Before the

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of The Continued Costing and Pricing of Unbundled Network Elements and Transport and Termination	)	Docket No. UT-003013

DIRECT TESTIMONY OF RICHARD CABE ON BEHALF OF RHYTHMS LINKS INC. AND COVAD COMMUNICATIONS COMPANY

May 19, 2000

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LAWYERS
601 UNION STREET, SUITE 5450
SEATTLE, WASHINGTON 98101-2327
(206) 623-4711

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Q. Please state your name and business address.

A. My name is Richard Cabe. My business address is 219 I Street, Salida, Colorado.

Q. Dr. Cabe, please briefly describe your professional background.

A. I am an economist in private practice, specializing in economic analysis of regulatory matters in the telecommunications industry. I have presented testimony in matters concerning competition in the telecommunications industry to the public utility commissions of Alabama, Arizona, Colorado, Florida, Georgia, Iowa, Kentucky, Louisiana, Mississippi, New Mexico, North Carolina, Oregon, South Carolina, Tennessee, Texas, Utah and Washington. I have also assisted in preparation of comments filed before the FCC. Until May of 1999, I was employed as Associate Professor of Economics and International Business at New Mexico State University. In that position, I taught graduate and undergraduate economics courses and arranged the telecommunications curriculum for conferences sponsored by the Center for Public Utilities. Over the last several years, I offered graduate courses in Industrial Organization, Microeconomic Theory, Antitrust and Monopoly Power, Game Theory, Public Utilities Regulation, and Managerial Economics for MBA students. My experience with telecommunications regulation began when I was employed by

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this Commission. During my employment at the Washington Commission, I served as a staff member to the Federal - State Joint Board in CC Docket No. 86-297. When I left the Washington Commission staff to complete my doctoral degree, my title was Telecommunications Regulatory Flexibility Manager. Additional information concerning my qualifications is provided as Exhibit RC-2.

Q. Dr. Cabe, what is the purpose of your testimony?

A. Rhythms Links Inc. ("Rhythms") and Covad Communications Company ("Covad") have asked me to present my recommendation to the Commission regarding the pricing and underlying cost support for line-sharing-related unbundled network elements.

Q. What criteria must the prices for unbundled network elements and interconnection pertaining to line sharing meet?

A. Prices for line-sharing elements and related interconnection arrangements must meet the criteria established in the Telecommunications Act of 1996 ("Act") that prices for unbundled network elements be cost-based and nondiscriminatory.[1] The FCC has previously determined, and I agree, that prices based on the Total Element Long Run Incremental Cost ("TELRIC") methodology meet these

[1] *Pub. L. 104-104, Title VII, § 252(d)(1), Feb. 8, 1996, 110 Stat. 153 (hereinafter referred to as the "Act").*

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criteria.[2] The FCC's *Third Report and Order*[3] has provided additional guidance concerning the application of TELRIC principles to derive prices for line sharing.

Q. Are there other public policy goals or concerns that are important to consider in setting prices for line-sharing elements and related interconnection arrangements?

A. Yes. The Commission should evaluate the parties' alternative proposals for prices related to line sharing in light of the public policy imperative to promote advanced services, as stated in Section 706 of the Act. This proceeding offers the Commission an opportunity to secure an important benefit of the Act for all Washington consumers — the delivery of innovative services. Adoption of the Act would have made little sense if Congress did not envision that a competitive local exchange market would deliver innovative, improved services, at better prices, to Washington consumers than did the previous single-provider market. Yet much of the activity surrounding implementation of the Telecommunications Act to date has focused on the steps necessary to enable competition for the types of services that U S WEST and GTE already offer ubiquitously to their retail customers. In contrast, this proceeding's consideration of line sharing and related prices focuses on the actions needed to facilitate competition for advanced

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[2] *First Report and Order, In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 (CC Docket No. 96-98), adopted August 1, 1996, (hereinafter referred to as "First Report and Order") at ¶ 672, codified in 47 C.F.R. § 51.505.*

[3] *Third Report and Order in CC Docket No. 98-147 and Fourth Report and Order in CC Docket No. 96-98, FCC 99-355, adopted November 18, 1999, released December 9, 1999 (hereinafter referred to as "Third Report and Order*").

