

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Richard N. Myers	:	
	:	
v.	:	C-2017-2620710
	:	
PPL Electric Utilities Corporation	:	

INITIAL DECISION

Before
Elizabeth H. Barnes
Administrative Law Judge

INTRODUCTION

A residential landlord customer 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” on his and eleven of his tenants’ residential dwellings. 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.

HISTORY OF THE PROCEEDING

On August 11, 2017, Richard N. Myers (Complainant) filed the instant Complaint against PPL Electric Utilities Corporation (PPL, PPL Electric, Company or Respondent) with the Pennsylvania Public Utility Commission (Commission) averring he wished to opt out of smart meter installations at his residence at 1123 Elm Avenue, Lancaster, PA 17603 and at eleven rental homes that he owns in Lancaster and Columbia, Pennsylvania. Complainant avers smart meters are a health and fire hazard and he has a legal right to opt out of smart meter installations.

Electronic service of the complaint occurred on August 22, 2017.¹ On September 12, 2017, Respondent filed a timely Answer with New Matter. The Answer admitted that the Respondent provides electric service to the Complainant at the addresses shown on the Complaint. The Answer contends that the Respondent is required to install AMI, or smart meters for all AMR customers and that it has the right to terminate service for failure of a customer to permit access to the meter.

On October 3, 2017, a Hearing Notice was issued scheduling a hearing for January 31, 2018 and assigning the case to me as presiding officer. A Prehearing Order was issued on October 4, 2017. On December 18, 2017, PPL filed a Motion to admit Curtis S. Renner, Esquire *pro hac vice* and represent PPL as additional counsel. On December 20, 2017, PPL requested a continuance of the evidentiary hearing. A Hearing Cancellation/Reschedule Notice was issued on January 3, 2018, rescheduling the hearing to February 5, 2018. On January 9, 2018, an Interim Order was issued admitting Mr. Renner *pro hac vice*. On January 15, 2018, Complainant served direct testimony. On January 19, 2018, a Second Prehearing Order was entered establishing a due date of February 15, 2018 for PPL to submit its rebuttal testimony. On January 22, 2018, a Hearing Cancellation/Reschedule Notice was issued rescheduling the hearing to April 2, 2018. Also on January 22, 2018, an Amended Second Prehearing Order was issued changing the hearing date to April 2, 2018 and permitting the Complainant to have his witnesses participate in the hearing via telephone.

On February 6, 2018, Complainant requested that he be allowed to update his direct testimony and exhibits. On February 8, 2018, the parties and the ALJ exchanged email correspondence, which established a due date of March 16, 2018, for the Complainant's updated testimony and exhibits as well as a due date of March 26, 2018, for PPL Electric's written expert rebuttal testimony and exhibits. On March 16, 2018, the Complainant served his updated direct

¹ PPL signed a waiver of the Section 702 requirement for registered or certified mail service of formal complaints, 66 Pa. C.S. § 702, and agreed to electronic service under the Commission's waiver of 702 program. *See In Re: Electronic Service of Formal Complaints*, Secretarial Letter Dated December 22, 2014, at Docket Nos. M-2013-2398153 *et al.* Service is listed in the electronic Audit History of the case as entered by the Secretary's Bureau as having been affected on August 22, 2017. Thus, PPL's Answer filed on September 12, 2017 is deemed timely filed.

testimony and exhibits. On March 26, 2018, PPL Electric served its written expert rebuttal testimony and exhibits.

On March 30, 2018, PPL Electric filed a Motion in Limine to exclude the Complainant's exhibits. The Motion in Limine was argued at the in-person evidentiary hearing on April 2, 2018. At the hearing, Complainant appeared *pro se* with one witness, David O. Carpenter, M.D. Respondent appeared represented by Devin Ryan, Esquire and Curtis Renner, Esquire with four witnesses: William Hennegan², Scott Larson, Christopher Davis, Ph.D., and Mark Israel, M.D. Admitted into the record at the hearing were Complainant's Exhibits Nos. 1-6, 8-10, 12-27. Also admitted at the hearing were PPL Electric Exhibits Nos. 2-4, 9-10.

On April 4, 2018, a Briefing Order was issued directing PPL to submit by April 10, 2018, post-hearing exhibits concerning customer contact history at Complainants' rental properties. The Briefing Order gave the parties leave to file Main Briefs on or before May 18, 2018 and Reply Briefs on or before June 4, 2018. On April 6, 2018, PPL submitted PPL Electric Exhibit No. 11, customer notification and smart meter installation date information for Complainant's tenants' accounts, with a verification by William Hennigan. On April 24, 2018, this Exhibit was entered into the record. Complainant filed a response, not objecting to PPL Exhibit No. 11 on April 10, 2018; however, Complainant requested post-hearing Complainant's Exhibits Nos. 29 and 30 be admitted into the record. On April 10, 2018, I sent the Commission's Secretary Chiavetta an Interoffice Memorandum requesting PPL Electric Exhibit No. 11 be attached to the docket. On April 11, 2018, I sent Secretary Chiavetta an Interoffice Memorandum requesting Complainant's letter and Exhibits Nos. 29 (a Copy of Complainant's Complaint) and 30 (A January 31, 2006 Letter from PPL to Complainant regarding landlord agreement for his rental properties) be attached to the docket.

The Transcript, consisting of 278 pages, was filed on April 27, 2018. On May 18, 2018, PPL's Main Brief was filed. Also on May 18, 2018, Complainant's attempted filing of his brief was rejected by the Secretary's Bureau for lack of original signatures on the cover sheet.

² The Transcript states William Pennedan testified. Tr. 2, 201. However, the correct name is William Hennegan. See Verification to PPL Electric Exhibit No. 11.

Complainant e-mailed and mailed hard copies of his Main Brief to PPL's counsel and the presiding officer on May 18, 2018. I have considered Complainant's Main Brief in the proceeding as he attempted to timely file with a signed cover letter addressed to the administrative law judge. A hard copy of the main brief is admitted into the record.

