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March 30, 2018

VIA ELECTRONIC FILING

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

Re: Richard N. Myers v. PPL Electric Utilities Corporation
Docket No. C-2017-2620710

Dear Secretary Chiavetta:

Enclosed for filing is the Motion in Limine of PPL Electric Utilities Corporation to Exclude the Complainant's Exhibits, Testimony, and Witness in the above-referenced proceeding. Copies will be provided as indicated on the Certificate of Service.

Respectfully submitted,

Devin Ryan

DTR/jl
Enclosures

cc: Honorable Elizabeth Barnes
Certificate of Service

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing has been served upon the following persons, in the manner indicated, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

VIA E-MAIL & OVERNIGHT DELIVERY

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Date: March 30, 2018



Devin T. Ryan


**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Richard N. Myers,	:	
	:	
Complainant,	:	
	:	
v.	:	Docket No. C-2017-2620710
	:	
PPL Electric Utilities Corporation,	:	
	:	
Respondent.	:	

NOTICE TO PLEAD

YOU ARE HEREBY ADVISED THAT, PURSUANT TO 52 PA. CODE § 5.103(c), YOU MAY FILE A REPLY TO THE ENCLOSED MOTION WITHIN TWENTY (20) DAYS AFTER THE DATE OF SERVICE. YOUR REPLY SHOULD BE FILED WITH THE SECRETARY OF THE PENNSYLVANIA PUBLIC UTILITY COMMISSION, P.O. BOX 3265, HARRISBURG, PA 17105-3265. A COPY OF YOUR REPLY SHOULD ALSO BE SERVED ON THE UNDERSIGNED COUNSEL.

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Date: March 30, 2018

Attorneys for PPL Electric Utilities Corporation

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Richard N. Myers,	:	
	:	
Complainant,	:	
	:	
v.	:	Docket No. C-2017-2620710
	:	
PPL Electric Utilities Corporation,	:	
	:	
Respondent.	:	

**MOTION IN LIMINE OF
PPL ELECTRIC UTILITIES CORPORATION TO
EXCLUDE THE COMPLAINANT’S EXHIBITS, TESTIMONY, AND WITNESS**

TO ADMINISTRATIVE LAW JUDGE ELIZABETH H. BARNES:

PPL Electric Utilities Corporation (“PPL Electric” or the “Company”) hereby files this Motion in Limine pursuant to the Pennsylvania Public Utility Commission’s (“Commission”) regulations at 52 Pa. Code § 5.103 and requests that Administrative Law Judge Elizabeth H. Barnes (the “ALJ”) prohibit the Richard N. Myers’s (“Complainant”) witness, Dr. David O. Carpenter, from testifying because his opinions have been found to be unreliable in other proceedings. Further, the Company requests that several exhibits submitted by the Complainant be excluded because they are hearsay and not subject to a hearsay exception under the Pennsylvania Rules of Evidence. Moreover, many of the Complainant’s exhibits also should be excluded because they are irrelevant, lack authenticity, and are inherently unreliable. Further, the ALJ should exclude the majority of the Complainant’s direct testimony because it recites or relies upon hearsay statements or otherwise objectionable materials.

In support thereof, the Company states as follows:

I. BACKGROUND

1. PPL Electric is a public utility that provides electric distribution and provider of last resort services in Pennsylvania subject to the regulatory jurisdiction of the Commission. PPL Electric furnishes electric distribution, transmission, and provider of last resort electric supply services to approximately 1.4 million customers throughout its certificated service territory, which includes all or portions of 29 counties and encompasses approximately 10,000 square miles in eastern and central Pennsylvania.

2. On August 22, 2017, PPL Electric was served with the above-captioned Complaint filed by the Complainant.

3. On September 11, 2017, PPL Electric timely filed an Answer to the Complaint.

4. On October 3, 2017, a Notice was issued scheduling an evidentiary hearing for January 31, 2018, in Harrisburg, Pennsylvania.

5. On October 4, 2017, the ALJ issued the First Prehearing Order, which set forth certain procedural rules in this proceeding.

6. On December 18, 2017, PPL Electric filed a Motion for Admission Pro Hac Vice of Curtis S. Renner, Esquire, as additional counsel on behalf of the Company.

7. On December 20, 2017, PPL Electric filed a letter requesting that the January 31, 2018 hearing be rescheduled because its witnesses were unavailable for a hearing on that date.

8. On December 27, 2017, PPL Electric filed a letter requesting that any expert testimony and exhibits be presented in written form in advance of the hearing and exchanged by the parties on or before January 15, 2018.

9. On January 3, 2018, a Notice was issued re-scheduling the evidentiary hearing for February 5, 2018.

10. On January 9, 2018, the ALJ issued an Interim Order granting the Motion for Admission Pro Hac Vice.

11. On January 15, 2018, the Complainant served: (1) the direct written testimony and exhibits of the Complainant; (2) the direct written testimony and exhibit of Martha R. Herbert; and (3) the direct written testimony and exhibits of David O. Carpenter.

12. On January 19, 2018, the ALJ issued the Second Prehearing Order, which established a due date of February 15, 2018, for PPL Electric to submit its written expert rebuttal testimony and exhibits.

13. On January 22, 2018, the ALJ issued an Amended Second Prehearing Order, which permitted the Complainant to have his expert witnesses participate via telephone at the evidentiary hearing.

14. On February 6, 2018, the Complainant requested that he be allowed to update his direct testimony and exhibits.

15. On February 8, 2018, the parties and the ALJ exchanged email correspondence, which established a due date of March 16, 2018, for the Complainant's updated testimony and exhibits as well as a due date of March 26, 2018, for PPL Electric's written expert rebuttal testimony and exhibits.

16. PPL Electric hereby submits this Motion in Limine seeking to: (1) exclude Dr. Carpenter from testifying on behalf of the Complainant because his opinions have been found to be unreliable in several proceedings; (2) exclude certain exhibits submitted by the Complainant because they are hearsay and not subject to a hearsay exception under the Pennsylvania Rules of Evidence; (3) exclude certain of the Complainant's exhibits because they are irrelevant, lack

authenticity, and are inherently unreliable; and (4) strike certain portions of the Complainant's written direct testimony.

II. MOTION IN LIMINE

17. The Complainant has submitted his intended exhibits in advance of the evidentiary hearing. As summarized below, many of these exhibits should be excluded from the record because they are objectionable on several grounds, including hearsay, relevance, authenticity, and inherent unreliability:

- Exhibit 3 – A document titled “BioInitiative 2012 Report”

Objections: (1) hearsay opinions about medical and scientific issues; (2) hearsay – even when relied upon by an expert witness, the substance of hearsay statements should not be admitted into the record; (3) relevance – the proposed exhibit does not address the radiofrequency (“RF”) fields from the AMI meters being used by PPL Electric; (4) relevance – the proposed exhibit addresses health conditions other than those alleged by Complainant; (5) inherently unreliable – the BioInitiative Report is an advocacy document and not a scientific study, and has been widely criticized for its lack of scientific objectivity and reliability, as addressed in Dr. Israel's direct testimony in this case.

- Exhibit 4 – A document titled “Bibliography of Reported Biological Phenomena (‘Effects’) and Clinical Manifestations Attributed to Microwave and Radio-frequency Radiation” by the Naval Medical Research Institute, dated October 4, 1971.

Objections: (1) hearsay opinions about medical and scientific issues; (2) relevance – the proposed exhibit does not address RF fields from AMI meters used by PPL Electric; (3) authenticity – the document's authors are not being presented to authenticate the accuracy of the statements in the document.

- Exhibit 5 – “List of 155 Reviews of Non-thermal Effects of Microwave/Intermediate Frequency EMFs” written by Martin Pall.

(1) hearsay opinions about medical and scientific issues; (2) hearsay – even when relied upon by an expert witness, the substance of hearsay statements should not be admitted into the record; (3) relevance – no showing that the proposed exhibit addresses RF fields from AMI meters used by PPL Electric; (4) authenticity – the document's author is not being presented to authenticate the accuracy of the statements in the document.

- Exhibit 6 – Letter written by Dr. Martha R. Herbert and an enclosed document titled “Autism and EMF? Plausibility of a pathophysiological link Part I and Part II.”

Objections: (1) hearsay opinions about medical and scientific issues; (2) hearsay within hearsay; (3) relevance; (4) authenticity – the document’s author is not being presented to authenticate the accuracy of the statements in the document.

- Exhibit 7 – Curriculum vitae of Dr. Martha R. Herbert.

