

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE MINNESOTA PUBLIC UTILITIES COMMISSION

**In the Matter of a Commission Initiated
Investigation Into U S WEST
Communications Inc.'s Costs Relating to
Line Sharing Services**

**FINDINGS OF FACT,
CONCLUSIONS OF LAW AND
RECOMMENDATION**

Hearings in this matter were conducted on July 17-19, 2000, by Administrative Law Judge Steve M. Mihalchick in the Large Hearing Room of the Minnesota Public Utilities Commission, 200 Metro Square Building, 121 East 7th Place, St. Paul, Minnesota. The record was closed upon receipt of the final brief on August 21, 2000.

Steven H. Alpert, Assistant Attorney General, Minnesota Attorney General's Office, Telecommunications and Energy Division, Capitol Office Building, Suite 200, 525 Park Street, St. Paul, Minnesota 55103, appeared as attorney for the Department of Commerce. Jason Topp, Attorney at Law, Qwest, Inc., 200 South Fifth Street, Room 395, Minneapolis, Minnesota 55402 and John M. Devaney, Attorney at Law, Perkins, Coie, LLP, 607 Fourteenth Street, N.W., Washington, D.C. 20005-2011 appeared for and on behalf of Qwest Corporation. Mark J. Ayotte and Philip R. Schenkenberg, Attorneys at Law, Briggs and Morgan, 2200 First National Bank Building, 332 Minnesota Street, St. Paul, Minnesota 55101, and Clay Deanhardt, Attorney at Law, 2330 Central Expressway, Santa Clara, California 95050, appeared for and on behalf of Covad, JATO, New Edge and NorthPoint. Joan L. Volz, Attorney at Law, Blumenfeld & Cohen, 13525 265th Street, Welch, Minnesota 55089, and Douglas H. Hsiao, Attorney at Law, 9100 E. Mineral Circle, Englewood, Colorado 80112, appeared for and on behalf of Rhythms Links, Inc.

ISSUES

Three main costing and pricing issues remain disputed in this docket:

- a. The price of the high frequency portion of the loop as an unbundled network element.
- b. The recurring and non-recurring prices for installing and maintaining the additional equipment needed to support line sharing;
- c. The non-recurring prices for installing and disconnecting a shared line.

Issues of OSS and line conditioning costs and pricing were removed from these proceedings by the Administrative Law Judge.^[1]

Based upon the record, the Administrative Law Judge makes the following:

FINDINGS OF FACT

BACKGROUND AND LEGAL FRAMEWORK

1. Section 251(c) of the Telecommunications Act of 1996 (Act) requires incumbent local exchange carriers (ILECs) to provide competitive local exchange carriers (CLECs)^[2] with interconnection, access to unbundled network elements (UNEs), and collocation "on rates, terms and conditions that are just, reasonable and nondiscriminatory" Section 252(d) of the Act authorizes and requires State commissions to set nondiscriminatory prices for such interconnection, access, and collocation based on cost "without reference to a rate-of-return or other rate-based proceeding." The Act authorizes the FCC to establish additional standards by rule, which it has done.

2. In 1997, the Minnesota Legislature amended Minn. Stat. § 237.12, which deals with service connections between telephone companies, by adding subdivision 4. Subdivision 4 requires that prices for interconnection and network elements for telephone companies with more than 50,000 access lines be based on:

A forward-looking economic cost methodology which shall include, but is not limited to, consideration of the following:

(1) the use of the most efficient telecommunications technology currently available and the least cost network configuration, given the existing location of the incumbent telephone company's wire centers;

(2) forward-looking depreciation rates;

(3) a reasonable allocation of forward-looking joint and common costs;

(4) forward looking cost of capital; and

(5) Minnesota tax rates, and where applicable, Minnesota facility placement requirements, Minnesota topography, and Minnesota climate.

3. Minn. Stat. § 237.12, subd. 4(1), is virtually identical to 47 C.F.R. § 51.505(b)(1), one of the rules adopted by the FCC to implement the Act. 47 C.F.R. § 51.505(b)(1) requires that the total element long-run incremental cost (TELRIC) of an element should be measured based on the use of the most efficient telecommunications technology currently available and the lowest cost network configuration using the existing location of the ILEC's wire centers.

4. Minn. Stat. §237.74, subd. 2, states: "No telecommunications carrier shall offer telecommunications service within the state upon terms or rates that are unreasonably discriminatory." Minn. Stat. §237.09, subd. 2 states: "To the extent prohibited by the Federal Communications Commission or public utilities commission, a telephone company shall not give preference or discriminate in providing services,

products, or facilities to an affiliate or to its own or an affiliate's retail department that sells to consumers."

5. It is possible to send more than one signal at a time over a voice-grade copper loop. The configuration under consideration in this proceeding is to send the voice signal at its standard low frequency and to add a high frequency signal carrying digital information. This ability is called line sharing and the resulting service is called Digital Subscriber Line, or DSL, service.^[3] DSL service is an additional service that may be provided over an existing loop if the end user customer is already a ILEC voice customer and the characteristics of the loop (copper, length, loading, etc.) meet certain requirements.

6. In order to use line sharing, it is necessary to attach a splitter to the end of the loop so that the high frequency signal can be split from the low frequency voice signal and each signal routed to the appropriate place. This is done by a "POTS splitter" located on or near the Main Distribution Frame (MDF). The digital signal is routed to a Digital Subscriber Line Access Multiplexor (DSLAM) and the voice signal is routed back to the MDF. At the customer end the line must also be "split." A DSL modem must be installed in the customer's computer to use the high frequency signal and filter devices must be attached to lines going to regular voice grade telephones, modems, and other devices to filter out the high frequency "noise." No changes to the loop itself, i.e., from the MDF to customer network interface, are necessary.

7. The ability to carry a high frequency signal on an existing copper loop constitutes a network element that may be unbundled and made available to CLECs. This high frequency unbundled network element is referred to here as the HUNE. It has also been referred to as the high frequency "portion" of the loop.

8. Technology has been or is being developed that will allow DSL service to be used not just for internet services, but for other services such as additional voice lines, movies on demand, and anything else that can be transmitted by digital signal. Thus, DSL has most of the capabilities of a voice grade loop, and some additional ones, making it a service of interest to many customers and to CLECs.

