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**

JOINT DIRECT TESTIMONY OF

SHERRY LICHTENBERG AND TIM GATES

Batch Hot Cut Process

ON BEHALF OF

WORLDCOM, INC. (MCI)

January 23, 2004

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I. INTRODUCTION

Q. MS. LICHTENBERG, PLEASE STATE YOUR NAME, OCCUPATION AND EMPLOYER FOR THE RECORD.

A. My name is Sherry Lichtenberg. I am currently employed by MCI as Senior Manager, Operational Support Systems Interfaces and Facilities Development.

Q. MR. GATES, PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.

A. My name is Timothy J Gates. I am a Senior Vice President with QSI Consulting. My business address is 917 West Sage Sparrow Circle, Highlands Ranch, Colorado 80129.

Q. WHAT IS QSI CONSULTING, INC. AND WHAT IS YOUR POSITION WITH THE FIRM?

A. QSI Consulting, Inc. ("QSI") is a consulting firm specializing in traditional and non-traditional utility industries, econometric analysis and computer aided modeling. I currently serve as Senior Vice President.

Q. MS. LICHTENBERG, PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND AS IT RELATES TO YOUR TESTIMONY IN THIS PROCEEDING.

A. I have twenty-two years of experience in the telecommunications market, fifteen years with AT&T and seven with MCI. I joined MCI in 1996 as a member of the initial team responsible for the development of MCI's local service products, both UNE-P and facilities based. Prior to joining MCI, I held a number of positions at AT&T, including working in the General Departments organization, where I developed methods and procedures and billing and ordering systems for use by the Bell Operating Companies. I was Pricing and Proposals Director for AT&T

Government Markets, and Executive Assistant to the President and Staff Director for AT&T Government Markets. I also held a number of positions in Product and Project Management. My current role with MCI includes designing, managing and implementing MCI's local telecommunications services to residential and small business customers on a mass-market basis nationwide. I support both UNE-P product development and our testing and planning for facilities based competition via UNE-L. I have testified in numerous proceedings before the FCC and state public service commissions including multiple 271 proceedings, network modernization proceedings and a variety of DSL proceedings. In addition, I have worked with the MCI contracts organization to negotiate our interconnection agreements with the incumbents.

Q. MR. GATES PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A. I received a Bachelor of Science degree from Oregon State University and a Master of Management degree in Finance and Quantitative Methods from Willamette University's Atkinson Graduate School of Management. Since I received my Masters, I have taken additional graduate-level courses in statistics and econometrics. I have also attended numerous courses and seminars specific to the telecommunications industry, including both the NARUC Annual and NARUC Advanced Regulatory Studies Programs.

Prior to joining QSI, I was a Senior Executive Staff Member at MCI WorldCom, Inc. ("MWCOM"). I was employed by MCI and/or MWCOM for 15

years in various public policy positions. While at MWCOM I managed various functions, including tariffing, economic and financial analysis, competitive analysis, witness training and MWCOM's use of external consultants. Prior to joining MWCOM, I was employed as a Telephone Rate Analyst in the Engineering Division at the Texas Public Utility Commission and earlier as an Economic Analyst at the Oregon Public Utility Commission. I also worked at the Bonneville Power Administration (United States Department of Energy) as a Financial Analyst doing total electric use forecasts while I attended graduate school. Prior to doing my graduate work, I worked for ten years as a forester in the Pacific Northwest for multinational and government organizations. Exhibit TJG-1 to this testimony is a summary of my work experience and education.

Q. MS. LICHTENBERG, HAVE YOU EVER TESTIFIED BEFORE THIS COMMISSION ("COMMISSION")?

A. No. However, I have testified on telecommunications issues before numerous state commissions, including Texas, California, Nevada, Illinois, Michigan, Indiana, Wisconsin, Ohio, Maryland, Delaware, Pennsylvania, New York, Georgia, Florida, South Carolina, North Carolina, Alabama, Tennessee, and Washington DC, as well as the FCC.

Q. MR. GATES, HAVE YOU EVER TESTIFIED BEFORE THIS COMMISSION?

A. Yes, I have testified before this Commission or filed comments in proceedings before this Commission as stated in the list of proceedings found in Exhibit TJG-1. I have testified more than 200 times in 42 states and filed comments with

the FCC on various public policy issues ranging from costing, pricing, local entry and universal service to strategic planning, merger and network issues. As noted above, a list of proceedings in which I have filed testimony or provided comments is attached hereto as Exhibit TJG-1.

Q. ON WHOSE BEHALF WAS THIS TESTIMONY PREPARED?

A. This joint testimony was prepared on behalf of WorldCom, Inc. and its regulated subsidiaries ("MCI").

II. PURPOSE AND BACKGROUND

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of our testimony is threefold:

(1) we describe for the Commission FCC rule §51.319(d)(2)(ii) and explain the manner by which the Commission can best fulfill its obligations included therein,

(2) we briefly discuss the relationship between rule §51.319(d)(2)(ii) which is the focus of this proceeding, and §51.319(d)(2)(iii) as it relates to impairment faced by CLECs without access to unbundled local switching, and

(3) we evaluate Qwest's "Batch Hot Cut ("BHC") Proposal" in relation to the requirements of rule §51.319(d)(2)(ii) (and to a lesser extent, the impact of Qwest's proposal on issues related to impairment).

III. SUMMARY OF CONCLUSIONS

Q. CAN YOU BRIEFLY SUMMARIZE YOUR PRIMARY CONCLUSIONS?

A. Yes. Our primary conclusions can be categorized and summarized as follows:

Mechanization

(1) The FCC has found that incumbent local exchange carrier ("ILEC") hot cut processes as they currently exist are a source of impairment for carriers attempting to use their own facilities to serve mass market customers. Specifically, the FCC pointed to the overly manual nature of existing hot cut processes as the primary culprit.[1] Indeed, the FCC specifically identifies the overly manual nature of existing hot cut processes as the primary obstacle to sufficient scalability, sufficient reliability relative to service quality, and affordability. As such, in an effort to improve upon the existing process, the Commission's chief objective in this case should be to encourage a hot cut process that removes, to the utmost extent possible, manual intervention.

Limitations on Order Types

(2) Through MCI's participation in the Qwest Batch Hot Cut Forum, it has become clear that the final proposal Qwest intends to submit with its testimony in this proceeding will exclude some very important order types. Thus, while Qwest proposes to improve its hot cut processes it does not intend to make those improved processes available to some of the most important order types required by CLECs. For example, it appears that Qwest will exclude any order that would require a hot cut (i) from one UNE-L CLEC to another, (ii) for a loop over which a customer's data service is being provided, even if the customer's voice service relies upon the same loop, (iii) to an Enhanced Extended Link ("EEL") and then to a collocation in a second central office so that a carrier can serve customers from a central office where it has no collocation arrangements, (iv) for loops served over integrated digital loop carrier ("IDLC") systems, and (v) customers with line splitting. These types of exclusions will vitiate the benefits of the improved process.

Efficient and Cost-Based

(3) The FCC specifically identified the current non-recurring rates associated with hot cuts as a major factor in its finding of

[1] See *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, and Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket Nos. 01-338, 96-98 & 98-147, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, FCC 03-36, (rel. Aug. 21, 2003) ("*Triennial Review Order*" or "*TRO*"). *TRO* ¶465.

impairment.[2] Likewise, it directed state commissions to reassess hot cut rates based upon its TELRIC rules and to examine efficiencies that might be gained by offering hot cuts in a "batch."[3] To this point, Qwest has provided no cost information or a rate proposal related to its improved hot cut processes. As such, little can be said about Qwest's proposal in this regard except that CLECs will have very limited time to review it. Nonetheless, the rates associated with any process ultimately approved by the Commission will be of paramount importance. One of the primary benefits of the UNE-platform ("UNE-P") is that CLECs can acquire customers in a low cost fashion given the relatively efficient nature of the process. If an improved hot cut process is meant to elevate UNE-L to an operational level sufficient to replace UNE-P for purposes of mass market service delivery, the rates for a hot cut must be highly comparable to those available under UNE-P today (and as such, the process must be of comparable efficiency).

Scalability

(4) The FCC has tasked this Commission with approving an improved hot cut process within a 9 month timeframe. Qwest, in hopes of convincing this Commission that its new process will overcome impairment so that it no longer must unbundle its local switching facilities, has conceptualized an improved process it will ask this Commission to approve. Part and parcel of Qwest's new process will be dramatic system enhancements, re-designed process engineering and a commitment to meet CLEC demands for cuts (meant to provide the necessary scalability for Qwest's largely manual process) but only those hot cuts negotiated and agreed to as part of the "transition plan," despite the fact that that planning process remains a mystery. The Commission must bear in mind that none of Qwest's proposed improvements have been tested; indeed, none of them have even been designed let alone constructed at this point. As such, even if MCI agreed with Qwest's proposed processes verbatim (which it does not), MCI would still have major concerns regarding Qwest's ability (or its incentive) to effectively follow through on a proposal constructed primarily of promises. As such, the manner by which any process ultimately approved by the Commission is tested for commercial use at volumes that would result in a market without UNE-P is of

[2] *Id*., ¶470.
[3] §51.319(d)(2)(ii)(A)(4).

critical importance. Likewise, the performance metrics and penalties that will govern the process over time are of equal importance.

