

All our energy.  
All the time.



February 26, 2021

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



*Handled  
3:18pm  
MLA*

Dear Ms. Mosher:

***2020 Capital Budget Variance Report***

Please find attached five copies of the Company's 2020 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

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

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

GCC06  
Enclosure

**MARITIME ELECTRIC COMPANY, LIMITED**  
**2020 CAPITAL BUDGET VARIANCE REPORT**

**February 26, 2021**

**MARITIME ELECTRIC COMPANY, LIMITED**  
**2020 Capital Budget Variance Report**

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**MARITIME ELECTRIC COMPANY, LIMITED**  
**2020 Capital Budget Variance Report**  
**INTRODUCTION**

On December 9, 2019, the Island Regulatory and Appeals Commission (“IRAC” or “the Commission”) issued Order UE19-09 approving an Application by Maritime Electric Company, Limited (“Maritime Electric” or the “Company”) in respect of its 2020 Capital Budget. As well, on May 5, 2020, the Commission issued Order UE20-02 approving a supplementary budget request (“SBR”) to increase the 2020 Line Rebuilds budget for the PEI Broadband Project, and on November 4, 2020, the Commission issued Order UE20-05 approving an SBR to increase the 2020 Transportation Equipment budget for the Electric Vehicle (“EV”) Charging Stations project. This report provides a description of the variances of the actual expenditures from the approved 2020 Capital Budget.

Total capital expenditures (net of contributions in aid of construction) for 2020 were \$31,822,292 compared to the approved budget of \$38,122,822, resulting in an under budget variance of \$6,300,530. A number of projects could not be completed in 2020 requiring a carryover of \$8,492,000 to 2021. The net result is that the total capital expenditures for 2020 are expected to be over budget by \$2,191,470 as summarized in Section B of this report. However, before contributions in aid of construction, the total capital expenditures for 2020 are expected to be over budget by \$885,897 (or 2.4 per cent), including the \$8,849,000 carryover. Excluded from these variances are the capital expenditures carried over from 2019 that were completed in 2020 (Appendix II).

The carryover amount is significantly larger than previous years as a result of scope and timeline changes with the PEI Broadband Project, requiring \$4,942,000 of its \$5,710,000 budget allocation to be carried over to 2021. The remaining carryover amount of \$3,907,000 is required to complete projects that were added through a SBR or were delayed due to material supply issues, permitting requirements, internal and contracted labour constraints and COVID-19 travel restrictions. The Company expects to complete all of the carryover project work in 2021.

## MARITIME ELECTRIC COMPANY, LIMITED

## 2020 Capital Budget Variance Report

## SUMMARY

	Approved 2020 Budget (A)	2020 Expenditures (B)	2020 Variance (C = B - A)	Estimated Expenditures in 2021 (D)	Total Expected Expenditures (E = B + D)	Variance From Budget (F = E - A)
Generation	\$ 767,000	\$ 729,438	\$ (37,562)	\$ 48,000	\$ 777,438	\$ 10,438
Distribution	27,885,493 <sup>1</sup>	21,973,543	(5,911,950)	6,949,000	28,922,543	1,037,050
Transmission	9,214,000	7,654,996	(1,559,004)	1,852,000	9,506,996	292,996
Corporate	1,956,000	1,687,498	(268,502)	-	1,687,498	(268,502)
Capitalized General Expense	557,000	489,745	(67,255)	-	489,745	(67,255)
Interest During Construction	<u>563,000</u>	<u>444,170</u>	<u>(118,830)</u>	<u>-</u>	<u>444,170</u>	<u>(118,830)</u>
Sub-Total	40,942,493	32,979,390	(7,963,103)	8,849,000	41,828,390	885,897
Less: Contributions in Aid of Construction	<u>(2,819,671)</u>	<u>(1,157,098)</u>	<u>1,662,573</u>	<u>(357,000)</u>	<u>(1,514,098)</u>	<u>1,305,573</u>
Net Total	<u>\$ 38,122,822</u>	<u>\$ 31,822,292<sup>2</sup></u>	<u>\$ (6,300,530)</u>	<u>\$ 8,492,000</u>	<u>\$ 40,314,292</u>	<u>\$ 2,191,470</u>

<sup>1</sup> Order UE19-09 approved \$21,609,000, Order UE20-02 approved a SBR of \$5,710,000 and Order 20-5 approved a SBR of \$566,493.

<sup>2</sup> Total does not include expenditures for prior year projects carried over to 2020. Refer to Appendix II.

**MARITIME ELECTRIC COMPANY, LIMITED**  
**2020 Capital Budget Variance Report**  
**4.0 - GENERATION**

**Generation - Summary**

	Capital Budget Subcategory	Approved 2020 Budget (A)	2020 Actual Expenditures (B)	2020 Variance (C = B - A)	Carryover to 2021 (D)	Total Expected Expenditures (E = B + D)	Expected Variance From Budget (F = E - A)
4.1	Charlottetown Plant Buildings and Services Projects	\$ 326,000	\$ 269,917	\$ (56,083)	\$ 38,000	\$ 307,917	\$ (18,083)
4.2	Charlottetown Plant Turbine-Generator Projects	211,000	168,104	(42,896)	10,000	178,104	(32,896)
4.3	Borden Plant Projects	<u>230,000</u>	<u>291,417</u>	<u>61,417</u>	<u>-</u>	<u>291,417</u>	<u>61,417</u>
	<b>TOTAL</b>	<b><u>\$ 767,000</u></b>	<b><u>\$ 729,438</u></b>	<b><u>\$ (37,562)</u></b>	<b><u>\$ 48,000</u></b>	<b><u>\$ 777,438</u></b>	<b><u>\$ 10,438</u></b>

**4.1 Charlottetown Plant Buildings and Services Projects**

The Generation 4.1 category will be \$18,083 under budget, including a carryover of \$38,000.

