

BEFORE THE WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION

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

PART A RESPONSE TESTIMONY

OF

ROY LATHROP

On

Behalf of

WORLDCOM, INC.

July 21, 2000

1 **PART 1: INTRODUCTION**

2

3 **Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.**

4 A. My name is Roy Lathrop. I am an Economist in the State Regulatory
5 Analysis Section of WorldCom Inc. ("Worldcom"). My business address is
6 1133 19th Street, NW, Washington DC, 20036.

7 **Q. PLEASE DESCRIBE YOUR QUALIFICATIONS.**

8 A. I am responsible for developing and promoting Worldcom public policy positions
9 before state and federal regulators. These policy positions generally involve
10 encouraging competition by implementing economically efficient costing and pricing.
11 For roughly two of the past three years, my efforts have been focussed primarily on
12 collocation costing and pricing cases, and on obtaining nondiscriminatory terms and
13 conditions for collocation. I have examined the cost studies and tariffs of several
14 incumbent local exchange companies ("ILECs"), assisted in the development of a
15 forward-looking collocation costing model sponsored by Worldcom and AT&T, and
16 I have filed testimony on various collocation issues in California, Michigan,
17 Minnesota, Massachusetts, New Jersey, New York, Pennsylvania and Washington
18 state.

19 Prior to joining MCIW, I was employed in the Telecommunications section of
20 the Washington Utilities and Transportation Commission ("WUTC"), where I
21 analyzed economic and policy issues involved in developing an alternative form of
22 regulation for US West, and costing and pricing issues related to network unbundling
23 proposals.

1 Prior to working at the WUTC, I was employed by the California Public
2 Utilities Commission (“CPUC”). My assignments at the CPUC included three years
3 in the Telecommunications Rate Design Branch of the Division of Ratepayer
4 Advocates where I provided analysis and expert testimony on various rate design,
5 cost and tariffing issues, including cases implementing incentive regulation for
6 California local exchange carriers. Subsequently, I served as an advisor to the
7 Commission responsible for economic and policy analysis for the electricity, natural
8 gas and water industries. Prior to working at the CPUC, I was employed as a
9 Research Economist at the Community and Organization Research Institute where
10 I conducted econometric and policy analysis related to water demand. I have a
11 Bachelor of Arts degree in Economics and Environmental Studies, and a Master of
12 Arts degree in Economics from the University of California at Santa Barbara.

13

14 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

15 A. The purpose of my testimony is to comment on the collocation cost studies
16 filed by US West Communications, Inc. (“USW”, now called “Qwest”) and
17 GTE Northwest, Incorporated (“GTE”, now called Verizon, Northwest, Inc. or
18 “Verizon.”). In addition, I comment on OSS cost recovery issues and I
19 address the need for the Commission to require Qwest and Verizon to
20 facilitate line sharing for local exchange service providers serving end users
21 using UNE-P (“unbundled network element – platform”).

22

1

2 **PART 2: COLLOCATION COSTS**

3 WHAT IS THE PROPER APPROACH TO DEVELOPING COLLOCATION COSTS
4 BASED ON FORWARD-LOOKING COSTING PRINCIPLES?

5 A. It is axiomatic that a cost component of collocation involves the floor space
6 in which collocation equipment is placed – the central office “rent.” Forward
7 looking central office (“CO”) space rental costs should be based upon a CO
8 that would be built today using current least-cost technology and best
9 practices space planning. Such a central office would be designed to
10 incorporate a multi-tenant environment, and would include, for example,
11 perimeter corridors and compartmentalized areas (which increase fire safety)
12 that would permit collocators to access their respective areas by relying on
13 electronic card key access without the need for escorts. Forward-looking CO
14 space rental costs would also reflect a fully air-conditioned CO. Because
15 properly developed space rental costs reflect a central office designed to
16 house telecommunications equipment, it is inconsistent to assess an
17 additional, separate charge for “space preparation” or “conditioning”. Such
18 additional charges would be duplicative. It follows that CLECs paying a
19 forward-looking space rental charge should not also be required to pay to
20 improve ILEC central offices to meet current standards.

