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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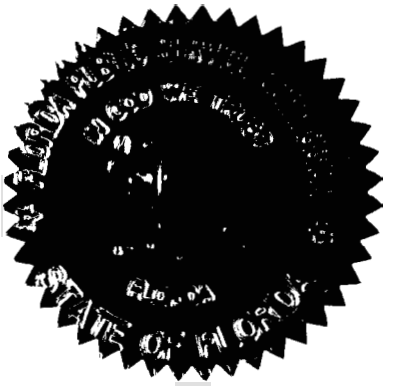

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VOLUME 2

Pages 202 through 398

PROCEEDINGS:	HEARING
BEFORE	CHAIRMAN BRAULIO L. BAEZ COMMISSIONER J. TERRY DEASON COMMISSIONER LILA A. JABER COMMISSIONER RUDOLPH "RUDY" BRADLEY COMMISSIONER CHARLES M. DAVIDSON
DATE:	Tuesday, February 24, 2004
TIME:	Commenced at 9:35 a.m.
PLACE:	Betty Easley Conference Center Room 148 4075 Esplanade Way Tallahassee, Florida

FLORIDA PUBLIC SERVICE COMMISSION

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REPORTED BY: LINDA BOLES, RPR
Official FPSC Reporter
(850) 413-6734

APPEARANCES: (As heretofore noted.)

I N D E X

WITNESSES

EXHIBITS

NUMBER:		ID.	ADMTD.
63	Exhibits to Prefiled Testimony of Witness K. Ainsworth as Indicated in the Prehearing Order	206	
64	Exhibits to Prefiled Testimony of Witness D. Aron as Indicated in the Prehearing Order	316	

P R O C E E D I N G S

(Transcript follows in sequence from Volume 2.)

MS. MAYS: Mr. Chair, if it please the Commission, we can go through the remaining witnesses and have that testimony and exhibits admitted.

CHAIRMAN BAEZ: Uh-huh.

MS. MAYS: The first witness will be BellSouth witness Mr. Ainsworth. He has filed an errata, and we would ask that all of his prefiled testimony, including his errata, be inserted in the record as though fully read. We would ask that all of Mr. Ainsworth's exhibits be marked as a composite Exhibit Number 63, and that those exhibits be admitted into the record.

CHAIRMAN BAEZ: Hold that thought. Show the Ainsworth exhibits marked as composite Exhibit 63.

(Exhibit 63 marked for identification.)

CHAIRMAN BAEZ: Without objection, show -- he had direct and rebuttal, you said?

MS. MAYS: I believe he had --

CHAIRMAN BAEZ: I believe he did.

MS. MAYS: -- direct, rebuttal and surrebuttal.

CHAIRMAN BAEZ: And surrebuttal. Show the direct, rebuttal and surrebuttal of Witness Ainsworth without objection entered into the record as though read.

I already marked the exhibits as composite 63. And

I'm not sure that the exhibits need, need to be entered right now. That's -- I don't know that that's the appropriate time entry.

MS. MAYS: For ease of -- we would certainly accept that the witness will stay on cross and they would be admitted subject to cross, or, or would you rather admit them at the end of cross-examination?

CHAIRMAN BAEZ: Well, since it's creating some difficulty in my trying to follow it, I think we're going to hold, we're going to hold it off until he stands for cross and then you just remember to move them in.

MS. MAYS: All right. We'll simply identify them then, Mr. Chairman.

CHAIRMAN BAEZ: Yes. We're just identifying exhibits at this point where we can.

BELLSOUTH TELECOMMUNICATIONS, INC.

DIRECT TESTIMONY OF KENNETH L. AINSWORTH

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 030851-TP

DECEMBER 4, 2003

Q. PLEASE STATE YOUR NAME, YOUR BUSINESS ADDRESS, AND YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC. ("BELLSOUTH").

A. My name is Ken L. Ainsworth. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375. My title is Director – Interconnection Operations for BellSouth.

Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE WITH BELLSOUTH.

A. I have over thirty-five years experience in the telecommunications industry. My experience covers a wide range of network centers as well as outside plant construction. Specifically, I have managed and/or supported the following network centers: Switching Control Center, Special Service Center, Central Office Operations, Access Customer Advocate Center, Facility Management Administrative Center, Circuit Order Control Center, Network Operations Center, Major Account Center, 911 Center and the Customer Wholesale Interconnection Network Services Center. In addition, I deployed the Work Force Administration

("WFA") system, which is used by these centers to track the status of certain activities performed by BellSouth's Network personnel. I am currently a Director for Interconnection Services directly supporting the Local Carrier Service Center ("LCSC") and Customer Wholesale Interconnection Services ("CWINS") Centers regarding pre-ordering, ordering, provisioning and maintenance activities for the wholesale market. I have participated in and provided technical assistance to numerous Competitive Local Exchange Carrier ("CLEC") workshops on issues dealing with pre-ordering, ordering, provisioning and maintenance of resold services and unbundled network elements.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My testimony will demonstrate two main points: (1) BellSouth has in place a proven, seamless, high quality individual hot cut process to handle unbundled loop ("UNE-L") volumes likely to result if BellSouth obtains full relief from unbundled circuit switching; and (2) BellSouth has in place a batch hot cut process that provides additional ordering efficiencies and the same proven, seamless, quality migrations as individual hot cuts to convert the embedded base of Unbundled Network Element Platform ("UNE-P") arrangements to UNE-L arrangements if BellSouth obtains full relief from unbundled circuit switching.

Q. WHAT ISSUES ON THE FLORIDA ISSUES LIST DOES YOUR TESTIMONY ADDRESS?

A. Issue 3 in its entirety.

Q. BASED ON THE VOLUME OF TESTIMONY FILED ON THE HOT CUT ISSUE, SHOULD THE COMMISSION INFER THAT A "HOT CUT" IS A DIFFICULT OR CUMBERSOME PROCESS?

A. Absolutely not. A hot cut, simply defined, is moving a jumper from one location to another. The hot cut itself involves basic network functions and skills that are used repeatedly in BellSouth's network every day. The extensive number of customers being served in Florida by a combination of a BellSouth loop and a CLEC switch demonstrates that BellSouth has a hot cut process that works.

Q. HAS THE COMMISSION REVIEWED BELLSOUTH'S HOT CUT PROCESS BEFORE?

A. Yes. This portion of the case should be familiar to the Commission. The Commission expended a great deal of time and energy reviewing the ordering and provisioning of hot cuts in BellSouth's 271 case. In that case, the Commission found that BellSouth provides CLECs nondiscriminatory access to UNE loops, provided via a hot cut process.

I. BELLSOUTH'S HOT CUT PROCESSES

A. General Overview of BellSouth's Different Hot Cut Processes

Q. GENERALLY, WHAT TYPES OF HOT CUT PROCESSES AND WHAT TYPES OF COORDINATION LEVELS DOES BELLSOUTH OFFER CLECS?

A. BellSouth provides three (3) different hot cut processes and three (3) different levels of coordination. Despite this variety of service offerings, however, the actual hot cut remains a simple, straightforward task – and a task BellSouth can perform at high volumes with a high degree of accuracy and speed.

Q. WHAT ARE THE THREE (3) DIFFERENT TYPES OF HOT CUT PROCESSES BELLSOUTH OFFERS?

A. BellSouth offers CLECs the following types of hot cuts: (1) individual hot cuts; (2) project hot cuts; and (3) batch hot cuts.

Q. PLEASE BRIEFLY DESCRIBE THE INDIVIDUAL, PROJECT, AND BATCH HOT CUT PROCESSES.

A. An individual hot cut service request is for a particular end-user account and is available for both residence and business service lines. Service requests for individual accounts may include single or multiple lines. Simply put, the individual account service request will process a single order for a single end-user.

The project hot cut is for cuts involving 15 or more lines to a single end-user. To ensure an efficient cut, BellSouth involves a project manager to coordinate the different work functions. The criteria for project hot cuts can be found at http://www.interconnection.bellsouth.com/guides/html/other_guides.html

The batch hot cut service request (which is interchangeably referred to as the "bulk" migration process) provides efficient processing for large volume migrations of UNE-P service to UNE-L service and is particularly suited to the migration of an embedded base of UNE-P circuits to UNE-L circuits. The batch hot cut process applies to migrations of multiple accounts for the same service type within a specific wire center. The batch process combines ordering efficiencies and project management support with a proven hot cut provisioning process. BellSouth's batch hot cut process can be found at http://www.interconnection.bellsouth.com/guides/unedocs/BulkManpkg.pdf

Q. PLEASE DESCRIBE THE DIFFERENT LEVELS OF COORDINATION BELLSOUTH OFFERS AND THE PROCESSES TO WHICH THEY APPLY.

A. BellSouth offers CLECs three (3) hot cut coordination levels: (1) coordinated / time specific, (2) coordinated, and (3) non-coordinated.

COORDINATED / TIME SPECIFIC hot cuts require BellSouth to convert the CLEC account on a specific date and at a specific time designated by the CLEC.

When the CLEC elects this option, BellSouth contacts the requesting CLEC 24 to 48 hours prior to the due date to verify that BellSouth's service order information agrees with the CLEC's request. At that time, BellSouth also confirms no jeopardy situation exists (for either the CLEC or for BellSouth), validates the specific conversion time requested, and provides to the CLEC the status of any dial tone test (that is, BellSouth's test of dial tone provided by the CLEC's

switch).

On the due date, the CWINS Center contacts the CLEC prior to the established conversion time for a final validation that the migration is still a "go". The BellSouth CWINS technician communicates with the BellSouth's Network groups at the specified conversion time and makes the execution request to perform the hot cut. The CWINS technician stays on the call, awaiting Network completion notification. When the technician in BellSouth's Network group completes the hot cut, that technician notifies the CWINS technician who documents the hot cut completion. At this point, the hot cut is complete in BellSouth's network.

Once the hot cut is complete, the CWINS technician attempts to notify the CLEC for acceptance of the order. "Acceptance" means that the CLEC agrees that the order has been fulfilled successfully and that it is appropriate for BellSouth to close the order as complete. Once BellSouth confirms CLEC acceptance, or default acceptance occurs (e.g., BellSouth never hears back from the CLEC), the pending service orders are completed in BellSouth's systems by the CWINS technician.

Coordinated/Time Specific is available for individual and project hot cuts.

COORDINATED hot cuts require BellSouth to convert the CLEC's customer account on a date specified by the CLEC and a best effort time frame negotiated by the parties. For coordinated hot cuts, BellSouth contacts the requesting CLEC 24 to 48 hours prior to the due date to verify that BellSouth's service order

information agrees with the CLEC's request. At that time, BellSouth also confirms no jeopardy situation exists (either for the CLEC or for BellSouth) and provides to the CLEC the status of any dial tone test performed (that is, BellSouth's test of dial tone from the CLEC's switch). Finally, during this call during the 24 to 48 hours prior to the due date, the parties verify the targeted time frame on the due date that the hot cut will be performed.

On the due date, CWINS will contact the CLEC prior to the conversion time for a final validation that the migration is still a "go". The BellSouth CWINS technician communicates with BellSouth's Network group prior to the conversion being started. Once all BellSouth personnel are in communication, the CWINS technician will make the execution request to perform the hot cut and stay on the call, awaiting Network completion notification. When the Network technician completes the hot cut, that technician notifies the CWINS technician who documents the completion. At this point, the hot cut is complete within BellSouth's network. The CWINS technician then attempts to notify the CLEC for acceptance. As discussed earlier, acceptance in this sense means that the CLEC agrees that the order has been fulfilled successfully and that is appropriate that BellSouth close the order as complete. Once CLEC acceptance is confirmed or default acceptance occurs, the pending service orders are completed by the CWINS technician.

Coordinated service is available on individual, project, and batch hot cuts.

NON-COORDINATED hot cut requests are converted by BellSouth's Network

personnel during normal business hours (8 a.m. – 5 p.m.) at various times on the due date based on the Network technicians' work load activity and schedule.

Once BellSouth network personnel complete the non-coordinated hot cut, the technician completes the work order that, in turn, generates a notification (either by facsimile or by e-mail) to the CLEC that the conversion is complete.

Non-coordinated service is available on individual, project, and batch hot cuts.

Q. PLEASE EXPLAIN THE BENEFITS OF EACH COORDINATION LEVEL.

A. COORDINATED/TIME SPECIFIC hot cuts allow CLECS to schedule conversions at a CLEC-requested time on the due date. This gives the CLEC an opportunity to schedule a specific conversion time with certain end-user customers based on the business needs of the CLEC or the end-user. The coordinated / time specific hot cut is the most detailed of the three (3) types of conversions and, as the FCC held, is not something BellSouth is required to "provide at no charge." *Georgia/Louisiana Order,* ¶ 222.

COORDINATED hot cuts assure the highest level of monitoring and interaction by BellSouth with the CLEC during the provisioning process culminating in direct completion notification at the completion of the conversion activity. The coordinated hot cut allows CLECs the added value of the coordination functions and direct notification and acceptance activities at the conclusion of the conversion. When CLECs desire coordination assurances, direct notification and

acceptance opportunities, the coordinated conversion would be a good choice.

NON-COORDINATED hot cuts, as suggested by the name, provide basic hot cut conversion processing without coordination functionality. This is not meant to suggest that BellSouth's provisioning activities are not internally coordinated for this type hot cut, because they are. However, BellSouth does not coordinate its conversion activities with the CLEC at the time of the hot cut. This type of hot cut allows a CLEC to convert its end-user from BellSouth's switch to the CLEC's switch over an unbundled loop (that is, the UNE-L) at the lowest possible cost to the CLEC. Network non-coordinated provisioning functions are still performed by BellSouth's Network personnel to assure a quality conversion. Completion notification is triggered by service order activity completion by Network personnel, which propagates either a facsimile or e-mail conversion completion notification (as specified by the CLEC) to the CLEC.

B. BellSouth's Individual Hot Cut Process

Q. HAS THE COMMISSION REVIEWED BELLSOUTH'S INDIVIDUAL HOT CUT PROCESS BEFORE?

A. Absolutely. As I mentioned briefly at the outset, this Commission, as well as the FCC, reviewed BellSouth's hot cut process during BellSouth's 271 applications and determined that BellSouth's hot cut process provided CLECs with nondiscriminatory access to unbundled loops. The provisioning process I discuss here is the same process reviewed during the 271 case.

Q. PLEASE EXPLAIN BELLSOUTH'S INDIVIDUAL HOT CUT PROCESS.

A. BellSouth has a seamless individual hot cut process that ensures minimal end-user service outage. A flow-chart of the individual hot cut process is attached to my testimony as Exhibit KLA-1. BellSouth's process provides for the following:

1. Pre-wiring and pre-testing of all wiring prior to the due date
2. Verification of dial tone from the CLEC's switch
3. Verification of correct telephone number from the BellSouth and CLEC switch using a capability referred to as Automatic Number Announcement ("ANAC")
4. Monitoring of the line prior to actual wire transfer to ensure end-user service is not interrupted
5. Notification to the CLEC that the transfer has completed

In addition to the activities listed above, coordinated hot cuts (including coordinated/time specific hot cuts) also include:

1. Notification to the CLEC of CLEC wiring errors, dial tone, or ANI problems
2. Verification of end-user information with the CLEC prior to the conversion
3. Verification with the CLEC of cut date and or time 24 – 48 hours prior to the conversion date
4. Joint acceptance testing, if requested by the CLEC.

Q. DOES BELLSOUTH CHECK FOR DIAL TONE PRIOR TO A HOT CUT?

A. Yes. BellSouth's processes require that a dial tone check be performed prior to a hot cut. Hot cuts involving designed loops are tested for CLEC dial tone 24-48 hours before due date. If no dial tone is found, the CWINS Center technician notifies the CLEC of the problem in order for the CLEC to have time to correct the problem prior to the due date and not jeopardize the hot cut. Coordinated hot cuts involving non-designed loops are tested for CLEC dial tone by the central office ("CO") technician when they perform the pre-wiring for the hot cut. If no dial tone is found, the CO technician places the order in jeopardy and the CWINS technician notifies the CLEC of the problem in order for the CLEC to have time to correct the problem prior to the due date and not jeopardize the hot cut.

For non-coordinated hot cuts, BellSouth checks for dial tone before the due date but does not require CLEC notification of a no dial tone problem. BellSouth's CO personnel check for CLEC dial tone when they perform pre-due date wiring functions. The CO technician places the order in jeopardy if no CLEC dial tone is present. The BellSouth CO technician checks again for CLEC dial tone on due date and if dial tone is present, the CO technician performs the hot cut. If on the due date, there is no CLEC dial tone, the hot cut does not go forward and the BellSouth technician codes the order as a Missed Appointment ("MA") due to CLEC problems. The CLEC is then notified, (either electronically, if the CLEC placed its Local Service Request ("LSR") electronically, or by fax if the CLEC placed its LSR manually), that the order is in MA status and that the CLEC must either supplement its order for a new due date or cancel its order. Even in non-coordinated cuts, the customer is not taken out of service if there is no dial tone on the receiving end of the cut.

Regardless of which type of hot cut is ordered by the CLEC, BellSouth also performs a check for CLEC dial tone immediately prior to the hot cut to ensure that dial tone is present.

Q. DOES THE HOT CUT PROCESS CAUSE SERVICE DISRUPTIONS? IF SO, DOES THAT MEAN THAT BELLSOUTH'S PROCESS IS NOT SEAMLESS?

A. The very nature of a hot cut is that there is a physical transfer of the loop facility serving the end-user from the existing central office switch (that is, BellSouth's switch) to the CLEC's switch. This physical transfer interrupts dial tone and the end-users ability to place or receive calls during this process only during the time the loop is disconnected from BellSouth's switch but is not yet connected to the CLEC's switch. Due to the pre-conversion work that BellSouth performs before the actual transfer from switch to switch, the average conversion time to make this physical transfer since January 2003 has only averaged 2:39 minutes in Florida according to BellSouth Service Quality Measurements ("SQM") reports. This indicates the end-user would only be without calling capability for only 2:39 minutes. The CLEC performs required number porting activities once the transfer from BellSouth's switch to the CLEC's switch is effectuated. BellSouth witness Mr. Varner will discuss the specifics of performance data.

Q. PLEASE ADDRESS HOW THE PROCESS CHANGES WHEN COSMIC FRAMES OR MULTIPLE FRAMES ARE INVOLVED IN THE CUT.

A. First, let me explain that the so-called "COSMIC" frame is a newer style modular Main Distributing Frame ("MDF") whose assignment records are housed in a system called SWITCH/FOMS ("Frame Order Management System"). Using a "punch down tool" on this style frame, temporary connections referred to as "jumpers" are made by punching the jumper wire onto special terminals that strip the insulation and cut off any excess jumper wire in one stroke. This takes less time than for older style frames that required soldered connections or so-called "wire wrapped" connections. Wire wrapped connections required a special tool that wound the jumper wire around a metal terminal once the technician had removed the plastic insulation from the jumper wire. SWITCH/FOMS also contains assignment algorithms meant to minimize the length of jumpers connecting loops and switch ports thereby reducing work times required to place jumpers. Thus, work times to complete required activities for an unbundled loop order and the number of wiring connections that have to be made in the CO vary depending on the frame type and/or the location of the demarcation point in a particular CO between BellSouth's network and the CLEC's collocation arrangement. The location of the demarcation influences work times because the placement of the demarcation affects the total quantity of jumpers that BellSouth's technicians must place to effectuate the transfer of an unbundled loop. Non-designed loops can require from 1 to 3 jumpers to make the connection from the CLEC demarcation point to the loops appearance on the MDF while designed loops can require from 2 to 6 jumpers to make this connection. Regardless of the arrangement, all of the jumpers are installed prior to the actual hot cut occurring.

Q. HOW IS A CLEC NOTIFIED THAT BELLSOUTH HAS COMPLETED ITS PORTION OF THE HOT CUT AND THAT THE CLEC SHOULD COMMENCE ACTIVITIES TO PORT THE TELEPHONE NUMBER FROM BELLSOUTH'S NETWORK TO THE CLEC'S NETWORK?

A. For coordinated hot cut conversions, the CLEC is directly notified by a telephone call from CWINS Center personnel. This notification occurs after the conversion is complete and takes place. From October 2002 to September 2003, BellSouth averaged 1:35 minutes to notify the CLEC to port the number after the conversions were completed. Exhibit KLA-2 sets forth the notification times for the past year.

For non-coordinated conversions, BellSouth notifies the CLEC via facsimile or e-mail (whichever the CLEC requests) at the completion of BellSouth's Network technician's work activity. Remember, however, that non-coordinated hot cuts only are an option for the CLEC for whom economics are of the utmost importance. For CLECs who want virtually real-time notification, BellSouth provides that option as well.

Q. WHEN DOES CLEC ACCEPTANCE OCCUR IN THE HOT CUT PROCESS?

A. Once BellSouth confirms CLEC acceptance, the BellSouth CWINS technician completes the pending service orders in BellSouth's systems. The service order also is completed in BellSouth's system if a default acceptance condition occurs. Specifically, if the CLEC is notified before 3:00 p.m. that the hot cut is complete,

the CLEC has until 6:00 P.M. to accept. If the CLEC is notified of completion after 3:00 P.M., the CLEC has until 12:00 P.M. of the next business day to accept the hot-cut. If the hot-cut is not accepted within these timeframes, the orders are closed by default acceptance.

Q. DOES THE HOT CUT PROCESS HAVE ANY NEGATIVE IMPACT ON E911, NUMBER PORTABILITY ADMINISTRATION CENTER ("NPAC"), PROVISIONING, REPAIR, BILLING, OR OTHER DATABASES?

A. No. Updates to the E911 database are triggered by disconnect orders closed in Service Order Communication System ("SOCS"). These same disconnect completions, along with the completion of all related orders, update all customer service records in the downstream systems including the provisioning, repair and billing information databases. BellSouth's process has no negative impact on the NPAC database. Once the conversion orders are issued, BellSouth places a concur message in the Local Number Portability ("LNP") gateway awaiting the CLECs' subscription to create the port. Once the gateway receives the create message from the CLEC, BellSouth will return the concur message that is already pending in the gateway. This process allows the CLEC to activate the port on the agreed upon date.

Q. IS BELLSOUTH'S INDIVIDUAL HOT CUT PROCESS EFFECTIVE?

A. Yes. This Commission and the FCC confirmed the effectiveness of BellSouth's hot cut process during BellSouth's Section 271 Application approval process.

This Commission, eight other state commissions, and the FCC all found BellSouth's hot cut process nondiscriminatory, timely, accurate, and effective. Further, BellSouth's hot cut process was reviewed as part of the third party testing performed by KPMG. That testing confirmed that BellSouth adhered to its process.

Q. WAS THE HOT CUT PROVISIONING PROCESS REVIEWED DURING THE FLORIDA OPERATIONAL SUPPORT SYSTEM ("OSS") THIRD PARTY TEST?

A. Yes. BearingPoint, formerly KPMG Consulting, did review the hot cut provisioning process during the Florida Test. They assessed it from a process standpoint in the PPR-9 Test Report Section which can be found beginning on page 423 of the Florida Test Final Report. Additionally, they observed live hot cuts both from a BellSouth and a CLEC perspective in the TVV-4 Test Report which can be found beginning on page 448 of the Florida Test Final Report. The evaluation criteria or test points for the hot cut observations can be found beginning on page 458 of the report.

Q. WHAT WERE THE FINDINGS OF THE FLORIDA TEST FINAL REPORT?

A. BearingPoint determined that BellSouth had an adequate and effective loop conversion or hot cut process. They found and reported on page 448 that:

"Loop Conversions (also referred to as Loop Migrations or Hot Cuts) – Existing BellSouth lines are migrated to the ALEC collocation facility inside a BellSouth

central office. BellSouth frame technicians migrate the lines at the main distribution frame (MDF) on the due date. The conversion is expected to occur on the Frame Due Date for non-coordinated conversions. During coordinated conversions, the cut occurs on the Frame Due Date and starts at the Frame Due Time (FDT) as indicated on the LSR. Cases involving Integrated Loop Carrier (IDLC) migrations require outside technicians to perform field work on the due date and time."

To establish that this process was adequate to migrate CLEC customers, BearingPoint observed live hot cuts. For many of hot cut observations, CLECs conducting business in Florida allowed BearingPoint to observe commercial installations of their orders. Data was also gathered during field inspections of hot cut activities in BellSouth central offices and from the CWINS Center. This data was logged and analyzed to determine if BellSouth's hot cut process along with its methods and procedures were adequate for the migration of customers from a BellSouth switch to a CLEC switch.

Beginning on page 458 of the Florida Test Final Report, BearingPoint listed their specific test points or evaluation criteria. First, they assessed whether the BellSouth technicians provisioned hot cuts in accordance with documented methods and procedures. BearingPoint observed live hot cuts and determined that the BellSouth technicians satisfactorily provisioned the hot cuts in accordance with BellSouth documented methods and procedures. Second, BearingPoint assessed BellSouth's performance from an SQM perspective. To achieve this, BearingPoint evaluated Bellsouth's ability to meet the coordinated

customer conversion interval performance benchmark which is the P-7 SQM. Additionally, BearingPoint assessed the P-7A SQM metric for Coordinated Customer Conversions, the P-3 SQM metric for Percent Missed Installation Appointments, the P-9 SQM metric for Percentage Troubles received within 30 Days of Service Order Completion, and the P-7C SQM metric for Percent Provisioning Troubles Received Within Seven Days of a Completed Service Order. For each measure, BearingPoint found that BellSouth indeed exceeded the benchmark or parity standard for the observations that they assessed during the test period. At the end of the testing, BearingPoint was able to confirm the adequacy and effectiveness of BellSouth's hot cut process by rating each of the test points or evaluation criteria as satisfied. This satisfactory rating provides an endorsement for BellSouth's hot cut process.

Q. IS THERE COMMERCIAL USAGE OF BELLSOUTH'S INDIVIDUAL HOT CUT PROCESS?

A. Certainly. As the FCC has repeatedly held, the most probative evidence of the availability of a functionality is actual commercial usage. *Bell Atlantic New York Order,* at ¶ 89. BellSouth has performed over 300,000 hot cuts between November 2000 and September 2003. Recently, in Florida, BellSouth converted over 200 lines for a single CLEC in one (1) central office on a single day. On the same day, BellSouth converted a total of over 400 lines in six (6) central offices in the same general area for the same CLEC. This level of commercial usage alone demonstrates BellSouth's ability to perform hot cuts at existing and foreseeable volumes.

Q. HOW IS BELLSOUTH'S PERFORMANCE ON COORDINATED HOT CUTS?

A. Superior. BellSouth witness Alphonso Varner discusses BellSouth's performance in detail, but I can tell you that BellSouth has performed at a very high level of consistency and quality in regards to hot cuts. For the period September 2002 through August 2003, BellSouth performed approximately 23,014 coordinated hot cuts in Florida. Of these, 99.92% of the hot cuts were completed within 15 minutes, which exceeds the Commission-approved benchmark of 95%.

Q. THE FCC INDICATED THAT NEITHER THE STATE'S NOR FCC'S 271 APPROVAL IS APPLICABLE TO A SITUATION IN WHICH CLECS WILL NOT HAVE UNBUNDLED CIRCUIT SWITCHING OR UNE-P. DO YOU AGREE?

A. No. This Commission reviewed BellSouth's hot cut process and determined that it provided CLECs non-discriminatory access to UNE loops. The fact that volumes of UNE loops may increase does not change the fact that BellSouth's process is nondiscriminatory and complies with all of BellSouth's obligations under the Act as this Commission and the FCC confirmed. The Commission does not need to revisit the process -- rather, if the Commission confirms that, as BellSouth witness Mr. Heartley and I demonstrate, BellSouth's process is fully scalable to meet forecasted demands, then the process is compliant.

C. <u>BellSouth's Project Hot Cut Process</u>

Q. PLEASE DESCRIBE BELLSOUTH'S PROJECT HOT CUT PROCESS.

A. Project conversions are available when the CLEC seeks to convert 15 or more lines to the same end-user. When the CLEC requests a project conversion for fifteen or more loops to be provisioned on a single individual order, a CWINS Center technician and a Project Manager are assigned to the order and the order is identified in the WFA system for Due Date tracking. The CWINS Center technician or Project Manager reviews the order for accuracy and queries associated systems for order status. The CWINS Center technician or Project Manager contacts the CLEC prior to the due date to confirm or negotiate the actual due date conversion time. The CWINS Center technician or Project Manager then contacts any associated work group to schedule the conversion.

On the Due Date, the CWINS technician verifies that the required personnel are scheduled for the conversion time. The CWINS Center technician sets up communications with required conversion personnel to begin service cutover to the CLEC. Upon completion of the cutover activity, the CLEC is notified. With CLEC concurrence, the service order is completed.

The CWINS Center technician completes the order in BellSouth's systems after concurrence of the CLEC. Any trouble conditions, made known by the CLEC, related to the conversion are resolved with the CLEC before the order is closed.

Q. IS THE PROVISIONING PROCESS FOR PROJECT HOT CUTS THE SAME AS FOR INDIVIDUAL HOT CUTS?

A. Yes. The "*Project Manager Implementation Guidelines*" posted on the Guides website http://www.interconnection.bellsouth.com/guides/html/other_guides.html, provides product-specific information.

D. BellSouth's Batch Hot Cut Process

Q. PLEASE DESCRIBE BELLSOUTH'S BATCH HOT CUT PROCESS.

A. BellSouth's "UNE-P to UNE-L Bulk Migration" is a batch hot cut process that CLECs may use when migrating existing multiple non-complex UNE-P services to a UNE-L offering. The batch hot cut process offers electronic ordering capability and adds project-management services to the basic proven hot cut provisioning process.

With respect to electronic ordering, CLECS can submit the Bulk Migration Request electronically, which allows the migration of multiple UNE-Ps to a UNE-L offering without submitting individual LSRs. BellSouth witness Mr. Pate describes this ordering mechanism in his direct testimony. I will address the project management services that are included in BellSouth's batch hot cut process in greater detail below.

Q. HOW DOES THE BATCH MIGRATION PROCESS WORK?

A. During the pre-ordering process, the CLEC submits a Notification Form to BellSouth's CCPM for UNE-P accounts to be converted to UNE-L within a single

wire center. The Customer Care Project Manager ("CCPM") reviews the Notification Form for errors and assigns a Bulk Order Project Identifier ("BOPI") and forwards the Notification Form to the Network Single Point of Contact ("SPOC") who assigns due dates to accounts and returns the Notification Form to the CCPM, who then returns the Notification Form to the CLEC.

Q. DURING THE PRE-ORDERING PROCESS, ARE THERE SPECIFIC INTERVALS FOR THE RETURN OF THE NOTIFICATION FORM TO THE CLEC?

A. Yes. Those intervals are as follows:

- Up to 99 Telephone Numbers, 7 business days
- 100 – 199 Telephone Numbers, 10 business days
- 200 or more Telephone Numbers, the CCPM will negotiate with SPOC
- Multiple Batch Requests from multiple CLECs may be submitted simultaneously
- Maximum Telephone Numbers per Batch Request is 99X25=2475

Q. WHEN IS THE FIRST DUE DATE ASSIGNED?

A. The first due date to be assigned by the SPOC will be a minimum of 17 business days after the Notification Form is returned to the CLEC. In other words, there are 3 days for the CLEC to submit a clean bulk LSR into their electronic system and then there is a minimum of 14 days after the LSR is submitted to the first service order due date.

