BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Alan V. Schmukler	:	
	:	
v.	:	C-2017-2621285
	:	
PPL Electric Utilities Corporation	:	

INITIAL DECISION

Before
Elizabeth H. Barnes
Administrative Law Judge

INTRODUCTION

A residential customer filed a complaint seeking to prevent an electric distribution company (EDC) from installing a smart meter on his residence and a directive that the EDC remove a smart meter a/k/a "Advanced Metering Infrastructure (AMI) meter" or "Radio Frequency (RF) meter" from the party wall shared with his neighbor. 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.

HISTORY OF THE PROCEEDING

On August 25, 2017, Alan V. Schmukler (Complainant) filed the instant Complaint averring he has had an electromagnetic sensitivity disability for 30 years and wishes to opt out of a smart meter installation at his residence, 199 Strawberry Street, Leola, Pennsylvania for health reasons and because he contends smart meters are fire hazards and unsafe. Complainant also requests that a smart meter be removed from 197 Strawberry Street as he shares a common wall with his neighbor and his neighbor's smart meter is negatively affecting his health. The Complaint

was served upon PPL Electric Utilities Corporation (PPL, PPL Electric, Company or Respondent) on September 26, 2017.[1] On October 16, 2017, Respondent filed a timely Answer with New Matter. The Answer admitted that the Respondent provides electric service to the Complainant at the address shown 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 October 26, 2017, a Hearing Notice was issued scheduling a hearing for February 2, 2018 and assigning the case to me as presiding officer. A Prehearing Order was issued on November 3, 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 21, 2017, PPL requested a continuance of the evidentiary hearing. On January 3, 2018, a Call-In Telephone Cancellation/Reschedule Hearing Notice was issued rescheduling the hearing to March 9, 2018. A Second Prehearing Order was issued on January 3, 2018. On January 8, 2018, an Interim Order was issued admitting Mr. Renner *pro hac vice*. On March 6, 2018, PPL filed a Motion in Limine seeking to exclude Complainant's pre-marked exhibits from being admitted into evidence. Oral argument regarding the Motion in Limine was heard at the hearing on March 9, 2018.

At the hearing, Complainant appeared *pro se* with one witness, William Bathgate, EE, ME. Respondent appeared represented by Devin Ryan, Esquire and Curtis Renner, Esquire with four witnesses: William Hennegan, Scott Larson, Christopher Davis, Ph.D., and Mark Israel, M.D. Complainant's Exhibits Nos. 1, 1B, 1C, 2, 2B, 3, 5, 6, 8, 10, 12, 13, 14, 15, 16, 17, 18, 21-27 were admitted into the record. Respondent's Exhibits Nos. 2-6 and PPL Electric Statements Nos. 1 and 2 were also admitted.

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[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 September 26, 2017 because an attempt to e-serve on August 25, 2017 was unsuccessful. Additionally, in its Main Brief, PPL stated it was served the Complaint on September 26, 2017. Thus, PPL's Answer filed on October 16, 2017 is deemed timely filed.

On March 15, 2018, a Briefing Order was issued. Also, on March 15, 2018, PPL filed a Motion to Exclude Exhibits seeking exclusion of the same exhibits PPL had sought to exclude in its Motion in Limine. A transcript consisting of 312 pages was filed on April 2, 2018. On April 26, 2018, Complainant e-mailed and submitted his Main Brief directly to the presiding officer with a copy served to PPL. On April 27, 2018, PPL filed its Main Brief. On May 15, 2018, Reply Briefs were submitted by both parties. Although the presiding officer and PPL were served copies of Complainant's Reply Brief, it was not properly filed with the Secretary's Bureau. On June 6, 2018, PPL filed a Motion to Strike Portions of Reply Brief seeking to exclude from the record evidence that was not in the record but raised for the first time in Complainant's Reply Brief. Complainant e-mailed an Answer to Motion to Strike to the presiding officer on June 21, 2018. I sent a copy of the Answer to Motion to Strike to counsel for PPL to cure any possible *ex parte* as it was not clear to me PPL had been served with a copy. The Secretary's Bureau attached Complainant's Answer to Motion to Strike, Reply Brief and Main Brief to the case on July 27, 2018 per my instruction. The record was closed on July 27, 2018. This case is ripe for a decision.

FINDINGS OF FACT

1. The Complainant in this proceeding is Alan V. Schmukler, who resides with his wife, Janice Zalewski, at the service property, 199 Strawberry Street, Leola, Pennsylvania 17540. Tr. 11, Complainant Exhibit 2B.[2]

2. The Respondent in this proceeding is PPL Electric Utilities Corporation, an electric distribution company (EDC). Tr. 11.

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 Exhibit No. 3.

[2] Hereinafter "Complainant Exhibit" will be referred to as "C Exhibit."

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 Exhibit No. 3 at 5-6, Tr. 232-233.

5. 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. 234.

6. The individual RF Mesh meters are used as relay points to transmit data back to PPL. Tr. 240-241.

7. 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. 233.

8. PPL had deployed 700,000 RF Mesh meters as of the March 9, 2018 hearing. Tr. 232-33, PPL Electric Exhibit No. 3.

9. On July 31, 2017, PPL sent Complainant a letter notifying him that it intended to install the new AMI meter on his property within approximately the next three weeks. PPL Electric Exhibit No. 2.

10. The Company installed the new RF Mesh meter on Complainant's neighbor's property on or about August 14, 2017. Tr. 13, Complainant's Introduction and MB at 1-3.

11. The RF Mesh meter to be installed for the Complainant's residential account is the Landis + Gyr Focus AXR-SD meter. Tr. 245.

12. Complainant is 73-years old with work experience in respiratory therapy at Einstein Hospital, Philadelphia and as a Hearing Examiner and Investigator for the Philadelphia Commission on Human Relations (PCHR). Tr. 14, C Introduction.

13. Complainant graduated from Temple University in 1979 with a Bachelor of Arts degree in interpersonal communications. Tr. 197.

14. Complainant has no college degrees in medicine, physics, chemistry, engineering, electromagnetics or bioelectromagnetics. Tr. 197-198.

15. Complainant is a homeopathy teacher/consultant and the author of "Homeopathy – An A to Z Home Handbook" that was published on July 8, 2006. Tr. 200, C Introduction.

16. Complainant does not possess a certification in homeopathy. Tr. 199.

17. Complainant does not currently have an AMI meter at 199 Strawberry Street; however, there is an AMI meter attached to the party wall he shares with his neighbor at 197 Strawberry Street. Tr. 11-12.

18. The AMI Meter at 197 Strawberry Street is located on the party wall approximately one foot from Complainant's service property as the house numbers 199 and 197 are two semi-detached residential homes. Tr. 11-12.

19. Since August 14, 2017, Complainant's chronic insomnia that he has experienced for many years became more severe to the point he is sleeping just two or three hours a night. Tr. 12-13, 201. C Introduction at 1.

