BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

IN THE MATTER OF THE CONTINUED COSTING AND PRICING OF UNBUNDLED NETWORK ELEMENTS, TRANSPORT, TERMINATION, AND RESALE	Docket No. UT-003013 (Part B) POST-HEARING BRIEF OF COVAD COMMUNICATIONS COMPANY

I. INTRODUCTION

Covad Communications Company ("Covad") urges this Commission to act promptly to establish costs and prices, and the basic terms and conditions inherent to such costs and prices, necessary to give local competition a chance to succeed in Washington. This Commission has attempted in its generic cost proceedings to establish agendas that will serve to enable competition under the Federal Telecommunications Act (the "Act") and applicable state law. Qwest and Verizon, however, have not always kept pace with the Commission's agendas. In this phase of this docket alone the Commission has seen both Qwest and Verizon try to avoid the issue of DSL line sharing over DLC fed loops. Qwest also failed to submit any testimony on rate design for loop conditioning.

Undoubtedly the ILECs will argue that certain issues are not yet ripe for consideration. While they can certainly make a straight-faced argument for more time, that would delay and could kill the emergence of competition in some markets. Whatever the ILECs' motives may be, the consequence of delay is to perpetuate and extend their monopolies. In the case of DSL service, the ILECs have succeeded in using their incumbency advantages to extend their market power into what could have been a competitive market from the outset. If

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competition is to take hold, the Commission must follow the agenda it has set and not let ILEC foot-dragging set the pace. If the Commission acts aggressively now, the ILECs will, in the future, come prepared to engage the issues, rather than try to avoid them.

II. LEGAL AND POLICY ISSUES

In this docket, the Commission must determine, among other things:[1] (1) the non-recurring prices for loop conditioning; (2) Verizon's non-recurring prices for dark fiber; and (3) the prices for line sharing on DLC/fiber loops. Below are legal and policy considerations which should guide the Commission's determination of these issues.

A. LEGAL ISSUES

1. Telecommunications Act of 1996

In February, 1996, Congress enacted the Telecommunications Act of 1996 (the "Act"). This landmark legislation changed national telecommunications policy from protecting monopolies to promoting competition. See 47 U.S.C. § 151 et seq. In doing so, the Act addressed in detail the relationship between incumbent local exchange companies ("ILECs") and their new competitors. To promote meaningful competition between the ILEC and its competitors, Congress required that network elements necessary for competition be made available at cost-based, nondiscriminatory prices. 47 U.S.C. § 252(d). These principles apply not just to competition in the provision of basic local phone service, but also to competition in the provision of advanced telecommunications services. Section 706 of the Act expresses Congress' intent to:

> [E]ncourage the deployment on a reasonable and timely basis of advanced telecommunications capability of all Americans (including, in particular, elementary and secondary schools and classrooms) by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local

[1] Due to limited resources, Covad will address only the issues in Part B that are of greatest interest to it. Covad's silence on any issue should not be construed as agreement with the ILECs' positions.

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telecommunications markets, or other regulating methods that remove barriers to infrastructure investment.

Congress directed the Federal Communications Commission ("FCC") to promulgate rules for pricing network elements, and directed State commissions to set prices consistent with the principles of the Act and the directives of the FCC.

2. Federal Court Decisions

a. Iowa Utilities II

Although no federal court case directly instructs a commission as to pricing for line sharing, the Eighth Circuit Court of Appeals' July 18, 2000 decision on remand in Iowa Utilities Board v. FCC, 219 F.3d 744 (8th Cir. 2000) ("Iowa Utilities II"), deals with the FCC's rules on pricing UNEs generally. At this time, that ruling has no impact on this proceeding because the Eighth Circuit has ordered a stay of that ruling, pending resolution by the Supreme Court.[2] Thus, the ruling in Iowa Utilities II is not currently effective. Indeed, it may never become effective. The Commission should recall that the Eighth Circuit already voided the FCC's pricing rules once, only to be reversed by the Supreme Court in AT&T Corp. v. Iowa Utilities Board, 525 U.S. 366 (1999).

3. FCC Orders

In its Local Competition Order, the FCC set out rules for state commissions to apply when establishing UNE prices. Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, First Report and Order, 11 FCC Rcd. 15,499, ¶ 1 (1996) ("Local Competition Order"). The FCC adopted a cost-based pricing methodology based on forward-looking economic costs, concluding that this best furthered the goals of the Act. Local Competition Order, ¶ 620. The adoption of a forward-looking cost

[2] The Eighth Circuit issued its order staying that portion of the decision which vacated Section 51.505(b)(1) on September 22, 2000.

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methodology required the FCC to reject claims that UNEs should be priced to recover other costs, including:

> (1) embedded or accounting costs in excess of economic costs; (2) incumbent LECs' opportunity costs; (3) universal service subsidies; and (4) access charges.

