BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 030851-TP

In the Matter of

IMPLEMENTATION OF REQUIREMENTS ARISING FROM FEDERAL COMMUNICATIONS COMMISSION'S TRIENNIAL UNE REVIEW: LOCAL CIRCUIT SWITCHING FOR MASS MARKET CUSTOMERS.

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VOLUME 23

Pages 3298 through 3479

PROCEEDINGS: HEARING

BEFORE: CHAIRMAN BRAULIO L. BAEZ
COMMISSIONER J. TERRY DEASON
COMMISSIONER LILA A. JABER
COMMISSIONER RUDOLPH "RUDY" BRADLEY
COMMISSIONER CHARLES M. DAVIDSON

DATE: Thursday, February 26, 2004

TIME: Commenced at 9:00 a.m.

PLACE: Betty Easley Conference Center
Room 148
4075 Esplanade Way
Tallahassee, Florida

REPORTED BY: JANE FAUROT, RPR
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APPEARANCES: (As heretofore noted.)

I N D E X

WITNESSES

EXHIBITS

NUMBER:		ID.	ADMTD.
113A	Public Exhibits to Witness Bryant's Prefiled Testimony	3303	
113B	Confidential Exhibits to Witness Bryant's Prefiled Testimony	3303	
114	Public Exhibits to Witness Lichtenberg's Prefiled Testimony	3304	
114B	Confidential Exhibits to Witness Lichtenberg's Prefiled Testimony	3304	

P R O C E E D I N G S

(Transcript follows in sequence from Volume 22.)

CHAIRMAN BAEZ: Next I have James Webber.

MS. McNULTY: Also may I have Dr. Bryant's testimony moved into the record as though read.

CHAIRMAN BAEZ: Oh, I'm sorry. Show the testimony of James Webber, direct, rebuttal, and surrebuttal entered into the record as though read.

MS. McNULTY: And Dr. Bryant's, as well.

CHAIRMAN BAEZ: And Dr. Bryant's, as well. Didn't I say Dr. Bryant? No.

MS. McNULTY: We just finished Dr. Bryant's and I forgot to ask.

CHAIRMAN BAEZ: Okay.

(REPORTER NOTE: For the convenience of the record, Dr. Bryant's testimony was inserted in Volume 22.)

MS. McNULTY: Also with James Webber's testimony, with the direct testimony we have there is an errata sheet which I have distributed to the Commissioners and parties. There is also one for Sherry Lichtenberg. It's one page. So for James Webber we have direct, rebuttal, and surrebuttal testimony, and with that testimony there are public and confidential exhibits that I would like marked for identification. The public exhibits are JDW-1 through 10 and 12.

CHAIRMAN BAEZ: Show those marked as Composite 113.

MS. McNULTY: Are those A?

CHAIRMAN BAEZ: 113A.

MS. McNULTY: And then the confidential exhibit is JDW-11.

CHAIRMAN BAEZ: Show JDW-11 marked as Composite 113B. Or 113B, sorry.

(Composite Exhibit 113 and 113B marked for identification.)

CHAIRMAN BAEZ: Ms. Lichtenberg.

MS. McNULTY: Ms. Sherry Lichtenberg filed direct testimony, rebuttal testimony, and the errata sheet distributed earlier has errata to the rebuttal testimony. There is a supplemental rebuttal testimony that was filed January 22nd, as well as surrebuttal testimony. And MCI would ask that that testimony be moved into the record as though read.

CHAIRMAN BAEZ: Show the direct, rebuttal including errata, the supplemental rebuttal, and surrebuttal testimony of Sherry Lichtenberg moved into the record as though read.

MS. McNULTY: Thank you. And with that testimony there are both public and confidential exhibits as follows: The public exhibits are Exhibits SL-1 through 5.

CHAIRMAN BAEZ: And show public Exhibits SL-1 through 5 marked as Composite 114.

MS. McNULTY: And the confidential exhibits are SL-6

through 7.

CHAIRMAN BAEZ: Show SL-6 through 7 marked as Composite 114B.

MS. McNULTY: Thank you, Chairman.

(Composite Exhibits 114 and 114B marked for identification.)

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.

A. My name is James D. Webber and my business address is: QSI Consulting, 4515 Barr Creek Lane, Naperville, Illinois 60564.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by QSI Consulting as a senior consultant within the firm's Telecommunication Division. QSI is a privately-held consulting firm that provides consulting services to a diverse group of clients within the regulated utility industries including, for example, competitive local exchange carriers, long distance carriers and energy service providers.

Q. PLEASE PROVIDE A SYNOPSIS OF YOUR EDUCATIONAL BACKGROUND AND RELEVANT WORK EXPERIENCE.

A. I earned both a Bachelor of Science degree in Economics (1990) and a Master of Science degree in Economics (1993) from Illinois State University.

From October 2000 until July 2003, I was employed by ATX/CoreComm as the Director of External Affairs. In that capacity, my responsibilities included: management and negotiation of interconnection agreements ("ICAs") and other contracts with other telecommunications carriers; management and resolution of operational impediments (including, for example, the unavailability of shared transport for purposes of IntraLATA toll traffic or continual problems associated with failed hot cut processes) arising from relationships with other carriers;

management of financial disputes with other carriers, design and implementation of cost minimizations initiatives; design and implementation of legal and regulatory strategies; and, management of the company's tariff and regulatory compliance filings. I was also involved in the Company's business modeling as it pertained to the use of Resale services, UNE-Loops and UNE-P.

Before joining CoreComm, I was employed by AT&T from November 1997 to October 2000 where I held positions within the company's Local Services and Access Management organization and its Law and Government Affairs organization. As a District Manager within the Local Services and Access Management organization I had responsibilities over local interconnection and billing assurance. Prior to that position, I had served as a District Manager – Law and Government Affairs where I was responsible for implementing AT&T's policy initiatives at the state level.

Prior to joining AT&T, I was employed (July 1996 to November 1997) as a Senior Consultant with Competitive Strategies Group, Ltd. ("CSG"), a Chicago-based consulting firm that specialized in competitive issues in the telecommunications industry. While working for CSG, I provided expert consulting services to a diverse group of clients, including telecommunications carriers and financial services firms.

From 1994 to 1996, I was employed by the Illinois Commerce Commission ("ICC") where I served as an Economic Analyst and, ultimately, as Manager of the Telecommunications Division's Rates Section. In addition to my supervisory responsibilities, I worked closely with the Commission's engineering

department to review Local Exchange Carriers' ("LECs") – and to a lesser extent Interexchange Carriers' ("IXCs") and Competitive Local Exchange Carriers' ("CLECs") - tariffed and contractual offerings as well as the supporting cost, imputation and aggregate revenue data.

From 1992 to 1994, I was employed by the Illinois Department of Energy and Natural Resources where I was responsible for modeling electricity and natural gas consumption and analyzing the potential for Demand Side Management ("DSM") programs to offset growth in the demand for, and consumption of, energy. In addition, I was responsible for analyzing policy options regarding Illinois' compliance with environmental legislation.

A more detailed discussion of my educational and professional experience can be found in **Exhibit JDW-1,** attached to this testimony.

Q. ON WHOSE BEHALF WAS THIS TESTIMONY PREPARED?

A. This testimony was prepared on behalf of MCImetro Access Transmission Services LLC, and MCI WorldCom Communications, Inc. (hereafter "MCI").

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to address Issues 3 and 5. At paragraph 419 of its *Triennial Review Order*, the FCC found, on a national basis, that competitive local exchange carriers ("CLECs") are impaired without access to unbundled local switching ("ULS") when attempting to serve the "mass market." *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 Order*" or "*Order*"), ¶3. The FCC pointed specifically to certain economic and operational criteria that served as the basis for its impairment finding, and asked state commissions to review these issues in more detail as they contemplate whether the finding of impairment should be overturned in any of the telecommunications markets within their jurisdictions. (See Order at paragraph 493.) At paragraph 476 of its *Triennial Review Order*, the FCC describes a number of economic and operational factors, including, for example, issues related to ILEC unbundling performance, collocation and the lack of processes and procedures facilitating the transfer of loops from one CLEC's switch to another CLEC's switch. The FCC specifically identified these types of issues as those it believed could add to the impairment faced by CLECs attempting to provide services via a UNE loop ("UNE-L") as compared to the relative ease with which CLECs can provide such services utilizing the UNE-P platform ("UNE-P"). I understand that BellSouth, and possibly Verizon, will be requesting the Florida Public Service Commission ("Commission") to enter a finding of "no impairment" with respect to unbundled local switching ("ULS") for mass market customers in certain markets within the state as well as the removal of ULS from the list of available unbundled network elements ("UNEs"). The purpose of this testimony is to describe why operational, network and in some cases technological factors give rise to impairment, and to describe how CLECs generally, and MCI specifically, are

impaired in their effort to serve the mass market using UNE-L without access to UNE switching in today's environment. This testimony also describes ways in which MCI believes many of the factors leading to today's impairment can be overcome with active oversight on the part of the Florida Public Service Commission and cooperation of the industry.

Q. BEFORE SUMMARIZING YOUR TESTIMONY, DO YOU HAVE ANY GENERAL COMMENTS?

A. Yes, I do. I believe it is critical to highlight the fact that UNE-P is successful today as a tool for mass market competition in large part because a number of talented people and an enormous number of resources were dedicated to its development as a commercially viable delivery platform over a period of many years, and because it involves the end- to-end lease of ILEC facilities. Further, it should be noted that much of the success of UNE-P must be attributed to the cooperation (however reluctant) on the part of the ILECs, based almost solely on their desire for §271 relief.

To assume that UNE-L, which requires the connection of an unbundled loop facility with the CLEC's switch, will overcome more challenging operational, technical and network hurdles in a mere 9-month timeframe is not sensible. Further, to assume such hurdles can be overcome in this limited timeframe without similar incentives on the part of the ILECs who have, for the most part, already been released from market restrictions via §271 is even more difficult to support. Similar to our experience with UNE-P, it is more logical to assume that the operational and technological issues giving rise to impairment

will be resolved over time, and loop portability, as described in detail throughout this testimony -- will become a reality with the guidance and oversight of state commissions and proper incentives to ensure ILEC cooperation.

Q. ARE THERE PARTICULAR ISSUES THE COMMISSION SHOULD KEEP IN MIND RELATIVE TO IMPAIRMENT FOR MASS MARKET SWITCHING AND EFFORTS MADE TO MITIGATE THAT IMPAIRMENT OVER TIME?

A. Yes. To the extent this Commission determines that the UNE-L strategy should become more widely implemented, it must recognize that transferring a customer's service from the local switch of one carrier to that of another relies upon numerous Operational Support Systems ("OSS"), processes and procedures as well as the availability and reliability of network elements, comprising a chain of connectivity between the customer and his/her local service provider of choice. Because of this necessary chain of connectivity, even if one assumes that ILEC hot cut processes can become seamless at some point in the future, CLECs are likely to remain impaired as a result of not one but numerous other operational and technological issues affecting loops, collocation and transport. Hence, it is absolutely imperative that the Florida Public Service Commission remain focused on each of these individual issues when evaluating impairment, and keep an unwavering eye on the primary objective -- to ensure mass market consumers can transfer their services from one facilities-based local service provider to another in as seamless and reliable manner as possible.

Q. ARE THERE BENCHMARKS AGAINST WHICH UNE-L PROVISIONING PROCESSES LIKE THE BATCH HOT CUT PROCESS SHOULD BE MEASURED RELATIVE TO THE SEAMLESSNESS AND RELIABILITY YOU ALLUDE TO ABOVE?

A. I will, throughout this testimony, point the Commission to the largely seamless and reliable nature of the existing UNE-P process as the benchmark to which UNE-L provisioning processes should be held if impairment is to be overcome. A finding of no impairment in the absence of ULS and a move to UNE-L as a mass market delivery method simply cannot occur until the ILECs' daily processes can support the seamless and reliable provisioning of loops to multiple carriers at commercial volumes consistent with the manner in which they currently accommodate CLEC orders via the UNE-P. As such, MCI recommends that the Florida Public Service Commission maintain the national finding of impairment throughout all telecommunications markets in the state of Florida until such time as UNE-L can realistically replace UNE-P as a tool for serving mass market customers. This will require resolution of all operational issues addressed is this and Ms. Lichtenberg's testimony as well as others that have not yet arisen.

Q. MUCH OF THIS PROCEEDING IS RELATED TO SO-CALLED "TRIGGER" ANALYSES. HOW DOES YOUR TESTIMONY ON OPERATIONAL ISSUES AFFECTING UNE-L RELATE TO TRIGGER ANALYSES?

A. As Dr. Bryant discusses in his testimony, the trigger analysis is supposed to examine whether mass markets consumers have three real and current choices

available to them by facilities-based carriers using ILEC loop facilities. Obviously, therefore, any examination of potential triggering companies requires an examination of whether those alleged "triggering" companies have overcome the technical issues related to connecting BellSouth's and Verizon's loops to the CLEC's switching facilities. To understand that, one needs to understand the technical issues relating to loop provisioning on a mass markets basis (and to understand whether the ILECs or the alleged triggering CLEC has implemented any of the steps necessary to make the provision of service to mass markets customers as seamless with UNE-L as it is with UNE-P).

Q. PLEASE BRIEFLY SUMMARIZE YOUR CONCLUSIONS.

A. As discussed in Ms. Lichtenberg's testimony, MCI intends to move toward serving its mass market customers using its own switching, collocation and transport facilities in combination with ILEC provided unbundled loops. MCI intends to pursue this strategy aggressively in locations where certain operational and economic hurdles can be overcome. However, this strategy is critically dependent upon reliable access to the customer's loop facilities and the OSS, processes, procedures, and other facilities needed to ensure that loops can be successfully extended to CLEC switching facilities and maintained on an on-going basis. The Commission must recognize that moving from a UNE-P to a UNE-L strategy requires a true paradigm shift for both the CLEC and its underlying loop provider -- the ILEC. And, unfortunately, based upon the operational issues described in this testimony, as well as the customer impacting issues discussed in Ms. Lichtenberg's testimony, MCI simply cannot, in the

foreseeable future, move forward with a migration of its sizeable UNE-P customer base to a UNE-L strategy with confidence that its customers will continue to receive the quality of service they have come to expect.

Simply put, at present MCI cannot reasonably move its 100,000 plus mass market customers to UNE-L, nor can it utilize a UNE-L delivery strategy to effectively address mass market customers throughout Florida on a going-forward basis. Moreover, as described in Dr. Bryant's testimony, it would not be economic for MCI to do so. Until the UNE-L process becomes as seamless as UNE-P, MCI, as well as other CLECs, remain operationally impaired without access to unbundled local switching as a means to access the ILEC's local loop as distinguished from economically impaired which is the topic of Dr. Bryant's testimony. Throughout my testimony, I use as a benchmark the successes UNE-P has enjoyed as a service delivery platform and I recommend that CLECs, ILECs, and this Commission strive to attain for UNE-L a comparable level of seamlessness, consumer transparency, and cost efficiency. Unless and until this goal is attained, MCI and the other CLECs seeking to implement a UNE-L local strategy for the mass market will continue to be impaired.

Q. WILL THE PARADIGM SHIFT YOU DISCUSSED IN YOUR PREVIOUS ANSWER HAVE A MAJOR IMPACT ON COMPETITION NATIONALLY AND IN FLORIDA?

A. It certainly has the potential to do so. The seamlessness and efficiency associated with UNE-P has, for the first time, made it possible for CLECs to enter the marketplace in a meaningful way, with UNE-P based market penetration

outpacing UNE-L based market penetration by about 2.5 to 1 on a national basis as depicted in **Exhibit JDW-2**.

For this type of entry to remain sustainable, the ease by which CLECs can participate in the market via UNE-P must be reproduced via the UNE-L strategy. That is, loop portability must become an operational and economic reality. If that benchmark is not attained, the competitive market and, more importantly, consumers will suffer. Indeed, CLEC market share would likely take a significant step backward and the benefits attributable to CLEC entry would likely diminish accordingly.

Q. HAS THE SEAMLESSNESS AND EFFICIENCY OF UNE-P HAD AN IMPACT ON COMPETITION IN THE LOCAL EXCHANGE MARKET IN FLORIDA IN MUCH THE SAME MANNER AS IT HAS NATIONALLY?

A. It certainly has. In fact, as the tables included in **Exhibit JDW-3** demonstrate, CLEC penetration rates for Florida have more than doubled during this same time period while UNE-P growth has comprised nearly all of BellSouth's network-based competitive losses even after accounting for the declining resale market. Indeed, the CLEC penetration rate in Florida as depicted on page 1 of Exhibit JDW-3 has increased from 6% to 13% over the past three years, according to FCC data. Moreover, page 2 of the same Exhibit highlights the fact that nearly all of the competitive growth is directly attributable to UNE-P and its success in overcoming the operational (and economic) barriers that had restrained growth from resale and UNE-L alternatives previously.

Issue 5(c): In which markets do any of the following potential operational barriers render CLEC entry uneconomic absent access to unbundled local circuit switching:

1. **The ILEC's performance in provisioning loops;**
2. **difficulties in obtaining collocation space due to lack of space or delays in provisioning by the ILEC; or**
3. **difficulties in obtaining cross-connects in the ILEC's wire centers?**

Q. ARE THERE IMPORTANT AREAS OF CONCERN UPON WHICH THE COMMISSION SHOULD FOCUS IN EVALUATING IMPAIRMENT RELATIVE TO MASS MARKET CUSTOMERS AND THE CHALLENGES THAT EXIST WITH A UNE-L DELIVERY STRATEGY?

A. Yes, there are. For purposes of clarity, I've have identified three broad areas of concern the Commission should consider when evaluating the operational and technical impairment that exists for carriers attempting to use UNE-L in order to serve mass market customers:

Loop Provisioning Issues: Although the FCC in its *Triennial Review Order* focused primarily on "hot cuts" and the impairment resulting from the inability of CLECs to reliably, seamlessly and economically cut loops in large numbers (i.e., in a "batch"), this is only one of the provisioning issues giving rise to impairment without UNE switching. Other important issues are those: (1) related to untested provisioning processes operating at dramatically increased volumes on a day-to-day basis for both "batch" cuts and for future provisioning requirements; (2) the increased reliability issues associated with substantial manual intervention in the provisioning process when compared to UNE-P, which is largely automated; and (3) the need to manage multiple provisioning scenarios

(e.g., CLEC-to-CLEC, UNE-L to Line Splitting). Solutions to all of these issues must be in place and tested for proper performance before UNE-L can be said to exist as a viable mass market delivery platform.

Loop Facilities: ILECs have maintained for years that end user loops served via Integrated Digital Loop Carrier ("IDLC") technology cannot be unbundled and provided to CLECs for UNE-L provisioning because those loops are permanently combined (i.e., "integrated") with their local switching facilities. Instead of admitting that unbundling IDLC is technically feasible and working to address the remaining operational aspects of any necessary solutions, they insist technical "work-arounds" must be implemented before a customer served via IDLC can be reached by a competitor. These workarounds are often time consuming, costly and fraught with technological deficiencies. To further exacerbate this problem, ILECs appear to be deploying IDLC technologies with increasing frequency. For example, it has been our experience that IDLC is used to serve as many as 40% to 60% of the end users in some central offices.

Because of these technological challenges associated with unbundling IDLC loops, ILECs have 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 "no impairment" can be entered.

These issues do not arise in a UNE-P environment. Because IDLC loops are integrated with the ILEC's switch and UNE-P uses both the loop and switch

facility, this connection between the two need not be broken to provide a working circuit in a UNE-P environment. For this reason, the myriad issues that arise with respect to unbundling IDLC are unique to a UNE-L strategy. These issues must be resolved before it can be decided that impairment has been overcome specific to UNE switching.

Moreover, the manner in which ILECs currently unbundled ILDC-based loops creates specific impediments for the ability of CLECs to offer comparable levels of quality as the ILECs when the CLECs emply UNE-L to provision xDSL services or dial up services. As such, the CLEC's ability to offer adequately "bundled" packages of services, which are increasingly demanded by customers, is threatened.

Collocation/Transport Complexities: A workable UNE-L architecture requires the CLEC to procure and place numerous telecommunications assets for purposes of aggregating and transporting UNE loops from the ILEC's central office to its own switching facility. Many of these facilities can be purchased and managed by the CLEC itself (i.e., loop aggregation equipment), while others are likely to be purchased from the ILEC and managed consistent with interconnection agreements and tariffs (e.g., collocation, transport and EEL capacity). The Commission should consider that both of these types of facilities are unique to a UNE-L architecture and are not required either by the ILEC in serving its own retail customers or by a CLEC relying upon UNE-P. As such, the costs of procuring, placing and managing these facilities are over and above those costs incurred by the ILEC or by a CLEC using UNE-P. The additional

complexity associated with procuring and managing these facilities is not only important from a perspective of operational impairment, but must also be considered for purposes of evaluating economic impairment as discussed in Dr. Bryant's direct testimony. Additionally, the availability and extent to which such services are currently deployed in relationship to the mass market must be contemplated when addressing impairment from an operational standpoint, particularly if ILEC policies, procedures and abilities are limiting factors.

II. ILEC HOT CUT PROCESSES ARE INADEQUATE AND LEAD TO IMPAIRMENT

Issue 3: (a) Does a batch hot cut process exist that satisfies the FCC's requirements in the Triennial Review Order? If not, in which markets should the Commission establish a batch cut process?

(c) For those markets where a batch cut process should be established, what specific processes should be employed to perform the batch cut?

(d) For those markets where a batch cut process should be established, is the ILEC capable of migrating multiple lines that are served using unbundled local circuit switching to CLECs' switches in a timely manner?

Q. THERE ARE A NUMBER OF ISSUES IN THIS PROCEEDING REGARDING HOT CUT PROCESSES. PLEASE DESCRIBE THESE PROCESSES AND WHY THEY ARE IMPORTANT.

A. The term "hot cut" describes the near-simultaneous disconnection of a working loop from a port on one carrier's switch and the reconnection of that loop to a port on a different carrier's switch without any significant out-of-service period. The term hot cut is also meant to include, at a minimum, the notification of the customer's network change for purposes of porting his/her telephone number to

the appropriate receiving carrier. In a hot-cut scenario, regardless of whose switch the customer is moving from and to, the ILEC must perform two manual wiring activities at the main distributing frame ("MDF"). The first step involves pre-wiring in preparation for the cut over. During this step the technician places a jumper between the CLEC tie facility and the customer loop. The jumper is terminated at the tie facility and not at the loop side. When the cut is scheduled to begin, the jumper that is connected to the loop side of the existing loop/port arrangement is disconnected and the jumper connected to the receiving CLEC's tie facility is terminated in its place. LNP translation activity is typically involved with this type of transaction and has traditionally been the responsibility of the receiving carrier. The diagram included in **Exhibit JDW-4** provides a high level depiction of the process described above.

Q. PARAGRAPH 488 OF THE FCC's TRIENNIAL REVIEW ORDER ("TRO") DIRECTS STATE COMMISSIONS TO APPROVE "BATCH" HOT CUT PROCESSES TO BE IMPLEMENTED BY ILECS. ARE THESE PROCESSES DIFFERENT FROM THE EXISTING PROCESSES?

A. Yes, they had better be. These new processes – once approved, implemented and tested – will serve two purposes. MCI uses the term Transition Batch Hot Cut Process to address the FCC's requirements that a "seamless, low-cost batch cut process for switching mass market customers from one carrier to another" be approved which – when implemented – will allow CLECs an opportunity to compete effectively in the mass market. (Order at paragraph 487). This process

should be implemented in order to effectuate a transition of customers off of UNE-P and onto UNE-L in large quantities, or "batches." A variant of this process should also transcend migrations *en masse* in order for CLECs to be able to effectively compete for mass market customers on an ongoing basis. This daily process is referred to as a Mass Market Hot Cut Process. To the extent that ILECs are unable to implement Transitional Batch Hot Cut Processes, the initial mass transitioning of customers from UNE-P to UNE-L will not be manageable. Moreover, if an effective, permanent process is not established, CLECs will remain impaired in their ability to address the mass market for all of the reasons cited in the *Triennial Review Order*. Given that the FCC based its national finding of impairment, at least in part, upon the absence of adequate hot cut processes, this Commission should evaluate any proposed processes in this context. Moreover, the Commission should ensure that hot cut processes are not only "identified" and "documented" but that they are actually tested and implemented prior to contemplating whether a finding of non-impairment in the absence of ULS is appropriate.

Q. IS THE COMMISSION SOMEHOW CONFINED TO AN EXAMINATION OF HOT CUT PROCESSES WITHIN THE CONTEXT OF "TRIGGER ANALYSES" OR LIMITED TO ANALYSES OF "BATCH" PROCESSES THAT ARE DESIGNED TO ADDRESS THE BATCH MIGRATION DESCRIBED ABOVE?

A. No. The Commission is not restricted in either sense. As described above, state Commissions must approve hot cut processes independent of trigger analyses.

Moreover, the FCC found that carriers are impaired without access to ULS when attempting to address mass market customers due - in part – to inadequate hot cut processes. In directing the commissions to examine issues of impairment more generally, the FCC indicated that state commissions should perform more granular analyses to determine whether a finding of "no impairment" should be granted and, in doing so, directed the commissions to examine other factors which include – in part – "difficulties in performing customer migrations between competitive LECs." (TRO *Order* ¶ 424 at footnote 1298.). Such difficulties may well arise outside of the "batch" concept discussed above and may lead to impairment. Hence, the commissions' analyses pertaining to hot cut processes cannot be limited to the Transition Batch Hot Cut process described above and should, therefore, include Mass Market Hot Cuts.

I recommend that the Commission not only require ILECs to work toward the development of an efficient, low cost Transition Batch Hot Cut process but that the ILECs also be required to improve upon their existing daily processes and implement a "seamless, low-cost" Mass Market Hot Cut Process for switching mass market customers from one carrier to another on a going-forward basis that is at least as transparent to the consumer as this process is today for CLECs utilizing a UNE-P strategy. Without the successful implementation of these processes, loop portability cannot become an operational and economic reality. Moreover, as discussed in Dr. Bryant's testimony, the extent to which UNE-L is viable for the mass market will be dependent, at least in part, on the costs incurred

during the hot cut process. As such, the Commission should ensure such a process is economically efficient.

Q. ISSUE 3(a) ASKS WHETHER "A BATCH HOT CUT PROCESS EXISTS THAT SATISFIES THE FCC'S REQUIREMENTS." PLEASE COMMENT.

A. As stated in Ms. Lichtenberg's testimony, MCI believes the existing processes are inadequate and do not measure-up to the FCC's requirements. In fact, she identifies many customer impacting, operational issues that involve the exchange of information that must take place in a UNE-L migration that make the current processes unworkable for the mass market in particular. MCI has serious concerns regarding the extent to which ILECs will be successful in designing, testing and implementing Transitional Batch Hot Cut processes which will be capable of seamlessly transferring customer's loops from one carrier's switch to another carrier's switch, to which I refer as loop portability, on an economic basis. Likewise, MCI is concerned about the extent to which ILECs will successfully implement a Mass Market Migration Hot Cut process that will be necessary to address the increasing daily migration and churn related volumes that which will no doubt exist in a dynamic competitive market where UNE-L is used to serve the mass market.

Q. GENERALLY SPEAKING, WHAT ARE SOME OF THE MAIN ISSUES THE COMMISSION SHOULD CONTEMPLATE WHEN DETERMINING THE PROCESS THAT SHOULD BE EMPLOYED TO PERFORM BATCH HOT CUTS AS CONTEMPLATED BY ISSUE 3(c)?

