BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the CONTINUED COSTING AND PRICING OF UNBUNDLED NETWORK ELEMENTS, TRANSPORT, TERMINATION, AND RESALE	**Docket No. UT-003013, Part B**

QWEST CORPORATION'S PART B POST-HEARING BRIEF

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I. Introduction

This proceeding is part of the follow-on cost docket in which the Commission is addressing issues that were not resolved in the first generic cost proceeding, Docket Nos. UT-960369, et al., and new issues that have arisen since the conclusion of that initial proceeding. In this part of the follow-on cost docket, which has been designated as Part B, the parties and the Commission are addressing: (1) costing and pricing issues that arise from the FCC's UNE Remand Order;[1] (2) issues relating to intercarrier payments of reciprocal compensation for the exchange of local traffic; (3) the rights and obligations of the incumbent local exchange carriers ("ILECs") and competitive local exchange carriers ("CLECs") relating to line splitting and line sharing in connection with digital subscriber line service ("DSL service"); and (4) cost recovery for the ILECs' modifications and enhancements to their operational support systems ("OSSs") to support line splitting.

In the UNE Remand Order, the FCC re-defined the unbundled network elements ("UNEs") that ILECs are required to provide under the Telecommunications Act of 1996 ("the Act"). The order responds to decisions from the United States Supreme Court and the United States Court of Appeals for the Eighth Circuit that required the FCC to reconsider the list and definitions of the UNEs that it initially required ILECs to provide under the Act. While some of the network elements that the FCC classified as UNEs in the UNE Remand Order were addressed by this Commission in the first generic cost proceeding, several of them are new elements that the Commission and the parties did not previously address. Accordingly, in this part of the follow-on cost docket, the Commission must determine the recurring and nonrecurring costs and prices for: (1) the UNE Combination Platform ("UNE-P"); (2)

[1] *In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, Third Report and Order and Fourth Further Notice of Proposed Rulemaking (Rel. Nov. 5, 1999) ("UNE Remand Order").

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Enhanced Extended Loops ("EEL"); (3) high capacity loops; (4) subloops; (5) unbundled dedicated interoffice transport ("UDIT") and extended unbundled dedicated interoffice transport ("EUDIT"); (6) multiplexing; (7) inquiries into the availability of poles, ducts, and rights of way; (8) dark fiber; and (9) on-premise wiring.

For each of these network elements, the Commission should accept the costs and prices that Qwest has proposed. Qwest's proposals are based upon a proper application of the FCC's mandated costing methodology known as TELRIC, or total element long run incremental costs, and are consistent with the Eighth Circuit's pronouncements relating to TELRIC. In addition, Qwest's proposed costs and prices for these network elements incorporate this Commission's previous rulings relating to the inputs and methodologies that ILECs and CLECs are required to use in their cost studies. In contrast to Qwest's proposals, the CLECs' proposals are uniformly based upon unrealistic assumptions about the costs that Qwest must incur to provide these network elements and, therefore, do not reflect a proper application of TELRIC. Adoption of the CLECs' proposals will deny Qwest the cost recovery to which it is entitled under section 252(d)(1) of the Act.

The issues in this docket relating to intercarrier payments of reciprocal compensation for the exchange of local traffic have taken a somewhat dramatic turn since the conclusion of the hearings on April 20, 2001. On April 27, the FCC released its long-awaited second Internet service provider order, which addresses the issue of intercarrier compensation for traffic delivered to Internet service providers.[2] The FCC concluded that Internet calls are interstate access traffic and, accordingly, ruled that pursuant to section 201 of the Communications Act of 1934, it has jurisdiction to decide the appropriate method of

[2] *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Intercarrier Compensation for ISP-Bound Traffic*, CC Docket Nos. 96-98 and 99-68, Order on Remand and Report and Order (Rel. Apr. 27, 2001)("ISP Order II").

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intercarrier compensation for this traffic.[3] The FCC was explicit in stating that state commissions are without authority to decide this issue.[4] As a result, the Commission has no alternative but to defer to the FCC and not issue any rulings in this docket relating to reciprocal compensation for Internet traffic.

The issues relating to DSL service primarily involve the nature of the ILEC's product offerings for line splitting and the availability of line sharing over fiber-fed, digital loop carrier loops ("DLC loops"). Qwest has described the preliminary line splitting offering that it has developed and explained that it is still in discussions with the CLECs concerning the precise details of this product. With the exception of OSS costs relating to line splitting, Qwest has not identified any new costs or rates for this product. However, there is a dispute between the ILECs and the CLECs concerning who should own the splitters that are used for line splitting. Qwest's position that the CLECs should own the splitters is supported by Staff and by the FCC's mandate that the architectures for line splitting and line sharing should be the same.

The evidence also demonstrates that Qwest is offering line sharing over fiber-fed DLC loops in precisely the same manner as it uses these loops to provide xDSL service to its own end users. This offering appears to be fully responsive to what the CLECs have requested. However, Qwest opposes the CLECs' proposal that the existing rates for line sharing apply to this offering. The CLECs did not provide any support for this proposal and were unable to explain the proposal during the hearing.

Finally, the Commission recognized in the first generic cost proceeding and in Part A of this docket that the ILECs are entitled to recover the costs they incur to provide CLECs with access to OSSs. The FCC's restatement in the UNE Remand Order of the network

[3] ISP Order II at ¶ 65.
[4] ISP Order II at ¶ 82.

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elements that ILECs must provide to CLECs required Qwest to modify its OSSs to enable CLECs to order all of the elements that the FCC identified. The Commission should allow Qwest to recover the costs of these modifications. In addition, while Qwest is not yet seeking recovery of the OSS costs it will incur to provide line splitting, the Commission should acknowledge Qwest's right to recover these costs.

II. Legal and Policy Issues

A. Legal

1. The Pricing Requirements of the Telecommunications Act of 1996, Related Decisions of Federal Courts, and Prior Orders of this Commission

Section 252(d)(1) of the Act requires state commissions to establish rates for interconnection and unbundled network elements that are "just and reasonable." As Qwest has emphasized previously, this right of cost recovery reflects the careful balance that Congress struck in passing the Act. While taking the extraordinary step of requiring ILECs like Qwest to turn over pieces of their networks to competitors, Congress sought to ensure that the ILECs would be properly compensated for this mandated use of their property.

To that end, section 252(d)(1)(A)(i) of the Act specifically mandates just and reasonable rates for interconnection and access to unbundled elements that are to be "based on the cost (determined without reference to rate-of-return or other rate-based proceeding) of providing the interconnection or network element." In this case, the CLECs' rate proposals do not realistically reflect the costs that Qwest will incur to provide UNEs and, therefore, violate this "just and reasonable" requirement.

In *Iowa Utils. Bd. v. FCC*, 219 F.3d 744, 751 (8th Cir. 2000) ("*Iowa Utils. II*"), the Eighth Circuit ruled that the FCC's application of TELRIC is unlawful. The court vacated 47 C.F.R. § 51.505(b)(1), which required that TELRIC should be based on "the use of the most efficient telecommunications technology currently available and the lowest cost network

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configuration, given the existing location of the incumbent LEC's wire centers." In doing so, the court held that this rule violated the plain meaning of section 252(d)(1)(A)(i), and it rejected the proposition that costs should be based "on the cost that some imaginary carrier would incur by providing the newest, most efficient, and least cost substitute for the actual item or element which will be furnished by the ILEC pursuant to Congress' mandate for sharing."[5] Instead, the court emphasized:

> *Congress was dealing with reality, not fantasizing about what might be*. . . . At bottom, Congress has made it clear that it is the cost of providing actual facilities and equipment that will be used by a competitor (and not some ideal state of the art presently available technology ideally configured but neither deployed by the ILEC nor to be used by the competitor) which must be ascertained and determined.

Id. at 8 (emphasis added).

Although the Eighth Circuit stayed its decision pending petitions for writ of certiorari to the United States Supreme Court, in a recent decision, it held that despite the stay, it still is "not permissible for [a state commission] to set prices based on the forward-looking costs of an idealized network . . . ."[6] In doing so, the court reaffirmed its opinion in *Iowa Utils. II*:

> We also should note that, after the opinion in *Iowa Utilities II* was filed on July 18, 2000, the panel granted the FCC's motion to stay the mandate on that part of the decision that vacated 47 C.F.R. § 51.505(b)(1), pending the filing and disposition of petitions for writ of certiorari in the Supreme Court. In October 2000, a number of such petitions were filed, and as this opinion is written those petitions remain pending in the Supreme Court. *Notwithstanding this turn of events, our decision in Iowa Utilities II is not vacated, remains the law, and requires vacatur of the § 252 agreement reached in this case.*[7]

Qwest prepared the cost studies that it submitted in this docket prior to the Eighth Circuit's recent decision that reaffirmed *Iowa Utilities II* and in a manner that is fully

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[5] *Id.*

[6] *Southwestern Bell Telephone Company v. Missouri Public Service Commission*, 236 F.3d 922, 925 (8th Cir. 2001).

[7] *Id.* at 924 n.4 (emphasis added).

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consistent with the FCC's application of TELRIC. Accordingly, when compared to the current state of TELRIC as defined by the Eighth Circuit, Qwest's cost studies are conservative in their estimates of cost.

The rulings of this Commission in prior wholesale cost proceedings also provide substantial guidance in addressing the cost and pricing issues that this docket presents. Qwest's cost studies rely significantly on the Commission's prior rulings and use specific inputs that the Commission has required in its previous orders. For example, Qwest's studies are consistent with the Commission's endorsement of TELRIC and use values that the Commission has prescribed or endorsed for cost of money, depreciation, fill factors, common costs, attributed costs, and expense factors.

2. The Network Elements that ILECs are Required to Unbundle and the Law Relating to Combinations of Network Elements

In *AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366 (1999), the Supreme Court invalidated the FCC's original list of UNEs that ILECs are required to provide under the Act, ruling that the FCC had improperly applied the "necessary" and "impair" standard in section 251(d)(2) of the Act. In response to that decision, in the UNE Remand Order, the FCC issued a new list of the network elements that ILECs must unbundle. That order requires ILECs to unbundle loops, sub-loops, network interface devices, local switching, interoffice transmission facilities, signaling networks and call-related data bases, and operations support systems.[8]

The Eighth and Ninth Circuits have issued conflicting rulings concerning whether ILECs are required to combine UNEs for CLECs. In *Iowa Utils. Bd. v. FCC,* 120 F.3d 753, 813 and n.39 (8th Cir. 1997), *aff'd in part, rev'd in part sub nom, AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366 (1999)("*Iowa Utilities Board I*"), the Eighth Circuit vacated the FCC rules

[8] UNE Remand Order at ¶¶ 163-438.

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set forth at 47 C.F.R. § 51.315(c) and (d) that required ILECs to combine UNEs upon requests from CLECs. The Eighth Circuit explained:

> The last sentence of subsection 251(c)(3) reads, "An incumbent local exchange carrier shall provide such unbundled network elements in a manner that allows *requesting carriers to combine* such elements in order to provide such telecommunications service." 47 U.S.C.A. § 251(c)(3) (emphasis added). This sentence unambiguously indicates that requesting carriers will combine the unbundled elements themselves.

Id.

Despite the Eighth Circuit's ruling, the Ninth Circuit reached a different result in *U S WEST Communications, Inc. v. MFS Intelenet, Inc.*, 193 F.3d 1112 (9th Cir. 1999). In that case, the Ninth Circuit affirmed the district court's decision to uphold a contract provision that required U S WEST to combine UNEs at the request of MFS. The Ninth Circuit reasoned that because FCC regulations prohibit ILECs from separating already-combined network elements, it "necessarily follows . . . that requiring U S WEST to combine unbundled network elements is not inconsistent with the Act . . . ."[9]

Following the Ninth Circuit's ruling, in *Iowa Utilities Board II*, the Eighth Circuit affirmed its initial decision to vacate the FCC's combining rules while expressly stating its disagreement with the Ninth Circuit's contrary ruling.[10] The Eighth Circuit emphasized that the Ninth Circuit had "misinterpreted our decision to vacate subsections (c)-(f)."[11]

Qwest strongly believes that the Eighth Circuit's rulings relating to this issue are consistent with the Act and correct in concluding that Congress did not intend to require ILECs to combine UNEs for CLECs. Nevertheless, as discussed below, Qwest will provide CLECs in Washington with both pre-existing and new combinations of UNEs.

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[9] 193 F.3d at 1121.
[10] *Iowa Utilities Board II*, 219 F.3d at 759.
[11] *Id.*

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3. Intercarrier Payments of Reciprocal Compensation for the Exchange of Local Traffic

In its ISP Order II, the FCC established that calls bound for the Internet are interstate access traffic. Based on that conclusion, the FCC ruled that pursuant to section 201 of the Communications Act of 1934, it has jurisdiction to decide the appropriate method of intercarrier compensation for this traffic.[12] The FCC removed this issue from the jurisdiction of state commissions, stating: "[b]ecause we now exercise our authority under section 201 to determine the appropriate intercarrier compensation for ISP-bound traffic, however, state commissions will no longer have authority to address this issue."[13] This ruling leaves the Commission without authority to decide the issues relating to reciprocal compensation for Internet traffic that the parties addressed during the hearing.

4. Line Splitting and Line Sharing

In its Line Sharing Order, the FCC established that the "high frequency portion of the loop is a network element that must be unbundled."[14] In a subsequent order relating to Southwestern Bell Communications' ("SBC") application under section 271 of the Act for entry into the Texas long distance market, the FCC addressed the CLECs' request to be able to provide data services over the same loops they are using to provide service to their customers through UNE-P. The FCC concluded that ILECs "have an obligation to permit competing carriers to engage in line splitting over the UNE-P where the competing carrier purchases the entire loop and *provides its own splitter*."[15] The FCC confirmed this obligation in its recent

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[12] ISP Order II at ¶ 65.
[13] ISP Order II at ¶ 82.
[14] *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 Nos. 98-147 and 96-98, Third Report and Order in CC Docket No. 98-147 and Fourth Report and Order in CC Docket No. 96-98 at ¶ 16 (Rel. Dec. 9, 1999) ("Line Sharing Order").
[15] *In the Matter of Application by SBC Communications, Inc. Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in Texas,* CC Docket No. 00-65, Memorandum Opinion and Order at ¶ 325 (Rel. June 30, 2000) ("SBC Texas 271 Order") (emphasis added).

