

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of	
Ensuring Customer Premises Equipment Backup Power for Continuity of Communications	PS Docket No. 14-174
Technology Transitions	GN Docket No. 13-5
Policies and Rules Governing Retirement Of Copper Loops by Incumbent Local Exchange Carriers	RM-11358
Petition for Declaratory Ruling to Clarify that Technology Transitions Do Not Alter the Obligation of Incumbent Local Exchange Carriers to Provide DS1 and DS3 Unbundled Loops Pursuant to 47 U.S.C. § 251(c)(3)	WC Docket No. 15-1
Petition of Telcordia Technologies Inc. to Reform or Strike Amendment 70, to Institute Competitive Bidding for Number Portability Administration and to End the NAPM LLC's Interim Role in Number Portability Administration Contract	WC Docket No. 09-109
Telephone Number Portability	CC Docket No. 95-116

COMMENTS OF PUBLIC KNOWLEDGE

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I. INTRODUCTION

Evidence that the Commission must act to protect consumers in the technology transitions only continues to accumulate. Just to pick one example, this past February hundreds of customers were left without service for weeks when Verizon did not immediately repair damaged lines in Manhattan.¹ In that case, customers reported being repeatedly offered VoiceLink service when they called to complain. Even if, as Verizon protested, extreme weather conditions make it more difficult to completely avoid these problems, those same weather conditions also make it even more crucial that elderly residents, people with disabilities, or others who may not be able to leave their homes have reliable communications service.

The Commission has rightly recognized that it must take action to ensure the technology transitions are a true step forward for consumers. In this docket, the Commission has solicited and received comment on the many facets of transitioning networks, discontinuing services, and preserving the core values that guide the success of our network. From battery backup to numbering administration to consumer privacy, the Commission's actions now will shape the future of how people use and rely on the communications networks that connect us all. Public Knowledge urges the Commission to adopt strong rules that will preserve the network compact that has successfully guided communications policy thus far.

II. THE CONTINUED ONSLAUGHT OF DEREGULATORY PROPOSALS IN THE STATES ONLY INCREASES THE FCC'S IMPORTANCE IN CONSUMER PROTECTION.

Less than three months into 2015, more alarmingly deregulatory bills have already been introduced in state legislatures to strip aspects of state agencies' authority to protect consumers

¹ Jon Brodtkin, *Verizon Will Fix Your Landline in a Month--Or Give You Wireless Right Now*, Ars Technica (Feb. 24, 2015), <http://arstechnica.com/business/2015/02/verizon-will-fix-your-landline-in-a-month-or-give-you-wireless-right-now/>.

in communications markets. This trend only highlights the important role the FCC must play in protecting consumers during the technology transitions. When state agencies are able and willing to ensure consumers have access to reliable, affordable network services, the Commission should work with those authorities, but when states have tied their own hands consumers rely on the FCC to step in to protect them.

For example, on March 3rd the Kentucky state legislature approved and delivered to the Governor a bill that would largely strip the Kentucky Public Service Commission's authority over most exchanges, and would reduce ILECs' obligation to provide basic wireline service.² And in Ohio, the Governor has included language in his proposed state budget that would allow ILECs to withdraw basic landline service with 120 days notice while limiting the Ohio Public Utilities Commission's ability to ensure consumers have continued access to alternative wireline services.³

These proposals are a sobering reminder that in many states, attacks on state commissions' authority have left the FCC as millions of consumers' first and only line of defense if something goes wrong in the tech transitions. A system that truly protects consumers would of course include both state and federal oversight, but recent state deregulatory efforts only emphasize how critical it is that the FCC protect consumers in the tech transitions.

III. ESTABLISHING CLEAR, STRONG METRICS FOR SERVICE CHANGES PROTECTS CONSUMERS AND CREATES CERTAINTY FOR ALL STAKEHOLDERS.

Section 214(a) is and will be a crucial legal provision in the tech transitions. At this point, the question is not really *whether* § 214(a) will be important in the transitions, but rather *how*

² Kentucky House Bill 152 (2015), *available at* <http://www.lrc.ky.gov/record/15rs/HB152.htm>.

³ Jackie Borchardt, *Landline Phone Deregulation Included in John Kasich's Budget Bill*, The Cleveland Plain Dealer (Feb. 23, 2015), http://www.cleveland.com/open/index.ssf/2015/02/landline_phone_deregulation_in.html.

exactly it will be applied. Seen in this light, creating a set of metrics or a “checklist” for service changes and discontinuance applications under § 214(a) will benefit all stakeholders by creating certainty while ensuring no one is left behind in the tech transitions.

