IN THE COMMONWEALTH COURT OF PENNSYLVANIA

Paula and Charles Hughes,	:	
	:	
Petitioners	:	
	:	
v.	:	No. 827 C.D. 2020
	:	Submitted: May 7, 2024
Pennsylvania Public Utility Commission,	:	
	:	
	:	
Respondent	:	

BEFORE: HONORABLE PATRICIA A. McCULLOUGH, Judge
HONORABLE MICHAEL H. WOJCIK, Judge
HONORABLE STACY WALLACE, Judge

OPINION BY JUDGE WOJCIK FILED: August 1, 2024

Paula and Charles Hughes (Consumers), proceeding *pro se*, seek review of the Pennsylvania Public Utility Commission's (PUC) order denying Consumers' exceptions, adopting an administrative law judge's (ALJ) initial decision, and dismissing their complaint. The PUC determined that Act 129 of 2008 (Act 129),[1] which amended the Public Utility Code (Code),[2] mandates the installation of smart meters and does not include an opt-out provision. Additionally, the PUC found that Consumers did not prove, by a preponderance of the evidence,

[1] Act of October 15, 2008, P.L. 1592, No. 129, 66 Pa. C.S. §§2803, 2806.1, 2807, 2811, 2813-2815.

[2] 66 Pa. C.S. §§101-3316.

that Intervenor PPL Electric Utilities Corporation's (PPL) installation of a smart meter constituted unsafe or unreasonable service under Section 1501 of the Code, 66 Pa. C.S. §1501. Consumers assert that the installation of smart meters violates their constitutional rights against unreasonable searches and seizures. They further contend that the PUC erred and/or abused its discretion by applying an erroneous burden of proof and issuing a determination that is not supported by substantial evidence. Upon review, we affirm.

I. Background

In October 2008, the General Assembly amended the Code by enacting Act 129. Act 129 amended the Electricity Generation Customer Choice and Competition Act[3] for the purpose of promoting energy efficiency and conservation across the Commonwealth. *Povacz v. Pennsylvania Public Utility Commission*, 280 A.3d 975, 982 (Pa. 2022) (*Povacz II*). Through Act 129, the General Assembly mandated PPL and other electric distribution companies (EDCs) with more than 100,000 customers to "furnish smart meter technology." Section 2807(f)(2) of the Code, 66 Pa. C.S. §2807(f)(2). Specifically, Section 2807(f) of the Code provides:

> (f) Smart meter technology and time of use rates.--
>
> (1) Within nine months after the effective date of this paragraph, [EDCs] shall file a smart meter technology procurement and installation plan with the [PUC] for approval. The plan shall describe the smart meter technologies the [EDC] proposes to install in accordance with paragraph (2).

[3] Act of December 3, 1996, P.L. 802, 66 Pa. C.S. §§2801-2815 (deregulating electricity generation in Pennsylvania and providing customers with the opportunity to select an electricity generation supplier).

(2) [EDCs] 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.

(3) [EDCs] shall, with customer consent, make available direct meter access and electronic access to customer meter data to third parties, including electric generation suppliers and providers of conservation and load management services.

(4) In no event shall lost or decreased revenues by an [EDC] due to reduced electricity consumption or shifting energy demand be considered any of the following:

(i) A cost of smart meter technology recoverable under a reconcilable automatic adjustment clause under section 1307(b), except that decreased revenues and reduced energy consumption may be reflected in the revenue and sales data used to calculate rates in a distribution rate base rate proceeding filed under section 1308 (relating to voluntary changes in rates).

(ii) A recoverable cost.

(5) By January 1, 2010, 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.
>
> (6) The provisions of this subsection shall not apply to an [EDC] with 100,000 or fewer customers.
>
> (7) An [EDC] may recover reasonable and prudent costs of providing smart meter technology under paragraph (2)(ii) and (iii), as determined by the [PUC]. This paragraph includes annual depreciation and capital costs over the life of the smart meter technology and the cost of any system upgrades that the [EDC] may require to enable the use of the smart meter technology which are incurred after the effective date of this paragraph, less operating and capital cost savings realized by the [EDC] from the installation and use of the smart meter technology. Smart meter technology shall be deemed to be a new service offered for the first time under section 2804(4)(vi). An [EDC] 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 [PUC]; or
>
> (ii) on a full and current basis through a reconcilable automatic adjustment clause under section 1307.