Objections: (1) hearsay – the Complainant did not author the document; (2) relevance – Dr. Herbert is no longer testifying on behalf of the Complainant; (3) authenticity – the document’s author is not being presented to authenticate the accuracy of the statements in the document.

- Exhibit 8 – A document titled “The implications of non-linear biological oscillations on human electrophysiology for electrohypersensitivity (EHS) and multiple chemical sensitivity (MCS)” by Cindy Sage.

Objections: (1) hearsay opinions about medical and scientific issues; (2) hearsay – even when relied upon by an expert witness, the substance of hearsay statements should not be admitted into the record; (3) authenticity – the document’s author is not being presented to authenticate the accuracy of the statements in the document.

- Exhibit 9 – June 17, 1999 Letter sent by W. Gregory Lotz, Ph.D. on behalf of the Radiofrequency Interagency Work Group (RFIAWG) to Mr. Richard Tell, Chair, IEEE SCC28 (SC4), Risk Assessment Work Group, Richard Tell Associates, Inc.

Objections: (1) hearsay – the document was not written by the Complainant and is being submitted for the truth of the matter asserted; (2) hearsay opinions about medical and scientific issues; (3) relevance; (4) authenticity – the document’s author is not being presented to authenticate the accuracy of the statements in the document.

- Exhibit 10 – Abstract of the 2014 *Disease Models & Mechanisms* (volume 7) article written by Natalie Matosin, Elisabeth Frank, Martin Engel, Jeremy S. Lum, and Kelly A. Newell, entitled “Negativity Towards Negative Results: A Discussion of the Disconnect Between Scientific Worth and Scientific Culture”.

Objections: (1) hearsay – the document was not written by the Complainant and is being submitted for the truth of the matter asserted; (2) hearsay opinions about medical and scientific issues; (3) relevance; (4) authenticity – the document’s author is not being presented to authenticate the accuracy of the statements in the document; (5) inherent unreliability – the exhibit only contains the abstract and not the complete document.

- Exhibit 11 – May 31, 2011 Press Release issued by the International Agency for Research on Cancer entitled “IARC Classifies Radiofrequency Electromagnetic Fields as Possibly Carcinogenic to Humans”.

Objections: (1) hearsay – the document was not written by the Complainant and is being submitted for the truth of the matter asserted; (2) hearsay opinions about medical and scientific issues; (3) authenticity – the document’s author is not being presented to authenticate the accuracy of the statements in the document; (4) inherent unreliability – this is only a portion of a the six-page press release and does not include the part that addresses RF fields from environmental sources such as Smart Meters.

- Exhibit 12 – A February 7, 2014 letter and enclosed document sent by Willie R. Taylor from the Office of Secretary, United States Department of the Interior, to Eli Veenendaal at the U.S. Department of Commerce about the impact of communication towers on migratory birds.

Objections: (1) hearsay – the document was not written by the Complainant and is being submitted for the truth of the matter asserted; (2) hearsay opinions about medical and scientific issues; (3) relevance; (4) authenticity – the document’s author is not being presented to authenticate the accuracy of the statements in the document.

- Exhibit 13 – Letters from Frank Marcinowski and Norbert Hankin of the United States Environmental Protection Agency’s (“EPA”) Radiation Protection Division sent to Janet Newton of The EMR Network in 2002.

Objections: (1) hearsay – the letters were not written by the Complainant and are being submitted for the truth of the matter asserted; (2) hearsay within hearsay where the documents characterize the opinions and view of third parties, including the opinion of an EPA staffer purporting to provide an opinion about the scope of the FCC’s standard; (3) authenticity – the documents’ authors are not being presented to authenticate the accuracy of the statements in the document.

- Exhibit 14 – August 29, 2013 Letter sent by the American Academy of Pediatrics to the Federal Communications Commission and the U.S. Food and Drug Administration.

Objections: (1) hearsay opinions about medical and scientific issues; (2) relevance – the proposed exhibit addresses RF fields from cell phones and does not address RF fields from the AMI meters being used by PPL Electric; (3) authenticity – the document’s authors are not being presented to authenticate the accuracy of the statements in the document.

- Exhibit 15 – A document titled “Wireless Smart Meter Case Studies” by the American Academy of Environmental Medicine.

Objections: (1) hearsay – the document was not written by the Complainant and is being submitted for the truth of the matter asserted; (2) hearsay opinions about medical and scientific issues; (3) authenticity – the document’s authors are not being presented to authenticate the accuracy of the statements in the document;

(4) inherent unreliability – the document was prepared by a special interest activist group.

- Exhibit 16 – A document titled “Electromagnetic and Radiofrequency Fields Effect on Human Health” by the American Academy of Environmental Medicine.

Objections: (1) hearsay – the document was not written by the Complainant and is being submitted for the truth of the matter asserted; (2) hearsay opinions about medical and scientific issues; (3) authenticity – the document’s authors are not being presented to authenticate the accuracy of the statements in the document; (4) inherent unreliability – the document comes from a special interest activist group.

- Exhibit 17 – A document titled “Wifi Radiation in Schools in Maryland Final Report” by the Maryland Children’s Environmental Health and Protection Advisory Council, dated December 13, 2016.

Objections: (1) hearsay – the document was not written by the Complainant and is being submitted for the truth of the matter asserted; (2) hearsay opinions about medical, scientific, and legal issues; (3) relevance – the proposed exhibit addresses RF fields from Wi-Fi networks and does not address RF fields from the AMI meters being used by PPL Electric; (4) authenticity – the document’s authors are not being presented to authenticate the accuracy of the statements in the document.

- Exhibit 18 – December 2017 publication by the California Department of Public Health entitled, “How to Reduce Exposure to Radiofrequency Energy from Cell Phones”.

Objections: (1) hearsay opinions about medical and scientific issues; (2) relevance – the proposed exhibit addresses RF fields from cell phones and does not address RF fields from the AMI meters being used by PPL Electric; (3) authenticity – the document’s authors are not being presented to authenticate the accuracy of the statements in the document.

- Exhibit 19 – A document titled “You can limit exposure to Radio-frequency (RF) Energy from your cell phone” prepared by the City and County of San Francisco.

Objections: (1) hearsay opinions about medical and scientific issues; (2) hearsay within hearsay where the document presents quotes from or opinions of third-parties; (3) relevance – the proposed exhibit addresses RF fields from cell phones and does not address RF fields from the AMI meters being used by PPL Electric; (4) authenticity – the document’s authors are not being presented to authenticate the accuracy of the statements in the document; (5) inherently unreliable – the document appears to be a proposed posting that was invalidated by the U.S. District Court in San Francisco.

- Exhibit 20 – Resolution No. 3362 passed by the City of Pembroke Pines, Florida on November 20, 2012.

Objections: (1) hearsay opinions about medical and scientific issues; (2) hearsay within hearsay where the document presents quotes from or opinions of third-parties; (3) relevance – the proposed exhibit addresses RF fields from cell phones and does not address RF fields from the AMI meters being used by PPL Electric; (4) authenticity – the document’s authors are not being presented to authenticate the accuracy of the statements in the document.

- Exhibit 21 – A Declaration by the Town of Jackson proclaiming October cell phone safety awareness month.

Objections: (1) hearsay opinions about medical and scientific issues; (2) hearsay within hearsay where the document presents quotes from or opinions of third-parties; (3) relevance – the proposed exhibit addresses RF fields from cell phones and does not address RF fields from the AMI meters being used by PPL Electric; (4) authenticity – the document’s authors are not being presented to authenticate the accuracy of the statements in the document.

- Exhibit 22 – A webpage titled “Worldwide Precautionary Action” by Parents for Safe Technology.

Objections: (1) hearsay opinions about medical, scientific and legal issues; (2) hearsay within hearsay where the document presents quotes from or opinions of third-parties; (3) relevance – the proposed exhibit does not address RF fields from the AMI meters being used by PPL Electric; (4) authenticity – the document’s authors are not being presented to authenticate the accuracy of the statements in the document; (5) inherent unreliability – the document was prepared by a special interest activist group.

- Exhibit 23 – A document titled “International Appeal: Scientists Call for Protection from Non-ionizing Electromagnetic Field Exposure.”

Objections: (1) hearsay opinions about medical and scientific issues; (2) hearsay – even when relied upon by an expert witness, the substance of hearsay statements should not be admitted into the record; (3) relevance – the proposed exhibit does not address RF fields from the AMI meters being used by PPL Electric; (4) inherently unreliable – the proposed exhibit is an online petition that represents opinions by anti-EMF/RF advocates, not scientific information; (5) authenticity – the document’s authors are not being presented to authenticate the accuracy of the statements in the document.

