Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Resilient Networks	)	PS Docket No. 21-346
	)	
Amendments to Part 4 of the Commission's	)	PS Docket No. 15-80
Rules Concerning Disruptions to	)	
Communications	)	
	)	
New Part 4 of the Commission's Rules	)	ET Docket No. 04-35
Concerning Disruptions to Communications	)	
	)	

COMMENTS OF
USTELECOM – THE BROADBAND ASSOCIATION

I.   INTRODUCTION AND SUMMARY

USTelecom – The Broadband Association ("USTelecom")[1] submits these comments in

response to the Federal Communications Commission's ("Commission's") *Notice of Proposed*

Rulemaking ("*Notice*")[2] examining a variety of potential solutions to promote greater resiliency

and reliability of communications networks during natural disasters and other emergencies.

USTelecom supports the Commission objective to ensure resilient and reliable networks, which

are increasingly vital to the daily lives of Americans.

Because no two disasters are the same and different technologies demand different

approaches to disaster preparedness and response, the Commission should build upon existing

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[1] USTelecom is the premier trade association representing service providers and suppliers for the communications industry. USTelecom members provide a full array of services, including broadband, voice, data, and video over wireline and wireless networks. Its diverse membership ranges from international publicly traded corporations to local and regional companies and cooperatives, serving consumers and businesses in every corner of the country.

[2] *Resilient Networks, Amendments to Part 4 of the Commission's Rules Concerning Disruptions to Communications; New Part 4 of the Commission's Rules Concerning Disruptions to Communications*, PS Docket Nos. 21-346 & 15-80; ET Docket No. 04-35, Notice of Proposed Rulemaking, FCC 21-99 (released Oct. 1, 2021).

voluntary frameworks and best practices to foster a flexible, rather than prescriptive, approach to network resiliency. Natural disasters are unpredictable and best addressed by allowing providers to respond to the situation on the ground rather than by mandating a set of rigid rules to which all must adhere regardless of changing conditions or the technologies involved. Promoting communication and cooperative practices, including encouraging participation in voluntary frameworks, facilitates optimal tailored responses to emergency scenarios. The Commission should avoid unnecessary and overly burdensome additional regulation, and should not attempt to extend wireless standards to wireline providers or impose new costly backup power requirements. Finally, while participation in the Disaster Information Reporting System ("DIRS") should remain voluntary, USTelecom supports the Commission's proposal to codify suspension of the Network Outage Reporting System ("NORS") when DIRS is activated.

II.   USTELECOM MEMBERS ARE DEEPLY COMMITTED TO BUILDING AND OPERATING RESILIENT AND RELIABLE NETWORKS

Climate change is causing a significant increase in the frequency and severity of natural disasters, which in turn have a major impact on communications networks as well as the electric grid on which those networks depend. As climate and water extremes increase, the world has seen more frequent and more severe heatwaves, forest fires, and flooding due to increased rainfall.[3] Warming oceans lead to more – and more intense – tropical storms.[4] As these events have become more common, so too have major power outages, which have increased by sixty-seven percent since 2000.[5]

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[3] *Climate and Weather Related Disasters Surge Five-Fold Over 50 Years, But Early Warnings Save Lives*, United Nations (Sept. 1, 2021), https://news.un.org/en/story/2021/09/1098662.

[4] *Id.*

[5] *Power OFF: Extreme Weather and Power Outages*, Climate Central (Sept. 30, 2020), https://medialibrary.climatecentral.org/resources/power-outages.

This trend will only continue, and USTelecom members are already taking great strides to prepare for, respond to, and rebuild after major disasters. It is an essential aspect of their operations to ensure that customers, retail and wholesale, stay online and get back online as quickly as possible after a network outage. USTelecom members have a long history of support for the communications needs of first responders and state and local government emergency management agencies. Additionally, USTelecom members across the board continue to transition their outdated copper networks to more reliable fiber and to invest in redundancy and resiliency for wireline broadband services. USTelecom members are committed to continue investing substantial funds to expand the reach of their networks to ensure their resiliency and dedicate significant resources to ensure quick restoration following natural disasters.

