

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554**

In the Matter of)	
)	
Public Safety and Homeland Security Bureau)	PS Docket No. 11-60
Seeks Comment on Improving Wireless Network)	
Resiliency Through Encouraging Coordination)	
with Power Companies)	
)	

TO: THE COMMISSION

COMMENTS OF THE FIRSTENERGY ELECTRIC UTILITIES

Jersey Central Power & Light Company, Metropolitan Edison Company,
Monongahela Power Company, Ohio Edison Company, Pennsylvania Electric
Company, The Cleveland Electric Illuminating Company, The Potomac Edison
Company, The Toledo Edison Company, West Penn Power Company

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February 8, 2019

SUMMARY

The FirstEnergy electric utility companies (collectively, FirstEnergy) have award-winning experience in restoring service to their customers during major outages and in providing assistance to other utilities during storm events. Having invested billions of dollars in recent years specifically to improve electric system resiliency, FirstEnergy looks forward to developing better coordination with communications companies to improve service restoration response of both industries during major outages.

An important component of improved resiliency and restoration is to recognize the importance of electric utility engineering and construction standards for pole attachments. Cheaper and faster is counterproductive to resiliency. Another important factor is increased investment by communications companies in storm response assets, including human resources as well as software and hardware. Where applicable, back-up generators should be located at critical facilities with periodic performance testing.

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INTRODUCTION

Pursuant to the Public Notice DA 19-13 (Public Notice), and Public Notice DA 19-26,¹ FirstEnergy welcomes this opportunity to provide comments on such an important topic as system resiliency and restoration of service. FirstEnergy is a recognized industry leader in restoring service to its customers, and it is in FirstEnergy's best interest to have communications companies working together with electric utilities during storm events. FirstEnergy also relies on fiber and other communications technology to safely operate its transmission and distribution systems, much of it self-provided but also with some use of commercial services as well. These remarks are offered with the goal of mutual benefit of all stakeholders.

FirstEnergy provides electric service to more than six million customers through ten operating companies spanning five states: Maryland, New Jersey, Ohio, Pennsylvania, and West Virginia. Two of the Companies' five states currently self-regulate pole attachments, New Jersey and Ohio. Regardless of jurisdiction, each of FirstEnergy's power companies have an experienced perspective to address the Commission's questions.

In recent years FirstEnergy and its transmission affiliates have invested billions of dollars for infrastructure improvements to improve resiliency and reliability of their electric systems. Commensurate upgrades and improvements in engineering and construction standards were also developed and implemented in large part to reduce customer interruption of service. FirstEnergy is dedicated to its customers, regulators, and investors to provide safe and reliable electric service at reasonable prices, and as a result FirstEnergy has been recognized for excellence two dozen times in the past 13 consecutive years by the Edison Electric Institute (EEI), either for recovery

¹ Released January 29, 2019, providing that filings that would otherwise be required to be filed between January 8 and February 7 will be due for filing on February 8, 2019.

from disaster impacts, for assistance to other utilities following disasters on their systems, or both.

FirstEnergy must note that applying its resiliency efforts to pole attachments has been resisted by communications providers who complain that they should not have to pay the costs of meeting these improved resiliency standards or wait for the design requirements. Attachers compare recent costs to historical costs to demonstrate the unreasonableness of the current standards, and complain that pole owners' engineering design requirements are too expensive and too slow.

FirstEnergy is encouraged that this request for Comments represents the Commission's acknowledgement that improving the resiliency of communications service is tied to improving the resiliency of the electric system. So long as electric poles provide the infrastructure for communications, resiliency cannot improve if pole owners are not allowed to require attachers to meet the same standards that pole owners impose upon themselves. But even when the electric industry has pleaded with the FCC not to implement rules that will hurt electric service reliability, the FCC has placed greater emphasis on removing barriers to broadband deployment.²

Resiliency of the pole plant infrastructure will suffer, for example, where attachments are allowed under the FCC's new rules in the recent Declaratory Ruling and Third Report (August

² See, generally, Comments of Coalition of Concerned Utilities, *Implementation of Section 224 of the Act; A National Broadband Plan for Our Future*, Report and Order and Order on Reconsideration, WC Docket No. 07-245, GN Docket No. 09-51, 26 FCC Rcd 5240 (2011) ("April 2011 Pole Attachment Order"); Comments and Reply Comments of the Utility Coalition on *Overlashing, Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, WC Docket No. 17-84 at Ex. B (Filed Feb. 16, 2018); and Comments of the Coalition of Concerned Utilities; Petition for Reconsideration of the Coalition of Concerned Utilities *Third Report and Order and Declaratory Ruling*, FCC 18-111, *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment* (WC Docket No. 17-84).

