EXHIBIT NO. _____ (DP/LN-27T)

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

DENNIS PAPPAS AND MATTHEW WHITE

ON BEHALF OF

QWEST CORPORATION

FEBRUARY 17, 2004

EXHIBITS LIST FOR BHC TESTIMONY

Exhibit DP/LN-28 **David Ehreth, *WestWave, Strategies for Unbundling Remote Access Terminals* (dated Oct. 16, 2000).**

Exhibit DP/LN-29 **Line Splitting/Loop Splitting Diagrams Presented as Batch Hot Cut Exhibit 4 by Michael Zulevic, Covad**

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I. IDENTIFICATION OF WITNESSES

Q. WHO IS SPONSORING THIS TESTIMONY?

A. This testimony is sponsored by two witnesses, Dennis Pappas and Matthew White.

Q. WHICH PORTIONS OF THIS TESTIMONY IS EACH WITNESS RESPONSIBLE FOR?

A. Mr. Pappas is responsible for the portions of this testimony addressing the overall design of the proposed batch hot cut process ("BHCP"), and the particular operational and network questions that CLECs have raised with respect to this new process. Mr. Pappas explains how Qwest's proposed BHCP alleviates the CLEC concerns and meets the FCC's directive to establish a procedure for the seamless migration of stand-alone unbundled loops.

Mr. White is responsible for the portions of this testimony answering CLECs' concerns regarding the planned operational support systems ("OSS") that support the batch hot cut processes, including the CLEC pre-ordering and ordering systems. Mr. White will explain the OSS modifications Qwest is proposing as part of the BHCP to enable CLECs to order larger quantities of stand-alone unbundled loops more efficiently and to track the status of those orders and Qwest's progress in cutting the ordered loops over to the CLECs' switches.

Q. MR. PAPPAS, PLEASE STATE YOUR NAME, EMPLOYER, AND BUSINESS ADDRESS.

A. My name is Dennis Pappas. I am employed by Qwest Corporation as a Director in the Technical-Regulatory Group of the Local Network Organization. My business address is 700 W. Mineral Avenue, Room MNH19.15, Littleton, Colorado 80120.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY ON THE BATCH HOT CUT PROCESS IN THIS DOCKET?

A. Yes. I filed direct testimony on the BHCP on January 23, 2004.

Q. MR. WHITE, PLEASE STATE YOUR NAME, EMPLOYER, AND BUSINESS ADDRESS.

A. My name is Matthew White. I am a Staff Advocate of Policy and Law in Qwest Service Corporation, a unit of Qwest. My business address is 930 15th Street, Denver, Colorado 80202.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS DOCKET?

A. I filed response testimony on February 2, 2004 in this docket. Regarding BHCP, I am adopting the Lynn Notarianni's portion of the Dennis Pappas/Lynn Notarianni testimony that was filed on January 23, 2004. For ease of reference, we have retained the exhibit number designations used in the January 23, 2004 testimony, i.e., DP/LN-26.

Q. WHAT IS THE PURPOSE OF YOUR RESPONSE TESTIMONY?

A. The purpose of our response testimony is to respond to the direct testimony on the Batch Hot Cut Process ("BHCP") of Patty Lynott, on behalf of McLeod USA, Robert V. Falcone on behalf of AT&T Communications, Tim Gates and Sherry Lichtenberg, jointly on behalf of Worldcom, Inc. (MCI), and Michael Zulevic, on behalf of Covad Communications.

II. EXECUTIVE SUMMARY AND ORGANIZATION OF TESTIMONY

Q. PLEASE SUMMARIZE THIS TESTIMONY.

A. In our opening testimony, we described how Qwest worked with the CLECs during the Batch Hot Cut Forum to reach agreement on the broad outlines of a new, region-wide process for performing large quantities of hot cuts in the same central office simultaneously and efficiently. We described how Qwest is streamlining its loop-by-loop hot cut procedures, developing new automated scheduling and notification tools at the CLECs' request, and working with the CLECs to eliminate the redundant steps currently made necessary by the CLECs' own failures to be ready on the day of cut. We also described the substantial benefits that CLECs will realize as a result of these improvements: they will be able to migrate significantly larger volumes of UNE-P lines to stand-alone unbundled loops at the same time, and during off-hours when their customers' lines are unlikely to be in use; they will receive a fixed (and short) provisioning interval for these large-scale migrations for the first time; they will have access to electronic tools that eliminate much of the need for coordination and back-and-forth communication with Qwest; and in virtually all states they will pay less for a qualifying hot cut than they do today.

In their testimony, the CLECs flat-out declare that all of this work is irrelevant, and that no matter what improvements Qwest adopts *or even could adopt*, it will not be enough to eliminate mass-market impairment. AT&T's witness says outright that there is *no possible* batch hot cut process Qwest could employ - not even the very process envisioned by the

FCC - that AT&T would find sufficient.[1] AT&T therefore simply ignores the FCC's instructions for this docket and instead advocates a pie-in-the-sky electronic loop provisioning proposal that the *Triennial Review Order* and the ALJ explicitly rejected. MCI likewise suggests that any batch hot cut process the Commission could adopt in response to the FCC's instructions would simply be an interim "Transition" measure that could not eliminate impairment until it is replaced by an electronic "Mass Market" process[2] - again, notwithstanding the FCC's rejection of such a process. AT&T's and MCI's insistence that there is *nothing* Qwest can do within the four corners of the *Triennial Review Order* to eliminate impairment highlights that their real interest lies in preserving UNE-P for as long as possible, not in developing a workable batch hot cut process, and their evaluations of Qwest's proposed process should be understood accordingly.

With respect to the particular impasse issues arising from the Batch Hot Cut Forum, the list started off narrow and has become even narrower. The CLECs have decided not to pursue a number of impasse issues in testimony, and Qwest has agreed to remove others by adopting the CLECs' suggestions. Still other impasse issues, related to particular OSS changes that CLECs wanted, have become moot as a result of the normal operation of the Change Management Process (which is where these issues belonged in the first place). As

[1] *See* Direct Testimony of Robert V. Falcone dated January 23, 2004 ("Falcone"), at 38:9-15; *Id.* at 59:12-15 ("Even the best manual processes that could be operationalized today, including batch migration processes, cannot satisfy the requirements needed to eliminate the CLECs' operational impairment in attempting to compete for mass-market customers."). On February 13, the ALJ struck the portion of the testimony containing these statements**.** *See* Order No. 10, *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 (February 13, 2004).

[2] Direct Testimony of Sherry Lichtenberg and Tim Gates, dated January 23, 2004 ("Lichtenberg/Gates") at 12:304-13:326.

for the issues remaining at impasse, the CLECs have, for the most part, simply asserted their positions without any evidentiary support at all. This testimony addresses each such issue in turn.

III. IMPASSE ISSUES

A. IMPASSE ISSUE P-3A (SCHEDULING BATCH HOT CUTS AT ANY TIME OF THE DAY)

Q. PLEASE DESCRIBE ISSUE P-3A AGAIN.

A. Qwest has proposed performing batch hot cuts from 3:00 AM to 11:00 AM, scheduling all lifts and lays at the beginning of that window where possible, followed by the prewiring for subsequent days' lifts and lays. Both the lifts and lays and the prewiring would be sequenced according to their locations in the central office to enable central office technicians to move as quickly and efficiently as possible. AT&T demanded that CLECs be permitted to choose whatever timeslots they want for their migration, including times outside the 3:00 AM to 11:00 AM window.[3]

Q. DOES ANY OTHER CLEC ENDORSE AT&T'S REQUESTS?

A. No.

Q. IS IT POSSIBLE TO ADOPT AT&T'S SUGGESTION AND RETAIN THE EFFICIENCIES OF THE BATCH HOT CUT PROCESS?

[3] Falcone at 26:4-11.

A. No. The time and cost savings from the proposed BHCP come from aggregating prewire and migration work into larger batches and sequencing that work in a manner that minimizes the technicians' movement throughout the central office. Allowing CLECs to reserve particular timeslots for their lifts and lays would force a reordering of the central office work, increase the time needed to perform the same set of tasks, and decrease the volume of prewires and migrations that could be completed in a shift. Rather than performing lifts and lays when it would be fastest and most efficient, the central office technicians would be required to periodically drop whatever prewiring or other work they are doing (or hold off on starting other work), log their progress, pick up the migration instructions, and then move to a different location to start performing lifts and lays. Given that up to four CLECs might be scheduling batch hot cuts on a given day, the potential for repeated interruptions, and therefore losses of efficiencies, is enormous.

AT&T's request that it be allowed to schedule batch hot cuts outside the 3:00 AM to 11:00 AM window would only increase the inefficiencies further. If different CLECs' lifts and lays could be spread throughout the twenty-four hour day rather than consolidated in the beginning of a single window, there is the potential for large gaps between the different batches of migration work, which could even extend beyond the length of the technicians' shift. The inefficiencies and costs would mount as Qwest would be required to add shifts of technicians and send them back and forth between different central offices to meet CLEC scheduling demands or keep the technicians occupied between widely dispersed cuts. AT&T's testimony completely ignores what changes in central office procedures would be required to comply with its scheduling requests.

Q. WHY DID QWEST PROPOSE THE 3:00 AM TO 11:00 AM WINDOW?

A. Scheduling batch hot cuts during this window allows a dedicated team of technicians to perform its migration work at a time when the overwhelming majority of business and residential customers are asleep or not using their lines. The dedicated team can also work during this time without interfering with the normal operations of the central office.

Q. PLEASE COMMENT ON AT&T'S CLAIM THAT "SELECT CUSTOMERS" MAY PREFER TO SCHEDULE CONVERSIONS OUTSIDE THIS WINDOW BECAUSE OF THE OUTAGES ASSOCIATED WITH A HOT CUT.[4]

A. It is a fact that the fewest number of telephone calls are made at 3:00 AM when most people are asleep. As I stated in my opening testimony, I observed a number of migrations using Qwest's hot cut process where the lifts and lays of the CLEC's customers began at 3:00 AM, and Qwest never encountered a line in use during those tests.[5] AT&T's witness provides no detail at all regarding who these "select" customers might be whose lines are more active at 3:00 AM than during the business day, and provides no evidence about how many there are.

The 3:00 AM start time is clearly ideal for the overwhelming majority of business and residential customers. In fact, McLeod likes the idea of an off-hours cut so much for its customers that it asks that it be permitted to schedule other kinds of non-batchable hot cuts

[4] Falcone at 26:18.

[5] Direct Testimony of Dennis Pappas and Lynn Notarianni dated January 23, 2004 ("Pappas/Notarianni") at 47:18-48:18.

during the same window.[6] It does not make sense to design the entire process for the "select" customers who may be an exception, and thereby incur all the inefficiencies brought about by spreading cuts over a twenty-four hour window. AT&T always has the option of scheduling a project-managed or coordinated hot cut under Qwest's existing provisioning options for these exceptional customers.

Q. DO YOU HAVE ANYTHING ELSE TO ADD TO YOUR PREVIOUS DESCRIPTION OF WHAT WILL TAKE PLACE DURING THE 3:00 AM TO 11:00 AM WINDOW?

A. Yes. My direct testimony misdescribes what would happen if a CLEC encounters a line in use at the time of the lift and lay.[7] Instead of waiting for a period of time and then simply disconnecting the call if it appears non-urgent, as I incorrectly suggested, Qwest's existing hot cut procedures for this situation would continue to apply. The central office technician would monitor the busy line on three individual occasions, and, if the line was still in use on the third try, would place the order into jeopardy status. The CLEC would be advised of the jeopardy and would then be required to resolve the line-in-use situation. Qwest expects this to be an infrequent occurrence in any event, since the lifts and lays would be taking place starting at 3:00 AM, when most customers are asleep.

B. IMPASSE ISSUE P-5 (LOOPS PROVISIONED OVER IDLC)

Q. PLEASE DESCRIBE IMPASSE ISSUE P-5 AGAIN.

[6] Direct Testimony of Patty Lynott dated January 23, 2004 ("Lynott") at 204-207.

[7] Pappas/Notarianni Direct at 58:9-60:16.

