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# -VIA ELECTRONIC FILING-

Ms. Carlotta S. Stauffer Commission Clerk Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850

# RE: Docket No.: 20170148-EI Petition for Determination under Rule 25-6.115, F.A.C., and approval of associated revised tariff sheet 6.300, by Florida Power & Light Company

Dear Ms. Stauffer:

Please find enclosed for electronic filing a copy of Florida Power & Light Company's responses to Staff's First Data Request (Nos. 1-14) in the above mentioned docket.

If there are any questions regarding this transmittal, please contact me at (561) 304-5170.

Sincerely,

<u>/s/ Kevin I.C. Donaldson</u> Kevin I.C. Donaldson Fla. Bar No. 0833401

Enclosure

Florida Power & Light Company

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## **QUESTION**:

Page 4 of the petition states that FPL currently estimates it will complete the hardening of all of its remaining overhead distribution feeders over the next five to six years. Please state the remaining overhead distribution feeders that will be replaced with hardened overhead facilities in miles and as a percentage of the total number of miles of overhead distribution feeder lines in FPL's system.

## RESPONSE:

At year-end 2016, approximately 7,600 overhead feeder miles remain to be hardened. In 2017 and 2018, consistent with its approved plans (i.e., FPL's 2016-2018 Hardening Plan and priority feeder initiative), FPL plans to harden another 2,700 overhead feeder miles in total. While the plans to harden feeder miles beyond 2018 have yet to be finalized (FPL's hardening plans are submitted for FPSC approval every three years, with the next filing expected to occur in 2019), FPL is currently projecting to complete the hardening/undergrounding of all feeders in 2022, assuming no unexpected disruptions or significant events occur during this period.

	Remaining overhead distribution feeders (miles)	Percent of total overhead distribution feeders to be hardened (miles)
2017	1,400	13%
2018	1,300	12%
2019	1,200	11%
2020	1,300	12%
2021	1,200	11%
2022	1,200	11%
2023	N/A	N/A

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#### **QUESTION**:

Page 4 of the petition states that FPL currently estimates it will complete the hardening of all of its remaining overhead distribution feeders over the next five to six years. Please complete the table below summarizing FPL's estimated cost to remove existing overhead facilities and estimated residential rate impact. For this question, please assume that no costs are recovered through CIAC as no customer conversions are requested. Column (1) represents element 2 of the CIAC formula, column (2) represents element 3 of the CIAC formula, and column (3) represents element 5 of the CIAC formula as shown on Tariff Sheet No. 6.300.

# **RESPONSE:**

The amounts in columns (1) and (2) represent the estimated costs associated with FPL's hardening program, and are not specific to OH/UG conversions.

	(1) Cost to Remove Existing Overhead Facilities (\$Millions)	(2) Net Book Value of the Existing Overhead Facilities (\$Millions) <sup>(1)</sup>	(3) The Salvage Value of the Existing Overhead Facilities to be Removed (\$Millions) <sup>(1)</sup>	Total (1)+(2)-(3)	Residential Rate Impact (\$/1,000 kWh) <sup>(2)</sup>
2017	\$47.0	\$18.8	\$0	\$65.8	\$0.04
2018	\$51.8	\$20.7	\$0	\$72.5	\$0.04
2019	\$58.8	\$23.5	\$0	\$82.3	\$0.05
2020	\$61.1	\$24.4	\$0	\$85.5	\$0.05
2021	\$63.8	\$25.5	\$0	\$89.3	\$0.05
2022	\$64.2	\$25.7	\$0	\$89.9	\$0.05
2023	N/A	N/A	N/A	N/A	N/A

<sup>(1)</sup> These items are not specifically tracked or maintained by FPL's accounting systems. As a proxy, the amounts in this column have been developed utilizing actual information from previously completed overhead to underground conversion projects to develop ratios to removal costs.

