

Fair and Non-Discriminatory Transmission Access on Prince Edward Island

Compliance of Maritime Electric Company Ltd.
(MECL) Open Access Transmission Tariff with US
Federal Energy Regulatory Commission
Standards

**Prepared for Carr, Stevenson and Mackay (CSM), Counsel to
the Island Regulatory and Appeals Commission**

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EXECUTIVE SUMMARY

Maritime Electric Company Ltd.'s (MECL) proposed open access transmission tariff (OATT) as filed is in general compliant with FERC open access standards for provision of wholesale transmission service.

FERC's primary principle for assurance of open access to transmission systems is provision of service in a non-discriminatory manner and at comparable rates for comparable service. Non-discriminatory service implies that a transmission provider will take service for its own customers under terms and conditions of service that are the same as it provides for other wholesale customers. Comparability implies similar rates for similar services.

Synapse Energy Economics, Inc. (Synapse) reviewed the proposal at the request of the Prince Edward Island Regulatory and Appeals Commission. In general, we agree with the findings made by Mr. Marshall of WKM Energy (on behalf of MECL) in which he indicated that MECL's revised OATT sufficiently addresses changes to the underlying FERC *pro forma* open access tariff to allow it to comply with FERC open access principles. We base this assessment on our review of the proposed tariff, and with reliance on the fact that MECL has made extensive use of the FERC-approved OATT in place in New Brunswick to revise its interim OATT.

However, we note two exceptions for which we recommend alternative action.

First, we recommend that the Commission require MECL to modify its proposed OATT to align its imbalance energy schedule with that of New Brunswick Power (NB Power) for all periods when the system is unconstrained for energy flowing to PEI (unless it can demonstrate incremental costs to its system). For any period when the system is constrained, and MECL needs to operate on-island generation to provide reliable service during such constrained operations, the imbalance energy schedule should reflect on-island costs corresponding to MECL's marginal generation costs. We acknowledge FERC's finding in its Order 890 that imbalance penalty schedules such as those proposed by MECL are permissible; our recommendation stems from the underlying premise that imbalance energy should be settled at cost. MECL has not demonstrated that it will incur costs associated with transmission customer use of NB Power imbalance energy.

And second, on the issue of transmission planning, we agree with the City of Summerside's recommendation that the baseline plan should be finalized after allowing for a meeting of the Transmission System Users Group to provide input on the process.

The Commission should consider and decide on the cost allocation and rate design issues associated with the MECL 69 kV radial lines, accounting for factors in addition to the outcome of a direct application of certain FERC tests. As long as the overarching issue of service comparability and non-discriminatory access is met, FERC OATT compliance is not dependent on the exact mechanism used by PEI to allocate transmission costs. There are a number of different ways to treat the cost allocation of transmission assets that would maintain service comparability and non-discriminatory access.



1. INTRODUCTION

1.1. Overview

On July 8, 2016, Maritime Electric Company Limited (MECL) filed an application before the Island Regulatory and Appeals Commission (IRAC or the Commission) of the Province of Prince Edwards Island (PEI) to amend and revise the MECL Open Access Transmission Tariff (OATT) beginning in January 1, 2017.¹ MECL states that the amended and revised OATT addresses the following issues:

- Incorporates aspects of Federal Energy Regulatory Commission (“FERC”) Orders 889 and 890;
- Aligns with FERC Orders 888, 889, and 890 as well as other FERC orders;
- Aligns with New Brunswick Power Company’s (NB Power) OATT where NB Power has received approval from the New Brunswick Energy and Utilities Board to deviate from FERC;
- Formalizes the MECL transmission planning process;
- Updates the OATT rates based on historical 2014-year cost data (taken from MECL’s 2014 Cost Allocation Study) plus the actual transmission system usage for 2014; and
- Applies transmission losses on a postage stamp basis based on historical values for the same month from the previous year.

The Commission has engaged Synapse to produce a report on FERC compliance of the proposed MECL OATT, including a review of the following items:

- MECL OATT application, including (a) the evidence of William Marshall and the cost allocation material provided, and (b) the detailed schedules provided in the MECL filing for the OATT requirements, for provision of transmission and ancillary services under a cost-of-service framework.
- Elements of New Brunswick’s OATT and FERC documents, especially FERC documents pertaining to the changes that have occurred since MECL’s filing of an interim OATT (including, but not limited to, Order 890 and Order 1000).
- Mr. Marshall’s material on the changes that have occurred in FERC OATT policy since the original open access initiative, within reason, to provide an independent review of the overall compliance of MECL’s OATT as filed.
- Relevant City of Summerside filing materials, and additional City of Summerside information if or as necessary to address MECL OATT concerns raised.

¹ Maritime Electric Company, Limited. Application and Evidence of Maritime Electric Company, Limited. July 8, 2016.



1.2. Structure of Report

This report first summarizes the essentials in MECL's OATT filing. It provides relevant, abbreviated background material on the MECL system, and on the Summerside Electric (SE) system. It identifies the key changes incorporated into MECL's revised OATT proposal. It includes the underlying information regarding MECL's transmission revenue requirements, transmission rate design, and applicable billing determinants for customers taking service under the OATT (effectively, just three transmission customers: MECL on behalf of its native load, the City of Summerside, and West Cape wind farm). It summarizes the ancillary service schedules proposed by MECL.

The report then highlights the characteristics of a FERC-compliant open access transmission tariff. It next describes the set of issues raised by the City of Summerside, and it discusses those issues and the material provided by Mr. Dunn on behalf of the City of Summerside. Lastly, it summarizes our opinion on the overall compliance of the proposed MECL OATT with FERC principles for open access, addresses each of the City of Summerside's concerns, and provides recommendations for the Commission on the proposed OATT specifics.

2. MECL OATT

This section contains relevant background information on the MECL and City of Summerside systems, a summary of MECL's proposed changes in its OATT, and detailed sections itemizing the changes in the MECL OATT. It presents the transmission revenue requirement and the transmission and ancillary service schedules in MECL's proposed OATT.

2.1. Background

MECL owns and operates a fully integrated system that provides for the purchase, generation, transmission, distribution, and sale of electricity across Prince Edward Island. MECL owns the 109 MW oil- and diesel-fired Charlottetown Thermal Generating Station and the 40 MW diesel-fired Borden Generating Station. Both facilities generally provide back-up power for the island. MECL purchases the bulk of its energy and capacity from NB Power, until recently delivered via two 138 kV submarine cables (100 MW capacity each) leased from the government of Prince Edward Island. In 2017, two additional 138 kV submarine cables of 180 MW each were installed, increasing the capacity available to deliver energy between New Brunswick and Prince Edward Island.² In addition, MECL purchases wind-sourced

² Borden to Cape Tormentine, NB. The NB terminals of both old and new cables and then connected to the Memramcook substation in southeastern New Brunswick.

energy through contracts with PEI Energy Corporation. MECL supplies roughly 90 percent of the PEI load under a fully bundled, cost-of-service regulatory model.³

Summerside Electric Department supplies roughly 10 per cent of the peak PEI load through purchases from NB Power, the 12 MW Summerside Wind farm, and 12.5 MW Summerside Diesel Generation facility.⁴ Purchases from NB Power are delivered to Summerside via MECL's 69 kV T-11 line. Summerside takes firm and non-firm point-to-point transmission service from MECL under the current interim OATT.