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order that reconsidered its original Line Sharing Order.[16] In accordance with these pronouncements by the FCC, Qwest is in the process of developing its line splitting product offering.

To enable CLECs to provide DSL loops from remote terminals, Qwest also is providing the CLECs with the same arrangement that Qwest uses for its customers for this purpose. Under this arrangement, Qwest places a distribution area hotel ("DA hotel") at a remote terminal, adjacent to the feeder distribution interface ("FDI"). The DA hotel is a small structure in which CLECs and Qwest can place the equipment they need to provide DSL services on DLC loops. The details of this product offering are discussed below.

5. OSS Cost Recovery

When the Commission entered its 17th Supplemental Order in Docket Nos. UT-960369, et al., allowing Qwest to recover its OSS transition costs from the CLECs, there were two federal district courts decisions confirming that CLECs are obligated to pay the costs of OSS development. Qwest has previously discussed those cases and will briefly summarize them here. The rulings remain valid, and continue to support this Commission's cost recovery decision.

In *AT&T Communications of the South Central States v. BellSouth Telecommunications, Inc.*, 20 F.Supp. 2d 1097 (E.D. Ky. 1998) (No. 97-79), the Kentucky court held that because OSS costs associated with developing interfaces are caused by CLECs and benefit only them, the CLECs must pay these costs:

> The PSC correctly notes that '[o]ne would not argue he was denied access to a concert on the basis that he was required first to buy a ticket.' . . . Because the electronic interfaces will only

[16] *In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996,* Third Report and Order on Reconsideration in CC Docket No. 98-147, Fourth Report and Order on Reconsideration in CC Docket No. 96-98, Third Further Notice of Proposed Rulemaking in CC Docket No. 98-147, Sixth Further Notice of Proposed Rulemaking in CC Docket No. 96-98 at ¶ 19 (Rel. Jan. 19, 2001) ("Line Sharing Reconsideration Order").

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> benefit the CLECs, the ILECs, like BellSouth, should not have to subsidize them. . . . AT&T is the cost causer, and it should be the one bearing all the costs; there is absolutely nothing discriminatory about this concept.

Slip op. at 16.

Similarly, in *U S WEST Communications, Inc. v. AT&T Corp.*, Nos. A1-97-085 and A1-97-082 (D.N.D. January 8, 1999), the Federal District Court for North Dakota held that U S WEST has no obligation to pay the costs of OSS development:

> [T]he Agreement provides that those who create the cost, pay the cost. No one disputes that access to the OSS is essential. It is in fact a critical and essential part of the infrastructure being sold to a competitor. The Act and the Agreement mandate the provision of interconnection, again, on a non-discriminatory basis. *That does not mean that the incumbent LEC must pay a portion of the costs involved in providing the interconnection for the use of a competitor*.

Slip op. at 21 (emphasis added).

The facts upon which the Commission has based its previous decisions to allow OSS cost recovery from the CLECs were identical to those in the Kentucky and North Dakota cases and have not changed. Qwest modified its internal systems and developed its OSS interfaces – including Electronic Data Interexchange ("EDI") and Interconnection Mediated Access ("IMA") – only for the benefit of the CLECs. Neither Qwest nor its customers caused the systems modifications or the OSS interface expenditures. Based on the same reasoning that the courts followed in *AT&T v. BellSouth* and *U S WEST v. AT&T*, these costs should be borne exclusively by the CLECs.

B. Policy

As Qwest has observed previously, the Commission is experienced in these cost docket proceedings, and is well aware that its decisions on the issues presented must be consistent with the law and with the general policies of the state and the federal government to advance competition in the local telecommunications markets. The Commission has, to date,

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been quite successful in achieving these outcomes, and has promoted competitive entry and competition in the state to the benefit of Washington consumers.

III. UNE Costs and Prices

A. Qwest

1. Nonrecurring Costs and Study Methodology

Nonrecurring costs are the one-time costs associated with establishing a service or providing a UNE. These costs typically arise from specific activities or transactions that Qwest must perform in response to a CLEC order for service or for a UNE. Ex. T-1001 at 6 (Million Direct). Qwest has presented nonrecurring cost studies in this docket relating to the following services and network elements: the UNE platform; subloop unbundling; high capacity capable loops; dark fiber; UDIT; extended UDIT; EEL; multiplexing; on-premise wire; space availability inquiries and field verifications for poles, ducts, and conduits; and field connection points.[17]

The development of Qwest's nonrecurring cost studies begins with input from subject matter experts concerning the types of tasks and activities that are necessary to establish a service or to provide a UNE. These subject matter experts typically are engineers or product managers. After these experts identify the tasks that Qwest must perform, they estimate the time needed to perform each task and the probability that the task will have to be performed. They provide these estimates using forward-looking assumptions and relying on their extensive experience with the tasks and activities that are associated with a service or a network element. *Id.* at 8.

[17] As part of Exhibit C-1002, Qwest submitted engineering costs associated with particular field connection arrangements. That approach was necessary because connection can occur at any technically feasible point in the subloop. Because the nature and location of a field point connection will vary from one request to another, the total costs associated with establishing specific connections must be determined on an individual case basis ("ICB").

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The times and probability estimates that the subject matter experts develop are multiplied by the appropriate labor rate associated with the activity. The resulting figure represents the direct costs of the activity. Qwest's nonrecurring studies add to this amount the Commission's approved loadings of 19.62 percent and 4.05 percent, which produces TELRIC plus common nonrecurring costs. *Id.* at 8.

The Staff witness who addressed Qwest's nonrecurring studies, Jing Roth, did not contest Qwest's overall methodology for calculating nonrecurring costs in its studies. The Intervenor CLECs' joint witness, Thomas Weiss, acknowledged that it was not unreasonable for Qwest to base its nonrecurring studies on time estimates provided by the subject matter experts who actually perform the tasks that give rise to nonrecurring costs. Tr. at 3635 (Weiss Cross). This same methodology underlies nonrecurring charges that this Commission has previously approved.[18]

Adjustments to Qwest's Nonrecurring Cost Studies

After filing its nonrecurring cost studies ("NRC") in this proceeding, Qwest realized that it had not included several adjustments in its studies that are required by previous rulings from the Commission. Qwest initially did not calculate separate connect and disconnect costs for the nonrecurring studies, as is required by the Commission's Seventeenth Supplemental Order.[19] Qwest also inadvertently overlooked work times that the Commission ordered in its Eighth Supplemental Order.[20] To address these oversights and to bring its nonrecurring studies into compliance with the Commission's orders, Qwest submitted revised studies with the rebuttal testimony of its cost witness, Teresa Million. The revised studies produce

[18] *See generally* Eighth Supplemental Order: Interim Order Determining Prices in Phase II; and Notice of Prehearing Conference, Docket No. UT-960369, *et al.*, ¶¶ 444-482 (May 11, 1998) ("Eighth Supplemental Interim Order").
[19] Seventeenth Supplemental Order: Interim Order Determining Prices; Notice of Prehearing Conference, Docket No. UT-960369, *et al.*, ¶ 471 (Sept. 23, 1999).
[20] Eighth Supplemental Order Interim Order at ¶ 474.

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separate connect and disconnect costs for each nonrecurring charge that Qwest submitted. The revised studies also include adjusted work times that are required by the Commission's Eighth Supplemental Order, including, as discussed below, the six-minute order processing time for Qwest's interconnection service center ("ISC"). Ex. T-1009 at 2-5 (Million Rebuttal). In addition, in its rebuttal filing, Qwest agreed to Staff's recommendation of using the Commission's previously approved customer transfer charge ("CTC") for converting existing POTS customers to the UNE-P.[21]

These adjustments to Qwest's nonrecurring studies bring the studies into compliance with the Commission's prior orders and also respond directly to the majority of criticisms of the studies that were offered by Staff and Joint Intervenor witness, Mr. Weiss. Staff and Mr. Weiss did present other criticisms of the studies, none of which has merit.

Responses to Staff's and Joint Intervenors' Criticisms of Qwest's Nonrecurring Studies

Staff asserted that Qwest should modify its nonrecurring studies by reducing the time estimates and probabilities for several ordering and processing activities. Qwest adopted some of these recommendations in its rebuttal submission, and it rejected others that were without proper support and that would have understated Qwest's nonrecurring costs. The recommendations of Staff that Qwest included in the revised nonrecurring cost studies include: (1) a CTC for UNE-P existing that is based upon the CTC that the Commission has previously approved; (2) reduction of the order processing time in the ISC for the connect and disconnect functions relating to UNE-P for new POTS; (3) adjusted percentages for UNE-P new orders that flow through and orders that are handled manually to reflect an increased

[21] As explained by Ms. Million, Qwest recommends an adjustment to this CTC to exclude the OSS costs that are embedded in that rate. It would be improper to include these costs in a CTC for UNE-P for existing POTS ("UNE-P existing"), since demand for that product was not included in determining the amount of OSS costs for CTC. Accordingly, Qwest recommends that the nonrecurring rate for UNE-P existing be based on the CTC the Commission previously approved, less the OSS costs included in that charge. Ex. T-1009 at 2.

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probability of mechanized orders; and (4) a reduction in time for ISC input order processing greater than the reduction that Staff recommended. Tr. at 3900-3904 (Roth Cross).

Qwest did not adopt Staff's recommendation to reduce the time for carrier service center telephone calls relating to EEL. The recommendation to reduce the work time in the cost studies for carrier service center telephone calls for EELs arose from Staff's misperception that these calls are only internal to Qwest and do not involve customers. In fact, the nonrecurring cost study for EELs reflects the fact that carrier service center places both internal calls and calls to the customer. Because the study requires the inclusion of both types of calls, the reduction that Staff recommends is improper. *See* Tr. at 3904-3907 (Roth Cross); Ex. C-1002 at 213 (Qwest Nonrecurring UNE studies).

Qwest also did not adopt Staff's recommendation to reduce the probability that Qwest will receive orders from CLECs without the use of an electronic interface. This probability reflects the extent to which CLECs are likely to fax orders to Qwest instead of using Qwest's electronic interfaces that provide access to Qwest's internal OSSs. The decision to fax orders instead of using electronic interfaces rests with the CLECs, so this probability is one over which Qwest has little control. Staff recommended a probability of 25 percent that Qwest would receive orders by fax. Particularly since it cannot control the CLECs' decisions to submit orders manually instead of electronically, Qwest believes that this understates the probability of manual orders. *See* Tr. at 3907-3909.

Mr. Weiss also recommends that Qwest adjust the assumption relating to the percentage of orders that Qwest receives electronically, but he asserts that all of the orders Qwest receives should be assumed to be electronic. This proposed assumption is wholly unrealistic and would clearly result in an understatement of Qwest's nonrecurring costs. Mr. Weiss acknowledges that the CLECs, not Qwest, decide whether orders are submitted

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electronically or manually. Tr. at 3647-3648 (Weiss Cross). The data that are available demonstrate that a significant percentage of the orders that CLECs submit to Qwest are transmitted by fax. *See, e.g.,* Tr. at 3907-3909. Mr. Weiss would ignore this reality and simply have the Commission deny Qwest the higher costs that are associated with processing orders that CLECs choose to submit by fax on the ground that manual orders are not "forward-looking." In arguing specifically that Qwest should be denied cost recovery for processing orders, Mr. Weiss ignores the fact that it is the CLECs that choose to submit orders by fax, and, therefore, it is the CLECs that impose the costs of manual processing on Qwest. Qwest is entitled to be compensated for these processing costs. *See* Tr. at 3647-3650 (Weiss Cross).

Mr. Weiss' unrealistic approach to order processing also is reflected in his assumptions relating to the types of OSSs that Qwest should provide to CLECs. As he explained during cross-examination, Mr. Weiss begins his analysis of issues relating to OSS with the assumption that instead of being required to provide CLECs with access to its existing OSSs, Qwest must provide access to OSSs that are completely mechanized. He asserts that this obligation exists regardless of whether Qwest's existing OSSs are fully mechanized and regardless of whether Qwest uses some manual processes to handle its own retail orders. Tr. at 3573-3574 (Weiss Cross). Further, while asserting that Qwest must meet a standard of full mechanization, Mr. Weiss does not identify any particular type of OSS that he believes would achieve this goal and acknowledges that his experience with OSSs is limited. Tr. at 3574-3575 (Weiss Cross).

Mr. Weiss' assumption about the type of OSSs to which Qwest must provide access directly conflicts with Eighth Circuit's ruling in *Iowa Utilities Board I* establishing that ILECs are required to provide access only to their existing networks: "[w]e also agree with the petitioners' view that subsection 251(c)(3) implicitly requires unbundled access only to an

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incumbent LEC's *existing* network – not to a yet unbuilt superior one."[22] This clear interpretation of the Act establishes that, contrary to Mr. Weiss' assertion, Qwest is required only to provide CLECs with access to its existing OSSs – the same OSSs that Qwest uses to process its retail orders. Mr. Weiss uses his flawed assumption to propose the elimination from Qwest's nonrecurring studies of the costs associated with UNE ordering and "associated plant record functions." Ex. T-1330 at 21 (Weiss Response). He offers no explanation for the proposed removal of these costs, other than to state in a conclusory manner that these activities will be performed "in an automated fashion by Qwest's OSS system." *Id.* Because Mr. Weiss' assumption about the nature of the OSSs to which Qwest must provide access is wrong, his proposed elimination of these real-world costs also is wrong and should be rejected.

