

**BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION  
COMMISSION**

In the Matter of the Pricing Proceeding for -960369	)	Docket No. UT
Interconnection, Unbundled Elements, Transport and Termination, and Resale	) ) )	(Phase II)
In the Matter of the Pricing Proceeding for Interconnection, Unbundled Elements, Transport and termination, and Resale for U S WEST Communications, Inc.	) ) ) ) )	Docket No UT-960370 (Phase II)
In the Matter of the Pricing Proceeding for Interconnection, Unbundled Elements, Transport and Termination, and Resale for GTE Northwest <u>Incorporated</u>	) ) ) ) )	Docket No. UT-960371 (Phase II)

**TESTIMONY OF**  
**LARRY B. BROTHERRSON**  
**ON BEHALF OF**  
**U S WEST COMMUNICATIONS, INC.**

**FEBRUARY 15, 2000**

**DIRECT TESTIMONY OF LARRY B. BROTHERRSON**

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**IDENTIFICATION OF WITNESS**

**Q. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.**

A. My name is Larry B. Brotherson. I am employed by U S WEST Communications, Inc. (“U S WEST”) as a director in the Wholesale Markets organization. My business address is 1801 California Street, Room 610, Denver, Colorado 80202.

**Q. BRIEFLY OUTLINE YOUR EMPLOYMENT BACKGROUND.**

A. In 1979, I joined Northwestern Bell Telephone Company. I have held several assignments within Northwestern Bell, and later within U S WEST, primarily within the law department. Over the past 20 years, I have been a state regulatory attorney in Iowa, a general litigation attorney for the company and a commercial attorney supporting several organizations within U S WEST addressing legal questions, drafting contracts, and advising on legal issues associated with various products. With the passage of the Federal Telecommunications Act of 1996, I was assigned to be the attorney in support of the interconnection group. In that role, I was directly involved in negotiating contract language with CLECs dealing with various section of the Act, such as collocation. A considerable amount of detail and effort was spent on U S WEST collocation language. In 1999, I assumed my current duties as director of wholesale advocacy.

My responsibilities include coordinating the witnesses for all interconnection

1 arbitrations as well as working with various groups within the Wholesale  
2 Markets organization of U S WEST Communications to develop  
3 testimony addressing issues associated with interconnection services.

4 **Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?**

5 A. My formal education consists of two degrees: a Bachelor of Arts degree  
6 from Creighton University in 1970, and a Juris Doctorate degree from  
7 Creighton University in 1973.

8 **Q. HAVE YOU PREVIOUSLY TESTIFIED IN WASHINGTON?**

9 A. No.

10 **PURPOSE OF TESTIMONY**

11 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

12 A. The purpose of this testimony is to describe U S WEST's collocation  
13 products and the collocation provisioning processes; including  
14 descriptions of the proposed collocation rate elements. I also describe  
15 how U S WEST's collocation service offerings comply with the Federal  
16 Communications Commission (FCC) orders in CC Docket Nos. 96-98  
17 and 98-147. These collocation service offerings comply with the national  
18 rules for collocation established by the FCC's First Report and Order, CC  
19 Docket No. 96-98, Implementation of the Local Competition Provisions  
20 in the Telecommunications Act of 1996, released August 8, 1996 (First  
21 Interconnection Order), and the First Report and Order, CC Docket No.  
22 98-147, Deployment of Wireline Service Offering Advanced

- 1 Telecommunications Capability, released March 31, 1999 (Advanced
- 2 Services Order).

1 **COLLOCATION**

2 ***Collocation Overview***

3 **Q. PLEASE PROVIDE A BRIEF OVERVIEW OF COLLOCATION.**

4 A. U S WEST facilitates interconnection and access to unbundled network  
5 elements within U S WEST central office buildings through collocation.  
6 In accordance with the terms and conditions of the CLEC's respective  
7 interconnection agreements, both virtual and the various forms of physical  
8 collocation are available to CLECs.

9 Collocation allows a CLEC to place cables into a U S WEST central office and  
10 terminate those cables on transmission equipment owned by the CLEC.  
11 The CLEC installs and maintains its own equipment in the collocation  
12 space provided by U S WEST. The CLEC's transmission equipment can  
13 be interconnected to the U S WEST network. Collocation also facilitates  
14 CLEC access to unbundled network elements and, thus, is integral to the  
15 provision of other unbundled network elements.

