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Mr. Chairman, members of the Committee, thank you for the opportunity to appear before this committee and provide AEP's perspective on the August 14th outage. My name is E. Linn Draper, Jr. I am Chairman, President and Chief Executive Officer of American Electric Power, the largest electricity generator and transmission owner in the U.S, with 38,000 MW of generation capacity and 39,000 miles of transmission line. Almost 5 million customers are linked to AEP's 11-state electricity transmission and distribution grid. The company is based in Columbus, Ohio. With $5 billion invested in our transmission grid, ours is a unique perspective.

From the outset, let me be clear, we did it right. The AEP system held together – a point of pride for us. Our protective systems performed automatically as they were designed to perform, our operators performed and communicated as they should and our load and generation remained in balance throughout the day. Our grid is large, robust and integrated, and can therefore withstand the power swings we experienced that day. Michehl Gent, NERC President and CEO, on Aug. 15 said AEP's 765-kV transmission system is "often heralded as the world's finest transmission system."

From an operational standpoint, the 14th was a fairly typical August day until our operators first detected transmission line problems at an interconnection point with FirstEnergy, and AEP contacted FirstEnergy's operators. Throughout this event, we

maintained extensive communications with our reliability coordinator, PJM, and with FirstEnergy.

Power flows before the event, especially into Michigan and northern Ohio, were high but not unusual, given typical summer loads. It's important to note that Michigan is often a significant importer of power. Power flows on our lines continued to increase because of increased demand outside our system. We still do not know the cause of that increased demand.

As the flows of power exceeded safe operating levels across our lines, our equipment in northern Ohio operated automatically to isolate the problem. This is exactly the way the equipment is designed. To quote the DOE's National Transmission Grid Study, released in May of last year, "electricity flows according to the laws of physics and not in response to human controls, what happens in one part of the grid can affect users throughout the grid."

The opening of the lines isolated our system and prevented damage to the equipment. More importantly, it avoided cascading outages across the AEP System and probably far beyond, given the central role of AEP's transmission grid in the Eastern Interconnection. AEP's system was not the only one to respond this way – the transmission system serving Consumers Power's load, among others, also isolated from the problem during the event, and their system held. I don't know why all systems didn't perform in a similar manner.

Automatic tripping of lines is not simply a matter of protecting our equipment. There are serious reliability and safety implications if the automated protection mechanisms do not activate.

First, if the equipment is damaged, it can be out of service for an extended time – further burdening other lines that are, as we all know, already stressed. In short, the system holds for as long as it can, but at some point equipment must trip off to prevent further cascading outages. In this instance, tripping off stopped the cascade to the south, enabling AEP's personnel to assist others in their restoration efforts, because we were not busy with restorations of our own.

Tripping off also has safety implications. If current runs as high as it was during the event, it could actually cause the lines to literally melt or to sag beyond design criteria, which can result in safety hazards to the public.

I can't speculate on the root causes for this event, so I can't tell you that it wouldn't have occurred a year ago, or that it will never occur in the future. The interconnected nature of our grid, and the fact that we're now using it in ways that it was not originally intended or designed, mean that these kinds of events *can* occur in the future, although lessons learned can prevent a reoccurrence of the same magnitude.

I take great exception to the characterization of the U.S. transmission system as "third world grid," as some have said. The American transmission grid is the strongest in the world, although it is being pushed to its limits on a continuing basis.

The electrical grid in this country was designed in large part to get a local utility's generation to its customers – not to carry thousands of cross-country and regional transactions, as the grid is now called to do. In the five-year period during which wholesale electric competition first gained momentum, the number of wholesale transactions in the U.S. went from 25,000 to 2 million – an 80-fold increase. And many stakeholders are striving for continued growth. Needless to say, transmission infrastructure expansion – which is an expensive and time-consuming prospect at best – did *not* increase 80-fold in that time frame. In fact, very little expansion has taken place.