Testing and Monitoring

(5) In simplest terms, in its *Triennial Review Order* the FCC found that CLECs should be allowed to continue purchasing and using UNE-P, because important obstacles existed with respect to their ability to use their own facilities to serve the mass market. Primary amongst those obstacles was the hot cut process that would be required to change a customer from one network to another absent UNE-P. The FCC found that the hot cut process was time consuming, had a high probability of error (and hence, increased the number of service impacting problems), that it was expensive and ultimately, that it was not scalable to meet the needs of a competitive marketplace the size of that created via UNE-P. Having come to that conclusion, the FCC tasked state commissions with improving the hot cut process to overcome these problems. In fulfilling that task, this Commission should keep squarely in mind that the hot cut process and the UNE-P provisioning process (and Qwest's retail provisioning process) are all meant to accomplish exactly the same task: i.e., connect the customer's loop to the switch that will provide it local service, and that that process cannot be said even to "exist" until it has been developed, tested, and is in use by CLECs. As such, if a facilities-based service model like UNE-L is ever to achieve the type of competitive entry achieved via UNE-P (or if it is to be an effective manner of competing with Qwest's retail services), the hot cut process must be as timely, reliable, scalable and economically viable as both the UNE-P provisioning process, and Qwest's retail provisioning process. As such, while Qwest will undoubtedly tout the many improvements it has made to its existing hot cut process, the Commission must resist evaluating Qwest on how far it has come in improving a relatively poor process, but instead, keep its eye on how far Qwest must still go to reach either of these benchmarks. In doing so, the Commission should always ask itself the following questions when evaluating Qwest's improved process: Will the improved hot cut process work as effectively as either the UNE-P provisioning process or Qwest's retail provisioning process? Will it be as timely? Will it be as reliable? Will it be as scalable? Will it be as economically viable? Unless the answer to each of these

questions is "Yes," in MCI's opinion, the improvement process is incomplete.

IV. BATCH HOT CUT REQUIREMENTS

Q. WHAT IS A "HOT CUT" AND WHY ARE HOT CUTS SO IMPORTANT RELATIVE TO THE FCC'S *TRIENNIAL REVIEW ORDER*?

A. At footnote 1409 of its *Triennial Review Order* (¶465), the FCC describes the hot cut process as it is currently accomplished by ILEC's in today's environment:

> 1409…a hot cut is a largely manual process requiring incumbent LEC technicians to manually disconnect the customer's loop, which was hardwired to the incumbent LEC switch, and physically re-wire it to the competitive LEC switch, while simultaneously reassigning (*i.e.*, porting) the customer's original telephone number from the incumbent LEC switch to the competitive LEC switch….. From the time the technician disconnects the subscriber's loop until the competitor reestablishes service, the subscriber is without service. Simultaneously, incumbent LEC and competitor technicians must coordinate to ensure that the subscriber's telephone number is "ported" to the competitor's switch so that inbound calls are properly routed to the requesting carrier's switch. This process necessarily disconnects service to the customer for a brief period of time, as the physical connection between the loop and the incumbent LEC switch is broken and then a new connection with the competitive LEC switch is made. [references and cites removed]

Hot cuts are important relative to the FCC's *Triennial Review Order* because the FCC found the largely manual, coordinated hot cut process described above to be a major source of impairment for carriers attempting to serve mass market customers using their own facilities. Hence, state commissions were directed by the FCC to identify ways in which ILECs should improve upon these processes.

Q. HAS MCI PARTICIPATED IN THE QWEST REGION BATCH HOT CUT FORUM IN AN EFFORT TO NARROW ISSUES RELATED TO AN IMPROVED HOT CUT PROCESS FOR QWEST?

A. Yes, it has. MCI has participated actively in the Batch Hot Cut Forum.[4] MCI has participated in these collaborative meetings in an effort to help state commissions, and Qwest, identify ways in which the existing hot cut process can be improved to overcome the economic and operational impairment recognized by the FCC. More specifically, and as we discussed throughout the Batch Hot Cut Forum, MCI's primary concern is with the impact of these new processes on consumers. Indeed, Qwest has agreed to implement a number of the proposals made by MCI, including an on-line scheduling system and an order tracking application that will reduce the need for coordination via telephone calls.

Q. THEN WHY DOES MCI STILL HAVE CONCERNS ABOUT THE QWEST BATCH HOT CUT PROCESS?

A. As we discussed throughout the Batch Hot Cut Forum, MCI's primary concern is with the impact of these new processes on consumers, particularly those consumers with MCI DSL, those served by IDLC, and those customers that are migrating from one CLEC to another.

Q. WILL THE HOT CUT PROCESSES PROPOSED BY QWEST SERVE TO OVERCOME THE OPERATIONAL OR ECONOMIC OBSTACLES RECOGNIZED BY THE FCC RELATIVE TO IMPAIRMENT?

A. No, unless Qwest in its testimony in this proceeding introduces major improvements to its "Final Proposal" provided to the BHC Forum website on

[4] MCI also participated in BHC collaborative meetings in the SBC and Verizon territories. BellSouth has opposed the collaborative approach used in other regions of the country.

January 9, 2004, the resultant processes will not serve to overcome the operational obstacles identified by the FCC. With respect to economic obstacles contributing to impairment, little can be said at this time since Qwest will be presenting its proposed rates for its "improved" hot cut processes (and providing supporting cost documentation) for the first time in its testimony filed in this docket simultaneously with ours.

Q. IS IT REALISTIC TO THINK THAT QWEST COULD DEVELOP A HOT CUT PROCESS CAPABLE OF EFFECTIVELY STREAMLINING THE PROCESS TO ACCOMMODATE VOLUMES CURRENTLY ACHIEVED BY UNE-P IN A 9 MONTH TIMEFRAME?

A. Probably not. The UNE-P provisioning process was developed over 2-3 years of constant work, with the assistance of numerous CLECs, state commissions, consumer groups, and notably, the cooperation of the regional Bell operating companies ("RBOCs") who were actively seeking §271 approval. Likewise, the automated and efficient processes used by ILECs to provision their own retail services (designed specifically to avoid the type of loop cutover work at issue in this proceeding) were developed over an even longer period. To assume that Qwest, or any ILEC, could achieve similar results in a 9-month timeframe for its hot cut process used to support UNE-L, probably isn't realistic. This is especially true since the parties have had to engage in a debate as to the form of the BHC process. This is not to say that the Batch Hot Cut Forum was not worthwhile, since many agreements were crafted in that process. Moreover, even where

agreement could not be achieved, the parties developed a level of understanding that will be valuable in limiting the litigation on the impasse issues.

Q. IS MCI INTERESTED IN AN IMPROVED HOT CUT PROCESS TO BE APPROVED BY THIS COMMISSION CONSISTENT WITH THE FCC'S SCHEDULE, EVEN IF SUCH A PROCESS DOES NOT OVERCOME ALL OF THE OBSTACLES LEADING TO IMPAIRMENT?

A. Yes, but it is clear that a finding of "no impairment" cannot be made without having this process in place, fully tested at commercial volumes and with metrics to ensure continued performance over time. MCI is very interested in any improvements that can be made to the hot cut process either within 9 months, or any time thereafter. MCI is committed to serving mass market customers on its own facilities where it is operationally and economically viable, and is encouraging state commissions to eliminate operational and economic obstacles that stand in its way in that regard. In a telecommunications market reliant so heavily on bundled products, a company's long term viability cannot be sustained in a scenario wherein it relies almost exclusively upon the facilities of its primary competitor (e.g. UNE-P). To ensure that CLECs can move to this service delivery method without harming customers, MCI recommends that the Commission maintain the national finding of impairment throughout all telecommunications markets in the state until such time as UNE-L can realistically replace UNE-P as a tool for serving mass market customers.

V. QWEST'S BATCH HOT CUT PROCESS

Q. SHOULD THE COMMISSION LIMIT ITS INVESTIGATION TO THE BATCH HOT CUT PROCESS ONLY?

A. No. In an effort to alleviate some of the operational barriers to UNE-L recognized by the FCC, the TRO requires that the states approve a batch hot cut process ("Transition Batch Hot Cut Process") to transition existing UNE-P customers to UNE-L by cutting over unbundled loops in high volumes from Qwest to CLECs.[5] The FCC expected that such a process would enable groups of UNE-P customers to be transitioned to UNE-L simultaneously in batches, thus "result[ing] in efficiencies associated with performing tasks once for multiple lines that would otherwise have been performed on a line-by-line basis."[6] Yet although the FCC recognized that such "a seamless, low-cost batch cut process for switching mass market customers from one carrier to another is necessary, at a minimum, for carriers to compete effectively in the mass market," it did not view this transitioning process as a panacea.[7] Indeed, because this Transition Batch Hot Cut Process only addresses the issue of transitioning to UNE-L the embedded base of customers that competitors like MCI have acquired on UNE-P, it is merely one discrete piece of the much larger puzzle that must be assembled before UNE-L can be seen as a viable service delivery method. In practical terms, eliminating the operational barriers associated with the every day hot cut process

[5] Id. at ¶¶ 487-490.
[6] Id.
[7] *See, e.g.*, TRO ¶ 423 describing the batch process as mitigating, not necessarily eliminating impairment, ¶487.

("Mass Market Hot Cut Process") – which will be used to move customers to and from multiple carriers in a dynamic competitive market – is far more critical than implementing a Transition Batch Hot Cut Process that is only useful for simultaneously moving batches of UNE-P customers to UNE-L.

Q. DOES MCI HAVE ANY CONCERNS AT THIS TIME ABOUT HOW QWEST IS ADDRESSING BATCH HOT CUTS?

A. Yes. While the Batch Hot Cut Forum was useful in many respects, it is clear that many issues remain unresolved or at impasse.

Q. IS MCI AT IMPASSE ON MOST ISSUES RELATING TO THE PROPOSED QWEST BHC PROCESS?

A. No. To say that MCI is at impasse on most issues would be incorrect. Qwest appears to have made movement in the right direction by listening to the concerns of the CLECs and including some recommended features. For instance, Qwest has agreed to develop a "due date scheduler" and an online order status tool – both of which were recommended by MCI and other CLECs. Nevertheless, and despite the progress made during the Batch Hot Cut Forum, there are issues at impasse and others that are not well defined.

