

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

**In the Matter of the Petition of Qwest
Corporation to Initiate a Mass-Market
Switching and Dedicated Transport Case
Pursuant to the Triennial Review Order**

Docket No. UT-033044

REBUTTAL TESTIMONY

OF

TERESA K. MILLION

ON BEHALF OF

QWEST CORPORATION

FEBRUARY 17, 2004

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EXECUTIVE SUMMARY

Purpose of Testimony

The purpose of my testimony is to address issues raised in the direct testimonies of Mr. Timothy Gates and Ms. Sherry Lichtenberg on behalf of MCI, Mr. Robert Falcone on behalf of AT&T, Ms. Patty Lynott on behalf of McLeodUSA, and Mr. Michael Zulevic on behalf of Covad regarding the appropriate estimated costs for the Batch Hot Cut (“BHC”) installation option. First, I rebut the CLEC contention that the Commission should consider costs in a separate proceeding, and explain why costs must be addressed in the present docket. Second, I discuss the types of loops that should be included in the BHC process, and explain why new and IDLC loops should not be included. Third, I explain how technology should be considered in a TELRIC study and how it should not be considered in a TELRIC study. Fourth, I explain why BHC costs are not comparable to UNE-P or retail nonrecurring costs, as claimed by the CLECs. Fifth, I discuss Operational Support Systems (“OSS”) costs, and how they should be considered by the Commission. Finally, I address the CLEC’s claims regarding BHC volumes.

Recommendation

The Commission should accept the TELRIC study filed by Qwest as the cost basis for the BHC installation nonrecurring price.

1

I. IDENTIFICATION OF WITNESS

2 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION**
3 **WITH THE QWEST CORPORATION.**

4 A. My name is Teresa K. (Terri) Million. My business address is 1801 California
5 Street, Denver, Colorado. I am employed as a Staff Director - Service Costs in the
6 Qwest Services Corporation Public Policy department. I am testifying on behalf of
7 Qwest Corporation (“Qwest”).

8 **Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS PROCEEDING?**

9 A. Yes. On January 23, 2004, I filed direct testimony in this proceeding.

10

II. PURPOSE OF TESTIMONY

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

12 A. The purpose of my testimony is to reply to the testimonies of Ms. Sherry
13 Lichtenberg and Mr. Timothy Gates on behalf of MCI, Mr. Robert Falcone on
14 behalf of AT&T, Ms. Patty Lynott on behalf of McLeodUSA, and Mr. Michael
15 Zulevic on behalf of Covad. I will address issues related to: (1) the development of
16 costs for Qwest’s Batch Hot Cut (“BHC”) installation option; and (2) the
17 identification of appropriate volumes data.

18

III. APPROPRIATE FORUM TO ADDRESS COSTS

19 **Q. DO THE INTERVENORS ARGUE THAT THE DEVELOPMENT OF**
20 **COSTS FOR THE BHC PROCESS SHOULD BE CONSIDERED IN A**

1 **SEPARATE DOCKET?**

2 A. Yes. McLeod urges the Commission to “conduct a separate proceeding to establish
3 TELRIC compliant NRCs for the BHC process”¹ and AT&T argues that the
4 Commission should “adopt an interim rate subject to true up and subsequently
5 schedule sufficient time to more thoroughly review the study and adopt permanent
6 rates.”²

7 **Q. DO YOU AGREE?**

8 A. No. As I stated in my direct testimony, the FCC ordered state commissions to
9 approve “within nine months of the effective date of this order [the Triennial
10 Review Order, or ‘TRO’], a batch cut migration process to be implemented by
11 incumbent LECs that will address the *costs* and timeliness of the hot cut process”³
12 To that end, the FCC requires state regulators to approve both the specific *processes*
13 and appropriate volume of loops associated with a batch hot cut process, and “adopt
14 *TELRIC rates for the batch hot cut activities they approve.*”⁴ Thus, per the FCC,
15 *costs must be addressed in this proceeding, and the costs approved by the*
16 *Commission must reflect the BHC process that the Commission adopts.*

¹ Direct Testimony of Patty Lynott dated January 23, 2004 (Exhibit No. not provided) (“Lynott”) lines 85-87.

² Direct Testimony of Robert Falcone dated January 23, 2004 (Exhibit No. RVF-14T) (“Falcone”) page 36.

³ *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; Deployment of Wireline Services Offering Advanced Telecommunications Capability; Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, CC Docket Nos. 01-338, 96-98, 98-147, FCC 03-36 (Rel. August 21, 2003) (“TRO”) at ¶ 488 (emphasis added).*

⁴ *Id.* at ¶ 489 (emphasis added).

1 Further, as Mr. Zulevic points out on page 6 of his direct testimony, the FCC
2 requires the state commissions to adopt “rates for the batch cut activities it approves
3 in accordance with the FCC’s TELRIC rules for UNEs, which rates shall reflect the
4 efficiencies associated with batched migration of loops....(TRO, ¶ 489).” Mr.
5 Zulevic also notes that the FCC guidance with respect to the BHC process indicates
6 that states must adopt “specific processes to be employed when performing a batch
7 hot cut, *taking into account the ILEC’s particular network design and cut-over*
8 *practices* (TRO, ¶¶ 488-489).”⁵ In its discussion, the FCC provides a specific
9 example of the practices of one ILEC stating that “[u]nder a batch cut process, *these*
10 *activities* might be undertaken simultaneously for all lines affected by a given batch
11 order....[and directs that] state commissions should adopt TELRIC rates for the
12 batch cut *activities* they approve”⁶

13 **Q. BASED ON THE FCC’S TRO DISCUSSION, WHAT DO YOU**
14 **CONCLUDE?**

15 A. Two conclusions may be drawn from the FCC’s discussion. First, the Commission
16 must approve a BHC process and adopt TELRIC-based rates that are based on the
17 adopted process. Second, the direction from the FCC effectively precludes this
18 Commission from ignoring Qwest’s particular network design and cut-over
19 practices when evaluating the BHC process and costs. The Commission cannot
20 approve a given BHC process, and then adopt rates based on the costs for a

⁵ Direct Testimony of Michael Zulevic dated January 23, 2004 (Exhibit No. MZ-9T) (“Zulevic”) page 5.

⁶ TRO at ¶ 489 (emphasis added).

1 different process that assumes, for example, mechanization that does not exist. The
2 Commission cannot approve a BHC *process* that includes pre-wiring, dial tone
3 tests, and “lift and lay” activities, and then approve *rates* based on theoretical
4 technologies proposed by CLECs that would allegedly eliminate these activities. In
5 order to assure that the Commission-approved rates/costs reflect the Commission-
6 approved process, the TELRIC for the BHC process must be addressed in this
7 docket.

8 **Q. DO THE CLECS COMPLAIN THAT THERE IS NOT ENOUGH TIME IN**
9 **THIS DOCKET TO REVIEW THE BHC COSTS FILED BY QWEST?**

10 A. Yes. The CLECs state that they will have little time to review Qwest’s costs. For
11 example, Mr. Falcone says that “it will be very difficult to adequately review
12 Qwest’s cost study during the limited time provided in this proceeding.”⁷ The
13 CLECs also complain that they asked Qwest for an estimate of costs during the
14 BHC forum, and Qwest did not provide a cost study at that time. However, Qwest
15 could not have provided a meaningful cost study at that time, because the BHC
16 process had not yet been established - in fact significant process changes were made
17 at the last forum held in January, 2004. As Mr. Zulevic states in his direct
18 testimony: “you cannot develop a cost structure and associated rate when you don’t

⁷ Falcone, page 36.

1 know what the final BHC product will be and what work or services it will or will
2 not include.”⁸

3 The Qwest nonrecurring BHC TELRIC study was provided as Exhibit TKM-3
4 attached to my direct testimony, filed on January 23, 2004. The study shows all of
5 the activities, work times, probabilities, and labor rates assumed in the study, and
6 any analyst can easily follow the study calculations. Because each of the steps and
7 work activities in the BHC process were discussed in detail in the BHC forums
8 attended by the CLECs, they should be very familiar with the work activities
9 included in the cost study. In addition, the CLECs will have had almost a month to
10 evaluate this study prior to filing rebuttal testimony, as well as additional evaluation
11 time prior to the hearing. I do not believe there is any basis for moving the cost
12 debate to another proceeding based on the “limited time” provided to evaluate costs
13 in this proceeding.