Joint Intervenor witnesses, John Klick and Brian Pitkin, asserted incorrectly in their testimony that Qwest is, in effect, seeking a double recovery based on the assumptions relating to OSSs that are included in the nonrecurring cost studies. Ex. T-1310 at 49-50 (Klick and Pitkin Response). They argue that Qwest's proposed nonrecurring charges are higher than they otherwise would be because Qwest's studies assume "manual or semi-mechanized" processing of orders. *Id*. at 49. The double-recovery is caused, they argue, by inflated NRCs resulting from this OSS assumption and, at the same time, Qwest's proposed recovery of OSS costs that include costs for mechanized, electronic flow-through of orders. *Id.* This argument is premised on faulty assumptions and, therefore, is without any merit.

Messrs. Klick and Pitkin are incorrect in assuming that the OSS transition costs that Qwest has sought to recover in this and previous proceedings include costs for making Qwest's OSSs "more mechanized." In fact, the OSS costs that Qwest has sought to recover

[22] 120 F.3d at 813 (emphasis in original).

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are only the costs associated with providing CLECs with access to Qwest's OSSs, not the costs of increasing mechanization within Qwest's OSSs. Ex. T-1070 at 5-8 (Brohl Direct). On cross-examination, Mr. Klick acknowledged that he wasn't sure about the nature of the OSS transitional costs that Qwest has sought to recover, and that if Qwest is, in fact, not attempting to recover the costs of increasing the mechanization of its OSSs, his concern about a double-recovery would be eliminated. Tr. at 3792-3793 (Klick Cross).

Finally, the Commission also should reject Mr. Weiss' recommendation that the costs for disconnection that are included in Qwest's cost studies should be eliminated. The costs of disconnection are real costs that Qwest will incur, and Qwest must be compensated for them. Mr. Weiss asserts incorrectly that the complete elimination of disconnection costs from Qwest's NRC studies is "consistent with the Commission's earlier findings and decisions regarding disconnection costs." Ex. T-1330 at 21 (Weiss Response). The Commission's Eighth Supplemental Order that Mr. Weiss relies upon does not support eliminating cost recovery for disconnection. Instead, in its Seventeenth Supplemental Order, the Commission required separate rates for connections and disconnections, and Qwest has complied with that directive.

a. Nonrecurring Cost Issues (including six-minute order processing time)

As discussed above, when Qwest originally submitted its nonrecurring cost studies, it inadvertently did not include certain adjustments to time estimates that are required by the Commission in the November 1999 filing in compliance with the Eighth Supplemental Order.[23] The adjustments that Qwest overlooked included the requirement of six minutes for order processing. Accordingly, in its rebuttal filing, Qwest submitted revised nonrecurring

[23] Eighth Supplemental Order at ¶ 474.

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cost studies that included the six-minute order processing time and other time estimates required by the Eighth Supplemental Order. Ex. T-1009 at 4-5; Tr. at 1826 (Million Cross). This adjustment to the nonrecurring cost studies nullifies the criticisms of Staff and Mr. Weiss relating to this issue.

While Qwest adjusted its nonrecurring cost studies to reflect the Commission's ordered use of six minutes for order processing, as Qwest has stated in the past, that assumption is unrealistic and assumes efficiencies in order processing that cannot be achieved. The reality is that Qwest's interconnect service center ("ISC") must devote substantially more than six minutes for both connection and disconnection services. The Commission's decision in the Eighth Supplemental Order to order the input of six minutes for the ISC rests on an error in testimony from a U S WEST witness during Phase A. As Qwest explained in its response to a bench request in this docket, a cost witness for U S WEST inadvertently testified that U S WEST's nonrecurring cost study for the unbundled loop included work time of six minutes for the ISC when, in fact, the study assumed 45 minutes for the first order and six minutes for each additional order. *See* Qwest Response to Bench Request 02-021. The witness mistakenly testified that the ISC work time for all orders, not just additional orders, is six minutes. The Commission should not deny the cost recovery to which Qwest is entitled by perpetuating that error in this proceeding.

Six minutes clearly does not realistically reflect the amount of time that the ISC requires for connection and disconnection, even with mechanized order processing. A comparison between the ISC work time that was included in the nonrecurring cost study that Qwest initially submitted for the DS1 capable loop and the six minutes ordered by the Commission demonstrates the unrealistic nature of the six-minute input. The nonrecurring costs for the DS1 capable loop show that substantially more than six minutes of ISC work

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time is required for connections and disconnections. *Compare* Ex. C-1002 at 73 *with* Ex. C-1010 at 92. This realistic estimate of ISC work time is supported by the experience of Qwest's subject matter experts who work in the ISC. *See* Qwest Response to Bench Request 02-021. While Qwest has updated its nonrecurring cost studies over time to reflect efficiencies that it has realized in the ISC through mechanized order processing, even with those adjustments, substantially more than six minutes of ISC work time is required to process orders. *Id.* The Commission's adherence to the erroneous work time for the ISC will continue to deny Qwest full cost recovery.[24]

b. UNE Combination Platform

Qwest offers five standard UNE combinations consisting of pre-existing UNEs that are combined to serve existing customers. Qwest also offers combinations of UNEs not previously combined to serve new customers. The UNE combination of 1FR/1FB lines consists of an analog 2-wire voice grade loop, analog line side port, shared transport, and, if desired, vertical features. The pre-existing combination consisting of local exchange private line circuits is offered only when the CLEC establishes that these circuits will carry a significant amount of local exchange traffic to a particular end user customer. The requirement that the CLEC carry a significant amount of local exchange traffic to a particular end user was established by the FCC in its Supplemental Order and its Supplemental Order Clarification.[25]

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[24] In the Notice of Issues to be Addressed in Part B Post-Hearing Briefs, issued April 27, 2001, the Commission requested that the parties address how to validate the reasonableness of the opinions of subject matter experts ("SMEs"). Qwest emphasizes two points in response to this inquiry. First, the SMEs on whom Qwest relies for assumptions that are used in cost studies uniformly have extensive experience in the areas that they have addressed. Qwest believes that the extensive body of experience that its SMEs have serve as an important source of validation. Second, the absence of any challenges to assumptions or opinions offered by SMEs should serve as tacit endorsement of their views. May of the opinions regarding work times and engineering issues that have been presented by Qwest SMEs as the basis for cost study inputs have not been contested and, therefore, should be deemed valid.

[25] *See In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket 96-98, FCC 00-183, Supplemental Order Clarification at ¶ 22 (Rel. June 2, 2000).

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The nonrecurring charges that Qwest has presented for these UNE combinations relate to the one-time activities that are associated with converting an existing UNE platform and connecting a new UNE platform that a CLEC requests. While nonrecurring rates exist for the elements that make up the UNE combinations, the one-time activities converting and connecting the UNE-P differ from the activities associated with the connection of each individual element. Accordingly, Qwest's nonrecurring cost studies reflect the specific activities and times relating to conversion and connection of the UNE platforms. Ex. T-1001 at 11 (Million Direct) and Ex. C-1002 (Qwest's Nonrecurring UNE cost studies).

As noted above, Qwest has agreed to use the Commission's previously approved CTC for UNE-P existing. In addition, Qwest has agreed to use this CTC for private line conversions in place when the CLEC is already the private line customer and desires to convert the circuit to a UNE. *See, e.g.*, Ex. T-1009 at 2; Tr. at 2003-04 (Million Cross). This proposal is acceptable to XO, the carrier that raised the issue. Tr. at 3070-71 (Knowles Cross).

c. Enhanced Extended Links

Enhanced extended links, or "EELs," provide CLECs with the ability to serve an end user by extending the end user's loop from the end office that serves the end user to a different end office in which the CLEC is located. EELs give CLECs the advantage of having to aggregate fewer loops at their locations. This reduced aggregation increases efficiency by allowing CLECs to transport the aggregated loops over high capacity facilities to their central switching locations. Ex. T-1062 at 23 (Hooks Direct).

EELs consist of a combination of loop and interoffice facilities and may also include multiplexing and concentration capabilities. EEL transport and loop facilities may utilize DS0, DS1, or DS3 equivalent bandwidths.

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As with UNE combinations, there are specific nonrecurring costs associated with the individual elements that comprise the EEL service. However, there are separate nonrecurring costs for EELs that reflect the one-time activities that must be performed to establish an EEL link. Qwest's nonrecurring cost study for EELs develops the costs for these activities. Ex. T-1001 at 17-18 (Million Direct).

As noted previously, Staff recommended an adjustment to the EEL nonrecurring cost study to reflect a reduction in work time for carrier service telephone calls associated with processing EEL orders. As discussed above, this proposed reduction is inappropriate, since it is based upon Staff's misperception that these calls are intracompany and do not involve the customer. In fact, these calls include calls to the customer, which explains the work time that Qwest included in its EEL nonrecurring study.

d. High Capacity Loops

Qwest presented both recurring and nonrecurring cost studies for high capacity loops. These loops include DS1 and DS3 capable loops. A DS1 capable loop provides a digital transmission path from a network interface in a Qwest serving wire center ("SWC") to the network interface at the end user's premises within the serving area of the SWC. A DS3 capable loop provides a similar digital transmission path at a higher transmission rate than a DS1 loop. The DS3 capable loop is configured as a channel on a fiber-based system. Ex. T-1001 at 13 (Million Direct). DS1 unbundled loops can be provided using a variety of transmission technologies, including, for example, metallic wire, metallic wire-based digital loop carrier, and fiber-optic fed digital carrier systems. Ex. T-1062 at 11 (Hooks Direct).

Qwest's nonrecurring costs for DS1 and DS3 capable loops are included in Exhibit C-1010. The nonrecurring charges associated with DS1 and DS3 capable loops are dependent upon the type of installation that a CLEC requests. Qwest offers basic installation for existing

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service; basic installation with performance testing for new service; coordinated installation with cooperative testing for either an existing or a new service; and coordinated installation without testing for existing service. Each of these services has unique characteristics and costs. *Id.* at 12.

Qwest offers basic installation for existing DS1 and DS3 service. With basic installation, Qwest disconnects the loop from its termination and delivers it to the point of network demarcation through the use of interconnection tie pairs ("ITPs"). Qwest notifies the CLEC when this activity is complete. A basic installation charge applies for the first loop and for each additional loop that a CLEC orders. *Id.*

Basic installation with performance testing is the minimum level of installation that is required for a new DS1 and DS3 service. With this type of installation, Qwest completes the circuit wiring and performs the tests that are necessary to ensure that the new circuit meets applicable parameter limits. Upon completing the testing, Qwest sends the results of the test to the CLEC. A nonrecurring charge for basic installation with performance testing applies to the first loop and to each additional loop that a CLEC orders. *Id.* at 13.

Coordinated installation includes cooperative testing and is used when an existing Qwest end user or a CLEC end user changes to another CLEC. At an appointed time, Qwest disconnects the loop from the existing termination and delivers it to the point of network demarcation in coordination with the CLEC. Qwest then completes the required performance tests and any other testing requested by the CLEC. If a CLEC requests testing that goes beyond the testing requirements in the applicable Qwest Technical Publication, the CLEC is required to pay additional nonrecurring charges. As with the other types of installation, the nonrecurring charges for coordinated installation with cooperative testing apply to the first loop and to each additional loop that a CLEC orders. *Id.* at 13-14.

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Qwest offers coordinated installation without testing for 2-wire analog loop start or ground start unbundled loops. When a Qwest end user or a CLEC end user changes to another CLEC, Qwest disconnects the loop and delivers it to the requesting CLEC to the network demarcation point through the use of an ITP. The disconnection and delivery of the loop occur at appointed times. This option gives a CLEC the ability to coordinate the conversion and thereby minimize any service interruption that the end user will experience. The nonrecurring charges for this type of installation also are on a per loop basis.

The nonrecurring costs and charges associated with these different forms of installation are calculated using the general methodology described above for Qwest's nonrecurring cost studies. Qwest's subject matter experts provided time estimates and probabilities for the different activities required for installation, including time estimates and probabilities for disconnecting loops, delivering loops to demarcation points with the use of ITPs, completing circuit wiring, and performing testing. These time estimates and probabilities were multiplied by the appropriate labor rate to develop the nonrecurring costs.

The majority of the reductions in work times that the Joint Intervenors recommended for Qwest's nonrecurring cost studies related to the proposed elimination of testing activities for high capacity loops that their witness, Mr. Weiss, asserted were duplicative. Ex. T-1330 at 21 (Weiss Response). In particular, he asserted that testing performed by Qwest's service delivery implementor has also been performed earlier in the service provisioning process. As Ms. Million demonstrated in her rebuttal testimony, there is no duplication of testing activities in the nonrecurring charges. In the cost study, multiple people perform different testing functions. While the involvement of multiple people could give the appearance of duplicated effort, in reality, there is no duplication. Ex. T-1009 at 32-33 (Million Rebuttal). Based on Ms. Million's testimony, Mr. Weiss retracted this criticism during the hearing, acknowledging

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that there is no duplication of testing activities in Qwest's cost study. Tr. at 3652-3654 (Weiss Cross). That retraction led to an agreement on the record between the parties that the costs associated with these testing activities are properly included in the study. Tr. at 3654 (Weiss Cross).

e. Subloops

The FCC defines subloops in the UNE Remand Order as "portions of the loop that can be accessed at terminals in the incumbent's outside plant."[26] Pursuant to the order, ILECs "must provide unbundled access to subloops nationwide, where technically feasible."[27] The terminals that are accessible for purposes of subloop unbundling include "any point where technicians can assess the wire or fiber within the cable without removing a splice and/or digging up or trenching underground to reach the wire within." Ex. 1062 at 15 (Hooks Direct). The FCC has identified three points in the network where ILECs should provide access: (1) points close to the customer's premises, such as poles, pedestals, network interface devices and minimum points of entry; (2) the feeder distribution interface; and (3) the main distribution frame in the central office.[28]

The nonrecurring rates Qwest proposes for subloops are set forth in Exhibit 1061. These costs are supported by Qwest's experience in Washington; they are reasonable and forward-looking, and should be adopted. Further, to allow CLECs to interconnect with Qwest outside of central office, Qwest offers the Field Connection Point ("FCP"). Ex. 1062 at 16 (Hooks Direct). When a CLEC wishes to access subloops, Qwest will assess a nonrecurring FCP Quotation Preparation Fee ("QPF") based upon information provided by the CLEC regarding a number of issues, including, but not limited, to the point at which the CLEC

[26] UNE Remand Order at ¶ 206.
[27] *Id.* ¶ 205.
[28] UNE Remand Order ¶¶ 206, 210.

