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March 21, 2014

Ms. Carlotta S. Stauffer
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard, Room 110
Tallahassee, FL 32399-0850

Re: Docket No. 140002-EG – Smart Meter Progress Report

Dear Ms. Stauffer:

Pursuant to Order No. PSC-10-0153-FOF-EI, issued March 17, 2010 in Docket Nos. 080677-EI and 090130-EI ("Order 0153"), Florida Power & Light Company ("FPL" or the "Company") submits this annual progress report on its implementation of smart meters. FPL is providing this informational update in the Energy Conservation Cost Recovery docket, as required by Order 0153.

Progress Report

In 2013 FPL completed the deployment of 4.5 million smart meters to its residential and small business customers. The Company also completed the installation of its planned smart grid technologies in FPL power plants, substations and distribution infrastructure, funded in part by a $200 million grant from the U.S. Department of Energy (DOE).

These innovative technologies are delivering value for FPL customers. Smart meters and associated technologies are enabling important customer benefits and achieving operational savings, while laying the foundation for additional benefits in the future.

Status of the Smart Meter Deployment Program

By the end of the first quarter of 2013, FPL had essentially completed smart meter installations for all residential and small business customers ahead of its original schedule. During the remainder of 2013, the Company focused on completing meter installations that it initially had been unable to complete, installing smart meters for its large residential customers outside Miami-Dade County and activating all remaining eligible smart meters. In 2014, FPL begins deployment for the approximately 200,000 commercial and industrial customers who do not yet have smart meters. The Company expects to complete these installations in 2015.

Greater Value for Customers through Strong System Performance

FPL sets high standards for the performance of its remote meter-reading system, which continues to exceed expectations. The 2013 billing "read rate," which is the percent of successful remote meter reads each month, continued to be an outstanding 99.9 percent. These highly dependable remote readings are enabling FPL to improve customer service. Examples of this improvement include the elimination of more than 500,000 estimated bills over the last three years and the ability to immediately identify high energy-use days when customers have billing inquiries.

Enhancing Customer Outreach and Engagement

FPL has continued to enhance its Energy Dashboard, which customers with activated smart meters can access online and via telephone. The Energy Dashboard enables customers to see their energy use by the hour, day and month. The usage data in the Energy Dashboard has now been integrated into FPL's Online Home Energy Survey, so customers can receive a report on their energy use when they take the voluntary survey.

FPL actively informs customers about the Energy Dashboard and encourages its use. Once the smart meter is activated, FPL sends a letter or email to the customer explaining the benefits of the Energy Dashboard and how to access it. Throughout 2013, FPL promoted the Energy Dashboard in emails to customers with newly activated smart meters and to new FPL customers.

In addition, FPL promoted the Energy Dashboard regularly in customer newsletters, bill inserts and Web banners on FPL.com. The Energy Dashboard was also referenced in two advertising initiatives - FPL's annual energy conservation education campaign and a television/print advertising campaign intended to inform customers about smart grid benefits. In 2013, customers accessed the Energy Dashboard approximately 1.9 million times.

In the first half of 2013, FPL continued to partner with Miami-Dade College and Broward College to offer "Energy Savings Essentials," a free class about how to use the Energy Dashboard to create a personal energy savings plan. This program was initially funded as part of the DOE grant. Upon completion of the grant in February 2013, FPL

continued to fund the program through mid-2013. More than 1,400 customers participated in the class over the life of the program.

FPL continued to conduct community outreach, participating in more than 60 community events and reaching more than 700 members of homeowners associations.

FPL also continued to inform customers about smart meters and the smart grid through the news media. In April 2013, FPL invited the media, along with DOE representatives and business, political and community leaders, to tour its performance and diagnostic centers and learn how smart grid enhancements are enabling improved customer service. The event resulted in several news articles in local and national media that highlighted customer benefits.

As residential smart meter installations wound down, FPL's education efforts turned toward helping customers understand its proposal for a Non-Standard Meter Rider option. The Company has provided information to help customers evaluate the costs of opting out of smart meters versus the enhanced service and other benefits they provide (see "Responding to Customer Concerns" below).

Enabling New Customer Benefits through Smart Meter Technology

The implementation of projects and system integration efforts made possible by smart meters is well underway, producing additional benefits for customers. In addition to providing customers with more information to manage their energy use, smart meters help FPL deliver on its commitment to provide customers with highly reliable, affordable electricity. Smart meters help identify power outages and reduce service restoration time, and improve operational efficiencies that help maintain the lowest typical residential bill in Florida.

