BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PAMELA SCOTT,

Complainant,

vs.

DUQUESNE LIGHT COMPANY,

Respondent.

No: C-2018-3004042

POST-HEARING BRIEF AND PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER

Filed on Behalf of:
Duquesne Light Company

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I. INTRODUCTION

Duquesne Light Company distributes electricity to Complainant Pamela Scott. The law requires Duquesne Light to replace the analog meter currently installed at her home with a digital smart meter. Complainant, however, placed a lock on the analog meter and prevented Duquesne Light from exchanging it.

She then filed a Formal Complaint with the Commission, claiming that Duquesne Light does not have the right to install a smart meter. She also asserted that a smart meter will damage her health and creates a fire hazard. Finally, she claimed that the Company attempted to install a smart meter at her home during a "heavy rainstorm." None of these claims have legal or evidentiary merit, and the Presiding ALJ should dismiss the Formal Complaint in its entirety.

The Commission has repeatedly ruled that Act 129's smart meter mandate lacks an opt-out provision. Complainant provided no evidence to support her health and safety claims, while Duquesne Light presented overwhelming evidence refuting her allegations. For example, Complainant offered no medical records or testimony to support her claim that radiofrequency ("RF") from the Company's smart meter will damage her health. Conversely, Duquesne Light proved through expert testimony that the amount of RF from its smart meters is far below all relevant health standards (including those set by the Federal Communications Commission) and that its smart meters emit much less RF than many natural and man-made sources that Complainant is already exposed to, including her phone, wireless router, local broadcast stations, other human beings, and the Earth.

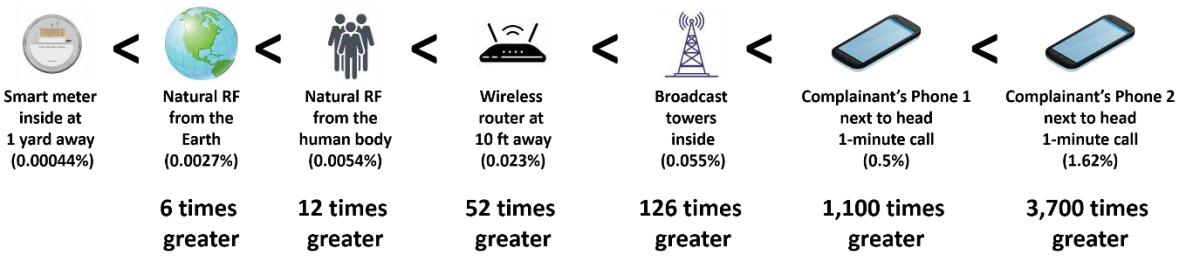

Figure 4. RF exposure of DLC smart meters relative to other RF sources.[1]

As for Complainant's safety concerns, she identified no design or construction flaw in the Company's smart meter. She did not cite a single instance where Duquesne Light's smart meter caused a fire. In contrast, Duquesne Light proved that its smart meters passed exhaustive safety and flammability testing. The meters comply with safety standards set by the Underwriters Laboratory ("UL") and the American National Standards Institute ("ANSI"). In addition, Duquesne Light has already installed roughly 620,000 smart meters in its service territory. None have caused a fire.

Finally, Duquesne Light did not try to install a smart meter during a "heavy rainstorm" on August 10, 2018, as Complainant alleges. Complainant admitted that she was not even home when Company personnel arrived at her property that day, and so Complainant's claim -- by her own admission -- rests on pure speculation. Indeed, Duquesne Light did not exchange the meter that day, nor did the Company remove the lock that Complainant had unlawfully placed on the meter in an attempt to replace it.

In sum, other than Complainant's personal opinions (which were simply misinformed), she presented no evidence to support her allegations. Pennsylvania law, the Commission's Implementation Order, and the Company's Smart Meter Plan and Tariff

[1] This figure is included in DLC Ex. G-2 and G-3.

all require Duquesne Light to install a smart meter at her home. Overwhelming evidence proves that the Company provided -- and continues to provide -- adequate, efficient, safe, and reasonable service in all aspects of its smart meter operations. Accordingly, Duquesne Light requests that the Formal Complaint be dismissed in its entirety and that the Presiding ALJ enter an order stating that the Company can terminate Complainant's service if she continues to prevent the meter exchange.

II. THE EVIDENCE ESTABLISHED AT THE HEARING

A. *The meter that is currently installed at the Service Address no longer has an operational network.*

Complainant resides at 134 Markham Drive, Pittsburgh, PA 15228 ("Service Address"). Tr. at 101. The meter currently installed at the Service Address ("Current Meter") is an Automated Meter Reading ("AMR") meter. Tr. at 327. It contains an electronic device called an "ERT" that transmitted readings to Duquesne Light via RF on the Company's AMR fixed network when that network was operational. Tr. at 327-28. The fixed network has been discontinued in favor of Duquesne Light's smart meter mesh network. Id.

B. *Act 129 of 2008, the Commission's Implementation Order, and the Company's Smart Meter Plan and Tariff require Duquesne Light to install a smart meter with certain specifications at the Service Address.*

Act 129 of 2008 ("Act 129") requires electric distribution companies with more than 100,000 customers to adopt smart meter deployment plans and to install smart meters throughout their service territories within 15 years of the Commission order. 66 Pa. C.S.A.

§ 2807. Act 129 also lists the required smart meter functionalities, which was supplemented by Commission Order. Id.

Duquesne Light has more than 100,000 customers and falls within the scope of Act 129. The Company filed a Smart Meter Plan with the Commission on June 29, 2012, at Docket No. M-2009-2123948, which the Commission approved. The Company also filed an Amended Smart Meter Plan, which was approved by the Commission in relevant part on April 7, 2017 at Docket No. P-2015-2497267.

Duquesne Light's Commission-approved Tariff states that smart meters conforming to Company standards must be installed at each metered service premises pursuant to Act 129 and the Company's Smart Meter Plan. Tr. at 333-34; DLC Ex. C. Customers cannot refuse a smart meter for any reason. Tr. at 334; DLC Ex. C. If a customer does not want a smart meter, their sole remedy is to request that the smart meter be placed at a different location on their property, subject to the cost-allocation and other provisions in Tariff Rule 9B. Tr. at 333-34; DLC Ex. C.

If a customer prevents Duquesne Light from accessing its equipment, the Company can terminate their service. 66 Pa. C.S.A. § 1406(a) ("A public utility may notify a customer and terminate service provided to a customer…for…failure to permit access to meters, service connections or other property of the public utility for the purpose of replacement, maintenance, repair or meter reading."); 52 Pa. Code § 56.81 (same); Duquesne Light Company's Tariff Rule 33 ("The company may terminate electric service…in case meter readers or other authorized representatives of the Company cannot gain admittance or are refused admittance to the premises for the purposes of reading Company meters, inspection and repairs, removal of Company property,

responding to an emergency, restoring electric service, rendering the electric facilities safe and reliable, or for any other purpose incident to the service or in case the customer interferes with Company representatives in the performance of their duties.").

C. Like many other common devices, the Company's smart meter network transmits information through brief, low-power radiofrequency communications.

After the Commission approved the Company's Smart Meter Plan, Duquesne Light deployed smart meter technology – commonly called Advanced Metering Infrastructure ("AMI") – throughout its service territory. Tr. at 184. Duquesne Light's AMI system uses RF to transmit information on a two-way communication system. Tr. at 185-86.

Duquesne Light's smart meters send communications through the Company's "mesh network" to a collection point (previously, a cell relay, but now, a router). Tr. at 187. At the collection point, a cellular modem communicates back to the utility's head-end system. Id. RF transmissions also travel in the opposite direction (from utility to meter) because the network allows for two-way communications, as required by Act 129. 66 Pa. C.S.A. § 2807; Tr. at 185-86.

Smart meters operate in a dynamic, self-healing environment, so a smart meter must communicate with its neighbors to maintain the mesh network. Tr. at 247-48. These communications allow smart meters to find a path to the collection point, even if their normal communication path is disrupted. Id. Because Duquesne Light's smart meters are located close together, they only require low transmission power. Id.

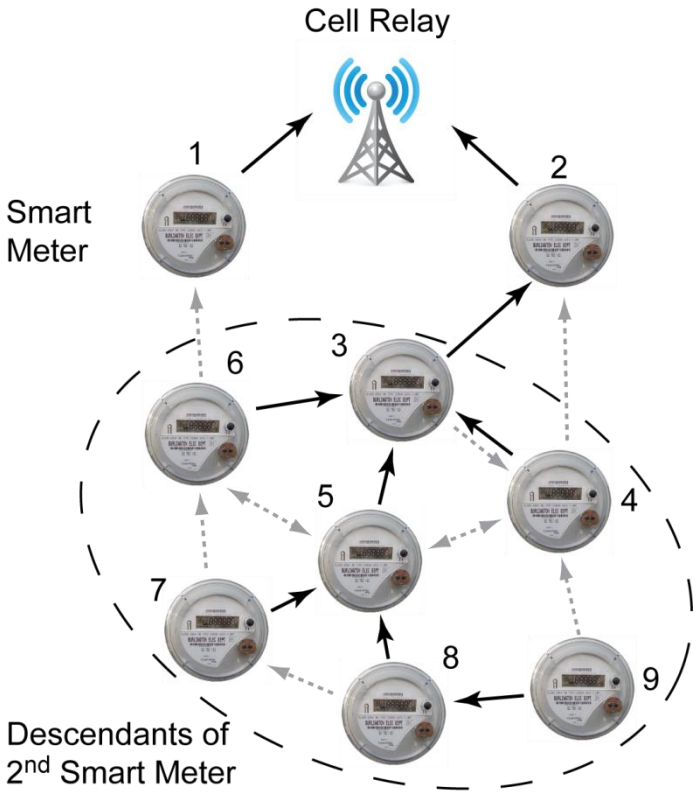

Figure 3. Illustrative example of a smart meter mesh network.[2]

Given Complainant's concerns about RF, it is important to note that RF communications are nothing out of the ordinary. Many household devices – including televisions, radios, cell phones, wireless Wi-Fi devices in routers, baby monitors, cordless phones, and garage door openers – transmit information via RF. Tr. at 188. RF also is emitted from many natural sources, such as human beings and the Earth. Tr. at 243-44, 260.

Duquesne Light's use of RF to transmit meter data is nothing new for Complainant. When the Company's AMR fixed network was operational, the Current Meter transmitted information via RF. Tr. at 328. Complainant raised no concerns about the Current Meter's

[2] This figure is included in DLC Ex. G-2 and G-3.

reliance on RF transmissions, nor has she attempted to distinguish the RF from the Current Meter from the smart meter's RF.

As shown below, RF from smart meters fall in the "non-ionizing" portion of the electromagnetic spectrum. DLC Ex. G-2, G-3; Tr. at 242-43, 298. Non-ionizing radiation cannot break molecular bonds and has no proven adverse health effects. DLC Ex. G-2, G-3; Tr. at 242-43, 298.

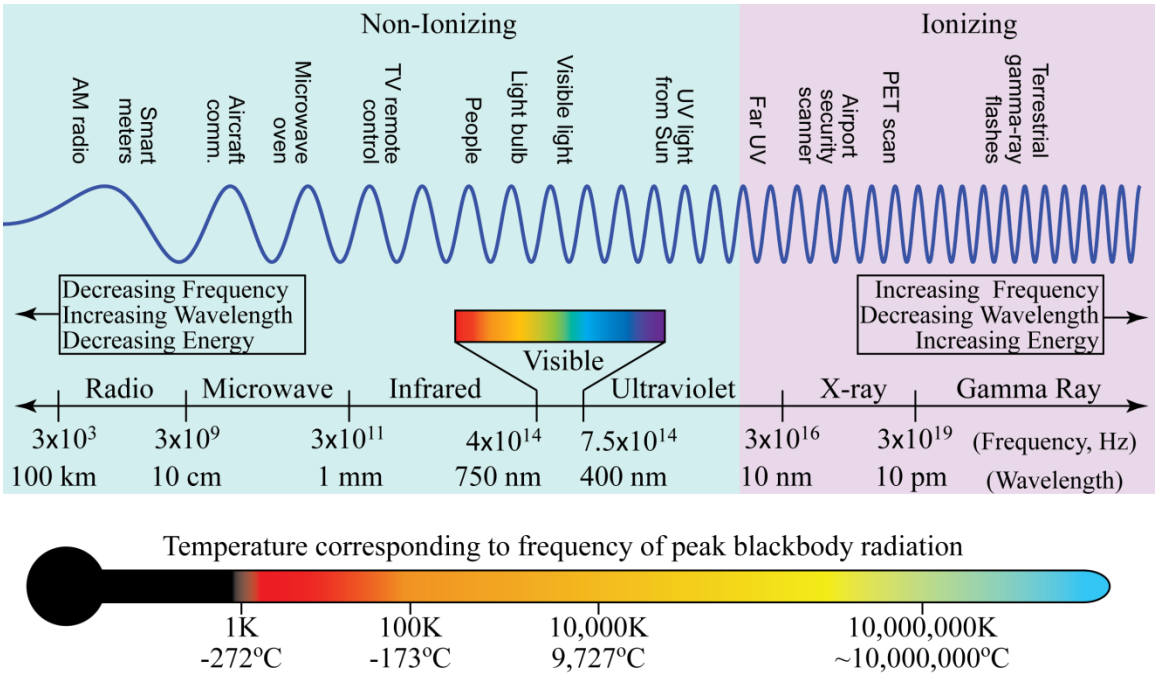

Figure 2. The electromagnetic spectrum and the relationship between frequency, wavelength, energy, and temperature.[3]

[3] This figure is included in DLC Ex. G-2 and G-3.

