

**PENNSYLVANIA  
PUBLIC UTILITY COMMISSION  
Harrisburg, PA 17120**

Public Meeting held April 25, 2024

Commissioners Present:

Stephen M. DeFrank, Chairman  
Kimberly Barrow, Vice Chair  
Ralph V. Yanora  
Kathryn L. Zerfuss  
John F. Coleman, Jr.

James Quigley and Teresa Mendez-Quigley

C-2017-2617558

v.

PECO Energy Company

**OPINION AND ORDER**

**BY THE COMMISSION:**

Before the Pennsylvania Public Utility Commission (Commission) for consideration and disposition are the Exceptions filed by James Quigley and Teresa Mendez-Quigley (the Complainants or the Quigleys) on January 19, 2019, in response to the Initial Decision (Initial Decision or I.D.) of Administrative Law Judge (ALJ) Darlene Davis Heep, which was served on the Parties on December 31, 2018, in the above-captioned proceeding. Replies to Exceptions were filed by PECO Energy Company (PECO or the Company) on January 30, 2019. The Initial Decision denied and dismissed the Formal Complaint (Complaint) filed by the Complainants on August 1, 2017. For the reasons discussed below, we shall deny the Complainants' Exceptions; adopt the Initial

Decision of ALJ Heep; and dismiss the Complaint, consistent with this Opinion and Order.

## I. Background

This case involves a Complaint concerning the safety of the advanced metering infrastructure (AMI), or smart meter, that PECO proposes to install at the Complainants' residence and use in the ordinary course of business to measure the Complainants' electricity consumption. The Complainants refuse to have a smart meter installed for health reasons. In their Complaint, the Quigleys requested: (1) that the Commission establish an "opt-out" exemption from the requirement to have a smart meter installed "on the grounds of health maintenance," (2) that PECO be required to install an analog meter, and (3) that the Commission order PECO "to stop sending harassing shut-off notices." Complaint at 3.

PECO, an electric distribution company (EDC) subject to the jurisdiction of the Commission, furnishes, owns and maintains the meters in its distribution system. *See*, PECO Energy Company Tariff Electric Pa. P.U.C. No. 7, Supplement No. 46, Section 6.4, page 14; *see also*, Section 14.1, page 24.

The Complainants, James Quigley and Teresa Mendez-Quigley are PECO customers who have been notified of PECO's intent to install a smart meter at the service address. Answer at 1-2.

Act 129 of 2008 (Act 129 or Act), *inter alia*, amended Chapter 28 of the Public Utility Code (Code) and required EDCs with more than 100,000 customers to file smart meter technology procurement and installation plans for Commission approval and to furnish smart meter technology within its service territory in accordance with the provisions of the Act. Section 2807(f) of the Code provides as follows:

(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 General Assembly found that it was “in the public interest” to implement the measures set forth in Act 129 and that the universal installation of smart meters would enhance the “health, safety and prosperity” of Pennsylvania’s citizens through the “availability of adequate, reliable, affordable, efficient and environmentally sustainable electric service at the least cost.” *See*, H.B. 2200, 192d Gen. Assemb., Reg. Sess. (Pa. 2008).

By Order entered in 2009, the Commission directed all EDCs subject to Act 129’s smart meter requirements, including PECO, to universally deploy smart meter technology within their respective service territories in the Commonwealth in accordance with a depreciation schedule not to exceed fifteen years and in accordance with other guidelines established therein. *See, Smart Meter Procurement and Installation*, Docket No. M-2009-2092655 (Implementation Order entered June 24, 2009) (*Smart Meter Installation Order*). PECO sought and obtained the Commission’s

approval to complete the installation of AMI meters for substantially all customers within its service territory by the end of 2014. *See, Smart Meter Technology Procurement and Installation Plan Phase II* filed by PECO, as revised, by the Joint Petition for Settlement, Docket No. M-2009-2123944 (Order entered August 15, 2013) (*PECO Smart Meter Phase II Plan*).

## **II. History of the Proceeding**

On August 1, 2017, the Quigleys filed a Complaint with the Commission against PECO objecting to the installation of a smart meter at the service address due to health concerns. As relief, the Quigleys requested that the Commission: (1) exempt the Complainants' residence from smart meter installation due to health concerns, (2) require PECO to install an analog meter, and (3) require PECO to stop threatening to shut off service at the service address. I.D. at 1-2.

On August 11, 2017, PECO filed an Answer to the Complaint (Answer). In its Answer, PECO denied all material allegations of fact in the Complaint. PECO also asserted that the Company was installing the smart meter in accordance with Act 129 and that the Company had the right to terminate service when a customer refuses to allow the Company access to its meters and that a ten-day termination notice was sent. PECO requested that the matter be dismissed. Answer at 1-3.

On August 20, 2017, the Complainants filed a Response to the Answer, requesting a hearing. I.D. at 2.

An Initial Hearing Notice was issued on September 1, 2017, setting the hearing for April 17-18, 2018. A prehearing order was issued on September 7, 2017, setting discovery and other deadlines. *Id.*

The hearing was held as scheduled. The Complainants represented themselves and presented no witnesses. *Id.*

PECO was represented by Ward L. Smith, Esquire, Shawane Lee, Esquire, and Thomas Carl Watson, Esquire. PECO presented the following witnesses: Mr. Bryan Uber, Mr. Glenn Pritchard, Christopher Davis, Ph.D., and Mark Israel, M.D. *Id.*

On May 30, 2018, a briefing order was issued, requiring Main Briefs to be filed by July 10, 2018 and Reply Briefs by August 7, 2018. *Id.*

On June 12, 2018, the Complainants requested an extension of time to file briefs. PECO did not object and the parties were given until August 3, 2018, to file Main Briefs and until September 7, 2018, to file Reply Briefs. I.D. at 3.

On July 16, 2018, PECO filed a Motion to Admit Thomas Carl Watson, Esquire *Pro Hac Vice*. The Complainants filed objections to that motion on July 26, 2018. By order issued on August 17, 2018, the motion was granted. (*August 2018 Order*). On August 27, 2018, the Complainants filed a Motion for Leave for Interlocutory Appeal of the *Pro Hac Vice* ruling. PECO filed its opposition to interlocutory review on September 9, 2018. *Id.*

By Order entered on September 20, 2018, the Commission declined the interlocutory review and returned the matter to the Office of Administrative Law Judge. *Id.*

The record closed on September 21, 2018.

On December 31, 2018, the Commission served ALJ Heep's Initial Decision in *James Quigley and Teresa Mendez-Quigley v. PECO Energy Company*, Docket No. C-2017-2617558.

As noted above, on January 19, 2019, the Complainants filed Exceptions to the Initial Decision. On January 30, 2019, PECO filed Replies to Exceptions.

On November 4, 2020, the Commission entered an Order and Notice, at Docket No. M-2009-2092655, pursuant to 66 Pa. C.S. § 501, instituting a stay of certain formal complaint proceedings then pending before the Commission involving challenges to EDC deployment of smart meter technology as being in violation of Section 1501 of the Code (*November 4, 2020 Stay Order*). The *November 4, 2020 Stay Order* also directed that the stay would apply to any new formal complaints filed with the Commission claiming that EDC deployment of smart meter technology was a violation of Section 1501, and that the stay would remain in place until it was lifted by further Commission action. By Order entered November 14, 2023, at Docket No. M-2009-2092655, the Commission lifted the stay. Notice was provided on November 14, 2023, informing the Complainants of the lifting of the stay and their procedural rights and obligations under the Commission's regulations.

### **III. Discussion**

#### **A. Legal Standards**

##### **1. General Burden of Proof for Complaint Proceeding**

As the party seeking affirmative relief from the Commission, the complainant in a formal complaint proceeding has the burden of proof. 66 Pa. C.S. § 332(a). The evidence necessary to meet that burden must be substantial. 2 Pa. C.S.

§ 704. “Substantial evidence” is such relevant evidence that a reasonable mind might accept as adequate to support a conclusion. *Consolidated Edison Company of New York v. National Labor Relations Board*, 305 U.S. 197, 229, 59 S.Ct. 206, 217. 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. PUC*, 413 A.2d 1037 (Pa. 1980).

To establish a sufficient case and satisfy the burden of proof, the complainant must show that the respondent utility is responsible or accountable for the problem described in the Complaint. *Patterson v. The Bell Telephone Company of Pennsylvania*, 72 Pa. P.U.C. 196 (1990). The offense must be a violation of the Code, a Commission Regulation or Order or a violation of a Commission-approved tariff. 66 Pa. C.S. § 701. Such a showing must be by a “preponderance of the evidence.” *Samuel J. Lansberry, Inc. v. Pa. PUC*, 578 A.2d 600 (Pa. Cmwlth. 1990), *alloc. denied*, 529 Pa. 654, 602 A.2d 863 (1992). That is, the Complainant’s evidence must be more convincing, by even the smallest amount, than that presented by the respondent. *Se-Ling Hosiery, Inc. v. Margulies*, 364 Pa. 45, 70 A.2d 854 (1950).