The ordering activity is such that the LCSC will use its normal process to handle orders that fall out for manual or partial handling.

Q. PLEASE DESCRIBE THE ROLE THE PROJECT MANAGER PLAYS IN THE BATCH MIGRATION PROCESS AND THE EFFICIENCIES GAINED FROM PROJECT-MANAGEMENT.

A. The role of the project manager in the batch migration process is to be the SPOC as the liaison between the CLEC and network operations. They coordinate due dates, advise of potential delays or problems, and advise of completion of the project. In the batch hot cut provisioning process, the BellSouth CCPM provides CWINS and the network operations group with notification of planned bulk activity, monitors status of the order(s), interfaces with the CLEC and Bellsouth groups during the process, and tracks orders and the project until it is complete. The project manager is the party responsible in the first instance for ensuring successful completion of the process.

Q. PLEASE DESCRIBE THE PROVISIONING PROCESS IN THE BATCH MIGRATION PROCESS.

A. The batch hot cut process provisioning process is the same as the individual hot cut provisioning process. The benefits of this are obvious – the CLEC is afforded access to the same nondiscriminatory, 271-compliant process that this Commission approved only last fall.

Q. WILL BELLSOUTH PROVIDE THE CLEC A WINDOW OF TIME WITHIN WHICH BATCH HOT CUTS WILL BE COMPLETED?

A. Yes. Because the batch hot cut process provides the assistance of the CCPM, a CLEC may request, through the project manager, that some of their coordinated conversions, such as business accounts, be converted within a specified window of time. The project manager will work with the centers and network groups to make best efforts to accommodate the request.

A CLEC also may request work outside normal business hours, to be handled on a special project basis and negotiated through a CCPM. As with all special projects, this work would be subject to overtime billing as specified in the parties' interconnection agreement.

Q. IS THE BATCH HOT CUT PROCESS MORE EFFICIENT FOR THE CONVERSION OF AN EMBEDDED BASE OF UNE-P ORDERS TO UNE-L ORDERS?

A. Yes, because it was designed specifically to handle large conversions of UNE-P to UNE-L such as will be accomplished in the conversion of the embedded base.

Q. IS THERE COMMERCIAL USAGE OF BELLSOUTH'S BATCH HOT CUT PROCESS?

A. Yes. Since bulk migration has been made available, there has been limited activity requested by the CLECs. However, at the time of this filing, BellSouth currently has a total of five (5) bulk migration requests pending. Four (4) bulk migration requests have been successfully ordered and completed.

Q. IN ADDITION TO OPERATIONAL EFFICIENCIES, ARE THERE RATE ADVANTAGES TO THE BATCH PROCESS?

A. Yes. The rate for the batch hot cut is discussed in the testimony of BellSouth witness John Ruscilli.

Q. DOES BELLSOUTH'S BATCH HOT CUT PROCESS INCLUDE LOOPS SERVED BY INTEGRATED DIGITAL LOOP CARRIER ("IDLC")?

A. Yes. IDLC is a special version of DLC that does not require a host terminal in the central office, sometimes referred to as the COT, but instead terminates the digital transmission facilities directly into the central office switch. In its Texas 271 Decision, the FCC found that "the BOC must provide competitors with access to unbundled loops regardless of whether the BOC uses integrated digital loop carrier (IDLC) technology or similar remote concentration devices for the particular loops sought by the competitor." Memorandum Opinion and Order, *Application by SBC Communications Inc., et al., Pursuant to Section 271 of Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in Texas*, 15 FCC Rcd 18354, ¶ 248 (2000) ("*Texas Order*"). BellSouth provides access to such IDLC loops via the following methods:

- Alternative 1: If sufficient physical copper pairs are available, BellSouth will reassign the loop from the IDLC system to a physical copper pair.
- Alternative 2: Where the loops are served by Next Generation Digital Loop Carrier ("NGDLC") systems, BellSouth will "groom" the integrated loops to form a virtual Remote Terminal ("RT") arranged for universal service (that is, a terminal which can accommodate both switched and private line circuits). "Grooming" is the process of arranging certain loops (in the input stage of the NGDLC) in such a way that discrete groups of multiplexed loops may be assigned to transmission facilities (in the output stage of the NGDLC). Both of the NGDLC systems currently approved for use in BellSouth's network have "grooming" capabilities.
- Alternative 3: BellSouth will remove the loop distribution pair from the IDLC and re-terminate the pair to either a spare metallic loop feeder pair (copper pair) or to spare universal digital loop carrier equipment in the loop feeder route or Carrier Serving Area ("CSA"). For two-wire Integrated Services Digital Network ("ISDN") loops, the Universal Digital Loop Carrier ("UDLC") facilities will be made available through the use of Conklin BRITEmux or Fitel-PMX 8uMux equipment.
- Alternative 4: BellSouth will remove the loop distribution pair from the IDLC and re-terminate the pair to utilize spare capacity of existing Integrated Network Access ("INA") systems or other existing IDLC that terminates on Digital Cross-connect System ("DCS") equipment. BellSouth will thereby route the requested unbundled loop channel to a channel bank where it can be de-multiplexed for delivery to the requesting CLEC or for termination in a DLC channel bank in the central office for

concentration and subsequent delivery to the requesting CLEC.

- Alternative 5: When IDLC terminates at a switch peripheral that is capable of serving "side-door/hairpin" capabilities, BellSouth will utilize this switch functionality. The loop will remain terminated directly into the switch while the "side-door/hairpin" capabilities allow the loop to be provided individually to the requesting CLEC.
- Alternative 6: If a given IDLC system is not served by a switch peripheral that is capable of side-door/hairpin functionality, BellSouth will move the IDLC system to switch peripheral equipment that is side-door capable.
- Alternative 7: BellSouth will install and activate new UDLC facilities or NGDLC facilities and then move the requested loop from the IDLC to these new facilities. In the case of UDLC, if growth will trigger activation of additional capacity within two years, BellSouth will activate new UDLC capacity to the distribution area. In the case of NGDLC, if channel banks are available for growth in the CSA, BellSouth will activate NGDLC unless the DLC enclosure is a cabinet already wired for older vintage DLC systems.
- Alternative 8: When it is expected that growth will not create the need for additional capacity within the next two years, BellSouth will convert some existing IDLC capacity to UDLC.

The eight (8) alternatives for giving a CLEC access to loops served by IDLC listed above are listed in order of complexity, time, and cost to implement. The simplest is listed first and the most complex, lengthy, and costly to implement listed last. Also, Alternative 1 and the copper loop solution of Alternative 3 do not

add additional Analog to Digital conversions. When a CLEC orders a loop, BellSouth delivers that loop to the specifications ordered by the CLEC. Thus, ordinarily BellSouth chooses the method for delivering the loop meeting the ordered specification without involving the CLEC.

Q. WHAT HAPPENS IF ONLY ALTERNATIVES 7 OR 8 ARE AVAILABLE?

A. In that scenario, which BellSouth anticipates occurring very infrequently, BellSouth will provide the CLEC two choices – the CLEC may pay special construction charges to build the necessary facilities, or BellSouth will provide the CLEC a UNE-P at the TELRIC rate. BellSouth only will make the second of these options available in those areas in which it receives relief from unbundled switching.

Q. HAS THIS COMMISSION REVIEWED THESE EIGHT (8) ALTERNATIVES PREVIOUSLY?

A. Yes. All nine of BellSouth's states and the FCC considered and approved these eight (8) alternatives for providing unbundled loops served via IDLC during BellSouth's Section 271 applications.

a. SCALABILITY OF BELLSOUTH'S HOT CUT PROCESSES

Q. IS BELLSOUTH'S INDIVIDUAL AND/OR BATCH HOT CUT PROCESS SCALABLE TO MEET LOAD DEMAND THAT MIGHT RESULT IF BELLSOUTH RECEIVES UNBUNDLED SWITCHING RELIEF?

A. Absolutely. BellSouth's systems and processes are scalable and the capacity of those systems and processes may be readily increased as demand warrants. I will address the scalability of the centers involved in the hot cut process, while BellSouth witnesses Pate and Heartley address the scalability of the OSS and network forces, respectively.

BellSouth's performance measurements demonstrate that BellSouth's LCSC and CWINS organizations are staffed sufficiently to handle the current volumes of unbundled loop orders. They also establish that BellSouth has scaled its resources as necessary to handle changes in volumes of such orders over the years. More fundamentally, the outstanding performance of the LCSC and CWINS in handling both steady growth and spikes in demand makes clear that BellSouth will continue to staff its LCSC and CWINS organizations sufficiently to handle any reasonably foreseeable demand for hot cut conversions.

Finally, BellSouth has a strong incentive to ensure that the LCSC and CWINS are adequately staffed to meet demand for all order types, including hot cut loops in that BellSouth remains subject to penalties and voluntary payments under its Self Effectuating Enforcement Measurements ("SEEMs") plan for performance failures.

Q. FOR WHAT VOLUME LEVELS ARE THE CENTERS CURRENTLY STAFFED?

A. Current staffing of the LCSC and CWINS were predicated on expectation of higher UNE loop conversion volumes than currently exist. There are three (3) dedicated LCSCs (located in Atlanta, Georgia, Birmingham, Alabama and Fleming Island, Florida) serving the CLEC community for preordering and ordering. Further, there are two (2) dedicated CWINS operational centers (located in Birmingham and Fleming Island) to perform hot cut coordination, when required. These operational groups have currently redirected resources due to lower than expected UNE conversion volumes. That means these operational groups have the available capacity to reallocate these personnel at such time that the UNE conversion volumes increase.

Q. CAN CENTERS PERSONNEL BE REALLOCATED AS PRODUCT DEMAND CHANGES WITHOUT ADDITIONAL STAFFING?

A. Yes. The LCSC and CWINS personnel provide support across the entire range of wholesale products and services BellSouth makes available. Any increase in hot cut volumes resulting from the absence of UNE switching presumably would be accompanied by a decrease in order types that rely on UNE switching (i.e., UNE-P), such that the resources currently dedicated to one could then be devoted to the other. Initially, LCSC service reps are hired and trained in a single product type, for example, residential resale or simple business resale or UNE-P. As service representatives become more proficient with their initial discipline, additional training to handle other types of order requests is provided. With this

cross training, many LCSC service representatives are able to handle multiple types of service order requests thus enabling the LCSC organization to move service representatives from one function to another. CWINS employees complete various levels of technical classroom training, in addition to receiving CWINS-specific training on the CLEC products or functions they are assigned to support. CWINS employees therefore are capable of handling provisioning, maintenance, and repair functions for a variety of wholesale products with minimal additional on-the-job training. The CWINS reallocates its employees among products as necessary to handle shift in demand.

Q. IF UNBUNDLED CIRCUIT SWITCHING IS ELIMINATED IN CERAIN AREAS, HOW WILL BELLSOUTH MEET THE DEMAND?

A. The LCSC and CWINS organizations use sophisticated force models to ensure that their operations are adequately staffed to meet anticipated CLEC demand. BellSouth's sustained level of performance for both UNE loops and hot cuts validates that the current force models have been successful in meeting CLEC service order demand with quality and reliability.

Q. DID BELLSOUTH DO A FORCE MODEL TO ANTICIPATE STAFFING NEEDS ASSUMING THE ELIMINATION OF UNBUNDLED CIRCUIT SWITCHING?

A. Yes. Using an estimated volume of UNE-L orders that I will discuss later, BellSouth ran the centers force model to determine anticipated staffing needs assuming a worst case scenario.

Q. DOES BELLSOUTH OBTAIN CLEC FORECASTS TO ASSIST IN SCALING ITS WORK FORCE?

A. BellSouth attempts to obtain such forecasts. Accurate and timely CLEC forecasts help BellSouth plan for future hot cut volumes, but are not required for the operation of its force models. CLECs are requested to provide a forecasted number of unbundled loops a minimum of 30 days prior to submitting their first unbundled loop order. After CLECs order their first unbundled loop, BellSouth requests six-month interval forecasts by unbundled loop type and wire center. Accurate and timely forecast information is helpful in assisting BellSouth meet projected hot cut volumes; however, BellSouth force models are not dependent upon receipt of such forecasts because CLECs generally do not provide such forecasts.

Rather, as noted above, the force models automatically factor demand projections based on historical trends into LCSC/CWINS staffing requirements. BellSouth makes adjustments, as necessary, to handle sudden increases in volume – and undertakes hiring initiatives as soon as it becomes apparent that additional resources will be necessary to handle anticipated future demand. Nonetheless, CLECs could help BellSouth anticipate and fulfill future staffing needs by providing timely and accurate forecasts, especially for substantial increases in volumes.

Q. WHAT DO YOU MEAN BY "WORST CASE" SCENARIO?

A. I am not using the term "worst case" in a negative or judgmental manner. Rather, I am using it simply to refer to the maximum amount of hot cuts that the LCSCs and CWINS Centers would reasonably be expected to handle if the following were to occur:

1. This Commission finds that CLECs are not impaired without unbundled switching (and thus, UNE-Ps) in any market in BellSouth's nine-state region.
2. CLECs decide to convert the totality of their UNE-P base to unbundled loops attached to the CLECs' switches rather than BellSouth's switches.
3. UNE-P growth and UNE-L growth is maintained throughout the relevant period for the absolute highest volumes of each that has occurred at any time in the last 33 months that BellSouth has maintained records.

Q. WHAT MONTHLY VOLUME OF UNE-P TO UNE-L CONVERSIONS RESULTS FROM YOUR ASSUMPTIONS?

A. The "worst case" monthly volume of hot cuts (except for adjustments to that volume that I will discuss later in this testimony) is 317,998 across the entirety of BellSouth's nine-state region. The following explains how I arrived at that value:

The highest single-month volume of UNE-Ps added (116,295) occurred in June 2002. The highest single-month volume of UNE-L inward movement added (19,029) occurred in January 2001. These "highest ever" volumes were assumed as monthly growth going forward. The pictorial in Exhibit KLA-3, which is attached to this testimony, depicts how those volumes grow over time.

Following is a brief explanation:

In October 2003, there were about 2.21million UNE-Ps in service region-wide. Projecting forward for nine (9) months to July 2004 (the earliest expected decision by a Public Service Commission in BellSouth's region), there would be 3.26 million UNE-Ps in service (2.21M + (9 * 116,295). However, because the conversion of a BellSouth retail account to a UNE-P arrangement does not require a hot cut, the monthly volume expected in July 2004 is equal to the quantity of "stand-alone" unbundled loops requested (19,029).

Assuming that in July 2004, all nine Commissions in BellSouth's region decided that CLECs are not impaired without unbundled switching and that CLECs may continue to request UNE-Ps for an additional five (5) months, the expected quantity of UNEP-s in service in December 2004 would be 3.84 million. This level of UNE-Ps becomes the "embedded base" which later will be converted to stand-alone unbundled loops via the hot cut process. For the next eight (8) months, the monthly volume of hot cuts would rise to 135,324. This is the sum of the "worst case" unbundled loop volume (19,029) plus the "worst case" monthly growth for UNE-Ps (116,295).

Beginning in August 2005, BellSouth would begin the transition of the embedded base of UNE-Ps (3.84 million) plus handle the "worst case" monthly unbundled loop volume (19,029) and the "worst case" monthly UNE-P growth volume (116,295). During each of the subsequent seven-month intervals, BellSouth would migrate one third of the embedded base. Thus, the "worst case" monthly hot cut volume at the region level would be 317,998 (that is, 19,029 + 116,295 +

((3.84M * 0.333)/7))

Because on average there are 22.3 business days per month, the daily volume becomes 14,260 (that is, 317,998 / 22.3) at the regional level.

Q. WHAT OTHER ADJUSTMENTS TO ANTICIPATED VOLUMES HAVE YOU ASSUMED?

A. During CLEC workshops, CLECs have suggested that two adjustments should be made to increase the anticipated volume of hot cuts by including: (1) some level of "churn" from one local carrier to another; and (2) increased trouble reports for unbundled loops compared to UNE-P arrangements. While I do not necessarily agree with the CLECs' suggestions, I have included those adjustments to prove my point that BellSouth can expand its LCSC and CWINS groups to handle hot cut volumes even when these additional factors are taken into account. . Accordingly, I made an upward adjustment of 4% churn per month (48%) per year and an upward adjustment of 5% increased trouble report rate. I treated these adjustments as if they resulted in additional hot cuts (again, a "worst case" assumption) and the resultant monthly volume for hot cuts rose to 347,254 per month (15,572 per business day).

Q. WHAT ARE THE CENTERS' INPUTS TO THE FORCE MODEL?

A. In order to ensure adequate staffing of the centers supporting CLECs, BellSouth utilizes a work force model to anticipate staffing needs based on historical trends,

time and motion studies, internal forecasts and targeted benchmarks. The work force model provides a means to assure adequate staffing of BellSouth's LCSC and CWINS operations. The models utilize a forward-looking view of activity by product type, which allows BellSouth sufficient time to hire and train personnel in anticipation of any increase in activity. The force model has proved reliable. It allowed BellSouth staff to meet tighter benchmarks for Firm Order Confirmations ("FOCs") and rejects for partially mechanized orders. BellSouth has clearly demonstrated, through its performance data, that the infrastructure to handle increasing levels of orders is in place and functioning at a very high level.

Q. WHAT ARE THE CENTERS' STAFFING REQUIREMENTS FROM THE MODEL?

A. Using daily volumes for Florida (29% of all the UNE-Ps in BellSouth's region) means that BellSouth would have to hire and train 425 technicians in the CWINS Centers and 105 service representatives in the LCSCs. Again we have assumed a worst-case scenario for the CWINS Centers that 50% of the migrations would be coordinated and thus would require CWINS involvement. BellSouth expects the number of coordinated migrations to be much less than this.

Q. HOW CAN THE CENTERS MEET THESE PROJECTED STAFFING LEVELS?

A. Force and load management is something BellSouth has been doing for decades. BellSouth would hire the additional force by engaging its Human Resources Department. Human Resources would advertise the jobs in local

media and conduct job fairs and testing events to screen applicants. Human Resources would require 90 days from notification to employees being added to the payroll.

Q. HAS BELLSOUTH EVER HIRED CENTER PERSONNEL IN SUCH VOLUMES BEFORE?

A. Yes. During the time period 1998-2001, BellSouth hired and trained approximately 2,000 service representatives and technicians for its Wholesale operations.

Q. DOES BELLSOUTH HAVE TO HIRE ALL OF THESE PEOPLE AT ONCE?

A. No. The transition period for the embedded base of UNE-Ps in the Order is almost two years away (August 2005) as shown in Exhibit KLA-3, so BellSouth has an extended period of over which to add force if needed.

Q. ARE THESE FORECASTED VOLUMES REALISTIC?

A. No. First, as other BellSouth witnesses describe, BellSouth only is seeking elimination of unbundled circuit switching in certain areas of the state. Thus, BellSouth's assumption of UNE-L orders is high in that unbundled UNE-P will continue to be available in some areas of the state. Second, whenever it had a choice, BellSouth used the highest volume value available – highest UNE-Ps in a month etc. The point, however, is that if BellSouth can scale its forces to meet

the most unrealistic demand, it certainly can scale its forces to meet a more realistic demand.

b. REGIONALITY OF BELLSOUTH'S PROCESSES

Q. ARE BELLSOUTH'S HOT CUT PROCESSES REGIONAL?

A. Yes. In the 271 cases, state commissions and the FCC held that BellSouth's OSS (pre-ordering, ordering, provisioning, maintenance and repair, and billing) are regional. For example, in the FCC's Five-state Order, (WC Docket No. 02-260, ¶130) the FCC held "We find that BellSouth, through the Pricewaterhouse Coopers (PwC) report, provides evidence that its OSS in Georgia are substantially the same as the OSS in each of the five states."

Further, in CC Docket No. 02-35 (GA/LA Order) at ¶111, the FCC held that "[t]he record indicates ... BellSouth has provided detailed information regarding the "sameness" of BellSouth's systems in Georgia and Louisiana, including their manual systems and the way in which BellSouth personnel do their jobs. Accordingly, we find that BellSouth, through the PwC audit and its attestation examination, provides evidence that its OSS in Georgia are substantially the same as the OSS in Louisiana. We shall consider BellSouth's commercial OSS performance in Georgia and the Georgia third-party test to support the Louisiana application and rely on Louisiana performance to support the Georgia application."

Q. DOES BELLSOUTH PERFORM ITS HOT CUT PROCESSES THE SAME WAY IN ALL NINE OF ITS STATES?

A. Yes it does.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

BELLSOUTH TELECOMMUNICATIONS, INC.
REBUTTAL TESTIMONY OF KENNETH L. AINSWORTH
BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP
JANUARY 7, 2004

Q. PLEASE STATE YOUR NAME, YOUR BUSINESS ADDRESS, AND YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC. ("BELLSOUTH").

A. My name is Ken L. Ainsworth. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375. My title is Director – Interconnection Operations for BellSouth.

Q. ARE YOU THE SAME KEN L. AINSWORTH WHO EARLIER FILED DIRECT TESTIMONY IN THIS DOCKET?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY BEING FILED TODAY?

A. I respond to portions of the direct testimonies of Mr. David E. Stahly on behalf of Supra Telecommunications and Information Systems, Inc. ("Supra"), Mr. James D. Webber and Ms. Sherry Lichtenberg on behalf of MCI, Mr. Mark David Van de

Water on behalf of AT&T, and Mr. Terry L. Alleman on behalf of Sprint with regard to BellSouth's hot cut processes.

A. The Hot Cut Process

Q. WHILE YOU CAN ADDRESS EACH OF THE COMPETITIVE LOCAL EXCHANGE CARRIERS' ("CLECS'") TESTIMONIES SPECIFICALLY LATER IN YOUR REBUTTAL, PLEASE ADDRESS GENERALLY THE MAIN CLEC ALLEGATIONS REGARDING BELLSOUTH'S HOT CUT PROCESS.

A. Certainly. The CLECs generally complain about six (6) aspects of the process, each of which BellSouth has addressed:

(1) Go Ahead Notifications – BellSouth will provide the CLEC with notification via telephone (coordinated cuts) after each cut, or via email or fax (non-coordinated cuts) to allow the CLEC to port the number. For coordinated cuts, BellSouth's data shows that it provides the go-ahead notification, on average, in less than two (2) minutes.

(2) Database impacts – BellSouth's hot cut process will not adversely impact database updates. With respect to E911, the end user's address will remain the same regardless of the end user's local service provider. Consequently, even if for some reason there was delay in updating the local service provider in the E911 database, it would not impact the ability of emergency personnel to find the end user.

(3) After hours cuts – BellSouth will work with the CLECs, via the project management function, to provide after-hours cuts when possible. BellSouth will not dispatch personnel late in the evening for safety reasons – thus, after hours cuts that require dispatch may not be possible.

(4) Provision of all end user lines on same day – one of the benefits of the project management aspect of the batch process is the ability to schedule cuts so that they best meet the needs of all parties involved. BellSouth will make best efforts to schedule work for the same end user on the same day.

(5) Exclusion of certain loop types – BellSouth designed the batch hot cut process to convert UNE-P arrangements to UNE-L arrangements given the predominance of UNE-P arrangements and the Federal Communications Commission's ("FCC's") Order focused on UNE-P conversions.

(6) CLEC-to-CLEC migrations – BellSouth will perform hot cuts for CLEC-to-CLEC migrations. The issues about which the CLECs' complain are issues regarding the CLECs' inability to exchange information amongst themselves. The reliability of the CLECs' information is not a flaw in BellSouth's process.

Go-Ahead Notifications

Q. PLEASE EXPLAIN BELLSOUTH'S "GO AHEAD" NOTIFICATION PROCESS TO CLECs.

A. BellSouth developed the process for "Go Ahead" notifications with the needs of the CLEC in mind. When a CLEC wishes to have real time notification of hot cut completions, BellSouth offers coordinated hot cuts, which include a call to the CLEC upon completion of the hot cut. As I stated in my direct testimony, for the last year, BellSouth has made these notifications on average in less than two (2) minutes after the hot cut is complete.

For CLECs who do not wish to order coordinated hot cuts, BellSouth provides "Go Ahead" notifications either by e-mail or fax. The CLEC determines the method of delivery. BellSouth delivers these notifications at an account level, which means that for each account being converted, a notification is sent. These notifications are driven by the closure of the work steps by the Central Office ("CO") and/or Field Technicians involved in the hot cut. Once the work steps are completed, an automated program is activated to send either the fax or e-mail notification.

Q. MR. STAHLY ASSERTS, ON PAGE 23 OF HIS TESTIMONY, THAT BELLSOUTH IS WILLING TO COMMIT TO "GO AHEAD" NOTIFICATIONS "EVERY COUPLE OF HOURS". [Emphasis in original.] PLEASE COMMENT.

A. Even though BellSouth has no published metric requiring that a technician report or complete his/her work completions within a specified time, the work is done on a timely basis dependent on the type conversion ordered. For example, on coordinated conversions, the completed activity is reported to the Customer Wholesale Interconnection Services ("CWINS") Center immediately upon

completion. The CWINS will immediately post the end time of the cut and notify the CLEC. These times are tracked by the CWINS and currently average less than two (2) minutes from completion of the cut to CLEC notification as stated in my direct testimony. On non-coordinated conversions, there is no CWINS involvement. Based on the volumes being converted, it is not always efficient for the technician to close his work after each conversion. However, BellSouth is willing to commit that, for batch migrations, the time elapsed between the actual cut to the time their work is completed, which generates the CLEC completion notification, will not exceed a two (2) hour interval.

Q. ON PAGE 24 OF HIS TESTIMONY, MR. STAHLY STATES 'RATHER THAN SEND NOTICES LISTING MULTIPLE CUTOVERS ON A SINGLE NOTICE, BELLSOUTH SENDS A SEPARATE E-MAIL NOTICE FOR EACH AND EVERY NUMBER BELLSOUTH CUTS OVER...." DIDN'T SUPRA ADVOCATE EMAIL NOTIFICATION IN ITS RECENT COMPLAINT TO THE FCC REGARDING BELLSOUTH'S HOT CUT PROCESS?

A. Yes. However, BellSouth was already working to implement e-mail notification as the result of a request that Supra made in a meeting between BellSouth and Supra in March 2003. BellSouth implemented e-mail notification on June 20, 2003. Moreover, no CLEC has ever requested BellSouth to send "Go Ahead" notifications for multiple accounts on the same e-mail or fax.

Database Updates

Q. ON PAGE 27 OF HER TESTIMONY, MS. LICHTENBERG ALLEGES THAT IT REQUIRES "MANUAL COORDINATION" BETWEEN THE ILEC AND THE CLEC "TO CREATE AND ISSUE THE E911, LIDB, CNAM AND LNP TRANSACTIONS" INVOLVED IN A HOT CUT. DO YOU AGREE?

A. As far as E911, LIDB, CNAM, and LNP are concerned, there is no need for any manual coordination. Routing to the number, if it is ported, is a direct result of the download of information from the Number Portability Administration Center ("NPAC"), which is a mechanized process that occurs everyday as numbers port. It is the responsibility of the port-to carrier to notify NPAC that the port has completed. Then, NPAC downloads the information and the routing is changed and no manual activity occurs. For LIDB and CNAM, the CLEC would populate information in their own LIDB and CNAM databases (or a third party's databases if they don't own their own) based on their own schedule. For a ported number the information sent by the port-to carrier to the NPAC should include routing information ((destination port code ("DPC") for the appropriate database)). Once that information is downloaded by NPAC proper routing occurs. Again, no manual effort is required. If it is only a loop involved (i.e. the CLEC is providing the switching with a CLEC number rather than a ported number), then it's entirely up to the CLEC to publish the correct routing instructions through the appropriate Telcordia document LIDB Access Routing Guide ("LARG"), or CNAM Access Routing Guide ("CNARG"). If the number is not ported there is no LNP interaction.

Q. MS. LICHTENBERG ALLEGES, ON PAGES 37-38 OF HER TESTIMONY, THAT THE HOT CUT PROCESS WILL CAUSE ERRORS IN THE E911 DATABASE. IS THIS TRUE?

A. No. Updates to the E911 database are triggered by a disconnect order. Bellsouth has procedures in place that ensure timely issuance and completion of the disconnect order that unlocks the E911 database records. BellSouth's disconnect service order to unlock the E911 database records has the same due date as the CLEC's request to port the number thereby minimizing errors in the E911 database. In the rare event that the completion of the service order is delayed, there will be no impairment to the end user's ability to effectively contact E911 in that the end user's address remains the same – it is only the identity of the service provider that changes. Thus, emergency personnel can obtain the address, regardless of the change in local service providers.

Q. ON PAGE 44 OF HER TESTIMONY, MS. LICHTENBERG COMPLAINS ABOUT BELLSOUTH'S POLICY OF ONLY ALLOWING "AS IS" DIRECTORY LISTING CHANGES FOR THE FIRST MIGRATION IN A BATCH HOT CUT. ARE HER COMPLAINTS VALID?

A. No. BellSouth does allow migration of directory listings "as is" on subsequent requests, when appropriate. All characteristics of the directory listing to be migrated "as is" must remain unchanged. For example, record type ("RTY"), listing type ("LTY"), alpha listing identifier code ("ALI"), listing telephone number, etc. Any change in the way the listing is set up on the existing customer service

record does not qualify for an "as is" migration.

After-Hours Cuts

Q. MR. VAN DE WATER ALLEGES, ON PAGE 22 OF HIS TESTIMONY, THAT BELLSOUTH'S BATCH HOT CUT PROCESS IS FLAWED BECAUSE IT DOES "NOT ALLOW FOR AFTER-BUSINESS-HOURS HOT CUTS." IS THIS CORRECT?

A. No. As I stated in my direct testimony, a CLEC may request work outside of normal business hours, to be handled on a special project basis and negotiated through a Customer Care Project Manager ("CCPM"). As with all special projects handled outside of normal business hours, this work could be subject to overtime billing as specified in the parties' interconnection agreement.

End-user lines

Q. MR. VAN DE WATER ALLEGES, ON PAGE 22 OF HIS TESTIMONY, THAT BELLSOUTH'S BATCH HOT CUT PROCESS IS FLAWED BECAUSE IT DOES NOT INSURE THAT ALL END USERS' LINES WOULD BE PROVISIONED ON THE SAME DAY. PLEASE COMMENT.

A. All lines for an individual end user on a single CSR will be provisioned on the same day. If an end user has multiple accounts, the CLEC can request that the CCPM ensure that all of the accounts for that end user are provisioned on the

same day.

The issues raised here by Mr. Van De Water are precisely why BellSouth has included the CCPM in its batch hot cut process. The involvement of the CCPM adds flexibility to the process to handle these types of issues.

Q. ON PAGE 29 OF HIS TESTIMONY, MR. VAN DE WATER CRITICIZES BELLSOUTH'S ALLEGED "FAILURE" TO IDENTIFY THE QUANTITY OF LOOPS THAT CAN BE PROVISIONED TOGETHER IN THE BATCH PROCESS. PLEASE ADDRESS THIS CONCERN.

