

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

In the Matter of)
)
Recommendations of the Independent Panel) EB Docket No. 06-119
Reviewing the Impact of Hurricane Katrina on) WC Docket No. 06-63
Communications Networks)

To: The Commission

PETITION FOR RECONSIDERATION

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Pursuant to 47 U.S.C. § 405 and 47 C.F.R. § 1.429, PCIA – the Wireless Infrastructure Association (“PCIA”),¹ hereby petitions the Commission to reconsider its Order in this proceeding adopting an 8-hour back-up power requirement.² PCIA members include commercial mobile radio service (“CMRS”) carriers and wireless infrastructure providers that construct, modify, own, operate, lease and manage over 111,000 communications towers and antenna facilities nationwide, which enable valuable wireless and broadcasting services to the public. As such, they bring to this proceeding a wealth of experience in tower siting issues at the federal, state and local levels.

¹ PCIA is the trade association representing the wireless telecommunications infrastructure industry. PCIA seeks to facilitate the deployment of widespread dependable communications networks across the country, consistent with the mandate of the Telecommunications Act of 1996.

² See *Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks*, Order, FCC 07-107, ¶ 77 (rel. June 8, 2007) (“Order”); 47 C.F.R. § 12.2 (“[C]ommercial mobile radio service (CMRS) providers must have an emergency backup power source for all assets that are normally powered from local AC commercial power, including those inside central offices, cell sites, remote switches and digital loop carrier system remote terminals. . . . CMRS providers should maintain emergency back-up power for a minimum of 24 hours for assets inside central offices and eight hours for cell sites, remote switches and digital loop carrier system remote terminals that are normally powered from local AC commercial power.”).

PCIA urges the Commission to reconsider the adoption of the back-up power requirement. Comprehensive fact-finding is needed before any back-up power mandates are considered. Because Section 12.2 requires, for the first time, the provision of back-up power at cell-sites on towers and other wireless infrastructure, PCIA members have a substantial interest in developing sound policy approaches in this proceeding.³ As explained more fully below, PCIA's members and the public are adversely affected by the Order and the better course is a more flexible best practices approach to network reliability.⁴

INTRODUCTION AND SUMMARY

In the aftermath of Hurricane Katrina and the damage it caused to communications and 911 systems, Chairman Kevin J. Martin convened the Katrina Panel to study the impact of the hurricane on communications infrastructure. The Katrina Panel was charged with identifying ways the Commission could improve disaster preparedness, network reliability and first responder communications.

In its June 2006 report, the Katrina Panel recommended that “in order to ensure a more robust E-911 service, the FCC should encourage the implementation of *best practice recommendations* [including that]... [s]ervice providers, network operators and property managers should ensure availability of emergency/back-up power (e.g., batteries, generators, fuel cells) to maintain critical communications services during times of commercial power failures, including natural and manmade occurrences. The emergency/back-up power generators should

³ See 47 C.F.R. § 1.429 (“Any interested person may petition for reconsideration of a final action in a proceeding conducted under this subpart.”)

⁴ See 47 U.S.C. § 405(a) (“After an order, decision, report, or action has been made or taken in any proceeding by the Commission... any party thereto, or any other person aggrieved or whose interests are adversely affected thereby, may petition for reconsideration.”)

be located onsite, *when appropriate*.”⁵ Following the Katrina Report, the Commission issued a Notice of Proposed Rulemaking inviting comment on the Panel’s best practice recommendations.⁶ The NPRM sought comment on these recommendations in relation to E911 and first responders. The NPRM did *not* seek comment on back-up power *mandates*, let alone timeframes, for CMRS cell sites.⁷

On June 8, 2007, the Commission issued its Order addressing the recommendations of the Katrina Panel.⁸ Among other items,⁹ the Order considered three best practice recommendations relating to E911. As for the first two,¹⁰ the Commission found no record support to institute mandatory rules and that the best practices may be cost-prohibitive in certain cases. Yet, when it came to the back-up power recommendation, the FCC altered course by

⁵ See *Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks*, Report and Recommendations to the Federal Communications Commission, at 39 (filed June 12, 2006) (emphasis added) (hereinafter “Katrina Report”).

⁶ See *Recommendations of the Independent Panel Reviewing the Impact of Katrina on Communications Networks*, Notice of Proposed Rulemaking, 21 FCC Rcd 7320 (2006) (“Katrina NPRM”).

⁷ See *id.* at 7326 (“[T]he Independent Panel recommends that service providers and network operators should consider placing and maintaining 911 circuits over diverse interoffice transport facilities and should ensure availability of emergency back-up power capabilities (located on site, when appropriate)... We seek comment on how the Commission can best encourage implementation of these recommendations consistent with our statutory authority and jurisdiction, and we welcome further suggestions on measures that could be taken to strengthen 911 and E911 infrastructure and architecture.”)

⁸ See Order.