Outage Identification and Restoration Speed

FPL continues to make progress in using smart meter technology to improve outage identification and restoration speed. Smart meters provide the Company with visibility to outages that would otherwise be difficult to detect on the distribution system.

For example, when a customer contacts FPL to report an outage, the FPL representative can communicate with the meter to see if it is receiving electricity.[1] That helps FPL quickly determine if the problem is with its equipment or the customer's equipment. The cause of the outage could be as simple as a tripped breaker, which the representative can help the customer correct immediately.

FPL field restoration crews are now able to view real-time outage information based on communication from the smart meter. Restoration specialists who travel to an area to

[1] The customer no longer needs to speak to a Care Center representative to report an outage, though that option remains available. The customer may instead choose to report the service issue through FPL's Interactive Voice Response ("IVR") system or through FPL's website.

restore electric service can check the status of the local meters with distribution system data before leaving the area to ensure that all customers who were part of an outage have had service restored. This ultimately makes service restoration verification more efficient, which in turn can improve restoration speed. This information has helped to reduce the number of repeat customer calls and field visits for embedded outages.

In addition, FPL is working to accelerate outage detection by creating new tools that use distribution system data, meter event data and Care Center system information to help prioritize service restoration efforts for critical community facilities, such as hospitals, 911 centers, and police and fire services. This information is used in the automated creation of outage tickets that, in many cases, enable FPL to begin restoring power before customers call to report an outage. The Company is further leveraging smart meter information to detect equipment issues, and has begun to proactively replace some equipment prior to a potential interruption in electric service. FPL continues to develop and test other ways to use the data provided by smart meters to enhance grid operations and outage response.

As a result of these enhancements, FPL now responds to thousands of power outages per year before a customer contacts the Company about the interruption. In some cases the Company also is able to restore power without a single customer calling. Since the start of FPL's smart meter rollout:

- The number of field visits has been reduced by 98,000
- 25,000 outage tickets have been supplemented with beneficial information obtained with the help of smart meters
- 8,600 outage tickets have been generated before a customer call
- 1,900 outage tickets were created and power was restored without a single customer calling to report the outage

Enhanced Customer Service and Operational Efficiencies

To enhance customer service and enable greater operational efficiencies, FPL implemented Remote Connect Service (RCS), which allows remote connection and disconnection of electric service using smart meters. Customer benefits include:

- Faster, more convenient service connection for customers who are opening new accounts
- Faster, more convenient service disconnection at the customer's request (e.g., moving out of a home or business)
- Faster service reconnection when payment is received for accounts that have been disconnected for non-payment (in just minutes, rather than within 24 hours, as previously)

FPL began phasing in this service in September of 2012 in Broward County and completed the system-wide activation to all 4.2 million eligible customers in September 2013.[2]

The remote system performance is exceeding expectations, as evidenced by a 98.9% transactional success rate in 2013. In mid-2013, FPL performed a follow-up customer survey of those customers who used the new remote process. Customers indicated they were satisfied with reconnection times, and those who had been disconnected and reconnected before the implementation of the remote service noticed an improvement in reconnection speed after the new service was implemented.

Smart Devices for Grid Modernization

As discussed in prior reports, the deployment of smart meters enabled receipt of a $200 million DOE grant, which FPL utilized to make significant enhancements to the reliability and efficiency of the electric grid. The Company has achieved the following incremental smart grid distribution and transmission milestones:

- By the end of 2013, FPL had installed more than 11,500 "smart" devices on its transmission and distribution grid and added some form of enhanced digital technology to all of its substations.
- The Company installed sensors and monitors on transformers, breakers and battery banks in order to determine the health of the equipment and predict, and address, potential issues.
- FPL installed digital microprocessor technologies and updated transmission protection and control panels to provide real-time telemetry, which includes receiving and communicating grid information within seconds or minutes of an event occurring.

FPL staff has developed software applications to analyze smart grid telemetry data coming into the Company's predictive diagnostic centers. Engineers and operators use this data to pinpoint equipment problems in order to resolve them before outages occur.

The recently installed digital distribution equipment is connected through a wireless mesh network. FPL uses the same radio network cards in the smart meters and the distribution automation switches to fully leverage the network capabilities. The mesh radio technology connects the recently installed capacitor controllers and thousands of other distribution grid sensors and monitors, such as fault current indicators and vault transformer monitors.

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[2] In some instances FPL has not activated the RCS function and in other instances the meters that were installed do not have the RCS switch. Examples include customers in the Medically Essential Services Program (MESP), large commercial and industrial customers, and certain facilities with electrical equipment that provides safety functions, such as railroad crossing signals.

