BEFORE
THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Dorene Dougherty	:	
	:	
v.	:	C-2018-3001474
	:	
Pennsylvania Electric Company	:	

PREHEARING CONFERENCE ORDER

On April 24, 2018, Dorene Dougherty ("Complainant") filed a Formal Complaint ("complaint") with the Pennsylvania Public Utility Commission ("Commission") against Pennsylvania Electric Company ("Respondent" or "PENELEC"). The complaint asserted that the utility was threatening to shut off or already had shut off Complainant's electric service. The relief requested was: (a) not to shut off Complainant's electric service, (b) allowing Complainant to keep the analog meter due to health concerns regarding smart meters and (c) a guarantee that Respondent's actions regarding the meter will not cause harm to her or her property. The Commission served Respondent with the complaint on April 27, 2018.

On May 17, 2018, Respondent filed its Answer and New Matter, which included a notice to plead, admitting and denying various averments in the complaint. Also, on May 17, 2018, Respondent filed Preliminary Objections ("POs") to the complaint arguing that the complaint was legally insufficient under 52 Pa. Code § 5.101(a)(4) because it fails to state a claim upon which relief can be granted. The POs included a notice to plead.

On June 5, 2018, Complainant submitted a Petition for Extension of Time to file a response to Respondent's New Matter and POs. On June 15, 2018, Administrative Law Judge ("ALJ") Jeffrey A. Watson granted Complainant's request for an extension. On August 2, 2018, Complainant filed her responses to the New Matter and POs.

On October 18, 2018, ALJ Watson issued an Interim Order denying Respondent's POs. Also, on October 18, 2018, ALJ Watson issued a separate Interim Order establishing the initial litigation schedule for this matter.

On October 30, 2018, Respondent served Complainant with Interrogatories and Requests for Production of Documents. On December 18, 2018, Respondent filed a Motion to Compel seeking an order directing Complainant to respond to Respondent's discovery.

On January 4, 2019, Respondent submitted a list of three expert witnesses for a future hearing in accordance with the litigation schedule.

On January 7, 2019, ALJ Watson issued an Interim Order granting Respondent's Motion to Compel discovery. Complainant was directed to complete responses to Respondent's Interrogatories and Requests for Production of Documents no later than February 1, 2019.

On January 7, 2019, Eldon Kibler, who assisted Complainant with communications, submitted a letter from Dr. Gunnar Heuser on behalf of Complainant.

On February 13, 2019, Respondent filed a Motion to Dismiss for Complainant's failure to provide complete responses to the Respondent's discovery. The motion included a notice to plead requiring Complainant to file a response within five days of service.

On March 5, 2019, Respondent filed a status report with the Commission.

On March 21, 2019, the Commission sent a letter to Complainant returning Complainant's "Objection and Response to Motion of Pennsylvania Electric Company to Dismiss Complaint of Dorene Dougherty for Failure to Comply with Order" because it failed to have an original signature. The letter granted Complainant ten days to return it with an original signature to preserve the filing. Complainant did not complete this filing.

On March 28, 2019, the Commission issued a Hearing Notice scheduling this matter for a Telephonic Prehearing Conference on April 16, 2019 at 11:00 a.m. Also, on March 28, 2019, ALJ Watson issued a Prehearing Conference Order addressing various procedures for the conference.

On April 8, 2019, Respondent requested a continuance of the April 16, 2019 Prehearing Conference. On April 11, 2019, the Commission issued a notice cancelling the April 16, 2019 hearing. Also, on April 11, 2019, ALJ Watson issued an Order continuing the Prehearing Conference scheduled for April 16, 2019.

On April 19, 2019, the Commission returned Complainant's "Motion for Rescheduling Prehearing Conference" based on failure to have an original signature.

Also, on April 19, 2019, Complainant filed an "Objection and Response to Motion of Pennsylvania Electric Company to Dismiss Complaint of Dorene Dougherty for Failure to Comply with Order."

On May 6, 2019, the Commission issued a notice scheduling a Telephonic Hearing Conference for May 23, 2019. Also, on May 6, 2019, Complainant re-submitted her Motion for Rescheduling Prehearing Conference with an original signature.

On May 24, 2019, the Commission issued a notice scheduling a Telephonic Hearing Conference for June 17, 2019. Also, on May 24, 2019, ALJ Watson issued a Prehearing Conference Order addressing the rules for the Prehearing Conference scheduled on June 17, 2019.

On June 17, 2019, a Prehearing Conference was held with Complainant and counsel for Respondent in attendance. At the conference, Complainant identified the witnesses she would have present testimony.

On June 19, 2019, ALJ Watson issued an Interim Order Holding in Abeyance Respondent's Motion to Dismiss and Compelling Complainant to Provide Full and Complete Responses to Respondent's Discovery Requests and to Exchange Witness Information.

On July 1, 2019, Complainant submitted her Answers to Respondent's Interrogatories.

On July 2, 2019, ALJ Watson received a "Motion for Late Filing of Interrogatories to be Propounded on Pennsylvania Electric Company or in the Alternative Motion for Leave to File Interrogatories Out of Time." On July 9, 2019, Respondent submitted its response to Complainant's "Motion for Late Filing of Interrogatories to be Propounded on Pennsylvania Electric Company or in the Alternative Motion for Leave to File Interrogatories Out of Time."

On July 16, 2019, Respondent filed a status report in accordance with ALJ Watson's Interim Order on June 19, 2019.

On July 29, 2019, ALJ Watson issued an Interim Order Denying Complainant's Motion for Late Filing of Interrogatories to be Propounded on Pennsylvania Electric Company or in the Alternative Motion for Leave to file Interrogatories Out of Time.

On July 31, 2019, the Commission issued a letter indicating a deficiency for Complainant's "Letter in Reply to Pennsylvania Electric Company's Reply to Motion" because it failed to have an original signature.

On August 14, 2019, the Commission returned Complainant's status report because it failed to have an original signature.

On August 15, 2019, the Commission returned Complainant's "Letter in Reply to Pennsylvania Electric Company's Reply to Motion" in accordance with the July 31, 2019 deficiency letter.

On August 19, 2019, Respondent submitted its status report.

On August 26, 2019 and August 27, 2019, the Commission issued Hearing Notices scheduling a Telephone Hearing for October 22, 2019.

On September 3, 2019, the Commission issued a notice cancelling the October 22, 2019 hearing and rescheduling the hearing for October 24, 2019.

On September 6, 2019, Complainant submitted a status report. Also, on September 6, 2019, Complainant filed a "Reply to Letter of July 9, 2019 From Tori L. Geisler to PUC Secretary Chiavetta."

On September 16, 2019, Complainant filed a Petition for Extension of Time to file Direct Testimony.

On September 23, 2019, the Commission issued a notice cancelling the October 24, 2019 hearing date and scheduling a Prehearing Conference for October 22, 2019. Also, on September 23, 2019, ALJ Watson issued a n Interim Order Requiring the Parties to: (a) provide dates for a rescheduled hearing, (2) file a status report by October 8, 2019 and (3) prepare to discuss discovery.

On October 7, 2019, Complainant filed a status report in compliance with the September 23, 2019 Prehearing Order.

On October 11, 2019, Complainant submitted written Direct Testimony of Dr. Gunner Heuser.

On October 15, 2019, Respondent submitted a letter advising of availability of its witnesses.

Also, On Octobe 15, 2019, ALJ Watson issued an Interim Order directing the parties to provide available hearing dates between January 2020 and February 2020 and file a status report by November 1, 2019.

On October 22, 2019, a Telephonic Prehearing Conference was held with Complainant and counsel for Respondent in attendance. During the conference, it was decided that parties would present evidence via oral testimony at the hearing in lieu of written testimony. On October 23, 2019, ALJ Watson issued an Interim Order: (1) confirming decisions from the Prehearing Conference, (2) providing direction for the presentation of evidence at the hearing and (3) dismissing Respondent's prior Motion to Dismiss as moot.

On November 4, 2019 and November 7, 2019, Complainant and Respondent filed their respective status reports.

On November 25, 2019, Complainant submitted a letter advising on acceptable hearing dates.

On December 19, 2019, the Commission issued a Hearing Notice scheduling a Telephone Hearing for March 26, 2020.

On March 16, 2020, ALJ Watson issued an Interim Order continuing the March 26, 2020 hearing due to office closure.

On August 19, 2020, ALW Watson issued an Interim Order directing the parties to provide proposed dates for a telephonic hearing in October 2020.

On September 4, 2020, Respondent filed a joint status report proposing November 19, 2020 as the hearing date.

On September 10, 2020, the Commission issued a notice scheduling a Telephonic Hearing for November 10, 2020. On September 16, 2020, ALW Watson issued an Interim Order advising the parties of requirements for the hearing.

On September 10, 2020, Complainant submitted a status report.

On September 17, 2020, Attorney Curtis S. Renner filed an Entry of Appearance.

On October 15, 2020, Complainant filed an Objection and Motion for Proof of Authority to the appearance of Attorney Curtis S. Renner.

On October 16, 2020, Respondent filed a Motion to Stay Proceedings pending a final order in *Povacz v. Pa. PUC*, Docket Nos. 492 C.D. 2019, *et al.* 606 C.D. 2019, and 607 C.D. 2019 (Slip. Op. dated Oct. 8, 2020).

On November 4, 2020, the Commission entered an Order at Docket No. M-2009-2092655 staying Formal Complaint proceedings pending before the Commission involving challenges to an electric distribution company's deployment of smart meter technology as being in violation of Section 1501 of the Code.

On November 6, 2020, the Commission issued a Notice cancelling the November 19, 2020 hearing.

On November 14, 2023, the Commission entered an Order at Docket No. M-2009-2092655 lifting the stay of all Formal Complaint proceeding pending before the Commission challenging an electric distribution company's deployment of smart meter technology.

On November 29, 2023, the Commission issued a Call-In Telephonic Prehearing Conference Notice assigning the undersigned as the presiding officer.

THEREFORE,

IT IS ORDERED:

1. **DATE AND TIME OF PREHEARING CONFERENCE.** That an initial telephonic prehearing conference telephonic hearing will be held in this case on:

Friday, February 2, 2024, beginning at 10:00 a.m.

To participate in the prehearing conference, you must dial the toll-free number listed below. You will be prompted to enter a PIN number, which is also listed below. You will be asked to speak your name, press the # key, and then the telephone system will connect you to the hearing. If you have any additional participants for the prehearing conference who are participating from a separate phone, you must provide them with the telephone number and PIN Number.

Toll-free Bridge Telephone Number: **877-939-4790**

PIN Number: **65766604**

2. **FAILURE TO APPEAR.** That failure of a party to attend the initial prehearing conference, without good cause shown, shall constitute a waiver of all objections to any motions or arguments raised and to any order or ruling with respect thereto.

3. **REPRESENTATION.** If you are an individual, you may represent yourself or you may have an attorney represent you. All others, including a partnership, corporation, trust, association, or governmental agency or subdivision, must be represented an attorney licensed to practice law in Pennsylvania, or admitted *pro hac vice*.[1] And, unless you are an attorney, you may not represent someone else.

[1] 52 Pa. Code §§ 1.21 & 1.22.

4. **PREPARATION.** That parties shall review the regulations pertaining to prehearing conferences, in particular 52 Pa. Code § 5.222(d), which provides that parties and counsel will be expected to attend the conference fully prepared for useful discussion of all problems involved in the proceeding, both procedural and substantive, and fully authorized to make commitments with respect thereto. The preparation should include, among other things, advance study of all relevant materials, and advance informal communication between the participants, including requests for additional data and information, to the extent it appears feasible and desirable. Specifically, the parties shall be prepared to discuss: (a) whether Complainant still wishes to continue with the complaint, (b) issues decided by *Povacz, et al. v. Pa. Public Utility Commission*, 280 A.3d 975 (Pa. 2022) as they relate to this case and (c) potential hearing dates and planned witnesses. For your convenience, a copy of *Povacz* is included as Attachment 1.

5. **DISCOVERY.** That the parties shall conduct discovery pursuant to 52 Pa. Code §§ 5.321-5.373. We encourage the parties to cooperate and exchange information on an informal basis. The parties shall cooperate rather than engage in numerous or protracted discovery disagreements that require my participation to resolve. All motions to compel shall contain a certification by counsel setting forth the specific actions the parties have undertaken to resolve their discovery disputes informally. If a motion to compel does not contain this certification, we shall contact the parties and direct them to resolve the matter informally and provide the certification if they are unsuccessful. There are limitations on discovery and sanctions for abuse of the discovery process. 52 Pa. Code §§ 5.361, 5.371-5.372.

6. **CHANGE OF PREHEARING CONFERENCE DATE.** That a request for a change of the scheduled initial prehearing conference date shall state the agreement or opposition of other parties, and shall be submitted in writing, via email, no later than five (5) days prior to the initial prehearing conference. 52 Pa. Code § 1.15(b). My email address is callenswor@pa.gov.

7. SERVING THE PRESIDING OFFICER. You must serve the presiding officer directly with a copy of any document that you file in this proceeding. If you send the undersigned any correspondence or document, you must send a copy to all other parties. My email address is callenswor@pa.gov.

Date: December 11, 2023

/s/
Chad Allensworth
Administrative Law Judge

C-2018-3001474 - DORENE DOUGHERTY v. PENNSYLVANIA ELECTRIC CO

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280 A.3d 975
Supreme Court of Pennsylvania.

Maria POVACZ, Appellee
v.
PENNSYLVANIA PUBLIC UTILITY COMMISSION, Appellant
Laura Sunstein Murphy, Appellee
v.
Pennsylvania Public Utility Commission, Appellant
Cynthia Randall and Paul Albrecht, Appellees
v.
Pennsylvania Public Utility Commission, Appellant
Maria Povacz
v.
Pennsylvania Public Utility Commission
Appeal of: PECO Energy Company
Laura Sunstein Murphy
v.
Pennsylvania Public Utility Commission
Appeal of: PECO Energy Company
Cynthia Randall and Paul Albrecht
v.
Pennsylvania Public Utility Commission
Appeal of: PECO Energy Company
Maria Povacz, Cross Appellant
v.
Pennsylvania Public Utility Commission, Appellee
Laura Sunstein Murphy, Cross Appellant
v.
Pennsylvania Public Utility Commission, Appellee
Cynthia Randall and Paul Albrecht, Cross Appellants
v.
Pennsylvania Public Utility Commission, Appellee
Maria Povacz, Cross Appellant
v.
Pennsylvania Public Utility Commission, PECO Energy Company
Laura Sunstein Murphy, Cross Appellant
v.
Pennsylvania Public Utility Commission, PECO Energy Company
Cynthia Randall and Paul Albrecht, Cross Appellants
v.
Pennsylvania Public Utility Commission, PECO Energy Company

No. 34 MAP 2021, No. 35 MAP 2021, No. 36 MAP 2021, No. 37 MAP 2021, No. 38 MAP 2021, No. 39 MAP 2021, No. 40 MAP 2021, No. 41 MAP 2021, No. 42 MAP 2021, No. 43 MAP 2021, No. 44 MAP 2021, No. 45 MAP 2021
|
Argued: December 7, 2021
|
Decided: August 16, 2022

Synopsis

Background: Electricity consumers petitioned for review of decisions of the Pennsylvania Public Utility Commission (PUC), Nos. C-2015-2475023, C-2015-2475726, and C-2016-2537666, denying consumers' requests to be exempted from installation by energy company of wireless smart electric meters in or on their homes. Petitions were consolidated. The Commonwealth Court, Nos. 492 C.D. 2019, 606 C.D. 2019, 607 C.D. 2019, Ellen Ceisler, J., 241 A.3d 481, affirmed in part, reversed and remanded in part, and vacated and remanded in part, finding that smart meter statute did not mandate universal installation of smart meters regardless of customers' wishes and without any health-related accommodations. All parties petitioned for allowance of appeal, and review was granted.

Holdings: The Supreme Court, Nos. 34 MAP 2021 through 45 MAP 2021, Donohue, J., held that:

[1] statute requiring electric distribution companies (EDCs) to furnish smart electricity meters did not permit customers to opt out of receiving smart meters;

[2] PUC's reference to "conclusive causal connection" between utility's service and customers' health conditions was consistent with "preponderance of the evidence" standard;

[3] customers failed to meet prima facie burden to establish radio frequency (RF) emissions from smart meters caused their alleged health problems;

[4] PUC properly adjudicated claims of unsafe and unreasonable service disjunctively; and

[5] customers failed to establish utility's furnishing of smart meters constituted unreasonable service.

Affirmed in part and reversed in part.

Dougherty, J., filed opinion concurring in part and dissenting in part.

Procedural Posture(s): On Appeal; Review of Administrative Decision.

West Headnotes (37)

[1] **Statutes** Construction based on multiple factors

The plain language of a statute is the best indication of the General Assembly's intent, and where the statutory language is clear and unambiguous, courts must give effect to the plain language thereof. 1 Pa. Cons. Stat. Ann. §§ 1921(a), 1921(b).

1 Case that cites this headnote

[2] **Statutes** What constitutes ambiguity; how determined

A statute is ambiguous when there are at least two reasonable interpretations of the text.

[3] **Statutes** Context

Courts read the words of a statute in context, not in isolation, and in a manner that gives meaning to every provision.

[4] **Statutes** Absent terms; silence; omissions

When interpreting a statute, adding words or phrases to the statute in a way that changes its scope and operation is prohibited. 1 Pa. Cons. Stat. Ann. § 1923(c).

[5] **Electricity** Supply of Electricity in General

Statutory provisions governing energy efficiency and conservation (EE&C) program applied to existing electric consumer base on universal basis, and, thus, statute requiring electric distribution companies (EDCs) to furnish smart electricity meters to electric customers did not permit customers to opt out of receiving smart meters; allowing customers to reject EE&C measures would prevent EDCs from developing and complying with smart meter plans and from complying with consumption-and-demand-reduction requirements of EE&C program, and statutory framework, including provisions allowing customers with smart meters to elect money-saving services and prioritizing smart meters for new construction and for "depreciated" old-style meters, only made sense in context of universal shift to smart meter technology. 66 Pa. Cons. Stat. Ann. §§ 2802(16), 2802(17), 2806.1, 2807(f)(1), 2807(f)(2), 2807(f)(7).

2 Cases that cite this headnote

[6] **Public Utilities** Regulation of Charges

A "tariff" is a document that governs how an energy provider charges a customer for their energy usage. 66 Pa. Cons. Stat. Ann. § 102.

