

September 3, 2018

Rosemary Chiavetta, Secretary  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street, 2<sup>nd</sup> Floor North  
P.O Box 3265  
Harrisburg, PA 17105-3265

**Re: Richard N. Myers v. PPL Electric Utilities Corporation**  
**Docket No. C-2017-26200710**

Dear Secretary Chiavetta:

Enclosed for filing is the Exceptions to Administrative Law Judge Elizabeth H. Barnes Initial Ruling dated August 16, 2018 in the above referenced proceeding. Copies will be provided as indicated on the enclosed Certificate of Service

Respectfully Submitted,

  
Richard N. Myers

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**Richard N. Myers**  
**Complainant**

v

**Docket No.C-2017-2620710**

**PPL Electric Utilities Corporation**  
**Respondent**

**EXCEPTIONS OF COMPLAINANT RICHARD N. MYERS  
TO THE INITIAL DECISION OF ADMINISTRATIVE LAW  
JUDGE ELIZABETH H. BARNES ISSUED  
AUGUST 16, 2018**

*PRO SE*

**Dated: September 3, 2018**

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## I INTRODUCTION

I respectfully request the Commission to overrule the ALJ's Initial Decision and issue a Final Order to exempt me from having PPL install a smart meter on my home and rental properties.

Forced exposure 24 hours a day to non-thermal RF radiation emitted by PPL's smart meter, in addition to the unprecedented amount of non-thermal RF radiation we are receiving from the ever increasing proliferation of wireless technologies, needlessly puts my health and that of others at risk.

I have provided the Commission with a preponderance of substantial, legally credible, and unimpeachable scientific evidence that meets my burden of proof and for the Commission to rule in my favor under **66 Pa § 1501**.

## II EXCEPTIONS

- A. Exception No. 1: The ALJ erred in her statement "Complainant, however, has not identified scientific studies to support his theory that non-thermal RF fields from an AMI meter can cause or contribute to adverse health effects." *Initial Decision at 25***

This statement is without merit. I identified 4,266 scientific studies by author, year, and title from multiple publications. They report biological and adverse health effects from non-thermal RF radiation in humans, animals, outside living organisms (in vitro), and plants.

*Biointiative 2015 SECTION 15 2012 Supplement p. 7; Digital p. 1012* My studies include positive and negative studies. PPL identified only 10 studies by author and year, all of which consist of negative findings. *PPL Exhibits No. 2 at 9-13*. The number of my positive studies is 400 times greater than the negative studies PPL identified. *Complainant Direct Testimony at 5-6, Complainant Main Brief at 12, Complainant Reply Brief at 2, and Transcript at 11.*

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The ALJ apparently overlooked Appendix A in my Main Brief. In Appendix A I listed 407 scientific studies which briefly explain the positive findings from these studies. My claim is not “theory” which is the term the ALJ used in the Exception above. It is scientific evidence and fact from peer-reviewed studies published in professional journals. Even PPL’s expert witness Dr. Davis fully acknowledges that there are studies that report biological effects at low levels. *Transcript p.255 at 2-4.*

It does not matter that studies reporting adverse health effects were or were not conducted using PPL’s AMI smart meter (Landis+GYR E350 Focus AX-SD model). The issue is exposure to non-thermal RF radiation, not the device which emits it<sup>1</sup>. The claim that the research or evidence was not linked to the “AMI smart meter” appears five other times in the Initial Decision. Why this appears is not relevant and should be discounted.

My 4,266 studies provide overwhelming and unequivocal scientific evidence that adverse health effects have been attributed to non-thermal RF radiation. Nowhere has PPL rebutted the science in these studies. PPL instead attacks the messenger (Dr. Carpenter, Dr. Pall, the U.S Navy), not the primary science. Compared to the number of studies cited by PPL my studies comprise a **preponderance** of evidence that excess exposure to non-thermal RF radiation from a PPL smart meter or other wireless devices can put my health at risk. The below table summarizes:

(continued next page)

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<sup>1</sup> Would a tobacco manufacturer be exempted from Federal tobacco regulations by claiming the scientific research was not based on tobacco provided his supplier?

Item	Complainant	PPL
Studies identified and entered into the Record	4,266 (Dr. Carpenter, US Navy, Dr. Pall)	10 – Dr. Israel (PPL Electric Statement 2) 0 – Dr. Davis (PPL Electric Statement 1)
Positive or negative findings:	Mostly Positive	Negative
Study description	Author Year Title Publication	Author Year
Time period:	1932-2018 Roughly 1800 studies between 2007 and 2012 alone	2002-2015

The weight of the evidence in these thousands of studies also meets the standard stated in the ALJ's Initial Decision below:

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. Lanberry, 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 evidence .