(2) FPL has calculated a hypothetical rate impact for the removal costs shown in column (1), because the cost of removal is debited to Account 108 and thus serves (in isolation) to increase rate base. However, FPL has not included the net book value of the removed existing overhead facilities (column (2)) in the hypothetical rate impact calculation, because the investment in the existing overhead facilities is simply transferred from Account 101 to Account 108, with no net impact on rate base. See FPL's response to Staff's First Data Request No. 14. The hypothetical rate impact calculation is based on the full cost of removal shown in column (1), however, FPL notes that because its base rates for 2017 and 2018 already reflect estimates for the cost of removing existing overhead facilities associated with hardening projects, the rate impacts shown in the table above for those two years are not fully incremental to current rates. The revenue requirements used to determine the hypothetical rate impact reflect a return on the cost of removal in column (1), using FPL's current

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weighted average cost of capital from the May 2017 Earnings Surveillance Report at the midpoint of FPL's authorized return on equity range (10.55%). Additionally, while FPL has calculated a hypothetical rate impact for all of the years shown on the table, in reality there could be no base rate impact in 2017-2020 because of the base rate freeze under the terms of FPL's 2016 rate case settlement agreement.

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#### **QUESTION**:

Page 5 of the petition states that FPL is currently aware of several municipalities that are considering or moving forward with plans to convert existing non-hardened feeders to underground facilities.

a. Please list all the municipalities FPL refers to.

Total

\$64.6

b. Based on the municipalities that are the subject of the above statement and listed in the response above, please complete the table below summarizing the amount of CIAC FPL estimates it will receive.

# **RESPONSE**:

a. The following municipalities are in discussions with FPL with respect to potential overhead to underground conversion projects: (1) Town of Palm Beach; (2) Town of Longboat Key; (3) Town of Palm Beach Shores; (4) Village of Key Biscayne; (5) City of Sunny Isles Beach; and (6) City of Fort Lauderdale.

	Total CIAC under current Tariff Sheet No. 6.300 (Millions)	Total CIAC under proposed Tariff Sheet No. 6.300 (i.e., excluding Existing Facilities Cost) (Millions)
2017	\$3.4	\$2.7
2018	\$12.0	\$9.4
2019	\$12.7	\$9.9
2020	\$10.6	\$8.2
2021	\$14.2	\$11.1
2022	\$9.1	\$7.1
2023	\$2.6	\$2.0

b.

Total CIAC Difference as of 2023 = \$14.2 million Residential Rate Impact (\$/1,000 kWh) in 2023 of \$14.2 million reduction in CIAC = \$0.01

\$50.4

The revenue requirements used to determine the hypothetical \$0.01 rate impact reflect a return on the \$14.2 million 2017-2023 total CIAC difference, using FPL's current weighted average cost of capital from the May 2017 Earnings Surveillance Report at the mid-point of FPL's authorized return on equity range (10.55%).

As all of the potential projects are still in the early planning phase, the CIAC estimates provided above are based on non-binding "ball park" estimates, which FPL develops and

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provides to customers to give them a general sense of magnitude for their conversion projects. Please note that the CIAC associated with the Existing Facilities Cost excluded from the second column above is for all facilities to be removed (which, for example could include lateral removal costs), as FPL has not separately tracked/maintained that level of detail for just feeders. Because FPL's proposed exclusion of Existing Facilities Cost only applies to feeders, the \$14.2 million total CIAC difference and the associated Residential Rate Impact of \$0.01 are likely overstated.

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**QUESTION**:

Pages 4 and 6 of the petition cite Rule 25-6.0432, F.A.C. Please confirm that FPL is referring to Rule 25-6.0342, F.A.C.

# RESPONSE:

The petition's cite references on pages 4 and 6 were typographical errors. The two cite references should have been 25-6.0342, F.A.C.

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## **QUESTION**:

Page 6 of the petition states that FPL's experience is that underground tends to be more storm resilient than hardened overhead facilities. Please provide a discussion and supporting documentation for this statement.

## RESPONSE:

Since underground facilities are less prone to certain storm-related outage causes (e.g., wind, downed/damaged trees and flying debris) vs. overhead facilities (including hardened overhead facilities), they generally are more storm resilient. For instance, during Hurricane Matthew in 2016, 2.2% of FPL's affected underground feeders experienced an outage, while 9.4% of FPL's affected hardened feeders experienced an outage and 13.8% of FPL's non-hardened affected feeders experienced an outage.

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#### **QUESTION**:

Page 6 of the petition states that underground facilities have historically provided better overall day to day reliability. Please provide a discussion and supporting documentation for this statement.