9. In 1999, Qwest began offering its voice customers DSL service using the high-frequency spectrum of its voice loops. That service was known as MegaBit Subscriber Service. In documents filed April 26, 1999, with the FCC to support the prices in its MegaBit tariffs, Qwest reflected no loop costs as part of the costs of providing the service. Qwest described its pricing as market based, but did not mention loop costs or an imputation, allocation, or other mechanism to charge itself for using the high-frequency portion of the loop.^[4]

10. Neither Qwest nor any other ILEC voluntarily offered to provide unbundled line sharing to CLECs. On May 27, 1999, the Minnesota Public Utilities Commission (Commission) opened a docket to investigate the practices of Minnesota ILECs with respect to line sharing. On October 8, 1999, the Commission issued its

Order Requiring Technical Trials, Good Faith Resolution Of Operational Issues, And A Resulting Report, Docket No. P999/CI-99-678 (October 8, 1999).

11. On December 1, 1999, U S WEST Communications, Inc., now Qwest Corporation (Qwest), and five CLECs submitted a stipulation to the Commission that included interim prices, “subject to true up based on a separate TELRIC-based cost docket that the parties will jointly request be initiated and completed by the Commission as a contested case proceeding within 180 days from the date of this stipulation.” On December 3, 1999, the Commission issued an Order adopting the Stipulation and initiating the present proceeding to determine cost issues relevant to the provisioning of line sharing.

12. In ordering the line sharing technical trials as well as approving the line sharing stipulation and ordering this cost proceeding, the Commission ordered the parties to work with each other on this project in good faith and directed that they be guided by the understanding that the Commission believes that Qwest should provide line sharing to the CLECs “on the same terms and conditions (including pricing, processes, and services) that it provides to itself.”

13. On December 9, 1999, the FCC released its *Line Sharing Order*^[5] requiring ILECs to provide line sharing and establishing a framework that states could use to establish prices related to the provision of line sharing.

14. The *Line Sharing Order* specifically directed that the price of line sharing UNEs “should be set by states in the same manner as they set the price for other unbundled network elements,”^[6] and noted that virtually all states had already adopted and implemented a TELRIC methodology.^[7] With regard to the establishment of the price of the HUNE, the FCC required that TELRIC principles be used to adopt a reasonable method for determining the shared loop cost. The *Line Sharing Order* did not prescribe a cost allocation methodology for loop costs, but established a maximum price test:

In arbitrations and in setting interim prices, states may require that incumbent LECs charge no more to competitive LECs for access to shared local loops than the amount of loop costs the incumbent LEC allocated to ADSL services when it established its interstate retail rates for those services. This is a straightforward and practical approach for establishing rates consistent with the general pro-competitive purpose underlying the TELRIC principles.^[8]

15. The FCC went on to explain the reasons for its determination:

We find it reasonable to presume that the costs attributed by LECs in the interstate tariff filings to the high-frequency portion of the loop cover the incremental costs of providing xDSL on a loop already in use for voice services. Under the price cap rules for new access services, the recurring charges for such services may not be set below the direct costs of

providing the service, which are comparable to incremental costs. The rates the incumbent LECs set for their special access xDSL services should cover those costs. The incumbent LECs filed their cost support for their own special access DSL services before we issued the notice giving rise to this Order compelling line sharing, and they have defended their cost support when challenged in petitions to reject or suspend their tariff filings. Since the incremental loop cost of the high-frequency portion of the loop should be similar to the incremental loop cost of the incumbent LEC's xDSL special access service, this approach should result in the recovery of the incremental loop cost of the high-frequency portion of the loop.^[9]

16. In Paragraph 152 of the *Line Sharing Order*, the FCC found:

Currently, incumbent LECs are recovering the full embedded cost of their loops through revenues received from intrastate business and residential voice services, interstate access charges, and intrastate access charges. Nothing we do today affects the ability of incumbent LECs to continue to receive revenues from those services.

17. The FCC established further directives for applying TELRIC principles in its *Local Competition Order*.^[10] The *Local Competition Order* expressly prohibited ILECs from charging CLECs for costs not caused by the provision of the UNE being priced:

Only those costs that are incurred in the provision of the network elements in the long run shall be directly attributable to those elements. Costs must be attributed on a cost-causative basis. Costs are causally-related to the network element being provided if the costs are incurred as a direct result of providing the network elements, or can be avoided, in the long run, when the company ceases to provide them.^[11]

In addition, the FCC found in the *Local Competition Order* that embedded costs, opportunity costs, and universal service subsidies are not proper considerations for setting the price of unbundled network elements.^[12]

18. On July 18, 2000, during the evidentiary hearings in this docket, the Eighth Circuit Court of Appeals issued its decision on remand in *Iowa Utilities Board v. FCC (Iowa Utilities II)*. The court vacated several FCC rules, including 47 C.F.R. § 51.505(b)(1). The Court held that because the rule requires costs to be based upon a hypothetical network, it violates the plain meaning of the Act because Congress intended the rates to be based on the cost of providing the interconnection or network element.^[13] The Eighth Circuit did not vacate the use of the TELRIC methodology required by the remainder of 47 C.F.R. § 51.505 or any other FCC rule that is relevant here. *Iowa Utilities II* did not expressly invalidate Minn. Stat. § 237.12, subd. 4(1).

The Unbundled Network Elements

The HUNE

19. The price Qwest may charge for an unbundled loop was set in the Generic Cost Docket at \$17.87. At the time of the hearing in this docket, that price had not been deaveraged.

20. Qwest recovers its embedded costs, including the embedded cost of the local loop, through the prices that it currently charges for local service, optional features, and toll access.^[14]

21. While it is necessary to attach devices to split off the HUNE from the low frequency signal, no changes to the loop itself are necessary.^[15] Thus, Qwest incurs no actual cost for providing the HUNE itself. It only incurs costs for the splitters and necessary shelf space and equipment and for making the necessary connections.

22. Dr. Edward Fagerlund, an economist employed by the Department, adopts the view that the HUNE and the voice grade spectrum are joint products that should be looked at as a composite unit. To him, the cost of the HUNE should not be the focus of the cost analysis. Instead, the cost of the composite unit, the UNE loop, is the appropriate focus of the cost analysis.

23. Dr. Fagerlund states that because Qwest is presumed to be fully recovering its embedded costs, including the embedded cost of the local loop, and because in every case of line sharing Qwest will be receiving payment for the local loop, the price for the HUNE should be set at zero.

24. Dr. Fagerlund is of the further opinion that if any price above zero is set for the HUNE, there should be a equivalent decrease in the price of local service to that customer so that the total price for the HUNE and local service is no greater than the price set for local service. To do otherwise would provide Qwest with double recovery. However, because applying an offset imposes administrative costs while yielding the same net result, Dr. Fagerlund strongly recommends setting the HUNE price at zero.