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telecommunications services that many Washington consumers - and in particular the residential customer - cannot yet obtain. The Commission's decisions in this proceeding will help to determine whether competitive market forces will drive the spread of such services to all Washington consumers as quickly as possible or whether monopolistic pricing will stunt their growth.

DSL is an emerging technology with great promise for meeting the need for advanced telecommunications services. To carry out the policy imperative to promote the spread of advanced services, this Commission must ensure that the prices, terms and conditions under which Washington ILECs offer the unbundled network elements and interconnection arrangements necessary to effectuate line sharing do not discourage competitive entry into this market.

The potential for new entrants to accelerate the delivery of competitive benefits to consumers of DSL-based services depends on the new entrants' ability to obtain access to customers on terms and conditions that place them on an even competitive footing with incumbents. The manner in which the Commission resolves issues related to pricing for the unblundled network elements necessary for line sharing will substantially affect the ability of new entrants to compete with ILECs, especially in providing DSL services to residential and small business customers.

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Q. How can the Commission best ensure that the costs and prices adopted in this proceeding will facilitate the competitive offering of DSL-based services to the benefit of all Washington consumers?

A. The Commission can best facilitate emerging competition for DSL-based services in Washington by adopting recurring and nonrecurring charges for line-sharing-related elements and interconnection arrangements that reflect a rigorous application of TELRIC principles.

The remainder of my testimony will identify the unbundled network elements that are required for line sharing and discuss issues that arise in calculating TELRIC-based recurring and nonrecurring charges for those unbundled network elements and interconnection arrangements.

Q. What is line sharing?

A. Line sharing occurs when DSL services are provisioned across a local loop simultaneously with analog voice services. The DSL services are provided over frequencies higher than those used by analog, circuit- switched voice transmissions. While ILECs like U S WEST and GTE have line shared with themselves since they began deploying DSL services, CLECs only recently obtained the same rights under the FCC's *Third Report and Order* in CC Docket 98-147. Michael Zulevic, a Director of Network Deployment for Covad and a former U S WEST central office technician, describes the technical issues surrounding line sharing in more detail in his testimony filed concurrently with

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mine.

Q. Can CLECs provide DSL services through line sharing in Washington?

A. Yes. I understand that a coalition of CLECs negotiated an interim line sharing agreement with U S WEST that was signed on April 24, 2000. A copy of the agreement is attached as Exhibit RC-3 to my testimony. The agreement contains an "opt-in" clause so that CLECs other than the original signatories can benefit from it. Covad and Rhythms are both original signatories to the agreement. I am not aware of any line sharing agreements with GTE and do not believe that GTE is currently making line sharing available to any CLEC in Washington.

Q. Will line sharing work over both copper and fiber-fed loops?

A. Yes. The technically feasible options for line sharing differ depending on whether the existing loop facility is all-copper from the customer premises to the central office ("home-run copper") or copper from the customer premises to a digital loop carrier ("DLC") facility and then fiber from the DLC to the central office ("fiber-fed loop"). In the latter case, the technically feasible options differ depending on whether the DLC is DSL-compatible or not. Forward-looking DLC equipment incorporates the DSLAM/splitter function into line cards that are placed in the DLC. Alternatively, carriers can physically or virtually collocate their own DSLAM functionality at ILEC Remote Terminal ("RT").

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Q. Does your testimony address pricing for both technically feasible options?

A. No. Although the FCC did require the ILECs to provide line sharing over fiber fed loops, there is not yet any agreement in place that I am aware of that will implement that part of the order in Washington. It is also my understanding that the network architecture for line sharing through fiber-fed loops in Washington has not yet been determined. Accordingly, it is premature to address the cost of line sharing through fiber fed loops in Washington. Instead, I recommend that the Commission defer consideration of this issue until it is ripe.

My present testimony is restricted to discussion of rate elements for line-sharing over home-run copper. By establishing these prices on a expedited schedule, the Commission will allow competitors such as Rhythms and Covad to initiate line sharing at reasonable prices, on at least all-copper loops, more quickly than would otherwise be possible.

III. THE COMMISSION SHOULD ADOPT RHYTHMS' AND COVAD'S PROPOSED PRICES FOR UNBUNDLED NETWORK ELEMENTS AND INTERCONNECTION ARRANGEMENTS RELATED TO LINE SHARING.

