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E-File

May 5, 2022

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor North
P.O. Box 3265
Harrisburg, PA 17120-3265

**Re: Investigation into Conservation Service Provider and Other Third-Party Access to Electric Distribution Company Customer Data
Docket No. M-2021-3029018**

Dear Secretary Chiavetta:

Enclosed for filing on behalf of PPL Electric Utilities Corporation ("PPL Electric") are PPL Electric's Comments in the above-captioned proceeding. These Comments are being filed pursuant to the February 8, 2022 and March 23, 2022 Secretarial Letters issued in this matter.

Pursuant to 52 Pa. Code § 1.11, the enclosed document is to be deemed filed on May 5, 2022, which is the date it was filed electronically using the Commission's E-filing system.

If you have any questions, please do not hesitate to contact me.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Michael J. Shafer", is written over a light blue horizontal line.

Michael J. Shafer

Enclosure
cc via email: Certificate of Service
Jeff McCracken
Scott Thomas
Christian McDewell

PPL Electric Utilities Corporation

**Comments on the
February 8, 2022 Secretarial Letter**

**Investigation Into Conservation Service Provider
and Other Third-Party Access to Electric Distribution
Company Customer Data**

Docket No. M-2021-3029018

Table of Contents

I. INTRODUCTION AND BACKGROUND	6
II. COMMENTS	7
1. Electric Distribution Company (EDC) Smart Meter Customer Data Access by CSP and Other Third Parties Technical Concerns	10
a. Is it possible to develop a path in which certain CSPs or other third parties are granted authorization to access EDC smart meter customer data electronically in a secure manner?	10
b. Can the web portals available to electric generation suppliers be utilized for this access, or is an alternate pathway necessary?	11
c. Do individual EDCs already maintain an alternative method of data access for CSPs and other third parties?	12
d. How are CSPs provided customer data when performing services under Act 29?	12
e. What technical limitations currently prevent EDCs from providing smart meter data electronically to CSPs or other third parties?	12
f. Aside from CSPs, what other third-party entities should be considered for potential access?	13
g. What criteria should the EDCs utilize to determine eligibility for CSPs and other third parties? Should there be different standards and/or different levels of access to data for different types of CSPs and other third parties?	13
h. Should the EDCs require financial security instruments, such as bonds, to help protect data confidentiality? If yes, are rules required to implement these financial security requirements? Also, if yes, should there be different security thresholds required for different types of CSPs and other third parties?	14
i. What types of tools should be required to ensure that CSPs and other third parties accessing utility systems have access to help features, such as online trouble ticket systems or technical documentation, to enhance their customer experience? What other features may be necessary?	15

- j. How should costs incurred for this purpose be recovered?15
- k. What legal limitations currently prevent EDCs from providing smart meter data electronically to CSPs or other third parties?16
- l. How do EDCs protect their data when it is provided to CSPs performing services under Act 129 to ensure it is not abused? Can this method be extended to other CSPs or other third parties not under contract to perform Act 129 services for the EDC?19
- m. Could the EDCs utilize contracts to protect the confidentiality of the data? If yes, what limitations currently exist that prevent the utilities from implementing these contracts?19
- n. Would the EDCs need to include any provisions created in these proceedings in a tariff in order to apply them to CSPs and other third parties? What other terms of use should be included?20
- o. How should a CSP or other third party obtain customer consent for access to data from EDC systems? Would the EDC determine if a CSP or other third party has obtained the proper customer authorization before customer data is provided? 20
- p. How would the EDC be notified when a customer grants consent for a CSP or other third party to access its EDC-maintained customer data?21
- q. How should a customer withdraw previously granted consent for CSP or other third-party access to the EDC's data? How would the EDC be notified of this withdrawal of consent?22
- r. How would the EDCs monitor data access to determine if a CSP or other third party becomes a "bad actor" by violating its agreements (failing to maintain data confidentiality, pulling data for customer without proper authorization, etc.)? What processes could be used to remove access and prevent misuse?22
- s. For third parties that serve as both a Distributed Energy Resource Aggregator under FERC Order 2222 and a CSP, what limitations on the use of data should be placed on them to prevent unauthorized use between roles?22
- t. Should a utility be held accountable for the improper or illegal acts of a customer-authorized CSP or other third party?23

u.	What action, if any, can the Commission take against CSPs and other third parties that misuse their access to customer data or the data itself?	24
2.	Utility Usage Data and Meter Access	24
a.	What customer data should the utility share with CSPs and other third parties? Should different types of CSPs and other third parties have different access to customer data?	24
b.	What types of data should the EDCs withhold from CSPs and other third parties? Do the EDCs' current systems allow for the data to be restricted?	25
c.	In what format should the data be given? Should the data from each EDC be in identical format (similar to the Electronic Data Exchange Working Group web portal data)? What other technical standards should be applied to the data?	25
d.	Should aggregated data (i.e. – benchmarking or geographic data) be made available? Should aggregated data be available to a wider array of CSPs and other third parties?	26
e.	Should the Commission establish standard protocols and communication mediums for providing direct access to usage information from the meter to the Home Area Network?	26
f.	Should CSPs and other third parties be provided direct access to the meter? What policies or regulations should this Commission promulgate to ensure that these CSPs and other third parties are provided timely access under reasonable terms and conditions to the EDC's customer metering facilities?	26
g.	What communications, software or hardware can facilitate this direct access to the meter for customers and their approved CSPs and other third parties, and should the Commission establish requirements and/or standards to facilitate this access?	27
h.	What electronic access to customer meter data do CSPs, other third parties, and EGSs need from EDCs, that they currently do not have?	27
3.	Home Area Network (HAN) Protocols	27
a.	Should there be interconnectivity between the smart meter and other equipment in the home?	27