On June 12, 2018, Reply Briefs were filed by both parties and the record closed. On July 9, 2018, PPL filed a Motion to Strike Portions of Complainant's Reply Brief. On July 16, 2018, Complainant filed an answer to PPL's Motion to Strike Portions of his Reply Brief. On July 19, 2018, Complainant filed a Motion to Reopen the Record for the purpose of taking additional evidence. Complainant requested Complainant's Exhibit 29, "Actions from Peer Review of the Draft NTP Technical Reports on Cell Phone Radiation March 26-28, 2018" be admitted. On July 27, 2018, PPL filed an Answer to Motion to Reopen Record. This case is ripe for a decision.

FINDINGS OF FACT

1. The Complainant in this proceeding is Richard N. Myers who resides at 1123 Elm Avenue, Lancaster, Pennsylvania. Tr. 171- 177, Direct Testimony of Richard N. Myers.

2. Complainant is a landlord for eleven rental residential dwellings in PPL's service territory including: 1) 735 Bay St., Lancaster; 2) 720 High St., Lancaster; 3) 31 W. Frederick St., Lancaster; 4) 553 W. Vine Street, Lancaster; 5) 17 E. Filbert St., Lancaster; 6) 529 Poplar Street, Lancaster; 7) 525 Beaver Street, Lancaster; 8) 521 Beaver St., Lancaster; 9) 523 Beaver St., Lancaster; 10) 551 Dauphin St., Lancaster; and 11) 115 S. 3rd St., Columbia. Complaint, C Exhibit 30.

3. The Respondent in this proceeding is PPL Electric Utilities Corporation, an electric distribution company (EDC).

4. 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 Exhibit No. 3.

5. 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 Exhibit No. 3 at 5-6, Tr. 218-219.

6. The RF Mesh system allows the Company to receive data from the customer’s meter wirelessly, unlike PPL’s previous powerline carrier (PLC) system that used the customer’s actual wires. Tr. 218.

7. The individual RF Mesh meters are used as relay points to transmit data back to PPL. Tr. 218-219.

8. 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 Exhibit No. 3 at 3, 32, Tr. 218.

9. PPL has deployed 720,000 RF Mesh meters as of the April 2, 2018 hearing. Tr. 221, PPL Electric Exhibit No. 3.

10. Complainant has a PPL Landlord Account #91038-78001, which allows PPL to bill Complainant for electric service when tenants discontinue service in their names. C Exhibit 30, Tr. 181-182.

11. PPL sent 6-week and 3-week notification letters to Complainant’s rental property addresses instead of to the landlord Complainant’s address, notifying intent to install the new AMI meters on those respective properties. PPL Electric Exhibit No. 11, Tr. 181-182.

12. All tenant meters have been replaced. PPL Electric Exhibit No. 11.

13. On July 20, 2017, PPL sent Complainant a letter notifying him that it intended to install the new AMI meter on his premises located at 1123 Elm Avenue, Lancaster, Pennsylvania within approximately the next three weeks. PPL Electric Exhibit No. 2.

14. PPL never sent notification to 1123 Elm Avenue, Lancaster regarding the intended replacement of meters on Complainant's rental properties. Tr. 181, PPL Electric Exhibit No. 11.

15. The RF Mesh meter to be installed for the Complainant's residential account is either the Landis + Gyr Focus AXR-SD or the E350 Focus AX-SD meter. Tr. 217, 221. C Exhibit Direct Testimony of Richard Myers at 1-2, Tr. 177.

16. Complainant holds a Bachelor of Arts in Naval Science and History. Tr. 191-192.

17. Complainant is neither a medical doctor nor a registered nurse. Tr. 192.

18. Complainant is neither a lawyer nor an engineer. Tr. 192.

19. Complainant uses an Apple 6s 16 GB cell phone relatively regularly and a laptop computer; however, Complainant attempts to minimize the use of these devices and is seeking a Faraday³ cage for his phone. Tr. 193, 198-199, PPL Electric Exhibit No. 10.

20. Complainants' tenants include pregnant women and infants. Tr. 179-181.

21. Complainant's Witness David O. Carpenter has an M.D. from Harvard college and Harvard Medical School and has been the Director of the Institute for Health and Environment, an institute at the University of Albany, since 1998. Tr. 51-55.

22. Dr. Carpenter is not a Board-certified physician and he has never practiced medicine; however, he is a professor in environmental health science at the University of Albany. Tr. 53, 56.

³ Faraday cages protect data and credit card information by blocking cell phone signals.

23. Dr. Carpenter worked for the National Institute of Mental Health in neurobiological research and he has also worked for the New York State Department of Health. Tr. 54-56.

24. Dr. Carpenter was accepted as a medical expert witness in public health. Tr. 59-60.

25. Dr. Carpenter is familiar with the Bolkow [Volkow] study, the BioInitiative Report (C Exhibit 3), the 1971 review from the National Technical Information Service (C Exhibit 4), Dr. Martin Pall's List of 155 Reviews (C Exhibit 5) and national toxicology studies. Tr. 66-71.

26. Dr. Carpenter opined there are biological or adverse health effects from non-thermal RF radiation including elevation of cancer of the nervous system and changes to the metabolic activity of the brain. Tr. 66, 71-78.

27. Dr. Carpenter admits the RF fields from the PPL AMI meter comply with Federal Communications Commission (FCC) standards regarding RF exposure; however, he opines the standard should be changed as it does not regulate pulses, but rather exposure over a time period. Tr. 110-111.

28. 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 1-2.

29. 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 2.

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

31. 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.

32. 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, 12.

33. 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 8.

34. 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 8-9.

35. 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.

36. 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.

37. There are seven television broadcast towers within a 50 mile radius of Complainant's residence in Lancaster, Pennsylvania. PPL Electric Statement No. 1 at 16.

38. Based on the locations of each tower and their RF power outputs, the constant background level of RF fields at Complainant's residence are 18.4 times higher than the RF signals from the AMI meter. PPL Electric Statement No. 1 at 16, PPL Electric Exhibit CD-5.

39. The existing background levels of RF fields at Complainant's rental properties in Lancaster and Columbia are many times higher than the fields from the AMI meter. PPL Electric Statement No. 1 at 16 – 17.

40. 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. C Introduction at 2, PPL Electric Statement No. 1 at 14, PPL Electric Exhibit CD-4.

41. Even 30 feet away from a person using a cell phone, the RF fields are 3 times higher than from the AMI meter. PPL Electric Statement No. 1 at 14.