Commonwealth v. Williams, 557 Pa. 207, 732 A. 2d 1167 (1999). *Initial Decision at 11*

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, **“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)*

**B. Exception No. 2: The ALJ erred in her statement “The vast majority of the studies referenced by Complainant (4,266 of 4,289) are from Complainant Exhibits 3 through 5, which do not provide a reliable scientific basis for reaching a conclusion about the AMI smart meters being used by PPL”** *Initial Decision at 20*

I totally disagree. The numbers, quality, and legal credibility of the scientific studies I presented far exceeds what PPL presented. This unequivocally provides the Commission the justification it needs to declare PPL smart meters as constituting unsafe and unreasonable service

under **66 Pa § 1501**, especially when I am willing to pay PPL for an employee to read my meter and spare PPL the expense. *Complainant Reply Brief at 17*. Is not a person's health worth a few dollars a day or less?

Additionally:

The majority of my studies were published in professional journals and were subject to peer review. If the Commission accepts the 10 scientific studies PPL's Dr. Israel cites (*PPL Statement No. 2 p. 9-13*) as having scientific merit the same standard should apply to my studies. Not doing so would be a double standard, arbitrary and capricious.

My Exhibits 3, 4 and 5 are fully backed by expert testimony from Dr. Carpenter. Dr. Carpenter co-edited Exhibit No.3 (Bionitiative 2102), endorsed Exhibit No.4 (Navy Bibliography) *Transcript p.122 at 2-4* and included Exhibit No. 5 (Dr. Pall's 155 studies) as an exhibit in his Direct Testimony letter of March 12, 2018. *Transcript 122 at 2-4 Complainant Exhibit No. 1*.

With all due respect to the ALJ and Commissioners, Dr. Carpenter's Curriculum Vitae (*Complainant Exhibit No. 2*) and his concentration on RF radiation and its impact on health preceding his editing the 2007 Edition of Bioinitiative and after make him better qualified to judge the reliability and scientific credibility of the studies in my three Exhibits than a person who is not a subject matter expert. Even more important, non-subject matter experts on the Commission should not second guess the peer-review process in professional journals and the journal editors who published these studies.

PPL discredited the studies in my Exhibits 3, 4 and 5 because I did not provide complete information such as the studies themselves, a design of the studies, an analyses of the data, that the authors of the studies (in my case thousands) were not available for cross examination, etc.

However, PPL failed to provide this very same information for their studies. This is a double standard. The same standard should apply equally to Complainant and Respondent.

Positive findings carry more weight than negative findings. From the many countless references I can cite to support this I refer you to the statements by Dr. Martin Blank, an EMF researcher: *Complainant's Main Brief at 52 and 19*. This is not complicated but common sense. Consider for example two people who are searching for the same thing. One person finds it, the other does not. Does that prove that it was never discovered? Surely Dr. Israel's 10 negative studies and Dr. Davis' zero negative studies do not negate more than 4,000 positive studies. *PPL Electric Statements No. 1 and No. 2*

PPL's criticism of Exhibits 3, 4 and 5 for not being scientific studies misrepresents my Testimony and completely misses the mark. No one claimed these exhibits were scientific studies. They are compilations, bibliographies and lists of scientific studies. PPL does not rebut the science, they dodge it. The Commission should rule on primary science, not the title or format of the document, or publisher.

**Bioninitiative 2012 – Exhibit No. 3** Bioinitiative 2012 serves a vital purpose. It fills a huge information gap for the public and public officials about health risks from excess exposure to non-thermal RF radiation. This is information that the wireless industry has suppressed and kept from the public, lawmakers, and public health officials for many years. *Complainant's Exhibits No. 24 and 25*. And PPL continues that tradition by petitioning the Commission to not allow any findings of fact from the research, Exhibits and expert testimony I provided.

PPL's criticism of this report as an advocacy document because it challenges PPL's advocacy is nonsense and should carry no weight. What matters is scientific content. The authors of the roughly 1800 new studies published between 2007 and 2012 are the active

investigators in this field.<sup>2</sup> *Transcript p. 75 at 15-17.* Nearly all of the research underwent peer-review. *Transcript p. 74 at 13-14 and 83 at 8-9* If PPL objects to the science, their criticism should be aimed at the authors or editors of the professional journals who published the studies.

Criticism that the Bioinitiative Reports lack scientific objectivity is patently false and misses the point. The Report cites negative studies throughout the document. *Complainant Main Brief at 53. Bioinitiative 2012 Digital pages 61 and Table 1-1 starting at p. 73, 92,93,193,209 239, 242, 259-336. Paper SECTION I, Table 1-1, SECTION 6 Appendix 6-A, Appendix B,* to name a few. That many more positive studies are listed than negative studies just might be the reality. If PPL claims the weight of evidence proves otherwise they did not provide it for the record.

