

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Paula and Charles Hughes	:	
	:	
v.	:	C-2019-3007631
	:	
PPL Electric Utilities Corporation	:	

**INITIAL DECISION NON-PROPRIETARY VERSION**

Before  
Elizabeth H. Barnes  
Administrative Law Judge

**INTRODUCTION**

Two residential customers filed a complaint seeking to prevent an electric distribution company (EDC) from installing a smart meter a/k/a “Advanced Metering Infrastructure (AMI) meter” or “Radio Frequency (RF) meter” at their residence for health, safety, and privacy reasons. The complaint will be dismissed for failure to prove by a preponderance of evidence that the installation of the smart meter constitutes unsafe or unreasonable service under 66 Pa. C.S. § 1501 or otherwise violates the Public Utility Code, a Commission order or regulation or a Commission-approved tariff of the company.

**HISTORY OF THE PROCEEDING**

On February 4, 2019, Paula and Charles Hughes (Complainants) filed the instant Complaint with the Pennsylvania Public Utility Commission (Commission) against PPL Electric Utilities Corporation (PPL or Respondent) averring they wish to opt out of a smart meter installation at their residence, 5471 Highview Drive, Gap, Lancaster County, Pennsylvania (account number

ending in 026) for health, safety, and privacy reasons and requesting a directive that PPL be precluded from terminating their electric service.

The Complaint was served upon PPL on February 4, 2019. On February 25, 2019, Respondent filed an Answer. The Answer admitted that the Respondent provides electric service to the Complainants at the address listed on the Complaint. The Answer contends that the Respondent is required to install AMI, or smart meters, for all automatic meter reading (AMR) customers and that it has the right to terminate service for failure of the customer to permit access to the meter.

On March 4, 2019, a Hearing Notice was issued scheduling a hearing for September 19, 2019 and assigning the case to me as presiding officer. A Prehearing Order was issued on March 5, 2019. On July 24, 2019, PPL concurrently filed a Motion for Protective Order and a Motion to Compel Discovery Responses. On August 2, 2019, a Protective Order and an Order Granting PPL's Motion to Compel were concurrently issued. PPL served its direct testimony and exhibits upon the presiding officer and Complainants on August 5, 2019. Complainants' discovery responses were due by August 20, 2019. On September 12, 2019, PPL filed a Motion to Dismiss. An Order Denying Motion to Dismiss was entered on September 16, 2019, because the only interrogatory question Complainants refused to answer pertained to phone billing records, which were addressed to their son instead of Complainants. On September 19, 2019, the hearing was held as scheduled.

At the hearing, Complainants appeared *pro se* with 17 exhibits pre-marked A-G. Respondent appeared represented by Devin Ryan, Esquire, Garrett Lent, Esquire, and Curtis Renner, Esquire with 15 exhibits and four witnesses: Kevin Durkin, Donald Vinciguerra, Christopher Davis, Ph.D., and Mark Israel, M.D. All statements and exhibits were admitted into the record.

A transcript consisting of 110 pages was filed on October 11, 2019 and the record closed the same day. This case is ripe for a decision.

## FINDINGS OF FACT

1. The Complainants in this proceeding are Paula and Charles Hughes (Complainants), who reside at 5471 Highview Drive, Gap, Lancaster County, Pennsylvania (service property). N.T. 8.
2. The Respondent in this proceeding is PPL Electric Utilities Corporation, an electric distribution company (EDC). N.T. 8-9.
3. On June 30, 2014, PPL filed its new Smart Meter Plan intended to comply with all the requirements of Act 129 and the Commission's Smart Meter Implementation Order. PPL Electric Statement No. 4 at 4.
4. PPL selected Radio Frequency ("RF") Mesh meters and metering system because the Company determined that the RF Mesh system would support the 15 capabilities required by Act 129 and the Smart Meter Implementation Order. PPL Electric Statement No. 4 at 4.
5. The individual RF Mesh meters are used as relay points to transmit data back to PPL. PPL Electric Statement No. 4 at 5-6.
6. Under the Smart Meter Plan, the RF Mesh meters are to be deployed between 2017 and 2019 for all of PPL's 1.4 million customers. PPL Electric Statement No. 4 at 6.
7. PPL had deployed over one million RF Mesh meters as of the September 19, 2019 hearing and none of them have caused a fire. PPL Electric Statement No. 4 at 10.
8. The RF Mesh meter to be installed at the service property is the Landis + Gyr Focus AXR-SD meter. PPL Electric Statement No. 4 at 5-6.

9. The Landis + Gyr Focus AXR-SD meter is certified by the Underwriters Laboratories at UL 2735. PPL Electric Statement No. 4 at 8.

10. The Landis + Gyr Focus AXR-SD meter is compliant with the American National Standards Institute (ANSI). PPL Electric Statement No. 4 at 8.

11. PPL Witness Davis has a Ph.D. in Physics and is a fulltime Professor with an endowed Chair at the University of Maryland, where for over 30 years he has taught Physics, Electrical Engineering, Electromagnetics, and RF Electromagnetics to undergraduate and graduate students. PPL Electric Statement No. 1 at 1-5.