[7] **Electricity** Supply of Electricity in General

Provision of energy efficiency and conservation (EE&C) program statute that required electric distribution companies (EDCs) to furnish smart electric meters to customers who requested them early and agreed to pay for them did not indicate that only customers who requested smart meters would receive them; statutory framework for program, which also included provisions for installation of smart meters on new buildings and in accordance with depreciation schedule, required EDCs to develop and file plan for procurement and installation of smart meters, which involved development of massive infrastructure required to utilize smart meter technology, which involved additional costs, and which could not be done if EDCs were required to predict number of customers who would request smart meters. 66 Pa. Cons. Stat. Ann. §§ 2807(f)(1), 2807(f)(2)(i), 2807(f)(7).

[8] **Electricity** Supply of Electricity in General

Provision of energy efficiency and conservation (EE&C) program statute requiring electric distribution companies (EDCs) to install smart electric meters in newly constructed buildings did not indicate that smart meter installation was limited to new construction, and, thus, did not support customers' claim that statute permitted them to opt out of receiving smart meters; provision merely prioritized smart meters for new buildings and ensured that new buildings would receive smart meters without waste and added expense of installing old-style meters and then replacing them pursuant to applicable plan as approved by Public Utility Commission (PUC), at which point old-style meters would not yet have reached end of their useful life. 66 Pa. Cons. Stat. Ann. § 2807(f)(2)(ii).

[9] **Electricity** Supply of Electricity in General

Provision of energy efficiency and conservation (EE&C) program statute allowing customers with smart electric meters to voluntarily participate in time-of-use rates and real-time pricing did not indicate that electric customers could opt out of receiving smart meters; providing customers with optional money-saving services that worked with smart meter technology made sense only in context of mandatory system-wide installation of smart meter technology, as allowing customers to opt out of smart meter technology, such that they could not participate in optional cost-saving services, would conflict with EE&C program's purpose, and optional services, unlike mandatory smart meters, served individual customers looking to have greater control over electricity consumption, not program in general. 66 Pa. Cons. Stat. Ann. §§ 2806.1, 2807(f)(2), 2807(f)(5).

3 Cases that cite this headnote

[10] **Electricity** Supply of Electricity in General

While it is true that an electric customer need not avail himself of all aspects of smart meter technology, such as the optional time-of-use rates and pricing plans offered in the statute governing the duties of electric distribution companies (EDCs), that fact does not negate the plain language of the energy efficiency and conservation (EE&C) provisions of the Electricity Generation Customer Choice and Competition Act, which, taken as a whole, indicate that the installation of smart meters is mandatory. 66 Pa. Cons. Stat. Ann. §§ 2807(f)(2), 2807(f)(5).

[11] **Public Utilities** Presumptions in favor of order or findings of commission

A customer seeking affirmative relief from the Public Utility Commission (PUC) must prove by

a preponderance of the evidence that the named utility was responsible or accountable for the problem described in the complaint and that the offense was a violation of the Code, a PUC regulation or order, or a violation of a PUC-approved tariff. 66 Pa. Cons. Stat. Ann. §§ 332(a), 701.

2 Cases that cite this headnote

[12] Evidence Greater weight; evenly balanced evidence

To establish a claim by a "preponderance of the evidence" means to offer evidence that outweighs or is more convincing than, by even the smallest amount, the probative value of the evidence presented by the opposing party.

3 Cases that cite this headnote

[13] Electricity Supply of Electricity in General

Although the statutory provisions governing the energy efficiency and conservation (EE&C) program do not provide an electric customer with the right to opt-out of the installation of a smart meter at their residence, they may file a complaint raising a claim that installation of a smart meter violates the statute requiring every public utility to provide service that is, among other things, both safe and reasonable. 66 Pa. Cons. Stat. Ann. §§ 1501, 2806.1, 2807.

[14] Electricity Supply of Electricity in General

To carry their burden of proof on a claim that a utility's furnishing of a smart electric meter violates the statute governing the character of utility services and facilities, a customer may be required to present medical documentation and/or expert testimony demonstrating that the furnishing of a smart meter constitutes unsafe or unreasonable service under the circumstances presented. 66 Pa. Cons. Stat. Ann. §§ 1501, 2807(f)(2).

[15] Public Utilities Evidence

The burden of proof in cases before the Public Utility Commission (PUC) is preponderance of the evidence, which is the standard applied in civil suits, such as for negligence or for medical malpractice. 66 Pa. Cons. Stat. Ann. § 332(a).

[16] Public Utilities Evidence

In cases before the Public Utility Commission (PUC), including those based on claims that a utility has provided unsafe service, because the issue of causality typically involves explanations and inferences not within the range of ordinary training, knowledge, intelligence and experience, the parties submit expert testimony to support their theory of liability or their defense. 66 Pa. Cons. Stat. Ann. §§ 332(a), 1501.

[17] Public Utilities Evidence

The "preponderance of the evidence" burden of proof requires a customer claiming that a utility has provided unsafe service to prove before the Public Utility Commission (PUC) that a service or facility is, more likely than not, the cause of the problem described in their complaint. 66 Pa.

Cons. Stat. Ann. §§ 332(a), 1501.

[18] **Electricity** Supply of Electricity in General

To support a claim that an electric distribution company (EDC) has provided unsafe service by installing smart electric meters that give off dangerous radio frequency (RF) emissions, a customer must present (1) expert opinion rendered to a reasonable degree of scientific certainty that smart meters emit RFs and that RF emissions cause adverse health effects and (2) expert opinion rendered to a reasonable degree of medical certainty that RF emissions from the smart meters, either alone or cumulative to other sources of RF emissions, caused the customer harm. 66 Pa. Cons. Stat. Ann. §§ 332(a), 1501.

4 Cases that cite this headnote

[19] **Electricity** Supply of Electricity in General

Once a customer who claims, before the Public Utility Commission (PUC), that a utility has provided unsafe service by installing a smart electric meter that generates radio frequency (RF) emissions with adverse health effects has provided expert opinion that smart meters emit RFs, that RF emissions cause adverse health effects, and that RF emissions from the smart meter at issue caused harm to the customer, the utility may then defend by providing scientific and/or medical expert testimony that, within a reasonable degree of certainty, the RF emissions from smart meters did not cause the alleged harm; the fact finder must then weigh the evidence and decide whether it is more likely than not that the smart meter causes harm to the customer. 66 Pa. Cons. Stat. Ann. §§ 332(a), 1501.

4 Cases that cite this headnote

[20] **Public Utilities** Evidence

A "conclusive causal connection" between a utility's service or facility and the harm supporting a customer's claim before the Public Utility Commission (PUC) of unsafe service means that the proffered evidence must support the conclusion that a causal connection existed between a service or facility and the alleged harm; it is not possible for evidence that is inconclusive to be sufficient to meet the "preponderance of the evidence" standard of proof. 66 Pa. Cons. Stat. Ann. §§ 332(a), 1501.

1 Case that cites this headnote

[21] **Public Utilities** Evidence

In the context of evidence proffered to support a claim of unsafe utility service before the Public Utility Commission (PUC), "inconclusive" means that the evidence does not lead to a conclusion of a definite result one way or the other. 66 Pa. Cons. Stat. Ann. §§ 332(a), 1501.

[22] **Evidence** Greater weight; evenly balanced evidence

While the "preponderance of the evidence" standard is not stringent, it does require that the plaintiff's evidence ever so slightly, as with the weight of a feather, supports the plaintiff's contention; evidence that does not support a conclusion or is inconclusive cannot meet that minimal burden.

1 Case that cites this headnote

[23] **Public Utilities** Evidence

Where scientific evidence is required to establish the safety of a utility's service or facility before the Public Utility Commission (PUC), use of the evidentiary standard of "conclusive causal connection" to assess the evidence is correct. 66 Pa. Cons. Stat. Ann. §§ 332(a), 1501.

[24] **Public Utilities** Evidence

The evidence proffered by a utility customer in support of a claim before the Public Utility Commission (PUC) of unsafe service need not be based on absolute certainty, thereby removing all doubt that a factual assertion is correct; however, evidence of a mere possibility that harm could result is never sufficient to meet a "preponderance of the evidence" standard. 66 Pa. Cons. Stat. Ann. §§ 332(a), 1501.

[25] **Electricity** Supply of Electricity in General

On their claim before Public Utility Commission (PUC) that utility's installation of smart electric meters at their homes caused adverse health effects, customers failed to meet their prima facie burden to establish that utility was responsible or accountable for customers' alleged health problems relating to electromagnetic hypersensitivity syndrome (EHS); customers' biophysics expert admitted that customers' self-diagnoses of EHS were insufficient to establish customers had EHS and that there was no evidence exposure to radio frequency (RF) emissions from smart meters could cause individualized injuries alleged by customers, and inconclusive nature of scientific studies as to safety of smart meters did not weigh in favor of finding RF emissions actually caused customers' symptoms. 66 Pa. Cons. Stat. Ann. §§ 332(a), 1501.

[26] **Electricity** Supply of Electricity in General

Whether a causal connection exists between radio frequency (RF) emissions and adverse health effects, for purposes of determining whether expert evidence is necessary to support a claim before the Public Utility Commission (PUC) that a utility's installation of smart electric meters constitutes unsafe service, involves explanations and inferences not within the range of ordinary training, knowledge, intelligence and experience. 66 Pa. Cons. Stat. Ann. § 1501.

[27] **Electricity** Supply of Electricity in General

The amendments to the Electricity Generation Customer Choice and Competition Act that establish the energy efficiency and conservation (EE&C) program do not allow health accommodations to customers with respect to the installation of smart electric meters; the amendments do not even speak to accommodations. 66 Pa. Cons. Stat. Ann. §§ 2803, 2806.1, 2807, 2811, 2813, 2814, 2815.

[28] **Electricity** Duty to supply, conditions, and discrimination

It would always be unreasonable for a utility to provide electric service that is unsafe, but safe service may also be unreasonable. 66 Pa. Cons. Stat. Ann. § 1501.

1 Case that cites this headnote

[29] **Electricity** Supply of Electricity in General

In determining whether utility's installation of smart electric meters at customers' homes constituted unreasonable service, Public Utility Commission (PUC) did not require customers to prove that utility provided unsafe service, but, rather, properly separated customers' claims that utility provided unsafe service and unreasonable service, even if PUC misstated standard of proof for unreasonable-service claim, where PUC accepted determinations of ALJ, who applied correct standard in reviewing claim, and PUC referred to correct standard, which treated safety and reasonableness as separate, when discussing decision in prior case. 66 Pa. Cons. Stat. Ann. § 1501.

[30] **Public Utilities** Evidence

The applicable standard of proof for a claim before the Public Utility Commission (PUC) under the utility statute governing the character of service and facilities requires a customer to demonstrate by a preponderance of the evidence based on the totality of the circumstances that the furnishing of a service or facility is unsafe or unreasonable, disjunctively. 66 Pa. Cons. Stat. Ann. § 1501.

[31] **Electricity** Supply of Electricity in General

Electric customers failed to establish before Public Utility Commission (PUC) that utility's furnishing of smart electric meters at their homes constituted unreasonable service, where customers based their unreasonable-service claim on allegations that smart meters emitted radio frequency (RF) emissions that caused wide array of health symptoms, including those related to electromagnetic hypersensitivity syndrome (EHS), but scientific research and studies regarding effects of RF emissions on human health were inconclusive, customers' biophysics expert admitted no evidence indicated utility's installation of smart meters caused customers' symptoms, and customers did not offer evidence that smart meters were unreasonable on non-health-related grounds. 66 Pa. Cons. Stat. Ann. § 1501.

1 Case that cites this headnote

[32] **Electricity** Supply of Electricity in General

Although an electric customer may not prevent the installation of a smart meter under the energy efficiency and conservation (EE&C) program, they can file a claim that smart meter technology service is unsafe and/or unreasonable; if the customer establishes by a preponderance of the evidence based on the totality of the circumstances that smart meter service violates the statute prohibiting unsafe or unreasonable utility service, they are entitled to an accommodation to the extent allowed by the statutes governing the EE&C program and by the utility's tariff. 66 Pa. Cons. Stat. Ann. §§ 332(a), 1501, 2807(f)(2).

[33] **Electricity** Supply of Electricity in General

An electric distribution company (EDC) cannot be required to provide an accommodation to a customer regarding the installation of a smart electric meter without the finding of a violation of the statute prohibiting unsafe or unreasonable utility service. 66 Pa. Cons. Stat. Ann. § 1501, 2807(f)(2).

Ann. §§ 332(a), 1501.

[34] **Electricity**Supply of Electricity in General

The amendments to the Electricity Generation Customer Choice and Competition Act that adopt the energy efficiency and conservation (EE&C) program are mandatory, requiring the system-wide installation of smart meter technology by electric distribution companies (EDCs), including smart meters. 66 Pa. Cons. Stat. Ann. §§ 2803, 2806.1, 2807, 2811, 2813, 2814, 2815.

[35] **Electricity**Supply of Electricity in General

Although electric customers are not entitled to opt out of having a smart meter installed at their home, the Public Utility Commission (PUC) is authorized to determine and prescribe a remedy to individual customers who establish by a preponderance of the evidence that furnishing smart meter technology to them is unsafe or unreasonable. 66 Pa. Cons. Stat. Ann. §§ 332(a), 1501, 2807(f)(2).

1 Case that cites this headnote

[36] **Electricity**Duty to supply, conditions, and discrimination

When the Public Utility Commission (PUC) determines whether a customer alleging unsafe utility service has met their burden to show an electric utility's services caused adverse health effects, reference to a "preponderance of the evidence" burden of proof is not inconsistent with the use of a "conclusive causal connection" evidentiary standard to assess whether expert evidence meets that burden. 66 Pa. Cons. Stat.

[37] **Public Utilities**Evidence

The burden for proving a utility has provided unsafe service before the Public Utility Commission (PUC) is the same as for proving the utility has provided unreasonable service, where the challenge is based on the effect on the health of the customer. 66 Pa. Cons. Stat. Ann. § 1501.

***981** Appeal from the Order of the Commonwealth Court at No. 492 CD 2019 dated October 8, 2020 which Affirmed/Reversed/Remanded the Order of the PUC at Nos. C-2015-2475023 dated March 28, 2019

Appeal from the Order of the Commonwealth Court at No. 606 CD 2019 dated October 8, 2020 which Affirmed/Reversed/Remanded the Order of the PUC at No. C-2015-2475726 dated May 9, 2019

Appeal from the Order of the Commonwealth Court at No. 607 CD 2019 dated October 8, 2020 which Affirmed/Reversed/Remanded the Order of the PUC at No. C-2016-2537666 dated May 9, 2019

Appeal from the Order of the Commonwealth Court at No. 607 CD 2019 dated October 8, 2020 which Affirmed/Reversed/Remanded the Order of the PUC at No. C-2016-2537666 dated March 28, 2019

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OPINION

JUSTICE DONOHUE

***982** In 2008, the General Assembly enacted Act 129[1] as part of the Pennsylvania Public Utility Code. Act 129 amended the Electricity Generation Customer Choice and Competition Act[2] for the purpose of promoting an energy efficiency and conservation ("EE&C") program in Pennsylvania.[3] This case centers around the following provision in Act 129 that directs electric distribution companies ("EDCs")[4] ***983** in Pennsylvania to "furnish" smart electric technology to their customers:

> **(f) Smart meter technology and time of use rates.--**
>
> (2) 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. § 2807(f)(2).

Act 129 defines "smart meter technology" as follows:

> [T]he term "smart meter technology" means technology, including metering technology and network communications technology capable of bidirectional communication, that records electricity usage on at least an hourly basis, including related electric distribution system upgrades to enable the technology. The technology shall provide customers with direct access to and use of price and consumption information. The technology shall also:
>
> (1) Directly provide customers with information on their hourly consumption.
>
> (2) Enable time-of-use rates and real-time price programs.
>
> (3) Effectively support the automatic control of the customer's electricity consumption by one or more of the following as selected by the customer:
>
> (i) the customer;
>
> (ii) the customer's utility; or
>
> (iii) a third party engaged by the customer or the customer's utility.

66 Pa.C.S. § 2807(g). Relevant to this case, smart meter technology includes advanced metering infrastructure meters, also known as wireless smart meters ("smart meters").

Several electric customers have instituted legal action against the Public Utility Commission ("PUC") to prevent the installation of smart meters at their homes. It is their contention that a customer has the ability to opt-out of the installation of smart meters by EDCs. They also claim that smart meters cause health problems and their installation constitutes unsafe or unreasonable service under Section 1501 of the Public Utility Code ("Code"), which provides that

> [e]very public utility shall furnish and maintain adequate, efficient, safe, and reasonable service and facilities, and shall make all such repairs, changes, alterations, substitutions, extensions, and improvements in or to such service and facilities as shall be necessary or proper for the accommodation, convenience, and safety of its patrons, employees, and the public....

66 Pa.C.S. § 1501 ("Section 1501").

For the reasons set forth herein, we conclude that Act 129 does mandate that EDCs furnish smart meters to all electric customers within an electric distribution service area and does not provide electric customers the ability to opt out of having a smart meter installed. An electric customer with concerns about smart meters may seek an accommodation from the PUC or EDC,[5] but to obtain one the customer ***984** must establish by a preponderance of the evidence that installation of a smart meter violates Section 1501. In this case, the electric customers did not prove that installation of a smart meter at their premises violates Section 1501; therefore, the PUC was not required to prescribe any remedial action. Having so concluded, we reverse the Commonwealth Court's ruling that Act 129 does not mandate the installation of smart meters. Additionally, we clarify the use of the conclusive causal connection standard for proving a violation under Section 1501 and hold that a preponderance of the evidence is the standard that applies to claims brought under Section 1501. Finally, we reverse the Commonwealth Court's remand of the case to the PUC.

I. BACKGROUND

In 2009, the PUC articulated its belief "that it was the intent of the General Assembly [in Act 129] to require all covered EDCs to deploy smart meters system-wide." Implementation Order, 104 Pa.P.U.C. 263 (Pa. P.U.C. June 24, 2009), at 14. The PUC derived this interpretation from the requirement in Section 2807(f)(2)(iii) that EDCs "shall furnish smart meter technology ... in accordance with a depreciation schedule not to exceed 15 years." *Id.* Accordingly, the PUC ordered Pennsylvania's EDCs to develop smart meter technology procurement and installation plans and to furnish smart meter technology to all electric customers, including smart meters, with no option to "opt-out" of the installation. *Id.* at 34. The PUC has maintained its position regarding the system-wide installation of smart meters since entering the Implementation Order. *See, e.g.*, *Theresa Gavin v. PECO Energy Co.*, C-2012-2325258, 2012 WL 6641346, at *1 (Pa. P.U.C. Nov. 26, 2012) (interpreting 66 Pa.C.S. § 2807(f)(2) "as requiring large electric companies to employ smart meters system-wide, and as providing no option for customers to 'opt out' of this installation"); *Frompovich v. PECO*, C-2017-2474602, 2018 WL 2149249 (Pa. P.U.C. May 3, 2018) (same); *Jon Allen Hribal v. West Penn Power Co.*, C-2019-3008050, 2020 WL 5877004 (Pa. P.U.C. Sept. 22, 2020) (same).