42. Complainant used his cell phone for 16,222 minutes over a 12-month period. PPL Electric Statement No. 1 at 15, PPL Electric Exhibit No. 10.

43. RF fields at 3 meters from the AMI meter are 94 times smaller than the background RF exposure from UHF Television broadcasting at Complainant's rental property in Columbia. PPL Electric Statement No. 1 at 16-17, PPL Electric Exhibit CD-7.

44. The new smart meters do not cause adverse thermal or non-thermal biological effects. PPL Electric Statement No. 1 at 17-18.

45. 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.

46. 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.

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

48. 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.

49. Dr. Israel also 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.

50. Claimed symptoms related to 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 11-12.

51. There are no established medical criteria for the diagnosis or treatment of IEI. PPL Electric Statement No. 2 at 13.

52. IEI and the variety of symptoms attributed to it are not caused by exposure to RF fields. PPL Electric Statement No. 2 at 9-15

53. 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 14.

54. 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 14.

55. PPL's new AMI meters are equipped with software and mechanisms that better alert the Company if there is an issue with overheating. Specifically, there is a heat alarm set within the meter software program, so when the temperature of the meter hits an established level, the Company is alerted of the issue. Tr. 221.

56. PPL monitors the meter's temperature data, so it can track the meter's temperature and identify any current issues or problematic trends. Tr. 221.

57. The Landis + Gyr E350 Focus AX-SD and Landis + Gyr Focus AXR-SD meters are not fire hazards. Tr. 221.

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 its 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 *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).⁴

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

⁴ 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).

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 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 Telephone Co. 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 (Order entered

Jan. 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)

A public utility's Commission-approved tariff is prima facie reasonable, has the full force of law and is binding on the utility and the customer. 66 Pa.C.S. § 316, *Kossmann v. Pa. Pub. Util. Comm'n*, 694 A.2d 1147 (Pa.Cmwlt. 1997) (*Kossmann*); and *Stiteler v. Bell Telephone Co. of Pennsylvania*, A.2d 339 (Pa.Cmwlt. 1977) (*Stiteler*).

PPL's Motion to Strike and Complainant's Motion to Reopen the Record

PPL moves to strike the following from Complainant's Reply Brief:

- a. Information about the travel and compensation of Dr. Carpenter in this proceeding. (Complainant's RB at 4)
- b. Definitions of microwatt, nanowatt, picowatt, and femtowatt from Wikipedia.org. (Complainant's RB at 5)
- c. Definition of "pulse" from Webster's Seventh New Collegiate Dictionary. (Complainant's RB at 7)
- d. Statements, information, and photograph relating to a June 8, 2018 test conducted by the Complainant of his neighbor's meter. (Complainant's RB at 7-8)
- e. Abstracts of research papers sent to PPL Electric's counsel on January 15, 2018, which were included in the Complainant's previous versions of testimony and exhibits. (Complainant's RB at 10)
- f. The draft NTP Study and related media articles and activist webpages. (Complainant's RB at 10)
- g. Hyperlink to an online article at biomedcentral.com that does not work. (Complainant's RB at 11)
- h. Statement about whether he could find certain studies on PubMed or not. (Complainant's RB at 12)
- i. Information about the U.S. National Institutes of Health's online life sciences library. (Complainant's RB at 12)
- j. Information about PubMed. (Complainant's RB at 12)
- k. Information about the development of the polio vaccine. (Complainant's RB at 12)
- l. Allegation that there were "few if any smart meters" deployed between 2002 and 2010. (Complainant's RB at 12)
- m. Reference to portion of Main Brief that contained quote from and link to U.S. Government Accountability Office report from 2012 that is not in the BioInitiative Report. (Complainant's RB at 14)

- n. Enclosure in the Complainant's September 29, 2017 Reply to PPL Electric's Answer to the Complaint. (Complainant's RB at 17)
- o. Statement about an alleged opt-out policy by the Transportation Security Administration ("TSA"). (Complainant's RB at 17)
- p. PPL Electric's response to discovery about the new AMI meter's frequency range. (Complainant's RB at 19-20, 23)
- q. Information on microwave frequencies from Wikipedia.org. (Complainant's RB at 19-20)
- r. Hyperlink to Complainant's Exhibit 4. (Complainant's RB at 20)
- s. Statement that Complainant's Exhibit 4 is "readily available to the public." (Complainant's RB at 20)
- t. Hyperlink to Complainant's Exhibit 12. (Complainant's RB at 23)
- u. Hyperlink to Complainant's Exhibit 13. (Complainant's RB at 24)
- v. Information about the reputation, membership, and mission of the American Academy of Environmental Medicine ("AAEM") that is purportedly sourced from AAEM's website and that is not set forth in Complainant's Exhibit 15. (Complainant's RB at 25-26)
- w. Quote from Complainant's MB about Bervinchak and Murphy cases. (Complainant's RB at 25)
- x. Hyperlink to Complainant's Exhibit 17. (Complainant's RB at 26)
- y. Hyperlink to Complainant's Exhibit 18. (Complainant's RB at 26)
- z. Hyperlink to Complainant's Exhibit 19. (Complainant's RB at 27)
- aa. Hyperlink to a signed version of Complainant's Exhibit 21 that is not in the record. (Complainant's RB at 28)
- bb. Statement that "Dr. Henry Lai is a world renowned researcher on non-ionizing RF radiation." (Complainant's RB at 30)

PPL contends that Complainant's attempt to introduce and rely upon all of this extra-record evidence should be rejected.

Complainant agrees the evidence regarding Dr. Carpenter's travel expenditures should be stricken. He argues the terms nanowatt, picowatt and femtowatt are in the BioInitiative 2012 Exhibit that was entered into the record. C Exhibit 3. The term "pulse" was in Exhibit 3 and at 42 times in Complainant's Exhibit 4, which was also entered into the record. Complainant conducted a test at his home meter showing an average of 8,208 pulsed signals being emitted during a 24-hour period. He requests the Commission consider this evidence or order an independent third-party test. Answer To Motion To Strike at 3-4. Complainant contends the abstracts are a part of the record, and not new information and there is new information announced in March 2018 that NTP Cell phone study shows exposure to cell phone radiation causes cancer in rats. Id. At 4.