Q. PLEASE SUMMARIZE MCI'S GENERAL CONCERNS WITH QWEST'S PROPOSAL.

A. As discussed earlier in this testimony, MCI's concerns can be summarized into the following categories: (1) Mechanization -- the process must be substantially more mechanized than existing processes, (2) Limitations on Order Types -- it must be available to all types of transactions a CLEC is likely to encounter in a world where UNE-P no longer exists, (3) Scalability -- it must be capable of

handling dramatically increased order volumes without inserting additional delay and/or error into the process, (4) Testing and Monitoring -- it must be governed by performance measures and penalties consistent with the commercial volumes it will be required to support and finally (5) Efficient and Cost Based -- it must be comparable in terms of quality, timeliness, reliability and cost to existing UNE-P provisioning methods or more importantly, Qwest's own retail provisioning processes. We will address each of these areas with respect to Qwest's proposal in this proceeding. Prior to discussing these broad issues, however, we will specifically address the impasse issues that are of concern to MCI.

VI. IMPASSE ISSUES

Q. HOW MANY IMPASSE ISSUES RESULTED FROM THE REGIONAL BATCH HOT CUT FORUM?

A. Based on the record in that Forum, it appears that 19 issues were at impasse for various reasons. MCI was not at impasse on all 19 issues, and our testimony will only address those issues with which MCI has disagreement with Qwest.

Q. PLEASE ADDRESS EACH IMPASSE ISSUE WITH WHICH MCI HAS A CONCERN, AND PROVIDE MCI'S PROPOSED RESOLUTION.

A. We will identify each issue below using the issue number from the BHC forum, final issues matrix, and then discuss the impasse issue and MCI's recommendations.

VII. ISSUE P-5 – IDLC LOOPS

Q. PLEASE DESCRIBE THIS ISSUE AND THE POSITIONS OF THE PARTIES.

A. The issue was phrased, "Whether the Batch Hot Cut process should include loops provisioned over IDLC". Qwest argued that IDLC loops are handled using the standard hot cut process. MCI and other CLECs argue that IDLC loops must be included in the BHC, especially since a large percentage of loops are served over IDLC facilities. Moreover, the extent to which the CLECs are denied a BHC process for a substantial portion of the network seriously calls into question whether economies of scale will be sufficient enough to warrant any attempt on the part of CLECs to implement UNE-L for the remainder of the market, even for those customers for which the hot cut process might be available.

Q. DOES QWEST PROVIDE LOOPS OVER IDLC?

A. Yes, as is reflected in MCI's direct operational impairment testimony, Qwest has a significant number of loops provided over IDLC. That testimony also quantifies the amount of IDLC used by Qwest in this state.

Q. SINCE A SIGNIFICANT NUMBER OF QWEST'S LINES ARE SERVED VIA IDLC SYSTEMS, HOW DOES THAT IMPACT THE BHC PROCESS?

A. Because of these technological challenges associated with unbundling IDLC loops, Qwest has consistently suggested that UNE-L requests for loops served via IDLC must "fall out" of any provisioning process (including "batch" hot cuts) and be provisioned via an extremely expensive and time-consuming manual process.

These issues must be addressed and resolved before a finding of non impairment can be entered.

Q. BUT HASN'T QWEST SAID IN THE BATCH HOT CUT FORUM THAT IT WILL CUT OVER THE UNE-P IDLC LOOPS?

A. Yes. But Qwest has indicated that it will not include the IDLC loops in the batch process and will only cut over 10 IDLC loops per day, per "manager's area." According to Mr. Pappas during the Batch Hot Cut Forum, Qwest "…would convert ten UNE-Ps that are on IDLC today, per day, at a single RT [remote terminal]."[8] For example as noted in the BHC forum, in Fort Collins, Colorado, the manager's area would include the cities of Fort Collins, Loveland, Greeley and Berthoud.[9] To be fair, however, Mr. Pappas did note that more urban areas might have a "manager's area" that was limited to one central office. It is clear that converting a dozen or so UNE-P loops a day will not be sufficient given the number of IDLC loops Qwest has in the state.

Q. CAN IDLC BE UNBUNDLED DIGITALLY AS YOU DISCUSS ABOVE?

A. Yes, despite arguments to the contrary from Qwest and the other ILECs, it is technically feasible to routinely unbundle IDLC in a digital format without losing the inherent "integrated" advantages enjoyed by the ILECs' bundled products. Indeed, the FCC in its *Triennial Review Order* noted: "We recognize that it *is* technically feasible (though not always desirable for either carrier) to provide

[8] See Batch Hot Cut Forum, December 2, 2003, transcript at page 384.
[9] Id. at 390.

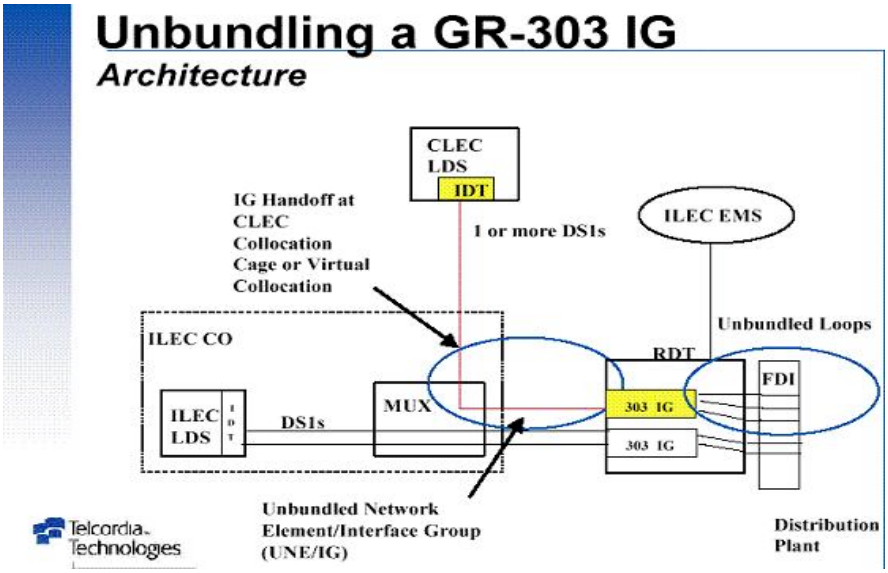
unbundled access to hybrid loops served by Integrated DLC systems."[10] (Emphasis added).

The most advanced IDLC systems engineered and deployed today (GR-303 compliant) have that capability. BellCore (now Telcordia) who developed the GR-303 interface, describes at least two methods by which GR-303 compliant IDLC can be unbundled electronically without requiring a dispatch.

Q. PLEASE DESCRIBE THOSE METHODS.

A. The first method entails the establishment of separate interface groups at the IDLC remote terminal so that a distinct interface group is assigned to a CLEC and passed through a multiplexing device in the central office for purposes of accessing individual lines at the DS0 or DS1 level. This particular unbundling strategy has been discussed for years by industry bodies and has been supported by Telcordia in the past in numerous symposiums. Indeed the following diagram depicting the manner by which this process would work was constructed by Telcordia and provided to the industry in one of its GR-303 symposiums.

[10] See TRO at ¶ 297, n.855.



425

426 *Source: Telcordia's GR-303 Access Symposium binder, Tab 4, August 11, 1999.*

427 **Q. DO OTHER METHODS OF UNBUNDLING IDLC EXIST?**

428 A. Yes, Telcordia also describes another method relative to sharing GR-303 Interface
429 Groups between the ILEC and the CLEC, using a sidedoor port on the ILEC's
430 digital switch for purposes of accessing individual DS0s for transfer to the
431 CLEC's switch. The diagram below shows the use of a GR-303 interface group
432 sharing ILEC and CLEC traffic wherein all CLEC traffic is routed through a
433 sidedoor port, supporting a DS1 or DS0 unbundling scenario. This drawing is
434 also taken from Telcordia documentation, this time from Telcordia's most recent
435 issue of *Notes on the Network*, a leading source of engineering documentation
436 relevant to today's telecommunication network. [11]

[11] Examples taken from: Telcordia Notes on the Networks Issue 4, October 2000.

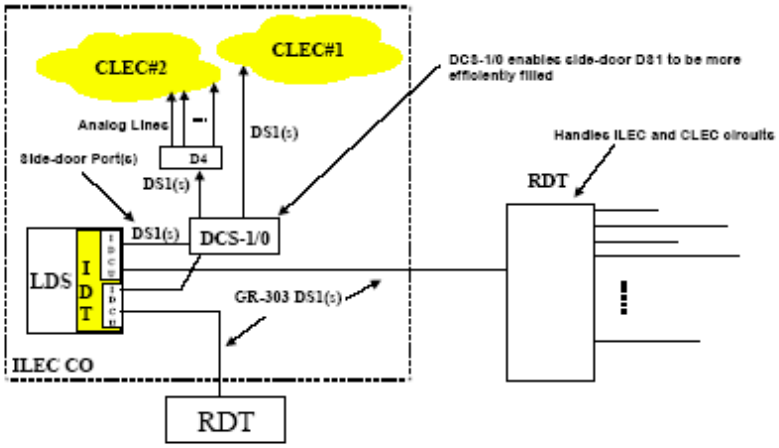


Figure 12-36. IDLC Unbundling Using Sidedoor Port

In the scenario above, unbundled CLEC loops are provisioned as non-locally switched circuits within the IDLC system. Telcordia describes this application as follows:

> While the digital system cross-connect ("DCS"), DCS-1/0, is shown in the figure, it is not a requirement of this architecture. The advantage of using a DCS-1/0 is realized if the CLEC is not fully utilizing a DS1 from the ILEC local digital switch (LDS) to the CLEC, and multiple switch modules with individual digital control units (IDCU) are used by the ILEC. If a DCS-1/0 is placed between the LDS DS1 sidedoor port and the CLEC DS1s, it would permit full utilization of the sidedoor LDS/IDCU hardware by enabling CLEC DS0s to be rearranged in the DCS-1/0 and placed on the individual CLEC DS1s. (See *Notes on the Networks* at Section 12-56)(acronym definitions added).