16 **DO U S WEST'S COLLOCATION OFFERINGS COMPLY WITH THE**  
17 **FEDERAL COMMUNICATIONS COMMISSION'S (FCC) ORDERS**  
18 **CONCERNING COLLOCATION?**

19 Yes. The FCC's First Interconnection Order established national rules to  
20 provide physical and virtual collocation. Collocation allows CLECs to  
21 collocate equipment to obtain interconnection or to access unbundled network

1 elements. My testimony describes the collocation rate elements offered by  
2 U S WEST that comply with the national rules.

3 **DO U S WEST'S COLLOCATION OFFERINGS COMPLY WITH THE**  
4 **FEDERAL COMMUNICATIONS COMMISSION'S FIRST REPORT**  
5 **AND ORDER IN CC DOCKET NO. 98-147 CONCERNING**  
6 **COLLOCATION?**

7 A. Yes. The FCC's Advanced Services Order requires U S WEST to make  
8 cageless, shared, and adjacent collocation available to competing carriers.  
9 In addition, U S WEST may adopt reasonable security measures to protect  
10 its central office equipment. U S WEST is proposing rates for cageless  
11 and shared collocation and is offering adjacent collocation through the  
12 Bona Fide Request (BFR) process.

13 **Q. DO U S WEST'S COLLOCATION OFFERINGS COMPLY WITH**  
14 **THE FEDERAL COMMUNICATIONS COMMISSION'S FIRST**  
15 **REPORT AND ORDER IN CC DOCKET NO. 96-98 REGARDING**  
16 **THE COST AND PRICING OF THE COLLOCATION RATE**  
17 **ELEMENTS?**

18 A. Yes. The rates of the proposed collocation rate elements are in  
19 compliance with the rules established in the FCC's First Interconnection  
20 Order. The cost-based rates proposed by U S WEST for these services are  
21 listed in Exhibit JLT-1 of Mr. Thompson's testimony. The testimony of  
22 Mr. Thompson will also describe the costs used to develop the proposed  
23 rates for the collocation rate elements.

1       **Q.   PLEASE DESCRIBE THE TYPES OF COLLOCATION.**

2       A.   There are two types of collocation – physical and virtual collocation.

3           There are three varieties of physical collocation: caged, cageless and shared  
4           collocation. In addition, adjacent collocation is provided through the  
5           Bona Fide Request (BFR) process.

6           Under a caged physical collocation arrangement, the CLEC's equipment is  
7           surrounded by a cage that provides an increased level of security to the  
8           CLEC's equipment.

9           Under cageless physical collocation, a CLEC's equipment is placed in the  
10          U S WEST central office adjacent to U S WEST or other CLEC  
11          equipment, but is not separated from other central office equipment by a  
12          cage or walls.

13          Under shared physical collocation, two or more CLECs can share a single  
14          collocation enclosure; however, only one CLEC obtains a Caged Physical  
15          Collocation arrangement from U S WEST. CLECs may share the space  
16          according to the terms and conditions agreed upon by the two CLECs.

17          Under virtual collocation, the CLEC's equipment is turned over to U S WEST  
18          for engineering, installation and maintenance. Virtual collocation, which  
19          is available on a per shelf basis, is used principally when there is no space  
20          for physical collocation.

21          Under Adjacent Collocation, U S WEST will provide collocation in adjacent



1 controlled environmental vaults or similar structures to the extent  
2 technically feasible. Because zoning and other state and local regulations  
3 may affect the viability of adjacent collocation, and the need to exercise  
4 some measure of control over design or construction parameters, and the  
5 need to ensure reasonable safety and maintenance requirements, adjacent  
6 collocation is available through the Bona Fide Request (BFR) process.

7 **Q. WHAT ARE THE DIFFERENCES BETWEEN PHYSICAL AND**  
8 **VIRTUAL COLLOCATION?**

9 A. Under physical collocation, floor space in a U S WEST central office is  
10 leased to the CLEC. The CLEC's employees access that floor space for  
11 the purpose of installing and maintaining the CLEC's own transmission  
12 equipment. Under virtual collocation, leased floor space is not required.  
13 The CLEC procures and then delivers its equipment to U S WEST who  
14 then installs and maintains the CLEC's equipment.