Criticism that the Report lacks balance is disingenuous because it ignores the purpose of the report. Again, Bioinitiative 2012 was written to fill a huge gap in public knowledge and to alert the public, lawmakers, and government officials about the health risks from over exposure to non-thermal RF radiation. Bioinitiative 2012 is especially relevant at this time of the unprecedented proliferation of wireless devices. With no disrespect intended, if the ALJ and Commissioners do not research or possess expertise in non-thermal RF radiation they are not in a position to deem the 1,800 scientific studies in the Bioinitiative Report to be inferior to the research proffered by PPL. I urge the members of the Commission to not prejudge the Bioinitiative Report on PPL's groundless assertion but examine it carefully since your ruling affects not just me, but 12 million Pennsylvanians. I provided the Commission two copies.

**U.S. Navy's Bibliography of Reported Biological Phenomena ('Effects') and Clinical Manifestations Attributed to Microwave and Radio-Frequency Radiation – Exhibit No. 4**

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<sup>2</sup> During the same 2007-2012 period PPL's Dr. Israel identified only 7 studies which all report negative results. Where is the balance? *PPL Electric Statement No. 2, p. 9-13*

I submitted this report for its historical value. *Transcript p. 16 at 7-19*. Being a bibliography of course it does not contain complete scientific studies, procedures, measurement, data, conclusions, etc. as PPL stated. As a stand-alone document I did not represent Exhibit 4 to be a reliable scientific bases for reaching conclusions about RF fields from PPL's AMI smart meters. However, the Bibliography is extremely relevant and valuable as an historical document. It proves that biological and adverse health effects from non-thermal RF radiation have been known and reported for many decades, all the way back to the early 1930s. It debunks PPL's wild claim that there is no reliable medical evidence that RF fields from AMI smart meters cause or contribute to disease.

**Dr. Martin Pall's List of 155 Reviews – Exhibit No. 5** Dr. Carpenter's listed this as one of his six Exhibits in his Direct Testimony dated March 12, 2018. *Complainant Exhibit No. 1* He endorsed the studies at the hearing and testified that he read probably 95% of the 155 studies. Dr. Carpenter would not have included the 155 studies as one of his Exhibits if he did not think Dr. Pall's studies had scientific merit. Again, with all due respect, Dr. Carpenter is more qualified to assess the scientific merit of these studies than non-subject matter experts who will rule on my Complaint. PPL's Dr. Israel and Dr. Davis did not claim to have read any of the 155 studies in the list, so on what grounds does PPL have to discredit them? Dr. Pall's studies are supportive of my claim that excess exposure to non-thermal RF radiation puts my health at risk.

**C. Exception No. 3: The ALJ erred with regards to Findings of Facts 35, 38, 39, 41, and 43. *Initial Decision at 8-9***

These five Findings have no relevance. They ignore or neglect the single most important fact at the very heart of this issue:

(continued next page)

**Research scientists have established beyond any reasonable doubt that bioeffects and some adverse health effects occur at levels thousands of times below existing public safety levels. Appendix A of Complainant's Reply Brief; Complainant's Main Brief at 11 and 29-39; Bioinitiative 2012 SECTION 1 Conclusion Table 1 or Digital p. 101-103**

Rather than repeat my earlier arguments I refer you to my Main Brief, Reply Brief, and Bioinitiative 2012, as cited below. All the research I reference below is based on scientific studies from my Exhibits and are part of the record. They contain no extra-record evidence.

**Finding of Fact 35: "The levels of RF fields from the Landis + Gyr Focus AXR-SD AMI meters are 98,000 times lower than the RF exposure safety limits established by the FCC."**

**Irrelevant/debunked.** I documented that adverse health effects occur below these levels which appear in PPL Electric Exhibit CD-2:

0.0000061 mW/cm<sup>2</sup>

FCC's 0.6 mW/cm<sup>2</sup> RF limit

See Appendix A of Complainant's Reply Brief, Bioinitiative 2012 SECTION 1 Conclusion Table 1-1, or Digital at 101-103, and Complainant's Main Brief at 33-35

**Finding of Fact 38: "The constant background level of RF fields from television towers within 50 miles of the Complainant's residences are 18.4 times higher than the RF signals from the AMI meter."**

**Irrelevant/debunked.** I documented that adverse health effects occur below these levels which appear in PPL Electric Exhibit CD-5:

0.0000126 mW/cm<sup>2</sup>

0.00000614 mW/cm<sup>2</sup>

0.000000683 mW/cm<sup>2</sup>

See Appendix A of Complainant's Reply Brief; Bionitiative 2012

SECTION 1 Conclusion Table 1-1 or Digital at 101-103; and Complainant Main Brief at 33-35

