

**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
	)	
Special Access for Price Cap Local Exchange Carriers	)	WC Docket No. 05-25
	)	
AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access	)	RM-10593
	)	

**REPLY COMMENTS OF U.S. TELEPACIFIC CORP.**

Tamar E. Finn  
Joshua M. Bobeck  
MORGAN, LEWIS & BOCKIUS LLP  
2020 K St., NW  
Washington, D.C. 20006  
202.373.6000 (Tel.)  
202.373.6001 (Fax)  
tamar.finn@morganlewis.com  
joshua.bobeck@morganlewis.com

March 9, 2015

*Counsel for U.S. TelePacific Corp.*

**TABLE OF CONTENTS**

I. INTRODUCTION AND SUMMARY .....2

II. THE COMMISSION SHOULD STRENGTHEN ITS COPPER LOOP RETIREMENT RULES TO PROMOTE DEPLOYMENT OF BROADBAND TO LOCATIONS WHERE DEPLOYMENT OF FIBER IS NOT ECONOMIC .....6

    A. THE COMMISSION’S DEFINITION OF RETIREMENT SHOULD PROHIBIT DE FACTO RETIREMENTS .....6

    B. THE COMMISSION SHOULD EXTEND THE SHORT FORM NOTICE REQUIREMENT TO COPPER FEEDER .....9

    C. THE COMMISSION SHOULD INCREASE THE NOTICE PERIOD FOR COPPER RETIREMENT .....11

III. THE COMMISSION SHOULD ADOPT ITS PROPOSED PRESUMPTION REGARDING DISCONTINUANCE OF WHOLESALE SERVICES .....12

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**REPLY COMMENTS OF U.S. TELEPACIFIC CORP.**

U.S. TelePacific Corp. (“TelePacific”) respectfully submits these Reply Comments regarding the Commission’s Notice of Proposed Rulemaking (“*NPRM*”)<sup>1</sup> proposing rules and rule modifications to govern during technology transitions.

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<sup>1</sup> *In the Matter of Ensuring Customer Premises Equipment*, PS Docket No. 14-174, *Backup Power for Continuity of Communications Technology Transitions*, GN Docket No. 13-5, *Policies and Rules Governing Retirement of Copper Loops by Incumbent Local Exchange Carriers*, RM-11358, *Special Access for Price Cap Local Exchange Carriers*, WC Docket No. 05-25, *AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access*, RM-10593, Notice of Proposed Rulemaking and Declaratory Ruling, FCC 14-185 (rel. Nov. 25, 2014) (“*NPRM*”).

## I. Introduction and Summary

In January of 2013, TelePacific filed a letter urging the Commission to refresh the record regarding pending petitions seeking change to the Commission's copper retirement rules.<sup>2</sup> TelePacific urged the Commission to revisit its copper retirement rules in order to expand the availability of broadband by promoting access to copper loops for the delivery of Ethernet over copper ("EoC"). In particular, TelePacific explained that copper-based broadband services such as EoC provides carriers the ability to deliver broadband to communities that lack access to fiber networks. The Commission's current copper retirement rules impede competitive carriers' ability to use copper loops to provide broadband at affordable prices. In addition, given the public claims of the ILEC regarding the future of copper it is apparent that the ILECs intend to aggressively retire copper in the foreseeable future.

CLECs such as TelePacific continue to rely heavily on access to ILEC copper to deliver broadband service. TelePacific's surveys of alternative fiber suppliers in its markets demonstrate that there is no alternative to the ILEC for more than 80% of TelePacific's business customer locations. While TelePacific generally would prefer to use fiber and IP-based technologies to provide service, fiber is available to less than 20% of its customer locations. Although TelePacific has a substantial network, it typically does not build the last mile because it is not economical to do so for the small and medium sized business customers it serves. For instance, when ordering Ethernet services from a third party vendor, the cost for them to extend or build fiber to a customer location can be \$5,000- \$250,000 or more in special construction costs

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<sup>2</sup> Letter from Joshua M. Bobeck, Bingham McCutchen LLP, on behalf of TelePacific Commc'ns Corp. et al., to Marlene H. Dortch, Secretary, FCC, *Policies and Rules Governing Retirement of Copper Loops by Incumbent Local Exchange Carriers*, RM-11358, WC Docket No. 10-188, et al., (filed Jan. 25, 2013). *See also* Reply Comments of U.S. TelePacific et al., GN Docket No. 12-353, RM-11358, (filed March 20, 2013). Copies of both the 2013 letter and reply comments are attached hereto.

depending on the location.

Moreover, even where copper remains the most efficient alternative for reaching a small or medium sized business customer location, it is not always a viable solution. While EoC has the capacity to provide broadband service at speeds greater than 100 Mbps, its capabilities depend on loop length and loop quality. Properly maintained copper loops, however, are not always available. Where copper is unavailable TelePacific relies on DS1s, ordered either as UNEs or from ILEC special access tariffs.

In the *NPRM*, the Commission sought comment on proposals to strengthen its “pro-consumer and pro-competition policies and protections in a manner appropriate for the technology transition” and the post transition communications environment.<sup>3</sup> The *NPRM* proposes both to modernize the copper retirement rules to reflect the reality that CLECs and ILECs have brought innovative copper-based broadband services to consumers and businesses who otherwise would be deprived of reasonably priced broadband. Similarly, the Commission proposes changes to its Section 214 discontinuance rules to ensure that where ILECs intend to discontinue wholesale services, such as DS1 service, over legacy networks that consumers and business are not deprived of the benefits competition brings. The Commission’s discontinuance rules derived from Section 214 of the Act are a crucial component of the Commission’s “pro-competition” policies.<sup>4</sup> These rules require carriers to obtain Commission approval before discontinuing, reducing, or impairing telecommunications service. The Commission’s public review process helps ensure that the public is protected and harm to consumers is minimized. The modifications proposed in the *NPRM* are reasonably calculated to protect consumers while facilitating the transition to next generation networks and telecommunications services.

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<sup>3</sup> *NPRM* ¶ 2.

<sup>4</sup> *Id.* at ¶ 5.

In these reply comments, TelePacific urges the Commission to adopt the following proposals identified in the *NPRM*.

**Copper Retirement Rules**

- Define the term retirement, and prohibit ILECs from the practice of “de facto” retirement without submitting proper notice of network change;
- Subject ILEC retirement of copper feeder to the same notice requirements as copper subloops and copper loops;
- Extend the notice period for copper loop retirement from 90 days to 1 year.

**Section 214(a) Discontinuance Rules**

- Adopt a rebuttable presumption that a discontinuance of service to a wholesale customers will discontinue, reduce or impair service provided to end users;
- Where discontinuance of a wholesale service will discontinue, reduce or impair service to retail end users, the ILEC should be required to provide equivalent service on equivalent rates, terms and conditions;
- Adopt the explicit criteria set forth in the NPRM and proposed by Windstream to assess whether the ILEC is providing equivalent services.

## **II. The Commission Should Strengthen its Copper Loop Retirement Rules to Promote Deployment of Broadband to Locations Where Deployment of Fiber is not Economic**

### **A. The Commission's Definition of Retirement Should Prohibit De Facto Retirements**

The *NPRM* seeks comment on its proposal to define “copper retirement” as “the removing or disabling of” copper loop, subloop and feeder facilities.<sup>5</sup> TelePacific agrees with this definition. The *NPRM* also sought additional examples of the ILEC practice of “de facto” copper retirement achieved by outright neglect of the ILECs’ copper plant. Numerous such examples appear in the comments. Although rule 51.319(a)(3)(iii) provides that, for fiber overbuilds, ILECs must maintain copper loops connected to a customer premise until retired and restore such loops to serviceable condition upon request, the examples in initial comments show the rule does not go far enough to prevent deterioration of the copper plant. The Commission accordingly should modify its rules to require that ILECs that have not retired copper loops and subloops continue to maintain their copper facilities, regardless of whether fiber to the home, curb or feeder has been overbuilt, and make clear the Commission will aggressively enforce the rule. ILECs should not be permitted to neglect their copper loops and then force consumers to subscribe to different services because the copper plant no longer supports the services to which consumers previously subscribed.

AT&T claims that the Commission lacks any record evidence supporting the proposed rule changes.<sup>6</sup> Of course, that misses the point; the Commission is, through this Notice and Comment rulemaking, seeking such information. Numerous comments filed in response to the *NPRM* laid out the evidence AT&T claimed the agency lacks. Even if AT&T is correct that

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<sup>5</sup> *NPRM* ¶ 52.

<sup>6</sup> Comments of AT&T Services, Inc. at 28. (“AT&T Comments”).

previous criticisms were unsubstantiated, that is no longer the case. Comments filed in response to the *NPRM* provide compelling evidence that ILECs, particularly Verizon and AT&T, have engaged in this “de facto” retirement strategy and that their practices impact competitors’ ability to offer services in competition with the ILEC and reduce consumer choice.

For example, significant rain storms in California in 2010 revealed “outside plant that was long-obsolete and management decisions that had deferred or diverted capital and operating expenditures from readying the network for winter rain” - which occurs annually in California.<sup>7</sup> Further, between 2010 and 2013, statistics showed that both AT&T and Verizon neglected their copper networks as neither met the state’s minimum repair interval measure, while other smaller ILECs met their standards.<sup>8</sup> Verizon’s performance continued to decrease, demonstrating that it deliberately failed to maintain its copper network.<sup>9</sup>

The record also shows that ILECs have deliberately neglected their copper plant. Verizon, for instance, has rejected orders because copper was not available despite the lack of any network change notice.<sup>10</sup> Verizon also refuses to provide access to copper at locations where it has overbuilt FiOS, even where the copper remains in place.<sup>11</sup> Verizon’s practices clearly constitute behavior that influences the ability of competitors to provide service.

CLECs’ experience with Verizon is reinforced by the experience of members of the Communications Workers Association (“CWA”) which represents many of the outside plant technicians working for Verizon. According to CWA, Verizon “has adopted a policy of ‘de facto

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<sup>7</sup> California Association of Competitive Telecommunications Companies Comments (“CalTel Comments”) at 12.

<sup>8</sup> CalTel Comments at 12.

<sup>9</sup> CalTel Comments at 12.

<sup>10</sup> Comments of XO Communications, LLC at 11. (“XO Comments”).

<sup>11</sup> XO Comments at 11.

copper discontinuance.’”<sup>12</sup> Verizon implements this policy by failing to maintain its copper plant including delaying or outright refusing to repair copper facilities.<sup>13</sup> CWA explains that Verizon no longer conducts routine testing or replaces faulty cable.<sup>14</sup> In lieu of maintaining the network, Verizon technicians are apparently instructed to push customers to subscribe to inferior wireless services such as the Voice Link service that consumers universally rejected in Verizon’s disastrous Fire Island experiment.<sup>15</sup> In numerous instances, customers refusing to accept Voice Link were left without service at all.<sup>16</sup> These appear to be deliberate strategic decisions, resulting in part from Verizon’s planned reductions in its technician workforce including the elimination of preventive maintenance crews.<sup>17</sup>

Where copper facilities have not been the subject of a notice that the ILEC intends to remove, disable or replace them, such facilities should be available to CLECs.<sup>18</sup> This provides CLECs with certainty and the ability to plan their marketing, understanding which areas have copper available and areas where copper may not be available. Further, where copper is not “retired” the ILEC should be required to maintain it<sup>19</sup> and “restore the copper loop to serviceable condition upon request.”<sup>20</sup> The Commission’s copper retirement rules adopted in 2003 are no longer workable in light of efforts by ILECs such as Verizon to abandon their copper networks without actually retiring them.

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<sup>12</sup> Comments of the Communications Workers of America at 24. (“CWA Comments”).

<sup>13</sup> *Id.* at 24, 26.

<sup>14</sup> *Id.* at 25-26.

<sup>15</sup> *Id.* at 25.

<sup>16</sup> *Id.*

<sup>17</sup> *Id.* at 26.

<sup>18</sup> XO Comments at 11.

<sup>19</sup> *Id.*

<sup>20</sup> 47 C.F.R. §51.319(a)(2)(iii)(B).

The ILECs argue that the Commission's copper retirement rules (47 C.F.R. § 51.319(a)(3)(iii)(B)) allow an ILEC to neglect copper loops that the ILEC is not using until a CLEC requests access to it.<sup>21</sup> As noted, the Commission should make clear that its rules require the ILEC to restore the copper loop to serviceable condition upon request and update those rules to ensure they apply to all copper loops, regardless of fiber overbuild status. In addition, the Commission should take steps to end ILEC practices of neglecting copper loops that are in use, either by wholesale or retail customers, in order to force customers to transition to more expensive services and ensure that CLECs are deprived of access to copper loop infrastructure to compete for such customers. For example, where a customer experiences more than two outside plant-related trouble reports in 30 days, TelePacific will often move the customer from a copper UNE-DS1 or EoC loop to special access DS-1. Bonded DS1s are not only a more expensive alternative to UNEs, there are also technical limitations to how much bandwidth can be derived from bonded DS-1s, meaning a customer's needs for high speed broadband often cannot be met. The practice of neglecting the copper network therefore has real, adverse consequences for competition and customers.

**B. The Commission Should Extend the Short Form Notice Requirement to Copper Feeder**

The *NPRM* proposes to define copper retirement by adding a new section 51.332 explicitly defining copper retirement and including the feeder portion of the loop in such definition.<sup>22</sup> Such rule changes would obligate ILECs to submit short term notice of network changes for copper feeder as well as copper distribution Subloops and home run loops under section 51.333.<sup>23</sup> Where copper feeder is retired, it forecloses CLECs' ability to access home run

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<sup>21</sup> AT&T Comments at 31.

<sup>22</sup> *NPRM* ¶ 51.

<sup>23</sup> *See NPRM*, Appx. A p. 54-55

copper loops necessary for competing, especially in the market for Ethernet that requires home run copper loops.

