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**6712-01**

**FEDERAL COMMUNICATIONS COMMISSION**

**47 CFR Part 51**

**[PS Docket No. 14-174, GN Docket No. 13-5, RM-11358, WC Docket No. 05-25, RM-10593; FCC 14-185]**

**Ensuring Customer Premises Equipment Backup Power; Technology Transitions; Copper Retirement; and Discontinuance of Service**

**AGENCY:** Federal Communications Commission

**ACTION:** Proposed rule.

**SUMMARY:** In this document, the Federal Communications Commission (Commission) initiates a rulemaking seeking public comment on: ensuring reliable back-up power for consumers of IP-based voice and data services across networks that provide residential fixed service that substitutes for and improves upon the kind of traditional telephony used by people to dial 911; protecting consumers by ensuring they are informed about their choices and the services provided to them when carriers retire legacy facilities (e.g., copper networks) and seek to discontinue legacy services (e.g., basic voice services); and protecting competition where it exists today, so that the mere change of a network facility or discontinuance of a legacy service does not deprive small- and medium-sized businesses, schools, libraries, and other enterprises of the ability to choose the kinds of innovative services that best suit their needs. The proposed rules and the comment process that follows will help the Commission ensure that the fundamental values of competition, consumer protection, public safety, and national security are not lost merely because technology changes.

**DATES:** Submit comments on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Submit reply comments on or before

**[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].**

**ADDRESSES:** You may submit comments, identified by PS Docket No. 14-174, GN Docket No. 13-5, RM-11358, WC Docket No. 05-25, RM-10593, 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 e-mail: [FCC504@fcc.gov](mailto:FCC504@fcc.gov) or phone: 202-418-0530 or TTY: 202-418-0432.

For detailed instructions for submitting comments and additional information on the rulemaking process, see the SUPPLEMENTARY INFORMATION section of this document.

**FOR FURTHER INFORMATION CONTACT:** Michele Levy Berlove, Competition Policy Division, Wireline Competition Bureau, at (202) 418-1477 or by email at [Michele.Berlove@fcc.gov](mailto:Michele.Berlove@fcc.gov).

**SUPPLEMENTARY INFORMATION:** This is a summary of the Commission's Notice of Proposed Rulemaking in PS Docket No. 14-174, GN Docket No. 13-5, RM-11358, WC Docket No. 05-25, RM-10593; FCC 14-185, adopted on November 21, 2014 and released on November 25, 2014. The full text of this document is available for public inspection during regular business hours in the FCC Reference Information Center, Portals II, 445 12th Street, SW, Room CY-A257, Washington, DC 20554. The document may also be purchased from the Commission's duplicating contractor, Best Copy and Printing, Inc., 445 12th Street, SW, Room CY-B402, Washington, DC 20554, telephone (800) 378-3160 or (202) 863-2893, facsimile (202) 863-2898, or via the Internet at <http://www.bcpweb.com>. It is available on the Commission's Web site at <http://www.fcc.gov/>.

## **Synopsis**

1. In the Notice of Proposed Rulemaking (NPRM), we seek to ensure preservation of the fundamental values of competition, consumer protection, public safety, and national security during the transition of legacy networks and services to networks and services based on new technologies. We advance these goals by proposing and seeking comment on revisions to our rules and policies concerning continuity of power, copper retirement, and service discontinuances governed by Section 214 of the Communications Act of 1934, as amended (the Act).

### **I. INTRODUCTION**

2. The Commission has recognized that our communications infrastructure is undergoing key technology transitions, for example: (1) the transition of switched voiced services from legacy TDM and Signaling System No. 7 (SS7) networks to Session Initiation Protocol (SIP)/IP networks; (2) the transition of TDM-based switched voice services to interconnected VoIP services that rely on SIP/IP networks, and relatedly the advent of Voice over LTE (VoLTE) services that will soon be widely available on LTE wireless networks, and (3) the change in the physical layer of last-mile technology, in particular from twisted pairs of copper wire to fiber optics cable, co-axial cable, and wireless technologies. The network investment that is leading to these technology transitions has many benefits. Modernizing communications networks can dramatically reduce network costs and lead to the development of new and innovative services, devices, and applications, and can also result in improvements to existing product offerings and lower prices. To date, these new technologies generally have enabled the creation of additional choices for customers of voice, video, and broadband services. In many cases, retail customers may return to a legacy, copper-based service if the new services fail to meet their needs or expectations. However, as the Commission unanimously recognized in the January Technology Transitions Order:

[I]n the natural course of progress, we expect there will come a tipping point, a point where the adoption of new communications technologies reaches a critical mass and most providers wish to cease offering legacy services. This is a reflection of technological innovation and in that respect is a good thing. But it also removes a choice from the marketplace: the choice that has been the source of the enduring values for generations and the service that Congress beyond question marked as essential to all Americans. From this perspective, we stand today at the precipice of a very different technology transition – the turning off of the legacy suite of services that has served our nation well.

The Commission in January went on to affirm that our “mission and statutory responsibility are to ensure that the core statutory values endure as we embrace modernized communications networks.”

3. Many consumers have embraced new technologies. However, we recognize that many consumers continue to rely on the features and functionalities of the legacy wireline networks, and the Commission must ensure that it can carry out its statutory mission as networks reach the “tipping point” in the transition away from legacy facilities and services. Currently, consumers may expect certain familiar data-based services, such as credit card readers, home alarms, and medical alert monitors to function in a particular way. Consumers of wireline telephony may also expect their plug-in phones to work during a power outage without any action on their part. However, networks other than copper and services not based on TDM may not support these functionalities, or not in the ways that consumers have come to expect. Moreover, competitive LECs have come to rely on the incumbent LEC legacy facilities to provide broadband services to small- and medium-sized businesses and other enterprise

customers. And some parties argue that certain copper retirements and transitions from TDM preclude their access to affordable last-mile facilities and ability to serve these retail customers. As new facilities and services are introduced and adopted, the tipping point draws closer. The time to act is now to prevent harm to consumers, competition, public safety, and national security that cannot be undone.

## **II. BACKGROUND**

### **A. CPE Backup Power**

4. Consumers receiving voice telephone service over legacy copper networks have traditionally relied on power provided from the central office to sustain service during power outages. (Loops provided over Digital Loop Carrier (DLC) are an exception. For DLC loops, backup power (if provided) is provided by the DLC remote terminal. Remote terminals, however, are less likely to provide backup power than central offices.) Moreover, even in a prolonged outage lasting days or weeks, central offices typically have backup power capabilities that can ensure continuous voice service over copper to residences for the duration of the outage. Hence, consumers have been able to count on the continued availability of telephone service in harsh weather conditions and other emergencies when they are most vulnerable.

5. The availability of CPE backup power at the residence is therefore an important issue for consumers that may be faced with retirement of the copper networks in their communities. Carriers planning to retire their copper networks can potentially use a variety of physical media on which to transmit their services, including fiber, coaxial cable, or wireless. None of these network alternatives, however, will typically function in a power outage without a backup power source for customer CPE. As consumers transition from legacy copper loops to new technologies, it is important they continue to have reasonable CPE backup power alternatives to support minimally essential residential communications, particularly access to emergency communications, during power outages.

6. CPE backup power is not solely a copper retirement issue, however. Millions of consumers in communities where legacy copper networks continue to operate already rely on other networks that do not provision line power to the customer premises. For these consumers as well, CPE backup power is a significant issue that must be addressed to ensure continuity of communications. We therefore examine ways to promote access to CPE backup power for residential voice services across different technologies by proposing a framework that would establish reasonable expectations for when providers should bear responsibility for the provision of CPE backup power during a power outage.

### **B. Copper Retirement**

7. Considering the technology transitions currently underway, we find that the time is right to review our current regulations governing copper retirement. We do not believe that our copper retirement process sufficiently protects our core values given the increase in frequency and volume of copper retirements and the concurrently growing impact on consumers and competition. This document thus proposes revising our copper retirement process to better protect consumers and ensure that transitions to fiber do not undermine competition while at the same time maintaining the incentives for incumbent LECs to deploy fiber.

8. We recognize the many benefits of fiber-based service and the desirability for incumbent LECs of not having to operate both copper and fiber networks indefinitely, including the potential for more bandwidth and increased reliability in difficult weather conditions. We emphasize that we support and encourage fiber deployments, and are committed to maintaining the incentives for providers to deploy fiber. The National Broadband Plan recognized that requiring incumbent LECs to maintain two networks—one copper and one fiber—“would be costly, possibly inefficient and reduce the incentive for incumbents to deploy fiber facilities.” The Commission’s task is to protect consumers and promote competition while taking account of the need of incumbent LECs to manage their networks effectively and efficiently.

9. Current Regulations. Our current regulations governing copper retirement by incumbent LECs were issued a decade ago, when fiber loop deployment was still in its infancy and large-scale retirement of copper networks was far in the future. Currently, incumbent LECs that intend to retire loops or subloops that are being replaced with FTTH or Fiber-to-the-Curb (FTTC) loops must provide notice via our network change disclosure process. Interconnecting carriers can seek to delay but cannot prevent retirement, nor do our rules contemplate that we approve or deny planned copper retirements for which incumbent LECs provide notice under part 51. (In the Triennial Review Order, the Commission declined to impose any “affirmative regulatory approval” prior to the retirement of copper loop facilities.) This reflects the Commission’s decision a decade ago to decline to require affirmative regulatory approval before an incumbent LEC can retire any copper loop facilities and its finding that “such a requirement is not necessary at this time because our existing rules, with minor modifications, serve as adequate safeguards.” Our existing rules do not impose specific consumer notice or consumer education requirements on carriers retiring copper facilities.

10. Increasing Scope and Frequency of Retirements. Incumbent LECs are steadily transitioning wire centers from copper facilities to fiber and all-IP networks. Indeed, the Commission has posted over 20 Public Notices for incumbent LEC proposed copper retirements since January 2014, and we expect the notice of copper retirements to increase in volume and geographic scope.

11. Consumer Protection Concerns. Our record reflects concern that incumbent LEC decisions related to copper retirement can have a significant impact on consumers, yet our Part 51 rules are silent on this important issue. For instance, Public Knowledge and other consumer advocacy groups summarized and submitted multiple filings asking state public service commissions to pause copper retirements and to investigate service-related issues with existing copper networks. These consumer advocates allege that “customers are being involuntarily

moved to fiber or IP-based service (or some combination thereof), even if those new technologies fail to serve all of the user's needs or will be more expensive." These groups also allege that in some cases incumbent LECs are failing to maintain their copper networks in an effort to push consumers off of copper and onto fiber or other technologies. Further, they claim that some incumbent LECs are misleading subscribers into believing that they may no longer continue to receive legacy service (e.g., legacy voice-only service, known as POTS) or, at a minimum, that those carriers are failing to advise subscribers that their legacy service remains available over new network facilities. Incumbent LECs dispute these allegations. For example, with respect to the claim consumers are forced off of legacy services during copper retirements, Verizon asserts that where it retires copper facilities, customers migrated to fiber "receive the same POTS service at the same price, unless they choose to upgrade." Consumer advocates also assert that an important step in protecting consumers is to ensure that they have a voice in the retirement process.

12. Competitive Concerns. We are committed to preserving the core statutory value of competition during the technology transitions that are underway. Competitive LECs have expressed concern over copper retirements, alleging, among other things, that incumbent LECs are retiring copper—and thereby wasting a valuable resource—merely to preclude potential broadband competitors from providing service. Competitive carriers use copper facilities to provide alternative broadband services to small- and medium-sized businesses. As reflected in the various filings with the Commission, competitive LECs claim that the increased pace of copper retirement will lead to reduced availability of Ethernet-over-Copper services to small and medium businesses. Because of their concerns, certain competitive LECs have requested that the Commission permit incumbent LECs to retire or otherwise remove copper only in a narrow range of circumstances. Competitive LECs also recommended revisions to our copper retirement process. Specifically, in 2007, BridgeCom et al. and XO et al. filed petitions for

rulemaking to modify the Commission's copper retirement regulations. In its petition, BridgeCom recommends applying copper retirement rules to the feeder portion of the copper loop and subloops. XO recommends stronger notice requirements, such as requiring incumbent LECs to publish notice of a proposed copper retirement at least 12 months before implementation. These competitive LECs also request that the Commission allow states to adopt copper loop requirements stronger than the Commission's rules.

13. In response, incumbent LECs argue there is no evidence that copper retirement has hurt competition for broadband. They also state that forcing incumbent LECs to maintain redundant copper facilities prevents them from efficiently upgrading their networks, and discourages incumbent LEC and competitive LEC network investments in fiber. They claim consumers will ultimately be harmed by diminished investment in broadband technologies if incumbent LECs are forced to retain copper facilities.

14. Benefits of Copper. Construction of fiber and transitions to next-generation networks carry clear benefits, but this does not mean that copper networks are without value. In particular, the Commission recognizes the importance of copper facilities as a means for competitors to provide advanced telecommunications capability to businesses, schools, libraries, hospitals, other enterprise customers, and consumers with disabilities. Competitive LECs provide voice and broadband service to enterprise customers by leasing copper loops and connecting those loops to their own Digital Subscriber Line (DSL) or EoC equipment that is generally collocated in the incumbent LEC's central office. Competitive LECs can provide broadband with EoC at speeds from 3 to 30 Mbps, and in some areas can reach 200 Mbps. Companies are testing technologies over copper that will provide speeds of 10 Gbps. Further, the use of competitive carriers' own equipment over leased copper enables these carriers to design their own set of integrated broadband, voice, and even video services. Another important feature of copper is that it carries an independent source of power that preserves service during

emergencies when the electric power grid fails. Finally, copper is already deployed and financed by ratepayers and subsidies.

**C. Section 214 Discontinuance**

15. Pursuant to our Section 214(a) discontinuance process, telecommunications carriers—other than CMRS providers—and interconnected Voice over Internet Protocol (VoIP) providers must obtain Commission authority to discontinue interstate or foreign service to a community or part of a community. (For convenience, in certain circumstances, this document uses “discontinue” (or “discontinued,” etc.) as a shorthand that encompasses the statutory terms “discontinue, reduce, or impair” unless the context indicates otherwise.) The discontinuance rules are designed to ensure that customers are fully informed of any proposed change that will reduce or end service, to ensure appropriate oversight by the Commission of such changes, and to provide an orderly transition of service, as appropriate. This process allows the Commission to minimize harm to customers and to satisfy its obligation under the Act to protect the public interest. (The Commission normally will authorize proposed discontinuances of service unless it is shown that customers or other end users would be unable to receive service or a reasonable substitute from another carrier, or that the public convenience and necessity would be otherwise adversely affected. Where there is question as to whether a service has reasonable substitutes or whether the present or future public convenience and necessity will be adversely affected, the Commission will scrutinize the discontinuance application, consistent with its statutory obligations.) The Commission has discretion in determining whether to grant a provider authority to discontinue, reduce, or impair service pursuant to Section 214. To be clear, the fact that a carrier is statutorily obligated to seek discontinuance approval does not mean the carrier will be prevented from discontinuing the service. Rather, it means that the request must go through a public review process to ensure that the public interest—encompassing consumer protection, competition, public safety, and other statutory responsibilities—is protected.