A. A batch hot cut process can achieve the efficiencies envisioned by the FCC only if it is limited to migrations that can actually be "batched" or processed on a consolidated basis. That is, migrations that involve the reuse of existing facilities and do not require the dispatch of a technician to the field. UNE-P lines provided over IDLC cannot be included in the batch hot cut process because the unbundling of each IDLC line requires a truck roll to the field to determine what alternative facilities are available for the stand-alone unbundled loop and to perform the cutover. Each IDLC line in an order might have to be unbundled in a different way. CLECs may still continue to order and receive unbundled loops that require field dispatches, including loops with IDLC, but they must use Qwest's existing provisioning options instead of the batch hot cut process.

AT&T, MCI and McLeod have all filed testimony demanding that IDLC loops be eligible for the batch hot cut process.[8]

Q. ISN'T THIS A REVERSAL OF AT&T'S POSITION AT THE BATCH HOT CUT FORUM?

A: Yes. Although AT&T witness Robert Falcone now insists that IDLC lines be included in the batch hot cut process, his fellow AT&T representative John Finnegan conceded at the Forum that such lines were not batchable. Mr. Finnegan agreed with Qwest "that the process may not lend itself to doing batches of IDLC migrations when you're going to the

[8] *See* Falcone at 29:14-30:12; Gates/Lichtenberg at 15:368-378; and, Lynott at 6:26-28.

remote terminals in the field to do it."[9] Mr. Falcone participated in the Batch Hot Cut Forum as well and should be aware of his colleague's statements.

Q. PLEASE EXPLAIN MORE ABOUT WHAT TYPES OF ORDERS ARE ELIGIBLE FOR THE BATCH HOT CUT PROCESS AND WHY.

A. The *Triennial Review Order* states that the entire purpose of adopting a batch hot cut process is to capture the efficiencies that result from undertaking simultaneously the batch cut activities for all lines affected by a given batch order.[10] Qwest's proposed batch hot cut process therefore supports provisioning of lines that can be efficiently and inexpensively completed in batches of multiple orders, not those that require individualized handling. To be eligible for the BHCP, therefore, a migration order must involve the reuse of facilities and must not involve an outside technician dispatch (as IDLC migrations *always* do) because such a dispatch is by definition work that is specific to an individual order and that cannot be efficiently performed with other orders. The orders that can be included in a BHC are:

- Conversions from UNE-P to a stand-alone unbundled loop.
- Migration from one CLEC's UNE-P to a different CLEC's Loop, if the CLECs coordinate and facilities are reused.
- CLEC-to-CLEC loop migrations, so long as the losing CLEC does not sabotage the winning CLEC by holding on to the loop facilities to prevent their reuse. (If the CLECs do not coordinate the disconnect and subsequent reuse, Qwest may have to dispatch a technician to the field. MCI's and AT&T's suggestion that

[9] Transcript of Batch Hot Cut Forum December 2, 2003 at 381:16-19.

[10] *Triennial Review Order* ¶ 489.

Qwest will not include CLEC-to-CLEC migrations in the BHCP as a matter of course is simply incorrect.)[11]

- Conversions from resale to a stand-alone unbundled loop.
- Migrations from Qwest retail to a CLEC's stand-alone unbundled loop.

Also, a CLEC is able to combine any of these types of orders into a single BHC.

Q. DO THE CLECS THAT INSIST ON INCLUDING IDLC LINES IN THE BATCH HOT CUT PROCESS EXPLAIN HOW SUCH MIGRATIONS CAN BE CONSOLIDATED, GIVEN THAT THEY REQUIRE INDIVIDUAL FIELD DISPATCHES?

A. No. They simply assert that IDLC lines must be included without explaining how this can be done using the existing technology deployed in Qwest's network today (as opposed to some non-existing theoretical electronic loop provisioning architecture discussed below).

Q. THE CLECS SAY THAT OTHER RBOCS CONVERT UNE-P LOOPS CURRENTLY WORKING OVER IDLC AS PART OF THEIR BATCH HOT CUT PROCESS.[12] IS THIS CORRECT?

A. To the extent other ILECs are saying they are including IDLC loops in their batch hot cut processes, they are including them in name only. Even if IDLC loops are nominally within the umbrella of the other ILECs' batch hot cut processes, they are always handled on separate tracks than other migrations in the process, often at different hours and intervals and usually at different prices. Both SBC and BellSouth, for example, impose additional

[11] *See* Lichtenberg/Gates at 43:1016-21; Falcone at 21:9-14.

[12] *See* Lynott at 10:197-201; Lichtenberg/Gates at 22:516-33.

non-recurring charges and restrictions on these IDLC migrations that result in IDLC loops effectively being migrated on an individual rather than a consolidated basis, no matter what label these carriers put on the process.

Verizon, much like Qwest, has found that by including IDLC, the nonrecurring charge for the BHC option would have to increase in order to cover the cost of dispatching a technician to field in order to perform the facility transfer. In fact, in Florida and California, Verizon has submitted a cost study for an IDLC surcharge in order to cover the cost of this additional work. In California, the proposed surcharge is $150.49 for the first loop and $131.00 for each additional at the same location. In Florida, the surcharge is a flat $111.85 for each UNE-P over IDLC conversion.

Q. GIVEN THAT QWEST WILL CONTINUE TO PROVISION LOOPS UTILIZING IDLC TECHNOLOGY WITH THE EXISTING HOT CUT PROCESSES, WHAT STRATEGY DO THE CLECS USE TO TRY TO MANUFACTURE AN IMPAIRMENT?

A. The CLECs argue that Qwest's IDLC has inherent problems that make use of the existing provisioning processes risky. There is no basis for these statements. I will address each of their questions below.

Q. MCI STATES THAT LOOPS PROVISIONED OVER IDLC "FALL OUT" OF THE NORMAL PROVISIONING PROCESS AND ARE PROVISIONED USING AN

"EXTREMELY EXPENSIVE AND TIME CONSUMING MANUAL PROCESS."[13] ARE THE ISSUES RAISED IN THIS TESTIMONY VALID?

A. No. The provisioning process for IDLC is different than other analog loops; however, the provisioning interval and associated costs using either the Basic or Coordinated installation options are identical to all other analog loops. Qwest has also shown that it can consistently provision such loops at a high degree of quality. For example, in the section 271 proceeding in Minnesota, in a wire center with a substantial percentage of IDLC lines, Qwest demonstrated that it was able to consistently provision in excess of 97% of loops over IDLC within standard intervals.[14]

Q. MCLEOD STATES THAT CUSTOMERS ARE DOWN FOR UP TO FOUR HOURS WHEN A CONVERSION FROM IDLC TO COPPER OR UDLC TAKES PLACE.[15] PLEASE SHARE WITH THIS COMMISSION YOUR EXPERIENCE WHEN YOU HAVE PERFORMED THESE TYPES OF CONVERSIONS.

A. I have performed tasks such as this on multiple occasions. Let me explain what occurs when a line is converted from one platform (IDLC) to another (copper or UDLC). At the feeder distribution interface ("FDI"), the field technician tests the new feeder (F1) facility. This test is intended to ensure that the new loop is acceptable between the FDI and the serving central office; therefore, the technician will conduct a battery of tests to make this

[13] Lichtenberg/Gates at 15:387-389.

[14] *Commission Investigation into Qwest's Compliance with Section 271(c)(2)(B) of the Telecommunications Act of 1996*: Checklist Items 1, 2, 4, 5, 6, 11, 13 and 14; PUC Docket No. P-421/CI-01-1371; OAH Docket No. 7-2500-14486-2. Qwest Corporation's Post-Hearing Brief Regarding Compliance with Checklist Items 1, 2, 4, 5, 6, 11, 13 and 14 of the Telecommunications Act of 1996, page 152.

[15] Lynott at 291-292.

determination. Upon concluding these tests, the technician will know that the facility is acceptable and will call translations requesting that the order be worked. Just like any other hot cut, the field technician will monitor the line to ensure that the end user is not talking and then move the cross-connect jumper to the new F1 facility; the F2 pair going to the end user is reused. By following this process, Qwest can ensure that the end user is down for a minimal period of time. In most cases where I performed this work activity, dial tone was already on the new F1 by the time I made it to the end user's location to test at the network interface device. In my experience, the outage times proclaimed by McLeod are certainly not commonplace.

Q. MCI AND AT&T CLAIM THAT IDLC IS AN IMPAIRMENT IN AND OF ITSELF.[16] PLEASE COMMENT.

A. MCI and AT&T are simply trying to lay the groundwork for Electronic Loop Provisioning ("ELP"). The FCC and the ALJ presiding over this case has already held that ELP will not be an issue for consideration in this docket.

Q. AT&T ASSERTS THAT CLECS ARE IMPAIRED BY ILECS USING ENHANCED LOOP TECHNOLOGY (IDLC).[17] IS THIS TRUE?

A. No. IDLC systems collect customers' loops and place them on a digital carrier system that terminates directly on the ILEC local switch. It is not possible to isolate an individual customer's loop in an IDLC system and transfer it to a CLEC. Contrary to AT&T's

[16] *See* Lichtenberg/Gates at 19:452-69; Falcone at 29:14-30:10.

[17] Falcone at 29:14-30:10.

assertion, when a CLEC signs up a customer that is served by such as system, Qwest will transfer the customer's line either to a copper loop, or to a Universal Digital Loop Carrier system ("UDLC") that allows the loop to be accessed at the main distribution frame and transferred to the CLEC. While AT&T asserts these options are "technically inferior" to IDLC,[18] ILECs and Qwest serve millions of customers with copper and UDLC loops.

Q. EVERYWHERE, MCI ARGUES THAT THERE IS THE POSSIBILITY FOR ERRORS WHEN A QWEST TECHNICIAN PERFORMS A LINE AND STATION TRANSFER ("LST") WHEN PROVISIONING A LOOP FORMERLY ON IDLC.[19] PLEASE DESCRIBE HOW A TECHNICIAN PERFORMS AN LST?

A. When a technician is dispatched to the field for a LST, one of the first tasks the technician performs is testing the new facility – either the copper pair or the channel of the UDLC. The testing performed is similar to the testing that occurs today in the Hot Cut process. The field technician will not perform the conversion until any issue is resolved if the loop the end user is being moved to tests defective. The resolution could include simply requesting a new facility or finding the trouble and repairing it. Therefore any issue with the facility the UNE-P IDLC end user is being moved to is addressed and resolved prior to the field technician or the central office technician performing his or her work. Even if some possibility for error theoretically exists, problems such as that described rarely occur in the real world.

[18] *Id.*

[19] Direct Testimony of Mark L. Stacy regarding Operational Impairment dated December 22, 2003 at 46:894-898.

Q. MCI CLAIMS THAT UDLC CONTRIBUTES TO MULTIPLE TRANSMISSION PROBLEMS ASSOCIATED WITH UNE LOOPS.[20] IS THIS AN ISSUE FOR QWEST?

A. No. Telcordia addressed this exact issue in Section 12.13.3 of its "Notes on the Network," which states that when an unbundled copper loop greater than 900 ohms or 12,000 feet long is terminated at the RT, the customer may encounter degraded voice frequency if UDLC is not installed. Because of this issue, Qwest places a line card of greater ohms to address this issue, a 1500-ohm card at the DLC for loops are greater than 900 ohms or 12,000 feet long. Thus, MCI's concern is without merit.

Q. MCI ALSO STATES THAT THE USE OF A UNE-LOOP STRATEGY INSTEAD OF A UNE-P STRATEGY WILL DEGRADE THE XDSL SERVICE OVER THE LINE. IS THIS TRUE?

A. No, it is not. It is well known and understood that the bandwidth of an xDSL is dependent on the characteristics of the loop such as its length.[21] It does not depend upon which carrier provides the switching. If the loop provides certain capabilities for Qwest, the same capabilities exist for the CLEC as well.

Q. DOES QWEST GUARANTEE DATA RATES TO END USERS ORDERING VOICE SERVICES TODAY?

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[20] *Id.* at 45:864-870.

[21] *Id.* at 45:871-46:886.

