population, including any minority or low-income population.

VI. References

The documents below are referenced in the preamble. All documents are located in the Air Docket at the address listed in section titled **ADDRESSES** at the beginning of this document. Unless specified otherwise, all documents are available in Docket ID No. EPA–HQ–OAR–2012–0580 at *http://www.regulations.gov*.

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List of Subjects in 40 CFR Part 82

Environmental protection, Administrative practice and procedure, Air pollution control, Recycling, Reporting and recordkeeping requirements, Stratospheric ozone layer.

Dated: March 28, 2013.

Bob Perciasepe,

Acting Administrator.

For the reasons set out in the preamble, 40 CFR part 82 is proposed to be amended as follows:

PART 82—PROTECTION OF STRATOSPHERIC OZONE

■ 1. The authority citation for part 82 continues to read as follows:

Authority: 42 U.S.C. 7414, 7601, 7671–7671g.

■ 2. Section 82.154 is amended by adding section vii to paragraph (a)(1) to read as follows:

§ 82.154 Prohibitions.

(a)(1) * * *

(vii) Effective [DATE 60 days after publication of final rule in the **Federal Register**], isobutane (R–600a) and R–441A as substitutes in household refrigerators, freezers, and combination refrigerators and freezers; and propane (R–290) as a substitute in retail food refrigerators and freezers (standalone units only).

[FR Doc. 2013–08667 Filed 4–11–13; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Chapter I

[PS Docket No. 13–75; PS Docket No. 11–60; FCC 13–33]

Improving 9–1–1 Reliability; Reliability and Continuity of Communications Networks, Including Broadband Technologies

AGENCY: Federal Communications Commission.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Federal Communications Commission proposes a range of approaches to ensure that providers of 9–1–1 communications services implement best practices and other sound engineering principles to improve the reliability and resiliency of the Nation's 9–1–1 networks. The Notice of Proposed Rulemaking also proposes amendments to the Commission's current rules to clarify and add specificity to service providers' obligations to notify 9–1–1 call centers of communications outages. This action follows an inquiry by the Public Safety and Homeland Security Bureau into widespread 9–1–1 service outages during the ''derecho'' windstorm that affected large portions of the United States in June 2012, revealing significant vulnerabilities in current 9–1–1 network configuration and service provider maintenance practices. The Commission requests comment on these proposals to improve the reliability and resiliency of 9–1–1 networks and ensure that 9–1–1 call centers receive timely and actionable notification of service outages.

DATES: Submit comments on or before May 13, 2013 and reply comments by May 28, 2013. Written comments on the Paperwork Reduction Act proposed information collection requirements must be submitted by the public, Office of Management and Budget (OMB), and other interested parties on or before June 11, 2013.

ADDRESSES: Submit comments to the Federal Communications Commission, 445 12th Street SW., Washington, DC 20554. Comments may be submitted

electronically through the Federal Communications Commission's Web site: *http://fjallfoss.fcc.gov/ecfs2/*. In addition to filing comments with the Secretary, a copy of any comments on the Paperwork Reduction Act information collection requirements contained herein should be submitted to the Federal Communications Commission via email to *PRA@fcc.gov* and to Nicholas A. Fraser, Office of Management and Budget, via email to *Nicholas_A._Fraser@omb.eop.gov* or via fax at 202–395–5167. For detailed instructions for submitting comments and additional information on the rulemaking process, see the **SUPPLEMENTARY INFORMATION** section of this document. Parties wishing to file materials with a claim of confidentiality should follow the procedures set forth in § 0.459 of the Commission's rules. Confidential submissions may not be filed via ECFS but rather should be filed with the Secretary's Office following the procedures set forth in 47 CFR 0.459. Redacted versions of confidential submissions may be filed via ECFS.

FOR FURTHER INFORMATION CONTACT: Eric P. Schmidt, Attorney Advisor, Public Safety and Homeland Security Bureau, (202) 418–1214 or *eric.schmidt@fcc.gov*. For additional information concerning the Paperwork Reduction Act information collection requirements contained in this document, contact Judith Boley-Herman, (202) 418–0214, or send an email to *PRA@fcc.gov*.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Notice of Proposed Rulemaking in PS Docket No. 13–75 and PS Docket No. 11–60, released on March 20, 2013. The full text of this document is available for public inspection during regular business hours in the FCC Reference Center, Room CY–A257, 445 12th Street SW., Washington, DC 20554, or online at *http://www.fcc.gov/document/improving-9-1-1-reliability*.

I. Introduction

1. In this *Notice of Proposed Rulemaking (NPRM),* we seek comment on approaches to ensure the reliability and resiliency of the communications infrastructure necessary to ensure continued availability of the Nation's 9–1–1 system, particularly during times of major disaster. We take this action in response to the findings and recommendations presented in the Public Safety and Homeland Security Bureau's (PSHSB or Bureau) January 10, 2013, report titled Impact of the June 2012 Derecho on Communications Networks and Services: Report and Recommendations (*Derecho Report),* which is available at *http://www.fcc.gov/document/derecho-report-and-recommendations*. In that report, following an extensive inquiry and review of comments, the Bureau found that the June 2012 derecho affecting the Midwest and Mid-Atlantic United States severely disrupted 9–1–1-related communications and that these disruptions were due in large part to avoidable planning and systems failures within 9–1–1 service providers' networks. The Bureau concluded that these failures could, and would, have been avoided if providers had followed industry best practices and other sound engineering principles. Accordingly, the Bureau recommended that the Commission consider action in the following areas: (1) 9–1–1 circuit auditing; (2) 9–1–1 service provider central office backup power; (3) physical diversity of monitor and control links; and (4) improved outage notification to Public Safety Answering Points (PSAPs). This *NPRM* seeks comment on approaches to implement these recommendations, taking into account the evolving nature of network technologies, as well as the continuing migration of circuit-switched services to Internet Protocol (IP)-based platforms. Thus, any rules or other policies designed to improve 9–1–1 service reliability will be developed with the ongoing transition to Next Generation 9–1–1 (NG9–1–1) in mind.

II. Discussion

A. Need for Commission Action

2. The Commission previously has addressed communications reliability issues by working with service providers to develop voluntary best practices, and by measuring the effectiveness of those best practices through outage reporting. The outage reporting process has often been effective in improving the reliability, resiliency, and security of many communications services. The June 2012 derecho, however, revealed the limits of that approach and highlighted the potential benefits and importance of supplementing a voluntary approach with respect to critical 9–1–1 communications.

3. The Commission seeks comment on the extent to which 9–1–1 failures during the derecho reflect the reliability of 9–1–1 networks nationwide. Why would PSAPs located in other parts of the Nation be more or less vulnerable to the effects of a storm like the derecho? To what extent have service providers affected by the derecho addressed vulnerabilities revealed by the storm, both in the affected region and across their entire service areas? What specific remedial actions have these service providers taken, particularly with respect to critical circuit auditing, functional central office backup power, and diversity of monitoring links, and when were those actions completed? Has the experience of the derecho caused other 9–1–1 service providers to reexamine their network architecture and maintenance practices, and what have those efforts revealed about the reliability and resiliency of the Nation's 9–1–1 infrastructure as a whole? What changes have been made to improve 9–1–1 reliability and resiliency? What assurance does the Commission have that these changes will persist?