Q. IN ADDITION TO THE SIMPLE FACT THAT CLECS CAN GAIN ACCESS TO UNBUNDLED CIRCUITS VIA THIS UNBUNDLING METHOD, ARE THERE OTHER ADVANTAGES TO THIS TYPE OF DIGITAL UNBUNDLING?

A. Yes. Not only would either of these methods provide a CLEC unbundled access to the same customer loops the customer enjoys today, without a technician dispatch, it would also mitigate (if not eliminate) the need for manual intervention

in the loop provisioning process (*i.e.*, the "hot cut"). Because GR-303 IDLC systems are largely software driven and do not rely upon manual copper wire manipulation for purposes of cross-connecting the derived circuits they support, unbundled loops could be provisioned to a CLEC on an electronic basis, free of any costly or time consuming technician dispatch. As such, this type of IDLC unbundling would go a long way toward providing non-discriminatory access to unbundled loops, and also toward removing impairment caused by the labor intensive and cumbersome hot cut processes supported by Qwest. In short, this type of unbundling once implemented, tested and proven in a commercial setting, would go a long way toward removing the impairment currently faced by mass-market CLECs without access to unbundled local switching.

Q. ARE THERE COMPLEXITIES ASSOCIATED WITH UNBUNDLING IDLC IN THE FASHION YOU HAVE DESCRIBED ABOVE?

A. Yes. Though unbundling IDLC is unarguably feasible, the work required to establish necessary processes and techniques to unbundle IDLC in this fashion in a commercial setting has never been undertaken in earnest by the ILECs. They have simply been provided no incentive to support this type of process that will only serve to enhance competition in the local market they currently dominate. As such, time and effort must be put toward making this technology a reality. Below we list a number of the obstacles that must be overcome on the road to efficiently unbundling IDLC for purposes of removing impairment:

A. Since each CLEC circuit requires a nailed up DS0, absent additional software functionality or other processes, the ILEC may

encounter blocking over the IDLC system as other circuits compete for DS0 channels.

B. The number of sidedoor ports that can be engineered varies depending on the LDS supplier and no standard appears to have emerged. Hence, a concerted effort on the part of the ILEC may be required to standardize this technology for this purpose.

C. There is limited support in existing special services design systems and databases to support sidedoor port circuits. Again, this results primarily from the fact that the vendors design systems based upon the needs of their primary customers and the ILECs have had little incentive in the past to pursue this type of unbundling technology. Hence, this issue could undoubtedly be overcome by the vendors if provided the proper incentive.

D. Other issues regarding security for an IDLC system providing multiple interface groups to multiple CLECs need to be addressed. Likewise, numerous other details associated with sharing test resources, alarms, etc., would require additional development.

Q. WHY SHOULD THE INDUSTRY WORK TOWARD OVERCOMING THESE OBSTACLES?

A. UNE-P allowed CLECs to overcome the many issues we have described above relative to hot cuts and loop provisioning—issues that had heretofore largely stymied local competition via UNE-L. If the FCC and/or this Commission realistically intend for UNE-L to take the place of UNE-P as a competitive service delivery vehicle, then these same problems must be overcome in a different way. We have identified the manner by which that can be accomplished above. Unbundling IDLC will not be easy. It will require the hard work of the ILECs, the CLECs and, most importantly, state public utility commissions. However, until it is accomplished, CLECs will be impaired without access to UNE switching and UNE-P. It is MCI's hope that addressing the problems in that order

(*i.e.*, first fix the IDLC unbundling issue as well as the manual hot cut issue, then decide whether impairment remains) will provide the type of incentive necessary for proper ILEC involvement (contrasted with their general nay-saying relative to these options in the past).

Q. WHAT CONFIDENCE CAN THE COMMISSION HAVE THAT IDLC CAN BE UNBUNDLED AND THAT THESE ISSUES YOU HAVE IDENTIFIED ABOVE CAN BE OVERCOME?

A. Though these issues are real, and real effort will be required to address them, it is important to remind the Commission that Telcordia developed the specifications for the GR-303 platform for unbundling, and has demonstrated their commitment to resolving the issues associated with unbundling, by providing the methods described above. Telcordia has even organized and spearheaded symposia related to unbundling GR-303 equipment. In the final analysis, these types of issues are really no different than the myriad of issues the industry has been addressing for several years relative to the evolution of the network and unbundling in general. The arguments the ILECs make in opposition to IDLC unbundling should remind the Commission of similar arguments the same ILECs made almost 10 years ago when they argued that loops in general could not be unbundled save catastrophic repercussions to the entire network. Those catastrophic events failed to materialize and the same will undoubtedly hold true relative to IDLC unbundling. Finally, Bell South and SBC include IDLC in their batch hot cut processes. Bell South will use GR303 and other techniques when available. At the very least,

Qwest should agree to include IDLC circuits in the batch process even if these circuits must first be cutover only where spare copper is available.

Q. WHAT IS MCI'S PROPOSED RESOLUTION TO THIS ISSUE?

A. The Commission should require Qwest to include IDLC loops in BHC orders.

Q. SHOULD THE HOT CUT PROCESSES ULTIMATELY IMPLEMENTED BY THE COMMISSION EXCLUDE ANY PARTICULAR ORDER TYPES?

A. Generally, no. While there might be a legitimate reason to exclude some particular order type, such exclusion should be the exception as opposed to the rule. Qwest, from what we have seen to date, appears to make such exclusions common place; thus, mitigating the potential benefits of improved hot cut processes. To the extent their efforts are successful, the process in which we are currently engaged is likely to be for naught. If that is the result of this process, then CLECs will have to use the existing hot cut processes.

Q. WHY IS THIS ISSUE IMPORTANT?

A. To the extent CLECs intend to implement a UNE-L strategy, the economics require them to move their embedded base of UNE-P customers to UNE-L. Customers served by UNE-P today are not homogeneous with relation to service type, customer type, or loop type. As such, if Qwest is successful in maintaining the numerous exclusions it has proposed relative to its hot cut processes, there will be a large number of existing UNE-P customers who will not be able to be cutover with the hot cut process. Further, to maintain their customers over any length of time on a going forward basis, CLECs need to be able to address all

customer types represented in their market. That would include, at a minimum, all types of lines that are currently contained within their embedded base.

Q. CAN YOU PROVIDE SOME EXAMPLES OF EXCLUSIONS AND EXPLAIN WHY THEY WOULD DISRUPT THE CLEC'S BUSINESS IF MAINTAINED?

A. Yes, we can provide three of the most important examples. First, Qwest has for the most part stated that its "batch" hot cut processes will not support customer loops currently provided via IDLC facilities (as discussed above), at least not within the same timeframe or at the same costs as other loops. Second, we understand that Qwest will exclude any line that is currently being used for both voice and data services (line sharing or line splitting) from these processes (see below). Third, we also understand that Qwest does not intend to support hot cuts where the receiving carrier is not collocated in the office where an end user's loop is terminated, *i.e.*, it will not allow for hot cuts to take place where EELs are used to gain access to end users by taking the loop from the MDF and connecting it to a collocation at another central office where it can then be transferred to the carrier's switch (or in many circumstances, it has simply not developed the processes needed to provide BHCs in a situation where a carrier uses an EEL).

By including these – and potentially other – prohibitions on the use of BHC processes, Qwest has substantially reduced the percentage of current and future customers' loops that could potentially benefit from the processes which are being designed to mitigate impairment. As such, even with the BHC process advocated by Qwest, CLECs will remain impaired when attempting to serve any

of the mass market customers who happen to fall into these categories, which could easily be well over half of all such customers. For example, it has been our experience that in some central offices, many mass market customers are served via IDLC. Moreover, the extent to which the CLECs are denied a BHC process for a substantial portion of the network seriously calls into question whether economies of scale will be sufficient enough to warrant any attempt on the part of CLECs to implement UNE-L for the remainder of the market, even for those customers for which the hot cut process might be available.

Q. PLEASE DESCRIBE MCI'S PROPOSAL RELATED TO EELS.

A. MCI should be allowed to submit an order that requests a loop housed in Qwest Central Office A, be "cut" to a collocation facility (i.e., an MCI CFA), in Central Office B. When Qwest receives such an order, it should provision on MCI's behalf, as part of its hot cut pre-wiring function, a DS0 EEL extending from Central Office A to MCI's CFA in Central Office B. All ANI testing should be completed via the DS0 EEL, and on DD-2 Qwest should cut the requested loop to the EEL so that MCI dial tone from its collocation in Central Office B is provided to the customer via his/her loop located in Central Office A. Non-recurring charges specific to an EEL/Hot Cut should be computed and presented to state public utility commissions for review before approval.

VIII. ISSUE P-6A and B – LINE SPLIT LOOPS

Q. PLEASE DESCRIBE THIS ISSUE AND THE POSITION OF THE PARTIES.

A. Issue P-6a is described, "Whether the Batch Hot Cut process should include line split loops." Issue P-6b is described, "Whether the Batch Hot Cut process should include UNE-P with ancillary DSL." Qwest argues that including line split loops would eliminate some of the efficiencies of the BHC. The CLECs argue that line split loops are required per the TRO. In addition, CLECs point out that Qwest, among all the other ILECs, is the only one that actually has a process to migrate a line split UNE-P line to a line split UNE-L line without disrupting the customer's data services. Thus, Qwest has the process CLECs need but refuses to implement it as part of its batch process.

Q. WHAT IS MCI'S PROPOSED RESOLUTION TO THIS DISPUTE?

A. The Commission should require Qwest to include line split loops in the BHCs. At ¶ 211 of the TRO it states,

> We also require incumbent LECs to provide competitive LECs the ability to line split, which allows two competitive LECs to split the loops so that one carrier can provide narrowband service and the other can provide broadband service.

