

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
AT&T Petition to Launch a Proceeding)	GN Docket No. 12-353
Concerning the TDM-to-IP Transition,)	
Petition of the National Telecommunications)	
Cooperative Association for a Rulemaking)	
to Promote and Sustain the Ongoing TDM-to-IP)	
Evolution)	
)	
Policies and Rules)	
Governing Retirement of Copper Loops)	RM-11358
By Incumbent Local Exchange Carriers)	
)	
Petition of XO Communications, LLC,)	
Covad Communications Group, Inc., NuVox)	
Communications and Eschelon Telecom, Inc.)	
For a Rulemaking to Amend Certain Part 51)	
Rules Applicable to Incumbent LEC)	
Retirements of Copper Loops and Copper)	
Subloops)	

**REPLY COMMENTS OF MPOWER COMMUNICATIONS CORP., U.S. TELEPACIFIC
CORP., ACN COMMUNICATIONS SERVICES, INC., LEVEL 3 COMMUNICATIONS,
LLC, TDS METROCOM, LLC, BLUE ROOSTER TELECOM, INC., IMPULSE
TELECOM, LLC., RURAL BROADBAND NOW!, SONIC TELECOM, LLC, ALPHEUS
COMMUNICATIONS, LLC, AND MEGAPATH CORPORATION**

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The undersigned, Mpower Communications Corp., U.S. TelePacific Corp. (collectively TelePacific); ACN Communications Services, Inc.; Level 3 Communications, LLC; TDS Metrocom, LLC; Blue Rooster Telecom, Inc.; Impulse Telecom, LLC; Rural Broadband Now!; Sonic Telecom, LLC; Alpheus Communications, LLC; and MegaPath Corporation file these reply comments in support of the request filed on January 25, 2013.¹

I. Introduction and Summary

The comments filed in this proceeding provide broad support for the Commission to modify its copper retirement rules so that customers served by EoC deployment can continue to receive a choice of broadband services and so that CLECs can continue investing in technology that uses the copper infrastructure that is already in place to expand the availability of reasonably priced broadband. As demonstrated below, the objections raised by the ILECs are easily addressed and should not deter the Commission from recalibrating its copper retirement rules to foster and protect investment in innovative use of the embedded base of copper loops across the country.

Small and medium sized business customers lack access to fiber networks that typically have been deployed only to the most densely concentrated business markets. While the Commission's goal of universal broadband deployment is achievable, universal broadband via fiber to the premises is not on the immediate horizon. The challenge is how to increase access to broadband, encourage the deployment of advanced broadband networks, and foster competition simultaneously. The Commission can balance these goals by fostering competition through

¹ Letter of U.S. TelePacific Corp. et al. Requesting Commission to Refresh Record and Take Expedited Action to Update Copper Retirement Rules, WC Docket Nos. 10-188, 12-353; GN Docket Nos. 09-51, 13-5; RM-11358 (filed Jan. 25, 2013) ("Joint Request").

access to UNE copper loops — as Congress intended — where it has determined that CLECs are impaired without access to such elements. In contrast, the ILECs suggest that the only way to encourage investment in advanced broadband networks is to allow them unfettered discretion to retire their copper local loops — the critical piece of their natural monopoly network infrastructure that the 1996 Act obligates them to share with competitors.

Consistent with the *TRO*'s goal of promoting investment in equipment to unleash the potential of embedded copper loops, CLECs have invested in innovative broadband services using these loops. Competitors bring broadband to business customers that would otherwise lack access to affordable broadband service using ADSL2+ and VDSL2 to provide Ethernet over Copper (“EoC”). On January 25, 2013, a number of the undersigned CLECs asked the Commission to revisit its copper retirement rules to provide CLECs with the regulatory certainty to continue funding innovation in and deployment of affordable, advanced broadband services over the existing copper infrastructure. In particular that Joint Request, among other items, asks the Commission to suspend its current rules allowing ILECs to retire copper loops until revisions to those rules are in place; eliminate the deemed denied standard that allows ILECs unfettered discretion to retire copper loops; and modify the retirement rules applicable to the feeder portion of the loop so CLECs may have access to home run loops where the ILECs have deployed fiber feeder but are using copper subloops.

Not surprisingly, the RBOCs and their trade associations object to this request and seek to roll back broadband competition, arguing that (1) copper loops are an “anachronism” that cannot possibly provide the broadband services American businesses require; (2) under the Commission’s unbundling framework CLECs are not entitled to access such loops; (3) the cable MSOs will provide significant competition to serve the business market; and (4) where the

ILECs “retire” copper loops, CLECs should be able to replace them by building fiber facilities. The record shows the fallacy of these arguments.

The comments from EoC equipment manufacturers demonstrate advances in EoC technology that allow service providers to provision EoC with 100 Mbps of capacity. And these manufacturers are promising further innovation, including higher bandwidth over longer distances, so that end users that currently cannot obtain advanced broadband services will be able to use such services in the future.

Similarly, the claim that CLECs can easily deploy their own fiber networks is baseless. TelePacific demonstrates that in California, competitive fiber facilities are only available at 9% of its customer service locations. Further, recent national estimates suggest approximately two-thirds of the business locations in the country lack access to fiber. Despite erroneous conclusions in the *TRO*, it is much harder for CLECs to overbuild the ILEC copper network given the ILEC’s economies of scale and scope and their ability to extend their existing copper network by lashing fiber to existing copper cables.

Fiber deployment remains a significant challenge, even for ILECs. It is significant that of the three remaining BOCs, only Verizon has pursued a fiber to the premises strategy. CenturyLink, like the CLECs, is investing heavily in EoC. AT&T uses copper in its fiber to the node U-Verse network. In the business market, AT&T’s announced fiber deployment initiative is still only projected to cover 50 percent of the multi-tenant business addresses with six or more tenants in its footprint, leaving a significant segment of its ILEC territory without access to fiber. And even Verizon, the poster child for fiber deployment, has essentially ceased FiOS expansion and entered into joint marketing arrangement with the cable companies rather than expand its FiOS investment and compete. The RBOCs claim that cable investment in the business market

cannot be ignored. But independent research raises serious doubt about the ability of the cable MSOs to make any significant inroads into that market to challenge the RBOC monopoly.

The RBOCs are wrong when they misrepresent the Commission's impairment findings in the *TRO* and *TRRO* and challenge the Commission's authority to modify the copper retirement rules adopted in the *TRO*. The Commission unequivocally determined that CLECs are impaired without access to copper loops, regardless of the services they elect to provide over such loops. The Commission has ample authority under the Act to correct the mistakes made in the *TRO* that inexplicably allow the ILECs to retire copper loops with little if any regulatory oversight. As explained below, however, the CLECs do not seek access to copper loops in perpetuity.

The RBOCs are also mistaken when they attempt to link copper retirement to their incentive to deploy fiber. CenturyLink, for example, is adamant that it has no plans to retire its copper and it still has ample incentive to justify continued fiber deployment. The RBOCs' claims regarding the costs they incur to maintain copper loops where they have also deployed fiber are also overstated. In many cases the ILEC must maintain its systems and infrastructure supporting copper because they themselves continue to use copper. Verizon, AT&T and CenturyLink have all explained that they plan on using copper in their network for a long time into the future.

Despite these plans, the RBOCs have pursued a regulatory agenda that is hostile to CLEC access to copper loops, such as the statements from Verizon's CEO about the company's intent to "kill" the copper, AT&T's IP Transition petition which seeks relief from the copper retirement rules altogether, and USTA's Forbearance Petition which seeks additional relief from the copper retirement rules. All of these actions harm investment in broadband EoC by creating regulatory uncertainty surrounding CLECs' continued ability to obtain access to critical last-mile inputs.

While the CLECs seek immediate Commission action to rectify the current imbalance in

copper retirement rules to provide regulatory certainty, they do not suggest that each and every existing copper loop should be made available in perpetuity. The CLECs are interested in the proposals, to which AT&T and Verizon allude in their comments, for an alternative path to resolving this important issue. But the Commission should not delay consideration of the requested relief based on illusory promises.

As explained in the Joint Request, EoC and other broadband over copper technologies that are used by ILECs as well as CLECs bridge the gap between now and the future when broader fiber deployment may become possible. The Commission has a public interest obligation to ensure that CLECs have access to copper loops to bring affordable broadband to consumers — such as small and medium sized business customers — that would otherwise lack competitive alternatives to the ILEC’s advanced broadband services.