20. Since August 14, 2017, Complainant has had difficulty concentrating. Tr. 13.

21. Complainant sleeps in a mylar/aluminum foil poncho and an aluminum hat in a room farthest from his neighbor's AMI meter. Complainant covered some walls with aluminum foil and mylar and all of these measures provide him "minimal relief." C Introduction at 1, Tr. 203-204.

22. Complainant has been diagnosed with insomnia, lag sleep disorder and electromagnetic sensitivity to electric and magnetic fields (EMFs). Tr. 110-120. C Exhibit 1.

23. In the early 1990s, Complainant found it difficult to switch from typewriters to computers when he worked at PCHR and he believes he became electromagnetic sensitive as early as 1991. Tr. 125-127, 208, C Exhibit 3.

24. Complainant uses a computer at the service property, but he purchased a special color monitor for his computer that he believes emits less radiation. Tr. 122, C Exhibit 2 and 2B.

25. Complainant shut off his Wi-Fi and installed a hard wire cable connection for internet service in his residence in 2011 in order to reduce his exposure to EMFs. Tr. 123-125, C Exhibit 2B.

26. Complainant had good employee work evaluations at PCHR until he refused to use a computer and insisted upon using a typewriter to do his work. Tr. 208.

27. Complainant's Witness Bathgate is a retired electrical and mechanical engineer. Tr. 30-33.

28. Mr. Bathgate worked for 8 years as Head of Project Development in power switching and distribution systems at Emerson Electric Corporation, St. Louis, Missouri. Tr. 30-33.

29. Mr. Bathgate holds mechanical and electrical engineering degrees from Iowa State University and the University of Illinois but is not a licensed engineer. Tr. 29-30.

30. Mr. Bathgate has experience taking apart AMI meters, and in particular the Landis + Gyr Focus AXR-SD meter. Tr. 34, 39-40.

31. Mr. Bathgate is an electrical engineering expert with knowledge in the area of radiofrequency; however, he is neither a physicist nor a medical doctor. Tr. 40-41.

32. There is both a magnetic field and a radiofrequency field created by conducted emissions, which travel on the wires inside a home. Tr. 68.

33. Transients feed into appliances and affect the varistors, which are electronic components used as protectors or surge suppressors in appliances including smart meters. Tr. 70-71, 75.

34. Varistors have limited numbers of cycles of discharging a surge to ground and at failure will not discharge a power surge. Tr. 70.

35. If a varistor fails in a smart meter, the electrical components in the smart meter will be damaged. Tr. 70-73, C Exhibit 25 at 12.

36. Mr. Bathgate performed his measurements in Michigan using a different AMI Itron meter with the ZigBee radio inside of it turned on, which attempts to connect with smart appliances even if such appliances are not installed. Tr. 81-83, 96-97, C Exhibit 25 at 12.

37. When some AMI meters are installed, a ZigBee radio is on regardless of whether there are appliances that can communicate with it. Tr. 96-97.

38. When PPL installs its Landis + Gyr AXR-SD AMI meters, the ZigBee radio is not turned on.

39. PPL is looking into a pilot program whereby the ZigBee radio would be turned on only upon a customer's request, so the customer could view their own usage in an in-home display. Tr. 239.

40. Mr. Bathgate witnessed an Itron AMI smart meter explode off of his neighbor's house after a lightning strike; whereas, he has personally had strikes to his house in Michigan where his analog meter did not explode because the tremendous voltages were negated to the ground via its design. Tr. 78-82, 101.

41. Ionizing radiation has an ability to break molecular bonds in cells and has a thermal heating effect. Tr. 91.

42. Non-ionizing radiofrequency radiation is at the low energy end of the electromagnetic spectrum. Tr. 91.

43. The Landis + Gyr Focus AXR-SD meter is certified by the Underwriters Laboratories at UL 2735. Tr. 78-79.

44. 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.

45. 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.

46. 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.

47. 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.

48. 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.

49. 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 8.

50. 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.

51. 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 9, 14, PPL Electric Exhibit CD2.

52. 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.

53. There are eight television broadcast towers within a 50 mile radius of Complainant's location in Leola, Pennsylvania. PPL Electric Statement No. 1 at 13.

54. Based on the locations of each tower and their RF power outputs, the constant background level of RF fields at Complainant's residence are 16.7 times higher than the

RF signals from the AMI meter. PPL Electric Statement No. 1 at 13, Tr. 260-61, PPL Electric Exhibit CD-5.

55. 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 11, PPL Electric Exhibit CD-4.

56. A transient event is a short-lived burst of energy in a system caused by a sudden change of state typically appearing as a short burst of oscillation. C Exhibit 26.

57. The new smart meter does not generate electrical power, does not produce additional harmonics over and above what is already coming into the meter, and does not interfere with the operation of house wiring. C Exhibit 26, Tr. 41-42, 55-74, 102, PPL Electric Statement No. 1 at 11

58. The very low level RF signals from power supplies in modern electronics are either filtered out and/or are heavily attenuated by resistance if they try to travel on household wiring. PPL Electric Statement No. 1 at 11.

59. The filter on the Complainant's current meter is not different in function than that on the meter to be installed on his property. Tr. 229-237.

60. RF fields are always non-ionizing because they do not have sufficient energy to break chemical bonds. Tr. 256, PPL Electric Exhibit CD1, PPL Electric Statement No. 1 at 5-6.

61. RF fields are not capable of being in the ionizing portion of the electromagnetic spectrum and cannot switch back and forth between ionizing and non-ionizing as claimed by Mr. Bathgate. Tr. 258.

62. 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.

63. 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.

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

65. 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.

66. 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.

67. 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 8.

68. Other than Complainant's Exhibits 1 and 2, consisting of one letter dated January 9, 2018 from a medical doctor, Michael J. McGee M.D. and three letters from homeopathic doctors as well as a discharge summary from the National Institutes of Health

(NIH), Complainant showed no medical records supporting his claimed EHS or IEI symptoms. C Exhibit 1 and 2, PPL Electric Statement No. 2 at 15.

69. There are no established medical criteria for the diagnosis or treatment of IEI. PPL Electric Statement No. 2, p. 16, lines 8-9.

70. IEI and the variety of symptoms attributed to it are not caused by exposure to RF fields. PPL Electric Statement No. 2 at 9-11.

71. 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. 2A at 11, PPL Electric Statement No. 2B at 10-11.

72. 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. 2A at 12, PPL Electric Statement No. 2B at 11.

73. None of Complainant's exhibits are actual scientific studies and most appear to be taken from activist websites. PPL Electric Statement No. 2 at 17-20.

74. There is no reliable medical basis to conclude that RF fields from the AMI meters being used by PPL will cause or contribute to the development of illness or disease. PPL Electric Statement No. 2 at 21.

75. There is no reliable medical basis to conclude that RF fields from the AMI meters being used by PPL would cause, contribute to, or exacerbate any of the symptoms claimed by the Complainant, or any other adverse health effects. PPL Electric Statement No. 2.

76. PPL's new AMI meters are equipped with software and mechanisms that better alert the Company if there is an issue with overheating.

77. 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. 247.

78. PPL takes 15-minute interval temperature readings from the meter, so it can track the meter's temperature and identify any current issues or problematic trends. Tr. 247.