⁹ The Katrina Order (1) recommended a number of the industry best practices suggested by the Katrina Panel; (2) adopted rules requiring communications providers to have emergency back-up power and (3) adopted rules requiring communications providers to submit reports regarding their 911 and E911 networks. See Order at ¶¶ 1, 75.

¹⁰ The first two best practices recommended that (i) 911 circuits be placed over diverse interoffice transport facilities and (ii) alternative methods of communication for critical personnel be established. See Order at ¶ 74.

adopting it as a mandate and extending it to cover CMRS providers and cell sites – notwithstanding the same lack of record support.¹¹

As adopted, the “back-up power rule” provides that “LECs and CMRS providers should maintain emergency back-up power for a minimum of 24 hours for assets inside central offices and eight hours for cell sites, remote switches and digital loop carrier system remote terminals that are normally powered from local AC commercial power.”¹² On July 31, 2007, two parties filed pleadings seeking a stay of the 8-hour back-up power rule.¹³ On August 2, 2007, PCIA filed comments in support of the stay requests.¹⁴ That same day, the Commission delayed the effective date of the back-up power rule until October 9, 2007 to “provide the Commission with additional time to consider the issues raised by CTIA in its Motion for Administrative Stay and to hear from other concerned parties on these issues.”¹⁵

As discussed in the stay requests, PCIA’s comments, and the instant petition, the rule as adopted is contrary to the public interest and is legally flawed. As a threshold matter, the “one-size fits all” approach applicable to all cell sites fails to account for the complexity of today’s

¹¹ In fact, of the comments cited by the Commission, only one party, NENA, even arguably sought the imposition of such a rule albeit in the wireline context for central offices. *See* Comments of NENA, EB Docket No. 06-119, WC Docket No. 06-63 at 6 (filed Aug. 6, 2006). The other comment cited by the Commission included only a suggestion that service providers have back-up procedures in place and that some providers do try to provide back-up power at critical points including central offices. *See* Comments of St. Tammany Parish Communications Dist. 1, EB Docket No. 06-119, WC Docket No. 06-63 at 2 (filed Aug. 4, 2006).

¹² 47 C.F.R. § 12.2; *see Order* at ¶ 77.

¹³ *See* Motion for Administrative Stay of CTIA – The Wireless Association (“CTIA”), EB Docket No. 06-119, WC Docket No. 06-63 (filed July 31, 2007) (“CTIA Motion”); NextG Networks, Inc. (“NextG”) Request for Partial Stay of Commission’s Back Up Power Rule, EB Docket No. 06-119, WC Docket No. 06-63 (filed July 31, 2007) (“NextG Request”).

¹⁴ *See* Comments of PCIA in Support of Stay Requests, EB Docket No. 06-119, WC Docket No. 06-63 (filed Aug 2, 2007) (“PCIA Comments”).

¹⁵ *Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks*, Order, FCC 07-139, EB Docket No. 06-119, WC Docket No. 06-63 (rel. Aug. 2, 2007).

wireless infrastructure, which includes towers, rooftops, distributed antenna systems (“DAS”) and other specialty installations – all of which have space, legal and contractual constraints that affect the ability to provide back-up power. PCIA is particularly concerned that, in adopting the new rule, the FCC has failed to take into account the unique role of the infrastructure industry, which is adversely affected both because it is being asked to facilitate the installation of generators or batteries at sites that in many cases cannot be accommodated and by the time and cost it will take to renegotiate leases (where even possible). Moreover, the rule fails to take into account local concerns, and could force the abandonment of sites, thereby adversely impacting service to the public – all while failing to remedy the impact of flooding like that caused by Hurricane Katrina. Legally, the Order also provides an insufficient statutory basis for the rule, which lacks a reasoned basis and record support and was promulgated with insufficient notice.

Accordingly, PCIA recommends that the rule be set aside on reconsideration. In the short term, CMRS providers will continue to make decisions concerning the resiliency of their networks based on their vast experience, network architecture, traffic requirements, different site situations, and local process. If the Commission believes that some action regarding back-up power is needed at this time, PCIA could support the commencement of a Notice of Inquiry (“NOI”) that would allow all interested stakeholders – including federal, state and local decisionmakers, CMRS carriers and the infrastructure industry – to develop a meaningful record to determine whether any long-term rule changes are appropriate or warranted.

DISCUSSION

I. THE BACK-UP POWER REQUIREMENT IS CONTRARY TO THE PUBLIC INTEREST.

PCIA commends the Commission’s continuing efforts and commitment to improve disaster preparedness, network reliability and first-responder communications. In the aftermath

of Hurricane Katrina and the events of 9/11, the importance of these items has become all the more apparent. While PCIA applauds the Commission's determination to focus on these issues, the one-size-fits-all back-up power rule will have a number of unintended adverse consequences for PCIA's members and the public. These unintended consequences threaten to subvert the goal of a resilient communications infrastructure. Indeed, by this mandate, some wireless carriers will be required to abandon or disable non-compliant cell-sites, thereby weakening existing communications coverage and infrastructure. Even where compliance may be possible at other sites, difficult and complex local permitting and contractual issues have not been recognized or considered.

