In the Matter of	)
	)
Reliability an Continuity of Communications	) PS Docket No. 11-60
Networks, Including Broadband Technologies	)
	)

COMMENTS OF
THE COMMUNICATIONS SECTOR COORDINATING COUNCIL

The Communications Sector Coordinating Council[1] (CSCC) writes to share its history of experiences coordinating with power companies before, during and after disasters strike— coordination that continues today. The CSCC commends the FCC's Public Safety and Homeland Security Bureau (Bureau) for recognizing the interdependencies between electrical supply and communications service, particularly during disasters.[2] The CSCC meets regularly to review industry and government actions on critical infrastructure protection priorities and cross-sector issues, such as this. CSCC members understand well the criticality of power to network operation, and have taken numerous steps with electric companies to better plan for, and recover from, disasters in coordination with our government partners. We continue to make progress in coordination as we study possible best practices and develop new recommendations. We encourage the Commission to continue to facilitate any additional industry standards and best practices that would further allow for coordination between the communications and energy

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[1] The CSCC is comprised of the companies and associations that make up the five segments of the communications sector—broadcast, cable, satellite, wireless and wireline. *See* US Communications Sector Coordinating Council, About the CSCC, https://www.comms-scc.org/about-1 (last visited Feb. 8, 2019).

[2] *Public Safety and Homeland Security Bureau Seeks Comment on Improving Wireless Network Resiliency Through Encouraging Coordination with Power Companies*, PS Docket No. 11-60, Public Notice, DA 19-13 (rel. Jan. 3, 2019) (*Public Notice*).   We interpret the *Public Notice*'s use of "Power Companies" to implicate the energy sector broadly and the electric segment of the energy sector more specifically, as electric companies are generally the entities providing last-mile power for communications networks. *See* Dept. Homeland Security, CISA, Energy Sector, https://www.dhs.gov/cisa/energy-sector (last visited Feb. 8, 2019).

sectors via existing DHS work streams and its own Broadband Deployment Advisory Committee (BDAC).

I.   THE COMMUNICATIONS AND ENERGY SECTORS HAVE A HISTORY OF COLLABORATION

The communications and energy sectors have coordinated for years in various federal government settings to understand inter-dependencies and plan for greater resilience and reliability, particularly after a disaster. As the *Public Notice* correctly notes, the Commission itself uses advisory committees to "work on cross-sector collaboration" and the Commission is a supporting agency to Emergency Support Function (ESF) #2, coordinated by the Department of Homeland Security (DHS).[3] ESF #2 is the primary mechanism for communications sector response in a disaster.[4] Accordingly, DHS has served as the backdrop to a number of communications-electric advisory committee coordination efforts including:

National Security Telecommunications Advisory Committee (NSTAC)

The NSTAC, an advisory committee to the President devoted to ensuring national security/emergency preparedness (NS/EP) via the availability and reliability of telecommunications services,[5] has issued multiple reports regarding dependencies between energy and communications. Many members of the CSCC also participate in NSTAC.[6] These reports include:

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[3] *Public Notice* at 4.

[4] FEMA, Emergency Support Function #2 – Communications Annex at 1 (2016), https://www.fema.gov/media-library-data/1473679033823-d7c256b645e9a67cbf09d3c08217962f/ESF_2_Communications_FINAL.pdf ("Emergency Support Function (ESF) #2 – Communications supports the restoration of communications infrastructure, coordinates communications support to response efforts, facilitates the delivery of information to emergency management decision makers, and assists in the stabilization and reestablishment of systems and applications during incidents.").

[5] DHS, CISA, National Security Telecommunications Advisory Committee, https://www.dhs.gov/cisa/national-security-telecommunications-advisory-committee (last visited Feb. 8, 2019).

[6] For a current NSTAC roster, as well as a list of past NSTAC Chairs, *see* DHS, NSTAC Members, https://www.dhs.gov/nstac-members (last visited Feb. 8, 2019).