79. If the Company detects an issue with the meter's temperature, PPL will dispatch a technician to investigate. Tr. 247-248.

80. PPL has conducted substantial research and taken many steps to prevent fire incidents similar to the ones alleged by the Complainant.

81. From the Company's research, "the root cause of the vast majority" of any fires involving new meters is the customer-owned meter bases wearing out and producing loose connections between the "blade" of the meter and the "jaw" of the meter base. Tr. 235.

82. PPL has taken several steps to mitigate the risk of these worn out meter bases, including analyzing the materials utilized for meter bases, enhancing its inspection criteria so that its service technicians are better able to "identify loose jaws in the field," and ensuring the new AMI meters meet the American National Standards Institute ("ANSI") and Institute of Electrical and Electronics Engineers ("IEEE") requirements. Tr. 236, 238.

83. The new meter is not a fire risk due to any alleged inadequate surge protection. Tr. 283.

84. The new digital meter, as compared to the analog meter, can better withstand damage from a surge because of the padding materials that are utilized when building transformers. Tr. 245.

85. These padding materials are tested to withstand up to 6,000 volts. Tr. 245.

86. The surge protection on the new AMI meter also is no different in function than the Complainant's current meter. Tr. 236-237.

87. The new AMI meter to be installed by the Company is not a fire or safety hazard. Tr. 235-238, 247-248, 283-284.

88. 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. Tr. 221, PPL Electric Exhibit No. 5.

89. PPL is collecting data on the amount of electricity used and significant event information, such as outages, voltage, heat alarms, and meter tampering alerts. Tr. 221-222, PPL Electric Exhibit No. 5, Section 1.2.

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 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).[3]

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,

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[3] 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).

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 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).

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

PPL's Motion In Limine and Motion to Strike Certain Portions of the Complainant's Reply Brief

PPL objected to Complainant's Exhibits 1-27 in its Motion in Limine on the grounds that the exhibits are hearsay evidence and not subject to a hearsay exception. (See PPL Electric Motion in Limine ¶¶ 14, 16-19, Tr. 113-187). PPL 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. Tr. 113-187. PPL M.B. 1-14. PPL's Motion in Limine was granted in part and denied in part. Tr. 111-308.

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 Complainant's attempt to place additional evidence into 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. Accordingly, the motion to strike will be granted and the extra-record evidence in Complainant's Reply Brief will be stricken.

Health and Safety Concerns

Complainant claims he has suffered from Electromagnetic Hypersensitivity (EHS) for 30 years and after PPL placed an AMI meter on his neighbor's adjoining party wall on August 14, 2017, Complainant's insomnia became severe and he struggled to concentrate. Tr. 6, 12-13. To show he suffered from EMS, Mr. Schmukler produced a photocopied letter dated

January 9, 2018, purported to be from Michael J. McGee, M.D. of Family Medicine New Holland, which stated:

> Alan Schmukler has been a patient in my office since 3/4/2014. He has a long history of insomnia and was first diagnosed with phase lag sleep disorder at the NIH sleep lab many years ago. Around that same time, he was also diagnosed with electromagnetic sensitivity. Over the years he has been extremely sensitive to EMFs that are emitted by cell phones, smart meters and other specific electronic devices. This type of exposure makes him physically sick with nausea, lack of mental focus and market worsening of his chronic sleep difficulties. These symptoms are severe enough that they have an adverse effect on his health and well-being. It is my medical opinion that secondary to his significant electromagnetic sensitivity, that he should strictly avoid exposure to such EMF sources to include smart meters and cell phones.

C Exhibit 1.

Complainant also offered copies of letters from homeopathic physicians Dr. Manish Bhatia, Leela D'Souza Francisco, MD (hom, CIH (Cardiology); and Manfred Mueller MA DHM RSHom (NA) CCH all of which stated Complainant has electromagnetic hypersensitivity and insomnia. C Exhibit 1.

Complainant also showed a copy of a January 12, 1981 Discharge Summary Report from the National Institutes of Health (NIH) which shows he was diagnosed with " phase lag sleep disorder." The report stated in pertinent part: "Sleep and temperature were recorded on four days and were found to be markedly disturbed. The patient was unable to sleep before about 7 or 8 a.m. He was hypersomnic, sleeping up to 12 hours at a stretch with interruptions. His temperature fell throughout the day as he became increasingly fatigued and rose during the night, an inversion of the usual pattern." C Exhibit 1B.

Complainant believes his low levels of melatonin cause his sleep lag disorder and that the synchronizing agents of the circadian system are light and melatonin. C Exhibit 2. Complainant resides with his wife at 199 Strawberry Street in a semi-detached home next to 197 Strawberry Street, Leola, Pennsylvania. Mr. Schmukler alleges that AMI Meters at his and his neighbor's residences (on a party wall) will have a deleterious impact on his medical condition

of electromagnetic hypersensitivity syndrome (EHS) and will constitute a violation of the 66 Pa.C.S. § 1501 requirement that a utility company provide its customers with safe and reasonable service and facilities.

Mr. Schmukler claims EHS is a recognized disability under the Americans With Disabilities Act (ADA). He cites to the ADA's website at https://www.access-board.gov which states: "The Board recognizes that multiple chemical sensitivities and electromagnetic sensitivities may be considered disabilities under the ADA if they so severely impair the neurological, respiratory or other functions of an individual that it substantially limits one or more of the individual's major life activities." C MB at 27. Complainant believes AMI meters are exposing him to radio frequency (RF) radiation, which inhibit melatonin production, which is a key mediator of the sleep/wake cycle and necessary for sleep. C MB at 23. Mr. Schmukler contends that he suffers from chronic insomnia, which became much worse after the AMI meter was installed on a neighbor's adjoining wall on August 14, 2017. C MB 23.

Additionally, Complainant contends that AMI Meters emit radio frequency radiation 24 hours a day, 7 days a week and that this constant exposure to microwave radiation has been associated with adverse health effects ranging from insomnia and concentration deficits to cancer. C MB at 5. He contends the AMI meter creates high frequency voltage transients due to its "switched mode power supply" (SMPS) and that these transients are superimposed on the house wiring creating electromagnetic fields that extend into the rooms of any home with an AMI meter. Thus, Complainant argues it is unreasonable and unsafe service for PPL to expose an electromagnetically hypersensitive customer to an AMI meter's direct microwave radiation and the electromagnetic field created by the transient currents it produces. C MB at 5-6.

Mr. Schmukler offered as further evidence numerous exhibits raising concerns about increasing exposure to EMFs generated by electric and wireless devices. Specifically, he cites as authority for his position excerpts from the International Agency for Research on Cancer (IARC), of the World Health Organization (WHO), which he claims concluded RF-EMF radiation is carcinogenic to humans. C MB at 47. He also cited to the EUROPA EM-EMF Guideline 2016 for evidence that "long-term exposure to certain EMFs is a risk factor for

diseases such as certain cancers, Alzheimer's disease, and male infertility…. According to these sources, common EHS symptoms include: headaches, concentration difficulties, sleep problems, depression, lack of energy, fatigue and flu-like symptoms." C MB at 47. Additionally, Complainant contends non-ionizing radiation is a class 2B carcinogen. C MB at 37.