A. The One-Size Fits All Approach Fails to Account for the Complexity of Today's Wireless Infrastructure.

The 8-hour back-up power rule for cell sites was adopted without full consideration of today's wireless infrastructure. Wireless networks are enormously complex and intricate systems that rely on different sites and types of infrastructure that are not conducive to a one-size-fits-all back-up power rule. Network "cell sites" may consist of stand-alone towers, rooftop sites, DAS facilities or other specialty installations, each with its own unique considerations when it comes to back-up power. As a practical matter, the wide variety of infrastructure facilities undercuts the efficacy of a uniform power requirement. The Commission's declaration that no "undue burden" results from its arbitrary 8-hour back-up power requirement is thus inconsistent with a marketplace where different cell-site configurations present very different compliance burdens.¹⁶

First, many stand-alone tower sites are not suited to handle the eight hour back-up requirement simply due to space constraints. Originally, many of these sites were built by

¹⁶ See Order at 78.

carriers to house their own equipment.¹⁷ Subsequently, collocation became a more prevalent approval, and additional carriers were added to structures that originally supported only one carrier. The installation of multiple additional carriers and their equipment has meant that many of these CMRS sites have already grown to capacity with respect to ground space where back-up batteries and/or generators would need to be located.¹⁸ Therefore, in many instances there literally is no available space to accommodate additional equipment for back-up power supply. This problem is compounded because the backup equipment is required for all carriers on the site (for example, a tower supporting five carriers would be required to house five times the amount of back-up power needed to support only a single carrier).

In some congested and more urban areas, carriers rely on rooftop cell site installations to fill in their network coverage. Rooftops present unique concerns under the new rule. For example, many may face structural issues from siting back-up power given the myriad of additional facilities that may be located on a roof, e.g., heating and cooling systems, elevator equipment, signage, lightning rods – all in addition to antennas and supporting equipment. These structural issues may limit or preclude the addition of back-up power batteries or generators to support one or more carriers. In addition, given the proximity to people living and working in a building, there may be health and safety concerns that limit or prevent the installation of large batteries or generators – an issue discussed further below.

Third, DAS systems rely on fiber optic cable and small antennas that are deployed in a variety of tight settings, including on lamp posts and utility poles. Many of these types of facilities simply lack the space to accommodate site-specific back-up power. Even in cases where there may be adequate space, the real costs of back-up power solutions and transaction

¹⁷ See Declaration of Monica Gambino (Ex. 1) (“Crown Castle Declaration”) ¶ 4.

¹⁸ See *id.*

costs of negotiating additional attachments may render DAS deployment commercially infeasible.¹⁹ Other unusual installations, such as the concealment of antennas within a church steeple, also face severe space constraints and other concerns that would limit the ability to add back-up power equipment to the site and may even preclude use of the site altogether.

The rule thus interjects the Commission into network engineering and management decisions that have wisely been left to the judgment of carriers in a competitive industry.²⁰ Moreover, it may ultimately limit the number and types of cell sites that can be deployed, undermining the national broadband imperative and continuing buildout of service in rural and underserved areas. In addition, it may circumscribe local support for creative solutions that encourage the use of existing facilities, as well as federal and local efforts to limit the physical presence of cell sites for aesthetic and environmental reasons. Thus, at a time when wireless infrastructure is under increasing pressure to provide additional coverage in the most discrete way possible, this mandate undercuts each of those imperatives.

The Commission should thus set aside the current rule on reconsideration. Instead of artificially limiting the types of cell site configurations available to network managers through a one-size-fits-all rule and innumerable waiver requests and/or rule clarifications,²¹ and undermining effective local deployment and siting solutions, the Commission should encourage all parties to continue to work toward securing robust and resilient communications networks,

¹⁹ See generally NextG Request.

²⁰ See, e.g., *Communications Assistance for Law Enforcement Act and Broadband Access and Services*, Second Report and Order and Memorandum Opinion and Order, 21 FCC Rcd 5360, ¶ 49 (2006) (“Service providers are free to configure and build their systems any way they choose.”).

²¹ For example, NextG Networks has suggested it will file a Petition for Clarification that the Rule is inapplicable to the DAS platform. See NextG Request at 2.

but with the flexibility to take into account the unique concerns presented by each site in their portfolio.

B. The Rule Fails to Take Into Account the Unique Role of the Infrastructure Industry.

In its recent comments, PCIA supported the CTIA Motion, which demonstrated that the 8-hour back-up power rule for cell sites will create major difficulties for CMRS carriers.²² Many of these carriers rely on infrastructure companies to locate, develop, manage and/or build-out their wireless infrastructure sites. These infrastructure companies play a key role in the siting process, which includes coordination with federal, state and local governments and zoning authorities through the permitting process, as well as the negotiation of contracts with building and land owners which will house CMRS facilities.