The ILECs oppose these proposed changes. AT&T argues that copper feeder is already subject to the Commission's notice of network change rules adopted in the *Local Competition Second Report & Order*<sup>24</sup> pursuant to section 251(c)(5) of the Act.<sup>25</sup> While technically accurate, AT&T conveniently ignores the existing copper retirement rules distinction between copper loops and Subloops on the one hand and copper feeder on the other. In those rules, adopted pursuant to the *TRO*, the Commission added two important features: (1) the right for competitors to file objections to network change notices regarding copper loop facilities; and (2) the requirement that ILECs file such network change notices at least 91 days before the planned retirement to allow the Commission and the parties to address and objections that may arise.<sup>26</sup> The Commission clearly excluded feeder from the scope of the modifications it made to the network change rules.<sup>27</sup> The *TRO* appears to have excluded feeder from these rules because it was eliminating the availability of copper feeder as a UNE. However, circumstances have changed since 2003 and CLECs require access to home run copper loops in order to provide Ethernet services to customers in locations where the deployment of fiber is not economic.

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<sup>24</sup> *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, Second Report & Order, 11 FCC Rcd 19392 (1996).

<sup>25</sup> AT&T Comments at 29.

<sup>26</sup> *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*, CC Docket Nos. 01-338, 96-98, 98-147, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978, 17147 ¶ 283 (2003) ("*TRO*") corrected by Errata, 18 FCC Rcd 19020 (2003), 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).

<sup>27</sup> *Id.* at n.829 (stating that the "modified network notification requirements" do not apply to "the retirement of copper feeder plant.").

CLECs, however, cannot serve such customers if the copper feeder is unavailable. As Birch explains, the “[r]eplacement of copper feeder can have the same harmful consequences as removal or replacement of home run copper loops.”<sup>28</sup> This is because where home run copper does not exist but copper distribution Subloops remain available, CLECs “cannot afford to access such Subloops via collocation at the remote terminal.”<sup>29</sup> Where CLECs cannot access copper loops needed to provide small and medium sized business customers access to competitively priced Ethernet service, the customer either will have no access to Ethernet or will be forced to subscribe to the ILEC service, if any is available.<sup>30</sup>

### **C. The Commission Should Increase the Notice Period for Copper Retirement**

The NPRM asks whether the current ninety (90)-day interval for ILEC advance notice of planned copper retirement is sufficient.<sup>31</sup> TelePacific urges the Commission to extend the notice period to 1 year, because the current interval is insufficient.<sup>32</sup> While the ILECs complain that there is no evidence the existing notice requirements are inadequate,<sup>33</sup> the record suggests otherwise.

Technology transitions have significant impact on customers. Sophisticated business end users in particular must work closely with their competitive suppliers in transition planning. The

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<sup>28</sup> Comments of Birch Communications, Inc., Integra Telecom, Inc., and Level 3 Communications, LLC at 35. (“Birch Comments”).

<sup>29</sup> *Id.* at 31, n.74 citing *QSI Consulting, Inc., Viability of Broadband Competition in Business Markets: An Analysis of Broadband Network Unbundling Policies and CLEC Broadband Competition*, at 12 (Jan. 21, 2010), attached as Exhibit A to Comments of Covad Communications Company, WC Dkt. No. 09-223 (filed Jan. 22, 2010).

<sup>30</sup> *See id.* at 31.

<sup>31</sup> *NPRM* ¶ 59.

<sup>32</sup> XO Comments at 17; Birch Comments at 37-38.

<sup>33</sup> *See Verizon Comments* at 33.

“planning and carrying out the migration of a large enterprise network from one service to another often takes a year or more.”<sup>34</sup> For carriers, such migrations are exponentially more time intensive because of the multiple customers and locations involved and coordination that needs to occur between carrier, ILEC, customer and government entities and property owners in case of self-deployment of alternative facilities. The current notice periods are inadequate to facilitate a transition of customers from copper without disruption.<sup>35</sup> Such a transition involves numerous steps and is even more time intensive when the lack of available fiber requires deployment of fiber as a replacement.<sup>36</sup>

### **III. The Commission Should Adopt its Proposed Presumption Regarding Discontinuance of Wholesale Services**

The NPRM proposes to establish that an ILEC discontinuance of a wholesale service will discontinue, reduce or impair services to retail customers therefore requiring approval pursuant to Section 214(a) of the Act.<sup>37</sup> The ILECs object to this proposal, arguing that it would harm the end users the Commission seeks to protect and would impede technology transitions.<sup>38</sup> The ILEC objections are without merit.

The ILECs argue that the Commission’s rebuttable presumption conflicts with precedent that limits the applicability of Section 214(a) to discontinuances of wholesale service.<sup>39</sup> The cases that Century cites in support, *Western Union*<sup>40</sup> and *Lincoln County*,<sup>41</sup> however, are

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<sup>34</sup> Comments of the Ad Hoc Telecommunications Users Committee at 11. (“Ad Hoc Comments”).

<sup>35</sup> XO Comments at 17.

<sup>36</sup> *Id.*

<sup>37</sup> NPRM ¶ 103.

<sup>38</sup> See Verizon Comments at 26-27; CenturyLink Comments at 16-17.

<sup>39</sup> CenturyLink Comments at 16-17.

<sup>40</sup> *Western Union Tel. Co. Petition for Order to Require the Bell System to Continue to Provide Group/Supergroup Facilities*, 74 FCC 2d 293 (1979).

consistent with the Commission’s proposal. In each case, the Commission refused to apply section 214(a) to discontinuance of a wholesale service because the proposed discontinuance had no effect on end users.<sup>42</sup> The *NPRM* is clear that in such cases the proposed wholesale discontinuance rules would not apply.<sup>43</sup> Commenting parties, including other CLECs, agree with this interpretation of the Commission’s proposal.<sup>44</sup>

But it is obvious that in the vast majority of cases ILEC discontinuance of wholesale inputs used by CLECs will reduce or impair service to end users. As Birch explains, CLECs rely on ILEC facilities and services as wholesale inputs to serve customers because at an overwhelming majority of locations CLECs lack access to reasonably priced alternatives.<sup>45</sup> Moreover, the Commission has repeatedly found that CLECs “rely heavily” on ILEC wholesale inputs to serve their customers.<sup>46</sup> Without such alternatives, and deprived of ILEC facilities, consumers will lack access to competitively priced services and the benefits of competition.

Nor is there any merit to the argument that the Commission’s proposed wholesale discontinuance rules would force consumers to stick “with services they do not want.”<sup>47</sup> The

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<sup>41</sup> *Lincoln County Tel. Sys., Inc. v. Mountain States Tel. and Tel. Co.*, , 81 FCC 2d 328, (1980).

<sup>42</sup> *See Lincoln County* 81 FCC 2d at 334-35 ¶ 22 (finding no section 214 discontinuance because network change did not “impair the service available to the public”); *Western Union Tel. Co.*, 74 FCC 2d at 297 ¶ 9 (complainant failed to show how tariff change would impede its ability to serve customers.).

<sup>43</sup> *NPRM* ¶ 110 (discussing equivalent access proposal in conjunction with ILEC “request for section 214 authority to discontinue.”).

<sup>44</sup> *See Birch Comments* at 10 (“where the presumption is not rebutted, the Commission should require compliance with the Equivalent Wholesale Access requirement as a condition of any grant of an incumbent LEC application to discontinue, reduce, or impair a legacy wholesale service ... used by competitive carriers as an input to downstream retail service.”)

<sup>45</sup> *Birch Comments* at 5-6.

<sup>46</sup> *Special Access for Price Cap Local Exchange Carriers et al*, 27 FCC Rcd 10557, 10559 ¶ 2 (2012) (“Competitive carriers rely heavily on special access to reach customers” including for the provision of Ethernet.).

discontinuance rules do not prevent ILECs from offering new IP-based services to consumers; but they protect consumers who might otherwise lose access to legacy services or features they determine remain valuable.

Under the circumstances where the Commission proposes to apply the Section 214(a) discontinuance process to ILEC discontinuances of wholesale services, the Commission proposes to require ILECs to provide services to wholesale customers on equivalent rates, terms and conditions.<sup>48</sup> Further, in order to best facilitate the IP transition, the NPRM proposes to establish objective standards and clear criteria for applying the equivalent wholesale access requirement. Consistent with other comments filed in this proceeding,<sup>49</sup> TelePacific urges the Commission to adopt the Windstream proposals set forth in paragraph 111 of the *NPRM*.

The ILECs complain that the Commission's proposed measures to protect competition during the IP transition will impede the transition and are contrary to the public interest.<sup>50</sup> The purpose of the proposed rules, however, is to preclude ILECs from "parlaying their old TDM monopolies to current and future last-mile IP dominance."<sup>51</sup> Thus, the Commission proposes to ensure that where competition is dependent on access to ILEC wholesale inputs such access remains available during the transition. Ensuring continued access to critical wholesale inputs is thus consistent with the public interest and consistent with the Commission's broad authority under section 214(a) to protect the public interest.

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<sup>47</sup> CenturyLink Comments at 20.

<sup>48</sup> *NPRM* ¶ 110.

<sup>49</sup> Ad Hoc Comments at 15-16; Birch Comments at 11-13; XO Comments at 26.

<sup>50</sup> AT&T Comments at 57-58.

<sup>51</sup> Comments of Sprint Corporation at 2.

## CONCLUSION

For the foregoing reasons the Commission should adopt the measures proposed in the NPRM to ensure that technology transitions, including the transition from copper networks, do not deprive consumers and businesses the benefit of competition.

Respectfully submitted,

*/s/ Joshua M. Bobeck* \_\_\_\_\_

Tamar E. Finn

Joshua M. Bobeck

MORGAN, LEWIS & BOCKIUS LLP

2020 K St., NW

Washington, D.C. 20006

202.373.6000 (Tel.)

202.373.6001 (Fax)

tamar.finn@morganlewis.com

joshua.bobek@morganlewis.com

March 9, 2015

*Counsel for U.S. TelePacific Corp.*

Eric Branfman ([eric.branfman@bingham.com](mailto:eric.branfman@bingham.com))  
Tamar Finn ([tamar.finn@bingham.com](mailto:tamar.finn@bingham.com))  
Joshua Bobeck ([josh.bobeck@bingham.com](mailto:josh.bobeck@bingham.com))

January 25, 2013

**VIA ELECTRONIC FILING**

Ms. Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, DC 20554

Re: **REQUEST TO REFRESH RECORD AND TAKE EXPEDITED ACTION TO UPDATE COPPER RETIREMENT RULES TO PROMOTE AFFORDABLE BROADBAND OVER COPPER**  
*WC Docket Nos. 10-188, 12-353; GN Docket Nos. 09-51, 13-5; RM-11358*

Dear Ms. Dortch:

Mpower Communications Corp., and U.S. TelePacific Corp. (together, “TelePacific”); ACN Communications Services, Inc.; Level 3 Communications, LLC; TDS Metrocom, LLC and Telecommunications for the Deaf and Hard of Hearing, Inc. (“TDI”) request that the Commission refresh the record and take expedited action to update its copper retirement rules to preserve and promote affordable broadband over copper. The uncertainty created by AT&T and Verizon statements that they intend to “kill the copper” hinders investment in technologies such as Ethernet over Copper, which many small and medium businesses rely on today for affordable, high-speed broadband access. The Commission should update its rules to ensure that in today’s challenging economic environment, no customer loses the affordable broadband it receives from its chosen provider, and more customers have the option of adopting high-speed broadband using affordable Ethernet over copper.

**I. INTRODUCTION AND SUMMARY**

The Commission has determined that “access to broadband has become essential”<sup>1</sup> and has shifted its policymaking towards the singular goal of making

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<sup>1</sup> See *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 Nos. 11-121, FCC 12-90, Report (“2012 Broadband Report”) ¶ 120.

Beijing  
Boston  
Frankfurt  
Hartford  
Hong Kong  
London  
Los Angeles  
New York  
Orange County  
San Francisco  
Santa Monica  
Silicon Valley  
Tokyo  
Washington

broadband available to all Americans.<sup>2</sup> Under its authority pursuant to Section 706 of the Telecommunications Act of 1996 (“1996 Act”), the Commission has adopted rules to enhance competition and reduce barriers to investment.<sup>3</sup> It also has recognized the extraordinary sums the industry has invested in deploying broadband capable networks.<sup>4</sup> Despite these efforts, the Commission found a persistent, and “large deployment gap” for broadband, in part because of the “challenging economics posed by many unserved and underserved areas.”<sup>5</sup> As a result of this gap, the Commission concluded in 2010, 2011 and 2012 that broadband is not being deployed to all Americans on a reasonable and timely basis.<sup>6</sup>

Because “broadband deployment is not reasonable and timely,” Section 706(b),<sup>7</sup> commands the Commission to “take immediate action to accelerate deployment of such capability by removing barriers to infrastructure investment and by promoting competition in the telecommunications market.”<sup>8</sup> Although the policies of promoting competition and reducing regulation may sometimes conflict, it is the Commission’s duty to reconcile and promote both statutory directives to achieve lower prices, higher quality, and the rapid deployment of new technologies and services for all Americans.

The Commission should not accept the false choice between regulating

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<sup>2</sup> See e.g. *2012 Broadband Report* ¶¶ 10-14; *Connect America Fund; A National Broadband Plan for Our Future; Establishing Just and Reasonable Rates for Local Exchange Carriers; High-Cost Universal Service Support; Developing an Unified Intercarrier Compensation Regime; Federal-State Joint Board, Report and Order and Further Notice of Proposed Rulemaking*, 26 FCC Rcd 17663 ¶ 1 (2011) (“*Connect America Fund Order*”).

<sup>3</sup> See e.g. *Implementation of Section 224 of the Act; A National Broadband Plan for Our Future*, Report and Order and Order on Reconsideration, 26 FCC Rcd 5240 (2011).

<sup>4</sup> *2012 Broadband Report* ¶ 136.

<sup>5</sup> *2012 Broadband Report* ¶ 137.

<sup>6</sup> See *2012 Broadband Report; 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*, Seventh Broadband Progress Report, 26 FCC Rcd 8008 ¶ 1 (2011); See *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*, 25 FCC Rcd 9556, 9558, ¶¶ 2-3 (2010) (“*2010 Sixth Broadband Progress Report*”).