12. In addition to his teaching, Dr. Davis is an active scientific researcher in the fields of Physics, Biophysics, Electrical Engineering, Bioelectromagnetics and RF Bioelectromagnetics, conducting many scientific studies in these fields and publishing over 250 studies in peer-reviewed scientific journals. PPL Electric Statement No. 1 at 1-5.

13. Dr. Davis conducted a substantial amount of research on RF fields of the type produced by the AMI meters being used by PPL. PPL Electric Statement No. 1 at 3.

14. RF fields are part of the lower energy, non-ionizing portion of the electromagnetic spectrum which consists of lower frequency signals that do not have enough energy to break chemical bonds in cells or DNA. PPL Electric Statement No. 1 at 5-6.

15. RF fields come from many sources in our everyday environments, including AM/FM radio, television broadcast, cell phones and their communication networks, portable phones, garage door openers and Wi-Fi networks. PPL Electric Statement No. 1 at 5-7, 14.

16. The Federal Communications Commission (FCC) has determined safe public exposure levels for RF fields from devices that transmit RF signals, such as the AMI meters. PPL Electric Statement No. 1 at 9-10.

17. The FCC safe public exposure limits are based on evaluations of the body of scientific research on RF fields and were adopted in consultation with other federal agencies, including the Food and Drug Administration (FDA) and the Environmental Protection Agency (EPA). PPL Electric Statement No. 1 at 9-10.

18. The levels of RF fields from the Landis + Gyr Focus AXR-SD AMI meters are 98,000 times lower than the RF exposure safety limits established by the FCC. PPL Electric Statement No. 1 at 13, PPL Electric Exhibit CD2.

19. RF signals from the AMI meter are of very short duration and will occur for only a total of 84 seconds over a 24-hour period. PPL Electric Statement No. 1 at 7.

20. There are 10 television broadcast towers within a 50 mile radius of Complainants' residence in Gap, Pennsylvania. PPL Electric Statement No. 1 at 15.

21. Based on the locations of each tower and their RF power outputs, the constant background level of RF fields at Complainants' residence are 12.5 times higher than the RF signals from the AMI meter at 3 meters distance. PPL Electric Statement No. 1 at 15, PPL Electric Exhibit CD-5.

22. The RF exposure from a cell phone used at a person's head is 260,000 times higher than the average RF levels one meter away from the Company's new smart meter. PPL Electric Statement No. 1 at 14.

23. PPL Witness Israel received his undergraduate degree from Hamilton College and his medical degree from the Albert Einstein College of Medicine, and he completed his medical training at Harvard Medical School. PPL Electric Statement No. 2 at 1.

24. Dr. Israel is a Professor of Medicine, Pediatrics, and Molecular and Systems Biology at the Dartmouth Medical School and the Executive Director of the Israel

Cancer Research Fund in New York, an international charitable fund for medical and scientific research programs. PPL Electric Statement No. 2 at 1.

25. Dr. Israel is board certified and licensed to practice medicine. PPL Electric Statement No. 2 at 3.

26. Dr. Israel has conducted medical research for 40 years in a wide variety of areas, including systems biology, biochemistry, cell biology, cancer, molecular biology, and molecular genetics and has published over 245 medical research studies in leading peer-reviewed scientific journals. PPL Electric Statement No. 2 at 3-4.

27. Dr. Israel has taught medicine and science for more than 30 years to medical students, graduate students, interns, residents, and practicing physicians in a number of fields, including endocrinology, immunology, hematology, neurology, cardiology, biochemistry, cell biology, genetics, molecular genetics, medical oncology, and radiation oncology. PPL Electric Statement No. 2 at 3.

28. Claimed symptoms related to Electromagnetic Hypersensitivity (EHS) are more accurately described as “Idiopathic Environmental Intolerance” (“IEI”), in which “idiopathic” means “cause unknown,” rather than electromagnetic hypersensitivity. PPL Electric Statement No. 2 at 13.

29. There are no established medical criteria for the diagnosis or treatment of IEI. PPL Electric Statement No. 2.

30. IEI and the variety of symptoms attributed to it are not caused by exposure to RF fields. PPL Electric Statement No. 2 at 13.

31. The World Health Organization and a number of other public health authorities have concluded that the scientific research on RF exposures from cell phone use,

which are far higher than the RF from PPL's smart meters, has not shown that RF fields cause adverse health effects. PPL Electric Statement No. 2 at 10-15, PPL Electric Exhibit MI-1.

32. Several U.S. state public health authorities also have investigated claims about health effects from smart meters and have concluded that there is no credible scientific evidence that RF fields from smart meters will cause or contribute to any adverse health effects. PPL Electric Statement No. 2 at 11, PPL Electric Exhibit MI-2.

