

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE 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 Telecommunication Services

Rulemaking 08-01-005  
(Filed January 10, 2008)

**Declaration of Joseph Gillan**

**Witness Qualifications**

1. My name is Joseph Gillan. My business address is PO Box 7498, Daytona Beach, Florida, 32116. I am a consulting economist with a practice specializing in the telecommunications industry.
2. I am a graduate of the University of Wyoming where I received B.A. and M.A. degrees in economics. My graduate program focused on the analysis of economic issues involving public utilities, including telecommunications.
3. In 1980 I was recruited to join the Policy Analysis and Research Division at the Illinois Commerce Commission, the state agency responsible for regulating public utilities in Illinois. From 1980 to 1985, I was responsible for the policy analysis of issues created by the emergence of competition in regulated markets, in particular the telecommunications industry.
4. While on the staff of the Illinois Commission, I was named to the Staff Subcommittee for the Communications Committee of the National Association of Regulatory Utility Commissioners (NARUC). I was also appointed to the Research Advisory Council overseeing the National Regulatory Research Institute, NARUC's research arm located at Ohio State University.
5. In 1985, I left the Commission to join U.S. Switch, a venture firm organized to develop interexchange access networks in partnership with independent local telephone companies. At the end of 1986, I resigned from my position as Vice President, Marketing and Strategic Planning, to begin a consulting practice.
6. Over the past twenty years, I have provided testimony before more than 35 state commissions, seven state legislatures, the Commerce Committee of the United States Senate, and the Federal/State Joint Board on Separations Reform. I have also been called to provide expert testimony before federal and state civil courts by clients as diverse as the trustees of a small competitive carrier in the Southeast to Qwest Communications. In addition, I have filed expert analysis with the Finance Ministry of the Cayman Islands and before the Canadian Radio-television and Telecommunications Commission.

7. I currently serve on the Advisory Council to New Mexico State University's Center for Public Utilities (since 1985) and I am an instructor in their "Principles of Regulation" program taught twice annually in Albuquerque. I have also lectured at Michigan State University's Regulatory Studies Program, the School of Laws at the University of London, and at the Northwestern University School of Law.<sup>1</sup>

### Summary

8. The purpose of my declaration is to address the central claim by Drs. Aron and Taylor that Verizon and AT&T should enjoy unfettered discretion to retire copper facilities without approval,<sup>2</sup> even if that means the forced-migration of the ILECs' own customers and the elimination of broadband services offered by competitors. The declaration below responds to this claim with the following:

- \* The core assertion that copper retirement is *needed* to encourage the deployment of fiber is an academic theory contradicted by the facts. Neither AT&T nor Verizon has retired any copper in California despite substantial fiber deployment;
- \* AT&T's broadband architecture is copper-*dependent*, thereby proving that the existing copper network can, with additional investment by *either* an incumbent or competitor, become an important component of a comprehensive broadband policy;
- \* Verizon's internal analysis fundamentally concludes that shutting down its copper network would require a massive and costly forced-migration of customers, because its FiOS entertainment network will not voluntarily attract the majority of its base;
- \* The FCC's broadband policy – which denies competitors unbundled access to *certain* broadband facilities – does not apply to "enterprise loops."<sup>3</sup> As a result, even if unfettered copper retirement was a part of the FCC's broadband policy (a claim not

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<sup>1</sup> A complete summary of my qualifications, listing of testimony and publications is attached to this declaration.

<sup>2</sup> See Appendix A, Declaration of Dr. Debra Aron attached to Comments of Verizon California Inc (U-1020-C) filed March 14, 2008 ("*Aron Declaration*") and Declaration of Dr. William Taylor, attached to Comments of Pacific Bell Telephone Company, D/B/A AT&T California (U-1001-C), filed March 14, 2008 ("*Taylor Declaration*").