A. In addition to the numerous issues described in Ms. Lichtenberg's testimony, MCI's concerns regarding ILEC hot cut process can generally be categorized as follows: (1) workability; (2) availability; (3) costs; and (4) scalability.

Q. PLEASE PROVIDE ADDITIONAL DETAIL REGARDING EACH OF MCI'S CONCERNS.

A. Given that in markets where MCI chooses to serve its substantial mass market customer base via UNE-L a hot cut will be required for each new customer it wins, in addition to the migration of existing UNE-P customers to UNE-L *en masse*, the capabilities of the ILECs' systems and processes to accommodate this substantially increased volume of hot cuts in a timely manner without customer service interruption is paramount. Using existing technology, ILEC manual intervention will be required for each one of the loops for a hot cut. In other words, an ILEC technician will need to be dispatched to accommodate the frame manipulation. Concerns regarding the ILEC's ability to handle hundreds of thousands of these types of manual orders on an ongoing basis are legitimate. This is especially troubling given that most ILECs have in the past accomplished very few of these hot cuts in a commercial setting, and almost none on a mass markets basis because most hot cuts have been for limited numbers of enterprise customers.

Q. PLEASE EXPLAIN YOUR CONCERNS RELATIVE TO "WORKABILITY."

A. A hot cut is, by definition, a coordinated effort on the part of the ILEC and the CLEC to "cut" a loop with minimal disconnection time (i.e., the time wherein the

customer is connected to no switch or is connected to a switch wherein his/her telephone number is no longer active). For this reason, the ILEC hot cut process must be specifically designed to minimize not only the time and cost specific to the ILEC's activities, but also those associated with the CLEC's representatives. In short, the ILEC process must work well not only for the ILEC, but for the CLEC as well.

Q. PLEASE EXPLAIN YOUR CONCERNS ABOUT "AVAILABILITY."

A. Even with the limited amount of information available from the ILECs to this point specific to their proposed hot cut processes (including BellSouth and Verizon), it is clear that the ILECs intend to limit both the types of loops and the number of loops they will accommodate via a hot cut. More specifically, the ILECs have generally stated that they intend to limit the hot cut process such that: (1) CLEC-to-CLEC, UNE-L based migrations would not be available via the hot cut process; (2) lines currently involved in a "line splitting" arrangement could not be cut via the hot cut process; (3) IDLC lines would not be available for provisioning via the hot cut process; (4) lines for customers having more than 4 lines would not be available for hot cut; (5) lines to be provisioned over Enhanced Extended Links ("EELs") would not be available; and (6) requests for loops greater than 25-50 per day per central office ("CO") would, in most circumstances, not be available without significant "negotiation" and departure from existing provisioning and performance intervals. All of these restrictions, and others, substantially reduce the benefit provided by the hot cut process and could severely limit the efficiency by which CLECs could offer mass market

services on a UNE-L basis. In short, hot cut processes with these types of restrictions do very little to help overcome the FCC's national finding of impairment and should not be approved by state commissions toward that end.

Q. EXPLAIN YOUR CONCERNS RELATIVE TO HOT CUT COSTS.

A. 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 advocated by the ILECs. The lesson to be learned from experience is that the ILECs have an incentive to dramatically over estimate the costs associated with provisioning UNEs and their estimates tend to be based on cost studies that incorporate inefficient procedures or technologies and that include duplicative work steps, exaggerated estimated work times and many other errors for purposes of advocating non-recurring charges substantially in excess of efficiently incurred costs. The same will undoubtedly be true of the hot cut process. For that reason, it is critical that this 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). Thus, to the extent NRCs 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. HAVEN'T ILECS MADE STATEMENTS TO THE EFFECT THAT THESE HOT CUT MIGRATIONS WILL NOT POSE ANY PROBLEMS?

A. Yes. Though ILECs claim that they can handle large volumes of hot cuts, the facts simply don't support their bravado. For example, Verizon claims that if an operational framework is "sufficiently flexible to accommodate substantial increases and decreases in demand," it meets the scalability test. However, this definition raises additional questions relative to their definition of the term "sufficiently flexible" and their ability to "accommodate increases in demand."

These questions begin with the negotiation process. Typically, only individual hot cuts are given standard completion appointment intervals. Bulk hot cut project completion due dates are normally negotiated, which allows the ILEC to spread its work load to meet the throughput restraints of the underlying process. The manual requirements of the process dictate the need to match the appropriate number of technicians and other personnel with the volume of work that is requested and, as such, it is the manned workforce that provides the restraining factor in upward scalability. As volumes increase, a workload strain is placed on the existing work force, eventually leading to transfers from other jobs within the ILEC or through new hires, in order to meet demand. Unfortunately, simply "throwing more bodies" at the problem is only helpful to a limited degree, as real-world constraints on the number of technicians that can work on a given frame at a given time come into play. To the extent the ILEC's process cannot keep up

with the dramatically increased demand for hot cuts, the compounding effect of missed cut dates would create long UNE-L provisioning intervals and an enormous backlog of hot cut requests.

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

A. The major bottleneck in the hot cut process appears at the MDF. As described before, from an operational standpoint, 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 the ILECs, versus the very different hot cut requirements they will face in a market without 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 multiple frame technicians working on a number of individual large business hot cuts concentrated on a given loop count; 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.

Q. ARE THERE ANY RECOMMENDATIONS YOU CAN MAKE TO THIS 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. In a truly forward-looking environment, hot cuts should become routine and totally automated. Today's "hot cut processes" as briefly described above remain largely manual, or labor intensive, and can be made marginally more efficient with system and process related improvements. There are, however, technological solutions that can help to automate the most manual intensive portion of this process and, thereby, make it more efficient, less time consuming and less costly to implement hot cuts on a going forward basis. Verizon, for example, has developed a wholesale provisioning tracking system known as "WPTS" that has automated a number of the manually intensive coordination steps. Additionally, several vendors have technologies that are either currently available or in development that can automate the MDF wiring functions. Examples of Vendors who provide electromechanical and micro-relay type MDFs include NHC (www.nhc.com) and Simplernetworks (www.simplernetworks.com), respectively. There are many others as well.

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 one of incentive, not of technology. Unless required to provide a UNE-L provisioning process approaching the automated efficiency of their retail or UNE-P-based services, ILECs have little incentive to consider a technology that will make UNE-L a more viable option. Indeed, ILECs are motivated to delay the implementation of such advances, claiming such advancements are unnecessary, too costly or impossible. As such, ILECs spend the majority of their time pointing to the limitations of existing equipment rather than describing how it could be improved or trialing innovative alternatives.

Q. ARE THESE PROBLEMS EXACERBATED WHEN THE MIGRATION IS FROM ONE CLEC TO ANOTHER?

A. Yes. The issues associated with this process are magnified with the introduction of CLEC-to-CLEC hot cuts as well as with myriad other scenarios (e.g., hot cut from a line sharing CLEC to a CLEC handling both the broadband and narrowband application, moves from one CLEC to another wherein the receiving CLEC is serving via the ILEC's resale services and many others). In many of these scenarios, three or more individual carriers as well as providers of ancillary services such as NPAC and PSAPs, are required to cooperate, in real time, for purposes of accommodating this largely manual process. A failure at any one of the numerous steps can result in a customer losing service.

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

A. Absolutely. As Ms. Lichtenberg describes in more depth, churn will become increasingly important and will ultimately drive the rate at which UNE-L migrations grow. Moreover, while the ILECs would have this 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. (See, *e.g.*, *Order* ¶ 476.) Based upon the ILECs' positions as stated in staff workshop held at the Florida Public Service Commission on October 28, 2003, the ILECs do not intend to support CLEC-to-CLEC migrations. 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 is in serious doubt. All of the issues which lead to the FCC's finding of impairment without ULS come into play in such a situation and are compounded by the fact that a third carrier is now involved. Yet, the ILECs, who by the very nature of their control of the local loop are critical to the process, intend to leave this issue unaddressed. Clearly, if the Commission intends for loop portability and UNE-L to be widely implemented, this critical issue must be addressed and included in all hot cut processes evaluated, designed, tested, implemented and certified by the Florida Public Service Commission.

Q. TO YOUR KNOWLEDGE, HAVE BELLSOUTH AND VERIZON SUFFICIENTLY ADDRESSED THE ISSUES DESCRIBED ABOVE?

A. In all fairness, the ILECs have only communicated their plans to the industry through workshops held at the Commission's offices on October 28, 2003. Based upon the information provided during those workshops, however, I would say no, they have not. My expectation is that the ILECs in their direct testimony will be proposing specific processes in these proceedings at the same time my direct testimony is being filed. I intend to carefully review all such filings and respond as may be appropriate in the rebuttal phases of these proceedings.

In response to the issues in this docket, I set forth attributes that the Transition Batch Hot Cut and Mass Market Hot Cut processes should contain which can be used by the Commission in order to evaluate the extent to which the ILEC proposals will meet the FCC's criteria and the service performance levels CLECs and consumers deserve to receive.

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

A, Generally, no. While there might be a legitimate reason to exclude some particular order type, such an exclusion should be the exception as opposed to the rule. The ILECs, from what I have seen to date, appear 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.

To the extent CLECs intend to implement a UNE-L strategy in order to move their embedded base of UNE-P based customers to UNE-L and maintain their customers over any length of time on a going forward basis, they 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. This issue is likely to be controversial in many respects. First, I understand the ILECs do not intend to allow for the complete flow through of, and thus intend to delay, hot cut orders where IDLCs are deployed. Second, I understand that any line that is currently being used for both voice and data services will be excluded from these processes. Third, I also understand that the ILECs do not intend to support hot cuts where the receiving carrier is not collocated in the office where an end user's loop is terminated. Fourth, they will not allow for hot cuts to take place where EELs are used to gain access to end-end users.

By including these – and potentially other – prohibitions on the use of hot cut processes, the ILECs have 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, CLECs will remain impaired when attempting to serve any of the mass market customers who happen to fall into these categories, which is likely to be well over half of all such customers. Moreover, to the extent the CLECs are denied a hot cut 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 that market.

Q. ISSUE 3(d) ASKS WHETHER ILECS ARE "CAPABLE OF MIGRATING MULTIPLE LINES THAT ARE SERVED USING UNBUNDLED LOCAL CIRCUIT SWITCHING." DO YOU HAVE A COMMENT IN THIS REGARD?

A. As is described above, there are numerous exceptions to the circumstances in which ILECs currently acknowledge that (a) "hot cuts" are required and (b) that performance measurements are appropriate, rendering data to specifically address this issue extraordinarily difficult to access. By excluding certain types of orders or arguing that performance measurements aren't applicable for certain other types of orders, it is difficult to get a true sense of the extent to which CLECs are capable of migrating multiple lines served by ULS. This is analogous to the golfer who refuses to count strokes for various reasons, thus making his score appear better than his actual performance – without which strokes his/her score tends toward par. Indeed, other golfers would never get a sense of whether such a player is capable of legitimately making par.

For example, IDLC based loops – when ordered for UNE-L purposes – typically drop to manual and orders for large quantities of loops ordered at one time (a batch) are typically the subject of negotiated "projects" which are not usually tracked for performance measurement purposes. MCI has described its concerns about ILEC abilities in terms of workability and scalability, in part, for this very reason. Simply put, it is unlikely ILECs will be able to perform such migrations on timely basis in a seamless manner as is required by the FCC and as will be expected by end -users. Moreover, such performance has not been tested

and performance guarantees have not been offered to date. To the extent this Commission intends to protect end users when implementing hot cut processes, it should clearly define all such processes both in terms of order types that which can and can not be excluded and in terms of performance requirements. Moreover, prior to opening the flood gates, and allowing the ILECs to remove local switching from the list of available UNEs based, at least in part on a finding that CLECs are not impaired as a result of the adoption and "implementation" of hot cut processes, it should certify that the ILEC performance is at an acceptable level and that loop portability is a reality. To do otherwise would be truly reckless. Moreover, once certified, any finding of "no impairment" should be dynamic in that failure on the part of the ILEC to maintain its performance at a satisfactory level should immediately bring about the revocation of the "no impairment" finding until the Commission has determined the situation leading to inadequate performance is remedied. In the meantime, CLECs should have full access to ULS in order to address the mass market.

Q. DO THE ISSUES BRIEFLY OUTLINED ABOVE ADDRESS ALL ATTRIBUTES BY WHICH THE ILEC HOT CUT PROCESSES SHOULD BE EVALUATED?

A. First, Ms. Lichtenberg addresses a number of these issues in her testimony. Hence, my testimony should not be considered the final word on this particular topic. Additionally, I intend to address issues pertaining specifically to loops, collocation and transport later in this testimony. As such, the list of properties to be included in ILEC's upcoming Transition Batch Hot Cut and Mass Market Hot

Cut processes will be expanded as a part of those discussions. Finally, MCI will comment more fully on this subject once it has reviewed the ILECs' direct testimony.

III. LOOP RELATED OPERATIONAL AND TECHNOLOGICAL ISSUES GIVE RISE TO IMPAIRMENT

Issue 5(c): In which markets do any of the following potential operational barriers render CLEC entry uneconomic absent access to unbundled local circuit switching:

1. The ILEC's performance in provisioning loops;
2. difficulties in obtaining collocation space due to lack of space or delays in provisioning by the ILEC; or
3. difficulties in obtaining cross-connects in the ILEC's wire center?

Q. ISSUE 5(c) ASKS PARTIES TO INDICATE WHETHER OPERATIONAL BARRIERS PERTAINING TO "ILEC PERFORMANCE IN PROVISIONING LOOPS" CREATE BARRIERS TO ENTRY WHEN THEY'RE ATTEMPTING TO ADDRESS THE MASS MARKET. IS IT YOUR OPINION THAT SUCH BARRIERS EXIST AT THE PRESENT TIME?

A. Yes. Loop acquisition is critical to the implementation of a UNE-L based strategy designed to address the mass market. In a UNE-L environment, CLECs will require timely, efficient and low cost access to UNE loops, and must be able to depend upon loop quality characteristics comparable to those enjoyed by its primary competitor: the ILEC. Indeed, the physical process of accessing the unbundled loop, and thereafter using that loop to provide a comparable service to its customer, is likely to be the most important and difficult obstacle to overcome

in rendering UNE-L a workable delivery platform for mass market customers. In the following section I identify a number of operational obstacles that plague the existing UNE-L delivery strategy, and lead to increased operational complexities, diminished quality, and increased costs when compared to the existing retail and/or UNE-P arrangements. Clearly, these issues give rise to impairment.

Q. CAN YOU BRIEFLY SUMMARIZE THESE OPERATIONAL CONCERNS?

A. The majority of the operational issues I describe below result directly from the fact that in a UNE-L environment, the ILEC will be separating network elements that it had specifically combined in order to provide its own retail service in as efficient a manner as possible (and currently maintains in a combined fashion to provide UNE-P). The intentional separation of a combined loop and port combination generates two types of problems. First, because ILECs insist that integrated DLC facilities ("IDLC") cannot be unbundled at the DS-0 (individual line) level, the line is re-assigned to an alternate facility even though that same customer as a BellSouth or UNE-P customer may have been using the facility currently supporting his or her/her service for years. In many circumstances, the facility to which the customer is re-assigned is technologically inferior to the existing facility or may simply be a facility that has been poorly maintained. Further, even the presumably simple process of reassigning a new facility is anything but simple, and can cause numerous service-impacting problems for the customer (problems the customer will undoubtedly identify with switching service providers).

Second, as greater numbers of competitors are moved from more efficient fiber-based services to copper-based services via the reassignment process described above and ILECs take advantage of the FCC's relaxation of retirement and maintenance requirements, this Commission will undoubtedly begin to see two networks develop, each exhibiting dramatically different levels of quality -- the network used by the ILEC to serve its retail customers versus the network leased to CLECs by the ILEC for purposes of competing against it. As CLECs compete for limited numbers of inferior quality facilities when the ILEC begins to retire its copper plant, situations of "no facilities" or facilities that will require costly repair before they can be used will undoubtedly become more problematic for the CLECs, thereby increasing the amount of time required to service any single customer, and dramatically increasing the CLEC's customer acquisition costs.

Q. PLEASE DESCRIBE IN MORE DETAIL THE TWO PRIMARY CONCERNS YOU SUMMARIZE ABOVE.

A. Before the Commission can fully appreciate the operational barriers I've have summarized above, a brief overview of the existing outside plant network is appropriate. The diagrams included in **Exhibit JDW-5** depict the three most common outside local loop serving arrangements. In the case depicted at the top portion of the diagram, the copper loop enters the central office where it is manually cross connected from the vertical side of the main distributing frame (generally considered the "outside plant" or OSP appearance) to the horizontal side of the frame (generally considered the "central office" or CO appearance).

The lower portion of the diagram depicts two alternate serving arrangements that utilize more advanced "pair gain" platforms known as universal digital line carrier ("UDLC") and integrated digital line carrier ("IDLC"). In a general sense, the purpose of these applications is to aggregate the traffic of literally hundreds of individual customers and then multiplex those individual signals into a single, higher bandwidth signal that can be transported more efficiently back to the CO.

The first example on the lower left hand portion of the diagram depicts a UDLC application. In this scenario, the copper loop that leaves the customer connects to a Digital Loop Carrier ("DLC") at a remote terminal ("RT"). The electronics in the DLC convert the analog signals to a digital multiplexed format and then send the digital signal over a feeder cable (copper in this case) to the central office ("CO"). The cable terminates in the CO on a Central Office Terminal (COT), which converts the signal back to individual analog lines that ultimately terminate at the MDF for manual wiring purposes. The MDF wiring appearances serve as a point of interface for the carriers' switching equipment.

In the second example, the loop from the customer connects to a remote terminal equipped with IDLC technology, sometimes referred to as next generation DLC ("NGDLC"). With this application, the electronics convert the analog signals to a digital multiplexed format, and then send the digital signal over fiber feeder cable to the CO, terminating directly in the ILECs' digital switch without converting the signal back to analog.

Q. CAN YOU EXPLAIN THE DIFFERENCE BETWEEN UDLC AND IDLC IN MORE DETAIL?

A. Older Universal Digital Loop Carrier ("UDLC") technology consists of a remote terminal ("RT"), a transmission (transport) facility to link the RT to the central central office ("CO") and a central office terminal ("COT"). The RT aggregates the copper distribution pairs and performs conversions -- converting the customer's analog signal to a digital multiplexed format going to the central office, and (in the opposite direction) converting the digital signal from the central office to the customer to an analog signal. The transport carries the digital signal from the RT to the COT, and vice versa. The COT equipment converts the digital signal from the RT to an analog signal before the signal is terminated on the Main Distributing Frame ("MDF") and cross-connected to the switch port.

With the introduction of digital switches, an additional conversion was needed at the MDF. The signal that was converted from digital to analog at the COT had to be converted back to a digital signal by an Analog Interface Unit ("AIU") resident in the switch. The required digital-to-analog conversion at the CO was unnecessary, inefficient, and expensive as more digital switches were deployed, IDLC addressed these inefficiencies by eliminating the need for the additional analog-to digital conversions at the CO. The analog signal originating at the customer's premises still is converted to digital at the RT, but no other analog/digital conversions are necessary as digital switches can accept the digital formatted signal without conversion (something older analog switches could not

do). Unlike traditional copper loops or UDLC lines, IDLC lines do not typically have termination appearances on the MDF.

Q. ARE THERE ADVANTAGES SPECIFIC TO IDLC OVER UDLC?

A. The answer to that question is strongly influenced by whether you ask it with respect to retail/bundled services or if the question is specific to unbundled services. With respect to bundled services (retail and/or UNE-P), there are undisputable advantages to IDLC. For bundled services, IDLC allows local loops to be connected to a digital circuit switch more efficiently and cost effectively when compared to UDLC because IDLC requires neither an analog conversion at the CO, nor the AIU line card at the switch, nor manual MDF wiring. As a result, compared to today's IDLC technology, older UDLC systems require unnecessary investment for digital-to-analog and analog-to-digital conversion equipment and MDF wiring in the central office.

Q. DO THESE ADVANTAGES ACCRUE TO CLECS UTILIZING UNE-L?

A. Typically not. To the extent that IDLC has advantages over UDLC and ILECs continue to insist that they will not unbundle IDLC systems for use by their CLEC competitors, these advantages accrue only to retail and UNE-P services that rely upon the combined nature of the IDLC system. If the Commission were to effectively eliminate UNE-P with a finding of no impairment (without also entering a finding that the ILECs must unbundle their IDLC systems), this Commission would further ensure that only ILECs and their retail customers would enjoy the benefits of IDLC. More importantly, the Commission would foreclose CLECs from competing for a large portion of the ILECs' customer base.

Q. ARE THERE SPECIFIC CONCERNS REGARDING UNBUNDLED UDLCs?

A. Yes, there are. Section 12.13.3 of Telcordia Notes on the Networks (SR-2275, Issue 4, October 2002) which is entitled "Unbundling Issues Associated with UDLC and IDLC Systems" indicates that UDLC contributes to multiple problems including: (a) increased dial tone delay; (b) degradation of on-hook transmission services, such as caller ID; (c) degradation of signal quality as a result of multiple A/D and D/A conversions; and (d) reduction in analog modem operation speeds due to the number of A/D conversions.

This later issue has been an increasing concern for MCI. Specifically, IDLC avoids additional analog-to-digital and digital-to-analog conversions inherent in the UDLC system. In doing so, the IDLC system avoids problems associated with dramatically reduced bit rate speeds for voice band data connections that plague UDLC systems, such as faxes or analog modems. This issue is described more fully in Microsoft's Windows 2000 support website, where it is explained that: "there can be only one analog connection between your modem and the host computer" if a PC modem is able support a V.90 dial-up connection which operate at speeds of 56 kilobits per second. **(See Exhibit JDW-6)** Moreover, customers served by UDLC technology cannot receive ISDN and ADSL services without the installation of additional external loop electronics to increase digital transmission bandwidth at the UDLC. These limitations do not exist with most IDLC configurations. In short, UDLC systems can dramatically

reduce the access speed enjoyed by dial-up Internet customers, while IDLC systems avoid these problems entirely.

Q. HOW DO ILECS CURRENTLY PROVISION UNE LOOPS WHEN THE EXISTING, BUNDLED LOOP FACILITY IS PROVIDED OVER IDLC?

A. Based upon their fundamental position that IDLC loops cannot be unbundled in a technically practicable manner, when faced with a UNE loop request for a customer who is currently served via IDLC, the ILECs typically bypass the IDLC system and transfer the loop to an all-copper pair, if one is available, or utilize an UDLC serving application. Either procedure requires central office and outside plant rewiring to complete the new circuit from the MDF to the customer and provides the CLEC, and the end user customers, with a very different facility than that it enjoyed when receiving service from the ILEC.

Q. HOW DOES THIS CHANGE OF FACILITIES AFFECT THE CLEC AND END USER CUSTOMER?

A. This process provides the customer with a facility very different than that it enjoyed as an ILEC's retail customer or CLEC's UNE-P customer. The difference is almost always detrimental to both the customer and the CLEC because UDLC requires multiple analog/digital conversions that dramatically limit the dial-up modem throughput capability of the circuit. Further, both methods require extensive manual intervention for purposes of provisioning, a result specifically removed in the ILEC's provisioning process for bundled (retail/UNE-P) services via the IDLC technology. The diagram taken from

Telcordia Notes on the Network Issue 4 section 12.13.2.1 provides an illustrative example of the two "workarounds" described above. **(See Exhibit JDW-7)**

Q. UNDER THE COPPER SCENARIO DESCRIBED ABOVE, DO ILECS AND/OR CLECS NEED TO DISPATCH TECHNICIANS FOR LOOP INSTALLATIONS?

A. Typically, yes. ILEC technicians are involved with CO work in this scenario but in most cases technicians are also dispatched to the RT and even to the end-user premise in some instances in order toto change facilities. In addition, in some situations CLECs must also visit the customer's premises to change/validate wiring and test customer equipment. In contrast, a UNE-P environment involving an "as is" or "as ordered" migration does not typically require the ILEC or CLEC to dispatch technicians to the CO or field.

Q. DO THESE UNBUNDLING METHODS IDENTIFIED ABOVE IMPAIR THE CLECs?

A. Absolutely. The CLEC faces both technical and provisioning disadvantages relative to either work around identified above. The process almost invariably entails additional provisioning time, additional costs and the result is often an inferior facility. Likewise, all of these difficulties and increased costs appear to the customer to be a direct result of choosing a competitor's service. An ILEC customer who is currently being served by an IDLC is more likely to convert to a CLEC if the transition is quick and seamless, but not if the new service is technologically inferior and takes an extended period of time to provision.

Q. IF HOT CUTS COULD BE ACCOMPLISHED IN A RELATIVELY TIMELY AND LOW COST FASHION, WOULD THE ISSUES YOU HAVEYOU'VE DESCRIBED ABOVE, AND POTENTIALLY OTHERS, REMAIN?

A. Yes. The operational obstacles I have described above will exist regardless of how effective any hot cut process is today or eventually becomes.

Q. CAN THE COMMISSION HELP TO ADDRESS THE OPERATIONAL IMPAIRMENT ISSUES YOU HAVE DESCRIBED ABOVE?

A. Yes. However, addressing these issues concerning IDLC technology will require diligent efforts on the part of the Commission, BellSouth and Verizon. This results from the fact that the only way to ensure CLECs are not impaired is to ensure that they have access to the same quality of service provided by the technology that BellSouth and Verizon use to serve their own end-user customers. In the case of IDLC, that can only be accomplished by unbundling IDLC technology in an electronic manner that provides the CLEC with access to individual customer circuits at a digital level. Short of achieving this solution, its seems clear that without UNE-P, CLECs will continue to be impaired in the marketplace because they'll be saddled with less effective facilities to be used in competing for the very same end user customers.

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

A. Yes, despite arguments to the contrary from BellSouth and the other ILECs, it is technically feasible to unbundle IDLC in a digital format without losing the

inherent "integrated" advantages enjoyed by the ILEC's 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 unbundled access to hybrid loops served by Integrated DLC systems. (*Order* ¶ 297, footnote 855).

The most advanced IDLC systems engineered and deployed today (GR-303 compliant) have that capability. Bellcore (now Telcordia) which developed the GR-303 interface, describes two different methods by which GR-303 compliant IDLC can be unbundled electronically without requiring a dispatch. One method entails the establishment of separate interface groups (IG) in the IDLC so that a distinct IG is assigned to a CLEC and passed through a multiplexing device in the central office for purposes of accessing individual lines at the DSO or DS1 level. This particular unbundling strategy has been discussed for years by industry bodies and has in the past been supported by Telcordia in numerous symposiums. **(See Exhibit JDW-8)**

Q. DO OTHER METHODS OF UNBUNDLING IDLC EXIST?

A. Yes, Telcordia also describes another method relative to sharing GR-303 Interface Groups between the ILEC and the CLEC, thereafter using a sidedoor port (also known as "hairpinning") on the ILEC's digital switch for purposes of accessing individual DSOs for transfer to the CLEC's switch. The diagram in **Exhibit JDW-9** shows the use of a GR-303 Interface Group sharing ILEC and CLEC traffic wherein all CLEC traffic is routed through a sidedoor port, supporting a DS1 or DS0 unbundling scheme.