<sup>7</sup> 47 U.S.C. § 1302(b).

<sup>8</sup> *Id.*

“legacy” TDM technology and deregulating “new” IP technology.<sup>9</sup> The advantage of technology is that it can turn what was once considered “old” into something “new.” Copper loops are a fundamental building block in communications networks, including the IP-based networks that both industry and regulators aspire to deploy across America. As Overture Networks, a leading developer and manufacturer of Carrier Ethernet products noted, “***Ethernet over Copper is a means to deliver IP, and not a legacy TDM technology.***”<sup>10</sup> Almost since the ink was dry on the *Triennial Review Order*<sup>11</sup> and the Commission’s copper loop retirement rules,<sup>12</sup> innovative companies have harnessed the innate capacity of embedded copper loop infrastructure. These companies, including equipment manufacturers and telecommunications carriers, have found ways to increase the capacity of copper loops and the broadband speeds that carriers can deliver over that loop infrastructure. In particular, the development of Ethernet over Copper (“EoC”) technology makes broadband available to a large base of customers that previously did not have access to affordable broadband capacity because they were not located close enough to fiber networks. Even AT&T’s latest announcement implicitly recognizes the value of copper because its U-verse network relies on a combination of fiber-to-the-node, *copper* subloops, and VDSL technology to bring broadband speeds to residential consumers and after AT&T’s fiber investment is completed, half of the multi-tenant business locations in AT&T’s territory will remain wholly reliant on copper infrastructure. Nationwide, the percentage of businesses relying on copper infrastructure is even higher, since approximately 68% of buildings with 20 or more employees are not connected to fiber networks.<sup>13</sup> Indeed, Overture estimates that “each year more copper ports are

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<sup>9</sup> *AT&T Petition to Launch a Proceeding Concerning the TDM-to-IP Transition*, (filed Nov. 7, 2012).

<sup>10</sup> Overture Networks, *ex parte* notice in GN Docket Nos. 09-47, 09-51, 09-137, and RM-11358, 1 (filed Dec. 7, 2012) (emphasis in original) (“*Overture Ex Parte*”).

<sup>11</sup> *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*, CC Docket Nos. 01-338, 96-98, 98-147, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978, ¶ 7 (2003) (“*TRO*”), *corrected by Errata*, 18 FCC Rcd 19020 (2003), *vacated and remanded in part, aff’d in part, United States Telecom Ass’n v. FCC*, 359 F.3d 554 (DC Cir 2004) (*USTA II*), *cert. denied*, 543 U.S. 925 (2004), *on remand, Unbundled Access to Network Elements; Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, Order on Remand, 20 FCC Rcd 2533 (2005) (“*TRRO*”), *aff’d, Covad Commc’ns Co. v. FCC*, 450 F.3d 528 (D.C. Cir. 2006).

<sup>12</sup> 47 C.F.R. § 51.333.

<sup>13</sup> *Overture Ex Parte*, at 2 (citing Vertical Systems figure).

deployed than fiber ports at a ratio of almost 2:1.”<sup>14</sup>

Where alternative fiber is not available, competitive carriers also rely on incumbents’ copper loops to deliver high-speed broadband to customers. For example, a TelePacific survey of nine CLECs in California shows that they have installed EoC capability in 343 California wire centers, giving the majority of small and medium sized businesses served by those wire centers the ability to purchase EoC based broadband service today.<sup>15</sup> Texatel undertook a similar study that shows six CLECs provide EoC broadband options to more than 400,000 business customers in 130 wire centers in Texas.

Because AT&T and Verizon will continue to rely on copper loop infrastructure to deliver broadband services for the foreseeable future, it is disingenuous of them to claim that preserving CLEC access to copper thwarts or slows down the transition to all-IP networks. The Commission’s current copper retirement rules impede competitive carriers’ ability to use copper loops to provide broadband at affordable prices through Ethernet over Copper. Based on public statements from ILECs, the retirement of copper loops or feeder will accelerate in the near future. Given the large number of Americans and businesses that already have access to high-speed broadband over copper loops,<sup>16</sup> and the 19 million Americans that do not have access to fixed broadband meeting the speed benchmark today,<sup>17</sup> the Commission should modify its copper retirement rules to ensure that (1) customers currently receiving broadband over copper loops do not lose their affordable broadband service and (2) the rules promote the regulatory certainty necessary for further investments in development of new technologies for affordable broadband over copper.

Although fiber-to-the-home delivering 100 Mbps may be the ultimate

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<sup>14</sup> *Id.* 4.

<sup>15</sup> Declaration of Nancy Lubamersky on behalf of Mpower Communications Corp. and U.S. TelePacific Corp. in Support of the Request to Refresh Record and Take Expedited Action to Update Cooper Retirement Rules to Promote Affordable Broadband Over Copper (“*Lubamersky Declaration*”) at ¶4.

<sup>16</sup> *See 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 Nos. 11-121, FCC 12-90, Report, ¶¶60 & Chart 1 (“*2012 Broadband Report*”) (79% of households have access to fixed broadband speeds meeting the benchmark via DSL and approximately 30% have access via other copper technologies). *See Overture estimates, supra*, for business data.

<sup>17</sup> *Id.* ¶ 135.

national goal, industry and consumers need options to bridge the divide between today's largely copper-based networks and the mainly-fiber networks of the future. Because broadband is not being reasonably and timely deployed to all Americans, pursuant to Section 706 and Section 251(c)(3) the Commission should modify its copper loop retirement rules so that customers who may not want, or cannot afford, 100 Mbps fiber connections can realize the value of and grow into higher broadband speeds. Specifically, the Commission should require ILECs to provide CLECs with access to unbundled copper loops even where ILECs have received Commission permission to "retire" such copper loops and prohibit ILECs from removing copper loops from their network without affirmative permission from the Commission. The current rules regarding retirement should be clarified to make clear that retirement only allows the ILEC to retire such loops for its own use and does not relieve the ILEC of its duty to provide unbundled access to copper loops that remain in place in the network.

## **II. THE COMMISSION SHOULD SEEK ALTERNATIVES FOR EXPANDING THE AVAILABILITY OF AFFORDABLE BROADBAND**

In August, the Commission released its Eighth Report tracking the progress of broadband deployment in the United States. This report concluded that "broadband is not yet being deployed ""to all Americans" in a reasonable and timely fashion."<sup>18</sup> The report found that not only do 19 million Americans live in areas where broadband is not physically deployed, forty percent of Americans that do have the ability to subscribe to fixed broadband decline to subscribe due to concerns including affordability.<sup>19</sup> Some estimate that nearly 70% of business locations in the U.S. cannot access fiber.<sup>20</sup> In other cases the broadband deployed, such as to schools and libraries, does not fully meet the customer's needs.<sup>21</sup>

The industry has developed a partial solution to these deployment and affordability gaps, namely EoC, but Commission rules need to be changed to promote its deployment. In the business market for dedicated services, customers are flocking to EoC to gain higher speeds (3 to 50 Mbps) at rates that are more affordable than traditional TDM- or fiber-based services. As the attached declaration shows, in California, competitors have installed EoC capability in 343 California wire centers, giving more than 80% of the small and medium

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<sup>18</sup> 2012 *Broadband Report* ¶ 1.

<sup>19</sup> *Id.* ¶ 5.

<sup>20</sup> Sean Buckley, "Finding New Gold in Copper," *FierceTelecom*, p. 8. (Sept. 2012).

<sup>21</sup> 2012 *Broadband Report* ¶ 5 ("80 percent of E-rate funded schools and libraries say their broadband connections do not fully meet their needs.")

businesses served by those wire centers the ability to purchase broadband service ranging from 3 to 50 Mbps today.

The Commission acknowledged in its August 22, 2012 Special Access Order that competitive deployment of last mile access facilities has not expanded beyond areas with significant concentration of business demand.<sup>22</sup> In markets such as Atlanta, 60 percent of the zip codes lacked competitively provided service.<sup>23</sup> While the data analyzed in the Special Access Order was not the result of mandatory data collection and was limited to certain markets, the Commission recognized that it would be unlikely to find different trends in other markets.<sup>24</sup> Although the Commission's analysis demonstrates that competitors tend to concentrate their deployment of competitive facilities in geographic areas where the demand for service is highest and most concentrated, the Commission found that "demand exists for ... services outside of these areas."<sup>25</sup> Similarly, the Commission concluded that this demand — in areas where the demand is less concentrated — cannot easily be served by extending competitive networks from those areas where demand is concentrated. TelePacific's survey confirms that alternative last-mile access to customer locations is available less than 15% of the time. Including available on net buildings/addresses from 27 alternative providers in 30 wire centers, TelePacific would be able to buy last mile access from a provider other than the ILEC at only 12.5% of its customer service addresses in those wire centers.

These areas — where demand for competitive service exists but competitors lack the ability to economically extend their own fiber networks — are ideally suited for competitive entry using access to unbundled loops. This is the regime the Commission envisioned when it promulgated its unbundling rules in the *TRRO*.<sup>26</sup> Importantly, competitive EoC in California is available not only in urban business districts, but also in areas of the state where there are fewer concentrations of potential customers, such as north of the San Francisco Bay area

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<sup>22</sup> See *Special Access for Price Cap Local Exchange Carriers*, WC Docket 05-25, *AT&T Corp. Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, RM-10593, Report and Order, FCC 12-92 ¶ 49 (rel. Aug. 22, 2012) ("*Special Access Order*").

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

<sup>24</sup> *Id.* ¶ 50.

<sup>25</sup> *Id.* ¶ 53.

<sup>26</sup> See *TRRO* ¶ 149 (the Commission is "more likely to find that competitive LECs are impaired without access to unbundled loops of the lowest capacity levels, for which revenue opportunities are the smallest, if no alternatives outside the incumbent's network are available.").

and in the Central Valley and Central Coast.<sup>27</sup> In short, the unbundling regime gives competitors the ability to enter less concentrated markets and prove the business case that eventually may lead to deploying their own last mile facilities.

The Commission's copper retirement rules, however, impede CLECs' ability to serve these locations using the robust and innovative network technology that the industry has developed to bring broadband service to customers where fiber deployment is not economically efficient. The Commission's current policy allowing copper loop retirement was premised on the belief that "[t]he phone companies are sitting on aging infrastructure," and that "[c]opper wire will end its life."<sup>28</sup> That premise is contradicted by current developments and deployment of technology that makes affordable broadband over copper a reality.

### **III. ETHERNET OVER COPPER PROVIDES AN INNOVATIVE SOLUTION TO DEPLOY ROBUST BROADBAND**

It is widely understood that the costs of deploying fiber in the local loop to every home and business are daunting, especially in the midst of a global economic slowdown, and it appears that many ILECs (with the exception of Verizon's FiOS project) have elected to forego deploying fiber directly to residences and small and medium sized businesses. Thus, copper -- whether in the form of a hybrid fiber/copper deployment or in the continued use of copper from the central office to the end user premises (home run copper loops) -- will remain a prevalent and important part of the network for some time.

Indeed, some ILECs have made clear their intent to continue to rely at least in part upon the existing copper network (at least for themselves) to ensure a viable interim path toward a longer-term broadband deployment strategy. Before its acquisition by CenturyLink, Qwest stated that it did not see FTTH as "necessary for Qwest in the foreseeable future."<sup>29</sup> The Metro Ethernet Forum notes that using existing voice-grade copper infrastructure keeps deployment

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<sup>27</sup> Lubamersky Declaration, Exh. C.

<sup>28</sup> *Copper Lines Regaining Luster*, quoting then FCC Chairman Michael K. Powell, Washington Post, February 7, 2003, <http://www.washingtonpost.com/ac2/wp-dyn?pagename=article&node=&contentId=A38106-2003Feb6&notFound=true> (December 27, 2006).

<sup>29</sup> Yu-Tine Wang, *Qwest Continues Line Loss, Targets FTTH*, Communications Daily, at 9, Oct. 29, 2009.

costs down because “there is no need for new cabling inside or outside the residence or business and service providers enjoy new returns on their already amortized assets.”<sup>30</sup> FierceTelecom interviewed ILECs using EoC and reports that CenturyLink expanded EoC after purchasing Qwest into an additional 334 wire centers and Windstream “sees EoC as a quick time-to-market tool to drive higher speed connections to a business customer” where it cannot justify a fiber build.<sup>31</sup>

It is evident that providers that intend or desire to migrate to fiber will continue to make substantial use of copper for the foreseeable future. Indeed, the industry -- largely driven by innovative and enterprising companies, including CLECs -- continues to find innovative ways to expand the capabilities of existing copper plant. This phenomenon started in the 1990s, as the nascent competitive industry brought to market advanced xDSL technologies that had gathered dust on the ILECs’ shelves for years. As Chairman Kennard noted over a decade ago, “[a]lthough DSL technology has been available for years, it was not until the passage of the Act that competitive providers — called data LECs or DLECs — specializing in DSL deployment were born and began offering DSL service to consumers. ... Once the DLECs had access to the inputs necessary to offer their DSL products to consumers, the threat of such competition spurred the BOCs to develop their own DSL products.”<sup>32</sup> Much the same is true now, as CLECs deploy Ethernet over Copper and other innovative technologies that leverage the legacy copper plant to deliver broadband services capable of speeds of 3 to 50 Mbps or greater.<sup>33</sup> Indeed, one consultant reports that after EoC becomes available in a building, the quote for fiber to that building “drop[s] in half,” spurring “fiber providers to provide competitive prices.”<sup>34</sup>

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<sup>30</sup> Ethernet in the First Mile over Copper (EFMC), A Tutorial, 1, available at: <http://metroethernetforum.org/PDFs/EFMA/efm%20copper%20tutorial%20v2.pdf>.

<sup>31</sup> Stepping to the EoC plate: Incumbent Telcos Take a Swing, FierceTelecom (Feb. 7, 2012), available at: [http://www.fiercetelecom.com/special-reports/stepping-eoc-plate-incumbent-telcos-take-swing?utm\\_medium=rss&utm\\_source=rss](http://www.fiercetelecom.com/special-reports/stepping-eoc-plate-incumbent-telcos-take-swing?utm_medium=rss&utm_source=rss).