In addition to individual provider efforts, USTelecom members are spearheading voluntary initiatives aimed at increasing network resiliency and preventing the harms caused by disaster-driven outages. One such effort is the Cross-Sector Resiliency Forum ("CSRF"), which brings together representatives from the communications and electric sectors to improve communication and coordination in preparing for and responding to natural disasters. Additionally, member companies that offer wireless services are signatories to and active participants in the Wireless Resiliency Cooperative Framework (the "Framework").

III. VOLUNTARY FRAMEWORKS ARE AN EFFECTIVE TOOL TO PREPARE FOR AND RESPOND TO DISASTERS

A. Participation in the Wireless Resiliency Cooperative Framework Should Not Be Mandated, and the Framework Should Not Be Expanded to Include Wireline Providers

Communications network outages will inevitably happen as a result of natural disasters. While no one can prevent them, it is essential that the right tools and procedures be put into place

to minimize the harm they cause. No two outages are the same; indeed, within the same outage scenario no two providers will be affected in precisely the same manner. Because of this, it is critical to allow providers to be flexible in how they respond. The voluntary Wireless Resiliency Cooperative Framework is designed to provide flexibility by allowing wireless competitors to share resources they would not normally share in the course of doing business, but it does not impose prescriptive requirements as to what resources must be shared or when. This allows providers to tailor their response to the requirements of each emergency situation, fostering efficiency and cooperation. Provider actions for wireline and wireless services alike should be driven by how best to respond to the emergency. Adopting rigid rules to address resource sharing would frustrate rather than further incident response.

Moreover, there is no evidence that the Framework has failed as a voluntary endeavor such that prescriptive regulation is justified. Quite the contrary, disaster recovery efforts in recent years are replete with examples of cooperation and information sharing between wireless and wireline providers. These include: sharing fuel resources and sharing information with one another on access and debris removal and restoring backhaul. There is already extensive ongoing cooperation and coordination between wireless and wireline providers at state-administered Emergency Operations Centers ("EOCs") and DHS's National Coordinating Center for Communications ("NCC").

Importantly, the Framework was crafted for *wireless* providers; simply inserting the words "wireline providers" into the existing Framework would not be appropriate because the issues affecting each type of provider are different. Beyond the types of activities described above, mutual aid in general is less practical in the wireline context. First, and perhaps most obviously, roaming is not a wireline issue; sharing of network resources and capabilities with competitors is likely to be impractical in most cases, as the Commission's CSRIC has previously

recognized.[6] In the aftermath of a disaster, wireline provider resources should be devoted to repairing and rebuilding their own networks. Providers do not regularly have extra resources to provide to others if they are fully engaged in their own recovery and rebuilding efforts and requiring them to do so risks spreading resources too thin, potentially leading to slower recovery times and longer outages. Taken too far, mutual aid would create disincentives for a competitor to invest in its own resiliency and service restoration capabilities.

This is particularly true today when supply chain challenges are making it difficult to obtain the resources necessary to build new networks and maintain existing infrastructure. In particular, fiber supply challenges are frequently pushing lead times for delivery out to more than six months. With necessary materials in short supply, providers need all the resources they can get to maintain their own networks. They would not likely be able to share enough materials to adequately repair another provider's facilities, and might be left with inadequate materials to repair their own. As such, extending the Framework to wireline providers would likely hinder post-disaster response and the Commission should not require it.

B. Expanding the Scope of the Framework to Include Backhaul is Unnecessary

Improving coordination between backhaul providers and those they serve – including wireless providers – is a worthy goal. However, regulation is not necessary to achieve this objective. These relationships are successfully governed by contract and do not require extra-contractual regulation to compel coordination. All providers have strong incentives to keep their networks up and running, and backhaul providers have specific contractual commitments to