**Finding of Fact 39: "The existing background levels of RF fields at Complainant's rental properties in Lancaster and Columbia are many times higher than the fields from the AMI smart meter."**

**Irrevelant/debunked.** I documented that adverse health effects occur below these levels which appear in PPL Electric Exhibit CD-7:

0.0000643 mW/cm<sup>2</sup>

0.00000614 mW/cm<sup>2</sup>

0.000000683 mW/cm<sup>2</sup>

See Appendix A of Complainant's Reply Brief; Bionitiative 2012

SECTION 1 Conclusion Table 1-1, or Digital at 101-103; and Complainant's Main Brief at 39

**Finding of Fact 41: "Even 30 feet away from a person using a cell phone, the RF fields are 3 times higher than from the AMI Meter."**

**Irrelevant/debunked.** I documented that adverse health effects occur below these levels which appear in PPL Electric Exhibit CD-4:

5 mW/cm<sup>2</sup>

1.59 mW/cm<sup>2</sup>

0.000019 mW/cm<sup>2</sup>

0.0000061 mW/cm<sup>2</sup>

See Appendix A of Complainant's Reply Brief; Bionitiative 2012

SECTION 1 Conclusion Table 1-1 or Digital at 101-103; and Complainant's

Main Brief at 37

**Finding of Fact 43: "RF fields at 3 meters from the AMI meter are 94 times smaller than the background RF exposure from UHF Television broadcasting at Complainant's rental property in Columbia."**

**Irrelevant/debunked.** I have documented that adverse health effects occur below these levels which appear in PPL Electric Exhibit CD-5:

0.0000126 mW/cm<sup>2</sup>

0.00000614 mW/cm<sup>2</sup>

0.000000683 mW/cm<sup>2</sup>

See Appendix A of Complainant's Reply Brief; Bionitiative 2012

SECTION 1 Conclusion Table 1-1 or Digital at 101-103; and Complainant's

Main Brief at 36

**D. Exception No. 4: "The ALJ erred in deeming Finding of Fact 40 to be relevant to me: "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." *Initial Decision at 9***

This does not apply to me. I never place a cell phone to my head and I take other precautions to minimize my exposure to RF radiation. Please see Complainant's Main Brief at

22-23 and 36; Transcript p. 198 at 16 to 199 at 5. I have documented that adverse health effects occur below these levels shown in PPL Electric Exhibit CD-4:

5 mW/cm<sup>2</sup>

1.59 mW/cm<sup>2</sup>

0.000019 mW/cm<sup>2</sup>

0.0000061 mW/cm<sup>2</sup>

**E. Exception No. 5: The ALJ's reference to Finding of Fact 42 is highly misleading:**

**“Complainant used his cell phone for 16,222 minutes over a 12-month period.”**

*Initial Decision at 9*

This is not applicable to me. I never place a cell phone to my head. I take other precautions to minimize my exposure to RF radiation. Please see Complainant's Main Brief at 22-23 and 36; Transcript p. 198 at 16 to 199 at 10.

**F. Exception No. 6: The ALJ erred in endorsing Findings of Fact 36: “RF signals from the AMI meter are of very short duration and will occur for only a total of 84 seconds over a 24-hour period.”** *Initial Decision at 8*

PPL's claim may sound credible but it is clever deception and highly misleading. PPL's AMI smart meter can emit signals up to 8,400 times a day, according to testimony by Dr. Davis. *Complainant's Main Brief at 10; Transcript p. 234 at 9-11* The 84 second total misses the point entirely. My point is the very brief, very rapid, but very intense burst of signals. (Transcript p. 93 at 9-20) that can occur thousands upon thousands of times per day. Please see text box at bottom of page in Complainant Main Brief at 27 and Exhibit No. 8

Additionally:

PPL has not answered the important question of how many times their AMI smart meter emits signals in a 24-hour period. The figures PPL provide contradict each other and what PPL provided me in Discovery. This number is very important because research shows the very rapid and intense jack-hammer like bursts of non-thermal emissions is deleterious to health and is at the heart of my complaint. *Transcript p. 234 at 9-15; p. 257 at 6-11; p. 93 at 6-11. Myers Main Brief at 9-10.* I again make my request that the Commission order an independent third-party test be conducted (at an undisclosed time and location) on an AMI smart meter that has already been installed on a building and is part of the mesh to validate the number of emissions in a 24-hour period.

**G. Exception No. 7: Regarding the ALJ statement that additional evidence not in the record should be stricken. *Initial Decision at 16***

I made approximately 100 references to my Exhibits in my Main Brief and other material in the record. However, I want to make sure that none of my evidence in the record is accidentally stricken, especially the below evidence I identified which is crucial to my case.