4. Although we intend the approaches in this *NPRM* to complement and strengthen—not to replace—the Commission's current approach to network reliability, we seek comment on the appropriate balance between voluntary best practices and Commission mandates as they relate to 9–1–1 communications. In light of the many existing best practices addressing these issues and service providers' failure to implement them fully, however, we seek comment on whether there is any assurance that additional voluntary best practices would necessarily lead to effective and consistent compliance without additional Commission action, especially after such dangerous failures potentially affected millions of people. The *Derecho Report* noted that multiple 9–1–1 service providers implemented best practices to varying degrees, or adopted key best practices in theory, with substantial exceptions in day-to-day operation. To what extent are network reliability best practices, particularly those regarding physical auditing of critical circuits, functional and well-maintained central office backup power, and diversity of network monitoring links, followed today? What evidence exists that they are followed? What circumstances might lead to these best practices not being followed? What measures can be taken to compensate for the failure to implement a best practice so that 9–1–1 reliability is not impaired? What evidence exists to substantiate that these measures are taken routinely when best practices are not followed? What incentives do service providers have to implement best practices, and are those incentives sufficient? Beyond general agreement with best practices, what assurances can 9–1–1 service providers make to ensure rigorous implementation on a nationwide basis?

5. Which advisory bodies do service providers look to for guidance regarding

best practices, *e.g.,* Communications Security, Reliability, and Interoperability Council (CSRIC), Alliance for Telecommunications Industry Solutions (ATIS) Network Reliability Steering Committee (NRSC), Association of Public-Safety Communications Officials (APCO), National Emergency Number Association (NENA), or other organizations? What best practices are followed today other than those adopted by CSRIC? What relevant industry standards are followed routinely? If so, are they preferred over the best practices adopted by CSRIC? What evidence exists that these standards are routinely followed? How do they differ from the best practices issued by CSRIC? For example, are there specific regional circumstances that would make it more difficult or expensive to perform critical circuit auditing? Do service providers take measures to compensate for failing to implement the best practice in these instances? What evidence exists to substantiate that these measures are actually taken? Should certain best practices be considered critical for some parts of the country and not others? If existing best practices have proven difficult for service providers to implement or inadequate to prevent communications outages, what can be done to update or revise those practices to reflect lessons learned in the derecho? Which best practices, specifically, should be added or expanded, and would such changes make service providers more likely to comply in the future?

B. Entities Subject to Proposals

6. We seek comment on the class of entities to which the proposals put forward for consideration in this *NPRM* would apply. Throughout this *NPRM* we use the term ''9–1–1 service provider,'' defined in the *Derecho Report* as a communications provider ''responsible for routing and delivering 9–1–1 calls to PSAPs.'' These providers are typically ILECs, though as the Bureau explained, the transition to NG9–1–1 may broaden the class of entities that perform this function. Accordingly, we seek comment on defining the term ''9–1–1 service provider.'' We anticipate that the proposals in this *NPRM* would apply to all 9–1–1 service providers, and tentatively define that term to include all entities, including ILECs that provide 9–1–1 call routing, automatic location information (ALI), emergency services Internet protocol networks (ESInets), and similar services directly to a PSAP. Is that definition sufficient to capture all the entities that both now and in the future could provide functions necessary to the provision of such services to a PSAP? If not, how should this term be defined? For example, should any of the proposals apply to other types of wireline service providers, wireless service providers, interconnected VoIP service providers, or other potential means of reaching a PSAP as NG9–1–1 broadens the range of entities capable of delivering 9–1–1 service? Should reliability standards or certification requirements extend to data centers and other facilities that may in the future be used to host NG9–1–1 components? Are there certain proposals from which non-ILEC service providers should expressly be exempt? To the extent that any of the implementation approaches would impose obligations on entities regulated as common carriers under Title II of the Communications Act, should there be a mechanism for cost recovery beyond the 9–1–1 related tariff mechanisms already in place?

C. Implementation Approaches

7. We seek comment on four possible approaches to implement the recommendations for Commission action in the *Derecho Report.* We seek input on whether each of these approaches can stand alone, or whether the Commission should adopt two or more options as part of an integrated approach (*e.g.,* reporting, certification, performance reliability requirements). As noted above, these proposals are intended to complement, rather than to replace, the Commission's current support for implementation of best practices developed through cooperation with industry and advisory bodies. We also seek comment on the suitability of each of the approaches described below, as well as any other approaches the Commission should consider. However the Commission decides to proceed, a meaningful level of specificity is essential for any approach to be effective. We therefore seek comment on the suitability of existing best practices as a basis for any rules we may adopt. Although each proposal is intended to be flexible, commenters should describe in detail how they propose to implement their preferred approach and how those choices would advance the goals of this *NPRM.*

8. We specifically seek comments from state commissions and PSAPs on the approaches they use to oversee 9–1–1 connectivity. Many states, for example, regulate 9–1–1 service provided by ILECs. Do those states use a reporting approach? Onsite audits? Do PSAPs that contract for 9–1–1 services impose certification or similar requirements upon their 9–1–1 service providers? Do they specify levels of reliability through service level agreements (SLAs) or require adherence to best practices? Are such SLAs negotiated at the PSAP, state, or service-provider level, and what level of 9–1–1 service do they provide? What have state commissions and PSAPs found to work in their oversight of 9–1–1 service providers, and what needs to be improved?

9. *Reporting.* Under this approach, the Commission would require service providers to periodically report on the extent to which they are voluntarily implementing critical best practices, or complying with applicable standards established by the Commission. Would adoption of this reporting approach alone or as part of an integrated approach meet the goal of ensuring 9–1–1 reliability? What costs and benefits would such a reporting obligation create? Which best practices or other standards should be subject to reporting requirements, and are these standards sufficiently detailed to objectively evaluate compliance? To what extent would such a reporting obligation be effective in the absence of a companion requirement to correct deficiencies revealed in the reports? What performance level should the Commission use to prompt remedial actions based on these reports? Commenters offering support for this approach should specify the scope, granularity, and frequency of reporting they support.

10. We note that the Commission has used reporting in the past as a means of ensuring a certain level of reliability in 9–1–1 services. In 2007, in response to Hurricane Katrina, the Commission adopted rules requiring local exchange carriers, wireless service providers subject to 9–1–1 requirements, and interconnected VoIP service providers ''to conduct an analysis of the resiliency and reliability of their 911 networks or systems and to submit a report to the Commission.'' The reports proved of limited use, however, because they lacked the specificity necessary to determine network reliability in individual cases. In light of this experience, we invite commenters to address how to craft a reporting requirement that would more effectively promote reliability of 9–1–1 services and networks and create incentives for service providers to maintain consistently high standards of 9–1–1 reliability.

11. *Certification.* Under this approach, the Commission would require providers to certify periodically that their 9–1–1 network service and

facilities comply with voluntary industry best practices, reliability requirements specified by the Commission or other standards. This approach could help ensure that senior management is aware of significant vulnerabilities in the 9–1–1 network and accountable for its decisions regarding design, maintenance, and disaster preparedness. Are existing best practices sufficiently detailed to serve as standards for certification? What performance level should the Commission use to prompt remedial actions based on these certifications? With respect to this approach, we seek comment on existing certification schemes—whether or not directly related to the work of the Commission—that might serve as models for certification in this context.

12. Do existing Commission certification schemes, such as those used for Consumer Proprietary Network Information or Equal Employment Opportunity; provide an appropriate model for addressing 9–1–1 reliability? Why or why not? What are the tradeoffs among the various models? What costs and benefits would be associated with each? Is there sufficient justification for the Commission to adopt a new certification model? If so, why? Would one possible model be found in Section 302 of the Sarbanes-Oxley Act, which requires Chief Executive Officers (CEOs) and Chief Financial Officers (CFOs) to certify the integrity of financial reports their companies submit to the Securities and Exchange Commission? If so, which portions of certification under Sarbanes-Oxley are suitable for certifications in this context, and are there others that are not suitable? For example, as under Sarbanes-Oxley, should corporate officers be personally liable for the accuracy of their certifications, and how would the Commission enforce such a requirement? What costs and benefits would be associated with this model?