15 **Q. DO CLECS HAVE THE OPTION OF PHYSICAL OR VIRTUAL**  
16 **COLLOCATION?**

17 A. Yes. In accordance with the FCC's First Interconnection Order and terms  
18 and conditions of their respective interconnection agreements, virtual and  
19 physical collocation are available to CLECs. If physical collocation is not  
20 practical because of "space limitations," U S WEST will provide for  
21 virtual collocation.

22 **Q. HOW DOES A CLEC PLACE AN ORDER FOR COLLOCATION?**

1       A.   U S WEST requires CLECs to follow two steps to order collocation.

2           First, the CLEC submits a Physical or a Virtual Collocation order form, and  
3           the appropriate Quotation Preparation Fee (QPF) to its U S WEST  
4           Account Manager. U S WEST then conducts a feasibility study to  
5           determine whether space is available within a specific central office and to  
6           develop a quotation specific to the CLEC's request. A letter is provided to  
7           the CLEC indicating the results of the feasibility study. If space is  
8           available, the U S WEST Product Manager compiles the quotation  
9           information and provides the CLEC with a quote identifying the  
10          nonrecurring and recurring charges and the estimated construction  
11          schedule.

12          Second, within 30 days of U S WEST's quotation, the CLEC must accept the  
13          quotation and submit fifty percent (50%) of the nonrecurring charges to  
14          U S WEST or the quotation expires and the space is returned to available  
15          inventory. Physical collocation arrangements are scheduled for  
16          completion 90 calendar days after receipt of the 50%, non-recurring  
17          charge partial payment. Virtual collocation is scheduled for completion 90  
18          calendar days after receipt of the 50% non-recurring charge, or 90 calendar  
19          days after receipt of the CLEC's equipment, whichever is later.

20        ***Collocation Rate Elements***

21        **Q.   WHAT SPECIFIC RATE ELEMENTS APPLY TO U S WEST'S**  
22        **COLLOCATION PROPOSAL?**

1 A. The rate elements that apply to collocation fall into three categories: (1)  
2 rate elements common to physical and virtual collocation; (2) rate  
3 elements unique to physical collocation; and (3) rate elements unique to  
4 virtual collocation.

5 **Q. PLEASE DESCRIBE THE RATE ELEMENTS THAT ARE**  
6 **COMMON TO BOTH PHYSICAL AND VIRTUAL**  
7 **COLLOCATION.**

8 A. There are 11 common rate elements to collocation. The common rate  
9 elements include the (1) Quote Preparation Fee, (2) Terminations, (3)  
10 Interconnection Tie Pair, (4) Entrance Facility, (5) Cable Splicing (6)  
11 Power Usage, (7) Back-up AC Power Feed Usage, (8) Back-up AC Power  
12 Cable, (9) DC Power Feed – Additional, (10) Security, and (11) Central  
13 Office Clock Synchronization. The following is a brief description of  
14 each of these common rate elements:

15 **(1) Quote Preparation Fee (QPF):** Recovers the cost of preparing an  
16 individual quotation for a CLEC, including reviewing the requested  
17 collocation equipment, identifying available floor space, power, cable  
18 terminations, entrance facilities, etc. U S WEST retains the QPF to cover  
19 the cost of preparing the quotation. The quote provided to the CLEC  
20 specifies the charges that are associated with the requested collocation  
21 arrangement, including the amount of labor associated with equipment  
22 installation, engineering, and training, if applicable. Upon completion of  
23 the collocation service, the QPF will be deducted from the Space

1 Construction charge.

2 **(2) Terminations:** Recovers the cost of the terminations, tie cables,  
3 associated racking and terminating blocks and panels required to connect  
4 U S WEST unbundled network elements to the CLEC's equipment in their  
5 collocation space. A monthly charge, based on the type of connection  
6 (DS0, DS1 or DS3) being used, applies for cable placement, cable, block  
7 placement, and blocks required by the CLEC.

