

MISSION:DATA

May 29, 2024

Via E-Filing

Ms. Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, Pennsylvania 17120

Re: Docket No. L-2023-3044115, Distributed Energy Resources Participation In Wholesale Markets

Dear Secretary Chiavetta:

Attached for electronic filing please find Mission:data Coalition's comments in the above-referenced proceeding.

Respectfully submitted,

/s/ Michael Murray, President
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CERTIFICATE OF SERVICE

Distributed Energy Resources Participation :
In Wholesale Markets : Docket No. L-2023-3044115

I hereby certify that on this day, May 29, 2024, I served a copy of Mission:data Coalition’s Comments in accordance with the requirements of 52 Pa. Code § 1.54. Microsoft Word-compatible copies have been circulated to the contact persons for this matter via electronic mail in accordance with the Commission’s Order posted on February 22, 2024, in this proceeding.

SERVICE BY EMAIL ONLY

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BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Distributed Energy Resources Participation :
In Wholesale Markets : Docket No. L-2023-3044115

Comments of Mission:data Coalition

1. Introduction

On February 22, 2024, the Pennsylvania Public Utility Commission (Commission) initiated an Advance Notice of Proposed Rulemaking (ANOPR), Docket No. L-2023-3044115,¹ to consider any changes or additions to the Commission’s regulations or policies to align with Federal Energy Regulatory Commission (FERC) Order 2222, *Participation of Distributed Energy Resource Aggregations in Markets Operated by Regional Transmission Organizations and Independent System Operators*.

As background, Mission:data Coalition (Mission:data) is a not-for-profit organization focused on advancing policies that improve electric customers’ access to, and utilization of, their own energy-related data held by regulated monopolies. The coalition is supported by over 25 technology companies delivering consumer-focused energy services, representing over \$1 billion/year in energy management business across North America. Mission:data has been deeply involved in the development of “data portability” proceedings at other state commissions across the country, participating in regulatory dockets in 14 states and the

¹ *Distributed Energy Resources Participation in Wholesale Markets*, Docket No. L-2023-3044115 (Order entered Feb. 22, 2024) (ANOPR), available at: <https://www.puc.pa.gov/pcdocs/1817408.pdf>

District of Columbia. Mission:data herewith offers technical expertise on the data requirements necessary to participate in PJM Interconnection, LLC (PJM) markets and Pennsylvania's current restrictions on access to such information.

Mission:data limits our response to the topic of metering requirements. We appreciate this opportunity to provide comments on the ANOPR.

2. Background

Pennsylvania has invested billions of dollars in advanced metering (also called "smart meters") and the electric distribution companies' (EDCs) related information technology systems. But ratepayers have very limited ability to share their energy information electronically with energy management services. To date, the Commission has restricted the recipients of customer data (with customer consent) to only licensed entities, known as electric generation suppliers (EGSs).² This means that Pennsylvanians are unable to have their individual energy data shared with home energy efficiency contractors, smart home devices, utility bill management software, or distributed energy resource (DER) aggregators (DER Aggregators) of any kind unless they are licensed EGSs.

Since 2012, DER Aggregators and various advocates have sought electronic access to their customers' energy-related information held by EDCs in a manner consistent with statute, and this history is instructive to the present proceeding. At first, the Commission supported data accessibility to non-EGSs. In its *Smart Meter Procurement and Installation Final Order*, at Docket No. M-2009-2092655 (Order entered December 6, 2012), the Commission directed a working group to develop standardized solutions for third-party acquisition of a customer's historical interval usage (HIU) and billing quality interval use

² 52 Pa. Code § 54.2.

(BQIU) data via an EDC-provided, secure web portal.³ At the time, the Commission defined “third parties” as “electric generation suppliers **and customer-authorized third party entities**.”⁴ This position was reasonable because Act 129, passed in 2008, required electric distribution companies (EDCs) to “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**” with the consent of the customer (emphasis added).

