

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

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In the Matter of a Commission Initiated
Investigation into U S WEST Communication,
Inc.'s Costs Related to the Provision of Line
Sharing Services

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DOCKET NO. P-5692,5710,5827,5638,
5670,466,421/CI-99-1665

ORDER SETTING PRICES FOR
UNBUNDLED NETWORK ELEMENTS

PROCEDURAL HISTORY

On December 3, 1999, the Commission approved a stipulation (hereinafter "the Stipulation") establishing prices related to line sharing.¹ The Stipulation was signed by five competitive local exchange carriers (CLECs) and U S WEST Communications, Inc.(U S WEST or USWC), now operating as Qwest Corporation (Qwest). The prices were interim, "subject to true up based on a separate TELRIC² [total element long-run incremental cost]-based cost docket that the parties will jointly request be initiated and completed by the Commission as a contested case proceeding...."

On December 8, 1999, the Commission issued its NOTICE AND ORDER FOR HEARING. That Order initiated the current docket, referring the issue of setting prices for line sharing to the Office of Administrative Hearings for a contested case proceeding before an administrative law judge (ALJ).

On December 9, 1999, the Federal Communications Commission (FCC) released its order directing telephone companies to provide line sharing, and establishing a framework that states could use to establish the relevant prices.³

¹In the Matter of a Commission Initiated Investigation into the Practices of Incumbent Local Exchange Companies Regarding Shared Line Access Docket No. P-999/CI-99-678 ORDER ADOPTING TERMS AND CONDITIONS FOR PROVISION OF LINE SHARING IN MINNESOTA AND INITIATING COST PROCEEDING (December 3, 1999).

²The definition of TELRIC is set forth at 47 C.F.R. § 51.505(b), and discussed below.

³*In the Matters of Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98 (*Local Competition Docket*), Fourth Report and Order, CC Docket No. 98-147 (*Advanced Services Docket*), Third Report and Order, 14 FCC Rcd. 20,912 (*Line Sharing Order*).

On May 18, 2000, the Administrative Law Judge Steve M. Mihalchick issued his *Fifth Prehearing Order* rejecting consideration of the cost of Qwest's operation support systems (OSS) in this docket.

On October 25, 2000, the ALJ issued his Findings of Fact, Conclusions of Law, and Recommendation (ALJ's Report). Qwest and a group of CLECs both filed exceptions to the ALJ's Report by November 13. Those parties and the Minnesota Department of Commerce (Department) filed replies to the exceptions by November 27.

The matter came before the Commission on April 17, 2001.⁴

FINDINGS AND CONCLUSIONS

I. Legal framework

The federal Telecommunications Act of 1996 (the Act) directs incumbent local exchange carriers (LECs or ILECs) to provide CLECs with interconnection, access to unbundled network elements and collocation. 47 U.S.C. § 251(c). Interconnection means linking competing telecommunications networks to permit the exchange of traffic. An unbundled network element (UNE) is a facility or piece of equipment used to provide telecommunications service, provided at cost to a competitor without requiring the competitor to purchase undesired elements. Collocation refers to a CLEC interconnecting or obtaining access to UNEs by placing its own equipment within a LEC's premises. See generally 47 C.F.R. § 51.5. Minnesota statutes have somewhat similar provisions. Minn. Stat. § 237.12.

LECs and CLECs may ask a state public utilities commission to set the terms for interconnection, access to UNEs and collocation, under certain conditions and subject to various guidelines. 47 U.S.C. § 252(b)-(d); Minn. Stat. § 237.12, subd. 4. In proceedings before this Commission, the LEC generally bears the burden of proof. 47 C.F.R. § 51.505(e); **Minn. Rules 7812.1700, subp. 23.**

II. Factual background

For one caller to communicate with another, their lines must connect. Telephone companies connect these lines through a device called a switch, which they store in buildings called central offices. The Act permits CLECs to install their plant within the incumbent's central office, and to connect that plant to the incumbent's switch. Consequently, central offices may have areas designated exclusively for the telephone company, other areas for CLECs (CLEC collocation areas), and still other areas that are used by both the telephone company and the CLECs (common areas).

A telephone company sends a telephone message by converting the sound of a voice into electromagnetic signals, and transmitting them through a medium such as a telephone line. Just as a standard radio has the capacity to receive many different signals across a range of the electromagnetic spectrum, a standard telephone line can also transmit signals across a range of the electromagnetic spectrum. Voice communications occupy only a fraction of the

⁴Commissioner Reha took no part in this decision.

total spectrum that a telephone line can transmit. The remaining spectrum can be used for providing other “advanced” services.⁵ “Line sharing” refers to the practice of two different service providers offering two different services over the same line, with each provider using different frequencies.⁶

The configuration under consideration in this proceeding involves using a telephone line’s lower frequency spectrum for transmitting analog voice signals,⁷ and using the higher frequencies for transmitting other signals, especially digital signals.⁸ Today these digital signals are used to provide high-speed internet connections, but they can conceivably also provide more voice channels, movies on demand, and other content. The ability to transmit and receive these other digital signals is called Digital Subscriber Line (DSL) service.

