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MARITIME ELECTRIC
A FORTIS COMPANY

November 12, 2021

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

Dear Commissioners:

2022 Capital Budget Application – Docket UE20733
Response to Interrogatories from Commission Staff

Please find attached the Company's response to Interrogatories from Commission Staff with respect to the 2022 Capital Budget Application filed on July 14, 2021. An electronic copy will follow shortly.

Yours truly,

MARITIME ELECTRIC

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Response to Interrogatories with respect to the 2022 Capital Budget Application from Commission Staff

2022 Capital Budget Application UE20733

Submitted November 12, 2021

The Island Regulatory and Appeals Commission (the "Commission"), in assessing the reasonableness of the 2022 Capital Budget Application submitted by Maritime Electric Company, Limited ("Maritime Electric" or "MECL"), requests responses to the following interrogatories:

IR-1 In regard to Section 3.3 – Estimated Impact on Rate Base, Revenue Requirement, and Customer Rates, please explain how the increased revenue requirement for 2022 will be recovered from ratepayers if there is not a General Rate Application to approve a change in rates effective in 2022?

Response:

Due to the regulatory process required to address the applications currently before the Commission, it became evident that it would be quite challenging to incorporate a GRA for new customer rates effective March 1, 2022 into that workload. Therefore, the Company reviewed its financial projections for 2022 and, with some significant adjustments and deferrals, developed a budget for 2022 that will allow its GRA to be postponed by one year.[1]

If there is not a General Rate Application ("GRA") to approve a 2022 change in rates, the 2022 increase in depreciation associated with ongoing capital additions will be materially offset by a 2022 reduction in depreciation due to the retirement of the Charlottetown Thermal Generating Station ("CTGS").

[1] Significant adjustments and deferrals refer to: (i) identifying operating costs that may be temporarily deferred to help manage operating, depreciation and finance cost increases that cannot be avoided or deferred; (ii) deferring implementation of the 2020 Depreciation Study; (iii) deferring the amortization of the undepreciated reserve variance related to the CTGS; (iv) deferring the collection of the receivable balance of the Energy Cost Adjustment Mechanism; and (v) deferring balances related to the continued collection of the 2020 revenue shortfall and continued refund of the Rate of Return Adjustment balance.

IR-2 In regard to Section 3.5 – System Reliability Performance and Improvement, please advise whether the issues with reporting the SAIFI and SAIDI to the Commission have been resolved? If so, please provide details for the Commission to reconnect and view these reports.

Response:

In late January of this year, Maritime Electric became aware that the Excellius software used to report key performance indicator ("KPI") results to the Commission was no longer functional, as the vendor had stopped supporting its use at the end of 2020. The software was purchased in 2006 and served the Company well for the past 14 years; however, compared to software with more modern interfaces, it was not user friendly which made the updating of KPI results a time consuming process.

In February 2021, the Company identified a vendor that could convert the Excellius software to a newer platform which would enable it to continue reporting to the Commission as it had in the past. However, the conversion cost, estimated at $35,000 US plus $5,000 CDN for internal labour, was higher than expected. The Company decided to consider other software options that could serve the same purpose but be easier to use and require a lower investment.

Over the last several months, the Company has been developing a process to update KPIs for the Commission using Microsoft Excel and PowerPoint. This process was delayed for a period of time due to the temporary reassignment of a staff person, but has since been resumed.

The Company expects the new KPI reporting solution to be finalized by the end of November 2021. If the solution proves agreeable to the Commission, it will be adopted on a permanent basis.

In the interim, the Company's SAIFI and SAIDI results to the end of September 2021 are provided in IR-2 – Attachment 1.

IR-3 In regard to Section 3.5 – System Reliability Performance and Improvement, please explain what the deficiencies in Maritime Electric's historical SAIFI records are and how they might affect the data collected.

Response:

Maritime Electric's historical system average interruption frequency index ("SAIFI") records have inaccuracies due to limitations of the Company's outage management system, as it is not uncommon for customer outages to be counted multiple times during phased outage restoration. This is due to the fact that the outage system requires that new outages be created in the system when the response to the large outage restores power to some, but not all customers. The need to create new outage events for those customers that did not have their power restored, even though they are experiencing just one outage event, renders SAIFI artificially high. The limitation does not affect system average interruption duration index ("SAIDI") because the outage duration is the same regardless of whether it was recorded as a single or multiple events. Also, because customer average interruption duration index ("CAIDI") is the quotient of SAIDI divided by SAIFI,[2] CAIDI will be artificially low when SAIFI is artificially high.

Phased outage restoration typically occurs during major storm events, therefore, the SAIFI error is more pronounced when transmission line, substation or feeder/circuit outages occur simultaneously with localized outages. It is currently impractical to correct SAIFI errors during a storm event as it would involve a labour intensive process of tracing individual customer outages back to the lines, feeder/circuit and substation levels. In the future, as the ability to know a customer's connection status in real time through innovations, such as advanced metering infrastructure (i.e., smart meters and associated smart-grid components), the accuracy of the outage data will improve. Until this occurs however, Maritime Electric will continue to focus on SAIDI when assessing system reliability and prioritizing projects to improve it.

[2] CAIDI = SAIDI/SAIFI

IR-4 In regard to Section 3.5 – System Reliability Performance and Improvement, when comparing Maritime Electric's SAIDI and SAIFI to other utilities, are factors such as differences in storm conditions considered? If not, could this contribute to Maritime Electric's increased SAIDI performance during 2018 and 2019?

Response:

When reporting system average interruption duration index ("SAIDI") and system average interruption frequency index ("SAIFI"), the extent to which storm conditions differed in other provinces is not considered in the calculations. For example, in 2019, Tropical Storm Dorian impacted Nova Scotia ("NS") and Prince Edward Island ("PEI") more than New Brunswick and Newfoundland, which increased SAIDI (All In) and SAIFI (All In) reliability performance experienced by customers in NS and PEI.[3]

While there was a significant increase in Maritime Electric's SAIDI (All In) in 2018 and 2019, the Company uses a five-year moving average to show SAIDI and SAIFI long-term trends as a means to eliminate data anomalies.[4] The current five-year moving average shows an upward trend in the Maritime Electric's SAIDI (All In), which indicates that the electricity supply system is vulnerable to the more frequent and intense storms being experienced on PEI and that events are having a direct impact on system reliability.

System reliability measures such as SAIDI and SAIFI are useful for comparing Maritime Electric's reliability performance to similar utilities in the region, as they give a relative indication of the level of service the Company is providing. Insight into customer expectations is also useful when considering reliability performance. For example, Maritime Electric quarterly polling over the past four years indicates that one of the top three reasons that customers gave an overall opinion rating of fair or poor 94 per cent of the time, was because service was not reliable (i.e., too many outages). Maritime Electric is working on a plan that will help to improve SAIDI (All In) and SAIFI (All In) reliability performance to as good or better than in neighbouring jurisdictions, regardless of how storm conditions or other common system impacts vary across the region.

[3] When discussing SAIDI and SAIFI, Maritime Electric uses the qualifiers "All In" and "MED Excluded" to differentiate reliability performance under all operating conditions (i.e., All In includes outages associated with major storms and other significant outage events) and under normal operating conditions (i.e., MED Excluded, with MED indicating a Major Event Day as determined by Institute of Electrical and Electronics Engineers methodology, excludes outages associated with major storms and other significant outage events).

[4] Table 7 in Confidential Appendix S-1 of the 2022 Capital Budget Application compares Maritime Electric's SAIDI's (All In) five-year moving average to other Atlantic utilities.

IR-5 In regard to Section 3.5 – System Reliability Performance and Improvement, please provide a list of projects that relate to improving the SAIDI performance. Please include a projection of the improved SAIDI performance as each project is completed.

