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FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 51 and 63

[GN Docket No. 13-5, RM-11358; FCC 16-90]

Technology Transitions, Policies and Rules Governing Retirement of Copper Loops by Incumbent Local Exchange Carriers

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In this document, the Federal Communications Commission (Commission) initiated this rulemaking in August 2015 to help guide and accelerate the transitions from networks based on TDM circuit-switched voice services running on copper loops to all-IP multi-media networks using copper, co-axial cable, wireless, and fiber as physical infrastructure. In this Second Report and Order and Order on Reconsideration, we take several actions aimed at stripping away anachronistic rules while ensuring that competition continues to thrive and consumers are protected during technology transitions.

DATES: Effective upon approval by the Office of Management and Budget. The Commission will publish a document in the Federal Register announcing the effective date(s).

FOR FURTHER INFORMATION CONTACT: Megan Capasso, Wireline Competition Bureau, Competition Policy Division, (202) 418-1151, or send an email to Megan.Capasso@fcc.gov. For additional information concerning the Paperwork Reduction Act information collection requirements contained in this document, send an email to PRA@fcc.gov or contact Nicole Ongele at (202) 418-2991.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Second Report and Order and Order on Reconsideration in GN Docket No. 13-5, RM-11358, FCC 16-

90, adopted July 14, 2016 and released July 15, 2016. 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. It is available on the Commission's Web site at https://apps.fcc.gov/edocs_public/attachmatch/FCC-16-90A1.pdf. The Commission will send a copy of this Second Report and Order and Order on Reconsideration in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, see 5 U.S.C. 801(a)(1)(A).

Synopsis

1. In the Second Report and Order, we update our review and notice procedures governing the filing and processing of applications pursuant to section 214 of the Communications Act of 1934, as amended (the Act) to discontinue, reduce, or impair service (the section 214 discontinuance process). Section 214 of the Act and the Commission's implementing rules generally require telecommunications carriers and interconnected Voice over Internet Protocol (VoIP) providers to obtain Commission authority to discontinue interstate or foreign service to a community or a party of a community. The Commission relieved Commercial Mobile Radio Service (CMRS) providers of this obligation in 1994. The VoIP Discontinuance Order moots any need to find a separate basis of authority over VoIP providers in connection with this Order.

2. All applicants seeking to discontinue a service are currently required to file a section 214 application in accordance with rules governing notice, opportunity for comment, review, and processing requirements. Commenters have 15 days to file objections if the applicant is a non-dominant carrier and 30 days to file if the applicant is a dominant carrier. The application is automatically granted on the 31st day after filing for non-dominant carriers and on the 60th day after filing for dominant carriers unless the Wireline Competition Bureau (Bureau)

has notified the applicant that the grant will not be automatically effective. The Bureau has considerable discretion in determining whether to grant such authority based on the application, responsive comments, and other filings. The Bureau will normally authorize the discontinuance “unless it is shown that customers would be unable to receive service or a reasonable substitute from another carrier or that the public convenience or necessity is otherwise adversely affected.”

3. In evaluating whether the discontinuance will harm the public interest, the Commission has employed a five factor balancing test to analyze: (1) the financial impact on the common carrier of continuing to provide the service; (2) the need for the service in general; (3) the need for the particular facilities in question; (4) increased charges for alternative services; and (5) the existence, availability, and adequacy of alternatives. We find that the existence, availability, and adequacy of alternatives, or the adequate replacement factor, has heightened importance in the context of technology transitions. Consistent with the proposals in the Emerging Wireline Further Notice of Proposed Rulemaking (FNPRM), 80 FR 57768-01, we now adopt an updated approach for preparing, reviewing, and evaluating section 214 discontinuance applications that relate to technology transitions (technology transition discontinuance applications).

4. The Framework for the Adequate Replacement Test. We conclude that the public interest requires that applications seeking to discontinue a legacy time-division multiplexed (TDM)-based voice service as part of a transition to a new technology, whether IP, wireless, or another type, indicate that a technology transition is implicated. The requirements we articulate for eligibility for automatic grant of discontinuance applications involving a technology transition apply only to legacy voice services. Other services to which section 214(a) discontinuance obligations apply and voice services subject to section 214(a) being discontinued in non-technology transitions circumstances will continue to be subject to our pre-existing

discontinuance process, which provides the public an opportunity to comment and to which our traditional five-factor balancing test applies. We decline to apply the adequate replacement test to legacy data services. For any other domestic service for which a discontinuance application is filed, section 63.71(e) of our rules (redesignated as section 63.71(f) herein) shall continue to govern automatic grant procedures. Unlike traditional applicants, technology transition discontinuance applicants seeking streamlined treatment will be required to submit with their application either a certification or a showing as to whether an adequate replacement exists in the service area. Applications either (i) certifying or (ii) demonstrating successfully through their showing that an adequate replacement exists will be eligible for automatic grant pursuant to section 63.71(d) of the Commission's rules as long as the existing requirements for automatic grant are satisfied. We stress that attempting to satisfy the adequate replacement test is entirely voluntary for an applicant. Voice technology transition discontinuance applicants that decline to pursue this path are not eligible for streamlined treatment and will have their applications evaluated on a non-streamlined basis under the traditional five factor test. Moreover, the showing made regarding an adequate alternative under the five factor test does not require the network performance testing and other specific showings required under the adequate replacement test for streamlined treatment.

5. We further conclude that an applicant for a technology transition discontinuance may demonstrate that a service is an adequate replacement for a legacy voice service by certifying or showing that one or more replacement service(s) offers all of the following: (i) substantially similar levels of network infrastructure and service quality as the applicant service; (ii) compliance with existing federal and/or industry standards required to ensure that critical applications such as 911, network security, and applications for individuals with disabilities remain available; and (iii) interoperability and compatibility with an enumerated list

of applications and functionalities determined to be key to consumers and competitors. One replacement service must satisfy all the criteria to retain eligibility for automatic grant.

6. Technology transition applicants can either demonstrate compliance with these objective criteria or make a demonstration that, despite not being able to meet the criteria, the totality of the circumstances demonstrates that an adequate replacement nonetheless exists. If an applicant cannot certify or make that showing, or declines to pursue the voluntary path of streamlined treatment, it must include in its application an explanation of how its proposed discontinuance will not harm the public interest, with specific reference to the five factors the Commission traditionally considers. The Bureau will then weigh that information as part of the traditional multi-factor evaluation, placing particular scrutiny on the adequate replacement factor under the newly-enhanced test. Only meaningful, factual objections regarding the reliability of certifications provided will be persuasive. Any entity or individual may object to the certification or showing, and the Commission will consider the objection and determine if the applicant needs to provide additional support.

7. In adopting objective, quantifiable standards for the adequate replacement test, we seek to minimize uncertainty or confusion that could slow or even discourage technology transitions. Moreover, we do not want to stifle the new and innovative ways that a replacement service could benefit customers. For that reason, we announce a test that sets clear, achievable benchmarks but leaves flexibility, recognizing that a shift from a TDM network to a new technology will never be a purely apples-to-apples comparison.

8. The approach we adopt today places a new prominence on the adequate replacement analysis. This new emphasis does not, however, displace the Commission's traditional five-factor test outside the context of technology transition discontinuance applications seeking streamlined treatment. The five factor test is aimed at promoting—and

where necessary, balancing—the four missions of our agency, namely to protect consumers, promote competition, ensure universal access, and strengthen public safety. Four of the factors—(1) the financial impact on the common carrier of continuing to provide service, (2) the need for the service in general, (3) the need for the particular facilities in question, and (4) increased charges for alternative services—offer a traditional balancing of the financial and competitive needs of industry against the values of consumer affordability and expectations.

9. The adequate replacement factor, in contrast, aims to balance all four missions as a means of ensuring all Americans benefit from these exciting new technologies. This has always required a deeper analysis, but that need is particularly acute in the context of discontinuances involving legacy voice services related to technology transitions. We disagree that the action we take today is inconsistent with the Commission’s recent revisions to the universal service program rules, particularly in the Connect America Fund proceeding. We made it clear in the December 2014 Connect America Order that even though we were forbearing “from enforcing a federal high-cost requirement that price cap carriers offer voice telephony service throughout their service areas pursuant to section 214(e)(1)(A) in three types of geographic areas,” those carriers are still subject to section 214(a)’s mandate regarding the need for Commission authorization before discontinuing a service. We conclude, however, that certain principles—such as access to critical applications such as 911—are not subject to balancing and must remain available and fully functional as part of any transition. The streamlined, technology neutral framework that we adopt will help to protect those principles.

10. Limited to the Technology Transition Context. We conclude that the adequate replacement test we discuss here should only apply to any application involving a technology transition from TDM to IP or wireline to wireless in which the applicant intends to discontinue completely customers’ access to the legacy voice service. The components of the test are

specifically tailored to measure considerations relevant to a technology transition that are not as prominent in other contexts. For example, requiring minor discontinuances of particular applications or functionalities (such as operator-assisted functionalities) associated with a service to demonstrate that an adequate replacement is available is not necessary. We conclude that limiting the test to the context of technology transitions accomplishes our regulatory goals in an appropriately narrow manner.

11. No Presumptions or Exclusions Regarding Specific Technologies. We decline to presume that particular technologies, by their nature, represent an adequate replacement for legacy voice services in all instances, because our public interest analysis demands that applicants provide objective evidence showing a replacement service will provide quality service and access to needed applications and functionalities. IP-based and other new services should demonstrate that they meet consumers' and providers' fundamental needs through satisfaction of performance standards, compliance with Commission rules, and harmony with key legacy functionalities and applications before we grant permission to remove existing voice services from the marketplace. It is critical that we retain the ability to examine each discontinuance application given the potential for variability in different implementations of the same technology. The same technology could nonetheless utilize different features, be produced by different vendors with different methodologies, and use different quality measurement techniques, any of which could result in varied service quality and thus lead to potential interoperability issues. We will allow testing data from one area to be used to support future discontinuance applications in another area, conditioned on certifications that the network is built according to the same detailed design plan as the network supporting the service under the prior discontinuance. We believe the current discontinuance process, subject to the changes adopted

today, provides the appropriate balance of allowing for public comment and objections while retaining the opportunity for speedy and effective resolutions.

12. We retain largely the same standards for automatic grant that apply under the current regime for the special context of technology transitions. However, we allow a more streamlined approach for discontinuances involving services that are substantially similar to those for which a section 214 discontinuance has previously been approved. We also take action to streamline our section 214 process in instances where consumers no longer subscribe to legacy voice services. Although our actions today focus primarily on technology transitions, we recognize that the market is constantly evolving even outside the context of these crucial transitions. For that reason, we allow a section 214 discontinuance application be eligible for automatic grant without any further showing if the applicant can demonstrate that the service has zero customers in the relevant service area and no requests for service in the last six months.

13. No Arbitrary Timelines. We do not establish timelines for reviewing applications that are not eligible for automatic grant, because the public interest demands that we provide appropriate scrutiny and careful review to discontinuance applications related to technology transitions given their novelty and complexity, and we cannot guarantee at this time how long that process will take. An application will remain under consideration for automatic grant unless: (i) the Commission receives comments setting forth significant, meaningful, evidence-based objections or (ii) after reviewing the application, Commission staff has concerns about the impact of the planned discontinuance on the public convenience and necessity. Should such an objection arise, we will review the applicant's and objector's showings as expeditiously as possible. We do intend to rely on the efficiencies of precedent and data provided regarding similar transitions when factually or legally similar disputes arise. Finally, should it be

determined that the existing process is resulting in unacceptable delay or inefficiency, we will revisit our decision not to establish timeframes for acting on section 214 applications.

14. We also decline to adopt a hard deadline for when a Public Notice should be released for a technology transition discontinuance application following its submission. Staff review applications for completeness, accuracy, and fulfillment of all predicate requirements, including providing notice to affected customers, before issuing the Public Notice. Imposing a hard deadline could result in issuance of public notice of defective applications, and commenters have not identified a pattern of undue delay. Based on actual experience with the streamlined process we adopt today, we can revisit this issue at a future date if necessary. Moreover, to facilitate public input on these types of applications, the Bureau will not only continue to list such notices prominently, but will also identify them specifically as applications related to technology transitions on the Commission's website.

15. An Objective Factor-Based Test Is Preferable To A Subjective Case-by-Case Approach for Technology Transition Discontinuances. The three-pronged test tied to specific benchmarks will allow industry to establish reasonable expectations about the investments necessary to satisfy the test while also protecting consumers. Notably, through the detailed articulation that we provide today, the adequate replacement standard will be substantially clearer than it has been to this point.

16. Successful Prior Certifications Will Streamline Future Applications. We will allow a repeat applicant for a 214 discontinuance application in the technology transition context to rely on its successful certification of compliance with all three prongs of the adequate replacement test in a previously approved application involving a substantially similar service. A substantially similar service is one offered by the same applicant relying on the same

technology and utilizing a comparable network infrastructure. The practical effect of this rule is to allow the applicant to bypass the performance testing requirements described below.

17. Commenters will have the opportunity to rebut an applicant's planned reliance on a previous application if they can offer substantial evidence that the technology or network infrastructure are not in fact substantially similar to the service subject to the certifications in the previous application or the certifications have been proven unreliable, based on significant consumer complaints or new independent data.

18. Treating First and Third Party Services Equally. We conclude that both first and third party services should be eligible as potential adequate replacement services. Third party services have always been eligible for consideration under the 214 discontinuance process as potential adequate replacements. The question is whether an adequate replacement exists in the service area, not who provides the service that provides that adequate replacement.

19. Applicants seeking to discontinue a service have the burden of demonstrating that the discontinuance will not harm the public interest. Applicants relying on a third party service will be allowed to make a prima facie showing based on publicly available information as to whether the third party service meets our test as an adequate replacement. We will take into account an applicant's faultless inability to access necessary data and information from a third party when reviewing any application that relies on the existence of third party services to meet the adequate replacement test. Any commenter opposing grant of a section 214 application relying on a third party service must rebut the prima facie showing made by the applicant. Should the objecting commenter raise legitimate concerns, we will remove the application from consideration for automatic grant. In attempting to rebut such a showing, members of the public who use the third party service can agree to participate in tests necessary to measure network performance, as required under the criteria.

20. Requiring A Single Service to Satisfy All Prongs. To ensure that consumers receive the integrated service experience they need and deserve, we require that a single service (whether first- or third-party) satisfy all three prongs of the adequate replacement test in order to be eligible for automatic grant.

21. Network Infrastructure and Service Quality. To satisfy the first prong of the adequate replacement test, and thereby be eligible for automatic grant, an applicant must demonstrate that at least one service provides: substantially similar network performance as the service being discontinued; substantially similar service availability as the service being discontinued; and coverage to the entire affected geographic service area.

22. Customers rightfully expect that any adequate replacement for a wireline legacy voice service will be available in the same coverage area, allow customers to make and receive high quality voice calls consistently, and support the applications and functionalities on which they rely. However, we recognize that a comparison between a legacy voice service and its potential replacement is not an apples-to-apples comparison. We thus provide applicants the flexibility either to demonstrate compliance with all of the benchmarks, or to provide evidence that demonstrates that, despite falling short of certain specified benchmarks, the network providing the replacement service nonetheless provides substantially similar performance and availability when considering the totality of the circumstances. A replacement network's performance will be evaluated against objective benchmarks, but falling short of any single metric will not automatically disqualify it from being considered adequate. The actual performance numbers will be evaluated in a holistic manner to determine the overall network performance, enabling the carrier to show that the totality of circumstances demonstrate adequate performance. Legacy data services will not be subject to the adequate replacement test and associated streamlined processing that we announce today. Rather, those services will be

evaluated under the traditional process, and the Commission will continue to closely scrutinize such applications in determining whether the public interest would be harmed by the discontinuance.

