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1 2		Rebuttal Testimony of Richard Cabe Rhythms/Covad Exhibit RC-13T August 4, 2000
3		August 4, 2000
4		I. INTRODUCTION
5	Q.	Please state your name and business address.
6	A.	My name is Richard Cabe. My business address is 219 I Street, Salida, Colorado.
7 8	Q.	Are you the same Richard Cabe who submitted Direct and Response Testimony in this proceeding?
9 10	A.	Yes I am.
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12	Q. What is the purpose of your reply testimony?	What is the purpose of your reply testimony?
13	A.	This testimony replies to the response testimony of QWEST witnesses regarding
14		QWEST's proposals for a change for access to line sharing arrangements and a charge
15		to recover costs claimed to be related to OSS improvements to accommodate line
16		sharing.
17 18		II. ALLOCATION OF LOOP COST TO LINE SHARED ACCESS
19	Q.	At page 9 of his Response Testimony, Dr. Fitzsimmons states as follows: "In the
20	case of the high-frequency spectrum UNE, leasing the UNE to a the ability of QWEST to provide XDSL service over the high-frequency.	case of the high-frequency spectrum UNE, leasing the UNE to a competitor removes the ability of QWEST to provide XDSL service over the high-frequency portion of
would give up its ability to provide service using t	the loop. In a competitive market, it is highly unlikely that any rational provider would give up its ability to provide service using the high frequency spectrum on	
22		its loops without requiring compensation from the competitor that will use the spectrum." What do you make of this statement?
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24	A.	This statement makes it clear that Dr. Fitzsimmons believes that QWEST should be
25		compensated for the revenue it would have received from the sale of xDSL services, but for the fact of the customer choosing to purchase xDSL service from a competitor. Dr.
26		for the fact of the customer choosing to purchase XDSL service from a competitor. Dr.

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Fitzsimmons also refers to the high frequency portion of the loop as an asset<sup>1</sup>. In economics, an asset is anything that has the capacity to generate future net revenue. Assets are typically valued at the present value of the future net revenue that control of the asset can create. Since line shared access to the loop creates no loop cost, Dr. Fitzsimmons focuses on the asset value of that access, and in so doing, proposes a charge to replace the revenue that QWEST could have generated with that asset, were it not for the requirement to allow competitive access. This is really the only explanation for QWEST's line charge that makes sense. Recovery of loop cost provides no basis for the charge because loop costs are fully recovered elsewhere, and line sharing clearly doesn't cause any loop cost. The essence of this opportunity cost argument is that providing access to a competitor will cause QWEST a loss of revenue from end users, and this loss of revenue amounts to a cost of providing access - an opportunity cost. The FCC, however, after extensive comment and analysis, specifically rejected opportunity cost pricing for UNEs at paragraphs 708 and 709 of the Local Competition Order.<sup>2</sup> In addition, as discussed in my direct and response testimony, QWEST's proposal would have the effect of preserving the margin that QWEST now enjoys in providing xDSL services over line sharing arrangements - even when the end user chooses to take service from another xDSL provider. There is no cost basis for the charge, except the opportunity cost which arises when a customer chooses a CLEC instead of QWEST. This opportunity cost notion is the basis for Dr. Fitzsimmons contention that competitive

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"Local Competition Order").

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Response Testimony of William Fitzsimmons at Page 9. First Report and Order In the Matter of Implementation of Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98 (Rel. Aug. 8, 1996)( hereinafter referred to as

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considerations other than incremental cost. In particular, I have discussed the fact that a non-zero charge would allow double recovery, would be discriminatory, would discourage adoption of this advanced telecommunications service, and would distort the market's choice among alternative technologies for delivery of high speed data. I still believe that a price of zero for line sharing is justified by those considerations, even regarding the two portions of the loop's spectrum as joint products, in which case we must proceed without the guidance of the principle of cost causation.

However, in the course of considering Dr. Fitzsimmons' example of chicken breasts and wings, I reached the conclusion that I was mistaken in my earlier view of the analog voice portion and the high bandwidth portion of the local loop as joint products.

