

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of:)
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)
Inquiry into Circumstances of Major 911 Outage) PS Docket No. 14-72
Centered in Washington State on April 9-10, 2014)
)

To: Chief, Public Safety and Homeland Security Bureau

**COMMENTS OF THE
TELECOMMUNICATIONS INDUSTRY ASSOCIATION**

I. INTRODUCTION AND SUMMARY

The Telecommunications Industry Association (TIA)¹ hereby submits comments to the Commission’s Public Notice in the above-referenced proceeding.²

¹ TIA is the leading trade association for the information and communications technology (ICT) industry, with 600 member companies that manufacture or supply the products and services used in global communications across all technology platforms. TIA represents its members on the full range of public policy issues affecting the ICT industry and forges consensus on industry standards. For over 80 years, TIA has enhanced the business environment for broadband, mobile wireless, information technology, networks, cable, satellite, and unified communications. TIA is accredited by the American National Standards Institute (ANSI).

² Public Safety and Homeland Security Bureau Inquiry into Circumstances of Major 911 Outage Centered in Washington State on April 9-10, 2014, PS Docket No. 14-72 (rel. May 16, 2014) (“PN”).

II. TIA SUPPORTS THE COMMISSION'S GOAL OF ENSURING THAT THE NATION'S NETWORKS ARE RELIABLE AND RESILIENT

TIA strongly supports ensuring that the nation's communications networks are reliable and resilient, especially during times of major natural and man-made disasters. Public communication networks are of vital importance to virtually all aspects of our society, including public safety, national security, economic stability, and prosperity. TIA understands the gravity of issues related to this endeavor and urges the Commission to take as balanced an approach as possible in this undertaking. Such an approach should reflect an understanding of a number of trends that network vendors and network equipment operators have come to find as tried and true principles.

The National Security Telecommunications Advisory Committee ("NSTAC") has previously produced a useful set of conclusions on network reliability, noting that a wide-ranging assortment of elements that may benefit or negatively impact/harm the network. These include software, hardware, human and inter-government relationship factors.³ As a result, appropriate network architecture must anticipate a broad range of contingencies. The NSTAC has also previously acknowledged the diverse factors involved with improving networks when it stated that "the evolution of the communications network will be driven by changes in technology, applications, content, devices, and increased requirements for capacity, bandwidth, and spectrum."⁴ As TIA has noted in its previous submissions on the topic of network reliability, numerous voluntary intra- and inter-industry efforts, and public-private partnerships, undertake the task of network reliability continuously, producing standards and best practices that are

³ See NSTAC, *Next Generation Networks Task Force Report* (rel. Mar. 28, 2006) at G-1 to G-10.

⁴ NSTAC, *NSTAC Report to the President on Communications Resiliency* (rel. Apr. 19, 2011) at 4 (NSTAC 2011 Report).

heavily relied upon.⁵ TIA supports deference to these efforts in lieu of new regulations on network resiliency and reliability.

A. Regulatory Action is Not Required by the Commission to Ensure Continual Improvement of the Reliability and Resiliency of Communications Networks

As a general response to the Commission's inquiry into this matter, TIA stresses that with typical network design, a critical element to resiliency is identifying potential points of failure. Network operators and equipment vendors take seriously reliability and resiliency. From their perspective, the highest priority is placed on designing networks to avoid such risks. The transition from legacy technology to internet protocol ("IP") -based technology is, in fact, one of the most noteworthy fundamental improvements towards increased resiliency due to the nature of IP.⁶ Further, the Department of Homeland Security ("DHS") has acknowledged that operators have "historically factored natural disasters and accidental disruptions into network resiliency architecture, business continuity plans, and disaster recovery strategies."⁷ The Commission should acknowledge that under the current regulatory approach, communications networks have been dynamically improving their reliability and resiliency. TIA firmly believes that "market

⁵ See, e.g., Comments of TIA, PS Docket No. 11-60, PS Docket No. 10-92, EB Docket No. 06-119 (filed Jul. 10, 2010) at 10-20 ("TIA Network Reliability Comments").

⁶ IP communications allow for a message to be broken down into packets that are sent off individually in multiple directions in search of the most efficient and least congested route. IP also allows for increased awareness of the cause of message failures. See Nuechterlein, J., Weiser, P., *Digital Crossroads: American Telecommunications Policy in the Internet Age* (2007) at 121-123.

⁷ See, DHS, *Communications: Critical Infrastructure and Key Resources; Sector Specific Plan as Input to the National Infrastructure Protection Plan* (2007) at 2, available at <http://www.dhs.gov/xlibrary/assets/nipp-ssp-communications.pdf>.

incentives will remain the fundamental driver of industry practices and standards,” as noted by the NSTAC.⁸

TIA urges the Commission to keep in mind its goal of removing barriers to innovation and infrastructure deployment.⁹ TIA firmly believes that applying new uniform rules creates the possibility of several highly impactful and adverse effects. If new regulations are adopted in this matter, the Commission will be ignoring the wide variety of challenges faced by networks across the United States and how they are efficiently dealt with today. Unnecessary mandates could also hinder the development and deployment of smart grid technology, which has been heavily invested in across several sectors.¹⁰ TIA strongly opposes the forced commitment of capital towards meeting reliability mandates, even in instances where it is not appropriate for a facility, could better/otherwise be dedicated to best addressing resiliency challenges as deemed appropriate by those with the best knowledge of what a particular network needs to increase resiliency: the operator of that network. Taking the ability to make these judgments from network operators would detract from the network resiliency and reliability goals of the Commission.