Response:

In Section 3.5 of the 2022 Capital Budget Application ("Application"), Maritime Electric focuses on four projects designed to improve system average interruption duration index ("SAIDI") performance on high outage feeders. All of these projects involve adding or upgrading downline reclosers and one also includes the trial use of cellular communications for monitoring the new reclosers.

All feeders in Maritime Electric's supply system have reclosers within their respective substations. These reclosers improve reliability by automatically restoring power when a fault occurs but the cause is not sustained. An example would be a tree branch temporarily contacting a line, as opposed to a tree falling into a line. When the latter occurs, the recloser would automatically attempt to restore power three times before needing to be reset by a powerline technician or Energy Control Centre operator (once the tree is cleared from the line).

Downline reclosers serve a similar function as substation reclosers but with the distinction that they are installed outside of, and some distance from, the substation. As such, they provide system resiliency and operating flexibility, especially during major disruptions and local system events, through improvements and effectiveness associated with:

- Isolating faults and identifying their location;
- Reducing restoration tasks and timelines; and
- Staging of cold load pickup.

The downline recloser projects in Section 6.1e (iv) of the Application are for feeders located in Tignish West, Irishtown and Bedeque. The Tignish West feeder, at 250 kilometres ("km"), is the longest in the supply system, while Irishtown (175 km) and Bedeque (170 km) are both twice as long as the system's average feeder length (70 km). An additional downline recloser is proposed in the Cavendish Feeder Automation project in Section 6.1h of the Application. The Cavendish feeder (57 km) is below the average feeder length but the summer population of Cavendish presents unique challenges when outages occur that would benefit from the addition of downline reclosers and the ability to control them remotely.

Detailed engineering for the proposed downline recloser projects will be completed in 2022 and involve identifying the recloser installation locations that best balance customer count and feeder section lengths. Once the new reclosers are operational, SAIDI improvements will be tracked, and the data will be used for planning and estimating potential benefits of future projects. For example, a downline recloser was installed on the Bonshaw feeder (in the New Haven area) in 2011. From that time to 2020, the recloser prevented approximately 54,000 customer outage hours, which improved the overall system SAIDI (All In) by 0.07 hours annually. In time, with more downline recloser installations to track and analyze, the ability to project SAIDI performance impacts on a project by project basis is expected to improve.

Other projects included in the Application that directly relate to improving SAIDI performance are described in Section 5.4b – Reliability Driven Line Extensions and Section 6.1a – East Royalty

(Marshfield) Substation.[5] The reliability driven line extension projects will provide SAIDI improvements by creating new backup feed options within and between feeders, as detailed in Appendix H of the Application. The East Royalty (Marshfield) Substation will improve reliability as detailed in the Company's response to Commission IR-17, concerning the 2021 Capital Budget Application.

The 2022 Capital Budget Application also includes projects that, while driven by the need to replace or upgrade aged and deteriorated infrastructure and components, additionally provide reliability benefits to customers. These projects are described in the following sections of the Application:

- 4.2 – Charlottetown Generating Station – Turbine Generator;
- 4.4 – Borden Generating Station – Turbine Generator;
- 5.2 – Distribution Transformers;
- 5.5 – Line Rebuilds;
- 5.7 – Distribution Equipment;
- 6.1b – Crossroads Substation Rebuild;
- 6.1c – West Royalty X5 Autotransformer Upgrade;
- 6.1e – Substation Modernization Program;
- 6.1f – 138 kV Breaker Replacement Program; and
- 6.2 – Transmission Projects.

As with downline reclosers, SAIDI performance impacts for any project with the potential to improve reliability are difficult to predict. For that reason, it is more informative to evaluate completed projects based on actual outage data,[6] and use the results to inform future reliability improvement project decisions.

[5] For operational designation, the new substation to service the East Royalty area will be called the Marshfield Substation.

[6] This can be labour intensive, depending upon the level of accuracy required.

IR-6 In regard to Section 3.6 – Planning Capital Investments, please explain how factors such as increased electric vehicles and increased net metering customers have impacted Maritime Electric's planned capital investments.

a. Does the current Integrated System Plan accommodate the recent increase in electric vehicles, electric heating and net metering customers?

Response:

Neither electric vehicles nor net metering customers have impacted Maritime Electric's proposed capital investments for 2022, to any material extent.

Presently, when a customer acquires an electric vehicle ("EV") and installs charging equipment, the Company is not contacted unless the customer wants to increase the amperage of their service connection to accommodate the additional load. As such, Maritime Electric is typically not aware of new EV charging locations and it is therefore more likely that multiple customers on the same transformer could overload the transformer or secondary lines if one or more added an EV to their household load. If this occurs, and Maritime Electric becomes aware of the situation either through an outage or transformer connection data, the solution is to either split the load by adding transformer(s) or increase the size of the transformer.

Until there is significant EV market penetration, projected for 2025 or later, Maritime Electric expects that existing infrastructure, upstream of the distribution transformer level, will be able to accommodate the additional load effects of residential EV charging. While this is highly dependent on the rate of EV adoption, the 2025 or later timeframe for significant EV penetration aligns well with Maritime Electric's plans for installing advanced metering infrastructure ("AMI"), including smart meters and associated data management systems, in the near future. With AMI, the Company will be able to develop time-of-use rates or other usage shifting programs that could help to minimize the need for infrastructure upgrades or expansions that would otherwise be required to support a wide spread transition to electric vehicles.

To date, the impact of an increasing number of net metering customers has not affected the design of the Company's supply system and, with the exception of costs for additional meters and their installation, the Application does not include any capital investments related to net metering customers. Net metering installations have the potential to require capital investment in the supply system once the feeder on which they are installed reaches its host capacity for distributed generation.[7] At current solar net metering installation rates, this may occur as early as 2023, at which time Maritime Electric will begin to include the necessary capital additions in its annual Capital Budget Application.

It is worth noting that the incremental impact of electric space heating, through both new construction and space heating conversions, has a much larger impact in the short and medium terms on both energy consumption and system peak than either electric vehicles or net metering.

a. The 2020 Integrated System Plan ("ISP") anticipates the continued increase in electrification of space heating on Prince Edward Island ("PEI"). Using projections in the

[7] Host capacity refers to the amount of distributed generation that a feeder can accommodate before it impacts the feeder's power quality or reliability.

January 2020 load forecast, the ISP assumed a relatively similar annual uptake in electric space heating compared to the previous few years, which is consistent with what has actually happened in 2020 and 2021. There are no indications that this growth trend will change over the short to medium term.

The ISP anticipated a gradual increase in EVs based on a consultant's projections for New Brunswick.[8] The PEI Government's EV incentive program was announced in March 2021,[9] which was after the ISP was filed, so its impact was not contemplated in the ISP. Nevertheless, there are still relatively few EVs on PEI and, for this reason, they have made little difference to Maritime Electric's energy purchase or system infrastructure requirements. To date, the program has incented 266 vehicles,[10] and there are a total of 365 battery-only EVs registered on PEI. It would take 500 EVs, simultaneously charging at system peak, to add 1 per cent to PEI's peak load,[11] and approximately 5,100 EVs to increase PEI's annual energy requirements by 1 per cent.[12] In comparison, Maritime Electric estimated that there were 5,369 heat pumps installed in 2020,[13] which alone would increase PEI's energy requirements by just over 1 per cent.[14]

The PEI Government's net metering incentive was announced in August 2019, and the number of applications received by Maritime Electric increased almost immediately, compared to historic levels. Over half of the net metering applications have been received by the Company since the ISP studies were completed, so the extent of net metering was not fully reflected in the ISP document. Because solar net metering installations impact energy purchases but not system peak (which occurs in winter, after sundown), net metering has little impact on most of the results of the ISP.