There is no good reason to preclude line split loops from the BHC process. Indeed, at ¶ 252 of the TRO the FCC encouraged the ILECs to use the collaborative process to address any OSS changes that might be necessary to support line splitting.

Q. DO YOU ANTICIPATE SITUATIONS IN THAT A UNE-P CUSTOMER WITH LINE SPLITTING WILL MIGRATE TO A UNE-L SCENARIO?

A. Yes. Today there are customers in line splitting scenarios where the voice service is provided via UNE-P. It is likely that a CLEC will want to move that voice service from UNE-P to UNE-L if UNE-P is no longer available. In that scenario there is no reason to eliminate the loop from the BHC.

Data services are becoming an ever-increasing part of full-service communications packages offered not only by CLECs, but also by Qwest and the other ILECs. And, digital subscriber line ("DSL") growth rates are still dramatic as literally thousands of new DSL subscribers join the ranks of the broadband subscribership every day. As such, it is becoming far more common to encounter subscribers who have DSL services on their existing loop, but want to change either their entire service package, or just their voice services, to another carrier. Either of these scenarios is likely to require a hot cut. Yet, again, Qwest does not plan to support this type of hot cut in its improved processes.

Q. QWEST INDICATES THAT SUCH A SCENARIO WOULD BE CHANGING THE SERVICE FROM A NON-DESIGN SERVICE TO A DESIGN SERVICE, THEREBY ELIMINATING EFFICIENCIES THAT THE BHC WAS DESIGNED TO CAPTURE. DO YOU AGREE?

A. No. The customer was previously receiving voice and data over a loop that was capable of providing the service. Eliminating the ILEC local switching does not eliminate the loop. As such there is no need to "design" the loop since it was already in service and providing both voice and data. The "design" issue is a red-

herring and should be ignored. Qwest should be required to include these loops in the BHC.

Q. WHAT IF THERE ARE OTHER TECHNICAL ISSUES ASSOCIATED WITH INCLUDING THE LINE SPLIT LOOPS IN THE BHC?

A. If there are other situations that require attention, then Qwest should work to resolve those issues and not simply refuse to do so. During the Batch Hot Cut Forum, Mr. Zulevic from Covad explained to the parties how simple the actual cut of line split loop would be.[12] There is no technical reason not to include line split loops in the BHC.

IX. ISSUE P-12 – MIGRATION BY TELEPHONE NUMBER

Q. PLEASE DESCRIBE THIS ISSUE AND THE POSITION OF THE PARTIES.

A. MCI has asked for the capability of migrating a customer by telephone number ("TN") and street address number ("SANO"). Qwest considers this issue outside the BHC implementation process but specifically noted that "…there is no technical limitation precluding Qwest from modifying the edits in its integrated mediated access ("IMA") systems to allow CLECs to enter TN and SANO for UNE-P to UNE-Loop conversions."[13]

Q. HOW DOES MIGRATION BY TN AND SANO BENEFIT THE INDUSTRY?

A. Migration by TN and SANO saves the CLEC considerable time on each local service request ("LSR") by not having to enter the entire customer address. It

[12] See Batch Hot Cut Forum Exhibit 4.
[13] See Batch Hot Cut Forum Issues List; Issue P-12; Qwest Response dated 12/10/03.

also eliminates potential errors in the LSR associated with typos or other unique aspects of address notations (i.e., "St." versus "Street"). By saving time for the CLEC and avoiding errors on LSRs (and avoiding the resulting rejects), the industry and the consumer benefit. Since there is no technical limitation precluding Qwest from processing LSRs with TN and SANO, the Commission should require Qwest to do so.

Q. DOES QWEST OPPOSE MIGRATION BY TN AND SANO?

A. Qwest has indicated that it will not oppose MCI Change Request Nos. CR SCR061302-01 and SCR022703-18 that deal with the migrate by TN and SANO issue. [14]

Q. DOES THAT RESOLVE THIS ISSUE?

A. No. The Change Management process can be very time consuming with no guaranty of success. Further, Qwest has indicated that resources for updating IMA releases have been reduced dramatically. The industry should not have to wait for such important enhancements when there is no technical reason not to implement them.

Q. IF THE COMMISSION ORDERS QWEST TO MAKE THIS CHANGE DOES THAT EXPEDITE THE CHANGE MANAGEMENT PROCESS?

A. Yes. When a change is required by a regulatory order the change requests becomes a "regulatory" change request and it then takes priority over non-regulatory CRs. Having an order from this Commission directing Qwest to implement Migration by TN and SANO by a certain date and before any finding

of "no impairment", if any, were to become effective for any area within the state will aid the CLECs in their attempts to get this important capability in place sooner.

X. ISSUE P-23 – NOTIFICATION OF BATCH COMPLETION

Q. PLEASE DESCRIBE THIS ISSUE AND THE POSITION OF THE PARTIES.

A. MCI has asked Qwest to consider updating the web-based order status tool more often than once every 30 minutes. MCI recommends that the status tool update at least every 10 - 15 minutes so as to limit the amount of time the customer is unable to receive calls.

XI. ISSUE P-27c – LEVEL OF MECHANIZATION

Q. PLEASE DESCRIBE THIS ISSUE AND THE POSITION OF THE PARTIES.

A. MCI has recommended that Qwest investigate the use of automated or robotic frames for central office activities. This type of mechanization is an excellent way to increase capacity and efficiencies which were specific goals of the *Triennial Review Order* for the BHC process. Qwest states that it has evaluated such technologies but has chosen not to implement them.

Q. WHY IS MECHANIZATION IMPORTANT?

A. Each of the obstacles described by the FCC in the *TRO* related to the hot cut process (i.e., timeliness, scalability, reliability, seamlessness and cost) can be addressed with increased mechanization. Indeed, the primary advantage of the

[14] Id.

UNE-P provisioning process when compared to the hot cut process is the level of mechanization. If done correctly, little or no manual intervention is required to move a customer from one carrier's service to another via UNE-P. This substantially increased level of mechanization in the UNE-P process bears substantial fruit, for example:

(1) The time required to move the customer from one carrier to another is dramatically reduced, from several days to just a few minutes.

(2) The rate of error in the process is dramatically reduced. The largest single component leading to service disruption in the hot cut process is human error.

(3) The process is highly scalable given that software/hardware resources are easily supplemented.

(4) The process is relatively inexpensive. The single most expensive component of any provisioning function is human intervention.

It is this increased level of mechanization, and the resultant benefits, that have made UNE-P such a successful competitive platform. And, unless state regulators are willing to see the substantial progress made by competitors with UNE-P evaporate without it, the hot cut process will need to exhibit the same types of efficiencies.

Q. DOES QWEST RELY HEAVILY UPON MECHANIZATION FOR PURPOSES OF INCREASING THE EFFICIENCY (AND LOWERING THE COSTS) OF ITS RETAIL PROVISIONING PROCESSES?

A. Absolutely. In fact, the FCC at ¶ 465 of its *TRO* made a point of noting the discrepancy between an ILEC's primarily software-driven retail provisioning process, and the manually intensive nature of existing hot cut processes in an

effort to illuminate the competitive disadvantage CLECs would face absent access to unbundled local switching (or a dramatically improved/mechanized hot cut process):

> The barriers associated with the manual hot cut process are directly associated with incumbent LECs' historical local monopoly, and thus go beyond the burdens universally associated with competitive entry. Specifically, the incumbent LECs' networks were designed for use in a single carrier, non-competitive environment and, as a result, the incumbent LEC connection between most voice-grade loops and the incumbent LEC switch consists of a pair of wires that is generally only a few feet long and hardwired to the incumbent LEC switch. Accordingly, for the incumbent, connecting or disconnecting a customer is generally merely a matter of a software change. In contrast, a competitive carrier must overcome the economic and operational barriers associated with manual hot cuts. Our finding concerning operational and economic barriers associated with loop access reflects these significant differences between how the incumbent LEC provides service and how competitive LECs provide service using their own or third-party switches. [emphasis added]

It is important to note that the FCC, in the excerpt above, singles out the disparity between the software driven nature of the ILEC's retail process, compared to the manual nature of the hot cut process, as the primary basis for its finding regarding operational and economic impairment.

Q. DOES TECHNOLOGY EXIST THAT COULD BE USED TO AUTOMATE ACTIVITIES ASSOCIATED WITH BHCS?

A. Yes, and many of the ILECs utilize these technologies for purposes of provisioning retail products with the specific intention of removing manual work steps from their provisioning process. For example, Verizon employs the two most common types of technology that can be used to cutover a loop without

manual intervention: (1) automated or mechanized frame systems and (2) electronic loop provisioning via GR-303.[15] There are numerous vendors that provide these automated loop provisioning systems and, not surprisingly, each vendor describes in detail how its system can obviate the need for manual intervention in the cutover process. Examples of vendors who provide electromechanical and micro-relay type frame systems include NHC (www.nhc.com) and Simplernetworks (www.simplernetworks.com), respectively. There are many others as well.[16]

Q. PLEASE EXPLAIN THE LIMITATIONS CURRENTLY HINDERING THIS TECHNOLOGY FOR MORE WIDESPREAD USE.

A. For the most part, it appears the largest hindrance with respect to these automated systems is incentive, not technology. Unless required to provide a UNE-L provisioning process approaching the automated efficiency of their retail or UNE-P based services, Qwest has little incentive to consider a technology that will make UNE-L a more viable option. Indeed, Qwest is motivated to delay the implementation of such advances, claiming such advancements are unnecessary, too costly or impossible. As long as Qwest can convince state commissions that the substantially limited manual processes, and the enormous non-recurring charges they require, are sufficient, Qwest has little incentive to automate the process or improve it to any degree beyond that required on a regulatory basis.

[15] GR-303 is a Bellcore (now "Telcordia") standard around which multiple equipment vendors build "next generation digital loop carrier" systems ("NGDLC").
[16] Other providers include Avaya (Automated Main Distributing Frame System), Oki (Smart MDF) and CON-X (ILEC Central Office Solutions).