At the outset, there seems to be some confusion as to what exactly § 214(a)’s role in the tech transitions is. For example, AT&T protests that creating certainty by establishing the metrics by which the Commission will evaluate § 214(a) applications would be a “piecemeal and uneven” way to approach the technology transitions.⁴ But clear, common-sense metrics that ensure consumers’ basic service is not left behind in the tech transitions would be the exact opposite of a piecemeal approach. This proceeding is not about implementing a new regime; is about understanding how *existing* legal requirements will apply to the tech transitions. Section 214(a), by its own words, applies to every carrier seeking to make service changes that would “discontinue, reduce, or impair service to a community.”⁵ Setting out how the Commission will evaluate tech transitions applications under § 214(a) is indeed the exact opposite of a piecemeal approach. Rather than creating an application-by-application jurisprudence for the tech transitions, the Commission is here contemplating how to ensure everyone is on the same page at the outset.

Of course, in referring to § 214(a) rules as “piecemeal and uneven” AT&T may also have been referring to rules that apply to AT&T as an ILEC that do not apply to other voice providers, like cable operators offering managed VoIP services. While there are reasons we have certain expectations for ILECs that we do not have for other wireline voice providers, if AT&T would like to expand certain obligations to all basic voice providers it is free to make such a proposal,

⁴ AT&T Comments at 6. AT&T does, however, elsewhere acknowledge that § 214(a) is “designed... to protect the public.” *Id.* at 4.

⁵ 47 U.S.C. § 214(a).

and PK would welcome the discussion. The tech transitions do indeed raise many deeper questions about how best to effectuate the fundamental values of the network, and new ideas are welcome in the debate. That does not, however, mean the Commission's current proposal to provide clarity on carriers' existing obligations under § 214(a) is anything other than an evenhanded effort to protect consumers and provide order in the tech transitions.

PK continues to support the metrics discussed in our original comments, in addition to agreeing with the Communications Workers of America that the Commission should collect data on service quality from all telecommunications carriers.⁶ This would help the Commission understand what service quality the carriers are currently offering, identify instances where carriers are failing to adequately maintain their networks, and evaluate whether new services are a true step forward.

The Commission also has clear authority to implement strong metrics under § 214. Courts have found § 214 to be among the "abundant powers granted to the Federal Communications Commission,"⁷ and specified that § 214 "leaves exclusively within the jurisdiction of the Commission the determination of whether to grant a certificate of convenience and necessity and to determine in a proper proceeding whether a certificate is necessary in the premises."⁸ This provision alone gives the Commission strong authority to protect the public interest in service discontinuances, but the Commission's authority to implement these rules is especially strong when combined with its authority to make necessary rules to execute the provisions of the Communications Act and its authority to ensure common carriers' practices are

⁶ Comments of CWA at 34-38.

⁷ *Chastain v. Am. Telephone & Telegraph Co.*, 351 F. Supp. 1320, 1323 (D.D.C. 1972).

⁸ *ITT World Commc'ns Inc. v. New York Telephone Co.*, 381 F. Supp. 113, 120 (S.D.N.Y. 1974).

just, reasonable, and non-discriminatory.⁹ Here, the Commission must use that authority to provide clarity to all stakeholders and ensure customers continue to have access to reliable services throughout and after the tech transitions.

IV. CONSUMERS SHOULD STILL HAVE RELIABLE BACKUP POWER AFTER THE TECHNOLOGY TRANSITIONS.

A. Guaranteed Backup Power is the Baseline.

Right now, consumers are guaranteed backup power for traditional landlines during power outages. In fact, many consumers keep their landline service specifically to retain this feature.¹⁰ While technology transitions hold tremendous promise for a state-of-the-art communications network, the loss of guaranteed backup power or shifting backup power responsibility to the consumer are serious changes that could end up creating a network that serves some and not others. Ultimately, a technological transition that eliminates consumers' option to have a reliable, self-powered phone is a step backward.

The baseline that we start from is the traditional POTS millions of people rely on today. The goal of the technology transitions is to provide better telecommunications services to all Americans. In service of this goal, the Commission must not evaluate new technologies by comparing them to themselves, but instead evaluate them by looking to the existing basic service. The baseline that we start from is the traditional POTS that millions of Americans rely on today. The baseline is not what backup power carriers have decided to provide for new, untested products, but a reliable self-powered network that works when consumers need it most and without the public having to take measures to ensure its reliability.