- Exhibit 24 – A publication entitled “Captured Agency: How the Federal Communications Commission Is Dominated by the Industries It Presumably Regulates,” by Norm Alster.

Objections: (1) hearsay – the document was not written by the Complainant and is being submitted for the truth of the matter asserted; (2) relevance; (3) authenticity – the document’s author is not being presented to authenticate the accuracy of the factual statements in the document.

- Exhibit 25 – January 2011 *Seattle Magazine* article written by Naomi Ishisaka, entitled “UW Scientist Henry Lai Makes Waves in the Cell Phone Industry”.

Objections: (1) hearsay – the document was not written by the Complainant and is being submitted for the truth of the matter asserted; (2) hearsay within hearsay where the document presents quotes from or opinions of third-parties; (3) relevance – the proposed exhibit is about cell phones, not RF fields from PPL Electric’s AMI meters; (4) authenticity – the document’s author is not being presented to authenticate the accuracy of the factual statements in the document; (5) inherent unreliability – the document is a media article.

- Exhibit 26 – A webpage from *Radiation.news* entitled, “Non-industry Studies vs Industry Studies Show Vast Difference in the Harmful Effects of Microwave Radiation”.

Objections: (1) hearsay – the document was not written by the Complainant and is being submitted for the truth of the matter asserted; (2) hearsay within hearsay where the document presents quotes from or opinions of third-parties; (3) relevance; (4) authenticity – the document’s author is not being presented to authenticate the accuracy of the factual statements in the document; (5) inherently unreliable – the proposed exhibit is an online post.

- Exhibit 27 – A document titled “Electromagnetic Fields and Cancer: The Cost of Doing Nothing,” by Dr. David O. Carpenter.

Objections: (1) hearsay statements within the document; (2) hearsay – even when relied upon by an expert witness, the substance of hearsay statements should not be admitted into the record; (3) inherently unreliable – Dr. Carpenter’s testimony and research have been found to be unreliable in several proceedings and should be disregarded.

- Exhibit 28 – A document titled “Radiofrequency Radiation” from <https://wirelessaction.wordpress.com>

Objections: (1) hearsay – the document was not written by the Complainant and is being submitted for the truth of the matter asserted; (2) hearsay within hearsay where the document presents quotes from or opinions of third-parties; (3) hearsay – even when relied upon by an expert witness, the substance of hearsay statements should not be admitted into the record; (4) relevance; (5) authenticity – the document’s author is not being presented to authenticate the accuracy of the factual statements in the document.

18. The Complainant also submitted two pieces of written direct testimony: (1) the direct testimony of the Complainant; and (2) the direct testimony of Dr. David O. Carpenter, including his curriculum vitae (Complainant's Proposed Exhibits 1 and 2). As explained in more detail below, most of the Complainant's testimony contains and relies upon hearsay statements that are not otherwise subject to a hearsay exception and, therefore, should be excluded. Further, the testimony of Dr. Carpenter should be disregarded in its entirety because his opinions have been found to be unreliable in several proceedings.

A. DR. CARPENTER SHOULD BE PROHIBITED FROM TESTIFYING AS AN EXPERT WITNESS ON BEHALF OF THE COMPLAINANT

19. PPL Electric submits that the Complainant's witness, Dr. Carpenter, should be prohibited from testifying as an expert witness because his opinions have been found in several proceedings to be unsubstantiated, flawed, biased, and scientifically unreliable.

20. In 2010, in an electric transmission line siting case before this Commission, Dr. Carpenter's opinions about the scientific research showing adverse health effects from EMF were rejected in their entirety by the Commission. *See Application of PPL Elec. Utils. Corp. Filed Pursuant to 52 Pa. Code Chapter 57, Subchapter G, for Approval of the Siting and Constr. Of the Pa. Portion of the Proposed Susquehanna-Roseland 500 kV Transmission Line in Portions of Lackawanna, Luzerne, Monroe, Pike and Wayne Cntys., Pa.*, Docket Nos. A-2009-2082652, *et al.*, 2010 Pa. PUC LEXIS 434, at *172-73 (Order entered Feb. 12, 2010). The Administrative Law Judge Susan D. Colwell ("ALJ Colwell") rejected Dr. Carpenter's testimony, finding that it was "unsubstantiated" and that his opinions were "flawed", "extreme" and "not based on a reliable and objective review of the scientific research." *Id.* at *176-77. ALJ Colwell concluded that "there is no good basis to give any weight to Dr. Carpenter's extreme views." *Id.* at *177.

21. The Commission agreed with ALJ Colwell's findings that:

- “The record shows that **Dr. Carpenter's opinions were flawed and were not based on a reliable and objective review** of the scientific research.” *Id.* at *177 (emphasis added).
- “When the record is viewed in its entirety it is clear that **Dr. Carpenter's testimony is largely unsubstantiated** (albeit heartfelt) opinion. *Id.* at *180 (emphasis added).
- “In light of this overwhelming evidence, **there is no good basis to give any weight to Dr. Carpenter's extreme views.**” *Id.* at *177 (emphasis added).

22. In 2012, Dr. Carpenter sought again to present his opinions about EMF and health in a trial court in Washington State. The trial court held an evidentiary hearing to determine if Dr. Carpenter could present his opinions about EMF and alleged health effects. *Lakey v. Puget Sound Energy, Inc.*, 296 P.3d 860, 863-66 (Wash. 2013) (en banc) (“*Lakey*”). At the conclusion of that hearing, the trial court ruled that his testimony was inadmissible because his “theories lacked general acceptance in the scientific community and that he failed to follow proper epidemiological methodology, rendering his conclusions unreliable.” *Id.*

23. The trial court also emphasized that:

- “Dr. Carpenter's methodology for arriving at his opinion is incomplete at best.”
- “Dr. Carpenter, who is not an epidemiologist, disregards and dismisses the majority of studies that find no evidence or insufficient evidence to conclude that EMFs, at the level found on Plaintiff's property, cause diseases such as leukemia. The failure to address the majority of studies that do not find reliable evidence of adverse effects from EMF exposure is inconsistent with how epidemiological research is evaluated.”
- “... Dr. Carpenter is not able to state to a reasonable degree of medical certainty that EMF at any level *causes* leukemia, Alzheimer's disease, or ALS. At most, he was able to state that he believed there was a statistically significant association or correlation between EMF and the diseases mentioned despite there being no animal studies to support the conclusion or no single mechanism that explains how EMF causes such diseases.”
- “...Dr. Carpenter did not include all of the relevant studies in his review study. In particular, he did not include three studies that she considers to be “the closing

studies” in the area of EMF and adverse health effects. These studies demonstrated that there is no link between EMF and the adverse effects alleged by Plaintiff.”

- “...Dr. Carpenter’s reliance upon a statistically significant association between EMF and leukemia and other diseases is misplaced as epidemiologists do not and should not equate a statistically significant association to causation.”

Lakey v. Puget Sound Energy Inc., No. 10-2-32386-4 SEA, pp. 3-4 (Wash. Super. Ct. 2011).¹

24. The Supreme Court of Washington affirmed the trial court’s decision, finding that “Carpenter failed to follow proper methodology, rendering his conclusions unreliable and therefore inadmissible.” *Lakey* at 866. The Supreme Court also found that:

Carpenter did not consider all relevant data, as basic epidemiology required. Carpenter discounted entire epidemiological and toxicological studies, especially the newer epidemiological studies. Carpenter failed to consider the later, better studies about the links between EMF and health harms, seriously tainting his conclusions because epidemiology is an iterative science relying on later studies to refine earlier studies in order to reach better and more accurate conclusions. Carpenter refused to account for the data from the toxicological studies, which epidemiological methodology requires unless the evidence for the link between exposure and disease is unequivocal and strong, which is not the case here. Carpenter also selectively sampled data within one of the studies he used, taking data indicating an EMF-illness link and ignoring the larger pool of data within the study that showed no such link. **Carpenter's treatment of this data created an improper false impression about what the study actually showed.**

Id. (emphasis added).

25. In 2015, the Kentucky Public Service Commission rejected Dr. Carpenter’s opinions about EMF and health, noting that were they “more akin to advocacy” concerning the alleged dangers of low-level EMFs. See *Barker v. East Kentucky Power Cooperative, Inc.*, Case

¹ A true and correct copy of this decision is attached hereto as Attachment A.