<sup>3</sup> As I explain below, the FCC's TRO established different policies applicable to different *loop* types that generally track (but are not limited to) the terms "mass market" and "enterprise" as used to define *customer* types. The FCC adopted this convention to carefully preserve unbundled access to broadband offerings typically associated with business customers (in particular, DS1s), while simultaneously adopting policies that the FCC hoped would encourage the deployment of fiber to predominately residential areas. Importantly, enterprise loops are not – and never have been – included as part of the FCC's broadband policies.

supported by the discussion in FCC orders), that would still not justify the abandonment of copper that is – or requested to become – an enterprise loop;

- \* Although neither AT&T nor Verizon intends to retire copper in the foreseeable future, the Commission should move forward and adopt the rules proposed by CALTEL. Unfettered copper retirement is *not* needed to promote the deployment of fiber by the incumbent, but stable copper retirement policies *are* needed to foster the deployment of broadband networks by entrants.<sup>4</sup> Verizon and AT&T should not be permitted to retire copper out from under entrants merely because they have deployed fiber for other services; and,
- \* Only the state Commission has the procedural tool of discovery and state-specific expertise to resolve the inherently fact-specific question as to when (if ever) it is in the public interest to implement a forced-migration of telephone customers to an entertainment network so that the traditional network can be shut down.<sup>5</sup>

9. The ubiquitous copper networks of Verizon and AT&T are a network inheritance from a different regulatory and market era. Although funded by private investment, the networks were protected from competition for decades by public policy to ensure ubiquitous deployment. The basic question in this proceeding is: Should the Commission retain oversight so as to have a voice in when (and whether) these networks should be dismantled?

10. The CALTEL Petition sets forth a simple and elegant answer. The rules proposed by CALTEL provide the Commission a continuing voice as to whether shutting down this public/private resource makes sense by: (a) establishing a *procedure* for future retirements should any be proposed, and (b) adopting a rebuttable *presumption* that requires the incumbent to demonstrate that any such retirement is in the public interest. The CALTEL Petition strikes a reasonable balance by providing that the incumbent may

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<sup>4</sup> New technologies (principally DSL technologies combined with port/pair bonding) enable copper loops to support broadband speeds and services that directly compete with services provided incumbents. The importance of these technologies is described in the Declaration of Sarah DeYoung, Executive Director of CALTEL.

<sup>5</sup> It is important to note that neither FiOS nor Uverse are complete stand-alone networks, physically separate in every way from the more traditional copper network. All of these facilities are likely to share common support structures, rights-of-way, conduit and, in some places, fiber cables (if not individual strands).

retire copper facilities when in the public interest, but may not strategically eliminate this important resource to prevent its use by rivals or limit the choices of customers.<sup>6</sup>

### **Verizon and AT&T Have No Current Plans to Retire Copper**

11. The declarations provided by Drs. Aron and Taylor are most notable for two interrelated assertions. First, each concludes (for their respective client) that Verizon and AT&T have responded to the incentives provided by the FCC's broadband policy by deploying fiber networks in California. Second, they allege that this investment would be disrupted if their clients could not *also* retire copper plant. For their part, however, AT&T and Verizon have not actually retired any copper, have no plans to retire copper, and do not expect to retire copper. As such, the facts do not support the claimed *linkage* between fiber deployment and copper retirement.

12. The indisputable fact pattern is that both AT&T and Verizon have been deploying fiber without retiring copper plant. If the practice is to deploy fiber without retiring copper, then the relevant question (addressed in the final section of my declaration) is whether to codify this practice in order to provide stability to the market. But the principal claim of Drs. Aron and Taylor – *i.e.*, that copper retirement is a necessary element of the FCC's broadband policy – is demonstrably false.