Local Competition Order, ¶ 621. To properly capture forward-looking economic costs, the FCC adopted the TELRIC methodology. Local Competition Order, ¶ 672. Because in competitive markets the price of a good or service tends to move towards its long-run economic cost, the FCC expected this pricing methodology to encourage efficient levels of entry and investment. Local Competition Order, ¶¶ 672-75.

The FCC also placed the burden of demonstrating costs of providing UNEs on the ILEC, because the ILEC has access to that information and is better situated to meet that burden:

> We note that incumbent LECs have greater access to the cost information necessary to calculate the incremental cost of the unbundled elements of the network. Given this asymmetric access to cost data, we find that incumbent LECs must prove to the state commission the nature and magnitude of any forward-looking cost that it seeks to recover in the prices of interconnection and unbundled network elements.

Local Competition Order, ¶ 680. This allocation of the burden of proof on costing issues was codified in FCC Rule 51.505. Thus, where the ILEC fails to offer evidence sufficient to prove the appropriateness of its proposed prices, the Commission should reject those prices in full.

When the FCC issued its Line Sharing Order on December 9, 1999, it specifically directed that the price of line sharing UNEs "should be set by states in the same manner as they set the price for other unbundled network elements,"[3] and noted that virtually all states had already adopted and implemented a TELRIC methodology.[4] With regard to the establishment of the price of the high frequency unbundled network element ("HUNE"), the FCC further required

[3] Deployment of Wireline Services Offering Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Third Report and Order, CC Docket No. 98-147 and Fourth Report and Order in CC Docket 96-98, 14 F.C.C.R. 20912, ¶135(1999) ("Line Sharing Order").

[4] Line Sharing Order, ¶ 132.

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that TELRIC principles be used to adopt a reasonable method for determining the shared loop cost. In extending the methodology, the FCC concluded:

> In arbitrations and in setting interim prices, states may require that incumbent LECs charge no more to competitive LECs for access to shared local loops than the amount of loop costs the incumbent LEC allocated to ADSL services when it established its interstate retail rates for those services. This is a straightforward and practical approach for establishing rates consistent with the general pro-competitive purpose underlying the TELRIC principles. We find that establishing the TELRIC of the shared line in this manner does not violate the prohibition in section 51.505(d)(1) of our rules against considering embedded cost in the calculation of the forward looking economic cost of an unbundled network element.

Line Sharing Order, ¶ 139 (emphasis added). The FCC went on to explain the reasons for its determination:

> We find it reasonable to presume that the costs attributed by LECs in the interstate tariff filings to the high-frequency portion of the loop cover the incremental costs of providing xDSL on a loop already in use for voice services. Under the price cap rules for new access services, the recurring charges for such services may not be set below the direct costs of providing the service, which are comparable to incremental costs. The rates the incumbent LECs set for their special access xDSL services should cover those costs. The incumbent LECs filed their cost support for their own special access DSL services before we issued the notice giving rise to this Order compelling line sharing, and they have defended their cost support when challenged in petitions to reject or suspend their tariff filings. Since the incremental loop cost of the high-frequency portion of the loop should be similar to the incremental loop cost of the incumbent LEC's xDSL special access service, this approach should result in the recovery of the incremental loop cost of the high-frequency portion of the loop.

Line Sharing Order, ¶ 140 (footnote omitted) (emphasis added). In a later Order regarding access reform issues, the FCC clarified that this pricing principle for the HUNE is mandatory, not suggestive. The FCC stated:

> The Line Sharing Order concluded that states should not permit incumbent LECs to charge more to competitive LECs for access to shared local loops than the amount of loop costs the incumbent LEC allocated to ADSL services when it established its interstate retail rates for those services.

FCC 00-193, Sixth Report and Order in CC Docket Nos. 96-262 and 94-1, Report and Order in CC Docket No. 99-249, Eleventh Report and Order in CC Docket No. 96-45 (rel. May 31, 2000), at ¶ 98 (emphasis added).

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The FCC established another critical directive for the application of TELRIC principles in its Local Competition Order. The FCC expressly prohibited ILECs from charging competitive local exchange carriers ("CLECs") for costs not caused by the provision of the UNE being priced:

> Only those costs that are incurred in the provision of the network elements in the long run shall be directly attributable to those elements. Costs must be attributed on a cost-causative basis. Costs are causally-related to the network element being provided if the costs are incurred as a direct result of providing the network elements, or can be avoided, in the long run, when the company ceases to provide them.

Local Competition Order, ¶ 691. In addition, the FCC found in the Local Competition Order that embedded costs, opportunity costs, and universal service subsidies are not proper considerations for setting the price of unbundled network elements. Local Competition Order, ¶¶ 704-15. These FCC principles apply in this docket.

4. Washington Law and Prior Commission Orders

Washington State telecommunications policy as declared by the legislature in 1985 provides that it is the policy of the State to:

> (1) Preserve affordable universal telecommunications service;
>
> (2) Maintain and advance the efficiency and availability of telecommunications service;
>
> (3) Insure that customers pay only reasonable charges for telecommunications service;
>
> (4) Insure that rates for noncompetitive telecommunications services do not subsidize the competitive ventures of regulated telecommunications companies;
>
> (5) Promote diversity in the supply of telecommunications services and products in telecommunications markets throughout the state . . . .