PECO Energy Company ("PECO," formerly the Philadelphia Electric Company) is a privately owned utility that distributes electricity and is the default service provider to Maria Povacz, Laura Sunstein Murphy, and Cynthia Randall and Paul Albrecht (collectively, "Customers"). Following entry of the Implementation Order, PECO informed Customers that it would be replacing their automatic meter reading meters, also known as Legacy meters, with smart meters. Customers notified PECO that they would not allow installation of a smart meter, claiming that they are hypersensitive to the radiofrequency electromagnetic energy that smart meters emit ("RF emissions"). In response, PECO advised Customers that their electricity would be shut off unless they allowed the installation of a smart meter.

Customers filed separate complaints with the PUC, invoking the "safe and reasonable standard" of Section 1501 and seeking exemption from the installation of smart meters. They presented scientific research studies on RF emissions and evidence from their physicians demonstrating that they had health issues that could be exacerbated by exposure to RF emissions. PECO filed preliminary objections to the complaints. An administrative law judge ***985** ("ALJ") sustained PECO's preliminary objections in part, finding that opting out of the smart meter installation was not an available legal remedy. However, the ALJ advanced Customers' complaints for determinations of whether, in light of their purported health issues, they were entitled to accommodations under Section 1501. After a series of hearings, the ALJ found that Maria Povacz had failed to show that RF emissions from a smart meter "will cause or is causing" her health problems; however, the ALJ opined, the preponderance of the evidence suggests that some aspect of the smart meter other than RF emissions "is inimitably perceptible by and contrary to the health and well-being" of Provacz. Povacz Initial Decision, No. C-2015-2475023, at 28. Thus, the ALJ ordered PECO, at

PECO's expense, to move Povacz's smart meter away from her house. The ALJ denied relief to the other complainants.

Customers filed exceptions to the ALJ's evidentiary rulings with the PUC, and PECO filed one exception related to the ALJ's determination that "some other aspect" of the smart meter affected Povacz's health. In three lengthy decisions,[6] largely centered on the expert evidence introduced by Customers regarding the harm purportedly caused by RF emissions that is discussed at length in Section C infra, the PUC overruled Customers' exceptions and granted PECO's exception, thereby denying relief to Customers.[7] Customers and the PUC appealed to the Commonwealth Court, and PECO intervened.

Upon consideration of the consolidated petitions for review, the Commonwealth Court affirmed in part, reversed and remanded in part, and vacated and remanded in part. *Povacz v. Pa. Pub. Util. Comm'n*, 241 A.3d 481 (Pa. Commw. 2020).[8] In doing so, the Commonwealth Court was persuaded by Customers' initial claims that, contrary to the PUC's interpretation, Act 129 does not mandate the universal installation of smart meters, regardless of customers' wishes, and that the PUC had incorrectly concluded that it lacked authority to grant Customers an accommodation based on their health concerns.

The Commonwealth Court acknowledged that "Act 129 mandates that an electric distribution company, such as PECO, shall furnish smart meter technology ... in accordance with a depreciation schedule not to exceed 15 years." ***986** *Povacz*, 241 A.3d at 488 (quoting 66 Pa.C.S. § 2807(f)(2)(iii)). The court noted, however, that nothing in Act 129 "affirmatively mandates that customers must allow installation of wireless smart meters" and "wireless meters are not mentioned at all in the statute." *Id.* at 488 & n.11 (internal quotation marks omitted). Resorting to the dictionary definition of "furnish," which means "to provide with what is needed; ... supply, give," the court determined that the definition of "furnish" does not imply that a recipient is forced to accept that which is offered. *Id.* at 488 (quoting WEBSTER'S NINTH NEW COLLEGIATE DICTIONARY 499 (1985)). In short, the court opined that, although Act 129 requires an EDC to furnish a smart meter, nothing in the language of Act 129 requires a customer to accept the smart meter and, thereby endure involuntary exposure to RF emissions. Therefore, the court concluded, "Act 129 does not preclude either PECO or the PUC from accommodating a customer's request to have RF emissions from that customer's meter turned off, to have a smart meter relocated to a point remote from the customer's house,[9] or some other reasonable accommodation." *Id.* at 490. Rather than grant Customers relief in the form of a system-wide "opt-out," the Commonwealth Court reversed that portion of the PUC's decisions in which it purportedly found that it lacked authority to accommodate a request to avoid RF emissions. The court remanded to the PUC "to allow consideration of [Customers'] requests for accommodations, and a determination of what, if any, accommodations are appropriate[.]" *Id.*

Turning to Customers' contentions that electricity service must be both safe and reasonable pursuant to Section 1501 of the Code and that the PUC erred in requiring Customers to prove that smart meters were both unsafe and unreasonable, the Commonwealth Court opined that the PUC had not set forth a consistent standard. The court highlighted that, at one point in its decisions, the PUC recognized the ALJ's role as determining "whether use of a smart meter...will constitute unsafe **or** unreasonable service." *Povacz*, 241 A.3d at 490-91 (citing *Maria Povacz v. PECO Energy Co.*, No. C-2015-2475023, at 15, 27, 2019 WL 1506827 (Pa. P.U.C. Mar. 28, 2019)) (emphasis in original). Elsewhere in its decisions, however, the PUC required proof by a preponderance of the evidence that installation of a smart meter constitutes "unsafe **and** unreasonable service." *Id.* at 491 (citing *Povacz*, No. C-2015-2475023, at 15, 27, 2019 WL 1506827) (emphasis in original). Given what the court perceived as a possible error by the PUC in applying a conjunctive burden of proof, the Commonwealth Court vacated and remanded for application of the "correct disjunctive burden of proof." *Id.*

The Commonwealth Court next addressed Customers' claim that mandatory installation of smart meters at their homes is unreasonable considering their fears concerning their health, and because no compelling reason exists to mandate that they be exposed involuntarily to RF emissions. Initially, the court repeated its conclusion that Act 129 does not mandate Customers' acceptance of smart meters, and thus, does not bar accommodations for Customers' health concerns. Then, the court noted that the record contained no evidence that PECO would incur unreasonable costs in accommodating Customers' ***987** requests and that, if Customers were granted relief, "it was difficult to imagine that large numbers of other PECO customers" would approach the utility with requests to avoid RF emissions by refusing installation of a smart meter. *Povacz*, 241 A.3d at 492. According to the court, even if the actual risk to their health was uncertain, Customers' averment that the burden of forced exposure to RF emissions was greater than the burden on PECO in providing accommodation was "well taken." *Id.* As such,

the court instructed the PUC to consider on remand that "[l]ogic, safety concerns, and fairness require some balancing of the parties' interests." *Id.*

Regarding Customers' claim that the PUC improperly required them to prove by a preponderance of the evidence that exposure to RF emissions would "cause, contribute to, or exacerbate their health conditions," the Commonwealth Court found persuasive the reasoning of *Naperville Smart Meter Awareness v. City of Naperville*, No. 11 C 9299, 2013 WL 1196580 (N.D. Ill. 2013) (*Naperville I*). In *Naperville I*, the Illinois district court addressed the same issue Customers raise here and found that the plaintiffs' claims would not have been viable because, like Customers, the *Naperville I* plaintiffs based their claims on a theory that RF emissions "have the potential to be harmful." *Povacz*, 241 A.3d at 493 (quoting *Naperville I*, 2013 WL 1196580, at *11). The *Naperville I* court opined that, even assuming as true that smart meter RF emissions could cause harm, "the bare allegation that it is unknown whether plaintiffs are actually being harmed by the level of RF waves emitted from one smart meter is insufficient to raise a claim for relief." *Id.* at 494 (quoting *Naperville I*, 2013 WL 1196580, at *11).

Echoing *Naperville I*, the Commonwealth Court determined that the PUC applied an appropriate burden in requiring Customers to prove a "conclusive causal connection between RF exposure and those adverse health effects—a burden that cannot be satisfied by research and studies that are inconclusive." *Povacz*, 241 A.3d at 493. The court explained that this burden of proof extends to claims seeking to prevent harm, requiring proponents of such claims to demonstrate "by a preponderance of the evidence that the utility's proposed conduct would create a proven exposure to harm." *Id.* (internal quotation marks omitted). Having endorsed the PUC's "conclusive causal connection" standard, the Commonwealth Court was unwilling to revisit the PUC's findings of fact regarding Customers' claims of adverse health conditions, which the court found were based on substantial evidence. Thus, the court affirmed the PUC's finding that Customers failed to prove that PECO's smart meter installation constitutes unsafe service, i.e., Customers did not prove a conclusive causal connection between RF emissions and adverse human health effects or demonstrate by a preponderance of the evidence that the utility's conduct creates a proven exposure to harm.

Judge Crompton filed a concurring and dissenting opinion, challenging only the majority's conclusion that Act 129 does not require every customer to accept a smart meter.[10] Judge Crompton opined that, simply because Act 129 gives customers a degree of control over, inter alia, pricing options and meter data, it "does not mean the installation of smart meters may be interpreted to be optional." *Povacz*, 241 A.3d at 497 (Crompton, J., concurring and dissenting). He concluded that the General Assembly unambiguously intended for mandatory installation of smart meters ***988** based upon the absence of an opt-out provision in the Act. Also, he observed that the electric utilities had expended "substantial resources" for over a decade "in reliance on the certainty of the meaning of the Act to fulfill the State mandate" and in the absence of any action by the General Assembly to correct it. *Id.*

Noting that it is not the court's role to insert an opt-out provision in Act 129 where none existed, Judge Crompton nevertheless agreed with the majority that a remand was appropriate to allow Customers the opportunity to request accommodation by demonstrating that mandatory smart meter installation was unreasonable because of the uncertainty of the PUC's application of the standard in Section 1501. *Cf. Povacz*, 241 A.3d at 499 (Crompton, J., concurring and dissenting) (suggesting that the "PUC was not confused about the standard by which it should measure whether the smart meter fulfills the requirement of Section 1501," but it is unclear whether it properly applied the standard). On remand, he opined, the PUC should consider only the evidence of record in determining whether the installation of a smart meter would be unreasonable as to Customers under Section 1501.

All parties petitioned for allowance of appeal, and we granted review of the following questions:

619-621 MAL 2020 / 34-36 MAP 2021 (PUC's Appeal)

(a) Did the Commonwealth Court commit an error of law by concluding that the statute does not mandate universal deployment of smart meters, which is contrary to the plain and unambiguous statutory language of Section 2807(f)(2) of the Pennsylvania Public Utility Code, 66 Pa.C.S. § 2807(f)(2)?

(b) On a question of first impression involving Act 129's smart meter deployment mandate, did the Commonwealth Court abuse its discretion by interpreting the Public Utility Code in a manner that violated the rules of statutory construction and disregarded the legislative intent of the General Assembly?

(c) Did the Commonwealth Court commit an error of law by articulating a burden of proof under Section

1501 of the Pennsylvania Public Utility Code, 66 Pa.C.S. § 1501, that could result in a utility being found in violation of the Code without evidence of harm?

622-624 MAL 2020 / 37-39 MAP 2021 (PECO's Appeal)

(d) Did the Court err when it concluded that Act 129 allows individual [Customers] to reject or "opt-out" of smart meter technology, on the grounds that Act 129 requires that "Electric distribution companies shall furnish smart meter technology," Webster's Dictionary defines "furnish" as meaning "to provide with what is needed; ... supply, give," and that this definition of "furnish" does not imply that the recipient is forced to accept that which is offered?

663-668 MAL 2020 / 40-45 MAP 2021 ([Customers'] Cross-Appeals)

(e) Did the lower court err as a matter of law by upholding the PUC's interpretation of Section 1501 of the Public Utility Code as requiring as to issues of safety proof of a "conclusive causal connection" between RF exposure from smart meters and harm to Petitioners, when this heavy and unprecedented burden is not compelled by the language of the statute, where the statutory and dictionary definition of the ***989** word "safe" includes protection from the possibility of harm, not just the conclusively proven certainty of harm, and where imposition of this burden would render it impossible for Petitioners to prove their cases?

Povacz v. Pa. Pub. Util. Comm'n, —— Pa. ——, 253 A.3d 220 (2021) (per curiam). Issues (a), (b), and (d) collapse into one straightforward question: Does Act 129 mandate the system-wide installation of smart meters? Issues (c) and (e) relate to the burden of proof for establishing a violation of Section 1501.

II. Does Act 129 Mandate the Systemwide Installation of Smart Meters?

A. Arguments of the Parties

Designated as appellants, the PUC and PECO ("PUC-PECO")[11] assert that the Commonwealth Court erred in holding that Act 129 does not mandate the system-wide installation of smart meters. PUC-PECO describe the Commonwealth Court's ruling as contrary to the plain and unambiguous statutory language of Act 129. As statutory support for their claim that the General Assembly intended for the mandatory, system-wide installation of smart meters, PUC-PECO cite the language of Act 129: "Electric distribution companies shall furnish smart meter technology...." 66 Pa.C.S. § 2807(f)(2) (emphasis supplied). According to PUC-PECO, the Commonwealth Court took the word "furnish" out of context and ignored the mandatory nature of the word "shall."[12] PUC Brief at 18. More specifically, they fault the court for sua sponte construing the term "furnish" to mean "offer," which is subject to a customer's right to refuse that which is offered. *Id.* at 39. In support, they argue that the meaning of "furnish" is discernable from the use of that term elsewhere in the Code. PECO Brief at 42–46 (citing definitions of "facilities," "rates," and "service" in 66 Pa.C.S. § 102,[13] and ***990** 66 Pa.C.S. §§ 1101, 1102, 1501, 1507).[14] Consequently, they continue, the court improperly inserted a blanket opt-out exemption that the General Assembly did not include in Section 2807(f).

PUC-PECO further contend that the Commonwealth Court's interpretation of Act 129 violates the rules of statutory construction by failing to give effect to all provisions of Act 129, and it leads to an absurd result given the facts that Act 129 contemplates the use of smart meter technology to reduce electric consumption in the Commonwealth and that allowing customer ***991** choice would result in significant additional costs to electric customers. Specifically, PUC-PECO claim that the Commonwealth Court failed to give effect to the language in subsection (f)(2)(iii), which requires EDCs to furnish smart meter technology "[i]n accordance with a depreciation schedule not to exceed 15 years." PUC Brief at 34 (quoting 66 Pa.C.S. § 2807(f)(2)(iii)). According to PUC-PECO, subsection (f)(2)(iii) indicates a clear desire by the General Assembly that every customer not encompassed by subsections (f)(2)(i) (consumers who request and pay for a smart meter in advance of the installation of smart meters within their service area) and (f)(2)(ii) (new building construction) shall receive a smart meter. *Id.* at 35–36 (citing Implementation Order, 104 Pa.P.U.C. 263, at 9 (providing grace period for smart meter network design, development, and installation after which EDCs must initiate system-wide deployment of smart meters)). Complaining that the Commonwealth Court abused its discretion by ignoring the use of "furnish" in other parts of the Code; adding language to Act 129; imputing statutory language unrelated to smart meter deployment; and citing irrelevant extra-record material, PUC-PECO fault the court for reaching an erroneous conclusion that electric customers do not have

to accept smart meter technology. PUC Brief at 37–46; PECO Brief at 42–50.

In contrast, Customers agree with the Commonwealth Court's determination that the language of Act 129 does not facially require every customer to accept a smart meter and endure involuntary exposure to RF emissions. Randall/Albrecht Brief at 37; Povacz/Murphy Brief at 11. They reason that, taken together, the three subsections of Section 2807(f)(2) simply require EDCs to make smart meter technology available on a fifteen-year depreciation schedule to customers who request and pay for a smart meter and to new building construction customers. Randall/Albrecht at 38–39; Povacz/Murphy at 13–14. As for the phrase "shall furnish" used in Section 2807(f)(2), Customers argue that "shall" refers only to the three methods listed in (f)(2)(i)–(iii) by which EDCs are to furnish smart meter technology and that "furnish" implies an ability to reject a smart meter rather than be forced to have one installed against their will. Randall/Albrecht Brief at 38, 40–41; Povacz/Murphy Brief at 14, 16.

B. Analysis

[1] [2] [3] [4]When interpreting a statute, we strive to ascertain the intent of the General Assembly in enacting the law under review. 1 Pa.C.S. § 1921(a); *Phila. Gas Works v. Pa. Pub. Util. Comm'n*, —— Pa. ——, 249 A.3d 963, 970 (2021), *reargument granted in part*, —— Pa. ——, 256 A.3d 1092 (2021). The plain language of a statute is the best indication of the General Assembly's intent, and where the statutory language is clear and unambiguous, we must give effect to the plain language thereof. 1 Pa.C.S. § 1921(b); *Phila. Gas Works*, 249 A.3d at 970. A statute is ambiguous when there are at least two reasonable interpretations of the text. *A.S. v. Pa. State Police*, 636 Pa. 403, 143 A.3d 896, 903 (2016). We read the words of a statute in context, not in isolation, and in a manner that gives meaning to every provision. *Phila. Gas Works*, 249 A.3d at 970. Adding words or phrases to a statute in a way that changes its scope and operation is prohibited. 1 Pa.C.S. § 1923(c); *Pa. Sch. Bds. Ass'n, Inc. v. Pub. Sch. Emps. Ret. Bd.*, 580 Pa. 610, 863 A.2d 432, 439 (2004).

[5]Inconsistently, the Commonwealth Court reasoned that, although Act 129 mandates the installation of smart meters, "nothing in the statutory language affirmatively mandates that customers must allow ***992** installation of wireless smart meters." *Povacz*, 241 A.3d at 488. Thus, the Commonwealth Court concluded that the PUC erred in finding that PECO may not or need not offer an accommodation to Customers in the form of relocating the smart meter, providing a wired smart meter, or turning off a smart meter's the RF emissions. *Id.* at 490, 492. Our comprehensive reading of Act 129 leads us to conclude that the statute is not ambiguous and that Section 2807(f)(2) imposes a mandate on EDCs to furnish smart meter technology to all electric customers within an electric distribution service area, regardless of a customer's preference. In reaching this conclusion, we have considered Section 2807(f)(2) in its context as the implementation provision of Act 129.

We reiterate that Act 129 was an amendment to the Electricity Generation Customer Choice and Competition Act ("Competition Act"). According to the General Assembly, the purpose of the Competition Act was to deregulate the electric industry and to establish "standards and procedures" to create "direct access by retail customers" to "a competitive market for the generation and sale or purchase of electricity" as of January 1, 2001. 66 Pa.C.S. §§ 2802(12), (13), and 2806(a). Because reliable electric service "is of the utmost importance to the health, safety and welfare of the citizens" of Pennsylvania, the General Assembly stated that restructuring the electric industry "should ensure the reliability of the interconnected electric system by maintaining the efficiency of the transmission and distribution system." *Id.* § 2802(12). To that end, the General Assembly declared:

> It is in the public interest for the transmission and distribution of electricity to continue to be regulated as a natural monopoly subject to the jurisdiction and active supervision of the [PUC]. [EDCs] should continue to be the provider of last resort in order to ensure the availability of **universal electric service in this Commonwealth** unless another provider of last resort is approved by the Commission.