In turn, Section 2807(g) of the Code defines "smart meter technology" as follows:

> (g) . . . [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). Smart meters, also known as advanced metering infrastructure (AMI) meters, record electricity consumption on at least an hourly basis using radio frequency (RF) electromagnetic energy. *Povacz II*, 280 A.3d at 983-84; Section 2807(g) of the Code, 66 Pa. C.S. §2807(g).

Act 129 directed the PUC to "adopt an energy efficiency and conservation 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. Section 2806.1(a) of the Code, 66 Pa. C.S. §2806.1(a). After Act 129 took effect, the PUC directed subject EDCs, including PPL, to submit plans to the PUC for the deployment of smart meter technology within their respective service territories.

In response, PPL sought and obtained the PUC's approval to complete the deployment and installation of smart meters for its customers within its service territory by the end of 2019. PPL notified its electric customers, including

Consumers, of its intent to replace their existing powerline carrier meters with smart meters at their residences. Consumers refused to have a smart meter installed.

On February 4, 2019, Consumers filed a formal complaint with the PUC to opt out of a smart meter installation at their residence citing health (hypersensitivity to the RF emissions), safety, and privacy concerns. PPL filed an answer in response denying that smart meters cause adverse health effects and asserting that Act 129 requires PPL to install smart meters for all customers, without exception, and that it has the right to terminate service for customers that refuse installation.

In September 2019, a hearing before the ALJ ensued. At the hearing, Consumers, who appeared *pro se*, testified and presented 17 exhibits. Consumers' evidence included medical letters regarding their underlying health conditions and an article titled "Stop Smart Meters NY" relating to the safety and privacy of smart meters. PPL appeared, represented by counsel, and presented 15 exhibits and 4 expert witnesses. All exhibits were admitted into evidence. Following the close of the record, the ALJ issued an initial decision denying Consumers' formal complaint and Consumers filed exceptions.[4]

By opinion and order dated July 16, 2020, the PUC denied the exceptions, adopted the ALJ's initial decision, and dismissed Consumers' complaint. The PUC held that Act 129 mandates EDCs, such as PPL, to furnish smart meters to all electric customers within its electric distribution service area,

[4] In an attempt to bolster their claims, Consumers attached evidence that was not part of the record before the ALJ. The evidence included "Excerpt A - A section about the Federal Trade Commission Act from a 'Consumer Compliance Handbook' and Excerpt B - Selected pages from a Congressional Research Service Report titled 'Smart Meter Data: Privacy and Cybersecurity' dated February 3, 2012." PUC Opinion and Order, 7/16/20, at 15. The PUC disregarded this extra-record evidence on the basis that the parties cannot introduce new evidence at the exceptions stage. *Id.*

without exception. Act 129 does not provide customers with a right to opt out of smart meter installation. However, electric customers may seek an accommodation by filing a claim under Section 1501 of the Code, 66 Pa. C.S. §1501, and proving, by a preponderance of the evidence, that the installation of a smart meter is unsafe and/or unreasonable. The PUC found that Consumers failed to show a conclusive causal connection between the low-level RF fields emitted from the smart meter and the alleged adverse health effects by a preponderance of the evidence.

From this decision, Consumers petitioned for review with this Court. PPL intervened. At Consumers' request, this Court stayed the installation of a smart meter at their residence pending disposition of three consolidated appeals involving similar issues: *Povacz v. Pennsylvania Public Utility Commission* (Pa. Cmwlth., No. 492 C.D. 2019), *Murphy v. Pennsylvania Public Utility Commission* (Pa. Cmwlth., No. 606 C.D. 2019), and *Randall v. Pennsylvania Public Utility Commission* (Pa. Cmwlth., No. 607 C.D. 2019).

On October 8, 2020, this Court decided the three consolidated appeals and affirmed in part, reversed and remanded in part, and vacated and remanded in part the PUC orders. *Povacz. v. Pennsylvania Public Utility Commission*, 241 A.3d 481 (Pa. Cmwlth. 2020) (*Povacz I), rev'd in part, aff'd in part, Povacz II*. In *Povacz I*, this Court stated:

> [W]e affirm the PUC's rejection of [the c]onsumers' constitutional challenge. We reverse the PUC's conclusion that it lacks authority to accommodate [the c]onsumers' desire to avoid RF emissions from smart meters and vacate the PUC's determination that such accommodation would not be reasonable. We affirm the PUC's determination of the burden of proving harm. We affirm the PUC's findings of fact. We remand this matter to the PUC for determinations of whether accommodations are appropriate for each of the

> [c]onsumers, and if so, what those accommodations should be.

