

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Malgorzata Lesniewski	:	
	:	
v.	:	C-2018-3004594
	:	
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 a/k/a “Advanced Metering Infrastructure (AMI) meter” or “Radio Frequency (RF) meter” on her residence. 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 22, 2018, Malgorzata Lesniewski (Complainant) filed the instant Complaint requesting that PPL Electric Utilities Corporation (PPL or Respondent) be directed to remove a smart meter from her residence at 511 Recreation Drive, Effort, Pennsylvania (account number ending in 016) for health reasons. Complainant avers that her daughter’s hypertension was exacerbated by the “dirty electricity” emitted from a smart meter attached to the service property. Additionally, Complainant contends smart meters are an invasion of her privacy rights. In the

alternative to a total removal of the meter, Complainant requests the meter be moved from the house to another location on the service property at PPL's cost.

The Complaint was served upon PPL on September 12, 2018.<sup>1</sup> On October 2, 2018, Respondent filed an Answer. The Answer admitted that the Respondent provides electric service to the Complainant and has installed a new AMI meter 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 denies that the new AMI meter has caused, contributed to, or exacerbated any illnesses. Further, PPL denies it should be required to move the AMI meter to another location at its cost.

On October 4, 2018, a Telephone Hearing Notice was issued scheduling a hearing for February 7, 2019 and assigning the case to me as presiding officer. A Prehearing Order was issued on October 5, 2018.

At the hearing on February 7, 2019, Complainant appeared *pro se* with 6 Exhibits. Respondent appeared represented by Devin Ryan, Esquire, Michael Shafer, Esquire, and Curtis Renner, Esquire with 4 written statements, 15 exhibits and four witnesses: Kevin Durkin, Scott Larson, Christopher Davis, Ph.D., and Mark Israel, M.D. Complainant's Exhibits Nos. 1 - 6 were admitted into the record. Respondent's Statements 1-4 and Exhibits CD-1 – CD-5; MI-1-MI-3; KD-1-KD-6 and SL-1 were admitted into the record. Tr. 4.

A transcript consisting of 104 pages was filed and the record closed on March 2, 2019. This case is ripe for a decision.

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<sup>1</sup> 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 12, 2018. Thus, PPL's Answer filed on October 2, 2018 is deemed timely filed.

## FINDINGS OF FACT

1. The Complainant in this proceeding is Malgorzata Lesniewski, who resides at 511 Recreation Drive, Effort, Pennsylvania (service address). Tr. 8.
2. Complainant requests an installed AMI meter be removed or relocated (at PPL's cost) from her service property at 511 Recreation Drive. Tr. 8.
3. The Respondent in this proceeding is PPL Electric Utilities Corporation, an electric distribution company (EDC). Tr. 8.
4. On June 30, 2014, PPL filed its new Smart Meter Plan intended to comply with all the requirements of Act 129 and the Commission's Smart Meter Implementation Order. PPL Electric Exhibit Nos. SL-1, "PPL Smart Meter Technology Procurement and Installation Plan," June 30, 2014.
5. PPL selected Radio Frequency ("RF") Mesh meters and metering system because the Company determined that the RF Mesh system would support the 15 capabilities required by Act 129 and the Smart Meter Implementation Order. PPL Electric Exhibit No. SL-1.
6. The RF Mesh system allows the Company to receive data from the customer's meter wirelessly, unlike PPL's previous powerline carrier (PLC) system that used the customer's actual wires. Tr. 46-49, PPL Statement No. 3 at 6-7.
7. The individual RF Mesh meters are used as relay points to transmit data back to PPL. Tr. 48.
8. Under the Smart Meter Plan, the RF Mesh meters are to be deployed between 2017 and 2019 for all of PPL's 1.4 million customers. PPL Electric Statement No. 4 at 3-5.

9. PPL had deployed approximately 1,000,000 RF Mesh meters as of the date of the hearing. PPL Statement No. 4 at 10.

10. On July 31, 2018 a new AMI meter a/k/a RF Mesh meter was installed at the service property. Tr. 48, PPL Exhibit KD-1, “Account Contact History.”