21 This aspect of forward-looking cost development is particularly

1 important. ILECs' COs generally were built to accommodate different
2 technological requirements for equipment space and connectivity
3 arrangements than may exist in a CO today. As a result, ILECs' COs may
4 reflect inefficient characteristics. For example, various sized "pockets" of
5 space may be scattered throughout the central office, created by the
6 replacement of analog equipment with more space efficient digital
7 equipment. These "pockets" may be vacant, used by administrative staff, or
8 have unused analog equipment retired in place. There may be lengthy and
9 indirect cable routes caused by congestion in the overhead cable racks as
10 a result of removing previous equipment without removing cables. In
11 addition, there may be multiple voice grade cross-connects using a main
12 distribution frame ("MDF") and various intermediate distribution frames
13 ("IDF") with complex inter-DF tie cable systems resulting in excessive cable
14 lengths and additional points of failure. Under these circumstances, it is
15 tempting to permit the ILECs to recover costs associated with "preparing" the
16 CO to house the CLECs' telecommunications equipment. However, there
17 are a number of reasons why the Commission should not succumb to this
18 temptation.

19 First, as noted initially, applying forward-looking costing principles in the
20 context of collocation requires an approach in which the goal should be to develop
21 a forward looking CO space rental charge. A forward looking CO space rental
22 charge will be based on a CO already configured with sufficient power, air

1 conditioning etc, to accommodate a number of different carriers' equipment. To
2 assess a separate "space preparation" or "conditioning" charge is the antithesis of
3 this approach and would permit double recovery of costs.

4 Second, since the ILEC controls the placement of collocators' equipment in
5 the CO, the ILEC exerts almost total control over the costs its competitors pay for
6 collocation. Moreover, the ILEC has no incentive to minimize the CLECs' collocation
7 costs, and in fact has the opposite incentive. By focussing on the development of
8 an appropriate forward looking space rental charge and denying the ILECs the ability
9 to assess separate "space preparation" charges, the Commission can guard against
10 these incentives that are contrary to the pro-competitive purposes of the
11 Telecommunications Act.

12

13 **Q. HAVE OTHER STATES ADOPTED A FORWARD-LOOKING APPROACH TO**
14 **COLLOCATION COSTS?**

15 **A.** Yes. Recently, the Michigan Commission rejected the Ameritech Michigan
16 costing approach that included proposed "conditioning" charges:

17 The Commission concludes that it should not adopt Ameritech
18 Michigan's model, which assumes that the cost of existing central
19 office buildings plus the costs of modifications are a proper basis for
20 determining the forward-looking cost of central office space. Contrary
21 to Ameritech Michigan's argument, TSLRIC principles require the
22 assumption that the location of the buildings remains unchanged, but
23 does not require the assumption that the existing buildings with their
24 current configurations will be used.¹

25

¹ Michigan Public Service Commission, Opinion and Order in Case U-11831, November 16, 1999 at pages 30 and 31.

1 **Q. HAS THE FCC PROVIDED A COMPREHENSIVE FORWARD-LOOKING**
2 **APPROACH TO COLLOCATION COSTING?**

3 A. No. It is worth noting that while the FCC has addressed collocation costs in
4 various orders, it has not specifically and explicitly provided a comprehensive
5 forward-looking approach to collocation costing. This is important because
6 certain FCC pronouncements might, if considered alone, lead to short run
7 incremental costing. For example, in the Advanced Services Order, the FCC
8 discussed recovering “site conditioning” costs on a pro rata basis. While the
9 FCC’s discussion addressed the problem of “first in pays”, it was not
10 provided within the larger context of a comprehensive collocation costing
11 method. That is, the FCC did not consider the question whether a forward-
12 looking approach to collocation costing includes site conditioning type costs
13 within the per square foot central office floor space costs. The FCC stated:

14

15 ...incumbent LECs must allocate space preparation, security measures, and
16 other collocation charges on a pro-rated basis so the first collocator in a
17 particular incumbent premises will not be responsible for the entire cost of
18 site preparation. For example, if an incumbent LEC implements cageless
19 collocation arrangements in a particular central office that requires air
20 conditioning and power upgrades, the incumbent may not require the first
21 collocating party to pay the entire cost of site preparation. In order to ensure
22 that the first entrant into an incumbent’s premises does not bear the entire
23 cost of site preparation, the incumbent must develop a system of partitioning
24 the cost by comparing, for example, the amount of conditioned space
25 actually occupied by the new entrant with the overall space conditioning
26 expenses. We expect that state commissions will determine the proper
27 pricing methodology to ensure the incumbent LECs properly allocate site

1 preparation costs among new entrants.²

2

3 The proper collocation costing and pricing methodology, one that avoids

4 double counting, includes a forward-looking space rental cost and therefore

5 no need to recover “space preparation” costs or to charge for HVAC and

6 power upgrades on an individual case basis (“ICB”), a point I return to below.

