

331 Shady Ridge Drive  
Monroeville, PA 15146

February 3, 2017

*Via Paper Filing*

Rosemary Chiavetta, Secretary  
Pennsylvania Public Utility Commission  
P.O. Box 3265  
Harrisburg, PA 17105-3265

RE: **Michele Hriadil and Francis Hriadil v. Duquesne Light Company**  
Docket No. C-2016-2571726

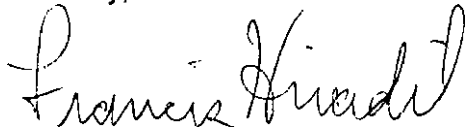
Dear Secretary Chiavetta:

Enclosed please find Complainants New Matter #3, along with 5 Exhibits, to add to our Formal Complaint filed by Michele and Francis Hriadil.

A copy of this document has been served upon the Respondent's Counsel, Jeremy V Farrell, Esquire, in accordance with Commission regulations.

Please feel free to contact me if you have any questions.

Sincerely,



Francis Hriadil  
Complainant  
(412) 779-3314  
hriadil@attglobal.net

Enclosure

Cc: Jeremy V Farrell, Esquire, Counsel for Duquesne Light Company (with enclosure)

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FEB - 3 2017

PA PUBLIC UTILITY COMMISSION  
SECRETARY'S BUREAU

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

MICHELE HRIADIL and  
FRANCIS HRIADIL,

Complainant,

vs.

DUQUESNE LIGHT COMPANY,

Respondent.

No: C-2016-2571726

**NEW MATTER #3**

Filed by Michele and Francis Hriadil

hriadil@attglobal.net  
(412) 779-3314  
331 Shady Ridge Drive  
Monroeville, PA 15146

**NOTICE TO PLEAD on NEW MATTER #3**

**TO: RESPONDENT'S GENERAL COUNSEL, JEREMY V FARRELL, ESQUIRE, AND LAUREN N RULLI, ESQUIRE.**

**YOU ARE HEREBY NOTIFIED TO FILE A WRITTEN RESPONSE TO THE WITHIN NEW MATTER OF COMPLAINANTS MICHELE AND FRANCIS HRIADIL WITHIN TWENTY (20) DAYS OF SERVICE HEREOF, OR A JUDGMENT MAY BE ENTERED AGAINST YOU.**



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Francis Hriadil  
February 3, 2017

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

MICHELE HRIADIL and  
FRANCIS HRIADIL,

Complainant,

vs.

DUQUESNE LIGHT COMPANY,

Respondent.

No: C-2016-2571726

**NEW MATTER #3**

TO THE HONORABLE COMMISSION:

1. Complainants (our) Formal Complaint, Complainants (our) November 29, 2016  
Response to Respondent's original Preliminary Objections, Complainants (our) December 19, 2016  
Response Addendum to Respondent's Corrected Preliminary Objections, Complainants (our)  
January 9, 2017 Response to the Respondent's Answer and New Matter, Complainants (our)  
January 20, 2017 Response to the Respondent's Answer in Opposition to Complainant's Motion for  
Summary Judgment, Complainants (our) January 24, 2017 New Matter, Complainants (our)  
January 27, 2017 New Matter #2, all Supporting Documents and all Exhibits, are incorporated here-in by  
reference as if fully restated.

2. In Section 4, pages 2 and 3, of Respondent's Answer and New Matter, Respondent presents the following reference to the FCC, CCST, and WHO.

"With respect to Complainants' concerns about the radio frequency ("RF") of its new smart meters, Duquesne Light states that the Company's smart meters, like its traditional analog meters, utilize low-energy RF waves to transmit electricity, but transmit RF waves for only short periods every day. Furthermore, the Federal Communications Commission ("FCC") has established safe limits for RF exposure and the RF exposure for Duquesne Light's smart meters is well below the limits set by the FCC. In fact, according to a study completed by the California Council of Service and Technology, smart meters, when installed and maintained properly, result in lower RF emission than most common household electronic items, such as cell phones, microwaves, wireless internet, baby monitors, and garage door openers. The World Health Organization has similarly concluded that no adverse health effects have been demonstrated to result from exposure to low-level RF. A copy of Duquesne Light's promotional brochure titled "Understanding Radio Frequency and Your New Meter" that discusses these matters is attached as Exhibit B. In light of the foregoing, Duquesne Light denies that the installation of a smart meter at the Property would endanger the health or wellbeing of Complainants."

Complainants (we) wish to raise a New Matter about these references.

3.0. Respondent's Counsel "states" that the Federal Communications Commission (FCC) has established "safe limits" for RF exposure and the RF exposure for Duquesne Light's Smart Meters is well below the limits set by the FCC. This is a mischaracterization of the facts. These kinds of statements are always made and they are always taken at face value; but, they do not hold up under close scrutiny and they do not justify the safety of Smart Meters.