A. Qwest promises that the voice signal (300 – 3000 Hz) will support ringing voltage of approximately 98 volts AC and talking battery of approximately 54 volts DC and will be free of any service affecting troubles. In order for a Qwest end user to have a guarantee for data rates, they would be required to have a qualified loop, and then order an appropriate service such as DSL, 56Kbps, DSS or Basic rate ISDN. A CLEC would be required to do the same.

Q. FINALLY, MCI ARGUES THAT IDLC LOOPS ARE SO PREVALENT AS TO RENDER ITS EXCLUSION FROM THE BHCP A FATAL FLAW. SPECIFICALLY, MCI CITES A CENTRAL OFFICE IN WASHINGTON TO HAVE 100% OF THE LOOPS PROVISIONED VIA IDLC. WHAT HAS YOUR RESEARCH UNCOVERED?

A. The wire center MCI uses to illustrate this point is in Aberdeen WA – ABRDWA01C9T – which is really a tandem switch (hence the "T" on the end of the CLLI code). The transport between the switch and the tandem were run via IDLC; however, the actual percentage of IDLC in the office in question has an IDLC make-up of approximately 7% of the total loops.[22] Based on the information in the ICONN database, Qwest has a total of 2,487 loops (7%) working on IDLC and 6,911 (20%) working on UDLC in the Aberdeen office.

Q. MOREOVER, IS THE CENTRAL OFFICE EXAMPLE PROVIDED BY MCI A CENTRAL OFFICE IN WHICH QWEST SEEKS RELIEF?

[22] The ICONN database is located at http:www.qwest.com/cgi-bin/iconn/iconn_centraloffice.pl?function=3.

A. It is not. Therefore, MCI's point is moot.

Q. PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY ON WHETHER IDLC LOOPS SHOULD BE INCLUDED IN THE BATCH HOT CUT PROCESS.

A. The question is not whether CLECs will have access to such loops, but whether they will be provisioned through the batch hot cut process or the existing provisioning options that were reviewed and approved in connection with Qwest's section 271 application. Including such loops in the batch hot cut process would eliminate efficiencies and unnecessarily increase costs. The CLECs' real argument is that the existence of IDLC shows that CLECs will be operationally impaired if forced to use any unbundling process. However, the data shows that Qwest provisions such loops on a daily basis today, and does so at a high level of quality. The concerns raised by the CLECs simply do not have any basis in reality.

C. IMPASSE ISSUES P-6(A) AND (B) (LINE-SPLIT LOOPS)

Q. PLEASE DESCRIBE IMPASSE ISSUES P-6(A) AND (B) AGAIN.

A. Line splitting is an arrangement where one CLEC provides voice service and a second CLEC provides DSL over a UNE-P purchased from Qwest. The impasse issue is whether the proposed batch hot cut process can be used to convert an existing line-splitting arrangement into a loop-splitting arrangement, in which the voice CLEC obtains a stand-alone unbundled loop from Qwest and connects it to its own circuit switch, while arranging for a second CLEC to provide DSL over the high-frequency portion of that loop. Because these conversions are idiosyncratic and require additional work at different locations in the

central office from where ordinary hot cuts are taking place, line-splitting arrangements are not "batchable" and are thus not eligible for conversion via the batch hot cut process. (These arrangements can continue to be migrated via Qwest's existing provisioning options, however.)

MCI and Covad argue that line-splitting arrangements should be eligible for the batch hot cut process. Covad's batch hot cut testimony also calls for a number of changes to Qwest's OSS for *non-batch hot cut* conversions in order to implement the FCC's line-splitting mandates. As discussed below, these line-splitting OSS implementation questions are not properly part of the nine-month cases at all; the *Triennial Review Order* expressly committed these questions to the Change Management Process.

Q. DOES COVAD CONCEDE THAT THE CONVERSION OF A LINE-SPLITTING ARRANGEMENT REQUIRES ADDITIONAL WORK THAT IS NOT REQUIRED WHEN CONVERTING AN ORDINARY UNE-P?

A. Yes. Covad witness Michael Zulevic admits that Qwest must make at least one additional cross-connect for each line-splitting arrangement and perform a separate data continuity check on the circuit.[23] This actually understates the additional work required, as Mr. Zulevic's own network diagrams show. Mr. Zulevic's diagrams presented as Batch Hot Cut Exhibit 4 and attached hereto as Exhibit DP/LN-29**,** demonstrate that there are multiple ways that line- and loop-splitting arrangements might be configured, and the central office technicians could be required to add and remove as many as four cross-connects depending

[23] Direct Testimony of Michael Zulevic dated January 23, 2004 ("Zulevic") at 16:23-26.

on the scenario. Moreover, as those same diagrams show, there is frequently additional work during the actual migration: in some scenarios (examples 1, 2, and 4 in Mr. Zulevic's diagram), there are in fact two different lifts and lays at two separate locations in the central office (the COSMIC™ or MDF frame and the line splitter located in a common area) instead of just one. Where the CLEC uses a Qwest-owned common line splitter, the Qwest COTs would have to leave the COSMIC™ or MDF after the first lift and lay, travel to the location of the common splitter for a second lift and lay, and then travel back to COSMIC™ or MDF for the next order in the batch. A CLEC could avoid the need for a second Qwest lift and lay if it maintained its own line splitter in its own collocation space and performed the second lift and lay itself, but that would require additional coordination between Qwest and the CLEC in the middle of a batch. In short, the extra prewiring, extra lifts and lays, extra movement within the central office, and extra coordination that would be required on individual conversions of line-splitting arrangements make these conversions impossible to consolidate or sequence with other migrations and would destroy the efficiencies that are the point of batching hot cuts in the first place.

Q. DOES MCI DISPROVE THAT THE CONVERSION OF LINE-SPLITTING ARRANGEMENTS REQUIRES ADDITIONAL WORK STEPS?

A. No. MCI's *entire* testimony about what central office steps would be required to migrate a line-splitting arrangement is as follows: "During the Batch Hot Cut Forum, Mr. Zulevic from Covad explained to the parties how simple actual cut of [the] line split loop would

be."[24] But the very diagrams from the Forum that MCI cites demonstrate that these cuts would require additional work in additional locations that would not be required for an ordinary hot cut.

Q. COVAD SUGGESTS THAT THE FACT THAT LINE SPLITS CANNOT BE CUT USING THE BHCP "ENSURES" CLECS WILL NOT BE ABLE TO MIGRATE THEIR EXISTING CUSTOMERS OR WIN AND SERVE NEW CUSTOMERS WITH LOOP-SPLITTING ARRANGEMENTS.[25] IS THIS RIGHT?

A. Not at all. The fact that line-splitting arrangements require extra steps to migrate and are so few and scattered may prevent them from being converted as part of the new batch process, but they can continue to be converted using Qwest's existing conversion options. Qwest's Migration and Conversion Overview procedural PCAT (provided at Exhibit DP/LN-21 to our direct testimony) describes the various options that are available, and there is a current provisioning option to cover every migration scenario that Covad describes.

At the same time, I note that Covad agreed with Qwest at the Batch Hot Cut Forum that it would not be possible in any event to include as part of the batch hot cut process conversions where the CLEC wanted to add a new loop-splitting arrangement. A hot cut including a new loop-splitting arrangement would require even more one-off, line-by-line work than conversion of an existing line-splitting arrangement would, including additional

[24] Lichtenberg/Gates at 28:650-52.

[25] Zulevic at 9:23-10:5.

central office wiring, line tests, and field dispatches. Covad conceded at the Forum that because of the additional one-off work required for a new loop-splitting arrangement (including "quite a few cross connects . . . that would need to be made"), it would be inappropriate to include such conversions as part of the batch hot cut process.[26]

Q. COVAD SUGGESTS THAT IF A CLEC CUTS A LINE-SPLITTING ARRANGEMENT TO A STAND-ALONE UNBUNDLED LOOP, THE DATA SERVICE "WILL BE TAKEN DOWN FOR AT LEAST A FEW DAYS."[27] IS THIS TRUE?

A. No, and Covad should know better. On July 1, 2003, Covad submitted a CR to the Change Management Process requesting that the outages (down-time) for conversions from a line shared to line split loop to a UNE-L loop splitting arrangement be reduced.[28] During the June 21, 2003, clarification meeting for this CR, John Berard of Covad stated that 45 minutes would be an acceptable period of downtime.[29] During the October 15, 2003, CMP Product/Process Meeting, Qwest confirmed that it would meet Covad's request of a maximum of 45 minutes of downtime,[30] and Qwest modified its processes and procedures accordingly. On October 7, 2003, Qwest updated its Loop Splitting, Line Splitting, and Line Sharing/Shared Loop PCATs to include this accommodation. The Provisioning and

[26] Transcript of Batch Hot Cut Forum, December 2, 2003 at 443:9-444:19 (colloquy between Mr. Zulevic and Mr. Steese).

[27] Zulevic at 8:4-5.

[28] CMP CR PC070103-3.

[29] Qwest, Product Process CMP Meeting Distribution Package Jan. 21, 2004, page 85, at http://www.qwest.com/wholesale/cmp/teammeetings.html.

[30] *Id.*

Installation section of the Loop Splitting PCAT now states: "For Loop Splitting, the Migration activities will not exceed forty five (45) minutes."[31] In addition, Qwest communicated this PCAT update to the CLECs with a notification on October 6, 2003.[32]

Q. COVAD ASKS THAT QWEST BE ORDERED TO CHANGE ITS OSS TO PERMIT CLECS TO ORDER A LINE-SPLITTING ARRANGEMENT WITH A SINGLE LSR.[33] PLEASE RESPOND.

A. This is an issue about Qwest's general OSS that has nothing to do with the batch hot cut process. It is also an issue that is beyond the scope of this docket: the *Triennial Review Order* specifically directed carriers to raise these kinds of OSS-related line-splitting implementation questions in the Change Management Process, not the already crowded nine-month cases. Indeed, as Covad's witness concedes,[34] the very OSS changes that Covad asks for are already teed up as Change Requests in the CMP, and they are *already* slated for implementation in April and October of this year. In other words, Covad's advocacy is moot.

Q. PLEASE EXPLAIN WHY YOU SAY COVAD'S OSS REQUESTS ARE BEYOND THE SCOPE OF THIS DOCKET.

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[31] The Loop Splitting, Line Splitting, and Line Sharing/Shared Loop PCATs are available on the Qwest web site at http://www.qwest.com/wholesale/pcat/loopsplitting.html, http://www.qwest.com/wholesale/pcat/linesplitting.html, and http://www.qwest.com/wholesale/pcat/linesharing.html, respectively.

[32] Notification number PROD.10.06.03.F.03570.PCATs_Update.

[33] Zulevic at 11:24-12:9.

[34] Zulevic at 18:1-18.

A. The 485-page *Triennial Review Order* discusses many topics in addition to the nine-month batch hot cut and mass-market switching cases. An entirely different section of the *Order* (the section on loops) expands the FCC's prior line-splitting mandate and discusses the need for ILECs to update their OSS to implement that mandate.[35] But the FCC did not make the implementation of line splitting a part of the nine-month mass-market switching and batch hot cut cases, or even mention this subject in laying out the roadmap for these state commission proceedings. On the contrary, the FCC expressly instructed carriers to resolve line splitting implementation questions *outside* those cases: "[W]e encourage incumbent LECs and competitors to use existing state commission collaboratives and change management processes to address OSS modifications that are necessary to support line splitting."[36] Even MCI acknowledges the *Triennial Review Order*'s holding.[37]

The OSS changes that Covad advocates are exactly the type of line-splitting implementation matters that the FCC commits to the Change Management Process. (Indeed, as discussed below, Covad's proposed OSS changes are *already* in the process of being adopted through the CMP.) The ALJs presiding over the *TRO* dockets in Arizona has already ruled that the "FCC's Triennial Review Order did not require line splitting to

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[35] *See Triennial Review Order* ¶ 252.

[36] *Id.* The FCC defines "line splitting" as "the scenario where one competitive LEC provides narrowband voice service over the low frequency of a loop and a second competitive LEC provides xDSL service over the high frequency portion of that same loop." *Triennial Review Order* ¶ 251. The FCC thus uses the term to cover *both* what Qwest and Covad ordinarily call "line splitting" and "loop splitting."

