

**BEFORE THE  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, D.C. 20554**

In the Matter of

Technology Transitions

GN Docket No. 13-5

Policies and Rules Governing Retirement Of  
Copper Loops by Incumbent Local Exchange  
Carriers

RM-11358

Special Access for Price Cap Local Exchange  
Carriers

WC Docket No. 05-25

AT&T Corporation Petition for Rulemaking  
to Reform Regulation of Incumbent Local  
Exchange Carrier Rates for Interstate Special  
Access Services

RM-10593

**COMMENTS OF THE CALIFORNIA PUBLIC UTILITIES COMMISSION**

AROCLES AGUILAR  
HELEN M. MICKIEWICZ  
505 Van Ness Avenue  
San Francisco, CA 94102  
Phone: (415) 703-1319  
Fax: (415) 703-4592  
Email: [hmm@cpuc.ca.gov](mailto:hmm@cpuc.ca.gov)

October 30, 2015

Attorney for the  
California Public Utilities Commission

## I. INTRODUCTION

The California Public Utilities Commission (CPUC or California) submits these comments in response to the *Further Notice of Proposed Rulemaking (FNPRM)* released by the Federal Communications Commission's (FCC or Commission) on August 7, 2015.<sup>1</sup> Having released an order adopting rules regarding copper retirement, back-up power, and § 214 discontinuance policy, the FCC poses additional questions on the same broad topic of technology transitions. In the *FNPRM*, the FCC seeks further comment on numerous topics pertaining to the anticipated discontinuance of legacy services as part of the transition from traditional time-division multiplex (TDM) service to Internet Protocol-enabled (IP-enabled) services.

The FCC offers specific proposals for possible criteria against which to measure “what would constitute an adequate substitute for retail services that a carrier seeks to discontinue, reduce, or impair in connection with a technology transition” [from TDM to IP, wireline to wireless].<sup>2</sup> In seeking comment on its proposals, the FCC affirms its continued dedication “to providing carriers the guidance and clarity they need to implement new technologies at scale as quickly as possible.”<sup>3</sup> And, the FCC emphasizes that it intends to adopt “clear criteria” to eliminate uncertainty that might impede the

---

<sup>1</sup> *In the Matter of Technology Transitions; Policies and Rules Governing Retirement Of Copper Loops by Incumbent Local Exchange Carriers; Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services; Further Notice of Proposed Rulemaking*; GN Docket No. 13-5; RM-11358; WC Docket No. 05-25; RM-10593 (FCC 15-97); rel. August 7, 2015. (*FNPRM*)

<sup>2</sup> *FNPRM* at ¶202.

<sup>3</sup> *Id.*

industry from implementing a prompt transition to IP and wireless technology.<sup>4</sup> The FCC also expressed confidence that establishing clear principles it proposes would ensure that key functions remain in place, thus contributing to increased “public acceptance of alternative technologies, thus decreasing resistance to services based on next-generation technologies.”<sup>5</sup>

The FCC cites to § 214 (a) of the Communications Act of 1934, because service providers must comply with its provisions in terminating service to customers:

No carrier shall discontinue, reduce, or impair service to a community, or part of a community, unless and until there shall first have been obtained from the Commission a certificate that neither the present nor future public convenience and necessity will be adversely affected thereby.<sup>6</sup>

In reviewing § 214 discontinuance applications under existing precedent, the Commission considers the availability of adequate substitute services as just one of five factors to be evaluated and applied in determining whether discontinuing the service in question would adversely affect the public convenience and necessity.<sup>7</sup> To date the FCC has analyzed applications based on the facts presented, and has not codified any specific criteria by which it evaluates the adequacy of substitute services.

---

<sup>4</sup> *FNPRM* at ¶203.

<sup>5</sup> *Id.* at ¶205.