2020 Variances

ECC Sprinkler Upgrades	\$ (12,222)	
Control Room Washroom/Kitchen Renovations	16,663	
Charlottetown Plant Miscellaneous Buildings and Services	(9,524)	
Separation of Machine Shop from the CTGS	(51,000)	\$ (56,083)

2021 Carryovers

ECC Sprinkler Upgrades (Appendix I)	25,000
Control Room Washroom/Kitchen Renovation (Appendix I)	<u>13,000</u>

**Generation 4.1 Under Budget Variance (including carryover) \$ (18,083)**

The Energy Control Centre (“ECC”) Sprinklers Upgrade will be over budget by \$12,778, including a carryover of \$25,000. The carryover is necessary to complete landscaping over the area of the new buried fire main, as the work extended into late fall and had to be deferred to spring 2021 due to ground conditions. The over budget variance is due to an underestimation of the cost to have a National Fire Protection Association certified engineering firm prepare the final design for the sprinkler upgrades. Extra costs associated with off-Island contractors having to follow COVID-19 protocols also contributed to the over budget variance.

## MARITIME ELECTRIC COMPANY, LIMITED

## 2020 Capital Budget Variance Report

## 4.0 - GENERATION

The Control Room Washroom/Kitchen Renovations will be over budget by \$29,663, including a carryover of \$13,000. The carryover is necessary to accommodate contractor completion of minor deficiencies that are tied to final payment. The over budget variance is due to a change in the project scope to allow the ECC meeting room to be relocated to the ground floor of the building to address security concerns (given its proximity to the ECC) and to utilize the space to consolidate offices in the same work area. It was determined that it would be more cost effective to make this change during the kitchen and washroom renovations, than it would be to complete the relocation as a separate project in the future.

The Separation of Machine Shop from the Charlottetown Thermal Generating Station (“CTGS”) project has been deferred indefinitely due to ongoing uncertainty around the future of the Combustion Turbine 3 (“CT3”) Balance of Plant Equipment Building project and the scope of the CTGS Decommissioning project.

#### 4.2 Charlottetown Plant Turbine-Generator Projects

The Generation 4.2 category will be \$32,896 under budget, including a carryover of \$10,000.

##### 2020 Variances

Mobile Diesel Fuel Degradation Conditioning System	\$	(20,399)	
Combustion Turbine Improvements		(22,497)	\$ (42,896)

##### 2021 Carryover

Mobile Diesel Fuel Degradation Conditioning System (Appendix I)			<u>10,000</u>
<b>Generation 4.2 Under Budget Variance (including carryover)</b>			<b><u>\$ (32,896)</u></b>

The Mobile Diesel Fuel Degradation Conditioning System will be \$10,399 under budget, including a carryover of \$10,000. The system was delivered in December 2020 at a tendered price that was approximately \$10,400 less than budgeted. The carryover is required for the purchase of critical spare parts that have not yet been delivered and the completion of in-person training which is delayed due to COVID-19 travel restrictions.

## MARITIME ELECTRIC COMPANY, LIMITED

## 2020 Capital Budget Variance Report

## 4.0 - GENERATION

The Combustion Turbine Improvements budget was provisional and the full amount was not required.

#### 4.3 Borden Plant Projects

The Generation 4.3 category was \$61,417 over budget, primarily due to the replacement of the electromechanical relays for Combustion Turbine #1 (“CT1”) and Combustion Turbine #2 (“CT2”) costing more than was estimated.

##### 2020 Variances

Asphalt Paving at Entrance Roadway	\$ (2,000)
Miscellaneous Combustion Turbine Building and Services Improvements	<u>63,417</u>
<b>Generation 4.3 Over Budget Variance</b>	<b><u>\$ 61,147</u></b>

The purchase cost of the CT1 and CT2 protection relays and the associated installation labour were both higher than budgeted. The higher than estimated installation cost was associated with having to follow COVID-19 protocols, as the consultant was from off-Island and the work was done when travel restrictions within Atlantic Canada were in place.