8 https://www.cbc.ca/news/canada/new-brunswick/nb-power-electric-vehicle-fast-charging-stations-report-1.5417102

9 https://www.cbc.ca/news/canada/prince-edward-island/pei-electric-vehicles-rebate-myers-march2021-1.5954631

10 Figure provided by efficiencyPEI, current to October 19, 2021.

11 ISP, Table 4 "PEI Electric Vehicle Forecast" indicates a maximum vehicle peak charging impact of 6.0 kilowatts ("kW") per vehicle, and an annual average vehicle consumption of 3,000 kilowatt-hours ("kWh").

12 PEI was supplied 1,534,182 megawatt-hours ("MWh") in 2020 - Prince Edward Island 47th Annual Statistical Review 2020, Table 90 "Total Electricity Supply, 2013-2020". # EVs = (1,534,182 MWh x 1%) / (3,000 kWh/1,000).

13 Table in IR-11a in Maritime Electric response to Synapse Energy Economics Inc. Rate Design Interrogatories (UE22503), filed with the Commission October 1, 2021.

14 efficiencyPEI estimates that each residential heat pump uses on average around 3,000 kWh (or 3.0 MWh) annually. (3.0 MWh x 5,369 heat pumps) = 16,107 MWh, which is just over 1 per cent of the Island supply of 1,534,182 MWh.

IR-7 In regard to Section 3.7(a) – Internal Labour and Transportation, please provide the calculations to determine wages allocated to capital projects as a whole and to individual projects.

Response:

THE RESPONSE TO IR-7 HAS BEEN FILED
WITH THE COMMISSION ON A CONFIDENTIAL BASIS.

IR-8 As required by Commission Order UE21-02, please provide a forecast, as of December 31, 2021, of the unspent portion of any previously approved capital budget that MECL intends to carryover to 2022.

Response:

A forecast, as of December 31, 2021, of the unspent portion of any previously approved capital budget that Maritime Electric intends to carryover to 2022, is provided in IR-8 – Attachment 1.

IR-9 In regard to Section 4.2(a) – On-Island Generating Capacity Study, the Commission has currently retained an independent consultant to review MECL's Integrated System Plan. Please provide justification for retaining an independent consultant to provide an on-island generating capacity study at this time.

Response:

The Integrated System Plan ("ISP") looks at the electricity supply system at a high level and, for generation planning purposes, undertakes a preliminary analysis to provide a roadmap for security of supply and the future generation needs of the system.

A full generating capacity study includes examining the capacity situations in Atlantic Canada, Quebec and New England, reviewing emerging technologies (such as wind or solar with battery storage), the impact of demand-side management measures on system loading, system reliability levels and projected needs, transmission and/or distribution alternatives, and the latest projections on distributed generation. The effort required for such analyses is substantial, and a long-term view of the system must be taken.

The Company sees benefit in undertaking a full generating capacity study prior to seeking Commission approval for new on-Island generation, so that the latest and most relevant information can be included in an application, given the long-term cost/benefit impacts to the electricity supply system. As the ISP does not include an in-depth analysis of all generation and capacity options, such a study is now required to ensure that its capacity and security of supply obligations are always achievable and satisfied.

IR-10 In regard to Section 5.1(b) – Replacements Due to Road Alterations, in the 2021 year are the Replacements Due to Road Alterations projected to run over-budget? If yes, by how much?

a. Has Maritime Electric received any other information that would lead them to believe an increase in budget for Replacements Due to Road Alterations of 35% is required? If so, please provide.

Response:

Actual spending on Replacements Due to Road Alterations was approximately $750,000 at the end of the third quarter, 2021. There are several projects remaining and the current forecast to the end of 2021 is estimated at approximately $1,000,000, which would result in an over-budget variance of approximately $524,000.

a. Costs to complete work under Replacements Due to Road Alterations require an annually recurring provisional budget allocation. Maritime Electric estimates the provisional amount each year based on recent past experience and any other relevant information that may be available when preparing the Capital Budget Application ("Application"). As the Application is typically prepared many months before the Company receives information from the Department of Transportation and Infrastructure on the projects planned for the budgeted year, reliance on historical budgeting and spending is necessary. It is unlikely that this will change in the future due to the Government's budget cycle being April 1 to March 31 each year.

Maritime Electric's budgeted and actual forecast amounts for spending on Replacements Due to Road Alterations is shown in Table 1.

Table 1
Budgeted and Actual/Forecast Spending on Replacements Due to Road Alterations 2017 to 2021

	2017	2018	2019	2020	2021	Average
Budget	$ 560,000	$ 487,000	$ 527,000	$ 557,000	$ 476,000	$ 521,000
Actual/Forecast	497,574	760,623	1,011,224	822,188	1,000,000	818,322
Variance	$(62,426)	$273,623	$ 484,224	$ 265,188	$ 524,000	$ 297,321

Since 2018, Maritime Electric has under budgeted for Replacements Due to Road Alterations. The proposed increase in budget has therefore been requested to have the provisional allocation more closely reflect historical spending and reduce future variances.

IR-11 In regard to Section 5.3(b) – Street and Area Lighting, this will be year eight of a ten year conversion program. Is the program on track? Please explain and provide details.

Response:

Maritime Electric's light emitting diode ("LED") Conversion Program began in 2015 with approximately 9,500 light fixtures to be replaced over a 10-year period. Approximately 7,200 high pressure sodium and mercury vapour light fixtures will have been replaced by the end of 2021, with 2,300 light fixtures remaining for replacement over the next three years. On average 1,026 fixtures per year have been replaced through the Conversion Program, which Maritime Electric anticipates completing, as planned, by the end of 2024.

IR-12 In regard to Section 5.5(b) – PEI Broadband Project, in previous filings with the Commission, it appeared as though the Bell portion of the PEI Broadband Project was under-budget due to Bell replacing a majority of the poles under the joint use program. Per Appendix J, the Bell portion of the project no longer appears to be under-budget. Please explain.

Response:

Table 1 in Appendix J of the 2022 Capital Budget Application shows $4,481,000 as a "Revised" budget amount for Bell "Line Rebuilds" in 2021. This is incorrect and the amount should be shown as nil.

Table 1 of Appendix J has been corrected as follows.

Table 1
2020 - 2023 Annual & Multi-year Totals for PEI Broadband Project

	SBR Table 4[a]		Revised[b]		Change	
	Line Rebuilds	**Contributions**	**Line Rebuilds**	**Contributions**	**Line Rebuilds**	**Contributions**
2020						
Bell	$ 2,436,000	-	$ 5,710,000	$ -	$ 3,274,000	$ -
Xplornet	3,274,000	2,000,000	-	-	(3,274,000)	(2,000,000)
Subtotal	$ 5,710,000	$ 2,000,000	$ 5,710,000	$ -	$ -	$ (2,000,000)
2021						
Bell	$ 2,508,000	$ -	$ -	$ -	$ (2,508,000)	$ -
Xplornet	3,373,000	2,060,000	4,431,000	2,707,000	1,058,000	647,000
Subtotal	$ 5,881,000	$ 2,060,000	$ 8,912,000	$ 2,707,000	$ (1,450,000)	$ 647,000
2022						
Bell	$ 2,585,000	$ -	$ -	$ -	$ (2,585,000)	$ -
Xplornet	3,472,000	2,121,000	4,564,000	2,788,000	1,092,000	667,000
Subtotal	$ 6,057,000	$ 2,121,000	$ 4,564,000	$ 2,788,000	$ (1,493,000)	$ 667,000
2023						
Bell	$ 2,662,000	$ -	$ -	$ -	$ (2,662,000)	$ -
Xplornet	3,577,000	2,185,000	4,701,000	2,871,000	1,124,000	686,000
Subtotal	$ 6,239,000	$ 2,185,000	$ 4,701,000	$ 2,871,000	$ (1,538,000)	$ 686,000
TOTAL	**$23,887,000**	**$ 8,366,000**	**$23,887,000**	**$ 8,366,000**	**$ -**	**$ -**
Bell	$10,191,000	$ -	$ 5,710,000	$ -	$ (4,481,000)	$ -
Xplornet	13,696,000	8,366,000	13,696,000	8,366,000	-	-
TOTAL	**$23,887,000**	**$ 8,366,000**	**$19,406,000**	**$ 8,366,000**	**$ (4,481,000)**	**$ -**

a. See also the Company's Response to IR-13 on the PEI Broadband Project submitted on March 17, 2020.
b. Revised amounts for 2021-2023 are subject to annual approval by IRAC in accordance with the Capital Expenditures Justification Criteria.