2.2. OATT Update Proposal

General Updates in Response to FERC Order 890

MECL's proposed updates to the current, interim OATT include changes to reflect compliance requirements primarily under FERC Order 890.⁵ MECL's interim tariff was premised on the *pro forma* open access tariff following FERC's seminal Order 888.⁶ The changes to FERC's *pro forma* OATT subsequent to Order 890 reflect both major reforms: consistency and transparency in Available Transfer Capability (ATC) calculation, open coordinated planning, imbalance penalty issues, establishment of conditional firm service, transmission service rollover rights policies, clarification of tariff ambiguities, increased transparency and customer access to information; and what FERC characterizes as "other" reforms—capacity reassignment, network resource designation, and reservation priority rules.⁷ A redline version of MECL's OATT (based off of the original MECL interim OATT) is included in MECL's application, and Mr. Marshall's testimony walks through each of the sections, describing how the changes are in accordance with FERC principles and specific changes based on FERC Order 890.

The proposed revision to the OATT does not contain detailed changes to reflect FERC's Order 1000.⁸ As offered by Mr. Marshall, this is because there is no regional transmission organization to which PEI could legally belong.⁹ However, MECL does participate in the Maine and Atlantic Technical Planning Committee (MATPC). The MATPC provides coordinating input to studies conducted by each member organization and presents study results.

With one major exception concerning energy imbalance penalties (see Section 2.4) and one minor exception concerning transmission planning (see Section 2.5), in general we agree with the findings of

³ Maritime Electric Company, Limited. Application and Evidence of Maritime Electric Company, Limited. July 8, 2016.

⁴ <https://summerside.ca/residents/electricity>. Accessed September 26, 2017.

⁵ FERC Order 890, issued February 16, 2007. <https://www.ferc.gov/whats-new/comm-meet/2007/021507/E-1.pdf>.

⁶ <https://www.ferc.gov/legal/maj-ord-reg/land-docs/order888.asp>.

⁷ See for example FERC's fact sheet on Order 890, at <https://www.ferc.gov/whats-new/comm-meet/2007/021507/E-1.pdf>.

⁸ FERC Order 1000 on regional transmission planning principles. <https://www.ferc.gov/industries/electric/indus-act/trans-plan.asp>.

⁹ See Mr. Marshall's evidence at pages 19-21.



Mr. Marshall that the revised OATT sufficiently addresses changes to the underlying FERC *pro forma* open access tariff to allow it to comply with FERC open access principles. Our concurrence with Mr. Marshall's opinion is based primarily on the fact that MECL has made extensive use of the FERC-approved OATT in place in New Brunswick to revise its interim OATT.

We also note that while Mr. Marshall does not provide extensive support for his finding of concurrence with MECL's proposal to include all 69 kV radial lines in the OATT rate, we too agree that inclusion of all 69 kV radial transmission lines in the OATT rate complies with underlying FERC principles. This is the case primarily because of the overarching principle that seeks to ensure both non-discriminatory access to the transmission system, and comparable transmission rates between those using the system for similar service. Under the City of Summerside's proposal, the rates charged for similar transmission service for MECL native load and Summerside load could be different.¹⁰ MECL has effectively moved towards a uniform transmission rate, pooling all network and line facilities in a manner analogous to Ontario's use of a line connection pool. In Ontario's line connection pool, all load taking line connection service attracts the same uniform rate.

2.3. Specific Changes to MECL OATT to Address Order 890 Changes

FERC Order 890 sought to clarify Orders 888 and 889 in order to ensure FERC's goal that transmission service be non-discriminatory and implemented on a just and reasonable basis. MECL lists the changes to the OATT resulting from FERC Order 890:¹¹

- Increased transparency in ATC determination;
- Conditional firm component for Long-Term Point-to-Point Transmission Service;
- Initial allocation and extension procedures;
- Extension of reciprocity;
- Removal of penalties on Point-to-Point reservation exceedances;
- Designation of network resources;
- Reservation priority and pre-confirmed transmission requests;
- Failure to meet study deadlines;
- Processing of service requests and transfers;
- Creditworthiness;

¹⁰ We address this in more detail in Section 4.1 of this report.

¹¹ Maritime Electric Company, Limited. *Application and Evidence of Maritime Electric Company, Limited*. July 8, 2016. Page 21.



- Clarification of tariff ambiguities and additional definitions;
- Open, coordinated, and transparent transmission planning; and
- Energy and generator imbalance penalties.

MECL addresses the first 11 points in a single section of its application, but the details the last two issues separately in its application. MECL's inclusion of updated language in its proposed OATT in these 11 areas is reasonable. The following summarizes MECL's positions in these 11 areas:

Available Transfer Capability: MECL claims that its ATC calculations follow the same methodology used by New Brunswick Power (NB Power) since MECL coordinates with NB Power on its ATC and Total Transfer Capabilities (TTC) values.¹²

Conditional firm component for Long-Term Point-to-Point Transmission Service: MECL has incorporated additional language to provide service through re-dispatch or conditional curtailment. The proposed OATT includes additional language in Section 15.4 that specifies re-dispatch and conditional curtailment.¹³

Initial allocation and extension procedures: The MECL application notes that the situation on PEI is different from New Brunswick regarding the initial allocation. Its reasoning is that the interconnection capability between PEI and New Brunswick is not currently congested and that there currently is a surplus of ATC. MECL's indicates that its approach is more consistent with FERC policy than New Brunswick on this issue.¹⁴ On the extension procedures, MECL has modified its OATT to adopt wording in FERC Order 890 and has changed the term of the Point-to-Point Transmission Service extension right from one year to five years.¹⁵

Extension of reciprocity: The MECL proposed OATT adopts wording from FERC Order 890.¹⁶

Removal of penalties on Point-to-Point reservation exceedances: MECL proposes to retain language from FERC Order 888 that specifies the rate treatment if a transmission customer exceeds its reserved capacity. MECL proposes to retain the 110 percent charge for hourly On-Peak or Off-Peak Point-to-Point Transmission Service, and 150 percent when the transmission service is constrained. Given that

¹² Maritime Electric Company, Limited. *Application and Evidence of Maritime Electric Company, Limited*. July 8, 2016. Page 22.

¹³ Maritime Electric Company, Limited. *Open Access Transmission Tariff -Proposed*. January 1, 2017. Page 37.

¹⁴ Maritime Electric Company, Limited. *Application and Evidence of Maritime Electric Company, Limited*. July 8, 2016. Page 23.

¹⁵ Maritime Electric Company, Limited. *Application and Evidence of Maritime Electric Company, Limited*. July 8, 2016. Page 24.

