

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Improving the Resiliency of Mobile Wireless Communications Networks	)	PS Docket No. 13-239
	)	
Reliability and Continuity of Communications Networks, Including Broadband Technologies	)	PS Docket No. 11-60
	)	

**REPLY COMMENTS OF PCIA–THE WIRELESS INFRASTRUCTURE ASSOCIATION**

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**I. INTRODUCTION AND SUMMARY**

PCIA–The Wireless Infrastructure Association (“PCIA”)<sup>1</sup> respectfully submits these reply comments in response to the Federal Communications Commission’s (“FCC” or “Commission”) *Notice of Proposed Rulemaking* seeking comment on the resiliency of mobile wireless communications networks during emergencies.<sup>2</sup> PCIA provides these reply comments in response to the Commission’s inquiry into whether mandatory outage reporting and requirements will allow consumers to compare competing networks’ reliability and encourage competition that will improve network resiliency.

The record demonstrates that additional regulation is unnecessary because robust competition among wireless providers drives investment in network resiliency and plan extensively for rapid restoration of service. The record’s examples of industry preparation and cooperation before, after and during emergencies illustrate the industry’s commitment to

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<sup>1</sup> PCIA is the national trade association representing the wireless infrastructure industry. PCIA’s members develop, own, manage, and operate towers, rooftop wireless sites, distributed antenna systems, small cells and other facilities for the provision of all types of wireless, telecommunications, and broadcasting services. PCIA and its members partner with communities across the nation to affect solutions for wireless infrastructure deployment that are responsive to the unique sensitivities and concerns of each community.

<sup>2</sup> *In re* Improving the Resiliency of Mobile Wireless Communications Networks, Reliability and Continuity of Communications Networks, Including Broadband Technologies, *Notice of Proposed Rulemaking*, 28 FCC Rcd 14373 (2013) (“NPRM”).

deploying robust networks and restoring service quickly. While the wireless industry shares the Commission's concerns regarding network resiliency and reliability, the proposed disclosure would interfere with ongoing industry investment and cooperation.

The proposed disclosure will also mislead consumers and undermine the Commission's goal of improved network reliability. Consumers may be misled is misleading because the disclosure conflates cell site outages with service coverage losses, fails to account for diverse network architectures, and makes wireless providers accountable for circumstances outside their control. Moreover, the proposed DIRS triggering standard will exacerbate these problems because it would not be representative of a provider's overall network reliability. Voluntary, supplemental information will not solve the problems with the proposed disclosure because it undercuts the Commission's goal of simplicity, adds to the costs of implementing the disclosure system, and invites future regulation by the Commission to govern the supplemental information released. Instead of adopting a flawed disclosure system, the Commission should continue to work through its multi-stakeholder efforts to best promote resiliency and reliability.

If the Commission does act, it should narrow the definition of "network site," refrain from adopting backup power requirements, and fully count temporary tower locations. The proposed definition of "network site" in the NPRM would include distributed antenna systems ("DAS") and small cell solutions; however, site outages for these types of technology do not impact service coverage in the same way macro site outages do because of their small, distributed nature. Therefore, their inclusion in a metric is inappropriate. The proposal to address backup power requirements in this proceeding is also misplaced. Backup power presents a complicated regulatory challenge that requires providers to navigate numerous local, state and federal regulations. Adopting a single, blanket backup power rule is inadvisable, and attempting

to do so here will distract the Commission from the primary goal of this proceeding. Finally, temporary towers should count fully under the proposed disclosure. Failure to count temporary towers or counting them fractionally could discourage providers from taking advantage of an important tool in responding to emergencies. Fractional counting could also significantly increase the administrative and compliance burden of the proposed rules.

## **II. THE COMMENTS DEMONSTRATE THE WIRELESS INDUSTRY'S CONTINUED EFFORTS TO DEVELOP AND IMPLEMENT EMERGENCY RESPONSE STRATEGIES**

The record demonstrates the wireless industry's commitment to investing in resiliency and planning for and responding to emergencies. The comments also show that this investment is driven by competition that already exists among wireless providers, including competition over network resiliency and reliability. Instead of adopting unnecessary and misleading reporting requirements, the Commission should facilitate the industry's development of innovative and flexible solutions to emergency planning.