<sup>6</sup> 47 U.S.C. § 214 (a)

<sup>7</sup> In evaluating an application for discontinuance authority under section 214(a), the Commission considers five factors that are intended to balance the interests of the carrier seeking discontinuance authority and the affected user community: (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) the existence, availability, and adequacy of alternatives; and (5) increased charges for alternative services, although this factor may be outweighed by other considerations. (*FNPRM*, Footnote 656. p. 108-9)

## II. DISCUSSION

### A. Establishing Clear Standards to Streamline Transitions to an All-IP Environment

In this *FNPRM*, the FCC is proposing to adopt criteria by which to evaluate the adequacy of substitute service for service discontinuance applications involving a technology transition. Specifically, for a § 214 application to be eligible for automatic grant of approval,<sup>8</sup> the FCC is proposing that a carrier seeking to discontinue an existing retail service in favor of a retail service based on a newer technology must demonstrate that the substitute retail service the carrier proposes to offer, or alternative services available from other providers in the affected service area, meet the following criteria in order:

- (1) network capacity and reliability;
- (2) service quality;
- (3) device and service interoperability, including interoperability with vital third-party services (through existing or new devices);
- (4) service for individuals with disabilities, including compatibility with assistive technologies;
- (5) PSAP and 9-1-1 service;
- (6) cybersecurity;
- (7) service functionality; and
- (8) coverage.<sup>9</sup>

---

<sup>8</sup> See 47 C.F.R. § 63.71 (c), which provides for an automatic grant of approval to the applicant under specified circumstances.

<sup>9</sup> *FNPRM* at ¶ 208. “We further tentatively conclude that if a carrier certifies in its application that it satisfies all of these criteria, then the application will be eligible for automatic grant pursuant to section 63.71(d) [sic] of the Commission’s rules as long as other already-adopted applicable requirements for automatic grant are satisfied. However, if the carrier discontinuing a service during a technology transition is unable to file such a certification, or if comments or objections call into question whether a substitute or alternative service satisfies all of the criteria we adopt, then we would not automatically grant the application.” ¶ 210.

The CPUC supports in general the adoption of the criteria the FCC proposes, and comments here on several of the suggested criteria – network capacity and reliability, service quality, service for individuals with disabilities, and PSAP and 9-1-1 service. We also offer some comments on consumer education.

## **B. General Transition Policy Considerations**

As an initial matter, the FCC seeks comment on when any criteria that the Commission adopts should apply. The FCC asks a number of specific questions:

Should [the application of its proposed criteria] be dependent on the nature of the existing service and the newer service to which the carrier is transitioning? What should qualify as a ‘service based on a newer technology’? Rather than framing the draft rule in terms of discontinuance of an ‘existing’ service in favor of a ‘service based on a newer technology,’ should we instead frame it in terms of discontinuance of ‘legacy service,’ and if so how should the term ‘legacy service’ be defined?”<sup>10</sup>

The FCC also asks whether the criteria it proposes should apply where the replacement service a requesting carrier offers or the alternative services available from other providers in the relevant service area are IP-based or wireless. Further, the FCC invites comment on what criteria should apply if the replacement or alternative service is based on next-generation technologies.<sup>11</sup>

### **1. Basic Service and Service Quality**

California must place its answers to these questions in context. To maintain a minimum level of service available to everyone in California at a reasonable rate, the CPUC has mandated basic service elements for voice service for all carriers of last resort

---

<sup>10</sup> *Id.*, at ¶ 209.

<sup>11</sup> *Id.*

(COLRs). In addition, California Public Utilities (CA PU) Code § 876 requires telephone corporations that offer basic residential telephone service to offer California LifeLine service (the California low-income telephone program).<sup>12</sup> Since 2012, all holders of certificates of public convenience and necessity (CPCNs)<sup>13</sup> providing residential service or Lifeline service must also provide basic service, as the CPUC has defined it, on an *unbundled* basis.

