

All our energy.
All the time.



July 6, 2022



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

Dear Commissioners:

Please find enclosed five (5) copies of Maritime Electric's Application seeking approval of the capital budget expenditure of \$1 (one dollar) to purchase certain 138 kV overhead transmission assets, located in Bedeque, presently owned by the Province of Prince Edward Island. An electronic copy will be forwarded shortly.

If you require further information, 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

GCC21
Encl. as noted

C A N A D A

PROVINCE OF PRINCE EDWARD ISLAND

**BEFORE THE ISLAND REGULATORY
AND APPEALS COMMISSION**

IN THE MATTER of Section 17(1) of the *Electric Power Act* (R.S.P.E.I. 1988, Cap. E-4) and **IN THE MATTER** of the Application of Maritime Electric Company, Limited for the approval of a 2022 Supplemental Capital Budget Request of \$1 (one dollar) for the purchase of certain 138 kV overhead transmission assets, located in Bedeque, presently owned by the Province of Prince Edward Island.

**APPLICATION
AND
EVIDENCE OF
MARITIME ELECTRIC COMPANY, LIMITED**

July 6, 2022

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1.0 APPLICATION

C A N A D A

PROVINCE OF PRINCE EDWARD ISLAND

**BEFORE THE ISLAND REGULATORY
AND APPEALS COMMISSION**

IN THE MATTER of Section 17(1) of the *Electric Power Act* (R.S.P.E.I. 1988, Cap. E-4) and **IN THE MATTER** of the Application of Maritime Electric Company, Limited for the approval of a 2022 Supplemental Capital Budget Request of \$1 (one dollar) for the purchase of certain 138 kV overhead transmission assets, located in Bedeque, presently owned by the Province of Prince Edward Island.

Introduction

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

Application

2. Maritime Electric hereby applies for an order of the Island Regulatory and Appeals Commission (“IRAC” or the “Commission”) approving the capital expenditure of \$1 (one dollar) by Maritime Electric for the purchase of certain 138 kilovolt (“kV”) overhead transmission assets, located in Bedeque, presently owned by the Province of PEI. Upon purchase, the assets will be included in Maritime Electric’s rate base. In future, any capital expenditures required by Maritime Electric to replace these assets will be applied for as a part of the Company’s annual capital budget application process.

SECTION 1.0 – APPLICATION

3. The proposal contained in this Application represents a just and reasonable balance of the interests of Maritime Electric and those of its customers and will, if approved, allow the Company to continue to operate and maintain these assets and perform necessary capital additions and improvements at a cost that is, in all circumstances, reasonable.

Procedure

4. Filed herewith is the Affidavit of Jason C. Roberts, T. Michelle Francis, Angus S. Orford and Enrique A. Riveroll which contains the evidence on which Maritime Electric relies in the Application

Dated at Charlottetown, Province of PEI, this 6th day of July, 2022.



D. Spencer Campbell, Q.C.

STEWART MCKELVEY
65 Grafton Street, PO Box 2140
Charlottetown PE C1A 8B9
Telephone: 902-629-4549
Facsimile: 902-892-2485
Solicitors for Maritime Electric Company, Limited

2.0 AFFIDAVIT

C A N A D A

PROVINCE OF PRINCE EDWARD ISLAND

**BEFORE THE ISLAND REGULATORY
AND APPEALS COMMISSION**

IN THE MATTER of Section 17(1) of the *Electric Power Act* (R.S.P.E.I. 1988, Cap. E-4) and **IN THE MATTER** of the Application of Maritime Electric Company, Limited for the approval of a 2022 Supplemental Capital Budget Request of \$1 (one dollar) for the purchase of certain 138 kV overhead transmission assets, located in Bedeque, presently owned by the Province of PEI.