No. 2013-00291, 2015 Ky. PUC LEXIS 609, at *21 (Ky. Pub. Serv. Comm'n Jul. 6, 2015).

Specifically, the Kentucky Public Service Commission stated:

Complainants were unable to cite to any definitive study establishing a causal link between EMF exposure and verified health risks. Complainants' expert witness, Dr. Carpenter, testified to his belief that EMF levels far below those at Complainants' property are more than likely carcinogenic and otherwise harmful. **However, Dr. Carpenter's testimony has been roundly criticized and rejected by many other tribunals in which he has appeared as a witness.** Dr. Carpenter has never personal[ly] conducted any studies regarding EMF exposure. Tribunals including the Pennsylvania and Minnesota Commissions, Washington Supreme Court and U.S. District Court for the Southern District of Indiana have found that his testimony is more akin to advocacy.

Id. at *21 (emphasis added).

26. Dr. Carpenter's opinions about alleged health effects of RF fields from Smart Meter have similarly been rejected in two utility regulatory cases in Canada. In 2012, the Quebec Energy Board rejected Dr. Carpenter's claims about RF health effects on the grounds that his opinions were biased and he did not present an objective opinion. *Décision, Régie de L'Énergie, Québec*, D-2012-127, p. 97 (Oct. 5, 2012).² In 2013, in another Smart Meter case, the British Columbia Utilities Commission held that it would give "little weight" to Dr. Carpenter's testimony, because he "summarizes the references he cites in a manner consistent with his own beliefs, rather than accurately reporting their findings... [and] ...adopted a less than objective and fully informed approach." *In the Matter of FortisBC Inc.*, Decision on Certificate of Public Convenience and Necessity for the Advanced Metering Infrastructure Project, p. 22 (British Columbia Utilities Commission, July 23, 2013).³

² A true and correct copy of the pertinent pages from this decision is attached hereto as **Attachment B**.

³ A true and correct copy of the pertinent pages from this decision is attached hereto as **Attachment C**.

27. As this Commission as well as other commissions and courts have found, Dr. Carpenter's opinions are based on flawed methodologies and analyses, lack scientific objectivity, are tainted by bias and, as a result, are wholly unreliable. Accordingly, Dr. Carpenter's unreliable and highly prejudicial should not be allowed in this proceeding.

B. THE COMPLAINANT HAS SUBMITTED EXHIBITS THAT SHOULD BE EXCLUDED BECAUSE THEY ARE HEARSAY

28. The Complainant has submitted exhibits that should be excluded from the record in this proceeding because they are hearsay statements⁴ and not subject to a hearsay exception. Specifically, these exhibits are proposed Exhibits 3 through 28.

29. These exhibits are hearsay because they are out of court statements being offered for the truth of the matter asserted. The exhibits were not written by the Complainant or his witness or contain statements not made by the Complainant or his witness, such as various documents, reports, articles, excerpts of articles, abstracts of articles and studies, press releases, and letters. (*See* Complainant's Proposed Exhibits 3 through 28) Indeed, many of the proposed exhibits are hearsay within hearsay, because the documents purport to quote from and/or characterize the views of third-parties. Moreover, the only witness the Complainant is calling to

⁴ Hearsay is an out-of-court statement offered to prove the truth of the matter asserted. Pa.R.E. 801; *Bonegre v. Workers' Compensation Appeal Board (Bertolini's)*, 863 A.2d 68, 72 (Pa. Cmwlth. 2004). Ordinarily, hearsay evidence is inadmissible unless some exception applies. Pa.R.E. 802. The hearsay rule is somewhat relaxed in proceedings before administrative agencies. *Rox Coal Co. v. Workers' Comp. Appeal Bd. (Snizaski)*, 570 Pa. 60, 807 A.2d 906 (2002). The Commonwealth Court established what is commonly called the "Walker Rule" to apply to the use of hearsay evidence during administrative proceedings:

- (1) Hearsay evidence, properly objected to, is not competent evidence to support a finding;
- (2) Hearsay evidence, admitted without objection, will be given its natural probative effect and may support a finding, if it is corroborated by any competent evidence in the record, but a finding of fact based solely on hearsay will not stand.

Walker v. Unemployment Comp. Bd. of Review, 367 A.2d 366, 370 (Pa. Cmwlth. 1976). The "Walker Rule" has been affirmed by the Pennsylvania Supreme Court. *Rox Coal Co. v. Workers' Comp. Appeal Bd. (Snizaski)*, 570 Pa. 60, 807 A.2d 906 (2002).

testify is Dr. Carpenter. As such, the actual authors of these various materials, to testify at the hearing and authenticate the statements therein. Therefore, these exhibits are out of court statements.

30. Further, the Complainant is submitting the exhibits to prove the truth of the matter asserted therein. The Complainant is planning to use these exhibits to demonstrate that PPL Electric's new AMI meter is a health, safety, and fire hazard, that the AMI meter and associated infrastructure allegedly do not protect the Complainant's data and privacy, and that the Complainant will suffer alleged health effects if the new AMI meter is installed.

31. Thus, these materials are hearsay statements and are inadmissible unless subject to a hearsay exception. *See* note 1, *supra*.

32. An exception to the hearsay rule is that an expert may express an opinion that is based on material not in evidence, including other expert opinions, where such material is of a type customarily relied on by experts in his or her profession. *See Lower Makefield Twp. v. Lands of Dalgewicz*, 4 A.3d 1114, 1122 (Pa. Cmwlth. 2010), *affirmed*, 67 A.3d 772 (Pa. 2013); *Collins v. Cooper*, 746 A.2d 615, 618 (Pa. Super. 2000); *Primavera v. Celotex Corp.*, 608 A.2d 515, 520-21 (Pa. Super. 1992); Pa.R.E. 703.⁵

33. Here, however, the Complainant's only witness should not be certified as an expert witness and allowed to testify, for the reasons explained in Section II.A, *supra*. Therefore, none of these materials will be used form the basis of any expert witnesses' opinions.

⁵ An expert may base his or her opinion on facts made known to the expert; “[t]hat those facts were in part hearsay does not invalidate the expert’s opinion. *See Steinhauer v. Wilson*, 485 A.2d 477, 479 (Pa. Super. 1984). However, Pennsylvania Rule of Evidence 705 requires an expert to disclose to the fact-finder the facts or data on which the opinion is based. Pa.R.E. 705 (“If an expert states an opinion the expert must state the facts or data on which the opinion is based.”).

34. The Complainant cannot rely on these materials to form his own opinion. The Complainant is not a medical or scientific expert and cannot rely upon these materials as a basis for forming and offering opinions about medical or scientific issues. See Pa.R.E. 702. “The test to be applied when qualifying an expert witness is whether the witness has any reasonable pretension to specialized knowledge on the subject under investigation.” *Miller v. Brass Rail Tavern*, 664 A.2d 525, 528 (Pa. 1995). Nothing submitted by the Complainant attests that he is an expert in any of the fields relevant to the subject matters of physics, biophysics, chemistry, electrical engineering, electromagnetics, bioelectromagnetics, radio-frequency bioelectromagnetics and dosimetry, medicine, fire safety, or law.

35. Finally, even if these materials are allowed to form the basis of the Complainant’s opinion or any expert’s opinion, these materials cannot be submitted into the record. See *Klein v. Aronchick*, 85 A.3d 487, 503-04 (Pa. Super. 2014) (citing *Aldridge v. Edmunds*, 750 A.2d 292, 297-98 (Pa. 2000)). Although hearsay statements, such as articles, studies, and treatises, can be relied upon by expert witnesses in forming their opinions, the substance of those hearsay statements is not permitted to be entered into the record to prove the truth of the matter asserted. See *id.*; *Nigro v. Remington Arms Co.*, 637 A.2d 983, 993 (Pa. Super. 1993) (citations omitted). As explained previously, the Complainant is offering all of these materials to prove the truth of the matter asserted. Thus, even if the Complainant or his witness is permitted to offer expert opinions and rely on these materials in forming the basis of those opinions, the proposed exhibits cannot be admitted into the record in this proceeding.

36. For these reasons, the Complainant’s proposed Exhibits 3 through 28 should be excluded from the record. If not, PPL Electric’s due process rights would be violated because

the Company would be denied the opportunity to cross-examine the individuals who actually authored these materials and statements.