A. BellSouth has no predetermined limit on the number of loops that can be provisioned together in its batch hot cut process. Many variables would have to be assumed in order to set such a limitation including whether multiple CLECs submit batch orders at the same time for the same central office and the size of the central office involved. The use of the CCPM and the Network Single Point Of Contact ("SPOC") allows the flexibility necessary to set due dates based on these and other variables. BellSouth in the past has stated to one CLEC that a good rule of thumb to use would be 125 lines per central office per day. However, this is not a hard and fast rule for the reasons stated above. BellSouth has already proven that it can perform hot cuts at a much higher rate than this in some central offices as I stated in my direct testimony.

Q. DO REQUESTS FOR LOOPS GREATER THAN 25-50 PER DAY PER CENTRAL OFFICE REQUIRE "SIGNIFICANT NEGOTIATION" AND

DEPARTURE FROM EXISTING PROVISIONING AND PERFORMANCE INTERVALS AS ALLEGED BY MR. WEBBER ON PAGE 20 OF HIS TESTIMONY?

A. No. BellSouth's individual and project hot cut processes do not require any negotiation and/or departure from existing provisioning and performance intervals unless there are 15 or more lines on the same end user account. Due to the nature of the batch hot cut process, there is negotiation that takes place within BellSouth to establish due dates for the hot cuts. BellSouth has proposed, however, performance measurements that will monitor the period of time between receipt and return of the initial spreadsheet from the CLEC. These procedures are discussed in my direct testimony.

Exclusion of Loop Types

Q. MR. WEBBER, ON PAGE 27 OF HIS TESTIMONY, COMPLAINS BECAUSE CERTAIN (UNSPECIFIED) LOOP TYPES ARE "EXCLUDED" FROM THE HOT CUT PROCESS. PLEASE COMMENT.

A. BellSouth's batch hot cut process includes conversions to both voice and data loops. Both designed and non-designed voice loops are included as well as both designed and non-designed xDSL type loops. The xDSL loops include Asymmetrical Digital Subscriber Line ("ADSL"), High-bit-rate Digital Subscriber Line ("HDSL"), and unbundled copper loops. All non-complex UNE-P services are available for conversions to these loops through the batch hot cut process.

This includes the vast majority of the existing UNE-P accounts that are in place today. BellSouth's records indicate that for the 12-month period December 2002 through November 2003, 99.93% of the UNE-P lines that have been installed are eligible for conversions to UNE-Loops through BellSouth's batch hot cut process. The small percentage, 0.07%, of services or loop types that are not included in the batch hot cut process can be converted through BellSouth's individual or project hot cut processes.

Q. WHY DOES BELLSOUTH LIMIT THE BATCH HOT CUT PROCESS TO UNE-P TO UNE-L CONVERSIONS?

A. BellSouth developed its batch hot cut (bulk migration) process with input from the CLEC community through the Change Control Process ("CCP") process. To my knowledge, the CLECs did not request that any other loop types be included in the process. Bellsouth also believes that its batch hot cut process meets the requirements set forth in the Triennial Review Order ("TRO"). The purpose of the batch hot cut process mentioned in the TRO was to convert UNE-Ps to UNE-Loops and BellSouth's process will do that.

Q. DOES LIMITING THE BATCH PROCESS TO CONVERSIONS FROM UNE-P TO UNE-L "MITIGATE THE POTENTIAL BENEFITS OF IMPROVED HOT CUT PROCESSES" AS MR. WEBBER ALLEGES ON PAGE 27 OF HIS TESTIMONY?

A. No. As I stated above, the service or loop types that are not included in the

batch hot cut process constitute a very small percentage of the existing UNE-P accounts.

Q. ON PAGE 20, LINES 17-18 OF HIS TESTIMONY, MR. WEBBER COMPLAINS BECAUSE BELLSOUTH'S HOT CUT PROCESS IS NOT AVAILABLE FOR ENHANCED EXTENDED LINKS ("EELS"). PLEASE COMMENT.

A. BellSouth has a hot cut process to convert retail and/or resale service to EELs. BellSouth's product team is developing an ordering process for UNE-P to EELs. If any CLEC actually ordered this, prior to mechanization, BellSouth will develop a manual workaround.

CLEC-to-CLEC Migrations

Q. MR. WEBBER ARGUES, ON PAGE 20 OF HIS TESTIMONY, THAT BELLSOUTH'S HOT CUT PROCESS IS NOT "AVAILABLE" BECAUSE IT DOES NOT INCLUDE CLEC-TO-CLEC MIGRATIONS. PLEASE COMMENT.

A. Mr. Webber is incorrect. BellSouth will perform CLEC-to-CLEC conversions. BellSouth's CLEC-to-CLEC conversion product is described in the ***CLEC to CLEC Conversion for Unbundled Loops*** document located on the CLEC Guides web site at: http://www.interconnection.bellsouth.com/guides/html/usoc.html. CLEC-to-CLEC loop conversions may be ordered individually or as a project. Bulk Migration is not available for a CLEC-to-CLEC conversion. The Bulk Migration product is

specifically for UNE-P to UNE-Loop conversions by a single CLEC.

Q. WITNESS LICHTENBERG ALLEGES, ON PAGE 30 OF HER TESTIMONY, THAT THE EXCHANGE OF INFORMATION FOR CLEC-TO-CLEC MIGRATIONS HAS NOT BEEN ESTABLISHED. PLEASE COMMENT.

A. As I have testified, BellSouth will perform CLEC-to-CLEC migrations. The issues, about which the CLECs complain, however, are not BellSouth's problems. Rather, CLECs complain about the inability to obtain cooperation or accurate information from one another. Problems presented are related to obtaining accurate end-user information from other CLECs' Customer Service Records ("CSRs"); difficulty obtaining CSRs from CLECs; and difficulties in obtaining circuit ID information from other CLECs as preparation to migrating an end-user between CLECs. The CLECs need to fix those problems, not BellSouth. That being said, BellSouth is currently participating with other ILECs and CLECs in a Florida End User Migration collaborative to identify and propose resolutions for CLEC-to-CLEC end-user migration issues.

Q. IS IT PRACTICAL TO ALLOW A "MIGRATE AS IS" FUNCTIONALITY FOR DIRECTORY LISTINGS FOR CLEC-TO-CLEC MIGRATIONS AS MS. LICHTENBERG ADVOCATES ON PAGE 45 OF HER TESTIMONY?

A. No, it is not practical to allow a "migrate as is" functionality for directory listings for CLEC-to-CLEC migrations. In case of standalone directory listings, migrating from one CLEC to another, BellSouth has a manual process, which allows the

submission of one Local Service Request ("LSR"); however, the CLEC does have to provide complete directory listing information. In support of this manual process, Change Control 1108 was submitted, accepted, and prioritized by the CLEC community to mechanize BellSouth's manual process. To my knowledge, no request was received from any CLEC to include "migrate as is" functionality in this process.

Other Issues

Q. MR. VAN DE WATER CONTENDS, ON PAGE 22 OF HIS TESTIMONY, THAT BELLSOUTH LACKS A PROCESS FOR TIMELY RESTORAL OF CUSTOMER SERVICE IN THE EVENT OF A PROBLEM WITH THE HOT CUT. DO YOU AGREE?

A. No. In the rare event that there is a problem encountered during a hot cut, BellSouth will work to resolve the problem if it is in the BellSouth portion of the network. If the problem is in the CLEC portion of the network, the CLEC has an opportunity to either correct its problem or request that BellSouth delay the hot cut as long as the CLEC has not performed number porting activity and the BellSouth service orders have not been completed. Once the order is closed, the UNE-P records are purged and the only way to address a trouble on the unbundled loop is via a trouble ticket. This requirement for a trouble ticket is the same for retail and wholesale service.

Q. MR. STAHLY STATES, ON PAGE 20 OF HIS TESTIMONY, THAT BELLSOUTH'S BATCH CUT INTERVALS SHOW THAT "BELLSOUTH IS INCAPABLE OF CUTTING OVER COMMERCIAL VOLUMES OF CUSTOMERS." DO YOU AGREE WITH MR. STAHLY?

A. Absolutely not. The intervals in the batch hot cut process are designed to allow the project manager the opportunity to schedule the cuts so that they will occur in the most efficient manner possible. It is important to remember that the batch process applies to conversion of an embedded base – it is not applicable to daily load. Thus, there is ample time to schedule the cuts assuming proper planning and scheduling by the CLEC.

Moreover, as BellSouth witness Milton McElroy discusses in his rebuttal testimony, BellSouth's third party test of its batch hot cut process shows its capability to move large quantities of customers from BellSouth's switches to a CLEC's switches in a single day. Further, BellSouth's commercial experience with Supra demonstrates that the third party auditor's (Price Waterhouse Cooper) attestations are borne out in the "real world" to which Mr. Stahly refers.

Q. WHAT IS THE HIGHEST SINGLE DAY / SINGLE OFFICE VOLUME OF HOT CUTS THAT BELLSOUTH HAS PERFORMED FOR ONE CLEC IN FLORIDA?

A. On December 22, 2003, one (1) CLEC in Florida had 655 scheduled conversions in nine (9) different central offices. The highest single office volume occurred on the same day with 264 conversions scheduled in Perrine. 263 of the 264 orders

were completed for the one (1) CLEC in Perrine on the due date. There was one (1) order missed due to CLEC reasons. Out of 655 total scheduled conversions on this date, BellSouth successfully completed 648. Three (3) orders were missed for BellSouth facility reasons and four (4) orders were missed due to CLEC reasons, which resulted in a BellSouth due date performance of over 99% for the one (1) CLEC in Florida on this date.

Q. MR. STAHLY PROVIDES, ON PAGE 24 OF HIS TESTIMONY, AN "EXAMPLE" OF THE CHRONOLOGY OF A CUTOVER. DO YOU AGREE WITH HIS "EXAMPLE"?

A. No. First, why would Mr. Stahly resort to a fictitious "example" when he could easily have cited to one particular telephone number of the 2,400 hot cuts he states on page 21 of his testimony BellSouth has provided to Supra that adhered to the timeframes in his "example"?

Q. IN MR. ALLEMAN'S TESTIMONY, ON PAGES 5-6, HE DESCRIBES SPRINT'S HOT CUT PROCESS. HOW DOES SPRINT'S PROCESS COMPARE TO BELLSOUTH'S PROCESS?

A. Although the Sprint and BellSouth hot cut processes are similar, BellSouth offers enhancements not included in Sprint's process that provide multiple system access types for submitting a service request, coordinated and non-coordinated conversion options to migrate an end-user, and multiple communication opportunities between BellSouth and the CLEC to ensure a successful

conversion. See Exhibit KLA-4 for an itemized comparison between the hot cut processes used by Sprint and BellSouth.

Q. ON PAGE 10 OF HIS TESTIMONY, MR. ALLEMAN TESTIFIES THAT SPRINT'S HOT CUT PROCESS DOES NOT GIVE RISE TO IMPAIRMENT IN ITS TERRITORY. SHOULD HIS CONCLUSION APPLY TO BELLSOUTH'S PROCESS AS WELL?

A. Yes. Unlike Sprint, BellSouth has developed a batch hot cut process. This along with its existing proven individual and project hot cut processes does not give rise to impairment. If Mr. Alleman is correct that Sprint's hot cut process does not give rise to impairment (and I believe that he is correct), then BellSouth's process, whose robustness is about ten times that of Sprint's process (as confirmed by BellSouth's independent third party auditor) likewise does not give rise to impairment.

B. <u>BellSouth's Hot Cut Performance</u>

Q. PLEASE COMMENT GENERALLY ON THE CLECS' ALLEGATIONS REGARDING BELLSOUTH'S PERFORMANCE OF ITS HOT CUT PROCESS.

A. Certainly. What is most noteworthy about the CLECs' comments as a whole is their lack of credible evidence to support their allegations. This Commission should not make the same mistake made by the FCC in the Triennial Review proceeding and rely on uncorroborated anecdotal evidence. Rather, this

Commission should look at the facts, all of which support BellSouth's high level of performance.

Mr. Stahly's testimony offers a good example of the CLEC's lack of corroborating evidence. Mr. Stahly offers extensive inflammatory rhetoric, but does not offer one scrap of evidence to support his rhetoric. Thus, rather than waste this Commission's time rebutting specific unsupported allegations, I submit that the Commission should disregard this testimony as a whole. To the extent the Commission does consider Mr. Stahly's testimony, despite his complete failure to provide any meaningful information in this regard, I do have relevant facts regarding BellSouth's responsiveness to Supra's requests and will provide those specifics later in this testimony.

Q. ON PAGE 10 OF HIS TESTIMONY, MR. STAHLY STATES "ALTHOUGH SUPRA TELECOM HAS ALREADY STARTED THE PROCESS OF CUTTING OVER ITS CUSTOMERS TO ITS OWN SWITCHES, OVER 95% OF SUPRA'S MASS MARKET CUSTOMERS ARE STILL SERVED BY UNE-P" INFERRING THAT THE FAULT LIES WITH BELLSOUTH. IS THAT INFERENCE CORRECT?

A. No. To my knowledge, Supra installed and has made operational ********** ********** PROPRIETARY ********** ******** central offices in 2001 and 2002, respectively. Only recently, however, has Supra actually begun the process of moving its customers to its own switches. According to Mr. Stahly's testimony, Supra has requested and

BellSouth has provided a total of 2,400 unbundled loops, which Supra used to serve its customers over Supra's switches.

Q. DO YOU HAVE PERFORMANCE DATA DEMONSTRATING BELLSOUTH'S HOT CUT PERFORMANCE FOR SUPRA AND REBUTTING HIS UNCORROBORATED ALLEGATIONS ABOUT "SERVICE DISRUPTIONS"?

A. Yes. Per published Performance Measurement and Analysis Platform ("PMAP") results during the months of July 2003 through October 2003, BellSouth converted ******* of Supra's UNE-P services over to UNE loops. The due date performance was 100% for these 4 months, indicating no BellSouth misses. Even though, at the time of this filing, November PMAP data was not available, I can provide results per our local operations reports. During November 2003, BellSouth had orders for a total of ********* conversion orders for Supra. Of the ********* orders, ****** due dates were missed for BellSouth reasons and ***** due dates were missed due to Supra reasons. This reflects a Bellsouth due date performance of 98%.

Q. MR. STAHLY STATES, ON PAGE 19 OF HIS TESTIMONY, THAT CUSTOMERS SHOULD EXPERIENCE LESS THAN THREE MINUTES OF SERVICE DISRUPTION. DOES BELLSOUTH MEET THAT STANDARD?

A. Yes. BellSouth's performance measures for coordinated hot cuts performed for CLECs this year reveals that the average interval when the loop was detached from BellSouth's switch but not yet attached to a CLEC's switch as 2:39 which

falls within Mr. Stahly's recommendation of "less than three minutes." Notably, Mr. Stahly suggests that only BellSouth might, through the hot cut process, cause service disruption. As Mr. Stahly acknowledges, however, Supra has significant responsibility to ensure minimal service disruption. For example, Supra must provision its own switch port and assure dial tone is present and that all required switch-based features are translated in its switch at the time of cutover. Once the cutover of the loop from BellSouth's switch to Supra's switch is effectuated, Supra must launch messages to begin the porting of calls bound for that telephone number to Supra's switch. Obviously, BellSouth is not and cannot be responsible for Supra's actions or inactions regarding the hot cut process.

Q. MR. STAHLY SUGGESTS, ON PAGE 19 OF HIS TESTIMONY, THAT "UNTIL RECENTLY" SUPRA'S CUSTOMERS WERE NOT ABLE TO RECEIVE CALLS FROM CELLULAR CARRIERS. PLEASE COMMENT.

A. In a meeting BellSouth had with Supra in September 2003, Mark Neptune (Supra) asked about the inability of cellular carriers to reach ported numbers. The example Supra gave was an AT&T Wireless customer not being able to reach the telephone number of one of their employees whose number was ported. Supra only cited a couple of wireless carriers who had experienced the problem, and in both cases, the situation was remedied by working with the wireless carrier. Nevertheless, Mr. Stahly infers the problem was BellSouth's. However, in this case, BellSouth was asked to investigate why this was happening. After some review, a letter was sent by BellSouth to Supra

explaining that this issue could not be a BellSouth problem, as the same database is used to route calls for BellSouth's own landline customers as well as calls from any carrier, wireless or otherwise, that reaches BellSouth's network unqueried. That, combined with the fact that the problem was remedied by the wireless carrier, is evidence that the issue was not with BellSouth. Either the wireless carrier had not updated their LNP routing database, or, more likely, they had no routing built for the NPA/NXX of Supra's Local Routing Number ("LRN") for their switch. This could be a wireless carrier problem or a problem with the information Supra placed in the Local Exchange Routing Guide ("LERG"). Since some wireless carriers were able to route, it is more than likely that it is a problem with the wireless carrier's LNP database. It is surely not a problem with Bellsouth.

Q. MR. STAHLY ASSERTS, ON PAGE 21 OF HIS TESTIMONY, THAT 5% OF THE CUTOVERS HAD NO DIAL TONE REQUIRING DISPATCHES OF BELLSOUTH'S AND THIRD PARTY'S TECHNICIANS TO CORRECT THE PROBLEM. DO YOU KNOW HOW MR. STAHLY ARRIVED AT THE LEVEL OF "5%" AND DO YOU AGREE WITH MR. STAHLY'S ASSESSMENT OF THE BLAME?

A. No. I do not know how Mr. Stahly arrived at 5%, but let's look at the facts. I would assume that Mr. Stahly is referring to those conversions that required a BellSouth dispatch to change from integrated subscriber loop carrier facilities to a suitable universal or copper facility. In such cases, BellSouth's technician verifies both the old facility is working on the BellSouth switch and, after conversion,

again verifies the new facility is working on the CLEC switch. If there is a problem with dial tone, the technician will not complete that order until the no dial tone problem is resolved (changing pairs, etc). It is true that these new 'cut to' pairs could go into a maintenance problem after the conversion has been completed. However, this is not an issue that is unique to Supra, as this also applies to BellSouth's own retail customers on new services, transfer of services, changes, etc. This fact is supported by looking at the published PMAP data for dispatched trouble reports within 30 days of an order completion for BellSouth's retail residence and business combined for < 10 circuits. During the months of April through October 2003, the retail PT30 results ranged from 9.72% to 10.86%. Noting that Mr. Stahly complains that 5% of Supra's conversions later experienced some no dial tone problems, that volume is clearly under the volume experienced by BellSouth's own customers.

Q. NEXT, ON PAGE 23 OF HIS TESTIMONY, MR. STAHLY ASSERTS THAT 47% OF THE CUTOVERS HAD NUMBER PORTING PROBLEMS CAUSED BY BELLSOUTH. IS HE CORRECT?

A. Absolutely not. Here again, let's look at the facts. BellSouth provides Supra timely completion notices. Supra, however, does not timely port the number. See Exhibit KLA-5 containing comparisons of BellSouth Go-Ahead completion notices and Supra porting activity. This exhibit shows Supra's porting activity significantly lags behind BellSouth's Go-Ahead message delivery. For example, on November 24, 2003, BellSouth provided ******* Go-Ahead notices while Supra ported only ******* telephone numbers. The remaining port backlog caused

Supra to continue activations for the next five (5) days, including Saturday. This is while Supra continued to provision other orders during that same period. This delay also increases as Supra's daily order activity increases. It is Supra's lack of timely porting, due to no fault of BellSouth, which is responsible for their customer delays in correctly receiving calls. As further evidenced by the attached Exhibit KLA-6, Supra has had minimal contact with BellSouth concerning so-called porting problems caused by BellSouth. The exhibit contains the call logs maintained by the LCSC for the months of October and November, which are related to LNP issues. As represented on this log, the calls total ****** over a 2-month period which, even if these were all Bellsouth issues (which they were not), would only represent 2% of the volume of orders converted for Supra during the period. Certainly, this does not equate to anything close to the 47% Mr. Stahly alleges. In reality, the 47% would be closer to the volumes of lines that Supra failed to port timely after the conversion and the BellSouth go ahead port notification.

Q. MR. STAHLY STATES, ON PAGE 22 OF HIS TESTIMONY, THAT "SUPRA HAS LOST AT LEAST 16 CUSTOMERS OVER THE PAST MONTH DUE TO BELLSOUTH'S INABILITY TO PERFORM ACCEPTABLE HOT CUTS. THIS IS RUB.???" [sic] WHAT DOES "THIS IS RUB.???" MEAN?

A. Only Mr. Stahly knows for sure. Were I to translate what "This is rub.???" means, I would suggest that the interchange between Mr. Stahly and his apparent editors was that Mr. Stahly's preceding statement was "rubbish".

Q. NEXT, MR. STAHLY STATES "THE ILEC CANNOT HOT CUT THE CLEC's NEW CUSTOMERS TO THE CLEC's SWITCH IN A TIMELY MANNER." DO YOU AGREE WITH HIS CONCLUSION?

A. No. As I showed in my direct testimony in this proceeding (as did BellSouth's witness Al Heartley), BellSouth can scale its operations and personnel to accommodate even a "worst case" scenario. Here, Mr. Stahly refers to "new" customers, which I assume to be a reference to customers acquired after this Commission reached a finding of no CLEC impairment. To calculate load, I used the highest level of inward UNE-P movement that BellSouth has encountered at any time in the last 33 months (at the time I filed by direct testimony in this proceeding) and assumed that that level of inward movement would be repeated every single month going forward. The bottom line is that, even assuming that volume as well as making other upward adjustments to the load volume, BellSouth can accommodate those projected volumes.

Q. MS. LICHTENBERG ALLEGES, ON PAGE 18 OF HER TESTIMONY, THAT A UNE-L MIGRATION "TAKES AT LEAST FIVE DAYS." IS SHE CORRECT?

A. No. BellSouth's intervals for individual hot cuts range from 3-4 days depending on whether or not the loops are designed or non-designed and if non-designed, whether they are coordinated or non-coordinated.

Q. MS. LICHTENTBERG ALLEGES, ON PAGE 25 OF HER TESTIMONY, THAT BECAUSE BELLSOUTH'S HOT CUT PROCESS IS MANUAL, IT "OFTEN

RESULT[S] IN ERRORS AND DELAYS." DOES THE DATA CONFIRM HER POSITION?

A. Absolutely not. Ms. Lichtenberg makes several unfounded allegations without any data to support her erroneous claims. As the FCC and nine state commissions have found, the mere absence of a mechanized process does not indicate that an ILEC is non-compliant or that CLECs are impaired. Please see the testimony of Alphonso Varner for details relating to BellSouth's hot cut performance.

C. Scalability

Q. MR. STAHLY, ON PAGE 27 OF HIS TESTIMONY, DISCUSSES WHAT WOULD HAPPEN WERE THIS COMMISSION TO IMPLEMENT RELIEF FROM UNBUNDLED LOCAL SWITCHING. IS THE 6-MONTH TIMEFRAME MR. STAHLY SUGGESTS ACCURATE?

A. No, and this Commission should not be concerned with such a contrived circumstance which, in any event, will never occur. As I pointed out in my direct testimony, if this Commission were to reach a finding that CLECs are not impaired without unbundled local switching, the conversion of Supra's (and other CLECs') embedded base of customers served by UNE-P would not commence until August 2005 (over a year and a half from the time this testimony is filed) and then would be migrated to the CLECs' own switches over a 21 month transition period as set out by the FCC in its Triennial Review Order. Thus, BellSouth has

a year and a half to get ready for something that will occur over an almost two-year period. I showed calculations in my direct testimony (as did BellSouth witness Al Heartley) deriving the personnel BellSouth would have to hire and train even in a "worst case" scenario. I also testified regarding the steps BellSouth would take to accommodate such a scenario. I would note, however, that my "worst case" scenario was predicated on a finding that all the Commissions in BellSouth's nine-state region would find that CLECs were impaired in no markets in BellSouth's region and that BellSouth and no CLECs reached agreement whereby the CLEC's customers would remain on BellSouth's switches at market rates. My calculations considered even such an unlikely outcome and concluded that BellSouth could accommodate the volumes of hot cuts resultant from such an outcome.

Q. MR. STAHLY CONTENDS, ON PAGE 27 OF HIS TESTIMONY, THAT BELLSOUTH WOULD HAVE TO CUT OVER 1,200 OF SUPRA'S CUSTOMERS PER DAY IN ORDER TO MIGRATE SUPRA'S BASE OF CUSTOMERS CURRENTLY SERVED BY UNE-P. CAN BELLSOUTH CUT OVER 1,200 LOOPS PER DAY?

A. Without a doubt. First, let me again note that under the FCC's guidance, the embedded base of customers served by UNE-P would be migrated not in twelve months as Mr. Stahly incorrectly suggests, but rather in 21 months. For the sake of argument, however, let's assume that Mr. Stahly is correct and that BellSouth would have to migrate Supra's customers to Supra's switches in twelve months. As BellSouth witness Milton McElroy testifies, BellSouth's third party test of its

batch hot cut process affirms that BellSouth can successfully migrate at least 125 loops per central office per day. BellSouth operates 198 central offices in Florida. Doing the sort of quick math that Mr. Stahly apparently prefers reveals that BellSouth could cutover 24,750 loops per day (125 * 198). Assuming an embedded base of 300,000 Supra customers, BellSouth could (assuming Supra is likewise prepared to do the work required on its part to effectuate the cutovers) migrate those customers to Supra's switches in a little over twelve (12) days, not twelve (12) months. I would note that today Supra's ********** switches in service possess nowhere near the capacity needed to effectuate such a transition, thus the commencement of the migration (were it to take place at all) is dependent on Supra's augmenting its switching capacity which, to my knowledge, has not even begun.

Q. ON PAGES 6-9 OF HIS TESTIMONY, MR. ALLEMAN CALCULATES A WORST-CASE LOAD SCENARIO OF UNBUNDLED LOCAL SWITCHING IS ELIMINATED. DOES BELLSOUTH AGREE WITH HIS METHODOLOGY?

A. Yes. BellSouth used similar methodology in calculating its "worst case" scenario that is described in my direct testimony and in the direct testimony of Al Heartley.

D. IDLC

Q. ON PAGE 20, LINES 15-16 OF HIS TESTIMONY, MR. WEBBER ARGUES THAT IDLC LINES ARE NOT AVAILABLE TO BE CUT VIA THE HOT CUT PROCESS. IS HE CORRECT?

A. No. IDLC lines are available to be cut via the hot cut process. IDLC lines require that the line be cut to a new facility, and thus require a field dispatch. This does not mean, however, that the line is not available to be cut via the hot cut process. I described the IDLC conversion options at length in my direct testimony.

Q. ON PAGE 25 OF HIS TESTIMONY, MR. STAHLY DISCUSSES INTEGRATED DIGITAL LOOP CARRIER ("IDLC") EQUIPMENT AND COMPLAINS THAT 39 OF SUPRA'S REQUESTED HOT CUTS IN A PARTICULAR BELLSOUTH CENTRAL OFFICE WERE FULFILLED USING SL-2 LOOPS. WHAT ARE SL-2 LOOPS AND WHY WERE THEY PROVIDED TO SUPRA?

A. First, let me explain that IDLC equipment allows connecting loops directly to switching equipment without intervening equipment referred to as Central Office Terminals or "COTs". In older forms of Digital Loop Carrier ("DLC") equipment, the individual loops are multiplexed onto high-speed transmission facilities at the DLC Remote Terminal ("RT") for transport to the serving central office. At the central office, the high-speed transmission facilities are de-multiplexed back to discrete pairs (one for each customer loop). With IDLC, there is a device referred to as the COT but it does not perform the de-multiplexing back to discrete loops. Rather it is used for administrative purposes. This means that the high-speed transmission facilities (usually operating at DS-1) containing the multiplexed loops are connected directly to the switching equipment and other means for providing unbundled loops must be utilized. Some of those methods (for example, the use of so-called "side door" or "hair pin') must be designed so as to make sure all required assignments are performed. It is this circuit

designing that requires that certain unbundled loops be provisioned as SL-2 loops. This Commission has previously addressed and set the rates that BellSouth may charge CLECs for SL-2 loops.

Q. ON PAGE 25 OF HIS TESTIMONY, MR. STAHLY ALLEGES "AS OF DECEMBER 2, 2003, BELLSOUTH HAS NOT GIVEN A REASON FOR REJECTING THE ORDERS." DID BELLSOUTH INFORM SUPRA AS TO WHY FOUR (4) OF THE REQUESTED 99 UNBUNDLED LOOP ORDERS WERE CANCELLED?

A. Yes. BellSouth notified Supra's representative by e-mail on November 17, 2003, that there were no compatible facilities available to provision four (4) of the lines on this particular batch request to either SL-1 or SL-2 loops. I have attached a copy of the e-mail as Exhibit KLA-7.

Q. ON PAGE 26 OF HIS TESTIMONY, MR. STAHLY OPINES THAT THE NO DIAL TONE PROBLEMS ENCOUNTERED BY SUPRA'S CUSTOMERS WERE BECAUSE OF BELLSOUTH'S USE OF IDLC EQUIPMENT. DOES THAT MAKE SENSE?

A. No. Obviously, Supra's customers have dial tone while they are connected to BellSouth's switch. Because the loop (including those provided via IDLC equipment) does not provide dial tone, it is apparent to me that the source of the alleged dial tone problems are attributable to problems in Supra's switch at the time of the hot cut.

Q. ON PAGE 28 OF HIS TESTIMONY, MR. STAHLY DISCUSSES ISSUES THAT WOULD ALLEGEDLY PREVENT SUPRA FROM SERVING CUSTOMERS OVER ITS OWN FACILITIES EVEN SETTING ASIDE HIS COMPLAINTS REGARDING BELLSOUTH'S HOT CUT PROCESS. FIRST HE STATES "THE ILEC CANNOT CUT OVER ALL OF THE CLEC'S EXISTING CUSTOMERS TO THE CLEC'S SWITCH BASED ON TECHNICAL OR OPERATIONAL CONSTRAINTS SUCH AS MASS DEPLOYMENT OF INTEGRATED DIGITAL LOOP CARRIER SYSTEMS AND FIBER." DO YOU AGREE WITH HIS CONCLUSION?

A. No, for the reasons set forth in Mr. Tennyson's rebuttal testimony.

Q. MR. WEBBER FURTHER ALLEGES, ON PAGE 32 OF HIS TESTIMONY, THAT THE PROCESS OF REASSIGNING THE FACILITY IS "ANYTHING BUT SIMPLE," AND "CAN CAUSE NUMEROUS SERVICE-IMPACTING PROBLEMS" FOR THE END-USER. PLEASE COMMENT.

A. Mr. Webber's allegations are without merit and he provides no evidence to support them. The process that Mr. Webber speaks of certainly is simple and is something that ILECs perform on a daily basis. The process of which he speaks simply is moving a given end user from one facility to another (i.e. moving from IDLC to copper). BellSouth performs these tasks on a routine basis and does so without incident. As I stated earlier and in my direct testimony, BellSouth's performance measures for coordinated hot cuts demonstrate that the average out of service time for hot cuts is 2:39 minutes. This includes hot cuts where

facility changes are involved.

E. Automation of the Hot Cut Process

Q. ON PAGE 34 OF HIS TESTIMONY, MR. STAHLY SUGGESTS THAT "THE COMMISSION SHOULD REQUIRE BELLSOUTH TO ESTABLISH AN **AUTOMATED** BATCH HOT CUT PROCESS FOR ALL WIRE CENTERS WHERE THE COMMISSION FEELS FLORIDA TELECOMMUNICATIONS USERS SHOULD HAVE A CHOICE OF LOCAL PHONE COMPANIES." [Emphasis in original.] PLEASE RESPOND.