The burden of proof is comprised of two distinct burdens: (1) the burden of production; and (2) the burden of persuasion. *Hurley v. Hurley*, 2000 Pa. Super. 178, 754 A.2d 1283 (2000). The burden of production, also called the burden of going forward with the evidence, determines which party must come forward with evidence to support a particular claim or defense. *Scott and Linda Moore v. National Fuel Gas Distribution*, Docket No. C-2014-2458555 (Final Order issued August 25, 2015) (*Moore*). The burden of production goes to the legal sufficiency of a party’s claim or affirmative defense. *See, Id.* It may shift between the parties during a hearing. A complainant may establish a *prima facie* case with circumstantial evidence. *See, Milkie v. Pa. PUC*, 768 A.2d 1217, 1220 (Pa. Cmwlth. 2001) (*Milkie*). If a complainant introduces sufficient evidence to establish legal sufficiency of the claim, also called a

*prima facie* case, the burden of production shifts to the utility to rebut the complainant's evidence. *See, Moore*.

If the utility introduces evidence sufficient to balance the evidence introduced by the complainant, that is, evidence of co-equal value or weight, the complainant's burden of proof has not been satisfied and the burden of going forward with the evidence shifts back to the complainant, who must provide some additional evidence favorable to the complainant's claim. *See, Milkie*, 768 A.2d at 1220; *see also, Burleson v. Pa. PUC*, 443 A.2d 1373 (Pa. Cmwlth. 1982), *aff'd*, 501 Pa. 433, 461 A.2d 1234 (1983).

Having produced sufficient evidence to establish legal sufficiency of a claim, the party with the burden of proof must also carry the burden of persuasion to be entitled to a favorable ruling. *See, Moore*. While the burden of production may shift back and forth during a proceeding, the burden of persuasion never shifts; it always remains on a complainant as the party seeking affirmative relief from the Commission. *See, Milkie*, 768 A.2d at 1220; *see also, Riedel v. County of Allegheny*, 633 A.2d 1325, 1328, n.11 (Pa. Cmwlth. 1993); *see also, Burleson*, 443 A.2d at 1375. It is entirely possible for a party to carry the burden of production but not be entitled to a favorable ruling because the party did not carry the burden of persuasion. *See, Moore*. In determining whether a complainant has met the burden of persuasion, the fact-finder<sup>1</sup> may engage in determinations of credibility, may accept or reject testimony of any witness in whole or in part, and may accept or reject inferences from the evidence. *See,*

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<sup>1</sup> In formal complaint proceedings, the Commission, not the ALJ, is the ultimate fact-finder; it weighs the evidence and resolves conflicts in testimony. When reviewing the initial decision of an ALJ, the Commission has all the powers that it would have had in making the initial decision except as to any limits that it may impose by notice or by rule. *Milkie*, 768 A.2d at 1220, n. 7 (citing, *inter alia*, 66 Pa. C.S. § 335(a)).

*Moore*, citing *Suber v. Pennsylvania Com'n on Crime and Delinquency*, 885 A. 2d 678, 682 (Pa. Cmwlth. 2005) (*Suber*).

## **2. Burden of Proof Applied to Section 1501<sup>2</sup> Complaint Challenging Smart Meter Installation**

In *Povacz, et al. v. Pa. PUC*, 280 A.3d 975 (Pa. 2022) (*Povacz II*), which dealt with consolidated appeals involving the deployment of smart meters by PECO Energy Company, the Supreme Court of Pennsylvania (Supreme Court) reversed the Commonwealth Court's October 8, 2020 decision in *Povacz v. Pa. PUC* (241 A.3d 481) (*Povacz I*), and thereby affirmed the Commission's March 28, 2019 and May 9, 2019 Orders in *Maria Povacz v. PECO Energy Company*, C-2015-2475023 (*Povacz 2019 Order*); *Laura Sunstein Murphy v. PECO Energy Company*, C-2015-2475726 (*Laura Sunstein Murphy*); and *Cynthia Randall and Paul Albrecht v. PECO Energy Company*, C-2016-2537666 (*Cynthia Randall*). By *Povacz II*, the Supreme Court affirmatively established that there is no "opt-out" provision for installation of a smart meter pursuant to Act 129 and that to raise a viable challenge to smart meter installation, a customer must satisfy the preponderance of evidence standard for a violation of Section 1501 of the Code. *Povacz II* at 280 A. 3d at 983-984.

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<sup>2</sup> The applicable Commission Regulation governing an EDC's provision of safe service is codified at 52 Pa. Code § 57.28(a)(1). Pursuant to Section 57.28(a)(1), an EDC must use reasonable efforts to properly warn and protect the public from danger and to exercise reasonable care to reduce the hazards to which customers may be subjected to by reason of the EDC's provision of electric utility service and its associated equipment and facilities. See, 52 Pa. Code § 57.28(a)(1). See, *Final Rulemaking Order, Rulemaking Re: Electric Safety Regulations, 52 Pa. Code Chapter 57*, Docket No. L-2015-2500632 (Order entered April 20, 2017) (*Electric Safety Final Rulemaking Order*).

Pursuant to Section 1501 of the Code, all public utilities have a duty to maintain “adequate, efficient, safe, and reasonable service<sup>3</sup> and facilities” and to make repairs, changes, and improvements that are necessary or proper for the accommodation, convenience, and safety of its patrons, employees, and the public.

*See*, 66 Pa. C.S. § 1501. Section 1501 of the Code, provides, in pertinent part, as follows:

Every public utility shall furnish and maintain adequate, efficient, safe, and reasonable service and facilities, and shall make all such repairs, changes, alterations, substitutions, extensions, and improvements in or to such service and facilities as shall be necessary or proper for the accommodation, convenience, and safety of its patrons, employees, and the public . . . Such service and facilities shall be in conformity with the regulations and orders of the commission.

66 Pa. C.S. § 1501.

As previously noted, in *Povacz II*, the Pennsylvania Supreme Court not only affirmed the Commission’s determination that there is no “opt-out” provision for smart meter installation in either Act 129, the Code, Commission Regulations, or Orders,

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<sup>3</sup> The term “service” is defined broadly under Section 102 of the Code to include any and all acts done or rendered or performed and any and all things furnished or supplied and any and all facilities, used, furnished or supplied by public utilities. *See*, 66 Pa. C.S. § 102. The statutory definition of “service” is also to be broadly construed by the Commission and the courts. *Country Place Waste Treatment Co., Inc. v. Pa. PUC*, 654 A.2d 72 (Pa. Cmwlth. 1995).

but also confirmed that challenges to smart meter installation, other than an “opt-out,” may arise under Section 1501<sup>4</sup> of the Code. Therein, the Supreme Court stated:

[W]e conclude that Act 129 does mandate that EDCs furnish smart meters to all electric customers within an electric distribution service area and does not provide electric customers the ability to opt out of having a smart meter installed. An electric customer with concerns about smart meters may seek an accommodation from the PUC or EDC, but to obtain one the customer must establish by a preponderance of the evidence that installation of a smart meter violates Section 1501 [of the Code].

*Povacz II*, at 983-984; *See, Povacz v. PECO Energy Company*, Docket No. C-2012-2317176 (Opinion and Order entered January 24, 2013) (*Povacz 2013 Order*; *see also, Frompovich v. PECO Energy Co.*, Docket No. C-2015-2474602 (Opinion and Order entered May 3, 2018) (*Frompovich*).

In applying Section 1501 to a complaint challenging the installation of smart meter technology, the Supreme Court affirmed the Commission’s Opinion and Order in the *Povacz 2019 Order*, stating:

A customer seeking affirmative relief from the [Commission] must prove by a preponderance of the evidence that the named utility was responsible or accountable for the problem described in the complaint and that the offense was a violation of the Code, a [Commission] regulation or [o]rder, or a violation of a [Commission]-approved tariff. [See] 66

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<sup>4</sup> The Commission has also determined that if a customer’s formal complaint raises a claim under Section 1501, related to the safety of a utility’s installation and use of a smart meter at the customer’s residence, such a claim is legally sufficient to proceed to an evidentiary hearing before an ALJ. To satisfy the burden of proof a complainant may be required to present medical documentation and/or expert testimony demonstrating that the installation of a smart meter constitutes unsafe or unreasonable service. *Povacz II* at 1000, citing *Susan Kreider v. PECO Energy Company*, P-2015-2495064, 2016 WL 406549, at \*14 (Pa. P.U.C. January 28, 2016) (*Kreider*).

Pa.C.S. §§ 332(a), 701; *Samuel J. Lansberry, Inc. v. Pa. Pub. Util. Comm'n*, . . . 134 Pa. Commw. 218, 578 A.2d 600 ([Pa. Cmwlth.] 1990)[.] . . .

Although Act 129 does not provide an electric customer [] with the right to opt-out of the installation of a smart meter at their residence, they [sic] may file a complaint raising a claim that installation of a smart meter violates Section 1501 of the Code.