AFFIDAVIT

We, Jason Christopher Roberts of Suffolk, T. Michelle Francis of Emyvale, Angus Sumner Orford of Charlottetown and Enrique Alfonso Riveroll of New Dominion, in Queens County, Province of Prince Edward Island, MAKE OATH AND SAY AS FOLLOWS:

1. We are the President and Chief Executive Officer, Vice President, Finance and Chief Financial Officer, Vice President, Corporate Planning and Energy Supply and Vice President, Customer Service for Maritime Electric, respectively, and as such have personal knowledge of the matters deposed to herein, except where noted, in which case we rely upon the information of others and in which case we verily believe such information to be true.

SECTION 2.0 – AFFIDAVIT

2. Maritime Electric is a public utility subject to the provisions of the *Electric Power Act* engaged in the production, purchase, transmission, distribution and sale of electricity within PEI.

3. We prepared or supervised the preparation of the evidence and to the best of our knowledge and belief the evidence is true in substance and in fact.

4. Section 7.0 contains a proposed Order of the Commission based on the Company's Application.

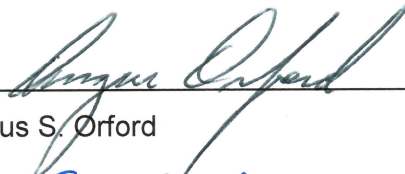
SWORN TO SEVERALLY at
Charlottetown, PEI,
the 6th day of July, 2022.



Jason C. Roberts



T. Michelle Francis



Angus S. Orford



Enrique A. Riveroll



A Commissioner for taking affidavits
in the Supreme Court of Prince Edward Island.

3.0 INTRODUCTION

3.1 Corporate Profile

Maritime Electric owns and operates a fully integrated power system providing for the purchase, generation, transmission, distribution and sale of electricity throughout PEI. The Company's head office is located in Charlottetown with generating facilities in Charlottetown and Borden-Carleton.

Maritime Electric is the primary provider of electricity on PEI delivering approximately 90 per cent of the electrical energy supplied in the province. To meet customer energy demand and supply requirements, the Company has contractual entitlement to capacity and energy from NB Power's Point Lepreau Nuclear Generating Station ("Point Lepreau") and an agreement for the purchase of capacity and system energy from NB Power delivered via four submarine cables owned by the Province of PEI. Through various contracts with the PEI Energy Corporation, the Company also purchases the capacity and energy from 92.5 megawatts ("MW") of wind generation on PEI.

Maritime Electric is a public utility under the PEI *Electric Power Act*. As a public utility, the Company is subject to regulatory oversight and approvals of the Commission. IRAC's authority to regulate public utilities is found in the *Electric Power Act* and the *Island Regulatory and Appeals Commission Act*.

3.2 Purpose

Maritime Electric submits this 2022 Supplemental Capital Budget Request Application ("Application") seeking approval of the capital expenditure of \$1 (one dollar) to purchase certain 138 kV overhead transmission assets, located in Bedeque, presently owned by the Province of PEI ("Province").

4.0 CONTINGENCY FUND

4.1 History

In 1977, the Province was electrically interconnected with New Brunswick by two 100 MW, 138 kV submarine cables (“Cable #1” and “Cable #2”). The installation of the submarine cables cost approximately \$36 million and they are owned by the Province, which received Federal Government funding for 50 per cent of the costs. On PEI, the overhead portion of the project included the construction of two 138 kV H-frame transmission lines running a distance of ten kilometres (“km”) each from the cable riser station in Richmond Cove to the equipment located in Maritime Electric’s switching station in Bedeque. Under the Interconnection Lease Agreement (between the Province, the PEI Energy Corporation and Maritime Electric), these assets are operated and maintained by Maritime Electric as an integral part of the Company’s transmission system. Maritime Electric owns the utility easements of the right of way corridor that the transmission lines occupy and the property where the Bedeque switching station is located. A description of the Province-owned 138 kV overhead transmission equipment in Bedeque is attached herein as Appendix A.

