

Maritime Electric Co. Ltd. (MECL) 2022 Supplemental Capital Budget Request:

**Advanced Metering for Sustainable Electrification Project Application –
UE20737.**

**Supplemental Comments to the Island Regulatory and Appeals Commission –
January 2024**

REVIEW OF EXHIBIT M-7: POSTED DECEMBER 18 2023

- 1) With the significant cost increases and project scope changes revealed in “Response to the November 2nd. Interrogatories from Commission Staff” (Document M-7), I can no longer support the project as defined in UE20737.
- 2) M-7 reveals that the CIS replacement cost is now \$26.2M (22% higher) and the deployment cost of the AMI meters and infrastructure is now \$37.8M (45% higher). This brings into perspective that the original project scoping was flawed.
- 3) The proposal in M-7 to salvage the business case is to exclude the CIS cost of \$26.2 M. With the dependence of AMI upon the new CIS, this proposal cannot be accepted.
- 4) The combined project cost is \$64M compared to the original submission of \$47.6M; the increased IDC of \$2.8M (from the original \$1.9M) results in a \$66.8M project. The fixed Government contribution of \$19M is now a reduced contribution from 50% down to 28%. **It is unacceptable for customers to contribute \$47.8M + annual carrying costs.**
- 5) M-7 also shows on:
 - a. Page 1: A major CIS change from OnPrem (storage) to cloud-based SaaS with a claimed \$1.1M project cost reduction but an undeclared future annual software service cost. Page 2 refers to removing the CIS OnPrem S/W license capital cost but does not comment on the additional annual software service cost. Page 5 shows an additional \$1M software service cost during implementation; is this \$1M (or more) likely to be the additional operating cost for each future year?
 - b. Page 4: The cost allocation for the CIS Owner’s Engineer function - Project Management and Information Technology advice - is prematurely reduced.
 - c. Page 5: The CIS Contingency increase to \$4.9M on \$21.25M is an increase from 15% to 23% - not 30% as quoted?
 - d. Page 9: Originally there was no AMI contingency; now \$925,000 is cited as 10% but on the total AMI cost it is an inadequate 2.5%.

RECOMMENDATIONS:

- 1) **This Commission Application process should be halted and a thorough Project Management review undertaken by an expert panel of project management and technical/utility experts.**
- 2) **The proposal to exclude the CIS cost from the project business case should be revoked.**

Specific Commentary:

M-7 Project Costs are Excessive:

For cost reference, the Application Interrogatories of September 2023 show:

- a. The cost of the program to replace Mechanical meters with Remote Interrogation (RI) Meters was less than \$10M over the last 18 years.
- b. The current CIS has evolved over the last 34 years, has had two major software platforms and has serviced the customer growth and changes in metering from Mechanical to Remote Interrogation (RI) successfully
- c. According to MECL data, the current CIS total investment (excluding retirements) has been less than \$3M.

M-7 Project Reliability is not substantiated:

Prior to the release of M-7, the original CIS proposal cited concerns with a cloud-based (SaaS) data storage's dependency upon internet integrity during power outage conditions. Therefore a preference for the OnPrem (on-site storage) was specified. By adopting SaaS, is this concern mitigated within the M-7 proposal other than stipulating a migration plan in the future? Operation of both the AMI and CIS systems during power outage conditions must be examined.

The realities of DSM and Smart Meters for PEI:

- 1) Demand Side Management (DSM) relies upon "Use-of-Appliances" actions taken by customers either manually or automatically using programmed controllers.
- 2) Smart Meters cannot control "behind the meter" appliances; additional controllers or human intervention is required to take advantage of Time-of -Wind and/or Time-of -Day tariffs.
- 3) The usefulness of Smart Meters is the detailed time recording of energy consumption particularly after individual DSM actions have been taken.
- 4) The PEI Government's Electrification Strategy is changing the opportunities for applying DSM tariffs:
 - a. The narrow diversity of energy-supply types available to MECL restrict Time-of -Day energy tariffs other than eliminating or shifting peak-load.
 - b. If space heating and cooling continue to drive seasonal Grid peak load conditions, DSM tariffs will only be effective if heat storage is employed.
 - c. DSM tariffs could penalize customers having only Baseboards or Heat Pumps.
 - d. With the elimination of oil heating (as a companion heating source to electricity), the target customer for the adoption of DSM will have to change to the lower energy use customer group resulting in less peak-load reduction opportunities.