Id. § 2802(16) (emphasis supplied). In short, enactment of the Competition Act was an expression of the General Assembly's two-fold intent. First, the General Assembly wanted to allow customers to choose their electric generation vendor. Second, it wanted to keep Pennsylvania's electric transmission and distribution system subject to the PUC's jurisdiction and supervision

to promote the public purpose by "continuing universal service and energy conservations policies, protections and services," and permitting "full recovery of such costs ... through a nonbypassable rate mechanism." *Id.* § 2802(17).

On the tails of deregulating electric generation through the Competition Act, the General Assembly sought "to reduce energy demand and consumption within the service territory of each electric distribution company" in Pennsylvania. 66 Pa.C.S. § 2806.1(a). To that end, the General Assembly amended the Competition Act with Act 129. Act 129 directed the PUC to "adopt an energy efficiency and conservation ["EE&C"] program to require [EDCs] to adopt and implement cost-effective energy efficiency and conservation plans to reduce energy demand and consumption" within their service territories. *Id.* Accordingly, EDCs developed and filed for PUC-approval plans that included a variety of EE&C measures[15] that met the requirements ***993** of the EE&C program, including the requirements for the reduction in consumption and demand set forth in subsections (c) and (d) of Section 2806.1. *Id.* § 2806.1(a)(5), (b)(1). Pursuant to a PUC-approved plan, the electric consumption "of the retail customers of each electric distribution company" was to be reduced by a minimum of three percent by May 31, 2013, and the demand "of the retail customers of each electric distribution company" was to be reduced by a minimum of 4.5 percent by May 31, 2013. *Id.* § 2806.1(c), (d). As to reducing demand, the General Assembly defined "peak demand" as "[t]he highest electrical requirement occurring during a specified period. For an electric distribution company, the term shall mean **the sum of the metered consumption for all retail customers** over that period." *Id.* § 2806.1(m) (emphasis supplied). Moreover, the EE&C program allowed EDCs to "recover on a full and current basis from customers ... all reasonable and prudent costs incurred in the provision or management" of an EE&C plan. *Id.* § 2806.1(k).

Section 2806.1 expresses the General Assembly's intent to create the EE&C program to include electric customers; hence the need for a plan based on a fixed existing customer base. *See* 66 Pa.C.S. § 2807(f)(1) (requiring EDCs to develop plan for implementation and deployment of smart meter technology). If, as argued by Customers, retail customers could choose the type of EE&C measures they prefer, including the type of electric meter, then EDCs could not comply with the requirements of the EE&C program or their individual PUC-approved plans,[16] and the General Assembly's goal of reducing energy consumption and demand in Pennsylvania would not be realized.

In support of the EE&C program created by Section 2806.1 of Act 129, the General Assembly authorized the PUC to assign specific duties to EDCs. *See* 66 Pa.C.S. § 2807 (Duties of electric distribution companies). The PUC first directed EDCs to "provide safe and reliable service to all customers connected to the [distribution] system." *Id.* § 2807(a). The fact that a customer must be connected to the distribution system to obtain electric service confirms that EDCs operate on a universal basis in Pennsylvania. Although EDCs provide electric service to individual homes, they do not tailor electric service to an individual's preferences. Rather, subject to the PUC's approval, EDCs retain control over the distribution of electric service to all retail customers within a distribution service area.[17]

***994** [6]Indeed, pursuant to PECO's tariff,[18] a consumer who wants electric service contractually agrees to the installation of a meter that is designed to capture their electricity usage. *See* Tariff (Electric) No. 4, 1/1/2010, §§ 1.3 (Application); 1.5 (Rules and Regulations); 4.2 (Service Contract); 3.2 (Meter Location). PECO chooses the type of meter, owns the meters it installs, and has a right to access private property to test, maintain, and replace its meters. *See id.* §§ 6.4 (Meters and Transformers); 10.1 (Company Maintenance); 14.1 (Supply of Meters). PECO may terminate electric service to customers who refuse access to an electric meter. *Id.* § 18.3 (TERMINATION FOR CAUSE).[19] In short, the authority to select and install a certain type of electric meter rests solely with EDCs, in this case PECO, not the customer. In compliance with Act 129, PECO selected smart meters. Thus, Customers' suggestion that the installation of smart meters is subject to customer choice is not supported by the statute.

The PUC also directed EDCs to "file a smart meter technology procurement and installation plan" ("Procurement and Installation Plan") "[w]ithin nine months after the effective date" of Act 129, i.e., by September 14, 2009, for approval by the PUC. 66 Pa.C.S. §§ 2806.1(a), 2807(f)(1). It is apparent that in order to develop and file its Procurement and Installation plan, an EDC would need to rely on its existing customer base, not parts of it.[20]

A Procurement and Installation Plan had to "describe the smart meter technologies ***995** the [EDC] propose[d] to install in accordance with paragraph [(f)(2)])." 66 Pa.C.S. § 2807(f)(1). Paragraph (f)(2) is the provision at the center of this controversy, and it provides:

> (2) 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. § 2807(f)(2). Reading subsections (f)(1) and (2) together, it is clear that (f)(2) sets forth the protocols for furnishing smart meters to the universe of customers considered in the Procurement and Installation Plan.

[7]Customers' opt-out argument erroneously focuses on (f)(2)(i), which references customers who request a smart meter and agree to pay for it on request ("early technology adopters"), thereby divorcing that clause from the preceding requirement to develop and file a Procurement and Installation Plan.[21] Customers' preferred reading, that only those customers who agree to pay for a smart meter would receive a smart meter, flies in the face of the development and filing of a plan for procurement and installation. It ignores the magnitude of the infrastructure required for utilization of smart meter technology and requires an EDC to have a crystal ball to conjure up the number of customers desiring a smart meter.[22]

[8]A separate protocol for new building construction is contained in Section 2807(f)(2)(ii). Contrary to Customers' claim that this provision evidences the intent that smart meter installation is limited to new building construction, this provision ensures that new buildings are not equipped with old-style meters that would then have to be replaced pursuant to a distribution company's PUC-approved plan. Indeed, the PUC recognized that replacing meters before the end of their ***996** useful life prevents EDCs from taking advantage of the full depreciation of that meter or requires customers to pay an increased rate to cover the cost of the Legacy meters and smart meters. Implementation Order, 104 Pa.P.U.C. 263, at 12. Requiring smart meters in new building not originally considered in the approved plan avoids both waste and added expense.

As with requests by early technology adopters, the General Assembly streamlined the process for furnishing smart meter technology by also moving smart meters for new building construction to the front of the line. Absent a mandate for the system-wide deployment and installation of smart meter technology pursuant to a PUC-approved plan, the General Assembly would have no reason to segregate these two customer categories from all electric customers in Pennsylvania.

Finally, Customers and their amicus argue that the term "depreciation" found in subsection (f)(2)(iii) does not equate with the universal deployment of smart meters, because depreciation is an accounting term and, therefore, relates to the useful life of smart meters furnished pursuant to (f)(2)(i) (upon customer request) and (f)(2)(ii) (new construction) only.[23] Povacz/Murphy Brief at 14–15; Randall/Albrecht Brief at 39. We agree with Customers that the accounting term "depreciation schedule" used in (f)(2)(iii) does not mean "deployment." However, although not optimally worded, we interpret this subsection in context as allowing EDCs to depreciate fully the existing Legacy meters while simultaneously furnishing smart meter technology to customers at little to no additional cost. In fact, the inclusion of a depreciation schedule makes sense only in the context of a mandatory system-wide replacement of Legacy meters with smart meters pursuant to Act 129. Otherwise, EDCs would incur the financial burden and stranded costs associated with EDCs having to take Legacy meters that still have a useful life out of service and to replace them with smart meters upon customer demand or in new building construction, thereby defeating the economies of a full-scale smart meter technology deployment and installation. Section 2807(f)(2)(iii) alleviates that burden by allowing EDCs to recover the balance of their investment in Legacy meters while they are simultaneously deploying smart meter technology, first to early technology adopters and new building construction and then to all other customers. Pursuant to (f)(2)(iii), the length of that depreciation period may not exceed fifteen years.[24] If the ***997** General Assembly envisioned a customer-choice EE&C program — rather than the system-wide replacement of Legacy meters with smart meters — there would be no reason to provide economic relief to EDCs by including a depreciation schedule in Section 2807(f)(2)(iii). By providing a depreciation schedule, the General Assembly ensured that EDCs could operate in a cost and time effective manner by deducting from taxable income the unrecovered balance of their investment in the Legacy meters over several years, as the value of the Legacy meters decreased, while simultaneously incurring costs to procure and install smart meters to all electric customers pursuant to the requirements of Act 129.

[9]As suggested by PUC-PECO, further support for our interpretation of Section 2807(f)(2) as mandating the universal installation of smart meters is found in two subsequent sections of Act 129. The first reads as follows:

> (5) By January 1, 2020, or at the end of the applicable generation

> rate cap period, whichever is later, a default service provider shall submit to the [PUC] one or more proposed time-of-use rates and real-time price plans. The [PUC] shall approve or modify the time-of-use rates and real-time price plan within six months of submittal. The default service provider **shall offer the time-of-use rates and real-time price plan to all customers that have been provided with smart meter technology under paragraph (2)(iii)**. **Residential or commercial customers may elect to participate in time-of-use rates or real-time pricing.** The default service provider shall submit an annual report to the price programs and the efficacy of the programs in affecting energy demand and consumption and the effect on wholesale market prices.

66 Pa.C.S. § 2807(f)(5) (emphasis supplied). Contrary to Customers' claim that this provision supports their notion of customer opt-out, providing a customer with optional money-saving services makes sense only in the context of the mandatory system-wide installation of smart meter technology. The language highlighted above indicates that time-of-use rates and real-time price plans are optional services available to all customers whose Legacy meters have been replaced with smart meters. If (f)(2)(iii) applies only to smart meters furnished to early technology adopters and new construction customers, then all other customers connected to the electric distribution system would not have smart meters and, therefore, could not elect to participate in the optional services. That result conflicts with the purpose of the EE&C program to reduce electric consumption and demand across the Commonwealth.

The second provision that supports our interpretation of Section 2807(f)(2) reads, in relevant part, as follows: "(7) An electric distribution company **may recover reasonable and prudent costs of providing smart meter technology under paragraph (2)(ii) and (iii)**, as determined by the [PUC]." 66 Pa.C.S. § 2807(f)(7). The ***998** recovery of costs by EDCs makes sense only in the context of a mandatory system-wide installation of smart meter technology, as one such cost would include the removal and depreciation of Legacy meters. The lack of a reference in (f)(7) to early technology adopters identified in (f)(2)(i) is obvious — a customer who requests the installation of smart meter technology in advance of the schedule in a PUC-approved plan must pay for the smart meter at the time of request. Thus, there is no cost for EDCs that furnish smart meters to early technology adopters to recover. 66 Pa.C.S. § 2807(f)(2)(i). If (f)(2)(iii) applies only to smart meters furnished to new building construction, then the reference to (f)(2)(ii) in (f)(7) is superfluous.

[10]According to the Commonwealth Court, Act 129 mandates a distribution company to "furnish smart meter technology, but [it] does not require every customer to avail himself of every aspect of that technology." *Povacz*, 241 A.3d at 488. This phrasing suggests that the installation of smart meter technology is required, but only if a customer wants the technology. We disagree. In doing so, we acknowledge that smart meter technology is required to provide customers with accurate usage and pricing information and to "support the automatic control of a customer's consumption" by the customer, the customer's utility, or a third party. 66 Pa.C.S. § 2807(g)(3)(i)–(iii). Nonetheless, while it is true that a customer need not avail himself of all aspects of smart meter technology, i.e., the time-of-use rates and pricing plans offered in Section 2807(f)(5) are optional, that fact does not negate the plain language of Act 129, which, taken as a whole, indicates that the installation of smart meters is mandatory. It is not dependent on customer choice, other than allowing pre-scheduled installation at the request of an early technology adopter. 66 Pa.C.S. § 2807(f)(2)(i). At bottom, a customer may choose what to do with smart meter technology, but they may not choose whether to have a smart meter installed.

We note that PUC-PECO and Customers focus uniquely on what Act 129 does not say about smart meter technology. Specifically, PECO-PUC argue that the General Assembly could have explicitly included in Act 129 — but did not — an opt-out provision to electric customers. *Accord Povacz*, 241 A.3d at 497 (Crompton, J., concurring and dissenting). In turn, Customers argue that the General Assembly could have explicitly stated in Act 129 — but did not — that the system-wide installation of smart meters is mandated. We consider this purported conflict easily resolved by the General Assembly's use of the phrase "shall furnish smart meter technology," which, as we have explained, expresses the General Assembly's intention that EDCs create and implement plans for the development and system-wide installation of smart meter technology as part of the Commonwealth's EE&C program. 66 Pa.C.S. §§ 2807(f)(2), 2806.1. Whereas the mandatory furnishing of

smart meters serves the EE&C program, the optional services, e.g., time of use rates, serve individual customers looking to have greater control over their electric consumption.

Considering the overall goal of Act 129 to promote energy efficiency and conservation in Pennsylvania, the plain language of Section 2807(f)(2) mandates the system-wide installation of smart meter technology, including smart meters, with no opt-out provision. We reject the Commonwealth Court's contrary holding that, although EDCs are required to furnish smart meters, customers may choose to reject one. The Commonwealth Court erred in bolstering its customer opt-out ***999** position with editorial comments to the definition of smart meter technology:

> [T]he terms "smart meter technology" means technology ***including*** [(not necessarily limited to)] metering technology and network communications technology ***capable of*** [(not "requiring")] bidirectional communication, that ***records*** [(not "transmits")] electricity usage on at least an hourly basis, including related electric distribution system upgrades to enable the technology. The technology shall provide customers with direct ***access to and use of*** [(not mandatory use of)] price and consumption information....

Povacz, 241 A.3d at 489 (quoting 66 Pa.C.S. § 2807(g)). The fact that the General Assembly allowed customer choice regarding some aspects of the mandated smart meter technology, e.g., time-of-use rates and real-time price programs, does not negate its intention that EDCs furnish smart meters to all customers in furtherance of the EE&C program. If the General Assembly had intended to provide electric customers the ability to opt-out of smart meter installation, it would have used the same customer-choice language it used for the optional time-of-use rates and real-time price programs offered in Section 2807(f)(5). Neither the Commonwealth Court nor this Court has the power to insert words into statutory provisions where the General Assembly failed to supply them. 1 Pa.C.S. § 1923(c); *Pa. Sch. Bds. Ass'n, Inc.*, 863 A.2d at 439. Moreover, the General Assembly has had decades during which it could have changed the language of Act 129 to include an opt-out provision. Its silence speaks volumes in support of our conclusion that the PUC's interpretation of Act 129 has been and is consistent with the legislative intent to impose a mandate.

III. Customer Burden of Proof for Establishing a Violation of Section 1501's Safe and Reasonable Service Requirements

[11] [12]A customer seeking affirmative relief from the PUC must prove by a preponderance of the evidence[25] that the named utility was responsible or accountable for the problem described in the complaint and that the offense was a violation of the Code, a PUC regulation or Order, or a violation of a PUC-approved tariff. 66 Pa.C.S. §§ 332(a), 701; *Samuel J. Lansberry, Inc. v. Pa. Pub. Util. Comm'n*, 134 Pa.Cmwlth. 218, 578 A.2d 600 (1990), *alloc. denied*, 529 Pa. 654, 602 A.2d 863 (1992).

[13] [14]Although Act 129 does not provide an electric customer with the right to opt-out of the installation of a smart meter at their residence, they may file a complaint raising a claim that installation of a smart meter violates Section 1501 of the Code. Relevant to this matter, Section 1501 provides as follows:

> Every public utility shall furnish and maintain adequate, efficient, safe, and reasonable service and facilities, and shall make all such repairs, changes, alterations, substitutions, extensions, and improvements in or to such service and facilities as shall be necessary or proper for the accommodation, convenience, ***1000** and safety of its patrons, employees, and the public.

66 Pa.C.S. § 1501. Pursuant to this section, an EDC (as a public utility) must provide service that is, inter alia, both safe and reasonable. To carry their burden of proof on a Section 1501 claim, a smart meter challenger may be required to present medical documentation and/or expert testimony demonstrating that the furnishing of a smart meter constitutes unsafe or unreasonable service in violation of Section 1501 under the circumstances presented. *Susan Kreider v. PECO Energy Co.*,

P-2015-2495064, 2016 WL 406549, at *14 (Pa. P.U.C. Jan. 28, 2016).

A. Unsafe Service

In their complaints, Customers averred that PECO was responsible or accountable for harm to their health caused by RF emissions from smart meters and that the furnishing of smart meters was unsafe and/or unreasonable service in violation of Section 1501. *See e.g.*, Povacz Amended Complaint, 4/8/2016, ¶¶ 10–13, 15, 17; Murphy Complaint, 7/28/2015, ¶¶ 11–12, 14, 34–35, 37; Randall Complaint, 4/1/2016, ¶¶ 9–14, 16, 19–20, 24, 26, 28–29. In support of their Section 1501 claims, Customers presented their own self-reporting testimony of adverse effects from exposure to RF emissions,[26] medical testimony from their treating physicians,[27] and expert testimony ***1001** from Dr. Andrew Marino, a retired professor of the Louisiana State Medical School with a B.S. in physics and a Ph.D. in biophysics, who, during his thirty-three year career, focused on the biological effects of electromagnetic energy and the electrical properties of tissue as they are influenced by that energy. N.T., 9/15/2016, at 565–66. Dr. Marino relied on various scientific studies in support of the two conclusions he reached: (1) established science provides a basis on which to conclude that RF emissions from smart meters could expose Customers to harm, and (2) because smart meters have not been proven to be safe, it is unreasonable to impose on Customers forced exposure to RF emissions from smart meters. N.T., 9/15/2016, at 578–79, 594, 596–97, 601–23, 625, 628–29, 723–32; N.T., 1/25/2017, at 1854–56, 1860–61).