16. In this document, we focus on three key issues in the context of service discontinuances: (1) ensuring that consumers receive adequate substitutes for discontinued services; (2) further defining the scope of our Section 214(a) authority, focusing in particular on the context of wholesale services; and (3) ensuring competitive availability of wholesale inputs following discontinuance of incumbent LECs' TDM services on which competitive LECs currently rely.

17. Adequacy of Substitutes for Retail Services. In evaluating a Section 214 discontinuance application, the Commission generally considers a number of factors, including the existence, availability, and adequacy of alternatives. Through these factors, the Commission ensures that the removal of a choice from the marketplace occurs in a manner that respects consumer expectations and needs. In an era of ubiquitous legacy services, identifying an adequate like-for-like substitute was comparatively easy. Today, that is not the case. Building on this theme, Public Knowledge states that “[b]efore policymakers can state with confidence that any new technology is comparable to or better than existing network technology, [they] must know the metrics by which to compare the two. The Commission should therefore establish the metrics by which it will evaluate new technologies, when, for example, a carrier files an application to change or retire its network under § 214(a).”

18. Network Security and Reliability. Improved network security reduces risk to all interconnected service providers, their customers, and the nation as a whole. Careful attention to network security becomes particularly important when networks are in transition, and it is relevant to whether proposed or available alternative services provide the same reliability and resiliency that consumers have come to expect from their home voice service.

19. Wholesale Access to Last-Mile Services. In the Technology Transitions Order, the Commission noted the importance of maintaining wholesale access to protect the enduring value of competition embodied in our communications laws during and after the technology

transitions. One of the primary goals of this document is to begin the process of ensuring that there is competition in serving every level of the enterprise market, from very small businesses to large enterprises. As explained in the National Broadband Plan, “[b]ecause of the economies of scale, scope, and density that characterize telecommunications networks . . . it is not economically or practically feasible for competitors to build facilities in all geographic areas.” This is especially true in those cases where the potential return on investment from serving the needs of lower demand users, such as residences and small businesses, does not justify the cost of overbuilding an incumbent. Faced with these economic realities, competitive LECs continue to rely significantly on wholesale access to the last-mile facilities of incumbent LECs, and have expressed concern about the future of wholesale access to last-mile facilities and services as we undergo the technology transitions. (Some competitive LECs point out that the Commission based its decisions to grant forbearance from dominant carrier regulation on the availability of regulated “TDM-based, DS1 and DS3 special access services . . . in addition to section 251 UNEs.”) Even incumbent LECs wanting to serve customers with operations outside of their service territory—as would happen with a retail business with multiple locations—depend on wholesale inputs and for that purpose have their own competitive LEC subsidiaries.

20. COMPTTEL has proposed a framework to guide the IP transition because “failure to adopt and enforce technology-neutral wholesale policies threatens the ability of competitive carriers to obtain last-mile access . . . and thus jeopardizes competition in the business broadband market.” As Chairman Wheeler noted recently, competitive providers “deliver important competitive alternatives to business and enterprise customers. This in turn helps those enterprises provide better, more affordable goods and services to members of the general public.” For example, competitive LECs can provide broadband with EoC to small- and medium-sized businesses at speeds that reach 200 Mbps. Moreover, in its 2009 petition, Cbeyond sought expedited rulemaking concerning access by competitive providers to incumbent

LEC fiber loops. Cbeyond claimed that with access to high capacity fiber and hybrid loops, competitors can “aggressively market the next-generation applications that are the key to small businesses.” Competitive LECs continue to serve an important part of the Nation’s enterprise market, and “as competitive LECs offer competitive service, it creates an incentive for incumbents to invest more in their networks and offer better services to win their share of business customers.”

21. In the Triennial Review Order, the Commission emphasized the importance of incentivizing investment for the deployment of new technologies. In doing so, the Commission limited unbundling requirements imposed on incumbent LECs’ mass-market fiber loop deployments to remove disincentives to the deployment of advanced telecommunications. This decision did not, however, eliminate the requirement to provide special access services that serve as critical inputs to competition—nor did it eliminate the requirement to unbundle DS1 and DS3 capacity loops. Today, with significant fiber deployment and the current technological transition already underway, we must ensure the customers of both incumbent and competitive LECs who currently depend on legacy services continue to have appropriate access to either adequate legacy or IP-based service alternatives. The Commission’s discretion to grant a provider authority under Section 214 to discontinue special access service provides a mechanism to address these concerns. In applying Section 214, the Commission must fully understand the impact on competition and innovation of either granting or denying the application.

### **III. DISCUSSION**

#### **A. Continuity of Power for CPE**

22. Retirement of copper networks highlights a broader challenge facing consumers of any service that depends upon access to a residential power supply. The ability to communicate during power outages remains critical, particularly during prolonged outages caused by catastrophic storms or other major disasters. In such situations, consumers have a

heightened need to be able to communicate with public safety officers, first responders and other response workers in order to convey or receive lifesaving information. This need is felt not only by consumers being migrated from copper to fiber and other networks, but also those who have already made that transition by subscribing to facilities-based VoIP services or other IP-based solutions. Moreover, not only is backup power for services delivered over fiber or other non-copper media typically limited, but individual communications providers use different technologies and apply different policies to the powering of end user devices, resulting in the potential for consumer confusion.

23. As technology transitions, it is important that lines of responsibility for provisioning CPE backup power are clearly delineated and understood by providers and consumers alike, so that performance can meet expectations and continuity of communications can be ensured. Establishing clear expectations for both providers and customers as to their responsibilities throughout the course of an outage should minimize the potential for lapses in service to occur due to consumer confusion or undue reliance on the provider. Accordingly, as part of our efforts to promote smooth technology transitions, we consider the adoption of baseline requirements for ensuring continuity of power for CPE during commercial power outages. In the discussion below, we seek comment on a framework for establishing reasonable expectations regarding provisioning CPE backup power in the event of an outage.

24. As a threshold matter, we seek comment on the communications services we should include within the scope of any CPE backup power requirements we may adopt. We observe that CPE backup power is not an issue that needed to be addressed with respect to legacy networks that provided line power to consumers, because consumers could rely on the availability of continuous power sufficient to operate basic telephone CPE indefinitely. However, it is an issue that must be addressed in the context of providing CPE backup power for VoIP and potentially other residential IP-based services (as well as legacy services delivered

over fiber), because CPE for these services typically will require a backup power source. We therefore propose that any potential requirements would apply to facilities-based fixed voice services, such as interconnected VoIP, that are not line-powered by the provider. For this purpose, how should the Commission define a “fixed” wireless service? Does it depend upon whether the service is primarily used from a fixed location and/or marketed for that purpose? Is taking a functional approach to defining “fixed” wireless service appropriate, and if so how would that apply to services on the market today? How do we account for power outages affecting other CPE, such as cordless phones, or the network itself?

25. While consumers generally may use residential communications services for a wide range of communications needs, power during an outage is a valuable and limited resource. We therefore intend that any backup power requirements we propose today afford sufficient power for minimally essential communications, including 911 calls and the receipt of emergency alerts and warnings. We seek comment on what services should be considered “minimally essential” for purposes of continuity of power. While voice services historically have been the primary means of contacting 911, there are circumstances where other modes of communication, such as texting, may be more effective or energy-efficient; additionally, Next Generation 911 will begin to introduce images, video and other new data streams into Public Safety Answering Points (PSAPs). In addition, we seek comment on the extent to which backup power can be prioritized or otherwise conserved for such minimally essential communications needs. For example, can service providers offer mechanisms for lowering power usage and conserving battery power, such as a default turnoff of all communication services when the device is operating on battery, so that the device does not drain backup power while a consumer is away from home or otherwise not using the device? Can CPE be configured to only power on to receive emergency alerts? If it is technically difficult to distinguish incoming emergency alert calls from other incoming calls, should only 911 calls be supported? What measures can

providers take to rapidly load shed non-essential communications functions to extend the duration of available backup power to support minimally essential functions? In this regard, we seek comment on the extent to which it is reasonable to place an obligation on the provider (versus place an expectation on the consumer) to take measures to conserve backup power for minimally essential communications. How should consumer preferences and community public safety interests inform our policymaking?

26. In the discussion that follows, we seek comment on a framework to establish expectations for when providers must take steps to maintain continuity of power for CPE. (In the event we were to adopt a requirement that providers must provision CPE backup power, we expect that providers would be entitled to commercially reasonable compensation in exchange for providing this service.) In the past, consumers have relied upon service providers for backup power for their residential landline phones. Is it reasonable for providers to continue to bear primary responsibility for CPE backup power, and if so, to what extent? We propose that providers should assume responsibility for provisioning backup power that is capable of powering their customers' CPE during the first eight hours of an outage. (In this context, unless otherwise stated, we use the term "backup power" to refer to the availability of standby backup power, not actual talk time.) Eight hours appears to be consistent with certain VoIP deployment models already in practice, though some providers have deployed backup power devices that are capable of providing power for up to twenty-four hours. (We note that CSRIC's report indicates that while backup time across different use cases may vary, several current deployments support up to eight hours of standby battery backup. Providing consumers with eight hours of backup power would accommodate circumstances where the power goes out in the middle of the work day or in the middle of the night, when consumers may be away from home or asleep and therefore would not reasonably be able to take measures on their own to ensure continuity of communications. On the other hand, a longer time period—such as the twenty-four hours

afforded by Verizon’s devices—could provide consumers with sufficient time to attend to other time-sensitive matters that may arise during the course of a natural disaster or other emergency. We seek comment on these options.

27. To the extent we place the responsibility on providers to provide CPE backup power, we seek comment regarding solutions that are currently available to providers to meet this responsibility. To the extent such solutions are available, could they be widely deployed at a reasonable cost? If not, what technical hurdles or other issues must be addressed? The Communications Security, Reliability and Interoperability Council (CSRIC) recently issued recommendations for advancing the state of the art in CPE powering. Could power-over-Ethernet (PoE) be used to power devices that lack a backup power supply but are connected to devices that are running on battery power? CSRIC notes that PoE “is an established standard commonly used in hotels and other commercial applications,” and “could provide an easy to implement approach” in certain circumstances. Could solar power, fuel cells, or other alternative energy sources be used to maintain a continuous CPE power supply that operates independently of the commercial power grid?

28. We also seek comment on how the provider would meet its responsibility to provide backup power for a specific duration of time. Would it be sufficient for the provider to initially install backup power technology at the customer’s residence, while leaving the consumer responsible for any associated maintenance of the power supply? How are providers currently supporting CPE backup power today across different services and technology platforms? How long does the backup power currently offered by providers last, and for what services? In what form is the backup power provided? Should the provider have any responsibility to monitor battery status and determine whether the battery has degraded and if so, how could this responsibility be carried out? Should that responsibility change if the consumer self-installs the CPE, versus having the provider professionally install the CPE? Should

consumers be able to opt out of backup power? Could providers install CPE backup power sources that are located external to the customer's residence and thus able to be monitored and maintained remotely? Are there other methods that could be used to ensure the availability of CPE backup power immediately after a power outage? Our proposals are stated in terms of standby time, but is talk time the appropriate metric?

29. We next seek comment on the extent to which consumers could self-provision CPE backup power. Under our proposal, after the first eight hours of an outage, the burden to maintain continuity of power for CPE no longer would be on the provider under our rules, but would be allowed to fall on the consumer. (Where we refer to the "burden" or the like falling or shifting to the consumer, we mean the practical need to provide for backup power and do not propose imposing any legal duty or obligation on consumers.) We seek comment on whether this is a reasonable expectation. Also, to the extent consumers self-provision CPE backup power, we seek comment on how best to ensure they are equipped to do so. We believe that expecting consumers to self-provision CPE backup power after certain amount of time may be reasonable to the extent that consumers would have ready access, through standard commercial outlets, to replacement batteries or other backup power technology. We seek comment on the commercial availability of such technologies. We note that CSRIC has recommended that providers make affordable options for battery backup of CPE available to consumers. For customers who choose battery backup, should service providers be required to offer spare batteries, at reasonable cost, to replace batteries when battery life falls below the eight-hour threshold or otherwise during times of extended power outages? Should providers be expected to standardize CPE power supplies and connector interfaces across network devices and CPE, so that a common battery backup unit can be used in the home with multiple devices? (For example, service providers may require their equipment developers to provision CPE that uses a power source of a type that consumers can easily replace, e.g., D-cell batteries. CSRIC states

that “[i]mprovements in battery technology are . . . allowing [D-cell batteries] to approach the backup times of lead acid batteries on single charge discharges.”) Are such efforts already under way? We seek comment on the use of D-cell batteries and on the costs and benefits of requiring consumers to purchase a sufficient number of D-cell batteries to provide continuing backup power. Another option may be Lithium-Ion external battery packs, which are widely used to provide reserve power to mobile phones and tablets, using a standardized so-called USB micro-B connector on the mobile device. We seek comment on the variety of options available, today and in the foreseeable future, as well as the technical trade-offs inherent in the different options.

30. We believe that a comprehensive consumer education plan would be critical to consumers’ ability to successfully self-provision CPE backup power. Are service providers already offering consumers necessary information regarding backup power options and on how to install and maintain backup power technologies? Are providers offering consumers a sufficient explanation of a device’s emergency use capabilities, battery backup units, and how to access detailed information about battery backup? We seek comment on whether we should require providers to develop and implement consumer education plans regarding the availability of CPE backup power. We also seek comment on when providers should make such information available. For example, when would it be sufficient for service providers to make this information available—at the point-of-sale, at the initial set up of CPE, or at some other point in the process? Should providers also provide detailed CPE backup power information immediately prior to a predicted extreme weather event or other anticipated emergency? We seek comment generally on additional ways in which providers may facilitate consumers’ ability to self-provision CPE backup power.