C. MANY OF THE COMPLAINANT’S EXHIBITS SHOULD OTHERWISE BE EXCLUDED BECAUSE THEY ARE IRRELEVANT, LACK AUTHENTICITY, AND ARE INHERENTLY UNRELIABLE

37. As noted above, many of Complainant’s proposed exhibits also are inadmissible due to other significant flaws, including relevance,⁶ authenticity,⁷ and inherent unreliability.⁸

38. First, the contents of many of the proposed exhibits are irrelevant because they: (a) address exposures other than the RF fields from the AMI meters being used by PPL Electric; (b) address health conditions other than the one raised by Complainant; (c) do not address issues relevant to the installation of AMI meters in Pennsylvania; (d) and/or were submitted by Dr. Herbert, who is no longer testifying on behalf of the Complainant (see Complainant’s Proposed Exhibits 3 through 7, 9, 10, 12, 14, 17 through 26, and 28).

39. Second, many of the Complainant’s proposed exhibits lack authenticity, are inherently unreliable, or both because: (a) the authors are not being presented to authenticate their statements; (b) they are incomplete extracts or portions of other documents; (c) are

⁶ See Pa.R.E. 401 (“Evidence is relevant if: (a) it has any tendency to make a fact more or less probable than it would be without the evidence; and (b) the fact is of consequence in determining the action.”); *Ecker v. Amtrak*, 2015 Phila. Ct. Com. Pl. LEXIS 98 (Mar. 13, 2015), *affirmed*, 2015 Pa. Super. Unpub. LEXIS 3615 (Pa. Super. 2015); *Parr v. Ford Motor Co.*, 109 A.3d 682 (Pa. Super. 2014), *appeal denied*, 2015 Pa. LEXIS 1150 (Pa. 2015). Even if evidence is relevant, such evidence may be excluded “if its probative value is outweighed by a danger of one or more of the following: unfair prejudice, confusing the issues, misleading the jury, undue delay, wasting time, or needlessly presenting cumulative evidence.” *Parr*, 109 A.3d at 697 (quoting Pa.R.E. 403).

⁷ See Pa.R.E. 901(a) (“To satisfy the requirement of authenticating or identifying an item of evidence, the proponent must produce evidence sufficient to support a finding that the item is what the proponent claims it is.”). Indeed, “[w]hen a party offers evidence contending either expressly or impliedly that the evidence is connected with a person, place, thing, or event, the party must provide evidence sufficient to support a finding of the contended connection.” Pa.R.E. 901, cmt. (citing *Commonwealth v. Hudson*, 414 A.2d 1381 (Pa. 1980); *Commonwealth v. Pollock*, 606 A.2d 500 (Pa. Super. 1992)).

⁸ See *Blum v. Merrell Dow Pharms., Inc.*, 705 A.2d 1314, 1325 (Pa. Super. 1997) (excluding expert testimony because the “analysis was so flawed as to render [the expert’s] conclusions unreliable and therefore inadmissible”), *affirmed*, 764 A.2d 1 (Pa. 2000).

composites of documents from multiple sources and different authors, or unknown authors; (d) have been reworded or “doctored” to alter the content of the document they purport to be; (e) were generated by unreliable anti-electromagnetic field (“EMF”)/RF advocacy groups; and/or (f) were prepared or relied upon by Dr. Carpenter, whose testimony has been found to be unreliable in several proceedings (see Complainant’s Proposed Exhibits 3 through 28). Indeed, some of the exhibits have no identified author or source, or where the source of a proposed exhibit can be determined, some of those documents were downloaded from the websites of anti-EMF/RF advocacy groups (see, e.g., Complainant’s Proposed Exhibits 3, 11, 16, 22, 26, and 28). These types of anonymous and advocacy materials cannot be relied on as providing reliable and balanced statements about medical and scientific issues.

40. For these reasons, the Complainant’s exhibits should be excluded because they are irrelevant, lack authenticity, and are inherently unreliable.

D. THE MAJORITY OF THE COMPLAINANT’S DIRECT TESTIMONY SHOULD BE EXCLUDED

41. The majority of the Complainant’s written direct testimony should be excluded from the recording in this proceeding as well for several reasons.

42. First, the Complainant’s direct testimony has many passages in which he quotes or entirely relies upon hearsay statements or his exhibits. (See Complainant’s Direct Testimony, p. 3, line 15 to p. 15, line 16; p. 17, line 10 to p. 18, line 20) For the reasons explained in Section II.B-C above, such statements and materials should not be admitted in this proceeding. As a result, these passages of the Complainant’s direct testimony should be excluded from the record.

43. Second, the Complainant is not an expert witness that can testify about and rely upon these scientific and medical issues set forth in his testimony. The Complainant is attempting to rely upon others’ findings and statements to render scientific and medical opinions

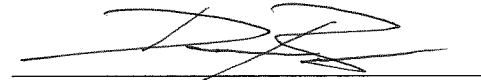
about PPL Electric's new AMI meters. Only an expert in those fields is qualified to do so, which the Complainant is not. Moreover, even if the Complainant were an expert, the substance of those hearsay statements should not be admitted into the record, as explained previously.

44. For these reasons, PPL Electric respectfully submits that the ALJ should exclude the portions of the Complainant's direct testimony that rely upon hearsay statements or his exhibits or that offer the Complainant's scientific and medical opinions.

III. CONCLUSION

WHEREFORE, PPL Electric Utilities Corporation respectfully requests that Administrative Law Judge Elizabeth H. Barnes grant this Motion in Limine and prohibit Dr. Carpenter from testifying in this proceeding as well as exclude the Complainant's proposed testimony and exhibits from the evidentiary record in this proceeding, as explained above.

Respectfully submitted,



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Date: March 30, 2018

Attorneys for PPL Electric Utilities Corporation

ATTACHMENT “A”

IN THE SUPERIOR COURT OF THE STATE OF WASHINGTON
FOR THE COUNTY OF KING

CATHERINE LAKEY, a single woman; *et al.*,

Plaintiffs,

vs.

PUGET SOUND ENERGY INC., a
Washington Corporation; and CITY OF
KIRKLAND, a Washington municipal
corporation

Defendants.

No. 10-2-32386-4 SEA

SUMMARY DECISION

THIS MATTER came before the undersigned pursuant to Defendant Puget Sound Energy's ("PSE") motion challenging the admissibility of Plaintiffs' expert's opinion on electro-magnetic fields ("EMFs"). Specifically, the question raised on Defendant's motion for a *Frye* hearing was whether Plaintiff's claims (that the presence of EMFs on their property is injurious to the health of Plaintiffs and their families) are based upon reliable medical or scientific opinion. Plaintiffs underlying theory for their cause of action alleges

that the presence of EMFs is a continuing trespass as well as a nuisance and that they have a reasonable apprehension of injury arising from the exposure to EMF.

The court granted Defendant's request for a *Frye* hearing which commenced on April 25, 2011 and concluded on April 27, 2011. The court considered all of the pleadings, the evidence submitted at the hearing, argument of counsel, and having been duly advised and for the reasons stated below, the court concludes that the scientific testimony of Dr. David O. Carpenter, Plaintiff's expert witness, is not admissible because it does not meet the *Frye* test.

The *Frye* Standard

When novel scientific evidence is at issue, the proposed scientific testimony must meet the standard set forth in *Frye v. United States*, 293 F. 1013 (1923); *State v. Copeland*, 130 Wn.2d 244 (1996). Under *Frye*, evidence derived from a scientific theory is admissible only if the theory or principle has achieved general acceptance in the relevant scientific community. Plaintiff argues that there is nothing new or novel in this case and that the real issue is simply a difference of opinion among experts. This court disagrees. *Frye* specifically held that,

[W]hile courts will go a long way in admitting expert testimony deduced from a well-recognized scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs.

Frye, 293 F. at 1014.

The primary rationale underlying the *Frye* test is that general acceptance in the relevant scientific community ensures reliability and validity since judges do not have the expertise to assess the validity of a challenged theory or application. In accordance with ER 702, scientific evidence is allowed only if it will assist the trier of fact to understand the evidence. Allowing evidence that is unreliable or that is not based on established scientific principles

will not be helpful to the fact finder and will only serve to mislead or confuse by inviting a conclusion based on speculative theories or fears that are not supported by science.

In examining the proffered evidence, courts look at whether the underlying theory is generally accepted in the appropriate scientific community and whether there are generally accepted methods of applying the theory or principle in a manner capable of producing reliable results. *State v. Riker*, 123 Wn2d 351, 359 (1994); *State v. Copeland*, 130 Wn2d 244 (1996).