However, in 2015, the Commission reversed itself, imposing artificial and unnecessary restrictions on recipients of the EDCs’ data about customers that lasts through today. In Docket No. M-2009-2092655, the Commission authorized data-sharing software systems that were limited to serving licensed EGSs (“[W]e agree that unlicensed third parties, as well as other consumers, should not be granted access to the web portals, except as an agent of a licensed EGS or as an Act 129 Energy Efficiency and Conservation Program CSP contracted with the EDC...”).⁵ Since 2015, other possible avenues for DER Aggregators and energy management firms to access customer data, with customer consent, have been foreclosed upon by the Commission. CPower, Inc. applied to become a licensed EGS for the purpose of accessing customer energy usage data from EDCs, but the Commission denied CPower, Inc.’s application.⁶ Then, in 2022, the Commission opened Docket No. M-2021-3029018, *Investigation into Conservation Service Provider and Other Third Party*

³ Docket No. M-2009-2092655. December, 2021 Final Order at 13-14.

⁴ Docket No. M-2009-2092655, *Order re: the Petition of the NRG Retail Affiliates (NRG) for Clarification and/or Reconsideration of the Commission’s September 3, 2015 Final Order* (Order entered November 5, 2015) at 2, footnote #4. Emphasis added.

⁵ Docket No. M-2009-2092655, Final Order dated September 3, 2015 at 13.

⁶ See the October 7, 2021 Final Order entered by the Commission in Docket No. A 2019-3009271, Application of Enerwise Global Technologies, LLC d/b/a CPower (Enerwise) to become a licensed EGS.

Access to Electric Distribution Company Customer Data, citing its denial of CPower’s EGS application as a reason to open a proceeding with a broader focus.⁷ However, the Commission abruptly closed the proceeding one year later, citing the existence of FirstEnergy’s voluntary tariff as a reason to end its investigation.⁸ To date, the Commission has not ruled on the fundamental questions of whether and how non-licensed third parties may access customer data held by EDCs.

⁷ Docket No. M-2021-3029018, Secretarial Letter Opening Proceeding dated February 8, 2022 at 1.

⁸ Docket No. M-2021-3029018, Secretarial Letter Closing Proceeding dated July 3, 2023 at 2.

Mission: data notes that California⁹, Colorado¹⁰, Illinois¹¹, Kentucky¹², Michigan¹³, New Hampshire¹⁴, New York¹⁵ and Texas¹⁶ have begun offering customer data portability to any third party, not just state-licensed entities. These states are far ahead of Pennsylvania and will be well-positioned to reduce energy burdens for residents and support economic development stemming from innovative new energy management solutions. Moreover, to

⁹ California Public Utilities Commission. Decision D.13-09-025 dated September 25, 2013, establishing eligibility criteria for third parties that do not include holding a license.

<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M077/K191/77191980.PDF>

¹⁰ Colorado Public Utilities Commission. Decision C17-0556 in Proceeding No. 16A-0588E dated July 25, 2017 requiring Xcel Energy to offer Green Button Connect My Data consistent with Colorado Code of Regulations 723-3 3027(e) which states, “*Nothing in these rules shall limit a customer’s right to provide his or her customer data to anyone.*”

http://www.dora.state.co.us/pls/efi/efi_p2_v2_demo.show_document?p_dms_document_id=869034&p_session_id=

¹¹ Illinois Commerce Commission. Final Order in Docket No. 14-0507 dated July 26, 2017 requiring implementation of Green Button Connect My Data pursuant to Section 16-122 of the Public Utility Act, which states there are no licensing requirements: “(a) *Upon the request of a retail customer...electric utilities shall provide to the customer or its authorized agent the customer’s billing and usage data.*”

