**	**$ 4,284,513**	**$ 88,000**	**$ 4,372,513**	**$ (432,987)**

In section 4, page 4-5 of the 2019 Capital Budget Variance Report, the Company indicated that section 5.5 Line Rebuilds would have an over budget variance of $79,713. This variance included the budget for the Howlan Road Single Phase Rebuild of $512,700 as it was uncertain at the time if the project could be deferred.

Since the 2019 Capital Budget Variance Report was submitted, the Company determined that deferral of the Howlan Road project was possible. The necessary rebuild work along the Howlan Road has subsequently been addressed as a component of the Smallman Road line extension project that is proposed in the Company's 2021 Capital Budget Application. Through the Smallman Road project, the existing single phase line along the Howlan Road will be rebuilt as a three phase line to improve reliability by redistributing customer load within the service area of the O'Leary Substation.

[1] The variance total reported in the 2019 Capital Budget Variance Report of $520,987 did not include the amount carried over to 2020.

IR-2 In regards to section 5.6 System Meters - please provide capital expenditures for each of the subcategories which were presented in the 2019 capital budget. Specifically:

a. Watt-hour Meters,
b. Combination Meters,
c. Misc. Metering Equipment,
d. Outdoor Metering Tanks, and
e. Bridge Meters for Load Research.

Response:

The table below provides the requested breakdown of the budget and actual expenditures for each of the subcategories in Section 5.6 System Meters of the 2019 Capital Budget Application.

Section 5.6 System Meters					
Capital Project Subcategory	**Approved 2019 Budget (A)**	**2019 Actual Expenditures (B)**	**Carryover to 2020 (C)**	**Total Expected Expenditures (D = B+C)**	**Expected Variance From Budget (E = D-A)**
Watt-hour Meters	$ 263,000	$ 318,340	$ -	$ 318,340	$ 55,340
Combination Meters	144,000	191,245	-	191,245	47,245
Miscellaneous Metering Equipment	34,000	29,392	-	29,392	(4,608)
Outdoor Metering Tanks	114,000	-	-	-	(114,000)
Bridge Meters for Load Research	100,000	106,388	-	106,388	6,388
TOTAL	**$ 655,000**	**$ 645,365**	**$ -**	**$ 645,365**	**$ (9,635)**

The number of watt-hour meter installations were 18 per cent higher than budget (1,540 actual vs 1,306 budgeted installations) while combination meter installations were 30 per cent higher (122 actual vs 94 budgeted installations). This was mainly the result of requests for new services, due to above average housing starts and higher than expected construction of larger multi-unit buildings.

The outdoor metering tanks budget was a provisional allocation. Two metering tanks were budgeted for new customer tank requests or existing customer tank replacements in 2019, but were not required. Because the 2020 Capital Budget was proposed and approved with a similar provisional allocation for outdoor metering tanks, a carryover of the 2019 allocation was not required.

IR-3 In regards to section 6.1 Substation Projects - please provide capital expenditures for each of the subcategories which were presented in the 2019 capital budget. Specifically:

a. Lorne Valley 69KV Switching Station Expansion,
b. 15/20 MVA Airport Power Transformer Replacement,
c. Substation Engineering & Environmental Assessment,
d. Substation Modernization Program, and
e. 138KV Breaker Replacement Program.

Response:

The table below provides the requested breakdown of the budget and actual expenditures for each of the subcategories in Section 6.1 Substation Projects of the 2019 Capital Budget Application.

Section 6.1 Substation Projects					
Capital Project Subcategory	**Approved 2019 Budget (A)**	**2019 Actual Expenditures (B)**	**Carryover to 2020 (C)**	**Total Expected Expenditures (D = B+C)**	**Expected Variance From Budget (E = D-A)**
Lorne Valley 69 kV Switching Station Expansion	$ 2,820,000	$ 3,524,350	$ -	$ 3,524,350	$ 704,350
15/20 MVA Airport Power Transformer	1,100,000	1,035,796	-	1,035,796	(64,204)
Substation Engineering and Environmental Assessment	263,000	54,869	205,000	259,869	(3,131)
Substation Modernization Program	685,000	684,042	-	684,042	(958)
138 kV Breaker Replacement Program	134,000	133,380	-	133,380	(620)
TOTAL	**$ 5,002,000**	**$ 4,284,513**	**$ 205,000**	**$ 5,637,437**	**$ 635,437**

To supplement the information provided in the 2019 Capital Variance Report, the higher than expected expenditures on substation project 6.1a Lorne Valley 69 kV Switching Station Expansion were a result of:

- An increase in the cost of civil construction work from the time that the estimate was initially developed in early 2018 to when the work was contracted in 2019. This cost increase was caused by an increased demand for civil construction contractors and construction materials, and a site requirement for 4,600 tonnes more fill than what was budgeted in the initial estimate.
- Enhancements to the final design of the protection and control system to a modular configuration that simplified its construction, testing and commissioning, and will result in improved reliability during operation and maintenance.
- The inclusion of an emergency generator in the final design to keep station equipment operational during outage events.

