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VIA ELECTRONIC MAIL
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Carmen D. Diaz
Acting Secretary to the Board
Board of Public Utilities
44 South Clinton Avenue, 1st Floor
P.O. Box 350
Trenton, NJ 08625-0350

RE: In the Matter of Straw Proposal on Advanced Metering Infrastructure ("AMI") Data Transparency, Privacy and Billing
BPU Docket No. EO2110716

Dear Acting Secretary Diaz:

Enclosed for filing is an electronic copy of comments on behalf of Atlantic City Electric Company ("ACE" or the "Company") in the above-captioned matter.

Consistent with the Order issued by the New Jersey Board of Public Utilities ("BPU" or "Board") in connection with *In the Matter of the New Jersey Board of Public Utilities' Response to the COVID-19 Pandemic for a Temporary Waiver of Requirements for Certain Non-Essential Obligations*, BPU Docket No. EO20030254, Order dated March 19, 2020, this document is being electronically filed with the Board and the New Jersey Division of Rate Counsel. No paper copies will follow.

Thank you for your assistance with this matter.

Respectfully submitted,

Cynthia L.M. Holland
An Attorney at Law of the
State of New Jersey

Enclosure
cc: Robert Brabston, Esq.
Stacy Peterson
Brian O. Lipman, Esq.
T. David Wand, Esq.

IN THE MATTER OF ADVANCED METERING INFRASTRUCTURE (AMI) DATA TRANSPARENCY, PRIVACY & BILLING

BPU Docket No. EO20110716

Comments of Atlantic City Electric Company

In accord with the July 29, 2022 Public Notice in the above captioned proceeding, Atlantic City Electric Company ("ACE" or the "Company") offers these general comments on Staff's Recommended Minimum Filing Requirements ("MFRs") for AMI data access.

1. Customer Ownership and Sharing of Energy Related Data

Although ACE supports the goal of increasing customer awareness around their energy consumption data and providing tools to help customers reduce their energy, shift their energy during periods of high demand, and save on their energy bill, the Company submits that Green Button Connect ("GBC") is not a cost-effective option. Rather, based on the experience of ACE's affiliates in other jurisdictions, it is likely that GBC will only benefit a very small number of customers (well below 1%) without any incremental value not already in ACE's portfolio of products and services.

2. AMI Data Provision Timeline

The Company recommends that the Board establish a working group to determine home area network ("HAN") device format and connect ability, as well as the feasibility and benefit of offering data on a sub-15 second basis through a customer-owned device.

ACE currently intends to make validated AMI data available to customers through My Account within 48 hours after the meter reading is captured in the Meter Data Management System ("MDMS"). It is notable that the ACE meters currently approved by the Board do not have WiFi capabilities. The AMI meters that ACE is installing have a ZigBee radio in them to allow for HAN functionality. ZigBee is a short-range communication protocol and technology like WiFi that allows for electronic devices to communicate with each other. This feature can enable in-home devices that also have a ZigBee radio to communicate directly with the meter. A common example of the use of ZigBee is for in-home displays that show near real-time energy use data to the customer. Another use case that also exists is for the meter to communicate with Zigbee enabled smart appliances or thermostats.

Although the ACE AMI meters do contain the Zigbee radio, the Company has not investigated the potential of using the feature for these use cases and has not proven out the technology or business processes that would surround it. The pathway to move this technology to a production use case has not been laid out and all the details and costs of further investigating this are unknown at this time. More research may be required to know exact details and better understand industry adoption. To ACE's knowledge, ZigBee technology has not seen the success and widespread adoption that may have been initially anticipated. Rather, WiFi is the more typical choice for in-home smart devices.

ACE is not aware of what in-home ZigBee enabled devices exist in the consumer market or how well those devices' function or if they are even compatible with the Company's meters, which have already been procured. For the devices that are compatible, it is not known what the pairing process would look like and if it may even be different for each device. It is also not known the cost and availability of these devices for consumers. Before being able to comment on what efforts would be required to allow for production level use case, the Company submits that an in-lab proof of concept or test would be needed so that the process and requirements on a small scale would be known before implementation.

When considering this ZigBee functionality, the Company would also need to determine how it interfaces with existing business processes. Questions remain, such as:

- Does each device need to be manually paired with a call from the customer for security reasons?
- What happens when a customer moves and takes their device with them?
- How would we unpair the device?
- How do customers get support if they have questions or technology issues with the devices?
- How is the line determined between utility and device manufacturer for support?
- Will the electric utility be expected to provide tech support for customers using these devices?

All these critical questions, and others, have yet to be answered. Notably, the Company believes there is also a significant question surrounding the customer demand for this feature, as ACE has not seen many requests from customers for this technology.

Finally, at this time, ACE does not view implementation of ZigBee enabled HAN as a cost-effective solution and does not have a cost estimate for any widespread adoption without significant additional investigation.