D. *The RF from the radios in the Company's smart meters is a tiny fraction of the permissible limits set by the FCC and other organizations.*

Duquesne Light is deploying Itron's OpenWay Centron smart meter throughout its service territory. Tr. at 185, 213. That meter carries an FCC identification number of SK9AMI7. Id. Duquesne Light's smart meter contains two radios: the Local Area Network ("LAN") radio and the ZigBee radio. Tr. at 186-87.

The LAN radio transmits at 900 megahertz and communicates with nearby smart meters to form the mesh network referenced above. Id. Each communication from a LAN radio is incredibly brief (lasting just 20-150 *milliseconds*) and occurs at low power (0.69 watts). Tr. at 190, 249.

The LAN radio communicates important information between Duquesne Light and its smart meters, primarily consumption data (the amount of electricity consumed by the residence, which is used to calculate a customer's monthly bill). Tr. at 189-90. The LAN radio also communicates other information that Duquesne Light uses to provide safe and reliable service to its customers, including "on-demand" reads to troubleshoot problems, as well as network control synchronization and network security messages to establish and maintain the mesh network. Id.

The ZigBee radio transmits at 2.4 gigahertz and, when enabled by the customer, will communicate consumption data from the meter to certain devices in the service address (like an in-home display unit). Tr. at 186-87. The ZigBee radio is *not* automatically paired with any devices in the customer's home when Duquesne Light installs a smart meter at a residence. Tr. at 187-88. It only pairs with a device if the customer requests it from Duquesne Light. Id.

Duquesne Light's smart meter also contains surge or overvoltage protection to protect the meter's electric components. Tr. at 223. It protects "two times overvoltage," meaning it protects up to 480 volts on a typical residential service. Id. If a power surge exceeds the overvoltage protection, then the meter's metal oxide varisitor electronically opens and the meter powers down. Id. ANSI and UL tested the smart meter's surge protection features; they met both standards. Tr. at 224.

Complainant claims that RF from smart meters threatens her health, but the LAN and ZigBee radios easily comply with all applicable health standards for RF emissions, including those set by the Federal Communications Commission ("FCC"). The FCC regulates RF-emitting devices in the United States for intentional and unintentional radiation. Tr. at 195, 208.

The FCC has established safe levels, or maximum permissible exposure limits ("MPE"), for intentional RF transmissions. Tr. at 256-57; DLC Ex. G-2 and G-3. In setting these limits, the FCC relied on input from several health agencies such as the National Council for Radiation Protection, the Institute of Electrical and Electronics Engineers ("IEEE"), the National Institute for Occupational Safety and Health, the Occupational Safety and Health Administration, the Environmental Protection Agency, and the Food and Drug Administration ("FDA"). Tr. at 303. The FCC considered both the thermal and non-thermal effects of smart meters in setting its standards. Tr. at 304.

The FCC's standards are based on a comprehensive evaluation of the available body of scientific literature and protect against all known and established health effects, including health effects against potentially vulnerable groups. Tr. at 302-03. The FCC's standards also incorporate a safety factor of 50 below the lowest exposure level that has

any adverse effect, as identified by the body of scientific literature. Tr. at 257-58, 302-03. In 2019, the FCC concluded after a six-year review that its MPE limits are still valid and do not need to be revised. Tr. at 303-04.

The FCC's regulations establish that the MPE to RF fields emitted by the LAN radio is 0.61 milliwatts per square centimeter. Tr. at 195. The MPE for the ZigBee radio is 1.0 watts per square centimeter. Tr. at 196. As noted below, the radios in Duquesne Light's meters are far below those limits — even if they operated all day (which they do not). Tr. at 195, 198, 200.

Two other organizations – the IEEE and the International Commission on Non-Ionizing Radiation Protection ("ICNIRP") – also set standards for RF emissions. DLC Ex. G-2, G-3. The IEEE developed exposure limits for electromagnetic fields based on lengthy and comprehensive assessments of the scientific literature. Tr. at 259. ICNIRP is a non-governmental agency that is formally recognized by the World Health Organization ("WHO") for establishing standards on electric and magnetic field exposure, including radio frequency exposure. Tr. at 306. It reviewed the entire available body of scientific research on non-ionizing electromagnetic waves and developed exposure standards through weight-of-the-evidence reviews. Tr. at 258-59.

The RF exposure limits established by all three organizations (FCC, IEEE, and ICNIRP) are shown in the table below.

Table 3. Exposure limits specified by the FCC, IEEE, and ICNIRP[4]

Agency	Power Density Limit at 900 MHz		Power Density Limit at 2.4 GHz		SAR Limit (W/kg)
	(W/m^2)	(mW/cm^2)	(W/m^2)	(mW/cm^2)	
FCC (CFR §1.1310 and §2.1093)	6	0.6	10	1.0	0.08 (Whole body) 1.6 (over any 1 gram of tissue)
ICNIRP (1998)	4.5	0.45	10	1.0	0.08 (Whole body) 2 (over any 10 grams of tissue)
IEEE, (C95.1, 2019)	4.5	0.45	10	1.0	0.08 (Whole body) 2 (over any 10 grams of tissue)

Note: mW/cm^2 = milliwatts per square centimeter; W/m^2 = watts per square meter; 1 mW/cm^2 = 10 W/m^2.

Expert testimony established that the radios in the Company's smart meters comply with all three standards. Tr. at 259-60. In fact, the FCC issued a "Grant of Equipment Authorization" in 2011, which is the agency's official verification that the radios in the Company's smart meter meet the FCC's requirements. DLC Ex. F-6; Tr. at 199. The Grant of Equipment Authorization remains in effect today. Tr. at 199.

Not only do the radios in the Company's smart meters comply with the FCC's limits, but the amount of RF from the radios is just a tiny fraction of those limits. As shown below, if Complainant stood outside just one yard from the Company's smart meter, she will be exposed to only **0.0097%** of the FCC's limits, assuming that the smart meter is transmitting at an average "duty cycle."[5] DLC Ex. G-2, G-3. If she stood inside and one yard from the smart meter (again assuming an average duty cycle), the percentage drops to **0.00044%** of the FCC's limits. Id. Complainant would be exposed to much higher levels of RF from many other existing sources, such as her phone, wireless router, and local broadcast stations.

[4] This table is included in DLC Ex. G-2 and G-3.
[5] "Duty cycle" is the amount of time that a radio in a smart meter transmits over a set period of time, such as 24 hours. Tr. at 191.

Table 6. Example calculations of RF exposure for sources at the Complainants' residence[6]

Source	Distance from source	Duty Cycle (in a 30-minute period)*	Calculated value (% of FCC limit)
Complainant's Phone 1	Used at the head	1-minute call	0.50
Complainant's Phone 2	Used at the head	1-minute call	1.6
Wireless Router	10 feet	5 minutes of use	0.023
Local Broadcast Stations	~3.5 – 10 miles away	100%	0.055
Smart Meter LAN (Inside, Average)†,§	1 yard	0.21%	0.00044
Smart Meter LAN (Outside, Average)	1 yard	0.21%	0.0097

* The FCC specifies a 30-minute averaging period in assessing RF exposure.

† The exposure from the smart meter inside the home will be reduced by the exterior wall material, assumed to be brick. Only 45% of the energy incident on the outer wall will pass through the brick into the residence (NIST, 1997). This factor is included in the calculation of exposure due to the smart meter inside the residence.

§ The smart meter preferentially transmits in the forward direction. The amount of energy transmitted toward the back of the smart meter is approximately 10% that of the forward direction (EPRI, 2010). This factor of 10% is included in the calculation of exposure due to the smart meter inside the residence.

E. The scientific and medical evidence does not establish a link between RF exposure below acceptable levels and adverse health effects.

Robust scientific and medical evidence does not establish that RF exposure below accepted guidelines causes any adverse health effects. Tr. at 295-96; DLC Ex. G-1. Many organizations have performed thorough "weight of the evidence" reviews[7] to determine the potential health effects of RF fields, so much so that the WHO stated that more is known about the potential health effects from RF exposure than from most chemicals. Tr. at 299. One of the Company's experts, Dr. Gabor Mezei, opined that the

[6] This table is included in DLC Ex. G-2 and G-3.

[7] A "weight-of-the-evidence" review is a generally-accepted scientific method to evaluate the strength of the scientific literature to arrive at a conclusion. Tr. at 300. A weight-of-the-evidence review is conducted by first identifying all available scientific publications published in the peer-reviewed literature that are relevant to the topic. Id. Each study is then evaluated to determine its strengths and limitations. Id. Greater weight is given to well-conducted studies. Id. at 301. After the appropriate weight is assigned to each study and its findings are reviewed, the reviewing entity reaches a conclusion about the question at hand. Id.

potential health effects of RF exposure is a "very well researched area" that has been "going on for decades…" Id. Dr. Mezei further stated that this extensive research is important because "the more information you have, the more confident you are in your conclusions." Id.

According to Dr. Mezei, some of the major weight of the evidence reviews regarding the potential health effects of RF were conducted by ICNIRP in 2009, the Health Protection Agency of the United Kingdom[8] in 2012, the International Agency for Research on Cancer ("IARC")[9] in 2013, the European Union Scientific Committee on Non-Emerging and Newly-Identified Health Risks ("SCENIHR")[10] in 2015, and the FDA in 2020. Tr. at 305-06; DLC Ex. G-1. All of these studies concluded that the scientific evidence does not establish a cause-and-effect relationship between low level RF exposure (*i.e.*, exposure below currently existing, scientifically-based exposure guidelines) and any adverse health effects, including cancer and non-cancer outcomes. Tr. at 307-308; DLC Ex. G-1. In addition, every other organization or agency listed in Appendix B of Dr. Mezei's expert report reviewed the scientific evidence regarding the potential health effects of RF fields and reached the same conclusion. Tr. at 308-09.

The WHO also found that the existing scientific evidence does not confirm the existence of any adverse health effects below established guideline-level values. Tr. at 309.

[8] The Health Protection Agency of the United Kingdom is the United Kingdom's primary governmental agency charged with protecting public health. Tr. at 306.
[9] IARC is the WHO's cancer research agency that coordinates international cancer research. Tr. at 306-07.
[10] SCENIHR is an independent scientific committee comprised of experts in different areas that provides guidance to the European Commission. Tr. at 307.

Moreover, several governmental agencies in the United States have analyzed whether RF emitted by smart meters causes adverse health effects, including: the Maine Center for Disease Control; the California Council on Science and Technology; the Colorado Department of Public Health and Environment; the Michigan Public Service Commission; the Oregon Health Authority; the Public Utility Commission of Texas; the Arizona Department of Health Services; the Vermont Department of Health; the Vermont Public Service Department; and the North Carolina Public Health Division. Tr. at 309-11; DLC Ex. G-1. All of these agencies concluded that the existing scientific evidence does not show that RF exposure from smart meters would have a negative impact on public health. Tr. at 311.

F. The smart meter's contribution to Complainant's RF exposure is negligible.

Since Complainant's health claims revolve around her concerns about RF exposure, it is important to assess the amount of RF exposure she can be expected to receive from Duquesne Light's smart meter at the Service Address. Complainant made no effort to do this, but Duquesne Light did.

As explained in more detail, in light of the short period of time per day that the meter transmits by RF, the low power of its radios, and distance and barriers that will ordinarily be between Complainant and the smart meter, the RF from a Duquesne Light smart meter will be a negligible contribution to her existing RF exposure. Dr. Mezei concluded that she will not suffer any adverse health effects from RF from a smart meter. Tr. at 295-96; DLC Ex. G-1.

The estimated time that a Duquesne Light smart meter will transmit energy during a 24-hour period – commonly called the "duty cycle" – was assessed through a study analyzing the deployment of roughly 13,000 OpenWay smart meters, which are the ones being deployed by Duquesne Light. Tr. at 192-93; DLC Ex. E-2. The study found that the average duty cycle of the LAN radio to be just 0.21%, which means that the radio communicates information by RF for just 0.21 percent of the day. Tr. at 193, 197; DLC Ex. E-2. Put more simply, the LAN radio transmits RF *for slightly less than three minutes per day on average*. Tr. at 193-94; DLC Ex. E-2, G-2, G-3.

Table 1. Duty cycle of DLC smart meters*,†[11]

Duty Cycle Description	Duty Cycle Value
Minimum	0.002% (0.03 minutes per day)
Average	0.21% (2.99 minutes per day)
Maximum	8.0% (115.2 minutes)

* Itron (2015).
† This table includes values after a November 2019 upgrade to the DLC system in order to allow the DLC network to utilize IPv6 standards and architecture. Prior to this upgrade the minimum, average, and maximum duty cycle of the DLC smart meters were 0.02%, 0.06%, and 0.58%, respectively.

One of the Company's experts, Dr. Benjamin Cotts, explained that a smart meter's duty cycle is "very low" compared to other RF-emitting devices. Tr. at 252.[12] Television and radio broadcast stations, for example, have a 100 percent duty cycle. Id.

[11] This table appears in DLC Ex. G-2 and G-3.
[12] The expected maximum duty cycle for the LAN radio is roughly 8 percent, meaning that the meter would transmit for 115.2 minutes in a 24-hour period. DLC Ex. G-2, G-3. The estimated minimum duty cycle for the Company's smart meters is about 0.03 minutes per day, which is a fraction of a second. DLC Ex. G-2, G-3. For a ZigBee radio that is not paired with another device in the customer's home (which is the option Complainant probably will choose), the duty cycle is roughly 0.01%, which is slightly less than 10 seconds per day. DLC Ex. G-2, G-3.

Two other factors limit the amount of RF that Complainant will be exposed to from a smart meter: propagation and attenuation. With respect to propagation, because the smart meters communicate with other nearby meters, the RF communications are purposefully directed through the front of the meter and away from the customer's home. Tr. at 188-89. RF emitted from the back of a smart meter is thus roughly 10 times lower than the amount transmitted through the front. Tr. at 189. The smart meter also sits in a metal box, which further limits the RF directed towards the home. Id. The home's construction materials (*i.e.*, exterior walls) also deflect RF directed towards the home. Id.

