

State of Florida



## 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-**

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**DATE:** March 19, 2020

**TO:** Office of Commission Clerk (Teitzman)

**FROM:** Division of Economics (Smith II) *MS*  
Office of the General Counsel (Schrader) *CS* *QOH* *SC*

**RE:** Docket No. 20190215-EI – Petition for approval of depreciation rates for energy storage equipment, by Tampa Electric Company.

**AGENDA:** 03/31/20 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate

**COMMISSIONERS ASSIGNED:** All Commissioners

**PREHEARING OFFICER:** Administrative

**CRITICAL DATES:** None

**SPECIAL INSTRUCTIONS:** None

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### Case Background

On December 6, 2019, Tampa Electric Company (TECO or Company) filed a request for approval of a new depreciation classification and depreciation rate for the accounting of its energy storage equipment (Petition). The Company's request is in accordance with Rule 25-6.0436(3)(b), Florida Administrative Code (F.A.C.), which requires that: "[u]pon establishing a new account or subaccount classification, each utility shall request Commission approval of a depreciation rate for the new plant category."

Pursuant to Rule 25-6.0436(3)(a), F.A.C., electric utilities are required to maintain depreciation rates and accumulated depreciation reserves in accounts or subaccounts in accordance with the

Uniform System of Accounts for Public Utilities and Licensees, as found in the Code of Federal Regulations, which is incorporated by reference in Rule 25-6.014(1), F.A.C.<sup>1</sup>

In its annual Ten Year Site Plan filed with the Commission on April 1, 2019, the Company stated its intention to implement a 12.6 megawatt (MW) lithium-ion energy storage system adjacent to the Big Bend Solar site at Big Bend Station.<sup>2</sup> On January 13, 2020, TECO filed its response to Staff's First Data Request. In that response, the Company stated that installation of the Big Bend Battery Project began in 2019 and TECO placed the project into service in January of 2020.<sup>3</sup>

Currently, the Company does not have an authorized depreciation rate for the types of equipment required for the Big Bend Battery Project or any other energy storage endeavors.

In 2017 and 2020, the Commission approved similar petitions filed by Florida Power & Light Company (FPL) and Duke Energy Florida, LLC (DEF), respectively, for approval of a new depreciation class and rate for energy storage equipment. In those dockets, the Commission allowed a 10 percent depreciation rate and zero net salvage for similar equipment.<sup>4</sup>

Staff is not aware of any public comments or concerns on this matter.

The Commission has jurisdiction in this matter pursuant to Sections 366.04, 366.05, and 366.06, Florida Statutes (F.S.).

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<sup>1</sup>Code of Federal Regulations, Title 18, Subchapter C, Part 101, for Major Utilities, as revised April 1, 2013.

<sup>2</sup>See TECO's Ten Year Site Plan, filed April 1, 2019.

<sup>3</sup>Document No. 00228-2020, TECO's Responses to Staff's First Data Request, No. 3.

<sup>4</sup>Order No. PSC-2017-0359-PAA-EI, issued September 20, 2017, in Docket No. 20170097-EI, *In re: Petition for approval of a new depreciation class and rate for energy storage equipment by Florida Power & Light Company*; and Order No. PSC-2020-0056-PAA-EI, issued February 24, 2020, in Docket No. 20190183-EI, *In re: Petition for approval of a new depreciation class and for energy storage, by Duke Energy Florida, LLC*.

## Discussion of Issues

**Issue 1:** Should the Commission establish an annual depreciation rate applicable to energy storage equipment for TECO?

**Recommendation:** Yes. Staff recommends that the Commission approve an annual depreciation rate of 10 percent, and a zero percent net salvage level, applicable to TECO's energy storage equipment. (Smith II)

**Staff Analysis:** As outlined in its petition, TECO does not currently maintain a stand-alone Federal Energy Regulatory Commission (FERC) account classification, nor does it have a specifically-authorized depreciation rate, for investments related to energy storage. The Company is requesting authorization to record and depreciate energy storage-related investments by plant function as defined in FERC Accounts; 348 - Energy Storage Equipment – Production, 351 - Energy Storage Equipment – Transmission, and 363 - Energy Storage Equipment – Distribution. These accounts were originally established by the FERC in 2013, by Order No. 784, with the primary purpose of accounting for energy storage investments based on how specific assets are used in providing electric service.<sup>5</sup>

