

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

In the Matter of

Recommendations of the Independent Panel
Reviewing the Impact of Hurricane Katrina on
Communications Networks

EB Docket No. 06-119
WC Docket No. 06-63

**PETITION OF THE UNITED STATES TELECOM ASSOCIATION
FOR CLARIFICATION AND/OR RECONSIDERATION**

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INTRODUCTION AND SUMMARY

As stewards of the nation's communications infrastructure, United States Telecom Association ("USTelecom") members embrace their unique responsibility to keep critical channels of communication functioning in times of crisis. Our members have devoted careful attention to emergency planning over the last several years as large-scale disasters have affected so many Americans. During these times of national crisis, USTelecom's members led the way in fortifying existing communications infrastructure and in providing interim solutions in areas where service restoration has been required.

Members have built and continue to build the very best and most resilient communications networks in the world. Members have also worked hard to implement practical emergency-planning procedures designed to keep those networks functioning in emergency situations. Precisely because USTelecom and its members share the Commission's goal of ensuring the resiliency of critical communications facilities, carriers have in place detailed policies to facilitate the deployment of resources and personnel to prevent service interruptions whenever possible, to limit the duration of disruptions when they cannot be prevented, and to

restore service as quickly as possible during emergencies. It is critical to successful emergency planning and crisis response that carriers have and retain the ability to satisfy these objectives.

The complexity and variability of networks themselves and the emergency situations that can disrupt network services require that carriers have flexibility in responding to a crisis and, specifically, in maintaining backup power for particular network assets. One size does not fit all in keeping network facilities powered during emergency situations. For example, while the vast majority of all network remote terminals have onsite backup batteries, some remote terminals are physically too small to support a backup battery or a battery over a certain size. In addition, remote terminals and network central offices are sometimes located in or near areas with zoning and environmental prohibitions that can operate to restrict certain backup power sources such as onsite generators. Moreover, an emergency situation itself can require carriers to prioritize deployment of backup power sources to network assets that support public and private facilities providing critical emergency services. In a weather-related emergency, the flexibility to move network assets – including backup power sources – out of a storm’s path to avoid damage and then back into affected regions is also vital, as is the flexibility to move emergency response assets from one region to another.

To the extent the Commission’s new “backup power rule”¹ can be interpreted to impose a single, prescriptive approach to backup power design and deployment in emergency situations, USTelecom respectfully requests that the Commission clarify or, if necessary, grant reconsideration of the rule to make clear that carriers retain appropriate flexibility in designing

¹ See Order, *Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks*, EB Docket No. 06-119, WC Docket No. 06-63, FCC 07-107 (rel. June 8, 2007) (“*Order*”). The *Order* indicates that local exchange carriers (“LECs”) and commercial mobile radio service (“CMRS”) providers should maintain 24 hours of backup power for central offices and eight hours of backup power for remote terminals and switches. See *id.* ¶ 77.

their network facilities and deploying backup power resources. The rule should reflect the underlying recommendation of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks and applicable industry best practices promulgated by the Network Reliability and Interoperability Council (“NRIC”). The Commission should clarify or reconsider the rule for the additional reason that a single, prescriptive rule would violate the Administrative Procedure Act (“APA”).

USTelecom files the instant petition only out of an abundance of caution. Given the productive discussions between the Commission and the industry that have taken place since the *Order* was issued, USTelecom is confident that all parties truly desire to reach the right result – *i.e.*, regulation that will make the nation’s communications infrastructure as resilient as possible in crisis situations. USTelecom and its members will continue to work with the Commission to achieve this goal.

BACKGROUND

In January 2006, as part of the governmental response to Hurricane Katrina and its aftermath, the Commission established the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks (“Katrina Panel” or “Panel”). The Commission instructed the Panel (1) to study the impact of Hurricane Katrina on telecommunications and media infrastructure, including communications among public-safety workers; (2) to review the sufficiency of the effort to repair damage to that infrastructure; and (3) to make recommendations for improving disaster preparedness, network reliability, and communications among first responders.²

² See Notice, 71 Fed. Reg. 933 (Jan. 6, 2006).

