

June 12, 2017

Patricia Lucarelli, Coordinator  
Chief of Legal Services  
RI Energy Facilities Siting Board  
89 Jefferson Blvd.  
Warwick, Rhode Island 02888

Re: Proposed Solar Energy Project at the Tiverton Power Facility  
304 Progress Road, Tiverton, Rhode Island

Dear Ms. Lucarelli:

Tiverton Power LLC, is submitting this letter to the Energy Facility Siting Board (“EFSB”) to describe a proposed solar energy project the company plans to undertake at its nominal 287-megawatt (MW) combined cycle electric generation facility in Tiverton, Rhode Island, and to explain why we do not believe these upgrades constitute an “alteration” pursuant to R.I.G.L. § 42-98-3(d) such that they require a license from the EFSB.

The Energy Facility Siting Act, R.I.G.L. § 42-98-4, requires that an “alteration” to a “major energy facility” must first obtain a license from the EFSB. Because the facility’s capacity is greater than 40 MW, it is a “major energy facility” under R.I.G.L. §42-98-3(d), and subject to EFSB’s jurisdiction “Alteration” is defined under the Act as:

a significant modification to a major energy facility, which, as determined by the board, will result in a significant impact on the environment, or the public health, safety, and welfare. Conversion from one type of fuel to another shall not be considered to be an ‘alteration.’

As explained below, the proposed solar project is not a significant modification to the facility and will not result in a “significant impact” on either the environment, or public health and safety. We respectfully request that the EFSB review the details of this project and determine that no EFSB review or license is required.

#### **Tiverton Power Facility Description and Setting**

Tiverton Power LLC (a subsidiary of Emera Energy of Halifax, Nova Scotia), is the owner and operator of this nominal 287-megawatt (MW) combined cycle electric generating facility. The facility is located in the Tiverton Industrial Park off Route 24, approximately two miles inland from the Sakonnet River, and ten miles inland from Rhode Island Sound.

The primary equipment at the facility consists of one GE Frame 7FA combustion turbine, one heat recovery steam generator (HRSG), and one steam turbine. The steam turbine utilizes an air cooled condenser, and there is no cooling tower associated with the steam turbine. There are two small cooling towers serving the combustion turbine cooling system and the combustion turbine inlet air cooling system. The facility also includes a gas compression system to increase the pressure of the fuel gas from pipeline pressure to the level required by the turbine, as well as an ammonia refrigeration system to provide inlet air cooling to improve warm weather performance.

The facility uses process water for makeup to the cooling systems for the combustion turbine and inlet air and to provide makeup for steam losses. Because the facility uses an air cooled condenser for the steam turbine, water usage at the facility is relatively low compared to many combined cycle power plants. Water is supplied by the North Tiverton Fire District. The facility has a zero discharge treatment system for process wastewater; therefore, no process wastewater is discharged from the facility. Sanitary wastewater discharges to an onsite system.

The combustion turbine is fired by natural gas. It is not permitted to fire any other fuel. There is no supplemental firing, and steam is generated in the HRSG solely with waste heat from the turbine. The combustion turbine is equipped with selective catalytic reduction to control nitrogen oxides (NO<sub>x</sub>) emissions. The facility also has a diesel fire pump.

### **Description of Proposed Solar Project**

Tiverton Power is proposing to install a 0.25 MW (250 kW) rooftop solar array to generate electricity for sale to the electric grid in connection with Rhode Island's Renewable Energy Growth Program. Tiverton has received a Certificate of Eligibility from National Grid and the project has been approved for interconnection by the Independent System Operator, ISO New England. The project will include a rooftop solar array (solar panels to be mounted on existing roof structure with no structural modification of existing building required), building-mounted inverters, a single ground-mounted dry transformer, and an electric meter. There will be a single equipment pad to support the transformer and, if not pole mounted, the electric meter. The solar project output will be interconnected to the grid via an existing 12.47 kV National Grid distribution line that currently serves the Tiverton Power facility when it is not generating power. The solar project will not be interconnected directly to the existing facility and will not affect existing plant operations.