IR-13 In regard to Section 5.8 – Transportation Equipment, please explain the prudence of replacing vehicles #4 and #6 when the annual repairs are minimal.

Response:

It is critical that Maritime Electric vehicles are readily available for daily tasks and incident response at all times. For this reason, vehicles are replaced before signs of imminent failure, or before the on-going maintenance costs become significant, which often means the vehicle is unavailable for use.

The criteria used by Maritime Electric to determine when to replace an existing vehicle with a new vehicle was included in the Maritime Electric Transportation Equipment Justification document, provided as Appendix L of the 2022 Capital Budget Application ("Application"). For ease of reference, this information is presented in Table 1.

Table 1
Maritime Electric Replacement Criteria for Vehicles

Tracked Heavy Vehicles	15 years
Heavy/Medium Flat Bed Trucks	10 years or 250,000 km
Heavy Vehicles	10 years or 250,000 km
Service Trucks (CSUP – run double shift) Medium Vehicles	5 years or 250,000 km
Passenger Vehicles	7 years or 200,000 km

To determine if a vehicle has reached the end of useful service life, the age of the vehicle is a guiding factor along with a number of additional criteria such as annual maintenance costs, power take-off ("PTO") hours (applicable to heavy vehicles and service trucks) and vehicle condition (e.g., rust, electrical issues, etc.). Based on all criteria considerations, it has been determined that the vehicles listed as #4 and #6 in Table 54 of Section 5.8 – Transportation Equipment will reach the end of their useful service life and will require replacement in 2022.

Vehicles #4 and #6 are fitted with specialized equipment and dispatched daily. A loss of either of these vehicles would significantly impact Maritime Electric operations as the Company fleet does not have an equivalent spare and to equip a rental vehicle would be costly and could take several days to complete or not be possible at all.

Vehicle #4

Vehicle #4 is a 2012 General Motors of Canada ("GMC") cargo van. As such, it will be ten years old when replaced, which is past the Company's replacement criteria of seven years for passenger vehicles. This particular model of cargo van is no longer manufactured by GMC and the local dealership has advised Maritime Electric that the acquisition of new replacement parts will have a long lead time if the part is even available. The body of vehicle #4 had advanced corrosion as shown in photos provided in IR-13 – Attachment 1.

It is anticipated that the delivery of a replacement for vehicle #4, if approved, could be delayed until late in the fourth quarter of 2022, as a result of the shortage of available vehicles due to

computer chip and other supply chain shortages. The mileage of Vehicle #4 will likely be over 200,000 kilometres ("km') at time of replacement.

Vehicle #6

Vehicle #6 is a 2018 Ford Escape that is equipped as a radio frequency ("RF") remote interrogation meter reading vehicle, of which there are only two in Maritime Electric's transportation fleet. Vehicle #6 was identified for replacement in 2022 when it is expected to reach a mileage of 200,000 km by the time a replacement vehicle is secured, which is consistent with the Company's replacement criteria for passenger vehicles. An additional consideration was the fact that vehicle #6 had reliability issues despite having incurred relatively low annual maintenance costs at the time the application was prepared.

In August 2021, the engine of vehicle #6 failed and a complete engine replacement was required. To manage replacement costs, a used engine was sourced and installed as shown in the service invoice provided in IR-13 – Attachment 2.

With the engine replacement completed, the year-to-date maintenance costs for vehicle #6 in 2021 are $8,261 resulting in a revised maintenance cost three-year average (for 2019, 2020 and 2021) of $4,035 per year.

IR-14 Appendix L – Please provide a listing of the current transportation fleet.

Response:

A listing of Maritime Electric's current transportation fleet is provided in IR-14 – Attachment 1.

IR-15 In regard to Section 6.1(i) – Rattenbury Small Scale Solar and Battery Storage Pilot, is there government funding (federal or provincial) available? If so, has Maritime Electric applied?

Response:

Maritime Electric has investigated available government funding programs and is not aware of any federal funding that would apply. With respect to provincial funding, the PEI Solar Electric Rebate Program does appear to be available and this was supported in preliminary conversations with efficiencyPEI, the agency responsible for the program.

Maritime Electric has not yet applied for funding under the PEI Solar Electric Rebate Program, as the application requires the identification of the supplier/installer as well as specific information on system components. The supplier/installer will not be known until selected through a competitive tendering process, which will be completed after the project is approved by the Commission as part of the 2022 Capital Budget. The exact kilowatt ("kW") size of the system will be determined after the final design is completed.

If approved under the PEI Solar Electric Rebate Program as a 15 kW system, as proposed, the rebate amount is $350 per installed kW, which would provide a total rebate of $5,250.

IR-16 In regard to Section 6.1(i) – Rattenbury Small Scale Solar and Battery Storage Pilot, please provide additional justification for pursuing the pilot project. Include research from other available sources and outline benefits the proposed pilot will provide to MECL and its ratepayers.

Response:

The Rattenbury Small Scale Solar and Battery Storage Pilot will serve as a research, development and demonstration project to help Maritime Electric better understand the operating characteristics of small-scale solar generation with battery storage, on and off the grid. Due to the uniqueness of Maritime Electric's site specifics and local supply system conditions, it is difficult to source information on relevant similar projects and related research reports.

Through the pilot project, Maritime Electric will investigate the effects of this type of system on power quality in both normal and emergency back-up operating modes. By its nature, inverter-based generation such as solar is low inertia, which can be problematic without some means of external frequency control. The pilot project will help Maritime Electric better understand how these systems work during normal and abnormal system conditions. The system will help supply station service and serve as an emergency backup power supply source. The resulting data will assist Maritime Electric in assessing the possibility of using this technology for other applications.

Maritime Electric is experiencing significant interest in the installation of net metered solar generation. As the penetration of net metered solar generation increases, the Company anticipates that host capacity will be reached on some feeders.[15] Once this occurs, additional system infrastructure will be required.

The pilot project will improve Maritime Electric's ability to model customer net metered solar generation on its system, which will help to determine the capital investment that will be required to accommodate further growth of these installations.

[15] Host capacity refers to the amount of distributed generation that a feeder can accommodate before it impacts the feeder's power quality or reliability.

IR-17 In regard to Section 7.1(a) – Recurring Annual Capital Requirements, please provide an updated Table 74 including a "2021 to date" column.

Response:

An updated Table 74 that includes a "2021 to date" column is shown below. The "2021 to date" amounts shown for Material and External Labour, while listed separately, are managed as a total amount because, in most cases, Corporate Service projects are completed through supply and install contracts.

Table 74
Historical and Proposed Capital Expenditures
Corporate Services

	2017	2018	2019	2020	2021 Budget	2021 To Date[a]	2022 Budget
Material	$ 11,920	$ 6,818	$ 24,840	$ 190,698	$ 51,000	$ 128,387	$ 71,000
External Labour	699	99,619	103,897	13,963	345,000	143,980	355,000
Internal Labour and Transportation	13,730	13,978	14,090	34,596	15,000	12,364	15,000
Other	7,151	17,473	9,673	76,158	-	-	-
TOTAL	**$ 33,500**	**$ 137,888**	**$ 152,500**	**$ 315,415**	**$ 411,000**	**$ 284,731**	**$441,000**

a. As of October 31, 2021.