A Contingency Fund, which is owned and controlled by the Province, was established to pay for capital replacements related to the interconnection. The original fund balance of \$3 million was collected from ratepayers over a period of years at an annual contribution level of 0.5 per cent of the initial capital cost of the original interconnection. The \$3 million balance was held by the Province in interest-bearing accounts that were sufficiently liquid to ensure the funds remained readily available for use. Over time, the balance of the fund exceeded \$3 million and the excess was directed towards the expansion of the interconnection facilities.

In 1991, the Contingency Fund was used to add a second reactor to the interconnection, which allowed the second submarine cable to be electrically loaded. Similarly, when the Confederation Bridge was being constructed from 1993 to 1997, the Contingency Fund was used for the construction of access tunnels to the bridge abutments. The access tunnels were intended to allow the use of the utility corridor of the Confederation Bridge for a future high voltage interconnection cable; however, the utility corridor has since been ruled out for this use.

SECTION 4.0 – CONTINGENCY FUND

1 In 1997, the entire Contingency Fund was used to repair and splice damaged submarine cables
2 as a result of Cable #2 being damaged by a ship anchor.

3
4 In 2002, the Contingency Fund was used to replace the crossarms on transmission lines Y-101
5 and Y-103. This work included adding switches at the Richmond Cove riser station and the
6 Bedeque switching station to allow paralleling of the submarine cables.

7
8 In 2011, the Contingency Fund was used to replace the submarine cable radio system that
9 provides protection for the submarine cables. This work included the associated teleprotection
10 system equipment which had become obsolete.

11
12 In 2012, the entire Contingency Fund was used to repair two hydraulic fluid leaks in Cable #1.

13
14 In 2018, the Contingency Fund was used for repair work to address a catastrophic failure of 138
15 kV circuit switch CS1 in the Bedeque switching station that resulted in Cable #1 and transmission
16 line Y-101 tripping and locking out (i.e., disrupting the supply of electricity from Cable #1). The
17 repairs required major components of the circuit switch to be replaced and an internal inspection
18 of the associated reactor to be carried out. The inspection also identified that the equipment was
19 approaching end of life requiring near term replacement. This particular incident prompted
20 discussions between the Province and Maritime Electric on the future use of the Contingency
21 Fund and the future ownership of the 138 kV overhead transmission assets. It was recognized by
22 both parties that the aged assets of the overhead 138 kV transmission owned by the Province will
23 require replacement and the Contingency Fund was no longer the appropriate manner of
24 financing the replacement.

25
26 In summary, the Contingency Fund has been used over the years for all aspects of repair,
27 replacement, additions and expansion of the interconnection assets. On two occasions, the
28 Contingency Fund was entirely depleted for submarine cable repairs. The interest-bearing
29 growth of the Contingency Fund has been used in the past to pay for interconnection additions
30 and expansions but the Contingency Fund does not have the capacity to address the asset
31 replacement of the aged 138 kV overhead transmission system owned by the Province.

4.2 Present Contingency Fund

Maritime Electric is currently collecting \$375,000 annually from transmission users in accordance with the provisions of the Interconnection Lease Agreement in order to increase the Contingency Fund balance to \$5 million. The balance of the Contingency Fund was approximately \$2.8 million at the end of 2021, and it is estimated that the fund will accumulate to \$5 million by 2027. Over that same period, expenditures for capital replacements will have to be made for the 138 kV overhead transmission assets and switching station equipment. If the Contingency Fund were used to replace the overhead transmission assets and switching station equipment, as identified in Table 1 in Section 5.1, the fund would be depleted by 2027 and would not fully fund the required expenditures.

The remaining expenditures required in 2027 through 2029, if paid for by Maritime Electric, would be considered a Maritime Electric capital cost, as is contemplated in the Interconnection Lease Agreement and discussed in Section 5.2. Such cost would be included in the Company's rate base and collected from transmission users in accordance with provisions of the Open Access Transmission Tariff ("OATT").

In summary, if the Contingency Fund were to be used to fund the capital expenditures the present balance would only partially fund the expenditures required in 2023 to 2027, thus depleting the fund. Then it would take more than thirteen years to replenish the Contingency Fund to a \$5 million balance.