PECO challenged Customers' evidence with expert testimony from Christopher Davis, Ph.D., a professor of electrical and computer engineering at the University of Maryland in College Park with a Ph.D. in Physics; Mark Israel, M.D., and PECO engineer, Mr. Glenn Pritchard, who was a principal in analyzing and selecting the smart meter technology adopted by PECO. Dr. Davis concluded, to a reasonable degree of scientific certainty, that there is no reliable scientific basis to conclude that exposure to RF emissions from a smart meter can cause any adverse biological effects in people, including Customers. N.T., 5/18/2016, at 25. Similarly, based upon his own evaluation of whether RF emissions from smart meters can cause, contribute to, or exacerbate the conditions described by Customers, Dr. Israel concluded, to a reasonable degree of medical certainty, that there is no reliable medical basis on which to conclude that RF emissions from smart meters caused, contributed to, or exacerbated or will cause, contribute to, or exacerbate any of their self-reported symptoms or conditions. N.T., 5/18/2016, at 26.

The PUC concluded that Customers did not sustain their "initial burden of proof in demonstrating that RF exposure from a PECO smart meter will cause harm" to their health, and PECO satisfied its burden of production, thereby shifting the burden of production back to Customers. Povacz, No. C-2015-2475023, at 70. However, the PUC found, Customers "failed to submit any additional evidence to demonstrate that RF emissions from a smart meter will adversely affect [their] health and therefore failed to carry [their] burden of proof" as to the safety of smart meters. *Id.* at 70–71.

The Commonwealth Court agreed with the PUC that Customers generally failed to prove, by a preponderance of the evidence, a conclusive causal connection between exposure to RF emissions from smart meters and adverse human health effects. *Povacz*, 241 A.3d at 493, 494 (citing *Letter of Notification of Philadelphia Electric Company Relative to the Reconductoring and Rebuilding of the Existing 138kV Line to Operate as the Woodbourne-Heaton 230 kV Line in Montgomery and Bucks Counties*, No. A-110550F0055, 1993 WL 855896 (Pa. P.U.C. Nov. 12, 1993) ("*Woodbourne-Heaton II*")). Customers do not challenge the finding that they failed to prove that RF emissions from smart meters are unsafe. Rather, they challenge the Commonwealth Court's application of the "conclusive causal connection" standard of proof to their individual circumstances. ***1002** Povacz/Murphy Brief at 36; Randall/Albrecht Brief at 59.

1. Arguments of the Parties

Customers reason that the Commonwealth Court erred in requiring proof of a conclusive causal connection to support their specific claims under Section 1501 that smart meters are unsafe because, given current medical research and studies, that is an impossible burden to meet. Randall/Albrecht Brief at 59. Customers disagree with the Commonwealth Court's reliance on *Woodbourne-Heaton II*, claiming that decision is irrelevant because it involved a community's concerns about overhead power lines; it did not involve any threat of service termination; and customers could move their residences to escape the electromagnetic field generated by the power line. Povacz/Murphy Brief at 36. In contrast, Customers contend this case involves RF emissions from smart meters; the threat of service termination if a smart meter is not accepted; and the inability of customers to move

anywhere in Pennsylvania to avoid the smart meter mandate. Customers also consider *Woodbourne-Heaton II* to be outdated because it was decided twenty-eight years ago, when "neither cell phones, iPads, microwaves, big screen T.V.s nor computers were used the way they are today creating a steady burst of RF emissions[.]" *Id.* at 37. Moreover, they assert, the *Woodbourne-Heaton II* decision was limited to the facts of that specific case. *Id.* (citing *Woodbourne-Heaton II*, No. A-110550F055, 1993 WL 855896, at *15 (Hanger, Comm'r, concurring and dissenting)).

Customers also distinguish *Naperville I*, upon which the Commonwealth Court relied in articulating the standard of proof for a Section 1501 safety violation.[28] According to Customers, the federal *Naperville I* decision is not controlling authority before this Court, especially on a question of Pennsylvania law, and it did not concern any issue regarding the appropriate standard of proof in an administrative agency setting. Randall/Albrecht Brief at 63; Randall/Albrecht Reply Brief at 4, 9. They contend that *Naperville I* is further distinguishable because it involved, inter alia, the issue of whether the collection of consumer energy-consumption data every fifteen minutes and storage of that data for three years by the City of Naperville's public utility was reasonable under the Fourth Amendment of the United States Constitution and Article 1, § 6 of the Illinois Constitution. Povacz/Murphy Brief at 38. On appeal from the district court's ruling in *Naperville I*, the Seventh Circuit concluded that the data collection was a warrantless search but reasonable "because of the significant government interests in [the modernization of the electric grid] and the diminished privacy interests at stake." *Naperville Smart Meter Awareness v. City of Naperville*, 900 F.3d 521, 527–29 (7th Cir. 2018) ("*Naperville*").[29]

***1003** Having distinguished the above authority, Customers now suggest that the correct standard of proof under Section 1501 for their claims that smart meters are unsafe is evidence demonstrating that a utility's action "poses a risk of harm." Povacz/Murphy Brief at 39, 41. In support, they rely on the Commonwealth Court's holding in *West Penn Power v. Pa. Pub. Util. Comm'n*, 219 A.3d 716, 2019 WL 5801716 (Pa. Commw. 2019) (non-precedential decision), which involved a landowner's allegation that the utility's plan to spray pesticides near his shallow well was unsafe and unreasonable, as it threatened to compromise his water supply. According to Customers, the Commonwealth Court used a correct standard of proof in *West Penn Power* when it held that the complainant had to present substantial evidence to demonstrate that the utility's plan to spray pesticides near his shallow well "posed a risk of harm" to him. Povacz/Murphy Brief at 39.

Next, Customers argue that medical evidence from a treating physician, e.g., a medical certification, is sufficient to meet their proposed "risk of harm" standard of proof. In support, they point to a provision in the Code that prohibits a public utility from terminating service to a premises when a licensed medical professional "has certified that the customer ... or a member of the customer's ... household is seriously ill or afflicted with a medical condition that will be aggravated by cessation of service." 52 Pa.C.S. § 56.111.[30] They argue further that treating physicians are in the best position to protect human health, not the PUC or PECO, which rely on outdated science and research at the expense of individual electric customers with complicated medical concerns. Povacz/Murphy Brief at 43–44.

As an alternative to medical certification being sufficient proof to support a claim under Section 1501, Customers generally argue against the safety of EF emission generating devices and argue that the Federal Communication Commission ("FCC") guidelines regarding wireless technology and non-thermal harms relied on by PECO's experts are outdated and unreliable. Povacz/Murphy Brief at 45. In support, they cite *Environmental Health Trust v. FCC*, 9 F.4th 893 (D.C. Cir. 2021). Therein, the circuit court reviewed an FCC order "terminating a notice of inquiry regarding the adequacy of the [FCC's] guidelines for exposure to radiofrequency radiation," addressing claims that the FCC failed to respond to significant comments regarding "whether the [FCC] should initiate a rulemaking to modify its guidelines." *Env't Health Tr.*, 9 F.4th at 900. Customers describe *Environmental Health Trust* as "a significant legal development" and "a game changer" because, in their view, it calls into question the sufficiency of PECO's expert testimony to rebut Customers' prima facie case of adverse reactions to the smart meters installed at their homes. Albrecht/Randall Brief at 18 n.3; Povacz/Murphy Brief at 46, 48.

PUC-PECO maintain that the Commonwealth Court's use of the conclusive causal connection standard of proof as articulated in *Woodbourne-Heaton II* was correct. In response to Customers' attack on *Woodbourne-Heaton II*, PUC-PECO argue that the focus of that case was "the evidentiary ***1004** standard for weighing scientific research and studies in the context of the preponderance of the evidence standard" applied by the PUC. PUC Responsive Brief at 26. According to PUC-PECO,

> [a]t its core, the

> *Woodbourne-Heaton* standard ... is based on the unremarkable principle that, when the evidence of record is inconclusive and, therefore, will not support a finding that [RF emissions] can cause, contribute to, or exacerbate the medical conditions reported by [Customers], they have not satisfied the burden of proof the Code imposes for granting their requested relief.

PECO Second Brief at 46–47. *See* 66 Pa.C.S. § 332 (providing that proponent of a rule or order has the burden of proof). PUC-PECO suggest that, because an evidentiary standard is an objective legal mechanism independent of the facts under review, Customers' complaint that *Woodbourne-Heaton II* is irrelevant and out-of-date is an attempt to alter a standard of proof that they failed to meet. PUC Responsive Brief at 27.

As for Customers' medical certification argument, PUC-PECO explain that medical certifications are meant to prevent termination of service to a customer whose physician certifies that the customer suffers from a medical condition that would be "aggravated by cessation of service." PECO Second Brief at 50 (citing 66 Pa.C.S. § 1406(f); 52 Pa. Code §§ 56.11, 56.2). Here, PUC-PECO point out, Customers have not alleged that termination would aggravate any of their medical conditions; rather they claim the continuation of their electric service with smart meters would aggravate their medical condition. *Id.* at 51.

Nor do PUC-PECO agree that *Environmental Health Trust* supports Customers' position. PUC Reply Brief at 32–35; PECO Second Brief at 56–60. In fact, they argue, Customers have mischaracterized the holding in that case. Specifically, PUC-PECO assert that the two-judge majority in *Environmental Health Trust* held, "To be clear, we take no position in the scientific debate regarding the health and environmental effects of RF [emissions] — we merely concluded that the [FCC's] cursory analysis of material record evidence was insufficient as a matter of law." *Env't Health Tr.*, 9 F.4th at 914. Thus, PUC-PECO explain, although the court recognized that the record before the FCC may have been more than sufficient to justify the FCC's conclusion, the FCC did not provide any reasoning to which the court could defer or that satisfied the procedural requirements of the Administrative Procedure Act. PECO Second Brief at 58–59 (citing *Env't Health Tr.*, 9 F.4th at 914). PUC-PECO point out that the FCC's existing guidelines for RF emissions are still in effect. *Id.* at 59. Moreover, PUC-PECO surmise, because the RF emissions of smart meters are "far below" the existing FCC standards, it is "unfathomable" that the FCC would alter its guidelines "in a way that affects this dispute." *Id.*

2. Analysis

In applying the preponderance of the evidence burden of proof, the PUC has used the evidentiary standard of "conclusive causal connection" for scientific evidence proffered to establish that RF emissions result in adverse human health effects for almost three decades. In the early 1990s, protesters to the proposed energization of a former railroad transmission line cautioned that electro-magnetic field emissions created "an unreasonable risk of danger." *Re Phila. Elec. Co.*, No. A-110550F0055, 1993 WL 383052 (Pa. P.U.C. Mar. 26, 1993) (*Woodbourne-Heaton I*) (citing Protestants Reply Exceptions pp. 1–3). The ALJ found there was no conclusive proof of causality between ***1005** the emissions and adverse human health effects. Even so, the ALJ opined, the protesters' fear, which arose from the inconclusiveness of whether exposure to electro-magnetic emissions results in adverse health effects, was reasonable. "[M]otivated by a compelling sense of fairness to consider all recent data from the scientific community," the PUC remanded for the purpose of, inter alia, "receiving evidence and comment regarding all studies of the health effects of magnetic fields which are available on or before the hearings on that evidence commence...." *Woodbourne-Heaton II*, 1993 WL 855896, at *1. On remand, the ALJ concluded that the record evidence did "not support a finding or conclusion that there is a causal connection between exposure to EMFs and adverse human health effects because of the continued inconclusiveness of the scientific research and studies." *Id.* at *3 (citing ALJ Initial Decision, 7/23/1393, at Conclusion of Law #2). The PUC agreed,

> by reason of the fact that the additional scientific research and studies presented of record at the hearing in the remanded proceedings do not support a finding or conclusion that there is a conclusive causal connection between exposure to [RF emissions] and adverse human health effects because of the

> inconclusive nature of said research and studies, when viewed in totality[.]

Id. at *13.

Today, we address the similar question of the causality between RF emissions from a smart meter and adverse human health effects. In the almost three decades since the *Woodbourne-Heaton* litigation, fear about the potentially harmful effects of RF emissions and the inconclusiveness of scientific research and studies have remained constant. To the extent Customers challenge the safety of smart meters based on their individualized concerns about adverse effects, we conclude that neither fear nor inconclusive scientific research is sufficient to prove that smart meter technology constitutes unsafe service under Section 1501.[31] Allowing fear — however reasonable given the inconclusiveness of scientific research and studies — to support a finding or conclusion that smart meter technology is unsafe, in the absence of substantial evidence of causality between RF emissions and adverse human health effects, eliminates the requirement that a customer prove the utility is responsible or accountable for the problem described in the complaint. *See* 66 Pa.C.S. § 332(a) (imposing burden of proof on proponent of rule or order).

[15] [16]We reiterate that the burden of proof in PUC cases is preponderance of the evidence, which is the standard applied in civil suits, e.g., for negligence or for medical malpractice. *Samuel J. Lansberry, Inc.*, 578 A.2d at 602 ("It is clear ... that the degree of proof required to establish a case before an administrative tribunal is the same degree of proof used in most civil proceedings, *i.e.*, a preponderance of the evidence."). In such cases, because the issue of causality typically "involves explanations and inferences not within the range of ordinary training, knowledge, intelligence and experience," *Commonwealth v. Nasuti*, 385 Pa. 436, 123 A.2d 435, 438 (1956), the parties submit expert testimony to support their theory of liability or their defense. *Accord Smith v. German*, 434 Pa. 47, 52, 253 A.2d 107, 109 (1969) ("Just as the plaintiff was required to offer expert testimony in order to establish the medical connection between the injuries arising ***1006** from the accident and the personality change, so too is such expert testimony required by the party seeking to establish that it was not the injury but some other factor which caused the change."). This standard of proof and supporting evidence is routinely applied by the PUC in the context of a Section 1501 claim. *See Kreider*, 2016 WL 406549, at *14 ("The Complainant will have the burden of proof during the proceeding to demonstrate, by a preponderance of the evidence, that PECO is responsible or accountable for the problem described in the Complaint. In order to carry this burden of proof, the Complainant may be required to present evidence in the form of medical documentation and/or expert testimony."); *Romeo v. Pa. Pub. Util. Comm'n*, 154 A.3d 422, 430 (Pa. Commw. 2017) (explaining that complainant may prove Section 1501 claim through complainant's own personal testimony and/or "testimony of others as well as other evidence that goes to that issue"); *Atuahene v. PECO Energy Company*, No. C-2019-3012904, 2021 WL 3032744, at *3, *5 (Pa. P.U.C. May 21, 2020) ("To establish a sufficient case and satisfy the burden of proof, the Complainant must show that the respondent utility is responsible or accountable for the problem described in the Complaint. ... At the hearing, a complainant may prove his/her claim through the complainant's own personal testimony and/or 'the testimony of others as well as other evidence that goes to that issue.' ").

[17] [18] [19]The preponderance burden requires a customer to prove that a service or facility is — more likely than not — the cause of the problem described in their complaint. *See Popowsky v. Pa. Pub. Util. Comm'n*, 594 Pa. 583, 937 A.2d 1040, 1055 n.18 (2007) ("This Court has characterized a preponderance of the evidence as tantamount to a 'more likely than not' inquiry[.]"). Specific to smart meters and RF emissions, the burden is two-fold. First, a customer must present expert opinion rendered to a reasonable degree of scientific certainty that smart meters emit RFs and that RF emissions cause adverse health effects and, second, expert opinion rendered to a reasonable degree of medical certainty that RF emissions from the smart meters, either alone or cumulative to other sources of RF emissions, caused them harm. *See* PA SSJI (Civ) § 4.80 ("An expert witness gives his or her *opinion*, to a reasonable degree of professional certainty, based upon the assumption of certain facts."). Once the customer produces such evidence, the utility may then defend by providing scientific and/or medical expert testimony that, within a reasonable degree of certainty, the RF emissions from smart meters did not cause the alleged harm. The fact finder must then weigh the evidence and decide whether it is more likely than not that the smart meter causes harm to the customer.

[20] [21] [22] [23]Drawing on the ALJ's wording in the *Woodbourne-Heaton II* matter that there was "no conclusive proof" and that the evidence "did not support a finding or conclusion that there is a causal connection," ALJ Initial Decision, 7/23/1993, at Conclusion of Law #2, the PUC uses the phrase "conclusive causal connection." "Conclusive causal connection" means that the proffered

evidence must support the conclusion that a causal connection existed between a service or facility and the alleged harm. It is not possible for evidence that is inconclusive to be sufficient to meet the preponderance of the evidence standard. Inconclusive means that the evidence does not lead to a conclusion of a definite result one way or the other. While the preponderance of the evidence standard is not stringent, it does require that the plaintiff's evidence ever so slightly (like, with the weight of a feather) supports the ***1007** plaintiff's contention. Evidence that does not support a conclusion (or is inconclusive) cannot meet that minimal burden. *Accord Ethan Habrial v. Metropolitan Edison Company*, No. C-2018-3005907, 2020 WL 3840469, at *3 (Pa. P.U.C. June 29, 2020) ("The decision of the Commission must be supported by substantial evidence. 2 Pa.C.S. § 704. 'Substantial evidence' is such relevant evidence that a reasonable mind might accept as adequate to support a conclusion. More is required than a mere trace of evidence or a suspicion of the existence of a fact sought to be established."). Thus, where scientific evidence is required to establish the safety of a service or facility, use of the evidentiary standard of "conclusive causal connection" to assess the evidence is correct.

[24]A customer's evidence certainly need not be based on absolute certainty, thereby removing all doubt that a factual assertion is correct. However, evidence of a mere possibility that harm could result is never sufficient to meet a preponderance of the evidence standard. For example, *Woodbourne-Heaton II* addressed the concept of harm from RF emissions in a general sense because the protestors therein alleged that they had been adversely affected by reason of the potential for exposure to RF emissions, not that they had personally experienced any harmful effects from reconductoring the transmission line. Here, in contrast, Customers challenge the safety of smart meters supported by their own testimony and documented by evidence of their unique medical conditions from their treating physicians.[32] Ms. Povacz and Ms. Murphy averred that exposure to RF emissions will cause them harm. *Povacz*, No. C-2015-2475023, at 5 (citing Provacz Amended Complaint ¶¶ 10–13, 15, 17); *Murphy*, No. C-2015-2475726, at 7 (citing Murphy Second Amended Complaint ¶¶ 11–12, 14, 34–35, 37). Ms. Randall averred that the installation of a smart meter would present a health risk. *Randall/Albrecht*, No. C-2016-2537666, at 4 (citing Randall Complaint ¶ 6).[33] The generic versus specific nature of a claim does not diminish the need to prove, by a preponderance of the evidence — with expert opinion within a reasonable degree of certainty — that the service or facility is unsafe and that a causal connection exists between the allegedly unsafe service or facility and harm, either to the public at large or to specific individuals.

