

**BEFORE THE PUBLIC UTILITIES COMMISSION OF
THE STATE OF CALIFORNIA**

Order Instituting Investigation into the State of
Competition Among Telecommunications
Providers in California, and to Consider and
Resolve Questions raised in the Limited
Rehearing of Decision 08-09-042.

I.15-11-007
(Filed November 5, 2015)

**REBUTTAL/SUPPLEMENTAL TESTIMONY OF SARAH
DEYOUNG ON BEHALF OF THE CALIFORNIA ASSOCIATION OF
TELECOMMUNICATIONS COMPANIES (CALTEL)**

July 15, 2016

Q.1: Please state your name, title, and business address.

A.1: My name is Sarah DeYoung. I am the President and Executive Director of the California Association of Competitive Telecommunications Companies (CALTEL). My business address is 50 California Street, Suite 1500, San Francisco, California, 94111.

Q.2: Please describe your educational background and work experience.

A.2: I earned a Bachelor of Arts degree from the University of Michigan and a Masters of Management (MBA) from the Kellogg School of Management at Northwestern University.

In 1982, I joined the Bell System's Long Lines Division in Chicago, Illinois. At Divestiture in 1984, I remained an employee of AT&T, and for the next six years held a variety of positions in the Finance, Engineering and Access Management Divisions.

In 1995, I led development of an early template for an interconnection agreement between AT&T and Ameritech in the context of Ameritech's "Customers First" local competition trial. Following passage of the 1996 Telecommunications Act ("Act"), I joined AT&T's Local Services Organization in San Francisco. During the next eight years, I was a part of, and ultimately led, the team that served as AT&T's interface with Pacific Bell (and later with all incumbent local exchange carriers acquired by SBC Communications) to ensure that the market-opening requirements of Sections 251, 252 and 271 of the Act were reasonably attained.

At the time I left AT&T to join CALTEL in 2004, I was the Director responsible for managing the business-to-business relationship between AT&T and SBC Communications. My team supported AT&T's consumer and business services product

management organizations by negotiating and arbitrating interconnection agreements and leveraging regulatory and legal avenues to resolve a wide variety of technical, operational and contractual issues.

Since September, 2004, I have served as CALTEL's President and Executive Director and have prepared and filed comments (as well as verified declarations) in a number of Commission proceedings, focusing in particular on the availability of wholesale inputs in facilitating competitive choice in retail telecommunications markets. I also meet regularly with members of the California State Assembly and State Senate, particularly the chairmen and staff of the Assembly Utilities and Commerce and the Senate Energy, Utilities and Communications Committees, to discuss issues of concern to CALTEL's member companies.

Q.3: Have you testified before the California Public Utilities Commission in the past?

A.3: Yes, I have testified on numerous occasions. I have also actively participated in numerous Commission workshops and panel discussions. In addition, I have testified before other state commissions, the California state legislature, the Federal Communications Commission (FCC) and the Department of Justice (DOJ).

Q.4: For whom are you offering this testimony?

A.4: I am testifying on behalf of CALTEL. CALTEL is a non-profit trade association that represents the interests of wireline competitive local exchange carriers (CLECs) in regulatory proceedings at the Commission and FCC, and on legislative issues before the California state legislature.

Q.5: What is the purpose of your testimony?

A.5: After reviewing the testimony and responses to Information Requests provided by other parties, CALTEL believes that the record needs to be supplemented with regards to Issue 1(b)(iii)(1) “Wholesale Inputs for Wireline Service,” specifically with regards to access to last-mile local loops, in order to be more accurate and complete. While I agree with much of the analysis and data about competition from CLECs in retail markets that has been submitted to date, the testimony and responses of some of the other parties fail to differentiate between the importance and availability of wholesale inputs in connection with residential vs. business markets.¹ In particular, I believe that all of the other parties either oversimplify or ignore the *current* threats to CLECs’ continued access to the primary source of local loops.

In this testimony, I will supplement the record by summarizing the rules and processes that govern access to the local loops that Section 251 of the Act and the FCC’s unbundling rules require incumbent local exchange carriers (ILECs) to make available as unbundled network elements (UNEs), including how rates were set by this Commission in 2004 and have been adjusted since then. Next, I will discuss regulatory and market changes that are likely to reduce or eliminate competitive carriers’ access to those inputs. Then I will address and clarify gaps and inaccuracies in the record with respect to Issue 3(c)(ii)(2), “Market Share in Various Wholesale Markets – Local Loop,” including identification of any comparable substitutes for two-wire UNE loops obtained from ILECs.