5.0 TRANSFER OF OWNERSHIP

While the Contingency Fund could be used to partially fund the required capital investment necessary to replace the aged 138 kV overhead transmission assets and switching station equipment, the Province and Maritime Electric are in agreement that the Contingency Fund cannot support the full magnitude of expenditures needed for the necessary asset replacement. The Province is interested in conveying of these assets, as indicated in the letter attached herein as Appendix B, and Maritime Electric is interested in acquiring them.

The Interconnection Lease Agreement contemplates Maritime Electric's investment in the 138 kV overhead transmission and switching station equipment assets, as discussed in Section 5.2.

Maritime Electric currently maintains these and all other 138 kV transmission assets on PEI. As a result, the transfer in ownership of these assets will not change the operating expenses associated with their maintenance. Maritime Electric is experienced in all aspects of managing, engineering, procuring, constructing and commissioning of high voltage transmission line, high voltage substation and high voltage switching station projects. Maritime Electric power line technicians are trained in the maintenance of 138 kV assets and the Company has all the necessary equipment and vehicles to execute the work.

The benefit of transferring ownership of these assets to Maritime Electric will allow the Contingency Fund to be preserved for repairs to the four submarine cables and the associated cable riser station equipment, which will continue to be owned by the Province.

In anticipation of the approval of this application, Maritime Electric has included in its annual 2023 capital budget application the applicable capital expenditure as summarized in Table 1 of Section 5.1, and provided sufficient detail to allow the Commission to approve the ongoing capital replacement costs related to the 138 kV overhead transmission assets.

In addition, Maritime Electric will work with the Province and the PEI Energy Corporation to update the Interconnection Lease Agreement as discussed in Section 5.3.

5.1 Annual Capital Expenditure Forecast

The anticipated annual capital expenditures forecast over the next seven years are summarized in Table 1.

Table 1 Annual Capital Expenditures Forecast 2023 to 2029		
Year	Asset Description	Estimated Cost
2023	138 kV Breaker 952 Y-101	\$ 142,000
2024	138 kV Breaker 954 Y-103	146,000
2026	138 kV Reactor #1/Circuit Switcher #1	2,138,000
2027	138 kV Reactor #2/Circuit Switcher #2	2,228,000
2027	138 kV Transmission Line Rebuild (10 km) Y-101	2,094,000
2028	138 kV Transmission Line Rebuild (10 km) Y-103	2,157,000
2028	138 kV Switches	279,000
2029	138 kV Switches	286,000
	TOTAL	\$ 9,470,000

5.2 Interconnection Lease Agreement

The Interconnection Lease Agreement contemplates Maritime Electric's investment in these Province-owned assets, as identified in Articles 9 and 10.

Article 9.2(a) which specifically states that *“capital replacements will be made from the Contingency Fund up to the amount of the Fund”*. Article 9.2(b) states that *“capital replacements of a cost greater than the amount in the Contingency Fund will be subject to agreement between the Province and Maritime Electric. If paid for by Maritime Electric, costs are considered to be a Subsequent Maritime Electric Capital Cost¹, to be included in the rate base and collected from*

¹ “Subsequent Maritime Electric Capital Costs” is defined in the Interconnection Lease Agreement (Article 1 – Definitions (xxxvi)) to mean the aggregate cost of capital replacements and/or capital additions incurred by Maritime Electric after the In-Service Date, July 1, 2017, including interest during construction, which are paid for by Maritime Electric

1 *transmission users in accordance with the provisions of the OATT as submitted by Maritime*
2 *Electric for approval by the Commission”.*

3
4 Under Article 10.2(b), for capital additions agreed upon by the Province and Maritime Electric, the
5 Province shall have the option to direct Maritime Electric to purchase and install such capital
6 additions with costs to be included in rate base and collected from transmission users in
7 accordance with provisions of the OATT.