In addition, in accordance with the principle of attenuation, a person's RF exposure rapidly decreases as the distance from the smart meter increases. Tr. at 252-54. Because the smart meter sends out a finite amount of power, as the distance from the smart meter increases, the total power becomes distributed over a larger area, thus losing force. Tr. at 253-54. For example, a person standing 10 yards from a smart meter receives about 100 times less RF exposure than someone standing one yard away. Tr. at 254.

By using the smart meter's estimated duty cycle, as well as the principles of propagation and attenuation, Dr. Cotts estimated Complainant's expected RF exposure from the Company's smart meter at the Service Address. As depicted below, Dr. Cotts determined that a person standing inside the Service Address and only one yard from the smart meter would be exposed to just **0.00044%** of the FCC's limits, assuming that the LAN radio was transmitting at an average duty cycle. Tr. at 273; DLC Ex. G-2, G-3. A person standing one yard away from a smart meter outside the home would be exposed

to just **0.0097%** of the FCC's limit (again assuming an average duty cycle). Tr. at 273; DLC Ex. G-2, G-3.

Notably, even if Complainant stood outside her home and was only eight inches from the smart meter and it transmitted as much as possible (*i.e.*, at the maximum duty cycle), *she still would only be exposed to less than 8% of the FCC's exposure limits.* Tr. at 273; DLC Ex. G-2, G-3.

Table 7. Example variability of smart meter in different exposure scenarios[13]

Scenario	Forward/Back Transmission Factor	Transmission through Wall Material	Distance from Smart Meter	Duty Cycle	Calculated Value (% of FCC Limit)
Inside Minimum	0.1	0.45	10 feet	0.002%	0.0000004%
Inside Average	0.1	0.45	1 yard	0.21%	0.00044%
Inside Maximum	0.1	0.45	~8 inches	8.0%	0.35%
Outside Minimum	1	1	10 feet	0.002%	0.0000086%
Outside Average	1	1	1 yard	0.21%	0.0097%
Outside Maximum	1	1	~8 inches	8.0%	7.8%

In light of the above, it is not surprising Complainant already receives much higher levels of RF from many natural and man-made sources, *including from other human beings and the Earth*:

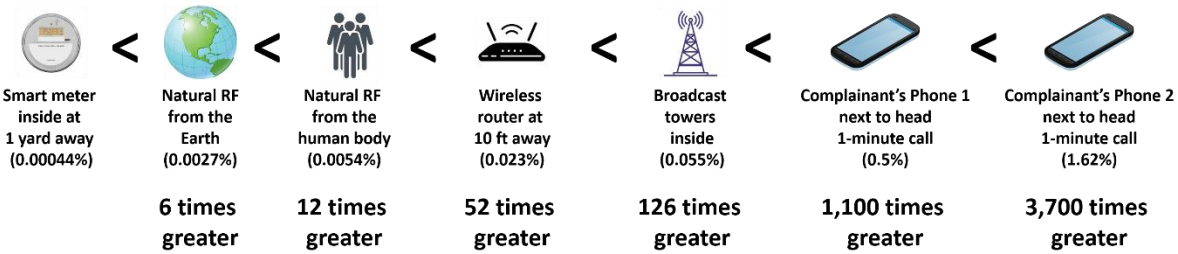

Figure 4. RF exposure of DLC smart meters relative to other RF sources.[14]

[13] This table is included in DLC Ex. G-2 and G-3.
[14] This figure is included in DLC Ex. G-2 and G-3.

G. Duquesne Light's smart meter passed extensive safety and flammability tests and has never caused a fire.

In addition to Complainant's health concerns, she alleged that smart meters "catch on fire in ways that analog meters do not." Tr. at 160. Complainant presented no evidence to support this claim. She also provided no evidence that Duquesne Light's smart meter has ever caused a fire. Tr. at 166-67. Duquesne Light established that it has installed roughly 620,000 smart meters throughout its service territory. Tr. at 326. They have not caused any fires. Id. In fact, Itron's OpenWay Centron smart meter (the model being deployed by Duquesne Light) has not caused any fires in any service territory. Tr. at 222. It also has never been recalled from the field for safety, quality, or reliability purposes. Tr. at 224.

The evidence also established that Duquesne Light's smart meters comply with the applicable safety standards set by ANSI and have been certified by UL. Tr. at 216. Complainant produced no evidence to the contrary.

With respect to the ANSI standards, ANSI C12.1 and ANSI C12.20 establish safety and performance criteria for electric revenue meters. Tr. at 215. Itron tested the Company's smart meter for compliance with ANSI C12.1 and ANSI C12.20. Tr. at 218. Specifically, trained employees ran a battery of tests to verify compliance, including but not limited to no load and starting load tests; internal loss testing; temperature rise testing; and voltage interruption tests. Tr. at 219-20; DLC Ex. F-1. The smart meter passed all of the tests that Itron performed as part of ANSI C12.1 and ANSI C12.20. Tr. at 220; DLC Ex. F-1.

Itron also submitted the Company's smart meter to UL for testing under UL 2735 (Standards for Safety for Electric Utility Meters). Tr. at 215. UL 2735 is a certification standard that applies to electric utility meters, including smart meters. Tr. at 216. If a meter is UL-certified, it means that it has undergone extensive testing by UL and meets UL's certification standards. Id.

UL certified that Duquesne Light's smart meter complies with UL 2735, which validates that it is safe. Id.; DLC Ex. F-2. This also means that the smart meter passed UL's flammability tests. Tr. at 220-21. In fact, the base material in Duquesne Light's smart meter is PET rynite, which is considered a fire-resistant material under UL's standards. Tr. at 221-22. PET rynite has a melting point of 489 degrees Fahrenheit. Tr. at 222. Many other common materials on a home have much lower melting points, such as vinyl siding (160 degrees Fahrenheit), paint (200 degrees Fahrenheit), wood burners (200-250 degrees Fahrenheit), and wire insulation (194 degrees Fahrenheit). Id.

Itron also performed its own flammability tests on the Company's smart meter. Tr. at 220-21. Specifically, Itron injected a "glow wire" into the base of a smart meter for 30 seconds at a temperature of 1,760 degrees Fahrenheit to ensure that the meter did not catch on fire. Tr. at 221. Duquesne Light's smart meter passed Itron's flammability tests. Id.

H. Complainant presented no evidence at the hearing to support her claims, while Duquesne Light presented overwhelming evidence refuting her allegations.

On August 16, 2018, Complainant filed a Formal Complaint with the Commission. She sought to opt-out of receiving a smart meter. Duquesne Light filed a timely Answer

and New Matter, which denied Complainant's allegations and stated that Act 129 required the Company to install a smart meter at the Service Address.

On March 12, 2020, the parties participated in a lengthy telephonic hearing. Complainant called Joshua Hart as her first witness. He is the Director of the advocacy group "Stopsmartmeters.org." Tr. at 40. Complainant offered Mr. Hart as an expert witness on the public health effects of smart meter installations, even though he admittedly is not a medical doctor, epidemiologist, public health professional, certified electrician, or electrical engineer. Tr. at 46-47, 54-55. Mr. Hart also testified that he has never met Complainant, has never seen any medical records regarding her alleged health symptoms (including electro hypersensitivity syndrome), and has never talked to her treating physicians. Tr. at 56, 61-62.

No court has ever accepted Mr. Hart as an expert witness relating to the health effects of smart meters on human beings, and he did not know if an administrative body had ever accepted him as an expert witness. Tr. at 72-76. Due to his lack of qualifications, Duquesne Light moved to preclude Mr. Hart from testifying as an expert witness. Tr. at 64, 77. The Presiding ALJ did not accept Mr. Hart as an expert witness, but allowed him to testify as a fact witness.[15] Tr. at 76-79.

[15] To the extent Complainant claims that Mr. Hart should have been permitted to testify as an expert witness on the public health effects of smart meter installations, this argument should be rejected. A person qualifies as an expert witness if, through education, occupation, or practical experience, the witness has a "reasonable pretension to specialized knowledge" on the matter at issue. Ruzzi v. Butler Petroleum Co., 588 A.2d 1, 10 (Pa. 1991); Kursis v. Baldwin-Lima-Hamilton Corp., 319 A.2d 914, 924 (Pa. 1974). Pennsylvania courts have long held that testimony regarding the existence or nonexistence of a disease or disorder requires the training and experience of a medical expert. Travellers Ins. Co. v. Heppenstall Co., 61 A.2d 809, 813 (Pa. 1948) (matters involving the existence or nonexistence of a disease require the training and experience of a medical expert); Collins v. Cooper, 746 A.2d 615, 620 (Pa. Super. Ct. 2000) (same). The testimony at the hearing established that Mr. Hart possessed no medical training or experience and thus was not qualified to testify as an expert about the alleged public health effects of smart meter installations. Specifically, Mr. Hart testified that he was not a medical doctor, epidemiologist, or public health professional. Tr. at 54-55. He also had little knowledge of Complainant's alleged medical issues because he has never met Complainant or spoke to her treating physicians and has never reviewed her

After Mr. Hart's testimony, Complainant testified as a fact witness. She claimed that smart meters emit RF "24/7" and have adverse health effects on "all living things," especially people who suffer from electro hypersensitivity syndrome ("EHS"). Tr. at 138. Complainant has diagnosed herself with EHS. Tr. at 176. No doctor has ever diagnosed her with this condition, and Dr. Mezei explained that EHS is not a recognized medical diagnosis. Tr. at 174-76, 316-17. Complainant also produced no medical records at the hearing, let alone any records establishing a link between RF and her alleged health problems. Tr. at 174-75, 180-81.

As for safety concerns, Complainant contended that Duquesne Light's smart meters "catch on fire in ways that analog meters do not." Tr. at 160. She presented no evidence to support this claim, nor did she offer any evidence that Duquesne Light's smart meters have ever caused a fire. Tr. at 166-67.

Finally, Complainant raised a few other issues during her testimony, all of which were either irrelevant or contradicted by the record evidence. For example, she claimed that Act 129 does not require Duquesne Light to install a smart meter at the Service Address and suggested that it may violate the Fourth and Fourteenth Amendments to the United States Constitution and Article I of the Pennsylvania Constitution. Tr. at 113, 118-19. Despite her lack of qualifications or experience, she also claimed that the FCC's RF safety standards are too high. Tr. at 134. Complainant further alleged that "smart meters actually consume energy unlike analog meters," and that the ZigBee radio violates Act 129 because it can communicate with devices in her home. Tr. at 141, 144, 171-72. Finally, she asserted that Duquesne Light tried to install a smart meter at the Service

medical records. Tr. at 56, 61-62. For these reasons, the Presiding ALJ properly excluded Mr. Hart from testifying as an expert witness.

Address during a "heavy rainstorm" on August 10, 2018, although she later admitted that she was not even home at the time. Tr. at 158-59, 169-70.

Duquesne Light presented testimony from two expert witnesses: Dr. Benjamin Cotts and Dr. Gabor Mezei.[16] Duquesne Light also presented testimony from four fact witnesses: Michael Belanger (Product Manager for Itron); Steve Wright (Senior Product Manager for Electricity Metering for Itron); Michael Secchiutti (Senior Manager of Smart Meter Operations for Duquesne Light); and Ronald Dornin (Interim Manager of Maintenance Program Planning for Duquesne Light). Tr. at 183-210; 211-228; 324-338; 339-347.

III. APPLICABLE LEGAL STANDARD

To prevail, a complainant generally must demonstrate that the public utility violated the Public Utility Code or a Commission regulation or order. Bostard v. Metropolitan Edison Co., Docket No. C-2018-3002753, 2020 WL 1906057, at *2 (Pa. P.U.C. Mar. 23, 2020) (Myers, ALJ). In smart meter cases, the complainant has the burden of proving, by a preponderance of the evidence, that the utility is responsible for the problem described in the Complaint. Kreider v. PECO Energy Co., Docket No. P-2015-2495064, 2015 WL 5256653, at *11 (Pa. P.U.C. Sept. 3, 2015). The preponderance of the evidence standard requires proof by a greater weight of the evidence. Commonwealth v. Williams, 732 A.2d 1167, 1187 (Pa. 1999); Bostard, 2020 WL at *3.

[16] The Presiding ALJ accepted Dr. Cotts as an expert witness in the field of electrical engineering, physics, and electromagnetics with an emphasis on the field effects of electromagnetic frequency and RF. Tr. at 234-35. The Presiding ALJ accepted Dr. Mezei as an expert witness in the field of epidemiology, health sciences, and research with an emphasis on electromagnetic fields and radiofrequency fields. Tr. at 295.

When presented with a challenge to a smart meter installation, the ALJ's role is "to determine based on the record in this particular case, whether there is sufficient evidence to support a finding that the Complainant was adversely affected by the smart meter or whether [the utility's] use of a smart meter will constitute unsafe or unreasonable service in violation of Section 1501 under the circumstances in this case." Bostard, 2020 WL at *4 (citing Kreider, 2015 WL 5256653 and Frompovich v. PECO Energy Co., Docket No. C-2015-2474602, 2018 WL 2149249 (Pa. P.U.C. May 3, 2018)).

IV. ARGUMENT

The Presiding ALJ should dismiss all aspects of the Formal Complaint. There is no evidence – let alone a preponderance of the evidence – establishing that Complainant will be adversely affected by the installation of a smart meter. Nor is there any evidence that the installation of a smart meter constitutes unsafe or unreasonable service by Duquesne Light.

Duquesne Light is required to install a smart meter at the Service Address by Act 129, the Commission's Implementation Order, and the Company's Smart Meter Plan and Commission-approved Tariff. The Company provided -- and continues to provide -- adequate, efficient, safe, and reasonable service to Complainant. She presented no evidence to support her claims that the Company's smart meter threatens her health or safety, or that the Company otherwise failed to provide reasonable service. Accordingly, the Formal Complaint should be dismissed.

A. Duquesne Light must install a smart meter at the Service Address and can terminate Complainant's service if she continues to block the installation.

