Docket: UE20731 Order: UE22-03

**IN THE MATTER** of an application by Maritime Electric Company, Limited for approval to demolish the existing Steam Plant Building and to construct a Combustion Turbine #3 Equipment Building at the Charlottetown Thermal Generating Station, pursuant to sections 10 and 17(1) of the *Electric Power Act*, RSPEI 1988, Cap. E-4.

CERTIFIED A TRUE COPY

Cheryl Mosher,

Senior Financial Advisor

Island Regulatory & Appeals Commission

# Order

**BEFORE THE COMMISSION ON Friday**, the 13<sup>th</sup> day of May, 2022.

J. Scott MacKenzie, Q.C., Chair M. Douglas Clow, Vice-Chair Erin T. Mitchell, Commissioner

### **BACKGROUND:**

- 1. On June 8, 2021, Maritime Electric Company, Limited ("MECL" or the "Company") filed a supplemental capital budget request seeking approval to demolish the existing Steam Plant Building at the Charlottetown Thermal Generating Station ("CTGS") and to construct a new building to house combustion turbine #3 ("CT3") (the "Application").
- 2. The demolition of the existing Steam Plant Building and construction of a new CT3 equipment building were recommended in the CTGS Decommissioning Study that was commissioned by MECL. The Decommissioning Study was prepared by GHD in June 2018.
- 3. Following receipt of the CTGS Decommissioning Study, Commission staff retained an independent expert, Synapse Energy Economics, Inc. ("Synapse"), to evaluate the proposed decommissioning plan.
- 4. Following the exchange of interrogatories with MECL, Synapse recommended against the demolition of the existing Steam Plant Building and the construction of a new CT3 equipment building. Synapse suggested that MECL prepare a more robust business case and a long-term plan for the CTGS site prior to completing the proposed demolition and construction.
- 5. The Commission considered the CTGS Decommissioning Study as part of MECL's 2019 General Rate Application in Docket UE20944. In Order UE19-08, the Commission approved all aspects of the decommissioning plan as proposed by GHD, with the exception of the demolition of the existing Steam Plant Building and the construction of a new CT3 equipment building.
- 6. In making this decision, the Commission expressed concerns about the lack of a long-term plan for the CTGS site. Without a long-term plan, the Commission could not determine whether the proposed demolition and construction were economical and in the best interests of ratepayers.
- 7. MECL was therefore ordered to file a long-term plan for energy system utilization at the CTGS site. The plan was to be filed by September 30, 2020. The Commission stated that MECL could again apply for approval to demolish the existing Steam Plant Building and to construct a new CT3 equipment building, once the Company had a clear plan for the future use of the CTGS site.
- 8. On September 30, 2020, MECL filed an Integrated System Plan ("ISP") with the Commission. According to MECL, the ISP included the Company's long-term plan for the CTGS site. Although the ISP did include some future options about how the CTGS site could be used, MECL did not provide any definite plan for long-term use of the site.
- 9. On November 23, 2020, the Commission issued a letter of direction to MECL. The Company was directed to file an application with the Commission detailing the Company's plan for the CTGS site, including a 5 to 15 year plan for the site, and an explanation as to how any new facility at the site would meet the current and future needs of the Company.