7 This approach therefore avoids altogether the “first in pays” problem the FCC

8 addressed in the Advanced Services Order.

9

10 **Q. HOW DOES THIS ANALYSIS COMPARE WITH THE QWEST’S COST**
11 **PRESENTATION?**

12 A. It is not clear whether Qwest’s cost presentation is consistent with forward-looking

13 principles. Qwest generally took a forward-looking approach to developing a central

14 office space cost. I was unable to determine, however,

1 ² FCC Order 99-48, *Advanced Services Order*, ¶ 51, CC Docket No. 98-147, March 31, 1999.

1 whether any “space preparation” type charges were included in the sample of cageless
2 collocation jobs Qwest used to develop other collocation costs.³ Qwest also did not state
3 whether space preparation charges were included in its development of caged collocation
4 costs, for which it relied on a team of experts to revise the cost assumptions to account for
5 the cost differences between cageless and caged collocation.⁴ (“Space preparation” or
6 “conditioning” charges are frequently assessed through an ICB charge. However, without
7 proposed tariff language and proposed rate sheets, it is difficult to determine whether an
8 ILEC intends to assess an ICB charge, which would not necessarily appear on a list of
9 collocation cost components.)

10 Qwest’s charge for caged collocation, termed “space construction”, comprises
11 various cost elements, including engineering, cage construction, a power feed,
12 overhead cable racking and support structure, lighting and HVAC. Qwest’s rent
13 charge includes an electrical outlet, and maintenance and repair as well as general
14 housekeeping services. If Qwest did include any space preparation charges in its
15 development of caged collocation costs (for example, as part of any of the cost
16 elements for rent or space construction), they should be removed as duplicative of the
17 forward-looking space rental costs. The Commission should exclude costs associated
18 with demolition, reconstruction and modification activities.

19

1 ³ Qwest’s sample of collocation jobs were constructed prior to May of 1999. Direct Testimony of
2 Jerrold L. Thompson, February 15, 2000 at p.7, line 20-21.

1 ⁴ May 17, 2000 Errata to the Direct Testimony of Jerrold L. Thompson, February 15, 2000.

1 **Q. HOW DOES THE ABOVE ANALYSIS COMPARE WITH THE VERIZON'S COST**
2 **PRESENTATION?**

3 A. Verizon, like Qwest, generally took a forward-looking approach to developing a
4 central office space cost. Unfortunately, Verizon includes several categories of space
5 preparation-type costs in its cost presentation that are duplicative of forward-looking
6 space rental costs.

7 **Verizon's Space Rental Costs**

8 Verizon developed space rental costs beginning with the land and building
9 investments to construct selected central offices, and indexed the building
10 investment to current values. Verizon deducted 16% of the building investment for
11 HVAC (relying on RS Means, an industry construction text), then added back an
12 "HVAC Shell Cost" based on one ton of HVAC for each 300 sf of floor space. While
13 this approach generally estimates forward-looking central office space costs, the
14 process excludes any economies of scale that would be available by providing
15 HVAC for an entire building, rather than "units" of 300 sf. In addition, it appears that
16 Verizon double counted HVAC investment by adding back some HVAC to its building
17 investment, while separately charging for HVAC based on DC amps. That is,
18 Verizon recovers all necessary HVAC costs based on the number of amps a
19 collocator orders.

20 Verizon's approach to building investments double-counted costs to the
21 extent that multiple investments (in different periods) in a particular central office
22 were associated with re-configuring or expanding space that involved space
23 preparation activities such as demolition and reconstruction. Indeed, Verizon notes

1 that its buildings supported mechanical and electronic switching equipment in the
2 past and “have been brought up to date” and now support the digital technology
3 being deployed by Verizon today.

4 Verizon may also have double-counted cost factors. Verizon’s cost
5 development appears to have used the “overhead and profit” column from RS
6 Means, to which Verizon added 15% for “general conditions” and an additional 9%
7 for engineering fees. Verizon also applied its overhead cost factor. At a minimum,
8 Verizon should be required to revise the inputs so as to not use the overhead and
9 profit factor from RS Means.