11. During the time period of 2004 to July 31, 2018, a PLC meter was attached to the service property. Tr. 49.

12. The PLC meter worked through communicating through the electric network that was directly connected to the customer’s home. Tr. 49-50.

13. The RF Mesh meter installed at the Complainant’s residential account is the Landis + Gyr Focus AXR-SD meter. Tr. 59-60, PPL Statement No. 4 at 6, PPL Exhibit No. SL-1.<sup>2</sup>

14. Complainant resides with her husband, one minor child, O.J. (age 11). Tr. 8-19, Complainant (“C”) Exhibit No. 4, “After Visit Summary – Children’s Hospital of Philadelphia”.<sup>3</sup>

15. Complainant does not have an engineering degree and is not a licensed medical professional. Tr. 42.

16. Complainant is currently a stay-at-home mom. Tr. 45.

17. Shortly after the installation of a new AMI meter at the service property on or about August 7, 2018, Complainant’s dog was sent to the hospital for a week. Tr. 10-11.

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<sup>2</sup> There is a discrepancy between PPL Witness Larson’s testimony of “AX-SD”, versus his written direct testimony that the specific model of the new RF Mesh meter that was installed is the Landis + Gyr E350 Focus AXR-SD. I find AXR-SD is the correct model number.

<sup>3</sup> Hereafter Complainant Exhibit No. shall be referred to as “C Exhibit No.”

18. Complainant's husband has had increased nose bleeds and sinus problems and worsened hyperthyroidism symptoms after the new meter was installed. C Exhibit 1 at 32-33.

19. In August 2018, O.J. slept in a bed next to an interior wall that had the new meter on the exterior part of the wall. Tr. 11.

20. Within a month of the installation of a new AMI meter at the service property, O.J., was hospitalized at the Children's Hospital of Philadelphia on August 24, 2018, for hypertension. C Exhibit No. 4, 25, Tr. 11-12.

21. O.J. was again hospitalized on or about October 3, 2018 for hypertension (high blood pressure) and was instructed to follow-up with the Division of Nephrology (providing for treatment of kidney diseases) at the Children's Hospital of Philadelphia. Tr. at 11, 23-24, 95-97; C Exhibit Nos. 4-5, "Home Management Instructions of Children's Hospital of Philadelphia".

22. O.J. has a history of being admitted and discharged by Children's Hospital of Philadelphia including stays from October 28, 2016 to November 10, 2016; November 28, 2016 to December 5, 2016; January 16, 2017 to January 18, 2017; December 19, 2017 to December 22, 2017; and January 15, 2018 to January 19, 2018. Tr. 39-40, C Exhibit No. 5.

23. O.J. routinely is seen every month by a doctor for kidney dialysis. Tr. 25, 41-42, C Exhibit No. 4.

24. O.J.'s symptoms of periodic hypertension date back at least to October 28, 2016. Tr. 25, 92-93.

25. O.J.'s blood pressure is generally monitored twice daily by Complainant. Tr. 25, C Exhibit No. 4.

26. Complainant and her spouse own two wireless telephones, which they turn off at night. Tr. 31, 36, C Exhibit No. 6, "AT&T Wireless Statement dated 12/7/17."

27. Complainant turns off her Wi-Fi router in the service address at night. Tr. 31.

28. O.J. has a wireless phone with no phone service, which runs off of Wi-Fi for data. Tr. 32-36.

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

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

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

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

33. 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.

34. 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.

35. RF fields come from many sources in our everyday environments, including AM/FM radio, television broadcast, cell phones and their communication networks, portable phones, garage door openers and Wi-Fi networks. PPL Electric Statement No. 1 at 5-7, 12.

36. “Dirty electricity” is a non-scientific term that sometimes is used to refer to electrical characteristics (harmonics and transients) that can be found on household wiring. Tr. 75-76, PPL Electric Statement No. 1 at 8.

37. AMI meters do not generate electricity, do not generate harmonics and transients that are significant compared to the harmonics and transients already present on the 60 Hz power coming into the home and do not interfere with the operation of household wiring. Tr. 8-9.

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

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

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

41. 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.

42. The RF field exposure 30 feet from a person using a cell phone are three times larger than the RF fields from the AMI meter. PPL Electric Statement No. 1 at 14, PPL Electric Exhibit CD4.