In this scenario, unbundled CLEC circuits 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).

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, there are. Not only would either of these methods provide a CLEC unbundled access to individual customer loops in a digital format, it would also mitigate, if not remove entirely, the need for manual intervention in the loop provisioning process. 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 but also toward removing impairment caused by the manually intensive and cumbersome hot cut processes supported by BellSouth. 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'VE DESCRIBED ABOVE?

A. Yes, there are. Though unbundling IDLC is unarguably feasible, the work required to establish necessary processes and techniques to unbundled 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 is a list a number of the obstacles that must be overcome on the road to efficiently unbundling IDLC for purposes of removing impairment:

First, 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.

Second, 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.

Third, 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.

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

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 its commitment to resolving the issues associated with unbundling by providing the methods described above. 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 regarding the evolution of the network and unbundling in general. This Commission should initiate a proceeding designed to fully explore options for providing CLECs high quality unbundled loops and – specifically – unbundled loops provided over IDLC. Such a proceeding should clearly focus on the potential for the two IDLC strategies included in this testimony to mitigate CLEC impairment without access to ULS.

Q. IS THIS AN IMPORTANT ISSUE?

A. Yes, it is. IDLC technology is used to provide services to upwards of 40% to 60% of residential and small business customers in some exchanges. As a result, absent some resolution of the problems identified above, a significant percentage of customers in some exchanges could experience either decreased service quality if they switch to a CLEC's service accommodated by UNE-L (because their loop will be changed to a less efficient technology), or they could experience significant delays in service availability from the CLEC because the ILEC "works around" the IDLC technology for purposes of providing either a copper or UDLC alternative. In many cases customers will experience both problems when purchasing service from a CLEC in this manner but would experience none of those same problems if they stayed with the ILEC, or returned to the ILEC's service. In either circumstance, the CLEC will be required to wait longer and pay more to serve its customer when IDLC is present, absent the unbundling options I've described above.

Q. IS THE USE OF IDLC OCCURRING MORE FREQUENTLY?

A. All indications are that the number of ILEC customers served via IDLC is increasing. This results primarily from the fact that most packet-capable DLC platforms (platforms that support both voice and DSL functionality) are integrated DLC platforms. Hence, as carriers like SBC and Verizon institute DSL-based network upgrade initiatives like Project Pronto and PARTS (meant to increase their geographic market capabilities for DSL), respectively, the number of IDLC terminals in their networks increase substantially, and more customers are moved

to IDLC facilities. As such, the IDLC-related issues identified above are becoming more and more important on a daily basis.

This Commission has a unique opportunity to take a leadership role on this very important issue and require BellSouth and Verizon to provide a *digital* handoff to CLECs when their customers are served by IDLC. This way the CLEC customers can have instantaneous provisioning just the same as BellSouth and Verizon customers enjoy today.

Q. ARE THERE OTHER AREAS THE COMMISSION SHOULD ALSO ADDRESS CONCERNING UNBUNDLED LOOPS THAT WILL HELP TO EASE IMPAIRMENT?

A. Yes, there are. Until IDLC can be unbundled, and even thereafter for those facilities not served by IDLC, issues with respect to accessing high quality, copper facilities will continue to exist. As fiber-based facilities continue to expand in use in the network, and as the ILEC's continue to retire copper facilities that have been replaced by those newer technologies, the availability of high quality copper loops will become less prevalent and "no facilities available" notices will become more common. Even if spare copper loops are available, it is likely that they have not been maintained properly and may not even be useable for voice services without maintenance or repair activities taking place at the time of installation. These activities – which must be undertaken on behalf of the CLECs, but not the ILECs – delay CLEC access to not only to the loops, but to the entire market served by those loops. The condition and availability of these loops would be less

of an issue, if the Commission would take active steps to ensure that ILECs maintain the loops properly as required by the *Triennial Review Order*:

> We require incumbent LECs to make routine network modifications to unbundled transmission facilities used by requesting carriers where the requested transmission facility has already been constructed. By 'routine network modifications' we mean that incumbent LECs must perform those activities that incumbent LECs regularly undertake for their own customers. (*Order*, ¶ 632.)

Q. ARE THERE OTHER ISSUES THAT CONFRONT CLECS EVEN IF COPPER LOOPS ARE AVAILABLE?

A. Yes. When and if loops are available, if they are long loops, they may have xDSL inhibiting load coils and bridged taps on them, which would not allow xDSL services unless those inhibitors are removed (that is, the loop is "conditioned"). Consistent with the FCC's mandate for advanced services, CLECs need access to conditioned loops to be able to offer advanced services ILECs should make these xDSL capable loops available to CLECs as required by the *Order*:

> As noted above, we conclude that incumbent LECs must provide access, on an unbundled basis, to xDSL-capable stand-alone copper loops because competitive carriers are impaired without such loops. (*Order* ¶642)

Additionally, ILECs often impose steep nonrecurring charges for conditioning loops which contribute to economic impairment as discussed in greater detail in Dr. Bryant's direct testimony. Because the ILEC relies on technologies in which loop conditioning is not an issue, the CLEC is disadvantaged relative to the ILEC regardless of the conditioning fees imposed by the ILEC.

Q. WHAT ARE MCI'S QUALITY OF SERVICE CONCERNS RELATIVE TO BELLSOUTH'S AND VERIZON'S CURRENT PROVISIONING OF UNE-L OFF OF AN IDLC?

A. FCC Rule 51.319(a) requires ILECs to provide CLECs with non-discriminatory access the local loop, in accordance with section 251(c)(3) of the act as set forth in paragraphs (a)(1) through (a)(9) of this section. FCC Rule 51.319(a)(2)(iii) states when a CLEC seeks access to a hybrid loop for the provision of narrowband services, the ILEC may either provide the CLEC with non-discriminatory access to an entire hybrid loop capable of voice-grade service, (i.e. equivalent to DS0 Capacity), using time-division multiplexing technology, or, provide the CLEC with non-discriminatory access to a spare home-run copper loop.

When a CLEC orders a UNE loop that is served by an IDLC, the current provisioning processes used by the ILECsadds at least one additional Analog to Digital ("A/D") conversion on the loop at the COT in the CO. This additional A/D conversion cuts the data throughput on the loop in half and, as a result, the CLEC loop does not have service "equivalent to DS0 capacity, " which provides for 64 kbps. The two A/D conversions inherent in an UDLC architecture will drop the maximum transmission speed on the line to the V.34 limits (up to 33.6 kbps). This substantially reduced capacity cannot be considered "equivalent to DS0 capacity," as required by the FCC's rules.

With regards to alternative provided to the ILECs in Rule 51.319(a)(2)(iii), providing CLECs spare home-run copper loops, to the extent these facilities exist at all, some of these facilities have not been maintained in years and may not be

able to provide "equivalent DS0 capacity" either. Further, if these home-run copper facilities do NOT exist, then there is no alternative available. Therefore, the manner in which BellSouth and Verizon currently provide CLECs with UNE-L on hybrid loops must be changed before a finding of non-impairment on unbundled local switching can be made.

IV. COLLOCATION AND TRANSPORT ISSUES MAY GIVE RISE TO IMPAIRMENT

Q. PLEASE INTRODUCE THIS ISSUE.

A. In order for MCI to move toward a mass market UNE-L deployment strategy, such a strategy must be operationally sound and economically viable. MCI will be unable to offer retail services when and where these requirements are not met. Using the UNE-L strategy, MCI must have the ability to gain access to mass market customers utilizing collocation and transport services to extend its customers' loops to MCI's own switching facilities rather than relying on the ILEC's combined loop and switching elements as is currently done (utilizing a UNE-P strategy). It is critical, therefore, that MCI not be impaired with respect to these elements. Transport and collocation elements must be available, accurately provisioned in a timely manner and properly maintained if MCI, or any other CLEC is to have the ability to move forward with this strategy, and to serve the mass market in Florida.

Q. PLEASE BRIEFLY DISCUSS THE EXISTING NETWORK ARCHITECTURE AS IT RELATES TO A COLLOCATING CLEC.

A. Collocation-specific network architecture issues revolve around the ILEC's central office ("CO"), specifically, the ILEC's main distribution frame ("MDF"). The MDF is the central point of termination for virtually all voice-grade facilities and equipment in a central office. At a very simplistic level, COs are designed such that any individual outside plant facility (i.e., a loop) can be cross-connected to any individual central office electronic equipment, primarily the switch for purposes of completing basic local exchange services. This is accomplished primarily by terminating all outside plant facilities to the MDF, and thereafter establishing a defined "appearance" for that particular loop at a defined point on the MDF. Likewise, the majority of CO central office electronic equipment is also terminated to the MDF with a defined appearance. After all such equipment is terminated to the MDF in this fashion, connecting any two pieces of equipment for purposes of providing service can be accomplished by placing a cross-wire connection, which is a very labor intensive, "on site" process, between the two appearances for purposes of establishing an electrical circuit. From a collocating CLEC's perspective, it is the MDF where the CLEC gains access to the outside plant network of the ILEC and it is from that location that the differences (and disadvantages to the collocating CLEC) become starkly clear. This is because the ILEC can access its end user customers by performing a single manual step - - placing a jumper on the frame - - whereas a UNE-L CLEC must "build out" from its own CO central office electronic equipment to each ILEC CO central office,

via collocation arrangements and physical transport facility placements, in order to reach the very same customer. There are obvious differences in the costs and activities associated with serving and end user customer between an ILEC, which performs a single step, and a CLEC, which must perform multiple steps in addition to the step performed by the ILEC. Because the CLEC is required to perform these additional steps, and because these steps are not without cost (to the contrary, as is discussed in the companion economic testimony, these steps are quite costly) the CLEC is – by definition – disadvantaged and therefore potentially impaired. Dr. Bryant's direct testimony discusses the economic considerations in more detail.

A. Collocation related impairment

Q. ISSUE 5(C) ASKS CARRIERS TO COMMENT AS TO WHETHER THEY ARE IMPAIRED AS A RESULT OF ISSUES PERTAINING TO COLLOCATION?

A. As has been stated throughout my testimony, my intent is to address operational issues and, as such, my response here is intended only to address the extent to which CLECs can practically rely upon access to collocation arrangements in order to gain assess to their mass market customers throughout the state in the absence of unbundled local switching ("ULS").

As it stands today, MCI, and many other CLECs do not currently have collocation arrangements (whether they by physical, cageless or virtual, etc.) in as ubiquitous a fashion as would be necessary to serve their UNE-P based mass market

customers throughout the state. Indeed, MCI serves more than 100,000 lines via the UNE-P throughout the state of Florida. These customers are served through approximately *****BEGIN PROPRIETARY*****[redacted]*****END PROPRIETARY***** end offices. By way of comparison, MCI is only collocated in *****BEGIN PROPRIETARY*****[redacted]*****END PROPRIETARY***** central offices throughout the state, leaving approximately *****END PROPRIETARY*****[redacted]*****END PROPRIETARY***** central offices that would ultimately require collocation of some form prior to the point at which UNE-P is eliminated through a finding of "no impairment." Moreover, additional end offices would need to be addressed with collocation as the number of offices where MCI's mass market end users are served increases, creating an additional strain on the resources of both MCI and the ILECs. As I suspect is the case with other CLECs, therefore, MCI is not currently able to accommodate all of its UNE-P based mass market customers should those customers be migrated en masse to UNE-L. Moreover, setting aside questions regarding the extent to which mass market customers can be economically served based upon a network which includes collocation, it is currently unclear whether the CLECs will be able to obtain access to collocation arrangements in conjunction with the necessary transport facilities on a timely basis such that a migration can be supported. Collocation is an intricate process, which requires CLECs to perform numerous complex functions and activities that are not required where ULS is available. Each step taken by the CLEC in order to reach the end user customer through collocation adds time and cost to the process and

introduces a probability of error and customer dissatisfaction that is not associated with the ILEC's provision of service to the same customer or UNE-P based CLEC customers.

Assuming that the Commission ensures collocation arrangements are available in conjunction with transport and that such arrangements are provisioned on a timely basis prior to a migration en masse, it is unlikely that collocation will give rise to impairment. If, on the other hand, ILECs are unable to respond quickly enough to the numerous collocation requests over the next several months, collocation may well create barriers to the mass market in the absence of ULS.

Q. ARE CLECS ABLE TO RELY UPON ACCESS TO COLLOCATION ARRANGEMENTS IN ALL ILEC CENTRAL OFFICES FROM WHICH THEY CURRENTLY SERVE RETAIL CUSTOMERS VIA THE UNE-P?

A. At this time, it is entirely unclear whether CLECs will be able to rely upon the availability of collocation arrangements in all offices where they presently serve UNE-P based mass market customers, particularly in light of the tremendous volumes of requests which would occur if one were to assume that all customers currently served via UNE-P were simultaneously migrated to the UNE-L strategies of multiple carriers throughout the entire state or any other significant geographic area within the state. MCI, for example, has tens of thousands of UNE-P customers in Florida served from *****BEGIN PROPRIETARY***** [redacted] ****END PROPRIETARY***** ILEC offices and is currently collocated in *****BEGIN PROPRIETARY***** [redacted] *****END PROPRIETARY*****

offices. Moreover, there are numerous other UNE-P providers in the state of Florida who collectively serve roughly 700,000 UNE-P based end user lines in BellSouth's territory alone. To the extent they all move toward UNE-L, there would be a significant strain on the availability of collocation arrangements and, more importantly, a tremendous strain would be placed on the ILECs' abilities to manage the requests and provisioning related processes that would be necessary to accommodate such an unprecedented paradigm shift. Obviously, if MCI cannot access collocation arrangements in each central office from which it currently serves customers via UNE-P or if the company is unable to use EELs in combination with a working hot cut process as described elsewhere in this testimony, MCI's ability to attract new customers or even serve its existing customers would be severely impaired. Therefore, to the extent that ULS is to be removed from the list of UNEs based upon a finding of non impairment as it pertains to collocation, the Commission should implement backstop measures which allow for the maintenance of ULS for mass market customers where collocation arrangements are effectively unavailable to requesting carriers lest CLECs remain impaired. Moreover, to the extent that the Commission were to enter – at some future date in some areas – a finding of "no impairment" pertaining to ULS for mass market customers, the Commission must ensure that EELs – an issue which I discuss later in this testimony -- are available throughout the state in conjunction with hot cut procedures which permit the seamless transition of customers between carriers whether they choose to use EELs or collocation as a means to access end user loops.

Q. ASSUMING THAT MCI IS ABLE TO OBTAIN THE COLLOCATION ARRANGEMENTS NECESSARY TO SERVE EXISTING AND FUTURE END USER CUSTOMERS, WHAT OTHER ISSUES MAY CAUSE IMPAIRMENT?

A. It has been MCI's experience during the early stages of collocation that, even when space is ultimately made available by the ILECs, it was not uncommon to experience significant delays before gaining access to the requested arrangements. To the extent that history repeats itself in an era where the implementation of UNE-L could potentially become more widespread in certain markets, CLECs who choose to implement UNE-L will be unable to do so when and where such delays take place. Under these conditions, it would be impossible to migrate existing customers to UNE-L as well as to continue to effectively market throughout the state since the ultimate ability to serve customers in the absence of ULS arrangement implementation timelines, the Commission should mandate that ULS remain available to such carriers and in such locations where mass market customers are concerned. Moreover, to the extent that collocation is ultimately implemented in such a location, the CLEC should have the choice to leave any remaining customers on UNE-P until such time as a migration to UNE-L is operationally may be in question.

To the extent the Commission enters at some future date a finding of non-impairment without access to ULS as it pertains to the mass market for any particular area, it is my recommendation that the Commission implement backstop measures in this regard. Specifically, to the extent that CLECs' access

to end-user is effectively unavailable, delayed or otherwise impeded as a result of collocation afeasible.

B. Transport Related Impairment

Q. WHY HAVE YOU INCLUDED TRANSPORT IN THE SAME SECTION OF YOUR TESTIMONY AS COLLOCATION?

A. Because transport and collocation are intrinsically related in terms of the functions they perform in the network. Availability of and access to collocation facilities is meaningless in terms of a CLEC's ability to reach the end user customer without the availability of and access to transport facilities, and vice versa. This Commission can consider the UNE-L framework can be viewed as to be a very complex chain, each link of which must be procured, assigned, provisioned and maintained in order for customers to receive telephone services. Each link is subject to its own issues and complications, but each link is equally important in terms of providing the ultimate service. Any single component of the service, including transport, has the potential to take the customer out of service if something goes wrong.

Q. DOES TRANSPORT POSE CHALLENGES IN AND OF ITSELF?

Yes, it certainly can. In a situation where CLECs are replacing UNE-P with UNE-L, they'll rely heavily on their ability to utilize ILEC provided transport in order to extend individual customer loops to their own local switching facilities. Additionally, CLECs will be largely dependent upon ILEC provided transport in order to originate and terminate local, intraLATA and interLATA traffic on behalf of their end users that previously had been carried within the ILEC network via

shared transport. Moreover, CLECs will likely utilize ILEC provided transport in order to establish 911 trunk groups and, albeit to a lesser extent, OS and DA trunk groups. The sheer magnitude of blanketing a state or even a LATA with collocation arrangements and the transport facilities described herein can become daunting from a logistic and economic perspective. Given that these transport requirements are, for the most part, over and above those already required by a UNE-P based CLEC, the logistical and financial ramifications flowing from these requirements may lead to operational and/or economic impairment.

Q. PLEASE DISCUSS SPECIFIC OPERATIONAL ISSUES THAT MAY GIVE RISE TO IMPAIRMENT.

A. It is unclear whether the ILECs' networks are currently set up to accommodate the CLECs' need for transport both in terms of their need to extend loops (whether via collocation and interoffice transport arrangements of via Enhanced Extended Links, or EELs) to their own switches and in terms of meeting demand for the transport necessary to originate and terminate traffic. As such, it's unclear whether the ILECs will claim that "facilities are not available," rendering a migration from UNE-P to UNE-L doubtful at best. It's also unclear whether the ILECs will claim that as a result of the *Triennial Review Order*, they're not required to provide transport to requesting carriers in any or all of the circumstances identified above. Indeed, if the necessary physical connections cannot be obtained, or are substantially delayed, CLECs will be operationally impaired, if not physically precluded from accessing customers. Moreover, the ILECs have already indicated that hot cuts will not be available to carriers if those

carriers intend to utilize EELs in order toto extend customer loops to their own switch facilities. As such, even if hot cuts become a seamless, low cost reality and loop, collocation and transport related issues are resolved, CLECs who, for economic or operational reasons, choose to rely upon EELs will be impaired. That's because the ILECs intend to preclude Hot Cuts to these very CLECs who would use EELs in order toto operate in their intended manner. Clearly, the operational issues described herein, may give rise to CLEC impairment where access to ULS is unavailable.

Dr. Bryant's testimony addresses the financial issues related to UNE-L as a strategy in general and raises serious concerns with transport related costs and whether they contribute to economic impairment.

Q. CAN THE ISSUES LEADING TO IMPAIRMENT RELATIVE TO TRANSPORT BE ADDRESSED IN SUCH A WAY THAT MCI COULD PURSUE ITS PLAN TO MOVE TO A UNE-L STRATEGY?

A. To the extent the Commission intends to foster the expansion of a UNE-L strategy and, therefore, intends to minimize transport related issues which may give rise to impairment, it should consider, at a minimum, initiating proceedings which provide for EELs as discussed more fully later in this testimony, continued availability of transport and backstop measures which provide for use of ULS for mass market customers where transport is not reasonably available.

V. The Enhanced Link ("EEL") as a DS0 Loop Transport Tool

Q. PLEASE EXPLAIN THE POTENTIAL CONNECTION BETWEEN MASS MARKET SWITCHING IMPAIRMENT AND UNE TRANSPORT IMPAIRMENT.

A. Because UNE transport is governed by the Telecommunications Act of 1996, and it is provided via interconnection agreements that are mediated and/or arbitrated by state commissions with prices set consistent with TELRIC, changes in the availability of UNE transport for existing CLECs providing facilities based services could dramatically alter those CLECs' capabilities to continue providing services. Removing the ILEC's obligation to provide UNE transport within a given market has the potential to dramatically effect the process by which those "triggering" carriers access transport capacity and the prices they pay for such transport. As such, a decision to remove UNE transport from the UNE list in a given market has the potential to dramatically impact whether a carrier could be considered a "trigger" with respect to the FCC's analysis specific to mass market switching impairment. This Commission should be cognizant of this relationship as it evaluates the evidence provided by ILECs specific to impairment in both regards.

Q. PLEASE EXPLAIN ANY CONCERNS RELATIVE TO DSO-RELATED TRANSPORT ARRANGEMENTS BY DESCRIBING AND DEFINING AN EEL.

A. EELs are nothing more than a combination of unbundled loops, the potential for multiplexing and unbundled interoffice transport. The diagram contained in

Exhibit JDW-10 provides a simplistic example. As noted above, the primary advantage of an EEL is that a competitive carrier using an EEL need not collocate in every ILEC central office within which it chooses to serve a customer. By combining the unbundled loop with interoffice transport, the CLEC is able to "extend" the loop directly to its own CO. (Note that in most cases multiple transport facilities from multiple ILEC end office (each carrying multiple loops) would terminate in one ILEC central office before being transported to the CLEC's CO.)

Q. DOES THE INDUSTRY HAVE MUCH EXPERIENCE WITH EELS USED TO SUPPORT DSO-BASED SERVICES LIKE THOSE THAT WOULD BE REQUIRED TO PROVIDE MASS MARKET OFFERINGS?

A. No. This is highly troubling given the FCC's implicit (if not explicit) reliance upon the EEL for purposes of making UNE-L a more attractive delivery mechanism in lieu of continued availability of UNE-P. While UNE-P is a proven mechanism by which to provide competitive services to mass market customers in an efficient and economical manner, UNE-L fueled by increased reliance on DSO-based EELs is almost completely untried and certainly unproven. Very little, if any, real world experience exists in support of the notion that EELs can actually be used effectively as a DS0 transport option on any scalable, commercially viable basis. It appears this is true as a result of ILEC resistance relative to EELs as well as the fact that EELs may not even be economically viable in all situations, particularly for the mass market.

Q. WHAT CAN THE COMMISSION DO TO ENHANCE THE ABILITY OF CLECS TO USE EELS EFFECTIVELY IN A UNE-L ENVIRONMENT?

A. This Commission can focus its attention on two primary EEL related objectives that will substantially increase the likelihood that EELs can, in the future, be used effectively in a mass market scenario: (1) any approved ILEC Transitional Batch Hot Cut and Mass Market Migration Hot Cut processes should include detailed information and processes related to "cutting" a UNE loop to an EEL arrangement (as opposed to a the more restrictive proposal that collocation cages be the only location to which loops can be "hot cut"); and (2) arrangements related to "concentrated" EELs should be explored.

Despite the FCC's failure to properly evaluate real-world experience with DSO-based EELs in a UNE-L environment, there is an opportunity for this commission to elevate EELs to a more effective platform capable of enhancing the likelihood of UNE-L success. After having affirmed, in this proceeding, the FCC's finding that CLECs like MCI are impaired without access to UNE switching functionality, the Commission should begin the process, via follow-up proceedings, of addressing those issues generating impairment. When evaluating ways to overcome the economic and operational issues related to transport, MCI believes that the Commission's time would be well spent exploring with the industry how EELs could work more effectively in a concentrated format, and the extent to which ordering and provisioning processes specific to concentrated EELs could be used to limit some of the economic and operational challenges that exist with providing transport via a UNE-L platform today.

(i) The Advantages of Concentrated EELs

Q. WHAT DO YOU MEAN BY "CONCENTRATED" EELS?

A. A concentrated EEL is nothing more than the same unbundled loop and interoffice transport combination, with the added capability to "oversubscribe" the interoffice transport element with unbundled loops in a greater than 1:1 ratio. Said another way, "concentrating" an EEL allows a CLEC to purchase far fewer interoffice transport circuits to serve the same number of customers, with little or no impact on its resulting quality of service.

Q. HOW WOULD THE CLEC ACHIEVE A CONCENTRATION RATIO GREATER THAN 1:1?

A. Earlier in this testimony I described new or next generation DLC equipment, primarily GR-303 compatible equipment, that allows a carrier to concentrate traffic traveling between a remote terminal or RT and the integrated terminal on the central office switch. I discussed the fact that GR-303 compatible DLC allowed carriers to engineer their outside plant facilities with 4:1, 6:1 or even greater levels of concentration, thereby substantially reducing the feeder capacity required to serve the same number of distribution pairs. A concentrated EEL relies on this very same technology in extending the loop between central offices.

Q. HOW WOULD A CONCENTRATED EEL BE DIFFERENT FROM THE USE OF EELS TODAY?

A. One of the primary disadvantages of a traditional EEL delivery platform is that a competitive carrier must purchase one interoffice transport circuit for every unbundled loop it purchases in a central office. Effectively, competing carriers

are limited to a 1:1 concentration ratio between loop and interoffice transport. This substantially, and unnecessarily, increases the costs relative to EELs and contributes to an enormous waste of the ILEC's interoffice transport resources. A requirement that ILECs provide EELs in a more efficient, concentrated manner can reduce transport costs, (and CLEC switch interface costs,) by as much as 75% to 90% (and reduce wasted capacity by the same amount).

Q. PLEASE EXPLAIN THIS POINT IN GREATER DETAIL.

A. A concentrated EEL arrangement could rely upon the same GR-303 equipment discussed earlier. In simplest terms, to support a concentrated EEL arrangement, an ILEC could be required to place a GR-303 compatible RT in its central office, and lease access to that GR-303 RT on a "per port basis" to individual CLECs. Using the GR-303 RT, individual CLECs could purchase individual DS0 UNE loops from the ILEC, cross-connect those loops to the RT, and purchase transport from the RT to their own central office switches (using GR-303 signaling). Assuming a CLEC chose to use 4:1 concentration in such an arrangement, the CLEC would, using the concentrated EEL in this fashion, be required to purchase 1/4 the interoffice transport capacity originally required (likewise using 6:1 concentration would allow the CLEC to purchase only 1/6 the amount previously required).

Q. PLEASE SUMMARIZE YOUR POSITION ON CONCENTRATED EELS.

A. As the FCC and state commissions ponder the development of facilities based local exchange competition, opportunities like those exhibited by the concentrated EEL must be a realistic component of those considerations if UNE-L is to ever

fulfill the role of a primary mass market service platform. The concentrated EEL serves as a prime example of how newer technologies can be, and should be, used to reduce costs for all involved, in addition to providing a more efficient and scaleable competitive opportunity. There are few, if any technical barriers to a concentrated EEL arrangement, and while operational issues will no doubt require some amount of development, the competitive advantages undoubtedly require the effort. Nonetheless, ILECs will not offer concentrated EELs of their own volition (indeed, many have already refused to provide these arrangements in the fashion described above). Therefore, this Commission will need to provide the proper incentive for ILEC cooperation in the form of a docketed proceeding aimed at developing a workable concentrated EEL platform. It is MCI's opinion that proceedings of this type should immediately follow the Commission's decision in this docket in an effort to mitigate those transport-related issues giving rise to the impairment that exists today relative to unbundled mass market switching.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.

A. My name is James D. Webber and my business address is: QSI Consulting, 4515 Barr Creek Lane, Naperville, Illinois 60564.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by QSI Consulting, Inc. as a senior consultant within the firm's Telecommunication Division.

