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June 26, 2018

**VIA ELECTRONIC FILING**
Ms. Carlotta Stauffer, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

**Re: Docket No. 20180109-EI – Petition for initiation of formal proceedings for relief against Florida Power & Light Company regarding backbilling for alleged meter tampering and disconnection, by Terry A. Avera**

Dear Ms. Stauffer:

Enclosed is Florida Power and Light Company's Responses to Staff's First Data Request (Nos. 1-7).

Please do not hesitate to contact my office at (561) 691-7263 if you or your staff have any questions.

Sincerely,

*s/ David M. Lee*
David M. Lee

Enclosures

cc: The parties of record

1. **Has FPL offered Mr. Avera an energy audit since the replacement of his meter at his residence, 1755 NW 93rd St, Miami, FL, 33147, in April of 2017? If so, what was Mr. Avera's response?**

Yes, on June 16, 2017, Mr. Avera contacted FPL's Customer Care Center and spoke with an Energy Efficient Expert (EEE) regarding a high bill concern. The EEE reviewed the usage and energy dashboard information from the Smart meter serving the residence, provided energy conservation tips and completed a Phone Energy Survey (PES).

On July 19, 2017, Mr. Avera contacted FPL's Customer Care Center regarding a high bill concern. A Representative reviewed the customer's usage and energy dashboard information, and completed a PES. The Representative advised the customer that due to the increase in usage, there could be a possible appliance malfunction and offered a High Bill Investigation; however, the customer declined the offer and terminated the call.

2. **Records provided by FPL in response to Mr. Avera's informal complaint indicate that Mr. Avera's kWh consumption increased significantly from 2013 until 2017 (17,153 kWh in 2013 versus 26,614 kWh in 2016). Please indicate why FPL feels it is appropriate to use data from 2017 when calculating consumption from a previous year utilizing the seasonal average method.**

It is appropriate to use the data from 2017 because any readings during the time the condition existed would not be valid as data points for the purpose of backbilling as the condition caused the meter to only partially register the actual kWh being used at the residence.

To calculate Mr. Avera's Average Total Yearly kWh consumption FPL used the actual monthly kWh usage that registered on the meter for the following months: May 2017 (projected month), June 2017 and July 2017. These months were after the unauthorized condition was corrected on April 26, 2017.

3. **Prior to or on April 26, 2017, did anyone from FPL notify Mr. Avera that the meter at his residence was being replaced?**

It is not FPL's policy to notify customers when we replace our equipment, unless there is an issue with safe access to the meter. In this case the customer was not notified.

4. **Please provide the following:**

a. **The 2017 seasonal average percentage per month for the region where the subject house, 1755 NW 93rd St, Miami, FL is located:**

It is important to note that the 2017 kWh sales as a monthly percentage were not available when the back bill was calculated on August 28, 2017. The annual sales for a given year are not known

until the end of the year; therefore, the previous year's sales (2016) for the same months are used as the most recent available data to calculate the Average of Total Yearly kWh use and those months in 2017 that were back billed.

For reference, below are the actual 2017 factors, which were calculated in January of 2018, once all of 2017 kWh sales were available.

| 2017 Seasonal Average Factors South | |
|---|---|
| **Month** | **%** |
| 12 | 6.97 |
| 11 | 7.48 |
| 10 | 9.36 |
| 9 | 10.04 |
| 8 | 10.60 |
| 7 | 10.83 |
| 6 | 10.01 |
| 5 | 8.54 |
| 4 | 7.05 |
| 3 | 6.28 |
| 2 | 5.69 |
| 1 | 7.14 |

**b. The monthly kWh consumption for 2010, 2011 and 2012 for the address 1755 NW 93rd St, Miami, FL, 33147 if available;**

Due to record retention, the original kWh consumption billed is only available going back to the billing period ending August 15, 2012. FPL has available the following monthly kWh consumption data during the requested timeframe (this data was previously provided to Staff in FPL's response to the customer's complaint):

08/15/2012 – 1,819 kWh
09/14/2012 – 1,784 kWh
10/15/2012 – 1,862 kWh
11/13/2012 – 1,453 kWh
12/13/2012 – 1,335 kWh

**c. FPL's calculations, in an electronic format, that resulted in the estimated back-billing amount of 83,737 kWh along with an explanation of the process utilized by FPL to calculate this amount; and**

See the attached Excel spread sheet showing the seasonal average calculations performed to determine the Average of Total Yearly kWh which was then applied to the specific monthly seasonal average of each month back billed.