3. Adoption of Standardized Customer Privacy and Cybersecurity Requirements

ACE recommends that the Board establish a working group to evaluate and address cybersecurity requirements around this technology. At this stage, where most of the particulars are yet to be defined, the Company remains concerned about cybersecurity. Ultimately, proposed solutions must be reached, with an eye towards ensuring that confidential data is safely shared with only the intended parties, and otherwise securely retained by the Company in accordance with the law. The Board must allow ACE/Exelon to gauge the security posture of the companies that get the data, as an inadvertent disclosure may create a liability for the utility.

As this effort matures, it will likely be necessary to consider several technical security issues, including, but not limited to, the following:

- From what platform (or platforms) is the meter data being pulled? How is that access adjudicated and/or automated?
- What data is specifically being shared, and how is the data being anonymized and aggregated?
- Is there a potential for data to reveal sensitive information about how the utility infrastructure is built?
- How will the data be shared with third parties? (Will it be sent over the Internet? Will utilities be asked to upload data to a central repository or file drop? Will it be available to download via an ACE web portal?)
- How will the data be stored on each end of data exchanges with third parties? What controls and formal agreements will be in place to guarantee the security of our data?
- What is the liability in the event of inadvertent disclosure?

ACE looks forward to participating in working groups to thoroughly evaluate these, and related, questions.

4. Reporting Metrics

ACE recognizes that the Board put forward several metrics in the draft proposal. For metrics 3-11 & 14, ACE directs the Board to the Company's response to Point 1, above, which states ACE's position on GBC. If GBC is ultimately ordered, reporting GBC metrics externally, as delineated by the Board in this section, would require costly business process updates and technology updates, beyond what has already been approved for AMI implementation in the ACE service territory. Moreover, the Company believes that these costly business processes and technology updates would ultimately provide little value to the public.

ACE monitors the performance of its platforms through various processes, which may include reports and metrics. Those processes identify potential performance issues that our internal support teams address in a timely manner. If ordered to implement GBC, ACE would follow those same processes to ensure the platform performs as expected. ACE does not believe that sharing those performance-related metrics externally would benefit the public and adding that additional step requires incremental steps to ensure any data shared publicly is packaged and reviewed for external viewing that would come at an additional cost.

5. Data Granularity and Appropriate Rollout Schedule

The Company objects to providing 5-minute meter data to all customers. ACE's current infrastructure has been sized to provide data in 15-minute intervals, if the Board were to order a change to 5-minute intervals, the Company would need to make an incremental effort to evaluate the impact to the current AMI implementation, as well as any necessary changes to infrastructure and programing in the MDMS and the billing system. This additional work was not included in the Board's approval of AMI for ACE. This additional work would need to be funded as a separate

project. Accordingly, this cost would be incremental, over and above what was approved for ACE's ongoing implementation of AMI in the service territory.

Moreover, ACE does not believe 5-minute residential intervals improves the Company's use cases. ACE has standardized a one-meter program for 99% of all customers and rates at a 15-minute interval. This is more granular than other residential AMI industry average at 60-minute intervals. The program is currently in use in the field, where ACE has already installed meters and another 100,000+ pending in the warehouse. ACE already has a program designed to record load profile data in 15-minute intervals. Although ACE likely could change the program to record load profile data in 5-minute intervals, this change would triple the amount of data and storage necessary, at an impressive cost to customers. The additional storage is not without cost. Similarly, ACE likely could change the Over the Air ("OTA") program, but this is not a simple process and would require MDMS and Billing System changes – as well as extensive testing.

Thus, at present, ACE is planning on performing settlement using 15-minute intervals. Moving to 5-minute intervals will significantly increase costs, for which the Board would need to provide cost recovery, above and beyond that which was approved for the ACE program for AMI.

6. Additional Data Fields

Although ACE recognizes that meters collect other data, the Board's approved design for the ACE AMI program does not currently include passing this data on as a published data set. This process would need to be funded as a separate project, in addition to the prior AMI approval. This cost would be incremental over and above what was approved for ACE's on-going AMI implementation. Depending on the volume of additional data being requested, the Company submits that this requirement would result in increases in costs for storage, middleware, and processing.

7. Ensuring Fair Access and Competition

ACE recommends a working group to include EDCs, meter manufactures, and other stakeholders to evaluate meter app requirements. The inclusion of meter apps is another element that was not included in the approved scope of work for ACE's AMI implementation. Similarly, the inclusion of apps would need to be funded as a separate project. This cost would be incremental over and above what was approved for the ongoing AMI implementation.

ACE contends that a working group is appropriate for various reasons. Meters with apps are not yet commercially available for purchase, and the Company believes that the industry is still a few years away from even testing meters with apps. Once a meter is commercially available with apps, the Company would also need compatibility with the NIC (Network Interface Card) and AMI head end system. ACE believes this could be another year or two of development and testing. ACE has already placed purchase orders for all meters for the entirety of the AMI project. The meters ACE is buying are the latest meters from the two leading meter manufacturers; these meters have a 20-year useful life. These meters do not have WiFi connectivity, see above response regarding ZigBee.