. . . .

Pursuant to [S]ection [1501 of the Code], an EDC (as a public utility) must provide service that is, *inter alia*, both safe and reasonable. **To carry their burden of proof on a Section 1501 [of the Code] claim, a smart meter challenger may be required to present medical documentation and/or expert testimony demonstrating that the furnishing of a smart meter constitutes unsafe or unreasonable service** in violation of Section 1501 [of the Code] under the circumstances presented. *Susan Kreider v. PECO Energy Co.*, P-2015-2495064, 2016 WL 406549, at \*14 (Pa. P.U.C. Jan. 28, 2016).

*Povacz II*, 280 A.3d at 999-1000 (emphasis added; footnote omitted).<sup>5</sup>

In applying the standard of proof to scientific or expert medical evidence in support of alleged adverse health effects, the Commission ruled in the *Povacz 2019 Order*, and was subsequently affirmed by the Supreme Court in *Povacz II*, that in order to prevail in a Section 1501 claim against an EDC alleging that an AMI meter caused or will cause adverse health effects or harm to human health, the Complainant must demonstrate

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<sup>5</sup> With respect to the evidence necessary to support a challenge to smart meter installation under Section 1501, the Commonwealth Court has held that at the hearing, a complainant may prove his/her claim through the complainant's own personal testimony and/or "the testimony of others as well as other evidence that goes to that issue." *Romeo v. Pa. PUC*, 154 A.3d 422, 430 (Pa. Cmwlth. 2017) (*Romeo*).

by a preponderance of the evidence a “conclusive causal connection” between the harm to human health and the radio frequency fields (RFs)<sup>6</sup> from the AMI meter<sup>7</sup>.

### 3. Other Relevant Legal Standards

In addition to establishing that a complaint challenging the installation of a smart meter may arise under Section 1501, the Supreme Court’s decision in *Povacz II* acknowledged the Commonwealth Court’s rejection of a constitutional claim for exemption from smart meter installation predicated on a violation of “bodily integrity.” The Supreme Court noted the Commonwealth Court’s denial of a claim under the Fourteenth Amendment, stating:

The Commonwealth Court rejected Customers’ constitutional arguments, persuaded by the reasoning of *Naperville Smart Meter Awareness v. City of Naperville*, 69 F. Supp. 3d 830 (N.D. Ill. 2014) (“*Naperville I*”). Therein, a federal district court rejected the customers’ “*Fourteenth Amendment* bodily integrity argument because their complaint failed to identify an arbitrary deprivation of a recognized liberty or property interest” and to aver that the city’s decision to employ smart meters was arbitrary. *Id.* at 839 (internal quotations marks omitted).

*Povacz II* at 985, fn. 8. As the Supreme Court denied allocatur as to any constitutional claims, the Commonwealth Court’s holding stands.

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<sup>6</sup> RF is an abbreviation for radio frequency and is also used here to denote RF fields or RF signals.

<sup>7</sup> See, *Povacz 2019 Order* slip op., at 28-29 (citing *Letter of Notification of Philadelphia Electric Company Relative to the Reconstructing and Rebuilding of the Existing 138 kV Line to Operate as the Woodbourne-Heaton 230 kV Line in Montgomery and Bucks Counties*, 1993 WL 855896 (Pa. P.U.C. 1993), Docket No. A-110550F0055 (Final Order entered November 12, 1993) (*Woodbourne-Heaton Final Order*), slip op. at 11).

Further, the Supreme Court noted that a customer must be connected to the distribution system to receive electric service confirming that EDCs operate in a universal basis. *Povacz II* at 993. As such, the Court concluded that by obtaining service from their incumbent EDC, customers contractually accept the EDC's Commission-approved Tariff, including the installation of smart meter technology. *Id* at 994. Therefore, the Supreme Court found that "the authority to select and install a certain type of electric meter rests solely with the EDCs, [...] not the customer." *Id*.

Finally, we note that any argument or Exception that we do not specifically delineate shall be deemed to have been duly considered and denied without further discussion. The Commission is not required to consider expressly or at length each contention or argument raised by the parties. *Consolidated Rail Corp. v. Pa. PUC*, 625 A.2d 741 (Pa. Cmwlth. 1993); *see also, generally, University of Pennsylvania v. Pa. PUC*, 485 A.2d 1217 (Pa. Cmwlth. 1984).

## **B. ALJ's Initial Decision**

In the Initial Decision, ALJ Heep made seventy-three Findings of Fact (FOF) and reached eight Conclusions of Law (COL). *See, I.D.* at 3-11, 31-32. The Findings of Fact and Conclusions of Law are incorporated herein by reference and are adopted without comment unless they are either expressly or by necessary implication rejected or modified by this Opinion and Order.

In her disposition, ALJ Heep addressed the following issues: (1) the Complainants' refusal of the advanced metering infrastructure or smart meter and shut-off notices; (2) the Complainants' request for an analog meter and an opt-out; (3) RFs and the health of Ms. Quigley; and (4) the Complainants' procedural due process concerns. *I.D.* at 12-18.

## 1. Refusal of AMI meter and Shut Off Notices

The ALJ noted that the Complainants contacted PECO on several occasions and stated that they did not want an AMI electric meter or AMI gas metering module (gas module) installed at the service address. The ALJ provided that PECO attempted to install the smart meter and successfully installed a gas module after the Complainants contacted PECO to refuse the smart meter. I.D. at 16.

The ALJ explained that PECO's installation of the gas module and the Company's attempt to install the smart meter were not violations. The ALJ further explained that the shut off notices from PECO were also not a violation. The ALJ reasoned that by installing the gas module, PECO was seeking to comply with Commission Orders and its tariff. Similarly, regarding the electric smart meter, PECO was seeking to comply with the Commission's Order to EDCs with greater than 100,000 customers to implement a plan to install smart meters for their customers. I.D. at 16 (citing *Smart Meter Installation Order*).

Additionally, the ALJ noted that PECO's tariff provides that the Company owns and maintains the meters. The Company's tariff 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 or changing any or all equipment belonging to the Company. I.D. at 16-17.

Because the Complainants refused installation of the smart meter, the ALJ provided, the Company may terminate service to the Complainants on reasonable notice in accordance with its tariff. I.D. at 17 (citing *Frompovich*).

## **2. Request for an Analog Meter, Opt-Out**

The ALJ found that there is no basis upon which to order PECO to install an analog meter at the service address. The ALJ noted that the Company owns and maintains the meters and selects the type of meter to be used. I.D. at 18 (citing PECO Electric Tariff Sections 6.4, 14.5).<sup>8</sup> The ALJ also found that 52 Pa. Code § 56.12 requires that a company shall render bills based on actual readings except for particular exceptions. The ALJ stated that the Complainants have presented no evidence that they qualify for any of the exceptions. I.D. at 18.

The ALJ found that the Complainants could not prevail on their claim that Act 129 allows for an opt-out of smart meter installation. I.D. at 19 (citing *Povacz 2013 Order*).

## **3. RFs and the Health of Ms. Mendez-Quigley**

The ALJ noted that the Complainants contend that installation of a smart meter at the service address would be unreasonable given the medical state of Teresa Mendez-Quigley. The ALJ provided that the Complainants have attempted to minimize RF exposure in their home by using hardwired computers and not having a cordless phone or other wireless devices. I.D. at 19-20 (citing FOFs 67-72).

The ALJ provided that Mr. Quigley, based on his knowledge of scientific publications, referenced reports that he found valid which suggested that RFs may impact the medical condition of Ms. Mendez-Quigley. The ALJ stated that the Complainants established a *prima facie* case. I.D. at 22.

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<sup>8</sup> In the current PECO tariff, this reference would be to Sections 6.4 and 14.1, Supplement 46.

However, the ALJ found that PECO's rebuttal evidence outweighed that of the Complainants. The ALJ noted that according to PECO witness, Mr. Glenn Pritchard, the meters PECO use would transmit less often than the factory settings – from every 90 minutes to three or four times a day. I.D. at 23 (citing FOFs 50-51). Mr. Pritchard testified that PECO has three types of meters available. Each has a FlexNet radio to send usage information to PECO. Two models also have a Zigbee radio that can communicate to smart appliances in the customer's home. The Zigbee radio can be turned off in one of the models if the customer chooses to do so. I.D. at 23 (citing Tr. at 218-235).

The ALJ noted that according to Mr. Pritchard, the signal strength used for transmission in PECO's system does not have to be as strong as other smart meter systems because PECO operates its AMI system on a licensed frequency and therefore the PECO signal has less competition. I.D. at 24 (citing Tr. at 252). Mr. Pritchard also testified that PECO is not using a mesh AMI system that is of concern to the Complainants. I.D. at 24 (citing Tr. at 110, 229). Similarly, the ALJ noted Mr. Pritchard's testimony that the Complainants' meter would likely be set to signal every four hours for a total of 0.42 seconds of transmissions per day. I.D. at 24 (citing Tr. at 257).