Q. ARE YOU THE SAME JAMES D. WEBBER WHO FILED DIRECT TESTIMONY IN THESE PROCEEDINGS ON DECEMBER 4, 2003?

A. Yes, I am.

Q. ON WHOSE BEHALF WAS THIS TESTIMONY PREPARED?

A. This testimony was prepared on behalf of MCImetro Access Transmission Services LLC, and MCI WorldCom Communications, Inc. (hereafter "MCI").

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My testimony responds to various BellSouth witnesses who discuss: (1) the geographic areas affected by BellSouth's proposal that the Commission enter a finding of no impairment; (2) EELs; and, (3) unbundling of IDLC based loops.

II. SUMMARY OF CONCLUSIONS

Q. PLEASE SUMMARIZE YOUR CONCLUSIONS.

A. A brief summary of the issues addressed in my rebuttal is as follows:

- BellSouth proposes to eliminate unbundled local switching ("ULS") from twenty-three of thirty-one CEAs in Florida, which would cover virtually all of the UNE-P lines in BellSouth's serving territory. Approximately [redacted] percent, of MCI's UNE-P based end user lines are provisioned within the wire centers for which BellSouth claims CLECs are not impaired without access to unbundled local switching. Approximately 617,600, or 98 percent, of all CLEC UNE-P lines are in these areas. A finding of "no impairment" would require these lines to be migrated to UNE-P, and, given the operational impairment that in fact exists, would destroy UNE-P based mass market local competition in Florida.

- Neither BellSouth's individual hot cut process nor its batch ordering process permit CLECs to transfer retail or UNE-P lines to EELs. The Commission should require BellSouth to accommodate EELS in its individual hot cut process and its batch process.

- BellSouth's network contains a significant percentage of IDLC based loops, which means it is critical that BellSouth have processes that seamlessly migrate to UNE-L customers that are served on IDLC fed loops. BellSouth has failed to demonstrate that it can do so.

III. BELLSOUTH'S PROPOSAL TO REMOVE ULS FROM 23 CEAs THROUGHOUT FLORIDA WILL AFFECT MORE THAN 98% OF ALL UNE-P BASED END USER LINES THROUGHOUT THE STATE

Q. HAVE YOU ANALYZED THE IMPACT OF REMOVING UNBUNDLED LOCAL SWITCHING IN THE GEOGRAPHIC AREAS BELLSOUTH PROPOSES?

A. Yes. BellSouth alleges that requesting carriers are not impaired without access to ULS when attempting to serve the mass market in 23 of the 31 Florida CEAs. Ms. Tipton claims that ULS should be removed from 13 of these CEAs based upon the alleged presence of "triggering" carriers, while Dr. Aron, and other BellSouth witnesses claim ULS should be removed in 10 additional CEAs based upon the "potential" that carriers could deploy facilities to serve the mass market in those areas. Denying CLECs access to ULS in these CEAs would affect virtually all of the UNE-P lines in BellSouth's service territory in Florida. For example, more than [redacted], or approximately [redacted] percent, of MCI's UNE-P lines are in wire centers within the 23 CEAs where BellSouth claims there is no

impairment. And approximately 617,600, or 98 percent, of all CLEC UNE-P lines are served from within these areas.[1]

Q. ARE CLECS REASONABLY ABLE TO ACCESS CUSTOMERS WITHOUT ULS?

A. Setting aside questions regarding the economic practicability of serving residential and smaller business customers via UNE loops in Florida, CLECs cannot reasonably reach their current customer base throughout most of the state without access to ULS. MCI's local customers, for example, are spread throughout wire centers across the state. But MCI has collocations in a relatively small numbers of these areas. Without collocation or some other method of physically accessing customer loops, such as EELs coupled with a seamless hot cut process capable of handling large volumes of both inbound and outbound customer movement, MCI cannot offer services to most of its embedded base of customers without access to ULS. CLECs, including MCI, thus are currently dependent on ULS to serve the mass market in Florida.

Q. IN HOW MANY OF THE WIRE CENTERS FOR WHICH BELLSOUTH CLAIMS "NO IMPAIRMENT" IS MCI CURRENTLY COLLOCATED?

A. **Exhibit JDW-11** identifies the wire centers where MCI currently provides UNE-P based services and where BellSouth claims CLECs are not impaired without ULS. There are [redacted] such wire centers. The map also identifie [redacted] wire centers in

[1] Total UNE-P based line counts are taken from BellSouth's response to AT&T Interrogatory No. 55 in Georgia PUC Docket No. 17749-U

which MCI is currently collocated, leaving [redacted] wire-centers from which MCI could not access its customers unless it were able to build out additional collocation and transport facilities or gain access to EELs coupled with an efficient batch hot cut process.

Q. HAS BELLSOUTH CLAIMED THAT TRANSPORT TO AND FROM ANY OF THOSE [redacted] WIRE CENTERS SHOULD BE UNAVAILABLE TO REQUESTING CARRIERS?

A. In all likelihood, yes. BellSouth has identified hundreds of transport routes throughout Florida where it seeks relief from its unbundling obligations. Although MCI still is examining this information, given the volume of routes identified it is almost certain that BellSouth is claiming that it should not have to provide transport from some of those [redacted] wire centers. If BellSouth were to prevail with respect to any of these routes, it would no longer be possible for CLECs to use EELs or BellSouth unbundled transport to support mass market customers from those wire centers.

IV. BELLSOUTH FAILS TO DEMONSTRATE THAT CLECS CAN USE EELS TO SUPPORT MASS MARKET UNE-L

Q. DOES THE BACE MODEL RELY UPON THE AVAILABILITY OF EELS?

A. Yes. In fact, according to BellSouth witness Milner, two of the three architectures BellSouth's BACE model assumes CLECs will rely on to access customers assume they are able to use EEL connectivity either in lieu of collocation and transport facilities or in coordination with such facilities.

Q. ARE EELS WIDELY USED TODAY IN BELLSOUTH'S FLORIDA SERVICE TERRITORY?

A. No. By BellSouth's own admission there are only twenty-three EELs with UNE-L loops in its Florida territory today. (BellSouth's response to FCCA's Interrogatory No. 7). Thus, the BACE model relies on network architectures that are completely unproven in the market.

Q. DOES BELLSOUTH'S INDIVIDUAL HOT CUT PROCESS ALLOW CLECS TO TRANSFER BELLSOUTH RETAIL LINES OR CLEC UNE-P LINES TO EELS?

A. Not that I have been able to determine thus far. I have not been able to find any evidence demonstrating that BellSouth's practices and procedures would allow for such a transfer. In any case, to the extent such a process is available, it does not appear to be documented.

Q. WILL BELLSOUTH'S "BATCH" HOT CUT PROCESS ALLOW CLECS TO TRANSFER UNE-P CUSTOMERS TO EEL FACILITIES?

A. No. Although BellSouth alleges that it has a seamless and effective batch hot cut process in place that enables competitors to conversion existing UNE-P lines to UNE-L facilities (see Ruscilli Direct at p.13), the ***UNE-Port/Loop Combination (UNE-P) to UNE-Loop (UNE-L) Bulk Migration CLEC Information Package***

identifies BellSouth's requirement that end user loops be cross connected "to the CLEC's collocation equipment." (See page 4 of Exhibit RMP-2). That is, BellSouth's batch hot cut process specifically precludes the CLEC's use of EELs to effectuate the migration of UNE-P based end user customers to UNE-L facilities.

Q. DOES BELLSOUTH PERMIT CLECS TO ORDER DS0 EELS?

A. My understanding is that BellSouth stated at the hot cut workshops held in Tennessee on December 18, 2003 that it would process such orders. The catch, however, is that the requesting carrier must previously have (i) ordered transport facilities using the separate ASR process; and (ii) provided multiplexing equipment for BellSouth's use in the customer's serving wire center. BellSouth's requirement that CLECs provide their own multiplexing equipment in the customer's serving wire center means that the CLEC must house that equipment in some type of collocation space, which undermines the purpose of leasing EELs.

Q. DOES THE FCC's *TRO* PROVIDE ANY GUIDANCE REGARDING CLECS' USE OF EELS TO SERVE MASS MARKET CUSTOMERS?

A. Yes. For example, at paragraph 492 of the *TRO*, the FCC states that EELs can minimize collocation costs and increase the geographic reach of competitive LECs, thereby facilitating the expansion of competition based on UNE-L strategies in some markets.

Q. DO BELLSOUTH'S CURRENT PRACTICES EFFECTIVELY DEPRIVE CLECS OF THE BENEFITS THAT COULD BE ACHIEVED THROUGH EEL CONNECTIVITY?

A. Yes. CLECs attempting to implement UNE-L to serve mass market customers will not be able to use EELs to effectuate a conversion of their mass market customers because the batch ordering process precludes the use of EELs. Moreover, setting aside the mass migration, individual hot cut processes do not appear to be available to CLECs that intend to offer services to customers who are already receiving services comprised of BellSouth provided loops and transport (retail or otherwise). This Commission should not stand by while BellSouth attempts to block CLECs' efficient use of EELs, particularly when BellSouth's BACE model relies upon CLECs' ability to use EEL connectivity.

Q. HOW SHOULD BELLSOUTH'S PROCESSES AND REQUIREMENTS BE CHANGED TO MAKE EELS USEFUL TO CLECS?

A. To make EELs useful, CLECs should be allowed to submit an LSR that requests a loop housed in BellSouth Central Office A, for example, to be "hot cut" to a collocation facility (designated by a specific CFA) in Central Office B. When BellSouth receives such an order, it should provision on the CLEC's behalf, as part of its hot cut pre-wiring function, a DS0 EEL extending from Central Office A to the CLEC's CFA in Central Office B. All ANI testing should be completed via the DS0 EEL. On the day of the cut, BellSouth should cut the requested loop

to the EEL so that CLEC dial tone from its collocation in Central Office B is provided to the customer's loop located in Central Office A.

V. OBTAINING ACCESS TO IDLC BASED LOOPS INCREASES PROVISIONING INTERVALS AND COSTS AND DECREASES SERVICE QUALITY

Q. WHY IS ACCESS TO IDLC LOOPS SUCH A SIGNIFICANT ISSUE?

A. There are more than 2 million IDLC-fed loops in BellSouth's Florida service territory. In response to discovery, BellSouth stated that 38% of all loops in Florida are provisioned over IDLC based facilities while Exhibit AH-1 indicates that IDLC comprises [redacted] of the UNE-P lines in BellSouth's top 20 wire centers (with IDLC penetration in some wire centers between [redacted]).

Q. BELLSOUTH LISTS EIGHT "ALTERNATIVE" METHODS OF PROVIDING ACCESS TO IDLC BASED LOOPS. HAS BELLSOUTH PROVIDED SUFFICIENT INFORMATION IN ITS TESTIMONY FOR THE COMMISSION TO EVALUATE THESE ALTERNATIVES?

A. No. BellSouth witness Ainsworth simply lists the options that BellSouth claims are available to CLECs without providing operational details and without indicating the extent to which each such alternative has been previously deployed. With the exception of two of these alternatives, MCI lacks details pertaining to provisioning intervals, processes and procedures (including whether MCI

technician dispatches will be required), method of hand-off, technical performance and the applicability of nonrecurring or special construction charges. MCI is attempting to learn more about the new methods through discovery.

Q. BASED ON WHAT YOU KNOW NOW, ARE THERE PROBLEMS WITH BELLSOUTH'S APPROACH TO HANDLING IDLC LOOPS?

A. Yes. First, all of BellSouth's methods, except where the company transfers IDLC based loops to alternative home run copper loops (Alternative 1 and, potentially, Alternative 3), involve an additional analog to digital signal conversion that would degrade modem performance when, for example, customers dial up to the internet. Second, as BellSouth's own witness admits, many of these alternatives involve significant time and costs to implement, which ultimately impacts CLECs and their customers. Third, problems MCI has experienced thus far with IDLC when it has ordered UNE-L loops in Georgia call into question whether use of spare copper facilities is the only "alternative" method of unbundling that is actually employed by BellSouth. This last issue is discussed in the Rebuttal Testimony of Sherry Lichtenberg.

Q. DO SOME OF BELLSOUTH'S ALTERNATIVES APPEAR TO BE SIMILAR TO METHODS MCI ADVOCATES?

A. Yes. Alternatives 5 and 6 appear to be at least superficially similar to an IDLC access method MCI has proposed. It is apparent, however, that BellSouth's methods are not the same as what MCI has proposed, because BellSouth's

methods involve an additional analog to digital signal conversion, while MCI's do not require such a conversion.

Q. THE FIRST ALTERNATIVE BELLSOUTH PROPOSES IS TO PROVIDE AN UNBUNDLED LOOP OVER COPPER FACILITIES TO THE EXTENT SUCH FACILITIES ARE AVAILABLE. WHAT CONCERNS DO YOU HAVE WITH THIS ACCESS METHOD?

A. BellSouth's Loop *Technology Deployment Directives* call for increased use of fiber fed IDLC systems throughout the company's operating territories, decreased reliance on copper facilities and to some extent the retirement of such facilities. Increasingly, copper will become scarce and the availability of Alternative 1 – which BellSouth asserts is the quickest and least expensive to implement -- will decrease, thus increasing the probability for delayed provisioning and increased costs. In one wire center, for example, where BellSouth expects to be providing UNE-P services to more that [redacted] lines by December 2004 and where it is currently providing [redacted] of such services over IDLC loops, it potentially could be requested to unbundled as many as [redacted] IDLC based loops. It is highly unlikely that BellSouth will have [redacted] spare copper loops in that one wire center alone to meet the CLECs' needs.

Q. DOES MR. AINSWORTH ADDRESS YOUR PREVIOUS CONCERN THAT PROVIDING UNBUNDLED LOOPS VIA UDLC FACILITIES

WILL HARM SERVICE QUALITY AND PRECLUDE V.90, OR K56, MODEM CONNECTIVITY?

A. Yes. Unfortunately, however, he states that the UDLC option as well as all other options offered by BellSouth – excluding those that involve re-assignment to copper facilities – will involve additional analog to digital ("A/D") conversions and thereby negatively impact modem performance. BellSouth's *Loop Technology Deployment Directives* corroborates this conclusion, stating at Section 9.2.5, for example, that "it must be noted that modem speeds for circuits on universal COT terminations will be lower than those on integrated DLC."

Q. YOU STATED THAT ALL OF BELLSOUTH'S PROPOSED ALTERNATIVE METHODS, EXCEPT THOSE THAT EMPLOY HOME RUN COPPER LOOPS, WILL RESULT IN DEGRADED MODEM PERFORMANCE SERVICE. CAN DEGRADED SERVICE BE AVOIDED IN SOME CASES?

A. Yes. It is likely that at least a few of the alternative options could be deployed in such a way to avoid multiple A/D conversions, thereby resolving the issue pertaining to degraded modem performance. Moreover, I have offered at least one additional option in my Direct Testimony which, if cooperatively deployed, could provide resolution of this issue. The Commission should require that BellSouth work with CLECs to resolve this issue and to provide for effective processes and procedures whereby IDLC based loops can be unbundled in a timely and efficient manner without service degrading results.

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIOS WITH RESPECT TO UNBUNDLED LOOPS.

A. The Commission should require that unbundled loops be provided on a timely basis, regardless of whether they are provided via copper or IDLC based facilities, without "changing" the facilities over which connectivity is currently provided unless spare copper facilities are readily and economically available such that end user service quality will not be diminished after having received services via an unbundled loop. To the extent that BellSouth's proposed methods of unbundling IDLC loops – excluding the use of spare copper -- would have the practical effect of providing CLEC end users with lesser capable loops, the Commission should maintain a finding of impairment while investigating more fully all unbundling options offered in these proceedings. Additional recommendations regarding the availability of copper facilities are identified in my Direct Testimony.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.

A. My name is James D. Webber and my business address is: QSI Consulting, 4515 Barr Creek Lane, Naperville, Illinois 60564.

Q. ARE YOU THE SAME JAMES D. WEBBER WHO FILED DIRECT AND REBUTTAL TESTIMONY IN THESE PROCEEDINGS?

A. Yes, I am.

Q. ON WHOSE BEHALF WAS THIS TESTIMONY PREPARED?

A. This testimony was prepared on behalf of MCImetro Access Transmission Services LLC, and MCI WORLDCOM Communications, Inc. (collectively, "MCI").

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My purpose is to respond to the Rebuttal Testimony of various BellSouth witnesses who address issues pertaining to (A) IDLC based loops, (B) EELs, (C) Automated Distribution Frames, and (D) collocation, with respect to Issues 4 and 5(c).

II. IDLC

Q. MR. AINSWORTH STATES AT PAGE 28 OF HIS REBUTTAL TESTIMONY THAT IDLC BASED LOOPS ARE AVAILABLE TO BE CUT VIA BELLSOUTH'S HOT CUT PROCESSES. DOES THIS STATEMENT ALLEVIATE YOUR CONCERNS WITH RESPECT TO THE AVAILABILITY OF LOOPS SERVED VIA IDLC FACILITIES?

A. No, it does not. Mass market customers are accustomed to provisioning intervals that are much shorter than what BellSouth provides with UNE-L. To make matters worse, BellSouth may require special construction involving delays and the assessment of additional charges. Further as I will discuss below, many customers would experience degraded service quality when they are moved off of IDLC.

Q. HOW DO UNE-P AND UNE-L INSTALLATION INTERVALS COMPARE?

A. BellSouth's loop provisioning intervals are substantially longer than the intervals CLECs currently experience with UNE-P migrations. Individual retail to UNE-L migrations are completed in approximately 3-5 days, while UNE-P migrations are typically completed in a single day.

Q. WILL BELLSOUTH PROVIDE UNBUNDLED LOOPS IN APPROXIMATELY FIVE BUSINESS DAYS UNDER ALL THREE OF ITS HOT CUT PROCESSES?

A. No. The company's bulk hot cut process, for example, requires a minimum installation period of 24 business days (7 days to negotiate, 3 days to complete a bulk request containing negotiated due dates, and a 14 day interval until the first due date is assigned). As stated at page 10 of Mr. Ainsworth's Rebuttal Testimony, due "to the nature of the batch hot cut process, there is negotiation that takes place within BellSouth to establish dues dates for the hot cuts." Neither Mr. Ainsworth nor any of the other BellSouth witnesses explains the reasons why this period is so long.

Q. HAS IT BEEN MCI'S EXPERIENCE THAT BELLSOUTH WILL ALWAYS PROVIDE UNBUNDLED LOOPS IN CIRCUMSTANCES WHERE CUSTOMERS ARE SERVED VIA IDLC FACILITIES?

A. No, it has not. Mr. Ainsworth describes as eight "conversion options" BellSouth allegedly uses to provide CLECs UNE-L loops when the customer is currently served on IDLC facilities. However, BellSouth did not offer any of those alternatives to MCI when it ordered UNE-L loops in Georgia for customers that were being served on IDLC. Moreover, in response to interrogatories, BellSouth could not even identify the number of IDLC based loops that have been provided to CLECs under each of its conversion options, calling into question the extent to

which BellSouth's processes and procedures accommodate each of these alternatives.

Q. DO ANY OF BELLSOUTH'S IDLC CONVERSION OPTIONS CALL FOR SPECIAL CONSTRUCTION ACTIVITIES AND THE ASSOCIATED CHARGES?

A. Yes. In response to discovery in these proceedings, BellSouth has admitted that at least two of its conversion options call for special construction and associated charges.

Q. MR. TENNYSON ADDRESSES THE ISSUE OF DEGRADED DIAL-UP SERVICE IN HIS REBUTTAL TESTIMONY. DO YOU HAVE ANY COMMENTS?

A. Yes. First, however, I must note that Mr. Tennyson does not deny that customers whose services are switched from IDLC based loops to loops provided via its alternative methods will experience degraded dial-up modem performance. In fact, BellSouth admits in response to MCI's interrogatories that nearly all of its IDLC conversion options will negatively affect modem performance.

At pages eight through thirteen of his Rebuttal Testimony, Mr. Tennyson attempts to trivialize the impact BellSouth's IDLC conversion options will have on mass market customers who are moved from UNE-P based services to UNE-L based service, or from BellSouth's retail services to UNE-L based services. Among his arguments are the following: (1) the effect on dial-up services is not

relevant because voice grade services are not affected; (2) solving degraded dial-up performance issues may be difficult; and (3) DS0 services must not necessarily provide for 64 kbps. Mr. Tennyson's arguments ignore the simple fact that BellSouth's current IDLC conversion options will, in many cases, negatively affect CLEC's ability to compete for mass market customers because they would provide CLECs with loops that are inferior to the loops used in BellSouth's retail operation or by CLECs using UNE-P.

Q. TO WHAT EXTENT DO MASS MARKET CUSTOMERS RELY UPON THE AVAILABILITY AND PERFORMANCE OF DIAL UP ACCESS IN ORDER TO REACH THE INTERNET?

A. Approximately 39% of Florida's residential customers utilize dial-up services in order to access the internet from their homes. Additionally, according to an August 4, 2003 article appearing on the NetworkWoldFusion website, more than 60% of home office users access the internet via dial-up services.[1]

Q. HOW WERE THE RESIDENTIAL FIGURES YOU MENTIONED CALCULATED?

A. According to a recent article appearing on the CyberAtlas website, 74% of all residential internet users use dial-up service. The remaining 26% use cable modems or DSL.[2] According to the U.S. Department of Commerce, National Telecommunications and Information Administration, approximately 53% of the

[1] http://www.nwfusion.com/news/2003/0804v92.html
[2] http://cyberatlas.internet.com/markets/broadband/article/0,,10099_2246061,00.html

residential households in Florida have PCs with internet access in their homes. I multiplied the percentage of residential customers who use dial-up (74%) services by the percentage of Floridian households with internet access (53%) in order to derive the 39% Florida specific figure.[3]

Q. IS IT YOUR POSITION THAT ILECs ARE REQUIRED TO GUARANTEE MODEM PERFORMANCE?

A. No. But Part 51.319(a)(2)(iii) of the FCC's rules does state that ILECs are required to "provide nondiscriminatory access, on an unbundled basis, to an entire hybrid loop capable of voice-grade service (i.e. equivalent to DS0 capacity)" in cases where alternative copper facilities are not provided. It is unclear whether anything less than DS0 capacity is consistent with the FCC's rules.

Q. WHAT IS A DS0 AND WHAT IS ITS CAPACITY?

A. Newton's Telecom Dictionary (19th edition) defines DS0 as follows:

> Digital Signal, Level Zero. DS0 is 64Kbps. As the basic building block of the DS hierarchy, it is equal to one voice conversation digitized under PCM. Twenty-four DS-0s (24x64Kbps) equal one DS-1, which is a T-1, or 1.544 Mbps.

The Voice and Data Communications Handbook (4th Edition) describes DS0 as:

> Eight thousand samples per second, with each sample requiring eight bits, generates a digital stream of data at a rate of 64,000 bits per second. We know this as the *digital signal 0* (DS0), the digitized equivalent of one voice channel. (See Bates, Regis J. "Bud" and Gregory, Donald W. (2001), 4th Edition, McGraw-Hill at p.85).

[3] http://www.ntia.doc.gov/ntiahome/dn/hhs/TableH1.htm

Q. WHAT WOULD BE THE EFFECT OF BELLSOUTH'S IDLC UNBUNDLING ALTERNATIVES ON THE QUALITY OF THE LOOP AVAILABLE TO CLECs?

A. When a V.90 modem is connected to a telecommunications path capable of supporting 64 kbps, data throughput at the end user's computer would be *limited* to about 53 kbps due power and signaling constraints. Observable data throughput rates are more likely to be in the range of 50 kbps. The issue addressed in my Direct Testimony pertains to BellSouth's IDLC unbundling options that involve additional Analog to Digital (A/D) conversions. These additional A/D conversions render the V.90 protocol completely unobtainable. Once an end user's service is moved off an IDLC based loop and placed onto one of these lesser capable loops, modems, which could otherwise benefit from the V.90 protocol, will fall back to the V.34 protocol, which has a maximum throughput of 33.4 kbps. I do not believe the V.34 protocol provides end users with service that is equivalent to the V.90 protocol.

Q. IS IT YOUR UNDERSTANDING THAT BELLSOUTH HAS TESTED IDLC UNBUNDLING TECHNIQUES?

A. Yes. Specifically, Mr. Tennyson's Rebuttal Testimony states that BellSouth has tested the performance and feasibility of the "hairpin," or "side door," IDLC unbundling technique described in my rebuttal. Based on one trial that examined two loops provided under this technique, BellSouth has concluded that the

"hairpin," or "side door," technique is ineffective. Moreover, BellSouth appears unwilling to explore other options which would provide for the re-use of IDLC based facilities.

Q. UNDER WHAT CIRCUMSTANCES IS THIS TECHNIQUE APPLICABLE?

A. This form of IDLC unbundling may come into play in any circumstances where IDLC is deployed. The other form of IDLC unbundling described in my Direct Testimony was the use of interface groups. This form of loop unbundling would come into play only where GR-303 compliant IDLC is deployed.

Q. BASED ON MR. TENNYSON'S DESCRIPTION OF THE TEST BELLSOUTH CONDUCTED REGARDING THE VIABILITY OF THIS IDLC UNBUNDLING TECHNIQUE, SHOULD FURTHER TESTING BE FORECLOSED?

A. No. A significant portion of BellSouth's customer base and the CLECs' UNE-P customer base is served via IDLC based loops. It is evident from what has been discussed in this proceeding that "spare" copper facilities will not be available to support a competitive marketplace if that marketplace had to rely on UNE-L. In order to remove impairment, the ILECs must provide a workable solution that allows end-users to maintain a comparable level of service when they switch to UNE-L based facilities. Hence, the implementation of a solution that allows for the re-use of IDLC facilities that does not degrade service is critical.

Q. WHAT DO YOU SUGGEST?

A. BellSouth's test was performed on only two lines that were working in "Mode II" (*i.e.*, with concentration). A test on IDLC based lines operating without concentration is warranted. Testing another vendor's IDLC equipment also may be worth considering. Additionally, testing IDLC equipment terminating on switches other than the Nortel DMS 100 may yield different results for BellSouth and should be explored. Indeed, the FCC's *TRO* stated that other ILECs have successfully provided digital access to unbundled loops over IDLC based facilities using the hairpin technique. To the extent that IDLC based end-user loops will be unbundled on a going-forward basis in order that CLECs can serve the mass market, all reasonable alternatives should be explored.

Q. AT PAGES EIGHT AND NINE OF HIS REBUTTAL TESTIMONY, MR. TENNYSON STATES THAT UNBUNDLING NEXT GENERATION DIGITAL LOOP CARRIERS BY EMPLOYING GR-303 INTERFACE GROUPS IS IMPRACTICAL. PLEASE COMMENT.

A. My Direct Testimony described the use of GR-303 interface groups consistent with Telcordias's *Notes on the Network.* I am not aware of anything that demonstrates this unbundling technique is not feasible and I believe it should be considered as a potential solution to address IDLC unbundling related issues. It appears BellSouth's primary objections to the use of this technique are that GR-303 compliant IDLC comprise a relatively small percentage of BellSouth's

network and that CLECs would be required to accept a DS1 hand-off. Thousands of customers receive services over such facilities and may be affected if their loops are moved from BellSouth retail services to UNE-L or from UNE-P to UNE-L. From MCI's perspective, a DS1 hand-off is preferable particularly when considering the alternative – degraded end-user services.