10. MECL filed the Application with the Commission on June 8, 2021.

#### **OVERVIEW OF APPLICATION:**

- 11. MECL is seeking approval to demolish the existing Steam Plant Building and to construct a new building to house CT3. The estimated capital cost to construct the CT3 equipment building is \$4,168,000. MECL submits that this is the least-cost option to address the need to relocate equipment associated with the operation of CT3.
- 12. Since 2005, equipment related to the operation of CT3 has been located in the Steam Plant Building, while CT3 is located in a separate structure approximately 100 feet to the north of the Steam Plant Building. During the CTGS Decommissioning Study, GHD indicated that the full demolition of the Steam Plant Building would be cheaper than retaining and upgrading a portion of the Steam Plant Building to continue to house the CT3 equipment.
- 13. In April 2020, Fitzgerald and Snow (2010) Ltd. completed a constructability review which determined that retaining the Steam Plant Building was cost prohibitive. The review determined that expensive structural work would be required to retain the Steam Plant Building, including: (i) replacing unreinforced masonry, speed tiles and brick walls; (ii) installing additional steel piles; (iii) replacing the roof; and (iv) raising the elevation of the ground floor of the building to meet flood elevation requirements.
- 14. MECL also filed an updated estimate from CBCL Limited, dated April 8, 2021, in support of the estimated capital cost of \$4,168,000.
- 15. Based on the evidence of GHD, Fitzgerald and Snow, and CBCL Limited, MECL submits that constructing a new building to house the CT3 equipment is the least-cost option.
- 16. As part of the Application, MECL also filed a long-term plan for the CTGS site. MECL advises that over the next fifteen years, the Company's need for a new building at the CTGS site is limited to the CT3 equipment building as requested in this Application. In the event that a fourth combustion turbine ("CT4") is installed in the future, the Company intends to build an extension onto the CT3 equipment building to accommodate the CT4 equipment.
- 17. According to the long-term plan, the CTGS site will continue to serve as a transmission hub, distribution centre and generation station for the foreseeable future. Based on the Company's current anticipated needs, the site is expected to eventually house new on-Island dispatchable generating capacity, a new 69 kV substation, energy storage infrastructure such as small to medium-scale battery storage, and a possible 138 kV substation.
- 18. Following receipt of the Application, Synapse was engaged by the Commission to review the proposed plans for the CTGS site. The review was part of a broader review of MECL's 2020 Integrated System Plan that Synapse was retained to undertake.

- 19. Following the exchange of interrogatories with MECL, Synapse issued a report entitled "Prince Edward Island Resource Planning and Maritime Electric Capital Expenditures" dated April 27, 2022.
- 20. Synapse agreed with the proposed demolition of the existing Steam Plant Building, particularly as it would allow necessary acreage for future capacity resources, including battery storage. It would also allow for the possible expansion of the 138 kV transmission system, which is a reasonable use of the CTGS site and may be required due to future increases in wind energy resources. Synapse recommended that as the existing Steam Plant Building was being demolished, it was not unreasonable for MECL to construct a new building to house the CT3 equipment.
- 21. Synapse did not, however, agree with MECL's proposed use of the CTGS site for a fourth combustion turbine. Synapse concluded that until a full on-Island capacity or supply study is completed, it is not clear that the long-term plans should include CT4.
- 22. Following receipt of the Synapse report, a copy was provided to MECL for their review and comment.

#### **DECISION:**

- 23. The Commission has had an opportunity to review the Application, as well as the recommendations made by Synapse. The Commission is satisfied that MECL's proposed demolition of the existing Steam Plant Building and construction of a new building to house CT3 is, in the circumstances, reasonable. The Commission therefore approves the supplemental budget request in the amount of \$4,168,000.
- 24. In making this decision, the Commission accepts MECL's submission and supporting evidence which shows that the demolition and construction of a new building is the least-cost option.
- 25. In approving this Application, the Commission is not approving MECL's long-term plan for the CTGS site. This is because regulatory approval for the long-term plan is not required as part of this Application, and because the long-term plan is subject to change, depending on the future needs of MECL and its customers.
- 26. The Commission has likewise not made any finding regarding the requirement for, or appropriateness of, CT4. The Company's future on-Island generation needs will be thoroughly assessed in the On-Island Generating Capacity Study, approved as part of MECL's 2022 Capital Budget (Order UE21-16). Any request for on-Island generation will be considered as part of MECL's future capital budget(s), and subject to the Government's option to purchase, pursuant to section 17.1 of the *Electric Power Act*.

## **ORDER:**

The Commission Orders as follows:

- 1. The demolition of the existing Steam Plant Building at the CTGS site is hereby approved.
- 2. The supplemental capital budget request for the construction of a new building to house CT3 is approved in the amount of \$4,168,000.
- 3. The Company shall include updates on the work and expenditures approved herein as part of the CTGS decommissioning semi-annual reports filed with the Commission.

**DATED** at Charlottetown, Prince Edward Island, this 13<sup>th</sup> day of May, 2022.

#### BY THE COMMISSION:

(sgd) J. Scott MacKenzie

J. Scott MacKenzie, Q.C., Chair

(sgd) M. Douglas Clow

M. Douglas Clow, Vice-Chair

(sgd) Erin T. Mitchell

Erin T. Mitchell, Commissioner