¹ Mr. Gillan’s testimony on behalf of Cox, for example, does a good job of making that distinction.

These conclusions are based on analysis of the public versions of the testimony and responses to Information Requests provided on March 15, April 15 and June 1.² After reviewing these public versions, I concluded that I did not need access to any confidential information in order to address the “factual propositions”³ of other parties that pertain to these issues.

Finally, this testimony is based on my over-30 years of experience in the industry, with over 20 of those focused on competition in the local market. I performed as much research as possible in the timeframe permitted to buttress my recollection of key events and activities, but welcome revisions to any factual inaccuracies that I may have inadvertently included.

Q.6: Can you briefly summarize your testimony and recommendations?

A.6: Yes. Perhaps the best way is to first describe what I am not going to cover.

First, I refrain from making policy recommendations and instead focus on supplementing the record to support the data gathering and analysis goals of this proceeding. The regulatory landscape for key wholesale inputs is complicated. Different rules apply based on the type of input provided, the type of carrier providing the input, and other jurisdictional, technical, economic and practical considerations that have evolved over time. It is important for the record to accurately reflect these complications

² Because the preponderance of responses to Information Requests about the wholesale market was not scheduled to be provided until June 1, identification of errors or gaps in the record could only be performed after that date.

³ Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge dated July 1, 2016 at p. 14.

without getting distracted by irrelevant arguments⁴ about where the Commission's role begins and ends with regards to regulating the market for wholesale inputs.

I will also not discuss all aspects of the wholesale market. For example, several parties have invested time and energy describing business data services (BDS),⁵ which is a new term coined by the FCC to describe point-to-point circuits that, when provided by an ILEC, are known as special access services. Other parties claim that the FCC rule that determines that special access circuits with more than 10% interstate usage are jurisdictionally interstate (the 10% rule)⁶ bars the Commission from placing this wholesale input within the scope of this proceeding.⁷ I disagree, but have chosen not to focus my testimony on this aspect of the wholesale market. While there is no question that this wholesale input is of vital importance to all types of telecommunications carriers, including CLECs, I agree with TURN's and Cox's witnesses that the Commission should learn from but not try to replicate the FCC's efforts.⁸ Timing is an important concern: the FCC's efforts now include analysis of the results of a very detailed data collection, an order requiring significant revisions to ILEC special access tariffs, and a Notice of Proposed Rulemaking, or NPRM, that could lead to adoption of a

⁴ See, e.g. Motion of AT&T California and New Cingular Wireless PCS, LLC to Remove Certain Information Requests and Topics of Investigation, filed December 22, 2015 (AT&T December 22 Motion, CALTEL Response to Pending Motions, filed January 8, 2016, and CCTA Response to AT&T Motion, filed January 8, 2016, at footnote 2.

⁵ See, e.g. Supplemental Testimony and Exhibits of Susan M. Baldwin on Behalf of TURN, dated June 1, 2016 ("Baldwin 6-1 Testimony") and Testimony of Sprint Telephony PCS, L.P., dated June 1, 2016 ("Burt 6-1 Testimony").

⁶ See 47 C.F.R. § 36.154(a).

⁷ See, e.g. AT&T's Final Responses to Information Requests, dated June 1, 2016, at p. 12.

⁸ Testimony of Susan Baldwin on Behalf of TURN, dated March 15, 2016, at p. 23 ("Baldwin 3-15 Testimony") and Testimony of Joseph Gillan on Behalf of Cox California Telcom, LLC, dated June 1, 2016, at p. 33 ("Gillan Testimony").

new regulatory framework for BDS services provided by all types of providers—including ILECs, CLECs and cable companies--by year-end.⁹

Other parties have addressed other aspects of the wholesale market, specifically the ability to interconnect with the networks of other providers.¹⁰ While access to non-discriminatory and efficient interconnection arrangements is of vital importance to CLECs, as I and Joseph Gillan testified last year in the Commission’s review of Frontier’s acquisition of the Verizon California ILEC which resulted in a decision finding that IP interconnection agreements must be negotiated and filed subject to the requirements of Section 252,¹¹ I do not believe that the record needs further supplementation on this aspect of the wholesale market, at least not in this phase of the proceeding.

However, I do believe that the record with regards to UNEs is inadequate, especially with regards to two-wire copper circuits (loops) leased by CLECs to connect their networks to the premises of their residential and business customers. In the URF decision, the Commission found these loops to be a “major bottleneck to local telephone competition,”¹² and as I will explain further, this continues to be the case. Nonetheless, for a number of regulatory, technical and economic reasons, continued access to local

⁹ WC Docket No. 16-143, et al., *Business Data Services in an Internet Protocol Environment, et. al.*, Tariff Investigation Order and Further Notice of Proposed Rulemaking, FCC 16-54, issued May 2, 2016 (“BDS Order”)

¹⁰ Gillan Testimony at pp. 27-29, Burt 6-1 Testimony at pp. 14-15.