Q. PLEASE SUMMARIZE YOUR POSITION WITH RESPECT TO IDLC BASED LOOPS.

A. Based on BellSouth's provisioning intervals and its IDLC conversion methods, it is clear that if CLECs are restricted to UNE-L, their ability to provide services to customers who are served via IDLC based loops will be diminished when compared to their abilities when they are able to utilize ULS to access end-users. Provisioning delays and degraded service quality would hamper CLECs ability to compete for mass market customers if not corrected.

III. DS0 EELS AND HOT CUTS TO EELS

Q. MR. VARNER IMPLIES THAT DS0 EELS ARE CURRENTLY A VIABLE SOLUTION TO ADDRESS THE MASS MARKET. DO YOU HAVE ANY COMMENT?

A. Mr. Varner's testimony notes that the majority of the EELs BellSouth has provided in Florida are comprised of *DS1 loops* and then states that the company has some unspecified experience with DS0 based services, without providing any

real data. While Mr. Varner implies that DS0 EELs are, or will be, available in a manner that allows CLECs to support mass market customers, his statement does not provide the information CLECs need to actually begin to utilize this method for providing service to their customers. Indeed, the facts demonstrate that DS0 EELs are not currently provided to CLECs in any significant volume and it is entirely unclear if, or when, CLECs will be able to utilize EELs in order to support the mass market. BellSouth's January 5, 2004 response to MCI's Second Set of Interrogatories (No. 217) states that there are only 18 EELs comprised of DS0 loops in the whole of BellSouth's territory in Florida.

Q. PLEASE DISCUSS THE EXTENT TO WHICH BELLSOUTH'S HOT CUT PROCESSES CAN BE USED WITH EELS TO CONVERT UNE-P LINES TO UNE-L.

A. At page 12 of his Rebuttal Testimony, Mr. Ainsworth confirms that BellSouth's batch hot cut process does not include cuts to EELs, stating that "BellSouth's product team is *developing an ordering process for UNE-P to EEL"* and that "if any CLEC actually ordered this, prior to mechanization, BellSouth will *develop a manual workaround.*" (Emphasis added). At this point, CLECs know very little about the "process" that BellSouth is "developing," when the process will be implemented, whether it will be mechanized, and the extent to which the process will be timely, seamless, and cost effective. Based on Version 12 of BellSouth's *Unbundled Dedicated Transport – Ordinarily Combined UNE Combinations CLEC Information Package, dated August 5, 2003,* it would appear that the

ordering process may be manual whereas the UNE-P migration process is mechanized. It also appears that the process requires that multiple orders be placed to provision a single customer onto a DS0 EEL facility and that more information will be required to place such an order than would be required to place an order for UNE-P based services. Clearly, more detailed information should be provided in this regard.

At this point, however, and until the process to which Mr. Ainsworth alludes is implemented and tested, CLECs cannot fully ascertain the extent to which they will be able to utilize EELs to support the mass market. Early indications are that the processes will not be timely, seamless or cost effective.

IV. ADF

Q. MR. TENNYSON ADDRESSES ISSUES PERTAINING TO AUTOMATED DISTRIBUTION FRAMES IN HIS REBUTTAL TESTIMONY. DO YOU HAVE ANY COMMENTS?

A. My understanding is that Mr. Tennyson has concluded ADF technologies are not currently feasible either due to size or economic constraints. MCI has not recommended any one particular technology be implemented as a pre-condition to a finding of "no impairment." However, I understand that ADFs are being integrated into other carriers' networks including, for example, Verizon's network in New York and that those carriers intend to use those automated distribution frames to provide Hot Cuts. Such a deployment strategy may well be fruitful

here.[4] Attached to this testimony as Exhibit JDW 12 is a whitepaper from NHC, an ADF technology vendor, describing the technology and its applications.

Based on these facts, it would seem unreasonable to completely dismiss the possibility that ADF technology can, or should, be used in the future to perform hot cuts on an automated basis.

V. COLLOCATION AND TRANSPORT

Q. MR. GRAY'S REBUTTAL TESTIMONY DENIES THE POSSIBILITY THAT ACCESS TO COLLOCATION SPACE AND FACILITIES COULD GIVE RISE TO IMPAIRMENT. DO YOU HAVE ANY COMMENTS?

A. Yes. Mr. Gray argues that BellSouth's performance with respect to collocation has been very good over the recent past and that the company is required to "provide collocation space to CLECs in accordance with Commission-ordered provisioning intervals or pay SEEMs penalties." This may or may not be true for the current competitive environment. However, Mr. Gray's argument is not germane to the issue at hand. If all impediments to UNE-L competition were removed and all CLEC demand for loops had to be supported through collocation and EELs, demand for collocation could increase dramatically. For example, the Hollywood – Pembroke Pine CO (HLWDFLPE) has approximately 27,300 UNE-P lines served by 54 CLEC carriers. And there are 19 companies collocated in

[4] Before the State of New York, Public Service Commission, *Proceeding on Motion of the Commission to Examine the Process, and Related Costs of Performing Loop Migrations on a More Streamlined (e.g., Bulk) Basis*, Case No. 02-C-1425, Public Transcript (pages 290-293), Testimony of Michael A. Nawrocki, On Behalf of Verizon New York, Inc.

that CO. Assuming UNE-P were supplanted by UNE-L, collocation may be requested by as many as 35 additional carriers. To the extent BellSouth, CLECs and collocation vendors are unable to meet demand of this nature on a timely basis, some CLECs may be impaired as a result of issues stemming from collocation whether it be in the Hollywood – Pembroke Pine CO or others like it.

Q. IS YOUR ORIGINAL RECOMMENDATION REASONABLE IN LIGHT OF THE POTENTIAL THAT COLLOCATION MAY GIVE RISE TO IMPAIRMENT AS SOME POINT?

A. Absolutely. In fact, I recommended that the Commission take action *if* collocation gives rise to impairment and not before that point. Hence, Mr. Gray's concerns are unfounded.

Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL REBUTTAL TESTIMONY?

A. Yes, it does.

Q. PLEASE STATE YOUR NAME, EMPLOYER AND TITLE.

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

Q. PLEASE DESCRIBE YOUR BUSINESS EXPERIENCE.

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 services 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 and later American Bell. 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 state 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. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to address Issues 5(c) and 6. The discussion of operational barriers in Issue 5(c) falls into two categories: network operational issues and customer impacting operational issues. My testimony addresses the customer impacting operational issues, while MCI's Network Operational Testimony discusses the network barriers that exist today. Although it appears that BellSouth is the only ILEC in Florida that will be putting on testimony of operational impairment in Issue 5(c), my direct testimony on that issue deals with ILECs generally, because my testimony addresses not only operational barriers CLECs face, but also approaches to resolving problems I have identified, which will involve participation by all the players in the industry.

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. After years of laying the necessary operational and regulatory groundwork, MCI has begun providing local service to Florida residential and small business consumers. MCI now serves tens of thousands of Florida consumers using UNE-P, the only service delivery method that has proved successful thus far in bringing local service to the mass market. MCI is now exploring a move to a UNE-L service delivery method to serve these customers, because MCI would prefer to serve these customers whenever possible over its own facilities and because it wants to provide voice and DSL service using the same network. Today, transitioning from UNE-P to UNE-L is extremely difficult as a practical matter, in part because of the customer impacting operational problems that I discuss

below. Such problems must be understood in the context of today's market, both with respect to customer expectations and developing competition among carriers. Today's customers have experienced relatively seamless migrations with their long distance carriers, and increasingly with their local carriers as well. They will judge their experience with UNE-L carriers by the same standards, and thus so should the Commission. Today's competitive landscape involves a number of carriers with significant consumer customer bases, so it is no longer sufficient just to consider whether the ILECs can effect a customer's initial migration to a CLEC. Now the entire industry must be taken into account, because it is just as important that subsequent migrations from one CLEC to another be transparent to the customer.

In this context, the operational issues I discuss below are critical. Those issues involve the extensive manual ordering and provisioning processes and multi-carrier coordination currently required for UNE-L migration, as well as the exchange of information concerning the databases for customer service records ("CSRs"), the Local Facilities Administration and Control System ("LFACS"), E911, the National Number Portability Administration Center ("NPAC"), Local Number Portability ("LNP"), the Line Information Database ("LIDB"), the Caller Name Database ("CNAM"), Directory Listing/Directory Assistance ("DL/DA"), and printed directories. I also will discuss issues that must be addressed with respect to trouble handling. In addition to outlining these issues, I also have suggested approaches to addressing them, which should at least provide a starting point for resolution. Additional issues are certain to arise as MCI and other

carriers gain experience with UNE-L, and thus the Commission will need to play a continuing role to ensure that all operational barriers to UNE-L implementation are addressed and resolved.

Rolling access to UNE-P would not solve these operational problems. Rolling access only would address the initial migration from the ILEC to a CLEC, and not subsequent migrations between carriers. Moreover, rolling access would not address the operational issues I discuss below. In the final analysis, there is no "silver bullet" that will solve all the operational problems involved in rolling out UNE-L to the mass market. As with UNE-P, these problems will have to be solved one at a time with the Commission's oversight and with the active involvement of all industry players.

In short, numerous customer impacting operational barriers currently render CLEC entry via UNE-L uneconomic throughout Florida, and the Commission should so find. Upon reaching this conclusion (if not beforehand), the Commission should work with the industry to address that impairment so that the operational barriers that currently exist may be removed.

Issue 5(c): In which markets do any of the following potential operational barriers render CLEC entry uneconomic absent access to unbundled local circuit switching:

1. **The ILEC's performance in provisioning loops;**
2. **difficulties in obtaining collocation space due to lack of space or delays in provisioning by the ILEC; or**
3. **difficulties in obtaining cross-connects in the ILEC's wire centers?**

MCI's Florida Local Mass Market Service

Q. WHY IS IT IMPORTANT FOR THE COMMISSION TO CONSIDER CLECS' EXPERIENCE IN ENTERING THE FLORIDA LOCAL CONSUMER MARKET?

A. A review of CLECs' experience to date with UNE-P should provide the Commission with a general understanding of the kinds of obstacles that must be overcome in developing and implementing a new service delivery method. And consideration of CLECs' fledgling efforts to implement UNE-L will provide insight into the real-world operational challenges that CLECs face when attempting to serve the mass market with their own switches. Further, CLECs' efforts to enter the Florida local consumer market shed light on what consumers have come to expect when they migrate from one local service provider to another. Understanding those consumer expectations is a key part of recognizing and addressing operational problems.

Q. WHAT IS THE DIFFERENCE BETWEEN UNE-P AND UNE-L?

A. UNE-P involves the leasing of the piece parts of an ILEC's network on an end-to-end basis. When a customer is migrated from an ILEC to a UNE-P CLEC, no changes are made to the physical facilities used to serve the customer. To date, UNE-P has been the only service delivery method that has enabled CLECs to serve residential and small business customers on a broad scale and will continue be the only way to provide such service for some time.

In contrast, UNE-L involves leasing the customer's loop, terminating that loop to a CLEC's collocation space in the ILEC's central office (assuming the

CLEC has such a space), and transporting calls to the CLEC's switch from which the customer draws dial tone and receives local service. Migrating a customer from BellSouth today to a UNE-L CLEC requires the customer's loop to be "cut over" from the BellSouth switch to the CLEC's collocation space while the customer's service is still on, thus giving rise to the term "hot cut." Hot cuts are required in all UNE-L scenarios, for example, as when a CLEC migrates its own or another CLEC's UNE-P customer to UNE-L, or when a UNE-L customer moves from one CLEC to another, or even when a CLEC UNE-L customer is won back to the ILEC. Many steps in the cutover process are manual, which inevitably leads to customer outages and other problems that occur only rarely with UNE-P migrations. In addition, carriers must exchange critical information with each other and third parties, but the processes for doing so are far from seamless. As I discuss below, however, MCI is beginning to pursue UNE-L in certain locations where it makes economic and operational sense because of the advantages that could be realized once the many challenges to providing such service have been overcome.

Q. PLEASE DESCRIBE THE PROCESS THAT LED TO MCI'S LAUNCH OF LOCAL MASS MARKET SERVICE IN FLORIDA.

A. That process was a long one, beginning with the passage of the Telecommunications Act of 1996 ("Act"). Although the Act required ILECs to unbundle their networks, a number of battles had to be fought before MCI could launch its local consumer service in Florida. First of all, CLECs had to establish the right to use UNE-P, which took several years and two U.S. Supreme Court

decisions. Second, the industry and the Commission undertook lengthy UNE pricing proceedings for BellSouth alone, which have moved UNE rates closer to the TELRIC standard required by the FCC. Finally, major changes taking several years were required to modify BellSouth's operations support systems ("OSS") to make it feasible to order and provision service using UNE-P in the volumes required to serve mass market customers. UNE-L will bring additional systems requirements and changes, including the need to develop electronic processes and to interface to a significant number of data bases and to coordinate with additional vendors to ensure that customer migrations are completed in a timely and correct manner. Since these outside systems, such as the NPAC have not had to deal with mass markets customer migrations of the type seen with UNE-P, they are untested and potentially unready for these changes, making the process of curing "impairment" all the more difficult.

Q. WHEN DID MCI LAUNCH ITS LOCAL CONSUMER SERVICE AND WHAT HAS ITS EXPERIENCE BEEN?

A. MCI launched its residential service in BellSouth's Florida service territory using UNE-P in November 2001. Initially, the service was offered only a limited basis, with the expectation that future Commission rulings on pricing and other issues would enable MCI to sustain and broaden its service. Since then, MCI has expanded its local footprint and now serves more than 100,000 UNE-P lines in Florida and more than 3 million nationally. In April 2002 MCI launched "The Neighborhood built by MCI" in Florida and a number of other states. The Neighborhood provides Florida residential and small business consumers with

packages of local, intraLATA and interLATA voice services, along with assortments of popular features. MCI recently has begun supplementing its national voice offerings with DSL services provided via MCI's and its partners' digital data equipment, known as DSLAMs, located in certain BellSouth central offices. MCI is still in the early stages of rolling out its DSL service in Florida.

Q. DOES MCI PLAN TO MOVE ITS LOCAL RESIDENTIAL AND SMALL BUSINESS CUSTOMERS TO ITS OWN NETWORK?

A. Yes. MCI currently is evaluating the use of UNE-L in Florida. Once the problems with full-scale use of UNE-L described in my testimony and in MCI's Network Operational Testimony are corrected (and the economic issues addressed in MCI's economic testimony are addressed), we can begin to make the transition from UNE-P to UNE-L. The timing and scope of the deployment will of necessity be limited not only by the resolution of operational problems, but also by MCI's collocation and switch footprint and availability.

Q. WHY DOES MCI WANT TO TRANSITION CUSTOMERS FROM UNE-P TO UNE-L?

A. There are at least two reasons. First, MCI, like any carrier, would prefer to provide service using its own network as much as possible because doing so would allow MCI both to use its state-of-the-art network and to promote further innovation of its products and services through further development and deployment of new technology. Although UNE-P has been, and remains, critical to MCI being able to provide local residential and small business service in Florida, UNE-P requires MCI to rely on its chief competitor, BellSouth, for

network services. To the extent it is possible as a practical matter to do so, MCI would prefer to use its own network via UNE-L, to provide service to its customers.

Second, MCI must take into account the changes taking place today in the telecommunications industry. Telecommunications is gradually moving from an industry controlled by large monopolies to one with multiple carriers offering multiple services to a dynamic customer base. The trend in the industry is toward bundled services and IP-centric offerings that enable consumers to select one carrier that meets all of their communications needs. As MCI begins to roll out its broadband services to consumers, it only makes sense to integrate its broadband facilities with its voice facilities. Eventually, when voice over internet protocol ("VoIP") replaces traditional circuit switching as the technology of choice, it will be essential that MCI move off the ILECs' circuit switches and onto its own facilities. MCI is planning for that future while serving its more than 3 million mass markets customers today.

Q. WHERE WOULD MCI POTENTIALLY BE ABLE TO PROVIDE UNE-L SERVICE?

A. UNE-L requires the CLEC to have its own switch and to be collocated in the BellSouth central office where the loops of the customers it wants to serve are terminated. MCI will be able to provide UNE-L service only in areas where it already has deployed collocation equipment and local switches. While MCI intends to expand its switch footprint as its UNE-L strategy moves forward, the number of customers that today can be served by UNE-L is constrained by its

limited collocation and switch deployment. MCI has been a facilities-based local exchange carrier in the large enterprise market for a number of years. MCImetro -- MCI's CLEC -- installed its first switch in 1995 and since then has installed local switches, collocations in ILEC central offices and fiber rings in major metropolitan areas throughout the country, including Florida. MCI uses these facilities (along with leased high capacity loop facilities or their equivalent) to provide competitive local exchange service to business customers today. Moving to UNE-L would enable MCI to take advantage of those facilities. MCI will use its network wherever and whenever it can instead of constantly having to rely on, and do battle with, the ILEC for the nondiscriminatory use and correct pricing of its network. But MCI can do this for mass markets customers only when it can ensure that those customers will continue to have the same seamless migration experience that its UNE-P customers have today.

Q. DOES MCI INTEND TO USE UNE-L EVERYWHERE IT HAS MASS-MARKET CUSTOMERS?

A. No. I can't imagine that would happen. For one thing, there are many areas and even entire states where MCI does not have any facilities. And it is highly unlikely that UNE-L will make economic and operational sense everywhere in every state, but that is an analysis that will be discussed in detail in the economic testimony being filed by MCI in this proceeding.

Q. WHAT IS THE SIGNIFICANCE TO THIS CASE OF MCI'S PLANS TO BEGIN TRANSITIONING CUSTOMERS TO UNE-L?

A. MCI is in the early stages of planning for UNE-L in the mass market environment. MCI's migration of UNE-P customers to UNE-L will place it in a good position to identify operational issues for the Commission in this case and to work with ILECs and the Commission to resolve those issues as those plans become a reality.

MCI's plans also illustrate a more fundamental point: MCI and other CLECs have every incentive to serve customers over their own networks, and will do so where and when it makes operational and economic sense. They do not need to be forced to do so. Once the operational and economic barriers have been brought down, CLECs will move freely to a UNE-L strategy, something they cannot do today. The success of that transition will be the best evidence that CLECs are no longer impaired without access to ILEC switching.

Q. WHAT WOULD HAPPEN IF COMPETITORS WERE REQUIRED TO MOVE TO UNE-L TODAY?

A. There would be chaos and consumers would be the ones hurt. The UNE-L migration process today is manually intensive and cumbersome with multiple points of failure that could result in delay, inability to receive calls and, worse yet, loss of dial tone for the consumer. Customer migration problems could lead to customers being "stranded" on a carrier's network, unable to move anywhere else. These and other operational barriers prevent CLECs from being able to meet customer expectations. Thus, if the transition to UNE-L were made prematurely,

the progress that has been made toward a dynamic, competitive telecommunications market since the passage of the Act would be destroyed.

For UNE-L to be an acceptable service delivery method, it must allow competitors to meet and even exceed customers' expectations. In particular, migrations between carriers using UNE-L must be seamless and the systems and processes of the entire industry – ILECs, CLECs and third parties – must be fully functional and capable of working together effectively. Today these systems and processes are highly manual and are untested in a mass market environment.

Q. DO YOU EXPECT THAT IT WILL BE FAIRLY EASY FOR MCI TO MAKE THE TRANSITION TO UNE-L?

A. No. The transition to UNE-L will be extraordinarily difficult. MCI operates in forty-nine jurisdictions, dealing with the four major ILECs and interfacing with multiple ILEC OSS systems and with other CLECs across the country. As I have already noted, MCI has more than 3 million local customers nationally, with tens of thousands of customers here in Florida. It will be no small challenge to match our existing local network to our large and dynamic customer base. Doing so will take time and will require resolving many kinds of operational problems, not all of which can be anticipated. And because real customers will be involved, MCI will be required to proceed deliberately and carefully to avoid service outages and other customer-affecting problems.

Q. HAS ANY CARRIER BEFORE ATTEMPTED TO TRANSITION TO AND SERVE A LARGE MASS MARKET RESIDENTIAL CUSTOMER BASE USING UNE-L?

A. No. No carrier has yet attempted the kind of nationwide facilities-based approach for residential mass markets customers that MCI is envisioning here. Because this will be a new experience for the industry, many of the problems that arise will have to be worked out for the first time, which will add to the difficulty of creating workable solutions. To use UNE-L, MCI's network will need to be "interconnected" with the ILEC network in a much more integrated fashion than ever before. Beyond making the changes I describe below that are necessary to order and support UNE-L, "interconnection" in this sense also means that MCI will need to physically connect its local network with the ILEC local network in a much broader manner than ever before to get access to the ILEC loops we will still need to provide service to customers. That means growing the network that MCI already has by establishing more collocations and building or leasing more transport facilities from those collocations to connect to MCI's network. It also will require capacity upgrades to MCI's and other carriers' E911 trunks and additional trunking to the ILECs' tandem switches. For example, today a significant number of calls between ILEC and CLEC customers in the same rate center are completed in the ILEC's switch. Once customers are moved to UNE-L, however, these calls will need to route to the ILEC tandem switch to be completed, potentially increasing the need for tandem switching capacity. MCI's Network Impairment testimony describes these issues in greater detail

Q. DOES THE TRANSITION TO UNE-L INVOLVE MORE THAN SIMPLY MIGRATING MCI'S EXISTING UNE-P CUSTOMER BASE?

A. Yes, definitely. The move to facilities-based competition is not simply about customers moving from UNE-P to UNE-L, or even from the incumbent monopoly to the CLEC. Customers also will move from one CLEC to another. Those CLECs may be UNE-L CLECs, resellers, cable companies, or UNE-P CLECs. Today, customers return to the ILEC and migrate back and forth between UNE-P and resale CLECs on a daily basis. Some customers also try to migrate from facilities-based providers to UNE-P CLECs, but this process is yet to be seamless. The key point here is that MCI's move to facilities-based competition will not be limited to establishing and maintaining the relationship between MCI and the ILEC; it involves the entire industry -- MCI, the ILEC, and every other CLEC offering service in the state. And in reality, it involves more than that. As I will discuss in greater detail later, the move to facilities-based competition will have implications for third parties that provide necessary, but ancillary, services, such as E911 providers and the LNP provider.

Triennial Review Order

Q. DID THE FCC'S TRIENNIAL REVIEW ORDER RECOGNIZE THAT THERE ARE OPERATIONAL BARRIERS TO UNE-L?

A. Yes. Although I am not a lawyer, I have reviewed the *Triennial Review Order* issued by the FCC with respect to the operational issues it addresses, and the FCC clearly recognized that operational barriers exist to UNE-L competition today. (*See In the Matter of Review of the Section 251 Unbundling Obligations of*

Incumbent Local Exchange Carrier, CC Docket No. 01-338, *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, Report and Order and Order on Remand and Further Notice of Proposed Rulesmaking FCC 03-36 (rel. Aug. 21, 2003) ("*Triennial Review Order*" or "*Order*").) The FCC made a national finding of impairment with respect to unbundled local switching at the mass market level based on the existence of these operational barriers. (*Order* ¶ 419.) In essence, the FCC realized that competitors are currently unable to move to a UNE-L service delivery method with the processes and procedures that currently exist. Further, the FCC concluded that, for local competition to exist, competitors must have access to unbundled local switching until the existing operational and economic issues with UNE-L are fully identified, investigated and adequately resolved.

Q. DID THESE OPERATIONAL BARRIERS LEAD TO THE FCC'S FINDING OF IMPAIRMENT WITH RESPECT TO MASS MARKET SWITCHING?

A. Yes. In the *Triennial Review Order*, the FCC explicitly recognized the complex operational issues currently preventing UNE-L from being a viable local service delivery method and concluded that these issues were serious enough to find nationally that competitors are impaired without access to unbundled local switching. (*Order* ¶¶ 419, 456.) Unlike UNE-P migrations, in which the CLEC uses the same facilities as the ILEC in providing local service, UNE-L migrations

are complicated by the necessity of physically moving the customer's loop to the CLEC's switch. In addition, more data must be exchanged between local providers with UNE-L than is required with UNE-P. The FCC recognized that until these operational issues involving UNE-L are addressed and adequately resolved – that is, until migrations and service changes in a UNE-L environment are as seamless and trouble-free as they are with long-distance and UNE-P – a transition to UNE-L would do nothing but harm competition and consumers.

The FCC concluded that the record before it evidenced a wide array of operational issues that prevent UNE-L from being a realistic local service delivery method at present. (*See, e.g.*, *Order* ¶¶ 476-478.) As the FCC stated, competitive carriers may face barriers associated with loop provisioning that may impair their entry into the mass market. (*Order* ¶ 512.) The FCC asked the states to determine whether incumbent LECs are providing non-discriminatory access to unbundled loops. (*Order* ¶ 512.) In making this determination, the FCC requested the states to consider more granular evidence concerning the ILECs' ability to transfer loops in a *timely and reliable* manner. (*Order* ¶ 512 (emphasis added).) Accordingly, before UNE-L can be an operational reality, it must be possible timely and reliably to transfer loops from ILEC to CLEC as well as CLEC to CLEC and CLEC to ILEC – both as an operational necessity and to give customers the reliable, problem-free service they demand and expect.

Q. THE FCC DISCUSSED THE "HOT CUT" PROCESS AT SOME LENGTH.

A. Yes, and with good reason. The FCC noted that a "hot cut refers to a process requiring incumbent LEC technicians to disconnect manually 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." (*Order* ¶ 421 n.1294.) Hot cut problems listed by the FCC included "the associated non-recurring costs, the potential for disruption of service to the customer, and our conclusion, as demonstrated by our record, that incumbent LECs appear unable to handle the necessary volume of migrations to support competitive switching in the absence of unbundled switching." (*Order* ¶ 421 n.1294.) The FCC explained that because of the manual, labor-intensive nature of the hot cut process, "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." (*Order* ¶ 465.) In other words, the FCC concluded that the hot cut process posed a prohibitive barrier to UNE-L.

Q. DID THE FCC DISCUSS THE IMPACT OF OPERATIONAL IMPAIRMENT ON CUSTOMERS IN ITS ORDER?

A. Yes. In addition to discussing the technical aspect of these network operational issues, the FCC also explained how these operational issues negatively affect the customer's experience. The FCC noted that the delay that accompanies a UNE-L migration prevents competitors from providing service in a way that mass-market

customers have come to expect. (*Order* ¶ 466.) For example, in Florida a BellSouth UNE-P migration takes one business day, while migrating the same customer to UNE-L takes at least five business days, assuming BellSouth has the ability to schedule the cutover on the requested date. A UNE-L migration using today's hot cut process always will have the potential to harm a customer more than a UNE-P migration, because, as the FCC noted, "[f]rom the time the technician disconnects the subscribers loop until the competitor reestablishes service, the subscriber is without service." (*Order* ¶ 465 n.1409.) Similarly, the UNE-L process of "porting" the customer's number from the ILEC switch to the CLEC switch "also potentially subjects the customer to some period of time where incoming calls will not be received," because if the number is not ported properly, calls will not be routed to the customer's new number on the CLEC switch.

The FCC recognized that because "mass market customers generally demand reliable, easy-to-operate service and trouble-free installation," such disruptions and delays negatively affect customers' perceptions of the CLEC's ability to provide service. (*Order* ¶ 467.) Indeed, the FCC found in the *Triennial Review Order* that the record reflected that customers experiencing such difficulties are likely to blame the CLEC, not the ILEC, even if the problem is caused by the ILEC. (*Order* ¶ 467.) Moreover, because customers view the ILEC as a baseline alternative to the CLEC for local service, customers' negative perception of a CLEC's service directly hampers a CLEC's ability to win and retain customers. (*Order* ¶ 466.)