⁹ See 47 U.S.C. §§ 154(i), 201, 202.

¹⁰ John B. Horrigan, PhD, *Consumers and the IP Transition: Communications Patterns in the Midst of Technological Change* (Nov. 2014), <https://www.publicknowledge.org/assets/uploads/blog/Consumers.IP.Transition.FINAL.pdf>.

AT&T asserts “the transition is running smoothly” and claims consumers are “overwhelmingly adopting these new technologies” because “carriers have invested substantial resources in deploying next-generation facilities, upgrading the quality of their service offerings, and introducing innovative new features and functions to consumers”¹¹ However, AT&T fails to account for the many states that have deregulated basic landline service, allowed carriers to retire basic telephone service, and prevented state agencies such as public utilities commissions from accepting and resolving consumer complaints about degrading landline service.

Verizon has also joined the chorus, stating that “over the decades, countless technological advances have replaced previous, inferior technologies,”¹² citing fiber as “immune to many environmental factors that affect copper cable...less likely to experience outages during weather events or other public safety emergencies,” and fiber lines as “generally more durable...and require[ing] fewer repairs than copper lines.”¹³ But in the broader technology transitions, “new” does not always mean “better.” The new technologies that AT&T and Verizon propose to replace traditional POTS service are not self-powered, do not work with vital devices that vulnerable consumers rely on, and are not available in every community. The Commission should not concede reliability, functionality, and universal access on behalf of consumers. At this moment, we cannot broadly discontinue technologies that provide reliable service for consumers in favor of technologies that are not yet available to all Americans and do not work with the devices consumers need for their health, business, and safety.

Further, requiring consumers to be responsible for backup power when commercial power fails is a vast cultural shift. This would be the first time that we ask consumers to take on

¹¹ Comments of AT&T at 5.

¹² Comments of Verizon at 4.

¹³ *Id.* at 5.

the responsibility of ensuring their communications line to safety, 911, and loved ones has appropriate power during the most difficult times. The transition should not mean that customers must accept new fallibility in their telephone services, take full responsibility for battery backup for their telephone, and save sufficient additional money to cover the costs. In effect, this would be asking consumers to fund a step backwards in terms of technological capability.

B. The Commission Must Ensure Service Providers Fulfill their Role in Guaranteeing Backup Power.

The structure of the copper landline telephone network placed the responsibility of backup power during commercial power outages on the carrier. As long as the carrier secured central backup power, the copper line carried electricity over to the consumer's house and they enjoyed uninterrupted telephone service. With the advent of cordless phones, the only time the consumer worried about backup batteries was for their cordless phone or they simply retained a traditional landline phone to use during emergencies. VoIP, fiber, and wireless technologies make this scenario obsolete. These new technologies require three different levels of backup power – at the carrier's central location, on customer premises, and for the actual phone – that vary depending on the nature of the technology.

Public Knowledge agrees with the National Association of State 911 Administrators (“NASNA”) in their statement outlining that “if the provider chooses to deploy a backup power source that is external to the customer's premises, then the provider should be solely responsible for maintaining it. If the provider chooses to install backup power technology at the customer's residence, the consumer should be responsible for making sure the power supply is charged and ready, but the provider should be responsible for an annual maintenance check-up to ensure everything is in good working order and there hasn't been any degradation in the battery pack or power supply. If there has been, then the provider should replace it. If the consumer chooses to

self-provision CPE backup power, the provider should assist by making information available and offering to help ensure the installation is done properly. In all cases, the provider should be responsible for consumer education.”¹⁴

We also agree with the California Public Utilities Commission (“CPUC”) recommendation that the Commission should require providers to “offer optional battery backup power maintenance services” to ensure battery backup is functional because “some customers may not be able to perform battery inspection or replacement on their own, whether because disabled, not technically proficient, or disinterested.”¹⁵ However, we disagree that these optional services should only be provided “at cost.” Charging consumers additional fees for reliability that has always been paid for as part of their existing phone bill would be a step backwards. Today, backup measures are included in the cost of landline service. Allowing service providers to place an additional cost on customers’ bills as a result of a change in technology, which carriers have championed for offering companies new economic efficiencies, is adding insult to injury. In this new scenario, consumers would end up paying more, not less, for the same feature.

