

I. Meeting Packet



State of Florida
Public Service Commission
INTERNAL AFFAIRS AGENDA
Tuesday, February 19, 2013
Immediately following Commission Conference
Betty Easley Conference Center, Room 140

1. Briefing on Smart Meters: Technical Information and Regulatory Issues. (Attachment 1)
2. Briefing on Compressed Natural Gas Issues. (Attachment 2)
3. Update on Water Study Commission. (No Attachment)
4. Legislative Update. (No Attachment)
5. Executive Director's Report. (No Attachment)
6. Other Matters.

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**OUTSIDE PERSONS WISHING TO ADDRESS THE COMMISSION ON
ANY OF THE AGENDAED ITEMS SHOULD CONTACT THE
OFFICE OF THE EXECUTIVE DIRECTOR AT (850) 413-6463.**



Public Service Commission

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

DATE: February 11, 2013
TO: Braulio L. Baez, Executive Director
FROM: Walter Clemence, Public Utility Analyst II, Office of Industry Development and Market Analysis
Michael T. Lawson, Senior Attorney, Office of the General Counsel *JSC MF*
RE: Briefing on Smart Meters: Technical Information and Regulatory Issues.

CRITICAL INFORMATION: Please place on the February 19, 2013 Internal Affairs. This item is being presented for briefing only.

Florida Public Service Commission (FPSC) staff held a public workshop on September 20, 2012 to gather information on smart meters and to address concerns raised by consumers. Topics addressed during the workshop included jurisdiction of government agencies, health, privacy, data security, and alternatives to smart meters. Presentations were made by subject matter experts from utilities, transmitter manufacturers, and meter manufacturers. Twelve consumers provided public comment during the workshop and numerous customer contacts have been received. Staff is providing a summary of the issues that have been of concern to customers for briefing purposes.

Introduction

The meters being installed by the investor-owned utilities are not identical and have been rolled out on different schedules. Florida Power & Light Company (FPL) uses advanced metering infrastructure (AMI) that utilizes Radio Frequency (RF) Mesh technology that provides two-way communications infrastructure to and from the customer's meter. FPL began installing meters in 2006 and plans to complete their installation of 4.6 million meters in May of 2013. Tampa Electric Company (TECO) uses an automated meter reading (AMR) meter that is capable of transmitting from the meter, but the meter is not capable of two-way communication. TECO started its AMR roll out in 2003 and completed the installation of approximately 682,000 meters in January 2012. Progress Energy Florida, Inc. (PEF) used a mix of cellular AMR for large customers, drive-by AMR for residential and small commercial customers, and AMI for medium size commercial customers. PEF began installing AMR meters for its industrial customers in the 1990's and plan to complete its installations with AMI meters in October of 2013. Gulf Power Company (Gulf) also uses AMI meters within its service territory. Gulf started its installation of AMI meters in 2007 and completed the installation of approximately 437,000 meters in 2012.

Jurisdiction

The FPSC has jurisdiction over cost recovery of smart meters, but does not have specific statutory authority over the smart meters themselves. As required by Section 366.04, Florida Statutes, the FPSC has adopted and enforces the safety standards found in the National Electrical Safety Code (NESC) for all electric utilities. However, the NESC does not address radio frequency transmitted by devices such as smart meters. RF emission standards are established by the Federal Communications Commission (FCC).

Section 366.03, Florida Statutes (F.S.), requires the utilities to furnish to each customer reasonably sufficient, adequate, and efficient service upon terms as required by the FPSC. Section 366.04(1), F.S., indicates that the Commission has jurisdiction to regulate and supervise each public utility with respect to rates and service. Utilities present at the workshop agreed that the rates and services aspects of the statutes apply to smart meters.

Section 366.045, F.S., provides that the FPSC shall have jurisdiction over the planning, development, and maintenance of a coordinated electric power grid throughout Florida. Section 366.05(1), F.S., discusses the FPSC's jurisdiction to prescribe fair and reasonable rates and charges, and classification standards of quality and measurements. Rule 25-6.049, Florida Administrative Code, requires utilities to use commercially acceptable measuring devices owned and maintained by the utility to measure their customers' energy usage. Meter manufacturers and utilities at the workshop stated that the meters being installed are commercially accepted measuring devices.