b.	Can CSP or other third-party equipment installed in a customer’s home interact with the HAN or the smart meters?	28
c.	Do CSPs or other third parties that have installed equipment in a customer’s home still need access to customer data from the EDC?	28
4.	Automatic Control	28
a.	How can smart meters “effectively support” automatic control of a customer’s electricity consumption by customers, utilities, and the customer’s CSPs or other third parties?	28
b.	How is the smart metering system engaged in the initiation, maintenance, relinquishment, and verification of the automatic control of customer consumption?	29
c.	What smart metering protocols and communication mediums are needed to implement these automated protocols? Should the Commission establish standard protocols and standards for this purpose?	29
d.	What energy consuming customer assets can be controlled by these smart meter systems for each of the customer segments, and how is control of these assets impacted by the choice of communication medium and protocol?	29
III.	CONCLUSION	30

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Investigation into Conservation	:	
Service Provider and Other Third-	:	
Party Access to Electric	:	Docket No. M-2021-3029018
Distribution Company Customer	:	
Data	:	

**COMMENTS OF
PPL ELECTRIC UTILITIES CORPORATION ON
THE FEBRUARY 8, 2022 SECRETARIAL LETTER**

I. INTRODUCTION & BACKGROUND

On February 8, 2022, the Pennsylvania Public Utility Commission (“Commission”) issued a Secretarial Letter seeking comments from interested parties on five sets of questions regarding its investigation into Conservation Service Provider (“CSP”) and other third-party access to electric distribution companies’ (“EDC”) customer data. As outlined in the Secretarial Letter, the Commission’s investigation into these issues stems from its denial of the electric generation supplier (“EGS”) license application of Enerwise Global Technologies, LLC d/b/a CPower (“Enerwise”), which sought an EGS license “solely for the purpose of obtaining access to utility data systems on behalf of its customers” so that it could “verify customer performance in demand response programs and assist the customers in analyzing their electricity usage and capabilities.” (Feb. 8, 2022 Secretarial Letter, p. 1.)

PPL Electric appreciates the opportunity to provide input on the questions raised in the Commission’s February 8, 2022, Secretarial Letter and hereby files these Comments in response.

II. COMMENTS

Before addressing the Commission’s questions in detail, PPL Electric would like to offer its overall position regarding CSPs’ and other third parties’ access to customer data. As an EDC, PPL Electric must protect its customers’ data from unwarranted disclosure. The Company takes that responsibility seriously and has several practices and controls in place to protect against such disclosure. At the same time, PPL Electric recognizes the dynamic nature of the electric industry, the ever-expanding uses of customer data for operational purposes, and the benefits that can flow therefrom when such uses of customer data are permissible. In fact, PPL Electric has fully deployed a Distributed Energy Resources Management System (“DERMS”) and is currently conducting its Commission-approved DER Management Plan pilot program, which is designed to evaluate the costs and benefits of utilizing the automated settings on DERs’ smart inverters versus monitoring and actively managing the settings on DERs’ smart inverters.¹ Furthermore, there are efforts at the state and federal levels that will require improvements to the exchange of customer data, such as Federal Energy Regulatory Commission (“FERC”) Order No. 2222.² Accordingly, PPL Electric maintains that if the Commission were to grant CSPs and other third parties access to the Company’s customer data, then there must be: (1) a framework under which EGSs and other authorized third parties access the customer data but also share customer data with the EDCs; and

¹ See *Petition of PPL Elec. Utils. Corp. for Approval of Tariff Modifications and Waivers of Regulations Necessary to Implement its Distributed Energy Res. Mgmt. Plan*, Docket No. P-2019-3010128 (Order entered Dec. 17, 2020).

² See *Participation of Distributed Energy Res. Aggregations in Markets Operated by Reg’l Transmission Orgs. & Indep. Sys. Operators*, 172 FERC ¶61,247 (Sept. 17, 2020) (“FERC Order No. 2222”), *on reh’g, Participation of Distributed Energy Res. Aggregations in Markets Operated by Reg’l Transmission Orgs. & Indep. Sys. Operators*, 2021 FERC LEXIS 360 (Mar. 18, 2021) (“FERC Order No. 2222-A”), *on reh’g, Participation of Distributed Energy Res. Aggregations in Markets Operated by Reg’l Transmission Orgs. & Indep. Sys. Operators*, 2021 FERC LEXIS 887 (June 17, 2021) (“FERC Order No. 2222-B”).

(2) strict requirements and customer protections in place that the CSPs and other third parties must follow in order to access customer data.