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wishes to access the loop facilities. *Id.* This charge is set forth in Exhibit 1061 (Ex. RFK-2).

f. UDIT and EUDIT

Qwest's nonrecurring charge proposals for its UDIT are reasonable and should be adopted. Qwest's UDIT product provides the CLECs with a single transmission path between two Qwest wire centers in the same LATA and state. Ex. 1062 at 17 (Hooks Direct). In addition, the UDIT can be used as a path between one CLEC collocated in one Qwest wire center and another CLEC in a different Qwest wire center. *Id.* Where facilities are available, UDITS can be provisioned in a variety of bandwidths and, when separate channels are assigned, can provide CLECs with an opportunity to transport both voice and data traffic over the same facilities. *Id.* Qwest UDIT offerings that are under consideration in this docket involve the Optical Carrier, levels 3 and 12 (respectively, "OC-3" and "OC-12"), bandwidths.

As set forth in Exhibit 1061, Qwest proposes two nonrecurring charges associated with UDITs: DSO UDIT Transport ($312.38) and a generic nonrecurring charge for DS1/DS3/OC-3 and OC-12 UDITs ($352.54). These charges reasonably compensate Qwest for the time and expense arising from implementing an order for the UDIT product.

g. Multiplexing

The cost issues involving multiplexing relate to Qwest's product offering of DS0 Low Side Channelization. This element is comprised of the equipment plug-ins that are placed in the DS0 side of a DS1/DS0 multiplexer. Low Side Channelization provides transmission facilities between a customer's premises and a serving wire center, the wire center where a CLEC is collocated, or multiplexing equipment. Ex. T-1062 at 22 (Hooks Direct). To provide this product, Qwest incurs nonrecurring costs associated with high-side and low-side multiplexing activities, and it has proposed nonrecurring charges to recover these costs. *See* Ex. 1063 (Recurring Rates and Nonrecurring Charges). No party has contested the

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nonrecurring charges that Qwest has proposed to recover the costs it incurs for these multiplexing activities.

h. Poles, Ducts, and Rights of Way

Qwest has introduced nonrecurring charges for four activities relating to poles, ducts, and rights of way: (1) pole inquiry fee per mile; (2) innerduct inquiry fee per mile; (3) field verification fee for poles; and (4) field verification fees for manholes. Ex. T-1062 at 19 (Hooks Direct). The pole and innerduct nonrecurring charges arise from Qwest's need to perform an internal record review to determine whether a requested route or a facility is available for lease. The field verification charges relate to the costs Qwest incurs to conduct survey verifications of potential routes and to determine the scope of any required make-ready work for a route. *Id.*

The CLEC witnesses, Mr. Weiss and Mr. Klick, did not propose any adjusted work times or probabilities relating to these four nonrecurring activities.

i. Unbundled Dark Fiber

Unbundled dark fiber ("UDF") is a deployed, unlit pair of fiber optic cable or strands that connect two points within Qwest's network. There are two distinct types of UDF: (1) UDF interoffice facility, which is an existing route between two Qwest wire centers; and (2) UDF-Loop, which is an existing loop between a Qwest wire center and either a fiber distribution panel located at an appropriate outside plant structure or an end user customer premises. Ex. T-1062 at 20.

Neither Staff nor any CLEC has proposed changes relating specifically to Qwest's proposed NRCs for dark fiber. These proposed charges accurately reflect the nonrecurring costs that Qwest will incur to provide this UNE, and, accordingly, the Commission should approve them.

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j. On-Premise Wiring

In the UNE Remand Order, the FCC clarified its definition of the loop by establishing that the loop terminates at the customer's point of demarcation, not at the network interface device ("NID"), in cases where the ILEC owns the inside wire.[29] The wire to which the FCC refers includes indoor wire, outdoor wire, and wire on the customer's premises. Customers include subscribers, landlords, condominiums, and universities. T-1001 at 14 (Million Direct).

In response to the FCC's pronouncements relating to on-premise wiring and to CLEC requests, Qwest has presented a recurring cost study for building cable. This study is described in the section of this brief that addresses Qwest's recurring costs and rates. In addition to recurring costs, Qwest incurs nonrecurring costs to provide CLECs access to building cable. These costs arise from activities that include running jumpers from CLEC terminals to Qwest terminals and to the building cable. Qwest will address the recovery of costs for these activities in its individual dealings with the CLECs that request this element.

2. Recurring Costs

Recurring costs are the ongoing costs associated with providing a service or a network element. These costs generally are investment-related and include capital costs and operating expenses. Recurring costs typically are presented as a cost per month or a per unit of usage and are incurred throughout the period that Qwest provides a service or a network element to a customer. Ex. T-1001 at 5-6 (Million Direct).

Qwest's recurring cost studies are TELRIC-based. They identify the forward-looking, direct costs that are associated with provisioning a service or a UNE in the long run, plus the incremental costs of shared facilities and operations. The studies also identify total element

[29] UNE Remand Order at ¶ 193.

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costs, which are the average incremental costs of providing the entire quantity of the element. In addition, the assumptions, methods, and procedures that Qwest uses in its recurring studies are designed to produce the forward-looking replacement costs of reproducing the telecommunications network using the most efficient, least-cost technologies. *Id.* at 4.

All of Qwest's recurring studies follow the same basic steps to develop monthly, recurring TELRIC estimates. First, the studies define the network element or service for which Qwest is developing costs. Cost analysts rely on input from product managers and employees with technical expertise to identify the network components that are needed to provide the element or the service and to estimate the demand for the product or service. Second, the cost analyst determines the amount of investment that is needed for the element or service, using actual vendor prices for material and equipment. The investment also includes the expenses associated with placing the equipment, including capitalized labor costs. To ensure accurate levels of investment, Qwest relies on sound engineering assumptions and realistic levels of usage or demand. *Id.* at 6. Qwest recurring studies also use inputs for investments that the Commission has prescribed in previous orders.

Third, the cost analyst includes capital costs in the study. These costs are affected by the depreciation lives for the relevant plant accounts and by the weighted cost of debt and equity capital. The investment-related capital costs -- depreciation, cost of money, and income tax rate -- that Qwest has included in its recurring cost studies in this docket are based on rates that this Commission has prescribed or, in the case of the income tax rate, that have otherwise been established by law. Thus, consistent with the Commission's rulings in the Eighth Supplemental Order, Qwest's studies use a cost of money of 9.63 percent and the depreciation lives from Docket UT-951425. *Id.* at 7.[30]

[30] *See* Eighth Supplemental Order at ¶¶ 211, 217.

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Fourth, Qwest calculates investment-related operating expenses, such as maintenance expenses, using annual cost factors that the cost analyst applies to investment. Other operating expenses, such as product management expenses, are calculated using factors that are applied to investment-related costs. Qwest develops these cost factors based on operating data showing the historical relationship between expenses and investment that the company has experienced, with adjustments to account for inflation and increases in productivity. In the 25th Supplemental Order in Docket UT-960369, the Commission approved Qwest's factors relating to administrative, product management, and business fee expenses.[31] Qwest's recurring cost studies in this docket use these same factors.

Qwest's recurring studies also use the factor of 19.62 percent for attributed costs and the common cost factor of 4.05 percent that the Commission approved in the Seventeenth Supplemental Order. The cost analyst adds the operating expenses to the capital costs to produce investment based on direct costs and then adds 19.62 percent to produce the TELRIC for the network element. The analyst then adds common costs using the Commission's prescribed rate of 4.05 percent to obtain the total cost, which consists of TELRIC plus common costs. Finally, Qwest validates the results of its recurring cost studies by comparing them to other cost data and the results of other cost studies to ensure reasonableness. *Id.*

Joint Intervenor witness, John Klick, suggested in his testimony that Qwest's nonrecurring cost studies do not include adequate economies of scale because they are not based on the construction of an entire network that supports all services but, instead, build and cost elements on an individual basis. This assertion is incorrect. Consistent with the methodology Qwest followed in the recurring cost studies that it presented in previous cost proceedings and with Commission findings, Qwest's recurring studies in this docket include

[31] Twenty-Fifth Supplemental Order Accepting, Rejecting and Authorizing Refiling of Compliance Filings, Docket No. UT-960369, *et al.*, ¶¶ 125, 126 (May 2000)

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the economies of scale that result from building an entire network, not just piece parts. Ex. T-1009 at 19 (Million Rebuttal).

a. The Total Installed Factor ("TIF") and Utilization or Fill Assumptions

Qwest's total installed factor ("TIFs") are reasonable, forward-looking, and well supported by the company's actual experience in Washington. As explained by Qwest's cost witness, Ms. Million, TIF is a cost factor that combines all proper investment loadings into one factor that, when multiplied against the material investments, provides a total installed investment. *See* Ex. 1009 at 6 (Million Rebuttal). In contrast to the EF&I (engineered, furnished and installed) price for equipment, which includes the installation and engineering, application of the TIF factor to a material price calculates not only installation and engineering costs, but also other costs, including power, warehousing, transportation and finance charges. *Id.* Thus, properly calculated, TIF figures are higher than the investment loadings added to EF&I investment. *Id.*

While installation and engineering costs are the major components of TIF, the TIF factor also includes costs associated with a number of other factors, including investments for: (1) testing and power equipment required to properly operate the equipment represented by the material investment; (2) sales tax and interest during construction, added to the material investment to cover expenses Qwest incurs when it purchases equipment; and (3) warehousing and transporting the equipment from Qwest's warehouses to the equipment's ultimate location. *Id.* at 6-7.

Qwest relies on current General Ledger Journal files, as reflected in the company books, as well as other company reports (such as the MR2A) to calculate each of the underlying factors that make up the TIF. *See* Ex. 1009 at 7 (Million Rebuttal). In this regard,

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Qwest has consistently presented its material investment cost data on a fully loaded basis, using a TIF to arrive at that amount. *Id.* Although in the past the TIF may have been embedded in the costing data and, thus, not readily apparent in the study or model, Qwest's previously filed cost studies and cost models have included the TIF in a variety of ways depending on the level of material investment with which the cost analyst started. *Id.*

Qwest's practice of developing a factor that reflects *actual* average costs to be added to material investments is more accurate than relying on engineering estimates and is appropriate in forward-looking cost studies. Id. at 8. Because the equipment for which TIFs are developed come in many configurations and forms and because "no two jobs are alike," often there are "peaks and valleys in engineering estimates, making estimating very difficult, and not as accurate as using actual expenditures collected for the equipment being installed to develop an average loading factor." *Id.* at 8-9. Because the TIF represents a relationship of material investment to related expenditures based on data from the most current time period, it provides a forward-looking cost estimate based on Qwest's actual experience installing equipment. *Id.* at 9.

On behalf of the Joint Intervenors, Mr. Weiss asserts that Qwest's TIFs are flawed. *See, e.g.*, Ex. T-1330 at 10-11 (Weiss Response). As demonstrated by Ms. Million, however, Mr. Weiss' allegations are unfounded and based on his erroneous examination of one TIF. First, in discussing the TIF for Field Reporting Code ("FRC") 257C, Mr. Weiss chooses to concentrate on only one TIF (2.11), while ignoring the fact that Qwest has developed five other TIFs for FRC 257 alone. *See* Ex. T-1009 at 23 (Million Rebuttal). And while some of these additional TIFs fall within the range Mr. Weiss claims is reasonable, Ms. Million correctly points out that they do so, not because Qwest has chosen to apply some arbitrary limiting factor, but because that is what Qwest's experience in Washington dictates. *Id.*

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Indeed, in addition to being grounded in Qwest's actual experience, the TIFs have been analyzed by the Commission in part when the Commission considered the development of Qwest's annual cost factors in connection with the previous cost docket. *See id.* at 25 (citing Ex. 115 in the Generic Cost Docket, UT-960369). While the current use of TIFs in Qwest's studies here reflects a new presentation, the methodology has not changed. *Id.*

On the other hand, the factors suggested by Mr. Weiss are wholly unsupported. In an attempt to support his recommendations, Mr. Weiss relies on his "experience" with other carriers. Tr. at 3569-71, 3605 (Weiss Cross). However, despite his heavy reliance on such experience, Mr. Weiss refuses to provide any evidence from this experience substantiating his TIF testimony. *See, e.g.*, Exhs. 1339, 1343 (Joint Intervenors' data request responses); Tr. at 3606-10 (Weiss Cross). Moreover, Mr. Weiss admits that he never asked his clients in this proceeding (the nine Joint Intervenors) about their experiences with TIFs. Tr. at 3614 (Weiss Cross). And the Joint Intervenors similarly refused to provide any backup for Mr. Weiss' unfounded criticisms in response to Qwest's discovery requests on this issue. *See* Exhs. 1337, 1344 (Joint Intervenors' data request responses).

Although Staff suggests in pre-filed testimony that Qwest's TIFs may be higher than Staff would recommend, on cross-examination on the last day of the hearing, Mr. Spinks agreed that there might be a reason why TIFs are higher on a going-forward basis, including the possibility that the equipment costs have gone down while labor costs, taxes, and warehousing and transportation costs have gone up relative to the equipment cost. *See* Tr. at 3885-87 (Spinks Cross).