II. Comments Filed in Response to the Joint Request Demonstrate that the Copper Network Provides a Platform for the Delivery of Robust IP-based Broadband Services

The Joint Request demonstrated how the availability of copper loops allows CLECs to deploy affordable broadband solutions, particularly Ethernet over Copper (“EoC”), to small and medium sized business customers (“SMBs”).² Numerous parties, including the California CLECs,³ filed comments providing further evidence that CLECs are using copper loops to provide innovative services to customers that would otherwise lack access to the high bandwidth

² Joint Request at pp. 7-10.

³ See Comments of Blue Rooster Telecom, Inc., Impulse Telecom, LLC, Rural Broadband Now! and Sonic Telecom, LLC at pp. 3-7 (filed Mar. 5 2013) (“Blue Rooster et al. Comments”). Unless stated otherwise, all comments cited herein are to comments filed in RM-11358 on Mar. 5, 2013.

available over EoC or even lack access to broadband altogether.⁴ For example, within seven days of receiving the order, RBN provisioned a 24 Mbps Ethernet circuit using bonded EoC pairs to a hospital that could not get higher bandwidth or fiber-based service directly from AT&T.⁵ In another case where the ILEC had not deployed advanced services and had exhausted interoffice capacity, RBN provisioned a 45 Mbps Ethernet circuit using 8 bonded copper pairs to a rural high school, hauling the circuit 50 miles to interconnect with a fiber handoff at the County education department.⁶

A recent article in FierceTelecom surveys the extent of broadband deployment via EoC by seven incumbent and competitive LECs:⁷

- CenturyLink has 700 EoC equipped central offices.
- Windstream has 435 EoC equipped central offices.
- XO has 485 EoC equipped central offices.
- MegaPath has 693 EoC equipped central offices.
- Integra has 125 EoC equipped central offices.
- Alpheus has 123 EoC equipped central offices.
- Spirit has 28 EoC equipped central offices.

In total, the seven carriers FierceTelecom surveyed have 2,836 central offices equipped with technology capable of delivering high speed broadband to customers using EoC. The record

⁴ XO/Broadview Comments at pp. 5-8, Declaration of Samuel J. Koetter ¶¶ 4-12, Declaration of Rebecca Sommi ¶ 3-4; EarthLink et al. Comments at pp. 4-5.

⁵ Blue Rooster et al. Comments at p. 7.

⁶ *Id.* at pp. 7-8.

⁷ *EoC makes a new dent in Ethernet market*, FierceTelecom, Mar. 12, 2013, <http://www.fiercetelecom.com/special-reports/eoc-makes-new-dent-ethernet-market> (“Dent in Ethernet Market Article”).

shows that 650,000 businesses in California and Texas alone have access to competitive broadband provided using EoC⁸ and that EoC offers competitive broadband options not only to business but also residential customers.⁹ As FierceTelecom concludes, “[a]ll of these players may be different in their scale and focus, but the one thing they have in common is they are using EoC to help close...the ‘fiber gap.’”¹⁰

Remarkably, the ILECs ignore the copper technology gains in providing more throughput over longer distances¹¹ and fail to mention that they themselves have made significant investments in technology to deliver high capacity broadband services over their existing copper infrastructure.¹² Rather, the ILECs erroneously portray the transition to IP networks as requiring deployment of all fiber networks, which is simply incorrect.

By erroneously conflating broadband and IP with fiber and misrepresenting the broadband capacity available through EoC, they attempt to convince the Commission to allow premature retirement of this still valuable asset that has been deployed over the last century during a period of government sanctioned monopoly. For example, AT&T argues that the Commission should favor deployment of fiber at all costs because copper has “been rendered anachronistic, [and] no longer perform[s] optimally.”¹³ CenturyLink also makes the same error, alleging that reforming the copper loop retirement rules is unwise “in the midst of the transition

⁸ Joint Request, at Declaration of Nancy Lubamersky ¶ 11; TEXALTEL Comments at Declaration of Sheri Hicks ¶ 9.

⁹ Blue Rooster et al. Comments at p. 2.

¹⁰ Dent in Ethernet Market Article at p. 3.

¹¹ *See, e.g.* Overture Comments at pp. 1-2, 5; Adtran Comments at pp. 2-5.

¹² *See* Laying a Foundation for Future Growth, AT&T Analyst Conference, Nov. 7, 2012 (describing AT&T’s fiber to the node network); *See* Dent in Ethernet Market Article (discussing CenturyLink’s EoC deployment).

¹³ AT&T Comments at p. 2.

to IP networks and services.”¹⁴

Contrary to the ILECs’ claims, the equipment vendors explain that “copper is far from obsolete. Rather, it is a vibrant and important component of broadband deployment.”¹⁵ In today’s network, as carriers transition services from TDM to IP, “Ethernet over Copper is a significant, widely deployed and growing next generation technology that is critical to the ... the migration from legacy to Ethernet/IP services. In particular, ... Ethernet over Copper is a means to deliver IP, and not a legacy TDM technology.”¹⁶ More significantly, EoC and fiber are not mutually exclusive but are complementary, since “[t]oday, ... both ILECs and competitive carriers ... are making investments in Ethernet over Copper to support advanced IP services.”¹⁷ As Adtran explains, “copper loops are not an anachronism, but instead can be a robust component of broadband service providers’ ‘tool chest.’”¹⁸

Both ILECs and CLECs are investing in EoC.¹⁹ EoC has reinvigorated Consolidated Communications’ Pittsburgh market to the point that it is now taking its EoC product to California and plans to implement EoC in existing copper infrastructure while only building fiber in Greenfield builds.²⁰ Windstream also recognizes the value of deploying EoC in its ILEC network, explaining that “[i]n areas of its ILEC territory where it can’t make the business case to

¹⁴ CenturyLink Comments at p. i.

¹⁵ Adtran Comments at pp. 1-2.

¹⁶ Overture Comments at pp. 1-2.

¹⁷ Overture Comments at p. 5.

¹⁸ Adtran Comments at p. 6.

¹⁹ Overture Comments at p. 5.

²⁰ Sean Buckley, *Consolidated ramps up its business services strategy with Ethernet*, FierceTelecom, Feb. 14, 2013, <http://www.fiercetelecom.com/story/consolidated-ramps-its-business-services-strategy-ethernet/2013-02-14>.

bring a fiber to a particular business--which might want 15 or 20 Mbps--[Windstream] can quickly turn on EoC.”²¹ Given their use of copper in offering broadband to their customers, the ILECs cannot justify maintaining the Commission’s copper loop retirement rules on the basis that copper is an inadequate platform for delivering robust broadband services to American business and consumers.

The equipment manufacturers’ comments rebut the ILECs’ claims that EoC is limited due to lack of bandwidth or loop length issues. For instance, USTA claims that EoC broadband “typically ha[s] peak speeds of around 15 Mbps – much slower than fiber or coaxial cable.”²² This may have been the case years ago, but it no longer holds true.²³ As Overture explains, “Ethernet over Copper is a viable technology for delivering high-speed broadband services at bandwidths ranging from 10 Mbps to over 100 Mbps.”²⁴ In other dockets, CenturyLink acknowledges that CLECs can provide significant bandwidth over copper, claiming that “[t]hrough use of ‘pair bonding,’ CLECs can provide broadband speeds and performance that are comparable to those of CenturyLink’s enterprise broadband services.”²⁵ Adtran explains that its “ActivReach” solution “allow[s] service providers to deliver 100 Mbps of Ethernet services at three times the distance over legacy voice grade wiring in older and historic buildings.”²⁶ The

²¹ *Windstream sees EoC as a time-to-market play*, FierceTelecom, Feb. 7, 2012, <http://www.fiercetelecom.com/special-reports/stepping-eoc-plate-incumbent-telcos-take-swing/windstream-sees-eoc-time-market-play>. (“Windstream EoC Play”).

²² USTA Comments at p. 5.

²³ *See* XO Comments at Declaration of Samuel J. Koetter ¶ 4 (“XO accelerated its EoC connections to speeds of 100 Mbps in both directions.”)

²⁴ Overture Comments at p. 3.

²⁵ CenturyLink Petition for Forbearance, WC Docket No. 12-60, at Declaration of Ryan Schwertner ¶ 2 (filed Feb. 23, 2012).