### **A. The Wireless Industry Invests Heavily In Resiliency and Plans Extensively for Restoration**

Each emergency presents unique and unpredictable challenges. Wireless carriers and infrastructure providers routinely evaluate their emergency response plans based on the performance of their networks and effectiveness of their response plans during emergencies.<sup>3</sup> This constant evaluation allows wireless providers to develop detailed plans for rapidly restoring service after a disaster strikes. It also gives wireless providers the experience to respond flexibly when an emergency inevitably challenges even the most detailed response plans.

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<sup>3</sup> See Comments of CTIA – The Wireless Association, PS Docket Nos. 13-239, 11-60, at 6 (filed Jan. 17, 2014) (“CTIA Comments”).

The record shows that wireless providers work hard to plan for resilience and restoration in advance of emergencies. Commenters, including PCIA, highlighted examples of industry members working together<sup>4</sup> and with government and other agencies<sup>5</sup> to develop contingency plans for possible emergency situations and to restore service during outages. In addition to making emergency response plans, wireless providers plan their networks with resiliency in mind. This includes using hardened construction for infrastructure and taking advantage of backup power where possible.<sup>6</sup> Overlapping cell site coverage can also guard against a single site outage acting as a failure point for an entire network.<sup>7</sup>

Despite the wireless industry's best efforts, emergencies can cause site failures. But the record also shows that the industry already takes steps to minimize the impact of these outages and restore site operation as quickly as possible. Many wireless providers develop detailed emergency response action plans to coordinate their response to disasters. These action plans cover multiple aspects of emergency response. For example, wireless providers pre-stage

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<sup>4</sup> *Id.* at 9-10 (“For example, CTIA established a Business Continuity/Disaster Recovery Program, which provides an annual certification for wireless carriers that have met the planning standards and objectives necessary to ensure that they have prioritized service continuity and disaster recovery.”); Comments of AT&T, PS Docket Nos. 11-60, 12-239, at 6-8 (filed Jan. 17, 2014) (“AT&T Comments”) (citing numerous examples of AT&T cooperating with other wireless providers in responding to emergencies, including during Superstorm Sandy and Hurricane Irene); Comments of Sprint Corporation, Docket Nos. 11-60, 13-239, at 10-11 (filed Jan. 17, 2014) (“Sprint Comments”) (explaining how industry cooperation can improve resiliency by making shared backup power solutions more efficient); Comments of T-Mobile USA, Inc., PS Docket Nos. 11-60, 13-239, at 9 (filed Jan. 17, 2014) (“T-Mobile Comments”) (citing cooperation with AT&T during Superstorm Sandy).

<sup>5</sup> *See* CTIA Comments at 7-8 (explaining industry assistance in the development of the Department of Homeland Security's (“DHS”) National Infrastructure Protection Plan and Communications Sector Specific Plan); Comments of PCIA—The Wireless Infrastructure Association, PS Docket Nos. 11-60, 13-239, at 4 (filed Jan. 17, 2014) (explaining industry cooperation with the DHS's National Coordinating Center) (“PCIA Comments”).

<sup>6</sup> *See* AT&T Comments at 2-3 (explaining AT&T's use of Network Equipment-Building System (NEBS) guidelines for all critical equipment); Comments of Verizon and Verizon Wireless, PS Docket Nos. 11-60, 12-239, at 2-3 & n. 5 (filed Jan. 17, 2014) (“Verizon Comments”) (citing Statement for the Record, *Prepared Testimony of Verizon Vice President James Gerace*, FCC Field Hearing on Preparations and Impact of Hurricane Sandy, PS Docket No. 11-60 (Feb. 6, 2013) (“Sandy Hearing Remarks”)) (explaining that Verizon's replacement of copper wiring with fiber after Superstorm Sandy will improve resiliency because fiber is less susceptible to water damage); PCIA Comments at 4 (explaining the use of Network Operations Centers by industry members to monitor site operation status twenty-four hours a day, seven days a week).