In June 2006, the Panel submitted its report to the Commission.³ The Panel observed that “most of the [Gulf Coast] region’s communications infrastructure fared fairly well through the storm’s extreme wind and rain.” *Katrina Report* at i. But it also noted that “the unique conditions in Katrina’s aftermath . . . were responsible for damaging or disrupting communications service to a huge geographic area for a prolonged period of time.” *Id.* The Panel identified “three main problems that caused the majority of communications network interruptions: (1) flooding; (2) lack of power and/or fuel; and (3) failure of redundant pathways for communications traffic.” *Id.*

With respect to the second problem – lack of power – the Katrina Panel explained that hurricane winds and flooding “caused extensive damage to the power grid” in the Gulf Coast area, with the result that “power to support the communications networks was generally unavailable throughout the region.” *Id.* at 14. The Panel recognized that “the communications industry has generally been diligent in deploying backup batteries and generators.” *Id.* But it noted that, in many cases, sustaining backup power supplies was problematic. *See id.* at 14, 17-18.

The Katrina Panel issued 18 separate, multi-part recommendations for improving disaster preparedness, network reliability, and communications among first responders. *See id.* at 31-42. As relevant here, the Panel advised the Commission to bolster the E-911 system by encouraging network operators to implement the “best practice” – established by NRIC – of “ensur[ing] availability of emergency/backup power (*e.g.*, batteries, generators, fuel cells) to maintain critical communications services during times of commercial power failures, including natural and

³ *See Katrina Panel, Report and Recommendations to the Federal Communications Commission* (June 12, 2006) (“*Katrina Report*”), <http://www.fcc.gov/eb/hkip/karrp.pdf>.

manmade occurrences (e.g., earthquakes, floods, fires, power brown/blackouts, terrorism).” *Id.* at 39.⁴

After the Katrina Panel issued its report, the Commission initiated a rulemaking to address and implement the report’s recommendations. The *NPRM* sought comment on many of the Panel’s recommendations, including its recommendation that the Commission encourage network providers to implement several NRIC “best practices” that were “intended to promote the reliability and resiliency of the 911 and E911 architecture,” such as the practice of “ensur[ing] availability of emergency back-up power capabilities (located on-site, when appropriate).”⁵

On June 8, 2007, the Commission released the *Order*. As relevant here, the *Order* noted the Katrina Panel’s recommendation that the Commission encourage network providers to implement the NRIC best practice of ensuring the availability of backup power. *See Order* ¶ 74. The Commission reported that the National Emergency Number Association (“NENA”) had recommended that “the FCC or the state commissions, as appropriate, require all telephone central offices to have an emergency back-up power source.” *Id.* ¶ 76 (internal quotation marks

⁴ See NRIC VII Focus Group 1C, Final Report, *Analysis of the Effectiveness of Best Practices Aimed at E9-1-1 and Public Safety* 59 (Dec. 2005) (Best Practice 7-7-5204) (“Service Providers, Network Operators and Property Managers should ensure availability of emergency/backup power (e.g., batteries, generators, fuel cells) to maintain critical communications services during times of commercial power failures, including natural and manmade occurrences (e.g., earthquakes, floods, fires, power brown/black outs, terrorism). The emergency/backup power generators should be located onsite, when appropriate.”), http://www.nric.org/meetings/docs/meeting_20051216/FG1C_Dec%2005_Final%20Report.pdf.

⁵ Notice of Proposed Rulemaking, *Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks*, 21 FCC Rcd 7320, ¶ 16 (2006) (“*NPRM*”). The Commission subsequently issued an additional notice, requesting commenters to address “the applicability of the Independent Panel’s recommendations to all types of disasters” and “the impact of the country’s diverse topography on the Independent Panel’s recommendations.” Public Notice, *Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks*, 21 FCC Rcd 8583, 8584 (2006).

omitted). And it observed that St. Tammany Parish Communications District 1 (“St. Tammany Parish”) had “emphasize[d] the need for wireline providers to have backup procedures in place.” *Id.* Citing the comments of AT&T and Verizon, the Commission further noted that “[s]everal commenters supported this voluntary best practice and indicated that they have backup power available at their facilities.” *Id.*