¹¹ See record of A.15-03-005, including D.15-12-005, Decision Granting Application Subject to Conditions and Approving Related Settlements, A.15-03-005, issued December 3, 2015. See also Gillan Testimony at pp. 27-29.

¹² D.06-08-030 at p. 81, fn 306.

loops is increasingly uncertain even though there is still no comparable substitute for this critical wholesale input.

Issue 1: UNE Loops

Q.7: Can you briefly describe what a UNE loop is and how CLECs use them to provide voice and broadband services to end user customers?

A.7: Yes.

Section 251 requires ILECs like AT&T (formerly SBC California, and before that Pacific Bell) to lease components of their networks to CLECs. The rates are set by state commissions (based on pricing standards set by the FCC) pursuant to negotiated contracts that were arbitrated, if necessary, by state commissions as described in Section 252. In its unbundling rules, the FCC designated these components as “unbundled network elements,” or UNEs.

The FCC identified the local loop as a key UNE. A loop is the physical circuit that connects CLEC equipment collocated in an ILEC central office with customer premise equipment (CPE) located at a customer’s premise. There are generally three components of an ILEC loop: the F1, or feeder portion, the F2, or distribution portion, and the drop.

Loop facilities can be copper, fiber, or a hybrid of copper and fiber. Where all three components are made up of copper facilities, the F1 terminates at a Serving Area Interface (SAI); this type of loop is a “homerun copper loop.” Hybrid loops often occur where copper facilities in the feeder portion of the loop have been replaced with fiber that terminates in a remote terminal (RT) or Video Ready Access Device (VRAD); the latter type is known as Fiber-to-the-Node (FTTN) loops. Fiber loops have been defined by the FCC as loops that rely on fiber facilities in all three components (Fiber-to-the-Premise, or

FTTP, loops), or loops that rely on fiber F1 and F2 facilities and a copper drop that is less than 500 feet long (Fiber-to-the-Curb, or FTTC, loops). The FCC has not required ILECs to unbundle fiber loops, and has adopted rules that limit competitors' access to hybrid loops.

The FCC also identified different types of UNE loops, for which individual rates were set by state commissions. In addition to the two-wire loops that most CLECs purchase today, there are high-capacity loops (DS1s and DS3s) that traditionally were used to serve medium to large business customers. However, due to a technological innovation that has been implemented during the past decade (Ethernet over Copper, or EoC), CLECs can now use electronics to “bond together” multiple two-wire copper loops in order to achieve speeds up to 100 Mbps, two-thirds faster than that provided over a 1.5 Mbps high-capacity DS1 loop.

Finally, there are also sub-categories of two-wire loops, primarily differentiated based on loop characteristics that enable the loop to support delivery of Internet services (i.e. xDSL-capable).

Q.8: What other wholesale components does a CLEC need in order to utilize two-wire UNE loops?

A.8. Facilities-based CLECs own or control their own networks to provide service to end-user customers. These CLECs must invest in significant network assets such as switching equipment, transport facilities, customer service centers, provisioning and maintenance technicians, and Operational Support Systems (OSS). These components can be owned and operated by the CLEC, or obtained as wholesale inputs from other carriers.

In some cases, it makes economic sense for a CLEC to self-provision a local loop to connect its network to a customer premise. For example, CALTEL member Sonic Telecom is deploying or has deployed an FTTP architecture to serve residential customers in Sebastopol, Brentwood and San Francisco.¹³ Other CALTEL members that serve business customers deploy building laterals (fiber loops) to serve a very large tenant (or multiple tenants) in urban commercial buildings. But in the vast majority of cases, self-provisioning does not prove to be economically viable, and the CLEC opts to lease the loop or other last-mile facilities from the ILEC or another wholesale provider.¹⁴

As I will discuss under Issue 3, for CLECs like Sonic that serve residential customers, the only last-mile option other than deploying an FTTP architecture statewide is a two-wire UNE loop from the ILEC. For CLECs that serve business customers, there are other options such as ILEC special access circuits or commercially-available Ethernet circuits that might be available from an ILEC, cable company, or another competitive provider.

Q.9: Can you briefly explain the regulatory framework that governs CLEC access to UNE loops?