### Requested Depreciation Parameters

In its Petition, the Company requests Commission approval of a 10-year average service life (ASL), and a zero percent net salvage level (NS), for depreciating its energy storage equipment. An annual depreciation rate of 10 percent is computed by using these parameters.<sup>6</sup>

Industry-wide depreciation data and regulatory guidance regarding energy storage equipment is limited. In its petition, TECO referenced both the 2017 FPL and 2019 DEF petitions for similar authority to establish an annual depreciation rate for energy storage equipment.<sup>7</sup> In those 2017 FPL and 2019 DEF petitions, the utilities requested a 10 percent depreciation rate and a zero percent NS level. The Commission approved these petitions.<sup>8</sup>

To support its proposed parameters, TECO explained that the Company held consultations with its engineering subject matter experts and industry peers, including FPL and DEF, to arrive at its proposed 10-year ASL and zero percent NS parameters.<sup>9</sup>

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<sup>5</sup>U.S. Federal Energy Regulatory Commission, Order No. 784, issued July 18, 2013, in Docket Nos. RM11-24-000 and AD10-13-000, *In re: Third-Party Provision of Ancillary Services; Accounting and Financial Reporting for New Electric Storage Technologies*.

<sup>6</sup>Rule 25-6.0436(1)(e), F.A.C., and Rule 25-6.0436(1)(m), F.A.C., specify the Commission's depreciation rate formulae and methodologies.

<sup>7</sup>Document No. 11245-2019, Tampa Electric Company's Petition for Approval of Depreciation Rates for Energy Storage Equipment, ¶15.

<sup>8</sup>Order No. PSC-2017-0359-PAA-EI, issued September 20, 2017, in Docket No. 20170097-EI, *In re: Petition for approval of a new depreciation class and rate for energy storage equipment, by Florida Power & Light Company*; Order No. PSC-2020-0056-PAA-EI, issued February 24, 2020, in Docket No. 20190183-EI, *In re: Petition for approval of a new depreciation class and for energy storage equipment, by Duke Energy Florida, LLC*.

<sup>9</sup>Document No. 00228-2020, TECO's Responses to Staff's First Data Request, No. 9.

Given that utility-scale energy storage equipment/technology is relatively new, staff believes the Company's proposed ASL represents a measured and reasonable approach in life estimation. TECO asserts in its Petition that its request is for accounting purposes only, and will have no impact on base rates during the term of the 2017 Settlement Agreement.<sup>10</sup> Staff agrees with this assertion regarding impact.

Further, based on existing rules, the Commission will have future opportunities to evaluate TECO's depreciation data associated with useful lives and net salvage levels and to order modifications as appropriate.<sup>11</sup> Staff also believes that the Company's account classifications outlined in its petition, to which any newly-established depreciation rate would apply, are consistent with recent accounting guidance from the FERC.<sup>12</sup>

For the reasons outlined in this analysis, staff recommends that the Commission approve an annual depreciation rate of 10 percent, and a zero percent net salvage level, applicable to TECO's newly-established Account 348 - Energy Storage Equipment – Production, Account 351 - Energy Storage Equipment – Transmission, and Account 363 - Energy Storage Equipment – Distribution.

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<sup>10</sup>Pursuant to the terms of the 2017 Settlement Agreement, approved by Order No. PSC-2017-0456-S-EI, ¶ 3(b), TECO: "Except as specified in the 2017 Agreement, the company may not petition to change any of its general base rates, charges, credits, or rate design methodologies for retail electric service with an effective date for the new rates, charges, or rate design methodologies earlier than January 1, 2022."

<sup>11</sup>Rule 25-6.0436(4)(a), F.A.C., requires investor-owned electric companies to file a depreciation study for Commission review at least once every four years from submission of the previous study and/or pursuant to Commission order.

<sup>12</sup>U.S. Federal Energy Regulatory Commission, Order No. 784, issued July 18, 2013, in Docket Nos. RM11-24-000 and AD10-13-000, *In re: Third-Party Provision of Ancillary Services; Accounting and Financial Reporting for New Electric Storage Technologies*.

**Issue 2:** If the Commission approves staff's recommendation in Issue 1, should any transfers of plant investments and associated book reserves be authorized as part of this docket?