25. Dr. T. Randolph Beard, an Associate Professor of Economics at Auburn University, testified on behalf of the CLECs. He also noted that the incremental cost of the HUNE is zero because the high frequency capability of the loop is inherent in the loop and no additional resources need be used to create it. In his opinion, zero is the best price for the HUNE because:

- a. A HUNE price greater than zero is inefficient. Viewing this as a case of joint supply, the prices of the components should, in a competitive market, add up to the economic cost of the loop that provides them. Since the current voice rates and other charges already recover the loop costs, a positive HUNE price would cause the loops to be priced above their costs. This is economic inefficiency and can cause higher cost alternative forms of service to become viable.

b. A HUNE price greater than zero results in double recovery for the ILEC and causes a customer buying line sharing from an CLEC to pay extra for the customer's own loop.

c. A HUNE price greater than zero implies that a price squeeze by the ILEC is possible.

d. A HUNE price greater than zero creates an artificial cost advantage for Qwest arising solely from its dominant position and is discriminatory toward the CLECs in comparison to the terms Qwest obtains for itself.

Like Dr. Fagerlund, Dr. Beard feels that correcting offsets are possible, but too complex to implement.^[16]

26. Qwest maintains that CLECs should pay something for the HUNE because the HUNE is a valuable asset and advancing technology may make the upper spectrum more valuable than the lower spectrum. They suggest that a random survey of the population would support some level of compensation greater than zero.

27. Qwest asserts a zero price is not a "just and reasonable" rate under the Act, that the HUNE price should reflect the rate that would be charged in a competitive environment, and that a zero price violates the takings clause of the Fifth Amendment to the federal constitution.

28. Qwest proposes to charge the CLECs a monthly recurring rate for the HUNE of half the price of an unbundled loop as established by the Commission, which would apply to deaveraged prices, as well.^[17] In addition, Qwest has now proposed to limit the charge to \$10 and to "commit that it would not cause a price squeeze using its interstate DSL service, as long as it was receiving some amount for use of the high frequency loop."^[18]

29. Dr. William L. Fitzsimmons testified for Qwest. He holds a Ph.D. in Resource Economics from the University of Massachusetts, Amherst. In his opinion, the HUNE is a different kind of unbundled element because it is not a physical element and does not lend itself to pricing by the TELRIC approach.^[19] In his view, the loop cost should be recast as a common cost to be allocated between the HUNE and voice spectrum, which should be viewed as two "dedicated connections." Dr. Fitzsimmons testified that the most reasonable allocation of loop costs would be by the setting the price of the HUNE at 50% of the loop price.^[20] He arrived at the 50% figure as most reasonable because it is "one over two," and because, "there is no meaningful evidence that more or less than 50 percent of the loop costs should be allocated to either connection." Dr. Fitzsimmons conceded that there was no meaningful evidence to show that a one percent allocation of the costs to the HUNE would be unreasonable, but he did believe it would be unreasonable to expect a firm "in a competitive situation" to charge zero.^[21]

30. Dr. Fitzsimmons was also of the opinion that if 50% of the loop costs were allocated to the HUNE by setting the price at 50% of the loop price, it was not necessary

to remove those costs from the voice spectrum by applying an offset to the price of local service. His opinion was based upon what he considered to be a lack of evidence that Qwest was over-recovering its costs.^[22]

31. In January of 2000; after reviewing the December 9, 1999, *Line Sharing Order*, Qwest decided that the FCC was most concerned about a price squeeze issue. They also concluded that the problem on their DSL filing with the FCC was the difference between their recurring monthly direct costs, \$17.32, and the price, \$29.95,^[23] which they had set. Therefore, they decided to impute \$10.00, the approximate average difference throughout Qwest territory, to themselves and apply that as a limit on the HUNE price they would charge.^[24] Qwest argues that it could have allocated that \$10.00 as loop costs for the MegaBit service.

32. While Qwest may impute up to \$10 to its MegaBit service and promise not to reduce its retail price below the new price floor, nothing prevents Qwest from offering rebates or free services bundled with the xDSL service. Qwest's actual costs for MegaBit never change with the imputation. The CLECs, on the other hand, would still have up to \$10.00 of additional direct costs added to their xDSL service.

33. Dr. Fagerlund recommends rejecting the Qwest proposal because there is no clear mechanism for the Commission to establish and maintain a MegaBit price floor or to monitor compliance with a price floor.

Collocation Costs

34. Qwest and the CLECs have reached agreement on three network configurations for line sharing: 1) splitter attached to the Main Distribution Frame (MDF), 2) splitter placed in a common collocation area, and 3) splitter placed in the CLEC's collocation area, whether it is cageless or caged.^[25] The pricing for each of these configurations is based on the virtual collocation determinations of the Generic Cost Docket and is in large part agreed upon by the parties.

35. An MDF is a steel rack structure in a central office where the cables that come from the outside plant terminate and are cross-connected to office equipment blocks for the voice switch or to other blocks that distribute the lines elsewhere in the central office. An MDF has two sides, a "vertical" side that terminates the outside plant cables and a "horizontal" side where cables that go to the switch or other equipment are connected. An MDF may have unused rack space, or shelves, available. Another frame known as a COSMIC frame may be used. It has a different configuration, but, for the purposes of this proceeding, the same functions.

36. A "jumper" or "cross-connect" is a cable that connects a block on the vertical side to a block on the horizontal side. A tie cable is longer than a jumper and is used to connect between frames or from one place in a central office to another. The cables considered here contain 96 lines, each consisting of a pair of copper wires, plus some spares.

37. The parties' positions on collocation rates are summarized in the following table:^[26]

Proposed Collocation Prices
(dollars per 96 shared lines)

Activity	Splitter on MDF			Splitter in Common Area			Splitter in CLEC Collo Area		
	CLECs	DOC	QWEST	CLECs	DOC	QWEST	CLECs	DOC	QWEST
Land & Buildings	0.00	0.00	0.00	2.95	2.98	4.43	0.00	0.00	0.00
Relay Rack	0.00	0.00	0.00	0.68	0.69	1.03	0.00	0.00	0.00
Hole, Cable & MDF	27.17	27.17	27.17	9.54	9.54	9.91	10.06	10.06	10.06
Total Recurring	27.17	27.17	27.17	13.17	13.21	15.37	10.06	10.06	10.06
Planning	720.60	622.33	1310.18	453.10	720.60	1310.18	360.30	393.05	1,310.18
Cable & MDF	787.92	787.92	901.01	1276.74	1276.74	1491.63	1802.02	1802.02	1802.02
Total Non-Recurring	1508.52	1410.25	2211.19	1729.84	1997.34	2801.80	2162.32	2195.07	3112.20

The differences among the parties are the result of different facts and opinions as to the costs of planning and engineering splitter collocation and relay racks, the number of splitters per rack, and cable length.