## MARITIME ELECTRIC COMPANY, LIMITED

## 2020 Capital Budget Variance Report

## 5.0 - DISTRIBUTION

Distribution - Summary

	Capital Budget Subcategory	Approved 2020 Budget (A)	2020 Actual Expenditures (B)	2020 Variance (C = B - A)	Carryover to 2021 (D)	Total Expected Expenditures (E = B + D)	Expected Variance From Budget (F = E - A)
5.1	Replacements – Storms, Collision, Fire and Road Alterations	\$ 1,457,000	\$ 1,816,083	\$ 359,083	\$ -	\$ 1,816,083	\$ 359,083
5.2	Distribution Transformers	3,926,000	3,809,592	(116,408)	111,000	3,920,592	(5,408)
5.3	Services and Street Lighting	4,996,000	5,233,172	237,172	-	5,233,172	237,172
5.4	Line Extensions	3,340,000	3,377,694	37,694	272,000	3,649,694	309,694
5.5	Line Rebuilds	9,297,000	4,551,272	(4,745,728)	4,942,000	9,493,272	196,272
5.6	System Meters	905,000	888,194	(16,806)	-	888,194	(16,806)
5.7	Distribution Equipment	1,610,000	1,513,812	(96,188)	61,000	1,574,812	(35,188)
5.8	Transportation Equipment	2,354,493	783,724	(1,570,769)	1,563,000	2,346,724	(7,769)
	<b>Sub-Total</b>	<u>\$ 27,885,493</u>	<u>\$ 21,973,543</u>	<u>\$ (5,911,950)</u>	<u>\$ 6,949,000</u>	<u>\$ 28,922,543</u>	<u>\$ 1,037,050</u>
	Less: Contributions in Aid of Construction (CIAC)	(2,819,671)	(1,157,098)	1,662,573	(357,000)	(1,514,098)	1,305,573
	<b>TOTAL</b>	<u>\$ 25,065,822</u>	<u>\$ 20,816,445</u>	<u>\$ (4,249,377)</u>	<u>\$ 6,592,000</u>	<u>\$ 27,408,445</u>	<u>\$ 2,342,623</u>

**5.1 Replacements - Storms, Collision, Fire and Road Alterations**

The Distribution 5.1 category, which was a provisional budget allocation, was \$359,083 over budget.

2020 Variances

Replacements – Storms	\$ 11,319
Replacements – Road Alterations	<u>347,764</u>
<b>Distribution 5.1 Over Budget Variance</b>	<u><b>\$ 359,083</b></u>

Road alterations work primarily requires Maritime Electric to move and/or replace poles and other system infrastructure to accommodate roadway and construction realignment projects. In 2020, this included more extensive work than expected on bridge projects in Hunter River and Springvale, and on highway realignment projects in Caledonia (roundabout) and at the St. Peters Road/Charlottetown Bypass intersection. Also

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## 2020 Capital Budget Variance Report

## 5.0 - DISTRIBUTION

contributing to the increase was the cost to comply with COVID-19 protocols, as additional vehicles were required for line and traffic control crews to maintain a safe physical distance while travelling to and from work sites.

**5.2 Distribution Transformers**

The Distribution 5.2 category will be \$5,408 under budget, including a carryover of \$111,000.

2020 Variance

Distribution Transformers	\$ (116,408)
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2021 Carryover

Distribution Transformers (Appendix I)	<u>111,000</u>
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<b>Distribution 5.2 Under Budget Variance (including carryover)</b>	<b><u><u>\$ (5,408)</u></u></b>
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The \$111,000 carryover amount is for padmount transformers that were ordered in 2020 with delivery scheduled for the first quarter of 2021.

**5.3 Services and Street Lighting**

The Distribution 5.3 category was \$237,172 over budget.

2020 Variances

New Overhead and Underground Services	\$ 241,274
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Street and Area Lighting	<u>(4,102)</u>
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<b>Distribution 5.3 Over Budget Variance</b>	<b><u><u>\$ 237,172</u></u></b>
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Service requests associated with new construction continue to remain high and the over budget variance is a reflection of the strong housing construction sector in the province. In 2020, total new service requests were 1,178 as compared to 1,009 in 2019. Also contributing to the variance was the cost to comply with COVID-19 protocols, as additional vehicles were required for line and traffic control crews to maintain a safe physical distance while travelling to and from work sites.

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**5.0 - DISTRIBUTION**

**5.4 Line Extensions**

The Distribution 5.4 category will be \$309,694 over budget, including a carryover of \$272,000.

2020 Variances

Customer Driven Line Extensions	\$ 216,751	
Reliability Driven Line Extensions	<u>(179,057)</u>	\$ 37,694

2021 Carryover

Reliability Driven Line Extension – Clyde River Feeders (Appendix I)		<u>272,000</u>
<b>Distribution 5.4 Over Budget Variance (including carryover)</b>		<b><u>\$ 309,694</u></b>

Customer Driven Line Extensions were over budget due to a higher than expected demand to extend single and three phase main lines for customers (similar to service work, customer driven line extensions are associated with construction activity) and related extra costs associated with COVID-19 protocols compliance.

The St. Mary's Road and North Shore Feeder reliability driven line extension projects were both completed within one per cent of their respective budget allocations (St. Mary's Road had an under budget variance of \$1,795 and the North Shore Feeder had an over budget variance of \$832). The Clyde River Substation Feeders project will be \$93,906 over budget, including a carryover of \$272,000. The carryover is necessary because the project was delayed to the latter part of 2020 to coincide with the construction of the Clyde River Substation. The over budget variance is due to the reconfiguration of one of the three new circuits, from a planned 4 kilometres ("km") of non-energized new construction along the Cornwall Bypass, to a 2 km of energized double circuit rebuild along the old TransCanada Highway in Clyde River. This change was made in consultation with the Department of Transportation and Infrastructure, which preferred the alternate route. The rebuild of an energized line to a double circuit is more difficult and costly than it would have been to build a new single circuit line, as was originally estimated, even with the rebuild being over a shorter distance. The distance reduction does, however, provide the engineering benefit of minimizing the feeder length between the load and the substation.

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**5.0 - DISTRIBUTION**

**5.5 Line Rebuilds**

The Distribution 5.5 category will be \$196,272 over budget, including a carryover of \$4,942,000 related to the PEI Broadband Project<sup>3</sup>.