Q. WHAT WAS THE FCC'S ULTIMATE CONCLUSION?

A. The FCC found that CLECs are impaired nationally without access to the ILECs' unbundled local switching. The FCC recognized that numerous operational impediments make UNE-L currently infeasible, or, at most, possible only to a limited extent, and then only with a great risk of negative customer experience. Based on the FCC's reasoning, these operational impediments must be identified and adequately resolved before UNE-L can be considered a viable service delivery method.

Customer Expectations

Q. HOW HAVE CHANGES IN THE TELECOMMUNICATIONS INDUSTRY AFFECTED CUSTOMERS' EXPECTATIONS CONCERNING THEIR ABILITY TO MOVE FROM ONE CARRIER TO ANOTHER?

A. Today's telecommunications consumer is savvier than consumers of the past because of experience with long distance and local competition. Today's consumer moves frequently between carriers and expects seamless migrations. Carriers must be able to provide consumers with seamless and efficient migration between carriers, as well as timely repair and maintenance. If a carrier is unable to provide this high level of service to customers, it will not survive as a competitor.

Q. HOW DOES THE LONG DISTANCE TRANSITION WORK TODAY?

A. Migrations among carriers in the long distance market have set a benchmark for customers' expectations concerning migration among local providers. Through years of experience and expense, ILECs and interexchange carriers ("IXCs")

developed the Primary Interexchange Carrier ("PIC") process, using the Customer Access Record Exchange Interface ("CARE") interface. It has taken nearly fifteen years of PIC process improvements since CARE was introduced in 1988 for transitions between long distance providers to be as smooth as they are today. For the majority of all such transactions, this process is completely automated – the order comes into the underlying service provider's computer system containing customer data, and if the order meets basic criteria, it flows through the system to the switch, where the PIC is changed, and then a confirmation message is sent directly to the new IXC. The entire process takes approximately twelve hours. Thus, because of a standard, automated process that was created through ears of refinement and cooperation, transitioning between long distance providers is the quick and relatively problem-free process that customers have come to expect.

Q. IS THERE A SIMILAR EXPERIENCE TODAY IN THE LOCAL SERVICE ARENA?

A. Yes, for most customers, UNE-P transitions are also relatively seamless. CLECs and ILECs have worked together since the passage of the Act to develop an automated process for the smooth migration to UNE-P of retail, resale, and CLEC-served UNE-P local voice customers. Today, the customer does not know that the process is occurring until it is completed and the new carrier's features and functionalities, such as voice mail, appear on his line. Only rarely is there loss of dial tone, need for coordination between the ILEC and the CLEC, and or manual intervention at the central office distribution frame. Rather, just as in the

long distance world, the CLEC merely sends a request, which is usually automated, to the ILEC for the migration of the new CLEC customer, and the change is made. In this way, the UNE-P process is quite similar to the CARE long distance process, and is indeed no different from the customer's experience in changing features of its ILEC service without changing providers. As a result of the industry efforts concerning UNE-P, millions of customers have been migrated successfully from the ILEC to UNE-P CLECs, and from one UNE-P CLEC to another UNE-P CLEC, with no loss of dial tone and no need for central office based installation and maintenance support.

Q. CAN YOU PROVIDE A MORE DETAILED DESCRIPTION OF THE UNE-P MIGRATION PROCESS?

A. Yes. The process of migrating an ILEC customer to CLEC UNE-P service proceeds as outlined in Exhibit SL-1.

Q. HOW LONG DOES THE UNE-P MIGRATION PROCESS GENERALLY TAKE?

A. The entire retail to UNE-P migration process is typically completed within one business day, regardless of the features ordered. CLECs can send and receive up to 2000 transactions (including migrations, disconnections, and feature changes) per hour, because the process is almost wholly electronic. Most importantly, just like a long distance PIC change, the UNE-P migration process is relatively seamless to the customer and allows customers to change carriers whenever they want to.

Q. IS IT IMPORTANT THAT CUSTOMERS BE ABLE TO CHANGE PROVIDERS RAPIDLY AND SEAMLESSLY?

A. Yes, as noted above, today's consumer changes carriers more frequently than consumers of the past and expects to be able to do so in an efficient and timely manner. In the telecommunications industry, this movement of customers to and from carriers is commonly referred to as "churn." Churn generally describes the behavior of customers as they move not just from ILEC to CLEC but also from CLEC to ILEC and from CLEC to CLEC. Migrations between CLECs today using different service delivery methods (for example, from UNE-P to UNE-L or UNE-L to UNE-L) are not seamless, quick or efficient. Although procedures for migrations are being developed in Florida, much additional work will be required before they are finalized and implemented for all carriers. Without a simple and seamless method to transfer customers between providers using different facilities-based service delivery methods, customers may become "stuck" and unable to exercise their choice to leave one carrier and migrate to another.

Q. IS CHURN A BAD THING OR A GOOD THING?

A. It is really both. Churn is a good thing for consumers, because it allows them to try new products and services from varying providers. Such consumer movement encourages carriers to innovate and become more efficient, and, in turn, rewards that innovation and efficiency. In a very real sense, churn is the proof that the competitive process is working. Although good for consumers, churn is problematic for industry players: not only is it expensive when consumers pick a provider for only a short period of time and then leave for another provider, but

churn also complicates both the record keeping and billing processes that accompany acquiring and losing a customer for both the acquiring carrier and the underlying network service provider. However, competitors realize that churn – the customer's ability to move amongst providers quickly and efficiently – is a necessary and integral part of a competitive telecommunications landscape. Consumers cannot be "locked in" to a single provider or "stranded" on a single service delivery platform. They must be able to make choices and migrate among providers at will.

Q. IS THERE A LOT OF CHURN IN THE INDUSTRY TODAY?

A. Yes, as I discussed above, customers are more educated and savvy today and move more frequently among carriers to get better service packages. Churn rates today are fairly high in the telecommunications industry, in both long distance and UNE-P local markets. These high churn rates have been enabled by regulatory requirements and changes in the OSS of the carriers. Specifically, equal access in the long distance arena, and UNE-P and electronic order processing in the local service arena, have facilitated customer migrations and permitted churn to exist and accelerate.

Operational Impairment

Q. ARE THERE UNE-L PROVIDERS SERVING MASS MARKET CUSTOMERS ON A BROAD SCALE TODAY?

A. No. There are virtually no UNE-L providers from which Mass Markets customers can choose, and those providers that do exist provide service in limited areas and support a limited range of customers.

Q. WHY NOT?

A. There are a number of economic and operational reasons. One of the operational reasons is that a migration to and from the UNE-L service delivery method is anything but simple. The systems and processes involved in a UNE-L migration, as opposed to a UNE-P migration, are complex, manually intensive and cumbersome.

Q. WHAT MAKES THE UNE-L MIGRATION PROCESS SO COMPLEX?

A. Unlike UNE-P, UNE-L requires a physical change to the facilities involved in providing service to the customer because the loop serving the customer must be physically disconnected from the ILEC/UNE-P facilities and then connected to the UNE-L carrier's facilities in the ILEC central office. Moreover, UNE-L requires an unprecedented exchange of information between the multiple parties involved, including providers not generally involved in the processes reviewed and tested by the Commission. The process flow shown in Exhibit SL-2 illustrates the pre-ordering, ordering, provisioning, maintenance and repair and billing steps involved in a typical ILEC retail to CLEC UNE-L migration. The migration process is described in narrative terms in Exhibit SL-3.

Q. ARE THERE COMPLEXITIES THAT THE DIAGRAM IN EXHIBIT SL-2 DOES NOT INCLUDE?

A. Yes, while this process flow outlines the steps in a typical ILEC Retail to CLEC UNE-L migration, there are several things that it simply cannot illustrate adequately: (1) at numerous points in this process, manual handling of the UNE-L migration tasks is required, often resulting in errors and delay; (2) UNE-L flow through rates are lower than that of UNE-P, causing still more manual work and, hence, more delay; (3) there is a significant amount of information that must be exchanged among various parties to the migration, and the failure of this information to reach its destination in a timely and accurate manner could significantly affect a customer's service; and (4) the scalability of this process to meet mass-market volumes is doubtful and untested because loops have never been migrated at mass market volumes at this time. All four of these issues individually or in combination if left unresolved have the potential to derail a competitor's ability to utilize UNE-L to serve mass-market customers.

Q. IS THE UNE-L MIGRATION PROCESS READY FOR MASS-MARKET USE?

A. Absolutely not. If carriers move from a UNE-P to a UNE-L service delivery method before the processes and procedures are in place to allow migrations to take place quickly and efficiently, the churn that is a trademark of competition in the long distance and UNE-P markets will create significant problems both for carriers and customers. Without seamless and efficient migration processes in all directions and among all carriers, customers' attempts to migrate away from their

existing carriers could overwhelm the ability of carriers to accommodate those moves. The result could be that as customers are in effect held hostage to cumbersome untested processes that cannot support the volume of orders being issued.

In addition, the description and process flow discussed above only outlines the retail to CLEC UNE-L migration. This migration is only one of several migration scenarios that CLECs will encounter in a dynamic competitive UNE-L market. The core scenarios (as seen from MCI's perspective) include the following:

- Retail to MCI UNE-L migration
- CLEC UNE-L to MCI UNE-P migration
- MCI UNE-P to MCI UNE-L conversion
- CLEC UNE-P to MCI UNE-L migration
- CLEC UNE-L to MCI UNE-L migration
- MCI UNE-L to BellSouth retail migration
- BellSouth retail DSL customer (line sharing or FastAccess) to MCI line splitting via UNE-L
- Line-splitting UNE-P CLEC to MCI UNE-L line splitting (voice and data) migration

This list is by no means exhaustive, but illustrates the kinds of migrations that carriers will need to be able to process on a regular basis. The sheer number of scenarios that must be handled gives some indication of the complexity that moving to UNE-L will entail. Moreover, many of these scenarios involve greater

complexity than the retail-to-MCI migration, because some involve additional parties and some involve DSL service. MCI has attached these core migration process flows to this testimony as Exhibit SL-4. Included in these process flows are numbered points in the process where potential challenges may well exist as well as a glossary of relevant acronyms.

Q. PLEASE GIVE SOME EXAMPLES OF THE COORDINATION BETWEEN THE CLEC, ILEC AND THE CUSTOMER THAT IS REQUIRED TO EFFECT A UNE-L MIGRATION.

A. A cutover from an ILEC to a UNE-L CLEC requires manual coordination between the CLEC and the ILEC to request the physical movement of the loop, to test the loop once it has been moved, and to create and issue the E911, LIDB, CNAM, and LNP transactions. Moreover, if a customer is served by IDLC, a dispatch to the customer premise may be required and the customer will need to participate, too, by reprogramming features such as speed dial and perhaps remaining at home for a technician visit to connect the new loop and potentially to make changes to the inside wire termination at the NID. And a customer served by IDLC may not be able to receive UNE-L service at all, or may have service migration delayed until a new circuit can be deployed.

Q. PLEASE DESCRIBE THE COORDINATION THAT IS REQUIRED BETWEEN CLECS TO EFFECT A UNE-L CLEC-TO-CLEC MIGRATION.

A. As an example of the coordination that is required, the winning CLEC has to work with the losing CLEC to select a date for the migration and they have to

ensure that the losing CLEC's "port out" request to the ILEC will "mate" with the winning CLEC's migration request. If the port out request is rejected, the CLECs must negotiate a new due date and start all over again.

Q. WHAT NEEDS TO BE DONE TO ADDRESS THE ISSUES OF MANUAL PROCESSING AND MULTIPLE PARTY COORDINATION?

A. MCI recommends that the Commission open a separate docket to address these issues and additional operational issues such as the ones I raise below. Within such a docket, the Commission could establish industry workshops in which operational issues are raised and addressed under the Commission's supervision.

Q. DO YOU EXPECT THERE ARE OTHER OPERATIONAL BARRIERS THAT EXIST FOR UNE-L THAT MCI HAS NOT YET DISCOVERED?

A. Yes. As with the development of UNE-P, operational issues will emerge as carriers develop their systems to process UNE-L ordering and provisioning. Today, I am only discussing issues that I am aware as of the time of this filing. Many new issues can be expected to arise as MCI moves toward UNE-L service, and the industry and the Commission will need to address those problems during the process of removing operational barriers to UNE-L.

Q. YOU ALSO MENTIONED OPERATIONAL ISSUES RELATING TO INFORMATION EXCHANGE. PLEASE EXPLAIN WHAT YOU MEAN BY THAT.

A. There are multiple points where there are changes to customer records and information in both internal and external databases that are required for migration to a UNE-L service delivery method. Many of these changes result from the fact

that the CLEC switch will be used in the provision of service with UNE-L versus the ILEC switch that is used with UNE-P. Because there is very little mass market UNE-L competition today there are a great many unanswered questions surrounding these transfers and information exchanges. These exchanges of information all represent potential points of failure with UNE-L. These coordination, database, and ordering issues represent operational barriers that are of critical importance to both the customer and the service provider.

I will describe information exchange issues involving databases relating to CSRs, LFACS, E911, NPAC, LNP, LIDB, CNAM, DL/DA and printed directories. Changes to these databases must take place as efficiently and seamlessly as possible in every UNE-L scenario. In addition, I will discuss the changes to trouble handling that must take place before MCI can use UNE-L effectively. After outlining these issues, I also will discuss approaches MCI recommends for addressing them, which should provide at least a starting point for resolution.

Q. PLEASE EXPLAIN THE CSR ISSUE.

A. Obtaining accurate and complete customer information is essential to a CLEC's ability to submit a valid order. CSRs are used to identify address, feature, directory and other information for migrating customers. CSRs show the most current customer configuration based on the switch port and the current carrier's internal billing systems. During the pre-order phase of a migration, the CLEC representative needs to obtain current customer and service information to create the order. While this information can be retrieved on a real time basis for ILEC

retail customers (and some UNE-P CLEC customers), the systems and processes required to obtain and share this information have not been developed for all migration scenarios, most notably CLEC-to-CLEC migrations.

Q. IS THIS AN ISSUE FOR INITIAL MIGRATIONS FROM BELLSOUTH?

A. No. This is not an issue in initial migrations from BellSouth because BellSouth now allows UNE-P customers to be migrated by telephone number and house number, both of which are contained in BellSouth's CSRs.

Q. Is this process the same with all migrations?

A. No. Obtaining this type of customer information becomes much more difficult in a CLEC-to-CLEC UNE-L migration because the ILEC no longer has the current CSR information. Although the participants in the Florida collaborative have agreed to a 48 hour timeframe for exchanging CSR data, there is no way to ensure that this timeframe is met, and numerous problems with the process still exist. For example, that the "winning" CLEC must contact the "losing" CLEC by e-mail, fax, through a web site, or most often, by telephone, to obtain the relevant information. Obtaining information by telephone is not only manually intensive, but is made all the more difficult because there is no complete list of who and when to call. The manual nature of the process means it takes a long time (as opposed to instantaneous transmission for UNE-P) and has a greater margin for error because as yet, there are no CLEC CSR standards for database integrity. MCI's small business team has had significant problems in obtaining CSRs from a number of the CLECs active in the BellSouth territory. To make matters worse,

each carrier's CSR looks different and must be interpreted differently, which gives rise to miscommunication.

Q. IS MORE INFORMATION REQUIRED ON CSRS FOR UNE-L THAN CURRENTLY EXISTS?

A. Yes. Once the customer has migrated to a UNE-L CLEC, additional information is required to effect a subsequent customer move. For example, the carrier to whom the customer is migrating needs the customer's "circuit ID," which will be used by the ILEC to track where the customer exists on the main distribution frame of the ILEC's switch. The circuit ID generally is not included in the CSR, but rather is passed to the first UNE-L CLEC when the ILEC returns a firm order confirmation. The circuit ID is critical, since the winning CLEC will need that information to ensure that the same physical loop can be used to serve the customer, and the ILEC needs the circuit ID to provision the customer's existing loop to the winning CLEC, rather than having to find and provision another loop that its systems show to be available. Because all of the information needed for UNE-L migrations is not readily available – either because the ILEC cannot provide it, or because there are not reliable, comprehensive systems for transferring this information among CLECs – the CSR system must be revised and expanded to function properly for UNE-L.

Q. WHAT CSR INFORMATION DOES MCI REQUEST BE INCLUDED?

A. MCI needs the customer's billing telephone number; working telephone number; billing name and address; directory listing information (including listing type); complete service address; current PICs (for both inter and intraLATA, including

freeze status); local freeze status, if applicable; all vertical features; options (such as toll blocking and remote call forwarding); tracking or transaction number; service configuration information (*i.e.*, whether customer is served via resale, UNE-P, UNE-L, etc.); the identification of the network service provider, and the identification of any line sharing or line splitting on the line; the ILEC feature name and USOC for vertical features and blocking options to ensure that CLECs can understand each other's CSRs; circuit ID information; and identification of line sharing/line splitting providers.

Q. DO THESE CSR ISSUES AFFECT CLECS' ABILITY TO DEPLOY UNE-L?

A. Yes. This CSR issue must be addressed and the infrastructure developed prior to the implementation of UNE-L. Otherwise, customers will be stuck where they land in their first migration or ILECs will be forced to install more and more facilities to compensate for the inability to identify the current circuit being used.

Q. DOES MCI HAVE A PROPOSAL TO RESOLVE THESE CSR ISSUES?

A. Yes. Going forward, it will be necessary to implement a solution to these problems. MCI proposes the establishment of a distributed CSR database, shared and maintained by CLECs and ILECs alike. These database improvements may take a considerable amount of time, expense, and effort to accomplish, but are necessary before UNE-L migrations can be handled on the same basis as UNE-P migrations.

Q. PLEASE EXPLAIN THE DISTRIBUTED DATABASE CONCEPT IN MORE DETAIL.

A. MCI recommends that a central database be maintained to identify the owner of a particular customer and to support queries to the current provider to retrieve that customer's service information. The central database would not contain the CSR information but would function similarly to the current CARE clearinghouse, directing requests to the proper providers following a single data communications protocol. CLECs would maintain CSRs in a standard format and would agree to standard delivery methods and time frames. Companies that did not want to maintain their own CSRs or could not develop the software necessary to electronically transmit that information to other carriers could contract with the third party clearinghouses that would inevitably spring up to support this process. State commissions would need to develop standards and procedures to ensure that information was exchanged within the appropriate time frames. Until such a distributed method is developed, the ILECs should modify their CSR databases to provide access to the information they have about customers on their networks as well as the information remaining after a customer leaves the networks. BellSouth has made a first step in this process by allowing CLECs to allow each other to view customer information resident in the BellSouth systems, but this database modification is currently available only via LENS (the BellSouth graphical user interface), not EDI, and requires CLECs to coordinate with each other to give permission to view this information.

Q. ARE THERE OTHER DATA BASE ISSUES?

A. Yes, work is required on all the databases used to configure and provide UNE-L to mass markets customers, including LFACS, E-911, LIDB, CNAM, DA/DL, and potentially others.

Q. WHAT IS THE PROBLEM WITH LFACS?

A. In the pre-order phase, MCI may submit a loop qualification inquiry to LFACS to determine loop make-up information. The accuracy of the data retrieved from this database is critical to the CLEC's ability to determine if it can serve the customer. For example, the CLEC needs to know if the customer's loop is copper (and can be unbundled) or is served through an IDLC system, which the ILECs claim cannot be unbundled, or whether the customer has fiber to the home. The ILECs require that loops served by IDLC be handled separately and will not unbundle fiber to the home, so this pre-order information is critical in determining whether the customer can be migrated to a CLEC's switch.

Q. IS THE DATA CONTAINED IN LFACS ACCURATE?

A. At this point we do not know. There has been evidence in other proceedings, including various 271 proceedings and the Virginia arbitration proceeding at the FCC, that LFACS does not contain accurate data. Given the current low level of UNE-L and DSL competition, it is difficult to know how inaccurate LFACS data is, despite testing done during the 271 process.

Q. HOW DOES MCI PROPOSE TO RESOLVE THIS ISSUE?

A. MCI proposes that LFACS be audited for accuracy and that a process be developed to ensure that it is accurately maintained in real time when the ILEC alters or changes its loop plant. This is particularly important as ILECs take down

their copper plant and replace it with fiber. In addition, CLECs must be able to "reserve" a spare copper facility when a customer is migrating to ensure that that migration can take place. Currently, while LFACS will allow a CLEC to determine whether there is spare copper to support the unbundling of the customer's service, that copper loop may be "taken" by another CLEC or the ILEC itself to serve another customer in the process of migrating or changing his loop to allow the provision of data services.

Q. HOW IS UNE-L TROUBLE HANDLING DIFFERENT THAN TROUBLE HANDLING FOR UNE-P CUSTOMERS?

A. When providing UNE-L service, each company is responsible for maintaining its respective portions of the network. The CLEC is responsible for its switch, collocation space and transport. The ILEC is responsible for the loop, frame and connectivity to the CLEC collocation space. This is a notable difference from UNE-P where the ILEC is fully responsible for making repairs to the switch and network.

In a UNE-L environment, MCI representatives gather the appropriate information from the customer and make an initial trouble assessment. To do this, MCI must "sectionalize" the trouble and determine whether a dispatch in to the MCI switch, a dispatch in to the BellSouth the frame, or a dispatch out to the field is required. If the problem is in the CLEC's portion of the network, the CLEC either must dispatch a technician to its collocation cage or work with the ILEC to clear the problem. If no trouble is found on the CLEC's network, typically the CLEC will request BellSouth to determine if the problem is with

BellSouth's network. If no trouble is found after a "dispatch in" to BellSouth, the initial ticket may be closed and the CLEC may have to open a new ticket if it turns out the problem lies at the main distribution frame or the facility running from the frame to the CLEC's collocation space. This process thus can lease to increased out of service times and harm customers by putting them in the middle of "finger pointing" exercises.

Q. WHY IS THIS AN ISSUE?

A. Since few mass markets customers today have UNE-L service, this trouble handling process has not yet been adapted for a world where customer service outages must be repaired rapidly so that residential customers can continue to be able to receive dial tone at the same rates as ILEC customers. In addition, while test equipment is available to allow CLECs to "see" through the collocation and out to the customer's premise, CLECs will have to purchase and deploy it and train their service teams to use it.

Q. HOW DOES MCI PROPOSE TO HANDLE THIS ISSUE?

A. For trouble handling in a UNE-L environment to work properly, CLECs like MCI need to obtain newer and more advanced test equipment as well as to develop internal processes to address this trouble handling and the anticipated volumes. In addition, all parties need to make sure that the dispatch rules surrounding trouble handling are adequate, function properly and are scaled to mass market volumes. These kinds of issues lend themselves to a workshop process under Commission supervision, along the lines I already have discussed.

Q. WHEN A CUSTOMER MIGRATES TO UNE-L ARE THERE CHANGES INVOLVING A CUSTOMER'S E911 INFORMATION?

A. Yes. When a consumer migrates to a UNE-L CLEC, the 911 database must be updated to reflect the new switch provider. A customer's migration to a UNE-L CLEC requires the ILEC to "unlock" the E911 database, allowing the CLEC record to overlay the existing ILEC record with updated information, including the CLEC company code and 7x24 emergency number as well as the current customer address information if necessary.

Q. WHAT HAPPENS IF THE CHANGE IS NOT MADE CORRECTLY?

A. If this change is not made correctly, the customer's E911 information in the Automatic Line Identification ("ALI") database will not include the CLEC's company ID or the customer's correct address if the customer has moved or the record required some other correction. It is essential that this change to E911 be done correctly and also that it be seamless and transparent to the migrating consumer.

Q. IS THIS CHANGE REQUIRED FOR UNE-P?

A. No such change is required for UNE-P because the ILEC retains control over the 911-database information for the UNE-P CLEC and continues to provide trap and trace and law enforcement and health and safety functions. Because there is no change to the E911 database, there is little if any chance for errors to be introduced and no additional data requirements for the Public Safety Answering Position ("PSAP") administrators.

Q. COULD YOU EXPLAIN THE NECESSARY E911 CHANGE IN MORE DETAIL?

A. The ILEC in most cases maintains the 911 selective router used for routing a 911 call to the appropriate PSAP. The PSAP dips into the ALI database when a 911 call is received to retrieve the address of the caller. The PSAP is the custodian of the data required to dispatch emergency personnel. The PSAP must have a record for each customer a facilities CLEC has and must be able to contact that carrier. Thus, in a UNE-L environment, there are two orders required for changes to the 911 ALI database. One order must go from the ILEC to the 911 provider to unlock the record in the ALI database. This allows the CLEC to overlay the existing record with the updated 911 ALI record, once the migration has been successfully processed.

The second order must go through the CLEC's vendor (or the ILEC if the CLEC has contracted with it) to overlay the existing 911 record with the new record. It is essential that these orders are coordinated so that the ILEC "unlock" order arrives before the CLEC "create" order to newly populate the database.

A critical issue here is the timing of the "unlock" order. In MCI's experience in providing UNE-L to business customers, we have discovered that many ILECs do not send the "unlock" order until the CLECs migration order has actually closed in the ILEC billing system. Since this will necessarily be sometime *after* the physical completion of the order, there could be a time lag where the 911 system has incorrect information on the network service provider. The National Network Numbering Association ("NENA") standard is to send the

911 order at the time of port. MCI follows that standard. The discrepancy between the ILEC and CLEC processes could lead to major problems regarding 911 database accuracy and the ability of CLECs to provide current information to update the database. The ILEC systems should be revised so that the 911 records are sent at the time of porting. This change would greatly improve the timeliness of the 911 record process and further ensure that accurate customer information is in the 911 database.

Q. WHAT HAPPENS IF THE ORDERS ARE NOT SEQUENCED CORRECTLY?

A. If the sequence of the orders is disrupted, the 911 database cannot be updated. While the customer will be able to dial 911, the PSAP will only see the old customer record, which may or may not be accurate and will contain the wrong company ID for correction or trap and trace requests. As the number of UNE-L orders increases and particularly during the bulk transition of customers from UNE-P to UNE-L, the problem will become more severe. In addition, the CLEC will be required to manually check the PSAP information to determine if the update has been accepted and has passed the myriad of required edits.

Q. HOW SHOULD THIS PROBLEM BE FIXED?

A. Aside from requiring the ILECs to comport with the NENA guidelines as discussed above, these critical 911 orders must be coordinated through the various systems and processes of all industry players in order to ensure that migration to UNE-L does not result in E911 problems. MCI suggests that these issues be addressed through a workshop process under the Commission's supervision. As

operational barriers to UNE-L are overcome and CLECs transition to that service delivery method, it will be essential to ensure that the required 911 data are accurate as well as seamless and transparent to the consumer. In addition, the Commission, the ILEC, and the CLECs should work with the 911 database providers to improve the error handling capabilities of the system. Currently, 911 errors are returned to CLECs in batch files rather than in real time. This increases the potential for late or inaccurate updates to the database.

Q. ARE THERE ISSUES INVOLVING NPAC IN A UNE-L MIGRATION?

A. Yes. The National Number Portability Administration Center handles the data base updates necessary to determine the "home switch" for each UNE-L customer -- that is, the switch that customer is associated with.