23. We adopt benchmarks related to various metrics that, if satisfied, would demonstrate that a service is performing adequately enough to serve as a replacement for a legacy TDM service. There are two ways of demonstrating adequacy: (i) through performance testing that demonstrates satisfaction of each of the benchmarks, or (ii) a demonstration, based on the totality of the circumstances, the network still provides substantially similar performance and availability. As an example, an applicant might fall just short of our data loss benchmark but nonetheless make a showing that the totality of the circumstances demonstrates adequate performance. That showing would presumably include test data demonstrating achievement of the remaining benchmarks as well as an explanation for why the network fell short of the data loss benchmark and any planned improvements to the network which would allow for enhanced performance in the future. We interpret “substantially similar” in this context to mean that the network operates at a sufficient level with respect to the metrics identified below, such that the network platform will ensure adequate service quality for interactive and highly-interactive applications or services, in particular voice service quality, and support applications and functionalities that run on those services. Under either approach, the applicant initially provides the results of network testing, as well as outage and repair reporting, that demonstrate achievement of the benchmarks, although it may rely in subsequent applications on testing data from a previously approved discontinuance application.

24. **Network Performance.** We find that there are two essential metrics used to determine whether a particular data transmission network is an adequate replacement for a legacy wireline voice service: latency and data loss. Failure to satisfy a single metric is not

disqualifying. An applicant may either demonstrate achievement of both benchmarks, thus presumptively showing adequate performance, or demonstrate that the totality of the circumstances, including the voice service availability and network coverage criteria, demonstrates adequate network performance. By “presumptive” we refer to the fact the Commission may seek additional proof beyond certification.

25. We rely on industry technical standards and our approaches in other proceedings to adopt the benchmarks we will use in our section 214 process. The performance benchmarks are measured in accordance with our Technical Appendix. We define the latency benchmark as 100 milliseconds or less for 95% of all peak period round trip measurements, a benchmark consistent with previous Commission decisions in the universal service context, informed by ITU-T standards, and comparable to demonstrated performance under the Commission’s Measuring Broadband America program. This metric also provides for a latency performance that will allow the applicant’s network to perform its portion of an end-to-end voice call. We define the data loss metric as less than or equal to 1 percent for packet based networks.

26. Latency and data loss are the terms used for the two essential metrics described above for measuring network performance as a means of comparison to a legacy wireline voice service. We plan to apply the same metrics and benchmarks to all replacements, whether fixed or mobile, wireline or wireless, terrestrial or satellite. These metrics reflect the type of performance that should be expected of a sophisticated packet-based network infrastructure that can carry one or more applications including voice calls, fax, security/health alerts, gaming, video streaming and video conferencing. In order to be eligible for automatic grant, an applicant must be prepared to demonstrate the replacement service will perform as effectively as the legacy voice service.

27. Latency. In order for a replacement service to meet this aspect of the network performance prong and be eligible for streamlined treatment, latency must be limited to 100 milliseconds or less. Latency measures the time it takes for a data packet to travel from one point to another in a network, and is a significant factor in analyzing a network's performance. Measuring Broadband America data shows that wireline broadband providers meet this requirement. The Commission has measured latency as the round-trip time from the consumer's home to the closest designated speed measurement server within the provider's network and back.

28. AT&T asserts that the 100 millisecond roundtrip benchmark cannot be applied to the network architecture of certain non-packet based wireless services and that, as a result, the Commission should "adopt[] a threshold of less than 200 milliseconds measured mouth-to-ear." The 100 millisecond roundtrip standard is consistent with the CAF Phase II Service Obligations Order, where the Wireline Competition Bureau explained that it designed the 100 millisecond roundtrip latency standard to ensure that consumers ultimately achieve 200 milliseconds mouth-to-ear latency. That being said, the totality of the circumstances approach allows applicants to provide objective evidence to support their showing that the replacement service would offer substantially similar network performance and service availability, even if that evidence is not identical to the exact metrics that we identify. Our metrics, benchmarks, and methodologies measure packet-based technologies, which we expect will most frequently be associated with next generation technologies. We also note several examples of packet mobile networks. Specifically, because the 100 millisecond roundtrip standard is designed to ensure that consumers achieve 200 millisecond mouth-to-ear latency, objective evidence that a non-packet based replacement service meets the underlying 200 millisecond mouth-to-ear standard would be compelling as a component of a totality of the circumstances showing.

29. Data Loss. In order for a replacement service to meet this aspect of the network performance prong, data loss should be less than 1 percent for packet-based networks. Data loss exceeding 1 percent for packet-based networks would cause performance issues that warrant further examination. Applicants would need to demonstrate data loss is lower than this benchmark in order to have the opportunity to be eligible for automatic grant. Data loss is often referred to as the IP Packet Loss Ratio (IPLR) in IP networks. This metric measures the ratio of total lost IP packet outcomes to total transmitted IP packets in the environment under review. Consecutive packet loss is of particular concern for certain time-sensitive applications, such as voice and video.

30. We have chosen a packet loss rate of less than 1 percent because it will allow for successful quality voice calls and other highly interactive applications. We further find that this data loss benchmark is appropriate to ensure successful transmission of voice and video communications.

31. Although the network infrastructure and the services that run over the network are distinct, network performance affects the service quality being delivered to customers and thus should be measured. These measurements are an objective tool for determining when an application will be eligible for automatic grant; if the applicant cannot demonstrate that, it is appropriate to engage in further examination to ensure the services provided over newer technologies are adequate replacements for legacy voice services.

32. We recognize that carriers may incur costs in order to demonstrate they meet these benchmarks, and have taken steps to limit the burden of making these demonstrations in the section 214 discontinuance process. We allow successful testing results to be used as support for future applications involving the same applicant offering a service on a substantially similar network. Moreover, carriers are not required to meet these standards to file a section 214

discontinuance; if a carrier does not wish to present such information, its section 214 application will not be eligible for automatic grant, but rather will be subject to the traditional review process. And finally, we exempt small providers from the requirement to submit testing results in order to be eligible for automatic grant.

33. Wireless – Packet Networks. We intend to rely on the same metrics and benchmarks, applicable to both wireline and wireless networks, when we examine whether a mobile or fixed wireless network can qualify as an adequate replacement. Appendix B allows for generalized network testing standards which are applicable to both wireline and wireless networks.

34. Testing Methodology and Parameters. We find testing is necessary, at least initially, to ensure that applicants actually meet the benchmarks we have established to be eligible for automatic grant. Established testing parameters will ensure that the Commission analyzes similar data sets from applicants in the technology transitions. Although we expect that the Order and Technical Appendix will encompass all of the information that applicants need, we delegate authority to the Office of Engineering and Technology, working in consultation with the Wireline Competition Bureau and the Wireless Telecommunications Bureau, to issue more specific testing requirements, as necessary.

35. In order to comply with the testing parameters listed below, applicants filing their first technology transition discontinuance application will need to begin testing at least 30 days prior to filing that application. The 30-day test period is intended to ensure that the network is in a stable state and to allow for long-term projection of network infrastructure performance. Shorter periods would not account for variation in patterns and usage and could allow the applicant time to traffic engineer their network so that the chosen test customers performed better for a short period of time.

36. To demonstrate that replacement services will have adequate network performance and thereby remain eligible for streamlined treatment for a technology transition discontinuance, the provider must perform the following actions, which are detailed in Appendix B to this Order:

- Conduct 30 days of performance testing. This timeframe allows for: (1) testing of weekday and weekend periods with sufficient repetition to ensure a single outlying week was not chosen, and (2) monthly variation in network usage for individuals paying bills, 30 day/monthly data caps and enterprise end of month processing.
- Use a randomly selected sample group of a total of 50 residential and 50 enterprise customer locations per potential replacement service for testing, to ensure a representative sample. We recognize that fully random selection may not be possible because customer consent is required and other factors may impact the selection process. If the area where service is proposed to be discontinued is very large, for example covering several states or Tribal lands, more than 100,000 customers, or containing several legacy Local Access Target Areas, then several separate sample sets of 30-50 consumer locations would be required per state, region, or geographically-referenced area.
- Report results to the Commission.
- Host a website or websites where all test data, results, test plan and all associated documentation that is not subject to a confidentiality request or confidential pursuant to section 0.441 et seq. of our rules are available publicly. We would generally consider the detailed design document a document that warrants confidential treatment.

37. While we provide some flexibility in the testing parameters an applicant will use, the Commission will include in its evaluation of the discontinuance application whether the testing conditions used were appropriate to measure performance. Thus, in addition to testing results, the Commission will consider the testing parameters as a factor in determining whether it needs to remove the application from streamlined processing. If the testing parameters raise sufficient concerns such that the Commission removes the application from streamlined processing, the Commission will then consider those testing parameters in any totality of the circumstances analysis of the adequacy of the replacement network.

38. Small Business Exemption from the Network Performance Testing Requirements. We emphasize that no carrier must conduct testing or otherwise meet the criteria we adopt today. Compliance with these criteria merely enables potential automatic grant of a discontinuance application. The adequate replacement factor is merely one part of a multifactor balancing test, and the benchmarks associated with the criteria provide guidance to carriers and a path toward automatic grant of their technology transitions discontinuance applications. We also reemphasize that once a carrier completes testing of a next-generation service and successfully obtains automatic grant, it need not conduct testing again if it files an application involving a substantially similar replacement service.

39. However, we provide smaller carriers more flexibility in how they demonstrate network performance under this prong of the three-pronged test. We do not extend this exemption to any other components of the adequate replacement test we adopt today, including both of the other aspects of the network infrastructure prong (service quality and network coverage) or the other two prongs of the test. We conclude that carriers with 100,000 or fewer subscriber lines, aggregated across all affiliates, may remain eligible for automatic grant without compliance with the specific testing requirements of the network performance criterion we

articulate today. This exemption from complying with the specific testing parameters announced herein does not apply to any rate-of-return carrier that is affiliated with a price cap carrier. We encourage them, however, to share with the Commission whatever information they deem probative of their network performance.

40. **Service Availability.** In order to meet this aspect of the network performance prong and be eligible for automatic grant, an applicant must demonstrate service availability of 99.99 percent. The test we adopt today consists of a standard formula traditionally used by industry to measure telephone service availability for which we have defined the variables to ensure that all discontinuing carriers are measuring the same information. The replacement service's availability will be calculated using data regarding customer trouble reports, the average repair interval in responding to those reports, the number of lines in the service area, and the duration of the observation period to reach a representative measurement of a "four 9s" benchmark used to measure service availability. We conclude these variables will provide the best measure of customers' ability to access their provider's network.

41. The ITU defines "reliability" as "[t]he probability that an item can perform a required function under stated conditions for a given time interval." It defines "availability" as "[a]vailability of an item to be in a state to perform a required function at a given instant of time or at any instant of time within a given time interval, assuming that the external resources, if required, are provided."

42. We conclude that a 99.99 percent service availability standard, calculated according to the formula and parameters established herein, is a reasonable approach to ensure that a replacement service presumptively provides substantially similar service as the service being discontinued. We find that a so-called "five 9s" (i.e., 99.999 percent availability) standard, which would allow a subscriber's service to have, on average, approximately 5 minutes and 15

seconds of downtime per year, is too high a threshold. It would impose a higher standard than currently applies to TDM-based service. We also find that a 98 percent availability standard, which would allow, on average, approximately 7 days, 7 hours, and 12 minutes of downtime per year, is too low a benchmark for an applicant to be eligible for automatic grant, because it would allow more downtime than consumers should reasonably expect. (This conclusion does not prejudge how we might view such an application in the context of a holistic review.) The difference between a 99.999 percent and a 98 percent reliability standard—less than 2 percent—translates to more than seven additional days’ worth of service downtime per year, an amount that we judge would be quite meaningful to consumers. We conclude that if a replacement service faces that much service downtime, the section 214 application should not be eligible for automatic grant.

43. For carriers to demonstrate satisfaction of the 99.99 percent standard, we establish the following formula:
$$\text{Availability} = 1 - \left[\frac{\text{Number of Customer Trouble Reports} \times \text{Average Repair Interval}}{\text{Number of Lines (prorated)} \times \text{Observation Period Duration}} \right]$$
. For the purpose of this calculation, the following definitions apply:

- A “customer trouble report” is any report regarding trouble with service made by a customer to a carrier’s service department in which the customer reports either: (1) a total loss of connectivity, or (2) an inability to make and/or receive any voice calls using the carrier’s voice replacement service while other services provided over the customer’s connection may continue to function. The number of customer trouble reports must be tallied over all lines that are serving customers in the replacement network in the affected service area at any time during a contiguous 30-day observation period.

- A “repair interval” is the elapsed time, as on a running clock, from when a customer reports a trouble to the carrier’s service department until the carrier’s repair of the trouble is complete and the customer’s service is restored. If a customer reports trouble with service during the 30-day observation period that is not resolved by the end of the 30-day observation period, the length of the repair interval runs from the time the trouble with service is reported to the end of the observation period. The elapsed time may be recorded in measurement units of the applicant’s choosing, as precisely as the applicant chooses. When rounding is required, however, elapsed time must always be rounded up to the next higher measurement unit. The “average repair interval” is then calculated by summing the lengths of all repair intervals, over all lines that are serving customers in the replacement network, and dividing that sum by the number of customer trouble reports in the 30-day observation period.
- “Number of lines (prorated)” is the number of replacement network lines being served by the provider during the 30-day observation period. For the purpose of this calculation, lines served for part of the observation period should be pro-rated. A line that is in service for the entire duration of the observation period is counted as 1 line. When required, round fractional lines to the nearest hundredth of a line.
- The “observation period duration” should be expressed in the same units as the average repair interval.

44. In reporting the results of the availability calculation to the Commission as part of an application seeking streamlined treatment for a technology transition discontinuance, the applicant must report: (1) the number of customer trouble reports; (2) the average repair interval; (3) the number of lines (prorated); and (4) the calculated availability.

45. Congestion-Based Voice Call Failure. Certain non-packet wireless access technologies providing fixed services can experience the failure of voice calls because of network congestion. To address this potential issue, we establish a metric that applies solely to these technologies for determining the frequency of congestion-based voice call failure, meaning the probability that a customer trying to make a call will be unable to do so due to network congestion. We conclude that probability must be less than one percent during each daily peak busy hour, for at least 95 percent of the 30 days in the measurement period, to serve as an adequate replacement for a legacy voice service.

46. To calculate this benchmark for purposes of remaining eligible for automatic grant, the provider must calculate the probability of congestion-based voice call failure for every hour. For each of the 30 days measured, the provider must then determine the hour that had the highest probability of congestion-based voice call failure that day. The probability of congestion-based voice call failure each hour should be determined by dividing the number of failed calls during the hour by the total number of call attempts during the hour. For 95 percent of the total days, the failure probability during the hour with the highest failure probability must be less than one percent, *i.e.*, for at least 95 percent of the total days, less than one percent of all calls may be blocked in the worst hour due to unavailability of a radio access channel. These measurements would not be taken on a sample basis, but would be collected at each cell tower over all call attempts to or from customers for a 30-day period. In addition, if there are seasonal differences in traffic load—for example, if the area is a summer resort community—measurements to determine probability of call failure must be taken during the busy season.