The new rule will adversely affect the infrastructure industry in two principal ways. First, the back-up power rule will in many cases create an impossible situation for infrastructure providers, by requiring them to facilitate the addition of back-up batteries and/or generators at existing sites where, as noted above, free space is at a premium and/or may not exist. Indeed, in most cases, because fire codes often require safety zones around propane and diesel tanks, the amount of ground space required as a result of the rule will be substantially greater than any anticipated prior demand.²³ As a consequence, the infrastructure industry could encounter significant impediments in obtaining ground space to accommodate multiple requests for new generators or batteries, if available at all.²⁴

In addition, infrastructure providers will be forced to renegotiate a significant number of their site authorizations and/or leases to allow for the addition of multiple generators and battery

²² See generally PCIA Comments; see also CTIA Motion at 21-37.

²³ See Crown Castle Declaration at ¶ 4.

²⁴ See *id.*

packs. Tower site authorizations and leases are the result of complex and time consuming negotiations between the tower entities, property owners and localities. Renegotiation likewise promises to be a time-consuming and intensive process.²⁵ In some cases, renegotiation may be impossible due to local zoning restrictions or building codes. At the same time, property owners and localities may be reticent to such renegotiation even where installation of back-up power units is feasible. Further, tower owners may be thrust into the unfortunate position of intermediating between multiple attaching entities competing for horizontal space upon which to install their generators and/or batteries. Because of the failure to explore the necessity for these negotiations and the integral role that tower entities play therein, PCIA urges the Commission to reconsider its rule and involve wireless infrastructure providers if it determines that it is necessary to adopt any rules regarding back-up power going forward.

C. The Rule Ignores Local Concerns and Conflicts with Federal and State Safety Requirements.

The 8-hour back-up power rule is also untenable in light of other federal, state and local concerns. First and foremost, the rule creates preemption issues by seeking to impose a one-size-fits-all federal mandate which may conflict with local ordinances that seek to limit battery and generator placement for health, safety or other reasons.²⁶ Even where there is no conflict, the fuel and batteries required by the 8-hour back-up rule will expose infrastructure to new regulation at the state and local level, as discussed below. At the same time, localities may be all the more likely to use their powers to deny or impose conditions on infrastructure siting under the guise of health and safety concerns arising from the introduction of the fuel and batteries necessary to comply with the rule.

²⁵ *See id.*

²⁶ *See* CTIA Motion at 22-32.

For example, nationwide fire codes, state and local building codes, noise abatement rules, permitting laws and federal environmental regulation are all implicated by the installation of the generators and 600-1000 pound batteries that are necessary to comply with the requirement.²⁷ PCIA members routinely encounter and are aware of such requirements that may prescribe special action. For instance, under the Clean Water Act, spill prevention, countermeasure and control (“SPCC”) plans may have to be created for sites where certain quantities of fuel will be kept.²⁸ These plans must be in place before generators are installed. Many states also require emissions permits for the use of emergency generators under the Clean Air Act, and the use of multiple generators at a multi-carrier site could lead to protracted environmental review.²⁹ Similarly, California requires permitting at sites for use of hazardous substances including diesel fuel, propane and battery acid.³⁰ Unfortunately, in failing to take into account these varied rules, at a minimum, the emergency back-up power provision will introduce new regulatory obstacles to siting arrangements as well as increased transaction and compliance costs.

The current rule fails to reflect the needed input of the many public and private, federal state and local stakeholders interested in developing a workable and balanced approach to better ensure network resiliency during emergencies. Local compliance and input are critical to the wireless infrastructure industry as it seeks to work in conjunction with localities at the community level to achieve satisfactory arrangements for the unique circumstances and environmental priorities of each community. Additionally, localities are often best positioned to understand the challenges and types of emergencies with which they may be faced. Indeed, as highlighted in recent news reports, the continued lack of state and local input into federal

²⁷ See CTIA Motion at 22-32; *see also* NextG Request at 9-10.

²⁸ See Crown Castle Declaration at ¶ 5.

²⁹ *See id.*

³⁰ *See id.*

government disaster planning efforts has been a source of concern for many.³¹ The importance and value of this local input cannot be overstated, especially here, where local ordinances may make compliance with the Commission's rule impossible in some cases. The current rule places the CMRS and wireless infrastructure industries in middle of tensions between federal and state and local disaster planning, which is ultimately counterproductive to the goal of achieving resilient networks.

D. The Rule Undermines the Ability to Provide Service and Collocate.

The 8-hour back-up power rule also undermines other important policy goals, which the Order fails to take into account. In particular, the rule will compromise service to the public and reduce collocation opportunities.