IR-18 In regard to Section 7.2(c) – Cybersecurity Enhancements, in both 2021 and 2022 there are increased expenditures on Cybersecurity Enhancements. Please distinguish between the Cybersecurity Enhancements undertaken in 2021 versus those proposed for 2022.

Response:

Maritime Electric has two computer networks. They are:

- Information technology ("IT") network, which supports email, file access and business systems for billing, outage management, customer service, website hosting, etc.; and
- Operations technology ("OT") network, which supports the management and operation of the electrical grid, communication to substations, system monitoring and control, and system safety.

Maritime Electric's IT department is responsible for cybersecurity on both networks. This responsibility involves ensuring that the Company is always current in its awareness of the cyber risks that could damage its networks, and that it has the cyber controls in place to protect against those risks.

In the 2021 Capital Budget, three projects in Section 7.2 – Information Technology addressed cybersecurity as follows:

- 7.2d Business Network Security Review;
- 7.2e Cybersecurity Enhancements; and
- 7.2f Operations Network Data Centre Infrastructure.

The three projects had a total combined budget allocation of $662,000.

In the 2022 Capital Budget Application ("Application"), Maritime Electric consolidated all proposed cybersecurity enhancement activities into Section 7.2c – Cybersecurity Enhancements, with a proposed budget allocation of $547,000. For clarity, Section 7.2c – Cybersecurity Enhancements includes similar activities to what had previously been undertaken through three separate projects in 2021.

While there are many similarities in the investments required to ensure the security of Maritime Electric's computer networks in 2021 and 2022, there are also some activities that are unique to just one year. A breakdown of the cybersecurity enhancements undertaken in 2021 versus those proposed for 2022, is as follows.

Cybersecurity enhancements common to 2021 and 2022:

- A review of the IT network by an external security specialist,[16] with recommendations from the review for replacing or updating hardware, software, tools and configurations acted upon in each year.
- Purchase and deployment of software applications to enhance personal computer ("PC") end-point protection and manage privileged network access within the IT team.

[16] In the 2021 Capital Budget Application, this activity was included as 7.2d – Business Network Security Review.

Cybersecurity enhancements unique to 2021:

- Purchase and installation of equipment required to secure the OT network in accordance with the Company's Cybersecurity Risk Management Program.
- Purchase and implementation of software to replace the majority of IT network legacy servers and services that relied upon platforms no longer supported by the vendor.
- Purchase and deployment of enhanced encryption software for all of the Company's PC end-point assets.

Cybersecurity enhancements unique to 2022:

- Purchase and implementation of IT network software to provide enhanced security information and cyber-event management.
- Establishment of foundational cybersecurity controls for the OT network, including purchasing and deploying software for:
  - Centralized cyber-event retention and alerting;
  - Controls PC end-point protection and segmentation;
  - Management of network access restrictions; and
  - Network traffic inspection and control within and between OT substations.

IR-19 In regard to Section 7.2(d) – Customer Services and Communication Enhancements, did Maritime Electric perform a cost savings analysis for the proposed interactive voice response self service automation for customers? If so, please provide details.

Response:

A cost savings analysis for the proposed interactive voice response ("IVR") self-service initiative was not performed as the objective is to improve customer service. Rather than reduce resources, the time savings that will be experienced by customer service representatives ("CSRs") under the IVR system will instead be applied to other means of customer interaction and to provide more time for dealing with complex inquiries. During 2019 and 2020, total Contact Centre customer interactions increased by approximately 10.6 per cent (includes e-mail, web chat, telephone, mail and in-person meetings). IVR technology will help to improve availability of the existing CSR compliment to address the increase in customer interactions.

Maritime Electric interactions with customers by telephone through the Contact Centre are logged by CSR's using line of business ("LOB") codes. Over the past five years, LOB codes indicate that, on average, approximately 22 per cent of calls received are for the primary purpose of obtaining account balance information.[17] When customers simply want to know their account balance, the IVR tool can promptly assist them while CSR's can more efficiently and effectively service other customer interactions.

The current Virtual Contact Centre system used by Maritime Electric can be modified cost effectively to provide customers with self-service options, such as receiving their account balance or reporting outages, without having to speak with a CSR. As necessary, customers using the telephone self-service option will still have the ability to connect with a CSR to address other inquiries.

[17] On some of these calls, other issues may have been discussed but the LOB code for account balance inquiry was selected by the CSR as the primary issue.

IR-20 In regard to Section 8.0 – Capitalized General Expense, please provide additional details on the expenditures included under “Corporate Planning” in Table 88.

Response:

THE RESPONSE TO IR-20 HAS BEEN FILED
WITH THE COMMISSION ON A CONFIDENTIAL BASIS.

I N T E R R O G A T O R I E S

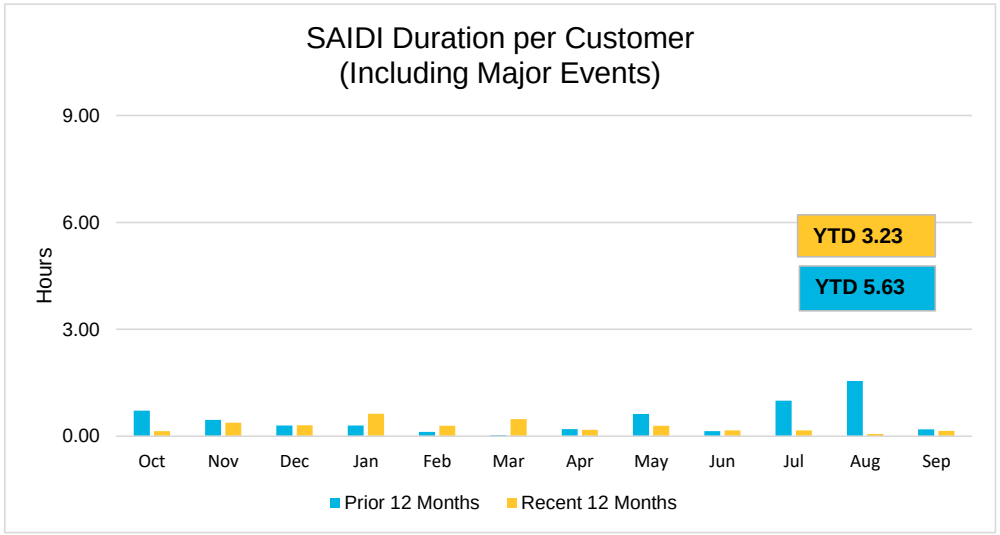
IR-2 – Attachment 1

SYSTEM RELIABILITY PERFORMANCE AND IMPROVEMENT

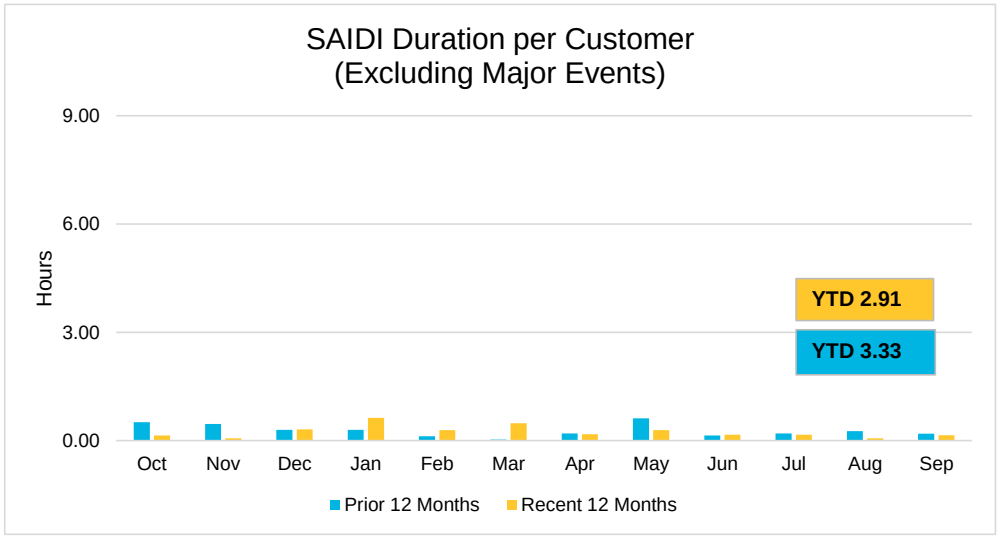
System Average Interruption Duration Index (SAIDI) - October 2019 to September 2021