<sup>32</sup> Statement William E. Kennard, Chairman Federal Communications Commission, Before the Committee on the Judiciary, United States House of Representatives on H.R. 1686 - the “Internet Freedom Act” and H.R. 1685 - the “Internet Growth and Development Act” (July 18, 2000), available at: <http://www.fcc.gov/Speeches/Kennard/Statements/2000/stwek096.html>.

<sup>33</sup> Ethernet over Copper appears also to be gaining traction in Europe according to recent reports. “European telcos turn to Ethernet over copper,” Total Telecom, Sept. 7, 2009 (available at: <http://www.totaltele.com/view.aspx?ID=448650>).

<sup>34</sup> Sean Buckley, “Finding New Gold in Copper,” FierceTelecom, p. 8 (Sept. 2012).

### **A. Increasing Demand for Ethernet**

Virtually all enterprise backbones are built using Ethernet technology. Because Ethernet has become the standard for enterprise networks, businesses are seeking and have sought to extend their Ethernet networks from their LAN to their WAN – thereby simplifying and optimizing their IT network.<sup>35</sup>

Enterprise customers, including, SMBs, continue to migrate towards IP based applications thereby expanding their consumption of packet network capacity.<sup>36</sup> These IP-based applications continue to become more multimedia oriented, creating more demand for higher capacity networks. Included in this trend is an increased adoption of Voice over IP (VoIP), with its economy, and efficiency to connect myriad locations including offices, remote locations and employee home offices.<sup>37</sup> These services must be supported by end-to-end transport networks with high capacity, high availability, and high performance denoted by low packet loss, packet latency, and packet jitter.<sup>38</sup>

### **B. Ethernet Over Copper is Ideally Suited to Meet Growing Broadband Demand**

While many urban areas have seen expansion of fiber capacity, the vast majority of commercial buildings lack fiber-based broadband. Furthermore, the business case to invest in the capital cost to deploy fiber in the near term for one or two Ethernet service terminations is marginal at best.<sup>39</sup> On the other hand, EoC is ideal because it leverages existing copper and allows providers and customers to expand capacity by increasing investment through deployment of network gear rather than through major capital construction projects.

EoC has additional advantages as well. For instance, while fiber remains the ideal solution, the Commission has long recognized the significant time, expense and disruption that occurs when fiber is deployed.<sup>40</sup> Deploying EoC avoids the time and expense of digging up streets to deploy fiber. As a result, broadband services over EoC can be deployed in a fraction of the time it takes to

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<sup>35</sup> See *Ex Parte* Letter from Jeffrey White, Hatteras Networks, Attachment, Leveraging Installed Copper to Reach Underserved and Unserved Community Anchor Institutions, GN Docket 09-51, at p. 7 (June 1, 2009) (“Hatteras *Ex Parte*”).

<sup>36</sup> *Id.*

<sup>37</sup> *Id.*

<sup>38</sup> Hatteras *Ex Parte* at p. 7.

<sup>39</sup> *Id.* at p. 8.

<sup>40</sup> See *Connect America Fund Order*, 26 FCC Rcd 17663 at ¶¶ 4-5, 7; *TRO*, ¶¶ 85-91.

deploy fiber to a new location. In addition, according to some equipment manufacturers, EoC bandwidth can typically be provided at a fraction of the cost of comparable bandwidth provided over fiber networks.<sup>41</sup>

As carriers add more EoC customers to their networks it increases the demand for more middle mile fiber bandwidth. More bandwidth demand and revenue then changes the business case for capital investment in fiber.

As business customers increasingly turn to Ethernet-based communications services to link their Ethernet local area networks (“LANs”), CLECs have been responding by developing broadband offerings based on EoC, Ethernet over DS1, and Ethernet over BSDSL technologies. These services are being marketed to small and medium sized businesses, filling in a significant gap in the offerings of the ILECs and cable.<sup>42</sup>

In addition to providing opportunities for small and medium size business to access the same robust and innovative IP applications available to fortune 500 companies, EoC allows large companies to leverage their network infrastructure to small remotely located offices, even those in more rural less densely populated areas as well as to individuals working remotely from home.<sup>43</sup>

Further, there is some suggestion that Ethernet services are more cost effective for business customers.<sup>44</sup> According to some providers, when compared to TDM-based services, a business receives over two times the bandwidth for the same price.<sup>45</sup>

EoC can also benefit the residential markets and consumers. Some CLECs are using EoC to offer higher speed broadband, voice and video services to residential customers. Verizon, for one, has announced it will not expand its FIOS network, choosing to invest instead in its wireless network.<sup>46</sup> AT&T recently announced that it will invest in additional deployment of its U-verse network capability (fiber-to-the-node), fiber to multi-tenant buildings, and its LTE

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<sup>41</sup> Hatteras *Ex Parte* at p. 7-8.

<sup>42</sup> Covad Comments, WC Docket No. 09-223, at 4.

<sup>43</sup> See [http://www.fiercetelecom.com/special-reports/competitive-carriers-hone-their-ethernet-over-copper-skills?utm\\_source=editorscorner#ixzz1sy4FBq7g](http://www.fiercetelecom.com/special-reports/competitive-carriers-hone-their-ethernet-over-copper-skills?utm_source=editorscorner#ixzz1sy4FBq7g).

<sup>44</sup> Hatteras *Ex Parte* at pp. 7-8.

<sup>45</sup> *Id.* at p. 7.

<sup>46</sup> See Letter from K. Gordon, New York Assistant Attorney General to J. Brilling, N.Y.P.S.C., Case 10-C-0202, Petition of Attorney General Eric T. Schneiderman to Modify the Verizon Service Quality Improvement Plan. (July 30, 2012) (“NY AG Letter”).

network.<sup>47</sup> In neighborhoods without FiOS or similar fiber-based deployments, consumers should not be relegated to slow DSL services that are incapable of supporting applications today's consumers' demand, such as streaming video, teleworking, and distance learning. Residential EoC could increase bandwidth not only for these applications, but also for higher quality Video Relay Service ("VRS") provided to hearing and speech impaired individuals.<sup>48</sup>

#### **IV. THE COMMISSION SHOULD ACT NOW TO MAINTAIN COMPETITIVE ACCESS TO COPPER LOOPS THAT CAN BE USED TO DEPLOY AFFORDABLE BROADBAND**

##### **A. ILECs are Expected to Disable Copper Permanently Where They Deploy Fiber**

In June 2012, Verizon signaled its intent to abandon its copper network. Verizon's CEO told investment analysts Verizon is "going into the copper plant areas and every place we have FiOS, we are going to kill the copper."<sup>49</sup> AT&T announced a significant investment in fiber upgrades in its wireline network and requested that the Commission remove regulatory requirements that AT&T maintain its "legacy TDM network."<sup>50</sup> More recently, Verizon announced that it would not replace the copper that was destroyed by superstorm Sandy.<sup>51</sup> This is a disturbing sign that the nation's two largest ILEC's are actively seeking to remove infrastructure that fosters competition. The Commission has an obligation to act and preserve the access it has mandated to local loops in order to preserve broadband competition.

Allowing ILECs to remove copper infrastructure that CLECs are using to provide competitive service -- or would be able to use to provide service at a

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<sup>47</sup> Laying a Foundation for Future Growth, AT&T Analyst Conference, (Nov. 7, 2012); Available at <http://www.att.com/gen/general?pid=23393>; <http://www.att.com/gen/press-room?pid=23506&cdvn=news&newsarticleid=35661&mapcode=>

<sup>48</sup> See Comments of Telecommunications for the Deaf and Hard of Hearing, Inc. *et al.*, GN Docket 12-228, at p. 5 (filed Sept. 20, 2012) ("For low income deaf and hard of hearing consumers who rely on broadband enabled services such as VRS and other iTRS services for communications, the retirement of copper loops may remove their only affordable access to broadband services.").

<sup>49</sup> Transcript, Verizon at Guggenheim Securities Symposium, at p. 8 (June 21, 2012).

<sup>50</sup> AT&T Petition to Launch a Proceeding Concerning the TDM-to-IP Transition, (filed Nov. 7, 2012).

<sup>51</sup> Thomas Gryta, "Verizon to Use Fiber to Fix Network," Wall St. J. (Dec. 4, 2012).

customers' request -- impedes competition. As New York's Attorney General has observed, at most customer locations there is a duopoly at best.<sup>52</sup> In small and medium sized business markets in particular, it is unlikely that there are any competitive facilities deployed even by the ILECs themselves. For example, in AT&T's 22 state footprint, AT&T has announced that it intends to deploy fiber to reach approximately 50 percent of the multi-tenant office buildings in its 22 state footprint with fiber.<sup>53</sup> This still leaves the remaining half of the multi-tenant business locations in AT&T's territory wholly reliant on copper infrastructure for reliable wire based broadband services. Even if the ILEC deployed fiber in a wire center, its competitors would likely need access to copper in the same wire center, both to continue serving existing customers and to compete for ILEC customers whose budget may not be able to absorb the cost of upgrading to fiber-based services.<sup>54</sup> Allowing an ILEC to remove copper infrastructure where it has deployed fiber would further entrench the ILEC's already dominant position in the marketplace with an effective monopoly for serving the area where fiber is deployed.

The Commission recognizes the importance of providing regulatory certainty to promote investment and innovation. Under the current copper retirement regime, ILECs believe they have the freedom to "kill the copper." For example, TDS Metrocom's Wisconsin interconnection agreement with AT&T provides that AT&T is not required to maintain an existing copper loop connected to a particular customer premise after the retirement notice period has expired.<sup>55</sup> CLECs lack regulatory certainty that the last mile copper loops on which they rely to provide broadband service to existing and potential customers will continue to be available. This lack of regulatory certainty hinders investment in the network gear needed to provide Ethernet over copper. Without some assurance that the

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<sup>52</sup> NY AG Letter.

<sup>53</sup> See Laying a Foundation for Future Growth, AT&T Analyst Conference, Nov. 7, 2012 at p. 11. Available at <http://www.att.com/gen/general?pid=23393>.

<sup>54</sup> Verizon, for example, has stated that it uses copper replacement has an opportunity to generate additional revenue by selling customers more expensive service, including bundles. See Transcript, Fran Shammo, Verizon Senior V.P. and CFO, Goldman Sachs Communacopia Conference, at p. 10 (Sep. 20, 2012).

<sup>55</sup> Amendment to Interconnection Agreement by and between Wisconsin Bell, Inc. d/b/a AT&T Wisconsin and TDS Metrocom, LLC, §11.1.2(a) (dated Feb. 29, 2008) ("AT&T shall maintain the existing copper Loop connected to the particular customer premises after deploying the FTTH/FTTC Loop and provide nondiscriminatory access to that copper Loop on an unbundled basis *unless AT&T retires that copper Loop* pursuant to the terms of section 11.1.3 [which require AT&T to comply with FCC network disclosure requirements and any applicable state requirements].") (emphasis added).

loops they currently use, and would use in the future, will continue to be available, CLECs and their investors may not be able to justify capital expenditures that must be recovered over multiple years.

**B. Removing Obstacles to Providing Ethernet over Copper Deployment Will Foster Broadband Competition, Innovation and Investment**

The Commission has long recognized the need to promote investment in the full range of communications technology that will bring broadband to American consumers and businesses. Commission policy not only encourages deployment of fiber but also seeks to “promote the 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.”<sup>56</sup> It would be contrary to Commission policy to allow ILECs to “kill the copper” and permanently remove copper infrastructure thereby preventing use of such infrastructure to provide broadband service. Regulatory protections are needed to bar the ILECs from unilaterally and permanently disabling their copper loop plant and thereby discouraging investment in EoC and other broadband over copper offerings.

Broadband innovation, investment and competition require access to unbundled copper loops. When these loops are not available at economic prices, the lack of copper effectively prevents CLECs from offering broadband service by raising the CLEC’s costs to the point where no customer can afford to purchase the service.

First, the Commission’s existing copper retirement rules permit ILECs to retire copper loops over CLEC objections *even where competitors currently use those loops to provide broadband to existing customers*. For example, if an ILEC files a notice of copper retirement, a CLEC objects to the retirement on the basis that it is using copper loops scheduled to be retired to provide a 10 Mbps broadband service to a hospital, and the Commission takes no action, the objection is deemed denied and the ILEC is permitted to retire the copper loop. This process is unreasonable and unfair, not only to the CLEC, but also to its broadband customer.

In such instances the Commission is most likely condemning the customer to a single broadband provider, or at best to a duopoly. The Commission has received significant data confirming that competitors have deployed broadband-capable fiber facilities only to a small percentage of businesses nationwide. This

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<sup>56</sup> TRO, ¶ 244.

means that in “the vast majority of commercial buildings in their territories, the ILEC is likely the only carrier that owns a last-mile connection to the building.”<sup>57</sup> This analysis has been confirmed both by independent sources,<sup>58</sup> as well as the Commission’s own decisions.<sup>59</sup>

The Commission has repeatedly recognized the dangers duopolies pose to competition.<sup>60</sup> The Commission and courts have “long recognized that duopolies may present significant risks of collusion and supracompetitive pricing, which can lead to significant decreases in consumer welfare.”<sup>61</sup> As the Commission has explained, these risks to competition and consumer welfare are supported by “Empirical evidence of duopolistic competition in some telecommunications markets.”<sup>62</sup> More significantly, the Commission found that duopoly markets are inconsistent with the unbundling provisions of the 1996 Act, where “Congress established means for additional competitors to enter without fully duplicating the incumbent’s local network.”<sup>63</sup> Thus the 1996 Act is clear that “Congress wanted to enable entry by multiple competitors through use of the incumbent LEC’s network.”<sup>64</sup>

Nor are the alternatives viable. Self-provisioning last mile facilities to

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<sup>57</sup> *United States v. SBC Communications, Inc.*, Complaint, No. 1:05-cv-02102, ¶ 15 (D.D.C. Oct. 27, 2005); *United States v. Verizon Communications Inc. and MCI, Inc.*, Complaint, No. 1:05-cv-02103, ¶ 15 (D.D.C. Oct. 27, 2005) .