43. RF fields from using cell phones near the head can be over 260,000 times higher than the RF fields from the AMI meter. Tr. 14, PPL Electric Exhibit CD4.

44. There are sixteen television broadcast towers within a 50-mile radius of Complainant's location in Effort, Pennsylvania. PPL Electric Statement No. 1 at 15.

45. Based on the locations of each tower and their RF power outputs, the constant background level of RF fields at Complainant's residence are 13.7 times higher than the RF signals from the AMI meter. PPL Electric Statement No. 1 at 15, PPL Electric Exhibit CD-5.

46. 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.

47. 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.

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

49. 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.



50. 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.

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

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

53. IEI and the variety of symptoms attributed to it are not caused by exposure to RF fields. PPL Electric Statement No. 2 at 16.

54. The World Health Organization and a number of other public health authorities have concluded that the scientific research on RF exposures from cell phone use, which are far higher than the RF from PPL’s smart meters, has not shown that RF fields cause adverse health effects. PPL Electric Statement No. 2 at 10-15, PPL Electric Exhibit MI-1.

55. Hyperthyroidism is a medical condition that is the result of excess production of thyroid hormone, which is regulated by a different hormone produced in the pituitary gland. PPL Electric Statement No. 2 at 15.

56. Complainant’s husband’s hyperthyroidism is not exacerbated or caused by exposure to RF fields from the AMI meter. PPL Electric Statement No. 2 at 16.

57. Exposure to the RF fields from the AMI meter is not causing or contributing to O.J.’s high blood pressure. PPL Electric Statement No. 2 at 16-17.

58. Radio Frequency fields from AMI meters do not interfere with the ability to sleep. PPL Electric Statement No. 2 at 18.

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

60. 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 17-19.

61. 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 at 19, Tr. 85.

62. A common complication of kidney disease a/k/a renal disorder, is elevated blood pressure because there are molecules made in the kidney that are important for the regulation of blood pressure and the kidney regulates overall amounts of bodily fluid, a critical determinant of blood pressure. Tr. 89.

63. PPL's new AMI meters are equipped with software and mechanisms that better alert the Company if there is an issue with overheating. PPL Statement No. 4 at 9-11.

64. 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 to the issue. PPL Statement No. 4 at 9-11.

65. 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. PPL Statement No. 4 at 9-11.

66. If the Company detects an issue with the meter's temperature, PPL will dispatch a technician to investigate. PPL Statement No. 4 at 9-11.

67. 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. PPL Statement No. 4 at 9-11.

68. 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") requirements. PPL Statement No. 4 at 9-11.

69. There have not been any fires caused by the E-350 Focus AXR-SD meter on a residential property in PPL's service territory as of the date of hearing. PPL Statement No. 4 at 10.

70. The new AMI meter to be installed by the Company is not a fire or safety hazard. PPL Statement No. 4 at 9-11.

71. 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. 61-62, PPL Electric Exhibit No. SL-1.

72. PPL uses firewalls to prevent anyone from obtaining unauthorized access to the AMI network. PPL Statement No. 4 at 6-8.

73. Customer data is encrypted to make the data readable to only PPL personnel who can decode the encryption. PPL Statement No. 4 at 6-8.

74. PPL's cybersecurity and data privacy policies are consistent with the national standards for the industry. PPL Statement No. 4 at 8.

## 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).<sup>4</sup>

In addition, a person does not sustain his or her burden of proof in an electric and magnetic field exposure case when the record evidence, “taken as a whole, leads to the ultimate finding and conclusion that the scientific studies at present are inconclusive.” *Letter of Notification of Phila. Elec. Co. Relative to the Reconstructing and Rebuilding of the Existing 138 kV Line to Operate as the Woodbourne-Heaton 230 kV Line in Montgomery and Bucks Counties*, 1992 Pa. PUC Lexis 160, at \*210-11 (June 29, 1992) (Initial Decision) (“*Woodbourne-Heaton*”). Rather, the person must demonstrate by a preponderance of the evidence that such exposure actually causes adverse health effects. *Id.* at \*211. Specifically, in AMI meter-related matters, the Commission has held that “[t]he Complainant will have the burden of proof during the proceeding to demonstrate, by a preponderance of the evidence, that [the utility] is responsible or accountable for the problem described in the Complaint.” *Kreider v. PECO Energy Co.*, Docket No. P-2015-2495064, p. 18 (Order entered Sept. 3, 2015) (Kreider); *see also Romeo v. Pa. Pub. Util. Comm’n*, 154 A.3d 422, 429 (Pa. Cmwlth. 2017) (Romeo) (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