[37] Lichtenberg/Gates at 26:619-21. Although MCI cites the *Triennial Review Order*'s ruling, it disingenuously suggests that *this* is the collaborative the FCC had in mind. *Id.* MCI is ignoring the *Triennial Review Order*'s specification of previously "*existing* collaboratives" such as the "change management processes" as that other forum. *Triennial Review Order* ¶ 252. Obviously, the FCC could not have predicted the creation of the Batch Hot Cut Forum at the time it drafted the *TRO*.

be addressed in the nine-month docket" and directed Covad not to raise the issue,[38] and the ALJ recently granted Qwest's motion to strike the testimony from Covad that addresses the very same OSS issue that Mr. Zulevic addresses here.[39] Similarly, the ALJ presiding over Oregon's *TRO*'s cases, ruled that the OSS modifications were not properly a part of these proceedings.[40]

Q. WHY DO YOU SAY THAT COVAD'S REQUEST FOR THESE OSS CHANGES IS MOOT?

A. All of the line-splitting OSS changes Covad requests were teed up as specific change requests in the Change Management Process (where these issues belong), and they either have been implemented already or are slated for implementation in April and/or October of this year. Qwest has already added the capability for a CLEC to submit a single LSR for new voice and data service for Resale Qwest DSL, UNE-P with Qwest DSL, and Line Sharing products in IMA Release 13.0. Qwest will add single LSR capability for new voice and data for Line Splitting and Loop Splitting in IMA Release 15.0, scheduled for production on April 19, 2004.[41] Upon implementation, a CLEC will be able to submit a single LSR for new voice and data service for Line Splitting and Loop Splitting products.

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[38] Procedural Order, *In the Matter of ILEC Unbundling Obligations as a Result of the Federal Triennial Review Order,* Docket No. T-00000A-03-0369, at 5-7 (Ariz. Corp. Comm'n filed Nov. 6, 2003).

[39] *See* Procedural Order, *In the Matter of ILEC Unbundling Obligations as a Result of the Federal Triennial Review Order,* Docket No. T-00000A-03-0369, at 3 (Ariz. Corp. Comm'n Feb. 10, 2004).

[40] *See* Ruling, *Matter of the Investigation To Determine, Pursuant to Order of the Federal Communications Commission, Whether Impairment Exists in Particular Markets if Local Circuit Switching For Mass Market Customers Is No Longer Available As An Unbundled Network Element,* Docket No. UM 1100, at 6 (Nov. 14, 2003).

[41] CMP CR SCR030603-01.

Qwest submitted a CR to CMP for the last piece of the puzzle - single-LSR conversion for existing arrangements with or without number portability - on December 3, 2003.[42] The CLEC community finished ranking all the proposed CRs for IMA Release 16.0 on February 5, 2004, and ranked this CR second out of fifty. That ranking means that the last of the OSS changes Covad wants will likely be implemented with the first 10,000 hours of development work done on IMA Release 16.0. (Qwest has allocated 30,000 development hours total to this release.)

IMA Release 16.0 is scheduled for release in October 2004. That means that if the CMP is allowed to run its course, Covad will likely have the last of the line-splitting-related OSS changes it advocates in place well before the December 2, 2004 date by which CLECs may no longer obtain UNE-P in the event of a "no impairment" finding. The fact that the CMP has already been able to care for Covad's requests proves that the *Triennial Review Order* correctly assigned questions like these to that process in the first place.

D. IMPASSE ISSUE P-8 (CONVERSIONS REQUIRING AN INDIVIDUAL FIELD DISPATCH)

Q. PLEASE DESCRIBE IMPASSE ISSUE P-8 AGAIN.

A. Lines that require the dispatch of a technician to the field in order to process and complete a conversion cannot be part of the batch hot cut process because their conversions cannot be combined and consolidated with other migrations. The whole point of creating a batch

[42] CMP CR SCR120303-01.

process, according to the *Triennial Review Order*, is to capture the efficiencies that result when provisioning activities are "undertaken simultaneously for all lines affected by a given batch order."[43] By definition, a field dispatch cannot be performed for all loops in a given batch simultaneously.

At the Batch Hot Cut Forum, Eschelon argued that conversions requiring field dispatches should be included as part of the batch hot cut process, no matter how much individual work was required on these lines. No other CLEC at the Forum adopted Eschelon's position. Eschelon has not, however, filed any batch hot cut testimony pursuing this issue.

Q. DO ANY CLECS ADDRESS IMPASSE ISSUE P-8 IN THEIR TESTIMONY?

A. Not directly. McLeod does suggest, however, that "Customers requesting new service at a location where there are no facilities to reuse should also be included in" the batch hot cut process, which asks for something similar.[44]

Q. CAN REQUESTS FOR NEW SERVICE WHERE THERE ARE NO FACILITIES TO REUSE BE ACCOMMODATED AS PART OF THE BATCH HOT CUT PROCESS?

A. No. McLeod's request is unreasonable for the very reason described above. Orders for new service where facilities cannot be reused may require the dispatch of field technicians to one or more locations to run new cross-connects or potentially even extend a new pair within the buried service wire. The economies from "batching" are lost when some of the

[43] *Triennial Review Order* ¶ 489.

[44] Lynott at 4:65-7.

lines in the batch require individual truck rolls. McLeod does not explain how orders like these requiring individual attention and separate dispatches can be included without losing the efficiencies of consolidated handling; it simply asserts they should be.

E. IMPASSE ISSUE P-10(D)(4) (LSR REQUIREMENT)

Q. PLEASE DESCRIBE IMPASSE ISSUE P-10(D)(4) AGAIN.

A. Under the batch hot cut process, CLECs would submit LSRs just as they do for orders today. While all the other CLECs at the Batch Hot Cut Forum accepted this requirement, Eschelon suggested that Qwest should be required to accept orders submitted by spreadsheet. However, Eschelon has not pursued this issue by filing batch hot cut testimony or given any details of an alternative proposal.

Q. DO ANY CLECS DISAGREE WITH QWEST'S POSITION IN THEIR TESTIMONY?

A. No, and this is not surprising. LSRs are the industry standard.

F. IMPASSE ISSUE P-11 (ABILITY TO SPECIFY ORDER IN WHICH LINES ARE CUT OVER)

Q. PLEASE DESCRIBE IMPASSE ISSUE P-11 AGAIN.

A. As described above, many of the time and cost savings in the batch hot cut process come from sequencing the lifts and lays in a batch by their locations on the central office frames so as to minimize the technicians' movement throughout the central office. At the Batch Hot Cut Forum, Eschelon demanded the right to specify the order in which the individual

lines in a batch would be cut over regardless of their location in the central office. No other CLEC endorsed this position at the Forum. Eschelon has not filed batch hot cut testimony pursuing this issue any further.

Q. DO ANY CLECS DISAGREE WITH QWEST'S POSITION IN THEIR TESTIMONY?

A. No. This issue should be decided in favor of Qwest.

G. IMPASSE ISSUE P-12 (PENDING CR FOR MIGRATION BY TELEPHONE NUMBER AND STREET ADDRESS NUMBER)

Q. PLEASE DESCRIBE IMPASSE ISSUE P-12.

A. MCI has submitted a CR to the Change Management Process seeking OSS modifications as part of IMA Release 16.0 that will allow to CLECs to submit orders to migrate UNE-L customers by submitting the customers' telephone number (TN) and street address number (SANO).[45] This is a general systems change that has no specific connection to the batch hot cut process and would apply to ordinary migrations and hot cuts as well.

Qwest has never opposed MCI's CR on the merits. However, MCI sought to have Qwest agree at the Batch Hot Cut Forum that it would implement this CR regardless of how the other CLECs prioritized it in the CMP voting. Qwest believed instead that the CMP should run its normal course, since the voting of the CLEC community as part of the prioritization

[45] CMP CR SCR120403-01.

process yields the most accurate assessment of whether CLECs really want or need a proposed OSS change.

Q. HAVE THE CLECS NOW VOTED ON MCI'S CR?

A. Yes, and hopefully this impasse issue is now moot. The CLECs finished their voting on all the proposed CRs for IMA Release 16.0 on February 5, 2004, and it ranked MCI's CR third out of fifty. That ranking means that MCI's OSS change will likely be implemented with the first 10,000 hours of development work done on Release 16.0. That release is scheduled for October 2004. That means that if the CMP is allowed to run its course, MCI is virtually certain to have migration by TN and SANO in place well before the December 2, 2004 date by which it could no longer obtain UNE-P in the event of a "no impairment" finding.

H. IMPASSE ISSUE P-21(C) (ERRORS IN THE RLDT)

Q. PLEASE DESCRIBE IMPASSE ISSUE 21(C).

A. At the Batch Hot Cut Forum, Eschelon expressed a concern that there could be errors in the Raw Loop Data Tool ("RLDT") that CLECs use to determine the makeup of the loops they wish to convert, and that as a result of these errors, a CLEC might unintentionally submit an order as part of a batch for a loop that was ineligible for conversion as part of the batch hot cut process (for example, one served over IDLC) and thereby jeopardize the status of the batch. (Although Qwest asked Eschelon to provide specific examples of these errors, Eschelon never did.) While Eschelon wanted some kind of mid-batch escalation process to determine when the errors were the CLEC's fault and when they were Qwest's, Qwest

proposed a simpler "no fault" solution that was ultimately more beneficial to the CLECs: as long as a batch started with at least 25 lines, Qwest would continue to process the batch even if some of the lines later proved ineligible for conversion, just as long as at least 20 qualifying lines remained. This solution proved satisfactory to the other CLECs at the Forum. Eschelon did not submit batch hot cut testimony to pursue this issue any further.

Q. DO ANY CLECS DISAGREE WITH QWEST'S POSITION IN THEIR TESTIMONY?

A. No. This issue should be resolved in Qwest's favor.

I. IMPASSE ISSUES P-23 AND P-24 (STATUS TOOL AND CLEC NOTIFICATION OF BATCH COMPLETION)

Q. PLEASE DESCRIBE IMPASSE ISSUES P-23 AND P-24.

A. Qwest's proposed batch hot cut process gives CLECs a choice of two options for receiving notification that the cuts of their lines have commenced and completed. A CLEC may use the existing functionality in its switch to "trap and trace" the line and detect the Qwest COT's pre- and post-cut ANI tests, thereby receiving instantaneous notifications of when the migration is about to begin and when it is complete. Qwest has also proposed a web-based Batch Status Tool ("BST") that will query the Work Force Administrator database ("WFA") every 15 minutes and report completion information or changes in order status information once the query completes, which typically takes up to another 15 minutes depending on what other action in WFA is taking place. (The BST will also provide other information such as the order status and the results of the lines' dial tone checks on the

prewire date.) Qwest proposed the BST at the specific request of the CLECs at the Batch Hot Cut Forum, who did not want to depend on receiving e-mails "pushed" from Qwest (as Qwest had originally proposed) but instead wanted a central location where they could access provisioning information.

The impasse issues vary by CLEC. MCI stated at the Forum that it supports the web-based system proposal, particularly if it can use it in conjunction with Trap and Trace.[46] However, MCI asks that the BST guarantee updates at least every 10 to 15 minutes instead of every 15 to 30.[47] AT&T disagrees with MCI and argues that any status tool that requires AT&T to monitor a web site is too burdensome; instead, it wants Qwest to "push" the information to it via e-mail or one of the OSS electronic interfaces.[48] McLeod also wants the BST to be integrated into Qwest's existing OSS interfaces.[49] As we discuss below, this last impasse issue should go away, since Qwest has determined after further investigation that it can implement BST through IMA.

Q. HOW DO YOU RESPOND TO MCI'S CONCERNS?

A. MCI's entire argument consists of a two-line assertion that the BST should update every 10 to 15 minutes without any analysis of whether this is even technically possible, given the way information is pulled from WFA. The BST is in the initial stages of development, and its functionality may change as development proceeds. Qwest has already taken steps to

[46] *See* Exhibit DP/LN-2, Issue P-24.

[47] Lichtenberg/Gates at 30:692-98.

[48] Falcone at 28:2-6.