Act 129, the Commission's Implementation Order, and the Company's Smart Meter Plan and Tariff establish that Duquesne Light is required to install a smart meter at the Service Address. And contrary to Complainant's claims, neither the United States Constitution nor the Pennsylvania Constitution prohibit the Company from doing so. If Complainant continues to block the installation, Duquesne Light can terminate her service.

1. Duquesne Light must install a smart meter at the Service Address pursuant to Act 129, the Commission's Implementation Order, and the Company's Smart Meter Plan and Tariff.

Act 129's plain language requires the Company to install a smart meter. It states in relevant part:

> Electric distribution companies shall furnish smart meter technology as follows: (i) Upon request from a customer that agrees to pay the cost of the smart meter at the time of the request; (ii) In new building construction; (iii) *In accordance with a depreciation schedule not to exceed 15 years.*

66 Pa. C.S.A. § 2807(f)(2) (emphasis added).

The Commission also issued an Implementation Order establishing guidelines for smart meter technology procurement and installation. See Smart Meter Procurement and Installation, Docket No. M-2009-2092655 (Implementation Order entered June 24, 2009).

The Commission has repeatedly ruled that the use of the word "shall" in Act 129 indicates the General Assembly's direction that all customers receive a smart meter. Evans v. PECO Energy Co., Docket No. C-2013-2368477, 2013 WL 7019103, at *3 (Pa. P.U.C. Dec. 19, 2013) (Hoyer, ALJ). No provision in the Public Utility Code

or the Commission's Regulations or Orders allows a customer to "opt out" of receiving a smart meter. Hoffman-Lorah v. PPL Elec. Util. Corp., Docket No. C-2018-2644957, 2019 WL 2325713, at *28 (Pa. P.U.C. May 23, 2019); Paul v. PECO Energy Co., Docket No. C-2015-2475355, 2018 WL 3093596, at *4-5 (Pa. P.U.C. June 14, 2018); Frompovich, 2018 WL at *4; Povacz v. PECO Energy Co., Docket No. C-2012-2317176, 2013 WL 392699, at *6 (Pa. P.U.C. Jan. 24, 2013).[17] Without additional legislation from the General Assembly, the Commission cannot prohibit a utility from installing a smart meter at a service address, even if a customer does not want one. Schmukler v. PPL Elec. Utilities Corp., C-2017-2621285, 2018 WL 4185440, at *27 (Pa. P.U.C. Aug. 16, 2018) (Barnes, ALJ).

These prior decisions must be upheld under the rule of *stare decisis*. It states, "[f]or the sake of certainty, a conclusion reached in one case should be applied to those which follow, if the facts are substantially the same, even though the parties may be different." Freed v. Geisinger Med. Ctr., 971 A.2d 1202, 1212 (Pa. 2009). *Stare decisis* "promotes the evenhanded, predictable, and consistent development of legal principles, fosters reliance on judicial decisions, and contributes to the actual and perceived integrity of the judicial process." Id. The Commission has applied *stare decisis* to its prior rulings that Act 129 requires the universal deployment of smart meters. See Bervinchak v. PPL Elec. Utilities Corp., Docket No. C-2016-2577527 and Docket No. C-2016-2572824, 2018 WL 4185438, at *15 (Pa. P.U.C. Aug. 16, 2018)

[17] The Commission has repeatedly stated that if a customer wants to opt-out of receiving a smart meter, the customer must lobby the General Assembly to change the law rather than seeking relief from the Commission. Myers v. PPL Elec. Utilities Corp., Docket No. C-2017-2620710, 2018 WL 4185437, at *22 (Pa. P.U.C. Aug. 16, 2018) (Barnes, ALJ); Kline v. PPL Elec. Utilities Corp., Docket No. C-2017-2621072, 2018 WL 4185436, at *15 (Pa. P.U.C. Aug. 16, 2018) (Barnes, ALJ).

(Barnes, ALJ) (*stare decisis* requires a finding that Act 129 contains no opt-out); Zimmerman v. PPL Elec. Utilities Corp., Docket No. C-2017-2615038, 2018 WL 4185439, at *15 (Pa. P.U.C. Aug. 16, 2018) (Barnes, ALJ) (same).

Here, the Presiding ALJ should apply *stare decisis* and hold that Complainant cannot opt-out of receiving a smart meter. Like prior complainants, Complainant seeks to opt-out of receiving a smart meter. However, her interpretation of Act 129 misconstrues its plain language, which states that electric distribution companies with more than 100,000 customers "shall furnish smart meter technology…in accordance with a depreciation schedule not to exceed 15 years." 66 Pa. C.S.A. § 2807(f)(2) (emphasis added).

Moreover, Duquesne Light's Tariff establishes that the Company can install a smart meter at the Service Address. Commission-approved tariffs have the force of law. Warren v. Duquesne Light Co., Docket No. F-2014-2399085, 2014 WL 3834561, at *3 (Pa. P.U.C. July 15, 2014) (Long, ALJ). Specifically, Rule 9B of the Company's Tariff states that smart meters conforming to Duquesne Light's standards *must* be installed at *each* metered service premises:

> **B. Meter Relocation for all Customers**
>
> Pursuant to Act 129 of 2008; the Commission's Smart Meter Procurement and Installation Implementation Order entered June 24, 2009, at Docket No. M-2009-2092655; and Duquesne Light's Smart Meter Procurement and Installation Plan, approved in relevant part by Order entered April 7, 2017, at Docket No. P-2015-2497267; **smart meter(s) conforming to Company standards must be installed at each metered service premises. Customers may not decline smart meter installation for any reason. Instead, as their sole remedy, customers may designate an alternative location on the premises for the smart meter.** The Company shall relocate the smart meter to such alternative location where (i) the relocation (including associated customer service equipment) conforms to the Company's "Electric Service Installation Rules" (see Rule No. 6) and the National Electric Safety Code, as determined by the Company

in its sole judgment; (ii) the relocation can be readily, safely, and reliably interconnected to the Company's facilities, as determined by the Company in its sole judgment; (iii) the customer provides any easements, permits, or other governmental or third-party approvals the Company deems necessary to accommodate such relocation; and (iv) the Company receives, in advance, payment for the Company's estimated total direct and indirect costs including the related income tax of such relocation.

DLC Ex. C.

In light of Act 129, the Commission Implementation Order, and the Company's Tariff, it is clear that Duquesne Light can - and must - install a smart meter at the Service Address.

2. The United States Constitution and the Pennsylvania Constitution do not prohibit Duquesne Light from installing a smart meter at the Service Address.

Duquesne Light believes Complainant may argue that the Fourth[18] and Fourteenth Amendments[19] to the United States Constitution and Article I, Section I[20] and Article I, Section II[21] of the Pennsylvania Constitution prohibit Duquesne Light from installing a smart meter at the Service Address. Tr. at 117-19. If raised, these arguments should be rejected for several reasons.

[18] "The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized." U.S. Const. amend. IV.

[19] Section 1 of the Fourteenth Amendment is the only section that Complainant could possibly be referring to in this case. It states: "All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws." U.S. Const. amend. XIV, § 1.

[20] "All men are born equally free and independent, and have certain inherent and indefeasible rights, among which are those of enjoying and defending life and liberty, of acquiring, possessing and protecting property and reputation, and of pursuing their own happiness." Pa. Const. Article I, § 1.

[21] "All power is inherent in the people, and all free governments are founded on their authority and instituted for their peace, safety and happiness. For the advancement of these ends they have at all times an inalienable and indefeasible right to alter, reform or abolish their government in such manner as they may think proper." Pa. Const. Article I, § 2.

First, the United States Constitution only applies to "state action." It does not apply to conduct by a private company like Duquesne Light, even if the company is regulated by the state. Jackson v. Metropolitan Edison Co., 419 U.S. 345, 349-350 (1974) (holding that although a utility company was heavily regulated by the Commonwealth of Pennsylvania, the company's decision to terminate the complainant's electric service was not "state action"); Schutz v. PPL Elec. Utilities Corp., No. C-2018-3005659, 2019 WL 2744430, at *12 (Pa. P.U.C. June 11, 2019) (utility was not a "state actor" subject to the United States Constitution). Thus, the United States Constitution does not bar Duquesne Light from installing a smart meter at the Service Address.

In addition, Duquesne Light did not deprive Complainant of any constitutional rights. Complainant appears to assume that merely attempting to install a smart meter violates her constitutional rights, but the Commission has dismissed constitutional claims when there is no evidence that any constitutional rights were actually violated. See, *e.g.*, Starr v. PECO Energy Co., Docket No. C-2015-2516061, 2016 WL 4699145, at *8 (Pa. P.U.C. Sept. 1, 2016) (complainant's arguments under Pennsylvania Constitution fail because they are premised on the assumption that the refusal of permit an opt-out threatens the complainant's inherent rights of life, liberty, or property).

Even if the United States Constitution or the Pennsylvania Constitution were relevant to this case (which they are not), the Presiding ALJ and the Commission do not have jurisdiction to rule on constitutional claims. The Commission is a creature of statute and may exercise only those powers that are expressly conferred upon it by the legislature. Feingold v. Bell of Pa., 383 A.2d 791, 794 (Pa. 1978). The Commission is only authorized to hear complaints regarding the Code, Commission Regulations, or a

Commission order. 66 Pa. C.S. § 701; Alkhatib v. PECO Energy Co., C-2011-2242125, 2012 WL 641672, at *5 (Pa. P.U.C. Jan. 12, 2012); White v. PPL Elec. Utilities Corp., Docket No. C-2018-3003468, 2019 WL 2250756 (Pa. P.U.C. May 6, 2019) (Barnes, ALJ) (Commission has no jurisdiction to determine if the installation of a smart meter violates a complainant's constitutional rights); Belmonte-Gates v. PECO Energy Co., F-2012-2332583, 2013 WL 596066, at *7 (Pa. P.U.C. Jan. 24, 2013) (Commission does not have jurisdiction over matters involving federal civil rights) (Cheskis, ALJ); Coppedge v. PECO Energy Co., F-2009-2135893, 2010 WL 3183815, at *5-6 (Pa. P.U.C. July 29, 2010) (Commission does not have jurisdiction over issues arising under the United States Constitution); Matrunics v. West Penn Power Co., Docket No. C-2017-2617235, 2020 WL 265236, at *9 (Pa. P.U.C. Jan. 9, 2020) (administrative law judge could not consider the complainant's claim that law violated Pennsylvania Constitution). Thus, to the extent Complainant raises constitutional claims, they must be rejected.

3. *Duquesne Light can terminate Complainant's service if she continues to block the installation of a smart meter.*

Finally, the Company's Tariff establishes that Duquesne Light can terminate Complainant's service if she continues to block the installation of a smart meter. In particular, Rule 22 authorizes Company representatives to access the Company's equipment for a host of enumerated reasons:

> 22. ACCESS TO PREMISES Company representatives, who are properly identified, **shall have full and free access to the customer's premises at all reasonable times for the purpose of reading Company meters, for inspection and repairs, for removal of Company property, or for any other purpose incident to the service. The Company shall have the right to access customer owned facilities and equipment at all hours for the purposes of responding to an emergency, restoring electric**

> **service, rendering the electric facilities safe and reliable, or for the purpose of reducing the likelihood of damage to the Company's facilities or equipment.** The customer should immediately communicate with the Company in case of any question as to the authority or credentials of Company representatives. A customer's failure to provide access may be grounds for service termination pursuant to Rule No. 33 herein.

Rule 33 authorizes Duquesne Light to terminate service and remove its equipment from the customer's property if the Company is blocked proper access to its equipment:

> 33. INACCESSIBILITY **The Company may terminate electric service and remove its equipment from the premises upon reasonable notice in case meter readers or other authorized representatives of the Company cannot gain admittance or are refused admittance to the premises for the purposes of reading Company meters, inspection and repairs, removal of Company property, responding to an emergency, restoring electric service, rendering the electric facilities safe and reliable, or for any other purpose incident to the service or in case the customer interferes with Company representatives in the performance of their duties.** When a residential customer or a residence is involved, the Company will comply with the provisions of 52 Pa. Code Chapter 56, "Standards and Billing Practices for Residential Utility Service" and 66 Pa.C.S. § 1406, "Termination of Utility Service."

These Tariff provisions have the force of law and collectively establish (i) that Duquesne Light's representatives must have full and free access to the Service Address at all reasonable times to exchange the meter, and (ii) that Duquesne Light can terminate Complainant's electric service and remove its equipment from the Service Address if she fails to grant proper access to Company representatives.

The Commission has repeatedly recognized that a utility can terminate a customer's service if the customer prevents the utility from accessing its equipment. 66 Pa. C.S.A. § 1406(a)(4); 52 Pa. Code § 56.81(3); Landis v. PPL Elec. Utilities Corp., Docket No. C-2018-3002142, 2020 WL 2764458, at *14 (Pa. P.U.C. May 21, 2020);

Beglin v. Pa. Elec. Co., Docket No. C-2018-3005272, 2020 WL 3288041, at *8 (Pa. P.U.C. June 10, 2020) (Watson, ALJ).

As noted above, Complainant placed a lock on the meter at the Service Address and has prevented the Company from exchanging it. If she continues to prevent the exchange either by locking the meter or some other means, then Duquesne Light can terminate her service in accordance with its Tariff.

B. The Formal Complaint should be dismissed because Duquesne Light provided -- and continues to provide -- adequate, efficient, safe, and reasonable service to Complainant.

Since Duquesne Light must install a smart meter at the Service Address, the only remaining issue is whether the Company's smart meter practices are adequate, efficient, safe, and reasonable, as required by Section 1501 of the Public Utility Code. 66 Pa. C.S. § 1501. The evidence establishes that Duquesne Light has provided adequate, efficient, safe, and reasonable service to Complainant. Specifically, the Presiding ALJ should reject Complainant's health and safety claims because she presented no credible evidence to support her allegations. Conversely, Duquesne Light presented overwhelming evidence that its smart meters comply with all health and safety standards and that it provided reasonable service to Complainant.