<sup>7</sup> *See* CTIA Comments at 3-4, 9-11; Sprint Comments at 7; Verizon Comments at 12; PCIA Comments at 5, 6-7, 12.

temporary towers, pre-arrange generator fuel delivery, and bring in mobile remote offices to respond to disasters.<sup>8</sup> Temporary towers and generators help providers maintain service coverage, and mobile remote offices allow providers to coordinate their efforts and provide customers with information about service during an emergency.<sup>9</sup> Wireless providers also consider details beyond network operation, including the provisioning of employees in a disaster area and the environmental impact of infrastructure failures during an emergency.<sup>10</sup> The unpredictable nature of emergencies makes it impossible to completely prevent site outages, but the wireless industry continues to demonstrate its commitment to deploying robust networks.

### **B. The Proposed Metric Could Undermine the Industry's Current Emergency Response Plans**

The Commission should encourage providers to work together to respond to an emergency as quickly and efficiently as possible. Wireless providers often work together to respond to disasters. For example, T-Mobile and AT&T agreed to open their networks to each other's customers during Superstorm Sandy.<sup>11</sup> Cooperation can also improve emergency response planning. Shared backup power solutions can make network resiliency planning more efficient and environmentally friendly.<sup>12</sup>

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<sup>8</sup> See AT&T Comments at 3-4; Verizon Comments at 3 n.5 (citing Verizon's Year-Round Network Preparation, <http://www.verizonwireless.com/news/Emergency/Preparation.html>) (explaining Verizon's disaster response plans).

<sup>9</sup> See Verizon Comments at 3 n.6 (citing Verizon Wireless's use of temporary towers, Mobile Support Unit, and Mobile Command Center in responding to 2013 tornados in Oklahoma).

<sup>10</sup> See AT&T Comments at 3-4 (explaining deployment of tent cities, Meals Ready to Eat, and health and safety support that AT&T provides for its restoration personnel); Verizon Comments at 3 n.5 (citing Sandy Hearing Remarks) ("Verizon also has the industry's first environmental hazmat response team . . . which remained on standby to deploy immediately, if needed to manage hazardous materials emergencies involving or threatening Verizon's critical communications facilities or infrastructure . . .").

<sup>11</sup> See T-Mobile Comments at 9; AT&T Comments at 6; PCIA Comments at 4-5.

<sup>12</sup> See Sprint Comments at 10-11.

The proposed metric threatens to undermine important industry cooperation. The stated premise of the NPRM's proposal, supported by some commenters,<sup>13</sup> is that wireless providers will respond to the metric by competing over the resiliency of their networks during an emergency.<sup>14</sup> However, the proposed metric will undercut the Commission's stated goals by encouraging providers to act self-interestedly (for example, by refusing to share networks or backup power generators) at precisely the time when cooperation would prove the most effective tool for improving network reliability and resiliency.

### **C. Competition Already Drives the Industry's Commitment to Resiliency and Reliability**

The record shows strong competition already exists among wireless providers and, significant to this proceeding, that competition includes network resiliency and reliability.<sup>15</sup> Wireless providers invest in advertising that highlights network reliability, which illustrates the extent to which reliability already plays a role in carriers' differentiation strategies.<sup>16</sup> The investment in disaster preparation mentioned above also illustrates that carriers take their reputations as reliable providers seriously. Providers that seek to compete solely on price put their long-term reputational success at risk to competitors that invest in resiliency and reliability.

The daily competition that already exists among providers offers the best gauge of network reliability. Consumers gauge their providers' reliability through their own daily experience. PCIA agrees that consumers' everyday experience provides more information in a

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<sup>13</sup> See Comments of Consumers Union, PS Docket Nos. 11-60, 13-239, at 4-5 (filed Jan. 17, 2014) ("Consumers Union Comments"); Comments of the Vermont Public Service Board, PS Docket Nos. 11-60, 13-239, at 2 (filed Jan. 17, 2014) ("Vermont PSB Comments").

<sup>14</sup> NPRM ¶ 1.

<sup>15</sup> See AT&T Comments at 1-6; Verizon Comments at 2-5; PCIA Comments at 3-4.

<sup>16</sup> See AT&T Comments at 1 n. 4; Verizon Comments at 2-3.

simpler metric than any government mandated reporting system ever could.<sup>17</sup> Through regular use of the network, consumers generate their own personal data on network reliability every day. Commenters that argue for more reporting requirements ignore the reality that consumers develop their own detailed reliability information by constantly interacting with wireless networks.<sup>18</sup>

Moreover, third party rankings, like JD Power & Associates, provide consumers with significant additional information regarding network reliability.<sup>19</sup> Commenters point out that these rankings provide independent information to consumers and help aggregate detailed network information by conducting consumer surveys and testing large geographic areas.<sup>20</sup> These tools facilitate existing competition and provide far more detail than the proposed reporting metric would provide to consumers.