**Recommendation:** Yes. Staff recommends the Commission authorize book transfers from Account 362 - Station Equipment to Account 348 - Energy Storage Equipment – Production, 351 - Energy Storage Equipment – Transmission, and Account 363 - Energy Storage Equipment – Distribution. (Smith II)

**Staff Analysis:** TECO has requested the Commission authorize the transfer of certain investments and corresponding reserve amounts related to energy storage equipment presently on TECO's books.<sup>13</sup> These assets are currently recorded to FERC Account 362 – Station Equipment, and are being depreciated at the authorized rate of 2.4 percent for this account.<sup>14</sup>

In response to Staff's First Data Request No. 5, TECO stated the following:

Effective in February 2020, the Big Bend Battery Storage Project plant in service and accumulated depreciation will be recorded in FERC Account 362 – Station Equipment with a depreciation rate of 2.4%. The amounts to transfer will depend on timing of the approval for energy storage depreciation rates. Once approved, the project amounts should be moved from FERC Account 362 to FERC Account 348 Energy Storage Equipment – Production, FERC Account 351 Energy Storage Equipment – Transmission, FERC Account 363 Energy Storage Equipment – Distribution, as appropriate depending on the use of the asset.

Staff believes the transfer of plant and reserve balances associated with energy storage equipment would be appropriate if the Commission establishes a new depreciation rate applicable to Account 348 - Energy Storage Equipment – Production, Account 351 - Energy Storage Equipment – Transmission, and Account 363 - Energy Storage Equipment – Distribution as recommended in Issue 1. These transfers would assist in ensuring that costs are assigned appropriately to the function for which the equipment is being used, as well as further refining cost recovery to the useful life patterns of the three energy storage (equipment) property groups.

TECO's methodology for determining its proposed plant investment apportionments focuses on how the assets are utilized on the Company's system. Specifically, if the asset is used for peak shaving, it's classified as a production investment and recorded to Account 348. If an asset is used for frequency response, it's classified as a transmission investment and recorded to Account 351. Assets that provide reliable energy back-up can be classified as a distribution investment and recorded to Account 363. If an asset serves roles across multiple functions, it is allocated on a percentage basis (by usage) accordingly.<sup>15</sup> Staff agrees with this methodology.

Therefore, if the Commission approves staff's recommendation in Issue 1, staff recommends the Commission authorize TECO to record book transfers from Account 362 - Station Equipment to

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<sup>13</sup>Rule 25-6.0436(2)(b), F.A.C., requires that: “[n]o utility shall reallocate accumulated depreciation reserves among any primary accounts and sub-accounts without prior Commission approval.”

<sup>14</sup>Order No. PSC-12-0175-PAA-EI, issued April 3, 2012, in Docket No. 110131-EI, *In re: Petition for approval of 2011 depreciation study and annual dismantlement accrual amounts by Tampa Electric Company*.

<sup>15</sup>Document No. 00228-2020, TECO's Responses to Staff's First Data Request, No. 8.

Account 348 - Energy Storage Equipment – Production, 351 - Energy Storage Equipment – Transmission, and Account 363 - Energy Storage Equipment – Distribution.

**Issue 3:** If a new depreciation rate for energy storage equipment is authorized in Issue 1, what should be the effective date?

**Recommendation:** Staff recommends that any newly-authorized depreciation rate for energy storage equipment applicable to Account 348 - Energy Storage Equipment – Production, Account 351 - Energy Storage Equipment – Transmission, and Account 363 - Energy Storage Equipment – Distribution, become effective upon the issuance of a final Order in this docket. (Smith II)

**Staff Analysis:** If the Commission establishes a new depreciation rate for TECO's energy storage equipment, applicable to Accounts 348 - Energy Storage Equipment – Production, Account 351 - Energy Storage Equipment – Transmission, and Account 363 - Energy Storage Equipment – Distribution, the effective date should be upon the issuance of a final Order in this docket.

**Issue 4:** Should this docket be closed?

**Recommendation:** If no protest to this proposed agency action is filed by a substantially affected person within 21 days of the issuance of the order, a consummating order should be issued the docket should be closed. (Schrader)

**Staff Analysis:** If no protest to this proposed agency action is filed by a substantially affected person within 21 days of the issuance of the order, a consummating order should be issued the docket should be closed.