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A FORTIS COMPANY

May 20, 2022

11:30 AM

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

Dear Ms. Mosher:

UE20945 - Application for an Order to Approve Open Access Transmission Tariff ("OATT") Changes

Please find attached the Company's responses to the Interrogatories filed by Commission Staff with respect to the Company's Application for an Order to Approve OATT Changes. An electronic copy will follow.

Yours truly,

MARITIME ELECTRIC

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The Island Regulatory and Appeals Commission (the "Commission"), in assessing the reasonableness of the 2021 Open Access Transmission Tariff ("OATT") Schedule Updates (the "Application") submitted by Maritime Electric Company, Limited ("Maritime Electric" or "MECL"), requests responses to the following interrogatories:

IR-1 Please provide a reconciliation of transmission costs according to the revised 2020 Cost Allocation Study ("CAS") versus the costs identified in Appendix A of the Application.

Response:

Table 1 is a reconciliation of transmission costs according to the revised 2020 CAS to the costs identified in Appendix A of the OATT Application.

Table 1 **Reconciliation of 2020 CAS Appendix A to Appendix A of OATT Application ($000s)**	
Net Revenue Requirement - 2020 CAS Appendix A Page 30 of 80, Column 4 labelled "Transmission"	**$ 14,704**
Add Back: OATT Revenue	2,513
Subtotal - Net Revenue Requirement Before OATT Revenue	17,217
Adjustment for Cable Contingency Fund Contribution	375
Adjustment to Amortization of Contribution	(79)
Adjustment for Cable Debt Payments	(3,218)
Adjustment to Transmission Line Maintenance	7
Total Transmission Costs After Adjustments, Appendix A of OATT Application	**$ 14,302**

A more detailed table is provided as IR-1 - Attachment 1 to this response.

The starting point of determining transmission system revenue requirement is the revised 2020 CAS, which was filed on February 25, 2022. In Appendix A of the revised 2020 CAS, on page 30 of 80, the column labelled "Transmission" has a "Net Revenue Requirement" total of $14,704,000, to which OATT Revenue of $2,513,000 is added to determine the total transmission system revenue requirement of $17,217,000. Four additional adjustments are required:

1. Cable Contingency Fund Contribution: Order UE18-05 approved the inclusion of the annual contribution to the Cable Contingency Fund of $375,000 as an OATT cost.

   This amount is not included in the 2020 revenue requirement. As a consequence of 2020 customer rates remaining unchanged from the rates charged in 2018, the Company continued to collect the $0.00027 per kilowatt hour ("kWh") rate rider implemented on March 1, 2013 from distribution customers and remitted this amount to the PEIEC monthly throughout 2020. This cost to distribution customers was partly offset by the additional net revenue from OATT charges to other transmission system users in 2020.

   Because the contingency fund contribution was recovered from the Company's distribution customers through a rate rider, it was not part of the Company's revenue requirement in the 2020 CAS. This adjustment to 2020 transmission revenue requirement is to reflect that

the Cable Contingency Fund Contribution is a transmission cost to be collected from OATT customers as per Order UE18-05.

2. Amortization of Contribution: This adjusts for the amortization of a $2.5 million contribution from West Cape Phase 1 that is included with contributions on distribution fixed assets in the 2020 CAS but should reduce the revenue requirement for amortization of transmission assets.

3. Cable Debt Payments: This is Maritime Electric's portion of the payments to the PEIEC for the 2017 cables, in accordance with the Debt Collection Agreement, and is to be recovered from distribution customers. Therefore, it is deducted from the transmission revenue requirement.

4. Transmission Line Maintenance: This adjustment is to recover from transmission customers the cost of a helicopter inspection of a dedicated facility transmission line.

IR-2 Please provide an explanation for transmission operating costs identified in the revised 2020 CAS that are not consider OATT related costs, including how they do not meet the terms of the OATT Tariff.

Response:

The Cost Allocation Study ("CAS") uses a three step methodology – functionalization, classification and allocation. The functionalization step breaks out the Company's total costs by function (e.g., generation, transmission, distribution) plus the various customer-related activities such as meter reading and billing. The results of the functionalization step provide the portion of Maritime Electric's costs that are related to the transmission system. However, only a portion of these costs are applicable to all users of the transmission system.

Only costs that are applicable to all users of the transmission system are recovered through OATT, with the exception of the debt repayment portion of interconnection costs, which are not recovered through OATT in accordance with the direction of the PEI Government.