Absent reconsideration, the resiliency goals underlying the emergency back-up power rule will be undermined by its implementation. Due to technical infeasibility, e.g., lack of usable space or structural limitations, contractual, permitting and/or other health and safety concerns, some cell sites will have to be abandoned or shut down in order for CMRS carriers to comply with the rule should it become effective. As a result, the rule's ultimate effect will be a contraction of service and harm to all parties involved, including the public, first responders, service providers and infrastructure providers. For consumers and public safety, coverage areas and E911 service will be diminished. This perverse effect of the rule stands directly at odds with the goals of ensuring network reliability and providing first responders with up-to-the second

³¹ See Spencer S. Hsu, *States Feel Left Out of Disaster Planning*, WASH. POST, Aug. 8, 2007 at A1 (Quoting Albert Ashwood, National President of State Emergency Managers, "In my 19 years in emergency management, I have never experienced a more polarized environment between state and federal government.")

communications. In addition, the time and cost of compliance with the rule may divert resources away from other important goals, including continued buildout in rural and unserved areas.

For many years, the Commission and other governmental bodies have encouraged collocation as a preferred approach where possible to add new wireless infrastructure.³² The challenge of locating the space necessary to comply with the 8-hour back-up power rule may discourage, limit or foreclose the use of existing facilities for collocation. The amount of space required for the 600-1000 pound batteries or a generator and fuel supplies is significant. On rooftops for example, the roof structure may not be able to accommodate the weight of added power sources for safety and load-bearing reasons. As discussed, space at the base of existing towers is already at a premium. Where a tower today may be able to house an additional tenant and equipment in the absence of the new rule, the requirement to ensure eight hours of backup power could foreclose that opportunity and force the construction of a new site. This also raises serious concerns about ensuring coverage in dense urban areas where collocation on buildings is in many cases the only practical option to provide needed coverage and capacity.

E. The Rule Will Not Remedy the Problems Created by Hurricane Katrina.

Finally, the 8-hour back-up power rule would not have significantly mitigated the harms caused by Hurricane Katrina, which led to the Katrina Report and this proceeding. As an initial matter, it bears repeating that the wireless industry was at the forefront of the response to the hurricane. As the Katrina Report noted, within one week after the storm, approximately 80

³² See, e.g., 47 C.F.R. § 1.1306 note 1 (“The use of existing buildings, towers or corridors is an environmentally desirable alternative to the construction of new facilities and is encouraged.”); Nationwide Programmatic Agreement for the Collocation of Wireless Antennas, executed by the FCC, the National Conference of State Historic Preservation Officers, and the Advisory Counsel for Historic Preservation (Mar. 16, 2001), *published at* 66 Fed. Reg. 17554 (Apr. 2, 2001) (stating that “the FCC encourages collocation of antennas where technically and economically feasible, in order to reduce the need for new tower construction.”).

percent of wireless cell sites were up and running.³³ In addition, over 100 cellular base stations on wheels were delivered to the Gulf Coast Region to restore service.³⁴ Following this disaster, carriers, infrastructure providers and regulators learned important lessons that can be employed to help ensure the post-Katrina situation does not happen again – namely, the importance of having the flexibility to craft solutions based upon specific site conditions. While batteries or back-up generators may be useful in some cases, they may not be practicable or advisable in others.

While the Katrina Report did recognize that wireless providers suffered from a lack of transport connectivity and lack of commercial power following the disaster,³⁵ the report also concluded that back-up power was simply “not enough for a catastrophe like Hurricane Katrina.”³⁶ The primary reason is that Katrina caused widespread flooding. This had several repercussions. First, the severe flooding both blocked access to and damaged equipment. When submerged for prolonged periods, electrical systems may short or fail regardless of availability of power. Second, there were “inconsistent and unclear requirements for communications infrastructure repair crews and their subcontractors” to gain access to areas damaged by the Hurricane.³⁷ Concomitantly, there were safety and security concerns for repair crews. Third, there was an overall lack of available fuel and access to such reserves was “extremely limited for the communications industry.”³⁸ In sum, the 8-hour back-up power requirement would have only been of limited utility following Katrina given the scope of the devastation, inaccessibility

³³ See Katrina Report at 9.

³⁴ See *id.*

³⁵ See *id.*

³⁶ *Id.* at 17.

³⁷ *Id.* at 15.

³⁸ *Id.* at 17.

of damaged areas, and other recovery difficulties. This highlights the fact that the Commission should explore more flexible options for strengthening network resiliency.

II. THE BACK-UP POWER REQUIREMENT IS LEGALLY FLAWED.

The FCC's adoption of the back-up power rule for cell sites is also legally flawed. First, the Order presents an insufficient statutory basis to sustain the regulation. Second, the rule is based on an insufficient record and is arbitrary and unreasoned. Third, the NPRM failed to provide adequate notice to interested parties that an 8-hour mandate for cell sites was contemplated. For these reasons as well, the rule should be set aside on reconsideration.

A. The Order Provides an Insufficient Statutory Basis for the Rule.

In its Order, the Commission imposes the emergency back-up power rule solely on the basis of its ancillary authority under Section 1 of the Communications Act.³⁹ The Commission's ancillary authority under Section 1, however, does not empower it to act where such action would be "ancillary to nothing."⁴⁰ Section 1 is only a general grant of jurisdiction that, absent some other specific authority, does not authorize the Commission to impose requirements to

³⁹ See Order at ¶ 77; see also 47 U.S.C. § 151.