⁵Congress adopted the Act to promote innovation, investment, and competition for all services in the telecommunications marketplace, including advanced services. Joint Statement of Managers, S. Conf. Rep. No. 104-230, 104th Cong. 2d Sess, 1 (1996). The term “advanced services” refers to, among other things,

high speed, switched, broadband, wireline telecommunications capability that enables users to originate and receive high-quality voice, data, graphics and video telecommunications. The term “broadband” is generally used to convey sufficient capacity – or “bandwidth” – to transport large amounts of information.

FCC’s *Line Sharing Order*, ¶ 1, fn. 2.

⁶*Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, First Report and Order and Further Notice of Proposed Rulemaking, 13 FCC Rcd. 4761, ¶ 92 (1999) (*Advanced Services First Report and Order*); ALJ Report, ¶ 5.

⁷“Voiceband services ... are analog telecommunications services that utilize the lower frequency portion of the local loop spectrum, from 300 Hertz to at least 3000 Hertz, and potentially up to 3400 Hertz, depending on the equipment and facilities.” FCC’s *Line Sharing Order*, ¶ 13, fn. 18.

⁸An electronic “analog” signal is so named because, on an oscilloscope, it appears as a smooth curve *analogous* to the natural compression waves made by any acoustical device (such as a voice). A digital signal, in contrast, appears as a series of discrete “steps” rather than curves. While most of the public switched network is designed to transmit analog signals, digital signals have certain advantages: They are cheaper to switch and transmit, they can be transmitted in the same bandwidth with other digital signals without creating interference, and they can be transmitted with greater fidelity than analog signals. Newton’s *Telecom Dictionary* 46, (17th ed. 2001).

The high-frequency portion of the loop constitutes a network element that a LEC must offer to CLECs on an unbundled basis.⁹ This high-frequency UNE is nicknamed the HUNE. While the HUNE is the only UNE in this docket not previously addressed by the Commission, line sharing also raises new collocation issues.

To use DSL, both ends of the line that connects the subscriber's premises to the LEC's central office (the loop) must have a "splitter" device. This device distinguishes the low-frequency voice signal from the high-frequency digital signal, and routes each signal to the appropriate place.

At Qwest's central office, the loop does not connect to a splitter directly. Rather, the loop terminates at the office's main distribution frame (MDF), which is simply a device to facilitate making (and changing) connections between outside loops and cables within the central office. From there, a cable routes the signal to the splitter. The voice portion of the signal is then routed back to the MDF and eventually on to the public switched telephone network. The digital portion of the signal is routed through a device called a Digital Subscriber Line Access Multiplexor (DSLAM) onto the packet network, which is distinct from the public switched telephone network. A schematic diagram of this arrangement appears at the end of this Order.¹⁰

Once the splitters are attached, it is possible for a loop to provide both voice and DSL services without further modification.

III. ALJ's Report

The ALJ identified one UNE – the HUNE – and multiple aspects of collocation that warrant charges related to line-sharing. He recommended the following charges:

⁹See generally FCC's *Line Sharing Order*.

¹⁰The diagram derives from the FCC's *Advanced Services Docket*, Memorandum Opinion and Order and Notice of Proposed Rulemaking, 13 FCC Rcd. 24012, Appendix B (1998).

| Charges Associated with Line Sharing | | | | |
|---|------------------------------|--------------------------------|--|-------------------------------|
| rate element | network configuration | | | units |
| | splitter on MDF | splitter in common area | splitter in CLEC collocation area | |
| HUNE | \$0 | \$0 | \$0 | per line per month |
| Installation | \$5.75 | \$5.75 | \$5.75 | per line |
| Disconnection | \$4.32 | \$4.32 | \$4.32 | per line |
| Planning | \$720.60 | \$453.10 | \$360.30 | per 96 lines |
| Land and Buildings | \$0 | \$2.95 | \$0 | per 96 lines per month |
| Relay Rack | \$0 | \$0.68 | \$0 | per 96 lines per month |
| Other Non-Recurring | \$787.92 | \$1,276.92 | \$1,802.02 | per 96 lines |
| Other Recurring | \$27.17 | \$9.54 | \$10.06 | per 96 lines per month |

IV. Commission action

Having reviewed the record of this case, the Commission will adopt the recommendations of the ALJ's Report, except as noted below in section IV.B. The Commission will now address specific exceptions to the ALJ's Report raised by the parties.

A. HUNE rate

As noted above, the ALJ concludes that a CLEC should pay Qwest \$0 per line per month for each HUNE that it ordered from Qwest. Qwest opposes this recommendation; the CLECs and the Department support it.

1. Legal standard

a. Pricing

As noted above, a LEC must provide CLECs with interconnection, access to unbundled network elements and collocation. 47 U.S.C. § 251(c); 47 C.F.R. § 51.5; Minn. Stat. § 237.12. Public utilities commissions have the authority to set the terms for interconnection, access to UNEs and collocation, under certain conditions and subject to various guidelines. Specifically, federal regulations state:

The total element long-run incremental cost [TELRIC] of an element is the forward-looking cost over the long run of the total quantity of the facilities and functions that are directly attributable to, or reasonably identifiable as incremental to, such element, calculated taking as a given the incumbent LEC's provision of

other elements.