As such, Qwest spends the majority of its time identifying the limitations of existing equipment rather than describing how it could improve or implement innovative alternatives.

Q. HAS VERIZON DEPLOYED AUTOMATED DISTRIBUTION FRAMES?

A. Yes. In a hearing that was completed just last week, the Verizon witnesses confirmed that the company does use automated distribution frames, albeit not necessarily for BHC purposes. The text of the transcript states:

> Q So for all three of these processes, the provisioning is manual; the movement of the frame is manual?
> A (Witness Maguire) Yes.
> (Witness McLaughlin) With one correction, except in those offices where we do have auto MDFs employed that may have CLEC equipment connected -- my answer was except for those offices where we may have MDFs employed in New York State that have CLEC equipment connected to them, it would be a manual process.
> Q Mr. McLaughlin, what's an automated distribution frame?
> A (Witness McLaughlin) It's a mechanical cross connect device that has terminated Verizon equipment for the most part and Verizon cable facilities to it.
> Q You caught me off guard, because I was -- had this outline, and we were going to talk about automated distribution frames later, but as long as you mentioned it, let me explore that last answer to that previous question. Does Verizon offer distribution frames today for hot cuts in New York?
> A (Witness Nawrocki) Verizon has offered automated MDFs on selected offices. I'm not aware that we have utilized these devices specifically for hot cuts. Typically these

devices are in small offices without colocation.[17]

Q So I have two answers which I think are conflicting, and that's why I pursued it. I want to make sure I have the right answer. Between the answer Mr. McLaughlin gave or the answer that Mr. Nawrocki gave, I just want to confirm that there is no CLEC equipment that is attached to automated distribution frames in New York.

A (Witness McLaughlin) My answer was except where they may. I do not have positive information one way or the other.

Q Mr. Nawrocki or anyone else on the panel, is there such a case in New York where a CLEC is attached to an automated distribution frame?

A (Witness Nawrocki) I'm not aware that we have these devices in any office colocation, but I wouldn't disallow it.

Q What do you mean you "wouldn't disallow it"?

A (Witness Nawrocki) To my knowledge, all these devices are in very small or middle offices without colocation. There may be an isolated case, not to my knowledge, where we have some -- some telekeyed equipment in the office.

Q If you had that situation, take it hypothetically, do you have plans to use automated distribution frames to perform hot cuts?

A (Witness Maguire) Yes.

Q You do?

A (Witness Maguire) If there is colocation and there are automatic distribution frames, as Mr. McLaughlin pointed out, then we will use that technology to perform hot cuts but, to expand a little bit, I'm not aware of any situation where we have ADFs and colocation.

Q Have you ever tried an application to use ADFs for hot cuts?

A (Witness McLaughlin) Not to my knowledge.

[17] Before the State of New York Public Service Commission; Case No. 02-C-1425; Proceedings on Motion of the Commission to Examine the Process and Related Costs of Performing Migration on a More Streamlined (e.g., bulk) Basis; Evidentiary Hearing, Tuesday, January 13, 2004. Cross of Verizon Witnesses McLaughlin and Nawrocki by MCI attorney Curtis Groves.

As the Commission can see by this exchange in New York, the technology does exist to automate much of the frame work that is done today by technicians. Qwest's refusal to consider such technology is at odds with the FCC's direction to resolve the overly manual nature of existing hot cut processes. Indeed, the FCC specifically identifies the overly manual nature of existing hot cut processes as the primary obstacle to sufficient scalability, sufficient reliability relative to service quality, and affordability.

Q. ARE THERE ANY RECOMMENDATIONS YOU CAN MAKE TO THE COMMISSION REGARDING THE LONG TERM USE OF TECHNOLOGY TO REDUCE LABOR TIMES, EXPENSES AND THE POTENTIAL FOR ERROR IN THE HOT CUT PROCESS?

A. Yes. If policy makers truly intend for UNE-L to replace UNE-P, such that millions of loops will be "ported" from one carrier to another on a regular basis, technology that automates the loop cutover function is the only way to reach that objective in an efficient manner. Today's "hot cut processes" as briefly described above remain largely manual, labor intensive, and can be made only marginally more efficient with system and process related improvements.[18] While many of these process and system changes are important and can lead to a more efficient, scalable and low cost hot cut methodology, they completely ignore the largest manually intensive step in the process, *i.e.*, the work of the frame technician to actually cutover the loop.

[18] Qwest has listened to the suggestions of the CLECs and is proposing to implement an electronic "scheduler" and a web based status tool. To the extent Qwest is successful in developing these tools, all parties should benefit from enhanced efficiencies.

XII. ISSUE P-29 – COORDINATION OF SYSTEM CHANGES WITH CMP

Q. PLEASE DESCRIBE THIS ISSUE AND THE POSITION OF THE PARTIES.

A. MCI has stated repeatedly that the system changes resulting from the Batch Hot Cut Forum should be made outside of the Change Management Program ("CMP"). Qwest argues that the changes that result from the TRO should be handled through the normal CMP process.

Q. PLEASE EXPLAIN WHY THE CMP IS NOT THE APPROPRIATE FORUM TO ADDRESS CHANGES RESULTING FROM THE TRO.

A. The TRO requirements are unique and extensive. There is currently a backlog of change requests ("CR") that will compete with any changes resulting from the TRO processes. This backlog, combined with Qwest's reduced resources and the time consuming nature of the CMP, means that some important changes will not be made, or that some changes will be delayed.

MCI recommends that the TRO changes be addressed together in a unique release. McLeod also requested that system enhancements associated with the BHC process be moved outside CMP as a separate release.[19] Including all the BHC changes (including migrate by TN and SANO) into one release will provide the focus and resources required to implement these changes. If the BHC changes are not done together, the industry risks having some capabilities delayed while others are implemented. Such a disjointed implementation will surely frustrate the intent of the TRO and will not eliminate the finding of impairment.

[19] See Batch Hot Cut Forum Issues Matrix; Issue P-29.

Q. PLEASE EXPLAIN.

A. The BHC process does not exist unless and until the systems are in place, working and tested under commercial volumes. If all of the features are not present because of CMP priorities, then the system is not yet viable or available as promised. In such a situation, the finding of impairment must remain.

Q. IS THERE A WAY TO AVOID THE DELAYS YOU'VE DISCUSSED?

A. Yes. If the Commission decides that these changes must be evaluated through the CMP, then the Commission should require Qwest to address all the BHC issues together and ensure that they are implemented together as a regulatory change request. Further, the Commission should order Qwest to implement, test and demonstrate that the processes are commercially viable by a certain date and before any finding of "no impairment", if any, were to become effective for any area within the state. Finally, MCI agrees with Covad's suggestion that Qwest allocate additional dedicated resources to address system changes related to the TRO.

XIII. ISSUE SC-1 / SC-5 – HANDLING ANTICIPATED VOLUMES

Q. PLEASE DESCRIBE THIS ISSUE AND THE POSITION OF THE PARTIES.

A. This issue relates directly to scalability. Scalability refers to the ILECs' ability to perform BHCs with increases in volumes. The CLECs have raised concerns as to whether Qwest can handle the many transactions that will occur as the result of a find of no impairment and the other day-to-day operations. Qwest claims that it

can handle the volumes as it has calculated them over the period allowed for conversion.

Q. WHAT DOES SCALABLE MEAN WITH RESPECT TO THE BHC PROCESS?

A. Scalability refers to the ILECs' ability to perform BHCs with increases in volumes. The BHC process must be capable of handling the migration of the embedded base of UNE-P lines to UNE-L, in addition to expected churn and other cut orders. Scalability is achieved by eliminating manual intervention. As such, and as discussed earlier in this testimony, an automated end-to-end process should be the goal of ILECs seeking scalability for BHCs. Unfortunately, Qwest has ignored the new technologies available today and instead relies almost entirely upon its traditional manual processes.

Q. QWEST CLAIMS THAT ITS BHC PROPOSAL IS SCALABLE. DO YOU AGREE?

A. No. Qwest has eliminated the scalability issue by artificially limiting the size of the batch orders (minimum of 25) and the number of cuts (100) that will be done in any central office on a given day. In other words, Qwest proposes a cap of 100 cuts per day, per central office for all CLECs. So, in Qwest's view, scalability is not an issue as long as it can cut 100 loops a day in a central office. This approach, however, forces the CLECs to conform to these arbitrary limitations. As you can imagine, given Qwest's intransigent approach to BHCs, the CLECs will have little or no ability to focus cuts in central offices where growth is

occurring or in any other prudent or economic manner.[20] More importantly, Qwest's agreements on batch hot cuts are apparently in some way connected to the "transition planning process," but this process remains a mystery.

Q. HASN'T QWEST MADE STATEMENTS TO THE EFFECT THAT THESE HOT CUT MIGRATIONS WILL NOT POSE ANY PROBLEMS?

A. Yes. The industry, however, including Qwest, has had no experience with large volumes of hot cuts. The FCC based its finding of impairment for unbundled local switching on this fact:

> Competitive carriers have shown that, although they have used hot cuts to serve certain small segments of the market, no competitive carrier relies on hot cuts to offer service to significant numbers of customers served by voice-grade loops. Having reviewed the record evidence, *we find that it is unlikely that incumbent LECs will be able to provision hot cuts in sufficient volumes* absent unbundled local circuit switching in all markets.[21] (emphasis added)

Q. HAVE OTHER ILECS EXPRESSED CONFIDENCE IN THEIR ABILITY TO HAVE A SCALABLE PROCESS IN PLACE?

A. Yes. For example, in New York, even based upon its own calculations, Verizon anticipates the need to hire and train literally thousands of new employees just to accommodate the increased volume of hot cut demands.[22] Qwest, on the other hand, has no plans to increase staff whatsoever in order to deal with these needs and instead will dedicate only two central office technicians per central office to do the BHCs. For that reason, Qwest is proposing to limit its BHCs to 100 per

[20] During the BHC Forum, for example Qwest indicated that there were 52 CLECs in Colorado. It is mind boggling to think that Qwest's "transition planning" approach combined with its arbitrary 100 cuts per day, per central office, for all CLECs will not result in frustration and inefficiency.
[21] See TRO at ¶ 468.

central office per day – a number that will be insufficient in many central offices unless the cuts are spread entirely over the timeframe identified by the FCC. In smaller central offices, a team of two technicians may be understandable. In larger central offices, however, Qwest could certainly bring more technicians to the task and accomplish far more than 100 BHCs per day. As the Commission is aware, when the migration of the embedded base begins, the largest central offices will have substantially more BHC requests – perhaps several hundred per CLEC per central office per day. The fact that Qwest, unlike other ILECs, does not see the need to "gear up" in order to accommodate the BHC requests should be a cause for the Commission's concern.