The definition of basic service the CPUC adopted in 2012 is technology-neutral, giving carriers who can meet the requirements the flexibility to do so using the technology of their choice. The nine elements include:

1. The ability to place and receive voice-grade calls over all distances utilizing the public switched telephone network or its successor network;
2. Free Access to 911/Enhanced 911 service;
3. Billing provisions: flat rate options for unlimited incoming and outgoing calls, and California Lifeline rates and charges for eligible customers;
4. Directory services: access to directory assistance within the customer's local community; options for listed or unlisted directory listings; and options for free white pages telephone directory;
5. Access to 800 and 8YY toll-free services;
6. Access to telephone relay service as provided in CA PU Code § 2881;

---

<sup>12</sup> California PU Code § 876 reads as follows: "The commission shall require every telephone corporation providing telephone service within a service area to file a schedule of rates and charges providing a class of lifeline telephone service. Every telephone corporation providing service within a service area shall inform all eligible subscribers of the availability of lifeline telephone service, and those they may qualify for and obtain service, and shall accept applications for lifeline telephone service according to procedures specified by the commission."

<sup>13</sup> This is one type of operating authority the CPUC issues, and it does so pursuant to CA PU Code § 1001.

7. Access to customer service information about Universal Lifeline Telephone Service, service activation, termination, and repair, and bill inquiries;
8. One-time free blocking for information services and one-time billing adjustments for charges incurred inadvertently, mistakenly, or without authorization; and
9. Access to operator services.

These nine elements refer to the provision of voice service. Accordingly, if the CPUC were evaluating copper retirement in the manner the FCC contemplates, it would need to consider whether the service provider is a carrier of last resort or a CPCN holder. If the provider is offering residential service, then the basic service criteria must be met. Some of these elements can be altered for providers who are not offering traditional wireline service (e.g. wireless carriers do not have to publish their own directory, but can provide one from another publisher). Non-wireline carriers can submit an informal filing with the CPUC's Communications Division, describing how the provider plans to continue to meet the CPUC's service quality requirements set forth in CPUC General Order 133-C.<sup>14</sup>

General Order 133-C has five service quality measures, rules for major service outages, and underlying standards applicable to facilities-based wireline telephone carriers. The five service quality measures are as follows:

- Telephone service installation interval (five business days);
- Installation commitments met 95% of the time;

---

<sup>14</sup> GO 133-C contains "rules governing telephone service", and sets forth the CPUC's service quality standards. The type of informal filing required for changes of the type described here is an "advice letter".

- Customer trouble reports per number of 100 working telephone lines;
- Out of service (OOS) repair interval (90% within 24 hours excluding Sundays, federal holidays, catastrophic events and widespread outages); and
- Answer time to reach a live operator (80% of calls in less than 60 seconds).

The FCC should be mindful that it is looking at the transition in this *FNPRM* through a lens focused on copper retirement, whereas the CPUC is looking through a lens focused on carrier of last resort and basic service requirements, including provision of Lifeline. The CPUC requires approval for withdrawal of service, but not for retirement of copper facilities.

## **2. Substitute Services**

The FCC tentatively concludes that “[w]here a carrier is seeking to establish the adequacy of alternative retail services in the context of a section 214 discontinuance application by certifying its compliance will all of the criteria such that its application may be eligible for automatic grant, ...the certification should be executed by an officer or other authorized representative of the company and be accompanied by a detailed statement explaining the basis for such certification.”<sup>15</sup> It seeks comment on whether such an approach would be consistent with the objectives of the revised service discontinuance process. The CPUC supports this recommendation.

The FCC also tentatively concludes that in cases where a carrier must demonstrate the existence of an adequate substitute service, the qualifying substitute service could be

---

<sup>15</sup> *FNPRM*, at ¶ 212.

one the carrier offers, or could be an existing service third parties offer. In addition, the FCC proposes that whether a first party or a third party would be offering the substitute service, the relevant criteria would be applied equally as stringently in both cases. The Commission seeks comment on these proposals and on possible alternatives.<sup>16</sup>

The CPUC recommends against an approach that would treat a first party and a third party service offering as the same. The two services might very well be comparable, but an applicant could easily cite to a non-existent replacement product, and the FCC might not know. Alternatively, the 214 applicant might cite to a product “available” only by press release. Web-site verification is not really proof that a product exists; sometimes it only shows an aspirational product that may appear if someone attempts to order it. Third-party products or services might indeed be comparable, but a carrier with an incentive to discontinue a service could identify third parties who *might* offer an alternative product. The opportunity for an applicant to identify a third-party product could lead to unintended incentives. Carriers might be tempted to overstate the capabilities of a product in advertising.