## RESPONSE:

Since underground facilities are less prone to certain day-to-day-related outage causes (e.g., vegetation, afternoon thunder storms with wind and lightning and vehicle hits) vs. overhead facilities, they generally provide better overall day-to-day reliability. Support for this statement can be seen on page 91 of FPL's most recent annual reliability report filing (filed with FPSC on March 1, 2017), where overhead and underground reliability indices (e.g., System Average Interruption Duration Index (SAIDI), System Average Interruption Frequency Index (SAIFI) and Customer Average Interruption Duration Index (CAIDI)) performance results for 2012-2016 indicate that underground facilities have provided better day-to-day reliability vs. overhead facilities. For instance, over the last five years, SAIDI for underground facilities has been, on average, over 75% better than SAIDI for overhead facilities.

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# **QUESTION**:

Please list all the municipalities that to date have completed the conversion from overhead to underground facilities, state the date of completed conversion, and provide a discussion and any available supporting documentation on reliability improvements since the conversion has been completed.

<u>Municipality / Project</u>	Completion Date
Town of Golden Beach	Apr-12
Town of Palm Beach - S. Ocean - Seagrape	May-12
City of Daytona Beach Shores	Jul-12
City of Ft Lauderdale - Sistrunk	Aug-12
City of Coconut Creek	Sep-12
Martin County - C.R. 707	Sep-12
City of Daytona Beach Shores - Section "E"	Nov-12
City of Daytona Beach Shores - Section "E-2"	Nov-12
City of Deerfield Beach	Apr-13
City of Hollywood - Minnesota to Tyler - Phase 3	May-13
City of Pompano Beach - N Pompano Bch Blv	May-13
Town of Golden Beach	May-13
City of Pompano Beach - E. Atlantic & N Pompano	Jun-13
City of Palm Coast	Jul-13
Town of Jupiter Inlet Colony	Aug-13
Town of Golden Beach	Aug-13
Town of Golden Beach	Aug-13
Town of Palm Beach - Everglades Island	Aug-13
Town of Sewall's Point - A1A Evans Crary	Sep-13
Collier Cty - Vandy - Phase 1	Nov-13
City of Ormond Beach	May-14
City of Coconut Creek	Jun-14
City of Ft Lauderdale - SE 15th St	Sep-14

## RESPONSE:

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Town of Jupiter Island - Phase F	Aug-15
City of Pompano Beach - Old Pompano	Sep-16
City of Daytona - Orange Ave Phs. #3	Apr-17
Town of Gulf Stream - Phs 1	May-17

A review of the converted feeders' SAIDI performance - one year before the conversion vs. one year after - indicates that, on average, SAIDI improved by over 35%.

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#### **QUESTION**:

For the municipalities that have completed conversion projects in the past five years, please provide the following information:

## RESPONSE:

	Total Amount of CIAC Paid to FPL (\$ Millions) for Projects Completed 2012-2017 YTD	Amount of CIAC Paid Associated with the Existing Facilities Cost (\$ Millions)
2008	\$0.91	\$0.11
2009	\$1.02	\$0.42
2010	\$1.32	\$0.54
2011	\$1.76	\$0.65
2012	\$3.47	\$0.73
2013	\$1.67	\$0.53
2014	\$0.27	\$0.06
2015	\$0.47	\$0.39
TOTAL	\$10.89	\$3.43

FPL notes that the total amount of CIAC paid to FPL in the first column above does not reflect work performed and/or paid for by the overhead to underground applicants. This differs from the ball park CIAC amounts provided in FPL's response to Question 3, which assumes FPL completes 100% of the work. Additionally, the CIAC associated with the Existing Facilities Cost provided in the second column above is for all facilities removed (which, for example, could include laterals), as FPL's accounting systems have not separately tracked/maintained that level of detail for feeders alone. This means the \$3.43 is likely overstated.

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#### **QUESTION**:

In general, what is the average cost to convert one mile of overhead distribution feeder lines to equivalent underground distribution feeder facilities?

# RESPONSE:

The average cost to convert one mile of overhead distribution feeder line to underground is not available as those costs have not been separately tracked or maintained. However, based on the municipality overhead to underground conversion projects that have been completed since 2007, the average cost to convert one mile of all types of overhead facilities (e.g., feeders and laterals) to underground is approximately \$1 million. FPL notes that overhead to underground conversion costs can vary significantly from project to project (e.g., the \$1 million average consists of conversion project costs that range from less than \$400 thousand per mile to more than \$2 million per mile).