To best accomplish these objectives, PPL Electric believes that EDCs should establish, own, and maintain new platforms or enhance existing platforms, where EGSs and other authorized third parties can access customer data. These platforms could leverage best practices of the EDCs' existing EGS portals and build upon them to provide the necessary data and controls or customer protections. The type of data accessible should be determined based on the category of the requester (e.g., CSP, distributed energy resource ("DER") aggregator, etc.). Any third parties desiring to utilize the new platforms must be either licensed (such as EGSs) or otherwise approved by the Commission to access that data. The Commission should retain oversight and authority over whom may access the EDCs' platforms and impose penalties on persons and entities that violate the Commission's orders, regulations, and/or other requirements governing access to the platforms, use of the customer data, etc. Further, such platforms should be flexible and able to accommodate future developments in the marketplace, including use by DER Aggregators under FERC Order No. 2222. Moreover, the platforms should enable the two-way exchange of customer data between EDCs and third parties, so that EDCs can utilize the third parties' customer data to improve their operations and provide substantial benefits to ratepayers. For example, authorized third parties could include electric vehicle ("EV") charging companies, and their provision of customer data to the EDCs would help the EDCs better prepare for more widespread deployments of EV chargers on their distribution systems. EDCs also could use the customer data provided by third parties to improve their system-wide and real-time situational awareness of distribution

system impacts from DERs and DER Aggregators, which will become increasingly critical as more DERs are deployed and as FERC Order No. 2222 is implemented.

In addition, the Commission should adopt stringent customer protections and communications requirements under any framework that grants CSPs and other authorized third parties access to customer data. As more customer data becomes available and able to be shared, customers should have a say in whether and to what extent their data is shared with third parties. Therefore, PPL Electric believes that a customer must affirmatively consent, either through the EDC-operated platforms or another process, before a CSP or other authorized third party is provided with the customer's data. To help inform that decision, EDCs should provide additional customer communications to make customers aware of who can access their data, what data is accessible, and how the data may be used.

As with the sharing and access of any data through digital means, strict cybersecurity practices and protocols must be in place for the EDCs and any third parties desiring access to customer data. EDCs are under continued threats from domestic and international actors who try to gain unauthorized access to the EDCs' systems and customer data. Before the Commission grants a third party access to an EDC's customer data, that third party must demonstrate that it has strict cybersecurity practices and protocols in place that will help protect against such threats to the customer data. Relatedly, as part of the Commission's oversight of third-party access to customer data, the Commission should be permitted to impose penalties on third parties that fail to adhere to their cybersecurity practices and protocols.

Lastly, whether through new platforms or some other process, EDCs will undoubtedly incur additional costs in order for third parties to access customer data. For example, there are

always costs associated with maintaining and managing a data system, such as third parties “data scraping” (i.e., running automated queries of the system to extract large amounts of data), which slows down the data system. PPL Electric believes that the costs of such a framework should be borne by those who most benefit. Until additional guidelines for said framework are established it is difficult to determine whether third parties or all customers will be the beneficiary.

With those overall Comments in mind, PPL Electric responds to the Commission’s questions in detail in the following sections.

1. Electric Distribution Company (EDC) Smart Meter Customer Data Access by CSPs and Other Third Parties Technical Concerns

a. Is it possible to develop a path in which certain CSPs or other third parties are granted authorization to access EDC smart meter customer data electronically in a secure manner?

Yes. It is possible to develop a path to provide certain CSPs and other third parties access to customer smart meter data. The data sharing platform can be designed with security protections built into it, such as segregating permissions, restricting access to certain data as needed, and designing a business and system process that allows for new users to be verified upon initial login. However, it will be important that the Commission oversees the entities obtaining access to customer data to enforce the security protections. Additionally, the data sharing platform should be uniform and able to serve the data needs of the EDC and all third parties accessing the data. The system also should allow customers to provide and revoke their consent to data disclosure in a secure and efficient manner. PPL Electric believes that stakeholder workshops would be helpful in designing a platform that meets the needs of all users.

b. Can the web portals available to electric generation suppliers be utilized for this access, or is an alternate pathway necessary?

The EGS portal is a good starting point to create a data sharing platform. However, PPL Electric would need to modify its portal in order to accommodate additional users. At the very least, the Company would need to conduct performance and load testing at the anticipated additional user level to help ensure that the additional users do not cause issues with the platform. Additionally, the current EGS portal does not have all of the functionality that will enable the implementation of the grid of the future. Potential additional functionality includes, but is not limited to, the ability to facilitate DER aggregation, support market-based customer incentives, and provide insight into customer resources to support grid reliability and resiliency.

Moreover, with respect to security, EGSs are only provided access to the portal after being licensed with the Commission and being electric data interchange (“EDI”) tested. The Company supports the Commission creating an approval mechanism for all third parties obtaining access to customer data through an EDC portal. This will provide a needed layer of control and security over sensitive customer data.

Additionally, not all data provided to EGSs through the supplier portal would be appropriate to share with CSPs or other third parties. As an example, the Eligible Customer List (“ECL”) should not be provided to CSPs, as it is a marketing tool only to be used by EGSs. As access to EDC data is expanded, the Commission should revisit regulations to make clear that an entity acting in multiple roles (e.g., an EGS that also provides CSP services) does not use access to the ECL for non-EGS activities.