Dr. Carpenter's Opinion

In this case, the critical issue is not just a difference of opinion. Plaintiff's expert opinion, or ultimate conclusion, is a minority view that is not generally accepted in the relevant scientific community. Dr. Carpenter's methodology for arriving at his opinion is incomplete at best. Dr. Carpenter, who is not an epidemiologist, disregards and dismisses the majority of studies that find no evidence or insufficient evidence to conclude that EMFs, at the level found on Plaintiff's property, cause diseases such as leukemia. The failure to address the majority of studies that do not find reliable evidence of adverse effects from EMF exposure is inconsistent with how epidemiological research is evaluated.

In addition, to his methodology of approach, Dr. Carpernter is not able to state to a reasonable degree of medical certainty that EMF at any level *causes* leukemia, Alzheimer's disease, or ALS. At most, he was able to state that he believed there was a statistically significant association or correlation between EMF and the diseases mentioned despite there being no animal studies to support the conclusion or no single mechanism that explains how EMF causes such diseases.

On the other hand, Dr. Nancy Lee, one of Defendant's experts, explained that the field of epidemiology requires review of all of the relevant studies and warned that looking at one or a few studies in isolation would lead to an incorrect conclusion. She likened Dr. Carpenter's methodology, relying upon select epidemiological studies, to looking at one piece of a puzzle and drawing a conclusion about the broader picture. Dr. Lee pointed out that Dr. Carpenter did not include all of the relevant studies in his review study. In particular, he did not include three studies that she considers to be "the closing studies" in the area of EMF and adverse health effects. These studies demonstrated that there is no link between EMF and the adverse effects alleged by Plaintiff. She also indicated that Dr. Carpenter's reliance upon a statistically significant association between EMF and leukemia and other diseases is misplaced as epidemiologists do not and should not equate a statistically significant association to causation. In summary, Dr. Lee opined that Dr. Carpenter reached the incorrect conclusion that EMF in this case is harmful to human health by examining select epidemiological studies in isolation.

Dr. Mark Israel, also a defense expert, testified about the method for determining a reliable scientific basis for the causes of cancer and opined that Dr. Carpenter's views were incomplete and unreliable. Dr. Israel is a medical doctor and cancer researcher specializing in the molecular causes and treatment of cancer. Dr. Israel opined that a reliable opinion would look to molecular studies, cellular studies, animal studies, and epidemiological studies in determining whether EMF causes cancer. He indicated that epidemiology studies are hypothesis-generating studies and that in the field of science, being able to build upon the findings of other studies is important and that no sound conclusion has been built upon the epidemiology studies Dr. Carpenter relies on. Finally, he opined that the majority of the


medical community does not believe that EMF causes cancer and that there is a significant distinction between association and causation which requires animal studies, known mechanisms, and reproducibility of the results.

Conclusion

Based upon the above summary discussion, the court grants Defendant's motion to find that the proffered testimony is not reliable and thus, inadmissible. The underlying motion which raised the necessity for a *Frye* hearing is a motion to dismiss based on failure to state claim. The court grants the motion to the extent that Plaintiffs cannot bring a nuisance or trespass claim based on the presence of EMF's. Therefore, the Motion to Dismiss (previously filed) is Granted.

Counsel shall confer and supplement this summary decision with proposed Findings if counsel believes such Findings are warranted.

IT IS SO ORDERED this 24th day of May, 2011.



Judge Mary I. Yu

King County Superior Court
Judicial Electronic Signature Page

Case Number: 10-2-32386-4
Case Title: LAKEY ET AL VS PUGET SOUND ENERGY INC ET
ANO
Document Title: ORDER
Signed by Judge: Mary Yu
Date: 5/24/2011 3:02:36 PM

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Judge Mary Yu

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ATTACHMENT “B”

D É C I S I O N

QUÉBEC

RÉGIE DE L'ÉNERGIE

D-2012-127

R-3770-2011

5 octobre 2012

PRÉSENT :

Richard Lassonde
Régisseur

Hydro-Québec
Demanderesse

et

Intervenants dont les noms apparaissent ci-après

Décision finale

Demande relative à l'autorisation du projet Lecture à distance – Phase 1

Intervenants :

- Association coopérative d'économie familiale de l'Outaouais (ACEFO);
- Association coopérative d'économie familiale de Québec (ACEFQ);
- Association des redistributeurs d'électricité du Québec (AREQ);
- Fédération canadienne de l'entreprise indépendante (FCEI);
- Groupe de recherche appliquée en macroécologie (GRAME);
- Option consommateurs (OC);
- Regroupement des organismes environnementaux en énergie (ROEÉ);
- Regroupement national des conseils régionaux de l'environnement du Québec (RNCREQ);
- Stratégies énergétiques et Association québécoise de lutte contre la pollution atmosphérique (S.É./AQLPA);
- Syndicat des employé-e-s de techniques professionnelles et de bureau d'Hydro-Québec, section locale 2000 (SCFP-FTQ);
- Union des consommateurs (UC);
- Union des municipalités du Québec (UMQ).

TABLE DES MATIÈRES

1. La Demande	7
2. La Procédure	7
3. Cadre d'analyse d'une demande sous l'article 73 de la Loi	8
4. Position du Distributeur	10
4.1 Objectifs visés par le Projet	10
4.2 Description du Projet	11
4.3 Justification du Projet en relation avec ses objectifs	17
4.4 Coûts associés au Projet	19
4.5 Étude de faisabilité du Projet et analyse de sensibilité	21
4.6 Impact sur les tarifs	23
4.7 Préoccupations socio-économiques et environnementales	23
4.8 Liste des autorisations exigées en vertu d'autres lois	31
4.9 Conclusion de l'argumentation du Distributeur	31
5. Position des intervenants	31
5.1 ACEFO	31
5.2 ACEFQ	32
5.3 FCEI	33
5.4 GRAME	35
5.5 OC	39
5.6 ROEÉ	41
5.7 RNCREQ	43
5.8 SCFP-FTQ	45
5.9 S.É./AQLPA	47
5.10 UC	50
5.11 UMQ	51
6. Réplique du Distributeur	53
6.1 SCFP-FTQ	53
6.2 ROEÉ	54
6.3 OC	54

7. Analyse et opinion de la Régie	54
7.1 Remarques préliminaires	54
7.2 Description du Projet	57
7.3 Objectifs et justification du Projet	58
7.4 Étude de faisabilité et analyses économiques du Projet	62
7.5 Analyses de sensibilité du Projet	79
7.6 Coûts et risques financiers associés au Projet	81
7.7 Impact sur les tarifs et traitement réglementaire	88
7.8 Préoccupations socio-économiques et environnementales.....	92
7.9 Autorisations exigées en vertu d'autres lois	118
7.10 Conclusion générale de la Régie	118
Dispositif	121

compteurs, qui respectent aussi les normes de Santé Canada, n'ont jamais généré de plaintes de clients quant à leur impact sur leur santé²⁷⁹.

[406] Même si la preuve est clairement à l'effet que les émissions de RF des CNG sont bien en deçà des normes de Santé Canada et des autres organismes de normalisation, les préoccupations de certains intervenants et de clients du Distributeur portent sur la question de savoir si ce type de RF peut représenter un risque pour la santé suffisant pour appliquer le principe de précaution.

7.8.2.2 La preuve sur l'impact des RF sur la santé

Le témoignage de David Carpenter

[407] S.É./AQLPA a fait entendre David Carpenter. Ce dernier s'est présenté comme « *public health physician* ». Il est « *professor of Environmental Health Sciences at the University at Albany* ». Il est également « *Director of the Institute for Health and the Environment* » à la même université dans l'État de New York aux États-Unis.

[408] S.É./AQLPA a demandé à la Régie de le reconnaître comme témoin expert médecin en santé publique, incluant les risques de santé associés à l'exposition aux RF.

[409] La Régie a refusé d'accorder le statut d'expert demandé²⁸⁰ aux motifs que David Carpenter n'est pas médecin, n'a jamais eu d'expérience clinique auprès de patients et n'a jamais personnellement fait de recherches sur les effets des RF sur la santé. La Régie n'a cependant pas rejeté son témoignage du dossier en raison de ses connaissances sur les recherches faites par d'autres dans ce domaine. Elle a donc accepté ce témoignage, sous réserve d'établir la force probante à y accorder²⁸¹.

[410] La Régie est d'avis que le témoignage de David Carpenter n'est pas probant, notamment pour les motifs soumis par le Distributeur aux paragraphes 153 à 165 de son argumentation écrite²⁸².

²⁷⁹ Pièce A-0106, pages 150 à 162 et pièce A-0115, pages 200 et 201.