Likewise, Mr. Weiss' observations regarding fill factors are misplaced. As he did in connection with TIFs, Mr. Weiss chooses to focus on only one of seven fill factors used by Qwest to support his recommendations. As Ms. Million points out, Mr. Weiss' choice to build

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his analysis based upon only one factor is flawed. *See* Ex. T-1009 at 26-28 (Million Rebuttal). Mr. Weiss' recommendation for an 85% fill factor for DS1 and DS3 capable loops demonstrates the inappropriateness in his approach – such a factor simply does not comport with the real-world experience of Qwest in Washington. *Id.* at 27-30. Mr. Weiss' assumptions regarding utilization rates for OC3s is similarly flawed and not grounded in the realities of building and maintaining the network in Washington. *See id.* at 31.

As with his claims regarding TIFs, Mr. Weiss's claim that an 85% fill is what would be achieved in a competitive market is unsupported by any real-world evidence. Mr. Weiss did not ask his own clients, the Joint Intervenors, about their utilization levels and, as with TIFs, the Joint Intervenors refused to respond to Qwest's discovery requests on this issue. *See, e.g.*, Tr. at 3585 (Weiss Cross); Ex. 1338. Indeed, Mr. Weiss could not provide a single example of a competitive market in which an 85% fill was experienced. Tr. at 3585 (Weiss Cross). As this Commission has stated, the use of fill factors that are greater than actual and projected fill factors is "contrary to the concept of deriving TELRIC." Eighth Supplemental Interim Order at ¶ 171. The Commission's conclusion in this regard is based, at least in part, upon the FCC's pronouncement that "the per-unit costs associated with the element must be derived by dividing the total cost associated with the element by a reasonable projection of the actual total usage of the element." *Id*. (citing First Report and Order at ¶ 682). While Qwest's fill assumptions are grounded in actual conditions and, thus, comport with these principles, Mr. Weiss' speculation does not.

Mr. Weiss' assumptions regarding fill factors are especially problematic given that TIFs make approximately a 20-25% difference in Qwest's recurring prices, while fill factors account for approximately 75-80% difference. In other words, Mr. Weiss' recommendations regarding fill factors have a much more significant impact (reduction) on Qwest's recurring

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costs than TIFs. In light of the evidentiary gaps in his analysis, however, the substantial reductions in Qwest's costs Mr. Weiss advocates should be rejected.

In sum, Qwest's TIFs and fill factors are reasonable and appropriate for Washington. They are based upon Qwest's real-world experience in serving the market in this state and are fully compliant with the Eighth Circuit's pronouncements regarding forward-looking assumptions relating to costs.

b. UNE Combination Platform

As set forth in the direct testimony of Perry W. Hooks, as adopted by Barbara J. Brohl, Qwest offers UNE combinations that consist of pre-existing UNEs that are combined to serve existing customers. *See* Ex. 1062 at 25-26 (Hooks Direct). In addition, Qwest has agreed to offer combinations of UNEs not previously combined to serve new customers. *Id.* at 25.

Qwest proposes recurring and nonrecurring charges associated with each of these combinations. As set forth in Exhibit T-1063, Qwest's proposed recurring UNE combination platform charges are the sum of the recurring charges established for each of the individual UNEs that make up the combination. Importantly, neither WorldCom nor any other party to this proceeding disputes the propriety of this pricing approach. Instead of challenging this logical pricing approach, WorldCom argues that this Commission should "seriously consider reexamining the UNE loop rate as soon as is practical." Ex. 1241 at 10 (Bobeczko Direct).

As grounds for this invitation to re-open the issue of unbundled loop rates, WorldCom claims that it is unable to enter the Washington residential market because, it claims, the Commission-approved unbundled loop price is too high. *See id.* at 8-9. However, WorldCom offers a flawed financial analysis of the likelihood of earning a profit on residential service in an attempt to support this assertion. Probing of WorldCom's witness during the hearing demonstrated that the revenue assumptions underlying WorldCom's profit analysis are too

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conservative and are inconsistent. This analysis provides no basis for the Commission to reject Qwest's recurring pricing for UNE combination platforms. *See* Tr. at 3311-17 (Krauss Cross).

c. Enhanced Extended Loops

Qwest's product offering for EEL is described above in connection with the discussion of nonrecurring costs. EEL is a service, and the rates for this service are derived from other TELRIC-priced elements and services. Accordingly, there is no need for a separate recurring cost study for EEL, and Qwest has not presented one. Ex. T-1009 at 17 (Million Direct).

As discussed previously, EEL is a combination of an unbundled DS1 or DS3 capable loop, multiplexing equipment, and dedicated interoffice transport. Tariffed rates already exist for direct-trunked transport and multiplexing, and Qwest has proposed rates in this docket for DS1 and DS3 capable loops.[32] When the Commission sets a final rate for DS1 and DS3 capable loops, all of the rate components for EEL will be established. *Id.*

Because EEL is a service that Qwest designs from end to end, the EELs that CLECs order may have different configurations. For example, the CLECs have a variety of bandwidth options from which to choose to construct EELs, since EEL transport and loop facilities may utilize DS0, DS1, or DS3 equivalent bandwidths. In addition, if a CLEC decides to add concentration equipment to the EEL, Qwest could configure the service in several different ways, depending upon the CLECs' preference. The recurring rates for EELs will depend on the particular configuration that a CLEC chooses. Ex. T-1062 at 24 (Hooks Direct). Based on this practical consideration and to allow the CLECs the flexibility of using different configurations, Qwest has proposed pricing EEL concentration configurations as ICB. Ex. T-1009 at 17 (Million Direct).

[32] Qwest's recurring cost study for DS1 and DS3 capable loops is discussed in the following section.

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d. High Capacity Loops

As set forth above, Qwest provided cost study support for its proposed recurring charges for high capacity loops. *See* Ex. T-1001 at 13; Ex. 1004 (TKM-10). Those proposed rates are set forth in Exhibit 1061 (RFK-2). Qwest developed these rates using the same TELRIC methodology and Commission-prescribed inputs that are discussed above. The rates that are based on this study are appropriate and should be adopted by the Commission. Qwest's study produces deaveraged costs for DS1 and DS3 capable loops, as well as DS1 capable feeder. Ex. T-1009 at 11 (Million Rebuttal).

Instead of taking issue with specific assumptions or data included in Qwest's recurring cost study relating to high capacity loops, the CLECs incorrectly assert that the Commission already set DS1 and DS3 loop rates in its generic cost docket proceeding. *See, e.g.*, Ex. T-1310 at 35 (Klick/Pitkin Response). As Mr. Buckley points out, however, in making this claim, the CLECs' witness, Mr. Klick, misinterprets the Commission's orders.

Contrary to Mr. Klick's assumption, the adjustments provided by the Commission in the Eighth Supplemental Order were not to establish a cost for a high capacity loop, but, instead, were intended to produce a proper allocation of placement and structure costs across all loops in Washington. As Mr. Buckley explains, the adjustment stemmed from the Commission's realization that counting the DS1 and DS3 circuits on a DS0 equivalent basis overstated the number of physical copper pairs or the number of DLC-derived channels, resulting in an overstated, incorrect economy of scale. *See* Ex. T-1050 at 4 (Buckley Rebuttal). This adjustment was a compromise that provided for a reduction in the UNE loop placement costs to account for the fact that the same cable sheath may deliver DS0s or voice grade service (single pairs) and DS1s (two pairs). *Id.* at 5. By stating the line counts on a physical pair basis, the Commission attempted to share the placement cost in the way it

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actually occurred (e.g., 1/100th of the placing costs to each of the 98 1FRs in a 100-pair cable and 2/100ths of the placing costs to the two-pair DS1 in the 100-pair cable). *Id.* In sum, the increase in the UNE loop cost reflected in the Commission's Eighth Supplemental order was a correction of the Hatfield model's overstatement of DS0 demand and was in no way intended to estimate DS1 or DS3 facility costs. *Id.*

In addition, none of the loop models considered by the Commission in the generic cost proceeding addressed the equipment required to provision high capacity circuits. *Id.* Thus, Mr. Klick's reliance upon the Seventeenth Supplemental Order with regard to two-wire versus four-wire loops and how the structure costs were assigned, *see* Ex. T-1310 at 35-36 (Klick/Pitkin Response), is wholly misplaced. Indeed, the quoted passage does not address how DS3 circuits are provisioned. *See Id.*

Moreover, the adjustment on which Mr. Klick bases his analysis applied to the Hatfield model only despite the fact that the Commission's loop rates are based on two additional cost models – RLCAP and BCPM. The Commission's adjustment to the Hatfield model does not affect Qwest's DS1/DS3 cost studies. The adjustment was an assignment of structure costs to the units within the facility (1/100th of the trench cost to each pair in a 100-pair cable). *See* Ex. T-1050 at 6-7 (Buckley Rebuttal). The resulting unbundled loop costs did not attempt to reflect the cost of building a fiber cable to a customer location and connecting it to equipment that provided the customer a high capacity circuit. *Id.* Nor did those costs estimate the copper cable and equipment necessary to deliver DS1 circuits to a customer location.

As Mr. Buckley explains in his rebuttal testimony, Mr. Klick erroneously ignores the fact that the Commission ruled on models that were designed to produce the average cost for voice-grade loops and that the models appropriately assumed a mix of copper and fiber

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facilities. *See* Ex. T-1050 at 7-8 (Buckley Rebuttal). Although Mr. Klick conceded that DS3 loops can only be provided on all-fiber loops, he agreed that the Hatfield model used in the generic proceeding did not include investment for all-fiber loops. Tr. at 3782 (Klick Cross). In short, Mr. Klick's analysis is not grounded in reality and therefore should be rejected. As Mr. Buckley demonstrates, building a network configured according to the costing methodology Mr. Klick proposes simply would not work. *Id.*

Finally, Mr. Knowles' assertion that Qwest proposes to impose retroactive monthly recurring charges of "$25 per DS-0, 600 per DS-1, and $16,800 per DS-3" is incorrect. *See* Ex. T-1210 at 18 (Knowles Response). Qwest has no such plans.

e. Subloops

The FCC has defined subloop unbundling as providing access to feeder and distribution facilities at any technically feasible point on the loop.[33] Qwest has proposed prices for subloops that are geographically deaveraged using the same zone that the Commission established for unbundled loops. Qwest's proposed prices are derived by developing the percentages of feeder investment and distribution/drop investment to the total investment per zone. These percentages are then multiplied by the existing loop rates per zone, resulting in zone-specific rates for distribution and feeder subloops. Ex. T-1001 at 11-12 (Million Direct).

By way of example, the loop rate for a DS0-equivalent loop is $7.50 in Zone 1. The percentage of feeder investment to total investment in Zone 1 is 27.2 percent, and the percentage of distribution/drop investment is 72.8 percent. Accordingly, Qwest's proposed rate for the feeder portion of the loop in Zone 1 is $2.04 ($7.50 x 27.2%), and the rate for the

[33] *In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996,* CC Docket No. 96-98, Third Report and Order and Fourth Further Notice of Proposed Rulemaking at ¶ 207 (Rel. Nov. 5, 1999).

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distribution portion of a loop is $5.46 ($7.50 x 72.8%). *Id.* at 12; Ex. C-1003.

Qwest also has developed a separate rate for DS1 capable feeder based on the likelihood that CLECs may desire to purchase larger increments of feeder capacity. The DS1 capable feeder provides a transmission path from a network interface in a Qwest serving wire center to the field connection point. Ex. T-1001 at 12 (Million Direct); Ex. C-1004.

The other parties to this docket do not contest the basic methodology that Qwest has followed to establish subloop rates. However, Staff suggests that in areas with dense populations, the ratio of feeder and distribution investment would likely be closer to a 50/50 split instead of Qwest's percentages of 27.2% for feeder and 72.8% for distribution. Ex. T-1350 at 8-9 (Spinks Response). Staff assumes that loops are shorter in areas of high population density, and asserts that a feeder/distribution investment ratio of approximately 50/50 should apply in these areas. There are at least two flaws in this assumption. First, it is wrong to make the blanket assumption that loops within the more densely populated areas of Washington are short or that loops in less densely populated areas are long. The zones in Washington are based upon loop cost by wire center, not loop length. Although the length of a loop necessarily affects its cost, length is not the only determining factor. Ex. T-1009 at 12 (Million Rebuttal).

Second, within each zone in Washington, there is significant variation in density. Throughout the wire centers in each of Washington's five zones, there are areas of dense population and areas that are more sparsely populated. In each of the wire centers, there also are short loop lengths and long loop lengths. Because each of the five zones has a mix of loop lengths and population densities, it is incorrect to assume that Zone 1 will have a higher percentage of feeder investment than other zones. In fact, Qwest has found little variation in

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the relationship between feeder and distribution across the five zones, and that the ratios of approximately 27% for feeder and 73% for distribution are appropriate for all zones. *Id.*

f. UDIT and EUDIT

Qwest's recurring charge proposals for its UDIT and EUDIT offerings are reasonable and forward-looking and should be adopted. As discussed above, Qwest's UDIT product provides the CLEC with a single transmission path between two Qwest wire centers in the same LATA and state. *See* Ex. 1062 at 17 (Hooks Direct). In addition, the UDIT can be used as a path between one CLEC collocated in one Qwest wire center and another CLEC in a different Qwest wire center. *Id.* Where facilities are available, UDITs can be provisioned in a variety of bandwidths and, when separate channels are assigned, can provide CLECs with an opportunity to transport both voice and data traffic over the same facilities. *Id.* As noted above, this proceeding involves Qwest's UDIT offerings in the Optical Carrier, levels 3 and 12 (respectively, "OC-3" and "OC-12") bandwidths.