Planning and Engineering Costs

38. Qwest engineers must plan and engineer the placement of the CLECs' splitters used for line sharing. This includes designing the cable racking, cabling, and splitter rack locations and differs depending upon the configuration used.

39. All parties used the ATT/MCI collocation model from the GCC to develop their pricing for planning and engineering and agreed to use a labor rate of \$65.51 for that function. Nonetheless, their proposals differ significantly as a result of differences in their estimates of the time required for planning and engineering.

40. Qwest engineer Robert J. Hubbard provided Qwest's estimates. He has over 33 years of experience as a cable splicer, cable repairman, design engineer, and for the last three years, as Manager of Qwest's Interconnection Planning Department. He estimates planning and engineering time at 20 hours for all three configurations. His estimate is based on an informal survey of engineers performing the work and was averaged over all configuration types.

41. Department witness Wes Legursky has been a telecommunications consultant for six years and previously worked as a planner and engineer for Ameritech for 13 years. He estimates planning and engineering time of 9.5 hours for MDF splitter collocation, 11 hours for splitter placement in a common area, and 6 hours for splitter placement in a CLEC's collocation area.

42. The CLECs' witness Michael Zulevic is Director of Network Deployment in the Central Region for Covad Communications Company. Prior to that, he worked for

U S WEST for 30 years in various positions from Central Office Technician, to several engineering positions, to Manager-Depreciation Lives and Analysis. He provided his knowledge of planning and engineering to John C Klick, an economic and financial consultant, who also testified on behalf of the CLECs. They propose planning and engineering times of 11 hours for MDF splitter collocation, 11.5 hours (of which five hours are for relay rack planning and engineering) for splitter placement in a common area, and 5.5 hours for splitter placement in a CLEC's collocation area.

43. In the line sharing configuration where the splitter is placed in a common collocation area, relay racks are used to hold the splitters. Mr. Klick was of the opinion that the engineering costs associated with relay racks should be attributed across all the splitters that can be placed in a rack. Thus, Mr. Klick would divide the five hours for relay rack planning by 12, add that to the 6.5 hours for other planning and engineering, and multiply by \$65.51 per hour, for a result of \$453.10 shown in the table above.^[27]

44. The Administrative Law Judge finds that the estimates of Mr. Zulevic and Mr. Klick should be adopted, including the allocation of relay rack planning. Mr. Legursky's estimates are realistic and unbiased and provide a good base reality check. Qwest's estimates are out of line with the other estimates, seem to include some unneeded functions, and lack sufficient detail to be relied upon. The CLECs' estimates are better supported and in line with Mr. Legursky's numbers. Likewise, in the splitter in common area configuration, allocating relay rack planning across all affected splitters makes sense because that function need not be repeated for every splitter in a rack.

Relay Rack

45. The parties differ on the number of splitters a relay rack should be assumed to hold for costing purposes. This figure affects their proposals for the recurring price of the relay rack and allocation of land and building cost in the splitter in common area configuration. (The parties agree that these prices should be zero for the other configurations.)

46. Qwest witness Mr. Hubbard recommended eight splitters per rack, based primarily on current experience in which orders from the CLECs for DSL service has been relatively low, less than forty line sharing orders,^[28] on the fact that there is currently an average of only three installed splitter shelves per relay rack, and on Mr. Hubbard's belief that DSL may be a short-live technology.^[29] Qwest also relied upon a prehearing ruling that Qwest could use its own best estimates of future demand because the CLECs had not provided any estimates of future use.

47. CLEC witness Mr. Zulevic testified a standard rack can hold up to 14 splitter shelves and should be configured to hold at least 12.^[30] Department witness Mr. Legursky also recommended approximately 12 splitters per rack, though his calculation was slightly different.^[31]

48. The Administrative Law Judge finds that it should be assumed that relay racks will be filled with 12 splitter shelves as recommended by the CLECs. Current use

is not a good indicator of future use of DSL. Even if the technology changes, as it certainly will, pricing should always be based upon efficient use of resources. Prices for the recurring costs of land and buildings and relay racks should be set accordingly.

Cable Length

49. The differences between the Department and the CLECs' proposals for recurring cable and MDF rates and those of Qwest are due to differing assumptions of the length of cables required when the splitter is placed either on the MDF or in a common area. All parties propose the same rate of \$1802.02 when the splitter is placed in the CLEC collocation area. Cable length assumptions also explain the differences in the rates proposed for nonrecurring Hole, Rack, and MDF for the splitter in common area configuration.

50. Three tie cables are needed when the splitter is located in the common area: The first carries the voice and data traffic from the MDF to the splitter; the second cable carries the voice traffic back to the MDF; the third cable carries the data between the data point of the splitter and the DSLAM. This configuration requires that additional blocks be installed on the MDF to terminate the two cables going to the splitter.

51. Because two feet of cable are needed for every foot the splitter is from the MDF, the distance of the splitters from the MDF is the key to the costing/pricing of the tie cables. The placement of the splitter as close to the MDF as possible is very important for another reason; there is a limit on the length of the line from the MDF to the customer of 18,000 feet. Above that distance, line sharing will not work.

52. In the Stipulation it was agreed that Qwest would install the splitter a) in a relay rack as close to the interconnection distribution frame (ICDF) or CLEC termination points as possible, b) on the ICDF, or c) if neither were available, on the MDF or other appropriate location.^[32]

53. The agreed-upon \$1802.02 rate for cable when the splitter is placed in the CLEC collocation area is based on the Collocation Cost Model from the Generic Cost Case; The Collocation Cost Model places the CLEC collocation area within 150 feet of the frame^[33], with 15 feet of cable added for the length up and down the rack (7.5 feet x 2).

54. Qwest witness Mr. Hubbard recommended 100 feet for the distance between the frame and the splitter. Mr. Hubbard produced a Collocation Job Summary chart at the hearing^[34] showing average cable lengths from 31 jobs in the 13 Minnesota central offices where line sharing collocations were complete through March, 2000.^[35] The chart was prepared based on discussions Mr. Hubbard had with Qwest personnel. The numbers provided appear to be general estimates and not actual measured lengths. Qwest had no updated or more accurate information available at the hearing.