¹⁶ Maritime Electric Company, Limited. *Application and Evidence of Maritime Electric Company, Limited*. July 8, 2016. Page 24.

transmission customers can cure potential exceedances by updating schedules close to the interval of service, retention of this aspect of FERC Order 888 is reasonable.¹⁷

Designation of network resources: MECL proposes to maintain the same process as NB Power by emailing changes and posting such changes without using the online OASIS portal.¹⁸ The proposed language in Section 30.2 includes:

This request must include a statement that the new network resource satisfies the following conditions: (1) the Network Customer owns the resource, has committed to purchase generation pursuant to an executed contract, or has committed to purchase generation where execution of a contract is contingent upon the availability of transmission service under Part III of the Tariff; and (2) The Network Resources do not include any resources, or any portion thereof, that are committed for sale to non-designated third party load or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program. The Network Customer's request will be deemed deficient if it does not include this statement and the Transmission Provider will follow the procedures for a deficient application as described in Section 29.2 of the Tariff.¹⁹

Reservation priority and pre-confirmed transmission requests: MECL proposes to clarify the reservation priorities by removing what had been the final determination step. In essence, MECL would institute a pre-confirmed request to provide assurance to the transmission customer and transmission provider that the service will be taken if it is determined to be available.²⁰

Failure to meet study deadlines: MECL proposes to adopt a policy similar to NB Power's. This would require notification to the Commission without imposing monetary penalties. In FERC Order 890, there are monetary penalties for persistent failures. MECL's proposed changes would require IRAC notification when more than 20 percent of the studies are not completed within deadlines for two consecutive quarters.²¹

Processing of service requests and transfers: MECL proposes to adopt the altered forms from Order 890.²²

¹⁷ FERC Order 890 removed Sections 13.9 and 14.8 addressing reservation exceedances from the *pro forma* tariff, but elsewhere stated that the Transmission Provider could address reservation exceedances. MECL's proposed approach keeps intact the language from FERC Order 888.

¹⁸ Maritime Electric Company, Limited. *Application and Evidence of Maritime Electric Company, Limited*. July 8, 2016. Page 25.

¹⁹ Maritime Electric Company, Limited. *Open Access Transmission Tariff -Proposed*. January 1, 2017. Page 69.

²⁰ Maritime Electric Company, Limited. *Application and Evidence of Maritime Electric Company, Limited*. July 8, 2016. Page 25.

²¹ Maritime Electric Company, Limited. *Application and Evidence of Maritime Electric Company, Limited*. July 8, 2016. Page 26.

²² Maritime Electric Company, Limited. *Application and Evidence of Maritime Electric Company, Limited*. July 8, 2016. Page 26.

Creditworthiness: MECL proposes to include a new attachment, Attachment O- Creditworthiness Procedures.²³

Clarification of tariff ambiguities and additional definitions: MECL adopted wording changes to improve the clarity of the OATT and to incorporate additional definitions. These changes include using the term, “transfer capability” instead of “transmission capacity.” The MECL OATT redline provides additional details on new and/or expanded definitions.²⁴

2.4. Energy Imbalances

MECL proposes to impose a scheduling penalty on energy imbalances arising from deviations from schedules for energy delivery from New Brunswick.²⁵ MECL proposes a direct pass-through of NB Power charges for regulation and load following services (Schedule 3 of the OATT), and a direct pass-through for charges for operating reserve services (Schedule 5, Schedule 6) if taken from NB Power.²⁶

MECL states that NB Power provides energy imbalance service, as the control area operator for both New Brunswick and PEI. The NB Power OATT tariff charges for these services are based on the Final Hourly Marginal Cost (FHMC) of imbalance energy in New Brunswick.²⁷ MECL provides no evidence of any incremental costs imposed on its system for imbalance energy provided by NB Power.

While FERC Order 890 does allow such penalties, we recommend that the Commission require MECL to modify its proposed OATT in the following way: Incorporate the same imbalance energy schedule as exists in the NB Power OATT for all periods when the system is unconstrained for energy flowing to PEI, unless and until it can demonstrate that the MECL system incurs costs under such circumstances. For any period when the system is constrained, and MECL needs to operate on-island generation in order to provide reliable service during such constrained operations, the imbalance energy schedule should reflect on-island costs reflective of MECL’s marginal generation costs.

2.5. Transmission Planning

MECL includes an Attachment K, Transmission System Planning, in its proposed OATT. The planning process includes preparation of a baseline plan, as well as arrangements for a meeting of the Transmission System Users Group after publishing the baseline plan. We agree with Mr. Dunn²⁸ that Attachment K should specify that the baseline plan will be finalized after allowing for a meeting of the Transmission System Users Group.

²³ Maritime Electric Company, Limited. *Application and Evidence of Maritime Electric Company, Limited*. July 8, 2016. Page 26.

²⁴ Maritime Electric Company, Limited. *Application and Evidence of Maritime Electric Company, Limited*. July 8, 2016. Page 26.

²⁵ MECL OATT, Schedule 4 Energy Imbalance Service, pages 92-93.

²⁶ MECL Application, pages 12-13.

²⁷ Evidence of William K. Marshall, page 32.

²⁸ Mr. Dunn’s Report at pages 8-9.

2.6. OATT Transmission Revenue Requirement, Cost Allocation, Billing Determinants and Rate Design

Transmission Revenue Requirement

MECL's proposed transmission revenue requirements for the open access tariff transmission facilities are seen in Table 1 below, allocated across five different components. In addition to these charges, the total transmission revenue requirement includes other charges for non-OATT facilities. These other charges relate to contracted wind, merchant wind, and energy control centers.²⁹ The revenue requirement for OATT facilities is expected to be \$10.272 million for 2017, roughly \$3 million higher than 2014, based on increases in the interconnection, substation, and lines components.³⁰

Table 1. 2014 MECL Transmission Revenue Requirement: OATT Facilities Only

	2014 Postage Stamp OATT facilities costs
	\$ '000
Interconnection	748
Substations	2,352
Lines	3,820
Communications	214
OATT Administration	172
Total, \$ '000	7,307
2014 Usage, MW	239.4
Average OATT Network Rate w/ 2014 Usage, \$/MW-Year	30,522

Source: MECL, Email response May 10, 2017, and Application Table 4.

Billing Determinants

MECL proposes to use the following billing determinants in its proposed OATT compared to the billing determinants used in the 2005 interim OATT.³¹

²⁹ MECL Application, Table 2, page 16.

³⁰ "Radial Transmission Lines" Excel file from MECL in response to May 10, 2017 email request of City of Summerside.

³¹ MECL Application. Page 18.

Table 2. MECL Transmission Usage (firm service or equivalent)

	2014 (MW)	2005 (MW)
Long-term firm Point-to-Point		
MECL Network (average 12 CP)	189.0	161.3
Summerside Network (average 12 CP)		17.6
Summerside short-term firm	10.0	
Summerside non-firm	6.7	
Merchant wind non-firm	33.7	34.2
Total	239.4	213.1

Source: MECL Application, Table 3, page 18.

The proposed billing determinants are approximately 26 MW higher than those used previously. This has the impact of lowering the \$/kW charge since the revenue requirements are spread over a larger denominator. As noted above, this will change going forward as the revenue requirements for any given year are likely to change (increase). Appendix B of the MECL Application shows the calculations of the proposed billing determinants for both firm transmission service (239.4 MW) and for Scheduled System and Control dispatch (259.0 MW). The difference between the two calculations is that MECL uses Appalachian pricing of 4,160 hours to determine the merchant on-peak capacity equivalent of either 17.8 MW (155,799 MWh/8,760 hr) or 37.5 MW (155,799 MWh/ 4,160 hr). Curiously, MECL does not apply the non-Appalachian determination for the Summerside on-peak determination of 5.9 MW (24,621 MWh/ 4,160 hr). If it treated the Summerside on-peak the same as the merchant wind on-peak, then it should be 2.8 MW (24,621 MWh/ 8,760 hr).