Q. ARE NPAC CHANGES NECESSARY WITH UNE-P?

A. No. Since UNE-P uses ILEC switching, there is no need to send transactions for UNE-P migrations to the NPAC, keeping the number administration task to a manageable level. When CLECs move to UNE-L, however, such transactions become a necessary and integral part of the process – and one that is currently untested at mass-market volumes.

Q. PLEASE EXPLAIN.

A. When a customer migrates to UNE-L, a transaction must be sent to NPAC to identify the "destination" switch for calls to this number. The ILEC initiates this transaction by creating a "10 digit trigger" in the donor (losing) switch at the time the UNE-L order is created. The trigger will cause incoming calls to "dip" into the NPAC database to determine the switch that now houses the number. The

CLEC initiates the second step of this process when it receives notification from the ILEC that the cut has been completed. The CLEC then sends a transaction to NPAC to claim the number. Until the CLEC claims the number in the NPAC database, the customer will be unable to receive any incoming telephone calls. If the NPAC transaction is not completed successfully, for example, if the NPAC system is down, the request is formatted incorrectly, or the ILEC has not notified the CLEC that the cut is complete, the customer will not be able to receive calls or voice mail messages, since calls will be directed to the incorrect home switch. It is essential that the NPAC process be coordinated and successful. If it is not, consumers could experience service problems that do not exist today with UNE-P.

When the customer changes carriers again, the losing carrier must "unlock" the existing record to allow the winning carrier to "replace" it with its destination code. Both churn and the addition of the ability for customers to migrate their numbers between wireless carriers and from wireline to wireless carriers will raise the number of transactions processed by the NPAC tremendously. It is unclear whether NPAC will be able to handle the volumes of transactions that would occur in a dynamic UNE-L market. In addition, the error checking rules for the NPAC are unclear and must be tested to ensure that the correct numbers are ported. If NPAC cannot handle the volumes or error rates are significant, changes to the NPAC process will undoubtedly prove necessary.

Q. DOES MCI HAVE ANY SUGGESTED RESOLUTION TO THIS ISSUE?

A. MCI recommends that the Commission address this issue in a workshop with the ILECs, CLECs, the NPAC administrator, Neustar and the organization that

develops requirements for the NPAC database (NAMPA), to determine NPAC's actual capabilities and to develop metrics for the completion of number portability tasks. Volume testing or scalability analysis also will be required to determine whether NPAC actually can handle the volumes of numbers that will be ported in a single day. Since a failure of the NPAC system will have a direct negative impact on customers, it is critical that the movement to UNE-L for mass markets customers not take place until all parties are clear that the system can support the increased volumes.

Q. ARE THERE ISSUES WITH LIDB AND CNAM?

A. Yes. The LIDB and CNAM databases provide information on caller identity and blocking options. UNE-P customers today use the LIDB and CNAM databases provided by the ILEC. Unless a customer of the CLEC chooses new blocking options, no changes are required to the data when a customer migrates. Problems arise, however, in the UNE-L context.

Q. WHY IS THE SITUATION DIFFERENT FOR UNE-L?

A. Today, when a customer migrates a telephone number to a UNE-L carrier, the losing company deletes the telephone number's LIDB and CNAM information from its LIDB and CNAM databases and the acquiring carrier therefore needs to load the telephone numbers' LIDB and CNAM information internally. MCI, as the acquiring carrier, loads the data internally and at its LIDB/CNAM vendor, VeriSign.

Q. WHY DOES THE NEED TO LOAD LIDB AND CNAM INFORMATION GIVE RISE TO PROBLEMS?

A. The LIDB and CNAM data entry step is performed while the migration order is in the order entry stage. CLECs either must create CNAM data from published sources, which results in a substandard database because not all necessary data is available publicly, or dip the ILEC systems to receive the data at a per dip TELRIC rate. In most jurisdictions, CLECs are not entitled to take a download of the entire database from the ILECs. Under the *Triennial Review Order*, the database dips referred to above will no longer be at TELRIC pricing. As a result, CLECs will have to choose between using their substandard databases or dipping the ILEC's database at a price that may exceed TELRIC.

Q. WHY ARE THESE PROBLEMS SIGNIFICANT?

A. LIDB and CNAM are essential databases. Customer information for migrating customers whose LIDB and CNAM is not loaded or incorrect will not be available for caller name display on caller ID, potentially leading to call blocking by the called party and improper rejection of third party billed calls. Differences between the ILEC's CNAM information and that provided by the CLEC will affect customers and cause an increase in the number of "troubles" directed to the CLEC's service organization, increasing cost and leading to the impression that the CLECs are providing substandard service.

Q. HOW DOES MCI PROPOSE THAT THIS ISSUE BE RESOLVED?

A. The Commission should ensure that ILECs charge just and reasonable rates for CNAM and LIDB data dips. In addition (or at least in the alternative), CLECs

should be allowed to obtain a "dump" of the ILECs databases, at just and reasonable rates, to ensure that there is consistency of information and that callers are provided with the fully functional features that they require.

Q. WHAT ISSUES FOR UNE-L MUST BE RESOLVED CONCERNING DIRECTORY LISTING AND DIRECTORY ASSISTANCE?

A. With UNE-L, CLECs must send directory listing information to the ILEC to include in both the printed and on-line directories of each company. This step occurs as part of the UNE-L migration order.

Q. DO CHANGES TO DL/DA OCCUR WITH UNE-P?

A. No. No changes are necessary in a migration to UNE-P.

Q. DO THEY OCCUR FOR UNE-L?

A. Yes. The CLEC completes the directory listing form and sends it with its order to the ILEC for processing. While an "as is" (i.e., no change) directory listing can be ordered from the ILEC as part of the "first" retail to UNE-L migration or UNE-P to UNE-L conversion, "as is" directory listings are not permitted for subsequent changes, which means that the winning CLEC must provide complete directory listing information for the customer, which increases the likelihood of errors or deletions in the directory as it is "opened" to remove listings and "closed" to put the same listings back in. Again, the sheer volume of directory changes to be processed if UNE-L were to become a viable mass-market service delivery method could have significant impacts on the directory publishing and operator services databases.

Q. DOES MCI HAVE A PROPOSED RESOLUTION OF THIS ISSUE?

A. Yes. MCI recommends that "migrate as is" functionality for directory listings be available for CLEC-to-CLEC migrations as well as for ILEC-to-CLEC migrations to limit the number of times that this information must be added and deleted.

Q. DO THESE INFORMATION EXCHANGE ISSUES HAVE A SIGNIFICANT EFFECT ON CUSTOMERS IN A UNE-L ENVIRONMENT?

A. Yes. All of these customer record and information changes must take place as efficiently and seamlessly as possible in a UNE-L environment. It is critical that these various orders and transfers of information be coordinated to the greatest extent possible throughout the various systems and processes of each provider and between providers. A lack of coordination could result in errors in the customer records, the loss of customer data and loss of dial tone.

Issue 6: If the triggers in §51.319(d)(2)(iii)(A) have not been satisfied for a given ILEC market and the economic and operational analysis described in §51.319(d)(2)(iii)(B) resulted in a finding that CLECs are impaired in that market absent access to unbundled local switching, would the CLECs' impairment be cured if unbundled local switching were only made available for a transitional period of 90 days or more? If so, what should be the duration of the transitional period?

Q. THE FCC REQUIRES THE STATES TO APPROVE AND IMPLEMENT A "BATCH" HOT CUT PROCESS. WHAT IS THE PURPOSE OF THE "BATCH" HOT CUT PROCESS?

A. In an effort to alleviate some of the operational barriers to UNE-L recognized by the FCC, the *Triennial Review Order* requires that the states approve a batch hot cut process ("Transition Batch Hot Cut Process") to transition UNE-P customers

to UNE-L by cutting over unbundled loops in high volumes from the ILEC to CLECs. (*See, e.g.*, *Order* ¶¶ 487-490.) 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." (*Order* ¶ 489.) 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. (*See, e.g.*, *Order* ¶¶ 423 (describing the batch process as mitigating, not necessarily eliminating impairment), 487.) Indeed, because this Transition Batch Hot Cut Process only addresses the issue of transitioning to UNE-L the base of customers that competitors like MCI have acquired on UNE-P, it is merely a 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 ("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. THE FCC ALSO REFERS TO THE CONCEPT OF "ROLLING ACCESS" IN ITS ORDER. WHAT IS "ROLLING ACCESS"?

A. In the *Triennial Review Order*, the FCC also raises the possibility of a state commission granting CLECs "rolling access" to mass market switching, if the state commission determines that such access would cure a finding of CLEC impairment. (*See Order* ¶¶ 521-524.) With rolling access, CLECs would have "access to unbundled local circuit switching for a temporary period [at least 90 days], permitting carriers first to acquire customers using unbundled incumbent LEC local circuit switching and later to migrate these customers to the competitive LECs' own switching facilities." (*Order* ¶¶ 521, 524.) In other words, rolling access allows CLECs to use UNE-P to acquire customers at the outset, but then requires that the CLEC transition (i.e., "roll off") those customers to UNE-L within a specified time period after acquisition. Theoretically, this process would enable the CLEC to avoid the delays and disruptions of service that would occur if a CLEC had to acquire the customer via UNE-L at the outset, because the customers are first acquired and then transferred to UNE-L via the Transition Batch Hot Cut Process.

Q. WILL ROLLING ACCESS CURE THE OPERATIONAL BARRIERS FACING A MOVE TO UNE-L?

A. No, as this description makes clear, rolling access does not ultimately alleviate the operational impairments presented by the everyday Mass Market Hot Cut Process, because it is simply a delayed batch hot cut process, one which focuses solely on transferring UNE-P customers to UNE-L. As I discuss above, the Mass Market

Hot Cut Process will be essential for all customer transfers other than those from UNE-P to UNE-L. For instance, even if CLECs have rolling access, they will not be able to rely on the Transition Batch Hot Cut Process for CLEC-to-CLEC UNE-L migrations. Therefore, regardless of whether the Transition Batch Hot Cut Process or rolling access alleviates some aspects of CLEC impairment, it is critical that state commissions investigate and resolve the substantial operational barriers associated with the Mass Market Hot Cut process as well.

Q. WHAT THEN SHOULD THE COMMISSION DO WITH RESPECT TO THE HOT CUT PROCESS?

A. Although the Commission must comply with the FCC's requirement that it evaluate, approve and implement a Transition Batch Hot Cut Process, that task should not distract the Commission from working toward alleviating the distinct operational issues associated with the Mass Market Hot Cut Process. The "Transition Batch Hot Cut Process" will necessarily require a number of coordinated steps and scheduling with the ILEC, and thus substantial ILEC involvement and oversight. In contrast, the Mass Market Hot Cut Process will need to be a standardized, simple, and low-cost process that can take place on a day-to-day basis. And it will have to function at the same time that the other migration processes are working as well, including migrations to and from retail, UNE-P, and resale, disconnections, suspensions, feature additions and changes. Thus, although a batch hot cut process may be helpful, it simply will not address the everyday operational barriers that exist in migrating customers from one UNE-L CLEC to another, from an ILEC to a UNE-L CLEC, and from a UNE-L

CLEC to an ILEC. To address these more fundamental difficulties with UNE-L migrations, the state must streamline the standard Mass Market Hot Cut process as well, so that it is as effective, efficient, seamless, low cost and scalable as possible, but without the special scheduling and ILEC handling necessary for the Transition Batch Hot Cut Process. For it is only when day-to-day migrations among all carriers, using all service delivery methods, take place quickly, efficiently and successfully, that a truly competitive market will exist. MCI discusses in detail its hot cut proposals in its Network Impairment Testimony.

Q. HAS BELLSOUTH SHOWN A WILLINGNESS TO IMPROVE ITS EXISTING MASS MARKET HOT CUT PROCESS?

A. No. BellSouth recently refused to engage in a collaborative process to improve its batch hot cut process, as illustrated by an email the BellSouth change management team e-mail sent to CLECs on November 20, 2003. (Exhibit SL-5.)

Q. IS BELLSOUTH'S RESPONSE SUFFICIENT?

A. No. The Commission should order BellSouth to work with CLECs to improve its batch hot cut process. BellSouth's response demonstrates that Commission involvement will be required to require BellSouth to make the changes necessary to make UNE-L operationally workable. Indeed, BellSouth's proposal at the Florida Batch Hot Cut workshop held on October 28, 2003 was merely to provide a method for ordering 100 hot cuts on the same LSR. It did not address the timing for these hot cuts, the information required on the ordering forms, or any improvements to the process itself. Until BellSouth has a fully developed and implemented transition batch hot cut process, and until that process is working

and metrics are in place, CLECs are impaired without access to unbundled switching.

Q. PLEASE BRIEFLY SUMMARIZE YOUR TESTIMONY.

A. One of the major issues in this proceeding is whether operational impairment exists. For the reasons I have outlined, and the ones described in MCI's Network Operational Testimony, it clearly does. But determining that operational impairment exists is the easy part of the Commission's job. The more difficult part is working with the industry to ensure that the barriers are removed. I have presented some approaches to known operational problems that should help the Commission and the industry progress toward making UNE-L operationally feasible for CLECs. As these problems and new ones that arise are addressed and remedied, the industry can begin to make UNE-L a reality.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

Q. PLEASE STATE YOUR NAME, EMPLOYER AND TITLE.

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

Q. ARE YOU THE SAME SHERRY LICHTENBERG WHO PROVIDED DIRECT TESTIMONY IN THIS DOCKET?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. The purpose of my rebuttal testimony is to rebut the Direct Testimony of BellSouth witnesses Kenneth L. Ainsworth, Ronald M. Pate, Alfred A. Heartley, and Alphonso J. Varner with respect to Issues 3(a), 5(c) and 6. I also briefly address Issue 4, explaining that MCI does not use its own switches to serve mass markets customers in Florida.

Issue 5(c): Operational Impairment

Scalability of BellSouth's Systems

Q. WHY IS SCALABILITY AN ISSUE?

A. BellSouth's testimony makes clear that its UNE-L provisioning processes are intensively manual. As explained below, moving from UNE-P to UNE-L would involve an exponential increase in UNE-L provisioning volumes. Manual processing of such volumes would give rise to concern even if they were to take place for a single project over a relatively short period, but in fact the manual

handling would have to take place day in and day out, month in and month out in every affected Florida wire center.

Q. WHAT IS THE RISK OF REQUIRING CLECS TO USE A PROVISIONING PROCESS THAT MAY FAIL TO WORK PROPERLY AT HIGH VOLUMES?

A. The immediate risk is there would be a large increase in human errors that would cause provisioning delays, customer outages and other service problems. Over the longer term, negative customer experience would harm CLECs and ultimately undermine local competition.

Q. SEVERAL BELLSOUTH WITNESSES EMPHASIZE ITS 271 APPROVALS IN 2002 IN SUPPORT OF ITS UNE-L PROVISIONING PROCESSES. IS THIS A VALID POINT?

A No. In its Triennial Review Order, the FCC rejected the argument that the 271 approvals demonstrated that CLECs were not impaired without access to unbundled local switching. The FCC emphasized that UNE-L volumes would increase to levels much higher than were evaluated during the 271 process:

> While incumbent LECs reference the Commission's determination in multiple section 271 orders that BOCs provision hot cuts at a level of quality that offers efficient competitors a meaningful opportunity to compete, and argue that performance data show that current hot cut performance is satisfactory, even as the number of hot cuts has increased, we find that the number of hot cuts performed by BOCs in connection with the section 271 process is not comparable to the number that incumbent LECs would need to perform if unbundled switching were not available for all customer locations served with voice-grade loops. In the states where section 271 authorization has been granted, unbundled local circuit switching has been available and, accordingly, the BOCs' hot cut performance has generally been limited. Moreover, ***we find that the issue is not how well the process works currently with limited***

> ***hot cut volumes, rather the issue identified by the record is an inherent limitation in the number of manual cut overs that can be performed, which poses a barrier to entry that is likely to make entry into a market uneconomic. . . . For those reasons, the Commission's prior findings in section 271 orders do not support a finding here that competitive carriers would not be impaired if they were required to rely on the hot cut process to serve all mass market customers.***

(Triennial Review Order, ¶ 469 (footnotes omitted, emphasis added.)

Q. DOES BELLSOUTH PRESENT EVIDENCE DEMONSTRATING THAT ITS SYSTEMS CAN HANDLE MASS MARKET VOLUMES OF UNE-L ORDERS?

A. No. BellSouth for the most part simply promises that it can scale its systems to handle higher volumes if called upon to do so. Such promises were unacceptable to the FCC and should be to this Commission as well. As the FCC stated: "We find . . . incumbent LECs' promises of future hot cut performance insufficient to support [an FCC] finding that the hot cut process does not impair the ability of a requesting carrier to provide the service it seeks to offer without at least some sort of unbundled circuit switching." (*Triennial Review Order*, ¶ 469 n.1437.)

Q. DOES MR. VARNER'S TESTIMONY CONCERNING BELLSOUTH'S PERFORMANCE METRICS SUPPORT BELLSOUTH'S CLAIM THAT ITS SYSTEMS ARE SCALABLE?

A. No. At best, Mr. Varner's testimony addresses BellSouth's performance with respect to the current low level of UNE-L orders. To make matters worse, his testimony does not give a clear picture of BellSouth's actual performance on UNE-L orders. For example, at page 19 of his testimony, he states that 86.42% of the "UNE Other" (non-UNE-P) LSRs met the flow through standard over a

certain period (apparently March to August 2003). In fact, however, most UNE-L LSRs do not flow through BellSouth's systems. For the period March to August 2003, the percentage of fully mechanized UNE-L orders that BellSouth achieved varied from 3.4% to 30.3%. (BellSouth response to AT&T First Interrogatory No. 28.) This percentage is much lower that the percentage of fully mechanized UNE-P orders over the same period, which ranged from 82.6% to 86.6%. (BellSouth response to AT&T First Interrogatory No. 28.)

Q. WHAT IS THE SIGNIFICANCE OF THE LOW FLOW THROUGH OF UNE-L ORDERS?

A. Low flow through means that most UNE-L orders must be processed manually by BellSouth's Local Carrier Service Center. Thus, not only are BellSouth's UNE-L hot cut processes (including the processes used to notify CLECs of the status of a cut) intensively manual, but its ordering processes are largely manual as well. Manual ordering processes greatly compound the problems introduced by the manual provisioning processes, increasing still more the chances for human error and customer service outages and other problems.

Q. HOW DO CURRENT UNE-L INSTALLATION INTERVALS COMPARE TO UNE-P INTERVALS?

A. Regional installation intervals for 2 wire analog loops with LNP were 5.06 days for nondesign loops and 5.32 days for design loops in October 2003. Comparable UNE-P installation intervals were 0.36 days for switch-based cuts and 1.52 days for CO based cuts (new installations) during that same period. (See October 2003

report entitled "FOCI UNE and Non-Design Fully Mech Non-Dispatch SQM Region.") Thus, even at current volumes UNE-L migrations take substantially longer than UNE-P migrations.

Q. BELLSOUTH WITNESSES AINSWORTH AND PATE POINT TO THIRD PARTY TESTING AS EVIDENCE THAT BELLSOUTH'S SYSTEMS SUPPORTING UNE-L ARE ADEQUATE. DO YOU AGREE?

A. No. Mr. Ainsworth refers to process and transaction testing of hot cuts (PPR-9 and TVV-4) at page 16 of his Direct Testimony, but both of the tests he refers to involved low volumes of orders, either issued by BearingPoint or a CLEC. In addition, the tests did not evaluate the ancillary processes necessary in a UNE-L environment, such as LNP, E911, and CLEC-to-CLEC migrations. Mr. Pate refers to another test (TVV-2) done for normal, peak and stress volumes, but fails to note that the orders tested did not go through the physical provisioning process, meaning there were no actual hot cuts performed. Moreover, TVV-2 involved mostly orders that flowed through BellSouth's order processing systems without human intervention, and thus involved an order mix quite different from one with just UNE-L orders. The bottom line is that BearingPoint never did volume testing of BellSouth's physical hot cut process, nor for that matter was there any volume testing that focused exlusively on UNE-L orders. Third party testing provides no evidence of how BellSouth's systems could be expected to perform with mass market volumes.

Q. BELLSOUTH WITNESSES AINSWORTH AND HEARTLEY DISCUSS A FORCE MODEL THEY SAY PREDICTS THE NUMBER OF

PERSONNEL THAT WOULD NEED TO BE ADDED TO HANDLE ADDITIONAL VOLUMES OF HOT CUTS. DOES THIS MODEL ESTABLISH WHETHER BELLSOUTH CAN SEAMLESSLY PROCESS HIGH VOLUMES OF UNE-L ORDERS?

A. No. To the contrary, this testimony demonstrates how intensively manual BellSouth's processes are because BellSouth's only proposed way to address much higher volumes of hot cuts is to hire more people. The problem that BellSouth fails to acknowledge is that mass market volumes are of a different order of magnitude than BellSouth's manual processes currently encounter. From March to August 2003, BellSouth's systems issued between 38 to 392 UNE-L service orders per month, whereas they issued between 27,619 to 38,400 UNE-P service orders per month during the same period. (BellSouth responses to AT&T First Interrogatory Nos. 28 and 32.) Unlike the UNE-P orders, most UNE-L orders fell out for manual processing in BellSouth's ordering systems and then had to be provisioned manually as well. Using a mathematical model to calculate the number of additional people that would be necessary in theory to handle such increased volumes fails to address the fundamental question of whether simply staffing up can address the problem. BellSouth also does not appear to address how it would deal with the greater amount of manual order processing that would be required for UNE-L orders, or how that manual order processing would affect the manual provisioning systems. In the end, BellSouth just says "trust me." The Commission should not accept that paper promise since every hot cut that fails will directly impact a Florida consumer.

Ability of BellSouth's Systems to Process All Types of UNE-L Orders

Q. DOES BELLSOUTH ADDRESS ALL THE ORDERING SCENARIOS YOU ADDRESSED IN YOUR DIRECT TESTIMONY?

A. No. BellSouth focuses on migrations from BellSouth to CLECs and ignores other kinds of transactions, such as CLEC-to-CLEC migrations.

Q. PLEASE DESCRIBE WHAT IS INVOLVED IN MIGRATING A CUSTOMER FROM ONE CLEC TO ANOTHER.

A. Of course, the loop needs to be moved from the losing CLEC's CFA to the winning CLEC's CFA, but that process will not provide the customer with the service that he has ordered. A CLEC-to-CLEC migration requires the losing CLEC to make the loop available to the winning CLEC for re-use, which requires providing the correct circuit ID and channel and pair assignment information to the winning CLEC. In addition, the losing CLEC must initiate the 10-digit LNP trigger in its switch and unlock the E911 database. While BellSouth is not directly involved in this process, the customer will not have the service he has requested until that process is complete. This Commission should not force CLECs to move to UNE-L until the CLEC-to-CLEC migration process is in place and tested, since the only "winner" in the chaos that will ensue if customers are "stranded" on one CLEC's platform will be BellSouth.

Q. HAS BELLSOUTH ADDRESSED THE IDLC PROBLEM SATISFACTORILY?

A. No. BellSouth proposes eight processes for migrating customers served by IDLC but does not explain in any detail how those processes will be implemented and how CLECs will be notified of the way in which that customer's order has been handled. Despite BellSouth's testimony, MCI has had eight orders to move a customer from UNE-P to UNE-L rejected in Georgia because no spare copper facility was available. BellSouth did not provide any of the alternatives (such as UDLC, hair pinning, side door access) discussed in its testimony. James Webber also discusses this issue in his Rebuttal Testimony.

Q. HOW SHOULD THE COMMISSION DEAL WITH THE REALITY THAT IMPAIRMENT ARISES NOT JUST FROM BELLSOUTH'S SYSTEMS, BUT FROM OTHER INDUSTRY PLAYERS AS WELL?

A. As I discussed in my Direct Testimony, the Commission establish a separate docket to address these issues on an industry-wide basis.

Issues 3 and 6: Batch Hot Cuts and Rolling Access

Q. HAS BELLSOUTH DEVELOPED AN ADEQUATE BATCH HOT CUT PROCESS?

A. No. BellSouth has developed a manually intensive batch ordering process that does not provide a seamless method for transitioning existing UNE-P customers to UNE-L. BellSouth's batch ordering process requires additional steps (a manual spreadsheet, negotiation for due dates and a new bulk LSR) to the process. In addition, the process allows BellSouth to set due dates individually for each of the orders in the batch. These additional steps seem to be contrary to the FCC's

recommendation that a batch process could simplify, streamline, and shorten the UNE-P to UNE-L migration process.

Q. ARE THERE REASONS TO BE CONCERNED ABOUT THE BATCH ORDERING PROCESS?

A. Yes. The batch ordering process starts with the requirement that the CLEC provide its Account Manager with a manual spreadsheet listing the lines to be moved. The Account Manager has 7 business days to review the spreadsheet and assign due dates to each of the 99 separate accounts that can be listed. (For a carrier providing residential service, the 99 accounts will translate to 99 individual customers.) The Account Manager then will return the spreadsheet to the CLEC. Unlike all other ILECs, BellSouth does not necessarily assign the same due date to each of the lines on the spreadsheet. BellSouth's apparently random date selection will not allow CLECs to plan for the transition of their customers and will create more work for all involved. Once the CLEC receives the spreadsheet with the listing of lines and proposed completion dates, the CLEC must create the bulk ordering LSR – only then can the orders be submitted electronically to BellSouth's OSS. BellSouth's internal systems will "explode" a single batch LSR into multiple LSRs. This process did not exist and therefore was not tested during the 271 proceedings and BellSouth has not provided documentation on how the process will work. I am concerned that the process will result in more orders falling to manual handling and more errors. At the very least, it adds steps to a process that should simplify the UNE-L ordering process. And because BellSouth's systems must issue multiple internal orders for each LSR, problems

such as the premature disconnects, which were a problem with UNE-P until BellSouth removed its two order process, would likely recur.

Q. HOW WOULD BELLSOUTH'S BATCH ORDERING PROCESS AFFECT CLECS?

A. CLECs would need to develop new software to accept and implement the new notifiers that would go with this process. CLECs would get an FOC for the "batch" order and then FOCs for the individual LSRs. MCI believes that there should be no requirement for a spreadsheet, a negotiation process, or the single "bulk LSR." MCI would prefer a process that provides standard due dates and allows the issuance of individual LSRs, but BellSouth continues to refuse to collaborate with CLECs to develop a true batch hot cut process. BellSouth is the only ILEC that has not established collaboratives to develop a batch hot cut process, preferring instead to simply tell CLECs and this Commisison that the existing process is "good enough."

Q. IS BELLSOUTH'S BATCH ORDERING PROCESS EFFICIENT?

A. No. The seven business days BellSouth requires for initial negotiation is far too long; the entire process from start to finish should take five business days. CLECs should not be forced to perform additional steps. Due dates should be decided in advance using a scheduling tool such as the one that Verizon is discussing and that SBC is proposing. Communications between the ILEC and the CLEC should be electronic, using a system similar to the Verizon WPTS hot cut tool, the Status Tool recently proposed by Qwest, or the SBC-proposed PWS system. Adding these tools would greatly improve BellSouth's process.

