

MECL Weather Normalization Reserve Mechanism Comprehensive Report –

Application UE21231

Comments to the Island Regulatory and Appeals Commission

Introduction

Since the introduction of the WNR in 2016, there have been two (2) significant changes that are altering the supply of electricity in PEI:

- a) Hitherto the use of electricity for heating and cooling was low; heating was predominantly oil-based and electric heaters were only used as supplements; few residences used Summer cooling and very few homes had heat pumps. MECL peak demands were less than 240MW occurring in December determined essentially by Christmas decorations.
- b) The term “Weather” has become much more than simply seasonal temperature changes. Weather now means higher winds, damaging storms and increased Summer temperatures

This new scenario suggests that attempts to “normalize” the MECL “Required Revenue” variability can no longer simply use ambient temperature. It also suggests that the revenue impacts of weather now require preemptive contingency financing.

Summary of UE21231 – Application and Interrogatories Information:

Topic 1 - The WNR Empirical Forecast Model:

It is clear that the seasonal prediction modeling of PEI electricity loads specifically for heating and cooling is both challenging and evolving. The MECL Application describes an empirical model that has evolved over time which appears to agree with past data and is, with the current round of changes, being proposed to predict future loads. The recent thrust for increased electrification of space conditioning and the year-to-year changes that continue have added a significant variable. The root problem is that past weather data does not now reflect today's weather and certainly not the future.

In noting the increasing complexity of the calculations required to compute a revenue reserve and the Commission's earlier questions on whether a WNR is required, the scope and usefulness should be re-considered.

Topic 2 - The Scope of Near-Term Climate Changes and the Rapidly Increased PEI Electrification

MECL has previously indicated (UE21505 – IR-5) that it is investigating the inclusion of a proposal to establish a weather contingency fund or weather reserve in the next GRA. This IR-5 also suggests that containing a large reserve within the MECL regulatory framework could be problematic. Such a contingency fund would easily accommodate the annual revenue fluctuations that the WNR mechanism is attempting to solve but the high probability of future weather events similar to Hurricane Fiona will rapidly exhaust any contingency mechanism funded by customers alone. The disposition of the Hurricane Fiona debt, now increased to \$38.5M, has yet to be decided.

Government Infrastructure and PEI Electricity Operations Engagement

The increasing and prominent role that climate change will have on the supply of PEI electricity and the scope of investments required by MECL to keep pace with Government electrification policies suggest that a different funding method for climate change related costs is needed. The potential financial burden cannot be absorbed by MECL as a private, shareholder-based Utility nor MECL customers, both of whom are regulated by the “Cost-of-Service” mechanism. Neither can these costs be accommodated within a forecasted annual Revenue Requirement. There is an urgent role here for the PEI Government. The PEI electricity infrastructure must become an ownership/operating partnership between MECL and the PEI Government. Future budgeting and operating costs should be managed as an extension of the existing Government controlled Island infrastructure.

Topic 1 - Precedents of/for Government Utility Engagement:

- a. Both the Federal and PEI Governments have funded all four (4) undersea transmission cables and maintained ownership with an operating lease agreement with MECL as the system operator. A cables damage contingency fund has operated for many years and is held and dispersed by the PEI Energy Corporation (PEIEC).
- b. The 2022 GRA Application process introduced the next step for Government Utility engagement where the PEIEC partnered with MECL and jointly presented subsequent amendments to MECL’s original GRA Application for the Commission to consider and subsequently approve.
- c. The new 2025 Woodstock Substation and the 2020 Federal funding of \$43M allocated to the PEI Government for wind farm Transmission services between Woodstock and Sherbrooke is a joint project between the PEI Government and MECL.

- d. The Electric Power Act (EPA) authorizes the Commission to regulate the PEI Energy Corporation (PEIEC) as a companion Utility to MECL which is one of a number of future mechanisms for engaging the PEI Government.

Topic 2 - Priority Government Utility Engagement Challenges:

- a. The MECL Sustainability Report identified that significant additional renewable energy requirements of 100MW wind energy and 120MW solar energy will be required to meet the PEI Government Net Zero objectives. The Government's 10MW Slemon Park solar farm is now operating and the 30MW East Point wind energy addition is currently under construction. These projects need to be rapidly duplicated to assist in meeting the increasing demand for electricity.
- b. As a result of the significant increases in customer electricity demand, driven by population growth and significant electrification over the past several years, MECL has recently submitted an application describing the need for 150MW of on-Island dis-patchable generating capacity involving combustion turbines, RICE plants and Battery Storage for a projected cost of \$427M. Hopefully this declaration is a "wake-up call" for the PEI Government as to the unaccounted costs of recent policy decisions and more importantly a clear message that our Island infrastructure of roads and buildings must now embrace electricity.

Conclusions:

- a. The complexity of WNR calculations are of value to MECL in capturing changes in heating/ cooling load and demand but are misplaced in the context of the revenue impacts of recent and future weather trends and events. The capped WNR "receivable from customers" of \$3.9M must be considered in the context of the ECAM "receivable from customers" now escalated to \$20.6M and the Hurricane Fiona "receivable from customers" now at \$38.5M.
- b. The variability in energy costs, which usually is a "receivable from customers" and a debt that attracts an MECL ROI, is captured by ECAM. The variability in "Revenue Requirement" will result from all other operating cost changes, predominantly the impact of weather. This undoubtedly will result in another "receivable from customers" debt that cannot be sustained by customers alone.
- c. I propose that the Commission sets an Order for the PEIEC and MECL to collaborate on a proposal for a strategy on Climate Change Funding that accommodates both normal and abnormal climate change impacts and which is separate from the MECL operating finances. It would therefore seem prudent to delay any decision on this narrow scope WNR Application until after the receipt of a much broader weather funding strategy - hopefully before the next GRA is submitted in 2026.