13. *Reliability Requirements.* Under a third approach the Commission would specify minimum standards for 9–1–1 communications reliability, based on recognized industry best practices. How can the Commission ensure that any such requirements account for sound engineering practices not specifically codified as CSRIC best practices, particularly as technologies evolve? Are there differences in the design and operation of particular 9–1–1 networks that the Commission should consider in connection with sound engineering and network reliability standards, and which may not be reflected fully in existing best practices?

14. *Compliance Reviews and Inspections.* Under this approach, the Commission would conduct periodic compliance reviews or site inspections of service provider facilities to verify that 9–1–1 service providers are adhering to certain standards. This approach may be best suited as part of an integrated approach, in conjunction with rules setting minimum standards for compliance. We seek comment on this option, as well as any benefits or costs of this approach. Which service providers should be subject to inspections or compliance reviews, and how often should those inspections occur? Should reviews be limited to records and documentation of compliance with Commission requirements, or should they include physical site inspections of network routes? Would this approach require additional staff, both at the Commission and employed by service providers, to conduct inspections and document compliance? If so, what experience and training would these personnel require, and would they be likely to detect network design and maintenance issues such as those that led to 9–1–1 failures during the derecho?

D. Bureau Recommendations for Improving 9–1–1 Network Reliability

15. As explained above, for each recommendation we seek comment on a range of possible implementation approaches. We also seek comment on the relative costs and benefits of the various proposals. We also seek comment on any alternative proposals that may be more effective or efficient in improving 9–1–1 network reliability or resiliency. In evaluating specific proposals for Commission action, we also seek comment on how we can best work in cooperation with state, tribal, and local governments, which we have recognized are the primary administrators of the legacy 9–1–1 system. For each of the proposals, we specifically seek comments from state commissions and PSAPs on the approaches they use to oversee 9–1–1 connectivity.

1. Routine 9–1–1 Circuit Auditing

16. Many of the vulnerabilities revealed by the derecho hinge on the concept of physical diversity. Under generally accepted definitions, physical diversity means that two circuits follow different paths separated by some physical distance so that a single failure such as a power outage, equipment failure, or cable cut will not result in both circuits failing. For example, two circuits that ride over the same fiber optic cable are not physically diverse, even though they utilize different fibers in that cable and may be logically diverse for purposes of transmitting data. We seek comment on this definition and any other concept of network diversity we should consider.

17. As the *Derecho Report* noted, for example, a physical diversity audit might have revealed vulnerabilities that led to 9–1–1 and ALI service failures to multiple PSAPs in Northern Virginia. To what extent does this experience reflect vulnerabilities in 9–1–1 networks nationwide? Do 9–1–1 service providers perform regular, physical audits—not just logical analyses—of critical circuits to ensure that their networks remain physically diverse? If so, what specifically do they do and how often? What steps are taken to ensure that physical diversity is sustained despite the circuit rearrangements that frequently take place in communications networks?

18. As a result of service providers' inconsistent auditing of 9–1–1 circuits and avoidable single points of failure in their networks, the *Derecho Report* recommended regularly-scheduled auditing of these circuits, noting that it ''should lead to fewer 9–1–1 outages and enhance the reliability of 9–1–1 communications. If providers do not regularly audit the physical routes of 9–1–1 circuits and ALI links, they will be ill-equipped to verify diversity and understand, avoid, or address instances where a single failure causes loss of all E9–1–1 circuits or all ALI links for a PSAP.'' Are there instances where single points of failure are unavoidable, and how should that term be defined? The *Derecho Report* concluded that the benefits of implementing this recommendation will likely outweigh any additional costs, given the large numbers of customers that can be served successfully in emergencies by circuits that are diverse, and the harms that could result from avoidable failures. The Bureau added that any burden likely would be modest because this obligation would apply only to a limited number of high-priority circuits that provide 9–1–1 service.

19. In light of providers' apparent failure to audit circuit diversity adequately, notwithstanding pre-existing best practices bolstered by Bureau reminders, we seek comment in general on the extent to which providers are auditing these circuits and whether those audits follow established best practices. Do existing best practices provide sufficient guidance on this topic? If not, what, specifically, should new or revised best practices address? What remedial actions have 9–1–1 service providers taken based on lessons learned in the derecho, whether or not they were directly affected by the storm?

20. How, when, and to what degree of specificity should network diversity audits be conducted? Under current technologies, critical 9–1–1 circuits include, at a minimum, 9–1–1 trunks to PSAPs and ALI/ANI links, but we seek comment on other transport routes or technologies that may also be vital for emergency response, now or in the future. Although some network characteristics may vary by service provider and location, any auditing obligation must be specifically defined to be effective. Should the Commission therefore adopt rules prescribing in some fashion how audits should be conducted, and should it conduct inspections or compliance reviews to enforce any such rules? How frequently should audits be conducted, and are there existing published industry standards that could serve as a model? Should the Commission require not only that service providers perform audits, but also that they take action to eliminate reasonably avoidable single points of failure? If so, should any single point of failure be considered unavoidable? Should the Commission require that audits be performed by independent experts or conduct periodic compliance reviews or formal inspections as a means of ensuring compliance? Are there complicating factors in performing diversity audits that the Commission should take note of? To what extent do leased circuits affect the ability to perform accurate audits? How would diversity be sustained despite normal circuit rearrangements and grooming?

21. How can the Commission ensure that its guidance regarding transport network diversity remains current as technology changes? For example, in a NG9–1–1 environment, it is likely that at least some crucial servers will be hosted outside of central offices, in either commercial or government data centers. In those cases, should the Commission ask or require such data centers to meet physical diversity standards or certify that they conduct diversity audits? Would it be sufficient if all such servers are backed up by a redundant hot standby server in another data center? Would conformance with the higher tiers of the ANSI/TIA–942 standard be suitable for qualifying data centers to host critical NG9–1–1 components? How does the transition to broadband, IP-based networks affect the ability to conduct accurate audits? Is a reporting requirement the best approach for ensuring that providers perform 9–1–1 audits?

22. We also seek comment on whether reports should be made publicly available. Should they be treated as confidential, absent a persuasive contrary showing, as with outage reports? Do commenters believe any such reports should be shared within the PSAP community, or made accessible to 9–1–1 industry associations (*e.g.,* APCO, NENA)? Should the reports be shared with state regulators such as state public utilities commissions?

23. We also seek comment on whether providers should certify that they are performing 9–1–1 circuit audits in conformance with best practices, and if so, how often they should so certify. If the Commission were to pursue the certification approach, to which standards should providers be required to certify? Do existing standards or guidance serve as a usable template? Beyond certifying that they have conducted an audit, what other information should service providers need to certify? For example, should they conduct audits under generally-accepted procedures reflected in best practices? Should providers certify that the circuits audited satisfied specified criteria for physical diversity and identify and describe exceptions in some fashion? How often should providers be required to file any such certifications, and how granular should they be? Should any certification requirement be accompanied by an obligation to correct deficiencies revealed by diversity audits?

24. We also seek input regarding additional costs, if any, that would accrue to providers in implementing requirements associated with this recommendation through any of the approaches noted above (*i.e.,* reporting, certification, performance requirements). The NPRM provides preliminary cost and benefit estimates and seeks comment on all aspects of and assumptions underlying the cost/benefit analysis.

2. Sufficient Backup Power at Central Offices

25. The derecho raised many questions regarding backup power, including whether all central offices must have some form of backup power, and what constitutes adequate backup power. During the derecho, approximately 7 percent of one affected service provider's central-office generators failed to operate properly when needed. To what extent is this failure rate representative of central-office backup power nationwide among all 9–1–1 service providers? What rate of generator or other backup power failures have service providers experienced during other recent power failures?