3.1. The Federal Communications Commission (FCC) is an independent Federal regulatory that "is charged with regulating interstate and international communications by radio, satellite, and cable." The FCC has five (5) main functions:

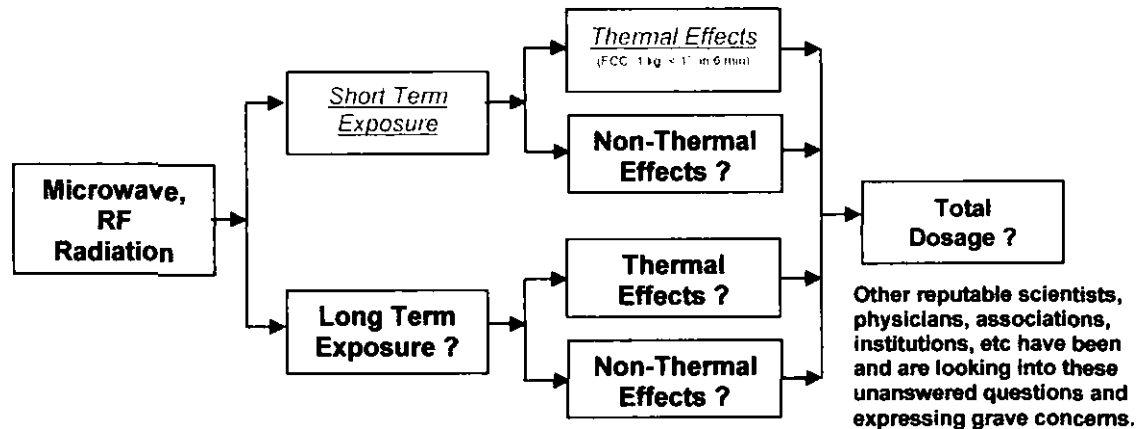
( <https://www.fcc.gov/about-fcc/what-we-do> )

- "Promoting competition, innovation and investment in broadband services and facilities
- Supporting the nation's economy by ensuring an appropriate competitive framework for the unfolding of the communications revolution
- Encouraging the highest and best use of spectrum domestically and internationally
- Revising media regulations so that new technologies flourish alongside diversity and localism
- Providing leadership in strengthening the defense of the nation's communications infrastructure"

As such, **the focus, responsibility, and expertise of the FCC is NOT public health.**

3.2. The FCC carried out a limited and incomplete assessment of RF radiation effects and provided an exposure limit that can only be characterized narrow and inadequate in light of current science, information, studies, and experimental results.

“What did the FCC assess”, and “what did they not assess” to set their RF exposure limit?



The FCC assessed only the thermal (ionizing) effects of short term exposure.

Specifically, the FCC stated, simply and only, that

a 30 minute exposure to a RF field

with an average Power Density of  $600 \mu\text{W}/\text{cm}^2$  ( $0.6 \text{ mW}/\text{cm}^2$ )

does not produce damage by thermal means, which is through a heating mechanism. That is all

it said. **Many important considerations remain unaddressed by this specification:**

How much time should safely pass between 30 minute exposures  
at that high of a level?

What is the maximum peak level that is safe?

How much total RF exposure is the general public and homeowner already  
getting from all of the various other RF sources in the environment?

What about the most vulnerable among us?

Pregnant women? Children? Elderly? Chronically ill?

What is the biological effect of low dose exposure over a long period?  
Over a lifetime?

And, Complainants (we) wish to point out that **this “limit” was established in the early 1990s based primarily on numbers published by the National Council on Radiation Protection (NCRP), a private council, in 1986, 31 years ago!** Also, **this limit is more than an order of magnitude (10x) larger than currently accepted standards existing in Europe and Asia, including Russia and China.** A few of these current standards are summarized below for reference:

Regulatory:	Italy, Poland, Hungary Bulgaria, China, Russia	10 $\mu\text{W}/\text{cm}^2$
Regulatory :	Switzerland	4.5 $\mu\text{W}/\text{cm}^2$
Recommendation:	Ecolog Institute	0.3 $\mu\text{W}/\text{cm}^2$
Recommendation:	Salzburg Resolution	0.1 $\mu\text{W}/\text{cm}^2$
Recommendation:	Biolnitiative Report (2008)	< 0.1 $\mu\text{W}/\text{cm}^2$ outdoor < 0.01 $\mu\text{W}/\text{cm}^2$ indoor
Recommendation:	STOA, EU Parliament	0.01 $\mu\text{W}/\text{cm}^2$

So, in this regard, the FCC is well out of step with much of the rest of the world. And, it is also noted that the Duquesne Light/Itron SK9AMI7 does not meet and could not be deployed under any of those standards. They are apparently more conscientious and cautious when it comes to the safety and well-being of their citizens than the FCC, or some in the PA PUC.

