



Transforming Policy. Expanding Markets.

**AEE COMMENTS IN RESPONSE TO THE QUESTIONS RELATED TO THE
COMMISSION'S INVESTIGATION INTO CONSERVATION SERVICE
PROVIDER AND OTHER THIRD-PARTY ACCESS TO ELECTRIC
DISTRIBUTION COMPANY CUSTOMER DATA
Docket No. M-2021-3029018**

Advanced Energy Economy ("AEE") is submitting these comments in response to the Commission's investigation into conservation service provider ("CSP") and other third-party data access to electric distribution company ("EDC") customer data. AEE is a national association of businesses that are making the energy we use secure, clean, and affordable. We work to accelerate the move to 100% clean energy and electrified transportation in the U.S. Advanced energy encompasses a broad range of products and services that constitute the best available technologies for meeting our energy needs today and tomorrow. These include energy efficiency, demand response, energy storage, solar, wind, hydro, nuclear, electric vehicles, and the smart grid. AEE represents more than 100 companies in the \$238 billion U.S. advanced energy industry, which employs 3.2 million U.S. workers. AEE crafted the below comments in response to the Commission's questions outlined in Attachment A of the Secretarial Letter filed on February 8, 2022.

AEE appreciates the Commission's interest and focus on customer smart meter data. Data is essential to all sectors and participants of the energy industry and is becoming even more so each day. Customer usage data is needed to determine what value can be provided to customers through investments in advanced energy technologies. Likewise, utility system data allows advanced technologies to participate more fully in offering grid solutions, whether procured by the utility or offered by third parties. A lack of quality data means that opportunities where value could be provided are missed and the ability of the market to support progress toward clean energy goals and enhanced service to customers is diminished. Ultimately, the more quality data that is available, the better the insights that can be drawn, and the more expeditiously and cost-effectively the state and EDCs can make progress toward their demand side management and clean energy goals. Yet, with the broadening of access to customer data usage comes greater risks to customer privacy. With that in mind, it is critical that the Commission and Staff strike an appropriate balance between data access and customer privacy. We believe that such a balance can indeed be achieved.

We look forward to further engagement with the Commission as their investigation into third-party data access to EDC customer data progresses. Additionally, due to the complexity of these policies and practices, AEE hopes to continue our involvement on this topic as additional opportunities and more in-depth discussions arise.

Sincerely,

Leah Meredith

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 in which CSPs and other third parties can access customer smart meter data electronically and securely. It is our contention that smart meter data, while collected by EDCs, is ultimately owned by the utility customer. Therefore, it is incumbent upon the Commission to ensure the development of a secure yet reliable electronic access pathway for the timely sharing of smart meter data. Several state utility commissions have also explored the topic of third-party access to smart meter customer data and, in the case of New York, have developed proposed frameworks for secure smart meter data sharing involving Green Button and Green Button Connect ("GB/ GBC").

GB and GBC are the leading data exchange standards for utilities, customers, and third parties to share data in a scalable and uniform manner. Furthermore, these standards should be used fully and are essential for the greatest and widest-reaching impacts throughout Pennsylvania. This is because uniformity leads to the broadest potential for use. To promote its success, regulators should create rules that ensure GBC's standard utility implementation across Pennsylvania to ease access for all consumers and third parties seeking to integrate with utilities' GBC platforms. Finally, to ensure the successful use of GBC as a private, secure, and auditable exchange, the Commission should adopt the following principles:

1. **Ensure bill-quality data:** Require interval data provided by the utility to customers, electricity suppliers, and third parties is the same data the utility will use to bill the customer. Also, to the extent possible, enabling access to data that has not yet been validated as bill quality should be made available at the lowest latency and granularity available.
2. **Provide full data sets:** Standardize the availability of a requisite set of usage, billing, and location data for historical and ongoing data access.
3. **Provide synchronous data:** Once a data request is authorized and authenticated by a customer, data should be delivered on-demand. Furthermore, if a customer grants ongoing vs. one-time access, ensure updated data is made available at the lowest latency possible.
4. **Adopt strong security protocols:** Data security must accommodate cloud-based systems.
5. **Ensure quality of service and transparency:** Web services and GBC platforms must be provided at a sufficiently high level of service, with performance metrics reported publicly.
6. **Provide testing environment:** Utilities should provide a testing environment and a production environment of GBC for third-party use.



