

Maritime Electric Co.Ltd.(MECL) 2017 Cost Allocation – Classification of Costs Application (UE22502) – Comments to IRAC

Application Overview:

Obligated to respond to the Commission order UE16-04 for a revised position on the allocation of the Pointe Lepreau \$19.9M annual costs, MECL has chosen to expand the scope of this order by adding proposed changes to the cost allocations of PEI combustion and PEI wind energy generation. In one way this application suggests that MECL is beginning to recognize and characterize the impact of customer demand/peak energy on customer costs more objectively. However the end result of the application is that the previous “Revenue-to-Cost ratio” (RTCs) for most customer classes change only slightly and the existing RTC inequities between classes remain. Assuming that the study’s conclusions will set rate recommendations, a fundamental flaw in the approach taken by MECL so far is a single focus upon RTCs without any consideration to the “Unit Cost” data provided by the 2015 Chymko Study. In this Study, Table 12 (page 26) shows the gross inequities between classes for both demand and service costs and therefore provides core areas where revenues should be changed which in turn will correctly reduce RTC inequities.

Application Commentary:

- 1) **Pointe Lepreau energy:** Other than the contribution to transmission capacity, it is not obvious why MECL is now describing this as low cost energy. Depending upon plant efficiency, the unit cost ranges between \$76/MWh. and \$84/MWh. but when the cost of MECL participation debt repayment (\$80M) for NB Power plant refurbishment is included, the unit energy cost is higher than system energy. However by changing the original 95% Demand and 5% Energy (for fuel) allocation to 25% Demand and 75% Energy, a thought process of correctly separating demand and energy costs is emerging which hopefully will be evident in future rate recommendations.
- 2) **PEI Wind Energy:** The Effective Load Carrying Capability (“ELCC”) of PEI wind energy for capacity planning purposes has been an evolving subject of discussion between MECL and the NB System Operator for many years. With the new mainland transmission cables in place, this topic will now reside exclusively within MECL/NB Power negotiations on mainland transmission capacity cost. Here mainland transmission capacity cost avoidance, at an assumed annual rate of \$80,000/MW, would be around \$2M/year so allocating \$5.3M/year appears to reflect the true operating value of wind energy generation coincident with PEI peak demand. Incidentally the proposed allocations of demand cost in both 1) and 2) here suggest energy costs for PEI wind and mainland nuclear energy would now be at \$58/MWh and \$69/MWh respectively.
- 3) **PEI Combustion Generation:** Hitherto, PEI generation has been justified by PEI peak demand and mainland transmission security/reliability requirements but the new mainland transmission cables have now eliminated the need for expensive PEI generation. As the recent CT4 application withdrawal by MECL attests, the cost of purchasing mainland capacity is lower than installing PEI generation. In citing only the (small) combustion fuel costs of \$1.2M, the application is incomplete by not including the (much higher) annual depreciation and financing costs of the combustion turbines remaining as an allocated demand cost; as a result the application does not show a complete comparison of energy and demand between the three referenced supplies.

- 4) **Demand Revenue:** Whether it is a DSM plan, annual capital expenditure, depreciation of generation equipment, purchase of transmission capacity or setting new rate structures, coincident peak power demand is becoming the primary driver. Costs for increased peak demand will now have two elements: 1) the cost of increased mainland transmission capacity and 2) future PEI system transmission and distribution expansion requirements. These elements are two tangible cost avoidance opportunities arising from controlling future increases in peak demand. The Chymko report shows that 37% of total costs are due to Demand (table 6), 52% of this Demand (table 7) should be allocated to the Residential class and yet Demand revenue collected here is 0% (table 12). It is critical that the current costs of demand are publicized and the correct collection of demand revenue within the rate classes is started. For the Residential tariff customers demand data is not currently metered so new approaches to metering or estimating demand data will be required.
- 5) **Customer Awareness and Education:** There is a simple explanation of the breakdown of customer bills that should attract the attention of some MECL customers. The Chymko report concludes that the 2014 \$179M Revenue Requirement should be allocated as: Energy - \$88.7M, Demand \$67M and Service - \$23.3M. Considering the annual energy demand of 1250GWh, the \$179M computes to each customer (on average) is paying 14.4c per KWh of energy used. The energy cost component of this 14.4c is 7.2c (which confirms the MECL claim that energy is passed through to the customer at cost), the Demand component is 5.3c and the Service component is 1.9c. In sharing/publishing this three-part breakdown, surely some customers would be receptive to advice on how to reduce this 5.3c Demand component? (Note: approval of the application will modify the above calculations)
- 6) **Use of Unit Cost Data:** The Chymko report states that unit cost has a “potential use for rate design” yet to date MECL appears to have ignored the data, focusing exclusively upon RTCs. Recognizing that correction of the unit cost inequities will take time and that “customer acceptance is an important consideration”, starting the education of customers directly and through pricing signals should be an MECL/IRAC priority.

Proposed IRAC Order Content:

Accept the application subject to:

- 1) Order MECL to deliver a document detailing: a) a new smart meter deployment program that will enable the collection of priority demand data from Residential customers and b) a customer education program that uses an estimation model for calculating the “likely” KW demand on a monthly, per-customer basis to be included in the monthly billing information.
- 2) Order MECL to deliver a document detailing: a) how the Site Related unit cost data (Chymko Report Table 12) compares to current Site Related revenue collection and b) a plan for correcting the between-classes inequities.
- 3) Items 2) and 3) above should be delivered before the June 2018 MECL updated cost allocation study is submitted to IRAC as ordered. It should be confirmed that the 2018 allocation study will be based upon 2017 data.
- 4) Request that all future annual financial reporting includes the separation of Demand, Energy and Service revenue and the separation of operating and capital costs into individual Demand, Energy and Service cost categories.