**The FCC did not assess non-thermal (non-ionizing) effects, and it did nothing to assess long term exposure.** As documented in Complainants (our) January 9, 2017 Response to Respondent’s Answer and New Matter to Formal Complaint Section 4 (3) (e) page 17, the Commission received the following expert testimony from witness Dr. Andrew A Marino, Phd and JD in Biophysics:

**“nowhere does the FCC assert that Smart Meters are safe with regard to physiological changes caused by physical processes other than heating or cooking. That claim is claim is unsupported and counter-scientific, and has never been made by the FCC.” (my emphasis)**

Low level RF transmitters, utilizing small amounts of power, have definite known effects on the human body. There are now medical treatments and procedures that use low level RF transmitters, with cell phone and Smart Meter like RF strength (less than 1 watt), to attack tumor

cells, etc. But, the generally accepted medical protocol is that these methods should not be used for the head or torso area because of the risk of damage to surrounding healthy tissue.

**There now exists a preponderance of evidence, from both epidemiologically-based and experimentally-based studies, that RF radiation does, in fact, produce damage by means other than thermal.** Dr. Marino presented evidence directly to the Commission on this fact. A few of the multitude of sources establishing this Material Fact were also provided in our Supporting Documents, Exhibits, and References that were provided with Complainants (our) Formal Complaint and our previous filings.

The concerns and warnings that have been raised are not new. In the August 2009 Volume 16 issue of the international Pathophysiology Journal, an article entitled, "Public Health Implications of Wireless Technologies" was published warning of dire consequences of under-regulated RF exposure. An excerpt from that article is presented below

[ [http://www.pathophysiologyjournal.com/article/S0928-4680\(09\)00017-0/fulltext](http://www.pathophysiologyjournal.com/article/S0928-4680(09)00017-0/fulltext) ]

"Global exposures to emerging wireless technologies from applications including mobile phones, cordless phones, DECT phones, WI-FI, WLAN, WiMAX, wireless internet, baby monitors, and others may present serious public health consequences.

**New, biologically based public exposure standards for chronic exposure to low-intensity exposures are warranted.**

**Existing safety standards are obsolete because they are based solely on thermal effects from acute exposures.**

The rapidly expanding development of new wireless technologies and the long latency for the development of such serious diseases as brain cancers means that **failure to take immediate action to reduce risks may result in an epidemic of potentially fatal diseases in the future.**

Regardless of whether or not the associations are causal, the strengths of the associations are sufficiently strong that in the opinion of the authors, **taking action to reduce exposures is imperative, especially for the fetus and children.**"

**(my emphasis)**

Briefly, low level RF exposure has been shown to

- **damage the fetal brain.** (<https://www.ncbi.nlm.nih.gov/pubmed/22268709>).
- **make cells leaky.** (<http://onlinelibrary.wiley.com/doi/10.1002/bem.2250100208/abstract>).
- **adversely affect the heart rhythm.**  
(<http://www.magdahavas.com/microwave-radiation-affects-the-heart-are-the-results-real-or-are-they-due-to-interference/>)
- **damage sperm.**  
([http://www.huffingtonpost.com/2011/11/29/laptop-wifi-sperm-damage-electromagnetic-radiation\\_n\\_1118726.html](http://www.huffingtonpost.com/2011/11/29/laptop-wifi-sperm-damage-electromagnetic-radiation_n_1118726.html))
- **break DNA.** (<http://www.cnn.com/videos/>)
- **damage DNA.** ([http://www.buergerwelle.de/assets/files/dna\\_damage\\_in\\_molt\\_4\\_t\\_cells.pdf](http://www.buergerwelle.de/assets/files/dna_damage_in_molt_4_t_cells.pdf))
- **increase glucose in the brain.** (<http://jamanetwork.com/journals/jama/fullarticle/645813>)
- **cut immunity.** (<https://www.ncbi.nlm.nih.gov/pubmed/10619445>)
- **dull memory.** (<https://www.ncbi.nlm.nih.gov/pubmed/18044737>)
- **stress genes.** (<https://www.ncbi.nlm.nih.gov/pubmed/11683499>)
- **weaken bones.**  
(<http://www.modernmedicine.com/modern-medicine/news/modernmedicine/modern-medicine-news/cell-phone-proximity-hip-tied-bone-minerali>)

to name but a few of the documented adverse effects

So, it is a Material Fact that the FCC has never declared that Smart Meters are safe with regard to physiological changes caused by non-thermal (non-ionizing) processes. And, as Dr. Marino has testified, "there is a reasonable basis in established science for the ... concern regarding risks to human health".

Smart Meters are and remain a credible threat of harm, and, as such, are a violation, at a minimum, of Section 1501 of the Public Utility Code, and the protections afforded under the ADA and ADAAG, especially to fetuses, children, and the elderly (of which we are a part).