- In 2005, the NSTAC initiated a Telecommunications and Electric Power Interdependency Task Force to "investigate [NS/EP] issues associated with the interdependencies between these two sectors."[7]
    - The Task Force issued a report in January 2006, finding that "that the most useful element of the sectors' emergency restoration relationship is the open dialogue between the points of contact at the local level."[8]
    - The report also recommended ways in which telecommunications and electric power service providers could become better involved in the Federal, State, regional and local emergency planning processes and emergency operations centers.[9]
- In January 2007, the NSTAC issued a report on Emergency Communications and Interoperability. The report included analysis of the interdependencies of electric and communications networks, including the impacts on first responders in a disaster setting.[10]
- In 2014, the NSTAC issued a report on ICT Mobilization, which noted that the ability of the communications and IT sectors to work quickly with the government in a cyber emergency could also enhance other critical infrastructure, such as power.[11]

National Infrastructure Advisory Council (NIAC)/ NSTAC Efforts

The NIAC, which provides "the President, through the Secretary of Homeland Security with advice on the security of the critical infrastructure sectors and their information systems,"[12] has worked in concert with the NSTAC on several matters related to electric/communications coordination since at least 2003.[13] This coordination has yielded several relevant reports including:

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[7] NSTAC, Telecommunications and Electric Power Interdependency Task Force (TEPITF), People and Processes: Current State of Telecommunications and Electric Power Interdependencies at ES-1 (2006), https://www.dhs.gov/sites/default/files/publications/NSTAC_XXIX_Reports_082206_0.pdf (included in a series of reports to the President).

[8] *Id.*

[9] *Id.* at 12.

[10] NSTAC, NSTAC Report to the President on Emergency Communications and Interoperability at 8 (2007), https://www.dhs.gov/sites/default/files/publications/NSTAC%20Report%20on%20Emergency%20Communications%20and%20Interoperability.pdf.

[11] NSTAC, NSTAC Report to the President on Information and Communications Technology Mobilization, at 24 (2014), https://www.dhs.gov/sites/default/files/publications/NSTAC%20-%20Information%20and%20Communications%20Technology%20Mobilization%20Report%2011-19-2014.pdf.

[12] DHS, National Infrastructure Advisory Council, https://www.dhs.gov/national-infrastructure-advisory-council (last visited Feb. 8, 2019).

[13] *See, e.g.*, NIAC, Meeting Minutes and Briefing Materials for October 14, 2003 Meeting, at 13 (2003), https://www.dhs.gov/sites/default/files/publications/niac-qbm-minutes-10-14-03-508.pdf.

- In 2009, NIAC released a report encouraging government to "facilitate conversations between and among sectors and companies that can better their infrastructure resilience and provide each stakeholder with an enhanced perspective on potential risks."[14]
- In 2013, NIAC issued a report about strengthening regional resilience of the "lifeline" sectors, which includes energy and communications.[15] The report featured input from both the communications and energy sectors, among others, and studied the results of Superstorm Sandy.[16] The report contained several recommendations related to how federal, state, and regional entities can coordinate with lifeline sectors in event response.[17]

Homeland Security Advisory Council (HSAC)

In 20l6, the HSAC[18] developed a report on cybersecurity incident response related to the NSTAC ICT Mobilization report. This report focused on the resiliency and interdependencies of the communications, electric and financial service sectors. A purpose of the report is to "help the three sectors and their government partners prioritize and accelerate restoration of services in a contested environment."[19] This type of response planning transcends the traditional physical disaster response but is equally important in today's world of continual cyber threats.

II. THE COMMUNICATIONS AND ENERGY SECTORS CONTINUE TO COLLABORATE AND COORDINATE TODAY

Coordination between the communications and electric sectors is not merely historical; it continues in earnest today in multiple venues connected with DHS. Certain CSCC members have already provided substantial feedback[20] on how they coordinate in times of disaster with DHS

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[14] NIAC, Critical Infrastructure Resilience Final Report and Recommendations at 14 (2009), https://www.dhs.gov/sites/default/files/publications/niac-critical-infrastructure-resilience-final-report-09-08-09-508.pdf.