3, 2018) that do not require first analyzing the existing pole loadings and the impact of adding the new attachments. Without properly considering pole owners' safety and reliability concerns, and also not requiring communications providers to pay for the costs they cause, the FCC has made it faster and cheaper to get onto poles, but increased the risk that poles will come down in severe weather.

Finally, although not addressed below, FirstEnergy is concerned that this request for comments fails to consider that incumbent local exchange carriers (ILECs) own a significant number of poles—between 15% and 45% in the FirstEnergy's territories, or in some cases poles are jointly owned. ILECs also have storm restoration responsibilities to the communications providers attached to their poles. Indeed, there is no service territory within FirstEnergy where ILEC partners do not own or jointly own a significant number of poles. FirstEnergy believes the Commission's inquiry into restoration efforts will be incomplete if it does not request that ILECs provide the same coordination information with respect to the poles that they control.

A. Best Practices

FirstEnergy has been recognized every year since 2006 by the Edison Electric Institute for its storm restoration performance. This performance reflects an attitude of 'safety first,' coupled with investment in a talented and dedicated workforce that is efficiently deployed.

FirstEnergy would note that some communications providers participate in disaster preparedness exercises alongside other utility services providers including electric, natural gas, and water companies, and numerous government agencies. Such exercises provide valuable opportunities to identify "seams" in operations. However, FirstEnergy would also note that a large number of communications providers—or their attachment infrastructure contractors—do

not participate in such exercises.

As an example of best practices, FirstEnergy operating company Jersey Central Power & Light (JCP&L) participated in a docketed proceeding before the New Jersey utility regulatory body, the Board of Public Utilities (BPU), investigating utility response during the severe March 2018 winter storms. JCP&L played a strong role in advancing coordination planning procedures it considered to be a “best practices” approach. That plan was filed with the BPU.³ One of the key features of this plan requires updated coordination protocols that include requiring communications providers to physically or telephonically join JCP&L’s storm recovery operations center to dynamically coordinate restoration efforts during major storm events. While this approach may need to be clarified in areas with large numbers of attaching communications providers, FirstEnergy believes this approach could provide a useful model for the Commission’s efforts to improve coordination.

B. Preparation and Response Coordination

1. Blue Sky Planning.

The FirstEnergy companies, pursuant to the respective state and local laws and regulations, regularly submit disaster recovery plans to the relevant authorities regarding electric service restoration during widespread emergency conditions (not limited to storms and hurricanes). FirstEnergy also periodically participates in active external emergency response exercises along with local first responders, government authorities including various

³ See, *In the Matter of the Board’s Review of Major Storm Events of March 2018*, Docket No. EO18030255, Order Accepting Staff’s Report Requiring Utilities to Implement Recommendations, July 25, 2018; available at: <https://www.bpu.state.nj.us/bpu/pdf/boardorders/2018/20180725/7-25-18-6A.pdf>.

jurisdictional agency resources, and citizen volunteers, to simulate disaster conditions and responses. FirstEnergy routinely solicits the participation of outside public and private sector entities when internal emergency response exercises are conducted. To the extent provided by communications providers, FirstEnergy also has critical communications facility locations stored in their critical facilities databases, which helps FirstEnergy prioritize restoration efforts pursuant to statutory and regulatory obligations.

For the actual events of routine or severe storms outages, FirstEnergy trains and deploys both bargaining unit and non-bargaining unit personnel to the field to perform safety and support functions, and fully staffs their central “Emergency Operations Center” on a 24/7 basis before, during, and after a storm outage event. These activities are only voluntary in the sense that FirstEnergy outperforms minimum requirements to achieve award-winning performance—they are at their essence the product of state laws, state public utility rules.