3.3. Every provider of Smart Meters is provided with a Grant of Equipment Authorization by the FCC to which it must adhere. This Equipment Authorization is valid only for the equipment identified on the authorization certificate, and valid only under the FCC's specific rules and regulations for proper installation. Separate Grants of Equipment Authorization were issued for the SK9AMI7 Smart Meter and the 802.15.4 ZigBee Module. The requirements on those authorizations state the following: [Exhibit 1 of 5 (2 pages)]

SK9AMI7 900 MHz LAN:

“Limited Modular Approval. Power listed is conducted. **This device must be professionally installed** and is limited to installation for mobile and fixed applications only. This grant is valid only when the device is installed by the grantee or contractors employed by the grantee who are instructed to ensure that the end-user has no manual instructions to remove or install the device. **The transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.** Installers and end-users must be provided with transmitter operation conditions for satisfying RF exposure compliance. Class II Change to add RF filter and new antenna type as described in this filing.” (my emphasis)

802.15.4 2.4 GHz ZigBee Module:

“Output power listed is conducted. Modular approval. The antenna(s) used for **this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.** Approval is limited to OEM installations only. OEM integrators must be provided with antenna installation instructions. OEM integrators and **end-users must be provided with transmitter operating conditions for satisfying RF exposure compliance.** This grant is valid only when the device is sold to OEM integrators and the OEM integrators are instructed to ensure that the end user has no manual instructions to remove or install the device. The only antennas approved for use with this module are those documented under the filings of this FCC ID.” (my emphasis)

The FCC Grants of Equipment Authorization are quite clear in requiring that:

- antenna(s) must provide a separation distance of at least 20 cm from all persons
- end-users must be provided with antenna installation and transmitter operating conditions for satisfying RF exposure compliance
- antenna(s) must not be co-located with any other antenna or transmitter
- antenna(s) must not be or operating in conjunction with any other antenna or transmitter
- the meters must be professionally installed

3.3.1. As indicated in Complainants (our) November 29, 2016 Response to Respondent's original Preliminary Objections filing, our electrical meter junction box is located on the front of our residence where the living room is located, and is right next to the bench we use when sitting on our front patio/porch. So, when we use our front bench, we are in close proximity to the Smart Meter and its emissions.

**The Respondent Duquesne Light does not provide any safety enclosure to maintain this safe 20 cm (8 inch) separation distance. There is nothing to prevent the homeowner, family members, children, pets, etc. from coming into close proximity to the Smart Meter on a regular basis, when carrying out normal activities around the residence. Further, the Respondent does not post any notice or warning on the Smart Meter, and does not even inform homeowners and their family members to always remain a "safe" distance away from the Smart Meter.**

It is also important to mention that EDCs, including Respondent Duquesne Light, routinely state that Smart Meter RF emissions are orders of magnitude less than that of a cell phone. Yet, cell phone manuals warn that people should stay 1 - 2 cm away from a cell phone; but, the FCC requires at least a 20 cm (8 inch) separation from a Smart Meter, which is an order of magnitude greater distance. Even the FCC own regulations inherently recognize the greater strength of the pulsed Smart Meter emissions, as Complainants (we) have established in our other filings, and the greater separation distance that is necessary. The numbers tell the real truth.

3.3.2. Also, in our November 29, 2016 filing, Complainants (we) established that we live in a condominium complex composed of buildings containing 6 connected condominium units per building. Each unit shares one or more walls. Our unit is an interior unit and shares two walls, one with each of our neighboring units on either side of us. Thus, **the electrical meter boxes are co-located in close proximity to each other.**

**Further, the 900 MHz and 802.15.4 2.4 GHz ZigBee transmitters and antennas are both co-located on the SK9AMI7. These transmitters and antennas are set up to work in conjunction with the HAN and RF appliances and other Smart Meters in the mesh network.**

3.3.3. Respondent Duquesne Light, stated in its Smart Meter Technology installation plan, the "Duquesne Light Company Final Smart Meter Technology Procurement and Installation Plan" Docket Nos. P-2012- M-2009-2123948, that it structured its SK9AMI7 Smart Meter deployment in the same manner as several EDCs in California, Nevada, and Illinois. These EDCs contracted out the Smart Meter installation to companies who hire temporary workers with little or no electrical or professional expertise. Typically, these "installers" receive only a few weeks of training before being dispatched into the field. It was noted in Complainants (our) previous filings that faulty installations are suspected in several cases where Smart Meters caused fires and explosions.

**Professional installation requires the use of a certified electrician.**

The FCC created these regulations to provide at least some measure of safety. Any one of these violations alone would negate the FCC Grant of Equipment Authorization, yet multiple violations are clearly evident. And, **as such, they represent a credible threat of harm and a clear violation of Section 1501 of the Public Utility Code.**

3.4. The FCC has also established that the maximum transmission power allowed for a 900 MHz transmitter is 1 watt (i.e. 1,000 mW).

Yet, taking into account the gain of the antenna, Itron's SK9AMI7 Technical Specifications indicate that the Antenna Gain,  $G_T = 2.2 \text{ dBi} = 1.66$   
the Transmitter Conducted Power,  $P_T = 688.65 \text{ mW}$ .

This produces a power output

**Equivalent/Effective Isotropically Radiated Power, EIRP = 1,143 mW**

in the direction of maximum antenna gain.