The CPUC suggests that, if, in a previous 214 grant of permission, the FCC has verified a third-party product as a comparable service and that the verified third-party service also is available in the same location as the discontinued service, then it could be used as a comparable service.

---

<sup>16</sup> *Id.*, ¶ 213.

### **C. Network Capacity and Reliability**

The FCC seeks comment on its tentative conclusion that any adequate substitute test that it adopts should evaluate whether the replacement or alternative service will both

- (a) afford the same or greater capacity as the existing service and
- (b) afford the same reliability as the existing service even when large numbers of communications, including but not limited to calls or other end-user initiated uses, take place simultaneously, and when large numbers of connections are initiated in or terminated at a communications hub, including but not limited to a wire center.

Specifically, the FCC explained that this two-prong test means the following criteria must be met:

- 1) Communications are routed to the correct location
- 2) Connections are completed
- 3) Connection quality does not deteriorate under stress
- 4) Connection setup does not exhibit noticeable latency.<sup>17</sup>

The CPUC agrees with the FCC that an IP substitute, at a minimum, must meet the proposed test in order to afford the same capacity and reliability.

### **D. Service Discontinuance**

The CPUC has established rules for the withdrawal of service for COLRs seeking to be relieved of their obligations. Those rules require the COLR to submit an advice letter or an application, depending on the circumstances. Again, as noted previously in these comments, the CPUC does not require a service provider seeking to retire copper to submit an application to, or obtain approval from, the CPUC.

---

<sup>17</sup> *Id.*, at ¶ 216.

### **E. Service Quality**

In the *FNPRM*, the FCC tentatively concludes that one criterion in any “adequate substitute test” would require a carrier to demonstrate in its § 214 application, “that any replacement or alternative service meets the minimum service quality standards set by the state commission responsible for the relevant service area.”<sup>18</sup> If the relevant state commission has not established such standards or lacks authority to do so, then the FCC proposes to apply federal standards to those 214 applications.

The CPUC supports the proposal to require that the replacement or alternative service must meet the relevant state commission’s minimum service quality standards. State commissions are better able to determine the needs of the affected community and what their residents have come to expect from the telecommunications services they receive.<sup>19</sup>

### **F. Service for Individuals with Disabilities**

The FCC tentatively concludes that another criterion in an adequate substitute test would require the carrier to demonstrate “that its replacement service or the alternative services available from other providers allow at least the same accessibility, usability, and compatibility with assistive technologies as the service being discontinued.”<sup>20</sup>

It is critically important that consumers with disabilities who rely on specialized equipment to communicate effectively over the public telecommunications network will

---

<sup>18</sup> *Id.*, at ¶ 218.

<sup>19</sup> The CPUC’s ability to comment further is constrained because it has an open rulemaking on service quality, *Order Instituting Rulemaking to Evaluate Telecommunications Corporations Service Quality Performance and Consider Modifications to Service Quality Rules*, R.11-12-001.

<sup>20</sup> *FNPRM* at ¶ 222.

continue to be able to communicate just as effectively after the transition to newer technologies. For example, where the 214 applicant is transitioning its service in the affected community to a similar IP-based service, the applicants' disabled subscribers should not be forced to switch to an alternative voice provider to ensure that the customer can continue to receive the same accessibility, usability, and compatibility with assistive technologies as the service being discontinued. A contrary outcome, where the subscriber is required to switch to maintain comparable service, would be especially disruptive to a population dependent on consistency and stability more than other customers. In addition, because disabled subscribers often have lower incomes than other demographic groups, being forced to switch to an alternative provider could prove costly.

To protect the communities of deaf and disabled users, the CPUC urges the FCC to require service providers to do one of the following: 1) ensure that the new service works with the equipment/device of the disabled subscriber; or 2) if the customer's assistive technologies are not compatible, the transitioning provider should offer the disabled subscriber, at no additional charge, new equipment that is compatible with the provider's IP service; or 3) provider should give financial assistance and information on a source from which the subscriber can purchase such new equipment.