Furthermore, as noted previously, the new platform should support the two-way flow of information between the EDC and the third parties. EDCs have an increasing need for data from

their customers to operate the distribution system safely and reliably. As an example, the increased deployment of behind the meter generation, storage, and EVs make it critical that EDCs obtain data from customers to operate the grid safely and efficiently. To this end, any data sharing platform should support the seamless two-way sharing of data to support grid technologies of the future.

- c. Do individual EDCs already maintain an alternative method of data access for CSPs and other third parties? If yes, please explain your system for this access.**

PPL Electric has Commission-approved contracts with certain CSPs for the purpose of implementing the Company's Phase IV Energy Efficiency and Conservation ("EE&C") Plan under Act 129 of 2008 ("Act 129"). Except for those CSPs, PPL Electric does not maintain an alternative method to provide CSPs or other third parties with access to its data.

- d. How are CSPs provided customer data when performing services under ACT 129?**

Currently, PPL Electric securely sends those CSPs customer data in accordance with the terms and conditions of its Commission-approved CSP contracts. The CSPs themselves never pull data from PPL Electric's system. Depending on the EE&C program, PPL Electric may send the data to the CSP via a secure FTP link on a weekly or ad hoc basis.

- e. What technical limitations currently prevent EDCs from providing smart meter data electronically to CSPs or other third parties?**

As explained Section II.1(a) and (b), *supra*, PPL Electric would need to make certain modifications to the current EGS portal to facilitate the safe and secure transfer of data to CSPs and other third parties through that platform.

f. Aside from CSPs, what other third-party entities should be considered for potential access?

It is currently unclear what third parties, beyond CSPs and EGSs, require customer data access. Nevertheless, access to customer data should be limited to parties that show a clear and justifiable need to the Commission, are licensed or otherwise authorized by the Commission, adhere to the necessary controls and data access requirements established by the Commission and EDCs, and have customer consent to access the customers' data. An individual customer's data and information is confidential, and appropriate steps must be taken to protect against unauthorized data access and disclosure. As such, when reviewing and evaluating a non-CSP's request for customer data access, the Commission should investigate the reason why that entity requires access to that data and whether the entity's status as a non-CSP weighs against approving its request for access.

g. What criteria should the EDCs utilize to determine eligibility for CSPs and other third parties? Should there be different standards and/or different levels of access to data for different types of CSPs and other third parties?

As noted previously, PPL Electric believes that the Commission should review and approve requests by CSPs and other third parties for access to customer data. As part of that review and approval process, the CSPs and third parties should be required to meet additional controls for the protection of customers and EDCs. Indeed, because the CSPs and other third parties would be requesting similar access to that of EGSs, the CSPs and other third parties should be held to similar eligibility requirements, including: (1) financial security protections; (2) adherence to an EDC registration and system testing process; and (3) a background credit check. Additionally, the CSPs and other third parties should only access the data of customers who have affirmatively consented

to such access. If the Commission determines that CSPs and other third parties should have different levels of access to customer data, then appropriate eligibility criteria should be established to protect customers.

- h. Should the EDCs require financial security instruments, such as bonds, to help protect data confidentiality? If yes, are rules required to implement these financial security requirements? Also, if yes, should there be different security thresholds required for different types of CSPs and other third parties? If no financial security should be required, please explain why not.**

As noted previously, PPL Electric supports the Commission adopting financial security protections as part of the eligibility requirements for CSPs and other third parties desiring access to customer data. To that end, the Commission should consider requiring CSPs and other third parties desiring such data access to maintain similar financial security as an EGS. Under Section 54.40(c) of the Commission's regulations, the initial security level from each EGS applicant is \$250,000. 52 Pa. Code § 54.40(c). "After the first year the license is in effect," the security level for each EGS licensee is "reviewed annually and modified primarily based on the licensee's reported annual gross receipts information." *Id.* § 54.40(d). Specifically, "[t]he security level will be 10% of the licensee's reported gross receipts." *Id.* To maintain their licenses, EGSs must "provid[e] proof to the Commission that a bond or other approved security in the amount directed by the Commission has been obtained," although an EGS can "seek approval from the Commission of an alternative level of bonding commensurate with the nature and scope of its operations." *Id.*

Here, by adopting similar financial security requirements for CSPs and other third parties that want customer data access, the Commission would help encourage the CSPs' and third parties' compliance with the Commission's requirements and, by extension, protect customers from unauthorized access or use of customer data. However, it is unclear if there should be different

financial security requirements depending on the kind of entity requiring access, as all the types of third parties that may request access are currently unknown. Notwithstanding, if the Commission determines that there should be different security thresholds depending on the type of entity, PPL Electric believes that the security threshold should be set at an amount commensurate with the entity's data access needs and with the potential risk to customers.

- i. What types of tools should be required to ensure that CSPs and other third parties accessing utility systems have access to help features, such as online trouble ticket systems or technical documentation, to enhance their customer experience? What other features may be necessary?**

After receiving Commission approval to access customer data, the CSPs and other authorized third parties should receive similar tools and features available to EGSs. Specifically, they should utilize EDC supplier portals (or similar platforms) and point of contact information to access approved customer data and information, submit questions and requests to EDCs, and access other necessary documents and information. Further, the CSPs and other authorized third parties should be provided access to EDI for data processing.

