

Energy Storage Canada (“ESC”) is the national trade association dedicated to accelerating the deployment of energy storage projects and technologies. Please find below written questions for Maritime Electric regarding the application with the Regulatory and Appeals Commission seeking approval of a supplemental capital budget request for a proposed “On-Island Capacity for Security of Supply Project”:

IR-1 Please describe the proposed approach to design, build, ownership and operation for the battery project. To what extent may third parties be commercially engaged in the battery project?

Response:

As indicated in Section 6.4.2 of the On-Island Capacity for Security of Supply Project (“Project”) Application (“Application”), Maritime Electric is seeking approval from the Island Regulatory and Appeals Commission (“Commission”) for a deferral of an initial \$12 million of the total Project cost for upfront engineering work and completion of a request for proposal (“RFP”) process. The upfront engineering is intended to help the Company determine the preferred commercial arrangements for the construction of all three Project components. In 2005 when Maritime Electric completed the combustion turbine #3 project, an engineering, procurement and construction (“EPC”) contract was the preferred format. In Section 6.4.2 of the Application, Maritime Electric identified the contract format to be utilized as EPC, but other types of contracts will be considered depending on recommendations from its engineering consultant.

Maritime Electric also recognizes that the construction of a Battery Energy Storage System (“BESS”) is different than that of traditional generators, such as combustion turbines (“CT”) or reciprocating internal combustion engines (“RICE”), and that different contract formats may be preferable. At this time, it is unclear to what extent third parties may be commercially engaged in the BESS project. Once the upfront engineering begins, the Company is open to discussing options with prospective BESS solution providers.

IR-2 How many substations have a minimum of two paths to Maritime Electric's transmission system and distribution load? And at a high level, in which regions of the province could the integration of batteries provide the greatest value?

Response:

For clarity, the reference to "a minimum of two paths to Maritime Electric's transmission system" was meant to identify substations that are part of a looped transmission path. For example, some substations have two transmission system paths (i.e., in and out), but are fed from one radial transmission line. Installing the BESS in one of these radially fed substations would not have the same benefits as a substation connected to a looped transmission system, where energy to and from the BESS can be supplied from two directions.

Currently, Maritime Electric has 10 substations that are connected to a looped transmission system that also have distribution load. The addition of the Woodstock switching station, which is currently under construction, will add St. Eleanors and Wellington substations to a looped transmission system, and the proposed Scotchfort substation (pending Commission approval) will bring the total to 13. Other factors that will impact the selected location for a BESS will be land availability at existing substations and ease of integration into facilities that can accommodate a BESS.

The upfront engineering discussed in response to IR-1, herein, will help the Company determine the preferred location for the BESS.

IR-3 Please describe the demand-side measures the utility has implemented and is investigating to contribute to resource adequacy and system reliability. Do customers have the option to adopt behind-the-meter energy storage to displace their load and/or export to the grid? Do they have access to time-varying rates for compensation, for consumption, and/or for export? And are demand charges (where applicable) determined based on coincidence with peak?

Response:

As indicated in Section 5.3.2 of the Application, demand-side management (“DSM”) initiatives are currently administered by efficiencyPEI and funded by the Government of PEI, Maritime Electric and the City of Summerside. The PEI Energy Corporation’s (“PEIEC”) Energy Efficiency and Conservation (“EE&C”) Plan provides details of planned DSM initiatives.

Customers have the option to adopt behind-the-meter energy storage to serve as a backup energy source, but current legislation does not permit them to export energy from a storage system to the grid. Currently, because customers do not have access to time-varying rates, this limitation has not been an issue as there are no economic benefits for using behind-the-meter energy storage to export to the grid.

Maritime Electric is currently working on a multi-year Advanced Metering for Sustainability Electrification Project, which includes the installation of advanced metering infrastructure (“AMI”), also referred to as smart meters. AMI will enable Maritime Electric to consider innovative rate structures, such as time-varying rates, in the future.

Demand charges (where applicable) are currently not determined based on coincident peak. Without AMI, Maritime Electric is unable to calculate demand based on coincident peak for individual customers.