RCW 80.36.300.

Properly interpreted and applied, these policies are fully consistent with the Act and applicable FCC orders. Covad's recommendations in this docket will further several of these policies and have no adverse impact on any of them. For example, adopting Covad's

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recommendation to set the interim HUNE price for DLC/fiber loops at $4 in the interim will clearly "advance the efficiency and availability of telecommunications service" and "[p]romote diversity in the supply telecommunications services," but will have no adverse effect on universal service.

Also, the Commission approved a standard for cost models in the prior cost docket, requiring that for UNE pricing, "the inputs 'must be realistic, accurate estimates of all of the actual costs a provider would incur if it built out a new network using the **least cost, forward-looking technology**.'" Eighth Supplemental Order, Generic Cost Docket, Docket Nos. UT-960369, et al., 27 (quoting U S West Brief) (emphasis added). Indeed, the Commission may not only reject inefficient costs and prices for UNEs and collocation, but may also direct the ILECs to provide the most efficient means of collocation of DSLAMs and splitters under its authority to regulate "the rates, services, facilities, and practices" of telecommunications companies. See, e.g., RCW 80.01.040(3); Fourth Supplemental Order, WUTC v. U S West Communications, Inc., Docket Nos. UT-941464, et al. (October 1995) (requiring unbundling, collocation, and interconnection under state law provisions prior to passage of the Act).

B. POLICY ISSUES

The Commission's responsibility in this proceeding is to price UNEs so CLECs have the ability to effectively compete with ILECs in the provision of telecommunications services to Washington consumers. This will be possible only if UNEs are priced at long-run, forward-looking costs, and are non-discriminatory in their application. Ultimately, appropriate pricing mechanisms will benefit consumers, and are in fact necessary to bring consumers the benefits of competition promised in the Act.

The Commission's pricing of line sharing UNEs is especially significant to consumers in the State. Unlike basic "plain old telephone service," xDSL service is currently unavailable to a substantial portion of Washington consumers. As a result, the Commission's efforts in line sharing will not only bring competitive xDSL offerings, but will also expose this

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service to many consumers who previously did not have access to this technology. The introduction of line sharing over DLC loops permits xDSL services to be offered to more residential and small business customers. How the Commission prices the line sharing over DLC loop UNE will in large part determine the breadth of the "digital divide" that separates those with access to high-speed data services and those without such access. When it was discovered the existing loop could deliver high-speed data without any additional loop costs, there was great hope for ubiquitous, low-cost, high-speed data services. If that hope is to be realized, the Commission must continue to price line sharing UNEs using new technologies efficiently, must avoid creating unnecessary costs of providing xDSL service, and must keep the xDSL consumer in the forefront of its public policy concerns.

The Commission should price the line sharing UNEs to promote efficient competition among providers. The FCC ordered line sharing, including line sharing over DLC, to break the ILECs' monopoly hold on the HUNE because it prevented meaningful competition from CLECs who were required to either buy an entire loop or build new facilities. Thus, the Commission's goal here is to establish prices that are cost-based, non-discriminatory, and efficient as between the ILEC and a CLEC wishing to serve a customer by using the HUNE. As a matter of public policy and good economics, the right policy for the Commission is to set prices correctly and let the market choose among alternative technologies.

III. DISCUSSION

A. ISSUE III. A. 1. k. QWEST NON-RECURRING COSTS/RATES FOR LOOP CONDITIONING

After the Commission established Qwest's costs for deloading a 25-pair binder group and bridge tap removal, the Commission asked parties to address in Part III of the previous cost docket, the rate structure to recover the cost of load coil and bridge tap removal. Seventeenth Supplemental Order, WUTC Docket No. UT-960369 at ¶¶ 236-237; see also

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Twenty-Fifth Supplemental Order, WUTC Docket No. UT-960369, at ¶ 100.[5] In the Seventeenth Supplemental Order, at ¶ 528, the Commission ordered:

> Pending the Commission's decision in Phase III on the most appropriate methods for generating loop conditioning cost recovery revenues, U S West's price for load coil removal on 25-pair binder group shall be $304.12 and the price for bridge tap removal at a single location shall be $147.37.

Specifically, the Commission asked whether the Commission should establish a pricing structure for both Verizon and Qwest that spreads the cost of deloading to all loops or whether the cost should be recovered only from the party that requests the activity. Seventeenth Supplemental Order, WUTC Docket No. UT-960369 at ¶¶ 236-237.

In order that costs be equitably distributed among those who will benefit from loop conditioning, Covad requests the Commission to adopt a rate structure that would recover costs on a per-pair basis. Thus, the $304.12 cost established by the Commission for deloading a 25-pair binder group should be recovered on a per-pair basis, resulting in a charge of $12.17 per pair. Exhibit T-1310 at 44.