- j. How should costs incurred for this purpose be recovered?**

As PPL Electric commented earlier, it is difficult to determine, at this time, whether customers or third parties should provide EDCs cost recovery. The Company believes that should the Commission move forward with a broader framework that allows for two-way data exchange, this format is most likely to benefit all customers, however, if the data platform is limited to only third parties requesting specific customer data that is pulled on a one-off basis, this is most likely to primarily benefit third parties and therefore the third parties should bear the cost of enhancements.

k. What legal limitations currently prevent EDCs from providing smart meter customer data electronically to CSPs or other third parties?

EDCs have a duty to protect its customers' usage data from unauthorized disclosure to third parties. See 66 Pa. C.S. §§ 1501, 2807(f)(3); 52 Pa. Code § 54.8; *Smart Meter Procurement and Installation*, Docket No. M-2009-2092655, p. 24 (Order entered June 24, 2009) (“*Smart Meter Implementation Order*”); *Smart Meter Procurement and Installation*, Docket No. M-2009-2092655, pp. 1-2 (Order entered Dec. 6, 2012) (“*Smart Meter EDI Order*”).

Under, Section 2807(f)(3) of the Public Utility Code, an EDC “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.” 66 Pa. C.S. § 2807(f)(3) (emphasis added); see *Smart Meter Implementation Order*, p. 24 (“Act 129 requires EDCs to make available to third parties, including electric generation suppliers and providers of conservation and load management services, with customer consent, direct access to the meter and electronic meter data.”) (emphasis added); *Smart Meter EDI Order*, p. 1 (“Act 129 requires these EDCs to make available to customers and their designated third parties, including electric generation suppliers (EGSs) and providers of conservation and load management services (CSPs), access to the meter and electronic meter data.”) (emphasis added).

In addition, Section 54.8 of the Commission's regulations states the following:

(a) An EDC or EGS may not release private customer information to a third party unless the customer has been notified of the intent and has been given a convenient method of notifying the entity of the customer's desire to restrict the release of the private information. Specifically, a customer may restrict the release of either the following:

(1) The customer's telephone number.

(2) The customer's historical billing data.

(b) Customers shall be permitted to restrict information as specified in subsection (a) by returning a signed form, orally or electronically.

52 Pa. Code § 54.8 (a)-(b) (emphasis added).

The Commission has explained the application of Section 54.8 as follows:

[T]he Commission has always been cognizant of customer privacy and security concerns and has promulgated regulations, such as 52 Pa Code §54.8 that restrict access to customer information. Specifically, Section 54.8 of the Code restricts an electric company or electric supplier may not release private customer information to a third party, including an affiliate of the electric company or electric supplier, **unless** the customer has been notified of the intent and has been given a convenient method of notifying the entity of the customer's desire to restrict the release of the private information. 52 Pa. Code § 54.8(a). Furthermore, electric generation suppliers are required to maintain the confidentiality of a consumer's personal information, including the customer's name, address, telephone number and historic payment information. *See* 52 Pa. Code § 54.43(d). In addition, the Commission has declared that all electric utility customers shall have the right to withhold all customer account and usage data from the Eligible Customer List that is made available to Commission-licensed Electric Generation Suppliers. *See Interim Guidelines for Eligible Customer Lists*, Final Order on Reconsideration, at Docket No. M-2010-2183412, entered November 15, 2011.

Smart Meter EDI Order, p. 2 (emphasis in original).

Furthermore, the Company has a duty under Section 1501 of the Public Utility Code to provide reasonable, safe, reliable, and adequate service³ to its customers. *See* 66 Pa. C.S. § 1501.

³ "Service" is defined in Section 102 of the Public Utility Code, 66 Pa. C.S. § 102, as the following:

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

Consistent with that duty, PPL Electric takes the protection of its customers' personal information seriously and will not disclose it unless otherwise provided by law, regulation, or order. If the Company were to disclose a customer's personal information without consent or pursuant to a Commission order, the customer or the Commission could potentially file a formal complaint and allege that such disclosure violated Section 1501. *See* 66 Pa. C.S. § 701; *Pa. PUC v. Columbia Gas of Pa., Inc.*, 2012 Pa. PUC LEXIS 1377, at *2-3 (Order entered Aug. 30, 2012).

Moreover, the Commission's general policy is that utilities must protect their customers' privacy. *See, e.g., Submission of the Electronic Data Exchange Working Group's Web Portal Working Group's Solution Framework for Historical Interval Usage and Billing Quality Interval Use*, 2016 Pa. PUC LEXIS 259, at *15 (Order entered June 30, 2016) ("*EDEWG Order*"). As stated in the *EDEWG Order*, "[T]his Commission has always held that customer privacy is of paramount importance." *Id.* Indeed, "this Commission maintains a zero tolerance policy regarding customer information confidentiality," and electric utilities "will be held responsible for any misuse of customer information." *Id.* at *16.

Thus, in general, an EDC must have customer consent to disclose customer data. Outside of the EDCs' Act 129 EE&C Plans, there is currently no mechanism for EDCs to obtain or verify customer consent to release data to CSPs or other non-EGSs.

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.