2020 Variances

PEI Broadband Project	\$ (4,942,067)	
Single and Three Phase Rebuilds	152,293	
Distribution Line Refurbishment	72,024	
Accelerated Distribution Component Replacement	(27,978)	\$ (4,745,728)

2021 Carryover

PEI Broadband Project (Appendix I)	4,942,000	
<b>Distribution 5.5 Over Budget Variance (including carryover)</b>		<b><u>\$ 196,272</u></b>

During 2020, there were scope and timeline changes to the PEI Broadband Project, as described in the PEI Broadband Project Six Month Report filed with the Commission on December 7, 2020. These changes resulted in lower than budgeted expenditures and a carryover amount of \$4,942,000, which is required to complete the 2020 component of the project.

Excluding the PEI Broadband Project, the Distribution 5.5 category was \$196,339 over budget. This over budget variance was primarily attributable to the Lower Montague and Bedford Road line rebuild projects costing more than estimated due to scope changes, and an unplanned emergency rebuild of a deteriorated and inaccessible distribution line under the Distribution Line Refurbishment Program. Extra costs associated with COVID-19 protocols compliance also contributed to the over budget variance of all line rebuild projects.

Included in the Single and Three Phase Rebuild category, the Lower Montague project was over budget by \$78,581 as a result of extending the three phase section by 15 spans to better balance and split the load on three downstream single phase lines. Also, a plan

<sup>3</sup> The SBR for the PEI Broadband Project was approved on May 5, 2020 in Order UE20-02.

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## 5.0 - DISTRIBUTION

to re-use the single phase conductor on the three phase upgrade portion of the project was not feasible due to its deteriorated condition, thereby increasing the cost of the rebuild.

The Bedford Road project, also included in the Single Phase and Three Phase Rebuild category, was over budget by \$19,045 as a result of converting a section of the line to three phase to provide for better distribution of load, improved voltage stability and new backup opportunities in the event of an outage. The other two planned line rebuild projects, North York River Road and Cambridge Road, had a combined over budget variance of \$54,677. The variance for North York River Road was due to higher than estimated material costs and for Cambridge Road, labour costs were higher than estimated.

The Distribution Line Refurbishment program was over budget by \$72,024 as a result of having to rebuild a 2 km section of inaccessible and severely deteriorated single phase line along the Island Blue Road in Point Pleasant. The work was necessary in order to safely reenergize the line and put it back into service for a customer.

The Accelerated Distribution Component Replacement program was under budget by \$27,978 due to completing approximately 18 fewer eastern cedar pole replacements than planned in 2020.

### 5.6 System Meters

The Distribution 5.6 category was \$16,806 under budget.

#### 2020 Variances

System Meters <sup>4</sup>	\$ (4,946)
Smart Meters	<u>(11,860)</u>
<b>Distribution 5.6 Under Budget Variance</b>	<b><u>\$ (16,806)</u></b>

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<sup>4</sup> Includes watt-hour meters, combination meters, metering tanks and miscellaneous metering equipment.

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## 5.0 - DISTRIBUTION

Included in the System Meters category was a budget of \$120,000 for outdoor metering tanks that were not necessary in 2020. This under budget variance was partially offset by an increase in net metering installations, which increased the number of meters required by 670, over the 2019 requirement.

Expenditures on Smart Meters were also slightly under budget as some consultant costs were less than estimated.

## 5.7 Distribution Equipment

The Distribution 5.7 category will be \$35,188 under budget, including a carryover of \$28,000 for voltage regulator controllers and \$33,000 for line tools and equipment, all ordered in 2020 with delivery expected in the first quarter of 2021. Expenditures on Relay Replacements were slightly under budget, as a result of savings in panel supply and associated installation costs.

2020 Variances

Distribution and Communication Equipment <sup>5</sup>	\$	(34,852)	
Relay Replacements		(22,221)	
Distribution Switches		(971)	
Meter Shop Equipment		(5,618)	
Line Tools and Equipment		(32,526)	\$ (96,188)

2021 Carryover

Distribution and Communication Equipment <sup>5</sup> (Appendix I)			28,000
Line Tools and Equipment (Appendix I)			<u>33,000</u>
<b>Distribution 5.7 – 2020 Under Budget Variance (including carryover)</b>			<b><u>\$ (35,188)</u></b>

## 5.8 Transportation Equipment

The Distribution 5.8 category will be \$7,769 under budget, including a carryover of \$1,563,000.

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<sup>5</sup> Includes voltage regulators, reclosers, controllers, transformer upgrades, communication equipment replacements and miscellaneous equipment.

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**5.0 - DISTRIBUTION**

2020 Variance

Transportation Equipment	\$ (1,570,769)
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2021 Carryover

Two Digger Derrick Trucks and One Aerial Bucket Truck (Appendix I)	1,000,000
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Electric Vehicle (“EV”) Charging Stations (Appendix I) <sup>6</sup>	<u>563,000</u>
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<b>Distribution 5.8 Under Budget Variance (including carryover)</b>	<b><u><u>\$ (7,769)</u></u></b>
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Two digger derrick line trucks and one aerial bucket line truck were ordered in January 2020 and progress payments<sup>7</sup> for all three vehicles totalling \$432,482 were made in November 2020. The associated carryover of \$1,000,000 is due to the long delivery lead time and represents the estimated remaining cost of the three line trucks. Expenditure details for each vehicle in the 2020 Capital Budget is provided in Appendix III.