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<sup>4</sup> In addition, any finding of fact necessary to support an adjudication of the Commission must be based upon substantial evidence. *Met-Ed Indus. Users Grp. v. Pa. Pub. Util. Comm’n*, 960 A.2d 189, 193 n.2 (Pa. Cmwlth. 2008) (citing 2 Pa.C.S. § 704). Substantial evidence is such relevant evidence as a reasonable mind might accept as adequate to support a conclusion. *Borough of E. McKeesport v. Special/Temporary Civil Serv. Comm’n*, 942 A.2d 274, 281 n.9 (Pa. Cmwlth. 2008) (citation omitted). Although substantial evidence must be “more than a scintilla and must do more than create a suspicion of the existence of the fact to be established,” *Kyu Son Yi v. State Bd. of Veterinary Med.*, 960 A.2d 864, 874 (Pa. Cmwlth. 2008) (citation omitted), the “presence of conflicting evidence in the record does not mean that substantial evidence is lacking.” *Allied Mech. and Elec., Inc. v. Pa. Prevailing Wage Appeals Bd.*, 923 A.2d 1220, 1228 (Pa. Cmwlth. 2007) (citation omitted).

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* (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).

## Health and Safety Concerns

Complainant claims she, her husband and her daughter have suffered from deleterious health conditions since July 31, 2018, when a new AMI meter was installed on an external wall of her residence. C Exhibit No. 1 at 32-33. Specifically, she contends her 11 year old daughter, O.J., has had sleeping issues and hypertension/high blood pressure. C Exhibit No. 1 at 33-35. Her husband has experienced worsened hyperthyroidism. C Exhibit No. 1 at 33. Complainant offered in support of her claims partial medical records including Home Management Instructions (C Exhibit No. 5) and an After Visit Summary (C Exhibit No. 6) from the Children’s Hospital of Philadelphia. She contends her daughter’s physical ailment of hypertension is aggravated by the installation of an AMI meter at her residence. Thus, it is unreasonable service to allow PPL to keep the AMI meter at its current location on her property.

Conversely, PPL contends Complainant, her husband and daughter may have Idiopathic Environmental Intolerance (IEI) and Complainant has failed in her burden of proving they have been medically diagnosed with EHS or that tinnitus, nausea, hyperthyroidism, headaches, nose bleeds, insomnia, or hypertension are caused by the AMI meter installed at her house.

## Disposition

I gave some weight to C Exhibit Nos. 1 (Complainant’s Statement), 4 and 5 as some of this evidence was corroborated by the testimonies of Complainant and Dr. Israel. However, regarding the remaining C Exhibits 2 “How EMFs Affect Your Patients”, and 3 “Exposed-Electronic Utility Meters A Fire Safety, Health, Privacy and Security Threat”, I gave little or no weight because the authors 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). PPL objected to these exhibits on the grounds that they contained hearsay evidence.

To show her daughter's hypertension became worsened after the AMI Meter was installed on July 31, 2018, Mrs. Lesniewski produced photocopied medical records. Complainant ("C") Exhibit No. 4, "After Visit Summary – Children's Hospital of Philadelphia". Complainant does not have an engineering degree and is not a licensed medical professional. Tr. 42. Complainant is currently a stay-at-home mom. Tr. 45.