The ALJ summarized the testimony of Dr. Christopher Davis, an expert presented by PECO who has a Ph.D. in Physics. Dr. Davis testified that the FlexNet and Zigbee radios that are part of the PECO AMI meters have outputs that are millions of times smaller than the exposure limits set by the Federal Communications Commission (FCC). I.D. at 24 (citing Tr. at 281, PECO Exh. CD-5). Dr. Davis determined that the exposure from an AMI meter is 1,679 times smaller than the cumulative average radio frequency exposure from UHF TV. I.D. at 25 (citing Tr. at 286-287; PECO Exh. CD-11). Dr. Davis also explained that if the automated meter reading (AMR) meter currently at the Complainants' home was replaced by an AMI meter, the Complainants'

exposure to RFs would be reduced by 79 percent. I.D. at 25 (citing Tr. at 287; PECO Exh. CD-12).

The ALJ noted that according to Dr. Mark Israel, an expert presented by PECO who is a medical doctor with extensive research experience, there is no reliable medical basis upon which to conclude that RF fields from PECO's AMI or AMR meters cause, contribute to or exacerbate Ms. Mendez-Quigley's medical conditions. I.D. at 27 (citing Tr. at 344-350).

The ALJ concluded that the evidence presented does not support the finding that installation of any of the PECO smart meters at the service address would be detrimental to the health of Ms. Mendez-Quigley in violation of Section 1501. The ALJ determined that the Complainants did not present a preponderance of evidence to rebut the competent and expert testimony of PECO's witnesses. Additionally, the ALJ noted that the Quigleys reported no negative effects of the existing AMR meter at the service address and the proposed AMI meter would result in a decrease of 79% in RFs. The ALJ concluded that the Complainants cannot prevail on this issue. I.D. at 30.

#### **4. Complainants' Procedural Due Process Concerns**

The ALJ noted that the Complainants contend that installation of an AMI meter at the service address is a violation of due process. I.D. at 30 (citing Quigley M.B. at 47). The ALJ stated that due process is satisfied when administrative agencies, like the Commission, provide notice and the opportunity to appear and be heard to the parties appearing before them. I.D. at 31 (citing *Schneider v. Pa. PUC*, 479 A.2d 10 (Pa. Cmwlth. 1984)). The ALJ stated that the Complainants' filed a Complaint with the Commission and the administrative procedures and the hearing provided the Complainants with an opportunity to be heard. The ALJ found that there is no violation of the Complainants' due process rights here. I.D. at 31.

Based on all the above, the ALJ denied the Complaint finding that there is insufficient evidence that the Complainants will be adversely affected by the smart meter or that PECO's use of a smart meter will constitute unsafe or unreasonable service in violation of Section 1501. I.D. at 32 (COL 6 citing *Kreider; Woodbourne-Heaton*). The ALJ concluded that the Complainants have not established that installation of an AMI meter at the serve address is unsafe or unreasonable. I.D. at 23 (COL 7 citing 66 Pa. C.S. § 332(a)).

### **C. Exceptions, Replies, and Disposition**

The Complainants Exceptions<sup>9</sup> generally pertain to the following: (1) Act 129 and an opt-out request; (2) burden of proof; (3) PECO's witnesses; (4) due process; and (5) issues with the Initial Decision including the use of the term "EFs" by the ALJ and two Conclusions of Law.

To the extent the Complainants' Exceptions include commentary alleging bias without foundation, such commentary is deemed to be immaterial, impertinent, and otherwise irrelevant to the disposition of this matter. Therefore, pursuant to 52 Pa. Code § 1.4(e), we shall strike such statements from our consideration of the Complainants' Exceptions.

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<sup>9</sup> We acknowledge that the format of the Complainants' Exceptions does not strictly comply with Section 5.533(b) of our Regulations, 52 Pa. Code § 5.533(b), which requires that exceptions be numbered, identify the finding of fact and conclusions of law to which exception is taken, and cite to the relevant pages of the Initial Decision. Nevertheless, particularly because the Complainants are appearing *pro se*, we will accept the Exceptions as filed pursuant to Section 1.2(a) of our Regulations, 52 Pa. Code § 1.2(a), to secure a just, speedy, and inexpensive determination. The Complainants did not number their Exceptions. We have numbered them by topic and combined those arguments that are repeated.

**1. Complainants' Arguments Regarding the Commission's No Opt-Out Interpretation of 66 Pa. C.S. § 2807(f)**

**a. Exception No. 1 (pp. 1-2 and 16): Act 129, Opt-In and *Ultra Vires* and Exception No. 2 (pp. 2-3): Request for an Analog Meter and Discussion of Section 1501**

In their Exception No. 1, the Complainants argue that the ALJ should find the Commission's Implementation<sup>10</sup> Order *ultra vires*,<sup>11</sup> "restore Act 129 as the enforceable law, making smart meters an opt-in, if desired (except in new construction)." Exc. at 1. The Complainants allege that the ALJ did not address whether the PUC's Implementation Order was *ultra vires*. Exc. at 16.

The Complainants contend that Act 129 does not require the installation of smart meters and that the Commission is in violation of Act 129. Exc. at 1-2.

In their Exception No. 2, the Complainants contend that Section 1501 requires PECO to offer them an analog meter as an accommodation. Exc. at 2-3.

**b. Replies**

PECO provides that the Complainants argue that "Act 129 does not mandate said installation on all customers." R. Exc. at 2 (citing Quigley M.B. at 14-17). The Complainants request that "medical opt-outs should be implemented." R. Exc. at 2 (citing Quigley M.B. at 48-49). PECO contends that the ALJ correctly concluded that the

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<sup>10</sup> *Smart Meter Procurement and Installation*, Docket No. M-2009-2092655 (Implementation Order entered June 24, 2009) (*Smart Meter Installation Order*).

<sup>11</sup> *Ultra vires*: A body exercising an invalid excess or power of authority. Black's Law Dictionary, 2nd ed.; <https://thelawdictionary.org/ultra-vires/>.

Commission has ruled that there is no opt-out available. R. Exc. at 2 (citing I.D. at 17-19).

PECO notes that the Complainants' claim that the ALJ did not use their preferred term – "*ultra vires*" when deciding this issue. PECO explains that *ultra vires* is Latin for "beyond the powers." PECO explains further that, as PECO understands it, the Quigleys are arguing that the Commission's ruling that Act 129 requires universal deployment of smart meters was "beyond the powers" of the Commission because that interpretation does not represent the will of the General Assembly as expressed in Act 129. R. Exc. at 2, n. 2.

PECO argues that the Commission has correctly interpreted and implemented Act 129 and should not grant Exception No. 1. R. Exc. at 4.

PECO contends that Exception No. 2 is another request to "opt out" of the universal deployment of smart meters. PECO maintains that to prevail under a Section 1501 claim, the Quigleys would need to prove by a preponderance of the evidence that PECO's AMI meter will adversely affect their health. R. Exc. at 5 (citing *Frompovich* at 57-58).

**c. Disposition**

In their Exception No. 1, the Complainants disagree with the Commission's interpretation of Act 129 and argue that they should be able to opt out of a smart meter installation at the service address. We disagree with the Complainants' argument that the

Commission’s Smart Meter Installation Order and its implementation of Act 129 was done *ultra vires*. This argument was considered and rejected in *Povacz II* as follows:

“[the Court’s] comprehensive reading of Act 129 leads us to conclude that the statute is not ambiguous and that Section 2807(f)(2) imposes a mandate on EDCs to furnish smart meter technology to all electric customers within an electric distribution service area, regardless of a customer's preference. In reaching this conclusion, we have considered Section 2807(f)(2) in its context as the implementation provision of Act 129.27.

*Povacz II* at 992.

Because the Pennsylvania Supreme Court’s holding in *Povacz II* expressly found that the “statute is not ambiguous” and there is no “opt-out” provision under Act 129, we shall deny Exception No. 1.

In *Povacz II*, the Pennsylvania Supreme Court expressly concluded that the complainant’s assertion of the right to “opt-out” of Act 129 was unfounded. The Supreme Court further found that a customer may seek an accommodation to smart meter installation, provided the customer first established a violation under Section 1501 of the Code. Therein, the Supreme Court stated:

[W]e conclude that Act 129 does mandate that EDCs furnish smart meters to all electric customers within an electric distribution service area and does not provide electric customers the ability to opt out of having a smart meter installed. An electric customer with concerns about smart meters may seek an accommodation from the PUC or EDC, but to obtain one the customer must establish by a

preponderance of the evidence that installation of a smart meter violates Section 1501 [of the Code].

*Povacz II*, at 983-984. Therefore, by establishing that there is no “opt-out” permitting a customer to refuse smart meter installation, the Supreme Court’s holding in *Povacz II* is controlling on the question. In the present case, the Complainants’ Exceptions assert that they are seeking a “substitution” or an “accommodation,” but fail to establish any violation by the utility under Section 1501 of the Code, as a prerequisite to seeking an accommodation. Therefore, the Complainants’ Exceptions are properly viewed as seeking an opt-out of smart meter installation. Accordingly, to the extent the Complainants assert a right to opt out of Act 129 to refuse smart meter installation, we shall deny the Complainants’ Exception No. 2 without further discussion.

