
Memorandum

To: IRAC

FROM: BOB FAGAN AND MAX CHANG

DATE: NOVEMBER 10, 2017

RE: PRINCE EDWARD ISLAND INTERCONNECTION UPGRADE PROJECT LEASE AND DEBT AGREEMENT – OPEN ACCESS TRANSMISSION TARIFF (OATT) IMPLICATIONS

On August 2, 2017, Maritime Electric Company, Limited (MECL) filed an application before the Prince Edward Island (PEI) Island Regulatory and Appeals Commission (IRAC) to approve the “Interconnection Lease Agreement” (entered into by three parties: the Province of PEI, the PEI Energy Corporation (PEIEC), and MECL) and the “Debt Collection Agreement” (entered into by four parties: the Province of PEI, PEIEC, MECL, and the City of Summerside (COS)) to recover and allocate project costs associated with the recently completed PEI Interconnection Upgrade Project.

The PEI Interconnection Upgrade Project is owned by the government of PEI, through the PEI Energy Corporation, and is being leased to Maritime Electric as the electric system operator. The Project consists of two new interconnecting cables between PEI and New Brunswick, with a combined capacity of 360 MW. The lease and debt agreements describe how the cable costs will be paid, and (combined with information in the open access transmission tariff (OATT) filing, and the material from UE20942) illustrate how the cable cost repayment is considered under the OATT construct and under the retail rate structure on PEI.

The PEI IRAC has requested Synapse to comment on the proposed interconnection and debt collection agreements with regards to their relevance concerning the OATT application before IRAC.

Synapse has reviewed the application and notes the following findings:

- Only MECL and Summerside will be directly responsible for PEIEC’s investment since the Provincial government decided that the generation of wind energy for export would not be required to directly fund the Interconnection Upgrade project costs.
- The allocation of debt costs between MECL and Summerside is based on the five-year average coincident peak load. The allocation percentages may be reset, per the language in the debt collection agreement.
- The exclusion of wind generators from the project cost recovery mechanism is fair since all wind exporters are excluded. Future developers of generation on the island should receive similar treatment for export capabilities. All wind generators – existing and future – will continue to be subject to tariff charges for firm or non-firm point-to-point export service, under the non-discriminatory terms and provisions of the OATT.

- We note that any increases in use of the transmission system by wind generators exporting to New Brunswick (and/or beyond NB, to Nova Scotia or New England) through the firm and non-firm export tariff provisions would result in additional revenue collected by MECL and thus reductions in the amounts otherwise required to be collected from other transmission users (MECL and COS).

Based on these findings, we conclude the debt recovery provisions are appropriate, since they use the same methodology as has been used for historical interconnection cost allocation, and do not result in any discriminatory treatment across transmission system users. We conclude that the agreement, as it primarily pertains to retail user cost recovery for capacity-related assets, does not directly alter or impact the proposed OATT. Some costs associated with the Interconnection Project will be included in the transmission revenue requirement collected under the OATT. As such, the allocation of those costs to OATT users is reasonable, in line with the OATT provisions.

Background

The following summarizes background information regarding the PEI Interconnection Upgrade project and proposed Debt Collection Agreement.

MECL and the Province recognized that there was a need for additional cable transmission capacity to be in place since PEI peak load had grown to over 260 MW, while the existing 1977 undersea cable interconnection had a capacity of only 200 MW, thus reinforcing the need to provide adequate import capability to PEI.¹

In 2016, the Province undertook the Interconnection Upgrade Project to install two 138 kV undersea cables with a transfer capability of 360 MW at a project cost of \$79 million net of federal funding.^{2, 3} There was also additional overhead transmission work in New Brunswick; our understanding is that the costs for that work will be directly recovered as part of the revenue requirements under the OATT.⁴

The project was substantially completed on July 1, 2017 when Cable #3 was placed into service. It is our understanding that both cables are now in service.⁵ The Province, MECL, and the COS focused efforts on

¹ MECL. Application. August 2, 2017. Page 6.

² http://www.maritimeelectric.com/about_us/projects/interconnection_upgrade_project/a_p_iu_overview.aspx

³ Application. Page 9.

⁴ As noted on the website for the Interconnection Project, “The project also consists of new infrastructure being built in New Brunswick. A landfall site and termination site will be constructed in Cape Tormentine as well as approximately 57 km of overhead transmission lines within new and existing easements from Cape Tormentine, NB, to the existing NB Power substation in Memramcook”. The OATT application case includes projections of additional annual interconnection costs beginning in 2017 of \$1.975 million, inclusive of New Brunswick Schedule 9 (essentially, direct assignment costs to MECL), and O&M and contingency fund amounts for the new cables. See “radial line estimates” Excel file provided by MECL in response to the City of Summerside’s request of May 10, 2017. Case UE20943.