# Q. Why did you conclude that the two portions of the loop cannot properly be regarded as joint products?

As I discussed in my Response Testimony, there are several reasons that it is inappropriate to apply the conventional analysis of joint product pricing to the two connections that result from providing analog voice service and xDSL service over a single loop using a line sharing arrangement. In analyzing Dr. Fitzsimmons' analogy I realized that I had not re-examined my notion of the two connections as joint products since the FCC reached a precise definition of what line sharing is. I had not given full effect to the FCC's determination that a CLEC cannot order line sharing on a "dry" loop one which is not currently in use for analog voice service - nor can a CLEC maintain an existing line sharing arrangement after analog voice service is terminated on a particular loop. These two conditions - which do not apply to chicken breasts and wings, or mutton

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and wool, or cotton and cottonseed oil, or any of the other standard examples of joint products - imply a very different relationship between the products and cost than is implied by ordinary joint products. The FCC's determination that a line sharing arrangement is only available as an adjunct to a loop that is also in use for the provision of analog voice service implies that one cannot cause an ILEC to incur loop costs by requesting line sharing, nor can loop costs be avoided in the long run by discontinuing a line sharing arrangement. Therefore, the two portions of the loop are not joint products in the traditional sense. Instead, unlike the case of traditional joint products, the cost of the loop can only be caused by the voice portion of the loop, and the cost of the loop is in no sense incremental to a line sharing arrangement. If QWEST were to agree to offer only the high bandwidth portion of the loop without the loop being in use for analog voice service, the appropriate analysis would be more similar to the usual case of joint products, although my Response Testimony notes important differences that would remain.

### Q. What is the implication of this conclusion for pricing line sharing arrangements?

A. Since line sharing cannot be ordered on a dry loop and the line sharing arrangement must terminate if a loop were no longer used for analog voice service, cost causation corroborates the conclusion reached by the FCC and the recommendation of my direct testimony: the UNE causes no incremental cost and should be priced at \$0.

II.

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## Q. Dr. Fitzsimmons protests that a competitive market would place a positive price on a product such as access to line sharing arrangements.<sup>8</sup>

A. No. I have no doubt that QWEST would place a positive price on access to line sharing if it were not constrained from doing so by the FCC and this Commission. This fact merely provides evidence that markets for services provided over local loops are not competitive; it proves nothing about what might occur in a competitive market because QWEST faces nothing resembling the discipline of a competitive market on the vast majority of its loops.

Nevertheless, one can ask what the prices would be if there were a competitive market for analog voice service and for line shared access to the loops used to provide that analog voice service. If such competitive markets were in place they would cause the price of analog voice service to cover the cost of the loop and the price of line sharing arrangements to include none of the costs of the loop. This result is established by the following reasoning: First, in competitive markets, no firm could survive in the long run offering analog voice service and line sharing at prices that recover more or less than the total cost of the loop;<sup>9</sup> at lower prices the firm could not attract capital, and at higher prices the resulting abnormal profit would attract new entry, increase supply and reduce price. This is the fundamental rule that competitive markets do not abide a return greater

Response Testimony of William Fitzsimmons at page 9, July 21, 2000. For the sake of exposition, this discussion neglects costs other than the loop that may be incremental to either analog voice services or data provided over a line sharing arrangement. Obviously, these costs would have to be recovered in a cost causative manner.

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or less than a normal economic profit, in the long run.<sup>10</sup> Second, if a firm sought to recover its loop cost from a price for voice service which failed to cover the entire cost of the loop, and a price for line sharing arrangements that recovered the shortfall of loop costs, <sup>11</sup> it would encounter the following difficulty. This firm would be most attractive to customers who want analog voice service, but do not want data service through a line sharing arrangement.<sup>12</sup> Thus, the firm seeking to recover less than the full cost of the loop from analog voice services would fail to recover its costs, would earn less than a normal profit and would not be able to attract capital. The only competitive market outcome in the long run would be for each firm to recover its loop costs from its analog voice customer and make line sharing arrangements available without trying to assess loop costs where none have been caused.