A.9: Yes. I will describe at a high level the current regulatory framework, which is the result of a multitude of laws, regulations, orders and court decisions that have been adopted or issued during the past twenty years.

¹³ Public Direct Testimony of Trevor R. Roycroft Ph.D. on Behalf of TURN, dated June 1, 2016, at pp. 91-95. *See also* <http://hoodline.com/2016/02/sonic-s-gigabit-fiber-internet-coming-to-entire-sunset-and-richmond-within-a-year> , <http://www.fiercetelecom.com/story/sonic-one-ups-google-fiber-san-francisco-1-gbps-service-40/2016-02-26>.

¹⁴ *See* BDS Order at ¶ 55. *See also* Baldwin 6-1 Testimony at pp. 3-4 and Gillan Testimony at pp. 32-33.

As I mentioned, two-wire local loops are one of the key UNEs identified by the FCC in its unbundling rules, which were adopted to implement the requirements found in Section 251(c)(3) of the Act. These unbundling rules, which the Act limits to ILECs, were initially adopted shortly after Act's passage, and have been subject to numerous court challenges and remands to the FCC over the years.

The rates for UNE loops are required to be cost-based, using a forward-looking economic cost standard called Total Element Long-Run Incremental Cost, or TELRIC. Development and adoption of individual UNE rates based on this standard was delegated to state commissions, as described further below.

Contracts containing the terms and conditions that apply to CLECs' non-discriminatory access to UNEs are known as Interconnection Agreements, or ICAs, and are required to be negotiated and filed with state commissions pursuant to Section 252 of the Act. There is also an important role for state commissions to play in the arbitration of any disputed contract language. This Commission arbitrated the first generation of Section 252 agreements between Pacific Bell and the pre-merger CLEC entities that were known as AT&T and MCI WorldCom in the late 1990's. Other CLECs participated in the arbitration proceedings and opted into the final agreements. Many of these agreements are expired but continue in full effect (in evergreen status) today.

These ICAs have been amended many times. Whenever the FCC or this Commission adopts new or revised regulations that impact terms and conditions in these agreements, a change-in-law amendment is negotiated and filed. As I will describe further in the discussion of Issue 2 below, there are also factors that impact the

availability or usability of UNE loops without having a direct impact on ICA terms and conditions, such as copper retirement and ILEC maintenance practices.

Q.10: How were the rates for UNE loops set and adjusted?

A.10: As I previously mentioned, UNE rates were set by this Commission based on the pricing standard (TELRIC) adopted by the FCC.

Briefly, initial rates for most UNEs offered by Pacific Bell were adopted in 1997 in the first ICA arbitrations. This was followed by a 1999 decision, D.99-11-050, adopting monthly recurring and non-recurring rates for most UNEs. The rate for a statewide-averaged two-wire loop was set at \$11.70. The Pacific Bell (now AT&T California) rates were adjusted numerous times over the next six years, most notably as a result of a “UNE re-examination” application, A.01-02-024, filed by CLECs (notably AT&T and MCI) in 2001. In 2002, the Commission decided to adopt significantly lower interim rates for a subset of key UNEs, including two-wire loops, while the reexamination was pending. The interim rate for a statewide UNE loop was decreased to \$9.82, subject to true-up.

The month that I joined CALTEL, in September, 2004, the Commission adopted permanent rates for those UNEs included in the reexamination. This was a contentious proceeding, and in addition to the ALJ’s Proposed Decision there were three Alternate Proposed Decisions issued by Commissioners. In the final decision, D.04-09-063, the permanent rate for a statewide two-wire UNE loop was set at \$11.93, but was adjusted slightly the following year as a result of a court remand to \$11.73.

One of my first accomplishments as the new Executive Director of CALTEL was to negotiate a settlement agreement with Pacific Bell (which had merged with SBC, and become known as SBC California) to mitigate the impact of the true-up of UNE rates on small and medium-sized CLECs.

The setting of UNE rates for GTE California, which was acquired by Verizon, followed a separate but similar path. Permanent rates were adopted in March, 2006. The statewide average rate was set at \$13.94 for a two-wire UNE loop.

In early 2005, SBC and Verizon announced planned acquisitions of the two largest CLECs, AT&T and MCI respectively. The Commission opened proceedings to assess the impact of these mergers in which CALTEL participated. In those proceedings, CALTEL argued that the post-merger CLEC industry could no longer afford to invest significant resources in participating in cost proceedings to revisit and adjust UNE rates every three years, and proposed adoption of a price cap mechanism instead. The proposed price cap mechanism was borrowed from the FCC's switched and special access regulatory regimes, and based rate adjustments on annual inflation less an industry-specific productivity factor.