[49] Lynott at 140-42.

address MCI's concern by proposing to increase the frequency with which the BST queries WFA to every 15 minutes, which is within the range recommended by MCI. Qwest's current proposal reflects its best understanding of what is technically possible.[50] Qwest notes that CLECs will be able to request further changes to the BST after it is implemented via the Change Management Process ("CMP"), where the entire CLEC community will be able to evaluate proposed changes and vote on whether they are worth undertaking.

Q. WHAT IF A CLEC NEEDS NOTIFICATION INFORMATION FOR A PARTICULAR CUSTOMER FASTER THAN THE BST CAN DELIVER IT?

A. Given that lifts and lays will be taking place starting at 3:00 AM when customers are not using their lines, Qwest expects that the BST's update intervals will prove sufficient for the vast number of conversions. But if a CLEC believes that a faster notification is necessary for particular migrations, it has the ability to receive *instantaneous* notification simply by using the existing "trap and trace" functionality already resident in its switches. As noted above and in our direct testimony, MCI, AT&T, and McLeod have all stated that "trap and trace" is likely a workable option for them.[51]

[50] WFA is a major Qwest provisioning system that is frequently accessed and updated by Qwest personnel and systems. While queries such as the one Qwest is proposing are time consuming, given the current development stage and system workload, a 15 minute query-time currently appears feasible. Qwest will, however, continue to develop this functionality with the goal of the shortest query time practicable.

[51] *See, e.g.,* e-mail from John F. Finnegan, AT&T, to Carolyn Hammack, Qwest (Jan. 21, 2004) (reporting that AT&T was still considering trap and tract but "believe[s] it had some potential to work"); e-mail from Patty C. Lynott, McLeod, to Carolyn Hammack, Qwest (Jan. 21, 2004) ("reporting that McLeod "believes this could be a viable option") (cited in**:** Pappas/Notarianni at 63:18-64:2).

Q. PLEASE RESPOND TO AT&T'S CONCERN THAT MONITORING THE BST REQUIRES TOO MUCH WORK ON THE CLEC'S PART.

A. First, the other CLECs simply do not agree. MCI repeatedly cites Qwest's development of the BST favorably as an example of where "Qwest appears to have made movement in the right direction by listening to the concerns of the CLECs and including some recommended features."[52]

Second, AT&T itself has flipped back and forth on the question of what kind of notification - a push solution like e-mail or a pull solution like the BST - it would find sufficient. At the Batch Hot Cut Forum, Qwest originally proposed notification via e-mail, and AT&T vigorously objected, asking Qwest instead to develop a "systematic solution" by which "Qwest doesn't have to manually create an e-mail to send to us every 30 minutes, and CLECs don't have to deal with this e-mail in a manual fashion."[53] Qwest created just such a "systematic solution" - the BST - at AT&T's and other CLECs' request. Now, AT&T complains that it "will have to constantly review the web-based tool to confirm order completion."[54] AT&T does not explain why it is so much more burdensome for it to refresh a status page on a website than to monitor an e-mail inbox for a message or wait for some other kind of electronic notification. Nor does AT&T account for the fact that a tool like the BST provides CLECs with a greater ability to sort information and automate its processing of the posted data (via a screen scrape or download of the web information)

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[52] Lichtenberg/Gates at 13:333-37.

[53] Transcript of Batch Hot Cut Forum, December 3, 2003 at 534:1-11 (Finnegan, AT&T).

[54] Falcone at 28:4-5.

than an order-specific e-mail message could. The fact that other CLECs have affirmatively *endorsed* Qwest's BST proposal should make clear that AT&T's purported concerns are overstated.

Q. PLEASE RESPOND TO AT&T'S AND MCLEOD'S SUGGESTION THAT THE BST BE INTEGRATED INTO IMA EDI AND IMA GUI.

A. Qwest is at the initial stages of developing the BST, and the contours of the BST are continuing (and will continue) to develop. Qwest now believes it can implement the changes AT&T (and McLeod) want, which should eliminate this as an impasse issue. After the Batch Hot Cut Forum, Qwest further investigated using both CEMR and IMA as platforms for the BST. While initial results, as discussed in our direct testimony, indicated that CEMR was the most feasible platform, subsequent investigations revealed that implementation through IMA (EDI and GUI) was also technically possible. Qwest now agrees to implement the BST through IMA. As a result, Qwest has included this information in the two CRs it submitted to CMP and will discuss its proposed implementation solution further when it presents these CRs to the CMP community on February 19, 2004. This issue is accordingly no longer at impasse.

J. IMPASSE ISSUE P-27(C) (LEVEL OF MECHANIZATION)

Q. PLEASE DESCRIBE IMPASSE ISSUE P-27(C) AGAIN.

A. As the FCC recognized, a hot cut is an inherently manual process requiring a physical "lift" of a line from a Qwest frame and a "lay" of that facility onto a CLEC frame. The *Triennial Review Order* directs incumbent LECs to adopt batch hot cut processes that realize

efficiencies and cost savings from consolidating large numbers of hot cuts; however, the batch process the FCC contemplated would still have the manual hot cut at its core.

In direct contradiction to the FCC's instruction, AT&T and MCI have both proposed forms of electronic loop provisioning that would require Qwest to spend billions of dollars on replacing its plant to avoid the manual hot cut. The FCC specifically rejected such proposals, and this Commission has as well.

1. Electronic Loop Provisioning ("ELP")

Q. HAS THIS COMMISSION ALREADY REJECTED AT&T'S ELECTRONIC LOOP PROVISIONING PROPOSAL?

A. Yes. AT&T's witness originally spent over a third of his testimony rehashing an electronic loop provisioning proposal that AT&T had originally presented to the FCC, and the FCC specifically "decline[d] to require"[55] in the *Triennial Review Order* on the ground that it was not "currently feasible."[56] The ALJ agreed that it was inappropriate for AT&T to present this proposal again here and struck the relevant portions of AT&T's testimony from the record on February 13, 2004.[57]

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[55] *Triennial Review Order* ¶ 491.

[56] *Id.* at ¶ 488 n. 1517.

[57] Order No. 10, *Petition of Qwest Corporation To Initiate a Mass-Market Switching and Dedicated Transport Case Pursuant to the Triennial Review Order,* Docket No. UT-033044 (Feb. 13, 2004).

Q. MCI HAS ADVOCATED A GR-303 LOOP UNBUNDLING PROPOSAL.[58] IS THIS DIFFERENT FROM AT&T'S ELP PROPOSAL IN ANY RELEVANT RESPECT?

A. No. MCI's GR-303 proposal is just another way to request that the Commission require Qwest to deploy a form of ELP throughout its network. Like AT&T's ELP proposal, MCI's proposal would require Qwest to spend billions of dollars to replace and upgrade its network across its region. And MCI's proposal is no more technically feasible. Exhibit DP/LN-28 attached to our direct testimony discusses the technical issues of GR-303 in much greater detail.

Q. EVEN ASSUMING MCI'S FORM OF ELP COULD BE DEPLOYED, ARE THERE TECHNICAL AND PRACTICAL LIMITATIONS TO MCI'S PROPOSAL?

A. Yes. Qwest does not use GR-303 for unbundling because the architecture is not scalable beyond certain limits; the architecture does not have the capacity to handle the universe of CLECs and their activity. The original GR-303 standard assumed 8 interface groups maximum. However, no vendor that I am aware of has met this number. The Litespan system, for example, has only 4 virtual interface groups ("VIGs"), meaning that it could provide unbundled loops to only four CLECs at a time at most. Qwest simply cannot offer unbundling to some CLECs and not others. Thus, this architecture is not a viable option.

Moreover, MCI does not take into account that IDLC unbundling using GR-303 requires a single DS-1 handoff from the CO multiplexer directly to the CLEC collocation. MCI incorrectly assumes that by implementing a replacement network of GR-303, Qwest would

[58] Stacy at 50:960-53:1027.

be able to provide unbundling for all CLECs. MCI does not disclose that this would only be an alternative for those CLECs having a "critical mass" of subscribers served by the remote terminal, *i.e.*, 24 subscribers to a virtual interface group ("VIG"). Not all CLECs would have 24 subscribers out of a remote terminal. It appears that MCI is suggesting an architecture that assumes a "one size fits all" scenario.

Q. HOW MUCH WOULD MCI'S PROPOSAL COST TO IMPLEMENT?

A. I do not have a precise figure, but the amount is certainly enormous. The number of Remote Terminals ("RT") on more than 22,400 locations across Qwest's region would need to be changed out. At a conservative estimate of $150,000 per location just for the replacement of the RTs,[59] Qwest would be looking at a capital investment in excess of $3 billion dollars. This amount increases when considering those locations where the existing UDLC is fed by copper facilities, since those facilities would have to be replaced with fiber facilities.

Q. WILL A GR-303 ARCHITECTURE DECREASE THE NEED FOR TECHNICIAN DISPATCH AND ALLOW ELECTRONIC PROVISION AS SUGGESTED BY MCI?

A. No. Even if a CLEC has a VIG assigned to it, the EMSs associated with these systems are not yet partitionable. In other words, the "brains" of the system are static and cannot handle multiple users. There are no vendors that I am aware of that provide a multi-carrier,

[59] This includes only the capital cost of electronics at the RT and other costs associated with the placement of the new RT.

partitionable EMS. Moreover, in this architecture, the fiber between the central office and the RT must be multiplexed from optical to electrical and then on to the DS1 level. This is ultimately the same thing as DS1 to DS0 "grooming." Both architectures require electronics to hand it off at the DS1 or DS0 level. Therefore, Qwest may still have to have to dispatch a technician to the field to unbundle loops and incur the labor cost associated with making the cross-connects at the RT on the CLEC's behalf.

Q. PLEASE SUMMARIZE YOUR TESTIMONY ON AT&T'S AND MCI'S ELP PROPOSALS.

A. MCI's ELP proposal is fatally flawed. It is an unproven technology that would cost billions of dollars to implement, even if it proved workable. There is no need to deploy this ridiculous proposal because Qwest has developed a process for batch hot cuts that works, and works well. Moreover, the FCC has specifically rejected the concept of ELP at this point in time.

2. Automatic Distribution Frames ("ADF") or Robotic Frames

Q. MCI SUGGESTS THAT ROBOTIC FRAMES REPRESENT THE STATE OF THE ART.[60] SINCE MCI IS BUILDING ITS NETWORK FROM SCRATCH, PRESUMABLY IT USES STATE OF THE ART TECHNOLOGY. HAS MCI OR ANY OTHER CLEC DEPLOYED THIS TYPE TECHNOLOGY IN THEIR NETWORKS?

[60] Lichtenberg/Gates at 32:761-33:774.

A. In the hundreds of collocations I have observed, both new and existing, I have not seen and am not aware of any CLEC that has deployed a robotic frame or ADF as part of their interconnection architecture. It is ironic that a company claiming to be building a network from the ground up would not implement the same type of equipment it asks the Commission to order Qwest to provide.

Q. PLEASE COMMENT ON MCI'S EXCERPT FROM THE TESTIMONY OF THOMAS MAGUIRE AND OTHER VERIZON WITNESSES IN THE STATE OF NEW YORK PUBLIC SERVICE COMMISSION, CASE NO. 02-C-1425, HEARING.[61]

A. While Verizon's testimony suggests that Verizon may be using ADFs on a very small, experimental scale, it does not demonstrate that ADFs are a viable application in central offices with large line counts.[62] In fact, the Verizon witnesses repeatedly emphasize that these deployments are in "small" and "very small" offices.[63] Maguire also notes that ADFs do not exist in any office where collocation is currently placed and that ADFs have never been used as an application for hot cuts.[64] Thus, this testimony does not establish anything with respect to whether robotic frames could be used in place of manual hot cuts in real-world locations to transfer loops to collocating CLECs at commercial volumes.

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[61] Lichtenberg/Gates at 34:794-35:860.

[62] *Id.*

[63] *Id.* at 35:822, 842.

[64] *Id.* at 35:856-60.

Our direct testimony provides additional information concerning Qwest's own experience with robotic frames and explains why MCI's proposal is not technically feasible.