(Average Time Power Out Per Customer Annually)

	SAIDI (Including Major Events)	
	Prior 12 Months	Recent 12 Months
Oct	0.72	0.14
Nov	0.46	0.38
Dec	0.30	0.31
Jan	0.30	0.63
Feb	0.12	0.29
Mar	0.03	0.48
Apr	0.20	0.18
May	0.62	0.29
Jun	0.14	0.16
* Jul	1.00	0.16
** Aug	1.55	0.06
Sep	0.19	0.15



	SAIDI (Excluding Major Events)	
	Prior 12 Months	Recent 12 Months
Oct	0.51	0.14
Nov	0.46	0.06
Dec	0.30	0.31
Jan	0.30	0.63
Feb	0.12	0.29
Mar	0.03	0.48
Apr	0.20	0.18
May	0.62	0.29
Jun	0.14	0.16
* Jul	0.20	0.16
** Aug	0.26	0.06
Sep	0.19	0.15



* Breaker failure in Lorne Valley due to lightning July 1, 2020

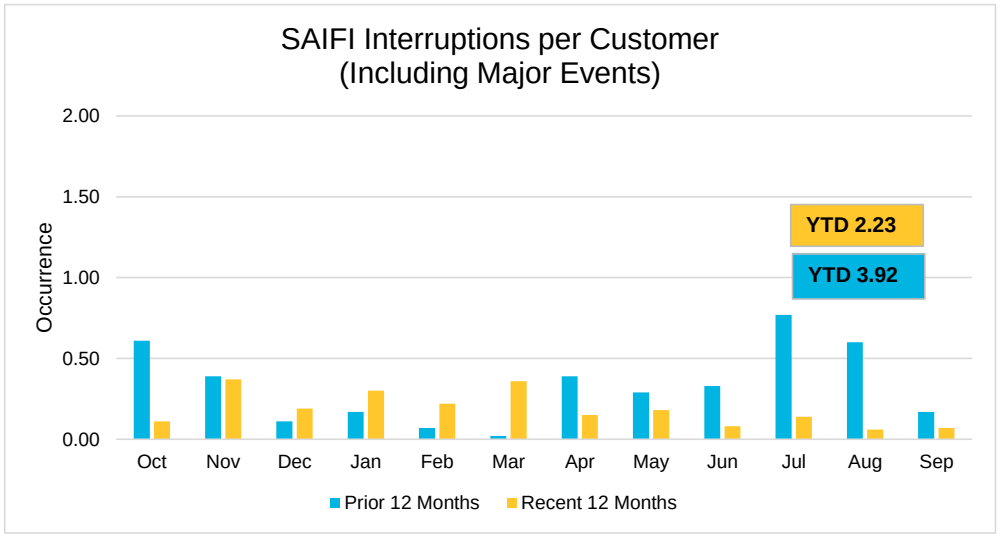
** Lightning storm August 14, 2020

SYSTEM RELIABILITY PERFORMANCE AND IMPROVEMENT

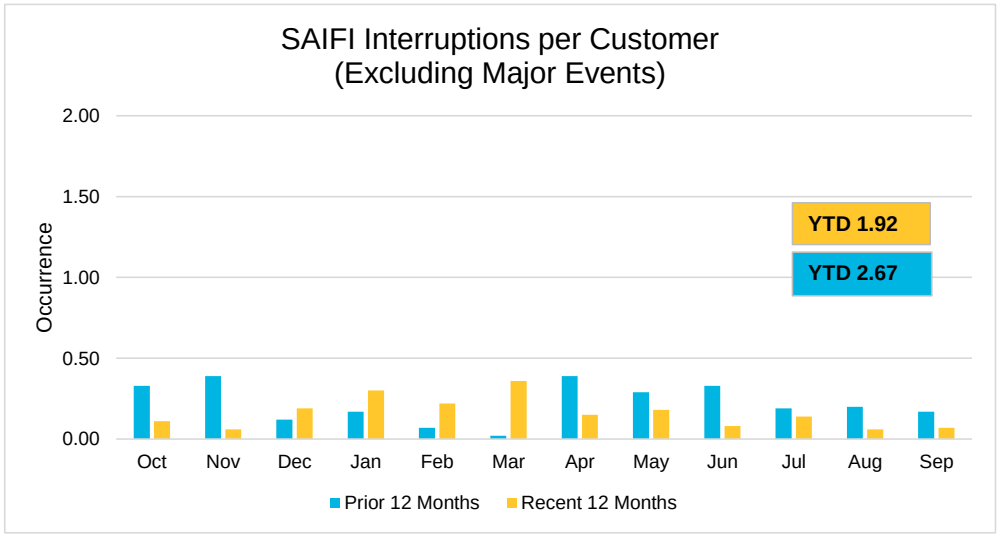
System Average Interruption Frequency Index (SAIFI) - October 2019 to September 2021

(Average # of Times Per Year Customers are Interrupted)

	SAIFI (Including Major Events)	
	Prior 12 Months	Recent 12 Months
* Oct	0.61	0.11
Nov	0.39	0.37
Dec	0.11	0.19
Jan	0.17	0.30
Feb	0.07	0.22
Mar	0.02	0.36
Apr	0.39	0.15
May	0.29	0.18
Jun	0.33	0.08
** Jul	0.77	0.14
*** Aug	0.60	0.06
Sep	0.17	0.07



	SAIFI (Excluding Major Events)	
	Prior 12 Months	Recent 12 Months
* Oct	0.33	0.11
Nov	0.39	0.06
Dec	0.12	0.19
Jan	0.17	0.30
Feb	0.07	0.22
Mar	0.02	0.36
Apr	0.39	0.15
May	0.29	0.18
Jun	0.33	0.08
** Jul	0.19	0.14
*** Aug	0.20	0.06
Sep	0.17	0.07



* A wind storm occurred on October 17, 2019.
** Breaker failure in Lorne Valley due to lightning July 1, 2020
*** Lightning storm August 14, 2020

I N T E R R O G A T O R I E S

IR-8 – Attachment 1

Forecast of 2021 Capital Budget Carryovers
Based on Actual Expenditures for the Period January 1, 2021 to September 30, 2021

