

OEC Members' Petition and PUCO Answers:

The Honorable Jenifer French, Chair
Public Utilities Commission of Ohio
180 E. Broad Street
Columbus, Ohio 43215-3793

Dear Chair French,

In June 2022, Ohioans faced devastating blackouts, in the midst of dangerous storms and extreme heat. As organizations focused on advocating for a reliable, efficient, and clean energy system, we join calls from the Ohio Consumers Counsel and the Ohio Manufacturers Association for a public investigation into these devastating outages. In the interest of equity and transparency, any investigation should include the opportunity for the public to participate. We request that the Commission ask AEP to answer the following questions and provide information regarding the following as part of that investigation:

- **How did AEP Ohio choose the areas where it cut off power? What analysis, automatic or otherwise, went into selecting those areas? Previous statements suggested the areas shut off were the most likely to “overload” the system, why did AEP Ohio conclude that shutting off these areas would solve the problem? What other options did it consider? What time frame was AEP Ohio operating under?**

The report said:

The report noted AEP Ohio still needs to improve communication with customers. During the PUCO's July 13, 2022 public meeting, AEP Ohio said it had only 5 minutes to make decisions about which power lines to turn off. You can find these statements on pages 21, 23, and 24 of the [meeting transcript](#). However, AEP Ohio also acknowledged it knew the storm was coming and was likely to cause disruptions. This PUCO report says AEP Ohio had 30 minutes to comply with load shedding events. You can find this information on page 7 of [the report](#).

On any load shedding event, page 7 states “AEP Ohio must begin acting immediately and must fully comply within 30 minutes.”

On choosing which electricity lines to cut power during high demand, page 7-8 states:

[T]he location of the forced outages were the areas where the demand for electricity exceeded the system's ability to supply it due to the damaged facilities . . . AEP Ohio personnel began to immediately assess each substation to

determine how to shed the required number of megawatts for that substation. Each substation has multiple distribution feeds leading out from the substation; each of those is monitored and shows how many megawatts of electricity are being drawn across that feed. AEP Ohio uses a combination of software and manual intervention to shed the required amount of load. In cases where manual intervention is necessary, AEP Ohio reported it selects the fewest number of distribution feeds it can shut down and still meet its load shed requirement. The number of customers, the type of customers (residential, commercial, or industrial), and the specific location of the customers are not readily available to the operations team 8 and are not considered. The only criterion for selecting those feeds is the amount of load they are carrying.

- **Why were some areas impacted with longer periods of blackout instead of turning off other areas and turning back on initially impacted areas?**

The report said:

The report does not address which neighborhoods were more heavily impacted by the shutoffs. On page 5, the report discusses some of the factors that go into outage decision making, but does not address historical decisions in grid investment that affect the strength of transmission lines across communities: Generally, EDUs prioritize the restoration of critical facilities such as hospitals, fire stations, and nursing homes. Other restoration factors include number of customers, level of damage, type of circuit, and available resources, including workforce.

- **How much load was AEP Ohio instructed to shed by PJM?**

The report said:

Page 7-9 describes the 3 load shedding events that occurred:

For Event 1, [from June 14 at 1:57 p.m. to June 15 at 9:48 a.m.], PJM issued five load shed directives . . . that, in total, required AEP Ohio to shed 396 MW of load across several transmission lines feeding distribution substations in the Columbus area.

For Event 2 from June 14 at 7:30 p.m. to June 15 at 9:48 a.m.: PJM began issuing additional load shed requirements to AEP Ohio. A total of 170 MW would need to be shed at various locations. AEP Ohio again went through the same process, using the same criterion, for selecting distribution feeds to shed load.

For Event 3 from June 15 at 10:40 a.m. to June 16 at 4:51 a.m.: The total required amount to be shed for this event was 479 MW.

- **What demand response measures did AEP Ohio take to relieve transmission stress? Could additional demand response or customer energy efficiency programs have lessened the amount of load required to be shed?**

The report said:

On page 6, the report explains the existing demand response program AEP Ohio and the regional grid operator, PJM, used to try and avoid outages:

One tool that EDUs can use to manage the load is the implementation of demand response. Some large-use customers, typically industrial, receive a type of electric service known as interruptible. In exchange for paying a discounted rate for electricity, demand response participants must be prepared to cease operations when required to do so. When there is an emergency directive issued by PJM, AEP Ohio may contact these customers to have them reduce or eliminate the amount of electricity they are using in order to reduce the load on the grid. On the morning of June 14, PJM issued load management requirements to AEP Ohio. AEP Ohio complied and contacted the interruptible customers who were in affected areas where load relief was needed. However, when the issue is isolated to specific locations as it was in this case, demand response is limited in its effectiveness because it is only beneficial if a significant amount of load responds, and it is on a circuit that requires load relief.

- **We know climate change is fueling more extreme weather events. What role did storm and heat related events in the last twelve months play in this specific event in terms of weakening the grid? What role does climate change play in these events? How is AEP preparing for increased extreme weather and threats to the electric grid as a result of climate change?**

The report said:

The report does not address climate change or storm related events outside of June 2022. Regarding planning for future events the PUCO recommends on page 15 to 16:

AEP Ohio should reevaluate its approach on its transmission vegetation management plan and move to a more cyclical trimming schedule, similar to its distribution plan. It is staff's understanding that AEP Ohio is already re-evaluating its vegetation management programs and anticipates changes. Staff recommends that AEP Ohio file an updated transmission vegetation management plan with the PUCO within 90 days of this report.