The EV Charging Stations<sup>8</sup> project was approved late in the 2020 and, as a result, a carryover is required for the majority of the project budget and related contribution amounts.

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<sup>6</sup> Customer contributions of \$357,000 related to EV Charging Stations are being carried over to 2021 as well (Appendix I).

<sup>7</sup> Progress payments were recorded as work in progress.

<sup>8</sup> The EV Charging Stations Project was approved as a SBR in Order UE20-05.

## MARITIME ELECTRIC COMPANY, LIMITED

## 2020 Capital Budget Variance Report

## 6.0 - TRANSMISSION

Transmission - Summary

	Capital Budget Subcategory	Approved 2020 Budget (A)	2020 Actual Expenditures (B)	2020 Variance (C = B - A)	Carryover to 2021 (D)	Total Expected Expenditures (E = B + D)	Expected Variance From Budget (F = E - A)
6.1	Substation Projects	\$ 6,257,000	\$ 4,860,208	\$ (1,396,792)	\$ 1,392,000	\$ 6,252,208	\$ (4,792)
6.2	Transmission Projects	<u>2,957,000</u>	<u>2,794,788</u>	<u>(162,212)</u>	<u>460,000</u>	<u>3,254,788</u>	<u>297,788</u>
	<b>TOTAL</b>	<u>\$ 9,214,000</u>	<u>\$ 7,654,996</u>	<u>\$ (1,559,004)</u>	<u>\$ 1,852,000</u>	<u>\$ 9,506,996</u>	<u>\$ 292,996</u>

**6.1 Substation Projects**

The Transmission 6.1 category will be \$4,792 under budget, including a carryover of \$1,392,000.

2020 Variances

Clyde River Substation	\$ (1,022,956)	
Substation Communications System Upgrade	(19,309)	
O'Leary Interconnection	(170,000)	
Substation Modernization Program	(11,034)	
138 kV Breaker Replacement Program	4,567	
Energy Control Centre Communication Room	(217)	
Communication Fibre at the ECC	(177,843)	\$ (1,396,792)

2021 Carryover

Clyde River Substation (Appendix I)	1,025,000
Substation Communications System Upgrade (Appendix I)	19,000
O'Leary Interconnection (Appendix I)	170,000
Communication Fibre at the ECC (Appendix I)	<u>178,000</u>
<b>Transmission 6.1 Under Budget Variance (including carryover)</b>	<b><u>\$ (4,792)</u></b>

The Clyde River Substation is expected to be completed on budget. However, construction was impacted by the delayed delivery of the structural steel as a result of COVID-19 and, as a result, a carryover of \$1,025,000 is required to complete the project in 2021.

The Substation Modernization program was under budget due to COVID-19 travel restrictions, as the consultant that the Company will be using to inspect substation



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## 6.0 - TRANSMISSION

grounding is from off-Island and it was determined that it would be more cost effective to complete the planned inspections under the program in 2021.

Other substation projects are expected to be completed on budget but require carryovers, and are as follows:

- The Substation Communications System Upgrade project requires a carryover of \$19,000 for equipment that was ordered in 2020 with delivery expected in the first quarter of 2021.
- The O'Leary Interconnection project requires a carryover of \$170,000 for the purchase of land and completion of a preliminary engineering design that was unable to be completed in 2020.
- The Communication Fibre at the ECC project requires a carryover of \$178,000 to complete remaining construction work.

## 6.2 Transmission Projects

The Transmission 6.2 category will be \$297,788 over budget, including a carryover of \$460,000.

### 2020 Variances

69 kV and 138 kV Switch Program	\$	1,479	
Transmission Line Refurbishment		122,077	
Y-109 Tap to Clyde River Substation		(198,340)	
Y-109 Rebuild Bannockburn Road to Steel Towers		(87,428)	\$ (162,212)

### 2021 Carryover

Y-109 Tap to Clyde River Substation (Appendix I)	373,000
Y-109 Rebuild Bannockburn Road to Steel Towers (Appendix I)	<u>87,000</u>
<b>Transmission 6.2 Over Budget Variance (including carryover)</b>	<b><u>\$ 297,788</u></b>

The Transmission Line Refurbishment project was \$122,077 over budget as a result of extra work that had to be done on transmission lines T-2, T-4, T-8 and T-10 associated with the new Lorne Valley Switching Station. The extra work was required to avoid large

**MARITIME ELECTRIC COMPANY, LIMITED****2020 Capital Budget Variance Report****6.0 - TRANSMISSION**

customer outages when rerouting the transmission lines into the station, installing in-line switches on T-8, and interconnecting T-2 and T-10 so that the T-8 in-line switches could be installed.

The Y-109 Tap to Clyde River Substation project is expected to be over budget by \$174,660, including a carryover of \$373,000. The project was delayed to the latter part of 2020 to coincide with the construction of the Clyde River Substation. The additional budget allocation is due to the requirement to change the location of a section of the line. The budget estimate was based on the majority of the construction being a transmission-only line on the opposite side of the road of an existing distribution line. However, approximately 3 km of the 6.5 km line needs to be located on the same side of the road as the existing distribution line to avoid areas of concern with respect to the proximity of the transmission line to customer properties. This requires that section of the line to be constructed as an energized distribution underbuild. It also requires new poles to be installed adjacent to the energized distribution line (to avoid customer outages), transferring the existing distribution lines to the new poles and the installing new transmission line above the distribution line. This type of construction is significantly more difficult, time consuming and costly.