13. To begin, AT&T California's fiber-deployment strategy is copper-*dependent*. That is, its Uverse architecture continues to rely on copper facilities to reach customers by deploying copper-enhancing technologies similar to those that CLECs would deploy to transform copper-into-broadband.<sup>7</sup> Consequently, the assumed linkage between fiber deployment and copper retirement is fundamentally inconsistent with the architecture chosen by AT&T:

AT&T California states that it has not removed or abandoned in place any copper cable replacing it with fiber optic cable. AT&T California does not migrate customers to an all-fiber loop, and does not discontinue or currently plan to discontinue loop availability with any fiber deployments.<sup>8</sup>

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<sup>6</sup> By creating a rebuttable presumption, the proposed rule also places the burden of proof with the incumbent. This approach is both administratively appropriate and conceptually correct. Only the incumbent has access to the information needed by the Commission to determine whether it is in the public interest to shut down a portion of the copper network. If the burden rested with the entrant to *defend* its access, the Commission would be perpetually engaged in discovery battles as entrants seek the data needed to challenge a decision (*i.e.*, the retirement of copper) from an incumbent already vested in the outcome. As formulated in the CALTEL Petition, however, the incumbent would have to provide evidence in support of its position, thereby correctly aligning the "owner" of the facts with the burden of proof.

<sup>7</sup> [www.att.com/Uverse/files/HowUverseIsDelivered\\_2-22.pdf](http://www.att.com/Uverse/files/HowUverseIsDelivered_2-22.pdf)

<sup>8</sup> AT&T California Response to CALTEL Request 1-20.

AT&T California does not retire copper loops in fiber overbuilds and has no current plans to do so ...<sup>9</sup>

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AT&T California states that it does not retire or abandon individual pairs within a copper cable, and does not retire or abandon individual pairs within a copper cable, and does not retire copper cables if they contain a working loop. Further, AT&T California repeats that there are no plans to replace existing copper loops with all-fiber facilities.<sup>10</sup>

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AT&T California states that it can and does leave copper cables in place where fiber is placed on the same route, but it does not place fiber solely to replace existing copper facilities.<sup>11</sup>

14. Although Verizon's FiOS architecture (unlike AT&T) relies entirely on fiber to the customer, even that deployment is occurring without any corresponding copper retirement:

Verizon is not abandoning or removing existing copper cable in conjunction with its FTTP deployment.<sup>12</sup>

15. There are several reasons why Verizon would not retire copper plant as it deploys fiber, including: (a) copper facilities remain a viable technology for many services; (b) not all customers desire FiOS-based services for quality and financial reasons; and (c) some customers may never desire FiOS-based services. These last two reasons expose an irrefutable truth about copper retirement: Before the copper network can be shut down, all the customers served by it must be either be enticed – or, should voluntary measures not prove compelling, forcefully-migrated – to fiber loops.

### **The Economics of Forced-Migration (the Prerequisite to Copper Retirement)**

16. As a practical matter, Verizon will never reach the day that *every* customer that it passes will subscribe to FiOS, or every premise that does subscribe to FiOS will *always* be occupied by a new owner/tenant with the same needs and demands. As a result, the question as to whether copper loops should be retired is inexorably tied to the question of what should be done with the customers still served by that copper.

17. Verizon has evaluated whether to implement a forced-migration of customers to its FiOS network on at least three occasions.<sup>13</sup> Although the specific details of these

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<sup>9</sup> AT&T California Response to CALTEL Request 1-6.

<sup>10</sup> AT&T California Response to CALTEL Request 1-12.

<sup>11</sup> AT&T California Response to CALTEL Request 1-13.

<sup>12</sup> Verizon Response to CALTEL Request 1-20.

<sup>13</sup> Verizon has slowly provided documents addressing its forced-migration analyses, separately providing analyses dated August 2005, February 2006 and August 2007. The earliest of these analyses clearly references analyses that predate it, even though Verizon has yet to

analyses are confidential, the following broad conclusions are drawn from a review of these analyses:

- \* Based on Verizon's internal expectations, most customers will not voluntarily subscribe to FiOS-based services;
- \* Even after the migration of customers to FiOS through customer choice, churn, and facility swaps to address persistent network troubles, copper will still serve most of its customers;
- \* Encouraging additional migrations through voluntary incentives would only be partially successful;
- \* A forced-migration strategy would be needed to shut down the copper network;
- \* Operational savings do not justify diverting capital to implement a forced-migration of traditional customers to FiOS;
- \* With each successive analysis, it appears that the estimated operational cost savings from a copper shutdown decline;<sup>14</sup> and
- \* Copper has not outlived its usefulness and value.