1. Complainant's health claims are completely undermined by the record evidence.

The Presiding ALJ should reject Complainant's claim that the installation of a smart meter at the Service Address will cause her to suffer adverse health effects. Complainant presented no evidence to support her claim. Notably, she produced no medical records

or similar evidence at the hearing. Tr. at 174-75. She claimed to suffer from EHS, but admitted that a doctor has never diagnosed her with this alleged condition; rather, it is a self-diagnosis. Id. at 174-76. She also presented no medical records or documents indicating that her alleged symptoms are caused by RF exposure. Tr. at 180-81.

Rather than presenting competent evidence, Complainant merely offered her opinion that she suffers from EHS and that the installation of a smart meter would exacerbate this purported condition. Complainant's personal beliefs, however, "no matter how strongly held, do not constitute evidence." Lamagna v. Pa. Elec. Co., Docket No. C-2017-2608014, 2018 WL 6124353, at *15 (Pa. P.U.C. Oct. 30, 2018) (Watson, ALJ); Zimmerman, 2018 WL at *9 (Barnes, ALJ) (bald assertions about alleged health problems arising from smart meters is not evidence). Her health claims should be dismissed on this basis alone.

In contrast, Duquesne Light presented overwhelming evidence that its smart meters pose no health risks. First, through the clear, credible, and unchallenged testimony of Dr. Benjamin Cotts, who was accepted by the Presiding ALJ as an expert witness in the field of electrical engineering, physics, and electromagnetics with an emphasis on the field effects of electromagnetic frequency and RF (see Tr. at 234-35), Duquesne Light proved that both radios in its smart meters emit only a tiny fraction of the RF limits set by respected organizations like the FCC, IEEE, and ICNIRP. Tr. at 188-89, 302-03. The FCC also issued a Grant of Equipment Authorization for Duquesne Light's smart meter, which is the agency's official approval that the smart meter satisfies its exposure limits. Tr. at 191-92.

Moreover, Dr. Cotts used the smart meter's estimated duty cycle, as well as the principles of propagation and attenuation, to demonstrate that Complainant would be exposed to just a minute percentage of the RF exposure limits once a smart meter is installed at the Service Address.

Table 7. Example variability of smart meter in different exposure scenarios[22]

Scenario	Forward/Back Transmission Factor	Transmission through Wall Material	Distance from Smart Meter	Duty Cycle	Calculated Value (% of FCC Limit)
Inside Minimum	0.1	0.8	10 feet	0.002%	0.0000007%
Inside Average	0.1	0.8	1 yard	0.21%	0.00077%
Inside Maximum	0.1	0.8	~8 inches	8.0%	0.62%
Outside Minimum	1	1	10 feet	0. 002%	0.0000090%
Outside Average	1	1	1 yard	0.21%	0.0096%
Outside Maximum	1	1	~8 inches	8.0%	7.8%

Duquesne Light also proved that many other natural and man-made devices emit much higher levels of RF than the radios in the Company's smart meters.

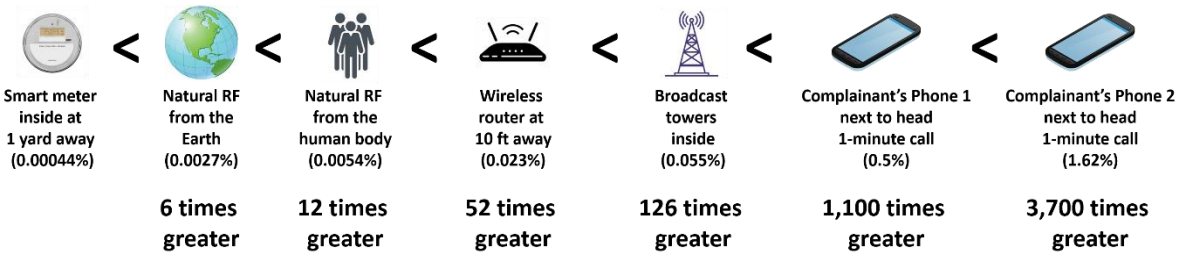

Figure 4. RF exposure of DLC smart meters relative to other RF sources.[23]

[22] This table is included in DLC Ex. G-2 and G-3.
[23] This figure is included in DLC Ex. G-2 and G-3.

Complainant claims that the FCC's safety standards are too low, but the Commission has repeatedly ruled that it is reasonable for a utility to install smart meters that comply with the FCC's regulations. See, e.g., Murphy v. PECO Energy Co., Docket No. C-2015-2475726, 2018 WL 1745254, at *21 (Pa. P.U.C. Feb. 21, 2018) (Heep, ALJ) ("As for the AMI meter, PECO selected and installed smart meters that meet FCC maximum exposure to EFs limits … [i]t was not and is not unreasonable for PECO to seek to install these meters in accordance with the Act 129 installation plan approved by the Commission."); Ottaviano v. PECO Energy Co., Docket No. F-2016-2542081, 2018 WL 937069, at *10-11 (Pa. P.U.C. Jan. 17, 2018) (Heep, ALJ) (dismissing the complainant's claims after finding that utility's smart meter complies with FCC standards).

And, in fact, the Commission has already rejected the same argument raised by Complainant. In Myers v. PPL Elec. Utilities Corp., Docket No. C-2017-2620710, 2018 WL 4185437 (Pa. P.U.C. Aug. 16, 2018) (Barnes, ALJ), an expert for the complainant (Dr. David Carpenter) opined that the FCC's standards should be changed because they failed to measure the intensity of RF emissions. Id. at *13. The Presiding ALJ rejected this argument, holding that Dr. Carpenter's beliefs about the FCC's standards did not prove that the smart meter posed a health risk, given that the meter complied with the FCC's current standards. Id. at *16. Here, Complainant lacks any scientific, medical, or regulatory background whatsoever, so her opinions regarding the FCC's standards are both misinformed and irrelevant.

Similarly, the Commission has ruled that the installation of a smart meter will not exacerbate a complainant's existing health conditions if the complainant is exposed to much higher levels of RF from other sources. See Zimmerman, 2018 WL at *9 (holding

that there was insufficient evidence to prove that RF fields emitted from a smart meter will exacerbate the complainant's health conditions because the smart meter emitted RF for a short duration each day and the complainant was exposed to much higher levels of RF from nearby TV towers); Caesar v. PECO Energy Co., No. C-2017-2605462, 2019 WL 365646, at *10-12 (Jan. 11, 2019) (ruling that the complainant could not establish a *prima facie* case that the installation of a smart meter at her residence would harm her because her current RF exposure from other sources is much higher).

After Dr. Cotts established that the RF emitted from the radios in the Company's smart meters are well below accepted limits, Duquesne Light proved through the testimony of Dr. Gabor Mezei, an epidemiologist accepted as an expert in the field of epidemiology, health sciences, and research with an emphasis on electromagnetic fields and radiofrequency fields (see Tr. at 295), that there is no established connection between RF exposure below legally-accepted limits and adverse health effects. Dr. Mezei testified that many reputable agencies have conducted thorough, weight of the evidence studies evaluating whether RF exposure below prescribed legal limits causes adverse health effects. Tr. at 299, 305-06; DLC Ex. G-1. All of them concluded that there is no scientific evidence establishing a cause and effect relationship between low-level RF exposure and adverse health effects. Tr. at 307-309; DLC Ex. G-1.

Duquesne Light also provided that several governmental agencies in the United States have analyzed whether smart meters cause adverse health effects. Tr. at 309-11. None of these agencies concluded that RF exposure associated with smart meters will cause adverse health effects. Tr. at 311.

Dr. Mezei's conclusion that there is no evidence that Complainant will be harmed by the installation of a smart meter at the Service Address (see Tr. at 295-96; DLC Ex. G-1) is consistent with many past findings by the Commission, which have rejected claims that the installation of a smart meter will cause adverse health effects even if it complies with applicable health standards. Bervinchak, 2018 WL at *12 (rejecting the complainant's claim that the installation of a smart meter will cause health problems after the utility's expert witness testified that the scientific literature does not establish a link between exposure to RF fields and adverse health effects); Ottaviano, 2018 WL 937069 at *10-11 (holding that smart meter would not have an adverse health effect on the complainant after the utility's expert witness testified that numerous studies have concluded that RF fields do not cause adverse health effects).

Further, Complainant's claim that she is vulnerable to harm from smart meters because she has EHS must be rejected for several reasons. First, as Dr. Mezei testified, EHS is not a recognized medical diagnosis. Tr. at 316-17. The WHO has reached the same conclusion, finding that the symptoms reported by individuals who claim to suffer from EHS are not related to RF exposure. Tr. at 317. Dr. Mezei also noted that SCENIHR (which is the European Union's scientific committee) has made the same finding. Tr. at 318. Moreover, Complainant admitted that a medical professional has never diagnosed her with EHS. Tr. at 174-76. She has no medical training or expertise and presented no medical records to support her self-diagnosis. Complainant also presented no evidence that Duquesne Light's smart meter would aggravate her purported EHS. For these reasons, and more, the Commission routinely rejects the EHS claim now advanced by Complainant. See Hoffman-Lorah, 2019 WL at *23 (complainant's testimony that she

experiences symptoms when she is near a smart meter failed to prove causal connection RF emissions and adverse health effects); Bervinchak, 2018 WL at *10 (complainant's claim that she suffers from EHS is a bald assertion and does not constitute evidence).

In sum, as noted above, the Commission has repeatedly dismissed Formal Complaints like this one where the utility's smart meters comply with existing RF limits and there is no proof that the installation of a smart meter would exacerbate the complainant's existing health conditions. Murphy, 2018 WL at *1; Ottaviano, 2018 WL at *1; Zimmerman, 2018 WL at *1; Caesar, 2019 WL at *1; Bervinchak, 2018 WL at *1. Accordingly, Complainant's health claims should be dismissed.

2. Duquesne Light's smart meters comply with all applicable safety standards and are not a fire hazard.

The Presiding ALJ also should reject Complainant's claim that the Company's smart meters "catch on fire in ways that analog meters do not." Tr. at 160. Complainant has no knowledge, qualifications, or experience that would lend any credibility to this bald allegation, and she did not explain the "ways" that she believes a smart meter can catch on fire where an analog meter would not. She did not claim to be an expert witness on any subject, let alone fire issues. There also was no evidence or testimony showing that she investigated any fires allegedly caused by a smart meter. Nor did she identify any design or construction flaw in the Company's smart meter.

In contrast, Duquesne Light presented overwhelming evidence that its smart meters passed extensive testing (including flammability testing) and meet all applicable safety standards. First, Duquesne Light proved that its smart meters have been certified by UL under the 2735 safety standard, which applies to electric utility meters (including

smart meters). Tr. at 216; DLC Ex. F-2. UL conducted numerous tests -- including flammability tests -- on the Company's smart meter before granting this certification. Tr. at 216, 220. The Commission has repeatedly found that UL certification is evidence that the utility is providing safe and reasonable service. Ottaviano, 2018 WL at *11 (finding that utility company's smart meters were safe because they passed all UL testing and certification requirements); Caesar, 2019 WL at *13 (rejecting complainant's claim that the meter posed a fire hazard after finding that the meter complied with ANSI and UL standards); Eckstein v. PECO Energy Co., No. F-2017-2601990, 2018 WL 2085879, at *9 (Mar. 26, 2018) (no basis to find that smart meters were a fire hazard because they had passed all UL testing).

Duquesne Light also proved that its smart meters satisfy the applicable ANSI standards (ANSI C12.1 and C12.20), which establish safety and performance criteria for electric revenue meters. Tr. at 220; DLC Ex. F-1. Itron ran numerous tests to determine if the smart meter met the ANSI standards. Tr. at 219-20; DLC Ex. F-1. The smart meter passed all of the tests and complies with ANSI C12.1 and C12.20. Tr. at 220; DLC Ex. F-1. The Commission has consistently held that compliance with ANSI standards is evidence of reasonable service. Lucey v. Metropolitan Edison Co., Docket No. C-2018-3003679, 2020 WL 1673939, at *10 (Pa. P.U.C. Mar. 2, 2020) (Heep, ALJ) (finding that utility's smart meter satisfied ANSI standards and rejecting claim that the meter posed a fire hazard); Biconik v. Pa. Elec. Co., Docket No. C-2017-2632380, 2020 WL 3288045, at *5 (Pa. P.U.C. June 12, 2020) (same).

In addition, Duquesne Light proved that its smart meters passed extensive flammability testing performed by Itron, which are described in more detail in Section II(G)

above. Tr. at 220-21. This is further proof that the smart meters are safe and do not pose a fire hazard.

Finally, Duquesne Light established that it has installed roughly 620,000 smart meters throughout its service territory; none have caused a fire. Tr. at 326. Steve Wright, a Senior Product Engineer for Electricity Metering with Itron, also testified that the type of Itron smart meter being deployed by Duquesne Light has never caused a fire since it has been deployed. Tr. at 222. The Commission has routinely dismissed claims alleging that a smart meter poses a fire hazard when the evidence proves that the make and model at issue has never caused a fire. Bervinchak, 2018 WL at *13 (rejecting claim that smart meters pose a fire hazard because the meter met all national standards, including ANSI and UL, and there had been no reported fires regarding the make and model of the smart meter); Ottaviano, 2018 WL at *11 (dismissing claim that smart meters pose a fire hazard because there was no evidence that the type of meter installed at complainant's residence had ever been subject to or cause a fire); Zimmerman, 2018 WL at *10 (ruling that the meter was not a fire hazard because the utility had deployed roughly 840,000 meters and there was no evidence that the meters had caused any fires).

In sum, Complainant provided no evidence that Duquesne Light's smart meters pose a fire hazard, while the Company presented voluminous testimony and evidence proving that its smart meters passed extensive testing by UL and Itron. Duquesne Light further proved that its smart meters have never caused a fire after being installed in the Company's service territory. Accordingly, this claim has no merit and should be dismissed.