- l. How do EDCs protect their data when it is provided to CSPs performing services under Act 129 to ensure it is not abused? Can this method be extended to other CSPs or other third parties not under contract to perform Act 129 services for the EDC?**

Under Act 129, the Commission reviews and approves EDCs' contracts with CSPs to implement the EE&C Plans. *See* 66 Pa. C.S. § 2806.1(a)(8). As explained previously, PPL Electric securely sends its contracted CSPs customer data pursuant to the terms and conditions of its Commission-approved CSP contracts. The CSPs do not pull customer data from a PPL Electric resource, as such an approach is less favored from a cybersecurity standpoint. Additionally, PPL Electric's CSP contracts contain several protections for customer data, including that the data will be stored appropriately and securely and will only be used for the purposes of the Company's EE&C Plan. Also, customers consent to their data being provided to the CSP when they submit their applications for participation in an Act 129 plan or receive the measures or incentives under the EE&C Plans.

- m. Could the EDCs utilize contracts to protect the confidentiality of the data? If yes, what limitations currently exist that prevent the utilities from implementing these contracts?**

It would not be feasible for EDCs to utilize contracts to protect customer data that is disclosed to CSPs outside of the EDCs' EE&C programs. Currently, EDCs are required to execute and manage a handful of CSP contracts to implement their EE&C Plans. The Commission's suggestion would require EDCs to enter into potentially hundreds of contracts with CSPs with whom the EDCs would not otherwise be in contractual relationships. Moreover, there would be significant time associated with negotiating and administering those hundreds of contracts. In addition, the remedy for any violation of these contracts would be a breach of contract action

brought by the EDC. This would force the EDC into an enforcement role because it would have to police whether the CSPs are appropriately handling customer data. EDCs do not have the time or resources to monitor CSPs in this manner. Finally, the Act 129 CSP contracts have to be reviewed and approved by the Commission. Outside of that context, however, the Commission generally would not review and approve contracts executed by EDCs and CSPs. Thus, the burden to ensure that adequate protections are in place for the customer data would fall squarely on the EDCs.

- n. Would the EDCs need to include any provisions created in these proceedings in a tariff in order to apply them to CSPs and other third parties? What other terms of use should be included?**

A CSP coordination tariff, similar to a supplier coordination tariff, may be appropriate depending on the outcome of this proceeding. Tariffs are legally binding on utilities and their customers,⁴ so tariff rules governing the disclosure and protection of such data could be useful, especially if the Commission reverses its position on the disclosure of customer data to CSPs and non-EGSs. Potential provisions to include in this tariff would include the data types to be provided, customer privacy protections, coordination cost responsibility, and access controls.

- o. How should a CSP or other third party obtain customer consent for access to data from EDC systems? Would the EDC determine if a CSP or other third party has obtained the proper customer authorization before customer data is provided? If yes, how? If no, please explain why not.**

The ultimate responsibility should be on the CSP to obtain and provide evidence of customer consent. The format of the customer consent should be uniform to facilitate efficient processing of the consents by the EDCs. It should not be the EDCs' role to determine if the consent

⁴ See, e.g., *Pa. Electric Co. v. Pa. PUC*, 663 A.2d 281, 284 (Pa. Cmwlth. 1995).

is valid or proper; rather, the CSP should be held accountable through penalties or other enforcement mechanisms if it is found to have sent improper or invalid customer consents. EDCs do not have the time or resources to make determinations on the propriety of customer consents. Nevertheless, EDCs will likely need to build IT systems to manage this process, and consideration should be given on how the associated capital costs and expenses will be recovered.

p. How would the EDC be notified when a customer grants consent for a CSP or other third party to access its' EDC-maintained customer data?

PPL Electric has not developed processes governing CSPs' access to customer data outside of its EE&C Plan. However, the method of notification should be automated as much as possible. Potential solutions include having the CSP verify that it has received customer consent when requesting access, with regulatory penalties prescribed for CSPs who request access without having customer consent. The CSP should be required to maintain a record of the customer consent for as long as the CSP has a relationship with the customer as well as through the conclusion of any formal customer complaint or other proceeding before the PUC in which such information may be applicable, including, but not limited to, instances in which an EDC notifies the third party that the EDC has an open complaint or proceeding and requests record retention. As an additional safeguard, the CSP should be required to send a notification to the customer confirming the customer's consent. This notification could be built into the portal process that gives the CSP access to particular customer information or the EDC could also provide such service through its website. It is important to note that these solutions would require IT investment to build, implement, and operate the portal, so the Commission should consider the associated capital costs and expenses that the EDCs would incur.

- q. How should a customer withdraw previously granted consent for CSP or other third-party access to the EDC's data? How would the EDC be notified of this withdrawal of consent?**

As stated previously, PPL Electric has not developed processes governing CSPs' access to customer data outside of its EE&C Plan. It is anticipated that the customer could contact the CSP or EDC to withdraw consent. If communicated to the CSP, the CSP would notify the EDC in a timely manner through the portal or website that the customer's consent has been withdrawn, after which the EDC would block the CSP's access to that customer's data. Similarly, if the withdrawal of consent is communicated directly to the EDC, the EDC would block the CSP's access to the customer's data.

- r. How would the EDCs monitor data access to determine if a CSP or other third party becomes a "bad actor" by violating its agreements (failing to maintain data confidentiality, pulling data for a customer without proper authorization, etc.)? What processes could be used to remove access and prevent misuse?**

EDCs should not be the primary party ensuring that CSPs or other third parties are not becoming "bad actors". EDCs lack the time and resources to police CSP and other third parties' action in this manner. This role is more appropriate and better suited for the Commission. However, if the EDC becomes aware of violations from its own investigations or customer complaints, it can block access to the customer data. Additionally, the EDC can report the violation to the Commission and assist in any investigation that the Commission may pursue.