FPL used the Seasonal Average Percentage of Usage method to back bill the account, using the actual usage recorded by the meter for the partial month of May 2017, after the condition was corrected on April 26, 2017, and actual usage for the months of June and July 2017, as data points, to calculate the Average of Total Yearly kWh.

**SEASONAL AVERAGE PERCENT OF USAGE**

FPL maintains records that track the monthly residential kilowatt-hour sales within geographic areas. From these records a chart is prepared by dividing the monthly sales into the annual sales to obtain the seasonal average percent of usage for each month of the year. Since the annual sales for the most current year on the chart is not known until the end of the year, the previous year's sales are duplicated. In Mr. Avera's case the most recent available year at the time his account was rebilled was 2016, so this data was used for the months rebilled in 2017.

FPL multiplies the average yearly total of kWh by the specific monthly seasonal average percentage of usage to determine the estimated usage for each month in the year. The original billed kWh is subtracted from the estimated monthly kWh, leaving the additional billed kWh.

This method of back billing was approved by Order No. PSC-96-1216-FOF-EI, issued September 24, 1996, in Docket No 960903-EI (In Re: Complaint of Mrs. Blanca Rodriguez against Florida Power & Light Company regarding alleged current diversion/meter tampering rebilling for estimated usage of electricity).

**d. Photographs of the meter number ACD5693 showing its condition before replacement depicting the broken/missing seal and the line side tap, if available.**

As previously reported in FPL's response to the customer's complaint, no photographs were taken of the unauthorized condition in the field.

**5. How does FPL define the term "isolated outage"? Under what scenarios or situations may such an isolated outage occur?**

For the analytics used to identify a potential condition at a customer's residence, an "isolated outage" refers to occurrences where the meter at a single premise experienced a loss of power and the other premises served by the same transformer did not experience an outage at that time.

**6. Does the 2011 isolated outage recorded at Mr. Avera's residence necessarily indicate meter tampering at that time? Can a meter be bypassed, as found in Mr. Avera's meter, without an isolated outage occurring?**

An isolated outage recorded by a Smart meter indicates that the meter was potentially removed from an energized socket to install or create an unauthorized condition; however, additional investigation is required to determine whether unauthorized usage occurred.

In Mr. Avera's case, the installation of the jumper from the line side lug to the load side lug documented at the residence can be performed without removal of the meter; however, the installation of the disconnect boot on the same side load blade of the meter, as found at the residence, would be difficult without removal of the meter.

**7. Please provide an explanation for the following:**

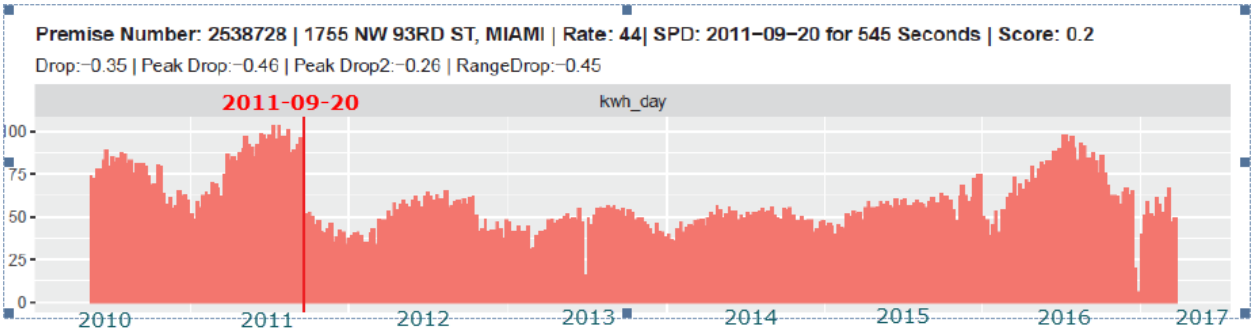
**a. The delay in discovering the unauthorized condition of the meter located at Mr. Avera's residence; and**

FPL's Revenue Protection Department continuously refines and develops new analytic tests to better identify potential theft conditions in the field. Leveraging data from smart meters and analytic tools, a new algorithm was developed in 2017, which generated the lead to investigate a possible unauthorized condition Mr. Avera's residence.

**b. The analytical tests that led to the discovery of the unauthorized condition of Mr. Avera's meter and the particular issues that may be identified in analytical tests of that nature.**

FPL uses Smart meter data analytics to identify potential equipment problems in the field that may impact our customer's electric service. Some tests are used to check for problems with the meter, electric service, transformers or our electric distribution system. The Revenue Protection Department in particular uses analytical tests to identify isolated meter outages that coincide with other events such as a remote disconnect or a drop in consumption. The analytical test that led to the discovery of the unauthorized condition at Mr. Avera's residence identified an occurrence where a single premise experienced a loss of power, immediately followed by a sustained drop in kWh consumption, while the other premises served by the same FPL equipment (transformer) did not experience an outage.