A. First of all, this Commission has already decided that Florida's citizens should have a choice of local phone companies and, indeed thousands of those citizens have chosen CLECs operating in Florida for their local phone service needs. Second, while Mr. Stahly only suggests an "automated" process, he does not articulate what that automated process should be, nor does he name commercially available software or other devices that would effectuate such automation. Finally, he makes no suggestion as to how such automation would be funded. I can only assume that he intends for ILECs such as BellSouth to fund such automation and that BellSouth would not be allowed to recover its outlays were such an automation implemented. Nonetheless, in his testimony, BellSouth witness Gary Tennyson explains why an automated process as suggested by AT&T in this proceeding is unworkable.

Q. AT&T ARGUES (VAN DE WATER TESTIMONY AT PAGE 19) THAT THE MANUAL HOT CUT PROCESS "IS INHERENTLY INCAPABLE OF SUSTAINING VOLUMES" NECESSARY TO SUPPORT UNE-L. DOES THIS PREMISE ACCORD WITH THE *TRIENNIAL REVIEW ORDER*?

A. No, it does not. AT&T argued that the FCC should require Electronic Loop Provisioning and the FCC rejected that argument. Despite its unsubstantiated finding that the hot cut process causes impairment, the FCC directed the states to implement a process that would alleviate impairment, presuming that such a manual process was achievable. This holding, in conjunction with the FCC's explicit rejection of AT&T's ELP process, undermines Van de Water's argument that a manual process is "inherently incapable of sustaining volumes." BellSouth witness Gary Tennyson addresses the infeasibility of the CLECs' electronic processes in more detail.

F. Miscellaneous Issues

Q. MR. WEBBER CLAIMS, ON PAGE 27 OF HIS TESTIMONY, THAT BELLSOUTH HAS ONLY "COMMUNICATED [ITS] PLANS [FOR HOT CUTS] TO THE INDUSTRY THROUGH WORKSHOPS HELD AT THE COMMISSION'S OFFICES ON OCTOBER 28, 2003." IS HE RIGHT?

A. No. BellSouth posted the CLEC information package for its mechanized bulk migration process to the CLEC website prior to the rollout of the process in March 2003. Prior to that, BellSouth had posted the CLEC information package

for its manual bulk migration process in 2002. As with any posting to the CLEC website, a carrier notification was also sent to the CLECs advising of the posting and availability of this process. Please see the rebuttal testimony of Ronald Pate for additional information regarding discussions of this process with the CLEC community through the CCP.

Q. MCI ADVOCATES THE ESTABLISHMENT OF A COMMISSION WORKSHOP TO ADDRESS ALLEGED ISSUES WITH BELLSOUTH'S HOT CUT PROCESS (LICHTENBERG TESTIMONY AT PAGE 28). IS THIS NECESSARY?

A. While under ordinary circumstances BellSouth fully supports collaborative improvements to its processes (See Line Sharing Collaborative), BellSouth cannot support the CLECs' requests for collaboration in this instance. First, the CLECs' requests for collaboration only have occurred after the commencement of the state impairment cases. Second, while the CLECs purport to want improvements to the process, they have failed to point to any reasonable, specific improvements or suggestions. Finally, and most importantly, the CLECs have admitted that no matter how many improvements BellSouth makes to its manual process, the CLECs will continue to argue they are impaired without an eight (8) billion dollar retrofit of BellSouth's network to allow for automated hot cuts. Given the CLECs' positions, it does not make sense for BellSouth to devote time and resources to a doomed process.

G. UNE-L Performance

Q. IS MS. LICHTENBERG'S CHARACTERIZATION, ON PAGES 35-36 OF HER TESTIMONY, OF INCREASED OUT OF SERVICE TIMES AND CUSTOMER HARM FOR TROUBLES IN A UNE-L ENVIRONMENT ACCURATE?

A. No, quite the contrary. BellSouth's performance data demonstrates that the Maintenance Average Duration time for 2 Wire Analog Loops is less that it is for UNE-P. For the period November 2002 through October 2003, the average duration time for trouble reports for 2 Wire Analog Loops Non-Designed was 14.01 hours while the average duration time for trouble reports for 2 Wire Analog Loops Designed was 5.52 hours. For this same period, the average duration time for trouble reports for UNE-P was 18.64 hours. (Please see Exhibit KLA-8) This data demonstrates that CLECs are not impaired due to increase out of service times and customer harm in the UNE-L environment as Ms. Lichtenberg states. Mr. Varner discusses BellSouth's performance in more detail.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

*** PUBLIC DISCLOSURE DOCUMENT ***

BELLSOUTH TELECOMMUNICATIONS, INC.
SURREBUTTAL TESTIMONY OF KENNETH L. AINSWORTH
BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 030851-TP
JANUARY 28, 2004

Q. PLEASE STATE YOUR NAME, YOUR BUSINESS ADDRESS, AND YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC. ("BELLSOUTH").

A. My name is Ken L. Ainsworth. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375. My title is Director – Interconnection Operations for BellSouth.

Q. ARE YOU THE SAME KEN L. AINSWORTH WHO EARLIER FILED DIRECT TESTIMONY IN THIS DOCKET?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY BEING FILED TODAY?

A. I will respond to certain hot cut issues raised in the rebuttal testimonies of Mr. Mark Neptune on behalf of Supra Telecommunications and Information Systems, Inc. ("Supra"), Mr. James D. Webber and Ms. Sherry Lichtenberg on behalf of

MCI, Mr. Mark David Van de Water on behalf of AT&T, and Mr. Michael Gallagher on behalf of Florida Digital Network ("FDN").

The Hot Cut Process – General

Q. THE CLECS HAVE CRITICIZED BELLSOUTH FOR BEING UNWILLING TO COLLABORATE (*See* Van de Water, at 9; Lichtenberg, at 10) . IS THIS CRITICISM MERITORIOUS?

A. No. BellSouth has always stated that it was willing to consider specific process changes proposed by the CLECs. While the CLECs have chosen to make these suggestions via this docket as opposed to through operational channels, BellSouth has listened. In an effort to be responsive, BellSouth has agreed to make the following enhancements to its effective and seamless batch hot cut process:

- Batch process will be applicable to CLEC-to-CLEC migrations (UNE-P to UNE-L);
- Batch process will be applicable to CLEC-to-CLEC migrations (UNE-L to UNE-L) at such time as necessary systems changes can be made;
- Batch process will guarantee that an end user's account will all be cut on the same day;
- Batch process will include after-hours and Saturday cuts;
- Batch process will guarantee a four-hour time window for coordinated hot cuts;

- Batch process will include a timely restoral process if there is a problem with the cut;
- BellSouth will implement a web-based communication system for non-coordinated hot cuts similar to that implemented by Verizon and SBC;
- BellSouth will reduce the 14-day provisioning interval in the batch process to 8 days;
- BellSouth will implement a scheduling tool similar to Verizon's;
- Batch process will include hot cuts to DS0 EELs.

These enhancements to BellSouth's already-compliant Batch Hot Cut Process should address virtually all of the CLECs' alleged criticisms of the process.

Q. ARE THERE FACILITIES-BASED CLECS THAT SUPPORT BELLSOUTH'S HOT CUT PROCESS?

A. Yes. FDN estimates that it purchases two-thirds (2/3) of the total UNE-Loops in Florida. The Commission, therefore, should give great weight to FDN's testimony that the hot cut process works, and that FDN is not operationally impaired.

Q. MS. LICHTENBERG ALLEGES ON PAGE 10 THAT "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." PLEASE COMMENT.

A. This testimony demonstrates that Ms. Lichtenberg does not know what she wants. On the one hand, she criticizes BellSouth for failing to develop a true "batch" process, but on the other hand argues that BellSouth must provide standard due dates with individual LSRs, exactly what the individual hot cut process provides. This type of contradiction, coupled with the fact that CLECs have stated that they would not support *any* manual hot cut process, is the reason BellSouth has declined to collaborate. The CLECs view collaboration as a means by which to delay a switching impairment decision, not as a means by which to improve the process.

However, as my testimony demonstrates, BellSouth is listening and considering all inputs from CLECs and commissions in various workshops to enhance the currently-compliant process. BellSouth is incorporating these suggestions for tools and additional processes into current processes when they are reasonable and enhance the existing process.

Q. MR. VAN DE WATER, ON PAGE 2 OF HIS TESTIMONY, ARGUES THAT BELLSOUTH HAS NOT COMPLIED WITH THE *Triennial Review Order* ("TRO") BECAUSE IT HAS NOT ADOPTED A BATCH HOT CUT PROCESS. PLEASE ADDRESS.

A. As with most of the CLEC testimony, AT&T is quick to call BellSouth's process non-compliant, but slow to provide technically feasible alternatives. BellSouth does not dispute that the provisioning portion of its Batch Hot Cut process is

identical to the individual process – the use of the provisioning process was deliberate. BellSouth took a proven, tested and approved process and overlaid a bulk ordering mechanism and project management to create a seamless, end-to-end process that will allow BellSouth to efficiently migrate thousands of UNE-P customers to UNE-L. These additions create efficiencies in the batch process and thereby it complies with the TRO.

Q. ON PAGE 14 OF HIS TESTIMONY, MR. NEPTUNE REFERS TO INCONSISTENCIES IN THE DATA PROVIDED BY BELLSOUTH WITNESSES RUSCILLI AND AINSWORTH AS TO THE NUMBER OF UNE-L LOOPS THERE ARE IN FLORIDA. PLEASE CLEAR THIS UP.

A. The numbers provided by Mr. Ruscilli were Florida specific and the numbers that I provided in my testimony were for the BellSouth region. Mr. Neptune makes an incorrect assumption that the numbers that I provided were only for Florida.

The Batch Hot Cut Process – Specifics

Hot Cuts for EELs

Q. ON PAGES 2, 6, AND 7 OF HIS TESTIMONY, MR. WEBBER INDICATES THAT "NEITHER BELLSOUTH'S INDIVIDUAL HOT CUT PROCESS NOR ITS BATCH ORDERING PROCESS PERMIT CLECS TO TRANSFER RETAIL OR UNE-P LINES TO EELs" AND THAT "THE COMMISSION SHOULD REQUIRE

BELLSOUTH TO ACCOMMODATE EELs IN ITS INDIVIDUAL HOT CUT PROCESS AND ITS BATCH PROCESS." PLEASE COMMENT.

A. Mr. Webber is partially correct. In direct testimony, I stated that BellSouth currently did not offer UNE-P transfers to EELS. However, BellSouth did support retail/resale transfers to EELS. I should clarify that the current retail/resale transfers were for DS1 service types and new UNE-P/resale DS0 service. As Mr. Weber indicated on pages 2 and 6 of his testimony, BellSouth currently does not provide migrations of existing UNE-P and DS0 retail loops to EELS. However, BellSouth has agreed to include hot cuts to DS0 EELs in its batch and individual hot cut processes. BellSouth's target implementation date is July 2004.

Q. FURTHER ON PAGE 8 OF HIS TESTIMONY, MR. WEBBER OPINES AS TO HOW BELLSOUTH'S PROCESSES AND REQUIREMENTS SHOULD BE CHANGED TO MAKE EELs USEFUL TO CLECS AND SUGGESTS THAT DURING THE PROVISIONING PROCESS, "ALL ANI TESTING SHOULD BE COMPLETED VIA THE DS0 EEL." DO YOU AGREE?

A. As I have indicated, the product team is developing the DSO EEL process. It would be premature for me to speculate on the connectivity process. However, BellSouth does agree that appropriate hot cut pre-due and due date testing would be part of the process. This would include the ANI testing at the conversion location as described by Mr. Webber on page 8 of his testimony.

CLEC-to-CLEC Migrations

Q. MS. LICHTENBERG, ON PAGE 7 OF HER TESTIMONY, IMPLIES THAT BELLSOUTH DOES NOT ADDRESS CLEC-TO-CLEC MIGRATIONS. HAS MS. LICHTENBERG IDENTIFIED ANY ISSUE IN A CLEC-TO-CLEC MIGRATION THAT IS THE RESPONSIBILITY OF BELLSOUTH?

A. Absolutely not. As I stated in my rebuttal testimony, the issues about which Ms. Lichtenberg complains are neither caused by BellSouth nor can they be resolved by BellSouth. Ms. Litchenberg seems to suggest that BellSouth should be penalized for lack of effective processes or execution between CLECs. I would submit the opposite and ask that the Commission not support this argument when Ms. Lichenberg admits that BellSouth is not directly involved in the process issues she describes.

Q. FROM A PROVISIONING PERSPECTIVE, WILL BELLSOUTH PERFORM CLEC-TO-CLEC MIGRATIONS?

A. Absolutely. BellSouth's individual hot cut process has always included CLEC-to-CLEC migrations. In response to CLEC concerns, BellSouth has agreed to CLEC-to-CLEC migrations (UNE-P to UNE-L) to the Batch Hot Cut Process, as well as CLEC-to-CLEC migrations (UNE-L to UNE-L) as soon as necessary systems changes can be made.

Web-based scheduler

Q. MS. LICHTENBERG STATES ON PAGE 8 THAT BELLSOUTH'S BATCH HOT

CUT PROCESS IS NOT ACCEPTABLE BECAUSE IT "REQUIRES ADDITIONAL STEPS (A MANUAL SPREADSHEET, NEGOTIATION FOR DUE DATES AND A NEW BULK LSR) TO THE PROCESS." ON PAGE 10, SHE RECOMMENDS THAT BELLSOUTH SHOULD IMPLEMENT "A SCHEDULING TOOL SUCH AS THE ONE VERIZON IS DISCUSSING AND THAT SBC IS PROPOSING". PLEASE RESPOND.

A. BellSouth's spreadsheet process, particularly when coupled with project management, is an effective means by which to manage large volumes of hot cuts. As demonstrated by BellSouth's third party test, BellSouth follows its process and the process works. Other than disagreeing with a manual process generally, Ms. Lichtenberg has not pointed to any specific or documented flaws in BellSouth's ordering process and, in fact, was involved in the development of the ordering portion of the batch hot cut process as Mr. Pate describes.

In an effort to be responsive to CLEC concerns, however, unfounded as they may be, BellSouth has agreed to implement a mechanized, web-based scheduler for batch ordering to further enhance the mechanized batch ordering process. BellSouth is targeting the release of this functionality for October 2004.

Same-day cuts for end user accounts

Q. ON PAGE 9 OF HER TESTIMONY, MS. LICHTENBERG CRITICIZES THE BATCH PROCESS FOR NOT GUARANTEEING AN END USER'S LINES WILL BE CUT ON THE SAME DAY. PLEASE RESPOND.

A. BellSouth will guarantee that all the lines in an end user's specific account will be cut on the same day. This should alleviate Ms. Lichtenberg's concern.

Interval Reduction

Q. MS. LICHTENBERG, ON PAGE 10 OF HER TESTIMONY, SUGGESTS THAT BELLSOUTH SHOULD REDUCE INITIAL NEGOTIATION FROM SEVEN (7) BUSINESS DAYS TO FIVE (5) BUSINESS DAYS, AS THE SEVEN (7) BUSINESS DAY INTERVAL IS TOO LONG. DO YOU AGREE?

A. If Ms. Lichtenberg is suggesting the entire processing interval for batch migrations should only require five (5) business days for processing transfers of possibly hundreds of lines, then I adamantly disagree. The planning, pre-due preparation (wiring), quality checks (ANAC), and due date work activity are functions directly related with the ability to match force to load. Handling mass volumes requires appropriate planning and appropriate intervals to effectuate a seamless migration. Five days is insufficient time to complete that process.

That being said, if Ms. Lichtenberg is referring specifically to the period of time in which BellSouth reviews the spreadsheet, BellSouth will be reducing that interval from 7 days to 4 days as part of a batch interval reduction effort.

In addition, BellSouth, in conjunction with other planned enhancements, will reduce the 14-business day provisioning interval to 8 days.

Q. ON PAGE 3 OF HIS TESTIMONY, MR. NEPTUNE CRITICIZES BELLSOUTH'S BATCH PROCESS AND SAYS IT ADDS DELAY IN THE INTERVAL AND CREATES ORDERING COMPLICATIONS. PLEASE COMMENT.

A. While there is a 14-day due date requirement, the process does not lead to conversion rejects or increased costs. The 14-day interval was established to aid in controlling appointments and workload management for mass quantities of service requests. With this due date comes the best effort assurance that all service will be completed on that due date and if there are any issues during the provisioning process, the CLEC is informed and adjustment can be made in the process. If there are no facilities to serve the requested loop, the CLEC is informed by the project manager with other possible options. A change in requested loop type could result in increased costs as with an individual loop change. There are no order complications as Mr. Neptune alleges. A tab-delimited file is created for uploading in Local Exchange Navigation System ("LENS") from the Excel formatted data. This is simply a matter of following four (4) steps listed in the LENS User Guide.

That being said, as stated above, BellSouth has agreed to shorten the provisioning interval from 14 days to 8 days.

Mechanized Communication Tool

Q. MS. LICHTENBERG COMPLAINS, ON PAGE 10 OF HER TESTIMONY, THAT BELLSOUTH NEEDS A COMMUNICATION TOOL SIMILAR TO THE VERIZON WPTS. PLEASE RESPOND.

A. BellSouth will provide a web-based notification tool for non-coordinated batch conversions. BellSouth will make this tool available to CLECs by June 2004.

Restoral Process

Q. ON PAGE 6 OF HIS TESTIMONY, MR. NEPTUNE, IN DESCRIBING THE CUTOVER PROCESSES, MENTIONS A "ROLLBACK" PROCESS IF THERE IS A PROBLEM ON EITHER SIDE. DOES SUPRA PROPOSE A "ROLLBACK" PROCESS?

A. BellSouth is updating its UNE-P to UNE-L Bulk Migration Process to document the acceptance process for coordinated orders, and the expedited restoral process for non-coordinated orders. This should address Mr. Neptune's concern.

Port In Error

Q. ON PAGES 2 AND 9 OF MR. NEPTUNE'S TESTIMONY, HE COMPLAINS THAT BELLSOUTH'S CURRENT PROCESSES DO NOT PROVIDE FOR TIMELY RESTORATION OF SERVICE IN THE CASE OF "PORT IN ERROR." PLEASE COMMENT.

A. The term "port in error" means that the CLEC incorrectly ported the number. "Port in error" occurs most frequently when the CLEC ports the end user's number prior to receiving the completion notice from Bellsouth. BellSouth will, for orders that will be missed on the due date due to CLEC or end user reasons, place a service order into Missed Appointment status. BellSouth will also, at the request of a CLEC, place an order in canceled status. These actions will prohibit the sending of the migration completion message to the CLEC. The CLEC receipt of the completion message is the signal to the CLEC that they may then test their end user's connectivity before porting the end user's telephone number. When the completion message is not received by the CLEC, the CLEC should not port the end user's telephone number. If Supra is experiencing "port in error" problems, it is the fault of Supra and not BellSouth.

Volumes in the Batch

Q. MR. NEPTUNE, ON PAGE 4 OF HIS TESTIMONY, CLAIMS THAT BELLSOUTH LIMITS SUPRA'S NUMBER OF CONVERSIONS TO 150 PER CENTRAL OFFICE, PER DAY. IS THIS CORRECT?

A. No. BellSouth has not imposed a limit on the number of conversions per central office, per day. BellSouth has offered to help Supra with the scheduling of their orders. With the exception of four (4) batch requests, to date Supra has converted all of their lines, approximately ** ,** through the individual hot cut process. By refusing to use the batch process, Supra has not allowed BellSouth the opportunity to help schedule and level load their orders. BellSouth

has offered the services of a Customer Care Project Manager ("CCPM") to assist with scheduling and level loading Supra's orders, even though they are not using the batch process. To date, Supra has not accepted this offer from BellSouth. As an example of Supra's inconsistency in scheduling their orders, for the week of January 5, 2004, Supra had ** ** (** ** in one Central Office) orders due on 1/5, ** ** order due on 1/6, ** ** ((** ** in one (1) Central Office and ** ** in another)) orders due on 1/7, ** ** ((** ** in one (1) Central Office)) orders due on 1/8 and ** ** ((** ** in one (1) Central Office)) orders due on 1/9. Supra's conversions for this week took place in a total of 13 Central Offices. In one (1) of the 13 offices, Supra had ** ** orders due for the week, while in three (3) of the 13 offices, Supra had ** ** or less orders due for the week. Supra's conversion ranged from ** ** orders for the week in one (1) office to ** ** orders for the week in another. BellSouth has no problems in performing the number of conversions that Supra has indicated they want to take place. However, some logic on the part of Supra is required in order for the conversions to take place without imposing undue burdens on both BellSouth and Supra.

Coordination Levels

Q. MR. NEPTUNE, ON PAGE 5 OF HIS TESTIMONY, COMMENTS ON AN "INDUSTRY" RECOMMENDATION OR STANDARD OF COORDINATION. DO YOU UNDERSTAND THIS COMMENT?

A. No. I'm not aware of an "industry" recommendation or standard that defines the

term coordination or coordinated as it relates to hot cuts. BellSouth's coordinated hot cut process was developed through negotiations with AT&T. I have previously explained BellSouth's coordinated hot cut process in my direct testimony and the explanation of coordination as it relates to a BellSouth hot cut is posted on BellSouth's website in the CLEC guides http://www.interconnection.bellsouth.com/guides/html/other_guides.html.

Q. MR. NEPTUNE, FURTHER ON PAGE 5 OF HIS TESTIMONY, CLAIMS THAT BELLSOUTH'S "COORDINATED" PROCESS DOES NOT ALLOW FOR COMMUNICATION DURING THE PROCESS. PLEASE COMMENT.

A. As I explained in my direct testimony, there are several opportunities for communication between BellSouth and a CLEC during a coordinated hot cut. The CLEC receives a call from BellSouth 24-48 hours prior to the due date. BellSouth again contacts the CLEC on the due date prior to the conversion. Finally, BellSouth contacts the CLEC immediately after the conversion. At any time during this process if any jeopardy condition occurs, the CLEC is contacted. Mr. Neptune's statement that the process "does not allow for communication" is absolutely incorrect. The only reason that communications would not take place would be due to the CLEC not having the personnel available to receive the calls.

Q. ON PAGES 6-7 OF MR. NEPTUNE'S TESTIMONY, HE ALLEGES THAT BELLSOUTH'S PROCESS DOES NOT ASSURE DIRECT NOTIFICATION OF THE CONVERSION AT CONCLUSION. PLEASE COMMENT.

A. Mr. Neptune continues to criticize BellSouth's coordinated hot cut process, which, to my knowledge, Supra has never attempted to utilize. As I explained above, there are numerous communication opportunities between BellSouth and a CLEC during the coordinated process. Also, as I stated above, the only reason that a CLEC would not receive notification at the conclusion of a conversion would be due to the CLEC not having the personnel available to receive such notification. BellSouth assures that the attempt is made to contact the CLEC. The CLEC has the responsibility to have someone available to receive the notification.

SBC's Process

Q. ON PAGE 10 OF HIS TESTIMONY, MR. VAN DE WATER DISCUSSES SBC'S PROCESS. WHAT IS YOUR ANALYSIS OF SBC'S PROCESS?

A. I have reviewed the SBC **proposed** batch processes and will address each of the bullet items in Mr. Van De Water's testimony below.

- Flexible scheduling—BellSouth has agreed to include after-hours and Saturday cuts in the batch process.
- Eliminates negotiation steps and time involved—BellSouth's current batch hot cut process involves very little negotiation with the CLEC. There is some internal negotiation that occurs to establish due dates. As stated previously, BellSouth also has agreed to implement a scheduling tool to allow CLECs to select batch migration due dates thus reducing negotiation steps and manual interface time.

- Provides defined interval to allow for CLEC resource planning – BellSouth's current batch hot cut process allows for CLEC resource planning. The CLECs have the ability to request a desired due date when they submit their batch request. If the requested due date does not represent an interval shorter than the minimum, BellSouth will honor that date as long as workload and personnel will allow. Regardless of whether the CLEC requests a due date, BellSouth supplies the due date when the project notification sheet is returned to the CLEC. This should allow the CLEC sufficient time for resource planning. As stated previously, BellSouth also is implementing a scheduling tool to allow the CLECs to select batch migration due dates prior to submitting their batch request.
- Provides CLECs an ability to reserve time—As stated above, under the current Batch process the BellSouth Customer Care Project Manger will work with the CLEC if they need a coordinated order worked within a window of time. Moreover, in an effort to be responsive, BellSouth has agreed to (1) commit to a four-hour time window for coordinated hot cuts; and (2) develop a scheduling tool to allow the CLEC to request time frames for coordinated orders.
- Wire center based to provide CLEC the ability to convert multiple central offices on the same day—BellSouth's current process also allows the ability to convert multiple offices on the same day.
- Includes requests involving IDLC cuts—BellSouth's current process includes requests involving IDLC cuts.
- Mechanized order flow—BellSouth's batch hot cut orders will flow through at the same rate as individual orders of the same type. In addition to this,

BellSouth current batch process allows for the submission of a single bulk LSR for up to 99 end user accounts where SBC's proposed process requires single LSR submissions for each account.

- Reservation tool—In BellSouth's current process, the Customer Care Project Manger performs this function for the CLEC. Again, BellSouth's scheduler tool which it has agreed to implement will allow due date reservations.
- Pre-order IDLC tool—BellSouth's current process also provides this function through the use of its Loop Makeup Tool. The CLEC can query to see what type of facility is currently on the end user's line and reserve an alternate facility, if available, if the line is on IDLC.

Window Of Time For Cuts

Q. MR. VAN DE WATER, ON PAGE 13 OF HIS TESTIMONY, SAYS THAT BELLSOUTH WILL NOT COMMIT TO TIME SPECIFIC HOT CUTS, OR EVEN A WINDOW, IN THE BATCH PROCESS. PLEASE COMMENT.

A. BellSouth will enhance the batch process to guarantee a four (4) hour time window for coordinated cuts in the batch process. This should alleviate Mr. Van de Water's concern.

After-Hours/Weekend Cuts

Q. FURTHER ON PAGE 13 OF HIS TESTIMONY, MR. VAN DE WATER STATES

THAT BELLSOUTH WILL NOT DO AFTER-HOURS HOT CUTS OR SCHEDULE HOT CUTS ON WEEKENDS TO AVOID END USER DISRUPTION. IS HE CORRECT?

A. No. BellSouth will include after hours and Saturday cuts in the batch process.

Retail-UNE-L Conversions

Q. ON PAGES 16-17 OF MR. VAN DE WATER'S TESTIMONY, AND PAGES 14-15 OF MR. GALLAGHER'S TESTIMONY, THEY CRITICIZE BELLSOUTH'S BATCH HOT CUT PROCESS BECAUSE IT DOES NOT APPLY TO RETAIL TO UNE-L CONVERSIONS. PLEASE COMMENT.

A. The purpose of the batch migration process is to move large numbers of loops from one carrier's local switch to another carrier's local switch. Thus, the process is particularly suited to the conversion of an embedded base of customers. Customer acquisition, on the other hand, does not lend itself to batch conversions. CLECs do not structure their marketing plans or their sales channels to target a single wire center per day. On the contrary, CLECs are winning customers statewide in whatever order they sign up. It would make no sense for a CLEC to forego the revenue associated with customer acquisition while it accumulated sufficient customers in a wire center to make use of the batch process meaningful. BellSouth has a Commission-approved individual hot cut process that should be utilized for customer acquisition.

Moreover, BellSouth has agreed to include CLEC-to-CLEC UNE-P to UNE-L and UNE-L to UNE-L conversions.

Scalability Of The Batch Hot Cut Process

Q. MS. LICHTENBERG, ON PAGE 3 OF HER TESTIMONY, ALLEGES THAT BELLSOUTH'S SCALABILITY ARGUMENTS ARE NO MORE THAN "FUTURE" PROMISES. DO YOU AGREE?

A. No, I do not agree. BellSouth has a proven track record of staffing its centers and network forces to accommodate changing and increasing loads. Ms. Lichtenberg has pointed to no evidence to support her claim that BellSouth's process is not scalable. The Commission, therefore, should disregard her testimony on this point.

Q. ON PAGE 6 OF HER TESTIMONY, MS. LICHTENBERG ALLEGES THAT BELLSOUTH'S FORCE MODEL "DOES NOT APPEAR TO ADDRESS" ANY INCREASED MANUAL ORDER PROCESSING. PLEASE COMMENT.

A. Ms. Lichtenberg is incorrect. BellSouth's force model does account for different fallout rates. The increased number of BellSouth Service Representatives that I included in my direct testimony included personnel to handle an increased number of manual orders.

Q. ON PAGE 18 OF HIS TESTIMONY, MR. VAN DE WATER CRITICIZES BELLSOUTH FOR "THROWING BODIES" AT THE HOT CUT PROBLEM RATHER THAN PROPOSING ANY MECHANIZATION OF THE PROCESS. PLEASE COMMENT.

A. First, BellSouth does not believe it has a hot cut "problem." Rather, it has an efficient and seamless process by which it can move loops from one carrier's switch to another carrier's switch. Second, BellSouth is not "throwing bodies" at the problem. Rather, it will staff its network forces to handle the hot cuts that arise. Whether AT&T likes it or not, it takes human beings to run a telephone company. Finally, BellSouth agrees that it has not taken steps to institute the eight (8) billion dollar retrofit of its network that AT&T advocates. Such a capital expenditure cannot be justified, particularly when BellSouth has an efficient hot cut process in place

Q. ON PAGE 19 OF HIS TESTIMONY, MR. VAN DE WATER ARGUES THAT BELLSOUTH'S CUTOVER OF OVER 200 LINES IN A SINGLE CENTRAL OFFICE IN ONE DAY DOES NOT DEMONSTRATE BELLSOUTH'S ABILITY TO PERFORM HOT CUTS AT FORESEEABLE VOLUMES. PLEASE COMMENT.

A. To the contrary, this single day shows BellSouth's ability to successfully complete high volumes of orders within a single office, both central office and IDLC, while sustaining significant volumes in several other offices. On the referenced date, BellSouth converted 98% of 440 orders scheduled for conversion. Approximately 50% of the orders on this day were IDLC conversions. On the same day, highest

single office performance was 97.5%, provisioning 201 of the 206 orders due. Through the date of this filing, BellSouth has consistently maintained a successful due date completion rate average of over 98% for UNE-P to UNE-L migrations with total UNE-P to UNE-L migration volumes as high as 1,000 per day total and in single offices of over 250 per day. Month over month, UNE-P to UNE-L volumes have risen significantly with totals of over 1900 in November 2003; over 3100 in December 2003; and over 4200 January 1 through January 23, 2004. During the months of November and December 2003, Missed Installation Appointments for the CLEC aggregate was 1.27% for November and 1.54% for December as compared to the BellSouth retail rates of 1.75% and 1.90%, respectively.

Bellsouth has maintained these high due date performance rates with virtually no advance planning. Given the fact that CLECs have the ability to use the batch migration process, which allows both the CLEC and BellSouth extended intervals for planning, it obviously follows that BellSouth's ability to perform hot cuts in large quantities would only improve, given some idea of 'foreseeable' volumes from the CLECs.