The participating utilities all indicate that the FCC has exclusive jurisdiction over any health effects from smart meters. The FCC's jurisdiction arose from the Federal Communications Act of 1934, continued with the Telecommunications Act of 1996. Workshop presenters agreed that the standards are uniformly adhered to by Florida's IOUs.

FPL presented information that the FCC corresponded with Florida Senator Bill Nelson in June of 2012 and reaffirmed that health issues related to smart meters are within their jurisdiction. Further, FPL indicated the FCC has stated that it has exercised its jurisdiction and will continue to exercise the FCC's jurisdiction over smart meter transmitters.

Commission staff invited the FCC and the California Council on Science and Technology (CCST) to attend the workshop. Both the FCC and CCST declined to attend the workshop.

Available Options

Staff does not believe that jurisdictional issues addressed at the workshop require any FPSC action.

Health

Smart meter transmitters are certified for compliance with RF emissions by the FCC. The transmitters within the meter have an FCC ID number that consumers could use to verify that it

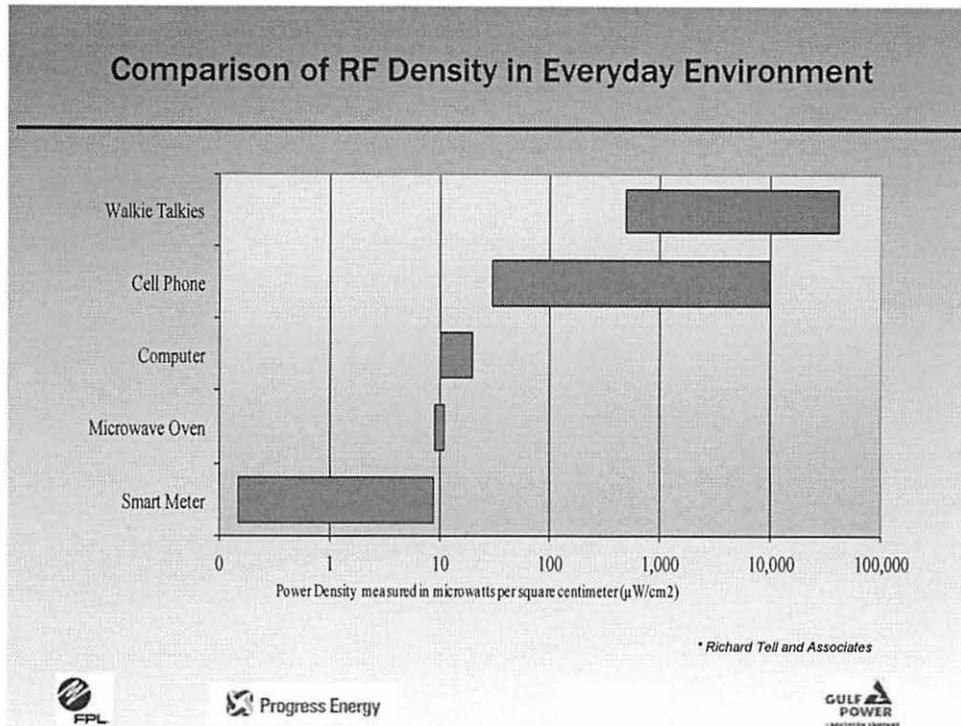
has been approved. RF emitting devices have been used since the 2nd World War and have been widely studied. The smart meter is a relatively new application of existing RF technology. Utilities and manufacturers presented information that smart meters are safe and operate within established authorized standards. However, during the public comment session, consumers presented information that the meters are unsafe and contended that the meters may operate outside the bounds of established standards.

The meter manufacturers who attended the workshop provided staff with an overview of the process for ensuring FCC RF compliance. First, the transmitter is tested by a third-party agency for compliance and then that information is filed with the FCC. Once approved, an FCC ID number is provided to transmitters that pass the test. Each FCC ID number is available to be verified on the FCC website, and consumers may reference the number that appears on any transmitter. In the event that a change is made to the transmitter, the testing and FCC filings must be resubmitted, and another FCC ID number would be assigned after compliance.