14 **Q. IN ADDITION TO THE FCC’S REQUIREMENTS, ARE THERE OTHER**
15 **REASONS WHY THE DISCUSSION OF COSTS SHOULD NOT BE**
16 **MOVED TO ANOTHER DOCKET?**

17 A. Yes. In the BHC Forum, Qwest and the CLECs discussed the BHC process,
18 reaching agreement on some issues and reaching impasse on others. However, the
19 discussions involved developing a *real world* BHC process that would be
20 implemented by Qwest. Thus, these are the forward-looking processes that will

⁸ Zulevic, page 20.

1 actually be used in the foreseeable future when a CLEC orders loops via the BHC
2 option. As I pointed out in my direct testimony, Qwest made changes to the *real*
3 forward-looking BHC process to meet the requests of CLECs. For example, Qwest
4 agreed to add pre-wiring and dial tone tests on the DVA date (due date minus three)
5 back into the process at the request of CLECs.⁹ This reduces the efficiencies gained
6 in Qwest's original proposal, and adds costs to the process.

7 If costs are determined in another docket, the CLECs are likely to argue that the
8 process determined in *this* forum is not "relevant" to the determination of costs in
9 the cost docket. As Mr. Finnegan of AT&T stated in the BHC forum, "what we
10 said or may have said or what Qwest has said in a cost docket, I don't know that
11 that's necessarily relevant."¹⁰ Separating the determination of costs from the
12 process discussion allows the CLECs to play a "shell game," where they argue in a
13 *cost* docket that the activities they insist on in this *process* proceeding (such as pre-
14 wire and dial tone tests on the DVA date) are either duplicative, not relevant, or not
15 forward-looking. Qwest could be faced with the prospect of having to perform a
16 number of activities on behalf of the CLECs on a forward-going basis with no hope
17 of recovering the associated costs. It would be patently unfair for the Commission
18 to adopt a process in this proceeding requiring Qwest to perform certain activities,
19 and then assume all these activities away when costs are developed.

⁹ In its original BHC proposal submitted in November, 2003 (and discussed in the December, 2003 forum), Qwest proposed that the central office technicians ("COTs") would perform all of the pre-wire, testing and lift and lay work on the due date, to gain efficiencies.

¹⁰ Transcript of Batch Hot Cut Forum, December 2, 2003, page 286.

1 As I will discuss later in my testimony, the CLECs typically argue that theoretical
2 forward-looking technologies and methods of operations (such as an application of
3 GR-303 technology or Electronic Loop Provisioning (“ELP”)) should be deployed
4 in the BHC process. While Qwest applauds the Commission for granting its motion
5 to strike portions of Mr. Falcone’s testimony regarding ELP in this proceeding,¹¹ it
6 is unclear whether the issue could be raised again by the CLECs in arguing the
7 appropriate forward-looking costs of a batch hot cut process. Therefore, although
8 my rebuttal testimony would normally address the reasons that Qwest believes ELP
9 is not appropriate to consider in developing the nonrecurring costs of a batch hot
10 cut, I will limit my discussion in this proceeding to similar theoretical technologies
11 raised by the other parties with the understanding that the same logic applies to
12 ELP.

13 **Q. HAVE THE CLECS PROPOSED MODIFICATIONS TO QWEST’S BHC**
14 **COSTS?**

15 A. No. The CLECs have not yet proposed specific modifications to Qwest’s costs.
16 However, it is likely that they will argue that these types of theoretical technologies
17 - which would supposedly eliminate most manual processes such as pre-wiring -
18 should be assumed in TELRIC studies. Thus, per the CLEC proposal, Qwest would
19 be left with a *process* - defined in this docket - that includes manual activities
20 performed on behalf of CLECs and a *rate* - established in another docket - that does

¹¹ *In the Matter of the Petition of Qwest Corporation To Initiate a Mass-Market Switching and Dedicated Transport Case Pursuant to the Triennial Review Order*, Docket No. UT-033044, Order No. 10, February 13, 2004, at ¶ 18.

1 not allow Qwest to recover the costs of these activities. The Commission should
2 not allow this to occur, nor can it, unless it is willing to completely disregard the
3 FCC's direction on this point.¹²

4 **Q. THE QWEST COST STUDY REFLECTS QWEST'S PROPOSED BHC**
5 **PROCESS RESULTING FROM THE BHC FORUM. WILL THE**
6 **COMMISSION BE ABLE TO ADJUST THE COST STUDY ON THE BASIS**
7 **OF THE FINAL BHC PROCESS IT DETERMINES IN THIS**
8 **PROCEEDING?**

9 A. Yes. Qwest's nonrecurring BHC cost study, filed as Exhibit TKM-3 to my direct
10 testimony, provides the detailed activities, time estimates and probabilities of
11 occurrence for each step of the BHC process. When the Commission determines
12 what the BHC process must entail, Qwest will be able to reflect any necessary
13 adjustments to those steps in its cost study. This could easily be accomplished via a
14 compliance filing to be made at the end of this proceeding. In order to ensure that
15 the process established by the Commission is reflected in the cost for the BHC
16 installation option, as required by the FCC, it is important for those two items to be
17 considered together.

¹² TRO at ¶ 489.

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IV. COST STUDY ISSUES

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A. Types of Orders Included in BHC Process

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1. New versus Reused Loops

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**Q. HAS ANY CLEC REQUESTED THAT THE BHC PROCESS INCLUDE
NEW AS WELL AS REUSED LOOPS?**

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A. Yes. Ms. Lynott of McLeod states that “customers requesting new service at a location where there are not facilities to reuse should also be included in this [the BHC] process.”¹³ Thus, Ms. Lynott requests that loop installations at locations without current working service be included in the BHC process.

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Q. SHOULD “NEW” LOOPS BE INCLUDED IN THE BHC PROCESS?

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A. No. First, a loop installation at a location without existing working service is not a “hot cut” as envisioned by the FCC. A hot cut requires disconnection of “hot” service from the ILEC (or another CLEC), and re-connection of service to the new CLEC within minutes via a “lift and lay.” Thus, the “hot” line is “cut” to another provider. With *new* service, there is no working service at the customer location thus there is no “hot” line to be cut.

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Second, it would be inappropriate to include the costs for new installations in the BHC rate because this would result in a loss of efficiency. The FCC found that a “seamless, low-cost batch hot cut process for switching mass market customers

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¹³ Lynott, lines 65-67.

1 from one carrier to another is necessary, at a minimum, for carriers to compete
2 effectively in the mass markets.”¹⁴ Thus, in developing its BHC process, Qwest
3 sought to provide a “hot cut” process that was efficient and low cost for CLECs.
4 To that end, Qwest excluded all orders that require “field work,” since these
5 activities entail much more labor (and more costs) than a simple hot cut. When new
6 service is requested, Qwest may be required to send out an installer to perform
7 outside plant work (e.g., at the SAI or premise), just as it would in order to provide
8 service to a new retail customer. Obviously, this would add significant costs to the
9 installation process resulting in less efficiency and higher costs.

10 2. IDLC Loops

11 **Q. DO THE CLECS ARGUE THAT IDLC LOOPS SHOULD BE INCLUDED**
12 **IN THE BHC PROCESS?**

13 A. Yes. AT&T, McLeod and MCI each argue in their testimony that IDLC loops
14 should be included in the BHC process.

15 **Q. DO YOU AGREE?**

16 A. No. As described in detail by Mr. Pappas, the cutover of IDLC loops requires
17 Qwest to perform fundamentally different activities than are required with non-
18 IDLC loops. For example, the migration of an IDLC loop requires the participation
19 of a field technician, which adds costs to the process. While Qwest can perform hot
20 cuts on IDLC loops, it has excluded these conversions from the BHC process in

¹⁴ TRO at ¶ 487.

1 order to keep the process as efficient and low cost as possible. Clearly, adding
2 IDLC loops to the BHC process would increase the cost of the BHC installation
3 option—which I am certain would be met with resistance from the CLECs.