The Complainant does not object to striking the hyperlink to an online article at biomedcentral.com because the hyperlink is no longer active. Complainant's RB at 12. The rest of Complainant's responses to PPL's Motion to Strike appear to be that what PPL says is "new evidence" is not evidence but arguments. Exhibit 21 is a public document.

Disposition

It is well-established that parties cannot present new evidence at the briefing stage. See, e.g., *Pa. Pub. Util. Comm'n v. Nat'l Fuel Gas Distrib. Corp.*, 1993 Pa. PUC LEXIS 95, at *7-10 (Order entered July 30, 1993); *Petition of the Borough of Cornwall for a Declaratory Order*, 2016 Pa. PUC LEXIS 3, at *24-26 (Jan. 6, 2016) (Recommended Decision), adopted as modified, Docket No. P-2015-2476211 (Order entered Aug. 11, 2016). "The Commission, as an administrative body, is bound by the due process provisions of constitutional law and by the principles of common fairness." *Hess v. Pa. Pub. Util. Comm'n*, 107 A.3d 246, 266 (Pa. Cmwlth. 2014) (citations omitted). "Among the requirements of due process are notice and an opportunity to be heard on the issues, to be apprised of the evidence submitted, to cross-examine witnesses, to inspect documents, and to offer evidence in explanation or rebuttal." *Id.* (citations omitted).

Section 332(c) of the Public Utility Code entitles every party to, among other things, "submit rebuttal evidence" and "conduct such cross-examination as may be required for a full and true disclosure of the facts." 66 Pa. C.S. § 332(c); see *Nat'l Fuel*, 1993 Pa. PUC LEXIS at *10 ("[S]uch material was outside the record and could be detrimental to the rights of other parties to confront such evidence."). Accordingly, extra-record evidence in briefs is commonly stricken because including extra-record materials in a party's brief "brings up hearsay problems and problems associated with the right to respond to evidence." *Pa. Pub. Util. Comm'n v. Pa. Power & Light Co.*, 1995 Pa. PUC LEXIS 190, at *232 (July 28, 1995) (Recommended Decision) ("PP&L").

I agree with PPL that the above-referenced attempts to place additional evidence not in the record should be stricken as these materials and testimony were either introduced for the first time in the Complainant's Main Brief or Reply Brief. By waiting until the briefing stage

to present any of this new evidence, the Complainant denied PPL Electric an opportunity to review and inspect those materials and testimony, to cross-examine the Complainant or other witnesses about them, and to present evidence in rebuttal. Therefore, it would violate PPL Electric's due process rights for any findings of fact to be based upon or influenced by the Complainant's extra-record evidence.

In addition, Section 5.431 of the Commission's regulations prescribes that "[t]he record will be closed at the conclusion of the hearing unless otherwise directed by the presiding officer or the Commission." 52 Pa. Code § 5.431(a). Particularly relevant here, "[a]fter the record is closed, additional matter may not be relied upon or accepted into the record unless allowed for good cause shown by the presiding officer or the Commission upon motion." *Id.* Petitions to reopen the record can be granted "if there is reason to believe that conditions of fact or law have so changed as to requires, or that the public interest requires, the reopening of the record." 52 Pa. Code § 5.571.

The parties had additional time to submit post-hearing exhibits because PPL requested an opportunity to submit evidence regarding notification letters and termination statuses of the 11 rental properties, and to submit Main and Reply Briefs. In the instant case, the record closed on June 12, 2018, when reply briefs were filed. I am not persuaded by Complainant to find this article "Actions from Peer Review of the Draft NTP Technical Reports on Cell Phone Radiofrequency Radiation" is new or novel evidence or showing any change in fact or law that would warrant the reopening of the record in the public interest. 52 Pa. Code §§ 5.431(b) and 5.571(a). The Article was published on March 28, 2018, prior to the close of the record and there is no good cause shown for its admittance as it consists of recommendations to the National Toxicology Program with regard to reports which have not yet been finalized. Thus, it has little evidentiary value. The article contains hearsay evidence to which PPL objects. Accordingly, the motion to strike will be granted and the motion to reopen the record denied.

Health and Safety Concerns

Complainant requests to opt-out of a smart meter installation and be authorized to retain an analog non-digital meter that does not transmit electromagnetic radiation into his

Lancaster residence. He also requests eleven of his rental properties opt-out of smart meter installation. After receiving PPL Post-hearing Exhibit No. 11, which shows smart meters have been installed at the 11 rental properties, by letter dated April 10, 2018, Complainant amends his complaint to include a claim that PPL should have sent him the 6-week and 3-week notification letters and should not have installed smart meters on his rental properties without proper notification and consent or during the period he had a formal complaint pending protesting same installations. He requests the Commission allow him and his tenants (including parents of small children) to opt-out of smart meter installations. C M.B. at 1.

Complainant claims there is a preponderance of scientific evidence and expert testimony in the instant case to prove non-thermal RF radiation emitted by PPL smart meters can have a negative impact on his health and the health of all persons. He claims that he is an aging senior citizen and the small children in his rental properties are a vulnerable subset of the general population. C M.B. at 1.

Complainant offers as evidence the testimony of Dr. David O. Carpenter, a magna cum laude graduate of Harvard College and a cum laude graduate of Harvard Medical School. Dr. Carpenter co-authored or authored 435 peer-reviewed studies and has written six books. Dr. Carpenter is currently a Professor of Environmental Health Sciences and Biomedical Sciences at the University of Albany. C Exhibit 2, Tr. 93.

Dr. Carpenter was accepted as a medical expert in public health. He opines that excessive exposure to radiofrequency like magnetic fields is associated with adverse health effects, including elevation of cancer of the nervous system. Tr. 78-79. Dr. Carpenter testified that agencies and individuals are in denial of the thousands of publications that report adverse health effects at intensities that do not generate tissue heating. Tr. 83. Dr. Carpenter bases his opinion in part upon the BioInitiative Report 2012. C Exhibit 3, Tr. 74. Dr. Carpenter admits the AMI meter average emissions are in compliance with the FCC's standards for RF emissions. However, Dr. Carpenter contends the FCC does not have the correct standard measuring the intensity of the impulses. Dr. Carpenter disagrees with the methodology of measurement as the standards do not address the intensity of the pulses, only average exposure over time. Tr. 93. Further, Dr. Carpenter testified there are individuals with conflicts of interest and strong ties in

the telecommunications industry influencing the FCC who ignore evidence and are under undue influence from the industry. Tr. 154-155.