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## **QUESTION**:

Page 7 of the petition states that excluding the Existing Facilities Cost from the CIAC for the conversion of existing non-hardened overhead feeder facilities to underground will reduce the cost of conversion thereby incentivizing more conversions. Please provide a discussion and any available documentation that supports this statement.

## **RESPONSE**:

The statement was based upon FPL's experience that cost is often a significant obstacle to municipalities that are interested in underground conversions. Therefore, it is reasonable to expect that reducing a municipality's overhead to underground conversion costs by excluding the Existing Facilities Cost would provide an additional incentive for municipalities to pursue such conversions.

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#### **QUESTION**:

Assuming the proposed tariff revision is approved, will FPL notify customers that may be considering overhead to underground conversion of the tariff change? If yes, please explain how.

## **RESPONSE**:

Yes. FPL expects that information about the availability of additional credits will be provided very early (most likely the initial meeting) in its discussions with potential overhead to underground conversion applicants. In fact, FPL has already informed all known municipalities currently considering conversion projects (see FPL's response to Staff's First Data Request No. 3(a)) of its recent filing with the FPSC and the potential for additional credits.

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#### **QUESTION**:

Rule 25-6.115(4) through (6), F.A.C., provides the steps for applicants requesting conversion projects (non-binding cost estimate; applicant request - payment of deposit - binding cost estimate; contract with utility). Please clarify the following language in the proposed tariff: "from an applicant who submits an application providing a binding notification". Would an applicant that has requested a binding cost estimate under Subsection (5), but has not yet entered into a contract with FPL pursuant to subsection (6), qualify to receive a lower CIAC calculation under the revised tariff?

#### **RESPONSE:**

Yes. The binding cost estimate would reflect the lower CIAC calculation under the revised tariff and remain applicable until the binding cost estimate expires (as noted in FPL's Tariff Sheet No. 6.301, a binding cost estimate can expire in 180 days if certain conditions are not met, e.g., CIAC is not paid).

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## **QUESTION**:

Were costs for the removal of existing overhead facilities for purposes of storm hardening included in FPL's most recent rate case filing?

# RESPONSE:

Yes. Actual removal costs (through 2016) as well as forecasted removal costs (for 2017 and 2018), associated with existing overhead facilities to be storm hardened, were included in FPL's most recent rate case filing (Docket No. 20160021-EI).

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## **QUESTION**:

Please discuss the differences in the accounting treatment of the Existing Facilities Cost for nonhardened overhead feeder X under the following three scenarios:

- a. FPL removes and replaces feeder X per its Storm Hardening Plan.
- b. FPL does a conversion project for feeder X and receives CIAC under current tariff 6.300.
- c. FPL does a conversion project for feeder X and receives CIAC under proposed tariff 6.300.

# **RESPONSE**:

For illustrative purposes, FPL assumes the following for its response to the Staff's questions:

Installed cost/investment of feeder x (Account 101) - \$1,000

Accumulated depreciation (Account 108) associated with feeder x - \$500

Cost to remove feeder x - \$250

Salvage value of feeder x - \$50

- a. FPL removes and replaces feeder X per its Storm Hardening Plan.
  - (1) Account 101 (plant in service) is credited and Account 108 (accumulated depreciation) is debited for \$1000 to retire the installed cost of feeder x;
  - (2) Account 108 is debited for \$250 to account for the removal costs for feeder x ; and
  - (3) Account 108 is credited for \$50 to account for the salvage value of feeder x.

In summary, the general body of customers pays for the Existing Facilities Cost of feeder x.

b. FPL does a conversion project for feeder X and receives CIAC under current tariff 6.300.

The accounting entries in FPL's response to Question 14(a) above would be the same for this scenario. Additionally, Account 108 would be credited for \$700 (\$500 for the remaining net book value + \$250 for the removal costs - \$50 for the salvage value), representing the CIAC collected from the overhead to underground conversion applicant.

In summary, the overhead to underground conversion applicant pays for the Existing Facilities Cost of feeder x.

c. FPL does a conversion project for feeder X and receives CIAC under proposed tariff 6.300. The accounting entries in FPL's response to subpart (a) above would be the same for this scenario.

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In summary, the general body of customers pays for the Existing Facilities Cost of feeder x, as they would if FPL had replaced feeder x per its Storm Hardening Plan.