3. Complainant failed to provide any evidence to support any of her other claims against Duquesne Light, and they should be dismissed.

Complainant provided no evidence to support the other claims she raised at the hearing, and they should be dismissed. First, Complainant asserted that the ZigBee radio can communicate with other devices in her home and thus exceeds Act 129's bi-directional communication requirements. Tr. at 172-174. The evidence proved, however, that the ZigBee radio is *not* automatically paired with any devices in the customer's home when Duquesne Light installs a smart meter. Tr. at 187-88. It only pairs with a device if the customer requests it. Id. Complainant admitted during cross-examination that she did not know that the ZigBee radio is not automatically paired with devices in her home. Tr. at 174. The Commission has repeatedly held that a utility does not provide unreasonable service merely by including a ZigBee radio in its smart meter. Freda v. PPL Elec. Util. Corp., Docket No. C-2019-3007408, 2019 WL 5865109, at *14 (Pa. P.U.C. Oct. 31, 2019) (Barnes, ALJ) (dismissing claim that ZigBee radio violated customer's rights and noting that customer could decline to activate the ZigBee radio); Maslar v. PPL Elec. Util. Corp., Docket No. C-2018-3003075, 2020 WL 2764460, at *8 (Pa. P.U.C. May 21, 2020) (same). Accordingly, the Presiding ALJ should reject this claim.

Complainant also asserted that smart meters consume more energy than analog meters. Tr. at 141, 144. Other than her own belief, however, Complainant provided no evidence to support this allegation. Complainant's unsupported opinion is not evidence. Lamagna, 2018 WL at *15; Zimmerman, 2018 WL at *9 (bald assertions about alleged health problems arising from smart meters is not evidence).

Conversely, Michael Secchiutti, the Senior Manager of Smart Meter Operations for Duquesne Light, explained that analog and smart meters measure electric consumption

in the same way. Tr. at 329. He further testified that the electronics in both types of meters are connected on the Company's side of the meter, so the energy used to power the meter's electronics is not measured as part of the customer's electric consumption. Tr. at 330. Therefore, the Presiding ALJ should reject Complainant's allegation.

Finally, Complainant alleged that Duquesne Light attempted to install a smart meter at the Service Address during a "heavy rainstorm" on August 10, 2018. Tr. at 158-59. Complainant later admitted, however, that *she was not even at the Service Address when Company personnel were there*. Tr. at 169-70. She presented no other witnesses to support her claim, and she conceded that she had no evidence that Company personnel visited her property for any reason other than to post a shut-off notice for refusing the smart meter exchange. Tr. at 170-71. In fact, the evidence proves that Duquesne Light did not try to exchange the meter at the Service Address on August 10, 2018, and that the lock that Complainant had unlawfully placed on the meter remained intact -- which shows that the Company did not try to remove the meter. Id. Accordingly, Complainant's claim should be rejected.

V. CONCLUSION

Duquesne Light is not violating the Code, a Commission Order, or its Tariff by attempting to install a smart meter at the Service Address. In fact, the Code, the Commission's Order, and Duquesne Light's Commission-approved Tariff all affirmatively require that the Company install a smart meter at Complainant's residence. The Commission has repeatedly held that customers cannot opt-out of receiving a smart meter, which is what Complainant seeks to do here. There is nothing unique about this

case that compels a different result. Accordingly, the Commission must dismiss this case under the principle of *stare decisis*.

The overwhelming evidence established that every aspect of Duquesne Light's smart meter program that has been challenged by Complainant is adequate, reliable, safe, and reasonable. The Company proved that its smart meters easily meet the RF emission standards set by the FCC, IEEE, and ICNIRP. The amount of RF from Duquesne Light's smart meter is a tiny fraction of Complainant's overall RF exposure. From a safety standpoint, Duquesne Light's smart meter passed extensive flammability testing by Itron and UL and satisfy the ANSI testing standards. Moreover, this make and model has never caused a fire, either in Duquesne Light's service territory or anywhere else.

Complainant's other fallback claims have no merit. The evidence shows that the ZigBee radio does not communicate with devices inside Complainant's home unless she makes such a request. In addition, analog and smart meters measure electric consumption in the same way, and the energy used to power the meter's electronics is not included in the customer's metered consumption. Finally, Duquesne Light did not try to install a smart meter at Complainant's home during a "heavy rainstorm" on August 10, 2018.

Simply stated, Complainant submitted no evidence to support any of her claims. Instead, she merely offered her own opinion about these issues, which is not enough to meet her burden of proof. Given that Complainant has refused Duquesne Light's efforts to install a smart meter at her premises, Duquesne Light may -- under its Tariff as well as Commission regulations -- terminate her service. Accordingly, Duquesne Light

respectfully requests that the Formal Complaint be dismissed and that the Presiding ALJ enter an order stating (i) Duquesne Light must install a smart meter at the Service Address, and (ii) Duquesne Light can terminate Complainant's electric service if she continues to prevent the Company from installing a smart meter at the Service Address.

Respectfully submitted,

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PROPOSED FINDINGS OF FACT

Background

1. Complainant Pamela Scott ("Complainant") resides at 134 Markham Drive, Pittsburgh, PA 15228 ("Service Address"). Tr. at 101.

2. Respondent Duquesne Light Company ("Duquesne Light" or "the Company") is an electric distribution company with more than 100,000 customers in its service territory.

3. The electric meter currently installed at the Service Address is an Automated Meter Reading ("AMR") meter. Tr. at 327. It contains an electronic device called an "ERT" that transmitted readings to Duquesne Light via radiofrequency ("RF") on the Company's AMR fixed network when that network was operational. Tr. at 327-28.

4. Duquesne Light's AMR fixed network has been discontinued in favor of its smart meter mesh network. Tr. at 327-28.

5. On August 16, 2018, Complainant filed a Formal Complaint with the Commission. She objected to Duquesne Light's attempt to install a smart meter at the Service Address and raised health and safety concerns.

6. On September 6, 2018, Duquesne Light filed a timely Answer and New Matter, which denied the allegations in the Formal Complaint and stated that Act 129 of 2008 ("Act 129") required the Company to install a smart meter at the Service Address.

7. On March 12, 2020, the parties participated in a telephonic hearing before the Presiding ALJ, which lasted approximately 10 hours. Tr. at 4, 355.

The Witnesses at the Hearing

8. Complainant called Joshua Hart as her first witness at the hearing. He is the Director the advocacy group "Stopsmartmeters.org." Tr. at 40.

9. Complainant offered Mr. Hart as an expert witness on the public health effects of smart meter installations. Tr. at 46-47.

10. Mr. Hart is not a medical doctor, epidemiologist, public health professional, certified electrician, or electrical engineer. Tr. at 54-55.

11. Mr. Hart has never met Complainant. Tr. at 56.

12. Mr. Hart has never seen any medical records regarding Complainant's alleged health symptoms (including electro hypersensitivity syndrome) and has never talked to her treating physicians. Tr. at 62.

13. No court has ever accepted Mr. Hart as an expert witness on the health effects of smart meters on human beings. Tr. at 72.

14. Mr. Hart did not know if an administrative tribunal had ever accepted him as an expert witness. Tr. at 72-76.

15. Duquesne Light moved to preclude Mr. Hart from testifying as an expert witness due to his lack of qualifications. Tr. at 64, 77.

16. The Presiding ALJ did not accept Mr. Hart as an expert witness, but he was permitted to testify as a fact witness. Tr. at 76-79.

17. Complainant testified as a fact witness on her own behalf. Tr. at 99-182.

18. Complainant testified that smart meters emit RF continuously and cause adverse health effects on all living things, including people who have electro hypersensitivity syndrome ("EHS"). Tr. at 106, 138.

19. Complainant is not a doctor or medical professional, but has diagnosed herself with EHS. Tr. at 176.

20. Complainant has never been diagnosed with EHS by a medical professional or doctor. Tr. at 174-75.

21. Complainant offered no medical records into evidence at the hearing.

22. Complainant testified that Duquesne Light's smart meters "catch on fire in ways that analog meters do not." Tr. at 160. She did not present any evidence to support this allegation.

23. Complainant presented no evidence that she is a certified fire investigator.

24. Complainant presented no evidence that Duquesne Light's smart meters have caused a fire. Tr. at 166-67.

25. Duquesne Light presented the testimony of two expert witnesses: Dr. Benjamin Cotts and Dr. Gabor Mezei. Tr. at 228, 288.

26. Dr. Cotts received a Bachelor of Science in Electrical Engineering from the University of Portland, a Master of Science in Electrical Engineering from Stanford University, and Ph.D. in Electrical Engineering from Stanford University. Tr. at 231; DLC Ex. G-2. He is a Registered Professional Engineer, which is the legal licensure required to perform engineering work and includes a strict code of ethics. Tr. at 231-32; DLC Ex. G-2. He currently works as a Senior Managing Engineer for Exponent, Inc. Tr. at 232-33; DLC Ex. G-2.

27. Dr. Cotts has specific work experience relating to electromagnetic frequency and RF; these are his specialties and the subject upon which he performed his doctoral and post-graduate work. Tr. at 234.

28. Dr. Cotts has been offered and accepted as an expert witness in other proceedings relating to electromagnetic frequency and RF, including testimony before the Connecticut Siting Council, the Public Service Commission of Kentucky, the Alberta Utility Commission, the Superior Court of Quebec, and the Supreme Court of British Columbia. Tr. at 234-35.

29. Duquesne Light offered Dr. Cotts as an expert witness in the field of electrical engineering, physics, and electromagnetics, with an emphasis on the field effects of electromagnetic frequency and RF. Tr. at 234-35.

30. The Presiding ALJ accepted Dr. Cotts as an expert witness in the fields for which he was offered by Duquesne Light. Tr. at 235.

31. After being accepted as an expert witness, Dr. Cotts presented expert testimony and opinion relating to the electromagnetic and RF exposure concerns raised by Complainant. Tr. at 228-88.

32. Duquesne Light offered Dr. Gabor Mezei as an expert witness at the hearing. Tr. at 295.

33. Dr. Mezei received a Medical Degree from the Semmelweis University of Medicine and a Ph.D. in Epidemiology from the University of California, Los Angeles. Tr. at 292; DLC Ex. G-1. He is a Senior Managing Scientist at Exponent, Inc. Tr. at 289; DLC Ex. G-1.

34. Dr. Mezei has testified before several judicial and administrative bodies regarding the potential health effects of electromagnetic and radiofrequency fields, including but not limited to the Pennsylvania Public Utility Commission, the Connecticut Siting Council, and the Kentucky Public Utility Commission, as well as public utility

commissions in Canada and Ireland. Tr. at 293. Dr. Mezei was accepted as an expert witness in those proceedings. Tr. at 293-94.

35. Dr. Mezei has consulted with several agencies or groups on the potential health effects of electromagnetic and radio frequency, such as the California Public Utility Commission and the California Council on Science and Technology. Tr. at 294.

36. Dr. Mezei has published approximately 60 peer-reviewed articles in the scientific literature, many of which deal with the potential health effects of RF fields. Tr. at 294.

37. Duquesne Light offered Dr. Mezei as an expert witness in the fields of epidemiology, health sciences, and research, specifically with respect to electromagnetic fields and RF fields. Tr. at 295. Complainant did not object to Dr. Mezei's expert qualifications. Id.

38. The Presiding ALJ accepted Dr. Mezei as an expert witness in the fields for which he was offered by Duquesne Light. Tr. at 295.

39. After being accepted as an expert witness, Dr. Mezei presented expert testimony and opinion relating to Complainant's allegations about the adverse health effects that she believed would result from the installation of a smart meter by Duquesne Light at the Service Address. Tr. at 295-323.

40. Duquesne Light presented testimony from four fact witnesses at the hearing: Michael Belanger, Steve Wright, Michael Secchiutti, and Ronald Dornin. Tr. at 183-208; 211-227; 324-337; 339-347.

41. Michael Belanger is employed by Itron, Inc. as a Senior Project Line Manager. Tr. at 183-84. He received an electrical engineering degree from the University

of Michigan. Id. at 184. Mr. Belanger has personal knowledge of the design, operation, and communication technology associated with the Itron smart meters being deployed by Duquesne Light, and he has personal knowledge of the testing and compliance standards set forth by the Federal Communications Commission ("FCC") for this type of meter. Id. at 185.

42. Mr. Belanger testified about the design, manufacture, capabilities, and operation of the smart meters being deployed by Duquesne Light in its service territory, as well as the compliance of these smart meters with various codes and standards. Tr. at 183-208.

43. Steve Wright is employed by Itron, Inc. as a Senior Product Manager. Tr. at 212. Mr. Wright has worked in the electric metering industry for 32 years, including 23 years as an Itron employee. Id. He has personal knowledge of the type of smart meter that Duquesne Light is deploying throughout its service territory. Id. at 213. Mr. Wright performed job duties for Itron relating to the construction, design, and operation of that meter. Id. at 212-13.

44. Mr. Wright presented testimony relating to the design, manufacture, capabilities, and operation of the smart meters being deployed by Duquesne Light in its service territory, as well as the compliance of these smart meters with various codes and standards. Tr. at 211-227.

45. Michael Secchiutti has been employed by Duquesne Light for roughly 20 years and currently serves as the Manager of AMI Operations. Tr. at 324. He received a Bachelor of Science in Electrical Engineering Technology from Penn State University. Id. at 324-25.

46. Mr. Secchiutti manages Duquesne Light's smart meter operations center, which monitors the Company's smart meters to ensure they operate properly. Id. at 325. He also manages the Company's meter data analytics group, which handles meter data that is being prepared for billing. Id.

47. Mr. Secchiutti testified about the meter that is currently installed at the Service Address, operational features of Duquesne Light smart meters and related network, and Duquesne Light's compliance with applicable standards. Id. at 324-337.