33. Complainants are neither medical professionals nor engineers. N.T. 37-38.

## DISCUSSION

### Legal Standards

Under Section 332(a) of the Public Utility Code, 66 Pa. C.S. § 332(a), "the proponent of a rule or order has the burden of proof." It is well-established that "[a] litigant's burden of proof before administrative tribunals as well as before most civil proceedings is satisfied by establishing a preponderance of evidence which is substantial and legally credible." *Samuel J. Lansberry, Inc. v. Pa. Pub. Util. Comm'n*, 578 A.2d 600, 602 (Pa. Cmwlth. 1990). The preponderance of evidence standard requires proof by a greater weight of the evidence. *Commonwealth v. Williams*, 557 Pa. 207, 732 A.2d 1167 (1999). This standard is satisfied by presenting evidence more convincing, by even the smallest amount, than that presented by another party. *Brown v. Commonwealth*, 940 A.2d 610, 614 n.14 (Pa. Cmwlth. 2008).

If the party seeking a rule or order from the Commission sets forth a *prima facie* case, then the burden shifts to the opponent. *MacDonald v. Pa. R.R. Co.*, 348 Pa. 558, 36 A.2d 492 (1944). Establishing a *prima facie* case requires either evidence sufficient to make a finding of fact permissible or evidence to create a presumption against an opponent which, if not met, results in an obligatory decision for the proponent. Once a *prima facie* case has been established, if contrary evidence is not presented, there is no requirement that the party seeking a rule or

order from the Commission must produce additional evidence to sustain his or her burden of proof. *See Replogle v. Pa. Elec. Co.*, 54 Pa. PUC 528, 1980 Pa. PUC LEXIS 20 (Order entered Oct. 9, 1980); *see also Dist. of Columbia's Appeal*, 21 A.2d 883 (Pa. 1941); *Application of Pennsylvania-American Water Co. for Approval of the Right To Offer, Render, Furnish or Supply Water Serv. to the Pub. in Additional Portions Of Mahoning Twp., Lawrence County, Pa.*, Docket No. A-212285F0148, 2008 Pa. PUC LEXIS 874 (Order entered Oct. 29, 2008).<sup>1</sup>

In addition, a person does not sustain his or her burden of proof in an electric and magnetic field exposure case when the record evidence, “taken as a whole, leads to the ultimate finding and conclusion that the scientific studies at present are inconclusive.” *Letter of Notification of Phila. Elec. Co. 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*, 1992 Pa. PUC Lexis 160, at \*210-11 (June 29, 1992) (Initial Decision) (“*Woodbourne-Heaton*”). Rather, the person must demonstrate by a preponderance of the evidence that such exposure actually causes adverse health effects. *Id.* at \*211. Specifically, in AMI meter-related matters, the Commission has held that “[t]he Complainant will have the burden of proof during the proceeding to demonstrate, by a preponderance of the evidence, that [the utility] is responsible or accountable for the problem described in the Complaint.” *Kreider v. PECO Energy Co.*, Docket No. P-2015-2495064, p. 18 (Order entered Sept. 3, 2015); *see also Romeo v. Pa. Pub. Util. Comm'n*, 154 A.3d 422, 429 (Pa. Cmwlth. 2017) (finding that the smart meter complainant should have a hearing to try to prove his claim through “the testimony of others as well as other evidence that goes to that issue.”)

Section 701 of the Public Utility Code provides that “any person . . . having an interest in the subject matter . . . may complain in writing, setting forth any act or thing done or

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<sup>1</sup> In addition, any finding of fact necessary to support an adjudication of the Commission must be based upon substantial evidence. *Met-Ed Indus. Users Grp. v. Pa. Pub. Util. Comm'n*, 960 A.2d 189, 193 n.2 (Pa. Cmwlth. 2008) (citing 2 Pa.C.S. § 704). Substantial evidence is such relevant evidence as a reasonable mind might accept as adequate to support a conclusion. *Borough of E. McKeesport v. Special/Temporary Civil Serv. Comm'n*, 942 A.2d 274, 281 n.9 (Pa. Cmwlth. 2008) (citation omitted). Although substantial evidence must be “more than a scintilla and must do more than create a suspicion of the existence of the fact to be established,” *Kyu Son Yi v. State Bd. of Veterinary Med.*, 960 A.2d 864, 874 (Pa. Cmwlth. 2008) (citation omitted), the “presence of conflicting evidence in the record does not mean that substantial evidence is lacking.” *Allied Mech. and Elec., Inc. v. Pa. Prevailing Wage Appeals Bd.*, 923 A.2d 1220, 1228 (Pa. Cmwlth. 2007) (citation omitted).

omitted to be done by any public utility in violation, or claimed violation, of any law which the commission has jurisdiction to administer, or of any regulation or order of the commission.” 66 Pa. C.S. § 701. Therefore, a complainant must generally demonstrate that the public utility violated the Public Utility Code or a Commission regulation or order.

The Commission has exclusive jurisdiction to adjudicate “issues involving the reasonableness, adequacy, and sufficiency” of a public utility’s facilities and services. *See Elkin v. Bell of Pa.*, 420 A.2d 371, 374 (Pa. 1980) (citations omitted). Section 1501 of the Public Utility Code states, in pertinent part, that:

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 also shall be reasonably continuous and without unreasonable interruptions or delay. Such service and facilities shall be in conformity with the regulations and orders of the commission. Subject to the provisions of this part and the regulations or orders of the commission, every public utility may have reasonable rules and regulations governing the conditions under which it shall be required to render service. . .