¹² Kentucky Public Service Commission. Order dated June 30, 2021 in Case No. 2020-00350: “...*the Commission finds that LG&E shall also be required to receive certification of its Green Button Connect My Data offering, to residential and non-residential customers alike. LG&E shall file with the Commission proof of its Green Button Connect My Data certification by June 30, 2023*” at 20:

https://psc.ky.gov/pscscf/2020%20cases/2020-00350/20210630_psc_order.pdf

¹³ Michigan Public Service Commission. Settlement agreement approved April 14, 2022 in Case No. U-21116 requiring Consumers Energy to “*improve the customer data sharing experience*” with Green Button Connect My Data to all residential and non-residential customers, at 5: <https://mi-psc.force.com/sfc/servlet.shepherd/version/download/0688y000002OjemAAC>

¹⁴ New Hampshire Public Utilities Commission. Order No. 26,589 in Docket No. DE 19-197 dated March 2, 2022 approving the design of a statewide multi-use energy data platform that permits customers to have their energy usage and billing data shared with third parties. There are no licensing requirements, but third parties must provide a federal tax identification number and complete a cybersecurity questionnaire. See settlement agreement at Appendix C:

https://www.puc.nh.gov/Regulatory/Docketbk/2019/19-197/LETTERS-MEMOS-TARIFFS/19-197_2021-04-28_EVERSOURCE_JT_SETTLEMENT_AGREEMENT.PDF

¹⁵ New York Public Service Commission. Docket No. 20-M-0082, *Order Adopting a Data Access Framework and Establishing Further Process* dated April 15, 2021. The entities eligible to receive customer data are any entity the customer chooses, not merely licensed suppliers.

<https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={A228D385-3E0E-41BC-A433-8ABD62F8A6E4}>

¹⁶ Public Utility Commission of Texas. Docket No. 47472, Final order dated May 29, 2018 requires data recipients to provide a DUNS number, contact information, and agreement to written terms of service, but there is no licensing requirement. See, e.g., Smart Meter Texas Business Requirements at 3:

https://interchange.puc.texas.gov/Documents/47472_100_968255.PDF

the extent these states participate in FERC-jurisdictional wholesale power markets, they will find it easier and less costly to comply with FERC Order 2222. In most of the states mentioned, DER Aggregators are not required to be licensed by the state because they do not provide electricity commodity service at retail.

Therefore, while Mission:data appreciates that FERC Order 2222 provided the impetus to address issues of data portability in this proceeding, the Commission should understand that existing statute supports action on the part of the Commission to establish data portability from EDCs. Moreover, by addressing in this proceeding how non-licensed entities may access customer data, the Commission can help ratepayers save substantial amounts of money on their monthly bills in ways outside of PJM. Section 50121 of the Inflation Reduction Act (IRA) provides \$4.3 billion to whole-home energy efficiency rebates, of which \$129,980,360 is allocated to Pennsylvania;¹⁷ contractors and the Department of Environmental Protection (DEQ) must have streamlined access to customer energy usage data, both historically and for at least one year in the future in order to validate energy savings and pay rebates to homeowners. Thousands or tens of thousands of rebate requests from Pennsylvania homeowners will need to be processed in the coming years – especially requests that require continuous, ongoing access to energy data in order to deliver and validate the promised energy savings. Mission:data hopes that the Commission will consider, as part of its deliberations in this proceeding, these substantial co-benefits to ratepayers stemming from establishing data portability to any entity authorized by the customer.

¹⁷ <https://www.energy.gov/articles/biden-harris-administration-announces-state-and-tribe-allocations-home-energy-rebate>

3. Metering Requirements and Utility-Controlled Data That is Necessary for Participation at PJM

a. Recommendation: Data Portability Requirements for EDCs

According to our analysis of PJM’s tariffs and manuals, the following information controlled by EDCs is required by PJM’s energy day-ahead, capacity, and ancillary services markets:

<i>Data requirement</i>	<i>PJM Reference</i>	<i>Why EDCs should be required to provide electronically</i>
60-minute usage data	“Demand Resources must be equipped with interval meters recording electrical usage at the EDC account level.” ¹⁸	EDCs are the exclusive owners of interval meters for billing purposes
Customer name, account number, premise address, transmission zone, peak load contribution (PLC)	“EDCs have ten (10) business days to review all registrations and verify the EDC account number, Zone, Pricing point, Line losses, existence of EDC interval meter if applicable, accuracy of Peak Load Contribution (PLC)...If the information provided by the CSP is incorrect the EDC may deny the registration.” ¹⁹	Although EDCs may not be the exclusive provider of most of these data types, the fact remains that EDCs may deny DER registrations if the EDC deems the information inconsistent with the EDC’s records. Thus, the only way to ensure accuracy and fairness for DER Aggregators is for the EDC to be required to provide such information to DER Aggregators with the permission of the customer.