8
9 **5.3 Interconnection Lease Agreement Amendments Required**

10 Upon the transfer of the 138 kV overhead transmission assets from the Province to Maritime
11 Electric, minor amendments will be required in the Interconnection Lease Agreement.

12
13 *Under Article I – Definitions*

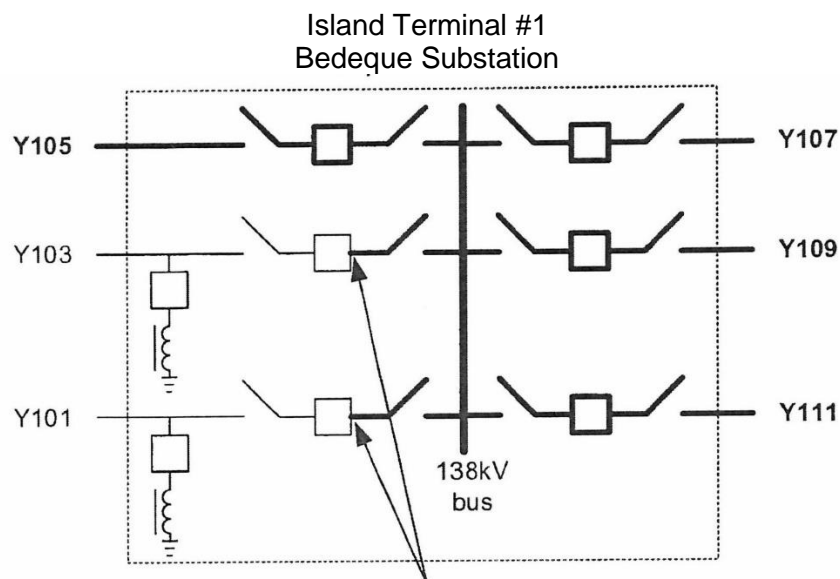
14 1.1 (xxi) **“Island Terminal #1”** means the point at which the Interconnection Facilities
15 transition to transmission facilities owned by MECL in Bedeque, PEI, which
16 shall be the PEI side bushings of the line Y101 and Y103 circuit breakers as
17 shown in Appendix A;

18
19 *Change to:*

20 1.1 (xxi) **“Island Terminal #1”** means the point at which the Interconnection Facilities
21 transition to transmission facilities owned by MECL in Fernwood, PEI, which
22 shall be the PEI side bushings of the Y101 and Y103 switches as shown in
23 Appendix A;

SECTION 5.0 – TRANSFER OF OWNERSHIP

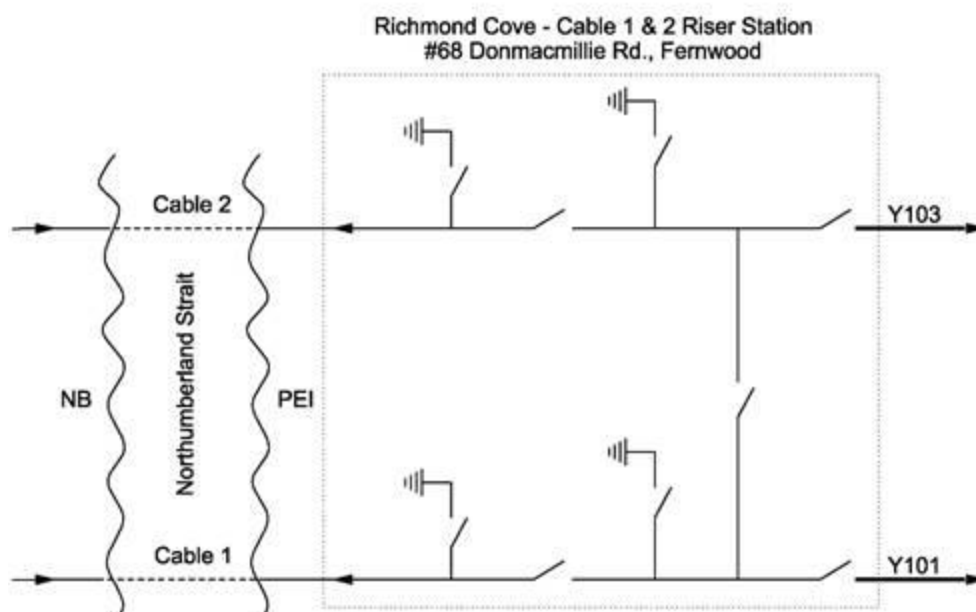
Under Appendix A:



