

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Alfred Ottaviano	:	
	:	
v.	:	F-2016-2542081
	:	
PECO Energy Company	:	

INITIAL DECISION

Before
Darlene D. Heep
Administrative Law Judge

INTRODUCTION

The Complainant, Alfred Ottaviano, filed this Complaint objecting to replacement of the PECO AMR¹ meter at his home with a PECO AMI² meter, also known as a "smart meter." He is concerned that smart meters cause fires and health problems. He also alleged that PECO threatened to shut off his service because he refused AMI meter installation.

This decision finds that PECO did not violate the Code, regulations or a Commission Order by issuing shut off notices and that the preponderance of the evidence does not support a finding that installation of a Smart Meter would cause fires or health problems for the Complainant and dismisses the Complaint.

1 AMR is an acronym for "automatic meter reading."
2 AMI is an acronym for "advanced metering infrastructure."

HISTORY OF THE PROCEEDINGS

On April 27, 2016, Alfred Ottaviano (“the Complainant” or “Mr. Ottaviano”) filed a Formal Complaint (Complaint) with the Commission against PECO Energy Company (“PECO”). This is an appeal of the Bureau of Consumer Services’ decision in Case #3396569. In the Complaint, he stated that PECO was threatening to shut off his service unless he had an AMI meter, also known as a smart meter, installed. He further explained in the Complaint that: 1) he was being harassed and threatened by PECO with shut off if he did not allow the company to replace his electrical meter with an AMI electrical meter; 2) the AMI meters cause fires; 3) radiation from the AMI meters raise health and safety concerns; 4) the AMI meters are not UL (Underwriters Laboratories) certified; 5) the AMI meters were deployed without proper consideration for the safety of the homeowners; 6) he will allow installation if the Commission can guarantee safety and that no harm will occur from installation of the Smart Meter; and 7) he would like installation of his AMI meter deferred until a ruling on the pending Act 129 provision that will allow a customer to opt out of smart meter installation. During the hearing, Mr. Ottaviano also expressed a concern about the privacy risk of installation of the smart meter. (Tr. 37-38).

PECO filed an Answer denying all material allegations and Preliminary Objections on May 4, 2016. In the Preliminary Objections, PECO averred that the Complaint should be dismissed pursuant to 52 Pa.Code § 5.101(a)(4) as legally insufficient. PECO contended that legislative and regulatory legal authority requires PECO to install smart meters throughout its service territory. PECO argued that there were no genuine issues of material fact and that PECO was entitled to judgment as a matter of law. The Complainant did not file a response to the Preliminary Objections.

The matter was assigned to Administrative Law Judges Christopher Pell and Darlene Heep, jointly. On August 1, 2016, ALJ Pell and ALJ Heep sustained the Preliminary Objections and dismissed the Complaint. The dismissal referred to *Antonio Romeo v. PECO Energy Company*, Docket No. C-2015-2479260 (Order entered March 3, 2016) (*Romeo*) because, like the Complaint in *Romeo*, Mr. Ottaviano's Complaint did not contain any allegations

to which he could personally testify, nor could he confirm that he experienced fire or damage or other specific safety or health problems with respect to the installation of a smart meter. This was distinguished from *Kreider v. PECO Energy Company*, Docket No. P-2015-2495064 (Order entered September 3, 2015), (*Kreider*), where the Preliminary Objection was overruled because Ms. Krieder alleged that she personally experienced or would experience adverse health effects.

Subsequent to the Order sustaining the Preliminary Objections in this matter, the Commonwealth Court reversed the Order sustaining the Preliminary Objections in *Romeo* and remanded the matter to the Commission for proceedings on Romeo's complaint. *Romeo v. Pa. Pub. Util. Comm'n*, 154 A.3d 422 (Pa. Cmwlth. 2017). The Commonwealth Court determined:

Just because he cannot personally testify as to the health and safety effects does not mean his complaint is legally insufficient. He could make out his claim through the testimony of others as well as other evidence that goes to that issue.

Based on the *Romeo* ruling, on July 12, 2017, the Commission reversed and remanded this matter to the Office of Administrative Law Judge. It was assigned to Administrative Law Judge Darlene Davis Heep, solely, and scheduled for hearing on September 25, 2017.

The hearing was held as scheduled. Mr. Ottaviano appeared *pro se*. He presented no witnesses.

PECO was represented by Ward Smith, Esq., Shawane Lee, Esq. and Thomas Watson, Esq. Testifying on behalf of PECO were Mr. Bryan Uber, PECO Supervisor for Customer Field Operations; Mr. Glenn Pritchard, PECO Principal Engineer for the AMI Deployment Project; Christopher Davis, Ph.D. in Physics; and Dr. Mark Israel, Physician.