241 A.3d at 494-95. From the *Povacz I* decision, all parties petitioned for allowance of appeal with the Pennsylvania Supreme Court, which was granted. Meanwhile, in this matter, we continued the stay pending the Supreme Court's disposition of the *Povacz I* appeal.

In *Povacz II*, the Pennsylvania Supreme Court affirmed in part and reversed in part this Court's decision in *Povacz I*, thereby affirming the PUC Orders underlying the appeals. The Supreme Court concluded that Act 129 mandates EDCs to "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." *Povacz II*, 280 A.3d at 983. "An electric customer with concerns about smart meters may seek an accommodation from the PUC or EDC . . . ." *Id.* at 983-84 (footnote omitted). However, to obtain an accommodation, the customer must prove that the installation of a smart meter violates Section 1501 of the Code, which requires utilities to provide safe and reasonable service. *Id.* To do so, the customer must establish a "conclusive causal connection" between RF exposure and the claimed health effects by a "preponderance of the evidence." *Id.* at 984. Applying this standard, the Supreme Court determined that the electric customers did not prove that installation of a smart meter at their premises violated Section 1501. *Id.* As a result, the PUC was not required to prescribe any accommodation. *Id.* Thus, the Supreme Court ordered:

> [W]e 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 [the c]ustomers 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 [the c]ustomers established that smart meter service is unreasonable under Section 1501.

Id. at 1014. Following *Povacz II*, this Court lifted the stay in this matter and directed the parties to file briefs. We now consider Consumers' petition for review.[5]

II. Issues

We have distilled Consumers' statement of questions involved into three central arguments. First, Consumers assert that Act 129 violates their constitutional rights arising under the Fourth Amendment of the United States (U.S.) Constitution, U.S. Const. amend. IV, and article I, section 8 of the Pennsylvania Constitution, Pa. Const. art. I, §8, against unreasonable searches and seizures. Second, they contend that the PUC applied an erroneous burden of proof by requiring Consumers to establish a violation of Section 1501 of the Code. Third, they argue that the PUC's determination is not supported by substantial evidence.

III. Discussion
A. Unreasonable Search and Seizure

Consumers argue that, because the Pennsylvania Supreme Court ruled that Act 129 was mandatory, it follows then that EDCs under the PUC's jurisdiction

[5] This Court's review is limited to determining whether the PUC violated a constitutional right, committed an error of law, rendered a decision not supported by substantial evidence, or violated its rules of practice. *Romeo v. Pennsylvania Public Utility Commission*, 154 A.3d 422 (Pa. Cmwlth. 2017). For questions of constitutional law, including whether an individual's constitutional right to be free from unreasonable searches has been violated, our standard of review is *de novo*, and our scope of review is plenary. *See Commonwealth v. Leed*, 186 A.3d 405, 414 n.4 (Pa. 2018); *Commonwealth v. Shabezz*, 166 A.3d 278, 285 (Pa. 2017).

are now state actors subject to the constitutional proscriptions against unreasonable searches and seizures. According to Consumers, the collection of data that can identify what appliances are being used in a person's home constitutes a warrantless search that violates the Fourth Amendment of the U.S. Constitution and article 1, section 8 of the Pennsylvania Constitution. Given the constitutional violation, they maintain that they should be entitled to opt out of the installation.

In *Povacz II*, the Supreme Court concluded that "Act 129 is mandatory, requiring the system-wide installation of smart meter technology by EDCs, including smart meters." 280 A.3d at 1014. Act 129 "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*." *Id.* at 992 (emphasis added). There is no opt-out provision. *Id.* at 1014. Although the customers in *Povacz I* raised substantive due process claims, the Supreme Court denied allocatur as to any constitutional issues.[6] *Povacz II*, 280 A.3d at 985 n.8.