I find Mrs. Lesniewski to be credible that her daughter was hospitalized on August 28, 2018 for hypertension and that on or about August 7, 2018, Complainant's dog was sent to the hospital for a week. Tr. 10-11. I also find Complainant's Exhibit No. 1 supports a finding that her husband has had increased nose bleed and sinus problems and worsened hyperthyroidism symptoms after the new meter was installed. C Exhibit 1 at 32-33. In August 2018, O.J. slept in a bed next to an interior wall that had the new meter on the exterior part of the wall. Tr. 11. Within a month of the installation of a new AMI meter at the service property, Complainant's daughter, O.J., was hospitalized at the Children's Hospital of Philadelphia on August 24, 2018, for hypertension. C Exhibit No. 4, 25, Tr. 11-12. O.J. was again hospitalized on or about October 3, 2018 for hypertension (high blood pressure) and was instructed to follow-up with the Division of Nephrology (treatment of kidney diseases) at the Children's Hospital of Philadelphia. Tr. at 11, 23-24, 95-97; C Exhibit Nos. 4-5, "Home Management Instructions of Children's Hospital of Philadelphia".

However, even accepting as true Complainant's averments that these medical symptoms occurred or worsened after the AMI meter was installed, there is insufficient evidence to show the AMI meter installed at the service property on July 31, 2018, is causing or exacerbating these symptoms. In other words, there is insufficient evidence for me to find that but for the installation of the AMI meter, these symptoms would not have occurred or that the AMI meter is the actual cause of or exacerbation of the health symptoms complained of.

The preponderance of evidence shows that O.J. has a history of being admitted and discharged by Children's Hospital of Philadelphia including stays from October 28, 2016 to November 10, 2016; November 28, 2016 to December 5, 2016; January 16, 2017 to January 18, 2017; December 19, 2017 to December 22, 2017; and January 15, 2018 to January 19, 2018. Tr.



39-40, C Exhibit No. 5. O.J. routinely is seen every month by a doctor for kidney dialysis. Tr. 25, 41-42, C Exhibit No. 4. O.J.'s symptoms of periodic hypertension date back at least to October 28, 2016. Tr. 25, 92-93. O.J.'s blood pressure is generally monitored twice daily by Complainant. Tr. 25, C Exhibit No. 4.

I find credible the testimony of PPL's Witness Mark Israel, 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. Dr. Israel is board certified and licensed to practice medicine. PPL Electric Statement No. 2 at 3. 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. 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.

Claimed symptoms related to Electromagnetic Hypersensitivity (EHS) are more accurately described as "Idiopathic Environmental Intolerance" ("IEI"), in which "idiopathic" means "cause unknown," rather than electromagnetic hypersensitivity. PPL Electric Statement No. 2 at 13. There are no established medical criteria for the diagnosis or treatment of IEI. PPL Electric Statement No. 2, p. 16, lines 8-9. IEI and the variety of symptoms attributed to it are not caused by exposure to RF fields. PPL Electric Statement No. 2 at 16.

The World Health Organization and a number of other public health authorities have concluded that the scientific research on RF exposures from cell phone use, which are far higher than the RF from PPL's smart meters, has not shown that RF fields cause adverse health effects. PPL Electric Statement No. 2 at 10-15, PPL Electric Exhibit MI-1.

Hyperthyroidism is a medical condition that is the result of excess production of thyroid hormone, which is regulated by a different hormone produced in the pituitary gland. PPL Electric Statement No. 2 at 15. Complainant's husband's hyperthyroidism is not exacerbated or caused by exposure to RF fields from the AMI meter. PPL Electric Statement No. 2 at 16.

There is insufficient scientific evidence for me to find that exposure to the RF fields from the AMI meter is causing or contributing to O.J.'s high blood pressure. PPL Electric Statement No. 2 at 16-17. There is insufficient scientific evidence in the instant case for me to find that Radio Frequency fields from AMI meters interfere with the ability to sleep. PPL Electric Statement No. 2 at 18.

Several State public health authorities in the United States also have investigated claims about health effects from smart meters and have concluded that there is no credible scientific evidence that RF fields from smart meters will cause or contribute to any adverse health effects. PPL Electric Statement No. 2 at 11, PPL Electric Exhibit MI-2. 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 17-19. 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 at 19, Tr. 85.

A common complication of kidney disease a/k/a renal disorder, is elevated blood pressure because there are molecules made in the kidney that are important for the regulation of blood pressure and the kidney regulates overall amounts of bodily fluid, a critical determinant of blood pressure. Tr. 89.