⁴⁰ *Am. Library Assoc. v. FCC*, 406 F.3d 689, 702 (D.C. Cir. 2005); see also *La. Pub. Serv. Comm'n v. FCC*, 476 U.S. 355, 374 (1986) (The FCC "literally has no power to act... unless and until Congress confers power upon it."); For the Commission to exercise the ancillary jurisdiction that it has invoked in the back-up power requirement, two pre-conditions must be satisfied. The subject of the regulation must be covered by the Commission's general grant of jurisdiction under Title I of the Communications Act and the subject of the regulation must be "reasonably ancillary to the effective performance of the Commission's various responsibilities." *United States v. Southwestern Cable Co.*, 392 U.S. 157, 178 (1968).

maintain backup power at cell sites.⁴¹ PCIA therefore agrees with CTIA that the Commission's reliance on only Section 1 is an insufficient statutory basis to sustain the new regulation.⁴²

B. The Rule Lacks a Reasoned Basis and Record Support.

The Commission's Order also lacks a reasoned basis and record support for the rule, and is therefore arbitrary.⁴³ Under principles of administrative law it is well established that an agency must both develop record support and provide an explanation for its rules.⁴⁴ In the Order, the Commission considered the Katrina Panel's recommendation to *encourage* the implementation of three best practices issued by the Network Reliability and Interoperability Council ("NRIC").⁴⁵ The Commission expressly agreed with the goals underlying the first two proposals⁴⁶ and, citing the absence of record support for mandates, recommended only that these best practices be encouraged. Nevertheless, the Commission went further with the Panel's third best practice recommendation – that “service providers, network operators and property managers should ensure availability of emergency/backup power” – and imposed an 8-hour back-up power mandate.

⁴¹ See, e.g., *Am. Library Assoc.*, 406 F.3d 689; *Motion Picture Ass'n of Am. v. FCC*, 309 F.3d 796 (D.C. Cir. 2002).

⁴² See CTIA Motion at 8-11.

⁴³ See 5 U.S.C. § 706.

⁴⁴ See *Motor Vehicles Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (“The agency must examine the relevant data and articulate a satisfactory explanation for its action including a ‘rational connection between the facts found and the choice made.’”) (quoting *Burlington Truck Lines, Inc. v. United States*, 371 U.S. 156, 168 (1962); *Home Box Office, Inc. v. FCC*, 567 F.2d 9, 35 (D.C. Cir. 1977) (an agency “must disclose in detail the thinking that has animated the form of a proposed rule and the data upon which that rule is based”).

⁴⁵ See Order at ¶ 74.

⁴⁶ These two best practice proposals call for (i) placing 911 circuits over diverse interoffice transport facilities and (ii) establishing alternative methods of communication for critical personnel. See *id.*

The emergency back-up power rule is arbitrary and capricious because it is inconsistent with the limited record. Here, the Commission seemed to base the cell site back-up power rule solely upon the comments of two parties: the National Emergency Number Association (“NENA”), which recommended that in the *wireline* context, “all telephone central offices [should] have an emergency back-up power source,”⁴⁷ and St. Tammany Parish Communications District 1, which suggested only that wireline and wireless providers “have backup *procedures* in place.”⁴⁸ The Order also references the comments of AT&T and Verizon, but those comments encouraged the implementation of best practices not mandates and refer to back-up power in wireline central offices and critical components of the network.⁴⁹ Throughout these and other comments, there is no discussion of, or support expressed for, a back-up power requirement for CMRS providers at all cell sites.

The back-up emergency power rule is also arbitrary because its eight-hour durational requirement lacks support in the record. Indeed, the Order and comments offer no basis for the 8-hour mandate.⁵⁰ The Commission cannot “pluck a number out of thin air.”⁵¹

Additionally, the emergency back-up power rule is also unlawful because the Order fails to “cogently explain why [the Commission] has exercised discretion in a given manner.”⁵² The Commission has not offered any explanation for applying the rule to CMRS providers in the

⁴⁷ See Comments of NENA, at 6.

⁴⁸ See Comments of St. Tammany Parish Communications Dist. 1, at 2 (emphasis added).

⁴⁹ See Comments of AT&T, EB Docket No. 06-119, at 13 (filed Aug. 7, 2006); Comments of Verizon, EB Docket No. 06-119, at 7 (filed Aug. 7, 2006).

⁵⁰ See, e.g., *Telocator Network of Am. v. FCC*, 691 F.2d 525, 544-45 (D.C. Cir. 1982) (predictive judgment must have “ascertainable foundation in the record” showing “thoughtful consideration duly attentive to the comments received”); *Cincinnati Bell Tel. Co. v. FCC*, 69 F.3d 752, 760 (6th Cir. 1995) (predictive judgment without record support is “highly suspect”).