Based upon contacts in the call center, media reports, and other inquiries, staff believes that AEP Ohio needs to improve the timeliness and effectiveness of its communication with its customers. Outages can cause major disruptions to the lives of Ohioans. Although outages are not always preventable, customers can better deal with the problems associated with outages if they have accurate and timely information from the utility to rely on when making decisions. Considering the information received after the events identified in this report, staff recommends that AEP Ohio establish a comprehensive plan to guide its communications with customers, their communities, and their government agencies, to ensure that accurate and timely information is getting to the customers who need it. AEP Ohio should work with PUCO staff to evaluate options for implementation of the provisions of the plan. For example, staff is aware that the percentage of customers who opt-in to AEP Ohio's service that allows them to receive text message information is very low. Providing that same service on an opt-out basis may be a way to improve communication. AEP Ohio should also evaluate options for communications with customers when electronic communications are difficult for those without power. Additional emphasis should also be put forward on improving AEP Ohio's community outreach plan that incorporates the existing network of emergency responders and community leaders and their respective organizations as a means in which to supplement its communication strategy in a comprehensive manner. In both rural and urban centers, emergency responders and community organizations play a vital role in spreading valuable information and services to the communities that they serve. Efforts should be made to capitalize on this important community asset. The events of June 13 through June 16, 2022, caused significant disruption to the daily lives of many Ohioans. Severe weather events will continue to have an impact on the utility infrastructure and delivery of these vital services. Although staff's review found that during the event the company adhered to the laws and rules in the state, followed its approved emergency plan, and responded appropriately in its recovery actions from the storm, it is the expectation of staff, and per the findings in this report, that additional diligence regarding right-of-way vegetation management and better customer communication by the company will assist in addressing the aftereffects of these weather occurrences.

- **Could additional distributed generation resources and battery storage within the impacted regions have played a role in alleviating the noted transmission issues?**

The report said:

The report does not address how decentralizing power generation to reduce reliance on long transmission lines could help prevent similar outages in the future.

- **What outreach was done to local elected officials and how quickly to inform them of what was going on? What outreach was done to state officials and entities?**

The report said:

On page 11, the report outlines all AEP Ohio's communications to customers:

AEP Ohio reported it attempted to maintain communications with the public throughout the event. The company also had communications with public officials as well as local and state emergency management agencies.

AEP Ohio summarized its total communications over the course of the storm event as reported below:

- Provided ongoing media updates, including on-camera interviews and information/statements for nearly 100 media inquiries
- Distributed 8 news releases to media across AEP Ohio's service territory
- Engaged with EMA contacts and community officials upon activation of the Incident Command System (ICS)
- Published 57 social media posts with 3.51 million impressions, 38k+ engagements and over 5,500 comments across Facebook, Twitter, and Instagram
- Responded to nearly 600 customer cases on social media
- Published ongoing updates to the company's website and blog
- Distributed special edition customer newsletter and pre-storm email to all customers
- Added and updated cooling center information to AEP Ohio outage maps

According to AEP Ohio, these communications included pre-storm tips, news releases, social media posts with outage updates and estimated restoration times, information on cooling centers, updates on the load shed events, newsletter articles, and information on assistance programs. AEP Ohio reports that because of this event, it is working with community officials to gather information and best practices to develop better ways to notify communities and various customer segments should emergency forced outages occur again.

- **How many customers, by zipcode, were already shutoff at the time of the blackout, due to nonpayment?**

The report said:

The report does not answer this question.

- **What is AEP Ohio’s process for notifying affected customers of an impending load shedding outage? How much time, prior to load shedding, did AEP Ohio have to notify affected customers?**

The report said:

The report does not address the amount of time AEP had to communicate with customers specifically. However, it did note on page 7 that for any load shedding event, “AEP Ohio must begin acting immediately and must fully comply within 30 minutes.”

- **What actions does AEP Ohio take in advance of storms or heat waves to educate customers on energy-saving tactics to help mitigate the need for load shedding?**

The report said:

The report does not address this question.

- **What parts of the AEP Ohio grid are most susceptible to future blackouts under similar circumstances? What grid modernization efforts are currently planned to reduce risk of similar blackouts in the future? If AEP Ohio does not have this information, it should develop an analysis of the AEP Ohio grid, including the age of the infrastructure, on a zip code by zip code basis.**

The report said:

The report does not address this question.

- **The Federal Infrastructure Investment and Jobs Act of 2021 provides approximately \$550 billion in federal funding for infrastructure improvements including transmission line expansion and upgrades, grid reliability efforts, and other projects focused on grid resiliency. The Commission should take actions to require AEP Ohio to publicly share their plans to utilize this funding, giving stakeholders the opportunity to give feedback.**

The report said:

The PUCO opened case number 22-0755 which provides rolling opportunities for comment on IIJA grant opportunities. The PUCO has not opened a similar case on the Inflation Reduction Act (IRA).

- **The Commission should require AEP Ohio to provide demographic data (in aggregate) of all impacted customers on a zip code by zip code basis, including total population affected in each zip code, race, age, gender, and income level.**

The report said:

The report does not address this request.