31. Finally, we seek comment on strategies for maintaining continuity of power for CPE during extended periods of commercial power failure. Power outages of such extended duration are comparatively rare, but they are likely to present additional challenges. During

prolonged outages, standard commercial supply chains that consumers would typically rely on for replacement batteries and other backup power technologies may be disrupted. We seek comment on how service providers can best assist consumers to obtain access to backup power resources during long-term power outages. What experiences have service providers had in these situations? We note the increasing popularity and proliferation of mobile cell phone charging stations among retail businesses. Such charging stations have repeatedly proven their usefulness in emergencies where carriers have provided disaster relief vehicles for customers of any wireless carrier to place calls, charge a variety of phones, and connect to the Internet via Wi-Fi. (We are also aware of efforts to provide fixed solar powered charging stations for people to charge their cell phones and laptop computers in several cities. We note that some of the charging stations used outside of the United States work very much like vending machines.) Would such solutions be feasible in more rural areas, or in areas with terrain that might be less accessible in the event of severe weather? Is it feasible to establish similar charging stations for CPE or their battery components that support other IP-based services?

32. We also seek detailed information regarding the costs and benefits of the CPE backup power requirements proposed in this document. What would be the costs and benefits of industry compliance with mandates such as these? (We observe that the proposed rules would permit providers to charge commercially reasonable fees for any provision of backup power required under the rules.) What are the costs of developing affordable backup power solutions for any CPE that currently lack them? With respect to backup power provided by batteries, we seek cost information for the entire battery lifecycle, including the costs of procuring, maintaining, and disposing of the batteries. We also seek comment on whether requiring providers to supply customers (or groups of customers) with initial backup power capability would introduce economies of scale. In addition, we seek comment on the costs to the consumer of self-provisioning CPE power during outages that exceed the initial window during which the

backup power obligation is on the provider, and whether these costs are more or less than they otherwise would be in the absence of any backup power requirements. In assessing the costs and benefits, how should we account for consumer usage patterns? Many consumers have already transitioned to fiber; what has been their experience, particularly with long duration or frequent power outages, and how should that inform our policymaking? Likewise, many consumers have mobile devices and many of those consumers have only wireless phones. How should that factor into our analysis?

33. In the same vein, how can we minimize the costs of compliance while maximizing the benefits? Would it be sufficient if every provider of facilities-based non-line-powered fixed voice services were to make available at least one piece of CPE that can be powered for at least 8 hours using commercially available batteries (such as D-cells)? (We note that some providers have deployed devices that are capable of providing back-up power for twenty-four hours.)

34. We next seek comment on the Commission's legal authority to adopt any of the proposals described above. Congress created the Commission, in part, "for the purpose of promoting safety of life and property through the use of wire and radio communications." As communications technologies increasingly operate on commercial power at the customer's premises rather than power from a central office delivered over copper lines, the Commission must ensure that technology transitions do not diminish access to critical communications services, especially 911. Congress has directed the Commission to "designate 911 as the universal emergency telephone number within the United States for reporting an emergency to appropriate authorities and requesting assistance," and to "promote and enhance public safety by facilitating the rapid deployment of IP-enabled 911 and E-911 services." The Commission is also charged with promulgating "regulations, technical standards, protocols, and procedures as are necessary to achieve reliable, interoperable communication that ensures access by individuals

with disabilities to an Internet protocol-enabled emergency network, where achievable and technically feasible.” We seek comment on whether requiring sufficient backup power to maintain 911 connectivity during power outages would be well within “[t]he broad public safety and 911 authority Congress has granted the FCC.”

35. Moreover, section 201(b) the Communications Act requires the practices of common carriers to be “just and reasonable,” and authorizes the Commission to “prescribe rules and regulations as may be necessary in the public interest to carry out the provisions” of the Act. Section 214(d) of the Act authorizes the Commission to require a common carrier “to provide itself with adequate facilities for the expeditious and efficient performance of its service as a common carrier.” And Section 214(a) empowers the Commission to attach conditions to the discontinuance of common carrier services to part or all of a community. The Commission also has general licensing authority under section 301 of the Act, as well as authority under Section 303(b) to “[p]rescribe the nature of the service to be rendered by each class of licensed stations and each station within any class” would provide an additional basis for Commission action. To the extent that our proposals apply to telecommunications carriers or fixed wireless service providers, we tentatively conclude that these provisions provide additional sources of authority for the proposals contained herein. We seek comment on this tentative conclusion.

36. Finally, in light of these statutory mandates, we seek comment on whether minimum backup power requirements to promote continuity of 911 and other communications services would be within Commission’s general jurisdictional grant under Title I of the Act and “reasonably ancillary to the Commission’s effective performance of its statutorily mandated responsibilities.” We also seek comment on any other sources of legal authority for the proposals set forth above.

37. Alternatively, should the Commission take steps, short of adopting rules, to promote the development and implementation of consumer CPE backup power solutions? The

CSRIC report observes that, due to the wide variety of backup power options and interfaces offered by individual service providers and CPE vendors, “some level of standardization is needed of . . . power systems and interfaces, if VoIP services are to meet the reliability that consumers expect in the United States.” Should the Commission take steps to promote the standardization of systems and interfaces that CSRIC recommends, e.g., in cooperation with industry standards bodies such as CableLabs or the Broadband Forum? Should the Commission charge CSRIC or another of its advisory bodies with addressing this issue? Do the best practices that CSRIC recommends in its recent report provide an adequate framework for ensuring that VoIP CPE maintain continuity of power in the event of commercial power failure? Should the Commission monitor whether the CSRIC best practices or any additional measures are being followed, and if so, how should it measure the effectiveness of these practices? While CSRIC’s recommendations specifically pertained to VoIP CPE, to what extent can CSRIC’s best practices be adapted to apply more broadly? What additional measures, beyond CSRIC’s recommendations, should providers undertake to ensure continuity of service during extended power outages?

38. We also seek comment on whether market-based incentives alone could deliver backup power solutions that meet consumer needs and expectations. To what extent do providers compete on the basis of their ability to provide reliable and continuous service during commercial power outages? Do providers have incentives to educate their customers on the potential loss of service that occurs during power outages, and to help them make informed decisions about the backup power options available to them? Is there evidence that backup capabilities for CPE have improved and will continue to improve?

39. Finally, we seek comment on any alternative approaches to providing continuity of communications for consumers, in the event of a power outage. In particular, we invite proposals that would address our concerns without the need to adopt regulatory requirements.

## **B. Copper Retirement**

40. We believe that the increasing frequency and scope of copper retirements call into question key assumptions that underpinned our existing copper retirement rules, and therefore changes are necessary to ensure that our copper retirement process protects retail customers and facilitates competition. In this document, we propose steps to maintain the vitality of our core values of consumer protection, competition, public safety, and national security through the forthcoming technology transitions. In particular, we propose revisions to our copper retirement rules that we believe will align the goals of consumer protection and competition with ongoing incentives to deploy advanced facilities and services. First, we propose defining “retirement” of copper—a term not currently defined in our rules—to include removing and disabling of copper loops, subloops, and the feeder portion of loops. Next, we seek comment on how to address allegations that in some cases incumbent LECs are not adequately maintaining their copper facilities that are not yet retired. We then explain why we do not intend to establish an approval requirement for copper retirement. We also propose and seek comment on improvements to our copper retirement process to better promote competition and protect consumers. This document then seeks comment on whether and how we should take action to promote the sale or auction of copper prior to retirement. Finally, it seeks comment on the adoption of best practices that can help address the need for reliable backup power.

### **1. Definition of “Copper Retirement”**

41. Although the Commission’s rules provide that incumbent LECs must comply with network change requirements before they retire any copper loops or subloops, the rules do not define “copper retirement,” either with regard to the facilities or the actions involved. We believe that it is necessary to propose a definition of copper retirement to provide parties with guidance on when a network change notification must be filed.

42. Copper Facilities to Be Included. We propose that copper facilities included within the concept of “retirement” should include copper loops, subloops, and the feeder portion of the loop. Including copper loops and subloops is consistent with our existing rules. However, our current rules do not encompass the feeder portion of loops. In its 2007 Petition for Rulemaking, BridgeCom requested that the Commission initiate a rulemaking proceeding to extend the copper retirement network change disclosure rules to the feeder portion of loops, noting that “if the feeder portion of the loop is unavailable for unbundled access, the practical difficulty of obtaining access to the remaining portion of the loop forecloses competitive access to the customer.” We tentatively agree, and we propose including the feeder portion of the loop within our definition of copper retirement. We seek comment on this proposal. Are there any reasons that we should not include copper feeder along with copper loops and subloops? Are there any other copper facilities that should be included?

43. Actions That Constitute Retirement. We seek comment on defining “copper retirement” as the “removing or disabling of” copper loops, subloops, and the feeder portion of loops. Should “removing” constitute the physical removal of copper? Should “disabling” mean rendering the copper inoperable? Should “disabling” constitute retirement only if it is intended to be long-term or permanent? Should “removing” or “disabling” be defined in different ways? Should we add additional forms of retirement to this definition, and if so what should they be? Should we employ different terminology than that proposed here?

44. “De Facto” Retirement and Adequate Maintenance of Facilities. As stated above, there are numerous allegations that in some cases incumbent LECs are failing to maintain their copper networks that have not undergone the Commission’s existing copper retirement procedures. Public Knowledge et al. express concern that consumers are losing access to basic phone service, and that “[d]enying basic phone service to people who have relied on the network for decades violates the network compact that has successfully guided our communications

policy for one hundred years.” First, to establish whether there is a factual basis for new rules in this area, are incumbent LECs in some circumstances neglecting copper to the point where it is no longer reliably usable? We seek specific examples and facts concerning the consequences to consumers, competition, and public safety. Next, we seek comment on whether and how we should revise our rules to address inadequate maintenance. If we find that new rules are necessary, one option would be to define retirement to include de facto retirement, i.e., failure to maintain copper that is the functional equivalent of removal or disabling. We seek comment on this approach. In particular, how would the Commission determine if an incumbent LEC’s treatment of its copper facilities fits the definition? For example, should the Commission consider service complaints? What would be the advantages and disadvantages of this approach to both consumers and competition? We seek comment on potential consequences or enforcement if copper facilities are allowed to degrade in quality to the point of de facto retirement without notice to customers? Is there an objective standard, such as industry standards, by which we can determine if copper is de facto retired? Are there any other legal or regulatory considerations with creating a de facto retirement standard?

45. Historically, the States, localities, and Tribal Nations have played a vital role in overseeing carriers’ service quality and network maintenance. Public Knowledge et al., however, suggest that some non-federal governmental entities may be less able to provide such oversight because some state legislatures “have removed state-level authorities’ ability to ensure customers continue to have meaningful access to the basic communications service they have always relied on at affordable prices.” We seek comment on the extent to which the States, localities, and Tribal Nations are able to address the consumer protection concerns raised by some incumbent LECs’ alleged failure to maintain copper facilities, and how that ability has changed over time. How should the trends in the regulatory capabilities of States, localities, and Tribal Nations inform our actions in this proceeding? We emphasize that in this document, we

do not seek to revisit or alter the Commission's determination in the Triennial Review Order to preserve state authority with respect to requirements for copper retirement.

**2. Revision of Copper Retirement Processes to Promote Competition and Protect Consumers**

46. We tentatively conclude that the foreseeable and increasing impact that copper retirement is having on competition and consumers warrants revisions to our network change disclosure rules to allow for greater transparency, opportunities for participation, and consumer protection. We discuss specific proposals and questions in this regard below. In connection with our proposed revisions to the copper retirement process, we propose streamlining our rules by creating a new § 51.332 in which we will consolidate network change notification requirements specific to copper retirement. We seek comment on this proposal.

47. Because we expect that an approval requirement would undesirably harm incentives for fiber deployment and because we do not wish to impose a technological mandate, we decline requests to revise our network change notification rules to require incumbent LECs to obtain our approval for copper retirement, as some have suggested. In other words, we believe that copper retirement should remain a notice-based process. We note in this regard that we anticipate that our separate proposal to ensure continued access to wholesale services following TDM discontinuances would address many of the concerns that have led certain competitive LECs to advocate an approval requirement.

**a. Competition: Expansion of Notice Requirements**

48. As incumbent LECs continue with their technology transitions, competitive providers have become concerned that the incumbent LECs are retiring copper networks in a manner that will harm their ability to compete. To ensure that competitive LECs are fully informed about the impact that copper retirements will have on their businesses, we propose revising our rules to require incumbent LECs to provide interconnecting competitors with

additional information about the potential impacts of proposed copper retirements. Specifically, we propose requiring that incumbent LECs provide a description of the expected impact of the planned changes, including but not limited to any changes in prices, terms, or conditions that will accompany the planned changes. (We emphasize that we do not seek through this proposal to provide an exemption from the statutory requirement pursuant to Section 214(a) to obtain authorization to discontinue, reduce, or impair service to a community or part of a community.) We further propose clarifying that incumbent LECs must provide direct notification of planned copper retirements to each telephone exchange service provider that interconnects with the incumbent LEC's network and must file a certificate of service to the Commission confirming the provision of such notice regardless of the timing of the retirement. (The short term notice provisions of our network change notification rules, which apply "[i]f an incumbent LEC wishes to provide less than six months notice of planned network changes," require the incumbent LEC to file a certification with the Commission stating that "at least five business days in advance of its filing with the Commission, the incumbent LEC served a copy of its public notice upon each telephone exchange service provider that directly interconnects with the incumbent LEC's network." Our network change notification rules state that "[i]ncumbent LEC notice of intent to [retire copper] shall be subject to the short term notice provisions of this section . . . ." we have not addressed the question of whether under our current rules an incumbent LEC must comply with the short term notice provisions for a copper retirement if it wishes to provide six months or more of advanced notice.) We seek comment on these proposals. Commenters may wish to address questions such as:

- Will the additional information be useful to competitive providers?
- Is there any reason why incumbent LECs should not be required to provide this additional information?

- Would providing this additional information impose an unreasonable burden on incumbent LECs?
- Is there any additional information that interconnecting telephone exchange service providers might need in order to make an informed decision?
- Would a narrower scope of information achieve the same goals as our proposal?
- How should the notification requirement apply in the event of a natural or manmade disaster?
- Should we require provision of this notification to information service providers that directly interconnect with the incumbent LEC's network and/or to any other entities?
- Should we take action to encourage incumbent LECs to meet with or more collaboratively communicate with entities to which they provide notice, and if so how?
- Would it be helpful for incumbent LECs to provide annual forecasts of expected copper retirements or other network changes; if so, to whom should they provide such forecasts?
- Should we act to ensure that the direct notifications proposed above—and/or network change notifications generally—are provided in a uniform format, and if so how can we best achieve that goal?