Finally, we again note that the Commission should ensure that it has sufficient jurisdiction to undertake any new reliability rules.¹¹ We also note for the Commission that the communications infrastructure is ultimately reliant on the power grid, for which states and the

⁸ See NSTAC 2011 Report at 14.

⁹ See TIA Network Reliability Comments at 3-6. As TIA has already described, adopting sweeping requirements, such as universal backup generator requirements for sites, would remove the ability to make the most informed hyper local decisions, and divert resources that would be used for other site-specific challenges that are of a higher priority. TIA believes that the only party in a position to make such a priority determination is the operator of the facility.

¹⁰ In January through May of 2010 alone, there were 30 publicly announced smart grid investment deals in the United States and Canada totaling over \$1.8 billion. See <http://idc-insights-community.com/posts/0cfbc7cb24>.

¹¹ See TIA Network Reliability Comments at 20-21.

North American Electric Reliability Corporation, which the Federal Energy Regulatory Commission (“FERC”) has certified as the nation’s Electric Reliability Organization of the bulk power system,¹² set reliability minimum standards. We strongly urge the Commission to coordinate with these state and Federal authorities who directly oversee grid reliability in its efforts to take steps to increase resiliency of the national communications network, particularly if any rulemaking is undertaken by the Commission.

B. The FCC Should Support Network Providers and Vendors as they Continue to Voluntarily Undertake Significant Efforts to Ensure Network Reliability

TIA believes that the current reliability ecosystem – consisting of industry voluntary and consensus-based standards, best practices, self-evaluation efforts, and public-private partnership efforts – should be relied upon by the Commission. Furthermore, there are several non-regulatory actions that the Commission is encouraged to take to further ensure network reliability.

Through the years, network operators and vendors have made great strides in network resiliency through voluntary, consensus-based standards development. After times of unprecedented stress on the communications network, network operators and vendors may find themselves in a reactionary position. As already noted by the NSTAC, we urge the Commission to recognize that these occurrences are unique and, for network providers and equipment vendors that design and plan for reliability, impossible to completely avoid.¹³

¹² See Order Certifying North American Electric Reliability Corporation as the Electric Reliability Organization, 116 F.E.R.C. ¶ 61,062.

¹³ See NSTAC 2011 Report at 1 (“While it would be near impossible to develop and maintain networks that are invulnerable to disruption, ensuring long-term communications resilience requires that the Government

From a standard developer standpoint, TIA has been instrumental in the standards making process both within TIA and in other standard development bodies, and continues to strive for greater network reliability and resiliency. In its history, TIA has issued over 3,500 ICT industry standards and related documents,¹⁴ the vast majority of which are ingrained with resiliency and reliability principles. TIA coordinates with dozens of global standards developing organizations, and continues its outreach. In our comments on general network reliability submitted previously by TIA, we have detailed a number of noteworthy standards that directly increase the resiliency and reliability of equipment and the networks that are built on the equipment TIA members manufacture.¹⁵

We also reiterate our strong belief that the use of non-mandatory best practices has resulted in immeasurable increases in network resiliency and reliability.¹⁶ Given the fact that each best practice is not relevant for each area, sector, node, etc. of the communications industry, because they are not mandated, network operators are allowed for the flexibility to employ the best equipment and systems that meet their specific challenges to network reliability. In addition, best practices allow for the “co-existence of new and old technologies”¹⁷ and therefore help facilitate the smoothest transitions in technology deployments. There are currently numerous voluntary industry efforts underway that continually formulate, aggregate, and update best

understand future systems and the future technology landscape when investing in and planning for durable, survivable communications for Government officials, first responders, and the general population.”).

¹⁴ TIA standards are available at <http://www.ihs.com/products/industry-standards/org/tia/list/index.aspx>. In addition, TIA publishes an annual report that includes the latest actions taken by each respective TIA engineering committee. See TIA, 2012-2013 Standards & Technology Annual Report (rel. Apr. 2012), available at <http://www.tiaonline.org/sites/default/files/pages/STAR2013withLinks.pdf>

¹⁵ See TIA Network Reliability Comments at 13-17.

¹⁶ See *Id.* at 17-18.

¹⁷ CSRIC Working Group 6, *Final Report: Best Practices Implementation* (rel. Dec. 2010) at 3 (CSRIC WG6 2010 Report). <http://transition.fcc.gov/pshs/docs/advisory/csric/WG-4A-Final-Report.pdf>

practices, and network operators and equipment vendors regularly look to best practices, both internal and external to their organization.

Given the abundance of best practice work today, TIA strongly urges the Commission to allow for these successful efforts to continue to evolve and succeed, and to refrain from adopting new unnecessary regulations on network reliability.

III. CONCLUSION

In light of the public's dependence on communications networks, the resiliency and reliability of these networks is of paramount importance. TIA supports the Commission's efforts to ensure that these networks are reliable and resilient. However, the Commission should refrain from taking regulatory action and encourage and allow network operators and vendors to continue their voluntary efforts in improving the reliability of their networks.

Respectfully submitted,

**TELECOMMUNICATIONS INDUSTRY
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