In MECL's exchange of data with Summerside,³² MECL provides the following monthly net peak loads for PEI.

³² Responses to Summerside's December 7, 2016 requests for information.

Table 3. PEI monthly net peak loads

Net Peak Load MW	2014			2015		
	Total	MECL	CoS	Total	MECL	CoS
January	243.8	218.9	24.9	263.9	235.3	28.6
February	236.9	213.6	23.3	254.1	229.1	25.0
March	225.4	202.0	23.4	232.5	207.7	24.8
April	196.4	175.5	20.9	198.4	176.2	22.2
May	187.4	171.9	17.5	183.5	164.8	18.7
June	181.0	162.4	18.6	182.7	165.0	17.7
July	194.1	174.5	19.6	189.6	171.0	18.6
August	195.0	176.8	18.2	204.9	183.8	21.1
September	184.9	166.4	18.5	182.6	165.8	16.8
October	195.6	177.2	18.4	193	173.0	20.0
November	225.0	202.1	22.9	235.2	210.5	24.7
December	254.5	227.1	27.4	240.6	215.1	25.5
Average	210.0	189.0	21.1	213.4	191.4	22.0

Source: Attachment D to email response to Summerside question 2 of December 7, 2016.

The PEI 12-month average net peak load is 210.0 MW for 2014, lower than MECL's calculation for transmission usage of 239.4 MW, which also includes the "firm service equivalent" usage of 33.7 MW for the West Cape wind farm.

MECL's calculation of the Summerside non-firm on-peak load appears to be based on the following data presented in MECL's response to Summerside's Question 2.³³

³³ MECL Response to Summerside Question 2. December 7, 2016.

Table 4. Summerside 2014 transmission usage: firm and non-firm point-to-point

	Firm Point-to-Point (MW)	Non-Firm Point-to-Point (MW)	Total
January	10	3.7	13.7
February	10	9.3	19.3
March	10	11.4	21.4
April	10	0.7	10.7
May	10	-	7 (sic)
June	10	6.7	16.7
July	10	0.7	10.7
August	10	8.0	18.0
September	10	1.4	11.4
October	10	1.9	11.9
November	10	5.3	15.3
December	10	13.5	23.5
Average	10	5.7	15.0

Source: MECL email response to Summerside questions of December 7, 2016.

MECL calculates that Summerside’s average 2014 transmission usage is 16.7 MW (10 MW short-term firm and 6.7 MW non-firm), seen in Table 3 of its Application. The Company’s responses to Summerside’s Question 2 suggests that the calculated 2014 total usage for Summerside is approximately 15 MW, slightly lower than the 16.7 MW proposed by MECL in the OATT.

MECL states that the rates for non-firm service are higher for usage during on-peak hours than for off-peak hours based on the Appalachian pricing methodology that calculates the higher on-peak rates. MECL proposes to maintain off-island transmission service (export) rates (but not the rates for Ancillary Services) at the lower off-peak (non-Appalachian pricing) rates, provided there is no congestion. MECL contends that this is to align the OATT with PEI’s policy of encouraging merchant wind development on the island.³⁴

Rate Design

MECL rate design for firm transmission services (network and firm point-to-point) is based on average 12-month coincident peak usage of the transmission system. It also includes the “equivalent” firm effect of non-firm point-to-point service taken by Summerside for part of its load, and by West Cape wind for

³⁴ MECL Application. Page 18.

exports off of the island.³⁵ As noted in Mr. Marshall's evidence, the use of a 12-month average peak complies with FERC precedents.³⁶ As also noted in response to inquiries from the City of Summerside, the use of an alternative "3 CP," or an average of the winter months usage, would result in the same usage allocation to Summerside as the 12 CP method (an increase in non-firm usage and a decrease in firm usage).³⁷

Proposed OATT Transmission and Ancillary Service Rates

MECL's proposed updates to the scheduled rates in its OATT are presented in its Tables 4 and 5 of the Application. Table 4 contains the proposed rates for Long-Term Firm transmission service (Network or Point-to-Point), and reflects a higher overall revenue requirement compared to 2005 values (on which the interim tariff is based) and a higher overall level of equivalent usage. The aggregate rate is 12.5 percent higher in nominal terms, between 2005 and 2014 rate computations. Table 5 contains the rates for the various schedules in the tariff, and it includes comparisons to the New Brunswick and Nova Scotia OATT rates. The values from MECL's tables are summarized in our Table 4, below.

³⁵ See, e.g., Table 3 of MECL's Application (page 18) or the table "Demand Determinants for 2014 Based on 3CP," in Attachment A of the email response to Summerside's Question 2 of December 7, 2016.

³⁶ Mr. Marshall at page 14. He notes the variation in of MECL's use of a 12 CP charge, compared to the FERC Order 890 network service charge determinant directly tied to monthly load ratio share.

³⁷ Attachment A of MECL response to Summerside inquiry of December 7, 2016, contained in an email from Spencer Campbell of Stewart Mckelvey on December 15, 2016.



Table 4. MECL Proposed OATT Rate Schedules

Services	Schedule in MECL OATT	MECL (existing) \$/MW-mo. (except noted)	MECL (proposed) \$/MW-mo. (except noted)	NB	NS
Scheduling, System Control, and Dispatch	1	89.48	95.70	234.69	416.45
Reactive Supply and Voltage Control from Generation Sources	2	144.68	127.97	156.00	214.97
Regulation (Automatic Generation Control)	3(a) (1)	52	8,321	8,321	217
Load Following	3(b) (1)	120	8,287	8,287	777
AGC and Load Following for Non-Dispatchable Wind	3(c) (1)	\$0.50/MWh	\$0.29/MWh	\$0.29/MWh	n/a
Energy Imbalance	4	NB FHMC	NB FHMC + Penalties	NB FHMC	n/a
Operating Reserve - Spinning	5 (1)	127	8,276	8,276	167
Operating Reserve - Supplemental (10 minute)	6(a) (1)	237	5,383	5,383	332
Operating Reserve - Supplemental (30 minute)	6(b) (1)	338	5,383	5,383	281
Point-to-Point Transmission Service	7 and 8	2,257	2,544	2,089	4,990
Network Transmission Service Annual	Attachment H	27,086	30,523	25,069	59,876
Network Transmission Service Monthly	Attachment H	2,257	2,544	1,730	4,241

Source: MECL Application, Table 5, and Attachment H; MECL Current OATT; Current OATT for New Brunswick, Nova Scotia.

The set of tariff schedules seen in MECL’s Application Table 5 are in compliance with the FERC *pro forma* tariff. In our opinion, the energy imbalance schedule, which includes MECL’s proposal to retain penalties beyond the balancing costs associated with NB Power’s OATT, should be modified even though it is technically in compliance with the FERC’s Order 890. The reason is that there is no evidentiary support for the added costs which would be imposed on transmission customers beyond the marginal costs for imbalance energy from New Brunswick. Even if NB Power’s balancing energy is sometimes – or often, or systematically – lower priced than forward-contracted energy, MECL has not provided any evidence of increased costs to its system if transmission customers take more energy from NB Power than scheduled. This will be particularly so with the presence of the new cables. Instances of congestion between PEI and New Brunswick will likely be exceedingly rare, if they occur at all, as long as the older cables remain in service and enable substantial redundancy of capacity in the event of a cable failure.