**In Complainant's Main Brief:**

Appendix A listing 407 studies

Page 11, paragraph 7

Page 22-23, paragraph K

Page 22-26

Page 28

Pages 29-39 , including the 38 scientific studies cited

Pages 44-45, including percentages of negative and positive studies

**In Complainant's Reply Brief:**

All information supported by my more than 50 citations of the Transcript, my Direct Testimony, my 27 Exhibits or any other information already in the record

**H. Exception No. 8: PPL erred in the statement “The majority of studies published have failed to show an association between exposure to radiofrequency from a cell phone and health problems.” *Interim Decision at 24***

Where are the studies? What are the titles? Who are the authors? Were the studies conducted by cell phone manufacturers or independent researchers? There is no information on the design of the studies, the data produced, whether critical or balanced criteria were used to identify and evaluate the scientific. As Counsel for PPL has claimed, this constitutes hearsay.

Therefore, PPL’s cell phone claims should carry no weight with the Commission. It would be a double standard since the ALJ was persuaded by PPL to discredit all my studies in Exhibit No. 4 for not adhering to these very standards. PPL also misled the ALJ and Commission with the above cell phone statement by conveniently omitting any reference to the WHO/IARC 2011 classification of RF radiation as a possible Group 2B carcinogen. This classification was largely based on cell phone/brain tumor studies. If Dr. Israel’s claim is true, how could the IARC classify radiation from cell phones as a Class 2 B carcinogen? *Bioinitiative 2012 – SECTION I 2012 Supplement, Digital p. 49*

**I. Exception No. 9: PPL contends that the Complainant Exhibits 1-10 and 12-27 should not be used to support any findings of fact is wholly without merit. *Initial Decision at 20***

It is nonsense for PPL to petition the Commission to not allow a Complainant to present facts and other evidence provided by or substantiated by an expert witness and peer reviewed science to support his Complaint. Nowhere in the record did PPL refute the scientific evidence and studies I researched and presented to the Commission. Failing that, PPL makes a transparent and desperate attempt to keep information and facts from coming before the Commission. This

is another example of industry's ongoing efforts to keep the public and government officials in the dark and which gave rise to the Bioinitiative Report. Please see Complainant's Exhibits 24 and 25. I respectfully reaffirm for the Commission:

Exhibit No. 3 (Bioinitiative 2012), Exhibit No. 4 (Navy Bibliography) and Exhibit No. 5 (Dr. Pall's 155 studies) are backed and endorsed by my expert witness Dr. Carpenter for their scientific credibility and merit. This is expert testimony

Individuals in this proceeding who do not possess Dr. Carpenter's expertise and the many hundreds of scientists whose research I presented to the Commission should not second guess or reject scientific research, evidence and facts in my Exhibits.

Nine (9) of my Exhibits are government documents and are credible evidence in accordance with 52 Pa. Code § 5.406

**J. Exception No. 10: The ALJ erred in the following statement: "While some researchers have reported biological changes associated with RF energy, these studies have failed to be replicated. *Initial Decision at 24***

This sweeping statement is false. The 4,266 scientific studies I identified do indeed replicate the fundamental point in my complaint: that non-thermal RF radiation can create biological and adverse health effects. Please see the following expert testimony:

Transcript p. 79 at 5-12

The four Hardell cell phone studies. *Complainant's Main Brief at 48*

Seven other scientific studies I cited. *Complainant's Main Brief at 48-49*

The Liburdy et al 1993 study on breast cancer cells replicated six times.

*Bioinitiative 2012, Digital at p. 354; paper SECTION 7, p. 18*

The two text boxes in Complainant's Main Brief at p. 49 which contrast and show the difference in physics replications vs. biological replications. I can cite other credible sources too numerous to mention.

**K. Exception No. 11: The ALJ erred in making the following statement: "As to the RF fields produced by the AMI meter being used by the Company, the Complainant does not contest Dr. Davis's expert testimony that the average exposure is 98,000 lower than the FCC RF exposure standard and that the peak RF exposures from the AMI meter is 95 times lower than the exposure standard." *Initial Decision at 8***

False. I refuted/debunked the "98,000" claim" with 11 scientific studies. Please see Exception No. 3 on page 8.

I refuted/debunked the "95 times lower" claim with 27 scientific studies. Please see Complainant Main Brief at 29-32.

**L. Exception No. 12: The following statement by the ALJ omits important information that understates the cell phone controversy and takes it out of context: "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." *Initial Decision at 10***

Omitted is the important fact that the World Health Organization's International Agency for Research on Cancer has classified non-thermal RF radiation as a Class 2B carcinogen – the same level as lead and DDT. *Complainant's Direct Testimony, p. 11 at 2-4* Citing just part of the story presented is arbitrary and misleading.