2 Placement of Assets.

To the extent that the Commission’s reference to assets includes human resources, service trucks, replacement equipment, and logistics control software and hardware, FirstEnergy always places assets prior to the arrival of a storm in a manner to best restore power according to system configuration and damage incurrence, while at the same time dynamically reacting to developments in real time. Except for backup generators in some locations, it is FirstEnergy’s experience that communications providers predominantly wait until after power service is restored before actively deploying their own assets, based on the fact that the Companies frequently do not encounter communications restoration crews in the field. To some extent, there is a logistics basis for the delay: fiber cannot be reattached to downed poles until the poles have been reset, and electric crews and communications crews cannot simultaneously reattach

to the reset poles without increasing the safety risk to both.

While pole-owning ILECs in FirstEnergy's territories have the contractual rights and expertise to replace poles during restoration, their investment in the necessary assets is much smaller than FirstEnergy's investment and commitment. Non-pole-owning competitive local exchange carriers (CLECs) possess neither the contractual rights nor the expertise to replace downed poles. FirstEnergy is unaware of any significant CLEC asset deployment activity during a storm event. The lack of predetermined processes and coordination has and continues to lead to delays in restoration. In many cases to avoid delays in service restoration, FirstEnergy opts or is forced to replace poles belonging to the ILECs during the event and true up accounting of assets post-event after multiple attempts to make contact. In some cases, after receiving a commitment from ILECs to replace poles in a timely manner during events, the ILEC, after a period of time, asks FirstEnergy to perform the work and true up accounting post-event due to a lack of internal resources, resulting in delays.

Even more lacking is the post-event clean up or follow-up work by communication companies, including ILEC-owned poles. This, among other reasons, leads to the prevalence of two-pole conditions where there are long delays by the communication companies to make final transfer to the new poles.

3. Lessons Learned.

The number one lesson learned from prior events, by far, is that FirstEnergy must be allowed to engineer, construct and maintain their electric distribution system pole plant in a manner that best withstands the forces of nature. As the Coalition of Concerned Utilities has

said: “every pole has a breaking point.”⁴ Attachers’ and the Commission’s emphasis on achieving the fastest and least expensive attachment process is at odds with maintaining electric systems that are resilient to damage in severe weather conditions. The fastest service restoration is a pole that doesn’t break in the first place. Many of the practices recently approved by the Commission, such as overlashing without prior loading analysis, are a direct threat to the resilience of FirstEnergy’s pole plant.

Other lessons learned include that simple compliance with FirstEnergy’s standard contract requirements such as placing marker tags on attachments, diligently following all of the FirstEnergy construction standards, accepting the necessary pole loading calculations, rigid enforcement of NESC requirements, and no unauthorized attachments would improve restoration of both electric service and communications service. In addition, requiring ILECs to perform the same level of inspection and maintenance activities as electric utilities, especially wood pole inspections, would also improve resiliency of the communication and electric distribution networks.

4. Downed or Cut Fiber.

FirstEnergy is aware of the publicly available news reports referenced in the Public Notice and assures the Commission that FirstEnergy does not contribute to downed fiber. The cited news sources did not investigate the cause of the downed fiber—they merely reported the claims of communications providers under scrutiny. Of course, in many instances the whole pole comes down along with all of the electric and communications attachments—the more attachments there are, the more difficult the restoration.

⁴ Reconsideration Petition of Concerned Utilities, p.12.

From the Companies' perspective, electric companies likely were falsely blamed for cell service failures during Hurricane Michael. As the *Wall Street Journal* article referenced in the Public Notice demonstrates, two neighbors with different carriers had very different experiences. In the reported example, it is unlikely that power company storm restoration efforts had anything whatsoever to do with that contrast—indeed, the customer with the working phone planned to leave because electric and water service wouldn't be available for some time. Clearly, the difference in communications service availability was inherent in the communications providers and systems themselves—not the electric company's restoration efforts.