The Commission declined to adopt CALTEL's proposal as a condition of approving the mergers (although UNE rates were temporarily frozen), but when CALTEL re-introduced the proposal in the Verizon UNE cost setting proceeding (which included the issue of reexamination of rates for both major ILECs), SBC California (now renamed AT&T California) and Verizon were encouraged to negotiate settlement agreements to determine how UNE rates might be adjusted going-forward without

holding resource-intensive cost proceedings every three years as originally contemplated by the FCC.

Settlement discussions were successful, and the Commission adopted these settlement agreements in D.09-02-017. The agreement with AT&T ran for seven years and adjusted UNE rates based on inflation subject to an upper and lower cap. The agreement with Verizon did not adopt a price cap mechanism, and simply froze UNE rates for six years.

Last fall, in anticipation of the AT&T agreement's expiration, CALTEL and AT&T negotiated a new agreement that reduced UNE rates for 2016 one final time (by 1% from 2015 rates), and thereafter freezes rates through 2020.¹⁵ CALTEL also negotiated a three-year rate freeze with Frontier as part of its settlement agreement in the Verizon/Frontier acquisition proceeding.¹⁶ The current statewide-averaged rates for two-wire UNE loops are \$11.27 for AT&T and \$13.94 for Verizon.

Thus far in this testimony I have only addressed UNE loops that CLECs lease from AT&T and Verizon (now Frontier). Both Consolidated and (legacy) Frontier note in their responses to Information Requests that they are subject to the Section 251 unbundling obligations and have not received requests to deliver UNEs. After the acquisitions of the former AT&T and MCI CLECs, and the removal of the UNE platform by the FCC as an initial entry mechanism, the remaining CLECs determined that they did not have sufficient interest or resources to pursue a cost proceeding to set permanent

¹⁵ See AT&T Advice Letter 44894, submitted October 1, 2015, deemed accepted and approved as of November 1, 2015.

¹⁶ D.15-12-005, Appendix A, Item A.6, at p. 4.

UNE rates, invest in collocation arrangements, and to develop OSS interfaces to support the necessary ordering, provisioning, maintenance and billing capabilities. As a result CLECs may have ICAs with those ILECs that provide access to interconnection and number portability arrangements, but as a practical matter they do not rely on UNEs in California outside of AT&T's and the former Verizon footprints.

With regard to the territories of the small independent ILECs (Small LECs), the Commission has unfortunately still not opened those territories to permit CLECs to compete there.¹⁷

Issue 2: Threats Facing Continued Access to UNE Loops

Q.11: Could you summarize the current factors that threaten to eliminate or diminish CLECs' ability to continue to rely on access to UNE loops?

A.11. Yes, I will briefly explain these factors, starting with issues that have the greatest potential for impacting CLEC access to two-wire UNE loops.

1) ILEC Loop Maintenance Practices/Service Quality

For the past five and a half years, CALTEL has been describing how ILECs' failure to maintain copper facilities results in poor service quality for CLEC customers, provisioning delays, lost business and decreased competition. CALTEL has repeatedly raised these issues in the context of the Commission's Service Quality proceeding,¹⁸ the

¹⁷ See D.14-12-084, Decision Adopting Rules and Regulations in Phase 1 of the Rulemaking for the California High Cost Fund-A Program. CALTEL also timely filed an Application for Rehearing on January 20, 2015. CALTEL's rehearing application is still pending.

¹⁸ See record of R.11-12-001, Order Instituting Rulemaking to Evaluate Telecommunications Corporations Service Quality Performance and Consider Modification to Service Quality Rules, issued December 1, 2011.

Frontier/Verizon acquisition proceeding,¹⁹ a number of FCC proceedings (including the Technology Transitions proceeding)²⁰ and in legislative activities before the State Senate and State Assembly.

As a current example, CALTEL member companies report to me that over 10% of the 2-wire UNE loops that AT&T delivers in a month are either not installed when reported as delivered, or are unusable. Because AT&T has refused to provide me with access to aggregated CLEC wholesale performance data, I cannot include specific data in the record. But as Commission staff does have access to wholesale data, I urge the Commission to verify this information by looking at the results for Performance Measure 17 (Percentage Troubles in 10 Days).

In some cases, it appears that AT&T is simply reporting the loop as installed when technicians have not yet been dispatched. In other cases, as CWA has discussed in the Service Quality proceeding, technicians are dispatched to swap out bad pair for good (although this may result in putting another customer out of service). In other cases, no good pair can be located, and the CLEC is forced to cancel the order as the customer becomes discouraged and returns to the ILEC or contacts a cable company for service.