10 **Verizon’s Building Modification Costs**

11 Verizon’s “Building Modification” cost element is assessed on a “per
12 occurrence” basis and includes three categories. The category called “Site
13 Modifications” includes “Demolition and Site Work” and “Dust Partition” costs
14 elements that are clearly associated with space preparation activities (remodeling,
15 repairing, and rehabilitating the central office) that are duplicative of forward-looking
16 space rental costs. A third cost element, “Ventilation Ducts” (referred to elsewhere
17 in Verizon’s presentation as “Minor HVAC”) is also associated with space
18 preparation activities and is duplicative of Verizon’s HVAC cost element. Each of
19 these site preparation related cost elements are inconsistent with forward looking
20 space rental costs and should be removed.

21 Verizon’s “Environmental Conditioning” cost component is assessed per 40
22 amps and is intended to recover the HVAC costs cost associated with dissipating the

1 heat generated by collocators' telecommunications equipment. While I have no
2 fundamental objection to the general structure of this cost, Verizon would be double
3 recovering if it assessed a charge for Ventilation Ducts (aka, "Minor HVAC") as
4 well.

5 If the Commission is willing to entertain the concept of space preparation
6 type charges, an approach I do not recommend, it should be circumspect in
7 considering Verizon's (and Qwest's) proposed costs because collocators have no
8 influence over where in the CO their equipment is located and Qwest and Verizon
9 have no incentive to minimize the costs borne by their competitors, two important
10 factors that would otherwise reduce the "actual costs" the ILECs claim the need to
11 recover.

12

13 **DOES EITHER ILEC REQUEST RECOVERY FOR HVAC OR POWER PLANT**
14 **ADDITIONS?**

15 I do not believe so. (It is difficult to know without examining proposed tariff language.) If
16 they have, such cost recovery would be discriminatory and inappropriate. Most ILEC
17 collocation cost studies and tariffs I have reviewed have included proposed ICB
18 ("individual case basis") charges for the space preparation type costs I described
19 above. More recently there has been a trend to include such costs explicitly on a flat
20 rated basis. In addition to the "room construction" type charges (demolition and
21 reconstruction), some ILECs have also proposed ICB charges for HVAC and power

1 plant additions. For example, although Qwest states that it does not seek cost
2 recovery for power plant additions, it does not exclude the possibility.

3 Permitting Qwest or Verizon to charge collocators for HVAC or power
4 upgrades would be inconsistent with the forward-looking approach to developing
5 space rental charges, discriminatory and should not be allowed. The ILECs charge
6 collocators for the use of a shared power plant, and also recover power costs from
7 retail rates (by applying cost factors). If ILECs were to place equipment to serve end
8 users (for example, DSLAMs) that caused them to expand a power plant, end users
9 would not be charged for the power plant addition, and it would be discriminatory to
10 assess collocators a charge in a similar situation. Furthermore, any ICB charges
11 ILECs assess collocators for HVAC power upgrades are short run incremental costs,
12 unlikely to capture the economies of scale that ILECs realize in their use and
13 operation of the CO HVAC and power systems.

14

15 **Other Collocation Cost Items**

16 **DO YOU HAVE ADDITIONAL COMMENTS ON QWEST'S COST STUDY?**

17 Yes. Qwest assumed specific numbers of collocators per central office in its general inputs
18 for collocation. Given the ever-increasing number of collocation applications, it may
19 be appropriate to revisit this figure prior to the implementation of rates established
20 in this proceeding (through a late-filed exhibit).

21 **Cable Racking Assumptions**

22 Qwest assumes that a significant percentage of collocations require cable

1 racking and aerial support, which overstates the cable racking costs. For example,
2 Qwest assumes that caged collocation is “generally in a place where no cable racking
3 previously existed”⁵ and for cageless collocation, Qwest assumes fully half the
4 central offices will need major racking and support. Indeed, this seems to conflict
5 with Qwest’s definition of cageless collocation that “...a CLEC’s equipment is
6 placed in the US West central office adjacent to US West or other CLEC
7 equipment...”⁶

8 If Qwest were placing its own equipment, it would place it close to the
9 devices to which the equipment connects, and in a place where overhead racking
10 exists. The assumed need for additional racking and overhead support likely arises
11 from Qwest’s desire to place collocators in a separate room or area. Qwest, which has
12 no incentive to minimize collocators’ costs, completely controls the placement of
13 collocators’ equipment. CLECs should pay for the use of cable racking and support
14 structure on a capacity basis (that is, the proportionate amount of space their cables
15 consume on the shared overhead cable racks). The amount of cable racking
16 dedicated to any one collocator would be very small if Qwest placed their equipment
17 in the same manner in which it placed its own equipment. CLECs should pay for no
18 more than about 10 feet of dedicated cable racking and overhead support.