- Q. Are you suggesting that unregulated trade in a "productive asset that is in limited supply" is likely to result in a price of zero?
- B. Not as a rule, however, the assumption of "limited supply" is a peculiar one in this context, and is inconsistent with "competitive" supply. If the question is what would happen in a competitive market, the only limitation on supply is cost, and the cost of

Of course, QWEST's proposal violates this most basic rule of competitive markets by trying to recover 100% of loop cost from analog voice service and an additional 50% of loop cost from users of line sharing arrangements.

Again, note that this is different from QWEST's proposal to recover **more** than 100% of loop cost. That proposal obviously makes sense only in an environment in which QWEST exercises monopoly power - not a competitive market.

Note, importantly, that the option of taking line shared xDSL service without analog voice service on the loop is not a possibility.

Response Testimony of William Fitzsimmons at page 9, July 21, 2000.

See Response Testimony of Jerold Thompson unnumbered page 4, July 21, 2000.

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unbundled network element. Then set the price of the ILEC's retail service constructed from the discriminatorily priced unbundled network element high enough that an imputation test is satisfied. By Mr. Thompson's test, the original UNE price could not have been discriminatory. Since it is always possible to set the retail price high enough that an imputation test is satisfied, Mr. Thompson's test implies that it is impossible to have a UNE price be discriminatory.

My testimony regarding discrimination is based on the economic sense of the word as it applies to ILEC provision of UNEs: an ILEC's price for a UNE is discriminatory if it makes the UNE available to CLECs only at a higher cost than the cost the ILEC incurs to make the UNE available to its own retail operations. This sense of discrimination is based on the standard economic notion of price discrimination and the FCC's interpretation that the Act's requirement of non-discriminatory interconnection and access to UNEs requires non-discrimination as between CLECs, and also non-discrimination as between CLECs and the ILEC's own retail operations. Since the high bandwidth portion of the loop is available to QWEST at a cost of zero, imposition of any higher cost on CLECs for access to the same high bandwidth portion of the loop would be discriminatory. The freedom to set QWEST's retail prices for services which rely on line shared access to the high bandwidth portion of the loop high enough to satisfy an imputation test does not alter the fact that the line sharing charge is discriminatory against CLECs.

<sup>18</sup> Local Competition Order, ¶¶218 and 312.

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Would harm to competition result if QWEST were allowed to impose a line charge greater than zero but within the bounds of an imputation test?

Yes, potentially in several ways. The concern for a price squeeze is a real possibility whenever UNE prices are discriminatory, and this concern can never be entirely removed by imposition of an imputation test. An imputation test is an administrative process, and is subject to all the potential shortcomings associated with such processes. But a price squeeze is by no means the only potential harm to competition that flows from price discrimination against new entrants. As discussed in my earlier testimony, QWEST's substitution of an imputation test for the Act's requirement of non-discrimination would result in an artificial price floor below which CLECs could not compete. This would slow the rate at which xDSL services are adopted by Washington customers. Aside from the direct harm to Washington consumers, this would harm competition. This is so because new entrants invariably incur fixed costs of entry and will consider the rate of growth of the market when deciding whether to enter or not. If new entrants correctly anticipate the reduced rate of growth likely in Washington caused by the discriminatory line charge they may choose not to enter. If they fail to anticipate this reduced rate of growth and enter the market, they will not realize financial projections and operate under a handicap in efforts to attract capital. Aside from the "stunted" growth of the Washington xDSL market due to the artificial price floor created by a non-zero line charge, this form of discriminatory pricing would provide the incumbent with a source of internal financing that is not available to new entrants. This "internal capital market" can be an especially important advantage where a new product is concerned because "external capital markets" do not have access to internal information and cannot evaluate projects as efficiently as the "internal capital market." The sort of projects which could

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be financed through this internal source include a wide variety of "investments in entry deterrence." Raising rivals costs through, for example, protracted litigation is one example. If the Commission were to substitute an imputation test for the Act's requirement of non-discrimination, alleged violations of the imputation test could provide opportunities for such protracted litigation.

### Q. Dr. Fitzsimmons states that you advocate addressing imbalances between wholesale and retail rates. Is this correct?