49. Competitive providers require adequate notice in order to plan for the elimination of copper-based facilities. Section 251(c)(5) requires “reasonable public notice of changes in the information necessary for the transmission and routing of services using that local exchange carrier’s facilities or networks, as well as of any other changes that would affect the interoperability of those facilities and networks.” To what extent does our section 251(c)(5)

authority support our proposals? Are the proposals above reasonable? To find that we have the necessary legal authority under section 251(c)(5), is it necessary to conclude that the information that is subject to our proposal is either “necessary for the transmission and routing of services using that local exchange carrier’s facilities or networks” or that it would “affect the interoperability of those facilities and networks” and, if so, is one of those standards met? Are there other sources of legal authority that would support the proposals described above?

50. Under our current rules, incumbent LECs must give at least ninety days’ advance notice of planned copper retirements. We seek comment on whether this amount of time is sufficient or whether it should be extended. If we do extend the time period, what is appropriate? Is 180 days appropriate? We note that the time period should provide sufficient notice for competitive LECs and for retail customers. We seek comment on whether a lengthier notice period would place too high a burden on incumbent LECs and/or whether the time period should be shortened.

**b. Consumer Protection**

51. Consumers and other retail customers need to understand what is and is not happening during a copper retirement, and they need to understand their choices about service. Since our current Part 51 rules make no provision at all for retail customers, we fear that this is not currently the case. As stated above, complaints have surfaced from multiple sources that in some cases incumbent LECs are moving customers of legacy services onto IP-based and triple play services during copper retirements, with no procedures in place for customer notice or choice. (Verizon has denied these allegations.) These allegations strengthen our belief that notice obligations should be extended to retail customers. Because copper retirement has the potential to reduce a retail customer’s choice, we believe that it is appropriate to extend the notice obligations of our network change disclosure rules to retail customers. We also believe that it is important to give retail customers a voice in the copper retirement process. The Bureau

already has created an e-mail address for public comment on copper retirement, and this document seeks to expand retail customers’ opportunities to participate in this important process. We also anticipate that notice to retail customers must differ from notice to providers. We therefore propose revising our network change disclosure rules to address the form, timing, and content of notice to retail customers, as well as to educate subscribers regarding copper retirements by which they may be affected, as detailed below. We seek comment on our legal authority to impose the requirements contemplated below.

**(i) Notice to retail customers.**

52. Recipients. Retail customers who are directly impacted by copper retirement need to know about it, and it simply is not realistic to expect consumers and other retail customers to monitor individual pages on the websites of carriers or the Commission. (We do not limit this proposal to residential consumers. Rather, references to “retail customers” and “subscribers” include non-residential users such as business and anchor institutions.) We therefore propose requiring incumbent LECs to provide notice of copper retirements to their retail customers who will be affected by the copper retirement. Under the proposed rule, an incumbent LEC would be required to directly notify all retail customers affected by the planned network change through electronic or postal mail unless the Commission authorizes in advance, for good cause shown, another form of notice. We seek comment on this proposal. Does it strike the correct balance between the benefits to retail customers of notification and the costs of providing the notification? We also seek comment on the ways in which a retail customer might be “affected” by a planned copper retirement. We propose that affected customers who must receive notice are anyone who will need new or modified CPE or who will be negatively impacted by the planned network change. We seek comment on this proposal. Does this proposal capture the correct population? In what circumstances other than needing new or modified CPE is a customer negatively impacted by a planned copper retirement? How

significant of a negative impact is necessary to trigger a notice requirement, and from whose perspective should the impact be evaluated? Should we adopt different or more limited criteria? Should our proposed notice requirement apply only to instances in which a technician would need to obtain access to the customer's premises? Should we deem any customer that will see a change in the electrical power arrangements for his or her service to be "affected"? Are there other circumstances or situations in which a retail customer could be affected by a planned copper retirement in a way that would warrant requiring direct notification of the planned changes? Are there any reasons why retail customers should not be entitled to notice of copper retirements by which they are affected?

53. We note that in some cases, it is possible that copper retirements might have little or no practical impact on retail customers. For example, a copper retirement may not result in the need to replace or install CPE on a retail customer's premises, eliminate line power, or affect the functionality of or access to third-party devices or services. In such circumstances, retail subscribers may find notice to be unnecessary or confusing. However, retail customers are affected by certain planned network changes involving copper retirement, particularly those that require a technician to seek entry to a retail customer's premises home. In those circumstances, we believe that an incumbent LEC's retail customers should be part of the network change disclosure process, and in particular we propose that incumbent LECs should be required to provide such customers notice of an impending copper retirement. We seek comment on these issues.

54. Form. The form of notice should be both efficient for incumbent LECs to undertake and effective in educating retail customers about retirements. We propose allowing incumbent LECs to use written or electronic notice such as postal mail or e-mail to provide notice to retail customers of a planned copper retirement. We seek comment on whether such types of notice adequately protect the interests of retail customers. For instance, in a 2002 order

addressing notice procedures for solicitation of opt-in or opt-out approval regarding use of customer proprietary network information (CPNI), the Commission stated:

[W]e recognize that consumers are deluged with unrequested or unwanted commercial e-mail (“spam”) and could easily overlook a notice provided via e-mail. Accordingly, we require carriers to follow certain precautions to ensure that such notices will not be mistaken as spam.

We seek comment on whether the notice procedures used in the CPNI context are appropriate for adaptation to the copper retirement context. What types of precautions should we require to ensure that retail customers have the information necessary to make informed decisions regarding their choices for telephone service? How can we ensure that notice to customers with disabilities is provided in accessible formats? With respect to notification via e-mail, we seek comment on requiring that carriers establish a method by which retail customers may choose the option to receive communications via e-mail and provide the e-mail address to which the incumbent LEC should send such communications. Would the fact that a customer has already agreed to receive monthly bills or other communications by e-mail demonstrate that the customer can be expected to receive adequate notice of network changes by e-mail? Should we require carriers to obtain express, verifiable, prior approval from retail customers before sending notices by e-mail? We also propose requiring that carriers send direct written notification in instances when an e-mail notice of a planned copper retirement is returned to the carrier as undeliverable. Would such procedures be adequate to ensure that subscribers receive notifications of planned copper retirements from incumbent LECs in a timely manner? Should we also permit oral notice or electronic notice other than by e-mail, such as by telephone call or publication on an incumbent LEC’s website? Would oral notification present opportunity for abuse or confusion? Should notice requirements differ depending upon the size of the carrier or other factors?

55. To ensure that sufficient information remains available to enable us to enforce our proposed rules, we propose requiring that incumbent LECs maintain records of customer notifications, in whatever form provided, for a minimum period of time. We seek comment on this proposal. If we impose such a requirement, what minimum retention period should we prescribe? In what circumstances, if any, would the burden imposed on incumbent LECs outweigh the Commission's need to have available to it records to evaluate a provider's compliance with our rules? What specific records should we require incumbent LECs to maintain, and in what format?

56. Content. We believe that retail customers are entitled to clarity regarding the services available to them. We therefore propose creating a requirement that the notices to subscribers affected by copper retirements state clearly and prominently that a retail customer "will still be able to purchase the existing service(s) to which he or she subscribes with the same functionalities and features as the service he or she currently purchases" if that statement is accurate; if this statement would be inaccurate, then we propose requiring the incumbent LEC to include a statement identifying any changes to the service(s) and the functionality and features thereof. We seek comment on this proposal. If the incumbent LEC cannot state accurately that the service(s) available to consumers will be unchanged, we would expect it to consider carefully whether it is required to file a discontinuance application pursuant to Section 63.71 of our rules. In that regard, we also seek comment on the allegations that in some cases, incumbent LECs are misleading retail customers into believing that they may no longer continue to receive legacy services (e.g., POTS) or, at a minimum, that incumbent LECs are failing to advise retail customers that their legacy service remains available over fiber.

57. Further, to be effective, the notice must provide retail customers with the information that they need to understand the practical consequences of copper retirement. To ensure that the notice is sufficient to serve its intended purpose, we propose minimum

requirements for the content of notices to subscribers. (As we noted in the 1998 CPNI Order, “[p]rescribing minimum content requirements will reduce the potential for customer confusion and misunderstanding as well as the potential for carrier abuses.”) Specifically, we propose certain requirements similar to those required by § 64.2008 of our rules for use of CPNI and by § 63.71 of our rules for notice to affected customers of planned service discontinuances. Further, we propose requiring that the notice provide sufficient information and that it contain a clear statement of the customer’s rights and the process by which the customer may comment on the planned copper retirement. We seek comment on these proposals.

58. We further seek comment on whether these proposed minimum customer notice requirements are adequate to protect consumer interests. Should there be additional requirements? Are any different or additional notice requirements necessary for certain populations, such as those who are not proficient in English or consumers with disabilities? Do these requirements place too onerous a burden on incumbent LECs? We also seek comment on whether the incumbent LEC should be required to make additional efforts to contact retail customers who do not contact the incumbent LEC to schedule a service call in instances when an incumbent LEC technician must visit the customers’ premises to complete work to effectuate the copper retirement.

59. Timing. Retail customers will need an opportunity to educate themselves regarding the implications of the planned copper retirement. We propose requiring that incumbent LECs give subscribers the same amount of notice that they give to interconnected providers, which we believe provides sufficient time for subscribers to become educated about the proposal. We seek comment on this proposal and, in the alternative, on what the appropriate notice period should be. We also propose allowing retail customers 30 days in which to comment on a proposed copper retirement from the date the Bureau releases its Public Notice. This matches the amount of time that interconnecting carriers have to comment, and we believe

it strikes the correct balance between providing retail customers with sufficient time to comment and ensuring certainty in our retirement process. We seek comment on this proposal.

60. Statutory Authority. To what extent does our section 251(c)(5) authority support our proposals? Is there any reason that retail customers should not be understood as persons entitled to receipt of “public notice”? Are the proposals above “reasonable”? To find that we have the necessary legal authority under section 251(c)(5), is it necessary to conclude that the information that is subject to our proposal is either “necessary for the transmission and routing of services using that local exchange carrier’s facilities or networks” or that it would “affect the interoperability of those facilities and networks,” and if so is one of those standards met? Are there other sources of legal authority that would support the proposals above? In addition, we seek comment on whether our proposals advance important government interests and on whether any other less restrictive approaches would accomplish our consumer protection goals.

61. Section 68.110(b). Section 68.110(b) of our rules provides that:

A provider of wireline telecommunications may make changes in its communications facilities, equipment, operations or procedures, where such action is reasonably required in the operation of its business and is not inconsistent with the rules and regulations in this part. If such changes can be reasonably expected to render any customer’s terminal equipment incompatible with the communications facilities of the provider of wireline telecommunications, or require modification or alteration of such terminal equipment, or otherwise materially affect its use or performance, the customer shall be given adequate notice in writing, to allow the customer an opportunity to maintain uninterrupted service.

What can we learn from § 68.110(b) in the context of our present customer notice proposal? Has this provision benefitted customers? To what extent does this provision authorize or otherwise relate to or overlap with our proposed customer notice? Is the overlap, if any, beneficial in ensuring customer understanding of the impact of various technology transitions, or does it render any portion of our proposal superfluous? Should § 68.110(b) serve as a model for customer notice requirements in the copper retirement context, and if so how?

**(ii) Upselling and consumer education**

62. As noted above, Public Knowledge and NASUCA have expressed concerns that incumbent LECs may take advantage of copper retirements to “upsell” subscribers—i.e., try to convince customers to purchase more profitable bundles of services in interactions that ostensibly are intended to prepare the customer for a change in facilities only (e.g., copper to fiber). We seek comment on whether this practice occurs or is reasonably foreseeable, the circumstances in which it occurs or would be reasonably foreseeable, and whether and how it harms or would harm consumers. Does upselling in such circumstances increase the likelihood of customer confusion? We are concerned by a number of consumer allegations that copper retirements have resulted in changes to their service may stem from aggressive or confusing upselling.

63. We therefore propose requiring incumbent LECs to supply a neutral statement of the various choices that the LEC makes available to retail customers affected by the planned network change. We seek comment on this proposal. We anticipate that it would enable consumers to make informed choices and to have the tools to determine for themselves what services to purchase. Should we require that this information be provided as a part of the consumer notice discussed above or separately from that notice? Should we require that this information be communicated in writing, or should oral communication be permissible? How can we ensure that such information is accessible to people with disabilities?

64. What kinds of services should we require the incumbent LEC to identify? Should it be required to identify services reasonably comparable to those to which the retail customer presently subscribes, or should a different standard apply? For voice services, should it be required to identify both facilities-based interconnected VoIP and TDM-based services? Should it ever be required to identify non-facilities-based services? Should it specifically be required to identify services designed for people with disabilities? We seek comment on whether the proposal would serve this purpose, whether it would address concerns about upselling, and whether it has any other benefits. We also seek comment on its drawbacks. In addition, we seek comment on whether this proposal advances important government interests and on whether any other less restrictive approaches would accomplish our consumer protection goals.

65. We further seek comment on whether we should require incumbent LECs to undertake additional measures beyond the notice described above to educate their retail customers regarding planned copper retirements by which they may be affected, and, if so, what measures should be required. The Commission required broadcasters to undertake consumer education initiatives in connection with the DTV transition in order “to ensure that consumers will receive the information they need to make proper preparations for the digital transition of the stations on which they rely for television service.” Is a similar education initiative necessary in the context of transitioning consumers away from legacy copper-based services? If so, what information should we require that consumers receive, how should it be conveyed, and to which consumers must this information be provided? We seek comment on the following possibilities:

- Direct mailing from the incumbent LEC to affected consumers containing clear explanations of any installation or modification of CPE;

- Minimum advance notice requirements for the scheduling of any service appointments and/or punctuality requirements for service appointments; and

We also seek comment on other possible consumer education requirements. Would the benefits of such requirements outweigh the burdens that they would impose on incumbent LECs? We seek comment on whether and how each consumer education requirement under consideration and any others suggested by commenters advance important government interests and whether other, less restrictive measures would accomplish the same goals. We also seek comment on our legal authority to impose any consumer education requirements.

66. In addition, we seek comment on appropriate enforcement remedies in the event of failure to comply with any new copper retirement customer notice, education, or upselling requirements. Would forfeiture be an appropriate remedy? Should we consider requiring refunds to customers?