18. The most interesting observation from the Verizon Analyses is that the necessary linkage between forced-migration and copper-retirement – that is, that customers must be evicted from the copper network before it can be shut down – has the potential to adversely affect fiber deployment. This is because the costs of a forced migration strategy *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. Consequently, Verizon has (thus far) declined to

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provide copies. Consequently, the conclusions presented here are based on an incomplete review of Verizon documents because there are clearly documents that have not yet been produced.

<sup>14</sup> Because Verizon has provided summary documents of its analyses, it is difficult to determine whether each analysis is founded on common assumptions. This difficulty, however, provides further support for the proposed CALTEL rules, which are designed to ensure that the Commission retains the oversight needed to review the factual basis for any proposed forced-migration/retirement in the future.

pursue a path of forced migration,<sup>15</sup> and instead has adopted a policy that it will return customers to copper upon request.<sup>16</sup>

### **FCC Broadband Policy Does Not Include Enterprise Loops**

19. In the Triennial Review Order,<sup>17</sup> the FCC adopted a broadband policy intended to promote the deployment of fiber technology to the mass market. The cornerstone of this policy was that the FCC would not require incumbents to share certain mass market loops with other competitors (*i.e.*, unbundle), under either Section 251 or Section 271 of the Act.<sup>18</sup> Specifically, the FCC adopted reduced unbundling obligations for a narrowly defined list of mass market loop types -- “fiber to the home” (FTTH),<sup>19</sup> “fiber to the curb” (FTTC) and “fiber to the predominantly residential multi-dwelling unit” (MDU).

20. AT&T and Verizon claim that the FCC’s broadband policy also includes a “right to retire” copper facilities when replaced by fiber. Leaving aside whether this linkage exists, it is first important to understand that the FCC’s broadband policy only reduced unbundling obligations as they applied to mass market loops, not enterprise loops.

21. To begin, the FCC did not define its unbundling policies by *customer*-type, but instead chose to adopt policies that would differ by *loop*-type.

[A] competitive LEC faces the same economic considerations in provisioning a DS1 loop to a large business customer typically associated with the enterprise market that it faces in provisioning that same loop type

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<sup>15</sup> See Verizon Response to CALTEL RFI 4-3(e) acknowledging: “Verizon’s analysis did not support pursuing Scenarios B (voluntary migration) or C (forced migration).” In the absence of forced-migration, Verizon’s copper network continues to serve a portion of its retail base, wholesale customers, the enterprise market, and cannot be retired.

<sup>16</sup> See Confidential Attachments 1 and 2 to Verizon’s Response to CALTEL RFI 1-5 and Confidential Attachment 3 to CALTEL RFI 1-3 adopting procedures and internal requirements to implement customer requests for a return to copper facilities. Also, see Verizon Confidential Response to CALTEL Request 1-6 providing data on the number of customers in California that have affirmatively requested a return to copper.

<sup>17</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 on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978, 17145 (2003) (“TRO”), corrected by Errata, 18 FCC Rcd. 19020 (2003) (“TRO Errata”), vacated and remanded in part, affirmed in part, *United States Telecom Ass’n v. FCC*, 359 F.3d 554 (D.C. Cir. 2004)(USTA II) cert. Denied, 125 S.Ct. 313,3165,345 (2004).

<sup>18</sup> Memorandum Opinion and Order, WC Dockets No. 01-338, 03-225, 03-260, and 04-48, FCC 04-254, rel. October 27, 2004.

