

Progress Energy Florida's Post-Workshop Comments

Progress Energy Florida (“PEF” or the “Company”) submits these post-workshop comments with respect to the Commission’s Smart Meter Workshop, held September 20, 2012. PEF appreciates the opportunity to provide these comments. Consistent with direction provided by Staff, PEF has used the round-table questions used during the workshop as the framework for its comments.

PEF believes it is helpful to describe the meters PEF currently uses, as well as explain the current plan for limited implementation of other types of meters. PEF currently utilizes Mobile Meter Reading (“MMR”) meters (or AMR meters) for residential customers. This is a one-way communication drive-by meter. PEF completed its MMR installation in 2005-2006. For large commercial and industrial customers, PEF uses Advanced Meter Reading (“AMR”) meters. These are two-way communication via cellular modems. Finally, PEF will begin this month to install a limited number of Automated Metering Infrastructure (“AMI”) smart meters for approximately 83,000 commercial and industrial customers with demand and time of use meters.

In addition, although the way in which these meters transmit usage from the customer to PEF is changing and has changed, what PEF obtains from the meter and how PEF uses that data has not changed. What was once a usage reading obtained by a person manually reading and recording the usage has now been streamlined so that a computer driving by the meter from the road can obtain the same usage information. The data collected is similar to what was collected in the past: kWh usage, kW demand and a meter number. The meter number is linked to the customer’s account information, but the meter itself does not contain that personal customer information. To access the personal information, PEF must use a separate computer system. And the privacy policies and processes to protect that customer information have not changed simply based on what meter reading process is used to collect usage.

1. What jurisdiction does the Florida Public Service Commission (FPSC) have over smart meters?

Pursuant to Section 366.04(6), the FPSC must “prescribe and enforce safety standards for transmission and distribution facilities of all public electric utilities.” Smart meters are considered to be distribution facilities. The statute further provides that the FPSC shall adopt the National Electric Safety Code (NESC) (ANSI C2) as the standard by which utilities’ distribution and transmission facilities must comply. Section 366.04(6) indicates that the standards included in the NESC “shall constitute acceptable and adequate requirements for the protection of the safety of the public and compliance with the minimum requirements of that code shall constitute good engineering practice by the utilities.” The NESC references meters as included in the scope of the NESC, but does not contain any specific requirements regarding meters. *See* Section 1, 011.A.

The FPSC also has jurisdiction over the rates set by utilities (Sections 366.04(1) and (2)(b)). PEF’s rates include costs for meter equipment, meter reading, rendering bills, etc. In addition, several FPSC rules relate to metering. *See, e.g.* Rule 25-6.022, F.A.C. (records of metering device and meter tests); Rule 25-6.049, F.A.C. (use of commercially acceptable measuring devices to measure energy sold); Rule 25-6.050, F.A.C. (location of meters); Rules 25-6.052,

6.056, 6.058-60, F.A.C. (testing of meters); Rule 25-6.054, F.A.C. (laboratory standards for meters); and Rule 25-6.055, F.A.C. (portable standards for meters).

2. What other State/Federal/Trade organizations have jurisdiction over smart meters and what are their responsibilities?

The Federal Communications Commission (FCC) regulates interstate and international communications by radio, television, wire, satellite and cable in all 50 states, the District of Columbia and U.S. territories. The FCC is responsible for managing and licensing the electromagnetic spectrum for commercial users and for non-commercial users including state, county, and local governments. This includes public safety, commercial and non-commercial fixed and mobile wireless services, broadcast television and radio, satellite and other services. Smart meters, because they operate within a licensed spectrum, must comply with the standards set forth by the FCC. The FCC's jurisdiction is provided by the Communications Act of 1934 and supplemented by the Telecommunications Act of 1996. As explained in more detail below, in this case, the FCC has preemptive jurisdiction over the health safety of smart meters. While the FPSC can ensure that the meters in use by utilities that it regulates falls within the limits set by the FCC, the FPSC has no jurisdiction to consider or make changes to the FCC standards.