## **2. Complainants’ Arguments Regarding the Burden of Proof**

### **a. Exception No. 3 (pp. 3-7): Health Matters**

In their Exception No. 3, the Complainants reiterate their arguments regarding their health concerns for Ms. Mendez-Quigley. The Complainants argue that the ALJ and the Commission ignored a doctor’s recommendation for Ms. Mendez-Quigley. Exc. at 3-6. The Complainants contend that the “preponderance of the peer-reviewed literature, finds harm to one or more aspects of human health.” Exc. at 6.

### **b. Replies**

PECO provides that the Quigleys are referring to Quigley Exhibit A-2 (also PECO’s Exhibit BU-6), which is a letter from Dr. Allan Crimm that the Quigleys sent to PECO. The letter states in its entirety: “To Whom It May Concern: It is my medical recommendation that this patient reduce involuntary electromagnetic exposure including

wireless transmission.” PECO notes that it objected to the admissibility of the letter (Tr. at 27-28) on the grounds that it is hearsay because it contains a concluding opinion from Dr. Crimm with respect to exposure to electromagnetic fields and health, Dr. Crimm was not presented for cross-examination or to provide the basis for his opinion, and that to allow his opinion to be admitted as substantive evidence would violate PECO’s due process rights. PECO submits that the ALJ sustained that objection. R. Exc. at 6 (citing Tr. at 33). PECO maintains that the ALJ did not ignore the Crimm letter. R. Exc. at 6 (citing I.D. at 5, FOF 24).

PECO avers that the Complainants did not provide a preponderance of evidence in support of their Complaint. According to PECO, Mr. Quigley testified on health issues although he was not offered or recognized as an expert in health or any other field. PECO asserts that the published research Mr. Quigley discussed is hearsay and cannot be used to prove the truth of the matters asserted therein. PECO contends that its scientific testimony demonstrated that there is no reliable basis to conclude that radiofrequency fields from PECO’s AMI or AMR meters cause, contribute to or exacerbate any of the medical conditions identified by the Quigleys. R. Exc. at 7 (citing Tr. at 341-351; PECO Exh. MI-3).

While the Quigleys relied heavily upon an article by Trevor Marshall of the Autoimmunity Research Foundation (Quigley Exh. B-2), PECO contends that it is not convincing and not sufficient to meet the Complainants’ burden of proof. PECO provides that according to the article, the researchers obtained some “microwave-shielding fabric” and sewed sixty-four “sleeping caps” which they distributed to sixty-four subjects. The subjects, many of whom were being treated for auto-immune diseases, were asked to wear the caps for four hours while asleep and four hours while awake. The subjects were then asked how they felt. R. Exc. at 7-8. PECO witness, Dr. Israel testified that the article was “simply a description of some poorly described hats that were given to some poorly described patients, who were asked some poorly described

questions...[I]n my review of more than a dozen medical databases, this so-called article never came up...I never heard of the organization. I never heard of the individual.”  
R. Exc. at 8 (citing Tr. at 364-368).

PECO notes that the Complainants primarily rely on the Marshall article for their claim that they demonstrated by a preponderance of the evidence that PECO’s AMI meter will exacerbate Ms. Mendez-Quigley’s health issues. PECO provides that the ALJ addressed this article and the other testimony, stating:

For example, a document from the Autoimmunity Foundation presented by the Complainants was characterized by Dr. Israel as an “article” as opposed to scientific research because the writers did not follow principles of scientific studies, using no control group or placebos.

R. Exc. at 8 (citing I.D. at 28).

PECO avers that the ALJ correctly concluded that the Marshall article was not convincing and not sufficient to meet the Complainants’ burden of proof. R. Exc. at 8.

**c. Disposition**

As noted *supra*, in affirming the Commission’s 2019 *Povacz Order*, the Pennsylvania Supreme Court held in *Povacz II* that, in order to prevail in a Section 1501 claim involving the safety of smart meters, and specially, against an EDC alleging that an AMI meter caused, or will cause, adverse health effects or harm to human health, the Complainant must demonstrate, by a preponderance of the evidence, a “conclusive causal connection” between the harm to human health and the RFs from the AMI meter. *See, Povacz II* at 1006. In that context, the lay opinion of the Complainants does not provide

a conclusive, causal connection between the harm to human health and the RFs from the AMI meter. *Id.*

The Supreme Court reiterated that complainants seeking relief from the Commission must satisfy their burden of proof by a preponderance of the evidence. The Court explained that inconclusive evidence – evidence that does not lead to a conclusion of a definite result one way or the other – does not meet even the minimal requirements of the preponderance of the evidence standard. *Id.* at 1005. The Court further opined that while a customer’s evidence does not need to prove their assertion beyond any doubt, evidence of a mere possibility that harm could result is insufficient to satisfy the preponderance of the evidence standard. *Id.* at 1008.

The Supreme Court further instructed that the burden of proof is two-fold for Section 1501 claims involving the safety of smart meters and RF emissions. First, a customer must present expert opinion rendered to a reasonable degree of scientific certainty that radio frequency emissions from smart meters cause adverse health effects. Next, a customer must present expert opinion rendered to a reasonable degree of medical certainty that RF emissions from the smart meters, either alone or cumulative to other sources of RF emissions, caused them harm. The utility may then refute the customer’s evidence by providing scientific and/or medical expert testimony that, within a reasonable degree of certainty, the RF emissions from smart meters did not cause the alleged harm. *Id.* Once the parties have presented their evidence, the onus then falls on the fact finder to weigh the evidence and determine whether it is more likely than not that the smart meter caused the customer harm. *Id.* at 1006.

In the present case, the ALJ’s analysis and disposition turned on the relative weight of the evidence presented by the Complainants to establish that installation of a smart meter would constitute a violation of the Code, a Commission Regulation or Order or a violation of a Commission-approved tariff, versus the weight of the evidence

presented by the Company in opposition to the Complaint. The ALJ concluded that the evidence presented by the Company outweighed the evidence presented by the Complainants on all issues. We concur. Upon review, we agree with the ALJ's well-reasoned analysis in the Initial Decision and the ALJ's conclusion that the Complainants did not meet their burden to demonstrate that the Company's installation of the smart meter at the service address constitutes unreasonable or inadequate service. I.D. at 32.

To prevail in a Section 1501 claim against an EDC alleging that an AMI meter caused, or will cause, adverse health effects or harm to human health, the Complainant must demonstrate, by a preponderance of the evidence, a "conclusive causal connection" between the harm to human health and the RFs from the AMI meter. *See, 2019 Povacz Order*. Here the ALJ properly concluded that there is insufficient evidence to support a finding that Complainant will be adversely affected by the smart meter or that PECO's use of a smart meter will constitute unsafe or unreasonable service in violation of 66 Pa.C.S. § 1501. I.D. at 32.

Specifically, we affirm the ALJ's finding in COL No. 6, that there is insufficient evidence to support a finding that Complainants will be adversely affected by the smart meter or that PECO's use of a smart meter will constitute unsafe or unreasonable service in violation of 66 Pa. C.S. § 1501. I.D. at 32. We find nothing in the Complainants' Exceptions to refute the ALJ's conclusion that the Company's use of a smart meter to measure the electric usage at the Complainant's property is unsafe or unreasonable. I.D. at 32, COL 7.

Therefore, upon review of the record, and based on the foregoing discussion, we find that the ALJ properly weighed the evidence presented to conclude that the Complainants failed to establish by a preponderance of the evidence that the Company's installation of a smart meter would constitute unreasonable or unsafe provision of service under Section 1501 of the Code. Therefore, we shall deny the

Complainants' Exception No. 3 challenging the ALJ's dismissal of the Complaint for failure to satisfy the burden of proof.

### **3. Complainants' Arguments Regarding PECO's Witnesses**

#### **a. Exception No. 4 (pp. 6-13)**

In their Exception No. 4, the Complainants generally disagree with the testimony of PECO's witnesses. The Complainants repeatedly cite to the "preponderance of published peer-review research" to dispute the testimony of PECO witnesses. According to the Complainants, PECO's witnesses are unfamiliar with numerous articles and research studies that the Complainants contend are relevant to the case. Exc. at 6-13.

The Complainants contend that Mr. Pritchard has "no experience whatsoever with human health." Exc. at 6. The Complainants disagreed with Mr. Pritchard's testimony that the wall of the service address would attenuate the signal away from the house. The Complainants contend that Mr. Pritchard was accepted by the ALJ as an expert in design, operation, and technology of AMI meters but not as an expert on shielding or reflectivity of RF transmission by building materials. Exc. at 7 (citing Quigley R.B. at 11).