C. The Commission Must Require Service Providers to Arrange for a Minimum of Seven Days of Backup Power to Ensure Public Safety

Public Knowledge believes the Commission’s proposal to require service providers to arrange for eight or even 24 hours of backup power is not sufficient time to meet Americans’ safety needs, particularly those living in natural disaster-prone areas. We maintain that a minimum time of seven days backup power is a reasonable requirement that will keep consumers safe before, during, and after a natural disaster, and allow them to rebuild their communities.

¹⁴ See Comments of National Association of State 911 Administrators, *Technology Transitions*, GN Docket No. 13-5, at pg. 2 (Feb. 5, 2015)

¹⁵ See CPUC Comments at Pg. 4

NASNA and the Environmental and Energy Study Institute (“EESI”) also agree that eight hours of backup power is not sufficient time. While NASNA agrees 24 hours is a better time frame, EESI disagrees. EESI notes that restoring power after Hurricane Sandy and Hurricane Katrina took 12 and 15 days respectively, and in average takes seven to 23 days.¹⁶ For this reason, EESI supports “a backup system for fiber-optic networks that lasts at minimum 10 days,” with the caveat that “more time may be warranted in communities that are particularly reliant on landline service or experience more frequent outages than average.”¹⁷ We support EESI’s comments and encourage the Commission to require service providers to arrange for a minimum of seven days backup power.

Public Knowledge agrees in part with the California Public Utilities Commission’s comments stating “expecting consumers to self-provision CPE backup power after 8 hours of standby time may be reasonable but only if the following conditions are met: (1) the FCC has conducted a public education about program of consumer responsibilities to self-provision CPE power beyond the 8 hours; (2) service providers have disclosed to consumers their responsibilities and their options for replacing batteries to prolong onsite CPE power; and (3) service providers offer spare batteries at reasonable cost.”¹⁸ Two of the conditions outlined by the CPUC have not been met because spare batteries at a reasonable cost are not available for most VoIP services, and the Commission has not conducted a public education program to inform consumers. Thus, the responsibility of providing backup power cannot fall on consumers

¹⁶ See, e.g., Comments of Environmental and Energy Study Institute, *Technology Transitions*, GN Docket No. 13-5 *et al.* at 3 (Feb. 5, 2015).

¹⁷ See EESI Comments at Pg. 4

¹⁸ See, e.g., Comments of California Public Utilities Commission, *Technology Transitions*, GN Docket No. 13-5 *et al.* at 6 (Feb. 5, 2015).

because they are ill prepared and the batteries necessary are not widely available in the market yet.

V. THE COMMISSION HAS AMPLE REASON AND AUTHORITY TO STRENGTHEN THE COPPER RETIREMENT PROCESS TO PROTECT CONSUMERS.

Despite the protests of some carriers that the copper retirement system needs no updating,¹⁹ the Commission is right to recognize that transitions away from the copper network can significantly impact consumers and competitors in addition to the issues that may be raised in a discontinuance application under § 214(a). Especially with the startling evidence of copper neglect submitted into the record by the Communications Workers of America (CWA), the Commission must act now to create strong copper retirement rules that accommodate the needs of consumers, and ensure carriers follow them.

The information submitted into the record by the CWA from carriers' employees is alarming and extremely concerning. Employees have reported to CWA that some carriers: have stopped testing and maintaining their facilities, set up appointments to respond to complaints 7-10 days after the complaint, do not adequately allocate resources to repair lines, no longer conducts quarterly battery checks or routine battery replacement in many remote terminals, and make it difficult for customers to avoid being switched to inferior services.²⁰ Even more startling is employees' reports that Verizon instructed at least some employees to leave some customers without any service if they refused to accept VoiceLink.²¹ This evidence only reinforces what we already knew: the Commission must waste no time in implementing rules that give consumers

¹⁹ See, e.g., Comments of AT&T Services, Inc., *Technology Transitions*, GN Docket No. 13-5 *et al.* at 1 (Feb. 5, 2015).

²⁰ See Comments of Communications Workers of America, *Technology Transitions et al.*, GN Docket No. 13-5 *et al.*, at 24-26 (Feb. 5, 2015).

²¹ See *id.* at 25.

notice and meaningful information about network changes through the Commission's copper retirement rules.