The FCC has exclusive authority over the technical aspects of radio communications. *Farina v. Nokia, Inc. et al.*, 625 F.3d 97 (U.S. 3d Cir. 2010). Smart meters are included in the realm of radio communications. Among other things, the FCC regulates human exposure to radio frequency (RF) and accordingly has set limits by which wireless devices, including smart meters, must comply. *Farina* at 106; 47 CFR Sect. 1.1310. The Supremacy Clause of the United States Constitution invalidates state law that “interferes with or is contrary to federal law.” *Farina* at 115 and references cited therein. In the *Farina* case, plaintiffs brought a putative class action suit against various cell phone providers, asserting that the cell phones were unsafe to use without headsets, because the phone emitted unsafe levels of RF radiation. Plaintiffs made these claims even though the RF radiation levels of the cell phones fell within the standards set by the FCC. *Id.* at 122. The court held that the plaintiffs' claims were barred under the concept of conflict preemption, because Congress charged the FCC with a “balancing situation,” where Congress intended the FCC to use its reasoned judgment to weigh the relevant considerations and determine how best to prioritize between competing objectives. *Id.* at 123. The court noted:

Accordingly, we conclude that Farina's claims are preempted by the FCC's RF regulations. The inexorable effect of allowing suits like Farina's to continue is to permit juries to second-guess the FCC's balance of its competing objectives. The FCC is in a better position to monitor and assess the science behind RF radiation than juries in individual cases. Regulatory assessments and rulemaking call upon a myriad of empirical and scientific data and medical and scientific opinion, especially in a case, such as RF radiation, where the science remains inconclusive. Though we foreclose relief for the members of this putative class, this does not render them devoid of protection. The FCC has pledged to serve an ongoing role in the regulation of RF radiation and to monitor the science in order to ensure its regulations remain adequate to protect the

public. OET Bulletin at 8; see also *EMR Network v. FCC*, 391 F.3d 269, 273 (D.C.Cir.2004) (noting the FCC's "determination to keep an eye on developments" and accommodate changes in the science). *Id.* at 133-134.

The District of Columbia Court of Appeals court considered a similar claim as that raised in *Farina* and came to the same conclusion. See *Murray v. Motorola, Inc., et al.*, 982 A.2d 764 (D.C. Cir. 2009) (finding conflict preemption where plaintiff asserted that cell phones were dangerous even though they fell within FCC RF standards). Of note, the *Murray* court considered whether the plaintiff's claims regarding non-thermal effects from RF radiation were preempted and held that those claims were also preempted. Specifically, the court recognized that "Congress mandated that the FCC 'shall...prescribe and make effective rules regarding the environmental effects of radio frequency emissions,' Telecommunications Act Sec. 704(b), and Congress directed that the FCC's rules 'should contain adequate, appropriate and necessary levels of protection to the public.' H.R. Rep. No. 104-204, pt. 1, at 95." *Id.* at 780. The court further noted that the FCC, when promulgating the RF standards, had considered various studies of non-thermal effects but had concluded that no reliable scientific data existed to indicate that non-thermal effects may be related to human health. *Id.* at 775.

Although the *Farina* and *Murray* cases involved RF radiation from cell phones, the rationale is the same with respect to smart meters. Smart meters fall well within the standards set by the FCC; in fact, as pointed out numerous times during the workshop, the level emitted by smart meters is several times lower than that emitted by cell phones. It is clear from the comments elicited by the public during the workshop that the concern is not whether the smart meters comply with the FCC standards; rather, the complaint is that the FCC standards are not stringent enough or that they do not adequately address non-thermal effects. The FPSC, however, is not the appropriate forum to enact changes to the FCC standards. Allowing the FPSC to re-weigh the standards set by the FCC would introduce the same conflict that was expressly disallowed by the *Farina* court.

One other question that arose during the workshop was whether there is an opportunity for members of the public to comment on proceedings before the FCC. On the FCC's website, specifically at www.fcc.gov/comments, members of the public can submit comments to the FCC. In addition, questions regarding potential RF hazards from FCC-regulated transmitters (such as smart meters) can be directed to the Federal Communications Commission, Consumer & Governmental Affairs Bureau, 445 12th Street, S.W., Washington, D.C. 20554; Phone: 1-888-225-5322; E-mail: rfafety@fcc.gov; or by going to: www.fcc.gov/oet/rfsafety.