²⁶ Adtran Comments at p. 5.

record accumulated in response to the Joint Request provides numerous examples where CLECs are providing service up to 100 Mbps of Ethernet using EoC.²⁷ Windstream, for example, is using EoC for DSLAM backhaul by taking “12 pairs of copper and bond[ing] them with Ethernet [to] get four times the amount of bandwidth out to the DSLAMs.”²⁸

III. The *TRO* Established that CLECs Are Impaired Without Access to Copper Loops for the Provision of Broadband and Promotes CLEC Investment in Broadband over Copper

The ILECs incorrectly insist that the Commission must reverse impairment findings in order to reform the copper retirement rules.²⁹ USTA makes the remarkable assertion that in the *TRO*, “the Commission concluded that, at least where a CLEC is seeking to offer broadband services, it cannot be considered impaired without access to the copper loop.”³⁰ Verizon incorrectly asserts that “the Commission could require unbundling under Section 251(c)(3) only upon a finding of impairment, which it could not make here given the robust and increasing competition for broadband services.”³¹ CenturyLink claims that the Joint Request “does not even attempt to show that [the] request meets the section 251(d)(2) impairment standard.”³² As explained below, the Joint Request did not seek to show impairment because the Commission

²⁷ Blue Rooster et al. Comments at pp. 3, 7; COMPTTEL Comments at pp. 3, 6; TEXALTEL Comments at p. 3; *see also* EarthLink et al. Comments at p. 4, n.12 (citing Press Release, Integra Telecom, *Integra Boosts Network Bandwidth with Symmetrical 60-Mbps Ethernet Over Copper Access*, Nov. 6, 2012, <http://www.integratelecom.com/about/news/Pages/Integra-Boosts-Network-Bandwidth-with-Symmetrical-60-Mbps-Ethernet-Over-Copper-Access.aspx>; Sean Buckley, *XO ups EOC ante with new 100 Mbps speeds*, FierceTelecom, Nov. 7, 2012, <http://www.fiercetelecom.com/story/xo-ups-eoc-ante-new-100-mbps-speeds/2012-11-07>.

²⁸ *See* Windstream EoC Play.

²⁹ *See, e.g.*, AT&T Comments at p. 3.

³⁰ USTA Comments at p. 2.

³¹ Verizon Comments at p. 22.

³² CenturyLink Comments at p. 15.

has already concluded that CLECs are impaired without access to copper loops.³³

Rule 51.319(a)(i) requires ILECs to unbundle copper loops and neither the rule nor Commission orders limit CLECs' ability to use copper loops to provide broadband services. The Commission found that an ILEC's provision of "conditioned, stand-alone copper loops" is required "to overcome such impairment for the provision of broadband services."³⁴ The Joint Request does not ask the Commission to reverse any impairment finding and no impairment analysis is required to suspend or strengthen current copper retirement rules. In the *TRO*, the Commission determined that copper loops should be made available on an unbundled basis pursuant to Section 251(c)(3) for narrowband and broadband services because CLECs are impaired without access to such facilities.³⁵

Contrary to the ILECs' arguments, it is precisely the *availability of unbundled, conditioned copper loops* that formed the basis of the Commission's finding that CLECs are not impaired by lack of access to fiber loops. The Commission expected CLECs to make innovative uses of these conditioned copper loops to provide broadband services, which indeed they have and continue to do. As the Commission explained, its unbundling policies "promote the

³³ See 47 C.F.R. § 319(a)(1).

³⁴ *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; Deployment of Wireline Services Offering Advanced Telecommunications Capability*, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978, 17128, ¶ 248 (2003) ("*TRO*"), *vacated and remanded in part, aff'd in part, United States Telecom Ass'n v. FCC*, 359 F.3d 554 (D.C. Cir. 2004) (*USTA II*), *cert. denied*, 543 U.S. 925 (2004), *on remand, Unbundled Access to Network Elements*, 20 FCC Rcd 2533 (2005) ("*TRRO*"), *aff'd, Covad Commc'ns Co. v. FCC*, 450 F.3d 528 (D.C. Cir. 2006).

³⁵ *TRO*, 18 FCC Rcd at 17103, ¶ 199; 47 C.F.R. § 319(a)(1); *TRO*, 18 FCC Rcd at 17128, ¶ 248 (CLECs "are generally impaired on a national basis without unbundled access to an [I]LEC's local loops, whether they seek to provide narrowband or *broadband services*, or both.") (emphasis added).

deployment of equipment that can unleash the full potential of the embedded copper loop plant so that consumers can experience enhanced broadband capabilities before the mass deployment of fiber loops.”³⁶

There is no dispute that the *TRO* allows an ILEC, despite the broad finding of impairment, to propose to retire copper loops when it deploys fiber facilities to serve customers formerly served by the copper network. However, the *TRO* provides that the “deemed denied” procedure does not apply “where the retirement scenario suggests that competitors will be denied access to the loop facilities required under [the Commission’s] rules.”³⁷ Furthermore, the Commission explained that the retirement notice process was designed to “ensure that [ILECs] and [CLECs] can work together to ensure the [C]LECs maintain access to loop facilities.”³⁸ As XO argues, the Commission “never intended to allow ILECs to ‘kill’ the copper loop infrastructure, as AT&T and Verizon have vowed to do, where it would result in the gutting of competition, particularly competition in advanced communications services.”³⁹

IV. Access to Copper Loops Remains Critical Because CLECs Face Significant Barriers to Fiber Investment

The ILECs argue that CLECs do not need access to copper loops to provide broadband because they can simply deploy fiber facilities and therefore the retirement rules should remain in place. The ILECs place significant emphasis on the Commission’s flawed analysis in the *TRO* that assumed that CLECs and ILECs faced equal barriers to the deployment of fiber facilities, especially to replace already existing copper loops. This is simply incorrect as the ILECs have

³⁶ *TRO*, 18 FCC Rcd at 17127, ¶ 244.

³⁷ *TRO*, 18 FCC Rcd at 17147, ¶ 282.

³⁸ *TRO*, 18 FCC Rcd at 17146-47, ¶ 281.

³⁹ XO Comments at p. 4 (footnote omitted).

enormous advantages in their economies of scope and scale and face far lower costs extending their networks using their existing infrastructure. Similarly, the Commission predicted that CLECs and ILECs would have the economic ability to deploy fiber and that the economic barriers to such deployment could be overcome. But this assumption was wildly optimistic as the business case for fiber deployment, including by the ILECs, has not been proven as shown by recent data that over two thirds of the business locations in the country lack access to fiber. Finally, although the ILECs assert they need unfettered discretion to retire copper loops to justify their fiber investment, the extent of fiber investment and copper retirements to date contradict their claims. The Commission should revise its assumptions and predictions and, consistent with its obligation to revisit failed predictive judgments, revise its copper retirement rules in light of current conditions.

A. CLECs and ILECs Are Not on An Equal Footing When it Comes to Overbuilding Copper Loops with Fiber Loops

The ILECs contend that the Commission's copper retirement rules need not be disturbed because the Commission found in the *TRO* that ILECs and CLECs largely face equal barriers to deployment of fiber networks.⁴⁰ But this assertion is flawed. First, in the *TRRO* the Commission affirmed that CLECs are impaired without access to DS0 loops, period.⁴¹ This finding of impairment is not limited to overbuild, greenfield, mass market, enterprise, or narrowband services.

The assumptions underlying the Commission's analysis with respect to CLECs' ability to deploy fiber was seriously flawed at the time the *TRO* was issued and are even more so apparent today. In the *TRRO*, the Commission found that CLECs "cannot deploy stand-alone DS1

⁴⁰ AT&T Comments at p. 9.