1 ⁵ Qwest’s Response to discovery propounded by Nextlink, et al 01-010.

1 ⁶ Direct Testimony of Larry B. Brotherson, February 15, 2000 at page 5.

1 **Bay Construction**

2 Qwest assumes end guard costs that actually exceed the cost of the equipment bay.
3 Qwest should be given the opportunity to revise this cost.

4 **Space Rental Cost**

5 Qwest provided materials in response to discovery request MCW 02-015 that include
6 a confidential attachment that indicates flaws in USW's cost development for space
7 rental cost. Qwest develops a "CLEC Rentable/Usable Space Factor (CLEC R/U),"
8 that accounts for the additional space collocation "uses" that is not rentable space (for
9 example, a dedicated hallway). The CLEC R/U is too high, thereby inflating space
10 rental costs.

11 Qwest developed its factor by averaging several actual collocations (using
12 CO floor plans) and two examples. In one example, four adjacent 100 square foot
13 cages are completely surrounded by a 4-foot aisle space, depicted as a box-within-a-
14 box. The "inner" box is the four 100 square foot cages, hence 20ft by 20 ft, or 400
15 square feet. The "outer" box adds the 4-foot aisle space to each side and thus the
16 total measures 28 ft by 28 ft. The CLEC R/U factor is calculated as the ratio of the
17 total space to the rented space, that is the 784sf (28ftx28ft) of the total, outer box to
18 the 400sf (20ftx20ft) of the inner box. Thus, the CLEC R/U factor derived in Qwest's
19 example is 1.96 (=784sf/400sf). If Qwest had an incentive to economize on space,
20 and hence collocators' costs, the CLEC R/U factor would not be as high. For
21 example, a CO with perimeter corridors would produce a much smaller CLEC R/U
22 factor. For example, a common aisle separating four 100 sf cages (two on a side)

1 produces a CLEC R/U factor of 1.375. (Assume a 7.5-foot wide aisle, 20 feet long,
2 for a total of 150sf, which, when added to the 400sf of the four 100sf collocation
3 cages, leads to a total of 550sf. (550sf/400sf = 1.375) Although a CLEC R/U of
4 1.375 is less than all but one of the factors Qwest used to develop its average, it is
5 achievable, and Qwest should be required to use a CLEC R/U factor of 1.375.

6

7 **Collocation Space Report**

8 Q. PLEASE DESCRIBE THE REQUIREMENT TO PROVIDE WHAT VERIZON
9 TERMS A “COLLOCATION SPACE REPORT.”⁷

10 A. The FCC’s Advanced Services Order states that incumbent LECs must submit to
11 requesting carriers, within ten days of a request, a report indicating the ILEC’s
12 available collocation space in a particular premises. “This report must specify the
13 amount of collocation space available at each requested premises, the number of
14 collocators, and any modifications in the use of the space since the last report. The
15 report must also include measures that the incumbent LEC is taking to make
16 additional space available for collocation.”⁸

17 Thus, it is possible such a report would simply show the following:

18 (number) square feet of collocation space available.

19 (number) collocators.

20 (brief description) modifications in the use of the space since the last report.

⁷ Qwest’s cost study does not appear to include such a report.

⁸ FCC’s ASO at paragraph 58.

1 (brief description) measures to make additional collocation space available.

2 **Q. SHOULD THIS INFORMATION BE READILY AVAILABLE TO**
3 **VERIZON AND QWEST?**

4 **A.** Yes. Verizon's and Qwest's records, if maintained on an ongoing basis, would
5 include all this information. (Indeed, collocation application fees generally include
6 time for staff to design, prepare engineering records and input data.) Qwest and
7 Verizon know the number of collocators, since they have received applications and
8 submit bills. Qwest and Verizon know the amount of collocation space available
9 because they have floor plans of their premises. Qwest and Verizon know what
10 measures they will take to make additional space available since modification plans
11 are known well in advance. Qwest and Verizon know of any modifications in the use
12 of space since the last report since they would have made or overseen the changes.
13 In other words, in a forward-looking environment, the information needed to generate
14 a Collocation Space Report should merely require accessing existing information
15 since Qwest and Verizon should be keeping their records up to date. (Presumably,
16 this would be important for equipment inventory management and tracking.)

17 If Qwest or Verizon have not kept their databases current, they should not
18 impose the cost of updating (or keeping records current) on CLECs. Many of the
19 activities needed to produce a space report are capable of being performed by
20 retrieval and updating computer database files. In that case, only about two hours
21 should be required to develop the collocation space report.