IR-4 In regards to section 5.8 - please provide expenditure details for each vehicle in the 2019 budget.

Response:

The expenditure details for each vehicle in section 5.8 Transportation Equipment are provided in IR-4 – Attachment 1.

The budgeted contingency was required for the purchase of a new Argo (required for off-road line operations) and the purchase of two new Honda CR-V's after two Maritime Electric owned 2007-2011 vintage CR-V's were condemned following a Honda Canada Safety Recall inspection (see IR-4 – Attachment 2). IR-4 - Attachment 3 provides an example of the type of rear wheel failure that could occur as a result of the rear-trailing arm separating from a corroded rear frame of a 2007-2011 Honda CR-V.

Honda Canada offered a buyback amount of $12,114 for the condemned vehicles which was applied in a tax beneficial way to the purchase price of one of the new CR-V's (this was the lowest cost option for replacing the two vehicles).

IR-5 In regards to section 5.1 - Replacements - Road Alterations - Is the government required to pay for costs incurred due to road alterations or do ratepayers pay for these changes?

a. If the government is required to pay for these changes, please include a summary of expenditures as a result of road alterations and the corresponding payments from the province.

Response:

The Government of PEI has the discretionary right under the Roads Act to charge Maritime Electric a fee for placing its poles and other equipment in the transportation right-of-way. However, in lieu of charging such a fee, Government's direction to the Company is that Government should not get billed when poles and/or equipment need to be relocated to match new right-of-way alignments. This has been the case for approximately 15 years as documented in a Maritime Electric internal memorandum dated September 13, 2005, attached hereto as IR-5 – Attachment 1.

a. As noted above, Government is not required to pay for Maritime Electric supply system changes that are necessitated by road alterations.

IR-6 Sections 5.1 through 5.4 of the 2019 capital budget appear to be driven by customer demand.

a. Is this accurate?
b. How much control does MECL have over these capital budget items?
c. The variance report indicated a number of these budget items are offset or partially offset with contributions in aid of construction. Do you have the breakdown of contributions in aid of construction to their appropriate category and subcategory?

Response:

a. Yes, sections 5.1 through 5.4 of the 2019 Capital Budget are driven by customer demand. The only exceptions are subcategories 5.3b and 5.4b as described in the response to IR-6b below.

b. Section 5.1 Replacements Due to Storms, Collisions, Fire and Road Alterations is all provisional under service obligations that are outside of Company control.

Section 5.2 Distribution Transformers is all provisional under service obligations that are driven by customer demand.

Section 5.3a New Overhead and Underground Services is all provisional under service obligations that are driven by customer demand.

Section 5.3b Street and Area Lighting is partially provisional and partially controllable. The Company is obligated to respond to customer requests for new lights and for repairing or replacing existing light installations. Expenditures under the LED Conversion Program are within the control of the Company.

Section 5.4a Customer Driven Line Extensions is all provisional under service obligations that are driven by customer demand.

Section 5.4b Reliability Driven Line Extensions involves line construction work that is planned and as such, costs incurred to complete the projects are within the control of the Company.

c. Contributions toward sections 5.1 through 5.4 of the 2019 Capital Budget were as follows:

Capital Budget Section	Capital Budget Description	Contribution Amount
5.3a	New Overhead and Underground Services	$ 555,188
5.3b	Street and Area Lighting	5,505
5.4a	Customer Driven Line Extensions	198,229
	TOTAL	**$ 758,922**

IR-7 In regards to section 5.8 – Maritime Electric indicated they made a progress payment in 2019 for the 2 aerial bucket trucks. How is it currently recorded?

Response:

The progress payments in 2019 for the two aerial bucket trucks were made when Freightliner (Daimler Trucks North America LLC) delivered the chassis of each truck to the Posi-Plus factory in Victoriaville, Quebec. The chassis delivery payment was a contractual requirement of Posi-Plus as indicated in the Posi-Plus quotation provided as IR-7 – Attachment 1.

The progress payments were recorded as additions to capital project code 90141 – D8 Transportation Equipment in the Company's December 31, 2019, Statement of Capital Projects, provided as IR-7 – Attachment 2. As such, the payments were subject to depreciation but the resultant amount was immaterial ($253,000 x 7% x ½ = $8,855). Future progress payments have and will be recorded as work in progress, as line truck delivery has recently increased to approximately two years.

IR-8 In regards to the carry forward projects listed in Appendix I - Please provide a breakdown the costs incurred to date for each project and a status update.