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[6] *See* Working Group 9, *Infrastructure Sharing During Emergencies Transport Subcommittee Shared Services*, Communications Security, Reliability and Interoperability Council (Dec., 2014), https://transition.fcc.gov/pshs/advisory/csric4/CSRIC_WG%209_Transport_Final_Recommendations_11-24-2014.pdf; *see also* Working Group 9, *Infrastructure Sharing During Emergencies Backup Power Subcommittee Shared Services*, Communications Security, Reliability and Interoperability Council (Dec., 2014), https://transition.fcc.gov/pshs/advisory/csric4/CSRIC_WG%209_Backup_Power_Reccomendations%20_11-24-2014.pdf.

fulfill. Moreover, such coordination is already happening and working.[7] No prescriptive rules will be more effective at promoting coordination than the marketplace; wireless providers' continued investment in already available resilient and redundant backhaul is the critical factor here.

C. The Commission Should Continue to Promote Coordination Between the Communications and Power Sectors, But Not Adopt New Backup Power Rules

Communications networks depend on electric power, without which they cannot operate. However, the frequency of power outages is increasing, and some of these outages last for weeks rather than hours or days.[8] While it is appropriate for communications providers to have backup power resources on hand to keep their networks operational during unavoidable emergencies, they cannot realistically plan for or coordinate themselves around power outages that last for a month, and it is unreasonable and inefficient to expect each of them to essentially create a secondary power grid in perpetuity. The larger discussion ultimately must focus on how to reduce the restoration time for the power grid rather than on extending the duration for which individual communications providers must be prepared to supply their own power.

Communications companies are working together well with electric companies. The Cross-Sector Resiliency Forum was created to promote greater coordination between the two sectors, and to facilitate collaborative efforts to plan for, respond to, and recover from natural disasters. Some of the key focal points of the CSRF include increased information sharing, including identification of critical sites and infrastructure for priority power restoration, and

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[7] *See supra* Section III.A.

[8] *See* Sophie Kasakove, *3 Weeks After Hurricane Ida, Parts of Louisiana Remain Dark*, The New York Times (Sept. 18, 2021), https://www.nytimes.com/2021/09/18/us/ida-louisiana-power-outages.html (Power outages following hurricane Ida lasted three weeks or longer in parts of Louisiana); Peter Marsters and Trevor Houser, *America's Biggest Blackout*, Rhodium Group (Oct. 26, 2017), https://rhg.com/research/americas-biggest-blackout-2/ (power outages due to hurricane Maria lasted more than a month).

utilizing periodic exercises and workshops to better understand each sector's emergency response

efforts. The CSRF leadership committee consists of representatives from CTIA, NCTA – The

Internet and Televisions Association, and the Edison Electric Institute ("EEI"), as well as

USTelecom, and the working group comprises stakeholders from across both industries. The

CSRF holds twice-yearly forums, bringing together the communications and electric industries to

discuss successful practices and lessons learned on the ground, and to share thoughts for how to

better coordinate and prepare for the future. The most recent forum, in the fall of 2021, featured a

detailed discussion of the response to Hurricane Ida, what went well and where there is

opportunity for improvement. One area that stands to benefit greatly from this increase in

communication is the problem of fiber cuts by electric companies and other players in the course

of recovery efforts, which worsen and prolong communications outage. When electric companies

have greater awareness of where communications companies' infrastructure is located, they are

less likely to cause damage in the course of their own rebuilding efforts. These opportunities for

direct discussion and collaboration are invaluable in coordinating disaster response and were a

focus of efforts at state- and local-level EOCs after Hurricane Ida. The Commission should

promote and encourage participation in the CSRF as a vital tool in emergency preparedness and

response planning.

Given the success of voluntary measures, no new backup power requirements are

necessary. There already exist backup battery requirements for residential services,[9] as well as

backup power certification requirements for covered 911 providers.[10] Communications providers

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[9] 47 C.F.R. § 9.20(b). *See Ensuring Continuity of 911 Communications*, PS Docket No. 14-174, Report and Order, 30 FCC Rcd 8677 (2015) (requiring providers of facilities-based fixed, residential voice services that are not line-powered to offer customers the option to purchase a backup power solution).

