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| State of Florida  pscSEAL | | Public Service Commission  Capital Circle Office Center ● 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850  -M-E-M-O-R-A-N-D-U-M- | |
| DATE: | January 25, 2018 | | |
| TO: | Office of Commission Clerk (Stauffer) | | |
| FROM: | Division of Engineering (Thompson, Ellis, King)  Office of the General Counsel (Murphy) | | |
| RE: | Docket No. 20170258-EQ – Petition for approval of a standard interconnection agreement for interconnected customer-owned battery subsystems, by Tampa Electric Company. | | |
| AGENDA: | 02/06/18 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate | | |
| COMMISSIONERS ASSIGNED: | | | All Commissioners |
| PREHEARING OFFICER: | | | Administrative |
| CRITICAL DATES: | | | None |
| SPECIAL INSTRUCTIONS: | | | None |

Case Background

On December 5, 2017, Tampa Electric Company (TECO or Utility) filed a petition for approval of a standard interconnection agreement for interconnected customer-owned battery subsystems. Although styled as a petition for a single interconnection agreement, TECO’s petition seeks approval of two new interconnection agreements: one for customers owning property where battery subsystems are connected (Owner’s Agreement) and one for customers renting property where battery subsystems are located (Renter’s Agreement). The Renter’s Agreement includes signature blocks for the Utility and the renter and puts the renter on notice about the Owner’s Agreement. These agreements, collectively referred to as the Agreements, are to facilitate the interconnection of customer-owned and customer-rented battery subsystems that are located behind the customer meter but which would be connected to and operate in parallel with TECO’s electrical grid.

The Commission has jurisdiction over this matter pursuant to Sections 366.04 and 366.05, Florida Statutes.

Discussion of Issues

Issue 1:

 Should the Commission approve Tampa Electric Company’s petition for a standard interconnection agreement for interconnected customer-owned battery subsystems?

Recommendation:

 Yes. The Agreements require customers owning and renting battery subsystems to adhere to terms which ensure the safety of the Utility’s personnel. Approval of this petition will not relieve the Utility of any requirements during a future rate case proceeding. Therefore, staff recommends that TECO’s petition for approval of a standard interconnection agreement for interconnected customer-owned battery subsystems should be approved as filed.

Staff Analysis:

 TECO’s proposed Agreements are intended for customers owning and renting battery subsystems. In the Owner’s Agreement, a battery subsystem is described as a battery system consisting of one or more storage batteries and battery chargers (including inverters, converters, and associated electrical equipment); this includes batteries charged by solar photovoltaic arrays. These battery subsystems will supply power only for the customer’s own use and will not export power into the Utility’s supply grid for more than 100 milliseconds. During a faulted condition on the Utility’s system, the customer’s battery subsystem will be isolated but it will still be able to provide electricity to the customer. A faulted condition can occur for reasons such as contact with vegetation, lightning, weather, animals and/or vehicles. The Utility currently anticipates interconnecting 73 customer-owned battery subsystems and the Owner’s Agreement will allow the safe interconnection of these subsystems. As long as the customer’s interconnection complies with the provisions set forth in the Owner’s Agreement, the Utility does not expect any negative impacts to its electrical grid. Some of the provisions of the Owner’s Agreement include requiring the customer to have the battery subsystem inspected and approved by the authority having jurisdiction and providing proof of this inspection and approval to the Utility, requiring the customer to maintain the specified amount of general liability insurance for personal injury and property damage, and requiring the customer to install an isolation switch to allow the Utility to completely separate the battery subsystem from the Utility’s system, if necessary, for safety purposes.

The provisions of the Renter’s Agreement notify the customer renting property where battery subsystems are located that the owner of the property remains responsible for all provisions in the Owner’s Agreement that the owner signed with the Utility. The Renter’s Agreement also requires the customer to abide by and comply with all applicable provisions of the Owner’s Agreement that relate to safety and that govern the use, operation and maintenance of the battery subsystem.

The benefit of the Agreements to the ratepayers owning battery subsystems and renting property where battery subsystems are located is allowing their subsystems to safely interconnect and operate in parallel with the Utility’s electrical grid by meeting the provisions set forth in the Owner’s Agreement. Under the Owner’s Agreement, operation of the battery subsystems in parallel with TECO’s electrical grid would not be permitted without meeting the specified requirements. Therefore, the Owner’s Agreement will facilitate customers’ desires to own and operate battery subsystems and the Utility personnel working at or near the premises will benefit from the safety measures included in the Owner’s Agreement. The required installation of a visible isolation switch helps to ensure that the battery subsystems are operated in a safe manner by allowing the Utility to open the switch under necessary conditions. Conditions which may require the switch to be opened are:

* Utility system emergencies or maintenance requirements;
* Hazardous conditions existing on the Utility’s system due to the operation of the customer’s battery subsystem.
* Adverse electrical effects (such as power quality problems) on the electrical equipment of the Utility’s customers caused by the battery subsystem.
* Failure of the customer to maintain the required insurance for the duration of the Owner’s Agreement.

The switch is to be readily accessible to the Utility and capable of being locked in the open position with a Utility padlock. The Utility will reimburse the customer for the cost of the switch installation for battery subsystems at or below 15 kW AC maximum capacity, not to exceed the amount listed on the Utility’s website. Approval of this petition will not relieve the Utility of any requirements during a future rate case proceeding.

Under the Owner’s Agreement, the customer agrees to permit the Utility to inspect the battery subsystem and its components as well as the required documentation, before and after the battery subsystem goes into service, and to witness the initial testing of the customer’s battery subsystem, if the Utility chooses. Once the Utility has received written documentation from the customer that the requirements of the Owner’s Agreement have been met and the correct operation of the isolation switch has been demonstrated to a Utility representative, the Utility will send a written notice within 10 business days that parallel operation of the battery subsystem can begin. Staff has reviewed the Owner’s Agreement and the Renter’s Agreement and recommends that the provisions of the Agreements are reasonable and are in place to protect the ratepayers as well as the Utility personnel. TECO’s Owner’s Agreement and Renter’s Agreement, in type-and-strike format, are included as Attachment A to this recommendation.

Conclusion

The Agreements require customers owning and renting battery subsystems to adhere to terms which ensure the safety of the Utility’s personnel. Approval of this petition will not relieve the Utility of any requirements during a future rate case proceeding. Therefore, staff recommends that TECO’s petition for approval of a standard interconnection agreement for interconnected customer-owned battery subsystems should be approved as filed.

Issue 2:

 Should this docket be closed?

Recommendation:

 Yes. If no person whose substantial interests are affected by the proposed agency action (PAA) files a protest within 21 days of the issuance of the PAA Order, a Consummating Order should be issued and the docket should be closed. (Murphy)

Staff Analysis:

 If no person whose substantial interests are affected by the PAA files a protest within 21 days of the issuance of the PAA Order, a Consummating Order should be issued and the docket should be closed.