3. FERC OATT COMPLIANCE STANDARDS

MECL's proposed OATT is directly patterned after the updated NB Power OATT. FERC approved NB Power's updated OATT in November 2015.³⁸ The NB Power OATT contained changes reflecting the requirements of FERC Order 890; other provisions are already compliant under earlier FERC OATT principles, especially the originating FERC Order 888 and its companion orders.³⁹ To the extent that MECL's proposed tariff is directly patterned after NB Power's OATT, or effectively offers non-discriminatory access and comparable transmission service similar to that provided in NB Power's OATT, it would be in compliance with FERC's open access principles.

FERC has an extensive history concerning the regulation of open access to electric power transmission systems, as is documented on its web page describing the extent of tariff reform.⁴⁰ This report will not detail the considerable extent of these efforts; instead we focus on the most recent reforms promulgated and approved under FERC Order 890, and the applicability of these reforms to NB Power's open access transmission tariff, upon which MECL has patterned its proposed OATT. In general, FERC's *pro forma* open access transmission tariff seeks to ensure service and rate comparability, as well as fair and non-discriminatory access to the transmission system. The *pro forma* OATT in general provides for the rates, terms and conditions of service for network and point-to-point transmission, and required ancillary services for wholesale transmission customers.

3.1. Service Comparability and Non-Discriminatory Access

FERC's preeminent principle for assurance of open access to transmission systems is provision of service in a non-discriminatory manner and at comparable rates for comparable service. Non-discriminatory service essentially implies that a transmission provider will effectively take service for its own customers under terms and conditions of service that are the same as it provides for other wholesale customers. Comparability of service essentially implies similar rates for similar services.

In granting market-based rate authority to foreign entities such as Canadian utilities or marketers, FERC does require that reciprocal access to those foreign transmission systems be granted, and use of an OATT-compliant tariff is generally required to ensure such reciprocity. However, FERC does not intrude on the authority of Canadian regulators to oversee their own transmission systems and does not adjudicate cost allocation or rate design issues as long as service comparability and non-discriminatory access is seen on the wholesale level. As FERC stated in 2007:

³⁸New Brunswick Energy Marketing Corporation, FERC Docket Nos. ER14-225-001, ER14-225-002, ER14-225-003, Order Accepting Notices of Change in Status and Updated Market Power Analysis, issued November 30, 2015. 153 FERC ¶ 61,254 Available at <https://www.ferc.gov/CalendarFiles/20151130160605-ER14-225-001.pdf>.

³⁹<https://www.ferc.gov/legal/maj-ord-reg/land-docs/order888.asp>.

⁴⁰<https://www.ferc.gov/industries/electric/indus-act/oatt-reform.asp>.

We will codify in § 35.37(d) of the Commission’s regulations the requirement that a market-based rate seller affiliated with a foreign utility, or its affiliate, that owns, controls, or operates transmission facilities outside of the United States and is interconnected with the United States must demonstrate that comparable, nondiscriminatory access is offered on those facilities so that competitors of the seller may reach United States markets.⁴¹

And, in a US Court of Appeals ruling,

FERC does not presume to tell foreign transmission owning utilities what tariffs they must file. If a marketing affiliate of such a utility wants to sell power at market-based rates in the United States, however, the utility must offer transmission service comparable to that required of a utility in the United States. Just as a domestic transmission-owning utility must allow competitors of its marketing affiliate to use its transmission services on a non-discriminatory basis to compete with the marketing affiliate, so too a foreign transmission-owning utility must allow companies that would compete with its marketing affiliate to use its transmission services to reach the United States market and compete on a level playing field with its marketing affiliate. See *Energy Alliance P’ship*, 73 FERC ¶ 61,019, at 61,030–31 (1995).⁴²

3.2. Applicability of FERC’s Seven Factor and Mansfield Tests

FERC’s Seven Factor Test is used to assess the classification of facilities as either distribution or transmission. FERC’s Mansfield Test is used to assess the extent to which radial transmission lines are considered “network” lines or are used in service of a single customer. Mr. Dunn directly references these tests in support of his assertion that the MECL radial transmission lines should not be included as OATT facilities in MECL’s proposed tariff.⁴³ However, the cases cited by Mr. Dunn in general recognize that the Seven Factor and Mansfield Tests alone do not necessarily lead to a certain line categorization decision or to cost allocation outcomes for customers. It is not true that the Mansfield and Seven Factor Tests are explicitly determinative of “facilities that should NOT be included in an OATT’s rate,” as Mr. Dunn asserts.⁴⁴

In our opinion, the cost allocation and rate design issues associated with the MECL 69 kV radial lines are issues to be considered and decided by the Commission, which will account for factors in addition to the

⁴¹ FERC Order 697, Market-Based Rates For Wholesale Sales Of Electric Energy, Capacity And Ancillary Services By Public Utilities, June 21, 2007. Paragraph 1001, Page 578 <https://www.ferc.gov/whats-new/comm-meet/2007/062107/E-1.pdf>.

⁴² US DC Circuit Court of Appeals, No. 03-1162, *Consumers Energy Company, Petitioner, v. FERC, Respondent Ontario Energy Trading International Corporation and Independent Market Operator, Intervenors on Petition for Review of Orders of the Federal Energy Regulatory Commission*.

⁴³ William H. Dunn, Jr., *Sunset Point, LLC, “Report on Issues Associated with the Open Access Transmission Tariff of Maritime Electric Company, Limited”*, page 1.

⁴⁴ *Ibid.*



outcome of a direct application of either of FERC's tests. As long as the overarching issue of service comparability and non-discriminatory access is met, FERC OATT compliance is not dependent on the exact mechanism used by PEI to allocate transmission costs. There are multiple ways to treat the cost allocation of transmission assets that would maintain service comparability and non-discriminatory access, which Mr. Dunn does not seem to acknowledge. We address these issues in a later section of this report. We next provide a summary description of the two FERC tests.

Seven Factor Test

The FERC Seven Factor Test may be used to determine if a specific facility should be classified as either distribution or transmission.

The seven factors are:

- 1) local distribution facilities are normally in close proximity to retail customers;
- 2) local distribution facilities are primarily radial in character;
- 3) power flows into local distribution systems, and rarely, if ever flows out;
- 4) when power enters a local distribution system, it is not reconsigned or transported on to some other market;
- 5) power entering a local distribution system is consumed in a comparatively restricted geographic area;
- 6) meters are based at the transmission/local distribution interface to measure flow into the local distribution system; and
- 7) local distribution systems will be of reduced voltage.

When FERC issued Order 888 in 1996, which opened the use of transmission facilities to competitive markets for supply, FERC defined the distinction between transmission and distribution facilities. In Order 888, FERC noted that it would defer to state classifications and cost allocations if consistent with FERC rules.⁴⁵

Mansfield Test

The five-factor Mansfield Test that FERC has used to address cost allocation issues pertains to radial transmission facilities serving a single customer.⁴⁶ It is our understanding that the purpose of the Mansfield Test is to help FERC determine if transmission-related costs should be incorporated into network rates or directly assigned to a single customer.