1

2 **PART 3: LINE SHARING**

3 **WHAT IS LINE SHARING?**

4 Line sharing is the use of one loop by two different telecommunications carriers that
5 provide service using different frequency ranges.

6

7 **SHOULD THE COMMISSION REQUIRE QWEST AND VERIZON TO**
8 **FACILITATE LINE SHARING BETWEEN CLECS?**

9 Yes. Worldcom and other CLECs should be permitted to add advanced services
10 capability to lines provisioned using UNE-P. There are no technical problems to
11 prevent ILECs from supporting CLECs' efforts to provide an advanced service
12 capability over a new or already operating UNE-P line. An ILEC would insert a
13 splitter in the UNE-P loop-port combination and wire the high frequency output of
14 the splitter to the DSL equipment. That is, the physical arrangements necessary
15 for a CLEC providing service using UNE-P to acquire access to the high
16 frequency portion of the loop are nearly identical to that which the ILECs provide
17 for line sharing with data CLECs. See, for example, Qwest's explanation of how
18 line sharing works with data CLECs under alternative network configurations
19 (splitter placement) in the Direct Testimony of Robert J. Hubbard, May 19, 2000
20 at p.7 and 9.

21

**1 IS PROVIDING SERVICE USING UNE-P AN IMPORTANT VEHICLE FOR
2 LOCAL EXCHANGE MARKET ENTRANTS?**

3 Yes. UNE-P is the only practical mechanism for mass market entry in the local exchange
4 market (resale and unbundled loops are simply not effective for a mass-market
5 means of serving local customers). Just as ILECs offer xDSL services internally
6 or through an affiliate, and data CLECs may avail themselves of line sharing,
7 Worldcom would like to provide DSL capability to customers it serves using
8 UNE-P, without the need to use a second line.

9 If ILECs are not required to facilitate CLEC-to-CLEC line sharing,
10 customers will be denied the choice of using one line for data and any other
11 provider but the ILEC for voice service. ILECs should be required to facilitate the
12 choice of a customer that has xDSL service and wishes to switch to a CLEC that
13 provides voice service using UNE-P and relies on a third party's xDSL
14 capabilities. Without ensuring that ILECs facilitate UNE-P line sharing, once an
15 ILEC offers long distance service, the ILEC will be the only provider capable of
16 providing a full complement of local, long distance and data services on one line.
17 In summary, ILECs should be required to enable CLECs to add, modify or remove
18 xDSL capabilities to a new or already operating UNE-P line or to migrate
19 customers who already subscribe to xDSL to UNE-P without loss of the data
20 service (whether the data service is provided by another CLEC through line
21 sharing, the ILEC, or an ILEC data affiliate).

**1 DO YOU AGREE WITH QWEST’S TESTIMONY REGARDING LINE
2 SHARING NETWORK CONFIGURATIONS?**

3 Not entirely. Qwest’s description of the line sharing network architecture⁹ appears to
4 assume the use of an intermediate distribution frame (“IDF”) in all instances,
5 which is not necessary. Interestingly, Qwest admits that a traditional call can be
6 routed “directly from the COSMIC or MDF to the CLEC/DLEC’s collocation
7 area.”¹⁰ In addition, Qwest noted that IDFs are unnecessary in a Colorado
8 proceeding:

9 “...US WEST provides CLECs with the same network connections as US
10 WEST uses to provision services to its own retail customers. CLEC
11 terminations share frame space with US WEST terminations without a
12 requirement to also traverse an intermediate device, such as an ICDF or
13 SPOT (Single Point of Termination) frame. A direct connection between the
14 collocation space and the same digital cross-connect frame terminating
15 similar retail services can be provisioned without a bona fide request.”¹¹
16

17 WHAT IS THE IMPACT OF QWEST ASSUMING THE USE OF AN IDF?

18 Assuming the use of an IDF will increase costs for line sharing by requiring more cross
19 connects than necessary, as well as introducing additional points of network
20 failure, similar to Qwest’s previous attempt to use a SPOT frame in collocation
21 arrangements.

1 ⁹ Direct Testimony of Robert J. Hubbard, May 19, 2000 at pages 6-7.

1 ¹⁰ Direct Testimony of Robert J. Hubbard, May 19, 2000, pages 4-5.

2
1 ¹¹ Affidavit of Thomas R. Freeberg, June 27, 2000 at page 27; Colorado Public Utility Commission
2 Docket No. 97I-198T.