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

(2) **Forward-looking cost of capital.** The forward-looking cost of capital shall be used in calculating the total element long-run incremental cost of an element.

(3) **Depreciation rates.** The depreciation rates used in calculating forward-looking economic costs of elements shall be economic depreciation rates.

47 C.F.R. § 51.505(b). Similarly Minnesota law states:

For telephone companies with more than 50,000 access lines, the prices for interconnection or network elements to be established by the commission in any pending or future proceeding shall 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.**

Minn. Stat. § 237.12, subd. 4.

b. Nondiscrimination

Both federal and state law bar a LEC from discriminating against CLECs. The Act states:

[E]ach incumbent local exchange carrier has the following duties:

*** * ***

(3) **UNBUNDLED ACCESS– The duty to provide ... nondiscriminatory access to network elements on an unbundled basis ... on rates, terms and conditions that are just, reasonable, and nondiscriminatory....**

47 U.S.C. 251(c). Minnesota law also restricts a LEC's discretion to discriminate:

... 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.

Minn. Stat. § 237.09, subd. 2.

Specifically with respect to line sharing, the FCC concluded that –

... 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.

FCC's *Line Sharing Order*, ¶ 139. Consistent with this finding, this Commission noted that a LEC should provide line sharing to CLECs "on the same terms and conditions (including pricing, processes and services) that it provides to itself."¹¹

2. Application

In applying the legal standards to the facts of the current case, the ALJ took note of two prior dockets.

In 1996, in accordance with these state and federal laws, the Commission initiated a Generic Cost Docket to establish rates for U S WEST's network elements and interconnection.¹² Among other things, that proceeding established the costs related to using U S WEST's loops, consistent with the legally-prescribed standards. But the proceeding did not address line-sharing; no telecommunications provider had offered DSL service to the public in Minnesota prior to 1998.¹³ As a consequence, this matter was left to the current docket.

Then in 1999, in an unrelated matter, U S WEST filed documents with the FCC to support the prices in its DSL tariffs. U S WEST characterized its pricing as market-based, but reflected no loop costs as part of the cost of providing the service. Qwest subsequently corroborated that the cost of the loop is attributed to the basic service, and there is no incremental cost of the loop attributed to DSL service.

In the current docket, the ALJ found that line sharing imposes various costs on U S WEST, now Qwest, as the table of Charges Associated With Line Sharing shows. But with respect to the cost of the HUNE, he found that all the costs were already reflected in the price of the loop, as determined in the Generic Cost Docket. Finding no incremental cost for the use of the high-frequency portion of the loop, and noting that the company imputed no portion of the loop cost to itself in its filings with the FCC, the ALJ recommended a cost of \$0.

In addition to being required by the statutory standards, the ALJ noted that a \$0 cost would have certain policy benefits. In particular, it would prevent Qwest from double-recovering the cost of its loops, or from engaging in a "price squeeze" – an anti-competitive practice whereby a wholesale provider discriminates in favor of an affiliated retail operation to the detriment of competing retail operations.

¹¹In the Matter of a Commission Initiated Investigation into the Practices of Incumbent Local Exchange Companies Regarding Shared Line Access, Docket No. P-999/CI-99-678 ORDER REQUIRING TECHNICAL TRIALS, GOOD FAITH RESOLUTION OF OPERATIONAL ISSUES, AND A RESULTING REPORT (October 8, 1999).

¹²In the Matter of a Generic Investigation of U S WEST Communications, Inc.'s Cost of Providing Interconnection and Unbundled Network Elements, Docket No. P-442, 5321, 3167, 466, 421/CI-96-1540 (Generic Cost Docket).

¹³In the Matter of USWC's Megabit Service Offering, Docket No. P-421/EM-98-471.

3. Qwest objections

Qwest raises a number of objections to the ALJ's recommendation. Qwest argues that a price of \$0 violates the Act's requirement that prices be just and reasonable, and that they incorporate a reasonable allocation of joint and common costs. Qwest also argues that a price of \$0 represents the taking of its property without just compensation.

a. Just and reasonable rates

Qwest notes that the Act requires the Commission to establish "just and reasonable" rates. 47 U.S.C. § 251(c)(3). Qwest argues that such rates would be the rates set in a competitive market, and that Qwest is entitled to recover the revenues that it might otherwise have received. The FCC's pricing rules do not permit the recovery of "opportunity costs". 47 C.F.R. § 51.505(d)(3). Moreover, in its *Line Sharing Order* the FCC rejected this argument directly:

We reject U S WEST's value-based pricing methodology. As we stated in the *Local Competition First Report and Order*,¹⁴ the price for unbundled network elements should be based upon forward-looking costs. Setting the price for an unbundled network element based on the competitive value that the facility confers upon another party does not conform with the TELRIC principles set forth both in this Order and in the *Local Competition First Report and Order*.

FCC's *Line Sharing Order*, ¶ 157 (citation added).