[25] [26]Whether a causal connection exists between RF emissions and adverse health effects "involves explanations and inferences not within the range of ordinary training, knowledge, intelligence and experience." *Nasuti*, 123 A.2d at 438. Thus, the ***1008** parties presented competing expert testimony. Customers' expert, Dr. Marino, testified that "a person's subjective self-diagnosis of [EHS] is not sufficient to establish that the person has [EHS]." N.T., 9/16/2016, at 787. He further stated that, although the studies he relied upon provide a basis to conclude that exposure to RF emissions from smart meters could cause danger or pose a risk of harm to an electric customer, he could not say that exposure would cause harm to Customers' health because "[t]here's no evidence that could warrant that statement." N.T., 9/15/2016, at 643–44. Although Customers claimed individualized injury based on exposure to RF emissions, their expert evidence fell short of proving by the preponderance of the evidence that PECO was responsible or accountable for the problem described in their complaints. 66 Pa.C.S. § 332(a).

In contrast, one of PECO's expert witnesses, Dr. Christopher Davis, concluded to a reasonable degree of scientific certainty there is no reliable scientific basis to conclude that exposure to RF fields from PECO's smart meters can cause adverse biological effects in people. Written Rebuttal Testimony of Christopher Davis, 5/18/2016, at 24–25. PECO's other expert, Dr. Marc Israel, testified to a reasonable degree of medical certainty there was no reliable medical basis to conclude that RF emissions from PECO's electric smart meter caused, contributed to, or exacerbated, or will cause, contribute to, or exacerbate, any of the symptoms identified by Maria Povacz and that exposure to electromagnetic fields from PECO's smart meters have not been and will not be harmful to her health. Written Rebuttal Testimony of Dr. Marc Israel, 5/18/2016, at 11–26.

Even if Customers' expert testimony was sufficient to meet the preponderance of the evidence burden of proof, the PUC was free to conclude that the contrary evidence was more weighty. That said, we find no error in the PUC's conclusion and the Commonwealth Court's affirmance that Customers failed to demonstrate that the installation of smart meters was unsafe. They simply failed to carry their burden of proving that PECO's installation of smart meters at their homes was — more likely than not — responsible or accountable for the problems described in their complaints and the PUC proceedings.

Customers rely on *Environmental Health Trust* as supporting their argument that smart meters are unsafe because FCC standards for RF emissions are outdated. We conclude that *Environmental Health Trust* provides no guidance on the matter at hand because the circuit court did not reach the merits of the question before it, i.e., whether the 1996 FCC limits for RF radiation exposure adequately protect against purported negative effects unrelated to cancer caused by exposure to RF radiation. Rather, the circuit court found that the FCC violated the requirements of the ADA by failing "to respond to record evidence that exposure to RF radiation at levels below the [FCC's] current limits may cause negative health effects unrelated to cancer" with a reasoned explanation for its contrary conclusion. *Env't Health Tr.*, 9 F.4th at 903, 905. Opining that the FCC's "factual premise — the non-existence of non-thermal biological effects — underlying the current RF guidelines may no longer be accurate[,]" the circuit court chastised the FCC for its silence as to why it determined, "in light of evidence suggesting the contrary, that exposure to RF radiation at levels below [the 1996 limits] does not cause negative health effects unrelated to cancer." *Id.* at 906. According to the circuit court, that silence deprived the court of a "basis on which to review the reasonableness of the [FCC's] decision" that its guidelines remain adequate. ***1009** *Id.* The court explained that, because an agency's rulemaking decision must have a reasoned basis, an agency cannot, in rendering a written decision, ignore evidence suggesting that a major factual premise of its position may no longer be correct. *Id.* at 907. At most, therefore, *Environmental Health Trust* suggests that the science regarding a causal connection between RF emissions and adverse human health effects has evolved since 1996, the last year FCC limits for RF emissions were updated. However, it does not support a claim that RF emissions at or below the 1996 FCC limits cause adverse human health effects and in no way overcomes the record facts that Customers failed to adduce sufficient evidence to meet the preponderance of the evidence standard.[34]

B. Reasonable Service

As an alternative argument, Customers claimed that their forced exposure to smart meters constitutes unreasonable service. *Povacz*, 241 A.3d at 490. In support, they relied on the same scientific studies, expert opinion, personal testimonies, and physician testimonies that they used in asserting that smart meters are unsafe. They specifically argued that the PUC has no authority to second-guess the medical judgment of their treating physicians, who recommended that Customers avoid exposure to RF emissions. PECO countered that it offers customers a reasonable alternative regarding smart meter installation. Specifically, "the customer has the option of relocating the smart meter to a different location because the customer has the right under the tariff to choose the location of the meter board and socket (while PECO chooses the type of meter)." *Povacz*, No. C-2015-2475023, at 91.

The PUC concluded that PECO did not act unreasonably by installing smart meters pursuant to Act 129, as Customers did not meet their burden of proof in demonstrating that they were medically sensitive customers or that RF emissions from a smart meter will adversely affect their health. *Povacz*, No. C-2015-2475023, at 91. Having failed to demonstrate that smart meters are unsafe, the PUC continued, Customers' "request to not receive [a smart] meter as part of receiving electric service from PECO is essentially the same as any other opt out request based on customer preference." *Id.* at 94. The PUC reasoned that, because Act 129 does not provide for a customer opt-out and the General Assembly did not intend "for EDCs to invest in and maintain two sets of meter systems based on customer preference...as part of furnishing" service consistent with Section 1501, reasonable service does not require an exception to the mandatory installation of smart meters.

Uncertain that the PUC applied the correct disjunctive "safe or unreasonable" standard in addressing Customers' Section 1501 claims, the Commonwealth Court remanded to the PUC for consideration of "whether accommodations are appropriate ***without*** proof of harm." *Povacz*, 241 A.3d at 492 (emphasis in original). The suggested accommodations included "wired smart meters" and "if wireless meters must be installed, turning off the emissions upon a customer's request." *Id.* at 492–93. In remanding, the court did not address whether the installation of smart meters was reasonable service, but it did recognize the competing interests of Customers' desire to avoid RF emissions and PECO's desire ***1010** to avoid having to provide accommodations based on Customers' fears where medical research has not determined the degree of risk posed by the level of exposure to RF emissions. *Id.* at 492.

1. Arguments of the Parties

Customers argue that the correct standard of proof for demonstrating unreasonableness under Section 1501 is evidence that the utility service poses a risk of harm to a

customer with unique medical conditions. In support, Customers cite *Branagh v. PECO Energy Co.*, No. C-2016-2576738, 2017 WL 6988946 (PUC Initial Decision, 12/27/2017), in which a pro se electric and gas customer claimed that PECO violated Section 1501 by installing smart meters on her home. According to Customers, the PUC upheld the ALJ's decision that, under Section 1501, PECO's service was unreasonable as to the customer because it installed the gas smart meter against her physician's advice. Povacz/Murphy Brief at 40; Povacz/Murphy Second Brief at 23.[35] In further support, Customers cite 52 Pa.C.S. § 56-111, which prevents the termination of utility service to a customer who has a valid medical certificate establishing that the customer has a medical condition that would be aggravated by the lack of electric service. Customers reason that, because a customer's physician is in the best position to treat health-related concerns, medical opinion should be sufficient to demonstrate that a utility service poses a risk of harm; thereafter, the burden of proving reasonableness shifts to the utility. Povacz/Murphy Brief at 41–45.[36] Customers appear to support a remand to the PUC for a determination of whether the installation of smart meters subject to accommodations would be unreasonable service under Section 1501 given their individual medical concerns.[37]

PUC-PECO submit multiple reasons why the Commonwealth Court erred in remanding with the instruction that the PUC take into consideration "[l]ogic, safety concerns, and fairness" in determining ***1011** the reasonableness of smart meter technology under Section 1501, without requiring proof of harm. PUC Brief at 52 (citing *Povacz*, 241 A.3d at 485, 491, 494). First, they claim that the Commonwealth Court's evidentiary approach ignores the "substantial evidence" standard applied to adjudications by administrative agencies. *Id.* In short, by allowing electric customers in a PUC proceeding to allege health concerns based on a belief that they will be harmed by smart meter technology, without proof by a preponderance of the evidence that a utility's service is unreasonable, the Commonwealth Court has ensured that the PUC's decisions will not be supported by substantial evidence. *Id.* at 52–53. Second, the Commonwealth Court's ruling violates the due process rights of utilities. *Id.* at 54. In other words, by requiring the PUC to direct a utility to provide accommodations without substantial evidence of a Section 1501 violation, the Commonwealth Court has placed utilities that have not committed a violation of Section 1501 in the untenable situation of being unable to defend against complaints alleging harm. *Id.* at 54–55. Third, "[a]lthough [Customers] tried to articulate separate violations of, respectively, the 'safe' and 'reasonable' elements of Section 1501, the alleged violations have a common origin[:]" a unique "sensitivity" or "susceptibility" to RF emissions. PECO Brief at 51. Fourth, having failed to prove that their unique sensitivity makes smart meter technology unsafe and then relying on the same health concerns, Customers failed to prove that smart meter technology is unreasonable. *Id.* at 52. Fifth, the Commonwealth Court erred by using the "guise of a remand" to substitute its judgment for that of the PUC and allow electric customers to compel an accommodation based on a sincere belief, despite the lack of substantial evidence that RF emissions have adverse health effects. *Id.* at 53. Sixth, by directing the PUC to consider non-smart-meter accommodations, the Commonwealth Court has created a second "opt-out exemption," the first being "the categorical and unconditional right of refusal it inserted in Section 2807(f)(2) by interpreting 'furnish' to mean 'offer.' " *Id.* at 54. Seventh, the Commonwealth Court's remand and instruction usurp the PUC's authority to determine what constitutes reasonable service under Section 1501, which authority the PUC exercised consistently with its decision in *West Penn Power*, 219 A.3d 716, 2019 WL 5801716. Therein, PUC-PECO explain, the complainant failed to meet his burden of proof by offering only his opinion that West Penn's proposed herbicide would cause harm to his property and, therefore, was unreasonable. PECO Brief at 56. Thus, they conclude, Customers' concerns about the effect of RF emissions on their medical conditions are not sufficient to prove that smart meter service is unreasonable, making this case indistinguishable from *West Penn Power Co.*

2. Analysis

[27]Initially, we disagree with the Commonwealth Court's assertion that the PUC's denial of accommodations was based on its "erroneous conclusion that Act 129 does not allow accommodations," *Povacz*, 241 A.3d at 492, for three reasons. First, the court's implied suggestion that Act 129 allows accommodations is inaccurate; Act 129 does not even speak to accommodations. Second, the PUC denied accommodations because Act 129 does not provide a customer the ability to opt-out of receiving smart meter technology, which is essentially what Customers were requesting. *Povacz*, No. C-2015-2475023, at 94. Third, the PUC denied accommodations because it found that Customers failed to establish a violation of Section 1501 that would have entitled them to an administrative remedy. *Id.*

***1012** [28]We also disagree with the Commonwealth Court that a remand is necessary because the panel was unsure if

the PUC had incorrectly applied a conjunctive interpretation of Section 1501, rather than the proper disjunctive interpretation. Granted, confusion in this regard is natural given the potential for overlap between an "unsafe" inquiry and an "unreasonable" inquiry. For example, we can say with certainty that it would always be unreasonable to provide electric service that is unsafe. On the other hand, it is easy to imagine situations where safe service could be unreasonable. For example, requiring a smart meter could be safe but unreasonable service if the smart meter were so large that it filled a consumer's entire basement or was to be installed on the front door of a house, detracting from the property's curb appeal.[38]

[29] [30]Nonetheless, on the record before us, we find no evidence of a misunderstanding by the PUC as to the proper, disjunctive standard for determining a violation of Section 1501. When considered in the context of the PUC's whole opinion, the standard-of-proof language challenged by the Commonwealth Court appears to be more of a misstatement by the PUC than a misapplication of Section 1501. Notably, the ALJ applied the correct standard in reviewing Customers' claim. *Accord Povacz*, 241 A.3d at 498 (Crompton, J., concurring and dissenting) (observing that ALJ "clearly enunciated, as conclusions of law, that utility companies are required to furnish safe and reasonable service"). Upon review, the PUC accepted the ALJ's determinations and even referred to the correct standard in discussing its decision in *Kreider*, 2016 WL 406549. *Accord Povacz*, 241 A.3d at 499 (Crompton, J., concurring and dissenting) (citing *Povacz*, No. C-2015-2475023). Thus, we discern no basis to remand to the PUC for application of the correct disjunctive standard under Section 1501. We reiterate the applicable standard of proof under Section 1501 requires a customer to demonstrate by a preponderance of the evidence based on the totality of the circumstances that the furnishing of a service or facility is unsafe **or** unreasonable. This was the standard applied by the PUC here.

Next, we observe that Customers' Section 1501 reasonableness claims are also based exclusively on their personal medical conditions. As support for their unreasonableness argument, they relied on the same inconclusive research and studies regarding the effects of RF emissions on human health that they relied on in attempting to establish a violation of the safety standard, as well as Dr. Marino's expert testimony, their personal testimonies, and the medical opinions of their treating physicians regarding their unique sensitivities to RF emissions. Their claims were sufficient to warrant a hearing before the PUC. *Accord Kreider*, 2016 WL 406549, at *6 (affording hearing to complainant who made averments particular to her that smart meter has caused or will cause health problems because it would enable PUC to closely evaluate her claims based on fully developed evidentiary record). However, the PUC determined that reasonable service did not require accommodating Customers, as they could not ***1013** prove by a preponderance of the evidence that PECO was responsible or accountable for the health problems described in their complaints. *Povacz*, No. C-2015-2475023, at 28; *Murphy*, No. C-2015-2475023, at 31; *Randall & Albrecht*, No. C-2016-2537666, at 27.

[31]Our review of the record reveals that the PUC considered all of Customers' evidence, finding that it did not overcome PECO's evidence regarding the inconclusiveness of whether RF emissions affect human health.[39] Nor did Customers offer any non-health related evidence that the furnishing of smart meters was unreasonable. Thus, we discern no basis on which to challenge the PUC's conclusion that Customers failed to establish a violation of Section 1501 based on unreasonable service.

IV. ACCOMMODATIONS

Upon finding a violation of Section 1501, the PUC is authorized to prescribe a remedy pursuant to Section 1505(a) of the Code:

> **(a) General rule.**--Whenever the commission, after reasonable notice and hearing, upon its own motion or upon complaint, finds that the service or facilities of any public utility are unreasonable, unsafe, inadequate, insufficient, or unreasonably discriminatory, or otherwise in violation of this part, the commission shall determine and prescribe, by regulation or order, the reasonable, safe, adequate, sufficient, service or facilities to be observed, furnished, enforced, or employed, including all such repairs, changes, alterations, extensions, substitutions, or improvements in facilities as shall be reasonably necessary and proper for the safety, accommodation, and convenience of the public.

66 Pa.C.S. § 1505(a).

On one hand, Customers rely on the argument (which we reject) that, because the installation of smart meters is not mandated by Act 129, an accommodation is not necessary. An electric customer can simply reject the installation of a smart meter, as Customers attempted to do. Povacz/Murphy Brief at 33. On the other hand, Customers explain that, regardless of which interpretation of Section 2807(f)(2) prevails, this matter is about the PUC's authority to consider a request for accommodation to a customer who demonstrates that smart meter service violates Section 1501. Randall/Albrecht Brief at 27–32. Claiming an unfettered right to avoid RF emissions, Customers request accommodation based on their medical histories and demonstrated desire to avoid or minimize exposure to RF emissions. They consider the appropriate relief to be the removal of wireless smart meters installed on their properties and the installation of an alternative meter. *Id.*[40] In response, ***1014** PUC-PECO object to having to provide Customers with accommodations absent a finding that smart meter technology violates Section 1501.

[32] [33]Pursuant to our interpretation of Act 129 as mandating the installation of smart meter technology, a customer may not prevent the installation of a smart meter. That said, a customer is not without recourse, as the provision of accommodations is a function of Section 1501, not of Act 129. Indeed, absent a mandate, there would be no need for the complaint procedure provided in the Code to electric customers who oppose installation of a smart meter. As in this case, a customer can file a claim under Section 1501 that smart meter technology service is unsafe and/or unreasonable. If the customer establishes by a preponderance of the evidence based on the totality of the circumstances that smart meter service violates Section 1501, they are entitled to an accommodation to the extent allowed by Act 129 and a utility's tariff. Thus, by operation of the statute, an EDC cannot be required to provide accommodation without the finding of a Section 1501 violation.

CONCLUSION

[34] [35] [36] [37]Act 129 is mandatory, requiring the system-wide installation of smart meter technology by EDCs, including smart meters. Although electric customers are not entitled to opt out of having a smart meter installed at their home, the PUC is authorized to determine and prescribe a remedy to individual customers who establish a violation of Section 1501 by a preponderance of the evidence that furnishing smart meter technology to them is unsafe or unreasonable. Reference to a preponderance of the evidence burden of proof and a "conclusive causal connection" evidentiary standard to assess whether expert evidence meets that burden is not inconsistent. The burden for proving a safety or reasonableness violation under Section 1501 is the same, where the challenge is based on the effect on the health of the customer.

Accordingly, we reverse the Commonwealth Court's ruling that Act 129 does not mandate the installation of smart meters. We affirm the Commonwealth Court's conclusion that the PUC did not err in finding that Customers failed to meet their burden of proving, by a preponderance of the evidence, a conclusive causal connection between RF emissions from smart meters and adverse human health effects. We reverse the Commonwealth Court's remand to the PUC for consideration of whether Customers established that smart meter service is unreasonable under Section 1501. The PUC has already made the determination that smart meter service is not unreasonable based on the same evidence supporting the finding that no safety violation was proven.

Chief Justice Baer and Justices Todd, Wecht and Mundy join the opinion.

Justice Dougherty files a concurring and dissenting opinion.

Former Justice Saylor did not participate in the consideration or decision of this matter.

JUSTICE DOUGHERTY, concurring and dissenting

I join the Majority's analysis and conclusion that Act 129 mandates the system-wide installation of smart meters. As the Majority correctly notes, the "plain language" of 66 Pa.C.S. § 2807(f)(2) dictates ***1015** this result. Majority Opinion at 998-99. Section 2807(f)(2) provides: "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. § 2807(f)(2). The "shall furnish" language requires electric companies to provide smart meters to all customers. *See Lorino v. Workers'*

Compensation Appeal Board, —— Pa. ——, 266 A.3d 487, 493 (2021) ("The term 'shall' establishes a mandatory duty[.]"). And subsections (i) through (iii) specify the timing of the mandatory, system-wide installation, *i.e.*, smart meters are to be installed when there are customer requests for them, when there is new construction, or when existing legacy meters reach the end of their useful lives up to fifteen years.