<sup>19</sup> Although the FCC refers to fiber-to-the-home and abbreviates the architecture as FTTH, it defines the configuration as “fiber-to-the-customer-premises.”

to a very small business or residential customer typically associated with the mass market. Thus, while we adopt loop unbundling rules specific to each loop type, our unbundling obligations and limitations for such loops do not vary based on the customer to be served.<sup>20</sup>

22. The California Commission issued arbitration decisions consistent with this distinction, concluding:

We are persuaded that the FCC's loop unbundling rules are customer-neutral, and that the unbundling rules apply with equal force to every customer served by that loop type.<sup>21</sup>

23. Importantly, however, "fiber" is not a loop *type*, it is a *technology*. The FCC defined DS1 and DS3 loops as enterprise loops, and retained the ILEC's unbundling obligations for enterprise loops, even where the enterprise loops is provisioned over fiber technology:

DS1 loops will be available to requesting carriers, without limitation, regardless of the technology used to provide such loops, e.g., two-wire and four-wire HDSL or SHDSL, fiber optics, or radio, used by the incumbent LEC to provision such loops and regardless of the customer for which the requesting carrier will serve unless otherwise specifically indicated. See supra Part VI.A.4.a.(v) (discussing FTTH). The unbundling obligation associated with DS1 loops is in no way limited by the rules we adopt today with respect to hybrid loops typically used to serve mass market customers. See supra Part VI.A.4.a.(v)(b)(i).<sup>22</sup>

24. As recognized by the California Commission, the FCC's broadband policies are customer-neutral because it is the loop-type that defines whether the policies apply, not the identity of the particular customer being served.<sup>23</sup> The FCC could not have been

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<sup>20</sup> TRO at ¶ 210 (emphasis added).

<sup>21</sup> *Order Granting Limited Rehearing of Decision (D.) 06-01-043 on the Issue Regarding Rules on Fiber-to-the-Home (FTTH), Fiber-to-the-Curb (FTTC) and Hybrid Loop, Modifying the Decision and Denying Rehearing, as Modified, in All Respects*, Application of Pacific Bell Telephone Company, d/b/a SBC California for Generic Proceeding to Implement Changes in Federal Unbundling Rules Under Sections 251 and 252 of the Telecommunications Act of 1996, Decision 07-01-019, January 11, 2007 at 6. See also *Decision Adopting Amendment to Existing Interconnection Agreements*, Petition of Verizon California for Arbitration of an Amendment to Interconnection Agreements with Competitive Local Exchange Carriers and Commercial Mobile Radio Service Providers in California Pursuant to Section 252 of the Communications Act of 1934, as Amended, and the Triennial Review Order, Decision 06-02-035, February 16, 2006.

<sup>22</sup> TRO ¶ 325, footnote 956 (emphasis added).

<sup>23</sup> TRO ¶ 210 (emphasis added) explains this distinction fully and also explains that, although the terms "enterprise" and "mass market" are not intended to *limit* the type of customer that can be served by a particular loop-type, different loop-types are commonly *associated* with particular customer classes:

clearer that its broadband policies did not extend to enterprise loops. When the FCC issued an *Errata* to the TRO changing the definition of a fiber-to-the-home loop as a loop terminating at “a residential unit” to the more generic term “customer premises,” Allegiance Telecom expressed the fear that the FCC may have extended its policies beyond the mass market, thereby restricting access to DS1 loops provisioned over fiber. The FCC responded to this concern by making clear enterprise DS1 loops were unaffected:

Allegiance also claims that it will lose access to DS1 loops. Motion at 11. It based that claim on the theory that when the Commission changed “residence” to end user in the erratum, it removed business customers served by DS-1 loops from the unbundling obligation. That reading of the erratum is incorrect. . . . The text, as well as the rules themselves, makes it clear that DS1 and DS3 loops remain available as UNEs at TELRIC prices.<sup>24</sup>