26. In light of these concerns, we seek comment on whether the Commission should institute requirements with respect to backup power, including testing and maintenance of backup power equipment. How closely do providers adhere to existing industry best practices and other published guidelines on backup power? Would new or expanded best practices provide additional guidance necessary to help maintain reliable backup power? If so, would additional best practices provide as much assurance of rigorous compliance as any of the approaches proposed here? What additional best practices are needed in this area? How closely do providers follow generator and battery manufacturers' recommended maintenance schedules? We also are interested in comment regarding backup power test records, *e.g.,* what types of records are actually maintained, and the general content of those records. How long are records retained, and are they shared effectively within the service provider's organization? As records could not always be readily located, does this suggest that FCC monitoring would be helpful? If a battery or generator fails a routine test, is that information communicated to management and reliably acted upon in a timely manner?

27. If we conclude that the Commission should establish backup power requirements, what, more precisely, should be required? Acknowledging that what constitutes a ''central office'' can vary to some extent by service provider and location, we ask commenters to give views on whether and how an adequate level of backup power may differ based on the type of facility. Should the required level of backup power depend on the relationship of each central office to reliable 9–1–1 service? Furthermore, the forecast transition to NG9–1–1 will likely allow some capabilities to be hosted outside of central offices in consolidated data centers. We seek comment on the level of backup power currently available at such facilities and the degree to which they should be required to comply with backup power standards for 9–1–1 networks.

28. Should the Commission require service providers to file reports describing their central office backup power schemes, including maintenance and testing? If so, how often should providers have to file such reports? Should reports be based on conformance with specific best practices, or other standards adopted by the Commission? How many reports would there be? We also ask what specific information should be included

in these reports, *e.g.,* should the report be limited to factual discussion of existing practices, or should providers also report on any planned improvements? Should the report explicitly note departures from industry best practices? Should the reports include an inventory of backup power deployment in service provider central offices? Should providers report on the results of recent tests and their protocol for addressing needed repairs? Should the reports be made publicly available? Would a requirement help foster the sustained focus needed to make a difference?

29. We also seek comment on the approach of having 9–1–1 service providers periodically certify that their central offices have sufficient backup power or conform with specific best practices. With this approach, to what standard(s) should providers certify? What existing industry backup power standards or guidance might serve as a usable template? Beyond certifying that their backup power meets minimum standards, what other factors might service providers be required to certify to? How often should providers be required to file any such certifications, and how granular should they be? Who, by title, should attest to the validity of the certification?

30. We seek comment on whether we should adopt a minimum standard for central office backup power. Should the Commission require on-site backup power for a specific number of hours, whether through appropriately rated batteries or a backup generator with a sufficient fuel supply? Should we require that service providers maintain sufficient backup power to ensure continuity of critical communications and, if so, how should ''critical communications'' be defined? Should the Commission require service providers to have in place and implement plans for regular maintenance and testing of backup power equipment? If so, should the Commission specify a level of detail and granularity for those plans? Would periodic site inspections or compliance reviews be useful to ensure compliance? Do service providers currently test backup generators under actual office load, and is that method preferable to or more effective than others? How often do service providers employ tandem generator arrangements where the failure of one generator would result in a central office being switched immediately to battery backup? Should these generators be replaced or redesigned to shed nonessential loads? We seek comments on the benefits and drawbacks of each implementation approach, and compared to each other.

31. We also seek input regarding additional costs, if any, that would accrue to providers who are not already rigorously implementing best practices, and to all providers to either report or certify. The cost associated with reporting and certification appears to be a fraction of the cost required to remediate deficiencies that these approaches reveal. However, the very preliminary information obtained by the Bureau so far suggests that remediation may not be necessary for a substantial majority of central offices that already have permanent generators and readily accessible portable generators; do not use tandem generator arrangements, where the failure of one generator results in neither generator functioning; and already have implemented appropriate battery and generator testing. We seek more specific information about the prevalence of each of these situations below, and on the estimated time and cost associated with remediation where necessary. Is the range of potential remediation costs wide enough to raise questions about whether the costs of remediation may exceed the benefits?

32. We have identified a number of questions involving potential costs that appear relevant to this inquiry. How many central offices have a generator onsite? A portable generator that can be deployed promptly (*e.g.,* within four hours)? What is the fully loaded cost of such a portable generator? How many central offices have batteries that are not tested to the manufacturer's specifications? How long does it take on average to test such batteries over the course of a year? What is the cost of doing so? Similarly, how many onsite generators are not tested monthly or yearly, and what would the associated incremental costs of such testing be? What is the likelihood of a generator's failing a monthly or annual maintenance test, and the associated cost of repairing it? How many tandem generator arrangements are there, in which the failure of one results in neither functioning? How much is already budgeted to address problems associated with the potential need to address these issues? The NPRM provides a preliminary analysis of and seeks comment on all aspects of and assumptions underlying the costs and benefits of: (1) Having generators available in all central offices; (2) more regular battery testing; (3) more regular generator testing; (4) repairing a generator soon after it fails a test; (5) eliminating a tandem generator arrangement where the failure of one generator results in neither generator functioning; (6). The NPRM seeks comment on all aspects of and assumptions underlying the cost/benefit analysis

3. Robust Network Monitoring Capabilities

33. A 9–1–1 service provider typically operates one or more Network Operations Centers (NOCs) from which it performs, among other tasks, remote monitoring of its network. This monitoring enables a provider to detect critical facilities outages and other problems as soon as they occur and to deploy resources as appropriate to rectify problems. These NOCs typically communicate with the network elements that they monitor by first connecting with one or more regional aggregation points, which then connect to the array of network elements to be monitored. The diversity of these regional aggregation points, including the diversity of the facilities that connect them to NOCs, is vital to communications reliability. During the derecho, the network monitoring capabilities of the two primary ILECs involved were disabled within the area of the storm, depriving them of visibility into the status of their network operations and complicating their recovery efforts. In both instances, the loss of monitoring capability throughout the segment of the network affected by the storm could be attributed to a single point of failure. To what extent do these failures reflect vulnerabilities in network monitoring systems nationwide? How often do other 9–1–1 service providers rely on a single physical path to monitor large portions of their networks, and why have redundant links not been installed?

34. Based on network monitoring failures during the derecho, the Bureau recommended that the Commission take action to ensure that 9–1–1 service providers put in place ''diverse monitor and control links and capabilities throughout their network[s].'' We seek comment on whether and how to implement this recommendation. What have 9–1–1 service providers affected by the derecho done to ensure they will not lose visibility into their networks during future emergencies? To what extent have other 9–1–1 service providers implemented diverse monitoring capabilities within their networks, and do they plan specific, additional improvements in response to the derecho? How can the Commission be confident that these measures will be sustained?

35. Should the Commission pursue the *Derecho Report's* recommendations

with respect to network monitoring, how should it specify the level or degree of ''diversity'' expected of network monitoring and control capabilities? For example, should the Commission define this ''diversity'' such that the failure of one element of a service provider's monitoring system, for example the failure of a control link, cannot result in the loss of network monitoring capabilities? If this definition is not suitable, what would a suitable alternative be and why is it superior? We observe that, unlike other policy objectives the Bureau recommends, diversity in network monitoring is not the subject of a specific CSRIC best practice, although other best practices address circuit diversity and network monitoring in general. Are new or more specific best practices needed to provide guidance in this area? If so, what new or revised best practices are needed? Would additional best practices provide as much assurance of rigorous compliance as any of the approaches proposed here? Who should be charged with developing these best practices? At a minimum, the derecho revealed that it is a sound engineering practice to design network monitoring centers with visibility into the network through physically diverse links that help to avoid single points of failure. Where are these concepts addressed in industry best practices or other published guidelines? How will the transition to NG9–1–1 affect network monitoring technologies and the need for diverse monitoring links?