When ILECs receive a request to deload even a single loop, it is common practice to deload all 25 pairs in the relevant binder group. Id. First, because deloading benefits all of the pairs in the deloaded binder group, the cost of deloading should be recovered equally from each pair. The deloading activity brings this portion of the loop plant up to modern design standards and makes the deloaded pairs available for provision of DSL services by either the ILEC itself or other CLECs. This upgrade to the ILEC network to permit advanced services is an investment that increases the value of the ILEC's loop plant. Id.

Second, recovering the costs from a CLEC for all the pairs in a particular binder group for which deloading, which the Commission ordered for the interim in the previous cost

[5] In Part III of the previous cost docket, several issues before the Commission, including loop conditioning, were deferred to the current proceeding. Transcript at 2025.

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docket,[6] is discriminatory and anticompetitive and violates 47 U.S.C. § 251(c)(3), which requires ILECs to provide UNEs on rates, terms, and conditions that are just, reasonable and nondiscriminatory. This scheme for cost recovery also violates state laws prohibiting discriminatory rates. Exhibit T-1310 at 45. Deloaded loops will have increasing value as the demand for advanced services increases. Id. If a CLEC pays for deloading the entire binder group, but most of the inventory remains in the possession of the ILEC, the CLEC is paradoxically creating free value for the ILEC, which is already in a dominant competitive position in the market. Id. Given that all deloaded pairs have increased value, the cost of deloading should be recovered on a per-pair basis. Id.

Qwest failed to develop and file any of the rate design testimony requested in the Seventeen Supplemental Order in the previous cost docket. Transcript at 1926-1927. Therefore, Qwest has offered no evidence as to why it would not be reasonable and equitable to allocate the costs of loop conditioning to each of the pairs in the binder group.

Also, the Commission should direct that Qwest not be permitted to charge for removing bridge tap and load coils on loops shorter than 18,000 feet because voice grade service on loops of 18,000 feet or less has not required load coils and bridge taps. Exhibit T-1310 at 43. Because loop conditioning on such loops is remedial in nature, serving to bring these loops up to current design standards, such costs should not be recovered from the CLECs. Id. at 44. In fact, Qwest has admitted as much, agreeing to a limited extent in its Settlement Agreement in WUTC Docket UT-991358, to remove non-conforming load coils and bridge taps in Washington. Id. at 44.

[6] See Seventeenth Supplemental Order, WUTC Docket No. UT-960369 at ¶238.

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B. ISSUE III.B. 2.a.6 VERIZON RECURRING COSTS/RATES FOR DARK FIBER

The Commission should reject Verizon's proposed prices for dark fiber and limit the types of costs Verizon can recover from CLECs at this time by excluding any capacity costs for dark fiber from such cost recovery. In determining the costs for dark fiber, the Commission must look closely at the restrictive terms and conditions under which Verizon offers dark fiber.[7] Exhibit T-1300 at 3.

As an initial matter, the only dark fiber Verizon offers to CLECs is spare capacity that will be subject to being taken back by Verizon on 12 months' notice. Exhibit T-1300 at 3. Verizon's proposal to offer dark fiber subject to reclamation by Verizon is similar to interruptible utility service, such as natural gas. Interruptible service has long been priced less than firm service, in part because it costs less to provide.[8] Just as with gas service, "interruptible" dark fiber costs less and should be priced lower accordingly.

Verizon studies reveal that Verizon attempted to study the long-run forward-looking economic cost of using dark fiber, as if Verizon would incur the cost of acquiring that capacity on behalf of the CLEC and dedicate that capacity to the use of the CLECs. Exhibit T-1300 at 4. The record reveals that this is not the case. Verizon is installing fiber to meet its own future needs and offers it to CLECs only as available. CLECs can only request fiber that is already in place and not in use by the ILEC. Exhibit T-1300 at 3. Verizon thus will

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[7] Both Qwest and Verizon appear to improperly read the FCC order so as to make dark fiber available only if it has previously been spliced to a patch panel or fiber distribution panel. Transcript at 2340-2345, 2347-2349; Exhibit T-1136 at 14. This narrow reading of "without removing a splice case" gives the ILEC the ability to deny all unused fiber by simply making splices to the patch panel only for ILEC demand. The FCC limitation was only intended to preclude CLECs from bringing their own fiber into an ILEC's splice case. The ILECs should be required to splice existing fiber in a case to an accessible point, such as a patch panel, to meet both ILEC and CLEC demand.

[8] The service costs less because the network does not have to be sized to meet peak demand.

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never install new dark fiber to meet CLEC demand. Id. Therefore, the CLECs do not impose any capacity costs on Verizon for fiber or related support structures. Id.