Complainant also offered the National Toxicology Program (NTP) cell phone study to show cell phone radiation causes cancer in rats. C MB at 17. Complainant argues this article is significant and shows cell phone radiation causes brain cancer in rats.

To support his claim, Complainant also offered other reports and reviews into evidence including: Dr. Martin Pall's List of 155 Reviews (C Exhibit 5), a U.S. Naval Medical Research Institute Report, 1972 (C Exhibit 4), and other studies. Tr. 91.

Conversely, PPL contends its expert witnesses Dr. Israel and Dr. Davis are more credible than Dr. Carpenter, and thus the scales tip in PPL's favor. PPL R.B. at 9. Dr. Davis refutes Dr. Carpenter's testimony regarding naval studies. Dr. Davis testified the Navy's interest in RF fields in the 1970's pertained to whether thermal heating effects were caused by exposure to high-power radar transmissions. Tr. 233. Dr. Israel testified that the bibliography offered by Complainant as evidence does not provide a reliable scientific basis for reaching conclusions about RF fields from AMI meters used by PPL. PPL Electric Statement No. 2 at 16.

PPL also contends Complainant's Exhibit 5 is not a scientific study published in a peer-reviewed scientific journal. PPL Electric Statement No. 2. PPL argues Complainant overstates and mischaracterizes the studies he believes support his position. PPL M.B. at 13.

Disposition

Under Pennsylvania's "*Walker Rule*," it is well-established that "[h]earsay evidence, properly objected to, is not competent evidence to support a finding." *Walker v. Unemployment Comp. Bd. of Review*, 367 A.2d 366, 370 (Pa. Cmwlth. 1976) (citations omitted). Even if hearsay evidence is "admitted without objection," the ALJ must give the evidence "its natural probative effect and may only support a finding . . . if it is corroborated by any competent evidence in the record;" as "a finding of fact based solely on hearsay will not stand." *Id.* at 370 (citations omitted).

PPL objected to many of Complainant's Exhibits in its Motion in Limine and at the hearing because they are hearsay and not subject to a hearsay exception. PPL Electric Motion in Limine. PPL now contends that although C Exhibits 1-10, and 12-27 were admitted into the record, the exhibits should not be used to support any findings of fact. PPL M.B. 1-14.

I am giving some weight to C Exhibits 1, 2 and 3 as Dr. Carpenter was present for cross examination and these exhibits were either his statement, his curriculum vitae or the BioInitiative article for which he was one of many authors. However, I am giving little or no weight to Dr. Martin Pall's List of 155 Reviews on Non-thermal Effects of Microwave/Intermediate Frequency EMFs. This document purports to offer citations to multiple articles to support the existence of non-thermal health effects. Mr. Pall and the authors of these articles were not available for cross-examination. PPL was denied an opportunity to test the veracity of the authors' opinions or their qualifications to render such opinions. 66 Pa. C.S. § 332(c). *Answerphone, Inc. & Elite Answering Serv. v. Bell Tele. Co. of Pa.*, 1993 Pa. PUC LEXIS 70, at *29-30 (Order entered April 1, 1993).

Regarding, Complainant's Exhibit 4, NMRI Bibliography of Reported Biological Phenomena and Clinical Manifestations Attributed to Microwave and Radio-Frequency Radiation, by Zorach Glaser, this study is an abstract and bibliography and does not contain the full scientific study including procedures, measurements, data, conclusions, etc. Thus, it is not very persuasive.

I am persuaded by the credible testimony of Dr. Davis, who explained that "there are also hundreds of studies, probably thousands of studies that record no effects" from RF exposure. Tr. 255. The vast majority of the studies referenced by Complainant (4,266 of 4,289) are from Complainant's Exhibits 3 through 5, which do not provide a reliable scientific basis for reaching a conclusion about the AMI meters being used by PPL Electric. PPL MB at 37-38. As Dr. Israel pointed out, the BioInitiative Report (C Exhibit 3) is an advocacy document and not a scientific study and has been widely criticized for its lack of scientific objectivity and reliability. PPL Electric Statement No. 2 at 14-15. PPL argues that this same view of the BioInitiative Report as being unbalanced and unreliable has been reached by public entities that have evaluated the document. PPL Electric Exhibit MI-4.

Dr. Carpenter admitted at the hearing that he was involved in creating the BioInitiative Report and that its purpose was to advocate against the current RF exposure standards. Tr. 157. On cross-examination, Dr. Carpenter admitted that the authors of the BioInitiative Report were hand-picked because they all had views known “to help support the goal of arguing for new standards.” Tr. 159. Because the BioInitiative Report is an advocacy document written in order to cast the science of RF exposure in a particular light, the report does not provide a balanced view of the scientific research. As the Health Council of the Netherlands concluded, “In view of the way the BioInitiative report was compiled, the selective use of scientific data and the other shortcomings mentioned above, the Committee concludes that the BioInitiative report is not an objective and balanced reflection of the current state of scientific knowledge. Therefore, the report does not provide any grounds for revising the current views as to the risks of exposure to electromagnetic fields.” PPL Electric Exhibit MI-4 at 1. The overall opinion of these institutions was that the report had many shortcomings. PPL Electric Exhibit MI-2 at 3.

Complainant’s Exhibit 4 is not a scientific study published in a peer-reviewed scientific journal; rather, it is merely a list of various studies. PPL Electric Statement No. 2 at 15. In addition, Exhibit 4 clarifies that any “effects are listed without comment or endorsement since the literature abounds with conflicting reports. In some cases the basis for reporting an ‘effect’ was a single or a non-statistical observation which may have been drawn from a poorly conceived/conducted experiment.” C Exhibit 4 at 7; PPL Electric Statement No. 2 at 15-16. Complainant’s assertion that the studies listed in Exhibit 4 evaluated non-thermal effects from low level RF exposures was successfully refuted by Dr. Davis. C Exhibit 4 is a document dated 1971. Dr. Davis, who has conducted research for the Navy, testified that the Navy’s interest about RF fields in the 1970’s was whether there were thermal (heating) effects caused by exposure to high-power radar transmissions. Tr. 233.