36. Should the Commission require service providers to file reports describing the diversity of their network monitoring capabilities? If so, how often should such reports be filed, and how granular should they be? What specific information should be included in these reports? For example, should the reports include detailed descriptions of service provider monitoring and control architectures, including maps? What are the public safety and homeland security implications of public disclosure of key network routes? Should such reporting be limited to factual discussion of existing practices, or should providers also report on any planned or ongoing efforts to improve the diversity of their network monitoring capabilities?

37. We also seek comment on the approach of having providers certify that their monitoring and control links are sufficiently diverse. With this approach, to what diversity standard should providers certify? For example, should service providers certify that no single points of failure exist in the network monitoring facilities that run between their NOCs and regional aggregation points? Beyond certifying that their monitoring links are sufficiently diverse, what other information should providers be required to certify? For example, should service providers be asked to certify that they have more than one regional aggregation point in major metropolitan areas? How often should providers be required to file any such certifications, and how granular should they be? How could existing certification schemes, such as section 302 of SOX, serve as models for such certification?

38. Should the Commission require service providers to implement a certain level of diversity in their network monitoring and control capabilities? If so, how precisely should the Commission specify the level or degree of ''diversity'' required of network monitoring and control links? Should the Commission avail itself of compliance reviews or formal inspections as a further means of ensuring compliance with any such rule it adopts?

39. The NPRM includes an analysis of the costs and benefits associated with ensuring more diversity in monitoring capabilities and seek comment on all aspects of and assumptions underlying that analysis.

E. Improved PSAP Notification Under Section 4.9 of the Commission's Rules

40. The derecho also demonstrated that timely, clear, and appropriately targeted communication between 9–1–1 service providers and PSAPs is key during any disruption of 9–1–1 service, particularly in a disaster when the public requires additional emergency assistance. The Commission's current rules recognize that PSAPs must be notified when communications outages affect 9–1–1 service, but the derecho revealed that many PSAPs' efforts to restore service and respond to emergencies during the derecho were hindered by inadequate information and otherwise ineffective communication by service providers. Although we recognize that conditions often change rapidly in disaster situations, PSAPs—and ultimately the public—depend on communications providers for accurate situational awareness when outages affect public safety. We therefore propose amendments to § 4.9 of the Commission's rules to clarify how service providers can more effectively and uniformly notify PSAPs of outages affecting 9–1–1 service and cooperate to restore service as quickly as possible.

41. Section 4.9 requires certain communications providers to notify the Commission within 120 minutes of discovering a reportable outage. The rule also requires specified providers to notify ''9–1–1 special facilities''—*i.e.,* PSAPs—affected by an outage with ''all available information that may be useful'' to mitigate the outage ''as soon as possible by telephone or other electronic means.'' After the derecho, however, many PSAPs reported that they were not notified of outages or received inadequate information about the scope of impacts to 9–1–1 service. The lack of specificity in this rule has led to questions regarding how to determine whether or how providers are complying with the Commission's PSAP notification requirements.

42. During the Bureau's derecho inquiry, multiple PSAPs stated that they contacted their 9–1–1 service provider to report a loss of service before being contacted by the provider. Other PSAPs received notification in the form of ''cryptic'' emails that referenced problems in one central office but did not specify all of the jurisdictions affected. Furthermore, inadequate information from service providers during the derecho led some PSAPs to activate ineffective reroutes, or to attempt to reroute even though service could have been restored via the original route.

43. We therefore propose revisions to § 4.9 intended to clarify 9–1–1 service providers' outage reporting obligations and better ensure that PSAPs receive timely and actionable notification when a communications outage affects 9–1–1 service. Under the proposed rules, service providers subject to PSAP notification requirements would be required to notify PSAPs of outages immediately, by telephone and in writing via electronic means. These notifications would include, at a minimum, the nature of the outage, the estimated number of users affected or potentially affected, the location of those users, the actions being taken by provider to address the outage, the estimated time at which service will be restored, recommended actions the impacted facility should take to minimize disruption of service, and the sender's name, telephone number and email address at which the sender can be reached.

44. We seek comment on this proposed language and any alternative revisions to § 4.9 that would accomplish the goal of clarifying reporting obligations and ensuring that PSAPs receive more detailed outage notifications. To what extent do providers currently inform PSAPs of 9–1–1 outages, and what is included in those communications? What additional information would PSAPs find useful? How much information that would be

helpful to PSAPs is practically available to service providers during natural disasters and other emergencies? Under the proposed rule, service providers would be required to provide PSAP notification immediately. Should the Commission adopt a more specific timeframe by when service providers must notify PSAPs? If so, what would be an appropriate timeframe? Should the Commission specify a list of acceptable ''electronic means'' for written notifications, or do PSAPs and service providers prefer flexibility to choose their own methods of communication? Should service providers be required to keep and retain records of their communications with PSAPs to demonstrate compliance with notification requirements? To what extent do state tariffs and other state and local regulations impose requirements regarding outage reporting and communication in general between service providers and PSAPs?

45. We note that the current outage reporting rules apply to a range of service providers beyond the ILECs that typically route 9–1–1 calls to PSAPs under current network configurations. Should any new or revised PSAP notification requirements apply to all entities covered by § 4.9, or only those considered ''9–1–1 service providers'' for purposes of this *NPRM*? Should amended notification requirements apply to additional service providers who are not already covered by § 4.9? Because our intent is to clarify the current rule and promote efficient communication between service providers and PSAPs, we begin with the assumption that revisions would be most effective if applied consistently to all providers covered by the current rule. We invite comment on that view, however, and seek input on the range of entities that should be subject to revised PSAP notification requirements.

46. In light of the anticipated evolution toward NG9–1–1, we also seek comment on whether entities such as data centers and centralized call centers that do not fit the traditional definition of PSAPs should also be notified of communications outages. For example, how would the outage-reporting rules apply to consolidated call centers that may not be physically located in the affected area but still serve many of the functions of a traditional local PSAP? As technologies evolve, is there a better way to approach PSAP notification than the current rubric of direct communication from service provider staff to PSAP staff? For example, are there automated technologies such as machine-readable data feeds that could transmit outage information to PSAPs in a standardized format?

47. Because service providers must already notify PSAPs of outages under current rules, we do not expect any incremental costs resulting from a clarification of that obligation. We do, however, seek comment on the costs and benefits of particular notification requirements, as well as the burden each approach would place on providers and PSAPs.

III. Other Matters

A. Legal Authority

48. The *NPRM* includes a discussion of the Commission's legal authority for the prospective actions discussed above to promote the reliability and resiliency of communications infrastructure that is essential for 9–1–1 service and seeks comment on that analysis.

B. Small Entities

49. The Commission seeks comment on the degree to which the rules proposed in this *NPRM* would affect small businesses.

C. Circumstances Beyond Providers' Control

50. The Commission seeks comment on the extent to which any action it takes in this area should account for circumstances beyond the control of the provider. What are the specific laws, regulations, and other challenges that would interfere with compliance with these requirements, and how prevalent are these challenges in specific localities? If cost should be considered, what are the appropriate criteria for deciding when a cost is truly prohibitive rather than merely inconvenient? Is the Commission's authority to suspend, revoke, amend, or waive its rules for good cause sufficient to ensure consideration of these factors, or should there be explicit exemptions in the rules themselves? If we determine that a particular state, local, or tribal law, regulation, or practice affirmatively impedes the deployment of effective 9–1–1 services to PSAPs or the deployment of NG9–1–1 services, would the Commission have authority to preempt that law, regulation, or practice? If so, under what circumstances should we exercise that authority?