55. Department witness Mr. Legursky testified that in an existing office there is a high probability of finding open space for relay rack placement within 25 feet of the MDF.^[36] CLEC witness Mr. Zulevic also recommended placing the relay rack within 25

feet of the MDF because space would be available in a forward-looking central office.^[37] Mr. Hubbard acknowledged there are might be up to seven rows of relay racks available within 25 feet of a distribution frame in a central office.^[38]

56. The Administrative Law Judge finds that there is no adequate evidence to support a firm distance figure to be used in the price calculations. Qwest's 100 foot figure is so large that it must be considered inaccurate or the result of inefficient engineering practices. The Department's and the CLECs' number of 25 is not much better because it is based on general speculation of what space should be available for a relay rack. Since Qwest should have provided current, accurate information, it must be found that it's proposal has not been proved. Twenty five feet should be used as an interim number, with the parties allowed to introduce better evidence in a subsequent proceeding and a settle-up allowed.

Install and Disconnect

57. The Department and the CLECs propose a non-recurring rate of \$5.75 to install a shared line, while Qwest proposes \$48.82. The rates proposed do not vary by network configuration. The Department and the CLECs propose a non-recurring rate of \$4.32 to disconnect a shared line; Qwest proposes \$28.26. The primary difference between the price proposals is the treatment of operational support systems (OSS). The Department and the CLECs assume a nondiscriminatory flow-through OSS, based on the NRC Model approved in the Generic Cost Docket.^[39] Qwest's rates reflect manual ordering and provisioning and assume CLEC line sharing orders are manually processed.^[40]

58. Under the FCC's Line Sharing Order 161, Qwest was to have the OSS necessary for line sharing in place by June 6, 2000 (180 days after the December 9, 1999 release date of the Order). Qwest argues manual provisioning should be used for costing purposes under the Eighth Circuit's decision in *Iowa Utilities II* because manual provisioning is actually used by Qwest today.

59. CLEC witness Mr. Klick proposed three changes to the NRC Model approved in the Generic Cost Docket to reflect differences associated with line sharing installs and disconnects: Use all copper service instead of the model's mix of copper and fiber technology, use an installation rate accounting for one jumper disconnection and two jumper connections, and use a disconnection rate to account for two jumper disconnections.^[41] Mr. Legursky made similar adjustments.

60. The Administrative Law Judge finds that the charges determined by the NRC Model as recommended by the Department and the CLECs are appropriate and that each of the adjustments proposed by Mr. Klick properly reflect the actual differences between POTS provisioning and shared line provisioning.

61. Qwest proposed that it charge the disconnect rate at the same time the CLEC orders installation of a shared line. But Qwest's cost study does not account for the time value of this proposed charge or for the churn rate for shared lines. Further,

the Generic Cost Docket recognizes that the disconnect charge should only be assessed at the time disconnect.

Based upon the foregoing Findings of Fact, and for reasons set forth in the attached Memorandum, the Administrative Law Judge makes the following,

CONCLUSIONS OF LAW

1. The Administrative Law Judge and Commission have jurisdiction in this matter under Minn. Stat. §§ 14.50 and 237.02, 237.081, and 237.16.

2. Qwest has the burden of proof with respect to issues of material fact. Facts at issue must be proven by a preponderance of the evidence.^[42]

3. The appropriate price for the HUNE is zero because Qwest incurs no cost for providing the HUNE.

4. The value the HUNE would have if a competitive market existed is reasonably determined by applying the TELRIC approach.

5. Public opinion on whether Qwest should be allowed to charge for the HUNE would vary with how the question is posed and is irrelevant and speculative here.

6. Under the FCC pricing rules, the price of the HUNE should be set at zero.

7. There is nothing about a HUNE price of zero that conflicts with the intent or goals of the Act, FCC rules, Minnesota statutes or rules, or Commission decisions.

8. The economic analyses of Dr. Fagerlund and Dr. Beard supporting a zero price for the HUNE are sound, based upon accurate understandings of DSL technology, and appropriate.

9. A zero HUNE rate avoids the price discrimination prohibited by Minn. Stat. §§ 237.09, subd. 2, and 237.74, subd. 2.

10. A HUNE price above zero would result in loops used in line sharing being priced above cost; which would be economically inefficient and could cause higher cost alternative forms of service to become viable.

11. A HUNE price above zero would lead to double recovery by Qwest and create an artificial cost advantage for Qwest.

12. A HUNE price above zero violates the basic requirement that Qwest provide elements to competitors on terms equivalent to that which it charges itself and would be discriminatory.

13. A HUNE price above zero makes a price squeeze by Qwest possible. This possibility can in theory be eliminated by imputing an additional cost to Qwest for

the HUNE and creating a price floor at the level of actual costs plus the imputed costs of the loop. But there is no adequate mechanism for establishing and maintaining such a price floor over time or for monitoring Qwest's compliance with such a price floor. Moreover, such a price floor would artificially create higher costs for the CLECs, and higher prices for consumers.

14. Qwest's claim that without a HUNE price above zero, it will not recover its loop costs is not supported by evidence in the record. It was Qwest's burden to bring forth any evidence it had that it will not recover its loop costs, particularly in a situation such as this where it has control of the critical information. Qwest has failed to do so.

15. Qwest's claim that a zero price for the HUNE will result in an unconstitutional taking of its property is not supported by facts in the record or the law. The Commission's rejection of essentially the same argument was upheld by the Federal District Court in *US WEST v. Minnesota PUC*, 55 F. Supp. 2d 968, 974 (D. Minn. 1999). Here, as there, Qwest presented no credible evidence that a HUNE price of zero will "negatively affect the overall operation of the incumbent LEC to such a degree that it can no longer receive a fair rate of return from its investment."

16. Qwest's proposal of allocating half of what it claims is the "common cost" of the loop to the HUNE is not based upon an incremental cost approach and is not a forward-looking economic cost methodology as required by Minn. Stat. § 237.12, subd. 4, and 47 C.F.R. § 51.505(b).

17. Qwest's pricing proposal does not meet the maximum price test of the *Line Sharing Order*. Qwest's proposal to impute a charge to itself \$10.00 for the HUNE was developed several months after it filed its MegaBit rates at the FCC and is illusory.