Three Complainant Exhibits and 34 PECO Exhibits were admitted into the record. The record closed on October 25, 2017, upon receipt of the hearing transcript.

FINDINGS OF FACT

1. Complainant is Alfred Ottaviano, a PECO customer on 341 South 4th Street in Philadelphia, Pennsylvania (service address). (Tr. 9).
2. Respondent is PECO Energy Company (PECO), a utility under the jurisdiction of the Pennsylvania Public Utility Commission.
3. Mr. Ottaviano has lived in his home for over 40 years. (Tr. 21).
4. Mr. Ottaviano has been and is a PECO electric customer. (Tr. 21).
5. PECO installed AMR meters, including at the home of the Complainant, beginning in about 2000. (Tr. 114).
6. PECO began to install the AMI, or smart meters, in 2012. (Tr. 116).
7. The PECO AMR meter system was shut down in April of 2017. (Tr. 114).
8. The AMR meters transmitted information. (Tr. 116).
9. AMI meters transmit information and can receive commands and instructions. (Tr. 116).
10. Both the PECO AMR and PECO AMI meters emit radio frequency fields (RFs). (PECO CD-12 to CD-11).
11. The AMI meters contain two radios: the FlexNet, to communicate with PECO, and the Zigbee, to communicate price and consumption information into the home. (Tr. 120-21).

12. PECO engaged two contractors to install the smart meters. (Tr. 71).

13. PECO sent to customers a 45-day letter, which informed the customer that within the next two months, PECO would replace the meters in the area. (PECO Exhibit BU-2).

14. The 45-day letter included a telephone number to call with any questions and to schedule an appointment for the meter change if the meter was located indoors or in a location that required the customer to provide access. (PECO Exhibit BU-2).

15. Complainant's meter is located indoors. (PECO Exhibit BU-1; Tr. 78-79).

16. The 45-day letter also stated that the new meters would help PECO "provide more information" to help the customer understand how the customer is using energy and how to save money and energy as well as "provide faster and more convenient service, detect problems faster and provide the platform for new products and services." (PECO Exhibit BU-2).

17. The 45-day letter was sent to Mr. Ottaviano on November 22, 2013. (Tr. 76; PECO Exhibit BU-1).

18. PECO also sent a 21-day letter to customers that contains essentially the same information as the 45-day letter but advising that new meters will be installed within 30 days. (PECO Exhibit BU-3).

19. The 21-day letter was sent to Mr. Ottaviano on December 17, 2013. (Tr. 77; PECO Exhibit BU-1).

20. PECO sends 10-day shut off notices and 72-hour shut off notices to customers if the customer has not responded to previous contact efforts and the company is unable to gain access to the meter to change it. (Tr. 74; PECO Exhibit BU-4).

21. Customers who have not had their meters changed to the AMI or smart meter are receiving estimated bills. (Tr. 74).

22. PECO's contacts with Mr. Ottaviano regarding smart meter installation are documented in the PECO Customer Information Management System ("CIMS"). (Tr. 75).

23. Between November of 2013 and October of 2016, Mr. Ottaviano received between 20 and 50 notices and phone calls advising him of the meter change and that his service could be shut off. (Tr. 19, 23; PECO Exhibit BU-1).

24. One 72-Hour Shut Off Notice sent to Mr. Ottaviano advised him that his service would be shut off because " You did not give us access to our meter and your equipment." (Complainant Exhibit 1).

25. The Shut off Notices also provided a telephone number to call PECO and also advised that the service would not be shut off if the Complainant provided access to the meter and equipment. (Complainant Exhibit 1).

26. PECO never shut off the Complainant's service and at the time of the hearing, the Complainant had PECO electric service. (Tr. 22).

27. The Complainant did not personally see or turn away a PECO employee at his home to install the smart meter prior to installation of the smart meter. (Tr. 26-28).

28. After several attempts to call and contact a customer to arrange installation of the new meter, PECO issues what is called a "friendly letter" that advises the customer that the company is seeking to install the meter in compliance with Pennsylvania state law, Act 129, and notifying the customer that those who do not accept the new meter could face termination, again providing a website to consult for information and a telephone number to call to schedule a meter change appointment. (PECO Exhibit BU-5).