66 Pa. C.S. § 1501.

When presented with a challenge to an AMI meter installation, the Commission has pronounced that “[t]he ALJ’s role . . . will be to determine based on the record in this particular case, whether there is sufficient evidence to support a finding that the Complainant was adversely affected by the smart meter or whether [the utility’s] use of a smart meter will constitute unsafe or unreasonable service in violation of Section 1501 under the circumstances in this case.” *Kreider v. PECO Energy Co.*, Docket No. P-2015-2495064 at 23 (Opinion and Order entered January 28, 2016) (citing *Woodbourne-Heaton*, 1992 Pa. PUC Lexis 160, at \*12-13). *Frompovich v. PECO Energy Co.*, Docket No. C-2015-2474602 at 10 (Opinion and Order entered May 3, 2018) (*Frompovich*).

Health and Safety Concerns

Complainants argued the smart meter emits a sound within a home and is unhealthy. N.T. 9. Mrs. Hughes testified she moved from a home with a smart meter at 41 Hershey Avenue, Paradise, Pennsylvania for that reason. N.T. 9-11, 41-42. She testified:

And the sound that is emitted goes through the walls twenty-four seven. It never stops. And even with the claims of PPL that there has only been – that there will only be a pulsing, there is no peace from the sound. The physical feeling is like being in a safe that compresses your chest cavity. You can't get away from it. And you can't sleep, and there is no quiet. Eventually, you hear a constant ringing in your ears and you feel as though your cognitive brain has dulled. And that's intolerable enough. Add in the conditions of **BEGIN PROPRIETARY** [REDACTED] **END PROPRIETARY** that I deal with, and there's no hope for a decent future because you feel and know that you're slowly dying and being driven crazy by this relentless sound.

N.T. 9-10.

Complainants offered as evidence to support their position Exhibit A, which is a copy of a formal complaint Complainants filed at the Attorney General's Office and two letters from Walter D. Steinke, DO, dated August 10, 2018, certifying that **BEGIN PROPRIETARY** [REDACTED] **END PROPRIETARY**.

Complainants also offered Exhibit E1, an Article entitled, "Exposed – Electronic Utility Meters, A Fire Safety, Health, Privacy and Security Threat" by Michele Hertz, Founder – Stop Smart Meters NY. Complainants argue that although they have three cell phones, which they use on average 15-20 minutes each day, they can turn off the phone, but not the RF meter. N.T. 39-41.

Conversely, PPL argues any health concerns Mr. and Mrs. Hughes have are without merit and have been clearly rebutted by PPL's witnesses. N.T. 91-92.

Disposition

Complainants have failed to show any health concerns such as **BEGIN PROPRIETARY [REDACTED] END PROPRIETARY** are likely to be caused, contributed to, or exacerbated by the AMI meter installed at their service property. Although Complainants offered testimony and medical letters regarding some health conditions they and their family may have or may be experiencing as of the date of the hearing, there is insufficient evidence to show any of these health conditions are as a result of AMI meters installed close to their premises or that the health conditions would be exacerbated by the installation of an AMI meter at the service property. PPL Electric Statement No. 2 at 7. Complainants are neither engineers nor medical professionals, and their lay opinions as to the probable health effects of radio frequency fields or electromagnetic fields emitting from an RF meter to be installed at their service property are non-persuasive. Further, the article upon which they rely to prove their health claims in Exhibit E1 was authored by an individual not available for cross-examination at the hearing. Exhibit E1 is unreliable hearsay evidence. The opinions of Complainants based upon the hearsay evidence in Exhibit E1 are non-persuasive. **BEGIN PROPRIETARY [REDACTED]**  
**[REDACTED]**  
**[REDACTED]**  
**[REDACTED]**  
**[REDACTED]**  
**[REDACTED]**  
**[REDACTED]**. **END PROPRIETARY** PPL Electric Statement No. 2 at 12-13. A “nocebo effect” may present symptoms similar to those Complainants complain of in IEI-EMF and control participants; however, there is no reliable medical basis to conclude that RF fields from the AMI meters being installed by PPL would cause, contribute to, or exacerbate any of the symptoms of **BEGIN PROPRIETARY [REDACTED]**  
**[REDACTED]** **END PROPRIETARY** claimed by Complainants, or any other adverse health effects. PPL Electric Statement No. 2 at 14-17.

I am persuaded by the credible testimony of Dr. Israel, who testified claimed symptoms related to EHS are more accurately described as IEI in which “idiopathic” means

“cause unknown.” PPL Electric Statement No. 2. Dr. Israel also evaluated scientific research on RF fields and adverse health effects generally. He testified that he has been systematically examining this research over the past several decades and that many hundreds of studies have been published. PPL Electric Statement No. 2. He testified that three groups of controlled laboratory studies on animals “are particularly informative because they address fundamental biological functions that are very sensitive to any disruption: genetics, reproduction, and growth and development.” PPL Electric Statement No. 2 at 8-9. Dr. Israel described a number of the studies in these areas which he considered good examples of well-designed and well-conducted studies. These studies found no adverse effects on genetics, fertility, reproduction, growth or development in the animals exposed to RF fields. PPL Electric Statement No. 2 at 9. Dr. Israel also provided examples of well-conducted animal studies on RF fields and cancer. He testified that these studies, which involved animals with lifetime exposures to RF fields, did not find any increased incidence in cancer in the RF exposed animals compared to non-exposed animals. PPL Electric Statement No. 2 at 9-10.