⁴¹ *TRRO*, 20 FCC Rcd at 2615, ¶ 149.

capacity loops on an economic basis.”⁴² Just last year, the Commission found that “data provided by incumbent LECs demonstrate that, even if competitors could easily deploy fiber to serve customer demand within 1,000 feet of incumbents’ facilities, many parts of an MSA would still not be served by competitive fiber.”⁴³ In TelePacific’s California footprint, TelePacific’s survey confirms that alternative last-mile access to customer locations is seldom available. Although TelePacific’s initial survey showed that alternative access was available less than 15% of the time, that number declined when TelePacific updated its survey to include all customer locations it serves in California. TelePacific would be able to buy last mile access from a provider other than the ILEC at only 9% of its customer service addresses in California.⁴⁴

The assumption that there is a level playing field for the deployment of fiber facilities ignores the fact that “[n]atural monopoly’ economics still apply to most outside plant: The incremental cost to the incumbent to serve an additional customer is far lower than the cost for a competitor to do so.”⁴⁵ The ILECs possess “inherent competitive advantages ... from their preexisting and pervasive telecommunications networks, which were developed and deployed across the country over the course of decades.”⁴⁶ These advantages include “a vast network of conduits, poles, wires, pedestals, manholes, and wire center buildings ... largely built under

⁴² *TRRO*, 20 FCC Rcd at 2628, ¶ 171.

⁴³ Special Access for Price Cap Local Exchange Carriers, AT&T Corp. Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, WC Docket No. 05-25, RM-10593, Report and Order, 27 FCC Rcd 10557, 10588, ¶ 55 (2012).

⁴⁴ Reply Declaration of Nancy Lubamersky at ¶ 9 (“Lubamersky Reply Declaration”).

⁴⁵ Comments of Interisle Consulting Group, GN Docket No. 12-353, at p. 4 (filed Jan. 28, 2013).

⁴⁶ Comments of Competitive Carriers Association, GN Docket No. 12-353, at p. 10 (filed Jan. 28, 2013).

conditions of pre-1996 de jure monopoly and rate of return regulation.”⁴⁷

This existing distribution network infrastructure provides tremendous built-in advantages. As Verizon has acknowledged, “copper and FTTP [Fiber to the Premises] fiber cables typically share the same carrying infrastructure” and “[f]iber cables may be placed alongside existing copper cables, or lashed directly to those cables.”⁴⁸ It is common for pole attachment agreements to allow attachers to overlash fiber to copper without submitting a pole attachment application, without paying for make-ready and without incurring additional pole rental fees.⁴⁹ This can create a stark difference between the barriers to CLEC and ILEC deployment of fiber. For example, in Huntington Beach, California, a city ordinance requires all new fiber construction be underground.⁵⁰ An exception, however, grandfathered “pre-1977 above-ground utilities.”⁵¹ Thus, when fiber optic technology became available, “Verizon and Time Warner were permitted to overlash fiber optic cable to their pre-1977, twisted copper and coaxial lines existing on utility

⁴⁷ Comments of Interisle Consulting Group, GN Docket No. 12-353, at pp. 3-4 (filed Jan. 28, 2013).

⁴⁸ Verizon Comments at Declaration of Claire Beth Nogay ¶ 28.

⁴⁹ See *Implementation of Section 703(E) of the Telecommunications Act of 1996, Amendment of the Commission's Rules and Policies Governing Pole Attachments*, CS Docket No. 97-151, Report and Order, 13 FCC Red 6777, 6807 ¶ 64 (1998) (“[w]e have been presented with no persuasive reason to change the Commission’s policy that encourages overlapping, and we agree with representatives of the cable and telecommunications industries that to the extent that it does not significantly increase the burden on the pole, overlapping one’s own pole attachment should be permitted without additional charge”) (footnotes omitted); *Cable Television Ass’n of Ga. v. Georgia Power Co.*, File No. PA 01-002, Order, 18 FCC Rcd 16333, 16340 (Enf. Bur. 2003) (finding a contract provision “that requires written consent to any overlapping, which the utility may take up to 30 days to deny or grant” as being “unjust and unreasonable on its face”).

⁵⁰ Reply Comments of The City of Huntington Beach, WC Docket No. 11-59, at p. 4, (filed Sep. 30, 2011).

⁵¹ *Id.*

poles.”⁵² CLECs deploying facilities in the present have to bear the enormous cost to underground their facilities while the incumbents get to overlash their fiber facilities to their existing monopoly-era cables.

ILECs possess further advantages even where they lack the ability to minimize the burden of deploying fiber by lashing new fiber construction to existing copper cables. Unlike CLECs, which must apply to the pole owner in order to attach, it is far more common for the ILEC to have an ownership interest or at least control over communications attachments to the poles and thus more flexibility in the timing of fiber deployment on its poles.⁵³ For example, there could be circumstances where poles are out of space and the CLEC has no ability to compel the pole owner to increase capacity by installing a new or larger pole.⁵⁴ An ILEC that owns or controls its own poles does not face these impediments.

B. In Most Markets, Deploying Fiber Is Simply Not Economic for CLECs Now or in The Foreseeable Future

The ILECs argue that the availability of copper loops will deter investment in fiber. But the reality is that depriving CLECs of copper will not drive more fiber investment until the

⁵² *Id.*

⁵³ *See Implementation of Section 224 of the Act; A National Broadband Plan for Our Future*, WC Docket No. 07-245, GN Docket No. 09-51, Report and Order and Order on Reconsideration, 26 FCC Rcd 5240, 5327, ¶ 199 (2011) (“historically incumbent LECs owned roughly as many poles as electric utilities, and it appears that incumbent LECs were generally able to ensure just and reasonable rates, terms and conditions for pole attachments by negotiating ‘joint use’ agreements”); *id.* at 5328 ¶ 203 (explaining that ILECs are “often ... differently situated from other attachers, both due to the terms of existing joint use agreements and because of their continuing pole ownership.”).

⁵⁴ *Implementation of Section 224 of the Act, A National Broadband Plan for Our Future*, WC Docket No. 07-245, GN Docket No. 09-51, Order and Further Notice of Proposed Rulemaking, 25 FCC Rcd 11864, 11872-73, ¶ 16 (2010); *see also Southern Co. v. FCC*, 293 F.3d 1338, 1346-47 (11th Cir. 2002) (finding that under the plain language of section 224(f)(2) of the Act “When it is agreed that capacity is insufficient, there is no obligation to provide third parties with access to a particular pole”).

economics of fiber investment improve and a CLEC can make a business case for such an investment. In the meantime, the nation's largest ILECs have each struggled with fiber investments, demonstrating that deployment of fiber is not always economic and undermining the ILEC argument that the key to broadband growth is retiring copper.

The Commission has long recognized the significant barriers associated with deployment of competitive last mile facilities.⁵⁵ As Ad Hoc observed, these

barriers to entry are so high that Verizon—a company that already owns substantial “last mile” infrastructure facilities throughout the eastern United States and has unparalleled economic and technological resources—has decided not to compete with the already-established cable monopoly. If Verizon has opted out of competing for additional wired IP connections, it is difficult to envision another entity that would have the resources and the know how to do so.⁵⁶

Any illusions the Commission may have about the ease with which CLECs can deploy competitive fiber networks should be eliminated given the limited fiber deployment by the largest ILECs in the country. Verizon has never committed to extend FiOS to 100% of its territory. It recently indicated that there will be little future network expansion beyond current levels and has thrown in the towel in the race against cable by agreeing to market services jointly with its most formidable competitors - the cable MSOs.⁵⁷ Similarly, in the business market,

⁵⁵ See *Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area*, WC Docket No. 09-135, 25 FCC Rcd 8622, 8660-61 ¶ 72 (2010) (“*Phoenix Forbearance Order*”); *id.* at 8660 n.216.

⁵⁶ Comments of the Ad Hoc Telecommunications Users Committee, WC Docket No. 12-353, at p. 12 & n.38 (filed Jan. 25, 2013) (*citing Applications of Cellco Partnership d/b/a Verizon Wireless and SpectrumCo LLC and Cox TMI, LLC For Consent To Assign AWS-1 Licenses*, 27 FCC Rcd 10698 (2012)).

⁵⁷ See Cecelia Kang, *Verizon Ends Satellite Deal, FiOS Expansion As It Partners With Cable*, Washington Post, Dec. 8, 2011, http://www.washingtonpost.com/blogs/post-tech/post/verizon-ends-satellite-deal-FiOS-expansion-as-it-partners-with-cable/2011/12/08/gIQAGANrfo_blog.html.