Q. WHAT IS THE MAJOR OBSTACLE TO A SCALABLE HOT CUT PROCESS ON THE PART OF QWEST?

A. The major bottleneck in the hot cut processes advocated by Qwest exists at the MDF or ICDF.[23] As described before, from an operational standpoint (absent installation and implementation of new technology that we discussed earlier), in a UNE-L environment each customer must be rewired manually for purposes of connecting the UNE loop to the receiving CLEC's collocation cage or EEL arrangement. This raises another important factor specific to scalability, *i.e.*, differences between large hot cut jobs undertaken today (or in the past) by Qwest versus the very different hot cut requirements they will face in a market without

[22] See Verizon's Panel Testimony filed October 24, 2003, New York Case No. 02-C-1425, Exhibit V-A, Force Load Model.

UNE-P. Currently, large project hot cuts typically involve one or a limited number of individual multi-line business customers wherein the cut, though potentially impacting many loops, is specific to a given customer. Frequently, the loop MDF connections for these groups of multiple lines are centrally located on the frame and typically all of the customers' loops are relatively concentrated geographically on the frame, because they terminate at the same premises. Conversely, a hot cut for a large group of residential, single line customers will generally appear at random frame locations. It is easy to envision frame technicians working on a number of individual large business hot cuts concentrated on a given termination block, however, it is equally as easy to envision the potentially chaotic situation that could develop as a result of multiple technicians working simultaneously on a number of large residential single line hot cut projects involving loops appearing in random locations on the frame. Therefore, even if Qwest were willing to increase its staffing to achieve more hot cuts per day in the short term, such staffing increases should not be considered to be a total or permanent solution to the problem. Such a solution will likely only be achieved through a change in technologies.

[23] Qwest has stated in the Batch Hot Cut Forum that the Qwest CLEC Coordination Center ("QCCC") in Omaha can handle well in excess of 3,600 cut a day. As such, the QCCC does not appear to be a limiting factor.

Q. TO THE EXTENT UNE-L BECOMES MORE WIDELY IMPLEMENTED, WILL CHURN IMPACT QWEST'S ABILITY TO KEEP UP WITH THE DEMAND FOR HOT CUTS?

A. Absolutely. Churn will become increasingly important and will ultimately drive the rate at which UNE-L migrations grow. MCI has provided its churn rates in its customer impact testimony to give the Commission a sense of the impact churn may have. Moreover, other CLECs may have provided churn rates in discovery responses that should be considered as well. While Qwest would have the Commission ignore CLEC-to-CLEC UNE-L migrations, it should not. In fact, the FCC specifically cited such migrations as a potential area of impairment.[24] Based upon Qwest's statements in the Batch Hot Cut Forum, Qwest does not intend to support CLEC-to-CLEC migrations within its BHC process unless they can be done with no truck roll or other complications. If a CLEC-to-CLEC migration has any complications whatsoever, then the migration must be done using the existing hot cut processes. As such, once a customer is served by a CLEC on UNE-L facilities, the ability of that particular customer to move to another carrier in the future without significant service-impacting problems is in serious doubt. All of the issues which lead to the FCC's finding of impairment without unbundled local switching come into play in such a situation and are compounded by the fact that a third carrier is now involved. Yet Qwest, which by the very nature of its control of the local loop is critical to the process, appears content (indeed, resolute) to leave this issue unaddressed.

[24] See TRO at ¶¶ 471 and 476.

Clearly, if the Commission intends for a customer's loop to be truly portable in a UNE-L environment, this critical issue must be addressed and included in all hot cut processes evaluated, designed, tested, implemented and certified by the Commission. The Commission should recognize that Qwest's ability to meet the demand for BHCs would be impacted by the total number of activities that Qwest must perform to accommodate all types of cuts, regardless of whether those activities occur in a "batch" scenario.

Q. DO YOU HAVE ANY FINAL COMMENTS ON THE SCALABILITY ISSUE?

A. Yes. Qwest notes that "transition planning" will occur prior to the beginning of the migration from UNE-P to UNE-L. It is unclear what this process would entail. Qwest has provided no information on how those meetings might be conducted. Will they be separate meetings with each CLEC? Will they be large industry meetings with all CLECs present? If the parties (whoever that may include) cannot reach agreement on when and where to cut over loops, how will such disagreements be resolved? It seems the entire BHC process and viability is based on a process that Qwest has not yet defined.[25]

XIV. ISSUE V-3 – SIZE OF A BATCH

Q. PLEASE DESCRIBE THIS ISSUE AND THE POSITION OF THE PARTIES.

[25] There is a reference to the Transition Planning at page 3 of BHC Forum Exhibit 9 Section 2, but it says simply, "Transition Planning is expected to take place between Qwest and the CLECs prior to implementation of the Batch Hot Cut Process." While it states that "the transition schedule will establish a central office time line to convert the embedded base within 21 month transition schedule put forth by the FCC in TRO." the devil is in the details.

A. As noted above, Qwest has limited the minimum size of the batch to 25 loops, although it will allow the batch to go through if 5 loops fall out of the batch.[26] MCI has argued that there should be no minimum size of the batch. Other CLECs agree that a minimum batch size is arbitrary.

Q. MIGHT THERE BE TIMES WHEN A CLEC WILL WANT TO SUBMIT A BATCH THAT IS SMALLER THAN 25?

A. Certainly. There is no reason to arbitrarily limit the minimum size of the batch. If a CLEC has five lines it would like to process as a batch, it should be allowed to do so.

Q. QWEST INDICATES THAT IT WILL LOSE EFFICIENCIES IF THE MINIMUM BATCH SIZE IS REDUCED. PLEASE RESPOND.

A. Qwest's statement regarding efficiencies is a pricing issue not an operational one. If the efficiencies are less with a smaller batch then that should be reflected in the price. MCI has consistently stated its expectation that prices will vary with the size of the batch, thereby reflecting the efficiencies and cost savings associated with each.

Q. HOW DO YOU PROPOSE TO SETTLE THIS ISSUE?

A. CLECs should be allowed to submit batch orders of any size. To the extent the size impacts the efficiencies that Qwest may obtain, then those efficiencies should be reflected in the price.

Q. THIS ISSUE ALSO DEALT WITH THE MAXIMUM BATCH SIZE FOR A CENTRAL OFFICE ON A GIVEN DAY. WHAT IS MCI'S RECOMMENDATION IN THIS REGARD?

[26] Qwest states that the batch must include at least 25 lines for a specific CLEC in one central office.

A. MCI recommends a maximum batch size per central office of at least 200 lines. These types of volumes should be achievable by Qwest and would allow CLECs more flexibility if planning their conversions over time.

XV. ISSUE S-2 – INTERVAL FOR THE BATCH

Q. PLEASE DESCRIBE THIS ISSUE AND THE POSITION OF THE PARTIES.

A. Qwest has recommended a seven (7) business day interval for BHCs.[27] The CLECs are requesting a quicker interval ranging from three to five business days.

Q. PLEASE EXPLAIN WHY A SEVEN BUSINESS DAY INTERVAL IS NOT ACCEPTABLE.

A. As stated in the beginning of this testimony, UNE-P is the standard by which a BHC process is judged. Today, Qwest is completing UNE-P orders in three (3) business days or less days. Moreover, UNE-P "conversion as is" for an existing customer can be done on the same day the LSR is received if it is received before noon.[28] Non-coordinated cuts are done in five (5) business days. Finally, as discussed during the BHC Forum, Qwest currently offers a "Quick Loop" service with an interval of 3 business days. With the Quick Loop product, a batch of one to eight lines are cut in three days, eight to sixteen lines are cut in four days and 16 to 24 lines are cut in five days. Given the efficiencies supposedly gained through the "improved" BHC process, certainly Qwest should be able to migrate UNE-P customers to UNE-L in no more than 5 business days. Indeed, during the last day of the Batch Hot Cut Forum the parties had extensive discussions about

[27] See Batch Hot Cut Forum Exhibit 10.

how to reduce the 7 day interval – by reducing times for both CLEC and Qwest activities.

The BHC process is supposed to be a more efficient process than the current process. The scheduler and the web based status tool should add significant efficiencies and time savings. Indeed, Qwest has estimated a 30 to 40 percent savings for the BHC process. Further, if Qwest is successful in eliminating the many different types of loops (IDLC, line split, ADSL, CLEC to CLEC, etc.) there is no reason why Qwest cannot achieve a five business day interval. The five business day interval should be more than sufficient with all loop types included.

XVI. ISSUE R-1 / R-2 – RATE STRUCTURE AND PRICE

Q. PLEASE DESCRIBE THIS ISSUE AND THE POSITION OF THE PARTIES.

A. At the outset of the Batch Hot Cut Forum, the CLECs stated that is was difficult if not impossible to opine on the BHC proposal without information on price. The trade-offs Qwest was proposing (dialtone check on due date versus dialtone check on due date minus two, for example) could not be evaluated in a vacuum without prices. That vacuum still exists since Qwest has not provided its proposed rates for the BHC process.