⁴⁵ FERC Order 888 p.438. <https://www.ferc.gov/legal/maj-ord-reg/land-docs/rm95-8-00w.txt>

⁴⁶ FERC Initial Decision in Docket EL00-73-001, March 28, 2001. 94 FERC 63,023 *Mansfield Municipal Electric Department and North Attleborough Electric Department v. New England Power Company*. Available at <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=3217537>.

The five factors are:

- 1) whether the facilities are radial, or whether they loop back into the transmission system;
- 2) whether energy flows only in one direction, from the transmission system to the customer over the facilities, or in both directions;
- 3) whether the transmission provider is able to provide transmission service to itself or other transmission customers over the facilities;
- 4) whether the facilities provide benefits to the transmission grid in terms of capability or reliability, and whether they can be relied on for coordinated operation of the grid; and
- 5) whether an outage on the facilities would affect the transmission system.

4. REVIEW OF CITY OF SUMMERSIDE'S ISSUES

4.1. Facilities in OATT Rate: Radial Line Issue

Overview: Summerside Electric Position on Radial Lines

Mr. Dunn, on behalf of Summerside Electric, recommends that all of the radial lines serving MECL and SE load be removed from the OATT network rate.⁴⁷ His recommendation is based on the following assertions:

- The FERC tests used to distinguish between transmission and distribution, and to identify Direct Assignment facilities,⁴⁸ would indicate that a portion of MECL facilities included in the proposed OATT rate are radial, are used solely to serve (separately) MECL and SE load, and should not be part of the network OATT rate; rather they should be charged separately to each of the transmission load customers. He states that there is extensive FERC precedent for not rolling in the cost of radial lines in a FERC compliant OATT.
- Issues of fairness and equity support separating the costs of the T-11 line (serving SE) from the radial lines serving solely MECL load. His position is that SE customers should pay the costs for the T-11 line, and MECL customers should pay the costs of the remaining radial lines.
- He describes Canadian experience, noting that Mr. Marshall indicates that British Columbia, Alberta, and Manitoba do not include radial lines in their transmission tariffs.⁴⁹ He also

⁴⁷ Mr. Dunn at pages 7 and 11.

⁴⁸ Mansfield (Direct Assignment) and Seven Factor (T/D split) tests.

⁴⁹ Mr. Dunn, page 8, citing slide 31 of his Tab K, which contains Mr. Marshall's 9/22/2016 presentation at MECL's OATT Technical Conference.

references the cost pools for transmission in Ontario, which include a “Connection Pool” for “radial line connections” to the “Network Pool” facilities.⁵⁰

Radial Lines and FERC Dockets

In his discussion of the FERC Seven Factor Test, Mr. Dunn expresses his concerns regarding the classification of distribution load serving facilities that serve either MECL or Summerside.⁵¹ In order to support his assertion regarding the exclusion of radial lines, Mr. Dunn references and attaches several FERC dockets on the issue.⁵² While it is true that Mr. Dunn’s examples provide definitions of radial lines that are supportive of his position, Mr. Dunn does not acknowledge that, upon closer reading of the cited FERC dockets, the treatment of radial lines becomes more nebulous. In the Southern California Edison docket, FERC indicated that the Seven Factor Test would be the “starting point,” but that the Commission would take into account other case-specific factors.⁵³ In the Entergy example, Mr. Dunn suggests that Entergy excludes radial lines in its MISO tariff.⁵⁴ Yet, Mr. Dunn does not mention that Entergy has a process to determine if radial lines are included in transmission rate base.⁵⁵ In Mr. Dunn’s Florida Municipal Light example, FERC notes its determination of facilities not eligible for transmission rate base inclusion was a very narrow determination aimed to achieve comparability to the test derived in the case. FERC then noted that in other circumstances the excluded facilities in this case would be integrated transmission facilities.⁵⁶

Another aspect of the FERC dockets referenced by Mr. Dunn, but not acknowledged by him, is the deference to state commissions from FERC. The Mid-American docket referenced by Mr. Dunn indicates that FERC will defer to state commission recommendations so long as the recommendations are consistent with FERC Order 888, in addition to its Seven Factor Test.⁵⁷

MECL’s opinion is that in Canada, most OATTs do not assign the cost of radial lines to distribution and that the costs are generally included with all interconnected lines.⁵⁸

⁵⁰ Mr. Dunn at page 8.

⁵¹ William Dunn. *Report on Issues Associated with the Open Access Transmission Tariff of Maritime Electric Company, Limited*. Page 5.

⁵² See William Dunn. Tabs A-J.

⁵³ 153 FERC ¶61,384 Docket RC15-1-000. December 31, 2005. Paragraph 4. Page 3.

⁵⁴ See William Dunn. page 3.

⁵⁵ See William Dunn. Tab C. Attachment O-*various*. Note M.

⁵⁶ 113 FERC ¶61,263. Dockets ER93-465-034, ER96-417-003, ER96-1375-004, OA96-39-011, OA97-245-004. Footnote 34. Page 9.

⁵⁷ 140 FERC ¶61,028. Docket EL12-57-000. Paragraph 19, page 6.

⁵⁸ Mr. Marshall notes at page 11 of his evidence, “In Canada most OATTs do not assign costs of radial lines to distribution. They are generally included with all interconnected lines so that all end use customers within a jurisdiction would have the same transmission component cost recovered through their rates. It is in line with the public policy objective that all citizens (and

In our opinion, the cost allocation and rate design issues associated with the MECL 69 kV radial lines feeding customer load off of the bulk network system are issues to be considered and decided by the Commission, who would account for factors in addition to the outcome of a direct application of the FERC tests. We believe that FERC OATT compliance is not dependent on the exact mechanism used by PEI to allocate transmission costs, as long as the overarching requirement for service comparability and non-discriminatory access is met. There are several ways to treat the cost allocation of transmission assets that would maintain service comparability and non-discriminatory access, as shown in the dockets provided by Mr. Dunn.

The Commission has latitude in its decision-making so long as the treatment is consistent with FERC Order 888. In the past, FERC has deferred to local regulatory bodies.⁵⁹

Radial Line Cost Allocation Effects

In response to a request made by the City of Summerside on May 10, 2017, MECL provided a file with data representing the breakdown between radial lines and networked lines on MECL's transmission system. It indicated that 29.4 percent of the "lines" portion of the 2014 OATT revenue requirement and 27.1 percent of the lines portion for expected 2017 OATT revenue requirements is classified as radial. See our Table 5, below.

ratepayers) be treated equally." He also provides a summary of Canadian circumstances in slide 31 of his 9/22/2016 presentation at the MECL OATT Technical Conference, which is reproduced later in this report.

⁵⁹ FERC Order 2000 references several instances of deference to regional bodies in the formation of Regional Transmission Organizations.