The Fourth Amendment of the U.S. Constitution (Fourth Amendment) protects "[t]he right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures." U.S. Const. amend. IV. Similarly, article I, section 8 of the Pennsylvania Constitution, Pa. Const. art. I, §8, affords people the same security against unreasonable searches and seizures. *See Interest of T.W.*, 261 A.3d 409, 417-18 (Pa. 2021).

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[6] In *Povacz I*, this Court declined to recognize a viable claim regarding a violation of rights under the Fourteenth Amendment of the U.S. Constitution, U.S. Const. amend. XIV. 241 A.3d at 488. Relying on the persuasive reasoning in *Naperville Smart Meter Awareness v. City of Naperville*, 69 F. Supp. 3d 830 (N.D. Ill. 2014) (*Naperville I*), which addressed the same issue, we rejected the customers' substantive due process argument because they failed to identify an arbitrary deprivation of a recognized liberty or property interest. *Povacz I*, 241 A.3d at 488. Because the Supreme Court declined to grant review of any constitutional issues, s*ee Povacz II*, 280 A.3d at 985 n.8, our holding on this issue stands.

A "search" occurs when "an expectation of privacy that society is prepared to consider reasonable is infringed." *United States v. Jacobsen*, 466 U.S. 109, 113 (1984). "[A]t the [Fourth Amendment's] very core stands the right of a man to retreat into his own home and there be free from unreasonable government intrusion." *Silverman v. United States*, 365 U.S. 505, 511 (1961). This protection, which was previously limited to common law trespass, now encompasses searches of the home made possible by "advancing technology." *Kyllo v. United States*, 533 U.S. 27, 35 (2001) (contemplating "imaging technology that could discern all human activity in the home"). Any other rule would "erode the privacy guaranteed by the Fourth Amendment." *Id.* at 34.

"The touchstone of the Fourth Amendment is reasonableness." *Florida v. Jimeno*, 500 U.S. 248, 250 (1991). Where the data collection is not performed as part of a criminal investigation, the courts must balance the intrusion on the individual's Fourth Amendment interests against the promotion of legitimate government interest. *Hiibel v. Sixth Judicial District Court*, 542 U.S. 177, 187-88 (2004).

Significant to our analysis here, the Fourth Amendment's protection against unlawful searches and seizures applies to "only governmental action." *Jacobsen*, 466 U.S. at 113. It follows, therefore, that "the proscriptions of the Fourth Amendment and [a]rticle I, [section] 8 [of the Pennsylvania Constitution], do not apply to searches and seizures conducted by private [actors]." *Commonwealth v. Harris*, 817 A.2d 1033, 1047 (Pa. 2002) (citing *Coolidge v. New Hampshire*, 403 U.S. 443 (1971); *Burdeau v. McDowell*, 256 U.S. 465 (1921); *Commonwealth v. Corley*, 491 A.2d 829 (Pa. 1985)). It does not apply to searches, even unreasonable ones, effected by private actors "not acting as an agent of the Government or with

the participation or knowledge of any governmental official." *Jacobsen*, 466 U.S. at 113.

Where the action complained of was taken by a private actor, such as a privately-owned utility company, we must examine whether the conduct itself involves private or state action. *Jackson v. Metropolitan Edison Co.*, 419 U.S. 345, 350 (1974). "The mere fact that a business is subject to state regulation does not by itself convert its action into that of the State for purposes of the Fourteenth Amendment. Nor does the fact that the regulation is extensive and detailed, as in the case of most public utilities, do so." *Id.* (footnote and citation omitted).

"[T]he inquiry must be whether there is a sufficiently close nexus between the State and the challenged action of the regulated entity so that the action of the latter may be fairly treated as that of the State itself." *Jackson*, 419 U.S. at 351. As the U.S. Supreme Court explained in *Blum v. Yaretsky*, 457 U.S. 991, 1004 (1982):

> The purpose of this requirement is to assure that constitutional standards are invoked *only when it can be said that the State is responsible for the specific conduct of which the plaintiff complains*. The importance of this assurance is evident when . . . the complaining party seeks to hold the State liable for the actions of private parties.

(Emphasis added.)

Pennsylvania courts have historically "rejected the contention that the furnishing of utility services is . . . a state function." *Jackson*, 419 U.S. at 353 (citing *Girard Life Insurance Co. v. City of Philadelphia*, 88 Pa. 393 (1879); *Baily v. Philadelphia*, 39 A. 494 (Pa. 1898)). In *Jackson*, the U.S. Supreme Court also rejected the contention that a utility is a state actor even where the utility is "a heavily regulated, privately owned utility, enjoying at least a partial monopoly in the

providing of electrical service within its territory" and takes action "in a manner which the [PUC] found permissible under state law." *Id.* at 358.