The purpose of Appendix A of the Application is to assign the transmission costs as either OATT or non-OATT related costs. Appendix A does this under the following headings:

- **Miscellaneous designated amounts** – an example is facilities used to connect Maritime Electric's combustion turbines to the transmission system. These generators are used only for Maritime Electric load and, thus, these costs are non-OATT related.
- **Designated for Maritime Electric wind purchases** – These facilities are used to connect the PEI Energy Corporation's wind farms to the Maritime Electric electrical system. Maritime Electric purchases all of the output from these wind farms to supply only its load and, thus, these costs are non-OATT related.
- **Designated for IPP merchant wind** – These facilities are used to connect the West Cape wind farm to Maritime Electric's electrical system and are used only by the West Cape wind farm. Thus, these costs are non-OATT related.
- **System capacitors – Schedule 2** – These assets are used to provide voltage support for the transmission system and, thus, are OATT related costs. These costs are recovered from all transmission users through OATT Schedule 2 – Reactive Supply and Voltage Control.
- **OATT transmission facilities** – These facilities are used by all transmission users. Thus, these costs are OATT related, and are recovered through OATT Schedules 7 and 8 - Point to Point Transmission service and Attachment H - Network service.
- **Energy Control Centre** – Only 25 per cent of the Energy Control Centre ("ECC") costs are deemed to be applicable to the transmission system. The other 75 per cent is deemed to be applicable to the distribution system as the ECC operators are responsible for some distribution system operations, for dispatching Maritime Electric's combustion turbines, and for scheduling hourly energy purchases with NB Power. Thus, 25 per cent of the ECC costs are OATT related costs, and are recovered from all users through OATT Schedule 1 – Scheduling, System Control and Dispatch.

IR-3 According to MECL, between 2015 and 2020, the Commission approved $49.7 million in transmission related capital expenditures. MECL proposes to include $32.2 million of the transmission related capital expenditures in the OATT revenue requirement.

a. Please provide a breakdown of the $17.5 million in transmission related capital expenditures that MECL considers to be non-OATT. Please refer to the capital budget(s) approving each expenditure.

b. Please explain why the expenditures are non-OATT and not included in the updated OATT revenue requirement.

Response:

a. Table 1 is a reconciliation of the total 2015-2020 Capital Budgets approved by the Commission to the total transmission additions to OATT facilities in Appendix A of the Application. The difference between these two amounts is $17.2 million, which was determined to be non-OATT.

Table 1
Reconciliation of Approved 2015-2020 Capital Budgets
to Additions to OATT Facilities per Appendix A of the Application

Description	Item	$ million
Total Approved Transmission Budgets 2015-2020[1]	1	49.4
Adjust to Actual Transmission Expenditures Capital Variance Reports	2	1.4
Net Transmission Additions to/from Non-transmission Assets and Projects	3	0.5
Communications Equipment Additions at 25%	4	1.0
2014 Mid-year Adjustment	5	3.4
2020 Mid-year Adjustment	6	(4.0)
GEC, IDC, Retirements, Other	7	2.2
Substation Assets Allocated to Distribution at 47%	8	(19.4)
Y-104 Allocated to Wind	9	(5.0)
Church Road No Longer Designated to Wind	10	2.8
Total Additions to OATT Facilities per Appendix A (rounded)		**32.2**

Table 2 provides a summary of the Capital Budget Orders approving the annual transmission budgets. The annual capital expenditure totals for transmission projects reported to the Commission in the Company's annual capital variance reports, and the Commission Orders approving the annual capital variance reports.

[1] Total 2015-2020 Approved Transmission Budgets of $49.7 million on page 21 of the presentation on February 18, 2022 was incorrect due to a typo in the presentation and should have been $49.4 million.

Table 2 Transmission Capital Budget and Annual Variance Report Approvals ($ million)						
Budget Year	Annual Approved Transmission Budget		Actual Transmission per Approved Annual Variance Report			
	Order	Budget	Current Year Projects	Prior Year Carryovers	Total	Order
2015	UE14-04	7.70	7.10	1.00	8.10	UE16-08
2016	UE15-01	10.40	7.33	0.95	8.28	UE17-03
2017	UE16-08	8.60	7.84	2.89	10.73	UE18-09
2018	UE17-03	6.20	5.53	1.63	7.16	UE19-09
2019	UE18-09	7.30	7.72	0.95	8.68	UE21-02
2020	UE19-09	9.20	7.66	0.20	7.86	UE21-16
Total		**49.40**	**43.17**	**7.63**	**50.80**	

b. The following provides in explanation of the reconciling items from Table 1:

Items 1 and 2 - Total Approved Capital Budgets and Annual Variances Approved by IRAC

The sum of items 1 and 2 from Table 1, $50.8 million, is the same as the total in Table 2. The annual transmission capital budgets were approved by the Commission in advance of construction and/or procurement of the additions, as documented in Table 2 under "Annual Approved Transmission Budget". Additionally, the Commission also approved any variances from approved budget and carry over amounts, as documented in Table 2 under "Actual Transmission per Approved Annual Variance Report".