**c. Expansion of Right to Comment**

67. Under our current network change disclosure rules, only information service providers and telecommunications service providers that directly interconnect with the incumbent LEC's network have the right to object to planned copper retirements, and they can only delay implementation for up to six months and seek technical assistance from the incumbent LEC. Since copper retirements may have significant impact on the public, members of the public should have the opportunity to comment publicly on such retirements. And industry participants should not be restricted unduly in the issues that they may draw to our attention. While the Bureau has provided the public at large with the opportunity to comment on network change disclosures via a special email address, we can do more to facilitate participation in this important process.

68. We anticipate that these comments will assist us in many circumstances. For instance, we expect that it would help call to our attention circumstances in which incumbent LECs are not complying with their obligations. (Consumers who have concerns about any particular situation also can contact our Consumer & Governmental Affairs Bureau to file complaints.”) Moreover, we will find value in hearing from the public about the potential benefits and/or harms that could come from the retirement of these copper facilities in our policymaking decisions going forward. Finally, we anticipate that we will be able to use the comments we receive to monitor for circumstances in which an incumbent LEC’s proposed copper retirement is accompanied by or is the cause of a discontinuance, reduction, or impairment of service provided over that copper—but the incumbent LEC has failed to seek the necessary authority, contrary to the requirements of Section 214(a) and our rules thereunder. We therefore propose revising our rules to provide the public, including retail customers and industry participants, with the opportunity to comment publicly on planned network changes. We seek comment on this proposal.

**d. Notice to States and the Department of Defense**

69. We recognize that we are not the only governmental authority with important responsibilities with respect to technology transitions. In particular, States serve a vital function in safeguarding the values of the Network Compact. As we have recognized on multiple occasions, both “State and federal enforcement tools are needed to protect consumers from fraudulent, deceptive, abusive, and unfair practices.” Further, the Department of Defense plays a key role in ensuring that telecommunications infrastructure remains secure and promotes public safety. We are cognizant that these authorities need information about transitions to fulfill their duties. Our rules implementing Section 214 already require applicants seeking discontinuance authority to provide copies of their applications to these entities, so our rules facilitate their ability to monitor some technology transitions. We believe that these authorities also need to

remain informed about copper retirements so that they can fulfill their respective missions with respect to the ongoing technology transitions. We propose requiring that incumbent LECs provide notice of planned copper retirements to the public utility commission and to the Governor of the State(s) in which the network change is proposed, and also to the Secretary of Defense. We expect that ensuring that State authorities receive notice of copper retirements will assist them in fulfilling their vital consumer protection role. Similarly, we expect that federal defense authorities will find this information useful in fulfilling their mission of ensuring the security of the Nation's communications networks. We seek comment on this proposal, including its benefits and drawbacks. Further, we seek comment on whether the same requirements should apply to other forms of network change notifications. Is there any reason why State authorities or the Department of Defense might need to receive notice of network changes that do not involve copper retirement? Are there other governmental entities that should also receive this direct notice, such as the Federal Aviation Administration, Tribal entities or municipalities, or should we rely on the expectation that any such other entity relying on the network will receive notice in the same manner as other customers? We also seek comment on our authority under section 251(c)(5) and/or other statutory provisions to impose this requirement.

**e. Certification**

70. To enable effective enforcement of any new rules adopted pursuant to this document, we propose requiring incumbent LECs to certify their compliance. Certification requirements also serve to remind parties of their obligations. Our existing network change rules require incumbent LECs to file in certain circumstances a certificate of service and/or a certification, each confirming fulfillment of certain obligations under our rules. (That certification must include: (1) a statement identifying the proposed changes; (2) a statement that public notice has been given in compliance with applicable rules; and (3) a statement identifying

the location of the change information and how it can be obtained.) Because we propose creating one comprehensive rule containing all requirements applicable to copper retirements, it will be most efficient for an incumbent LEC to provide us with a single certification confirming that it has fulfilled its various responsibilities. We seek comment on this proposal.

71. Under our existing rules, certifications, which must be filed when the incumbent LEC provides public notice other than by filing with the Commission, must include a statement identifying: (1) the proposed changes; (2) that public notice has been given in compliance with applicable rules; and (3) the location of the change information and how it can be obtained.

Furthermore, certificates of service under our existing rules must include: (1) a statement that, at least five business days in advance of its filing with the Commission, the incumbent LEC served a copy of its public notice upon each telephone exchange service provider that directly interconnects with the incumbent LEC's network; and (2) the name and address of each such telephone exchange service provider upon which the notice was served. We believe that this information will provide important insights into copper retirements, so we propose requiring incumbent LECs engaged in a copper retirement to file a unified certification containing all of the above information.

72. If we adopt our proposals to require incumbent LECs engaged in copper retirement to provide notice to customers as well as State and Department of Defense officials, we believe that it would be necessary for incumbent LECs to also certify their compliance with these proposed requirements to enable us to confirm their compliance. We therefore propose requiring incumbent LECs' certifications to include, in addition to the information required above:

- A statement that, at least five business days in advance of its filing with the Commission, the incumbent LEC served the required direct notice upon all affected retail customers;
- A copy of the written notice provided to affected retail customers; and
- A statement that the incumbent LEC notified and submitted a copy of its public notice to the public utility commission and to the Governor of the State in which the network change is proposed, and also to the Secretary of Defense.

73. We seek comment on these certification proposals, including on their benefits and drawbacks. Should we require incumbent LECs to include any additional information in the certifications that they file? Could we achieve our goals while requiring incumbent LECs to include less information in their certifications? What should be the deadline for filing a certification? Should we require either an officer of the incumbent LEC or an individual authorized by the incumbent LEC to sign the certification and attest to the truth and accuracy of the representations therein under penalty of perjury? We also seek comment on our authority under section 251(c)(5) and/or other statutory provisions to impose these certification requirements.

### **3. Sale of Copper Facilities That Would Otherwise Be Retired**

74. One potential way to maintain valued parts of the copper network while allowing incumbent LECs to continue their technology transition plans would be for incumbent LECs to sell or auction copper facilities that they intend to retire, on reasonable terms and conditions. Incumbent LECs could offload unwanted copper while competitors or other entities could continue to use the facilities to provide copper-based services. Consumers would continue to reap the benefits of their collective investment in our Nation's copper networks by retaining

more competitive alternatives than would otherwise be available.

75. Competitive LECs have demonstrated at least some interest in purchasing retired copper facilities. For example, in their petition for a copper retirement rulemaking, BridgeCom et al. request that the Commission consider requiring or authorizing incumbent LECs to sell or auction copper “pursuant to some public and fair process.” These competitive LECs claim a sale or auction would allow incumbent LECs to “terminate ownership and most responsibility for unwanted loops while also preserving the potential benefits of use of spare copper loops for provision of competitive services.” WorldNet, a competitive LEC serving small- and medium-sized business in Puerto Rico, also recommends requiring incumbent LECs to offer copper facilities for sale as a condition to retirement.

76. AT&T has stated as part of its technology transition proposal that it would consider selling retired copper facilities to competitive carriers that wish to use those facilities to provide service to their customers. In May, AT&T submitted a general proposal to offer copper loops that are retired under the network change disclosure rules for sale on commercial terms to competitive carriers. Under AT&T’s proposal, the parties would establish two agreements. The first agreement would be the general terms and conditions of the copper sale, including obligations of the purchaser. The terms state that the purchaser is responsible for any costs associated with re-terminating the cable at the frame and service area interface. In addition, the copper will be provided in “as-is” condition, and the purchaser is responsible for all maintenance and liabilities. This agreement also provides for a 90-day transition period and establishes the responsibilities of both parties during the transition. The second agreement provides for access to poles and/or conduit either by sale or lease. With respect to timing of the sale, AT&T’s proposal provides for a 150-day process: 30-day notice period, 30-day proposal or bid review period, and 90-day negotiation period to complete the sale. (If the parties do not sign the agreement at the end of the 90 days, the offer is rescinded.)

77. We believe that sale of copper facilities could be a win-win proposition that permits incumbent LECs to manage their networks as they see fit while ensuring that copper remains available as a vehicle for competition. We therefore seek comment on whether and how we should take action to promote the sale or auction of copper prior to retirement. We intend to develop a record to gauge the level of interest by competitive providers or others to purchase retired copper facilities and address some of the issues involved in a sale or auction. We further intend to determine what role, if any, the Commission should play in any sale or auction of copper, including whether the Commission should establish rules requiring incumbent LECs to make a good faith effort to sell their copper networks before retiring the facilities.

78. Interest in Purchase. First, we seek to gauge the level of interest by competitive providers and others in purchasing copper facilities that incumbents intend to retire. Under what terms and in what circumstances would competitive providers or others be interested in purchasing copper facilities? Although we have noted above the importance of copper and expressions of interest in the purchase of such facilities, do stakeholders feel purchasing retired copper is a valid or plausible method to address the competitive concerns raised by incumbent LEC copper retirement? What are the benefits and drawbacks to continued use of copper where fiber has been built-out?

79. Means of Facilitating Sale or Action. We seek comment on how the Commission can most effectively facilitate sale or auction of copper facilities than an incumbent LEC intends to retire. We tentatively conclude that the Commission should pursue a voluntary approach, rather than impose a requirement for sale or auction of copper facilities, as proposed by parties such as WorldNet. To that end, we seek comment on whether and how the Commission could facilitate the voluntary sale or auction of copper. What would be the role of the Commission, if any? Are there any existing rules or procedures the Commission may use to encourage the sale or auction of copper? Are there any regulatory barriers to the sale or auction of copper the

Commission should remove? Is there a role for state public service commissions in encouraging sale or auction of copper that an incumbent LEC intends to retire?

80. Structure of Sale or Auction. We seek comment on the ideal structure of any sale or auction, regardless of whether the sale or auction occurs voluntarily, as we propose, or pursuant to a regulatory requirement. We seek comment on AT&T's proposed structure, as well as on alternative sale and auction structures. If an auction mechanism were used, what form of auction would be most effective? How would a sale or auction work? For example, should a third-party be established to process the sale or act as clearinghouse for an auction? What are the advantages and disadvantages of each structure? Does one structure better promote the technology transition and our core values? To be effective, what is the minimum amount of time during which an incumbent LEC would need to offer the copper for sale or auction prior to retiring the network?

81. Price and Terms of Sale or Auction. We assume that price and terms of sale for copper facilities will be a driving factor in any transaction. We further assume that in any regulatory mechanism, incumbent LECs would be able to reject offers or bids that do not meet minimum thresholds on price and other terms. What would parties expect such minimum standards to be?

**C. Section 214 Discontinuances**

82. Our fundamental values and the Commission's statutory obligations are not lost or mooted merely because legacy services are discontinued. Therefore, it is critical for us to define carriers' responsibilities when discontinuing legacy services to ensure that we carry our values forward without regard to the particular technology used. In this document, we advance this goal in three ways. First, to ensure that we protect consumers, competition, and public safety, we seek comment on what constitutes an adequate substitute for a retail service being discontinued, reduced, or impaired. Second, we seek comment on better defining the scope of

our Section 214(a) authority, focusing in particular on the context of wholesale services. Third, we recognize the critical importance of ensuring that technology transitions do no harm to the benefits of competitive access, particularly in the period prior to ultimate action in our special access proceeding. Accordingly, we tentatively conclude that we should require incumbent LECs that seek Section 214 authority to discontinue, reduce, or impair a legacy service used as a wholesale input by competitive providers to commit to providing equivalent wholesale access on equivalent rates, terms, and conditions. We also seek comment on the relationship between the duration of this requirement, which would take the form of a condition imposed on a grant of discontinuance authority for TDM services on which competitive carriers depend, and the ultimate outcome of our special access proceeding.

**1. What Constitutes an Adequate Substitute for a Retail Service a Carrier Seeks to Discontinue, Reduce, or Impair?**

83. We agree with Public Knowledge that the public and industry alike would benefit from establishment of criteria to evaluate replacement technologies when a carrier files an application to discontinue a retail service pursuant to Section 214(a). We focus this inquiry, in particular, on consumer products. Industry and the public will benefit from articulation of clear, technologically neutral principles that define what constitutes an adequate substitute for consumers for a discontinued retail service. We therefore seek comment on whether the Commission should update its rules to define what would constitute an adequate substitute for retail services that a carrier seeks to discontinue, reduce, or impair in connection with a technology transition (e.g., TDM to IP, wireline to wireless). We will also look to any service-based experiments and other data collection activities that occur pursuant to the January Technology Transitions Order to inform these questions. We undertake this inquiry, in part, to ensure that the transition to IP-supported technologies does not impair the security, integrity and reliability of our nation's communications infrastructure.

84. What factors should we consider in evaluating Section 214 filings concerning discontinuance of retail services? Should certain factors be given greater weight than others? In particular, how much weight should we give to the adequacy of available substitutes? In the context of AT&T's proposed service-based experiments, Public Knowledge identified ten attributes it believes require particular evaluation: "(1) Network capacity, (2) Call quality, (3) Device interoperability, (4) Service for the deaf and disabled, (5) System availability, (6) PSAP and 9-1-1 service, (7) Cybersecurity, (8) Call persistence, (9) Call functionality, and (10) Wireline coverage." We seek comment on whether and how the Commission should consider these and/or other attributes and on the costs and benefits of articulating specific attributes. And we seek comment on what law enforcement capabilities the Commission should seek to preserve as the underlying communications technology changes. (We are committed to ensuring that law enforcement capabilities are maintained throughout the technology transitions.) We also seek comment on whether it should be necessary to meet all of the criteria to obtain streamlined treatment and/or approval or whether some criteria should be considered more important than others. And what should the Commission look for in evaluating each of the factors commenters may suggest? What enforcement remedies are appropriate for a carrier that obtains discontinuance authority predicated on meeting certain adequacy standards but fails to abide by those commitments? Should an applicant that seeks to discontinue a retail service be entitled to streamlined treatment and/or approval if a competitor offers a service that meets the criteria that we identify for an adequate substitute? What are the costs and benefits of this and other approaches to implementing criteria for adequacy of substitutes? We emphasize that we seek to develop technology-neutral criteria and do not wish to issue any technology mandates. We also seek comment on whether consumers expect, or should be entitled to expect, the same or equivalent functionalities from new services, or whether there are benefits from new services (e.g., more choice, lower cost, better features) that would compensate for any differences.

85. Below we discuss several of the attributes identified above, but we emphasize that we are interested broadly in identification and discussion (including weighing of costs and benefits) of possible attributes that the Commission should consider in evaluating Section 214 filings concerning discontinuance of retail services.