Based on the body of scientific research showing no consistent and reproducible effects from RF fields on cancer and other adverse health effects, the World Health Organization (“WHO”) has concluded that “no adverse health effects have been established as being caused by mobile phone use.” PPL Electric Statement No. 2 at 9-11. A number of other public health authorities, including agencies in Canada, the U.K., Sweden, Norway, the Netherlands, and New Zealand, among others, have recently reached similar conclusions. PPL Electric Statement No. 2 at 10-11; PPL Electric Exhibit MI-1. In addition, several U.S. state public health authorities and Public Utility Commissions have investigated claims about health effects from smart meters. These include the Maine Center for Disease Control (2010), the Vermont Department of Health (2012), Arizona Department of Health, Office of Environmental Health (2014), and North Carolina Department of Health and Human Services, Division of Public Health, Occupational and Environmental Epidemiology Branch (2015). These evaluations by State public health authorities and Public Utility Commissions conclude that RF fields from smart meters do not pose any public health risk. PPL Electric Statement No. 2; PPL Electric Exhibit MI-2.

There is no reliable medical basis to conclude that RF fields from the AMI meter being used by PPL Electric will cause or contribute to the development of illness or disease. PPL Electric Statement No. 2 at 16. There is no reliable medical basis to conclude that RF fields from the AMI meter being used by PPL Electric would cause, contribute to, or exacerbate any of the symptoms claimed by the Complainants, or any other adverse health effects. PPL Electric Statement No. 2 at 16.

Additionally, on this issue, I find credible the expert testimony of PPL witness Dr. Christopher Davis who opined the Landis + Gyr AMI meter would not cause adverse health effects. Dr. Davis co-authored 255 articles published in peer-reviewed scientific journals, two books, twelve book chapters and 324 papers presented at scientific conferences. PPL Electric Statement No. 1 at 2. He conducted a substantial amount of research on RF fields of the type produced by the AMI meters being used by PPL. PPL Electric Statement No. 1 at 3. RF fields are part of the lower energy, non-ionizing portion of the electromagnetic spectrum which consists of lower frequency signals that do not have enough energy to break chemical bonds in cells or DNA. PPL Electric Statement No. 1 at 5-6. RF fields come from many sources in our everyday environments, including AM/FM radio, television broadcast, cell phones and their communication networks, portable phones, garage door openers and Wi-Fi networks. PPL Electric Statement No. 1 at 5-6, 14.

The FCC has determined safe public exposure levels for RF fields from devices that transmit RF signals, such as the AMI meters. PPL Electric Statement No. 1 at 9-10. The FCC safe public exposure limits are based on evaluations of the body of scientific research on RF fields and were adopted in consultation with other federal agencies, including the FDA and the EPA. PPL Electric Statement No. 1 at 9-12.

The levels of RF fields from the Landis + Gyr Focus AXR-SD AMI meters are 98,000 times lower than the RF exposure safety limits established by the FCC. PPL Electric Statement No. 1 at 13, PPL Electric Exhibit CD2. RF signals from the AMI meter are of very short duration and will occur for only a total of 84 seconds over a 24-hour period. PPL Electric Statement No. 1 at 7.

There are 10 television broadcast towers within a 50 mile radius of Complainants' residence in Gap, Pennsylvania. PPL Electric Statement No. 1 at 15. Based on the locations of each tower and their RF power outputs, the constant background level of RF fields at Complainants' residence are 12.5 times higher than the RF signals from the AMI meter. PPL Electric Statement No. 1 at 15, PPL Electric Exhibit CD-5. The RF exposure from a cell phone used at a person's head is 260,000 times higher than the average RF levels 1 meter away from the Company's new smart meter. PPL Electric Statement No. 1 at 14. For all of these reasons, I find in favor of PPL on this issue.

### Data Privacy

Complainants contend that the new AMI meter invades their privacy and that mandatory installation of a smart meter violates their Fourth Amendment Rights against unreasonable search and seizure. N.T. 94-97. To support their position, Mr. and Mrs. Hughes cite the caselaw decision in *Naperville Smart Meter Awareness v. City of Naperville*, 900 F.3d 521 (7th Cir. 2018) (*Naperville*) and *Kyllo v. United States*, 533 U.S. 27 (2001). Complainants Exhibits D1-B and D1-C. Based upon this caselaw, Complainants contend that PPL is conducting an unreasonable search because the meter is reading distinct energy-consumption patterns or load like the City of Naperville. Mr. and Mrs. Hughes argue it need not be the police conducting the search and seizure or that the search be pursuant to a criminal case. N.T. 95-101. Mr. Hughes argues he has the right to privacy against anybody according to the Fourth Amendment, the U.S. and Pennsylvania Constitutions and individual privacy cannot be run over by PPL, an actor of the state, as PPL is under a direct order from Act 129. Thus, PPL is acting under the Commonwealth's directive as an actor of the state within the meaning of the Fourth Amendment. N.T. 100-103.