Notably, in *Povacz I*, this Court held that "[c]onstitutional protections apply [only] against state actors" and the EDC involved therein, PECO, was "*not a state actor in relation to its installation of smart meters and provision of electricity to its customers*." *Povacz I*, 241 A.3d at 486 n.9. The Pennsylvania Supreme Court did not disturb this finding on appeal. *See Povacz II*, 280 A.3d at 985 n.8 (declining to address any constitutional issues).

Nevertheless, Consumers argue that PPL is operating as a state actor under Act 129's mandate to install smart meters, and they rely on *Naperville Smart Meter Awareness v. City of Naperville*, 900 F.3d 521, 529 (7th Cir. 2018) (*Naperville II*),[7] for this limited proposition. In *Naperville II*, customers subject to smart meter installation asserted Fourth Amendment violations against the City of Naperville. Notably, the City of Naperville owned and operated the public utility that provided electricity to the city's residents. *Naperville II*, 900 F.3d 524. Because the public utility was a government actor, the federal court proceeded to address whether the City's use of smart meters constituted a search and whether the search was unreasonable under the Fourth Amendment. *Id.* at 525-29. The federal court ultimately concluded that, although smart meter data collection constituted a search, it was not an unreasonable one. *Id.* Thus, the federal court rejected the customers' constitutional claims. *Id*.

However, unlike in *Naperville II*, PPL is not a government-owned utility. Rather, PPL is a privately owned corporation that is highly regulated, just

[7] We may consider decisions from other states as persuasive authority. *See League of Women Voters v. Commonwealth*, 178 A.3d 737, 803 (Pa. 2018); *Commonwealth v. Small*, 189 A.3d 961, 973 (Pa. 2018); *Koken v. Reliance Insurance Co.*, 893 A.2d 70, 83 (Pa. 2006).

like PECO in *Povacz I*. Although Act 129 mandates PPL and other EDCs to install smart meters in their territories, PPL's compliance with Act 129 does not make it an agent of the state. *Povacz I*. There is no evidence in this case that the government controls the operations of PPL or that PPL acts as an agent of the government.

As for the smart meter's data collection, there is no evidence that the government is performing the search or using the data collected. PPL filed a detailed AMI Customer Privacy Policy as part of its smart meter plan, which sets forth the data to be collected from the smart meters, steps PPL will take to protect the data, and how PPL will use the data. The PUC summarized PPL's evidence:

> [Kevin] Durkin's written testimony explained what data the AMI meter collects and how [PPL] protects the data. PPL states that [it] does not collect any specific information about the use of individual appliances at the premises. Rather, [PPL] only collects information about the total electric usage at the premises. PPL states that it does not share AMI data, except as required or permitted by law, regulatory agencies, or governmental authorities. . . . [T]here is no record evidence that PPL easily shares AMI data with law enforcement or other third parties.

PUC Opinion, 7/16/20, at 24 (citations omitted). PPL collects data on a premise's energy consumption for billing purposes and to determine significant event information, such as outages, voltage, heat alarms, and meter tampering alerts. *Id*. Upon review, we conclude that PPL is not acting as an agent of the state when installing smart meters. Accordingly, we reject Consumers' claim that the installation of a smart meter violates their constitutional rights under the Fourth Amendment and article I, section 8 of the Pennsylvania Constitution.

B. Burden of Proof

Next, Consumers contend that the PUC erred by placing a high burden on customers to prove a violation of Section 1501 of the Code by requiring them to establish a conclusive causal connection by a preponderance of the evidence. According to Consumers, "[n]othing in Section 1501 supports the position that [they] were required[] to prove that RF exposure from PPL's [smart meter] will cause harm or that there is a 'conclusive causal connection.'" Petitioners' Brief at 50. Instead, they argue that the PUC should have concluded that "evidence of a risk of harm is sufficient to establish a violation of Section 1501." *Id.*

"Although Act 129 does not provide [] electric customer[s] 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." *Povacz II*, 280 A.3d at 999. Section 1501 of the Code provides:

> 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 added).