### **III. THE RECORD DEMONSTRATES THAT THE PROPOSED DISCLOSURE WILL NOT MEET THE COMMISSION'S OBJECTIVES AND WILL NOT SERVE CONSUMERS**

The reporting metric proposed in the NPRM will mislead consumers and fail to meet the Commission's goal of improving reliability. Commenters that argue the metric can be improved after it is adopted or that wireless providers can provide supplemental information to consumers ignore the underlying flaws in the proposed disclosure. To the extent that the Commission does act, it should continue to work through multi-stakeholder efforts to develop a system that effectively combines industry-centric reliability efforts with consumer-centric data efforts.

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<sup>17</sup> AT&T Comments at 9-10; Verizon at 2-3.

<sup>18</sup> See Comments of AARP, PS Docket Nos. 11-60, 13-239, at 9-10 (filed Jan. 17, 2014) ("AARP Comments").

<sup>19</sup> See Verizon Comments at 4.

<sup>20</sup> See Verizon Comments at 4; Comments of the Alliance for Telecommunications Industry Solutions, PS Docket Nos. 11-60, 13-239, at 2 (filed Jan. 17, 2014) ("ATIS Comments").

### **A. The Proposed Metric Would Mislead Consumers, Which Would Not Serve the Commission's Goals**

The record illustrates the significant flaws in the proposed reporting metric. PCIA agrees with the numerous other commenters that argue that: the percentage of operational cell sites does not accurately reflect service coverage; the cell site outage metric will discourage investment in heterogeneous networks; and the metric does not account for circumstances outside of providers' control.

The proposed site outage metric will mislead consumers because cell site outages do not accurately reflect service loss.<sup>21</sup> For example, differences in network design, propagation characteristics, power control, or network management could result in carriers with poorer outage scores providing similar or better coverage to consumers.<sup>22</sup> The proposal relies on the idea of enabling consumers' service decision with more information. However, if the metric leads consumers to pick a carrier with a higher outage metric score but poorer service coverage, the metric will understandably undercut the Commission's goals.

The increasing use of heterogeneous network design could also cause the metric to confuse consumers. DAS and small cell technologies play an important role in improving capacity and reliability. Their use also means wireless networks are more diverse and complicated than ever. PCIA agrees with commenters that if the proposed metric treats a DAS or small cell outage in the same way it treats macro cell outages, the metric will inflate the outage percentage without reflecting a similar loss of coverage.<sup>23</sup> This inflated outage percentage would harm both consumers and the wireless industry. For consumers, it is another example of how the

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<sup>21</sup> See CTIA Comments at 9-11; AT&T Comments at 10-11; T-Mobile Comments 3-5; PCIA Comments at 6-9.

<sup>22</sup> See Sprint Comments at 3; T-Mobile Comments at 4-5 (explaining two scenarios where a carrier with a lower percentage of operational cell sites could still provide more coverage than a competitor with a higher percentage of operational cell sites).

<sup>23</sup> See AT&T Comments at 13-14; Sprint Comments at 7; Verizon Comments at 7-8; PCIA Comments at 11-12.

propose metric fails to provide relevant information. For the wireless industry, the proposed metric would act as a penalty for providers that invest in DAS and small cell technology, technologies that would otherwise improve network coverage and capacity.

Finally, a variety of factors beyond carrier control impact the operational status of a cell site, including backhaul failures, power grid failures, and road closures.<sup>24</sup> Moreover, some aspects of an emergency situation, like the path of a storm or the epicenter of an earthquake, are entirely outside anyone's control.<sup>25</sup> Consumers will not benefit from a metric that relies on variables outside providers' control to gauge providers' network reliability, and it is impossible for wireless providers to invest in resiliency measures beyond the providers' control. Nonetheless, the proposed metric would rely on these variables along with variables that providers do control, which could distort the market.