86. With respect to services for consumers with disabilities, we seek comment on the extent to which an applicant that seeks to discontinue support for analog services must ensure that its services are compatible with assistive devices used by people with disabilities, and provide notice to people with disabilities regarding the potential for disruption in service. (Consumers with disabilities ask the Commission to make sure that accessible features are built into the design of new networks and services from the outset, and that various currently accessible technologies are made widely available and affordable during and after the retirement process.) For example, to what extent will the applicant be required to identify the services that might be disrupted—e.g., home health monitoring, TTY-based communications—and the extent to which loss of support for each such service might have an adverse impact on people with disabilities, as well as its plans for acceptable replacements? How should we account for consumer trends in determining adequate substitutes? What factors affecting access by people with disabilities should we consider in defining what would constitute an adequate substitute for retail services that a carrier seeks to discontinue, reduce, or impair in connection with a technology transition?

87. With respect to call functionality, what functionality is relevant? Should we consider only functionality related to voice calls (e.g., ability to use caller ID), or should we consider non-call functions as well? With regard to non-call functionality, should we consider, for instance, the functionality of third-party CPE and/or services such as home alarms, fax machines and medical alert monitors? Should we apply general principles or more specific

technical standards, and in each case what principles or standards should we apply? How can we ensure that our evaluation of functionality is technology neutral?

88. With regard to call persistence, what factors should we consider? Should we consider only voice calls or other forms of communication as well? Should we evaluate the likelihood of improperly dropping calls or other forms of communication? Should we consider whether there is risk of blocking, choking, reducing, or restricting traffic? (We note that the Bureau has issued two Declaratory Rulings clarifying that carriers are prohibited from blocking, choking, reducing, or restricting traffic in any way, including to avoid termination charges; and clarifying the scope of the Commission's prohibition on blocking, choking, reducing, or restricting telephone traffic which may violate section 201 or 202 of the Act.) Are other criteria relevant? What metrics should we apply? Should we apply a minimum performance threshold? How can we ensure that call persistence will be sustained after a Section 214 application is approved?

89. With respect to communications security, while IP technologies can produce cost efficiencies, they also can create the potential for network security risks through the exposure of network monitoring and control systems to end users. Communications network owners and operators have expressed a broad consensus that risk management measures are necessary to address these risks. Providers should implement security plans that can be communicated internally and externally with providers for which security interdependencies exist. We seek comment on the extent to which providers have implemented such measures; whether such implementation has been effective; and whether various providers possess understanding of other providers' risk management measures sufficient to address collective risks in an interconnected IP-network environment. We also seek comment on whether the Commission should require demonstration, as part of the Section 214 discontinuance process, that any IP-supported networks

or network components offer comparable communications security, integrity, and reliability. If so, we seek comment on what factors would be relevant to making such a determination.

90. With respect to PSAP and 911 service, is it sufficient that a provider demonstrate that a substitute retail service available to its customers will offer 911 capabilities that comport with Commission rules? Should providers further affirm that the transition to such substitute retail service will not result in any reduction in 911 capability relative to that offered by the discontinued service? For example, if a provider supplies latitude and longitude (“x,y”) coordinates for fixed and portable wireless home phones and femtocells that may replace in-home wire-based solutions, is that equivalent to the provision of a validated civic address Automatic Location Identification (ALI)? What is the impact on PSAPs if providers take different approaches in providing civic address ALI or just x,y whereas previously PSAPs have been expecting specific information from such providers? Do the issues raised in the 911 Policy Statement and NPRM, also adopted today, have any bearing on these questions? Although our primary focus is on consumer products, we also seek comment on what criteria we should apply for carriers that seek under Section 214 to discontinue 911 service to PSAPs. We also seek comment on the relationship between consideration of PSAP and 911 service pursuant to Section 214(a) and the 911 Policy Statement and Notice of Proposed Rulemaking also adopted today.

91. In addition to developing factors to guide evaluation of Section 214 discontinuance filings, we are interested in learning about means by which carriers and other industry segments can work collaboratively to ensure that new services meet the expectations and needs of consumers before any discontinuance occurs. For example, ADT Security Services reports that “the alarm industry is working with IP communications service providers to develop technical agreements that base their communications on Managed Facilities-Based Voice Network (MFVN) standards” to ensure that alarm monitoring systems already in consumers’ homes can transmit alarm signals properly during emergency situations. We seek comment on

progress in developing and implementing the MFVN standards and other standards or initiatives that may ease consumers' transition to new services. Also, is there anything the Commission can or should do to facilitate the development and implementation of such solutions?

## **2. Scope of Section 214(a) Discontinuance Authority and Wholesale Services**

92. Rebuttable Presumption. Under our precedent, a carrier need not seek Commission approval when discontinuing service to carrier customers if there is no discontinuance, reduction, or impairment of service to retail end-users. We do not propose to change course from this precedent. However, Section 214 and our implementing rules were designed to protect retail customers from adverse impacts associated with discontinuances, reductions, or impairments of service. As described above, competitive LECs play a vital role in serving the enterprise market. Where an incumbent LEC discontinues, reduces, or impairs a service offering used by competitive LECs to provide end users with service, this can also be expected to affect the competitive LECs' retail customers. We seek comment on whether this is the case. We are concerned that in the absence of further guidance, some carriers will mistakenly assume that their wholesale services are not relied upon by competitive LECs in serving retail customers, and thus will discontinue, reduce, or impair those services without following the process mandated by the Act. We seek comment on whether this concern is justified.

93. To address this potential issue, we seek comment on adopting a rebuttable presumption that where a carrier seeks to discontinue, reduce, or impair a wholesale service, that action will discontinue, reduce, or impair service to a community or part of a community such that approval is necessary pursuant to Section 214(a). This presumption would be rebutted where it could be shown that either: (i) discontinuance, reduction, or impairment of the wholesale service would not discontinue, reduce, or impair service to a community or part of a community; or (ii) discontinuance, reduction, or impairment of the wholesale service would not

impair the adequacy or quality of service provided to end users by either the incumbent LEC or competitive LECs in the market. We seek comment on this proposal, including on its costs and benefits. Is there any reason why we should not adopt this proposal? Should we modify it in any way? Should we evaluate the quality of service provided to end users with reference to service by competitive LECs in the market that use the wholesale service in question, or should we consider a different denominator of service providers? Is such a presumption consistent with Section 214(a)? How should we confirm that an incumbent LEC that discontinues a wholesale service and declines to file an application has properly rebutted the presumption? Should we require the incumbent LEC to file a certification with the Commission identifying and providing the basis for its conclusion? Should the incumbent LEC be required to send a copy of this certification to its competitive LEC wholesale customers and/or make the certification public? What should be the format and timing of this certification? In the alternative, should the incumbent LEC be required to maintain a record of the facts and analysis it relied on to determine the presumption was rebutted for a set period of time, and if so what period of time? Should we instead allow the incumbent LEC to determine for itself what records to retain?

94. Term Discount Plans. A discrete but related issue concerns whether a Section 214(a) discontinuance application is required when certain term discount plans are discontinued. For example, many TDM-based services are provided pursuant to various term plans for specific periods of time, such as one-year, three-year, five-year and seven-year commitment periods. In transitioning from TDM-based services to IP-based services, questions arise as to whether a Section 214 application is required with individual incremental changes, such as the elimination of a subset of the available service plans that reduce options for customers by eliminating longer term plans with associated higher discounts (lower prices) prior to elimination of shorter term plans. In such situations, the carrier may claim at each incremental change that, because there are other term plans available, the service is still available and thus no Section 214 application to

discontinue, reduce, or impair service is required. Accordingly, we seek comment on this situation. When a carrier is transitioning from TDM-based services to IP-based services, at what point in the process is the carrier required to file a Section 214 application? Although the Commission previously has held that a change in rates does not constitute a discontinuance of a service under Section 214, are there any rate changes that might fall outside the logic of those decisions, and should the Commission change course in this situation and conclude that an elimination of certain rate options can constitute an impairment of service if it is part of a longer term transition? For instance, in many of the sets of term plans applicable to an individual service, the largest discounts are provided to customers that purchase term plans longer than five years. If a carrier pursues elimination of the term plans individually, eliminating the longer term plans first, customers' only purchase options would be shorter length term plans at much higher rates, an effective rate increase. Does such a rate increase constitute a reduction or impairment of service under Section 214, and what criteria may be helpful in this analysis? If not, at what point, if any, in the course of eliminating individual rate options for the same service is the service reduced or impaired, such that the carrier is required to seek authority pursuant to Section 214? We seek comment on this question and on the point in the transition at which incumbent LECs should be required to obtain Section 214 authority. What are the costs and benefits of various approaches to these questions?

95. Tariffed and Non-Tariffed Services. We note that there may be a question regarding whether a carrier is required to file a Section 214 application if a non-tariffed service still being offered is functionally very similar to a tariffed service being discontinued. Indeed, in the past carriers have argued that no Section 214 application is required when discontinuing a tariffed service if they currently offer a non-tariffed service that is similar to the tariffed service being discontinued. We seek comment on whether in such situations, a Section 214 application should be required, because there is a service being removed from the tariff and whether that

constitutes a discontinuance, impairment or reduction of service, and on the costs and benefits of possible approaches.

### **3. Maintaining Wholesale Access to Last-Mile Services**

96. Competitive LECs are concerned that, if incumbent LECs discontinue TDM-based services in the transition from TDM to IP-based services, competitive LECs will lose the ability to access last-mile facilities necessary to serve their customers, such as DS1 and DS3 special access lines. (No discontinuance would affect an incumbent LEC's obligations to provide unbundled access to loops under § 51.319(a)(4) of our rules.) As noted above, competitive LECs use these facilities to serve retail customers, including providing packet-based broadband services to hundreds of thousands of American businesses at competitive prices. COMPTEL asserts that "the overwhelming majority of competition in the business broadband market comes from competitive carriers that rely substantially on last-mile inputs from the incumbent LEC." Competitive LECs, like the incumbents, want to transition customers to next generation services and desire a transition without disruptions in service and on comparable terms and conditions.

97. According to the competitive LECs, the uncertainty associated with the possible discontinuance of incumbent LECs' legacy services and replacement with packet-based services creates competitive disadvantages and major concerns about the ability to serve present and new customers. Windstream, for example, argues competitive LECs "face the prospect of entering into long-term contracts on the assumption that they will continue to be able to purchase equivalent services at equivalent rates, terms, and conditions after the transition, or attempting to price those future unknown input services, rates, terms and conditions into their contracts." While competitive LECs request that the Commission protect their access rights to these last-mile services amidst technology transitions, incumbent LECs are concerned that being required to offer long-term TDM arrangements may impede their plans to move to IP-based services.

98. In this rulemaking proceeding, we examine the role of Section 214 of the Act as incumbent LECs seek to discontinue TDM-based service used as wholesale inputs. As guidance, the National Broadband Plan recommends that the Commission adopt wholesale access frameworks to “ensure widespread availability of inputs for broadband services.”

99. The Section 214 discontinuance process provides for Commission oversight to ensure that consumers are fully informed of any proposed change to reduce or end service, and that adequate alternative services are available to them. Related to that, § 63.71 of the Commission’s rules establishes the procedures that carriers must follow to obtain such Commission approval, including notification of affected customers and the filing of an application for approval of the proposed discontinuance. As incumbent LECs announce plans and deadlines to transition away from TDM-based services to IP-based services, the Commission will be called upon to strike the appropriate balance between facilitating a viable migration path to IP-based services for incumbent and competitive LECs, and promoting competition and the public interest within the meaning of Section 214. We also take this opportunity to point out that since Section 214(a) and the Commission’s discontinuance rules apply to common carrier and interconnected VoIP services, the mere fact that a carrier obtains discontinuance authorization under Section 214(a) for such services has no legal bearing on its obligation to provide UNEs under § 51.319 of our rules. The Commission has held that “the provision of an unbundled network element is not the provision of a telecommunications service.”

100. Technology transitions must not harm or undermine competition. Our present goal is to maintain established rules and decisions that provide for wholesale access to critical inputs as we continue our special access rulemaking proceeding, along with other initiatives such as technology trials, to determine how customers are affected and whether rules and policies need to be modified in the future. Given the vital role that wholesale access to critical inputs plays in promoting competition, we seek to ensure on an interim basis the availability of last-

mile services to competitive LECs as incumbent LECs begin to discontinue their legacy networks in the transition to IP technology. As a result, we tentatively conclude that we should require incumbent LECs that seek Section 214 authority to discontinue, reduce, or impair a legacy service that is used as a wholesale input by competitive carriers to commit to providing competitive carriers equivalent wholesale access on equivalent rates, terms, and conditions. We seek comment on this tentative conclusion and how or whether it will promote the benefits of competition—innovation, investment, economic growth for the nation, and competitive prices and services for consumers. To what services should this apply? We also seek comment on the costs and benefits of such a conclusion—for example, how would it affect the incentives for incumbent LECs to upgrade their facilities? Should we require incumbent LECs to commit to a different standard, such as a “reasonably comparable” standard? We also seek comment on whether we should apply any standard that we establish as a condition on the grant of Section 214 discontinuance authority to preserve competition as we transition to an all-IP world or as a guide when considering applications. If applied as a condition on the grant, then we seek comment on the appropriate term. For example, should its duration be indefinite, or should it be dependent upon the outcome of our special access proceeding? And we seek comment on appropriate enforcement remedies for failure to comply with this proposed obligation.

101. Furthermore, through seeking comment in this rulemaking, we seek to establish important ground rules that would facilitate the IP transition by establishing objective standards and clear criteria for applying the standard set forth above in advance of Section 214 applications and narrowing the range of time-consuming individual disputes. For example, Windstream has suggested that when an incumbent LEC is discontinuing legacy services offered at speeds of 50 Mbps or less that the Commission apply six principles to evaluate replacement offerings as follows:

- (1) Price per Mbps Shall Not Increase. The price per Mbps of the IP replacement product shall not exceed the price per Mbps of the TDM product that otherwise would have been used to provide comparable special access service at 50 Mbps or below.
- (2) A Provider's Wholesale Rates Shall Not Exceed Its Retail Rates. An incumbent's wholesale charges for the IP replacement product shall not exceed its retail rates for the equivalent offering.
- (3) Basic Service Pricing Shall Not Increase. The wholesale price of the lowest capacity level of special access service at or above the DS1 level shall not increase (e.g., 2 Mbps Ethernet price shall not exceed the DS1 price when 2 Mbps is the lowest Ethernet option available).
- (4) Bandwidth Options Shall Not Be Reduced: Wholesale bandwidth options must, at a minimum, include the options that the incumbent offers to its retail business service customers.
- (5) No Backdoor Price Increases: Price hikes shall not be effectuated via significant changes to charges for NNI or any other rate elements, lock-up provisions, ETFs, special construction charges, or any other measure.
- (6) No Impairment of Service Delivery or Quality: Service functionality and quality, OSS efficiency, and other elements affecting service quality shall be equivalent to, if

not better than, what is provided for TDM inputs today.