⁵¹ *WJG Tel. Co. v. FCC*, 675 F.2d 386, 388 (D.C. Cir. 1982) (“an agency may not pluck a number out of thin air when it promulgates rules”); *Stereo Broad., Inc. v. FCC*, 652 F.2d 1026, 1031 (D.C. Cir. 1981) (“informed discretion [cannot be] a dictate of unbridled whim”).

⁵² *Motor Vehicle Mfg. Ass’n v. State Farm Mutual Auto. Ins. Co.*, 463 U.S. 29, 48 (1983).

absence of any record support or articulated statement of need. The Commission cites no evidence as to back-up power practices at cell sites, no evidence of the feasibility of imposing the back-up requirement, and no reasoned justification for imposing such a requirement upon an overly broad class.

Finally, the Order failed to “consider an important aspect of the problem.”⁵³ There is no discussion of how the rule will differently impact collocated cell sites, cell sites on top of buildings, cell sites on towers or DAS facilities, nor any explanation of how or why the 8-hour requirement (as opposed to any other duration) is needed or even came into being. Nor is there any discussion of why the prophylactic one-size-fits-all rule is more appropriate than rules tailored to different geographical areas associated with different risk factors (e.g., hurricanes, terrorist activity, etc.). Lastly, the Order failed to consider the possible preemption of state and local laws and the re-ordering of thousands of contracts between CMRS carriers, siting entities and building or land owners.

C. The Rule Was Promulgated with Insufficient Notice.

Interested parties also did not have adequate notice that the FCC was considering the adoption of an 8-hour back-up power mandate applicable to CMRS carriers and their cell sites.⁵⁴ Under the Administrative Procedure Act, the Commission must provide notice of proposed rulemaking that includes “either the terms of substance of the proposed rule or a description of the subjects and issues involved.”⁵⁵ Part of the reason for this notice requirement is to develop sound rules and practices by “giv[ing] affected parties an opportunity to develop evidence in the

⁵³ *State Farm*, 463 U.S. at 43.

⁵⁴ *See* 5 U.S.C. § 553(b)(3).

⁵⁵ *Id.*

record.”⁵⁶ The Katrina NPRM did not suggest that a back-up power mandate could be forthcoming – certainly not one that extended to CMRS carriers and delving into the complex question of the duration for which emergency power should be made available at cell sites.⁵⁷ Rather, the NPRM asked only for input on the “availability of emergency back-up power capabilities” in the context of establishing a best practice.⁵⁸

The lack of adequate notice is evidenced by the absence of valuable input from wireless infrastructure providers, carriers or other interested parties about the many unintended consequences of the rule. Had parties been aware, they would have advised the Commission (through comments rather than stay requests and petitions for reconsideration) that the back-up power rule would create situations where compliance is impossible even with much longer deadlines for compliance.

Furthermore, the eight hour durational aspect to the rule was not a “logical outgrowth” of the Katrina NPRM.⁵⁹ In the Katrina NPRM, not only was there no invitation to comment on a back-up power requirement as a rule, but there was no mention whatsoever of the duration for such a requirement at a wireline central office, cell site or any other communications asset.⁶⁰

III. INDUSTRY BEST PRACTICES ARE THE RIGHT APPROACH TO ENHANCE NETWORK RELIABILITY

As the representative of the wireless infrastructure industry, PCIA shares the Commission’s goals of promoting robust and resilient communications networks. Indeed, the

⁵⁶ *Int’l Union United Mine Workers of Am. v. Mine Safety & Health Admin.*, 407 F.3d 1250, 1259 (D.C. Cir. 2005).

⁵⁷ See Katrina NPRM, 15 FCC Rcd at 7326 ¶ 16.

⁵⁸ See *id.*

⁵⁹ See *Long Island Care at Home, Ltd. v. Coke*, 127 S. Ct. 2339, 2351 (2007) (“[T]he final rule the agency adopts must be “a ‘logical outgrowth’ of the rule proposed. The object, in short, is one of fair notice.”) (citations omitted).

⁶⁰ See generally Katrina NPRM.

industry is fully aware of the issue and everyday is making balanced, multifaceted decisions about ways to improve networks. In order to achieve the best policy outcome and to work toward the goals outlined in the Katrina Order, the Commission should set aside the rule on reconsideration. In its place, the FCC should encourage industry best practices to determine where back-up power is appropriate and feasible, but to allow for a variety of solutions to optimize system recovery following a disaster. In short, a one-size-fits-all approach does not serve the public interest and is not a viable mandate.

If the Commission believes that further inquiry is needed, it could issue an NOI into back-up power matters in which all interested stakeholders may participate. Such a proceeding would be consistent with the Katrina Panel's recommendation to rely on voluntary consensus as a means to enhance network resiliency and reliability.⁶¹ An NOI could also explore the many issues including state and local preemption, whether back-up power practices have changed post-Katrina and 9/11, whether rules are needed or useful and, if so, what approaches are appropriate given the vast number of cell sites and the wide range of site circumstances and constraints.

⁶¹ See Katrina NPRM, 15 FCC Rcd at 7322 ¶ 7.