In the *Order*, the Commission promulgated a rule requiring LECs and CMRS providers to “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.” *Id.* ¶ 77 & App. B (promulgating 47 C.F.R. § 12.2). The rule further 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.” *Id.*

Notice of the Commission’s new rule was published in the Federal Register on July 11, 2007,⁶ and the new backup power rule was set to take effect 30 days after, on August 10, 2007. On August 2, 2007, the Commission issued an order extending the effective date of the rule to October 9, 2007.⁷

⁶ Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks, 72 Fed. Reg. 37,655 (July 11, 2007).

⁷ Order, *Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks*, EB Docket No. 06-119, WC Docket No. 06-63, FCC 07-139 (rel. Aug. 2, 2007).

ARGUMENT

I. THE COMMISSION SHOULD MODIFY THE BACKUP POWER RULE TO PRESERVE THE FLEXIBILITY THAT CARRIERS NEED TO ENSURE THE FUNCTIONING OF CRITICAL COMMUNICATIONS SERVICES DURING DISASTERS

USTelecom's members support the Commission's policy of promoting the reliability of critical communications services, including 911 and E-911 services. They also understand the importance of ensuring adequate backup power for their communications facilities during commercial power outages. As the Commission and the Katrina Panel recognized, even without a rule, carriers have adopted policies and invested substantial resources to meet those goals. *See Order* ¶¶ 76, 78; *Katrina Report* at 14 (recognizing that "the communications industry has generally been diligent in deploying backup batteries and generators").

USTelecom's members generally follow NRIC's best practice by ensuring the availability of backup power for their facilities through a mix of onsite batteries and generators, supplemented by mobile generators and fuel trucks. Under the prevailing flexible, best-practices approach, a carrier may conclude, for example, that it makes sense to install a large battery in a remote terminal that serves a police station or hospital, rather than in one that serves a bowling alley. In addition, a key advantage of portable resources is that they allow carriers to deploy resources where they are most needed, and thereby to prioritize parts of the network that may be more important in the event of a disaster, such as network support for E-911 services, hospitals, first responders, and other government installations. Carriers also can move mobile resources out of the path of a damaging storm and then quickly deploy them to restore service after the storm passes.

To the extent that the new backup power rule impedes carriers' necessary flexibility in preparing for and responding to disasters, it could interfere with the Commission's policy of

ensuring the resiliency of critical communications services. For example, USTelecom's members collectively have more than 100,000 remote terminals, and the vast majority of these terminals already have backup battery power. These batteries are typically designed to an eight-hour engineering standard, but the actual life of the battery depends on numerous factors and may not, in practice, amount to eight hours at any particular moment in time. The requirements of the new rule with respect to remote terminals are subject to interpretation. One response to the new rule, however, could include assessing current levels of backup power, planning for the installation of new equipment, deploying the additional equipment, and resolving regulatory impediments – all of which would consume a substantial amount of time and effort and would require the acquisition of significant resources, which would otherwise be available to devote to other disaster-planning initiatives.

Moreover, full compliance with the rule may not be feasible in all cases because some remote terminals maintained by some carriers cannot accommodate larger batteries (or stationary generators), both because of the facilities' limited size and because zoning and environmental regulations inhibit carriers' ability to add additional resources to those facilities. Though the vast majority of all central offices already have access to backup power from generators, similar difficulties with a smaller number of central offices for some carriers could arise in responding to the rule's 24-hour backup power standard for those assets.

Furthermore, the rule adopted by the Commission cannot, by itself, ensure that carriers will be able to maintain and restore service when commercial power is unavailable for an extended period of time. The Katrina Panel observed that, in the wake of the storm, the power grid was disrupted for days on end. *See Katrina Report* at 14, 17. In that circumstance, it is particularly important for carriers to have the flexibility to make the choices that will restore and

maintain service to the most critical areas. And they should be given the flexibility, in preparing for such an event, to obtain, store, and deploy the resources – in particular, mobile generators that can be pulled out of the path of a storm and then deployed to critical areas after the storm hits – that will allow them to respond quickly, and sensibly, to a disaster.