Exhibit KLA-9 sets forth BellSouth's UNE-P to UNE-L hot cut performance for October 9, 2003 – January 23, 2004.

Q. ON PAGE 20 OF HIS TESTIMONY, MR. VAN DE WATER STATES THAT BELLSOUTH'S ASSUMPTION REGARDING NON-COORDINATED HOT CUTS IN ITS FORCE MODEL IS INCORRECT. PLEASE COMMENT.

A. There is no real way to be certain which option, coordinated or non coordinated, CLECs will choose to convert their UNE-Ps. BellSouth assumed that at least half of the migrations will be non-coordinated. To date, the vast majority, if not all, migrations of UNE-P to UNE-L have been non-coordinated. BellSouth does not expect that future migrations will differ very much from this. Moreover, MCI representatives, in a hot cut workshop in Tennessee, advised that they expected to use non-coordinated conversions. Further, based on the fact that a high percentage of UNE-P end users are residential, BellSouth expects the non-coordinated option to be used based simply on economics. If BellSouth's assumptions prove to be incorrect, BellSouth's force model can, and will, be adjusted.

Q. MR. VAN DE WATER, ON PAGE 22 OF HIS TESTIMONY, IMPLIES THAT BELLSOUTH INCORRECTLY ASSUMES A BALANCED LOAD OF MIGRATIONS WHEN THE REALITY IS THAT THE CONVERSIONS MAY BE "BACKLOADED" AT THE END OF THE SCHEDULE. DO YOU AGREE?

A. No I do not agree. The schedule, as outlined by the FCC in the TRO, allows sufficient time for any reasonable CLEC to plan and implement the necessary collocation arrangements and other facilities needed to provide switching. BellSouth should not be held accountable for poor planning on the part of a CLEC who chooses to procrastinate and wait until the end of the 27-month period to convert all of their UNE-Ps.

IDLC

Q. ON PAGE 3, MR. NEPTUNE STATES THAT "IN MANY CASES THE ASSIGNMENT AND CROSS-CONNECTION OF NEW F1 LOOPS OR UDLC FACILITIES TO EXISTING F2 COPPER LOOPS ARE THE MORE COMPLEX AND PROBLEMATIC PROCESSES." PLEASE ADDRESS.

The replacement of the current F1 facility is sometimes utilized to condition the end user for cross connection to the CLEC equipment or to provide a facility that is compatible for the service being ordered. Within the Central Office usually before the due date, the new F1 facility is connected to the CLEC demark point that was provided in the CLEC Local Service Request. On the due date in the field, the F1 is tested and cross-connected to the F2 pair that is already connected to the end user location.

Q. MR. NEPTUNE, ON PAGE 7 OF HIS TESTIMONY, COMPLAINS ABOUT THE NRC FOR UNE-P TO UNE-L CONVERSION NRCs ON THE GROUNDS THAT IT IS A MELDED RATE BETWEEN DISPATCH AND NON-DISPATCH. PLEASE COMMENT.

A. The NRCs for the individual hot cut process are those adopted as TELRIC-compliant by this Commission. The issue of the blended rate was an issue for the cost docket. This is not the place for Supra to attempt to relitigate the cost docket. Moreover, Supra has raised this precise issue in a complaint at the FCC and thus is barred from having it heard here.

Q. ON PAGE 4 OF HIS TESTIMONY, MR. NEPTUNE CLAIMS THAT IN NOVEMBER 2003, SUPRA SUBMITTED FOUR (4) 99 LINE BATCHES AND 30-40 LINES IN EACH WERE RETURNED AS SL-2 CONVERSIONS REQUIRED AND 1-5 WERE CLASSIFIED AS NON-CONVERTIBLE IN ANY WAY. FURTHER, MR. NEPTUNE STATES "AS OF DECEMBER 18, 2003, NO REASON HAS BEEN FORTHCOMING FOR THESE CLASSIFICATIONS." PLEASE COMMENT.

A. As stated and exhibited in my previous testimony, BellSouth's Customer Care Project Manager notified Supra via email advising the individual telephone numbers that were currently served by IDLC that BellSouth could not move to alternate compatible facilities. Even though there were no UDLC or Copper facilities available, records indicated many of those could, however, be served as an SL2 by a side door or hairpin arrangement on the IDLC. There were minimal amounts, less than five (5), of the 99 that had no facilities available for SL1 or SL2 and would need to be removed from the bulk request. The explanations were given in the email and also noted on the project spreadsheets returned to Supra.

Q. MR. NEPTUNE, ON PAGE 8 OF HIS TESTIMONY, CLAIMS THAT SUPRA DOES NOT HAVE NONDISCRIMINATORY ACCESS TO LOOPS BECAUSE FOUR (4) OF ITS 99 ORDERS IN PEMBROKE PINES WERE CLASSIFIED AS NON-CONVERTIBLE. PLEASE ADDRESS.

A. There are no non-convertible loops. As described in my direct testimony, BellSouth will perform special construction to provide unbundled loops. If Supra does not wish to incur the special construction cost, BellSouth will continue to provide UNE-P on that loop at TELRIC prices in those areas in which and at such time as BellSouth receives unbundled switching relief.

Q. MR. NEPTUNE FURTHER STATES, ON PAGE 8 OF HIS TESTIMONY, "SUPRA SUSPECTS THAT THIS LOOP REPLACEMENT PROCESS IS CAUSING A 4-5% RATE OF NDT OCCURRENCES DURING CONVERSIONS. SUPRA TELECOM CANNOT PROVIDE ACTUAL DATA BECAUSE BST DECLINES TO IDENTIFY THESE CUSTOMERS PRIOR TO CONVERSION." PLEASE COMMENT.

A. As Mr. Neptune admits, Supra has supplied no data to support this unsubstantiated allegation. Contrary to Mr. Neptune's testimony, BellSouth provides the CLECs with a means, through its loop make-up process, to verify the type of facility that is serving a line before they place a conversion order. This process is described further in the testimony of BellSouth's witness Pate.

Q. ON PAGE 10 OF HIS TESTIMONY, MR. NEPTUNE ALLEGES THAT SUPRA EXPERIENCES A LARGE NUMBER OF NDT CONDITIONS ON OR BEFORE THE CONVERSION DATE WHICH MEANS THAT LOOPS ARE CONVERTED TO COPPER OR UDLC PRIOR TO CONVERSION AND ARE NOT TESTED FROM CUSTOMER NETWORK INTERFACE DEVICE ("NID") TO THE

CENTRAL OFFICE PRIOR TO THE JUMPER MOVE ON THE MAIN DISTRIBUTING FRAME ("MDF"). PLEASE ADDRESS THIS ALLEGATION.

A. BellSouth as a policy does not perform any conversions before the actual due date on the order. If such a conversion were to occur before the actual due date, the BellSouth migration process requires that the CLEC dial tone be present before the conversion would take place. If CLEC dial tone is not present, the cut will not occur. In addition, the loops are not converted to copper or UDLC, as Mr. Neptune alleges, prior to the due date. As I explained above, the new F1 facility is cross-connected to the existing F2 at the time of the conversion of the line. The conversion is performed on the date specified on the FOC. BellSouth does not dispatch to work a pre-cut prior to the FOC date for two (2) reasons. First, this additional cut would cause a needless service disruption for Supra's customer. Second, the nature of cut would involve extra work for BellSouth Network personnel both in the field, central office, and other downstream departments. As far as testing from the NID, previous Installation work instructions required technicians to tag and test from the NID whenever service order activity required a dispatch. These instructions were revised on September 13, 2003, in response to Supra conversion orders placed in missed appointment ("MA") status. Supra was concerned that this would be an ongoing issue on all other dispatched orders. BellSouth's SSIM/IM staff and CWINS staff determined a revision was necessary since the service order activity was not end-user initiated and Supra's customers would be unaware of any pending work. Work instructions now state that an attempt will be made to gain access to the NID, and if access is denied, the order will be completed rather than MA'd.

Q. ON PAGE 13 OF MR. NEPTUNE'S TESTIMONY, HE DESCRIBES SUPRA'S PROPOSAL FOR IDLC WHICH PROPOSED "THAT IN AREAS OF HIGH SUPRA TELECOM CUSTOMER CONCENTRATION CONJOINED WITH HIGH CONCENTRATIONS OF IDLC BELLSOUTH COULD MOVE OR GROOM ALL THE CUSTOMERS TO 1-N REMOTE TERMINALS WHICH COULD BE DEMUXED AT THE CO AND HANDED OFF TO SUPRA AT THE APPROPRIATE LEVEL." PLEASE COMMENT ON SUPRA'S PROPOSAL.

A. BellSouth's offering titled "Unbundled Sub-loop Concentration (USLC)" dedicates a 96 channel DLC to a CLEC and hands the loops off to the CLEC at the DS1 level. It allows a CLEC to order sub-loops and transport them back to its collocation space. No CLEC has ever ordered USLC. The recent FCC TRO declined to require unbundled feeder and therefore BellSouth is withdrawing USLC. The TRO determined that CLECs are not impaired by not having access to unbundled feeder. The CLEC is free to place its own DLC systems and order unbundled sub-loops to accomplish this type of interconnection. Thus, BellSouth has no obligation to provide what Supra is asking.

Hot Cut Performance

Q. MR. NEPTUNE, ON PAGE 2 OF HIS TESTIMONY, TESTIFIES THAT DURING NOVEMBER 2003, OVER 2400 CUSTOMERS CONVERTED FROM UNE-P TO UNE-L EXPERIENCED NO DIAL TONE ("NDT") ON THE CONVERSION DATE 4-5% OF THE TIME AND COULD NOT RECEIVE CALLS FOR FOUR (4)

HOURS OR MORE 47% OF THE TIME. PLEASE COMMENT.

A. This testimony is identical to Supra's direct. As I stated and demonstrated in my Rebuttal testimony, the reason the customers could not receive calls 47% of the time was directly related to Supra's delay in porting their customers timely and was no fault of BellSouth. Please see my Rebuttal testimony for additional information.

Q. FURTHER ON PAGE 2 OF MR. NEPTUNE'S TESTIMONY, HE STATES THAT "A CUSTOMER EXPERIENCING NDT UPON CUTOVER CAN TYPICALLY EXPECT A TWENTY-FOUR HOUR WINDOW FOR REPAIR." PLEASE COMMENT.

A. First, before the cut, BellSouth tests for dial tone to verify the telephone number prior to the cutover. If a "NDT- no dial tone " condition exists, BellSouth will place the service order in Missed Appointment status and will BellSouth will not cut the loop.

After the cut, in the event the end user experiences problems after the conversion, BellSouth's repair commitment to wholesale customers is listed in our Operational Understanding:

> ... CWINS will provide CLEC certain telephone services pursuant to the Interconnection Agreement; the services and facilities will be at least equal in quality to that provided by BST to itself and its end users....Our

maintenance target is to provide "a business comparison offering" for SL1 – 2 wire analog voice grade loops.

Performance data demonstrates that BellSouth meets its repair commitments. Comparable data for BellSouth Retail and BellSouth wholesale customers for non-designed loops August through December 2003 is listed on Exhibit KLA-10. As the data demonstrates, the average repair time for CLECs is better than for BellSouth Retail each of the five (5) months.

Q. MR. NEPTUNE, ON PAGE 3 OF HIS TESTIMONY, EXPLAINS THAT PORTING IS A COMPLEX PART OF THE PROCESS. PLEASE ADDRESS.

A. Porting is a simple 3-step process:

(1) When the CLEC receives a Firm Order Commitment ("FOC"), they send a "create" message to NPAC.
(2) NPAC provides a mechanized notification to BellSouth that the create message has been sent; BellSouth responds with a mechanized "concur" message.
(3) On the due date, when BellSouth completes the migration activity, the CLEC is notified so they can send an "activate" message to NPAC.

The porting process successfully occurs many times a day for every end user telephone number "porting-in" or porting-out" of a BellSouth switch.

Q. IN ADDITION TO THE ABOVE CONCERN BY MR. NEPTUNE, HE CLAIMS THAT "DELAYS CAUSED BY THIS PROCESS COULD CAUSE UP TO 12 HOURS OF AN OSS CONDITION WHILE AWAITING A RESPONSE FROM THE CLEC." PLEASE COMMENT.

A. Mr. Neptune is absolutely correct. If a CLEC waits 12 hours to advise BellSouth of a problem, there could be 12 hours of out of service time.

Q. AS TO THE CENTRAL OFFICE TECHNICIANS ENTERING COMPLETIONS INTO THEIR SYSTEMS, MR. NEPTUNE STATES, ON PAGE 6 OF HIS TESTIMONY, THAT "THE EXTENT OF THEIR COMMITMENT IS THAT THEY WILL MAKE A BEST EFFORT TO ENTER THE COMPLETIONS IN LESS THAN FOUR (4) HOURS. THIS COMMITMENT IS ENTIRELY DEPENDANT UPON THE MOOD, ATTITUDE OR WORKLOAD OF A TECHNICIAN THAT SEES THE CLEC AS THE ENEMY." PLEASE COMMENT AS TO MR. NEPTUNE'S ASSESSMENT OF FOUR (4) HOUR COMPLETIONS.

A. BellSouth's current process is compliant with the TRO. That being said, in an effort to be responsive, BellSouth is enhancing the batch process to provide that BellSouth technicians will close out their work steps for non-coordinated batch cuts at least every 2 hours. As I have stated previously, BellSouth's automated notification system provides the notification to the CLEC within 2 minutes of the closing of the work steps by the technicians. Thus, the maximum amount of time that could pass between the hot cut and the CLEC notification would be a total of 2 hours and 2 minutes.

Q. ON PAGE 7 OF HIS TESTIMONY, MR. NEPTUNE COMPLAINS ABOUT BELLSOUTH'S PERFORMANCE ON GO-AHEAD NOTICES. HE CONTENDS THAT IT CAN TAKE UP TO FOUR HOURS FOR SUPRA TO RECEIVE THEM. PLEASE COMMENT.

A. In the absence of any willingness on the part of Supra to either use the batch process or work with a project manager to set conversion volumes and dates, BellSouth's Florida Network personnel have put forth their best efforts to handle Supra's large and inconsistent volume of orders with little or no planning. Technicians, both central office and field, have sometimes worked beyond their normally scheduled tours to complete the scheduled due dates. However, it would be a rare occasion that Supra would receive "go-aheads" as late as 9:00pm. Moreover, notably, Supra provides no evidence or specific examples to support its allegation. Previously provided testimony stated that Enhanced Delivery Initiative ("EnDI") mechanically sends an e-mail "go-ahead" notification to the CLEC within two (2) minutes of a completed –central office work step or ---- field technician completion message.

During the month of December 2003, Supra converted over ** ** orders. 98.5% of the "go-aheads" were sent between 7am and 6 pm. Mr. Neptune also references the notification process as being the most troublesome part of the conversion process since "go-ahead" notices are sent to the CLEC on an individual number basis. The individual e-mail notifications, however, were put into place at Supra's request.

As stated above, BellSouth has agreed to implement a web-based tool for posting the CLEC "go-ahead" notification. This application is expected to be deployed June 2004.

Q. FURTHER ON PAGE 9 OF HIS TESTIMONY, MR. NEPTUNE CLAIMS THAT THE CLEC PERFORMS LNP PORTING UPON RECEIPT OF THE BELLSOUTH COMPLETION NOTIFICATION, NOT ONCE THE CONVERSION IS COMPLETE AS BELLSOUTH WITNESS AINSWORTH IMPLIED IN HIS TESTIMONY. MR. NEPTUNE GOES ON TO SAY "THIS NOTIFICATION CAN BE AND OFTEN IS HOURS AFTER THE CONVERSION IS COMPLETED." PLEASE COMMENT.

A. For coordinated conversions, the CLEC is immediately notified by the CWINS that the conversion is complete. For non- coordinated conversions, the CLEC is notified after the technician has closed his work step. For individual orders, the work steps are closed after each order. However, for large volumes conversion such as bulk, it is more efficient for the technician to physically move jumpers for several orders before returning to his workstation to close out the work steps. For this efficiency reason, a central office technician working bulk volumes will close out his work within two (2) hours of the physical cut which would notify the CLEC that the conversion is complete and ready to port.

Q. ON PAGE 11 OF HIS TESTIMONY, MR. NEPTUNE WANTS BELLSOUTH TO IDENTIFY THE CLEC INVOLVED IN THE 600 CONVERSIONS BELLSOUTH CLAIMS TO HAVE PERFORMED SUCH THAT IT CAN BE DETERMINED HOW

MANY CUSTOMERS LOST DIAL TONE, ETC. PLEASE COMMENT.

A. The CLEC involved in the 600 conversions is ** **. The date of the 600 conversions was December 22, 2003. ** ** submitted ** ** orders involving eight (8) different central offices. ** ** of the ** ** were successfully completed. Five (5) of these orders could not be completed due to CLEC reasons (2-No access; one (1) No CLEC DT; one (1) Defective CLEC cable pair; one (1) CLEC other reason). There were two (2) orders that could not be completed due to lack of facilities; however, they could have been resubmitted as SL2.

BellSouth investigated those ** ** completed conversions on December 22, 2003, and found that only ** ** of the ** ** had a BellSouth problem after the conversion. ** ** trouble percentage for BellSouth issues, NDT, etc. for this day was 1.57%. This percentage is significantly lower that BellSouth's own retail rate for troubles following order activity. More orders were missed on this day due to ** ** reasons than for BellSouth reasons.

Mr. Neptune indicates a potential problem in porting and he is correct. However, once again, Supra fails to give valid reason for port problems. On December 22, 2003, ** ** orders were converted and ** ** "go-ahead" notifications were sent to ** ** by BellSouth. However, on this date, ** ** ported less than ** ** of the ** ** conversions. ** ** continued to port these customers on later dates, as evidenced by the fact that over ** ** numbers were ported on December 23, 2003, when ** ** only had one (1) order due

and only received one (1) "go- ahead" notification. The customer's incoming calls would have been negatively impacted, but this is clearly not the fault of BellSouth but is instead, caused by CLEC delay.

Q. FURTHER ON PAGE 11 OF HIS TESTIMONY, MR. NEPTUNE STATES THAT BELLSOUTH'S PROJECT MANAGER THAT WORKS WITH SUPRA DOES NOT KNOW HOW TO USE THE BULK MIGRATION REQUEST SYSTEM AND THAT SUPRA HAS NEVER BEEN MADE AWARE OF HOW IT WORKS OR TRAINED IN ITS USE. IS THIS CORRECT?

A. No. The project manager knows how to use the bulk migration process as explained in Ainsworth's testimony. The project manager's role begins in the pre-order issuance/ notification and follows through to the provisioning phase of this process. During the pre-ordering issuance/ notification process, the CLEC submits a Notification Form to BellSouth's CCPM for UNE-P accounts to be converted to UNE-L within a single wire center. The CCPM reviews the Notification Form for errors and assigns a Bulk Order Project Identifier ("BOPI") and forwards the Notification Form to the Network Single Point of Contact ("SPOC") who assigns due dates to accounts and returns the Notification Form to the CCPM, who then returns the Notification Form to the CLEC. Additionally, the project manager acts in a liaison capacity or single point of contact between the CLEC and network operations. The project manager coordinates with network to assign due dates, advise CLEC of potential delays or problems, and advise of completion of the project. In the batch hot cut provisioning process, the

BellSouth CCPM provides CWINS and the network operations group with notification of planned bulk activity, monitors status of the order(s), interfaces with the CLEC and Bellsouth groups during the process, and tracks orders and the project until it is complete. The project manager is the party responsible in the first instance for ensuring successful completion of the process.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

Florida – Docket No. 030851-TP
ERRATA – Ken Ainsworth's Pre-Filed Testimony
February 23, 2004

DOCUMENT	PAGE and/or LINE	CHANGE DESCRIPTION
Direct testimony	Page 8, Line 1	Add "or" after "(8 a.m.-5 p.m.)"
Direct testimony	Page 14, Line 20	Add "COORDINATED" after THE
Direct testimony	Page 22, Line 12	Change "7" to "4"
Direct testimony	Page 22, Line 13	Change "10" to "7"
Direct testimony	Page 23, Line 10	After "dates," insert "time frames, after hour scheduling, account coordination,"
Direct testimony	Page 23, line 21	After "The batch hot cut" delete "process"
Direct testimony	Page 23, Line 21	Add "wire work" after "provisioning"
Direct testimony	Exhibit KLA-3	In the "March 2006" block, change "2.22M" to "2.56M"
Direct testimony	Exhibit KLA-3	In the "October 2006" block, change "1.11M" to "1.28M"
Rebuttal testimony	Page 29, Line 24	Change "are" to "could be"
Rebuttal testimony	Page 29, Line 24-25	Add "." After "switch" and delete "at the time of the hot cut."
Surrebuttal testimony	Page 3, Line 6	After "days" add "(scheduled for OSS relief)"

CHAIRMAN BAEZ: Go ahead.

MS. MAYS: Yes, sir. The next witness, BellSouth would ask that, that the direct, rebuttal and surrebuttal testimony -- I'm sorry. Direct, rebuttal, surrebuttal and supplemental testimony of Dr. Debra J. Aron, together with her errata, be admitted into the record as though read. And we would ask that all of her exhibits be identified for the record as composite Exhibit 64.

CHAIRMAN BAEZ: Without objection, show the direct rebuttal, surrebuttal and supplemental testimony of Witness Aron, including errata, entered into the record as though read, and show the accompanying exhibits of Witness Aron marked as composite Exhibit 64 for identification.

(Exhibit 64 marked for identification.)

I. INTRODUCTION AND SUMMARY

Q. PLEASE STATE YOUR NAME AND POSITION.

A. My name is Debra J. Aron. I am the Director of the Evanston office of LECG, LLC, and Adjunct Associate Professor at Northwestern University. My business address is 1603 Orrington Avenue, Suite 1500, Evanston, IL, 60201.

Q. PLEASE DESCRIBE LECG, LLC.

A. LECG is an economics and finance consulting firm that provides economic expertise for litigation, regulatory proceedings, and business strategy. Our firm comprises more than 550 economists and professional staff members from academe and business, and has 25 offices in six countries. LECG's practice areas include antitrust analysis, intellectual property, and securities litigation, in addition to specialties in the telecommunications, gas, electric, and health care industries.

Q. PLEASE DESCRIBE YOUR PROFESSIONAL QUALIFICATIONS.

A. I received a Ph.D. in economics from the University of Chicago in 1985, where my honors included a Milton Friedman Fund fellowship, a Pew Foundation teaching fellowship, and a Center for the Study of the Economy and the State dissertation fellowship. I was an Assistant Professor of Managerial Economics and Decision Sciences from 1985 to 1992, at the J. L. Kellogg Graduate School

of Management, Northwestern University, and a Visiting Assistant Professor of Managerial Economics and Decision Sciences at the Kellogg School from 1993-1995. I was named a National Fellow of the Hoover Institution, a think tank at Stanford University, for the academic year 1992-1993, where I studied innovation and product proliferation in multi-product firms. Concurrent with my position at Northwestern University, I also held the position of Faculty Research Fellow with the National Bureau of Economic Research from 1987-1990. At the Kellogg School, I have taught M.B.A. and Ph.D. courses in managerial economics, information economics, and the economics and strategy of pricing. I am a member of the American Economic Association and the Econometric Society and an Associate member of the American Bar Association. My research focuses on multi-product firms, innovation, incentives, and pricing, and I have published articles on these subjects in several leading academic journals, including the *American Economic Review*, the *RAND Journal of Economics*, and the *Journal of Law, Economics, and Organization*. I currently teach a graduate course in the economics and strategy of communications industries at Northwestern University.

I have consulted on numerous occasions to the telecommunications industry on competition, costing, pricing, and regulation issues in the U.S. and internationally. I have testified in several states regarding economic and antitrust principles of competition in industries undergoing deregulation; measurement of competition in telecommunications markets; the proper interpretation of Long Run Incremental Cost and its role in pricing; the economic interpretation of pricing and costing standards in the Telecommunications Act of 1996 (i.e.,

Telecommunications Act of 1996, Pub.L.No. 104-104, 110 Stat. 56. The 1996 Act amended the Communications Act of 1934, 47 U.S.C. § 151 *et seq.* I refer to these Acts collectively as the "Telecommunications Act," the "Act," or as "TA96"); limitations of liability in telecommunications; Universal Service; and proper pricing for mutual compensation for call termination. I have testified in a number of states on issues pertaining to broadband markets, broadband deployment, and incentives for broadband investment. I have also submitted affidavits to the Federal Communications Commission ("FCC") analyzing the merits of SBC Michigan's application for authorization under Section 271 of the Telecommunications Act to serve the in-region interLATA market, CC Docket No. 97-137; explaining proper economic principles for recovering the costs of permanent local number portability, CC Docket No. 95-116; explaining the economic meaning of the "necessary and impair" standards for determining which elements should be required to be unbundled under TA96, CC Docket No. 96-98; and an analysis of market power in support of Ameritech's petition for Section 10 forbearance from regulation of high-capacity services in the Chicago LATA, CC Docket No. 95-65. I have consulted to carriers in Europe, the Pacific, and Latin America on interconnection and competition issues, and have consulted on issues pertaining to local, long distance, broadband, wireless, and equipment markets. I have conducted analyses of mergers in many other industries under the U.S. Department of Justice and FTC Merger Guidelines. In addition, I have consulted in other industries regarding potential anticompetitive effects of bundled pricing and monopoly leveraging, market definition, and entry conditions, among other antitrust issues, as well as matters related to employee compensation and contracts, and demand estimation. In 1979 and 1980, I

worked as a Staff Economist at the Civil Aeronautics Board on issues pertaining to price deregulation of the airline industry. In July 1995, I assumed my current position at LECG. My professional qualifications are detailed in my curriculum vitae, which is submitted as Aron Exhibit No. DJA-1.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION ("FPSC" OR "COMMISSION")?

A. No.

Q. WHAT IS YOUR UNDERSTANDING OF THIS PROCEEDING?

A. The FCC's Triennial Review Order ("TRO") requires state commissions to determine whether Competitive Local Exchange Carriers ("CLECs") would be "impaired" in the provisioning of local exchange service if access to the incumbent local exchange carrier's ("ILEC's") unbundled local switching were not available. The FCC prescribes two ways that state commissions are to conduct this analysis. First, the FCC designed a "bright-line" test consisting of certain "triggers" which, if met in a given geographic market, mandate a finding that CLECs are not impaired (within the TRO's meaning of that term) in that geography. BellSouth has conducted the analysis required by the triggers test, and the results of that analysis are provided in the direct testimony of Pamela A. Tipton.

In those geographic markets where the FCC's switching triggers are *not* met, there is an alternative test that state commissions must apply to determine whether CLECs are impaired without access to unbundled local switching. In promulgating this alternative approach to finding no impairment, the FCC reasoned that "there may well be markets where self-provisioning of switching is economic notwithstanding the fact that no three carriers have *in fact* provisioned their own switches. In such cases, we expect states to find 'no impairment.'" (TRO at ¶ 506, emphasis in original.) This alternative analysis is referred to as the "potential deployment" approach to determining impairment, and it involves considering three factors: evidence of actual deployment, potential operational barriers, and potential economic barriers. (47 CFR 51.319(d)(2)(iii)(B))

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to address Issues 5(d) and 5(e) of the Commission's issue list. These issues address the question of whether there are economic barriers in those geographic markets in Florida where the FCC's switching triggers are not met that would impair a CLEC's ability to provide local exchange service if it lacked access to unbundled switching. My testimony addresses the economic foundation upon which such an examination of potential economic barriers should be based. I discuss the economic model that BellSouth has submitted (the BACE model) and how this model accurately captures the analysis required by the potential deployment test. I also discuss a number of key inputs to the model, and the results of the model that I have obtained for the geographical markets covered by this proceeding.

Q. WHAT CONCLUSIONS HAVE YOU REACHED REGARDING WHETHER CLECS ARE IMPAIRED IN FLORIDA?

A. As the testimony of other BellSouth witnesses indicates, there are 31 relevant geographic markets in Florida. I understand that the FCC's switching triggers are met in 13 of those markets. Applying the "potential deployment" methodology to the remaining 18 markets leads to the conclusion that CLECs are not impaired without access to BellSouth's unbundled switching in an additional 10 of those markets. A list of the 10 additional markets is included in Aron Exhibit No. DJA-2.

II. ECONOMIC ANALYSIS REQUIRED BY THE POTENTIAL DEPLOYMENT TEST

Q. CAN YOU EXPLAIN THE FACTORS THAT THE FCC ASKED THE STATE COMMISSIONS TO CONSIDER IN THEIR APPLICATION OF THE POTENTIAL DEPLOYMENT TEST?

A. Yes. The FCC spelled out three factors to consider in applying the potential deployment test. First, state commissions are to consider any use of self-provisioned switches by CLECs, serving either mass market or enterprise customers in the geographic market in question. (TRO ¶ 507.) Such use may fall short of meeting the triggers test but be indicative of the ability of a geographic market to support "multiple, competitive supply." (TRO ¶ 506.) The evidence regarding this factor is provided in the testimony of BellSouth witness

Tipton. Second, the FCC required the states to consider the impact of potential operational barriers on the ability of a CLEC to enter economically. (TRO ¶ 507.) The evidence on this point is provided in the testimony of BellSouth witnesses Varner and Ruscilli. Finally, the FCC mandated that state commissions consider the potential economic barriers to a CLEC's self-provisioning of switching in a given market. (TRO ¶ 507.) The issue of *how* to assess potential economic barriers to self-provisioning switching is the focus of this section of my testimony.

Q. WHAT GUIDANCE DOES THE FCC PROVIDE IN THE TRO CONCERNING HOW ECONOMIC BARRIERS TO ENTRY SHOULD BE ANALYZED?

A. The FCC provides very explicit direction about what the analysis of potential economic barriers should encompass. The FCC has determined that "impairment" exists when "lack of access to an incumbent LEC network element poses a barrier or barriers to entry, including operational and economic barriers, that are likely to make entry into a market uneconomic." (TRO at ¶ 84.) Specifically, the FCC has mandated that the analysis must evaluate whether an efficient CLEC could economically enter a given geographic market. To the extent that such entry is economic, CLECs are not "impaired" in that market, within the TRO's meaning of the term.

Q. CAN YOU ELABORATE ON WHAT THE FCC MEANT WHEN IT REFERRED TO "AN EFFICIENT CLEC"?

A. Yes. The FCC specifically requires that the economic barriers analysis be applied to a CLEC that uses "the most efficient business model for entry rather than to any particular carrier's business model." (TRO ¶ 517.) The FCC further mandates that the analysis assume that the CLEC in question utilizes "the most efficient network architecture available." (TRO ¶ 517.) In other words, the TRO requires the state commissions to consider the economics of a CLEC with an optimized business model and network most appropriate to entry without access to unbundled local switching. The CLEC considered in the potential deployment analysis may therefore be materially different from many of today's CLECs, because these companies typically have business models directed toward taking advantage of the availability of unbundled switching (UNE-P) from BellSouth and/or are not currently efficient in their plans and operations.