47. **Network Coverage.** In order to meet this aspect of the network performance prong and be eligible for automatic grant, the applicant must demonstrate that either: (i) a single replacement service reaches the entire geographic footprint of the service area subject to

discontinuance; or (ii) there are multiple providers who collectively cover the entirety of the affected service area.

48. If the applicant is relying on a single replacement service, whether its own or that of a third party, eligibility for automatic grant will depend on whether it demonstrates that the replacement service reaches the entire geographic footprint of the area served by the legacy voice service. However, in service areas where the applicant relies on multiple providers' services, the applicant must demonstrate that other providers cumulatively reach all customers in the affected coverage area. In order to be eligible for automatic grant, the application must: (i) describe with sufficient particularity the geographic scope of the replacement service(s) available from the other provider(s), or (ii) otherwise demonstrate that each of these services satisfies the criteria we adopt today. We decline to adopt a de minimis threshold for judging whether a replacement service offers the same coverage. We do not see a basis for drawing such a line.

49. **Access to Critical Applications and Functionalities.** Under this prong, to remain eligible for automatic grant for a technology transition discontinuance application, an applicant must certify or show that at least one replacement service complies with regulations regarding availability and functionality of 911 service for consumers and public safety answering points (PSAPs), industry standards regarding communications security, and regulations governing compatibility with assistive technologies.

50. **911 and Emergency Services.** To satisfy the second prong of the adequate replacement test and remain eligible for automatic grant, applicants must certify or show compliance with: (i) 911 accessibility and location accuracy requirements; (ii) reliability and continuity of 911 service requirements with respect to backup power; and (iii) any other applicable emergency service requirements. The basic 911 service requirement is the transmission of wireless 911 calls to the PSAP (or designated default answering point or

appropriate local emergency authority) without respect to their call validation process, and without reference to location accuracy.

51. 911 Accessibility and Location Accuracy Requirements. The applicant must demonstrate that the replacement service complies with applicable regulations regarding the availability and required functionality of 911 service. Those regulations include the rules governing: (i) 911 call delivery, service, and location; (ii) the capabilities and routing necessary for consumers' continued access to 911 emergency service; and (iii) 911 calls to PSAPs or other appropriate local emergency authorities.

52. In order to satisfy this prong of the adequate replacement test and thus remain eligible for automatic grant, the replacement service must offer a dispatchable address capability. Traditional landline service generally guarantees the provision of Master Street Address Guide (MSAG)-validated address information to ensure proper call routing, location determination, and dispatch of emergency responders. Provision of other types of location information, such as wireless 911 ALI coordinates, would not ensure that the service provides an adequate replacement for a legacy voice service. If the rules applicable to the replacement service require provision of an MSAG-validated address, the applicant may meet this requirement by certifying that its replacement service meets the 911 registered location requirements applicable to that service. However, if the 911 requirements for the replacement service do not require provision of a validated address, the applicant must further certify that it will register a validated dispatchable address for each subscriber and provide the address to the appropriate PSAP for all 911 calls. A dispatchable address is an address that includes street name, building number, and any other information critical to dispatching emergency responders to the correct location and one that meets public safety requirements for inclusion in and verification by Automatic Location Information databases and PSAP Master Street Address Guides or their functional

equivalents. If the applicant is relying on a third party service, it must make an appropriate showing that the third party service provide meets this requirement. As applicable, alternative service providers must also be compliant with other Commission rules for 911 call delivery, service, and location in order for the applicant to retain eligibility for streamlined processing. For the applicant to retain eligibility for automatic grant, those alternative service providers must also comply with any new dispatchable address/location requirements, as applicable, that the Commission may adopt in the future. Consistent with the Commission rules regarding discontinuing service to completely exit an industry, the applicant seeking streamlined processing is required to provide the same advance notice to all PSAPs in its service area, and inform the Commission that it has done so. 47 CFR 63.71. These requirements also include notifying all affected customers, the applicable state agencies, and federally recognized Tribal Nations.

53. Backup Power. To ensure that consumers continue to receive the benefit of continued access to 911, applicants seeking to discontinue a legacy line-powered service in favor of a newer service that lacks line-powering must certify or make a showing that at least one replacement service in the area complies with our residential backup power requirements. Alternatively, an applicant may show that another provider in the affected area offers line-powering or complies with section 12.5. Section 12.5 applies to providers of Covered Services, which are defined as “any facilities-based, fixed voice service offered as residential service, including fixed applications of wireless service, offered as a residential service that is not line powered.” Section 12.5 requires providers to offer subscribers the option to purchase backup power for the Covered Service, with a minimum of eight hours of standby backup power. By February 13, 2019, such providers must also offer at least one option that provides a minimum of twenty-four hours of standby backup power. Providers must also notify consumers of the

following: (1) availability of backup power sources; (2) service limitations with and without backup power during a power outage; (3) purchase and replacement options; (4) expected backup power duration; (5) proper usage and storage conditions for the backup power source; (6) consumer backup power self-testing and monitoring instructions; and (7) backup power warranty details, if any. We are not adding to the Rule 12.5 requirements, but ensuring that a service provider's compliance with those requirements is a key consideration in whether that service represents an adequate replacement for a legacy line-powered service.

54. In order to ensure that consumers are aware of technology transitions with sufficient time to take action, we also require applicants to provide to consumers the initial notice containing the information elements of section 12.5, pursuant to section 63.71. Section 63.71(b) states that a carrier shall file its 214 application "on or after the date on which notice has been given to all affected customers." Section 63.71(d) provides that applications shall be automatically granted on the 31st day after filing an application for non-dominant carriers and the 60th day for dominant carriers, unless the Commission notifies the applicant that the grant will not be automatically effective. 47 CFR 63.71(d). Consequently, we expect that consumers will receive the initial backup power notice before the earliest possible date for grant of a section 214 discontinuance application—at least 30 days before the change occurs. Although section 12.5 requires disclosures be made at the point of sale, we anticipate that, in the context of the section 214 discontinuance process, it will not be the individual sale of a non-line powered service to a consumer that will trigger the need for notification of the backup power requirements of section 12.5, but rather the transition to a newer technology that may have different backup power capabilities. The underlying principle remains the same: prior to initiation of a new service (whether at the point of sale or at the time of a technology transition), consumers should have the benefit of understanding how to ensure continuity of 911 service through backup power.

We continue to require annual disclosures to be made as described in section 12.5, by any means reasonably calculated to reach the individual consumer.

55. We are not adding to the existing backup power requirements. In order for a service to qualify as an adequate replacement, it must abide by our existing backup power rules so that consumers receive information on backup power in advance of being transitioned to a replacement service that lacks line-power. Otherwise, the consumer could become aware of the limitations of the replacement service only when his or her 911 call does not go through during a commercial power outage.

56. Protecting PSAP Operations. To successfully meet this second prong, an applicant must certify or show that at least one replacement service complies with 911 network reliability requirements. This requirement will help ensure that the transition to the replacement service neither impairs the continuity of 911 service to PSAPs, nor disrupts the configurations and connectivity necessary for their 911 operations. This certification or showing imposes no new requirements and will not affect our policy work in other Commission proceedings.

57. **Communications Security.** To satisfy the second prong of the adequate replacement test and remain eligible for automatic grant, an applicant must certify or show that the replacement service offers comparably effective protection from network security risks. Satisfaction of this criterion is part of the adequate replacement test required for streamlined processing, and is not mandatory to discontinue service generally. This approach allows an applicant relying on a third party service to satisfy the adequate replacement test without requiring direct knowledge of that third party's security posture.

58. Our overarching objective is to preserve the availability, integrity, and confidentiality (AIC) of the network. Availability refers to the accessibility and usability of a network upon demand. Integrity refers to the protection against the unauthorized modification or

destruction of information. Confidentiality refers to the protection of data from unauthorized access and disclosure, both while at rest and in transit. In making the certification or showing necessary to demonstrate comparably effective protection from network security risks, the applicant must evaluate: (i) relevant cybersecurity standards and practices—whether industry-recognized or related to some other identifiable approach—the replacement service employs at the time of certification (e.g., a replacement service could employ the National Institute of Standards and Technology (NIST) Framework for Improving Critical Infrastructure Cybersecurity (NIST Framework) as a management tool to inform decisions about cyber risk analysis and organize mitigation activity and CSRIC IV provides guidance to the Commission on communications market sector implementation of the NIST Framework); (ii) what plans (if any) the replacement service has to incorporate cybersecurity threat information sharing as a part of the replacement service’s security operations; and (iii) roles and responsibilities for the replacement service’s cybersecurity, both with respect to the provider but also any third parties (e.g., the applicant’s vendors or contractors), to promote effective accountability for privacy and security.

59. If relying on its own service, the applicant must demonstrate that the replacement service offers comparably effective protection from network security risks to remain eligible for automatic grant. That demonstration can be made in one of two ways. If the applicant’s network security management practices are enterprise-wide, i.e., the enterprise safeguards AIC without differentiation between services, geographic areas, or service-providing affiliates, a certification to that effect will be sufficient to demonstrate that the replacement service offers comparably effective protection from network security risks.

60. Alternatively, the applicant must show that: (i) it has evaluated any known risks and vulnerabilities of the replacement service; (ii) it has taken measures to address and mitigate

the enumerated risks and vulnerabilities; (iii) it will inform consumers as part of the discontinuance notice required pursuant to section 63.71 what security measure(s) the consumers should take vis-à-vis the replacement service (e.g., downloading and maintaining up-to-date anti-virus software) and other steps consumers may take to ensure safe use of the replacement service; and (iv) it will undertake best efforts to identify any vulnerable facilities (e.g., fire, EMS, law enforcement and other critical infrastructure facilities) and users, and work to address and mitigate the enumerated risks and vulnerabilities (e.g., the use of diverse IP paths for critical infrastructure). Where an applicant provides written guidance or Public Service Announcements to individuals or organizations in accordance with (iii) and (iv) above, the applicant should provide a generic copy of such guidance to the Commission. This certification is not a directive on how to address network security. Applicants retain flexibility regarding how to address such risks.

61. We recognize the challenges for an applicant to gain access to a third party service's cyber risk management process would be particularly acute. Therefore, an applicant relying on a third party service instead must exercise reasonable diligence to identify the security profile of the technology of the replacement service, based on the replacement technology's ability to provide availability, integrity, and confidentiality. Focusing on the established key considerations of confidentiality, integrity, and availability provides a frame of reference for identifying the risks associated with the replacement technology. We note that a security profile is not intended to identify any specific cyber risk management process or specific vulnerabilities associated with a particular third party's replacement service, but instead serves to identify the general cyber risks, from a consumer's perspective, associated with the replacement service's technology. This is a particularly effective solution for applicants relying on third party services because a security profile may be gleaned from open source information and does not require

specific knowledge of the inherent security of the replacement service. While a security profile can be identified using publicly available information, it should be arrived at after the applicant undertakes an analysis centered on the availability, integrity, and confidentiality model described above under the certification approach. In this regard, the security profile can adjust to new threats and vectors as they emerge.

62. We seek to ensure that an applicant has established a sound basis for its representations about the comparable effectiveness of the protections from network security risks employed by a third-party replacement service, by exercising a reasonable degree of diligence in making those representations in light of all the facts and circumstances.

63. No carrier is required to comply with any specific network security standards. We do not dictate what measures a company must take, nor do we require that they submit potentially sensitive information to the Commission as part of their section 214 application. Rather, meeting this criterion is only necessary to satisfy the adequate replacement test, and that in turn is only required if they wish to remain eligible for automatic grant. Beyond that, the Commission has always recognized the importance of network security and agrees with commenters that it is a crucial consideration in determining whether an adequate replacement service exists. Transitioning from legacy-based services to new technologies presents new network vulnerability issues that did not exist with legacy technologies. We conclude the flexible, individualized approach we take to network security addresses concerns that applying a rigid standard would be counter-productive. Additionally, while we recognize that there is no universal cybersecurity standard to apply, we believe that there are generally accepted guidelines and best practices that carriers should consider when evaluating their own cybersecurity posture or the security profile of the replacement technology.

64. **Services for Individuals with Disabilities.** Under the critical applications prong, applicants will certify that at least one replacement service complies with the Commission's existing applicable accessibility, usability, and compatibility requirements governing services benefiting individuals with disabilities as a means to ensure that the replacement service offers accessibility levels at least as effective as those offered by the legacy voice service.

65. The Commission's rules regarding telecommunications-related accessibility requirements govern standards for accessibility, usability, and compatibility for:

- (i) telecommunications services and functionalities; (ii) voicemail and interactive menu functionalities; and (iii) advanced communications services (ACS), defined by statute to include both interconnected and non-interconnected VoIP service. The rules obligate service providers to ensure that a service is accessible to and usable by individuals with disabilities "if readily achievable" for services subject to part 6 or 7 of the rules, and "unless not achievable" for services subject to part 14 of the rules. To remain eligible for streamlined processing, an applicant must demonstrate that any public mobile service proposed as an adequate replacement complies with sections 14.60 and 14.61 of the rules. When a standard of accessibility or usability is not achievable, service providers are required to ensure the relevant service, functionality, or application is compatible with existing peripheral devices or specialized customer premises equipment commonly used by individuals with disabilities. To remain eligible for automatic grant, providers also must comply with rules regarding: (i) product design, development and evaluation; (ii) accessible information pass through; and (iii) customer access to information, documentation, and training.

66. In order to meet this factor under the critical applications prong, any new service must provide levels of accessibility, usability, and compatibility as effective as the legacy voice

service to be deemed an adequate replacement utilizing a new technology. We also expect that, due to reduced costs and heightened capabilities of next-generation services, more accessibility features and functionalities will be achievable within the meaning of our rules. Thus, we encourage carriers to proffer replacement services that have the potential to provide new accessibility features and functionalities and to make newly achievable features and functionalities available to their customers with disabilities.

67. We also remind carriers and interconnected VoIP service providers of their obligation under the existing telecommunications relay service rules to provide access to TRS, including 711 dialing access. The proposed replacement service or the alternative services available from other providers must provide such access, where required under the Commission's rules.

68. To the extent persons with disabilities need to transition to new equipment in order to maintain the same functionality or make use of improved functionality such as described above, we encourage service providers to make that transition as simple and inexpensive as possible, particularly for those who do not qualify for existing state and federal equipment distribution programs, and for those who are replacing devices not covered by equipment distribution programs. Interfaces between the network and user equipment and applications should facilitate interconnection of low-cost devices and software applications that provide accessibility.

69. We decline to impose an independent requirement with respect to real-time text (RTT) technology in this proceeding, but note that any requirements adopted in the Real-Time Text Notice of Proposed Rulemaking (RTT NPRM) docket would become part of our analysis under this factor. The RTT NPRM (2016 WL 1752915; 81 FR 33170-01, May 25, 2016) proposed rules defining the obligations of wireless service providers and equipment

manufacturers to support RTT over IP-based wireless voice services, and establishing technical standards for minimum required functionalities, the support providers must offer for those functionalities, and timelines for implementation of this transition. The RTT NPRM further sought comment on whether to amend the Commission's rules to place comparable responsibilities to support RTT on providers and manufacturers of wireline IP services and equipment that enable consumers to initiate and receive communications by voice. Applicants would be required to adhere to whatever applicable RTT implementation obligations and timetables are established by any final rules adopted in the RTT NPRM proceeding.