**This exceeds 1,000 mW.**

4. Respondent's Counsel also specifically references a "study" carried out by the California Council of Service and Technology, which states that "smart meters, when installed and maintained properly, result in lower RF emission than most common household electronic items, such as cell phones, microwaves, wireless internet, baby monitors, and garage door openers. "

**This "study" has been refuted and discredited by no less than 3 separate and independent expert sources:**

- (2 pages) David Carpenter M.D., Public Health Physician and Former Dean of the School of Public Health at the University at Albany, on the **faulty report** by the California Council on Science and Technology entitled, "Health Impacts of Radiofrequency from Smart Meters." Dr. Carpenter asserts and has testified that **"there is conclusive evidence for adverse health effects in humans."**
- (11 pages) Daniel Hirsch, University of California, SC, Lecturer, Director of Program on Environmental and Nuclear Policy, on the same **faulty report** by the California Council on Science and Technology, which was based on estimates from the Electric Power Research Institute (EPRI), an industry group. His analysis shows that **the whole body exposure from a Smart Meter is actually orders of magnitude higher than that of a cell phone**, rather than orders of magnitude lower as is routinely claimed.
- (14 pages) Karl Maret, M.D., BS in EE, MS in BE, President of Dove Health Alliance, a non-profit foundation specializing in the area of Energy Medicine, also asserts that this same CCST report used by many as evidence to validate the safety of Smart Meters **contains inaccuracies and minimizes the biological effects and health impacts of non-thermal radiofrequency radiation**, such as those produced by wireless technologies including Smart Meters

Copies of these three reports were included as Exhibits 1, 2, and 3 supplied with Complainants November 29, 2016 Response to Duquesne Light's original Preliminary Objections to Formal Complaint.

**Further corroboration comes from the FCC itself.**

As indicated here-in in Section 3.3.1., page 9, the FCC Grant of Equipment Authorization for the SK9AMI7 Smart Meter requires at least a 20 cm (8 inch) separation from the Smart Meter. Yet, cell phone manuals warn that people need only stay 1 - 2 cm away from a "supposedly stronger radiating" cell phone. That is, **the FCC requires more than an order of magnitude greater separation distance from a Smart Meter, than that needed for a cell phone.** These numbers reveal the real truth of the manner.

5. Respondent's Counsel also specifically asserts that "The World Health Organization has similarly concluded that no adverse health effects have been demonstrated to result from exposure to low-level RF." This again is incorrect.

Dr. Ronald Powell, a credible independent expert who testified before the Maryland General Assembly, published the content of his testimony in his document entitled, "A Message to the Maryland General Assembly on the Danger of Smart Meters" by Ronald Powell Phd". This report was supplied as Supporting Document 06 with Complainants (our) Formal Complaint to the PA PUC.

In his December 14 testimony, Dr. Powell detailed the specific health problems that have already been linked with the RF radiation given off by these Smart Meters, with specific reference to 3 wide ranging reviews of the findings that have been published by the international biomedical research community, namely "The BioInitiative 2012 Report", "Health Effects of RF - Research Review" (at the FCC), and "Electromagnetic Sensitivity and Electromagnetic Hypersensitivity: A Summary". There is also reference to a number of Medical Associations such as the American Academy of Environmental Medicine (AAEM) and the American Academy of Pediatrics (AAP). The specific report by the AAEM was supplied as Exhibit 4 in Complainants (our) November 29, 2016 Complainants Response to Respondent's original Preliminary Objections to Formal Complaint. All provide **irrefutable evidence correlating RF exposure to neurological, cardiac, and pulmonary disease, as well as reproductive and developmental disorders, immune dysfunction, cancer, and other health conditions. Everyone is susceptible to this; but, those who are most vulnerable are the young, the elderly (of who we are a part), and women who are pregnant.**

And, the World Health Organization (WHO) has indeed recognized this fact. It is a matter of the public record that on October 20, 2011, the International Agency for Research into Cancer (IARC), which is part of the World Health Organization released a new assessment. They had convened a panel of 31 experts from 14 countries, including the United States, to look at the available evidence. Their verdict (which was provided as Exhibit 6 in Complainants (our) January 9, 2017 Response to Respondent's Answer and New Matter), was that

**“Radio Frequency Electromagnetic Fields” (the sort given off by mobile phones and Smart Meters) belong to the “Group 2B” class of agents, such as lead, engine exhaust, and DDT, and as such, represent a potential “carcinogenic hazard”.**

And, we again reference Daniel Hirsch, University of California, SC, Lecturer, Director of Program on Environmental and Nuclear Policy, cited in Complainants (our) Section 4 here on page 11, in which he established that **the whole body exposure from a Smart Meter is actually orders of magnitude higher than that of a cell phone, which is corroborated by the FCC’s minimum separation distance regulation.**

No one questions the great harm caused by lead, engine exhaust, and DDT. This same classification of RF radiation from Smart Meters by the World Health Organization (WHO), alone, establishes **Smart Meters as a credible threat of harm, and a clear violation of Section 1501 of the Public Utility Code.**