D. Review and Sunset

51. We also seek comment on whether the Commission should conduct a periodic review of any rules or other requirements that it adopts to ensure that those actions provide flexibility and take into account the continuing advancement of technology. If so, how often should such reviews occur, and how should the ongoing utility of each proposal be measured? Alternatively, we seek comment on whether the Commission should establish a sunset date on which any of the proposals would cease to apply. How should that date be determined, and should it be tied to a specific triggering event, *e.g.,* demonstrated improvements in network reliability or the widespread adoption of NG9–1–1? Should any of these proposals sunset for individual service providers once they deploy NG9–1–1? Because certain approaches may entail upfront costs that decrease over time, what effect should the cost of compliance have on a potential sunset date? Should sunset occur automatically without additional Commission action, or should the Commission consider a possible sunset after further review? How else might the Commission ensure that any action it takes remains current and technologically appropriate over time?

E. Procedural Matters

1. Regulatory Flexibility Act

52. An Initial Regulatory Flexibility Analysis (IRFA) for this *NPRM* is located under section titled *Initial Regulatory Flexibility Analysis.* Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the *NPRM* indicated above.

2. Paperwork Reduction Act of 1995

53. This document contains proposed new information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104–13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107–198, see 44 U.S.C. 3506(c)(4), we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.

3. Ex Parte Rules

54. The proceeding of which this Notice is a part is a ''permit-but-disclose'' proceeding in accordance with the Commission's *ex parte* rules. Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation

within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule § 1.1206(b). In proceedings governed by rule § 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (*e.g.,* .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

4. Comment Filing Procedures

55. Pursuant to §§ 1.415 and 1.419 of the Commission's rules, 47 CFR 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments should be filed in PS Docket No. 13–75. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). *See Electronic Filing of Documents in Rulemaking Proceedings,* 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: *http://fjallfoss.fcc.gov/ecfs2/*.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

1. All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St. SW., Room TW–A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of *before* entering the building.

2. Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

3. U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street SW., Washington DC 20554.

People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an email to *fcc504@fcc.gov* or call the Consumer & Governmental Affairs Bureau at 202–418–0530 (voice), 202–418–0432 (TTY).

Confidential Materials: Parties wishing to file materials with a claim of confidentiality should follow the procedures set forth in § 0.459 of the Commission's rules. Confidential submissions may not be filed via ECFS but rather should be filed with the Secretary's Office following the procedures set forth in 47 CFR 0.459. Redacted versions of confidential submissions may be filed via ECFS.

Initial Paperwork Reduction Act Analysis

This document contains proposed information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104–13. Public and agency comments are due June 11, 2013.

Comments should address: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology; and (e) way to further reduce the information collection burden on small business concerns with fewer than 25 employees. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107–198, see 44 U.S.C. 3506(c)(4), we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission has prepared this IRFA of the possible significant economic impact on a substantial number of small entities by the recommendations in this *NPRM.* Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments provided in ''Comment Period and Procedures'' of this *NPRM.* The Commission will send a copy of this *NPRM,* including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). In addition, the *NPRM* and IRFA (or summaries thereof) will be published in the **Federal Register**.

A. Need for, and Objectives of, the Proposed Rules

2. The June 2012 Derecho storm revealed serious vulnerabilities in the Nation's 9–1–1 communications infrastructure that could have been prevented or mitigated through the implementation of best practices developed by industry and advisory bodies. Yet, the Bureau's inquiry into communications failures during and after the storm found that multiple 9–1–1 service providers failed to implement best practices related to physical circuit diversity, central office backup power, and network monitoring, leading to emergency communications outages affecting millions of Americans. In some cases, PSAPs did not receive timely or adequate notification of these outages, compounding the difficulty of providing emergency assistance until service was restored. A broad range of comments from state and local governments, as well as public safety entities themselves, support the Bureau's finding that such failures are unacceptable. As part of its statutory obligation to ensure that communications networks of all types ''promot[e] safety of life and property,''

the Commission has a particular responsibility to promote reliable emergency communications and prevent avoidable failures.

3. With the objective of ensuring reliability and resiliency of 9–1–1 networks and services, the *NPRM* proposes to:

- Ensure that 9–1–1 service providers conduct routine circuit audits to verify physical diversity and identify avoidable single points of failure. The *NPRM* seeks comment of the details of this obligation and the extent to which providers would be required to fortify non-diverse circuits.
- Ensure that 9–1–1 service providers maintain adequate backup power in central offices, supported by appropriate testing, maintenance, and records retention. The *NPRM* seeks comment on what level of backup power should be considered adequate and whether current maintenance and recordkeeping practices are sufficient to ensure reliability.
- Ensure that 9–1–1 service providers maintain robust and resilient network monitoring capabilities, supported by diverse network monitoring and control links. The *NPRM* seeks comment on the degree of diversity and specific engineering practices necessary to protect network monitoring capabilities against single points of failure.

4. The *NPRM* proposes a range of approaches by which the above objectives could be accomplished. For instance, 9–1–1 service providers could be required to report whether they have implemented relevant best practices, or a company representative could be required to certify compliance with best practices on a regular basis. The Commission could also codify key best practices in its rules, such as a minimum level of physical diversity for 9–1–1 circuits. Under the latter approach, the Commission could also ensure compliance though periodic site inspections and compliance reviews. As the *NPRM* notes, these alternatives need not be mutually exclusive and are intended as a starting point for discussion of which approach(es) will yield the greatest benefit in communications reliability at the lowest cost to service providers.

5. The *NPRM* also proposes revisions to § 4.9 of the Commission's rules to state with greater specificity how and when 9–1–1 service providers must notify PSAPs affected by communications outages. As noted in the *Derecho Report,* the current rule has led to questions regarding whether providers are complying fully with the Commission's PSAP notification requirements, and whether the current requirements provide PSAPs with actionable information. Clarification of these standards could increase compliance by service providers and improve situational awareness for PSAPs affected by outages.

6. The Commission traditionally has addressed communications reliability issues by working with service providers to develop voluntary best practices that address vulnerabilities in the communications network, and by measuring the effectiveness of those best practices through outage reporting. Under the Commission's current rules, the outage reporting process has often been effective in improving the reliability, resiliency, and security of many communications services. The June 2012 derecho, however, revealed the need to supplement this approach with regard to critical 9–1–1 communications. While the *NPRM* supports the development of additional best practices, it recognizes that additional Commission action may be appropriate. Thus, the proposed approach would complement, rather than replace, the existing regime of best practices and outage reporting.

B. Legal Basis

7. The legal basis for the rules and rule changes proposed in this *NPRM* are contained in Sections 1, 4(i), 4(j), 4(o), 201(b), 214(d), 218, 251(e)(3), 301, 303(b), 303(g), 303(r), 307, 309(a), 309(j), 316, 332, 403, 615a–1, and 615c of the Communications Act of 1934, as amended, 47 U.S.C. 151, 154(i), 154(j), 154(o), 201(b), 214(d), 218, 251(e)(3), 301, 303(b), 303(g), 303(r), 307, 309(a), 309(j), 316, 332, 403, 615a–1, and 615c. The Commission also believes it has ancillary authority under Title I of the Communications Act to impose the requirements discussed in the *NPRM* on any 9–1–1 service providers not subject to express regulatory authority under Title II. Any such regulations would be ''reasonably ancillary'' to the goal of ensuring a common baseline for the reliability of 9–1–1 service on a nationwide basis, regardless of the regulatory status of the entity providing the service.

C. Description and Estimate of the Number of Small Entities to Which Rules Will Apply

8. The RFA directs agencies to provide a description of, and, where feasible, an estimate of, the number of small entities that may be affected by the proposed rules adopted herein. The RFA generally defines the term ''small entity'' as having the same meaning as the terms ''small business,'' ''small organization,'' and ''small governmental jurisdiction.'' In addition, the term ''small business'' has the same meaning as the term ''small business concern'' under the Small Business Act. A small business concern is one which: (1) Is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).