70. **Interoperability with Key Applications and Functionalities.** Consistent with the FNPRM, 80 FR 57768-01, we define applications as offerings that run on TDM-based service, such as home alarm systems and modems, whereas functionalities are offerings included in the service, such as call-waiting and operator services. At the same time, we make clear that carriers are not required to provide access to these capabilities in perpetuity.

71. **Identifying Key Applications.** Widely adopted low-speed modem devices—in particular, fax machines, home security alarms, medical monitoring devices, analog-only caption telephone sets, and point-of-sale terminals—make up the initial list of key applications for which applicants seeking automatic grant must demonstrate that any replacement service offers interoperability. We will expect replacement services to offer compatibility with these devices until 2025, to provide time for the marketplace to migrate to new services and applications that will provide similar functions. Because the specific streamlining criteria we adopt are limited to ensuring adequate replacements for legacy voice services, it is not appropriate to adopt a low-latency option requirement. Non-voice services to which section 214(a) discontinuance obligations apply and voice services subject to section 214(a) being discontinued in non-technology transitions circumstances will continue to be subject to our pre-existing

discontinuance process, which provides the public an opportunity to comment and to which our traditional five-factor balancing test applies.

72. Because the list we adopt today may not be fully inclusive of all applications and functionalities that are significantly valued by stakeholders, we also adopt a process to supplement this list. We direct the Office of Engineering and Technology, working in consultation with the Wireline Competition Bureau and the Wireless Telecommunications Bureau (together, the Bureaus), and subject to the guidelines below, to seek comment and, based on the record developed, propose additions to the list of key applications and functionalities adopted above for Commission review and approval. Within three months of the effective date of the order, the Bureaus will release a public notice inviting consumers and industry stakeholders to indicate whether additional functionalities and applications should be added to the list. The Bureaus will also engage in outreach to solicit input from consumer and industry groups.

73. Relevant considerations in determining whether an application or functionality retains value to consumers in the marketplace such that it should be made interoperable with any replacement include whether: (i) customers rely on the application or functionality for health or safety reasons; (ii) the application or functionality is used as a wholesale input by other providers; (iii) the application or functionality relies on vendor equipment or inputs that have been discontinued; and (iv) the service provider, as opposed to the end-user customer, is the least-cost avoider. In this context, either the applicant or certain types of end users face costs to maintain compatibility with certain applications in the event of technological change in the applicant's provision of telecommunications services. The least cost avoider is whichever of these two parties faces the least costs of adapting to the technological change. Thus, the applicant would be the least cost avoider if the cost of making adjustments to its upgraded

service would allow existing applications to continue to operate were much lower than the aggregate costs to end users of updating their applications.

74. The first “health and safety” factor will determine whether consumers are using or ordering an application or functionality based on a TDM service and their relative significance in those consumers’ lives. We identified medical monitoring devices and home security alarms as the type of health and safety applications that remain key in the marketplace. The second factor focuses on the consumers who subscribe to an application or functionality from a provider who relies on the TDM-based service being discontinued. The third factor focuses on whether an application or functionality is outdated or operating on equipment that is obsolete. The fourth and final factor will look at whether the applicant or the end-user customer is able to address the interoperability concerns at the least cost.

75. We recognize that interoperability considerations will likely change over time. For that reason, we also conclude it important to review regularly the list of key applications to determine whether elements of that list no longer are key. We direct staff to examine this list as part of each internal biennial review of agency regulations. We also direct the Bureaus to propose changes or updates to the Commission, in particular to remove any applications or functionalities that may become obsolete. The Bureaus will continue their biennial review of the key applications and functionalities list and certification requirements through the year 2025, at the end of which the Bureaus will advise the Commission whether the list remains necessary given the status of technology transitions.

76. **Satisfying the Interoperability Standard for Key Applications.** To maintain eligibility for potential automatic grant status, covered applicants must certify or show that a replacement service offers interoperability and compatibility of the replacement service with the list of key applications and functionalities. Conversely, applicants will not be required to

demonstrate interoperability with applications and functionalities that are not on the list adopted today or as modified in the future.

77. When seeking a section 214 discontinuance, applicants should only certify compliance with this prong if the replacement service allows the key application to function or perform in a substantially similar manner as it did on the legacy voice service. Demonstrating applications' adherence to established technical standards would be influential in demonstrating achievement of the compliance criteria discussed above. Although we decline to adopt any specific standards, such as the as the ITU T.38 standard, or the Managed Facilities-Based Voice Network (MFVN) standards, adherence to these standards would be persuasive evidence of compliance with this prong should the underlying certification be challenged. We also note that 64-kbps encoding in accordance with ITU G.711 standard would allow a replacement service, such as a wireless replacement, to carry any signal that a customer can use today with a legacy TDM service. Lower bit rate signals cannot carry all the information carried in a 64-kbps signal and therefore 64-kbps encoding in accordance with ITU G.711 would support applications such as fax, credit card transactions, and medical monitoring. This would also be persuasive evidence of compliance. The Commission also supports any further industry testing efforts.

78. The approach we announce today will sunset in 2025, at which point the interoperability requirement will no longer be part of our section 214 analysis. By that time, consumers will have had ample time to transition to newer functionalities and applications. Until then, of course, parties are always free to request changes by petition or submissions in the biennial review process.

79. **Other Issues Regarding the Adequate Replacement Test.** We also sought comment on whether to include: (i) a partial or full exemption from the adequate replacement test for rural LECs, and (ii) affordability as a separate criteria under the test.

80. **No Rural LEC Exemption.** We decline to provide any rural LEC exemption because rural LECs have offered no compelling justification as to why these criteria would not be just as beneficial to their customers as they would be to the customers of other 214 discontinuance applicants in demonstrating the adequacy of replacement services. However, we are exempting small businesses, including rural LECs that satisfy the standard for this designation, from the network testing requirements we adopt today to remain eligible for automatic grant.

81. We emphasize that the Commission is committed to supporting quick and efficient transitions to IP in rural areas, and we do not burden rural LECs uniquely or excessively. Nevertheless, we find that rural consumers, with often limited choice in service providers, should equally benefit from full consideration of the adequacy of any replacement service to ensure continued network performance and service quality, as well as access to critical applications, and interoperability with valued services.

82. **Affordability.** The evaluation of how potential price increases for alternative services could impact consumers is a critical part of the traditional five-factor test for evaluating discontinuance applications. When applying the traditional five-factor test to determine whether a discontinuance would adversely affect the public convenience and necessity, the Commission can fully evaluate issues involving price and assess the needs of consumers who may only have access to a more expensive replacement service as part of a technology transition. We appreciate commenters' suggestions on possible ways to evaluate price increases in the context of the technology transitions. When called upon to apply this standard in the context of technology transitions, the Commission's focus will be on the price to consumers before and after a discontinuance resulting from transition to a newer technology. Numerous carriers have touted

the reduced costs and improved capabilities of their next-generation services and networks, and we anticipate that we will see those benefits accrue to consumers.

83. We nonetheless acknowledge the concerns expressed in the record about the potential for increased prices to customers for replacement services due to technology transitions, and emphasize that the Commission is committed to ensuring that technology transitions do not unduly impact our most vulnerable citizens. A coalition of public interest and civil rights groups urges that we require applicants to conduct an impact assessment of the discontinuance on low-income people and people of color. We decline to mandate such an impact analysis requirement as part of our framework for streamlined processing because we consider it unduly burdensome on applicants. Congress expressed its intent in the Act to make available communications service to “all the people of the United States,” and more recently, in the Telecommunications Act of 1996, Congress asserted the principle that rates should be “affordable,” and that access should be provided to low-income consumers in all regions of the nation. More broadly, we are taking actions to promote affordability of next-generation services in a variety of proceedings. We recently modernized our Lifeline program by taking a variety of actions that work together to encourage more Lifeline providers to deliver supported broadband services as we transition from primarily supporting voice services to targeting support at modern broadband services. In approving Charter’s acquisition of Time Warner Cable and Bright House, the Commission imposed a condition requiring the combined company to make available a discounted broadband service for low-income consumers. In the order approving the AT&T/DIRECTV transaction, the Commission required as a condition of this transaction that the combined company make available an affordable, low-price standalone broadband service to low-income consumers in the combined AT&T/DIRECTV wireline footprint. Altice and Cablevision also committed to providing a low-income broadband package to all eligible

customers in Cablevision's footprint within fifteen months after closing. Under the Commission's rules, recipients of high-cost universal service support are required to offer voice and broadband services at rates that are reasonably comparable to offerings of comparable services in urban areas. Consistent with these statutory objectives, affordability has always been—and will continue to be—a critical component of the Commission's determination as to whether a particular discontinuance request is consistent the Commission's obligation to ensure the public interest is protected.

84. Nothing we adopt today limits that obligation. While we do not include affordability as a separate criterion under the adequate replacement test we adopt today, affordability remains a critical part of the Commission's underlying evaluation of discontinuance requests. Therefore, the cost of replacement services will be considered both before issuing the Public Notice and during the comment period. Bureau staff review applications for completeness, accuracy, and fulfillment of all predicate requirements, including providing notice to affected customers, before issuing the Public Notice. In order to be considered for streamlined processing, applicants must include information about the price of replacement services compared to the legacy service in their application. The Bureau will not place an application on streamlined processing if there is a material increase in price for the replacement service compared to the service to be discontinued. Moreover, consumers affected by potential discontinuances and their advocates will continue to have the opportunity to offer comments and objections in the streamlined process. Should we receive evidence of material price increases for comparable services, particularly those with a disproportionate impact on vulnerable populations, we would remove that application from consideration for automatic grant.

85. Certain commenters also contend that the adequate replacement test should include a requirement that the discontinuance will not result in the loss of Lifeline service. We

emphasize that the test we announce today does not change or disturb in any way the eligible telecommunications carrier (ETC) obligations of any incumbent carrier to offer Lifeline service. In the recent Lifeline Reform Order, the Commission concluded that if an incumbent LEC is the only Lifeline provider in a given census block, it retains the ETC obligation to offer voice service. That requirement exists independent of the section 214 discontinuance process. Thus, if there is no other Lifeline provider in the community for which discontinuance is sought, the incumbent LEC cannot terminate voice service to Lifeline subscribers, and it must continue to offer Lifeline voice service to any qualifying Lifeline household.

86. Other Issues Related to the Discontinuance Process. Consumer Education.

Discontinuance of an existing service on which customers rely creates a need for customer education. To help ensure seamless transitions, we conclude that an applicant must offer adequate customer education materials and outreach plans when discontinuing a service as part of a technology transition. We wish to establish guidelines, not impose an unduly rigid mandate that forecloses flexibility. Nonetheless, those guidelines need to be clear enough to allow applicants to understand how to achieve compliance. To be clear, this consumer education requirement applies to the same universe of discontinuance applications as the new adequate replacement test, and the procedures governing all other discontinuance applications are undisturbed.

87. An adequate customer outreach plan must, at a minimum, involve: (i) the development and dissemination of educational materials provided to all customers affected containing specific information pertinent to the transition, as specified in detail below; (ii) the creation of a telephone hotline and the option to create an additional interactive and accessible service to answer questions regarding the transition; and (iii) appropriate training of staff to field and answer consumer questions about the transition. All aspects of the consumer outreach plan,

including the educational materials, the telephone hotline, and a carrier's contact information must be provided in accessible and usable formats. To ensure that customers understand the notice that they receive, any applicant who in the ordinary course of business regularly uses a language other than English in its communications with customers must provide the education materials to customers in both English and that regularly used language. The Commission will consider a carrier's certification of its compliance with these requirements as part of its overall analysis of whether granting the application would be in the public interest.

88. Similar to the DTV transition outreach requirements, the required educational materials to customers may be provided as a "bill stuffer," an information section on the bill itself, or as a discrete communication sent in the manner most commonly used to communicate with the customer. We recognize that certain customers do not receive a monthly bill (e.g., those using auto-payment plans), and thus provide a separate option. As billing practices change over time, the way in which customers receive educational materials is subject to change as well. The materials must be delivered in accessible and usable formats and include, at minimum: (i) a general description of the changes to the service, written in a non-technical manner that can be readily understood by the average consumer; (ii) the impact on existing applications and functionalities that are liked to be purchased by individual customers, including whether such applications, and functionalities will be available following the transition; (iii) any change in the price of the service and impact on applications and functionalities which run on the service to be discontinued; and (iv) points of contact who will address technology transitions issues, as much as is practicable. We recognize that third parties unrelated to the applicant provide many applications that run on the service. We would encourage third parties to cooperate with these consumer education efforts, but acknowledge that access to third party information may not be possible. If the applicant is relying on a third party service, we will further require the applicant

to provide: (i) contact information for that third party and (ii) upon inquiry from a consumer, information regarding the interoperability and compatibility of applications benefiting individuals with disabilities that run on the applicant legacy voice service.

89. We also encourage, but do not require, applicants to submit their consumer education materials to the relevant state commission(s) and/or Tribal government. We emphasize that there is an important role for state commissions and Tribal governments in promoting consumer education around the discontinuance of legacy voice services. As we noted in the Emerging Wireline Order in the context of copper retirement, states traditionally have played a critical role in consumer protection, and we strongly encourage carriers seeking to discontinue legacy voice services to partner with state public service commissions, Tribal entities, and other state and local entities to ensure consumers understand and are prepared for the transition. We will not, however, impose a mandate regarding outreach to state commissions and Tribal entities, because we believe it would unduly burden both industry and state and Tribal entities.

90. The applicant is required to provide an accessible telephone hotline staffed at least 12 hours per day, including between the hours of 9 a.m. and 5 p.m., to answer questions regarding the discontinuance, as some individuals with disabilities cannot afford Internet access, or may lack a reliable means of Internet access in their area. The applicant also has the option to additionally provide other interactive and accessible services (e.g., an online chat with a customer service representative) to answer questions regarding the discontinuance.

91. An applicant must designate staff trained to assist consumers with disabilities with the complex disability access issues related to the transition. The method for contacting these staff must be posted on an applicant's website. To accommodate consumers who may not be able to access the Internet, such contact information should be also publicized via alternate

means that are up to the applicant's discretion, such as in the required education materials included with billing statements, promotional materials, or publications disseminated by national consumer organizations.

92. Email Notice. We revise our rules to explicitly permit carriers to provide customers notice of discontinuances via email where those customers have previously agreed to receive notice from the carrier by that method. The Commission's rules currently require a carrier planning to discontinue, impair, or reduce service as defined under section 214 of the Act to notify all affected customers, the governor of the state affected, that state's public utility commission, and the Secretary of Defense. A copy of the relevant section 214 application also must be submitted to the public utility commission, governor, and secretary of defense. In the FNPRM, 80 FR 57768-01, the Commission sought comment on whether to revise these rules to allow email-based or other forms of electronic notice of discontinuance to customers, including whether alternative forms of notice should be permissible only with customer consent and, if so, what methods to obtain consent should be permissible.