Response:

A breakdown of the project costs as well as the status update on the project is provided in IR-8 - Attachment 1. Also provided as IR-8 – Attachment 2, is a Maritime Electric internal memorandum dated October 14, 2020 concerning changes to the ECC SCADA Simulator Project.

IR-9 In regards to Appendix II – Please provide more details on the Brookside Drive to Hazelbrook Extension and TCH to Mount Herbert Extension. The footnote indicated the project was cancelled however $640,000 has been spent to date.

Response:

The Trans Canada Highway ("TCH") to Mount Herbert Extension was cancelled but the Brookside Drive to Hazelbrook Extension was completed as planned. The need for the Mount Herbert Extension was reassessed and determined to be not required in the near term, based on the redistribution of customer loads following the addition of the Mount Albion Substation. When the TCH to Mount Herbert Extension was cancelled, the project budget of $303,000 was reallocated to the Brookside Drive to Hazelbrook Extension as that project was over budget by approximately $229,000. The need for additional budget to complete the Brookside Drive project was associated with issues not accounted for in the initial project estimate including: (a) joint use pole realignment and transfer costs that were identified in the detailed survey process; (b) modifications to transmission line T-2 that were identified during construction and were needed to maintain adequate line clearances; and (c) added traffic control requirements due to high traffic volume and speed.

Budget Item #	Vehicle Being Replaced		New Vehicle				Internal Labour (C)	Total (D = B+C)	Carryover to 2020 (E)	Costs Incurred in 2020 (F)	Total with 2020 Costs (G = D+F)
	Vehicle Being Replaced	Budget (A)	Vehicle Number	Type	Maritime Electric Department	Invoice[1] (B)					
1	HIAB Boom truck	$142,000	19-10-44	Palfinger boom on Ford Chassis	Stores	$125,179	$14,607	$139,786	$0	$0.00	$139,786
2	Aerial Bucket Truck	475,000	20-12-65	Posi 500-51 Aerial Bucket	Line Dept	126,000	14,607	140,607	290,311	279,788	420,395
3	Aerial Bucket Truck	443,000	20-12-72	Posi 500-51 Aerial Bucket	Line Dept	127,002	14,607	141,609	299,550	286,469	428,078
4	1/2 Ton Truck	37,000	19-05-05	2019 GMC Canyon SLE 4WD CrewCab	Engineering	40,083.	2,921	43,005	0	0	43,005
5	Honda CRV	37,000	19-04-33	Nissan Rogue	Meter Reader	34,677	2,921	37,598	0	0	37,598
6	Toyota Rav4	37,000	19-06-23	Dodge Ram 1500 ST Quad Cab	Properties	34,921	1,461	36,382	0	0	36,382
7	GMC Van	63,000	19-06-20	Ford F-150 Supercab XLT with Spacekap	Meter Dept	56,122	2,921	59,043	0	0	59,043
8	Tacoma 4x4	37,000	19-05-38	GMC Canyon SLE 4WD Crewcab	Survey Dept	42,259	1,461	43,720	0	0	43,720
9	Tacoma 4x4	37,000	19-05-46	GMC Canyon SLE 4WD Extended Cab	Technical Services	42,451	1,461	43,912	0	0	43,912
10	Ford F150 4x4	42,000	19-05-36	Ford F-150 XLT	Line Dept	41,409	1,461	42,869	0	0	42,869
11	Honda Element	42,000	19-06-02	Dodge Ram 1500 ST Crew Cab	Survey Dept	39,720	1,461	41,180	0	0	41,180
12	Ford F-150 4x4	42,000	19-06-45	GMC Sierra 2500 HD SLE Doublecab	Mechanical Maintenance	50,688	1,461	52,149	0	0	52,149
13	Pole Trailer	30,000	19-56-38	Argo Trailer	Line Dept	24,461	0	24,461	0	0	24,461
14	Wire Tensioning Trailer	103,000	18-56-11	Wire Tensioning Trailer	Line Dept	87,856	1,461	89,316	0	0	89,316
11	Contingency	75,000	19-04-09	Honda CR-V[2]	Meter Reader	35,133	4,382	39,516	0	0	39,516
			19-04-12	Honda CR-V[2]	Engineering	20,655 [3]	4,382	25,037	0	0	25,037
			19-12-69	Argo	Dart Team	42,882	0	42,882	0	0	42,882
	Budget	**$1,642,000**			**Totals**	**$971,498**	**$71,575**	**$1,043,072**	**$590,000**	**$566,257**	**$1,609,329**
								5.8 - Transportation Equipment Variance (H = G-A)			**$(32,671)**

1 Invoice amount consists mainly of the item's base price, freight and pre-delivery inspection costs.
2 New CR-V to replace condemned unit. See IR-4 – Attachment 2 "Honda Safety Recall: Rear frame stiffener corrosion".
3 A Honda Canada Credit of $12,114 for the salvage value of the two condemned CR-V's was applied toward the invoice amount for this vehicle.