Q. HOW DOES THE BATCH ORDERING PROCESS ADDRESS LINE SPLIT LINES?

A. My understanding is that when a customer is served by a UNE-P voice CLEC and a data CLEC over a line splitting configuration, and the customer is being migrated to a UNE-L loop, BellSouth will disconnect the CLEC line from the splitter and thus take down the customer's data service. The line would then be migrated to UNE-L. Theoretically, the CLEC could then order that the line splitting be re-installed, but BellSouth has yet to provide information on how this process will be accomplished, particularly if the CLEC is teaming with a data CLEC to provide line splitting via a second collocation arrangement (one for data). A process that does not allow the customer to retain his or her data provider when he moves to UNE-L is not acceptable and harms customers directly. This process must change so the customer's line splitting arrangement is not taken down.

Q. WHAT CHANGES MUST BE MADE TO BELLSOUTH'S METRICS TO TAKE ACCOUNT OF THE BATCH PROCESS?

A. Assuming that BellSouth does not correct its existing process to provide a real bulk migration process, metrics need to be developed that address the process and its possible flaws. Metrics must be developed for errors created by BellSouth in the multiple LSRs generated from the batch LSR. In addition, there needs to be a metric for timely unlocking of the E911 database. A metric also is needed to track the due dates that CLECs are assigned. The earliest due date appears to be 24 business days (7 days to negotiate the batch and then a 17 day window).

Further, the number of "batch" orders that are rejected needs to be tracked. A separate disaggregation for batch orders is needed to ensure that the batch orders move smoothly from ordering to provisioning—that is, from initiation of the order through the provisioning process, including the start and end time given for the whole batch.

Issue 4: Actual Switch Deployment

Q. DOES MCI OFFER SERVICE TO LOCAL MASS MARKET CUSTOMERS TODAY IN FLORIDA USING UNE-L?

A. No. MCI only offers local mass market service in Florida using UNE-P.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes, it does.

Q. PLEASE STATE YOUR NAME, EMPLOYER AND TITLE.

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

Q. ARE YOU THE SAME SHERRY LICHTENBERG WHO PROVIDED DIRECT AND REBUTTAL TESTIMONY IN THIS DOCKET?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL REBUTTAL TESTIMONY?

A. The purpose of my supplemental rebuttal testimony is to clarify my testimony with respect to Issue 4 and provide additional information explaining why MCI is not a trigger company under the analysis provided by MCI witness Dr. Mark T. Bryant. In so doing, I will further rebut the Direct Testimony of BellSouth witness Pamela Tipton and Verizon witness Orville D. Fulp.

Issue 4: Actual Switch Deployment

Q. PLEASE CLARIFY YOUR REBUTTAL TESIMONY WITH RESPECT TO MCI'S OFFERING OF UNE-L TO CUSTOMERS IN FLORIDA.

A. Certainly. MCI does not currently use UNE-L to provide service to residential customers in Florida, nor does it offer or hold itself out as providing residential service via UNE-L in Florida. MCI does offer and provide business services via UNE-L to business customers. MCI *does not* currently offer or provide such services through its mass market residential and small business sales channels, however, except through its limited direct

or face-to-face business sales channels. As I explain below, MCI has provisioned few UNE-L lines in Florida, and in most (if not all) cases those lines are for medium- to large-sized businesses. Locations MCI serves throughout the country generally are affiliated with a larger enterprise customer with specialized business needs requiring UNE-L functionality such as analog lines for fax machines. In some cases, the customer needs specialized functionality permitted by the billing systems that support MCI's UNE-L service. The main factor in determining what product and delivery method MCI uses to serve a customer is not a predetermined line count or revenue amount set by MCI, but a customer's specific and sometimes highly customized needs.

Q. HOW DOES MCI PROVIDE LOCAL SERVICE TO FLORIDA MASS MARKET CUSTOMERS?

A. Other than in some exceptional cases involving business customers, MCI's vehicle for providing residential and small business local service is UNE-P. MCI provides UNE-P service in BellSouth's service territory today, and MCI is projected to launch UNE-P in the Verizon Florida territory in February, 2004.

Q. PLEASE EXPLAIN FURTHER THE CIRCUMSTANCES IN WHICH MCI PROVIDES UNE-L SERVICE TO LARGER BUSINESS CUSTOMERS.

A. On occasion, large or mid-sized business customers will require a relatively small number of DS-0 loops to some location or locations as part of a larger

service package. For example, an enterprise customer using MCI as a single source provider might obtain high-capacity service connections at a central location and also need a relatively small number of voice-grade ("DS-0") lines at a satellite location. A mid-sized business might require a high-capacity line for its primary voice and data needs and also a handful of individual voice-grade lines to use in conjunction with fax machines and dial-up modems. In other cases, MCI uses UNE-L to meet specific customer needs that MCI can only fulfill through its UNE-L product. Such needs often include the customer's desire for a consolidated bill for all services, including toll free or 800 services or multi-location billing functionality. In addition, in many instances MCI is not the sole provider of local telecommunications services to the customer, but is the customer's "alternative" provider and the customer still receives most of its local telecommunications services from the ILEC. Thus, the number of DS0s or voice grade equivalents that MCI provides to a customer rarely reflects that customer's total demand for local telecommunications services.

Q. DO YOU HAVE ANY GENERAL COMMENTS CONCERNING THE EVIDENCE BELLSOUTH WITNESS TIPTON PROVIDES CONCERNING MCI'S SWITCH DEPLOYMENT IN FLORIDA?

A Yes. As a preliminary matter, I note that MCImetro Access Transmission Services, LLC and Intermedia Communications, Inc. are affiliates, so their switches must be treated as belonging to one company, not two, for trigger purposes. According to Ms. Tipton's Exhibit PAT-1, MCI has **** [redacted]

[redacted] **** total switches in Florida, when in fact it has **** [redacted], **** as reflected in Confidential Exhibit SL-6. I would add that of those switches, **** [redacted] **** are in Verizon's service territory and **** [redacted] **** of the switches in BellSouth's service territory are being decommissioned. Finally, I note that Ms. Tipton makes no effort to quantify the UNE-L activity on each switch.

Q. DO YOU HAVE ANY GENERAL COMMENTS CONCERNING THE EVIDENCE VERIZON WITNESS FULP PROVIDES CONCERNING MCI'S SWITCH DEPLOYMENT IN VERIZON'S SERVICE TERRITORY IN FLORIDA?

A. Yes. Mr. Fulp identifies the correct number of MCI switches in Verizon's service territory, but again it must be borne in mind that the "WorldCom" and Intermedia switches must be treated as belonging to one company.

Q. IS MCI PROVIDING ACTIVE AND CONTINUING LOCAL SERVICE TO MASS MARKET CUSTOMERS IN FLORIDA USING ITS OWN SWITCHES?

A. No. As I noted above, MCI is not using its mass market sales channels to sell UNE-L to mass market customers. Moreover, many of the UNE-L lines MCI has provisioned are to large- and medium-sized business customers rather than small business customers. MCI has provisioned few if any UNE-L lines to small business customers in Florida.

Q. PLEASE EXPLAIN FURTHER THE LIMITATIONS OF MCI'S UNE-L SERVICE IN FLORIDA.

A. MCI is only collocated in only **** [redacted] **** ILEC wire centers in Florida, and has UNE-L lines in only **** [redacted] **** of those wire centers. The most UNE-L lines that MCI has in any of those wire centers is **** [redacted], **** and MCI has only two collocations with more than **** [redacted] **** UNE-L lines, as shown in Confidential Exhibit SL-7. MCI's records do not categorize these lines according to the size of the business served, but, based on MCI's business practice and experience, it is virtually certain that most if not all of these few UNE-L lines are for medium and large business customers, not mass market customers. Moreover, it is possible that some of these circuits ride on DS1 loops, which are only provided to larger business customers.

Q. DOES MCI'S EXPERIENCE REFLECT THAT ECONOMIC AND OPERATIONAL BARRIERS HAVE BEEN REMOVED IN THOSE WIRE FLORIDA CENTERS WHERE MCI HAS PROVISIONED UNE-L LINES?

A. Absolutely not. To the contrary, MCI has provisioned almost no UNE-L lines to mass market customers in Florida, which further demonstrates that these barriers still exist.

Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL REBUTTAL TESTIMONY?

A. Yes.

Q. PLEASE STATE YOUR NAME, EMPLOYER AND TITLE.

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

Q. ARE YOU THE SAME SHERRY LICHTENBERG WHO PROVIDED DIRECT, REBUTTAL, AND SUPPLEMENTAL REBUTTAL TESTIMONY IN THIS DOCKET?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY IN THIS PROCEEDING?

A. The purpose of my surrebuttal testimony is to address the Rebuttal Testimony of BellSouth witnesses Kenneth L. Ainsworth, Ronald M. Pate, Alphonso J. Varner and Milton McElroy with respect to Issues 4 and 5(c).

Introduction

Q. DOES BELLSOUTH PROVIDE EVIDENCE IN ITS REBUTTAL TESTIMONY THAT ITS UNE-L ORDERING AND PROVISIONING SYSTEMS CAN HANDLE MASS MARKET VOLUMES?

A. No. As with its direct testimony, BellSouth focuses on its existing UNE-L processes that currently handle low volumes of orders. BellSouth also submits evidence of a third-party test done without the involvement of CLECs or the Commission that evaluated aspects of BellSouth's batch hot cut process, but involved only a few hundred orders submitted over the course of four days in three central offices. I will discuss this testing later in my testimony.

Q. DOES BELLSOUTH ACKNOWLEDGE THAT IMPAIRMENT CAN ARISE IF MIGRATIONS DO NOT TAKE PLACE SEAMLESSLY BETWEEN ALL CARRIERS IN THE DIFFERENT SCENARIOS THEY WILL ENCOUNTER?

A. No. Although BellSouth does not deny that problems exist in CLEC-to-CLEC migrations, for example, BellSouth's position is that problems arising from carriers other than itself are irrelevant to the impairment analysis, however real those problems may be to the carriers involved and their customers. BellSouth fails to recognize that in a fully competitive market, customers must be able to move from carrier to carrier seamlessly as they do today in the long distance market and, to a more limited degree, with UNE-P in the local market. This case is not just about BellSouth's performance, but about the experience of all carriers — and their customers.

Q. IS BELLSOUTH WILLING TO WORK COLLABORITIVELY WITH CLECS TO IDENTIFY AND REMEDIATE OPERATIONAL IMPAIRMENT?

A. No. Although BellSouth has participated in one workshop process in Florida with respect to CSRs, its position generally is that its current UNE-L processes are good enough and that CLECs should have the burden of identifying specific problems and then requesting solutions through the change management process. While the change management process (at least in theory) can work reasonably well to make software changes to existing electronic processes, it is not suited to transforming BellSouth's manual and complex UNE-L ordering and provisioning

systems so that they can provide seamless migrations in a facilities-based world. Making such a transformation will involve a give-and-take process and require the management and coordination of significant changes to BellSouth's systems and processes over an extended period. Other ILECs, including SBC, Verizon and Qwest, have worked collaboratively with CLECs to improve their batch hot cut processes, reducing the number of contested issues dramatically and providing a good first step toward addressing the entire UNE-L migration process. BellSouth stands alone as the only RBOC that has refused to undertake such a collaborative process.

Q. BELLSOUTH CONTENDS THAT MCI IS SEEKING TO REQUIRE BELLSOUTH TO IMPLEMENT ELECTRONIC LOOP PROVISIONING. IS THAT THE CASE?

A. No. MCI has not taken a position on AT&T's ELP proposal in these proceedings or anywhere else. MCI believes that automation can be introduced into the hot cut process in phases, beginning with automating the ordering and tracking processes via an on-line due date scheduler and tracking system similar to Verizon's WPTS, and ending with upgrades to BellSouth's physical plant that will allow for the automated unbundling of loops and cutovers. MCI has not, however, proposed a wholesale upgrading of that network as a precondition to a finding of no impairment.

Ordering Systems

Q. MR. PATE ASSERTS THAT FLOW THROUGH FOR UNE-L IS HIGH. IS HE CORRECT?

A. No. The chart on page 6 of Mr. Pate's Rebuttal for May–July 2002 shows flow-through calculations for "UNE," which includes both UNE-L and UNE-P. Thus, the flow through shown in that category tells one little about flow through for UNE-L, since the number of UNE-P orders dwarfs the number of UNE-L orders. The chart on page 7 purports to show flow through of 86.19% for UNE-L orders for August 2003. That number does not reflect the CLECs' experience however, because all orders that fall out for manual processing by design are excluded from consideration.

Q. HAS BELLSOUTH PROVIDED A MORE ACCURATE PICTURE OF UNE-L FLOW THROUGH IN ITS DISCOVERY RESPONSES?

A. Yes, as I noted in my rebuttal, BellSouth provided data in response to AT&T Interrogatory No. 28 showing the percentage of fully mechanized UNE-L migration orders by region and by state. For the region the percentage of fully mechanized UNE-L migration orders in August 2003 was 27.1% and for Florida the figure was 23.7%.

Q. IS MR. PATE ABLE TO EXPLAIN AWAY THESE FIGURES?

A. No. Although Mr. Pate claims that these low percentages "should [not] be the sole basis for the Commission to determine a finding of impairment," he has no good explanation for them. The only difference between these percentages and flow-through percentages that Mr. Pate points to at page 11 of his rebuttal is the inclusion of manual orders, but in fact there were only 136 manual UNE-L migration orders for the region in August 2003, as compared to 3120 mechanized orders. Likewise, in Florida there were only 21 manual UNE-L migration orders

for the month, as compared to 1548 mechanized orders. Subtracting out the manual orders only raises the percentage of fully mechanized orders for the month to 24.0% for Florida and to 28.5% for the region.

Q. HOW DO YOU RESPOND TO MR. PATE'S CONTENTION THAT BELLSOUTH'S PERFORMANCE WAS DEEMED ADEQUATE FOR 271 PURPOSES?

A. When BellSouth received authority to provide in-region long distance authority in Florida, the only service delivery method by which CLECs were providing high volume service to mass market customers was UNE-P. As the FCC found in the *Triennial Review Order*, "the number of hot cuts performed by BOCs in connection with the section 271 process is not comparable to the number that incumbent LECs would need to perform if unbundled switching were not available for all customer locations served with voice-grade loops." *Triennial Review Order*, ¶ 469. The flow-through that might be acceptable for low volumes of UNE-L orders could cause impairment for mass market volumes. And mechanization percentages on the order of what BellSouth is providing, combined with its manual provisioning processes, almost certainly would give rise to impairment for CLECs attempting to submit high volumes of UNE-L migration orders.

Q. PLEASE COMMENT ON THE CHART ON MECHANIZED LSRS THAT APPEARS ON PAGE 8 OF MR. PATE'S REBUTTAL.

A. The fact that only 2.3% of BellSouth's electronic orders are for UNE-L demonstrates the relative insignificance of UNE-L today as a mass market service

delivery method. Further, of the 17,943 mechanized UNE-L orders that were submitted for the region in August 2003, only 3120 were for the migration of BellSouth retail customers to CLEC UNE-L. (BellSouth Response to AT&T Interrogatory No. 28.) This constitutes about 1.4% of the 228,326 mechanized orders to migrate BellSouth retail customers to UNE-P. (BellSouth Response to AT&T Interrogatory No. 32.)

Q. WITH RESPECT TO LFACS, MR. PATE AT PAGE 13 RELIES ON FCC 271 RULINGS THAT BELLSOUTH PROVIDES THE SAME INFORMATION TO CLECS AS IT PROVIDES TO ITSELF. PLEASE RESPOND.

A. This issue must now be viewed in the mass market context. Although BellSouth may provide the same information to CLECs as it does for itself, BellSouth still has most of the customers, and thus it is the CLECs that will have to do most of the migrating, at least at first. Inaccurate data will have a disproportionate impact on CLECs attempting to place high volumes of UNE-L orders. It is therefore critical that the LFACS database be accurate. Moreover, because high UNE-L order volumes would lead to frequent LFACS changes (such as when changes are made to IDLC loops), BellSouth should be required to update the database in real time.

Q. DOES MCI HAVE ANY RECENT EXPERIENCE WITH THE LFACS DATABASE?

A. Yes. During recent preliminary testing in Georgia, MCI submitted eight queries to LFACS, which showed that six of the loops had IDLC and two were copper.

MCI received rejects for all eight orders on the ground that all eight were IDLC. Either LFACS returned incorrect data, or the rejects contained inaccurate information. (Of course, in addition, BellSouth should not have rejected the orders on the grounds they were IDLC.) MCI intends to work with its account team to better understand these rejects, but they point out potential problems with the data in LFACs.

Q. MR. PATE CONTENDS THAT NPAC CAN HANDLE INCREASED VOLUMES FROM UNE-L. PLEASE RESPOND.

A. Because mass market UNE-L volumes will be a new experience for the industry, it remains to be seen whether NPAC can handle such volumes. Not all CLECs participate in forecasting, and the current forecast does not include UNE-P to UNE-L transitions. The Commission needs to be sure that the NPAC rules can account for all the transactions that will take place. NPAC's metrics are not made available to the public. The Commission and the industry need better insight into this issue to ensure that there is not a replay of the wireless number portability experience.

Q. AT PAGE 20 OF HIS REBUTTAL, MR. PATE CONTENDS THAT "CLEC-TO-CLEC MIGRATIONS ARE EXTRANEOUS TO THIS DOCKET." DO YOU AGREE?

A. No. For the reasons I have already discussed, if the industry has not developed a seamless process for CLEC-to-CLEC migrations, CLECs will be impaired and their customers will be harmed. All carriers, including ILECs, must be a part of making this process work. Not only must ILECs be involved in facilitating

CLEC-to-CLEC migrations, but the same or similar processes must be employed when a UNE-L customer migrates back to an ILEC.

Q. DO YOU AGREE WITH THE APPROACH TO THE CSR ISSUE THAT MR. PATE SUGGESTS AT PAGE 25 OF HIS REBUTTAL?

A. I agree that BellSouth and the CLECs should deal with this issue collaboratively. Other ILECs also should be involved in the process. I further agree that performance measurements and remedies will need to be established. Where we may disagree is that MCI believes that a clearinghouse much like CARE in long distance should be established to facilitate the transmission of CSR information between carriers.

Q. MR. PATE STATES AT PAGE 26 THAT CLECS DO NOT NEED CIRCUIT IDs TO MIGRATE UNE-P CUSTOMERS TO UNE-L. IS THAT WHAT YOU ASSERTED IN YOUR TESTIMONY?

A. No. My discussion of the need for circuit IDs concerned subsequent migrations of UNE-L customers. As I acknowledged, circuit IDs are not an issue for the initial migration from BellSouth to the CLEC. They are an issue, however for subsequent migrations (including subsequent migrations to the ILEC), and it is critical that the issue be addressed.

Provisioning Systems

Q. MR. AINSWORTH STATES THAT THE DATABASE UPDATES YOU DISCUSSED IN YOUR TESTIMONY DO NOT REQUIRE COORDINATION BETWEEN THE CLEC AND THE ILEC. IS THIS CORRECT?

A. Only partially. MCI creates its database update transactions electronically but cannot release them until BellSouth notifies it that the cutover has been completed. As demonstrated by BellSouth's own so-called third party test, this notification process is far from manual. The frame technician notifies the CWINS center by telephone that the cut has been completed. (McElroy Rebuttal, p. 17.) CWINS personnel complete the order in EnDI, which generates an email or fax to the CLEC. The CLEC must track the receipt of these notifiers so that it may initiate the LNP activation process. Customers will not be able to receive calls until this process is complete.

Q. HOW CAN BELLSOUTH CORRECT THIS PROBLEM?

A. BellSouth should work with CLECs to develop an automated method for notifying them that the conversion is complete. Verizon already has a real-time, notification system that allows CLECs to track the process of their cutovers without the manual coordination steps required by BellSouth, and SBC and Qwest have agreed to develop such a tool. In addition, Verizon has announced that it is working with the NPAC to determine how it can pull the LNP trigger for the CLEC so that the risks to customers associated with missing this step can be eliminated.

Metrics

Q. MR. VARNER, AT PAGES 2-3 OF HIS REBUTTAL, STATES THAT BELLSOUTH DOES NOT MEASURE NON-COORDINATED CUTOVERS IN ITS METRICS P-7 AND P-7A-C, BUT PLANS TO ADD

METRICS THAT WILL PROVIDE THIS INFORMATION. PLEASE COMMENT.

A. MCI agrees that such metrics need to be added. Although Mr. Varner states that the current lack of information on non-coordinated cutovers is not a problem because they constitute only 3% of the current volume, these volumes will increase in the future because residential UNE-L cutovers will be non-coordinated. The lack of current data on these cutovers blocks the Commission from being able to determine whether BellSouth's performance in this area contributes to the impairment CLECs face.

Q. MR. VARNER CONTENDS THAT BELLSOUTH'S MANUAL HANDLING OF UNE-L MIGRATION TASKS DOES NOT RESULT IN ERRORS AND DELAY. HOW DO YOU RESPOND?

A. BellSouth's performance data is of limited value because CLECs are not submitting large volumes of UNE-L orders. Moreover, the three hot cut metrics Mr. Varner refers do not provide data on non-coordinated cutovers that MCI would use for residential customers, and in any event only provide a small window into the overall process, focusing on the hot cut itself and provisioning troubles within seven days after the cutover.

Q. AT PAGE 6 OF HIS REBUTTAL, MR. VARNER CONTENDS THAT BELLSOUTH'S PERFORMANCE DATA REFUTE YOUR CONCERN ABOUT INCREASED OUT OF SERVICE TIMES AND CUSTOMER HARM. PLEASE RESPOND.

A. As a preliminary matter, BellSouth's performance data only concerns the current level of UNE-L circuits. Moreover, BellSouth's metrics only take into account the BellSouth side of the equation. The fact that the circuit is "broken up" between two carriers, going from BellSouth's facilities to the CLEC's collocation and switch, could lead to greater outage times, which will not always be captured by BellSouth's metrics.

Third Party Testing

Q. MR. MCELROY DESCRIBES A THIRD-PARTY TEST PERFORMED BY PRICEWATERHOUSECOOPERS ("PwC") FOR BELLSOUTH. DO YOU HAVE ANY INITIAL CONCERNS ABOUT HOW THE TEST WAS DONE?

A. Yes. The test was performed without participation by CLECs or the Commission, which casts doubt on its objectivity, completeness and conclusions. Because BellSouth has provided only limited information about the test, it is impossible at this juncture for CLECs to evaluate fully the test methodology or results.

Q. PLEASE COMMENT ON THE SCOPE OF THE TEST.

A. Only the lift and lay process was tested. Although PwC states that it issued orders and reviewed the ordering process, there appears to be no data provided with respect to the ordering process. Aspects of UNE-L migration such as LNP, directory listings, trouble handling and 911 were not tested.

Q. PLEASE COMMENT ON THE TEST METHODOLOGY.

A. Without a test plan, it is difficult to know what PwC did or how it was done. Based on what is provided in Mr. McElroy's testimony, it appears that the test bed

consisted of 750 lines that BellSouth wired to its frames in three central offices. These lines were translated in the BellSouth switches, but did not go to a CLEC collocation cage or switch. When the "migration order" was worked, the lines were re-terminated on the CLEC portion of the BellSouth Main Distributing Frames and then run back to the switches. According to BellSouth, most of the orders were issued using BellSouth bulk ordering process.

Q. IS THERE ADDITIONAL INFORMATION THAT CLECS AND THE COMMISSION WILL NEED TO DEVELOP ABOUT THE TEST?

A. Yes. Among other things, we need to learn about the type of orders that were issued, what happened to each order and which orders resulted in the exceptions that BellSouth has listed. BellSouth provides no data on the size of the original bulk ordering requests, how many times they were rejected (if at all), and whether the due date was the same for all the individual orders. BellSouth also provides no data on other cuts taking place at these central offices at the same time as the bulk migrations. In addition, it is not clear at this stage how IDLC lines were handled.

Q. PLEASE COMMENT ON THE EXCEPTIONS NOTED BY PWC.

A. For 22 lines, no dial tone was detected prior to the cut, but the cuts were done anyway. If this problem existed for a live customer, and the trouble was on the loop, the customer would have continued to have problems after the cut. If customer were suspended or had had dial tone removed for some reason, the CLEC would not have wanted the cut to proceed.

For 3 lines, the was no dial tone for longer than 20-40 minutes, with no explanation given. The result for a real customer would be the inability to make calls during this period.

Two lines were cut on the wrong due date (one early and one late). In the case of an early cut, the CLEC might not have completed translations, leaving the customer with no dial tone. Or the CLEC might not be ready to activate the LNP transaction, leaving the customer unable to receive calls. The customer would call for service, the CLEC would report to it to BellSouth as a UNE-P line, and BellSouth would show no record of the customer existing, which could take considerable time to resolve. A similar problem could occur if the cut were late. The CLEC would assume the order was rejected and would pull its translations from the switch and submit a new order to BellSouth. Indeed, a late cut is potentially more disruptive than an early cut.

One line was cut even though the telephone number was wrong. In such a case the wrong customer would have been migrated. The losing CLEC would receive a loss notice and stop billing the customer. The gaining CLEC would not bill the new customer since no order was placed for that migration. If the customer reported trouble to the losing CLEC, it would not be able to resolve it, since according to BellSouth, it would no longer own the customer. If trouble were reported to the new CLEC, it would turn the customer away, since the customer would not be in its database. BellSouth provides no explanation of why this problem happened. It simply says it was "resolved" by working with the pseudo CLEC.

For six lines, CLEC dial tone was not tested prior to the cut. If CLEC dial tone had not been present, the customer would have been migrated with no dial tone.

For 47 (according to BellSouth) or 49 (according to PwC) lines, no cutover notification was given. In a non-coordinated cut (which MCI will use for residential customers), BellSouth notifies CLECs of the cut via a fax or email apparently generated by the EnDI system. Testing showed that this system failed on at least one day and presumably more, causing 47 (or 49) notifications to be "misplaced" and not sent. CLECs would have assumed that the customer was not cut over and thus would not have activated the LNP transaction. The customer would have been unable to receive calls. The CLEC would not be aware of the problem until the customer called to complain. The CLEC would then have to work with BellSouth to figure out what the problem was, a process that would take time and cause customer dissatisfaction.

Q. IS THIS A SMALL NUMBER OF PROBLEMS?

A. No. Out of the 724 orders observed, 81 problems were noted, or 11% of the total. Just based on the limited information made available to CLECs about the test, therefore, it is clear that BellSouth's batch hot cut process is flawed and that its use would result in significant harm to consumers.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes, it does.

MCI Corrections to Prefiled Testimony

1. Sherry Lichtenberg, Rebuttal Testimony, page 8, line 4:
after "handled."
strike "~~Despite BellSouth's testimony, MCI has had eight orders to move a customer from UNE-P to UNE-L rejected in Georgia because no spare copper facility was available. BellSouth did not provide any of the alternatives (such as UDLC, hair pinning, side door access) discussed in its testimony. James Webber also discusses this issue in his Rebuttal Testimony.~~"

and on page 8, line 12,
after "the Commission"
insert "<u>should</u>"

2. James D. Webber, Direct Testimony, page 55, line 14:
after "ULS"
strike "~~arrangements implementation timelines, the~~"
and insert: "<u>would largely be dependent on collocation arrangments. The</u>"

(Transcript continues in sequence with Volume 24.)

STATE OF FLORIDA)

: CERTIFICATE OF REPORTER

COUNTY OF LEON)

I, JANE FAUROT, RPR, Chief, Office of Hearing Reporter Services, FPSC Division of Commission Clerk and Administrative Services, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

DATED THIS 1st day of March, 2004.

_____

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