The ALJ found that the use of the HUNE for DSL service imposes no incremental cost on the loop. As a result, the ALJ was well within the bounds of reason to propose a price of \$0. The Commission agrees with this analysis.

b. Joint and common costs

Qwest criticizes the ALJ's Report for saying that Qwest has no costs associated with the HUNE, noting testimony saying that there are joint and common costs associated with the HUNE. The ALJ's Report notes, however, that Qwest has no *incremental* costs associated with the HUNE beyond those that are associated with the voice line. ALJ Report at 18-19. That position is well supported by the evidence.

Qwest also argues that the FCC's pricing rules require an allocation of a portion of the loop's joint and common costs to the HUNE. Those rules state:

- (a) *In general*. The forward-looking economic cost of an element equals the sum of:
- (1) The total element long-run incremental cost of the element, as described in paragraph (b); and
 - (2) A reasonable allocation of forward-looking common costs, as described in paragraph (c).

* * *

¹⁴FCC's *Local Competition Docket*, First Report and Order, 11 FCC Rcd. 15,499 (1996) (*Local Competition Order*).

(c) Reasonable allocation of forward-looking common costs--(1) Forward-looking common costs. Forward-looking common costs are economic costs efficiently incurred in providing a group of elements or services (which may include all elements or services provided by the incumbent LEC) that cannot be attributed directly to individual elements or services.

(2) Reasonable allocation. (i) The sum of a reasonable allocation of forward-looking common costs and the total element long-run incremental cost of an element shall not exceed the stand-alone costs associated with the element. In this context, stand-alone costs are the total forward-looking costs, including corporate costs, that would be incurred to produce a given element if that element were provided by an efficient firm that produced nothing but the given element.

(ii) The sum of the allocation of forward-looking common costs for all elements and services shall equal the total forward-looking common costs, exclusive of retail costs, attributable to operating the incumbent LEC's total network, so as to provide all the elements and services offered.

47 C.F.R. § 51.505.

Qwest's argument turns on the meaning of "reasonable allocation." While the FCC rules require that 100% of the joint and common costs related to a set of UNEs be recovered from among the price of those UNEs, they do not say what percentage of those costs any given UNE should bear. The only limit is that the allocation to any given UNE be "reasonable" and not so much as to cause the cost of that UNE to exceed its "stand-alone cost." The FCC rejects the argument that its rules mandate allocating joint and common costs to the HUNE. FCC's *Line Sharing Order*, ¶¶ 137-41.

Indeed, they may require the opposite. A loop enables the provision of both voice and DSL service, so the cost of the loop is related to the provision of either service. In this sense, there is no reason to allocate any more of the loop cost to the elements that support voice service than to the elements that support DSL service. But Qwest's tariffs distinguish between the two services. Specifically, the tariffs provide that a subscriber must receive voice service to receive DSL service, but need not receive DSL service to receive voice service. Thus, a subscriber always triggers the purchase of a loop, but not always the separate purchase of a HUNE. If the Commission were to allocate, say, 50% of the loop's joint and common costs to DSL service and 50% to voice service, then half of the loop costs would go unallocated whenever a customer ordered voice service without DSL service. Only by allocating 100% of the joint and common costs to voice service can Qwest be assured that all of its wholesale cost to provide the loop will be allocated to a service provider (either a CLEC or Qwest's own retail operations).¹⁵

¹⁵Qwest argues that there is an insufficient relationship between the wholesale cost-based price of its local service and the retail price, so that it cannot be assured of recovering its loop costs when a subscriber buys local service from Qwest. The FCC rejects this argument. While some retail prices may be below cost, others may be above cost; in aggregate a LEC's prices permit adequate cost recovery.

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 sources.

In any event, the discretion arguably allowed by the FCC's joint and common cost rules in no way supercedes the mandate of the nondiscrimination laws.

c. Takings

Finally, Qwest argues that a \$0 price violates the United States Constitution's Fifth Amendment. The Fifth Amendment says, in relevant part, "[n]o person shall ... be deprived of life, liberty or property without due process of law, nor shall private property be taken for public use without just compensation." Qwest argues that this language bars the Commission from setting a price of \$0 per month for the HUNE.

Qwest cites a number of Fifth Amendment cases to discuss what conduct constitutes the taking of property. But the Fifth Amendment does not bar the taking of property; it merely bars the taking of property without just compensation. Ultimately, Qwest's argument fails because Qwest fails to demonstrate that it could not receive just compensation.

The argument that Qwest would not have an adequate revenue stream to recover its loop costs rests on the premise that Qwest would sell HUNEs in isolation, independent of an end use customer buying a voice line. This premise is inconsistent with the record. As discussed above, every customer that buys DSL service over a Qwest loop also buys voice service over that loop. Thus, any analysis of the revenues Qwest would receive for the use of its HUNE, divorced from the revenues that Qwest would receive for the use of the rest of its loop, is necessarily incomplete. And there is no basis in the record to conclude that these revenue streams, taken together, do not permit Qwest to recover its costs.