K. IMPASSE ISSUE P-29 (INTEGRATION WITH CMP)

Q. PLEASE DESCRIBE IMPASSE ISSUE P-29 AGAIN.

A. As explained in our opening testimony, Qwest and the CLECs collaboratively designed the Change Management Process ("CMP") as a forum for the CLEC community to propose and deliberate over various changes to Qwest's OSS, prioritize those changes according to their importance to the CLECs, and integrate those changes with additional ones that may be required by new regulatory mandates. The point of the CMP is to take the finite amount of resources that Qwest is able to spend on OSS revisions at any given time and rank the various proposed changes in order of priority, so that those finite resources can be expended on those projects that are required by law and most important to the CLEC community as a whole. The CMP was approved as part of the section 271 process.

Qwest plans to use the CMP exactly as it was intended and bring the BHCP-related OSS through the CMP as regulatory mandates so they can be slotted in upcoming IMA releases according to the agreed-on rules for the process. To that end, Qwest has already submitted two CRs (SCR012203-01RG and SCR012203-02RG) to CMP for the OSS interface changes necessary to implement Qwest's proposed batch hot cut process.

MCI and Covad make a number of arguments in their testimony that all have the aim of end-running the previously agreed upon ground rules of the CMP in order to influence the

outcomes. MCI argues that any OSS changes required by the *Triennial Review Order* should be given a special status above that of a normal regulatory mandate, and that Qwest should be required to issue a special additional IMA release outside the normal schedule dedicated just to these changes.[65] Covad similarly suggests that Qwest should be forced to spend "a separate pot" of time and money just on implementing *Triennial Review Order* changes so as not to crowd out non-*TRO* changes.[66] (In addition, as noted above, MCI and Covad both try to demand special treatment for the particular CRs they favor - migration by TN and SANO in MCI's case, and single-LSR orders for line splitting in Covad's. This last argument is addressed above in connection with Impasse Issues P-6 and P-12 respectively.)

Q. IS THIS THE APPROPRIATE PLACE TO START CHANGING THE GROUND RULES OF THE CMP?

A. No. As explained in our direct testimony, the CLECs and Qwest collaboratively designed the CMP with exactly the present situation in mind. They created a special category in the CMP Document for OSS modifications that are mandated by regulatory changes ("Regulatory CRs"), and provided that such CRs would go "above the line" and be the first changes worked on in the releases to which they were assigned. The *Triennial Review Order* may be large, but for purposes of the CMP it is fundamentally no different than any other regulatory order requiring some OSS changes. Far from suggesting that the *Triennial Review Order* is some kind of unique super-mandate that trumps all the ILECs' existing

[65] Lichtenberg/Gates at 37:896-903.

[66] Zulevic at 20:5-9.

change management processes, the FCC expressly endorses and relies on those existing processes, explicitly assigning many of the tasks of implementing its OSS mandates to the incumbents' existing CMPs. *See, e.g.*, *Triennial Review Order* at ¶ 252 ("encourag[ing] incumbent LECs and competitors to use existing state commission collaboratives and change management processes to address OSS modifications that are necessary to support line splitting").

Qwest's CMP has already been approved by this Commission and the FCC as the sole avenue for Qwest and the CLECs to modify Qwest's OSS interfaces. It is inappropriate to expect the Commission to order an exception to the process that it already approved, when the collaborating authors of the CMP clearly anticipated situations like the *Triennial Review Order* and designed the process to manage the resulting changes.

Q. PLEASE COMMENT ON MCI'S SUGGESTION THAT QWEST BE REQUIRED TO ISSUE A SEPARATE, OUT-OF-SCHEDULE IMA RELEASE TO ENSURE THAT ALL BATCH HOT CUT RELATED CRS ARE IMPLEMENTED ON TIME?

A. There is simply no need to do this. Those BHCP-related CRs that the CLECs agree are regulatory CLECs will go to the head of the queue and be included in IMA Release 16.0, which has a current release production date of October 18, 2004. Even those particular CRs that are not officially Regulatory Mandates but that Covad and MCI insist are essential to the batch hot cut process (such as migration by TN and SANO) have been prioritized sufficiently high in the just-completed CLEC voting - 2 and 3 out of 50 - that they are all but certain to go into Release 16.0 as well. All of the OSS interface changes CLECs argue

they need will be implemented by October 18, 2004 - well before the December 2, 2004 date after which CLECs could not purchase unbundled switching in the event of a "no impairment finding."

In addition, MCI's blithe suggestion that Qwest should add on an extra, out-of-schedule IMA release is impractical and unrealistic. A separate new release would impact the currently scheduled releases significantly. This is not a situation where new personnel can come in and immediately be up to speed. Qwest's OSS interfaces are detailed and complex, and they offer an extremely high level of ordering efficiency and mechanization. Qwest employs a staff of systems analysts and developers who are each familiar with the intricacies of Qwest's systems. Their time is fully occupied by the task of preparing the next IMA release. As soon as the CLEC community prioritizes a release (as the CLECs just did for IMA Release 16.0 at the beginning of February), these personnel begin the process necessary to implement the release as scheduled. If the Commission were to order an additional release, some of Qwest's analysis and development resources currently involved on development for the "old" release would necessarily have to be devoted to the new release, reducing the size and effectiveness of the "old" release team.

Q. PLEASE COMMENT ON COVAD'S WORRY THAT THE *TRO*-RELATED OSS CHANGES WILL SQUEEZE NON-*TRO*-RELATED CHANGES OFF THE LIST FOR RELEASES 15.0 AND 16.0?

A. Covad's concern is overstated. Qwest has already committed to the CRs it will include in IMA Release 15.0, and nothing ordered in response to the *Triennial Review Order* will go

into that release (or take up the 40,000 developer hours Qwest is dedicating to it). With respect to Release 16.0, Qwest estimates it will take 6,000 to 10,000 of the 30,000 developer hours dedicated to that release to implement the BHCP-related IMA changes Qwest is proposing, leaving an additional 20,000 to 24,000 hours for non-BHCP-related, prioritized systems changes. Hence, Covad's suggestion that Qwest be ordered to create a separate additional pot of developer hours for *TRO* changes is unnecessary.

L. IMPASSE ISSUES SC-1 AND SC-5 (SCALABILITY AND VOLUMES)

Q. PLEASE DESCRIBE IMPASSE ISSUES SC-1 AND SC-5 AGAIN.

A. These impasse issues relate to Qwest's ability to manage the anticipated volumes of batch hot cuts. Without making any attempt to predict or provide any specific evidence regarding what expected conversion volumes will even be, several CLECs argue that Qwest cannot meet these demands. This is not true. As Ms. Terri Million shows in her rebuttal testimony, even in the worst case scenario, Qwest would have no difficulty meeting the anticipated volumes with batches of the size contemplated in the process. In addition, Ms. Lorraine Barrick, an independent auditor has reviewed Qwest's batch hot cut process and performance data and concludes that Qwest's proposed process would in fact be scalable. Ms. Million's and Ms. Barrick's rebuttal testimonies explain the bases of their conclusions in more detail.

Q. MCLEOD CONTENDS THAT THE OSS ASPECTS OF QWEST'S BATCH HOT

CUT PROCESS ARE NOT SCALABLE.[67] IS THIS CORRECT?

A. No. Qwest's proposed batch hot cut process relies on the same OSS approved by this Commission and the FCC during the section 271 approval process. During the section 271 approval process, Qwest's OSS was thoroughly tested for both capacity and scalability.[68] This test measured Qwest's system capacity for processing pre-ordering queries and order transactions as well as verifying Qwest's ability to handle reasonably foreseeable future demands. The test results demonstrated that Qwest OSS is scalable and capable of handling increased volumes of unbundled loop migrations, and both this Commission and the FCC declared that Qwest's OSS are adequate based on these test results.

Q. MCLEOD ALLEGES THAT QWEST HAS DENIED REQUESTS FOR CERTAIN ORDERS FOR BATCHES OF HOT CUTS IN THE PAST DUE TO "RESOURCE CONSTRAINTS."[69] PLEASE COMMENT ON THIS CLAIM.

A. McLeod does not give any details regarding its allegations, so Qwest cannot identify or respond to the particular events McLeod alleged. But Qwest's records indicate that on seven different occasions in the fourth quarter of 2002 that Qwest converted 100 lines or more within a single central office on a single day for McLeod. Furthermore, between

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[67] Lynott at 104-39.

[68] The tests were conducted by KPMG. The final test report can be found in the record of this state's section 271 proceeding. *See In the Matter of the Investigation Into U S West Communications, Inc.'s Compliance With Section 271 of the Telecommunications Act of 1996*, Docket No. 003022, Before the Washington Utilities and Transportation Commission, Exhibit 1697 - Qwest Communications OSS Evaluation, Final Report, Version 2.0, KPMG Consulting, 5/28/02 placed on the record June 5, 2002 ("KPMG Final Report"). Table 15-6, page 252, shows that Qwest satisfied all evaluation criteria for this test.

[69] Lynott at 114-15.

October 2002 and December 2003, Qwest processed more than 80 orders per day in a single central office a total of 35 times.

In an effort to allocate central office resources in an efficient manner, Qwest and McLeod have been negotiating conversion volumes for the past 18 months. During those negotiations, McLeod would come to Qwest with requests for conversions on an office-by-office basis and Qwest would work with the CO staff to understand their pending loads in an attempt to load balance for the central office technicians. As McLeod recognizes, this has allowed Qwest to convert approximately 99,000 UNE-P lines to stand-alone unbundled loops over the past 18 months while still maintaining its normal daily workloads. Moreover, this was all done without an increase in staffing. Qwest's capacity to perform large quantities of migrations will only increase even further once Qwest adds the dedicated teams of technicians and the additional working hours that the batch hot cut process contemplates. Data for McLeod individually and CLECs generally show that Qwest has continually provisioned unbundled loops at an outstanding level of quality today, and give comfort about Qwest's ability to continue doing so going forward.

Q. MCI STATES THAT QWEST IS LIMITING BATCH SIZES TO 100 PER CENTRAL OFFICE PER DAY BECAUSE QWEST HAS NO PLANS TO INCREASE HEADCOUNT.[70] IS THIS ACCURATE?

A. No. The chart on page 143 of my direct testimony contains the staffing estimates based on the worst case scenario of having to convert 100% of the UNE-P market. As you can see

[70] Lichtenberg/Gates at 40:968-41:981.

from the chart, Qwest would have to add resources in the QCCC, Service Delivery organization and of course, in the CO within the Local Network organization. It has been the expectation of the batch hot cut process development teams all along once a state commission makes a finding of "no impairment" in a given market, Qwest will begin staffing and training the teams as necessary. The limit of 100 per day per office has nothing to do with any resistance to staff up to the level required: it is simply all that is needed to handle the expected migration and churn volumes, even in the worst of all possible worst-case scenarios, as Ms. Million explains. (This 100 per central office per day maximum is discussed in greater detail in the next section.)

Q. DOES MCI ADMIT THAT THE QCCC WILL BE ABLE TO HANDLE THE EXPECTED MIGRATION VOLUMES?

A. Yes. MCI even admits that the QCCC will be able to handle the volumes and "does not appear to be a limiting factor."[71]

Q. HAS QWEST BEEN ABLE TO HANDLE BATCHES OF UP TO 100 ORDERS FOR UNE-P CONVERSION IN A SINGLE CENTRAL OFFICE IN THE PAST?

A. On numerous occasions in 2002 and 2003, Qwest worked between 85-120 conversion orders in a CO in a single day. As McLeod admitted, Qwest has converted over 99,000 UNE-P lines at a very high level of quality in the last 18 months.

Q. WHAT PROOF DOES QWEST HAVE THAT IT CAN STAFF UP AND

[71] *See* Lichtenberg/Gates at 42 n. 23.

REALLOCATE RESOURCES IN THIS MANNER?