<sup>58</sup> See Government Accountability Office, Report to the Chairman, Committee on Government Reform, House of Representatives, FCC Needs to Improve Its Ability to Monitor and Determine the Extent of Competition in Dedicated Access Services, GAO-07-08, at 20 (Nov. 2006) (finding competitive deployment in 16 markets limited to 6% of buildings with DS1demand; 15% with DS3 demand, and 25% with demand for 2 or more DS-3s).

<sup>59</sup> *Petitions of the Verizon Telephone Companies for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Boston, New York, Philadelphia, Pittsburgh, Providence and Virginia Beach Metropolitan Statistical Areas*, 22 FCC Rcd 21293, ¶ 41 (finding that competitors light only 0.25% of the commercial buildings in the six covered MSAs combined.); *Petitions of Qwest Corp. for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Denver, Minneapolis, St. Paul, Phoenix and Seattle Metropolitan Statistical Areas*, 23 FCC Rcd 11729 ¶ 40 (finding that competitors served approximately 0.17 to 0.26 percent of all commercial buildings in the four MSAs combined.).

<sup>60</sup> 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 (rel. June 22, 2010) (“*Phoenix Forbearance Order*”).

<sup>61</sup> *Phoenix Forbearance Order* ¶ 29.

<sup>62</sup> *Id.* ¶ 31. (citing duopoly era in mobile wireless).

<sup>63</sup> *Id.* ¶ 32.

<sup>64</sup> *Id.*

small and medium size businesses and residential consumers is not an economic option. As explained above, such deployment is rarely economic in areas outside of the most densely populated business centers. The Commission has consistently found that all competitive carriers, including cable companies, “face extensive economic barriers” to the deployment of competitive facilities where they lack existing facilities needed to serve the customer.<sup>65</sup> These barriers include significant sunk costs along with substantial economies of scale and scope.<sup>66</sup> These barriers continue to make deployment of competitive last mile broadband facilities “costly and difficult.”<sup>67</sup> Furthermore, the ILECs are no longer required to offer tariffed access to Ethernet that competitors might be able to use as inputs to their own services.<sup>68</sup>

At a minimum, the Commission should revise its rules to ensure that copper routes supporting at least one customer currently receiving broadband over copper are preserved. This action would ensure that no current broadband over copper customer loses access to its service and preferred service provider and preserve opportunities for additional customers to gain such access along the same route. The Commission has determined that competitors are impaired without access to copper loops. ILECs should not be permitted to retire copper routes in use by a competitor without an affirmative showing that the competitor is not impaired without access to the copper loops in that route.

#### **V. THE COMMISSION HAS THE AUTHORITY TO ESTABLISH RULES THAT PROMOTE AFFORDABLE BROADBAND OVER COPPER LOOPS**

Adopting the rules proposed herein promoting affordable broadband over copper loops implements statutory mandates in the Communications Act and the Telecommunications Act of 1996. As discussed below, these mandates, including Sections 251(c)(3), 271, and 706 of the Act, provide the Commission both “authority” and “discretion” “to settle on the best regulatory or deregulatory approach to broadband,”<sup>69</sup> which includes adopting the proposed rules. Pursuant to its plenary authority under § 201, the Act provides the Commission with the

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<sup>65</sup> Phoenix Forbearance Order ¶ 90 (citing TRO ¶¶ 85-91).

<sup>66</sup> TRO, ¶ 86.

<sup>67</sup> Phoenix Forbearance Order ¶ 73.

<sup>68</sup> See *Petition of AT&T Inc. for Forbearance Under 47 U.S.C. § 160(c) from Title II and Computer Inquiry Rules with Respect to Its Broadband Services*, 22 FCC Rcd 18705 (2007).

<sup>69</sup> *Ad Hoc Telecomms. Users Comm. v. FCC*, 572 F.3d 903, 906–07 (D.C. Cir. 2009).

authority to “prescribe such rules and regulations as may be necessary in the public interest to carry out the provisions of this Act.”<sup>70</sup>

#### **A. Commission Authority Under Section 706**

Section 706 of the 1996 Act<sup>71</sup> provides the Commission with authority to establish rules that would promote affordable broadband over copper. Section 706 instructs the Commission to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans” and, if it finds that advanced telecommunications capability is not being deployed to all Americans “on a reasonable and timely basis,” to “take immediate action to accelerate deployment of such capability.”<sup>72</sup> “[A]dvanced telecommunications capability,” as defined in the statute, includes broadband Internet access.<sup>73</sup>

Section 706(a) requires that the Commission encourage the deployment of such capability by “utilizing, in a manner consistent with the public interest, convenience, and necessity,” various tools including “measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment.”<sup>74</sup> For the reasons stated above, adopting rules that promote affordable broadband over copper “will have precisely that effect.”<sup>75</sup>

Section 706(a) authorizes the Commission “to take actions, within [its] subject matter jurisdiction and not inconsistent with other provisions of law, that encourage the deployment of advanced telecommunications capability by any of

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<sup>70</sup> 47 U.S.C. § 201(b); *see also AT&T v. Iowa Utils. Bd.*, 525 U.S. 366, 378 (1999) (the Commission “has rulemaking authority to carry out the ‘provisions of this Act,’ which include §§ 251 and 252, added by the Telecommunications Act of 1996.”) (quoting § 201(b)).

<sup>71</sup> § 706, Pub. L. 104-104, Title VII, February 8, 1996, 110 Stat. 153, reproduced in the notes under 47 U.S.C. § 157. Section 706 is not part of the Communications Act of 1934. Congress enacted Section 706 as part of the Telecommunications Act of 1996 and more recently codified the provision in Chapter 12 of Title 47, at 47 U.S.C. § 1302.

<sup>72</sup> 47 U.S.C. § 1302(a), (b).

<sup>73</sup> 47 U.S.C. § 1302(d)(1) (defining “advanced telecommunications capability” as “high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology”).

<sup>74</sup> 47 U.S.C. § 1302(a).

<sup>75</sup> *See In re Preserving the Open Internet Broadband Industry Practices*, GN Docket No. 09-191, WC Docket No. 07-52, 25 FCC Rcd 17905, 17968 ¶¶ 117-123 (Dec. 23, 2010) (discussing same in the context of establishing open Internet rules) (“*Net Neutrality Order*”).

the means listed in the provision.”<sup>76</sup>

Section 706(b) of the 1996 Act<sup>77</sup> provides additional Commission authority to take actions such as adopting rules that would promote affordable broadband over copper. In particular, Section 706(b) directs the Commission, if it finds that advanced communications capability is not being deployed in a reasonable and timely fashion, to “*take immediate action* to accelerate deployment of such capability by removing barriers to infrastructure investment and by promoting competition in the telecommunications market.”<sup>78</sup> As recently as August of 2012, the Commission “conclude[d] that broadband deployment to *all* Americans is not reasonable and timely” and noted that “[a]s a consequence of that conclusion,” Section 706(b) was triggered.<sup>79</sup> Therefore, Section 706(b) directs the Commission to “take immediate action to accelerate broadband deployment” and adopt pro-investment, pro-competition rules that would promote affordable broadband over copper.

### **B. Commission Authority Under Section 251(c)(3)**

Acting under the statutory mandate of section 706(b), section 251(c)(3) of the Act,<sup>80</sup> provides the Commission with the authority to establish regulations applicable to incumbent LECs that under the Commission’s existing rules are already obligated to provide unbundled access to copper loops. In the TRO and the TRRO the Commission unequivocally found that CLECs were impaired without access to copper loops: ILECs must “offer unbundled access to stand-alone copper loops and subloops for the provision of narrowband and broadband services.”<sup>81</sup>

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<sup>76</sup> *Net Neutrality Order*, ¶ 119.

<sup>77</sup> 47 U.S.C. § 1302(b).

<sup>78</sup> *Id.* (emphasis added).

<sup>79</sup> *2012 Broadband Report*.

<sup>80</sup> The 1996 Act imposes a number of duties on incumbent LECs that are designed to open local markets to competition that could all serve as the basis for the Commission’s jurisdiction. “Foremost among these duties is the incumbent LEC’s obligation under 47 U.S.C. § 251(c)(3) ... to share its network with competitors.” *AT&T Corp. v. Iowa Utils. Bd.*, 525 US 366, 371 (1999) (“*Iowa Utils. Bd.*”). In particular, section 251(c)(3) requires “that incumbent LECs make elements of their networks available on an unbundled basis to new entrants at cost-based rates, pursuant to standards set out in section 251(d)(2).” *TRRO* ¶ 1. In addition, section 251(d)(2) provides that “[i]n determining what network elements should be made available for purposes of subsection (c)(3), the Commission shall consider, at a minimum, whether ... the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer.” 47 U.S.C. § 251(d)(2).

<sup>81</sup> *TRO*, ¶ 7 (2003).

Because the Commission has the authority to require Section 251(c)(3) unbundling of copper loops and has already made that determination, the Commission likewise has the authority, in an effort to promote competition and affordable broadband over copper, to prevent ILECs from retiring copper loops and subloops that CLECs require as Section 251(c)(3) UNEs to provide broadband over copper. Such action would be consistent with the Act because the retirement of copper by incumbent LECs denies CLECs nondiscriminatory access to facilities without which the Commission has already found CLECs are impaired.

### C. Commission Authority Under Section 271

Under Section 271 of the Act, the Commission also has the authority to promote the availability of copper loops and regulate the ability of the largest ILECs — the Bell Operating Companies (“BOCs”) — to retire and remove such loops from service in order to promote competition and affordable broadband over copper loops. Section 271(c)(2)(B)(iv) requires that BOCs provide requesting carriers with access to “Local loop transmission from the central office to the customer’s premises, unbundled from local switching or other services.”<sup>82</sup> This obligation is independent of any duty to offer UNE loops pursuant to Section 251(c)(3), as described above.<sup>83</sup> Further, while UNEs under Section 251(c)(3) are only available where the Commission has determined requesting carriers are impaired,<sup>84</sup> Section 271 imposes on the BOCs a *permanent* duty to provide access to the items enumerated on the competitive checklist, even where requesting carriers are not impaired.<sup>85</sup>

For purposes of Section 271(c)(2)(B)(iv), the Commission defined the “local loop” “as a transmission facility between a distribution frame, or its equivalent, in an incumbent LEC central office, and the demarcation point at the customer premises”<sup>86</sup> and declared that to satisfy the checklist the BOC “must

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<sup>82</sup> 47 U.S.C. § 271(c)(2)(B)(iv).

<sup>83</sup> *TRO*, ¶ 654.

<sup>84</sup> *See* 47 U.S.C. § 251(d)(2)(B).

<sup>85</sup> *See USTA II*, 359 F. 3d at 588. In the *TRO*, the Commission explained that a BOC’s obligation to provide access to elements encompassed within the competitive checklist continued even after the BOC was no longer required to provide the corollary element under Section 251(c)(3) of the Act. *See TRO*, ¶ 655.

<sup>86</sup> *Joint Application by BellSouth Corporation, Bellsouth Telecommunications, Inc., and BellSouth Long Distance, Inc. for Provision of In-Region, InterLATA Services in Georgia and Louisiana*, 17 FCC Rcd 9018, 9144 ¶ 218 n. 852 (2002) (emphasis added); *Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of*

provide access to any functionality of the loop requested by a competing carrier unless it is not technically feasible to condition the loop facility to support the particular functionality requested.”<sup>87</sup> Furthermore, in order to comply with the requirement to provide nondiscriminatory access to loops, BOCs must, upon request, “take affirmative steps to condition existing loop facilities to enable competing carriers to provide services not currently provided over the facilities.”<sup>88</sup>

It would be consistent with § 271 and the Commission’s decision implementing the checklist to specify that the BOCs may not remove copper loops from their network in order to avoid the unbundling obligations set forth in § 271. The Commission has the authority to create such a rule and the public interest in deployment and adoption of affordable justifies such a rule.

#### **D. The Broadband Plan Supports Commission Action**

The National Broadband Plan recognized the need to harness the untapped resources in the nation’s existing copper loop plant. For example, in Recommendation 4.7, the Plan urged the Commission to review its competition regulations “and take expedited action . . . to ensure widespread availability of inputs for broadband services provided to small businesses, mobile providers and enterprise customers.”<sup>89</sup> Among those inputs are copper loops. In recommendation 4.9, the Report urges the Commission to “ensure appropriate balance in its copper retirement policies.” The Broadband Plan recognizes that competitors “are currently using copper to provide SMBs with a competitive

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*the Telecommunications Act of 1996 To Provide In-Region, InterLATA Services In Texas*, 15 FCC Rcd 18354, 18480 ¶ 246 (2000) (“SWBT Texas 271 Order”).

<sup>87</sup> *Application by Qwest Communications International Inc. for Authorization to Provide In-Region, InterLATA Services in Arizona*, 18 FCC Rcd 25504 at App. C ¶ 49 (2003) (emphasis supplied); *see also SWBT Texas 271 Order*, 15 FCC Rcd at 18480-81, ¶ 248; *Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act To Provide In-Region, InterLATA Service in the State of New York*, 15 FCC Red 3953, 4095-96 ¶ 271 (1999) *aff’d sub nom. AT&T Corp. v. FCC*, 220 F3d 607 (D.C. Cir. 2000); *Application by BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc., for Provision of In-Region, InterLATA Services in Louisiana*, 13 FCC Red 20599, 20713 ¶ 187 (1998).

<sup>88</sup> *Application by Verizon Maryland Inc., Verizon Washington, D.C. Inc., Verizon West Virginia Inc., Bell Atlantic Communications, Inc. (d/b/a Verizon Long Distance), NYNEX Long Distance Company (d/b/a Verizon Enterprise Solutions), Verizon Global Networks Inc., and Verizon Select Services Inc., for Authorization To Provide In-Region, InterLATA Services in Maryland, Washington, D.C., and West Virginia*, 18 FCC Rcd 5212 App. F ¶ 49 (2003).