²⁸⁰ Pièce A-0148, décision du 17 mai 2012 rendue séance tenante, pages 110 à 113.

²⁸¹ Pièce A-0148, page 113.

²⁸² Pièce B-0163, pages 39 à 43.

[411] Le contre-interrogatoire du témoin a montré qu'il était biaisé. Ainsi, contrairement aux *Attentes de la Régie relatives au rôle des témoins experts*²⁸³ (les Attentes), ce témoin que l'intervenant voulait faire reconnaître comme expert n'a pas présenté une position indépendante et objective, mais il a fait ce que ces Attentes prescrivent de ne pas faire, c'est-à-dire qu'il s'est comporté en représentant du participant qui l'a engagé²⁸⁴. À cet égard, David Carpenter, en contre-interrogatoire, a eu de la difficulté à dissocier, aux deux rapports qu'il a produits, ce qui avait été rédigé par lui ou par son procureur²⁸⁵. Il a admis que M^c Neuman et d'autres représentants de S.É./AQLPA lui avaient suggéré des changements de texte²⁸⁶.

[412] S.É./AQLPA a même produit un commentaire récent du témoin Carpenter où il critique un rapport du CCST intitulé « *Health Impact of Radio Frequency from Smart Meters* ». Entre autres commentaires, le témoin Carpenter écrivait :

*« The benefit of the smart meters is entirely to the utilities, and is economic in nature. If they install smart meters they can fire those individuals who at present are employed to go around reading meters. Thus this is a job-killing proposal, and will increase unemployment in a state that already has too much. »*²⁸⁷

[413] Manifestement, le témoin Carpenter, expert ou pas, ne satisfait pas aux critères d'objectivité auxquels la Régie est en droit de s'attendre²⁸⁸.

Le témoignage du D^r Michel Plante

[414] Une des preuves des plus pertinentes et crédibles présentées à la Régie est celle du D^r Michel Plante.

²⁸³ http://www.regie-energie.qc.ca/regie/DirectivesInstructions/Regie_RoleExperts_18juillet2011.pdf.

²⁸⁴ Attentes, page 3.

²⁸⁵ Pièce A-0149, pages 33 à 36.

²⁸⁶ Pièce A-0149, page 36.

²⁸⁷ Pièce A-0149, pages 220 et 221 et pièce C-SÉ-AQLPA-0041.

²⁸⁸ http://www.regie-energie.qc.ca/regie/DirectivesInstructions/Regie_RoleExperts_18juillet2011.pdf.

ATTACHMENT “C”



IN THE MATTER OF

FORTISBC INC.

**CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY
FOR THE ADVANCED METERING INFRASTRUCTURE PROJECT**

DECISION

July 23, 2013

Before:

**L.F. Kelsey, Commissioner/Panel Chair
N.E. MacMurchy, Commissioner
D.M. Morton, Commissioner**

TABLE OF CONTENTS

	Page No.
EXECUTIVE SUMMARY	I
1.0 THE APPLICATION	1
1.1 Specific Orders Sought	2
2.0 THE PROCESS	2
2.1 Interveners	2
2.2 Community Input Sessions	3
2.3 Procedural Conference	3
2.4 Written Process	4
2.5 Oral Hearing	4
2.6 Procedural Motions	5
3.0 REGULATORY AND POLICY CONTEXT	5
3.1 Jurisdiction	6
3.2 What Constitutes Public Convenience and Necessity	7
3.3 How do British Columbia's Energy Objectives, Legislation and Regulations Inform this Decision	9
3.4 2008 Advanced Metering Infrastructure Project Decision	10
4.0 EVIDENCE AND EXPERT WITNESSES	13
4.1 How does the Panel Weigh the Evidence?	13
4.2 Expectations for Expert Witnesses	13
4.3 Individuals Qualified as Experts	14
4.3.1 Dr. William Bailey	14
4.3.2 Dr. Martin Blank	18
4.3.3 Dr. David Carpenter	20
4.3.4 Dr. Isaac Jamieson	22
4.3.5 Dr. Donald Maisch	24
4.3.6 Dr. Margaret Sears	25
4.3.7 Dr. Yakov Shkolnikov	28
4.4 Individuals Filing Evidence but not Cross-Examined	29
4.4.1 Mr. Curtis Bennett	29
4.4.2 Mr. Jerry Flynn	30

TABLE OF CONTENTS

	Page No.
4.4.3 Dr. Girish Kumar	33
4.4.4 Robert McLennan	34
4.4.5 Dr. Karl Maret	35
4.4.6 Dr. Timothy Schoechle	36
4.5 Adverse Inference	37
5.0 PROJECT NEED	39
6.0 PROJECT DESCRIPTION	41
6.1 Existing System	41
6.2 Proposed AMI Project	42
6.3 AMI Components	43
6.4 Project Scope	44
6.4.1 Procurement	45
6.5 Project Management	45
6.5.1 Project Schedule and Phasing	46
6.5.2 Project Risks	47
6.6 Consultation	48
7.0 PUBLIC INPUT	50
7.1 Public Participation	50
7.2 Letters of Comment	50
7.3 The Community Input Sessions	51
8.0 ECONOMIC ANALYSIS AND RATE IMPACT OF THE PROJECT	53
8.1 Net Present Value Analysis of Costs and Benefits (Economic Analysis)	55
8.1.1 Key Assumptions	55
8.1.1.1 Discount Rate	55
8.1.1.2 General Inflation and Escalation Rate	56
8.1.1.3 Term of 20 Years	57
8.1.1.4 Income Taxes	58
8.1.2 Project Costs and Benefits	58
8.1.2.1 Project Capital Costs	59

TABLE OF CONTENTS

	Page No.
8.1.2.2 Contingency Allowance and Accuracy of the Project Cost Estimate	60
8.1.2.3 CPCN Development Costs	61
8.1.2.4 Sustaining Capital, Project Operating Costs and Benefits	62
8.1.3 Quantifiable Operational Costs and Savings	63
8.1.3.1 Meter Reading	63
8.1.3.2 Remote Disconnect/Reconnect	64
8.1.3.3 Measurement Canada Compliance	67
8.1.3.4 Meter Exchanges	68
8.1.3.5 Contact Centre	69
8.1.4 Soft Benefits	69
8.1.4.1 Customer Service and Satisfaction	70
8.1.4.2 System Efficiency and Reliability	72
8.1.5 Other Potential and Future Benefits	72
8.1.5.1 Voltage Optimization	73
8.1.5.2 Outage Management	74
8.1.5.3 Development of Future Rates	75
8.2 Policy/Environmental Benefits	76
8.2.1 Clean Energy Act – GHG Reductions	76
8.3 Theft Reduction Benefit	77
8.3.1 Theft Reduction – Revenues	78
8.3.2 Decrease in Network Electricity Losses	79
8.3.2.1 Treatment of Uncertain Benefits	79
8.3.2.2 Identification of Key Assumptions used to Estimate the Theft Benefit	80
8.3.2.3 Review of Key Assumptions in the theft benefit estimate	82
8.3.2.3.1 Number and growth rate of marijuana grow sites on FortisBC's network	82
8.3.2.3.2 Average Energy Use per Site	83
8.3.2.3.3 Percentage of Sites Stealing Electricity	84
8.3.2.3.4 Theft Detection Rate and Recovered Revenue	85

TABLE OF CONTENTS

	Page No.
8.3.2.4 Valuing the Decreased Network Electricity Losses from the Project	86
8.3.3 Are There Lower Cost Ways of Obtaining the Theft Benefit?	87
8.3.4 Theft Reduction Benefit – Other Considerations	87
8.3.5 Summary	88
8.4 Economic Analysis – Summary	89
8.5 Rate Impact of the Project	89
8.5.1 Carrying Costs	90
8.5.2 Theft Reduction Benefit	91
8.5.3 Depreciation	91
8.5.3.1 AMI Meters	93
8.5.3.2 Other Project Asset Classes	95
8.5.4 Accounting Treatment of the Existing Meters	97
8.5.5 BCUC Staff Model	99
9.0 PROJECT ALTERNATIVES CONSIDERED	100
9.1 Status Quo	101
9.2 Automated Meter Reading	101
9.3 Power Line Carrier AMI	101
9.4 Alternative Evaluation	102
9.4.1 AMI RFP Process and Credibility of PLC estimate	104
10.0 RADIO FREQUENCY EMISSIONS AND HEALTH	105
10.1 Introduction	105
10.2 Does Safety Code 6 Apply To FortisBC's AMI Program?	106
10.3 Do the Emission Standards Set Out in Safety Code 6 Adequately Protect FortisBC Customers?	108
10.3.1 Thermal Effects	108
10.3.2 Non-Thermal Effects	109
10.3.3 Does Safety Code 6 take the 'Precautionary Principle' Into Account?	112
10.4 Other Issues	114
10.4.1 What Will I <i>Actually</i> Be Exposed To From FortisBC's AMI Equipment?	114