### **B. The Proposed DIRS Data Would Not Be Representative of a Provider's Overall Network Reliability**

The proposed metric could skew the results and give consumers an inaccurate impression of providers' network reliability. There is broad agreement among the commenters that the DIRS reporting trigger is not representative of a provider's overall network reliability and would not be meaningful to consumers.<sup>26</sup> Most of the country has never experienced a full DIRS activation (only 19 states have), and within the states that have experienced a full DIRS activation, only Florida, Louisiana, and Mississippi have had more than one DIRS activation affecting more than four counties.<sup>27</sup> The infrequent and geographically isolated activation of the DIRS system means

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<sup>24</sup> See CTIA at 12-13; T-Mobile at 5-6; Sprint at 7-8; PCIA Comments at 9.

<sup>25</sup> See T-Mobile Comments at 6 (illustrating the possibility that a carrier with above average resiliency investment could look unprepared under the metric if a tornado hit its switch and missed that of a less prepared competitor).

<sup>26</sup> See CTIA Comments at 11-12; Sprint Comments at 4-5; AARP at 13; Comments of The Blooston Rural Carriers, PS Docket Nos. 11-60, 13-239, at 4 (filed on Jan. 17, 2014) ("Blooston Comments").

<sup>27</sup> Sprint Comments at 4; Blooston Comments at 4.

that many consumers will not have information for the providers in their area. However, in part because of the FCC's endorsement of this metric, consumers might assume that outage statistics from one part of the country reflect the reliability of a provider across the country.

It would undercut the purpose of the proposal if consumers make assumptions about network reliability based on information from outside their area or based on a very limited sample size. The proposed DIRS triggered reporting could unfairly punish wireless providers that do invest in network resiliency and reward providers that do not invest in network resiliency. As mentioned above, providers cannot control every aspect of an emergency, which might skew the reporting, and the limited sample of DIRS activations will exacerbates this problem. For example, a tornado or hurricane that hits an area with a well-prepared provider especially hard could make that provider look unprepared, and with the limited number of DIRS activations, it is unlikely that that provider would experience another event in the same area that would demonstrate the resiliency of its network.<sup>28</sup> Therefore, the limited snapshot of a single DIRS performance could dictate the public perception of a provider's network reliability nationwide. Knowing this possibility, providers might ignore the proposed metric and focus on internal metrics that provide a more reliable picture of reliability. A provider might also try to explain to consumers why they use a different metric to gauge reliability, which would undercut the Commission's goal of simplicity.

Commenters that suggest reporting some information is better than no information ignore the underlying flaws in the metric.<sup>29</sup> The assumption of these commenters rests on the idea that something is better than nothing. But as any business knows, the answer for selling each unit of a

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<sup>28</sup> See Blooston Comments at 4.

<sup>29</sup> See Vermont PSB Comments at 2; Consumers Union Comments at 2-3; Comments of the California Public Utilities Commission and the People of the State of California, PS Docket Nos. 11-60, 13-239, at 2 (filed on Jan. 17, 2014) ("CPUC Comments").

product at a loss is not to sell more units; it is to reevaluate the cost structure of the product. Likewise, the solution to a metric that relies on flawed information is not to release the information and hope to improve it in the future. Rather, the solution is to get better information. As has been noted above, the proposed metric suffers from a number of flaws that will tend to mislead consumers. Instead of adopting the proposed metric and attempting to improve it on-the-fly, the Commission should use its multi-stakeholder efforts to establish processes that inform consumers and encourage investment in network resiliency.

### **C. Voluntary, Supplemental Information Will Not Solve the Shortcomings of the Proposed Metric**

That some commenters suggest that wireless providers can address the shortcomings of the proposed metric by providing supplemental information underscores the flaws of the proposed disclosure requirement.<sup>30</sup> First, the proposed reporting disclosure is not clear and could necessitate boilerplate language for each reporting carrier to clarify the various factors it attempts to distill into one number. This boilerplate could lead to consumer confusion and become a *de facto* reporting requirement, adding burdens on both the industry and the Commission not contemplated in the analysis of costs-benefits, Regulatory Flexibility Act compliance, and Paperwork Reduction Act compliance. Such supplemental information about the proposed metric foils the Commission’s goal of a simple, easy-to-understand metric. It could also erode public confidence in the utility of the metric.