The FCC further seeks comment on the effect of this transition on people with disabilities who must transition to new equipment. The Commission asks:

[W]hat is needed to reduce the burden of obtaining such equipment, 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 (such as individuals with medical devices that are incompatible with

IP service). Should we require carriers seeking to discontinue existing services in such contexts to include in their section 214 applications information regarding the availability of IP-enabled devices that can also be distributed to selected and qualifying recipients under applicable state and federal programs?”<sup>21</sup>

California has the largest specialized telecommunications equipment distribution program in the country. Through oversight of that program, the CPUC has received anecdotal evidence that equipment the program distributes is not compatible with current IP technology. The nature of the customers’ experience suggests that problems are not easily identified. Accordingly, the CPUC recommends that the FCC conduct a trial to determine the nature and extent of the problem. Once that step has been taken, consumers, carriers, state equipment distribution programs and the FCC should work together to develop mitigation strategies. Based on the trial results, the FCC may want to consider imposing additional conditions on service discontinuance. The trial could serve to highlight both technical and adoption-related issues that would need to be addressed in the IP transition.

The FCC also seeks comment on implementation of real time text to replace TTY text services. “We note that as TDM networks are discontinued in favor of IP-based networks, there is an opportunity to implement IP-based real time text to replace TTY text services, as the key functionalities of both services are similar.”<sup>22</sup> The FCC seeks

---

<sup>21</sup> *Id.*

<sup>22</sup> *Id.*, ¶ 223.

input on whether it “should require the implementation of real time text over IP networks and whether we should set an end date for the termination of TTY text services.”<sup>23</sup>

California’s experience has shown that the use of TTY devices is declining. Yet, the CPUC’s program has disabled California residents still using such devices. In 2014, for example, TTY devices accounted for 1,320,442 calls and 1,705,131 minutes of use in California.<sup>24</sup> This data gives the CPUC pause regarding a termination date for TTY text services. The CPUC does not oppose a requirement that voice providers implement real time text over IP networks. At the same time, California considers it premature for the FCC to set an end date *now* for terminating TTY text service. The CPUC’s disabled telecommunications equipment distribution program does not currently distribute IP-compatible TTY equipment. If, however, the FCC does set an end date for TTY text service, then the FCC should consider a process for ensuring the availability of IP text compatible equipment, perhaps for free or at the expense of the transitioning provider. Further, the FCC should consider requiring the provider to offer the disabled subscriber the training and support necessary to ensure that the new equipment functions properly, and that the disabled individual understands how to use the new equipment.

#### **G. PSAP and 9-1-1 Service**

California agrees with the FCC that “[t]he ability of consumers to contact 9-1-1 and reach the appropriate Public Safety Answering Point (PSAP) and for that PSAP to

---

<sup>23</sup> *Id.*

<sup>24</sup> Information provided by the DDTP administrative contractor (California Communications Access Foundation).

receive accurate location information for the caller is of the utmost importance.”<sup>25</sup> We also strongly agree with the FCC’s tentative conclusion that another criterion in an adequate substitute test should require the carrier to demonstrate that a substitute service offered by the requesting carrier in the relevant service area complies with applicable state, Tribal, and federal regulations regarding the availability, reliability, and required functionality of 9-1-1 service. For VoIP services, the FCC’s evaluation should be based on whether the VoIP service complies with the 9-1-1 regulations applicable to such services, including any back-up power requirements.

The FCC also seeks comment on what considerations it should apply to “discontinuance of 9-1-1 network services and components, such as trunks and selective routers that support the capability of individual consumers to effectively reach 9-1-1.”<sup>26</sup> The CPUC recommends that the FCC approve such a discontinuance *only if* an adequate substitute is available and carriers reliant on the discontinuing 9-1-1 provider have transitioned to that alternative provider.

In reviewing § 214 discontinuance notices that would affect PSAPs, critical to the FCC’s review should be the need to honor the PSAP timeframe for change, and not base transition timing on the carrier’s desire to end a service that is working in the PSAP’s configuration. Provisioning and migrating communications connectivity to PSAPs requires extensive coordination among many agencies and providers to ensure that

---

<sup>25</sup> *FNPRM*, at ¶ 225.