I am also persuaded by the credible testimony of Dr. Israel who testified that the bibliography “does not provide information about the design of the studies, the type and dose of exposures used, or the outcomes of those exposures,” and as such, “does not provide a reliable scientific basis for reaching a conclusion about the RF fields from the AMI meters being used by PPL Electric.” PPL Electric Statement No. 2 at 16.

Complainant's Exhibit 5 also is not a scientific study published in a peer-reviewed scientific journal. PPL Electric Statement No. 2 at 16. It is presented as a list of "reviews" of non-thermal effects from RF fields, but even that title is misleading "because most of the documents listed are not 'reviews' of the scientific literature, but individual studies or other documents," many of which were not published in peer-reviewed scientific journals. PPL Electric Statement No. 2 at 16. Dr. Carpenter agreed that the list prepared by Dr. Pall – who was not present at the hearing to answer questions about what the document actually represents – is nothing more than a "bibliography," just like the Exhibit 4 bibliography from 1971, only "a little more primitive." Tr. 121. "Most importantly," Dr. Israel observed, "this list of documents does not include any information about the design of the individual studies, the data produced in the studies, the analyses of the data, any qualitative evaluation of the individual studies and the data in the studies, or any showing that any critical or balanced criteria were used to identify and evaluate the scientific research." PPL Electric Statement No. 2 at 16. Therefore, these documents, and the studies referenced therein, do not provide a reliable scientific basis upon which to render any conclusions. PPL MB at 37-38.

Third, the Complainant erroneously contends that the opinion of his expert witness, Dr. David O. Carpenter, should be accorded more weight because he has more years of experience evaluating research studies and editing scientific journals than Dr. Israel and because Dr. Israel is biased. C MB at 51, 54, 61. Dr. Israel has over 40 years of experience in conducting medical research and 30 years teaching medicine and science to medical students, graduate students, interns, residents, and practicing physicians. He has published over 245 medical research studies in leading scientific journals such as the New England Journal of Medicine, Cancer Research and Nature, among others. PPL Electric Statement No. 2 at 3. He has also written chapters in medical textbooks and is a co-Editor of the textbook *The Molecular Basis of Cancer*. PPL Electric Statement No. 2 at 3-4. Throughout his career, Dr. Israel has peer-reviewed scientific proposals for major research organizations such as the U.S. National Cancer Institute, Cancer Research UK, and German Cancer Aid, among others. PPL Electric Statement No. 2, at p. 4, lines 14-17. He has also served as an editor and peer reviewer for leading scientific journals, such as *Clinical Cancer Research*, *Neuro-Oncology*, *Cancer Research*, and others. PPL Electric Statement No. 2, p. 4, lines 17-20.

Dr. Israel's expert opinion was accepted by this Commission in *Frompovich*. Dr. Carpenter's opinions have been found to have been flawed in prior judiciary proceedings. PPL MB at 31-35.

Complainant continues to maintain that the AMI meters create "pulsed" fields and insists that his health concerns stem from "intermittent spikes of peak energy." Complainant's MB at 7, 13, 15, 26, 27, 29, 33. As explained by Dr. Davis, "This is a frequently misstated fact." Tr. 234. The AMI meter being used by PPL Electric does not produce pulsed fields. Rather, it "produces sinusoidal RF fields, which are physically different fields from pulsed fields." PPL Electric Statement No. 1, at p. 8, lines 13-14. Therefore, it is inaccurate to claim that the AMI meters create "pulsed" fields. As to the RF fields produced by the AMI meter being used by the Company, the Complainant does not contest Dr. Davis's expert testimony that the average exposure is 98,000 lower than the FCC RF exposure standard and that the peak RF exposures from the AMI meter is 95 times lower than the exposure standard. PPL Electric Statement No. 1, p. 13, lines 13-22; see also PPL Electric Exhibit CD-3. Although Dr. Carpenter advocates the FCC should amend its regulation, that alone is insufficient to find the smart meter is a health hazard, when it is compliant with the FCC's current standard.

Dr. Carpenter admitted on cross-examination that the International Agency on Cancer (IARC) looked at RF fields from smart meters and concluded there was "inadequate evidence" of cancer for RF from smart meters. Tr. 144-146. Dr. Israel also testified that IARC found "inadequate" scientific evidence to reach a cancer classification for RF exposures from smart meters. PPL Electric Statement No. 2 at 19. Dr. Israel stated that IARC's conclusion about smart meters appears in the pages missing from the Complainant's exhibit on IARC. PPL Electric Statement No. 2 at 19. Dr. Carpenter did not agree with the conclusion. Tr. 146.

Complainant argues that the FCC standard is "obsolete" because it is based on "old radar research conducted more than 25 years ago or longer." C MB at 49. However, he bases his claim that the meter is unhealthy in part on the 1971 bibliography of radar studies conducted more than 45 years ago. In addition, he mistakenly argues that the FCC has failed to reassess its guidelines for RF exposure. C MB at 18. Dr. Carpenter, admitted that the FCC has undertaken a public reassessment of its RF exposure standard and that, to his knowledge, the

FCC had not finished that reassessment. Tr. 112-113. Dr. Davis explained that the FCC continues to consider whether new scientific research shows any adverse effects from RF fields. PPL Electric Statement No. 1 at 9. Thus, even Complainant's witness admits the FCC's evaluation of its RF exposure standard remains ongoing.

Complainant references extra-record evidence about a General Accounting Office (GAO) report concerning the FCC RF standard and provides some language from the GAO report. C MB at 50. As this is extra-record evidence without the full report included, it is excluded.

Dr. Davis testified that a number of federal agencies, including the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), and the National Institute on Occupational Safety and Health (NIOSH) have worked and continue to work with the FCC on RF issues. PPL Electric Statement No. 1 at 11. On their websites, these federal agencies continue to point the public to the FCC website on RF safety and do not say or suggest that the FCC exposure limits are inadequate to protect public health. PPL Electric Statement No. 1 at 11. Dr. Davis testified that the FDA has found: "The weight of scientific evidence has not linked cell phones with any health problems. Cell phones emit low levels of radiofrequency energy (RF). Over the past 15 years, scientists have conducted hundreds of studies looking at the biological effects of the radiofrequency energy emitted by cell phones. While some researchers have reported biological changes associated with RF energy, these studies have failed to be replicated. The majority of studies published have failed to show an association between exposure to radiofrequency from a cell phone and health problems." PPL Electric Statement No. 1-2.