Moreover, Verizon is already recovering the costs for any unused spare fiber through application of a fill factor or utilization adjustment to its costs, which has the effect of marking up the cost per fiber recovered through fiber-based services to include the cost of spare, unused fiber. Id. at 4. Under these circumstances, the inclusion of capacity costs in the rates for dark fiber is improper. Exhibit T-1300 at 1. The capacity costs to be eliminated would include costs for the fiber itself, the structure supporting the fiber and the placement of the fiber. Id. at 4.

The recurring costs to CLECs for Verizon dark fiber should include only operations and maintenance costs of the fiber. Exhibit T-1300 at 4. The operation and maintenance costs that should be included in the non-recurring costs are a mileage-related component for inter-office dark fiber or a loop-related component for dark fiber in the loop. Id. at 4.

C. ISSUE III. B. 1. f. VERIZON NON-RECURRING COSTS/RATES FOR LOOP CONDITIONING

With respect to Verizon, Covad requests the Commission to make certain adjustments in Verizon's costs for loop conditioning and to develop a rate structure for loop conditioning identical to that requested above for Qwest.

Verizon's loop conditioning costs should be revised to use identical times for identical activities and to substitute more reasonable time estimates for several activities. In Verizon's cost studies, activities that are common to more than one study have different times attributed to them. Exhibit T-1310 at 46. Moreover, the time allotments themselves are excessive. Id. There is no reason that the times specified for Qwest in the Commission's Eighth Supplemental Order should not be applied to Verizon. Id. at 47. When these times are applied, the revised calculations for Verizon's loop conditioning are $200.31 for load coil removal for a 25-pair binder group and $193.59 and $364.73 respectively for bridge tap removal at single and

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multiple locations. Exhibit T-1310 at 47. These are the costs that should be adopted by the Commission.

With respect to recovery of loop conditioning costs, the cost of deloading a 25-pair binder group should be recovered on a per-pair basis at a cost of $8.01 per pair. Exhibit T-1310 at 47. As discussed above in Section II.A., the cost of removal of load coils should not be allocated entirely to the CLEC making the initial request for deloading, but to each of the pairs. Id. at 44. The remaining deloaded pairs would be available for use by both other CLECs and Verizon itself. Id. Also, the deloading increases the value of the Verizon loop plant. Id. Making the CLEC requesting load coil removal pay the entire cost is discriminatory and would violate both federal and state law. See Section II.A. above.

Finally, as with Qwest, Verizon should not be permitted to charge for bridge tap and load coil removal on loops shorter than 18,000 feet because these devices are unnecessary on such loops and should not have been installed. This issue is briefed in Section II.A. above. Verizon itself has adopted this position in other jurisdictions, acknowledging its responsibility to bring loop plant up to current design criteria. Exhibit T-1310 at 43-44.

D. ISSUE III. B. 2. d. 14 VERIZON RECURRING COSTS/RATES FOR DLC-BASED LOOPS

Covad's recommendations for Verizon's recurring costs and rates for DLC loops are addressed in Section III.E. below. This section discusses Issue V. B., Line Sharing Over DLC loops.

E. ISSUE V. B. LINE SHARING OVER DLC LOOPS

The Third Supplemental Order in this proceeding identified the "costing and pricing of line sharing on fiber loops/DLC systems" as an issue to be addressed in Part B. Third Supplemental Order, WUTC Docket No. UT-003013, at 4. Line sharing is the provision of xDSL-based service by a competitive local exchange carrier ("CLEC") and voiceband service by an incumbent local exchange carrier ("ILEC") on the same loop. Voice and data streams are

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separated at the central office by means of a splitter which routes the data to the Digital Subscriber Line Access Multiplexer ("DSLAM") and the voice to the ILEC circuit switching equipment.

To date in Washington, line sharing has occurred only on DS-0 copper loops.[9] In the newer digital loop carrier ("DLC") network architecture, service is provided over a mixture of traditional copper loop facilities and muxed (concentrated) fiber or copper facilities.[10] The "feeder" portion of the loop (running from the central office to a remote terminal) is on fiber or muxed copper facilities and the "distribution" portion of the loop (running from the remote terminal to the customer premise) is on a copper loop facility. Because this is often the more efficient forward-looking architecture, the Commission in its prior cost docket assumed it would be used on longer loops. In fact, both Qwest and Verizon use DLC technologies today in their networks.

1. The FCC has ordered ILECs to provide CLECs access to line sharing over the entire DLC loop.

The Federal Communications Commission ("FCC") has required ILECs to provide CLECs unbundled access to the high frequency portion of the loop in order to facilitate line sharing pursuant to its authority to identify a minimum list of network elements that must be unbundled on a nationwide basis. Deployment of Wireline Services Offering Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Third Report and Order, CC Docket No. 98-147 and Fourth

[9] A DS-0 loop is traditional loop with a pair of copper wires running unbroken from the CO to the customer premise and no muxing (concentrating) electronic equipment.

[10] Although the forward-looking technology in many cases would be fiber, ILECs have been able to use existing copper facilities equipped with muxing equipment to provide service over the feeder portion of loops. Copper feeder can be muxed to DS-1 or higher capacity levels. This enables ILECs to increase capacity of existing feeder plant without the need to run new fiber or additional copper feeder lines. Whether the muxing technology is copper or fiber-based, it is referred to generically as DLC. Covad's arguments herein refer to DLC generally, whether fiber or copper-based.