Although the Commission adopted performance measures and a remedy plan (for AT&T only) meant to mitigate these types of wholesale performance problems, these measures were negotiated based on the expectation that CLECs would receive service at

¹⁹ See record of A.15-03-005, including D.15-12-005, Decision Granting Application Subject to Conditions and Approving Related Settlements, A.15-03-005, issued December 3, 2015.

²⁰ See record of Technology Transitions et al., GN Docket No. 13-5 et al., Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking, released August 7, 2015 (“Tech Transitions August 2015 Order”).

parity with ILEC retail customers. As CALTEL has explained in the Commission's Service Quality proceeding, if CLECs had imagined that ILECs would provide such increasingly poor service to their own customers, they would have opted to use objective benchmarks rather than parity analogs to measure wholesale performance.²¹

2) Copper Retirement

The FCC first adopted rules governing the ability of ILECs to retire copper facilities when those facilities have been replaced with fiber in the 2003 *Triennial Review Order*.²² Several groups of CLECs filed petitions with the FCC seeking to revisit those rules in 2007, the same year that CALTEL filed a Petition for Rulemaking (P.07-07-009) with this Commission to adopt state-specific rules. Although CALTEL's petition was granted, and some important information was gathered and entered into the record, the Commission for the most part declined to adopt the rules proposed by CALTEL.²³

Last August, in the Technology Transitions proceeding, the FCC finally acted on the 2007 petitions, and revised its copper retirement rules to extend notice deadlines, provide notice to retail as well as wholesale customers, and importantly, find that ILEC failure to maintain copper facilities equates to *de facto* copper retirement which must meet the qualifications for retirement and noticed appropriately.²⁴ However, the FCC

²¹ See, e.g., CALTEL Reply Comments to Assigned Administrative Law Judge's Ruling and Communications Division Staff Report, dated April 17, 2015, at pp. 2-3.

²² CC Docket No. 01-338, et al., Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers* et al., FCC 03-36, released August 21, 2003 ("TRO").

²³ D. 08-11-003, Decision Adopting Process Governing Retirement by Incumbent Local Exchange Carriers of Copper Loops and Related Facilities Used to Provide Telecommunications Services, issued November 13, 2008.

²⁴ See Tech Transitions August 2015 Order.

confirmed that it was retaining “a notice-based regime for copper retirement, in contrast to the approval-based process for a section 214(a) discontinuance of service.”²⁵

The FCC also declined to adopt requirements that ILECs provide comparable wholesale replacements for UNE loops that become unavailable because the underlying copper facility has been retired, as well as a number of other safeguards proposed by CLECs, including issuing a non-binding forecast of copper retirements for the next 12-24 months, maintaining a searchable database of retired copper or copper noticed for retirement, and developing a formal plan that addresses the elimination of access to copper facilities as a result of a natural disaster or emergency.²⁶

Earlier today, the FCC released a subsequent order in the Technology Transitions proceeding which I have not had the opportunity to review.²⁷ From the FCC’s press release, I am aware that one component of the order grants a request for reconsideration that CALTEL member TelePacific Communications filed and which CALTEL supported. While that request addresses service discontinuance that is the result of copper retirement, it will not prevent or mitigate the discontinuance, but will simply ensure that the CLEC does not run afoul of FCC rules as it attempts to deal with the impact.

Back in 2008, when the Commission issued its copper retirement decision, the primary reason for not granting CALTEL’s requests was because the threat of copper retirement were described as “unripe”, “premature” and “unnecessary.” Eight years later,

²⁵ Id at ¶ 18.

²⁶ See Tech Transitions August 2015 Order.

²⁷ Technology Transitions et al., GN Docket No. 13-5 et al., Declaratory Ruling, Second Report and Order, and Order on Reconsideration, released July 15, 2016 (“Tech Transitions July 2016 2015 Order”).

due to the evolution of ILEC networks and the regulatory victories they have achieved, ILECs have the incentive and motive to accelerate the retirement of copper loops. For example, last week Century Link announced that it intended to retire copper in eight states, including mass retirements in Minneapolis-St. Paul, Minnesota and Vancouver, Washington.²⁸

As I previously stated, it is important to note that the impacts of these two primary threats to copper loops—retirement and unusable facilities due to lack of ILEC maintenance—will never be reflected in the terms and conditions of Section 252 agreements. In other words, ILECs can argue that they remain subject to the same unbundling obligations as before but competitors’ ability to take advantage of that access will be diminished or eliminated.

2) Other Potential Threats

There are other threats to continued access to UNE loops that are less likely, but also not hypothetical.