29. A "friendly letter" was sent to Mr. Ottaviano on January 15, 2014.
(Tr. 82).
30. A ten-day notice was sent to the Complainant on January 20, 2014.
(Tr. 103).
31. 72-hour shut off letters are hand delivered to the property rather than mailed. (Tr. 78).
32. PECO restarted the notice process for the Complainant on several occasions, including on August 18, 2014, November 5, 2014 and October 5, 2015. (PECO Exhibit BU-1).
33. On January 8, 2014, January 20, 2014, October 7 and October 19, 2015, PECO contract installers visited the property to install the meter but were unable to access the meter area. (Tr. 78).
34. After each unsuccessful visit by the install contractor, PECO made telephone calls and sent "friendly letters" as well as shut-off notices to the Complainant, for more than a year. (PECO Exhibit BU-1).
35. Complainant filed an informal complaint with BCS on October 27, 2015, BCS # 3396569. (PECO Exhibit BU-1).
36. On October 30, 2015, Mr. Ottaviano called PECO and stated that he would allow installation of any meter except the AMI meter. (PECO Exhibit BU-1).
37. PECO installed the AMI meter at the service address on October 18, 2016.
(Tr. 97; PECO Exhibit BU-1).

38. The Complainant allowed the PECO technician to install the AMI meter at the service address. (PECO Exhibit BU-1).

39. PECO is now installing Aclara meters. (Tr. 120).

40. The Aclara meters were, at the time of the hearing, recently made commercially available to PECO and approved for use on PECO's metering system. (Tr. 120, 121).

41. The Aclara meters are fully certified under UL 2735 and have UL stickers. (Tr. 120, 124).

42. The Aclara meters do not have Zigbee radios and therefore cannot send consumption or price data into the home of a customer. (Tr. 121).

43. A Landis + Gyr meter was installed at the Thunder Hollow Apartment Complex when there was a fire in February of 2014. (Tr. 121).

44. All meters are encrypted with a 256-byte encryption scheme. (Tr. 124).

45. PECO replaced 186,000 of the first type of smart meters utilized after they were found not suitable for deployment. (Tr.134).

46. The smart meters utilized by PECO meet the Federal Communications Commission (FCC) and the International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines for RFs. (PECO Exhibits CD-5 to CD-8).

47. Average RF emissions of the PECO AMI meters are millions of times less than the FCC and ICNIRP standards. *Id.*

DISCUSSION

The Pennsylvania Public Utility Code requires each public utility to provide the following:

Every public utility shall furnish and maintain adequate, efficient, safe, and reasonable service and facilities, . . . Such service and facilities shall be in conformity with the regulations and orders of the commission.

66 Pa.C.S. § 1501.

The statutory definition of “service” is to be broadly construed. *Country Place Waste Treatment Co., Inc. v. Pa. Pub. Util. Comm'n*, 654 A.2d 72 (Pa.Cmwlth. 1995).

“Service, used in its broadest and most inclusive sense, includes any and all acts done, rendered, or performed, and any and all things furnished or supplied, and any and all facilities used, furnished, or supplied by public utilities, or contract carriers by motor vehicle, in the performance of their duties under this part to their patrons, employees, other public utilities, and the public, as well as the interchange of facilities between two or more of them.”

66 Pa.C.S.A. § 102.

Mr. Ottaviano contends that: 1) he was being harassed and threatened by PECO with shut off notices if he did not allow the company to install an AMI meter; 2) the AMI meters cause fires; 3) radiation from the AMI meters raise health and safety concerns; 4) the AMI meters are not UL certified; 5) the AMI meters were deployed without proper consideration for the safety of the homeowners; 6) he will allow installation if the Commission can guarantee safety and that no harm will occur from installation of the Smart Meter; 7) he would like installation of his AMI meter deferred until a ruling on the pending Act 129 provision that will allow a customer to opt out of smart meter installation; and 8) there may be loss of privacy with installation of the smart meter.

Section 332(a) of the Public Utility Code, 66 Pa.C.S. § 332(a), provides that the party seeking relief from the Commission has the burden of proof. Complainant seeks relief from the Commission, and, therefore, has the burden of proof in this proceeding.

“Burden of proof” means a duty to establish a fact by a preponderance of the evidence, or evidence more convincing, by even the smallest degree, than the evidence presented by the other party. *Se-Ling Hosiery v. Margulies*, 364 Pa. 54, 70 A.2d 854 (1950).

If a complainant establishes a *prima facie* case, the burden of going forward with the evidence shifts to the utility. If a utility does not rebut that evidence, a complainant will prevail. If the utility rebuts complainant’s evidence, the burden of going forward with the evidence shifts back to a complainant, who must rebut the utility’s evidence by a preponderance of the evidence. The burden of going forward with the evidence may shift from one party to another, but the burden of proof never shifts; it always remains on a complainant. *Replogle v. Pennsylvania Electric Company*, 54 Pa. PUC 528 (1980), and *Waldron v. Philadelphia Electric Company*, 54 Pa. PUC 98 (1980).