[15] NIAC, Strengthening Regional Resilience, at 6 (2013) https://www.dhs.gov/sites/default/files/publications/niac-regional-resilience-final-report-11-21-13-508.pdf.

[16] *Id.* at 50-52.

[17] *Id.* at 41-49.

[18] DHS, Homeland Security Advisory Council, https://www.dhs.gov/homeland-security-advisory-council (last visited Feb. 8, 2019). The HSAC is comprised of "leaders from state and local government, first responder communities, the private sector, and academia," including representatives of the communications and energy sectors, and is tasked to "provide[] advice and recommendations to the Secretary [of Homeland Security] on matters related to homeland security." *Id.*

[19] HSAC, Final Report of the Cybersecurity Subcommittee, Part I- Incident Response at 2 (2016), https://www.dhs.gov/sites/default/files/publications/HSAC_Cybersecurity_IR_FINAL_Report.pdf.

[20] *See, e.g.*, Letter from Joseph P. Marx, Assistant Vice President, Federal Regulatory, AT&T, to Lisa M. Fowlkes,

and its National Coordinating Center for Communications under the ESF #2 construct.[21] Yet beyond that, NS/EP coordination among critical infrastructure sectors has accelerated with the founding of DHS's National Risk Management Center (NRMC) in July 2018. The NRMC "is a planning, analysis, and collaboration center working to identify and address the most significant risks to our nation's critical infrastructure."[22]

The risk management activities of the "Tri-Sector Executive Working Group" are among the first priorities for the NRMC. The "Tri-Sector" consists of the communications, electric and finance sectors, and recently received its charter under DHS, though actual coordination began in 2014. CSCC representatives are active participants in the Tri-Sector Executive Working Group and our collective efforts with the other sectors include: (1) directing intelligence collection requirements; (2) building cross-sector risk management playbooks; and (3) better understanding systemic risk.[23] This is the type of planning and coordination that can "promote a clear understanding of coordinated responsibilities between communications providers and power companies during disasters and other events where sustained power outages might affect the provision of communications services."[24] The CSCC encourages the Commission to work with

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Chief, Public Safety and Homeland Security Bureau, PS Docket No. 11-60 (Nov. 26, 2018); Letter from Jeanne W. Stockman, Senior Counsel, CenturyLink, to Marlene H. Dortch, Secretary, FCC, at 1 (Sept. 11, 2018); Response of T-Mobile, PS Docket No. 11-60 at 8 (Nov. 26, 2018); Letter from Robert G. Morse, Associate General Counsel, Verizon to Marlene H. Dortch, Secretary, FCC at 7 (Nov. 26, 2018).

[21] DHS, CISA, National Coordinating Center for Communications, https://www.dhs.gov/cisa/national-coordinating-center-communications (last visited Jan. 24, 2019) ("National Coordinating Center for Communications (NCC) continuously monitors national and international incidents and events that may impact emergency communications. Incidents include not only acts of terrorism, but also natural events such as tornadoes, floods, hurricanes and earthquakes. In cases of emergency, NCC Watch leads emergency communications response and recovery efforts under Emergency Support Function #2 of the National Response Framework.").

[22] DHS, CISA, National Risk Management Center (2018) https://www.dhs.gov/sites/default/files/publications/NRMC%20100%20Days%20Fact%20Sheet%2020181115_CISA.pdf.

[23] *Id.*

[24] *Public Notice* at 4.

DHS and the NRMC in order to harmonize its efforts with any coordination efforts that are already taking place.