The project will utilize existing conduit for cable running from the Tiverton Power main facility building under the facility driveway to the interconnection point to the grid. This thereby limits excavation to that necessary for a small equipment pad (approximately 25 square feet), a trench to install approximately 15 feet of conduit between an existing pole and a new riser pole, and possibly 1 - 2 additional new poles. Based on these project characteristics, we believe the project will not require any permits from RIDEM. The Coastal Resources Management Council (CRMC), which also has jurisdiction over this facility, has already advised us that the facility poses no impact to coastal resources and a CRMC Assent will not be required.

### **Benefits from Proposed Solar Project**

The proposed solar project has been proposed in response to Rhode Island's Renewable Energy Growth Program. The RE Growth Program was formed pursuant to Chapter 26.6 of Title 39 of the Rhode Island General Laws under the recently-enacted Clean Energy Jobs Program. The benefits of the proposed solar project are aptly stated in the statute:

#### **§ 39-26.6-1 Purpose.**

The purpose of this chapter is to facilitate and promote installation of grid-connected generation of renewable-energy; support and encourage development of distributed renewable energy generation systems; reduce environmental impacts; reduce carbon emissions that contribute to climate change by encouraging the siting of renewable energy projects in the load zone of the electric distribution company; diversify the energy generation sources within the load zone of the electric distribution company; stimulate economic development; improve distribution system

resilience and reliability within the load zone of the electric distribution company; and reduce distribution system costs.

We believe that the proposed solar project has all of these attributes.

### **Required Permits and Approvals for the Solar Project**

RIDEM: Based on the use of the existing building to mount the solar array and inverters and the extremely limited amount of excavation and additional impervious surface required for ground-mounted equipment, we believe that no permits are required from RIDEM.

CRMC Assent: Even though the facility is located at an inland location, a power generating facility with a generating capacity of greater than 40 megawatts may require an Assent from the Coastal Resources Management Council (CRMC) if the project is judged to impact the coastal environment. The Coastal Resources Management Council (CRMC), has already advised us that the facility poses no impact to coastal resources and a CRMC Assent will not be required.

ISO New England: The proposed solar project has already been approved for interconnection by ISO New England.

FERC: Electric generating facilities (with the exception of hydropower facilities) are not subject to the jurisdiction of the Federal Energy Regulatory Commission (FERC) and the proposed upgrades will not require the alteration of any gas or electric transmission lines. Therefore, FERC approval is not required. As neither FERC nor any other federal approvals will be required, coastal zone consistency for a federal action also does not apply to the proposed upgrades.

Town of Tiverton: The project has received all necessary approvals from the Town of Tiverton.

### **Environmental Impacts of the Proposed Upgrades**

The project will be located entirely within the developed portion of the site and primarily on existing structures. The proposed project will result in an insignificant increase in impermeable surface at the site (only for the transformer pad); The solar array itself will not increase the amount of impermeable surface because it is mounted on the building and therefore will not affect existing drainage. Excavation will be limited. There will be no wetland impacts and the project will not consume water or generate wastewater. The project will have no air emissions and will not generate any solid waste in operation. The transformer for the project will be a dry transformer with no possibility of leaking transformer fluid.

### **Conclusion**

As explained above, the proposed will:

- Assist the state in meeting the objectives of the Rhode Island Renewable Energy Growth program;
- Have no impacts on ambient air quality;
- Not require a significant change to the facility's footprint or boundaries.
- Not impact the local water supply infrastructure;
- Not have a wastewater discharge;

- Not increase employment or traffic;
- Not have a significant noise impact;
- Not impact wetlands or drainage at or near the site; and
- Not have any impact on the coastal environment.

For these reasons, Tiverton Power LLC believes that the proposed turbine upgrades do not constitute an "alteration" under R.I.G.L. § 42-98-4, and thus do not require a license from the EFSB. We respectfully request that the EFSB determine that no EFSB review or license is required. If you have any questions on this submittal, or require additional information, please do not hesitate to contact me at 401 624 4300 ext. 102 or at [tricia.keegan@emeraenergy.com](mailto:tricia.keegan@emeraenergy.com).

Thank you.

Very truly yours,



Tricia Keegan  
Facility Manager