1. Total Small Entities

9. Our action may, over time, affect small entities that are not easily categorized at present. We therefore describe here, at the outset, three comprehensive, statutory small entity size standards. First, nationwide, there are a total of approximately 27.9 million small businesses, according to the SBA. In addition, a ''small organization'' is generally ''any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.'' Nationwide, as of 2007, there were approximately 1,621,315 small organizations. Finally, the term ''small governmental jurisdiction'' is defined generally as ''governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.'' Census Bureau data for 2011 indicate that there were 89,476 local governmental jurisdictions in the United States. We estimate that, of this total, as many as 88,506 entities may qualify as ''small governmental jurisdictions.'' Thus, we estimate that most governmental jurisdictions are small.

2. Entities Subject to NPRM

10. As noted in the *NPRM,* we seek comment on the class of entities to which the proposals would apply. Generally, we expect Commission action to focus narrowly on entities that provide key facilities for 9–1–1 service rather than the broader class of all communications services capable of placing 9–1–1 calls. Like the *Derecho Report,* the *NPRM* defines ''9–1–1 service provider'' as a communications provider ''responsible for routing and delivering 9–1–1 calls to PSAPs.'' Under current technologies, these providers are typically ILECs, although the transition to NG9–1–1 may broaden the class of entities that provide 9–1–1 service in the future. The *NPRM* therefore asks whether the Commission should codify a definition of the term ''9–1–1 service provider'' that clarifies the extent, if any, to which the proposals would apply to non-ILEC providers of 9–1–1 service.

11. We anticipate that the proposals in this Notice would apply to all 9–1–

1 service providers, and tentatively define that term to include all entities, including ILECs, that provide 9–1–1 call routing, ALI, emergency services Internet protocol networks (ESInets), and similar services directly to a PSAP. The transition to NG9–1–1 may allow other service providers to perform similar functions, and we seek comment on the degree to which the proposals should apply to other types of wireline service providers, wireless service providers, interconnected VoIP service providers, or other potential means of reaching a PSAP as NG9–1–1 broadens the range of entities capable of delivering 9–1–1 service. We also seek comment on whether there should be a cost-recovery mechanism for entities regulated as common carriers under Title II of the Communications Act to the extent not already provided under state tariffs.

12. *Incumbent Local Exchange Carriers (ILECs).* Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. Census Bureau data for 2007 show that there were 3,188 firms in this category that operated for the entire year. Of this total, 3,144 had employment of 999 or fewer, and 44 firms had had employment of 1,000 employees or more. Thus under this category and the associated small business size standard, the majority of these incumbent local exchange service providers can be considered small.

13. The Commission has included small incumbent LECs in this present RFA analysis. As noted above, a ''small business'' under the RFA is one that, *inter alia,* meets the pertinent small business size standard (*e.g.,* a telephone communications business having 1,500 or fewer employees), and ''is not dominant in its field of operation.'' The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not ''national'' in scope. The Commission has therefore included small incumbent LECs in this RFA analysis, although the Commission emphasizes that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

14. The actions proposed in the *NPRM* could require 9–1–1 service providers to take a range of actions to strengthen the Nation's 9–1–1 infrastructure in the areas of circuit diversity, central office backup power, and network monitoring and control. Specific regulatory obligations would depend upon the approach chosen to implement each of these objectives. Requirements for compliance could range from periodic reporting on whether 9–1–1 service providers are voluntarily implementing best practices, to mandatory standards for 9–1–1 network reliability codified in the Commission's rules and subject to its enforcement powers. Service providers also could be required to periodically certify that they have adequate internal controls to ensure network reliability and inform senior management of any significant vulnerabilities. Because many 9–1–1 service providers already implement some or all of the relevant best practices on a voluntary basis, the additional burden of compliance with these requirements may be minimal.

15. Generally, the reporting and certification approaches would likely require more recordkeeping and information collection than the codification-and-enforcement approach, which would focus on the actual implementation of best practices. However, reporting and certification may give service providers more flexibility in designing and maintaining their networks while ensuring that they remain accountable for the results of their decisions. At a minimum, 9–1–1 service providers would be required to keep records of, and disclose to the Commission, the extent to which they have implemented the best practices discussed in the *NPRM.* At a maximum, they would be required to comply with reliability standards enforced by the Commission, potentially requiring changes to networks that do not currently meet these standards.

16. The *NPRM* also proposes revisions to § 4.9 of the Commission's rules to clarify service providers' obligations to notify PSAPs of 9–1–1 outages. The *NPRM* seeks comment on this objective, as well as on the substantive terms of the reporting obligation.

E. Steps Taken To Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

17. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include (among others) the following four alternatives: (1) The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.

18. The approaches proposed in the *NPRM* are intended to complement and strengthen, not to replace, the Commission's current approach of encouraging service providers to voluntarily implement best practices and measuring compliance through outage reporting. Thus, small entities with limited resources would continue to enjoy many of the benefits of the current regime, including a general focus on network performance and reliability rather than specific design requirements. The Commission has traditionally considered this approach a more flexible and less costly alternative to more comprehensive regulation, and the *NPRM* would preserve those advantages in large part.

19. To the extent that the *NPRM* would impose new obligations on small entities, we seek comment on alternatives including (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities. Which of the proposed approaches do small entities find particularly difficult or costly to comply with, and how could those difficulties be addressed through modifications or exemptions? What would be the effect on public safety of exemptions from 9–1–1 service requirements, regardless of cost?

F. Federal Rules That May Duplicate, Overlap, or Conflict With the Proposed Rule

None.

IV. Ordering Clauses

20. *It is further ordered* that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, *shall send* a copy of this Notice of Proposed Rulemaking,

including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

21. Accordingly, *it is ordered* pursuant to sections 1, 4(i), 4(j), 4(o), 201(b), 214(d), 218, 251(e)(3), 301, 303(b), 303(g), 303(r), 307, 309(a), 309(j), 316, 332, 403, 615a–1, and 615c of the Communications Act of 1934, as amended, 47 U.S.C. 151, 154(i)–(j) & (o), 201(b), 214(d), 218, 251(e)(3), 301, 303(b), 303(g), 303(r), 307, 309(a), 309(j), 316, 332, 403, 615a–1, and 615c, that this Notice of Proposed Rulemaking in PS Docket No. 13–75 and PS Docket No. 11–60 *is adopted.*

List of Subjects in 47 CFR Part 4

Telecommunications.

Federal Communications Commission.

Marlene H. Dortch,

Secretary.

Proposed rules

For the reasons set forth in the preamble, the Federal Communications Commission proposes to amend 47 CFR part 4 as follows:

PART 4—DISRUPTIONS TO COMMUNICATIONS

■ 1. The authority citation for part 4 continues to read as follows:

Authority: Sec. 5, 48 Stat. 1068, as amended; 47 U.S.C. 154, 155, 201, 251, 307, 316, 615a–1, 1302(a), and 1302(b).

■ 2. Section 4.9 is amended by revising paragraphs (a)(4), (c)(2)(iv), (e)(5), (f)(4), and (g)(1)(i) to read as follows:

§ 4.9 Outage reporting requirements—threshold criteria.