Conversely, PPL contends radiofrequency fields are always non-ionizing, non-carcinogens and they do not inhibit melatonin production in the body. PPL Electric Statement No. 1 at 16-17. PPL contends Complainant may have Idiopathic Environmental Intolerance (IEI) and has failed in his burden of proving he has been medically diagnosed with any disability recognized under the ADA. Additionally, the Commission lacks jurisdiction to determine whether Complainant has a disability as defined under the ADA or to enforce its provisions. PPL R.B. at 16.

Disposition

The Commission, not the ALJ, is the ultimate fact-finder in formal proceedings on a complaint of a public utility's quality of service; the Commission must weigh the evidence and resolve conflicts in the testimony. 66 Pa. C.S. § 335(a); see also *Milkie v. Pa. Pub. Util. Comm'n*, 768 A.2d 1217, 1220, n. 7 (Pa. Cmwlth. 2001).

As a Commonwealth agency, the Commission is governed by the Commonwealth's Administrative Agency Law, 2 Pa. C.S.§ 101, *et seq.* Section 505 of the Administrative Agency Law, 2 Pa. C.S. § 505, specifies that a Commonwealth agency is not bound by technical rules of evidence at an agency hearing. Specifically, 2 Pa. C.S. § 505, provides: "Commonwealth agencies shall not be bound by technical rules of evidence at agency hearings, and all relevant evidence of reasonably probative value may be received. Reasonable examination and cross-examination shall be permitted." Thus, if the evidence is relevant to the issues before the agency and of reasonable probative value, the agency may receive it. 2 Pa. C.S. § 505. Evidence is relevant if it tends to establish facts in issue. *LeRoi v. Pa. State Civil Service Commission,* 382 A.2d 1260 (Pa. Cmwlth. 1978).

The Pennsylvania Supreme Court has stated, however, that in order for evidence relied upon in an administrative proceeding to be considered "substantial evidence," the ". . . information admitted into evidence must have sufficient indicia of reliability . . . " *Gibson v. W.C.A.B,* 861 A.2d 938, 944, 580 Pa. 470, 480 (Pa. 2004). "If the evidence is both competent and sufficient, then the finding is supported by substantial evidence." Id.

Accordingly, while the strict rules of evidence have been relaxed in agency hearings under the Commonwealth's Administrative Agency Law, see 2 Pa. C.S. § 505, there has not been an abandonment of all rules. *Ronald and Beverly Dawes v. Pennsylvania Gas and Electric,* F-2013-2361655 (Initial Decision Issued January 14, 2014) (related to authentication per Pa. R.E. Rules 901 of a third-party recording of a customer call and application of Best Evidence Rule, Pa. R.E, Rules 1001 and 1002). For evidence relied upon in an administrative proceeding to be considered competent, the evidence must be authenticated and follow the applicable hearsay rules.

Under the Pennsylvania Rules of Evidence, Rule 901, parties to a hearing are required to satisfy the requirement of authenticating or identifying an item of evidence. To do so, "the proponent must produce evidence sufficient to support a finding that the item is what the proponent claims it is." Pa. R.E., Rule 901. The rationale for requiring authentication is that it provides a measure of protection against fraud or mistaken attribution of a writing to a person who fortuitously has the same name as the author. *Commonwealth v. Brooks*, 508 A. 2d 316 (Pa. Super. 1986); *Commonwealth v. Harrison*, 434 A.2d 808 (Pa. Super. 1981). Improper authentication can lead to reversal on appeal. *Kopytin v. Aschinger*, 947 A.2d 739 (Pa. Super. 2008). As it is the duty of the ALJ to ensure that the evidentiary record is solid and reliable, permitting improper authentication is a breach of that duty. *See Moore*.

Hearsay is an out-of-court statement made by a declarant that is offered by a party to prove the truth of the matter asserted in the statement. See Pa. R.E., Rule 801. The general rule against hearsay is that hearsay is inadmissible at trial unless it falls into one of the recognized exceptions to the hearsay rule pursuant to the Pennsylvania Rules of Evidence, other rules prescribed by the Pennsylvania Supreme Court, or statute. See Pa. R.E., Rules 801, 802,

803, 803.1, 804. The rationale for the rule against hearsay is that hearsay lacks the guarantees of trustworthiness to be considered by the trier of fact; however, exceptions have been fashioned to accommodate certain classes of hearsay that are substantially more trustworthy than hearsay in general, and thus merit exception to the rule against hearsay. See e.g. *Commonwealth v. Kriner,* 915 A.2d 653 (Pa. Super. 2007); *Commonwealth v. Cesar*, 911 A.2d 978 (Pa. Super. 2006); *Commonwealth v. Bruce*, 916 A.2d 657 (Pa. Super. 2007).

Under the relaxed evidentiary standards applicable to administrative proceedings, see 2 Pa. C.S. § 505, it is well-settled that simple hearsay evidence, which otherwise would be inadmissible at a trial, generally may be received into evidence and considered during an administrative proceeding. *D'Alessandro v. Pennsylvania State Police*, 937 A.2d 404, 411, 594 Pa. 500, 512 (2007) (*D'Alessandro)*. The Supreme Court of Pennsylvania stated:"Hearsay is a statement, other than one made by the declarant while testifying at the trial or hearing, offered in evidence to prove the truth of the matter asserted." Pa. R.E. 801(c). Hearsay evidence is normally inadmissible at trial unless an exception provided by the Pennsylvania Rules of Evidence, jurisprudence, or statute is applicable. Pa. R.E. 802. Complicating this general rule in the administrative law context, however, is Section 505 of the Administrative Agency Law: "Commonwealth agencies shall not be bound by technical rules of evidence at agency hearings, and all relevant evidence of reasonably probative value may be received. Reasonable examination and cross-examination shall be permitted." 2 Pa. C.S. § 505. Therefore, hearsay evidence may generally be received and considered during an administrative proceeding. *See A.Y. v. Commonwealth, Dep't of Pub. Welfare, Allegheny County Children & Youth Serv.,* 537 Pa. 116, 641 A.2d 1148, 1150 (1994).

However, whether simple hearsay may support a finding of an agency depends on whether the evidence meets the criteria of the *Walker/Chapman* rule. The *Walker/Chapman* rule provides that simple hearsay evidence may support an agency's finding of fact so long as the hearsay is admitted into the record without objection and is corroborated by competent evidence in the record. *See Walker v. Unemployment Compensation Board of Review*, 367 A. 2d 366, 370 (Pa. Cmwlth. 1976) (*Walker*) (citations omitted); see also *Chapman v. Unemployment Compensation Board of Review,* 20 A. 3d 603, fn. 8 (Pa. Cmwlth. 2011) (*Chapman*).

Under Pennsylvania's *Walker/Chapman* Rule, it is well-established that "[h]earsay evidence, properly objected to, is not competent evidence to support a finding." 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).