18. For Qwest to charge CLECs for the HUNE and not actually charge itself would be preferential and discriminatory in violation of the Act and Minn. Stat. §§ 237.09, subd. 2, and 237.74, subd. 2

19. The planning and engineering time estimates proposed by the CLECs, with the allocation of time for planning relay rack suggested by Mr. Klick, are appropriate and should be adopted.

20. The recommendation of the CLECs to assume that 12 of 14 relay racks are filled in the splitter in common area configuration is appropriate and should be adopted.

21. The recommendation of the Department and the CLECs to use 25 feet as the cable length should be adopted on an interim basis. Qwest and the other parties should be allowed to provide updated and accurate information and argument in a subsequent proceeding and the rate established should be subject to true-up.

22. The recommendations of the CLECs as to collocation prices are appropriate and should be adopted.

23. The recommendations of the Department and the CLECs as to installation and disconnection charges are appropriate and should be adopted, including the recommendation that Qwest not be allowed to charge the disconnection charge until the time of disconnection.

Based upon the foregoing findings and conclusions, the Administrative Law Judge makes the following:

RECOMMENDATIONS

IT IS RESPECTFULLY RECOMMENDED that the Public Utilities Commission order:

1. That the HUNE price is set at zero.
2. That the following charges for UNE rates as recommended by the CLECs are adopted:

Charges Associated with Line Sharing					
Activity	Rate Type	Per	On MDF	Common Area	CLEC Collo
High-Frequency Portion of the Loop	Recurring	Shared Line	\$0.00	\$0.00	\$0.00
Installation of a Shared Line	Non-Recurring	Shared Line	\$5.75	\$5.75	\$5.75
Disconnection of a Shared Line	Non-Recurring	Shared Line	\$4.32	\$4.32	\$4.32
Planning (Cabling & Equipment)	Non-Recurring	96 Shared Lines	\$720.60	\$453.10	\$360.30
Land & Buildings	Recurring	96 Shared Lines	\$0.00	\$2.95	\$0.00
Relay Rack	Recurring	96 Shared Lines	\$0.00	\$0.68	\$0.00
Other Non-Recurring (Cable & MDF)	Non-Recurring	96 Shared Lines	\$787.92	1276.74	\$1,802.02
Other Recurring (Hole, Rack & MDF)	Recurring	96 Shared Lines	\$27.17	\$9.54	\$10.06
TOTALS					
Loop	Recurring	Shared Line	\$0.00	\$0.00	\$0.00
Installation	Non-Recurring	Shared Line	\$5.75	\$5.75	\$5.75
Disconnection	Non-Recurring	Shared Line	\$4.32	\$4.32	\$4.32
Collocation	Recurring	96 Shared Lines	\$27.17	\$13.17	\$10.06
Collocation	Non-Recurring	96 Shared Lines	\$1,508.52	\$1,729.84	\$2,162.32

3. That Qwest and the other parties may provide updated and accurate information and argument as to the appropriate figure to be used for cable length in a subsequent proceeding and the rate established here shall be subject to true-up.

4. That Qwest is prohibited from assessing the disconnection charge until the time of disconnection.

Dated this 24th day of October, 2000.

STEVE M. MIHALCHICK
Administrative Law Judge

Transcript prepared by Shaddix & Associates.

NOTICE

Notice is hereby given that, pursuant to Minn. Stat. § 14.61, and the Rules of Practice of the Public Utilities Commission and the Office of Administrative Hearings, exceptions to this Report, if any, by any party adversely affected must be filed within 20 days of the mailing date hereof with the Executive Secretary, Minnesota Public Utilities Commission, 350 Metro Square, 121 7th Place East, St. Paul, Minnesota 55101. Exceptions must be specific and stated and numbered separately. Proposed Findings of Fact, Conclusions and Order should be included, and copies thereof shall be served upon all parties. If desired, a reply to exceptions may be filed and served within ten days after the service of the exceptions to which reply is made. Oral argument before a majority of the Commission will be permitted to all parties adversely affected by the Administrative Law Judge's recommendation that request such argument. Such request must accompany the filed exceptions or reply, and an original and 15 copies of each document should be filed with the Commission.

The Minnesota Public Utilities Commission will make the final determination of the matter after the expiration of the period for filing exceptions as set forth above, or after oral argument, if such is requested and had in the matter.

Further notice is hereby given that the Commission may, at its own discretion, accept or reject the Administrative Law Judge's recommendation and that the recommendation has no legal effect unless expressly adopted by the Commission as its final order.

MEMORANDUM

A HUNE Price of Zero Is Justified by the Evidence and the Law.

The appropriate price for the HUNE is zero. Qwest incurs no cost to provide the HUNE. The established unbundled loop price, which compensates Qwest for all of its loop costs, does not change as a result of line sharing and will still be collected by Qwest. Law and sound economic theory require that the price for the HUNE equal the zero incremental cost of the HUNE.

A Zero HUNE Price Is Constitutional.

Qwest maintains that “without compensation in the form of a positive rate” for the HUNE, there will be an unconstitutional taking of Qwest’s property. Qwest further contends “the rental that probably could have been obtained” is the proper measurement of the value of the taking in this case.^[43] Qwest’s unconstitutional taking arguments are not supported by fact or law.

In *U S WEST Communications, Inc. v. Minnesota Public Utilities Commission*, 55 F.Supp.2d 968, 989 (D. Minn. 1999), the Court addressed compensation for UNEs pursuant to interconnection agreements and held that public utilities, which have a hybrid of public and private status, must be analyzed slightly differently under the Takings Clause.

The end goal is not a fair rate of return as in the traditional rate-setting paradigm, but rather equitable opening up of a market. Neither party to the Agreement is expected to profit in the interconnection or resale process. See 47 U.S.C. § 251(c)(4)(A) (“to offer for resale at wholesale rates ...”) Because these transactions are not designed to be profitable, the analysis cannot be fair rate of return as to any individual provision concerning the sale or access of services to the CLECs. Rather the query must be whether any provision or provisions of the Agreement negatively affect the overall operation of the incumbent LEC to such a degree that it can no longer receive a fair rate of return from its investment.^[44]

The Court concluded that U S WEST’s takings argument was not ripe for review for two reasons. First, the Court was not then in the position to determine the effect of the agreement on U S WEST’s overall rate of return. Second, if U S WEST were not earning an overall fair rate of return, it would be required to seek a rate increase to attempt to reach the necessary level of return. So long as U S WEST had an opportunity to have its retail rates readjusted, there could be no determination that its investors were being deprived of a fair rate of return. The Court dismissed U S WEST’s takings claim.