Item 3 - Net Transmission Additions to/from Non-transmission Assets and Projects

The regulatory approval process documented above with respect to items 1 and 2 also applies to all capital projects, not just transmission projects. There can be some transmission projects that include capital additions to the distribution system or other asset categories, and vice versa. Over the five-year period of 2015 to 2020, approximately $0.5 million of transmission additions related to these situations as shown in Table 3.

Table 3 2015 – 2020 Net Transmission Additions to/from Non-transmission Assets and Projects ($ million)	
Transmission Project Additions to Non-transmission Assets	(0.6)
Additions to Transmission Assets from Other Project Categories	1.1
Net Transmission Additions from Non-transmission Assets and Projects	**0.5**

Item 4 - Communications Equipment Additions at 25 per cent

Communications equipment is considered to be primarily distribution assets but, similar to substations (item 8 below), these assets serve both distribution and transmission service functions. The 25 per cent allocation to the transmission function has been used since the Company's CAS was prepared by Foster and Associates in 1993. The use of this equipment closely mirrors ECC operations and therefore the same 25 per cent allocation

to transmission is used. Total additions to communications equipment from 2015 to 2020 were $4.0 million, of which 25 per cent or 1.0 million were allocated to transmission OATT facilities.

Items 5 and 6 - Mid-year Adjustments

The Company's cost allocation studies are based on an annual average rate base. To reflect the average, mid-year adjustments are required to the opening and closing balances of the transmission assets allocated to OATT facilities. The 2014 CAS transmission assets allocated to OATT facilities included half of the total 2014 additions (2014 being the final year of the 2014 CAS). The remaining half of 2014 additions are now being added back to arrive at the 2020 balance. Similarly, half of the 2020 additions are being removed to reflect the average asset base for the final year in the 2020 CAS.

Item 7 - GEC, IDC, Retirements and Other Adjustments

General expense capital ("GEC") and interest during construction ("IDC") are approved by the Commission as part of the annual capital budget and variance reporting processes. These amounts are allocated annually based on the proportionate share of asset additions to the related asset categories. Over the five-year period from 2015 to 2020, approximately $1.8 million in GEC and IDC was added to transmission assets related to OATT.

Retirements refer to assets removed from service and approximately $0.7 million of transmission assets assigned to OATT were removed from service from 2015 to 2020.

Finally, other adjustments occur from time to time to correct the assignment of asset values to the proper accounts. Over the five-year period, approximately $1.1 million in adjustments were added to OATT facilities.[2]

Item 8 - Substation Assets Allocated to Distribution at 47%

Beginning in 2006, the Company estimated the portion of substation assets used for transmission purposes based on a proxy value of the transmission versus distribution substation replacement cost. In the 2014 CAS, 72.163 per cent of substations were allocated to transmission based on this methodology.

Since 2014, the determination of the portion of substation assets used for transmission purposes has changed. The portion of substation assets used for transmission purposes is now estimated using a proxy value of transmission versus distribution substation transformer MVA rating. Therefore, in the 2020 CAS, 53 per cent of substations were allocated to the transmission function based on this methodology and 47 per cent to distribution. In part, this lower allocator reflects that much of the investment in substations from 2015 to 2020 has been distribution related. This allocator is applied to the total value of substation assets in service, not just the additions from 2015 to 2020.

[2] Approximately $0.9 million related to adjustments to retirements from 2011 to 2014 that were charged to transmission assets but should have been charged to distribution assets.

Table 4 Adjustment to 2014 Substations Mid-Year Balance ($ millions)	
2014 CAS ($38.0 at 72.163%)	27.4
2014 CAS ($38.0 at 53%)	20.1
Adjustment to 2014 Substations Mid-Year Balance	(7.3)

Substation additions from 2015 to 2020 also need to be adjusted to reflect that approximately 53 per cent is for transmission purposes or, alternatively, 47 per cent of transmission assets are considered to be for distribution functions.