¹⁸ *PJM Manual 11: Energy & Ancillary Services Market Operations*. Section 10.4.1 at 181. Available at <https://www.pjm.com/-/media/documents/manuals/m11.ashx%27>

¹⁹ *Id.*, Section 10.2.4 at 173.

Mission:data believes that the Commission should require all EDCs to provide the information listed above to any entity authorized by the utility account holder. The Commission should follow the lead of other states and require EDCs to conform to the Green Button Connect My Data (GBCMD) standard, with periodic testing and certification by an independent body. GBCMD has been mandated by states covering over 36 million electric meters and is proven to be secure, mature, and available from a wide range of information technology vendors. Mission:data also believes that GBCMD satisfies FERC’s requirement that PJM “coordinate with distribution utilities and relevant electric retail regulatory authorities to establish protocols for sharing metering and telemetry data, and that such protocols minimize costs and other burdens and address concerns raised with respect to privacy and cybersecurity.”²⁰

b. Terms and Conditions

Mission:data strongly recommends that the Commission review and approve any terms and conditions that EDCs wish DER Aggregators to agree to as a condition of receiving the customer data outlined above. In our experience, we have seen utilities establish unfair, coercive and unreasonable terms and conditions when the regulator is not paying attention. Such terms can undermine the purpose of DER participation in PJM. For example, if EDCs were to state in their terms and conditions that none of the data provided to DER Aggregators comes with a warranty for accuracy – a common provision in our experience – it would make it impossible for DER Aggregators to participate at PJM without significant business risk. Since EDCs are by law the

²⁰ FERC Order 2222 ¶ 270.

exclusive provider of metering and metering data, having such provisions in EDCs' terms and conditions would in effect deny a customer from participating in a retail DER aggregation offering. Fairness demands that EDCs be held responsible for the *quality* of the information provided electronically to DER Aggregators.

In addition, Mission:data strongly recommends consistency in the terms and conditions across all EDCs, so that DER Aggregators do not face business risks in some service territories and not others. Inconsistent terms and conditions can result in skewed market participation, particularly if the eligibility criteria and termination provisions differ from EDC to EDC. Mission:data also recommends that the registration or onboarding process for third parties be uniform across Pennsylvania. We note that states such as New Hampshire have established a multi-utility registration process for third parties so that a third party needs only register once for all of New Hampshire, rather than three separate registrations, one for each electric utility.²¹ For these reasons, the Commission should review and approve in this proceeding all EDC terms and conditions for data recipients.

c. Addressing Telemetry via New Advanced Meter Deployments with Wi-Fi

In addition to historical electric usage data (used for settlement) and customer information such as address, transmission load and PLC, it is important to address

²¹ "The utility or delegated authority selected by the Council ("Centralized Cyber Authority") shall establish a centralized and standardized review process for the registration...The Centralized Cyber Authority shall have 30 days to complete the registration....The final results shall be shared with the Platform user by the 35th day after registration." New Hampshire Public Utilities Commission, Docket No. DE 19-197, *Development of a Statewide, Multi-Use Online Energy Data Platform*. Order No. 26,589 dated March 2, 2022. Settlement agreement, Appendix C at Bates page 35.

telemetry requirements – that is, real-time communication of load and status between a DER Aggregator and PJM. Currently, FirstEnergy, PPL Electric and Duquesne Light Co. provide electric meters with a Zigbee²² radio that transmits electric usage information every 5-7 seconds to a customer-purchased receiver. Currently, that is the only mechanism for DER Aggregators to acquire real-time electric usage information from the EDCs’ meters; the alternative is an expensive and duplicative sub-meter that must be installed at the DER Aggregator’s cost. (Our understanding is that PECO has the same hardware capability in its meters as other Pennsylvania utilities but does not allow customers to “turn on” the Zigbee technology.)