- s. For third parties that serve as both a Distributed Energy Resource Aggregator under FERC Order 2222 and a CSP, what limitations on the use of data should be placed on them to prevent unauthorized use between roles?**

Currently, the PJM Interconnection LLC ("PJM") tariff filing to implement FERC Order No. 2222 is pending before the FERC. Following FERC's Final Order on the PJM filing, PJM

must implement a series of manual and process changes to accommodate FERC Order No. 2222, including determining what data and information is needed by each stakeholder, including EDCs, DER Aggregators and DER customers. For this reason, it is not yet clear what data and information will be required for a DER Aggregator to operate, nor how the DER Aggregator should obtain that data. It is too early to determine how DER Aggregator data needs overlap with the data needs of CSPs and other third parties.

The Company recommends that the Commission make it clear that DER Aggregators and CSPs are separate market participants. Although CSPs may also be DER Aggregators, not all DER Aggregators are CSPs. Per FERC Order No. 2222, DER Aggregators may provide DER Aggregation offerings in multiple markets, not simply Demand Response, which is the focus of most CSPs. For this reason, it is recommended that the Commission first focus on the data needs of CSPs and establish controls to protect customers and manage access. However, as PJM's FERC Order No. 2222 filing evolves and transitions to implementation by PJM, the Commission should evaluate the data needs of DER Aggregators through those processes and determine what controls should be put in place. Building upon this, the Commission can then compare the data needs of CSPs, DER Aggregators, and other third parties to determine where overlapping requirements exist to improve data exchange efficiencies.

t. Should a utility be held accountable for the improper or illegal acts of a customer authorized CSP or other third party?

Public utilities should not be held accountable for the improper or illegal acts of other entities. In fact, the opposite is true—EDCs should be shielded from liability arising out of providing access to CSPs or other third parties. EDCs would only be providing this information at the direction of the Commission and with customer consent. If a CSP or other third party

ultimately engages in improper or illegal activities, the accountability should lie with the party that engaged in the offending behavior.

- u. What action, if any, can the Commission take against CSPs and other third parties that misuse their access to customer data or the data itself? Please cite to any statutes or regulations that support your answer.**

Section 502 of the Public Utility Code provides that the Commission can bring enforcement proceedings against “any person or corporation” when it determines that the person or corporation “is violating, or is about to violate, any provisions of this part; or has done, or is about to do, any act, matter, or thing herein prohibited or declared to be unlawful; or has failed, omitted, neglected, or refused, or is about to fail, omit, neglect, or refuse, to perform any duty enjoined upon it by this part, or has failed, omitted, neglected or refused, or is about to fail, omit, neglect, or refuse to obey any lawful requirement, regulation or order made by the [C]ommission” 66 Pa. C.S. § 502. Therefore, if a CSP or other third party were to violate the Public Utility Code, the Commission’s regulations, a Commission order, or a Commission-approved tariff by misusing its access to customer data or the data itself or accessing the data without authorization, the Commission should be able to bring an enforcement action against the CSP or other third party. If such a violation is established, the Commission has the power to impose civil or criminal penalties, depending on the nature of the violation. *See* 66 Pa. C.S. §§ 3301-3302.

2. Utility Usage Data and Meter Access

- a. What customer data should the utility share with CSPs and other third parties? Should different types of CSPs and other third parties have different access to customer data?**

PPL Electric anticipates that CSPs and other third parties will want customers’ interval meter data. PPL Electric does not know if access to other customer data will be requested.

However, granting CSPs and other third parties access to any customer data should only occur after Commission review and approval. Moreover, PPL Electric believes that the Commission needs to establish: (1) what data is appropriate to provide to CSPs and other third parties; (2) whether there are adequate protections available to protect the customer data; and (3) whether all CSPs and other third parties should be provided the same type of data, or whether the intended use of the data should determine what data is provided. Additionally, the Commission should consider what data should be provided back to the EDC, such as data from behind the meter generation, storage, and EVs, to facilitate the safe and reliable operation of the distribution system.

b. What types of data should the EDCs withhold from CSPs and other third parties? Do the EDCs' current systems allow for this data to be restricted?

Data access should be limited to what the customer has consented to provide and the minimum amount of data necessary for the CSP or other third party to provide its service to the customer. At this time, the Company does not know the range of services that CSPs or other third parties will want to provide and cannot comment on the types of data that should appropriately be withheld.

c. In what format should the data be given? Should the data from each EDC be in an identical format (similar to the Electronic Data Exchange Working Group web portal data)? What other technical standards should be applied to the data?

PPL Electric supports providing data in a uniform format similar to the Electronic Data Exchange Working Group ("EDEWG") web portal. Technical standards and cybersecurity protections should be developed during stakeholder working groups.