3. Are transmitters utilized by smart meters licensed by the Federal Communications Commission (FCC)?

Please see PEF's response to questions 8 and 11 of Staff's Data Request No. 1, filed June 14, 2012. The cellular modems installed in the AMR meters are also licensed by the FCC and must be certified compliant with FCC's Part 15 Rules.

4. How does a utility or transmitter manufacturer comply with FCC radio frequency (RF) emission requirements?

Please see PEF's responses to questions 8 and 11 of Staff's Data Request No. 1, filed June 14, 2012.

5. Have the potential health effects from RF from wireless smart meters been studied?

Yes. Many studies have been conducted on the potential health effects. These studies demonstrate that the RF fields and emissions from the meters the Company has deployed or will be deploying are in compliance with the FCC's RF exposure limits by a wide margin. Please see PEF's response to question 9 of Staff's Data Request No. 1, filed June 14, 2012.

6. Have the effects of RF from a multi-meter installation been studied?

Please see PEF's response to questions 9 and 12 of Staff's Data Request No. 1, filed June 14, 2012.

7. What is the FCC's approval process for a smart meter transmitter?

This is a question best answered by the FCC, as well as product suppliers, who produce and test products for compliance with FCC performance and safety requirements. PEF would also point to the FCC's website at <http://transition.fcc.gov/> for additional information.

8. Does the utility consider individual customer data confidential?

Yes. Certain individual customer data is considered confidential. The basis of this designation is to ensure compliance with federal privacy laws. In addition, although not required by law, PEF's policy is to only disclose specific customer usage information when required by a valid governmental agency request, a subpoena, or where otherwise required by law. Please also see PEF's response to question 15 of Staff's Data Request No. 1, filed June 14, 2012.

9. What is the legal basis for the utility's privacy policy?

PEF complies with various provisions of the Fair and Accurate Credit Transaction Act (FACTA) and the Fair Credit Reporting Act (FCRA), as well as various identity theft regulations promulgated by the Federal Trade Commission pursuant to those federal laws. These laws and regulations require that certain actions be taken to protect disclosure of data specific to the customer (defined as name, social security number, date of birth, banking accounting information, credit card information, addresses, credit history, and credit scores) and personally identifying information of PEF's customers (defined as name in combination with account number, premise ID, email address, PIN). Please also see PEF's response to question 15 of Staff's Data Request No. 1, filed June 14, 2012.

10. Does the utility share individual customer data with others, including affiliates?

Without customer consent, PEF only shares data in the following circumstances: (1) when an individual fails to satisfy their financial obligation, PEF refers unpaid final account debts to an

outside collection agency, which in turn, posts unpaid debt on the consumer's credit bureau file; (2) PEF passes information to the credit bureau for a credit check; and (3) when required by law to do so, for example, in response to a subpoena. PEF does share data with contracted third parties who are acting as agents of the company, but PEF's contracts contain confidentiality provisions that obligate the third parties to similarly treat the individual customer data as confidential. In storm response situations, regulated affiliates may also back up PEF in call center functions and will have access to Florida customer information for calls on outages, restoration, and storm response. These affiliates are bound by the same rules that apply to our PEF associates. Please also see PEF's response to question 16 of Staff's Data Request No. 1, filed June 14, 2012.

11. What customer information is stored with the utility for a period of time that is longer than necessary to bill the customer?

After an account is closed, the customer's billing history and account information is retained in PEF's system for 2 years. The customer identifier information (phone numbers, social security number, date of birth and driver's license number) is maintained indefinitely after the customer no longer has an account with the company. The social security number and driver's license number are masked in the general use and availability of our customer service system, such that the majority of customer service associates accessing the account could only see a portion of those numbers. Please also see PEF's response to question 22 of Staff's Data Request No. 1, filed June 14, 2012.

12. Can a smart meter identify the usage patterns of specific devices within a customer's home or business?

No. Readings from these meters include total house consumption for specific periods of time, which is the same data that is currently measured and gathered.

13. What cyber security measures has the utility taken to ensure the security of the data transmitted by the meter?

Please see PEF's response to question 17 of Staff's Data Request No. 1, filed June 14, 2012.