The FDA also emphasizes the important difference to health between thermal effects (heating) and non-thermal effects from RF fields: "Whereas high levels of RF can produce health effects (by heating tissue), exposure to low level RF that does not produce heating effects causes no known adverse health effects." PPL Electric Statement No. 1, p. 12, lines 6-8. In this regard, the unrefuted expert testimony by Dr. Davis is that "the RF fields from the AMI meter being used by PPL Electric are far too low to cause a heating effect." (PPL Electric Statement No. 1 at 12.

Complainant argues the Commission “does not have to resolve the scientific dispute over health risks from non-thermal RF radiation. The Commission’s ruling should be based on primary science and whether that science shows that pulsed, non-thermal /frequency hopped spread spectrum radiation from PPL’s smart meter can adversely affect a person’s health...” C MB at 13. Complainant, however, has not identified scientific studies to support his theory that non-thermal RF fields from an AMI meter can cause or contribute to adverse health effects. Instead, Complainant makes numerous claims and arguments based on the BioInitiative Report, other activist materials and media reports. The body of scientific research does not show that exposure to non-thermal RF fields cause or contribute to adverse health effects. Therefore, I find in favor of Respondent on this issue.

Fire Concerns

I infer from Mr. Larson’s testimony that PPL intends to or has already installed either the Landis + Gyr Focus AXR-SD model or the Landis +GYR E350 Focus AX-SD model of an AMI meter upon Complainant’s dwelling and the dwellings of his eleven tenants. Tr. 217, 221. Mr. Larson referenced both meters in his testimony. Tr. 217, 221. Complainant offered no evidence to show these AMI meters have design defects making them fire hazards in comparison to analog meters. However, Complainant generally argues PPL is violating 66 Pa. C.S. § 1501, which requires utilities to provide safe and reasonable service.

Conversely, PPL argues that the new AMI meters are not a fire hazard because they are equipped with software and mechanisms that better alert the Company if there is an issue with overheating. Tr. 221. PPL also contends the Landis + Gyr E350 Focus AX-SD Meter is able to withstand a thermal index up to 160 degrees Celsius. Tr. 220.

Disposition

In the *Frompovich* case, the Commission recognized PECO Energy Company did have an issue with the initial deployment of Sensus smart meters. The Commission held:

Specifically, as to the Complainant's fire hazard claim, PECO satisfied its burden of production, or the burden of going forward with the evidence, to show that the brand of AMI to be installed at the Complainant's home – the Landis + Gyr meter – does not present a fire hazard. PECO presented evidence in this case that previously there was a fire hazard problem with a particular brand of meter PECO had initially used in the AMI deployment. However, in approximately 2012, those meters were all removed and replaced with the Landis + Gyr Focus meters. PECO showed that since the installation of over 1.2 million of Landis + Gyr Focus meters, there have been no reports of fire incidents related to the meters. Tr. at 143. PECO showed that a Landis + Gyr meter would be installed at Ms. Frompovich's home.

Additionally, we take judicial notice here that the fire hazard issue involving the prior brand of AMI meter was raised to our attention during PECO's Smart Meter Phase II Plan proceeding at Docket No. M-2009-2123944, discussed *supra*, fn 3. In the Recommended Decision for that case, it was noted that PECO had experienced several meter events involving overheating during the Phase I deployment. PECO initiated corrective action including replacement of the installed smart meters with meters manufactured by a different contractor, Landis + Gyr. PECO had completed replacing the meters on or before January 18, 2013, the date PECO filed its Smart Meter Phase II Plan. *See* Phase II R.D. at 9.

Moreover, the Complainant did not present any competent evidence in this record to show that the Landis + Gyr brand of meters causes fires or otherwise presents a fire hazard. Therefore, we agree with the ALJ's conclusion that the Complainant did not satisfy her burden of proving that the type of AMI meter to be installed at her home would constitute an unsafe fire hazard in violation of 66 Pa. C.S. § 1501.

Frompovich at 56-57.

PECO had an overheating issue with its initial deployment of Sensus AMI meters; however, these Sensus AMI meters were eventually removed by PECO and replaced with Landis + Gyr Focus AXR-SD meters, the same as are being deployed at residences by PPL through its Agent Grid One Solutions. *Id.* at 56. It is unknown how the communications systems between PECO and PPL compare; however, the Commission has already deemed it to be reasonable and not a fire hazard within the meaning of 66 Pa. C.S. § 1501 to allow another electric distribution company to install the Landis + Gyr Focus AXR-SD meter on residential dwellings with its service territory. The Commission has held that since the installation of over 1.2 million Landis + Gyr Focus meters, there have been no reports of fire incidents related to the meters. *Id.* At 56-

57. Similarly, there is no evidence to show PPL has had any fire incidents related to the same or similar make and model meters after deploying 720,000 meters. Tr. 221.

Since there is evidence of some fires in the past due to micro-arcing from loose jaws per the testimony of Mr. Larson, I encourage PPL and/or its Agents (i.e. Grid One Solutions) to perform a statistically relevant sample audit on its past meter installations and going forward to perform certain customer meter base checks (if it is not already doing so) prior to setting any meters as an added precaution against fires caused by micro-arcing. I recommend PPL and its Agents consult with other peer EDCs to determine and adopt the best practices regarding customer meter base inspections. In summary, PPL should perform what tests serve to minimize any potential fires due to micro-arcing.

I am persuaded by the credible testimonies of Dr. Davis and Mr. Larson to find that the new meter is not a fire risk. Although Mr. Larson testified the meter was certified by Underwriters Laboratories, I recommend PPL and its Agents verify that the Underwriter's Inspection Certificate is present on every AMI meter prior to its installation as an additional precaution.

Tenants' Meter Concerns

The Complainant has requested that the new AMI meter on his eleven tenants' properties, located in Lancaster and Columbia, be removed as well or that the tenants be given the opt out option. The new AMI meter was installed on these eleven properties, some after a Complaint was filed during a disputed period.