93. The record confirms our belief that email is the preferred method of notice for many carriers seeking discontinuance, as well as for consumers. We also explicitly permit carriers to provide notice by any other alternative method to which the customer has previously agreed. We decline, however, to afford carriers the blanket ability to give notice to customers in whatever form those carriers believe is most efficient, regardless of whether the customer has agreed to that method. In both instances, the same provisos adopted in connection with the recently-adopted copper retirement rules shall apply. For example, notice must be made in a clear and conspicuous manner; and may not contradict or be inconsistent with any other information with which it is presented. In addition, (a) the incumbent LEC must have previously obtained 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 ensure that the subject line of the message clearly and accurately identifies the subject matter of the e-mail; and (c) any email notice returned to the carrier as undeliverable will not constitute the provision of notice to the customer.

94. Notice to Tribal Governments. We revise our rules to require all carriers to provide notice of discontinuance applications to any federally-recognized Tribal Nations with authority over the Tribal lands in which the discontinuance, reduction, or impairment of service is proposed, in addition to the notice already required to state PUCs, state Governors, and the Department of Defense. This outcome aligns the notice requirements for section 214 discontinuance applications and copper retirement network changes, imposes the same requirement on all carriers serving Tribal lands, and places Tribal governments in all states in a position to prepare and address any concerns from consumers in their Tribal communities.

95. Timing of Notice. Unlike the Emerging Wireline Order, where the record on the copper retirement notice period reflected numerous instances in which competitors and their customers suffered actual harm due to the notice period, commenters in this proceeding have not offered specific evidence of actual harm caused by the discontinuance notice provisions in section 63.71. We therefore decline to revise section 63.71 to require advance notice of a planned discontinuance or to lengthen the discontinuance process by changing the existing timeline for filing objections and/or allowing automatic grant. We nonetheless recognize that large-scale technology transition-related discontinuances have not yet occurred. Thus, while we do not take action today to revise section 63.71, we emphasize that the Commission may revisit this issue if presented with evidence of such a need in the future.

96. Non-Substantive Change to Code of Federal Regulations. Our current rules require that public notices of network changes, which include copper retirement notices, be

labeled with one of a variety of enumerated titles, “as appropriate.” In the Emerging Wireline Order, we adopted a unique set of network notification requirements specific to incumbent LEC retirement of copper facilities. However, none of the titles enumerated in section 51.329(c) relate specifically to copper retirement notices. To alleviate this potential confusion and to allow the public to readily differentiate copper retirement notices from all other types of network change disclosures, we adopt two new titles to those already included in section 51.329(c): “Public Notice of Copper Retirement Under Rule 51.332” and “Certification of Public Notice of Copper Retirement Under Rule 51.332.”

97. Clarification of Copper Retirement Notice Rules. Under the recently adopted revised copper retirement rules, copper retirement notices to retail customers must include “[t]he name and telephone number of a contact person who can supply additional information regarding the planned changes.” Those same notices must also include “a toll-free number for a customer service help line” in the requisite neutral statement of the services available to the incumbent LEC’s retail customers. To alleviate potential confusion regarding whether an incumbent LEC must include the name and phone number of a specific individual in copper retirement notices in addition to a toll-free number for a customer service center, we clarify that copper retirement notices to enterprise customers must include the name and address of a contact person who can provide additional information regarding the planned change, as required by section 51.327(a)(2). Enterprise customers are all business customers other than those considered very small. For copper retirement notices to mass market customers, however, inclusion of the toll free number for a customer service help line required by section 51.332(c)(2)(i)(C) will be sufficient to satisfy the requirements of section 51.327(a)(2). Mass market customers consist of residential customers and very small business customers. Very small businesses typically

purchase the same kinds of services as do residential customers, and are marketed to, and provided service and customer care, in a similar manner.

98. **ORDER ON RECONSIDERATION.** In response to a Petition for Reconsideration filed by TelePacific, we revise the Commission's rules to make a competitive LEC's application for discontinuance deemed granted on the effective date of any copper retirement that made the discontinuance unavoidable, so as long as the discontinuance application is filed at least 40 days prior to the retirement effective date. This will address a gap in our rules that left competitive LECs potentially vulnerable to violating our discontinuance rules for reasons entirely outside of their control.

99. **Background.** The Commission addresses changes in carriers' facilities and changes to their services through separate rules. Changes to a carriers' facilities are subject to the Commission's network change disclosure rules, which are notice-based. Changes to a carrier's service, however, are subject to the Commission's service discontinuance rules, which require Commission approval. All references to the section 214 discontinuance process encompass the reduction or impairment of service under section 214 as well.

100. In the Emerging Wireline Order, the Commission revised its copper retirement notice rules to require 180 days' advance notice to interconnecting entities and non-residential retail customers and 90 days' advance notice to residential retail customers. Under the prior rules, a carrier could provide as little as 90 days' notice of a planned copper retirement to interconnecting telephone exchange service providers, and it was not required to provide any notice to retail customers.

101. On November 18, 2015, U.S. TelePacific Corp. (TelePacific) filed a Petition for Reconsideration of the Emerging Wireline Order to address what it perceives to be a gap between the Commission's copper retirement and discontinuance processes that could require a

competitive LEC to seek Commission authorization to discontinue broadband service to its end user customers when a planned retirement would cause the loss of access to copper facilities over which it provides broadband service.

102. Among other problems, TelePacific could unavoidably find itself out of compliance with the Commission's rules if the copper retirement becomes effective and the incumbent LEC cuts off access to its copper before the Commission approves TelePacific's discontinuance application.

103. The Commission's rules require that a carrier file its section 214 discontinuance application "on or after the date on which notice has been given to all affected customers." The rules provide for automatic grant of applications on the 31st day after filing for non-dominant carriers and the 60th day after filing for dominant carriers, unless the Commission removes the application from streamlined processing. The Commission may in its discretion remove the discontinuance application from streamlined processing. Thus, the application could remain pending at the time the copper retirement becomes effective. These potential outcomes, TelePacific contends, arise from an unintended defect in the competitive safety net the Commission created in the Emerging Wireline Order by the combination of the 180-day copper retirement notice period and the interim reasonably comparable wholesale access rule.

104. To address potential harm to its competitors and consumers, TelePacific recommends either: (i) automatically granting a section 214 application on the date of a copper retirement, as long as the application is submitted at least 60 days before implementation of a copper retirement; or (ii) "requir[ing] a delay in the copper retirement until the competitive LEC's discontinuance no longer creates 'an unreasonable degree of customer hardship.'" There is currently no mechanism for delaying a copper retirement, assuming the incumbent LEC's notice complies with the Commission's rules.

105. **Discussion.** We revise the Commission’s rules to harmonize the discontinuance and newly-revised copper retirement processes. Accordingly, if a competitive LEC files a section 214(a) discontinuance application based on an incumbent LEC’s copper retirement notice in situations where the incumbent is not discontinuing TDM-based service, the competitive LEC’s application will be automatically granted on the effective date of the copper retirement as long as it satisfies two conditions. First, the competitive LEC’s discontinuance application must be submitted to the Commission at least 40 days before the incumbent LEC’s copper retirement effective date. Section 63.71(e) of the Commission’s rules provides that “an application will be deemed filed on the date the Commission releases public notice of the filing.” For purposes of the requirement we adopt today, the 40 days will be measured from the date of submission for filing rather than on the date the application is deemed filed under section 63.71(e). Second, the competitive LEC’s discontinuance application must contain a certification that the basis for the application is the incumbent LEC’s planned copper retirement. Under this new requirement, competitive LECs will have more than four months to consider the implications of the planned copper retirement and weigh their alternatives.

106. As discussed above, the copper retirement and discontinuance processes are distinct, the former based on notice and the latter on approval. We conclude this approach strikes the right balance and harmonizes the two processes. A competitive LEC will not be faced with a pending discontinuance application after it loses access to copper following a copper retirement, and incumbent LECs maintain certainty in the timing of their copper retirements. We therefore grant in part TelePacific’s petition.

107. However, we deny the portion of the Petition that seeks broader relief. Indefinitely delaying a planned copper retirement is an untenable option. In the Emerging Wireline Order, we noted that “retaining a time-limited notice-based process ensures that our

rules strike a sensible and fair balance between meeting the needs of interconnecting carriers and allowing incumbent LECs to manage their networks.” Thus, in extending the copper retirement notice period, we rejected the opportunity to provide for a notice period longer than six months. Creating the potential for an indeterminate period of time before an incumbent LEC can proceed with a planned copper retirement would insert delay and uncertainty into the process and might deter deployment of next-generation technologies, thus undermining the balance we sought to attain when adopting the 180-day copper retirement notice period. Indeed, delaying copper retirements until any unreasonable degree of hardship to a competitive LEC’s customers is eliminated would transform the copper retirement process from notice-based to approval-based. Because the Act requires only that incumbent LECs “provide reasonable public notice” of network changes such as copper retirements, we rejected such a result in the Emerging Wireline Order. We reaffirm that conclusion here.

108. Although delaying a copper retirement would provide carrier-customers and end user customers with the additional time they need to consider their options and take steps to minimize disruption of service and might even prevent the need for a competitive LEC to file a preemptive section 214 application, this also would create a subjective standard with resulting uncertainty in timing for the incumbent LEC such that it would not be able to plan the specific timeframe of its network changes with confidence. This in itself might discourage or delay certain technology transitions, contrary to the Commission’s commitment to support and encourage the deployment of innovative and improved communications networks.

109. **Paperwork Reduction Act Analysis.** The Second Report and Order contains new and modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Pub. Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the PRA. OMB, the general public, and other

Federal agencies will be invited to comment on the new or modified information collection requirements contained in this proceeding. In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002, Pub. Law 107-198, see 44 U.S.C. 3506(c)(4), we previously sought specific comment on how the Commission might further reduce the information collection burden for small business concerns with fewer than 25 employees. In this present document, we: (1) require carriers to demonstrate that a service is an adequate replacement for a legacy voice service by certifying or showing that one or more replacement service(s) offers each of the following: (i) substantially similar levels of network infrastructure and service quality as the applicant service; (ii) compliance with existing federal and/or industry standards required to ensure that critical applications such as 911, network security, and applications for individuals with disabilities remain effective; and (iii) interoperability and compatibility with an enumerated list of applications and functionalities determined to be key to consumers and competitors; (2) explicitly permit carriers to provide customers notice of discontinuances via email where those customers have previously agreed to receive notice from the carrier by that method; (3) require carriers to provide notice of planned discontinuances to Tribal governments in the state in which the discontinuance is proposed; (4) require carriers to provide pricing information about the applicant service subject to discontinuance and the proposed replacement service; and (5) require carriers to provide an adequate consumer outreach plan and accompanying consumer education materials when discontinuing legacy retail services. We also revise section 51.329(c) of the Commission's rules to include two new titles that may be used to label public notices of network changes. And in the Order on Reconsideration, we revise the Commission's rules to provide that if a competitive LEC files a section 214(a) discontinuance application based on an incumbent LEC's copper retirement notice without an accompanying discontinuance of TDM-based service, the competitive LEC's application will be

automatically granted on the effective date of the copper retirement as long as (1) the competitive LEC submits its discontinuance application to the Commission at least 40 days before the incumbent LEC's copper retirement effective date, and (2) the competitive LEC's discontinuance application contains a certification that the basis for the application is the incumbent LEC's planned copper retirement. We have assessed the effects of these requirements and find that any burden on small businesses will be minimal because: (1) we do not require carriers to conduct testing or otherwise meet the criteria we adopt today; (2) carriers already conduct testing when developing their networks; (3) once a carrier completes testing of a next-generation service and successfully obtains automatic grant, it need not provide testing results again if it files an application involving a substantially similar replacement service; (4) we include a small business exemption from the testing requirements; (5) we are not imposing new standards of service on carriers seeking to discontinue existing services; (6) we are permitting carriers to provide notice to customers by means through which the customer has already agreed to receive communications from the carrier; (7) the notice that carriers must provide to Tribal governments is the very same notice they must already provide to the public utility commission and to the governor of the state in which the discontinuance, reduction, or impairment of service is proposed, and to the Secretary of Defense; (8) carriers must already appropriately label their network change disclosures; and (9) we address a gap in our rules such that now a competitive LEC will not be faced with a pending discontinuance application after it loses access to copper following a copper retirement and incumbent LECs maintain certainty in the timing of their copper retirements.

110. **Congressional Review Act.** The Commission will send a copy of this Second Report and Order and Order on Reconsideration to Congress and the Government Accountability Office pursuant to the Congressional Review Act.

111. **Final Regulatory Flexibility Analysis.** As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission included an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities of the policies and rules proposed in the Emerging Wireline Order and FNPRM in GN Docket No. 13-5, 80 FR 57768-01. The Commission sought written public comment on the proposals in the FNPRM, including comment on the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

112. Need for, and Objectives of, the Final Rules. In the Emerging Wireline Order and FNPRM, 80 FR 57768-01, the Commission emphasized the importance of speeding market-driven technological transitions and innovations while preserving the core statutory values as codified by Congress: competition, consumer protection, universal service, and public safety. In this Order, we further those values by updating our review and notice procedures governing the filing and review of technology transitions discontinuance applications filed pursuant to section 214 of the Act. Furthering these core values will accelerate customer adoption of technology transitions. The Order adopts rules that will appropriately manage the technology transitions, and develop the right framework for new technologies. To fulfill the Commission's goal of stripping away the outdated and unnecessary, we have provided common sense solutions in the interim until this as yet not fully formed new technology regime emerges.

113. In this Order, we define our expectations for what the public interest will require before a carrier can take a legacy voice service off the market and refine our section 214 discontinuance notice requirements to ensure that the public is aware of and prepared for such transitions. The action we take is in the public interest as we are providing certainty to carriers, thereby advancing technology transitions.

114. Technology Transitions Discontinuance Applications. In the context of discontinuance applications related to technology transitions, the public interest requires that applicants filing to discontinue a legacy TDM-based voice service as part of a transition to a new technology, whether IP, wireless, or another type (technology transition discontinuance applicants) must identify in the application that a technology transition is implicated. Unlike traditional discontinuance applications, in order to retain eligibility for streamlined processing and potential automatic grant, the Order requires that technology transition discontinuance applicants submit with their application either a certification or a showing as to whether an adequate replacement exists in the service area. Applicants also must submit price information about the service subject to discontinuance and the proposed replacement service.

115. Specifically, the Order requires that an applicant for a 214 discontinuance demonstrates that a service is an adequate replacement for a legacy voice service by certifying or showing that one or more replacement service(s) offers each of the following: (i) substantially similar levels of network infrastructure and service quality as the applicant service; (ii) compliance with existing federal and/or industry standards required to ensure that critical applications such as 911, network security, and applications for individuals with disabilities remain available; and (iii) interoperability and compatibility with an enumerated list of applications and functionalities determined to be key to consumers and competitors.

116. Technology transition applicants can either demonstrate compliance with these objective criteria or make a demonstration that, despite not being able to meet the criteria, the totality of the circumstances demonstrates that an adequate replacement nonetheless exists. Applicants either (i) certifying or (ii) demonstrating successfully through their showing that an adequate replacement exists remain eligible for automatic grant pursuant to section 63.71(d) of the Commission's rules as long as the existing requirements for automatic grant are satisfied. To

ensure that consumers receive the integrated service experience they need and deserve, the Order requires that a single service (whether first- or third-party) satisfy all three prongs of the adequate replacement test in order to be eligible for automatic grant.