<sup>26</sup> *Id.*

multiple types of communications are not interrupted. In California, the Governor's Office of Emergency Services, not the CPUC, has oversight responsibility for PSAPs.

Regarding access to 9-1-1 by consumers who are using non-traditional calling methods, the rules for providing 9-1-1 capable service should be technology-neutral. Keeping in mind the acknowledged problems with location accuracy for wireless devices, and the decades it has taken to achieve an indoor location accuracy rules, the FCC should not authorize a substitute which cannot provide a dispatchable address for automatic location identification (ALI), in addition to automatic number identification (ANI) and at least eight hours battery backup.

The CPUC urges the FCC to continue its work to complete the rules for VoIP providers, including non-interconnected VoIP providers. The FCC's workshop on May 8, 2015, highlighted the challenges of balancing innovations in content that could be provided to PSAPs with the processes for standardization, integration, and adoption.

Copper retirement is a critical issue for the emergency calling components of the PSTN. One reason that changes to the copper network are so important to the 9-1-1 network and providers is that changing a configuration requires lead time and funding, both of which are in short supply. The PSAP's primary function is to answer 9-1-1 calls and dispatch emergency services. The need for PSAP personnel to participate in testing changes poses the potential to distract from or interfere with that core purpose. In general, PSAPs operate under the principle that, "if it works, don't change it." Testing of new solutions or connectivity is important because even apparently small changes could

have a significant impact. PSAP personnel are also mindful of budgetary considerations because PSAPs frequently receive funding from multiple sources and jurisdictions.

#### **H. Consumer Education**

The FCC “remains concerned about the level of consumer education and outreach around technology transitions generally.”<sup>27</sup> The FCC notes that discontinuance of an existing service “on which customers presently rely creates an especially great need for customer education.”<sup>28</sup> Accordingly, the FCC now proposes to require that “part of the evaluation of a section 214 application to discontinue a legacy retail service should include whether the carrier has an adequate customer education and outreach plan.”<sup>29</sup> The FCC asks whether it can and should provide particular metrics and guidance concerning what would constitute an adequate education and outreach plan, as well as how best to work with the state commissions and Tribal governments on education and outreach.<sup>30</sup>

The CPUC recommends that the FCC consider a service provider’s education and outreach plans as part of a 214 Application review. We agree that educating consumers regarding the changes that will accompany the transition to IP service is important, and that effective, widespread consumer education will help smooth the transition. Such education and outreach will be especially important to the most vulnerable populations -- disabled and elderly consumers. In particular, the CPUC strongly urges the FCC to work

---

<sup>27</sup> *Id.*, ¶ 233.

<sup>28</sup> *Id.*

<sup>29</sup> *Id.*

<sup>30</sup> *Id.*

with the states, Tribal governments, the disabled community, and service providers to develop materials and disclosure rules to ensure that providers adequately notify consumers in addition to taking steps to achieve outreach and consumer education. These steps would help inform all consumers generally, and especially disabled subscribers, regarding critical components of the transition: the potential impact on telephone equipment, the need for back-up power, the responsibility of the consumer to maintain a back-up battery, the telecommunications devices special-needs subscribers must use, and adoption of best practices that can be employed by the service providers when transitioning disabled customers to IP-based equipment.

#### **I. Section 214(a) Discontinuance Process**

Recognizing that email may be the preferred method of notice for both the carriers seeking discontinuance and consumers, the FCC asks whether it should revise its rules “to explicitly allow email based notice or other forms of electronic or other notice of discontinuance to customers.”<sup>31</sup>

Not all subscribers have access to e-mail service, and the percentage of customers without e-mail access is higher among low-income demographic groups. The CPUC recommends that the Commission require notices to be provided in the same manner as the subscriber is currently billed by the transitioning service provider, unless the customer requests a different method of notice.

---

<sup>31</sup> *Id.*, at ¶ 239.