The ALJ makes no mention of the 10 U.S. government authorities and 16 foreign nations who disagree and which I cited in my Direct Testimony. Omitting those authorities I identified who disagree is arbitrary and misleading. *Transcript p. 182 at 12-15; Complainant's Direct Testimony at 12.*

The World Health Organization advocates for the Precautionary Principle with regards to public exposure to non-thermal RF radiation as shown below. *Transcript p. 86 at 9-13;*

*Bioinitiative 2012 Digital at p. 1352, paper SECTION 23, p. 11*

The WHO Declaration from the Fourth Ministerial Conference on Environment and Health (WHO, 2004a) refers explicitly to the precautionary principle with the recommendation:

“that it should be applied where the possibility of serious or irreversible damage to health or the environment has been identified and where scientific evaluation, based on available data, proves inconclusive for assessing the existence of risk and its level but is deemed to be sufficient to warrant passing from inactivity to policy alternatives” (WHO, 2004b).

Finally, the Communist Chinese and Russian governments protect their citizens by setting cell phone safe exposure levels approximately 50 times lower than the United States.

*Bioninitiative 2012, Digital. p. 136; paper SECTION 3, p. 8;*

**M. Exception No. 13 :The ALJ erred in being persuaded by Dr. Davis who explained there are also hundreds of studies, “probably” thousands of studies that record no effects from RF radiation. (Quotation marks my own) *Initial Decision at 20***

Where are those studies? Who are the authors? Were they peer-reviewed? Did wireless industry conduct the studies or did independent researchers? Why didn't Dr. Davis identify them in his written testimony? If the ALJ and Commission give weight to Dr. Davis's vague reference to “probably thousands of studies” (hearsay) **more weight** should be given to the thousands of peer reviewed scientific studies I identified by author, year and title.

Moreover, as I stated on page 5 a study with positive findings has more significance than PPL's negative studies.

**N. Exception No.14: The ALJ erred in her statement “I am not persuaded by Complainant to find this article “Actions from Peer Review of the Draft NTP Technical Reports on Cell Phone Radiofrequency Radiation” is new or novel evidence of showing any change in fact or law that would warrant the reopening of the record in the public interest.” *Initial Decision at 35***

This is “new” information. It is the first time that government appointed scientists reported clear evidence that cell phone radiation was carcinogenic to rats.

It is “novel” because it confirms the cell phone-cancer link which independent researchers have been reporting for decades. I refer you please to the list of 20 scientific studies on brain tumor risks in *Biointiative 2012 Digital p.777-780. Paper Table 1 Section 11- Part I* Also, the cancer findings from 31 epidemeologic studies in *Biointiative 2012 Digital 815-822, Paper SECTION 11 – Part 3;*

It is in the “public interest” for Commissioners to consider that a government appointed expert panel reported clear evidence that exposure to cell phone radiation caused cancer in rats. Moreover, I respectfully maintain that I was improperly denied the opportunity to elicit expert testimony from my witness about the NTP study at the April 2 hearing. In Dr. Carpenter’s Direct Testimony letter date March 12, 2018 he wrote that he would address research relating to biological health effects from exposure to non-thermal RF radiation. The draft NTP technical report is within that scope of testimony. I should have been allowed to elicit testimony from my expert witness. See page 17 (Footnote 3) and page 18 of *Complainant’s Main Brief* for further explanation.

In accordance with **52 Pa. Code 5.571 (a) and (d) (2)** I appeal and respectfully request the Commissioners please approve my July 19, 2018 Motion to reopen the record.

The NTP’s final ruling on the expert panel’s report of clear evidence that non-thermal RF radiation was found to be cancerous to rats is supposed to be announced soon. I respectfully request the Commission to hold off on its ruling on my Complaint and that of others in order to consider the NTP’s conclusion.

**O. Exception No. 15: The ALJ erred in being persuaded by Dr. Israel that Complainant Exhibit 4 does not provide a reliable scientific basis for reaching a conclusion about the RF fields from the AMI smart meters being used by PPL Electric. *Initial Decision at 21***

The thousands of studies I identified in Exhibits 3, 4 and 5 support and replicate the finding that non-thermal RF radiation has biological and adverse health effects. There is no basis to dismiss many decades of research because the studies were not performed using “AMI smart meters”. Would Marlboro cigarettes be exempt from Federal tobacco regulations by claiming research was not done using Marlboro cigarettes?