No. I advocate a price for line shared access to local loops that would not result in double recovery for QWEST and therefore would not implicate a reduction in rates for some analog voice services. Dr. Fitzsimmons goes on to discuss implicit subsidies and rate re-balancing, but I am at a loss to understand Dr. Fitzsimmons complaints about implicit subsidies (e.g., Response Testimony of William Fitzsimmons at page 12). QWEST's proposal would create a new source of revenue in excess of cost, which Dr. Fitzsimmons would probably characterize as an additional implicit subsidy in support of local exchange customers. Dr. Fitzsimmons and I clearly have very different views about implicit subsidies. At page 3 of his Response Testimony, Dr. Fitzsimmons refers to "subsidies from business customers and high margin services, that were once earmarked to help fund below cost residential service." I am aware of no such "earmarking" of funds from high margin services. In my view, such "earmarking" and associated reporting on the sources and uses of the subsidy would constitute an **explicit** subsidy. In the present situation, without such earmarking and associated reporting, all that is in evidence is prices sufficient to allow "high margins," and the funds generated from these services are as likely to go to excess profit as to subsidize other services. I recommend

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that the Commission should **not** include any allocation of loop cost to prices for line sharing arrangements and therefore avoid creating a source of funds which could either be characterized a source of an implicit subsidy or a source of excess profit. I note that one of several undesirable consequences of creating such a source of revenue in excess of cost would be double recovery and a consequent windfall for QWEST, to the immediate detriment of Washington ratepayers and contrary to the public interest in development of competitive markets for telecommunications services.

### Q. Does QWEST complain that its retail rates may not be sufficient to recover costs?

A. Dr. Fitzsimmons complains that "QWEST is not even assured that it will "single recover" the costs of its loop network." Mr. Thompson is concerned that I have made an erroneous assumption about the relationship of QWEST's revenues to its embedded costs. My caution to the Commission regarding double recovery is based on the presumption that existing rates approved by the Commission were calculated to recover the entirety of loop costs, and this presumption has not been contested. Indeed, staff witness Thomas L. Spinks provides an analysis suggesting that QWEST's existing rates have been very successful in recovering all costs of owning and operating the local exchange network. Mr. Thompson suggests that this may change in the future as a result of line sharing. While I doubt this claim, I agree with Dr. Fitzsimmons that this proceeding is not the proper place to consider retail prices, including any complaint that QWEST might have about its ability to "single recover" loop costs from existing rates.

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Response Testimony of William Fitzsimmons at page 3, July 21, 2000.

See Response Testimony of Jerold Thompson at page 2, July 21, 2000.

See Response Testimony of Thomas L. Spinks, page 9, July 21, 2000.

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3	noted that Ms. Brohl relies on an FCC "definition" of "line sharing" that was made in
4	passing in an introductory paragraph:
5	The provision of xDSL-based service by a competitive
6	LEC and voiceband service by an incumbent LEC on the same loop is frequently called "line sharing." <sup>23</sup>
7 8	Despite this so-called "definition," the FCC's usage throughout the substantive portion
9	of the order refers to lines shared by xDSL and voice service without regard to whether
10	the two services are provided by separate entities. For example, with specific relevance
11	to OSS, Paragraph 96 of the <i>Line Sharing Order</i> states:
12	Where incumbent LECs provide shared-loop xDSL
13	services to their voice customers, either through their own subsidiaries or in cooperation with an unaffiliated ISP, the
14	incumbent must resolve many of the same problems that they claim stand in the way of providing competitors with access to the high frequency portion of the loop. (Emphasis supplied,
15	footnotes omitted)
16	In Paragraph 99, the <i>Line Sharing Order</i> states:
17	We conclude that the type of effort required for incumbent LECs to establish appropriate line sharing ordering practices is
18	incremental in nature, and does not require a major development initiative. Incumbent LECs already accommodate orders for the
19	advanced services, such as ADSL, that they deploy on <b>lines</b> shared with their own voice services. There are substantial
20	operational similarities between the line sharing situation involving a competitive and an incumbent LEC, and the
21	deployment of <b>shared line</b> xDSL provided by an incumbent LEC or an ISP." (Emphasis supplied, footnotes omitted)
22	Despite the casual nature of the FCC's "definition" of "line sharing" and the widespread
23	usage in the same Order of "shared line" and similar phrases to refer to shared use of the
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25	23 Line Sharing Order at paragraph 4.
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same line without regard to corporate identity or affiliation of providers, QWEST has elevated this "definition" to the status of dogma with implications for cost analysis which it apparently believes requires no further discussion. QWEST also relies on this definition as a justification for non-response to information requests. Rhythms Data Request 3-8 sought an explanation as to why certain OSS improvements "were not required in order for U S West to provide retail xDSL services over a shared line with its own retail basic exchange service." QWEST's response was to point out that QWEST does not line share with itself and to reproduce a portion of the Supplemental Direct Testimony of Barbara J. Brohl, which is also reproduced in her Response Testimony, without providing the requested explanation.