4 **Q. CAN A CLEC ORDER A HOT CUT FOR IDLC LOOPS?**

5 A. Yes. However, the order would not be eligible for the BHC process. An existing
6 hot cut option (e.g., basic installation, coordinated installation) could be ordered to
7 cutover an IDLC loop.

8 **Q. MCI ARGUES THAT OTHER RBOCS HAVE INCLUDED IDLC LOOPS IN**
9 **THEIR BHC PROCESSES,¹⁵ AND THAT QWEST SHOULD DO THE**
10 **SAME. PLEASE COMMENT.**

11 A. It is true that other RBOCs have included IDLC loops in what they define as the
12 BHC process. However, these IDLC loops are provisioned using a separate, more
13 expensive process than non-IDLC loops. For example, SBC has proposed an
14 “IDLC Basic Option” for BHC at a proposed rate that is much higher than the rate
15 for non-IDLC BHC options.¹⁶ Likewise, Verizon has proposed an “IDLC
16 Surcharge” that is added to the batch hot cut rate when IDLC loops are cut over.¹⁷
17 Thus, while SBC and Verizon state that IDLC loops are part of the BHC process,
18 they propose a significantly higher price for IDLC loops.

¹⁵ Direct Testimony of Sherry Lichtenberg and Tim Gates, dated January 23, 2004 (Exhibit No. not provided) (“Lichtenberg/Gates”), page 22.

¹⁶ The proposed SBC rate for IDLC batch hot cuts in California is \$93.21, which is significantly higher than the standard BHC rate.

¹⁷ Verizon has proposed an IDLC surcharge of \$111.85 in Florida and \$131.00 in California.

1 Rather than simply define a separate IDLC BHC rate, Qwest proposes that CLECs
2 utilize the other loop installation options, which hardly creates a hardship for
3 CLECs. In fact, the CLECs could utilize the basic loop installation option in
4 Washington to migrate IDLC loops, with a combined nonrecurring cost for
5 installation and disconnection of \$51.94, which is significantly below the BHC
6 IDLC rate proposed by either SBC or Verizon for IDLC loops.

7 **B. Technology Assumptions in TELRIC Studies**

8 **Q. DOES MCI ARGUE THAT LOOPS ARE PROVISIONED VIA “AN**
9 **EXTREMELY EXPENSIVE AND TIME CONSUMING MANUAL**
10 **PROCESS” AND THAT “THESE ISSUES MUST BE ADDRESSED AND**
11 **RESOLVED BEFORE A FINDING OF NON-IMPAIRMENT CAN BE**
12 **ENTERED?”¹⁸**

13 A. Yes. MCI argues that the current loop hot cut process is not efficient, since it uses a
14 “time consuming manual process” that requires field technician work. Mr. Gates
15 and Ms. Lichtenberg suggest that Qwest should implement “GR-303 compliant”
16 technology, which they allege is “technically feasible.” They provide some general
17 information on GR-303 technology, and suggest that “because GR-303 IDLC
18 systems are largely software driven and do not rely upon manual copper wire
19 manipulation for purposes of cross-connecting the derived circuits they support,
20 unbundled loops could be provisioned to a CLEC on an electronic basis, free of any

¹⁸ Lichtenberg/Gates, pages 15 to 16.

1 costly or time-consuming technician dispatch.”¹⁹ Similarly, MCI argues that
2 automated distribution frames (“ADF”) will eliminate the need for manual cross
3 connects.

4 **Q. WILL YOU ADDRESS THESE TECHNOLOGY ISSUES IN YOUR**
5 **TESTIMONY?**

6 A. I will address these issues from a TELRIC perspective. Please refer to the rebuttal
7 testimony of Mr. Pappas for a discussion of the technical issues regarding GR-303
8 and ADFs. Mr. Pappas demonstrates that the “solutions” proposed by the CLECs
9 are not practical, and do not represent “currently available” technologies that can be
10 deployed, on the required scale, in the Qwest network. Therefore, it is not
11 reasonable to assume that the theoretical application of these technologies would
12 somehow eliminate the need for the manual work time associated with installing
13 IDLC loops.

14 **Q. ACCORDING TO AT&T AND MCI, HOW SHOULD THESE**
15 **TECHNOLOGIES BE CONSIDERED IN A TELRIC STUDY?**

16 A. Essentially, MCI argues that the forward-looking technology used to provision
17 loops should be based on its notion of a “GR-303 compliant” network that
18 supposedly would allow for all loops to be provisioned electronically. In similar
19 fashion, MCI argues that ADF will also allow for all loops to be provisioned
20 electronically. Thus, while the CLECs have not yet provided a specific response to

¹⁹ Lichtenberg/Gates, page 20.

1 Qwest's BHC TELRIC study, *it is likely they will argue that these network*
2 *technologies should be assumed in the studies, eliminating the need for manual*
3 *work tasks that Qwest performs today.* This assumption would presumably lead to
4 the elimination of most manual work (e.g., performing pre-wiring, connecting
5 jumpers, etc.), and would significantly reduce Qwest's loop installation costs.

6 **Q. SHOULD A NONRECURRING COST STUDY FOR LOOPS ASSUME THE**
7 **APPLICATION THE TYPES OF THEORETICAL TECHNOLOGIES**
8 **ADVOCATED BY THE CLECS?**

9 A. No. As a threshold matter, the FCC specifically declined to consider AT&T's ELP
10 proposal in the TRO Order. The FCC stated:

11 491. Other Issues. We note that AT&T and WorldCom propose other
12 mechanisms intended to mitigate the disruptions and other practical
13 difficulties inherent in the current loop infrastructure. First, AT&T argues
14 that unbundled switching for voice-grade loops is essential until incumbent
15 LECs offer an electronic loop provisioning (ELP) method of transferring large
16 volumes of local customers in the mass market from one carrier to another
17 that it describes as being analogous to the existing process used to change a
18 customer's long distance provider and as eliminating the need for physical hot
19 cuts. We agree with AT&T that it is easier for a competitive LEC to manage
20 the hot cut process when migrating large numbers of lines served by
21 unbundled loops combined with unbundled local circuit switching to stand-
22 alone loops than in individual hot cut situations, because the conversions can
23 be project-managed by both the incumbent LEC and the requesting carrier.
24 However, the evidence in the record suggests that an ELP process, to be
25 effective, would require *significant and costly upgrades* to the existing local
26 network at both the remote terminal and central office. AT&T's ELP
27 proposal proposes to "packetize" the entire public switched telephone network
28 for both voice and data traffic, at a cost one party estimates to be more than
29 \$100 billion. Incumbent LECs state that AT&T's proposal would entail a
30 fundamental change in the manner in which local switches are provided and
31 would require dramatic and extensive alterations to the overall architecture of
32 every incumbent LEC local telephone network. Given our conclusions above,

1 we decline to require ELP at this time, although we may reexamine AT&T's
2 proposal if hot cut processes are not, in fact, sufficient to handle necessary
3 volumes. (emphasis added)

4 Consistent with the FCC's rejection of the ELP proposal raised by AT&T in the
5 TRO, this Commission has also declined to address ELP in the context of the BHC
6 process, therefore Qwest believes it cannot be considered in this proceeding for
7 purposes of determining the nonrecurring BHC cost. Thus, for similar reasons
8 other forms of ELP such as GR-303 and ADFs should not be considered as
9 appropriate "forward-looking" technologies in the development of BHC TELRIC
10 studies.

11 **Q. PLEASE EXPLAIN FURTHER WHY A NONRECURRING BHC STUDY**
12 **FOR LOOPS SHOULD NOT ASSUME THE THEORETICAL**
13 **APPLICATION OF GR-303 TECHNOLOGY PRESENTED BY MCI.**

14 A. MCI has provided a simple description of a GR-303 network that will supposedly
15 eliminate manual IDLC loop processes, and argues that this technology is
16 "unarguably feasible"²⁰ However, while the GR-303 standard exists today, the
17 application proposed by MCI - which would eliminate manual work on IDLC loops
18 - does not. Ms. Lichtenberg and Mr. Gates admit that "the work required to
19 establish necessary processes and techniques to unbundled IDLC in this fashion in a
20 commercial setting has never been undertaken in earnest by the ILECs."²¹ They
21 then list several "obstacles that must be overcome on the road to efficiently

²⁰ Lichtenberg/Gates, page 20.