As an example of the importance of flexibility, consider a circumstance in which a remote terminal serving a police station has a battery that is designed to last for eight hours, and a remote terminal serving a bowling alley has a portable generator with enough fuel to run for 72 hours, but no battery. The commercial power for the remote terminal serving the police station fails first. Seven-and-a-half hours later, the remote terminal serving the bowling alley loses commercial power. To the extent that the rule could be interpreted to require the carrier to keep the mobile generator at the remote terminal serving the bowling alley for a full eight hours, rather than using it to supplement the battery at the remote terminal serving the police station, it would not promote the Commission’s goal of ensuring the resiliency of critical communications services – and indeed would interfere with public-safety priorities.

In sum, preserving flexibility in the provision of backup power allows carriers to work to improve network reliability in emergency situations – an aim that all parties share – in the most efficient manner. To that end, the Commission should clarify or grant reconsideration of the rule consistent with the Katrina Panel’s recommendation and applicable industry best practices promulgated by NRIC.

II. THE COMMISSION SHOULD GRANT RECONSIDERATION BECAUSE THE BACKUP POWER RULE SUFFERS FROM LEGAL INFIRMITIES

The Commission should further clarify or reconsider the backup power rule because it did not provide proper notice when promulgating the rule and because the rule lacks support in the record.

The APA requires agencies to provide notice of, and an opportunity to comment on, new regulations. *See* 5 U.S.C. § 553(b), (c). The Commission did not satisfy that requirement with respect to the backup power rule. In the *NPRM*, the Commission sought comment on the Katrina Panel’s recommendation that the Commission encourage network providers to implement several NRIC “best practices” that were “intended to promote the reliability and resiliency of the 911 and E911 architecture,” such as the practice of “ensur[ing] availability of emergency back-up power capabilities (located on-site, when appropriate).” *NPRM* ¶ 16. In the *Order*, the Commission mandated that carriers “have an emergency backup power source for all assets that are normally powered from local AC commercial power” and that they “maintain emergency back-up power for a minimum of 24 hours for assets inside central offices and eight hours for . . . remote switches and digital loop carrier system remote terminals.” *Order* App. B (promulgating 47 C.F.R. § 12.2).

The gap between the request for comment in the *NPRM* and the rule adopted in the *Order* is too great to satisfy the APA. Based on the *NPRM*, interested parties could not have anticipated (and from their comments, in fact did not anticipate) that the Commission might require carriers to have 24 hours of backup power for all central offices and eight hours of backup power for all remote terminals and switches. *See, e.g., National Mining Ass’n v. Mine Safety & Health Admin.*, 116 F.3d 520, 531 (D.C. Cir. 1997) (per curiam) (“Notice [is] inadequate when the interested parties could not reasonably have anticipated the final rule[.]”) (internal quotation marks omitted). The *NPRM* made no mention of an intention to adopt a mandatory rule on backup power for central offices, remote terminals, and switches. And the Commission did not invite (or receive) comment on the technical feasibility or efficacy of specific backup power standards, such as the 24- and eight-hour standards adopted in the rule.

Moreover, even if comments had advocated a rule like the one adopted by the Commission, an agency “cannot bootstrap notice from a comment,” *Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 506, 549 (D.C. Cir. 1983); thus, the critical point is that the *NPRM* did not say that the Commission was considering mandating that carriers have a certain amount of backup power for certain types of facilities and equipment. The notice provided was therefore inadequate.

In addition, the backup power rule lacks support in the record. It is established law that, to survive review in the court of appeals, the Commission’s backup power rule must be supported by “substantial evidence” in the record. 5 U.S.C. § 706(2)(E). As the D.C. Circuit has observed, that standard requires the Commission to identify “such relevant evidence as a reasonable mind might accept as adequate to support [its] conclusion,” and to articulate a “rational connection between the facts found and the [decision] made.” *Burlington N. R.R. v. Surface Transp. Bd.*, 114 F.3d 206, 210 (D.C. Cir. 1997) (internal quotation marks omitted; second alteration in original). Moreover, where an agency promulgates a “specific . . . standard” to govern parties’ conduct, it must be able to defend that specific standard with reference to “support in the record.” *Shays v. FEC*, 414 F.3d 76, 102 (D.C. Cir. 2005). It cannot simply “pluck[]” a numerical standard “out of thin air.” *Time Warner Entm’t Co. v. FCC*, 240 F.3d 1126, 1137 (D.C. Cir. 2001).