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Report and Order in CC Docket 96-98, 14 F.C.C.R. 20912, 20915 (1999) ("Line Sharing Order"). In the Line Sharing Order, the FCC concluded that "lack of access to high frequency portion of the local loop materially diminishes the ability of CLECs to provide certain types of advanced services to residential and small business users, delays broad facilities based market entry, and materially limits the scope and quality of competitor service offerings." Line Sharing Order, 14 F.C.C.R. at 20916. The FCC recognized that line sharing "is vital to the development of competition in the advanced services market, especially for residential and small business users." Id. The FCC also recognized that self-provisioning of loops "is not a viable alternative to the incumbent's unbundled loop because replicating an incumbent's vast and ubiquitous network would be prohibitively expensive and delay competitive entry." Line Sharing Order at ¶ 37.

The FCC made it clear that ILECs are to permit line sharing by CLECs on DLC loops also. In the Line Sharing Order, the FCC concluded that "incumbent LECs are required to unbundle the high frequency portion of the local loop even where the incumbent LEC's voice customer is served by DLC facilities" and must provide unbundled access to the high frequency portion of the loop at the central office and the remote terminal. Line Sharing Order at ¶ 19 (emphasis added). See also Deployment of Wireline Services Offering Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Third Report and Order on Reconsideration and Third Further Notice of Proposed Rulemaking, CC Docket No. 98-147, and Fourth Report and Order on Reconsideration and Sixth Further Notice of Proposed Rulemaking, CC Docket 96-98, at ¶ 8 (released January 19, 2001)("Reconsideration Order"). In the Reconsideration Order, the FCC clarified "that the requirement to provide line sharing applies to the entire loop, even where the incumbent has deployed fiber in the loop (e.g., where the loop is served by a remote terminal)." Id. at ¶10. The FCC stated:

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> Thus, although the high frequency portion of the loop network element is limited by technology, i.e., is only available on a copper loop facility, *access* to that network element is not limited to the copper loop itself. When we concluded in the *Line Sharing Order* that incumbents must provide unbundled access to the high frequency portion of the loop at the remote terminal as well as the central office, we did not intend to limit competitive LECs' access to fiber feeder subloops for line sharing.

Id. (emphasis added). The FCC continued:

> In the absence of this clarification, a competitive LEC might undertake to collocate a DSLAM in an incumbent's central office to provide line-shared xDSL services to customers, only to be told by the incumbent it was migrating those customers to fiber-fed facilities and the competitor would now have to collocate another DSLAM at a remote terminal in order to continue providing line-shared services to those same customers. If our conclusion in the *Line Sharing Order* that incumbents must provide access to the high frequency portion of the loop at the remote terminal in order as well as the central office is to have any meaning, then competitive LECs must have the option to access the loop at either location, not the one that the incumbent chooses as a result of network upgrades entirely under its own control. This approach is consistent with the dual goals expressed in the *Line Sharing Order* of allowing incumbents to deploy whatever network architecture they deem to be most efficient, while also requiring them to engage in good faith negotiations regarding their unbundling obligations.

Id. at ¶ 11 (emphasis added).

2. Qwest's proposed access to line sharing on its DLC network does not comply with federal requirements.

Qwest has begun its rollout of its own retail DSL service over DLC fed loops. E.g., Exh. 1097. Qwest has decided on a network architecture that will require deployment of DSLAM's and splitters at feeder/distribution interfaces ("FDI"), where the copper and fiber or muxed copper portions of the loop interface. In fact, Qwest publicly announced last week that its retail DSL service is being extended to DLC loops to permit Qwest to provide DSL service to more of its customers. See Appendix 1. For Qwest's competitors, data LECs ("DLECs"), Qwest has unilaterally proposed that DLECs must place their DSLAM and splitters at each FDI in a remote terminal, termed a "DA Hotel," in order to be able to compete for the retail customer with the same geographic reach. Transcript at 2213-2214; Exhibit 1098. Although the FCC made it clear that DLECs are entitle to line sharing over the entire DLC based loop, Qwest admitted that

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with its DA Hotel proposal the CLEC would only be able to share the distribution portion of the loop, not the feeder. Transcript at 2224-2225.

On top of the expense of additional collocation space, power, and DSLAMs at all the remote terminals, Covad and other CLECs would have to purchase a dedicated circuit to transport data to the central office. Transcript at 2224-2225. Not surprisingly, the CLECs have not indicated support for this expensive and burdensome proposal. Transcript at 2242. Apart from the fact it is not economically feasible, this unilateral proposal by Qwest is in violation of the FCC's clear directive in the Reconsideration Order that CLECs should not be forced to collocate DSLAMs at remote terminals. Indeed, the FCC based its decision on a finding that collocation at remotes is likely to be "costly, time consuming and often unavailable." Reconsideration Order at ¶ 13.