Q. ARE THERE OTHER IMPLICATIONS OF THE FCC'S DIRECTIVE TO EVALUATE AN "EFFICIENT" CLEC?

A. Yes. There are two implications that flow from the directive to consider the ability of an efficient CLEC to economically enter a given market. First, the operating assumptions that are employed must be consistent with the operations of an efficient firm. This would tend to suggest that key operating metrics like customer acquisition cost, customer churn, and so forth, would tend to be better than the average of actual firms (a number of CLECs have gone bankrupt,

suggesting that, on average, CLECs do not have optimally efficient operations). Second, efficient firms would tend to sell a broad array of products to a wide range of customers. This is true because many products and customers can be serviced using the same asset platform without replicating many of the fixed costs. For example, an efficient firm would likely leverage its network assets and sales force to sell products that cost little incrementally to provide and sell, but which could contribute meaningful incremental revenue. The FCC recognized this premise as well:

> The state commission must consider *all* revenues that will derive from service to the mass market.... The state must also consider the revenues a competitor is likely to obtain from using its facilities for providing data and long distance services and from serving business customers.... Consideration of potential revenues is consistent with our standard...and with the guidance of the *USTA* decision. (TRO at ¶ 519, emphasis in original, footnotes omitted.)

Q. WHAT KIND OF ANALYSIS DEFINES WHETHER AN EFFICIENT CLEC CAN "ECONOMICALLY" ENTER A GIVEN MARKET?

A. It is both standard business practice, and intuitively compelling, that one would begin such an analysis with a business case, which is exactly what the FCC requires. A business case is an analytical approach, with a specific structure, that is used to quantify the expected value of a particular investment opportunity, and thus determine whether the investment opportunity is "economic." When a

CLEC considers whether to enter a given market, that option is an example of an "investment opportunity." If the expected payoff from CLEC competitive entry without the local switching UNE is at least as great as the expected payoff from other investments of comparable risk (that is, it covers the market cost of capital), then the business case analysis will indicate that entry is economic, and thus the CLEC is not impaired in that market. Conversely, if the expected payoff from CLEC competitive entry without the local switching UNE does *not* cover the relevant cost of capital, the business case analysis will indicate CLEC impairment. Properly implemented, the business case approach correctly distinguishes between "economic" and "uneconomic" entry, and therefore is particularly (and uniquely) suited to an analysis of CLEC impairment.

Q. DOES THE FCC DISCUSS THE USE OF A BUSINESS CASE ANALYSIS AS PART OF THE "POTENTIAL DEPLOYMENT" ANALYSIS?

A. Yes. In fact, the FCC explicitly directs the state commissions to use the business case approach:

> Consistent with the impairment standard we adopt today, state commissions must determine whether competitors are unable economically to serve the market. State commissions should not focus on whether competitors operate under a cost disadvantage. *State commissions should determine if entry is economic by conducting a business case analysis for an efficient entrant.* This involves estimating the likely potential revenues from entry, and

subtracting out the likely costs.... (TRO at n. 1579, emphasis added.)

Q. WHAT IS THE RELATIONSHIP BETWEEN A BUSINESS CASE AND NET PRESENT VALUE?

A. Net present value ("NPV") is a concept widely used to measure the attractiveness of a business case. A positive NPV means that the present value of the revenues generated by a business opportunity exceeds the present value of the costs (including the cost of capital). Put differently, a positive NPV indicates that a given business decision (e.g., entry into a market) is "economic," within the meaning of that term as contemplated by the FCC and in the economics literature.

Q. DOES THE FCC ENDORSE THE USE OF NPV TO EVALUATE WHETHER CLEC ENTRY IS ECONOMIC?

A. Yes. The FCC explicitly endorses the use of NPV as the proper measure of whether entry is economically possible. (TRO at n. 260.)

Q. PLEASE DISCUSS THE STRUCTURE OF A PROPERLY-SPECIFIED BUSINESS CASE MODEL.

A. A properly structured business case analysis permits the determination of whether entry is economic and thus whether investors would rationally provide the capital needed to fund entry (and other) costs that would be incurred by an

efficient CLEC to generate the expected benefits. These costs and benefits can be quantified as cash flows over time. Obviously, if the cash costs, in present value terms, imposed on investors exceed the expected cash benefits, in present value terms, investors will not provide capital and entry will be "uneconomic." Hence, a business case analysis must identify the amount and timing of cash flows, and the method for calculating the present value of those cash flows.

Q. CAN YOU ELABORATE ON THE IMPORTANCE OF THE TIMING AND CERTAINTY OF CASH FLOWS?

A. By timing, I mean that the business case analysis must recognize and properly account for the fact that competitive entry is a long-term proposition. It is common to model the business in question for at least 10 years. One must include all of the cash costs associated with entry, which include any expenditures on capital items that are designed to provide service and generate revenues, over a number of years. It is a fundamental tenet of economics that, all else being equal, a contemporary cash flow is worth more than the same cash flow received in the future. In addition, a cash flow received immediately has no more (and may have less) risk than a longer-term expected cash flow. As a result, a properly specified business case must identify when the cash inflows and outflows occur so that the pattern of cash flows can be compared properly to alternative investments.

Similarly, the future cash flows associated with an investment opportunity (such as competitive entry) cannot be known with certainty. A properly-specified

business case must reliably adjust for such uncertainty so as to permit a comparison of the results of this opportunity with alternative investments. As Dr. Billingsley explains in his testimony, this is done by comparing investment opportunities of equal (or reasonably similar) risk in order to determine the cost of capital that is relevant to the business case.

Q. WHAT ADDITIONAL ECONOMIC FACTORS MUST BE CONSIDERED IN A PROPERLY-SPECIFIED BUSINESS CASE?

A. In accounting for the available revenues and associated costs, any business case seeking to represent an accurate picture of whether an efficient CLEC could economically enter any particular local exchange market must consider the cost-reducing effects of scale and scope economies. The FCC has said that state commissions may "not define the market so narrowly that a competitor serving that market alone would not be able to take advantage of available scale and scope economies from serving a wider market." (TRO at ¶ 495.) Clearly, the FCC contemplates that in considering whether a CLEC can "economically" enter a particular market, the array of opportunities available to a rational CLEC for establishing a profitable business should be considered.

These principles require that an impairment analysis reflect the sources of economic efficiency that are available to an efficient CLEC that is considering competitive entry into the market. It is therefore appropriate to model the *entire* geographic and product scope of operations in which a rational, efficient CLEC would participate. To evaluate the economics of serving a given customer type

by geographic market, one must apply this operational model to assess the cash inflows and outflows that occur as a result of a CLEC entering a particular geographic market and serving a particular type of customer (without the local switching UNE) in that market. For example, in assessing whether it is economic for a CLEC to serve mass-market customers in Deerfield Beach, one would first have to model the overall operations of an efficient CLEC. If an efficient CLEC would presumably operate elsewhere in the state and in other states, and would serve enterprise as well as mass-market customers, then those operations must be modeled. In the context of that model, one can assess whether serving mass-market customers in Deerfield Beach would be "economic." That assessment would have to take into account that some costs would be shared with, or borne entirely by, the enterprise part of the business and/or other geographic markets. In this way, any economies of scale or scope would be incorporated into the model when assessing the viability of serving the mass market in any one geographic market.

Q. IS IT NECESSARY TO PERFORM A SEPARATE ANALYSIS, IN ADDITION TO A BUSINESS CASE ANALYSIS, TO ACCURATELY ADDRESS ADDITIONAL CONSIDERATIONS SUCH AS SUNK COSTS AND ECONOMIES OF SCOPE AND SCALE?

A. No. The purpose of a business case is to assess, within the framework of the business case model, the effect of *all* barriers to entry and barriers to capturing profit opportunities that exist in the market at issue. Entry barriers raise the costs or reduce the revenue opportunities associated with competitive entry. A well-

specified business case model incorporates as costs (or reductions in revenue opportunities) the effect of all such barriers. Hence, a proper business case will consider and quantify the effects of any economic barrier to entry that is relevant to the market at issue and incorporate it into the model, and similarly will incorporate any benefits from scale or scope economies. The results of the business case will thereby permit a determination of whether entry is economic despite the existence of potential economic entry barriers.

Q. CAN YOU PROVIDE AN EXAMPLE OF HOW ENTRY BARRIERS ARE INCORPORATED INTO A BUSINESS CASE ANALYSIS?

A. Yes. The FCC noted that barriers that may be relevant include (1) scale economies; (2) sunk costs; (3) first-mover advantages; (4) absolute cost advantages; and (5) barriers within the control of the ILEC. (TRO at ¶¶ 87-91.) A business case can be designed to account for any and all of these.

Consider, first, the "scale economies" barrier cited by the FCC. Suppose that a CLEC seeking to enter a market had to invest in an Operational Support System ("OSS") to manage its backend order entry, billing, and other issues. If the system's costs are relatively invariant to scale (i.e., one size fits all), then the OSS system costs would provide a source of scale economies because those costs would not increase proportionately with increases in output. The OSS system therefore may deter a CLEC from entering a market if the CLEC does not expect to win enough customers to cover the up-front, scale-invariant costs of the OSS system. This scale economy can be modeled as a one-time, up-front

expenditure on the OSS system that does not vary with output volume. By modeling the OSS costs in this way, within the business case analysis, one ensures that the costs, and the effects of scale economies created thereby, are properly considered.

Consider a second example pertaining to "first-mover advantage." The FCC explains that a CLEC may be disadvantaged, relative to the incumbent, by not being able to obtain preferential access to buildings and rights-of-way, or by facing customers that are reluctant to switch carriers. (TRO at ¶ 89.) By properly specifying the costs faced by an efficient CLEC seeking building access or rights-of-way access, the business case would produce an accurate assessment of this particular barrier. In certain cases, the barrier may make entry uneconomic, while in other cases, the attractiveness of a given market may overwhelm this disadvantage.

Barriers that are within the control of the ILEC also can be incorporated into a business case analysis. The FCC's discussion on such barriers focuses on the hot cut process. (TRO at ¶ 91 n. 304, ¶ 459.) The business case can incorporate the effect of ILEC-based barriers, when they exist, by estimating their effects on the CLEC's operating (or acquisition) costs, customer churn, or by estimating their effects on the CLEC's revenue opportunities (e.g., ability to win market share). In sum, the economic effects of the entry barriers described by the FCC (and the countervailing advantages of the CLEC) can, and should, be incorporated into the business case analysis when they exist. By so doing, one may properly determine whether entry genuinely is economic.

III. THE BACE MODEL AND ITS KEY INPUTS

Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A. In this section I do two things: first, I describe why I find the BellSouth Analysis of Competitive Entry ("BACE") model to be constructed in accordance with both general economic principles and the guidance given in the TRO; second, I supply empirical and economic evidence to support a number of key model inputs for which I am responsible.

Q. CAN YOU PROVIDE AN OVERVIEW OF THE BACE MODEL?

A. Yes. BellSouth's BACE model is a sophisticated, granular, multi-period model of an efficient, generic CLEC's entry into the local telecommunications business. It models in a realistic way the costs and revenues a CLEC would accrue in entering the market, over time and by geographic market. In short, it is the kind of model that a real CLEC could use when constructing a business plan and precisely the kind of business-case model specified by the FCC.

Q. IS THE STRUCTURE OF THE BACE MODEL IN LINE WITH GENERAL ECONOMIC PRINCIPLES?

A. Yes, it is. Over the last few months my staff and I have discussed the structure of the model at length, examined its input tables and outputs, spent significant time working with the model during its development, and met with the model

developer (Mr. Stegeman) on numerous occasions. Based on all the work we have done, I believe we have a firm understanding of the economic structure of the model, and I find it to be in line with general economic principles.

Q. DOES THE BACE MODEL PERMIT USERS TO CONDUCT THE ECONOMIC ANALYSIS REQUIRED BY THE POTENTIAL DEPLOYMENT TEST?

A. Yes, it does. As I discussed in the previous section, the TRO establishes a clear approach for conducting the economic analysis required by the potential deployment test. The essence of that test is to model the cash flows of an efficient CLEC to determine whether the NPV of entry in a given market is positive. In my judgment as an economist and based on my extensive work with BACE and Mr. Stegeman, I believe that the BACE model achieves this effectively. It is substantially more detailed in its delineation of revenues and costs than most business case models that I have seen. It is also highly granular in its treatment of geographic and customer variations.

Q. CAN YOU DESCRIBE IN MORE DETAIL THE WAY IN WHICH THE BACE MODEL REPRESENTS A PROPER BUSINESS MODEL, CONSISTENT WITH THE FCC'S DIRECTION IN THE TRO?

A. Yes. First, the model is designed to reflect the costs and revenues of an efficient CLEC that is serving many geographic areas, and is serving both business and residential customers. In doing so, the model captures the benefits in any given geographic market from economies of scale and scope across customer types

and across geography. The model also incorporates the ability of a CLEC to target customers and to make economically rational decisions about whether to serve a given geography or type of customer. The BACE model not only includes detailed network costs and wholesale (UNE) costs, it also incorporates realistic costs associated with customer acquisition, churn, taxes, bad debt, and other factors that are relevant to a real firm's profitability. Again, consistent with the direction from the FCC and with sound economic principles, it models a realistic business case in which a CLEC will provide an array of services for which customers will vary in their demands. It also accounts for the fact that some customers will purchase stand-alone basic service, while others will purchase a larger bundle or array of services.

Q. DOES THE BACE MODEL INCORPORATE THE ECONOMIC BARRIERS TO ENTRY THAT MAY BE RELEVANT TO CLEC ENTRY, AS DISCUSSED BY THE FCC?

A. Yes. As Mr. Stegeman testifies, the BACE model considers all relevant costs, whether sunk or recoverable, of entry and operation of a CLEC. In addition to the network costs and operational costs such as collocation, the model incorporates the effects of customer churn, of customer acquisition costs, of OSS costs, and of the fixed costs of providing switching. It also incorporates "first mover advantages" of the incumbent in a number of ways, including the assumption that the entrant will, even after ten years, achieve only a relatively small share of the market.

Q. HOW IS THE BACE MODEL USED TO ASSESS IMPAIRMENT?

A. The criterion for impairment calculated by the model is the NPV standard that was discussed earlier, and the NPV standard is applied separately to the mass-market customers in each geographic market so that each market can be assessed separately. Notably, in the model, it is not sufficient that the total market in a geographic area (enterprise and mass market together) be NPV positive; it must be demonstrated that the mass market itself provides positive NPV in order for the model to deliver the conclusion that the mass market is unimpaired. This is a rigorous test for impairment (indeed, it is overly rigorous from an economic perspective because the model allocates fixed costs to the mass market even in situations in which all the fixed costs might appropriately be allocated to the enterprise market for purposes of an impairment test).

Q. YOU MENTIONED THAT YOU ARE RESPONSIBLE FOR SOME OF THE KEY INPUTS OF THE BACE MODEL. PLEASE EXPLAIN.

A. I provided a number of the inputs into the model, including information regarding segmentation and CLEC revenues, churn, sales expenses, and general and administrative expenses. The development of these inputs required economic analysis and judgment. In the remainder of this section of my testimony, I provide more detail regarding what I recommended for each of these inputs.

Q. PLEASE DISCUSS THE CUSTOMER SEGMENTATION THAT IS USED IN THE BACE MODEL.

A. Certainly. Let me begin by describing why "customer segmentation" as used in the BACE model is required. One of the main themes running through the TRO is the requirement that the impairment analysis be "granular" (e.g., see TRO at ¶ 56.) By this, the FCC has sought to ensure that variations in revenues and costs by geography, customer class, and services offered be taken into consideration. Given this direction, it is clearly inadequate to assume that the CLEC being modeled gains the same revenue per line for every subscriber acquired – obviously some customers spend more than others, and may therefore be more attractive for the CLEC to acquire.

Further, the TRO requires that the CLEC business case model "tak[e] into consideration any countervailing advantages that a new entrant may have." (TRO at ¶ 84.) The ability to target attractive customers selectively is one such advantage that CLECs have exploited in reality and is highlighted in the TRO ("competitors often are able to target particular sets of customers." TRO at n. 1539.) For example, suppose a CLEC determines that it is only profitable to sell to customers who spend at least $60 on local service, features, and long-distance service. The CLEC would then enter the market with a $60 service bundle so that, by self-selection, most of the customers acquired would be profitable. Without a segmentation of customers based on their level of spending, it would be impossible to take into account this kind of "cream skimming" that an efficient CLEC could perform.

As described by Mr. Stegeman, the BACE model reflects both the granular differences in customer spend and the potential for targeting opportunities by dividing the customer base into seventeen segments – one residential segment, divided into five "quintiles" by customer spend, and four business segments (segmented by numbers of lines at each business customer location), each further subdivided into three "terciles" by spend. Each geographic market (that is, UNE zones subdivided by CEAs as discussed in Dr. Pleatsikas's testimony) is then allocated the appropriate number of customers from each segment to reflect the actual economic profile of that market. For example, a CLEC may find more high-spend customers in downtown Miami than in Gainesville. I find this segmentation to be an economically reasonable way to take into account the granular variation of customer spending and potential for cream skimming required by the TRO.

Q. HOW IS THE REVENUE OF THE MODELED CLEC DETERMINED?

A. As described by Mr. Stegeman, the revenues of the modeled CLEC are derived from the prices that the CLEC charges, the quantities of different products that each customer takes, and the number of subscribers that it wins in each customer segment – in other words, revenues are derived from prices and quantities, as one would expect.

Q. HOW ARE THE MODELED CLEC'S PRODUCT PRICES AND QUANTITIES DETERMINED?

A. As described in Mr. Stegeman's testimony, the modeled CLEC is able to sell services both *à la carte* and in bundles. The prices and quantities (e.g., the price per long distance minute and the corresponding minutes of use per customer) by customer segment for *à la carte* services were developed in a pre-processing program using industry standard market sizes and actual billing data for BellSouth's customer locations. Prices for bundled services are direct inputs into the BACE model that I developed after reviewing the prices of actual CLEC bundled service offerings in Florida. The bundle prices are generally lower than the price of purchasing the equivalent *à la carte* offerings separately. All prices in the BACE model, whether for *à la carte* or bundled offerings, are, therefore, the "prevailing prices" required by the TRO for this analysis. (TRO at n. 1588.)

Q. HOW IS THE NUMBER OF CLEC CUSTOMERS DETERMINED FOR EACH CUSTOMER SEGMENT?

A. In its most basic terms, for each customer segment, the BACE model computes the total number of customers won by the CLEC in each year by multiplying the CLEC's forecast market share of local service in that year by the total number of customers in the market. The market share is computed for each of 10 years (t), for each market (i), and for each customer segment (j) and each spend class of each segment, (k). Or:

$$CLEC\ Share_{i,j,k,t} = \frac{Number\ of\ CLEC\ Served\ Customers\ Locations_{i,j,k,t}}{Number\ of\ CLEC\ and\ ILEC\ Customers\ Locations_{i,j,k,t}}$$

To describe the CLEC share over time (*t*), I selected a mathematical curve according to which CLEC penetration increases over time at a decreasing rate (that is, more quickly at first, then more slowly over time). This specification requires an estimate of two parameters: the "rate of the climb" (or "*p*-value") and the ultimate maximum market share (or "asymptote").

I recommend the use a rate of climb of 0.50 for residential customers and successively lower *p*-values for the business segments, such that the largest business segment ("SME/C") has a *p*-value of 0.25. A p-value of 0.50 means that the carrier will obtain half the difference between its current market share and its ultimate market share in a given year. The lower *p*-value for business customers means that the CLEC penetration of these customer locations will be slower, in line with the TRO's observation that they might be more willing to sign term contracts. (TRO at ¶¶ 127-128.) Furthermore, I recommend an asymptote of 15 percent for all customer segments in the geographic markets in which the CLEC operates.

Q. WHY ARE THESE RECOMMENDATIONS FOR THE NUMBER OF CUSTOMERS REASONABLE?

A. There are a number of steps that I took to arrive at the rates of climb and ultimate market share that I recommended be included in the model: (1) I reviewed the academic literature on firm growth; (2) I inspected actual CLEC wholesale line gains in the BellSouth region; and (3) I reviewed the success of cable telephony and other providers. Below I will say a few words about each of these sources of

information, but in short all of them support the current inputs into the BACE model.

(1) Peer-reviewed empirical studies of firm growth provide support for using a curve of the general shape that I describe that is based on a p-value and an asymptote. Research on firm growth generally has found that the size of a typical, successful entrant (when plotted against time) increases rapidly when the firm is young and small, and tends to level off (i.e., the growth rate decreases) as the firm becomes older and larger (see, e.g., Richard E. Caves, "Industrial Organization and New Findings on the Turnover and Mobility of Firms," Journal of Economic Literature, Vol. XXXVI, December 1998, pp. 1947-1982).

(2) My review of wholesale data on CLEC lines in BellSouth wire centers also confirms that this general curve shape is reasonable for CLEC entry and growth. I analyzed data on every wire center in the BellSouth territory, examining several hundred examples of entry by different CLECs over time. While the shape of the penetration curves varied from case to case, my visual inspection confirmed the reasonableness of using a two-parameter (i.e., "rate of climb" and asymptote) curve to represent the general penetration profile of an efficient CLEC over the 10-year time frame that is incorporated into the BACE model. In addition to confirming the basic shape of the penetration curves, I found that the actual BellSouth data of CLEC penetration provided support for the asymptote or maximum assumed market share. I specifically note that in Florida, CLECs, in aggregate, had attained market shares of 15 percent or more in 35 of BellSouth's wire centers.

(3) Cable TV providers that have elected to offer voice telephony have already achieved penetration rates far in excess of the 15 percent "maximum" market share assumed for the modeled CLEC in the BellSouth business case. Both Cox Communications and Comcast Corp. have successfully rolled out telephony service to their existing customers in target markets. Both operators have achieved penetration rates of 20-30 percent of their target markets in far less than ten years. I am aware that Cox Communications does not operate in Florida, but I believe that the experience of cable telephony providers around the country is informative as to levels of penetration that are achievable in Florida. For example, in the Orange County market, Cox Communications serves 53 percent of existing Cox cable TV customers, and Cox has achieved a 19 percent share of telephone-ready homes in Cox's total geographic footprint nationwide. Furthermore, figures cited in the TRO also confirm that cable television companies are having considerable success in those areas where they choose to compete. According to the FCC's figures, cable television companies throughout the nation have captured approximately 26 percent of the households in areas where they compete with the ILEC for voice telephony. The FCC reports that 2.6 million homes subscribe to cable telephony on a nationwide basis and that about 9.6 percent of the nation's 103.4 million households, or 9.9 million households, have cable telephony available to them. Thus, of the 9.9 million that can obtain cable telephone service, 2.6 million (or 26.2 percent) have selected it. (TRO at ¶ 444.) In addition to the cable-telephony experience, a prominent CLEC has reached a 15 percent market share on a statewide basis in less time than I have assumed in the model parameters. UBS Warburg noted in a December 2002 report on AT&T that, "The company [AT&T] recently announced that it had turned

EBITDA positive in New York State, where it has roughly 15% market share after almost three years of entry." Hence, if anything, actual experience therefore indicates that 15 percent is a conservative ultimate penetration for the modeled efficient CLEC to achieve after 10 years.

Q. IN CONSIDERING THE MARKET SHARE PENETRATION THAT THE CLECS MAY ACHIEVE, DO YOU ALSO CONSIDER WHETHER THE CLECS MAY PENETRATE DIFFERENT CUSTOMER GROUPS AT DIFFERENT RATES?

A. Yes. In my opinion, it is clear that CLECs attempt to attract disproportionate numbers of high-spending customers. Because CLECs are not obliged to serve all customers, it would be rational for an efficient CLEC to "cream skim," and the price offerings of actual CLECs suggest that this is their aim, as I discussed in my $60 bundle pricing example above. Anecdotal evidence also supports the CLEC customer-targeting hypothesis – for example according to analysts at Banc of America Securities:

> AT&T's approach to launching local service has been very granular. AT&T's "cherry picking" approach has drawn Bell ire but it has worked. The company targets expansion by state, by neighborhood, and by profit hurdle, experiencing substantial success in the process. (David W. Barden, "AT&T Corporation: A Case for Consumer Services," Banc of America Securities—United States Equity Research, April 30, 2003, p. 6.)

Q. IS THERE ANY FURTHER EVIDENCE OF THE DEGREE TO WHICH CLECS SUCCEED IN THEIR EFFORTS TO TARGET HIGH-SPENDING CUSTOMERS?

A. Yes. BellSouth customer disconnect information indicates that the Company's customers whose monthly spending is substantially below the average are least likely to become "competitive disconnects." If there were no customer targeting, one would expect competitors to win customers about evenly from each customer segment. This is not the case. Instead, BellSouth data indicate that competitive disconnects have been lowest among residential customers with lower-than-average spending on telecommunications services. This is illustrated in Aron Exhibit No. DJA-3. The exhibit shows the proportion of competitive disconnects by spending quintile (arrayed from the highest spenders (quintile 1) to the lowest spenders (quintile 5)). Absent cream skimming, one would expect CLECs to win 20 percent of its customers from each quintile (i.e., the line labeled "expected"). However, the exhibit shows that this is not the case. The lowest-spending quintile customers disconnect from BellSouth to go to a CLEC at about one-half the expected (i.e., non-targeted) rate.

Aron Exhibit No. DJA-4 illustrates that cream skimming also occurs in the SOHO ("Small Office/Home Office") category. Like the residential case, if no cream skimming occurred, one would expect customer location losses to be evenly divided among the three spending categories. This implies that 33 of every 100 customers won by the CLEC would be drawn from each of the three spending level segments. Instead, for SOHO customers, CLECs attract the highest

spending customer locations at about twice the rate that would occur without cream skimming ***PROPRIETARY***.

Q. BASED ON THIS INFORMATION, WHAT VARIATION IN PENETRATION RATES DO YOU RECOMMEND ACROSS THE CUSTOMER SPEND GROUPS?

A. The evidence clearly supports the economically rational expectation that CLECs engage in customer targeting. Such targeting is efficient and should be considered as one of the "countervailing advantages" that the FCC requires state commissions to consider in their impairment analyses. I recommend that customer targeting be modeled in the residential and SOHO (1 to 3 line) customer segments consistent with the evidence of BellSouth's experience.

Q. YOU HAVE BEEN DISCUSSING THE PENETRATION RATES FOR CLECS IN THE LOCAL VOICE MARKET. HOW DOES THE BACE MODEL ESTABLISH WHETHER A PARTICULAR TYPE OF CUSTOMER WILL PURCHASE ONE OR MORE SERVICES IN ADDITION TO LOCAL EXCHANGE SERVICE?

A. The model considers the penetration calculation in two conceptual parts. The first part produces the overall CLEC market share for local service that I have been discussing above – in other words, the CLEC's success in attracting customers in the marketplace. The second part quantifies the percentage of the CLEC's customers in each customer segment who also subscribe to the other services the CLEC offers, such as long distance, DSL, or a bundle. These two

parts work in tandem to produce the number of customers that the CLEC serves with different products in each spend category.

My recommendations for the second part – that is, the penetrations of *à la carte* non-local products—are summarized in Aron Exhibit No. DJA-5. To arrive at these recommendations, I conducted an extensive review of the public literature to find relevant industry data (primarily industry and investment analyst reports and CLEC presentations to investors) and considered data provided by BellSouth from its own experience in the marketplace.

Q. WHAT DO YOU RECOMMEND FOR THE CHURN RATES USED IN THE MODEL?

A. "Churn" refers to the frequency with which customers disconnect or change providers and is generally expressed as the percentage of subscribers who leave a given provider over a particular time period. I recommend the following rates: 4 percent per month for residential customers, 2 percent per month for the two smaller business segments, and 1.5 percent per month for the two larger business segments.

Q. HOW DID YOU ARRIVE AT YOUR RECOMMENDED CHURN RATES?

A. For residential customers, I reviewed actual CLEC churn rates and also the churn experience of related industries such as wireless, long-distance, and Internet access. For actual CLECs, Z-Tel reported a monthly churn of about 4

percent in 3Q01, and MCI reported in the TRO proceeding that long-term churn for its mass-market *Neighborhood* plan is 4-6 percent per month. (See respectively, James J. Linnehan, "Z-Tel Technologies, Inc.—Still Chugging Along," Thomas Weisel Partners Merchant Banking, November 8, 2001, p. 3; and Gil Strobel (Worldcom) to Marlene H. Dortch, Secretary, FCC, CC Dockets No. 01-338, 96-98, 98-147 (filed November 15, 2002).)

The wireless industry may also provide useful inferences regarding CLEC churn. Banc of America Securities believes this to be the case. In the same report I cited earlier they conclude:

> We believe the wireless churn rate is a relatively close proxy for local churn, although we would expect local churn to be higher than wireless churn. The lack of local number portability is a solid churn defense for the wireless companies (LNP is available for local service) and is only partially offset by service and network issues facing wireless carriers.

I concur with this view. The Banc of America report estimates the average cellular churn rate for what the analyst calls the "big six" wireless carriers to be 2.4 percent per month, and 2.6 percent when the analyst includes "smaller wireless carriers and affiliates." A study by Morgan Stanley (Simon Flannery, "Trend Tracker: Bottom Line Better, But for How Long?" Morgan Stanley North American Equity Research, May 23, 2003) confirms the reasonableness of this estimate.

I am aware that wireless local number portability is expected to increase wireless churn rates. For example, InStatMDR, a market research firm, estimates that local number portability could increase wireless churn 25-50 percent (i.e., from 2.4 percent to 3.0-3.6 percent). Such an increase, were it to occur, would still place wireless churn well below my recommended CLEC consumer churn rate of 4.0 percent, even though it is not clear whether InStatMDR considered all the ways that wireless companies may respond to local number portability to manage their churn (e.g., by changing the structure of their contracts).

I also examined the residential long-distance and high-speed Internet churn experiences. Because long distance providers have had a longer opportunity to move toward an equilibrium level of churn, and CLECs may bundle high-speed Internet service with their residential voice offerings, the churn rates for these services may provide useful information.

With regard to long-distance service, an IDC survey of residential customers concludes "26.2% of the total population indicated that they changed their long distance telephone service (not necessarily service providers) in the past 12 months." (*The Evolving Landscape of Consumer Telecom: IDC's 2002 U.S. Residential Telecommunications Survey*, IDC, Report #27724, August 2002, p. 4.) The 26.2 percent annual churn represents 2.5 percent per month. Also, as IDC notes, the 26.2 percent churn survey result includes respondents who changed plans without necessarily changing their particular service provider. Thus, the churn from one provider to another may be even less.

As for high-speed Internet service, the IDC Report concludes, "According to the 2002 survey results, 25.4% of the high-speed Internet population indicated that they changed service providers in the past 12 months." This likewise indicates a churn rate of about 2.5 percent per month.

In short, there is no reason why an efficient CLEC, providing adequate service and customer support, should not achieve a churn rate of 4 percent or lower, per month, for residential customers.