Table 5 Adjustment 2015-2020 Additions to Distribution Function ($ millions)	
2015-2020 Substation Additions (after mid-year adjustments)	25.8
Adjustment to distribution functions at 47%	(12.1)

Together, these two adjustments, $(7.3) million and $(12.1) million, comprise the total adjustment of $(19.4) million in Table 1.

Item 9 - Y-104 Allocated to Wind

Line Y-104 is a 138 kV transmission line which extends from the West Royalty substation to the Church Road substation, near Dingwells Mills, and cost $11.6 million.

As built, line Y-104 is 83.1 km long. It replaced the previous 69 kV transmission line, T-4, which ran from the Charlottetown substation to the Lorne Valley substation. Y-104 was extended to Church Road to accommodate wind power development in eastern PEI. Doing so resulted in Y-104 being 35.9 km longer than a rebuild of T-4 would have been. This line extension is designated transmission facilities associated with the wind farms serving only Maritime Electric load for OATT purposes (i.e., it is not included in OATT facilities). Therefore, the $5.0 million cost to construct 35.9 km extension is excluded from OATT facilities.[3]

Item 10 - Church Road No Longer Designated to Wind

The Church Road substation, which cost $2.8 million, was deemed a facility designated for Maritime Electric wind purchases when it was originally placed in service in 2013, and the associated costs are not reflected in the current OATT. The connection of the Church Road substation to line Y-104 in 2017 changed this substation to an OATT facility, as it now forms part of the looped transmission system serving load in eastern PEI. Therefore, the cost of the substation has been added to the balance of OATT transmission facilities in the current Application.

[3] 35.9 km / 83.1 km x $11.6 million = $5.0 million

IR-4 According to MECL, the OATT transmission facilities have increased by $32.2 million since 2015. A breakdown of the OATT transmission infrastructure additions (2015-2020) is found at slide 22 of MECL's Stakeholder Presentation (reference slide 30 of the revised Stakeholder Presentation). Please provide further details regarding each proposed infrastructure addition, including references to the approved capital budget, and justification for including in the OATT transmission facilities.

Response:

An excel workbook detailing all OATT additions by year is provided as IR-4 – Attachment 1 to this response, which supports the following table from page 30 of the stakeholder presentation on February 18, 2022. The excel workbook includes references to specific asset accounts, annual capital projects as listed in the table below, the annual capital budget orders approving the initial project budgets and the annual variance report orders approving the actual expenditures incurred.

Table 1 OATT Transmission Infrastructure Additions 2015-2020 ($000s)	
Transmission Line Refurbishments and Projects (rounded to $8.0 million in February 18 presentation)	8,092
Y-104 Build	5,204
69 and 138 kV Switch Replacement	2,249
Y-109 Extension to Borden (rounded to $2.1 million in February 18 presentation)	2,001
Lorne Valley Switching Station	1,932
69 kV Breaker Replacement	1,265
Communications Equipment	1,163
T-3 Rebuild Borden to Albany	1,055
T-8 Rebuild	951
T-1 Line Extension to Bagnall Road	1,005
Transmission Capacitors	905
T-21 Line Rebuild	782
138 kV Tap to Clyde River	445
Substation Modernization	440
T-15 Extension to Airport	422
Y-109 Bannockburn-Steel Towers	183
Other	1,317
Subtotal	**29,411**
Adjustment to Dedicated Facilities - Church Road Substation	2,759
Total	**32,170**

IR-5 According to Table 2 – Functional Allocation of Revenue Requirement – the total proposed OATT revenue requirement has increased by approximately 35.4% and the proposed Point to Point Transmission and Network Transmission rates have both increased by approximately 25.5%. Could the proposed increases be considered rate shock? Please explain.

Response:

Rate shock refers to a rate increase so high that some customers cannot pay their bills. The determination of the point at which a rate increase qualifies as rate shock is subjective.

Utility ratemaking is a complex process that requires the application of multiple principles that sometimes, by their very nature, are conflicting:[4]

1. Recovery of cost of service – The aggregate of all customer rates and revenue must be sufficient to recover the utility's cost of service;
2. Fair apportionment of costs among customers and appropriate cost recovery should be reflected in rates;
3. Price signals that encourage efficient use and discourage inefficient use of electricity;
4. Customer understanding and acceptance;
5. Practical and cost effective to implement while sustainable to meet long-term objectives;
6. Customer rate stability with impacts to customers being managed;
7. Revenue stability; and
8. Avoidance of undue discrimination by enhancing and maintaining interclass equity.

These widely accepted principles are not considered in any particular order but are considered as a whole in developing rate proposals. Principle 6 is most closely aligned to the concept of rate shock. However, it is worth noting that while this is one consideration in developing rate proposals, it is not, nor should it be, the only consideration.