Table 5. Radial lines portion of MECL proposed OATT transmission facilities

	2014 Postage Stamp OATT facilities costs	Estimated radial lines portion		2014 OATT facilities costs with radial lines removed	2017 indicative Postage Stamp OATT facilities costs	Estimated radial lines portion		2017 OATT facilities costs with radial lines removed
		(%)	\$ '000			(%)	\$ '000	
	\$ '000	(%)	\$ '000	\$ '000	\$ '000	(%)	\$ '000	\$ '000
Interconnection	\$748	0%	\$0	\$748	\$2,723	0%	\$0	\$2,723
Substations	\$2,352	0%	\$0	\$2,352	\$2,652	0%	\$0	\$2,652
Lines	\$3,820	29.4%	\$1,122	\$2,698	\$4,511	27.1%	\$1,223	\$3,288
Communications	\$214	0%	\$0	\$214	\$214	0%	\$0	\$214
OATT Administration	\$172	0%	\$0	\$172	\$172	0%	\$0	\$172
Total	\$7,307	29.4%	\$1,122	\$6,184	\$10,272	27.1%	\$1,223	\$9,049

Source: MECL Excel in response to City of Summerside request from May 10, 2017. Note that this is only the OATT-related portion of MECL's overall transmission revenue requirement.

Based on the portion of "Lines" cost (in Table 5) considered radial, MECL also provided a measure of the OATT tariff rate effect of the removal of the radial lines. This is seen in Table 6, below. Table 7, following, shows the overall rate impact comparison for the proposed OATT facilities under the City of Summerside's suggested removal of radial lines from the OATT.

Table 6. Measure of average OATT rate effect of removing radials: 2014 and 2017

Impact on OATT rates 2014 annual cost		
OATT facilities 2014 annual cost	\$7,307	(\$ x 1,000)
Reduction in cost with radials removed	\$1,122	(\$ x 1,000)
Reduction in OATT rates for trans service	15.4%	
Firm OATT rate with radials removed	\$25,836	(\$ / MW-year)
Impact on OATT rates 2017 annual cost		
OATT facilities 2017 indicative annual cost	\$10,272	(\$ x 1,000)
Reduction in cost with radials removed	\$1,223	(\$ x 1,000)
Reduction in OATT rates for trans service	11.9%	
Firm OATT rate with radials removed	\$37,797	(\$ / MW-year)

Source: MECL response to City of Summerside request of May 10, 2017.

Table 7. Comparison of total measure of average OATT rate effect of removing radials: 2017

	OATT Rate Excludes Radial Line / Radial Reallocated						
	Usage Share	Usage (Equiv. Firm MW)	Radial Lines Allocated Cost	Rest of OATT Lines	Total OATT+ Allocated	Ave Ann Rate	Ave Mthly Rate
MECL customers	78.9%	189.0	1,198	7,144	8,341	44,134	3,678
Summerside	7.0%	16.7	26	631	657	39,340	3,278
West Cape	14.1%	33.7	-	1,274	1,274	37,797	3,150
Total		239.4	1,223	9,049	10,272		

	All Lines Rolled into OATT Rate						
	Usage Share	Usage (Equiv. Firm MW)	Radial Lines Allocated Cost	Rest of OATT Lines	Total OATT+ Allocated	Ave Ann Rate	Ave Mthly Rate
MECL customers	78.9%	189.0	-	8,109	8,109	42,907	3,576
Summerside	7.0%	16.7	-	717	717	42,907	3,576
West Cape	14.1%	33.7	-	1,446	1,446	42,907	3,576
Total		239.4		10,272	10,272		

Source: MECL response to City of Summerside request of May 10, 2017, and tabulation by Synapse.

Table 7, above, shows the overall rate comparison for transmission lines, substations, interconnections, communications, and OATT administration, based on the indicative 2017 facilities costs (excluding other transmission revenue requirements: energy control center, merchant wind, Maritime Electric contract wind, and miscellaneous designated facilities, seen for 2014 in MECL Application Table 2).

Table 7 also shows that, using indicative costs for 2017, the total rate seen for transmission service would be the same for all customers under MECL’s proposed tariff structure. Under SE’s proposed allocation of radial line costs, both Summerside and West Cape transmission customers would see lower average rates than MECL customers, for similar service. Similar service in this instance is measured by the “Equivalent Firm MW,” based on MECL’s demand determinants.⁶⁰

The T-11 line, as with all other 69 kV radial lines that feed MECL substations to serve load, will require specific consideration of the following factors to fully ascertain the overall costs associated with this one

⁶⁰ See “Demand Determinants for 2014 Based on 3CP,” provided by MECL on December 15, 2016 in response to Summerside’s questions of December 7, 2016. We presume that the equivalent firm service is the same for 12 CP, as is indicated in MECL’s Application in Table 3, page 18.

line, and to compare those costs to the overall costs associated with each of all other radial lines serving MECL load:

- It will be subject to varying upgrade requirements in future years.
- It will have accumulated depreciation effects since its installation.
- It will have also accumulated capital additions since its installation.
- It will be used at different levels depending on the loading characteristics going forward.

Mr. Dunn has not put forward any evidence quantifying these effects, including the effect of all past rate treatment for the line.

Even so, independent of whether or not it would be feasible to accurately characterize the long-term costs of the individual T-11 line, it may still not result in a rate comparable to the average rate that would be attached to all of the remaining radial lines serving MECL load in a similar way to Summerside's load. MECL is essentially proposing a uniform rate structure that is analogous to Ontario's common line connection pool, though in this case all assets are lumped in a single network rate.

Ontario Line Connection Pool Concept

Mr. Dunn asserts that "If this concept [Ontario Network Pool] were applied on PEI, the MECL customers would pay for the cost of the radial line connecting them to the bulk transmission network and both sets of customers would pay for the cost of the bulk transmission network (non-radial) facilities."

But Mr. Dunn appears to miss the point of the presence of Ontario's Line Connection pool, the corollary to the Network Pool in Ontario. If the line connection pool were applied in PEI, then the current and ongoing costs (i.e., the current and ongoing revenue requirements) of all of the radial lines (T-11, plus the remaining 69 kV radial lines that serve MECL customers) would be pooled, and a uniform rate would be established based on the underlying total of charge determinants. This is effectively what the MECL proposed OATT rate does.

Canadian Jurisdiction Radial Lines Cost Allocation

Mr. Dunn directly references a slide from Mr. Marshall's 9/22/2016 technical briefing. That slide is reproduced below, as Figure 1.

Figure 1. Reproduction of slide from Mr. Marshall’s 9/22/2016 MECL technical conference presentation

Canadian Pro Forma OATTs (3)

Cost Allocation by Function					
Jurisdiction	Substation Step-Down Transformers	Load-Serving Radial Lines	Transmission Network	Generator Connection Assets	Generator Step-Up Transformers
British Columbia	D	D	T	G	G
Alberta	D	D	T	G	G
Saskatchewan	D	T	T	G	G
Manitoba	D	D	T	G	G
Ontario	T	T	T	T	T
Quebec	T	T	T	T	T
New Brunswick	D	T	T	G	G
Nova Scotia	D	T	T	G	G
FERC	D	D/T	T	G	G
MECL Application	D	T	T	G	G

All radial lines built on inter-provincial transmission

"D" means that the associated costs are allocated directly to Distribution or to an in province Transmission service that is separate from the OATT
 "T" means that the associated costs are allocated to transmission and collected via the OATT
 "G" means that the associated costs are directly allocated to Generators

Source: Mr. Dunn, Attachments, Tab K, and original from MECL OATT technical conference presentation.