The proposal to allow wireless providers to provide supplemental information also suggests that any additional information not “mislead or confuse consumers.”<sup>31</sup> This suggestion invites protracted debate and future regulation by the Commission of what constitutes

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<sup>30</sup> See Consumers Union Comments at 6-7.

<sup>31</sup> *Id.* at 6.

“misleading” information, and it would increase the burdens of the proposed metric on both the Commission and industry. There is no obvious standard for what constitutes misleading or confusing consumer information, which means the Commission will have to define what kind of supplemental information is acceptable. Initially, this will likely require an additional proceeding because the Commission did not define the type of supplemental information that should be permitted in the NPRM. From the industry standpoint, even after another proceeding to define what information is permissible, it will take time for providers to fully understand the boundaries of any new regulatory system. The result of all of this would be a significant increase in the administrative burdens on the Commission and the compliance burdens on the industry. Instead of trying to fix a flawed metric through the vague concept of supplemental information, the Commission should focus on developing a useful system through its multi-stakeholder efforts.

**D. The Commission Should Continue to Act Through Its Multi-Stakeholder Efforts to Best Promote Resilience and Reliability**

The record supports the use of the Communications Security Reliability and Interoperability Council (“CSRIC”) and the Technological Advisory Council (“TAC”) to develop resiliency and reliability processes and practices that serve both consumers and industry.<sup>32</sup> Both CSRIC and TAC are already working on wireless network reliability and resiliency improvement.<sup>33</sup> As discussed above, the wireless industry works diligently, both independently and with government, to improve network reliability and resiliency.<sup>34</sup> Instead of adopting a metric that will confuse consumers and frustrate the wireless industry’s current efforts to improve network resiliency, the Commission should rely on its multi-stakeholder efforts to

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<sup>32</sup> See CTIA Comments at 8, 22-23; T-Mobile 10-11; PCIA Comments at 14-15.

<sup>33</sup> See ATIS Comments at 6; CTIA comments at 8; T-Mobile at 11; PCIA Comments 14-15.

<sup>34</sup> See *supra* Part II.A.

develop a system of consumer- and industry-centric resiliency data that reinforce one another and support the Commission's ultimate goal of improving wireless network reliability.

#### **IV. SMALL CELLS, DAS, AND CONSUMER EQUIPMENT SHOULD BE EXEMPTED FROM THE DEFINITION OF "NETWORK SITE"**

If the Commission does adopt a reporting requirement, it should significantly narrow the definition of "Network Site." The NPRM defines "Network Site" as "any land station used to provide CMRS."<sup>35</sup> PCIA agrees with the commenters that suggested this definition is too broad and will sweep equipment into the reporting metric that will undercut its effectiveness, including small cells, DAS, and some consumer equipment (for example, femtocells).<sup>36</sup> As discussed above, small cell and DAS site outages do not impact a wireless network in the same way a macro site outage does.<sup>37</sup> Consumer equipment failures also do not impact the resiliency of a wireless network, and consumer equipment is completely outside the control of wireless providers. However, the proposed definition of Network Site could sweep all of this equipment into the reporting metric. If the Commission does adopt a reporting requirement, it should look to the record for examples of how it can narrow the definition of Network Site to more accurately reflect the type of outages that could significantly impact service coverage.<sup>38</sup>

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<sup>35</sup> NPRM ¶ 30, App. A.

<sup>36</sup> See Verizon Comment at 6, 9-10; PCIA Comments at 11.

<sup>37</sup> See *supra* Part III.A.

<sup>38</sup> See Verizon Comments at 6-9 (arguing DAS and small cell sites should be exempt from reporting requirements), 9-10 (arguing consumer equipment should be exempt from reporting requirements); AT&T Comments at 13-14 (arguing that inclusion of small cells in the reporting metric will distort the metric); Joint Comments of Competitive Carriers Association and NTCA – The Rural Broadband Association, PS Docket Nos. 11-60, 13-239, at 11-12 (filed Jan. 17, 2014) (arguing small cells should be excluded from the Commission's reporting requirements) ("CCA Comments"); PCIA Comments at 11-12 (arguing that it is premature to include DAS and small cell in a broader outage reporting requirement).