The first is the opportunity for an ILEC to file a petition with the FCC for forbearance from Section 251 obligations. Four petitions were filed between the years 2005-2009, and three of the four were denied by the FCC. CALTEL considered this to be enough of a threat that it sponsored legislation in 2010 that would require the Commission to gather data and participate in any forbearance proceeding that impacted a California metropolitan statistical area (MSA). CALTEL’s sponsored bill, AB 1315

²⁸ See e.g. <http://www.fiercetelecom.com/story/centurylinks-copper-replacement-plan-could-spur-protests-consumers-clecs/2016-07-05>. See also <https://ecfsapi.fcc.gov/file/1063069816022/c%20160330%20CTL%20QC%20791%20FTTH%20Copper%20Retirements%20in%20MN%20&%20WA.pdf>.

(Fuentes), was passed by the legislature, signed by the Governor, and chaptered as P.U.C. Section 716.

A second potential threat is ILEC termination of ICAs that have expired and are in “evergreen” status. Virtually all of the ICAs of CALTEL member companies fall into this category: even though CLECs may wish to update or revise certain terms in agreements that were arbitrated nearly 20 years ago, the time and expense to do so is prohibitive. That is why CALTEL included a term in the settlement agreement negotiated with Frontier last year to allow CLECs to extend the terms of their in-effect ICAs until January 1, 2019.²⁹ Additional risk is associated with the reassessment of the Commission’s governance over telecommunications that is a component of the reforms recently announced by the Governor’s office and state legislature.³⁰ As CALTEL told Assembly Member Gatto in a letter opposing his proposed measure to reorganize and redistribute the Commission’s duties to other state agencies:

With regards to regulation of the wholesale market, the Federal Telecom Act of 1996 (Act), as well as a number of related FCC rules and orders, delegates a number of duties to state commissions. In particular, the CPUC has the duty and authority to arbitrate and enforce interconnection agreements pursuant to Sections 251 and 252 of the Act. The CPUC provides a critical venue for adjudication and resolution of intercarrier disputes that involve critical issues such as local interconnection, the unbundling of network elements, colocation, number portability, and access to rights-of-way, poles and conduits. The Act also requires the CPUC and other state commissions to partner with the FCC in developing policies that preserve competitive markets and remove barriers to competition... Unfortunately, the passage of ACA 11 will create significant uncertainty around the continued existence of the CPUC and its important role with regards to the duties and authority delegated to it in the Act. Any ambiguity regarding how those

²⁹ D.15-12-005, Appendix A, Item A.1, at p. 3.

³⁰ See “Governor Brown, Legislators Announce Sweeping Reforms to California Public Utilities Commission at <https://www.gov.ca.gov/news.php?id=19461> , which includes “Assess State Telecommunications governance by January 1, 2018.

functions will be “reallocated or reassigned” by a future Legislature will create significant business uncertainty for competitive carriers, and will provide significant opportunity for anti-competitive actions by incumbents.

Another potential threat is the opportunity for an ILEC to request a cost proceeding to revisit some or all UNE rates. CALTEL’s regulatory advocacy, and ability to negotiate UNE rate settlement agreements with AT&T and Verizon (now Frontier) that benefit all members of the CLEC industry, ensure that this threat is removed for at least another three to four years.

Finally, Commission rules and policies with regards to the issuance, maintenance or revision of Certificates of Public Convenience and Necessity (CPCNs) also have threatened to disrupt competitors’ access to UNE loops. Following the passage of SB 1161 in 2012, questions were raised in multiple Commission application proceedings about the Commission’s authority to continue to issue, and to not revoke, CPCNs for CLECs that offer VoIP services to some or all of their end-user customers. As CALTEL explained to Commission staff, Commission rules require that a CPCN is a pre-requisite to obtaining access to Section 252 ICAs.³¹ When CALTEL’s requests to intervene were denied, CALTEL sponsored legislation that would clarify the Commission’s CPCN authority with respect to VoIP providers. That legislation, AB 1409 (Bradford), was vetoed by the Governor at the PUC’s urging. Although PUC representatives have apparently backed away from considering changes to CPCN policies based on the type of voice services being offered, CALTEL remains concerned that this threat will move back

³¹ ALJ-Resolution 181, Revises Resolution ALJ-178 Implementing the Provisions of Section 252 of the Telecommunications Act of 1996, issued October 5, 2000 at p. 2: “We also require that any potential Competitive Local Exchange Carrier which intends to make use of these rules must have been granted a Certificate of Public Convenience and Necessity (CPCN), or at least have filed an application for a CPCN, prior to applying to have an interconnection dispute mediated, or an agreement approved or arbitrated.”

to the forefront as the Commission’s authority over VoIP or IP-enabled services is reassessed by the state legislature.³²

Issue 3: Wholesale Market for Local Loops

Q.12: In the face of these threats, are there comparable substitutes for UNE loops available to CLECs?