If Respondent submits evidence of “co-equal” weight to counter Complainant’s evidence, Complainant has not satisfied the burden of proof unless additional evidence opposing Respondent’s evidence is presented. *Morrissey v. PA Dept. of Highways*, 424 Pa. 87, 225 A.2d 895 (1967), and *Burleson v. Pa. Pub. Util. Comm’n.* 66 Pa.Cmwlth. Ct. 282, 443 A.2d 1373 (1982), *aff’d.* 501 Pa. 443, 461 A.2d 1234.

Any decision of the Commission must be supported by substantial evidence. See, e.g., Section 704 of the Administrative Agency Law, 2 Pa.C.S. § 704. “Substantial evidence” is such relevant evidence that a reasonable mind might accept as adequate to support a conclusion. More is required than a mere trace of evidence or a suspicion of the existence of a fact sought to be established. *Norfolk & Western Ry. Co. v. Pa. Pub. Util. Comm’n.*, 489 Pa. 109, 413 A.2d 1037 (1980); *Erie Resistor Corp. v. Unemployment Comp. Bd. of Review*, 194 Pa. Superior Ct. 278, 166 A.2d 96 (1961); and *Murphy v. Comm., Dept. of Public Welfare, White Haven Center*, 85 Pa. Commonwealth Ct. 23, 480 A.2d 382 (1984).

Each claim of Mr. Ottaviano will be viewed in accordance with these requirements.

1. Complainant's claims of harassment and threats by PECO with shut off notices if he did not allow the company to install an AMI meter.

In support of this claim, Mr. Ottaviano testified that his smart meter was installed under duress. (Tr. 22, 41). He avers that he had no option other than PECO turning off his service. (Tr. 41). The Complainant stated that he kept getting notices from PECO that he refused installation but that he did not refuse because no one ever showed up at the house. He also noted that he has never been behind on a bill for almost fifty years, yet he kept getting notices from PECO that the company would shut off the power. (Tr. 24). He testified that PECO was never denied access to the meter. (Tr. 25, 30).

The preponderance of the evidence does not support Mr. Ottaviano on this issue.

Act 129 of 2008 ("the Act" or "Act 129") required electric distribution companies ("EDCs") to file Smart Meter technology procurement and installation plans with the Commission for approval. The Act provided:

(f) *Smart Meter technology and time of use rates.*

(1) Within nine months after the effective date of this paragraph, electric distribution companies shall file a Smart Meter technology procurement and installation plan with the commission for approval. The plan shall describe the Smart Meter technologies the electric distribution company proposes to install in accordance with paragraph (2).

(2) Electric distribution companies shall furnish Smart Meter technology as follows:

- (i) Upon request from a customer that agrees to pay the cost of the Smart Meter at the time of the request.

- (ii) In new building construction.
- (iii) In accordance with a depreciation schedule not to exceed 15 years.

66 Pa.C.S. § 2807(f). The Act requires that any smart meter technology utilized have bidirectional or two-way communication technology. 66 Pa.C.S. § 2807(g).

On June 18, 2009, the Commission ordered EDCs with greater than 100,000 customers to adhere to the guidelines established for Smart Meter technology procurement and installation. The Commission also ordered EDCs to file a Smart Meter technology procurement and installation plan.³ PECO developed a Smart Meter installation plan that was approved by the Commission.⁴ Under that plan, PECO is replacing AMR meters with AMI meters or “smart meters.”

Complainant asserts, and a plain reading suggests, that § 2807(f)(2) provides an “opt in” or “opt out.” In 2013, however, the Commission concluded that there is no provision in the Code, the Commission’s Regulations or Orders that allows a PECO customer to “opt out” of smart installation. *See Maria Povacz v. PECO Energy Company*, Docket No. C-2012-2317176 (Order and Opinion entered January 24, 2013).

Complainant was sent a letter notifying him that the meters would be changed in his area within the 60 days of the date of the letter. He then was sent a letter letting him know that the meters would be changed in his area within the next 30 days. Both letters provided a telephone number for the Complainant to call if he needed to provide access to the meter. PECO personnel could not reach the Complainant's meter unless he provided access because his meter was indoors. Complainant did not contact PECO.

³ *See Smart Meter Procurement and Installation*, Docket No. M-2009-2092655 (Implementation Order entered June 24, 2009) (*Smart Meter Procurement and Installation Order*).

⁴ *See Petition of PECO Energy Company for Approval of its Smart Meter Technology Procurement and Installation Plan*, Docket No. M-2009-2123944 (Order entered May 6, 2010) (*PECO Smart Meter Plan Order*).