AT&T's statement that it is deploying fiber to only 50% of the multi-tenant business locations in its territory⁵⁸ is indicative of the difficult economics of fiber deployment by even those companies with the deepest pockets of all. A recent report suggested that at the end of 2012, nearly a decade after the *TRO* changed unbundling rules in an effort to promote investment in fiber, 63.9% of commercial buildings with more than 20 employees are *still not connected to fiber*.⁵⁹ And TelePacific's data shows much lower fiber penetration, with alternative fiber available to only 9% of its California customer service addresses.⁶⁰

The ILECs claim that even in the absence of CLEC fiber deployment, the ILECs should remain free to retire copper loops needed to serve business customers because the Cable MSOs will provide competition.⁶¹ CenturyLink, for example, cites a report from Insight Research for this position, but fails to address the key conclusion of that report. While the ILECs continue to point to the Cable MSOs' ventures into the business market, independent research suggests that "they will remain as small players in a big industry."⁶² The Insight report notes many of the challenges the Cable MSOs face as they enter this market, including the significant investments necessary to expand the addressable market as well as to overcome their "immature" support

⁵⁸ See Laying a Foundation for Future Growth, AT&T Analyst Conference, Nov. 7, 2012 at pp. 11, 40 (noting that AT&T defines a multi-tenant business location as one with six or more tenants).

⁵⁹ Vertical Systems Group: U.S. Business Fiber Penetration Rises to 31.8%, Mar. 12, 2013, http://www.verticalsystems.com/prarticles/stat-flash-2012release-usfiber2011penetration_prnews.html

⁶⁰ Lubamersky Reply Declaration at ¶ 9.

⁶¹ See CenturyLink Comments at p. 10.

⁶² The Insight Research Corporation, Cable TV Enterprise Services: 2012-2017 (Sep. 2012) Excerpt, at p. 9, available at <http://www.insight-corp.com/sendexec.asp?report=enterprise12&ReportName=Cable TV Enterprise Services, 2012-2017>.

systems.⁶³ This same research further suggests that the current rate of Cable MSO capital expenditures for expansion into the business market is not sustainable and that it will drop “24 percent in the out-years, but customer acquisition will also drop accordingly.”⁶⁴

It is likely that in areas where the ILECs retire copper loops used to serve business customers there will not be suitable alternatives to provide business customers with a choice of robust broadband services, such as those that can be provided today over copper loops. While CLECs can obtain wholesale service from a multitude of suppliers, they can only do in areas where alternative facilities are available.⁶⁵ As the TelePacific survey shows, alternative facilities are only available for 9% of its customer locations in California. Where such facilities are not available, it is imperative that the Commission ensure that the ILECs, through the retirement of copper loops necessary to enable competition, are not free to “retire” competition.

C. The ILECs Do Not Need Unfettered Discretion to Retire Copper Loops

The ILECs claim that revisions of the Commission’s copper rules proposed in the Joint Request would undermine their incentive to deploy fiber loops. For example, Verizon claims that

⁶³ *Id.* at p. 6.

⁶⁴ *Id.*

⁶⁵ For example, USTA argues in a footnote that ACN resells service obtained from cable and fixed wireless suppliers and that these are “adequate alternatives.” USTA Comments at p. 5 n.11. But USTA is mistaken for two reasons. First, ACN does not resell cable or fixed wireless. ACN has found, not surprisingly, that providers of such services are resistant to serve competitors. So, ACN only markets these services to potential customers for the service providers – effectively as a sales agent. The customer does not look to ACN as its service provider. In addition, ACN generates far less revenue from these marketing activities than it does for services where it owns the customer. Second, ACN serves a significant base of customers that are located where there are no cable or fixed wireless alternatives. If ACN is unable to procure reasonably priced inputs for its own services and is limited to marketing the services of other providers in the more profitable areas where the ILECs deploy fiber and retire copper, it is entirely possible that ACN would be unable to justify continuing to provide its own services in those areas where there are no cable or fixed wireless alternatives.

its investment in FiOS was driven in part by significant cost savings it could attain from the retirement of the copper loops to customers now served by FiOS.⁶⁶ Verizon further suggests that having to maintain copper and fiber — as it does now — would cause Verizon to alter its plans for the deployment of fiber in the future.⁶⁷ CenturyLink claims that the copper retirement rules “play a critical role” in promoting deployment of broadband networks,⁶⁸ yet states that it “generally does not retire copper after it upgrades its outside plant.”⁶⁹ This shows that the connection between retiring copper and investing in fiber is tenuous, at best. Not all carriers retire their copper facilities as they deploy fiber and it does not seem to have any impact on their incentive to invest in fiber.

For example, Verizon explained to the California PUC in 2008 that it “is not retiring copper loops as part of its FTTP deployment in California and has no current plans to do so. Accordingly, Verizon has no standard practice with respect to copper loop removal or disconnection in FTTP overbuild areas.”⁷⁰ Indeed, Verizon admits both that “a significant, though consistently declining, number of customers continues to be served by legacy copper facilities” and “in some scenarios, particularly if the copper loop is buried or lashed to fiber,

⁶⁶ Verizon Comments at pp. 10-11.

⁶⁷ *Id.* at p. 11.

⁶⁸ CenturyLink Comments at p. 3.

⁶⁹ *Id.* at p. 14.

⁷⁰ Panel Declaration of Richard L. Fowler, John C. Mannix, Louis D. Minion, and Warren E. Thomas on Behalf of Verizon-California, Before the Public Utilities Commission of California, *Rulemaking Regarding Whether to Adopt, Amend, or Repeal Regulations Governing the Retirement by Incumbent Local Exchange Carriers of Copper Loops and Related Facilities Used to Provide Telecommunications Services*, 08-01-005 March 14, 2008, at ¶ 34 (“Verizon CPUC Decl.”).

Verizon may leave the loop in place, effectively ‘retiring in place.’”⁷¹ More strikingly, CenturyLink states that it “typically does not retire copper loops when it overbuilds them with fiber-based loops.”⁷²

Although ILECs, to date, have either NOT filed copper retirement notices (CenturyLink), or filed few notices that resulted in limited protests, ILECs could reverse course at any time and start retiring copper that is used today to provide broadband service to existing customers or could be used tomorrow to provide a competitive alternative broadband service. Any significant uptick in copper retirements threatens to strand the investment in EoC equipment using copper loops that the Commission explicitly endorsed and encouraged in the *TRO*. Neither EoC customers nor EoC competitors should see their investments stranded by an ILEC campaign of copper “retirement.” The Commission should let EoC and fiber compete, giving the end user a choice in broadband providers.

Small business customers want to be able to choose from a range of broadband providers and a Pew Report found that with more competitive alternative providers, broadband becomes much more affordable.⁷³ In particular, the Pew Report found that broadband users who have (1) just one broadband provider, (2) more than one broadband provider, or (3) four or more broadband providers service their neighborhood report an average monthly bill of \$44.70,

⁷¹ Verizon Comments at Declaration of Claire Beth Nogay ¶¶ 32-33.

⁷² CenturyLink Comments at p. 2. Because this is the case, it is not clear what CenturyLink’s interest is in this proceeding, since any change in the copper loop retirement rules will not apply to ILECs that do not retire any copper loops.

⁷³ John Harrington, Pew Internet & American Life Project, *Home Broadband Adoption 2009, Broadband adoption increases, but monthly prices do too*, June 2009, at 5 (noting that home broadband users with four or more broadband service providers serving their neighborhood have monthly bills over 28 percent lower than an area with one provider), <http://www.pewinternet.org/~media/Files/Reports/2009/Home-Broadband-Adoption-2009.pdf>.

\$38.30, and \$32.10, respectively.⁷⁴ The Commission can promote competition that drives prices down for consumers by adopting rules that limit an ILEC's ability to retire copper loop plant that is used to promote competition in advanced telecommunications services in the local telecommunications market.

CenturyLink claims that none of the harms alleged in the previous petitions for rulemaking on copper loop retirement have come to pass.⁷⁵ But, as discussed above, CenturyLink and other ILECs have not systematically sought to retire copper loops and deny CLECs access to those critical inputs. As explained in the Joint Request, however, the ILECs have made public statements in the last twelve months signifying a dramatic shift in their policies.⁷⁶ AT&T, as part of its petition relating to the IP transition, urges the Commission to allow ILECs unfettered discretion to retire copper.⁷⁷ Verizon's promise to "kill" the copper⁷⁸ is a direct threat to competition based on access to copper loops. These recent developments underscore that the harm to broadband EoC investment if the rules are not revised is significant. Investors are wary of investing in CLEC EoC deployment when ILEC retirement notices are deemed granted — to the extent any such notice is required at all. While CenturyLink today maintains its copper plant even as it deploys fiber, under today's Commission rules, it could reverse course at any time, leaving CLECs without any protection against having their investment stranded.