Island Terminal #1
MECL-owned facilities illustrated in BOLD LINE
Owner-owned facilities illustrated in THIN LINE

Change to:

Island Terminal #1
Cable Riser Station (Fernwood)



6.0 CONCLUSION

Maritime Electric submits this Application seeking approval of the capital expenditure of \$1 (one dollar) to purchase certain 138 kV overhead transmission assets, located in Bedeque, presently owned by the Province.

The benefit of transferring ownership of these assets to Maritime Electric will allow the Contingency Fund to be preserved for repairs to the four submarine cables and the associated cable riser station equipment, which will continue to be owned by the Province. The Province is interested in conveying of these assets, as indicated in the letter attached herein as Appendix B, and Maritime Electric is interested in acquiring them.

Upon approval of this Application, the assets, purchased for \$1 (one dollar) will be included in Maritime Electric's rate base. In future, any capital expenditures required by Maritime Electric to replace these assets will be applied for as a part of the Company's annual capital budget application process.

7.0 PROPOSED ORDER

C A N A D A

PROVINCE OF PRINCE EDWARD ISLAND

**BEFORE THE ISLAND REGULATORY
AND APPEALS COMMISSION**

IN THE MATTER of Section 17(1) of the *Electric Power Act* (R.S.P.E.I. 1988, Cap. E-4) and **IN THE MATTER** of the Application of Maritime Electric Company, Limited for the approval of a Supplemental Capital Budget Request of \$1 (one dollar) for the purchase of certain 138 kV overhead transmission assets, located in Bedeque, presently owned by the Province of Prince Edward Island.

UPON receiving an Application by Maritime Electric Company, Limited (“Maritime Electric”) for approval to purchase certain 138 kV overhead transmission assets;

AND UPON considering the Application and Evidence filed in support thereof;

NOW AND THEREFORE pursuant to the *Electric Power Act* and the *Island Regulatory and Appeals Commission Act*, the Commission order as follows:

IT IS ORDERED THAT:

1. Maritime Electric purchase from the Province of Prince Edward Island the 138 kV overhead transmission assets, herein identified in Appendix A, for \$1 (one dollar).