Similarly, in upholding the FCC’s use of a forward-looking methodology in *Iowa Utilities II*, the Eighth Circuit noted that if Qwest receives its actual costs of furnishing its network to its competitors, together with a permitted reasonable profit, there is no Constitutional violation.^[45] “Payment of cost-based rates represents full compensation to the incumbent LEC for use of the network elements that carriers purchase.”^[46]

Qwest’s argument cannot apply to the price of the HUNE because there is no property for which Qwest is not receiving full compensation because its actual incremental cost for the HUNE is zero.

A Zero HUNE Price Is Just, Reasonable And Nondiscriminatory.

Qwest argues that a zero HUNE price will violate the Act because such a price is not “just and reasonable.”^[47] But, contrary to Qwest’s arguments, the standards are not

“just” as determined by a random public survey and “most reasonable” as determined by Qwest.

Qwest claims that zero is unjust because it is entitled to something for its valuable asset. That theory has some attraction if one assumes that the HUNE is equivalent to the voice portion of the loop and of similar value on the market. But that is far from a valid assumption. The HUNE is most accurately considered just another service that is available because a loop to a customer exists. In an unregulated, competitive market, Qwest might be able to command some price for the HUNE initially. But competitive pricing would soon force it to apply the extra income it was earning to reducing the price of the other products such as the voice portion of the loops to those customers with DSL service, or of all loops, or to rolling back the price of the HUNE to zero. Qwest has not proposed any such adjustments here. Only the Department and the CLECs have argued that if a non-zero price is allowed, an offset should be required. Because it is not supported by any empirical evidence or consistent with any solid economic principle, Qwest’s theory of entitlement must be rejected.

Nor is a UNE price equal to the nothing Qwest has been charging itself “unjust.” To the contrary, it would be unjust and discriminatory to require the CLECs to pay up to \$10 to Qwest while Qwest continues to charge itself nothing for the use of the high frequency spectrum on a shared line. It would be unjust to require ratepayers to pay twice for loop costs if they want DSL services. If the rate paying public was made aware of this fact, they would certainly respond that Qwest is not entitled to the extra payment for the HUNE.

In summary, a price of zero for the HUNE is just, reasonable, and nondiscriminatory.

A Non-Zero HUNE Will Result In Double Recovery.

Qwest argues there would be no concern about double recovery because there has been no evidence presented in this case that Qwest’s retail rates for local service currently recover the cost of the loop and that even discussing retail rates is improper because UNE prices are to be based only on cost.^[48] Neither of these arguments, however, supports Qwest’s attempts to achieve double-recovery of its loop cost under the line-sharing combination.

Contrary to Qwest’s claim, the record evidence shows Qwest is fully recovering its loop costs. Dr. Fagerlund pointed out that Qwest set its various rates for voice services without regard to line sharing, and did so in a way that allowed it to recover its embedded costs.^[49] Likewise, the FCC has found that ILECs are currently recovering the full embedded costs of their loops.^[50] If Qwest wanted to prove that, despite all appearances, it is not currently recovering its costs, it had an obligation to present evidence comparing all its revenues and all its costs, either in this proceeding or in a proceeding seeking a rate increase. Qwest failed to sponsor any testimony comparing total loop costs with total loop revenues.^[51] The extent of Qwest’s evidence on this point

was a chart showing that residential rates are lower than business rates.^[52] That does not satisfy Qwest's burden.

A Zero HUNE is Consistent with FCC Rules

The two most significant FCC pricing principles in this docket are that the HUNE should be priced using an "incremental cost approach," and that CLECs should pay for only those costs that they cause to occur. Here, there is no incremental loop cost associated with a CLEC's use of the HUNE. Likewise, because there must be local voice service before there can be line sharing, and if Qwest ceases to provide the service, the costs do not go away, the cost of the loop is not caused by line sharing.

Qwest's attempt to rely on the FCC's pricing guideline regarding the allocation of joint and common costs is based upon an incorrect premise. Qwest argues that when a line is shared, loop costs are transformed from a direct cost to a common cost of two "dedicated connections." But in fact, the loop has always provided the user with a set of services, including local and toll voice messages, caller ID, alarm services, and so on. The addition of one more service provided over the loop (i.e., xDSL service) does not change the character or the cost of the existing loop. The "dedicated connections" do not exist.^[53]

In addition, any price greater than zero would allow Qwest to put the CLECs in exactly the price squeeze that the FCC sought to avoid by ordering line sharing.^[54] A price squeeze could happen because Qwest could undercut CLEC prices by setting its retail prices for MegaBit below the sum of direct costs plus the HUNE charge it does not have to pay. Qwest promises to prevent that price squeeze by agreeing to price MegaBit services higher than the sum of its direct cost plus an "imputed" amount for the HUNE. Even if the imputation commitment could be enforced, it would still result in an artificially high minimum price for DSL services, thereby eliminating the benefits of competition.

Moreover, an imputation still results in Qwest keeping for itself the amount of the imputation, while CLECs would incur the direct cost of having to pay the HUNE price to Qwest. Qwest would still have the benefit of the extra income, giving it an unfair advantage.

The CLECs' Proposed Collocation Rates Should be Adopted.

The proposal regarding cable length requires additional comment. Qwest's proposal to use 100 feet as the average distance between the frame and the splitter derives from choices Qwest made as to relay rack placement that were self-serving and not efficient.

The CLECs argue that the terms of the Stipulation requires Qwest to place the splitters as close to the DS0 terminations as possible and that Qwest didn't do that. As noted in the Findings, the Stipulation requires Qwest to place the splitter "in a relay rack" as close to the ICDF or CLEC DS0 termination points as possible or on the ICDF, or, as a last choice, on the MDF. Qwest hasn't proposed using ICDFs in this

proceeding,^[55] so its first obligation is to set up a relay rack as close as possible to the MDF. Quest has not so because they claim an average distance of 100 feet and there is credible evidence from Mr. Legursky and Mr. Zulevic that there ought to be sufficient space for a relay rack within 25 feet of MDFs in typical central offices. The CLECs and their customers should not have to pay for this inefficiency.

Moreover, Quest has the burden of establishing its costs with a cost study.^[56] The updated and complete information for all jobs completed in all 51 central offices was available prior to the hearing.^[57] Quest had control of this information, yet failed to present it. It is fair to presume that the actual average distances are significantly shorter than Quest presented. Quest should be required to provide reliable measurements and justify them before recovering anything more than recommended by the Department and the CLECs.