⁷⁴ *Id.*

⁷⁵ CenturyLink Comments at p. 6.

⁷⁶ *See* Joint Request at p. 11.

⁷⁷ AT&T Petition to Launch a Proceeding Concerning the TDM-to-IP Transition, GN Docket No. 12-353 (filed Nov. 7, 2012).

⁷⁸ Transcript, Verizon at Guggenheim Securities Symposium, at p. 8 (June 21, 2012).

D. The Commission Possesses Broad Latitude to Account for These Changes in the Marketplace and Revise its Copper Retirement Rule Accordingly

Given the current conditions described above, which undermine the assumptions underlying the Commission’s copper retirement rules, the Commission should revise its copper retirement rules as set forth in the Joint Request. The Commission has a special duty to revise its rules when its predictive judgments are proven incorrect.⁷⁹ The Commission’s “latitude to make policy based on predictive judgments deriving from its general expertise...implies a correlative duty to evaluate its policies over time to ascertain whether...they actually produced the benefits the Commission originally predicted they would.”⁸⁰ And when it revisits its policies, the Commission “need not demonstrate to a court’s satisfaction that the reasons for the new policy are better than the reasons for the old one; it suffices that the new policy is permissible under the statute, that there are good reasons for it, and that the agency believes it to be better.”⁸¹

V. The TELRIC Rates for UNE Loops Fairly Compensates the ILECs

Whether copper loops should continue to be available under Section 251 and at what rate they should be available under Section 252 are distinct questions. AT&T incorrectly contends that under the “principle of constitutional avoidance” associated with the “Taking Clause,” the Commission cannot require that ILECs maintain a copper network that they seek to retire.⁸² ILECs are being compensated at TELRIC-based rates for the Section 251(c)(3) copper facilities and they have not challenged the rates “as being so unjust to be confiscatory, that is as

⁷⁹ See *Bechtel v. FCC*, 957 F.2d 873, 881 (D.C. Cir. 1992).

⁸⁰ *Id.*

⁸¹ *American Electric Power Service Corporation, et al., v. FCC*, Case No. 11-1146, slip. op at p. 5 (D.C. Cir. Feb. 26, 2013) quoting *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009).

⁸² AT&T Comments at 14 and n.40.

threatening an incumbent's financial integrity.”⁸³ The Supreme Court rejected ILEC arguments that challenged TELRIC ratemaking methodology on these grounds.⁸⁴ As CompTel notes, “if the ILEC was not fully compensated it certainly would be submitting revised cost studies to state commissions.”⁸⁵

TELRIC principles require UNEs to be priced based on the forward-looking cost of the entire network, not on a route-by-route examination of whether copper or fiber is being used to serve a particular customer.⁸⁶ Moreover, because the Act and Commission rules require state commissions to evaluate network costs and set specific UNE rates, to the extent ILECs wish to show that current TELRIC rates should be revised given declining utilization of copper, they must first present such evidence to the state commissions. Any revised cost studies would need to account for other changed circumstances, such as the availability of gel-filled copper cables

⁸³ See *Verizon Communications, Inc. v. F.C.C.*, 535 U.S. 467, 524 (2002).

⁸⁴ *Id.*

⁸⁵ COMPTTEL Comments at p. 10, n.34.

⁸⁶ *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Services Providers*, CC Docket No. 96-98, 95-185, First Report and Order, 11 FCC Rcd 15499, 15848-49 ¶ 685 (1996) (“*Local Competition Order*”) (subsequent history omitted) (“conclud[ing] that the forward-looking pricing methodology for interconnection and unbundled network elements should be based on costs that assume that wire centers will be placed at the incumbent LEC's current wire center locations, but that the *reconstructed local network* will employ the most efficient technology for reasonably foreseeable capacity requirements,” which has often been referred to as the “scorched node” costing method) (emphasis added); See *Petition of WorldCom, Inc. Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes with Verizon Virginia Inc., and for Expedited Arbitration*, CC Docket Nos. 00-218, 00-251, Memorandum Opinion and Order, 18 FCC Rcd 17722, 17739, ¶ 30 & n.84 (Wir. Comp. Bur. 2003) (“TELRIC equates the current market value of the existing network of an incumbent telecommunications provider with the cost the incumbent would incur today if it built a local network that could provide all the services its current network provides to meet reasonably foreseeable demand using the least-cost, most-efficient technology currently available” but “must take as a given the existing wire center locations) (citing *Local Competition Order*, ¶ 685); 47 C.F.R. § 51.505(b)(1).

that reduce maintenance costs and revised capital and depreciation inputs.

The ILECs do not provide specific, credible evidence of higher loop costs, but make only vague references to the fact that any such updated rates would be so high as to make loops uneconomic.⁸⁷ Although Verizon argues that its “costs of maintaining the copper facilities in those areas [where all fiber has been deployed] are more than \$200 million per year,”⁸⁸ it also admits that even where FiOS is deployed a significant number of its customers continue to be served by copper facilities and fiber is placed alongside or lashed to copper cables.⁸⁹ According to Verizon’s 2012 Annual Report, “[a]s of December 31, 2012, [Verizon] achieved penetration rates of 37.3% and 33.3% for FiOS Internet and FiOS Video, respectively.”⁹⁰ As such, Verizon continues to bear the cost of maintaining copper facilities for both its customers and CLECs that purchase unbundled copper facilities at TELRIC rates.

Verizon’s FiOS penetration rate and ILEC statements support, rather than rebut, the fact that there is one ILEC network that utilizes a combination of fiber and copper to provide communications services to customers. Despite their claims to the contrary, the ILECs may keep at least some copper in their network active because the majority of their customers are unlikely to adopt fiber-based services and a forced migration of recalcitrant customers would be cost prohibitive. In California, Verizon’s internal analysis concluded that shutting down its copper network would require a massive and costly forced-migration of customers, “because its FiOS

⁸⁷ AT&T Comments at p. 17; Verizon Comments, Nogay Decl. ¶ 41.

⁸⁸ Verizon Comments at p. 11.

⁸⁹ Verizon Comments, Declaration of Claire Beth Nogay ¶¶ 28, 33.

⁹⁰ Verizon 2012 Annual Report at p. 32,
http://www22.verizon.com/investor/DocServlet?doc=vz_ar_2012.pdf.

entertainment network will not voluntarily attract the majority of its base.”⁹¹ This “forced migration” would “compete within Verizon with FiOS deployment for capital and, as such, expending resources to migrate customers off copper could actually discourage additional broadband deployment elsewhere.”⁹² In fact, according to documents produced to the CPUC, Verizon completed at least three studies of a forced migration policy and “[w]ith each successive analysis, it appears that the estimated operational cost savings from a copper shutdown decline.”⁹³

The cost savings that ILECs such as Verizon claim will accrue from copper retirement are vastly overstated. In fact, the ILECs will continue to accrue most of the costs Verizon identified by its Declarant, Ms. Nogay, as long as it has copper in its network, regardless of what individual routes may be retired, and many of the identified costs apply equally to fiber networks. The brief period between initial comments and replies in this proceeding did not afford undersigned CLECs enough time to evaluate Verizon’s claims thoroughly. But even a cursory analysis suggests that many of the claimed activities will continue to occur even where Verizon has retired its copper. For example, the majority of costs will not go away if the carrier is only retiring certain copper routes while using other copper infrastructure to serve customers or as the support structure for fiber. Unless the ILEC plans on a forced migration to transition all customers off of copper AND to deploy fiber in completely separate conduit and aerial plant, it is likely the majority of these maintenance costs and all systems costs will continue for the

⁹¹ Comments of California Association of Competitive Telecommunications Companies, WC Docket No.12-61, RM-11358 (filed April 9, 2012) at Attachment 1, Declaration of Joseph Gillan on behalf of CalTel, California Public Utilities Commission Rulemaking 08-01-005, ¶ 8 (May 9, 2008).

⁹² *Id.* ¶ 18.

⁹³ *Id.* ¶ 17.

foreseeable future.

VI. The Commission has the Authority to Establish Rules that Protect Copper Loop UNEs and Promote Affordable Broadband Over Copper

The ILECs make various claims that the Commission lacks the authority and discretion under Sections 706, 251(c)(3), and 271 of the Act to adopt rules that prevent copper loop retirement as a means to promote affordable broadband. As discussed below, these arguments have no merit and the Commission should reject them.

