

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)
)
)
Response Efforts Undertaken During the) GN Docket No. 17-344
2017 Hurricane Season)

The Wireless Infrastructure Association (WIA) is encouraged that the Federal Communications Commission (FCC or Commission) is seeking comment on the resiliency of the communications infrastructure and industry responses to the 2017 hurricane season in the above captioned proceeding. The 2017 hurricane season included four hurricanes that made landfall in the United States and its territories. These extreme weather events enacted catastrophic damage on American families in the way of loss of property, limb and life. While these events caused service outages in some instances, the underlying support structures, like towers and rooftop facilities, largely weathered the storm making restoration of service that much faster. WIA proudly joins the chorus of voices in recognition of the first responders, volunteers, and average citizens that worked together in the lead up to and the cleanup following these massive storms. Lives were saved due the generosity of soul and spirit.

Most tower-supported networks feature inherent redundancies based on the distributed nature of modern wireless networks. And while a not insignificant number of people were impacted by the loss of wireless service during and immediately following the hurricanes, the redundancy of the network means that while there may be loss of service at one site, the outage is isolated. As was shown during the 2017 hurricane season, the wireless infrastructure industry quickly restored service in the affected areas shortly after the storms. According to the FCC's

outage data, during Hurricane Harvey and Hurricane Irma, virtually all wireless service was restored to the affected disaster areas within one week.¹

WIA looks forward to supplementing the record in the coming days, however, anecdotal evidence demonstrated that the wireless networks showed great resiliency during the hurricanes. For instance, one WIA member company shared that while they had a total of about 160 towers that were affected by Hurricane Irma in Florida, South Carolina, and Georgia, none suffered severe damage that had a significant impact on service interruption or restoration. This same member company said it had approximately 60 sites in Texas that went through Hurricane Harvey without any tower damage. Finally, this company had fifteen towers in Puerto Rico that went through Hurricane Maria and only two concrete poles were severely damaged and one is in the process of being replaced because cracks were found in parts of it.

Another company reported that of their over 700 towers in the path of Hurricane Harvey in Texas, only one tower collapsed. This tower was located at ground zero for Harvey landfall and was only fifty feet from the Gulf of Mexico. For Hurricane Irma, none of this company's nearly 2,200 towers in Florida nor their over 100 towers in Puerto Rico collapsed.

Examples like these show the inherent resilience contained within the relevant engineering and construction standards wireless support structures rely on.² Media reports tell a similar story. The Associated Press (AP) reported,

“Roads, refineries and other infrastructure have taken a beating in the Texas and Louisiana regions hit by Harvey – but cell phone networks so far remain largely

¹ See Communications Status Report for Areas Impacted by TS Harvey, *available at* <https://www.fcc.gov/harvey> (Aug. 26 - Sept. 5); Hurricane Irma Communications Status Report, *available at* <https://www.fcc.gov/irma> (Sept. 7 - 18).

² See, William Garrett, PE SECB & Bryan Lanier, PE, SE, *Classification of Tower Structures per ANSI/TIA-222-G, IBC & ASCE-7* (May 2017), *available at* <https://wia.org/wp-content/uploads/White-Paper-Structure-Class-Updated-5-1-17.pdf>.

functional. One reason: Big carriers brought in supplemental equipment and backup power and turned to drones to diagnose problems.”³

It was further reported that within a few days after the storm, one of the most heavily hit areas, Aransas County, reported thirty-two percent of its twenty-eight towers out of service.⁴ “That’s down from 95% right after the weekend’s storm, according to data from the Federal Communications Commission.⁵ Throughout the affected region, slightly less than 4% of cell towers were [out of service.]”⁶

The prevailing reason that wireless sites go out of service is due to lack of electricity. Backup generators may be flooded or often run out of fuel. After hurricanes or other disasters, facility owners require access to their sites for maintenance or to bring fuel for the backup power source. However, WIA members have shared that they are often unable to access sites in the immediate aftermath of the storm. The inability to reach a site poses a major challenge to getting the tower back online. This obstacle is most often administrative, whereby the tower owner or operator is not permitted to enter the disaster area. WIA requests that the FCC work with the Federal Emergency Management Agency, other agencies, states, and localities to ensure priority access after storms for tower owners and operators when acting in their owner or management capacity.

³ Anick Jesdanun, *So Far, Cellphone Networks Have Weathered Harvey*, AP, Aug. 31, 2017, available at <https://www.usnews.com/news/business/articles/2017-08-31/so-far-cellphone-networks-have-weathered-harvey>.

⁴ *Id.*

⁵ See Communications Status Report for Areas Impacted by TS Harvey, available at <https://www.fcc.gov/harvey> (Aug. 26 - Sept. 5); Hurricane Irma Communications Status Report, available at <https://www.fcc.gov/irma> (Sept. 7 - 18).

⁶ *Id.*

CONCLUSION

WIA applauds the Commission's efforts in closely examining the performance of wireless networks during and after the catastrophic weather events of 2017. WIA looks forward to sharing additional information as the proceeding moves forward to provide the FCC with a robust record as administrative adjustments are considered.

Respectfully submitted,

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