The data retrieved from the Smart meter serving Mr. Avera's residence (ACD5693) from May 18, 2010 to April 26, 2017 was used to generate the graph below. The graph below illustrates the isolated outage on September 20, 2011 as shown by the red line, followed by a sustained drop in average daily kWh consumption.


Premise Number: 2538728 | 1755 NW 93RD ST, MIAMI | Rate: 44| SPD: 2011-09-20 for 545 Seconds | Score: 0.2
Drop:-0.35 | Peak Drop:-0.46 | Peak Drop2:-0.26 | RangeDrop:-0.45
2011-09-20
kwh_day
100
75
50
25
0
2010
2011
2012
2013
2014
2015
2016
2017

**Florida Power & Light Company**
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**Attachment No. 1**

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**TERRY A AVERA**
**1755 NW 93rd ST**
**MIAMI, FL 33147**

| Month | Year | KWH | % | Yearly | Remarks |
|---|---|---|---|---|---|
| July | 2017 | 4130 | 11.27 | 36646 | 4130/11.27% = 36646 |
| June | 2017 | 3547 | 9.63 | 36833 | 3547/9.63% = 36833 |
| May | 2017 | 2071 | 8.02 | 40773 | projected: kWh from 4/26 to 5/15 = 2071, 2071/19 days = 109 kWh/day<br>109 * 30 days = 3270/8.02% = Total Yearly kWh use of 40773. |
| | | | | **114,252** | 114,252 kWh/3 years = **Average of Total Yearly kWh use of 38084** |