Public Knowledge also agrees with CWA that retail customers should be able to file objections to network changes, as interconnecting carriers can.²² Additionally, the Commission should not extend notice-only copper retirement rules to situations in which the carrier wishes to replace its copper network with wireless.²³ Given the wide-ranging concerns raised about relying on wireless networks as a replacement for traditional wireline infrastructure, it would be premature to put copper-to-wireless transitions in a procedure that only gives stakeholders notice and the opportunity to delay transitions for a short time.

Finally, the Commission has strong authority to implement its proposed network change notification rules. AT&T argues the Commission lacks authority for requiring notices of network changes to retail customers.²⁴ Section 251(c)(5) imposes on ILECs "[t]he duty to provide reasonable public notice of changes in the information necessary for the transmission and routing of services using that local exchange carrier's facilities or networks, as well as of any other changes that would affect the interoperability of those facilities and networks."²⁵ Network changes that impact interoperability of the ILEC's network with end-user equipment can have significant consequences for network users if they do not have adequate notice to prepare.²⁶ The Commission has ample authority to update its rules to account for the tremendous changes facing consumers when carriers retire their copper networks, and Public Knowledge urges the Commission to do so.

²² *See id.* at 8-9; 47 C.F.R. § 51.333(c).

²³ *Id.* at 7-8 (comparing proposed rules to 47 C.F.R. §§ 51.325(a)(4) and 51.331(c)).

²⁴ *See* Comments of AT&T at 37-38.

²⁵ 47 U.S.C. § 251(c)(5).

²⁶ *See* Comments of The Ad Hoc Telecommunications Users Committee, *Technology Transitions*, GN Docket No. 13-5, at 8 (Feb. 5, 2015).

VI. NUMBERING ADMINISTRATION MUST CONTINUE TO ENSURE RELIABLE, COMPETITIVE CHOICES FOR CONSUMERS.

PK agrees with Neustar that numbering administration issues are critical to ensuring a successful transition of the phone network.²⁷ The reliable operation of our numbering system lies at the very core of the network's functions, and it is one of the chief reasons why many people simply assume that our phone network will always just work. This may have led to numbering issues holding a lower public profile than other current telecommunications policy topics, but it makes getting numbering right no less critical to the future of our network.

Getting numbering administration right is crucial to ensuring competition, reliability and public safety in the network. Consumers rely on efficient and impartial number portability system to be able to switch providers without needing to give up their phone number, which prevents providers from hiding from competition.

As the Commission moves forward with its next Local Number Portability Administrator (LNPA) contract, Public Knowledge urges the Commission to ensure continued reliability and security in the numbering system. Particularly since we are now in the midst of the technology transitions, the LNPA must also be prepared to handle unexpected problems that could arise, either in the course of transitioning between LNPA providers or as a result of some broader technology transition. We have already seen how the tech transitions can create unanticipated problems in the network, even absent any bad actors. For example, the transition to IP led to the use of least-cost routers that too often failed to complete or sustain calls to and from rural areas,²⁸

²⁷ See Comments of Neustar, Inc., *Technology Transitions*, GN Docket No. 13-5 *et al.* (Feb. 5, 2015).

²⁸ See *Rural Call Completion*, WC Docket No. 13-39, Report and Order and Further Notice of Proposed Rulemaking (rel. Nov. 8, 2013).

and led to routing practices that have increased the frequency and severity of NG911 outages.²⁹ No company *intended* to create these problems, or even expected them to appear, but they appeared nonetheless.

Similarly, unanticipated problems could indeed arise in the numbering system, especially during a time of so much change in technology and business practices. The Commission and the LNPA must take every reasonable precaution to ensure the numbering system remains reliable and can resort to back-up options if unexpected problems do arise. Where those precautions or backup systems would benefit from broader public input, the Commission should solicit public comment, as it has done for many other aspects of the tech transitions.

VII. CONCLUSION

The technology transitions present a host of important issues and questions that consumers are relying on the Commission to decide. The answers to those questions could very well shape the future of the networks we use to called loved ones, conduct business, engage in civic participation, and seek help during emergencies. Public Knowledge urges the Commission to protect consumers and the fundamental values of the network by creating strong rules that establish how the Commission will determine whether new services are truly equal to or better than what network users have now.

Respectfully submitted,

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²⁹ See *911 Governance and Accountability*, PS Docket No. 14-193, *Improving 911 Reliability*, PS Docket No. 13-75, Policy Statement and Notice of Proposed Rulemaking (Nov. 21, 2014).