1

2 **WHEN SHOULD THE ISSUE OF CLEC-TO-CLEC LINE SHARING BE**
3 **RESOLVED?**

4 Either in this phase of the proceeding or in phase B.

5

6

7 **PART 4: OSS COSTS**

8 **WHAT COST STANDARD SHOULD APPLY TO RECOVERY OF OSS COSTS?**

9 The cost standard that should apply is one that requires costs be forward-looking, reflect
10 efficient operations, and considers the total demand when analyzing the cost of
11 providing nondiscriminatory access to OSS.

12

13 **ARE QWEST'S AND VERIZON'S PROPOSED OSS COSTS CONSISTENT WITH**
14 **FORWARD-LOOKING PRINCIPLES?**

15 No. Qwest and Verizon are claiming cost recovery for OSS costs based on "actual"
16 expenditures to modify their OSS systems for a multi-provider environment. The
17 proper forward-looking costs would not be a simple tabulation of current (or
18 recent) expenditures. Instead, the proper cost would be the difference between the
19 cost of developing a forward-looking, efficient OSS system excluding the new
20 features and the cost of developing a forward-looking, efficient OSS system
21 including the new features. The forward-looking per-unit cost is de minimus

1 because the total cost difference between developing the two OSS systems (with
2 and without the features the ILECs added to their legacy systems) would be
3 relatively small, and because the cost would be shared among (divided by) all
4 users, including the ILECs' retail customers.

5

6 **CAN THE COST DIFFERENCE YOU DESCRIBE BE QUANTIFIED EASILY FROM**
7 **THE COST INFORMATION PROVIDED BY QWEST AND VERIZON?**

8 No. The tabulations of costs provided by Qwest and Verizon are basically "time and
9 materials" to modify their existing legacy systems. There is no information that
10 indicates that Qwest and Verizon even began with forward-looking, efficient
11 systems. Even if there was evidence that the ILECs' legacy systems were "up to
12 date" the proper cost is not the cost to modify existing (possibly efficient)
13 systems, but the difference between developing systems with and without the
14 necessary features. In addition, Qwest and Verizon have no particular incentive
15 to minimize costs that they expect not to pay. Hence, it is unlikely that least cost
16 solutions have been obtained. (Even if the tabulation of costs were the "right"
17 costs to examine, the situation is problematic when functions are outsourced,
18 particularly to an affiliated vendor. For example, a vendor may provide deep
19 discounts to entice a customer to purchase a product, recognizing that
20 subsequent work – undiscounted -- will be obtained.)¹²

21

1 ¹² Qwest's response to discovery request RLI-03-008 (c) indicated that no information was
2 available to Qwest regarding Telcordia's price quote.

1 **Q IS THERE ANY EVIDENCE THAT QWEST AND VERIZON DID NOT**
2 **HAVE FORWARD-LOOKING, EFFICIENT OSS SYSTEMS TO BEGIN**
3 **WITH?**

4 **A.** Possibly. Qwest and Verizon indicate increasing expenditures on OSS prior to the
5 “additional” expenditures for which they claim cost recovery now. There is no
6 substantiation that these expenditures were undertaken to bring existing OSS
7 systems up to forward-looking, efficient capabilities. In fact, the expenditures
8 prior to the Act may have modified the OSS systems in a way that complicated
9 (and hence increased the cost) to complete the tasks for which the ILECs claim
10 cost recovery.

11 Clearly, OSS costs have been included in the ILECs’ rates (through the
12 application of overheads and cost factors). If the trend in OSS expenditures on a
13 per unit basis (for example, per-line or per- dollar of revenue) has remained
14 constant, then it is possible that the OSS costs for which the ILECs are claiming
15 cost recovery are in some sense included in existing rates. For example, the new
16 collocation costs were developed by applying the same cost factors.

17

18 **WHAT HAVE QWEST AND VERIZON PROPOSED FOR OSS COSTS?**

19 **A.** Qwest has proposed what appear to be a per-order charge of \$14.19 (manual) and
20 \$9.58 (electronic) for “start up” costs, and “ongoing” charges (presumably per line
21 per month) of \$1.76 for manual and \$2.02 for electronic. Verizon proposes to

1 charge \$3.27 per order for transition (start-up) costs, and \$3.76 per order for
2 transaction costs (until 17.375 million orders are processed). In addition, Verizon
3 plans to charge \$4.92 per local service request for the recovery what it refers to as
4 national open market shared/fixed costs.