6. Furthermore, the National Institutes of Health (NIH) has **released definitive evidence that pulsed RF radiation exposure, at frequencies, intensities, and modulations emitted from cell phones and Smart Meters, causes tumor formation.** [Exhibit 2 of 5 (7pages)] In May 2016, researchers at the National Toxicology Program (NTP), a federal interagency group under the National Institutes of Health (NIH), reported partial findings from a \$25 million animal study of the cancer risk from Radiofrequency (RF) radiation. In the study, rats were **exposed to RF radiation at 900 MHz.** The controlled study showed that RF radiation caused two types of tumors, glioma and schwannoma. None of the control rats (those not exposed to the radiation) developed said tumors.

Though these are partial findings, it is important to understand that they are by no means preliminary. The NTP report was peer-reviewed by experts. According to the NTP, **the effects of RF radiation on these two tumors are final.** And, the Federal Government released this partial report because the results have **“broad implications for public health.”**

Christopher Portier, retired head of the NTP who helped launch the study, said that this is not just an associated finding. He said that **the relationship between the RF radiation exposure and cancer is clear. "I would call it a causative study, absolutely. They controlled everything in the study. It's because of the exposure."**

The authors added that **their findings supported WHO's classification of RF radiation, from cell phones, Smart Meters, etc., as a "Group 2B" class carcinogenic agent.**

A review paper in the Electromagnetic Biology and Medicine journal, Volume 35, 2016 - Issue 2, [Exhibit 3 of 5 (1 page)], entitled "Oxidative mechanisms of biological activity of low-intensity radiofrequency radiation", reported that, in 93 of 100 studies, RF radiation produced a cellular stress response which can lead to DNA damage and cancer. Others have reported DNA damage as well. And, it is important to note that **the NTP study also found evidence of DNA damage.**

David Carpenter, a public health clinician and the Director of the Institute for Health and the Environment at the University at Albany, S.U.N.Y., said, "The trend here is important. The question is, **'Should one be concerned?' The answer is clearly 'Yes.'**"

American Cancer Society (ACS): On May 27, 2016, Otis W. Brawley, M.D., American Cancer Society Chief Medical Officer released the following statement: (<https://acspressroom.wordpress.com/>)

"For years, the understanding of the potential risk of radiation from cell phones has been hampered by a lack of good science. **This report from the National Toxicology Program (NTP) is good science.**" (my emphasis)

"The NTP report linking radiofrequency radiation (RFR) to two types of cancer marks a paradigm shift in our understanding of radiation and cancer risk. The findings are unexpected; we wouldn't reasonably expect non-ionizing radiation to cause these tumors. **This is a striking example of why serious study is so important in evaluating cancer risk.**" (my emphasis)

"**It's interesting to note that early studies on the link between lung cancer and smoking had similar resistance, since theoretical arguments at the time suggested that there could not be a link.**" (my emphasis)

"The new report covers only partial findings from the study, but importantly one of the two cancers linked to cell phone radiation was malignant gliomas in the brain." ... The second cancer, called a schwannoma, is an extremely rare tumor in humans and animals, reducing the possibility that this is a chance finding. **And importantly, the study found a 'dose/response' effect: the higher the dose, the larger the effect, a key sign that this association may be real.**" (my emphasis)

**This NTP report alone establishes the Material Fact that Smart Meters are a credible threat of harm to the general public, and a clear violation of Section 1501 of the Public Utility Code.**

The evidence is clear and overwhelming, and it continues to grow. The World Health Organization (WHO) recognizes it. The National Institutes of Health (NIH) recognize it. The American Cancer Society (ACS) recognizes it. And, so do many other independent public Health and Medical organizations. It can no longer simply be ignored or dismissed by the Commission. It would be blatantly irresponsible and an act of outright negligence to do so.

7. Concerning Safety, in Section 4 page 2 of Respondent's Answer and New Matter, Respondent's Counsel "denies that its smart meters pose a safety hazard."

Complainants (we) wish to emphasize again that, Duquesne Light's denial aside, it cannot be denied that there have been 1000s of fires related to Smart Meters documented in PA, CA, TX, FL, NV, IL, and across Canada, in which severe injury, fatalities, and significant property damage have occurred.

Overheating was found to be a major issue. Causes were traced to the nature and quality of the Smart Meter design and construction, the quality of the installation, and the condition of the wiring in the residence, which is not even evaluated or considered before installation.