A. The Commission Has Authority Under Section 706

Verizon cites no statement to support its argument that it is “settled precedent” under the *TRO* that “Section 706 favors investment in new fiber technologies over competitor’s use of copper loops.”⁹⁴ The Commission never issued such a ruling, nor could it under the plain language of Section 706. Any such interpretation would contravene the dual statutory directives in Section 706 to promote both investment and competition.

First, Verizon ignores the text of Section 706(a) requiring the Commission to “encourage the deployment” of “advanced telecommunications capability” through “measures that *promote competition* in the local telecommunications market.”⁹⁵ Allowing ILECs broad discretion to retire copper does not promote deployment of competitive advanced telecommunications services but reduces competition. Reducing competition could result in a broadband monopoly or duopoly of incumbent cable and telephone companies, which is the antithesis of a competitive market and therefore contrary to Section 706(a).

Second, in the *TRO*, the Commission held that its “obligation to ensure the deployment of

⁹⁴ Verizon Comments at p. 21.

⁹⁵ 47 U.S.C. § 1302(a) (emphasis added).

advanced telecommunications capability under section 706 warrants different approaches with regard to existing [copper] loop plant and new [fiber] loop plant.”⁹⁶ The Commission stated that “[w]ith existing copper loops, all investment in advanced telecommunications capability is necessarily limited to the equipment, not the transmission facility.”⁹⁷ Consistent with Section 706’s goal,⁹⁸ the Commission encouraged both infrastructure investment (fiber) and equipment investment (copper) that “can unleash the full potential of the embedded copper loop plant so that consumers can experience enhanced broadband capabilities before the mass deployment of fiber loops.”⁹⁹ The investment to deploy fiber did not trump the incentive to invest in equipment.

Third, Verizon is wrong in asserting that Section 706(b) does not provide Commission authority to promote broadband because “the facts do not support” such a finding.¹⁰⁰ As the Joint Request explains,¹⁰¹ the Commission recently concluded that broadband deployment to all Americans is not reasonable and timely¹⁰² and noted that “[a]s a consequence of that conclusion,” Section 706(b) was triggered.¹⁰³ Verizon contends that although Section 706(b) directs the Commission to “take immediate action to accelerate broadband deployment,” such

⁹⁶ *TRO*, 18 FCC Rcd at 17126, ¶ 244. *See also EarthLink v. FCC*, 462 F.3d 1, 5 (D.C. Cir. 2004).

⁹⁷ *TRO*, 18 FCC Rcd at 17126-27, ¶ 244.

⁹⁸ *See* Joint Request at p. 16.

⁹⁹ *TRO*, 18 FCC Rcd at 17127, ¶ 244.

¹⁰⁰ Verizon Comments at p. 21.

¹⁰¹ *See* Joint Request at p. 17.

¹⁰² *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act; A National Broadband Plan for Our Future*, GN Docket No. 11-121, Eighth Broadband Progress Report, 27 FCC Rcd 10342, 10344, ¶ 1 (“2012 Broadband Report”).

¹⁰³ *Id.* at 10349-50, ¶ 8.

action would “be limited to areas where fiber or other forms of broadband have not been deployed.”¹⁰⁴ The text of Section 706(b) contains no such limitation and such a cramped reading would conflict with the text of Section 706(b) directing the Commission to remove barriers to investment AND promote competition.

B. The Commission has Authority Under 251(c)(3)

Verizon and AT&T also incorrectly contend that Section 251(c)(3) does not provide a basis for the Commission to prevent ILECs from retiring copper loops and subloops that CLECs require as Section 251(c)(3) UNEs to provide broadband over copper.¹⁰⁵ They claim that while Section 251(c)(3) grants the Commission authority to require unbundling of ILEC facilities, the Commission does not have the authority to require ILECs to maintain those facilities solely for the purpose of providing them on an unbundled basis to competitive providers. Verizon and AT&T are wrong again.

The Commission has the authority to prevent retirement under the existing rules¹⁰⁶ and ILECs never challenged this aspect of the *TRO* when they appealed it to the D.C. Circuit.¹⁰⁷ The

¹⁰⁴ Verizon Comments at p. 21; Moreover, Verizon’s statement that “[w]here fiber exists, advanced telecommunications capability is clearly available” (Verizon Comments at pp. 21-22) is wrong because ILECs routinely replace copper feeder with fiber and continue to use copper to the customer premises. Unless the ILECs equip the copper plant with the necessary electronics, there is no guarantee that advanced telecommunications capability is available.

¹⁰⁵ Verizon Comments at p. 22; AT&T Comments at pp. 12-14.

¹⁰⁶ See 47 C.F.R. § 51.333(f) (“An objection to a notice that an incumbent LEC intends to retire any copper loops or copper subloops and replace such loops or subloops with fiber-to-the-home loops or fiber-to-the-curb loops shall be deemed denied 90 days after the date on which the Commission releases public notice of the incumbent LEC filing, *unless the Commission rules otherwise within that time. Until the Commission has either ruled on an objection or the 90-day period for the Commission’s consideration has expired, an incumbent LEC may not retire those copper loops or copper subloops at issue for replacement with fiber-to-the-home loops or fiber-to-the-curb loops.*”) (emphasis added).

¹⁰⁷ See generally *United States Telecom. Ass’n v. FCC*, 359 F.3d 554 (D.C. Cir. 2004).

TRO acknowledges that when “the copper retirement scenario suggests that competitors will be denied access to the loop facilities required under [the Commission’s] rules,” an opposition in response to the ILEC’s copper loop retirement notice will not be “deemed denied.”¹⁰⁸ What the CLECs request are strengthened rules that limit retirement so that they can invest in electronics needed to provision affordable broadband over copper without the copper wire being stripped out from beneath them, stranding their investment in EoC equipment.¹⁰⁹

AT&T claims that the Eighth Circuit’s decision in *Iowa Utilities Board v. FCC*,¹¹⁰ prevents the Commission from restricting retirement of copper facilities.¹¹¹ AT&T relies on the court’s ruling that CLECs are not entitled to access a network that is *superior* in quality to that which “the incumbent LECs provide the services to themselves.”¹¹² Contrary to AT&T’s claims, the copper network is the *existing* network. In fact AT&T, Verizon and other BOC allies go to great lengths to demonstrate that the fiber network is superior.¹¹³ It is more than ironic that the ILECs are now citing the court’s “superior” network language to justify denying CLECs’ access to network elements that the ILECs claim is inferior. The Eighth Circuit never addressed AT&T’s contention that the Commission lacks the ability to require that an ILEC “maintain”

¹⁰⁸ See XO Comments at 4.

¹⁰⁹ Verizon also claims that “if Section 251(c)(3) did provide such authority, the Commission would have to exercise that authority consistent with other statutory provisions, including Section 706, which would not permit such a result.” Verizon Comments at 22. For the reasons discussed above, Verizon is wrong. Section 706 requires that the Commission take such action.

¹¹⁰ 120 F.3d 753 (8th Cir. 1997).

¹¹¹ AT&T Comments at p. 4.

¹¹² 120 F.3d at 812.

¹¹³ Verizon Comments at p. 2 (fiber “offers consumers unparalleled capabilities, reliability, and opportunity”); Fiber to the Home Council Comments at p. 3 (declaring that “fiber is the vastly superior wireline technology” and touting “fiber’s far superior performance attributes”).

copper facilities it no longer uses in its network and provide CLECs access to those facilities.¹¹⁴ As noted above, the Commission already has the authority to deny specific copper retirements, which the ILECs never challenged.

In addition, AT&T's argument is inconsistent with the Commission's interpretation of the term network element in the statute. The Commission has consistently held that its unbundling "rules look at what use a [C]LEC will make of a particular network element when obtaining the element" pursuant to section 251(c)(3).¹¹⁵ Thus, as long as the CLEC "intends to provide a telecommunications service over that [copper] facility," it remains available, even if the ILEC has elected not to use such element.¹¹⁶ The Commission and the courts have applied this same analysis in requiring ILECs to provide access to spare fiber and copper over the ILECs' objection that such elements should not be available because the ILECs themselves were not using them.¹¹⁷

AT&T also cites *United States Telecom Ass'n v. FCC*,¹¹⁸ and incorrectly asserts that the Court held that competition through unbundling is "completely synthetic."¹¹⁹ The ILECs

¹¹⁴ See AT&T Comments at p. 4.