A. First, as I explained in my direct testimony, Qwest did this on a very large scale when it created the QCCC from scratch in a short time to improve loop provisioning performance. In addition, Qwest can move resources from one area to another to handle sudden spikes in demand for technician support. Reallocation of resources is not a new concept to Qwest. For situations such as the rush at the annual beginning of college in college communities, for example, Qwest routinely shifts resources to address the increase in order activity prior to and immediately after the semesters begin. The same resource shifting occurs as a result of weather or fire emergencies. In fact, I was sent to Cheyenne, Wyoming in the early 1980's to work for weeks after a flood hit the city causing damage to Qwest's outside plant facilities. This is not an uncommon phenomenon: even CLECs surely shift resources or contract for additional technicians in those particular markets where they have marketing blitzes. Qwest's consistently high loop provisioning performance data should provide the Commission with great comfort that this resource issue is a red herring.

M. IMPASSE ISSUE V-2 (MAXIMUM SIZE OF A BATCH)

Q. PLEASE DESCRIBE IMPASSE ISSUE V-2 AGAIN.

A. A maximum of 100 CLEC lines in a given central office per day can be scheduled for a batch hot cut during the 3:00 AM to 11:00 AM window. This 100 per central office per day through the batch process is *in addition to* whatever other hot cuts CLECs schedule for that day during normal business hours through Qwest's current provisioning options.

MCI flatly asserts that the maximum should be 200 lines per central office per day, but gives no explanation how it calculated this number or why it thinks that this would be achievable in terms of central-office staffing and operations.[72] AT&T and McLeod simply say that 100 per day is too low without specifying or justifying any alternative maximum.[73] AT&T asserts that Qwest should add a second shift of central office technicians to perform batch hot cuts.[74]

Q. WHY DID QWEST PROPOSE THE 100 DAILY MAXIMUM PER CENTRAL OFFICE?

A. As discussed above in connection with Impasse Issue P-3A, Qwest has proposed to perform batch hot cuts in a specific window outside of normal business hours in order to gain efficiencies from concentrating the work in a single window and maximize the number of cuts that can be performed by minimizing disruptions to the batch hot cut technicians' work from the normal daily operations of the central office. Qwest's observations of hot cut work established that a dedicated team of two technicians working off-hours and without interruption could perform 100 lifts and lays in a single eight-hour shift and still have time left over to complete those orders in Qwest's systems and perform prewires for subsequent days' migrations. (Our direct testimony on this issue details Qwest's time estimates.) Even though Qwest presented this information in the Batch Hot

[72] Lichtenberg/Gates at 46:1074-75.

[73] Falcone at 20:6-9; Lynott at 129-31.

[74] Falcone at 21:5-6.

Cut Forum, none of the CLECs address it in their testimony or give any explanation why they think the central office technicians' work could be expanded even further.

Q. WHAT ABOUT ADDING A SECOND TWO-TECHNICIAN SHIFT, AS AT&T SUGGESTS?

A. As explained in our opening testimony, the ICDFs where prewiring and migration activity take place concentrate a very large number of terminations in a very small space. It is not unusual, for example, to have over 4,000 DS-0 terminations for a CLEC in a space four feet wide. (The relevant variable is *not* the overall size of the central office or the MDF, as AT&T's witness suggests,[75] but rather the particular frames in the central office where the batch hot cut work actually takes place.) It would be difficult for four technicians to work in the same small space simultaneously without losing efficiencies. AT&T's long-ago-resolved complaints about the use of ICDFs *at all* are beside the point: that is where the lines are today, and that is where the batch hot cut work needs to be performed.

The discussion of Impasse Issue P-3A above explains why Qwest cannot add a second shift of two technicians outside the 3:00 AM to 11:00 AM window and maintain the efficiencies (and lower costs) that both Qwest and the CLECs want. Interference from (and with) the normal daily operations of the central office slows down the conversion process and prevents tasks from being sequenced in the most efficient order possible. In addition, spreading lifts and lays out over a sixteen-hour window dissipates the efficiencies that had been gained by consolidating them in a single block of time starting at 3:00 AM.

[75] Falcone at 22:18-19.

More fundamentally, regardless of whether adding on extra shifts of technicians is workable, AT&T has not established any practical need to do this at all. AT&T simply asserts that 100 batch hot cuts per central office per day is an insufficient number without providing any concrete evidence of a specific business need for more. We discuss this further next.

Q. PLEASE RESPOND TO THE CLECS' CLAIMS THAT 100 BATCH HOT CUTS PER CENTRAL OFFICE PER DAY IS TOO LOW A NUMBER.

A. It is meaningless to talk about whether the 100 per central office per day maximum sounds "too high" or "too low" in the abstract; rather, the sufficiency of that number depends on whether it can accomplish the task at hand. Ms. Million's direct testimony provided specific volume data demonstrating that even in the central offices across Qwest's region with the greatest existing volumes of UNE-P lines, and even assuming the hypothetical worst of all worst-case scenarios (100% conversion of UNE-P to stand-alone unbundled loops via the batch hot cut process), CLECs can clear out the embedded base of UNE-P lines in an extremely short period using batches of 100 and *still* have more than abundant slots left to cover any reasonably possible growth in UNE-P lines, newly acquired customers, or churn.[76]

By contrast, the CLECs claiming that the 100 per central office per day maximum is too low present nothing but their own unsupported assertions. AT&T speculates that a CLEC with 200 UNE-P lines in a central office might find it more efficient to convert in one day

[76] Exhibit TKM-5, dated January 23, 2004.

rather than two,[77] but presents no analysis of whether CLECs are able to process 200 hot cuts per central office per a day on *their* end or of what practical impact one day could have in the context of a FCC-specified twenty-one month transition. Similarly, McLeod baldly asserts that the daily maximum "would prevent providers from even *considering* the opportunity to wholesale local services to other carriers,"[78] without any business case or other explanation of why this would possibly be so.

N. IMPASSE ISSUE V-3 (MINIMUM SIZE OF A BATCH)

Q. PLEASE DESCRIBE IMPASSE ISSUE V-3 AGAIN.

A. To qualify for the batch hot cut process, a CLEC must submit orders for at least 25 lines in the same central office on the same day. MCI, AT&T and McLeod insist that there be no minimum, so that the CLEC would qualify for the batch process even if the CLEC submits only one or two orders for conversion.

Q. PLEASE RESPOND TO THIS SUGGESTION.

A. These CLECs would eliminate the whole point of creating a batch hot cut process in the first place. As the *Triennial Review Order* explicitly recognizes, the entire reason for creating a batch provisioning option separate from the ILECs' existing hot cut options is to "spread[] loop migration costs among a *large* number of lines, decreasing per-line cutover costs,"[79] and to capture "the efficiencies associated with performing tasks once for multiple

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[77] Falcone at 22:10-13.

[78] Lynott at 130-31 (emphasis in testimony).

[79] *Triennial Review Order* ¶ 487 (emphasis added).

lines that would otherwise have been performed on a line-by-line basis."[80] Moving from the FCC's expected "large number of lines" to an inaccurately named "batch" of two destroys these efficiencies and fails to spread costs. The rebuttal testimony of Ms. Million describes some of these lost efficiencies and higher costs in more detail.

O. IMPASSE ISSUE S-2 (STANDARD INTERVAL)

Q. PLEASE DESCRIBE IMPASSE ISSUE S-2 AGAIN.

A. This issue addresses the standard provisioning interval that should apply to the batch hot cut process. Qwest proposes a seven business day interval, which is substantially less than that proposed by any other ILEC and in harmony with the intervals agreed to in the section 271 process. The CLECs counter with a five business day interval.

Q. WHY DID QWEST PROPOSE A SEVEN DAY INTERVAL?

A. First, the CLECs wanted a defined standard interval. Typically, requests for conversion in excess of 25 lines are treated on an Individual Case Basis ("ICB") and the Due Date ("DD") is negotiated between the parties. Second, the CLECs wanted the ability to change the connecting facility assignment ("CFA") on individual lines, if necessary, to keep a loop which contains a CLEC problem in the scheduled batch. Today, if a bad CFA is discovered on the DD, Qwest uses an extremely manual process on the DD to try and resolve the problem. However, the existing process requires extensive coordination and manual handling with, at times, multiple phone calls in order to find a good CFA. At that

[80] *Id.* ¶ 489.

point, the new CFA is manually assigned and then it is necessary, after the conversion is complete, to update the necessary records and databases. The CLECs must issue a subsequent ("sub") LSR, and this "sub" has to be manually handled by Qwest. At the BHC Forum, all parties agreed that this level of manual work on the day of cut would not work given the volumes involved and the need to streamline the process. As such, all parties agreed to eliminate this work on the day of cut and to create a time earlier in the process for the CLEC to make any necessary CFA changes. The CLEC desired time to fix network problems on their end is built into the seven-day interval at their request.

Q. A "BATCH" IN THE PROPOSED BATCH HOT CUT PROCESS WILL CONTAIN AT LEAST TWENTY-FIVE LINES. CAN A CLEC RECEIVE A SEVEN-DAY PROVISIONING INTERVAL FOR MIGRATIONS OF GROUPS OF TWENTY-FIVE LINES OR MORE TODAY?

A. No. In fact, they cannot receive a standard interval at all: intervals for groups of twenty-five lines or more must typically be negotiated on an individual case basis ("ICB"). For this reason, the CLECs' repeated comparisons of Qwest's proposed seven-day provisioning interval to intervals for smaller groups of loops under existing provisioning processes are inapposite, as I explain next.

Q. MCLEOD COMPARES THE PROPOSED BATCH HOT CUT PROCESS TO THE EXISTING "QUICK LOOP" PRODUCT AND ASSERTS THAT THE LATTER IS THREE DAYS. IS THIS ACCURATE?

A. No. McLeod's portrayal of the Quick Loop installation is only a partial description of the

offering. It is true that Quick Loop involves conversion of an existing customer that is not served by IDLC and whose conversion does not require a dispatch of a technician. However, the standard installation interval is not simply three days. The installation interval is dependent on the number of lines being converted and whether Local Number Portability ("LNP") is required. The following chart displays the standard interval associated with Quick Loop:

Quick Loop Installation Intervals		
Option	**# of Loops**	**Standard Interval**
Quick Loop	1 to 24	3
Quick Loop	25 +	ICB
Quick Loop + LNP	1 to 8	3
Quick Loop + LNP	9 to 24	4
Quick Loop + LNP	25 +	ICB

Thus if a CLEC wanted 25-100 loops - the relevant order size for the batch hot cut process - through Quick loop, the CLEC would have to negotiate an interval on an ICB and not be entitled to the three-day interval McLeod asserts. The proposed seven-day interval for the batch hot cut process is a substantial improvement over Quick Loop.

Q. WHY ARE QUICK LOOP REQUESTS FOR 25+ LINES TREATED ON AN ICB?

A. Typically when a customer has a large project of 25 or more lines, more coordination is required. By having the interval as ICB, this allows Qwest and the CLEC to discuss the project and determine the installation interval. An additional benefit of project coordination in this instance is to allow resource re-allocation in a given CO if needed.

Q. HAS ANY STATE COMMISSION SET A STANDARD INTERVAL FOR QUICK

LOOP WITH MORE THAN 25 LOOPS?

A. Yes. The Utah Commission set a ten day interval for Quick Loop without LNP activity. In all other states the interval is on an Individual Case Basis ("ICB"). This again supports the proposed seven-day interval, for the batch hot cut process as it is shorter than that ordered by the Utah Commission.

Q. WHY ARE THE INTERVALS FOR QUICK LOOP LONGER DIFFERENT WHEN LNP IS INVOLVED?

A. The inclusion of Local Number Portability requires additional coordination. When the Quick Loop installation option was developed the Qwest group responsible for LNP activity requested an additional day for coordination purposes when the number of loops exceeds 8 loops.

Q. WILL THE MIGRATIONS INVOLVED IN THE BATCH HOT CUT PROCESS TYPICALLY INVOLVE LNP?

A. Yes. Typically the end user customer wants to retain the existing telephone number. As McLeod states in its testimony, it has been actively converting UNE-P customers to unbundled loops and in virtually all, if not all, circumstances LNP is involved.

Q. MCLEOD REQUESTS THAT THIS COMMISSION EXPAND THE QUICK LOOP PROVISIONING OPTION CREATED AND AGREED UPON IN THE SECTION 271 PROCEEDINGS. PLEASE RESPOND.