8 **(3) Interconnection Tie Pair (ITP):** Recovers the cost of the frame, tie  
9 cables, associated cable racking and terminating blocks required to be  
10 placed between the shared frame and the Cosmic frame. The ITP replaces  
11 the expanded interconnection channel termination (EICT) rate element  
12 and will allow CLECs access to unbundled network elements. It also  
13 provides for interconnection with a wide variety of network services,  
14 including trunk-side ports on end office and tandem switches, unbundled  
15 loops, and other private line facilities. A monthly charge, based on the  
16 number of connections and the type of connection (DS0, DS1 or DS3)  
17 being used by the CLEC, applies on a per connection basis.

18 **(4) Entrance Facility:** U S WEST offers four choices for entrance facility,  
19 Standard Shared, CLEC POI, Cross Connection and Express Fiber. The  
20 Standard Shared and the CLEC POI Entrance Facility rate elements take  
21 into account this Commission's concern that the construction of a separate  
22 manhole may be required because of congestion in many of U S WEST's  
23 manholes used for entrance facilities. The Standard Shared entrance

1 facility cost assumes that the point of interface occurs at manhole #1. The  
2 CLEC POI entrance facility cost assumes that the point of interface occurs  
3 at a separate manhole other than manhole #1. The Commission addressed  
4 this issue in its 17<sup>th</sup> Supplemental Order stating:

5 ...if U S WEST can demonstrate that its first manhole is  
6 congested, it can require the CLECs to use a separate  
7 manhole and recover the cost from the CLECs. Where  
8 U S WEST claims that a manhole is congested, it must  
9 provide access to the manhole so that the CLECs can  
10 verify that claim. [para.319]

11 **Standard Shared Entrance Facility** recovers the cost of extending the  
12 U S WEST fiber optic cable from the CLEC fiber just outside the  
13 U S WEST central office -- the point of interconnection (POI) at manhole  
14 #1-- to the CLEC equipment located in the U S WEST central office. The  
15 Standard Shared Entrance Facility consists of a manhole,  
16 conduit/innerduct, placement of conduit/innerduct, fiber cable, fiber  
17 placement, splice case, a splice frame, fiber distribution panel, and the  
18 relay rack. The Standard Shared Entrance Facility charge consists of a  
19 non-recurring charge per fiber and a monthly recurring charge per fiber,  
20 with a minimum quantity of 12 fibers (the number of fibers in the standard  
21 cable).

22 **CLEC POI Entrance Facility** recovers the costs for a manhole just outside  
23 the U S WEST central office, other than manhole #1, in addition to the  
24 costs for Standard Shared entrance facility. The CLEC POI Entrance  
25 Facility charge consists of a non-recurring charge per fiber and a monthly  
26 recurring charge per fiber, with a minimum quantity of 12 fibers (the

1           number of fibers in the standard cable).

2           **Cross Connection Entrance Facility** recovers the same costs in the standard  
3           entrance facility except that it requires two fiber distribution panels. The  
4           fibers terminate on the first fiber distribution panel and provide test access  
5           and flexibility for cross connections to the second fiber distribution panel,  
6           where the CLEC's equipment is terminated within the central office. The  
7           Cross Connection Entrance Facility charge consists of a non-recurring  
8           charge per fiber and a monthly recurring charge per fiber, with a minimum  
9           quantity of 12 fibers (the number of fibers in the standard cable).

10          **Express Fiber Entrance Facility** recovers the cost to terminate the CLEC  
11          fiber cable in its collocation space with no splice points. If the cable is not  
12          fire rated, a transition splice will be required inside the cable vault to  
13          convert the fiber cable to a fire rated cable for extension to the collocation  
14          space. An additional charge is assessed for the conversion to fire rated  
15          cable. The Express Fiber Entrance Facility consists of a non-recurring and  
16          a monthly recurring charge per cable.

17          **(5) Cable Splicing:** Recovers the cost of labor and equipment required to  
18          perform a subsequent splice to the CLEC-provided fiber optic cable at the  
19          point of interconnection (POI) after the initial splice for the entrance  
20          enclosure. There are two non-recurring charges associated with fiber  
21          splicing -- a charge that is applied per setup and a second charge that  
22          applies per fiber spliced.