<sup>89</sup> Connecting America, National Broadband Plan, Recommendation 4.7 at p. 48.

alternative for broadband service.”<sup>90</sup> The recommendation further suggests that competitors using unbundled copper loops may “provide their own set of integrated broadband, voice and even video” using such inputs.<sup>91</sup> Of course when such facilities are “retired” or removed, this impedes competitors’ “existing broadband services” provided over such copper loops as well as “the ability of competitors to offer new services.”<sup>92</sup>

## VI. REMEDY REQUESTED

While the *TRO* adopted rules to govern ILEC copper loop retirement, the text of the *TRO* cannot be read to permit the ILECs to “kill” copper loops and permanently disable them. The *TRO* instead observes that the notice requirements it adopted were intended to “ensure that the [C]LECs maintain access to loop facilities.”<sup>93</sup> Further, the *TRO* provides that its rules will deem denied any filed opposition to an ILEC’s copper loop retirement notice “unless the retirement scenario suggests that competitors will be denied access to the loop facilities required under [the Commission’s] rules.”<sup>94</sup> Under these rules it appears likely that the Commission never intended to allow ILECs to wholly dismantle or “kill” their copper loop infrastructure to the detriment of competitors.

In order to guard against the premature dismantling of a vital conduit for providing broadband for those in areas where competitive deployment of fiber is not currently deployed, Petitioners urge the Commission to adopt the following relief.

### A. Suspend the Current Rules Regarding Copper Retirement

As an interim measure, until the completion of the rulemaking, the Commission should suspend its rules permitting ILECs to retire copper loops absent emergency circumstances.

### B. The Commission should adopt the following rules to promote the efficient use of already existing copper infrastructure that is available to provide affordable broadband service:

- **Reverse “deemed denied” standard.** All interconnecting carriers shall be given advance notice of permanent

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<sup>90</sup> National Broadband Plan at Recommendation 4.9, p. 48.

<sup>91</sup> *Id.*

<sup>92</sup> *Id.*

<sup>93</sup> *TRO*, ¶ 281.

<sup>94</sup> *TRO*, ¶ 282.

disabling or removal of copper loops (including copper feeder) and an opportunity to object. Where copper is being used to provide broadband service to existing customers, permission to remove or permanently disable shall only be given by the Commission upon an affirmative finding that the particular disabling or removal is in the public interest, that the customers receiving service will not have service disrupted and will have a choice among reasonably priced competitive offerings of the same or similar service.

- **Clarify “retirement” does not permit physical removal.** The Commission should clarify that permission to retire copper (loops or feeder) does not afford the ILEC the right to remove copper from the ground (or poles). The Commission apparently contemplated in the *TRO* that this could encompass removal of copper;<sup>95</sup> however, without clarification, the term retirement could be interpreted broadly.<sup>96</sup> The Commission should therefore clarify that retirement does not refer to the physical removal of copper, and that any action short of that does not terminate the obligation to provide unbundled access to loop elements over copper. For instance, retirement could be interpreted as a declaration by the carrier that copper is “retired,” *i.e.* it is no longer available for use while leaving it in place; a decision by the carrier that it will disable the copper while leaving it in place in a condition from which it could be made available with some modification; or a decision by the carrier that it will no longer maintain a copper facility, without physically removing or disabling it. This is an asset that can be leveraged to promote affordable retail broadband; it would be highly inefficient to allow the mothballing of this asset when it otherwise remains in place for productive use.

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<sup>95</sup> *TRO*, n.847.

<sup>96</sup> For example, retirement could mean that the ILEC no longer intends to use the facility but it will otherwise remain in place and be maintained, or it could mean that the ILEC carrier will disable the copper while leaving it in place in a condition from which it could be made available with some modification; or it could mean that the ILEC will no longer maintain the facility, but will not physically remove or disable it.

- **Separately define standard for removal.** The Commission should also separately define removal and permit removal only in a very narrow range of circumstances, rather than permitting this useful asset to be regularly taken out of commission too easily.
- **Apply the retirement rules to the feeder portion of the loop.** In the *TRO*, the Commission modified its network disclosure rules to provide for an opportunity to object to notices of retirement of copper loops and subloops, but provided that this would not apply to notices of retirement of the feeder portion of loops.<sup>97</sup> However, if the feeder portion of the loop is unavailable for unbundled access, the practical difficulty of obtaining access to the remaining portion of the loop forecloses competitive access to the customer.
- **Make retirement/removal data easily accessible and searchable.** The Commission should require ILECs to maintain a comprehensive database, accessible to CLECs and regulators, that includes information about the availability of copper. The database shall indicate whether copper has been merely disabled or permanently removed and should permit look-ups on a geographic basis.
- **State action to preserve copper.** The Commission should clarify that state commissions may adopt restrictions on disconnection, removal, or disabling of copper loops that are stronger than the Commission's rules.
- **Public notice period.** The Commission should deny the US Telecom petition requesting that the notice time period for retiring copper loops begins with the ILEC notice to interconnecting carriers rather than the Commission's public notice.

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<sup>97</sup> *TRO*, at n.829.

## VII. CONCLUSION

Since the adoption of copper retirement rules, advancements in EoC technology have enabled carriers to increase significantly the broadband speeds that can be achieved over embedded copper infrastructure. Incumbent and competitive carriers alike should be able to utilize embedded copper loops to offer high-speed broadband to customers during the transition from all-copper networks to primarily-fiber networks. Deploying fiber to the majority of customer locations will not be cost-justified for some time to come, and it may never be economical for multiple providers to deploy fiber to certain customers or classes of customers.<sup>98</sup> Until fiber deployment is economical, or technological advancements enable faster speeds using another technology, copper is a valuable tool to bring affordable, high-speed broadband to many consumers and small and medium businesses. The Commission should update its regulations to encourage use of this valuable resource and accelerate broadband deployment and adoption throughout America.

Respectfully submitted,

*/s/ Joshua M. Bobeck*

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Eric J. Branfman  
Tamar E. Finn  
Joshua M. Bobeck  
Bingham McCutchen LLP  
2020 K St., NW  
Washington, D.C. 20006  
202.373.6000 (Tel.)  
202.373.6001 (Fax)  
eric.branfman@bingham.com  
tamar.finn@bingham.com  
josh.bobek@bingham.com

January 25, 2013

cc: Michael Steffen  
Angela Kronenberg  
Christine Kurth

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<sup>98</sup> Because reasonable wholesale access to fiber last mile facilities has not materialized, the Commission also should update its impairment analysis for fiber loops, especially for small and medium-sized business customers.

Ms. Marlene H. Dortch  
January 25, 2013  
Page 24

Priscilla Argeris  
Nicholas Degani  
Sean Lev  
Julie Veach  
Rebekah Goodheart  
Deena Shetler  
Lisa Gelb  
Travis Litman  
William Dever  
Jennifer Prime  
Heather Hendrickson  
Tim Stelzig  
Claude Aiken  
Wesley Platt  
John Visclosky  
Pamela Megna  
Henning Schulzrinne

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

In the Matter of	)	
	)	
Business Broadband Marketplace	)	WC Docket No. 10-188
	)	
In the Matter of	)	
	)	
AT&T Petition to Launch a Proceeding Concerning the TDM-to-IP Transition;	)	WC Docket No. 12-353
	)	
Petition of the National Telecommunications Cooperative Association for a Rulemaking to Promote and Sustain the Ongoing TDM-to-IP Evolution	)	
	)	
In the Matter of	)	
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51
	)	
In the Matter of	)	
	)	
Technology Transitions Policy Task Force	)	GN Docket No. 13-5
	)	
In the Matter of	)	
	)	
Petitions for Rulemaking and Clarification Regarding the Commission's Rules Applicable to Retirement of Copper Loops and Copper Subloops	)	RM-11358
	)	

**DECLARATION OF NANCY LUBAMERSKY ON BEHALF OF  
MPOWER COMMUNICATIONS CORP. AND U.S. TELEPACIFIC CORP.  
IN SUPPORT OF THE REQUEST TO REFRESH RECORD AND TAKE  
EXPEDITED ACTION TO UPDATE COPPER RETIREMENT RULES TO  
PROMOTE AFFORDABLE BROADBAND OVER COPPER**

1. I am Nancy Lubamersky, Vice President, Public Policy and Strategic Initiatives for U.S. TelePacific Corp., which, together with its affiliate Mpower Communications Corp., offers competitive broadband service under the “TelePacific” brand. I am also the Co-Chair of the California Association of Competitive Telecommunications Companies (“CALTEL”).

2. The purpose of my declaration is to provide factual support for the “Request to Refresh Record and Take Expedited Action to Update Copper Retirement Rules to Promote Affordable Broadband Over Copper” filed by TelePacific and other parties in WC Docket Nos. 10-188, 12-353; GN Docket Nos. 09-51, 13-5 and RM-11358. In particular, this Declaration provides information from TelePacific and other CLECs operating in the state of California who have invested in the deployment of Ethernet over Copper equipment and are now using those investments to provide broadband and other communications services to their consumer and business customers.

3. I have personal knowledge of all facts stated in my declaration.

### **Competitive Ethernet over Copper Deployment**

#### **Background**

4. In December 2012, I asked member companies in CALTEL to identify the wire centers in California where the companies have invested in and deployed Ethernet-over-Copper (“EoC”) transmission equipment in order to provide the Federal Communications Commission (“FCC”) with data regarding the continued value of the

ILECs' copper loop plant in providing broadband services to customers, including consumers and small and medium sized business ("SMB") customers.<sup>1</sup>

5. TelePacific, through its outside counsel at Bingham McCutchen LLP, engaged Michael Mulkey to assist TelePacific in collecting and analyzing the information provided by California CLECs pursuant to my request.

6. I provided Mr. Mulkey with information regarding the wire centers where TelePacific has invested in and deployed EoC transmission equipment in order to provide broadband to its business customers. I received similar EoC deployment information from Sonic Telecom, Inc., who offers broadband Internet service to residential consumers and small business customers, and provided that information to Mr. Mulkey as well.

7. Mr. Mulkey received similar EoC deployment information from seven other responding CLECs: Blue Rooster Telecom, Inc.; Cbeyond Communications, Inc.; Impulse Advanced Communications, LLC; MegaPath Corporation; Norcast Communications Corporation; Rural Broadband Now! LLC and XO Communications Services.

8. Mr. Mulkey then aggregated the information provided by each CLEC,<sup>2</sup> he provided the aggregated information to me, and I combined this information with data from a GeoResults<sup>3</sup> database of California businesses to identify SMBs (defined for

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<sup>1</sup> These customers, SMBs, for purposes of this analysis are defined as a business having between 10-249 employees at a given location.

<sup>2</sup> Non-disclosure agreements protect the confidentiality of such sensitive business information and limit its use for advocacy before the FCC.

<sup>3</sup> GeoResults is a database marketing and consulting firm (<http://www.georeresults.com>) serving the telecommunications industry. TelePacific had previously purchased GeoResults data for many of the ILEC wireline central offices in California.

purposes of this analysis as 10-249 employees in a given location) within 12,000 feet (on an airline mileage basis) of a CLEC EoC equipped wire center.<sup>4</sup>

9. Based on the combination of the aggregated CLEC wire center list with GeoResults' counts of SMBs within 12,000 feet from the serving ILEC central offices, Mr. Mulkey prepared summary spreadsheets displaying the availability and ubiquity of CLEC EoC service alternatives in the state of California. Based on the aggregated list of EoC locations and the GeoResults data, TelePacific prepared coverage maps of the EoC served cities by participating CLECs statewide.

### **Analysis of the Data**

10. The data I have compiled shows that the ten CLECs participating in this exercise have invested in and installed EoC capability in 343 different wire centers in California.

11. In those 343 wire centers, approximately 250,000 SMBs can purchase broadband services via EoC provided by one or more of the CLECs that provided data.

12. In more than one-third of these wire centers, there are at least three different CLECs to choose from for EoC-based broadband service.

13. Attached to my declaration are several exhibits identifying these wire centers.

14. Exhibit A shows the list of all 343 wire centers.

15. Exhibit B shows that out of the 343 wire centers covered by these 9 CLECs, there are 84 where two CLECs have deployed EoC; 62 where three CLECs have

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<sup>4</sup> It is possible that in a few instances where wire centers are adjacent, using the 12,000 feet radius could double count certain businesses within 12,000 feet of more than one wire center.

deployed EoC; 37 where four CLECs have deployed EoC; sixteen where five CLECs have deployed EoC and one wire center where six CLECs have deployed EoC.

16. Also attached as Exhibit C is a statewide map of California showing the dispersal of the 343 wire centers across the state.

**TelePacific Alternative Last Mile Access Survey**

17. TelePacific has contractual arrangements with 27 alternative (non-incumbent) providers to buy last mile access to reach customer locations. These alternative providers include fiber companies, cable companies, and competitive telecommunications carriers.

18. I directed my staff to review a random group of thirty wire centers, at least one in each LATA in California where TelePacific provides service, and collect current customer addresses from each of the 30 wire centers selected using this sampling method.

19. My staff compared this current customer address list to the list of on-net buildings we have received from our 27 alternative providers to determine whether TelePacific could request last mile access to the customer location from an alternative (non-ILEC) provider.<sup>5</sup>

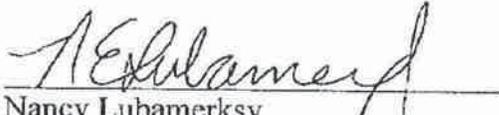
20. Only 12.5% of the current customer addresses included in our survey were listed as on-net buildings for the 27 alternative providers.

21. Declarant sayeth no more.

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<sup>5</sup> Although a provider's list of on-net buildings indicates that they offer service to a particular building, in practice, a provider may not have available capacity to fulfill a specific service request.

I declare under penalty of perjury that the foregoing is true and correct.



Nancy Lubamerksy  
Vice President, Public Policy and Strategic Initiatives  
U.S. TelePacific Corp.