Moreover, even if Qwest concludes that its current rates do not permit it to recover its line costs, Qwest still cannot sustain a takings claim until it demonstrates that it lacks other means to raise revenues. Courts, including the Federal District Court in Minnesota¹⁶ and the Eighth Circuit Court of Appeals,¹⁷ have repeatedly rejected the takings claims of incumbent telephone companies for just this reason. As recently as 1999 the district court noted that, when evaluating a takings claim,

...the query must be whether any provision or provisions of [an interconnection agreement] negatively effect the *overall* operation of the incumbent LEC to such a degree that it can no longer receive a fair rate of return from its investments.

In this case, it is premature to ask this question.... Because Minnesota offers an opportunity to U S WEST to have its rates readjusted, U S WEST has not yet exhausted its state remedies and its takings claim is [not] ripe for review.¹⁸

The court stressed the importance of Qwest's overall operation in a takings analysis;

FCC's *Line Sharing Order*, ¶ 152.

¹⁶*U S WEST v. Minnesota PUC*, 55 F. Supp. 2d 968, 974 (D. Minn. 1999).

¹⁷*Iowa Utils. Bd. v. FCC*, 120 F.3d 753 (1997), *rev'd in part sub nom., AT&T Corp. v. Iowa Utils Bd.* 525 U.S. 366, 119 S.Ct. 721 (1999).

¹⁸*U S WEST v. Minnesota PUC*, 55 F. Supp. 2d at 989-990 (emphasis in original).

Qwest's focus on a single UNE to ground its takings claim clearly misses this mark. Until Qwest demonstrates that it has exhausted its other opportunities to raise revenues and that its still cannot earn a fair rate of return from its investments, the record will not support Qwest's takings claim.¹⁹

4. Conclusion

The Commission finds the ALJ's reasoning well-grounded. Indeed, given the prohibitions on discrimination, it is difficult to see how the ALJ could have arrived at a different conclusion. Construing its own order, the FCC noted:

...The *Line Sharing Order* concluded that states should not permit incumbent LECs to charge more to competitive LECs for access to share local loops than the amount of loop costs the incumbent LEC allocated to [DSL] services when it established its interstate retail rates for those services. To date, we are not aware of any incumbent LECs that have allocated any loop costs to [DSL] services.²⁰

On the basis of the record before it, the Commission will adopt the ALJ's recommendation, and set the price of the HUNE at \$0.

B. Cable length

While the Commission did not specifically ask the parties to identify the amount of cable required to connect a CLEC's splitter to Qwest's MDF within a central office, some assumption about the amount of cable required for this task is necessary to establish the Other Non-Recurring and Other Recurring costs. ALJ Report ¶ 49.

¹⁹Qwest suggests that it has already exhausted its administrative remedies, in that it surrendered its right to seek a rate increase according to the terms of its Alternative Form of Regulation (AFOR) Plan. In the Matter of a Petition by U S WEST Communications, Inc. Requesting Approval of an Alternative Regulation Plan, Docket No. P-421/AR-97-1544 Amended Alternative Form of Regulation Plan for the State of Minnesota (January 11, 1999). An AFOR plan represents an agreement between a telephone company and the Commission establishing the terms for providing telecommunications services in lieu of statutory rate-of-return regulation, adopted pursuant to Minnesota Statutes § 237.76 *et seq.* A company entering such a plan must designate each of its services as either Price Regulated, Flexibly Priced, or Non-Price Regulated. Minn. Stat. § 237.761. Qwest cites Section IV.E of the AFOR Plan for the proposition that it cannot raise rates. While this section restricts Qwest's discretion to raise rates for Price Regulated services, it does not restrict Qwest's discretion to raise rates for its other services.

²⁰*In the Matter of Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers, Low-Volume Long Distance Users, Federal-State Joint Board on Universal Service*, CC Docket Nos. 96-262 and 94-1, Sixth Report and Order, CC Docket No. 99-249, Report and Order, CC Docket No. 96-45, Eleventh Report and Order, 15 FCC Rcd. 12962, ¶ 98 (2000) (CALLS Order).

CLECs have an interest in minimizing the amount of cable used, because it contributes a substantial portion of the cost of line-sharing. Also, DSL service deteriorates when transmitted over more than 18,000 feet of cable,²¹ so using less cable within the office leaves more cable to reach customers.

The dispute among the parties arises from the fact that the distance between the splitter and the MDF influences the amount of cable required. As noted above, cable within the central office carries the signal from the MDF to the splitter. The voice portion of the signal is then routed via a separate cable back to the MDF. In other words, for each foot that separates the MDF from the splitter, two feet of cable are required. To minimize this distance, Qwest agreed to place its splitters in one of three locations: 1) in a relay rack as close as possible to the interconnection distribution frame (ICDF) or CLEC termination points, 2) on the ICDF, or 3) if neither of those options are available, on the MDF itself or in some other appropriate location. Stipulation at ¶ 7.

The parties agreed on the amount of cable required when the splitter is put in the CLEC collocation area, or on the MDF itself. But the parties could not agree about the amount of cable needed when the splitter is installed in the common area.²²

The ALJ recommended developing UNE prices on the assumption that the average distance between a splitter and the MDF would be 25 feet. But the ALJ offered this recommendation provisionally, suggesting that it was “based on general speculation of what space should be available....” ALJ Report at ¶ 56.