Similarly, the Complainants argue that Dr. Davis has no experience treating patients or dealing with human health and therefore cannot surpass the credibility of a practicing physician. Exc. at 7. The Complainants disagree with much of Dr. Davis' testimony. According to the Complainants, they demonstrated that Dr. Davis was unfamiliar with substantial amounts of published research concerning the damage caused by RF transmissions at non-ionizing frequencies. The Complainants contend that Dr. Davis "does not have the expertise that PECO claims." Exc. at 7 (citing Quigley M.B. at 36-39; Quigley R.B. at 11-14).

The Complainants argue that the FCC exposure limits “have been overwhelmingly disputed in peer-reviewed literature.” The Complainants argue that Dr. Davis’ explanation of a pulsed field was “obviously flawed.” Exc. at 8. The Complainants provide that Dr. Davis “did not present the Court or [the] Quigleys with the algorithms he used to make his estimates,” which the Complainants considered unprofessional. Exc. at 9 (citing Quigley R.B. at 18).

In the same fashion, the Complainants disagree with Dr. Israel’s testimony and question Dr. Israel’s qualifications. They contend that “Dr. Israel was not familiar with the published peer-reviewed literature under cross examination.” Exc. at 12. The Complainants state “The only conclusion can be that Dr. Israel did not conduct a professional literature search as he testified.” On that basis, the Complainants disagree with the ALJ’s finding that Dr. Israel’s testimony was persuasive. Exc. at 13.

**b. Replies**

According to PECO, the Complainants make two overall claims with respect to PECO’s experts: (1) that PECO’s experts had “an inability to recognize and cite professionally researched, written, and published articles,” and (2) that “actual research has indicated that any and all RF transmissions will have an impact on Ms. Mendez-Quigley’s health in a multiplicity of ways.” R. Exc. at 9 (citing Exc. at 6).

PECO provides that it responded at length to the Complainants’ claim that PECO’s experts were not able to recognize and cite studies by citing and quoting the extensive record testimony in which Dr. Davis and Dr. Israel discussed such research in detail and at length. R. Exc. at 9 (citing PECO R.B. at 12-13, 16-17).

PECO explains that it responded to the Marshall article - what the Quigleys call “actual research” in its response to Exception No. 3. R. Exc. at 9.

PECO maintains that the ALJ did not rely upon Mr. Pritchard's testimony to reach conclusions about human health. Rather, each reference to Mr. Pritchard's testimony in the Initial Decision pertains to some aspect of the design, operation, and technology of AMI installations. R. Exc. at 9 (citing I.D. at 7-9, FOFs 34-56 (all related to AMI and AMR system characteristics); I.D. at 16, 18 (reasons for installing the AMI system); I.D. at 23-24 (transmission characteristics of the meters); I.D. at 29 (the Quigleys did not present either substantial evidence or a preponderance of evidence to counter Mr. Pritchard's testimony)). R. Exc. at 9-10.

PECO disagrees with the Complainants' opinion that Mr. Pritchard "attempts to overstate his expertise in shielding." R. Exc. at 10 (citing Exc. at 7). PECO cites to Mr. Pritchard's testimony as follows:

The simple fact of having a wall, a smart meter is designed to, with the FlexNet radio, transmit away from the house. There's no benefit of transmitting into the house because it's trying to reach one of the TGB<sup>12</sup> towers, as I defined...

Again, so the FlexNet radio transmitting outwardly the amount of signal that would be coming back is very minimal. There's the meter socket, which is a metal enclosure. That actually acts [as a] ground to reflect the signal away from the house. Furthermore, the wall will attenuate additional signal. So any signal from your meter would be very similar to the background signals that are there today.

Id. (citing Tr. at 250-251).

PECO provides that the ALJ discussed Mr. Pritchard's testimony accurately. PECO opines that all of Mr. Pritchard's testimony on this issue relates to the

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<sup>12</sup> Tower Gateway Base Station – a collection point that will ultimately transmit user information to PECO. Tr. at 221, 251.

design, operation and technology of advanced meter installations. R. Exc. at 11 (citing ID. at 23-24).

PECO notes the Complainants' argument that the ALJ inappropriately relied on Dr. Davis' testimony. R. Exc. at 12 (citing Exc. at 7-11). While the Complainants contend that Dr. Davis "has no experience in treating patients or dealing with human health," PECO notes that Dr. Davis was not offered as an expert in human health and did not offer opinions in that field. R. Exc. at 12. PECO submits that it addressed the Complainants' contention that Dr. Davis was unfamiliar with research related to RF transmissions in its Reply Brief. R. Exc. at 12 (citing PECO R.B. at 12-13).

Regarding the Complainants' argument that PECO relies too heavily on the FCC standards, PECO opines that the Complainants' argument is based on inadmissible extra-record evidence. R. Exc. at 12 (citing PECO R.B. at 10). Additionally, PECO provides that Dr. Davis testified that he agrees with the FCC conclusion that research has shown that non-thermal effects have not been scientifically demonstrated. R. Exc. at 12 (citing PECO Exh. CD-3 at 2).

PECO disagrees with the Complainants' assertion that in Dr. Davis' testimony regarding "pulsed" fields that Dr. Davis was "trying to obfuscate" and that his testimony "is obviously flawed." R. Exc. at 12 (citing Exc. at 8). Dr. Davis had testified that:

In communications physics and engineering, 'pulsed' means using (1) amplitude modulation that is (2) done in a way that produces a signal that has abrupt changes in the amplitude of the sine wave. PECO's AMI meters produce frequency modulated, specifically 'frequency shift keyed' regular non-pulsed sine waves. PECO's AMI meters do not emit 'spikes' – they send out regular sine waves. The sine waves are not

amplitude modulated. Therefore, PECO's AMI meters do not send out pulsed signals.

R. Exc. at 12, n. 5 (citing PECO Exh. CD-3 at 1; Tr. at 278).

PECO contends that the Complainants provided no basis for their "conclusory characterizations" regarding Dr. Davis' testimony. R. Exc. at 12.

PECO disagrees with the Complainants' claim that the ALJ erred in referring to Dr. Davis' testimony regarding background UHF TV transmission. The Complainants argue that:

[T]he idea of cumulative average is used to make a momentary high RF transmission appear lower over time. The PUC Court has therefore allowed Dr. Davis to deny the impact to Ms. Menedez-Quigley's health from the short term high RF exposure of PECO's meters.

R. Exc. at 13 (citing Exc. at 8).

PECO explains that Dr. Davis testified that the UHF TV background exposure is 1,600 times higher than exposure from the AMI meter over time. R. Exc. at 13 (citing I.D. at 25; Tr. at 286-287, PECO Exh. CD-11). Dr. Davis also testified that the peak exposure from the AMI meters, while transmitting at their peak power, is nearly 40 times less than the applicable FCC standard for average exposure. R. Exc. at 13 (citing I.D. at 25).

While the Complainants opined that Dr. Davis did not provide his underlying calculations for his estimates and this is "considered highly unprofessional in learned circles," PECO avers that the Quigleys could have asked Dr. Davis for that information in discovery or on cross but did not do so. R. Exc. at 14 (citing Exc. at 9).

PECO maintains that the Complainants' argument that Dr. Davis' estimate of Ms. Mendez-Quigley's cell phone usage must be incorrect because she had not testified until the very end of the trial about her cell phone usage after Dr. Davis' testimony is wrong. PECO notes that Ms. Mendez-Quigley testified about her cell phone usage on April 17 (Tr. at 53, 62-64, 68) while Dr. Davis provided his estimate on April 18 (Tr. at 291-296). R. Exc. at 14.

PECO disagrees with the Complainants' argument that Dr. Davis' testimony should not be relied upon because he is paid and would not have been hired if he disagreed with PECO. PECO provides Dr. Davis testified on this issue as follows:

First of all, I would never testify for anybody where I didn't feel comfortable telling the absolute truth of what I believe is correct. And I think what you're asking doesn't make sense. I mean, any witness that's presented, you hope will help your case. And I believe that I am telling the absolute truth about what the matter is here. And clearly, that's why I like to think I'm valuable in presenting this evidence.

R. Exc. at 15 (citing Tr. at 299-300).

PECO opines that Dr. Davis is "only willing to testify in matters where he is comfortable telling the absolute truth." PECO submits that the Complainants' various arguments regarding Dr. Davis' testimony do not provide any reason to give his testimony lesser weight. R. Exc. at 15.

PECO provides that the Complainants argue that the ALJ relied on Dr. Israel's testimony inappropriately. The Complainants contend that Dr. Israel has not treated patients with the autoimmune illness that Ms. Mendez-Quigley suffers from. R. Exc. at 15 (citing Exc. at 11). PECO counters that Dr. Israel has approximately forty years of experience in an active medical practice with substantial experience treating

patients including those with autoimmune illnesses. R. Exc. at 15 (citing PECO M.B. at 12-13, 17; PECO R.B. at 15).