25. The FCC clearly did *not* adopt a policy of extraordinary incentives to encourage broadband deployment for enterprise loops. The California Commission correctly requires the unbundling of DS1s and DS3s – the most common form of enterprise loop – without regard to the technology being used or the FCC’s broadband policies. As such, even *assuming* that the FCC adopted a copper retirement policy to reinforce its broadband policy, that policy does not include enterprise loops.<sup>25</sup>

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In considering the different customer markets to inform our understanding of competitive carrier loop deployment, we note that our market classifications allow us to conduct our impairment analyses for the various loop types at a more granular level but are not intended to prohibit the use of UNE loops by customers not typically associated with the respective customer market class. For example, business customers typically associated with the enterprise market may require DS0 lines, particularly if they have remote business locations staffed by only a few employees where high-capacity loop facilities are not required. Because a competitive carrier faces the same economic characteristics to serve these customers at their remote locations with a DS0 loop that it faces to serve residential customers served by the same loop type, our customer class distinctions are not intended to preclude a competitive LEC from obtaining an unbundled DS0 loop to serve these business customers. Similarly, a competitive LEC faces the same economic considerations in provisioning a DS1 loop to a large business customer typically associated with the enterprise market that it faces in provisioning that same loop type to a very small business or residential customer typically associated with the mass market. Thus, while we adopt loop unbundling rules specific to each loop type, our unbundling obligations and limitations for such loops do not vary based on the customer to be served.

<sup>24</sup> *Allegiance Telecom, Inc. et al. v. FCC*, D.C. Cir. No. 03-1316, Opposition of the Federal Communications Commission to Allegiance Telecom’s Motion for Stay Pending Review (filed Oct. 31, 2003) at 12.

<sup>25</sup> The principal focus of my declaration has been on tangible facts (*i.e.*, that AT&T and Verizon do *not* retire copper as part of their fiber deployments), and clear policy guidance from

### **The Case for Rulemaking Now**

26. As explained above, AT&T and Verizon's investment behavior demonstrates that copper retirement is not a necessary prerequisite to broadband deployment.<sup>26</sup> AT&T's broadband deployment is *dependent* upon copper facilities, while Verizon's parallel deployment of fiber suggests a market sufficiently large for both networks.<sup>27</sup> The fact that neither carrier has plans to retire copper facilities (at least for the foreseeable future), however, does not lessen the need for the Commission to adopt a framework today that could be used to review any future retirement.

27. There are substantial public-policy questions -- and important issues of fact -- that the California Commission should address before sanctioning the shutdown of the traditional loop network. The ILECs will no doubt point to the FCC's network modification rules as sufficient to protect the interest of California consumers and competitors.<sup>28</sup> These federal rules, however, are seriously deficient because they presume that any opposition to a retirement should be denied unless the FCC rules otherwise "based upon the specific facts and circumstances of the case at issue within 90 days."<sup>29</sup> Importantly, because the federal procedure does not include an opportunity for discovery, the only available "facts" will be those selected by the ILEC.

28. The discovery in this proceeding has dramatically exposed the inherent weakness in the federal rules. But for discovery, this Commission would have had to confront the issues in this proceeding "guided" only by the type of academic speculation AT&T and Verizon submitted with their comments. It was discovery that demonstrated that AT&T and Verizon were deploying fiber *without* plans to retire copper and, perhaps more importantly, that any copper retirement would need to be preceded by a massive forced-migration of traditional phone customers onto Verizon's entertainment network before the copper network could be shut down.

29. At the time the FCC's *TRO* was issued, there was virtually no information concerning fiber overbuilds, much less the interrelationship between that overbuild and

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the FCC (such as, its broadband policy is limited to mass market loops). These facts -- combined with the important policy issues associated with a forced-migration of customers off the traditional network -- support the recommendation of my declaration that the Commission adopt the proposed CALTEL rules so that it may review the legitimacy of any future request with the full authority and information to protect the public interest. The *legal* question as to whether the FCC has preempted state involvement in this issue is addressed in CALTEL's brief.