To be "properly objected to" in an administrative proceeding, the hearsay evidence must not fall within one of the recognized exceptions to the rule against hearsay. Hearsay that falls within one of the recognized exceptions to the hearsay rule is competent evidence that may be relied upon by the agency. *See Chapman, supra*, n. 8 (finding that the Board properly relied upon a party's admission as competent evidence as a recognized exception to the hearsay rule); see also *Ruth Sanchez v. PPL Electric Utilities Corporation*, Docket No. C-2015-2472600 (Order entered July 21, 2016) (*Sanchez)* (finding that testimony related to the issuance of a termination letter fell within the business records exception to the hearsay rule, and, therefore, was not simple hearsay, and was competent evidence to be relied upon in the proceeding to determine whether the complainant satisfied her burden of proof); see also Pa. R.E., Rules 802, 803, 803.1, 804.

Moreover, hearsay cannot corroborate hearsay. See *Sule v. Philadelphia Parking Authority*, 26 A. 3d 1240, 1244 (Pa. Cmwlth. 2011), citing *J.K. v. Department of Public Welfare*, 721 A.2d 1127, 1133 (Pa. Cmwlth. 1998) (noting substantial evidence did not exist because there was no non-hearsay evidence to corroborate hearsay testimony).

I gave some weight to Exhibit No. 21 regarding fire hazards as this evidence was corroborated by the testimony of Mr. Larson that PECO had some fires regarding its first deployment of meters. Additionally, as Complainant had an expert witness in the field of electrical and mechanical engineering, the studies upon which Mr. Bathgate was basing his opinion were relevant. However, I gave little or no weight to some of the reports related to health issues including C-15 and 16, Daniel Hirsch Report and the BioInitiative Report, and other documents purporting to offer literature citations to multiple articles to support the

existence of non-thermal health effects. 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. The Bell Tele. Co. of Pa.,* 1993 Pa. PUC LEXIS 70, at *29-30 (Order entered April 1, 1993).

I am giving little or no weight to the letters in Complainant's Exhibit 1 because the doctors were not present to be cross-examined, and PPL was denied an opportunity to test the veracity of their medical 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). Dr. McGee opined, "It is my medical opinion that secondary to his [Mr. Schmukler's] significant electromagnetic sensitivity, that he should strictly avoid exposure to such EMF sources to include smart meters and cell phones." However, PPL had no opportunity to cross-examine Dr. McGee; thus, under the *Walker* Rule, I am not relying upon this opinion to support a finding of fact that Complainant is electromagnetically hypersensitive or that the new AMI meters cause, contribute to, or exacerbate Complainant's illness. Dr. McGee appears to be a medical physician. The other three letters appear to have been written by doctors with homeopathic education. Homeopathy is defined as "a system of medical practice that treats a disease especially by the administration of minute doses of a remedy that would in healthy persons produce symptoms similar to those of the disease." *Webster's Collegiate Dictionary* at 554-555 (10th ed. 2001).

The installation of an AMI meter on 197 Strawberry St. on August 14, 2017 correlates to a self-reported worsening of Complainant's symptoms of lack of concentration and insomnia since August 14, 2017; however, there is insufficient evidence to prove the installation of the AMI meter caused the worsening of Complainant's symptoms as they are subjective by Complainant's own admissions. Complainant testified, "There is no test for electromagnetic sensitivity. You can't do a drug test or an x-ray. It's purely diagnosed clinically. That is based on the patient's self-report. So, when the symptoms are consistent with electromagnetic sensitivity, then that becomes a diagnosis." Tr. 113.

Even if I were to give weight to C Exhibit 1 and find Complainant has EHS, a recognized ailment in the ADA, EHS is not a medical diagnosis that is widely accepted among medical practitioners given the credible testimony of Dr. Israel, who describes EHS as an idiopathic environmental intolerance, which has an unknown cause. Dr. Israel opined that Complainant's insomnia was not caused by radio frequency waves emitting from his neighbor's smart meter. I am persuaded to find Complainant suffers from insomnia and sleep lag disorder. However, I am not convinced EHS has a scientific basis as it appears to be based entirely upon self-reporting of adverse reactions to electromagnetic fields at intensities well below the maximum levels permitted by the FCC's radiation safety standards. The symptoms of EHS seem to vary widely and there is a psychological component to EHS. In giving his opinion, Dr. Israel relied on reports, "It is the IEI-EMF individuals' belief that exposure to RF EMFs will cause harm, rather than actual exposure itself, that results in the presence of symptoms in IEI-EMF individuals." PPL Electric Statement No. 2.

Further, the Commission has no jurisdiction to decide claims for ADA accommodations, even those related to the installation of an AMI meter. The Commission already held, "it is beyond the jurisdiction of the Commission to determine whether the Complainant has a disability or a cause of action under the American[s] with Disabilities Act." *Frompovich v. PECO Energy Co*., Docket No. C-2015-2474602, p. 43 (Opinion and Order entered May 3, 2018). As the Commission held in *Frompovich,* if the Complainant "believes that [he] has a valid ADA claim," then he "must work through the federal courts or one of the federal enforcement agencies, which include the Department of Labor, the Equal Employment Opportunity Commission, the Department of Transportation, the Federal Communications Commission or the Department of Justice, but not this Commission." *Id.* Thus, in keeping with the Commission's recent ruling in *Frompovich* and the plain language of the Public Utility Code, the Commission lacks jurisdiction over the Complainant's claim that he has a disability and should be granted an accommodation under the ADA.

I am persuaded by the credible testimony of Dr. Israel, who testified he would not rely upon either the Bio Initiative Report or World Health Organization press release entitled, "IARC Classifies Radiofrequency Electromagnetic Fields as Possibly Carcinogenic to Humans"

dated May 31, 2011 as reliable scientific studies. C Exhibits 16 and 17, PPL Electric Statement No. 2 at 17-20. They are insufficient evidence that AMI meters cause or exacerbate Complainant's insomnia or EHS. Dr. Israel testified that the letters in C Exhibit 1 did not provide any useful diagnostic medical information but "have the appearance of reiterating information that likely was provided by the patient." PPL Electric Statement No. 2 at 16.

In forming his medical opinion, Dr. Israel relied upon studies from the United Kingdom Health Protection Agency (2012), the Royal Society of Canada (2013), the New Zealand Ministry of Health (2015), and the European Commission's Scientific Committee on Emerging and Newly Identified Health Risks (2015). These entities concluded there is no reliable scientific evidence that exposure to RF fields causes claimed IEI symptoms. The World Health Organization has found that, "There is little scientific evidence to support the idea of electromagnetic hypersensitivity." These findings from public health entities and expert panels show that the theory of IEI caused by exposure to RF fields has not been generally accepted in the medical community. PPL Electric Statement No. 2 at 10-11.