Q. WHAT EVIDENCE DID YOU CONSIDER IN ARRIVING AT YOUR CONCLUSIONS REGARDING CHURN FOR THE BUSINESS SEGMENTS?

A. I reviewed analyst studies and surveys regarding existing levels of churn. For example, a Goldman Sachs analysis claims "[M]any CLECs have customer attrition rates in excess of 2% per month [for business customers with sub-T1 requirements]." (Lawrence Benn, "Telecom Services: CLECs," Goldman Sachs, January 22, 2001, p. 51.) I infer from this that business customers with T-1 (i.e., DS-1) and above requirements would have lower churn rates (and other evidence that I will discuss supports this) because, as the TRO observes, these larger customers would be more likely to be signed to term contracts. (*TRO* at ¶¶ 127-128.) A study of US LEC, a business-oriented CLEC, by investment analysts Kaufman Brothers, concluded that after quarterly churn "ticked up" to 3 percent due to a "clean-up of payables" and other reasons, the expectation was that churn would return "to historical industry leading levels of 1% per quarter." A quarterly churn rate of 1 percent represents a monthly churn of about 0.3

percent, just one-fifth of the 1.5 percent monthly rate that I recommend for CLECs that serve the larger business customers. Indeed, the Kaufman US LEC Report concludes:

> In our opinion, [US LEC] is executing well in a difficult environment. US LEC, with several years of history in its targeted markets in the mid-Atlantic and south, is approaching incumbent status while its operations achieve critical mass and start to generate positive [free cash flow]. (Vik Grover, "US LEC Corp.: 1Q03 Earnings Review," Kaufman Brothers, L.P., April 30, 2003, p. 1.)

This suggests that an efficient CLEC can move toward an ILEC-type churn rate.

In another survey, Morgan Stanley analysts conclude that about 64 percent of the business customers in its survey are either indifferent to switching, somewhat unlikely to switch, or very unlikely to switch suppliers. (Simon Flannery, "Annual Telecom Services Survey Part 3: Competition" Morgan Stanley North America Equity Research, June 17, 2003, p. 4.) The survey also concludes that 36 percent are "somewhat" or "very" likely to switch local services providers in the next 12 months. If *all* 36 percent of such business customers do in fact switch providers, this would imply a monthly industry-wide churn rate as a result of seeking a different carrier of 3.7 percent. If only those who indicated that they are "very likely" to switch do, in fact, switch, this would imply a monthly churn rate of 1.4 percent.

In sum, my recommendation of a 2 percent churn rate for the smaller (SOHO and "SME/A") business customers and a 1.5 percent churn rate for the "larger" ("SME/B" and "SME/C") business customers is reasonably close to actual CLEC experience (in some instances it is substantially greater than actual CLEC experience) and so provides a generous point of reference for the efficient CLEC.

Q. PLEASE EXPLAIN WHAT YOU MEAN BY "SALES" AND "GENERAL AND ADMINISTRATIVE" EXPENSES.

A. A firm's expenses generally can be organized as being "cost of goods" (or "operating expenses") or "Sales, General & Administrative" (or "SG&A") expenses. I understand that there are no strict accounting guidelines that distinguish between the cost of goods and SG&A classifications. From an economic perspective, the group of expenses known as "sales" contains types of expenses that are different from, and incurred differently than, expenses associated with G&A. The former expenses relate to customer acquisition, while the latter relate to the overall management of the firm (such as executive, legal, human resources, and the like). I therefore analyzed "S" separately from "G&A." To separate the costs, I consulted a survey on CLEC accounting practices by analysts at Merrill Lynch. The survey provided a description of the types of expenses that CLECs generally book as "SG&A." From this description, I could create a mapping of ILEC SG&A accounts to CLEC SG&A accounts. It was on this basis that I was able to harmonize ILEC data with general CLEC accounting practices. As I describe later, I used ILEC data to provide an estimate of the

"G&A" portion of expenses. I separately estimated the "Sales" (customer acquisition) expenses.

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS WITH REGARD TO CUSTOMER ACQUISITION (I.E., "SALES") COSTS.

A. I recommend that customer acquisition costs for residence customers be no higher than $95 per subscriber, and that business acquisition costs be based on a multiple of about ***PROPRIETARY*** times the first month's expected average revenue for that particular segment of customer.

Q. PLEASE EXPLAIN HOW YOU DETERMINED THE CUSTOMER ACQUISITION COST RECOMMENDATION FOR RESIDENTIAL SUBSCRIBERS.

A. I relied on reports available from Wall Street investment analysts regarding CLEC customer acquisition costs. I also relied on information provided by CLECs in *ex parte* presentations in other regulatory venues, and I considered the academic literature to determine how to interpret these data. First, regarding the empirical survey, I found a range of estimates and claims for customer acquisition costs, as shown in Aron Exhibit No. DJA-6.

As the exhibit shows, analysts at Thomas Weisel Partners indicate that Z-Tel's actual per customer acquisition costs were in the $60-$70 range. They conclude that Z-Tel's target customer acquisition cost of $50 per account has been established as management seeks to improve efficiency by cutting back on

telemarketing and eliminating direct mail, "as these are its most expensive sales channels." Z-Tel seeks to emphasize an incentive program that harnesses customer referrals to entice its existing customers to market to new ones.

Also as noted in the exhibit, customer acquisition costs for Talk America currently are estimated to be $80 per customer. According to its website, Talk America provides residential and small business customers with a variety of local, long-distance, and bundled voice offerings, as does the modeled CLEC. For purposes of valuing AT&T, the investment analysts at Banc of America Securities "deem to be appropriate" the use of $125 per customer for AT&T's UNE-P business case. Thus, publicly available estimates of customer acquisition costs for mass-market customers range from $50 to $125.

Q. ARE CUSTOMER ACQUISITION COSTS OF UNE-P-BASED PROVIDERS LIKELY TO BE REPRESENTATIVE OF CUSTOMER ACQUISITION COSTS OF UNE-L-BASED PROVIDERS?

A. There is reason to believe that customer acquisition costs for UNE-P-based providers are higher than those of UNE-L-based providers (and almost certainly higher than those of *efficient* UNE-L providers).

Economists Thomas Hazlett and Arthur Havenner demonstrate that customer acquisition costs are inefficiently high when UNE-P is available in areas where a CLEC would not otherwise suffer impairment. (Thomas W. Hazlett and Arthur M. Havenner, "The Arbitrage Mirage: Regulated Access Prices with Free Entry in

Local Telecommunications Markets," Review of Network Economics, (undated), pp 4-7.) They argue that the availability of the local switching UNE provides a CLEC with the opportunity to defer investment while it gathers more information regarding the future costs and revenues of serving the market. However, what begins as a benefit to CLECs is dissipated in the form of inefficiently high customer acquisition costs as UNE-P-based CLECs seek to compete for customers. The result is inefficiently low facilities investment and inefficiently high customer acquisition costs. Accordingly, one should not accept at face value the actual customer acquisition costs of CLECs, because theory suggests that these may not be representative of the customer acquisition costs that would be incurred by an efficient CLEC.

Based on the Hazlett and Havenner research, one might reasonably select a value from the lower end of the range of data, such as the $50 target for Z-Tel. However, to be conservative I recommend the use of $95 per residential customer, which is above the midpoint of the range.

Q. PLEASE EXPLAIN HOW YOU DETERMINED THE CUSTOMER ACQUISITION COST RECOMMENDATIONS FOR BUSINESS SUBSCRIBERS.

A. These parameter values are based on independent analysis, which I confirmed with information from BellSouth. My analysis considered acquisition costs from Mpower, Choice One, and Allegiance. Mpower, for example, presents data in its December 2001 10-K report that imply that selling cost per gross line added was on the order of $309 in 2000 and $343 in 2001. In a May 2002 conference call

for investors, Mr. Steve Dubnik, Chairman and CEO of Choice One Communications, estimated that his company's selling expenses were approximately $170 per line. I also estimate, based on data from a February 19, 2002 analyst report on Allegiance by Thomas Weisel Partners, that Allegiance's customer acquisition costs were on the order of $188 per line in 2001. According to its website, Allegiance does not market to residential customers, so the estimate applies to the types of business customers that are Allegiance's focus.

According to information from BellSouth, it pays its independent sales agents approximately ***PROPRIETARY*** times the first month's revenue to acquire Small Business Customers. CLECs also utilize sales agents and compensate them in a similar fashion. Based on revenue estimates for the different business segments, I conservatively estimated business customer acquisition costs per line as shown in Exhibit DJA-7.

Q. WHAT DO YOU RECOMMEND FOR G&A EXPENSES?

A. I recommend that G&A expenses be modeled as a percent of revenue. I further recommend that G&A be computed as 15 percent of long-distance revenues and 28.4 percent of all other revenue.

Q. HOW DID YOU DETERMINE THAT IT IS APPROPRIATE TO MODEL G&A EXPENSES AS A PERCENT OF REVENUE?

A. As well as conducting an extensive review of the relevant empirical academic literature, I performed my own empirical analysis of G&A expenses. The analysis confirmed that these expenses are substantially and significantly explained, in a statistical sense, by revenues. My analysis examined total operating revenue and G&A expenses for all of the reporting companies (and over the 1992-2002 period) in ARMIS. I used a statistical technique called "weighted regression" to determine the linear relationship between G&A and revenue. The data representing a number of ILECs of various sizes over a number of years, indicated a very strong relationship, with G&A averaging about 28 percent of revenues.

I assumed a lesser G&A of 15 percent of revenue for long distance, because the model assumes that long distance is operated on a resale basis. I expect that a CLEC operating an efficient resale long distance business would have a significantly lower G&A cost than would a facilities-based operation.

IV. RESULTS OF THE MODEL RUNS

Q. BASED ON THE RESULTS OF THE BELLSOUTH IMPAIRMENT MODEL YOU HAVE DESCRIBED, WHICH GEOGRAPHIC AREAS IN FLORIDA ARE UNIMPAIRED?

A. Aron Exhibit No. DJA-2 lists the ten geographic markets in Florida in which the FCC's triggers are not met, but where CLECs are not impaired without access to BellSouth's unbundled switching. A map of these areas is provided in Aron Exhibit No. DJA-8.

Q. WHAT ARE YOUR CONCLUSIONS?

A. I believe that BellSouth has provided a highly granular, detailed, sophisticated, and nuanced model of CLEC entry that incorporates the directives of the FCC in its *TRO*, and the best available research on the parameter inputs that were under my supervision and control. I conclude that CLECs are unimpaired in the areas I have listed above, and the Commission should declare that BellSouth need not provide access to unbundled local switching in those ten geographic markets. To arrive at any other conclusion would contravene the intention of the Telecommunications Act to promote competition, would contravene the directives of the FCC in implementing the Act, and would discourage efficient investment in Florida.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. It does.

BELLSOUTH TELECOMMUNICATIONS, INC.

REBUTTAL TESTIMONY OF DR. DEBRA J. ARON

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 030851-TP

JANUARY 7, 2004

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND POSITION.

A. My name is Debra J. Aron. I am the Director of the Evanston office of LECG, LLC, and Adjunct Associate Professor at Northwestern University. My business address is 1603 Orrington Avenue, Suite 1500, Evanston, IL, 60201.

Q. ARE YOU THE SAME DEBRA J. ARON WHO FILED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. My rebuttal testimony responds to the economic arguments made by Dr. Mark T. Bryant on behalf of MCI, Mr. Steven E. Turner on behalf of AT&T, Mr. Don J. Wood, also on behalf of AT&T, and Mr. Joseph Gillan on behalf of the Florida Competitive Carriers Association ("FCCA").

II. RESPONSE TO DR. BRYANT

Q. PLEASE COMMENT ON DR. BRYANT'S ARGUMENT THAT THE SOCIAL COSTS OF FINDING NO IMPAIRMENT WHERE IMPAIRMENT EXISTS ARE GREATER THAN THE COSTS OF FINDING IMPAIRMENT WHERE NO IMPAIRMENT EXITS. (BRYANT DIRECT 19)

A. This is unsupported and, in my opinion, seriously misguided conjecture on the part of Dr. Bryant. Mr. Gillan makes similar arguments, so my comments here will apply to his testimony as well. The asymmetry between the effects of the two potential types of errors recited by Dr. Bryant is of a different type than claimed by Dr. Bryant. The asymmetry is in the *observability of the outcomes.* If the Commission errs in finding impairment where none exists, the social costs are extremely difficult to measure, because the nature of the social cost is in the lost investment, innovation, and economic development that would have been forthcoming but remains unknown and unobserved. This, however, does not make these losses any less real nor less significant. In contrast, if the Commission errs in finding no impairment where impairment exists, the social cost is merely the foregone entry of carriers who would, in any event, rely entirely on the network of the incumbent (what the D.C. Court of Appeals, in *USTA v. FCC,* referred to as "synthetic" competition). The social cost, therefore, is likely to be relatively low, while the observed effect—that there will be fewer visible "competitors" in the market—would be relatively apparent. Hence, while the asymmetry of social costs would, if anything, favor erring on the side of

finding no impairment, the political pressure clearly favors a finding of impairment. Commissions should resist the temptation to succumb to short run incentives to behave myopically for purposes of preserving the *perception* of competition, and instead seek to engage in decision making that maximizes social welfare and will encourage *true* competition. By law, carriers are entitled to unbundled local switching where impairment exists, but this entitlement should not be confused with the social-welfare benefits of promoting facilities-based competition where such competition can be economic.

Q. PLEASE ELABORATE ON THE SOCIAL WELFARE COSTS OF AN ERRONEOUS FINDING OF IMPAIRMENT.

A. The FCC recognized that unbundling is "one of the most intrusive forms of economic regulation—and one of the most difficult to administer." (TRO ¶ 141) This intrusive form of regulation diminishes the incentives for the facility owner to keep up or improve the property, as it must share the benefits of those investments with its competitors. (Breyer *Iowa Utilities*, TRO ¶ 64) It also can damage the incentives of CLECs to invest in network infrastructure. There are, as well, significant administrative and social costs of managing a shared resource. (TRO ¶ 64) Facilities-based competition reduces the need for administrative oversight and regulation and therefore better serves the Act's goal of reduced regulation.

Facilities-based competition also better serves the Act's goal of innovation. UNE-P-based CLECs are restricted in their ability to innovate because they

cannot innovate along the dimensions (that is, facilities) that are owned or controlled by the ILEC. In addition, the FCC found that facilities-based competition creates redundancy, which increases reliability and enhances national security. (TRO fn. 233)

As noted by the FCC Chairman Michael Powell in his Separate Statement to the TRO, facilities-based competitors can offer differentiated service, they can control more of their own costs thereby offering consumers real potential for lower prices, they are less dependent on the incumbent, and they provide vital redundancy of networks. (TRO Powell Separate Statement, page 3) It is for these reasons, and perhaps others, that the FCC "disagree[s] that duplication of facilities is necessarily 'wasteful'" (TRO fn. 233) and that "we disagree with commenters that argue that the Act contains a 'statutory mandate of equal treatment of all three options.'" (TRO fn. 233) It is also for these reasons that the Congress did not create a general unbundling obligation, but instead provided a limitation in the form of the Section 252 requirements.

Q. DOES DR. BRYANT MISSTATE THE EFFECTS OF A FINDING OF NON-IMPAIRMENT WHEN HE CLAIMS THAT "UNE-P COMPETITION WILL BE TERMINATED, AND ALL CONSUMERS CURRENTLY SERVED BY UNE-P CLECS WILL BE FORCED TO MAKE A CHANGE IN THEIR TELEPHONE SERVICE: EITHER SWITCHING BACK TO THE ILEC, SWITCHING TO A UNE-L CLEC, OR SWITCHING TO THEIR EXISTING CLEC'S NEW UNE-L FACILITIES"? (BRYANT DIRECT 15-16)

A. Yes, this is an erroneous statement for several reasons. A finding of "non-impairment" does not necessarily terminate UNE-P competition, but rather terminates (over time) the ILEC's obligation to provide unbundled local switching at regulated prices. Incumbent carriers may continue to provide unbundled local switching on commercially agreeable terms, as determined by the actions of the marketplace. Moreover, a finding of non-impairment does not terminate competition, but rather shifts the focus of competition to UNE-L and bypass competition, which, as I discussed, and as the FCC agrees, provides for the potential of more robust and vigorous form of competition than can UNE-P. Finally, a finding of non-impairment does not immediately "terminate" UNE-P, it merely begins a gradual phase-out process.

Moreover, it is simply not true that the gradual switch from UNE-P to UNE-L in areas where there is no impairment "forces" consumers to make a change in their telephone service. The transition of customers from UNE-P to UNE-L is a service provider issue, not a consumer issue. Switching the service platform from the ILEC's switch to the CLEC's does not require the consumer to make any change at all. Certainly, there would be no injury to the CLEC's customer due to being served by the CLEC's switch rather than that of the ILEC.

Dr. Bryant may be envisioning instances in which a CLEC would rather exit the market than pursue the UNE-L opportunity. This is, of course, a possibility, particularly for CLECs with no particular comparative advantage or expertise with the deployment of actual telephone network facilities. Where CLECs are unimpaired, however, the exit of particular carriers who cannot survive if required

to compete without regulatory favor creates opportunities for those who can. It would be poor public policy to perpetuate a defective regulatory policy (mandated unbundling where CLECs are not impaired) simply to sustain an artificial market structure.

Q. DR. BRYANT ARGUES THAT CLECS "HAVE MUCH TO GAIN BY LIMITING THEIR DEPENDENCE UPON THE INCUMBENT." (BRYANT DIRECT 21) PLEASE COMMENT.

A. Dr. Bryant ignores the fact that CLECs have much to gain by depending on an incumbent that remains under the firm grip of regulation. A CLEC that has available to it UNE-P at regulated prices can defer making investments by using UNE-P even when there would be no impairment without it. Thus, rather than actually investing in bringing new, facilities-based technologies to the market place, UNE-P permits CLECs to defer investment in infrastructure. While such an approach may benefit the individual CLEC business plan, it delays the benefits that new technology brings to consumers.

Q. DR. BRYANT CLAIMS THAT THE ACT "DOES NOT GIVE PREFERENCE" TO THE THREE TYPES OF ENTRY VEHICLES (RESALE, UNE-BASED, AND FACILITIES-BASED) FOR WHICH IT PROVIDES. (BRYANT DIRECT 22) IS THIS CORRECT?

A. No. In fact, that is not the issue. While one can argue that the law is agnostic about which form of entry a particular CLEC chooses, the law is perfectly clear

that where CLECs are not impaired without access to any given unbundled network element, unbundling that network element is not required. Hence, where CLECs are not impaired without access to unbundled local switching, for example, the Act strictly disfavors—i.e., precludes—UNE-P based entry. This Commission is not being asked to make an impairment decision *despite* the Act's alleged neutrality over different entry vehicles, but precisely *because* the Act strictly favors facilities-based entry (or resale) where there is no impairment, to the point of requiring it. The Act's philosophy in that regard is the foundation of this proceeding.

Q. DR. BRYANT CLAIMS THAT THERE IS AN INCONSISTENCY IN BELLSOUTH'S POSITION, IN LIGHT OF THE ALLEGED FACT THAT ILECS ARE NOT BUILDING THEIR OWN LONG DISTANCE NETWORKS. (BRYANT DIRECT 23) IS THERE AN INCONSISTENCY?

A. No, for two reasons. First, wholesale long-distance service is not an unbundled network element. Long-distance carriers need not offer wholesale service, nor must they price it at TELRIC if they do offer it. Similarly, it may be the case that in markets where CLECs are not impaired without access to unbundled local switching, ILECs nevertheless may provide switching at market-determined prices, just as some long-distance carriers provide wholesale long-haul services at market-determined prices. Thus, finding a finding of no impairment actually introduces consistency for the use of local and long distance networks – both will be priced according to market forces.

Second, ILECs are in fact bringing new long distance capacity to the market, to the extent that they are not leasing capacity from the big three incumbents, but rather leasing capacity from newcomer wholesale providers such as Williams Communications.

Q. DOES DR. BRYANT OFFER AN ANALYSIS OF THE FEASIBILITY OF POTENTIAL DEPLOYMENT?

A. Yes, Dr. Bryant sponsors a model, or "analytical tool," upon which he relies to make recommendations to the Commission as to the geographic markets in which he believes CLECs are impaired without access to unbundled local switching. His model, however, is flawed in a number of critical respects, rendering his conclusions irrelevant.

Q. DR. ARON, FROM YOUR PERSPECTIVE AS AN ECONOMIST, PLEASE DESCRIBE THE PROBLEMS WITH DR. BRYANT'S ANALYTICAL MODEL.

A. First, Dr. Bryant's uses an improper framework for analyzing potential deployment and therefore impairment. Moreover, even within the context of the analysis itself, Dr. Bryant makes several assumptions that do not reflect the potential of a reasonably efficient CLEC. In particular, based on the extensive research I have performed on these issues, I conclude that Dr. Bryant's assumptions regarding prices, customer acquisition costs, churn, bad debt, DSL

penetration, and DSL prices do not reflect the opportunities available to an efficient CLEC.

Q. WHAT YOU MEAN WHEN YOU SAY THAT DR. BRYANT'S ANALYSIS USES "AN IMPROPER FRAMEWORK"?

A. The FCC explains in great detail what it believes is the economically appropriate framework for evaluating potential deployment of a reasonably efficient CLEC. The FCC is clear that an impairment analysis should be based on a business case analysis ("[S]tates should perform a business case analysis of providing local exchange service" TRO fn.1581). Based on my many years of experience as a business school professor, as well as my general knowledge as a professional economist, I can say that a proper and standard business case analysis for a startup firm would model the costs and revenues per period (typically, per year) over several years and then calculate the discounted present value of the cost and revenue flows. Explicitly modeling the business over a period of time is important in modeling new entry in particular, because entry typically requires start-up costs that are incurred right away but only recovered over time. That is, revenues tend to increase over time, so that there is a mismatch between the timing of revenues and the timing of costs. If one fails to model the costs and revenues over time, one cannot readily capture the fact that many costs are incurred immediately, but revenues that may justify those costs may start small and increase over time. A static model that, for example, considers only the first year or two of operation would tend to overstate costs and understate revenues, concluding that the enterprise is not profitable, when in fact it may be if the

discounted present value of future revenues and costs are accounted for. Dr. Bryant admitted in discovery that a company's business plan can have negative net revenue in the early years and nevertheless have a positive net present value ("NPV") over a specified period of time. (See MCI Response to BellSouth Interrogatory 3-150) Alternatively, a model that compares only the long run "steady state" costs and revenues would tend to ignore the up-front costs of entry. A proper business case analysis accounts for all these effects by explicitly modeling the costs and revenues over time and calculating a discounted present value of the firm. A snapshot or static business model that considers only a single (or "typical") period of costs and revenues is not likely to be a valid and robust business case from which reliable conclusions can be drawn.

The approach adopted by Dr. Bryant suffers from this fundamental structural defect. Dr. Bryant's impairment tool is based on a model developed by the National Regulatory Research Institute ("NRRI"). The NRRI model is a single-period or static spreadsheet that appends revenue estimates to an annualized costing model. Dr. Bryant admitted in discovery that he did not perform a time series analysis with respect to the use of his impairment tool. (MCI Response to BellSouth Interrogatory 3-163) This approach therefore fails to conform to the business case (net present value) methodology that would properly assess the viability of a business and that the FCC unequivocally requires. It would therefore be inappropriate to use Dr. Bryant's model to decide issues raised by the TRO.

Q. ARE YOU AWARE OF ANY OTHER STRUCTURAL DEFECTS WITH DR. BRYANT'S MODEL?

A. Yes. Dr. Bryant's model ignores the ability of the CLEC to serve medium and large business customers. (See MCI Response to BellSouth Interrogatory 3-175) Ignoring this market segment violates the principles of sound business case analysis, and is contrary to the explicit guidance provided by the FCC ("The state must also consider the revenues a competitor is likely to obtain from using its facilities for providing data and long distance services and from serving business customers" (TRO ¶ 519)). It is contrary to the principles of sound business case analysis because the ability of a CLEC to serve the enterprise market affects its ability to share the costs of a switch, transport, collocation and other items across market segments. As the FCC observes, this potential to share costs is a form of scale economies (considering revenues from business customers "will therefore take into account the scale and scope economies available to carriers using existing facilities to provide a variety of services to all customers that are likely to be served by an efficient entrant." (TRO fn. 1586)). A rational CLEC will consider the ability to leverage these potential scale economies as part of its business case analysis. While it may not be economic for a CLEC to invest in a switch to serve only the enterprise and small business market, it may well be economic to invest in a switch to serve these customer segments along with the enterprise market. The correct standard for assessing whether it is economic to serve the mass market via UNE-L is to determine whether serving the mass market provides positive NPV to a hypothetical CLEC that also has the possibility of serving the enterprise market. Ignoring this possibility deprives the

CLEC of legitimate scale economies and could therefore lead to a conclusion of impairment when there is no impairment. This further reinforces my conclusion that Dr. Bryant's modeling approach fails to meet the FCC's standards and so its results can be given no weight in determining impairment.

Q. ARE THERE ANY OTHER PROBLEMS WITH DR. BRYANT'S MODEL?

A. Yes. It is clear that he has offered unsupported and unreasonable inputs that drive his results. These include his inputs for revenues, penetration, bad debt, customer acquisition costs, and customer churn.

Q. DR. BRYANT BEGINS HIS DISCUSSION OF THE "PROCESS [HE USED] TO ESTIMATE REVENUE" RELEVANT TO A CLEC CONSIDERING POTENTIAL DEPLOYMENT WITH ASSERTIONS THAT FUTURE REVENUES WILL FOLLOW A DECLINING PATH OVER TIME. (BRYANT DIRECT 78) WHAT IS THE RELEVANCE OF THIS DISCUSSION?

A. There is none, insofar as Dr. Bryant clarified in discovery that *none of his revenue projection estimates* were used in the impairment model he sponsors. (See MCI Response to BellSouth Interrogatory 3-145) Moreover, Dr. Bryant begins his analysis with the ILEC's existing rates (Bryant Direct 80) but his claims that prices will decline 11 to 20 percent from that level over time as a result of competition (Bryant Direct 79-86) are deficient in a number of respects. The critical deficiency of an assumption of future price reductions, however, is

that it violates the requirements of the FCC's potential deployment analysis. The FCC requires that states evaluate potential deployment business cases *using the existing level of prices and revenues.* The FCC concludes that it "expect[s] states to consider prices and revenues prevailing at the time of their analyses." (TRO fn. 1588) The FCC thereby concludes that existing prices and revenues are reasonable proxies for likely prices and revenues after competitive entry and will result in a more administrable standard.

Q. ARE THERE ANY OTHER DEFICIENCIES IN DR. BRYANT'S ANALYSIS OF PROJECTED PRICE TRENDS?

A. Yes. Dr. Bryant produced his analysis in discovery. Upon review of that document, I note that his analysis, while ignoring any potential for innovation that could increase demand or provide new services (and other deficiencies), assumes that CLECs will, in aggregate, achieve *over a 21 percent market share in the first year*, and achieve *over 47 percent of the market by year ten.* (MCI Response to BellSouth Interrogatory 3-144, page 12) In contrast, his impairment model assumes that an efficient CLEC will have a market share of 5 percent. If Dr. Bryant believes that an efficient CLEC could not achieve a market share above 5 percent, it is disingenuous to quote results to this Commission about price trends that he predicts only on the assumption that CLECs will capture nearly half the market.

Q. IF DR. BRYANT DOES NOT INCORPORATE THE PRICE TREND ASSUMPTIONS INTO HIS MODEL, WHAT IS THE BASIS FOR HIS REVENUE ASSUMPTIONS?

A. I understand from Dr. Bryant's response to discovery that he bases his revenue assumption on aggregate wireline FCC data. (MCI Response to BellSouth Interrogatory 3-153 B)

Q. IS THIS AN ACCEPTABLE FOUNDATION FOR A REVENUE ASSUMPTION IN A POTENTIAL DEPLOYMENT MODEL?

A. No. First, Dr. Bryant's revenue assumptions fail the requirement that the analysis be sufficiently granular to take into account the state of impairment in a particular market. In particular, the FCC concluded "[t]hat market-specific data is needed is indicated by the significant variation in the costs and revenues an efficient entrant is likely to face." (TRO ¶ 485) Dr. Bryant's revenue estimates are based on national average ILEC revenues, which include not only customers outside the Florida BellSouth territory, but customers outside of Florida, and indeed customers outside the entire BellSouth footprint. Dr. Bryant makes no attempt to adapt these national figures to reflect the unique characteristics of the Florida customer base (such as the relatively high level of international calling), the demographic mix of customers in the relevant geographic area, or the specific services offered by service providers in the state. These factors are relevant to the economics of the CLEC business model, and it is improper to omit them if it is possible to include them.

Indeed, MCI presumably knows its own average revenue per customer in Florida, but Dr. Bryant chose not to consider that in his model, and MCI refused to provide this information in discovery on the grounds that it is "not relevant." (MCI Response to BellSouth Interrogatory 3-149) By ignoring its own offerings in Florida, and by ignoring revenue sources that are clearly available to it, MCI's revenue approach violates the FCC's granularity requirements in the TRO. (TRO ¶ 519) While MCI's own revenue numbers are not determinative of the revenue potential of an efficient CLEC, it is irresponsible for MCI to conceal them in presenting an analysis of CLEC competitive entry. Such revenue estimates clearly could give some indication of the ability of a CLEC to achieve revenue in excess of an ILEC's revenues per customer, and give some indication of the differences in revenue potential between geographic markets. Finally, MCI's refusal to consider and provide information about its own revenues appears to be particularly disingenuous in light of its willingness to rely on what it represents to be based on its own churn and bad debt numbers for its model assumptions.

Q. DR. BRYANT ARGUES THAT HIS REVENUE ASSUMPTION IS REASONABLE BECAUSE IT IS SIMILAR TO THE PRICE OF ONE OF MCI'S BUNDLED OFFERINGS. (BRYANT DIRECT 89) IS THIS A GOOD POINT OF COMPARISON FOR A REASONABILITY CHECK?

A. No. Dr. Bryant compares his revenue assumption with MCI's Neighborhood Advantage 200 plan, priced in Florida at $39.99. However, MCI offers several bundles in Florida, in addition to the particular bundle referenced by Dr. Bryant and in addition to *à la carte* services. In fact, my search of MCI's website

indicated that the Advantage 200 plan is the cheapest bundled offering advertised on the website. Examples of other MCI bundles available for residential customers in Florida include a $62.49 plan (Neighborhood Complete, including a $6.50 end-user charge) and a $97.49 plan (MCI Neighborhood HiSpeed, including a $6.50 end-user charge). MCI has ignored the fact that it offers, and presumably some customers purchase, these more expensive bundles. Moreover, the bundle to which Dr. Bryant compares his revenue assumption does not include various sources of revenue that MCI presumably receives even from the customers to whom it sells that bundle, such as long distance calling in excess of the 200 included minutes, international calling (which is billed separately under the MCI plan), and Directory Assistance. Once again, I observe that if MCI's bundled pricing is relevant, then MCI's revenues per customer would presumably be relevant, but Dr. Bryant declined to rely on MCI revenue information.

Q. DOES THE BACE MODEL USE THE ILEC'S EXISTING LEVEL OF PRICES AND REVENUES?

A. No, it adjusts them downward. The BACE model "starts with" the ILEC's prices, as advocated by Dr. Bryant, and then assumes that when CLEC customers purchase services *à la carte*, they pay 90 percent for the local services of what they would pay if purchasing the same services from the ILEC. This adjustment is not applied as a price trend, but as a once-and-for-all (constant in each period) 10 percent cut. Hence, the BACE model incorporates a "CLEC discount" from ILEC rates. For bundled services, the model assumes that CLECs offer a number of bundle types, the prices of which are based on the actual prices of the relevant

bundles actually offered by CLECs in Florida. The model assumes, consistent with the direction provided by the FCC, that these prices do not change over time.