Because an EDC must furnish service that is both safe and reasonable, "[t]o carry their burden of proof on a Section 1501 claim, [] smart meter challenger[s] 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." *Povacz II*, 280 A.3d at 1000. Under Act 129, "an EDC cannot be

required to provide accommodation without the finding of a Section 1501 violation."[8] *Id.* at 1014.

To satisfy this burden, the Supreme Court held that customers must establish a "conclusive causal connection" by a preponderance of the evidence standard. *Povacz II*, 280 A.3d at 1006. The Supreme Court explained:

> "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 plaintiff's contention. Evidence that does not support a conclusion (or is inconclusive) cannot meet that minimal burden . . . . 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.

Id. at 1006-07 (emphasis added) (internal citations omitted). In short, customers "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

[8] As the Supreme Court noted: "This holding does not preclude an electric utility from providing a reasonable accommodation to an electric customer in the absence of a [S]ection 1501 violation pursuant to a customer service policy." *Povacz II,* 280 A.3d at 984 n.5. However, the Supreme Court made clear that to *require* an accommodation, a violation of Section 1501 must be established. *Id.* at 1014.

to the public at large or to specific individuals." *Id.* at 1007. Upon review, the PUC did not err in applying this burden.

C. Substantial Evidence

Lastly, Consumers assert that the PUC's findings are not supported by substantial evidence. They contend that the PUC erred by not accepting their evidence and instead accepting PPL's "extreme and unreasonable position" that RF exposure from smart meters is incapable of causing harm. Petitioners' Brief at 49. According to Consumers, reliable scientific evidence clearly shows that RF exposure from smart meters may be harmful to persons, like Consumers, who have a hypersensitivity to RF.

The PUC is the ultimate finder of fact in formal complaint proceedings. *Milkie v. Pennsylvania Public Utility Commission*, 768 A.2d 1217, 1220 n.7 (Pa. Cmwlth. 2001); Section 335 of the Code, 66 Pa. C.S. §335. As factfinder, the PUC is empowered to review record evidence, make credibility determinations, and accord evidentiary weight. *Milkie*, 768 A.2d at 1221; *Verizon Pennsylvania LLC v. Pennsylvania Public Utility Commission*, 303 A.3d 219, 239 (Pa. Cmwlth. 2023). When reviewing a decision of the PUC, an appellate court "should neither substitute its judgment for that of the PUC when substantial evidence supports the PUC's decision on a matter within the PUC's expertise, nor should it indulge in the process of weighing evidence and resolving conflicting testimony." *Lehigh Valley Transportation Services, Inc. v. Pennsylvania Public Utility Commission*, 56 A.3d 49, 56 (Pa. Cmwlth. 2012). Substantial evidence is "relevant evidence which a reasonable mind would accept as adequate to support the conclusion reached." *Township of Exeter v. Zoning Hearing Board of Exeter Township*, 962 A.2d 653,

659 (Pa. 2009) (citation and quotation omitted). The PUC's findings are conclusive where they are supported by substantial evidence. *Hess v. Pennsylvania Public Utility Commission*, 107 A.3d 246, 258 n.7 (Pa. Cmwlth. 2014).

As discussed above, to establish a violation of Section 1501, Consumers "need[ed] 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." *Povacz II*, 280 A.3d at 1007. "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." *Id*. (citation and quotation omitted). Expert evidence is required. *Id.*

In *Povacz II*, the parties presented competing expert testimony. "Although [the c]ustomers 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." 280 A.3d at 1008. PECO challenged the customers' evidence with expert testimony, which the PUC found persuasive. One expert testified, "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 [the c]ustomers." *Id*. at 1001. Another PECO expert testified, "based upon his own evaluation of whether RF emissions from smart meters can cause, contribute to, or exacerbate the conditions described by [the c]ustomers," and "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." *Id*. Based upon the credited evidence, the PUC determined that the customers failed to satisfy their burden. *Id*.