Dr. Israel also evaluated whether there is a credible scientific basis for Complainant's claim that RF fields caused him to have insomnia or aggravated his insomnia. There have been a number of studies on whether sleep quality is adversely affected by RF fields from everyday sources such as cell phone and radio towers. PPL Electric Statement No. 2 at 11-13. Overall, this body of scientific research has found no adverse effects on sleep quality related to exposure to RF fields from cell phones or RF communications towers. PPL Electric Statement No. 2 at 11. Similarly, laboratory studies with human volunteers exposed to RF fields have reported no consistent adverse effects on sleep quality due to RF exposures. PPL Electric Statement No. 2 at 11.

Dr. Israel also evaluated scientific research on RF fields and adverse health effects generally. He examined controlled animal laboratory studies, which "provide a reliable basis for determining whether RF fields have the capability to cause or contribute to adverse health effects in animals," such as cancer or adverse effects on growth, development, or reproduction. PPL Electric Statement No. 2 at 12-13. These studies found no such adverse

health effects. PPL Electric Statement No. 2 at 12-13. Dr. Israel further reported that 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. 2A at 11, PPL Electric Statement No. 2B at 10-11. 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. 2A at 12, PPL Electric Statement No. 2B at 11.

Dr. Israel reviewed all of the exhibits offered by Complainant. Dr. Israel found that none of Complainant's exhibits are actual scientific studies and most appeared to be taken from activist websites. He testified that these exhibits lack scientific objectivity, do not offer a balanced assessment of the scientific research on RF fields, and do not provide scientifically reliable or useful data for reaching conclusions about RF fields and the causation of any symptom or health effect. As a medical doctor and scientific researcher, Dr. Israel would not rely on any of the documents provided by Complainant. PPL Electric Statement No. 2 at 17.

Overall, as an expert in medicine and medical research, particularly as related to RF fields and health, Dr. Israel found, based on his medical education, training and experience, and his evaluation of the scientific research, and to a reasonable degree of medical certainty, that: 1) There is no reliable medical basis to conclude that RF fields from the AMI meters being used by PPL will cause or contribute to the development of illness or disease; and 2) There is no reliable medical basis to conclude that RF fields from the AMI meter being used by PPL would cause, contribute to, or exacerbate any of the symptoms claimed by the Complainant, or any other adverse health effects. PPL Electric Statement No. 2 at 17-22.

At the hearing, I accepted Mr. Bathgate as an expert in electrical engineering based upon his education and work experience. I did not accept him as a medical expert. I am not persuaded by his testimony that RF fields can be both non-ionizing and ionizing. To him, ionizing means that the field will produce a heating effect on water and biological systems. Tr.

106. Rather, I give Dr. Davis's testimony more weight. RF fields are always non-ionizing because they do not have sufficient energy to break chemical bonds. Tr. 256, PPL Electric Exhibit CD1, PPL Electric Statement No. 1 at 5-6. RF fields are not capable of being in the ionizing portion of the electromagnetic spectrum and cannot switch back and forth as claimed by Mr. Bathgate. Tr. 258. Given Mr. Bathgate's lack of knowledge about the science of RF fields, I find his testimony about RF fields from the AMI meters to be unpersuasive.

In addition, Mr. Bathgate claims that an AMI meter, allegedly like the one the Company plans to install, produces voltage transients even when "nothing in the house [is] on," such as lights or appliances, because the meters do not have sufficient filters. Tr. 64. However, Mr. Bathgate's exhibit states that these measurements were performed "with few appliances running except a refrigerator and a few lights on," which contradicts his testimony that the measurements were made with "nothing in the house on." Complainant's Exhibit 27 at 2, Tr. 64.

The Complainant also has alleged that the meter can tell if certain appliances are being used by a person, such as a hair dryer or TV. Tr. 225-226. Mr. Bathgate performed his experiment and calculations using a different AMI meter—an Itron meter that is attached to his house in Michigan. Tr. 81-83. Based upon his experiment with an Itron meter, Mr. Bathgate opines that the AMI meter produces voltage transients even when no appliances are on. Tr. 64. Mr. Bathgate never established that he would get the same results from the Company's Landis + Gyr meter. Mr. Bathgate conducted his measurements when his Itron meter had the ZigBee radio inside of it turned on, which attempts to connect with smart appliances even if such appliances are not installed. Tr. 96-97. PPL agrees that when the ZigBee radio is on, the meter produces additional signals. Tr. 97. However, the evidence shows that the ZigBee radios in PPL's new AMI meters are always turned off unless a customer specifically requests that the ZigBee radio be activated. Tr. 239.

For these reasons, Mr. Bathgate's opinions were based on some incorrect assumptions, and his testimony is unreliable to prove Complainant's claim that voltage transients are produced by the Landis + Gyr meter when all appliances are shut off because of insufficient filters. I find in favor of Respondent on the issue of health and safety concerns.

Fire Concerns

Complainant contends AMI meters have design defects making them fire hazards in comparison to analog meters, as AMI meters are neither grounded nor contain any fuse or circuit breaker. He contends an AMI meter could burst into flames from a power surge and explode. He claims the meter has design defects. Complainant stated that evidence of these defects is in an article from a website, Green Tech Media at www.greentechmedia.com entitled, "Pennsylvania-based Utility PECO Halted Installation of Sensus Meters After Reports of About Two Dozen Fires" (2012). C Exhibit 21. Complainant claims an analog meter can withstand much higher power surges without exploding because there is a ground connection that allows a surge to short, to ground. C MB at 7, C Exhibit 19 and 21.

Complainant contends PPL's witness Larsen admitted that the meter is not designed as a protection device, that surge protection is not of foremost importance in the meter's design, and that although PPL could remotely shut off a meter if a heat alarm is triggered, PPL does not employ the remote shut off due to a temperature alarm. C M.B. 227 citing Tr. 244 - 248. Complainant avers that if the AMI meter's temperature alarm went off, PPL would send a technician within two hours, but help would not likely arrive in time to prevent a fire. C MB at 228-231.

Complainant also alleges that the new AMI meter is unsafe and would cause fires because, according to him, there have been other incidents where electric arcing in AMI meters have caused fires, the meter has inadequate surge protection, and the meter has not been certified by Underwriters Laboratories ("UL"). Complainant's Introduction at 4. Mr. Bathgate also claimed that his neighbor's Itron meter in Michigan exploded and caught on fire in May 2016. Tr. 78, 101, C Exhibits 19 and 21.

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. Additionally, the Company claims it has conducted substantial research and has taken many steps to prevent fires involving loose "jaws" at the customer's meter base,

which could cause the micro-arcing of electricity between the jaw and blade of the AMI meter. Tr. 235-247. PPL also contends the Landis + Gyr meter meets the American National Standards Institute (ANSI) and Institute of Electrical and Electronics Engineers (IEEE) requirements and is certified by Underwriters Laboratories. N.T. 235-236.

Disposition

In the *Frompovich* case, the Commission recognized PECO Energy Company (PECO) 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, C Exhibit 21. 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 found 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 make and model meter after deploying 700,000 such meters.