The backup power rule is unlikely to survive review under those standards because it lacks support in the record. None of the comments the Commission cited in its discussion of the backup power requirements (*see Order* ¶¶ 76-77) provide record support for single, prescriptive backup power requirements. St. Tammany Parish’s comments (cited in footnote 97 and

endorsed in paragraph 77) did not mention backup power at all.⁸ NENA’s comments (also endorsed in paragraph 77) simply noted support for NRIC’s best practice regarding backup power and “recommend[ed] that the FCC or the state commissions, as appropriate, require all telephone central offices to have an emergency back-up power source.” NENA Comments at 6. NENA did not mention remote terminals or switches; it did not suggest that the Commission mandate that the backup power source for central offices last for a particular number of hours; and it provided no evidence or analysis to support its recommendation.

To be sure, as the Commission noted (*see Order* ¶ 76), both AT&T and Verizon reported that they maintain backup power for critical facilities.⁹ But neither discussed mandatory minimum backup power requirements for certain facilities.¹⁰ Finally, neither NRIC nor the Katrina Panel – nor any other commenter – provided evidentiary support for, or even discussed the technical feasibility of, a mandatory backup power rule such as the one that the Commission promulgated.

⁸ The entirety of St. Tammany Parish’s comments on this point was the following statement: “On a short-term basis it is imperative that the LEC, CLECs, and wireless telephone providers be required to demonstrate they have adequate *backup procedures* in place and that these procedures are fully explained to the field personnel and readily available to field personnel in the event of failed communications between the field offices and home office.” St. Tammany Parish Comments at 2 (emphasis added; emphasis in original omitted); *see Order* ¶ 76 n.97.

⁹ *See* AT&T Comments at 13 (“It is considered *a best practice* for LECs to have back-up batteries and/or diesel generators in every *central office*.”) (emphases added); Verizon Comments at 7-8 (“Every *critical* component in Verizon’s networks is protected by automatic power back-up systems.”) (emphasis added).

¹⁰ *See, e.g.*, Verizon Comments at 11 (“It is important to note that NRIC Best Practices are strictly voluntary and are intended to remain so. . . . NRIC Best Practices are most rapidly and most effectively applied by leaving specific implementation decisions to individual firms. Each provider should retain the ability to use its own technical and operational judgment to determine how, when, where to deploy NRIC Best Practices to maximize network reliability and security at the least cost.”).

In addition to the lack of supporting evidence in the record, the *Order* did not address the relative costs and benefits of the rule the Commission adopted. The Commission did not explain why it chose a mandatory regulation over the best-practices approach advocated by the Katrina Panel and NRIC. Nor did it provide any justification for the specific standards that it adopted. Furthermore, the *Order* makes the unsupported leap that the rule’s requirements “will not create an undue burden since several [carriers] reported in their comments that they already maintain emergency back-up power.” *Order* ¶ 78. As explained above, the rule goes beyond the practices reported by carriers in their comments, and, in any event, the *Order* failed to explain the basis for concluding that the rule would not be unduly burdensome for *all* carriers. Thus, the *Order* articulated no rational connection between the decision to adopt the rule and any facts found by the Commission, as required by basic principles of administrative law.¹¹

¹¹ *Cf. City of Brookings Mun. Tel. Co. v. FCC*, 822 F.2d 1153, 1169 (D.C. Cir. 1987) (“It is well settled that an agency has a duty to consider responsible alternatives to its chosen policy and to give a reasoned explanation for its rejection of such alternatives.”) (internal quotation marks omitted).

CONCLUSION

The Commission should clarify the backup power rule to more accurately reflect the Commission's goal and the recommendations of the Katrina Panel and NRIC regarding backup power, or if necessary grant reconsideration of the rule.

Respectfully submitted,

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