Q. What loop functionality must be available to Rhythms and Covad to enable them to provide DSL-based services over the same loop that ILECs use to

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provide voice services?

A. Pursuant to the FCC's *Third Report and Order* in CC Docket 98-147, incumbent local exchange carriers must make the high-bandwidth portion of the local loop available to competitors such as Rhythms and Covad so that they may offer DSL-based services in a line-sharing mode.[4]

Q. Is it economically meaningful to identify a unique forward-looking economic cost associated with the high-bandwidth portion of the loop as opposed to the remaining bandwidth of the same loop?

A. No. ILECs incur the same forward-looking economic cost for feeder, distribution and loop termination facilities whether they provide an entire loop, just the high-bandwidth portion of the loop or just the remaining bandwidth of the same loop. In economic parlance, the vast majority of the costs of providing various portions of the loop bandwidth are joint or "shared" costs.[5]

There is no one economically correct way to identify a specific portion of the joint cost of the loop with a specific portion of that loop's bandwidth. Thus, there is no "correct" allocation of joint loop costs between the high-bandwidth and voice-grade portions of the loop.

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[4] *Third Report and Order at ¶ 26.*

[5] *In the home-run copper scenario, the ILEC may also incur some incremental cost if the ILEC provides a stand-alone splitter for use by the CLECs.*

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Q. Given that the vast majority of costs associated with line sharing are joint with the costs of providing the voice portion of the loop, how should the Commission set prices for the high-bandwidth portion of the local loop?

A. The Commission should focus on the nondiscrimination requirement of the Act. That is, the Commission should set the price for use of the high-bandwidth portion of the local loop so that an unaffiliated competitor that is equally efficient as ILEC's data division or affiliate in supplying the competitively provided portions of DSL-based services, such as the customer premises equipment and DSLAM, has the same opportunity to earn an overall corporate profit from the offering of DSL-based services as does the ILEC and its parent company.[6]

Q. How can the Commission establish non-discriminatory recurring charges for the high-bandwidth portion of the local loop?

A. The FCC's *Third Report and Order* provides a simple prescription for establishing a price for line sharing:

> We conclude that, 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

[6] *In proposing this standard, I presume that neither the ILEC nor its data affiliate has any unfair competitive advantage as a result of discriminatory access to the functionality of unbundled network elements.*

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> purpose underlying the TELRIC principles. We find that establishing the TELRIC of the shared line in this manner does not violate the prohibition of 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.[7]

The FCC went on to note that:

> 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 recutting 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. [8]

To the best of my knowledge, Washington ILEC's tariffs for DSL allocate no loop costs to DSL service. In fact, U S WEST has admitted in public discovery responses in Minnesota that "In the retail service environment for MegaBit service, the cost of the loop is attributed to basic service, *and therefore there is no incremental cost of the loop attributed to MegaBit.*"[9] GTE also admitted that "Since ADSL employs the existing loop for new applications, the costs of the loop are already recovered through existing rates . . . .Allocating a greater portion of loop costs to the ADSL service would only force subscribers to pay a higher, noncompetitive rate for their ADSL

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[7] *Third Report and Order at ¶ 139, footnotes omitted.*

[8] *Third Report and Order at ¶ 140, footnote omitted.*

[9] *U S WEST March 17, 2000 Response to Covad Information Request No. 33 in Minnesota Public Utilities Commission Docket No. P421/C1-99-1665, emphasis added. A copy of the response is attached as Exhibit RC-4 to my testimony.*

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service, with little possibility of any corresponding reductions in local rates. U S WEST and GTE are not the only ILECs to acknowledge that the incremental cost of the line shared loop for providing DSL is $0. As GTE has stated, "Since ADSL employs the existing loop for new applications, the costs of the loop are already recovered through existing rates . . . Allocating a greater portion of loop costs to the ADSL service would only force subscribers to pay a higher, noncompetitive rate for their ADSL service, with little possibility of any corresponding reductions in local rates. [10] For example, SBC stated in pleadings on behalf of Pacific Bell before the FCC that:

> Several petitioners contend that Pacific must assign outside plant (local loop) costs to its ADSL service. But Commission [FCC] rules impose no such requirement. FCC Rule 61.38 requires LECs to identify the direct cost to provide the proposed new service. Pacific proposes to transmit ADSL over loops under tariffs already approved by the Commission and state regulators. *Loop costs therefore contribute nothing to the direct cost of ADSL service*. Pacific has offered a low-speed data-over-voice (DOV) service as part of its Generic Digital Tariff (GDT) product line in the interstate tariff since 1992. Cost allocation issues for DOV services were settled long ago.[11]

Bell Atlantic has also argued against imputation of any loop costs when a loop is used to supply both basic exchange service and DSL-based services, stating that:

> ... the fact is that the cost of unbundled loops and similar network elements is not an incremental cost of DSL, because it does not reflect new costs incurred to offer that service. Therefore, there are no loop costs to be imputed to DSL. [citing Alfred E. Kahn, *Letting Go: Deregulating the Process of Deregulation*, at 78] ("if indeed the costs of the loop do not vary depending upon the number of local or toll calls placed on it, then incorporating some

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[10] *GTE's Reply, In the Matter of GTE Telephone Operating Companies Tariff FCC No. 1, Transmittal No. 1148, May 28, 1998, at 18 (footnote omitted).*

[11] *Reply of Pacific Bell, In the Matter of Pacific Bell, Pacific Tariff FCC No. 128, Transmittal No. 1986, Pacific's ADSL Service, June 26, 1998, at 15 (footnotes omitted emphasis added).*

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> portion of those costs in the prices for those uses of it … inefficiently discourages that usage.")

> ... the facilities in question are multi-use facilities, capable of supporting a variety of services. As such, *the cost of the facilities are already recovered in state-regulated rates for all of the other services that historically have been provided over them, including local dialtone voice services. Any requirement to impute loop costs to DSL would artificially inflate the cost of that service, place Bell Atlantic's DSL service at a competitive disadvantage, and deprive consumers of truly competitive pricing for these services*.…[12]

The ADSL tariffs in question addressed the home-run copper scenario. Thus, unaffiliated competitors should be able to obtain the high-frequency portion of the loop without any charge for home-run copper loops. Both Bell Atlantic and Bell South have agreed as much. In a proceeding before the New York Public Service Commission, Bell Atlantic stated:

> BA-NY's cost studies for its retail, interstate, ADSL-based service (Infospeed DSL), did not include any allocation of loop costs, and accordingly BA-NY does not now propose to allocate any loop costs to its line-sharing rates.[13]

Similarly, BellSouth stated in its permanent loop rate proposal in North Carolina that "The New Entrants state that 'no cost should be attributed to the loop facility over which line sharing will be provided.' (New Entrants Proposal at 2.) BellSouth agrees with this proposition and thus its cost studies do not reflect

[12] *Bell Atlantic Telephone Companies, Tariff FCC No 1, Transmittal No. 1076, CC Docket No. 98-168, Bell Atlantic's Direct Case, at 13, emphasis supplied.*
[13] *Bell Atlantic – New York's Initial Brief on Costs and Rates for Line Sharing, filed in New York Public Service Commission ("NYPSC") Case 98-C-1357, April 28, 2000, at 12-13.*

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costs attributed to the loop facilities."[14]

Q. Did the FCC give explicit recognition to the incumbents' inclusion of zero loop costs in setting prices for their own DSL-based service where the DSL-based service is offered in conjunction with the same customer's basic exchange service?

A. Yes. In its *Third Report and Order*, the FCC observes that "[t]he record indicates that incumbent LECs generally allocate virtually all loop costs to their voice services, then deploy a voice-compatible xDSL service such as ADSL on the same loop, allocating little or no incremental loop costs to the new resulting service."[15]

Competitive parity and the general requirement that incumbents not discriminate against competitors in pricing access to their network resources are by themselves sufficient bases upon which to *require* the assignment of zero loop costs in pricing the high-bandwidth portion of the local loop.