²¹ Lichtenberg/Gates, page 20.

1 unbundling IDLC for purposes of removing impairment.”²² Thus, MCI admits that
2 even if it is “theoretically possible” for this technology to be implemented
3 throughout the network, it is not available for deployment today.

4 **Q. SHOULD A TELRIC STUDY ASSUME TECHNOLOGIES AND METHODS**
5 **OF OPERATIONS THAT ARE NOT AVAILABLE TO AND DEPLOYABLE**
6 **BY QWEST TODAY?**

7 A. No. Since its adoption, TELRIC has required that costs be determined based on
8 technologies, etc. that are “currently available.”²³ However, as in the present
9 proceeding, CLECs often propose the use of models, inputs, algorithms and
10 adjustments that bear no relationship to reality, but are entirely theoretical—such as
11 the application of the electronic solutions proposed by MCI. MCI, AT&T and other
12 CLECs also often argue that evidence regarding networks, technology, practices,
13 and costs today is not even relevant to evaluate the reliability of TELRIC proposals,
14 because this information is “real” and not “hypothetical.” On that basis, CLECs
15 often argue not only that Qwest’s actual costs may be ignored, but that the current
16 costs and practices of other ILECs and facilities-based CLECs must be ignored as
17 well. The proposition that current costs and practices are not relevant to TELRIC
18 and may not be considered has been rejected by the courts, the FCC, and
19 economists alike.²⁴ As the Seventh Circuit has explained, “[h]ow would one know

²² Lichtenberg/Gates, page 20.

²³ *Local Competition Order*, 11 FCC Rcd at 16218 adopting rule 47 C.F.R. § 51.505(b)(1).

²⁴ *See e.g., CO PUC Cost Docket Rehearing Order* at 30 (“[i]n order to determine what something might cost in the future, it is permissible to consider what it costs in the present.”)

1 the long-run costs of the most efficient technology without understanding the costs
2 of today's most efficient producers?"²⁵ The Seventh Circuit Court of Appeals has
3 recognized that "while TELRIC calls for a projection, it does not demand that every
4 ingredient be hypothetical."²⁶

5 A TELRIC study should consider the most efficient designs, technologies and
6 practices available today that have actually been deployed or used by a carrier with
7 the size and scope similar to Qwest. This approach is consistent with the FCC's
8 preference, as set forth in the *Triennial Review Order* that decisions under the Act
9 be based on "actual marketplace evidence" in lieu of "cost estimates" that are
10 "difficult to verify" and "easily manipulated by advocates."²⁷ Since MCI and
11 AT&T have not identified a single carrier with the scope and scale of Qwest that
12 has implemented the electronic configurations described in their testimonies,
13 TELRIC studies should not consider these "theoretical" technologies.

14 **Q. IS THE QWEST BHC NONRECURRING COST STUDY FORWARD-**
15 **LOOKING?**

16 A. Yes. Qwest's BHC process defined in the cost study is forward-looking and at the
17 same time considers the gains in efficiencies anticipated by the FCC. It should be
18 evident from the discussions that took place during the forum, as well as from the

²⁵ *AT&T v. Illinois Bell*, Case Nos. 03-2735 & 03-2766, *slip op.* Nov. 10, 2003 at 13 (7th Cir. 2003).

²⁶ *Id.* (rejecting claim that "use of actual fill factors (or asset lives matching the [ILEC's] financial reports) violates federal law because TELRIC is forward looking").

²⁷ TRO at ¶ 90.

1 direct testimony of the CLECs themselves, that there is a certain amount of manual
2 activity that cannot be avoided when performing a hot cut. As Mr. Falcone states at
3 page 6 of his direct testimony, a hot cut “is a complex, highly manual process.” Mr.
4 Falcone goes on to admit on page 17 of his direct testimony that “the batch hot cut
5 process does not eliminate any of the manual steps necessary to perform a hot cut.”
6 This is because the hot cut process requires the migration of customers from one
7 switch to another. That said, Qwest has included in its cost study the anticipated
8 efficiencies that will be gained with the implementation of additional OSS
9 capabilities (e.g., the scheduling tool and the status tool) discussed by Qwest
10 witness Notarianni in her direct testimony (Exhibit No. DP/LN-1T). Qwest has also
11 provided the Commission with independent evidence, via the Hitachi Report, of the
12 actual time it took the central office technicians to perform pre-wiring, testing, and
13 “lift and lay” procedures during a trial of the BHC process. Thus, Qwest’s cost
14 study calculates only the forward-looking costs of the BHC installation option.

15 Finally, it is interesting to note that in other forums, CLECs have argued that
16 TELRIC costs are developed using “best practices,” which are available today. For
17 example, in *Verizon v. FCC*, where it wanted to show that TELRIC methods are
18 reasonable, AT&T told the Court that TELRIC is based on “actual prices” and the
19 “best practices” of the ILECs “as they install new network elements or replace

1 existing ones.”²⁸ Yet in state proceedings like this one, where rates are established,
2 AT&T reverts back to the hyper-theoretical view of TELRIC, where “actual prices”
3 and real “best practices” are not to be considered. In the *Verizon v. FCC* case the
4 Court made it clear that new technologies and practices would not be considered
5 under the TELRIC methodology until the facts of their deployment and resulting
6 savings were each observable in the market.²⁹

7 **Q. DO OTHER PROBLEMS ARISE WHEN THEORETICAL**
8 **TECHNOLOGIES AND METHODS OF OPERATIONS ARE ASSUMED IN**
9 **TELRIC STUDIES?**

10 A. Yes. MCI and AT&T claim that Qwest should implement theoretical electronic
11 technologies and that these technologies should be assumed in cost studies;
12 however, they generally ignore the costs Qwest would incur to put such
13 technologies in place. While these CLEC proposals assume deployment by the
14 ILEC of fully automated systems that exist only in the imaginations of their
15 advocates, they do not provide for recovery of the investment that would be
16 incurred to obtain and install those systems. For example, in cost proceedings,
17 AT&T and MCI have often argued that nonrecurring costs should assume full
18 mechanization, with virtually no manual work required. Yet, the recurring costs

²⁸ Reply Brief of AT&T Corp. at 17 (filed July 23, 2001), *Verizon v. FCC*, 535 U.S. 467 (2002)(arguing that TELRIC rates are based on “actual prices’ that prevail” when “LECs install new network elements or replace existing ones using efficient technology;” and on “the best practices” of the ILECs).

²⁹ *Verizon v. FCC*, 535 U.S. at 506 (more efficient element not reflected in TELRIC determinations until “the fact of the element's greater efficiency . . . become[s] apparent when reflected in lower retail prices drawing demand away from existing competitors (including the incumbent)”).

1 proposed by these parties (e.g., the HAI Model) do not include the recurring costs
2 associated with placing the investment required. Essentially, AT&T and MCI
3 would like Qwest to spend billions of dollars to change out its network and OSS for
4 their benefit, without having to pay for it (*see* OSS discussion below). The
5 Commission must be careful to avoid falling prey to such a “shell game” when
6 BHC rates are set in this proceeding.

7 **Q. IN THE BHC FORUM, DID QWEST AND THE CLECS DISCUSS THE**
8 ***REAL* PROCESSES THAT QWEST WOULD FOLLOW TO PROCESS BHC**
9 **ORDERS?**

10 A. Yes. In the BHC Forum, Qwest and the CLECs discussed the BHC process,
11 reaching agreement on some issues and reaching impasse on others. However, the
12 discussions involved the *real* BHC process as it would occur in the *real* world—
13 since these are the processes that will be used in the foreseeable future in the loop
14 ordering process. As I pointed out in my direct testimony, Qwest made changes to
15 the *real* BHC process to meet the requests of CLECs. For example, Qwest agreed
16 to add pre-wiring and dial tone tests on the DVA date (due date minus three) back
17 into the process at the request of CLECs.³⁰ This reduces efficiencies, and adds
18 costs to the process.