The effects of RF can be either thermal or non-thermal. At very low levels, RF can pass directly through the body and has no effect on a person. At higher levels, the RF can accumulate energy within the body, and this effect can raise body temperature. The standards set by the FCC focus primarily on the thermal effects from RF. The FCC does look at the non-thermal effects; however, it believes it is appropriate to use the thermal effects as a guide for setting standards. Non-thermal effects reported by customers include headaches and difficulty sleeping.

Comments were provided regarding multi-meter installations and the possible health effects from these meter banks. FPL conducted third-party testing and found that at a distance of one foot from 100 smart meters, the RF was 15% of the allowable exposure limit. The testing company also tested banks of 80 meters and came to the same conclusion. FPL's study found that the exposure from multi-meter installations was still well below the standards established by the FCC.

The following is a chart that was presented by the IOUs in a joint presentation at the workshop. The chart shows a comparison of RF emission levels from various devices typically found in a home.



Summary

The FPSC does not have regulatory authority over any potential health effects from smart meters; the FCC is the entity that has jurisdiction over the issue. However, staff will monitor the FCC for any updates to FCC standards.

Privacy

The IOUs all hold customer data confidentially, except for release for regulated business purposes and to comply with court orders. Municipal utilities must comply with Florida’s Sunshine Law. Customer data that is maintained by a municipal utility must be disclosed as part of a public records request. The Florida Municipal Electric Association stated that it is considering seeking legislative support to allow for a delay in releasing interval data by 3 months, while maintaining the availability of current monthly data.

Smart meters do not transmit or store any personal customer identification information. The meters do not transmit customer names, billing information, or addresses. The Federal Trade Commission has regulations in place that are designed to prevent identity theft. The IOUs’ privacy policies are designed to be consistent with Federal Trade Commission regulations. Further, the IOUs can use the FPSC confidentiality process to ensure that any customer information that is provided to the FPSC remains confidential.

The utilities were unanimous in their presentations that the only time customer data would be released to a third party is when it is specifically requested by the customer, unless required by law. However, the utilities look at ownership of the data differently; FPL and PEF see themselves as custodians of the data, TECO believes that it owns the information, and Gulf believes that the customer owns the data. In the future, commercial interests may want access to

this data and the ownership of the data may determine who receives any potential value from this data.

Customers expressed concern that the meter will indicate what appliances are being used and the information from the smart meter will be used to market items to consumers. Customers also expressed concern that smart meters are an attempt by United Nations Agenda 21 to regulate how consumers use electricity. The meter manufacturers stated that the meters only measure total usage and are unable to identify usage from specific appliances.

Summary

The IOUs have all represented that they have privacy policies in place. Staff will monitor any legislative changes that may require the FPSC or the utilities to act.

Data Security

The data transmitted by the smart meter does not contain any personal customer identification information. Smart meters only transmit information about usage, the meter number, meter type, tampering indications, and error checking information. Moreover, the information transmitted by the meters is encrypted, so if a person did intercept a signal, they would not be able to decipher it.

The utilities transmit the encrypted information securely, and have cyber and privacy policies in place. FPL, Gulf, and PEF have used third-party testing to ensure the security of their transmission of customer usage information from the meter to the utility. TECO's information technology staff consistently monitors their system to ensure security.

The National Institute of Standards Technology (NIST) is the leading board that promulgates security standards, and they have several working groups that promote and develop those standards. The NIST process is a collaborative one among private industry, public industry, and individuals who come together and establish standards for cyber security and interoperability.

During the last Congressional Session, several cybersecurity bills were before Congress; these bills did not pass.

Summary

It appears existing data security protocols are being followed and staff will monitor for further enhancements to security requirements, including federal legislation.

Alternatives

FPL commented during the workshop that it would be open to an alternative to requiring all customers to accept a smart meter. Gulf, TECO, and PEF do not believe that the FPSC should require a smart meter alternative. However, IOUs all appear to be in agreement that if an option is offered, the customer who requests an alternative type of meter should be responsible for all the related costs. The FPSC has a history of ensuring that the cost-causer pays the costs

associated with their request. Examples include undergrounding of distribution lines, distribution upgrades for net metering, and customer-requested electric line extensions.