## Q. Without the requested explanation to rely on, what do you conclude regarding the OSS improvements associated with Ms. Brohl's first consideration?

A. I conclude that if the Commission were to find that these are costs which should be recovered through a separate charge, the charge should be calculated so as to encompass QWEST's MegaBit subscribers in the same way that it encompasses xDSL customers served by CLECs. This recommendation is founded on two points. First, if QWEST were to provide xDSL service over shared lines through a separate subsidiary, its xDSL customers would be situated in exactly the same circumstance as customers served through a technologically identical line sharing arrangement by an unaffiliated CLEC. QWEST should not be able to determine the structure of this charge, which has substantial competitive implications, through its choice of corporate structure. Second,

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QWEST responses to Rhythms Data Request 3-8, Parts A and C, attached to the Response Testimony of Richard Cabe as Exhibit RC-11.

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without regard to QWEST's chosen corporate structure, the placing of QWEST customers and CLEC customers in the same circumstance relative to all charges and non-price terms and conditions is the sine qua non of non-discriminatory access.

Providing access to line sharing arrangements under non-discriminatory prices, terms and conditions requires, at a minimum, that all end-user customers are similarly situated with respect to any OSS transition charge.

### Q. Please discuss the second consideration on which Ms. Brohl relies.

A. The second consideration on which Ms. Brohl relies in discussing OSS improvement costs is that line sharing leads to "two customers for the same product - the end-user and the data CLEC." Again, a detailed explanation was not provided as to why this does not apply when QWEST or an affiliate is the xDSL provider. Apparently the product for which there are two customers is the loop, and OSS improvements are required to allow the end-user to pay loop related local service charges and the CLEC providing xDSL service to the same end-user to pay an additional 50% of the loop UNE charge for the same loop. I have explained in detail why it is improper to impose such a loop related charge. If QWEST's contention that imposition of such a charge would create additional OSS transition costs were accepted, this would be another reason to deny QWEST's proposal for imposing such a charge - it would create costs for no useful purpose. This portion of the OSS transition charge would be a charge to recover administrative costs of imposing a line sharing charge, which I have argued should not be imposed. Even if

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Response Testimony of Barbara J. Brohl at page 8, July 21, 2000.

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such a charge were to be imposed, however, my Response Testimony shows that QWEST has failed to substantiate the magnitude of any such transition costs. Beyond the lack of substantiation of the total amount of OSS transition cost, which is discussed in my Response Testimony, note that QWEST claims no knowledge of the detailed basis for its cost estimates that would allow the Commission to ascertain the portion of the claimed costs associated with the second consideration on which Ms. Brohl relies.<sup>26</sup> In any case, if the Commission were to order a line sharing charge that would make CLECs second customers for a single line, and if the Commission determined that this circumstance required OSS modifications that were only beneficial to line sharing arrangements, and if the Commission determined that these costs were not being recovered elsewhere and should be recovered through a separate OSS transition charge, then the charge should be calculated in such a way as to encompass customers of QWEST xDSL services as well as customers of CLEC xDSL services. As noted in my Response Testimony, all xDSL customers benefit from competition enabled by OSS improvements and QWEST may very well use a separate affiliate to provide xDSL services, placing its own xDSL operations in the situation of a "second customer" on a single line. In no event should QWEST be allowed to determine the structure of a charge imposed on CLECs by choosing one corporate structure or another.

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See QWEST responses to Rhythms Data Request 3-8, Parts A and C, attached to the Response Testimony of Richard Cabe as Exhibit RC-11.

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IV. SUMMARY AND CONCLUSION

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