³⁰ In its original BHC proposal submitted in November, 2003 (and discussed in the December, 2003 forum), Qwest proposed that the COTs would perform all of the pre-wire, testing and lift and lay work on the due date, to gain efficiencies.

1 Yet if we accept the theoretical CLEC view of forward-looking technologies in a
2 TELRIC study, the pre-wiring function would not even exist, and would not be
3 recovered via these TELRIC rates. Thus, in a “process-oriented” workshop, CLECs
4 request *real world* additions to the process, adding real costs for Qwest, while in the
5 “TELRIC world” they assume away all of these activities and costs. AT&T and
6 MCI would like pre-wiring on the DVA date, along with dial tone tests - yet they
7 want Qwest to forego all recovery of these costs by assuming them away via a
8 hyper-theoretical version of a TELRIC study. This explains why, as I discussed
9 earlier, CLECs would like to de-link the process and costing phases of this docket.
10 By doing this, they can perpetuate a “bait and switch” process where they demand
11 more manual Qwest work in one proceeding, while denying Qwest cost recovery
12 for this work in another proceeding. The words of Mr. Finnegan (AT&T) in the
13 process-oriented forum are instructive: “what we said or may have said or what
14 Qwest has said in a cost docket, I don’t know that that’s necessarily relevant.”³¹

15 **Q. WHAT DO YOU CONCLUDE?**

16 A. The BHC TELRIC study should identify the nonrecurring costs that will be
17 incurred by Qwest to install loops using the BHC process. The study should be
18 based on real technologies that are available to and deployable by Qwest today.
19 Cost studies should not assume a hyper-theoretical view of TELRIC that would
20 assume away most of the manual activities that Qwest will perform on behalf of -

³¹ Transcript of Batch Hot Cut Forum, December 2, 2003, page 286.

1 and at the request of - CLECS. The Telecommunications Act states that an ILEC
2 must be able to recover its costs.

3 **C. Comparisons of BHC Costs with Other Costs/Rates**

4 **1. UNE-P Rates**

5 **Q. DO THE CLECS ARGUE THAT THE NONRECURRING COST OF THE**
6 **BHC PROCESS SHOULD APPROXIMATE THE NONRECURRING**
7 **RATES FOR UNE-P?**

8 A. Yes. For example, Ms. Lichtenberg and Mr. Gates suggest in their testimony that
9 “the rates for a hot cut must be highly comparable to those available under UNE-P
10 today....”³² Ms. Lynott states that “the NRCs for any BHC process must at least be
11 much closer, if not comparable, to the current UNE-P NRCs.”³³

12 **Q. DO YOU AGREE?**

13 A. No. The nonrecurring activities required for the BHC are very different from the
14 activities required to initiate UNE-P service. Therefore, there is no basis for
15 arguing that the BHC nonrecurring rates should be comparable to UNE-P
16 nonrecurring rates. It is important to understand that there are two types of UNE-P
17 nonrecurring rates in place today. First, there are UNE-P “new” nonrecurring rates
18 that are applied when working service *does not* already exist at a customer location.

³² Lichtenberg/Gates, page 6.

³³ Lynott, lines 90-91.

1 This rate assumes that the service will be established in a Qwest switch for the first
2 time and may require a field dispatch, cross-connect work, etc. Second, there are
3 UNE-P “conversion” rates that are applied when working service *does* already exist
4 at a customer location. This rate assumes a simple “billing change” where the
5 customer will continue to be served from Qwest’s switch, and almost no manual
6 intervention is required.

7 The BHC process is different than both the UNE-P “new” and UNE-P “conversion”
8 nonrecurring processes. First, while the “new” UNE-P process assumes field
9 installation work may be required, the BHC process specifically excludes these
10 manual activities. In addition, the BHC process includes a “hot cut,” where the
11 loop will be cut over from one switch to another. As I described earlier, there is no
12 “hot cut” on a new installation. Second, while the UNE-P “conversion” process
13 assumes no manual work - since the existing connections remain in place - the BHC
14 process requires a customer to be cut over to another switch, requiring manual work
15 by the COT and other groups.

16 **Q. ACCORDING TO THE CLECS, WHICH UNE-P RATES SHOULD THE**
17 **BHC RATES BE COMPARED WITH?**

18 A. Ms. Lynott states that the BHC nonrecurring rates should be compared with the
19 UNE-P “new” rates.³⁴ However, it appears that AT&T and MCI are advocating
20 that the BHC rate approach the UNE-P “existing” rate, which is less than \$1.00 in

³⁴ Lynott, lines 91-92.

1 Washington. This is entirely inappropriate, since the UNE-P “conversion” cost/rate
2 assumes no manual work, except a small amount of ISC work when an order “falls
3 out,” while a BHC process requires manual work by several groups. Mr. Falcone
4 admits this in his direct testimony when he states that “there [are] significantly
5 more steps involved in a hot cut....”³⁵

6 MCI warns the Commission that “[t]o the extent non-recurring costs for the hot cut
7 process substantially exceed existing UNE-P migration charges, UNE-L will suffer
8 from economic disadvantage relative to UNE-P and relative to the ILEC’s retail
9 services....”³⁶ However, as discussed above, the differences inherent in
10 provisioning these different products makes it impossible to achieve the costs
11 recommended by MCI unless the Commission were willing to disregard entirely the
12 FCC direction to take into account the activities necessary to perform batch hot cuts
13 and instead, provide the CLECs with a low price regardless of Qwest’s costs to
14 perform batch hot cuts. This, of course, would be patently unfair, and would place
15 Qwest, once again, in the position of having to underwrite the CLECs’ entry into
16 the competitive marketplace; a result the FCC has previously rejected in other
17 proceedings.³⁷

³⁵ Falcone, page 7.

³⁶ Lichtenberg/Gates, page 49.

³⁷ *In the Matter of Local Exchange Carriers’ Rates, Terms, and Conditions for Expanded Interconnection Through Physical Collocation for Special Access and Switched Transport*, CC Docket No. 93-162, Second Report and Order at ¶ 33 (rel. June 13, 1997) (“Second Report and Order”).

1

2. Retail Rates

2 **Q. DO THE CLECS ARGUE THAT NONRECURRING BHC RATES SHOULD**
3 **BE COMPARABLE WITH RETAIL NONRECURRING RATES?**

4 A. Yes. Ms. Lichtenberg and Mr. Gates reiterate that Qwest's BHC installation option
5 "must be comparable in terms of quality, timeliness, reliability and *cost* to existing
6 UNE-P provisioning methods or more importantly, Qwest's own *retail provisioning*
7 *processes.*"³⁸

8 **Q. SHOULD NONRECURRING BHC RATES BE COMPARED WITH**
9 **RETAIL NONRECURRING RATES?**

10 A. No. The assumptions and activities contained in Qwest's nonrecurring retail cost
11 study for basic exchange service bears little resemblance to the BHC process.

12 There are at least two major differences between the BHC process and the retail
13 installation process.

14 First, Qwest's retail nonrecurring cost study assumes that when a customer
15 disconnects service, approximately 75% of the time the Qwest facilities and
16 connection will be left in place, remaining connected to the switch for the next
17 customer to use. This practice is referred to throughout the industry as "dedicated
18 inside plant ("DIP")," and assumes for example, that when a customer moves out of
19 his or her house, the next customer moving into the house will request services that
20 can be provided *using the same connection to the switch*. That allows Qwest to

³⁸ Lichtenberg/Gates, page 14.

1 provision the next customer at the location by establishing the customer record and
2 making a software change in the system, since the connection to the switch remains
3 in place.³⁹ This process - which allows switch connections to remain in place -
4 cannot be used in a BHC, since a BHC always requires a cross-connection to be
5 moved from one switch to another.

6 Second, while the nonrecurring cost for retail installation assumes field installation
7 work may be required to establish new service (e.g., service at a new location, or a
8 service where no DIP is in place), the BHC process specifically excludes these
9 manual activities. Thus, the BHC process is not comparable with the retail
10 installation process.