Conversely, PPL argues that any claim that the installation of the meter would violate the Fourth Amendment is incorrect. N.T. 91-94. To support its position, PPL cites the caselaw decision in *Jackson v. Metropolitan Edison Company*, 419 U.S. 345 (1974) (*Jackson*) and contends that unlike the City of Naperville, PPL is not a state actor involved in the installation of smart meters that could violate the constitutional rights of the Complainants.

Rather, PPL is a private corporation as defined under Section 102 of the Public Utility Code as an electric distribution company. N.T. 92-94. PPL argues it is deploying to all of its 1.4 million customers the AMI meters after a fully litigated proceeding before the Commission regarding this specific technology that was approved by the Commission. N.T. 93.

### Disposition

As a part of its Smart Meter Plan proceeding, PPL filed a detailed AMI Customer Privacy Policy, which sets forth the data PPL will collect through the new smart meter, the steps the Company will take to protect the data, and the ways in which PPL will use the data. PPL Electric Exhibit No. DV-1. PPL uses firewalls to prevent anyone from obtaining unauthorized access to the AMI network. PPL Statement No. 4 at 7-8. Customer data is encrypted to make the data readable to only PPL personnel who can decode the encryption. PPL Statement No. 4 at 7-8. PPL's cybersecurity and data privacy policies are consistent with the national standards for the industry. PPL Statement No. 4 at 7-8. Additionally, if Complainants are concerned about the AMI meter's connection to smart appliances in their home, they can decline to have the ZigBee radio activated. *See Lesniewski v. PPL Electric Utilities Corporation*, C-2018-3004594 (Final Order entered April 29, 2019, adopting Initial Decision issued March 25, 2019 at 24), wherein the Commission found in favor of PPL regarding the same data privacy issue. Specifically, the Commission held that Ms. Lesniewski had an option to decline activation of the ZigBee radio device located within the AMI meter.

Regarding Complainants' argument that a mandatory smart meter would violate their Fourth Amendment rights of freedom from unreasonable searches and seizures, I agree with PPL that it is not a "state actor" in that it is not a sovereign governmental entity also responsible for law enforcement. Rather, it is a private, regulated utility company not constrained by the Fourth Amendment. *Jackson, supra*. Further, there is no evidence in the instant case that PPL is making its data easily accessible to law enforcement or other third parties.

In *Naperville*, the Seventh Circuit found the City of Naperville owned and operated a public utility that provides electricity to its residents. Naperville began replacing its

residential customers' analog energy meters with digital smart meters. *Naperville*, 900 F.3d at 524. Naperville's Electric Utility collects residents' energy-consumption data at fifteen-minute intervals, storing it for up to three years. The Seventh Circuit concluded that the use of smart meters intruded upon reasonable expectations of privacy, thus constituting a search subject to Fourth Amendment constraints, but that such searches were "reasonable," and thus constitutionally permissible and consistent with the Fourth Amendment. In finding that the Naperville Electric Utility's use of the smart meters constituted a search, the court relied heavily on *Kyllo v. United States*, 533 U.S. 27, 31–32 (2001). The Court referenced the administrative search doctrine to find that the presumption had been overcome. *Naperville*, 900 F.3d at 528-29 (citing *Camara v. Municipal Court*, 387 U.S. 523 (1967) (*Camara*)). In particular, City of Naperville had "no prosecutorial intent;" "public utility [e]mployees—not law enforcement officials—collect and review the data." *Id.* Thus, the Electric Utility's intrusion was more innocuous than that found to violate the Fourth Amendment in *Camara*. For these reasons, I find in favor of Respondent on this data privacy issue.

#### Opt-In versus Opt-Out Program

Complainants argue Act 129 provides the AMI meters were to be installed as requested by the customers. Complainants did not request the installation and they wish to opt out from a smart meter installation. N.T. 104.

Conversely, PPL contends its installation of an AMI Meter is required by Pennsylvania law and that it would not constitute unreasonable or unsafe service to install an AMI Meter on Complainants' property. PPL argues Complainants have failed to demonstrate that any AMI meter causes, contributes to or exacerbates any adverse health effect. PPL denies the AMI meter causes fires or is a privacy risk. N.T. 91-94.