Further, there may be a correlation between the date the new AMI meter was installed and subsequent worsening of health symptoms, but given the evidence O.J. has a renal disorder, which can be an actual cause of high blood pressure as the kidney regulates bodily fluid

and blood pressure, there is insufficient evidence to persuade me to find the RF meter is causing or exacerbating O.J.'s high blood pressure.

Another factor I am considering is that Complainant and her spouse own two wireless telephones, which they turn off at night. Tr. 31, 36, C Exhibit No. 6, "AT&T Wireless Statement dated 12/7/17." Complainant turns off her Wi-Fi router in the service property at night. Tr. 31. O.J. has a wireless phone with no phone service, which runs off of Wi-Fi for data. Tr. 32-36. Thus, there are other electrical devices in the home emitting radio frequency waves.

I find credible PPL Witness Davis, who has a Ph.D. in Physics and is a fulltime Professor with an endowed Chair at the University of Maryland, where for over 30 years he has taught Physics, Electrical Engineering, Electromagnetics, and RF Electromagnetics to undergraduate and graduate students. PPL Electric Statement No. 1 at 1-5. In addition to his teaching, Dr. Davis is an active scientific researcher in the fields of Physics, Biophysics, Electrical Engineering, Bioelectromagnetics and RF Bioelectromagnetics, conducting many scientific studies in these fields and publishing over 250 studies in peer-reviewed scientific journals. PPL Electric Statement No. 1 at 1-5.

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. RF fields are part of the lower energy, non-ionizing portion of the electromagnetic spectrum which consists of lower frequency signals that do not have enough energy to break chemical bonds in cells or DNA. PPL Electric Statement No. 1 at 5-6. RF fields come from many sources in our everyday environments, including AM/FM radio, television broadcast, cell phones and their communication networks, portable phones, garage door openers and Wi-Fi networks. PPL Electric Statement No. 1 at 5-7, 12.

"Dirty electricity" is a non-scientific term that sometimes is used to refer to electrical characteristics (harmonics and transients) that can be found on household wiring. Tr. 75-76, PPL Electric Statement No. 1 at 8. AMI meters do not generate electricity, do not generate harmonics and transients that are significant compared to the harmonics and transients

already present on the 60 Hz power coming into the home and do not interfere with the operation of household wiring. Tr. 8-9.

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

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

The RF field exposure 30 feet from a person using a cell phone are three times larger than the RF fields from the AMI meter. PPL Electric Statement No. 1 at 14, PPL Electric Exhibit CD4. RF fields from using cell phones near the head can be over 260,000 times higher than the RF fields from the AMI meter. Tr. 14, PPL Electric Exhibit CD4.

Additionally, there are sixteen television broadcast towers within a 50-mile radius of Complainant's location in Effort, Pennsylvania. PPL Electric Statement No. 1 at 15. Based on the locations of each tower and their RF power outputs, the constant background level of RF fields at Complainant's residence are 13.7 times higher than the RF signals from the AMI meter. PPL Electric Statement No. 1 at 15, PPL Electric Exhibit CD-5. Thus, given the background RF exposure to the service property compared to the minimal RF exposure from the AMI meter, I am not persuaded to conclude the AMI meter is causing a deleterious health effect to the Lesniewski family.

## Fire Concerns

Complainant contends AMI meters have design defects making them fire hazards in comparison to her old meter. 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. PPL Statement No. 4 at 9-11.

## Disposition

I find PPL Witness Scott Larson to be credible and find that there is a heat alarm set within the meter software program, so when the temperature of the meter reaches an established level, the Company is alerted to the issue. PPL Statement No. 4 at 9-11. 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. PPL Statement No. 4 at 9-11. If the Company detects an issue with the meter's temperature, PPL will dispatch a technician to investigate. PPL Statement No. 4 at 9-11.

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. PPL Statement No. 4 at 9-11. 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") requirements. PPL Statement No. 4 at 9-11. There have not been any fires caused by the E-350 Focus AXR-SD meter on a residential property in PPL's service territory as of the date of hearing. PPL Statement No. 4 at 10. The new AMI meter to be installed by the Company is not a fire or safety hazard. PPL Statement No. 4 at 9-11.

In the *Frompovich* case, *supra*, 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 1,000,000 such meters. PPL Statement No. 4 at 10.