Meter installation contractors visited the service address and upon finding that they could not access the meter, placed the Complainant in the customer contact system that required telephone calls and additional letters. (Tr. 79, 83). As part of the company's continued effort to install the smart meter in accordance with its Commission-approved Act 129 Implementation Plan, PECO sent additional letters and made telephone calls to the Complainant seeking access to change the meter. PECO Exhibit BU-1. With no response to these contacts, PECO sent shut off notices to the Complainant. Under the circumstances, PECO did not commit a violation in sending the shut off notices.

The PECO electric tariff also supports a finding that there was no violation. A public utility's Commission-approved tariff is *prima facie* reasonable, has the full force of law and is binding on the utility and the customer. 66 Pa.C.S. § 316, *Kossman v. Pa. Pub. Util. Comm'n*, 694 A.2d 1147 (Pa.Cmwlth. 1997) (*Kossman*); and *Stiteler v. Bell Telephone Co. of Pennsylvania*, 32 Pa. Commw. 319, 379 A.2d 339 (Pa.Cmwlth. 1977) (*Stiteler*).

Under the PECO Tariff Electric, Section 6.4 provides that the company owns and maintains the meters. Section 14.5 provides that the company will select the type and make of the metering equipment to be used for meters supplied by the company and may from time to time change or alter the equipment. The Tariff provides for the same ownership and control of gas meters.

Section 10.1 of PECO's Commission-approved tariff provides that the Company shall keep in repair and maintain its own property installed on the premises of the customer. Section 10.5 states that PECO employees shall have access to the premises of the customer at all reasonable times for the purpose of reading meters, and for installing, testing, inspecting, repairing, removing or changing any or all equipment belonging to the Company.

Section 18.3 provides that the Company may terminate service on reasonable notice if entry to the meter is refused, or if access to the meter is obstructed or hazardous. Specifically, PECO's tariff provides:

The Company may terminate on reasonable notice if entry to the meter or meters is refused or if access thereto is obstructed or hazardous; or if utility service is taken without the knowledge or approval of the Company; or for other violation of these Rules and Regulations and/or applicable Commission rules, including those found at Pennsylvania Public Utility Code or the Commission's regulations.

The notices issued by PECO were not in violation of any law, regulation or commission order and the PECO tariff provides that the company may terminate service upon reasonable notice where access to the meter is refused or obstructed. Mr. Ottaviano's meter is located indoors and PECO employees and contractors could not access the Complainant's meter despite numerous attempts by the company. Although Mr. Ottaviano did contact the company in 2014 to discuss installation of the meter, he did not choose a date and was to call back to schedule installation. When he did not, additional notices were sent and efforts to contact him were made. (PECO Exhibit BU-1). Although he eventually agreed to accept the new meter and allow installation, the record shows that subsequent to his October 2014 call to PECO, he spoke with PECO employees and stated that he did not want the meter. (PECO Exhibit BU-1). Again, PECO sent a series of notices and made efforts to contact Mr. Ottaviano. *Id.*

Although there was no actual termination, PECO issued ten-day termination notices and 72-hour termination notices in compliance with 52 Pa. Code § 56.331 and § 56.333. Such notices are inherently unsettling; however, there was no violation here.

Mr. Ottaviano received between 20 and 50 contacts from PECO - by letter, hand-delivered notice and telephone call- regarding changing his AMR meter to an AMI meter. He was also advised that his service could be shut off if access to the meter to change it was not provided. Also, as PECO Supervisor for Field Operation Brian Uber noted, customers who have not had their meters changed to the AMI meter are receiving estimated bills and there are negative implications if estimated bills are issued for more than six months (Tr. 74), presumably alluding to the six-month limit for estimated bills placed on utility companies and found in 52 Pa. Code § 56.12.

Given the law, Commission requirements, the indoor location of Mr. Ottaviano's meter preventing direct access by PECO personnel, and Mr. Ottaviano's failure to provide access to his meter, PECO's multiple attempts to contact the Complainant do not arise to harassment or threats and therefore were not violations.

2. Complainant's claims that PECO failed to provide him with safe and reasonable service, 66 Pa.C.S. § 1501.

The Complainant makes several claims pertaining to the safety and reasonableness of the service provide by PECO with respect to installation of the smart meters.

- a. Radiation from the AMI meters raise health and safety concerns

Mr. Ottaviano is concerned that smart meters cause health problems. While he raised no particular health, issues concerning himself or his household members, he presented an example of an article that he had read that was prepared by Maryland Smart Meter Awareness alleging "Radiofrequency/Microwave Radiation from Smart Meters." (Complainant Exhibit 4). He is understandably concerned for the health and safety of his family. Given the record evidence, however, there is no basis upon which to find that the meter installed by PECO presents health risks to the Ottaviano household.