SECTION 7.0 – PROPOSED ORDER

1 DATED at Charlottetown this _____ day of _____, 2021

2

3 BY THE COMMISSION

4

5 _____ Chair

6

7

8 _____ Commissioner

9

10

11 _____ Commissioner



APPENDIX A

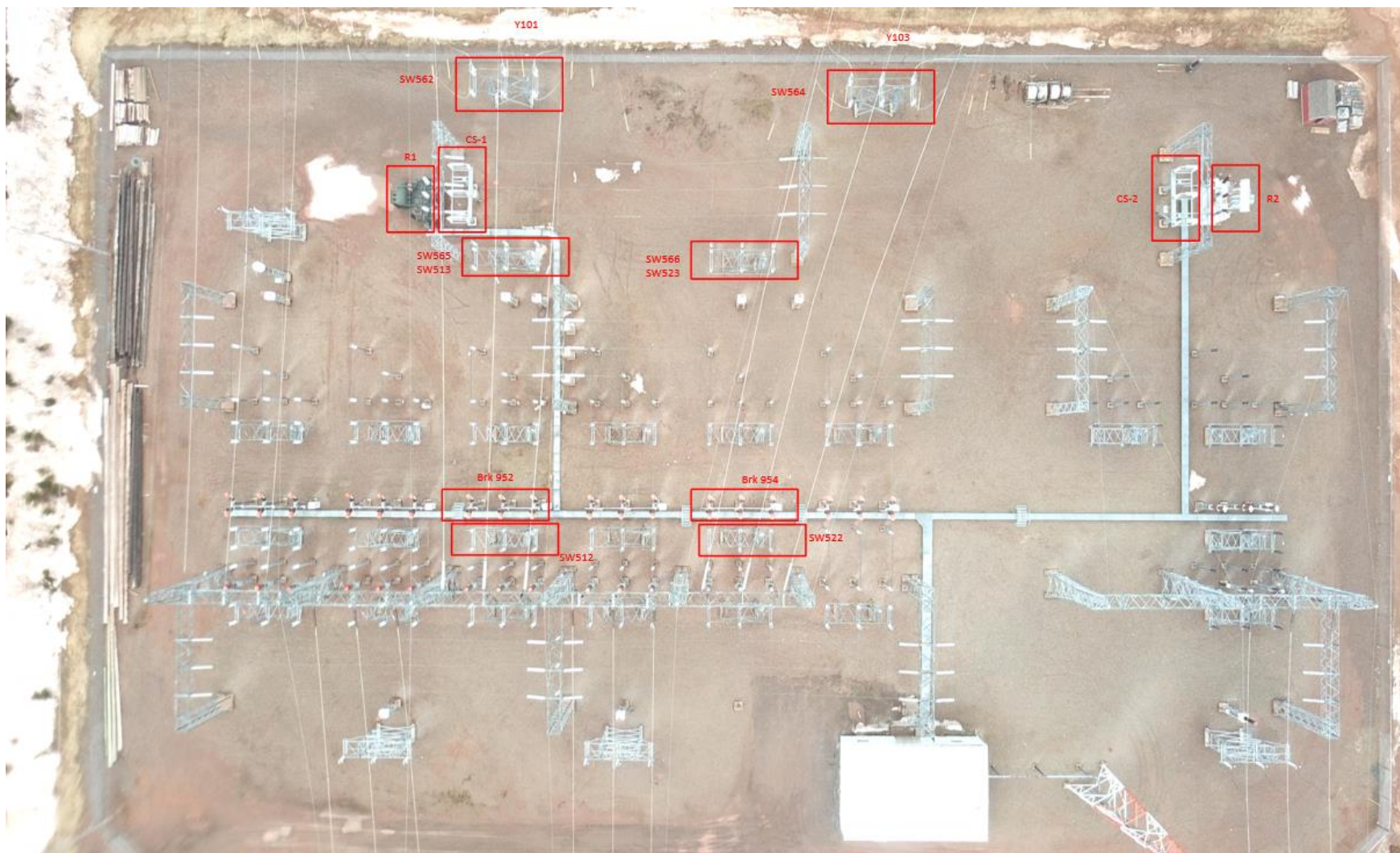
Description of the 138 kV Overhead Transmission Assets

Appendix 1

Description of PEI Government Owned 138 kV Overhead Transmission Equipment Bedeque PE						
Maritime Electric Designation	Year Built	Item/Equipment	Length	Number of Structures	Conductor Type	Number of Poles
Y-101	1978	H Frame Transmission Line	9.74 Km	48	954 ACSR	96
Y-103	1978	H Frame Transmission Line	9.84 Km	52	954 ACSR	99
162-R1	1977	Reactor #1	n/a	n/a	n/a	n/a
163-R2	1991	Reactor #2	n/a	n/a	n/a	n/a
970-CS-1	1976	138 kV Circuit Switcher	n/a	n/a	n/a	n/a
971-CS-2	1976	138 kV Circuit Switcher	n/a	n/a	n/a	n/a
952	1976	138 kV Breaker	n/a	n/a	n/a	n/a
954	1976	138 kV Breaker	n/a	n/a	n/a	n/a
512	1978	138 kV Breaker Switch	n/a	n/a	n/a	n/a
513	1978	138 kV Grounding Switch	n/a	n/a	n/a	n/a
522	1978	138 kV Breaker Switch	n/a	n/a	n/a	n/a
523	1978	138 kV Grounding Switch	n/a	n/a	n/a	n/a
562	1978	138 kV Y-101 Line Isolating Switch	n/a	n/a	n/a	n/a
564	2007	138 kV Y-103 Line Isolating Switch	n/a	n/a	n/a	n/a
565	1978	138 kV Reactor # 1 Switch	n/a	n/a	n/a	n/a
566	1978	138 kV Reactor # 2 Switch	n/a	n/a	n/a	n/a