PECO states that the Complainants allege that Dr. Israel “overlooked” or “dismissed” approximately 1,800 studies. PECO explains that this is a reference to the “Bioinitiative Report” edited by Dr. David Carpenter. PECO offers that: (1) the BioInitiative Report is hearsay and cannot be relied upon for the truth of the matters asserted therein; (2) Dr. Carpenter was cross-examined about the BioInitiative Report in *Myers v. PPL Electric Corporation*, C-2017-260710, and ALJ Barnes concluded that the BioInitiative Report “does not provide a balanced view of the scientific research,”<sup>13</sup> and (3) Dr. Israel provided details of his review process for evaluating studies in this area. R. Exc. at 16 (citing PECO M.B. at 17).

PECO responded to the Complainants’ argument that Dr. Israel was unfamiliar with studies and could not name any studies during cross examination in its Reply Brief with quotations from and citations to the record evidence in which Dr. Israel showed familiarity with studies and named studies when asked to do so. R. Exc. at 16 (citing PECO R.B. at 16-17). PECO reasons that none of the Complainants’ arguments regarding Dr. Israel provide a reason to give lesser weight to his testimony. R. Exc. at 16.

### **c. Disposition**

As noted *supra*, in affirming the Commission’s 2019 *Povacz Order*, the Pennsylvania Supreme Court held in *Povacz II* that, in order to prevail in a Section 1501 claim involving the safety of smart meters, and specially, against an EDC alleging that an

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<sup>13</sup> *Richard N. Myers v. PPL Electric Utilities Corporation*, Docket No. C-2017-2620710 (Initial Decision served August 16, 2018 at 21) (*Myers 2018 Initial Decision*) (citation added).

AMI meter caused, or will cause, adverse health effects or harm to human health, the Complainant must demonstrate, by a preponderance of the evidence, a “conclusive causal connection” between the harm to human health and the RFs from the AMI meter. *See, Povacz II* at 1006. In that context, the lay opinions of the Complainants do not provide a conclusive, causal connection between the harm to human health and the RFs from the AMI meter. *Id.* In the present case, the Complainants have not met their burden of proof.

Based on our review of the record, we agree with the ALJ’s determination that the installation of a smart meter would not be unsafe or unreasonable. I.D. at 32. We also agree with the ALJ that the testimony of the PECO witnesses is credible and more persuasive than that of the Complainants. The ALJ concluded that PECO established that the PECO AMI system does not emit EFs of the type and level of concern to the Quigleys and PECO experts refuted the reports referred to by the Complainants. I.D. at 23. The ALJ reasoned that the expert testimony and opinions of Dr. Israel, Dr. Davis, and Mr. Pritchard were not countered by the Complainants with either substantial or a preponderance of the evidence. I.D. at 29.

Mr. Pritchard testified that the AMI signal from the meter is designed to transmit away from the home (Tr. at 250), the strength of the signal from the AMI meter would be “softer” because PECO uses a dedicated frequency for transmissions (Tr. at 252), and the interval length of the signaling time would be every three to four hours (Tr. at 251). Dr. Davis testified that the AMI signal duration would be 70-milliseconds (Tr. at 284), that the signal would be less than the RFs from the background at the service address from UHF TV (Tr. at 286) and less than the AMR meter (Tr. at 287) or Ms. Mendez-Quigley’s cellphone usage (Tr. at 295). Dr. Israel testified that the AMR and AMI meter would not exacerbate or cause Ms. Mendez-Quigley’s health issues (Tr. at 350-351). The Complainants presented a letter from a physician stating that Ms. Mendez-Quigley should avoid “electromagnetic exposures

including wireless transmissions” (Quigley Exhibit A-2, also PECO’s Exhibit BU-6) and numerous articles that were not corroborated by expert testimony. The ALJ correctly weighed the evidence and concluded that the installation of a smart meter would not be unsafe or unreasonable. I.D. at 32.

We disagree with the Complainants’ arguments that the PECO witnesses are “unqualified.” Exc. at 6. Each PECO witness was experienced in the field for which their testimony was offered. The Complainants did not object to the witnesses or their testimony at the hearing. Mr. Pritchard did not testify regarding health matters. We do not agree with the Complainants’ argument that Dr. Davis tried to “obfuscate” the matters he testified about. The Complainants argue that Dr. Davis and Dr. Israel were unfamiliar with numerous articles on the topic of RFs and health. PECO provided that these “1,800 articles” were from the “BioInitiative Report” that was found to be hearsay and unreliable. *See, Myers 2018 Initial Decision* at 21. We agree with the ALJ that Mr. Pritchard, Dr. Davis and Dr. Israel provided expert testimony that outweighed the lay testimony of the Complainants. Accordingly, the Complainants’ Exception No. 4 is denied.

#### **4. Complainants’ Arguments Regarding Due Process**

##### **a. Exception No. 5 (pp. 13-15)**

In their Exception No. 5, the Complainants contend that the Commission used “[i]ntentionally deceptive language” by using the terms “Initial Decision” and “Initial Hearing.” The Complainants argue that the use of the term “initial” signifies that there will be a subsequent final decision and final hearing. The Complainants aver that they would “subpoena communications between the PUC and PECO regarding the interpretation of Act 129 and call witnesses” if they had a subsequent hearing.

Exc. at 13.

The Complainants repeat their argument from their July 24, 2018 Objection to PECO's Motion to Admit Counsel *Pro Hac Vice* that the *pro hac vice* admission of a PECO attorney was prejudicial to them. Exc. at 14.

**b. Replies**

PECO provides that a Prehearing Order was issued in this proceeding on September 7, 2017. The Prehearing Order stated that an Initial Hearing would be held on April 17-18, 2018 and detailed the requirements and due dates for the Parties to identify expert and fact witnesses and provide exhibits and statements as follows:

**ON OR BEFORE February 20, 2018**, any party wishing to present expert testimony (medical, technical, etc.) must provide to the other party the name and business address of that expert and a written summary of the expected testimony of that expert.

**ON OR BEFORE February 20, 2018**, any party wishing to present factual testimony of any person other than the Complainant must provide to the other party the name and business address of that person and a written summary of the expected testimony of that person.

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**ON OR BEFORE April 3, 2018**, Complainant and Counsel for PECO are directed to provide one another with copies of all exhibits and statements to be presented at the hearing.

Prehearing Order at 2.

PECO identified its expert and fact witnesses and provided expert and fact witness reports on February 20, 2018. PECO notes that the Complainants did not provide any witnesses or witness reports. On April 3, 2018, PECO served its hearing exhibits.

PECO notes that at about the same date, the Complainants served PECO with dozens of documents that they proposed to submit as hearing exhibits.

PECO submits that at the hearing, the Complainants claimed that the use of the term “Initial Hearing” is “misleading”, and the Complainants stated:

[I]t was our intent in this initial hearing to present the peer-reviewed case, if you will, as well as other credible literature for what we wanted to explain to the Court. It was our further intent, knowing this was the initial hearing, that in the subsequent hearing, we would subpoena and call expert witnesses.

R. Exc. at 17 (citing Tr at 28, 32).

According to PECO, the ALJ properly required the Complainants to proceed with the presentation of their full evidentiary case. R. Exc. at 18 (citing Tr. at 32-33). PECO submits that the Complainants claim that the term “Initial Hearing” is “intentionally deceptive.” R. Exc. at 18 (citing Exc. 5a).

PECO provides that the Complainants had ample notice of the date on which they were required to identify expert witnesses and provide witness reports because the Prehearing Order explicitly stated that these were due by February 20, 2018. PECO contends that the Complainants’ claim that the use of the term “initial” with regard to the hearing was misleading or deceptive is implausible. R. Exc. at 18.

PECO notes that it filed a Motion to Admit Thomas Carl Watson, Esquire *Pro Hac Vice* on July 16, 2018. The Complainants filed objections to the motion on July 26, 2018. PECO provided a reply to the Complainants’ objections on August 3, 2018. The ALJ granted PECO’s Motion on August 17, 2018. PECO avers that the ALJ’s August 17, 2018 Order correctly granted PECO’s Motion. *Id.*

**c. Disposition**

We disagree with the Complainants' argument that the use of the word "initial" is misleading or deceptive. The requirements for expert witnesses and evidence were clearly spelled out in the Prehearing Order. The Complainants received the prehearing order and sent a letter to the Commission, received on April 7, 2018, stating that PECO missed the deadlines for evidence etc. Clearly, the Complainants were aware of the deadlines for submitting witness reports and evidence. While the Complainants provide that they would have subpoenaed witnesses and provided expert testimony at a subsequent hearing, they had adequate time to prepare for the initial hearing but did not do so beyond assembling the exhibits that were entered into evidence. The ALJ did not err by continuing with the initial hearing after the Complainants stated that they were waiting for the subsequent hearing to provide expert witnesses and subpoena the Commission to obtain communications between PECO and the Commission. PECO was ready for the initial hearing and it would have been prejudicial to PECO to discontinue the hearing. The Complainants were afforded ample notice and opportunity to present evidence. It was not prejudicial to the Complainants as they contend, to proceed with the scheduled hearing. Exc. at 13-14.