117. The Order explains that if an applicant cannot certify or make that showing, or declines to pursue the voluntary path of streamlined treatment, it must include in its application an explanation of how their proposed discontinuance will not harm the public interest with specific reference to the five factors the Commission traditionally considers. The Bureau, acting on delegated authority, will then weigh that information as part of the traditional multi-factor evaluation, but with the adequate replacement factor subject to increased scrutiny under the newly enhanced test.

118. The Order rejects calls from incumbent LECs to presume that particular technologies, by their nature, represent an adequate replacement for legacy voice services in all instances. Our public interest analysis demands that applicants provide objective evidence showing a replacement service will provide quality service and access to needed applications and functionalities. At the same time, we recognize the importance of promoting speedy transitions. Therefore, the Order allows a for a more streamlined approach for discontinuances involving services that are substantially similar to those for which section 214 discontinuance has previously been approved. Commenters will have the opportunity to rebut an applicant's planned reliance on a previous application if they can offer substantial evidence that the technology or network infrastructure are not in fact substantially similar to the service subject to the certifications in the previous application or the certifications have been proven unreliable, based on significant consumer complaints or new independent data. The practical effect of this rule is to allow the applicant to bypass the performance testing requirements. This streamlined

approach benefits applicants, while protecting the interests of all stakeholders, industry and consumers.

119. The Order further streamlines the section 214 process in instances where consumers no longer subscribe to legacy voice services. Although this rulemaking is focused primarily on technology transitions, the Commission emphasizes the market is constantly evolving, even outside the context of these crucial transitions. For that reason, the Commission adopts AT&T's commonsense proposal that a section 214 discontinuance application be eligible for automatic grant without any further showing if the applicant can demonstrate that the service has zero customers in the relevant service area and no requests for service in the last six months.

120. The Order also rejects incumbent LECs' contention that we should establish timelines for reviewing applications that are not eligible for automatic grant. The Order rejects this request because the public interest demands that we provide appropriate scrutiny and careful review to discontinuance applications related to technology transitions given their novelty and complexity, and we cannot guarantee at this time how long that process will take. Such timelines could force the Commission to shortchange its responsibility to ensure that technology transitions result in high service quality and successful customer experiences.

121. The Order finds that both first and third party services should be eligible as potential adequate replacement services. The Order concludes that applicants relying on a third party service should be allowed to make a prima facie showing based on publicly available information as to whether the third party service meets our test as an adequate replacement. The Order emphasizes that the adequate replacement test is only part of the public interest analysis, and the Commission will take into account an applicant's faultless inability to access necessary data and information from a third party when reviewing any application that relies on the existence of third party services to meet the adequate replacement test. An objector to a section

214 application relying on a third party service must rebut the prima facie showing made by the applicant. Should the objector raise legitimate concerns, the Commission will remove the application from consideration for automatic grant. In attempting to rebut such a showing, members of the public who use the third party service can agree to participate in tests necessary to measure network performance, as required under the criteria.

122. The Order declines to provide any rural LEC exemption. The order concludes that rural consumers, with often limited choice in service providers, should equally benefit from full consideration of the adequacy of any replacement service to ensure continued network performance and service quality, as well as access to critical applications, and interoperability with valued services. Moreover, the Order concludes that rural LECs have offered no compelling justification as to why the adequate replacement criteria would not be just as beneficial to their customers as they would be to the customers of other 214 discontinuance applicants in demonstrating the adequacy of replacement services. However, as discussed below, we are exempting small businesses, including rural LECs that satisfy the standard for this designation from the network testing requirements we adopt today to remain eligible for automatic grant.

123. The Order does not include affordability as a separate criterion under the adequate replacement test but states that the cost of replacement services will be considered during the application review process. The Order concludes that if there is a material increase in the price for the replacement service compared to the service to be discontinued, the Bureau will not place the application on streamlined processing.

124. **Adequate Replacement Test.** After adopting the general framework, the Order details a three-prong adequate replacement test that enables potential automatic grant of a discontinuance application. We emphasize that no carrier *must* meet these criteria or conduct

testing. Also, the adequate replacement factor is merely one part of a multifactor balancing test, and the benchmarks associated with the criteria provide guidance to carriers and a path toward automatic grant of their technology transitions discontinuance applications. We also emphasize that once a carrier completes testing of a next-generation service and successfully obtains automatic grant, it need not conduct testing again if it files an application involving a substantially similar replacement service.

125. Prong One: Network Infrastructure and Service Quality. First, consumers expect and deserve a replacement for an applicant service that will provide comparable network quality and service performance. Therefore, the Order requires that to satisfy the first prong of the adequate replacement test and thus remain eligible for automatic grant, an applicant must demonstrate that a service or combination of services provides: (a) substantially similar network performance as the service being discontinued, which involves satisfying benchmarks for latency and data-loss; (b) substantially similar service availability as the service being discontinued, which involves satisfying a benchmark of 99.99 percent availability calculated by using data regarding customer trouble reports, the average repair interval in responding to those reports, the number of lines in the service area, and the duration of the observation period; and (c) coverage to the entire affected geographic service area, which involves demonstrating that either: (i) a single replacement service reaches the entire geographic footprint of the service area subject to discontinuance, or (ii) there are multiple providers who collectively cover the entirety of the affected service area. The Order interprets “substantially similar” in this context to mean that the network operates at a sufficient level with respect to the metrics identified in the Order, such that the network platform will ensure adequate service quality for time-sensitive applications, and support applications and functionalities that are associated with these services.

126. Network Performance. The Order finds that 30 days of network performance testing is necessary, at least initially, to ensure that applicants actually meet the benchmarks we have established to be eligible for automatic grant and to ensure that the network is in a stable state and to allow for long-term projection of network infrastructure performance. The Order emphasizes that network performance has long been a hallmark of this country's communications networks and that must continue during the technology transitions. The Order specifies the testing methodology to be used in measuring network performance in order to avoid confusion and argument over the merits of particular results reported by carriers in their discontinuance applications. Moreover, established testing parameters will ensure that the Commission analyzes similar data sets from applicants in the technology transitions. While the Order provides some flexibility in the testing parameters an applicant will use, the Commission will include in its evaluation of the discontinuance application whether the testing conditions used were appropriate to measure performance. Thus, in addition to testing results, the Commission will consider the testing parameters as a factor in determining whether it needs to remove the application from streamlined processing. If the testing parameters raise sufficient concerns such that the Commission removes the application from streamlined processing, the Commission will then consider those testing parameters in any totality of the circumstances analysis of the adequacy of the replacement network.

127. The Order provides smaller carriers more flexibility in how they demonstrate network performance under this prong of the three-prong test. We recognize that network testing under the parameters established in Appendix B could be more difficult for smaller carriers and relatively speaking burdensome, given the more limited number of customers. Thus, the Order concludes that carriers with 100,000 or fewer subscriber lines, aggregated across all affiliates, may remain eligible for automatic grant without compliance with the specific testing

requirements of the network performance criterion we articulate today. We further note that this exemption from complying with the specific testing parameters announced herein does not apply to any rate-of-return carrier that is affiliated with a price cap carrier. The Order does not extend this exemption to any other components of the adequate replacement test we adopt today, including both of the other aspects of the network infrastructure prong (service quality and network coverage) or the other two prongs of the test.

128. Service Availability. The Order concludes that a 99.99 percent service availability standard, calculated according to the formula and parameters established in the Order, is a reasonable approach to ensure that a replacement service presumptively provides substantially similar service as the service being discontinued. The Order adopts a test that consists of a standard formula traditionally used by industry to measure telephone service availability for which the Order defined the variables to ensure accuracy and that all discontinuing carriers are measuring the same information. The replacement service's availability will be calculated using data regarding customer trouble reports, the average repair interval in responding to those reports, the number of lines in the service area, and the duration of the observation period to reach a representative measurement of a "four 9s" benchmark used to measure service availability. The Order concludes these variables will provide the best measure of customers' ability to access their provider's network. And, as with the network performance testing, the Order requires a 30-day observation period to ensure network stability and allow for long-term projection of network reliability.

129. Certain non-packet wireless access technologies providing fixed services can experience the failure of voice calls because of network congestion. To address this potential issue, we establish a metric that applies solely to these technologies for determining the frequency of congestion-based voice call failure, meaning the probability that a customer trying

to make a call will be unable to do due to network congestion. We conclude that, to satisfy this benchmark and remain eligible for automatic grant, the probability must be less than one percent during the daily peak busy hour for at least 95 percent of the 30 days in the measurement period, for this type of network to serve as an adequate replacement for a legacy voice service. Non-packet wireless access technologies used to provide fixed services are of particular concern here because, unlike service over copper loops which is dedicated to one subscriber, the radio access network is shared by multiple subscribers. The network could thus conceivably lack adequate capacity and result in an unacceptable level of failed calls due to congestion.

130. Establishing a benchmark for service availability protects consumers, schools, libraries, healthcare facilities, utilities, and small- and medium-sized businesses, all of which depend on a service to be available when needed for everyday or emergency use. Past experiences, including what occurred on Fire Island after Superstorm Sandy, demonstrate the importance of reliability as we undergo technology transitions. We now find that a service availability benchmark will help provide interested stakeholders with clear, objective “criteria that will eliminate uncertainty that could potentially impede the industry from actuating a rapid and prompt transition to IP and wireless technology.”

131. Network Coverage. The Order requires that to meet this prong and thus be eligible for streamlined processing, a replacement service must be available to all affected customers covering the entire geographic scope of the service area subject to the application and actually function as intended for affected customers, or else it cannot be certified as a replacement service for those customers. Specifically, in order to be eligible for automatic grant, the application must describe with sufficient particularity the geographic scope of the replacement service(s) available from the other provider(s) and must otherwise demonstrate that each of these services satisfies the criteria we adopt today. This requirement promotes the core

values established by the Act, including that of ensuring universal access. Allowing a carrier to discontinue service when there are no other service options available would run contrary to that mission. Additionally, this requirement, as a part of our overarching determination of the public interest implications of a discontinuance application, sufficiently addresses any concerns regarding potential disparate impacts on minority communities. The Order declined to adopt a de minimis threshold for judging whether a replacement service offers the same coverage as to ensure that all customers in a service territory where the legacy voice service is offered continue to have the ability to obtain service.

132. Prong Two: Critical Applications. Second, the public relies on assurances that critical applications related to public safety and protecting those most vulnerable remain accessible and operational through any transition. Therefore, to satisfy the second prong of the adequate replacement test and remain eligible for automatic grant, applicants must demonstrate that access to critical applications and functionalities as required under our rules remains available. Under this second prong, an applicant for discontinuance of service must certify that at least one replacement service complies with Commission regulations regarding availability and functionality of 911 service for consumers and public safety answering points (PSAPs), provides comparably effective network security, and complies with Commission regulations regarding compatibility with assistive technologies. Incorporating these certifications into our section 214 process benefits consumers, public safety entities, and industry participants alike by providing clear, consistent, and certain guidance regarding the importance of ensuring that critical applications will continue to function following a technology transition and are free from network vulnerabilities.

133. The Order specifically concludes that, in order to satisfy the consumer access to 911 requirement and remain eligible for automatic grant, the replacement service must offer a

dispatchable address capability. If the rules applicable to the replacement service require provision of an MSAG-validated address, the applicant may meet this requirement by certifying that its replacement service meets the 911 registered location requirements applicable to that service in the Commission's rules. However, if the 911 requirements for the replacement service do not require provision of a validated address, the applicant must further certify that it will register a validated dispatchable address for each subscriber and provide the address to the appropriate PSAP for all 911 calls. If relying on a third party service, the applicant must show that the third party service provide meets this requirement to allow the applicant to remain eligible for streamlined processing. These requirements will ensure that PSAPs continue to receive accurate location information to dispatch emergency first responders directly to the correct location of the 911 call, thereby serving to minimize the response time critical for saving lives and safeguarding the public.

134. The Commission declined to impose any new financial obligations on carriers under this prong. For example, while we acknowledge the perspective of consumer advocacy groups and state and local governments that argue that when the transition to a replacement service requires upgrade of assistive technologies, the applicant should not only inform affected users of the associated costs but help subsidize them, we emphasize that that this is not the appropriate forum in which to impose any new financial obligations upon providers.

135. Prong Three: Interoperability. Third, we also emphasize in the Order that consumers should have access to the applications and functionalities they have come to associate as—and which currently remain—key components of the applicant service. Therefore, to satisfy the third prong of the adequate replacement test and retain eligibility for streamlined processing, the Order requires that an applicant must demonstrate that a replacement service offers compatibility with an enumerated set of applications and functionalities. The Order adopts

AT&T's proposal that widely adopted low-speed modem devices such as fax machines, home security alarms, medical monitoring devices, analog-only caption telephone sets, and point-of-sale terminals should make up the initial list of key applications for which interoperability is required.

136. The Order directs the Office of Engineering and Technology, working in consultation with the Wireline Competition Bureau and the Wireless Telecommunications Bureau (Bureaus) and subject to the guidelines below, to seek comment and, based on the record developed, propose additions to the list of key applications and functionalities adopted above for Commission review and approval. These guidelines are: (i) whether customers rely on the application or functionality for health or safety reasons; (ii) whether the application or functionality is used as a wholesale input by other providers; (iii) whether the application or functionality relies on vendor equipment or inputs that have been discontinued; and (iv) whether the service provider, as opposed to the end-user customer, is the least-cost avoider. The Order concludes that it is appropriate to expect that replacement services offer compatibility with these devices until 2025. These guidelines reflect our goal of ensuring that the technology transitions broadly benefit consumers, including those who still value certain applications and functionalities associated with legacy voice services. Applying certain market-based considerations and adopting a sunset for this requirement is intended to address incumbent LECs' concerns about being placed at a potential competitive disadvantage by requiring them indefinitely to retain applications and functionalities that are no longer important to consumers.

137. Again, whether by certification or appropriate showing, applicants meeting this adequate replacement test will still have the opportunity for automatic grant, allowing for speedy review where an applicant complies with all relevant standards. Our mission here is to ensure a

customer experience with the replacement service that is substantially similar to the customer experience with the service being discontinued, not to create new obligations.

138. **Other Issues.** Customer Education & Outreach Plan. The Order requires that an applicant offer an adequate customer education and outreach plan in accessible and usable formats. An adequate customer outreach plan includes: (i) the development and dissemination of educational materials, provided to all customers affected, containing specific information pertinent to the transition; (ii) the creation of a telephone hotline and the option to create an additional interactive and accessible service to answer questions regarding the transition; and (iii) appropriate training of staff to field and answer consumer questions about the transition. The educational materials must include, at minimum: (i) a general description of the changes to the service, written in a non-technical manner that can be readily understood by the average consumer; (ii) the impact on existing applications and functionalities that are likely to be purchased by individual customers, including whether such applications and functionalities will be available following the transition; (iii) any change in the price of the service and impact on applications and functionalities which run on the service to be discontinued; and (iv) points of contact who will address technology transitions issues, as much as is practicable. If the applicant is relying on a third party service, we require the applicant to provide: (i) contact information for that third party; and (ii) upon inquiry from a consumer, information regarding the interoperability and compatibility of applications and functionalities benefiting individuals with disabilities that run on the applicant's legacy voice service. Moreover, to ensure that customers understand the notice that they receive, any applicant who in the ordinary course of business regularly uses a language other than English in its communications with customers must provide the education materials to customers in both English and that regularly used language. We find that the establishment of clear guidance on education outreach materials will help promote the smoothest

possible technology transition, consumer choice, and the fulfillment of consumer information needs. We also find that the plan's additional protections for vulnerable consumers, as well as the required hotline, further promote these values. Moreover, we do not find these requirements to be overly burdensome, as much of the information we are requiring is similar to the information required through copper retirement notices under the rules adopted in the Emerging Wireline Order. The Commission will consider a carrier's certification to these requirements as part of its overall analysis of whether granting the application would be in the public interest.