Finally, when apps do become available in a few years, there will still questions on the following:

- Platform to be used - several are theorized
- Compatibility to AMI head end systems and current meters
- Security Vulnerability and Assessment of a third-party app
- Economic Model for purchase of apps from utility and / or customer
- Market Penetration of meters with apps
- ANSI and Industry standard for meters with apps – currently non-existent

As to fees, the Company submits that all cost-related requirements comport with utility rate-making standards for prudently incurred costs. As to other provisions in the notice, concerning App Stores and other elements, ACE submits that the process is still entirely too early to address these matters. For these reasons, ACE submits that a working group is necessary for further evaluation.

8. Billing and Settlements

Staff recommends that each EDC settle customer accounts using actual AMI customer data, rather than estimated data. ACE will settle customer accounts using actual AMI data when available.

Staff also recommend that each EDC establish the customer's Peak Load Contribution ("PLC") using each customer's load data. ACE will establish customer PLC using each customer's load data when available.

ACE has a program designed to record load profile data in 15-minute intervals. As noted above, ACE does not support 5-minute intervals. Transitioning to something other than 15-minute intervals is likely a costly endeavor that was not considered in the approval of the ACE AMI program.

9. Format of Data Sharing

In response to the Staff recommendation that the EDCs enable authorized third parties to access their customers' interval usage data through the Electronic Data Interchange ("EDI") as well as through the EDCs' supplier web portals via flat files (i.e., "batch CSV" or Tab-delimited files), the Company recommends that a working group discuss the use cases for data sharing and whether traditional EDI transactions would be a good fit.

As used by the utility today, these are primarily associated with monthly billing enrollment, invoicing, and payment activity. Traditional EDI communications methods have a number of unique requirements for EDCs, third-parties, and regulators, which should be considered by the Board. Similar to third-party energy suppliers, the Board should establish minimum requirements that third-party demand response companies meet in order to provide a positive customer experience. This would include certification testing by third-parties to ensure that agreed-upon transactions can be processed successfully. In-house technical and customer service experts should also be available from third-parties, similar to energy suppliers and EDCs.

The current design specifications for ACE are to provide 15-minute intervals for the Supplier Portal and EDI. NJ. For third parties to access the supplier portal or via EDI, they will need to be set up as a supplier, licensed by the BPU. The Company does have aggregators currently that operate as such. The third parties would also need to go through EDI testing in order to use that functionality.

Staff also recommends that AMI data be transmitted to the authorized third parties no longer than 60 seconds after customer authorization. ACE believes that performance requirements should only be applied in the context of a specific use case and technical solution. It is premature to discuss any specific number of seconds at this time.

Staff recommends that the following data types be shared with authorized third parties, in addition to AMI usage data: (1) All customer billing information, including, but not limited to, account information, meter information, rate information, and any other data necessary to participate in various demand management programs; (2) Premise addresses for multi-site customers; and (3) Customer account number(s). ACE asserts that data elements shared with third parties should be discussed in detail for each use case and its purpose. A working group would best address these issues.

Finally, where Staff recommends that the EDCs shall not be permitted to charge a fee to the customer or to the third party with whom the customer wishes to share their AMI data, including authorized third-party suppliers, Distributed Energy Resource aggregators, and other energy services companies, ACE contends that costs should be recovered in accord with traditional ratemaking principles.

10. Emergency Responders Access

As discussed in previous comments, ACE is concerned with the proposed definition of AMI providing "sharing of instantaneous usage and demand measurements on a near real-time basis, at watt-level precision." An outline of the timeline of how data will be collected and made available is discussed in response to Topic 1 and throughout this document. Having access to the AMI system will allow ACE increased visibility of the energy grid and the customers on it, which will enable enhanced customer service during a weather event. System operators will be able to interrogate meters to know which customers are out of service and which customers have been restored. This ability will improve the quality of the underlying outage information and provide a more informed estimated time of restoration. It will also help ACE avoid unnecessary truck rolls to feeders and areas that have already been restored, preserving valuable crew resources, and helping to manage outage restoration crews post-storm events more efficiently.

Allowing a more efficient restoration process will free up resources for ACE to work with emergency responders during emergency events. However, the AMI data itself will not be used by the emergency responders and it is not envisioned that emergency responders will have access to AMI data. Regarding the identification of live wires during a restoration event, ACE will continue to send personnel to those sites to evaluate those situations due to safety concerns. ACE has always prioritized working with emergency responders during weather events and will continue to do so with the implementation of AMI in its service territory.

11. Appropriate Utility Use of AMI Data

Staff states a belief that use of AMI data should be limited to "the EDC's core functions (such core functions include billing, settlements, and reliability)" and that anything beyond that should "be open to competition by authorized third parties." ACE urges the Board Staff to reconsider its position on core functions. For example, the Board has authorized the Company to implement Energy Efficiency and Electric Vehicle programs for customers within its territory. Allowing the Company to utilize data to advance these programs is consistent with the Board's approval of such programs and would better achieve the State goals. Where the Board has authorized a program within the utility franchise area, the Board has already decided that the utility is best situated to provide the service. Therefore, it is not unfair competition, beyond the Company's "core function," or contrary to law for the Company to utilize data to ensure customers benefit from appropriate, Board-approved programs or services.

CONCLUSION

The Company appreciates the opportunity to comment in this proceeding and respectfully requests the opportunity to participate in subsequent working groups to evaluate the various questions remaining.