14. What security measures does the utility take to ensure that customer information is delivered securely from the meter to the utility?

Please see PEF's responses to questions 17 and 18 of Staff's Data Request No. 1, filed June 14, 2012.

15. How does the utility ensure that smart meters are protected from cyber hacking?

Please see PEF's response to question 28 of Staff's Data Request No. 1, filed June 14, 2012.

16. What are the cost components of metering service currently included in customer rates?

Essentially all the costs of metering are currently in customer rates. This includes the cost of the meter (return and depreciation), operations, maintenance & testing of meters, meter reading and rendering bills. These costs are typically included in the customer charge (fixed monthly cost) along with the cost of services and all customer billing and information.

17. Under what circumstances should an alternative to a smart meter be offered?

This is more of a policy question than a technical question. There are no technical reasons why an alternative should be offered. Wireless smart meters comply with all defined performance characteristics according to FCC policy by significant margins and are well below levels of RF strength for products and devices that have been mainstreamed and accepted in society for decades such as garage door openers, baby monitors, wireless home phones, cellular phones, microwave ovens, etc. In addition, offering alternatives to the smart meter may undermine the Company's ability to obtain the full benefits that a smart grid offers, because significant gaps in the use of smart meters by customers will not provide the needed foundation to implement a more efficient and effective smart grid.

18. If an alternative to a smart meter were to be offered, what are the costs of providing that service?

PEF is unable to determine the cost of an alternative until all factors are known, including the specific nature of the alternative, total number of customers desire alternatives, their geographic location, and systems and staffing costs to maintain multiple separate meter reading and billing options. Please also see PEF's response to question 20 of Staff's Data Request No. 1, filed June 14, 2012.

19. How should the rate for that service be calculated?

An initial, one-time fee, plus an on-going monthly fee (part of the fixed monthly customer charge) for the alternative service is likely the most appropriate structure to ensure that the customers wishing to opt out of the smart meter bear the complete cost of providing that alternative. Although PEF has not identified an alternative at this time, a future rate for any alternative should include all incremental costs incurred by the Company for the cost of the alternative. This would include (but not be limited to) such costs as meter change out costs, manual meter reading costs, costs associated with manual readings being converted to billing system data, and costs associated with degradation of smart meter information infrastructure.

20. How does an opt-out affect the cost-effectiveness of the utility's current smart meter roll-out?

It would reduce the cost-effectiveness and could erode the overall rationale for deployment. This is particularly true for PEF's targeted MESH deployment aimed at commercial meters. Such an approach is very dependent of sufficient meter density to form a sharing, redundant communications MESH. Loss of even small numbers could drive up costs materially requiring increases in repeater/relays along with backhaul access points. This erosion makes the MESH

less efficient and effective, and would additionally require a specialized niche approach that runs in parallel for opt-out customers, also at a high cost.

21. What is the feasibility of using a wired option over wireless transmission of customer metering data? What is the cost difference between the technologies?

One wired option involves the customer self-providing, through the local bell exchange, a dedicated wired phone line to communicate with the smart meter. This has the advantage of directly linking a major portion of the incremental expense to the consumers leveraging the infrastructure. However, there still would be back office infrastructure impacts. Systems would have to be architected to provide an alternate path (wired and wireless) into data network and data management systems. In addition this approach also makes automated reading dependent on customers maintaining a phone line in good standing with the local bell exchange. This would potentially erode capabilities of timely and accurate meter reads. These meter reads would now be dependent on up-to-date, paid-in-full wired service from the local bell exchange. Disconnected lines would mean manual and estimated reads, potential billing, credit and collection issues, and progressive escalation issues up to and including potentially a conversion back to wireless infrastructure. Additionally the back office system modifications should be borne by those consumers who leverage that infrastructure and not be spread across all customers.

PEF is also looking at power line carrier (PLC) technology as another wired option. Duke Energy deployed this type of technology infrastructure for their residential customers in Ohio and PEF will be evaluating the strategic value, best practices and lessons learned from the more comprehensive and strategic platform being leveraged in Ohio as we move forward.