7. Implementation should be identical across utilities to simplify and reduce the cost of accessing the data. GBC often involves building a customized authorization portal for every utility, and the authorization process for commercial and industrial (C&I) customers can be particularly challenging, especially if the customer has multiple metered accounts. The Commission should therefore ensure that authorization requirements are as similar as possible across utilities and within the residential and C&I customer segments.

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

Yes, web portals can be used effectively to facilitate access to utility customer smart meter data in a way that also lessens the burden of customer participation in demand side management programs. One of the main obstacles to tapping into the value of residential flexible load management technologies through traditional demand response programs is the prevalence of cumbersome enrollment mechanisms that require customers to provide information that is not known by memory, such as a utility account number. We have previously urged Commissions to adopt an approach to implementing a data access tool that does not require a customer to provide this information.

Smart Meter Texas (SMT) is an example of successful implementation of a streamlined mechanism that has greatly increased customer participation rates in demand response compared to more laborious enrollment processes in other jurisdictions. The SMT data repository was established over a decade ago through a collaborative effort among a range of stakeholders including Texas utilities, the Public Utilities Commission of Texas (PUCT), retail energy providers, in-home device manufacturers, and consumer advocates, as a statewide clearinghouse for smart meter data and associated customer information. In 2017, the PUCT initiated a proceeding to update the business requirements for SMT. In the course of this effort, stakeholders recognized that burdensome requirements for customer authorization and enrollment with a service provider had resulted in low utilization of SMT. The parties entered into a unanimous settlement to update and streamline the business requirements for SMT, including by allowing an aggregator to access certain customer premise information, including the customer's unique "Electric Service Identifier ID" (ESI ID) for a given address. This approach has proved effective in facilitating demand response participation and AEE would advocate that the Pennsylvania Commission follow a similar protocol using the general principle of creating a pathway that is no more onerous than what customers would use to access other online utility functions.

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.

No comments.

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



No comments.

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

We support the need for a balance between customers' privacy and the need for data access for all participants in the energy marketplace. In New York, the Commission took a risk-based approach where the more sensitive the data collection, the tighter the cybersecurity requirements. In Pennsylvania, it is challenging for third parties not directly contracted with an EDC to access smart meter data, even with customer consent. This barrier is less a technical limitation and more of a limitation caused by current EDC operating policies and procedures. Currently, EDCs have little incentive to share detailed customer smart meter data with third parties that are not CSPs, thus limiting customer choices for energy management services. Allowing entities other than EDCs and their contracted vendors to access this wealth of customer data, with customer consent, can increase the quality and quantity of demand side management offerings. A large percentage of Pennsylvania's utility demand side management programs are standard offerings, which are generally the most cost-effective programs. However, this "one size fits most" approach can have the unintended consequence of EDCs not having the bandwidth to offer turnkey customer solutions that target deeper energy savings; this undoubtedly leaves energy savings on the table and creates a barrier for utility customers looking to save more on their energy costs. Broadening access to smart meter data to additional third parties, therefore, is likely to increase achievable energy savings. Since EDCs are responsible for the collection and management of customer data, they should be able to claim at least a portion of any additional energy savings resulting from third party demand side management offerings.

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

CSPs and other third parties play a key role in helping EDCs meet their energy efficiency and demand response goals, which have resulted in over 1,000 GWh of annual energy savings and millions of dollars in benefits to Pennsylvania's electric customers.¹ It is unlikely that the utilities could have achieved this milestone without the involvement of third parties to enable energy saving measures and target customers to increase participation in EDCs' existing demand side management programs. However, as demand side management offerings mature and the low hanging fruit dwindles, limiting access to customer data by non-utility providers will significantly hinder the effectiveness of both utility demand side management programs and third-party energy services in Pennsylvania. It is our position, therefore, that any third party that can meet reasonable, required standards for protecting customer data and privacy, should be allowed to access customer data with customer consent.

While currently third parties are limited in their ability to help customers unlock the latent potential of demand side resources, the future envisioned in FERC Order 2222, which includes demand side management in its definition of distributed energy resources ("DER"), may require the Commission to consider policy changes, such as increasing third-party access to customer smart meter data, in order



for DERs to provide services to both retail and wholesale markets and programs. Ensuring that third parties have access to the necessary data to facilitate wholesale market participation, as well as participation in utility demand side management programs, will allow the value and utilization of these resources to be maximized for the benefit of all ratepayers. To this end, we believe that meaningful data sharing by utilities and third parties, with appropriate checks to ensure double-counting or duplicate compensation does not occur, and that there is operational compatibility in the services provided across different markets, is critical to the utility of the future.