Project Description	2021 Annual Capital Budget Section	Actual To Date 2021 09 30	2021 Approved Budget A	2021 Forecast B	2021 Forecast Carryover to 2022 C	Total Forecast D =B+C	Variance - Budget vs Forecast E=D-A	Notes
2021 Capital Projects								
Charlottetown Plant Buildings and Services Projects	4.1	$ 14,280	$ 125,000	$ 122,000	$ 14,000	$ 136,000	$ 11,000	Carryover required due to delayed delivery of ECC duct heaters and standing desks (both expected in the first quarter of 2022).
Borden Plant Projects	4.3	86,013	305,000	200,000	11,000	211,000	(94,000)	Carryover required to allow for supplier final load testing and training completion on Backup Power Supply for CT1 and CT2 project.
Distribution Transformers	5.2	3,579,012	5,192,000	4,939,000	253,000	5,192,000	-	Carryover required due to longer than normal deliveries for padmount transformers. Equipment has been ordered and is expected in the first quarter of 2022.
PEI Broadband Project	5.5b	221,540	4,431,000	1,250,000	3,181,000	4,431,000	-	Carryover required to ensure that the system modifications required by Xplornet Communications, along with the associated Maritime Electric plant specific work can be completed.
Distribution Equipment	5.7	1,090,168	2,035,000	1,879,000	156,000	2,035,000	-	Carryover required due to longer than normal deliveries for voltage regulators. Equipment has been ordered and is expected in the second quarter of 2022.
Transportation Equipment	5.8	489,718	1,864,000	990,000	874,000	1,864,000	-	Carryover required due to long deliveries for the three line trucks and a GMC van. Equipment has been ordered but deliveries for the line trucks could extend into 2023, due to COVID-19 related manufacturing and supply chain delays.
East Royalty (Marshfield) Substation[a]	6.1a	205,558	2,890,000	2,345,000	545,000	2,890,000	-	Carryover required due to late delivery of structural steel, buswork, insulators and other miscellaneous equipment.
Crossroads Substation Modifications	6.1b	90,287	208,000	168,000	40,000	208,000	-	Carryover required as engineering and design could not start until the 2021 Capital Budget was approved in June 2021. Engineering and design is expected to be completed by the end of the year, but because some work and components are held up until this occurs, the project will extend into 2022.
Rattenbury Transformer Upgrade	6.1c	127,356	946,000	781,000	165,000	946,000	-	Carryover required for civil and other on-site work now planned for 2022, due to late delivery of the transformer.
Subtotal		**$ 5,903,932**	**$ 17,996,000**	**$ 12,674,000**	**$ 5,239,000**	**$ 17,913,000**	**$ (83,000)**	
Capital Projects Carried Over from Prior Years								
PEI Broadband Project	From Appendix I of 2020 Capital Variance Report	1,040,029	4,942,000	2,000,000	2,942,000	4,942,000	-	Carryover required to ensure that the system modifications required by Bell Canada, along with the associated Maritime Electric plant specific work can be completed.
Transportation Equipment	From Appendix I of 2020 Capital Variance Report	220	1,000,000	310,000	690,000	1,000,000	-	Two digger/derrick line trucks ordered in 2020 will not be delivered until 2022, due to supplier delays.
O'Leary Interconnection	From Appendix I of 2020 Capital Variance Report	-	170,000	-	170,000	170,000	-	Carryover required due to site selection and associated land acquisition has taken longer than expected, requiring a further carryover into 2022.
Subtotal		**$ 1,040,249**	**$ 6,112,000**	**$ 2,310,000**	**$ 3,802,000**	**$ 6,112,000**	**$ -**	
TOTAL		**$ 6,944,181**	**$ 24,108,000**	**$ 14,984,000**	**$ 9,041,000**	**$ 24,025,000**	**$ (83,000)**	

a. For operational designation, the new substation to service the East Royalty area will be called the Marshfield Substation

I N T E R R O G A T O R I E S

IR-13 – Attachment 1 and 2

Photos of 2012 GMC Cargo Van – Vehicle ID # 120748

Photo 1
Front end of 2012 GMC cargo van

Photo 2
Signs of corrosion on bottom of 2012 GMC cargo van

Photo 3
Corrosion of undercarriage on 2012 GMC van

Photo 4
Corrosion along the bottom of door panels on 2012 GMC van

Photo 5
Engine compartment on 2012 GMC cargo van

Engine Replacement Invoice – Ford Escape SUV – Vehicle ID # 180416

78460

COOPERS SERVICE CENTRE

AC DELCO SERVICE

MARITIME ELECTRIC COMPANY
P.O. BOX 1382
CHARLOTTETOWN PE 2
902629371 ( ) -

112 LONGWORTH AVE
CHARLOTTETOWN, PE
(902)566-3026
BN843363854

Year Make. 2017 Ford Escape SE
Engine 1.5L L4
License A011U
MLG in/out 136207 /
Vin 1FMCU9GD8JUC39171

Date 09/02/21 Schedule 08/23/21 ***INVOICE : 104118*** 02:07 pm Page 1

REMARKS AND LABOR DESCRIPTIONS	HRS	PRICE	PARTS & LUBRICANTS	QTY	PRICE	TOTAL
INSTALL AND BALANCE 4 TIRES		80.00	USED ENGINE WITH 130000 KM(N) THE	1.00	2200.00	2200.00
RE AND RE ENGINE		1960.00	PRICE IS WHAT IT COST US			
Remove & Install: BR930952 DRIVERS SIDE		105.00	786953 TRAN FUID max life atf	6.00	16.99	101.94
WHEEL BEAI			SYTHIC OIL 5W20	5.00	7.99	39.95
			8-51348 OIL FILTER	1.00	9.25	9.25
			[10951147] AC DELCO OPTIKLEEN WINDSHIELD CLEANER	1.00	4.99	4.99
			[ANTIFREEZE] ANTIFREE	4.00	8.95	35.80
			WIRE TIES	3.00	0.50	1.50
			HOSE CLAMPS	1.00	3.50	3.50
			EXHUST GASKETS(N)	2.00	18.95	37.90
			MANIFOLD STUDS	3.00	12.95	38.85
			9L8Z7A248 FRONT TRAN SEAL(N)	1.00	32.36	32.36
			DRAIN AND FILL A/C	1.00	90.00	90.00
			1234 A/C FREEON(N)	16.0	7.95	127.20
			BR930952 DRIVERS SIDE WHEEL BEAING REAR	1.00	445.48	445.48

DATE	TIME	PHONE	APPROVED	AMOUNT

Kate O'Brien 13-Sept-2021

I acknowledge notice and oral approval of an increase in the original estimated price

All Parts Are New Unless Shown As (U) Used or (R) Rebuilt

Labor	2145.00
Sublet	0.00

This charge represents costs and profits to themotor vehicle repair facility for miscellaneousshop supplies or waste disposal.

Parts & Lubricants	3168.72
HAZ. DISPOSAL	23.00
	25.00
Gasoline	0.00
Sub Total	5361.72
Sales Tax	800.81
Deposit	0.00
Disc. Applied	0.00
TOTAL	**6162.53**
BALANCE DUE	**6162.53**

CHARGE

X .....

ACCEPTANCE SIGNATURE

I accept the charges and terms of this agreement.

18/04/16

I authorize the above repairs and necessary materials. Your employees may operate vehicle for inspection, testing, delivery at my risk. You will not be responsible for loss or damage to vehicle or items left in it. I agree to pay reasonable storage on vehicle left more that 3 working days after notification that job is completed. Labor is guaranteed 90 days or 4000 miles whichever occurs first. All other guarantees are made by the manufacturer. Warrantee work based on this bill must be performed at this shop. All parts are new unless specified as (U) used or (R) rebuilt. REMOVED PARTS WILL BE DISPOSED OF UNLESS I INITIAL HERE_____.

