

State of Florida



## Public Service Commission

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TALLAHASSEE, FLORIDA 32399-0850

**-M-E-M-O-R-A-N-D-U-M-**

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**DATE:** August 24, 2017

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

**FROM:** Division of Economics (Higgins) *DH*  
Office of the General Counsel (Brownless) *wbm* *mm* *sa* *jon*

**RE:** Docket No. 20170097-EI – Petition for approval of a new depreciation class and rate for energy storage equipment, by Florida Power & Light Company.

**AGENDA:** 09/07/17 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate

**COMMISSIONERS ASSIGNED:** All Commissioners

**PREHEARING OFFICER:** Brisé

**CRITICAL DATES:** None

**SPECIAL INSTRUCTIONS:** None

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### Case Background

On May 1, 2017, Florida Power & Light Company (FPL or Company) filed a request for approval of a new depreciation classification and depreciation rate for the accounting of its energy storage equipment. The Company's request, in accordance with Rule 25-6.0436(3)(b), Florida Administrative Code (F.A.C.), 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

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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 December 2016, the Company received Commission authorization to implement a 50 megawatt (MW) battery storage pilot program (Battery Storage Pilot).<sup>2</sup> This authorization is pursuant to the terms of the Company's Stipulation and Settlement Agreement (2016 Settlement) which resolved all issues in FPL's 2016 rate case and associated dockets.<sup>3</sup> Currently, the Company does not specifically classify nor have an authorized depreciation rate for the types of equipment required to effectuate its planned Battery Storage Pilot or any other energy storage endeavors.

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> Order No. PSC-16-0560-AS-EI, issued December 15, 2016, in Docket No. 160021-EI, *In re: Petition for rate increase by Florida Power & Light Company*; Docket No. 160061-EI, *In re: Petition for approval of 2016-2018 storm hardening plan, by Florida Power & Light Company*; Docket No. 160062-EI, *In re: 2016 depreciation and dismantlement study by Florida Power & Light Company*; and Docket No. 160088-EI, *In re: Petition for limited proceeding to modify and continue incentive mechanism, by Florida Power & Light Company*.

<sup>3</sup> *Id.*

## Discussion of Issues

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

**Recommendation:** Yes. Staff recommends that an annual depreciation rate of 10 percent applicable to FPL's energy storage equipment be approved. (Higgins)

**Staff Analysis:** As outlined in its petition, FPL does not currently maintain a stand-alone 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 in Federal Energy Regulatory Commission (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>4</sup>

### Requested Depreciation Parameters

The Company has requested 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>5</sup>

Industry-wide depreciation data and regulatory guidance regarding energy storage equipment is limited. However, through data request responses, FPL provided documentation detailing regulatory approvals of ASL and NS values similar to its proposals that are applicable to other electric utilities operating in the United States; namely, Consolidated Edison of New York (ConEd) and Pacific Gas & Electric (PG&E).<sup>6</sup> With respect to the ConEd decision, the New York Public Service Commission authorized an ASL of either 10 or 15 years (depending on the specific project), and a zero percent NS level.<sup>7</sup> The California Public Utility Commission authorized an ASL of 15 years, and a zero percent NS level applicable to PG&E's energy storage equipment.<sup>8</sup>

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<sup>4</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>5</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>6</sup> See FPL's Responses to Staff's First Data Request, No. 8, and Staff's First Request for Production of Documents, No. 1.

<sup>7</sup> State of New York Public Service Commission, Order Approving Electric and Gas Rate Plans, issued January 25, 2017, CASE 16-E-0060, *In re: Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Electric Service*.

<sup>8</sup> Public Utilities Commission of the State of California, Decision 17-05-013, issued May 11, 2017, Application 15-09-001, *In re: Application of Pacific Gas and Electric Company for Authority, Among Other Things, to Increase Rates and Charges for Electric and Gas Service Effective on January 1, 2017 (U39M)*.

Further supporting its request, FPL held consultations with its engineering subject matter experts, as well as energy storage equipment manufacturers, to arrive at the proposed 10-year ASL and zero percent NS level. FPL contends its proposal is reasonable given the newness of the technology and an industry-wide lack of available retirement and salvage data.

Given the fact that utility-scale energy storage equipment/technology is in its infancy phase of development and application, staff believes the Company, in proposing an ASL at the bottom-end of a 10- to 15-year range represents a measured and reasonable approach in life estimation. Further, the Commission will have future opportunities based on existing rules to evaluate FPL's depreciation data associated with useful lives and net salvage levels and to order modifications as appropriate.<sup>9</sup> Staff also believes the Company's account classifications outlined in its petition, to which any newly-established depreciation rate would apply, comport with recent accounting guidance from the FERC.

Staff notes that any depreciation rate the Commission finds appropriate will initially be used for accounting purposes only and will have no impact on base rates during the term of the Company's 2016 Settlement.<sup>10</sup>

For the reasons outlined in this analysis, staff recommends that an annual depreciation rate of 10 percent, applicable to FPL's newly-established Account 348 - Energy Storage Equipment – Production, Account 351 - Energy Storage Equipment – Transmission, and Account 363 - Energy Storage Equipment – Distribution, be approved.