- 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?**

In its investigation into this important topic, it is important that the Commission draws a distinction between third parties that provide products and services directly to utility customers and CSPs or other entities that are providing services on behalf of the utility. Both often interact directly with customers, but the latter have active contracts with the EDCs and thus should be viewed as agents of the utility. This distinction is especially important because EDCs rigorously vet all CSPs and other contractors before engaging them in the implementation of utility programs and should not be overburdened with additional technical and IT security requirements that are not already placed upon them by their utility clients. Conversely, third parties that are not CSPs need not be subject to the same requirements as CSPs acting as agents of the utility, who are more likely to have direct access to utility systems. The Commission must instead establish standards that are suitable for third parties who are not agents of the utility to have timely, secure access to customer data with customer consent. Once the appropriate security and data management standards are established by the Commission, it will not be necessary for EDCs to be the gatekeeper in determining eligibility for third parties' ability to access customer data.

- 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.**

No. The Commission should have the ability to audit the cybersecurity protocols of third parties but not direct the EDCs to require financial security instruments. As previously mentioned, GBC is a data exchange standard that can be used across multiple utilities as it ensures the accessibility of energy usage and billing data in a standardized format that would be auditable by the Commission. Furthermore, EDCs should not be held liable for third party data breaches where the utility customer has consented to the sharing of their smart meter data.

- 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?

No comments.

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

It is good public policy to not charge individual customers or third parties for access to customer smart meter data and, moreover, worthwhile to consider opportunities to modernize utility incentives, especially by incentivizing them to do data-sharing constructively. While it is likely that EDCs will incur additional costs in making customer data more accessible, such expanded access has the potential to also benefit the utility's own demand side management programs and ability to meet their goals under Act 129. Furthermore, access to customer utility data will become more necessary to participate in the energy marketplace as technology evolves. Expanded data access benefits all customers by making them the recipients of the cost-savings incurred through programs that benefit from greater data access. Therefore, we recommend that the Commission begin tracking costs associated with expanded data access and consider the option of cost recovery in base rates.

EDC SMART METER DATA ACCESS BY CSPS AND OTHER THIRD PARTIES LEGAL CONCERNS:

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

No comments.

b. 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?

No comments.

c. 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?

While contracts are a necessary and effective tool to maintain data confidentiality for CSPs who are providing customer services as agents of the utility, it is not necessary for the EDC to utilize contracts with other third parties to protect data confidentiality. This practice would be inefficient and a drain on utility resources to execute and manage contracts with third parties that are not CSPs or acting as agents of the EDC. Rather, the Commission should set standards that govern the protection of confidential data by third parties not acting as CSPs.



d. 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?

No. It is good public policy to not charge individual customers or third parties for access to customer smart meter data and, moreover, worthwhile to consider opportunities to modernize utility incentives, especially by incentivizing them to do data-sharing constructively. However, because it is likely that EDC will need to take on additional costs in making customer data more accessible, we recommend that the Commission begin tracking costs associated with expanded data access and consider the option of cost recovery in base rates. Expanded data access benefits all customers by making them the recipients of the cost-savings incurred through programs that are strengthened from greater data access.

e. 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.

Because we believe utility customers are the owners of their own billing and energy usage data, sharing this data with independent third parties, that is, third parties who are not CSPs, should be at the customer's discretion. If the sharing process between customers and third parties is too cumbersome, very few customers are likely to complete the processor follow through with sharing their data on an ongoing basis if that is needed for the provision of the service. Therefore, we believe that a balance should be struck, with an emphasis on customer consent based on the following principles:

1. The use of authentication credentials.
2. An acceptance of instant and digital authorization.
3. The use of a seamless click-through menu or window.
4. The use of standardized language across multiple applications or platforms.
5. An effort to reduce the customer's effort.

The Commission should study the experiences of online data-sharing application implementations by utilities in other jurisdictions to avoid issues that have hindered customer data access. These include, but are not limited to:

1. Requiring an online account to be set up by the customer before data may be shared with a third party and/or eliminating alternate methods by which a customer may grant access (via a Letter of Authorization or similar instrument);
2. Limiting rights to grant data sharing access to third parties to only the account "owner" or "administrator" as designated by the customer; and
3. Requiring separate data sharing requests and approvals for multiple accounts held by a single customer.



4. Developing distinct and disparate authentication, authorization, and data sharing systems across EDCs
5. Requiring burdensome or additional customer verification information beyond what a customer reasonably has access to or can reasonably use to verify identity.

f. 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?

No comments.

g. 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?