The company installed a Landis +Gyr smart meter at the service address. PECO expert witness Pritchard testified that the company Landis + Gyr meters have two radios, the FlexNet, which communicates usage information to PECO, and the Zigbee, which is designed to communicate consumption and cost information to the customer. The communications are hosted, and meters are provided by the Sensus company. (Tr. 117-120). This meter replaced an AMR meter at the residence. (Tr. 74-75).

PECO expert Dr. Christopher Davis, Ph.D., acknowledged that radio frequency fields are produced by the smart meters. He also distinguished, however, the type of radio frequency fields emitted by devices such as x-rays and microwave ovens from those emanating from smart meters. According to Dr. Davis, radio frequency waves from microwave ovens are

"intense" and heat biological matter but smart meters do not produce a wave that is intense enough to heat biological matter. (PECO Exhibit CD-2, p. 3). He stated that RFs from PECO AMI meters are the same types of fields used in radio communications for garage door openers, baby monitors, and radio stations. (PECO Exhibit CD-3 at 1). He also stated that much larger RFs are generated by "typical household appliances" than an AMR or AMI meter. PECO Exhibit CD-2 at 4.

Dr. Davis also noted that the radios in the PECO AMI meter installed at the Complainant's home emit RFs, on average exposures, millions of times smaller than the FCC Maximum Permissible Exposure and international standards set out in the ICNIRP (International Commission on Non-Ionizing Radiation Protection). (PECO Exhibit CD 5, CD 7).

He also noted that peak exposures, the moment of the highest RF emissions, from the FlexNet radio, at 0.016 mW/cm², is 37.5 times smaller than the FCC Maximum Permissible Exposure Level of 0.6 mW/cm and the Zigbee radios, at 0.00026 mW/cm², is 3,800 times smaller than the FCC limit of 1 mW/cm² for such devices. (PECO Exhibit CD 6). For comparison, Dr. Davis pointed out that the FCC limits for cell phone exposure when making a call are 19 million times greater than the AMI smart meter. He also stated that the AMI meter installed at the Ottaviano home emits 83% less in RFs than the previously installed AMR meter. (PECO Exhibit CD 10), (PECO Exhibit CD 11).

Dr. Mark Israel, M.D., was recognized as an expert in Methodology of Evaluations, i.e., in determining whether an exposure causes, contributes to or exacerbates a medical condition. (PECO Exhibit MI-2). Dr. Israel has been director of a program involving the study of Molecular Neuro-Oncology, and has studied, researched and taught in the areas of immunology, genetics, radiation oncology, cell biology, medical research and radio frequency electromagnetic fields and health.

According to Dr. Israel, there is no reliable basis upon which to conclude that radio frequency fields from the smart meter utilized by PECO will have adverse health effects. (PECO Exhibit MI-3). He also reviewed the available medical literature and publications on the

subject. He noted that there were numerous studies conducted and that the World Health Organization and other public health authorities have comprehensively examined studies of radio frequency fields and found that they do not cause adverse health effects. (PECO Exhibit MI-3)⁵

There was no evidence to the contrary to support finding that the smart meter has or will have an adverse health effect upon the Ottaviano household or the Complainant.

b. Complainant's claims that AMI meters cause fires

Mr. Ottaviano is concerned that the AMI meter installed by PECO is a fire hazard. His apprehension was based on news reports of fires and electric meters and his understanding that PECO had to replace smart meters because of incidents involving fires. In support, he introduced two articles about fires where a PECO smart meter was present. (Complainant Exhibits 2 and 3).

PECO witness Pritchard, while disputing that PECO AMI meters caused fires, acknowledged that the first 100,000 or so smart meters installed by PECO, which were manufactured by a different company, were removed and replaced when they were found "not suitable for [PECO] deployment" (Tr. 133-135). The Company subsequently obtained and began to install the Landis + Gyr smart meters. A Landis+Gyr meter is installed at the Complainant's home.

Mr. Pritchard also testified that PECO now has and is installing Aclara brand meters, which is now the meter commercially offered for PECO's billing and usage communication system. The company has some Landis + Gyr meters but can no longer acquire them because they are no longer available. (Tr. 137).

⁵ During the hearing, Mr. Ottaviano attempted to raise specific health issues that he had not mentioned in his complaint. PECO objected, noting that this information was not in the Complaint and that the Complainant had not provided this information prior to the hearing or in response to discovery issued by PECO to Mr. Ottaviano. Mr. Ottaviano did not deny that he had not provided the information. (Tr. 32-37). It was ruled that testimony about specific health conditions was disallowed. In any event, Dr. Israel testified that there is no reliable medical basis to conclude that radio frequency fields from PECO meters do or will cause or contribute to any adverse health effects. (PECO Exhibit MI-3, p. 3).