While the Commission agrees with the ALJ’s recommendation, it does not share the ALJ’s ambivalence. The record reveals a sufficient basis for rendering a decision. The CLEC’s witness testified that conceptually a telephone company should be able to locate a splitter within 25 feet of the MDF. And the Department’s witness testified that, based on his experience in actual Qwest central offices, a space in a relay rack should be available for a splitter within 25 feet of the MDF. Even Qwest’s own witness acknowledged that there might be up to seven rows of relay racks available within 25 feet of the MDF within Qwest’s existing central offices. Each such rack has the capacity to hold up to fourteen splitters. Given Qwest’s stipulation to locate splitters as close as possible to the MDF, it seems eminently reasonable to find that a splitter could be located, on average, within 25 feet of the MDF.

Qwest asks the Commission to reject the ALJ’s recommendation, arguing that the most compelling evidence on this issue – Qwest’s own survey of actual cable used in central office installations – indicated a need for 100 feet of cable. The ALJ found this survey unpersuasive. It appeared to be based on general estimates rather than measurements, and was based on only a sample of Qwest projects. Qwest declined to reveal the nature of the jobs in question, the identities of the central offices in question, or the basis for the selection

²¹While the ALJ’s Report at ¶ 51 suggests that the distance from the DSLAM to the MDF does not count in the 18,000 foot calculation, the parties agree that it does.

²²The CLECs, the Department and Qwest agree (1) about the amount of cable needed, on average, when the splitter is located on the MDF or in the CLEC’s common area, (2) that this issue influences nonrecurring cost rather than recurring costs, and (3) that the Commission may disregard any inadvertent contrary implication found in the ALJ’s Report at ¶ 49.

of this sample. Under the circumstances, the ALJ was well within the bounds of reason to dismiss the survey.

Qwest has the burden to prove that “the rates for each element it offers do not exceed the forward-looking economic cost per unit of providing the element, using a cost study that complies with the methodology set forth in [federal regulations].” 47 C.F.R. § 51.505(e); *see also* Minn. Rules 7812.1700, subp. 23. Qwest acknowledged having data on the amount of cable used in all of its DSL central office installations. But Qwest produced neither the required cost study nor the data. When the party that bears the burden of proof fails to produce evidence within its control, the trier of fact is entitled to conclude that the evidence does not support that party’s position.

C. Main Distribution Frame (MDF) Block

As noted above, Qwest agreed to place its splitters in one of three locations: 1) in a relay rack as close as possible to the interconnection distribution frame (ICDF) or CLEC termination points, 2) on the ICDF, or 3) on the MDF or in some other appropriate location.²³ And as noted above, the splitter’s location influences the Other Non-Recurring Cost rate element. All parties agree that placing the splitter on the MDF minimizes these non-recurring costs, but they disagree on the extent. In particular, they agree that placing the splitter on the MDF obviates the need for a block. Yet Qwest incorporates the cost of a block into its Other Non-Recurring Cost estimate, whereas the CLECs omit it from theirs.

Qwest argues that the Other Non-Recurring Cost element should incorporate a sum reflecting various miscellaneous costs. The Other Non-Recurring Cost element is a kind of catch-all category for various incidental costs. The calculation of this cost reflects experience. But Qwest has little experience with locating a splitter on the MDF. As a result, Qwest has little evidence with which to estimate the real-world costs that it will have to incur to provide a splitter on the MDF. Nevertheless, Qwest argues, the CLEC’s proposed pricing scheme fails to address a number of costs such as land and building costs, and costs associated with consuming space on the MDF. To rectify this situation, Qwest’s proposal includes the cost of a block in the calculation as a proxy for these other costs, at least on an interim basis.

Whatever the merits of Qwest’s allegations that the Other Non-Recurring Cost element fails to incorporate all appropriate costs, the record does not support its calculations. Instead, the record contains agreement from all parties, including Qwest, that a splitter placed on the MDF does not require a block. As noted above, Qwest bears the burden of proof. 47 C.F.R. § 51.505(e); Minn. Rules 7812.1700, subp. 23. The Commission will decline to alter the ALJ’s recommended Other Non-Recurring Cost estimate on the basis presented here.

D. Splitter shelves

As noted above, Qwest agreed to place its splitters in one of three locations: 1) in a relay rack as close as possible to the interconnection distribution frame (ICDF) or CLEC termination points, 2) on the ICDF, or 3) on the MDF or in some other appropriate location. Stipulation at ¶ 7. The third option involves placing the splitter on the MDF. While this location requires more planning and imposes a larger recurring cost, it does not require the

²³Stipulation at ¶ 7.

use of any relay racks. The second option involves putting the splitter within the CLEC's collocation area. The Commission established the costs the CLEC must pay for the use of this area in a prior docket. But the first option may involve placing the splitter within the common area on separate relay racks. Relay racks cost money and, when placed in a common area, occupy scarce floor space that must be allocated among all users. Consequently the parties agree that when a CLEC buys line-sharing and it requires placing a splitter within the common area, the CLEC should contribute something for the cost of the racks (Relay Racks), and for the cost of the space (Land and Buildings) occupied by those racks.