11 3. Other ILEC BHC Rates

12 **Q. HOW DO QWEST'S COSTS FOR BATCH HOT CUTS COMPARE TO THE**
13 **BATCH HOT CUT RATES PROPOSED BY OTHER ILECS?**

14 A. Qwest's BHC costs are comparable to the BHC rates proposed by other ILECs, if
15 these rates are evaluated on an "apples to apples" basis. However, the rates are
16 difficult to directly compare, because each ILEC has defined the BHC elements
17 somewhat differently. For example, SBC has proposed rates for an "Enhanced
18 Daily Process," a "Defined Batch Process" and a "Bulk Project Offering."
19 However, the BHC process in each case is limited to conversions from retail or

³⁹ Once the CLECs have established customers in their switches, they will be able to make use of this same practice to keep the costs of customer connections to a minimum.

1 UNE-P - it does not include CLEC to CLEC conversions, which are included in the
2 Qwest BHC process. SBC also charges a separate “service order” charge while
3 Qwest service order costs are included in the BHC rate. Finally, SBC has separate
4 disconnect charges, as does Qwest in Washington. Bell South also has a
5 disaggregated “a la carte” rate structure, with a separate per loop BHC charge,
6 service order charge, and cross-connect charge that would be applied when a BHC
7 is ordered. Verizon has proposed separate batch hot cut rates and “large job” hot
8 cut rates, and provides for an “initial” and “additional” line at a specific end user
9 location. In addition, the ILEC’s proposed rates vary by state, and in some cases
10 different states have different rate structures.

11 The point is that any comparison of rates must be reviewed carefully by the
12 Commission, to assure an “apples to apples” comparison. CLECs, for example,
13 may compare Qwest’s BHC rate with the BHC per loop price proposed by Bell
14 South - which is only one portion of the total BHC charge - and argue Qwest’s rate
15 is too high. However, if one compares the Qwest BHC proposed rate with a Bell
16 South BHC rate, one must compare the Qwest rate with the sum of the BHC,
17 service order, and cross-connect rate. For example, in Florida, the Bell South
18 proposed rate for the first 2-wire non-designed loop at a customer location (without
19 coordination) is \$42.74 (BHC per loop) + \$1.52 (service order charge) + \$8.22

1 (cross-connect) = \$52.48.⁴⁰ This compares with Qwest's proposed BHC rate for
2 connection and disconnection of \$51.08.

3 **D. Reasonableness of Qwest's BHC Costs**

4 **Q. HAVE THE CLECS PROVIDED A SPECIFIC CRITIQUE OF QWEST'S**
5 **BHC COST STUDY?**

6 A. No. Since the CLECs did not have access to the Qwest BHC cost study at the time
7 they submitted direct testimony on January 23, 2004, they have not yet provided
8 specific comments on the BHC study. While I am certain that specific feedback
9 will be provided in rebuttal testimony, the CLECs did provide some general
10 comments regarding Qwest cost studies in their direct testimony. For example, Mr.
11 Gates provided the following:

12 **Q. DOES THE INDUSTRY HAVE EXPERIENCE WITH**
13 **DETERMINING THE COSTS OF HOT CUTS?**

14 A. Yes. After substantial time and effort, CLECs and state commissions
15 waded through a plethora of ILEC data to conclude that *UNE-P*
16 *provisioning costs were closer to \$1 in a migration situation, as opposed*
17 *to the more than \$100 originally advocated by the ILECs.* The lesson to
18 be learned from that experience is that ILECs, including Qwest, have an
19 observed propensity to *dramatically exaggerate the costs associated with*
20 *provisioning UNEs* and from my experience in reviewing ILEC cost
21 studies in general, and Qwest cost studies specifically, *their estimates tend*
22 *to be based on cost studies that incorporate inefficient procedures or*
23 *technologies.* Likewise, their studies are generally defined by *duplicative*
24 *work steps, exaggerated estimated work times and many other errors* all
25 tending toward non-recurring charges substantially in excess of efficiently
26 incurred costs. Although we have yet to see a price proposal for Qwest's
27 hot cut processes, the same will undoubtedly be true of the cost studies
28 that accompany the price proposal. For that reason, it is critical that the

⁴⁰ The rate for an additional loop at a specific customer location is \$26.15.

1 Commission understand that the hot cut process will, for the most part,
2 take the place of a UNE-P migration. (*i.e.*, the method by which most
3 mass market customers are changed from one carrier to another today).⁴¹

4 I will address each of the italicized and underlined sections of this testimony.

5 **Q. PLEASE ADDRESS MR. GATES' CLAIM THAT QWEST ORIGINALLY**
6 **ADVOCATED A RATE OF MORE THAN \$100 FOR UNE-P.**

7 A. Mr. Gates claims that Qwest proposed a rate of over \$100 for a UNE-P conversion
8 that is now about \$1.00, and that this shows that Qwest will always “dramatically
9 exaggerate costs.” This statement is inaccurate is at least two respects. First,
10 Qwest has never proposed a nonrecurring rate of even close to \$100 for the UNE-P
11 Conversion UNE.⁴² In fact, when the UNE-P Conversion element was first
12 introduced, the proposed nonrecurring rate was under \$8.00. Second, as discussed
13 above, there is also a UNE-P New element, and the costs for this element are well
14 above \$1.00. This example proves that it is Mr. Gates who exaggerates when he
15 claims that Qwest has a “propensity to exaggerate costs.”

16 **Q. PLEASE ADDRESS MR. GATES' CLAIM THAT QWEST'S ESTIMATES**
17 **“TEND TO BE BASED ON COST STUDIES THAT INCORPORATE**
18 **INEFFICIENT PROCEDURES OR TECHNOLOGIES” AND ARE**
19 **DEFINED BY “DUPLICATE WORK STEPS.”**

⁴¹ Lichtenberg/Gates, page 49.

⁴² Qwest did previously file *basic* loop nonrecurring rates over \$100 several years ago. However, these were not UNE-P “conversion” rates, they were basic loop rates. Due to increased mechanization, basic loop nonrecurring costs have decreased.

1 A. The procedures and technologies assumed in the BHC study are based on many
2 processes agreed to in the BHC forum. As stated elsewhere in this testimony,
3 Qwest has agreed to implement an appointment scheduler, a status tool, and a
4 spreadsheet function that will make the BHC process more efficient. In addition, as
5 discussed above, there is no basis for assuming theoretical technologies such as
6 ELP or MCI's application of GR-303 technology in a TELRIC study. Thus, there is
7 no evidence that Qwest uses "inefficient procedures or technologies."

8 Further, MCI is talking out of both sides of its mouth when it claims Qwest uses
9 "duplicative work steps." As stated above and in my direct testimony, Qwest's
10 original BHC process proposed to eliminate so-called "duplicative" steps, such as
11 performing dial tone tests on both the DVA and due date. Yet MCI and others
12 argued in the BHC forum that it would be problematic to eliminate this "duplicate"
13 step. One would hope that in their analysis of the BHC cost study, MCI would not
14 claim that the steps *they have requested* are duplicative, and should be eliminated
15 from the cost study.

16 **Q. PLEASE ADDRESS MR. GATES' CLAIM THAT QWEST COST STUDIES**
17 **CONTAIN EXAGGERATED ESTIMATED WORK TIMES.**

18 A. There is no basis for Mr. Gates' assumption that the BHC cost study will contain
19 exaggerated work times. In fact, the testimony of Ms. Lynott includes BHC trial
20 observations that help to validate the time estimates in Qwest's cost study. For
21 example, Ms. Lynott observed that the elapsed time for pre-wiring a batch of 25

1 orders was approximately two hours (for two technicians), which translates to 4.8
2 minutes per loop. While this represents a very limited sample of BHCs, the 4.8
3 minutes is very close to the 5 minutes estimated in the Qwest cost study (for two
4 technicians). Ms. Lynott also observed that the elapsed time for the lift and lay
5 process was one hour and 20 minutes, or 3.2 minutes per loop. It is not clear
6 exactly what activities are included in this time period, but if we look at the elapsed
7 time for *all* due date activities in the Qwest cost study, the time is about 3.5 minutes
8 (excluding travel).⁴³ The applied time is actually less, because the study assumes
9 that only one technician performs each dial tone test. Thus, Ms. Lynott's
10 observations validate the estimated times in the Qwest study.