23          **(6) Power Usage:** Recovers the cost of purchasing power from the electric

1 company and the cost of the power plant and maintenance to provide  
2 power to the CLEC's equipment. The power plant consists of the back-up  
3 power generator, rectifiers, power boards, battery distribution frame  
4 boards, batteries and the cable and support structure that connects all these  
5 components. The monthly charges are based on the size of the power feed  
6 requested by the CLEC.

7 **(7) Back-up AC Power Feed Usage:** Recovers the cost to provide Back-up  
8 AC power to the CLEC's equipment in the event of an commercial power  
9 failure. Back-up AC power usage is an optional service and is available in  
10 conjunction with Back-up AC Power Cable. Back-up AC power is  
11 available in 120V, 208V-single phase, 208V-three phase, 240V-single  
12 phase, 240V-three phase, and 480V-three phase. The recurring monthly  
13 charge is on a per ampere basis.

14 **(8) Back-up AC Power Cable:** Recovers the cost of providing the  
15 engineering and installation of holes/fire stopping, wire, conduit and  
16 support, breakers and miscellaneous electrical equipment necessary to  
17 conduct Back-up AC power from the generators to the CLEC's space.  
18 The Back-up AC Power Feed is optional and is available with single or  
19 triple phase options for 20 amp, 30 amp, 40 amp, 50 amp, 60 amp, and  
20 100 amp requirements. The monthly Back-up AC Power Feed charge is  
21 on a per foot basis. The length of the cable will be determined at the time  
22 the collocation order is placed and will be based on the distance between  
23 the CLEC equipment and the generator.

- 1           **(9) DC Power Feed – Additional:** Recovers the cost for the cables, lugs,  
2           fuses and Htaps required to hook the cables to the power network.  
3           Additional power feed cables are connected directly to the CLEC's  
4           equipment and dedicated exclusively for the use by the CLEC. A power  
5           feed consists of an original (A feed) with two cables and a back-up (B  
6           feed) with two cables, four for the combined A & B feed. Power feed is  
7           available in 20, 30, 40, and 60 amps for all physical collocation and 100,  
8           200, 300, and 400 amps for caged collocation only.
- 9           **(10) Security:** Recovers the cost for the (e.g., card readers, identification  
10           cards, etc.) at U S WEST's central office. A recurring monthly charge is  
11           applied, per CLEC employee for access cards and per CLEC employee,  
12           per central office for card access.
- 13           **(11) Central Office Clock Synchronization:** Recovers the cost of providing  
14           composite clock and/or DS1 synchronization signals traceable to a stratum  
15           1 source to provide timing accuracy of  $\pm 1 \times 10^{-11}$ . The CLEC must  
16           determine the synchronization requirements for its equipment and notify  
17           U S WEST of these requirements when ordering the clock signals.  
18           Central office synchronization is required for collocation involving digital  
19           services or connections. Synchronization may be required for analog  
20           services. Central office synchronization is available where U S WEST  
21           wire centers are equipped with Building Integrated Timing Supply (BITS).  
22           Central Office Clock Synchronization is an optional service. A monthly  
23           charge is applied on a per port basis.



1       **Q. PLEASE DESCRIBE THE RATE ELEMENTS THAT ARE UNIQUE**  
2       **TO CAGED AND CAGELESS PHYSICAL COLLOCATION**  
3       **PRODUCTS.**

4       A. Three types of charges apply to physical collocation. The Space  
5       Construction and Rent charges apply to all physical collocation while  
6       Grounding applies only to caged collocation. Each of these rate elements  
7       is described below:

8       **Space Construction:** recovers the cost of engineering the job, constructing an  
9       enclosure around the CLEC's leased space, providing a single power feed,  
10      overhead structures to support cable racking and CLEC equipment, cable  
11      racking, additional lighting, and the supporting environmental  
12      requirements (heating ventilation and air conditioning). There are  
13      separate non-recurring charges for caged and cageless collocation  
14      arrangements. Upon completion of the collocation service, the QPF will  
15      be deducted from the Space Construction charge.