Installation intervals and other elements affecting service delivery shall be equivalent to, if not better than, what the incumbent delivers for its own or its affiliates' operations.

We seek comment on each of Windstream's proposed principles and other principles the Commission could use to guide its determinations of a functionally equivalent service with equivalent rates, terms, and conditions. Are some of Windstream's proposed principles more appropriate for adoption in this proceeding than others? For each principle, should its duration be indefinite, or should it be dependent upon the outcome of our special access proceeding?

102. We note that the Commission, in evaluating Section 214 applications, is called upon to examine a number of factors. (Those factors include: (1) the financial impact on the provider of continuing to provide the service; (2) the need for the service in general; (3) the need for the particular facilities in question; (4) the existence, availability, and adequacy of alternatives; and (5) increased charges for alternative services, although this factor may be outweighed by other considerations.) To accomplish the underlying goal of ensuring that competition is not adversely affected as incumbent LECs discontinue their TDM services in the IP transition, which the tentative conclusion is intended to address, we seek comment on whether the Commission should evaluate any other factors in the reasonable interpretation of Section 214. Should we consider revising our rules in the way we apply this provision? We note that many of the services that the incumbent LECs are claiming would replace TDM offerings currently are not offered pursuant to tariffs and therefore, lack the transparency and section 203 protections that purchasing a tariffed service provides. How should the Commission take these differences into account in considering whether these services are adequate substitutes?

103. In addition, we seek comment on whether we should consider revising § 63.71 of the Commission's rules that establish the procedures that carriers should follow to obtain Section

214 approval, including notification of affected customers. We recognize that incumbent LECs and wholesale customers may be at different stages of moving to IP-based services. Incumbent LECs argue that without the ability to discontinue long-term TDM-based offerings, their transition plans to IP services may be impeded. Meanwhile, competitive LECs express concerns that “wholesale customers need significant lead time so that they can both plan for the necessary changes to their products as well as prepare their customers for changes to offerings dependent upon ILEC last-mile facilities.” Therefore, we seek comment on what is sufficient notice for competitive LECs when there is a discontinuance, reduction, or impairment of service in a transitioning market. In particular, how much lead time is needed for a competitive LEC to move its customers to alternative service arrangements absent disruptions in service while not unduly impeding the incumbent LEC’s ability to transition? Additionally, many competitive LECs currently purchase wholesale inputs pursuant to long-term tariffs and other agreements that contain early termination penalties. How should such terms be treated when the provisioning carrier is seeking to end provisioning a service and the purchasing carrier needs to move to alternative services and/or providers in order to continue providing its retail offering? We seek comment on both the timing and form of notice. Does the sufficiency of the notice depend on how many of the competitive LEC(s) customers will have to be moved as a result of the discontinued, reduced, or impaired service?

#### **IV. PROCEDURAL MATTERS**

##### **A. Ex Parte Presentations**

104. The proceeding this document initiates shall be treated as 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.

## **B. Filing Instructions**

105. Pursuant to §§ 1.415 and 1.419 of the Commission's rules, 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 by paper or by using the Commission's Electronic Comment Filing System (ECFS).

- 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. Because 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 12<sup>th</sup> 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 12<sup>th</sup> 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 e-mail to [fcc504@fcc.gov](mailto:fcc504@fcc.gov) or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

### **C. Paperwork Reduction Act**

106. This document contains proposed new and modified 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."

**D. Regulatory Flexibility Act**

107. As required by the Regulatory Flexibility Act of 1980 (RFA), the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules proposed in the NPRM. The analysis is found below. We request written public comment on the analysis. Comments must be filed in accordance with the same deadlines as comments filed in response to the NPRM and must have a separate and distinct heading designating them as responses to the IRFA. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of this Notice of Proposed Rulemaking, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.

**E. Initial Regulatory Flexibility Analysis**

1. As required by the Regulatory Flexibility Act (RFA), the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the policies and rules proposed in this Notice of Proposed Rule Making (Notice). 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 paragraph [insert] of this Notice. The Commission will send a copy of this Notice, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). In addition, the Notice and IRFA (or summaries thereof) will be published in the Federal Register.

**F. Need for, and Objectives of, the Proposed Rules**

2. The Notice proposes new steps to address competition and consumer protection issues in connection with copper retirement, service transitions, and related issues. The Commission has recognized that the Nation's communications networks are in the midst of a technological revolution involving the transition from a network based on time-division multiplexed (TDM) circuit-switched voice services running on copper loops to an all-Internet Protocol (IP) multi-media network using copper, co-axial cable, wireless, and fiber as physical infrastructure. The Commission has also recognized the need to ensure our core values as we move further toward the tipping point of the technology transition. Thus, the Commission seeks comment on a variety of issues in the following areas.

3. First, the Notice proposes and seeks comment on steps the Commission could take to safeguard continuity of communications throughout a power outage, including the possible adoption of new rules in this area.

4. Second, the Notice seeks comment on a proposed definition of copper retirement that includes within its purview copper loops, subloops, and the feeder portion of the loop, and the removing and disabling of those loops, subloops and feeder portion of the loops.

5. Third, the Notice seeks comment on whether and how the Commission's rules should ensure that incumbent LECs maintain copper facilities for which they have not undergone the retirement process. The Notice also seeks comment on whether and how the Commission should revise its rules to address inadequate maintenance, including whether to define retirement to include de facto retirement, i.e., failure to maintain copper that is the functional equivalent of removal or disabling.

6. Fourth, the Notice seeks comment on modifications to the Commission's existing network change disclosure rules. These rule revisions would expand notice, comment, and objection requirements for notices of network change. Specifically, the Notice seeks comment

on whether to: (1) encompass the feeder portion of copper loops and subloops in the rules; (2) require direct notification to all interconnecting carriers plus a public notice filed with the Commission; (3) extend the minimum time for providing notice of copper retirements; (4) expand the notice requirement to retail customers; (5) allow incumbent LECs to use written or electronic notice such as e-mail to provide notice to retail customers of a planned copper retirement; (6) impose minimum requirements for the content of notices to retail customers; (7) require incumbent LEC to maintain records of customer notifications for some period of time; (8) prohibit incumbent LECs from including in notice to retail customers any statement attempting to encourage the purchase of a service other than the service to which the customer currently subscribes; (8) require that retail customers be given the same amount of notice as we propose to provide to interconnected providers in connection with copper retirement notices; (9) require that the incumbent LEC file a certificate of service with the Commission that includes all of the following: (i) a statement that identifies the proposed changes; (ii) a statement that public notice has been given in compliance with the rule; (iii) if an incumbent LEC provides public notice other than by filing with the Commission, a statement identifying the location of the change information and describing how this information can be obtained; (iv) a statement that, at least five business days in advance of its filing with the Commission, the incumbent LEC served a copy of its public notice upon each interconnecting telephone exchange service provider; (v) the name and address of each interconnecting provider upon which written notification was served; (vi) a statement that, at least five business days in advance of its filing with the Commission, the incumbent LEC served the required direct notice upon all affected retail customers; (vii) a copy of the written notice provided to affected retail customers; and (viii) a statement that the incumbent LEC notified and submitted a copy of its public notice to the public utility commission and to the Governor of the State in which the network change is proposed,

and also to the Secretary of Defense; and (10) allow retail customers the opportunity to publicly comment on copper retirement notices.

7. Fifth, the Notice seeks comment on whether and how the Commission should take action to promote the sale or auction of copper prior to retirement. The Notice seeks to gauge the level of interest by competitive providers and others in purchasing copper facilities that incumbents intend to retire, including under what terms and in what circumstances would they be interested in purchasing copper facilities. The Notice also seeks comment on whether and how the Commission should encourage the voluntary sale or auction of copper.

8. Sixth, seeks comment on whether the Commission should update its rules to define what would constitute an adequate substitute for a retail service that a carrier seeks to discontinue, reduce, or impair.

9. Seventh, the Notice seeks comment on establishing a rebuttable presumption that where a carrier seeks to discontinue, reduce, or impair a wholesale service, that action will discontinue, reduce, or impair service to a community or part of a community such that approval is necessary pursuant to Section 214(a). The Notice also seeks comment on whether a Section 214(a) discontinuance application is required when certain term discount plans are discontinued. And the Notice seeks comment on whether a carrier is required to file a Section 214 application if a non-tariffed service still being offered is functionally very similar to a tariffed service being discontinued.

10. Finally, with respect to competitive access to wholesale last-mile services, this Notice tentatively concludes that we should require incumbent LECs that seek Section 214 authority to discontinue, reduce, or impair a legacy service that is used as a wholesale input by competitive providers to commit to providing competitive carriers equivalent wholesale access on equivalent rates, terms, and conditions.

**G. Legal Basis**

11. The proposed action is authorized under sections 1, 2, 4(i), 214, and 251 of the Communications Act of 1934, as amended; 47 U.S.C. 151, 152, 154(i), 214, and 251.

**H. Description and Estimate of the Number of Small Entities To Which the Proposed Rules Will Apply**

12. The RFA directs agencies to provide a description and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted. 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 SBA.

13. The majority of our proposals in the Notice will affect obligations on incumbent LECs. Other entities, however, that choose to object to network change notification for copper retirement under our new proposed rules may be economically impacted by the proposals in this Notice.

14. **Small Businesses.** Nationwide, there are a total of approximately 28.2 million small businesses, according to the SBA.

15. **Wired Telecommunications Carriers.** The SBA has developed a small business size standard for Wired Telecommunications Carriers, which consists of all such companies having 1,500 or fewer employees. Census data for 2007 shows that there were 31,996 establishments that operated that year. Of those 31,996, 1,818 operated with more than 100 employees, and 30,178 operated with fewer than 100 employees. Thus, under this size standard, the majority of firms can be considered small.

16. **Local Exchange Carriers (LECs).** Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. According to Commission data, Census data for 2007 shows that there were 31,996 establishments that operated that year. Of those 31,996, 1,818 operated with more than 100 employees, and 30,178 operated with fewer than 100 employees. Consequently, the Commission estimates that most providers of local exchange service are small entities that may be affected by the rules and policies proposed in the Notice.

17. **Incumbent Local Exchange Carriers (incumbent LECs).** Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to incumbent local exchange services. The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. According to Commission data, 1,307 carriers reported that they were incumbent local exchange service providers. Of these 1,307 carriers, an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees. Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by rules adopted pursuant to the Notice.

18. We have 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. We have therefore included small incumbent LECs

in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

19. **Competitive Local Exchange Carriers (competitive LECs), Competitive Access Providers (CAPs), Shared-Tenant Service Providers, and Other Local Service Providers.** Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. 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. According to Commission data, 1,442 carriers reported that they were engaged in the provision of either competitive local exchange services or competitive access provider services. Of these 1,442 carriers, an estimated 1,256 have 1,500 or fewer employees and 186 have more than 1,500 employees. In addition, 17 carriers have reported that they are Shared-Tenant Service Providers, and all 17 are estimated to have 1,500 or fewer employees. In addition, 72 carriers have reported that they are Other Local Service Providers. Of the 72, seventy have 1,500 or fewer employees and two have more than 1,500 employees. Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, Shared-Tenant Service Providers, and Other Local Service Providers are small entities that may be affected by rules adopted pursuant to the Notice.

20. **Interexchange Carriers (IXCs).** Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to interexchange services. The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. According to Commission data, 359 companies reported that their primary telecommunications service activity was the provision of interexchange services. Of these 359 companies, an estimated 317 have 1,500 or fewer employees and 42 have more than 1,500 employees. Consequently, the

Commission estimates that the majority of interexchange service providers are small entities that may be affected by rules adopted pursuant to the Notice.

21. **Other Toll Carriers.** Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to Other Toll Carriers. This category includes toll carriers that do not fall within the categories of interexchange carriers, operator service providers, prepaid calling card providers, satellite service carriers, or toll resellers. The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. Census data for 2007 shows that there were 31,996 establishments that operated that year. Of those 31,996, 1,818 operated with more than 100 employees, and 30,178 operated with fewer than 100 employees. Thus, under this category and the associated small business size standard, the majority of Other Toll Carriers can be considered small. According to Commission data, 284 companies reported that their primary telecommunications service activity was the provision of other toll carriage. Of these, an estimated 279 have 1,500 or fewer employees and five have more than 1,500 employees. Consequently, the Commission estimates that most Other Toll Carriers are small entities that may be affected by the rules and policies adopted pursuant to the Notice.

22. **Wireless Telecommunications Carriers (except Satellite).** Since 2007, the SBA has recognized wireless firms within this new, broad, economic census category. Prior to that time, such firms were within the now-superseded categories of Paging and Cellular and Other Wireless Telecommunications. Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees. For this category, census data for 2007 show that there were 11,163 establishments that operated for the entire year. Of this total, 10,791 establishments had employment of 999 or fewer employees and 372 had employment of 1000 employees or more. Thus, under this category and the associated small

business size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities that may be affected by our proposed action.

23. Similarly, according to Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, Personal Communications Service (PCS), and Specialized Mobile Radio (SMR) Telephony services. Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees. Consequently, the Commission estimates that approximately half or more of these firms can be considered small. Thus, using available data, we estimate that the majority of wireless firms can be considered small.

24. **Cable and Other Program Distribution.** Since 2007, these services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: “This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies.” The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees. Census data for 2007 shows that there were 31,996 establishments that operated that year. Of those 31,996, 1,818 operated with more than 100 employees, and 30,178 operated with fewer than 100 employees. Thus, under this size standard, the majority of firms offering cable and other program distribution services can be considered small and may be affected by rules adopted pursuant to the Notice.

25. **Cable Companies and Systems.** The Commission has developed its own small business size standards, for the purpose of cable rate regulation. Under the Commission’s rules, a “small cable company” is one serving 400,000 or fewer subscribers, nationwide. Industry data

indicate that, of 1,076 cable operators nationwide, all but eleven are small under this size standard. In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers. Industry data indicate that, of 6,635 systems nationwide, 5,802 systems have under 10,000 subscribers, and an additional 302 systems have 10,000-19,999 subscribers. Thus, under this second size standard, most cable systems are small and may be affected by rules adopted pursuant to the Notice.