Q. Are there any additional public policy rationales for a zero-dollar line-sharing recurring charge?

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[14] *Comments of BellSouth Telecommunications INc. In the Matter of Proceeding to Determine Permanent Pricing for Unbundled Network Elements, North Carolina Utilities Commission Docket No. P-100, Sub 133d, at 4.*

[15] *Third Report and Order at ¶ 41, footnote omitted.*

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A. Yes. To qualify for line-shared ADSL service, the customer must have in place a conventional dial tone access line for which he or she pays both the Washington-tariffed monthly exchange access line rate as well as the FCC-tariffed Subscriber Line Charge ("SLC"), along with prices for other related vertical services linked to the subscriber's line. Thus, unless an ILEC adopts an offsetting decrease in the monthly recurring charge for voice-grade services, any line-sharing charge that exceeds any incremental loop costs will provide windfall profits to the ILEC with no corresponding benefit to its voice-service customers. Ultimately, such a line-sharing charge could increase the price that basic exchange service customers pay for any DSL-based service provided over the same line, whether they buy that service from the incumbent, its data affiliate or an unaffiliated competitor.

Such a result would be contrary to Congress's intent, expressed in § 706 of the Act, to "encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to 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 telecommunications markets, or other regulating methods that remove barriers to infrastructure investment."

Both the need to prevent windfall profits and the public policy imperative to promote the deployment of advanced services such as DSL-based services

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support Rhythms' and Covad's proposal to adopt no recurring line-sharing charge for access to the high-bandwidth portion of the local loop. When the Commission considers prices for various forms of access to the high bandwidth portion of loops served in a fiber-fed loop scenario it will be appropriate to consider any incremental costs of that access.

Q. Some ILECs have proposed to offer DSL-based services only through a separate subsidiary. Does this approach allay the public policy concerns associated with charging a non-zero price for access to the high-bandwidth portion of the loop?

A. No. First, I am not aware of any ILEC in Washington that has proposed creating a separate DSL subsidiary along the lines of SBC ASI, Ameritech Advanced Data Services, and Bell Atlantic's proposed New York SDL subsidiary. Even if they had, that would not change this analysis.

Establishing a separate subsidiary — with both the ILEC and the new subsidiary wholly owned by the same parent corporation — makes no change whatsoever in the underlying economics of the situation. Money paid to the ILEC by its retail DSL affiliate is not a cost but a transfer — such payments amount to moving funds from one pocket to another within the same corporate trousers. Very much to the contrary for an unaffiliated potential competitor in the retail DSL business, funds that CLECs must pay to an unaffiliated ILEC for access to the high-bandwidth portion of a local loop constitute a real, and unavoidable, cost of doing business. Recognition of this important difference makes it clear that all the public policy problems associated with a non-zero price for access to the high-

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bandwidth portion of the local loop apply equally to the case in which an ILEC's parent corporation has established a separate subsidiary to provide retail DSL services. If access to the high-bandwidth portion of the loop is priced above zero, with or without a separate retail DSL subsidiary, competitors will face a discriminatory price, the ILEC will receive a windfall through double recovery of loop costs, and consumers will pay an unnecessarily high price for DSL-based services.

Q. Why is a non-zero price necessarily discriminatory, even if the ILEC charges the same price to its retail DSL affiliate as to unaffiliated DSL providers?

A. The ILEC's parent corporation discriminates against unaffiliated DSL providers whenever it charges a price greater than its cost. Whatever corporate structure is devised to organize DSL activities and resulting charges that flow among affiliates are absolutely irrelevant to determining whether a charge to competitors is discriminatory. Because the ILEC does not incur any additional loop cost when another carrier uses the high-bandwidth portion of the loop, any price greater than zero would impose a greater cost on competitors than the ILEC incurs, and is therefore discriminatory.

Q. You said that allowing Washington ILECs to charge a non-zero price for access to the high-bandwidth portion of the local loop would result in a higher than necessary price of retail DSL service. Please explain.

A. Because any charge to unaffiliated DSL providers will be a real cost that those

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providers must pass on to customers, the retail price of DSL-based services will be higher if ILECs impose a non-zero line-sharing charge. Such a charge is unnecessary because loop costs are all recovered from services other than the high-bandwidth portion of the loop — indeed, as I discussed above, such a charge would result in anticompetitive discrimination and windfall double recovery of loop costs. In any case, retail DSL charges would be unnecessarily inflated and Washington consumers would pay unnecessarily high prices if ILECs were allowed to impose a non-zero line sharing charge.