Further, we find no error with the ALJ's *August 2018 Order* approving PECO's Motion to admit Mr. Watson *pro hac vice*. The ALJ reasoned that the failure to file the Pro Hac Vice Motion prior to the hearing was an oversight rather than a deliberate act. *August 2018 Order* at 7. We agree with the ALJ that "there is nothing prejudicial to the Complainants in granting the admission of Mr. Watson Pro Hac Vice Nunc Pro Tunc and it would be inefficient and wasteful of the resources of the Commission and of the parties to set this matter for another hearing because of the curable and technical time of filing error." *August 2018 Order* at 9.

In our opinion, the Complainants' due process rights were preserved throughout every phase of the proceeding. The ALJ adjusted the proceeding schedule to accommodate the Complainants' request for additional time to make filings. Accordingly, because we conclude the ALJ protected the Complainant's procedural due process rights at every stage of the proceeding and did not act in a prejudicial manner towards the Complainants by proceeding with the initial hearing as scheduled, the Complainants' Exception No. 5 is denied.

**5. Complainants' Arguments Regarding the Initial Decision and Two Conclusions of Law**

**a. Exception No. 6 (pp. 15-16)**

In their Exception No. 6, the Complainants argue that: (1) the Initial Decision misrepresents their concerns regarding the Zigbee radio and the existing AMR meter; and (2) the ALJ used the term EFs incorrectly. The Complainants also except to Conclusions of Law Nos. 5 and 6. Exc. at 14-16.

COL No. 5 states:

Utility companies are required to furnish and maintain adequate, efficient, safe, and reasonable service and facilities. *Paul v. PECO Energy Company*, Docket No. C-2015-2475355 (Opinion and Order entered June 14, 2018) (*Paul*); 52 Pa. Code § 57.194.

The Complainants contend that the use of the word "all" in Section 1501 does not provide for "reasonable" efforts on the part of the EDCs, but rather Section 1501 requires "best efforts" including all substitutions for the accommodation of patrons. Exc. at 15.

COL No. 6 states:

There is insufficient evidence to support a finding that Complainant will be adversely affected by the smart meter or that PECO's use of a smart meter will constitute unsafe or unreasonable service in violation of 66 Pa.C.S. 1501. *Kreider v. PECO Energy Company*, Docket No. P-2015-2495064 at 23 (Order entered January 28, 2016) (citing *Woodbourne-Heaton*, 1992 Pa. PUC Lexis 160 at 12-13).

The Complainants allege that COL No. 6 is bias and the "PUC Court fails to acknowledge the full responsibility that PECO holds under 66 PA. C.S. 1501." Exc. at 15-16.

**b. Replies**

PECO notes that the I.D. states "the Quigleys reported no negative effects of the AMR meter at the service address." R. Exc. at 19 (citing I.D. at 30). In their Exceptions, the Complainants state "[t]he PUC Court clearly missed the Quigleys concern in their Main Brief noting that her autoimmune diagnosis happened after the installation of the AMR. A latency period could reasonabl[y] be expected." R. Exc. at 19 (citing Exc. at 15). PECO maintains that the Complainants provided no testimony on latency periods and did not claim that the AMR transmissions caused Ms. Mendez-Quigley's autoimmune disorder. PECO provides that Dr. Israel addressed the issue, concluding that there is no reliable medical basis to conclude that radiofrequency fields from PECO's AMI or AMR meter cause, contribute to or exacerbate the medical conditions made by the Complainants. R. Exc. at 19 (citing Tr. at 345-350).

While the Complainants argue that the ALJ used the term "EFs" but should have used "RFs," PECO provides that the ALJ indicated that the terms "EMF" (another term for "EF") and "RF" were used interchangeably in the proceeding. R. Exc. at 19

(citing I.D. at 2, fn. 2). PECO continues that in the combined testimony of the Quigleys, the term “radiofrequency” or “RF” is used approximately fifty times, while the term “electromagnetic” or “EMF” is used ten times. PECO provides additional examples of the two terms used in the Quigley Main Brief and concludes that the ALJ was correct noting that the terms were used interchangeably, and the ALJ used the term in the same manner as the Quigleys. R. Exc. at 19-20.

PECO submits that the ALJ correctly found that the Complainants did not present sufficient evidence to support a finding that a PECO AMI meter would violate Section 1501 (R. Exc. at 5 citing COL No. 6). PECO avers that the Complainants cannot prevail on their Section 1501 claim because they did not prevail on their evidentiary case. R. Exc. at 6.

Regarding the Complainants’ assertion that the ALJ and the Commission are “deeply biased” and are “incapable of unbiased decision-making,” PECO disagrees with that assessment. PECO contends that its Reply Exceptions demonstrate that for each example of bias that the Complainants claim, the ALJ accurately states and evaluates the record evidence and law in the Initial Decision. R. Exc. at 1.

### **c. Disposition**

The Complainants maintain that the ALJ misrepresented their concerns regarding transmissions from the Zigbee radio and AMR meter. We disagree. The ALJ stated that the Complainants were concerned with the Zigbee radio transmitting into their home to smart appliances. I.D. at 30 (citing Quigley M.B. at 35). The ALJ noted that the installation of a smart meter by PECO would result in a decrease of 79% in RFs as compared to those from the existing AMR meter. I.D. at 30. The ALJ concluded that all of the meters used by PECO emit far less than the maximum exposure allowed by the FCC. I.D. at 30 (citing FOFs 59-62). The ALJ clearly acknowledged the Complainants’

concerns when the ALJ stated, “Given the medical history of Mrs. Mendez-Quigley, it is understandable that the Quigleys are concerned about any possible health effects of the installation of a smart meter.” I.D. at 30. We disagree with the Complainants’ opinion that the ALJ “missed” or “misrepresented” their concerns. The ALJ clearly acknowledged and addressed the Complainants’ concerns. The ALJ concluded that “the evidence presented does not support finding that installation of any of the PECO smart meters at the service address would be detrimental to the health of Mrs. Mendez-Quigley in violation of Section 1501.” I.D. at 30. We agree with the ALJ’s finding.

COL No. 5 is an accurate cite from *Paul* and 52 Pa. Code § 57.194. The Complainants contend that Section 1501 “does not provide for *reasonable* efforts on the part of the EDCs” but rather it requires “*best efforts* including all substitutions for the accommodation of patrons.” Exc. at 15 (emphasis added). Section 1501 uses the term “reasonable” and does not include the term “best efforts.” There is no error in COL No. 5.

COL No. 6 indicates the ALJ’s finding that the Complainants have not met the burden of proof that PECO’s smart meter will constitute unsafe or unreasonable service in violation of Section 1501. As discussed *supra*, the Complainants have failed to meet their burden of proof. There is no error in COL No. 6. We disagree with the Complainants’ assertion of bias by the ALJ and the assertion that the ALJ did not recognize PECO’s responsibilities under Section 1501. The ALJ properly weighed the testimony and found the testimony of the PECO experts outweighs the lay testimony of the Complainants. Accordingly, the Complainants have failed to prove a violation of Section 1501. We find no bias in the ALJ’s careful analysis of the testimony of both Parties.

We note that the ALJ used the terms EF and RF interchangeably in the Initial Decision. We do not agree with the Complainants’ averment that the ALJ used the

term EF incorrectly. We find no error here as the ALJ explained that the terms EF and RF would be used interchangeably in the same or similar manner as the Complainants used these terms in their testimony and Main Brief. I.D. at 2, n. 2.

Based on the forgoing, the Complainants' Exception No. 6, regarding the Zigbee radio and AMR meter transmissions, the ALJ's use of the term EF, and the Conclusions of Law Nos. 5 and 6, is denied.

#### **IV. Conclusion**

In light of the above discussion, we shall: (1) deny the Complainants' Exceptions; (2) adopt the ALJ's Initial Decision; and (3) dismiss the Complaint, consistent with this Opinion and Order; **THEREFORE,**

#### **IT IS ORDERED:**

1. That the Exceptions filed by James Quigley and Teresa Mendez-Quigley on January 19, 2019, to the Initial Decision of Administrative Law Judge Darlene Davis Heep issued on December 31, 2018, at Docket No. C-2017-2617558, are denied, consistent with this Opinion and Order.

2. That the Initial Decision of Administrative Law Judge Darlene Davis Heep, issued on December 31, 2018, at Docket No. C-2017-2617558, is adopted, consistent with this Opinion and Order.

3. That the Formal Complaint filed by James Quigley and Teresa Mendez-Quigley, on August 1, 2017, at Docket No. C-2017-2617558, is dismissed.

4. That this proceeding is marked closed.

**BY THE COMMISSION,**

A handwritten signature in black ink, appearing to read "Rosemary Chiavetta". The signature is written in a cursive, flowing style.

Rosemary Chiavetta  
Secretary

(SEAL)

ORDER ADOPTED: April 25, 2024

ORDER ENTERED: April 25, 2024