¹¹⁵ *Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities*, 20 FCC Rcd 14853, 14901, ¶ 90 (2005) *aff'd sub nom Time Warner Telecom, Inc. v. FCC*, 507 F.3d 205 (3d Cir. 2007).

¹¹⁶ *Id.* at 14923, ¶ 127.

¹¹⁷ See *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, 15 FCC Rcd 3696, 3776, ¶ 174 (1999) (subsequent history omitted); *AT&T Communications of Virginia, Inc. v. Bell Atlantic-Virginia, Inc.*, 197 F.3d 663, 672 (4th Cir. 1999); *U.S. West Communications, Inc. v. Jennings*, 46 F. Supp. 2d 1004, 1018-19 (D.Ariz. 1999); *MCI Telecommunications Corp. v. BellSouth Telecommunications, Inc.*, 40 F. Supp. 2d 416, 425 (E.D.Ky. 1999).

¹¹⁸ 290 F.3d 415, 424 (D.C. Cir. 2002) ("*USTA I*").

¹¹⁹ AT&T Comments at pp. 2 and 12.

continue to take this statement out of context. The *USTA I* court explained that “Congress sought to foster competition in the telephone industry and plainly believed that merely removing affirmative legal obligations would not do the job.”¹²⁰ Therefore, Congress “charged the Commission with identifying those network elements whose lack would ‘impair would-be competitors’ ability to enter the markets.’”¹²¹ The court’s discussion of “synthetic” competition was limited to the Commission’s previous unbundling standard which the Court criticized because it permitted CLECs access to all of the ILEC’s network.¹²² Those rules are long gone and CLECs now only have access to those network facilities that are “*very expensive to duplicate*,” such as local loop and transport elements.¹²³ UNE-L competition is not synthetic because, as the Commission predicted, CLECs are deploying electronics to “unleash the full potential of the embedded copper loop plant so that consumers can experience enhanced broadband capabilities.”¹²⁴ The record demonstrates this is occurring and that carriers utilize UNE loop facilities until it is cost justified to deploy their own last mile facilities to customers.¹²⁵

C. The Commission has Authority Under Section 271

Under Section 271 of the Act, the Commission has the authority to promote the

¹²⁰ *USTA I*, 290 F.3d at 422.

¹²¹ *Id.*

¹²² *Id.*

¹²³ *Id.* at 426 (citing Justice Breyer’s concurrence in *Verizon*, 535 U.S. at 510 n. 27); *see also* 47 C.F.R. § 51.319(a)(1) (requiring unbundled access to copper loops.).

¹²⁴ *TRO*, 18 FCC Rcd at 17126-27, ¶ 244.

¹²⁵ *See* Blue Rooster et al. Comments at p. 9 (Sonic is an ideal example of how copper based solutions such as EoC need to remain viable as it incrementally deploys fiber. Sonic expands its FTTP network in areas where it obtains a large enough base of customers subscribing to copper based service to make fiber deployment economic.); MegaPath Comments at p. 4 (“CLECs are almost never able to adopt a ‘if we build it, they will come’ strategy with respect to last-mile facilities, and instead must attempt to get facilities in place as customer demand actually materializes”).

availability of copper loops and regulate the ability of BOCs to retire and remove such loops from service. By mischaracterizing the 271 forbearance relief, Verizon contends the Commission has no such authority.¹²⁶ What Verizon fails to explain is that this forbearance relief did not extend to local copper loops the BOCs are required to provide pursuant to Section 271(c)(2)(B)(iv). Rather, the Commission only granted forbearance with respect to the unbundling requirements of Section 271 applicable to: “fiber-to-the-home loops (FTTH loops), fiber-to-the-curb loops (FTTC loops), the packetized functionality of hybrid loops, and packet switching.”¹²⁷

While Verizon asserts that requiring access to these fiber elements under section 271 would undermine its incentive to deploy fiber, both the Commission and the D.C. Circuit recognize that this argument does not apply to copper loops. When the D.C. Circuit affirmed the Commission’s *Section 271 Forbearance Order*, it quoted the order and explained that “[t]he FCC emphasized that its ‘obligation to ensure the deployment of advanced telecommunications capability under section 706 warrants different approaches with regard to existing [copper] loop plant and new [fiber] loop plant,’”¹²⁸ and that CLECs have the “continued ability to compete in the broadband market by ... accessing ILECs’ legacy copper elements.”¹²⁹ In sum, the *Section 271 Forbearance Decision* and subsequent appeal recognized CLECs’ continued right to

¹²⁶ Verizon Comments at 23.

¹²⁷ *Petition for Forbearance of the Verizon Telephone Companies Pursuant to 47 U.S.C. § 160(c)*; *SBC Communications Inc.’s Petition for Forbearance Under 47 U.S.C. § 160(c)*; *Qwest Communications International Inc. Petition for Forbearance Under 47 U.S.C. § 60(c)*; *BellSouth Telecommunications, Inc. Petition for Forbearance Under 47 U.S.C. § 160(c)*, 19 FCC Rcd 21496, ¶ 1 (2004) (“*Section 271 Forbearance Order*”), *aff’d EarthLink, Inc. v. FCC*, 462 F.3d 1 (D.C. Cir. 2006).

¹²⁸ 462 F.3d 1, 5 (quoting *TRO*, ¶ 244).

¹²⁹ *Id.* at 7.

unbundled copper loops for use as inputs in advanced, broadband services.

VII. Access to Copper Loops Is a Necessary Bridge to the All-Fiber Future Envisioned by the Commission

Contrary to claims that the requested modification to the copper loop retirement rules is overbroad and would require ILECs to maintain copper forever,¹³⁰ the Joint Request is narrow and designed to preserve CLEC access to copper on a temporary basis. It is incorrect to suggest that CLECs favor prohibiting any copper retirement at all. The CLECs agree that the ILECs should not have to maintain copper indefinitely in all circumstances. But until such time as there is consensus on those circumstances, the CLECs ask for a temporary freeze on copper retirement until the Commission restores “balance” to the retirement rules. Given the fact that many ILECs profess they do not intend to retire copper loops,¹³¹ the proposed rule changes should have no significant effect on ILEC fiber deployment incentives or the cost savings the ILECs allegedly anticipated when they planned their fiber deployment.

Of course, the CLECs remain willing to maintain a dialogue with Verizon, AT&T and other ILECs regarding negotiated solutions. Although AT&T is “studying possible alternatives for retired copper facilities”¹³² and Verizon touts providers’ “incentives to cooperate with their wholesale customers to find workable alternatives as copper is retired,”¹³³ CLECs have no assurance that copper retirements will not increase during the period in which AT&T studies alternatives and Verizon explores fiber-based replacements for EoC. The status quo is

¹³⁰ See CenturyLink Comments at p. 14 (mistakenly claiming the Joint Request seeks access to copper “indefinitely”).

¹³¹ See, e.g. CenturyLink Comments at p. 14. (stating that it “generally does not retire copper after it upgrades its outside plant.”)

¹³² AT&T Comments at pp. 18-19.

¹³³ Verizon Comments at p. 25.

unacceptable and must change now, not after AT&T and Verizon have explored other alternatives. As demonstrated in the comments of CLECs and the equipment vendors in this proceeding regarding the investment in EoC and the number of customers receiving such service, it should be self-evident that these customers deserve more than 90 days' notice and an opportunity to object before any objection is "deemed denied" and competitive broadband service provided to customers is cut off. If the Commission desires to promote market-based solutions it should, at a minimum, ensure that both copper loop and feeder retirements are suspended for an interim period while providers and customers attempt to negotiate alternative solutions.

VIII. Conclusion

For aforementioned reasons, the Commission should adopt the revisions to its copper retirement rules set forth in the Joint Request. These revisions will help ensure that customers currently receiving broadband over copper loops, such as small and medium-sized business customers that obtain EoC, do not lose their affordable broadband service. Modification of the Commission's copper retirement rules will further provide the regulatory certainty necessary for CLECs to continue investing in innovative technology that can provide business and residential customers with affordable broadband service using existing infrastructure.

Respectfully submitted,

/s/

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March 20, 2013