HONDA

Safety Recall: Rear frame stiffener corrosion

Dear Honda CR-V owner:

In accordance with the requirements of the *Canada Motor Vehicle Safety Act*, we are notifying you of a Safety Recall that applies to your vehicle.

Honda Motor Co. has determined that a defect, which relates to motor vehicle safety, exists in certain 2007-2011 model year CR-V vehicles.

What is the problem?

On some 2007-2011 CR-V vehicles, one or both rear frame stiffeners may become excessively corroded over time. Corrosion is generally more prevalent on a vehicle operated in regions where road de-icing salt is frequently used. Although a certain amount of corrosion is expected to occur from normal vehicle operation, excessive corrosion to the rear frame may result in frame stiffener perforation. Where excessive frame stiffener corrosion exists, a rear-trailing arm may separate from the vehicle's body. A separated rear-trailing arm may cause the vehicle to be difficult to control, increasing the risk of a crash.

To correct this issue, the rear frame stiffener on both sides will be inspected and, if the rear frame has no perforation in the areas adjacent to the rear-trailing arms, corrosion protection will be applied in these areas to prevent future concerns. Please note that this safety recall does not cover corrosion at other locations on the vehicle, nor does the added corrosion protection apply to other locations.

What should you do?

Please contact your Honda dealer to schedule an appointment to have the recall completed on your vehicle. Your dealer will be able to give you an estimate of how long they will require your vehicle – usually less than a day. The dealer will perform the recall free-of-charge.

In the exceptional case that the rear frame inspection reveals that one or both of your vehicle's stiffeners are excessively corroded, dealers will provide you with an offer to purchase your vehicle. The purchase price offered will be a pre-determined value that is calculated taking into account key vehicle attributes, such as model year, trim, and mileage. The price offered will also include a bonus amount over and above the vehicle's estimated value. Where a vehicle inspection reveals excess corrosion, dealers will provide you with temporary alternative transportation, free-of-charge, until the vehicle purchase process is complete.

If you are not the only driver of this vehicle, please advise all other drivers and passengers of this important information!

Who to contact if you experience problems or have questions?

If you need assistance with locating a Honda dealer, or if your dealer is unable to make the necessary repairs free of charge, please contact Honda Canada Customer Relations at 1-888-9HONDA9 (1-888-946-6329). You can also visit our website at www.honda.ca to locate a Honda dealer near you.

Please help Honda Canada keep you informed:

You have received this letter as government records indicate that this vehicle is registered to you. If you do not own this vehicle or if your contact information has changed, please contact your local government vehicle registration agency. Additionally, please help Honda Canada keep you informed by confirming your information at **honda.ca/infoupdate**. Please login using the secure Web PIN (above).

We apologize for any inconvenience this Safety Recall may cause you. Thank you for your co-operation.

Sincerely,

Dave Jamieson
Vice President, Parts and Service

HONDA CANADA INC.
180 HONDA BOULEVARD, MARKHAM, ON, L6C 0H9 • TEL 1-888-9HONDA9 • FAX (TOLL FREE) 1-877-939-0909 • honda_cr@ch.honda.com

Example of the rear wheel failure that could occur on 2007-2011 Honda CR-V's included in the Honda Safety Recall provided as IR-4 – Attachment 2.

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MARITIME ELECTRIC

Charlottetown

MEMORANDUM

TO:	J. W. Geldert, F. J. O'Brien
FROM:	J. D. Gaudet
DATE:	September 13, 2005
SUBJECT:	ROW Fees and the Roads Act

During the 2004 fall sitting of the PEI Legislature section 4.1 of the *Roads Act* was amended to read as follows:

4.1. (1) The Minister may grant to a public utility an easement that authorizes the public utility to have access to any highway or portion of the highway for the purpose of placing, laying or maintaining the poles, lines, plant or equipment of the public utility above, across, in, on or under the highway or the portion of the highway.

(2) The Minister may charge a fee in such amount as may be prescribed or negotiated with the public utility, for the grant of an easement under subsection (1).

(3) Where a public utility conducts any operations in the exercise of its rights under an easement, the utility is
(a) responsible for the cost of those operations, including all costs necessary to restore the highway to its condition prior to the commencement of the operations;
(b) liable for any damage suffered by a third party as a result of the operations.

(4) Where an easement may interfere with highway construction or maintenance, the Minister may relocate the easement and the Minister may recover any expense incurred by the relocation from the public utility. 1997,c.45,s.1; 2004,c.17,s.2.