Currently, FPL is placing customers who express concerns about smart meters on a “hold list” This delay allows FPL to temporarily delay the installation of a smart meter. FPL estimates it may have as many as 25,000 customers (.5% of all meter installations) on the hold list at the end of its smart meter deployment in May 2013. It is not known what FPL will do with these customers in May 2013. Currently, the costs to read these customers analog meters are being borne by the general body of ratepayers which reduces the overall savings that may be achieved by smart meters.

During the workshop, FPL indicated that allowing a customer to opt for a non-smart meter could cost as much as \$1,000 per customer over a five-year period. For FPL, or any utility, the question then becomes how to allocate these costs between an upfront cost and a monthly charge.

All customers who provided public comment at the workshop and many who have corresponded with the FPSC wish to have an alternative to a smart meter. Some advocated that before the smart meters were installed, there should have been an opt-in to the smart meter installation. The possible alternative includes a digital meter or the use of an analog meter. However, some customers expressed concerns about having a digital meter and only wanted an analog meter.

Providing an alternative to a smart meter would give customers a choice in their meter. Customer concerns about privacy, health, and data security might be alleviated. However, many of those customers that provided public comment did not want to be assessed a separate charge associated with their decision not to have a smart meter.

In California, Pacific Gas and Electric, Southern California Edison, and San Diego Gas & Electric all have a California Public Utilities Commission-approved opt-out program. Customers pay a \$75 fee to enroll and \$10 a month for meter reading. Low-income customers pay an initial fee of \$10 and \$5.00 a month for meter reading. Avista Utility in Oregon charges an upfront fee of \$221.61 and a monthly charge of \$50.88.

Not all opt-out programs come with a fee. Vermont’s legislature passed a bill in 2012 that prohibits utilities from assessing fees from customers who opt out of a smart meter. The Vermont Department of Public Service staff had previously recommended the inclusion of guidelines that would have required cost-based fees for an opt out.

Summary

Most of the IOUs at the workshop stated that an opt out is not needed at this time. FPL appears to be open to an alternative to smart meters. Therefore, it may be more appropriate for the utility to file a tariff for FPSC review and approval that addresses their situation. Staff will continue to monitor issues associated with alternatives to smart meters in Florida.

The FPSC does have authority to act on the issue of alternative types of meter installations. While staff believes that a utility seeking such an alternative should file a tariff, there are other actions the FPSC might take. The FPSC could initiate rulemaking on this topic; however, there

appears no consensus among the utilities on the issue of smart meter alternatives. Staff could bring an item to Agenda or Internal Affairs and request that Commissioners approve an item that would require IOUs to file tariffs offering an opt-out. Finally, utilities could continue to handle customer requests for smart meter alternatives as they are currently. The costs of continuing to serve customers who have not yet had a smart meter installed would be borne by all customers under existing rates.

Public Comment

The most common concerns expressed by members of the public were health issues and privacy concerns. Presenters were concerned that: (1) the health effects have not been studied enough or that they are experiencing adverse effects from the meter; (2) utilities will know what appliances the customer is using and that usage information will be sold to third parties; and (3) that smart meters are a control device that will force them into time of use rates.

The most common concern expressed by customers in both the public comment section of the workshop and in post-workshop comments was the health effects of RF. As discussed earlier, the FPSC does not have authority over the health effects from smart meters.

Members of the public did provide studies to support their claims. However, while Commission staff does not have the expertise to evaluate and validate these or any health studies, staff would note that expert regulatory bodies have established standards to ensure that the transmissions from smart meters are safe.

Summary

Consumers have raised concerns and would like the option to opt-out of a smart meter, primarily without being assessed an additional fee. Staff will continue to be available to consumers to answer questions and will continue to serve as a source for information.

Conclusion

Staff does not believe that the FPSC needs to take any specific actions at this time to provide for an alternative to smart meters. The issues that are of concern to consumers are outside the jurisdiction of the FPSC. However, the FPSC should allow utilities to voluntarily provide their customers with new services under an appropriate, approved tariff. Staff would review any tariff that a utility files in response to smart meter concerns, and a recommendation on the filing would be brought before the FPSC at a scheduled Agenda Conference. As with any tariff, special attention would be paid to any charges requested by the utility. Staff believes all charges should be cost-based to ensure any subsidization is kept to a minimum. Further, the filing should clearly detail the purpose of offering the new tariff.

WC