<sup>26</sup> Verizon acknowledges there is also no technical need to retire copper when deploying fiber. See Verizon Response to CALTEL Request 1-13: "[I]t is technically feasible to leave copper facilities in place where infrastructure capacity is not a factor ...."

<sup>27</sup> As noted earlier, Verizon's fiber facilities commonly share support structure and other facilities with its copper loops.

<sup>28</sup> See, for instance, Verizon Comments at 8.

<sup>29</sup> *TRO* at ¶ 281.

the fate of traditional copper facilities. In fact, the FCC described the entire fiber overbuild scenario as “largely theoretical.”<sup>30</sup>

30. Confronted with a scenario it considered largely theoretical, the FCC adopted theoretically useful copper retirement rules, but made clear that the states remained its partner in this area of evolving policy:

As a final matter, we [the FCC] stress that we are not preempting the ability of any state commission to evaluate an incumbent LEC’s retirement of its copper loops to ensure such retirement complies with any applicable state legal or regulatory requirements.... We expect that the state review process, working in combination with the [Federal Communications] Commission’s network disclosure rules noted above, will address the concerns noted by Corning and others regarding the potential impact of the incumbent LEC retiring its copper loops.<sup>31</sup>

31. Discovery is the only effective mechanism for removing layers of theory to determine the facts beneath. It is because of discovery that the Commission can look beyond the academic speculation of Drs. Aron and Taylor to consider the actual business plans of AT&T and Verizon. And it was discovery that revealed the important interrelationship between copper retirement and the forced migration of traditional phone customers.

32. The principal consequence of CALTEL’s proposed rules is to make sure that a process is in place that would allow this Commission to evaluate what changed circumstance would cause AT&T or Verizon to reach a *different* conclusion than it has reached thus far. The “changed circumstance” most troubling to CALTEL is the added competitive benefit to the ILEC (not included in its current analyses) that could come from shutting down a competitor.

33. As explained in the Panel Declaration of Sarah DeYoung, new technologies are increasing the broadband potential of copper, and the Commission should expect that competitors will deploy broadband capabilities over copper to create enterprise loops.<sup>32</sup> The FCC’s broadband policies (however defined) are specifically targeted at the mass market. There is nothing in Comments or Declarations filed by AT&T and Verizon, however, that suggest – much less concede – this important point. By claiming a federal

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<sup>30</sup> TRO at ¶ 276.

<sup>31</sup> TRO at ¶ 284.

<sup>32</sup> Because of the FCC decision to eliminate UNE-P, most CLECs have had to abandon the mass market (including the two largest mass market competitors, the pre-merger AT&T and MCI). As a result, most CALTEL members (like CLECs nationally) focus primarily on providing integrated voice/broadband services to the enterprise market. This is not to say, however, that the benefits from the rules proposed by CALTEL would be limited to the enterprise market, only that the immediate benefit would likely be concentrated among this customer segment.

“right” to retire copper, these carriers are effectively asserting a federal right to eliminate competition.

34. Carriers that would lease copper to introduce these new technologies are facilities-based, with substantial sunk costs in electronics, transport, back office systems and other start-up costs, even if they do not themselves construct last-mile/first-mile loop facilities. Indeed, the basic economic equation for entrants with respect to *these* costs is similar to that for AT&T, whose architecture also continues to rely on copper.<sup>33</sup> Before incurring these sunk costs, entrants require a stable planning horizon – or, at least, basic protection from the ILEC concluding to withdraw a critical input from the market.

35. The CALTEL Petition represents a reasonable compromise. It does not guarantee continued access to copper; it merely guarantees a *process* that could lead to a fact-based discussion of the issue.<sup>34</sup> There is no effective downside – to the public or the public interest – from such an approach. The ILECs have shown that copper retirement is not linked to fiber deployment. Consequently, there is no evidence that supports the claim

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<sup>33</sup> The principal cost-structure difference between AT&T and a CLEC is that the CLEC must lease copper from AT&T (and thereby incur a monthly recurring cost), while the financial cost to AT&T is based on the undepreciated investment cost that remains to be recovered. The vast majority of AT&T’s loop plant was installed long ago and has been depreciated for years. Although these costs were “sunk” when first incurred, the fact that most of these costs have been recovered means that the incremental sunk cost to Uverse is largely concentrated in the same electronics, transport and back-office investments that an entrant leasing copper would also require.