The rationale for the amendment was to establish a new process in which the Province would no longer financially compensate Maritime Electric for costs associated with road work.

.../2

JDG34

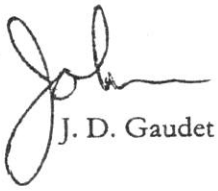
Historically, a cost sharing arrangement was followed in which the Province paid for all Maritime Electric labour and transportation costs associated with the relocation of T&D equipment on government right of ways. Approximately seven years ago that arrangement was changed with the establishment of the *Public Utility Easement (FEES) Regulation* that set out fees on a per kilometer basis in respect of the granting of a public utility easement. On an annual basis, these fees amounted to approximately $172,000. Accordingly, the Company paid this annual fee for the following four years at which time the Province stopped invoicing Maritime Electric. Inquiries were made to determine the Province's position but the responses were at best unclear. Consequently, Management continued to book these annual amounts.

Then, in 2004, the Province advised of their intent to change legislation to reflect yet another arrangement that would see the utility held responsible for all costs associated with T&D equipment relocation as requested by the Department of Transportation and Public Works.

Discussions with the Deputy Minister revealed that the amounts previously collected more than offset the Province's costs as billed by Maritime Electric during the period and that it was their intent to collect from Maritime Electric amounts approximately equal to those billed by the Company for road work changes. The fees, if continued to be collected, would have resulted in an imbalance.

To summarize, the four payments made (approximately $688,000) more than offset Maritime Electric's billings to the Province for the period 1998 to 2004 and on a go forward basis, in lieu of ROW fees, the Province will not be billed for equipment relocation as in the past. There are no outstanding liabilities with respect to the PEI government ROW fees.

Attached for information is an e-mail from the Deputy Minister.



J. D. Gaudet

Enclosure

JDG34

Gaudet, John

From: Steve MacLean [scmaclean@gov.pe.ca]
Sent: September 8, 2005 2:59 PM
To: Gaudet, John
Subject: Easement Fees

Attachments: Steve MacLean.vcf

Steve MacLean.vcf
(841 B)

John:

Just a quick email for the record to confirm our conversation about the changes in legislation and regulation within the Road Act as it affects T&D easements, fees and the like.

The intent and effect of the changes made during last legislative session are:

1) Substantial fees that have been charged to MECL (since mid 1990's) for occupation and operation of your physical plant within the provincial right-of-way will no longer apply. Accordingly you will no longer receive any additional invoices or charges beyond those you have been made aware of already for prior years. I understand our respective accounting staff need to do some reconciliation of some of the previous charges.

2) At the same time and in place of this change the Department will no longer financially compensate MECL for costs related to moving poles and other related infrastructure to accomodate highway reconstruction or new construction. My Department will upon request, provide your engineering department with regular updates of our 5 year construction program to aid MECL in planning for the related work (and expense) required on your part.

3) The legislation/regulation does have some remaining content within it that permits a fee charge-back in the event that MECL is uncooperative and refuses to move necessary poles as an example. This provision is one of those kinds of remedies that exists to make the change workable and enforcable,...but given the long history of a very cooperative business relationship between our organizations, [redacted]

Feel free to put a copy of this e-mail in the file for your auditors to find.

Regards,
Steve

Existing highways

(2) All highways laid out or constructed prior to August 10, 1985, shall be the width as stated or determined in any deed, reservation in a Crown grant, or warrant of survey prepared by the Surveyor General, and in the absence of any such instrument, shall be a width of sixty-six feet. 1985,c.38,s.2.

Public utility easements

4.1. (1) The Minister may grant to a public utility an easement that authorizes the public utility to have access to any highway or portion of the highway for the purpose of placing, laying or maintaining the poles, lines, plant or equipment of the public utility above, across, in, on or under the highway or the portion of the highway.

Fee

(2) The Minister may charge a fee in such amount as may be prescribed or negotiated with the public utility, for the grant of an easement under subsection (1).

Liability of utility

(3) Where a public utility conducts any operations in the exercise of its rights under an easement, the utility is

(a) responsible for the cost of those operations, including all costs necessary to restore the highway to its condition prior to the commencement of the operations;

(b) liable for any damage suffered by a third party as a result of the operations.

Relocation expenses

(4) Where an easement may interfere with highway construction or maintenance, the Minister may relocate the easement and the Minister may recover any expense incurred by the relocation from the public utility. 1997,c.45,s.1; 2004,c.17,s.2.

Approval of opening to highway

5. (1) No person or municipality shall

(a) open or authorize the opening of any highway; or

(b) permit the interconnection of a highway or proposed highway with another highway,

without the approval of the Minister.

Costs to be paid by beneficiary

(2) Before giving his approval the Minister shall ensure that all costs associated with such opening or interconnection are or will be paid for by the persons or municipality benefiting therefrom or authorizing the opening or interconnection.