As outlined in Mr. Hooks' testimony, Qwest proposes UDIT recurring charges of two types: variable and fixed. The variable or "distance-sensitive" rates depend on the mileage between the originating and terminating central offices while the flat-rated bandwidth-specific rates depend upon bands the CLEC requires. *See* Ex. 1062 at 17 (Hooks Direct); Ex. 1061 (RFK-2).

Like the UDIT product, Qwest's EUDIT product is available in a variety of bandwidths and provides CLECs with a transmission path between the Qwest serving wire center and the CLECs' wire center or an IXC's point of presence located within the same serving wire center. Ex. 1062 at 18 (Hooks Direct). Unlike the UDIT, however, recurring charges for EUDITs are flat-rated bandwidth-specific only; there are no distance-sensitive rates for EUDITs. *Id.*; Ex. T-1061 (RFK-2).

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On cross-examination of Qwest's witness, Mr. Kennedy, the CLECs appeared to argue that the UDIT and EUDIT products should have the same rate structure. *See* Tr. at 2115-20 (Kennedy Cross). On redirect examination, however, Mr. Kennedy made clear that Qwest's approach is sound and supported by Qwest's Commission-approved tariff governing interconnection facilities. The Commission has approved rate structures for entrance facilities and direct trunked transport that mirror the rate structures applicable to EUDITs and UDITs and that involve the same underlying facilities. *See Id.* at 2125-28 (Kennedy Redirect).

g. Multiplexing

As discussed above in connection with nonrecurring costs, the cost issues involving multiplexing relate to Qwest's product offering of DS0 Low Side Channelization and DS0 UDIT Low Side Channelization. These are individual elements that fall within the transport category of UNEs. These facilities are available for channel performance. Ex. T-1001 at 16 (Million Direct).

Qwest's recurring studies for these elements follow the same TELRIC methodology that is summarized above. The TELRIC-based recurring rates that Qwest has proposed for these elements are reasonable and utilize the Commission's prescribed inputs from its prior orders. The Commission should adopt these rates.

h. Unbundled Dark Fiber

There are two forms of unbundled dark fiber, interoffice facility ("IOF") and loop. IOF dark fiber constitutes an existing route between two Qwest wire centers. Ex. T-1062 at 20 (Hooks Direct). Loop dark fiber is an existing loop between a Qwest wire center and either a fiber distribution panel located at an appropriate outside plant structure or at an end-user customer's premises. *Id.* Qwest used a 14-state average sheath mile weighting for direct buried and underground investment to calculate the cost of IOF dark fiber, but the

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Commission Staff recommended that Qwest not use a region-wide weighting to calculate the Washington-specific costs since Washington has a lower proportion of higher costs for direct buried dark fiber than the average. Using the average results in a higher cost estimate, particularly in rural areas.

Qwest has agreed to use the Washington-specific model run for recurring costs for UDF. Qwest's calculation of recurring dark fiber costs is TELRIC-based and relies upon the appropriate Commission-prescribed inputs. The dark fiber study produces rates that are reasonable and that should be adopted by the Commission.

i. On-Premise Wiring

As discussed above in connection with nonrecurring charges, Qwest recognizes that access to a loop includes access to inside wire that it owns. In response to a request by the CLECs, Qwest has provided a separate rate for building cable on a per pair basis at established field connection points ($0.91 per pair, per month). The rate is a single monthly rates for all five zones in Washington. Because building cable costs do not vary geographically, there is no need to deaverage the rate. (T-1009 at 16). The building cable study (C-1017, TKM-23) assumes that the CLECs will place their own common terminals or cross-connect facilities, at their own expense to jumper to Qwest's terminal and building cable.

B. Verizon

Qwest does not have comments relating to Verizon's costs and pricing proposals.

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IV. Reciprocal Compensation

A. Legal and Policy Issues

Section 252(d)(2)(A) of the Act and the FCC's rules implementing that section govern the appropriate rates for reciprocal compensation. Section 252(d)(2) provides that reciprocal compensation for transport and termination of traffic must "provide for the mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier's network facilities of calls that originate on the network facilities of the other carrier" and must be determined "on the basis of a reasonable approximation of the additional costs of such calls."

The FCC has determined, as a general matter, that rates for reciprocal compensation must be symmetrical – *i.e.*, that the same rates apply to both incumbent LECs and CLECs.[34] The FCC's rules regarding symmetrical treatment only apply, however, when carriers provide and perform the same services. Thus, Rule 711(a)(1), 47 C.F.R. § 51.711(a)(1), implementing section 252(d)(2)(A), requires symmetrical compensation only when carriers provide the *same services*:

> For purposes of this subpart, symmetrical rates are rates that a carrier other than the incumbent LEC assesses upon an incumbent LEC for transport and termination of local telecommunications traffic equal to those that the incumbent LEC assesses upon the other carrier *for the same services*.[35]

Accordingly, FCC Rule 709(a) provides:

> In state proceedings, a state commission shall establish rates for transport and termination of local telecommunications traffic that are structured consistently *with the manner that carriers incur those costs*, and consistently with the principles in §§ 51.507 and 51.509.[36]

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[34] First Report and Order at ¶¶ 1085-86.
[35] 47 C.F.R. § 711(a)(1) (emphasis added).
[36] 47 C.F.R. § 51.709(a) (emphasis added).

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Thus, the Act and the FCC's rules mandate that carriers be compensated for costs that they actually incur and, consistent with that core principle, recognizes that different rates could be charged for transport and termination where carriers provide different transport and termination services.

As discussed above, in ISP Order II, the FCC ruled that Internet traffic is interstate in nature and that, accordingly, the FCC has exclusive jurisdiction to decide the appropriate form of intercarrier compensation for this traffic. In ruling that this traffic is interstate and is not subject to the reciprocal compensation provisions of section 251(b)(5) of the Act, the FCC stated that "state commissions will no longer have authority to address this issue."[37]

As a result of this order, the Commission no longer has authority to rule on the appropriate form of intercarrier compensation for Internet traffic. Despite the Commission's lack of jurisdiction over this issue, it is noteworthy that in the ISP Order II, the FCC concluded preliminarily that bill and keep is the most appropriate of intercarrier compensation for Internet traffic: "[B]ased upon the current record . . . bill and keep appears the preferable cost recovery mechanism for ISP-bound traffic because it eliminates a substantial opportunity for regulatory arbitrage."[38] In reaching that result, the FCC specifically endorsed most of the public policy and economic arguments that Qwest presented in this docket in support of bill and keep.[39] In particular, it found that: (1) bill and keep is likely to be more economically efficient than recovering the costs of Internet calls from originating carriers; (2) bill and keep will send proper economic signals and eliminate regulatory arbitrage; (3) without bill and keep, carriers have "enormous incentive" to target Internet service providers ("ISPs") as customers for the purpose of generating large amounts of reciprocal compensation; (4)

[37] ISP Order II at ¶ 82.
[38] *Id.* at ¶ 6.
[39] *Id.* at ¶ 67-76.

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reciprocal compensation for Internet traffic undermines the operation of competitive markets; and (5) application of reciprocal compensation to Internet traffic fails to account for competitive carriers' ability to recover costs from their ISP customers.[40]

B. Jurisdiction

As stated, the ISP Order II gives the FCC exclusive jurisdiction to decide the appropriate method of intercarrier compensation for Internet traffic. In addition, the FCC's assertion of jurisdiction precludes state commissions from granting the CLECs' request that Internet traffic be included in calculating the relative use of interconnection facilities for the purpose of allocating the costs of those facilities between CLECs and ILECs. The FCC rules that establish relative use as the basis for determining responsibility for the costs of transmission facilities are part of 47 C.F.R. Subpart H, which is titled, "Reciprocal Compensation for Transport and Termination of Local Telecommunications Traffic." The FCC makes clear that the rules within this subpart "apply to reciprocal compensation for transport and termination of local telecommunications traffic." *See* 47 C.F.R. § 51.701(a).

Accordingly, the responsibility of paying for transmission facilities is governed by the FCC's reciprocal compensation rules, and those rules make clear that only local traffic should be included in the calculation of relative use. Given the FCC's pronouncement that Internet traffic is interstate and that issues relating to reciprocal compensation for this traffic are within the FCC's exclusive jurisdiction, state commissions are without authority to require the inclusion of this traffic in calculations of relative use.

C. Rate Structure

Qwest opposes Staff's recommendation of a multi-tiered rate structure for reciprocal compensation that would set separate rates for call set-up and call duration for all local calls

[40] *Id.*

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and also would provide for different rates based on the switch load factor of the terminating traffic. *See* Ex. T-1230 at 8-9, 12-13 (Blackmon Response). This issue is one on which Qwest and the CLECs agree. As explained by Joint Intervenor witness, Michael Starkey, a two-tiered rate structure creates significant administrative burdens and costs for the CLECs and the ILECs. These burdens arise from substantial changes to billing systems that are required by a multiple rate structure and from the systems changes that are needed to track initial call minutes and additional call minutes separately. Tr. at 3283-84 (Starkey Cross); *see also* Tr. at 2455 (Malone Redirect).[41]

Because of the expense and difficulty of administering this type of rate structure, CLECs and ILECs in California and Texas agreed to charge each other an average rate per minute instead of following the bifurcated rate scheme that the commissions in those states ordered. As Mr. Starkey explained, the CLECs and the ILECs wanted to avoid the difficulties of billing under a double-tiered rate structure. Tr. at 3284-85 (Starkey Cross).

In this case, Staff has not yet analyzed the magnitude of the billing and other systems modifications and the related administrative changes that a multi-tiered rate structure would impose on the CLECs and the ILECs. Tr. at 2996-97 (Blackmon Cross). At the same time, Staff acknowledges that these issues should be considered, stating that "[t]he Commission has ever . . . been sensitive to the possibility that measurement and billing costs could swamp whatever efficiencies might be gained through more accurate prices." *Id.* In addition, no party presented a cost study supporting this type of rate structure or proposed specific rates that could be used for a multi-tiered rate structure.

[41] Among the post-hearing issues that the Commission asked the parties to address in their briefs is whether the inclusion of peg counts and minutes of use on an hourly basis in interoffice trunk reports would affect the a carriers' ability to implement a dual rate structure. The availability of this information would not reduce the difficulties of implementing a billing system for this type of structure and, therefore, does not affect the ILECs' and CLECs' concerns about imposing this type of structure.

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In sum, given the CLECs' and the ILECs' joint opposition to this type of rate structure, the absence of proposed rates, and the absence of any analysis of the billing and administrative costs that this structure would impose, Qwest urges the Commission to reject Staff's proposal.

D. Tandem Switching Issue

The issue of whether to charge the end office or tandem rates established in Washington arises only in the context of voice traffic, not Internet traffic. The FCC's assertion of jurisdiction over Internet traffic in ISP Order II establishes that all issues relating to intercarrier compensation for Internet traffic, including the applicability of bill and keep or any rate for terminating that traffic, shall be decided by the FCC, not state commissions.

As discussed above, the Act and the FCC's rules establish that rates for reciprocal compensation should be symmetrical, but only when the ILEC and the CLEC are providing the same transport and termination services. The FCC's rules establish further that the rates for reciprocal compensation must reflect the manner in which a carrier incurs transport and termination costs.

The CLECs contend that they are entitled to reciprocal compensation that includes both end office and tandem switching rates for all local traffic that they terminate. This approach would result in the CLECs recovering substantially more than the costs that they incur to terminate local traffic, and, therefore, the Commission should reject the CLECs' contention.

As an initial matter, a CLEC cannot be compensated at the tandem rate unless it demonstrates that its switches, its serving area, and its customer base justify a tandem rate. These determinations are fact-intensive and must be determined by the Commission on a case-by-case basis. Because of the fact-specific nature of this issue, it would be inappropriate for the Commission to issue a generally applicable pronouncement that CLECs are entitled to

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receive tandem rates, as the CLECs apparently would like the Commission to do. Instead, the Commission must evaluate the facts relating to each CLEC and decide on a CLEC-specific basis whether the tandem rate may be appropriate in some circumstances. Ex. T-1110 at 5-6 (Brotherson Rebuttal).

As Qwest witness Larry Brotherson discusses in his testimony, these CLEC-specific inquiries present several questions that the Commission has not considered previously. These questions include, for example: (1) whether a CLEC that serves only ISPs can be considered to be serving a geographic area similar to that which Qwest serves; (2) whether a CLEC should receive the tandem rate if its switch covers only 30 percent or even 60 percent of Qwest's end offices; and (3) whether a CLEC can be deemed to be serving the same geographic area as Qwest if it serves only business customers and not residential customers. *Id.* at 6 These questions can only be addressed in a manner that is specific to each CLEC, and they demonstrate why it would be improper to pronounce that CLECs are generally entitled to the tandem rate.

Equally improper is the CLECs' request for a Commission ruling establishing that any CLEC that receives the tandem rate should be permitted to charge that rate for all local traffic that it terminates. Staff's testimony properly demonstrates why the Commission should reject this request from the CLECs. According to Staff, compensation at the tandem rate may be appropriate where a carrier has customers spread over a broad geographic area on its fiber ring, since that circumstance may be analogous to situations where the ILEC would route traffic through a tandem switch and charge the tandem rate. However, when there are large volumes of traffic terminating at a single end office, the ILEC would use direct end office trunking to deliver that traffic and would not route the traffic through a tandem switch. When the CLEC has the analogous situation – where there are direct trunks between a Qwest end

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office and a CLEC switch, for example – it likewise should be permitted to charge only the end office rate. If the CLECs were permitted to charge the tandem rate in this circumstance, the rate would not reflect the cost efficiencies that result from direct trunking, and the CLECs would receive compensation in excess of their costs. Moreover, this outcome would violate the FCC's principle of rate symmetry for reciprocal compensation, as set forth in 47 C.F.R. § 51.711(a). Ex. T-1230 at 20-21 (Blackmon Response); Ex. T-1110 at 6-8 (Brotherson Rebuttal).