**Digital Smart Meters, including the Duquesne Light/Itron SK9AMI7, use electronic components and flammable materials which are particularly susceptible to utility-side power/voltage surges. The result is overheating, explosion, and fire. Smart Meters are also lacking in adequate Surge Arrestors to protect a homeowner's electrical circuitry, and provide no Circuit Breaker Protection.**

One only needs to look online, or in the press, to see the evidence. [Exhibit 4 of 5 (2 pages) ]

A recent example occurred right here in Pennsylvania. On January 20, 2017, the day Complainants (we) mailed our Response to the Respondent's Answer in Opposition to Complainant's Motion for Summary Judgment, a power outage occurred in Brookville Borough in Jefferson County. The cause was a **power surge**. The Associated Press reported

**"The 911 calls started pouring in just after noon in the tiny western Pennsylvania town of Brookville. The electrical meter is on fire. The house siding is burning. My power strip is smoking. The computer is fried. The carpeting is singed. Our light bulb exploded.**

A power company says a failed power line component was to blame for an **electrical surge** Jan. 20 in Brookville, population 4,000. When it was over, **500 to 1,000 residents were affected**, said Tracy Zents, the director of Jefferson County's Department of Emergency Services.

**"I've been doing this a little over 30 years, and this is definitely a first for me,"** Zents said. "We were fortunate that nobody was hurt."

**The volume of calls quickly overwhelmed the local volunteer fire department** 70 miles northeast of Pittsburgh, which had to call three other departments for help, Zents said.

**Even the police department wasn't spared. The surge tripped the department's main office radio, so the initial emergency calls were missed**, said Chief Jason Brown."

**(emphasis added)**

It was "a first" because the Borough never had Digital Smart Meters before. The description of the burning meters, the burning siding, and the property damage that occurred, along with pictures, can be found in the news reports that covered the occurrence. Two have been provided in Exhibit 4.

One might be curious as to what Smart Meter was involved. The area is "serviced" by none other than the same Centron/Itron SK9AMI7 Digital Smart Meter [Exhibit 5 of 5 (1 pages) ] currently being deployed in our area by Duquesne Light. And, this instance of Smart Meter fires from a voltage/power surge in Brookville Borough is not just an isolated case. There have been many others across the world. Fortunately, this time, in Brookville, there were no serious injuries or fatalities. Nevertheless, there remain great concerns about future re-occurrences. It is with good reason that some have referred to these devices as "ticking time bombs."

WHEREFORE, considering the incontrovertible facts and issues established here-in, along with the many other relevant factors Complainant's (we) have presented in our Formal Complaint, in our in our previously filed January 27, 2017 New Matter #2, our January 24, 2017 New Matter, our January 20, 2017 Response to the Respondent's Answer in Opposition to Complainant's Motion for Summary Judgment, our January 9, 2017 Response to the Respondent's Answer and New Matter, and our November 29, 2016 and December 19, 2016 written responses to both the Respondent's original Preliminary Objections and the Corrected Preliminary Objections, Complainants Michele Hriadil and Francis Hriadil respectfully request the following:

- #1. the Respondent concedes that the that the FCC "safety limit", such as it is,
  - (a). was created in the early 1990s, based on NRCP data that is 31 years old, and it has not been updated since that time.
  - (b). only considered, and was only intended to prevent, harm from exposure to RF radiation due to thermal (ionizing) mechanisms.
  - (c). is out of step with the rest of the world, which for public safety, has established or recommended limits that are orders of magnitude lower than this old US standard.

This is a matter of record. And, if the Respondent cannot establish otherwise, Complainants (we) respectfully request that the Commission rule that it is a Material Fact that this is the case.

- #2. that the Respondent concedes that the FCC
  - (a). has not addressed non-thermal (non-ionizing) effects, and did nothing to assess repeated long term exposure.
  - (b). has never asserted that Smart Meters, including the SK9AMI7, are safe with regard to physiological changes caused by physical processes other than heating or cooking (i.e. ionizing).

This is a matter of record. And, if the Respondent cannot establish otherwise, Complainants (we) respectfully request that the Commission rule that it is a Material Fact that this is the case.

#3. that the Respondent concedes that

- (a). it must adhere "to the letter" to all aspects of the FCC Grants of Equipment Authorization for the SK9AMI7 Smart Meter, and the 900 MHz and 802.15.4 2.4 GHz ZigBee transmitters and antennas.
- (b). it provides no safety barrier to provide, insure, and maintain the required safe separation distance of at least 20 cm (8 inches) from all persons.
- (c). it does not post any notice or warning on the Smart Meter, and does not warn the homeowner of the danger of RF exposure within this 20 cm (8 inch) safe separation distance.
- (d). it installs the Smart Meter immaterial of its proximity to areas of regular and frequent family activity, which includes children and the elderly (of which we are a part).
- (e). its SK9AMI7 contains co-located 900 MHz and 2.4 GHz transmitters and antennas.
- (f). it installs the Smart Meter immaterial of its proximity and co-location with other Smart Meters, including apartment buildings and connected condominium residences (such as our residence).
- (g). it utilizes contracted "installers", with varying degrees of expertise and training, and supplied by sub-contractors, who are not Duquesne Light certified electricians.

And, if the Respondent cannot establish otherwise, Complainants (we) respectfully request that the Commission rule that it is a Material Fact that this is the case.