Powers of Minister

(3) For the purposes of this section the Minister may

(a) develop and implement policies upon which to base his decision;

(b) enter into agreements with a person or municipality respecting construction and the payment of costs;

(c) make his approval subject to such conditions as he sees fit including a condition requiring the conveyance of the road to the Crown. 1985,c.38,s.2.

CHAPTER R-15

ROADS ACT

PUBLIC UTILITY EASEMENT (FEES) REGULATIONS

Pursuant to section 54 of the *Roads Act* R.S.P.E.I. 1988, Cap. R-15, the Minister of Transportation and Public Works made the following regulations:

Public utility easement fees

1. (1) A public utility, except a water or sewerage public utility, shall pay to the Provincial Treasurer in respect of the grant of a public utility easement pursuant to section 4.1 of the Act an annual fee calculated as follows:

(a) $75 per kilometre where the aerial lines or cables extend along highways designated as arterial highways;

(b) $37.50 per kilometre where the aerial lines or cables extend along highways designated as collector or local highways or along seasonal roads or subdivision streets.

Application

(2) The fees set out in subsection (1) apply to existing and future installations. (EC476/97)

POSI+

10 ARTISAN BLVD., VICTORIAVILLE QC G6P 7E4 CANADA T 800-758-5717 | F 819-758-9529 www.posi-plus.com

MARITIME ELECTRIC
180 KENT STREET
CHARLOTTETOWN P.E.I.
C1A 7N2

OCTOBER 29TH 2018

ATTENTION : BARB McGUIRE

We at Posi-Plus wish to thank you for your interest in our product. In reference to your request for quotation 2018-43 we wish to submit the following quotation for your consideration. We look forward to the opportunity to work with you on this project. If you should have any questions regarding any of the enclosed information please do not hesitate to call

BEST REGARDS
MIKE RUSSELL

ONE ONLY FREIGHTLINER CAB AND CHASSIS AS PER ATTACHED SPECIFICATION	$ 126,000.00
ONE ONLY POSI-PLUS MODEL 400-46 C/W PROTEK FIBREGLASS UTILITY LINE BODY AS PER ATTACHED SPECIFICATION	$ 253,644.00
TOTAL	$ 379,644.00

TERMS :

CAB AND CHASSIS NET UPON RECEIPT OUR YARD
AERIAL NET UPON INSTALATION
ALL APPLICABLE TAXES EXTRA
BALANCE NET 15 DAYS
FOB CHARLOTTETOWN PEI
DELIVERY 28 TO 30 WEEKS FROM RECEIPT OF CHASSIS

OPTION PRICES :

MODEL 500-51 IN LIEU OF MODEL 400-46 QUOTED	$ 11,636.00
ARROW BOARD SAFETY SIGN	$ 1,550.00

Maritime Electric
Statement of Capital Projects
For the Twelve Months Ending December 31, 2019
(unaudited)

Confidential

Description	Current Month	Year to Date	Budget	Percent of Budget
Generation				
Charlottetown Plant Buildings and Services Projects	38,927	97,985	171,000	57.30%
Charlottetown Boiler Projects	4,084	5,084	8,000	63.56%
Charlottetown Plant Turbine-Generator Projects	95,352	323,045	1,424,000	22.69%
Borden Plant Projects	17,112	59,226	143,000	41.42%
Total Generation	155,475	485,340	1,746,000	27.80%
Distribution and Transmission				
Distribution				
70200 - D-1 Replacement Due to Storms, Road Alterations	136,434	2,119,728	1,418,000	149.49%
70202 - D-2 Distribution Transformers	576,791	4,711,370	4,168,000	113.04%
70203 - D-3 Services and Street Lighting	478,961	4,917,056	4,375,000	112.39%
70204 - D-4 Line Extensions	184,092	2,929,514	2,928,000	100.05%
70205 - D-5 Line Rebuilds	200,048	4,284,513	4,805,500	89.16%
70206 - D-6 System Meters	47,154	645,367	655,000	98.53%
70207 - D-7 Distribution Equipment	252,797	1,856,059	2,033,000	91.30%
90141 - D-8 Transportation Equipment	7,268	1,043,072	1,642,000	63.52%
	1,883,544	22,506,679	22,024,500	102.19%
Transmission				
80220 - T-1 Substation Projects	596,745	5,432,438	5,002,000	108.61%
80219 - T-2 Line Projects	131,656	2,288,626	2,325,000	98.44%
	728,400	7,721,064	7,327,000	105.38%
Distribution and Transmission	2,611,945	30,227,743	29,351,500	102.99%
Contributions	(54,324)	(758,922)	(400,000)	189.73%
Total Distribution and Transmission	2,557,620	29,468,821	28,951,500	101.79%