I also join the Majority Opinion insofar as it determines that, although electric customers are not entitled to opt out of having smart meters installed at their homes, individual customers may be able to demonstrate their entitlement to accommodations under 66 Pa.C.S. § 1501 ("Every public utility shall furnish and maintain adequate, efficient, safe, and reasonable service and facilities, and shall make all such repairs, changes, alterations, substitutions, extensions, and improvements in or to such service and facilities as shall be necessary or proper for the accommodation, convenience, and safety of its patrons, employees, and the public."). While Act 129 mandated system-wide installation of smart meters, it did not nullify Section 1501.

I respectfully disagree, however, with the Majority's ruling regarding a customer's burden to demonstrate electric service is unsafe or unreasonable under Section 1501. The Majority holds a customer must establish a "conclusive causal connection" between the service and adverse human health effects. Majority Opinion at 1014 ("We affirm the Commonwealth Court's conclusion that the PUC did not err in finding that Customers failed to meet their burden of proving, with a preponderance of the evidence, a conclusive causal connection between RF emissions from smart meters and adverse human health effects."); *see also id.* at 1007 ("[U]se of the evidentiary standard of 'conclusive causal connection' to assess the evidence is correct."). Yet, as the Majority itself correctly notes, "the burden of proof in PUC cases is preponderance of the evidence[.]" *Id.* at 1005; *see also Popowsky v. Pennsylvania Public Utility Comm'n*, 594 Pa. 583, 937 A.2d 1040, 1057 (2007) ("[T]he PUC properly applies a preponderance of the evidence standard to make factually-based determinations[.]"); *Samuel J. Lansberry, Inc. v. Pennsylvania Public Utility Comm'n*, 134 Pa.Cmwlth. 218, 578 A.2d 600, 602 (1990), *alloc. denied*, 529 Pa. 654, 602 A.2d 863 (1992) ("It is clear ... that the degree of proof required to establish a case before an administrative tribunal is the same degree of proof used in most civil proceedings, *i.e.*, a preponderance of the evidence."). "[P]roof by 'a preponderance of the evidence' is the lowest degree of proof recognized in the administration of justice[.]" *Se-Ling Hosiery v. Margulies*, 364 Pa. 45, 70 A.2d 854, 856 (1950); *accord Commonwealth v. Ehredt*, 485 Pa. 191, 401 A.2d 358, 360 (1979) ("[T]he preponderance standard is the least burdensome standard of proof known to the law[.]"). "This Court has characterized a preponderance of the evidence as tantamount to a 'more likely than not' inquiry[.]" *Popowsky*, 937 A.2d at 1055 n.18.

The meaning of "conclusive," on the other hand, is "[s]erving to put an end to doubt, question, or uncertainty; decisive[.]" Conclusive, The American Heritage Dictionary ***1016** of the English Language (5th ed. 2022) (accessed at https://ahdictionary.com/word/search.html?q=conclusive [last visited August 10, 2022]). A party's evidence does not have to remove all doubt, question, and uncertainty in order to make a fact or legal conclusion more likely than not. In other words, conclusive proof is not required under the preponderance of the evidence standard. *See Barrett v. Otis Elevator Co.*, 431 Pa. 446, 246 A.2d 668, 673 (1968) ("If for no other reason than the quantity of evidence, it certainly is more difficult to prove [c]onclusively that no jobs are available than to prove [c]onclusively that a job is available, but conclusive proof is not required on this issue. Given that a preponderance of the evidence is all that is required, the proof of a negative does not appear so difficult that the burden of proof should be placed on the party who wishes to establish the affirmative."); *see also Moberly ex rel. Moberly v. Secretary of Health and Human Services*, 592 F.3d 1315, 1325 (Fed. Cir. 2010) ("To be sure, it is not necessary for a Vaccine Act petitioner to point to conclusive evidence in the medical literature linking the DPT vaccine to a child's injury ..., as the legal standard is a preponderance of the evidence[.]") (internal quotation and citations omitted); *Hennessy v. Schmidt*, 521 F.2d 1282, 1285 (7th Cir. 1975) ("At the outset, it is manifest from a reading of the conclusion of law numbered 6 that the District Court ignored the proper and valid rule or test for viewing and weighing Hennessy's evidence and making findings of fact in accordance with the 'preponderance of the evidence' as recited in conclusion of law numbered 3, and erroneously viewed and weighed Hennessy's evidence and made its finding of fact under the non-applicable stricter rule or test of conclusive proof. The District Court by applying the stricter improper conclusive proof rule or test in this case placed a higher burden of proof upon Hennessy than is lawfully required."); *City of Sunland Park v. Santa Teresa Concerned Citizens Ass'n, Inc.*, 110 N.M. 95, 792 P.2d 1138, 1141 (N.M. 1990) ("Whatever 'conclusive proof' means, it obviously is a much higher standard of proof than 'a preponderance of the evidence.' "); *Edwards v. Shreveport Creosoting Co.*, 207 La. 699, 21 So.2d 878, 879-80 (La. 1945) ("The law is clear that the plaintiff in a compensation case bears the burden of proving his case

with reasonable certainty, by a preponderance of the evidence. He is not obliged to furnish conclusive proof."); *Matter of N.L.B.*, 1993 WL 13965712 at *3 (Kan. App. Feb. 26, 1993) (*per curiam*) (unpublished memorandum opinion) ("Because paternity actions are civil in nature, the burden of proof is by a preponderance of the evidence and conclusive proof is not required.").

The Majority notes "the PUC has used the evidentiary standard of 'conclusive causal connection' for scientific evidence proffered to establish that RF emissions result in adverse human health effects for almost three decades[,]" beginning with *Letter of Notification of Philadelphia Electric Company Relative to the Reconductoring and Rebuilding of the Existing 138kV Line to Operate as the Woodbourne-Heaton 230 kV Line in Montgomery and Bucks Counties*, Docket No. A-110550F055, 1993 WL 855896 (Nov. 12, 1993) (*Woodbourne-Heaton II*). Majority Opinion at 1004-05. However, as customers Cynthia Randall and Paul Albrecht persuasively argue, "stating that a standard of proof has been applied by PUC for a lengthy period of time says nothing about whether that standard is **correct** and legally defensible." Reply Brief of Appellees Cynthia Randall and Paul Albrecht at 8-9 (emphasis in original). The PUC in *Woodbourne-Heaton II* did not cite any legal authority for a conclusive causal connection ***1017** standard. Moreover, apart from the Commonwealth Court's decision below, the Majority does not identify any appellate court decision approving this test. Indeed, Randall and Albrecht represent that, to their knowledge, there is no such precedent. *See id.* at 9. To the contrary, as discussed, requiring a party to demonstrate a fact or legal conclusion "conclusively" when its burden of proof is merely preponderance of the evidence is inconsistent with precedent of this Court and many others. *See Barrett*, 246 A.2d at 673; *Moberly*, 592 F.3d at 1325; *Hennessy*, 521 F.2d at 1285; *City of Sunland Park*, 792 P.2d at 1141; *Edwards*, 21 So.2d at 879-80; *Matter of N.L.B.*, 1993 WL 13965712 at *3.

The Majority contends "neither fear nor inconclusive scientific research is sufficient to prove that smart meter technology constitutes unsafe service under Section 1501." Majority Opinion at 1005. I agree proof of fear alone is insufficient to carry a customer's burden to demonstrate entitlement to an accommodation under Section 1501. Subjective fears, no matter how sincerely felt, do not establish service is inadequate, inefficient, unsafe, or objectively unreasonable. In fact, as the Majority notes, *see id.* at 1005 n.31, customers Randall and Albrecht appear to concede as much. *See* Brief of Appellees Cynthia Randall and Paul Albrecht at 56 ("This is not to suggest that utility customers can establish claims under Section 1501 based solely on their sincere beliefs."); *id.* ("[S]incere belief of harm or potential harm alone should not be enough to establish a claim under Section 1501[.]"). But I cannot concur that inconclusive scientific research may never be sufficient to demonstrate a lack of safety under Section 1501. The preponderance of the evidence standard does not require a customer to prove unsafety with scientific certainty. *See Sharpe v. Secretary of Health and Human Services*, 964 F.3d 1072, 1078 (Fed. Cir. 2020) ("Notably, the preponderance of the evidence standard for off-table claims does not require a petitioner to prove causation with scientific certainty."); *Moberly*, 592 F.3d at 1325 ("[T]he legal standard is a preponderance of the evidence, not scientific certainty.").

The Majority insists " '[c]onclusive causal connection' means that the proffered evidence must support the conclusion that a causal connection existed between a service or facility and the alleged harm." Majority Opinion at 1006. But "conclusive" does not mean simply supporting a conclusion. Indeed, if it did, the phrase "conclusive evidence," used ubiquitously in the law, would be a redundant expression, as "evidence" alone, by definition, is something that supports a conclusion. *See* Black's Law Dictionary (11th ed. 2019) (defining "evidence" as "[s]omething (including testimony, documents, and tangible objects) that tends to prove or disprove the existence of an alleged fact; anything presented to the senses and offered to prove the existence or nonexistence of a fact"). Rather, as noted, "conclusive" is defined as eliminating all doubt, question, or uncertainty. *See supra* at 1015-16. Thus, the phrase "conclusive causal connection" does not merely require evidence of a causal nexus; it mandates proof of a **definite** causal link, which is well beyond what the modest preponderance of the evidence standard demands.

Similarly, the Majority argues "[i]t is not possible for evidence that is inconclusive to be sufficient to meet the preponderance of the evidence standard" because "[i]nconclusive means that the evidence does not lead to a conclusion of a definite result one way or the other." Majority Opinion at 1006. Actually, "inconclusive" does not mean merely not leading to a conclusion. The definition of "inconclusive" is "not leading to a **firm** conclusion; not ending doubt or dispute." Google Dictionary, ***1018** https://www.google.com/search?q=inconclusive+definition & source (last visited August 10, 2022) (emphasis added). Evidence does not have to dictate a definitive conclusion and end all doubt and dispute in order to clear the low hurdle of the preponderance of the evidence standard. In other words, inconclusive proof – evidence that does not lead to a "firm" conclusion as to an issue –

may nonetheless satisfy the minimal preponderance standard. *See Software Publishers Ass'n v. Scott & Scott, LLP*, 2007 WL 92391 at *4 (N.D. Tx. 2007) ("Though not conclusive on the issue of assignment (as the certificates are not signed by the purported author of the works described therein), the court finds that under the preponderance standard, these writings are sufficient to satisfy the court's jurisdictional inquiry that such a written assignment exists in this case.").

The majority emphasizes "evidence of a mere possibility that harm could result is never sufficient to meet a preponderance of the evidence standard." Majority Opinion at 1007. This is indisputable; a bare possibility does not rise to the level of a more-likely-than-not showing. However, the discordant and unprecedented conclusive causal connection standard is not necessary to keep a utility from having to defend against the "mere possibility" of harm. The traditional preponderance of the evidence standard protects against this concern. *See Commonwealth v. $301,360.00 U.S. Currency*, 182 A.3d 1091, 1097 (Pa. Cmwlth. 2018) ("In a forfeiture proceeding involving either money or a vehicle, the Commonwealth bears the initial burden of establishing, by a preponderance of the evidence, that a substantial nexus exists between the property subject to forfeiture and a violation of the Drug Act. ... However, the Commonwealth must establish more than the possibility or a mere suspicion of a nexus.") (emphasis omitted); *Huddell v. Levin*, 537 F.2d 726, 740 (3d Cir. 1976) ("A plaintiff must prove his case by a preponderance of the evidence; proof of a 'substantial possibility' of survival does not comport with that affirmative burden."). In sum, because I view the Majority's endorsement of a conclusive causal connection standard for proving adverse human health effects under Section 1501 to be both internally inconsistent with its recognition of the governing preponderance of the evidence standard and contrary to law, I respectfully cannot join this aspect of the Majority's opinion.

Finally, in light of my disagreement with the conclusive causal connection standard, I must dissent from the Majority's determination to "reverse the Commonwealth Court's remand to the PUC[.]" Majority Opinion at 1014. The PUC applied the conclusive causal connection standard in denying relief to the customers. *See Povacz*, No. C-2015-2475023, at 28 ("[T]he Complainant must demonstrate by a preponderance of the evidence a 'conclusive causal connection' between the low-level RF exposure from a PECO smart meter and the alleged adverse human health effects."); *Murphy*, No. C-2015-2475023, at 31 (same); *Randall & Albrecht*, No. C-2016-2537666, at 27 (same). As discussed, I believe this was error. Consequently, in my view, the case should be remanded to the PUC for consideration of the customers' claims to accommodations pursuant to Section 1501 under the proper preponderance of the evidence standard, which would require the customers to demonstrate their entitlement to relief by a fair preponderance of the evidence, but would not include the incongruous and tougher burden of establishing a conclusive causal connection between RF emissions and adverse human health effects.

All Citations

280 A.3d 975, Util. L. Rep. P 27,570

Footnotes

[1] Act of 2008, Oct. 15, P.L. 1592, No. 129, § 3, effective in 30 days (Nov. 14, 2008); 66 Pa.C.S. §§ 2803, 2806.1, 2807, 2811, 2813–2815.

[2] *See* Act of 1996, Dec. 3, P.L. 802, No. 138, 66 Pa.C.S. §§ 2801–2815 (effective January 1, 1997) (deregulating electricity generation in Pennsylvania and providing customers with the opportunity to select an electricity generation supplier).

[3] Pennsylvania's EE&C program is codified at 66 Pa.C.S. § 2806.1 and applies to electric distribution companies with more than 100,000 customers. 66 Pa.C.S. § 2806.1(l).

[4] An electric distribution company

> is responsible for delivering the electricity to those customers who choose to buy from an EGS [electricity generation supplier]. Additionally, the EDC is responsible for both acquiring and delivering electricity for those customers who do not shop or buy their electricity from an EGS or where an EGS fails to provide the promised electricity. When an EDC acquires electricity for customers not served by an EGS, the EDC is functioning as the "default service provider" (DSP).

In re Implementation of Act 129 of October 15, 2008, L-2009-2095604 (Pa. P.U.C. Sept. 22, 2011), at 1.

[5] *See* 66 Pa.C.S. §§ 1505 (requiring the PUC to prescribe remedial action upon finding a violation of Section 1501 "as shall be reasonably necessary and proper for the safety, accommodation, and convenience of the public") and 1501 (requiring utility to take remedial action "as shall be necessary or proper for the accommodation, convenience, and safety of its patrons, employees, and the public"). This holding does not preclude an electric utility from providing a reasonable accommodation to an electric customer in the absence of a Section 1501 violation pursuant to a customer service policy.

[6] *Maria Povacz v. PECO Energy Co.*, No. C-2015-2475023, 2019 WL 1506827 (Pa. P.U.C. Mar. 28, 2019); *Laura Sunstein Murphy v. PECO Energy Co.*, No. C-2015-2475726, 2019 WL 2250790 (Pa. P.U.C. May 9, 2019); *Cynthia Randall and Paul Albrecht v. PECO Energy Co.*, No. C-2016-2537666, 2019 WL 2250792 (Pa. P.U.C. May 9, 2019).

[7] On November 4, 2020, the PUC "ordered that any formal complaint filed ... on or after November 4, 2020, challenging an [EDC's] deployment of smart meter technology as being in violation of Section 1501 of the Public Utility Code, 66 Pa.C.S. § 1501, is to be stayed until the Commission takes further action to lift the stay." *White v. PPL Elec. Utils. Corp.*, C-2021-3024463, 2021 WL 1424764 (Pa. P.U.C. Apr. 12, 2021) (citing *Order re Smart Meter Procurement and Installation*, No. M-2009-2092655 (Nov. 4, 2020)).

[8] The Commonwealth Court rejected Customers' constitutional arguments, persuaded by the reasoning of *Naperville Smart Meter Awareness v. City of Naperville*, 69 F. Supp.3d 830 (N.D. Ill. 2014) ("*Naperville II*"). Therein, a federal district court rejected the customers' "Fourteenth Amendment bodily integrity argument because their complaint failed to identify an arbitrary deprivation of a recognized liberty or property interest" and to aver that the city's decision to employ smart meters was arbitrary. *Id.* at 839 (internal quotation marks omitted).

This Court denied allocatur as to any constitutional claims.

[9] The Commonwealth Court cited *Benlian v. PECO Energy Corp.*, No. 15-1218, 2016 WL 3951664, at *2 (E.D. Pa. July 20, 2016), as precedent for such an accommodation, as PECO installed a smart meter on a pole away from the customer's house to alleviate his concerns about RF emission.

[10] Judge Fizzano Cannon joined in the concurring and dissenting opinion.

[11] Although the PUC's and PECO's positions generally align, they address different issues and raise different arguments in their respective briefs. Similarly, Customers present unique arguments on the various issues in their respective briefs. Thus, although we refer to the opposing parties collectively, for the most part, we refer to the source brief for the particular argument presented.

[12] As amicus of the PUC and PECO, the Energy Association of Pennsylvania ("EAP") emphasizes that, pursuant to Pennsylvania case law, "shall" means "must." EAP Brief at 14–15 & n.15 (citing appellate court decisions). In EAP's view, interpreting "shall furnish" as requiring the mandatory provision of smart meter technology distinguishes the General Assembly's use of other words in the Code, like "offer," "render," and "supply." *Id.* at 15–17. If "furnish" carried the same meaning, the General Assembly would not have used the separate repetitive words in the statute. *Id.* EAP cautions that upholding the Commonwealth Court's interpretation of Act 129 would open the door for electric customers to dictate individual terms, forcing EDCs to incur additional costs for customized service. *Id.* at 17–19. According to EAP, EDCs act within their sole discretion outside of the authority of the PUC, and administrative agencies, municipalities, and customers do not have authority to impose burdens or compel regulated companies to alter lawful conduct. *Id.* at 20, 24–25.

[13] The Code includes the term "furnish" in the following definitions:

> "**Facilities.**" All the plant and equipment of a public utility, including all tangible and intangible real and personal property without limitation, and any and all means and instrumentalities in any manner owned, operated, leased, licensed, used, controlled, **furnished**, or supplied for, by, or in connection with, the business of any public utility.
>
> "**Rate.**" Every individual, or joint fare, toll, charge, rental, or other compensation whatsoever of any public utility, or contract carrier by motor vehicle, made, demanded, or received for any service within this part, offered, rendered, or **furnished** by such public utility, or contract carrier by motor vehicle, whether in currency, legal tender, or evidence thereof, in kind, in services or in any other medium or manner whatsoever, and whether received directly or indirectly, and any rules, regulations, practices, classifications or contracts affecting any such compensation, charge, fare, toll, or rental.
>
> **"Service.**" Used in its broadest and most inclusive sense, includes any and all acts done, rendered, or performed, and any and all things **furnished** or supplied, and any and all facilities used, furnished, or supplied by public utilities, or contract carriers by motor vehicle, in the performance of their duties under this part to their patrons, employees, other public utilities, and the public, as well as the interchange of facilities between two or more of them, but shall not include any acts done, rendered or performed, or any thing furnished or supplied, or any facility used, furnished or supplied by public utilities or contract carriers by motor vehicle in the transportation of voting machines to and from polling places for or on behalf of any political subdivision of this Commonwealth for use in any primary, general or special election, or in the transportation of any injured, ill or dead person, or in the transportation by towing of wrecked or disabled motor vehicles, or in the transportation of pulpwood or chemical wood from woodlots.