Impact Of The Eighth Circuit Decision

Iowa Utilities II does not affect the analysis in this proceeding. Whether and how the FCC may modify the rules adopted in its Line Sharing Order are unknown and will remain so for some time. The Generic Cost Docket on which the pricing in this docket is based has an independent state law basis. Quest argues that, by implication or preemption, the Eighth Circuit decision has invalidated Minn. Stat. § 237.12, subd. 4(1), because it contains the same language. But the Court did not do so expressly. The Administrative Law Judge and the Commission lack the statutory authority to declare the statute invalid or to ignore its requirements.

Moreover, the Administrative Law Judge declines to adopt Quest's suggestion to follow the approach of *Iowa Utilities II* and require costs to be measured on the actual, not hypothetical network costs. Use of a hypothetical network model is an economically sound and entirely appropriate method of determining accurate and fair costs for rates established in this proceeding. The TELRIC method applied to a hypothetical network as required by Minn. Stat. § 237.12, subd. 4, is much like the familiar replacement method appraisal of income-producing real property. As one step in determining the value of a piece of property, an appraiser determines how much it would cost to build a piece of property that would provide the same functions, not how much it would cost to rebuild an identical property. This often gives a more accurate picture of the market value of the property than the original cost or reproduction cost appraisal methods. That is the case here.

More importantly, 47 C.F.R. § 51.505(b)(1) and Minn. Stat. § 237.12, subd. 4(1), have not been used as a basis for costing in this proceeding.^[58] Whether § 51.505(b)(1) exists or not has no impact on the proposed pricing of the HUNE, because there is no additional loop cost to Quest, actual or hypothetical, when a HUNE is leased by a CLEC. Section 51.505(b)(1) has no impact on the installation and disconnection rates, as the entire difference between the parties relates to whether CLECs are to be charged for manual ordering and provisioning. The Commission's determination in the Generic Cost Docket that CLECs need not pay for manual ordering and provisioning was based

on the requirements of 47 U.S.C. § 251(c)(3) for nondiscriminatory access, not on a § 51.505(b)(1) analysis.^[59]

Similarly, the parties' dispute on cable length relates to where the splitter will be placed in one of the network configurations and factual evidence as to what typically exists in central offices. Section 51.505(b)(1) is not implicated in this analysis.

Finally, the proposals for planning and engineering rates differ primarily in the amount of time assumed in three network configurations. Mr. Zulevic's and Mr. Legursky's testimony as to those time assumptions were based on their experience in actual central offices and did not rely on § 51.505(b)(1).

S.M.M.

^[1] *Fifth Prehearing Order* (May 18, 2000).

^[2] In this Report, "CLECs" means CLECs in general and "the CLECs" means the following parties: Covad Communications Company, Rhythms Links, Inc., NorthPoint Communications, JATO Communications Corp., and New Edge Network, Inc.

^[3] There are different types of DSL service. They are often referred to collectively as "xDSL" because they use different first initials of the acronym.

^[4] Exhibit 9.

^[5] *In the Matter of Deployment of Wireless Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order in CC Docket No. 98-147, Fourth Report and Order in CC Docket No. 96-98. (*Line Sharing Order*).

^[6] *Line Sharing Order*, ¶ 135.

^[7] *Line Sharing Order*, ¶ 132.

^[8] *Line Sharing Order*, ¶ 139.

^[9] *Line Sharing Order*, ¶ 140 (footnote omitted).

^[10] *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, First Report and Order, 11 FCC Rcd. 15,499, ¶ 1(1996) ("*Local Competition Order*").

^[11] *Local Competition Order*, ¶ 691.

^[12] *Local Competition Order*, ¶¶ 704-15.

^[13] *Iowa Utilities Board v. FCC*, ___ F.3d ___, 2000 WL 979117 (8th Cir. July 18, 2000).

^[14] T. 711-713, 753.

^[15] Loop conditioning may be necessary, but it has been determined that Qwest may not charge loop conditioning charges. *Fifth Prehearing Order* (May 18, 2000).

^[16] T. 511-515.

^[17] Prior to deaveraging, the price was \$8.94, half of the loop price.

^[18] T. 392.

^[19] Exhibit 1, at 1-2.

^[20] T. 41-42.

^[21] T. 111-112.

^[22] T. 46-49.

^[23] Exhibit 9.

^[24] T. 389-393; Exhibit 16.

^[25] T. 260.

^[26] Extracted from Exhibit 35 at 2 and Exhibit 38 at 10, as modified by Mr. Legursky at the hearing. T.661-662.

^[27] Exhibit 33 at 23; Exhibit 35.

- [28] T. 234-234.
- [29] Exhibit 13 at 15.
- [30] Exhibit 31 at 5; T 597.
- [31] T 667-673.
- [32] Exhibit 32, Stipulation, ¶ 7.
- [33] Exhibit 33 at 27.
- [34] Exhibit 14.
- [35] T. 430-433.
- [36] T 683.
- [37] Exhibit 31 at 3.
- [38] T 285-286.
- [39] T 618-619.
- [40] T 440-441.
- [41] Exhibit 33, p. 34.
- [42] Minn. R. 7812.1700, subp. 23.
- [43] Qwest Brief at 10.
- [44] *U S WEST Communications, Inc. v. Minnesota Public Utilities Commission*, 55 F.Supp.2d 968 at 989-90.
- [45] *Iowa Utilities II*, slip op. at 14.
- [46] *Id.*, slip op. at 13.
- [47] Qwest Brief at 4.
- [48] Qwest Brief at 15-17.
- [49] Exhibit 40 at 17-18; T. 750.
- [50] *Line Sharing Order*, ¶¶ 151-52.
- [51] T. 197; T. 86.
- [52] Exhibit 3 at 14.
- [53] The CLECs also argue that the “dedicated connection” argument falls apart when one considers Qwest’s “MegaBit Lite” service in which the DSL service is not always connected. In fact, even with this service, the HUNE is always connected. It is the connection at the DSLAM, after the high frequency signal has been split off, that is not always connected. Exhibit 10.
- [54] *Line Sharing Order*, ¶ 141.
- [55] ICDFs were found to be unnecessary in the Generic Cost Case and their costs were disallowed.
- [56] See 47 C.F.R. § 51.505(e).
- [57] T. 345.
- [58] They were used in the Generic Cost Docket to determine loop costs, but Qwest is not contesting those cost here.
- [59] *Fifth Prehearing Order*, (May 18, 2000), p. 2.