FirstEnergy further notes that in the referenced *Wall Street Journal* article there was no mention of electric companies being at fault for cutting fiber during restoration efforts, nor was there any distinction indicated as between collocation to *electric* poles versus *ILEC* poles or *CLEC*-owned poles (many CLECs are registered as public utilities and have legal authority to place their own poles such as mid-span poles). Efforts to follow the link provided to the Commission's DIRS resulted in a "Page Not Found" error message and so FirstEnergy has not analyzed the data therein.

Further, FirstEnergy has not received credible complaints that they have cut fiber during restoration efforts. It is FirstEnergy's policy to not cut fiber except when absolutely necessary. To ensure that instances of fiber cuts or other damage are eliminated or greatly minimized, FirstEnergy's internal and external employees are informed of the potential impact this practice might have if done while making repairs. Many years ago, FirstEnergy proactively began including instructions on this very subject in onboarding process documents that detail expectations and proper actions should a crew encounter a situation where cutting fiber could potentially be needed to restore service in a safe and timely manner.

With respect to the impact of clean-up efforts, FirstEnergy does not perform clean-up or removal of downed trees or other storm debris from roadways or private property except where critical roads need to be opened or where downed lines are present. Other than the exceptions noted, that work is performed by private landowners, government authorities or civilian volunteers. In fact, one lineman with forty years of experience refused the request of a state trooper to cut a downed major telecommunications line that was lying across a heavily travelled roadway. Instead, the FirstEnergy crew helped build a wooden cover so that the telecommunications line would not have to be cut in order to re-open the road.

FirstEnergy's line crews can provide numerous such examples of going out of their way to assist communications restoration. But it is important to recognize that an electric crew's first obligation is to restore electric service to its customers—assisting communications providers cannot supplant that obligation.

The incidence of downed fiber correlates very highly with downed electric lines. The most common cause of downed electric lines is trees in or near the right of way contacting and/or dragging down all lines as they fall. However, some vegetation grows into the lower communications lines even though FirstEnergy's higher electric lines have been cleared according to approved vegetation management plans. While FirstEnergy diligently performs routine vegetation management despite landowners frequently litigating its rights to do so, it is FirstEnergy's experience that ILECs perform minimal, if any, vegetation management along their pole lines, and that non-ILEC communications providers perform none. A tree contacting only a communications line can break poles and affect both communications and electric service.

FirstEnergy suggests that a potential focus of this question could be whether collocation on electric poles is in the best interest of a resilient wireless infrastructure system given the

exposure to downed lines and poles. For example, wireless communication fiber backhaul could be placed underground or on dedicated poles instead of collocating on electric poles. Or perhaps the Commission should examine whether communications providers should bear more of the cost and responsibility for vegetation management.

5. Transmission Line Siting.

To respond to these questions, FirstEnergy first distinguishes between transmission and distribution assets, where the former does not fall within Commission jurisdiction over fiber line pole attachments. FirstEnergy's definition of transmission "siting" includes the process of determining the location, voltage, and interconnection of transmission lines and related facilities. FirstEnergy certainly designs, constructs, and maintains their transmission lines in a manner to provide safe and reliable electric service, which includes efforts to best withstand the forces of nature. FirstEnergy sites transmission lines pursuant to the needs of the electric grid, including the requirements established by regional transmission organizations (RTOs), the Federal Energy Regulatory Commission (FERC), state Public Utility Commissions (PUCs), and local authorities. It is a very complex, time-consuming, expensive, and heavily regulated process.

In situations where a communications provider has requested FirstEnergy's voluntary permission to attach to an existing transmission structure, FirstEnergy performs necessary analyses to ensure that the additional loads of such attachments fully meet safety and reliability construction standards and grants voluntary permission accordingly. Coordination with communications providers on transmission siting decisions would be inappropriate, since communications providers do not even have a federal right of access to transmission structures and the transmission providers by law are answerable to their transmission customers and

regulators. In some regions, the transmission owner is not even the same entity as the electric distribution company with whom communications providers actually do have a right of access.

C. **Prioritization of Restoration and Information Sharing**

1. 2017/2018 Challenges.