<sup>34</sup> Importantly, there are issues raised by AT&T and Verizon in the form of academic speculation in their comments that could be factually addressed under the CALTEL rules. For instance, the Commission could evaluate whether the claimed operational cost savings would justify the disruption of forced-migration and retirement, as well as consider whether the then-effective UNE rates would be adequate compensation to keep particular loops in service. On this latter point, Dr. Aron’s declaration, in particular, invites misunderstanding by attempting to initiate a *theoretical* debate as to whether TELRIC theory would produce theoretically compensatory rates (*See* Aron Declaration at ¶ 98 arguing that the “TELRIC concept becomes inapplicable.”). At no point is TELRIC theory the relevant issue – as CALTEL has argued elsewhere, UNE prices should be brought under price cap regulation because, among other concerns, no truly “TELRIC” cost studies exist. The only relevant question to the Commission at the time the question *itself* becomes relevant (that is, when an actual request to retire copper is presented under the CALTEL rules), is whether the then-effective UNE prices remain reasonable relative to the ongoing maintenance costs. Although there is no reason to explore this question *now* (given Verizon has three-times concluded that Dr. Aron’s theoretical benefits from copper retirement do not justify retirement), the Commission may find it instructive to compare the estimated *annual* savings from retiring copper (as currently estimated by Verizon) to the *monthly* UNE rates paid by CLECs. As noted, such a comparison is not necessary to resolve this rulemaking, but it does provide context in which to judge the stridency of Dr. Aron’s advocacy.

that adopting rules requiring the ILEC to demonstrate the public benefit of retiring copper plant would discourage additional fiber deployment.<sup>35</sup>

36. Moreover, the primary motivation for AT&T and Verizon to deploy fiber is the need for an entertainment-quality network to compete head-to-head with cable companies for triple play services in the mass market. That motivation is unaltered by a policy that protects copper from being abandoned, particularly a policy that protects copper used (or useful) as enterprise loops from being retired.<sup>36</sup>

37. The Verizon analysis also documents an issue that was not investigated by the FCC in the *TRO* (where it described the fiber overbuild scenario as “largely theoretical.”)<sup>37</sup> One of the more significant dislocations from “copper retirement” occurs in the *traditional* phone market, because it is these traditional phone customers that must be force-migrated onto fiber loops before the copper network can be shut down. While the forced-migration of the mass market onto Verizon’s entertainment network is not the principal concern of CALTEL today (because CALTEL members focus on enterprise customers), the Commission should be concerned that Verizon can declare its fiber network the winner, even if the market, as measured by the number of consumers that have chosen it, did not.

38. I declare under penalty of perjury under the laws of the state of California that the foregoing is true.

Date: May 9, 2008

Respectfully submitted,

By: /s/Joseph Gillan

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<sup>35</sup> Indeed, the Verizon analysis demonstrates the opposite, because it exposes the basic tension between investing in fiber to serve customers that want it, compared to diverting that capital to force customers onto fiber that are satisfied with their service today.

<sup>36</sup> To the contrary, the incentive is increased to the extent that copper-availability leads others into the triple-play market. On the one hand, AT&T argues that its Uverse network, which relies on copper connections to the customer, fully achieves the broadband benefits sought by the FCC’s mass market policies. If so, however, then that same argument supports the continued availability of copper in the Verizon region to enable a Uverse-like competitor (if not AT&T itself) to deploy services to compete with FiOS (as well as to support another choice in AT&T’s own territory). The fact that AT&T and Verizon have chosen not to compete with one another in the mass market is no reason to precludes others from providing customers choice.

<sup>37</sup> *TRO* at ¶ 276.