⁵ MECL’s interconnection upgrade website indicates a September 2017 project completion date.

http://www.maritimeelectric.com/about_us/projects/interconnection_upgrade_project/a_p_iu_overview.aspx.



developing the necessary agreements to lease the Interconnection Upgrade Project assets to MECL and develop the cost recovery mechanism for the Province’s net investment in the Interconnection Upgrade Project.⁶ We note that one of the intents of the Debt Collection Agreement is to recover costs of the Interconnection Upgrade Project without profit or loss to MECL and the city of Summerside.^{7, 8}

MECL’s general rate case (UE20942) included the major costs associated with the Interconnection Upgrade Project.⁹ While the total cost of the project has remained static, the proposed cost allocations in the UE20942 case assumed that the Province incurred a financing rate on the project of 3.5 percent.¹⁰ MECL estimated that its 2018 annual lease costs to the Province would be \$3,172,000 and that other OATT participants’ costs would be \$843,500. MECL’s initial estimate for other OATT participants included both the City of Summerside and wind generators exporting energy off island.

Although MECL’s original filing included cost sharing for all OATT participants, the Province concluded that OATT participants involved only in the generation of wind energy for export will not be required to fund the recovery of the province’s original capital investment.¹¹

Proposed Debt Collection

The initial allocation included wind developers exporting energy off the island. In addition, the table included an assumption that the financing costs for the Interconnection project would be at 3.5%.¹² The initial, interim, and final cost allocations for MECL, OATT participants, and the City of Summerside are summarized below:

Table 1 Changes in Debt Collection Allocation

	Initial Allocation filed by MECL	Allocation Following Exclusion of Export Wind Generators	Allocation Reflecting lower financing rate
MECL	\$3,172,000	\$3,609,000	\$3,217,538
Other OATT participants*	\$842,500	\$405,500	\$361,481
Total	\$4,014,500	\$4,014,500	\$3,579,019
Note: Other OATT participants initially included export wind generators. However, the Province excluded export wind generators, so that only the City of Summerside was included in the final debt collection allocation. This table excludes any effects of future increases in wind exporters use of firm or non-firm point to point service, which would ultimately lower the net costs for transmission service seen by MECL and COS. Source: MECL Application, Tables 1 and 2, pages 14 and 16.			

⁶ Application. Page 7.

⁷ Debt Collection Agreement. August 2, 2017. Page 3.

⁸ The 138kV submarine cables, mainland terminal #2 and island terminal #2, and all associated operational facilities.

⁹ Application, Page 8.

¹⁰ Application, Page 9.

¹¹ Application. Page 13.

¹² Application. Page 15.

The allocation in UE20942 excludes exporters, and only includes MECL and Summerside, but at a 3.5% financing rate. In the Debt Collection Agreement, the parties noted that the Province financed the Interconnection Upgrade project at a lower rate of 2.512 percent that lowers the debt costs for both MECL and the City of Summerside. The parties noted that the final allocation of costs to MECL is approximately \$45,000 more than what MECL initially proposed and as shown in the table above.¹³

The Province's election to exclude export wind generators is consistent with the Province's original intent of developing the undersea cable to meet the capacity needs of the island, not to increase the capability to export wind generation.¹⁴ Therefore, we believe that the proposed debt collection allocation is reasonable.¹⁵

Proposed Debt Collection Allocation and Rights to Interconnection Capacity

The Debt Collection Agreement describes the proposed methodology to allocate debt costs between MECL and the City of Summerside. The proposed methodology is based on each party's share of the average 12-month coincident peak demand for MECL and the City of Summerside for the last five years, and is thus a reasonable cost allocation approach.¹⁶ The agreement allows the allocation ratio to be reset every five years.¹⁷ This allocation is generally consistent with allocation for the MECL proposed OATT, except as noted above (footnote 15) the difference between using OATT billing determinants, and using actual gross peak load.

Article 7 of the Debt Collection Agreement formalizes the proposed methodology between Maritime Electric and the City of Summerside to share the import capacity of the interconnection facilities from New Brunswick and PEI and shares the same methodology as the debt costs.

In addition, the Debt Collection Agreement also outlines that MECL and the City of Summerside will have assured access to the import capacity of the new submarine cables relative to the debt cost allocation. The Debt Collection Agreement also states that during the term of the agreement that the allocation may change.¹⁸

¹³ Application. Page 15.

¹⁴ Application. Page 15.

¹⁵ We note that the proposed allocation is tied to average peak load (12CP) of the MECL and COS, which "reflects the historical approach to allocating use of the interconnection facilities" (Application, page 16). This differs somewhat from the relative transmission system usage share under the OATT, which defines usage after accounting for the COS behind the [wholesale] meter generation.

¹⁶ Application. Page 11.

¹⁷ Application. Page 16.

¹⁸ Debt Collection Agreement. Page 11.

Additional Comments

Article 8 of the Debt Collection Agreement creates an Interconnection Committee with one representative from each of the Province, PEIEC, City of Summerside and MECL. The Committee does not have the authority to modify or amend the terms of the Lease, but provides a forum to share communication and information among stakeholders during the operation of the submarine cables.¹⁹

MECL contends that the lease with the PEIEC reflects the prior lease agreement and reflects current practice in allocating import capacity.²⁰

¹⁹ Application. Page 11

²⁰ Application. Page 12.