| Service Date | # of Days | KWH As-Billed | Seaonal Average % | KWH Re-Billed | Remarks |
|---|---|---|---|---|---|
| 05/15/17 | 32 | 2885 | 8.02% | 3395 | 38084 * 8.02% = 3054 / 30 = 101.81 * 13 days (4/13 to 4/26) = 1324.<br>1324 + 2071 (4/26 to 5/15) = 3395 |
| 04/13/17 | 30 | 1649 | 7.53% | 2868 | 38084 * 7.53% = 2868 |
| 03/14/17 | 29 | 1723 | 6.24% | 2376 | 38084 * 6.24% = 2376 |
| 02/13/17 | 31 | 1727 | 5.23% | 1992 | 38084 * 5.23% = 1992 |
| 01/13/17 | 31 | 1038 | 7.29% | 2776 | 38084 * 7.29% = 2776 |
| 12/13/16 | 31 | 1953 | 7.07% | 2693 | 38084 * 7.07% = 2693 |
| 11/12/16 | 29 | 1892 | 7.00% | 2666 | 38084 * 7.00% = 2666 |
| 10/14/16 | 29 | 2363 | 9.10% | 3466 | 38084 * 9.10% = 3466 |
| 09/15/16 | 30 | 2632 | 10.60% | 4037 | 38084 * 10.60% = 4037 |
| 08/16/16 | 32 | 2911 | 11.04% | 4204 | 38084 * 11.04% = 4204 |
| 07/15/16 | 31 | 2858 | 11.27% | 4292 | 38084 * 11.27% = 4292 |
| 06/14/16 | 32 | 2619 | 9.63% | 3667 | 38084 * 9.63% = 3667 |
| 05/13/16 | 29 | 2154 | 8.02% | 3054 | 38084 * 8.02% = 3054 |
| 04/14/16 | 30 | 2042 | 7.53% | 2868 | 38084 * 7.53% = 2868 |
| 03/15/16 | 32 | 1832 | 6.24% | 2376 | 38084 * 6.24% = 2376 |
| 02/12/16 | 29 | 1317 | 5.23% | 1992 | 38084 * 5.23% = 1992 |
| 01/14/16 | 31 | 2041 | 7.29% | 2776 | 38084 * 7.29% = 2776 |
| 12/14/15 | 32 | 2006 | 7.53% | 2868 | 38084 * 7.53% = 2868 |
| 11/12/15 | 29 | 1606 | 8.36% | 3184 | 38084 * 8.36% = 3184 |
| 10/14/15 | 29 | 1753 | 8.85% | 3370 | 38084 * 8.85% = 3370 |
| 09/15/15 | 32 | 1867 | 10.13% | 3858 | 38084 * 10.13% = 3858 |
| 08/14/15 | 30 | 1748 | 10.44% | 3976 | 38084 * 10.44% = 3976 |
| 07/15/15 | 30 | 1771 | 10.60% | 4037 | 38084 * 10.60% = 4037 |
| 06/15/15 | 32 | 1832 | 9.45% | 3599 | 38084 * 9.45% = 3599 |
| 05/14/15 | 30 | 1693 | 8.70% | 3313 | 38084 * 8.70% = 3313 |
| 04/14/15 | 29 | 1511 | 7.69% | 2929 | 38084 * 7.69% = 2929 |
| 03/16/15 | 31 | 1520 | 6.39% | 2434 | 38084 * 6.39% = 2434 |
| 02/13/15 | 30 | 1313 | 5.26% | 2003 | 38084 * 5.26% = 2003 |
| 01/14/15 | 33 | 1496 | 6.60% | 2514 | 38084 * 6.60% = 2514 |
| 12/12/14 | 29 | 1377 | 6.50% | 2475 | 38084 * 6.50% = 2475 |
| 11/13/14 | 30 | 1493 | 7.29% | 2776 | 38084 * 7.29% = 2776 |
| 10/14/14 | 29 | 1514 | 9.16% | 3488 | 38084 * 9.16% = 3488 |
| 09/15/14 | 32 | 1703 | 10.95% | 4170 | 38084 * 10.95% = 4170 |
| 08/14/14 | 30 | 1582 | 10.67% | 4064 | 38084 * 10.67% = 4064 |
| 07/15/14 | 32 | 1620 | 9.86% | 3755 | 38084 * 9.86% = 3755 |
| 06/13/14 | 30 | 1589 | 9.28% | 3534 | 38084 * 9.28% = 3534 |
| 05/14/14 | 30 | 1598 | 9.04% | 3443 | 38084 * 9.04% = 3443 |
| 04/14/14 | 31 | 1486 | 7.20% | 2742 | 38084 * 7.20% = 2742 |
| 03/14/14 | 28 | 1254 | 6.52% | 2483 | 38084 * 6.52% = 2483 |
| 02/14/14 | 30 | 1214 | 6.27% | 2388 | 38084 * 6.27% = 2388 |
| 01/15/14 | 33 | 1363 | 7.25% | 2761 | 38084 * 7.25% = 2761 |
| 12/13/13 | 30 | 1309 | 7.45% | 2837 | 38084 * 7.45% = 2837 |
| 11/13/13 | 29 | 1444 | 8.17% | 3111 | 38084 * 8.17% = 3111 |
| 10/15/13 | 29 | 1537 | 9.26% | 3527 | 38084 * 9.26% = 3527 |
| 09/16/13 | 33 | 1840 | 10.74% | 4090 | 38084 * 10.74% = 4090 |
| 08/14/13 | 30 | 1563 | 10.74% | 4090 | 38084 * 10.74% = 4090 |

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**49283-70115 85**
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**1755 NW 93rd ST**
**MIAMI, FL 33147**

| Service Date | # of Days | KWH As-Billed | Seaonal Average % | KWH Re-Billed | Remarks |
|---|---|---|---|---|---|
| 07/15/13 | 31 | 1331 | 10.24% | 3900 | 38084 * 10.24% = 3900 |
| 06/14/13 | 30 | 1498 | 9.28% | 3534 | 38084 * 9.28% = 3534 |
| 05/15/13 | 30 | 1441 | 8.44% | 3214 | 38084 * 8.44% = 3214 |
| 04/15/13 | 32 | 1373 | 6.88% | 2620 | 38084 * 6.88% = 2620 |
| 03/14/13 | 28 | 1031 | 5.82% | 2216 | 38084 * 5.82% = 2216 |
| 02/14/13 | 30 | 1286 | 6.07% | 2312 | 38084 * 6.07% = 2312 |
| 01/15/13 | 33 | 1500 | 6.90% | 2628 | 38084 * 6.90% = 2628 |
| 12/13/12 | 30 | 1335 | 6.47% | 2464 | 38084 * 6.47% = 2464 |
| 11/13/12 | 29 | 1453 | 7.13% | 2715 | 38084 * 7.13% = 2715 |
| 10/15/12 | 31 | 1862 | 9.52% | 3626 | 38084 * 9.52% = 3626 |
| 09/14/12 | 30 | 1784 | 10.47% | 3987 | 38084 * 10.47% = 3987 |
| 08/15/12 | 30 | 1819 | 10.91% | 4155 | 38084 * 10.91% = 4155 |
| | | **98,951** | | **182,688** | 182,688 Re-billed - 98,951 As-billed = **83,737 Additional kWh billed** |