In the instant case, PPL showed that 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. 247. Further, PPL takes 15-minute interval temperature readings from the meter, so it can track the meter's temperature and identify any current issues or problematic trends. Tr. 247. If the Company detects an issue with the meter's temperature, PPL will dispatch a technician to investigate. Tr. 247-248. Thus, as PPL's expert witness Dr. Davis stated, "the smart meters can actually help people from having a fire" because of the temperature alarms. Tr. 283-284.

The fact that Mr. Bathgate witnessed a fire and explosion of an Itron AMI meter installed by a different electric utility after a lightning strike, is insufficient to show the Landis + Gyr AMI meter is unsafe or a fire hazard. Tr. 101.

PPL has conducted substantial research and taken many steps to prevent fire incidents similar to the ones alleged by the Complainant. From the Company's research, "the root cause of the vast majority" of any fires involving new meters is the customer-owned meter bases wearing out and producing loose connections between the "blade" of the meter and the "jaw" of the meter base. Tr. 235. Based on that research, PPL has taken several steps to mitigate the risk of these worn out meter bases. The Company analyzed the materials utilized for

meter bases and enhanced its inspection criteria so that its service technicians are better able to "identify loose jaws in the field." Tr. 236. PPL also ensures that the new AMI meters meet the ANSI and IEEE requirements. Tr. 238.

PPL Witness Larson admitted fire safety is of national concern regarding smart meters and certain deployments had "come into the papers." Tr. 235. PPL found the root cause of the vast majority of fire incidents related to installation issues in which the customers' meter base jaws are spread out too far for a tight fit with the blade insert of the AMI meter, "which causes excessive arcing." Tr. 235. Mr. Larson admitted, "a little bit of micro arcing inside there, which depending on the severity could greatly increase the temperature of that meter, eventually leading to a fire." Tr. 235. Mr. Larson testified that PPL has done a number of measures to mitigate the risk of fire by analyzing the base materials and enhancing inspection criteria. PPL has deployed at least 700,000 out of 1.4 million AMI Meters. Tr. 238.

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 am taking judicial notice of ANSI/UL 414 (Safety Standards for Meter Sockets), which defines maximum allowable insertion force at Section 17; UL 2735, Standard for Electric Utility Meters; ANSI C12.7 American National Standard Requirements for Watthour Meter Sockets; ANSI Z535.4 Product Safety Signs and Labels; and ANSI C12.10, American National Standard for Electromechanical Watthour Meters. Also, I am taking judicial notice of a White Paper entitled TESCO Hot Socket Gap Research and the use of this data in the development of tools for the early detection and handling of dangerous field conditions. http://www.tesco-advent.com/pdf/TESCO-hot-sockets-white-paper.pdf. 52 Pa. Code § 5.40 (relating to official and judicial notice of fact). The article addresses the deployment of new AMI meters and the need for early detection devices and inspection processes to identify dangerous field conditions prior to catastrophic failure. The article recommends testing jaws for insertion force and replacing jaws with tested forces less than a threshold of 3-5 pounds of force per jaw.

Based upon these above-standards and White Paper article, I recommend PPL and its Agents consult with other peer EDCs to determine and adopt the best practices regarding customer meter base inspections. At a minimum, customer meter base checks should include the following tests. First, verify conductor terminals are tight. Second, identify and address any defects during installation, i.e., loose or broken socket jaws, significantly corroded and rusty socket jaws, and compromised meters that leak or are degraded by rodent or insect infestation. Third, check that the common neutral is common to all exposed metal surface. Fourth, employ a jaw tension test to ensure proper socket jaw tension force prior to connecting a meter into a customer's meter base. Fifth, replace a customer's equipment at PPL's cost if the customer's meter base socket jaws have an unsafe low socket jaw retention force. A hot socket gap indicator device may be used for such tests and socket safety clips(s) might be used to temporarily restore a safe retention force on socket jaw(s) until the customer's meter base can be replaced. Load side socket jaws should be tested to ensure there is no voltage or continuity indicated. In summary, PPL should perform tests that serve to minimize any potential fires due to micro-arcing.

I am persuaded by the credible testimony of Dr. Davis to find that the new meter is not a fire risk due to any alleged inadequate surge protection. Tr. 283. His opinion was corroborated by PPL witness Larson, who testified that the "new digital meter, as compared to the analog meter," can better withstand damage from a surge "because of the padding materials that are utilized when building transformers." Tr. 245. These padding materials are tested to withstand up to 6,000 volts. Tr. 245. I find the surge protection on the new AMI meter is no different in function than the Complainant's current meter. Tr. 236-37. Additionally, although Complainant contends the meter is not UL certified, Complainant's expert witness, Mr. Bathgate, acknowledged that the new AMI meter to be installed by PPL is in fact certified by UL. Tr. 78 As explained by Mr. Bathgate, the meter has a specific safety certification "called UL 2735." Tr. 78-79. Therefore, I find in favor of PPL on this issue; however, 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. UL 2735, Standard for Electric Utility Meters and ANSI Z535.4 (Product Safety Signs and Labels).

Privacy Concerns

The Complainant also has raised privacy issues with the new AMI meter, specifically whether the meter can tell if certain appliances are being used by a person, such as a hair dryer or television. Tr. 225-226. I am persuaded to find credible the testimony of PPL witness Hennegan, who testified that the meter cannot detect such use by a customer and that he possesses the technical knowledge and qualifications to answer that question with certainty. Tr. 225-228. As 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. Tr. 221, PPL Electric Exhibit No. 5. Consistent with that policy, the Company claims that it will collect data on the total amount of electricity used at the premises as well as significant event information, such as outages, voltage, heat alarms, and meter tampering alerts. Tr. 221-22; PPL Electric Exhibit No. 5, Section 1.2.

Additionally, if Complainant is concerned about the AMI meter's connection to smart appliances in his home, he can decline to have the ZigBee radio activated. Tr. 94-97, 238-239. For these reasons, I find in favor of PPL on the privacy issue.

Neighbor's Meter Concerns

The Complainant has requested that the new AMI meter on his neighbor's property, located at 197 Strawberry Street, be removed as well. Tr. 192. The new AMI meter was installed on the neighbor's property on or about August 14, 2017. Specifically, Complainant contends the Company could replace the AMI meter with an analog meter without violating any of his neighbor's due process rights. Complainant argues he does not require consent of his neighbor. Complainant contends the neighbor's consent was not required to place the AMI meter at 197 Strawberry Street, and if she had denied consent, PPL would have placed the AMI meter there anyway barring a court action by her. PPL replaced his neighbor's meter in August 2017 with only prior notice but without his neighbor's express consent and they could do it again. Introduction at 5.

Conversely, PPL contends that the neighbor has rights and is entitled to due process before this Commission about decisions made that directly affect the meter for her account. *See Schneider v. Pa. Pub. Util. Comm'n*, 479 A.2d 10, 15 (Pa. Cmwlth. 1984) (citation omitted). Due process is satisfied when a party is "afforded notice and the opportunity to appear and be heard." Id. Here, nothing in the record indicates that the neighbor wants the meter removed. In fact, the Complainant has not even spoken with his neighbor about the meter installed on her residence, nor does the Complainant believe that she is even aware of these issues. Tr. 192, 212. The Complainant also conceded that he is not authorized to appear on his neighbor's behalf. Tr. 212. Therefore, the neighbor has not been afforded any notice or the opportunity to be heard on this matter. For these reasons, the Complainant cannot represent his neighbor and contest the installation of the AMI meter on his neighbor's property because it would violate the neighbor's due process rights. I find in favor of PPL on this issue.