### Data Privacy

Complainant contends it is unreasonable that the new AMI meter invades her privacy because the meter is able to check how often she uses electricity and which appliances are being used. Complainant is not comfortable with sharing that information. Complaint at 7. Complainant also contends that hackers can hack into the system and check if someone is home or not to plan a robbery. Complaint at 7. Conversely, PPL argues its meter complies with its AMI Customer Privacy Policy and that the ZigBee radio in the meter is turned off. Tr. 61-62.

### Disposition

As a part of its Smart Meter Plan proceeding, PPL filed a detailed AMI Customer Privacy Policy, which sets forth the data PPL will collect through the new smart meter, the steps the Company will take to protect the data, and the ways in which PPL will use the data. Tr. 61-62, PPL Electric Exhibit No. SL-1. PPL uses firewalls to prevent anyone from obtaining unauthorized access to the AMI network. PPL Statement No. 4 at 6-8. Customer data is encrypted to make the data readable to only PPL personnel who can decode the encryption. PPL Statement No. 4 at 6-8. PPL's cybersecurity and data privacy policies are consistent with the national standards for the industry. PPL Statement No. 4 at 8. Additionally, if Complainant is concerned about the AMI meter's connection to smart appliances in her home, she can decline to have the ZigBee radio activated. Tr. 66-68. For these reasons, I find in favor of PPL on the privacy issue.

### Costs of Meter Relocation

As an alternative relief to meter removal, Complainant requests the AMI meter be moved farther away from the house, to another location on the service property at PPL's cost. Conversely, PPL contends it is willing to relocate the meter, but not willing to absorb the cost of relocation per its tariffed provisions.

### Disposition

In *Povacz v. PECO*, C-2015-2475023 (Initial Decision issued March 16, 2018), the ALJ gave the residential customer an option to notify the EDC whether she would relocate the meter socket at her service address. If timely done, the ALJ further ordered the customer to pay the costs to move her meter socket and ordered the EDC to bear the costs associated with connecting its service to a new location of a meter socket. *Id.* at 32, Ordering Paragraphs Nos. 1-9. Exceptions were filed and this case is pending a final Commission decision.

Rule 4(I)(1) and (2) of the company's tariffs provide:

(1) The relocation of customer's facilities due to moving or rearranging Company's facilities at the direction of either the federal, state or local government is the customer's responsibility and expense.

(2) The relocation of Company facilities, when done at the request of others, is at the applicant's expense and payment of the company's estimated cost of the relocation is required in advance of construction. When the request is from an affected property owner and the facilities are on the customer's property, the charges for relocation of distribution system facilities are limited to estimated contractor costs, estimated direct labor and estimated material costs, less an amount equal to any estimated maintenance expense avoided as a result of the relocation.

Rule 4(I)(1) and (2), Supplement No. 59, Electric Pa. PUC No. 201, PPL Electric Exhibit Nos. KD-5 (Rules for Electric Service, Rule 10) and KD-6 (Rule 4 – Supply of Service).



A public utility's Commission-approved tariff is prima facie reasonable, has the full force of law and is binding on the utility and the customer. 66 Pa.C.S. § 316, *Kossmann; Stiteler*. Thus, I find Tariff Rule 4(I)(1) and (2) to be binding upon the parties and Complainant has failed to show the tariff provision to be unreasonable. Under PPL's Tariff Rule 4(I)(1) and (2), Complainant has the option of relocating her meter to a different location because while PPL chooses the type of meter, the customer chooses the location of the meter board and socket. If Ms. Lesniewski would like a different location for the AMI meter, she can hire an electrician to move the meter board/socket to a new location on the service property. This will, in some situations require work on the PPL system as well to extend its conductors to the new meter board location. PPL will limit charges for relocation of distribution system facilities to estimated contractor costs, estimated direct labor and estimated material costs, less an amount equal to any estimated maintenance expense avoided as a result of the relocation in accordance with its tariffed provisions. This option remains open to the parties. However, there is no tariff provision requiring PPL to move an AMI meter solely at the EDC's expense. Thus, I find in favor of Respondent 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 her 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 her 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. Complainant has failed to sustain her 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.

12. 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”).

13. 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).

14. 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”).

15. 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”).

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

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