26. **All Other Telecommunications.** The Census Bureau defines this industry as including "establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Establishments providing Internet services or Voice over Internet Protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry." The SBA has developed a small business size standard for this category; that size standard is \$30.0 million or less in average annual receipts. According to Census Bureau data for 2007, there were 2,623 firms in this category that operated for the entire year. Of these, 2,478 establishments had annual receipts of under \$10 million and 145 establishments had annual receipts of \$10 million or more. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

**I. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements**

27. The Notice proposes a number of rule changes that will affect reporting, recordkeeping, and other compliance requirements. Each of these changes is described below.

28. The Notice proposes to require incumbent LECs to provide direct notification to all interconnecting carriers and affected retail customers of a network change involving copper retirement plus a public notice filed with the Commission. The Notice also proposes to require incumbent LECs to provide additional information about the potential impacts of proposed copper retirements in their notices. In addition, the Notice proposes to require incumbent LECs to file a certification with the Commission that includes the proposed network change, the notification to interconnecting carriers, and a copy of the written notice provided to affected retail customers. For other entities that wish to object to a proposed network change involving copper retirement, they may file objections to and comments on copper retirement notices.

**J. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered**

29. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (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.

30. The proposals require notifications and information regarding copper retirements as well as certifications. Paragraph 46 in the primary item discusses the need to revise the requirements of our network change disclosure rules to promote competition and safeguard against copper retirements for discriminatory and anticompetitive purposes. The Notice seeks comment on the proposed notification requirements and alternative methods of communication such as email and company websites.

31. The proposal also seeks to require incumbent LECs to maintain records of customer notifications, in whatever form provided, for a fixed period of time. The Notice seeks comment on the proposal. It also seeks comment on the appropriate retention period and on whether the benefits of such a record retention requirement outweigh any associated burden on incumbent LECs. The Commission seeks the same cost/benefit analysis of its proposed certification requirement.

**K. Federal Rules that May Duplicate, Overlap, or Conflict With the Proposed Rule**

32. None.

**V. ORDERING CLAUSES**

33. Accordingly, IT IS ORDERED, pursuant to the authority contained in sections 1-4, 201, 214, and 251 of the Communications Act of 1934, as amended; 47 U.S.C. 151-154, 201, 214, 251, and 157(a), and § 1.1 of the Commission's rules, 47 CFR 1.1, that the Notice of Proposed Rulemaking IS ADOPTED.

34. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this NPRM, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

List of Subjects in 47 CFR Part 51

Communications, Communications common carriers, Defense communications, Telecommunications, Telephone.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch,  
Secretary.

For the reasons discussed in the preamble, the Federal Communications Commission proposes to amend 47 CFR part 51 as follows:

**PART 51 – INTERCONNECTION**

1. The authority for part 51 continues to read as follows:

Authority: Sections 1-5, 7, 201-05, 207-09, 218, 220, 225-27, 251-54, 256, 271, 303(r), 332, 706 of the Telecommunication Act of 1996, 48 Stat. 1070, as amended, 1077; 47 U.S.C. 151-55, 157, 201-05, 207-09, 218, 220, 225-27, 251-54, 256, 271, 303(r), 332, 1302, 47 U.S.C. 157 note, unless otherwise noted.

2. Section 51.325 is amended by revising paragraph (a)(4), redesignating paragraphs (c) and (d) as (d) and (e), and adding new paragraphs (c) and (f), to read as follows:

**§ 51.325 Notice of network changes: Public notice requirement.**

(a) \* \* \*

(4) Will result in the retirement of copper, as defined in § 51.332.

\* \* \* \* \*

(c) In addition to providing the public notice required by paragraph (a) of this section, the incumbent LEC shall notify and submit a copy of its public notice to the public utility commission and to the Governor of the State in which the network change is proposed, and also to the Secretary of Defense, Attn. Special Assistant for Telecommunications, Pentagon, Washington, DC 20301.

\* \* \* \* \*

(f) Notices of network changes involving the retirement of copper, as defined in § 51.332, are subject only to the requirements set forth in this section and §§ 51.329(c) and (d), 51.332 and 51.335.

3. Section 51.329 is amended by redesignating paragraph (c) as paragraph (d) and adding new paragraph (c) to read as follows:

**§ 51.329 Notice of network changes: Methods for providing notice; public comment.**

\* \* \* \* \*

(c) The public may file comments on an incumbent LEC's notice of planned network change. In the context of copper retirement, such comments must be filed with the Commission no later than the twenty-ninth day following the release of the Commission's public notice. In all other instances, such comments may be filed with the Commission until the effective date of the planned network changes.

\* \* \* \* \*

**§ 51.331 [Amended].**

4. Section 51.331 is amended by deleting paragraph (c).

5. Add § 51.332 to read as follows:

**§ 51.332 Notice of network changes: Copper retirement.**

(a) Definition. For purposes of this section, copper retirement is defined as removal or disabling of copper loops, subloops, or the feeder portion of such loops or subloops, or the replacement of such loops with fiber-to-the-home loops or fiber-to-the-curb loops, as those terms are defined in § 51.319(a)(3).

(b) Methods for Providing Notice.

(1) In providing the required notice to the public of network changes, an incumbent LEC must use one of the following methods:

(i) Filing a public notice with the Commission; or

(ii) Providing written public notice through industry fora, industry publications, or the carrier's publicly accessible Internet site.

(2) An incumbent LEC must provide each information service provider and telephone exchange service provider that directly interconnects with the incumbent LEC's network with a copy of the public notice.

(3) An incumbent LEC also must directly provide notice through electronic mail or postal mail to all retail customers affected by the planned copper retirement.

(i) For purpose of this section, an affected retail customer is anyone who will need new or modified customer premise equipment or who will be negatively impacted by the planned network change. The contents of any such notification must comply with the requirements of paragraph (c) of this section.

(ii) Notice to each affected retail customer shall be in writing unless the Commission authorizes in advance, for good cause shown, another form of notice. If an incumbent LEC uses e-mail to provide notice to retail customers, it must comply with the following requirements in addition to the requirements generally applicable to notification:

(A) an incumbent LEC must obtain express, verifiable, prior approval from retail customers to send notices via e-mail regarding their service in general, or planned network changes in particular;

(B) An incumbent LEC must allow customers to reply directly to the e-mail notice;

(C) E-mail notices that are returned to the carrier as undeliverable must be sent to the retail customer in another form before carriers may consider the retail customer to have received notice; and

(D) an incumbent LEC must ensure that the subject line of the message clearly and accurately identifies the subject matter of the e-mail.

(c) Content of Notice.

(1) Public Notice. Public notice must set forth the information required by § 51.327. In addition, the public notice must include a description of any changes in prices, terms, or conditions that will accompany the planned changes.

(2) Retail Customers. Notification to retail customers must provide sufficient information to enable the retail customer to make an informed decision as to whether to continue subscribing to the service to be affected by the planned network changes, including but not limited to the following:

(i) The information required by § 51.327;

(ii) A statement that the retail customer will still be able to purchase the existing service(s) to which he or she subscribes with the same functionalities and features as the service he or she currently purchases from the incumbent LEC, except that if this statement would be inaccurate, the incumbent LEC must include a statement identifying any changes to the service(s) and the functionality and features thereof;

(iii) A statement that the retail customer has the right to comment on the planned network changes; and

(iv) The following statement: “This notice of planned network change will become effective ninety days after the Federal Communications Commission (FCC) releases a public notice of the

planned change on its website. If you wish to comment on the planned network change, you should file your comments as soon as possible, but no later than thirty calendar days after the FCC releases public notice of the planned network change. You may file your comments electronically on the Commission's website at [insert URL for ECFS], or you may file them by mail. If you wish to file by mail, address your comments to the Federal Communications Commission, Wireline Competition Bureau, Competition Policy Division, Washington, DC 20554, and include in your comments the statement 'Network Change' and a reference to [insert name of ILEC and affected geographic region]. Comments should include specific information about the impact of this planned network change upon you, including any potential loss of functionalities or interference with third-party devices or services.”

(3) If any portion of a notification is translated into another language, then all portions of the notification must be translated into that language.

(4) An incumbent LEC may not include in the notification or any other communication to a customer related to copper retirement any statement attempting to encourage a customer to purchase a service other than the service to which the customer currently subscribes.

(d) Certification. An incumbent LEC must file a certification with the Commission that shall include:

(1) A statement that identifies the proposed changes;

(2) A statement that public notice has been given in compliance with paragraph (b)(1);

(3) If an incumbent LEC provides public notice by any of the methods specified in paragraph (b)(1)(ii) of this section, a statement identifying the location of the change information and describing how this information can be obtained.

(4) A statement that, at least five business days in advance of its filing with the Commission, the incumbent LEC served a copy of its public notice upon each information service provider and telecommunications service provider that directly interconnects with the incumbent LEC's network;

(5) The name and address of each such information service provider and telecommunications service provider upon which written notification was served;

(6) A statement that, at least five business days in advance of its filing with the Commission, the incumbent LEC served the direct notice required by paragraph (c)(3) of this section upon all affected retail customers;

(7) A copy of the written notice provided to affected retail customers; and

(8) A statement that the incumbent LEC notified and submitted a copy of its public notice to the public utility commission and to the Governor of the State in which the network change is proposed, and also to the Secretary of Defense in compliance with § 51.325(c).

(e) Timing of Notice. An incumbent LEC must provide public notice of copper retirement at least ninety days before implementation pursuant to the procedures provided in paragraph (b) of this section.

(f) Implementation Date. The Commission will release a public notice of filings of such notices of copper retirement. The public notice will set forth the docket number and NCD number assigned by the Commission to the incumbent LEC's notice. Notices of copper retirement shall be deemed approved on the 90th day after the release of the Commission's public notice of the filing, unless an objection is filed pursuant to paragraph (h) of this section or the Commission takes action pursuant to paragraph (l) of this section.

(g) Interconnecting LEC Objection Procedures. An objection to an incumbent LEC's notice that it intends to retire copper may be filed by an information service provider or telecommunications service provider that directly interconnects with the incumbent LEC's network. Such objections must be filed with the Commission, and served on the incumbent LEC, no later than the twenty-ninth day following the release of the Commission's public notice. All objections filed under this section must:

(1) State specific reasons why the objector cannot accommodate the incumbent LEC's changes by the date stated in the incumbent LEC's public notice and must indicate any specific technical information or other assistance required that would enable the objector to accommodate those changes;

(2) List steps the objector is taking to accommodate the incumbent LEC's changes on an expedited basis;

(3) State the earliest possible date (not to exceed six months from the date the incumbent LEC gave its original public notice under this section) by which the objector anticipates that it can accommodate the incumbent LEC's changes, assuming it receives the technical information or other assistance requested under paragraph (h) of this section;

(4) Provide any other information relevant to the objection; and

(5) Provide the following affidavit, executed by the objector's president, chief executive officer, or other corporate officer or official, who has appropriate authority to bind the corporation, and knowledge of the details of the objector's inability to adjust its network on a timely basis:

"I, (name and title), under oath and subject to penalty for perjury, certify that I have read this objection, that the statements contained in it are true, that there is good ground to support the objection, and that it is not interposed for purposes of delay. I have appropriate authority to

make this certification on behalf of (objector) and I agree to provide any information the Commission may request to allow the Commission to evaluate the truthfulness and validity of the statements contained in this objection.”

(h) Responses to Objections. If an objection is filed, an incumbent LEC shall have until no later than the sixtieth business day following the release of the Commission’s public notice to file with the Commission a response to the objection and to serve the response on all parties that filed objections. An incumbent LEC’s response must:

- (1) Provide information responsive to the allegations and concerns identified by the objectors;
- (2) State whether any implementation date(s) proposed by the objector(s) are acceptable;
- (3) Indicate any specific technical assistance that the incumbent LEC is willing to give to the objectors; and
- (4) Provide any other relevant information.

(i) Resolution of Objections to Timing. If an objection based on timing is filed pursuant to paragraph (h) of this section, then the Chief, Wireline Competition Bureau, will issue an order determining a reasonable public notice period, provided however, that if an incumbent LEC does not file a response within the time period allotted, or if the incumbent LEC’s response accepts the latest implementation date stated by an objector, then the incumbent LEC’s public notice shall be deemed amended to specify the implementation date requested by the objector, without further Commission action. An incumbent LEC must amend its public notice to reflect any change in the applicable implementation date pursuant to paragraph (b) of this section.

6. Section 51.333 is amended by revising the section heading and paragraphs (b) and (c) to read as follows and removing paragraph (f).

**§ 51.333 Notice of network changes: Short term notice, objections thereto.**

\* \* \* \* \*

(b) Implementation date. The Commission will release a public notice of filings of such short term notices. The public notice will set forth the docket number assigned by the Commission to the incumbent LEC's notice. The effective date of the network changes referenced in those filings shall be deemed final on the tenth business day after the release of the Commission's public notice, unless an objection is filed pursuant to paragraph (c) of this section.

(c) Objection procedures for short term notice. An objection to an incumbent LEC's short term notice may be filed by an information service provider or telecommunications service provider that directly interconnects with the incumbent LEC's network. Such objections must be filed with the Commission, and served on the incumbent LEC, no later than the ninth business day following the release of the Commission's public notice. All objections filed under this section must:

(1) State specific reasons why the objector cannot accommodate the incumbent LEC's changes by the date stated in the incumbent LEC's public notice and must indicate any specific technical information or other assistance required that would enable the objector to accommodate those changes;

(2) List steps the objector is taking to accommodate the incumbent LEC's changes on an expedited basis;

(3) State the earliest possible date (not to exceed six months from the date the incumbent LEC gave its original public notice under this section) by which the objector anticipates that it can accommodate the incumbent LEC's changes, assuming it receives the technical information or other assistance requested under paragraph (c)(1) of this section;

(4) Provide any other information relevant to the objection; and

(5) Provide the following affidavit, executed by the objector's president, chief executive officer, or other corporate officer or official, who has appropriate authority to bind the corporation, and knowledge of the details of the objector's inability to adjust its network on a timely basis:

"I, (name and title), under oath and subject to penalty for perjury, certify that I have read this objection, that the statements contained in it are true, that there is good ground to support the objection, and that it is not interposed for purposes of delay. I have appropriate authority to make this certification on behalf of (objector) and I agree to provide any information the Commission may request to allow the Commission to evaluate the truthfulness and validity of the statements contained in this objection."

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