11 **E. OSS Cost Issues**

12 **Q. THE CLECS SUGGEST THAT IF QWEST WOULD AGREE TO FURTHER**
13 **MECHANIZATION OF ITS BHC PROCESS, THE COSTS FOR THE BHC**
14 **INSTALLATION OPTION WOULD GO DOWN. DO YOU AGREE?**

15 A. No. Qwest's provisioning processes already include a great deal of mechanization.
16 In fact, a close inspection of the work groups included in the BHC cost study
17 reveals that, with the exception of the central office, there is very little manual
18 activity included in the study. This is because other steps in the process (e.g., ISC,

⁴³ The Qwest cost study estimates 0.5 minutes per loop for the lift and lay, 1.5 minutes for the dial tone tests, 0.5 minutes to evaluate the spreadsheet and one minute to log completion, for a total elapsed time of 3.5 minutes.

1 QCCC) are already highly mechanized, and much of the manual work for these
2 groups results from orders that fall out of these mechanized processes

3 Further mechanization would not lower costs because the costs for the additional
4 mechanization that the CLECs are recommending are very high. For example, as
5 discussed above, MCI and AT&T's witnesses recommend automated frames and
6 other electronic solutions.⁴⁴ None of these technologies exists in Qwest's network
7 today, but the CLECs never mention what it would cost Qwest to deploy such
8 systems ubiquitously in its network, if in fact they could be deployed.⁴⁵ Evidently,
9 the CLECs believe that ILECs, such as Qwest, have an unending source of cash and
10 resources with which to deploy such mechanized systems. This, if it ever was true,
11 is certainly not true now, nor will it be true going forward in a competitive
12 marketplace. Yet, Mr. Zulevic suggests that the Commission simply "order Qwest
13 to use a 'separate pot' of hours to implement systems changes that flow from the
14 TRO proceedings." Further, he recommends that Qwest be "ordered that it cannot
15 reduce the number of hours or releases currently dedicated to the 2004 IMA
16 releases in order to accommodate any TRO changes."⁴⁶ I was not, however, able to
17 discern from Mr. Zulevic's testimony how he expected Qwest to pay for the
18 "separate pot" of hours—the CLECs certainly never offer to assume responsibility
19 for such costs. It would be inappropriate for the Commission to set a price for the

⁴⁴ Lichtenberg/Gates, page 30.

⁴⁵ As I mention above, the FCC has received estimates for deploying ELP nationwide that are in excess of \$100 billion.

⁴⁶ Zulevic, page 20.

1 BHC installation option that assumed further mechanization without also including
2 the cost to deploy that mechanization in Qwest's BHC rates. By the same token, as
3 I discussed earlier, it would also be inappropriate for the Commission to expect
4 Qwest to provision loops on the basis of its particular network design and cut-over
5 practices, as directed by the FCC, while adopting costs that are not based on the
6 work activities involved in those practices.

7 **Q. YOU SUGGESTED ABOVE THAT QWEST HAS ALREADY SPENT A**
8 **SIGNIFICANT AMOUNT OF MONEY ON OSS ENHANCEMENTS FOR**
9 **THE BENEFIT OF THE CLECS THAT HAS NOT BEEN RECOVERED.**
10 **PLEASE QUANTIFY THAT FOR THE COMMISSION.**

11 A. From 1997 through 2004 Qwest will have spent approximately \$500 million
12 modifying and enhancing its legacy systems purely for purposes of providing OSS
13 access to the CLECS. To date, Qwest has been provided only limited recovery
14 amounting to less than \$15 million of that amount in three of its fourteen in-region
15 states. This \$500 million in expenditures represent only the systems changes that
16 have been made expressly for the benefit of the CLECs and their customers. From
17 1997 to 2003, Qwest also spent an additional \$5.5 billion over and above this
18 amount for changes to the legacy systems many of which benefit both Qwest and
19 the CLECs. With this amount of money at stake in an environment of ever-
20 increasing market loss, it should come as no surprise that Qwest is resistant to yet
21 another suggestion by the CLECs that it implement more mechanization in its

1 systems so that it can be paid less, or not at all, by the CLECs for the work it
2 performs on their behalf.

3 **Q. PLEASE COMMENT ON THE MCI SUGGESTION THAT THE**
4 **COMMISSION SHOULD REQUIRE THAT THE BHC MECHANIZATION**
5 **ISSUES BE “IMPLEMENTED TOGETHER AS A REGULATORY**
6 **CHANGE REQUEST.”⁴⁷**

7 A. Once again the CLECs are suggesting to the Commission a solution to the
8 implementation of mechanization with no mention of how it would all be paid for.
9 Designating a change request (“CR”) as “regulatory” merely influences the priority
10 in which it is addressed within the change management process (“CMP”). It does
11 not in any way recommend to the Commission how Qwest should be allowed to
12 recover its costs for implementing the CRs that come out of the CMP. This is the
13 primary reason that Qwest included in its BHC installation option the costs to
14 implement the mechanization tools (e.g., appointment scheduler and status tool)
15 agreed upon in the BHC forum. This is similar to the circumstance surrounding the
16 implementation of line sharing, where the FCC specifically permitted recovery of
17 line sharing OSS costs. Consistent with this, Qwest believes that the OSS changes
18 that will be initiated as a result of the BHC process should be recovered through the
19 BHC installation rate.

⁴⁷ Lichtenberg/Gates, page 38.

1

V. VOLUMES

2 **Q. DO THE CLECS PROPOSE A MINIMUM BATCH SIZE OF LESS THAN**
3 **25?**

4 A. Yes. AT&T argues that “there is no reason why there should be a minimum batch
5 size”⁴⁸ while recommending a minimum batch size of two. MCI states that
6 “CLECs should be able to submit batch orders of any size.”⁴⁹

7 **Q. DO YOU AGREE THAT THERE SHOULD BE NO MINIMUM BATCH**
8 **SIZE, OR A MINIMUM BATCH SIZE OF TWO?**

9 A. No. From a cost perspective, costs are reduced when the quantity of orders in a
10 BHC increase, due to economies of scale. If a CLEC orders 25 loops in a BHC, the
11 COTs can perform the hot cut for each loop at a lower cost, because there are some
12 “fixed” activities that must be performed regardless of the size of the batch. For
13 example, if a COT must travel to another office to perform a minimum of 25 pre-
14 wires, the travel time can be divided by the number of loops to yield the applied
15 time per loop (i.e., 20 minutes * two COTS /25 = 1.6 minutes). If the COTs must
16 travel to another CO to perform only two pre-wires, the applied time would be (20
17 minutes * two COTs / 2 = 20 minutes). Mr. Falcone admits that such efficiencies
18 would be realized: “Therefore, an order containing more than one loop would save
19 a trip or trips to an unmanned central office.”⁵⁰ Qwest chose 25 orders as the

⁴⁸ Falcone, page 19.

⁴⁹ Lichtenberg/Gates, page 45.

⁵⁰ Falcone, page 19.

1 minimum in order to gain these efficiencies and lower cost. A batch of two would
2 be significantly more expensive on a per loop basis than a batch of 25.

3 MCI argues that “to the extent the size impacts the efficiencies that Qwest may
4 obtain, then those efficiencies should be reflected in the price.”⁵¹ If Qwest were to
5 reduce the minimum batch size, the costs would increase—a change I am confident
6 the CLECs would not be happy with.

7 **Q. DOES AT&T SUGGEST THAT THE MINIMUM SIZE OF A BATCH**
8 **SHOULD VARY BY THE SIZE OF THE CENTRAL OFFICE IF ROLLING**
9 **UNE-P IS ALLOWED?**

10 A. Yes. Mr. Falcone states that “if rolling UNE-P is allowed, then the minimum may
11 be central office specific.”⁵² He states that the minimum may be “10 or 20” in large
12 offices and “two or three lines” in small offices. AT&T suggests that the minimum
13 size of a batch should be lower in smaller central offices because a CLEC might not
14 be able to accumulate the minimum number of customers in the smaller office as
15 quickly as it could in a larger office. This misunderstands the point of “batching”
16 conversions in the first place, which is to capture the efficiencies and per-line
17 savings that arise *only* when the ILEC is performing a sufficient number of hot cuts
18 in the same location at the same time. If the CLEC has not accumulated a sufficient
19 number of lines in a central office, the consolidated migration of those lines will not

⁵¹ Lichtenberg/Gates, page 45.