No comments.

h. 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 property authorization, etc.)? What process could be used to remove access and prevent misuse?

No comments.

i. For third parties that serve as both a Distributed Energy Resource Aggregator under FERC Order 2222² and a CSP, what limitations on the use of data should be placed on them to prevent unauthorized use between roles?

CSPs who are contracted with utilities should follow the same protocols and procedures as other third parties, including receiving customer consent, to utilize customer smart meter data for purposes that are outside their contracted role as agents of the utility. Should CSPs receive data through their role as utility contractors that is not accessible to other third parties, they should not be authorized to use that data as a DER aggregator, unless they are contracted with an EDC or other regulated entity to do so.

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

EDCs should not be held liable for third party data breaches where the utility customer has consented to the sharing of their smart meter data and the EDC has no contractual relationship with the third party responsible for the breach.



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

No comments.

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?

Ultimately, customer smart meter data belongs to the customer, and they should have the option to consent to the sharing of their data on an opt-in basis. Furthermore, regulations should incentivize utilities to raise customers' awareness and understanding of their ability to access their own data, how to authorize third parties to access the data, understand energy programs and applicable rates, and how they can use this data to reduce their energy usage and costs. In addition, utilities should streamline the customer and third-party authorization process to release data to ensure robust participation in any data exchange to enable further innovation and energy-related products and services. Appropriate security protocols must be utilized to protect and secure customer and electric system data from unauthorized disclosure or system breaches by bad actors. They will also enable customers to have transparency into how and where their data is being shared and provide them with the ongoing ability to manage permissions. If done properly, these various data access efforts can appropriately provide for a competitive marketplace, stimulate job-creating innovation, lead to the development of new products and services, animate the DER market, benefit the electricity system, enhance customer options to control energy usage and costs, and support the transition to more advanced energy technologies. CSPs should not need any additional customer consent or opt-ins in order to use data from the utility to implement utility programs; rather, utilities should continue to share data with CSPs that enable them to implement utility programs according to their contracts. The Commission should play a role in crafting regulations that enable a data-rich environment that encourages and empowers utilities, customers, and third parties who are not CSPs, to share energy billing, system, and usage data.

- 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?

No comments.

- 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 Workign Group web portal data)? What other technical standards should be applied to the data?

No comments.



- 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?

Yes, anonymized, aggregated data, subject to a suitable aggregation standard to protect customer privacy, should be made available without the need for customer consent. We believe that the “4/50 rule” fairly balances customer protection and market needs. This rule stipulates the anonymized data must include at least four customers with no one customer accounting for more than 50 percent of the combined load.

- 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?

No comments.

- 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?

No comments.

- 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?

No comments.

- 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.

No comments.

HOME AREA NETWORK (HAN) PROTOCOLS:

AEE is not submitting comments in response to the questions raised in this section.

AUTOMATIC CONTROL:



AEE is not submitting comments in response to the questions raised in this section.

ADDITIONAL CONCERNS: PLEASE ADDRESS ANY ADDITIONAL QUESTIONS OR RAISE ANY ADDITIONAL CONCERNS YOU HAVE REGARDING CSP OR OTHER THIRD PARTY ACCESS TO EDC CUSTOMER DATA SYSTEMS.

Policymakers should adopt regulations that enable a data-rich environment that encourages and empowers utilities, customers, and third parties to share energy billing, system, and usage data. Regulations should incentivize utilities to raise customers' awareness and understanding of their ability to access their own data, how to authorize third parties to access the data, understand energy programs and applicable rates, and how they can use this data to reduce their energy usage and costs. In addition, utilities should streamline the customer and third-party authorization process to release data to ensure robust participation in any data exchange to enable further innovation and energy-related products and services. Appropriate security protocols must be utilized to protect and secure customer and electric system data from unauthorized disclosure or system breaches by bad actors. They will also enable customers to have transparency into how and where their data is being shared and provide them with the ongoing ability to manage permissions. If done properly, these various data access efforts can appropriately provide for a competitive marketplace, stimulate job-creating innovation, lead to the development of new products and services, animate the DER market, benefit the electricity system, enhance customer options to control energy usage and costs, and support the transition to more advanced energy technologies.

Data is the lifeblood of today's modern economy. Timely and convenient access to utility and customer data for third-party providers is a necessary and vital component of moving the electric utility industry into the digital age, unlocking value, and engaging customers in new ways. AEE appreciates the opportunity to provide these responses to the Commission's questions and we look forward to our continued participation into the Commission's investigation of this important topic.