Initially, Qwest is proposing DA Hotels at 23 remote terminals in Washington. Transcript at 2215. Mr. Hubbard testified for Qwest that there are at least ten times as many FDI's as there are central offices. Transcript at 2336. Under Qwest's proposal, the CLEC would not only have to place equipment at each FDI, where it has customers, it would also have to retain a DSLAM in the central office to serve the copper loops that are provisioned from there. Transcript at 2264. If a CLEC has to locate ten times as many DSLAMs and splitters to serve the same area currently served by the DSLAM and splitter at the central office, the CLEC could experience a 1000 percent increase in equipment costs to provide DSL service to the same number of potential customers. In addition, CLECs will have to pay for space, power, and FDI terminations for these remote terminals. Exhibit 1098 at 7-11.

Qwest is also asking CLECs to make upfront commitments, including financial commitments, to participate and obtain space at remote terminals. Exhibit 1098 at 19; Transcript at 2242-2243. Because Qwest is building space at the FDI based on upfront commitments and does not assure that there will be space available in the future, future entrants as well as entrants

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that do not have the financing or the ability to make commitments now will not be assured of the ability to obtain space later to achieve entry into new geographic areas.

The FCC anticipated the anticompetitive harm from proposals such as Qwest's that would require collocation at remote terminals when it clarified that CLECs should be able to access fiber loops for line sharing at the central office. Specifically the FCC stated:

> We provide this clarification because it would be inconsistent with the intent of the Line Sharing Order and the statutory goals behind sections 706 and 251 of the Telecommunications Act of 1996 to permit increased deployment of fiber-based networks by ILECs to unduly inhibit the competitive provision of xDSL services. This clarification promotes the 1996 Act's goal of rapid deployment of advanced services because it makes clear that competitive LECs have the flexibility to engage in line sharing using DSLAM facilities that they have already deployed in central offices rather than having to duplicate those facilities at remote terminals.

Reconsideration Order at ¶ 13.

This Commission should not let Qwest or Verizon evade their obligation to permit CLECs to line share over the entire loop. Under the FCC's orders, Qwest may not force DLECs to collocate a DSLAM at each remote terminal. As the FCC recognized, the smaller number of customers served at remote terminals by the CLEC means there is insufficient economy of density for the CLECs to make it cost-effective to locate DSLAMs there. The FCC further found that CLECs will be unable to compete with the ILEC if they are forced to do so. Indeed, Qwest's own witness testified:

> I seriously doubt that a CLEC is going to go out and do the expense of remotely locating, putting equipment into a DA hotel, if they're not going to serve a large number of customers. It just doesn't make sense.

Transcript at 2225.

Deployment of DSLAMs at remote terminals presents an entirely different situation for an ILEC. When an ILEC deploys a DSLAM at a remote terminal in a neighborhood, where it is already serving most of the voice subscribers, it can immediately realize the cost-savings of scale and density from that architecture. See Exhibit T-1301 at 4. Regulatory measures, as required by the local competition provisions of the 1996 Act, must be

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adopted to compel ILECs to share economies of density with new entrants if there is to be competition within a reasonable time. Id. at 3.

3. The Commission Should Act Now to Establish Parity Between the ILECs and CLECs for DSL Services

Costing and pricing over DLC systems was to be considered in this docket. Without submitting cost data to the Commission for review in this docket, Qwest has adopted and is proceeding to install a DSL over DLC network architecture that would impose major upfront investment costs on CLECs. At the same time, Qwest has been delaying rollout of the wholesale offerings for DLC loops until the retail product is rolled out. Transcript at 2213. Qwest appears to have unilaterally established costs that it is intending to charge CLECs to access its loops at remote terminals. Exhibit 1098. Thus, Qwest is intending to offer its retail product prior to costs and prices being approved for CLECs. Transcript at 2213.

It is clear that under the Qwest's plan, there will be a substantial delay before there will be CLEC entry into the DSL over DLC market because Qwest's proposal is not feasible for the CLECs. At best there are substantial issues to be addressed with respect to line sharing over DLC. This will allow Qwest to gain a significant headstart in acquiring DSL market share because there will be no competition from CLECs. Indeed, Qwest's advantage of being able to enter the market first, free of any competition may well give Qwest an insurmountable lead. Unfortunately, this is not the first time Qwest has bestowed the "first to market" advantage on itself. When Qwest offered its own retail DSL offerings based on line sharing over copper loops, it initially refused CLECs access to line sharing arrangements. By early 2000, Qwest had captured more than 80 percent of the DSL market in Washington, despite having entered the market later than its competitors. Exhibit T-1301 at 8. This discriminatory treatment of CLECs with respect to line sharing over DLC is likely to permit Qwest to obtain the same result of locking in a substantial share of the market.