While Mission:data supports maintaining the Zigbee capability for the lifespan of meters in Pennsylvania – whether it is used for participation at PJM or any other energy management purpose – the Commission should be aware that, with a typical lifespan of 15 years, replacements of the EDCs’ meter fleet are coming soon. According to major meter manufacturers, the vast majority of new deployments are coming with Wi-Fi capabilities instead of Zigbee. Whereas Zigbee was not used widely by customers owing to the fact that it required purchasing a separate Zigbee device for about \$90, the reality is that most American homes and businesses already have Wi-Fi devices. This means that customers will be able to share electric usage information as frequently as once per second with a DER Aggregator instantly and without extra cost.

Therefore, Mission:data strongly recommends that the Commission amend 52 Pa. Code § 75.14 so that EDCs replacing their meters beyond a threshold of, say,

²² Zigbee is a radio communications standard operating on the 2.4Ghz frequency band. Zigbee Smart Energy Profile v1.1b is the most commonly used protocol for broadcasting real-time electric usage information from advanced meters to customer-authorized devices inside a home or business.

50,000 meters at a time should be required to guarantee free, open, non-discriminatory access to real-time electric usage information to any device authorized by an account holder. The open and non-discriminatory provisions are essential to prevent EDCs from meddling in the affairs of DER Aggregators or forcing DER Aggregators to purchase Wi-Fi devices, or to license software from EDCs or EDCs' unregulated affiliates as a condition of making economic use of their real-time energy information. Furthermore, the Commission should specify the IEEE2030.5 protocol operating over Wi-Fi to ensure the interoperability of devices among the different EDCs in Pennsylvania. Mission:data notes that several states, such as Colorado, have established similar requirements regarding interoperability and non-discriminatory access.²³

Finally, establishing free, open, non-discriminatory access to real-time electric usage data for all customer types is consistent with several PJM markets and is encouraged by PJM itself. According to PJM, Relevant Electric Retail Regulatory Authorities (RERRAs) are encouraged, if not obligated, by PJM to establish metering requirements such that “the AMI [advanced metering infrastructure] system shall be designed to allow for full implementation of PRD [Price-Responsive Demand] including metering reading requirements, supervisory control requirements, and all other requirements developed under the PJM RAA, PJM Operating Agreements, OATT and PJM Manuals.”²⁴ Thus, amending 52 Pa. Code § 75.14 as described above achieves

²³ See, e.g., Colorado Public Utilities Commission. Proceeding No. 21A-0279E. Unanimous Comprehensive Settlement Agreement, Section II (“HAN Deployment and Data Rules”) at 11-13.

²⁴ *PJM Manual 18: PJM Capacity Market*. Section 3A.4.2 at 45. Available at <https://www.pjm.com/-/media/documents/manuals/m18.ashx>

alignment with both PJM's capacity market as well as its DER Aggregator Participation Model.

4. Conclusion

Data portability is an important tool that benefits consumers. By pairing Green Button Connect My Data with enabling real-time broadcast technology on advanced meters to meet PJM's telemetry requirements, as Mission:data recommends, customers of all types will be able to access novel energy management services as well as participate in PJM markets. Residential customers will also be able to more easily access IRA rebates once Green Button Connect My Data is enabled.

Most importantly, it would be unfair and discriminatory if Pennsylvania EDCs **failed** to provide necessary customer information to DER Aggregators, particularly the information that is required by PJM. FERC Order 2222 guarantees DER participation in wholesale markets, and withholding electronic access to key data undermines FERC's order. It is now up to the Commission to ensure that EDCs do not use their exclusive access to customer information to disadvantage DER Aggregators as co-equal market participants.

Sincerely,

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