**P. Exception No. 16: The ALJ erred in her statement: “The body of scientific research does not show that exposure to non-thermal RF fields cause or contribute to adverse health effects. Therefore I find in favor of Repondent on this issue.” *Initial Decision at 25***

**Refuted/debunked** Please see Exception No. 1 and 2

Based on the testimony of my expert witness, my Direct Testimony, Exhibits, Transcript, Main Brief, Reply Brief, Motion to Reopen the Record and these Exceptions I respectfully request the Commission rule in my favor. Not only should the Commission rule on the science but consider the grave impact your decision could have on millions of people based on the evidence I provided.

**Q. Exception No. 17: The following statement by the ALJ misrepresents my objections to smart meters and should not mislead the Commission: “Therefore, it is inaccurate to claim that the AMI meters create “pulsed” fields. *Initial Decision at 23***

It doesn't matter if one uses the term pulse, frequency hopped spread spectrum, or sinusoidal RF fields to describe RF radiation emitted in rapid bursts by AMI smart meters. That's semantics and not the point. My objection (and others) to the AMI smart meter is its unique feature of rapidly emitting thousands upon thousands of intermittent, very brief bursts of intense

energy 24/7/365. *Complainant's Main Brief at 23-24. Transcript p. 93 at 13-20*<sup>3</sup> My concern is adverse health effects which is backed by expert testimony and scientific research. Please see the 14 scientific research studies I cited at *Complainant's Main Brief at 25-26. Transcript p. 93 at 3-20*.

**R. Exception No.18 I take strong exception to PPL's contention that its expert witness Dr. Israel and Dr. Davis are more credible than Dr. Carpenter, and thus the scales tip in PPLs favor. Dr. Davis. Initial Decision at 19**

Dr. Davis' is a Professor of Engineering and Electrical/Computer Engineering. *PPL Electric Exhibit No. 1, p. 1* He is not a medical doctor or biologist. He has no medical expertise and is not qualified to diagnose patients. Dr. Davis has not identified one peer-reviewed scientific study to buttress his claim of AMI smart meter safety. He has not rebutted any of the 407 scientific studies I invited PPL to refute on page 65 of Appendix A to my Main Brief, nor any of the thousands of other scientific studies in my Exhibits. *PPL Electric Statement No. 1, Initial Decision at 8, 9 and 23*.

Dr. Davis' six Exhibits CD-2 through CD-7 are nothing more than arithmetical conjecture and hypotheses. They may appear persuasive at first glance, but this is not science. *Complainant's Main Brief at 33 and 29-39*. His exhibits are irrelevant and have no legal bearing in this matter.<sup>4</sup> The Commission must not rule on conjecture and hypotheses. It must rule on primary science.

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<sup>3</sup> Based on testimony by Dr. Davis, that could be as high as 8,400 times a day. *Complainant's Main Brief, p. 26 subparagraph 2B*.

<sup>4</sup> Dr. Davis figures were calculations, not measurements. He ignores the reality of cumulative exposure over many years, radiation from banks of smart meters on apartment buildings and the radiation emitted by nearby meters chatting with one another in the mesh.

The fact that someone with Dr. Davis' credentials would attempt to sway the Commission using exhibits with no scientific merit does not speak well to his credibility in this proceeding, in my view. The science that has been presented to the Commission is the thousands of peer reviewed studies that I identified and my expert witness endorsed in testimony. This includes of course RF radiation frequencies emitted by PPL smart meters.

**Dr. Isreal.** Dr. Israel's statement that there is no reliable medical basis to conclude that RF fields from PPLs AMI meter will cause or contribute to the development of disease is fatally flawed and should be given no weight. *PPL Electric Statement No. 2 at p. 25.*

Am I and the Commission to believe that one person, Dr. Israel, possesses more scientific expertise and superior judgment than all the hundreds if not thousands of scientists since the 1930s who have researched and published studies in in peer-reviewed scientific journals which report biological and adverse health effects from non-thermal RF radiation. Did all those scientists get it wrong?

Amazingly, Dr. Israel would have the Commission believe his 10 studies with negative findings through computer searches he computer searched and cited by author and year prove the safety of PPL's AMI smart meter. This is not a balanced view. Yet he wrongly discredits my expert witness who honestly reports both positive and negative studies in Biinitiative 2012. Dr. Israel's negative studies prove nothing. This may be scientific thinking for Dr. Israel. But I don't buy it and neither should the Commission. Dr. Israel has not rebutted the science in any of the thousands of scientific studies I identified in my Exhibits 3, 4 and 5.

Dr. Israel's refusal to acknowledge eight decades of massive amounts of scientific research that report adverse health effects from non-thermal RF radiation should afford his expert testimony little or no credibility.