A. McLeod's request is beyond the scope of this proceeding. The *Triennial Review Order* directs state commissions to adopt a new batch hot cut process, not reopen every ILEC

UNE provisioning process for amendment. The FCC "conclude[s] that the loop access barriers contained in the record may be mitigated through the creation of a batch cut process," and accordingly orders that "State commissions must approve, within nine months of the effective date of this Order, a batch cut migration process to be implemented by incumbent LECs that will address the costs and timeliness of the hot cut process."[81] Nothing in the *Triennial Review Order*, however, gives the states a roving mandate to ferret out and fix alleged impairments.

Q. AT&T COMPARES THE BHCP TO OTHER ANALOG LOOP PROVISIONING OPTIONS AND COMES UP WITH A FIVE-DAY INTERVAL.[82] IS AT&T MAKING THE RIGHT COMPARISON?

A. No. AT&T, like McLeod, compares apples and oranges, citing the intervals that apply to a single loop or small (up to eight) group of loops, not a batch of 25 to 100. The installation interval for unbundled loops is based on the volume of loops being provisioned. For an analog loop the intervals are as follows:

Analog Loop Installation Intervals		
Option	**# of Loops**	**Standard Interval**
Analog Loop	1 to 8	5
Analog Loop	9 to 16	6
Analog Loop	17 to 24	7
Analog Loop	25 +	ICB

[81] *Id.* ¶¶ 487-88.

[82] Falcone at 31:11-13.

The existing intervals recognize that provisioning of multiple lines requires additional time. Rather than establishing different intervals based on the size of a batch, Qwest determined that it would match the standard seven-day interval that currently applies to analog loop requests up to 24 lines. This table contains the very intervals the CLECs agreed during the section 271 process would provide them a meaningful opportunity to compete. The proposed batch hot cut process's seven-day interval for batches of 25 to 100 loops goes one step better.

Q. MCLEOD SUGGESTS THAT THE SEVEN-DAY INTERVAL CAN BE REDUCED TO FIVE DAYS BECAUSE NO WORK IS BEING PERFORMED ON DAY 5 AND DAY 6.[83] IS THIS ACCURATE?

A. No. These are the days that CLECs supplement their orders if they need to change their CFAs and Qwest redoes the prewiring to reach the new CFAs. They were put into the interval at the CLECs' own insistence at the Batch Hot Cut Forum. If Qwest performs a DT/ANI test during the pre-wiring on DVA (days 2 to 3) and finds no dial tone ("NDT"), the CLEC is notified via the batch status tool and a jeopardy is issued on the line. This gives the CLEC the standard interval to make the CFA changes (3 days) and to submit a supplemental order. Upon receipt of the supplemental order, the Qwest COT would need time to wire to the new CFA.

Q. ARE CLECS REQUIRED TO UTILIZE BHC FOR CONVERSIONS OR MIGRATIONS?

[83] Lynott at 9:186-87.

A. No. If a CLEC believes that the seven-day interval would somehow jeopardize the customer's migration to the CLEC, then the CLEC can elect to use one of the other installation options.

Q. PLEASE RESPOND TO MCLEOD'S STATEMENT THAT QWEST SHOULD SET INTERVALS THAT ARE AT PARITY WITH UNE-P AND QWEST RETAIL.[84]

A. It was recognized in the section 271 proceedings that the provisioning of unbundled loops does not have a retail analog, so McLeod's suggested comparison to retail provisioning is meaningless. The provisioning of UNE-P is likewise inapposite. If the UNE-P installation is a "Conversion As Is" then the customer's service does not physically change. The service continues to be provisioned by the Qwest switch, the features and functionalities remain the same and outside plant facilities remain untouched. Basically, the change is one of records only, including the network records and the billing records. However, when the end user customer switches to an unbundled loop the situation is very different. The customer's facilities must be tested and moved from the Qwest switch to the CLEC's facilities. Additionally, based on the facilities involved, a field dispatch may be required. As discussed extensively during the section 271 Workshops and as currently reflected in the PIDs, the unbundled loop is not in parity with Qwest retail service.

Q. IS QWEST'S PROPOSED SEVEN-DAY INTERVAL A SUBSTANTIAL IMPROVEMENT FOR CLECS?

A. Absolutely. The seven-day interval provides the CLECs with a standard interval regardless

[84] Lynott at 9:171-90.

of the size of the batch, thereby allowing them to give their end users a firm due date at the time the order is submitted and not after some case-by-case interval can be negotiated in the ICB process. Additionally, it supports the CLECs' needs to provide for CFA changes or to make sure that their translations have been programmed. In short, it allows a defined period of time that Qwest will cut over large quantities of unbundled loops without the need to negotiate an interval. It provides certainty, but recognizes what all parties, including CLECs, recognized in the section 271 process: that when large volumes of unbundled loops are involved, the provisioning interval must increase. The Commission should approve Qwest's proposed seven-day interval.

P. IMPASSE ISSUE T-1 (COMMERCIAL TESTING)

Q. PLEASE DESCRIBE IMPASSE ISSUE T-1 AGAIN.

A. All the CLECs agreed that before the Commission can approve Qwest's proposed BHCP, there must be evidence that the process works in a commercial setting. The CLECs and state staff members that attended the Forum disagreed, however, on the precise nature of that process testing.

Q. AT&T, MCI AND MCLEOD ALL STATE THAT QWEST MUST HAVE ITS BHCP TESTED BY AN INDEPENDENT THIRD PARTY BEFORE THE COMMISSION APPROVES THE PROCESS. PLEASE RESPOND.

A. Hitachi Consulting has already performed a test to evaluate Qwest's new BHCP. The testimony of Lorraine Barrick explains the test, and sets forth her conclusions about the test. Qwest and McLeod jointly performed this testing with Hitachi overseeing the process.

Q. WHY DID QWEST ASK MCLEOD TO PARTICIPATE IN A TEST OF THE ORIGINALLY PROPOSED BHCP?

A. At the time Qwest began developing a new BHCP, McLeod was the only company submitting the volumes of conversion orders in a single central office that would be necessary for a test. Qwest, in an effort to test its process, contacted McLeod to see if it had an interest in participating in the trial with the understanding that the newly proposed process would be used.

Q. MCLEOD SUGGESTS THAT ALL OF THE NEW OSS SUPPORTING QWEST'S BATCH HOT CUT PROPOSAL MUST BE SEPARATELY TESTED. IS THIS NECESSARY?

A. No. This will automatically happen as part of the CMP, and no additional test is required. Once an OSS interface change is submitted, processed, and implemented through CMP, it is placed into "CLEC Test" status. Before it is moved from "CLEC Test" status to "Closed," all parties to the CMP must agree to close the change request. This final agreement gives all CLECs an opportunity to adequately "test" every change to ensure it meets both their expectations and needs, before the CR is closed. Additional testing of these changes outside the CMP is unnecessary.

Q. PLEASE SUMMARIZE YOUR CONCLUSIONS ON TESTING QWEST'S BATCH HOT CUT PROCESS.

A. Hitachi has already tested Qwest's BHCP, and in the most recent trials, the process has worked exactly as expected. McLeod, Qwest's testing partner, agrees that many aspects of

the process work and work well. McLeod's only testing concern has been whether Qwest's central office technicians can provision 100 lines in a day. As Ms. Barrick explains, the evidence shows that this will not be a problem. Qwest has adequately tested its process, and the results of the test show that Qwest will be able to meet anticipated demands.

IV. LOOP PROVISIONING ISSUES

Q. HAVE ANY OF THE INTERVENORS RAISED GENERAL LOOP PROVISIONING ISSUES.

A. Yes. AT&T raises a number of general questions about Qwest's ability to provision loops in large quantities. I will react to these issues individually.

Q. AT&T CITES "PROVISIONING DELAYS" AND "SERVICE OUTAGES" AS REASONS TO SUPPORT THE FCC'S FINDING OF IMPAIRMENT.[85] PLEASE COMMENT ON BOTH OF THESE ISSUES.

A. This Commission has to look no further than the PID results on each of these issues. Regionally, for the past 12 months, Qwest has provisioned requests for UNE-Loop orders at a level above the 98% mark between December 2002 and September 2003, and for the last two months on the regional performance report, Qwest has performed above 99%.[86] The data on service outages are equally good. From December 2002 until September 2003, the average coordinated hot cut took approximately 3 minutes, with only one month - May

[85] Falcone at 8:1-8:18.

[86] 2003 Regional OP-3D PID measurements, Dec 02 to Nov 03.

2003 - running longer at 4 minutes.[87] For the same period of time, new service installation quality (OP-5) averaged 98.7%. To summarize, Qwest provisions loops and meets installation commitments more than 98% of the time. Service outages only occur, on average, in about 1.3% of the time and that the overall time an end user is involved in the conversion is approximately 3 minutes. Given that the lift and lay itself only takes approximately 20 seconds, and given that Qwest provides a way for the CLEC to receive instantaneous notification once a lift and lay is complete (through "trap and trace"), any responsibility for a longer customer service outage was only with the CLECs themselves and their efficiency in porting their customers' telephone numbers after a cut.

Q. AT&T ALSO DISCUSSES SUBSTANDARD PERFORMANCE IN RETURNING TIMELY FIRM ORDER CONFIRMATIONS ("FOCS"). PLEASE COMMENT ON THESE CLAIMS.

A. Once again, the proof is in the regional PID measurements – in particular, PO-5A-1(b), FOCs returned on time. Qwest's performance in this area averages an extremely high 99.81% of FOCs are returned on time.[88]

Q. AT&T CONTENDS THAT QWEST'S HIGH PERFORMANCE LEVELS WILL DROP AS QWEST STAFFS UP TO MEET EXPECTED DEMANDS. DO YOU AGREE?

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[87] 2003 Regional OP-7 PID measurements, Dec 02 to Nov 03.

[88] 2003 Regional PO-5A-1(b) PID measurements, Dec 02 to Nov 03.

A. No. This work is not as complicated as AT&T is attempting to portray, and there are many individuals who are more than qualified to perform it. As companies continue to downsize, there will potentially be even more available by the time the conversions of UNE-P to stand-alone unbundled loops begin in earnest.

Q. AT&T DESCRIBES THE HOT CUT PROCESS AS AN INFERIOR METHOD OF PROVIDING SERVICE TO CLECS, AND STATES THAT IT WILL CAUSE OPERATIONAL DIFFICULTIES IN TERMS OF INCREASED TROUBLES FOR THE CLEC. DOES QWEST'S PERFORMANCE DATA BEAR THIS OUT?

A. No, it does not. Qwest tracks performance data for both analog loops and UNE-P-POTS. Qwest tracks, among other things, the percentage of installation commitments met, new installation service quality, and several different repair metrics. In each instance, the regional and state specific data for both analog loops and UNE-P-POTS is very similar. Specifically, the regional data shows:

Performance Metric	Analog Loops	UNE-P-POTS
OP-3: Installation Commitments Met	Zone 1: 98.1% - 99.3% Zone 2: 98.5% - 99.5%	Dispatch in MSA: 96.3% - 98.9% Dispatch out MSA: 96.0% - 98.7% No Dispatch: 99.89% - 99.97%
OP-5: Installation Service Quality	Total: 98.16% - 99.01%	Total: 97.0% - 98.1%
MR-6: Mean Time to Restore Service	Zone 1: 2.6 – 8.6 hours Zone 2: 1.8 – 12.0 hours	Dispatch in MSA: 10.5 – 12.3 hours Dispatch out MSA: 9.5 – 12.7 hours No Dispatch: 2.7 – 4.7 hours
MR-8: Overall Trouble Rate	Total: .6% - 1.0%	Total: 0.8% - 1.3%

This data shows an extraordinary level of performance in all respects. Qwest consistently meets over 98% of its commitments, while simultaneously experiencing less than 3% troubles on those new installations. In addition, the overall trouble rate is consistently less than 1%. This data does not show either UNE-P or analog loops to be superior in relation to the other. To the contrary, it shows that CLECs can readily use and rely upon both products. In sum, any concerns about Qwest's ability to provision unbundled loops are totally without basis. The fact that Qwest has provisioned 99,000 loops for McLeod in a very short period of time, without additional resources, and at a high level of quality, makes this point.

V. CONCLUSION

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.