16      The physical collocation space construction charge includes the provisioning  
17      of one 40 amp power feed. If the CLEC requests a caged collocation with  
18      a power feed of 20, 30, 60, 100, 200, 300 or 400 amperes, an adjustment  
19      to the space construction charge is applied for the amps requested. If the  
20      CLEC requests a cageless collocation with a power feed of 20, 30, or 60  
21      amperes per bay, an adjustment to the space construction charge is applied  
22      for the amps requested.

23      The cageless collocation is designed to provide two bays for the CLEC's

1 equipment. If the CLEC requires additional bays, an incremental non-  
2 recurring charge, per bay, is applied to recover the prorated costs of the  
3 supporting structure, cable racking, lighting, and grounding facilities.

4 Consistent with the FCC's First Interconnection Order, CLECs have the  
5 option to subcontract the construction of the caged enclosure to  
6 contractors approved by U S WEST, in conformance with U S WEST's  
7 standards.

8 **Rent:** Recovers the cost of one 110 AC, 15 amp electrical outlet, preventative  
9 maintenance and repair of climate controls, filters, fire and life systems  
10 and alarms, mechanical systems, and HVAC, bi-weekly housekeeping  
11 service and general repair and maintenance. A recurring monthly charge  
12 for rent applies on a per square foot basis.

13 **Grounding:** Recovers the cost of extending the building DC ground from the  
14 grounding plane of the central office to the CLEC's caged collocation  
15 space.

16 **Q. PLEASE DESCRIBE THE RATE ELEMENTS THAT ARE UNIQUE**  
17 **TO VIRTUAL COLLOCATION.**

18 A. There are two rate elements unique to virtual collocation -- Equipment  
19 Bay/Shelf and Labor Charges, which include: Engineering, Installation,  
20 Training, Maintenance, and Inspection. Each of these charges is described  
21 below:

22 **Equipment Bay:** Recovers the cost of the equipment rack in which the

1 CLEC's virtually collocated equipment and fuse panel are mounted. Each  
2 bay includes the 7 foot bay, its installation and all necessary  
3 environmental supports (e.g., floor space, heat/air conditioning and  
4 lighting). Physical dimensions of the equipment bay are 84 inches high by  
5 26 inches wide by 12 inches deep. Each bay is capable of providing space  
6 for six shelves. The cost of the equipment bay is recovered through a  
7 recurring rate per month, per equipment shelf.

8 **(2) Labor Charges:** Recovers the cost of equipment (a) engineering,  
9 (b) installation, (c) training, (d) maintenance and (e) inspection. Except  
10 for training labor, there are two labor rates: one for labor performed during  
11 regular business hours (8:00 AM to 5:00 PM Monday through Friday,  
12 except holidays) and a second for labor performed outside of regular  
13 business hours. The labor charges are described below:

14 **(a) Engineering:** Recovers the cost of planning and engineering  
15 the installation of the CLEC equipment and associated supporting  
16 equipment such as power, cabling, cable racking, frame  
17 terminations, lighting, and entrance facility. U S WEST charges  
18 CLECs per half hour of engineering labor performed during  
19 regular business hours and a somewhat higher rate per half hour  
20 for engineering performed outside of regular business hours.

21 **(b) Installation:** Recovers the cost of the installation or removal  
22 of the CLEC equipment and associated supporting equipment.  
23 Installation labor is assessed in half hour increments for

1 installation labor performed during regular business hours and at a  
2 somewhat higher rate per half hour for installations performed  
3 outside of regular business hours.

4 **(c) Training:** Recovers the cost of training U S WEST employees  
5 on the installation and maintenance of non-standard equipment  
6 provided by a CLEC under a virtual collocation arrangement. This  
7 charge does not apply if a CLEC selects equipment already in use  
8 by U S WEST in the same metropolitan area. The training element  
9 covers the cost of training three U S WEST employees, and  
10 includes the actual cost of the training course, and the employees'  
11 time. In the event a second CLEC selects the same equipment, the  
12 second CLEC is assessed a training fee equal to one-half the fee  
13 charged to the first CLEC. The first CLEC is refunded one-half  
14 the training fee.

15 **(d) Equipment Maintenance:** Recovers the cost of repairs and  
16 maintains a CLEC's equipment under a virtual collocation  
17 arrangement. U S WEST bills the CLEC in half-hour increments  
18 for equipment maintenance during regular business hours and at a  
19 somewhat higher rate for maintenance performed outside of  
20 regular business hours.