Q. How do you propose that the jumper and tie cable prices be applied?

A. The Commission should rely on TELRIC pricing principles to determine the number of jumper placements and removals and the number of tie cables for which CLECs should be charged. The FCC has ruled that:

> The total element long-run incremental cost of an element should be measured based on the use of the most efficient telecommunications technology currently available and *the lowest cost network configuration*, given the existing location of the incumbent LEC's wire centers. [16]

In other words, regardless of the network configuration that an ILEC chooses for the placement of splitters, the prices charged to CLECs for jumper placement/removal and tie cables should reflect the most efficient, least cost configuration possible. This principle applies whether the ILEC or the new entrant owns the splitter.

As Mr. Zulevic explains in his testimony, an ILEC could choose to place splitters at

[16] 47C.F.R. 51.505(b)(1), emphasis supplied.

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its Main Distribution Frame, which would require one tie cable and two jumper placements/removals. Mr. Zulevic concludes that this scenario is the most efficient, lowest cost configuration; thus, I recommend that the Commission base pricing for jumper placement/removal and tie cables on this scenario, regardless of the actual splitter placement that an ILEC imposes on data competitors.

This pricing rule is consistent with the outcome that the FCC found presumptively reasonable in its Third Report and Order in which the FCC contemplated splitter placement within the MDF. The FCC stated that:

> We would expect that the costs of installing cross connects for xDSL services in general would be the same as for cross connecting loops to the competitive LECs' collocated facilities, particularly where the splitter is located within the incumbent LEC's MDF. Accordingly, we find it reasonable to establish a presumption that, where the splitter is located within the incumbent LECs' MDF, the cost for a cross connect for entire loops and for the high frequency portions of loops should be the same. We would expect the states to examine carefully any assessment of costs for cross connections for xDSL services that are in excess of the costs of connecting loops to a competitive LECs' collocated facilities where the splitter is located within the MDF. If the splitter is not located within the incumbent LEC's MDF, however, then we would expect the states to allow the incumbent LEC to adjust the charge for cross connecting the competitive LEC's xDSL equipment to the incumbent LECs' facilities to reflect any cost differences arising from the different location of the splitter, compared to the MDF. We would expect that this amount would be only minimally higher than for cross connecting a splitter located within the MDF to the competitive LEC's xDSL equipment. [17]

Although the FCC allows for the possibility of some increment of cost for splitter placement other than at the MDF when, for one reason or another it is desirable to depart

[17] *Third Report and Order* at ¶145.

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from the arrangement that is normally most efficient, the clear expectation is that other placements would result in costs "only minimally higher" than the cost of the MDF placement scenario.

Q. How should OSS be priced for line sharing?

A. At this time I recommend that no additional charge is needed to recover such costs. It should be recognized that the costs of forward looking OSS have been included in UNE prices generally, as OSS is necessary to the functioning of all facets of a modern telecommunications network. If the ILECs contend that some OSS functionalities were not contemplated in developing the cost of forward-looking OSS included in existing UNE prices, then they bear the substantial burden of providing that such a difference exists. I have not seen such evidence in this case or any other. Even if, the ILECs meet this burden, it should be expected that the incremental cost of addressing any such difference would be very small. Conceptually, such an incremental cost, if any, should be calculated as the difference between the cost of developing a forward-looking OSS including the new functionalities and the cost of developing a forward-looking OSS without the new functionalities. Further, any improvements in OSS capabilities inure to the benefit of the ILEC, who continues to own the right to use the upgraded OSS irrespective of the presence of competing DSL providers. Any OSS cost to be recovered exclusively from DSL services must be cost caused by and shared exclusively among those services. To meet the FCC's proposed test for the validity of any such claims for recovery, an ILEC would have

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to provide a detailed evidentiary basis on which interested parties and the Commission could determine the extent to which any new OSS capabilities benefit the ILECs' own operations (or those of affiliates), as opposed to being required solely for the provisioning of line sharing for unaffiliated competitors.[18] Until an ILEC carriers the substantial burden of showing that such costs exist and are properly attributed to line sharing, no such charge should be established. If claims for such recovery are presented in this proceeding I will examine the supporting evidence and make a recommendation to the Commission.

Q. Does that conclude your testimony at this time?

A. Yes, it does.

[18] *Third Report and Order at ¶ 106*.

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