Smart meters, together with these additional smart grid devices, further enhance reliability by moving the Company from monthly to hourly meter reads and reducing the need for physical travel to substations by sending crucial information immediately after an event occurs. This new technology can help to prevent outages and makes it possible for FPL to more quickly identify and correct problems when outages do occur.

Responding to Customer Concerns

During FPL's deployment of smart meters, the Company has worked hard to help its customers understand the facts regarding the meters and their benefits. Despite these efforts, a very small percentage of FPL customers – approximately one-half of one percent – have objected to the installation of the new standard meter. During deployment, FPL temporarily postponed the installation of smart meters for these customers pending a long-term solution. With deployment to residential and small business customers essentially completed in 2013, and consistent with the Florida Public Service ("Commission") Staff briefing on smart meters issued in February of 2013, FPL moved forward with a proposal designed to provide customers with the option of receiving service through a non-communicating meter rather than the standard smart meter.

In August 2013, FPL filed a Petition with the Commission proposing to offer a cost-based tariffed rate for those customers who choose to receive service through the non-standard, non-communicating meter. Under the new tariff, the costs associated with the program will be borne by the customers choosing this available non-standard service rather than by the general body of customers – more than 99.5 percent of whom have FPL's standard meter.

Based upon the Commission's January 2014 order, FPL filed a revised tariff reflecting a reduction in both the Enrollment Fee and the Monthly Surcharge for customers who choose to participate in this program. FPL plans to begin billing non-standard meter customers at the tariff rates in June of 2014.[3] Beginning in 2015, FPL will update the Commission on the program in its annual smart meter progress report, and at other times as requested by the Commission and Commission Staff.

FPL has also undertaken a study of customer-owned meter enclosures to attempt to determine whether communications received through the smart meter might help to identify conditions within the meter enclosures before those conditions lead to possible service issues for our customers. That study began in 2013, and field testing is expected to be completed during the third quarter of 2014. Once the field work has concluded, FPL will complete its analysis of the data and will provide the Commission with its report. At this time, it is too early in the process to draw any conclusions from this project.

[3] FPL will bill customers subject to refund, in accordance with Order No. PSC-14-0036-TRF-EI.

Industry Recognition for Leadership in Providing Smart Grid Benefits to Customers

FPL has received two prestigious electric utility industry awards for its smart grid program: the 2013 "Smart Grid Project of the Year" and "Renewable Energy Integration Project of the Year," presented by *POWERGRID International* magazine at the 2014 DistribuTECH conference held in January in San Antonio, Texas.

FPL earned the Smart Grid Project of the Year award for its "Reaping the Benefits of the Smart Grid" entry, which summarized the success of the Company's power grid modernization program. The project was recognized for customer benefits in the areas of outage prevention and restoration, as well as for the online Energy Dashboard, which enables more customer control over their energy use and bills.

The Renewable Energy Integration Project of the Year award recognized FPL's "Smart Island Detection System," which monitors, in real-time, the flow of electricity from renewable energy sources interconnected to the power distribution grid. The technology ensures that major fluctuations in electricity flow do not adversely affect the customer's or the Company's equipment. The monitoring devices are currently in operation at three FPL substations that receive electricity generated at two landfills and a biomass facility.

In addition to these industry awards, Bryan Olnick, FPL Vice President of Distribution Operations, was recognized as a Smart Grid Pioneer by *Smart Grid Today,* a leading industry publication, for being one of the 50 men and women who were pioneers in modernizing the electric grid.

In Conclusion: A Foundation for Important Customer Benefits—Now and in the Future

Smart grid technology is the keystone of the U.S. electric utility industry's efforts to modernize the nation's electric system. More than 40 percent of U.S. homes now have smart meters.

FPL's smart grid is recognized as one of the most comprehensive, full-scale deployments of its kind. The Company's electric grid, including smart meters and associated technologies, has produced substantial customer benefits and laid the foundation for a number of continued improvements in efficiency, reliability and customer service.

Having successfully completed the projects funded by the DOE grant and the installation of more than 4.5 million smart meters for residential and small business customers, FPL has a team and structure in place that are helping to drive further innovation. The Company is continuing to leverage its technology investments to develop new tools to enhance service reliability and deliver even more value for its customers.

Thank you for your interest in this informational update. Please do not hesitate to contact me should you have any questions.

Sincerely,

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cc: All parties on attached service list via e-service

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