Q. WHAT DOES DR. BRYANT ASSUME ABOUT CUSTOMER ACQUISITION COSTS?

A. Dr. Bryant assumes that the efficient CLEC will spend $130 per line to acquire a customer, whether that is a residential or business customer.

Q. WHAT EVIDENCE DOES DR. BRYANT PROVIDE IN SUPPORT OF THIS ASSUMPTION?

A. Dr. Bryant himself presents no justification. In response to BellSouth's Interrogatory 3-153, Dr. Bryant simply offers that this is "the default value used by Dr. Gabel in the NRRI model."

I understand that Dr. David Gabel, associated with NRRI, programmed the model that Dr. Bryant advocates. I would like to have the opportunity to determine how Dr. Gabel arrived at his figure, because it is not evident based on the response to interrogatory 3-153. The figures presented in this response include, first, a CLEC (Z-Tel) whose customer acquisition costs are claimed to be between $80 and $100. This experience is some $30 to $50 less than the $130 used by Dr. Gabel (and, derivatively, by Dr. Bryant). Dr. Bryant does not explain whether or how he incorporates that experience into his estimate. I will note, however, that

my recommendation ($95 for residential customers) falls very close to the middle of the claimed Z-Tel's experience. If an *actual* CLEC can attain these levels, it would seem that this is an important datum regarding what an *efficient* CLEC might attain.

The figures presented by Dr. Bryant in response to discovery also include the customer acquisition costs of a cable-TV company that offers voice telephony in some areas of the country and several examples of wireless service providers. However, Dr. Bryant does not demonstrate how he derives his recommended $130 from any figure, or combination of figures, in the response, or how one might adjust the wireless (and possibly cable TV) figures to account for interindustry differences, such as the fact that many wireless carriers provide and program the handset "free" to new customers, or that they sign up customers to term contracts (and therefore can justify spending more to acquire customers).

Q. HOLDING ASIDE THE FACT THAT DR. BRYANT'S CUSTOMER ACQUISITION COST ESTIMATE IS UNSUPPORTED, IS HIS ASSUMPTION NEVERTHELESS A REASONABLE ONE?

A. No, it is unreasonably high for a residential line according to the data I have seen. As I explained and fully documented in my direct testimony, several CLECs have reported customer acquisition costs far below the number advocated by Dr. Bryant, and I have seen no published estimates that reach the $130 level. For example, Talk America, a CLEC that markets primarily to mass-market customers, is estimated to spend on the order of $80 per customer acquisition.

(See Vik Grover, "Raising Numbers Again," Kaufman Bros. Equity Research (KBRO Kaufman Bros. L.P.), April 30, 2003, p. 1. See, also, Excerpt from The Wall Street Transcript, "Company Interview: Gabriel Battista, Talk America Holdings, Inc." May 2003, p. 5.) Management at Z-Tel, another CLEC that markets primarily to mass-market customers, claims that it is trying to reduce customer acquisition costs to $50. (See James J. Linnehan, "Z-Tel Technologies, Inc.: Still Chugging Along," Thomas Weisel Partners Merchant Banking, November 8, 2001, p. 3.) I also noted in my direct testimony that investment analysts at Thomas Weisel Partners estimated that Z-Tel's *actual* customer acquisition costs were in the $60 to $70 range, not the $80 to $100 range that Dr. Bryant claims, without reference to source, documentation, or support, is Z-Tel's customer acquisition costs. Indeed, according to Banc of America Securities, even AT&T's customer acquisition costs are somewhat less than Dr. Bryant's estimate, and are expected to drop 50 percent over the next five years. (David W. Barden, "AT&T Corporation: A Case for Consumer Services," Banc of America Securities—United States Equity Research, April 30, 2003, p. 17.) None of these estimates for actual CLECs exceeds or even meets Dr. Bryant's recommendation for an efficient CLEC.

Finally, as I discussed in my direct testimony, the experiences of actual CLECs may not be indicative of what an efficient CLEC could accomplish. I described that UNE-P-based firms have the incentive to spend inefficiently high amounts to acquire customers. The reason is that having UNE-P available where there is no impairment provides CLECs with an opportunity to save on network investments, but these savings are dissipated in competition for new customers. The bottom

line is that an estimate of customer acquisition costs, such as Dr. Bryant's, that exceeds the customer acquisition costs observed for UNE-P-based firms is, in and of itself, evidence of the unreasonableness of the estimate for an efficient UNE-L-based CLEC.

Q. PLEASE COMMENT ON DR. BRYANT'S ESTIMATE OF "CHURN."

A. In his testimony, Dr. Bryant says, "customer life is 12 months." (Bryant Direct 90) Dr. Bryant also claims to evaluate the impact on impairment of using different customer lives between 8 and 16 months. The text that is available with the model itself indicates that the model evaluates customer term of 15 months, and performs a sensitivity analysis for other values between 10 and 20 months. I am unable to account for the discrepancy between the Mr. Bryant's testimony and the model documentation.

I have several comments about Dr. Bryant's churn assumption. First, I find it entirely implausible on its face that an efficient CLEC would spend $130 per line to acquire a customer that is expected to stay with the CLEC for only 12 months. Such a CLEC would have to collect nearly $11 per month just to recover its customer acquisition costs from its customers. In contrast, for example, Talk America, a UNE-P-based CLEC that serves the mass market, had monthly churn of 4.1 percent (which implies that at the end of about 17 months, the CLEC will have lost about half of the customers that the CLEC had signed up at the beginning of that period) and customer acquisition costs of $80. (Vik Grover, "Talk America Holdings, Inc, Kaufman Brothers, April 30, 2003, p. 1.) This

means that Talk America would have to collect approximately $4.70 per month over the life of its average customer to recoup its customer acquisition costs, or less than half of the monthly necessary recoupment implied by Dr. Bryant's churn and customer acquisition cost proposals.

Dr. Bryant argues that his assumption is based on the "recent experience of MCI" (Bryant Direct 90) and in discovery claims that this assumption is based on undocumented "interviews with MCI personnel." (MCI Response to BellSouth Interrogatory 153 E) Of course, even aside from the lack of documentation for this assumption, MCI cannot be the relevant standard because no effort has been made to demonstrate that MCI represents an efficient CLEC. Moreover, MCI's "recent experience" is not likely to reflect a long run equilibrium level of churn (as opposed to a start-up level of churn). This is particularly important because Dr. Bryant's model is a one-period "static" model, so his churn level is presumably expected to apply in a long-run equilibrium, not for the initial experience of a relatively new entrant in to the market.

Second, Dr. Bryant's estimate of churn also suffers from insufficient granularity. Dr. Bryant assumes that all types of customers will have the same average tenure with the CLEC. As the FCC noted in its TRO, business customers are less averse to signing term contracts (TRO ¶ 452), so although a 4 percent per month churn rate is reasonable for residential customers, one would expect that business customers would have lower churn rates. In light of the availability of contracting, especially for business customers, it is unreasonable to assume that

the entire customer base of an efficient CLEC would turn over its entire base of customers every 12 months.

Finally, as I noted, Dr. Bryant claims that this assumption is based on his undocumented "interviews" of MCI personnel. While the specific results of a particular CLEC's business likely do not reflect the potential of an efficient CLEC, it nevertheless appears self-serving that Dr. Bryant relied on MCI for churn, but he did not rely on MCI for other, perhaps more obvious, input items. For example, Dr. Bryant says that he obtained his estimate of long-distance spending from the FCC's 2003 Reference Book. (MCI Response to BellSouth Interrogatory 153-B) Dr. Bryant is testifying on behalf of the nation's second largest long-distance provider. It seems that he could have obtained a more nuanced, granular, and supportable level of long-distance spending (one that reflects the countervailing advantage of being able to select your customers) by interviewing MCI personnel regarding long-distance spending in Florida—especially given Florida's particularities regarding international calling—rather than use a national average computed by the FCC on the basis of nationally-sampled bills. Instead he claims that "[i]nsufficient data existed at the time of the filing" to even differentiate between business and residence long-distance revenue per line. (MCI Response to BellSouth Interrogatory 174) Moreover, in BellSouth Interrogatory 160, Dr. Bryant was given the opportunity to explain why he chose Dr. Gabel's revenue or cost estimates in some instances, why he interviewed MCI personnel in other instances, and why he relied on FCC national statistics in yet other instances, but he offered no such explanations.

Q. PLEASE COMMENT ON DR. BRYANT'S ASSUMPTION REGARDING BAD DEBT.

A. Dr. Bryant assumes that the efficient CLEC will experience bad debt of 5 percent of revenue (based, as I noted, entirely on undocumented "interviews" with MCI personnel). (MCI Response to BellSouth Interrogatory 157) This proportion is some 3 *times* the average historical bad debt experience of the RBOCs and is not representative of what one might reasonably expect an efficient CLEC to experience.

Managing bad debt is important because failure to pay for service exerts a double whammy: it is both a loss of revenues that falls to the bottom line, and it implies that the CLEC incurred costs to provide service that was never paid for. Thus, it is very important for firms to manage bad debt, and it is unreasonable to incorporate as part of an "impairment" analysis the assumption that a CLEC might fail to properly manage this very important cost with reasonable efficiency. If anything, CLECs should be able to avoid high risk customers simply by refusing to serve them.

As one indicator of bad debt, I examined CLECs for which I could find uncollectibles percentages for either (or both) 2001 and 2002, one of which (2001) was a recession year. From 73 observations, I determined that the median ratio of bad debt to revenues was about 2.8 percent. The median is an indicator of central tendency. The measure indicates that there are as many observations above 2.8 percent as there are below 2.8 percent. This is an extremely

conservative indicator of the bad debt rate that an efficient CLEC should be able to attain. Indeed, one might argue that an *efficient* CLEC's rate of bad debt should be in one of the lower quintiles or deciles. Nevertheless, the actual (median) experience of the CLEC sample is substantially below Dr. Bryant's proposal, and more in line with the 2.75 percent that I recommend.

Q. PLEASE COMMENT ON DR. BRYANT'S ASSUMPTIONS REGARDING DSL PENETRATION RATES.

A. The effective proportions of CLEC business and CLEC residence customers that ultimately subscribe to DSL, as computed from Dr. Bryant's model, are 1.2 percent for businesses and 5 percent for residences. These effective penetration rates are too low to account for the customer targeting and bundling in which an efficient CLEC can engage.

Indeed, according to Figure 24 in this Commission's Annual Report on Competition Markets in Florida, 24 percent of Florida households already have adopted broadband, and 38 percent of those (that is, 9 percent of the total) have opted for DSL (Figure 22). Moreover, DSL subscription continues to grow at a rapid clip. Yet, Dr. Bryant ultimately estimates that only 5 percent of the CLEC's residences will subscribe to its broadband offering. I conclude that an estimated effective cross-penetration between the CLEC's voice and broadband offerings that is *substantially less than the average penetration level that currently exists in the marketplace today,* ignoring the fact that CLECs can disproportionately target complex-needs customers, and ignoring the growth of

DSL, does not adequately conform to the FCC's requirement that the potential deployment analysis consider all of the revenues and countervailing advantages that are available to the CLEC.

Q. DOES DR. BRYANT UNDERPRICE THE ASSUMED DSL SERVICES?

A. Yes, he does. Dr. Bryant assumes that residences pay $35 extra per month for DSL service from his modeled CLEC. While DSL is certainly available at approximately $35, one might expect that a reasonably efficient CLEC could offer additional DSL-related products, or "vertical services," just as BellSouth does. For example, in addition to a $39.95 DSL offering, BellSouth offers a home networking option ($10.00), a parental controls/firewall ($6.95), web remote access ($4.95), and a static IP address ($14.95). While not all DSL customers will take some or all of these options, some customers will take one or more. The ability to sell customers additional, useful features increases the revenue opportunity, and, I understand, actual revenue, from DSL service. I do not believe that Dr. Bryant's assumed DSL price adequately accounts for such, or other, vertical revenue opportunities associated with DSL service.

The availability of other revenue opportunities is evidenced in the market. For example, my research indicates that while "lite" packages are available for less, higher speed DSL service is available for residential customers for about $49.95 from a variety of carriers in Florida (including Covad TeleSurfer PLUS Residential, BellSouth DSL FastAccess, and AT&T Preferred DSL). For SOHO businesses, DSL service is available for nearly $50 from MCI, BellSouth, and

Sprint, but it is also available for substantially more (such as $79.95 from BirchNet DSL, EarthLink Small Office, and MegaPath Networks and for $99.95 from Comtex Telecommunications). Hence, my recommendation of $47 for *à la carte* residential and SOHO business customers for the BACE model is both reasonable and conservative, while Dr. Bryant's proposal is unreasonably low and is not reflective of revenues available in the market, as is required by the TRO. I would note that the BACE model also incorporates DSL in packages and applies prices for those packages based on the bundle prices currently available from CLECs in the market. Dr. Bryant does not explicitly incorporate bundles into his model at all.

Q. DO YOU AGREE WITH DR. BRYANT'S ASSUMPTIONS REGARDING OVERALL PENETRATION?

A. No. Dr. Bryant assumes a static CLEC market share of 5 percent. (Bryant Direct p.88) While a penetration rate of 5 percent may be reasonable for a growing CLEC early in its life, it is not appropriate as an ultimate penetration rate. Nevertheless, there is no way of knowing in MCI's model whether one should interpret the 5 percent as the "average" penetration over an (unspecified) period of time, whether it is a "steady state" ultimate penetration (and the penetration rates leading up to it are ignored), whether it is the assumed penetration in the first or second year of operation, or some other interpretation.

Indeed, the limitations of a static model such as MCI's are particularly apparent when attempting to model penetration. A new CLEC may start with a penetration

of zero, and will increase its penetration over time. Accordingly, the BACE model explicitly assumes that a CLEC starts with no customers and grows toward its ultimate penetration of 15 percent (though never quite achieves it) over a ten year period. Dr. Bryant's penetration assumption could be consistent with many ultimate penetration rates, including a 15 percent penetration rate achieved over a period of time, but these dynamics are entirely unspecified in MCI's static model. What is clear is that 5 percent is unreasonably low as an estimate of the ultimate penetration rate for an efficient CLEC.

There are a number of reasons that Dr. Bryant's 5 percent market share estimate is unreasonable as an ultimate penetration rate. First, as I explained in my direct testimony, it has already been demonstrated that CLECs can achieve significantly higher rates of penetration. AT&T has achieved 15 percent in New York, and Cox Communications has achieved 19 percent penetration of the telephone-ready homes in its geographic footprint around the nation, and 53 percent of its existing cable TV customers in its Orange County (California) footprint. In Florida over all, Table 2 of the Commission's Annual Report on Competition shows that CLECs serve 21 percent of the lines in BellSouth's service territory. While this 21 percent includes many UNE-P-based CLECs, it certainly demonstrates a greater willingness on the part of customers to leave BellSouth than is assumed by Dr. Bryant.

Moreover, Dr. Bryant himself explains that UNE-L based providers will be more aggressive in expanding their market shares than would UNE-P providers. As Dr. Bryant explains, facilities-based CLECs are "under pressure to recover sunk costs

by increasing volume." (Bryant Direct 82) Aside from "sunk cost" concerns, facilities investments create some scale economies, which induce efficient CLECs to increase volume to leverage those economies of scale. Indeed, increasing its customer base allows the CLEC to exploit the efficiencies available to a facilities-based provider. Hence, an efficient facilities-based provider will necessarily operate at a scale that exploits its scale economies in equilibrium.

Finally, in order to appropriately interpret the 15 percent penetration assumption, it is useful to recall that the market share numbers reported in many public venues (including the FCC reports) are at the level of large geographic areas such as an entire state. A carrier that has, say, a 2 percent market share in a state would have a far higher share in the geographic markets in which it operates. A carrier that has a 5 percent share in a metropolitan area would also have a much higher market share in its geographic market if it served only a part of that metropolitan area. The penetration rate of the BACE model applies only to the penetration of the narrowly defined geographic markets in which it operates, not to the average penetration of an entire state or MSA (which would obviously be lower as a consequence of the markets which the CLEC does not serve).

For example, suppose a particular MSA has three zones, 1, 2, and 3, each with equal numbers of customers. If a CLEC operates only in zone 1 and obtains 15 percent of the market there, then it would be calculated to have 5 percent of the MSA. Looked at differently, if carriers are observed to obtain 5 percent of an MSA, they may well be capturing a far higher percentage of the subset of the market in which they operate.

III. RESPONSE TO MR. TURNER

Q. WHAT COMMENTS DO YOU HAVE ON MR. TURNER'S TESTIMONY?

A. The main comment I have is that Mr. Turner's approach, as it stands, is useless to address the FCC's definition of impairment. Mr. Turner's theory of impairment was considered and explicitly rejected by the FCC. Mr. Turner's approach does not address the question of whether an efficient CLEC economically could enter a market without access to a particular unbundled element (which is the essence of the FCC's impairment definition, e.g., see TRO ¶ 84), and so it provides no economically useful information to the Commission, and should be disregarded.

Q. WHAT DO YOU MEAN THAT MR. TURNER'S APPROACH DOES NOT ADDRESS "IMPAIRMENT"?

A. Mr. Turner's theory of impairment is that CLECs are impaired because (he claims) they have higher costs than does the ILEC. (Turner Direct 4-5) His impairment analysis computes the supposed cost disadvantages, relative to the ILEC, faced by a CLEC that seeks to self-provision switching to serve mass-market customers. (Turner Direct 5-7) Cost disparities, however, are not determinative of whether entry is "economic," which is the basis of the FCC's definition of impairment. Costs are relevant only within the context of a well-defined business case analysis that evaluates whether entry by an efficient CLEC is economic, and whether CLECs incur costs that are not incurred by ILECs is not determinative of impairment. In fact, as the FCC recognized (TRO ¶ 112),

entry by an efficient CLEC may be "economic" without access to the unbundled element even when the CLEC suffers from a cost disadvantages. In real markets (as well as in many standard economic models of competition), firms with different costs coexist in competition with one another, and such competition is sustainable and viable for the firms. A sound business case analysis considers not just costs, but also the revenues that an efficient CLEC reasonably could attract and, as I mentioned, any countervailing advantages that the CLEC might enjoy, such as the ability to target geographic areas or customers within those areas, and "second-mover" advantages such as the ability to create a lower-cost network topography or use more flexible or powerful switches. An approach that seeks only to demonstrate a cost disadvantage cannot determine whether competitive entry is "economic" and so does not address the essential issue of the FCC's impairment definition.

As I noted, approaches such as Mr. Turner's, which focus on absolute cost disadvantages, were reviewed and rejected by the FCC during the Triennial Review proceeding. The FCC concluded, "We reject the proposal to find impairment whenever entrants would suffer from a substantial cost disadvantage (such as five percent), regardless of whether entry is still possible." (TRO ¶ 112) The FCC requires that "cost factors listed should not be considered in isolation, but only in the context of a broad business case analysis that examines all likely potential costs and revenues." (TRO fn. 1581. See, also fn. 1497) The FCC specifically directs states "not [to] focus on whether competitors operate under a cost disadvantage. [Rather,] [s]tate commissions should determine if entry is economic by conducting a business case analysis for an efficient entrant." (TRO

fn. 1579) The FCC also correctly noted that a cost disadvantage standard, such as Mr. Turner's, would focus on maximizing entry to the detriment of the other goals of the Act, such as innovation, deployment of new technologies, and reduced regulation. (TRO ¶ 112)

The Supreme Court also rejected the theory that demonstrating a cost disadvantage is sufficient to prove impairment. The Court explained that a CLEC that was able to operate profitably without access to an unbundled element could not argue that it was impaired on the grounds that it would be even more profitable with access to the element. (*AT&T* et al. *v. Iowa* et al. 13-14) Nor can a CLEC claim impairment by noting that its costs would increase in the absence of access to the UNE. (*AT&T* et al. *v. Iowa* et al. 14) Indeed, Mr. Turner's comments are based on an approach that expressly is rejected as "unreasonable" by the Court. As a result, the FCC's rules were vacated by the Court, and the FCC, in the TRO, established an impairment test based on the economics of entry, not on cost differentials or cost increases.

Mr. Turner admits that his analysis is not determinative of whether a CLEC has an economic business case in any geographic market, and that he has not performed any analysis to determine whether it could have a positive business case. Specifically, Mr. Turner responded with an unqualified "no" to the following question: "Has any analysis, study, or evaluation been conducted by, on behalf, or at the direction of AT&T to determine whether a CLEC providing a qualifying service via the UNE-L can make a positive return on investment in any wire center or combination of wire centers? If the answer to this Interrogatory is

in the affirmative, identify all documents referring or relating to such analysis, study or evaluation." (AT&T Response to BellSouth Interrogatory 4-162)

Q. IS IT LEGITIMATE TO CONSIDER THE COSTS OF AN EFFICIENT CLEC?

A. Yes, it is, if these costs are considered in the proper analytical framework. As the FCC explained (TRO ¶ 77), this framework is a fully-developed "net present value" business case that considers revenues, as well as costs, and countervailing advantages that the CLEC might enjoy. A business case evaluates the CLECs' costs relative to its revenues, not relative to the ILEC's costs. Mr. Turner's analysis is in no way a business case and therefore is not helpful to this Commission.

IV. RESPONSE TO MR. WOOD

Q. SHOULD THE FPSC REJECT MR. WOOD'S PROPOSAL TO REPUDIATE THE USE OF AN ECONOMIC IMPAIRMENT ANALYSIS TO IDENTIFY GEOGRAPHIC MARKETS WHERE IMPAIRMENT DOES NOT EXIST? (WOOD DIRECT 6)

A. Yes, it should reject Mr. Wood's proposal. Mr. Wood argues that an economic analysis may be useful as a way to identify factors that contribute to impairment, but that the Commission should not use a business case analysis to determine whether impairment exists. Mr. Wood argues that a business case analysis that

does not demonstrate "impairment" is inherently flawed because many CLECs have tried and failed to implement UNE-L over the past 7 years. Mr. Wood therefore concludes that "impairment" is obvious. I interpret this testimony to imply that Mr. Wood urges the FPSC to simply disregard the potential deployment component of the FCC's impairment methodology as part of its determination of the geographic markets in which BellSouth can be relieved of the unbundled local switching obligation, on the grounds that he already knows what the answer should be. (Wood Direct 4)

Clearly, this is not what the FCC appeared to have in mind when it wrote 51.319(d)(2)(iii)(B). This rule requires states to evaluate potential deployment as part of their impairment assessments if neither switching trigger is met. The FCC's rule clearly requires a state commission to evaluate the bright-line triggers tests, and then, in instances where the triggers are not met, to nevertheless find that requesting carriers are not impaired without access to the local switching UNE where it finds that self-provisioning of switching is economic. As a matter of logic, the fact that the FCC includes the potential deployment test must be understood to imply that the FCC considers it possible to demonstrate lack of impairment thereby. The FCC's rules indicate a recognition that if the triggers are not satisfied in a market, that does not necessarily imply that CLECs could not economically do business there with UNE-L if unbundled switching were unavailable. There is no doubt that the existence of UNE-P affects the desirability and viability of pursuing a UNE-L strategy.

CLECs may opt to use UNE-P rather than UNE-L when the former provides the CLEC with a greater profit opportunity, or greater flexibility, than the latter. However, greater (or lesser) profitability is not the standard that the FCC requires for an evaluation of impairment. As I noted earlier, the FCC's standard of impairment is whether an efficient CLEC could economically enter the market without access to the unbundled element. (TRO ¶ 84) The FCC's trigger's tests are asymmetric tests of impairment: satisfying the triggers tests demonstrates lack of impairment, but failing them does not demonstrate impairment. If there is "multiple, competitive supply" (TRO fn. 283) (as indicated by the triggers tests), an efficient CLEC clearly is not impaired without access to the unbundled element. Thus, passing a triggers test clearly indicates that there is no impairment. But, if there is not multiple, competitive supply currently in the market, this does not mean that competitors would be unable to enter the market without access to the UNE. As I mentioned, CLECs might use UNE-P instead of UNE-L because it promises greater profits, not because it uniquely resolves the market entry problem. As FCC Chairman Powell noted, "[A]n honest inquiry into this area [of impairment analysis using the triggers] must recognize what the record amply demonstrates: there is a correlation between the availability of UNE-P and the failure of competitors to utilize their own switching capacity." A well-structured business case analysis can help identify those areas where CLECs are not impaired, even when neither trigger test is satisfied.

Q. AREN'T THE PAST 7 YEARS THEMSELVES INDICATIVE OF IMPAIRMENT, AS CLAIMED BY MR. WOOD? (WOOD DIRECT 4)

A. No. First, Mr. Wood seems to argue that the triggers tests will demonstrate that CLECs are not serving mass-market customers using their own switches. (Wood Direct 4) Mr. Wood's entirely unsupported and conclusory rhetoric aside, he provides no evidence that CLECs have experienced impairment in the specific geographic markets that are at issue in this proceeding, and admits in discovery that he performed no economic impairment analysis, study, or evaluation of impairment associated with local switching. (AT&T Response to BellSouth Interrogatories 4-152 and 4-153).

Second, even in those instances where the triggers are not met, CLECs are not necessarily impaired, as the FCC has clearly recognized in its Rule requiring a potential deployment analysis. As I have discussed, one reason that CLECs are not necessarily impaired in geographic markets where the triggers are not met is that the availability of UNE-P itself affects CLECs' business decisions. The availability of UNE-P where there is no impairment provides a convenience for CLECs, as noted by Chairman Powell in his Separate Statement to the TRO. Even when UNEs are priced based on cost, CLECs may well have the incentive to use UNE-P, rather than make their own investments, even in many areas for which there is no genuine impairment. Moreover, the availability of UNE-P to other CLECs in areas where there is no genuine impairment damages the business cases of those CLECs that otherwise would invest in their own switching. In sum, the forward-looking risks and potential profits of an efficient CLEC, rather than a retrospective review of CLEC successes and failures in a world of ubiquitous UNE-P availability, is the relevant indicator of impairment.

Q. IS IT TRUE, AS MR. WOOD ASSERTS, THAT "AN EFFICIENT CLEC THAT EXPERIENCES A COST DISADVANTAGE CANNOT COMPETE ON PRICE OVER TIME, AND THEREFORE CANNOT PRUDENTLY INVEST IN ASSETS WHOSE COSTS CAN ONLY BE RECOVERED OVER AN EXTENDED PERIOD OF TIME"? (WOOD DIRECT 10)

A. No. Both in theory and in fact, competition can be viable when competitors have varying levels of costs, and one would be hard-pressed to explain much of the real world if one insisted on a worldview that permits the survival only of competitors with identical costs. The claim that a cost disadvantage renders a firm incapable of competing effectively and viably in a market is simply inconsistent with much of modern economic theory, which provides a number of models in which firms with different cost structures providing identical products viably coexist. The notion that competition cannot accommodate heterogeneity in costs reflects a shallow understanding of the richness of economic models of competition.

Moreover, efficient CLECs need not compete only on price, but can compete by differentiating their products from their rivals and earn a premium from those customers who value the specific product characteristics offered by the CLEC.

Q. MR. WOOD ARGUES THAT REVENUES NEED NOT BE CONSIDERED BECAUSE THE SAME REVENUE POTENTIAL EXISTS FOR BOTH ILEC AND CLEC, SO THAT THE ONLY ISSUE IS COSTS. PLEASE COMMENT. (WOOD DIRECT 9-10)

A. Mr. Wood is incorrect on at least two grounds. First, as a matter of economic principle, if the revenue potential is the same for two firms, a cost difference nevertheless does not necessarily render the higher cost firm uneconomic, as I just explained. Second, Mr. Wood is incorrect that CLECs and ILECs necessarily face the same revenue potential. One of the advantages of a CLEC is the ability to target high-profit customers, and ignore unprofitable ones. My own analysis indicates that this "cream skimming" is occurring in the BellSouth-served territories. Mr. Wood's entire approach, besides being rejected as probative by the FCC, is based on a flawed premise.

V. RESPONSE TO MR. GILLAN

Q. PLEASE COMMENT ON MR. GILLAN'S ASSERTION THAT "ELIMINATING UNE-P WOULD REDUCE LOCAL COMPETITION IN 2004 (BASED ON BELLSOUTH'S PROJECTIONS) BY NEARLY 90%." (GILLAN DIRECT 4)

A. As I noted in my response to Dr. Bryant, a market where CLECs are not impaired without access to unbundled local switching permits the opportunity for greater, not less, competition. The reason is that in those areas, after a transition period that provides CLECs with the opportunity to obtain any needed switching (either self-provisioned, from a wholesale switch provider or from the ILEC on commercial terms), competition will occur at the network (switching) level as well as at the retail level. In contrast, with UNE-P there is no competition at the network level. Thus, in markets in which there is no impairment, the resulting

competition would be more robust than it is today. In areas where an efficient CLEC would be impaired without access to the unbundled switching element, UNE-P will remain available. Mr. Gillan's argument simply reduces to the superficial tautology that eliminating UNE-P would eliminate UNE-P. It does not address the more probative issue of the effect on innovation, consumer welfare, or the future development of competition. Where unbundled local switching is eliminated as a UNE due to lack of impairment, competition will be enhanced, as envisioned by the Act.

Q. DOES MR. GILLAN ARGUE THAT THE FPSC SHOULD NOT REMOVE A NETWORK ELEMENT BASED ON A POTENTIAL DEPLOYMENT ANALYSIS?

A. Yes, I believe he does. Like Mr. Wood, Mr. Gillan argues that a potential deployment analysis can indicate why impairment exists, but that it would not be "reasonable" for the Commission to remove a network element unbundling requirement based on a potential deployment analysis. (Gillan Direct 18) Hence, like Mr. Wood, Mr. Gillan would have the Florida Commission ignore the plain language of the federal rules. I believe that this is misguided for the reasons I discussed in my response to Mr. Wood's recommendation. Nothing in the FCC's discussion or its rules even hints at this ill-conceived proposal. Rather, the FCC is very explicit that states must first examine the bright-line triggers tests and then they must consider whether an efficient CLEC could economically provide mass-market service without access to the unbundled switching UNE. This is one way of addressing Chairman Powell's concern that CLECs use UNE-P even

in instances where there is no genuine impairment. Mr. Gillan's undisciplined advocacy should be rejected.

Q. MR. GILLAN ARGUES THAT UNE-P ENCOURAGES INVESTMENT. (GILLAN DIRECT 52) PLEASE COMMENT.

A. Mr. Gillan's opinions and conjecture on this are irrelevant to any determination of "impairment" under the FCC's rules. The FCC clearly states that facilities-based competition serves the public policy goal of innovation. (TRO fn. 233) Moreover, removal of unbundling obligations is not optional if the impairment test fails. It is mandatory. The public policy considerations weighing any pros and cons of unbundling already are incorporated in the provisions of the Act itself.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes it does.

(Transcript continues in sequence with Volume 3.)

STATE OF FLORIDA)
: CERTIFICATE OF REPORTER
COUNTY OF LEON)

I, LINDA BOLES, RPR, Official Commission Reporter, 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' attorneys or counsel connected with the action, nor am I financially interested in the action.

DATED THIS 26TH DAY OF FEBRUARY, 2004.

LINDA BOLES, RPR
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