While there was information presented by Ms. Ottaviano that meters previously installed by PECO were present at the scene of house fires, there was no definitive evidence presented here that the meters were the cause of the fires. In any event, PECO removed those meters and replaced them with Landis+Gyr meters.

The smart meter to be installed at the Complainant's residence will be either a Landis+Gyr or an Aclara meter. There is no evidence that these meters are subject to or cause fires. Therefore, the Complainant's claim is not supported.

c. Complainant's claims that PECO's AMI meters are not UL certified

Mr. Ottaviano is concerned about safety because the meter installed at his home does not have a UL Sticker from Underwriter Laboratories, which among its activities conducts tests regarding the safety of consumer products. Mr. Pritchard testified that although the meter does not have a UL sticker, it has met all UL tests. (Tr. 134-136).

According to Mr. Pritchard, the Landis + Gyr meters, such as that at the home of Mr. Ottaviano, were tested and found to meet UL requirements. As background, he testified that electric meters were previously not generally listed under UL. When PECO found that the first smart meters the company had obtained, that were manufactured by another company, had some problems, it obtained meters through Landis + Gyr. In an effort to ensure quality and safety, PECO participated in the development of a UL standard for such meters, UL Standard 2735. (Tr. 135).

Landis + Gyr meters utilized by PECO were manufactured prior to the development of the standard. The UL process and assessment generally also involves review during manufacturing and design. Therefore, the UL stickers could not be placed on the already manufactured PECO smart meters. However, Mr. Pritchard testified, UL testing was conducted on the Landis + Gyr meters and they met the UL certification standard (Tr. 123-125). PECO also noted that the Aclara meters, which it now deploys, bear the UL sticker because they were

manufactured after the development of the UL standard and met all safety tests. (Tr. 124). Mr. Pritchard also noted that the Aclara meter is available to Mr. Ottaviano. (Tr. 132).

Given this testimony, there is no basis upon which to find that the absence of a UL sticker renders the meters installed by PECO unsafe. There was no evidence to the contrary. Therefore, the Complainant cannot prevail on this claim.

d. Complainant's concerns regarding safety of the homeowners.

Mr. Ottaviano contends that the smart meters were deployed by PECO without safety considerations of homeowners. The evidence supports a finding that PECO considered safety when developing its smart meter program and deploying its meters. PECO removed and replaced over 100,000 of the first type of smart meter that the company installed due to Company concerns about the meter. PECO also participated in the development of a UL standard for smart meters, had the Landis + Gyr meters tested to the new UL standard, which they met, and is now deploying a meter that has the UL sticker, the Aclara.

Mr. Ottaviano also contends that PECO could have made better efforts to educate the public and explain what they were trying to do "instead of aggressively telling people that if they don't take this and install it, we're going to shut your power off." (Tr. 60). The record shows that PECO sent out several letters explaining the deployment of the meters. The company also offered additional sources to provide scientific and technical information about the meter. The company also made several telephone calls to the complainant and provided him with a telephone number to call to obtain additional information and to schedule installation. (PECO Exhibit BU-1 through PECO Exhibit BU-5). Installation technicians visiting the service address were not able to access the meter. Complainant did not make the meter accessible for more than two years after the first contact by PECO. Id. The evidence presented showed that PECO's efforts to provide safe meters and to educate the public and Mr. Ottaviano about the meters was adequate, and reasonable in accordance with 66 Pa.C.S. § 1501. There is no basis upon which to find for the Complainant here.

- e. Complainant's request for a Commission guarantee of safety of the Smart Meter.

The Complainant is seeking a guarantee of the safety of the meters from the Commission. There is nothing requiring that the Commission guarantee the safety of all devices, equipment and facilities of the entities it regulates. However, the Commission is concerned with safety and reasonableness of service and requires that every public utility provide "safe, and reasonable service and facilities, . . . in conformity with the regulations and orders of the commission." 66 Pa.C.S. § 1501. A utility that does not meet this standard can be fined by the Commission and ordered to provide safe and reasonable service. No unsafe or unreasonable service is found here.

PECO made efforts to provide safe meters, participating in the development of the UL safety standard and removing meters that it had initially installed about which the company had concerns. There was no evidence presented here to support a finding that the meters to be installed at the home of the Complainant is unsafe or that PECO has been unreasonable in its handling of this matter. The Complainant cannot prevail here.

3. Complainant's request to defer installation of the AMI meter.

The Complainant would like his AMI meter removed and AMI meter installation postponed pending action by the Pennsylvania legislature that will allow a customer to opt out of a smart meter.