139. Email Notice. The rules adopted in the Order allow carriers to provide email notice to customers of a planned discontinuance where those customers have previously agreed to receive notice from the carrier by that method. The Order allows carriers to provide notice by any other alternative method to which the customer has previously agreed. In both instances, the same provisos adopted in connection with the recently-adopted copper retirement rules shall apply (e.g., notice must be made in a clear and conspicuous manner; and may not contradict or be inconsistent with any other information with which it is presented). In addition, (a) the incumbent LEC must have previously obtained 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 ensure that the subject line of the message clearly and accurately identifies the subject matter of the e-mail; and (c) any email notice returned to the carrier as undeliverable will not constitute the provision of notice to the customer. As in the copper retirement context, this requirement should be sufficient to ensure that customers receive notice, without imposing unnecessary additional burdens on incumbent LECs. This outcome affords carriers greater flexibility in providing notice of discontinuances and establishes a measure of symmetry between the email notice requirements for discontinuances and the copper retirement rules.

140. Notice to Tribal Governments. Further, the rules adopted in the Order require all carriers to provide notice of discontinuance applications to Tribal governments in the state in which the discontinuance is proposed, in addition to the notice already required to state PUCs, state governors, and the Department of Defense. This outcome aligns the notice requirements for section 214 discontinuance applications and copper retirement network changes, imposes the same requirement on all carriers serving Tribal lands, and places Tribal governments in all states in a position to prepare and address any concerns from consumers in their Tribal communities. The Order also rejected proposals to revise the discontinuance timing of notice rules in section 63.71.

141. Timing of Notice. The Order rejects revising section 63.71 to require advance notice of a planned discontinuance or to lengthen the discontinuance process by changing the existing timeline for filing objections and/or allowing automatic grant. Based on the record, we conclude that there is no evidence of actual harm; however, we recognize that large-scale technology transition-related discontinuances have not yet occurred. Thus, while we do not revise section 63.71 in this Order, we emphasize that the Commission may revisit this issue if presented with evidence of such a need in the future.

142. Order On Reconsideration. The Order on Reconsideration revises the Commission's rules to make a competitive LEC's application for discontinuance deemed granted on the effective date of any copper retirement that made the discontinuance unavoidable as long as the discontinuance application is filed at least 40 days prior to the retirement effective date and the competitive LEC certifies that the copper retirement was the basis for the discontinuance. This is intended to address a gap in the Commission's rules that left competitive LECs potentially without recourse to avoid violating the discontinuance rules. Under this new

requirement, competitive LECs will have more than four months to consider the implications of the planned copper retirement and weigh their alternatives.

143. Summary of Significant Issues Raised by Public Comments to the IRFA.

There were no comments raised that specifically addressed the proposed rules and policies presented in the FNPRM IRFA (80 FR 57768-01). Nonetheless, the Commission considered the potential impact of the rules proposed in the IRFA on small entities and reduced the compliance burden for all small entities in order to reduce the economic impact of the rules enacted herein on such entities.

144. Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration. Pursuant to the Small Business Jobs Act of 2010, which amended the RFA, the Commission is required to respond to any comments filed by the Chief Counsel of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rule(s) as a result of those comments. The Chief Counsel did not file any comments in response to the proposed rule(s) in this proceeding.

145. Description and Estimate of the Number of Small Entities to Which Rules May Apply. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, 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. Pursuant to the RFA, the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in

the Federal Register.” A small business concern is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA). A small business is an independent business having less than 500 employees. Nationwide, there are a total of approximately 28.2 million small businesses, according to the SBA.

146. The majority of the rules and policies adopted in the Order will affect obligations on incumbent LECs and, in some cases, competitive LECs. Our actions, over time, may affect small entities that are not easily categorized at present. We therefore describe here, at the outset, the comprehensive small entity size standards that could be directly affected herein.

147. **Wireline Providers.** 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. According to Census Bureau data for 2007, there were 3,188 firms in this category, total, that operated for the entire year. Of this total, 3,144 firms had employment of 999 or fewer employees, and 44 firms had employment of 1000 employees or more. Thus, under this size standard, the majority of firms can be considered small.

148. 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, 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 local exchange service are small entities that may be affected by rules adopted pursuant to the Order.

149. Incumbent Local Exchange Carriers (Incumbent LECs). Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The closest applicable 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, 1,307 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 Order.

150. 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. The Small Business Act contains a definition of “small business concern,” which the RFA incorporates into its own definition of “small business.” 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.

151. 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 Order.

152. Interexchange Carriers. Neither the Commission nor the SBA has developed a small business size standard specifically for providers of interexchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. According to Commission data, 359 carriers have reported that they are engaged in the provision of interexchange service. Of these, 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 IXCs are small entities that may be affected by rules adopted pursuant to the Order.

153. 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. 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 rules adopted pursuant to the Order.

154. **Wireless Providers.** Wireless Telecommunications Carriers (except Satellite). Since 2007, the Census Bureau has placed wireless firms within this new, broad, economic census category. 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 the category of Wireless Telecommunications Carriers (except Satellite), census data for 2007 show that there were 1,383 firms that operated for the entire year. Of this total, 1,368 firms had employment of 999 or fewer employees and 15 had employment of 1000 employees or more. Since all firms with fewer than 1,500 employees are considered small, given the total employment in the sector, we estimate that the vast majority of wireless firms are small.

155. Wireless Telephony. Wireless telephony includes cellular, personal communications services, and specialized mobile radio telephony carriers. The SBA has developed a small business size standard for Wireless Telecommunications Carriers (except Satellite). Under the SBA small business size standard, a business is small if it has 1,500 or fewer employees. According to Commission data, 413 carriers reported that they were engaged in wireless telephony. 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.

156. **Cable Service Providers.** Cable and Other Program Distributors. 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. To gauge small business prevalence for these cable services we must, however, use current census data that are based on the previous category of Cable and Other Program Distribution and its associated size standard; that size standard was all such firms having \$13.5 million or less in annual receipts. According to Census Bureau data for 2007, there were a total of 3,188 firms in this category that operated for the entire year. Of this total, 2,684 firms had annual receipts of under \$10 million, and 504 firms had receipts of \$10 million or more. Thus, the majority of these firms can be considered small and may be affected by rules adopted pursuant to the Order.

157. Cable Companies and Systems. The Commission has also 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. The Commission determined that this size standard equates approximately to a size standard of \$100 million or less in annual revenues. The Commission also applied this size standard to MVPD operators in its implementation of the CALM Act. Industry data shows that there are 660 cable operators in the country. Depending upon the number of homes and the size of the geographic

area served, cable operators use one or more cable systems to provide video service. Of this total, all but eleven cable operators nationwide 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. Current Commission records show 4,945 cable systems nationwide. The number of active, registered cable systems comes from the Commission's Cable Operations and Licensing System (COALS) database on Aug. 28, 2013. A cable system is a physical system integrated to a principal headend.

158. Of this total, 4,380 cable systems have less than 20,000 subscribers, and 565 systems have 20,000 or more subscribers, based on the same records. Thus, under this standard, we estimate that most cable systems are small entities.

159. **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 \$32.5 million or less in average annual receipts. According to Census Bureau data for 2007, there were 2,383 firms in this category that operated for the entire year. Of these, 2,346 firms had annual receipts of under \$25 million and 37 firms had annual receipts of \$25 million or more. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

160. **Description of Projected Reporting, Recordkeeping, and Other Compliance**

Requirements for Small Entities. A number of our rule changes will result in additional reporting, recordkeeping, or compliance requirements for small entities. All of the rules we implement impose some compliance burdens on small entities by requiring them to become familiar with the new rules to comply with them. In certain cases, the burden of becoming familiar with the new rule in order to comply with it is the only additional burden the rule imposes. For all of the rule changes, we have determined that the benefit the rule change will bring for consumers, competition, and innovation outweighs the burden of the increased requirement/s. Other rule changes decrease reporting, recordkeeping, or compliance requirements for small entities. We have noted the applicable rule changes below impacting small entities.

161. Adequate Replacement Test. Any carrier that wants the potential for automatic grant of a technology transition discontinuance application must comply with the new adequate replacement test explained above. Although this will increase reporting, recordkeeping, and compliance requirements for small businesses these certification and compliance requirements are minimally necessary to enable us to evaluate these types of discontinuance applications more briskly to the benefit of applicants, consumers, and public safety entities. We specifically balance these burdens against the need to ensure that next-generation services meet the needs of consumers. These standards will create certainty regarding technology transitions discontinuances, and will benefit consumers, public safety entities, and industry participants by clarifying the importance of ensuring that network performance will be sufficient, that critical applications will continue to function, and that consumers will have access to the applications they associate as key components of the applicant service following a technology transition.

162. Allowing transition applicants to either demonstrate compliance with objective criteria or make a demonstration that, despite not being able to meet the criteria, the totality of the circumstances demonstrates that an adequate replacement nonetheless exists, while remaining eligible for automatic grant gives applicants flexibility and decreases the burdens associated with strict compliance rules. Additionally, the Commission evaluating first and third party services equally and allowing applicants relying on a third party service to make a prima facie showing based on publicly available information as to whether the third party service meets our test as an adequate replacement gives applicants flexibility and decreases compliance burdens. The Order further promotes speedy transitions and decreases compliance burdens by allowing for a more streamlined approach for discontinuances involving services that are substantially similar to those for which section 214 discontinuance has previously been approved and streamlining the section 214 process in instances where consumers no longer subscribe to legacy voice service. These rules allow the applicant to bypass the performance testing requirements. Thus, the streamlined approach benefits applicants by reducing the reporting, recordkeeping and compliance burdens resulting from performance testing requirements, while protecting the interests of all stakeholders, industry and consumers. It also ensures a customer experience with the replacement service that is substantially similar to the customer experience with the service being discontinued, without creating new overly burdensome obligations.

163. Moreover, as described above, established network performance testing parameters will avoid confusion over the merits of particular results and ensure that the Commission analyzes similar data sets from applicants in the technology transitions. Although network testing increases compliance burdens, the Order provides some flexibility in the testing parameters an applicant will use. If the testing parameters raise sufficient concerns such that the Commission removes the application from streamlined processing, the Commission will still

consider those testing parameters in any totality of the circumstances analysis of the adequacy of the replacement network. We conclude these metrics are appropriate for replacement networks in order to provide substantially similar performance as a legacy TDM service.

164. Another rule that will decrease recording, recordkeeping and compliance burdens on small businesses is the performance test exemption for small carriers. We recognize that in other contexts smaller carriers may require more tailored solutions and network testing under the parameters established in Appendix B could be more difficult for smaller carriers and relatively speaking burdensome, given the more limited number of customers. Therefore, the Order provides smaller carriers more flexibility in how they demonstrate network performance under this prong of the three-prong test. The Order concludes that carriers with 100,000 or fewer subscriber lines, aggregated across all affiliates, may remain eligible for automatic grant without compliance with the specific testing requirements of the network performance criterion we articulate today.

165. The Order's established benchmarks for network performance, service availability, and network coverage protect consumers that depend on a network performing properly and service to be available when needed for everyday or emergency use. Similarly, consumer access to 911 and the dispatchable address requirement are critical to ensuring public safety. The Order also notes that transitioning from legacy-based services to new technologies presents new network vulnerability issues that did not exist with legacy technologies and comparing legacy voice services to new technologies is in part an apples-to-oranges comparison. Thus, in order to demonstrate that a replacement service is offering comparable security, the Order finds that a security benchmark that measures the unique risks associated with new technologies is necessary. The Order notes that satisfaction of this criterion is part of the adequate replacement test required for streamlined processing and is not mandatory to

discontinue service generally. Moreover, the Order's interoperability guidelines reflect our goal of ensuring that technology transitions broadly benefit consumers of all types, including those who still value certain applications and functionalities associated with legacy voice services.

166. Therefore, the benefits of the adequate replacement test outweigh any additional reporting, recordkeeping, or compliance obligations upon small businesses.

167. Application Requirements. Applicants filing technology transition discontinuance applications and seeking streamlined treatment are also required to provide pricing information about the applicant service subject to discontinuance and the proposed replacement service. Although they are required to provide this information, it allows the Commission to evaluate the application in a streamlined manner without further information collections. This also ensures that consumer interests are protected throughout technology transitions.

168. Consumer Education & Outreach Plan. While the Order's establishment of consumer education and outreach materials requires a modest increase in a carrier's compliance burden, an overwhelming majority of commenters support its inclusion as it will help promote the smoothest possible technology transition, consumer choice, and the fulfillment of consumer information needs. The outreach plan's additional protections for vulnerable consumers, as well as the required hotline, further promotes these values. The Commission does not find these requirements to be overly burdensome as much of the information we are requiring is similar to the information required through copper retirement notices under the rules adopted in the Emerging Wireline Order. It also enables providers to respond to any customers who need assistance during the technology transitions process. The Commission will consider a carrier's certification to these requirements as part of its overall analysis of whether granting the application would be in the public interest to minimize the burdens of strict compliance.

169. Email Notice and Notice to Tribal Governments. Allowing providers to send email and alternative forms of notifications previously accepted by consumers decreases the burden of the discontinuance notification requirement for small businesses. Thus, making the discontinuance process more manageable for small businesses. Requiring carriers to provide notice of discontinuance applications to Tribal governments in the state in which the discontinuance is proposed may increase the burden on small entities, but it aligns the notice requirements for section 214 discontinuance applications and copper retirement network changes, imposes the same requirement on all carriers serving Tribal lands, and places Tribal governments in all states in a position to prepare and address any concerns from consumers in their Tribal communities.

170. Order On Reconsideration. The Order on Reconsideration's revisions to the Commission's rules address a gap in the former rules that clarifies and harmonizes the copper retirement and discontinuance processes. Allowing a competitive LEC's application for discontinuance to be deemed granted on the effective date of any copper retirement that made the discontinuance unavoidable (if they meet certain requirements described above) reduces the compliance burdens on competitive LECs. Additionally, permitting competitive LECs to have more than four months to consider the implications of the planned copper retirement and weigh their alternative further reduces their compliance burdens.

171. **Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered.** The RFA requires an agency to describe any significant, specifically small business, 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 and reporting requirements under the rule for such 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 such small entities.”

172. The Commission is aware that this rulemaking could impact small entities by imposing costs and administrative burdens. For this reason, in reaching its final conclusions and taking action in this proceeding, the Commission has taken a number of measures to minimize or eliminate the costs and burdens generated by compliance with the adopted regulations. As described above, for example, we considered alternatives to the rulemaking changes that could have increased the burden of compliance for small businesses. We conclude that the new and updated requirements are minimally necessary to ensure we meet our statutory responsibilities with respect to technology transitions while preserving the core values of consumer protection, competition, universal service, and public safety. We believe that it is unlikely that small business will be impacted significantly by the final rules so as to outweigh the benefits of the rules.