CSCC Members also routinely take part in joint exercises with the electric sector. Most notably, representatives from the respective sector Information Sharing and Analysis Centers (ISACs)[25] collaborated on walk-throughs of the *Tri-Sector All-Hazards Crisis Coordination (AHCC) Playbook* in the most recent CyberStorm VI exercise[26] as well as during Hurricane Florence. The electric sector invited a senior-level communications sector participant to its November 2017 GridEx IV event,[27] and work is currently underway for additional CSCC participation in the upcoming GridEx V exercise.[28] Additionally, the two sectors had significant interaction during the DHS ESF #2 Winter Workshop in November 2018, which focused on the interactions between ESF #12[29] and ESF #2, as well as lessons learned from the 2018 hurricane season. One of the explicit purposes of the workshop was to discuss preventing and mitigating

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[25] *See* National Council of ISACs, About ISACs, https://www.nationalisacs.org/about-isacs (last visited Feb. 8, 2019) ("Information Sharing and Analysis Centers help critical infrastructure owners and operators protect their facilities, personnel and customers from cyber and physical security threats and other hazards. ISACs collect, analyze and disseminate actionable threat information to their members and provide members with tools to mitigate risks and enhance resiliency.").

[26] DHS, Cyber Storm VI: National Cyber Exercise, https://www.dhs.gov/cyber-storm-vi (last visited Feb. 8, 2019) ("Cyber Storm VI is the latest iteration of the DHS national-level cyber exercise series that simulates a cyber crisis of national and international consequence.").

[27] *See* North American Electric Reliability Corporation (NERC), Grid Security Exercise GridEx IV: Lessons Learned at vi-vii (Mar. 2018) (finding that utilities should make use of existing communications resiliency tools and continue to strengthen their cross-sector relationships with other critical infrastructure sector).

[28] *See* NERC, GridEx V, https://www.nerc.com/pa/CI/CIPOutreach/Pages/GridEx.aspx (last visited Feb. 8, 2019). GridEx V will be held November 13-14, 2019 and "is an opportunity for utilities to demonstrate how they would respond to and recover from simulated coordinated cyber and physical security threats and incidents, strengthen their crisis communications relationships, and provide input for lessons learned."

[29] ESF # 12 describes how "Energy provides support to [DHS] by assisting local, state, tribal, territorial, and Federal government entities, nongovernmental organizations (NGO), and the private sector by coordinating government capabilities, services, technical assistance, and engineering expertise during disasters and incidents that require a coordinated Federal response." FEMA, ESF #12- Energy Annex at ESF #12-1 (June 2016) https://www.fema.gov/media-library-data/1470149363676-f4f9246fc46b10727523aee39e076a2a/ESF_12_Energy_Annex_20160705_508.pdf.

fiber cuts after disasters, and this group expects to continue the discussion in March 2019. CSCC members also report that they engage directly with their relevant electric sector counterparts for company-specific coordination in-region.

Finally, the Commission has itself recently charged a new "Disaster Response and Recovery Working Group" of the BDAC with "making recommendations on measures that can be taken to improve resiliency of broadband infrastructure" including "developing best practices for coordination among wireless providers, backhaul providers, and power companies during and after a disaster."[30] The BDAC includes representation from a number of CSCC members as well as electric companies.[31] This forum, like the DHS advisory committees and working groups, is an important venue for developing the types of principles and best practices that can supplement the existing frameworks and practices to improve coordination between the communications sector and the electric companies. The CSCC encourages the Bureau to carefully study any recommendations that may develop in that forum.

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[30] *FCC Announces Membership of the Broadband Deployment Advisory Committee's Disaster Response and Recovery Working Group*, GN Docket No. 17-83, Public Notice, DA 18-1121 at 1 (rel. Nov. 1, 2018).

[31] *Id.* at Appendix.

III. CONCLUSION

CSCC members have a demonstrated commitment to network resiliency and cross-sector coordination. We ask that the Bureau make use of existing venues for cross-sector coordination as it seeks to promote overall network resiliency. We appreciate your consideration of these comments and welcome further discussion on this topic.

Sincerely,

COMMUNICATIONS SECTOR COORDINATING COUNCIL

Robert Mayer
Chairman
February 8, 2019

Kathryn Condello
Vice Chairman