Executed on: January 25, 2013  
Larkspur, California

Wire Centers with CLEC EoC Deployment
AGORCA11
ALBYCA11
ALHBCA01
ALMDCA11
ANHMCA01
ANHMCA02
ANHMCA11
ANHMCA12
ANTCCA11
APTSCA12
ARCDCA11
ARGRCA11
ARTNCA11
ARTSCAXF
ATSCCA11
AUBNCA01
AVBHCA11
BELLCA11
BKFDCA12
BKFDCA14
BKLYCA01
BLFLCAXF
BLGRCA11
BLPKCAXF
BNCICA11
BNPKCA11
BRBNCA11
BRBNCA13
BRDLCA16W00
BREACA12
BRLNCA01
BSRNCA70
BVHLCA01
BYPKCA11
CCMNCA11
CHICCA01
CHNOCA11
CHVSCA11
CLBSCA11
CLCYCA11
CLCYCAXG
CLMTCAXF
CLVSCA11
CMBACA11
CMRLCAXF

Wire Centers with CLEC EoC Deployment
CMTNCA0
CMTNCA01
CNCRCA01
CNPKCA01
COLACA01
CORNCA11
COTNCA11
COVNCA01
CRDMCA11
CRLSCA11
CRLSCA12
CRPRCA01
CSMSCA11
CTTICA12
CVELCA01
CYCSCA11
DAVLCA12
DAVSCA11
DLMRCA12
DWNYCA01
ELCJCA11
ELMNCA01
ELRICCA01
ELSBCA11
ELSGCA12
ELTRCA11
ELWDCCA01
ENCTCA12
ESCNCA01
FLBKCA12
FNTACA11
FRFDCA01
FRMTCA11
FRMTCA12
FROKCA11
FRSNCA01
FRSNCA11
FRSNCA12
FRSNCA13
FSVLCA11
FTBRCA02
FUTNCA01
GLDLCA11
GLNDCA01
GLRYCA01

Wire Centers with CLEC EoC Deployment
GOLTCAXF
GRDNCA01
GRDNCA02
GRGVCA01
HLBGCA11
HLWDCA01
HMBACA12
HNBHCAXF
HNBHCAXG
HNBHCAXH
HNBHCAXL
HNFRCA01
HNPKCA01
HRBHCAXA
HWTHCA01
HYWRCA01
HYWRCA11
IGNCCA12
IGWDCA01
IMBHCA11
IRVNCA01
IRVNCA11
IRVNCA12
LACRCA11
LAHBCAXF
LAJLCA11
LAMSCA01
LAPNCAXF
LAPNCAXG
LFYTCA11
LGNGCA12
LMPCCAXF
LNBHCAXF
LNBHCAXG
LNBHCAXM
LNBHCAXS
LNBHCAXT
LODICA01
LOMTCA11
LRKSCA11
LSANCA01
LSANCA02
LSANCA03
LSANCA04
LSANCA05

Wire Centers with CLEC EoC Deployment
LSANCA06
LSANCA07
LSANCA08
LSANCA09
LSANCA10
LSANCA11
LSANCA12
LSANCA13
LSANCA14
LSANCA15
LSANCA23
LSANCA29
LSANCA34
LSANCA35
LSANCA38
LSANCA56
LSATCA11
LSGTCAXA
LSGTCAXF
LSVGNVXK
LSVGNVXV
LVMRCA11
LYVLCAXF
MDSTCA02
MLBRCA11
MLPSCA11
MLVYCA01
MNDCCA11
MNPKCA11
MNRVCAXG
MRBACA11
MRCDCA01
MRHLCAXF
MRTZCA11
MTVWCA11
NAPACA01
NHLDCA11
NHLLCA01
NHWDCA01
NHWDCA02
NIPMCA11
NORGCA11
NOVTCAXF
NRWLCAXF
NRWLCAXG

Wire Centers with CLEC EoC Deployment
NSCRCA11
NTCYCA11
OCSOCA11
OKLDCA03
OKLDCA04
OKLDCA11
OKLDCA12
OKLDCA13
ONTRCAXF
ONTRCAXG
ORNGCA11
ORNGCA13
ORNGCA14
ORVACA11
OTMSCA11
PCBHCA01
PCRVCAXF
PDLYCA11
PDRYCAXF
PLALCA02
PLALCA12
PLCNCA11
PLDSCAXF
PLSPCAXG
PLTNCA12
PLTNCA13
PLVLCA11
POMNCAXF
POWYCA11
PRMTCA01
PSDNCA11
PSDNCA12
PSRBCA01
PTLMCA01
PTVLCA11
PXBHCA11
RBRNCA11
RCMDCA11
RDBHCAXF
RDCYCA01
RDLDCAXF
RENONV02
RESOCA01
RILTCA11
RNMGCAXF

Wire Centers with CLEC EoC Deployment
ROSMCA11
RTPKCA11
RVSDCA01
SANTCA01
SBSTCA11
SCRMCA01
SCRMCA02
SCRMCA03
SCRMCA11
SCRMCA12
SCRMCA13
SGATCA01
SHOKCA01
SHOKCA04
SIMICA11
SJCPCA12
SKTNCA01
SKTNCA11
SLBHCAF
SNANCA01
SNANCA11
SNANCA12
SNBBCAF
SNBBCAXG
SNBRCAF
SNBUCA02
SNCLCA12
SNCRCA11
SNCZCA01
SNCZCA11
SNDGCA01
SNDGCA02
SNDGCA03
SNDGCA05
SNDGCA06
SNDGCA11
SNDGCA12
SNDGCA14
SNDGCA15
SNDGCA16
SNDMCAF
SNFCCA01
SNFCCA04
SNFCCA05
SNFCCA06

Wire Centers with CLEC EoC Deployment
SNFCCA12
SNFCCA13
SNFCCA14
SNFCCA17
SNFCCA21
SNFNCA XG
SNGBCA01
SNJSCA02
SNJSCA11
SNJSCA12
SNJSCA13
SNJSCA14
SNJSCA15
SNJSCA18
SNJSCA21
SNLNCA11
SNLOCA01
SNMCCA11
SNMICA11
SNMNCA XG
SNMNCA XJ 3)
SNMTCA11
SNPDCA01
SNRFCA01
SNRFCA11
SNRMCA11
SNRSCA01
SNRSCA11
SNTCCA01
SNTCCA11
SNTMCAXF
SNVACA01
SNVACA11
SONMCA12
SPSDCA11
SSLTCA11
STHNCA11
THOKCAXF
TMTNCA11
TRACA11
TRLCCA11
TRNCCA11
TRNCCAXF
TRNCCAXG
TULRCA11

Wire Centers with CLEC EoC Deployment
TUSTCA11
UKIHCA01
UNCYCA11
UPLDCAXF
VCVLCA12
VISLCA11
VISTCA12
VLLJCA01
VNNYCA02
VNTRCA11
WDLDCA11
WHTRCAXF
WHTRCAXH
WHTRCAXJ
WLANCA01
WLANCAXF
WLANCAXG
WLANCAXH
WLMGCA01
WLNTCAXF
WLTSCA12
WMNSCAXF
WNCKCA11
WNSCA11
WSCRCA11
WTVLCA01
YNVLCA11
YRLNCA11

<b>Summary:</b>	
Wire Centers with single CLEC EoC:	<b>143</b>
Wire Centers with multiple CLECs deploying EoC:	<b>200</b>
	CO's w/2 CLECs: 84
	CO's w/3 CLECs: 62
	CO's w/4 CLECs: 37
	CO's w/5 CLECs: 16
	CO's w/6 CLECs: 1
Total Surveyed CLEC EoC Deployments in CA:	<b>343</b>



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

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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	)	

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**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**

Tamar E. Finn  
Joshua M. Bobeck  
Philip J. Macres  
Bingham McCutchen, LLP  
2020 K St., NW  
Washington, DC 20006  
(202) 373-6000 (tel)  
(202) 373-6001 (fax)  
Tamar.finn@bingham.com  
Josh.bobek@bingham.com  
Philip.macres@bingham.com

*Counsel for Mpower Communications Corp., U.S. TelePacific Corp., ACN  
Communications Services, Inc., Level 3 Communications, LLC, TDS Metrocom, LLC,  
Alpheus Communications, LLC, and MegaPath Corporation*

Jeff Buckingham, President  
Blue Rooster Telecom, Inc.  
P.O. Box 4959  
San Luis Obispo, CA 93403  
(805) 545-5100  
jeff@blueroostertelecom.com

Michael Ireton, President  
Rural Broadband Now!  
111 S Main St.  
Willits, CA 95490  
(707) 459-0824  
mike@ruralbroadbandnow.com

March 20, 2013

Dave Clark, President  
Impulse Telecom, LLC  
5383 Hollister Avenue, Suite 240,  
Santa Barbara, CA 93111  
(805) 456-5800  
dave@impulse.net

Dane Jasper, Founder & CEO  
Sonic Telecom, LLC  
2260 Apollo Way  
Santa Rosa, CA 95407  
(706) 522-1000  
dane@corp.sonic.net

**TABLE OF CONTENTS**

TABLE OF CONTENTS..... iii

I. INTRODUCTION AND SUMMARY ..... 1

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..... 5

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 ..... 10

IV. ACCESS TO COPPER LOOPS REMAINS CRITICAL BECAUSE CLECS  
FACE SIGNIFICANT BARRIERS TO FIBER INVESTMENT ..... 12

    A. CLECs and ILECs Are Not on An Equal Footing When it Comes to  
    Overbuilding Copper Loops with Fiber Loops..... 13

    B. In Most Markets, Deploying Fiber Is Simply Not Economic for CLECs  
    Now or in The Foreseeable Future..... 16

    C. The ILECs Do Not Need Unfettered Discretion to Retire Copper Loops ..... 19

    D. The Commission Possesses Broad Latitude to Account for These Changes  
    in the Marketplace and Revise its Copper Retirement Rule Accordingly ..... 23

V. THE TELRIC RATES FOR UNE LOOPS FAIRLY COMPENSATES THE  
ILECS ..... 23

VI. THE COMMISSION HAS THE AUTHORITY TO ESTABLISH RULES THAT  
PROTECT COPPER LOOP UNES AND PROMOTE AFFORDABLE  
BROADBAND OVER COPPER ..... 27

    A. The Commission Has Authority Under Section 706 ..... 27

    B. The Commission has Authority Under 251(c)(3) ..... 29

    C. The Commission has Authority Under Section 271 ..... 32

VII. ACCESS TO COPPER LOOPS IS A NECESSARY BRIDGE TO THE ALL-  
FIBER FUTURE ENVISIONED BY THE COMMISSION ..... 34

VIII. CONCLUSION..... 35

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.<sup>1</sup>

## **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

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<sup>1</sup> 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”).<sup>2</sup> Numerous parties, including the California CLECs,<sup>3</sup> 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

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<sup>2</sup> Joint Request at pp. 7-10.

<sup>3</sup> 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.<sup>4</sup> 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.<sup>5</sup> 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.<sup>6</sup>

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

- 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

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<sup>4</sup> 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.

<sup>5</sup> Blue Rooster et al. Comments at p. 7.

<sup>6</sup> *Id.* at pp. 7-8.

<sup>7</sup> *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 EoC<sup>8</sup> and that EoC offers competitive broadband options not only to business but also residential customers.<sup>9</sup> 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.’”<sup>10</sup>

Remarkably, the ILECs ignore the copper technology gains in providing more throughput over longer distances<sup>11</sup> and fail to mention that they themselves have made significant investments in technology to deliver high capacity broadband services over their existing copper infrastructure.<sup>12</sup> 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.”<sup>13</sup> CenturyLink also makes the same error, alleging that reforming the copper loop retirement rules is unwise “in the midst of the transition

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

<sup>9</sup> Blue Rooster et al. Comments at p. 2.

<sup>10</sup> Dent in Ethernet Market Article at p. 3.

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

<sup>12</sup> *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).

<sup>13</sup> AT&T Comments at p. 2.

to IP networks and services.”<sup>14</sup>

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.”<sup>15</sup> 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.”<sup>16</sup> 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.”<sup>17</sup> As Adtran explains, “copper loops are not an anachronism, but instead can be a robust component of broadband service providers’ ‘tool chest.’”<sup>18</sup>

Both ILECs and CLECs are investing in EoC.<sup>19</sup> 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.<sup>20</sup> 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

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<sup>14</sup> CenturyLink Comments at p. i.

<sup>15</sup> Adtran Comments at pp. 1-2.

<sup>16</sup> Overture Comments at pp. 1-2.

<sup>17</sup> Overture Comments at p. 5.

<sup>18</sup> Adtran Comments at p. 6.

<sup>19</sup> Overture Comments at p. 5.

<sup>20</sup> 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.”<sup>21</sup> 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.”<sup>22</sup> This may have been the case years ago, but it no longer holds true.<sup>23</sup> 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.”<sup>24</sup> 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.”<sup>25</sup> 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.”<sup>26</sup> The

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<sup>21</sup> *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”).

<sup>22</sup> USTA Comments at p. 5.

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

<sup>24</sup> Overture Comments at p. 3.

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

<sup>26</sup> 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.<sup>27</sup> 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.”<sup>28</sup>

### **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.<sup>29</sup> 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.”<sup>30</sup> 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.”<sup>31</sup> CenturyLink claims that the Joint Request “does not even attempt to show that [the] request meets the section 251(d)(2) impairment standard.”<sup>32</sup> As explained below, the Joint Request did not seek to show impairment because the Commission

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<sup>27</sup> 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>.

<sup>28</sup> *See* Windstream EoC Play.

<sup>29</sup> *See, e.g.*, AT&T Comments at p. 3.

<sup>30</sup> USTA Comments at p. 2.

<sup>31</sup> Verizon Comments at p. 22.

<sup>32</sup> CenturyLink Comments at p. 15.

has already concluded that CLECs are impaired without access to copper loops.<sup>33</sup>

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."<sup>34</sup> 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.<sup>35</sup>

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

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<sup>33</sup> See 47 C.F.R. § 319(a)(1).

<sup>34</sup> *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).

<sup>35</sup> *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.”<sup>36</sup>

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.”<sup>37</sup> 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.”<sup>38</sup> 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.”<sup>39</sup>

#### **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

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<sup>36</sup> *TRO*, 18 FCC Rcd at 17127, ¶ 244.