When a splitter is installed in the common area, the calculation of the Relay Rack and the Land and Buildings elements both depend upon the average number of splitters Qwest installs in a relay rack. As noted above, racks can accommodate up to fourteen shelves. Because a splitter can fit on a single shelf, perfect efficiency would result in fourteen splitters per rack. But the parties agree that it is unreasonable to establish a long-run incremental cost on the assumption that no shelf would ever go unused. Occasionally physical constraints may limit Qwest's ability to fill all fourteen shelves. And when all available shelves are full, Qwest must install a full rack – fourteen shelves – even when only one additional shelf is needed at the moment. As a result, the parties each propose that the Commission assume that Qwest averages fewer than fourteen splitters per rack.

The estimate of the number of splitters per rack turns in part on assumptions regarding the amount of demand for line sharing by CLECs. The parties agree that Qwest may occasionally have a half-empty rack in a central office. If you assume that Qwest would have two racks in that office, then you would conclude that 25% of the office's rack capacity was going unused (the number of empty racks (0.5) divided by the total number of racks (2)). If instead you assume that there is enough demand to require five racks in that office, then the fact that one rack was half-empty would produce an unused rack capacity of only 10% (the number of empty racks (0.5) divided by the total number of racks (5)).

Acknowledging that Qwest will have some unused shelves, the CLECs and the Department each estimate that an average of twelve shelves would be filled per rack. They base this estimate on their independent analyses, and on the fact that Qwest installs its own equipment on the relay racks. This fact increases the number of racks that Qwest would be expected to use in any given office, and diminishes the relevance of considering CLEC demand for DSL in isolation. The ALJ found this estimate reasonable, and incorporated it into his recommendations.

But Qwest argues that it will not average more than eight splitters per rack. Qwest bases this conclusion on its current experience, and on its forecasts of demand for DSL. In particular, Qwest anticipates that DSL may be a short-lived technology. The ALJ declined to adopt Qwest's position, noting that current demand is not a strong indicator of future demand, and that prices should be based on an efficient use of resources. The Commission finds the ALJ's analysis persuasive, and will adopt his recommendation.

E. Operation support systems (OSS) cost recovery

As noted above, the Commission complied with federal and state statutory directives by conducting a Generic Cost Docket to establish the prices that U S WEST Communications,

Inc. (now Qwest) could charge for interconnection and UNEs.²⁴ While the Act requires incumbent telephone companies to provide nondiscriminatory access to elements, 47 U.S.C. § 251(c)(3), U S WEST’s operation support systems were found to discriminate against CLECs. As a result, the Commission decided to –

Deny any U S WEST recovery of operation support systems (OSS) costs until U S WEST provides CLECs non-discriminatory access to OSS interfaces and until the Company provides reliable cost support for its proposed rates.²⁵

Now the issue of OSS arises again. The Stipulation that triggered the current docket stated that “U S WEST and the CLECs would ask the Commission to address the subject of appropriate cost recovery for operational systems upgrades related to line sharing in the cost docket...” The resulting Commission order asked that “the OAH make recommendations as to the appropriate cost recovery, if any, for operational systems upgrades related to line sharing,” and requested “the recommendations of the ALJ to be comprehensive of all relevant line sharing cost issues.” Additionally, the FCC found –

that incumbent LECs should recover in their line sharing costs those reasonable incremental costs of OSS modifications that are caused by the obligation to provide line sharing as an unbundled network element.

FCC’s *Line Sharing Order*, at ¶ 144.

But in his *Fifth Prehearing Order*, the ALJ rejected Qwest’s request to recover the cost of its OSS. The ALJ concluded that –

[in] the Generic Cost Docket, the Commission determined that U S WEST is not entitled to recover OSS costs until it provides nondiscriminatory access and provides reliable cost support.... That requirement still applies and the prior determination must be followed.

Qwest argues that the ALJ failed to fulfill the Commission’s request and the FCC’s finding when he rejected consideration of OSS costs.

The CLECs and the Department dispute this claim. In concluding – based on a prior Commission order – that no recovery was appropriate, the ALJ complied with the Commission’s request to make “recommendations as to the *appropriate* cost recovery, if any,” for Qwest’s OSS.

The Commission agrees with the ALJ’s recommendation. No party denies Qwest’s right to recover the incremental cost that line sharing imposes on non-discriminatory OSS, as soon as Qwest provides such OSS and can demonstrate its incremental cost. To date, Qwest has

²⁴In the Matter of a Generic Investigation of U S WEST Communications, Inc.’s Cost of Providing Interconnection and Unbundled Network Elements, Docket No. P-442, 5321, 3167, 466, 421/CI-96-1540 (Generic Cost Docket) ORDER RESOLVING COST METHODOLOGY, REQUIRING COMPLIANCE FILING, AND INITIATING DEAVERAGING PROCEEDING (May 3, 1999).

²⁵*Id.* at 3.

made no showing that it has done either of these things. The Commission is disinclined to require CLECs to pay Qwest for legally-mandated systems that Qwest is not providing.