A.12. It depends.

For CLECs that exclusively serve business customers, the most economic last-mile solution is usually to lease multiple two-wire loops from an ILEC and to bond them together using Ethernet over Copper (EoC) technology. Depending on the type of services desired by an individual business customer, the CLEC may opt to self-provision or use other wholesale inputs such as ILEC special access services, an Ethernet circuit obtained from an ILEC, cable company or competitive provider (where available), or even use fixed wireless connectivity obtained from a number of competitive providers.

As the FCC described at length in the BDS Order, unreasonable and anti-competitive terms and conditions in ILEC special access tariffs is currently the primary barrier to CLECs’ self-provisioning or taking advantage of competitive alternatives from non-ILEC carriers. Limited availability is also an issue: the FCC found that “while non-incumbent LEC affiliated competitive LECs—including, importantly, cable providers—are making great strides in competing to sell Ethernet services, data from the Commission’s business data services mandatory data collection show that these carriers serve no more than 25 percent of buildings with business data services demand over their

³² See “Governor Brown, Legislators Announce Sweeping Reforms to California Public Utilities Commission at <https://www.gov.ca.gov/news.php?id=19461> , which includes “Assess State Telecommunications governance by January 1, 2018.

own networks. Further, the data show that the vast majority of off-net services provided by competitive LECs is provided through either incumbent LEC leased facilities or incumbent LEC UNEs.”³³

For CLECs that serve residential customers, there really is no wholesale alternative to two-wire UNE loops obtained from an ILEC. AT&T witness Dr. Aron provides a list of CLECs whose websites indicate that they provide wholesale inputs, and one of those include CALTEL member companies that utilize excess capacity in their existing networks (i.e. switches and collocated equipment already in place in ILEC central offices) to lease ILEC UNE loops and combine them with local switching capability, to provide a UNE-P-like alternative to other CLECs.³⁴

As I explained previously, if a homerun copper loop is retired or otherwise unusable, ILECs are not required to provide CLECs with access to any fiber loops that may have been deployed. The FCC and courts have also declined to require cable companies to provide unbundled access to local loops.³⁵

A dark fiber loop, which was a defined UNE for which this Commission set rates, could also be used as a substitute for two-wire UNE loops. However, the FCC’s revision of the unbundling rules in 2005 found that competition from CLECs was not impaired

³³ BDS Order at ¶ 91.

³⁴ Testimony of Dr. Debra J. Aron on Behalf of AT&T California, dated June 1, 2016, at pp. 54-56.

³⁵ See Direct Testimony of Lee L. Selwyn on Behalf of the Office of Ratepayer Advocates, dated March 15, 2016, at pp. 69-70.

without access to dark fiber loops, and the rules were revised to limit access to dark fiber transport.³⁶

Access to some of the sub-loop UNEs that were originally defined by the FCC and for which rates were set by this Commission were removed by the FCC in the Triennial Review Order. ILECs are still obligated to unbundle a sub-loop which is made up of the distribution portion of the loop plus the drop, but there are technical and economic barriers to making this a workable option. Specific problems include an exorbitantly high non-recurring rate for ordering and installation (over \$135 per sub-loop), high costs to self-provision fiber to the ILEC SAI or RT, and technical challenges, including space limitations, in collocating equipment within these outside plant structures.

Conclusion

Q.13: Do you have anything you'd like to add in conclusion?

A.13: Yes. I am hopeful that the information I have provided is helpful to the Commission in furtherance of its goals to better understand the state of competition in California. Specifically, while I agree with much of the analysis and data about competition from CLECs in retail markets that has been submitted to date, I felt it was important to supplement the record with regards to two-wire copper circuits (loops) leased by CLECs as wholesale inputs to connect their networks to the premises of their residential and business customers.

³⁶ CC Docket No. 01-338, et al., Order on Remand, *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers* et al., FCC 04-290, released February 4, 2005 (“TRRO”) at ¶¶ 182-185.

In summary, UNE loops remain a critically important wholesale input for which there are limited comparable substitutes, especially for CLECs that serve the residential market. Nonetheless, for the regulatory, technical and economic reasons that I have described, continued access to local loops is increasingly uncertain.

Q.14: Does this conclude your testimony?

A.14. Yes, it does.