<sup>37</sup> *TRO*, 18 FCC Rcd at 17147, ¶ 282.

<sup>38</sup> *TRO*, 18 FCC Rcd at 17146-47, ¶ 281.

<sup>39</sup> 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.<sup>40</sup> But this assertion is flawed. First, in the *TRRO* the Commission affirmed that CLECs are impaired without access to DS0 loops, period.<sup>41</sup> 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

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<sup>40</sup> AT&T Comments at p. 9.

<sup>41</sup> *TRRO*, 20 FCC Rcd at 2615, ¶ 149.

capacity loops on an economic basis.”<sup>42</sup> 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.”<sup>43</sup> 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.<sup>44</sup>

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.”<sup>45</sup> 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.”<sup>46</sup> These advantages include “a vast network of conduits, poles, wires, pedestals, manholes, and wire center buildings ... largely built under

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<sup>42</sup> *TRRO*, 20 FCC Rcd at 2628, ¶ 171.

<sup>43</sup> 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).

<sup>44</sup> Reply Declaration of Nancy Lubamersky at ¶ 9 (“Lubamersky Reply Declaration”).

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

<sup>46</sup> 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.”<sup>47</sup>

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.”<sup>48</sup> 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.<sup>49</sup> 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.<sup>50</sup> An exception, however, grandfathered “pre-1977 above-ground utilities.”<sup>51</sup> 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

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

<sup>48</sup> Verizon Comments at Declaration of Claire Beth Nogay ¶ 28.

<sup>49</sup> 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”).

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

<sup>51</sup> *Id.*

poles.”<sup>52</sup> 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.<sup>53</sup> 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.<sup>54</sup> 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

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<sup>52</sup> *Id.*

<sup>53</sup> *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.”).

<sup>54</sup> *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.<sup>55</sup> 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.<sup>56</sup>

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.<sup>57</sup> Similarly, in the business market,

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<sup>55</sup> 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.

<sup>56</sup> 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)).

<sup>57</sup> 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](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 territory<sup>58</sup> 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*.<sup>59</sup> And TelePacific's data shows much lower fiber penetration, with alternative fiber available to only 9% of its California customer service addresses.<sup>60</sup>

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.<sup>61</sup> 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."<sup>62</sup> 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

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<sup>58</sup> 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).

<sup>59</sup> 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](http://www.verticalsystems.com/prarticles/stat-flash-2012release-usfiber2011penetration_prnews.html)

<sup>60</sup> Lubamersky Reply Declaration at ¶ 9.

<sup>61</sup> See CenturyLink Comments at p. 10.

<sup>62</sup> 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.<sup>63</sup> 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.”<sup>64</sup>

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.<sup>65</sup> 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

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<sup>63</sup> *Id.* at p. 6.

<sup>64</sup> *Id.*

<sup>65</sup> 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.<sup>66</sup> 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.<sup>67</sup> CenturyLink claims that the copper retirement rules “play a critical role” in promoting deployment of broadband networks,<sup>68</sup> yet states that it “generally does not retire copper after it upgrades its outside plant.”<sup>69</sup> 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.”<sup>70</sup> 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,

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<sup>66</sup> Verizon Comments at pp. 10-11.

<sup>67</sup> *Id.* at p. 11.

<sup>68</sup> CenturyLink Comments at p. 3.

<sup>69</sup> *Id.* at p. 14.

<sup>70</sup> 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.’”<sup>71</sup> More strikingly, CenturyLink states that it “typically does not retire copper loops when it overbuilds them with fiber-based loops.”<sup>72</sup>

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.<sup>73</sup> 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,

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<sup>71</sup> Verizon Comments at Declaration of Claire Beth Nogay ¶¶ 32-33.

<sup>72</sup> 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.

<sup>73</sup> 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.<sup>74</sup> 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.<sup>75</sup> 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.<sup>76</sup> AT&T, as part of its petition relating to the IP transition, urges the Commission to allow ILECs unfettered discretion to retire copper.<sup>77</sup> Verizon's promise to "kill" the copper<sup>78</sup> 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.

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<sup>74</sup> *Id.*

<sup>75</sup> CenturyLink Comments at p. 6.

<sup>76</sup> *See* Joint Request at p. 11.

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

<sup>78</sup> 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.<sup>79</sup> 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.”<sup>80</sup> 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.”<sup>81</sup>

**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.<sup>82</sup> 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

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

<sup>80</sup> *Id.*

<sup>81</sup> *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).

<sup>82</sup> AT&T Comments at 14 and n.40.

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

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.<sup>86</sup> 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

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

<sup>84</sup> *Id.*

<sup>85</sup> COMPTTEL Comments at p. 10, n.34.

<sup>86</sup> *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.<sup>87</sup> 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,”<sup>88</sup> 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.<sup>89</sup> 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.”<sup>90</sup> 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

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

<sup>88</sup> Verizon Comments at p. 11.

<sup>89</sup> Verizon Comments, Declaration of Claire Beth Nogay ¶¶ 28, 33.

<sup>90</sup> Verizon 2012 Annual Report at p. 32,  
[http://www22.verizon.com/investor/DocServlet?doc=vz\\_ar\\_2012.pdf](http://www22.verizon.com/investor/DocServlet?doc=vz_ar_2012.pdf).

entertainment network will not voluntarily attract the majority of its base.”<sup>91</sup> 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.”<sup>92</sup> 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.”<sup>93</sup>

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

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<sup>91</sup> 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).

<sup>92</sup> *Id.* ¶ 18.

<sup>93</sup> *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.”<sup>94</sup> 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.”<sup>95</sup> 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

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<sup>94</sup> Verizon Comments at p. 21.

<sup>95</sup> 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.”<sup>96</sup> 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.”<sup>97</sup> Consistent with Section 706’s goal,<sup>98</sup> 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.”<sup>99</sup> 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.<sup>100</sup> As the Joint Request explains,<sup>101</sup> the Commission recently concluded that broadband deployment to all Americans is not reasonable and timely<sup>102</sup> and noted that “[a]s a consequence of that conclusion,” Section 706(b) was triggered.<sup>103</sup> Verizon contends that although Section 706(b) directs the Commission to “take immediate action to accelerate broadband deployment,” such

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

<sup>97</sup> *TRO*, 18 FCC Rcd at 17126-27, ¶ 244.

<sup>98</sup> *See* Joint Request at p. 16.

<sup>99</sup> *TRO*, 18 FCC Rcd at 17127, ¶ 244.

<sup>100</sup> Verizon Comments at p. 21.

<sup>101</sup> *See* Joint Request at p. 17.

<sup>102</sup> *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”).

<sup>103</sup> *Id.* at 10349-50, ¶ 8.

action would “be limited to areas where fiber or other forms of broadband have not been deployed.”<sup>104</sup> 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.<sup>105</sup> 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 rules<sup>106</sup> and ILECs never challenged this aspect of the *TRO* when they appealed it to the D.C. Circuit.<sup>107</sup> The

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<sup>104</sup> 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.

<sup>105</sup> Verizon Comments at p. 22; AT&T Comments at pp. 12-14.

<sup>106</sup> 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).

<sup>107</sup> 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.”<sup>108</sup> 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.<sup>109</sup>

AT&T claims that the Eighth Circuit’s decision in *Iowa Utilities Board v. FCC*,<sup>110</sup> prevents the Commission from restricting retirement of copper facilities.<sup>111</sup> 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.”<sup>112</sup> 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.<sup>113</sup> 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”

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<sup>108</sup> See XO Comments at 4.

<sup>109</sup> 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.

<sup>110</sup> 120 F.3d 753 (8th Cir. 1997).

<sup>111</sup> AT&T Comments at p. 4.

<sup>112</sup> 120 F.3d at 812.

<sup>113</sup> 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.<sup>114</sup>

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).<sup>115</sup> 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.<sup>116</sup> 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.<sup>117</sup>

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

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<sup>114</sup> See AT&T Comments at p. 4.

<sup>115</sup> *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).

<sup>116</sup> *Id.* at 14923, ¶ 127.

<sup>117</sup> 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).

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

<sup>119</sup> 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.”<sup>120</sup> Therefore, Congress “charged the Commission with identifying those network elements whose lack would ‘impair would-be competitors’ ability to enter the markets.’”<sup>121</sup> 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.<sup>122</sup> 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.<sup>123</sup> 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.”<sup>124</sup> 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.<sup>125</sup>

### **C. The Commission has Authority Under Section 271**

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

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<sup>120</sup> *USTA I*, 290 F.3d at 422.

<sup>121</sup> *Id.*

<sup>122</sup> *Id.*

<sup>123</sup> *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.).

<sup>124</sup> *TRO*, 18 FCC Rcd at 17126-27, ¶ 244.

<sup>125</sup> *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.<sup>126</sup> 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.”<sup>127</sup>

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,’”<sup>128</sup> and that CLECs have the “continued ability to compete in the broadband market by ... accessing ILECs’ legacy copper elements.”<sup>129</sup> In sum, the *Section 271 Forbearance Decision* and subsequent appeal recognized CLECs’ continued right to

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<sup>126</sup> Verizon Comments at 23.

<sup>127</sup> *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).

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

<sup>129</sup> *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,<sup>130</sup> 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,<sup>131</sup> 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”<sup>132</sup> and Verizon touts providers’ “incentives to cooperate with their wholesale customers to find workable alternatives as copper is retired,”<sup>133</sup> 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

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

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

<sup>132</sup> AT&T Comments at pp. 18-19.

<sup>133</sup> 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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Tamar E. Finn  
Joshua M. Bobeck  
Philip J. Macres  
Bingham McCutchen, LLP  
2020 K St., NW  
Washington, DC 20006  
(202) 373-6000 (tel)  
(202) 373-6001 (fax)  
Tamar.finn@bingham.com  
Josh.bobek@bingham.com  
Philip.macres@bingham.com

*Counsel for Mpower Communications Corp.,  
U.S. TelePacific Corp.; ACN  
Communications Services, Inc.; Level 3  
Communications, LLC; TDS Metrocom,  
LLC, Alpheus Communications, LLC, and  
MegaPath Corporation*

Jeff Buckingham, President  
Blue Rooster Telecom, Inc.  
P.O. Box 4959  
Obispo, CA 93403  
(805) 545-5100  
jeff@blueroostertelecom.com

Dave Clark, President  
Impulse Telecom, LLC  
5383 Hollister Avenue, Suite 240, San Luis  
Santa Barbara, CA 93111  
(805) 456-5800  
dave@impulse.net

Michael Ireton, President  
Rural Broadband Now!  
111 S Main St.  
Willits, CA 95490  
(707) 459-0824  
mike@ruralbroadbandnow.com

Dane Jasper, Founder & CEO  
Sonic Telecom, LLC  
2260 Apollo Way  
Santa Rosa, CA 95407  
(706) 522-1000  
dane@corp.sonic.net

March 20, 2013

**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 DECLARATION OF NANCY LUBAMERSKY ON BEHALF OF  
MPOWER COMMUNICATIONS CORP. AND U.S. TELEPACIFIC CORP.  
IN SUPPORT OF THE REQUEST TO REFRESH RECORD AND TAKE  
EXPEDITED ACTION TO UPDATE COPPER RETIREMENT RULES TO  
PROMOTE AFFORDABLE BROADBAND OVER COPPER**

1. I am Nancy Lubamersky, Vice President, Public Policy and Strategic Initiatives for U.S. TelePacific Corp., which, together with its affiliate Mpower Communications Corp., offers competitive broadband service under the “TelePacific” brand. I submitted a declaration in these proceedings on January 25, 2013.

2. The purpose of my reply declaration is to provide updated factual support for the “Request to Refresh Record and Take Expedited Action to Update Copper

Retirement Rules to Promote Affordable Broadband Over Copper” filed by TelePacific and other parties. In particular, this Declaration provides information about the growth in competitive Ethernet over Copper deployment in California and the results of a survey of the availability of alternative last mile access for the customer locations TelePacific serves in California.

3. I have personal knowledge of all facts stated in my declaration.

#### **Competitive Ethernet over Copper Deployment**

4. In my declaration, I provided data about the nine CLECs participating in our survey of EoC deployment in California. The data showed that the nine CLECs have invested in and installed EoC capability in 343 different wire centers in California.

5. To provide context about the growth of EoC among the surveyed CLECs, I asked Mr. Mulkey to request additional information to determine the number of additional wire centers in California where CLECs expect to add EoC capability by year end 2014.

6. Mr. Mulkey was able to collect such data from two CLECs, including TelePacific. That data shows that these two CLECs plan to deploy EOC capability in 85 additional wire centers by year end 2014.

#### **TelePacific Alternative Last Mile Access Survey**

7. In my declaration, I provided data about last mile access alternatives to serve TelePacific end user locations in 30 wire centers in California. The data was based on my staff’s review of a random group of thirty wire centers in California where TelePacific provides service.

8. More recently, I directed my staff to update the data. Specifically, my staff compared a list of all customer service addresses that TelePacific serves in California to the list of on-net buildings we have received from 26 alternative providers to determine whether TelePacific could request last mile access to the customer location from an alternative (non-ILEC) provider.<sup>1</sup>

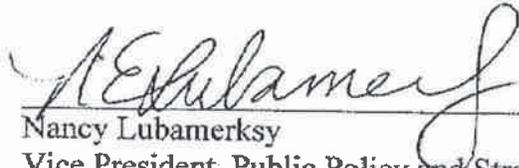
9. Only 9% of TelePacific's current California customer service addresses were listed as on-net buildings for the 13 alternative providers.

10. Declarant sayeth no more.

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<sup>1</sup> TelePacific's initial survey inadvertently included an alternative fiber provider that did not offer last mile access to customer locations in California. Of the 26 alternative providers, 13 did not offer last mile access to small and medium-sized business customer locations and only offered alternative fiber to ILEC wire centers, large enterprises, and data centers.

I declare under penalty of perjury that the foregoing is true and correct.



Nancy Lubamerksy  
Vice President, Public Policy and Strategic Initiatives  
U.S. TelePacific Corp.

Executed on: March 20, 2013  
Larkspur, California