21 **(e) Inspection:** Recovers the cost for inspection or supervision of  
22 facilities. In some cases, the CLEC's employees, agents or  
23 contractors may need to access U S WEST's manholes in order to

1                   conduct work operations. In such an instance, U S WEST will  
2                   need to assure that such work is performed in the proper manner  
3                   (e.g. with no damage to other facilities) and may have an employee  
4                   or agent present. U S WEST charges the CLEC for the inspector  
5                   expenses that are incurred. If the CLEC requires access to the  
6                   interface point, U S WEST will provide an inspector to escort the  
7                   CLEC's representative. U S WEST bills the CLEC in half-hour  
8                   increments during regular business hours and at a somewhat higher  
9                   rate for inspection performed outside of regular business hours.

1       **Q. ARE THERE ANY CHARGES ASSOCIATED WITH THE**  
2       **PROVISION OF THE CLEC EQUIPMENT TO U S WEST UNDER**  
3       **A VIRTUAL COLLOCATION ARRANGEMENT?**

4       A. No additional charges apply to virtual collocation. The CLEC's  
5       equipment is provided by the CLEC to U S WEST for installation in the  
6       U S WEST central office. U S WEST dedicates the equipment to the  
7       CLEC's use at no charge -- except for the rate elements I described earlier.  
8       Those rate elements are designed to recover the cost of equipment and  
9       labor that U S WEST provides to facilitate the CLEC's use of its  
10      equipment.

11      ***Collocation Availability***

12      **Q. IS COLLOCATION AVAILABLE TO CLECS WITHIN A**  
13      **REASONABLE AND WELL-DEFINED SCHEDULE?**

14      Yes. Listed below are the standard time frames for collocation: (Individual  
15      Interconnection agreements may differ)

16      Due Date intervals apply to facilities/network capacity in place.

17      Facilities/network capacity not in place intervals are provided on a  
18      Individual Case Basis (ICB).

19      **Physical Collocation**

20      Feasibility – Ten (10) Calendar Days

21      Quote - Twenty-five (25) Calendar days from Feasibility

22      Construction - Within Ninety (90) Calendar Days of quote

1 acceptance and payment.  
2 Supporting Infrastructure not in place (mechanical / electrical) - ICB

3 **Cageless Physical Collocation**

4 Feasibility - Ten (10) Calendar Days  
5 Quote - Twenty-five (25) Calendar Days from Feasibility  
6 Construction - Within Ninety (90) Calendar Days of quote  
7 acceptance and payment.  
8 Supporting Infrastructure not in place (mechanical / electrical) - ICB

9 **Virtual Collocation**

10 Feasibility - Five (5) Calendar Days  
11 Quote - Twenty-five (25) Calendar days from Feasibility  
12 Construction – Within Ninety (90) Calendar Days of quote  
13 acceptance and payment or Within Ninety (90) Calendar Days  
14 from receipt of CLEC’s equipment, whichever is later.  
15

16 **Q. AT WHAT POINTS IN THE U S WEST NETWORK WILL**  
17 **COLLOCATION BE AVAILABLE?**

18 A. Collocation is available at U S WEST central office premises. Collocation at  
19 other locations may be requested through the Bona Fide Request process.

20 **Q. PLEASE SUMMARIZE THE COLLOCATION RATE ELEMENTS.**

21 A. Exhibit LBB-01 illustrates a typical physical collocation arrangement and its  
22 associated rate elements. Exhibit LBB-02 illustrates a typical virtual  
23 collocation arrangement along with the various rate elements that apply to the  
24 service.

25 **CONCLUSION**

26 **Q. WHAT IS YOUR RECOMMENDATION?**

- 1           A. My testimony describes the collocation process and their associated rate
- 2           elements. I recommend that the Washington Commission approve the
- 3           proposed cost recovery process for the rate elements for collocation.



**1 Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

**2 A. Yes, it does.**

**3**



**EXHIBITS**

Physical Collocation Diagram

Exhibit LBB-01

Virtual Collocation Diagram

Exhibit LBB-02