Maritime Electric
Statement of Capital Projects
For the Twelve Months Ending December 31, 2019
(unaudited)

Confidential

Description	Current Month	Year to Date	Budget	Percent of Budget
Corporate				
90130 - C-1 Corporate Services	248,949	379,037	573,000	66.15%
90140 - C-2-0 Other IT Services / Projects	173,337	1,055,095	1,211,000	87.13%
Total Corporate	422,286	1,434,133	1,784,000	80.39%
Total Capital	3,135,381	31,388,293	32,481,500	96.63%
General Expense Capitalized	44,511	567,505	527,000	107.69%
Interest During Construction	75,233	474,433	429,000	110.59%
	3,255,125	32,430,232	33,437,500	96.99%
10796 - G-3-2 Modify RO-EDI for Recirc Flushing	-	-	50,000	0.00%
70411 - D-4-1 Brrokside Drive Hazelbrooke Extension	168,335	640,163	411,000	155.76%
70412 - D-4-1 TCH to Mt Herbert Extension	716	776	304,000	0.26%
70322 - D-6-1 Bridge Meter Pilot Project	-	22,050	22,000	100.23%
80819 - T-1-1 Mount Albion Substation	-	109,672	110,000	99.70%
80827 - T-1-2 Mount Albion Transformer	7,290	477,608	480,000	99.50%
80816 - T-1-4 Substation Automation	-	64,112	60,000	106.85%
80829 - T-1-5 Crossroads Control Building	110,405	115,818	114,000	101.59%
80833 - T-2-2 Mt Albion Extension to Substation	(35,000)	185,744	70,000	265.35%
90216 - C-1-2 West Royalty Service Centre Upgrade Plan Phase II	-	261,463	248,000	105.43%
90221 - C-2-5 Turbine Maintenace Software	2,696	61,109	55,000	111.11%
90218 - C-2-6 Web Self Service	-	46,616	44,000	105.95%
90220 - C-2-8 Email & DB Platform	10,591	47,269	40,000	118.17%
90174 - D-8 Fleet Carryover from Prior Year	18,687	608,068	605,000	100.51%
Total Capital Projects Carried Over From Prior Year	283,720	2,640,469	2,613,000	101.05%
Grand Total	3,538,845	35,070,701	36,050,500	97.28%

Original Project Year - ID	Description	Budget (A)	Costs Incurred In 2019 (B)	Carryover to 2020 (C)	Costs Incurred In 2020 (D)	Carryover to 2021 (E)	Total Projected Cost (F = B+D+E)	Projected/Actual Variance (G = F-A)	Comments
2019-4.1(a)	ECC SCADA Simulator	$121,000	$18,750	$100,000	$0	$0	$18,750	($102,250)	ECC SCADA Simulator Project budgeted at $100,000 was scaled back based on a recommendation to use an existing Siemens PSS/E Load Flow Software that Maritime Electric currently owns rather than the proposed Survalent SCADA Simulator. Additional detail concerning this charge is documented in a Mariitme Electric internal memorandum dated October 14, 2020, provided as IR-8 - Attachment 2.
2019-4.3(a)	CT3 Turbine Turbo Generator Overhaul	1,235,000	141,222	1,062,000	695,977	0	837,199	(397,801)	Project was completed. The budget included a provision for replacement parts, contingent on the results of the inspection, that were not required. Also, the replacement of a high pressure coupling nut (service bulletin #SB-266) estimated at $96,000, did not require replacement.
2019-5.4(b)	Bonshaw (West River Bridge) Circuit Extension	1,040,000	333,913	706,000	787,349	53,000	1,174,262	134,262	Project is near completion with a small amount of work to pull and terminate the undergound cables remaining. The underground portion of the project that was not completed in 2019 was expanded to accomodate changing a 275 metre overhead section of the design to underground (to comply with Commission Order UE93-14). The added cost of this change is approximately $134,000 (above the 2020 carryover amount of $706,000). With approximately 60% of this extra work completed in 2020, the work remaining to be completed in 2021 is estimated at $53,000.
2019-5.5(a)	Spring Valley Make-Ready Rebuild	212,500	124,511	88,000	90,296	0	214,807	2,307	Project was completed.
2019-5.7(a)	Voltage Regulators and 138 kV City Circuit Switches	1,299,000	1,092,879	175,000	175,854	0	1,268,733	(30,267)	Project was completed.
2019-5.8	Two Aerial Bucket Trucks	1,642,000	1,043,072	590,000	566,257	0	1,609,329	(32,671)	Project was completed.
2019-6.1(c)	Clyde River and O'Leary Engineering and Environmental Assessment	263,000	54,869	205,000	199,812	0	254,681	(8,319)	Project was completed. The timing of the Clyde River (New Haven) Substation required the Company to utilize the Section 6.1c budget for the engineering and environmental assessment, and the engineering design for that project, rather than working concurrently on the Clyde River and O'Leary projects. As a result, the development of the O'Leary Interconnection was deferred and subsequently included in the 2020 Capital Budget Application.
2019-7.1(c)	Forklift at West Royalty Service Centre	76,000	0	65,000	58,420	0	58,420	(17,580)	Project was completed.
2019-7.2(c)	Network Access Control	80,000	3,283	77,000	85,082	0	88,365	8,365	Project was completed.
2019-7.2(g)	Internal Audit Software Compliance	75,000	12,990	62,000	63,378	0	76,368	1,368	Project was completed.
TOTAL		**$6,043,500**	**$2,825,489**	**$3,130,000**	**$2,722,425**	**$53,000**	**$5,600,914**	**($442,586)**	