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<sup>9</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>10</sup> Pursuant to the terms of the 2016 Settlement Agreement, approved by Order No. PSC-16-0560-AS-EI, ¶ 18, FPL: “will pursue cost recovery for the Battery Storage Pilot in its next general base rate case . . .”.

**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 and Account 363 - Energy Storage Equipment – Distribution in the aggregate amounts detailed in Tables 2-2 and 2-3. (Higgins)

**Staff Analysis:** FPL has requested the Commission authorize the transfer of certain investment and corresponding reserve amounts related to energy storage equipment presently on FPL's books.<sup>11</sup> These investments, which are listed in Table 2-1 below, are FPL's Community Storage facilities, Florida Bay Everglades National Park facilities, Miami Open Tennis Stadium facilities, and South West facilities. These assets are currently recorded to FERC Account 362 – Station Equipment, and are being depreciated at the authorized rate of 1.9 percent for this account.<sup>12</sup>

The energy storage equipment listed in Table 2-1 was deployed as part of the Company's participation in the "White House Summit on Scaling Renewable Energy and Storage." The Summit, which was held in 2016, was essentially for the purposes of exchanging ideas and exploring ways to "scale-up" and/or "grid-scale" energy storage technologies. Staff notes the Commission has previously reviewed a portion of these (Table 2-1) energy storage investments in Docket No. 160021-EI, *In re: Petition for rate increase by Florida Power & Light Company*.<sup>13</sup>

FPL's methodology for determining its proposed plant investment apportionments from Account 362 - Station Equipment to Account 348 - Energy Storage Equipment – Production and Account 363 - Energy Storage Equipment – Distribution, focused 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.

Table 2-1 below shows the total amount of energy storage equipment investments, as well as the associated depreciation reserves FPL currently has recorded on its books.

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<sup>11</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>12</sup> Order No. PSC-16-0560-AS-EI.

<sup>13</sup> See Docket No. 160021-EI, Staff's Thirty-Second Set of Interrogatories, No. 403 (Hearing Exhibit 429).

**Table 2-1**  
**Account 362 - Station Equipment**

<b>Energy Storage Assets</b>	<b>Plant Investment (as of April 2017)</b>	<b>Depreciation Reserve (as of April 2017)</b>
Community Storage Facilities	\$500,254	\$3,326
Florida Bay Everglades N. P.	\$3,435,123	\$25,477
Miami Open Tennis Stadium	\$963,598	\$3,814
South West	\$6,080,404	\$97,793
<b>Total*</b>	<b>\$10,979,379</b>	<b>\$130,411</b>

Source: FPL's Response to Staff's First Data Request, No. 5 - Supplemental

\*May not add due to rounding

Tables 2-2 and 2-3 detail the apportionment of investments being requested for transfer from Account 362 - Station Equipment (Table 2-1) to Account 348 - Energy Storage Equipment – Production (Table 2-2) and Account 363 - Energy Storage Equipment – Distribution (Table – 2-3).

**Table 2-2**  
**Account 348 - Energy Storage Equipment – Production**

<b>Energy Storage Assets</b>	<b>Plant Investment (as of April 2017)</b>	<b>Depreciation Reserve (as of April 2017)</b>
Community Storage Facilities	\$250,127	\$1,663
Florida Bay Everglades N. P.	\$1,717,562	\$12,739
South West	\$5,472,364	\$88,014
<b>Total*</b>	<b>\$7,440,053</b>	<b>\$102,415</b>

Source: FPL's Response to Staff's First Data Request, No. 5 - Supplemental

\*May not add due to rounding

**Table 2-3**  
**Account 363 - Energy Storage Equipment – Distribution**

<b>Energy Storage Assets</b>	<b>Plant Investment (as of April 2017)</b>	<b>Depreciation Reserve (as of April 2017)</b>
Community Storage Facilities	\$250,127	\$1,663
Florida Bay Everglades N. P.	\$1,717,562	\$12,739
Miami Open Tennis Stadium	\$963,598	\$3,814
South West	\$608,040	\$9,779
<b>Total*</b>	<b>\$3,539,327</b>	<b>\$27,995</b>

Source: FPL’s Response to Staff’s First Data Request, No. 5 - Supplemental

\*May not add due to rounding

Staff believes the transfer of plant and reserve balances associated with energy storage equipment is 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.

Staff recommends the Commission authorize book transfers from Account 362 - Station Equipment to Account 348 - Energy Storage Equipment – Production and Account 363 - Energy Storage Equipment – Distribution in the aggregate amounts detailed in Tables 2-2 and 2-3.

**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 Commission Order in this docket. (Higgins)

**Staff Analysis:** If the Commission establishes a new depreciation rate for FPL'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 Commission Order in this docket.



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

**Recommendation:** If no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of the issuance of the order, this docket should be closed upon the issuance of a consummating order. (Brownless)

**Staff Analysis:** At the conclusion of the protest period, if no protest is filed, this docket should be closed upon the issuance of a consummating order.