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In order that parity be preserved, Covad proposes that the Commission order Qwest to provide remote terminal access to its DLC functionality via what Covad calls "plug and play." "Plug and play" is a shorthand description for a CLEC being able to virtually collocate line card in the ILEC's remote DSLAM.[11] The advantage of the plug and play proposal is that it preserves Qwest's ability to choose its network architecture, but nevertheless provides the DLEC with the functionality of line sharing over the hybrid fiber/copper loop without the tremendous expense and inefficiency of DLECs having to collocate full DSLAMs at remote terminals. Thus plug and play complies fully with the FCC's January 19, 2001 order.

This Commission has authority to implement plug and play on either an interim or permanent basis to ensure competitive parity and timely CLEC access to customers serve by DLC fed loops. For example, under 47 U.S.C. § 251(d)(3) the Commission can, establish additional unbundling obligations for ILEC's. Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, Third Report and Order, 15 F.C.C.R. 3696, ¶ 154 (1999) ("UNE Remand Order"). The FCC recognized that states are particularly well-suited to take the steps necessary to ensure that remote terminal access be provided in a manner that encourages competition:

> It is impossible to predict every deployment scenario or the difficulties that might arise in the provision of the high frequency loop spectrum element. States may take action to promote our overarching policies, where it is consistent with the rules established in this proceeding. We believe this approach will permit the states to benefit from the informed debate on the record in this proceeding, and will promote consistency in federal and state regulations.

Line Sharing Order, 14 F.C.C.R. 20912, at ¶ 225. State commissions in Illinois, Pennsylvania, Maryland, Texas, New York and Kansas have either ordered unbundling access to DLC architectures and/or functionalities like remote DSLAMs, or are considering taking such steps.

[11] Note that this is only necessary if the ILEC chooses the remote DSLAM architecture as has Qwest. Verizon is evaluating next generation DLC or "NGDLC" which is designed to facilitate line sharing.

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The Illinois Commerce Commission specifically ordered SBC to permit CLECs to collocate line cards at DLC facilities. Arbitration Decision on Rehearing, Illinois Commerce Commission, Docket Nos. 00-0312-00-0313 at 34-35 (February 15, 2001).

The Commission should ensure that CLECs are given meaningful and cost-effective access to the DLC architecture by ordering the ILECs to permit use of line cards by CLECs.[12] The record shows that this is a feasible technology. Transcript at 2340. The manufacturer of Qwest's Litespan 2000 DLC, which Qwest has deployed in Washington, has developed software capabilities for integrating the entire loop that may permit line cards to be used instead of placement of additional equipment at remote terminals. Transcript at 2336-2338. This will permit CLECs to share in the economies of density and scale that the ILECs realize in their network architecture because it eliminates the need for CLECs to locate and maintain expensive equipment at a numerous remote locations.

4. The Commission must act now to establish pricing for line sharing over DLC.

The Commission should order Washington ILECs to put into effect TELRIC-based UNE rates for line sharing over DLC loops. The forward-looking, cost-effective technology to accomplish line sharing is Next Generation Digital Loop Carrier ("NGDLC"), which permits line cards to be used in place of equipment to achieve DSLAM and splitting functionality required for line sharing over the entire local loop. Transcript at 3853.

Covad proposes that the Commission require ILECs to permit CLECs to line share over DLC loops at the UNE rates established for line sharing in the Thirteenth Supplemental Order in this docket until a permanent rate can be established. Transcript at 3852. The $4.00 rate established for line sharing should be a reasonable interim rate to cover the

[12] Verizon has not yet developed a network architecture for DSL services, but is expecting that it will use the Next Generation Digital Loop Carrier("NGDLC"), which permits line sharing of the fiber loop through use of line cards.

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efficient forward-looking costs if CLECs are permitted to use line cards to achieve virtual collocation at the remote terminals.[13] Based on NGDLC, which is the technology that should be assumed for UNE costing purposes, the incremental cost of line sharing should be low. On a permanent basis, the Commission should direct the ILECs to submit cost studies that comply with current FCC rules by using the least cost forward-looking technology, rather than the technology the ILECs may prefer to install and which properly share with the DLECs the benefits of the economies of scope and scale they enjoy.

IV. CONCLUSION

The issues that the Commission identified and requested the parties to address in this part of the docket are ripe for decision. While some rate elements may need to determined on an interim basis due to ILEC failure to submit cost studies, that is preferable to delaying implementation of any rate at all. In this competitive climate, CLECs cannot afford further delays in obtaining necessary network elements. If the public is ever to achieve the benefits of competition, the Commission must ensure that CLECs have reasonably-priced network elements now.

Respectfully submitted this 29th day of May, 2001.

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[13] Even based on Qwest's actual architecture, the $4.00 is a reasonable interim charge for line sharing over fiber. The DLECs will provide the line card and pay non-recurring charges for connections equivalent to what they would pay for a central office collocation. So all the $4.00 rate needs to cover is a portion of the remote DSLAM, power, ATM switching at the CO to get the data traffic to Covad's network and a share of the feeder portion of the loop.

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