As the Commission has noted, action should not be taken based on speculation. See *Pa. Pub. Util. Comm'n; United States Steel Division of USX Corporation; David M. Barasch, Consumer Advocate; City of Pittsburgh; Duquesne Industrial Intervenors; J&L Specialty Products Corp.; Pennsylvania Alliance for Jobs and Energy v. Duquesne Light Company*, 1987 Pa. PUC LEXIS 342 (Pa. PUC 1987). As held in *Commonwealth v. Thomas*, 2012 PA Super 169 (Pa. Super. Ct. 2012), current statutory law applies until the Legislature repeals or amends it. The law can only be applied as it exists. The Commission has interpreted

Act 129 as not allowing smart meter to opt out. *Maria Povacz v. PECO Energy Company*, Docket No. C-2012-2317176 (Order and Opinion entered January 24, 2013).

Mr. Pritchard stated during the hearing that the Aclara meter is available to the Complainant. Given Commission precedent, however, the remedy of deferring AMI installation is not available to the Complainant.

4. Complainant's concerns regarding loss of privacy

Mr. Ottaviano is concerned about a loss of privacy with installation of the smart meter. In particular, he finds it disquieting that the smart meters communicate with other equipment in the home. As examples, he is concerned that the information available through the smart meter will communicate his movements, whereabouts and habits as well as when he is present or not or when he will turn on his lights or operate appliances. (Tr. 38-39).

Mr. Pritchard testified that the Zigbee radio in the Landis + Gyr meters is designed to communicate consumption and then offer price signals. However, the design is to send this information to the home rather than the public or PECO. (Tr. 117).

According to the testimony of Mr. Pritchard, the level of encryption, or security, on the smart meters is similar to that used for online purchases and was positively reviewed by the U. S. Department of Energy. He further stated that the consumption data only shows how much is used and that it has no direct correlation to the specific activities of anyone in the home or which appliances are being used. (Tr. 127-128). He further testified that internally, PECO has additional controls on the data and that it is only used when interacting with a customer regarding billing or other company related matters. (Tr. 127).

Should PECO not maintain a system or a level of encryption to protect the privacy of its customers or if a breach of privacy protections occurs, PECO may be found in violation of Section 1501. However, the evidence presented shows that the smart meters were designed to provide consumption and usage information to the consumer. It also shows that PECO has taken

reasonable steps to protect the privacy of any information obtained through the smart meters and limit the business use thereof. Also, to date, the record does not show a breach of PECO security measures. Additionally, Mr. Pritchard provided credible testimony that the information obtained through the meter cannot provide specifics about the customer's whereabouts and behavior.

Based on the evidence presented at the hearing, there is no basis upon which to find a violation here.

The claims in the Complaint will be denied.

CONCLUSIONS OF LAW

1. The Commission has jurisdiction over the parties and the subject matter of this proceeding. 66 Pa.C.S. § 701.

2. The Complainant must establish his case by a preponderance of the evidence. *Samuel J. Lansberry, Inc. v. Pa. Pub. Util. Comm'n*, 578 A.2d 600 (Pa.Cmwlth. 1990), alloc. den., 602 A.2d 863 (Pa. 1992).

3. A public utility's Commission-approved tariff is *prima facie* reasonable, has the full force of law and is binding on the utility and the customer. *Pennsylvania Electric Co. v. Pa. Pub. Util. Comm'n*, 663 A.2d 281 (Pa.Cmwlth. 1995); *Respond Power, LLC v. Pennsylvania Electric Company*; *Respond Power LLC v. West Penn Power Company*, Docket Numbers C-2016-2576287; C-2016-2576292 (Order Entered July 13, 2017).

4. Act 129 of 2008 ("the Act" or "Act 129") required electric distribution companies ("EDCs") to file Smart Meter technology procurement and installation plans with the Commission for approval.

5. Utility companies are required to furnish and maintain adequate, efficient, safe, and reasonable service and facilities. 66 Pa.C.S. § 1501.

6. The Complainant has not met his burden of proof of establishing an offense in violation of the Public Utility Code, the Commission's regulations or an outstanding order of the Commission. 66 Pa.C.S. § 701; 66 Pa.C.S. § 1501.

7. Current statutory law applies until the Legislature repeals or amends it. *Commonwealth v. Thomas*, 2012 PA Super 169 (Pa. Super. Ct. 2012).

ORDER

THEREFORE,

IT IS ORDERED:

1. That the formal Complaint filed by Alfred Ottaviano versus PECO Energy Company at Docket No. F-2016-2542081 is denied and dismissed;
2. That the record in this matter be closed.

Date: January 17, 2018

_____/s/
Darlene D. Heep
Administrative Law Judge