66 Pa.C.S. § 102 (internal emphasis supplied).

[14] The Code also uses the term "furnish" in the following sections:

> Upon the application of any proposed public utility and the approval of such application by the commission evidenced by its certificate of public convenience first had and obtained, it shall be lawful for any such proposed public utility to begin to offer, render, **furnish**, or supply service within this Commonwealth....

66 Pa.C.S. § 1101.

> **(a) General rule.**--Upon the application of any public utility and the approval of such application by the commission, evidenced by its certificate of public convenience first had and obtained, and upon compliance with existing laws, it shall be lawful:
>
> (1) For any public utility to begin to offer, render, **furnish** or supply within this Commonwealth service of a different nature or to a different territory than that authorized by:
>
> (i) A certificate of public convenience granted under this part or under the former provisions of the act of July 26, 1913 (P.L. 1374, No. 854), known as "The Public Service Company Law," or the act of May 28, 1937 (P.L. 1053, No. 286), known as the "Public Utility Law."
>
> (ii) An unregistered right, power or privilege preserved by section 103 (relating to prior rights preserved).

66 Pa.C.S. § 1102 (emphasis supplied; footnotes omitted).

> Every public utility shall **furnish** and maintain adequate, efficient, safe, and reasonable service and facilities, and shall make all such repairs, changes, alterations, substitutions, extensions, and improvements in or to such service and facilities as shall be necessary or proper for the accommodation, convenience, and safety of its patrons, employees, and the public....

66 Pa.C.S. § 1501 (emphasis supplied).

> Every public utility, **furnishing** service upon meter or other similar measurement, shall provide, and keep in and upon the premises of such public utility, suitable and proper apparatus, to be approved from time to time and stamped or marked by the commission, for testing and proving the accuracy of meters furnished by such public utility for use; and by which apparatus every meter may be tested, upon the written request of the consumer to whom the same shall be **furnished**, and in the presence of the consumer, if he shall so desire....

66 Pa.C.S. § 1507 (emphasis supplied).

[15] Energy efficiency and conservation measures shall include

> solar or solar photovoltaic panels, energy efficient windows and doors, energy efficient lighting, including exit sign retrofit, high bay fluorescent retrofit and pedestrian and traffic signal conversion, geothermal heating, insulation, air sealing, reflective roof coatings, energy efficient heating and cooling equipment or systems and energy efficient appliances and other technologies, practices or measures approved by the commission.

66 Pa.C.S. § 2806.1(m).

[16] In fact, if an electric distribution company fails to achieve the reductions required under Section 2806.1 subsections (c) or (d), it is "subject to a civil penalty not less than $1,000,000 and not to exceed $20,000,000." 66 Pa.C.S. § 2806.1(f)(2)(i).

17 Notably, twice within Act 129, the General Assembly not only anticipated that EDCs would install smart meter technology system-wide, but also gave EDCs authority to require a customer to upgrade the technology by providing (1) that a distribution "may require that the customer install, at the customer's expense, enhanced metering capability sufficient to match the energy delivered by the electric generation suppliers with consumption by the customer," 66 Pa.C.S. § 2807(a); and (2) that nothing in Chapter 28 of the PUC Code "shall prevent the electric distribution company from upgrading its system to meet changing customer requirements...." *Id.* § 2807(b).

18 The PUC defines "tariff" as "[a]ll schedules of rates, all rules, regulations, practices, or contracts involving any rate or rates, including contracts for interchange of service[.]" 66 Pa.C.S. § 102. In other words, a tariff is the document that governs how an energy provider, such as PECO, charges a customer for their energy usage. Utility vendors submit their tariff to the government, i.e., the PUC, for approval. A PUC-approved tariff is prima facie reasonable, has the full force of law, and is binding on the utility and the customer. 66 Pa.C.S. § 316; *Lynch v. Pa. Pub. Util. Comm'n*, 140 Pa.Cmwlth. 599, 594 A.2d 816 (1991), *appeal denied*, 529 Pa. 670, 605 A.2d 335 (1992).

19 Relatedly, the PUC's regulations provide that

> [a] public utility may notify a customer and terminate service provided to a customer after notice as provided in §§ 56.91-56.100 (relating to notice procedures prior to termination) for any of the following actions by the customer ... 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(3).

20 Consumer advocate groups, licensed electric generation suppliers, and other interested entities participated in negotiations regarding the Petition of PECO Energy Company for Approval of its Smart Meter Technology Procurement and Installation Plan. Initial Decision (M-2009-2123944), 1/19/2010, at 2. These participants were aware of PECO's plan for the system-wide installation of smart meters pursuant to Act 129 and approved of it. For example, the Office of Small Business Advocate acknowledged that "the General Assembly mandated the deployment of smart meters to all customers over a 15-year period of time, regardless of how many of those customers will actually be able to save money by using those smart meters to adjust their consumption profile." Reply Exceptions, 3/1/2010, at 9. The Commonwealth of Pennsylvania, Department of Environmental Protection expressed that its "primary interests in this matter relate to the timeframe in which the metering infrastructure will be developed and installed, the timeframe in which smart meters will be deployed system-wide, and the functions the proposed smart meters and infrastructure will perform and support." Statement of the Commonwealth of Pennsylvania, Department of Environmental Protection in Support of Joint Petition for Partial Settlement, 11/23/2009, at 1. *See also* Settlement Agreement, 11/25/2009 (approving modified version of PECO's universal deployment and installation plan).

21 Although a customer who requests a smart meter pursuant to Section 2807(f)(2)(i) agrees to pay for the meter upon request, smart meter technology is not free to anyone. *See* 66 Pa.C.S. § 2807(f)(7) ("An electric distribution company may recover smart meter technology costs: (i) through base rates, including a deferral for future base rate recovery of current basis with carrying charge as determined by the commission; or (ii) on a full and current basis through a reconcilable automatic adjustment clause under section 1307.").

[22] PECO's tariff explains the operation of (f)(1), as follows:

> Once all necessary infrastructure is complete but not later than October 2012 a customer may request that PECO install a smart meter ahead of the planned schedule for their property[;] however the customer must pay the incremental cost of installing the meter outside of the normal installation schedule.

Tariff (Electric) No. 4 at § 14.10 (Provisions for Customer Requested Smart Meters). We note that Section 14.10 was added to Tariff (Electric) No. 4 following negotiations with and approval by consumer advocate groups, licensed electricity generation suppliers, and other interested entities. *See* supra note 17. Section 14.10 indicates that EDCs would need several years to complete the smart meter technology infrastructure mandated by Act 129. After completion of the smart meter technology infrastructure — but before the universal deployment of smart meter technology — EDCs could install smart meter technology at the request of an electric customer who requested a smart meter, i.e., early technology adopters. 66 Pa.C.S. § 2807(f)(2)(i); Tariff (Electric) No. 4 § 14.10; 66 Pa.C.S. § 2807(f)(2)(i). The associated provisions of Section 2807(f)(2)(i) and Section 14.10 of Tariff (Electric) No. 4 make sense only in the context of allowing early technology adopters to move to the head of the line, before the system-wide deployment and installation of smart meter technology pursuant to the schedule in a PUC-approved plan.

[23] *See, e.g.*, Wes Zimmerman Amicus Brief at 9–11 (arguing that the PUC conflates the meaning of "depreciation schedule" in Section 2807(f)(2)(iii) with "deployment" schedule, explaining that the term "depreciation" is used for accounting and tax purposes when determining the useful life of an asset).

[24] As stated earlier, although PECO originally requested a ten-year period in which to replace Legacy meters with smart meters, it reduced that period by five years based on its cost-benefit analysis of expediting the deployment process. Petition of PECO Energy Company for Approval of its Smart Meter Universal Deployment Plan, M-2009-2123944, 1/18/2013, ¶¶ 23–26, PECO Statement No. 2 (Direct Testimony of Michael J. Trzaska, Principal Regulatory and Rates Specialist for PECO). According to PECO,

> [t]he single largest benefit from early deployment is to enable PECO to cease paying fees to Landis+Gyr for services that company is providing to operate PECO's existing [Legacy] meters. The second largest benefit is derived from the lower costs PECO will incur to acquire and install smart meters under the shorter deployment schedule, which will enable PECO to achieve economies of scale in meter procurement, avoid future inflation-related increases in the price of meters and capture synergies in the install of meters generated by a more compressed implementation schedule. The third largest benefit is the greater operational savings PECO will achieve by early deployment of smart meters. In addition to these three major sources of savings, further savings will be achieved in the IT area from shortening the implementation schedule, and greater customer/societal benefits will be achieved from advancing the date when customers can begin to take advantage of smart meter functionality.

Id. ¶ 24, PECO Statement Nos. 1 (Direct Testimony of Michael Innocenzo, PECO Senior Vice President, Operations) and 2 (Direct Testimony of Michael J. Trzaska, Principal Regulatory and Rates Specialist for PECO).

[25] To establish a claim by a preponderance of the evidence means to offer evidence that outweighs or is more convincing than, by even the smallest amount, the probative value of the evidence presented by the opposing party. *Stacey Weaver v. PPL Electric Utilities Corp.*, No. C-2018-3005382, 2020 WL 5876967 (Pa. P.U.C. Sept. 17, 2020); *see also Popowsky v. Pa. Util. Comm'n*, 594 Pa. 583, 937 A.2d 1040, 1057 (2007) (acknowledging that "the PUC properly

applies a preponderance of the evidence standard to make factually-based determinations").

[26] Ms. Povacz testified that, after installation of the smart meter, she experienced buzzing in the ears, sleeplessness, fatigue, headaches, heart palpitations, chest pain, body aches, dizziness, and memory loss. Povacz Statement 2, 4/27/2016, at 10–21, 27; Povacz ALJ Initial Decision, C-2015-2475023, at 5, 12 (Pa. P.U.C. Jan. 26, 2018). Ms. Murphy claimed that the installation of smart meter exacerbated her existing medical conditions, which included two pre-existing genetic diseases, sensitivity to smells, fluorescent lights, electric pulsations, and most pharmaceutical drugs. After installation of the smart meter, she suffered from, inter alia, constipation, abdominal pain, hypothyroidism, diverticulitis, weight gain, atrial fibrillation, aortic valve regurgitation, detached retina, and leg pain. Murphy Statement 2, 4/29/2016, at 3, 14, 16–17, 24–29; Murphy ALJ Initial Decision, C-2015-2475726, at 9, 24 (Pa. P.U.C. Feb. 21, 2018). Ms. Randall averred that, given her long and complex medical history of multiple cancers, the installation of a smart meter increased her susceptibility to additional cancers by increasing the radiation levels in her home. N.T., 9/15/2016, at 50, 52-60; Randall/Albrecht ALJ Initial Decision, C-2016-2537666,16–17 (Pa. P.U.C. Feb. 21, 2018).

[27] Ms. Povacz's treating physician, Hanoch Talmor, M.D., testified that her self-reported symptoms were fully consistent with electromagnetic hypersensitivity syndrome ("EHS") and that they were worse when she was exposed to electromagnetic and RF emissions. Written Direct Testimony of Dr. Talmor, 4/27/2016, at 3-4. Dr. Talmor's holistic medical practice is in Florida, and his treatment of Ms. Povacz consisted of two telephone consultations with her about EHS. *Id.* at 1; N.T., 6/7/2016, at 102. He recommended that Ms. Povacz avoid all sources of RF emissions, and that PECO abstain from installing a smart meter at her home because of the negative health effects such a device would have on her. Written Direct Testimony of Dr. Talmor, 4/27/2016, at 5. Ms. Murphy's treating physician, Peter J. Prociuk, M.D., opined that, although there could be a connection between smart meter RF emissions and electromagnetic hypersensitivity, he was "very mindful of the fact that the clinical science is not well established." N.T., 12/5/2016, at 82. Ms. Randall's treating physician, Ann L. Honebrink, M.D., could not offer an opinion as to whether RF emissions can cause cancer, as she has "not studied the PECO fields" or whether RF emissions from smart meters can cause or exacerbate cancer. N.T., 9/27/2016, at 29. Given the inconclusiveness of their testimony, none of the treating physicians was offered as an expert on causation. *Povacz*, No. C-2015-2475023, at 60, n.19 ("The Complainant submitted that she did not offer Dr. Talmor's testimony on the issue of causation.") (citing Provacz Reply Brief at 18); *Murphy*, No. C-2015-2475726, at 64, n.21 ("The Complainant submitted that she did not offer Dr. Prociuk's testimony on the issue of causation.") (citing Murphy Reply Brief at 18); *Randall/Albrecht*, No. C-2016-2537666, at 59, n.20 ("Importantly, the Complainant submitted that she did not offer Dr. Honebrink's testimony on the issue of causation.") (citing Randall Reply Brief at 18).

[28] PUC-PECO do not discuss the *Naperville* cases in their filings before this Court.

[29] Customers highlight two statements by the Seventh Circuit which, they claim, support their position: the circuit court stated that if a city were "to collect data at shorter intervals, its conclusion could change," and that the electric utility "could have avoided this controversy ... by giving residents a genuine opportunity to consent to the installation of smart meters, as many other utilities have." Povacz/Murphy Brief at 38 (citing *Naperville*, 900 F.3d at 529).

We consider Customers' reliance on dicta in *Naperville* about what the circuit court might have held under different facts unavailing, as the circuit court's analysis was limited to determining if the collection of smart meter data

violated the Fourth Amendment. *Naperville*, 900 F.3d at 527–29.

30 According to Customers, if the PUC had followed the procedures regarding medical certifications in 52 Pa.C.S. §§ 56.111 and 56.118, the burden would have shifted to PECO to show, by a preponderance of the evidence, that Customers' medical certifications were invalid. Povacz/Murphy Brief at 45. However, as the application of Code provisions regarding medical certifications is not within the scope of our grant of review, we will not address that issue.

31 Albrecht and Randall concede that their sincerely held beliefs about smart meters and their desire not to be exposed to RF emissions would not be sufficient to demonstrate that smart meter technology is unsafe or unreasonable. Randall/Albrecht Reply Brief at 56.

32 By way of example, both Maria Povacz and Laura Murphy self-reported electromagnetic hypersensitivity syndrome ("EHS"), which reports their treating physicians confirmed without conducting any independent diagnostic testing. N.T., 9/15/2016, at 641–42; N.T., 6/7/2016, at 105.

33 Although Customers now argue that their claims are based on the contention that smart meters are unsafe because they "pose a risk of harm," Povacz/Murphy Brief at 39, 41, after review of the record, their specific challenges developed before the PUC are not so classified. Ms. Provacz's physician testified that RF emissions caused her self-reported symptoms. Written Direct Testimony of Dr. Talmor, 4/27/2016, at 3-4. Ms. Murphy's physician testified that RF emissions may have been a significant contributing factor to the exacerbation of her existing health issues. N.T., 12/5/2016, at 80. Ms. Randall's physician opined that, because of her history of cancer, radiation exposure of any kind, including RF emissions, should be avoided because of its potential to pose a risk of harm. N.T., 9/27/2016, at 25–26. None of the physicians testified within any degree of certainty and, as noted, Customers did not offer these witnesses as experts on causation. *See* note 27, supra.

34 For the same reasons, we do not consider *Environmental Health Trust* to be a game changer in the context of Customers' Section 1501 claim that smart meter technology is not reasonable.

35 PUC-PECO refute this interpretation of *Branagh*, explaining that, when the ALJ and PUC "considered the merits of Branagh's complaint, they applied the *Woodbourne-Heaton* standard; determined that Branagh did not establish that her alleged health effects were causally connected to smart meter RF [emissions]; and, therefore, installing electric or gas smart meters does not violate the safe and unreasonable service standards of Section 1501." PECO Second Brief at 53.

36 PUC–PECO complain that Povacz and Murphy have raised this argument for the first time in this appeal, denying them the opportunity to address the regulations. PECO Second Brief at 49; PUC Reply Brief at 37. Therefore, they contend, Povacz and Murphy have waived the argument that they do not have the burden of proving a violation of Section 1501; moreover, that argument is outside the scope of this Court's grant of review. PECO Second Brief at

49–50; PUC Reply Brief at 37.

As to the merits of the argument, PUC–PECO observe that Customers have not alleged the termination of their electric service would aggravate any of their unique medical symptoms; rather, they complain that the continuation of service with smart meters will aggravate their medical conditions. Therefore, they conclude, this case does not warrant invoking the protection provided by the medical certification process. PECO Second Brief at 50; PUC Reply Brief at 38–40.

37 The tentativeness of this argument reflects the contradictory conclusions of the Commonwealth Court. If the installation of smart meters is not mandatory as the Commonwealth Court concluded, then a customer could merely opt-out without need for establishing a violation of Section 1501. Despite holding that the installation of smart meters was at the customer's option, the Commonwealth Court also concluded that Customers should be given the opportunity to establish that smart meters were unreasonable in their specific circumstances.

38 Or, as in *Branagh*, where PECO's failure to coordinate properly its notices to and communication with the customer regarding the installation of a smart meter. On that point, we note our disapproval of Customers' self-serving misrepresentation of the *Branagh* holding. Povacz/Murphy Brief at 40. *In Branagh*, the PUC deemed PECO's service unreasonable because of how PECO mishandled the installation of a gas smart meter at the customer's property, not because the utility failed to defer to the medical opinion of the customer's physician. *Branagh*, 2017 WL 6988946, at *10.

39 As discussed, reference to a preponderance of the evidence burden of proof and a "conclusive casual connection" evidentiary standard to assess whether expert testimony meets that burden is not inconsistent. *See* pp. 47–50, supra.

40 On behalf of Customers, Lawrence and Alexia McKnight argue that, because the PUC and courts are not medical authorities, mandating potentially negative health exposure of RF emissions to medically vulnerable customers without an accommodation would lead to an absurd result, as well as a violation of federal laws, such as the Americans with Disabilities Act. McKnight Brief at 10–22, 22–26.

Similarly, the Jennings Family supports Customers with a federal anti-discrimination legal framework. Jennings Brief at 4–5. Citing the Americans with Disabilities Act, the Rehabilitation Act, and the Fair Housing Amendment Act, they argue that Act 129 should be interpreted along anti-discrimination lines. *Id.* at 5–9.

We decline to address these arguments because, as observed by PUC-PECO, issues related to federal disability and discrimination laws are outside the scope of the review granted in this case. PECO Second Brief at 53.