[10] 47 C.F.R. § 9.19(b). *See Improving 911 Reliability, Reliability and Continuity of Communications Networks, Including Broadband Technologies*, PS Docket Nos. 13-75 & 11-60, Report and Order, 28 FCC Rcd 17476, 17492 para. 45 (2013).

also adhere to industry best practices to improve network reliability. The Alliance for Telecommunication Industry Solutions ("ATIS") Network Reliability Steering Committee ("NRSC") maintains an extensive database of best practices, including a number related to managing power resources, that were originally created by the Network Reliability and Interoperability Councils ("NRIC") and built upon by the Communications, Security, Reliability, and Interoperability Council ("CSRIC").[11] These bodies comprised representatives from communications companies, industry associations, and government entities, who created the best practices with the recognition that mandating any of them would be inconsistent with their purpose, because it is impossible to identify in advance which practices will prove effective in addressing the needs that arise for a given organization in a given emergency.[12] In its order adopting the Wireless Resiliency Cooperative Framework, which is consistent with and builds upon the best practices of the CSRIC,[13] the Commission concluded that the voluntary Framework "present[ed] a more appropriate solution" for addressing network resiliency than prescriptive regulation, which did not account for new technologies – possibly hindering deployment – and was also likely to slow restoration of service.[14] The Commission further noted that it "has long encouraged the incorporation of voluntary industry standards in lieu of regulation."[15] The Commission should continue this stance in encouraging adherence to voluntary frameworks and best practices that keep networks resilient and reliable.

Practical considerations counsel against prescriptive backup power requirements. Any

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[11] *Industry Best Practices,* ATIS, https://bp.atis.org/ (last visited Dec. 16, 2021).

[12] *Id.*

[13] *Improving the Resiliency of Mobile Wireless Communications Networks, Reliability and Continuity of Communications Networks, Including Broadband Technologies*, PS Docket Nos. 13-239 & 11-60, Order, 31 FCC Rcd 13745, 13747 para. 5 (2016) ("*Mobile Wireless Resiliency Order*").

[14] *Id.*, para. 8.

[15] *Id.*, para. 10.

solutions that must be positioned with critical infrastructure in the emergency zone will also be exposed to the elements. Diesel generators are frequently relied upon for backup power to wireline and wireless networks, but placing this type of generator in the middle of a wildfire – or even just where wildfires are likely to occur – would likely prove disastrous. Flood waters would likely render any backup power solution completely inoperable. It therefore may be preferable to stage portable solutions outside the emergency zone to deploy when conditions are safe. Additional factors may preclude on-site backup power outright, including property rights, zoning laws, noise ordinances, fire codes, and environmental regulations, which will bear on whether a provider can comply with specific power requirements. Backup power solutions are costly, and by definition redirect provider capital towards efforts that are not for the upgrade of existing infrastructure – including redundancy investment – or for the extension of networks to unserved areas. Extensive requirements are likely to negatively impact deployment. It is also critical to remember that no backup power solution is meant to be run for extended periods. For example, many diesel generators require being taken offline for maintenance at regular intervals.[16] Finally, any backup requirements should be consistent nationally in a way that balances these considerations, without conflicting requirements from states and localities.

D. Clarity on the Operation of DIRS and NORS is Appropriate, But Participation in DIRS Should Remain Voluntary

While participation in DIRS should remain voluntary, the Commission should provide greater clarity around when it will be activated and then when it will be deactivated to prevent confusion. It would be preferable to activate DIRS quickly, even if ultimately in error, than to delay activation in the interest of accuracy. In addition, USTelecom supports the Commission's suggestion that it codify the suspension of NORS when DIRS is activated.

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[16] *See* AT&T Reply to Comments, PS Docket No. 17-344, at *6 n. 7 (filed Feb. 21, 2018).

IV. CONCLUSION

USTelecom supports the Commission's objective of improving network resilience and reliability and appreciates this opportunity to comment on its proposals. The Commission should focus on a flexible approach that allows providers to tailor their response to each unique emergency scenario rather than impose rigid, prescriptive rules and regulations that will frustrate, rather than further, their goals.

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