The Y-109 Rebuild Bannockburn Road to Steel Towers project is expected to be substantially on budget with a carryover of \$87,000. The project was not completed in 2020 because the line could not be taken out of service for reconductoring during the late fall and winter period due to system load constraints.

**MARITIME ELECTRIC COMPANY, LIMITED**  
**2020 Capital Budget Variance Report**  
**7.0 - CORPORATE**

**Corporate - Summary**

	Capital Budget Subcategory	Approved 2020 Budget (A)	2020 Actual Expenditures (B)	2020 Variance (C = B - A)	Carryover to 2021 (D)	Total Expected Expenditures (E = B + D)	Expected Variance From Budget (F = E - A)
7.1	Corporate Services	\$ 602,000	\$ 400,466	\$ (201,534)	\$ -	\$ 400,466	\$ (201,534)
7.2	Information Technology	<u>1,354,000</u>	<u>1,287,032</u>	<u>(66,968)</u>	<u>-</u>	<u>1,287,032</u>	<u>(66,968)</u>
	<b>TOTAL</b>	<b><u>\$ 1,956,000</u></b>	<b><u>\$ 1,687,498</u></b>	<b><u>\$ (268,502)</u></b>	<b><u>\$ -</u></b>	<b><u>\$ 1,687,498</u></b>	<b><u>\$ (268,502)</u></b>

**7.1 Corporate Services**

The Corporate Services 7.1 category was \$201,534 under budget. Two projects approved for 2020 were completed and the budget variance details for both are provided below.

2020 Variances

Recurring Annual Capital Requirements	\$ (36,585)
180 Kent Street Office Building Elevator – Phase 2	<u>(164,949)</u>
<b>Corporate Services 7.1 Under Budget Variance</b>	<b><u>\$ (201,534)</u></b>

The Recurring Annual Capital Requirements allocation was under budget by \$36,585 as a result of the inability to secure contractor and trades personnel for a small number of the facility upgrade projects.

The 180 Kent Street Office Building project was a two-year initiative with one elevator unit replaced in 2019 and the other unit replaced in 2020. Original budget projections in 2018 anticipated interior column structural modifications totalling \$476,000 (\$226,000 for 2019 and \$250,000 for 2020). However, the final elevator unit selections enabled the avoidance of structural changes and resulted in the project being completed under budget by \$164,949.

## MARITIME ELECTRIC COMPANY, LIMITED

## 2020 Capital Budget Variance Report

## 7.0 - CORPORATE

## 7.2 Information Technology

	Capital Budget Subcategory	Approved 2020 Budget (A)	2020 Actual Expenditures (B)	2020 Variance (C = B - A)	Carryover to 2021 (D)	Total Expected Expenditures (E = B + D)	Expected Variance From Budget (F = E - A)
7.2	Hardware Acquisitions	\$ 280,000	\$ 234,694	\$ (45,306)	\$ -	\$ 234,694	\$ (45,306)
7.2	Purchased Software and Upgrades	415,000	444,145	29,145	-	444,145	29,145
7.2	Other IT Services/Projects	<u>659,000</u>	<u>608,193</u>	<u>(50,807)</u>	<u>-</u>	<u>608,193</u>	<u>(50,807)</u>
	<b>TOTAL</b>	<b>\$ <u>1,354,000</u></b>	<b>\$ <u>1,287,032</u></b>	<b>\$ <u>(66,968)</u></b>	<b>\$ <u>-</u></b>	<b>\$ <u>1,287,032</u></b>	<b>\$ <u>(66,968)</u></b>

The Information Technology 7.2 category was \$66,968 under budget.

2020 Variances

Hardware Acquisitions	\$ (45,306)
Purchased Software and Upgrades	29,145
Payroll System	(1,820)
Business Network Security Review	(5,009)
Cybersecurity Enhancements	33
District Office Connectivity	(4,744)
Meter Order Advanced Features	(51,000)
Aged System Refresh	3,963
On-Line Services	<u>7,770</u>
<b>Corporate Services 7.2 Under Budget Variance</b>	<b>\$ <u>(66,968)</u></b>

Expenditures for Hardware Acquisitions in 2020 were reduced by \$45,306 to offset an overage in Purchased Software and Upgrades, which was the result of a new software agreement with Microsoft that increased costs by approximately \$30,000.

The Meter Order Advanced Features project was deferred indefinitely in order to align with the future development of a new Customer Information System.

**MARITIME ELECTRIC COMPANY, LIMITED**  
**2020 Capital Budget Variance Report**  
**8.0 - CAPITALIZED GENERAL EXPENSE**

**Capitalized General Expense - Summary**

	Capital Budget Category	Approved 2020 Budget (A)	2020 Actual Expenditures (B)	2020 Variance (C = B - A)
<b>8.0</b>	<b>Capitalized General Expense</b>	\$ 557,000	\$ 489,745	\$ (67,255)

The capitalized general expense amount includes 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.

The capitalized general expense category was \$67,255 under budget. The under budget variance is primarily attributed to lower than planned transportation and delivery costs, lower staffing level for part of the year and higher than expected direct charges to specific capital projects.