TABLE OF CONTENTS

	Page No.
10.4.2 What are the concerns arising from RF emissions being classified as a "Possible Carcinogen"?	116
10.4.3 What If I Live Near A Bank Of Meters?	120
10.4.4 What about My Total Exposure to EMF from all Sources?	123
10.4.5 How Frequently do AMI Meters Transmit and does this Create a Chronic Health Problem?	125
10.4.6 Will AMI Meters Interfere With My Medical Device?	131
10.4.7 What About People Concerned about Electromagnetic Hypersensitivity?	132
11.0 OTHER KEY ISSUES ARISING	137
11.1 Privacy and Use of Data Collected	137
11.2 Wireless System Security	140
11.2.1 ZigBee and Home Area Network	142
11.3 Fire Risk	143
11.4 Opt-Out	145
11.5 Environmental Impacts	149
11.6 Higher Bills	151
12.0 COMMISSION DETERMINATION	152
12.1 Public Convenience and Necessity	152
12.2 Depreciation Rate for Proposed Meters	153
13.0 SUMMARY OF DIRECTIVES	153

COMMISSION ORDER C-7-13

APPENDICES

APPENDIX A Summary of Rulings Made Before and After the Oral Hearing

APPENDIX B Regulatory Timetable

APPENDIX C List of Acronyms

APPENDIX D List of Exhibits

and organizations, Dr. Blank was quick to discredit the source rather than assist the Panel to understand the differences.

For these reasons, the Panel places little weight on the written evidence and oral testimony of Dr. Blank.

4.3.3 Dr. David Carpenter

Dr. Carpenter gave evidence on behalf of CSTS. He was tendered and accepted as an expert witness qualified to provide opinion evidence as a public health specialist with expertise in electrophysiology, low frequency electromagnetic field bio-effects, and radio frequency and microwave radiation bio-effects (T10: 2069-2070).

Dr. Carpenter's education includes an M.D., Harvard Medical School, Boston, MA 1964 and a B.A., Harvard College, Cambridge, MA 1959. His curriculum vitae is found in Tab 2E of Exhibit C9-8. His experience includes research and education in Ionizing and non-ionizing radiation biology.

His written evidence is found at Tab2B of Exhibit C9-8. His written evidence also includes an article he co-authored with Cindy Sage: "Setting Prudent Health Policy for Electromagnetic Field Exposures" (Exhibit C9-8, Tab 2C). He also responded to information requests (Exhibit C9-12-3.)

FortisBC expressed concern that Dr. Carpenter had been disqualified as an expert witness by the Quebec Board [Régie de l'énergie], and had failed to disclose this (T11:2107).

Further, FortisBC submits that Dr. Carpenter's conclusions regarding the harms posed by AMI meters are made without any reference to, or regard for, the specific level of exposure from the AMI meters. Dr. Carpenter noted that he did not have expertise in exposure levels and was not qualified to comment on the exposure levels from the AMI meters. He provided no scientific reason to disagree that the AMI meters meet the Safety Code 6 limit for both average and peak pulse levels. He does not have the scientific expertise to measure the RF from AMI meters as compared to the standards of the BioInitiative Report 2007. (FBC Final Submission, pp. 174-175)

FortisBC submits that Dr. Carpenter summarizes the references he cites in a manner consistent with his own beliefs, rather than accurately reporting their findings and provides the following illustration at paragraphs 520-521 of its Final Submission:

“...Dr. Carpenter referred to a study by Volkow et al. in support of his theory that cell phone RF alters the metabolism of the brain and various clinical measures in humans at exposure levels below the intensities that cause tissue heating:

Volkow ND, Tomasi D, Wange GJ, Vaska P, Fowler JS, Teland F, et al. 2011. Effects of cell phone radiofrequency signal exposure on brain glucose metabolism. *Journal of the American Medical Association* 305:808-814.: In healthy participants and compared with no exposure, 50-minute cell phone exposure was associated with increased brain glucose metabolism in the region closest to the antenna. This shows direct effects of RF radiation on the brain with cell phone use.”
[underlining added by FortisBC; footnote omitted]

FortisBC submits that the full quote shows that the authors considered the findings in the study much less conclusive:

“Conclusions - In healthy participants and compared with no exposure, 50-minute cell phone exposure was associated with increased brain glucose metabolism in the region closest to the antenna. This finding is of unknown clinical significance.” [underlining added by FortisBC; footnote omitted]
(FortisBC Final Submission, p. 177)

The CEC submits that the evidence submitted by Dr. Carpenter is “of limited assistance in informing the issue.” “Dr. Carpenter’s evidence is unduly weighted in favor of a particular viewpoint and not representative of the body of scientific literature. Such actions typify those of an advocate and are not in keeping with that of an objective contributor to the proceeding. The BCUC should find Dr. Carpenter’s evidence to be of limited value. Certain portions of Dr. Carpenter’s evidence are potentially misleading. Dr. Carpenter is somewhat injudicious in his commentary and is at times disrespectful to organizations which have considerable stature. Several of Dr. Carpenter’s statements are inflammatory and unreasonably dismissive of opinions that are not the same as his, regardless of the credentials of the statute of the decision-maker or the analysis conducted.”⁵

The CEC is of the view that the references cited by Dr. Carpenter were “decidedly weighted” in favour of one viewpoint. In support of this view, the CEC provided the following analysis: “Dr. Carpenter cited a total of 59 studies of which 43 were supportive of their being a negative effect

⁵ CEC Final Submission, pp. 92-93

(73%), 14 were not supportive (24%) and 2 were inconclusive. Of the 14 that were not supportive, Dr. Carpenter cited 5 with caveats. Dr. Carpenter did not provide any caveats with respect to the 43 supportive documents.”

The CEC further submits that some of the information provided as reference material without caveat by Dr. Carpenter is not necessarily well-respected and has been found to be implausible. For example, Dr. Carpenter cites reference item (g) “Mortality by neoplasia and cellular telephone base stations in the Belo Horizonte municipality, Minas Gerais state, Brazil by Dode AC et al without caveat and characterizes it as showing higher rates of death from cancer among individuals living close to cell towers than among those living further away. Rates were highest in residences less than 100 m, falling to near background a 1,000 m. This report has been subject to considerable critique and one of the other witnesses, Dr. Blank recognized that the results did not make sense.” (T9: 1681-1685) (CEC Final Submission, pp. 92-94)

CTCS submits “the expert opinion evidence adduced by FortisBC is inferior in weight to the direct medical & scientific expert opinion evidence provided by Dr. Blank, Dr. Carpenter & Dr. Sears the former of whom has personally conducted his own independent laboratory research on the very matter in issue” (CSTS Final Submission, p. 17)

The Panel has significant concerns about Dr. Carpenter’s testimony. Of particular concern is that Dr. Carpenter, in the words of FortisBC, “summarizes the references he cites in a manner consistent with his own beliefs, rather than accurately reporting their findings.” (FortisBC Final Submission, p. 177; T11:2091-2099) The Panel is also concerned with Dr. Carpenter’s reference to studies that suit his views and his inability to properly defend them as exhibited by the Belo Horizonte municipality study example.

In his attempt to summarize the references, Dr. Carpenter adopted a less than objective and fully informed approach. For this reason, the Panel gives little weight to his evidence.

4.3.4 Dr. Isaac Jamieson

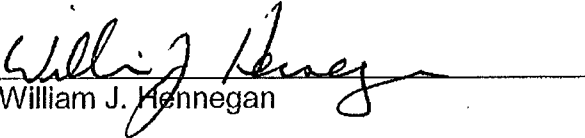
Dr. Jamieson gave evidence on behalf of CSTS. Dr. Jamieson was tendered and accepted as an expert witness to provide opinion evidence as “as an environmental scientist with expertise in environmental health, in particular expertise in exposure to radio frequency emissions and the environmental health implications of same.” A caveat was placed on his expertise noting that he

VERIFICATION

COMMONWEALTH OF PENNSYLVANIA

COUNTY OF LEHIGH

I, William J. Hennegan, hereby state that the facts above set forth are true and correct to the best of my knowledge, information and belief, and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).


William J. Hennegan