**Aerial View
Bedeqe Switching Station
(PEI Government Assets Denoted in Red)**





Bedeque 138 kV Switch



Bedeque 138 kV Reactor R1



Bedeque 138 kV Breaker



Bedeque 138 kV Circuit Switcher
CS2 and Reactor R2



Bedeque 138 kV Transmission Line
Switch #564 and Y103 Exit Structure



Typical Y101, Y103 Line Structure



Typical Y101, Y103 Line Structure



Typical Y101, Y103 Line Structure



Typical Y101, Y103 Line Structure



Typical Y101, Y103 Line Structure



APPENDIX B

Government Letter



Office of the Minister
PO Box 2000, Charlottetown
Prince Edward Island
Canada C1A 7N8

Transportation
and Infrastructure

Transports
et Infrastructure



Bureau du ministre
C.P. 2000, Charlottetown
Île-du-Prince-Édouard
Canada C1A 7N8



May 2, 2022

Mr. Angus Orford, Vice President
Corporate Planning and Energy Supply
Maritime Electric Company Limited
PO Box 1328
Charlottetown, PE C1A 7N2

Dear Mr. Orford:

**RE: Provincial Government Owned 138 kV Overhead Assets "Interconnection #1"
Transmission Lines Y-101/Y-103 Running from Fernwood to Bedeque and
138 kV Electrical Equipment in Maritime Electric's Bedeque Switching Station**

As defined in the PEI-NB Interconnection Lease Agreement of July 2017 (Appendix "A"), the Province of Prince Edward Island owns a 200-MW interconnection referred to as Interconnection #1. The on-Island overhead transmission equipment of Interconnection #1 consists of two 138-kV H-frame transmission lines that are 10 kilometers in length (Y-101 and Y-103), and 138-kV electrical equipment located in Maritime Electric's Bedeque Switching Station. The equipment in the Bedeque Switching Station includes two reactors, two breakers and ten switches. The Province of Prince Edward Island is agreeable to conveying these assets to Maritime Electric for the nominal amount of \$1 (one dollar).

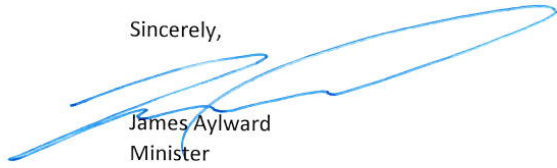
It is acknowledged by the Province that Maritime Electric's investment in these assets is permitted under the Interconnection Lease Agreement but would first require the use and expenditure of the Cable Contingency Fund balance. However, conveying these assets to Maritime Electric would allow the Cable Contingency Fund to continue to accumulate to the \$5 million maximum balance, and would preserve the funds for repairs to the four submarine cables.

It is understood and agreed that: i) Maritime Electric will continue to operate, maintain and repair these assets in accordance with Good Utility Practice; and ii) future capital expenditures required by Maritime Electric to replace these assets will be applied for as a part of the Company's annual capital budget application process with the Regulator.

.../2

Maritime Electric presently owns the right-of-way easements the transmission lines occupy, and the property upon which the Bedeque Switching Station sits, so there is no requirement for the transfer of real property or associated rights.

Sincerely,



James Aylward
Minister

C. Tyson Bradley, CEO
PEI Energy Corporation