E. Interconnection Cost Sharing

The issues relating to interconnection cost sharing concern the extent to which the ILECs should share in the costs of the interconnection facilities that CLECs acquire from the ILECs. Qwest agrees to share in the costs of interconnection trunking and entrance facilities in proportion to the amount of local exchange traffic that Qwest originates over those facilities. However, consistent with the FCC's ruling in ISP Order II that Internet traffic is interstate and is, therefore, within the FCC's exclusive jurisdiction, this traffic must be excluded from the calculations of the costs that the CLECs and the ILECs will bear for interconnection facilities. Qwest also is willing to pay for appropriate portions of the costs of facilities associated with meet point arrangements. However, as confirmed by XO Washington, Inc.'s ("XO") witness, Rex Knowles, the costs of meet point arrangements vary on a case-by-case basis. Tr. at 3055 (Knowles Cross). Accordingly, Qwest has agreed to work with the CLECs on a case-by-case basis to develop appropriate cost sharing arrangements for these facilities. *Id.*

1. Cost Sharing for the CLECs' Interconnection Facilities

Qwest agrees that the responsibility for paying for direct trunk transport ("DTT") and entrance facilities should be determined by each party's relative use of the facilities, with

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relative use determined by the amount of local traffic that each party originates over the facilities. In other words, if a CLEC were to originate 50 percent of the traffic carried over these facilities and Qwest were to originate the other 50 percent, each party would be responsible for 50 percent of the costs of the facilities. However, under the CLECs' proposal, non-local Internet traffic would be included in the calculation of relative use. The practical effect of this proposal would be that CLECs that originate little or no traffic would avoid paying the costs of the interconnection facilities that they order from Qwest; all of the costs of these facilities would be borne by Qwest. This is not just a hypothetical possibility, as demonstrated by Qwest's historical experience with CLECs that specialize in serving ISPs and do not originate traffic. If Internet traffic were included in the calculation of relative use, those CLECs would be improperly rewarded for not originating traffic by having Qwest pay for all of their DTT and entrance facilities.

The proposal to include Internet traffic in the calculation of relative use violates the requirements of the Act, the FCC rules, and the FCC's pronouncements in ISP Order II. As an initial matter, the FCC's ruling in ISP Order II that Internet traffic is interstate and within the FCC's exclusive jurisdiction precludes state commissions from including this traffic in the calculation of relative use of interconnection facilities. Compensation for the facilities associated with this interstate traffic is within the province of the FCC.

In any case, the FCC's rules relating to reciprocal compensation and relative use require the exclusion of Internet traffic. The FCC rules that implement the reciprocal compensation obligations set forth in section 251(b)(5) of the Act expressly limit reciprocal compensation to "*local* telecommunications traffic." 47 C.F.R. § 51.701(a) (emphasis added). Thus, in defining transport services that are subject to reciprocal compensation, the FCC speaks only of local traffic:

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> For purposes of this subpart, transport is the transmission and any necessary tandem switching of *local* telecommunications traffic subject to section 251(b)(5) of the Act from the interconnection point between the two carriers to the terminating carrier's end office switch that directly serves the called party, or equivalent facility provided by a carrier other than an incumbent LEC.

47 C.F.R. § 51.701(c) (emphasis added).

Consistent with this definition, the concept of each carrier paying for its relative use of transmission facilities, which is set forth in FCC Rule 51.709(b), applies only to local traffic. Because the FCC has established unequivocally that Internet traffic is interstate, this traffic should not be part of the relative use calculations that determine the extent of a carrier's reciprocal compensation obligations relating to transport facilities.

In addition, including Internet traffic in the calculation of relative use and thereby denying Qwest compensation for the interconnection facilities it provides to CLECs would violate the Act's requirement of "just and reasonable" compensation, as set forth in section 252(d)(1). To permit the cost recovery that the Act requires, Internet traffic must be excluded from the calculation of relative.

2. XO's Demand that the ILECs Pay for XO's Collocation Facilities

In his pre-filed testimony, XO witness, Mr. Knowles, asserted that the ILECs should be required to pay an appropriate portion of XO's collocation facilities. Ex. T-1210 at 13-15 (Knowles Response). However, during the hearing, Mr. Knowles clarified that XO will pay all the costs of its collocation facilities if those facilities are not priced "inappropriately high." Tr. at 3083-84 (Knowles Cross). Further, he acknowledged that in XO's view, the collocation prices that this Commission recently ordered are reasonable. *Id.* at 3084-85. Accordingly, it appears that XO is no longer requesting that the ILECs contribute to the costs of XO's collocation facilities.

V. DSL Issues

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The primary DSL issues that this docket presents involve line splitting and line sharing over DLC loops. Qwest addresses each of these issues in the sections that follow. Before addressing these issues, however, it is necessary to respond to a demand made by WorldCom during the hearing through its witness, Roy Lathrop.

As described by Mr. Lathrop, in a situation where WorldCom leases the UNE-P from Qwest to provide voice service to a customer, the Commission should require Qwest to continue providing DSL service to the customer even if Qwest desires to cease providing that service to the customer. Tr. at 3361-62 (Lathrop Cross). For several reasons, the Commission should reject this request from WorldCom.

First, the FCC has already rejected this request in its order relating to reconsideration of the Line Sharing Order. The FCC ruled as follows:

> We grant the petitions of AT&T and WorldCom with respect to their request for clarification that an incumbent LEC must permit competing carriers providing voice service using the UNE-platform to either self-provision necessary equipment or partner with a competitive data carrier to provide xDSL service on the same line. By doing so, we clarify that existing rules support the availability of line splitting. *We deny, however, AT&T's request that the Commission clarify that incumbent LECs must continue to provide xDSL services in the event customers choose to obtain voice service from a competing carrier on the same line because we find that the Line Sharing Order contained no such requirement*.[42]

Second, as Staff stated, this type of high capacity DSL service is not tariffed at the state level. Hence, the Commission is without authority or jurisdiction to compel Qwest to continue providing DSL service. Tr. at 3911 (Roth Cross).

Third, as a matter of policy, an ILEC should not be held "hostage" by being required to continue providing this service. Tr. at 3912. The market for data services is highly competitive, and customers will, therefore, be able to choose from among multiple providers

[42] Line Sharing Reconsideration Order at ¶ 16 (emphasis added).

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if Qwest stops providing DSL service. Indeed, Qwest's data demonstrate that DLECs are providing service in all but two of the central offices where Qwest is providing data service and in 12 central offices where Qwest is not providing these services. *See* Qwest Response to Bench Request No. 44. Moreover, as WorldCom would have it, only the ILECs would be required to continue providing DSL service when a customer switches its voice service to another carrier using UNE-P. The obligation would not extend to CLECs, resulting in inconsistent treatment and an arbitrary difference in legal obligations.

Fourth, WorldCom has failed to propose or even consider how this obligation would be implemented. For example, it has failed to address whether Qwest would be required to pay for use of the high frequency portion of the loop in this situation, whether Qwest would continue as the branded provider of DSL service, and whether WorldCom would share in the revenues from Qwest's DSL service. Tr. at 3363-66 (Lathrop Cross).

A. Line Splitting

Qwest agrees that it is required to provide line splitting to voice CLECs using the UNE-P, but it does not agree that it must provide access to or maintenance of the voice splitter in such cases. The FCC has defined "line splitting" as the delivery of voice and data services provided by competitive carriers over a single loop.[43] For those CLECs that request it, Qwest will provide a line splitting service to allow CLECs to provide voice and data services over the same unbundled loop using Qwest's UNE-P for "plain old telephone service" ("UNE-P POTS").

As distinguished from line splitting, line sharing occurs where Qwest occupies the low frequency portion of the loop, which is used to provide voice-grade service, and a single

[43] SBC Texas 271 Order at ¶ 324.

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CLEC occupies the unbundled high frequency portion, which is used to provide data service. *See* Ex. 1092 at 4 (Brohl Supp. Direct). Using the high frequency portion of an unbundled loop, a CLEC can provide xDSL service that is compatible with the UNE-P POTS service, *e.g.*, ADSL, RADSL, G.lite, Multiple Virtual Line transmission systems. *See* Ex. 1091 at 3 (Hooks Supp. Direct). By contrast, in a line splitting arrangement, two different CLECs occupy the high and low frequency portions of the loop, which is controlled by the voice CLEC. *See* Ex. 1092 at 4 (Brohl Supp. Direct). A separate arrangement between the two CLECs governs the provisioning of service to the end user, and Qwest is not involved in that arrangement. Notwithstanding the distinction between the line splitting and line sharing, the architecture of each should be the same. Consistent with the Commission-approved rates under the Part A Order that contemplate a CLEC/DLEC-owned splitter, Qwest should not be obligated to provide the splitter in a line-splitting arrangement.

1. Architecture (including ownership of the splitter)

As with line sharing, line splitting requires the use of a voice splitter. A voice splitter is a device that separates the voice traffic from the data traffic over the same loop, allowing for simultaneous transmission of both forms of communication. *See* Ex. 1091 at 4 (Brohl Supp. Direct). The CLECs argue that Qwest should provide and maintain the splitter, but, as discussed previously, under the terms of the SBC Texas 271 Order, and the more recent Line Sharing Reconsideration Order, the CLEC purchasing the unbundled loop is responsible for providing its own splitter.[44] Although the FCC indicated in the Line Sharing Reconsideration Order that it intended to revisit the issue in an upcoming proceeding, its current position is that ILECs are not obligated to either own or maintain such splitters on behalf of CLECs requesting line splitting service. Qwest's position is consistent with this FCC pronouncement.

[44] SBC Texas 271 Order at ¶ 325; Line Sharing Reconsideration Order at ¶ 19.

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In the SBC Texas 271 Order, the FCC explained its conclusion that ILECs are not required to provide the CLECs with splitters:

> The Commission has never exercised its legislative rulemaking authority under section 251(d)(2) to require incumbent LECs to provide access to the splitter, and incumbent LECs therefore have no current obligation to make the splitter available. . . . We did not identify any circumstances in which the splitter would be treated as part of the loop, as distinguished from being part of the packet switching element. That distinction is critical, because we declined to exercise our rulemaking authority under section 251(d)(2) to require incumbent LECs to provide access to the packet switching element . . . .
>
> The UNE Remand Order cannot fairly be read to impose on incumbent LECs an obligation to provide access to their splitters. . . . [45]

It is clear, therefore, that the splitter does not qualify as a UNE to which an ILEC is required to provide access.

A review of the unbundling standards set forth in section 251(d)(2) makes clear why a voice splitter does not qualify as a UNE to which an ILEC must provide access. A splitter is not a proprietary element and, therefore, does not have to pass the "necessary" prong of the "necessary and impair" standard in section 251(d)(2). Specifically, voice splitters are available on the open market at comparable prices to both ILECs and CLECs, who have been purchasing them to provide their respective types of xDSL service. *See* Ex. 1095 at 5 (Brohl Rebuttal). The FCC has acknowledged this availability.[46] Both Qwest and the UNE-P CLECs can obtain voice splitters from third-party vendors in a competitively neutral manner. *See* Ex. 1095 at 6 (Brohl Rebuttal). The voice splitter is simply a cost of doing business for an xDSL provider. *Id.* at 5.

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[45] SBC Texas 271 Order at ¶¶ 327, 328.

[46] *See* UNE Remand Order at ¶ 308 ("equipment needed to provide advanced services . . . are available on the open market at comparable prices to incumbents and requesting carriers alike").

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Access to a non-proprietary network element is appropriate only if lack of access will "impair" a requesting carrier.[47] A requesting carrier will be found to be impaired in offering a service only if it cannot self-provision the element or obtain it from a source other than the ILEC *and* if lack of access materially diminishes the carrier's ability to provide a service.[48] Here, the CLECs cannot meet this "impair" standard, since they clearly are able to self-provision or purchase splitters on the open market in the same manner as Qwest.

WorldCom's witness, Mr. Lathrop, incorrectly asserts that lack of access to a splitter would require a UNE-P CLEC to purchase collocation space. *See* Ex. 1250 at 11 (Lathrop Direct). A voice CLEC has the option of negotiating an arrangement with one or more data CLECs to provide the voice splitter, as it does in a line sharing situation with Qwest, thereby eliminating the need to purchase collocation space. *See* Ex. 1092 at 8 (Brohl Supp. Direct). A data CLEC sharing a line with Qwest can negotiate an arrangement to have its splitters located in the common area or its collocation area. *Id.* If the splitter is located in the CLEC's collation area, the CLEC manages the installation. *Id.* If it is located in the common area, then Qwest manages the installation. *Id.* The same scenario applies in a situation involving line splitting. Thus, the UNE-P CLEC would not be impaired by an ILEC's failure to provide a voice splitter.

Finally, requiring Qwest to provide stand-alone voice splitters in a line splitting situation would harm Qwest by forcing it to purchase equipment it does not already use. Qwest currently employs an integrated voice splitter/DSLAM in its provision of a Rate Adaptive Digital Subscriber Line ("RADSL") service. Qwest would have to purchase stand-alone voice splitters solely to accommodate line-splitting CLECs. Given that the FCC has already determined that CLECs are on "relatively equal footing" as compared to ILECs with

[47] UNE Remand Order at ¶ 31.
[48] UNE Remand Order at ¶ 51.

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respect to acquiring and installing equipment necessary to provide advanced services, and that such pieces of equipment are not needed to provide access to all functionalities and capabilities of the loop, it would be inequitable to require Qwest to provide voice splitters.[49]

2. Costs

Qwest has not provided any new costs studies specific to line splitting, because no additional costs have been identified in relation to this service. See Ex. 1092 at 3 (Brohl Supp. Direct). All costs associated with line splitting have already been included in other proposed or existing rates. Qwest's only recommendation is that the Commission refrain from ordering firm deadlines for deployment of line splitting, allowing instead for a collaborative process to first determine the operational impacts and then proceed with the issue of establishing a deployment schedule.