#4. that the Respondent concedes that, considering the 1.66 Gain of the 900 MHz transceiver (i.e. the transmitter and antenna), that the effective power in the direction of maximum antenna gain exceeds 1,000 milliwatts (mW). And, if the Respondent cannot establish otherwise, Complainants (we) respectfully request that the Commission rule that it is a Material Fact that this is the case.

- #5. that the Respondent concedes that the "study" by the California Council of Service and Technology, the Respondent has specifically referenced, has been challenged and criticized for being full of errors and inaccuracies by at least 3 separate and independent expert sources, with regards to its cell phone vs Smart Meter emission comparisons, and any claims of safety. This is a matter of record. This "study" has been refuted and discredited. As such, it is without merit and provides no credible information regarding Smart Meter characteristics and safety. And, Complainants (we) respectfully request that the Commission rule that it is a Material Fact that this is the case.
- #6. the Complainants (we) aver that it has been established that the whole body exposure from a Smart Meter is actually orders of magnitude higher than that of a cell phone, and that this has been corroborated by the FCC safe separation zone requirement of 20 cm (8 inches) which is an order of magnitude greater than the 1 - 2 cm for a cell phone. This is a matter of record. And, Complainants (we) respectfully request that the Commission rule that it is a Material Fact that this is the case.
- #7. that the Respondent concedes that its statement that the World Health Organization (WHO) has "concluded" that there are "no adverse health effects" from exposure to RF radiation of the type emitted from a Smart Meter is factually untrue. On the contrary, it is a matter of the public record that the WHO has classified such radiation, at a minimum, as belonging to the "Group 2B" class of carcinogenic agents, such as lead, engine exhaust, and DDT. And, Complainants (we) respectfully request that the Commission rule that it is a Material Fact that this is the case.

#8. the Complainants aver that the 2016 National Toxicology Program (NTP) report, from a comprehensive \$25 million study carried out under the auspices of the National Institutes of Health (NIH), has established definitive experimental evidence that RF radiation exposure, at the frequency (900 MHz) and intensities used by Smart Meters and cell phones, causes cancer and DNA damage. The study further established that the larger the dose of the exposure over time, the larger the effect that is caused. This report has been peer reviewed by independent experts and has been recognized and praised by the American Cancer Society (ACS), the Institute for Health and the Environment (IHE), and others. This is a matter of the public record. And, Complainants (we) respectfully request that the Commission rule that it is a Material Fact that this is the case.

#9. that the Respondent concedes that

- (a). the SK9AMI7 digital Smart Meter, which it is deploying, is composed of electronic components and flammable materials which are particularly susceptible to utility-side power/voltage surges, unlike the original, traditional, and more durable purely electro-mechanical analog meters, and as such pose an increased risk to the homeowner.
- (b). overheating of the electronic components and flammable materials inside of the digital Smart Meter, such as the SK9AMI7, can cause the components to "pop" and explode, and the materials to burst into flame.
- (c). they provide no Circuit Breaker protection for the homeowner as they are lacking in adequate Surge Arrestors.
- (d). Smart Meters have been involved in multiple fires, property damage, and injury caused by power/voltage surges, or overheating, or old building wiring (which is not examined or assessed prior to the Smart Meter installation), etc.
- (e). the Centron/Itron SK9AMI7 OpenWay Digital Smart Meter being deployed by Duquesne Light was involved in the power/voltage surge and outage that occurred recently in Brookville Borough. The SK9AMI7 meters overheated, caught fire, and burned. 500 - 1,000 residents were affected. Property damage resulted. It is a matter of record that was reported by the Associated Press, etc.

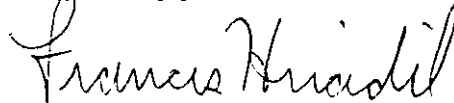
And, Complainants (we) respectfully request that the Commission rule that it is a Material Fact that this is the case.

Complainants (we) continue to strongly aver that this is all in violation of Section 1501 of the Public Utility Code, which the Commission is legally and ethically bound to uphold and enforce for the protection, safety, and well-being of the residents of the state of Pennsylvania.

We reiterate that we believe that we have established that our Formal Complaint is valid and has merit, and is neither frivolous nor a waste of everyone's time and resources; that we have met the criteria for legal sufficiency, we have established a cognizable claim, and we have provided sufficient evidence that this is a matter that is in the public interest.

And, we respectfully request that the Commission grant our requested relief from a device that Complainants (we) never requested or agreed to pay for, per § 2807 (f) (2) (i) of Act 129, and that, at a minimum, is in violation of Section 1501 of the Public Utility Code; and grant a Summary Judgment in our favor, and against the Respondent.

Respectfully yours,



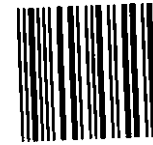
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February 3, 2017



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**NO SCANNED IMAGES ARE  
AVAILABLE**

**COMPLETE TESTIMONY  
AND/OR EXHIBIT(S)  
MAY BE VIEWED IN THE  
COMMISSION'S  
FILE ROOM**