**MARITIME ELECTRIC COMPANY, LIMITED**  
**2020 Capital Budget Variance Report**  
**9.0 – INTEREST DURING CONSTRUCTION**

**Interest During Construction - Summary**

	Capital Budget Category	Approved 2020 Budget (A)	2020 Actual Expenditures (B)	2020 Variance (C = B - A)
9.0	Interest During Construction	\$ 563,000	\$ 444,170	\$ (118,830)

The Company provides for the financing of construction work in progress by including an interest during construction (“IDC”) allowance as an addition to the cost of property constructed, using a return on average rate base with the assumption that all applicable project costs are financed over an average 90-day cycle. The IDC allowance is deducted from the Company’s financing expenses and subsequently charged to operations through amortization over the service life of the related assets.

IDC is calculated on all capital additions except land, distribution service lines (overhead and underground), distribution street lights (overhead and underground), communications equipment, engineering and survey equipment, distribution survey and stores equipment, SCADA equipment, office equipment, fleet, computer hardware and computer software.

The IDC category was \$118,830 under budget, as a result of a lower construction work in progress balance throughout 2020.



# APPENDIX I

## Schedule of Capital Budget Carryover Items

**MARITIME ELECTRIC COMPANY, LIMITED**  
**2020 Capital Budget Variance Report**  
**SCHEDULE OF CAPITAL BUDGET CARRYOVER ITEMS**

The following schedule outlines the capital projects (approved in Orders UE18-09, UE19-09, UE20-02 and UE20-05) carried over to 2021.  
Amounts carried over to 2021 represent estimated expenditures to complete the projects in 2021.

Original Project Year - ID	Description	Budget (A)	Costs Incurred In 2019 (B)	Costs Incurred In 2020 (C)	Carryover to 2021 (D)	Total (E = B + C + D)	Variance (F = E - A)	Comments
2019-5.4(b)	Bonshaw (West River Bridge) Circuit Extension	\$ 1,040,000	\$ 333,913	\$ 787,349	\$ 53,000	\$ 1,174,262	\$ 134,262	Delay due to change in scope and related late delivery of additional underground cable, pushing completion of installation to spring 2021.
<b>Subtotal 2019</b>		<b>\$ 1,040,000</b>	<b>\$ 333,913</b>	<b>\$ 787,349</b>	<b>\$ 53,000</b>	<b>\$ 1,174,262</b>	<b>\$ 134,262</b>	
2020-4.1 (a) (i)	ECC Sprinkler Upgrades	92,000	-	79,778	25,000	104,778	12,778	Delay to complete landscaping work in spring 2021.
2020-4.1 (a) (ii)	ECC Renovations	50,000	-	66,663	13,000	79,663	29,663	Delay to accommodate contractor completion of minor deficiencies.
2020-4.2 (a)	Mobile Diesel Fuel Degradation Conditioning System	111,000	-	90,601	10,000	100,601	(10,399)	Delay due to COVID-19 travel restrictions requiring in person training to be rescheduled.
2020-5.2	Distribution Transformers	3,926,000	-	3,809,592	111,000	3,920,592	(5,408)	Delay in delivery from vendor.
2020-5.4 (b) (iii)	Clyde River Feeder Line Extension	400,000	-	221,906	272,000	493,906	93,906	Delay to align with completion of the Clyde River Substation project.
2020-5.5 SBR	PEI Broadband Project	5,710,000	-	767,933	4,942,000	5,709,933	(67)	Delay due to change in scope and timelines by Bell.
2020-5.7 (i) (iii)	Distribution Equipment	947,000	-	912,148	28,000	940,148	(6,852)	Delay in delivery from vendor.
2020-5.7 (vi)	Line Tools and Equipment	207,000	-	174,474	33,000	207,474	474	Delay in delivery from vendor.
2020-5.8	Transportation Equipment	1,788,000	-	780,507	1,000,000	1,780,507	(7,493)	Delay in delivery from vendor.
2020-5.8 SBR	Electric Vehicle ("EV") Charging Stations	566,493	-	3,217	563,000	566,217	(276)	Delay due to time constraints and vendor delivery schedule.
2020-5.8 SBR	EV Charging Stations - Contributions	(419,671)	-	(62,500)	(357,000)	(419,500)	171	Delay due to time constraints and vendor delivery schedule.
2020-6.1 (a)	Clyde River Substation	3,712,000	-	2,650,141	1,025,000	3,675,141	(36,859)	Delay in delivery of structural steel due to COVID-19 related supply issues.
2020-6.1 (b)	Substation Communication System Upgrade	932,000	-	912,691	19,000	931,691	(309)	Delay in delivery from vendor.
2020-6.1 (c)	O'Leary Interconnection	170,000	-	-	170,000	170,000	-	Delay in project siting, and related land purchase and preliminary engineering design.
2020-6.1 (g)	ECC Communication Fibre	400,000	-	222,157	178,000	400,157	157	Delay due to late start and limited availability of crews to complete construction work in 2020.
2020-6.2 (c)	Tap to Clyde River Substation	1,060,000	-	861,660	373,000	1,234,660	174,660	Delay to align with completion of the Clyde River Substation project.
2020-6.2 (d)	Rebuild Bannockburn Road-Steel Towers	442,000	-	354,572	87,000	441,572	(428)	Delay due to system load constraints not allowing the line to be taken out of service for reconductoring in late fall and winter period.
<b>Subtotal 2020</b>		<b>\$ 20,093,822</b>	<b>\$ -</b>	<b>\$ 11,845,540</b>	<b>\$ 8,492,000</b>	<b>\$ 20,337,540</b>	<b>\$ 243,718</b>	
<b>TOTAL</b>		<b>\$ 21,133,822</b>	<b>\$ 333,913</b>	<b>\$ 12,632,889</b>	<b>\$ 8,545,000</b>	<b>\$ 21,511,802</b>	<b>\$ 377,980</b>	