B. Line Sharing Over DLC Loops

When the parties filed their pre-filed testimony, Qwest was still in the process of defining its product offering for line sharing over DLC loops. Qwest and the CLECs were engaged in discussions concerning how to accomplish line sharing from remote terminals, and this issue also was under consideration by the FCC. Because this product had not been defined with the necessary degree of specificity, Qwest did not submit a cost study for line sharing over DLC loops. Ex. T-1009 at 37-38 (Million Rebuttal).

By the time of the hearing, Qwest's definition of this product had evolved significantly due, in part, to the discussions with the CLEC community. As Ms. Brohl explained in the hearing, to enable CLECs to provide DSL loops from remote terminals, Qwest is providing the CLECs with the same arrangement that Qwest uses for its customers. Tr. at 2308 (Brohl Redirect). This arrangement is precisely what Covad stated it was seeking. Under this

[49] *See* UNE Remand Order at n. 609; Texas 271 Order ¶¶ 326-28.

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arrangement, Qwest places a distribution area hotel ("DA hotel") at a remote terminal, adjacent to the feeder distribution interface ("FDI"). The DA hotel is a small structure in which CLECs and Qwest can place the equipment they need to provide DSL services on DLC loops. As announced at a meeting with CLECs on February 2, 2001, Qwest's initial plan is to deploy approximately 23 DA hotels in Washington. Qwest has provided the CLECs with information concerning the locations of these hotels to enable them to decide which hotels to use. In addition, CLECs are permitted to request DA hotels at particular locations, and Qwest takes these requests into consideration in devising its build schedule. If Qwest decides to build at a location requested by a CLEC, Qwest offers the CLEC the opportunity to participate in a joint build process. Tr. at 2213-2218 (Brohl Cross). If a CLEC does not participate in a joint build process, it can have space in a DA hotel on a space-available basis. *Id.* at 2243.

Qwest has presented the CLECs with interim rates for line sharing over fiber, although it has not presented a cost study for this product. Qwest presented these rates to the CLECs at a meeting on January 19, 2001. At that point, there was no longer an opportunity to present a cost study for the product in this proceeding. Tr. at 2305 (Brohl Redirect).

Covad's witness, Mr. Klick, suggested that the existing rates for line splitting be used for this product. Tr. at 3843-51 (Klick Cross). However, when probed, Mr. Klick acknowledged that he did not know which specific rates would apply or how his proposal would be implemented. *Id.*

C. The Commission's Lack of Authority Over Interstate DSL Service

In response to the Commission's post-hearing inquiry, Qwest addresses whether the Commission has jurisdiction over interstate DSL services in this section.

Both state commissions and the courts have recognized the inherently interstate nature of DSL services. For example, the FCC's conclusion in the *GTE DSL Order*, that "it was

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appropriate for it rather than the states, to establish the price of xDSL service provided by ILECS" has been cited by the Washington UTC in a recent decision regarding the costing and pricing of network elements.[50] Additionally, the Ninth Circuit acknowledged that the "FCC regulates DSL service, as advanced telecommunications service subject to common carrier obligations."[51]

The FCC has also taken action with respect to wholesale and retail provisioning.[52] The FCC has determined that DSL services used to provide high speed Internet service are not subject to the discounted resale obligations of the 1996 Act when sold in bulk to ISPs. However, DSL services sold directly to residential and small business users are not exempt from the resale obligations. This federal action will enable ISPs to DSL services in bulk for ILECS in order to offer high-speed Internet services to consumers on a more cost-effective basis. [53]

Finally, Section 706 of the 1996 Act[54] requires both the FCC and state commissions to encourage the deployment of advanced telecommunications capability to all Americans. This responsibility is being jointly executed through the *Federal-State Joint Conference to Promote Advanced Broadband Services*. This Joint Conference provides a forum for an ongoing dialogue between the Commission, state regulators and local and regional entities.[55] The formation of the Joint Conference does not, however, imbue state commissions with *per se* regulatory authority of over these types of services. Instead, it is clear that any state

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[50] *Costing and Pricing of Unbundled Network Elements, Transport, and Termination*, Docket No. UT-003013 Thirteenth Supplemental Order, 207 P.U.R. 4th 379 (2001).
[51] *AT&T v. City of Portland*, 216 F.3d 871, 879 (9th Cir. 2000).
[52] *Second Report and Order and Order Terminating Investigation*, Report No. CC- 99-51, 1999 FCC LEXIS 5521(1999). In this context it is important to note Sections 251 and 252 refer to the ILEC's responsibility governing the calculation of wholesale and retail rates. However, Section 251(d)(3) permits a state commission to enforce regulations, orders or policies that establish the access and interconnection obligations of LECs only if they are consistent with the 1996 Act.
[53] *Id.*
[54] *See* 47 U.S.C. §157
[55] *See Report and Order* CC Docket No. 99-294, FCC No. 99-293 (October 8, 1999). Similarly, the FCC and the states have jointly developed a nationwide database of broadband deployment activities. *See* www. nrri.ohio-state.edu.

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commission action regarding advanced services (including DSL) is circumscribed by the inherently interstate nature of these types of services.

V. OSS Costs

As discussed above in connection with the legal issues that this docket presents, Qwest is entitled to recover the costs it incurs to provide CLECs with access to OSS. This right is rooted in the cost recovery provisions of the Act set forth at section 252(d)(1). The FCC has defined OSS as a UNE and, therefore, section 252(d)(1), which entitles ILECs to recover the costs of providing access to UNEs, allows ILECs to recover the costs associated with providing OSS access. This Commission has recognized Qwest's right to recover OSS costs in previous orders, and, as discussed above, federal district courts interpreting the Act also have recognized this right.

The OSS costs that are at issue in this docket involve the costs that Qwest has incurred, or will incur, in modifying its OSSs to enable those systems to handle orders for the new UNEs that the FCC identified in the UNE Remand Order and for line splitting. Contrary to suggestions by the CLECs, these costs are unrelated to Qwest's overall efforts to increase the mechanized processing of orders and to increase the flow-through of orders. Instead, the costs at issue relate solely to changes Qwest must make to its OSSs to enable CLECs to order the new UNEs and line splitting.

A. UNE Remand Order

In response to the UNE Remand Order, Qwest has modified its OSSs -- and is continuing to modify its OSSs -- to permit CLECs the access to those systems that is needed to order the new UNEs that the FCC identified. The changes to Qwest's OSSs give CLECs access to the information they need to perform the functions of pre-ordering, ordering, provisioning, and maintenance and repair. Ex. T-1072 at 2 (Brohl Direct).

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Any additions to the list of UNEs that Qwest must provide to CLECs requires Qwest to modify its OSSs to enable those systems to recognize and process orders for the new elements. The FCC's re-definition of UNEs in the UNE Remand Order has required substantial modifications to Qwest's OSSs. These modifications are in direct response to the UNE Remand Order, as Qwest would not have undertaken them but for the new obligations that the order imposed. Qwest does not benefit from these changes to its systems, since Qwest does not sell UNEs to its retail customers. Indeed, the additional functionality and systems infrastructure that Qwest must add places increased demands on its resources and requires operation and maintenance of a more complex systems environment. *Id.* at 6.

The specific OSS development projects that Qwest implemented in response to the UNE Remand Order relate to providing CLECs with OSS access for the purpose of ordering UNE-P, sub-loops, high capacity loops, shared transport, constrained loop, operator service and directory assistance, and unbundled switching. *Id.* at 7-8. These projects are software development projects, and they involve activities such as defining functional requirements, producing design specifications, coding modules, developing and executing test script, planning and building interface releases, and moving application code into production environments. Ex. C-1073 at 1. The specific tasks associated with each of these development projects are described in detail in the back-up materials that Qwest provided with its OSS testimony. *See* Ex. C-1073 (UNE Remand OSS Projects).

The total cost of the OSS projects arising from the UNE Remand Order in 1999 was $2,297,000. The total estimated OSS costs for 2000 relating to the obligations imposed by the UNE Remand Order are $1,033,000.[56] While Qwest has identified these costs, it did not

[56] These costs include expenses associated with Qwest's purchase of software upgrades from Telcordia. In the Thirteenth Supplemental Order, the Commission disapproved certain levels of Telcordia-related expenses that Qwest incurred, and Qwest has requested that the Commission reconsider that ruling. The Telcordia expenses relating to software upgrades that Qwest has included in this docket are necessary and appropriate costs. These

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submit a cost study for OSS costs in this phase of the docket and did not propose a specific cost recovery mechanism.[57]

B. Line Splitting and Line Sharing

As discussed above, Qwest is in the process of defining its line splitting product offering and is consulting with the CLECs as part of that process. Until Qwest defines this product and the methods and procedures for provisioning the product, it is not possible to estimate accurately the costs of modifying Qwest's OSSs to accommodate line splitting. For this reason, Qwest has not presented OSS line-splitting costs in this docket. Nevertheless, it is clear that Qwest will incur OSS costs relating to line splitting and will have to be compensated for those costs. Ex. T-1070 at 2-3 (Albersheim Supp. Direct).

Although Qwest has not prepared OSS cost estimates for line splitting, the Qwest Wholesale Systems Development Team has conducted an initial assessment of the likely OSS changes that will be needed for this new product. At a minimum, Qwest will have to establish methods and procedures for identifying line splitting within the OSSs as a separate, unique product. By necessity, these methods and procedures will be different from those that Qwest uses for line sharing, since line splitting and line sharing are different products. With line

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expenses relate to upgrades to the LFACS and SOACS software systems that are essential for modifying Qwest's OSSs in response to the UNE Remand Order. As Qwest's OSS cost witness, Renee Albersheim, explained, Qwest was required to purchase these upgrades from Telcordia since the original LFACS and SOACS systems that are already in place are Telcordia systems. Tr. at 2175-2176 (Albersheim Redirect). If Qwest had not obtained these upgrades, it would have been required to purchase completely new systems from another vendor. That approach would have been significantly more costly and less efficient that buying the upgrades from Telcordia. *Id.*

[57] Some of Qwest's OSS projects that implicate the UNE Remand Order were already underway in 1999 when the FCC issued that order. As a result, in Part A of the cost docket, Qwest included some of the costs relating to UNEs identified in the UNE Remand Order in its OSS cost submissions. Because the Commission eventually directed that OSS costs relating to the UNE Remand Order should be considered in Part B of the docket, Qwest moved any costs relating to the UNEs identified in the UNE Remand Order from their original project description categories to projects that are specifically identified as UNE Remand projects. Ex. T-1072 at 7. As a result, as part of its re-run of the OSS cost study from Part A, Qwest is excluding these costs relating to the UNE Remand Order. The removal of those costs from the OSS study submitted in Part A will eliminate any possibility of a double-recovery, and will leave the recovery of all costs associated with the UNE Remand Order to the cost study that Qwest eventually will submit to recover its UNE Remand OSS costs. Qwest will add costs permitted as a result of the UNE Remand Order to the cost study submitted in Part A.

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splitting, the OSSs will have to account for the fact that three parties are involved in the transaction: the voice CLEC, the data CLEC, and the ILEC. The specific OSS work needed to permit line splitting will include, at a minimum, changes to electronic interfaces and several downstream systems, including LFACS, SWITCH, and the CRIS billing systems.[58] *Id.* at 3-5.

The need for ILECs to modify their OSSs to accommodate line splitting is confirmed by WorldCom's witness, Roy Lathrop. T-1251 at 6 (Lathrop Response Testimony). Mr. Lathrop expressly acknowledges that ILECs will be required to modify their existing systems to handle this new product. Tr. at 3375 (Lathrop Cross). Similarly, Staff recognizes that OSS modifications are needed for line splitting. Ex. T-1365 at 5-6 (Roth Supp. Responsive Testimony).[59]

As Qwest has emphasized, it is very willing to discuss the OSS requirements for line splitting with the CLECs. Qwest is affirmatively seeking input from the CLECs relating to several OSS issues, including ordering, provisioning, maintenance and repair, and billing for line splitting. The related issues that require ongoing discussions between Qwest and the CLECs include which party will control each process, whether the voice provider or the data provider will submit orders to Qwest, and the nature of the verification and process control mechanisms that are required. The resolution of these issues will lead to further definition of the effects of line splitting on Qwest's OSSs.

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[58] LFACS is the Loop Facility Assignment and Control System, which maintains a mechanized inventory of outside plant facilities. SWITCH is a central office inventory system that supports the provisioning of switching facilities. CRIS is the Customer Record Information System and is the billing system for the majority of residence and business accounts involving exchange services. Ex. T-1070 at 5 (Albersheim Supp. Direct).

[59] As discussed previously, Qwest should not be required to provide splitters in connection with line splitting. However, if the Commission were to impose that obligation on Qwest, the size of the OSS development effort for line splitting would increase significantly. Qwest would have to modify its OSSs to be able to maintain an inventory of the splitters and to track splitter port assignments. In addition, it is likely that Qwest would have to modify its OSSs to permit pre-ordering, ordering, provisioning, maintenance, and billing in connection with the splitters. The changes that Qwest would have to make to its inventory system could be complex and could result in a very large development effort. Ex. T-1074 at 6 (Albersheim Supp. Response).

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Qwest has already begun discussing these issues with the CLECs. The first conference call between Qwest and the CLECs to discuss line splitting and OSSs took place on April 12, 2001. While Staff has suggested that the Commission impose a time schedule on the ILECs and the CLECs to resolve OSS and other issues relating to line splitting and order a collaborative effort (Ex. T-1365 at 7, 10 (Roth Supp. Responsive)), that type of involvement by the Commission is not necessary. Qwest and the CLECs are already actively working together to address these issues, and Qwest is confident that this voluntary, cooperative effort will be successful.

VII. Conclusion

For the reasons stated, Qwest requests that the Commission adopt the costs and rates that Qwest has proposed.

DATED: May 29, 2001

Respectfully submitted,

Qwest Corporation

By: _____

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