#### Disposition

The Commission has ruled that there is no provision in the Code, the Commission's Regulations or Orders that allows a PECO customer to "opt-out" of smart meter

installation. 66 Pa.C.S. § 2807(f); See *Bervinchak v. PPL Electric Utilities Corporation*, C-2016-2572824 and C-2016-2577527 (Final Order October 2, 2018, Initial Decision dated August 16, 2018); *Povacz v. PECO Energy Company*, Docket No. C-2012-2317176 at 10 (Order and Opinion entered January 24, 2013); *Povacz v. PECO Energy Company*, Docket No. C-2015-2475023 (ALJ Heep Initial Decision dated January 26, 2018). Moreover, the Commonwealth Court has held that federal law does not preempt the Commission's interpretation. See *Romeo v. Pa. Pub. Util. Comm'n*, 154 A.3d 422 (Pa. Cmwlth. 2017). The Commonwealth Court did not expressly address whether Mr. Romeo could opt-out of a smart meter installation. The Court held that Mr. Romeo's claim that smart meters cause safety and fire hazards and have a negative health impact, is not legally insufficient pursuant to 66 Pa. C.S. § 1501, which requires utilities to maintain adequate, efficient, safe and reasonable service and facilities for their customers. *Id.*

I infer from the *Romeo* decision, that it is legally sufficient to plead the relief requested in the instant case and claim that smart meters are generally unsafe and unhealthy, and the installation of them is unreasonable service in violation of 66 Pa. C.S. § 1501. However, the Commonwealth Court did not expressly address the opt-in versus opt-out argument. Although Complainants similarly situated to Mr. Romeo are entitled to an evidentiary hearing, there is Commission precedent that there is no opt-out provision in the current law in Pennsylvania.

The Commission has consistently held there is no opt-out provision for similarly situated Complainants in the past. The instant case is more similar than distinguishable from prior decisions wherein the Commission has dismissed similar complaints. *Pennsylvania Trout v. Dep't of Env'tl. Prot.*, 863 A.2d 93 (Pa. Cmwlth. 2004).

On October 15, 2008, Governor Edward G. Rendell signed Act 129 of 2008 into law, which directed electric distribution companies with at least 100,000 customers to file, with the Commission, a smart meter deployment and installation plan. Thus, there is a statute requiring smart meter deployment by large electric distribution companies operating within the Commonwealth. 66 Pa. C.S. § 2807(f).

The implementation of the Respondent's Smart Meter Deployment Plan and the approval of the costs associated with its implementation have been found by the Commission to be in accordance with Act 129 of 2008, 66 Pa. C.S. § 2807(f). The Respondent is required by statute and Commission Order to implement a Smart Meter Program, to install smart meters throughout its service territory, and to charge a Smart Meter Technology Surcharge to all of its metered customers.

As the Commission stated in its April 21, 2016 Opinion and Order in the case of *Frompovich*:

In past cases involving smart meter installation, we have evaluated on an individual case-by-case basis the specific allegations presented in each complaint and reached a conclusion based on those particular circumstances. While PECO is correct that as adopted Act 129 does not provide a general opt out provision, where a complainant's objection to installation of a smart meter was not based upon a general objection to smart meters *per se*, but rather upon facts specific to the individual complainant, we have denied preliminary relief and allowed the complaint to proceed to hearing. See *Kreider v. PECO Energy Company*, Docket No. P-2015-2495064 (Order on Material Question entered September 3, 2015; Order on Reconsideration entered January 28, 2016) (*Kreider*); *Paul v. PECO Energy Company*, Docket No. C-2015-2475355 (Order entered March 17, 2016). As we stated previously, "the law does not prohibit us from considering or holding a hearing on issues related to the safety of smart meters, consistent with our statutory authority in Section 1501 of the Code, when a legally sufficient claim is presented." *Kreider*, Order on Material Question at 17.

As in *Kreider* and *Paul*, Ms. Frompovich has alleged factual averments specific to her that, *if proven*, could implicate, under her particular circumstances, a violation of Section 1501 of the Code, a statute the Commission has jurisdiction to administer.

*Frompovich, supra* at 11-12 (Opinion and Order entered April 21, 2016) (emphasis added).

To the extent that Complainants in the instant case desire the ability to opt out of the smart meter installation, they could advocate for such ability before the General Assembly, which is currently considering amending Section 2807(f) in some pending bills including: PA House Bill Nos. 1564 and 1565; and Senate Bill No. 443. These bills are not yet law. The

Commission has held that it does not have the authority, absent a directive in the form of legislation, to prohibit the Respondent from installing a smart meter where a customer does not want one. *See Povacz v. PECO Energy Company*, Docket No. C-2012-231716 (Opinion and Order entered January 24, 2013). The Commission held that similarly situated Respondents would be in violation of law if they did not install a smart meter at properties similarly situated to Complainants' residence. *Id.*, *Frompovich* at 10. Thus, I find in favor of PPL on this issue.

### CONCLUSION

For all of these aforementioned reasons, the Complaint will be dismissed for failure to prove by a preponderance of evidence that the installation of this smart meter constitutes unsafe or unreasonable service under 66 Pa. C.S. § 1501 or otherwise violates the Public Utility Code, a Commission order or regulation or a Commission-approved tariff of the company. Although the Complainants are genuine in their concerns, the Commission's decisions cited above are controlling.

### CONCLUSIONS OF LAW

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

2. PPL Electric Utilities Corporation's smart meter procurement and installation plan, which was approved by Commission Order in the case of *Petition of PPL Electric Utilities Corp. for Approval of Its Smart Meter Technology Procurement and Installation Plan*, Docket No. M-2014-2430781, p. 24 (Order Entered Sept. 3, 2015) does not contain a provision for customers to opt out of smart meter installation.