## **A P P E N D I X   I I**

### **Schedule of Capital Budget Expenditures from Prior Years Completed in 2020**

## MARITIME ELECTRIC COMPANY, LIMITED

## 2020 Capital Budget Variance Report

## SCHEDULE OF CAPITAL BUDGET EXPENDITURES FROM PRIOR YEARS COMPLETED IN 2020

Original Project Year - ID	Description	Budget	Total		Total	Variance
			2019	2020		
2019-4.1 (a)	ECC SCADA Simulator	\$ 121,000	\$ 18,750	\$ -	\$ 18,750	\$ (102,250) <sup>1</sup>
2019-4.3 (a)	CT3 Turbine Turbo Generator Overhaul	1,235,000	141,222	695,977	837,199	(397,801) <sup>2</sup>
2019-5.5 (a)	Spring Valley Make-ready Rebuild	212,500	124,511	90,296	214,807	2,307
2019-5.7 (a)	T&D Equipment c/o Voltage Regulator and 138 kV Circuit Switches	1,299,000	1,092,879	175,854	1,268,733	(30,267)
2019-5.8	Two Aerial Bucket Trucks	1,642,000	1,043,072	566,257	1,609,329	(32,671)
2019-6.1 (c)	Clyde River and O'Leary Engineering and Environmental Assessment	263,000	54,869	199,812	254,681	(8,319)
2019-7.1 (c)	Forklift at West Royalty Service Centre	76,000	-	58,420	58,420	(17,580)
2019-7.2 (c)	Network Access Control	80,000	3,283	85,082	88,365	8,365
2019-7.2 (g)	Internal Audit Software Compliance	75,000	12,990	63,378	76,368	1,368
	<b>TOTAL</b>	<b><u>\$ 5,003,500</u></b>	<b><u>\$ 2,491,576</u></b>	<b><u>\$ 1,935,076</u></b>	<b><u>\$ 4,426,652</u></b>	<b><u>\$ (576,848)</u></b>

<sup>1</sup> The Company has decided to cancel the ECC SCADA Simulator project as detailed in the response to Commission Interrogatory IR-8 concerning the 2019 Capital Budget Variance Report.

<sup>2</sup> Project budget included a contingency allowance for the situation where engine was stripped down and damage that needed to be repaired was found. When the engine was stripped down, the only issues found were those that were known about in advance (via Service Bulletins) and were budgeted to be addressed.



## APPENDIX III

### Transportation Equipment Expenditures

**MARITIME ELECTRIC COMPANY, LIMITED**  
**2020 Capital Budget Variance Report**  
**TRANSPORTATION EQUIPMENT EXPENDITURES**

Budget Item #	Vehicle Being Replaced		New Vehicle				Internal Labour (C)	Total (D = B+C)	Carryover to 2021 (E)	Total with Carryover (F = D+E)
	Vehicle Being Replaced	Budget (A)	Vehicle Number	Type	Maritime Electric Department	Invoice <sup>1</sup> (B)				
1	Digger Derrick	\$ 490,000	20-12-51	Digger Derrick	Line Dept	\$ 150,303	\$ 5,099	\$ 155,402	\$ 345,000	\$ 500,402
2	Digger Derrick	490,000	20-12-63	Digger Derrick	Line Dept	150,081	5,099	155,180	345,000	500,180
3	Aerial Bucket Truck	460,000	20-12-66	Aerial Bucket Truck	Line Dept	132,098	5,098	137,196	310,000	447,196
4	GMC Van	79,000	20-07-31	2020 Ford F150 XLT	Meter Dept	62,647	3,059	65,706	0	65,706
5	1/2 Ton Truck	47,000	20-06-24	2020 Chevy Silverado 1500 4WD	Borden Plant	38,579	3,059	41,638	0	41,638
6	Ford F-150 4x4	47,000	20-06-17	2020 Chevy Silverado 1500 4WD	Mechanical Maintenance	38,294	3,059	41,353	0	41,353
7	Electric Vehicle with Charging Station	63,000	20-03-49	2020 Chevy Bolt with Charger	Engineering	59,303	3,059	62,362	0	62,362
8	Pole Trailer	37,000	20-51-40	Pole Trailer	Line Dept	26,530	3,059	29,589	0	29,589
9	Electric Vehicle Charging Stations	566,493	-	-	-	2,090	1,126	3,216	563,000	566,216
10	Contingency	75,000	21-05-32	2020 Toyota Tacoma	Tech Services	46,055	3,059	49,114	0	49,114
			20-06-26	2020 Chevy Silverado 1500 4WD	Survey Dept	39,909	3,059	42,968	0	42,968
	<b>Budget</b>	<b>\$ 2,354,493</b>			<b>Totals</b>	<b>\$ 745,888</b>	<b>\$ 37,836</b>	<b>\$ 783,724</b>	<b>\$ 1,563,000</b>	<b>\$ 2,346,724</b>
									<b>5.8 – Transportation Equipment Variance (G = F-A)</b>	<b>\$ (7,769)</b>

<sup>1</sup> Invoice amount consists mainly of the item's base price, freight, pre-delivery inspection costs and post-delivery customization costs.