⁵² Falcone, page 23.

1 result in the efficiencies and cost savings that justify the lower batch hot cut NRC.

2 As I described above, the costs for a BHC increase if the number of lines in the
3 batch is decreased.

4 **Q. THE CLECS ARGUE THAT THE MAXIMUM BHC LOOPS PER DAY PER**
5 **CENTRAL OFFICE SHOULD BE 200, RATHER THAN 100.⁵³ WILL YOU**
6 **ADDRESS THIS ISSUE?**

7 A. No, Mr. Pappas explains why provisioning 100 loops per day per central office is
8 reasonable. The exhibits to my direct testimony demonstrate that Qwest can handle
9 the anticipated BHC volumes within the 100 loop limitation.

10 **Q. DOES MS. LYNOTT CLAIM THAT QWEST WILL NOT BE ABLE TO**
11 **HANDLE 100 LOOPS PER DAY IN A CENTRAL OFFICE VIA THE BHC**
12 **PROCESS?**

13 A. Yes. Ms. Lynott states that “we do not believe that Qwest can meet its 100-line per
14 day per CO promise.”⁵⁴ She bases this on her observations during the BHC trials
15 conducted in four Qwest central offices. She notes that for each 25 line order, it
16 took two hours to complete pre-wiring, one hour and 20 minutes to complete the lift
17 and lay, and 15 minutes to disconnect the old jumpers. Thus, the time to convert 25

⁵³ Falcone, page 25; Lichtenberg/Gates, page 46.

⁵⁴ Lynott, lines 126-127.

1 lines is over 3.5 hours.⁵⁵ She concludes therefore, that Qwest can only complete
2 50-60 hot cuts in a day, per CO.

3 **Q. DO YOU AGREE THAT THIS DATA MEANS QWEST CAN ONLY**
4 **PROCESS 50-60 BATCH HOT CUTS PER DAY?**

5 A. No. First of all, the pre-wiring and lift and lay are performed on different days;
6 only the lift and lay is performed on the due date. If the lift and lay takes one hour
7 and 20 minutes for 25 loops, this would mean that it would take just over five hours
8 to complete 100 hot cuts. Thus, based on the trials, Qwest could perform 100 hot
9 cuts on the due date. The pre-wiring is to be done by the DVA date, but Qwest will
10 have some flexibility to do the pre-wiring over two days, and to assign the two-
11 person work crews where the work needs to be done. The CO technicians do not
12 have to complete pre-wiring for one set of 100 loops and the lift and lay for another
13 set of 100 loops on the same day in one central office. Mr. Pappas will address this
14 issue further.

15 **Q. DO THE CLECS ALLEGE THAT QWEST IS UNDERSTATING THE**
16 **ANTICIPATED UNE-L VOLUMES IT WILL INCUR IF IT IS GRANTED**
17 **SWITCHING RELIEF?**

18 A. Yes. For example, Mr. Falcone states that “the data included in the exhibits was
19 very limited.” He continues that “it did not incorporate any Qwest winbacks,

⁵⁵ Lynott, lines 328-335.

1 CLEC to CLEC hot cuts or regular hot cuts that are not part of the batch.”⁵⁶

2 **Q. DO YOU AGREE THAT QWEST’S BHC VOLUME ESTIMATES ARE**
3 **UNDERSTATED?**

4 A. No. In fact, the volume data I presented in Exhibit TKM-4 presents a very
5 conservative view of anticipated BHC volumes. First, the exhibit assumes that *all*
6 UNE-P customers will convert to UNE-L, and that all of these conversions will use
7 the BHC process. Second, the exhibit includes volumes based on a 3% per month
8 churn rate. That is, Exhibit TKM-4 assumes that each month, 3% of the UNE-L
9 customers (that used to be UNE-P prior to relief) will “churn” from one CLEC to
10 another. These CLEC to CLEC volumes are included in the analysis. Third, the
11 analysis assumes that after relief, all growth (and churn) that used to be UNE-P will
12 be realized in BHC volumes. Thus, the estimates provide an upper bound for BHC
13 volumes.

14 **Q. DOES EXHIBIT TKM-4 INCLUDE VOLUMES FOR ALL UNE-L**
15 **ORDERS?**

16 A. No. Prior to any granting of switching relief, and after relief, there are and will be
17 customers purchasing UNE-L. For example, today there are customers switching
18 from Qwest retail or UNE-P to UNE-L and from one CLEC to another using
19 UNE-L. The existing volumes are not included in the analysis because the purpose
20 of Exhibit TKM-4 is to identify *additional* UNE-L volumes that Qwest will incur

⁵⁶ Falcone, page 33.

1 *because* it is granted relief. The “base case” volumes will occur before, during, and
2 after any ruling by the Commission granting switching relief, and should not be
3 included in the analysis. In sum, Exhibit TKM-4 presents an *incremental* analysis
4 of BHC volumes.

5 **Q. DOES EXHIBIT TKM-4 INCLUDE VOLUMES FOR CLEC TO CLEC**
6 **ORDERS?**

7 A. Yes. The CLECs argue that CLEC to CLEC volumes are not included in the
8 analysis. However, as I mentioned above, the analysis does include volumes due to
9 churn. However, this is limited to churn for customers that would have been served
10 via UNE-P prior to relief. For example, if a UNE-P customer is converted to
11 UNE-L, and then moves to UNE-L with another CLEC, this order would be
12 accounted for in the volumes.

13 **Q. ARE “WINBACKS” RELEVANT TO THIS ANALYSIS?**

14 A. No. If a customer switches from a CLEC to Qwest, the order is not handled via
15 either the BHC or standard hot cut processes; it is handled as a Qwest retail order.
16 Thus, these orders should not be considered in a BHC analysis.

17 **Q. SHOULD “REGULAR” HOT CUTS BE CONSIDERED IN THIS**
18 **ANALYSIS?**

19 A. No. The analysis specifically relates to BHCs, and whether Qwest can handle
20 anticipated BHC volumes. The FCC ordered Qwest and other ILECs to develop a
21 new BHC process—not to re-evaluate existing hot cut and other loop installation

1 processes. Thus, the analysis does not include the “base case” of standard UNE-L
2 orders placed by CLECs today or in the future.

3 **Q. WON’T ALL CUSTOMERS BE ABLE TO USE THE BHC PROCESS,**
4 **INCLUDING EXISTING UNE-L CUSTOMERS?**

5 A. Yes. When a BHC process is approved, all CLEC customers (including UNE-L
6 customers) with the required minimum order quantity will be eligible for the BHC
7 process. Thus, if *all* future UNE-L customers (including the “base case” of UNE-L
8 volumes today) were to use the BHC process, the BHC volume could theoretically
9 be higher than the volumes in Exhibit TKM-4. However, that scenario is extremely
10 unlikely, since many customers will no doubt order UNE-L via the standard
11 installation options. It is clear that, if anything, the anticipated BHC volumes are
12 overstated. Qwest has done this to show that it can handle a “worst case scenario”
13 in the provisioning of loops via the BHC process.

14 **VI. CONCLUSION**

15 **Q. WHAT ACTION SHOULD THE COMMISSION TAKE IN THIS**
16 **PROCEEDING.**

17 A. The Commission should adopt a nonrecurring price for the BHC installation option
18 based on the TELRIC data provided in my direct testimony. Consistent with the
19 FCC’s TELRIC rules, the Qwest nonrecurring cost study identifies the forward-
20 looking cost to provision UNE loops via a batch process using the most efficient
21 technology that is reasonably available now, taking into account Qwest’s particular

1 network design and cut-over practices, as directed by the FCC. This study provides
2 the most reliable TELRIC data available for Qwest's operations in Washington.
3 There is no valid reason to separate the determination of costs for the BHC process
4 from the determination of the process itself in this proceeding.

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

6 A. Yes, it does.