(a) * * *

(4) Potentially affects a 911 special facility (as defined in paragraph (e) of § 4.5), in which case they also shall notify immediately by telephone and in writing via electronic means, any official who has been designated by the management of the affected 911 facility as the provider's contact person(s) for communications outages at that facility, and they shall convey all available information that may be useful to the management of the affected facility in mitigating the effects of the outage on callers to that facility. This information shall include, at a minimum, the nature of the outage, the estimated number of users affected or potentially affected, the location of those users, the actions being taken by provider to address the outage, the estimated time at which service will be restored, recommended actions the impacted 911 special facility should take to minimize disruption of service, and the sender's name, telephone number and email address at which the sender can be reached. Not later than 72 hours after discovering the outage, the provider shall submit electronically an Initial Communications Outage Report to the Commission. Not later than thirty days after discovering the outage, the provider shall submit electronically a Final Communications Outage Report to the Commission. The Notification and the Initial and Final reports shall comply with all of the requirements of § 4.11.

* * * * *

(c) * * *

(2) * * *

(iv) Potentially affecting a 911 special facility (as defined in paragraph (e) of § 4.5), in which case they also shall notify immediately by telephone and in writing via electronic means, any official who has been designated by the management of the affected 911 facility as the provider's contact person(s) for communications outages at that facility, and they shall convey all available information that may be useful to the management of the affected facility in mitigating the effects of the outage on callers to that facility. This information shall include, at a minimum, the nature of the outage, the estimated number of users affected or potentially affected, the location of those users, the actions being taken by provider to address the outage, the estimated time at which service will be restored, recommended actions the impacted 911 special facility should take to minimize disruption of service, and the sender's name, telephone number and email address at which the sender can be reached.

* * * * *

(e) * * *

(5) That potentially affects a 911 special facility (as defined in paragraph (e) of § 4.5), in which case they also shall notify immediately by telephone and in writing via electronic means, any official who has been designated by the management of the affected 911 facility as the provider's contact person(s) for communications outages at that facility, and they shall convey all available information that may be useful to the management of the affected facility in mitigating the effects of the outage on callers to that facility. This information shall include, at a minimum, the nature of the outage, the estimated number of users affected or potentially affected, the location of those users, the actions being taken by provider to address the outage, the estimated time at which service will be restored, recommended actions the impacted 911 special facility should take to minimize disruption of service, and the sender's name, telephone number and email address at which the sender can be reached. In determining the number of users potentially affected by a failure of a switch, a concentration ratio of 8 shall be applied. For providers of paging service solely, however, the following outage criteria shall apply instead of those in paragraphs (b)(1) through (b)(3) of this section. Notification must be submitted if the failure of a switch for at least 30 minutes duration potentially affects at least 900,000 user-minutes. Not later than 72 hours after discovering the outage, the provider shall submit electronically an Initial Communications Outage Report to the Commission. Not later than thirty days after discovering the outage, the provider shall submit electronically a Final Communications Outage Report to the Commission. The Notification and the Initial and Final reports shall comply with all of the requirements of § 4.11.

* * * * *

(f) * * *

(4) Potentially affects a 911 special facility (as defined in paragraph (e) of § 4.5), in which case they also shall notify immediately by telephone and in writing via electronic means, any official who has been designated by the management of the affected 911 facility as the provider's contact person(s) for communications outages at that facility, and they shall convey all available information that may be useful to the management of the affected facility in mitigating the effects of the outage on callers to that facility. This information shall include, at a minimum, the nature of the outage, the estimated number of users affected or potentially affected, the location of those users, the actions being taken by provider to address the outage, the estimated time at which service will be restored, recommended actions the impacted 911 special facility should take to minimize disruption of service, and the sender's name, telephone number and email address at which the sender can be reached. Not later than 72 hours after discovering the outage, the provider shall submit electronically an Initial Communications Outage Report to the Commission. Not later than thirty days after discovering the outage, the provider shall submit electronically a Final Communications Outage Report to the Commission. The Notification and the Initial and Final reports shall comply with all of the requirements of § 4.11.

* * * * *

(g) * * *

(1) * * *

(i) Within 240 minutes of discovering that they have experienced on any facilities that they own, operate, lease, or otherwise utilize, an outage of at least 30 minutes duration that potentially affects a 911 special facility (as defined in paragraph (e) of § 4.5), in which case they also shall notify immediately by telephone and in writing via electronic means, any official who has been designated by the management of the affected 911 facility as the provider's contact person(s) for communications outages at that facility, and the provider shall convey all available information that may be useful to the management of the affected facility in mitigating the effects of the outage on efforts to communicate with that facility. This information shall include, at a minimum, the nature of the outage, the estimated number of users affected or potentially affected, the location of those users, the actions being taken by provider to address the outage, the estimated time at which service will be restored, recommended actions the impacted 911 special facility should take to minimize the disruption of service, and the sender's name, telephone number and email address at which the sender can be reached; or

* * * * *

[FR Doc. 2013–08525 Filed 4–11–13; 8:45 am]

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FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 64

[WC Docket No. 13–39; FCC 13–18]

Rural Call Completion

AGENCY: Federal Communications Commission.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Federal Communications Commission proposes to adopt rules requiring facilities-based originating long distance providers to record and retain data on call completion rates to rural areas, and to report this data to the Commission on a quarterly basis. We propose to reduce or eliminate a provider's retention and reporting obligations if that provider certifies that it qualifies for one of two proposed safe harbor provisions. We also propose to prohibit both originating and intermediate providers from causing audible ringing to be sent to the caller before the terminating provider has signaled that the called party is being alerted. These changes will allow the Commission to more effectively determine the causes of call completion problems to rural areas and take action to cure them, and will also prevent consumer confusion caused by the injection of false ringtones before the called party has been alerted.

DATES: Submit comments on or before May 13, 2013.

Submit reply comments on or before May 28, 2013.

Written comments on the Paperwork Reduction Act proposed information collection requirements must be submitted by the public, Office of Management and Budget (OMB), and other interested parties on or before June 11, 2013.

ADDRESSES: You may submit comments, identified by WC Docket No. 13–39, by any of the following methods:

▪ *Federal Communications Commission's Web site: http://fjallfoss.fcc.gov/ecfs2/.* Follow the instructions for submitting comments.

▪ *People with Disabilities:* Contact the FCC to request reasonable accommodations (accessible format documents, sign language interpreters, CART, etc.) by email: *FCC504@fcc.gov* or phone: 202–418–0530 or TTY: 202–418–0432.

In addition to filing comments with the Secretary, a copy of any comments on the Paperwork Reduction Act information collection requirements contained herein should be submitted to the Federal Communications Commission via email to *PRA@fcc.gov* and to Nicholas A. Fraser, Office of Management and Budget, via email to *Nicholas_A._Fraser@omb.eop.gov* or via fax at 202–395–5167.

FOR FURTHER INFORMATION CONTACT: Steven Rowings, Competition Policy Division, Wireline Competition Bureau, at (202) 418–1033 or by email at *steven.rowings@fcc.gov.* To submit Paperwork Reduction Act (PRA) comments, send an email to *PRA@fcc.gov.* For further information concerning the Paperwork Reduction Act information collection requirements contained in this document, contact Judith B. Herman, 202–418–0214.

SUPPLEMENTARY INFORMATION: Pursuant to §§ 1.415 and 1.419 of the Commission's rules, 47 CFR 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). *See Electronic Filing of Documents in Rulemaking Proceedings,* 63 FR 24121 (1998).

▪ *Electronic Filers:* Comments may be filed electronically using the Internet by accessing the ECFS: *http://fjallfoss.fcc.gov/ecfs2/.*

▪ *Paper Filers:* Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St. SW., Room TW–A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of *before* entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street SW., Washington DC 20554.
- *People with Disabilities:* To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an email to *fcc504@fcc.gov* or call the Consumer & Governmental Affairs Bureau at 202–418–0530 (voice), 202–418–0432 (TTY).

This document contains proposed information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104–13. Public and agency comments are due June 11, 2013.

PRA comments should address whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; the accuracy of the Commission's burden estimates; ways to enhance the quality, utility, and clarity of the information collected; and ways to minimize the burden of the collection of