5
6 **Q. ARE YOU AWARE OF THE WUTC'S FINDING THAT ILECS' OSS**
7 **COSTS SHOULD BE PAID FOR BY CLECS?**

8 **A.** Yes, a finding with which I respectfully disagree, if the Commission intends to
9 permit recovery of the ILECs' claimed costs from CLECs. There are important
10 implications for the prospect of local competition to develop in Washington State
11 if the ILECs' claimed costs are imposed on CLECs. First, the fact that CLECs
12 must bear their own costs results in the respective companies facing unequal
13 cost burdens. Second, a structure in which one set of competitors (CLECs) bears
14 another's (ILECs) costs is undesirable for efficiency reasons since the incentive
15 to minimize costs is not placed with the entity that bears the costs. Third, the
16 absolute level of costs adds a layer of costs that CLECs must pay in addition to
17 existing recurring and nonrecurring costs.

18

19 **IS IT APPROPRIATE FOR NEW ENTRANTS TO PAY THE ILECS' CLAIMED OSS**
20 **COSTS?**

21 No. The costs Qwest and Verizon propose to recover were effectively caused by the
22 changes in the law and public policies that were intended to open the local exchange

1 market to competition. Indeed, one could as easily claim that Congress, rather than
2 new entrants, is the cost causer. Even if the Commission were to entertain permitting
3 the ILECs to recover some significant amount of their claimed OSS costs, the
4 prospects for local competition to develop in Washington State would be brighter if a
5 competitively neutral mechanism were to be used.

6 New entrants have incurred their own costs for OSS development
7 (including training personnel and building their own side of the gateway). To
8 impose the ILECs' OSS costs on CLECs in addition to CLECs' bearing their own
9 OSS costs would result in CLECs facing a greater cost burden than the ILECs,
10 since the ILECs do not bear any part of CLECs' OSS costs. The simplest
11 competitively neutral cost recovery mechanism would be for each company to
12 bear its own costs for access to OSS (which would ensure the incentive to
13 minimize costs and not shift the burden of enhancing a competitor's OSS system
14 that is not up to date.) Alternatively, the Commission could establish a
15 competitively neutral surcharge, applied to all access lines that would recover the
16 ILECs' costs for developing access (with CLECs also relying on their end users to
17 recover OSS costs). The surcharge would decrease over time as the number of
18 access lines increases each year.

19 The development of competition in the local exchange market will benefit
20 all customers, including those that choose to remain with the ILEC. Regardless of
21 which provider a customer chooses, the existence of viable choices for customers
22 will force all carriers, including the ILECs, to deploy new technologies more
23 quickly, to develop innovative product offerings, and to control prices. The

1 competitive discipline will benefit all users. The development of competition,
2 however, will be hindered if new entrants must bear their own OSS costs and
3 those of the ILEC as well.

4

5 **Q. WILL QWEST AND VERIZON OBTAIN BENEFITS FROM**
6 **DEVELOPMENT OF THEIR RESPECTIVE OSS SYSTEMS?**

7 A. Yes. Naturally, Qwest will benefit from developing its OSS systems by fulfilling
8 one of the requirements for entry into the long distance market. (Since Qwest is
9 required to provide new entrants with nondiscriminatory access to OSS before it
10 will be granted interLATA authority, any Qwest interLATA ambitions could be
11 seen as making Qwest the “causer” of its OSS costs.)

12 The modifications to the various ILEC OSS systems will provide some
13 benefit to the ILECs. For the variety of systems changed, it is hard to believe that
14 changes would be restricted to those only benefiting CLECs, while continuing to
15 leave ILECs “no better off.” It is more likely that in changing the OSS systems,
16 any opportunity for ILEC improvements that make CLECs no worse off would be
17 taken advantage of. For example, if an ILEC’s operations could be made more
18 efficient or flexible while accommodating the CLEC, at little to no incremental
19 effort, one would expect that to occur, rather than to see a clear opportunity for
20 benefit intentionally ignored. Similarly, any possibility for greater integration of
21 ILEC systems, or expansion of their capabilities (perhaps to handle more or

1 different standards) – while making the CLECs no worse off and at little
2 incremental effort – would be undertaken.

3 In addition, the ILECs retain the “new and improved” OSS systems which
4 may have value in their own right as intellectual property, as well as enabling the
5 ILECs to have a more efficient, productive means of providing service to their
6 customers.

7

8 **DOES THIS CONCLUDE YOUR TESTIMONY?**

9 A. Yes, at this time.

10