48. Ronald Dornin serves as Duquesne Light's Interim Manager of Maintenance Program Planning; previously, he was the Company's Manager of Metering Systems. Tr. at 338. Mr. Dornin has been employed by Duquesne Light for about five years. Id. He received a Bachelor of Science degree in electrical engineering from Grove City College and is currently pursuing a Master's degree in business administration from the University of Pittsburgh. Id. at 340

49. While serving as Duquesne Light's Manager of Metering Systems, Mr. Dornin was responsible for the Company's meter engineering team and its "meter shop." Tr. at 339. The meter engineering team trains and assists field employees with any issues they encounter in the field. Id. The meter shop tests and certifies the accuracy of all meters used by Duquesne Light in its service territory. Id.

50. As part of his duties as the Manager of Metering Systems, Mr. Dornin helped ensure that the Company's smart meters were installed safety, and he has supervised at least a few dozen exchanges in the field. Tr. at 339.

51. At the hearing, Mr. Dornin provided testimony about the quality control and safety measures that Duquesne Light takes to ensure that its meters are safely installed. Tr. at 338-48.

Duquesne Light's Smart Meter Plan

52. Act 129 lists the required smart meter functionalities, which were supplemented by Commission Order. 66 Pa. C.S.A. § 2807.

53. Duquesne Light has more than 100,000 customers and falls within the scope of Act 129.

54. Duquesne Light filed a Smart Meter Plan with the Commission on June 29, 2012 at Docket No. M-2009-2123948, which the Commission approved. The Company later filed an Amended Smart Meter Plan, which the Commission approved in relevant part on April 7, 2017 at Docket No. P-2015-2497267.

Duquesne Light's Tariff

55. Rule 9B of Duquesne Light's Tariff has been approved by the Commission and states that smart meters conforming to Company standards must be installed at each metered service premises pursuant to Act 129 and Duquesne Light's Smart Meter Plan and that customers cannot refuse the installation of a smart meter for any reason. DLC Ex. C; Tr. at 333-34.

56. Rule 9B of Duquesne Light's Tariff states that meter relocation is the sole remedy for customers who do not wish to receive a smart meter from Duquesne Light and that customers are responsible for paying the costs associated with meter relocation. DLC Ex. C; Tr. at 333-34.

57. Rule 22 of the Company's Tariff authorizes Company representatives to access the Company's equipment for several enumerated reasons, including to read Company meters and remove Company property. DLC Ex. C.

58. Rule 33 of the Company's Tariff states that the Company can terminate a customer's service if the customer prevents Duquesne Light from accessing its equipment. DLC Ex. C.

Duquesne Light's AMI Network

59. Duquesne Light's AMI network uses RF to transmit information on a two-way communication system. Tr. at 185-86.

60. Duquesne Light's smart meters send communications through the Company's "mesh network" to a collection point, which is a field area router mounted on a pole. Tr. at 187.

61. At the collection point, a cellular modem communicates back to the utility's head-end system. Tr. at 187.

62. RF transmissions also travel in the opposite direction (from utility to meter) because the network allows for two-way communications, as required by Act 129. 66 Pa. C.S.A. § 2807; Tr. at 185-86.

Duquesne Light's Smart Meter

63. Duquesne Light is deploying Itron's OpenWay Centron smart meter throughout its service territory; it has an FCC identification number of SK9AMI7. Tr. at 185, 213; DLC Ex. F-6.

64. The Company's smart meter contains two radios: the Local Area Network ("LAN") radio and the ZigBee radio. Tr. at 186-87.

65. The LAN radio transmits at 900 megahertz and communicates with nearby smart meters to form a mesh network. Tr. at 186-87.

66. Each communication from a LAN radio lasts just 20-150 milliseconds and occurs at a power of 0.69 watts. Tr. at 190, 249; DLC Ex. F-6.

67. The LAN radio provides the Company with consumption data, which is the amount of electricity consumed by the residence. Tr. at 189-90. The LAN radio also provides the Company with "on-demand" reads to troubleshoot problems, and it provides network control synchronization and network security messages to establish and maintain the mesh network. Id.

68. The ZigBee radio transmits at 2.4 gigahertz and, when enabled by the customer, will communicate consumption data from the meter to certain types of devices within the service address, such as an in-home display unit. Tr. at 186-87.

69. The ZigBee radio is not automatically paired with any devices in the customer's home when Duquesne Light installs a smart meter at a residence. Tr. at 187-88. It only pairs with a device if the customer requests it from Duquesne Light. Id.

70. Duquesne Light's smart meter contains surge or overvoltage protection to protect the meter's electric components. Tr. at 223.

71. The surge or overvoltage protection protects two times overvoltage, meaning that it protects up to 480 volts on a typical residential service. Tr. at 223.

72. If a power surge exceeds the overvoltage protection, then the meter's metal oxide varisitor electronically opens and the meter powers down. Tr. at 223.

73. The American National Standards Institute ("ANSI") and Underwriters Laboratory ("UL") tested the smart meter's surge protection features; these features meet both standards. Tr. at 224.

Health Standards for RF Emissions

74. The Federal Communications Commission ("FCC") established safe levels, or maximum permissible exposure limits ("MPE"), for RF transmissions in the United States. Tr. at 256-57; DLC Ex. G-2 and G-3.

75. To set its MPE limits, the FCC relied on input from several health agencies such as the National Council for Radiation Protection, the Institute of Electrical and Electronics Engineers ("IEEE"), the National Institute for Occupational Safety and Health, the Occupational Safety and Health Administration, the Environmental Protection Agency, and the Food and Drug Administration ("FDA"). Tr. at 303.

76. The FCC considered both the thermal and non-thermal effects of smart meters in setting its MPE limits. Tr. at 304.

77. The FCC's standards are based on a comprehensive evaluation of the available body of scientific literature and protect against all known and established health effects, including those against potentially vulnerable groups. Tr. at 302-03.

78. The FCC's standards incorporate a safety factor of 50 below the lowest exposure level that has any adverse effect, as identified by the body of scientific literature. Tr. at 257-58, 302-03.

79. In 2019, the FCC concluded after a six-year review that its MPE limits are still valid and do not need to be revised. Tr. at 303-04.

80. The FCC's regulations establish that the MPE to RF fields emitted by the LAN radio is 0.61 milliwatts per square centimeter. Tr. at 195.

81. The MPE for the ZigBee radio is 1.0 watts per square centimeter. Tr. at 196.

82. The IEEE and the International Commission on Non-Ionizing Radiation Protection ("ICNIRP") also developed exposure limits for electromagnetic fields based on lengthy and comprehensive assessments of the scientific literature. Tr. at 258-59; DLC Ex. G-2, G-3.

83. ICNIRP is a non-governmental agency that is formally recognized by the World Health Organization for establishing standards on electric and magnetic field exposure, including RF exposure. Tr. at 306. It reviewed the entire available body of scientific research on non-ionizing electromagnetic waves and developed exposure standards through weight-of-the-evidence reviews. Tr. at 258-59.

84. The RF exposure limits established by the FCC, IEEE, and ICNIRP are shown below:

Table 3. Exposure limits specified by the FCC, IEEE, and ICNIRP

	Power Density Limit at 900 MHz		Power Density Limit at 2.4 GHz		
Agency	**(W/m^2)**	**(mW/cm^2)**	**(W/m^2)**	**(mW/cm^2)**	**SAR Limit (W/kg)**
FCC (CFR §1.1310 and §2.1093)	6	0.6	10	1.0	0.08 (Whole body) 1.6 (over any 1 gram of tissue)
ICNIRP (1998)	4.5	0.45	10	1.0	0.08 (Whole body) 2 (over any 10 grams of tissue)
IEEE, (C95.1, 2019)	4.5	0.45	10	1.0	0.08 (Whole body) 2 (over any 10 grams of tissue)

Note: mW/cm^2 = milliwatts per square centimeter; W/m^2 = watts per square meter; 1 mW/cm^2 = 10 W/m^2.

See DLC Ex. G-2 and G-3.

Duquesne Light's Compliance With RF Health Standards

85. Both radios in the Company's smart meters comply with the exposure limits set by the FCC, IEEE, and ICNIRP, even if the radios operated all day long (which they do not). Tr. at 195, 198, 200, 259-60.

86. The amount of RF emitted from the radios in the Company's smart meters is just a tiny fraction of the FCC's limits. Tr. at 188-89, 302-03; DLC Ex. G-2, G-3.

87. Complainant would be exposed to much higher levels of RF from many other existing sources, such as her phone, wireless router, and local broadcast stations:

Table 6. Example calculations of RF exposure for sources at the Complainants' residence

Source	Distance from source	Duty Cycle (in a 30-minute period)*	Calculated value (% of FCC limit)
Complainant's Phone 1	Used at the head	1-minute call	0.50
Complainant's Phone 2	Used at the head	1-minute call	1.6
Wireless Router	10 feet	5 minutes of use	0.023
Local Broadcast Stations	~3.5 – 10 miles away	100%	0.055
Smart Meter LAN (Inside, Average)†,§	1 yard	0.21%	0.00044
Smart Meter LAN (Outside, Average)	1 yard	0.21%	0.0097

* The FCC specifies a 30-minute averaging period in assessing RF exposure.

† The exposure from the smart meter inside the home will be reduced by the exterior wall material, assumed to be brick. Only 45% of the energy incident on the outer wall will pass through the brick into the residence (NIST, 1997). This factor is included in the calculation of exposure due to the smart meter inside the residence.

§ The smart meter preferentially transmits in the forward direction. The amount of energy transmitted toward the back of the smart meter is approximately 10% that of the forward direction (EPRI, 2010). This factor of 10% is included in the calculation of exposure due to the smart meter inside the residence.

See DLC Ex. G-2, G-3.

88. In 2011, the FCC issued a "Grant of Equipment Authorization," which is the agency's official verification that the radios in the Company's smart meter meet the FCC's requirements. DLC Ex. F-6; Tr. at 199.

89. The FCC's Grant of Equipment Authorization remains in effect today. Tr. at 199.

Heath Effects of RF Emissions Below Accepted Standards

90. Many organizations have performed thorough "weight of the evidence" reviews to determine the potential health effects of RF fields. Tr. at 299.

91. Comprehensive weight of the evidence reviews evaluating the potential health effects of RF were conducted by ICNIRP in 2009, the Health Protection Agency of the United Kingdom in 2012, the International Agency for Research on Cancer ("IARC") in 2013, and the European Union Scientific Committee on Non-Emerging and Newly-Identified Health Risks ("SCENIHR") in 2015, and the FDA in 2020. Tr. at 305-06; DLC Ex. G-1.

92. All of these studies concluded that the scientific evidence does not establish a cause-and-effect relationship between RF exposure below currently existing, scientifically-based exposure guidelines and any adverse health effects, including cancer and non-cancer outcomes. Tr. at 307-308; DLC Ex. G-1.

93. The WHO also found that the existing scientific evidence does not confirm the existence of any adverse health effects below established guideline-level values. Tr. at 309.

94. The scientific and medical evidence does not establish that RF exposure below accepted guidelines causes any adverse health effects. Tr. at 295-96; DLC Ex. G-1.

95. Several governmental agencies in the United States have analyzed whether RF emitted by smart meters causes adverse health effects, including: the Maine Center for Disease Control; the California Council on Science and Technology; the Colorado Department of Public Health and Environment; the Michigan Public Service Commission; the Oregon Health Authority; the Public Utility Commission of Texas; the Arizona Department of Health Services; the Vermont Department of Health; the Vermont Public Service Department; and the North Carolina Public Health Division. Tr. at 309-11; DLC Ex. G-1.

96. All of these agencies concluded that the existing scientific evidence does not show that RF exposure from smart meters would have a negative impact on public health. Tr. at 311.

Duty Cycle of Duquesne Light's Smart Meters

97. The estimated time that a Duquesne Light smart meter would transmit energy during a 24-hour period – commonly called the "duty cycle" – was assessed through a study analyzing the deployment of roughly 13,000 OpenWay smart meters, which are the ones being deployed by Duquesne Light. Tr. at 192-93; DLC Ex. E-2.

98. The study found that the average duty cycle of the LAN radio is just 0.21%, meaning that the radio communicates information by RF for just 0.21 percent of the day; this translates to slightly less than three minutes per day on average. Tr. at 193-94, 197; DLC Ex. E-2, G-2, G-3.

99. The expected maximum duty cycle for the LAN radio is roughly 8 percent, meaning that the meter would transmit for 115.2 minutes in a 24-hour period. DLC Ex. G-2, G-3.

100. The estimated minimum duty cycle for the Company's smart meters is about 0.03 minutes per day, which is a fraction of a second. DLC Ex. G-2, G-3.

101. For a ZigBee radio that is not paired with another device inside the customer's home, the duty cycle is roughly 0.01%, which is slightly less than 10 seconds per day. DLC Ex. G-2, G-3.

102. A smart meter's duty cycle is very low compared to other RF-emitting devices such as television and radio broadcast stations, which have 100 percent duty cycles. Tr. at 252.

Propagation and Attenuation

103. Because smart meters communicate with other nearby meters, their RF communications are purposefully directed through the front of the meter and away from the customer's home; this is known as propagation. Tr. at 188-89.

104. RF emitted from the back of a smart meter is roughly 10 times lower than the amount transmitted through the front. Tr. at 189.

105. The smart meter also sits in a metal box, which further limits the amount of RF directed towards the home. Tr. at 189.

106. The home's construction materials, such as the exterior walls, further deflect any RF directed towards the home. Tr. at 189.

107. The principle of attenuation establishes that a person's RF exposure rapidly decreases as their distance from a smart meter increases. Tr. at 252-54.

108. Because the smart meter sends out a finite amount of power, as the distance from the smart meter increases, the total power becomes distributed over a larger area and loses force. Tr. at 253-54. For example, a person standing 10 yards from a smart meter receives about 100 times less RF exposure than someone standing one yard away. Tr. at 254.