**S. Exception No. 19 regarding the ALJ statement “I am giving some weight to C Exhibits 1, 2 and 3 as Dr. Carpenter was present for cross examination and these exhibits were either his statement, his curriculum vitae or the BioInitiative article for which he was one of many authors.” *Initial Decision at 20***

I take strong exception to ALJ giving only “some weight” to my Exhibits 1, 2, and 3 and being more persuaded by the credible testimonies of Dr. Davis and Dr. Israel . This ignores the overwhelming amount of scientific research I provided the Commission. Exhibit No. 3 (Bioinitiative 2012) also constitutes Dr. Carpenter’s expert testimony. Below is a synopsis of the testimony of these three experts. I submit it shows Dr. Carpenter is clearly the most credible. To summarize Dr. Carpenter’s Bioinitiative Report (Complainant Exhibit No. 3):

1,479 pages

Roughly 1800 scientific studies

Positive and negative findings throughout the document

Studies identified by author, year, title, subject matter, findings,

Nearly the entire body of EMF scientific research between 2007 and 2012

The largest compendium of its kind ever produced

Includes the majority of the EMF investigators between 2007 and 2012

Neither Dr. Carpenter, authors, researchers or anyone else involved in this huge effort received compensation. (*Transcript p. 157 at 5-7*)

Dr. Davis based his testimony on arithmetic, conjecture and hypothesis, did not identify any scientific studies by author or title, and denied that RF radiation produces biological effects in people. *PPL Electric Statement No. 1, p. 18*

Dr. Israel cited 10 negative studies, would have us believe they refute thousands of positive studies, and states there is no reliable medical basis to conclude that non-thermal RF

radiation from PPL's AMI smart meter will cause or contribute to illness or disease. *PPL*

*Electric Statement No. 2 at 25*

Below is information about Dr. Carpenter which did not appear in the Initial Decision and is provided as balance to Dr. Israel's and Davis's information.

At the University of Albany Dr. Carpenter has been a Professor in the Departments of Environmental Health Sciences and Biomedical Sciences for 33 years, was Dean of the School of Public Health for 13 years, and Director of Institute for Health and Environment for 17 years. He has served as Chair, Advisory Committee to WHO on collaborative activities, and has been a member of more than 50 international, national, state and local committees.

Having co-edited and worked on the landmark Bionitiative Report over many years Dr. Carpenter's demonstrated grasp of subject matter and expertise far exceeds that of Dr. Davis and Dr. Israel, in my view.

### **III CONCLUSION**

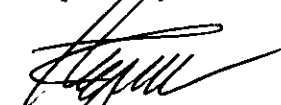
1. As Complainant I met my burden of proof and provided the Commission with a preponderance of unimpeachable scientific evidence by which anyone can reasonably conclude that the non-thermal RF radiation emitted by PPL's AMI smart into my home can put my health and that other's at risk
2. The preponderance and credibility of the scientific evidence I provided gives the Commission the justification and grounds it needs to declare ACT 129's requirement to install a smart meter in my home is unsafe and unreasonable utility service in violation of **66 Pa § 1501**, especially if I am willing to pay PPL for the expense. I respectfully request under **66 Pa § 1501** that an

electrical meter that does not emit RF radiation be allowed on my home and any properties I own.

3. If the Commission rules that it does not have the authority to declare that ACT 129 violates **66 Pa § 1501**, then the Commission should take all possible measures, collectively or individually, to mitigate ACT 129's public health risks. As I requested in my written Direct Testimony these are:

- Contact the Chairman of the Consumer Affairs Committee and urge the Committee to immediately release for vote by the General Assembly HB 1564 or equivalent legislation that allow consumers to opt out of smart meter installations.
- Urge the General Assembly, Department of Education, the Department of Health and other appropriate agencies to initiate public education campaigns to raise awareness of the hazards of non-thermal RF radiation emitted by wireless technologies and precautions the public can take to minimize exposure and health risks.
- Require a tracking program and data base be established to monitor consumer complaints about sudden illnesses that develop after a smart meter is installed or can otherwise be attributable to smart meters.
- Defer ruling on my Complaint and that of others until the final Report on the NTP cell phone study is released which is expected this fall.

Respectfully submitted,



Richard N. Myers

Dated: September 3, 2018

**CERTIFICATE OF SERVICE**

**VIA HAND-DELIVERY**

I hereby certify that I have this day served a true copy of the foregoing document upon the parties, listed below, in accordance with the requirements of § 1.54 (relating to service by a party).

Devin Ryan  
C/O Post & Schell  
17 North Second Street, 12<sup>th</sup> Floor  
Harrisburg, PA 17101-1601

Signed: \_\_\_\_\_



Richard N. Myers

Dated this 4th day of September, 2018

**RECEIVED**

SEP - 4 2018

PA PUBLIC UTILITY COMMISSION  
SECRETARY'S BUREAU