Q. EXPLAIN YOUR CONCERNS RELATIVE TO HOT CUT COSTS.

A. The *Triennial Review Order* requires states to "…approve and implement a batch cut process that will render the hot cut process more efficient and reduce per-line

[28] See, Exhibit C to Qwest SGAT.

hot cut costs."[29] The FCC specifically identified the current non-recurring rates associated with hot cuts as a major factor in its finding of impairment.[30] Likewise, it directed state commissions to reassess hot cut rates based upon its TELRIC rules and to examine efficiencies that might be gained by offering hot cuts in a "batch."[31]

Q. DO YOU KNOW WHY THE FCC HAS FOCUSED THE STATES ON THE COST OF HOT CUTS?

A. Yes. It is clear that the existing hot cut process is not efficient and it is expensive. Indeed, the FCC states, "The record contains evidence that hot cuts frequently lead to provisioning delays and service outages, and are often priced at rates that prohibit facilities-based competition for the mass market."[32] It is for this reason that the FCC required the states to implement an efficient BHC process to overcome these costs and operational problems. Otherwise, the finding of impairment will remain.

Q. WHAT DID THE FCC FIND WITH RESPECT TO THE CURRENT HOT CUT PROCESS?

A. At paragraph 473 of the *Triennial Review Order* the FCC states, "…we find the overall impact of the current hot cut process raises competitors' costs, lowers their quality of service, and delays the provisioning of service, thereby preventing them from serving the mass market in the large majority of locations."

[29] See TRO at ¶ 460.
[30] *Id*., ¶470.
[31] §51.319(d)(2)(ii)(A)(4).
[32] See TRO at ¶ 465.

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

A. Yes. After substantial time and effort, CLECs and state commissions waded through a plethora of ILEC data to conclude that UNE-P provisioning costs were closer to $1 in a migration situation, as opposed to the more than $100 originally advocated by the ILECs. The lesson to be learned from that experience is that ILECs, including Qwest, have an observed propensity to dramatically exaggerate the costs associated with provisioning UNEs and from my experience in reviewing ILEC cost studies in general, and Qwest cost studies specifically, their estimates tend to be based on cost studies that incorporate inefficient procedures or technologies. Likewise, their studies are generally defined by duplicative work steps, exaggerated estimated work times and many other errors all tending toward non-recurring charges substantially in excess of efficiently incurred costs. Although we have yet to see a price proposal for Qwest's hot cut processes, the same will undoubtedly be true of the cost studies that accompany the price proposal. For that reason, it is critical that the Commission understand that the hot cut process will, for the most part, take the place of a UNE-P migration. (*i.e.*, the method by which most mass market customers are changed from one carrier to another today). To the extent non-recurring costs for the hot cut process substantially exceed existing UNE-P migration charges, UNE-L will suffer from an economic disadvantage relative to UNE-P and relative to the ILEC's retail services that are, in large part, similar to a UNE-P migration. MCI is concerned

that existing hot cut costs – to the extent they might be applied in the future – and any hot cut charges which may be determined in future proceedings will be inappropriately based upon inefficient processes and technologies and, as a consequence, set at rates which are too high to allow for economic use of the UNE-L strategy for mass market customers.

Q. WAS IT POSSIBLE TO DEVELOP PRICES AND COST STUDIES BEFORE THE QWEST BHC PROPOSAL WAS FINALIZED?

A. Perhaps not. But it would have been helpful to have prices for the Qwest proposal as it was initially set forth. With that information in place, it would have been easier to estimate the impact of changing the existing proposal.

Q. DID QWEST PROVIDE A RANGE OF POSSIBLE COSTS?

A. Yes. Mr. Brigham provided a very rough cost estimate of $75 for a hot cut and suggested that a BHC might be provided for about $45 per line.[33] He said that Qwest had not done a cost study, but that he was providing the number as an estimate only. Again, it is impossible to provide an opinion on Qwest's hot cut proposal absent a price for the service. Based on Qwest's comments during the Batch Hot Cut Forum, we expect to see proposed rates supported by cost studies in Qwest's testimony in this proceeding. We will comment on those prices and costs in our rebuttal if at all possible.

[33] See Batch Hot Cut Forum Transcript at page 317 on December 2, 2003.

Q. DO YOU HAVE CERTAIN EXPECTATIONS ASSOCIATED WITH THE PROPOSED PRICES?

A. Yes. The FCC directed state commissions to reassess hot cut rates based upon its TELRIC rules and to examine efficiencies that might be gained by offering hot cuts in a "batch."[34] As such, we expect to see TELRIC compliant cost studies that reflect the efficiencies and improvements in Qwest's BHC process.

XVII. ISSUE T-1 – WORKABILITY OF BHC PROPOSAL

Q. PLEASE DESCRIBE THIS ISSUE AND THE POSITION OF THE PARTIES.

A. The issue relates to Qwest's ability to demonstrate that the BHC proposal actually works. The CLECs have argued for some type of testing and monitoring to determine whether the systems work as designed and whether they can work under commercial loads going forward. Qwest has refused to agree to any testing or monitoring other than the existing performance indicators ("PIDs").

Q. IS QWEST'S BHC PROPOSAL MADE UP OF A COMBINATION OF PROCESS CHANGES THAT CAN BE ACCOMPLISHED WITHOUT SIGNIFICANT LEAD TIME, AS WELL AS ENHANCEMENTS THAT WILL REQUIRE FURTHER DEVELOPMENT AND TIME?

A. Yes, it is. Qwest's hot cut proposal is, in our opinion, made up of three primary components:

(1) process and system changes that can be made in a reasonable period of time without substantial likelihood of problems,

(2) process and system changes that will require some industry involvement and could take time to work through the Change Management Process ("CMP"), and

[34] §51.319(d)(2)(ii)(A)(4).

(3) enhancements that show promise toward reducing costly coordination time and providing increased functionality, but which are largely available today only in conceptual format and for which substantial work must be undertaken both to (a) finalize the specifics of the enhancement and then (b) implement the enhancement through the CMP process.

Q. DO YOU HAVE CONCERNS REGARDING ANY OF THESE ENHANCEMENTS?

A. In large part we believe many of the enhancements proposed by Qwest would improve its hot cut processes. Our primary concern is that attempting to conceptualize, design, test and then adopt enhancements of this type (and magnitude) in a 9 month timeframe is fraught with the potential for disaster. For example, Qwest has suggested that it will design and implement a scheduling tool that will allow CLECs to reserve blocks of time within which they could schedule their hot cut jobs. This scheduling tool is, in concept, an improvement over Qwest's existing process and was requested by MCI and other CLECs. The scheduling tool will eliminate the need to negotiate with Qwest, and it should provide CLECs with some amount of certainty as to the timeframe within which they'll be able to connect customers to their network, and it should allow Qwest to better match its force and load requirements. However, it is clear from the collaborative process that this scheduling tool is still very much "on the drawing board." The same is true of the web-based order status too. Qwest is still conceptualizing how these new systems will work, which systems it will support, what the interface will look like and be capable of, and the business rules surrounding its use. Simply put, the scheduling tool and the web-based order

status tools are along way from a reality at this point, and it seems unlikely that Qwest will be able complete its design, implementation and testing within the few months that remain in the FCC's original 9 month window.

Q. ARE THERE OTHER MAJOR SYSTEMS CHANGES THAT SHARE THIS SAME FATE?

A. Yes, there are several. Qwest has stated that it will be updating its web-based order status tool at various points throughout the order provisioning process. Qwest will also be implementing various "timers" and email exchanges and it is not yet clear whether those systems will be updated in time to implement the BHC.

Q. WITH THIS MAJOR SYSTEM WORK AHEAD OF IT, IS IT LIKELY QWEST WILL BE ABLE TO FULLY IMPLEMENT EVEN THE PROCESS IT IS PROPOSING WITHIN THE 9 MONTH WINDOW AVAILABLE IN THIS CASE?

A. No. MCI has offered to work with Qwest's developers to ensure that the system meets MCI's and other CLECs' needs. Hopefully this collaborate effort with speed development and avoid potential problems going forward.

Q. ARE THERE OTHER PROMISES MADE BY QWEST RELATIVE TO ITS HOT CUT PROCESSES ABOUT WHICH YOU ARE SKEPTICAL?

A. Yes. As we discussed above, in our opinion, Qwest's hot cut process can be sufficiently scalable only if it is mechanized to a substantially larger degree than that proposed by Qwest. Given Qwest's unwillingness to investigate and deploy automation, MCI is skeptical about Qwest's ability, as well as its incentive, to follow through on its commitments.

Q. WHAT ARE YOU ATTEMPTING TO PORTRAY TO THE COMMISSION IN YOUR DISCUSSION ABOVE?

A. One of the Commission's most important roles in this proceeding will be to identify all of the enhancements in Qwest's hot cut process that exist today largely as promises. The Commission must then design and implement the proper testing, measurement criteria and incentive structure necessary to ensure that Qwest delivers on those promises. In MCI's mind, the tools most important to this initiative will be (1) a rigorous testing requirement that will test the capabilities of Qwest's processes/systems at a commercial scale comparable to that it would experience given a finding of no impairment, (2) applicable performance metrics aimed at measuring the extent to which Qwest's proposed processes/systems actual perform as promised over time and (3) an incentive structure that compensates CLECs fairly for any poor performance on Qwest's part. Further, within this proceeding, the Commission should develop some sense of the hot cut volumes Qwest is likely to face given a finding of "no impairment" so as to make itself comfortable with Qwest's ability to accommodate those volumes using the process the Commission ultimately adopts. Using that information the Commission should likewise estimate the increased workforce Qwest would need to procure, train and place in order to meet its promises related to scalability. Finally, the Commission should require of Qwest an implementation plan related to those force enhancements.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.