Complainant's Expected RF Exposure at the Service Address

109. Complainant will not suffer any adverse health effects due to RF emitted from a smart meter. Tr. at 295-96; DLC Ex. G-1.

110. If Complainant stood outside the Service Address and just one yard from the Company's smart meter, she will be exposed to only 0.0097% of the FCC's limits, assuming that the smart meter is transmitting at an average duty cycle. DLC Ex. G-2, G-3.

111. If Complainant stood inside the Service Address and was just one yard from the smart meter, she would only be exposed to 0.00044% of the FCC's limits if the smart meter operated on an average duty cycle. DLC Ex. G-2, G-3.

112. Even if Complainant stood outside the Service Address and was only eight inches from the smart meter and it transmitted at the maximum duty cycle, she would be exposed to less than 8% of the FCC's exposure limits. Tr. at 273; DLC Ex. G-2, G-3.

113. Complainant already receives much higher levels of RF from many natural and man-made sources, including her wireless router, phone, other human beings and the Earth. DLC Ex. G-2, G-3.

114. Complainant presented no medical evidence, witnesses, or records at the hearing demonstrating that RF emitted from a smart meter will harm her.

Safety Standards

115. ANSI C12.1 and ANSI C12.20 establish safety and performance criteria for electric revenue meters. Tr. at 215.

116. Itron tested the Company's smart meter for compliance with ANSI C12.1 and ANSI C12.20. Tr. at 218. Specifically, trained employees of Itron's qualification lab ran a battery of tests to verify compliance, including but not limited to no load and starting load tests; internal loss testing; temperature rise testing; and voltage interruption tests. Tr. at 219-20; DLC Ex. F-1.

117. Duquesne Light's smart meter passed all of the tests that Itron conducted as part of ANSI C12.1 and ANSI C12.20 testing. Tr. at 220; DLC Ex. F-1.

118. Itron also submitted the Company's smart meter to UL for testing under UL 2735 (Standards for Safety for Electric Utility Meters). Tr. at 215.

119. UL 2735 is a certification standard that applies to electric utility meters, including smart meters. Tr. at 216.

120. If a meter is UL-certified, it means that it has undergone extensive testing by UL and meets UL's certification standards. Tr. at 216.

121. UL certified that Duquesne Light's smart meter complies with UL 2735, which validates that it is safe and that the meter has passed UL's flammability tests. Tr. at 216, 220-21; DLC Ex. F-2.

122. The base material in Duquesne Light's smart meter is PET rynite, which is considered a fire-resistant material under UL's standards. Tr. at 221-22.

123. PET rynite has a melting point of 489 degrees Fahrenheit. Tr. at 222. Many common household materials have much lower melting points, such as vinyl siding (160

degrees Fahrenheit), paint (200 degrees Fahrenheit), wood burners (200-250 degrees Fahrenheit), and wire insulation (194 degrees Fahrenheit). Id.

124. Itron performed its own flammability tests on the smart meter being deployed by Duquesne Light. Tr. at 221. Specifically, Itron injected a "glow wire" into the base of a smart meter for 30 seconds at a temperature of 1,760 degrees Fahrenheit to ensure that the meter did not catch on fire. Id.

125. Duquesne Light's smart meter passed Itron's flammability tests. Tr. at 221.

126. Duquesne Light has installed roughly 620,000 smart meters throughout its service territory. Tr. at 326.

127. The Company's smart meters have not caused any fires. Tr. at 326.

128. The type of Itron smart meter being deployed by Duquesne Light has never caused a fire since it has been deployed by Itron. Tr. at 222. It also has never been recalled from the field for safety, quality, or reliability purposes. Id. at 224.

129. Complainant did not claim to be a fire or flammability expert, and she did not identify any instance in which Duquesne Light's smart meter caused a fire.

Energy Consumption

130. Analog and smart meters measure electric consumption in the same way, and the electronics in both types of meters are connected on the Company's side of the meter. The energy used to power the meter's electronics is not included as part of the customer's metered electric consumption. Tr. at 329-30.

131. Complainant presented no evidence to support her claim that smart meters consume more energy than analog meters.

Duquesne Light's Attempt to Install a Smart Meter at the Service Address

132. Complainant placed a lock on the meter at the Service Address; the lock was in place when Duquesne Light personnel visited the Service Address on August 10, 2018. Tr. at 170-71.

133. Complainant was not present when Duquesne Light's personnel visited the Service Address on August 10, 2018. Tr. at 169-70.

134. Duquesne Light did not remove the lock that was on the meter on August 10, 2018, and did not attempt to install a smart meter at the Service Address on that date. Tr. at 170-71.

135. Complainant presented no witnesses or evidence to support her claim that the Company attempted to exchange the meter at the Service Address during a "heavy rainstorm" on August 10, 2018. Tr. at 170-71.

PROPOSED CONCLUSIONS OF LAW

1. The Commission has jurisdiction over the parties and the subject matter in this proceeding. 66 Pa. C.S. § 701.

2. Under Section 332(a) of the Pennsylvania Public Utility Code, the proponent of a rule or order has the burden of proof. 66 Pa. C.S. § 332(a). It is well-established that "[a] litigant's burden of proof before administrative tribunals . . . is satisfied by establishing a preponderance of evidence which is substantial and legally credible." Samuel J. Lansberry, Inc. v. Pa. Pub. Util. Comm'n, 578 A.2d 600, 602 (Pa. Cmwlth. 1990).

3. The preponderance of evidence standard requires proof by a greater weight of the evidence. Commonwealth v. Williams, 732 A.2d 1167, 1187 (Pa. 1999). This standard is satisfied by presenting evidence that makes the existence of a contested fact more likely than its nonexistence. Brown v. Commonwealth, 940 A.2d 610, 614 n.14 (Pa. Cmwlth. 2008).

4. In smart meter-related matters, the Commission has held that "[t]he Complainant will have the burden of proof during the proceeding to demonstrate, by a preponderance of the evidence, that [the utility] is responsible or accountable for the problem described in the Complaint." Kreider v. PECO Energy Co., Docket No. P-2015-2495064, 2015 WL 5256653, at *11 (Pa. P.U.C. Sept. 3, 2015).

5. When presented with a challenge to a smart meter installation, the Commission has pronounced that "[t]he ALJ's role . . . will be to determine based on the record in this particular case, whether there is sufficient evidence to support a finding that Complainant was adversely affected by the smart meter or whether [the utility's] use of

a smart meter will constitute unsafe or unreasonable service in violation of Section 1501 under the circumstances in this case." Kreider v. PECO Energy Co., Docket No. P-2015-2495064, 2016 WL 406549, at *14 (Pa. P.U.C. Jan. 28, 2016).

6. To satisfy the burden of proof, a complainant must demonstrate that the utility violated the Public Utility Code or a regulation or order of the Commission. 66 Pa. C.S. § 701. This must be shown by a preponderance of the evidence. Patterson v. Bell Telephone Co. of Pa., Docket No. F-8966524, 1990 WL 10702674 (Pa. P.U.C. 1990).

7. Upon the presentation by a complainant of evidence sufficient to initially satisfy the burden of proof, the burden of going forward with the evidence, sometimes called the burden of persuasion, to rebut the evidence of the complainant shifts to the respondent. If the evidence presented by the respondent is of co-equal weight, the complainant has not satisfied the burden of proof. The complainant has to provide some additional evidence to rebut the evidence of the respondent. Burleson v. Pa. Pub. Util. Comm'n., 443 A.2d 1373, 1375 (Pa. Cmwlth. 1982), aff'd, 461 A.2d 1234 (Pa. 1983).

8. While the burden of persuasion may shift back and forth during a proceeding, the burden of proof never shifts. The burden of proof always remains on the party seeking affirmative relief from the Commission. Milkie v. Pa. Pub. Util. Comm'n, 768 A.2d 1217, 1220 (Pa. Cmwlth. 2001).

9. In order to prevail on a claim against an electric distribution company alleging that an AMI meter caused or will cause adverse health effects or harm to human health, the Complainant must demonstrate by a preponderance of the evidence that there is a "conclusive causal connection" between exposure to electromagnetic frequency and adverse human health effects; when the record evidence demonstrates a body of

inconclusive scientific research and studies as to the causal connection, the burden of proof is not satisfied. Branagh v. PECO Energy Co., No. C-2016-2576738, 2019 WL 6458306, at *7 (Pa. P.U.C. Nov. 14, 2019); Randall v. PECO Energy Co., Docket No. C-2016-2537666, 2019 WL 2250792, at *17 (Pa. P.U.C. May 9, 2019).

10. A public utility's Commission-approved tariff is *prima facie* reasonable, has the full force of law and is binding on the utility and the customer. Pa. Electric Co. v. Pa. Pub. Util. Comm'n, 663 A.2d 281 (Pa.Cmwlth. 1995); Respond Power, LLC v. Pa. Elec. Co. *and* Respond Power LLC v. West Penn Power Co., Docket Numbers C-2016-2576287 and C-2016-2576292 (Order Entered July 13, 2017).

11. Assertions, personal opinions, or perceptions do not constitute evidence. Pa. Bureau of Corrections v. City of Pittsburgh, 532 A.2d 12, 14 (Pa. 1987); Lamagna v. Pa. Elec. Co., Docket No. C-2017-2608014, 2018 WL 6124353, at *15 (Pa. P.U.C. Oct. 30, 2018) (Watson, ALJ); Zimmerman v. PPL Elec. Util. Corp., Docket No. C-2017-2615038, 2018 WL 4185439, at *9 (Pa. P.U.C. Aug. 16, 2018) (Barnes, ALJ).

12. A public utility is required to provide adequate, efficient, safe, and reasonable service. 66 Pa. C.S. §§ 102 and 1501.

13. No provision in the Public Utility Code or the Commission's Regulations or Orders allows a customer to "opt out" of receiving a smart meter. Hoffman-Lorah v. PPL Elec. Util. Corp., Docket No. C-2018-2644957, 2019 WL 2325713, at *28 (Pa. P.U.C. May 23, 2019); Paul v. PECO Energy Co., Docket No. C-2015-2475355, 2018 WL 3093596, at *4-5 (Pa. P.U.C. June 14, 2018); Povacz v. PECO Energy Co., Docket No. C-2012-2317176, 2013 WL 392699, at *6 (Pa. P.U.C. Jan. 24, 2013).

14. Without additional legislation from the General Assembly, the Commission cannot prohibit an electric distribution company that is covered by Act 129 from installing a smart meter at a service address, even if a customer does not want one. Schmukler v. PPL Elec. Utilities Corp., C-2017-2621285, 2018 WL 4185440, at *27 (Pa. P.U.C. Aug. 16, 2018) (Barnes, ALJ).

15. The United States Constitution and the Pennsylvania Constitution do not prohibit Duquesne Light from installing a smart meter at the Service Address. Jackson v. Metropolitan Edison Co., 419 U.S. 345, 349-350 (1974); Schutz v. PPL Elec. Utilities Corp., No. C-2018-3005659, 2019 WL 2744430, at *12 (Pa. P.U.C. June 11, 2019); Starr v. PECO Energy Co., Docket No. C-2015-2516061, 2016 WL 4699145, at *8 (Pa. P.U.C. Sept. 1, 2016).

16. Duquesne Light has more than 100,000 customers and is covered by Act 129 of 2008.

17. Act 129 of 2008, 66 Pa.C.S. § 2806.1 *et seq*., required electric distribution companies to file smart meter technology procurement and installation plans with the Commission for approval. 66 Pa.C.S. § 2807(f).

18. A utility may issue written notice of termination to a customer if a customer does not permit access to meters, service connections, or other property of the public utility for the purpose of replacement, maintenance, repair, or meter reading, including the installation of a smart meter. 66 Pa.C.S. § 1406(a)(4); 52 Pa. Code § 56.81(3).

19. Any testimony of a lay witness related to technical or specialized knowledge should be excluded and given no evidentiary weight. Gibson v. W.C.A.B., 861 A.2d 938, 947 (Pa. 2004).

20. The hearsay evidence presented by Complainant in this case was properly objected to and excluded and may not support any findings of fact. Walker v. Unemployment Comp. Bd. of Review, 367 A.2d 366, 370 (Pa. Cmwlth. 1976).

21. Complainant failed to carry her burden of proof establishing that Duquesne Light violated the Public Utility Code or a regulation or order of the Commission in requiring installation of a smart meter at Complainant's property. 66 Pa.C.S. § 332.

22. Complainant failed, with respect to each one of her claims, to carry her burden of proof establishing that Duquesne Light provided unsafe or unreasonable service in violation of 66 Pa.C.S. § 1501.

PROPOSED ORDER

THEREFORE,

IT IS ORDERED:

1. That the Formal Complaint filed by Pamela Scott against Duquesne Light Company at Docket No. C-2018-3004042 is dismissed in its entirety with prejudice.

2. That Docket No. C-2018-3004042 shall be marked closed.

3. That Duquesne Light shall be entitled to terminate the electric service of Pamela Scott at her residence located at 134 Markham Drive, Pittsburgh, PA 15228 if she prevents Duquesne Light from installing a smart meter at her residence.

_____

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PAMELA SCOTT,	:	
	:	
Complainant,	:	
	:	
vs.	:	No: C-2018-3004042
	:	
DUQUESNE LIGHT COMPANY,	:	
	:	
Respondent.	:	

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true copy of the foregoing Post-Hearing Brief and Proposed Findings of Fact, Conclusions of Law, and Order upon the participants listed below in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant):

Pamela Scott
134 Markham Drive
Pittsburgh, PA 15227

Administrative Law Judge Jeffrey Watson
Pennsylvania Public Utility Commission
Piatt Place - 301 Fifth Avenue
Suite 220
Pittsburgh, PA 15222
(via mail and e-mail at dpallas@pa.gov)

Dated this 24th day of July, 2020

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