Clearly, there is a need to strengthen the grid through greater investments – new equipment, new lines and new technologies – to support the grid for the manner in which it is used today.

Several factors will hasten grid improvement:

First and foremost, we need regulatory certainty. If we need to build new transmission facilities today, we must navigate through multiple state and federal regulators to get that done. Processes vary in every state. For permits and siting, for instance, we must get approvals from multiple state regulators, and probably multiple federal regulators as well. We proposed a 765-kV line in West Virginia and Virginia in 1990. After an expenditure of over $50 million, we received final clearance to build the line this year. While we respect the interests of all jurisdictions in siting decisions, we'll never get where we need to be if it takes 13 years to get permission to build a power line.

And for every dollar we spend – and the National Transmission Grid Study quoted a price of $1.8 million per mile for a new 765-kV line – we must go back to those multiple state and federal regulators to receive full recovery. In this context, it is difficult to understand recent actions by the FERC to eliminate transmission revenues from third party or wholesale customers. If what FERC is proposing comes to pass, power can move from St. Louis to New Jersey for the same fee as moving power from Pennsylvania to New Jersey. Such scenarios not only jeopardize existing investments, they create a disincentive for future investments since full and fair cost recovery is even more difficult.

Second, and also critically important, we must improve coordination and communication among the various entities that oversee the grid. The reality is that we don't have one single transmission grid owner and operator throughout the country, nor would it be feasible or wise to do so. It's a given that there will always be seams – or boundaries – between various grid operators.

What's required is continuous improvements in the coordination among the various grid operators to ensure coordinated planning and operations, and quick response in emergency situations. On Aug. 14, our operators did coordinate and communicate with other operators, which helped to prevent this from spreading even further across the country – but we can all strive to improve. Those who are using this event to promote their desire for a single RTO administering a spot market are not only missing the boat, but misleading you and others into thinking that simply installing such an RTO would answer the reliability issues that have been raised by this event.

Next, I fear that the current controversy and seemingly endless debate over the role of RTOs is hindering our ability to make progress and create an environment that is conducive to investment. While AEP has committed $50 million to RTO development, many states now are opposing an expansive role of RTOs, including a number of AEP's 11 states, while others fully support a broad role for RTOs and more federal control over the grid and the wholesale market.

While debate about RTOs rages on, let's not forget some key points:

- AEP is at the center of the current debate largely because of the quality and the scope of our system, which is at the crossroads of many markets – that's one big reason we're coveted by market stakeholders in their attempts to expand.
- Policies should balance both generation and transmission. Transmission owners must receive sufficient revenues to assure adequate investment.
- Parties that benefit from competitive markets should bear the costs. Those that use the transmission system to receive those benefits should pay for it.
- While some have even suggested splitting up the AEP system, that's unacceptable and counter-productive. AEP's system has been touted as the backbone of the Eastern Interconnect. Splitting it apart amidst efforts to increase the nation's electric reliability flies in the face of reason.

We need consensus on an appropriate use of the grid. If we focus solely on competitive markets and economics, serious implications for reliability and security arise.

We need a balance, but that balance must be tipped toward reliability – the fundamental foundation of the transmission grid. Without reliability, we have no market to structure.

The benefits of competitive markets should not only flow to generation owners or electricity users, as seems to be the present policy, but also to the transmission owners who need to receive a sufficient share of benefits to assure investment in the transmission infrastructure necessary to support competitive markets.

Additionally, we must approve NERC as the enforcement entity for mandatory reliability standards. Our grid is interconnected. We must all play by the same rules, and we must have a knowledgeable independent entity – such as NERC – empowered to enforce such standards.

Thank you again for the opportunity to address this committee. We will continue to work with DOE, NERC and all entities embarking on investigations of the events of August 14th and look forward to a complete analysis and answer to what happened that day.

I encourage you to wait until the NERC/DOE investigation is complete to draw conclusions. Thank you again and I will be happy to respond to any questions from the Committee.