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. C MB at 228-229. Complainant contends the Commission recognized deployment should be to customers requesting smart meters per Act 129 and cites to the Commission's Implementation Order *In re: Smart Meter Procurement and Installation,* M-2009-2092655 (Implementation Order entered June 24, 2009 at 6). Complainant contends the Commission intended for customers to be enticed by pricing and features to request the meter, not to impose the meter on all customers and threaten termination of service for refusals to allow access to meters for a meter change.

Additionally, Complainant contends ten other States including: Maryland, Vermont, Maine, Texas, California, Arizona, Washington, Florida, Hawaii and Oklahoma have offered residents the freedom of opting out of a smart meter. C Exhibits 22, 23. Complainant contends the Commission never held public hearings regarding smart meter opt out provisions before removing consumers' choice. Complainant contends placement of an AMI meter on his home violates Item 4 of the Castle Doctrine, House Bill No. 40 Session 2011, which addresses

the Crimes Code, title 18 Pa. Consolidated Statutes. He claims his neighbor's AMI meter, which is one foot from his residence, is sending microwaves into his home and creating EMFs due to transients being on the house wiring 24 hours a day, which constitutes a high degree of molestation within the meaning of the Crimes Code. C MB at 243.

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 keep the AMI Meter as installed at Complainant's neighbor's property located at 197 Strawberry Street, and to install an AMI meter at Complainant's residence, 199 Strawberry Street. PPL argues Complainant has 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. Further, PPL contends Complainant did not produce his neighbor as a witness to the proceeding and failed to show the neighbor consented to his request that the AMI Meter installed at 197 Strawberry Street be removed and exchanged for an analog meter. PPL argues Complainant cannot contest the installation of an AMI Meter on his neighbor's property without violating the neighbor's due process rights. PPL MB at 7-9.

Disposition

Regarding the claim that placement of an AMI meter on his home violates Item 4 of the Castle Doctrine, at House Bill No. 40 Session 2011, which addresses the Crimes Code, a house bill is neither enacted nor effective legislation. Even if it were, the Commission can only determine whether PPL violated the Public Utility Code or Commission regulations, not whether its conduct rises to criminal "molestation" within the meaning of the Crimes Code. It is the province of the criminal courts, not the Commission, to determine violations of the Crimes Code. Similarly, it is the province of the civil courts to determine fraud, negligence or other causes of action that do not require the Commission's specialized knowledge. Such cases can be fully and adequately addressed before the courts. *DeFrancesco v. Western Pennsylvania Water Co.*, 499 Pa. 374, 453 A.2d 595 (1982).

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 *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 injunctive 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 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.

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.

Frompovich v. PECO Energy Co., Docket No. C-2015-2474602 at 11-12 (Opinion and Order entered April 21, 2018) (emphasis added).

To the extent that Mr. Schmukler 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 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.

Termination of Service

Complainant claims PPL has no right to terminate his electric service if he denies PPL access to replace his existing meter. Conversely, Respondent argues it is required to install AMI, or smart meters, for all AMR customers and that it has the right to terminate service for failure of the customer to permit access to the meter.

I agree with PPL that if the Commission denies and dismisses this Complaint, PPL will have a legal right to initiate termination procedures if it is denied reasonable access to the Company's meter per its tariff, the Commission's Regulations, and Chapter 14 of the Public Utility Code. See 66 Pa. C.S. § 1406(a)(4); 52 Pa. Code § 56.81(3). PPL Electric Exhibits Nos. 6, and7.

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

Rule 10(B)(2)(g) of PPL Electric's tariff states that the Company is authorized to terminate service when: (1) its "representatives cannot gain admittance or are refused admittance to the premises for the purpose of reading meters, making repairs, making inspections, or removing Company property"; (2) "the customer interferes with Company representatives in the performance of their duties; or (3) "the meters or other equipment of the Company are not accessible during reasonable hours." PPL Electric Exhibit No. 7 at 2. Similarly, Rule 2F of PPL's Tariff, Supplement No. 42, Electric Pa. PUC No. 201 provides that PPL "shall have access at all reasonable hours to customer's premises, without charge for the

purpose of inspecting, installations, installing meters, reading, testing, removing, replacing, or otherwise maintaining or disposing of any of Company's property." PPL Electric Exhibit No. 6.

It is well-settled that where a customer refuses a utility access to its meter, the utility may terminate service after required notice is provided. The Commission's Regulations, at 52 Pa. Code § 56.81(3), provide, in pertinent part, the following:

> A public utility may notify a customer and terminate service provided to a customer after notice as provided in §§ 56.91-56.100 (relating to notice procedures prior to termination) for any of the following actions by the customer . . . Failure to permit access to meters, service connections or other property of the public utility for the purpose of replacement, maintenance, repair or meter reading.

52 Pa. Code § 56.81(3). Additionally, the Commission held in *Frompovich*,

> Based on our adjudication of Ms. Frompovich's claims herein, we find that PECO's proposed termination of electric service to the Complainant's service address for the Complainant's refusal to permit PECO access to its meter, so that PECO's employees can replace the existing AMR meter with an AMI meter, to be consistent with and authorized under Section 1501 of the Code, the Commission's Regulations at 52 Pa. Code § 56.81(3), and the Company's Tariff. We remind PECO, however, that prior to taking any steps related to such termination of service, it must adhere to the applicable provisions of the Commission's Regulations relating to Notice Procedures Prior to Termination at 52 Pa. Code §§ 56.91-100. In the applicable written notice(s) required under the Commission's Regulations, PECO is requested to inform or instruct Ms. Frompovich as to how she may avoid termination related to the meter.

Frompovich at 59. Accordingly, given this *stare decisis* precedent, 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. § 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) ("2015 Smart Meter Order") 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) ("Woodbourne-Heaton").

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 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) ("Smart Meter Implementation Order").

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) ("2010 Smart Meter Order").

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) ("2015 Smart Meter Order").

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

19. 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.

20. 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).

21. 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).

22. The Complainant cannot contest the installation of the AMI meter on his neighbor's property without violating the neighbor's due process rights because the neighbor has not been afforded any notice or an opportunity to be heard on this matter.

ORDER

THEREFORE,

IT IS ORDERED:

1. That the Motion of PPL Electric Utilities Corporation to Strike Certain Portions of the Complainant's Reply Brief filed on June 6, 2018 is granted.

2. That the extra-record evidence in Complainant's Reply Brief is hereby stricken.

3. That the Formal Complaint filed by Alan V. Schmukler against PPL Electric Utilities Corporation at Docket No. C-2017-2621285 is denied and dismissed.

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

Date: August 16, 2018

/s/

Elizabeth H. Barnes
Administrative Law Judge