PPL argues the filing of a formal complaint did not automatically grant injunctive relief to the Complainant. For emergency injunctive relief, Complainant would have had to file a petition under 52 Pa. Code § 3.1 *et al.*

Complainant was not notified of PPL's intent to install smart meters at his properties that he was leasing to his tenants. However, he was notified of this intent regarding his residential dwelling. There is insufficient evidence to show these 6-week and 3-week notices

of intent to install smart meters also contained notices of termination. The filing of a complaint has certain effects in termination of service cases. For example, under Section 56.92 of the Commission's regulations, "[a] public utility may not mail or deliver a notice of termination if a notice of initial inquiry, dispute, informal or formal complaint has been filed and is unresolved and if the subject matter of the dispute forms the grounds for the proposed termination." 52 Pa. Code § 56.92. However, when the grounds for termination are "unauthorized use of public utility service . . . or the customer's failure to pay undisputed bills," then the "public utility may terminate service after giving proper notice in accordance with §§ 56.91—56.98, whether or not a dispute is pending." 52 Pa. Code § 56.164.

I see no violation of the customer service regulations in Chapter 56 as there is sufficient evidence to show PPL sent 6-week and 3-week notices of the smart meter installations to the tenants at the 11 service properties before PPL installed the meters there. There is no evidence to show Complainant's meter has also been changed pending this dispute. There is insufficient evidence to show notices of termination were issued. Complainant cannot contest the installation of the matter for his tenants' accounts as those tenants have rights and are entitled to due process before the Commission makes decisions directly affecting the meters for their accounts. *Schneider v. Pa. Pub. Util. Comm'n*, 479 A.2d 10 (Pa.Cmwlth. 1984).

Opt-In versus Opt-Out Program

Complainant argues Act 129 created an opt-in program as opposed to an opt-out program whereby the General Assembly intended AMI meter deployment to be on a voluntary basis. Complaint.

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 at Complainant's property. PPL argues Complainant has failed to demonstrate any AMI Meter causes, contributes to or exacerbates any adverse health effect. PPL denies the AMI Meter causes fires or is a privacy risk.

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 *Maria Povacz v. PECO Energy Company*, Docket No. C-2012-2317176 (Order adopted January 24, 2013 at 10); *Maria 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 injunctive relief requested in the instant case and claim that smart meters are generally unsafe, 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 still horizontal *stare decisis* precedent at the Commission level to hold there is no opt-out provision in the current law in Pennsylvania. The fact that other States have opt-in provisions in their law is noted but is non-binding.

In Pennsylvania, 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, 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. (emphasis added)

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

To the extent that Mr. Myers desires the ability to opt out of the smart meter installation, he 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 Maria 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 similarly situated Complainants' residences. *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. Although the Complainant is genuine in his 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. § 331.

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. Complainant has failed to sustain his burden of proof that Respondent violated Section 1501 of the Public Utility Code. 66 Pa. C.S. § 1501.

9. 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 Telephone Co. of Pa.*, 420 A.2d 371, 374 (Pa. 1980) (citations omitted).

10. 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).

11. Under Pennsylvania’s “*Walker Rule*,” it is well-established that “[h]earsay evidence, properly objected to, is not competent evidence to support a finding.” *Walker v. Unemployment Comp. Bd. of Review*, 367 A.2d 366, 370 (Pa. Cmwlth. 1976) (citations omitted).

12. Even if hearsay evidence is “admitted without objection,” the ALJ must give the evidence “its natural probative effect and may only support a finding . . . if it is corroborated by any competent evidence in the record” as “a finding of fact based solely on hearsay will not stand.” *Id.* at 370.

13. Complainant has failed to sustain his 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.

14. PPL is legally required to install the RF Mesh meter on the Complainant’s 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).

15. 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).

16. 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).

17. 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).

18. If the Company does not install the new RF Mesh meter on the Complainant's residence in accordance with the Commission-approved deployment schedule, PPL may violate the Commission's 2010 Smart Meter Order, 2015 Smart Meter Order, and Smart Meter Implementation Order.

19. The Complainant has failed to demonstrate that the new AMI meter causes, contributes to, or exacerbates any adverse health effect.

20. The Complainant has failed to sustain his burden of proof that installing the new AMI meter would constitute unsafe or unreasonable service in violation of 66 Pa. C.S. § 1501.

21. Persons are entitled to due process before the Commission. *See Schneider v. Pa. Pub. Util. Comm'n*, 479 A.2d 10, 15 (Pa. Cmwlth. 1984).

22. Due process is satisfied when a party is afforded notice and the opportunity to appear and be heard. *See Schneider v. Pa. Pub. Util. Comm'n*, 479 A.2d 10, 15 (Pa. Cmwlth. 1984).

23. The Complainant cannot contest the installation of the AMI meter on his tenants' accounts without violating their due process rights because the tenants have not been afforded any notice or an opportunity to be heard on this matter.

ORDER

THEREFORE,

IT IS ORDERED:

1. That the Transcript on pages 2 and 201 is corrected such that the last name "Pennedan" is replaced with "Hennegan."
2. That PPL Electric Exhibit No. 11 is admitted into the record at C-2017-2620710.
3. That Complainant Exhibit Nos. 29 (Complainant's Formal Complaint) and 30 (letter from PPL to Complainant) are admitted into the record at C-2017-2620710.
4. That Complainant's Main Brief is admitted into the record.
5. That Complainant's Motion to Reopen Record and admit into evidence a document entitled, "Actions from Peer Review of the Draft NTP Technical Reports on Cell Phone Radiation March 26-28, 2018" (also pre-marked as Complainant's Exhibit No. 29) is denied.
6. That the Motion of PPL Electric Utilities Corporation to Strike Certain Portions of the Complainant's Reply Brief is granted.
7. That the extra-record evidence in Complainant's Reply Brief is hereby stricken.

8. That the Formal Complaint filed by Richard N. Myers against PPL Electric Utilities Corporation at Docket No. C-2017-2620710 is denied and dismissed.

9. That the docket in this proceeding be marked closed.

Date: August 16, 2018

/s/

Elizabeth H. Barnes
Administrative Law Judge