I N T E R R O G A T O R I E S

IR-14 – Attachment 1

Maritime Electric Vehicle Fleet 2021			
Year of Vehicle	**MECL Vehicle #**	**Description**	**Assignment**
2021	21-04-04	Honda CRV	Meter Dep't.
2021	21-04-06	Rav4 Prime	Meter Dep't.
2021	21-05-10	GMC Sierra 1500	CTGS Plant
2021	21-06-18	Toyota Tacoma 4X4	Survey
2021	21-56-19	Mobile fall Arrest trailer	Tech Services
2021	21-56-23	Pole Trailer	Eastern Line Dep't
2021	21-06-37	Ford 1/2Ton 4x4	Survey
2021	12-51-49	Pole Trailer	Central Line Dep't
2021	21-06-50	Ford F-150 4X4	Tech Services
2021	21-04-87	Volkswagen Atlas	V.P. Finance
2021	21-05-88	Toyota Tacoma	Central Line Supervisor
2021	21-06-89	Dodge Ram	Survey
2021	21-06-90	Dodge Ram	Island Area Rep.
2021	21-06-91	Dodge Ram	Western Line Supervisor
2020	20-06-17	Chevy Silverado	Eastern Line Dep't
2020	20-56-18	Fuel conditioning trailer	Production
2020	20-06-24	Chevy Silverado	Borden Plant
2020	20-06-26	Chevy Silverado	Survey
2020	20-06-31	Ford F250 w/Spacekap	Meter Dep't.
2020	20-05-32	Toyota Tacoma	Survey
2020	20-51-40	Pole Trailer	Western Line Dep't
2020	20-03-49	Chevrolet Bolt	Head Office
2020	20-12-65	Freightliner. Material Handler	Central Line Dep't
2020	20-06-84	Ford F150	President & CEO
2019	19-06-02	Dodge Ram	Survey
2019	19-05-05	GMC Canyon	Communications Tech.
2019	19-04-09	Honda CRV	Meter Dep't.
2019	19-52-12	Pole trailer	Western Line Dep't
2019	19-04-12	Honda CRV	Engineering
2019	19-06-20	Ford F-150	Tech Services
2019	19-06-23	Dodge Ram 1500	Properties/Stores
2019	19-04-33	Nissan Rogue	Meter Dep't.
2019	19-06-36	Ford 1/2Ton 4x4	Eastern. Area Rep
2019	19-05-38	GMC Canyon	Survey
2019	19-56-38	EZ Hauler Trailer	Central Line Dep't
2019	19-10-44	Ford F550	Stores
2019	19-06-45	GMC SIERRA 2500 SLE	Mechanical Maintenance
2019	19-05-46	GMC Canyon	Engineering
2019	19-12-68	Freightliner. Material Handler	Central Line Dep't
2019	19-12-69	Argo ATV	Central Line Dep't
2019	19-12-72	Freightliner. Material Handler	Eastern Line Dep't
2019	19-12-82	Freightliner. Material Handler	Western Line Dep't
2019	19-04-85	Volvo XC 60	V.P. Production
2019	19-04-86	Ford Explorer	V.P. Customer Service
2018	18-56-11	Bull wheel Tensioner	Line Dep't
2018	18-06-14	Chevy Silverado	Vegetation Management
2018	18-04-16	Ford Escape	Meter Dep't.
2018	18-05-25	Nissan Frontier	Survey
2018	18-06-29	GMC SIERRA 2500 SLE	Tech Services
2018	18-06-39	GMC Sierra SLE 2500HD	Tech Services
2018	18-06-41	GMC Sierra 1500	Survey
2018	18-12-62	Freightliner. Palfinger.	Transformer Dep't
2018	18-06-81	Ford F150	Central Line Dep't
2017	17-56-06	Wire Tensioner	Central Line Dep't
2017	17-52-10	Mobile Transformer	Engineering
2017	17-10-13	Dodge Ram 5500. CSUP	Central Line Dep't
2017	17-06-34	1/2 Ton Ford	Survey
2017	17-10-57	Dodge 5500. CSUP	Western Line Dep't
2017	17-12-59	Freightliner. Digger	Eastern Line Dep't
2017	17-12-61	Freightliner. Digger	Central Line Dep't
2017	17-12-75	Freightliner. Material Handler	Western Line Dep't
2017	17-12-79	Freightliner. Material Handler	Eastern Line Dep't
2016	16-04-01	Honda CRV	Production
2016	16-05-03	Nissan Frontier	Survey
2016	16-04-07	Honda CRV	Engineering
2016	16-06-08	Ford F-150	Tech Services

Maritime Electric Vehicle Fleet 2021			
Year of Vehicle	**MECL Vehicle #**	**Description**	**Assignment**
2016	16-06-22	Ford F250 w/Spacekap	Transformer Dep't
2016	16-06-27	Ford F250 w/Spacekap	Tech Services
2016	16-06-28	Dodge 2500	Central Line Dep't
2016	16-06-30	Dodge 2500	Transformer Dep't
2016	16-05-73	Nissan Frontier	Survey
2016	16-10-77	Dodge 5500. CSUP	Eastern Line Dep't
2015	15-05-15	Dodge 1/2 Ton 4 x 4	Western Line Dep't
2015	15-05-21	Dodge 1/2 Ton 4 x 4	Western Area Rep
2015	15-56-45	Transformer Oil Degasifier	Transformer Dep't
2015	15-12-71	Tracked Digger	Central Line Dep't
2015	15-12-80	Freightliner. Material Handler	Central Line Dep't
2014	14-06-40	Dodge 1/2 Ton 4 x 4	Engineering
2014	14-06-43	Dodge 1/2 Ton 4 x 4	Survey
2014	14-12-64	Freightliner. Digger	Central Line Dep't
2014	14-12-74	Freightliner. Digger	Central Line Dep't
2013	13-06-11	Ford F150 4x4	Survey
2013	13-52-16	Self loading U/G Tr	Line Dep't
2013	13-56-21	Utility Trailer	Central Line Dep't
2013	13-12-56	Freightliner. Digger	Western Line Dep't
2013	13-12-70	Argo ATV	Central Line Dep't
2012	12-52-05	4 Reel Trailer	Eastern Line Dep't
2012	12-51-44	Pole Trailer	Eastern Line Dep't
2012	12-07-47	GMC Van	Meter Dep't.
2012	12-07-48	GMC Van	Meter Dep't.
2012	12-12-54	Freightliner. Digger	Eastern Line Dep't
2012	12-12-58	Freightliner. Material Handler	Central Line Dep't
2011	11-52-04	2 Reel Trailer	Western Line Dep't
2011	11-06-19	GMC 4X4	CTGS Plant
2011	11-12-55	Freightliner. Material Handler	Central Line Dep't
2011	11-12-66	Freightliner. Material Handler	Western Line Dep't
2010	10-04-35	Honda CRV	Meter Dep't.
2010	10-10-42	Ford F550	Transformer Dep't
2010	10-12-63	International. Digger	Western Line Dep't
2009	09-12-50	Track Bucket	Line Dep't
2009	09-12-51	Freightliner. Digger	Central Line Dep't
2007	07-05-46	GMC Canyon	Engineering
2006	06-51-17	Pole Trailer	Western Line Dep't
2006	06-12-67	Freightliner. Material Handler	Eastern Line Dep't
2005	05-56-27	Utility Trailer	Central Line Dep't
2005	05-56-37	Utility Trailer	Central Line Dep't
2005	05-12-52	International. HIAB	XFMR Dep't & Stores
2004	04-52-01	2 Reel Trailer	Eastern Line Dep't
2004	04-12-60	International. Digger	Western Line Dep't
2003	03-52-25	4 Reel Trailer	Western Line Dep't
2003	03-12-65	Freightliner. Material Handler	Central Line Dep't
2000	00-56-02	Wire Tensioner	Central Line Dep't
1993	93-54-36	Wire Trailer	Central Line Dep't
1992	92-58-35	Pole/Utl Trailer	Central Line Dep't
1989	89-58-32	Pole Trailer	Eastern Line Dep't
1989	89-54-33	Wire Trailer	Eastern Line Dep't
1989	89-54-34	Wire Trailer	Central Line Dep't
1988	88-58-31	Pole/Util/ Trailer	Western Line Dep't
1987	87-56-07	Utility Trailer	Central Line Dep't
1987	87-56-08	Utility Trailer	Western Line Dep't
1986	86-55-28	Hot L. Trailer	Central Line Dep't
1984	84-51-22	Pole Trailer	Western Line Dep't
1980	80-56-09	Air Compressor	Borden Plant
1978	78-51-03	Pole Trailer	Central Line Dep't
1977	77-52-14	Triaxle Trailer	Central Line Dep't
1975	75-52-09	Mobile Transformer	Engineering
1974	74-56-15	Utility Trailer	Eastern Line Dep't
1974	74-56-20	Wire Trailer	Line Dep't
1972	72-53-24	Wire Trailer	Line Dep't
1986	86-51-29	Pole Trailer	Central Line Dep't