Like the customers in *Povacz II*, Consumers similarly failed to prove that the installation of smart meters at their residence would constitute unsafe or unreasonable service in violation of Section 1501 of the Code. Although Consumers testified and presented medical letters describing their health conditions and the health conditions of family members and claimed those conditions would be exacerbated by exposure to a smart meter, they did not present expert testimony to support their claims. Instead, they relied upon an article to establish a causal connection between the low-level RF fields from a smart meter and adverse health effects, titled "Stop Smart Meters NY."[9] However, the PUC found that the article constituted "unreliable hearsay evidence" because the author was not available for cross-examination at the hearing.[10] PUC Opinion at 11, 19-21. The PUC was not persuaded by Consumers' lay opinions as to the purported health effects that RF emissions from smart meters would cause. *Id*. at 11.

Even if Consumers met their threshold burden, the PUC found that PPL's credible expert evidence successfully rebutted any premise that the

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[9] On appeal, Consumers again attempt to rely on extra-record evidence in support of their claims. *See* Petitioners' Brief at 22, 32-33, 42, 49, 50, 52-57. However, this Court "cannot consider new evidence, and instead, must rely upon the evidence contained in the record certified by the agency." *Weaver v. Pennsylvania Board of Probation and Parole*, 688 A.2d 766, 773 (Pa. Cmwlth. 1997).

[10] Although the "'technical' rules of evidence do not limit administrative hearings, where all relevant evidence of reasonably probative value is admissible," *Gasparro v. Pennsylvania Public Utility Commission*, 814 A.2d 1282, 1284 (Pa. Cmwlth. 2003), this does not undermine the PUC's authority, as factfinder, to assign evidentiary weight to the evidence. *Milkie*, 768 A.2d at 1221.

installation of the PPL smart meter could cause adverse health effects or exacerbate Consumers' underlying health conditions. Specifically, Mark Israel, M.D. (Dr. Israel), a medical expert, testified that "claimed symptoms related to Electromagnetic Hypersensitivity (EHS) are more accurately described as Idiopathic Environmental Intolerance (IEI), in which 'idiopathic' means 'cause unknown.'" PUC Opinion at 11. The PUC found that Dr. Israel testified to a reasonable degree of medical certainty that there is no reliable medical basis to conclude that RF fields from the PPL smart meter will cause or contribute to the development of illness or diseases. *Id*.

In addition, Christopher Davis, Ph.D. (Dr. Davis), a professor of electrical and computer engineering with a Ph.D. in Physics, testified that the PPL smart meter would not cause adverse health effects. He testified that the levels of RF fields from the PPL smart meters are 98,000 times lower than the RF exposure safety limits established by the Federal Communications Commission (FCC).[11] PUC Opinion at 12. He also testified that the RF fields from the PPL smart meter are much lower than typical sources such as cell phones, which can be over 260,000 times higher than a smart meter. *Id*. at 18. Persuaded by PPL's expert evidence, the PUC concluded that there is no reliable medical basis to conclude that RF fields from the PPL smart meter would cause, contribute to, or exacerbate any of the symptoms claimed by Consumers, or any other adverse health effects. PUC Opinion at 20.

As in *Povacz II*, the PUC in this case found that the evidence of potential harm was inconclusive and determined that Consumers failed to sustain

[11] The PUC noted that the FCC has determined safe public exposure levels for RF fields from devices that transmit RF signals, such as the smart meters. PUC Opinion at 11. Those limits are based on evaluations of the body of scientific research on RF fields and were adopted in consultation with other federal agencies, including the Food and Drug Administration and the Environmental Protection Agency. *Id*. at 11-12.

their burden of proof. The PUC weighed the evidence presented and found that Consumers' lay testimony regarding the potential harm from smart meters was outweighed by the contrary expert evidence. Such determinations are the sole province of the PUC as factfinder, and we will not disturb them on appeal. *See Milkie*, 768 A.2d at 1221. Upon review, we conclude that the PUC's findings are supported by substantial evidence and support the conclusion that no causal connection exists between smart meters and the alleged harm.

IV. Conclusion

Accordingly, we affirm the PUC's order.

MICHAEL H. WOJCIK, Judge

IN THE COMMONWEALTH COURT OF PENNSYLVANIA

Paula and Charles Hughes,	:	
	:	
Petitioners	:	
	:	
v.	:	No. 827 C.D. 2020
	:	
Pennsylvania Public Utility Commission,	:	
	:	
Respondent	:	

O R D E R

AND NOW, this 1st day of August, 2024, the order of the Pennsylvania Public Utility Commission, dated July 16, 2020, is AFFIRMED.

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MICHAEL H. WOJCIK, Judge