3. Under Section 332(a) of the Pennsylvania Public Utility Code, the proponent of a rule or order has the burden of proof. 66 Pa. C.S. § 332(a). It is well established that "[a] litigant's burden of proof before administrative tribunals as well as before most civil proceedings is satisfied by establishing a preponderance of evidence which is substantial and

legally credible.” *Samuel J. Lansberry, Inc. v. Pa. Pub. Util. Comm’n*, 578 A.2d 600, 602 (Pa. Cmwlth. 1990).

4. The preponderance of evidence standard requires proof by a greater weight of the evidence. *Commonwealth v. Williams*, 557 Pa. 207, 732 A.2d 1167 (1999). This standard is satisfied by presenting evidence that makes the existence of a contested fact more likely than its nonexistence. *Brown v. Commonwealth*, 940 A.2d 610, 614 n.14 (Pa. Cmwlth. 2008) (citation omitted).

5. A person does not sustain his or her burden of proof in an electric and magnetic field exposure case when the record evidence, “taken as a whole, leads to the ultimate finding and conclusion that the scientific studies at present are inconclusive” rather, the person must demonstrate by a preponderance of the evidence that such exposure actually causes adverse health effects. *Letter of Notification of Phila. Elec. Co. 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*, 1992 Pa. PUC Lexis 160, at \*210-11 (June 29, 1992) (Initial Decision).

6. In AMI meter-related matters, the Commission has held that “[t]he Complainant will have the burden of proof during the proceeding to demonstrate, by a preponderance of the evidence, that [the utility] is responsible or accountable for the problem described in the Complaint.” *Kreider v. PECO Energy Co.*, Docket No. P-2015-2495064, p. 18 (Order entered Sept. 3, 2015).

7. Section 701 of the Public Utility Code provides that “any person . . . having an interest in the subject matter . . . may complain in writing, setting forth any act or thing done or omitted to be done by any public utility in violation, or claimed violation, of any law which the commission has jurisdiction to administer, or of any regulation or order of the commission.” 66 Pa. C.S. § 701.

8. The Commission has exclusive jurisdiction to adjudicate “issues involving the reasonableness, adequacy, and sufficiency” of a public utility’s facilities and services. See *Elkin v. Bell of Pa.*, 420 A.2d 371, 374 (Pa. 1980) (citations omitted).

9. When presented with a challenge to an AMI meter installation, the Commission has pronounced that “[t]he ALJ’s role . . . will be to determine based on the record in this particular case, whether there is sufficient evidence to support a finding that the Complainant was adversely affected by the smart meter or whether [the utility’s] use of a smart meter will constitute unsafe or unreasonable service in violation of Section 1501 under the circumstances in this case.” *Kreider v. PECO Energy Co.*, Docket No. P-2015-2495064, p. 23 (Order entered Jan. 28, 2016) (citing *Woodbourne-Heaton*, 1992 Pa. PUC Lexis 160, at \*12-13).

10. Complainants have failed to sustain the burden of proof that installing the new AMI meter would violate the Public Utility Code or any Commission regulation or order. See 66 Pa. C.S. §§ 332(a), 701.

11. PPL is legally required to install the RF Mesh meter on the Complainants’ property by Act 129 and Commission orders. See 66 Pa. C.S. § 2807(f); *Smart Meter Procurement and Installation*, Docket No. M-2009-2092655, pp. 9, 14 (Order entered June 24, 2009).

12. Nothing in Act 129 permits a customer to “opt-out” of a smart meter installation. See, e.g., *Starr v. PECO Energy Co.*, Docket No. C-2015-2516061, p. 11 (Order Entered Sept. 1, 2016).

13. The Commission previously determined that the Company’s existing PLC meters are not compliant with Act 129 and the Commission’s Smart Meter Implementation Order. See *Petition of PPL Electric Utilities Corporation for Approval of Smart Meter Technology Procurement and Installation Plan*, Docket No. M-2009-2123945, p. 24 (Order entered June 24, 2010).

14. Under the Company's Commission-approved Smart Meter Plan, PPL must replace all of the PLC meters with the RF Mesh meters, which the Commission declared as meeting all of the requirements of Act 129 and the Commission's Smart Meter Implementation Order. See *Petition of PPL Electric Utilities Corp. for Approval of Its Smart Meter Technology Procurement and Installation Plan*, Docket No. M-2014-2430781, p. 24 (Order Entered Sept. 3, 2015).

15. The Complainants have failed to demonstrate that the new AMI meter causes, contributes to, or exacerbates any adverse health effect.

16. The Complainants have failed to sustain their burden of proof that installing the new AMI meter would constitute unsafe or unreasonable service in violation of 66 Pa. C.S. § 1501.

ORDER

THEREFORE,

IT IS ORDERED:

1. That the Formal Complaint filed by Paula and Charles Hughes against PPL Electric Utilities Corporation at Docket No. C-2019-3007631 is denied and dismissed.
2. That the docket in this proceeding be marked closed.

Date: November 19, 2019

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/s/  
Elizabeth H. Barnes  
Administrative Law Judge