- d. Should aggregated data (i.e. – benchmarking or geographic data) be made available? Should aggregated data be available to a wider array of CSPs and other third parties?**

The Company provides aggregated data to interested stakeholders from time to time. However, PPL Electric is careful not to provide aggregated data in a way that could inadvertently reveal competitively sensitive information or customer-identifiable information (i.e., a single large customer in an isolated area). Creating a data sharing platform could streamline the process of answering requests for aggregated data from CSPs and other third parties.

- e. Should the Commission establish standard protocols and communication mediums for providing direct access to usage information from the meter to the Home Area Network? If so, what should those be?**

Yes. Direct access to usage information should be secured by ZigBee 2.1 and any updates to the ZigBee technology. ZigBee radios are currently installed inside the Company's AMI meters and, if activated, enable the meters to connect with customers' specific ZigBee-enabled devices through a Home Area Network ("HAN"). With that technology already in place throughout the Company's certificated service territory, PPL Electric believes that standardized use of ZigBee for direct access to usage information would be the most efficient and economical solution.

- f. Should CSPs and other third parties be provided direct access to the meter? What policies or regulations should this Commission promulgate to ensure that these CSPs and other third parties are provided timely access under reasonable terms and conditions to the EDC's customer metering facilities?**

PPL Electric opposes providing any third parties, including CSPs, direct access to customer meters. Direct access to customer meters creates an unacceptable cybersecurity risk by providing parties other than the EDC access to the distribution system. As noted previously, access to customer data can be provided through a data sharing portal or through the customer's use of HAN

devices complying with the ZigBee standard. Thus, there is no need to provide third parties with direct access to customer meters.

- g. What communications, software or hardware can facilitate this direct access to the meter for customers and their approved CSPs and other third parties, and should the Commission establish requirements and/or standards to facilitate this access?**

See Section II.3(f), *supra*.

- h. What electronic access to customer meter data do CSPs, other third parties, and EGSs need from EDCs, that they currently do not have? Provide specific examples where these entities do not have such access currently, and provide examples, if available, of electronic transactions that can be adopted to facilitate access.**

PPL Electric is an EDC, not a CSP, third party, or EGS. Moreover, the business models and operations of CSPs, EGSs, and other third parties vary widely. Therefore, PPL Electric cannot speculate as to what customer data CSPs, other third parties, and EGSs believe that they need but currently do not have.

3. Home Area Network (HAN) Protocols

- a. Should there be interconnectivity between the smart meter and other equipment in the home? If so, how much? [read capability vs. two-way communication]**

As stated previously, PPL Electric's AMI meters already have ZigBee radios installed which, if activated upon customer request, can connect with ZigBee-enabled devices through a HAN. PPL Electric sees no reason to deviate from the current standard of interconnectivity between the smart meter and other equipment in the home.

b. Can CSP or other third-party equipment installed in a customer's home interact with the HAN or the smart meters?

Yes, CSP or other third-party equipment installed in a customer's home can interact with the HAN and the Company's AMI meter, so long as the HAN is secured with ZigBee technology.

c. Do CSPs or other third parties that have installed equipment in a customer's home still need access to customer data from the EDC?

PPL Electric cannot speak for all CSPs, but in its experience with requests from Itron⁵ and in reviewing Enerwise's EGS Application,⁶ it appears that some CSPs still want data from the EDCs in addition to what is received from CSP installed devices.

4. Automatic Control

a. How can smart meters "effectively support" automatic control of a customer's electricity consumption by customers, utilities, and the customer's CSPs or other third parties?

The Company's AMI meters only transmit the customers' total usage at 15-minute intervals. They do not transmit to PPL Electric the individual usage information for appliances in the home. However, when utilizing a HAN, a customer can see how much electricity is being used by HAN-enabled devices and establish certain settings based on those usage patterns. For example, thermostats for electric heating, electric water heating, etc., can be monitored through a HAN, and when usage exceeds a certain level, the HAN can alert the customer and activate controls to reduce electric consumption.

⁵ See *Petition of Itron, Inc. for a Declaratory Order Regarding the Provision of Certain Customer Data as an Operator of Curtailment Services*, Docket No. P-2019-3011463 (Order entered Jan. 14, 2021).

⁶ See *License Application of Enerwise Global Techs., LLC d/b/a CPower for Approval to Offer, Render, Furnish, or Supply Elec. or Elec. Generation Servs.*, Docket No. A-2019-3009271 (Order entered Oct. 7, 2021).

- b. How is the smart metering system engaged in the initiation, maintenance, relinquishment, and verification of the automatic control of customer consumption?**

PPL Electric's AMI system is not engaged in the initiation, maintenance, relinquishment, and verification of the automatic control of customer consumption. See Section 4(a), *supra*.

- c. What smart metering protocols and communication mediums are needed to implement these automated controls? Should the Commission establish standard protocols and standards for this purpose?**

See Sections II.3(e) and II.4(a), *supra*.

- d. What energy consuming customer assets can be controlled by these smart meter systems for each of the customer segments, and how is control of these assets impacted by the choice of communication medium and protocol?**

PPL Electric's AMI meters are not used to control any customer-owned devices. See Section II.3(e), *supra*.

III. CONCLUSION

PPL Electric appreciates the opportunity to provide these Comments and respectfully requests that the Commission take these Comments into consideration in developing its next steps.

Respectfully submitted,



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Date: May 5, 2022

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CERTIFICATE OF SERVICE

(Docket No. M-2021-3029018)

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

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