## **V. THE COMMISSION SHOULD NOT ADOPT A BACKUP POWER REQUIREMENT**

The Commission should resist the suggestions of some commenters to include a backup power requirement for cell sites because such a requirement would unnecessarily complicate the purpose of this proceeding.<sup>39</sup> As PCIA noted,<sup>40</sup> requiring backup power presents a number of very significant challenges. The wireless industry does take advantage of backup power solutions where it can, but the diverse nature of wireless technology and cell site placement does not always allow for the use of backup power. Backup power requirements can also implicate a variety of local, state, and federal regulations that make the creation of a single backup power standard unworkable.

The Commission's stated goal in this proceeding is to improve network resiliency by allowing consumers to compare the operational status of competing carriers' networks during an emergency.<sup>41</sup> Addressing backup power requirements will not advance that goal, and as the comments illustrate, creating a simple, useful, and transparent reporting metric will prove complicated.

## **VI. THE COMMISSION SHOULD FULLY COUNT TEMPORARY TOWERS**

Temporary towers are an important part of wireless providers' emergency and rapid restoration plans; and discouraging providers from using temporary towers will hurt wireless network resiliency. The NPRM proposes to include temporary towers in the metric,<sup>42</sup> and it seeks

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<sup>39</sup> See CPUC Comments at 8-9; AARP Comments 27-29.

<sup>40</sup> PCIA Comments at 12-14; Comments of PCIA–The Wireless Infrastructure Association and The DAS Forum, PS Docket Nos. 11-60, 10-92, EB Docket No. 06-119, at 2-9 (filed July 7, 2011); Comments of PCIA–The Wireless Infrastructure Association and The DAS Forum, PS Docket Nos. 11-60, 10-92, EB Docket No. 06-119, at 7-8 (filed Sept. 1, 2011).

<sup>41</sup> NPRM ¶ 1.

<sup>42</sup> *Id.* at App. A, Proposed Definition of “Network Site,” Proposed 47 C.F.R. § 4.15(a)(i) (“any land station deployed by such provider on a temporary basis during a period of activation of the Disaster Information Reporting System (DIRS) for the purpose of providing CMRS”).

comment on how count temporary towers within the metric.<sup>43</sup> Counting temporary towers as anything less than a complete replacement for a cell site could significantly inflate site outage rates and distort the relationship between site outage rates and coverage rates.<sup>44</sup> Other commenters offer possible solutions that the Commission should consider to prevent the proposed metric, if it is adopted, from distorting the metric and discouraging the use of temporary towers.<sup>45</sup>

Suggestions that temporary towers should be counted fractionally or as a percentage of lost capacity that the tower replaces ignore the negative impact that such a system could have on overall wireless network resiliency.<sup>46</sup> They also ignore the additional burden fractional counting of temporary towers would place on wireless providers. While the Commission seeks to improve transparency through this proceeding, the ultimate goal is to improve wireless network resiliency. If the reporting metric inflates site outage rates by undercounting temporary sites, the Commission could do more harm than good to network resiliency strategies. Fractional counting could discourage providers from using temporary towers out of fear that it will be reflected negatively in the reporting metric. Fractional counting will also add to the administrative burdens of providers, which will discourage the use of temporary towers and increase the costs of implementing the proposed reporting system.

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<sup>43</sup> *Id.* at ¶ 38.

<sup>44</sup> *See* AT&T Comments at 11-12 (illustrating that the difference in the outage percentage between a system that gives no credit for temporary sites and one that counts them in addition to out of service cell sites could be nominal; 90% (90/100) in a system that does not count temporary towers versus 91% (100/110) in a system that counts both the original site and the temporary site).

<sup>45</sup> *See* Verizon Comments at 12; CCA Comments at 10-11 (arguing that the Commission should only count temporary towers in the numerator of the metric).

<sup>46</sup> *See* Consumers Union Comments at 8-9; CPUC Comments at 18.

**VII. CONCLUSION**

PCIA urges the Commission not to require facilities-based wireless providers to publicly report the percentage of operational cell sites during and after major emergencies because the proposed disclosure is: (1) unnecessary due to ongoing industry investment in planning for and responding to emergencies that is driven by existing competition; and (2) flawed and misleading to consumers, which will cause it to undermine its own purpose. If the Commission does act, PCIA urges the Commission to take steps to minimize the flaws in the proposed disclosure, including narrowing the definition of “network site,” refraining from adopting backup power requirements, and fully counting temporary replacement towers.

Respectfully Submitted,

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