While Mr. Dunn notes that the slide illustrates that British Columbia, Manitoba, and Alberta all allocate radial line costs to the Distribution function, he does not state that the rest of the slide illustrates that other Canadian jurisdictions (Saskatchewan, Ontario, Quebec, Nova Scotia, and New Brunswick) allocate radial line cost to the Transmission function. He also notes that New Brunswick accepted a recommendation to allocate sole use transmission facilities to “the rate class of customers served by those facilities.” We note that even though SE and MECL customers are served by different utilities, the customers of each utility share common rate class attributes. Lastly, we note that the “FERC” portion of this slide illustrates, correctly, that in the United States some radial lines are allocated to distribution and some are allocated to transmission.

Upgrades to Radial Lines: Firm and Non-Firm Service

Under MECL’s pooled approach for radial lines, any required upgrades would be based on firm service needs, and they would be paid for based on firm service charge determinants. This is a fair sharing of the costs to upgrade lines within the pool, to the extent they are needed to meet firm service requirements. Contrary to Mr. Dunn’s statement, SE should not be exposed to paying “100% of the cost [of] upgrading the radial T-11 line” to the extent that an upgrade is required to maintain delivery of SE’s firm service arrangements.

4.2. OATT Planning Process

Mr. Dunn suggests several modifications to the transmission planning section (Attachment K) of MECL's proposed OATT. He emphasizes the value of an open transmission planning process.⁶¹

Summerside notes that the proposed transmission planning is an improvement to the previous MECL OATT.⁶² However, Summerside does recommend some incremental improvements to the process. Specifically, Summerside recommends that:

- the timing of meetings of the Transmission System Users Group occur before the development of the Baseline Plan, rather than after the development of the Baseline Plan;
- the Information Exchange should apply to a broader group of stakeholders beyond Network Customers;
- the definitions of capitalized terms be refined.⁶³

The overall suggestions by Mr. Dunn to increase the transparency of the planning process appear to be reasonable and appropriate.

4.3. Discounts for Exports

Mr. Dunn objects to the presence of discounts for transmission service for exports of wind energy from PEI. He states that MECL should be required to provide cost justification for the discounts.⁶⁴

The FERC *pro forma* tariff allows for discounts for transmission service as long as those discounts are made available to users on a non-discriminatory basis.⁶⁵ The MECL proposed OATT includes the discount structure transparently for both firm and non-firm point-to-point service.⁶⁶ Those discounts could apply to export service or to other service offered in PEI. MECL's proposed OATT includes a discount for point-to-point service to a level equivalent to off-peak rates for export service, as long as the transmission off the island is unconstrained. With the completion of the new cables, it is likely that exports off-island will almost always be unconstrained, and thus it could be expected that revenues from exports going forward will be lower than seen historically, all else equal. However, with additional new wind on PEI, export revenue would increase, contributing to reducing the transmission cost burden on load.

⁶¹ Mr. Dunn at pages 8-9.

⁶² Dunn testimony, page 8.

⁶³ Dunn testimony, page 9.

⁶⁴ Mr. Dunn at page 10.

⁶⁵ FERC Order 888.

⁶⁶ MECL proposed Tariff, Schedules 7 and 8.

Mr. Dunn's evidence does not include any support that the discounts offered under the proposed OATT are non-compliant with the FERC *pro forma* tariff. As long as rates and service offerings are non-discriminatory, the Commission has full discretion to implement provincial policies that promote additional wind generation in part by allowing discounted use of the transmission system for exports.

4.4. Penalties with Scheduling Imbalances

Mr. Dunn notes that MECL proposes to impose scheduling penalties on transmission customers importing from New Brunswick.⁶⁷ He notes the existence of three volume-based bands for determining imbalance penalties. He also asserts that MECL incurs no imbalance energy costs when the NB Power cables are not constrained.

We agree with Mr. Dunn that the proposed OATT section on imbalance energy penalties is problematic. However, FERC Order 890 does allow transmission providers to implement the tiered penalty structure proposed by MECL.⁶⁸ In this particular instance, the control area operator (New Brunswick) does not impose any imbalance energy charges other than Forward Hourly Marginal Cost (FHMC) to settle imbalance energy.

In our opinion, while the MECL proposal is not in violation of the OATT principles, there is no support provided by MECL for any incurrence of costs due to the imbalances, and NB Power does not charge an adder above the FHMC for its settling of imbalance energy with NB Power OATT users. We recommend that the Commission direct MECL to consider reverting back to the existing imbalance energy protocol in the interim OATT, which uses the New Brunswick control area operator's protocol. Unless and until MECL can provide evidentiary support of increased system costs for imbalance energy, its proposal to charge an adder to balancing energy purchased from or sold to New Brunswick does not appear reasonable.

5. CONCLUSIONS AND RECOMMENDATIONS ON KEY ISSUES

5.1. FERC Compliance

MECL's proposed OATT is compliant with FERC principles of non-discriminatory open access to the transmission system. Its underlying rate design complies with FERC principles of comparable pricing for comparable services. We recommend two adjustments: removal of the imbalance energy penalties, with sole reliance on a pass-through of NB Power's FHMC for settling energy imbalances, as long as exports remain unconstrained; and a minor adjustment to Attachment K (transmission planning) to allow for

⁶⁷ Mr. Dunn, page 11.

⁶⁸ FERC Order 890 at paragraphs 627 through 728.

transmission customers to participate in user group meetings prior to release of the baseline plan. With these adjustments, we recommend approval of the proposed OATT.

5.2. OATT Facilities/Radial Line Cost Allocation

The proposed allocation of all 69 kV radial lines serving MECL and SE load into the network rate results in a uniform rate for all transmission system users. In particular, it allows similarly situated load customers (SE and MECL) to see the same rate for transmission. SE's proposed removal of radial lines from the OATT rate introduces rate differentials between SE and MECL customers for similar service.

If separate pools for network and line connection service were to be established, uniform rates between SE and MECL could still be seen. A more detailed analysis of contributions towards costs for facilities used by wind exporters would be necessary to better gauge the impact of any proposed alternative to MECL's proposed allocation method; SE's suggested alternative would not only result in non-uniform rates between SE and MECL, it would lower the total contribution towards transmission revenues from existing wind exporters. We recommend approval of the inclusion of all radial line costs in MECL's proposed OATT, thereby establishing a uniform transmission rate structure for similarly situated load customers.

5.3. Imbalance Penalties

FERC Order 890 allows for tiered penalties for energy imbalances such as those proposed by MECL in this application. Thus, MECL's proposal would be strictly compliant with FERC's OATT provisions. However, the spirit of FERC's changes to imbalance energy provisions in the *pro forma* tariff was to make such energy settlement align with the costs—market-based or otherwise—of providing energy imbalance service. It is not apparent to us that MECL will incur any costs when imbalances are settled using NB Power's FHMC metric, as directly applied in the NB Power OATT. Thus, we recommend that MECL modify its proposed OATT to align directly with the energy imbalance provision used by NB Power.

5.4. Discounts for Exports

Wind exporters on PEI have paid for or contributed to the interconnection costs that allowed flow of wind energy off-island. All uses of the transmission system for export result in incremental revenues for MECL that allow lower total costs for load customers. The FERC *pro forma* tariff allows for discounts for transmission system use such as is seen here, as long as the offered use is available to other users in a non-discriminatory manner. We recommend this aspect of MECL's proposed OATT be approved.