Date: October 14, 2020

To: Kent Nicholson

From: Jim Coyle; Jordan Sampson

Project: ECC SCADA Simulator

Subject: Project Update and Recommendation

Attachments: ECC Operator Training Simulator Report; PSS/E Reference Guide

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The purpose of this document is to provide an update of the ECC Supervisory Control and Data Acquisition (SCADA) Simulator Project. Justifications support a recommendation to use the Siemens PSS/E Load Flow Software and cancel the SCADA Simulator Project.

Background

In 2019, Maritime Electric budgeted $121,000 for the implementation of a SCADA Simulator at the Energy Control Center (ECC). The project's purpose was to improve training for new and existing ECC operators by simulating outage scenarios.

As described in the ECC Operator Training Simulator Report (November 2019), three simulator options and a Siemens PSS/E Load Flow Software option were evaluated and considered by MECL in 2019. The Survalent SCADA Simulator was the most attractive option because of its low cost and because Survalent is the vendor for the company's existing SCADA system; however, at the time, the simulator did not have load flow capabilities for simulating events. Survalent indicated that they were working on upgrades to their simulator to add load flow features within 12 months and expressed interest in working with MECL on a pilot project. The Siemens PSS/E Load Flow software option was implemented in the meantime as a trial because the Company had existing software licenses.

MECL carried over the project budget to 2020 as discussions with Survalent regarding a pilot project continued.

Project Update

Early in 2020, ECC operators were trained on the use of the Siemens PSS/E Load Flow software as discussions with Survalent regarding a pilot project continued. During this time, Survalent indicated that their simulator's load flow capabilities required MECL's Geographic Information System (GIS) mapping files. Although MECL maintains updated GIS files, they contain only a portion of the necessary data, unlike other utilities. A Customer Information System (CIS) database contains the remaining data (e.g.

transformers, conductor sizes, etc.), separate from the GIS files. Additionally, MECL's GIS mapping files' contents are not necessarily electrically correct (e.g. there are sometimes no differentiation between different intersecting lines at common pole structures). Discussions with the Information Technology (IT) department indicated that preparing the GIS files for a SCADA Simulator would be a significant project and would take years to complete.

Another option is to only import GIS mapping data for MECL's transmission system to the SCADA system, which is less complicated than importing the GIS data for the entire grid. Importing only transmission system data would enhance MECL's SCADA system by geographically representing lines and substations in PEI, which is presumed to improve ECC operator training; however, a training simulator would not accompany the SCADA system. Survalent's budget estimate for importing MECL's transmission system GIS data into the SCADA system was $60,000 to $80,000, which we consider too costly given the minimal added value.

Recommendation

We recommend moving forward with the Siemens PSS/E Load Flow Software and cancelling the SCADA Simulator Project for the following reasons:

1. Due to the small number of ECC operators at MECL compared to other utilities, the current cost of a SCADA simulator with load flow capabilities is currently not justifiable. The cost of alternate options that do not contain load flow capabilities is less but is not justifiable, given the minimal added value.
2. An existing license for the Siemens PSS/E Load Flow Software is available for the operators to use at no additional cost to MECL.
3. Regular updates would be required to SCADA simulator software files to reflect changes made to the PEI electrical system over time. The Siemens PSS/E Load Flow Software files are required to be updated by MECL's Corporate Planning Department regularly to ensure MECL's transmission system model is current to execute load flow scenarios and for other purposes.
4. Concerns that implementing a SCADA simulator will require extensive supervisory labour exist. The PSS/E load flow software would require significantly less effort because MECL already uses it.
5. There is a possibility that MECL completely overhauls its Outage Management System (OMS) in the future if MECL implements AMI meters (smart meters). In this case, a GIS mapping system (that merges the data from the company's existing CIS and GIS systems into one system) would likely replace the existing system, at which point MECL can reconsider the SCADA Simulator Project.