Rate increases of 35.4 per cent could be considered rate shock. The alternative to rate shock is to spread the required rate increase over a longer period of time. Maritime Electric did not propose this in the OATT Application due to the potential impact on its distribution customers. As a result of transmission rates being set based on actual historical costs and distribution rates being set based on a forecast of future costs, any further delay in the full implementation of the proposed OATT could result in Maritime Electric's distribution customers paying more than their share of the transmission system costs.[5]

In addition, Bonbright's Principle 2 states that costs be fairly apportioned to customers and appropriate cost recovery should be reflected in rates. The proposed OATT adjustments are meant to achieve this fair apportionment between transmission and distribution customers. OATT customers have enjoyed the benefits of investments in the Company's transmission system over

[4] Principles of Public Utility Rates by Dr. James Bonbright are used by regulators and utilities to assess the reasonableness of proposed rates and rate structures.

[5] Maritime Electric manages both transmission and distribution costs within the approved annual revenue requirement; therefore, timely updates to both transmission and distribution tariffs ensures both customer classes are treated equitably.

the last seven years without fully contributing to the cost of those investments. Those investments underwent an annual regulatory approval process that included public notification and opportunity for public input and scrutiny. The OATT itself was subject to a rigorous approval process before being approved in 2018.

IR-6 What is the rate impact to MECL's distribution customers if the proposed OATT schedule updates are approved? Assume there are no other changes to the currently approved rates for distribution customers.

Response:

In the short term, there will be no rate impact to Maritime Electric's distribution customers if the proposed OATT schedule updates are approved.

Maritime Electric's distribution customers will experience the benefit of the increased OATT charges when new rates are set after the conclusion of the pending General Rate Application. The pending General Rate Application assumes the proposed OATT will be approved effective July 1, 2022.

IR-7 In Commission Order UE18-05 approving the OATT, the Commission approved a discount for off-Island exports based on the transmission system in its current state, which had excess capacity.

a. Is MECL seeking Commission approval to continue the discount for off-Island exports?

b. If yes, please provide justification for the continuation of the discount.

c. Does the transmission system continue to have excess capacity? If yes, has there been any change (i.e. increase or decrease) in excess capacity since the OATT was implemented on August 1, 2018?

Response:

a. Yes. Maritime Electric is proposing to continue the discount for off-Island exports.

b. The Company believes that charging electricity exporters the off-peak hourly rate during on-peak hours, rather than the (higher) on-peak hourly rate (referred to as non-Appalachian pricing), provides three benefits:

1. There is a fairer sharing of transmission system costs between wind generation exporters and the PEI electricity users;
2. The resulting lower cost for transmission usage by exports supports the PEI Government's policy of encouraging the development of wind power in the Province for export; and
3. The Federal Energy Regulatory Commission pro-forma tariff recognizes the validity of offering a discount when there is no congestion, if doing so can be expected to result in an increase in transmission system usage and thus lower cost for all users.

c. Yes. The transmission system continues to have excess capacity for deliveries of electricity from PEI to New Brunswick. There has been no change since August 1, 2018.

Reconciliation of CAS Appendix A to Appendix A of OATT Application ($000s)

Revised Cost Allocation Study Appendix A Functionalized Revenue Requirement	Total Amortization A	Total Operating Expenses B	Total Financing Expenses C	Income Taxes D	Net Earnings E	Subtotal F=C+D+E	Gross Revenue Requirement G=A+B+F	Adjustment Other Revenue H	Net Revenue Requirement (Excluding OATT Revenue) I=G+H
Schedule 3.0 - Page 30 of 80, Column 4 "Transmission"	3,014	8,641	2,134	1,060	2,413	5,607	17,263	(46)	17,217
Add: Cable Contingency Fund Contribution	-	375				-	375	-	375
Subtotal Before Adjustments	3,014	9,016				5,607	17,638	(46)	17,592
Adjust for Amortization of Contribution	(79)						(79)		(79)
Adjust for Cable Debt Payments		(3,218)					(3,218)		(3,218)
Adjustment to Transmission Line Maintenance		7					7	-	7
Adjusted Totals	**2,935**	**5,805**				**5,607**	**14,348**	**(46)**	**14,302**
Corresponding Headings Revised OATT Appendix A	**Amortiztn expense**	**OM&A initial assignment**				**Interest, return & taxes**	**Total from Cost Allocation Study**	**Accrued Revenue Adjustment**	**Total Cost**