The Commission looks forward to establishing the cost of Qwest's OSS that complies with the Act. In the meantime, the Commission finds the ALJ's analysis persuasive. Any other decision would create an unwarranted incentive for Qwest to prolong the modification of its OSS.

F. Installation and disconnection

Qwest's OSS influence the cost to install and disconnect DSL service. Qwest asks that it be allowed to charge CLECs for the cost to install and disconnect a line using its current OSS. Qwest also asks that it be allowed to charge CLECs for the cost of disconnection at the time of connection.

The CLECs and the Department ask that Qwest's connection and disconnection fees reflect the anticipated costs of using nondiscriminatory automated OSS. They develop these estimates by using the nonrecurring cost model approved by the Commission in the Generic Cost Docket, with certain adjustments. They also ask that Qwest not be allowed to charge for disconnection until such a time as a disconnection occurs. The ALJ recommended adopting the CLECs' and the Department's position.

The Commission finds the ALJ's analysis persuasive. As noted above, permitting Qwest to charge CLECs for the cost of its OSS before Qwest has demonstrated that the systems do not discriminate would create an incentive for Qwest to delay the necessary modifications to its systems. Additionally, requiring CLECs to pay for disconnections long before they occur would be the equivalent of requiring CLECs to extend an interest-free loan, or even an outright gift, to Qwest. The Commission will decline to adopt such policies.

G. Planning and engineering

The parties agree that when a CLEC places an order for collocation in order to provide DSL by means of line sharing, Qwest engineers must plan where and how to install the splitter with its associated cables and racks. The parties agree that the Commission-approved AT&T/MCI collocation model is an appropriate tool to gauge the scope of this project. The parties agree to impute a cost of \$65.51 per hour for these services. But the parties disagree about the number of hours such planning and engineering should take. Their positions are as follows:

| How long should planning and designing take? | network configuration | | |
|--|---|---|-----------------------------------|
| | splitter on MDF (main distribution frame) | splitter in common area | splitter in CLEC collocation area |
| CLEC position | 11 hrs | 11.5 hrs (5 of which is for rack engineering) | 5.5 hrs |
| Department position | 9.5 hrs | 11 hrs | 6 hrs |
| Qwest initial position | 66 hrs | 66 hrs | 66 hrs |
| Qwest final position | 20 hrs | 20 hrs | 20 hrs |

The CLEC's witness emphasized that Qwest would not need to re-engineer a rack each time a new splitter was installed in a common area, because each rack could accommodate multiple splitters. Therefore the cost of engineering a rack should be allocated among all splitters put into the rack.

While Qwest initially proposed that it would incur 66 hours of engineering time to install any type of splitter, upon questioning by the Department and the CLECs, Qwest reduced its estimates to 20 hours. But Qwest still did not refine its estimate to the point that it distinguished between the time needed to install a splitter on the MDF, in a common area, or in a CLEC collocation area.

After reviewing the proposals, the ALJ found the CLECs' position to be the most detailed and compelling. The fact that the Department's proposal was similar to the CLEC's proposal bolstered the CLECs' case. He noted that the basis for Qwest's numbers lacked similar details to the CLECs' estimates, and that Qwest's numbers seemed to include the cost of unneeded functions.

Having reviewed the record and the ALJ's Report, the Commission finds the ALJ's analysis persuasive, and so will adopt his recommendation.

H. True-ups

Finally, the Commission notes that the Settlement that triggered this docket contains terms that incorporate the results of this docket retroactively. That is, the parties agreed to recalculate their payments owed to each other on the basis of the prices set herein. Where such true-up provisions exist in that docket, or in other interconnection agreements, the Commission anticipates that the relevant parties will be able to make appropriate arrangements. Parties need not seek Commission review of those arrangements unless they are unable to reach agreement among themselves.

ORDER

- 1. The findings and recommendations of the ALJ's Findings of Fact, Conclusions of Law, and Recommendation are accepted and adopted, except as noted above.**
- 2. The Commission approves the following charges associated with line sharing on a permanent basis:**

| rate element | network configuration | | | units |
|---------------------------|-----------------------|-------------------------|-----------------------------------|------------------------|
| | splitter on MDF | splitter in common area | splitter in CLEC collocation area | |
| High-frequency UNE (HUNE) | \$0 | \$0 | \$0 | per line per month |
| Installation | \$5.75 | \$5.75 | \$5.75 | per line |
| Disconnection | \$4.32 | \$4.32 | \$4.32 | per line |
| Planning | \$720.60 | \$453.10 | \$360.30 | per 96 lines |
| Land and Buildings | \$0 | \$2.95 | \$0 | per 96 lines per month |
| Relay Rack | \$0 | \$0.68 | \$0 | per 96 lines per month |
| Other Non-Recurring | \$787.92 | \$1,276.92 | \$1,802.02 | per 96 lines |
| Other Recurring | \$27.17 | \$9.54 | \$10.06 | per 96 lines per month |

3. Qwest may not charge for disconnection until the time of disconnection.
4. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION

**Burl W. Haar
Executive Secretary**

(S E A L)

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