Although FirstEnergy did not directly experience hurricane landfall in 2017 and 2018, experience during other routine and major weather events has been that nearly everyone wants and expects their service to be restored first, and that almost no one accepts waiting. Prioritization of service restoration is largely governed in the first place by state legislatures and/or public utility commissions, who must balance the needs of all customers and the public at large as well as the many sometimes competing state policy interests. Beyond the direct statutory and regulatory prioritization requirements, such as to hospitals and nursing homes, and resolving any clear dangers to public safety that downed energized power lines can present, FirstEnergy targets restoration efforts to achieve maximum benefit among electric customers using sophisticated system analysis tools. For example, these tools might indicate that restoring a certain distribution line into a particular substation would permit re-routing of energy flows that would bring back power to thousands more customers than restoring other nearby lines—thus advancing its priority.

2. Information from Power Companies.

FirstEnergy understands use of the term “commercial power outage” to mean loss of utility-delivered power. FirstEnergy provides both call center and on-line tools to customers, as well as mobile apps, to report outages and to monitor restoration progress. From FirstEnergy’s perspective, the best information that might help communications providers

prepare for and continue operations during power outages would be to suggest that communications providers invest in and implement similar outage management systems within their organizations, increase the number of utility bucket trucks in their vehicle fleets, perform their own vegetation management, develop “mutual aid” agreements similar to those that electric utilities employ, and incorporate redundancy and/or contingency planning in system design.

3. Information Sharing Restrictions.

While FirstEnergy could identify their outage management system vendors, such outage management system development is both unique to FirstEnergy’s information systems and service territories, and proprietary in nature. As far as design planning, FirstEnergy observes that there exists a very large number of consultants who could help communications providers adapt electric utility system planning protocols to their own system planning.

4. Communications Company Information.

FirstEnergy is somewhat at a loss to understand how they can “better prepare communications carriers for power outages during and after disasters” other than to suggest communications carriers invest in the hardware, software, and physical assets necessary to better manage their systems. For example, FirstEnergy informs its electric customers with a need for uninterrupted power supply that they can invest in on-site self-generation or battery back-up facilities. Other customers pay the extra cost for redundant service feeds or underground service lines. As suggested above, communications providers could utilize FirstEnergy’s outage reporting system to report locations of service outages during an event. Again, however, FirstEnergy cannot discriminate in favor of restoration of service to

communications providers unless specifically directed to do so by the relevant authorities.

D. Prospective Improvements for Coordination

While FirstEnergy does not currently perceive such gaps in coordination from the power company side, FirstEnergy will be glad to develop or refine a framework where improved response capabilities and information sharing is the primary objective pursuant to fair compensation for incremental efforts of FirstEnergy on behalf of communications providers. It would be unfair to expect power companies and their customers to incur additional costs to improve communications service without being reimbursed. For example, FirstEnergy employs meteorologists to precisely track storm activity to predict damage to electric infrastructure. If such information would prove useful to communications providers and is shared for their own storm preparation efforts, then reasonable compensation should be made.

FirstEnergy is unaware of state or local requirements specifying elevated prioritization for restoration of power to communications providers with which FirstEnergy is not already complying.

E. Government Coordination and Commission Efforts

One of the most significant hurdles to the cooperative efforts sought in these questions is the pervasive expectation and frequent demand that regulated power companies provide services to unregulated communications providers at zero or reduced cost. Power company resources are finite and dedicated to providing safe and reliable electric service at reasonable prices. If regulators, and consumer representatives agree that communications providers should receive special coordination services from power companies during restoration efforts, then all

should agree on requiring that communications providers pay the full cost for such special efforts. For example, “mutual assistance agreements” between power companies require that such aid must be fully paid by the requesting company—including all straight and overtime pay, travel, housing or other incremental costs.

F. Back-Up Power Best Practices

As noted above, FirstEnergy’s investment in electric system resiliency is expected to improve resiliency for all customers including critical communications sites. Commission support for the commensurate improved construction standards and make-ready costs would help leverage those investments. Customers with above-standard needs are generally required to pay the full cost for premium installations such as underground lines. FirstEnergy is not aware of any barriers preventing communications providers from leveraging overall resiliency improvements with specific resiliency investments of their own.

CONCLUSION

FirstEnergy respectfully requests the Commission consider these comments and suggestions to improve communications infrastructure resiliency and service restoration efforts.

Respectfully submitted,

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