173. In fact, we anticipate that in many instances, small businesses will find their burden decreased by the new rules. For example, permitting email-based notice of planned technology transitions discontinuances to customers or notice by any other alternative method to which the customer has previously agreed affords carriers greater flexibility in providing notice and establishes a measure of symmetry between the email notice requirements for discontinuances and the copper retirement rules. The requirement is sufficient to provide customers notice of discontinuance without imposing additional burdens on carriers. Requiring carriers to provide notice of discontinuance applications to Tribal governments in the state in which the discontinuance is proposed aligns the notice requirements for section 214 discontinuance applications and copper retirement network changes, imposes the same

requirement on all carriers serving Tribal lands, and places Tribal governments in all states in a position to prepare and address any concerns from consumers in their Tribal communities.

174. Specifically, allowing technology transition applicants to either demonstrate compliance with objective criteria or make a demonstration that, despite not being able to meet the criteria, the totality of the circumstances demonstrates that an adequate replacement nonetheless exists, while remaining eligible for automatic grant, gives applicants flexibility and decreases the economic burdens on small businesses associated with strict compliance rules. Additionally, the criteria established in the three-prong test provides clarity that should enable us to evaluate these types of discontinuance applications more briskly, to the benefit of applicants and consumers, including small businesses. Incorporating these certifications into our section 214 process benefits consumers, public safety entities, and industry participants alike by providing clear, consistent, and certain guidance regarding the importance of ensuring that network performance will be sufficient, critical applications will continue to function, and that consumers will have access to the applications they associate as key components of the applicant service following a technology transition.

175. Similarly, the Commission evaluating first and third party services equally and allowing applicants relying on a third party service to make a prima facie showing based on publicly available information as to whether the third party service meets our test as an adequate replacement gives small business applicants flexibility and decreases the economic burdens associated with strict compliance rules. Furthermore, requiring that a single service (whether first- or third-party) satisfy all three prongs of the adequate replacement test in order to be eligible for automatic grant ensures consumers receive the integrated service experience they need and deserve and also reduces the potential the economic impact of consumers having to find and employ multiple service providers to satisfy their needs.

176. The Order recognizes the importance of promoting speedy transitions by allowing for a more streamlined approach for discontinuances involving services that are substantially similar to those for which section 214 discontinuance has previously been approved and streamlining the section 214 process in instances where consumers no longer subscribe to legacy voice service. The practical effect of these rules is to allow the applicant to bypass the performance testing requirements. The streamlined approach benefits applicants by reducing the economic burdens resulting from performance testing requirements, while protecting the interests of all stakeholders, industry and consumers. As discussed above, this also ensures a customer experience with the replacement service that is substantially similar to the customer experience with the service being discontinued, without creating new overly burdensome obligations.

177. Furthermore, the established benchmarks for network performance, service availability, and network coverage protect small businesses that depend on a network performing properly and service to be available when needed for everyday or emergency use. Another rule that will decrease the economic burden on small businesses is the performance test exemption for small businesses or carriers. Network testing under the parameters established in Appendix B could be more difficult for smaller carriers and relatively speaking economically burdensome, given the more limited number of customers. Therefore, the Order provides smaller carriers more flexibility in how they demonstrate network performance under this prong of the three-prong test. The Order's interoperability guidelines also reflect our goal of ensuring that the technology transitions broadly benefit consumers of all types, including those who still value certain applications and functionalities associated with legacy voice services.

178. The Order's communications security criterion will ensure that consumers receive comparably effective protection from network security risks as they do with legacy networks.

Limiting this criterion to the context of streamlined processing and noting that compliance will be examined flexibly will reduce the impact on small businesses.

179. The Order's establishment of clear guidance on education outreach materials will help promote the smoothest possible technology transition, consumer choice, and the fulfillment of consumer information needs which effectively protects small businesses that depend on an applicant's services by minimizing any negative economic impact due to lack of understanding about a technology transition. The outreach plan's additional protections for vulnerable consumers, as well as the required hotline, further promotes these values.

180. By declining to provide any rural LEC exemption, the Order also protects small businesses that depend on a network performing properly and service to be available when needed for everyday or emergency use. The Order concludes that rural consumers or small businesses, with often limited choice in service providers, should equally benefit from full consideration of the adequacy of any replacement service to ensure continued network performance and service quality, as well as access to critical applications, and interoperability with valued services.

181. The Order on Reconsideration's revisions to the Commission's rules to make a competitive LEC's application for discontinuance deemed granted on the effective date of any copper retirement that made the discontinuance unavoidable as long as the discontinuance application is filed at least 40 days prior to the retirement effective date and the competitive LEC certification that the copper retirement was the basis for the discontinuance are intended to address a gap in the Commission's rules that left competitive LECs potentially without recourse to avoid violating the discontinuance rules. Permitting competitive LECs to have more than four months to consider the implications of the planned copper retirement and weigh their alternative reduces burdens the former rules did not properly address. These revisions reduce the economic

impact on competitive LECs and therefore burdens on consumers by clarifying and harmonizing the copper retirement and discontinuance processes.

182. **Federal Rules that Might Duplicate, Overlap, or Conflict with the Rules.**

None.

183. **Report to Congress.** The Commission will send a copy of this Second Report and Order and Order on Reconsideration, including the FRFA, in a report to be sent to Congress pursuant to the SBREFA. In addition, the Commission will send a copy of this Second Report and Order, Order on Reconsideration, and Declaratory Ruling, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the Second Report and Order, Order on Reconsideration, and Declaratory Ruling, and the FRFA (or summaries thereof) will also be published in the Federal Register.

184. **Ordering Clauses.** Accordingly, IT IS ORDERED that, pursuant to sections 1-4, 201, 214, 251, and 303(r), of the Communications Act of 1934, as amended, 47 U.S.C. 151 through 154, 201, 214, 251, 303(r), this Second Report and Order and Order on Reconsideration ARE ADOPTED.

185. IT IS FURTHER ORDERED that parts 51 and 63 of the Commission's rules ARE AMENDED as set forth in Appendix A, and that any such rule amendments that contain new or modified information collection requirements that require approval by the Office of Management and Budget under the Paperwork Reduction Act SHALL BE EFFECTIVE after announcement in the Federal Register of Office of Management and Budget approval of the rules, and on the effective date announced therein.

186. IT IS FURTHER ORDERED that this Second Report and Order and Order on Reconsideration SHALL BE effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], except for 47 CFR 51.329(c), 63.19(a),

63.60, 63.71, 63.602, and the outreach plan and consumer education requirements set forth in this Second Report and Order, which contain information collection requirements that have not been approved by OMB. The Federal Communications Commission will publish a document in the Federal Register announcing the effective date.

187. IT IS FURTHER ORDERED that the Petition for Reconsideration filed by TelePacific IS GRANTED IN PART AND DENIED IN PART.

188. IT IS FURTHER ORDERED that the Commission's Consumer & Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Second Report and Order and Order on Reconsideration to Congress and the Government Accountability Office pursuant to the Congressional Review Act, see 5 U.S.C. 801(a)(1)(A).

189. IT IS FURTHER ORDERED that the Commission's Consumer & Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Second Report and Order and Order on Reconsideration, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

List of Subjects

47 CFR Part 51

Communications common carriers, Telecommunications.

47 CFR Part 63

Cable television, Communications common carriers, Radio, Reporting and recordkeeping requirements, Telegraph, Telephone.

FEDERAL COMMUNICATIONS COMMISSION.

Marlene H. Dortch,
Secretary.

Final Rules

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR parts 51 and 63 as follows:

PART 51 – INTERCONNECTION

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

Authority: 47 U.S.C. 151-55, 201-05, 207-09, 218, 220, 225-27, 251-54, 256, 271, 303(r), 332, 1302.

2. Section 51.329 is amended by revising paragraph (c)(1) to read as follows:

§ 51.329 Notice of network changes: Methods for providing notice.

* * * * *

(c) * * *

(1) The public notice or certification must be labeled with one of the following titles, as appropriate: “Public Notice of Network Change Under Rule 51.329(a),” “Certification of Public Notice of Network Change Under Rule 51.329(a),” “Short Term Public Notice Under Rule 51.333(a),” “Certification of Short Term Public Notice Under Rule 51.333(a),” “Public Notice of Copper Retirement Under Rule 51.332,” or “Certification of Public Notice of Copper Retirement Under Rule 51.332.”

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PART 63 – EXTENSION OF LINES, NEW LINES, AND DISCONTINUANCE, REDUCTION, OUTAGE AND IMPAIRMENT OF SERVICE BY COMMON CARRIERS; AND GRANTS OF RECOGNIZED PRIVATE OPERATING AGENCY STATUS

3. Section 63.19 is amended by revising paragraph (a) introductory text to read as follows:

§ 63.19 Special procedures for discontinuances of international services.

(a) With the exception of those international carriers described in paragraphs (b) and (c) of this section, any international carrier that seeks to discontinue, reduce, or impair service, including the retiring of international facilities, dismantling or removing of international trunk lines, shall be subject to the following procedures in lieu of those specified in §§ 63.61 through 63.602:

* * * * *

4. Section 63.60 is amended by adding paragraph (h) to read as follows:

§ 63.60 Definitions.

* * * * *

(h) The term “technology transition” means any change in service that would result in the replacement of a wireline TDM-based voice service with a service using a different technology or medium for transmission to the end user, whether Internet Protocol (IP), wireless, or another type; except that retirement of copper, as defined in § 51.332(a) of this chapter, that does not result in a discontinuance, reduction, or impairment of service requiring Commission authorization pursuant to this part shall not constitute a “technology transition” for purposes of this part.

5. Section 63.71 is amended by revising paragraph (a) introductory text, adding paragraphs (a)(6) and (7), redesignating paragraph (f) as (j), redesignating paragraphs (b) through (e) as (c) through (f), adding new paragraph (b), adding a sentence to the end of newly redesignated paragraph (f), and adding paragraphs (g), (h), and (i).

The revisions and additions read as follows:

§ 63.71 Procedures for discontinuance, reduction or impairment of service by domestic carriers.

* * * * *

(a) The carrier shall notify all affected customers of the planned discontinuance, reduction, or impairment of service and shall notify and submit a copy of its application to the public utility commission and to the Governor of the State in which the discontinuance, reduction, or impairment of service is proposed; to any federally-recognized Tribal Nations with authority over the Tribal lands in which the discontinuance, reduction, or impairment of service is proposed; and also to the Secretary of Defense, Attn. Special Assistant for Telecommunications, Pentagon, Washington, DC 20301. Notice shall be in writing to each affected customer unless the Commission authorizes in advance, for good cause shown, another form of notice. For purposes of this section, notice by e-mail constitutes notice in writing. Notice shall include the following:

* * * * *

(6) For applications to discontinue, reduce, or impair an existing retail service as part of a technology transition, as defined in § 63.60(h) of this part, in order to be eligible for automatic grant under paragraph (f) of this section:

- (i) A statement that any service offered in place of the service being discontinued, reduced, or impaired may not provide line power; and
- (ii) The information required by § 12.5(d)(1) of this chapter.

(7) For applications to discontinue, reduce, or impair an existing retail service as part of a technology transition, as defined in § 63.60(h) of this part, in order to be eligible for automatic grant under paragraph (f) of this section:

- (i) A description of any security responsibilities the customer will have regarding the replacement service; and
- (ii) A list of the steps the customer may take to ensure safe use of the replacement service.

(b) If a carrier uses e-mail to provide notice to affected customers, it must comply with the following requirements in addition to the requirements generally applicable to the notice:

(1) The carrier must have previously obtained express, verifiable, prior approval from retail customers to send notices via e-mail regarding their service in general, or planned discontinuance, reduction, or impairment in particular;

(2) A carrier must ensure that the subject line of the message clearly and accurately identifies the subject matter of the e-mail; and

(3) Any email notice returned to the carrier as undeliverable will not constitute the provision of notice to the customer.

* * * * *

(f) * * * An application to discontinue, reduce, or impair an existing retail service as part of a technology transition, as defined in § 63.60(h) of this part, may be automatically granted only if the applicant provides affected customers with the notice required under paragraphs (a)(6) and (7) of this section, and the application contains the showing or certification described in § 63.602(b) of this part.

(g) An application to discontinue, reduce, or impair a service for which the requesting carrier has had no customers or reasonable requests for service during the 180-day period immediately preceding submission of the application shall be automatically granted on the 31st day after its filing with the Commission without any Commission notification to the applicant, unless the Commission has notified the applicant that the grant will not be automatically effective.

(h) An application to discontinue, reduce, or impair an existing retail service as part of a technology transition, as defined in § 63.60(h) of this part, shall contain the information required by § 63.602 of this part. The certification or showing described in § 63.602(b) of this part is only required if the applicant seeks eligibility for automatic grant under paragraph (f) of this section.

(i) An application to discontinue, reduce, or impair a service filed by a competitive local exchange carrier in response to a copper retirement notice filed pursuant to § 51.332 of this chapter shall be automatically granted on the effective date of the copper retirement; provided that:

(1) The competitive local exchange carrier submits the application to the Commission for filing at least 40 days prior to the copper retirement effective date; and

(2) The application includes a certification, executed by an officer or other authorized representative of the applicant and meeting the requirements of § 1.16 of this chapter, that the copper retirement is the basis for the application.

* * * * *

6. Section 63.602 is added to read as follows:

§ 63.602 Additional contents of applications to discontinue, reduce, or impair an existing retail service as part of a technology transition.

(a) The application shall include:

(1) The contents specified in § 63.505 of this part;

(2) A statement identifying the application as involving a technology transition, as defined in § 63.60(h) of this part;

(3) Information regarding the price of the service for which discontinuance authority is sought and the price of the proposed replacement service; and

(4) A certification, executed by an officer or other authorized representative of the applicant and meeting the requirements of § 1.16 of this chapter, that the information required by this section is true and accurate.

(b) In order to be eligible for automatic grant under § 63.71(f) of this part, an applicant must demonstrate that a service(s) identified pursuant to § 63.505(k)(2) of this part is an adequate

replacement for the voice service identified pursuant to § 63.505(k)(1) of this part by either certifying or showing, based on the totality of the circumstances, that one or more replacement service(s) satisfies all of the following criteria:

(1) Offers substantially similar levels of network infrastructure and service quality as the service being discontinued;

NOTE TO PARAGRAPH (b)(1): For purposes of this section, “substantially similar” means that the network operates at a sufficient level such that it will allow the network platform to ensure adequate service quality for interactive and highly-interactive applications or services, in particular voice service quality, and support applications and functionalities that run on those services.

(2)(i) Complies with regulations regarding the availability and functionality of 911 service for consumers and public safety answering points (PSAPs), specifically §§ 1.7001 through .7002, 9.5, 12.4, 12.5, 20.18, 20.3, 64.3001 of this chapter;

(ii) Offers comparably effective protection from network security risks as the service being discontinued; and

(iii) Complies with regulations governing accessibility, usability, and compatibility requirements for:

(A) Telecommunications services and functionalities;

(B) Voicemail and interactive menu functionalities; and

(C) Advanced communications services, specifically 47 CFR 6.1 through 6.11, 7.1 through 7.11, 14.1 through 14.21, 14.60 through 14.61; and

(3) Offers interoperability with key applications and functionalities.

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