CONCLUSION

For the foregoing reasons, PCIA respectfully requests that the Commission reconsider the eight hour back-up power rule, 47 C.F.R. § 12.2, and take the steps recommended herein to encourage continued best practices and engage in further fact finding to determine whether rules are needed or appropriate concerning back-up power at cell sites.

Respectfully submitted,

PCIA – THE WIRELESS
INFRASTRUCTURE ASSOCIATION

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August 10, 2007

EXHIBIT 1

**Before the
Federal Communications Commission
Washington, D.C. 29554**

| | | |
|-------------------------------------|---|----------------------|
| In the Matter of: |) | |
| |) | |
| Recommendations of the Independent |) | EB Docket No. 06-119 |
| Panel reviewing the Impact of |) | WC Docket No. 06-63 |
| Hurricane Katrina on Communications |) | |
| Networks |) | |
| |) | |

Declaration of Monica Gambino

I, Monica Gambino, hereby declares as follows:

1. My name is Monica Gambino and I am Vice President of Legal at Crown Castle USA Inc. ("Crown Castle"), a wholly owned subsidiary of Crown Castle International Corp. I have been employed at Crown Castle for seven years. I am responsible for oversight of the Crown Castle Legal Department, including regulatory compliance.
2. This declaration is intended to support the Petition for Reconsideration filed by PCIA – the Wireless Infrastructure Association in EB Docket No. 06-119 and WC Docket No. 06-63. The Petition for Reconsideration asks the FCC to reconsider its decision to adopt new Section 12.2 of its rules, which states that commercial mobile radio service (CMRS) providers with more than 500,000 subscribers should maintain emergency back-up power for a minimum of eight hours for cell sites that are normally powered from local AC commercial power. *See Order*, FCC 07-107 (rel. June 8, 2007). The rule is currently scheduled to take effect on October 9, 2007. *Order*, FCC 07-139 (rel. Aug. 7, 2007).

3. Crown Castle and its affiliates engineer, deploy, own and operate shared wireless infrastructure, including extensive networks of more than 23,000 antenna structure sites throughout the United States. Crown Castle's customers include commercial mobile radio service ("CMRS") providers subject to the *Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks*, Report and Order, 22 FCC Rcd 10,541, ¶ 77 and Appendix B (2007) ("Katrina Order").

4. Many of Crown Castle's CMRS customers have back-up power at the antenna structure sites, but few, if any, have eight (8) hours of back-up power at each of the Crown Castle sites where they have collocated antennas and equipment. Many of Crown Castle's antenna sites have more than one customer collocated at the site. At least half of Crown Castle's antenna structure portfolio is comprised of towers and other infrastructure that was originally built by CMRS carriers for their own use. Therefore, the ground space surrounding the antenna structures may be limited. As collocation has become accepted and even mandatory in many jurisdictions, Crown Castle has been expanding the antenna structure compounds to accommodate expected demand. Such expansion requires negotiations with landowners and can be a lengthy process. Because of the lack of FCC notice, the anticipated demand did not take into consideration the need for multiple tanks, generators and/or equipment cabinets that would be required pursuant to the Katrina Order. Given that local fire codes, in most cases, require a ten foot buffer zone around propane tanks and five foot buffer zones around diesel tanks, the amount of ground space needed to meet the requirements of the Katrina Order is

substantially greater than any anticipated prior need. As a result, if the FCC continues to require the CMRS providers to have eight hours of back-up power available, we could encounter significant delays in obtaining the ground space necessary to accommodate multiple requests for new generators or battery cabinets, if such space is obtainable at all.

5. Even if space is available at a tower site, there are multiple federal, state and local regulatory agencies that must approve the plans to install generators. Federal regulation pursuant to the Clean Water Act requires that spill prevention, countermeasure and control ("SPCC") plans be created for any facility where the cumulative quantity of oil (and other fuel) exceeds 1320 gallons. Given the potential for multiple tanks at a site, the antenna structure owner will face increased responsibility for drafting and maintaining the SPCC plan at a multitude of sites. Such plans will be required to be in place before or simultaneous with the installation of the tanks. In accordance with the Clean Air Act, many states require air emission permits for the use of emergency generators. In some cases, the use of multiple generators at a site could result in a protracted environmental review of the site by the regulatory agency because of the potential to emit pollutants from all of the generators. In addition, some states, like California, require a permit for the use of hazardous substances at the site, such as diesel fuel, propane and battery acid. Therefore, any new back-up power system would require a permit from the local governing agency. The California OSH office also requires that propane tanks be permitted pressure vessels. All of these permits could be required for each generator and are in addition to any permits

required by local jurisdictions governing land use. Combined, the task of installing back-up power can be encumbered by numerous permitting agencies and multiple levels of red tape, all affecting the timing and the feasibility of installing the back-up system.

6. For the reasons stated above, Crown Castle supports the Petition for Reconsideration.

I declare under penalty of perjury that the statements made are true and correct to the best of my knowledge and belief.

Monica Gambino

Executed on August 9, 2007